

Department of Environmental Conservation

Division of Environmental Remediation

Site Name: Batavia Iron & Metal Co. Inc. Site Number: 819018 Contract Number: D011945 Location: 301 Bank Street, Batavia, New York

Contract Documents

MACTEC Engineering and Geology, PC



New York State Department of Environmental Conservation KATHY HOCHUL, *Governor* Basil Seggos, *Commissioner* THIS PAGE WAS LEFT INTENTIONALLY BLANK

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SECTION I

Advertisement and Notice to Bidders

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SECTION I

Advertisement and Notice to Bidders

New York State Department of Environmental Conservation Division of Environmental Remediation

Project Name: Batavia Iron & Metal Company, Inc, Site No. 819018

Sealed bids for the Batavia Iron & Metal Company, Inc. project will be received by the New York State Department of Environmental Conservation (NYSDEC), Division of Management and Budget Services, Bureau of Expenditures [625 Broadway, 10th Floor, Albany, New York, 12233-5027], until the time of 1:00 PM, Eastern Standard Time, on the date of July 26, 2022. The bids will be opened and read aloud at the above time and date. Telegraphic or other electronically transferred bids will not be accepted.

The project involves the implementation of remedial activities at the Batavia Iron & Metal Company, Inc. site, located at 301 Bank Street, Batavia, New York. These activities include, but are not necessarily limited to, excavation and transportation of PCB contaminated soil to permitted disposal facilities and restoration of the site as described in the contract documents.

The estimated range for this work is: \$15,000,000 -20,000,000

Contract Documents are available in electronic format at no charge. Electronic copies of non-biddable Contract Document drawings, specifications, proposal forms, addenda, and a separate Limited Site Data Document may be downloaded from the Department website <u>http://www.dec.ny.gov/chemical/59233.html</u>. Hard copies (fees apply) and/or FTP link to biddable Contract Documents are available upon request from the Division of Environmental Remediation, 12th Floor, 625 Broadway, Albany, New York, 12233-7017, Attn: Lisa Gorton at <u>lisa.gorton@dec.ny.gov</u>.

Proposals will be accepted only from bidders who attend the Pre-Bid Conference. All proposals must be made on the official proposal form(s) and enclosed in the envelope which will be provided by the Department at the Pre-Bid Conference. Each proposal must be accompanied by a deposit or a bid bond in the amount of five-percent (5%) of Proposers bid amount. All Bidders must attend the Pre-Bid Conference to receive special requirements and/or instruction for the Contract. The Pre-Bid Conference will be held on July 14, 2022 at the Batavia Iron & Metal Company, Inc. site, located at 301 Bank Street, City of Batavia, Genesee County, New York, starting at 1:00 PM, Eastern Standard Time.

Attendees are encouraged to review COVID-19 Center for Disease Control (CDC) guidelines prior to attendance; current guidelines can be accessed at <u>https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/prevention.html</u>

ATTENDANCE IS MANDATORY AS A CONDITION OF BIDDING.

Minority-, Women-, and Service-Disabled Veteran-owned businesses are encouraged to submit bids in response to this solicitation. The New York State Department of Environmental Conservation is an Equal Opportunity/Affirmative Action Employer.

The Contractor shall adhere to the New York State Department of Environmental Conservation Guidelines Regarding Permissible Contacts During a Procurement and the Prohibition of Inappropriate Lobbying Influence. For the purpose of this Notice to Bidders, the Director of the Division of Environmental Remediation, Andrew Gugliemi, 12th Floor, 625 Broadway, Albany, New York, 12233-7011, shall be the Department's Designated Representative. Any questions, however, shall be directed to Lisa Gorton, the Department's Project Manager and Designated Contact, at <u>lisa.gorton@dec.ny.gov</u>.

Bidders may receive announcements of procurement opportunities by signing up for the NYSDEC – DER electronic mailing list ("listserv") at – <u>https://public.govdelivery.com/accounts/NYSDEC/subscriber/new</u>

Basil Seggos, Commissioner

SECTION II

Terms and Definitions

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SECTION II

Terms and Definitions

Wherever used in the Contract Documents, the following terms (or pronouns in place of terms) have the meanings indicated which are applicable to both the singular and plural thereof:

Addenda - Written or graphic instruments issued prior to the date for opening of Bids which interpret or modify the Contract Documents by way of changes, clarifications, corrections, or the provision of additional information.

Administrative Agreement - A written explanation of the Contract Documents, signed by Department, Engineer and Contractor on or after the Effective Date of the Agreement and dealing with procedural or administrative aspects of the Contract Documents which do not change the contract price.

Agreement - The written agreement between Department and Contractor covering the Work to be performed; other Contract Documents are attached to the Agreement and made a part thereof as provided therein.

Application for Payment – Billing invoice in the form required by Department on which Contractor must request progress or final payments and which is to include such supporting documentation as is required by the Contract Documents.

Bid - The written offer or proposal of the Bidder, submitted pursuant to Article 5 of Section III of the Bidding Documents on the form(s) provided.

Bidder - The person, partnership, corporation, joint venture or other combination thereof, who has submitted a Bid. Bidder may also be referred to as "Offerer" or "Proposer" throughout the Bidding Documents and Contract Documents.

Bid Security - The security designated in the Bidding Documents to be furnished by the Bidder as guarantee that he/she will enter into a Contract with Department for the performance of the Work, if the Work involved in the Bid is awarded to that Bidder.

Bidding Documents - The Advertisement and Notice to Bidders, Bidding Information and Requirements, the Bid Forms and Attachments, and the proposed Contract Documents, including all Addenda issued prior to receipt of Bids.

Bonds - Instruments of security furnished by Contractor and its surety in accordance with the Contract Documents. This refers to the labor and material payment Bond, performance Bond and those other instruments of security required by the Contract Documents.

Change Order - A document prepared and recommended by Engineer, which is reviewed by Department and has been signed by Contractor and Department and approved by Comptroller. It authorizes an addition, deletion or revision in the Work, or an adjustment in Contract Price or Contract Time, or any combination thereof, issued on or after the Effective Date of the Agreement.

Claim – Contractor's demand or assertion seeking as a matter of right, adjustment, interpretation, additional money, extension of time or other relief with respect to terms of the Contract.

Commissioner - Commissioner of the New York State Department of Environmental Conservation.

Comptroller - The Comptroller of the New York State Office of the State Comptroller.

Contract Documents - The Agreement, Addenda (which pertain to the Contract Documents), Contractor's Bid, including documentation accompanying the Bid and any post-Bid documentation submitted prior to the Notice of Award, all bid forms and attachments required by Section V, the General Conditions, the Supplementary Conditions, the Standard Specifications, the Supplementary Specifications, Appendix B, Appendix C, Appendix D, Measurement for Payment, Advertisement, Terms and Definitions, Bidding Information and Requirements, Supplementary Bid Information and Requirements, and the Drawings, together with all amendments, modifications and supplements issued pursuant to paragraphs 2.4 and 2.5 of Article 2 of the General Conditions on or after the Effective Date of the Agreement.

Contract Price - The money payable by Department to Contractor under the Contract Documents.

Contract Time - The number of days permitted by the Agreement for completion of Work. This number may be stated or implied by a requirement that all work be completed by a certain date.

Contractor - The person, partnership, corporation, joint venture, or other allowable combination thereof, who has entered into the Contract with Department for the Work. The term "Contractor" means Contractor or its authorized representative.

Correction Period - The period of time within which the Contractor shall promptly, without cost to Department and in accordance with Department's written instructions, either correct Defective Work, or if it has been rejected by Department, remove it from the site and replace it with non-defective Work, pursuant to paragraph 12.12 of the General Conditions.

Cost and Pricing Data - Refers to all data available to and relied upon by Contractor in negotiating, pricing, or performing Work covered by a Change Order, or a Proposed Change Order, or involved in a claim. Sample Cost and Pricing Data include data and

supporting documents pertaining to labor wages and material rates, crew mixes, labor productivity, payroll costs, price catalogs, quotations from and payments to Subcontractors, Suppliers or others, equipment production rates, equipment costs, sales and use taxes, cost of premiums for Bonds and Insurances, costs related to the determination of general and administrative overhead, site office overhead, profit, estimates and estimating guides, Contractor's computations and projections, and all of the relevant assumptions made by Contractor in pricing or figuring increases or decreases in Contract Price or Contract Time.

Cost of the Work Involved - The sum of all costs necessarily incurred and paid by Contractor in the proper performance of the Work involved.

Day - A period of time consisting of 24 hours lasting from midnight to midnight on any two consecutive dates.

Defective Work - Work that is unsatisfactory, faulty or deficient, or does not conform to the Contract Documents, or does not meet the requirements of any inspection, reference standard, test or approval referred to in the Contract Documents, or has been damaged prior to Engineer's recommendation of final payment; unless responsibility for the protection thereof has been assumed by Department at Substantial Completion in accordance with paragraphs 13.8 or 13.10 of the General Conditions.

Delivery - Shall be effective on the date of receipt by the addressee.

Department - New York State Department of Environmental Conservation.

Department Representative(s) - Employee(s) of Department engaged in Department activities relating to the work, but who is not responsible for day to day administration of the Project.

Design Engineer - The individual, partnership, corporation, joint venture, or any allowable combination thereof, who prepared and sealed the Contract Documents that were advertised for bid by Department.

Designated Contact(s) - Individuals to whom all contacts can properly be made during the Restricted Period in relation to the Permissible Contacts during a Procurement and Prohibition of Inappropriate Lobbying Influence clause of the Contract Documents. The Project Manager shall serve as the Department's Designated Contact for the Contract.

Designated Representative to Resolve Disputes- Department employee responsible for resolving all disputes between Contractor and Project Manager, as identified in the Supplementary Bidding Information and Requirements.

Dispute - A Claim that is not resolved pursuant to Article 8, Paragraph 8.10 of Section VIII - General Conditions, becomes a Dispute to be resolved under Appendix B of the Agreement.

Drawings, Plans - The Drawings, Plans or reproductions thereof, which show location, character, dimensions, and details of the Work to be performed and which are referred to in the Contract Documents.

Effective Date of the Agreement - The date on which the Agreement is executed by Comptroller.

Employee - Any person working on the project mentioned in the Contract of which these specifications are a part, and who is under the direction or control, or receives compensation from Contractor or Subcontractor.

Engineer - The individual, partnership, corporation, joint venture, or any allowable combination thereof, any entity named as Engineer in the Agreement who will have the rights and authority assigned to Engineer in the Contract Documents. The term "Engineer" means the Engineer or its authorized representative.

Equipment - All machinery and equipment, together with the necessary supplies for upkeep and maintenance, and also tools and apparatus necessary for the proper construction and acceptable completion of the Work.

Field Order - A written order issued by Engineer to Contractor which orders minor changes in the Work in accordance with Article 9, Paragraph 9.2 of Section VIII - General Conditions not involving an adjustment in the Contract Price or the Contract Time.

Law(s) - Applicable laws, rules, regulations, ordinances, codes or orders of a Federal or New York State court.

Material - Any approved material acceptable to Department and conforming to the requirements of the specifications.

Notice of Award - Department's written notice of Agreement execution by the New York State Office of the State Comptroller and stating pertinent information with which Contractor must comply.

Notice of Intent to Award - The written notice by Department to a Bidder stating that upon compliance by that Bidder with the conditions enumerated therein, within the time specified, Department intends to process contract through the appropriate New York State contract reviews.

Notice to Proceed - The written notice issued by Department to Contractor establishing the Date for Commencement of the Contract Time and, where applicable, authorizing Contractor to proceed with the Work at the site.

Overhead - General and administrative costs (whether at the site or in Contractor's principal or branch offices) and all other miscellaneous costs not assigned to a specific payment item as identified in Articles 9, 10 and 11 of the General Conditions.

Partial Utilization - Placing a portion of the Work in service for the purpose for which it is intended (or a related purpose) before reaching Substantial Completion for all the Work.

Physical Completion - The Work and all parts thereof have been completed to the satisfaction of Department.

Progress Schedule - Drawings, data computer reports, and narratives disclosing Contractor's approach to the Work; the associated Early Schedule, Late Schedule and Float times, as supported by the Critical Path Method (CPM) or Bar Chart Diagram; the Schedule of Values; and the Schedule of Shop Drawing submissions.

Project - The term "Project" means work at the same Site carried out pursuant to one or more sets of Contract Documents.

Project Field Representative - Department employee assigned responsibility for the day to day administration of the Project.

Progress Payment - Payment made to the Contractor as the result of an Application for Payment which accurately reflects the Contract work completed to date.

Project Manager - Department employee identified in the Supplementary Bidding Information and Requirements, responsible for administration of work required by Contract Documents and supervision of the Project Field Representative(s).

Proposed Change Order - A document prepared on a form furnished by the Department which is to be used: 1) by Department when requiring that Contractor figure the potential effect on Contract Price or Contract Time of a proposed change, (the proposed change is ordered upon signing by Department), or 2) by Contractor to notify Department that in the opinion of Contractor a change is required to respond to differing or unforeseen physical conditions under which the Work is to be performed as provided in paragraph 3.7 of Article 3 of the General Conditions or to emergencies under paragraph 5.23 of Article 5 of the General Conditions, or has been ordered in a Field Order, or in Engineer's approval of a Shop Drawing or sample, or in Engineer's written interpretation or clarification of the requirements of the Contract Documents. When signed by Department, a Proposed Change Order may or may not fully adjust Contract Price or Contract Time but is evidence that the change directed or documented by the Proposed Change Order will be incorporated in a subsequently issued Change Order following negotiations as to its effect, if any, on Contract Price or Contract Time.

Resident Engineer - The authorized representative of Engineer who is assigned to the site or any part thereof.

Resident Project Representative(s) - Person acting as assistant to the Resident Engineer who is assigned to the site or any part thereof.

Resident Superintendent - The authorized representative of Contractor who is assigned to the site or any part thereof.

Restricted Period - The time period which runs from contract bid advertisement to contract execution by the New York State Office of the State Comptroller.

Retainage - A percentage of a Progress Payment withheld from a Contractor as assurance that all the contract requirements will be satisfactorily completed.

Shop Drawings - All drawings, diagrams, illustrations, schedules and other data which are specifically prepared by or for Contractor to illustrate some portion of the Work and all illustrations, brochures, standard schedules, performance charts, instructions, diagrams and other information prepared by a Supplier and submitted by Contractor to illustrate material or equipment for some portion of the Work.

Site – The horizontal and vertical area requiring Work by Contractor, as bounded by and represented in the Contract Documents.

Specifications - Those portions of the Contract Documents consisting of written technical descriptions of materials, equipment, construction systems, standards and workmanship as applied to the Work and certain administrative details applicable thereto.

Subcontractor - An individual, partnership, corporation, joint venture or other allowable combination thereof, having a direct contract with Contractor or with any other Subcontractor for the performance of a part of the Work at the site.

Substantial Completion - The Work, or a specified part thereof, has progressed to the point where, in the opinion of Engineer as evidenced by Engineer's definitive Certificate of Substantial Completion, it is sufficiently complete, in accordance with the Contract Documents (with the exception of the minor items identified during inspection described in paragraph 13.6 of the General Conditions), so that it can be utilized continuously for the purposes for which it is intended. Substantial Completion of the Work, or specified part thereof, may be achieved either upon completion of Pre-Operational Testing or Start-up Testing, depending upon the requirements of the Contract Documents. The terms "substantially complete" and "substantially completed" as applied to any Work refer to Substantial Completion thereof.

Supplier - A manufacturer, fabricator, supplier, distributor, vendor, or other entity providing materials or components for the Project.

Testing, Pre-Operational - All testing, associated trim-out activities and specified manufacturer or supplier training required prior to placing the facilities in service, including but not limited to manufacturer or supplier installation checks; leak, disinfection and pressure tests; removal or erection of temporary components; tie-ins; flushing and chemical/mechanical cleaning operations; specified performance tests; and other necessary non-operating adjustments, cold-alignment checks, corrections, housekeeping and spare parts stocking required of Contractor to demonstrate to Department and Engineer that individual components of the Work have been properly erected and do operate in accordance with the Contract Documents, and that they can be placed in service and utilized continuously for their intended purposes.

Testing, Start-Up - Follows Pre-Operational Testing. Start-up Testing commences by placing portions of the Work in service under interim conditions, continues through initial utilization of the facilities under design media, and culminates with predefined trial utilization tests during which Contractor is to operate the Work, or specified parts thereof, under actual and simulated operating conditions and performing as defined in the Contract Documents, for the purposes of: a) making such minor adjustments and changes as may be found necessary to comply with the requirements of the Contract Documents, and b) complying with the Start-up Test requirements outlined in the Contract Documents.

Total Float - Number of days by which a part of the Work identified in the progress schedule may be delayed without necessarily extending the corresponding Contract Time, or Contract Times.

Underground Facilities - All pipelines, conduits, ducts, cables, wires, manholes, vaults, tanks, tunnels or other such facilities or attachments, and any encasements containing such facilities which have been installed underground to furnish any of the following services or materials: electricity, gases, steam, liquid petroleum products, chemicals, telephone or other communications, cable television, sewage and drainage removal, traffic or other control systems or water.

Work - Any and all obligations, duties, responsibilities, labor, materials, equipment, temporary facilities, and incidentals, and the furnishing thereof necessary to complete the construction assigned to or undertaken by Contractor pursuant to the Contract Documents. Also, the entire completed construction or the various separately identifiable parts thereof required to be furnished under the Contract Documents. Work is the result of performing services, furnishing labor, and furnishing and incorporating materials and equipment into the construction, all as required by the Contract Documents.

SECTION III

Bidding Information and Requirements

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SECTION III

Bidding Information and Requirements

ARTICLE 1 - Address for Notices

It is understood and agreed between the parties that Department's Representative(s) for the implementation of this Agreement, or for approval and direction called for therein, shall be the individual(s) named in Article 2 of Section IV, "Supplementary Bidding Information and Requirements."

Whenever it is provided in this Agreement that notice shall be given or other communications sent to Department, such notices or communications shall be delivered or sent to the Project Manager at the address set forth in Article 2 of Section IV, "Supplementary Bidding Information and Requirements." However, the Bid submittal should be addressed as stated in *Article 3 – Bid Instruction* below.

ARTICLE 2 - Interpretation of Bidding Documents

No interpretation of the meaning of the Bidding Documents will be made orally: all questions regarding the intent or meaning of the Bidding Documents shall be submitted in writing to the Project Manager at the address set forth in Article 2 of Section IV, "Supplementary Bidding Information and Requirements". The reply to the same, when deemed necessary, will be made available by Addenda. To be given consideration, all inquiries must be received in writing at the address set forth in Article 2 of Section IV, "Supplementary Bidding Information and Requirements", at least ten (10) days prior to the date fixed for the opening of Bids, or by the date indicated by Department. Any and all interpretations, and any supplemental instructions will be in the form of written Addenda made available in electronic format. Failure of any Bidder to receive any such Addenda shall not relieve said Bidder from any obligation under its Bid as submitted. All Addenda so issued shall become part of the Bidding Documents.

All pre-bid inquiries answered by means other than Addenda shall not be binding.

ARTICLE 3 - Bid Instructions

Department invites sealed Bids, on the forms attached hereto and submitted in the envelopes provided to: New York State Department of Environmental Conservation, Division of Management and Budget Services, Bureau of Expenditures, 625 Broadway, 10th Floor, Albany, New York, 12233-5027.

The outside of the envelope must bear the name and address of the Bidder, the Site Name, Site Number and Contact Number from the cover of the Contract Documents and specification book, and be clearly marked as "Bid."

Department may consider non-responsive any Bid not prepared and submitted in accordance with the provisions hereof, may waive any informalities or irregularities in any bid, or may reject any or all Bids. Bids that are illegible or that contain any omission, erasures, alterations, additions, conditions, or items not called for in the Bidding Documents, or that contain other irregularities of any kind, may be rejected as non-responsive. The failure or omission of any Bidder to obtain or examine any form, instrument, document or Bidding Documents, or any part thereof, shall in no way relieve any Bidder from any obligation in respect to its Bid. Complete sets of Bidding Documents shall be used in preparing Bids; neither Department nor Engineer assume any responsibility for errors or misinterpretations resulting from the use of incomplete sets of Bidding Documents.

Department is responsible for providing Addenda only to those persons or firms listed as having attended the mandatory Pre-Bid Conference.

Department and Engineer make copies of Bidding Documents available only for the purpose of obtaining Bids on the Work and do not authorize any other use of the Bidding Documents.

Each Bid must be submitted on the official form which is furnished by Department. All blank spaces in the Bid must be filled in as noted, and no change shall be made in the phraseology of the Bid or in the items mentioned therein.

The Bidder shall sign, in the space provided in the Bid form, with his or her usual signature. An officer of a corporation or a member of a partnership signing for the Bidder, shall place his or her signature and title after the word "By" under the name of the Contractor. The same procedure shall apply to the Bid of a joint venture by two or more Bidders; however, if the signature is by an agent or attorney-in-fact for the parties of the joint venture, then the Bid shall be accompanied by evidence of his or her authority to act on behalf of all parties of the joint venture.

The Bidder shall complete that portion of the Bid form requesting a statement of the Addenda which have been received, by Addenda number and date. If no Addenda have been received, insert the word, "NONE." Failure to complete this portion of the Bid form may result in a bid being declared non-responsive at Department's option.

Each Bid shall specify in words and figures, the correct gross sum, in the manner hereafter described for which the Work shall be performed according to the Bidding Documents together with a unit price expressed in words and figures for each separate items for which such a price is required. The lowest Bid shall be determined by Department on the basis of the total sum for which the entire Work will be performed, arrived at by a correct computation of all items specified in the Bidding Documents at the prices stated in the Bid. Department reserves the right to reject any Bid in which the Bid prices appear to constitute an unbalanced Bid for the work. In the event there is a discrepancy in any Bid between the unit prices and the extended totals, the unit prices shall govern. In the event there is a discrepancy in any Bid between the prices written in figures and the unit or lump sum prices written in words, the prices written in words shall govern. Department may reject as non-responsive bids which do not contain a price for every numbered item contained in the Bid form, or may insert a zero for every numbered item that doesn't contain a price.

Unless Department gives instructions to the contrary, the Bidder shall use no more than three decimal places in the cents column under unit Bid price items. If Bidder uses more than three decimal places without such instructions, Department may round off the Bid item to three decimal places.

The Bidder is responsible for examining supplemental information which is available for inspection, upon request, at the address for notices in Article 1 of this Section.

Department will not accept any Bid which has been transmitted electronically (e.g. via Facsimile, Telephone, Telegraph, email, text) or which has been received after the designated bid opening time except where there is evidence that the bid arrived on time, but was mishandled by the Department. A late Bid will be returned unopened with notification of the reason for non-acceptance.

Bids will only be accepted from persons or firms who have attended the mandatory Pre-Bid Conference.

Permissible Contacts During a Procurement and Prohibition of Inappropriate Lobbying Influence - Pursuant to State Finance Law §§139-j and §139-k, this contract includes and imposes certain restrictions on communications between a Governmental Entity and an Offerer/Bidder during the procurement process. An Offerer/bidder is restricted from making contacts from the earliest notice of intent to solicit bids through final award and approval of the Procurement Contract by the Department of Environmental Conservation (Department) and, if applicable, Office of the State Comptroller ("restricted period") to other than designated staff unless it is a contact that is included among certain statutory exceptions set forth in State Finance Law §139-j(3)(a). Designated staff, as of the date hereof, is identified on page I-1 of Section I, Advertisement and Notice to Bidders. Department employees are also required to obtain certain information when contacted during the restricted period and make a determination of the responsibility of the Offerer/bidder pursuant to these two statutes. Certain findings of non-responsibility can result in rejection for contract award and in the event of two findings within a four (4) year period, the Offerer / Bidder is debarred from obtaining governmental Procurement Contracts. Further information about these requirements, lobbying including of the law. found а copy new can be at http://www.ogs.state.ny.us/aboutogs/regulations/defaultAdvisoryCouncil.html .

ARTICLE 4 - Modification or Withdrawal of Bid

Permission will not be given to modify or explain by letter, telegram, telephone or otherwise, any Bid after it has been deposited with Department except that a Bid may be withdrawn, modified, and resubmitted prior to the date and time for opening the Bids. After such date and time, no Bid may be withdrawn by a Bidder except as provided by law, and provided further that: 1.) the Bidder files a duly signed written notice of a Bid mistake with Department within two (2) business days after the day of the Bid opening, and 2.) within three (3) business days thereafter demonstrates to the reasonable satisfaction of Department that there has been a material and substantial mistake in the preparation of the Bid. If these two conditions are not met, then the bid bond would be forfeited.

Prior to submittal of Bid, a Bidder may alter or correct a unit price, or a lump sum item, which has been entered on the Bid form by crossing out the entry, entering the new figure above or below the crossed-out entry, and initialing on the line of change. The crossing out of entries shall be with ink, or typed. All new entries and initials shall be legibly handwritten with ink, or typed. Any ambiguity arising from entries altered or corrected on the Bid Form may be cause for Department's rejection of the Bid as non-responsive.

If the Bid is made by an individual, the business address shall be given. If made by a corporation, the names and business addresses of the president, secretary and treasurer shall be given. If made by a partnership, the names and business addresses of the partners shall be given.

Department reserves the right to disqualify Bids, before or after opening, upon evidence of collusion with intent to defraud or other illegal practices upon the part of the Bidder.

All Bids submitted by an individual, a firm or partnership, a corporation or association, which submits more than one Bid for the same Work under the same or different name shall be rejected.

ARTICLE 5 - Required Bid Submittals

The following are to be submitted within the time periods indicated. At the option of Department, failure to make or amend a submittal will constitute proof that the Bidder has abandoned all rights and interests in the contract; that the Bid Security is forfeited to Department as liquidated damages; and that the Work may be awarded to another Bidder in a manner consistent with Law.

- a) The following items are to accompany Contractor's Bid submitted to Department as required in Article 3. The applicable forms and instructions can be found in Section V – Consolidated Bid Form Acknowledgements, Article 1:
 - Form of Bid (completed and endorsed)

- Bid Bond or Certified Check
- Offerer Disclosure of Prior Non-Responsibility Determinations (completed and endorsed)
- Vendor Assurance of No Conflict of Interest or Detrimental Effect (endorsed)
- In the case of a legally constituted joint venture, the bidders must submit a copy of the written joint venture agreement with their bid. Each member can only be part of one (1) joint venture. The agreement shall clearly define the relationship and services to be performed by each member, identify the authorized representative for each member, designate the lead principal participant, provide proof of insurance, identify percent equity share held by each member, and include any other relevant information.
 - The Bidder must also submit a statement signed by the Bidder's authorized representative acknowledging that such entities will be required to provide evidence of joint and several liability for the Bidder's obligations under the Contract. If the entity is an LLC, a statement signed by the bidder's authorized representative acknowledging that such entities will be required to provide guarantees of the Bidder's obligations under the Contract.
 - If the joint venture has not yet been legally formed, then the Bidder must submit a description of the proposed legal structure and draft copies of the underlying documents, including: a) all significant terms of the joint venture or partnership, including the rules relative to the administration of the joint venture, limited liability company or partnership, including dealing with deadlock situations; b) description of how the joint venture, limited liability company or partnership will operate administratively and technically; and c) a teaming agreement or comparable document setting forth the equity member's agreement to form the organization.
- Sexual Harassment Prevention Certification (see Article 26 below)
- Certificate Under Executive Order No. 16, Prohibiting State Agencies and Authorities from Contracting Businesses Conducting Business in Russia (see Article 27 below)
- b) The following items shall be submitted to the Project Manager within five (5) days of notification that the Bidder is the apparent low Bidder. The applicable forms and instructions can be found in Section V – Consolidated Bid Form Acknowledgements, Article 2:
 - Off-site permitted facility to receive material along with a copy of the facilities permit

- Plan of Operations (Work Plan) and Progress Schedule, Health and Safety Plan, Sampling Plan, and QA/QC Plan
- Statement of Surety's intent, complete and signed by a duly authorized surety company licensed to do business in the State of New York
- A description of projects completed by Bidder documenting its experience in this type of work, including previous experience (including applicable experience in New York State and evaluations from other clients for whom the bidder has provided goods and/or services); the abilities and experience of the personnel to be assigned to the work and the ability to provide any needed advanced techniques such as modeling; and overall, information which demonstrates the bidder's skill, judgment and business integrity. This should include the Bidder's approach proposed in meeting the requirements of the scope of work and the need to purchase the goods from and/or subcontract performance of services to others, outlining any cost or schedule impacts to the Bidder's overall performance of the Work.
- Completed NYS Vendor Responsibility Questionnaire (CCA-2) or an affidavit of no change (if appropriate). If the forms are filed using OSC's online VendRep System, a letter certifying that the forms have been so completed and submitted must be sent to the Project Manager. In the case of a joint venture, each member will be required to complete and submit a NYS Vendor Responsibility Questionnaire or an affidavit of no change (if appropriate). (Must be bound separately if submitting a paper copy of the Vendor Responsibility Questionnaire.)
- The Contractor agrees to submit an MWBE Utilization Plan and Work Force Utilization Plan either prior to or at the time of the execution of the contract. The Contractor agrees to use such MWBE Utilization Plan for the performance of MWBE's on the Contract Pursuant to the prescribed MWBE goals.
- An Authorizing Resolution stating that a certain individual has the authority to sign the Contract on behalf of the firm.
- Endorsed Executive Order No. 177 Certification (Anti-Discriminatory Policies and Practices)
- Any other information that demonstrates the Bidder's ability to perform the work described herein
- Low bidders may be asked to submit additional information to demonstrate competency

- c) The following items shall be submitted to the Project Manager within 14 days from the date of the Notice of Intent to Award letter from Department. The applicable forms and instructions can be found in Section V – Consolidated Bid Form Acknowledgements, Article 3:
 - Executed Agreement (four (4) endorsed originals)
 - Performance Bond with Power of Attorney & Surety Financial Statement (original and three copies)
 - Labor & Materials Bond with Power of Attorney & Surety Financial Statement (original and three copies)
 - Bid Breakdown of Items (original) (see Article 12 below)
 - Certificates of Insurance (original)
 - Consultant/Contractor Detailed M/WBE-EEO Utilization Plan (original). If the forms are filed using the Department's electronic M/WBE System, a letter certifying that the forms have been so completed and submitted must be sent to the Project Manager.
 - Service-Disabled Veteran-Owned Business (SDVOB) Utilization Plan (original) as detailed in Appendix D

ARTICLE 6 - Bid Security and Bonds

Bid Security shall be made payable to Department in an amount not less than five (5) percent (5%) of the Bidder's gross sum Bid. The Bid Security shall be in the form of either a certified or bank check upon an incorporated bank or trust company, or a Bid Bond issued by a surety satisfactory to Department.

Department will accept only Bonds from a surety company licensed to write Bonds of such character and amount under the laws of New York State and which are listed on the U.S. Treasury Department Circular 570.

Attorneys-in-fact who sign Bonds shall file with such Bonds a certified copy of their Power of Attorney to sign Bonds and to conduct business in the State of New York.

The Bid Security of a Bidder awarded a Contract for the Work will be retained until such Bidder has executed the Agreement and furnished the required bonds and insurance, whereupon the Bid Security will be returned. If the Bidder fails to execute and deliver the Agreement, other required documents and furnish the required bonds and insurance within fourteen (14) days after the Notice of Intent to Award, Department may annul the Notice of Intent to Award, and the Bid Security of that Bidder will be forfeited to Department. The Bid Security of any Bidder whom Department believes to have a reasonable chance of receiving the award may be retained by Department until the earlier of the 45th day after the Bid opening or seven (7) days after the Effective Date of the Agreement, whereupon Bid Security furnished by such Bidders will be returned. Bid Security of other Bidders will be returned after the Bid opening.

ARTICLE 7 - Approval of "or Equal" or Substitution Equipment, Systems or Items

There shall be no approval given by Department or Engineer during the bidding period or prior to Award of Contract for any "or equal" or substitution equipment, systems or items.

ARTICLE 8 - Other Contracts and Occupancy

Department may award other contracts in connection with this Work. Contractor shall not have exclusive occupancy of the real property within or adjacent to the limits of the Work.

In case of interference between the operations of utility owners and different contractors, Department will be the sole judge of the rights of each contractor and the sequence of work necessary to expedite the completion of the entire Project. In all such cases, Department's decision shall be accepted as final.

ARTICLE 9 - Taxes

Department is exempt from the payment of sales and compensating use taxes of the State of New York and of cities and counties on all materials, equipment and supplies sold to Department pursuant to this Contract. Also exempt from such taxes are purchases by Contractor and its Subcontractors of materials, equipment and supplies to be sold to Department pursuant to this Contract, including tangible personal property to be incorporated in any structure, building, or other real property forming part of the Project. These taxes are therefore not to be included in the Bid. The cost of all other taxes under the Contract shall be included in the Bid prices for the several items of the Contract.

ARTICLE 10 - Experience and Financial Statements

In accordance with New York State Executive Order No. 170, a Contract shall only be awarded to a responsible Bidder capable of performing and completing the Work in a satisfactory manner. The NYS Vendor Responsibility Questionnaire, instructions for which are included in Section V, "Bid Forms and Attachments" must be completed and submitted by the apparent low Bidder within five (5) days after the apparent low Bidder has been so notified.

Failure of the apparent low Bidder to timely submit the complete, properly executed questionnaire within five (5) days may result in disqualification.

Before Department will consent to any subcontracts at or over \$10,000, unless otherwise agreed to by the Department, the proposed subcontractor must submit the complete, properly executed "NYS Vendor Responsibility Questionnaire" through Contractor. Any delay in the progression of work caused by the failure of a subcontractor to comply with these requirements will be attributable to Contractor and any additional costs will be Contractor's responsibility.

The low Bidder shall demonstrate its responsibility to perform and complete Work by submitting a statement of its experience and the experience of any Subcontractor which the low Bidder intends to use to perform the Work. Department may require the low Bidder to further demonstrate its responsibility to perform and complete Work by submitting an additional experience and financial statement or information seven (7) days after bid opening or within seven (7) days of Department request, which shall include at a minimum, information pertaining to the Bidder's financial resources. The submitted financial information shall be certified by a Certified Public Accountant, and shall be submitted in the form required by Department. This can also apply to Contractor's Subcontractors.

In the case of a joint venture, each member must meet the experience requirements as amended above. A bid cannot be submitted by a Bidder, including a joint venture, where the Bidder or one of the members of a joint venture has less than three (3) years satisfactory experience in construction of the work to be performed, unless the Bidder or member of a joint venture is a successor in interest to a pre-existing company which meets the required minimum of three (3) years satisfactory experience in construction of the work to be performed.

All on-site personnel are required to have 40-hour Occupational Safety and Health Administration (OSHA) training plus a current eight-hour refresher, baseline medical monitoring, plus a current yearly physical, and training and current fit testing for respirator use if applicable.

Additionally, the successful Contractor must be compliant with Section X – Standard Specifications, SPEC 01 35 29 – Contractor's Health and Safety Plan and Safety and the OSHA Standards and Regulations contained in Title 29, Code of Federal Regulations, Part 1910 and 1926 (20 CFR 1910 and 1926) and subsequent additions and/or modifications, the New York State Labor Law Section 876 (Right-to-Know Law), the Standard Operating Safety Guidelines by the United States Environmental Protection Agency (EPA), Office of Emergency and Remedial Response and the Occupational Safety and Health Guidance Manual for Hazardous Waste Site Activities (NIOSH, OSHA, USCG, and EPA) provide the basis for the safety and health program. Additional specifications within this section are in addition to OSHA regulations and reflect the positions of both the EPA and the National Institute for Occupational Safety and Health (NIOSH) regarding procedures required to ensure safe operations at abandoned hazardous waste disposal sites.

ARTICLE 11 - Preliminary Progress Schedule

The Preliminary Progress Schedule shall consist of three (3) copies of a narrative description and a time-scaled critical path method diagram or bar chart diagram as specified in Section X – Standard Specifications, SPEC 01 32 16 – Progress Schedule. The narrative in the Preliminary Progress Schedule shall describe the order in which Bidder proposes to perform the Work pursuant to the specified Contract Time(s) and Work sequence conditions indicated in or required by the Bidding Documents. It shall also indicate proposed starting and completion dates for Work expressed in terms of days elapsed from the Notice to Proceed associated with each division of the Specifications within each major structure or geographical area of Work. Activities shall further identify significant submittals, approvals and associated deliveries, significant testing, major Department responsibilities, and responsibilities of affected utilities and third parties. The narrative shall include monthly percentages of completion for the Work in relation to the rate of progress anticipated in the Preliminary Progress Schedule.

ARTICLE 12 - Bid Breakdown

The Bid breakdown shall be submitted by the apparent low Bidder within fourteen (14) days after the date of the Notice of Intent to Award letter. Discrepancies, ambiguities or conflicts in the Bid breakdown shall be resolved in accordance with the terms and conditions set forth in Article 8.10 of Section VIII the General Conditions.

A Bidder submitting a Bid breakdown and awarded a Contract for the Work agrees and understands that those prices for separable parts of the Work disclosed on the Bid breakdown, where they are applicable and determined to be reasonable by Department may be used for the purposes of: a.) measurement and payment, b.) increase(s) or decrease(s) in the Contract Price due to adjustments in quantities to the separable parts of the Work, and c.) Change Orders or Proposed Change Orders which add or deduct like Work.

ARTICLE 13 - Subsurface and Technical Information

If boring logs and other subsurface information were made available for the inspection of Bidders, please note that such data were obtained with reasonable care and were recorded in good faith by Department, Engineer or the Design Engineer.

The soil and rock descriptions shown are as determined by a visual inspection of the samples from the various explorations unless otherwise noted. The observed water levels and/or water conditions indicated thereon are as recorded at the time of the exploration. These levels and/or conditions may vary considerably, according to the prevailing climate, rainfall and other factors, including the passage of time.

Similarly, data concerning leachate were obtained with reasonable care and recorded in good faith. The location and concentrations of leachate may vary considerably according to the prevailing climate, rainfall and other factors, including the passage of time. Bidders

may rely upon accuracy of the subsurface technical data as to where (location) and when (exact time) data was obtained; but not upon non-technical data, interpretations or opinions contained therein or for the completeness thereof.

When reports showing data obtained by investigations and tests at the site by Department, Engineer or the Design Engineer are included with the Bidding Documents, or made available to Bidders as set forth in the Bidding Documents, it is expressly understood and agreed that technical data, but not any non-technical data, interpretations or opinions contained in such reports, are incorporated by reference into the Contract Documents. Bidders may rely upon the accuracy of all such technical data contained in such reports as to where (location) and when (exact time) such technical data was obtained, unless the Bidding Documents limit any other basis upon which such technical data may be relied upon. It is further expressly understood and agreed that the use of any technical data contained in such reports is subject to all of the conditions and limitations set forth in the Bidding Documents.

Subsurface and technical information is made available to Bidders in good faith so that they may be aware of the information utilized for design and estimating purposes. Department makes no representations or warranties, express or implied, as to the completeness of this information or data, nor is such disclosure intended as a substitute for personal investigations, interpretations, and judgment of the Bidder.

ARTICLE 14 - Underground Facilities

The locations of Underground Facilities were ascertained with reasonable care and recorded in good faith from various sources, including the records of municipal and other public service corporations, and therefore such locations may only be approximate. Department does not assume responsibility for the accuracy or completeness of such locations.

ARTICLE 15 - Examination of Bidding Documents and Site

It is the responsibility of each Bidder, before submitting a Bid to: a.) examine the Bidding Documents thoroughly, b.) visit and visually inspect the site during the Pre-Bid Conference required pursuant to Article 3 of Section IV, "Supplementary Bidding Information and Requirements," c.) become familiar with local conditions that may affect cost, schedule, performance or furnishing of the Work, d.) become familiar with applicable Laws that may in any manner affect cost, schedule, performance or furnishing of the Work, e.) study and carefully correlate Bidder's observations with the Bidding Documents, and f.) notify the Project Manager identified in Article 1 of this Section promptly after discovering any conflicts, ambiguities, errors or inconsistencies in the Bidding Documents.

It is the responsibility of each Bidder to obtain any additional documents, information or data which pertain to the physical conditions (surface, subsurface and Underground

Facilities) at or contiguous to the site which may affect cost, schedule, progress, performance or furnishing of the Work and which Bidder deems necessary to determine its Bid for performing and furnishing the Work in accordance with the Bidding Documents.

The submission of a Bid constitutes an incontrovertible representation by Bidder that Bidder has taken steps reasonably necessary to ascertain the nature and location of the Work, and that Bidder has investigated and accounted for in the preparation of the Bid: a.) Governmental requirements and all reasonably foreseeable general and local conditions that may affect cost, schedule, performance or furnishing of the Work. Examples of such conditions include: 1.) conditions bearing upon the transportation, disposal, handling and storage of materials, 2.) the availability and suitability of labor, water, electric power, telephone, sanitary services, and roads, 3.) weather, river stages, tides or similar conditions at or contiguous to the site, 4.) physical conditions of the site, and 5.) the character of equipment and facilities needed preliminary to and during Work performance, b.) character, quality and quantity of surface, subsurface and Underground Facilities at or contiguous to the site, insofar as this information is reasonably ascertainable from the Drawings and Specifications included as part of the Bidding Documents, from the reports referenced in the Supplementary Bid Information. and from the documents, information and data regarding physical conditions at or contiguous to the site obtained by Bidder, and c.) Bidding Documents to be sufficient in scope and detail to indicate and convey understanding of all terms and conditions affecting cost, schedule, performance and furnishing of the Work.

Any Failure to take the actions described in this Article will not relieve that Bidder from responsibility for estimating properly the difficulty, cost of, and schedule for successfully performing the Work, or from performing the Work successfully without an increase in Contract Price or an extension in Contract Time.

Department, Engineer, or Design Engineer do not assume any responsibility for any conclusions or interpretations made by any Bidder based on the information made available by the Bidding Documents. Nor does Department, or Engineer assume any responsibility for any understanding reached or representation made concerning conditions which can affect the cost, schedule, progress, furnishing and performance of the Work prior to execution of the Contract, unless that understanding or representation is expressly stated in the Bidding Documents.

In an itemized contract, the estimate of quantities of work to be done and materials to be furnished is approximate and is given only as a basis of calculation upon which the award of the contract is to be made. Department does not assume any responsibility that the quantities estimated will be the actual quantities required; Contractor may not claim misunderstanding or deception because of such estimates of quantities or of the character of the work, location, or other condition pertaining thereto. Department may increase or diminish any or all of the quantities of work mentioned above or omit any of them, as deemed necessary or as being in the best interest of Department.

ARTICLE 16 - Subcontractors, Suppliers or Others

Unless otherwise agreed in writing by Department, Contractor shall subcontract no more than the percentage (%) of the total cost of the work under its contract as may be provided by the Contract Documents in Article 6 of Section IV, "Supplementary Bidding Information and Requirements". Procedures for approval of Subcontractors, Suppliers or other persons or organizations, after execution of the Agreement, are set forth in the General Conditions and the Supplementary Conditions.

ARTICLE 17 - Award of Contract

The Contract will be awarded to the lowest, responsive and responsible Bidder(s) that has prepared acceptable required submittals, in the opinion of Department, as stipulated in Article 5 of this Section.

To the extent permitted by applicable Law, Department reserves the right to reject any and all Bids, to waive any and all informalities or irregularities, to disregard all nonconforming, nonresponsive, or conditional Bids, or to re-advertise for Bids.

In order to be considered responsive, a Bid shall be completed, signed and be responsive in all respects to the Bidding Documents unless informalities are waived by Department.

In order to be considered responsible, a Bidder must establish to the complete satisfaction of Department and Engineer, as a minimum, that it has adequate and satisfactory experience and financial resources to meet the obligations under the Contract and award of the Contract would be in the best interest of the State. A Bidder's prior experience shall be considered satisfactory when among other factors, its performance of prior work was timely, of good quality, in compliance with any contract requirements including contracted costs and schedule, and in compliance with applicable Law. The Bidder must have a minimum of three (3) years satisfactory experience in construction of the work to be performed. This experience must include, but not be limited to, the excavation, transportations, and handling of hazardous waste and contaminated soil/sediment. Experience must also include the handling and treatment of contaminated water generated from hazardous waste operations. For work to be deemed satisfactory, the work must have been performed with required oversight from United States Environmental Protection Agency (USEPA), Department, or an equivalent state environmental regulatory agency (i.e., New Jersey DEP, Pennsylvania DER, etc). Brownfield cleanup work qualifies for the experience requirement. The bidder cannot meet the minimum experience requirements through the use of subcontractor(s).

Department may conduct such investigations as it deems necessary to assist in the evaluation of any Bid and to establish the responsibility in terms of satisfactory experience and financial ability of the Bidder, and of any proposed subcontractors. Department may reject the Bid of any Bidder which it deems not to be responsible and may reject performance of Work by any Subcontractor which it deems is not responsible.

It is the intention of Department that the work will be awarded within 45 calendar days after the opening of bids to the lowest responsive, responsible Bidder whose bid conforms to the requirements of the Contract Documents. Bids may not be withdrawn, altered or revoked during this 45-day period except as provided by law and specified within Article 4 of this Section. Even after the expiration of such 45-day period, Department may accept a Bid and award the work to any Bidder whose bid has not been unequivocally withdrawn or revoked prior to the mailing of written Notice of the Award to the successful Bidder. For purposes of the preceding sentence, withdrawal or revocation of a Bid shall not occur until Department receives an unequivocal written statement to that effect.

ARTICLE 18 - Time is of the Essence

Time is of the essence for the performance of Work required by the Contract Documents.

ARTICLE 19 - Applicability of Federal, State and Local Law

Any Bid and any Contract awarded pursuant to a Bid shall be subject to and governed by applicable Law.

It is the responsibility of each Bidder to be informed of and comply with federal, state and local Laws, affecting the cost, schedule, progress, performance or furnishing of the Work. This requirement includes, but is not limited to, applicable regulations concerning minimum wages, nondiscrimination in employment, affirmative action, protection of public and employee safety and health, environmental protection, fire protection and permits, and fees and licensing.

ARTICLE 20 - M/WBE and EEO Requirements

The M/WBE and EEO provisions of Appendix B are required provisions for this contract. The Bidder is required to comply with State regulations 9NYCRR Part 543 entitled, "Requirements and Procedures Regarding Business Participation Opportunities for Minorities and Women on State Contracts."

The selected Bidder shall be required to make good-faith efforts to subcontract at least the percentage stipulated in Section VII of Appendix B, of the contract price to NYS Certified Minority Business Enterprise(s) (MBE) and Women Business Enterprise(s) (WBE), respectively.

In accordance with Executive Law Article 15-A, Department is required to make available the NYS Directory of Certified Minority and Women Owned Business Enterprises. Empire State Development has put the Minority and Women's Business Development Directory on the Internet at <u>www.ny.newnycontracts.com</u>. Support will be available from 9:00 a.m. to 5:00 p.m., Monday through Friday, except for NYS holidays. If assistance is needed call (855) ESD-4MWBE or (855) 373-4692. For additional information and assistance regarding NYS Certified M/WBE's, please contact the Department's Minority and Women's Business Programs Unit at (518) 402-9240.

Pursuant to New York State Executive Law Article 15-A, and the attending rules and regulations, an approvable M/WBE Utilization Plan and Work Force Utilization Plan shall be required prior to or at the time of the execution of the Contract.

Contractor shall be required to provide equal opportunities to minorities and women with regard to all jobs necessary for the performance of work or contracts required by the project. In doing so, Contractor agrees to make good-faith efforts to employ minorities and women for at least the percentage stipulated in Section VII of Appendix B, of the work force hours required for the completion of the project. Different occupational category work force participation goals may be used to meet these overall goals for work force participation. Contractor shall not discriminate against employees or applicants for employment because of race, creed, color, national origin, sex, age, disability, or marital status, and shall undertake or continue existing programs of affirmative action to ensure that minority group persons and women are afforded equal opportunity without discrimination. Such programs shall include, but not be limited to, recruitment, employment, job assignment, promotion, upgrading, demotion, transfer, layoff, termination, rates of pay or other forms of compensation, and selection for training or retraining, including apprenticeship and on-the-job training.

As required by Department, Contractor shall request of each employment agency, labor union, or authorized representative of workers with which it has a collective bargaining or other agreement or understanding and which is involved in the performance of the contract with the Agency to furnish a written statement that such employment agency, labor union, or representative shall not discriminate because of race, creed, color, national origin, sex, age, disability, or marital status, and that such union or representative will cooperate in the implementation of Contractor's obligations hereunder.

Contractor shall include the provisions of Section VII of Appendix B in every subcontract or purchase order in such a manner that the subcontractor shall be required to comply with such provisions with respect to its work in conjunction with the contract with Department.

ARTICLE 21 – Participation Requirements for New York State Certified Service-Disabled Veteran-Owned Businesses

Article 17-B of the New York State Executive Law provides for more meaningful participation in public procurement by certified Service-Disabled Veteran-Owned Businesses (SDVOBs), thereby further integrating such businesses into New York State's economy. The Department recognizes the need to promote the employment of service-disabled veterans and to ensure that certified service-disabled veteran-owned businesses have opportunities for maximum feasible participation in the performance of Department contracts.

In recognition of the service and sacrifices made by service-disabled veterans and in recognition of their economic activity in doing business in New York State, Bidders are

strongly encouraged and expected to consider SDVOBs in the fulfillment of the requirements of the Contract. Such participation may be as subcontractors or suppliers, as protégés, or in other partnering or supporting roles. To obtain more information regarding the utilization of SDVOBs including how to find and contact them, please use the contact information below or go to the Division of Service Disabled Veteran's Business Development (DSDVBD) website at: <u>https://ogs.ny.gov/Veterans/default.asp</u>.

The contractor must make good faith efforts to subcontract a goal of six (6) percent (%) of the contract amount to New York State Certified Service-Disabled Veteran-Owned Businesses (SDVOBs), for purposes of providing meaningful participation by SDVOBs. Appendix D further defines the SDVOB provisions required by Executive Law, Article 17B.

ARTICLE 22 - Permissible Contacts During a Procurement and Prohibition of Inappropriate Lobbying Influence

Chapter 1 of the Laws of 2005, as amended by Chapter 596 of the Laws of 2005 (collectively referred to as the "Lobbying Law"), makes major changes to the Legislative Law and State Finance Law relative to lobbying on government procurements. More specifically, the Lobbying Law creates two new sections in the State Finance Law: Section 139-j addresses restrictions on "contacts" during the procurement process; and Section 139-k addresses the disclosure of contacts and the responsibility of offerer(s)¹ during the procurement process. The Lobbying Law applies to all procurements initiated on or after January 1, 2006. In this regard, a procurement means a contract or agreement involving an annual expenditure in excess of \$15,000 for a commodity, service, technology, public work, or construction; purchase, sale or lease of real property; or revenue contract.

In conformity with the Lobbying Law, during a procurement's restricted period² the only New York State Department of Environmental Conservation (Department) officer(s) or employee(s) that the offerer may "contact" is/are the Department designated contact person(s) for that procurement. In this regard, "contact" means any oral, written, or electronic communication under circumstances where a reasonable person would infer that the communication was intended to influence a procurement. Exceptions to this rule include:

- submission of a written proposal in response to an RFP, IFB or any other solicitation method;
- submission of written questions as part of an RFP, IFB or other solicitation method where all written questions and written responses will be provided to all offerer(s);

¹ Individual or entity, or any employee, agent, consultant or person acting on behalf of such individual or entity, that contacts the Department about a procurement during the restricted period.

² The period of time commencing with the earliest public notice, advertisement or solicitation of a Request for Proposals (RFP), Invitation for Bids (IFB), solicitation of proposals or any other method for soliciting responses from offerers intending to result in a procurement contract by the Department, and ending with the final contract award and approval by the Department, and the Office of the State Comptroller (if required).

- participation in a pre-proposal or pre-bid conference scheduled as part of an RFP, IFB or other solicitation process;
- written complaints by an offerer that the Department designated contact for a procurement fails to respond to in a timely manner;
- negotiations with the Department following tentative award;
- contacts between designated Department staff and offerer to request the review of a contract award; and
- communications with the Department regarding an appeal, protest or other review of a procurement, participation in an administrative or judicial proceeding regarding a procurement, and complaints regarding a procurement made to the Attorney General, Inspector General, District Attorney, or State Comptroller.

An offerer shall not, under any circumstances, attempt to influence a Department procurement in a way that violates or attempts to violate: Public Officers Law Section 73(5), relating to gifts intended to influence; or Public Officers Law Section 74, relating to the code of ethics for employees of state agencies, public authorities and public benefit corporations, members of the New York State Legislature, and Legislative employees.

An offerer who contacts the Department designated contact person for a procurement during the restricted period must be prepared to provide the following information: name, address, telephone number, place of principal employment and occupation of the person or organization making the contact, and whether the person/organization making the contact is the offerer or is retained, employed or designated by or on behalf of the offerer to appear before or contact the Department about the procurement.

An offerer that submits a proposal, bid or other response to a Department RFP, IFB or other solicitation method must: certify that it understands and agrees to comply with these guidelines regarding permissible contacts during a procurement and the prohibition of inappropriate lobbying influence; and disclose whether any governmental entity has, within the prior four years, found the offerer non-responsible due to a violation of the Lobbying Law or the intentional provision of false or incomplete information. Further, all Department procurement contracts will contain: a certification by the offerer that all information provided to the Department with respect to the Lobbying Law is complete, true and accurate; and a provision authorizing the Department to terminate the contract in the event such information is found to be intentionally false or incomplete.

The Department will investigate all allegations of violations of the Department guidelines regarding permissible contacts during a procurement and the prohibition of inappropriate lobbying influence. A finding that an offerer has knowingly and willfully committed such a violation may result in a determination that the offerer and its subsidiaries are non-responsible and therefore ineligible for award of the procurement contract. A second determination of non-responsibility for such a violation within four (4) years of the first such determination may render the offerer and its subsidiaries ineligible to submit a bid

or proposal or be awarded a procurement contract for four (4) years from the date of the second determination. The Department will notify the New York State Office of General Services (OGS) of any determination of non-responsibility or debarments due to violations of the Lobbying Law.

If you require further guidance on the new Lobbying Law, you are encouraged to visit the Advisory Council on Procurement Lobbying website at the following address: <u>http://www.ogs.state.ny.us/aboutOgs/regulations/defaultAdvisoryCouncil.html</u>, where Frequently Asked Questions (FAQ's) and answers adopted by the council have been posted. A copy of the new Procurement Lobbying Law is also available on this website.

ARTICLE 23 – Diesel Emissions Reduction Act 2006

In 2007, New York State passed legislation establishing the Diesel Emissions Reduction Act 2006 (DERA). This Act amended the Environmental Conservation Law (ECL) by adding Section 19-0323 which requires the use of best available retrofit technology (BART) and ultra-low sulfur diesel fuel (ULSD) for heavy duty vehicles owned or operated by, including on behalf of, state agencies and state or regional public authorities. The Department has promulgated regulations (6 NYCRR Part 248) to provide guidance on provisions of the law. The regulations may be found on the Department's website at http://www.dec.ny.gov/regs/2492.html.

The Contractor must comply with the specifications and provisions of ECL Section 19-0323 and 6 NYCRR Part 248, which require the use of Best Available Retrofit Technology (BART) and Ultra Low Sulfur Diesel (ULSD), unless specifically waived by the Department. Qualifications for a waiver under this law will be the responsibility of the Contractor.

ARTICLE 24 – Environmental Protection Fund Acknowledgment

If applicable, in recognition of a portion of the Department funds utilized for any work completed under this Contract, the Contractor agrees to acknowledge in any communication to the public, that such funding was provided from the Environmental Protection Fund as administered by the New York State Department of Environmental Conservation.

Article 25 – Executive Order 177

Executive Order No. 177, Prohibiting State Contracts with Entities that Support Discrimination, orders that New York State's government will not do business with entities that promote or tolerate discrimination or infringement on the civil rights and liberties of New Yorkers. New York State is dedicated to ensuring that all individuals are treated equally, regardless of their age, race, creed, color, national origin, sexual orientation, gender identity, military status, sex, marital status, disability, or other protected basis. To that end, New York has enacted numerous laws, regulations, and policies, and will

continue to aggressively enforce its strong protections against discrimination to the maximum extent allowable by law.

In order to comply with this order, the Contractor is required to complete the Executive Order No. 177 Certification which certifies that it does not have institutional policies or practices that fail to address the harassment and discrimination of individuals on the basis of their age, race, creed, color, national origin, sex, sexual orientation, gender identity, disability, marital status, military status, or other protected status under the Human Rights Law.

Article 26 - Sexual Harassment Prevention Certification

State Finance Law §139-I requires bidders on state procurements to certify that they have a written policy addressing sexual harassment prevention in the workplace and provide annual sexual harassment training (that meets the minimum requirements of section two hundred one-g of the NYS Labor Law and Department of Labor's model policy and training standards) to all its employees.

Where competitive bidding is required pursuant to statute, rule or regulation, every bid made to the state or any public department or agency of the state must contain the following statement:

"By submission of this bid, each bidder and each person signing on behalf of any bidder certifies, and in the case of a joint bid each party thereto certifies as to its own organization, under penalty of perjury, that the bidder has and has implemented a written policy addressing sexual harassment prevention in the workplace and provides annual sexual harassment prevention training to all of its employees. Such policy shall, at a minimum, meet the requirements of section two hundred one-g of the labor law."

Bids that do not contain the certification will not be considered for award; provided however, that if the bidder cannot make the certification, the bidder shall provide a signed statement with their bid detailing the reasons why the certification cannot be made. After review and consideration of such statement, the Department may reject the bid or may decide that there are sufficient reasons to accept the bid without such certification.

Bidders are required to sign and submit the Sexual Harassment Prevention Certification form, included in Section V, Article 1(g). If the bidder cannot make the certification then a signed statement must be submitted with the bid detailing the reasons why the certification cannot be made.

Article 27 - Executive Order No. 16

Executive Order No. 16 provides that "all Affected State Entities are directed to refrain from entering into any new contract or renewing any existing contract with an entity conducting business operations in Russia." The complete text of Executive Order No. 16 can be found at https://www.governor.ny.gov/executive-order/no-16-prohibiting-state-agencies-and-authorities-contracting-businesses-conducting . The Executive Order remains in effect while sanctions against Russia imposed by the federal government are in effect. Accordingly, vendors who may be excluded from award because of current business operations in Russia are nevertheless encouraged to respond to solicitations to

preserve their contracting opportunities in case the sanctions are lifted during a solicitation or even after award in the case of some solicitations. As defined in Executive Order No. 16, an "entity conducting business operations in Russia" means an institution or company, wherever located, conducting any commercial activity in Russia or transacting business with the Russian Government or with commercial entities headquartered in Russia or with their principal place of business in Russia in the form of contracting, sales, purchasing, investment, or any business partnership. Vendors responding to this solicitation are required to complete and submit the form entitled "Certification Under Executive Order No. 16 Prohibiting State Agencies and Authorities from Contracting with Businesses Conducting Business in Russia".

SECTION IV

Supplemental Bidding Information and Requirements

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SECTION IV

Supplementary Bidding Information and Requirements

ARTICLE 1 - Location and Description of Project

The Site Number of this project is 819018. The Project is located at 301 Bank Street, City of Batavia, Genesee County, NY. Access to the site is from 301 Bank Street.

The project includes contaminated soil excavation and transport to a permitted disposal facility contaminated material and restoration of the site as described in the contract documents.

ARTICLE 2 - Department Representatives

Lisa Gorton, Project Manager Division of Environmental Remediation lisa.gorton@dec.ny.gov 625 Broadway, Albany, NY 12233-7011 Benjamin Rung, Section Chief Division of Environmental Remediation benjamin.rung@dec.ny.gov 625 Broadway, Albany, NY 12233-7011 Andrew Guglielmi, Division Director Division of Environmental Remediation Designated Rep. to Resolve Disputes 625 Broadway, Albany, NY 12233-7011 andrew.guglielmi@dec.ny.gov Division of Environmental Remediation Kristopher Keenan, Project Field Representative 625 Broadway, Albany, NY 12233-7011 Krisopher.keenan@dec.nv.gov

ARTICLE 3 - Pre-Bid Conference

A pre-Bid conference will be held on July 14, 2022, at the project site located at 301 Bank Street, Batavia, NY, at the time of 1:00 PM Eastern Standard Time to view the Project area. The Pre-Bid Conference is held to discuss the requirements of the Bidding Documents, the protocols for performing the work, the conditions existing at the work site, and to provide for visual inspection of the Site by Bidders. Bidders will be required to sign an attendance sheet to document their presence at the mandatory Pre-Bid Conference.

Department will accept Bids only from those bidders who attend the Pre-Bid Conference, attendance is mandatory as a condition of Bid.

Attendees are encouraged to review COVID-19 Center for Disease Control (CDC) guidelines prior to attendance; current guidelines can be accessed at https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/prevention.html

ARTICLE 4 - Additional Bid Submittals

Experience in performance of the Scope of Work (SOW) and in accordance with Section III, Article 17, Paragraph 4, shall be demonstrated in writing and presented to the Department within five (5) days of Department's Notice of Apparent Low Bid per Section III, Article 5, (b).

Section III – Article 17 outlines the requirements for contractor experience in performance of the Scope of Work (SOW). For this contract, that experience shall be modified as follows:

The Bidder must have a minimum of three (3) years satisfactory experience in construction of the work to be performed. This experience must include:

- 1. The handling and treatment of contaminated water from hazardous waste operations, related to PCB under USEPA self-implementation programs.
- 2. Dewatering of excavations for the purpose of removing soil/waste material in a relatively dry environment.
- 3. The removal, demolition, excavation, transportations, and handling of hazardous waste and contaminated environmental media and materials.

For work to be deemed satisfactory, the work must have been performed with required oversight from USEPA, NYSDEC, or an equivalent environmental regulatory state agency (i.e., New Jersey DEP, Pennsylvania DER, etc.). Brownfield cleanup work qualifies for the experience requirement. The Bidder cannot meet the minimum experience requirements through the use of subcontractor(s).

ARTICLE 5 - Other Available Documents

The following items are available in the Limited Site Data Document for contractor's review in preparing the Bid:

- Figures, tables and field logs from the <u>Phase 1 Pre-Design Investigation Report</u>, Prepared by MACTEC Engineering and Geology, P.C. for the New York State Department of Environmental Conservation. February 2019.
- Figures, tables and field logs from the <u>Phase 2 Pre-Design Investigation Report</u>, Prepared by MACTEC Engineering and Geology, P.C. for the New York State Department of Environmental Conservation. February 2020.
- 3. Figures and tables from the <u>Construction Completion Report Interim Remedial</u> <u>Measure – Offsite City of Batavia Owned Property</u>, prepared by MACTEC

Engineering and Geology, P.C. for the New York State Department of Environmental Conservation. January 2019

- 4. Select Site photographs.
- <u>Final Grading and Site Restoration Map, 301 Bank Street, Batavia Iron & Metal</u>, prepared by GPI Engineering, Landscape Architecture & Surveying, LLP, August 2018.
- <u>Record of Decision, Batavia Iron and Metal Company, Inc., Environmental</u> <u>Restoration Project, Batavia, Genesee County, Site No., E819018</u>, prepared by Division of Environmental Remediation, New York State Department of Environmental Conservation, April 2013.
- 7. <u>Dewatering Estimates Technical Memorandum</u>, prepared by MACTEC Engineering and Geology, P.C. October 6, 2020
- 8. <u>Lead TCLP results, Batavia Iron and Metals Site, Technical Memorandum</u>, prepared by MACTEC Engineering and Geology, P.C. December 11, 2020

ARTICLE 6 - Subcontracting

The maximum subcontracting allowed for this contract is forty percent (40%) unless a higher percentage is approved by Department in writing.

ARTICLE 7 - Type of Schedule

Contractor shall provide a Critical Path Method (CPM) type of schedule as described in Section X, Spec 01 32 16 - Progress Schedule.

ARTICLE 8 - Wage Rates

The Department requires, for the work under this contract, that the Contractor and its subcontractor pay at least the prevailing wage rate and pay or provide the prevailing supplements, including premium rates for overtime pay, as issued by the State Labor Department. The current wage rates are included within the contract documents, Section XIII – Wage Rates and Associated Contract Requirements.

The Contractor is responsible for any additional costs related to new determinations of the wage rates. The annual determination of the prevailing rates of wages and supplements are usually published on May 31st of each year and are in effect July 1st through June 30th. New determinations will supersede the original schedule or any prior issued annual determination. Any rate change from a previously issued determination becomes effective July 1st, regardless of whether the new determination has been received by the Contractor.

Every contractor and subcontractor shall submit to the Engineer within thirty days after issuance of its first payroll, and every thirty days thereafter, a transcript of the original payroll records, subscribed and affirmed as true under penalty of perjury, as provided by Article 8, Section 220, of the NYS Labor Law. The Engineer shall receive and maintain such payroll records. The original payrolls and transcripts must be preserved for three (3) years from the date of completion of the project. The current prevailing wage rate schedule must be posted in a prominent and accessible place on the site of the public work project.

ARTICLE 9 – Bid Protest Guidelines

The intent and purpose of these guidelines is to set forth the procedure to be utilized when an

interested party challenges a contract bid award solicited by the Division of Environmental Remediation and routed to the Office of the State Comptroller (OSC) for approval pursuant to the provisions of Section 112 of the State Finance Law.

The protestor is responsible for complying with the restrictions on "contacts" under the Procurement Lobbying Law (State Finance Law, Section 139-j). All protests must be submitted to the Designated Department Contact listed in the Contract Documents.

- 1. The bid protest must be submitted within ten (10) Business days of the Department's Notification of Intent to Award letter being sent to the apparent low bidder.
- 2. The bid protest must be submitted in writing and must contain specific factual and/or legal allegations setting forth the basis on which the protesting party challenges the contract award. The notice of protest must be filed by the signatory of the bid or by an attorney representing the bidder. Any filing deadlines may be waived by the Department at its own discretion.
- 3. The Designated Department Contact will promptly submit the notice of protest, a bid protest summary and relevant bid documents to the Division of Management and Budget Services and the Office of General Counsel (OGC).
- 4. Once the formal notice of protest is filed, the Department, at its sole discretion, may continue or suspend the contract award process until the protest is resolved and a final Department determination is made.
- 5. As set forth in Section III, Article 17, of the Contract Documents, the Department reserves the right to reject any and all bids, to waive any and all informalities or irregularities, to disregard all nonconforming, nonresponsive, or conditional Bids, or to re-advertise for bids."

SECTION V

Bid Forms and Attachments

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SECTION V

Bid Forms and Acknowledgements

Site Name: Batavia Iron and Metal Co., Inc. Site Site Number: 819018

ARTICLE 1(a) - Contract Bid Form and Acknowledgment for Remediation of Contaminated Soil at the Batavia Iron and Metal Site, City of Batavia.

The Bidder hereby declares that either personally or through authorized representative(s), Bidder has carefully examined all Bidding Documents and has personally or through authorized representative(s) inspected the actual location of the work, together with the local sources of supply; and understands all terms and conditions of Bidding Documents. Bidder further understands that in signing this Bid, the right to plead any misunderstanding regarding the same is waived.

Pursuant to and in compliance with the Bidding Documents, the Bidder hereby offers to furnish all labor, materials, supplies, equipment and other facilities and appurtenances, necessary or proper for, or incidental to, the construction and completion of this Contract, as required by and in strict compliance with the applicable provisions of all Contract Documents, for the following unit and/or lump sum prices.

The undersigned shall meet the required submittal time periods listed in Article 5 - Required Bid Submittals of Section III - Bidding Information and Requirements.

The undersigned hereby designates the following office as the office to which such Notice of Intent to Award and Notice of Award may be emailed, mailed, or delivered:

Attention:	
Company Name:	
Street Address:	
City, State, Zip (+4):	
Email Address:	
Phone Number:	

BID

New York State Department of Environmental Conservation

Site Name: Batavia Iron and Metal Co., Inc.

Site Number: 819018

Payment Description		Unit	Estimated Unit or Lump Sum Price		Price	Total Amount
ltem Number			Quantity	Words	Figures	(\$)
LS-1	Mobilization/Demobilization	LS	1			
LS-2	Construction Monitoring	LS	1			
LS-3	Wetland Restoration	LS	1			
LS-4	Upland Area Restoration	LS	1			
UP-1	Site Services	Day	332			
UP-2	Contractor Health and Safety	Day	241			
UP-3	Construction Water Management, Treatment, Sampling, and Disposal	gal	3,000,000			
UP-4	Confirmation Sampling and Analysis (Metals and PCBs)	EA	1,372			

Payment	-		Estimated	Unit or Lump Sum Price		Total Amount
ltem Number			Quantity	Words	Figures	(\$)
UP-5	Excavation – Impacted Materials	CY	43,100			
UP-6	Clean Imported Backfill	CY	33,200			
UP-7	Non-TSCA PCB Impacted Material Off-Site Transportation and Disposal	TON	49,600			
UP-8	Amended Non-TSCA PCB Impacted Material Off-Site Transportation and Disposal	TON	3,500			
UP-9	TSCA PCB Impacted Material (PCBs >50ppm) Off-Site Transportation and Disposal	TON	12,400			
UP-10	Amended TSCA PCB Impacted Material (PCBs >50ppm) Off-Site Transportation and Disposal	TON	2,000			
Grand Tota	al Bid: \$(Price in Figures)					

Contractor Authorized Representative Contractor Name

Date

The undersigned acknowledges the receipt of the following Addenda and agrees to be bound by all Addenda issued by Department whether or not listed herein.

Addendum Number	Date of Addendum

Accompanying this proposal is bid security in the amount of \$_____, said security is in the form of certified check(s) totaling \$_____, and/or Bid Bond totaling \$ which shall become the property of the Department if this proposal shall be accepted by the Department, or, should the undersigned fail to execute and return the Contract in a timely manner, or fail to comply with the requirements of the Bidding Documents.

Corporate Seal

(If no seal, write "No Seal" and sign)

Legal Name of Person, Partnership, or Corporation

By Print Name and Title

Signature

Date

Please Complete Information Requested Below (as applicable):

The P.O. Box Address of the Bidder is:

)

s.s.:

Federal Identification Number is:

(ACKNOWLEDGMENT)

State of		
County of		

On the ____ day of _____ in the year _____, before me, the undersigned, a Notary Public in and for said State, personally appeared _____, personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name(s) is (are) subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their capacity(ies), and that by his/her/their signature(s) on the instrument, the individual(s), or the person upon behalf of which the individual(s) acted, executed the instrument.

(Seal)

Notary Public

ARTICLE 1(b) Bidder's/Proposer's Certification

Non-Collusive Bidding and Nondiscrimination in Employment in Northern Ireland MacBride Fair Employment Principles and State Ethics Law Principles and Procurement Lobbying Law

BY SUBMISSION OF THIS BID/PROPOSAL, AND BY SIGNING HEREUNDER THE BIDDER/ PROPOSER, AND EACH PERSON SIGNING ON BEHALF OF SUCH PARTY CERTIFIES, AND IN THE CASE OF A JOINT BID/PROPOSAL, EACH PARTY THERETO CERTIFIES AS TO ITS OWN ORGANIZATION, UNDER PENALTY OF PERJURY, THAT TO THE BEST OF HIS/HER KNOWLEDGE AND BELIEF:

A. <u>Non Collusion</u>, State Finance Law §139-d

- 1) The prices in this Bid have been arrived at independently without collusion, consultation, communication, or agreement, for the purpose of restricting competition, as to any matter relating to such prices with any other Bidder or with any competitor;
- 2) Unless otherwise required by law, the prices which have been quoted in this Bid have not been knowingly disclosed by the Bidder and will not knowingly be disclosed by the Bidder prior to opening, directly or indirectly, to any other Bidder or to any competitor; and
- 3) No attempt has been made or will be made by the Bidder to induce any other person, partnership or corporation to submit or not to submit a Bid for the purpose of restricting competition.

B. <u>MacBride Fair Employment Principles</u>, State Finance Law §165(5)

- 1) it or any individual or legal entity in which the Bidder/Proposer holds a ten-percent (10%) or greater ownership interest, or any individual or legal entity that holds a 10% or greater ownership in the Bidder/Proposer, either: (answer yes or no to one or both of the following, as applicable).
- 2) Has business operations in Northern Ireland:

3) Shall take lawful steps in good faith to conduct any business operations that it has in Northern Ireland in accordance with the MacBride Fair Employment Principles relating to non-discrimination in employment and freedom of workplace opportunity, regarding such operations in Northern Ireland and shall permit independent monitoring of its compliance with such Principles.

Yes \square or No \square (check answer)

C. <u>State Ethics Law Provision</u>

By submittal of this bid, the undersigned hereby certifies, for and on behalf of the bidder, that he is familiar with the following provisions of the State Ethics Law provisions applicable to post employment restrictions affecting former state employees: POL §73(8)(a)(i) the two year ban, and §73(8)(a)(ii), the life time bar, and that submittal of this bid is not in violation of either provision, and that no violation will occur by entering into a contract or in performance of the contractual services, and further that the bidder recognizes that the Department may rely upon this certification.

Except as follows: (attach information if needed)

Yes or No (check answer) If yes, complete #3

(Bidder/Proposer is to make full disclosure of any circumstances which could affect its ability to perform in complete compliance with the cited laws. Any questions as to the applicability of these provisions should be addressed to the New York State Joint Commission on Public Ethics, 540 Broadway, Albany, NY 12207 or by phone (518) 408-3976.

D. <u>Procurement Lobbying Affirmation</u>

The Undersigned affirms that it understands and agrees to comply with the procedures of the New York State Department of Environmental Conservation relative to permissible contacts as required by State Finance Law §139-j (3) and §139-j (6) (b).

Print Name, Title

Signature, Date

ARTICLE 1(c) – Bid Security (Page to Attach)

If Bid Security is a Bid Bond, use Bid Bond form and provide certified power of attorney.

ARTICLE 1(d) - Bid Bond

Know all men by these presents, that we, the undersigned ______, as Principal, and ______, as Surety, are hereby held and firmly bound unto New York State Department of Environmental Conservation in the penal sum of ______ for the payment of which, will and truly to be made, we hereby jointly and severally bind ourselves, our heirs, executors, administrators, successors and assigns. Signed this _____ day of _____ 20____.

The condition of the above obligation is such that whereas the Principal has submitted to New York State Department of Environmental Conservation certain Bid, attached hereto and hereby made a part hereof to enter into a contract in writing, for the <u>Remediation of Contaminated Soil</u>, at the Batavia Iron and Metal Site, City of Batavia, Contract No. D011945, Site No. 819018

Now, Therefore

- a) If said Bid shall be rejected, or in the alternate,
- b) If said Bid shall be accepted and the principal shall execute and deliver a contract in the Form of Contract attached hereto (properly completed in accordance with said Bid) and shall furnish a bond for the faithful performance of said contract, and for the payment of all persons performing labor or furnishing materials in connection therewith, and shall in all other respects perform the agreement created by the acceptance of said Bid.

Then this obligation shall be void, otherwise the same shall remain in force and effect; it being expressly understood and agreed that the liability of the Surety for any and all claims hereunder shall, in no event, exceed the penal amount of this obligation as herein stated.

The Surety, for value received, hereby stipulates and agrees that the obligation of said Surety and its bond shall be in no way impaired or affected by any extension of the time within which the Owner may accept such Bids; and said Surety does hereby waive notice of any such extension.

IN WITNESS WHEREOF, the Principal and the Surety have hereunto set their hands and seals, and such of them as are corporations have caused their corporate seals to be hereto affixed and these presents to be signed by their proper officers, the day and year first set forth above.

Corporate Seal(s) – Principal & Surety	Ву	
(If no seal, write "No Seal" and sign)	Pri	incina

Principal (Print Name and Title)

Principal (Signature and Date)

By

Surety (Print Name and Title)

Surety (Signature and Date)

- ACKNOWLEDGMENT BY SURETY COMPANY -

State of)	S.S.:	
County of)	5.5	
			, 20 before me personally came to me known, who being by me duly sworn, did
corporation; that by the order of thereto by like	that he/she d which exe t the seal aff the Board of order; and	resides in <u></u> (<i>title</i>) of _ ecuted the ixed to said Directors of that the lia	<i>(city, state)</i> , that he/she is <i>(firm)</i> , the corporation within instrument; that he/she knows the seal of said d instrument is such corporate seal; that it was so affixed of said corporation and that he/she signed his/her name abilities of said company do not exceed its assets as the laws of the State of New York.
(Seal)			Notary Public
	-	ACKNOWI	-EDGMENT BY PRINCIPAL -
State of)	S.S.:	
County of)		
personally appe the basis of satis the within instru his/her/their cap	ared sfactory evid ment and ac acity(ies), ar	ence to be knowledgeo nd that by h	, 20, before me, the undersigned notary public, , known to me or proved to me on the individual(s) whose names(s) is (are) subscribed to d to me that he/she/they executed the same in is/her/their signature(s) on the instrument, the of which the individual(s) acted, executed the

(Seal)

Notary Public

ARTICLE 1(e) - Offerer Disclosure of Prior Non-Responsibility Determinations (Page 1 of 2)

Name of Individual or Entity Seeking to Enter into the Procurement Contract:

Name:	
Address:	
Name and Title of Person Submitting this Form:	
Name:	
Title:	
Contract Procurement Number: D011945	
Date:	
1. Has any Governmental Entity made a finding of non-responsibility regarding the individua entity seeking to enter into the Procurement Contract in the previous four years?	al or
Yes \Box No \Box (If yes, answer questions 2.– 4., if no, go to question 5.)	
2. Was the basis for the finding of non-responsibility due to a violation of State Finance Law §139-j?	r
Yes 🗌 No 🗌	
3. Was the basis for the finding of non-responsibility due to the intentional provision of fals incomplete information to a Governmental Entity?	e or
Yes 🗌 No 🗌	
4. If you answered yes to any of the above questions, please provide details regarding the fine of non-responsibility below.	ding
Governmental Entity:	
Date of Finding of Non-responsibility:	
Basis of Finding of Non-Responsibility: <u>Provide details under separate cover, endorse, date</u> provide marked as Supplement to Article 1(e).	<u>and</u>

ARTICLE 1(e) - Offerer Disclosure of Prior Non-Responsibility Determinations (Page 2 of 2)

5. Has any Governmental Entity or other governmental agency terminated or withheld a Procurement Contract with the above-named individual or entity due to the intentional provision of false or incomplete information?

Yes 🗌 No 🗌	(If yes, provide details below.)

Governmental Entity:

Date of Termination or Withholding of Contract:

Basis of Termination or Withholding: <u>Provide details under separate cover, endorse, date and provide marked as Supplement to Article 1(e).</u>

Offerer Certification:

Offerer certifies that all information provided to the New York State Department of Environmental Conservation with respect to State Finance Law §139-k is complete, true and accurate.

Signature:	
Date:	
Name:	
Title:	

This form must be signed by an authorized executive or legal representative and returned with the bid/proposal.

ARTICLE 1(f) – Vendor Assurance of No Conflict of Interest or Detrimental Effect (Page 1 of 2)

The Firm offering to provide services pursuant to this Procurement/Contract, as a contractor, joint venture contractor, subcontractor, or consultant, attests that its performance of the services outlined in this Procurement/Contract does not and will not create a conflict of interest with nor position the Firm to breach any other contract currently in force with the State of New York.

Furthermore, the Firm attests that it will not act in any manner that is detrimental to any State project on which the Firm is rendering services. Specifically, the Firm attests that:

1. The fulfillment of obligations by the Firm, as proposed in the response, does not violate any existing contracts or agreements between the Firm and the State;

2. The fulfillment of obligations by the Firm, as proposed in the response, does not and will not create any conflict of interest, or perception thereof, with any current role or responsibility that the Firm has with regard to any existing contracts or agreements between the Firm and the State;

3. The fulfillment of obligations by the Firm, as proposed in the response, does not and will not compromise the Firm's ability to carry out its obligations under any existing contracts between the Firm and the State;

4. The fulfillment of any other contractual obligations that the Firm has with the State will not affect or influence its ability to perform under any contract with the State resulting from this Procurement;

5. During the negotiation and execution of any contract resulting from this Procurement, the Firm will not knowingly take any action or make any decision which creates a potential for conflict of interest or might cause a detrimental impact to the State as a whole including, but not limited to, any action or decision to divert resources from one State project to another;

6. In fulfilling obligations under each of its State contracts, including any contract which results from this Procurement, the Firm will act in accordance with the terms of each of its State contracts and will not knowingly take any action or make any decision which might cause a detrimental impact to the State as a whole including, but not limited to, any action or decision to divert resources from one State project to another;

7. No former officer or employee of the State who is now employed by the Firm, nor any former officer or employee of the Firm who is now employed by the State, has played a role with regard to the administration of this contract procurement in a manner that may violate section 73(8)(a) of the State Ethics Law; and

ARTICLE 1(f) – Vendor Assurance of No Conflict of Interest or Detrimental Effect (Page 2 of 2)

8. The Firm has not and shall not offer to any employee, member or director of the State any gift, whether in the form of money, service, loan, travel, entertainment, hospitality, thing or promise, or in any other form, under circumstances in which it could reasonably be inferred that the gift was intended to influence said employee, member or director, or could reasonably be expected to influence said employee, member or director, in the performance of the official duty of said employee, member or director or was intended as a reward for any official action on the part of said employee, member or director.

Firms responding to this Procurement/Contract should note that the State recognizes that conflicts may occur in the future because a Firm may have existing or new relationships.

The State will review the nature of any such new relationship and reserves the right to terminate the contract for cause if, in its judgment, a real or potential conflict of interest cannot be cured.

Signature:	

Date:

Name:

Title: _____

This form must be signed by an authorized executive or legal representative and returned with the bid/proposal.

Article 1(g) - Sexual Harassment Prevention Certification Form

By submission of this bid, each bidder and each person signing on behalf of any bidder certifies, and in the case of a joint bid each party thereto certifies as to its own organization, under penalty of perjury, that the bidder has and has implemented a written policy addressing sexual harassment prevention in the workplace and provides annual sexual harassment prevention training to all of its employees. Such policy shall, at a minimum, meet the requirements of section two hundred one-g of the labor law.

Company Name:
Signature:
Print Name and Title:
Date:

If the above certification cannot be made, the bidder must submit a signed statement below detailing the reasons why the certification cannot be made.

Company Name:		
Signature:	 	
Print Name and Title:		

Date:_____

Article 1(h) – Certification Under Executive Order No. 16, Prohibiting State Agencies and Authorities from Contracting with Businesses Conducting Business in Russia

Executive Order No. 16 provides that "all Affected State Entities are directed to refrain from entering into any new contract or renewing any existing contract with an entity conducting business operations in Russia." The complete text of Executive Order No. 16 can be found here.

The Executive Order remains in effect while sanctions imposed by the federal government are in effect. Accordingly, vendors who may be excluded from award because of current business operations in Russia are nevertheless encouraged to respond to solicitations to preserve their contracting opportunities in case the sanctions are lifted during a solicitation or even after award in the case of some solicitations.

As defined in Executive Order No. 16, an "entity conducting business operations in Russia" means an institution or company, wherever located, conducting any commercial activity in Russia or transacting business with the Russian Government or with commercial entities headquartered in Russia or with their principal place of business in Russia in the form of contracting, sales, purchasing, investment, or any business partnership.

Is Vendor an entity conducting business operations in Russia, as defined above? Please answer by checking one of the following boxes:

- 1. No, Vendor does not conduct business operations in Russia within the meaning of Executive Order No. 16.
- 2.a. Yes, Vendor conducts business operations in Russia within the meaning of Executive Order No. 16 but has taken steps to wind down business operations in Russia or is in the process of winding down business operations in Russia. (Please provide a detailed description of the wind down process and a schedule for completion.)
- 2.b. Yes, Vendor conducts business operations in Russia within the meaning of Executive Order No. 16 but only to the extent necessary to provide vital health and safety services within Russia or to comply with federal law, regulations, executive orders, ordirectives. (Please provide a detailed description of the services being provided or the relevant laws, regulations, etc.)
- 3. Yes, Vendor conducts business operations in Russia within the meaning of Executive Order No. 16.

The undersigned certifies under penalties of perjury that they are knowledgeable about the Vendor's businessand operations and that the answer provided herein is true to the best of their knowledge and belief.

Vendor Name: (legal entity)	 _
By: (signature)	 _
Name:	
Title:	
Date:	

ARTICLE 2(a) - Statement of Surety's Intent

To: New York State Department of Environmental Conservation

We have reviewed the Bid of:

(Contractor)

Having its place of business at:

(Address)

For the Project: Remediation of Contaminated Soil Batavia Iron and Metal Co., Inc., Site No. 819018

Bids for which will be received on ______ (Bid Opening Date) and wish to advise that should this Bid of Contractor be accepted and the Contract awarded to Contractor, it is our present intention to become surety on the Performance Bond and Labor and Material Payment Bond required by the Contract.

Any arrangement for the Bonds required by the Contract is a matter between Contractor and ourselves and we assume no liability to Department or third parties if for any reason we do not execute the requisite bonds.

We, the undersigned, are duly licensed to do business in the State of New York.

Attest, and Attach Power of Attorney:

Corporate Seal

(If no seal, write "No Seal" and sign)

Surety Name, Title

Surety's Authorized Signature(s), Date

Telephone Number and email address for Bonding Company

Telephone Number and email address for Bonding Broker

Article 2(b) - M/WBE-EEO Utilization Plan and Work Force Utilization

Contractor must submit M/WBE-EEO Utilization Plan after being issued Notice of Intent to Award in accordance with Article 5c. of Section III. Quarterly reporting is required throughout the term of the contract and Contractors will receive quarterly reminders from the M/WBE-EEO compliance unit.

Contractors are invited to file the required forms online or may choose to complete and submit paper forms. Instructions are available at: <u>http://www.dec.ny.gov/about/48854.html</u>

If submitting paper forms, The M/WBE-EEO Utilization Plan and/or quarterly reports shall be sent directly to:

NYS Department of Environmental Conservation Division of Management and Budget Services Minority and Women's Business Programs Unit 625 Broadway, 10th Floor Albany, New York 12233-5028

Contractors opting to file electronic forms can obtain the appropriate forms from the website. The Contractor will be able to amend the forms either online, through the quarterly report process, or by contacting the M/WBE-EEO compliance specialist.

M/WBE Directory on the Internet

Empire State Development has put the Minority and Women-Owned Business Directory on the Internet. The Internet address is <u>https://ny.newnycontracts.com/</u>. Support will be available from 9:00 a.m. to 5:00 p.m., Monday through Friday, except for NYS holidays. If assistance is needed, call (855)-ESD-4MWBE or (855)-373-4692.

Article 2 (c) - Instructions for Completing the New York State Vendor Responsibility Questionnaire CCA-2

- Please Read Before Completing Questionnaire -

Contractors must submit a Vendor Responsibility Questionnaire CCA-2 form after being announced the low bidder for any competitively bid contract of \$10,000 or more, or when proposed for subcontract work valued at \$10,000 or more. The Department may require additional information deemed necessary for its review.

Contractors are invited to file the required Vendor Responsibility Questionnaire online via the New York State VendRep System or may choose to complete and submit a paper questionnaire. To enroll in and use the New York State VendRep System, see the VendRep System Instructions available at: http://www.osc.state.ny.us/vendrep/systeminit.htm or go directly to the VendRep System online at http://www.osc.state.ny.us/vendrep/systeminit.htm or go directly to the VendRep System online at https://portal.osc.state.ny.us. For direct VendRep System user assistance, the Office of the State Comptroller's Help Desk may be reached at 866-370-4672 or 518-408-4672 or by email at helpdesk@osc.state.ny.us. Contractors opting to file a paper questionnaire can obtain the appropriate questionnaire from the VendRep website www.osc.state.ny.us. Contractors opting to file a paper questionnaire can obtain the appropriate questionnaire from the VendRep website www.osc.state.ny.us/vendrep or contact the Office of the State Comptroller's Help Desk.

The enrollment process in the VendRep System can take several days. Contractors are encouraged to enroll prior to submitting bids to ensure meeting the timeframes for certification.

Contractors electing to file the Vendor Responsibility Questionnaire online shall certify to the Department, via a letter, within the timeframe designated in the Instructions to Bidders, that the questionnaire has been updated. The Contractor will be able to supply any additional information requested by the Department, by updating the online questionnaire and notifying the Department via letter, that it has been recertified.

Throughout the contract term, the Contractor is required to notify the Department in writing of any changes in Contractor's vendor responsibility disclosure related to the Contractor commencing bankruptcy proceedings; filings against the Contractor for relief under bankruptcy; Contractor making general assessment for benefit of creditors; a Court appointing a party to take charge of the Contractor's property; Contractor's inability to pay debts; or the Contractor being found in violation of laws and regulations of any public body having jurisdiction.

If the Contractor elects to file a paper copy directly with the Department, a completed original CCA-2 Form must be submitted within the timeframe designated in the Instructions to Bidders. Submit completed questionnaires marked "**CONFIDENTIAL**" to:

NYS Department of Environmental Conservation Division of Environmental Remediation Lisa Gorton, Project Manager 625 Broadway, 12th Floor Albany, New York 12233-7017

Article 2 (d) – Authorizing Resolution

The Contractor is required to submit an Authorizing Resolution stating that a certain individual has the authority to sign the Contract on behalf of the firm.

ARTICLE 2(e) – Executive Order No. 177 Certification

The New York State Human Rights Law, Article 15 of the Executive Law, prohibits discrimination and harassment based on age, race, creed, color, national origin, sex, pregnancy or pregnancyrelated conditions, sexual orientation, gender identity, disability, marital status, familial status, domestic violence victim status, prior arrest or conviction record, military status or predisposing genetic characteristics.

The Human Rights Law may also require reasonable accommodation for persons with disabilities and pregnancy-related conditions. A reasonable accommodation is an adjustment to a job or work environment that enables a person with a disability to perform the essential functions of a job in a reasonable manner. The Human Rights Law may also require reasonable accommodation in employment on the basis of Sabbath observance or religious practices.

Generally, the Human Rights Law applies to:

- all employers of four or more people, employment agencies, labor organizations and apprenticeship training programs in all instances of discrimination or harassment;
- employers with fewer than four employees in all cases involving sexual harassment; and,
- any employer of domestic workers in cases involving sexual harassment or harassment based on gender, race, religion or national origin.

In accordance with Executive Order No. 177, the Bidder hereby certifies that it does not have institutional policies or practices that fail to address the harassment and discrimination of individuals on the basis of their age, race, creed, color, national origin, sex, sexual orientation, gender identity, disability, marital status, military status, or other protected status under the Human Rights Law. Executive Order No. 177 and this certification do not affect institutional policies or practices that are protected by existing law, including but not limited to the First Amendment of the United States Constitution, Article 1, Section 3 of the New York State Constitution, and Section 296(11) of the New York State Human Rights Law.

Contractor:	
Signature:	
Name:	
Title:	
Date:	

ARTICLE 3(a) - Instructions for Insurance

Please refer to Contract Documents Section VIII, Article 4, and any Addenda if applicable, for the types and amounts of insurance required for this contract, as well as the necessary forms and endorsement requirements.

If you do not require assistance, please:

- 1. Request that your insurance provider note the Department's specific contract number D011945 in the Description of Operations box on the ACORD form.
- 2. List the following address on the Workers' Compensation and Disability Benefits Certificates as Entity Requesting Proof of Coverage and on the ACORD forms and endorsements as the Certificate Holder:

State of New York and the NYS Department of Environmental Conservation Division of Environmental Remediation, Remedial Bureau E Lisa Gorton, Project Manager 625 Broadway, 12th Floor Albany, NY 12233-7017

And the following as Additionally Insured

City of Batavia Jason Molino, City Manager One Batavia City Centre Batavia, NY 14020

3. Submit all required insurance certificates and applicable endorsements to the following address:

New York State Department of Environmental Conservation Division of Environmental Remediation, Remedial Bureau E Lisa Gorton, Project Manager 625 Broadway, 12th Floor Albany, NY 12233-7017

ARTICLE 3(b) - Instruction for Performance Bond and Labor and Material Payment Bond

- 1) The performance bond and the labor and material payment bond are to be only submitted by the bidder who receives the Notice of Intent to Award letter from Department.
- 2) Use the forms that are included in the Contract Documents. **DO NOT RETYPE THE FORMS**.
- 3) Attach a <u>SEPARATE</u> certified power of attorney and surety financial statement to <u>EACH</u> bond (i.e., one set attached to performance bond and one set attached to labor and material payment bond)
- 4) Performance Bond and Labor and Materials Payment Bond must be secured by the surety and notarized within three (3) days of the date the Contractor signs the agreement.

ARTICLE 3(c) - Performance Bond (page 1 of 3)

Date Bond Executed:

NYSDEC-DER Site Number: 819018

Date Contract Executed by Principal:

Principal: (Name and Address)

Surety (Name and Address - Indicate State of incorporation and location of principal office)

Full and Just Sum of Bond

(Express in Words)

(Express in Numbers)

Know all men by these presents, that we, the **Principal** and **Surety**, above named, are held and firmly bound unto the New York State Department of Environmental Conservation for and on behalf of the People of the State of New York, hereinafter called the Department, in full and just sum of the amount stated above, good and lawful money of the United States of America, to the payment of which said sum, well and truly to be made, we bind ourselves, our heirs, executors and administrators, successors and assigns, jointly and severally, firmly by these presents.

Whereas, the **Principal** has entered into a certain written contract with the Department, covering the project and specification above;

Now, Therefore, the condition of this obligation is such, that if the **Principal** shall well, truly and faithfully comply with and perform all of the terms, covenants and conditions of said contract on their (his, its) part to be kept and performed, according to the true intent and meaning of said contract, and shall protect the Department and the People of the State of New York against, and pay any and all amounts, damages, costs and judgments which may or shall be recovered against the Department or the State of New York may be called upon to pay to any person or corporation by reason of any damages arising or growing out of the doing of said work, or the repair or maintenance thereof, or the manner of doing the same, or the neglect of the **Principal**, or their (its) agents or servants, or the infringement of any patent or patent rights by reason of the use of materials furnished or work done as aforesaid or otherwise, then this obligation shall be null and void, otherwise to remain in full force and virtue.

ARTICLE 3(c) - Performance Bond (page 2 of 3)

And the **Surety**, for value received, hereby stipulates and agrees, if requested to do so by the department to fully perform and complete the work mentioned and described in the contract and specifications, pursuant to the terms, conditions and covenants thereof, if for any cause, the **Principal** fails or neglects to so fully perform and complete the work; and the **Surety** further agrees to commence the work of completion within twenty days after notice thereof from the Department, and to complete the work with all due diligence.

And the **Surety**, for value received hereby stipulates and agrees that no change, extension, alteration or addition to the terms of this contract or specifications, accompanying the same, shall in any way affect its obligation on this bond, and it does hereby waive notice of any such change, extension, alteration or addition.

In Testimony Whereof, the **Principal**, and the authorized officers of the **Surety** have caused this instrument to be signed and sealed on the date shown above.

Signed, sealed and delivered in the presence of:		Principal Organization
Corporate Seal of Principal (if a Corporation)	of Principal (if a Corporation) By Print Name, Title Signature, Date Surety Business Address By Print Name, Title	
		Print Name, Title
		Signature, Date
		Business Address
	Ву	
Corporate Seal of Surety Company		
		Signature, Date
	Attest	
		Print Name, Title

Signature, Date

ARTICLE 3(c) - Performance Bond (page 3 of 3)

State of	•)	S.S.:		
County of	•)	5.5		
On this	day of			, 20	before me personally came
thedescribed in a corporation; th by the order o thereto by like	and which at the sea f the Boar e order; a	ex I aff d of	_ (<i>title)</i> of ecuted the w fixed to said ir f Directors of that the liabi	ithin inst nstrumen said corp lities of	known, who being by me duly sworn, did (city, state), that he/she is (firm), the corporation trument; that he/she knows the seal of said nt is such corporate seal; that it was so affixed poration and that he/she signed his/her name said company do not exceed its assets as the State of New York.
(Seal)					Notary Public
		-	ACKNOWLE	DGMEN ⁻	IT BY PRINCIPAL -
State of)	S.S.:		
County of)	5.5		
personally app the basis of sa the within instr his/her/their ca	eared tisfactory ument and apacity(ies	evid d ac), ai	lence to be the knowledged to nd that by his/	e individu o me tha her/their	, before me, the undersigned notary public, , known to me or proved to me on ual(s) whose names(s) is (are) subscribed to at he/she/they executed the same in r signature(s) on the instrument, the ne individual(s) acted, executed the

(Seal)

Notary Public

ARTICLE 3(d) - Labor and Material Payment Bond (page 1 of 3)

Date Bond Executed:

NYSDEC-DER Site Number: 622006

Date Contract Executed By Principal:

Principal: (Name and Address)

Surety (Name and Address - Indicate State of incorporation and location of principal office)

Full and Just Sum of Bond

(Express in Words)

(Express in Numbers)

Know all men by these presents, That We, the Principal and the Surety above named, are held and firmly bound unto the Department of Environmental Conservation for and on behalf of the People of the State of New York, in full and just sum of the amount stated above, good and lawful money of the United States of America, to the payment of which said sum, well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

Whereas, the **Principal** has entered into a certain written contract with the Department of Environmental Conservation, covering the project and specification indicated above.

Now, Therefore, the condition of this obligation is such, that if the **Principal** shall promptly pay all moneys due to all persons furnishing labor and materials to him or his subcontractors in the prosecution of the work provided for in the contract, then this obligation shall be void, otherwise to remain in full force and effect;

Provided, however, that the Comptroller of the State of New York having required the **Principal** to furnish this bond in order to comply with the provisions of Section 137 of the State Finance Law, all rights and remedies on this bond shall inure solely to such persons and shall be determined in accordance with the provisions, conditions and limitations of said Section to the same extent as if they were copied at length herein; and

ARTICLE 3(d) - Labor and Material Payment Bond (page 2 of 3)

Further, provided, that the place of trial of any action on this bond shall be in the county in which the contract was to be performed, or if the contract was to be performed in more than one county, then in any such county, and not elsewhere.

In Testimony Whereof, the **Principal** and the authorized officers of the **Surety** have caused this instrument to be signed and sealed on the date shown above.

Signed, sealed and delivered in the presence		
of:		Principal Organization
Corporate Seal of Principal (if a Corporation)	Ву	
		Print Name, Title
		Signature, Date
		Surety
		Business Address
	Ву	
		Print Name, Title
Corporate Seal of Surety Company		Signature, Date

Attest

Print Name, Title

Signature, Date

ARTICLE 3(d) - Labor and Material Payment Bond (page 3 of 3)

- ACKNOWLEDGMENT BY SURETY COMPANY -				
State of) s.s.:			
County of)			
On this	_ day of	, 20 before me personally came to me known, who being by me duly sworn, did		
described in a corporation; tha by the order of thereto by like	nd which executed at the seal affixed to the Board of Direc order; and that th	to me known, who being by me duly sworn, did (city, state), that he/she is of(firm), the corporation the within instrument; that he/she knows the seal of said said instrument is such corporate seal; that it was so affixed tors of said corporation and that he/she signed his/her name he liabilities of said company do not exceed its assets as d by the laws of the State of New York.		
(Seal)		Notary Public		
	- ACKN	IOWLEDGMENT BY PRINCIPAL -		
State of) s.s.:			
County of)			
personally apper the basis of sat the within instru- his/her/their cap	eared	, 20, before me, the undersigned notary public, , known to me or proved to me on to be the individual(s) whose names(s) is (are) subscribed to edged to me that he/she/they executed the same in to by his/her/their signature(s) on the instrument, the ehalf of which the individual(s) acted, executed the		

(Seal)

Notary Public

ARTICLE 3(e) – SDVOB Utilization Plan

Contractor must submit a Service-Disabled Veteran-Owned Business (SDVOB) Utilization Plan after being issued a Notice of Intent to Award in accordance with Section III, Article 5.c. Quarterly reporting is required throughout the term of the contract.

For additional information regarding the SDVOB Utilization Plan and quarterly reporting including information on how to obtain the forms, the contractor should contact the Department's SDVOB lead at:

SDVOB Program Lead Bureau of Contract and Grant Development New York State Department of Environmental Conservation 625 Broadway, 10th Floor Albany, NY 12233-1080

Phone: 518-402-9240 Email: <u>sdvob@dec.ny.gov</u>

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SECTION VI

Agreement

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SECTION VI

Agreement

This *Agreement*, by and between the **New York State Department of Environmental Conservation** (hereinafter referred to as Department) having offices at 625 Broadway, Albany, New York 12233 and, ______ (Bidder name)

a corporation organized and existing under the laws of the State of ______,

a partnership, consisting of ______,

an individual conducting business as ______,

hereinafter called "Contractor", the location of whose principal office is,

WITNESSETH

Whereas, Department is empowered by law to obtain services; the performance of these services is essential to Department; and Department, after fully examining all of its internal capabilities and thoroughly investigating all possible alternative approaches, has determined that certain tasks can best be accomplished through a contract;

Whereas, Contractor hereby represents that it is capable of providing the services which are the subject matter of this Contract;

Now Therefore, Department **and** Contractor, in consideration of the mutual covenants hereinafter set forth agree as follows:

ARTICLE 1 - Defined Terms

Terms used in the Agreement which are defined in the Contract Documents have the intent and meanings assigned to them in the Contract Documents.

ARTICLE 2 - Work

As indicated or specified in the Contract Documents, Contractor shall complete in a timely and workmanlike manner, any and all obligations, duties and responsibilities, and provide any and all labor, materials, equipment, temporary facilities, and incidentals necessary to complete the construction generally identified and shown on the plans and Contract Documents entitled:

New York State Department of Environmental Conservation Division of Environmental Remediation Site Name: Batavia Iron & Metal Company, Inc. Contract No. D011945 Date: June 2022

ARTICLE 3 - Engineer

MACTEC Engineering and Geology, PC (Engineer) shall assume all duties and responsibilities of and have the rights and authority assigned to Engineer in the Contract Documents in connection with completion of the Work in accordance with the Contract Documents.

ARTICLE 4 - Contract Documents

The Documents which comprise the entire Contract between Department and Contractor concerning the Work consist of the following:

- 4.1 Appendices A, B, C & D
- 4.2 Engineer's written clarifications and interpretations
- 4.3 Change Orders
- 4.4 Administrative Agreements
- 4.5 Field Orders
- 4.6 Proposed Change Orders signed by Department
- 4.7 Approved Shop Drawings
- 4.8 Addenda
- 4.9 Agreement (including all Appendices)
- 4.10 Measurement for Payment
- 4.11 Bid Forms and Attachments Exclusive of Bonds and Insurance Certificates
- 4.12 Drawings, Plans
- 4.13 Supplementary Specifications
- 4.14 Supplementary Conditions
- 4.15 Standard Specifications
- 4.16 General Conditions
- 4.17 Supplementary Bidding Information and Requirements
- 4.18 Bidding Information and Requirements
- 4.19 Terms and Definitions
- 4.20 Advertisement
- 4.21 Bonds and Insurance Certificates

In the event of a conflict between the documents set forth above, they shall be entitled to priority according to the order in which they are listed.

ARTICLE 5 - Contractor's Representations

In order to induce Department to enter into this Agreement, Contractor makes the following representations:

- 5.1 Contractor has familiarized itself with the nature and extent of the Contract Documents, Work, site, locality, and all local conditions and applicable Laws that in any manner may affect cost, schedule, progress, performance or furnishing of the Work.
- 5.2 Contractor has studied carefully all reports of explorations and tests of subsurface conditions and drawings of physical conditions which are identified in Information to Bidders, as provided in the General Conditions, and accepts the determination set forth in said Section to the

extent of the technical data contained in such reports and drawings upon which Contractor is entitled to reply.

- 5.3 Contractor has obtained and carefully studied all such examinations, investigations, explorations, tests, reports and studies which pertain to the subsurface or physical conditions at or contiguous to the site or otherwise may affect the cost, schedule, progress, performance or furnishing of the Work as Contractor considers necessary for the performance or furnishing of the Work at the Contract Price, within the Contract Time and in accordance with the other terms and conditions of the Contract Documents, including specifically the provisions of Article 3 of the General Conditions; and no additional examinations, investigations, explorations, tests, reports, studies or similar information or data are or will be required by Contractor for such purposes.
- 5.4 Contractor has reviewed and checked all information and data shown or indicated on the Contract Documents with respect to existing Underground Facilities. No additional examinations, investigations, explorations, tests, reports, studies or similar information or data in respect of said Underground Facilities are or will be required by Contractor in order to perform and furnish the Work at the Contract Price, within the Contract Time and in accordance with the other terms and conditions of the Contract Documents, including specifically the provisions of Article 3 of the General Conditions.
- 5.5 Contractor has correlated (or assumes responsibility for correlating) the results of all such observations, examinations, investigations, explorations, tests, reports and studies with the terms and conditions of the Contract Documents.
- 5.6 Contractor has given Engineer written notice of all conflicts, errors or discrepancies that he (she) has discovered in the Contract Documents and any written resolution thereof is acceptable to Contractor.
- 5.7 General Responsibility: The Contractor shall at all times during the Contract term remain responsible. The Contractor agrees, if requested by the Commissioner or his or her designee, to present evidence of its continuing legal authority to do business in New York State, integrity, experience, ability, prior performance, and organizational and financial capacity. Additional responsibilities required of the Contractor in order to perform and furnish the Work at the Contract Price, within the Contract Time and in accordance with the other terms and conditions of the Contract Documents, are specified within the provisions of Article 5 of the General Conditions.

ARTICLE 6 - Contract Term

The number of days within which, or alternatively, the dates by which, the Work, or any specified part thereof, is to be completed (the Contract Times) are set forth as follows:

- 6.1 The Work will be Substantially Completed within <u>five hundred fifty (550) calendar days</u> from the Effective Date of the Agreement, plus twenty (20) calendar days. Substantial completion is defined as the complete installation of backfill across the site.
- 6.2 Separable parts of the Work, as specified in Attachment A to this Agreement, will be Substantially Completed within the number of days stated in Attachment A from the Effective

Date of the Agreement, plus twenty (20) calendar days. Under this contract, Part A- Winter Shutdown is considered a separable part of the work.

- 6.3 The Work will be completed and ready for final payment in accordance with the General Conditions within <u>five hundred eighty-five (585) calendar days</u> from the Effective Date of the Agreement, plus twenty (20) calendar days
- 6.4 Department and Contractor recognize that the Contract Time(s) specified in paragraphs 6.1, 6.2 and 6.3 above are of the essence of this Agreement, and that Department may suffer financial loss if the Work is not completed within the Contract Time(s) specified above, plus any extensions thereof allowed in accordance with the General Conditions, as amended or supplemented in the Supplementary Conditions.
- 6.5 Accordingly, Contractor agrees to forfeit and pay Department as liquidated damages, and not as a penalty, the amount of one thousand five hundred and thirty-five dollars (\$1,535) for each day that expires after the Contract Time specified in paragraph 6.1 above for Substantial Completion until the Work is Substantially Complete (defined as all waste removed and disposed offsite and backfill complete). Contractor further agrees to pay Department as liquidated damages, and not as a penalty, each of the amounts set forth in Attachment A if applicable to this agreement for each day that expires after each of the contract times specified in paragraph 6.2 above for substantial completion until the each of the separable parts of the work is substantially complete. After substantial completion of the work, if Contractor shall neglect, refuse or fail to complete the remaining work within the contract time or any proper extension thereof granted by Department, Contractor shall pay Department as liquidated damages, and not as a penalty, the amount of **one thousand two** hundred and fifty-nine dollars (\$1,259) for each day that expires after the Contract Time specified in paragraph 6.3 above for completion and readiness for final payment. These liquidated damages are additive and represent a reasonable estimate, in lieu of any such proof, of Department's extra expenses for Inspection, engineering services, administrative costs, and Interim excess operating costs for each day that expires after the associated Contract Time.
- 6.6 In addition to the liquidated damage amounts set forth in paragraph 6.5 above, Contractor agrees to pay Department's additional actual damages arising out of the types of expenses itemized below for each day that expires after each of the Contract Times specified in paragraph 6.2 above for Completion of each of the designated parts of the Work until each of the designated parts of the Work achieves the specified completion. These actual damages are additive and shall equal Department's expenditures for costs other than those itemized in paragraph 6.5, including, but not limited to, delay damage settlements or awards related to other separate contracts, delay penalties or fines imposed by regulatory agencies, contract damage and loss of use, excess financing costs, and professional fees and related expenses incurred thereto.

ARTICLE 7 - Alterations and Omissions

Department reserves the right, at any time during the progress of the work, to alter the plans or omit any portion of the work as it may deem reasonably necessary for the public interest; making allowances for additions and deductions with compensation made in accordance with the Contract Documents.

ARTICLE 8 - Determinations as to Variances

In case of any ambiguity in the Contract Documents, the matter must be immediately submitted to the Representative of Department designated in the Contract Documents, who shall adjust the same, and his (her) decision in relation thereto shall be final and conclusive upon the parties.

ARTICLE 9 - Payment Procedures

Contractor shall submit Applications for Payment on standard form in accordance with the General Conditions. Applications for Payment will be processed by Engineer as provided in the General Conditions, as amended or supplemented in the Supplementary Conditions and in accordance with Section 139-f of the State Finance Law.

9.1 **Progress Payments.** Contractor shall submit Applications for Payments to Engineer for review no more frequently than monthly in accordance with paragraph 13.2 of the General Conditions from the date when the Contract Time commences to run. Department shall make progress payments against the Contract Price on the basis of Contractor's Applications for Payment as recommended by Engineer as provided below. All progress payments will be calculated on the basis of the progress of the Work measured by the Schedule of Values established pursuant to paragraph 1.4.3 of the General Conditions. Progress payments will also be made for materials pertinent to the Contract in accordance with the General Conditions. Contractor shall provide complete and accurate billing invoices to the Department in order to receive payment. Billing invoices submitted to the Department must contain all information and supporting documentation required by the Contract, the Department, and the State Comptroller.

Payments for expenditures incurred under this contract will be rendered electronically to the *Recipient/Contractor/Vendor* unless payment by paper check is expressly authorized by the Commissioner of the Department (Commissioner), in the Commissioner's sole discretion, due to extenuating circumstances. Such electronic payment shall be made in accordance with ordinary State procedures and practices. The *Recipient/Contractor/Vendor* shall comply with the *Office of the State Comptroller's (OSC's)* procedures to authorize electronic payments. Authorization forms are available at the *OSC's* website at <u>www.osc.state.ny.us/epay/index.htm</u>, by e-mail at <u>epunit@osc.state.ny.us</u> or by telephone at (518) 474-4032. The *Recipient/Contractor/Vendor* acknowledges that it will not receive payment under this *Contract* if it does not comply with the *OSC's* electronic payment procedures, except where the Commissioner has expressly authorized payment by paper check as set forth above.

- 9.1.1 Prior to Substantial Completion of the Work, progress payments will be made less five percent (5%) the aggregate of payments (i.e. retainage) previously made and less an amount necessary to satisfy any claims, liens, or judgments against Contractor which have not been suitably discharged.
- 9.2 **Payment upon substantial completion.** When the work, or major portions thereof, as contemplated in the Contract Documents, is substantially completed, Contractor shall submit to Department, an Application for Payment in accordance with the General Conditions for the remaining amount of the contract balance or amount due for that major portion

completed. Department will pay the remaining Contract balance, or amount due for that major portion completed, less two times the value of any remaining items to be completed and an amount necessary to satisfy any claims, liens, judgments against Contractor which have not been suitably discharged. Payment for remaining items will be made upon their completion.

9.3 **Final Payment.** Upon final completion of the physical Work and acceptance of the Work in accordance with the General Conditions, Department shall pay the remainder of the Contract Price as recommended by Engineer.

ARTICLE 10 - No Estimate on Contractor's Noncompliance

It is further agreed that so long as Contractor has not complied with any lawful or proper direction concerning the work or material given by Department, Contractor shall not be entitled to have any estimate made for the purpose of payment, nor shall any estimate be rendered on account of work done or material furnished until Contractor has fully and satisfactorily complied with such direction.

ARTICLE 11 - Delays, Inefficiencies, and Interference

Contractor agrees to make no claim for any consequential damages attributable to any delays, or act in the performance of this contract which are not directly occasioned by any act or omission to act by the State or any of its representatives. In the event Contractor completes the work prior to the contract completion date set forth in the proposal, Contractor hereby agrees to make no claim for extra costs due to delays, interferences or inefficiencies in the performance of the work.

- 1) Contractor further agrees that it has included in its bid prices for the various items of the Contract any additional costs for delays, inefficiencies, or interferences affecting the performance or scheduling of Contract work caused by, or attributable to, the following instances:
 - a. The work or the presence on the Site of any third party, including but not limited to that of other contractors or personnel employed by the State, or by other public bodies, by railroad, transportation or utility companies or corporations, or by private enterprises, or any delay in progressing such work by any third party.
 - b. The existence of any facility or appurtenance owned, operated, or maintained by any third party.
 - c. The act, or failure to act, of any other public or governmental body, including, but not limited to, approvals, permits, restrictions, regulations or ordinances.
 - d. Restraining orders, injunctions, or judgments issued by a court.
 - e. Any labor boycott, strike, picketing or similar situation.
 - f. Any shortages of supplies or materials required by the contract work.

g. Any situation which was, or should have been, within the contemplation of the parties at the time of entering into the contract.

ARTICLE 12 - Postponement, Suspension or Termination

- 12.1 Department shall have the right to postpone, suspend or terminate this Contract in whole or in part for the convenience of Department. If, after termination for cause of Contractor it is determined that no cause existed for termination of Contractor, such termination shall be deemed to have been made for the convenience of Department.
- 12.2 If this Contract is terminated by Department for convenience or cause, Department shall make payment on an equitable basis for all work performed in accordance with the Contract Documents prior to termination in accordance with paragraphs 12.3 and 12.4 below.
- 12.3 If this contract is terminated for cause, no payment shall be made for anticipated profit on unperformed work or services. Additionally, Department may adjust any payment due to Contractor at the time of termination to account for any additional costs to Department because of Contractor's default.
- 12.4 If this contract is terminated for convenience, payment shall be made for any services rendered and expenses incurred prior to the termination, in addition to termination settlement costs reasonably incurred by Contractor which had become firm prior to the termination.
- 12.5 Upon termination of this Contract under this Agreement, Department may take over the work or may award or negotiate a contract with another party to complete work required by these Contract Documents.
- 12.6 Termination for Non-Responsibility: Upon written notice to the Contractor, and a reasonable opportunity to be heard with appropriate Department officials or staff, the Contract may be terminated by the Commissioner, or his or her designee, at the Contractor's expense where the Contractor is determined by the Commissioner, or his or her designee, to be non-responsible. In such event, the Commissioner, or his or her designee, may complete the contractual requirements in any manner he or she may deem advisable and pursue available legal or equitable remedies for breach.
- 12.7 Suspension of Work (for Non-Responsibility): The Commissioner, or his or her designee, in his or her sole discretion, reserves the right to suspend any or all activities under this Contract, at any time, when he or she discovers information that calls into question the responsibility of the Contractor. In the event of such suspension, the Contractor will be given written notice outlining the particulars of such suspension. Upon issuance of such notice, the Contractor must comply with the terms of the suspension order. Contract activity may resume at such time as the Commissioner, or his or her designee, issues a written notice authorizing a resumption of performance under the Contract.

ARTICLE 13 – Completion of Physical Work and Final Acceptance

The time within which Department may bring an action on the Contract against Contractor shall be computed from the date of completion of the physical Work. In accordance with Section 138(a)

of the State Finance Law, Contractor shall notify Department in writing that the physical Work has been completed. The date of completion must be no more than thirty days prior to the date of the notice. This notice must be delivered personally, or, by either registered or certified mail, return receipt requested, to the exact address given below.

New York State Department of Environmental Conservation Division of Environmental Remediation Mr. David Harrington, Section Chief NYSDEC – Division of Environmental Remediation, Remedial Bureau E, Section A 625 Broadway, 12th Floor, Albany, New York 12233-7017

If Department disagrees with the date set forth in the notice, it will so advise Contractor in writing within 30 days of receipt of the notice. This notice will be delivered by either registered or certified mail, return receipt requested, to Contractor's address as shown in this Agreement.

If Department accepts Contractor's date of completion of physical Work, Department's final acceptance of work shall be as of that date.

When, in the opinion of Department, Contractor has fully performed the physical Work under the Contract, Department shall notify Contractor in writing of final acceptance.

ARTICLE 14 - Final Payment

After the final acceptance of the work, Engineer shall prepare a final agreement of the work performed and the materials placed and shall compute the value of such work and materials under and according to the terms of the contract. This agreement shall be certified, as to its correctness, by Engineer and submitted for final approval to Department. The Representative of Department designated in the Contract Documents shall have the right to reject the whole or any portion of the final agreement, should the said certificate of Engineer be found or known to be inconsistent with the terms of the agreement or otherwise improperly given and upon failure of Contractor to provide requested documentation including but not limited to that regarding payment of wages, suppliers or subcontractors. All certificates upon which partial payments may have been made being merely estimates, shall be subject to correction in the final certificate or final agreement.

ARTICLE 15 - Disposition of Documents and Data

Upon final acceptance of work under this Contract or termination of this Contract pursuant to this Agreement, or upon written demand of Department, Contractor shall promptly deliver or otherwise make available to Department all data, drawings, reports, estimates, and such other information and materials as may have been accumulated by Contractor in performing this Contract.

All documents and data are to be submitted in electronic format to the Engineer and Department. The Engineer/Department will not approve a final report unless, and until, all documents and data generated in support of that report have been submitted in accordance with the electronic submission protocols. Information on the format of data submissions can be found at: <u>http://www.dec.ny.gov/chemical/62440.html</u>. Information on document submissions can be found at: <u>http://www.dec.ny.gov/regulations/2586.html</u>.

ARTICLE 16 – Applicable Law; Jurisdiction; Service of Legal Process

Contractor agrees:

- 16.1 That this Agreement is subject to and governed by all applicable federal and New York State law.
- 16.2 To procure all necessary licenses and permits.
- 16.3 To voluntarily and irrevocably submit to the jurisdiction of a New York State Court of competent jurisdiction, to resolve any dispute or controversy arising out of this Contract.
- 16.4 That the venue of any action at law or in equity commenced against Department arising out of a Project in one of Department's regions, shall be in the county in that Region where Department regional headquarters is located.
- 16.5 That the service of legal process or any notices in connection with a dispute or controversy arising out of this Contract, by United States registered mail, postage prepaid, addressed to the Designated representative of Department at the address stated in the Contract. Documents shall constitute good and valid service of process upon Engineer.
- 16.6 To waive any defense based on or alleging lack of jurisdiction, improper venue, or invalid service, if there is compliance with paragraphs 16.3 and 16.4 in this Article.
- 16.7 This Contract may be presented in court as conclusive evidence of the foregoing agreement.

ARTICLE 17 - Sales and Use Tax Exemption

Contractor represents that this project has been bid in such a manner that Department has full advantage of available exemptions from sales and compensating use taxes. Accordingly, Contractor agrees to make all payment requests in a manner which affords Department full advantage of such exemptions. Further, Contractor agrees to complete and to require all subcontractors and material men to complete a Contractor Exempt Purchase Certificate in the name of the New York State Department of Environmental Conservation, which shall be furnished to all persons, firms or corporations from whom they purchase materials, equipment or supplies which are tax exempt by reason of the fact that they will be sold to Department, or will be used as an integral component in the construction, rehabilitation, or improvement of any structure of building required by the Contract Documents.

Contractor agrees to maintain and keep, and to contractually require all subcontractors and material men to maintain and keep, records relating to the tax exemption of material, equipment and Supplies for a period of six years. The six- (6) year period shall commence to run as of the date of final payment.

ARTICLE 18 - Effective Date

This Contract and all Contract Documents shall take effect as of the date it is approved and filed by the state Comptroller.

ARTICLE 19 – Vendor Responsibility

The Department recommends that vendors file a required Vendor Responsibility Questionnaire online via the New York State VendRep System. To enroll in and use the New York State VendRep System, see the VendRep System Instructions available at: <u>http://www.osc.state.ny.us/vendrep/vendor-index.htm</u> or go directly to the VendRep System online at <u>https://portal.osc.state.ny.us</u>.

Vendors must provide their New York State Identification Number when enrolling. To request assignment of a Vendor ID or for VendRep System assistance, contact the Office of the State Comptroller's Help Desk at 866-370-4672 or 518-408-4672 or by email at: ciohelpdesk@osc.state.ny.us. Vendors opting to complete and submit a paper questionnaire can obtain the appropriate questionnaire from the VendRep website www.osc.state.ny.us/vendrep or may contact the Department of the Office of the State Comptroller's Help Desk for a copy of the paper form.

ARTICLE 20 - Contract Price

The maximum payment which Department shall pay to Contractor, and which Contractor agrees to accept as full payment for its work under this Agreement, is the total of:

Bid

\$ (Express Sum in Figures)
\$ (Express Sum in Numbers)

Plus, or Minus executed change order(s)

SIGNATURE PAGE

IN WITNESS WHEREOF, this Contract has been duly executed by the parties hereto on the day and year appearing following their respective signatures.

<u>Agency Certification</u>: "In addition to the acceptance of this Contract, I also certify that original copies of this signature page will be attached to all other exact copies of this Contract."

CONTRACTOR SIGNATURE	DEPARTMENT SIGNATURE
Ву:	By:
Print Name:	Print Name:
Title:	Title:
Dated:	Dated:

Contractor Acknowledgement State of County of)) ss.:)		
in and for said State, personally or proved to me on the basis of s subscribed to the within instrume his/her/their capacity(ies), and th	appeared satisfactory evider ent and acknowled at by his/her/their	, before me, the undersigned, a Notary Public , personally known to me nee to be the individual(s) whose name(s) is (are) ged to me that he/she/they executed the same in signature(s) on the instrument, the individual(s), acted, executed the instrument.	
Notary Public			

ATTORNEY GENERAL SIGNATURE	COMPTROLLER SIGNATURE
	Approved:
	Thomas P. DiNapoli
Approved as to Form:	State Comptroller
Dated:	Dated:

ATTACHMENT A

SEPARABLE PARTS OF THE WORK

The specified work for Contract Number D011945 includes the following Separable Part A

Part A: Winter Shutdown. The CONTRACTOR shall furnish all labor, materials, equipment and incidentals necessary to prepare, protect, inspect and maintain the site during winter shutdown which will commence the third Saturday in December and continue until the second Sunday of March the following year for each year. Provisions for winter shutdown shall be included as an itemized cost under LS-1 and in accordance with the requirements outlined in Specification 01 92 13. Site Services (UP-1) and Health and Safety Services (UP-2) will not be paid during the winter shutdown period. Should the contractor elect to work through the winter, alternative schedules shall be considered under the provisions of the contract and as a substitution under a no cost change to the DEPARTMENT.

SECTION VII

Appendices A, B, C, D

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APPENDIX A

STANDARD CLAUSES FOR NEW YORK STATE CONTRACTS

PLEASE RETAIN THIS DOCUMENT FOR FUTURE REFERENCE.

January 2014

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STANDARD CLAUSES FOR NYS CONTRACTS

The parties to the attached contract, license, lease, amendment or other agreement of any kind (hereinafter, "the contract" or "this contract") agree to be bound by the following clauses which are hereby made a part of the contract (the word "Contractor" herein refers to any party other than the State, whether a contractor, licenser, licensee, lessor, lessee or any other party):

1. <u>EXECUTORY CLAUSE</u>. In accordance with Section 41 of the State Finance Law, the State shall have no liability under this contract to the Contractor or to anyone else beyond funds appropriated and available for this contract.

2. NON-ASSIGNMENT CLAUSE. In accordance with Section 138 of the State Finance Law, this contract may not be assigned by the Contractor or its right, title or interest therein assigned, transferred, conveyed, sublet or otherwise disposed of without the State's previous written consent, and attempts to do so are null and void. Notwithstanding the foregoing, such prior written consent of an assignment of a contract let pursuant to Article XI of the State Finance Law may be waived at the discretion of the contracting agency and with the concurrence of the State Comptroller where the original contract was subject to the State Comptroller's approval, where the assignment is due to a reorganization, merger or consolidation of the Contractor's business entity or enterprise. The State retains its right to approve an assignment and to require that any Contractor demonstrate its responsibility to do business with the State. The Contractor may, however, assign its right to receive payments without the State's prior written consent unless this contract concerns Certificates of Participation pursuant to Article 5-A of the State Finance Law.

3. COMPTROLLER'S APPROVAL. In accordance with Section 112 of the State Finance Law (or, if this contract is with the State University or City University of New York, Section 355 or Section 6218 of the Education Law), if this contract exceeds \$50,000 (or the minimum thresholds agreed to by the Office of the State Comptroller for certain S.U.N.Y. and C.U.N.Y. contracts), or if this is an amendment for any amount to a contract which, as so amended, exceeds said statutory amount, or if, by this contract, the State agrees to give something other than money when the value or reasonably estimated value of such consideration exceeds \$10,000, it shall not be valid, effective or binding upon the State until it has been approved by the State Comptroller and filed in his office. Comptroller's approval of contracts let by the Office of General Services is required when such contracts exceed \$85,000 (State Finance Law Section 163.6-a). However, such pre-approval shall not be required for any contract established as a centralized contract through the Office of General Services or for a purchase order or other transaction issued under such centralized contract.

4. WORKERS' COMPENSATION BENEFITS. In accordance with Section 142 of the State Finance Law, this

contract shall be void and of no force and effect unless the Contractor shall provide and maintain coverage during the life of this contract for the benefit of such employees as are required to be covered by the provisions of the Workers' Compensation Law.

5. NON-DISCRIMINATION REQUIREMENTS. To the extent required by Article 15 of the Executive Law (also known as the Human Rights Law) and all other State and Federal statutory and constitutional non-discrimination provisions, the Contractor will not discriminate against any employee or applicant for employment because of race, creed, color, sex (including gender identity or expression), national origin, sexual orientation, military status, age, disability, predisposing genetic characteristics, marital status or domestic violence victim status. Furthermore, in accordance with Section 220-e of the Labor Law, if this is a contract for the construction, alteration or repair of any public building or public work or for the manufacture, sale or distribution of materials, equipment or supplies, and to the extent that this contract shall be performed within the State of New York, Contractor agrees that neither it nor its subcontractors shall, by reason of race, creed, color, disability, sex, or national origin: (a) discriminate in hiring against any New York State citizen who is qualified and available to perform the work; or (b) discriminate against or intimidate any employee hired for the performance of work under this contract. If this is a building service contract as defined in Section 230 of the Labor Law. then, in accordance with Section 239 thereof, Contractor agrees that neither it nor its subcontractors shall by reason of race, creed, color, national origin, age, sex or disability: (a) discriminate in hiring against any New York State citizen who is qualified and available to perform the work; or (b) discriminate against or intimidate any employee hired for the performance of work under this contract. Contractor is subject to fines of \$50.00 per person per day for any violation of Section 220-e or Section 239 as well as possible termination of this contract and forfeiture of all moneys due hereunder for a second or subsequent violation.

6. WAGE AND HOURS PROVISIONS. If this is a public work contract covered by Article 8 of the Labor Law or a building service contract covered by Article 9 thereof, neither Contractor's employees nor the employees of its subcontractors may be required or permitted to work more than the number of hours or days stated in said statutes, except as otherwise provided in the Labor Law and as set forth in prevailing wage and supplement schedules issued by the State Labor Department. Furthermore, Contractor and its subcontractors must pay at least the prevailing wage rate and pay or provide the prevailing supplements, including the premium rates for overtime pay, as determined by the State Labor Department in accordance with the Labor Law. Additionally, effective April 28, 2008, if this is a public work contract covered by Article 8 of the Labor Law, the Contractor understands and agrees that the filing of payrolls in a manner consistent with Subdivision 3-a of Section 220 of the Labor Law shall be a condition precedent to payment by the State of

any State approved sums due and owing for work done upon the project.

7. <u>NON-COLLUSIVE BIDDING CERTIFICATION</u>. In accordance with Section 139-d of the State Finance Law, if this contract was awarded based upon the submission of bids, Contractor affirms, under penalty of perjury, that its bid was arrived at independently and without collusion aimed at restricting competition. Contractor further affirms that, at the time Contractor submitted its bid, an authorized and responsible person executed and delivered to the State a non-collusive bidding certification on Contractor's behalf.

8. <u>INTERNATIONAL BOYCOTT PROHIBI</u>TION. In accordance with Section 220-f of the Labor Law and Section 139-h of the State Finance Law, if this contract exceeds \$5,000, the Contractor agrees, as a material condition of the contract, that neither the Contractor nor any substantially owned or affiliated person, firm, partnership or corporation has participated, is participating, or shall participate in an international boycott in violation of the federal Export Administration Act of 1979 (50 USC App. Sections 2401 et seq.) or regulations thereunder. If such Contractor, or any of the aforesaid affiliates of Contractor, is convicted or is otherwise found to have violated said laws or regulations upon the final determination of the United States Commerce Department or any other appropriate agency of the United States subsequent to the contract's execution, such contract, amendment or modification thereto shall be rendered forfeit and void. The Contractor shall so notify the State Comptroller within five (5) business days of such conviction, determination or disposition of appeal (2NYCRR 105.4).

9. <u>SET-OFF RIGHTS</u>. The State shall have all of its common law, equitable and statutory rights of set-off. These rights shall include, but not be limited to, the State's option to withhold for the purposes of set-off any moneys due to the Contractor under this contract up to any amounts due and owing to the State with regard to this contract, any other contract for a term commencing prior to the term of this contract, plus any amounts due and owing to the State or monetary penalties relative thereto. The State shall exercise its set-off rights in accordance with normal State practices including, in cases of set-off pursuant to an audit, the finalization of such audit by the State agency, its representatives, or the State Comptroller.

10. <u>**RECORDS.</u>** The Contractor shall establish and maintain complete and accurate books, records, documents, accounts and other evidence directly pertinent to performance under this contract (hereinafter, collectively, "the Records"). The Records must be kept for the balance of the calendar year in which they were made and for six (6) additional years thereafter. The State Comptroller, the Attorney General and any other person or entity authorized to conduct an examination, as well as the agency or agencies involved in this</u>

contract, shall have access to the Records during normal business hours at an office of the Contractor within the State of New York or, if no such office is available, at a mutually agreeable and reasonable venue within the State, for the term specified above for the purposes of inspection, auditing and copying. The State shall take reasonable steps to protect from public disclosure any of the Records which are exempt from disclosure under Section 87 of the Public Officers Law (the "Statute") provided that: (i) the Contractor shall timely inform an appropriate State official, in writing, that said records should not be disclosed; and (ii) said records shall be sufficiently identified; and (iii) designation of said records as exempt under the Statute is reasonable. Nothing contained herein shall diminish, or in any way adversely affect, the State's right to discovery in any pending or future litigation.

11. IDENTIFYING INFORMATION AND PRIVACY (a) Identification Number(s). Every NOTIFICATION. invoice or New York State Claim for Payment submitted to a New York State agency by a payee, for payment for the sale of goods or services or for transactions (e.g., leases, easements, licenses, etc.) related to real or personal property must include the payee's identification number. The number is any or all of the following: (i) the payee's Federal employer identification number, (ii) the pavee's Federal social security number, and/or (iii) the payee's Vendor Identification Number assigned by the Statewide Financial System. Failure to include such number or numbers may delay payment. Where the payee does not have such number or numbers, the payee, on its invoice or Claim for Payment, must give the reason or reasons why the payee does not have such number or numbers.

(b) Privacy Notification. (1) The authority to request the above personal information from a seller of goods or services or a lessor of real or personal property, and the authority to maintain such information, is found in Section 5 of the State Tax Law. Disclosure of this information by the seller or lessor to the State is mandatory. The principal purpose for which the information is collected is to enable the State to identify individuals, businesses and others who have been delinquent in filing tax returns or may have understated their tax liabilities and to generally identify persons affected by the taxes administered by the Commissioner of Taxation and Finance. The information will be used for tax administration purposes and for any other purpose authorized by law. (2) The personal information is requested by the purchasing unit of the agency contracting to purchase the goods or services or lease the real or personal property covered by this contract or lease. The information is maintained in the Statewide Financial System by the Vendor Management Unit within the Bureau of State Expenditures, Office of the State Comptroller, 110 State Street, Albany, New York 12236.

12. EQUAL EMPLOYMENT OPPORTUNITIES FOR MINORITIES AND WOMEN. In accordance with Section 312 of the Executive Law and 5 NYCRR 143, if this contract is: (i) a written agreement or purchase order instrument, providing for a total expenditure in excess of \$25,000.00, whereby a contracting agency is committed to expend or does expend funds in return for labor, services, supplies, equipment, materials or any combination of the foregoing, to be performed for, or rendered or furnished to the contracting agency; or (ii) a written agreement in excess of \$100,000.00 whereby a contracting agency is committed to expend or does expend funds for the acquisition, construction, demolition, replacement, major repair or renovation of real property and improvements thereon; or (iii) a written agreement in excess of \$100,000.00 whereby the owner of a State assisted housing project is committed to expend or does expend funds for the acquisition, construction, demolition, replacement, major repair or renovation of real property and improvements thereon for such project, then the following shall apply and by signing this agreement the Contractor certifies and affirms that it is Contractor's equal employment opportunity policy that:

(a) The Contractor will not discriminate against employees or applicants for employment because of race, creed, color, national origin, sex, age, disability or marital status, shall make and document its conscientious and active efforts to employ and utilize minority group members and women in its work force on State contracts and will undertake or continue existing programs of affirmative action to ensure that minority group members and women are afforded equal employment opportunities without discrimination. Affirmative action shall mean recruitment, employment, job assignment, promotion, upgradings, demotion, transfer, layoff, or termination and rates of pay or other forms of compensation;

(b) at the request of the contracting agency, the Contractor shall request each employment agency, labor union, or authorized representative of workers with which it has a collective bargaining or other agreement or understanding, to furnish a written statement that such employment agency, labor union or representative will not discriminate on the basis of race, creed, color, national origin, sex, age, disability or marital status and that such union or representative will affirmatively cooperate in the implementation of the Contractor's obligations herein; and

(c) the Contractor shall state, in all solicitations or advertisements for employees, that, in the performance of the State contract, all qualified applicants will be afforded equal employment opportunities without discrimination because of race, creed, color, national origin, sex, age, disability or marital status.

Contractor will include the provisions of "a", "b", and "c" above, in every subcontract over \$25,000.00 for the construction, demolition, replacement, major repair, renovation, planning or design of real property and improvements thereon (the "Work") except where the Work is for the beneficial use of the Contractor. Section 312 does not apply to: (i) work, goods or services unrelated to this contract; or (ii) employment outside New York State. The State shall consider compliance by a contractor or subcontractor with the requirements of any federal law concerning equal employment opportunity which effectuates the purpose of this section. The contracting agency shall determine whether the imposition of the requirements of the provisions hereof duplicate or conflict with any such federal law and if such duplication or conflict exists, the contracting agency shall waive the applicability of Section 312 to the extent of such duplication or conflict. Contractor will comply with all duly promulgated and lawful rules and regulations of the Department of Economic Development's Division of Minority and Women's Business Development pertaining hereto.

13. <u>CONFLICTING TERMS</u>. In the event of a conflict between the terms of the contract (including any and all attachments thereto and amendments thereof) and the terms of this Appendix A, the terms of this Appendix A shall control.

14. <u>GOVERNING LAW</u>. This contract shall be governed by the laws of the State of New York except where the Federal supremacy clause requires otherwise.

15. <u>LATE PAYMENT</u>. Timeliness of payment and any interest to be paid to Contractor for late payment shall be governed by Article 11-A of the State Finance Law to the extent required by law.

16. <u>NO ARBITRATION</u>. Disputes involving this contract, including the breach or alleged breach thereof, may not be submitted to binding arbitration (except where statutorily authorized), but must, instead, be heard in a court of competent jurisdiction of the State of New York.

17. <u>SERVICE OF PROCESS</u>. In addition to the methods of service allowed by the State Civil Practice Law & Rules ("CPLR"), Contractor hereby consents to service of process upon it by registered or certified mail, return receipt requested. Service hereunder shall be complete upon Contractor's actual receipt of process or upon the State's receipt of the return thereof by the United States Postal Service as refused or undeliverable. Contractor must promptly notify the State, in writing, of each and every change of address to which service of process can be made. Service by the State to the last known address shall be sufficient. Contractor will have thirty (30) calendar days after service hereunder is complete in which to respond.

18. PROHIBITION ON PURCHASE OF TROPICAL HARDWOODS. The Contractor certifies and warrants that all wood products to be used under this contract award will be in accordance with, but not limited to, the specifications and provisions of Section 165 of the State Finance Law, (Use of Tropical Hardwoods) which prohibits purchase and use of tropical hardwoods, unless specifically exempted, by the State or any governmental agency or political subdivision or public benefit corporation. Qualification for an exemption under this law will be the responsibility of the contractor to establish to meet with the approval of the State. In addition, when any portion of this contract involving the use of woods, whether supply or installation, is to be performed by any subcontractor, the prime Contractor will indicate and certify in the submitted bid proposal that the subcontractor has been informed and is in compliance with specifications and provisions regarding use of tropical hardwoods as detailed in §165 State Finance Law. Any such use must meet with the approval of the State; otherwise, the bid may not be considered responsive. Under bidder certifications, proof of qualification for exemption will be the responsibility of the Contractor to meet with the approval of the State.

19. MACBRIDE FAIR EMPLOYMENT PRINCIPLES.

In accordance with the MacBride Fair Employment Principles (Chapter 807 of the Laws of 1992), the Contractor hereby stipulates that the Contractor either (a) has no business operations in Northern Ireland, or (b) shall take lawful steps in good faith to conduct any business operations in Northern Ireland in accordance with the MacBride Fair Employment Principles (as described in Section 165 of the New York State Finance Law), and shall permit independent monitoring of compliance with such principles.

20. <u>OMNIBUS PROCUREMENT ACT OF 1992.</u> It is the policy of New York State to maximize opportunities for the participation of New York State business enterprises, including minority and women-owned business enterprises as bidders, subcontractors and suppliers on its procurement contracts.

Information on the availability of New York State subcontractors and suppliers is available from:

NYS Department of Economic Development Division for Small Business Albany, New York 12245 Telephone: 518-292-5100 Fax: 518-292-5884 email: opa@esd.ny.gov

A directory of certified minority and women-owned business enterprises is available from:

NYS Department of Economic Development Division of Minority and Women's Business Development 633 Third Avenue New York, NY 10017 212-803-2414 email: <u>mwbecertification@esd.ny.gov</u> <u>https://ny.newnycontracts.com/FrontEnd/VendorSearchPu</u> <u>blic.asp</u>

The Omnibus Procurement Act of 1992 requires that by signing this bid proposal or contract, as applicable, Contractors certify that whenever the total bid amount is greater than \$1 million:

(a) The Contractor has made reasonable efforts to encourage the participation of New York State Business Enterprises as suppliers and subcontractors, including certified minority and women-owned business enterprises, on this project, and has retained the documentation of these efforts to be provided upon request to the State;

(b) The Contractor has complied with the Federal Equal Opportunity Act of 1972 (P.L. 92-261), as amended;

(c) The Contractor agrees to make reasonable efforts to provide notification to New York State residents of employment opportunities on this project through listing any such positions with the Job Service Division of the New York State Department of Labor, or providing such notification in such manner as is consistent with existing collective bargaining contracts or agreements. The Contractor agrees to document these efforts and to provide said documentation to the State upon request; and

(d) The Contractor acknowledges notice that the State may seek to obtain offset credits from foreign countries as a result of this contract and agrees to cooperate with the State in these efforts.

21. RECIPROCITY AND SANCTIONS PROVISIONS. Bidders are hereby notified that if their principal place of business is located in a country, nation, province, state or political subdivision that penalizes New York State vendors, and if the goods or services they offer will be substantially produced or performed outside New York State, the Omnibus Procurement Act 1994 and 2000 amendments (Chapter 684 and Chapter 383, respectively) require that they be denied contracts which they would otherwise obtain. NOTE: As of May 15, 2002, the list of discriminatory jurisdictions subject to this provision includes the states of South Carolina, Alaska, West Virginia, Wyoming, Louisiana and Hawaii. Contact NYS Department of Economic Development for a current list of jurisdictions subject to this provision.

22. <u>COMPLIANCE WITH NEW YORK STATE</u> <u>INFORMATION SECURITY BREACH AND</u> <u>NOTIFICATION ACT.</u> Contractor shall comply with the provisions of the New York State Information Security Breach and Notification Act (General Business Law Section 899-aa; State Technology Law Section 208).

23. <u>COMPLIANCE WITH CONSULTANT</u> <u>DISCLOSURE LAW</u>. If this is a contract for consulting services, defined for purposes of this requirement to include analysis, evaluation, research, training, data processing, computer programming, engineering, environmental, health, and mental health services, accounting, auditing, paralegal, legal or similar services, then, in accordance with Section 163 (4-g) of the State Finance Law (as amended by Chapter 10 of the Laws of 2006), the Contractor shall timely, accurately and properly comply with the requirement to submit an annual employment report for the contract to the agency that awarded the contract, the Department of Civil Service and the State Comptroller.

24. <u>PROCUREMENT LOBBYING</u>. To the extent this agreement is a "procurement contract" as defined by

State Finance Law Sections 139-j and 139-k, by signing this agreement the contractor certifies and affirms that all disclosures made in accordance with State Finance Law Sections 139-j and 139-k are complete, true and accurate. In the event such certification is found to be intentionally false or intentionally incomplete, the State may terminate the agreement by providing written notification to the Contractor in accordance with the terms of the agreement.

25. <u>CERTIFICATION OF REGISTRATION TO</u> <u>COLLECT SALES AND COMPENSATING USE TAX</u> <u>BY CERTAIN STATE CONTRACTORS, AFFILIATES</u> <u>AND SUBCONTRACTORS.</u>

To the extent this agreement is a contract as defined by Tax Law Section 5-a, if the contractor fails to make the certification required by Tax Law Section 5-a or if during the term of the contract, the Department of Taxation and Finance or the covered agency, as defined by Tax Law 5-a, discovers that the certification, made under penalty of perjury, is false, then such failure to file or false certification shall be a material breach of this contract and this contract may be terminated, by providing written notification to the Contractor in accordance with the terms of the agreement, if the covered agency determines that such action is in the best interest of the State.

26. **IRAN DIVESTMENT ACT**. By entering into this Agreement, Contractor certifies in accordance with State Finance Law §165-a that it is not on the "Entities Determined to be Non-Responsive Bidders/Offerers pursuant to the New York State Iran Divestment Act of 2012" ("Prohibited Entities List") posted at:

http://www.ogs.ny.gov/about/regs/docs/ListofEntities.pdf

Contractor further certifies that it will not utilize on this Contract any subcontractor that is identified on the Prohibited Entities List. Contractor agrees that should it seek to renew or extend this Contract, it must provide the same certification at the time the Contract is renewed or extended. Contractor also agrees that any proposed Assignee of this Contract will be required to certify that it is not on the Prohibited Entities List before the contract assignment will be approved by the State.

During the term of the Contract, should the state agency receive information that a person (as defined in State Finance Law §165-a) is in violation of the above-referenced certifications, the state agency will review such information and offer the person an opportunity to respond. If the person fails to demonstrate that it has ceased its engagement in the investment activity which is in violation of the Act within 90 days after the determination of such violation, then the state agency shall take such action as may be appropriate and provided for by law, rule, or contract, including, but not limited to, imposing sanctions, seeking compliance, recovering damages, or declaring the Contractor in default.

The state agency reserves the right to reject any bid, request for assignment, renewal or extension for an entity that appears on the Prohibited Entities List prior to the award, assignment, renewal or extension of a contract, and to pursue a responsibility review with respect to any entity that is awarded a contract and appears on the Prohibited Entities list after contract award.

APPENDIX B

Standard Clauses for All New York State Department of Environmental Conservation Contracts

The parties to the attached contract, license, lease, grant, amendment or other agreement of any kind (hereinafter "the contract" or "this contract") agree to be bound by the following clauses which are hereby made a part of the contract. The word "Contractor" herein refers to any party to the contract, other than the New York State Department of Environmental Conservation (hereinafter "Department").

I. Postponement, suspension, abandonment or termination by the Department:

The Department shall have the right to postpone, suspend, abandon or terminate this contract, and such actions shall in no event be deemed a breach of contract. In the event of any termination, postponement, delay, suspension or abandonment, the Contractor shall immediately stop work, take steps to incur no additional obligations, and to limit further expenditures. Within 15 days of receipt of notice, the Contractor shall deliver to the Department all data, reports, plans, or other documentation related to the performance of this contract, including but not limited to source codes and specifications, guarantees, warranties, as-built plans and shop drawings. In any of these events, the Department shall make settlement with the Contractor upon an equitable basis as determined by the Department which shall fix the value of the work which was performed by the Contractor prior to the postponement, suspension, abandonment or termination of this contract. This clause shall not apply to this contract if the contract contains other provisions applicable to postponement, suspension or termination of the contract.

II. Indemnification and Hold harmless The Contractor agrees that it will indemnify and save harmless the Department and the State of New York from and against all losses from claims, demands, payments, suits, actions, recoveries and judgments of every nature and description brought or recovered against it by reason of any omission or tortious act of the Contractor, its agents, employees, suppliers or subcontractors in the performance of this contract. The Department and the State of New York may retain such monies from the amount due Contractor as may be necessary to satisfy any claim for damages, costs and the like, which is asserted against the Department and/or the State of New York.

III. Conflict of Interest

(a) <u>Organizational Conflict of Interest.</u> To the best of the Contractor's knowledge and belief, the Contractor warrants that there are no relevant facts or circumstances which could give rise to an organizational conflict of interest, as herein defined, or that the Contractor has disclosed all such relevant information to the Department.

(1) An organizational conflict of interest exists when the nature of the work to be performed under this contract may,

without some restriction on future activities, impair or appear to impair the Contractor's objectivity in performing the work for the Department.

(2) The Contractor agrees that if an actual, or potential organizational conflict of interest is discovered at any time after award, whether before or during performance, the Contractor will immediately make a full disclosure in writing to the Department. This disclosure shall include a description of actions which the Contractor has taken or proposes to take, after consultation with the Department, to avoid, mitigate, or minimize the actual or potential conflict.

(3) To the extent that the work under this contract requires access to personal, proprietary or confidential business or financial data of persons or other companies, and as long as such data remains proprietary or confidential, the Contractor shall protect such data from unauthorized use and disclosure and agrees not to use it to compete with such companies.

(b) <u>Personal Conflict of Interest</u>: The following provisions with regard to management or professional level employee personnel performing under this contract shall apply until the earlier of the termination date of the affected employee(s) or the duration of the contract.

(1) A personal conflict of interest is defined as a relationship of an employee, subcontractor employee, or consultant with an entity that may impair or appear to impair the objectivity of the employee, subcontractor employee, or consultant in performing the contract work. The Contractor agrees to notify the Department immediately of any actual or potential personal conflict of interest with regard to any such person working on or having access to information regarding this contract, as soon as Contractor becomes aware of such conflict. The Department will notify the Contractor of the appropriate action to be taken.

(2) The Contractor agrees to advise all management or professional level employees involved in the work of this contract, that they must report any personal conflicts of interest to the Contractor. The Contractor must then advise the Department which will advise the Contractor of the appropriate action to be taken.

(3) Unless waived by the Department, the Contractor shall certify annually that, to the best of the Contractor's knowledge and belief, all actual, apparent or potential conflicts of interest, both personal and organizational, as defined herein, have been reported to the Department. Such certification must be signed by a senior executive of the Contractor and submitted in accordance with instructions provided by the Department. Along with the annual certification, the Contractor shall also submit an update of any changes in any conflict of interest plan submitted with its proposal for this contract. The initial certification shall cover the one-year period from the date of contract award, and all subsequent certifications shall cover successive annual periods thereafter. The certification is to be submitted no later than 45 days after the close of the previous certification period covered.

(4) In performing this contract, the Contractor recognizes that its employees may have access to data, either provided by the Department or first generated during contract performance, of a sensitive nature which should not be released without Department approval. If this situation occurs, the Contractor agrees to obtain confidentiality agreements from all affected employees working on requirements under this contract including subcontractors and consultants. Such agreements shall contain provisions which stipulate that each employee agrees not to disclose, either in whole or in part, to any entity external to the Department, Department of Health or the New York State Department of Law, any information or data provided by the Department or first generated by the Contractor under this contract, any site-specific cost information, or any enforcement strategy without first obtaining the written permission of the Department. If a Contractor, through an employee or otherwise, is subpoenaed to testify or produce documents, which could result in such disclosure, the Contractor must provide immediate advance notification to the Department so that the Department can authorize such disclosure or have the opportunity to take action to prevent such disclosure. Such agreements shall be effective for the life of the contract and for a period of five (5) years after completion of the contract.

(c) <u>Remedies</u> - The Department may terminate this contract in whole or in part, if it deems such termination necessary to avoid an organizational or personal conflict of interest, or an unauthorized disclosure of information. If the Contractor fails to make required disclosures or misrepresents relevant information to the Department, the Department may terminate the contract, or pursue such other remedies as may be permitted by the terms of Clause I of this Appendix or other applicable provisions of this contract regarding termination.

(d) The Contractor will be ineligible to make a proposal or bid on a contract for which the Contractor has

developed the statement of work or the solicitation package

(e) The Contractor agrees to insert in each subcontract or consultant agreement placed hereunder (except for subcontracts or consultant agreements for well drilling, fence erecting, plumbing, utility hookups, security guard services, or electrical services) provisions which shall conform substantially to the language of this clause, including this paragraph (e), unless otherwise authorized by the Department.

If this is a contract for work related to action at an inactive hazardous waste site, the following paragraph shall apply to those Contractors whose work requires the application of professional judgment: It does not apply to construction contracts.

(f) Due to the scope and nature of this contract, the Contractor shall observe the following restrictions on future hazardous waste site contracting for the duration of the contract.

(1) The Contractor, during the life of the work assignment and for a period of three (3) years after the completion of the work assignment, agrees not to enter into a contract with or to represent any party with respect to any work relating to remedial activities or work pertaining to a site where the Contractor previously performed work for the Department under this contract without the prior written approval of the Department.

(2) The Contractor agrees in advance that if any bids/proposals are submitted for any work for a third party that would require written approval of the Department prior to entering into a contract because of the restrictions of this clause, then the bids/proposals are submitted at the Contractor's own risk, and no claim shall be made against the Department to recover bid/proposal costs as a direct cost whether the request for authorization to enter into the contract is denied or approved.

IV. **Requests for Payment** All requests for payment by the Contractor must be submitted on forms supplied and approved by the Department. Each payment request must contain such items of information and supporting documentation as are required by the Department, and shall be all-inclusive for the period of time covered by the payment request.

V. **Compliance with Federal requirements** To the extent that federal funds are provided to the Contractor or used in paying the Contractor under this contract, the Contractor agrees that it will comply with all applicable federal laws and regulations, including but not limited to those laws and regulations under which the Federal funds were authorized. The Contractor further agrees to insert in any subcontract hereunder, provisions which shall conform substantially to the language of this clause.

VI. **Independent Contractor** The Contractor shall have the status of an independent contractor. Accordingly, the Contractor agrees that it will conduct itself in a manner consistent with such status, and that it will neither hold itself out as, nor claim to be, an officer or employee of the Department by reason of this contract. It further agrees that it will not make any claim, demand or application to the Department for any right or privilege applicable to an officer or employee of the Department, including but not limited to worker's compensation coverage, unemployment insurance benefits, social security coverage, or retirement membership or credit.

VII. Compliance with applicable laws

(a) Prior to the commencement of any work under this contract, the Contractor is required to meet all legal requirements necessary in the performance of the contract. This includes but is not limited to compliance with all applicable federal, state and local laws and regulations promulgated thereunder. It is the Contractor's responsibility to obtain any necessary permits, or other authorizations. By signing this contract, the Contractor affirmatively represents that it has complied with said laws, unless it advises the Department otherwise, in writing. The Department signs this contract in reliance upon this representation.

(b) During the term of this contract, and any extensions thereof, the Contractor must remain in compliance with said laws. A failure to notify the Department of noncompliance of which the Contractor was or should have been aware, may be considered a material breach of this contract.

VIII. **Dispute Resolution** The parties agree to the following steps, or as many as are necessary to resolve disputes between the Department and the Contractor.

(a) The Contractor specifically agrees to submit, in the first instance, any dispute relating to this contract to the designated individual, who shall render a written decision and furnish a copy thereof to the Contractor.

(1) The Contractor must request such decision in writing no more than fifteen days after it knew or should have known of the facts which are the basis of the dispute. (2) The decision of the designated individual shall be the final DEC determination, unless the Contractor files a written appeal of that decision with the designated appeal individual ("DAI") within twenty days of receipt of that decision.

(b) Upon receipt of the written appeal, the DAI, will review the record and decision. Following divisional procedures in effect at that time, the DAI will take one of the following actions, with written notice to the Contractor.

(1) Remand the matter to the program staff for further negotiation or information if it is determined that the matter is not ripe for review; or

(2) Determine that there is no need for further action, and that the determination of the designated individual is confirmed; or

(3) Make a determination on the record as it exists.

(c) The decision of the DAI shall be the final DEC decision unless the Contractor files a written appeal of that decision with the Chair of the Contract Review Committee ("CRC") within twenty days of receipt of that decision.

The designated individual to hear disputes is:

Michael Cruden, Director, Remedial Bureau E (Name and Title)

NYS Dept of Env. Conservation - Env. Remediation

625 Broadway, 12th Floor, Albany, NY (Address) 12233-7012

(518) 402-9814 (Tal

(Telephone)

The designated appeal individual to review decisions is:

<u>Andrew Guglielmi</u>, <u>Division Director</u> (Name and Title) NYS Dept of Env. Conservation - Env. Remediation <u>625 Broadway</u>, 12th Floor, Albany, NY 12233-7012 (Address)

(518) 402-9706 (Telephone)

The Chair of the Contract Review Committee is:

Department of Environmental Conservation Nancy W. Lussier Chair Contract Review Committee 625 Broadway, 10th Floor Albany, NY 12233-5010 Telephone: (518) 402-9228 (d) Upon receipt of the written appeal, the Chair of the CRC, in consultation with the members of the CRC and the Office of General Counsel, will take one of the following actions, or a combination thereof, with written notice to the Contractor.

(1) Remand the matter to program staff for additional fact finding, negotiation, or other appropriate action; or

(2) Adopt the decision of the DAI; or

(3) Consider the matter for review by the CRC in accordance with its procedures.

(e) Following a decision to proceed pursuant to (d) 3, above, the Chair of the CRC shall convene a proceeding in accordance with the CRC's established contract dispute resolution guidelines. The proceeding will provide the Contractor with an opportunity to be heard.

(f) Following a decision pursuant to (d) 2 or (d) 3, the CRC shall make a written recommendation to the Assistant Commissioner for Administration who shall render the final DEC determination.

(g) At any time during the dispute resolution process, and upon mutual agreement of the parties, the Office of Hearings and Mediation Services (OHMS) may be requested to provide mediation services or other appropriate means to assist in resolving the dispute. Any findings or recommendations made by the OHMS will not be binding on either party.

(h) Final DEC determinations shall be subject to review only pursuant to Article 78 of the Civil Practice Law and Rules.

(i) Pending final determination of a dispute hereunder, the Contractor shall proceed diligently with the performance of the Contract in accordance with the decision of the designated individual. Nothing in this Contract shall be construed as making final the decision of any administrative officer upon a question of law.

(j) Notwithstanding the foregoing, at the option of the Contractor, the following shall be subject to review by the CRC: Disputes arising under Article 15-A of the Executive Law (Minority and Women Owned Business participation), the Department's determination with respect to the adequacy of the Contractor's Utilization Plan, or the Contractor's showing of good faith efforts to comply therewith. A request for a review before the CRC should be made, in writing, within twenty days of receipt of the Department's determination. (k) The CRC will promptly convene a review in accordance with Article 15-A of the Executive Law and the regulations promulgated thereunder.

IX. Labor Law Provisions

(a) When applicable, the Contractor shall post, in a location designated by the Department, a copy of the New York State Department of Labor schedules of prevailing wages and supplements for this project, a copy of all re-determinations of such schedules for the project, the Workers' Compensation Law Section 51 notice, all other notices required by law to be posted at the site, the Department of Labor notice that this project is a public work project on which each worker is entitled to receive the prevailing wages and supplements for their occupation, and all other notices which the Department directs the Contractor to post. The Contractor shall provide a surface for such notices which is satisfactory to the Department. The Contractor shall maintain such notices in a legible manner and shall replace any notice or schedule which is damaged, defaced, illegible or removed for any reason. Contractor shall post such notices before commencing any work on the site and shall maintain such notices until all work on the site is complete.

(b) When appropriate, contractor shall distribute to each worker for this Contract a notice, in a form provided by the Department, that this project is a public work project on which each worker is entitled to receive the prevailing wage and supplements for the occupation at which he or she is working. Worker includes employees of Contractor and all Subcontractors and all employees of suppliers entering the site. Such notice shall be distributed to each worker before they start performing any work of this contract. At the time of distribution, Contractor shall have each worker sign a statement, in a form provided by the Department, certifying that the worker has received the notice required by this section, which signed statement shall be maintained with the payroll records required by the following paragraph (c).

(c) Contractor shall maintain on the site the original certified payrolls or certified transcripts thereof which Contractor and all of its Subcontractors are required to maintain pursuant to the New York Labor Law Section 220. Contractor shall maintain with the payrolls or transcripts thereof, the statements signed by each worker pursuant to paragraph (b).

(d) Within thirty days of issuance of the first payroll, and every thirty days thereafter, the Contractor and every subcontractor must submit a transcript of the original payroll to the Department, which transcript must be subscribed and affirmed as true under penalty of perjury. X. **Offset** In accordance with State Law, the Department has the authority to administratively offset any monies due it from the Contractor, from payments due to the Contractor under this contract. The Department may also (a) assess interest or late payment charges, and collection fees, if applicable; (b) charge a fee for any dishonored check; (c) refuse to renew certain licenses and permits.

XI. **Tax Exemption** Pursuant to Tax Law Section 1116, the State is exempt from sales and use taxes. A standard state voucher is sufficient evidence thereof. For federal excise taxes, New York's registration Number 14740026K covers tax-free transactions under the Internal Revenue Code.

XII. Litigation Support In the event that the Department becomes involved in litigation related to the subject matter of this contract, the Contractor agrees to provide background support and other litigation support, including but not limited to depositions, appearances, and testimony. Compensation will be negotiated and based on rates established in the contract, or as may otherwise be provided in the contract.

XIII **Equipment** Any equipment purchased with funds provided under this contract, shall remain the property of the Department, unless otherwise provided in the contract. The Contractor shall be liable for all costs for maintaining the property in good, usable condition. It shall be returned to the Department upon completion of the contract, in such condition, unless the Department elects to sell the equipment to the Contractor, upon mutually agreeable terms.

XIV. **Inventions or Discoveries** Any invention or discovery first made in performance of this Contract shall be the property of the Department, unless otherwise provided in the contract. The Contractor agrees to provide the Department with any and all materials related to this property. At the Department's option, the Contractor may be granted a non-exclusive license.

XV. Patent and Copyright Protection

If any patented or copyrighted material is involved in or results from the performance of this Contract, this Article shall apply.

(a) The Contractor shall, at its expense, defend any suit instituted against the Department and indemnify the Department against any award of damages and costs made against the Department by a final judgment of a court of last resort based on the claim that any of the products, services or consumable supplies furnished by the Contractor under this Contract infringes any patent, copyright or other proprietary right; provided the Department gives the Contractor: (1) prompt written notice of any action, claim or threat of infringement suit, or other suit, and

(2) the opportunity to take over, settle or defend such action at the Contractor's sole expense, and

(3) all available information, assistance and authority necessary to the action, at the Contractor's sole expense.

(4) The Contractor shall control the defense of any such suit, including appeals, and all negotiations to effect settlement, but shall keep the Department fully informed concerning the progress of the litigation.

(b) If the use of any item(s) or parts thereof is held to infringe a patent or copyright and its use is enjoined, or Contractor believes it will be enjoined, the Contractor shall have the right, at its election and expense to take action in the following order of precedence:

(1) procure for the Department the right to continue using the same item or parts thereof;

(2) modify the same so that it becomes non-infringing and of at least the same quality and performance;

(3) replace the item(s) or parts thereof with noninfringing items of at least the same quality and performance;

(4) if none of the above remedies are available, discontinue its use and eliminate any future charges or royalties pertaining thereto. The Contractor will buy back the infringing product(s) at the State's book value, or in the event of a lease, the parties shall terminate the lease. If discontinuation or elimination results in the Contractor not being able to perform the Contract, the Contract shall be terminated.

(c) In the event that an action at law or in equity is commenced against the Department arising out of a claim that the Department's use of any item or material pursuant to or resulting from this Contract infringes any patent, copyright or proprietary right, and such action is forwarded by the Department to the Contractor for defense and indemnification pursuant to this Article, the Department shall copy all pleadings and documents forwarded to the Contractor together with the forwarding correspondence and a copy of this Contract to the Office of the Attorney General of the State of New York. If upon receipt of such request for defense, or at any time thereafter, the Contractor is of the opinion that the allegations in such action, in whole or in part, are not covered by the indemnification set forth in this Article, the Contractor shall immediately notify the Department and the Office of the Attorney General of the State of New York in writing and shall specify to what

extent the Contractor believes it is and is not obligated to defend and indemnify under the terms and conditions of this Contract. The Contractor shall in such event protect the interests of the Department and State of New York and secure a continuance to permit the State of New York to appear and defend its interests in cooperation with Contractor as is appropriate, including any jurisdictional defenses which the Department and State shall have.

(d) The Contractor shall, however, have no liability to the Department under this Article if any infringement is based upon or arises out of: (1) compliance with designs, plans, or specifications furnished by or on behalf of the Department as to the items; (2) alterations of the items by the Department; (3) failure of the Department to use updated items provided by the Contractor for avoiding infringement; (4) use of items in combination with apparatus or devices not delivered by the Contractor; (5) use of items in a manner for which the same were neither designed nor contemplated; or (6) a patent or copyright in which the Department or any affiliate or subsidiary of the Department has any direct or indirect interest by license or otherwise.

(e) The foregoing states the Contractor's entire liability for, or resulting from, patent or copyright infringement or claim thereof.

XVI. **Force Majeure** The term Force Majeure shall include acts of God, work stoppages due to labor disputes or strikes, fires, explosions, epidemics, riots, war rebellion, sabotage or the like. If a failure of or delay in performance by either party results from the occurrence of a Force Majeure event, the delay shall be excused and the time for performance extended by a period equivalent to the time lost because of the Force majeure event, if and to the extent that:

(a) The delay or failure was beyond the control of the party affected and not due to its fault or negligence; and

(b) The delay or failure was not extended because of the affected party's failure to use all reasonable diligence to overcome the obstacle or to resume performance immediately after such obstacle was overcome; and

(c) The affected party provides notice within (5) days of the onset of the event, that it is invoking the protection of this provision.

XVII. **Freedom of Information Requests** The Contractor agrees to provide the Department with any records which must be released in order to comply with a request pursuant to the Freedom of Information Law. The Department will provide the contractor with an opportunity to identify material which may be protected from release and to support its position.

XVIII. **Precedence** In the event of a conflict between the terms of this Appendix B and the terms of the Contract (including any and all attachments thereto and amendments thereof, but not including Appendix A), the terms of this Appendix B shall control. In the event of a conflict between the terms of this Appendix B, and the terms of Appendix A, the terms of Appendix A shall control.

XIX. Article 15-Requirements

PARTICIPATION BY MINORITY GROUP MEMBERS AND WOMEN WITH RESPECT TO STATE CONTRACTS: REQUIREMENTS AND PROCEDURES

(a) General Provisions

(1)The Department is required to implement the provisions of New York State Executive Law Article 15-A and 5 NYCRR Parts 142-144 ("MWBE Regulations") for all State contracts as defined therein, with a value (1) in excess of \$25,000 for labor, services, equipment, materials, or any combination of the foregoing or (2) in excess of \$100,000 for real property renovations and construction.

(2)The Contractor to the subject contract (the "Contractor" and the "Contract," respectively) agrees, in addition to any other nondiscrimination provision of the Contract and at no additional cost to the New York State Department (the "Department", to fully comply and cooperate with the Department in the implementation of New York State Executive Law Article 15-A. These requirements include equal employment opportunities for minority group members and women ("EEO") and contracting opportunities for certified minority and women-owned business enterprises ("MWBEs"). Contractor's demonstration of "good faith efforts" pursuant to 5 NYCRR §142.8 shall be a part of these requirements. These provisions shall be deemed supplementary to, and not in lieu of, the nondiscrimination provisions required by New York State Executive Law Article 15 (the "Human Rights Law") or other applicable federal, state or local laws.

(3)Failure to comply with all of the requirements herein may result in a finding of non-responsiveness, non-responsibility and/or a breach of contract, leading to the withholding of funds or such other actions, liquidated damages pursuant to Section VII of this Article or enforcement proceedings as allowed by the Contract.

(b) Contract Goals

(1)For purposes of this procurement, the Department hereby establishes an overall goal of 20% for Minority and Women-Owned Business Enterprises ("MWBE") participation, (based on the current availability of qualified MBEs and WBEs).

(2)For purposes of providing meaningful participation by MWBEs on the Contract and achieving the Contract Goals established in Section II-A hereof, Contractor should reference the directory of New York State Certified MWBEs found at the following internet address;

https://ny.newnycontracts.com

Additionally, the Contractor is encouraged to contact the Division of Minority and Woman Business Development ((518) 292-5250; (212) 803-2414; or (716) 846-8200) to discuss additional methods of maximizing participation by MWBEs on the Contract.

(3)Where MWBE goals have been established herein, pursuant to 5 NYCRR §142.8, Contractor must document "good faith efforts" to provide meaningful participation by MWBEs as subcontractors or suppliers in the performance of the Contract. In accordance with Section 316-a of Article 15-A and 5 NYCRR §142.13, the Contractor acknowledges that if Contractor is found to have willfully and intentionally failed to comply with the MWBE participation goals set forth in the Contract, such a finding constitutes a breach of contract and the Contractor shall be liable to the Department for liquidated or other appropriate damages, as set forth herein.

(c) Equal Employment Opportunity (EEO)

(1) Contractor agrees to be bound by the provisions of Article 15-A and the MWBE Regulations promulgated by the Division of Minority and Women's Business Development of the Department of Economic Development (the "Division"). If any of these terms or provisions conflict with applicable law or regulations, such laws and regulations shall supersede these requirements. Contractor shall comply with the following provisions of Article 15-A:

> (i)Contractor and Subcontractors shall undertake or continue existing EEO programs to ensure that minority group members and women are afforded equal employment opportunities without discrimination because of race, creed, color, national origin, sex, age, disability or marital status. For these purposes, EEO shall apply in the

areas of recruitment, employment, job assignment, promotion, upgrading, demotion, transfer, layoff, or termination and rates of pay or other forms of compensation.

(ii)The Contractor shall submit an EEO policy statement to the Department within seventy two(72) hours after the date of the notice by Department to award the Contract to the Contractor.

(iii)If Contractor or Subcontractor does not have an existing EEO policy statement, the Department may provide the Contractor or Subcontractor a model statement. This statement can be found at the link provided in Section 8.

(iv)The Contractor's EEO policy statement shall include the following language:

- a. The Contractor will not discriminate against any employee or applicant for employment because of race, creed, color, national origin, sex, age, disability or marital status, will undertake or continue existing EEO programs to ensure that minority group members and women are afforded equal employment opportunities without discrimination, and shall make and document its conscientious and active efforts to employ and utilize minority group members and women in its work force.
- b. The Contractor shall state in all solicitations or advertisements for employees that, in the performance of the contract, all qualified applicants will be afforded equal employment opportunities without discrimination because of race, creed, color, national origin, sex, age, disability or marital status.
- c. The Contractor shall request each employer Department, labor union, or authorized representative of workers with which it has a collective bargaining or other agreement or understanding, to furnish a written statement that such employer Department, labor union, or representative will not discriminate on the basis of race, creed, color, national origin, sex age, disability or marital status and that such union or representative will affirmatively cooperate in the

implementation of the Contractor's obligations herein.

- d. The Contractor will include the provisions of Subdivisions (a) through (c) of this Subsection 4 and Paragraph "E" of this Section III, which provides for relevant provisions of the Human Rights Law, in every subcontract in such a manner that the requirements of the subdivisions will be binding upon each subcontractor as to work in connection with the Contract.
- e. **EEO Contract Goals** for the purposes of this procurement, the Department hereby establishes a goal of <u>10%</u> Minority Labor Force Participation, <u>10%</u> Female Labor Force Participation.

(2) Staffing Plan Form

To ensure compliance with this Section, the Contractor shall submit a staffing plan to document the composition of the proposed workforce to be utilized in the performance of the Contract by the specified categories listed, including ethnic background, gender, and Federal occupational categories. Contractors shall complete the Staffing plan form and submit it as part of their bid or proposal or within a reasonable time, but no later than the time of award of the contract.

(3) Workforce Employment Utilization Report Form ("Workforce Report")

- Once a contract has been awarded and during the term of Contract, Contractor is responsible for updating and providing notice to the Department of any changes to the previously submitted Staffing Plan. This information is to be submitted on a quarterly basis during the term of the Contract to report the actual workforce utilized in the performance of the Contract by the specified categories listed including ethnic background, gender, and Federal occupational categories. The Workforce Report must be submitted to report this information.
 - (ii) Separate forms shall be completed by Contractor and any subcontractor performing work on the Contract.

- (iii) In limited instances, Contractor may not be able to separate out the workforce utilized in the performance of the Contract from Contractor's and/or subcontractor's total workforce. When a separation can be made, Contractor shall submit the Workforce Report and indicate that the information provided related to the actual workforce utilized on the Contract. When the workforce to be utilized on the contract cannot be separated out from Contractor's and/or subcontractor's total workforce, Contractor shall submit the Workforce Report and indicate that the information provided is Contractor's total workforce during the subject time frame, not limited to work specifically under the Contract.
- (2) Contractor shall comply with the provisions of the Human Rights Law, all other State and Federal statutory and constitutional non-discrimination provisions. Contractor and subcontractors shall not discriminate against any employee or applicant for employment because of race, creed (religion), color, sex, national origin, sexual orientation, military status, age, disability, predisposing genetic characteristic, marital status or domestic violence victim status, and shall also follow the requirements of the Human Rights Law with regard to non-discrimination on the basis of prior criminal conviction and prior arrest.

(d) MWBE Utilization Plan

(1) The Contractor represents and warrants that Contractor has submitted an MWBE Utilization Plan either prior to, or at the time of, the execution of the contract.

(2) Contractor agrees to use such MWBE Utilization Plan for the performance of MWBEs on the Contract pursuant to the prescribed MWBE goals set forth in Section III-A of this Appendix.

(3)Contractor further agrees that a failure to submit and/or use such MWBE Utilization Plan shall constitute a material breach of the terms of the Contract. Upon the occurrence of such a material breach, Department shall be entitled to any remedy provided herein, including but not limited to, a finding of Contractor non-responsiveness.

(e) Waivers

(1)For Waiver Requests Contractor should use Waiver Request Form.

(2)If the Contractor, after making good faith efforts, is unable to comply with MWBE goals, the Contractor may submit a Request for Waiver form documenting good faith efforts by the Contractor to meet such goals. If the documentation included with the waiver request is complete, the Department shall evaluate the request and issue a written notice of acceptance or denial within twenty (20) days of receipt.

(4) If the Department, upon review of the MWBE Utilization Plan and updated Quarterly MWBE Contractor Compliance Reports determines that Contractor is failing or refusing to comply with the Contract goals and no waiver has been issued in regards to such non-compliance, the Department may issue a notice of deficiency to the Contractor. The Contractor must respond to the notice of deficiency within seven (7) business days of receipt. Such response may include a request for partial or total waiver of MWBE Contract Goals.

(f) Quarterly MWBE Contractor Compliance Report

Contractor is required to submit a Quarterly MWBE Contractor Compliance Report Form to the Department by the 10th day following each end of quarter over the term of the Contract documenting the progress made towards achievement of the MWBE goals of the Contract.

(g) Liquidated Damages - MWBE Participation

(1)Where Department determines that Contractor is not in compliance with the requirements of the Contract and Contractor refuses to comply with such requirements, or if Contractor is found to have willfully and intentionally failed to comply with the MWBE participation goals, Contractor shall be obligated to pay to the Department liquidated damages.

(2) Such liquidated damages shall be calculated as an amount equaling the difference between:

- (i) All sums identified for payment to MWBEs had the Contractor achieved the contractual MWBE goals; and
- (ii) All sums actually paid to MWBEs for work performed or materials supplied under the Contract.

(3) In the event a determination has been made which requires the payment of liquidated damages and such identified sums have not been withheld by the Department, Contractor shall pay such liquidated damages to the Department within sixty (60) days after they are assessed by the Department unless prior to the expiration of such sixtieth day, the Contractor has filed a complaint with the Director of the Division of Minority and Woman Business Development pursuant to Subdivision 8 of Section 313 of the Executive Law in which event the liquidated damages shall be payable if Director renders a decision in favor of the Department.

(h) Forms

The following forms referenced in Article XVIII 3-A-3, 3B, 3C and 5A can be found at http://www.dec.ny.gov/about/48854.html

Appendix C

Standard Clauses for Ethics in all NYSDEC Contracts

The parties to the attached contract, license, lease, grant, amendment or other agreement of any kind (hereinafter "the contract" or "this contract") agree to be bound by the following clauses which are hereby made a part of the contract. The word "Offeror" herein refers to any party submitting an application, bid, proposal, or other documents in response to this procurement. The word "Contractor" herein refers to any party to the contract, other than the New York State Department of Environmental Conservation (hereinafter "Department").

I. Conflict of Interest

A. Procurement Phase:

- 1. An Offeror will disclose any existing or contemplated relationship with any other person or entity, including relationships with any member, shareholders of 5% or more, parent, subsidiary, or affiliated firm, which would constitute an actual or potential conflict of interest or appearance of impropriety, relating to other clients/customers of the Offeror or former officers and employees of the Agencies and their Affiliates, in connection with the Offeror rendering services enumerated in this procurement. If a conflict does or might exist, the Offeror will describe how the Offeror would eliminate or prevent it. This description will include, but not be limited to what procedures will be followed to detect, notify the Agencies of, and resolve any such conflicts.
- 2. The Offeror must disclose whether it, or any of its members, shareholders of 5% or more, parents, affiliates, or subsidiaries, have been the subject of any investigation or disciplinary action by the New York State Joint Commission on Public Ethics or its predecessor State entities (collectively, "Commission"), and if so, a brief description must be included in the Offeror's response indicating how any matter before the Commission was resolved or whether it remains unresolved.
- 3. The Offeror/Contractor has provided a form (Vendor Assurance of No Conflict of Interest or Detrimental Effect attached hereto as **Attachment 4**), signed by an authorized executive or legal representative attesting that the Offeror's/Contractor's performance of the services does not and will not create a conflict of interest with, nor position the Offeror/Contractor to breach any other contract currently in force with the State of New York, that the Offeror/Contractor will not act in any manner that is detrimental to any State project on which the Offeror/Contractor is rendering services.

B. Contract Phase:

1. The Contractor hereby reaffirms the attestations made in its proposal and covenants and represents that there is and shall be no actual or potential conflict of interest that could prevent the Contractor's satisfactory or ethical performance of duties required to be performed pursuant to the terms of this contract. The Contractor shall have a duty to notify the Department immediately of any actual or potential conflicts of interest.

- 2. In conjunction with any subcontract under this contract, the Contractor shall obtain and deliver to the Department, prior to entering into a subcontract, a Vendor Assurance of No Conflict of Interest or Detrimental Effect form, signed by an authorized executive or legal representative of the subcontractor. The Contractor shall also require in any subcontracting agreement that the subcontractor, in conjunction with any further subcontracting agreement, obtain and deliver to the Department a signed and completed Vendor Assurance of No Conflict of Interest or Detrimental Effect form for each of its subcontractors prior to entering into a subcontract.
- 3. The Department and the Contractor recognize that conflicts may occur in the future because the Contractor may have existing or establish new relationships. The Department will review the nature of any relationships and reserves the right to terminate this contract for any reason, or for cause, if, in the judgment of the Department, a real or potential conflict of interest cannot be cured.
- 4. In performing this contract, the Contractor recognizes that its employees may have access to data, either provided by the Department or first generated during contract performance, of a sensitive nature which should not be released without prior Department approval. If this situation occurs, the Contractor agrees to obtain confidentiality agreements from all affected employees working on requirements under this contract including subcontractors and consultants. Such agreements shall contain provisions which stipulate that each employee agrees not to disclose, either in whole or in part, to any entity external to the Department, Department of Health or the New York State Department of Law, any information or data provided by the Department or first generated by the Contractor under this contract, any site-specific cost information, or any enforcement strategy without first obtaining the written permission of the Department. If a Contractor, through an employee or otherwise, is subpoenaed to testify or produce documents, which could result in such disclosure, the Contractor must provide immediate advance notification to the Department so that the Department can authorize such disclosure or have the opportunity to take action to prevent such disclosure. Such agreements shall be effective for the life of the contract and for a period of five (5) years after completion of the contract.
- 5. The Department may terminate this contract in whole or in part, if it deems such termination necessary to avoid a conflict of interest, or an unauthorized disclosure of information. If the Contractor fails to make required disclosures or misrepresents relevant information to the Department, the Department may terminate the contract, or pursue such other remedies as may be allowed by law or other applicable provisions of this contract regarding termination.
- 6. The Contractor will be ineligible to make a proposal or bid on a contract for which the Contractor has developed the statement of work or the solicitation package.

7. If this is a contract for work related to action at an inactive hazardous waste site, the following paragraph shall apply to those Contractors whose work requires the application of professional judgment: It does not apply to construction contracts.

Due to the scope and nature of this contract, the Contractor shall observe the following restrictions on future hazardous waste site contracting for the duration of the contract.

a. The Contractor, during the life of the work assignment and for a period of three (3) years after the completion of the work assignment, agrees not to enter into a contract with or to

represent any party with respect to any work relating to remedial activities or work pertaining to a site where the Contractor previously performed work for the Department under this contract without the prior written approval of the Department.

b. The Contractor agrees in advance that if any bids/proposals are submitted for any work for a third party that would require written approval of the Department prior to entering into a contract because of the restrictions of this clause, then the bids/proposals are submitted at the Contractor's own risk, and no claim shall be made against the Department to recover bid/proposal costs as a direct cost whether the request for authorization to enter into the contract is denied or approved.

II. PUBLIC OFFICERS LAW

Contractors, consultants, vendors, and subcontractors may hire former State Agency or Authority employees. However, as a general rule and in accordance with New York Public Officers Law, former employees of the State Agency or Authority may neither appear nor practice before the State Agency or Authority, nor receive compensation for services rendered on a matter before the State Agency or Authority, for a period of two years following their separation from State Agency or Authority service. In addition, former State Agency or Authority employees are subject to a "lifetime bar" from appearing before the State Agency or Authority or receiving compensation for services regarding any transaction in which they personally participated or which was under their active consideration during their tenure with the State Agency or Authority.

III. ETHICS REQUIREMENTS

The Contractor and its subcontractors shall not engage any person who is, or has been at any time, in the employ of the State to perform services in violation of the provisions of the New York Public Officers Law, other laws applicable to the service of State employees, and the rules, regulations, opinions, guidelines or policies promulgated or issued by the New York State Joint Commission on Public Ethics, or its predecessors (collectively, the "Ethics Requirements").

The Contractor certifies that all of its employees and those of its subcontractors who are former employees of the State and who are assigned to perform services under this contract shall be assigned in accordance with all Ethics Requirements. During the Term, no person who is employed by the Contractor or its subcontractors and who is disqualified from providing services under this contract pursuant to any Ethics Requirements may share in any net revenues of the Contractor or its subcontractors derived from this Contract. The Contractor shall identify and provide the State with notice of those employees of the Contractor and its Subcontractors who are former employees of the State that will be assigned to perform services under this Contract, and make sure that such employees comply with all applicable laws and prohibitions.

The State may request that the Contractor provide it with whatever information the State deems appropriate about each such person's engagement, work cooperatively with the State to solicit advice from the New York State Joint Commission on Public Ethics, and, if deemed appropriate by the State, instruct any such person to seek the opinion of the New York State Joint Commission on Public Ethics. The State shall have the right to withdraw or withhold approval of any subcontractor if utilizing such subcontractor for any work performed hereunder would be in conflict with any of the Ethics Requirements. The State

shall have the right to terminate this Contract at any time if any work performed hereunder is in conflict with any of the Ethics Requirements.

IV. SUBCONTRACTING

The Contractor agrees not to subcontract any of its services, unless as indicated in its proposal, without the prior written approval of the Department. Approval shall not be unreasonably withheld upon receipt of written request to subcontract.

The Contractor may arrange for a portion/s of its responsibilities under this Contract to be subcontracted to qualified, responsible subcontractors, subject to prior approval of the Department. If the Contractor decides to subcontract a portion of the services, the subcontractors must be clearly identified and the nature and extent of its involvement in and/or proposed performance under this contract must be fully explained by the Contractor to the Department. As part of this explanation, the subcontractor must submit to the Department a completed Vendor Assurance of No Conflict of Interest or Detrimental Effect form, as required by the Contractor prior to execution of this contract.

The Contractor retains ultimate responsibility for all services performed under the contract.

All subcontracts shall be in writing and shall contain provisions, which are functionally identical to, and consistent with, the provisions of this contract including, but not limited to, the body of this contract, Appendix A – Standard Clauses for New York State Contracts, Appendix B – Standard Clauses for All New York State Department of Environmental Conservation Contracts, Appendix C - Standard Clauses for Ethics in all New York State Department of Environmental Conservation Contracts, and the Solicitation Document.

Unless waived in writing by the Department, all subcontracts between the Contractor and subcontractors shall expressly name the State, through the Department, as the sole intended third party beneficiary of such subcontract. The Department reserves the right to review and approve or reject any subcontract, as well as any amendment to said subcontract(s), and this right shall not make the Department or the State a party to any subcontract or create any right, claim, or interest in the subcontractor or proposed subcontractor against the Department.

The Department reserves the right, at any time during the term of the contract, to verify that the written subcontract between the Contractor and subcontractors is in compliance with all of the provisions of this Section and any subcontract provisions contained in this contract. The Contractor shall give the Department immediate notice in writing of the initiation of any legal action or suit which relates in any way to a subcontract with a subcontractor or which may affect the performance of the Contractor's duties under the contract. Any subcontract shall not relieve the Contractor in any way of any responsibility, duty and/or obligation of the contract.

If at any time during performance under this contract total compensation to a subcontractor exceeds or is expected to exceed \$100,000, or as otherwise requested by the Department that subcontractor shall be required to submit and certify a Vendor Responsibility Questionnaire.

APPENDIX D

Participation Opportunities for New York State Certified Service-Disabled Veteran Owned Businesses (SDVOB)

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Appendix E

PARTICIPATION OPPORTUNITIES FOR NEW YORK STATE CERTIFIED SERVICE-DISABLED VETERAN-OWNED BUSINESSES

Article 17-B of the New York State Executive Law provides for more meaningful participation in public procurement by certified Service-Disabled Veteran-Owned Businesses ("SDVOB"), thereby further integrating such businesses into New York State's economy. the Department recognizes the need to promote the employment of service-disabled veterans and to ensure that certified service-disabled veteran-owned businesses have opportunities for maximum feasible participation in the performance of Department contracts.

In recognition of the service and sacrifices made by service-disabled veterans and in recognition of their economic activity in doing business in New York State, Bidders are expected to consider SDVOBs in the fulfillment of the requirements of the Contract. Such participation may be as subcontractors or suppliers, as protégés, or in other partnering or supporting roles.

The following link includes additional information regarding the responsibilities associates with the Department's SDVOB program: <u>http://www.dec.ny.gov/about/108183.html</u>

I. Contract Goals

A. The Department hereby establishes an overall goal of <u>6%</u> for SDVOB participation, based on the current availability of qualified SDVOBs. For purposes of providing meaningful participation by SDVOBs, the Bidder/Contractor should contact the Department's SDVOB lead with questions regarding compliance with SDVOB participation goals at:

Mark Krisanda

Contract Management Specialist/SDVOB Program Lead Bureau of Contract and Grant Development **New York State Department of Environmental Conservation** 625 Broadway – 10th Floor, Albany, NY 12233-1080 Phone #: (518) 402-9240 sdvob@dec.ny.gov

or reference the directory of New York State Certified SDVOBs found at: <u>https://ogs.ny.gov/veterans/Docs/CertifiedNYS SDVOB.pdf.</u> Additionally, following Contract execution, Contractor is encouraged to contact the Office of General Services' Division of Service-Disabled Veterans' Business Development at 518-474-2015 or <u>VeteransDevelopment@ogs.ny.gov</u> to discuss additional methods of maximizing participation by SDVOBs on the Contract.

B. Contractor must document "good faith efforts" to provide meaningful participation by SDVOBs as subcontractors or suppliers in the performance of the Contract (see clause IV below).

II. SDVOB Utilization Plan

- A. Pursuant to 9 NYCRR § 252.2(i), Contractors are required to submit a completed SDVOB Utilization Plan on Form SDVOB 100 prior to contract execution.
- B. The Utilization Plan shall list the SDVOBs that the Bidder intends to use in the performance of the Contract, a description of the work that the Bidder intends the SDVOB to perform to meet the goals on the Contract, the estimated dollar amounts to be paid to an SDVOB, or, if not known, an estimate of the percentage of Contract work the SDVOB will perform. By signing the Utilization Plan, the Bidder acknowledges that making false representations or providing information that shows a lack of good faith as part of, or in conjunction with, the submission of a Utilization Plan is prohibited by law and may result in penalties including, but not limited to, termination of a contract for cause, loss of eligibility to submit future bids, and/or withholding of payments. Any modifications or changes to the agreed participation by SDVOBs after the Contract award and during the term of the Contract must be reported on a revised SDVOB Utilization Plan and submitted to the Department.
- C. The Department will review the submitted SDVOB Utilization Plan and advise the Bidder/Contractor of the Department's acceptance or issue a notice of deficiency within 20 days of receipt.
- D. If a notice of deficiency is issued, Bidder/Contractor agrees that it shall respond to the notice of deficiency, within seven (7) business days of receipt, by submitting to the Department, a written remedy in response to the notice of deficiency. If the written remedy that is submitted is not timely or is found by the Department to be inadequate, the Department shall notify the Bidder/Contractor and direct the Bidder/Contractor to submit, within five business days of notification by the Department, a request for a partial or total waiver of SDVOB participation goals on SDVOB 200. Failure to file the waiver form in a timely manner may be grounds for disqualification of the bid or proposal.
- E. The Department may disqualify a Bidder's bid or proposal as being non-responsive under the following circumstances:
 - (a) If a Bidder fails to submit an SDVOB Utilization Plan;
 - (b) If a Bidder fails to submit a written remedy to a notice of deficiency;
 - (c) If a Bidder fails to submit a request for waiver; or
 - (d) If the Department determines that the Bidder has failed to document good faith efforts.
- F. If awarded a Contract, Contractor certifies that it will follow the submitted SDVOB Utilization Plan for the performance of SDVOBs on the Contract pursuant to the prescribed SDVOB contract goals set forth above.

G. Contractor further agrees that a failure to use SDVOBs as agreed in the Utilization Plan shall constitute a material breach of the terms of the Contract. Upon the occurrence of such a material breach, the Department shall be entitled to any remedy provided herein, including but not limited to, a finding of Contractor non-responsibility.

III. Request for Waiver

A. Prior to submission of a request for a partial or total waiver, Bidder/Contractor shall speak to the Department's Designated Contacts for guidance.

- B. Pursuant to 9 NYCRR § 252.2(m), a Bidder/Contractor that is able to document good faith efforts to meet the goal requirements, as set forth in clause IV below, may submit a request for a partial or total waiver on Form SDVOB 200, accompanied by supporting documentation. A Bidder may submit the request for waiver at the same time it submits its SDVOB Utilization Plan. If a request for waiver is submitted with the SDVOB Utilization Plan and is not accepted by the Department at that time, the provisions of clauses II (C), (D) & (E) will apply. If the documentation included with the Bidder's/Contractor's waiver request is complete, the Department shall evaluate the request and issue a written notice of acceptance or denial within 20 days of receipt.
- C. Contractor shall attempt to utilize, in good faith, the SDVOBs identified within its SDVOB Utilization Plan, during the performance of the Contract. Requests for a partial or total waiver of established goal requirements made subsequent to Contract award may be made at any time during the term of the Contract to the Department, but must be made no later than prior to the submission of a request for final payment on the Contract.
- D. If the Department, upon review of the SDVOB Utilization Plan and Monthly SDVOB Compliance Report (SDVOB 101) determines that Contractor is failing or refusing to comply with the contract goals and no waiver has been issued in regards to such non-compliance, the Department may issue a notice of deficiency to the Contractor. The Contractor must respond to the notice of deficiency within seven business days of receipt. Such response may include a request for partial or total waiver of SDVOB contract goals.

Waiver requests should be sent to:

Mark Krisanda Contract Management Specialist/SDVOB Program Lead Bureau of Contract and Grant Development New York State Department of Environmental Conservation 625 Broadway – 10th Floor, Albany, NY 12233-1080 Phone #: (518) 402-9240 sdvob@dec.ny.gov

IV. Required Good Faith Efforts

Pursuant to 9 NYCRR § 252.2(n), Contractors must document their good faith efforts toward utilizing SDVOBs on the Contract. Evidence of required good faith efforts shall include, but not be limited to, the following:

- (1) Copies of solicitations to SDVOBs and any responses thereto.
- (2) Explanation of the specific reasons each SDVOB that responded to Bidders / Contractors' solicitation was not selected.
- (3) Information describing the specific steps undertaken to reasonably structure the Contract scope of work for the purpose of subcontracting with, or obtaining supplies from, certified SDVOBs.
- (4) Other information deemed relevant to the waiver request.

V. Quarterly SDVOB Contractor Compliance Report

Pursuant to 9 NYCRR § 252.2(q), the Contractor is required to report quarterly SDVOB Contractor Compliance to the Department during the term of the Contract for the preceding month's activity, documenting progress made towards achieving the Contract SDVOB goals. This information must be submitted using form SDVOB 101 distributed by the Department's SDVOB program and should be completed by the Contractor and submitted to the Department, by the 20th day of October, January, April, and July during the term of the Contract, for that quarter's activity to:

Mark Krisanda Contract Management Specialist/SDVOB Program Lead Bureau of Contract and Grant Development New York State Department of Environmental Conservation 625 Broadway – 10th Floor, Albany, NY 12233-1080 Phone #: (518) 402-9240 sdvob@dec.ny.gov

VI. Breach of Contract and Damages

Pursuant to 9 NYCRR § 252.2(s), any Contractor found to have willfully and intentionally failed to comply with the SDVOB participation goals set forth in the Contract, shall be found to have breached the contract and Contractor shall pay damages as set forth therein.

SECTION VIII

General Conditions

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SECTION VIII

General Conditions

ARTICLE 1 - Preliminary Matters

Copies of Documents:

1.1 Department shall furnish to Contractor without charge up to five (5) copies of the Contract Documents. Additional copies of the Contract Documents will be furnished, upon request, at the cost of reproduction.

Preconstruction Conference:

- 1.2 No later than twenty (20) calendar days after the Effective Date of the Agreement, but before Contractor starts the Work, a conference will be held on a date and at a location set by Department to:
 - 1.2.1 Review, item by item, the requirements of this Article;
 - 1.2.2 Review the qualifications of Contractor's resident superintendent and the qualifications of any Subcontractors and Suppliers of Contractor;
 - 1.2.3 Discuss Contractor's plans for complying with the requirements of Article 5 *Contractor's Responsibilities* of the General Conditions;
 - 1.2.4 Formalize procedures for processing of Administrative Agreements, Payment Applications, Shop Drawings and other submittals, Change Orders and Proposed Change Orders, and Contractor requests for clarifications and interpretation of Contract Documents;
 - 1.2.5 Establish a working understanding among the parties as to the Work; and
 - 1.2.6 Discuss any conflicts, errors or discrepancies that Contractor has discovered by review of the Contract Documents.

Commencement of Contract Time and Start of Work at Site:

- 1.3 Before starting, Contractor shall carefully study and compare the Contract Documents and check and verify pertinent figures shown thereon and all applicable field measurements. Contractor shall immediately report in writing to Engineer any conflict, error or discrepancy which Contractor may discover and shall obtain a written interpretation or clarification from Engineer before proceeding with any Work affected thereby.
- 1.4 Before a Contractor may commence Work on the site but no later than ten (10) calendar days after Notice of Award, Contractor shall submit to Engineer for review and acceptance:

- 1.4.1 An interim progress schedule indicating Contractor's anticipated schedule for the Work for the first three (3) months in detail and for the remainder of the Work in summary form. If Contractor doesn't intend to perform Work on the date when Contract Time commences, Contractor must notify Department as soon as possible in writing when work will commence so inspection services can be scheduled to minimize cost to the Department. The interim progress schedule shall include the information specified in paragraphs 1.4.2 and 1.4.3.
- 1.4.2 An interim schedule of Shop Drawing, soil characteristic, sample collection and analytical test result submissions covering the various stages of Work detailed in the first three (3) months of the interim Progress Schedule; and
- 1.4.3 An interim schedule of values on the form provided by Engineer covering the various stages of Work detailed in the first three (3) months of the interim Progress Schedule. Such prices will include an appropriate amount of overhead and profit applicable to each item of Work which will be confirmed in writing by Contractor at the time of submission.
- 1.5 Contractor shall start to perform the Work on the date specified in the Notice to Proceed in a manner consistent with the Contract Documents. No Work shall be done prior to the date specified in the Notice to Proceed unless written permission to do so is given by the Department to the Contractor.

Finalizing Interim Schedules:

1.6 Contractor shall submit a proposed progress schedule to finalize the interim schedules submitted in accordance with paragraph 1.4 and the requirements of the Progress Schedule Section of the Standard Specification no later than twenty (20) days after starting work at the site. The progress schedule shall be acceptable to Engineer and Department as providing an orderly progression of the Work to completion within the Contract Time, but such acceptance will not relieve Contractor from full responsibility for the progress or scheduling of the Work. The schedule of Shop Drawing, material, soil characteristic, sample collection, and analytical test results submissions shall be acceptable to Engineer and Department as providing a workable arrangement for processing the submissions. The schedule of values shall be acceptable to Engineer and Department shall not be processed unless Contractor has submitted acceptable schedules.

ARTICLE 2 - Contract Documents: Intent, Amending, Reuse

Intent:

- 2.1 The Contract Documents comprise the entire agreement between Department and Contractor concerning the Work. The Contract Documents are complementary; what is called for by one is as binding as if called for by all.
- 2.2 The Contract Documents describe a functionally complete Project (or part thereof) to be constructed in accordance with the Contract Documents. Any work, materials or equipment that may be necessary to satisfactorily complete the contract must be supplied whether or not specifically called for. When words which have a well-known technical or trade meaning are used to describe Work, materials or equipment, such words shall be interpreted in accordance with that meaning. Reference to standard specifications, manuals or codes of any technical society,

organization or association, or to the Laws of any governmental authority, whether such reference be specific or by implication, shall mean the latest standard specification, manual, code or Laws in effect at the time of opening of Bids (or, on the Effective Date of the Agreement if there were no Bids), even though reference may be specifically made to an earlier standard. If there is any conflict or discrepancy between standard specifications, manuals, or codes of any technical society, organization or association, or between Laws, the Engineer shall determine which shall apply and shall be binding on Contractor. Contractor has a duty to comply with the latest standard specification, manual, code, or Laws in effect at the time of opening of bids, without any increase in Contract Price or extension in Contract Time. Clarifications and interpretations of the Contract Documents shall be issued by Engineer as provided in paragraph 8.4. However, no provision of any referenced standard specification, manual or code (whether or not specifically incorporated by reference in the Contract Documents) shall be effective to change the duties and responsibilities of Department, Contractor or Engineer or any of their consultants, agents or employees from those set forth in the Contract Documents. If there is any conflict or discrepancy between the provisions of the Contract Documents and any such referenced standard specification, manual, or code of any technical society, organization or association, the provisions of the Contract Documents will take precedence.

2.3 If during the performance of the Work, Contractor finds a conflict, error or discrepancy in the Contract Documents, Contractor shall so report to Engineer in writing at once and before proceeding with the Work affected thereby, and shall obtain a written interpretation or clarification.

Engineer will promptly investigate the matter and respond to Contractor. Until such interpretation or clarification is obtained from Engineer, any Work done by Contractor after the discovery of such a conflict, error or discrepancy, which is directly or indirectly affected by same, will be at Contractor's own risk and Contractor shall bear all cost arising therefrom. In resolving such conflicts, errors or discrepancies, the Contract Documents shall be given preference in the following order:

- 2.3.1 First, in accordance with the order of preference stated in the conflicting parts of the Contract Documents as provided by Article 4 of the Agreement;
- 2.3.2 In all cases, figured dimensions shall govern over scaled dimensions, but Work not dimensioned shall be as directed, and Work not particularly shown, identified, sized, or located shall be the same as similar parts that are shown or specified. Detail Drawings shall govern over general Drawings, larger scale Drawings take precedence over smaller scale Drawings, Change Order or Proposed Change Order Drawings govern over Contract Drawings, and approved Shop Drawings govern over Contract Drawings. Specifications shall govern as to products, execution and workmanship, and Drawings shall govern as to locations, dimensions, or quantities to be furnished. Further, in all cases where specifications, notes or details in two or more Specifications, or in two or more Drawings, conflict, the requirement calling for the larger quantities, or higher quality product or workmanship shall prevail and be binding on Contractor, unless otherwise directed by Engineer.

Amending and Supplementing Contract Documents:

2.4 The Contract Documents may be amended to provide for additions, deletions and revisions in the Work or to modify the terms and conditions thereof in one or more of the following ways as defined in Section 2, "Terms and Definitions."

- 2.4.1 An Administrative Agreement,
- 2.4.2 A Change Order (pursuant to Article 9), or
- 2.4.3 A Proposed Change Order signed by Department (pursuant to Article 9).

Contract Price and Contract Time may only be changed by a Change Order.

- 2.5 In addition, the requirements of the Contract Documents may be supplemented, and minor variations and deviations in the Work may be authorized, not involving an adjustment in Contract Price or Contract Time, in one or more of the following ways:
 - 2.5.1 A Field Order (pursuant to Article 8.4),
 - 2.5.2 Engineer's approval of a Shop Drawing or sample (pursuant to Article 5.23 thru 5.29), or
 - 2.5.3 Engineer's written interpretation or clarification (pursuant to Article 8.3).

Reuse of Documents:

2.6 Neither Contractor nor any Subcontractor or Supplier or other person or organization shall have or acquire any title to or ownership rights in any of the Drawings, specifications or other documents (or copies of any thereof) prepared by or bearing the seal of Engineer or Design Engineer; and they shall not reuse any of them on extensions of the Project or any other project without the written consent of Engineer, Design Engineer, and Department.

ARTICLE 3 - Availability of Lands; Physical Conditions; Reference Points

Availability of Lands:

- 3.1 As indicated in the Contract Documents, Department shall make available the lands upon which the Work is to be performed, rights-of-way and easements for access thereto, and such other lands as are designated for the use of Contractor. Easements or other authority for permanent structures or permanent changes in existing facilities will be obtained and paid for by Department, unless otherwise provided in the Contract Documents. If Contractor believes that any delay in Department's furnishing of these lands or easements entitles Contractor to an extension of the Contract Time, Contractor may make a request therefore as provided in Article 10 of the General Conditions. If Department and Contractor are unable to agree concerning such an extension, a claim may be made as provided in Articles 9, 10 and 11 of the General Conditions.
- 3.2 Any lands and easements for access not furnished by Department which Contractor deems necessary for the Work, including but not limited to requirements for temporary construction facilities, access and egress, or for storage of materials, shall be provided by Contractor at no increase in Contract Price nor extension in Contract Time. Contractor shall obtain all necessary permits and written approvals from the appropriate jurisdictional agencies and property owner(s) for use of premises not furnished by Department as described above, and for the use of all offsite areas needed for the Work including but not limited to off-site borrow pits, and waste and disposal areas. If permits and approvals do not specify the required treatment, if any, of said areas during and at the completion of the Work, the Progress Schedule must describe such

treatment. Copies of all permits and approvals applicable to said areas shall be filed with the Engineer before utilization of any said areas. Contractor shall have sole responsibility for any property damage or personal injuries occasioned by an act or omission of Contractor in respect to all lands, and easements obtained pursuant to this paragraph.

3.3 Engineering survey horizontal and vertical control reference points for construction which are specified in the Contract Documents or which in Engineer's judgment are necessary to enable Contractor to proceed with the Work, will be provided by Department. Contractor shall be responsible for laying out the Work using such reference points, shall protect and preserve the established reference points; and shall make no changes or relocations without the prior written approval of Engineer. Contractor shall notify Engineer in writing whenever any reference point is lost or destroyed or requires relocation because of necessary changes in grades or locations; and shall be responsible for the accurate replacement or relocation of such reference points by a New York State licensed surveyor at Contractor's expense.

Physical Conditions and Existing Structures:

3.4 **Explorations and Reports**: Reference is made to the Supplementary Bidding Information and Requirements for identification of those reports of explorations and tests of conditions at the site that have been utilized by the Design Engineer in preparation of the Contract Documents; and for identification of those drawings of physical conditions in or relating to existing surface structures (except Underground Facilities referred to in paragraphs 3.5 and 3.6) which are at or contiguous to the site that have been utilized by Design Engineer in preparation of the Contract Documents. Contractor may rely upon the accuracy of the technical data contained in such reports, as to the location where and at the point in time when data was obtained, but not upon non-technical data, interpretations or opinions contained therein or for the completeness thereof for Contractor's purposes. Except as indicated in the Bidding Information and Requirements Section and, in paragraphs 3.9 and 3.10, Contractor shall have full responsibility with respect to subsurface conditions which Contractor could reasonably expect or foresee by reason of the technical data and Contractor's inspection of the site, and with respect to physical conditions in or relating to such surface structures.

Physical Conditions - Underground Facilities Shown or Indicated:

- 3.5 The information and data shown or indicated in the Contract Documents with respect to existing Underground Facilities at or contiguous to the site is based on information and data furnished to the Design Engineer by the owners of such Underground Facilities or by others. Unless it is otherwise expressly provided in the Supplementary Conditions:
 - 3.5.1 Department shall not be responsible for the accuracy or completeness of any such information or data; and,
 - 3.5.2 Contractor shall have responsibility: a) for reviewing and checking all such information and data; b) for locating all Underground Facilities shown or indicated in the Contract Documents as to depth and alignment in advance of installations, backfilling or other work required by the Contract Documents; c) for coordination of the Work with the owners of such Underground Facilities during construction, d) for the safety and protection thereof, and e) for repairing any damage thereto resulting from the Work. The cost of and the time required to perform the responsibilities outlined in this paragraph will be considered as having been included in the Contract Price and in Contractor's

schedule for the performance of the Work within the prescribed Contract Time(s) and Contractor shall not be entitled to additional payment therefor.

- 3.5.3 Contractor shall excavate and uncover all Underground Facilities to be crossed or paralleled by the proposed Work a sufficient time in advance to permit change in line and grade of the existing Underground Facility or the proposed Work if the location of the existing Underground Facility should interfere with the Work. Further, a reasonable interval of time, up to thirty (30) days, will be allowed to Engineer and Department in order to resolve issues relating to Underground Facilities shown or indicated which are determined to interfere with the Work. This interval of time will be considered as having been included in the Contract Price and in Contractor's schedule for the performance of the Work within the Contract Time unless otherwise agreed to in writing by Department. If more than thirty (30) days is consumed in resolving such issues, no claim will be allowed unless: 1) Contractor has given the notice required in paragraph 3.7 of the General Conditions, and 2) within fifteen (15) days thereafter, Contractor has submitted to Department a written Proposed Change Order claim in accordance with the requirement of Article 9, 10 and 11 of the General Conditions and the Standard Specifications.
- 3.5.4 Where it is necessary for the Work to be close to or between other underground facilities or structures for short distances, Contractor shall shore, block, and protect the other underground facilities or structures to the satisfaction of the utility agency, state agency, municipality or private owner having ownership or jurisdiction over said underground facilities on structures.
- 3.5.5 Access to various municipal structures shall not be obstructed by Contractor to prevent use of hydrants, valves, manholes, fire alarms, etc. Contractor is to make no connections to existing water mains, or operate valves on existing mains, or otherwise interfere with the operation of the existing water distribution system, without first giving written notice to the owners of such municipal structures and securing their written approval, and satisfactory fulfillment of applicable permits, fees, or requirements of the proposed action.

Underground Facilities Not Shown or Indicated:

- 3.6 If an Underground Facility is uncovered or revealed at or contiguous to the site which was not shown or indicated in the Contract Documents and which Contractor could not reasonably have been expected to be aware of, Contractor shall promptly after learning thereof and before performing any Work affected thereby (except in an emergency as permitted by paragraph 5.23), identify the owner of such Underground Facility and give written notice of such uncovering to that owner and to Engineer and Department. Engineer and Department will promptly review the situation to determine the extent to which the Contract Documents should be modified to reflect and document the consequences of the existence of the Underground Facility, and take prompt action to amend the Contract Documents to the extent necessary. During such time, Contractor shall be responsible for the safety and protection of such Underground Facility as provided in paragraph 5.20.
 - 3.6.1 Contractor shall schedule excavation and uncovering Work to begin a sufficient time in advance to allow Engineer's review and the possible amendment to the Contract Documents if unanticipated Underground Facilities are discovered as described in paragraph 3.6. Further, up to thirty (30) days, will be allowed to Engineer and

Department to resolve issues and problems related to a report of newly discovered Underground Facilities, not shown or indicated. This interval of time will be considered as having been included in the Contract Price and in Contractor's schedule for the performance of the Work within the Contract Time and Contractor shall not be entitled to any additional payment therefor.

3.6.2 No claim by Contractor under paragraph 3.6 of the General Conditions will be allowed unless more than thirty (30) days has elapsed and 1) Contractor has given the notice required in paragraph 3.7 of the General Conditions, and 2) within fifteen (15) days thereafter, Contractor has submitted to Department a written Proposed Change Order claim in accordance with the requirements of Articles 8, 9, 10 and 11 of the General Conditions, and the Standard Specifications.

Report of Differing Site Conditions:

- 3.7 If Contractor believes that any subsurface or physical condition uncovered or revealed at the site renders materially inaccurate any information in the Contract Documents or technical data on which Contractor was entitled to rely as provided in paragraph 3.4, Contractor shall, immediately after becoming aware thereof and before performing any Work in connection therewith (except in an emergency as permitted by paragraph 5.23), notify Department and Engineer in writing about the inaccuracy or difference to allow Department and Engineer to make any necessary changes to minimize the cost of the Work.
- 3.8 Engineer's and Department's Review: Engineer and Department will promptly review the pertinent conditions, determine the necessity of obtaining additional explorations or tests with respect thereto, and notify Contractor in writing of findings and conclusions. Immediately thereafter, Department shall perform or cause to be performed any necessary or appropriate additional investigations and tests with respect to the newly discovered conditions and furnish copies to Contractor.
- 3.9 Possible Document Change: If Engineer concludes that there is a material error in the Contract Documents or that because of newly discovered conditions a change in the Contract Documents is required, a Proposed Change Order or a Change Order will be issued as provided in Article 9 to reflect and document the consequences of the inaccuracy or difference, provided Department has not exercised its right to suspend or terminate under Article 14 of Section 8, "General Conditions", Appendix B, or Article 12 of Section 6 "Agreement."
- 3.10 Possible Contract Adjustment: An increase or decrease in the cost of, or the time required to perform any part of the Work, whether or not affected by such differing conditions, and a corresponding adjustment in Contract Price or Contract Time in accordance with Articles 9, 10 and 11 of the General Conditions, or any combination thereof, may be allowable to the extent that they are attributable to any such inaccuracy or difference which Contractor could not reasonably have been expected to anticipate or be aware of. If Department and Contractor are unable to agree as to the adjustment in Contract Price or Contract Time, or if Engineer concludes that there is not a material error in the Contract Documents, or that the uncovered or revealed condition could reasonably have been anticipated by Contractor, and Contractor disagrees, a claim may be made therefor as provided in Articles 9, 10 and 11 of the General Conditions.
- 3.11 No claim by Contractor under paragraph 3.10 of the General Conditions will be allowed unless:
 1) Contractor has given the written notice required in paragraph 3.7 of the General Conditions, and 2) within fifteen (15) days thereafter, Contractor has submitted to Department a written

Proposed Change Order substantiating in detail Contractor's proposed adjustments in accordance with the requirements of Articles 9, 10 and 11 of the General Conditions, and the Standard Specifications.

3.12 Responsibilities and Allowances: Contractor shall schedule excavation and uncovering of Work to begin a sufficient time in advance to allow Engineer's review as described in paragraph 3.8, and Department's issuance of a Change Order or a Proposed Change Order as described in paragraph 3.9 in connection with a report of differing conditions. Further, a reasonable interval of time, not less than thirty (30) days will be allowed to Engineer and Department for those functions required to resolve any report of differing conditions. This interval of time will be considered as having been included in the Contract Price and in Contractor's schedule for the performance of the Work within the Contract Time. If more than thirty (30) days is used, no claim will be allowed unless (1) Contractor has given the written notice required in paragraph 3.7 of the General Conditions, and (2) within fifteen (15) days thereafter, Contractor has submitted to Department a written Proposed Change Order claim in accordance with the requirements of Articles 8, 9, 10 and 11 of the General Conditions, and the Standard Specifications.

ARTICLE 4 - Bonds and Insurance

Performance and Other Bonds:

4.1 Contractor shall furnish performance, labor and material payment Bonds, each in an amount at least equal to the Contract Price as security for the faithful performance and payment of all Contractor's obligations under the Contract Documents. These Bonds shall remain in effect until at least one year after the date when final payment is made, unless otherwise provided by Law or by the Contract Documents. Contractor shall also furnish such other Bonds as are required by the Supplementary Conditions. All Bonds shall: a) be in the form prescribed by the Contract Documents: and b) be executed by such sureties as are named in the current list of "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and As Acceptable Reinsuring Companies" as published by the U.S. Treasury Department. Also the surety shall be licensed to do business in New York State. All Bonds signed by an agent must be accompanied by an original or a certified true copy of the agent's power of attorney. Contractor's failure to submit and keep in effect a Bond or form of financial security acceptable to Department in the manner required by this paragraph shall be cause for termination. Contractor shall give written notice to Department and reference the site number and project name, if the surety on any Bond furnished by Contractor is declared bankrupt, becomes insolvent, its right to do business is involuntarily terminated by any state or federal agency, it ceases to meet the requirements of paragraph 4.1. Contractor, if required by Department, shall within fourteen days substitute another Bond or Surety, in an acceptable form of financial security. The top of all bonds shall have "NYSDEC-DER Site No. 819018".

If the provision of any bond requires that the surety be notified of any change in the Work, it shall be Contractor's responsibility to so notify the surety. Contractor shall furnish Department any modified bond.

Insurance - All Types:

4.2 The Contractor agrees to procure and maintain at its own expense and without expense to the Department insurance of the kinds and amounts hereinafter provided by insurance companies licensed to do business in the State of New York, covering all operations under this Contract.

The Contractor shall furnish to the Department a certificate or certificates with the appropriate endorsements showing that it has complied with this Article. The insurance documentation shall provide that:

- a. Liability and protective liability insurance policies shall provide primary and noncontributory coverage to the NYS Department of Environmental Conservation for any claims arising from the Contractor's Work under this contract, or as a result of the Contractor's activities. Insurance policies will not be accepted that:
 - remove or restrict blanket contractual liability located in the "insured contract" definition (as stated in Section V, Number 9, Item f in the ISO CGL policy) so as to limit coverage against claims that arise out of work; or
 - remove or modify the "insured contract" exception to the employers liability exclusion; or
 - do not cover the additional insured for claims involving injury to employees of the named insured or subcontractors.
- b. The Contractor shall provide fully-completed ACORD 855 New York Construction Certificate of Liability Insurance Addendum along with specified General Liability certificate and accompanying endorsements.
- c. The State of New York, NYS Department of Environmental Conservation, its officers, agents and employees, Division of Environmental Remediation, Remedial Bureau E, 625 Broadway, Albany, NY 12233-7017, shall be listed as Certificate Holder on all liability insurance certificate(s), as additional insureds on endorsement(s) and on additional supporting documentation.
- d. The policies shall include a waiver of subrogation endorsement in favor of the Department as an additional insured. The endorsement shall be on ISO Form number CG 24 04 or a similar form with same modification to the policy.
- e. Policies shall not be changed or canceled until thirty (30) days prior written notice has been given to the Department; as evidenced by an endorsement or declarations page.
- f. Insurance documentation shall disclose any deductible, self-insured retention, aggregate limit or any exclusion to the policy that materially changes the coverage required by the Contract.
- g. Endorsements in writing must be added to and made part of the insurance contract for the purpose of changing the original terms to reflect the revisions and additions as described. A copy of these endorsements must be provided to the Department.
- h. Applicable insurance policy number(s) referenced on the ACORD form must be referenced in the supporting documentation requested by the Department and supplied by the insurance company (e.g. endorsement page, declarations page, etc.).
- i. When coverage is provided by a non-admitted carrier, a copy of the declarations page along with the ELANY stamped certification wording affixed to the certificate of insurance must be provided to ensure that the excess line insurance has met all of the requirements for a valid excess line transaction in accordance with Article 21 of the New York State Insurance Law.

- j. Worker's Compensation and Disability Benefits certificates shall name the New York State Department of Environmental Conservation, Division of Environmental Remediation, Remedial Bureau E, 625 Broadway, 12th Floor, Albany, NY 12233-7017, as entity requesting proof of coverage.
- k. This Contract shall be void and of no effect unless the Contractor procures the required insurance policies and maintains them until acceptance or completion of the work, whichever event is later. If at any time during the term of this contract the coverage provisions and limits of the policies required herein do not meet the provisions and limits set forth in the Contract or proof thereof is not provided to the Department, the Contractor shall immediately cease Work on the Project. The Contractor shall not resume Work on the Project until authorized to do so by the Department. Any delay, time lost, or additional cost incurred as a result of the Contractor not having insurance required by the Contract or not providing proof of same in a form acceptable to the Department, shall not give rise to a delay claim or any other claim against the Department. Should the Contractor fail to provide or maintain any insurance required by this contract, or proof thereof is not provided to the Department, the Department may withhold further contract payments, treat such failure as a breach or default of this contract, and/or, after providing written notice to the Contractor, require the Surety "if any" to secure appropriate coverage and/or purchase insurance complying with the Contract and charge back such purchase to the Contractor.
- Should the Contractor engage a subcontractor, the Contractor shall impose the insurance requirements of this document on the subcontractor. Contractor shall determine the required insurance types and limits, commensurate with the work of the Subcontractor. The Contractor will maintain the certificate(s) and endorsement(s) for all subcontractors hired as part of the Contractor's records.

The following types and amounts of insurance are required for this Contract:

4.2.1 **Workers' Compensation:** For work to be performed in New York State, the Contractor shall provide and maintain full New York State coverage during the life of this contract for the benefit of such employees as are required to be covered by the New York State Workers' Compensation Law.

If the agreement involves work on or near a shoreline, a U.S. Longshore and Harbor Workers' Compensation Act and/or Jones Act policy as applicable must be provided. Any waiver of this requirement must be approved by the Agency and will only be granted in unique or unusual circumstances.

Evidence of Workers' Compensation and Employers Liability coverage must be provided on one of the following forms specified by the Chairman of the New York State Workers' Compensation Board:

FORM #	FORM TITLE
C-105.2	Certificate of Workers' Compensation Insurance (September 2007, or
	most current version)
U-26.3	State Insurance Fund Version of the C-105.2 form
SI-12/	Certificate of Workers' Compensation Self-Insurance
GSI-105.2	
CE-200	Certificate of Attestation of Exemption (when Contractor meets the
	requirements.)

All forms are valid for one year from the date the form is signed/stamped, or until policy expiration, whichever is earlier.

Please note - ACORD forms are <u>NOT</u> acceptable proof of New York State Workers' Compensation Insurance coverage.

Additional information can be obtained at the Workers' Compensation website: <u>http://www.wcb.ny.gov/content/main/Employers/Employers.jsp</u>

4.2.2 **Disability Benefits:** For work to be performed in New York State, the Contractor shall provide and maintain coverage during the life of this contract for the benefit of such employees as are required to be covered by the New York State Disability Benefits Law. Any waiver of this requirement must be approved by the Department of Environmental Conservation and will only be granted in unique or unusual circumstances.

Evidence of Disability Benefits coverage must be provided on one of the following forms specified by the Chairman of the New York State Workers' Compensation Board:

FORM #	FORM TITLE
DB-120.1	Certificate of Insurance Coverage under the New York State Disability
	Benefits Law
DB-155	Certificate of Disability Self-Insurance
CE-200	Certificate of Attestation of Exemption (when Contractor meets the requirements.)

All forms are valid for one year from the date the form is signed/stamped, or until policy expiration, whichever is earlier.

Please note - ACORD forms are <u>NOT</u> acceptable proof of New York State Disability Benefits Insurance coverage.

Additional information can be obtained at the Workers' Compensation website: <u>http://www.wcb.ny.gov/content/main/Employers/Employers.jsp</u>

- 4.2.3 **Commercial General Liability Insurance:** Contractor shall provide and maintain Commercial General Liability Insurance (CGL) covering the liability of the Contractor for bodily injury, property damage, and personal/advertising injury arising from all work and operations under this contract. The limits under such policy shall not be less than the following:
 - Each Occurrence limit \$5,000,000
 - General Aggregate \$8,000,000
 - Products/Completed Operations \$5,000,000
 - Personal & Advertising Injury \$1,000,000
 - Damage to Rented Premises \$50,000
 - Medical Expense \$5,000

Coverage shall include, but not be limited to, the following:

- Premises liability;
- Independent contractors;
- Blanket contractual liability, including tort liability of another assumed in a contract;
- Defense and/or indemnification obligations, including obligations assumed under this contract
- Cross liability for additional insureds;
- Products/completed operations for a term of no less than 3 years, commencing upon acceptance
 of the work, as required by the contract;
- Explosion, collapse, and underground hazards;
- Contractor means and methods; and
- Liability resulting from Section 240 or Section 241 of the New York State Labor Law.

The following ISO forms must be endorsed to the policy: <u>CG 20 10 11 85 or an equivalent</u> – Additional Insured-Owner, Lessees or Contractors <u>CG 25 03 11 85 or an equivalent</u> – Designated Construction Project(s) general aggregate limit (only required for construction contracts).

Limits may be provided through a combination of primary and umbrella/excess liability policies. The CGL aggregate shall be endorsed to apply on a per project basis for construction contracts.

4.2.4 **Business Automobile Liability:** Contractor shall provide and maintain Business Automobile Liability insurance covering liability arising out of the use of any registered motor vehicle in connection with the contract, including owned, leased, hired and non-owned vehicles. Such policy shall have a combined single limit for Bodily Injury and Property Damage of at least \$1,000,000.

If the Contractor does not own, lease or hire any registered motor vehicles or will not be using any vehicles on State Land proof of Business Automobile Liability Insurance shall not be required for this Contract. However, Contractor is required to execute Business Automobile Liability Insurance Attestation.

The Contractor shall assume full responsibility and liability that owners and operators of any registered motor vehicles entering State Land to conduct work under this contract carry the same Business Automobile Liability Insurance of the kinds and amounts listed above. NYS Department of Environmental Conservation reserves the right to request proof of the same.

4.2.5 **Environmental Liability:** Contractor shall procure, or otherwise obtain through an approved subcontractor, and maintain in full force and effect throughout the term of the contract, and for two years after completion hereof, pollution legal liability insurance with limits of not less than \$5,000,000 providing *primary* coverage for bodily injury and property damage, including loss of use of damaged property or of property that has not been physically injured. Such policy shall provide coverage for actual, alleged or threatened emission, discharge, dispersal, seepage, release or escape of pollutants, including any loss, cost or expense incurred as a result of any cleanup of pollutants or in the investigation, settlement or defense of any claim, suit, or proceedings against the Department of Environmental Conservation arising from the Contractor's work.

This requirement applies to mold as well, if excluded in the commercial general liability policy.

If vehicles are to be used for transporting hazardous materials, the Contractor shall also provide pollution liability broadened coverage for covered autos (endorsement CA 99 48 03 06 or CA 01 12 03 06) as well as proof of MCS 90.

4.2.6 **Professional Liability:** The Contractor shall procure and maintain during and for a period of three (3) years after completion of this contract, Professional Liability Insurance in the amount of \$2,000,000 issued to and covering damage for liability imposed on the Contractor by this contract or law arising out of any negligent act, error, or omission in the rendering of or failure to render professional services required by this contract. The professional liability insurance may be issued on a claims-made policy form, in which case the Contractor shall purchase at its sole expense, extended Discovery Clause coverage of up to three (3) years after work is completed if coverage is cancelled or not renewed. The Contractor shall provide coverage for its negligent act, error or omission in rendering or failing to render professional services required by this contract arising out of specifications, installation, modification, abatement, replacement or approval of products, materials or processes containing pollutants, and the failure to advise of or detect the existence or the proportions of pollutants.

Should any subcontractor(s) or supplier(s) retained by the Contractor provide professional services requiring design (i.e. the signature, stamp or certification of a licensed professional), the Contractor shall collect Professional Liability Insurance from the subcontractor(s) or supplier(s) and retain said insurance as part of the contract documents.

- 4.2.7 **Contractor's Equipment:** The Contractor shall secure, pay for, and maintain Property Insurance necessary for protection against the loss of owned, borrowed or rented capital equipment and tools, including any tools owned by employees, and any tools or equipment, staging towers, and forms owned, borrowed or rented by the Contractor. The requirement to secure and maintain such insurance is solely for the benefit of the Contractor. Failure of the Contractor to secure such insurance or to maintain adequate levels of coverage shall not render the Department or their agents and employees responsible for any losses; and the Department, their agents and employees shall have no such Liability.
- 4.2.8 **Owners and Contractors Protective Liability:** The Contractor shall obtain Owners/Contractors Protective Liability (OCP) Policy as follows:
 - For work related to street, road, highway, and/or bridge work
 - Form CG 00 09, Owners and Contractors Protective Liability Coverage form Coverage for Operations of the Designated Contractor; AND
 - Form CG 00 14, Special Protective and Highway Liability Policy New York Department of Transportation
 - For projects <u>not</u> related to street, road, highway, and/or bridge work
 - Form CG 00 09, Owners and Contractors Protective Liability Coverage form Coverage for Operations of the Designated Contractor ONLY

The policy shall be written on a project basis for the benefit of the People of the State of New York, the Department, its officers, agents, and employees, with respect to all operations under this contract by the Contractor or its subcontractors, including in such coverage any omissions and supervisory acts of the Department, its officers, agents, and employees.

The State of New York and the NYS Department of Environmental Conservation, Division of Environmental Remediation, Remedial Bureau E, 625 Broadway, Albany, NY 12233-7012 shall be the Named Insured in the OCP Policy, which shall be promptly furnished to the Department. OCP policy limits shall be no less than \$1 Million (Each Occurrence) / \$2 Million (General Aggregate).

4.2.9 **Umbrella and Excess Liability:** When the limits of the CGL, Auto, and/or Employers' Liability policies procured are insufficient to meet the limits specified, the Contractor shall procure and maintain Commercial Umbrella and/or Excess Liability policies with limits in excess of the primary; provided, however, that the total amount of insurance coverage is at least equal to the requirements set forth above. Such policies shall follow the same form as the primary.

ARTICLE 5 - Contractor's Responsibilities

Supervision and Superintendence:

- 5.1 Contractor shall supervise and direct the Work required by the contract competently and efficiently, devoting such attention thereto and applying such skills and expertise as may be necessary to perform the Work in accordance with the Contract Documents. Contractor shall be responsible for the means, methods, techniques, sequences and procedures of construction; except that Contractor shall not be responsible for the negligence of others in the design or selection of a specific means, method, technique, sequence or procedure of construction which is indicated in and required by the Contract Documents. Contractor shall be responsible to see that the finished Work conforms with the Contract Documents.
- 5.2 Contractor shall keep on the Site of the Work at all times during its progress, a competent and reliable resident superintendent, who shall not be replaced without written approval of Department. The superintendent will be Contractor's representative at the site and shall have authority to act on behalf of Contractor. All communications given to the superintendent shall be as binding as if given to Contractor.
 - 5.2.1 Department may require immediate replacement of the superintendent upon written notice for cause.
 - 5.2.2 The superintendent and similar authorized representatives of any Subcontractors as requested by Department or Engineer shall attend all meetings pertaining to the Work.
 - 5.2.3 Whenever the superintendent is not present for performance of a particular part of the Work and Engineer is not able to give to Contractor, through the superintendent, information relative to an interpretation of the Contract Documents, or relative to disapproval or rejection of materials or the performance of such work, Engineer may so inform the worker in charge of such Work. Information so given shall be binding as if given to superintendent.
 - 5.2.4 Contractor shall issue all communications to Department through Engineer except as provided by Contract Documents. All written correspondence to Engineer shall be copied to Department.

Labor, Working Hours, Materials and Equipment:

- 5.3 Contractor shall provide competent, suitably qualified personnel to survey and lay out the Work and perform construction as required by the Contract Documents. Contractor shall, at all times, employ labor and equipment which shall be sufficient to prosecute the several classes of work to full completion in the manner and time specified. All workers must have sufficient skill, experience and Health and Safety training required to perform properly the work assigned them. All workers engaged on special or skilled work shall have had sufficient experience in such work to perform properly and satisfactorily including operation of any equipment involved. Any person employed by Contractor or Subcontractor whom the Engineer or Department may determine incompetent or unfit to perform the work shall be at once discharged or reassigned and not again be employed on Work in connection with this Contract. The Contractor may request review by Department regarding the discharge of such employee(s). Contractor shall at all times maintain good discipline and order at the site. Except in connection with the safety or protection of persons or the Work or property at the site or adjacent thereto, and except as otherwise indicated in the Contract Documents, all Work at the site shall be performed during normal working hours as defined in paragraph 5.3.1 below, and Contractor shall not permit overtime Work or the performance of Work during hours other than normal Working hours without: a) prior written notice to Engineer; b) Department's written consent; and c) written approval from the New York State Department of Labor as required by law.
 - 5.3.1 Normal working hours shall be defined as a normal working schedule which a) does not exceed eight hours per working day, occurring between the hours set forth at the preconstruction conference, or if none are set forth, beginning no earlier than 7:00 a.m. and ending at no later than 5:00 p.m.; and b) does not exceed 40 hours per week, excluding overtime Work, Work on Saturdays, Sundays, and Federal- or New York State-observed holidays. Work during other than normal working hours may be scheduled by Contractor by first obtaining written permission from Department and as provided in Section 5.3. Department shall be entitled to recover extra costs incurred in providing inspection related to Work done during other than normal working hours in accordance with paragraph 5.3.5 below.
 - 5.3.2 If Contractor, for convenience, voluntarily chooses to schedule Work during hours other than normal working hours at no increase in Contract Price, Contractor shall submit details of such proposed schedule with the interim Progress Schedule described in paragraph 1.6 of the General Conditions. Any Progress Schedule calling for Work outside of normal working hours shall be reviewed for acceptance by Engineer and Department and must be in accordance with the requirements of the New York State Labor Law and Articles 1.6 and 5.3 of the General Conditions.
 - 5.3.3 If at any time subsequent to the submission and approval of the Progress Schedule pursuant to the General Conditions and the Standard Specifications, an event or delay not meeting the requirements for extensions in Contract Time set forth in Articles 9, 10 and 11 of the General Conditions occurs, and requires Contractor to schedule Work during hours other than normal working hours for Contractor's convenience and at no increase in Contract Price, Contractor shall submit, at least ten (10) working days in advance of the acceleration period, a proposed revised accelerated schedule for review by Engineer and Department. If Department accepts the revised accelerated Progress Schedule, Department will so notify Contractor in writing.

- 5.3.4 If the accelerated Progress Schedule pursuant to paragraph 5.3.2 or 5.3.3 is accepted by Department, Contractor shall reimburse Department for all extra costs incurred in providing inspection during hours other than normal working hours in accordance with paragraph 5.3.5 below. Acceptance by Department of the accelerated Progress Schedule shall not justify an increase in Contract Price; any increase in Contractor's cost to perform the Work, or any part thereof, whether or not affected by Contractor's initiated acceleration proposal, shall remain the responsibility of Contractor.
- 5.3.5 Contractor shall reimburse Department for the extra costs incurred in providing inspection during hours other than normal working hours when Department considers that the additional hours are due to Contractor's inefficiencies or delays. Reimbursement may include but may not be limited to costs for Engineer, Resident Project Representatives, administrative expenses and other related costs. Reimbursement for Engineer's charges shall be in amounts equal to Engineer's charges to Department for inspection during hours other than normal working hours under the terms of Engineer's agreement with Department. In the event Contractor fails to pay such costs within 30 days after receipt of an invoice from Department, a Change Order or Proposed Change Order may be issued incorporating the unpaid amounts, and Department shall be entitled to an appropriate decrease in Contract Price.
- 5.3.6 Department may direct Contractor to accelerate if the progress of Work indicates Contractor may not be able to complete the contract within the contract terms. Contractor shall be responsible for all increased costs due to the acceleration.
- 5.4 Unless otherwise specified in the Contract Documents, Contractor shall furnish and assume full responsibility for all materials, equipment, labor, transportation, construction equipment and machinery, tools, appliances, fuel, power, light, heat, telephone, water, sanitary facilities, storage areas, temporary facilities and all other facilities and incidentals necessary for the furnishing, performance, testing, start-up and completion of the Work.
 - 5.4.1 All water for testing, flushing and construction shall be furnished by Contractor. If water is available from Department and Department agrees to its use, Contractor shall connect to Department's water system at a point approved by Department. Department will charge Contractor for water used in performing the above functions in accordance with Department's established rate schedule. There shall be installed at each and every connection to any water supply: (a) a meter accepted by Department or Owner of water supply, and (b) a backflow preventer device accepted by the New York State Department of Health.
 - 5.4.2 In the event that Contractor wishes to utilize water from a source other than the Department's facilities as a substitute source of test water, Contractor shall submit sufficient information in accordance with paragraph 5.7.2 of the General Conditions to allow Engineer to evaluate the substitution. Additionally, such information shall include a description of the necessary equipment and temporary facilities needed to implement the substitute and an estimate of the costs savings anticipated. In the event that the substitution is accepted by Engineer pursuant to the requirements of paragraph 5.7.3 of the General Conditions and allowed by Department, and the supply of water is inadequate in quantity or quality, Contractor shall be responsible for obtaining other sources of test water at no increase in Contract Price or extension in Contract Time.

- 5.4.3 Contractor shall light the parts of the Work performed during working hours in the manner required by law and as required by Engineer or Department.
- 5.5 Except as otherwise provided in the Contract Documents, all materials shall be of good quality, good condition and new, and all equipment shall be new, or should be in good working order and of good quality. As required by Engineer, Contractor shall furnish satisfactory evidence (including reports of required tests) as to the kind and quality of materials and equipment. All materials and equipment shall be applied, installed, connected, erected, used, cleaned and conditioned in accordance with the instructions of the applicable Supplier except as otherwise provided in the Contract Documents.
 - 5.5.1 Contractor shall provide to Department for Department's benefit through Engineer all manufacturers' warranties for materials, and products incorporated into the Work, or required by the Contract Documents to be furnished by Contractor.
 - 5.5.2 Contractor shall obtain from manufacturers of all materials and products complete information as to any special condition, or restriction to be applied in the use of these items. Should the manner or method of installation, specified performance or test results as set forth in the Specifications be contrary to the manufacturer's recommendations for installation and use of the product, the Contractor shall notify Engineer of same for appropriate action. Lack of such notification shall constitute a certification and guarantee by Contractor that Specification requirements will be met by such materials and products to be incorporated.
 - 5.5.3 Contractor shall submit data on all products to be incorporated into the Work required by the Contract Documents, including but not limited to complete maintenance instructions (including preventive maintenance and operating requirement data) and parts lists in sufficient detail to facilitate ordering replacements, in accordance with the procedures set forth in the Special Supplementary Conditions, the Standard Specifications or the Supplementary Specifications.

Adjusting Progress Schedule:

5.6 Contractor shall report on the status of and any revisions to the Progress Schedule to Engineer and Department by delivering Progress Schedule status and update submittals to Engineer in accordance with the Specifications and Article 1.6 of the General Conditions. If Contractor does not adequately update the Schedule, Department may reject Contractor's requests for payment, provided that Department gives Contractor ten (10) days written notice of its intention to do so.

"Or-Equal" or Substitute Items:

5.7.1 Whenever materials or equipment are specified or described in the Contract Documents by using the name of a proprietary item or the name of a particular Supplier, the naming of the item is intended to establish the type, function, quality, performance and design criteria required. Unless the name is followed by words indicating that no "or equal" or substitution is permitted, materials or equipment of other Suppliers may be accepted by Engineer if sufficient information is submitted by Contractor to allow Engineer to determine that the material or equipment proposed is equivalent or equal to that named. The procedure for review by Engineer will include the following as supplemented in the Contract Documents. Requests for review of "or equal" or substitute items of material

and equipment will not be accepted by Engineer from anyone other than Contractor. If Contractor wishes to furnish or use an "or equal" or substitute item of material or equipment, Contractor shall make written application to Engineer for acceptance thereof, certifying that the proposed "or equal" or substitute shall perform the functions and achieve the results called for by the general design, be similar and of equal substance and quality to that specified and be suited to the same use as that specified.

- 5.7.1.1 The application shall state that the evaluation and acceptance by Engineer of the proposed "or equal" or substitute shall not prejudice completion of the Work, or any part thereof, within the Contract Time, or contract times (including Contractor's achievement of Substantial Completion on time), whether or not acceptance of the "or equal" or substitute for use in the Work would require a change in the Work, or any part thereof, or would require the Department or others having a contract with Department for Work on the Project to adapt the Contract Documents to the proposed "or equal" or substitute; and whether or not incorporation or use of the "or equal" or substitute in connection with the Work is subject to payment of any license fee or royalty. All variations of the proposed "or equal" or substitute from that specified shall be identified in the application and available maintenance, repair and replacement services shall be indicated. The application shall also contain an itemized estimate of all increases or decreases in the following costs: 1) the cost of, or the time required to perform any part of the Work, and the corresponding adjustments in Contract Price and Contract Time, resulting directly or indirectly from evaluation and acceptance of the proposed substitute, including, but not as a way of limitation, costs and delays associated with redesign, or claims of other contractors affected by the resulting "or equal" or substitute, and 2) increases or decreases in operating, maintenance, repair, replacement or spare part costs, all of which shall be considered by Engineer in evaluating the proposed "or equal" or substitute. In rendering a decision, Department and Engineer shall at a minimum, have access to any available Total Float in the approved Progress Engineer may require Contractor to furnish at Contractor's Schedule. expense additional data about the proposed "or equal" or substitute.
- 5.7.2 If a specific means, method, technique, sequence or procedure of construction is indicated in or required by the Contract Documents, Contractor may furnish or utilize a substitute only if first approved by Engineer. Contractor shall submit in writing sufficient information to allow Engineer to determine that the substitute proposed is equivalent to that indicated or required by the Contract Documents. The procedures for review by Engineer established by paragraph 5.7.1, and as may be supplemented in the Contract Documents, will apply to reviews under this paragraph.
- 5.7.3 Engineer shall be allowed a reasonable time as determined by Department within which to evaluate each proposed "or equal" or substitute. Engineer and Department shall be the sole judge of acceptability and no "or equal" or substitute shall be ordered, installed or utilized without Engineer's prior written acceptance which will be evidenced by either a Change Order or an approved Shop Drawing. Department may require Contractor to furnish at Contractor's expense a special performance guarantee or other financial security with respect to any substitute. Engineer will keep record of the time required by Engineer and Engineer's consultants in evaluating "or equals" or substitutions proposed by Contractor and in making changes in the Contract Documents occasioned thereby.

Whether or not Engineer accepts an "or equal" or proposed substitute, Department shall be entitled to an offset against any payment due Contractor for the charges of Engineer and Engineer's consultants for evaluating each proposed "or equal" or substitute after the second submittal on such item. In the event that substitute materials or equipment are accepted and are less costly than the originally specified materials or equipment, then the net difference in cost shall benefit Department, and an appropriate Change Order or Proposed Change Order shall be executed to reflect the difference in cost. If Engineer or Department determine that the deduction proposed by Contractor does not reflect the net difference in cost, then this shall be adequate justification to reject the proposed substitute. Additional construction and/or engineering costs identified after Department's acceptance of the proposal and resulting from installation of an "or equal" or substitute shall be borne by Contractor.

Subcontractors, Suppliers and Others:

- 5.8.1 Contractor shall not employ nor award Work to Subcontractors in excess of the amount specified in Article 6 of the Supplementary Bidding Information and Requirements Section. Such percentage may be increased by an Administrative Agreement if, during performance of the Work, Contractor requests an increase and Department at its sole discretion determines that the increase would be to Department's advantage. Contractor shall submit to Department a statement stating the character and amount of the work to be subcontracted and the party to whom it is proposed to subcontract the work. Contractor shall not employ any Subcontractor, Supplier or other person or organization whether initially or as a substitute, unless first approved by Department.
- 5.8.2 Wherever Work to be performed by Contractor or by a Subcontractor is dependent upon Work of other Subcontractor(s) or the work of separate contractor(s), then Contractor shall require such Subcontractor(s) whose Work is so dependent to:
 - 5.8.2.1 Provide necessary notices of delay, data or other requirement(s) for performance of dependent Work or work of separate contractor(s),
 - 5.8.2.2 Supply and/or install items to be built into dependent Work or work of separate contractor(s),
 - 5.8.2.3 Make provisions for dependent Work or work of separate contractor(s),
 - 5.8.2.4 Examine previously placed dependent Work or work of separate contractor(s),
 - 5.8.2.5 Check and verify dimensions of previously placed dependent Work or work of separate contractor(s),
 - 5.8.2.6 Notify Engineer in writing immediately upon determining previously placed dependent Work or work of separate contractor(s), the dimensions of which are unsatisfactory or will prevent a satisfactory installation of Work,
 - 5.8.2.7 Not proceed with Work until the unsatisfactory dependent conditions which prevent satisfactory installation of Work have been corrected.

Installation of Work by Contractor or by a Subcontractor in any given area shall constitute acceptance by Contractor or by such Subcontractor of all previously placed dependent Work or work of separate contractor(s) and after such acceptance Contractor shall not make any claims for additional costs based on alleged deficiencies in such Work.

- 5.8.3 Whenever other Contractor(s) will perform portion(s) of the work that depend on the Contractor's portion of the Work; Contractor shall provide all of the notices and information listed in 5.8.2 to such other Contractor(s) in a timely manner.
- 5.9 Contractor shall be responsible and liable to Department and Engineer for Contractor's acts and omissions and all acts and omissions of the Subcontractors, Suppliers and other persons and organizations performing or furnishing any of the Work under a contract with any level of Subcontractor or Supplier. Nothing in the Contract Documents shall create any contractual relationship between Department or Engineer and any such Subcontractor, Supplier or other person or organization. Department or Engineer may furnish to any Subcontractor or Supplier, to the extent practicable, evidence of the payments made to Contractor on account of specific Work done.
- 5.10 The various sections, divisions and subdivisions of the Standard and Supplementary Specifications and the identifications of any Drawings shall not control Contractor in dividing the Work among Subcontractors or Suppliers or delineating the Work to be performed by any specific trade. The Standard Specifications, Supplementary Specifications, and Drawings are complementary to each other and are to be read as a whole. Anything mentioned or shown in a division of such Specifications, or Drawings, or in a specific trade Drawing shall be effective as if shown in all divisions of such Specifications and in all Drawings. In addition to the requirements of paragraphs 5.24 through 5.30 of the General Conditions, shop drawings of a specific trade shall be compared to and coordinated with those from other trades by Contractor before submission to Engineer.
- 5.11 All Work performed for Contractor by a Subcontractor will be pursuant to an appropriate agreement between Contractor and the Subcontractor which specifically binds the Subcontractor to the applicable terms and conditions of the Contract Documents for the benefit of Department.

Patent Fees and Royalties:

5.12 Contractor shall pay all license fees and royalties and assume all costs incident to the use in the performance of the Work or the incorporation in the Work of any invention, design, process, product, device or intellectual processes which is the subject of patent rights or copyrights held by others, both when a particular invention, design, process, product or device is specified in the Contract Documents for use in the performance of the Work and otherwise. It is the intent of the parties that whenever Contractor is required or desires to use any design, device, material or process covered by letters, patent, trademark or copyright, the right for such use shall be provided for by suitable legal agreements with the patentee or owner, and a copy of this agreement shall be filed with Engineer. However, whether or not such agreement is made or filed as noted, Contractor and Contractor's surety in all cases shall indemnify and hold harmless Department and Engineer and their employees as provided in Appendix B.

Permits:

5.13 Unless otherwise provided in the Contract Documents, Contractor shall obtain and pay for any permits or licenses required for performance of Work. Contractor shall pay all governmental charges and inspection fees necessary for the prosecution of the Work, which are applicable at the time of opening of Bids, or if there are no Bids on the Effective Date of the Agreement. Contractor shall pay all charges for connections or disconnections required by the Work to Underground Facilities or utilities owned by third parties.

Laws and Regulations:

- 5.14.1 Contractor shall comply with all Laws applicable to performance of the Work. Except where otherwise expressly required by applicable Laws or Contract Documents, neither Department nor Engineer shall be responsible for monitoring Contractor's compliance with any Laws.
- 5.14.2 If Contractor observes that the Contract Documents are at variance with any applicable Laws, Contractor shall immediately give Engineer prompt written notice thereof, and any necessary changes will be authorized by one of the methods set forth in paragraph 2.4 and 2.5 of the General Conditions. If Contractor performs any Work knowing or having reason to know that it is contrary to such Laws, and without such notice to Engineer, Contractor shall bear all costs arising therefrom; however, it shall not be Contractor's primary responsibility to make certain that the Specifications and Drawings are in accordance with such Laws.

Taxes:

5.15 Contractor shall pay all sales, consumer, use and other similar taxes required to be paid by Contractor in accordance with the Laws of the State of New York which are applicable during the performance of the Work. Materials, supplies and equipment incorporated into the Work or sold to New York State are exempt from New York State sales tax.

Use of Premises:

- 5.16 Contractor shall confine the use and storage of construction equipment, the storage of materials and equipment and the operations of workers to the Project site and land and areas identified in and permitted by the Contract Documents and other land and areas permitted by applicable Laws, rights-of-way, permits and easements, and shall not unreasonably encumber the premises with construction equipment or other materials or equipment. Unless otherwise provided in the Contract Documents, use of Department's facilities at or contiguous to the site by Contractor for storage of materials or equipment shall not be permitted. Contractor shall assume full responsibility for any damage to any such land or area, or to the owner or occupant thereof or of any land or areas contiguous thereto, resulting from the acts or omissions of Contractor. Should any claim be made against Department or Engineer by any such owner or occupant because of the performance of the Work, Contractor shall promptly attempt to settle with such other party by agreement or otherwise resolve the Claim. Contractor shall indemnify and hold Department harmless in accordance with the provisions of Appendix B.
 - 5.16.1 Temporary buildings (e.g., storage sheds, trailers, shops, offices) and utilities may be erected by Contractor only with the approval of Engineer and shall be built without additional expense to Department. Such temporary buildings and utilities shall remain the property of Contractor and shall be decontaminated as necessary and removed by

Contractor at his expense upon completion of the Work; the buildings and utilities may be abandoned and remain at the site with the written consent of Department.

- 5.16.2 When materials are transported for performance of the Work, vehicles shall not be loaded beyond the loading capacity recommended by the manufacturer of the vehicle or prescribed by Federal, State, or local law or regulation. When it is necessary to cross curbs, sidewalks or work which is completed or underway on site, Contractor shall protect them from damage, and shall repair any damage caused.
- 5.16.3 Notwithstanding the designation of site boundaries or the indication of temporary fences or barricades, the provisions of the Contract Documents governing certain phases or portions of the Work may require that certain operations be carried out beyond the site boundaries. Trenching, utility Work, site development, landscaping, other Work, if required beyond such designated limits, shall be scheduled in such a manner as to cause or occasion a minimum of inconvenience or disturbance to or interference with the normal operation of Department, abutting owners and the public. Contractor shall obtain Department's prior approval and all necessary approvals from others, including but not limited to public authorities and utility companies for such operations, and shall conduct such operations expeditiously and restore the affected area to its original condition immediately upon completion of such operations, unless otherwise specified in the Contract Documents.
- 5.16.4 All existing walks, roadways, paved or landscaped areas on which temporary driveways or walks are rerouted shall be restored to their original condition, immediately upon completion of the phases or portions of the Work for which such features were disturbed unless otherwise specified in the Contract Documents.
- 5.16.5 Pumping, draining and control of surface and ground water will be carried out so as to avoid endangering the Work or any adjacent facility or property, or interrupting, restricting or otherwise infringing or interfering with the use thereof, or exceeding the limits allowed by Contract Documents, or applicable Law.
- 5.17 During the progress of the Work, Contractor shall keep the Site free from accumulations of waste materials, rubbish and other debris resulting from the Work. At the completion of the Work Contractor shall remove all waste materials, rubbish and debris from and about the premises as well as all tools, appliances, construction equipment and machinery, and surplus materials, and shall leave the Site clean and ready for Department. Contractor shall restore all pavement, sidewalks, driveways, fences, shrubs, lawns, trees and any other public or private property damaged as a result of the Work under this Contract. All such replacement shall be done in accordance with the applicable specifications and no separate or extra payment will be made unless specifically provided for in the Payment Items. In all cases, said replacement shall be at least equal to the original conditions.
- 5.18 Contractor shall not load nor permit any part of any structure to be loaded in any manner that will endanger the structure, nor shall Contractor subject any part of the Work or adjacent property to stresses or pressures that will endanger it.

As-Built Documents:

5.19 Contractor shall maintain in a safe place at the Site one (1) as-built document which shall consist of all Drawings, Specifications, Addenda, written amendments, Change Orders, Proposed

Change Orders, field test records, construction photographs, Field Orders and written interpretations and clarifications (issued pursuant to paragraph 8.3) in good order and annotated to show all changes made during construction. Contractor will be required to review with Engineer the status of all as-built documents in connection with Engineer's evaluation of an Application for Payment. Pursuant to paragraph 13.2.1 of the General Conditions, failure to maintain a current file of such as-built documents up-to-date may be just cause to recommend withholding of payments for Work performed. These as-built documents together with all approved samples and a copy of all approved Shop Drawings shall be available to Engineer for reference at the Site. Upon completion of the Work, these as-built documents, samples and Shop Drawings shall be delivered to Engineer for Department. Failure by Contractor to produce acceptable as-built documents of the above listed items shall be cause for reduction of Contract Price in an amount equal to Department's cost of generating or producing the as-built documents.

Health, Safety and Protection:

- 5.20 Contractor shall be responsible for initiating, maintaining and supervising all health and safety precautions and programs in connection with the Work which include but are not limited by the Contract Documents and Contractor's Health and Safety Plan. Contractor shall take all necessary precautions for the health and safety of, and shall provide the necessary protection to prevent damage, injury or loss to all employees and other persons and organizations who may be affected thereby. Contractor shall comply with all applicable Laws of any public body having jurisdiction for the health and safety of persons or property in order to protect them from damage, injury or loss; and shall erect and maintain all necessary safeguards for such health, safety and protection. Contractor shall notify owners of Underground Facilities and utility owners when performance of the Work may affect them, and shall cooperate with them in the protection, removal, relocation and replacement of their property. In addition to any requirements imposed by Laws, Contractor shall shore up, brace, underpin, and protect as may be necessary, all foundations and other parts of all existing structures adjacent to and adjoining the site which are in any way affected by the excavations or other operations connected with performance of the Work under the Contract.
- 5.21 All damage, injury or loss to any property referred to in the above paragraph caused, directly or indirectly, in whole or in part, by Contractor, any Subcontractor, Supplier or any other person or organization directly or indirectly employed by any of them to perform or furnish any of the Work or caused by anyone for whose acts any of them may be liable, shall be remedied by Contractor; provided that Contractor shall not be responsible for damage or loss attributable to defects in the Drawings or Specifications or to the acts or omissions of Department or Engineer or anyone employed by either of them or anyone for whose acts either of them may be liable, and to the extent not attributable, directly or indirectly, in whole or in part, to the fault or negligence of Contractor. Contractor's duties and responsibilities for the safety and protection of the Work shall continue until such time as all the Work is completed and Engineer has issued a written notice to Department and Contractor in accordance with paragraph 13.11 that the Work is acceptable, except as otherwise expressly provided in connection with Substantial Completion. Department has the right to suspend Work or terminate this contract for cause for Contractor's failure to comply with any health and safety plan required by the Contract Documents or Law.
- 5.22 Contractor shall designate a responsible representative at the site whose duty shall be the prevention of accidents. This person shall be Contractor's superintendent unless otherwise designated in writing by Contractor to Department.

Emergencies:

5.23 In emergencies affecting or threatening to affect the safety or protection of persons or the Work or property at the site or adjacent thereto when prompt action is required and there is no reasonable opportunity for prior consultation with Engineer or Department, then Contractor, without special instruction or authorization from Engineer or Department, is obligated to act to prevent or mitigate threatened damage, injury or loss. Contractor shall give Engineer prompt telephonic or electronic notice followed by written notice thereof, including any significant changes in the Work or variations from the Contract Documents which Contractor believes have been caused thereby. If Engineer determines that a change in the Contract Documents is required because of the action taken in response to an emergency, an Administrative Agreement, Field Order, Proposed Change Order or Change Order shall be issued to document the consequences of the changes or variations. Contractor shall give Engineer and Department name and number of contact for emergencies during non-Work hours.

Shop Drawings and Samples:

- 5.24 After checking and verifying all field measurements and after complying with applicable procedures specified in the Contract Documents, Contractor shall submit to Engineer for review and approval in accordance with the accepted schedule of Shop Drawing submissions (see paragraph 1.4, hereof) six (6) physical copies and one electronic copy of all Drawings plus additional copies as required by Contractor, unless otherwise specified in the Contract Documents. All such Shop Drawings shall bear a stamp or other specific written indication that Contractor has satisfied the requirements of the Contract Documents with respect to the review of the submissions including but not limited to paragraph 5.26 below. All submissions shall be identified as Engineer may require. The data shown on the Shop Drawings shall be complete with respect to quantities, dimensions, specified performance and design criteria, materials and similar data to enable Engineer to review the information as required.
- 5.25 Contractor shall also submit to Engineer for review and approval with such promptness as to cause no delay in Work, all samples required by the Contract Documents. Contractor shall check all samples, shall identify them clearly as to material, Supplier, pertinent data such as catalog numbers and the use for which intended, and shall submit with them a written certification that Contractor has satisfied the requirements of the Contract Documents with respect to the review of such submissions including but not limited to subparagraph 5.26 below.
- 5.26 Before submission of each Shop Drawing or sample, Contractor shall certify that all quantities, dimensions, specified performance criteria, installation requirements, materials, catalog numbers and similar data with respect thereto have been reviewed or that each Shop Drawing or sample has been coordinated with other Shop Drawings and samples and with the requirements of the Work and the Contract Documents.
- 5. 27 At the time of each such submission, Contractor shall give Engineer specific written notice of each variation that the Shop Drawings or samples may have from the requirements of the Contract Documents, and, in addition, shall cause a specific notation of each such variation to be made on each Shop Drawing submitted to Engineer for review and approval.
- 5.28 Engineer will review and approve or disapprove Shop Drawings and samples in 14 days. However, Engineer's review and approval of Shop Drawings will be only for conformance with the design concept of the Project and for compliance with the information given in the Contract Documents and shall not extend to the accuracy of other matters that may be contained in the submittals, including but not limited to such matters as dimensions, quantities, performance of

equipment and systems proposed by Contractor, Contractor's means, methods, techniques, sequences or procedures of construction (except where a specific means, method, technique, sequences, and procedures of construction is indicated in or required by the Contract Documents) or to safety precautions or program incident thereto, the correctness of which shall remain the sole responsibility of Contractor. The review and approval of a separate item as such will not indicate approval of the assembly in which the item functions.

- 5.28.1 When reviewed by Engineer, each submittal of Shop Drawings and samples will be returned to Contractor as either "Approved", "Approved as Noted", "Resubmit with Revisions", or "Disapproved." Submittals stamped as "Approved" or "Approved as Noted" will indicate Engineer's approval thereof, subject to the provisions of paragraph 5.28.
- 5.28.2 Contractor shall revise and correct Shop Drawings and samples and resubmit them to Engineer for Engineer's second review and return pursuant to paragraph 5.29. Contractor shall direct specific attention in writing to revisions other than the corrections called for by Engineer on previous submittals.
- 5.28.3 Costs associated with Engineer's review and return of a Shop Drawing or sample submission other than ones submitted pursuant to paragraph 5.7 of this Section shall be borne by Contractor after the Engineer's second (2nd) review. Department's charges to Contractor for additional reviews will be equal to Engineer's charges to Department under the terms of Engineer's agreement with Department. In the event Contractor fails to pay such costs within 30 days after receipt of an invoice from Department, funds will be withheld from payment requests and at the completion of the Work, a Change Order or proposed Change Order will be issued incorporating the unpaid amount, and Department will be entitled to an appropriate decrease in Contract Price.
- 5.28.4 After the Engineer's second (2nd) review, delays associated with Contractor's resubmittal and Engineer's review and return of a particular Shop Drawing or sample submission shall be the responsibility of Contractor. Such delays shall not justify an increase in Contract Price nor an extension in Contract Time.
- 5.29 Engineer's review and approval of Shop Drawings or samples shall not relieve Contractor from responsibility for any variation from the requirements of the Contract Documents unless Contractor has in writing called Engineer's attention to each such variation at the time of submission as required by paragraph 5.27 and Engineer has given written approval of each such variation by a specific written notation thereof incorporated in or accompanying the Shop Drawing or sample approval; nor will any approval by Engineer relieve Contractor from responsibility for errors or omissions in the Shop Drawings or from responsibility for complying with paragraph 5.26.
- 5.30 Where a Shop Drawing or sample is required by the Specifications, any related Work performed prior to Engineer's review and approval of the pertinent submission will be the sole expense and responsibility of Contractor.

Continuing the Work:

5.31 Contractor shall carry on the Work and adhere to the Progress Schedule during all Claims or Disputes with Department. No work shall be delayed or postponed pending resolution of any Claims or Disputes, except as permitted by Article 14 of the General Conditions or as Contractor and Department may otherwise agree in writing.

Weather Protection:

5.32 Contractor shall be responsible for initiating, maintaining and supervising all weather protection precautions and programs in connection with the Work. Additional weather protection provisions, if applicable, are set forth in the Supplementary Conditions, Standard Specifications or Supplementary Specifications.

Cutting and Patching of Work:

- 5.33 Contractor shall be responsible for all cutting of masonry and other materials, and all fitting, drilling or patching which may be necessary to complete the Work or to make its several parts fit together properly, whether or not such Work is expressly specified in the Contract Documents.
- 5.34 Contractor shall not damage or endanger any portion of the Work or the work performed by Department or by any separate contractors by cutting, patching or otherwise altering any work, or by excavation. Contractor shall not cut or otherwise alter work performed by Department or any separate contractors except with the written consent of Department and of such separate contractor. Contractor shall not unreasonably withhold from Department or any separate contractor consent to cutting or otherwise altering the Work.

Quality Control:

5.35 Reference is made to the Supplementary Conditions, Standard Specifications and Supplementary Specifications for the identification of Contractor's quality control system requirements under the Contract.

Project Meetings:

5.36 Contractor, along with appropriate Subcontractors, suppliers and manufacturers, shall attend weekly, or at an interval agreed to by the Department, project meetings at the site or as requested by Department or Engineer, for the purpose of discussing and resolving matters concerning the various elements of the Work.

Notification of Emergency Services:

5.37 Contractor shall notify all local Police, Fire Department and Ambulance Services at least twentyfour (24) hours in advance of construction across or adjacent to existing roadways in order that such services might be aware of any disrupted access.

Conflicts between Contract Documents and Site:

5.38 Contractor shall notify Engineer and Department immediately upon discovering any conflicts, ambiguities, error or inconsistencies in the Contract Documents, between the Contract Documents and the actual Site Conditions, or between the Contract Documents and work being done by others. Failure to promptly notify the Engineer and Department may invalidate Contractor's request for an increase in Contract Price and/or Time.

ARTICLE 6 - Other Work

Related Work at Site:

- 6.1 Department may perform other work related to the Project at the site by Department's own forces, have other work performed by utility owners, or enter into other contracts for such other work.
- 6.2 Contractor shall afford each utility owner and other contractor who is a party to a direct contract with Department (or Department, if Department is performing the additional work with Department's employees) proper and safe access to the site and a reasonable opportunity for the introduction and storage of materials and equipment and the execution of such work, and shall properly connect the Work with theirs. Contractor shall do all the Work that may be required to make its several parts come together properly and integrate with other work. Contractor shall only alter the work of others with the written consent of Engineer and notice to the other contractors whose work will be affected, and shall not endanger any work of others by altering their work. The duties and responsibilities of Contractor under this paragraph are for the benefit of such utility owners and other contractors.
- 6.3 If any part of Contractor's Work depends for proper execution or results upon the work of any such other contractor, utility owner or Department, Contractor shall inspect and promptly report to Engineer in writing any delays, defects or deficiencies in such work that render it unavailable or unsuitable for such proper execution and results. Contractor's failure to report shall constitute an acceptance of the other work as fit and proper for integration with Contractor's Work except for latent or non-apparent defects and deficiencies in the other work.

ARTICLE 7 - Department's Responsibilities

- 7.1 Department may issue communications to Contractor through Engineer.
- 7.2 In case of termination of the employment of Engineer, Department shall appoint an engineer whose status under the Contract Documents shall be the same as the former Engineer.
- 7.3 Department shall promptly furnish the data as required under the Contract Documents and shall make payments to Contractor promptly after they are due as provided in Article 13.
- 7.4 Department is represented by the Project Field Representative, the Project Manager and the Designated Representative whose duties and authority are set forth in the Contract Documents. Department is also represented by Engineer.
- 7.5 Department will not be responsible for Contractor's means, methods, techniques, sequences or procedures of construction, or the safety precautions and programs incident thereto, unless the Contract Documents specifically impose such a duty on Department. Department will not be responsible for Contractor's failure to perform or furnish the Work in accordance with the Contract Documents.
- 7.6 Department will not be responsible for the acts or omissions of Contractor or of any Subcontractor, any Supplier, or of any other person or organization performing or furnishing any of the Work.

ARTICLE 8 - Engineer's Duties and Responsibilities

Project Representation:

8.1 The duties and responsibilities and the limitations of authority of Engineer during construction are set forth in the Contract Documents. Engineer's Resident Engineer will assist Engineer in inspecting the performance of the Work. The duties, and authorities of any Resident Engineer and Resident Project Representatives are set forth in the Contract Documents. Secondarily Department is represented as set forth in article 7.4 of the General Conditions.

Visits to Site:

8.2 Engineer shall make any on-site inspections necessary to check the quality or quantity of the Work and to determine if the Work is proceeding in accordance with the Contract Documents. Engineer's duty to visit the site shall in no way be construed to relieve Contractor of its duty to perform the Work in conformance with the Contract Documents.

Clarifications and Interpretations:

8.3 Engineer or Department shall issue with reasonable promptness written clarifications or interpretations of the requirements of the Contract Documents (in the form of Drawings or otherwise) as Engineer or Department may determine necessary, which shall be consistent with or reasonably inferable from the overall intent of the Contract Documents.

Authorized Variations in Work:

8.4 Engineer may authorize minor variations in the Work from the requirements of the Contract Documents which do not involve an adjustment in the Contract Price or the Contract Time and are consistent with the overall intent of the Contract Documents. These may be accomplished by a Field Order and will be binding on Contractor who shall perform the Work involved promptly. If Contractor believes that a Field Order justifies an increase in Contract Price or an extension in Contract Time, Contractor shall be required to deliver a written notice thereof to Engineer in accordance with the provisions of Article 9 of the General Conditions. If Department and Contractor are unable to agree as to amount and extent thereof, a claim may be made pursuant to Articles 10 and 11 of the General Conditions.

Rejecting Defective Work:

8.5 Engineer, based on its inspections, reports of its Resident Engineer, other information available to it and its professional experience and training, or the direction of Department, may disapprove or reject Work at any time during the construction of the Work, which Engineer believes to be Defective Work. Engineer shall also have authority to require special inspection or testing of the Work as provided in paragraphs 12.4 through 12.10 of the General Conditions, whether or not the Work is fabricated, installed, or completed. When Contractor has been notified by Engineer of disapproval or rejection of Defective Work, Contractor shall take immediate action to correct same at no additional cost.

Shop Drawings, Change Orders and Payments:

- 8.6 Engineer's responsibilities regarding Shop Drawings and samples, are set forth in paragraphs 5.24 through 5.30 of the General Conditions. If Contractor believes that Engineer's approval of a Shop Drawing or sample justifies an increase in Contract Price or an extension in Contract Time, Contractor shall be required to deliver a written notice thereof to Engineer in accordance with the provisions of Article 9 of the General Conditions. If Department and Contractor are unable to agree as to amount and extent thereof, a claim may be made pursuant to Articles 10 and 11 of the General Conditions.
- 8.7 Engineer's duties regarding Change Orders are set forth in Articles 9, 10 and 11 of the General Conditions.
- 8.8 Engineer's duties regarding Applications for Payment, etc., are set forth in Article 13 of the General Conditions.

Determinations for Unit Prices:

8.9 Engineer will review and make preliminary determinations on the actual quantities and classifications of acceptable Unit Price Work performed by Contractor. Engineer will review such preliminary determinations with Contractor, before rendering a written decision thereon by recommendation of an Application for Payment or otherwise. Department shall review and approve Engineer's determinations. Department's decisions thereon shall be final unless within ten (10) days after the date of any such decision, Contractor delivers to Department and to Engineer written notice of disagreement with Engineer's Determination including written documentation supporting such position.

Engineer's Determinations and Claims:

- 8.10 Engineer shall interpret the Contract Documents and determine the acceptability of the Work thereunder subject to Department's right to modify or overrule Engineer's determination after consultation with Engineer and Contractor. Claims or other matters relating to the acceptability of the Work or the interpretation of the requirements of the Contract Documents pertaining to the performance and furnishing of the Work, or in respect to changes in the Contract Price or Contract Time will be referred to Engineer in writing with a request for a formal determination in accordance with this paragraph. Engineer shall render such determination in writing within a reasonable time. Written notice of Contractor's disagreement with Engineer's Determination constituting a Claim shall be delivered by Contractor to Engineer and Department within ten days after receipt. Written documentation supporting such position shall be submitted to Department within thirty (30) days of Engineer's Determination, unless the Department allows an extension of time to submit additional information.
 - 8.10.1 A written demand or written assertion by Contractor seeking the payment of money is not a Claim under this Article until certified as required below. Contractor shall submit with the claim a certification executed by Contractor's Authorized Representative specified in the Contract Documents that:
 - 8.10.1.1 The Claim is made in good faith,
 - 8.10.1.2 Supporting Cost and Pricing Data are current, accurate, and complete to the best of the Contractor's knowledge and belief, and

- 8.10.1.3 The amount of the Claim accurately reflects the adjustments in Contract Price or Contract Time for which Contractor believes Department is liable.
- 8.10.2 Contractor agrees that all unresolved claims shall be subject to the Dispute Resolution procedures as provided in Article VIII of Appendix B to the Agreement.
- 8.10.3 Contractor shall proceed diligently with performance of Work under this Contract, and comply with any decision of Engineer or Department pending final resolution of any request for relief, Claim, appeal, or action arising under the Contract.

Limitations on Engineer's Responsibilities:

- 8.11 Whenever in the Contract Documents the terms "as ordered," "as directed," "as required," "as allowed," "as approved," or terms of like effect or import are used, or the adjectives "unreasonable," "unsuitable," "acceptable," "proper," or "satisfactory," or adjectives of like effect or import are used to describe a requirement, direction, review or judgment of Engineer as to the Work, it is intended that such requirement, direction, review or judgment will be solely to evaluate the Work for compliance with the Contract Documents unless there is a specific statement indicating otherwise. The use of any such term or adjective shall not be effective to assign to Engineer any duty or authority to supervise or direct the furnishing or performance of the Work or any duty or authority to undertake responsibility contrary to the provisions of paragraph 8.12 or 8.13.
- 8.12 Engineer will not be responsible and Contractor remains responsible for Contractor's means, methods, techniques, sequences and procedures of construction, and the safety precautions and programs incident thereto, unless Contract Documents specifically impose such a duty on Engineer. Engineer will not be responsible for Contractor's failure to perform or furnish the Work in accordance with the Contract Documents.
- 8.13 Engineer will not be responsible for the acts or omissions of Contractor or of any Subcontractor, any Supplier, or of any other person or organization performing or furnishing any of the Work.

ARTICLE 9 - Changes in the Work

- 9.1 Department may, at any time or from time to time and without notice to any surety, order additions, deletions or revisions in the Work or other requirements, which the performance of, or compliance with, is established in the provisions of the Contract Documents. These changes will be initiated by Proposed Change Orders, in Administrative Orders and authorized by Change Orders. Upon receipt of an Administrative Order, or Proposed Change Order, the Contractor shall proceed with the Work involved. All such Work involved shall be performed in accordance with the applicable conditions of the Contract Documents. If an Administrative Order or Proposed Change Order causes an increase or decrease in the Contract Price or an extension or shortening of the Contract Time, an equitable adjustment will be made in a duly executed Change Order. The value of any work covered by a Proposed Change Order or a Change Order for an increase or decrease in the Contract Time, hereafter called the "Work involved", shall be determined by one of the following methods:
- 9.2 Department may order minor changes in the Work which do not involve an adjustment in the Contract Price or in the Contract Time and are consistent with the overall intent and purpose of the Contract Documents. Such minor changes will be authorized by a Field Order which shall be

binding on Department and Contractor who shall perform such changes promptly. If Contractor believes that a Field Order justifies an increase in the Contract Price or the Contract Time, Contractor shall make written notification in accordance with Article 8.10 of the General Conditions within three (3) days and provide documentation within 15 days in a Proposed Change Order to Engineer.

- 9.3 Additional work performed without authorization of a Proposed Change Order will not entitle Contractor to an increase in the Contract Price or an extension in the Contract Time, except in the case of emergency work as provided in paragraph 5.23 of the General Conditions and except in the case of uncovering Work as provided in paragraph 12.9 and 12.10 of the General Conditions.
- 9.4 When changes in the Work, involving adjustments to the Contract Price or Contract Time are contemplated by Department, pursuant to paragraph 9.1, Contractor may be requested to submit a cost proposal prior to being authorized to proceed with the change. If Department and Contractor are unable to agree and Department orders the change, or if Department pursuant to Engineer's review and decision concludes that the written direction, instruction, interpretation or clarification, approval, decision or determination does not require an increase in Contract Price or extension in Contract Time, Contractor will be required to carry on with the Work involved and adhere to the Progress Schedule. Contractor proposals substantiating the amount and extent of any proposed adjustment in Contract Price or Contract Time shall become due within three (3) days of receipt (or issuance) of a Proposed Change Order initiated by Department (or Contractor), and shall be submitted in accordance with Articles 8, 9, 10 and 11 of the General Conditions. Any delays in the submittal of Contractor proposals relative to adjustments in Contract Price or Contract Time will not justify a delay or constitute basis for an increase in Contract Price or an extension in Contract Time. Unless Contractor gives written notice of intent to appeal Department's determination or to file a claim in accordance with Article 8 of the General Conditions, within said thirty (30) days of the issuance of a Proposed Change Order or the rejection of a Proposed Change Order, Department's determination shall be final and binding upon Contractor.
- 9.5 Upon receipt of a cost proposal from Contractor, pursuant to paragraph 9.4 above, and if Department agrees with the increase or decrease in the Contract Price or Contract Time, Department shall authorize the change in the Work by issuing a Proposed Change Order and shall begin preparation of a Change Order covering the Work involved.
 - 9.5.1 A Change Order shall also be any other written order, including direction, instruction, interpretation, determination, or decision embodied in a Field Order, or in a response to a request for clarification or interpretation of the requirements of the Contract Documents, or in an approval of a Shop Drawing or sample, or in a decision relating to a report or differing or unforeseen conditions or the acceptability of Work or Administrative Order which causes any change, provided that Contractor gives Engineer and Department a dated written notice identifying the written order and stating circumstances and other information required in this Article and in Articles 8, 10 and 11 of the General Conditions indicating that Contractor considers the written order a Proposed Change Order.
 - 9.5.2 Contractor quotations substantiating the amount or extent of any proposed adjustment in Contract Price or Contract Time shall cover all known amounts or extents to which Contractor is entitled as a result of the proposed change. Pursuant to this requirement of the Contract Documents, Contractor acknowledges and agrees to the following

waivers when executing Change Orders or Proposed Change Orders authorized in accordance with paragraph 9.4 of the General Conditions:

- 9.5.2.1 Contractor acknowledges and agrees that the adjustments in Contract Price and Contract Time stipulated in this Change Order represent full compensation for all increases or decreases in the cost of, or the time required to perform the entire Work under the Contract, arising directly or indirectly from this Change Order, including this and all previous Change Orders. Acceptance of this waiver constitutes an agreement between Department and Contractor that the Change Order represents an allinclusive, mutually agreed upon adjustment to the Contract for all direct, indirect and consequential costs and delays, and that Contractor shall waive all rights to file a claim on this Proposed Change Order after it is properly executed.
- 9.5.2.2 Acceptance by Contractor is evidence of mutual accord and satisfaction for those adjustments in Contract Price and Contract Time stipulated in this Proposed Change Order, that Contractor shall submit detailed supporting data within fifteen (15) days in accordance with Articles 10 and 11 of the General Conditions to allow negotiation of outstanding issues, and that the changes ordered and documented by this Proposed Change Order will be incorporated into a future Change Order subsequent to agreement on all outstanding issues.
- 9.6 If the provision of any bond requires that the surety be notified of any change in the Work, it shall be Contractor's responsibility to so notify the surety and the amount of each applicable bond shall be adjusted accordingly. Contractor shall furnish proof to Department of such adjustment.
- 9.7 No claim by Contractor for an adjustment under this Article of the General Conditions shall be allowed if asserted after the date of final payment under this Contract.

ARTICLE 10 - Change of Contract Price or Time

- 10.1 The Contract Price constitutes the total compensation, subject to authorized adjustments, payable to Contractor for performing the Work. All duties, responsibilities and obligations assigned to or undertaken by Contractor shall be at its own expense without any change in the Contract Price or the Contract Time.
- 10.2 The Contract Price and the Contract Time may only be changed by a duly executed Change Order.
- 10.3 The value of the Work involved shall be determined by one of the following methods:
 - 10.3.1 Where the Work involved is covered by unit prices contained in the Contract Documents, those unit prices shall be used to determine the cost of the Work involved.
 - 10.3.2 Where the Work involved is not covered by unit prices contained in the Contract Documents, by application of mutually agreed upon unit prices to the quantities of the items of Work involved.

- 10.3.3 By mutual acceptance of a lump sum.
- 10.3.4 On the basis of the cost of the Work involved as provided in paragraph 10.4 of this Article plus a Contractor's fee for overhead and profit as provided in paragraph 10.7 of this Article.
- 10.3.5 Where the Department and Contractor cannot agree on any of the methods described above, and Department directs Contractor to proceed with the Work involved as provided in Article 10 of the General Conditions.
- 10.4 The Cost of the Work involved shall include the following items and shall not include any of the costs disallowed under this Article 10 of the General Conditions:
 - 10.4.1 Payroll costs of employees in the direct employ of the Contractor in the performance of the Work involved in job classifications agreed upon by Department and Contractor. Payroll costs shall include, but shall not be limited to, salaries and wages plus the cost of fringe benefits which shall include social security contributions, unemployment, excise and payroll taxes, workers or workmen's compensation, health and retirement benefits, and sick leave applicable thereto. Such employees may include foremen at the site but shall not include employees in the job classifications itemized in paragraphs 10.6.1. The costs of performing the Work involved during other than normal working hours, as defined in paragraph 5.3.1, shall be included in the above to the extent authorized by Department and as required by Law.
 - 10.4.2 Cost of all materials and equipment furnished and incorporated into the Work involved, including costs of transportation and storage thereof, and suppliers' field services connected therewith. All cash discounts shall accrue to Contractor unless Department deposits funds with Contractor with which to make payments, in which case, the cash discounts shall accrue to Department. All trade discounts, rebates and refunds, and all returns from sale of surplus materials and equipment shall accrue to Department, and Contractor shall make provisions so that they may be obtained.
 - 10.4.3 Payments made by Contractor to subcontractors who perform a part of the Work involved. If required by Department, Contractor shall obtain competitive bids from prospective subcontractors acceptable to Contractor and shall deliver such bids to Department who will then determine which bids will be accepted. If a subcontract provides that the subcontractor is to be paid on the basis of cost plus a fee, the subcontractor's cost shall be determined in the same manner as Contractor's cost of the Work involved. All subcontracts shall be subject to the provisions of the Contract Documents, insofar as applicable.
 - 10.4.4 Costs of special consultants, including but not limited to engineers, architects, testing laboratories, surveyors, attorneys and accountants, employed for services specifically related to the Work involved to the extent authorized in writing by Department.
 - 10.4.5 Costs of Contractor owned equipment Contractor shall be reimbursed for his ownership and operating costs for self-owned equipment employed on the Work involved. The rates of reimbursement shall be as listed on EquipmentWatch.com, its successor or equivalent, in effect on the date of issuance of the applicable Change Order or Proposed

Change Order, or prior to performing the Work in a claim for an increase or decrease in the Contract Price and applied in the following manner.

- 10.4.5.1 Ownership costs The equipment rates for ownership costs include depreciation on the original purchase, insurance, applicable taxes, interest on investment, storage, repairs, mobilization to and demobilization from the site of the Work involved, and profit reimbursement will be made for the hours on the Work involved. In no event shall the equipment rate billed to Department be at rates exceeding those described below.
- 10.4.5.2 Less than eight (8) hours of actual use or necessary for availability as approved by Engineer: The daily rate or the product of the hours of actual use multiplied by the hourly rate, whichever is less.
- 10.4.5.3 Between eight (8) hours and 40 hours of actual use: The weekly rate or the product of the hours of actual use used divided by eight (8) and multiplied by the daily rate, whichever is less.
- 10.4.5.4 Between 40 hours and 176 hours of actual use: The monthly rate or the product of the hours of actual use divided by 40 multiplied by the weekly rate, whichever is less.
- 10.4.5.5 Over 176 hours of actual use: The product of the hours of actual use divided by 176 multiplied by the monthly rate.
- 10.4.5.6 Operating costs including fuel, lubricants, other operating expendables, and preventive and field maintenance. Operating costs do not include the operator's wages. Contractor shall be reimbursed the product of the hours of actual use multiplied by the estimated operating cost per hour.
- 10.4.5.7 The geographic area adjustment factor and the Rate adjustment tables for federal aid projects shall be applied to the equipment ownership rates.
- 10.4.5.8 The rates used shall be those in effect at the time the Work involved is to be done as listed in the then current EquipmentWatch.com, is successor or equivalent.
- 10.4.5.9 In the event that a rate is not established in EquipmentWatch.com, its successor or equivalent, for a particular piece of equipment, Department will establish rates for ownership and operating costs.
- 10.4.5.10 Equipment to be used by Contractor shall be specifically described by manufacturer and model number and be of suitable size and capacity to accomplish the Work involved. In the event Contractor elects to use equipment of a higher rental rate than equipment suitable for the Work involved, payment will be made at the rate applicable to the suitable equipment. Department and Engineer shall determine the suitability of the equipment. If there is a differential in the rate of pay of the operator of oversized or higher rate equipment, the rate paid for the operator will likewise be related to the suitable equipment.

- 10.4.5.11 Transportation, loading and unloading, installation, dismantling and removal costs shall be included only if such construction equipment and machinery is imported to the site solely to perform the Work involved in the Change Order Proposed Change Order, or Claim. All equipment costs shall cease when the use thereof is no longer necessary to perform the Work involved or the equipment cannot be used to perform the Work involved due to contractor actions or inactions. Payroll costs for employees operating the equipment shall be in accordance with paragraph 10.4.1 of the General Conditions.
- 10.4.5.12 Actual equipment use time documented by Engineer shall be on the basis that the equipment was on and used at the site. In addition to the leasing rate, equipment operational costs shall not exceed the estimated hourly operation rate as set forth in EquipmentWatch.com, is successor or equivalent. Daily records listing the equipment units and their respective operators, identification code, and actual usage and certified at the end of each day by Engineer shall be the record upon which actual equipment use shall be based. For multiple shift work sequences, the allowable equipment rate for second or third shifts shall not exceed 50-percent (50%) of the base rate. Idle equipment at the site and necessary to perform the Work involved but not in actual use shall be paid at the rate determined above. Idle time shall include a reasonable time allowance to and from the site, and be as documented by Engineer.
- 10.4.6 Costs of Contractor rented equipment.
 - 10.4.6.1 In the event Contractor must rent a specific piece of equipment, payment will be the actual rental rate for the piece of equipment for the time that it is used on the Work involved or required by Department to be present, not to exceed the rental rate in EquipmentWatch.com, is successor or equivalent, plus the reasonable cost of moving the equipment onto and away from the site of the Work involved.
 - 10.4.6.2 Contractor shall also be reimbursed for the operating cost of the rented equipment if that cost is not included in the rental cost. The operating cost shall be determined in the same manner as specified for Contractor owned equipment above. If contractor owned equipment is available on site to complete the work, Contractor shall be reimbursed only at the rate for owned equipment and there shall not be any reimbursement for transportation of equipment to or from site.
 - 10.4.6.3 In the event area practice dictates the rental of fully manned or fueled and maintained equipment, payment will be made on the basis of an invoice for the rental of the fully manned, fueled and/or maintained equipment, including all costs incidental to its use, plus costs of moving to and from the site of the Work involved, provided the rate is substantiated by area practice.
 - 10.4.6.4 Transportation, loading and unloading, installation, dismantling and removal costs shall be included only if such construction equipment and machinery is imported to the site solely to perform the Work involved in the Change Order, Proposed Change Order, or Claim. All equipment costs shall cease when the use thereof is no longer necessary to perform the Work involved or the

equipment cannot be used to perform the Work involved due to Contractor actions or inactions. Payroll costs for employees operating the equipment shall be in accordance with paragraph 10.4.1 of the General Conditions.

- 10.4.7 The maximum amount of reimbursement for the ownership costs of Contractor owned equipment or for the rental costs of rented equipment shall be limited to the original purchase price of the equipment as listed in EquipmentWatch.com, is successor or equivalent. In the specific event where the reimbursement is limited by the original purchase price, Contractor shall be reimbursed for the operating cost per hour for each hour of actual use.
- 10.4.8 Supplemental costs due solely in connection with the Work involved to include the following:
 - 10.4.8.1 The necessary transportation, travel and subsistence expenses of Contractor's employees who are solely employed in the Work involved.
 - 10.4.8.2 Costs, including transportation and maintenance, of all materials, supplies, equipment, machinery, appliances, office and temporary facilities at the site required, but excluding hand tools, protective clothing and other consumables which are used or consumed in connection with the Work involved and are individually valued at less than \$100.00.
 - 10.4.8.3 Sales, consumer use, or similar taxes for which Contractor is liable, exclusive of New York State and local sales taxes for materials, supplies and equipment incorporated into the Work.
 - 10.4.8.4 Royalty payments and fees for licenses and permits.
 - 10.4.8.5 Costs of utilities at the site including but not limited to electricity, telephone, fuel, heat, water, property rental and sanitary facilities.
- 10.5 The amount of credit to be allowed by Contractor to Department for any individual change in the Work which results in a net decrease in cost shall be the amount of the actual net decrease plus a deduction in Contractor's fee equal to one-half of the fee derived from the application of paragraphs 10.7.2.1, 10.7.2.2 and 10.7.2.3 of this Article.
 - 10.5.1 When more than one individual change is covered by one Proposed Change Order or Change Order, the adjustment in Contractor's fee shall be the sum of the individual fees computed on each individual change in accordance with paragraphs 10.7.2.1 through 10.7.2.4.
- 10.6 The cost of the Work involved shall not include any of the following, all of which are to be considered general and overhead costs covered by the Contractor's fee:
 - 10.6.1 Payroll costs and other compensation of Contractor's executives, principals (of partnership and sole proprietorships), general managers, engineers, architects, estimators, attorneys, superintendents, administrators, auditors, accountants, purchasing and contracting agents, expeditors, timekeepers, clerks and other personnel employed by Contractor, at the site or not, for general administration of the Work

including any Change Orders, and who are not specifically included in the agreed upon schedule of job classifications referred to in paragraph 10.4.1 of this Article.

- 10.6.2 Expenses of Contractor's principal and branch offices other than Contractor's office at the site. Costs derived from the computation of an extended or unabsorbed home office overhead rate by application of the Eichleay, Allegheny, Burden Fluctuation, or other similar methods.
- 10.6.3 Any part of Contractor's capital expenses, including interest on Contractor's capital employed for the Work involved and charges against Contractor for delinquent payments.
- 10.6.4 Cost of premiums for all bonds and insurance whether or not Contractor is required by the Contract Documents to purchase and maintain the same.
- 10.6.5 Costs incurred in the preparation of Proposed Change Orders or Change Orders or in preparation or filing of claims.
- 10.6.6 Expenses of Contractor associated with anticipated lost profits or lost revenues, lost income or earnings, lost interest on earnings or unpaid retainage.
- 10.6.7 Small tools used or consumed in the performance of the Work involved having an individual value of less than \$100.00.
- 10.6.8 Costs due to negligence of Contractor or any subcontractor anyone directly or indirectly employed by them for whose acts any of them may be liable, including, but not limited to correction of defective work, disposal of equipment or material wrongly supplied and repairing any damage to property.
- 10.6.9 Other overhead or general expense costs of any kind and the costs of any item not specifically and expressly included in paragraph 10.4 of this Article, all of which are to be considered general and overhead costs covered by the Contractor's fee.

Contractor's Fee:

- 10.7 The Contractor's fee for general and administrative overhead costs (whether at the site or in Contractor's principal or branch offices), small tools and profit on the Work involved shall be determined by negotiations in accordance with this paragraph.
 - 10.7.1 Contractor shall negotiate with Department for reasonable overhead rates and fair and reasonable profit based on assumptions of risk, exposure to weather, size of the change, labor to material ratio, equipment requirements, and time of performance.
 - 10.7.2 In no case shall the Contractor's fee exceed the following percentages of the various percentages of the Cost of the Work involved.
 - 10.7.2.1 For costs incurred under paragraph 10.4.1 (Payroll Costs) of this Article, the Contractor's fee shall not exceed fifteen-percent (15%).

- 10.7.2.2 For costs incurred under paragraph 10.4.2 (Costs of Materials and Equipment) of this Article, the Contractor's fee shall not exceed ten-percent (10%).
- 10.7.2.3 For costs incurred under paragraph 10.4.3 (Cost of Subcontracts) of this Article, the Contractor's fee shall not exceed five-percent (5%) and the subcontractor's fee shall not exceed ten-percent (10%).
- 10.7.2.4 For costs incurred under paragraph 10.4.3 of this Article, for work performed by a subcontractor's subcontractor, the Contractor's and the first subcontractor's fees shall not exceed five-percent (5%) each and the second subcontractor's fee shall not exceed ten-percent (10%).
- 10.7.2.5 No fee shall be paid on the costs itemized under paragraphs 10.4.4 and 10.4.5 nor on subcontractors' fees derived in accordance with paragraphs 10.7.2.3 and 10.7.2.4.
- 10.7.3 No fee shall be paid on premium portion of wages nor on increased wages due to delays.
- 10.8 Changes in the Contract Price due to changes in the Contract Time.
 - 10.8.1 An increase in the Contract Price due solely to delays causing extensions in the Contract Time will be allowed only if the delays to the Work, or parts thereof, arise from acts or omissions of Department or Engineer which are longer than the time period(s) provided for review(s) or decision(s) as provided for in the Contract Documents, and provided further that the delays arise from changes in the Work covered by Proposed Change Orders or Change Orders prepared pursuant to Article 9 of the General Conditions or from suspensions of Work pursuant to paragraph 14.1 of the General Conditions. However no adjustment in the Contract Price shall be made under this paragraph for the following reasons:
 - 10.8.1.1 For any extensions granted in the Contract Time to the extent that performance would have been so extended by any other cause including fault or negligence of Contractor or subcontractors, suppliers or other persons or organizations.
 - 10.8.1.2 For any acceleration alternative in lieu of an extension proposed by Contractor, to the extent that the acceleration costs exceed those in connection with the alternative extension in Contract Time.
 - 10.8.1.3 For which a Contract Price is provided or excluded under any other provision of the Contract Documents.
 - 10.8.1.4 For delays which are covered by or which could be covered by reallocating the Total Float or a portion of it.
 - 10.8.2 Recovery of damages for delay on account of extensions in Contractor's Progress Schedule or in connection with acceleration alternatives thereof will be allowed only when said delays extend the Work, or a part thereof, beyond the applicable Contract Time(s).

- 10.8.3 It is further expressly agreed and understood that Contractor will not be entitled to any compensation or damages on account of delays which meet the requirements of paragraph 10.12.3 of the General Conditions for time extensions but which can or could have been avoided by reallocating portions of the Total Float. Under this requirement, it is further understood and agreed that the only remedies for delays which are figured to cause an extension in the Contract Time or form the basis for a proposal for an acceleration alternative thereof solely due to the use of Total Float will consist of an increase in Contract Time only and shall exclude Contractor's right to recover any delay damages or compensation from Department.
- 10.9 In submitting proposals or asserting claims for changes under this Article, Contractor acknowledges and agrees that no adjustment shall be made: 1) for any escalation costs for any part of the Work which is not delayed beyond the applicable latest possible dates specified in the approved Progress Schedule, or 2) for any acceleration costs incurred without prior authorization from Department, or 3) for which an adjustment has been provided for, limited as to extent, or excluded under any other provision of the Contract Documents.
- 10.10 Contractor quotations substantiating the amount or extent of any proposed adjustment in Contract Price or Contract Time shall cover all known amounts or extents (direct, indirect and overhead) to which Contractor is entitled as a result of the proposed change. Pursuant to this requirement, Contractor acknowledges and agrees to the following waivers when executing Proposed Change Orders and Change Orders authorized in accordance with Article 9:
 - 10.10.1 Contractor acknowledges and agrees that the adjustments in Contract Price and Contract Time stipulated in the Change Order represent full compensation for all increases or decreases in the cost of, or the time required to perform, the entire Work under the Contract arising directly or indirectly from the Change Order. Acceptance of this waiver constitutes an agreement between Contractor and Department that the Change Order represents an all-inclusive, mutually agreed upon, adjustment to the Contract for all direct, indirect and consequential costs and delays, and that Contractor will waive all rights to file a claim on the Change Order after it is duly executed.
 - 10.10.2 Acceptance by Contractor is evidence of mutual accord and satisfaction for those adjustments in the Contract Price and Contract Time stipulated in the Proposed Change Order, that Contractor will submit detailed supporting data within fifteen (15) days in accordance with Articles 10 and 11 of the General Conditions to allow negotiation of outstanding issues, and that the changes ordered and documented by the Proposed Change Order will be incorporated into a future Change Order subsequent to agreement on all outstanding issues.
- 10.11 Additional costs incurred due to acceleration or additional work performed by Contractor without an agreed upon Proposed Change Order will not entitle Contractor to an increase in Contract Price or Contract Time, except in the case of emergency work as provided in paragraph 5.23 of the General Conditions or in the case of uncovering Work as provided in paragraph 12.9 of the General Conditions.
- 10.12 The Contract Time may be changed only by a duly executed Change Order. Any proposal for an extension or shortening of the Contract Time shall be based on a Proposed Change Order in accordance with the provisions of this Article.

- 10.12.1 Contractor requests substantiating the extent of increase in the Contract Time shall be delivered to Engineer within fifteen (15) days of the event causing the proposed need for the extension in the Contract Time unless Department, in writing, allows an additional period of time. Contractor shall prove that the delays have materialized or will materialize despite reasonable, prudent, and diligent efforts to prevent such delays and meet the criteria set forth in this Article. Any delays by Contractor in submittal of proposals will not justify a delay or be basis for an extension of the Contract Time.
- 10.12.2 Extensions in Contract Time due to delays to parts of the Work will not be granted until all Total Float available for those parts of the Work has been used.
- 10.12.3 An extension in the Contract Time will not be granted unless Contractor can demonstrate, through an analysis of the Progress Schedule approved in accordance with the applicable provisions of the Standard Specifications, that the delay in completing the applicable parts of the Work within the applicable Contract Time(s) arises from unforeseeable causes beyond the control and without the fault or negligence of Contractor or its Subcontractors, Suppliers or other persons or organizations, and which Contractor could not have guarded against, and that such causes do or will cause extension of the schedule for that part of the Work beyond the applicable Contract Time. Examples of such causes include 1) acts of God or of the public enemy, 2) fires, floods, epidemics, quarantine restrictions, 3) strikes, freight embargoes, 4) unusually severe weather, 5) delays of Subcontractors or Suppliers at any tier arising from unforeseeable causes beyond the control and without fault or negligence of both Contractor and the Subcontractors, Suppliers or other persons organizations.
- 10.12.4 All time limits stated in the Contract Documents are of the essence. They have been developed by taking into account:
 - 10.12.4.1 The scope of the Work under the Contract Documents;
 - 10.12.4.2 Reasonable time for performance of the Work, or parts thereof, as a whole; and,
 - 10.12.4.3 The perceived sensitivity of the Work, or parts thereof, as a whole, to the potential delaying effect of causes meeting the requirements of paragraph 10.12.3.
 - 10.12.4.4 Therefore, and as long as delays meeting the requirements of paragraph 10.12.3 are not to be considered by Contractor in the initial development of the Progress Schedule pursuant to paragraph 1.6 of the General Conditions and the Progress Schedule Section of the Standard Specifications, the initial Progress Schedule developed by Contractor could show Total Float with respect to the Contract Time, or contract Times. Pursuant to the Float sharing requirements of the Contract Documents (as set forth in the provisions of Progress Schedule Section of the Standard Specifications) any such Total Float materializing between Contractor's completion of the Work, or part thereof, as anticipated by Contractor's approved progress Schedule, and the corresponding Contract Time(s) will be available to Department, Engineer, Contractor and others to absorb delays that cannot be mitigated by any other means.

- 10.12.5 The provisions of Section 10.11 of this Article shall govern and be applicable to the following:
 - 10.12.5.1 Changes in Contract Time initiated by Department or Contractor due to delays which meet the requirements of paragraph 10.12.4.
 - 10.12.5.2 Contractor proposals to accelerate the Progress Schedule, in lieu of the alternate extension of Contract Time, due to delays meeting the requirements of paragraph 10.12.3.
- 10.12.6 The provisions of paragraphs 10.11, 10.12.2, and 10.12.3 shall exclude recovery for damages arising out of an acceleration alternative to an extension in Contract Time on account of delays not meeting the requirements for extensions in Contract Time set forth in this Article.
- 10.12.7 The provisions of this Article 10 shall not exclude recovery for damages (including compensation for additional professional services and court costs) for delay by either party, except as otherwise specifically disallowed in this Article and in other provisions of the Contract Documents.
- 10.13 Failure, refusal or neglect by Contractor to comply with the time requirements for delivery of written Proposed Change Orders or notice of a claim shall be considered to be a waiver by Contractor of any request or claiming for extension in Contract Time.
 - 10.13.1 Contractor proposals (or claims) substantiating Contractor's proposed adjustment in Contract Price shall be delivered within the time period stipulated in paragraph 9.3 and 9.4, unless Department in writing, allows an additional period of time to ascertain accurate cost data. Contractor shall prove that additional costs were necessarily incurred, despite Contractor's reasonable, prudent, and diligent efforts to prevent such costs and which meet the criteria set forth in this Article. Any delays in the submittal of Contractor proposals relative to adjustments in Contract Price will not justify a delay or constitute basis for an increase in Contract Price or an extension in Contract Time.
 - 10.13.2 Contractor proposals (or claims) shall be submitted on forms required by Contract Documents, and shall remain firm for a period of at least 60 days from delivery of the proposal (or claim). Proposals (or claims) shall include itemized estimates of all costs and schedule adjustments that will result directly or indirectly from the changes described. Unless otherwise specified, itemized estimates shall be in accordance with the requirements of this Article of the General Conditions and in sufficient detail to reasonably permit an analysis by Engineer and Department of all quantities involved, labor and payroll costs, productivity rates, material costs, Subcontractor and Supplier costs, supplemental costs as described in paragraph 10.4.8, special consultant costs as described in paragraph 10.4.4, equipment costs, general and administrative overhead costs, field office overhead costs, and profit and shall cover all aspects of the Work involved in the change, whether such was deleted, added, changed, or impacted. Any amount claimed for Subcontractors, Suppliers or other persons or organizations shall be similarly supported. Itemized schedule adjustments shall be sufficiently detailed to permit an analysis of effects on the Progress Schedule as required in the Standard Specifications.

ARTICLE 11 - Unit Price Work and Cash Allowances

Cash Allowances:

- 11.1 Contractor shall include in the Contract Price all cash allowances named in the Contract Documents and all Work covered by those cash allowances shall be performed for an amount not to exceed those allowances without prior approval in writing by Engineer.
 - 11.1.1 The allowances include the cost to Contractor (less any applicable trade discounts) of materials labor and equipment required by the allowances to be delivered at the site, and all applicable taxes; and the cost documentation requirements of Articles 9, 10, 11 apply to cash allowances.
 - 11.1.2 Prior to final payment, an appropriate Change Order will be issued as recommended by Engineer to reflect actual amounts due Contractor on account of Work covered by allowances, and the Contract Price shall be correspondingly adjusted.

Unit Price Work:

- 11.2 Where the Contract Documents provide that all or part of the Work to be performed on the basis of Unit Prices, the following shall apply:
 - 11.2.1 The original Contract Price shall include the sum of the bid unit prices for each separately identified item of Unit Price Work times the estimated quantity of each item as indicated on the Contract Bid Form.
 - 11.2.2 Unless otherwise provided by the Contract Documents, the estimated quantities of Unit Price Work are not guaranteed and are solely for the purpose of comparing Bids and determining the initial Contract Price.
 - 11.2.3 Engineer shall determine the actual quantities and classifications of Unit Price Work performed by Contractor and will review with Contractor preliminary determinations before recommending an Application for Payment for those items.
 - 11.2.4 Contractor shall have included overhead and profit in the price of each separately stated unit price item bid.
 - 11.2.5 The unit price of an item of Unit Price Work shall be subject to re-evaluation, negotiation, and possible adjustment under the following conditions:
 - 11.2.5.1 If the total cost of a particular item of Unit Price Work changes by \$30,000 or five-percent (5%) or more of the total Contract Price, whichever is less, and the variation in the quantity of that particular item of Unit Price Work performed by Contractor differs by more than fifteen-percent (15%) from the estimated quantity of such item indicated in the Agreement; and
 - 11.2.5.2 If Contractor justifies and adequately documents to the Department's satisfaction additional expenses have been incurred as a result thereof, or
 - 11.2.5.3 If Department believes that the quantity variation entitles Department to an adjustment in the Unit Price,

Either Department or Contractor may make a request for an adjustment in the Contract Price in accordance with the Contract Documents. If the parties are unable to agree as to the effect of any such variations in the quantity of Unit Price Work performed, a claim may be made.

- 11.2.6 The negotiated Unit Price shall be applicable only to the variation in quantities above one hundred-fifteen-percent (115%) or below eighty-five-percent (85%) of the quantities estimated or indicated.
- 11.2.7 If Department or Contractor believes that the quantity variation requires an extension or shortening in Contract Time, either party shall within seven (7) working days of knowledge of the variation in quantities, submit a written Proposed Change Order to the other party and to Engineer, and substantiate the request within fifteen (15) days thereafter in accordance with the analysis and documentation provisions of the Standard and Supplementary Specifications.

ARTICLE 12 - Warranty and Guarantee; Tests and Inspections; Correction, Removal or Acceptance of Defective Work

Warranty and Guarantee:

- 12.1 Contractor warrants and guarantees to Department that all Work shall be in accordance with the Contract Documents and shall not be defective. Immediate notice of all defects shall be given to Contractor by Engineer. All defective Work, whether or not in place, may be rejected, corrected or accepted as provided in this Article.
 - 12.1.1 The obligations of Contractor under this paragraph 12.1 shall be in addition to and not in limitation of any obligation imposed upon it by special guarantees required by the Contract Documents or by Law.
 - 12.1.2 Notwithstanding anything in these Contract Documents to the contrary, when a particular item of equipment or part of the Work reaches Substantial Completion upon successful performance of Pre-operational Testing, and a) is not placed in continuous service until the commencement of the Correction Period, or b) is placed in continuous service upon reaching Substantial Completion (as a segment of a completed Project) but use will be limited until all segments of the Project reach substantial completion thereby commencing the Correction Period, and notwithstanding anything in the Contract Documents to the contrary, Contractor shall maintain the particular item of equipment or part of the Work in good order and in proper working condition during the period between the particular Substantial Completion date and the commencement of the Correction Period, and for such maintenance Contractor shall receive no adjustment in Contract Price. Also Contractor shall maintain the warrantees and guarantees required under paragraph 12.1 of the General Conditions in full force and effect during the period between the particular item's Substantial Completion date and the commencement of the Correction Period, and for such warranties and guarantees Contractor shall receive no adjustment in Contract Price.
 - 12.1.3 The warrantees and guarantees provided by Contractor under paragraph 12.1 of the General Conditions shall remain in full force and effect from the date of Substantial

Completion of the Work, or part thereof, until one year after the date of commencement of the Correction Period or such a longer period as may be prescribed by Law or the terms of any applicable specific warranty or guarantee required by the Contract Documents or by any specific provision of the Contract Documents.

One Year Correction Period:

- 12.2 If within the period from the date of Substantial Completion of a particular item of equipment or a designated part of the Work to one (1) year after the commencement of the Correction Period, or such longer period as may be prescribed by Federal or New York State Law or by the terms of any applicable special guarantee required by the Contract Documents or by any specific provision of the Contract Documents, the particular item of equipment or designated part of the Work is found to be defective, Contractor shall promptly, without an adjustment in Contract Price and in accordance with Department's or Engineer's written instructions, either correct such Defective Work, or if it has been rejected by Department or Engineer, remove it from the site and replace it with Work which conforms to the requirements of the Contract Documents. Department or Engineer may direct the correction or removal and replacement of Defective or rejected Work. In addition to any other remedies which Department may have, Contractor shall pay the indirect and consequential costs of such correction or removal and replacement, including but not limited to fees and charges of engineers, architects, attorneys and other professionals, any additional expenses incurred by Department due to delays to others performing work under a separate contract with Department, and other contractual obligations, if the Defective Work is not corrected or the rejected Work is not removed and replaced within 30 days of the Department's or Engineer's written rejection or request for rejection of Work unless otherwise provided for in writing. In the event that Contractor fails to pay such costs within 30 days after receipt of an invoice from Department, a Change Order or Proposed Change Order may be issued incorporating the unpaid amount, and Department shall be entitled to an appropriate decrease in the Contract Price. If the parties are unable to agree as to the amount thereof, a claim may be made therefore as provided in Articles 8, 9 and 10 of the General Conditions.
 - 12.2.1 At the date of Substantial Completion of the Work, the parties have agreed on the date for commencement of the Correction Period. However, Department may at its sole option advance or delay the date for commencement of the Correction Period, and Contractor's obligations to extend warranties and guarantees in accordance with paragraphs 12.1.2 and 12.1.3 or to maintain the Work in accordance with paragraph 12.1.2 and 12.1.3 until then shall remain absolute. Applicable Change Orders or Proposed Change Orders shall be executed by the parties to adjust the Contract Price, as appropriate, on the basis of the unit prices declared in Contractor's Bid for extended warranty and extended maintenance requirements.
 - 12.2.2 No later than 30 days before the date for commencement of the Correction Period, Engineer shall notify Contractor in writing of the date upon which the Correction Period is expected to commence, and Contractor shall ensure that the parts of the Work which reached Substantial Completion upon successful performance of Pre-operational Testing but were not placed in continuous service, are ready in their entirety by such date for use by Department as contemplated in the Contract Documents. In addition to any other damages payable by Contractor under these Contract Documents, Contractor shall also be liable for any damages suffered by Department on account of the parts of the Work which reached Substantial Completion upon successful performance of Preoperational Testing but were not placed in continuous service at the beginning of the

Correction Period because they were not ready for continuous utilization for the purposes for which they are intended.

- 12.2.3 Each month during the period between the date of Substantial Completion of parts of the Work which reached Substantial Completion upon successful performance of Preoperational Testing and the date of commencement of the Correction Period, Contractor shall certify to Engineer in writing that the said parts of the Work are being properly maintained and will be ready for use by Department upon commencement of the Correction Period.
- 12.2.4 During the period described in Section 12.2.3 until commencement of the Correction Period, Contractor shall bear all risks of injury, loss, or damage to any part of the Work arising from the elements or from any other cause. Contractor shall rebuild, repair, restore, and make good at no cost to Department all injuries, losses, or damage to any portion of the Work occasioned by any cause and shall at no expense to Department provide suitable drainage and erect such temporary structures and take all other actions as are necessary for the protection of the Work. Suspension of the Work or the granting of an extension in Contract Time for any cause shall not relieve Contractor of its responsibility for the Work as herein specified.
- 12.2.5 Contractor's responsibilities under this Paragraph 12.2 are in addition to, not in lieu of, all other obligations imposed by these Contract Documents.

Access to Work:

12.3 Representatives of Department, Engineer, and representatives of testing agencies and governmental agencies with jurisdictional interests will have access to the Work at all times for observation, inspection and testing. Contractor shall provide proper and safe conditions for such access. Inspections, tests or observations by Engineer, Department or third parties may be performed to provide information to Department on the progress of the Work, however, this provision is not intended to create any duty or obligation to Contractor by Department or Engineer, nor is the information provided intended to fulfill Contractor's obligations under the Contract.

Tests and Inspections:

- 12.4 Contractor shall give Engineer timely notice of readiness of the Work for all required inspections, tests or approvals.
- 12.5 If a Law specifically requires any Work or part thereof, to be inspected, tested or approved, Contractor shall assume full responsibility therefor, pay all costs in connection therewith and furnish to Engineer the required certificates of inspection, testing or approval. Except as provided in Article 5, Contractor shall be responsible for and shall pay all costs in connection with any inspection or testing required in connection with Department's or Engineer's acceptance of materials or equipment proposed or submitted to Department and Engineer for approval prior or subsequent to Contractor's purchase thereof for incorporation in the work. The cost of all inspections, tests and approvals in addition to the above which are required by the contract documents shall be paid by Contractor.

- 12.6 All inspections, tests or approvals other than those required by Law to be performed or given by public body having jurisdiction over the Work or any part thereof, shall be performed by organizations acceptable to Department and Engineer. Contractor shall perform sufficient inspection and testing of the Work to support the warranty and guarantee requirements of paragraph 12.1 and 12.2 of the General Conditions. Reference is made to the Supplementary Conditions, Standard Specifications and Supplementary Specifications for provisions applicable to the procurement of an independent testing laboratory.
- 12.7 If any Work, including the work of others, which is to be inspected, tested or approved is covered without written concurrence of Engineer, it must, if requested by Engineer, be uncovered for inspection. Such uncovering shall be at Contractor's expense unless Contractor has given Engineer timely notice of Contractor's intention to cover the same and Engineer has not acted with reasonable promptness in response to such notice.
- 12.8 Neither inspections by Engineer nor inspections, tests or approvals by others shall relieve Contractor from Contractor's obligations to perform the Work in accordance with the Contract Documents.

Uncovering Work:

- 12.9 If any work is covered contrary to the written request of Engineer, it must, if requested by Engineer, be uncovered for Engineer's inspection and replaced at Contractor's expense.
- 12.10 If Engineer considers it necessary or advisable that covered Work be inspected by Engineer or inspected or tested by others, Contractor, at Engineer's request, shall uncover, expose or otherwise make available for observation, inspection or testing as Engineer may require, that portion of the Work in question, furnishing all necessary labor, material and equipment.
 - 12.10.1 If it is found that such Work is Defective, Contractor shall bear all direct, indirect and consequential costs of such uncovering, exposure, observation, inspection and testing, and of satisfactory reconstruction, including but not limited to fees and charges of engineers, architects, attorneys and other professionals, any additional expenses incurred by Department due to delays to others performing work under a separate contract with Department, and other contractual obligations, Contractor shall further bear the responsibility for keeping the Work on schedule and shall not be entitled to any extension of Contract Time or recovery of any delay damages due to the uncovering.
 - 12.10.2 If, however, such Work is not found to be Defective, Contractor shall be allowed an increase in the Contract Price or an extension of the Contract Time, or both, directly attributable to such uncovering, exposure, observation, inspection, testing and reconstruction pursuant to Articles 9, 10 and 11.
 - 12.10.3 When covered Work is uncovered and found to be Defective, all direct, indirect and consequential costs as established in paragraph 12.10.1 shall be paid by Contractor. In the event that Contractor fails to pay such costs within thirty (30) days after receipt of an invoice from Department, a Change Order or Proposed Change Order may be issued incorporating the unpaid amount as an appropriate reduction in the Contract Price, and if the parties are unable to agree as to the amount thereof, the Contractor may make a claim therefore as provided in Articles 9 and 10 of the General Conditions.

Department May Stop the Work:

- 12.11 If the Work is defective, or Contractor fails to supply sufficient skilled workers or suitable materials or equipment, or fails to furnish or perform the Work in such a way that the completed Work will conform to the Contract Documents, Department may order Contractor to stop the Work, or any portion thereof, until the cause for such order has been eliminated; however, this right of Department to stop the Work shall not give rise to any duty on the part of Department to exercise this right for the benefit of Contractor or any other party.
 - 12.11.1 Contractor shall bear all direct, indirect and consequential costs of such order to Contractor to stop Work including but not limited to fees and charges of engineers, architects, attorneys and other professionals, any additional expenses incurred by Department due to delays to others performing work under a separate contract with Department, and other contractual obligations, and Contractor shall further bear the responsibility for maintaining schedule and shall not be entitled to any extension of contract time or recovery of any delay damages due to the order to stop Work.
 - 12.11.2 In the event that Contractor fails to pay such costs within thirty (30) days after receipt of an invoice from Department, a Change Order or Proposed Change Order may be issued incorporating the unpaid amount as an appropriate reduction in the Contract Price. If the parties are unable to agree as to the amount thereof, the Contractor may make a claim therefore as provided in Articles 8, 9, 10, and 11 of the General Conditions.

Correction or Removal of Defective Work:

12.12 If required by Engineer, Contractor shall promptly, as directed, either correct all defective Work, whether or not fabricated, installed or completed, or, if the Work has been rejected by Engineer, remove it from the site and replace it with non-defective Work that conforms with the Contract Documents. Contractor shall bear all direct, indirect and consequential costs of such correction or removal including but not limited to fees and charges of engineers, architects, attorneys and other professionals, any additional expenses incurred by Department due to delays to others performing work under a separate contract with Department, and other contractual obligations. Contractor shall further bear the responsibility for keeping the Work on schedule and shall not be entitled to any extension in Contract Time or recovery of any delay damages due to the correction or removal. In the event that Contractor fails to pay such costs within thirty days after receipt of an invoice from Department, a Change Order or Proposed Change Order may be issued incorporating the unpaid amount, as an appropriate reduction in the Contract Price. If the parties are unable to agree as to the amount thereof, the Contractor may make a claim therefore as provided in Articles 8, 9, 10, and 11 of the General Conditions.

Acceptance of Defective Work:

12.13 If, instead of requiring correction or removal and replacement of defective Work, Department prefers to accept it, Department may do so. Contractor shall bear all direct, indirect and consequential costs attributable to Department's evaluation and determination to accept such Defective Work, such costs to include but not be limited to fees and charges of engineers, architects, attorneys and other professionals, any additional expenses incurred by Department due to delays to others performing work under a separate contract with Department, and other contractual obligations. Contractor shall further bear the responsibility for keeping the Work on schedule and shall not be entitled to any extension in Contract Time or recovery of any delay or

acceleration damages due to Department's evaluation and determination to accept such Defective Work. If any such acceptance occurs prior to Engineer's recommendation of final payment, a Change Order may be issued incorporating the necessary revisions in the Contract Documents with respect to the Work; and Department shall be entitled to an appropriate reduction in the Contract Price. In the event that Contractor fails to pay such costs within thirty (30) days after receipt of an invoice from Department, or if the parties are unable to agree as to the amount thereof, Contractor may make a claim therefore as provided in Articles 8, 9, 10, and 11 of the General Conditions. If the acceptance occurs after final payment, an appropriate amount will be refunded by Contractor to Department.

Department May Correct Defective Work:

12.14 If Contractor fails within a reasonable time after written notice of Engineer to proceed to correct and to correct Defective Work or to remove and replace rejected Work as required by Engineer, or if Contractor fails to perform the Work in accordance with the Contract Documents, or if Contractor fails to comply with any other provision of the Contract Documents, Department may, after seven (7) days' written notice to Contractor, correct and remedy any such deficiency. To the extent necessary to complete corrective and remedial action, Department may exclude Contractor from all or part of the site, take possession of all or part of the work and suspend or terminate Contractor's services related thereto, take possession of Contractor's tools, appliances, construction equipment and machinery at the site and incorporate in the Work all materials and equipment stored at the site or for which Department has paid Contractor but which are stored elsewhere. Contractor shall allow Department, and Department's representatives, agents and employees such access to the site as may be necessary to enable Department to exercise the rights and remedies provided by this paragraph and the Contract Documents. All direct, indirect and consequential costs of Department in exercising such rights and remedies will be charged against Contractor in an amount approved as to reasonableness by Engineer, a Change Order will be issued incorporating the necessary revisions in the Contract Documents with respect to the Work, and Department shall be entitled to an appropriate decrease in the Contract Price. If the parties are unable to agree as to the amount thereof, Contractor may make a claim therefore as provided in Article 8, 9, 10, and 11. Such direct, indirect and consequential costs shall include but not be limited to fees and charges of engineers, architects, attorneys and other professionals, all costs of delay and all costs of repair and replacement of work of others destroyed or damaged by correction, removal or replacement of Contractor's Defective Work. Contractor shall not be allowed an extension of the Contract Time because of any delay in performance of the Work attributable to the exercise by Department of Department's rights and remedies hereunder.

ARTICLE 13 - Payments to Contractor and Completion

Schedule of Values:

13.1 The schedule of values established as provided in paragraph 1.4 and 1.6 of the General Conditions shall serve as the basis for progress payments. Progress payments for Unit Price Work shall be based on the number of units completed. Department will furnish Application for Payment forms.

Application for Progress Payment:

13.2 At least fourteen (14) days before each progress payment is scheduled to be submitted to the Department, Contractor shall submit to Engineer for review an Application for Payment on forms

furnished by Department filled out and signed by Contractor covering the Work completed as of the date of the Application and accompanied by such supporting documentation as is required by the Contract Documents. If payment is requested on the basis of materials and equipment not incorporated in the Work but delivered and suitably stored at the site or at another location agreed to in writing, the Application for Payment shall also be accompanied by bills of sale, invoices or other documentation supporting the cost, together with documents warranting that Department has received the materials and equipment free and clear of all liens, charges, security interests and encumbrances (each and all of these terms are hereinafter referred to as "Liens"). Each Application for Payment shall contain a certification by Contractor that progress payments received from Department on account of the Work have been applied by Contractor and its Subcontractors to discharge in full all of Contractor's and its Subcontractors' obligations stated in the prior Application for Payment, and that Contractor has verified the accuracy of the progress reported to have been completed by Contractor or its Subcontractors in the Application for Payment. Notwithstanding any other provisions of the Contract Documents to the contrary, neither Department nor Engineer are under any duty or obligation whatsoever to any Subcontractor or Supplier to insure that payments due and owing by Contractor to any of them are or will be made. Such parties shall rely only on Contractor's surety bonds for remedy of nonpayment by Contractor. The amount of retainage with respect to progress payments will be as provided for by the laws of New York State.

- 13.2.1 An Application for Payment a) will not be approved if the as-built documents, including but not limited to Drawings legibly marked in accordance with Contract Documents to record actual construction, are not kept current, and b) will not be approved until the completed as-built documents, showing all variations between the Work as actually constructed and as originally shown on the Drawings and other Contract Documents, have been inspected by Engineer. For the purpose of this paragraph, the as-built documents will be considered current if they include all of the documents itemized in paragraph 5.19 together with any other information that supplements or changes the original Contract Documents which has been delivered or otherwise made known to Contractor prior to the time when Application for Payment is to be reviewed by Engineer.
- 13.2.2 An Application for Payment will not be approved until Contractor has submitted and Engineer has reviewed the Progress Schedule and submittals required in Contract Documents which are due prior to that Application for Payment.

Contractor's Warranty of Title:

13.3 Contractor warrants and guarantees that title to all Work, materials and equipment covered by any Application for Payment, whether or not incorporated in the Project, shall pass to Department no later than the time of payment free and clear of all Liens.

Review of Applications for Progress Payment:

13.4 Engineer shall, within five (5) days after receipt of each Application for Payment, either recommend payment in writing and present the Application to Department or return the Application to Contractor indicating in writing Engineer's reasons for refusing to recommend payment. In the latter case, Contractor may make the necessary corrections and resubmit the application. After presentation of the application for payment with Engineer's recommendation, the amount recommended shall be paid in accordance with New York State Law upon approval of the Department.

13.5 Department may refuse to make payment of the full amount recommended by Engineer for one or more of the following reasons: claims have been made against Department on account of Contractor's performance, or furnishing of the Work, Liens have been filed in connection with the Work, there are other facts or circumstances entitling Department to a set-off against the amount recommended, or Department has determined that Work performed by Contractor does not conform to Contract Documents including, but not limited to, moneys payable by Contractor to Department pursuant to the requirements of Articles 5 and 12 of the General Conditions. In the event of such refusal to pay the full recommended amount, Department must give Contractor prompt written notice (with a copy to Engineer) stating the reasons for such action.

Substantial Completion:

- 13.6 When Contractor considers all or part of the Work ready for its intended use, Contractor shall notify Department and Engineer in writing that the Work or specified part thereof, is substantially complete except for items specifically listed by Contractor as incomplete, and request that Engineer issue a certificate of Substantial Completion for the Work, or such specified part thereof. Within a reasonable time thereafter, not to exceed 30 days, Department, Contractor and Engineer shall make an inspection of the Work, or specified part thereof, to determine the status of completion. If Engineer or Department does not consider the Work, or specified part thereof, substantially complete, Engineer shall notify Contractor in writing giving the reasons therefor, after consultation with the Department. If Engineer considers the Work, or part thereof, substantially complete, Engineer shall prepare and deliver to Department a tentative certificate of Substantial Completion for the Work, or part thereof, which shall fix the date of Substantial Completion. There shall be attached to the certificate a list of items to be completed or corrected before final payment, and Engineer's written recommendation as to a division of responsibilities between Department and Contractor pending final payment including but not limited to security, operation, safety, maintenance, heat, utilities, insurance and warranties. Department shall have seven (7) days after receipt of the tentative certificate with attachments during which to make written objection to Engineer as to any provisions of the referenced submittals and to direct a revision of the tentative certificate. Unless Department and Contractor agree otherwise in writing and so inform Engineer or Department directs the revision of the certificate of Substantial Completion for the Work, or specified part thereof. Engineer's recommendation will be binding on Contractor until final payment.
- 13.7 Department shall have the right to exclude Contractor from the Work, or part thereof, after the date of Substantial Completion for the Work, but Department shall allow Contractor reasonable access to complete or correct items on the tentative list.

Partial Utilization:

- 13.8 Department may use any finished part of the Work which has specifically been identified in the Contract Documents, or which Department, Engineer, and Contractor agree constitutes a separately functioning and usable part of the Work that can be used by Department without significant interference with Contractor's performance of the remainder of the Work, may be accomplished prior to Substantial Completion of all the Work subject to the following:
 - 13.8.1 Department at any time may direct Contractor in writing to permit Department to use any such part of the Work which Department believes to be ready for its intended use and substantially complete. Contractor may certify to Department and Engineer that said

part of the Work is substantially complete and request Engineer to issue certificate of Substantial Completion for that part of the Work. Within a reasonable time after such direction, Department, Contractor and Engineer shall make an inspection of that part of the Work to determine its status of completion. If Engineer does not determine that part of the Work to be substantially complete, Engineer will notify Department and Contractor in writing giving the reasons therefor. The provisions of paragraphs 13.6 and 13.7 will apply with respect to certification of Substantial Completion of that part of the Work and the division of responsibility in respect thereof and access thereto.

13.8.2 Department may at any time direct Contractor in writing to permit Department to take over operation of any such part of the Work although it is not substantially complete. A copy of such request will be sent to Engineer and within a reasonable time thereafter Department, Contractor and Engineer shall make an inspection of that part of the Work to determine its status of completion and will prepare a list of the items remaining to be completed or corrected thereon before final payment. If Contractor does not object in writing to Department and Engineer that such part of the Work is not ready for separate operation by Department, Engineer shall submit to Department a list of items to be completed or corrected together with a written recommendation as to a division of responsibilities between Department and Contractor, including but not limited to security, operation, safety, maintenance, utilities, insurance and warranties pending final payment for such Work. Department shall have seven (7) days to make written objection to Engineer's list and recommended division of responsibilities to direct a revision thereof. Such directed revision or otherwise objected list and recommended division of responsibilities, shall become binding upon Department and Contractor at the time when Department takes over such operation unless they shall have agreed otherwise in writing. During such operation and prior to Substantial Completion of such part of the Work, Department shall allow Contractor reasonable access to complete or correct items on said list and to complete other related Work.

Final Inspection:

13.9 Upon written notice from Contractor that the entire Work or an agreed portion thereof is complete, Engineer will make a final inspection with Department and Contractor and will notify Contractor in writing of all particulars in which this inspection reveals that the Work is incomplete or defective. Contractor shall immediately take such measures as are necessary to remedy such deficiencies.

Final Application for Payment:

13.10 After Contractor has completed all corrections to the satisfaction of Engineer and Department and delivered all maintenance and operating instructions, schedules, guarantees, Bonds, certificates of inspection, marked-up record documents (as provided in paragraph 5.19) and other documents - all as required by the Contract Documents, and after Engineer has indicated that the Work is acceptable (subject to the provisions of paragraph 13.12), Contractor may make application for final payment following the procedures for progress payments. The final Application for Payment shall be accompanied by all documentation called for in the Contract Documents, together with complete and legally effective releases or waivers satisfactory to Department of all Liens arising out of or filed in connection with the Work. In lieu thereof and as provided for by the laws of New York State and approved by Department, Contractor may furnish receipts or releases in full and an affidavit of Contractor that such receipts and releases include all labor, services, material and equipment for which a Lien could be filed, and that all payrolls, material and equipment bills, and

other indebtedness connected with the Work for which Department or Department's property might in any way be responsible, have been paid or otherwise satisfied; and consent of the surety, if any, to final payment. If any Subcontractor or Supplier fails to furnish a release or receipt in full, Contractor may furnish a Bond or other collateral satisfactory to Department to indemnify Department against any Lien.

Final Payment and Acceptance:

- 13.11 If, on the basis of Engineer's inspection of the work during construction and final inspection, and Engineer's review of the final application for payment and accompanying documentation, Engineer has determined that the work has been completed in substantial conformance with the Contract Documents and Contractor's other obligations under the Contract Documents have been fulfilled, Engineer will, within ten (10) days after receipt of the final application for payment, indicate in writing Engineer's recommendation of payment and present the application to Department for payment along with a certificate that the work was completed in substantial conformance with the contract documents. Thereupon Engineer will give written notice to Department and Contractor that the work is acceptable subject to the provisions of paragraph 13.13. Otherwise, Engineer will return the application to Contractor, indicating in writing the reasons for refusing to recommend final payment, in which case Contractor shall make the necessary corrections and resubmit the Application. After presentation to Department of the application and accompanying documentation, in appropriate form and substance, and with Engineer's recommendation and certification of substantial conformance with the Contract Documents, final payment will be paid by Department to Contractor in accordance with New York State Law. If Department believes deficiencies exist, it will so notify Engineer and Contractor in writing.
- 13.12 If, through no fault of Contractor, final completion of the Work is significantly delayed and if Engineer so confirms, Department shall, upon receipt of Contractor's final Application for Payment and recommendation of Engineer, and without terminating the Agreement, make payment of the balance due for that portion of the Work fully completed and accepted.

Waiver of Claims:

- 13.13 The making and acceptance of final payment will constitute:
 - 13.13.1 A waiver of all claims by Department against Contractor, except claims arising from unsettled Liens, from Defective Work appearing after final inspection pursuant to paragraph 13.11 or from failure to comply with the Contract Documents or the terms of any special guarantees specified therein; however, it will not constitute a waiver by Department of any claims or rights with respect to Contractor's continuing obligations under the Contract Documents; and
 - 13.13.2 A waiver of all claims by Contractor against Department other than those previously made in writing and still unsettled.

ARTICLE 14 - Suspension of Work and Termination

Department May Suspend Work:

- 14.1 Department may for its convenience, order Contractor in writing at any time to suspend the Work or any portion thereof for such a period of time as Department may determine to be appropriate. A suspension of Work order will fix the date on which the Work, or portion thereof, will be resumed. Contractor shall resume the Work, or portion thereof, on the date so fixed.
 - 14.1.1 If the performance of the Work or portion thereof is suspended for a period of time which exceeds the Total Float available in the approved Progress Schedule for the portion or portions controlling the Work affected by a suspension of Work order pursuant to paragraph 14.1, or by an act of Department or Engineer in the administration of the Contract, or by Department's or Engineer's failure to act within the applicable latest dates substantiated in the approved Progress Schedule, Contractor will be allowed an increase in Contract Price or an extension in Contract Time, or both, necessarily caused by such suspension which extends the applicable latest dates in the approved Progress Schedule. However, no adjustment will be made under this paragraph of the General Conditions for any suspension to the extent: 1) that performance would have been so suspended by any other cause, including the fault and negligence of Contractor, or 2) for which an adjustment is provided, limited as to extent, or excluded under any other provision of the Contract Documents.
 - 14.1.2 Contractor shall deliver to Engineer a written Proposed Change Order including at a minimum, justification for the request within seven (7) days or earlier if so required elsewhere in the Contract Documents, of the act or failure to act which Contractor believes gives rise to an adjustment in Contract Price or Contract Time pursuant to paragraph 14.1.1. Failure by Contractor to comply with the time requirements for delivery of written Proposed Change Orders will be considered to be a waiver by Contractor of any request for adjustment or claim for an increase in Contract Price or Contract Time for the period of time during which the Proposed Change Order has not been submitted.
 - 14.1.3 Contractor's proposal with all supporting data shall be delivered within 15 days of such notice or within twenty-two (22) days of such occurrence, whichever is later, unless Department allows an additional period of time to obtain more accurate data. Contractor shall prove that additional costs and delays were necessarily incurred which meet the criteria set forth in Articles 9, 10 and 11 of the General Conditions, despite Contractor's reasonable, prudent, and diligent efforts to prevent such costs or delays.
- 14.2 In addition to the provisions of Appendix B, if Department stops Work in accordance with Article 12.11 of the General Conditions or suspends Contractor's services in accordance with Article 12.11, or suspends the work or any portion thereof because of Contractor's failure to prosecute the work and to protect persons and property, Contractor shall not be entitled to an extension of Contract Time or an increase in Contract Price.

Department May Terminate:

14.3 Department may serve written notice upon Contractor and its surety that it intends to terminate the Contract for cause upon the date specified which shall not be less than seven (7) days from the date of the notice. Such notice shall contain the reasons for the intended termination which shall be effective on the date specified unless Contractor shall cease the violation(s) or make arrangements which are satisfactory to the Department to address the violation(s). Upon

termination, the Department may exclude Contractor from the site and take possession of the Work and of all Contractor's tools, appliances, construction equipment and machinery at the site and use the same to the full extent they could be used by Contractor without liability to Contractor for trespass or conversion, incorporate in the work all materials and equipment stored at the site or for which Department has paid Contractor but which are stored elsewhere, and finish the Work as Department may deem expedient. In such case Contractor shall not be entitled to receive any further payment until the Work is finished. If the unpaid balance of the Contract Price exceeds the direct, indirect and consequential costs of completing the Work including but not limited to fees and charges of engineers, architects, attorneys and other professionals and court costs, such excess will be paid to Contractor. If such costs exceed such unpaid balance, Contractor shall pay the difference to Department. Such costs incurred by Department will be approved as to reasonableness by Engineer and incorporated in a Change Order or Proposed Change Order.

Department may terminate for cause upon the occurrence of any one or more of the following events:

- 14.3.1 If Contractor commences a voluntary case under any chapter of the Bankruptcy Code, as now or hereafter in effect, or if Contractor takes any equivalent or similar action by filing a petition or otherwise under any other federal or state law in effect at such time relating to the bankruptcy or insolvency;
- 14.3.2 If a petition is filed against Contractor under any chapter of the Bankruptcy Code as now or hereafter in effect at the time of filing, or if a petition is filed seeking any such equivalent or similar relief against Contractor under any other federal or state law in effect at the time relating to bankruptcy or insolvency;
- 14.3.3 If Contractor makes a general assignment for the benefit of creditors;
- 14.3.4 If a trustee, receiver, custodian or agent of Contractor is appointed under applicable law or under contract, whose appointment or authority to take charge of property of Contractor is for the purpose of enforcing a lien against such property or for the purpose of general administration of such property for the benefit of Contractor's creditors;
- 14.3.5 If Contractor admits in writing an inability to pay its debts generally as they become due;
- 14.3.6 If Contractor fails to perform the Work in accordance with the Contract Documents, including, but not limited to, failure to supply sufficient skilled workers, or suitable materials or equipment, or failure to adhere to the progress schedule established under paragraph 1.6 as revised from time to time or failure to submit an updated schedule as required by paragraph 5.6;
- 14.3.7 If Contractor disregards Laws or Regulations of any public body having jurisdiction;
- 14.3.8 If Contractor disregards the authority of Engineer;
- 14.3.9 If Contractor filed certification in accordance with New York State Finance Law §139-k which was intentionally false or intentionally incomplete; or
- 14.4 Where Contractor's services have been so terminated by Department, the termination shall not affect any rights or remedies of Department against Contractor then existing or which may

thereafter accrue. Any retention or payment or moneys due Contractor by Department will not release Contractor from liability.

14.5 The Department may without cause and without prejudice to any other right or remedy terminate the Contract for convenience upon seven (7) days written notice to Contractor, it's surety and Engineer, and elect to abandon the Work and terminate the Agreement. In such case, Contractor shall be paid for all Work accepted by Department.

Contractor May Stop Work or Terminate:

14.6 If, through no act or fault of Contractor, Engineer fails to act on any Application for Payment within thirty (30) days after it is submitted, or Department fails for one hundred and twenty (120) days to pay Contractor any sum finally determined to be due by Department, then Contractor may, upon seven (7) days' written notice to Department and Engineer, terminate the Agreement and recover from Department payment for all Work accepted by Department. In lieu of terminating the Agreement, if Engineer has failed to act on an Application for Payment or Department has failed to make any payment as aforesaid, Contractor may upon seven (7) days written notice to Department of all amounts then due. The provisions of this paragraph shall not relieve Contractor of the obligations under paragraph 5.31 to carry on the Work in accordance with the progress schedule and without delay during disputes and disagreements with Department.

ARTICLE 15 - Miscellaneous

Notice and Service:

- 15.1 The term "notice" in this Article shall refer to any notice required under the Contract for claims (delay, change order, extra work, liquidated damages, etc.) or initial contract disputes against the Department. When notice is required to be sent by the Contractor to the Department, it must be in writing and provided within 15 calendar days of the date that the Contractor knew or should have known of the facts that form the basis of the claim or dispute. Notice should be as factually complete as possible, and contractors should have a continuing duty to promptly provide the agency with information about conditions of the claim. If a claim or dispute involves a matter of life, health or safety, notice must be made immediately to the Department.
 - 15.1.1 The Contractor shall give the Department immediate notice in writing of the initiation of any legal action or suit which relates in any way to a subcontract with a subcontractor or which may affect the performance of the Contractor's duties under the contract.
 - 15.1.2 The written notice must be addressed and delivered to the Project Manager at the address provided in Article 2 of Section IV.
 - 15.1.3 Written notice may be provided by the Contractor to the Department in one of the three methods to achieve actual notice: (i) first class mail and email; (ii) certified mail and first-class delivery; or (iii) overnight mail and first-class delivery. The written notice shall

contain a sufficient description of the claim or dispute pursuant to the provisions of the Contract.

- 15.1.4 Upon receipt of the written notice from the Contractor, the Department shall provide a written acknowledgment of receipt of notice. The Department's failure to provide written acknowledgment shall not be deemed a breach of contract or alter the Contractor's obligation to provide timely notice.
- 15.1.5 Any notice to or demand upon Contractor shall be deemed served if delivered to Contractor's representative at the site or if delivered to the individual proprietor if Contractor is an individual, to a partner if Contractor is a partnership or to an officer of the corporation if Contractor is a corporation, at the office of Contractor specified in the Contract Documents, or if deposited in the United States mail in a sealed, postage prepaid envelope, addressed to the principal office of Contractor listed in the Contract Documents, or emailed to the electronic address provided in Section V- Bid Forms and Acknowledgement and followed by written notice.
- 15.1.6 Any written notice or other communication to Contractor's Surety or Sureties shall be delivered or mailed to the home office of the Surety or Sureties, or to the agent or agents who executed the Bonds on behalf of the Surety or Sureties.
- 15.1.7 Any such notice or demand shall be deemed to have been given or made as of the time of actual delivery, or, in the case of mailing, at the time of actual receipt thereof.

Computation of Time:

15.2 When any period of time is referred to in the Contract Documents by days, it will be computed to exclude the first and include the last calendar day of such period. If the last calendar day of any such period falls on a Saturday or Sunday or on a day made a legal holiday by the State of New York, such day will be omitted from the computation. This does not apply to contract completion time as set forth in Article 6 of the Agreement.

General:

- 15.3 Should Department or Contractor suffer injury or damage to person or property because of an act or omission to act of the other party, its employees or agents or others for whose acts the other party is legally liable, a Claim may be made therefore, in writing to the other party within a reasonable time of the first observance of such injury or damage. The provisions of this paragraph shall not be construed as a substitute for or a waiver of the provisions of any applicable statute of limitations or repose.
- 15.4 The duties and obligations imposed by these General Conditions and the rights and remedies available to the parties hereunder, including but not limited to the warranties, guarantees and obligations imposed upon Contractor by Contract Documents and all of the rights and remedies available to Department thereunder, are in addition to, and are not to be construed in any way as a limitation of, any rights and remedies available to any or all of them which are otherwise imposed or available by New York State Laws, by special warranty or guarantee or by other provisions of the Contract Documents. The provisions of this paragraph shall be as effective as if repeated specifically in the Contract Documents in connection with each particular duty, obligation, right

and remedy. All representations, warranties and guarantees made in the Contract Documents shall survive final payment and termination or completion of the Agreement.

15.5 The obligation of Contractor to maintain the Work, or any part thereof, until the completion of the Correction Period shall survive final payment and termination or completion of the Agreement.

No Waiver of Legal Rights:

- 15.6.1 Inspection by Engineer or by any of its duly authorized representatives, any measurement or report by Engineer, any order by Department for the payment of money, any payment for or acceptance or possession of any Work or any extension in Contract Time or any possession taken by Department shall not operate as a waiver of any provision of the Contract Documents, or any power therein preserved to Department, or of any right to damages therein provided. Any Waiver of any breach of this Contract shall not be held to be a waiver of any other or subsequent breach.
- 15.6.2 Department reserves the right to correct any error that may be discovered in any estimate that may have been paid, and to adjust the same to meet the requirements of the Contract Documents. Department further reserves the right, should proof of Defective Work on the part of Contractor be discovered after the final payment has been made, to claim, and recover by process of law, such sums as may be sufficient to correct the error, or make good the defects in the Work.
- 15.6.3 Any waiver of any provision of the Contract Documents shall be specific, shall apply only to the particular item or matter concerned and shall not apply to other similar or dissimilar items or matters.

Affidavit and Release of Lien:

- 15.7.1 When the Work has been completed, Contractor shall execute a final release of Lien and an Affidavit declaring that all bills have been paid in full, and that the requirements of the New York State Labor Law have been complied with.
- 15.7.2 These documents will be furnished to Department on the forms provided by Department.
- 15.7.3 Contractor shall be responsible for obtaining and submitting these forms to Department for all subcontractors involved in the Work.

Recovery Rights Subsequent to Final Payment:

15.8 Department reserves the right, should an error be discovered in an Application for Payment or should proof of Defective Work or materials used by or on the part of Contractor be discovered after the final payment has been made, to claim and recover from Contractor or his Surety, or both, by process of law, such sums as may be sufficient to correct the error or make good the defects in the Work and materials.

General Guarantee:

15.9 Neither the final acceptance, nor final payment by Department, nor any provision of the Contract Documents, nor partial or entire use of the Work by Department, shall constitute an acceptance

of Work not done in accordance with the Contract Documents or relieve Contractor of liability in respect to any express warranties or responsibility for faulty materials or workmanship. Contractor guarantees the remedy of all Defective Work and payment for all damage to other Work, persons or property resulting therefrom which shall occur within one (1) year from the date of final acceptance unless a longer period is required by Contract Documents, by Law, or by standard practice. Department will give notice of observed Defective Work with reasonable promptness. Contractor shall ensure that its Surety shall be bound with and for Contractor in the faithful observance of this General Guarantee.

Audit; Access to Records:

- 15.10.1 In addition to the rights of access set forth in Appendix A, if Contractor has submitted Cost and Pricing Data in connection with the pricing of any Change Order, Proposed Change Order or Claim related to this Contract, Department and Engineer or any of their duly authorized representatives shall have the right to examine and audit all books, ledgers, records, and documents pertinent to all Cost and Pricing data available and relied upon by Contractor including but not limited to that used by Contractor in the determination of its Bid for the Work, in order to evaluate the accuracy, completeness, and currency of the Cost or Pricing data.
- 15.10.2 Contractor shall make available at Contractor's office at all reasonable times the materials described in paragraph 15.10.1 above, for examination, audit, or reproduction, until six (6) years after final payment under this Contract.
 - 15.10.2.1 If this Contract is completely or partially terminated, the records relating to the Work terminated shall be made available for six (6) years after any resulting final termination settlement.
 - 15.10.2.2 Records pertaining to appeals under Article 8 of Appendix B of the Agreement, to litigation or the settlement of claims arising under or relating to the performance of this Contract shall be made available until disposition of such appeals, litigation, or claims.
- 15.10.3 A provision stating that all the requirements of this Article of the General Conditions are applicable to Subcontracts under this Contract exceeding \$50,000 in value shall be inserted by Contractor in all such subcontracts.

Price Reduction for Defective Cost or Pricing Data:

- 15.11.1 This provision shall become operative only for any Change Order, or Proposed Change Order or claim settlement under this Contract involving aggregate increases and/or decreases in costs, plus applicable profits, of more than \$10,000; except that this provision shall not apply to any amendment to the Contract for which the price of the Work involved in the amendment is:
 - 15.11.1.1 Based on adequate price competition;
 - 15.11.1.2 Based on established catalog or market prices of commercial items sold in substantial quantities to the general public, or

15.11.1.3 Set by New York State law.

- 15.11.2 If any price, including profit, negotiated in connection with any Change Order, Proposed Change Order or claim settlement under this provision, was increased because: 1) Contractor or a Subcontractor, Supplier, other person or organization furnished Cost and Pricing Data that were not complete, accurate, and current as certified in its Certificate of Current Cost or Pricing Data; 2) a designated or prospective Subcontractor, Supplier, other person or organization furnished Contractor Cost and Pricing Data that were not complete, accurate, and current as certified in the Contractor's Certificate of Current Cost and Pricing Data; or 3) any of these parties furnished data of any description that were not accurate, the price shall be changed accordingly and the Contract shall be adjusted to reflect the change. This right to a change in Contract Price is limited to that resulting from defects in data relating to amendments to the Contract for which this provision becomes operative under paragraph 15.11.1 above.
- 15.11.3 Any decrease in Contract Price under paragraph 15.11.2 above due to defective data from a designated or prospective Subcontractor, Supplier, other person or organization that was not subsequently awarded the Subcontract or purchase order shall be limited to the amount, plus applicable overhead and profit markup, by which 1) the actual Subcontract or purchase order or 2) the actual cost to Contractor, if there was no Subcontract or purchase order, was less than the prospective Subcontract or purchase order, cost estimate submitted by Contractor; provided, that the actual Subcontract or purchase order price was not itself affected by defective cost or Pricing data.
- 15.11.4 Before awarding any Subcontract or purchase order which exceeds or can be reasonably expected to exceed \$150,000 when entered into, or pricing any Change Order or Proposed Change Order or claim settlement involving a pricing adjustment expected to exceed \$10,000, Contractor shall require the Subcontractor, Supplier, other person or organization to submit Cost or Pricing data (actually or by specific identification in writing), unless the price is:
 - 15.11.4.1 Based on adequate price competition;
 - 15.11.4.2 Based on established catalog or market prices of commercial items sold in substantial quantities to the general public; or
 - 15.11.4.3 Set by New York State law.
- 15.11.5 Contractor shall require such Subcontractor, Supplier, other person or organization to certify in the form prescribed in the Contract Documents, that to best of its knowledge and belief, the data submitted under paragraph 15.11.4 is accurate, complete, and current as of the date of agreement on the negotiated price of the Subcontract, purchase order, Change Order, Proposed Change Order, or claim settlement affecting the Subcontract.
- 15.11.6 Contractor shall make the provisions of this Article applicable to all Subcontracts or purchase orders that exceed or can be reasonably expected to exceed \$150,000.

No Waiver:

15.12.1 The rights and remedies set forth in the Contract Documents are not exclusive and are in addition to any other rights and remedies provided by law or equity. The duties and

obligations imposed by the Contract Documents and the rights and remedies available thereunder shall be in addition to and not a limitation of any duties, obligations, rights and remedies otherwise imposed or available by New York State law.

15.12.2 No act or omission by Department or Contractor shall constitute a waiver of any right or duty afforded any of them under the Contract Documents, nor shall any such act or omission constitute an approval of or acquiescence in any breach thereunder, except as may be specifically agreed in writing.

Comparable or Equivalent Terms:

- 15.13.1 Contractor warrants, represents and guarantees that all of the prices, terms, warranties and benefits granted to Department under the Contract are comparable to or better than the equivalent terms, prices, warranties and benefits offered to any other existing customer for similar Work.
- 15.13.2 In addition to the other remedies available, Department may demand repayment for any excess payment, plus interest thereon, for failure of Contractor to comply with paragraph 15.13.1.

Unlawful Provisions Deemed Stricken:

15.14.1 If the Contract Documents contain any unlawful provisions, such unlawful provisions shall be of no effect. Any provision determined to be unlawful by a court of competent jurisdiction, shall be deemed stricken from the Contract Documents without affecting the validity of the remaining provisions of the Contract Documents.

All Legal Provisions Included:

15.15.1 All provisions of Law required to be included in the Contract Documents shall be and are inserted herein. If through mistake, neglect, oversight or otherwise, any such provision has not been included or included in improper form, upon the application of either party, the Contract Documents shall be amended in writing at no increase in Contract Price nor extension in Contract Time, so as to comply with the Law.

No Estoppel:

- 15.16 Department or any officer, employee, servant or agent thereof, shall not be estopped, bound or precluded by any determination, return, decision, approval, order, letter, payment or certificate made or given by Engineer or any other officer, employee, servant or agent of Department, at any time, either before or after final completion and acceptance of the Work and payment therefor:
 - 15.16.1 From showing the true and correct amount, classification, quality, and character of the Work completed and materials furnished by Contractor or any other person under the Contract, or from showing at any time that any determination, return, decision, approval, order, letter, payment, or certificate is untrue and incorrect, or improperly made in any particular, or that the Work or the materials or any part thereof, do not in fact conform to the Contract Documents; or,

15.16.2 From demanding the recovery of any overpayments made to Contractor, or such damages as Department may sustain by reason of failure to perform each and every term, provision or condition of the Contract in accordance with its terms.

Prohibited Interests:

15.17 No official of Department who is authorized in such capacity on behalf of Department to negotiate, make, accept or approve or to take part in the negotiating, making or approving any architectural, engineering, inspection, construction or material supply contract or any Subcontractor in connection with the Work or the Project of which the Work is a part, shall be knowingly permitted by Contractor to become directly or indirectly interested personally in this Contract or in any part thereof. No officer, employee, architect, attorney, engineer or project representative of or for Department who is authorized in such capacity and in behalf of Department to exercise any executive, supervisory or other similar function in connection with the Work or the Project of which the Work is a part shall be knowingly permitted by Contractor to become directly interested personally in this Contract or project of which the Work is a part shall be knowingly permitted by Contractor to become directly or other similar function in connection with the Work or the Project of which the Work is a part shall be knowingly permitted by Contractor to become directly interested personally in this Contract or in any part thereof.

No Third Party Beneficiary:

15.18 Contractor acknowledges and agrees that it is not a third party beneficiary to any other agreement between the Department and any third party and/or any work product prepared or work performed for the Department by any third party, including but not limited to the contract between and/or work or work product performed by the Engineer; that nothing in the bid documents or the contract document shall be construed so as to give the contractor any legal or equitable claim, right or remedy against any other party with whom the Department has contracted, including but not limited to the Engineer; that nothing in any separate agreement between Department and any third party, including but not limited to the Engineer shall be construed to give the contractor any legal or equitable claim, right or remedy against such third party; rather such agreements are acknowledged and agreed to be intended to be for the sole exclusive benefit of the parties thereto. Contractor further acknowledges and agrees that its sole rights and remedies in connection with its bidding and performance of the work to be performed by it under the bid documents and contract documents are limited to such rights and remedies as are provided under the bid documents and contract documents. Further, contractor acknowledges and agrees that no claim against any third party, including but not limited to the Engineer, which is in separate contractual privity with the Department, shall arise out of such contractor's or the Engineer's performance of services for the Department pursuant to such separate contract.

Nothing herein shall release or waive any direct claim which the Department may have against any such separate contractor, including the Engineer, pursuant to the terms of the Department's contract with such third party.

Should any direct claim be brought by contractor against any third party in separate direct contractual relationship with the Department, contractor agrees to reimburse to the Department and to such separate contractor, including Engineer, their reasonable and necessary costs, including legal fees, incurred in the defense of such claim or claims.

SECTION IX

Supplemental Conditions

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SECTION IX

Supplementary Conditions

These Supplementary Conditions (SC) amend or supplement the provisions, as indicated below, of the Contract Documents. All provisions which are not so amended or supplemented remain in full force and effect.

The terms used in these Supplementary Conditions will have the meanings indicated in Section II – Terms and Definitions. Additional terms, if any, used in these Supplementary Conditions have the meanings indicated below, which are applicable to both the singular and plural thereof.

Access Agreements

Access Agreements are in place for limited use of adjacent properties owned by the City of Batavia, Elizabeth Hoffman and Ann Cervone and are attached to this Section.

Permits

A State Pollutant Discharge Elimination System (SPDES) equivalent permit has been obtained for treatment and discharge of construction water generated during dewatering activities and is attached to this Section.

A Joint Application Permit issued by the U.S. Army Corps of Engineers (USACOE) has been obtained for remedial activities to be conducted. The permit is attached to this Section.

A Water Quality Certification under Section 401 – Clean Water Act issued by the NYSDEC Regional Administrator has been obtained for remedial activities to be conducted. The certification is attached to this Section.

Approval for Cleanup and Disposal of PCB Remediation Waste under 40 CFR 761.61(a). United States Environmental Protection Agency.

Other

Section IX

Attachment List

- Attachment 1 Access Agreement for 299 Bank Street
- Attachment 2 Access Agreement for 303 Bank Street
- Attachment 3 Access Agreement for 305 Bank Street
- Attachment 4 SPDES Permit Equivalent
- Attachment 5 Nationwide Permit (NWP) 38.
- Attachment 6 Water Quality Certificate -
- Attachment 7 USEPA Approval for PCB Remediation

Target Property Address:	<u>299 Bank Street</u> Batavia, New York
Target Parcel Grid ID:	<u>71.019-1 (10.B)</u>
Printed Name of Property Owner	: <u>City of Batavia, New York</u>
Authorized Signature of Property Title: Date: Date:	Owner: Juson Molino
Day Time Phone Number: 58	a batana vew york . Com

(ECL)§ 27-1309 (3)-(4) and § 27-1313 (8) authorizes DEC and its Contractors (or the duly authorized Responsible Person, its employees, agents, consultants, contractors and subcontractors acting at the direction of DEC, so authorized by DEC in writing) to enter any inactive hazardous waste disposal site and properties near such site to inspect and collect samples, and to implement an inactive hazardous waste disposal site remedial program for such site. This is not a notice that DEC intends to acquire the above-specified property nor is it an offer to acquire it.

Keep This Copy for Your Records

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Environmental Remediation, Office of the Director 625 Broadway, 12th Floor, Albany, New York 12233-7011 P: (518) 402-9706 | F: (518) 402-9020 www.dec.ny.gov

July 7, 2017

<u>Certified Mail</u> <u>Return Receipt Requested</u>

City of Batavia One Batavia City Centre Batavia, New York 14020 Attn: Jason Molino, City Manager (<u>imolino@batavianewyork.com</u>)

> RE: 299 Bank Street Access Batavia Iron & Metal Inc., Inactive Hazardous Waste Disposal Site Registry Site No. 819018, (C) Batavia, Genesee County

Dear Mr. Molino:

Per recent e-mail correspondence between David Chiusano, of my staff, and the City Attorney, George S. Van Nest, the New York State Department of Environmental Conservation (the "Department" or "DEC") is preparing to implement an interim remedial measure ("IRM") to remove onsite and offsite above grade debris piles related to past disposal activities at the Batavia Iron and Metal Company Site located at 301 Bank Street, in the City of Batavia, Genesee County, New York (the "Site"). Site related debris exists on City of Batavia ("City") property located at 299 Bank Street. The Department's records indicate that the City is the owner of the property located near the Site at 299 Bank Street and identified on the County of Genesee Tax Map as Parcel Number 71.019-1 (10.B).

Environmental Conservation Law (ECL) Article 27 §§1309(3)-(4) and ECL Article 27 §1313(8) authorizes the Department or its authorized agents to enter upon any site, areas near such site, or area on which it has reason to believe that contaminants were disposed or discharged for purposes of inspection, sampling and testing, implementing a remedial program, long-term operation and maintenance, and temporary occupancy. The Department is remediating hazardous waste contamination that has occurred on or near City real property. Pursuant to ECL Article 27 §§1309(3)-(4) and ECL Article 27 §1313(8), DEC and its contractors are authorized to enter onto property for these purposes.



The Department, acting through its officers, employees, agents, consultant and contractors, requires access to City real property, above specified for the purpose of implementing remedial construction activities associated with the soil debris removal IRM for the Site. Those activities will generally include, but not be limited to, the excavation and offsite disposal of contaminated soil and debris followed by site restoration.

The name of the remedial contractor who will conduct the remediation is Nature's Way Environmental of Alden, New York. DEC representatives will be onsite full time to inspect, manage, and report their work. A DEC representative will soon follow up with you and provide you with a schedule to perform the investigation. Currently, it is our objective to initiate soil and debris removal in July 2016.

The DEC prefers to act in cooperation with private parties. Therefore, it is requested that the City sign the duplicate copies of the enclosed form acknowledging and consenting to the Department's Right-of-Entry onto your property. Two (2) copies of the property owner access acknowledgement form are enclosed (one copy for your records and one signed copy to be returned to the Department). Please return the completed form to the attention of David Chiusano, the Department Project Manager for the Site, in the enclosed self-addressed stamped envelope within one (1) week from the receipt of this letter.

The Department will make every effort to cooperate with the City so that any adverse impact of its entry on and occupancy of City property will be minimized. Prior to entering City property, to conduct any activities associated with the soil/debris removal effort, the Department will make every attempt to provide you at least two (2) business days advance notice. The Department's Contractor has comprehensive general liability insurance for the activities being conducted on your property. The Department will cooperate with the owner in pursuing with the insurer any claim that may arise. The Department will pay the cost of the work to be conducted on City property and will return the ground surface of the property to its condition before it entered the property, unless you otherwise agree.

Any questions or concerns about the Department's activities on your property should be directed to David Chiusano, DEC Project Manager, at (518) 402-9813, <u>david.chiusano@dec.ny.gov</u> or at the above address. Any questions on the DEC's legal authority should be directed to the assigned Program Attorney, Andrew Guglielmi, Esq., Office of General Counsel, at (518) 402-8556.

Nothing contained herein constitutes a waiver by the Department or the State of New York of any rights held pursuant to any applicable state and/or federal law or a release for any party from any obligations held under those same laws.

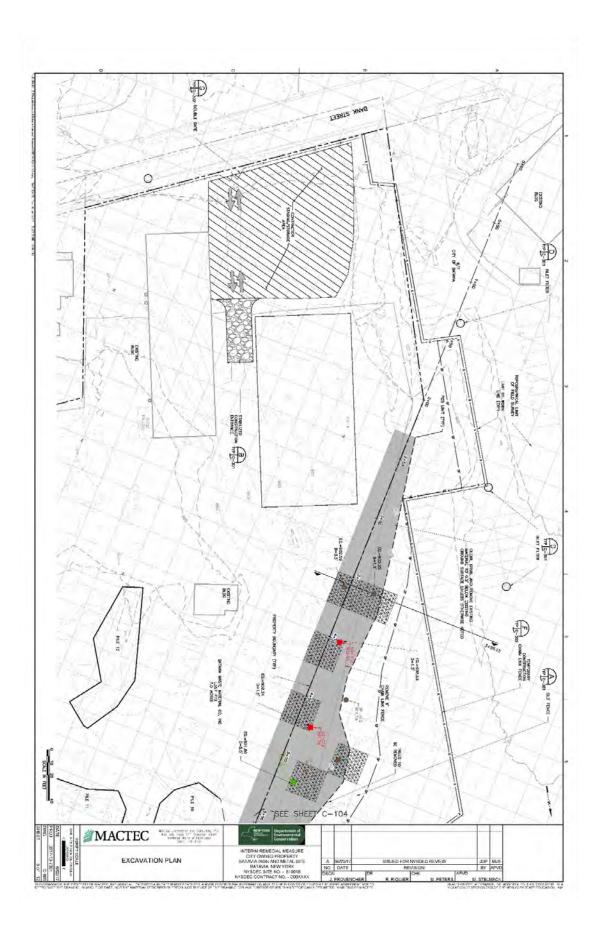
Sincerely,

Duscht

Robert W. Schick, P.E. Director Division of Environmental Remediation

Enclosures

ec: G. DiFante, City of Batavia (<u>gdifante@batavianewyork.com</u>)
G. Van Nest, City of Batavia (<u>gvannest@underbergkessler.com</u>)
W. Kuehner, DOH (<u>wendy.kuehner@health.ny.gov</u>)
M. Ryan, DER
M. Cruden, DER
D. Chiusano, DER
A. Guglielmi, Esq., OGC
T. Caffoe, DER, Region 8





Property Owner Access Acknowledgment

Target Property Addresses:

303 Bank Street Batavia, New York

Target Parcel Grid ID Nos:

71.019-1-13

Printed Name of Property Owner:

Richard Potwora

Authorized Property Owner Signature:

Date: 10/22/20

Day Time Phone Number: 585-537-9525

(ECL) § 27-1309 (3)-(4) and § 27-1313 (8) authorizes the DEC and its contractors (or the duly authorized Responsible Person, its employees, agents, consultants, contractors and subcontractors acting at the direction of the DEC, so authorized by the DEC in writing) to enter any inactive hazardous waste disposal site and properties near such site to inspect and collect samples, and to implement an inactive hazardous waste disposal site remedial program for such site. This is not a notice that the DEC intends to acquire the above-specified property nor is it an offer to acquire it.

Return This Copy to the DEC in the Postage-Paid Envelope Provided

Property Owner Access Acknowledgment

Target Property Addresses:

305 Bank Street Batavia, New York

Target Parcel Grid ID Nos:

71.019-1-14

Printed Name of Property Owner:

Creative Properties, Inc.

Authorized Property Owner Signature:

Date: 10/22/20

Day Time Phone Number	716-474-2122	Terry Platt	-
	585-409-8796	Tenant -	Ray Snyder

(ECL) § 27-1309 (3)-(4) and § 27-1313 (8) authorizes the DEC and its contractors (or the duly authorized Responsible Person, its employees, agents, consultants, contractors and subcontractors acting at the direction of the DEC, so authorized by the DEC in writing) to enter any inactive hazardous waste disposal site and properties near such site to inspect and collect samples, and to implement an inactive hazardous waste disposal site remedial program for such site. This is not a notice that the DEC intends to acquire the above-specified property nor is it an offer to acquire it.

Return This Copy to the DEC in the Postage-Paid Envelope Provided

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Water, Bureau of Water Permits 625 Broadway, Albany, New York 12233 www.dec.ny.gov

M E M O R A N D U M SPDES Permit Equivalent

TO: Ms. Lisa Gorton, DER

FROM: Douglas Ashline, Bureau of Water Permits, DOW

SUBJECT: SPDES Permit Equivalent: Batavia Iron & Metal Company, Inc., DER Site

ID# 819018

DRAINAGE BASIN: 01 / 02

DATE: November 17, 2020

In response to your request dated September 28, 2020, attached please find the effluent limitations and monitoring requirements for the above noted remediation discharge.

The discharge consists of treated water from groundwater and stormwater infiltration into excavation pits. The treatment system consists of screening settling and carbon filtration.

The DOW does not have any regulatory authority over a discharge from a State, PRP, or Federal Superfund Site. DER will be responsible for ensuring compliance with the attached effluent limitations and monitoring requirements, and approval of all engineering submissions. The additional conditions identifies the appropriate DER contact person who will receive all effluent results, engineering submissions, and modification requests. The Regional Water Engineer should be kept appraised of the status of this discharge and, in accordance with the attached criteria, receive a copy of the effluent results for informational purposes.

If you have any questions, please call Douglas Ashline at 518-402-8247.

Attachment (Effluent Limitations and Monitoring Requirements)

cc: Region 8 Regional Water Engineer (via email, w/attach) BWP Section Chief, DOW (via email, w/attach)



EFFLUENT LIMITATIONS & MONITORING REQUIREMENTS

OUTFALL	DISCHARGE TYPE	LATITUDE/ LONGITUDE	RECEIVING WATER and CLASS	EFFECTIVE	EXPIRING
001	Treated Remediation Wastewater	43° 00' 40" N 78° 10' 32" W	Wetland to an unnamed tributary of Tonawanda Creek, Class C	1/1/2021	12/31/2023

The discharges from the treatment facility shall be limited and monitored by the operator as specified below:

Outfall and Parameters Outfall 001		Monthly Avg. Limits	Daily Max Limits	Units	Minimum Monitoring Requirements		
	CAS No.				Measurement Frequency	Sample Type	FN
Flow	NA	NA	11550	GPD	Continuous	Recorder	
рН	NA	NA	6.5 - 8.5	SU	Monthly	Grab	1
Oil and Grease	NA	NA	15	mg/L	Monthly	Grab	1
Total Suspended Solids	NA	NA	40	mg/L	Monthly	Grab	1
Turbidity	NA	NA	5	NTU	Continuous	Recorder	1
Copper, Total	NA	NA	9	ug/l	Monthly	Grab	1
Lead, Total	NA	NA	5	ug/l	Monthly	Grab	1
Zinc, Total	NA	NA	84	ug/l	Monthly	Grab	1
Manganese	N/A	NA	300	ug/l	Monthly	Grab	1
Barium	N/A	NA	1000	ug/l	Monthly	Grab	1
arsenic	N/A	NA	150	ug/l	Monthly	Grab	1
Cis-1,2-Dichloroethene	156-59-2	NA	5	ug/l	Monthly	Grab	1
tetrachloroethene (PCE)	127-18-4	NA	1	ug/l	Monthly	Grab	1
trichloroethene (TCE)	79-01-6	NA	10	ug/l	Monthly	Grab	1
1,4-Dichlorobenzene	106-46-7	NA	5	ug/l	Monthly	Grab	1
Vinyl chloride	75-01-4	NA	2	ug/l	Monthly	Grab	1
Chlorobenzene	108-90-7	NA	5	ug/l	Monthly	Grab	1
Aroclor-1016	126+74-11- 2	NA	0.20	ug/l	Monthly	Grab	1,2
Aroclor-1221	11104-28-2	NA	0.20	ug/l	Monthly	Grab	1,2
Aroclor-1232	11141-16-5	NA	0.20	ug/l	Monthly	Grab	1,2
Aroclor-1242	53469-21-9	NA	0.20	ug/l	Monthly	Grab	1,2
Aroclor-1248	12672-29-6	NA	0.20	ug/l	Monthly	Grab	1,2
Aroclor-1254	11097-69-1	NA	0.20	ug/l	Monthly	Grab	1,2
Aroclor-1260	11096-82-5	NA	0.20	ug/l	Monthly	Grab	1,2
Perfluorooctane sulfonic acid (PFOS)	375-92-8	-	-	ug/l	Monthly	Grab	1,3
Perfluorooctanoic acid (PFOA)	335-67-1	-	-	ug/l	Monthly	Grab	1,3
Phenol Total	108-95-2	NA	5	ug/l	Monthly	Grab	1,4



Site Name: Batavia Iron & Metal Company, Inc. DER Site ID#: 819018 Page 2 of 4 Footnotes:

- The measurement frequency of parameters listed on this page shall be Monthly following a period of 12 (twelve) consecutive weekly sampling events showing no exceedances of the stated discharge limitations. If discharge limitation of any parameter listed on this page exceeds the stated limit, the measurement frequency for all parameters listed on this page shall again be weekly, until a period of four consecutive sampling events showing no exceedances at which point monthly monitoring may resume.
- 2. PCBs:
 - a. The treatment plant operator must monitor this discharge for PCBs using USEPA laboratory method 608. The laboratory must make all reasonable attempts to achieve a Minimum Detection Level (MDL) of 0.065 µg/l.
 - b. $0.065 \ \mu g/l$ is the discharge goal. The treatment plant operator shall report all values above the MDL ($0.065 \ \mu g/l$ per Aroclor). If the level of any Aroclor is above $0.065 \ \mu g/l$, the treatment must evaluate the treatment system and identify the cause of the detectable level of PCBs in the discharge.
 - c. If the Department determines that effluent monitoring results above can be prevented by implementation of additional measures as proposed by the treatment plant operator in footnote 3.b above, and approved by the Department, the treatment plant operator shall implement such additional measures.
- 3. PFOA/PFOS:
 - a. Treatment for PFOA/PFOS shall consist of a minimum of two GAC filters in series, with a sampling port located prior to the final GAC filter.
 - b. Monitoring for PFOS and PFOA shall use EPA Method 537, Version 1.1 and shall occur after the first of two granular activated carbon (GAC) filters in series. Upon receipt of analytical results for PFOS or PFOA with detectable levels at or above the Lowest Concentration Minimum Reporting Level (LCMRL), a confirmatory sample shall immediately be collected from the same location and analyzed to verify exceedance of the LCMRL action level.
 - c. If the confirmatory sample yields results for PFOS or PFOA at or above the EPA Method 537, Version 1.1 LCMRL, the lead GAC filter shall be replaced within 30 days of receipt of the confirmatory results, using the following step-wise procedure: the lead GAC filter shall be removed, the lag GAC filter shall become the lead filter, and a new GAC filter shall be installed in the lag position. If the lead GAC filter that had exceeded the action limit for PFOS or PFOA in the confirmatory sample is not changed out within 30 days of receipt of the sample results, discharge shall be temporarily ceased until GAC filter change out as noted above occurs.
 - d. If the confirmatory sample results are below the EPA Method 537, Version 1.1 LCMRL for PFOS and PFOA, sampling frequency will continue 1/month as indicated in the table above.
- 4. See limit for Phenolic Compounds (total phenols).



Site Name: Batavia Iron & Metal Company, Inc. DER Site ID#: 819018 Page 3 of 4 Additional Conditions:

1. Discharge is not authorized until such time as an engineering submission showing the method of treatment is approved by the Department. The discharge rate may not exceed the effective or design treatment system capacity. All monitoring data, engineering submissions and modification requests must be submitted to:

Ms. Lisa Gorton Division of Environmental Remediation NYSDEC, 625 Broadway, Albany, New York 12233- 7015, Tel: 518-402- 9574

With a copy sent to:

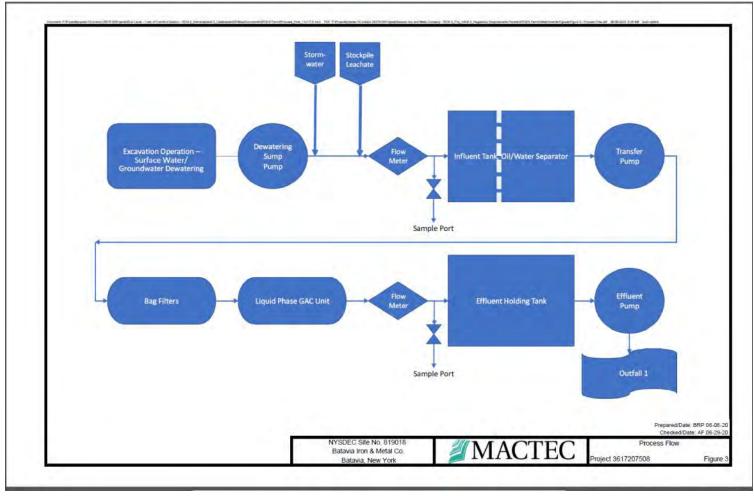
Regional Water Engineer, Region 8 6274 E. Avon-Lima Road, Avon, New York, 14414-9519 Phone: (585) 226-5450

- 2. Samples and measurements, to comply with the monitoring requirements specified above, must be taken from the effluent side of the final treatment unit prior to discharge to the receiving water body unless otherwise noted above.
- 3. Only site generated wastewater is authorized for treatment and discharge.
- 4. Authorization to discharge is valid only for the period noted above but may be renewed if appropriate. A request for renewal must be received 6 months prior to the expiration date to allow for a review of monitoring data and reassessment of monitoring requirements.
- 5. Both concentration (mg/l or µg/l) and mass loadings (lbs/day) must be reported to the Department for all parameters except flow and pH.
- 6. Any use of corrosion/scale inhibitors, biocidal-type compounds, or other water treatment chemicals used in the treatment process must be approved by the department prior to use.
- 7. This discharge and administration of this discharge must comply with the substantive requirements of 6NYCRR Part 750.



Site Name: Batavia Iron & Metal Company, Inc. DER Site ID#: 819018 Page 4 of 4

MONITORING LOCATIONS







DEPARTMENT OF THE ARMY BUFFALO DISTRICT, CORPS OF ENGINEERS 1776 NIAGARA STREET BUFFALO, NEW YORK 14207-3199

November 16, 2020

Regulatory Branch

SUBJECT: Department of the Army No. LRB-2020-00851, Nationwide Permit No. 38 as Published in the Federal Register, Volume 82, No. 4, on Friday, January 6, 2017

Ms. Lisa Gorton Project Manager, Division of Environmental Remediation New York State Department of Environmental Conservation 625 Broadway Albany, New York 12233

Dear Ms. Gorton:

This pertains to your application for a Department of the Army permit to impact 0.87-acre of wetland for the restoration project at the Batavia Iron and Metal Company site, located at 301 Bank Street, in the City of Batavia, Genesee County, New York.

Specifically, I refer to the pre-construction notification (PCN) you submitted requesting Department of the Army (DA) authorization. As of August 15, 2020, more than 45 calendar days have passed since your complete PCN was received. In accordance with 2017 Nationwide Permit General Condition 32 (a) (2), since you did not receive written notice from the district or division engineer prior to this date **you were authorized to begin your activity under Nationwide Permit (NWP) 38.**

However, to comply with NWP general condition #18 specific to endangered species and general condition #20 specific to historic properties an evaluation of these resources was performed. As a result, this office has determined that consultation is not required under Section 7 of the Endangered Species Act (see 33 CFR 330.4(f)) and consultation under Section 106 of the National Historic Preservation Act (see 33 CFR 330.4(g)) has been completed.

Again, you were authorized to begin your activity under Nationwide Permit (NWP) 38. However, it is incumbent upon you to construct your activity in compliance with the terms and conditions of the NWP (see attached). The NWPs expire on March 18, 2022. It is your responsibility to remain informed of changes to the NWP program. A public notice announcing any changes will be issued when they occur and will be available for viewing at our website: <u>http://www.lrb.usace.army.mil/Missions/Regulatory.aspx</u>. Note, that if your activity is not undertaken within the defined period or the project specifications have changed, you must immediately notify this office to determine the need for further approval. Your initiation of work as authorized by the enclosed NWP acknowledges your acceptance of the general and regional conditions contained therein. This does not obviate the need to obtain any other project specific Federal, state, or local authorization. Questions pertaining to this matter should be directed to me at 716-879-4308, by writing to the following address: U.S. Army Corps of Engineers, 1776 Niagara Street, Buffalo, New York 14207, or by e-mail at: Heather.L.Adams@usace.army.mil

Sincerely,

Heath Afr

Heather Adams Biologist

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Environmental Permits, Region 8 6274 East Avon-Lima Road, Avon, NY 14414-9516 P: (585) 226-5400 | F: (585) 226-2830 www.dec.ny.gov

IMPORTANT NOTICE TO ALL PERMITTEES

The permit you requested is enclosed. <u>Please read it carefully and note the conditions that</u> <u>are included in it</u>. The permit is valid for only those activities expressly authorized therein. Work beyond the scope of the permit and the approved project plans may be considered a violation of the law and be subject to appropriate enforcement action. Granting of this permit does not relieve the permittee of the responsibility of obtaining any other permission, consent, or approval from any other Federal, State or local government which may be required.

For many projects involving work in and around streams, lakes and wetlands the US Army Corps of Engineers (ACOE) may have regulatory authority in addition to this Department. If you have not already done so, you should contact their Buffalo District Regulatory Branch office at 716-879-4330 to obtain any required federal authorizations prior to commencing work.

Please note the expiration date of the permit. If you need additional time to complete your project, you must submit your request for permit renewal, in writing, prior to expiration of the permit (minimum of 30 days) and submitted to the Regional Permit Administrator at the above address. Provide an explanation of why additional time is needed and how much additional time you are requesting. Please refer to the general conditions listed in the permit for specific instructions. The DEC permit number & Program ID number noted on page 1 under "Permit Authorization" of the permit are important and should be retained for your records. These numbers should be referenced on all correspondence related to the permit, and on any future applications for permits associated with this facility/project area.

You must post the included Permit Notice Sign at the work site with appropriate weather protection and maintain a copy of this permit at project site or facility. Per Condition #2, you must also submit a Notice of Intent to Commence Work (attached) prior to starting work and similar notification must also be made upon completion of project as noted in the permit conditions.

If you have any questions on the extent of the work authorized or your obligations under the permit, please feel free to contact me at 585-226-5396 or <u>robert.call@dec.ny.gov</u>.

Sincerely,

Robert B. Call Deputy Regional Permit Administrator

ec: Habitat David Chiusano, NYSDEC Mark Stelmack, MACTEC Batavia





PERMIT Under the Environmental Conservation Law (ECL)

Permittee and Facility Information

Permit Issued To: NYS Dept of Environmental Conservation 625 BROADWAY ALBANY, NY 12233 Facility: BATAVIA IRON & METAL COMPANY 301 BANK ST BATAVIA, NY 14020

Facility Application Contact:

Mark Stelmack MACTEC Engineering and Geology 511 Congress St Ste 200 Portland, ME 04101 (207) 828-3592

Facility Location: in BATAVIA in GENESEE COUNTYFacility Principal Reference Point: NYTM-E: 241.046NYTM-N: 4766.714Latitude: 43°00'32.4"Longitude: 78°10'38.5"

Authorized Activity:

Permit for the removal of contaminated soils from a 6.8 acre area at a former metals recycling facility at 301 Bank Street. Approximately 37,885 square feet of wetland impacts are anticipated with a proposed restoration to promote the re-establishment of the ecological environment. All work will be done per the plans referenced in Natural Resources Condition #1 of this permit.

Permit Authorizations

Water Quality Certification - Under Section 401 - Clean Water Act Permit ID 8-1802-00008/00005

New Permit Effect

Effective Date: <u>9/1/2020</u>

Expiration Date: 12/31/2024



NYSDEC Approval

By acceptance of this permit, the permittee agrees that the permit is contingent upon strict compliance with the ECL, all applicable regulations, and all conditions included as part of this permit.

Permit Administrator: ROBERT B CALL, Deputy Permit Administrator Address: NYSDEC Region 8 Headquarters 6274 E Avon-Lima Rd Avon, NY 14414 Note: 11/17/2020 - corrected the "Permit Issued To:" to list the NYSDEC as the permit holder. - R. Call, NYSDEC

Authorized Signature:

"

Date _09/01/2020___

Distribution List

Habitat David Chiusano, NYSDEC Mark Stelmack, MACTEC Batavia

Permit Components

NATURAL RESOURCE PERMIT CONDITIONS

WATER QUALITY CERTIFICATION SPECIFIC CONDITION

GENERAL CONDITIONS, APPLY TO ALL AUTHORIZED PERMITS

NOTIFICATION OF OTHER PERMITTEE OBLIGATIONS

Permit Attachments

Site Plan Notice of Intent to Commence Work Permit Sign



NATURAL RESOURCE PERMIT CONDITIONS - Apply to the Following Permits: WATER QUALITY CERTIFICATION

1. Conformance With Plans All activities authorized by this permit must be in strict conformance with the approved plans submitted by the applicant or applicant's agent as part of the permit application. Such approved plans were prepared by MACTEC Engineering and Geology and titled "Restoration Plan Batavia Iron and Metal Company Inc. Site, NYSDEC Site No. 819018" dated June 2020 (a portion attached as Attachment A).

2. Notice of Intent to Commence Work The permittee shall submit a Notice of Intent to Commence Work to Bureau of Ecosystem Health at least 48 hours in advance of the time of commencement and shall also notify them promptly in writing of the completion of work.

3. Post Permit Sign The permit sign enclosed with this permit shall be posted in a conspicuous location on the worksite and adequately protected from the weather.

4. **Prior Approval of Changes** If the Permittee desires to make any changes in construction techniques, species to be planted, the site plan, any mitigation plan, scheduling or staging of construction, or any other aspect of this project, the Permittee shall submit a written request to the Regional Permit Administrator to make such proposed changes and shall not make such changes unless authorized in writing by the Department.

5. Precautions Against Contamination of Waters All necessary precautions shall be taken to preclude contamination of any wetland or waterway by suspended solids, sediments, fuels, solvents, lubricants, epoxy coatings, paints, concrete, leachate or any other environmentally deleterious materials associated with the project.

6. Install Erosion Controls Before any soil is disturbed on the subject site, the permittee shall install erosion and sedimentation controls which are adequate to prevent erosion and sedimentation off-site. Such controls shall be maintained until the unpaved portions of subject site, if any, are stabilized by a self-sustaining cover of vegetation that is adequate to prevent erosion and sedimentation on and off such site. Before such controls are removed, the permittee shall remove all sediment that has accumulated at such controls.

7. Invasive Species (Non-native Vegetation) To prevent the unintentional introduction or spread of invasive species, the permittee must ensure that all construction equipment be cleaned of mud, seeds, vegetation and other debris before entering any approved construction areas within the state regulated freshwater wetland or its 100 foot adjacent area.

8. Work Within Area Depicted on Plans All construction activity, including operation of machinery, excavation, filling, grading, clearing of vegetation, disposal of waste, street paving and stockpiling of material must take place within the project site as depicted on the project plans referenced by this permit. Construction activity is prohibited within areas to be left in a natural condition or areas not designated by the subject permit.

9. Minimize Adverse Impacts to Wetlands, Wildlife, Water All work must be performed in a manner which minimizes adverse impacts to wetlands, wildlife, water quality and natural resources.

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION Facility DEC ID 8-1802-00008

10. Seed, Mulch Disturbed Areas If seeding is impracticable due to the time of year, a temporary mulch shall be applied within 5 days and final seeding shall be performed at the earliest opportunity when weather conditions favor germination and growth; but not more than six months after project completion and no later than the permit expiration date.

11. State Not Liable for Damage The State of New York shall in no case be liable for any damage or injury to the structure or work herein authorized which may be caused by or result from future operations undertaken by the State for the conservation or improvement of navigation, or for other purposes, and no claim or right to compensation shall accrue from any such damage.

12. State May Order Removal or Alteration of Work If future operations by the State of New York require an alteration in the position of the structure or work herein authorized, or if, in the opinion of the Department of Environmental Conservation it shall cause unreasonable obstruction to the free navigation of said waters or flood flows or endanger the health, safety or welfare of the people of the State, or cause loss or destruction of the natural resources of the State, the owner may be ordered by the Department to remove or alter the structural work, obstructions, or hazards caused thereby without expense to the State, and if, upon the expiration or revocation of this permit, the structure, fill, excavation, or other modification of the watercourse hereby authorized shall not be completed, the owners, shall, without expense to the State, and to such extent and in such time and manner as the Department of Environmental Conservation may require, remove all or any portion of the watercourse. No claim shall be made against the State of New York on account of any such removal or alteration.

13. State May Require Site Restoration If upon the expiration or revocation of this permit, the project hereby authorized has not been completed, the applicant shall, without expense to the State, and to such extent and in such time and manner as the Department of Environmental Conservation may lawfully require, remove all or any portion of the uncompleted structure or fill and restore the site to its former condition. No claim shall be made against the State of New York on account of any such removal or alteration.

WATER QUALITY CERTIFICATION SPECIFIC CONDITIONS

1. Water Quality Certification The authorized project, as conditioned pursuant to the Certificate, complies with Section 301, 302, 303, 306, and 307 of the Federal Water Pollution Control Act, as amended and as implemented by the limitations, standards, and criteria of state statutory and regulatory requirements set forth in 6 NYCRR Section 608.9(a). The authorized project, as conditioned, will also comply with applicable New York State water quality standards, including but not limited to effluent limitations, best usages and thermal discharge criteria, as applicable, as set forth in 6 NYCRR Parts 701, 702, 703, and 704.

2. Water Quality Certification The authorized project, as conditioned pursuant to the Certificate, complies with Section 301, 302, 303, 306, and 307 of the Federal Water Pollution Control Act, as amended and as implemented by the limitations, standards, and criteria of state statutory and regulatory requirements set forth in 6 NYCRR Section 608.9(a). The authorized project, as conditioned, will also comply with applicable New York State water quality standards, including but not limited to effluent limitations, best usages and thermal discharge criteria, as applicable, as set forth in 6 NYCRR Parts 701, 702, 703, and 704.



GENERAL CONDITIONS - Apply to ALL Authorized Permits:

1. Facility Inspection by The Department The permitted site or facility, including relevant records, is subject to inspection at reasonable hours and intervals by an authorized representative of the Department of Environmental Conservation (the Department) to determine whether the permittee is complying with this permit and the ECL. Such representative may order the work suspended pursuant to ECL 71- 0301 and SAPA 401(3).

The permittee shall provide a person to accompany the Department's representative during an inspection to the permit area when requested by the Department.

A copy of this permit, including all referenced maps, drawings and special conditions, must be available for inspection by the Department at all times at the project site or facility. Failure to produce a copy of the permit upon request by a Department representative is a violation of this permit.

2. Relationship of this Permit to Other Department Orders and Determinations Unless expressly provided for by the Department, issuance of this permit does not modify, supersede or rescind any order or determination previously issued by the Department or any of the terms, conditions or requirements contained in such order or determination.

3. Applications For Permit Renewals, Modifications or Transfers The permittee must submit a separate written application to the Department for permit renewal, modification or transfer of this permit. Such application must include any forms or supplemental information the Department requires. Any renewal, modification or transfer granted by the Department must be in writing. Submission of applications for permit renewal, modification or transfer are to be submitted to:

Regional Permit Administrator NYSDEC Region 8 Headquarters 6274 E Avon-Lima Rd Avon, NY14414

4. Submission of Renewal Application The permittee must submit a renewal application at least 30 days before permit expiration for the following permit authorizations: Water Quality Certification.



5. Permit Modifications, Suspensions and Revocations by the Department The Department reserves the right to exercise all available authority to modify, suspend or revoke this permit. The grounds for modification, suspension or revocation include:

- a. materially false or inaccurate statements in the permit application or supporting papers;
- b. failure by the permittee to comply with any terms or conditions of the permit;
- c. exceeding the scope of the project as described in the permit application;
- d. newly discovered material information or a material change in environmental conditions, relevant technology or applicable law or regulations since the issuance of the existing permit;
- e. noncompliance with previously issued permit conditions, orders of the commissioner, any provisions of the Environmental Conservation Law or regulations of the Department related to the permitted activity.

6. Permit Transfer Permits are transferrable unless specifically prohibited by statute, regulation or another permit condition. Applications for permit transfer should be submitted prior to actual transfer of ownership.

NOTIFICATION OF OTHER PERMITTEE OBLIGATIONS

Item A: Permittee Accepts Legal Responsibility and Agrees to Indemnification

The permittee, excepting state or federal agencies, expressly agrees to indemnify and hold harmless the Department of Environmental Conservation of the State of New York, its representatives, employees, and agents ("DEC") for all claims, suits, actions, and damages, to the extent attributable to the permittee's acts or omissions in connection with the permittee's undertaking of activities in connection with, or operation and maintenance of, the facility or facilities authorized by the permit whether in compliance or not in compliance with the terms and conditions of the permit. This indemnification does not extend to any claims, suits, actions, or damages to the extent attributable to DEC's own negligent or intentional acts or omissions, or to any claims, suits, or actions naming the DEC and arising under Article 78 of the New York Civil Practice Laws and Rules or any citizen suit or civil rights provision under federal or state laws.

Item B: Permittee's Contractors to Comply with Permit

The permittee is responsible for informing its independent contractors, employees, agents and assigns of their responsibility to comply with this permit, including all special conditions while acting as the permittee's agent with respect to the permitted activities, and such persons shall be subject to the same sanctions for violations of the Environmental Conservation Law as those prescribed for the permittee.

Item C: Permittee Responsible for Obtaining Other Required Permits

The permittee is responsible for obtaining any other permits, approvals, lands, easements and rights-ofway that may be required to carry out the activities that are authorized by this permit.

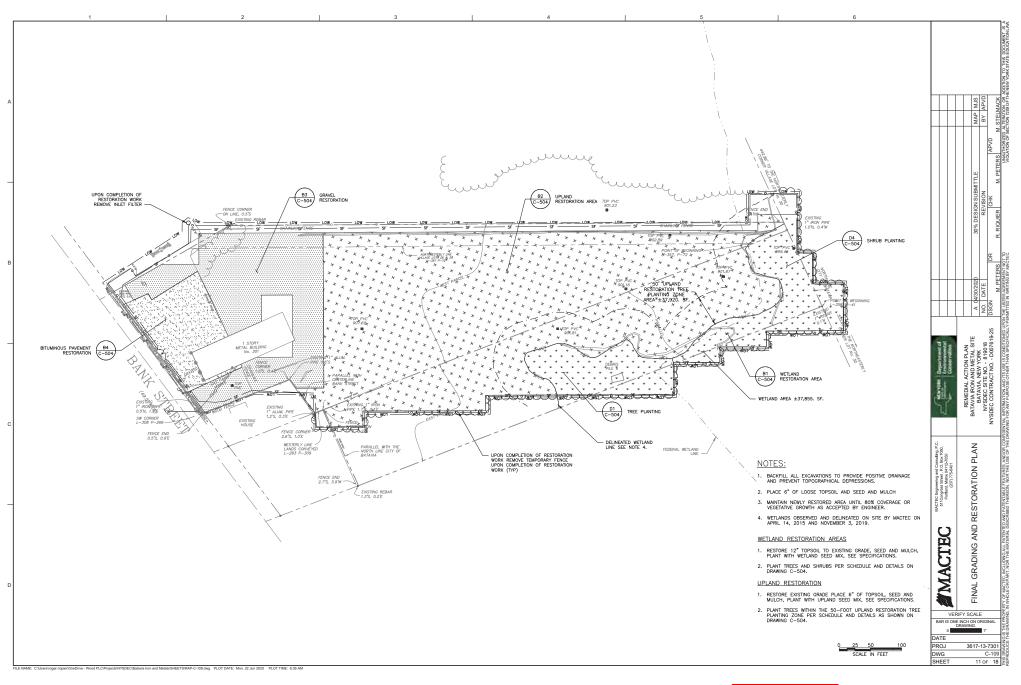
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION Facility DEC ID 8-1802-00008



Item D: No Right to Trespass or Interfere with Riparian Rights

This permit does not convey to the permittee any right to trespass upon the lands or interfere with the riparian rights of others in order to perform the permitted work nor does it authorize the impairment of any rights, title, or interest in real or personal property held or vested in a person not a party to the permit.





Attachment A

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Divsion of Environmental Permits, Region 8 6274 East Avon-Lima Road, Avon, NY 14414-9516 P; (585) 226-5400 I F; (585) 226-2830 www.dec.ny.gov

NOTICE OF INTENT TO COMMENCE WORK

Date:

NYS Department of Environmental Conservation Bureau of Ecosystem Health 6274 East Avon-Lima Road Avon, NY 14414

Re: DEC Permit No. 8-1802-00008/00005

In accordance with Condition # 2 of the referenced permit, I hereby serve notice to commence work on or about ______, 20____. Notice of project completion will be submitted within one week after termination of all work.

This is also to certify that, having read in entirety the permit, I am fully aware of and understand the general, supplemental and special conditions, and agree to comply in all respects to those requirements. I further understand that prior to undertaking any modification to the authorized project, I must seek and receive the written approval of the Regional Permit Administrator.

Signature of Permittee

WARNING

The Permittee and the contractor (if any) are required to follow all permit conditions. Violation of permit conditions may lead to legal action, including the imposition of substantial monetary fines and corrective work.

Signature of Contractor (if any)

Contractor's Address

Contractor's Telephone Number

Signature of Landowner(s)

Attention Permittee and/or Contractor: Please fold as noted on the back and return.



(Fold # 2)

Place Stamp Here

NYS Department of Environmental Conservation Attn: Bureau of Ecosystem Health 6274 E Avon-Lima Rd Avon, NY 14414

(Fold # 1 – Staple Here)

95-20-1 (8/87)-9d

New York State Department of Environmental Conservation

ENOTICE

The Department of Environmental Conservation (DEC) has issued permit(s) pursuant to the Environmental Conservation Law for work being conducted at this site. For further information regarding the nature and extent of work approved and any Departmental conditions on it, contact the Regional Permit Administrator listed below. Please refer to the permit number shown when contacting the DEC.

> **Regional Permit Administrator** Robert B. Call 8-1802-00008/00005 ph: (585)226-5396

Permit Number

12/31/2024

Expiration Date

NOTE: This notice is **NOT** a permit



June 9, 2020

Mr. David Chiusano Project Manager New York State Department of Environmental Conservation Division of Environmental Remediation 625 Broadway, 12th Floor Albany, New York 12233-7017

 Re: Batavia Iron and Metals Company Site Batavia, New York 14020
 Approval for Cleanup and Disposal of PCB Remediation Waste under 40 CFR §761.6l(a) and for Characterization and Verification Sampling under 40 CFR §761.6l(c) and Approval for Alternative Decontamination under 40 CFR §761.79(h)

Dear Mr. Chiusano:

This is in response to the May 22, 2020 letter transmitting the May 2020 document entitled "Self-Implementing On-Site Cleanup and Disposal of PCB Remediation Waste, Batavia Iron and Metals Company Site," prepared by MACTEC Engineering and Geology, P.C. (MACTEC), on behalf of the New York State Department of Environmental Conservation (NYSDEC), for the above-referenced site. This document will be referred to as the "Application." The polychlorinated biphenyl (PCB) contamination onsite is considered to be PCB remediation waste that is subject to the applicable cleanup levels under the federal regulations at 40 CFR §761.61(a)(4).

PCBs were detected at this 6.8 acre site at concentrations up to 560 parts per million (ppm). The proposed remedial action is to remove and dispose of all PCB remediation waste in excess of 1 ppm. Soils with PCB concentrations greater than 1 ppm but less than 50 ppm will be disposed of as PCB remediation waste at an approved, non-hazardous, off-site disposal facility in accordance with 40 CFR §761.61(a)(5)(v)(A); soils that exceed 50 ppm will be disposed of at a permitted hazardous waste facility in accordance with 40 CFR §761.61(a)(5)(v)(A); soils that exceed 50 ppm will be disposed of at a permitted hazardous waste facility in accordance with 40 CFR §761.61(a)(5)(i)(B)(2)(iii).

With the exception of the characterization sampling requirements under Subpart N of 40 CFR §761 and the verification sampling requirements under Subpart O of 40 CFR §761, the proposed removal of PCB remediation waste meets the self-implementing cleanup and disposal requirements under 40 CFR §761.61(a). In addition, based on the characterization and proposed verification sampling, in accordance with 40 CFR §761.61(c), the United States Environmental Protection Agency (EPA) finds that this sampling, in this proposed remediation

context, is acceptable for purposes of determining compliance with the High Occupancy Area PCB cleanup standard of 1 ppm.

NYSDEC has also requested, in accordance with 40 CFR §761.79(h), approval for an alternative procedure for decontamination of heavy equipment. The alternate decontamination method includes the use of a pressure washer and an aqueous-based solvent. As described in the Application, verification samples will be collected to confirm compliance with a decontamination standard of 10 micrograms per 100 square centimeters (i.e., the unrestricted use standard for non-porous surfaces previously in contact with liquid PCBs). EPA finds that the proposed alternative decontamination procedures are acceptable for the cleanup activities that will be performed at the site

EPA hereby approves the NYSDEC's Application, and it may proceed with the cleanup and disposal under 40 CFR §761.6l(a) and (c) and the Application, subject to this Approval. This Approval also constitutes order under the authority of Section 6 of the Toxic Substances Control Act (TSCA), 15 U.S.C. §2605. This approval only specifies the applicable requirements under TSCA and does not cite to or make any determinations regarding the requirements that may be applicable under other federal, state, or local law. TSCA disposal requirements do not supersede other, more stringent, applicable federal, state or local laws.

Please note that this Approval does not constitute a determination by EPA that the transporters or the disposal facilities selected by the NYSDEC are authorized to conduct the activities set forth in the Application. The NYSDEC is responsible for ensuring that its selected transporters and disposal facilities are authorized to conduct any such activities in accordance with all applicable federal, state and local statutes and regulations.

Should you have any questions concerning this matter, please feel free to contact me at (212) 637-3315 or have your staff contact Steve Ferreira at (212) 637-3759 or at <u>ferreira.steve@epa.gov.</u>

Sincerely,

Ariel Iglesias, Director Land, Chemicals and Redevelopment Division

cc: Mark Stelmack, MASTEC

SECTION X

Standard Specifications

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SECTION X

Standard Specifications

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+ + END OF TABLE OF CONTENTS + +

SPECIFICATION 01 25 00

SUBSTITUTION PROCEDURES

PART 1 – GENERAL

1.1 DESCRIPTION

- A. Scope: Section includes:
 - 1. Administrative and procedural requirements for selecting materials and equipment for the Project.
 - 2. Procedural requirements for substitutions of materials and equipment.
 - 3. Procedural requirements for substitute construction methods or procedures, when construction methods or procedures are specified.
 - 4. This section supplements the requirements of Article 5.7 of the General Conditions.
- B. A proposed substitute will not be accepted for review if:
 - 1. Approval would require changes in design concept or a substantial revision of the Contract Documents.
 - 2. Approval would delay completion of the Work or the work of other contractors.
 - 3. Substitution request is indicated or implied on a Shop Drawing or other submittal, or on a request for interpretation or clarification, and is not accompanied by CONTRACTOR's formal and complete request for substitution.
- C. If proposed substitute is not approved, CONTRACTOR shall provide the specified materials, equipment, method, or procedure, as applicable.
- D. Approval of a substitute does not relieve CONTRACTOR from requirement for submitting Shop Drawings and other submittals in accordance with the Contract Documents.
- E. ENGINEER and DEPARTMENT have the right to rely upon the completeness and accuracy of the information included in CONTRACTOR's request for approval of a substitute, and CONTRACTOR accepts full responsibility for the completeness and accuracy thereof.
- F. When approved substitute is defective or fail to perform in accordance with the Contract Documents, responsibility for remedying the defect or failure resides solely with CONTRACTOR and Supplier.

1.2 SUBSTITUTE MATERIALS AND EQUIPMENT

- A. Requests for approval of substitute items of materials or equipment will be evaluated in accordance with the requirements of the Article 5.7 of the General Conditions.
- B. Procedure:
 - 1. Submit requests for substitution in accordance with requirements for furnishing submittals, as indicated in Section X, Specification 01 33 00, Submittal Procedures.
 - 2. Submit separate request for each proposed substitute.
 - 3. Submit request for substitution using forms attached to this Section. Complete all information requested on each form and enclose with the forms supplementary information as required. In addition to requirements of the General Conditions and information required on substitution request forms, include with each substitute request the following:
 - a. Identification of the materials and equipment (as applicable), including manufacturer's name and address.
 - b. Manufacturer's literature with description of the materials and equipment, performance and test data, and reference standards with which materials and equipment comply.
 - c. Samples, when appropriate.
 - d. Name and address of similar projects on which the materials and equipment were used, date of installation, and names and contact information (including telephone number) for the facility operations and maintenance manager.

1.3 SUBSTITUTE CONSTRUCTION METHODS OR PROCEDURES

- A. Where construction methods or procedures are specified, for a period of 15 days after the Effective Date of the Contract, ENGINEER will consider CONTRACTOR's written requests for substitute construction methods or procedures shown or specified in the Contract Documents.
- B. The provisions of the General Conditions, as may be modified by the Supplementary Conditions, regarding substitute items of materials and equipment are hereby extended to apply to substitute construction methods or procedures.
- C. Procedure:
 - 1. Submit requests for substitution in accordance with requirements for furnishing submittals, as indicated in Section X, Specification 01 33 00, Submittal Procedures.
 - 2. Submit separate request for each proposed substitute.

- 3. Submit request for substitution using forms attached to this Section. Complete all information requested on each form and enclose with the forms supplementary information as required. In addition to requirements of the General Conditions and information required on substitution request forms, include with each substitute request the following:
 - a. Detailed description of proposed method or procedure.
 - b. Itemized comparison of the proposed substitution with the specified method or procedure.
 - c. Drawings illustrating method or procedure.
 - d. Other data required by ENGINEER to establish that proposed substitution is equivalent to specified method or procedure.

1.4 CONTRACTOR'S REPRESENTATIONS

- A. In submitting request for substitution, CONTRACTOR represents that:
 - 1. CONTRACTOR has read, fully understands and complies with the provisions regarding substitutes as indicated in the General Conditions, as may be modified by the Supplementary Conditions.
 - 2. Substitution request is complete and includes all information required by the Contract Documents.
 - 3. CONTRACTOR certifications required by the General Conditions, as may be modified by the Supplementary Conditions, are valid and made with CONTRACTOR's full knowledge, information, and belief.
 - 4. CONTRACTOR will provide the same or better guarantees or warranties for proposed substitute as for the specified materials, equipment, methods, or procedures, as applicable.
 - 5. CONTRACTOR waives all Claims for additional costs or extension of time related to proposed substitute that subsequently may become apparent.

PART 2 – PRODUCTS (NOT USED)

PART 3 – EXECUTION

3.1 ATTACHMENTS

- A. The documents listed below and attached following this Section's "End of Section" designation, are part of this Specification Section.
 - 1. Substitution Request Form (two pages).
 - 2. Product Substitution Checklist (one page).

+ + END OF SECTION + +

SUBSTITUTION REQUEST

Project:	Substitution Request Number:	
	From:	
To:	Date:	
	Engineer Project. No	
Re:	Contract For	
Specification Title:	Description:	
Section: Page:	Article/Paragraph:	
Proposed Substitute:		
Manufacturer: Address:	Phone:	
Trade Name:	Model No.:	
Installer: Address:	Phone:	
History: New product 1 to 4 years old 5 t	o 10 years old	
Point-by-point comparative data attached — REQUIRE Reason for not providing specified item:	ED BY THE CONTRACT DOCUMENTS	
Similar Installation:		
Project:	Engineer:	
Address:	Departmen <u>t:</u>	
	Date Installed:	
Proposed substitution affects other parts of Work:	o 🗌 Yes; explain	
Savings to Owner for accepting substitute: (attach detailed, itemized estimate)	(\$)	
Proposed substitute changes Contract Time: No (clarify whether change is to Substantial Completion, Miles	Yes [Add] [Deduct]days. stone, or time for readiness for final payment)	
Supporting Data Attached: Drawings Produ	act Data 🗌 Samples 🗌 Tests 🗌 Reports 🗌	

SUBSTITUTION REQUEST

(Cor	ntinu	ied)
(COL	I UIII U	icu,

Substitute product, method, or procedure is subject to payment of licensing fee or royalty (check if "yes" and attach information)

Substitute product, method, or procedure is patented or copyrighted (check if "yes" and attach information)

The undersigned certifies:

- Representations in the General Conditions and in Section 01 25 00, Substitution Procedures, regarding substitutions are valid.
- Same or better warranty and guarantee will be furnished for proposed substitution as for specified item.
- Same maintenance service and source of replacement parts, as applicable, is available.
- Proposed substitute will have no adverse effect on other trades and will not affect or delay Progress Schedule.
- Cost data as stated above is complete. Claims for additional costs or time related to accepted substitution which may subsequently become apparent are waived.
- Proposed substitute does not affect dimensions and functional clearances.
- Payment will be made for Engineer's review and changes, if any, to the design and Contract Documents, and construction costs caused by the substitute.

• Coordination, installation, and changes in the Work as necessary for accepted substitution will be complete in all respects.

Submitted by:	
Address:	
Telephone:	
Attachments:	

ENGINEER'S REVIEW AND ACCEPTANCE (OR NON-ACCEPTANCE) WILL BE DOCUMENTED IN A FIELD ORDER OR CHANGE ORDER, AS APPROPRIATE.

Additional Comments:	Contractor	Subcontractor	Supplier	Manufacturer	Engineer

PRODUCT SUBSTITUTION CHECKLIST

Date:	Re:
Engineer Proj <u>No.:</u>	Manufacturer's Project No.:
Filing No.:	Contract For:
Item Equivalence:	
☐ Is the submitted item equivalent to the specified item?	
Does it serve the same function?	
Does it have the same dimensions?	
Does it have the same appearance?	
☐ Will it last as long?	
Does it comply with the same codes, and standards and performan	nce requirements?
Has the item been used locally, and where are the projects?	
Has a problem occurred with the item, and what was the remedy?	
Effect on the Project:	
☐ Will the substitute affect other aspects of the construction?	
Are any details affected and are changes required?	
What is the cost of the changes?	
Who pays for the required changes?	
Are Contract Times affected?	
Effect on the Warranty:	
How does the proposed warranty differ from the specified warrant	ty?
Does the manufacturer have a track record of standing behind the	warranty?

Adapted from CSI Form No. 20.3, 1998 edition

SPECIFICATION 01 26 00

CONTRACT MODIFICATION PROCEDURES

<u>PART 1 – GENERAL</u>

1.1 DESCRIPTION

- A. Scope.
 - 1. This Section provides requirements which are in addition to provisions of the General Conditions (Articles 9 and 10), as may be modified by the Supplementary Conditions, and includes:
 - a. Requests for interpretation.
 - b. Minor changes in the Work and Field Orders.
 - c. Proposed Change Order Request.
 - d. Proposed Change Orders.
 - e. Approved Change Orders.
- B. Submit Contract modification documents to ENGINEER, addressed to the contact person as specified in the preconstruction conference, and in accordance with Specification 01 31 26, Electronic Communication Protocols.
- C. Retain at CONTRACTOR's office and at the Site complete copy of each Contract modification document and related documents, and ENGINEER's response.

1.2 REQUESTS FOR INTERPRETATION

A. General.

- 1. Transmit written requests for interpretation to ENGINEER. CONTRACTOR may prepare and transmit requests for interpretation.
- 2. Prepare and transmit request for interpretation to obtain clarifications or interpretations of the Contract Documents. Report conflicts, errors, ambiguities, and discrepancies in the Contract Documents by requesting an interpretation in accordance with General Conditions.
- 3. Do not transmit request for interpretation when other form of communication is appropriate, such as CONTRACTOR's submittals, requests for approvals of substitutes, notices, ordinary correspondence, or other form of communication. Improperly prepared or inappropriate requests for interpretation will be returned without response or action by ENGINEER.
- 4. Do not submit request for interpretation or clarification when:
 - a. answer may be obtained by observations at the Site; or
 - b. required information is clearly indicated in the Contract Documents; or

- c. required information is included in industry standards referenced in the Contract Documents or Supplier's instructions that are consistent with the Contract Documents; or
- d. are reasonably inferable from any of foregoing.
- 5. CONTRACTOR shall have sole financial responsibility for requests for interpretations or clarifications that are submitted late, out of sequence, or that are unnecessary.
- B. Procedure.
 - 1. Transmit requests for interpretation in accordance with Specification 01 31 26, Electronic Communication Protocols, and requirements of this Section. Include with each request for interpretation a separate letter of transmittal.
 - 2. ENGINEER will provide timely review of requests for interpretation. Allow sufficient time for review and response.
 - 3. ENGINEER will maintain log of requests for interpretation. Upon request, copy of log will be transmitted to CONTRACTOR
 - 4. ENGINEER's response to requests for interpretation will be transmitted in accordance with Specification 01 31 26, Electronic Communication Protocols, and requirements of this Section. Each response to a request for interpretation will include a separate letter of transmittal.
 - 5. ENGINEER's written response to each request for interpretation will be distributed to:
 - a. CONTRACTOR.
 - b. DEPARTMENT.
 - c. ENGINEER.
 - 6. If ENGINEER requests additional information to make an interpretation, CONTRACTOR requesting the interpretation shall transmit the information requested within ten days, unless ENGINEER allows additional time, via correspondence referring to request for interpretation number.
 - 7. Interpretations that One or Both Parties Believes Entails a Change to the Contract:
 - a. If CONTRACTOR believes that a change in the Contract Price or Contract Times or other change to the Contract is required as a result of ENGINEER's interpretation, so advise ENGINEER in writing before proceeding with the Work associated with the request for interpretation.
 - b. If, after this initial communication, CONTRACTOR believes that change in Contract Price, Contract Times, both, or other relief with respect to the terms of the Contract is necessary, recourse shall be in accordance with the Contract Documents.
- C. Preparation of Requests for Interpretation:
 - 1. Prepare each request for interpretation on the "Request for Interpretation" form included with this Section, or other form acceptable to ENGINEER.
 - 2. Number each request for interpretation as follows: Numbering system shall be the Contract number and designation followed by a hyphen and three-digit

sequential number. Example: First request for interpretation on the general contract for project titled, "Contract A15" would be, "RFI No. A15-GC-001".

- 3. In space provided on form, describe the interpretation requested. Provide additional sheets as necessary. Include text and sketches as required in sufficient detail to describe the need for an interpretation.
- 4. When applicable, request for interpretation shall include CONTRACTOR's recommended resolution.

1.3 MINOR CHANGES IN THE WORK AND FIELD ORDERS

A. General:

- 1. Field Orders, when required, will be initiated and issued by ENGINEER.
- 2. Field Orders authorize minor variations in the Work but do not change the Contract Price or Contract Times.
- 3. Field Orders will be in the form of Engineers Joint Contract Documents Committee document EJCDC[®] C-942, "Field Order".
- 4. ENGINEER will maintain a log of Field Orders issued.
- B. Procedure.
 - 1. Field Orders will be transmitted in accordance with Specification 01 31 26, Electronic Communication Protocols, and requirements of this Section. Each Field Order will include a separate letter of transmittal.
 - 2. Each Field Order will be distributed to:
 - a. CONTRACTOR.
 - b. DEPARTMENT.
 - c. ENGINEER.
 - 3. Field Orders that One or Both Parties Believes Entails a Change to the Contract Price or Contract Times:
 - a. If CONTRACTOR or DEPARTMENT believes that a change in the Contract Price or Contract Times or other change to the Contract is required as a result of a Field Order, so advise ENGINEER in writing before proceeding with the Work associated with the Field Order in accordance with General Conditions, Section VIII, Article 8.10.
 - b. If, after this initial communication, CONTRACTOR believes that change in Contract Price, Contract Times, both, or other relief with respect to the terms of the Contract is necessary, recourse shall be in accordance with the General Conditions.
 - 4. If the Field Order is unclear, submit request for interpretation.

1.4 PROPOSED CHANGE ORDER REQUEST

- A. General:
 - 1. Proposed Change Order Request may be initiated by ENGINEER or DEPARTMENT in accordance with General Conditions, Article 9.1

- 2. Proposed Change Order Request are for requesting the effect on the Contract Price and the Contract Times and other information relative to contemplated changes in the Work. Proposed Change Order Request do not authorize changes or variations in the Work, and do not change the Contract Price or Contract Times or terms of the Contract.
- 3. Proposed Change Order Request will be furnished using the "Proposed Change Order Request" form included with this Section.
- B. Procedure.
 - 1. Proposal Change Order Request will be transmitted in accordance with Specification 01 31 26, Electronic Communication Protocols, and requirements of this Section. Each Proposed Change Order Request will include a separate letter of transmittal.
 - 2. Each signed Proposed Change Order Request will be transmitted to:
 - a. CONTRACTOR.
 - b. DEPARTMENT.
 - c. ENGINEER.
 - 3. Transmit request for interpretation to clarify conflicts, errors, ambiguities, and discrepancies in Proposal Request.
 - 4. Upon receipt of Proposed Change Order Request, CONTRACTOR shall prepare and transmit to ENGINEER a Prosed Change Order, in accordance with the Contract Documents, for the proposed Work described in the Proposed Change Order Request.

1.5 PROPOSED CHANGE ORDERS

- A. General.
 - 1. Prepare and transmit written Proposed Change Order to ENGINEER in response to each Proposed Change Order Request; or when CONTRACTOR believes a change in the Contract Price or Contract Times or other change to the terms of the Contract is required; or to appeal an initial decision by ENGINEER concerning the requirements of the Contract Documents or relating to the acceptability of the Work under the Contract Documents; contest a set-off against payment due; or seek other relief under the General Conditions.
- B. Procedure.
 - 1. Prepare and transmit Proposed Change Order within time limits indicated in the General Conditions, as may be modified by the Supplementary Conditions.
 - 2. Transmit Change Proposals in accordance with Specification 01 31 26, Electronic Communication Protocols, and requirements of this Section. Include with each Proposed Change Order all required supporting documentation and a separate letter of transmittal.
 - 3. ENGINEER's Review and Requests for Interpretation:

- a. ENGINEER will review and act on each Proposed Change Order in accordance with, and within the time limits indicated in, the General Conditions, as may be modified by the Supplementary Conditions.
- b. When, ENGINEER requests additional information to render a decision, submit required information within three days of receipt of ENGINEER's request, unless ENGINEER allows more time. Submit the required information via correspondence that refers to the specific Proposed Change Order number.
- c. DEPARTMENT shall transmit to ENGINEER such comments, if any, that DEPARTMENT has on the Change Proposal, within 30 days of DEPARTMENT's receipt of the Proposed Change Order.
- d. ENGINEER will render a written decision on the Proposed Change Order.
- e. ENGINEER's response to Proposed Change Order will be transmitted in accordance with Specification 01 31 26, Electronic Communication Protocols, and requirements of this Section, the General Conditions, and the Supplementary Conditions.
- 4. ENGINEER's response to each Proposed Change Order will be distributed to:
 - a. CONTRACTOR.
 - b. DEPARTMENT
 - c. ENGINEER.
- 5. If Proposed Change Order is recommended for approval by ENGINEER and is approved by DEPARTMENT, an Approved Change Order will be issued or, when applicable, an appropriate use of contingency allowance will be authorized by DEPARTMENT.
- 6. If parties do not agree on terms for the change, DEPARTMENT or CONTRACTOR may file a Claim against the other, in accordance with the General Conditions, as may be modified by the Supplementary Conditions.
- C. Preparation of Change Proposals:
 - 1. Each Proposed Change Order shall be submitted on the "Proposed Change Order" form included with this Section, or other form acceptable to ENGINEER.
 - 2. Number each Proposed Change Order as follows: Numbering system shall be the Contract number and designation followed by a hyphen and three-digit sequential number. Example: First Change Proposal for the general contract for project named "Contract A15" would be, " Proposed Change Order No. A15-GC-001".
 - 3. In space provided on Change Proposal form:
 - a. Describe scope of each proposed change. Include text and sketches on additional sheets as required to provide detail sufficient for ENGINEER's review and response. If a change item is submitted in response to Proposed Change Order Request, write in as scope, "In accordance with Proposed Change Order Request No." followed by the Proposal Request number. Submit written clarifications, if any, to scope of change.

- b. Submit justification for each proposed change. If change is in response to Proposed Change Order Request, write in as justification, "In accordance with Proposed Change Order Request No." followed by the proposed change order request number.
- c. List the total change in the Contract Price and Contract Times for each separate change item included in the Proposed Change Order Request.
- 4. Unless otherwise directed by ENGINEER, attach to the Proposed Change Order detailed breakdowns of pricing (Cost of the Work and CONTRACTOR's fee) including:
 - a. List of Work tasks to accomplish the change.
 - b. For each task, labor cost breakdown including labor classification, total hours per labor classification, and hourly cost rate for each labor classification.
 - c. Construction equipment and machinery to be used, including manufacturer, model, and year of manufacture, and number of hours for each.
 - d. Detailed breakdown of cost of materials and equipment to be incorporated into the Work, including quantities, unit costs, and total cost, with Supplier's written quotations.
 - d. Breakdowns of the Cost of the Work and fee for Subcontractors, including labor, construction equipment and machinery, and materials and equipment incorporated into the Work, other costs, and Subcontractor fees (e.g., overhead and profit).
 - f. Breakdown of other costs eligible, in accordance with the General Conditions and the Supplementary Conditions under "Cost of the Work" provisions.
 - g. Other information required by ENGINEER.
 - h. CONTRACTOR's fees applied to eligible CONTRACTOR costs and eligible Subcontractor costs.
 - i. The change order backup shall be completed using the NYS Standard MURK 2018 (or current) format. DEPARTMENT will provide electronic version for CONTRACTOR use.

1.6 APPROVED CHANGE ORDERS

- A. General:
 - 1. Approved Change Orders will be recommended by ENGINEER (when required by the General Conditions), and will be approved and signed by DEPARTMENT and CONTRACTOR, to authorize additions, deletions, or revisions to the Work, or changes to the Contract Price or Contract Times.
 - 2. Approved Change Orders will be in the form of EJCDC[®] C-941, "Change Order".
- B. Procedure.

- 1. Approved Change Orders for signature by CONTRACTOR will be transmitted in accordance with Specification 01 31 26, Electronic Communication Protocols, and requirements of this Section. Each Change Order will include a separate letter of transmittal. CONTRACTOR shall print three originals of Approved Change Order for CONTRACTOR's signature.
- 2. CONTRACTOR shall promptly sign each original Approved Change Order and, within five days of receipt, return all originals to ENGINEER.
- 3. ENGINEER will sign each original Approved Change Order and forward them to DEPARTMENT.
- 4. After approval and signature by DEPARTMENT, original Approved Change Orders will be distributed as indicated below.
- 5. Original, signed Approved Change Orders will be distributed as follows:
 - a. CONTRACTOR: One original.
 - b. DEPARTMENT: One original.
 - c. ENGINEER: One original.

PART 2 – PRODUCTS (NOT USED)

PART 3 – EXECUTION

3.1 ATTACHMENTS

- A. The forms listed below, following this Section's "End of Section" designation, are part of this Specifications Section:
 - 1. Request for Interpretation form (one page).
 - 2. Proposed Change Order Request (one page).
 - 3. Proposed Change Order (one page).
 - 4. Field Order EJCDC C-942

+ + END OF SECTION + +

REQUEST FOR INTERPRETATION

DEPARTMENT:

Project Name:	
Contractor:	RFI No.
Date Transmitted:	Date Received:
Date Response Requested:	Date Response Transmitted:
Subject:	
Specification Section and Paragraph:	
Drawing References:	

INTERPRETATION REQUESTED:

Signature: _____ Date:

ENGINEER'S RESPONSE:

.

Signature: _____

PROPOSED CHANGE ORDER REQUEST

DEPARTMENT:	
Project Name:	
Proposal Request No.:	Date:
Contract Name and No.:	
Contractor:	
Other Contracts Involved in Proposed Change: _	

<u>TO CONTRACTOR</u>: Please submit a complete Change Proposal for the proposed modifications described below. If the associated Change Proposal is approved, a Change Order or allowance authorization will be issued to authorize adjustment so the scope of the Work. <u>This Proposal Request</u> is not a Change Order, Work Change Directive, Field Order, or an authorization to proceed with the proposed Work described below.

SCOPE OF PROPOSED WORK:

- 1. *Item*:
- 2. *Item*:
- 3. *Item*:

Proposal requested by:

Signature of Requestor:

PROPOSED CHANGE ORDER

DEPARTMENT:	
Project Name:	
Change Proposal No.:	Date:
Submitted in Response to Proposal Request No.:	
Contract Name and No.:	
Contractor:	
Subject:	

The following changes to the Contract are proposed:

SCOPE OF WORK: (attach and list supporting information as required)

- 1. *Item*:
- 2. *Item*:

JUSTIFICATION:

- 1. *Item*:
- 2. *Item*:

CHANGES IN CONTRACT PRICE AND CONTRACT TIMES:

We propose that the Contract Price and Contract Times be changed as follows:

For Contract Price, attach detailed cost breakdowns for Contractor and Subcontractors, Supplier quotations, and other information required.

For the Contract Times, state increase, decrease, or no change to Contract Times for Substantial Completion, readiness for final payment, and Milestones, if any. If increase or decrease, state specific number of days for changes to the Contract Times.

		Contract Times (days)	
Description	Amount	Substantial	Final
1. Item	\$0.00	0	0
2. Item	\$0.00	0	0
Total This Change Proposal	\$0.00	0	0

Changes to Milestones, if any:

Contractor represents that supporting data attached to this Change Proposal are accurate and complete. The requested time or price adjustment indicated in this Change Proposal is the entire adjustment to which Contractor believes it is entitled as a result of the proposed change(s) indicated herein.

Change Proposal by: _____

Signature of Proposer:

NEW YORK DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Field Order No.

Date of Issuance:	Site Name:
Owner: DEC	Owner's Contract No.:
Contractor:	Site No.:
Engineer:	
Paragraph 9.2, for minor changes in the W considers that a change in Contract Price	y execute this Field Order, issued in accordance with General Conditions Vork without changes in Contract Price or Contract Times. If Contractor or Contract Times is required, submit written notification in accordance with e documentation within 15 days in a Proposed Change Order to Engineer.
Specification	(s) Drawing(s) / Detail(s)
Description:	
Attachments:	
ISSUED:	RECEIVED:
Ву:	By:
Engineer (Authorized Signa	By:By:By:Contractor (Authorized Signature)
Title:	Title:
Date:	Date:
Copy to: DEC Project Manager and DEC E	Designated Representative

NEW YORK DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SPECIFICATION 01 29 73

SCHEDULE OF VALUES

<u>PART 1 – GENERAL</u>

1.1 DESCRIPTION

- A. Scope:
 - 1. CONTRACTOR shall prepare and submit to ENGINEER for acceptance a Schedule of Values that allocates cost to each item of the Work. Schedule of Value list of line items shall correspond to each aspect of the Work, established in Section III, Article 12, Section V, Contract Bid Form and Section VII, Measurement and Payment.
 - 2. Upon request of ENGINEER, support values with data that substantiate their correctness.
 - 3. Submit preliminary Schedule of Values to ENGINEER for initial review. CONTRACTOR shall incorporate ENGINEER's comments into the Schedule of Values and resubmit to ENGINEER. ENGINEER may require corrections and re-submittals until Schedule of Values is acceptable.
 - 4. Schedule of Values may be used as a basis for negotiating price of changes, if any, in the Work.
 - 5. Schedule of Values and the Progress Schedule updates specified in Specification 01 32 16, Progress Schedule, will be basis for preparing each Application for Payment.

1.2 SUBMITTALS

- A. Informational Submittals: Submit the following:
 - 1. Submit to ENGINEER Schedule of Values in the form and quantity required in Specification 01 33 00, Submittal Procedures, and in accordance with Specification 01 31 26, Electronic Communication Protocols.
 - 2. Content of Schedule of Values submittals shall be in accordance with Article 1.3 of this Section.
 - 3. Timing of Submittals:
 - a. Submit preliminary Schedule of Values within ten days following the date that the Contract Times commence running in accordance with the Notice to Proceed.
 - b. Submittal of the Schedule of Values for acceptance by ENGINEER shall be in accordance with the General Conditions, Articles 1.4 and 1.6 a. ENGINEER will not accept Applications for Payment without an acceptable Schedule of Values.

c. When required by ENGINEER, promptly submit updated Schedule of Values to include cost breakdowns for changes in the Contract Price.

1.3 SCHEDULE OF VALUES FORMAT AND CONTENT

- A. Organization and Major Elements of Schedule of Values
 - 1. Prepare Schedule of Values on the "progress estimate" or "continuation sheets", as applicable, of the Application for Payment form indicated in Article 13 of Section VIII, Payments to Contractor and Completion.
 - 2. Organization in Accordance with General Conditions Section V, Bid Form and Section VII, Measurement and Payment:
 - a. Organize the Schedule of Values by the Bid Schedule of Values.
 - b. Label each row in the Schedule of Values with the appropriate Bid Item number. Include an amount for each row in the Schedule of Values.
 - c. List sub-items of major items as identified in Section VII, measurement and payment for each item on the Bid Form. This shall include, if applicable, unit prices for each supplier and Subcontractor and their associated number of units if multiple Subcontractors are used for a single lump sum or unit priced pay item.
 - 3. Include in Schedule of Values unit price payment items with their associated quantity. Provide in the Schedule of Values detailed breakdown of labor, equipment, materials, fuel surcharge, and other direct costs (ODCs) for each unit prices when required by ENGINEER.
- B. Requirements for preliminary Schedule of Values and Schedule of Values are:
 - 1. Subcontracted Work:
 - a. Schedule of Values shall show division of Work between CONTRACTOR and Subcontractors.
 - b. Line items for Work to be done by Subcontractor shall include the word, "(SUBCONTRACTED)".
 - 2. Apportionment between Materials and Equipment, and Installation:
 - a. Schedule of Values shall include breakdown of costs for materials and equipment, installation, and other costs used in preparing the Bid by CONTRACTOR and each Subcontractor.
 - b. List purchase and delivery costs for materials and equipment for which CONTRACTOR may apply for payment as stored materials, when required by the ENGINEER.
 - 3. Sum of individual values shown on the Schedule of Values shall equal the total of associated payment item. Sum of payment item totals in the Schedule of Values shall equal the Contract Price.
 - 4. Overhead and Profit: Include in each line item a directly proportional amount of CONTRACTOR's overhead and profit. Do not include overhead and profit as separate item(s).

- 5. Include separate line item for each work item under both lumps sum and unit price items in accordance with Section VII, Measurement and Payment.
- 6. Project Record Documents:
 - a. Include in the Schedule of Values a line item with appropriate value for Project record documents.
 - b. If adequate record documents are maintained, up to 50 percent of the value of the record documents line item will be eligible for payment, spread evenly over those progress payments in which construction at the Site is performed.
 - c. Remainder of Project record documents line item will be eligible for payment when complete record documents are submitted in accordance with the General Conditions. If record documents submitted are unsatisfactory to ENGINEER, amount may be reduced via set-offs in accordance with the Contract Documents.

PART 2 – PRODUCTS (NOT USED)

PART 3 – EXECUTION (NOT USED)

+ + END OF SECTION + +

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SPECIFICATION 01 31 19.13

PRE-CONSTRUCTION CONFERENCE

PART 1 – GENERAL

1.1 DESCRIPTION

- A. Scope:
 - 1. A pre-construction conference will be held for the Project in accordance with General Conditions, Section VIII, Article 1.2.
 - 2. CONTRACTOR shall attend the conference prepared to discuss all items on the pre-construction conference agenda.
 - 3. ENGINEER will distribute an agenda, preside at conference, and prepare and distribute minutes to all conference participants and others as requested.
- B. Purpose of Pre-construction Conference:
 - 1. Purpose of conference is to designate responsible personnel, establish working relationships, discuss preliminary schedules submitted by CONTRACTOR, and formalize procedures for the preparation and review administrative and procedural requirements for the Project.
 - 2. Review and comply with the requirements of the General Conditions.
 - 3. Review CONTRACTOR's plans for complying with the requirements of Article 5 of the General Conditions.
 - 4. Discuss any conflicts, errors, or discrepancies that CONTRACTOR has discovered by review of the Contract Documents.
 - 5. Unless otherwise indicated in the Contract Documents or otherwise agreed to by the entities involved, Site mobilization meeting will be part of the preconstruction conference.

1.2 PREPARATION FOR PRE-CONSTRUCTION CONFERENCE

- A. Date, Time, and Location:
 - 1. Conference will be held no later than twenty calendar days after the effective Date of the Agreement, but before the CONTRACTOR starts the Work.
 - 2. Department will establish the date, time, and location of conference and notify the interested and involved entities.
- B. CONTRACTOR shall furnish information required and contribute appropriate items for discussion at the pre-construction conference.
- C. Handouts for Pre-Construction Conference:

- 1. CONTRACTOR shall bring to the conference the following, with sufficient number of copies for each attendee:
 - a. Preliminary Progress Schedule, as submitted to ENGINEER.
 - b. Preliminary Schedule of Submittals, as submitted to ENGINEER.
 - c. Preliminary Schedule of Values, as submitted to ENGINEER.
 - d. Listing of identity and general scope of Work or supply of planned Subcontractors and Suppliers.
 - e. List of emergency contact information.

1.3 REQUIRED ATTENDEES

- A. Representative of each entity attending the conference shall be authorized to act on that entity's behalf.
- B. CONTRACTOR Attendance: Conference shall be attended by CONTRACTOR's:
 - 1. Project manager.
 - 2. Site superintendent
 - 3. Site Health and Safety Officer
 - 4. Project managers for major Subcontractors, and major equipment Suppliers as CONTRACTOR deems appropriate.
- C. Other attendees will be representatives of:
 - 1. DEPARTMENT.
 - 2. ENGINEER.
 - 3. Authorities having jurisdiction over the Work, if available.
 - 4. Utility owners, as applicable.
 - 5. Others as requested by DEPARTMENT, CONTRACTOR, or ENGINEER.

1.4 AGENDA

- A. Preliminary Agenda: Be prepared to discuss in detail the topics indicated below. Revisions, if any, to the agenda below will be furnished to required attendees prior to the pre-construction conference.
 - 1. Procedural and Administrative:
 - a. Personnel and Teams:
 - 1) Designation of roles and personnel.
 - 2) Limitations of authority of personnel, including personnel who will sign Contract modifications and make binding decisions.
 - 3) Subcontractors and Suppliers in attendance.
 - 4) Authorities having jurisdiction.
 - b. Procedures for communications and correspondence, including electronic communication protocols.
 - c. Copies of the Contract Documents and availability.
 - d. Subcontractors and Suppliers.

- 1) Lists of proposed Subcontractors and Suppliers.
- e. The Work and Scheduling:
 - 1) General scope of the Work.
 - 2) Contract Times, including Milestones (if any).
 - 3) Phasing and sequencing.
 - 4) Preliminary Progress Schedule.
 - 5) Critical path activities.
- f. Safety:
 - 1) Responsibility for safety.
 - 2) Contractor's safety representative.
 - 3) Emergency procedures and accident reporting.
 - 4) Emergency contact information.
 - 5) Confined space entry permits.
 - 6) Hazardous materials communication program.
 - 7) Impact of Project on public safety.
- g. Permits.
- h. Review of insurance requirements and insurance claims.
- i. Coordination:
 - 1) Project coordination, and coordination among contractors.
 - 2) Construction coordinator.
 - 3) Coordination with DEPARTMENT's operations.
 - 4) Progress meetings.
 - 5) Preliminary Schedule of Submittals.
 - 6) Procedures for furnishing and processing submittals.
 - 7) Work not eligible for payment until submittals are approved or accepted (as required).
 - 8) Construction photographic documentation.
- j. Substitutes and "Or-Equals":
 - 1) Product options.
 - 2) Procedures for proposing "or-equals".
 - 3) Procedures for proposing substitutes.
- k. Contract Modification Procedures
 - 1) Requests for interpretation
 - 2) Written clarifications
 - 3) Field Orders
 - 4) Proposal Requests
 - 5) Change Proposals
 - 6) Work Change Directives.
 - 7) Change Orders.
 - 8) Procedure for Claims and dispute resolution
- 1. Payment:
 - 1) DEPARTMENT's Project financing and funding, as applicable.
 - 2) DEPARTMENT's tax-exempt status.
 - 3) Preliminary Schedule of Values

- 4) Procedures for measuring for payment.
- 5) Retainage.
- 6) Progress payment procedures.
- 7) Prevailing wage rates and payrolls.
- m. Testing and inspections, including notification requirements.
- n. Disposal of demolition materials.
- o. Record documents.
- p. Preliminary Discussion of Contract Closeout:
 - 1) Procedures for Substantial Completion.
 - 2) Contract closeout requirements.
 - 3) Correction period.
 - 4) Duration of bonds and insurance.
- 2. Site Mobilization (if not covered in a separate meeting):
 - a. Working hours and overtime.
 - b. Field offices, storage trailers, and staging areas.
 - c. Temporary facilities.
 - d. Temporary utilities and limitations on utility consumption (where applicable).
 - e. Utility company coordination (if not done as a separate meeting).
 - f. Access to Site, access roads, and parking for construction vehicles.
 - g. Maintenance and protection of traffic.
 - h. Use of Site and premises.
 - i. Protection of property.
 - j. Security.
 - k. Temporary controls, such as sediment and erosion controls, noise controls, dust control, storm water controls, and other such measures.
 - 1. Site barriers and temporary fencing.
 - m. Storage of materials and equipment.
 - n. Reference points and benchmarks; surveys and layouts.
 - o. Site maintenance during the Project.
 - p. Cleaning and removal of trash and debris.
 - q. Restoration.
- 3. General discussion and questions.
- 4. Next meeting.
- 5. Site visit, if required.

PART 2 – PRODUCTS (NOT USED)

PART 3 – EXECUTION (NOT USED)

+ + END OF SECTION + +

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SPECIFICATION 01 31 19.23

PROGRESS MEETINGS

PART 1 – GENERAL

1.1 DESCRIPTION

- A. Scope:
 - 1. Progress meetings will be held throughout the Project. CONTRACTOR shall attend each progress meeting prepared to discuss in detail all items on the agenda.
 - 2. ENGINEER will preside at progress meetings and will prepare and distribute minutes of progress meetings to all meeting participants and others as requested.

1.2 PREPARATION FOR PROGRESS MEETINGS

- A. Date and Time:
 - 1. Regular Meetings: Bi-weekly, occurring twice per month, on a day and time agreeable to DEPARTMENT, ENGINEER, and CONTRACTOR.
 - 2. Other Meetings: Weekly meetings may be requested in accordance with the General Conditions, Section VIII, Article 5.36, to discuss and/or resolve matters concerning various elements of the Work.
- B. Location:
 - 1. CONTRACTOR's field office at the Site or other location mutually agreed upon by DEPARTMENT, CONTRACTOR, and ENGINEER.
- C. Handouts:
 - 1. CONTRACTOR shall bring to each progress meeting not less than eight copies of each of the following:
 - a. List of Work accomplished since the previous progress meeting.
 - b. Up-to-date Progress Schedule.
 - c. Up-to-date Schedule of Submittals.
 - d. Health and Safety/Community Air Monitoring Summary.
 - e. Quality control testing including analytical testing Summary.
 - f. Detailed "look-ahead" schedule of Work planned through the next progress meeting, with specific starting and ending dates for each activity, including shutdowns, deliveries of important materials and equipment, Milestones (if any), and important activities affecting the DEPARTMENT, Project, and Site.

- g. When applicable, list of upcoming, planned time off (with dates) for personnel with significant roles on the Project, and the designated contact person in their absence.
- 2. Engineer shall bring to each progress meeting not less than eight (-8-) copies of each of the following:
 - a. Up-to-date Schedule of Submittals including identification of outstanding critical submittals.
 - b. Up-to-date Status tracking logs for RFI, PCOs, and Field Orders.

1.3 REQUIRED ATTENDANCE

- A. Representatives present for each entity shall be authorized to act on that entity's behalf.
- B. Required Attendees:
 - 1. CONTRACTOR:
 - a. Project manager.
 - b. Site superintendent.
 - c. Safety representative.
 - d. When needed for the discussion of a particular agenda item, representatives of Subcontractors and Suppliers shall attend meetings.
 - 2. Construction coordinator (if any).
 - 3. ENGINEER:
 - a. Project manager or designated representative
 - b. Others as required by ENGINEER.
 - 4. Department 's representative(s), as required.
 - 5. Testing and inspection entities, as required.
 - 6. Others, as appropriate.

1.4 <u>AGENDA</u>

- A. Preliminary Agenda: Be prepared to discuss in detail the topics listed below. Revised agenda, if any, will be furnished to CONTRACTOR prior to first progress meeting. Progress meeting agenda may be modified by ENGINEER during the Project as required.
- B. Safety
- C. Review, comment, and amendment (if required) of minutes of previous progress meeting.
 - 3. Review of progress since the previous progress meeting.
 - 4. Planned progress through next progress meeting.
 - 5. Review of Progress Schedule
 - a. Contract Times, including Milestones (if any)
 - b. Critical path.
 - c. Schedules for fabrication and delivery of materials and equipment.

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- d. Corrective measures, if required.
- 6. Submittals:
 - a. Review status of critical submittals.
 - b. Review revisions to Schedule of Submittals.
- 7. Contract Modifications (Status Tracking Log as maintained by ENGINEER)
 - a. Requests for Interpretation.
 - b. Field Orders.
 - c. Proposed Change Orders.
 - d. Approved Change Orders.
 - e. Claims.
- 8. Applications for progress payments status
- 9. Problems, conflicts, and observations.
- 10. Quality standards, testing, and inspections.
- 11. Coordination between parties.
- 12. Site management issues, including access, security, maintenance and protection of traffic, maintenance, cleaning, and other Site issues.
- 13. Permits.
- 14. Construction photographic documentation, as applicable.
- 15. Record documents status, as applicable.
- 16. Punch list status, as applicable.
- 17. Other business.

PART 2 – PRODUCTS (NOT USED)

PART 3 – EXECUTION (NOT USED)

+ + END OF SECTION + +

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SPECIFICATION 01 31 26

ELECTRONIC COMMUNICATION PROTOCOLS

<u>PART 1 – GENERAL</u>

1.1 DESCRIPTION

- A. Scope:
 - 1. This Section establishes the procedures with which the parties will comply regarding transmission or exchange of electronic data for the Project.
 - 2. CONTRACTOR shall provide labor, materials, tools, equipment, services, utilities, and incidentals shown, specified, and required for complying with this Section throughout the Project.
 - 3. This Section does not supersede the General Conditions, as may be modified by the Supplementary Conditions, regarding transmitting of the Contract Documents to CONTRACTOR after the Effective Date of the Contract.
 - 4. In addition to the requirements of this Section, comply with requirements for exchange of electronic data in the following:
 - a. Specification 01 32 16, Progress Schedule.
 - b. Specification 01 32 33, Photographic Documentation.
 - c. Specification 01 33 00, Submittal Procedures.
 - d. Specification 01 78 39, Project Record Documents.
- B. Coordination:
 - 1. CONTRACTOR shall require all Subcontractors and Suppliers to comply with the electronic communication protocols established in this Section.
- C. Related Sections:
 - 1. Specification 01 32 16, Progress Schedule.
 - 2. Specification 01 32 33, Photographic Documentation.
 - 3. Specification 01 33 00, Submittal Procedures.
 - 4. Specification 01 78 39, Project Record Documents.

1.2 TERMINOLOGY

- A. The following words or terms are not defined but, when used in this Section, have the following meaning:
 - 1. "Electronic data" means information, communications, drawings, or designs created or stored for the Project in electronic or digital form.
 - 2. "Confidential information" means electronic data that the transmitting party has designated as confidential and clearly marked with an indication such as "Confidential", "Business Proprietary", or similar designation.

3. "Written" or "in writing" means any and all communications, including without limitation a notice, consent, or interpretation, prepared and sent to an address provided in the Contract Documents or otherwise agreed upon by the parties and ENGINEER using a transmission method sent forth in this Section that allows the recipient to print or store the communication. Communications transmitted electronically are presumed received when sent in conformance with this Paragraph 1.2.A.3.

1.3 TRANSMISSION OF ELECTRONIC DATA

- A. Transmission of electronic data constitutes a warrant by the transmitting party to the receiving party that the transmitting party is one or more of the following:
 - 1. The copyright owner of the electronic data.
 - 2. Has permission from the copyright owner to transmit the electronic data for its use on the Project.
 - 3. Is authorized to transmit confidential information.
- B. Receiving party agrees to keep confidential information confidential and not to disclose it to another person except to (1) its employees, (2) those who need to know the content of the confidential information to perform services or construction solely and exclusively for the Project, or (3) its Consultants, Contractors, Subcontractors, and Suppliers whose contracts include similar restrictions on the use of electronic data and confidential information.
- C. Transmitting party does not convey any right in the electronic data or in the software used to generate or transmit such data. Receiving party may not use electronic data unless permission to do so is provided in the Contract Documents, or in a separate license.
- D. Unless otherwise granted in a separate license, receiving party's use, modification, or further transmission of electronic data, as provided the Contract Documents, is specifically limited to the design and construction of the Project in accordance with this Section, and nothing contained in this Section conveys any other right to use the electronic data for any other purpose.
- E. Means of Transmitting Electronic Data: Unless otherwise indicated in Table 01 31 26-A of this Section or elsewhere in the Contract Documents, transmission of electronic data for the Project will generally be via:
 - 1. E-mail and files attached to e-mail. Maintain e-mail system capable of transmitting and receiving files not less than 20 megabytes (MB) file size.

1.4 ELECTRONIC DATA PROTOCOLS

A. Comply with the data formats, transmission methods, and permitted uses set forth in Table 01 31 26-A, Electronic Data Protocol Table, below, when transmitting or using electronic data on the Project. Where a row in the table has no indicated means of transmitting electronic data, use for such documents only printed copies transmitted to the receiving party via appropriate delivery method.

	Data	Transmitting	Transmission	Receiving	Permitted	
Electronic Data	Format	Party	Method	Party	Uses	Notes
1.4.A.1. Project communications						
General communications & correspondence	EM, PDF	D, E, C	EM, EMA	D, E, C	R	
Meeting notices and agendas	EM, PDF	Е	EM, EMA	D, C	R	
Meeting minutes	PDF	Е	EM, EMA	D, C	R	
1.4.A.2. Contractor's submittals to Engineer						
Shop Drawings	PDF	С	EMA	Е	M (1)	(1)
Product data	PDF	С	EMA	Е	M (1)	(1)
Informational and closeout submittals:	PDF	С	EMA	Е	M (1)	(1)
Documentation of delivery of maintenance	PDF	С	EMA	Е	M (1)	
materials submittals						
1.4.A.3. Engineer's return of reviewed submittals						
to Contractor						
Shop Drawings	PDF	Е	EMA	D, C	R	
Product data	PDF	Е	EMA	D, C	R	
Informational and closeout submittals:	PDF	Е	EMA	D, C	R	
Documentation of delivery of maintenance	PDF	Е	EMA	D, C	R	
materials submittals						
1.4.A.4. Contract Modifications Documents						
Requests for interpretation to Engineer	PDF	C, D	EMA	Е	M (1)	(1)
Engineer's interpretations (RFI responses)	PDF	Е	EMA	C, D	R	
Engineer's clarifications to Contractor	EM, PDF	Е	EM, EMA	C, D	R	
Engineer's issuance of Field Orders	PDF	Е	EMA	C, D	R	
Potential Change Orders	PDF	E, D	EMA	С	R	
Change Proposals – submitted to Engineer	PDF	С	EMA	D, E	S	
Change Proposals – Engineer's	PDF	Е	EMA	C, D		
response						
Change Orders (for Contractor signature)	PDF	Е	EMA	С	R	(2)
1.4.A.5. Applications for Payment						(3)
1.4.A.6. Claims and other notices						(4)
1.4.A.7. Closeout Documents						
Record drawings (As-Builts)	DWG and	С	EMA	E, D	M (5)	(5)
	PDF					Ň
Other record documents	PDF	С	EMA	E. D	M (5)	(5)
Contract closeout documents						

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TABLE 01 31 26-AELECTRONIC DATA PROTOCOL TABLE (E-MAIL ATTACHMENTS)

Batavia Iron and Metal Site NYSDEC Contract No. D011945 Site No. 819018 B. Key to Electronic Data Protocol Table:

Data Format:

EM	.msg, .htm, .txt, .rtf, e-mail text
W	.docx, Microsoft [®] Word 2007 or later
EX	.xlsx, Microsoft [®] Excel 2007 or later
PDF	.pdf. Portable Document Format
DWG	.dwg. Autodesk AutoCAD 2013 drawing.

Transmitting Party:

D	DEPARTMENT
C	CONTRACTOR

- C CONTRACTOR
- E ENGINEER

Transmission Method:

- EM Via e-mail
- EMA As an attachment to an e-mail transmission
- CD Delivered via compact disc
- PW Posted to Project website
- FTP FTP transfer to receiving FTP server

Receiving Party:

D	DEPARTMENT

- C CONTRACTOR
- E ENGINEER

Permitted Uses:

- S Store and view only
- R Reproduce and distribute
- I Integrate (incorporate additional electronic data without modifying data received)
- M Modify as required to fulfill obligations for the Project

Notes:

(1) Modifications by ENGINEER to CONTRACTOR's submittals and requests for interpretations are limited to printing out, marking-up, and adding comment sheets.

- (2) May be distributed only to affected Subcontractors and Suppliers. Print out, sign document, and return executed ("wet") signatures to ENGINEER after Department Approval.
- (3) Submit printed Applications for Payment with original ("wet") signatures.
- (4) Submit notices, including Claims, in accordance with the notice provisions of the General Conditions.
- (5) Submit record drawings in native CAD format indicated when CONTRACTOR has executed ENGINEER's standard agreement for release of electronic files. In addition, always submit record drawings as a PDF file. Comply with requirements of Section 01 78 39, Project Record Documents.

PART 2 – PRODUCTS (NOT USED)

PART 3 – EXECUTION (NOT USED)

++ END OF SECTION ++

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SPECIFICATION 01 32 16

PROGRESS SCHEDULE

<u>PART 1 – GENERAL</u>

1.1 DESCRIPTION

- A. Scope:
 - 1. Prepare and submit Progress Schedules in accordance with the General Conditions (as may be modified by the Supplementary Conditions) and this Section, unless otherwise accepted by ENGINEER.
 - 2. Maintain and update Progress Schedules. Submit updated Progress Schedules as specified in this Section unless otherwise directed by ENGINEER.
 - 3. ENGINEER's acceptance of the Progress Schedule, and comments or opinions concerning the activities in the Progress Schedule shall not control CONTRACTOR's independent judgment relative to means, methods, techniques, sequences, and procedures of construction. CONTRACTOR is solely responsible for complying with the Contract Times.

1.2 SUBMITTALS

- A. Informational Submittals: Submit the following:
 - 1. Interim Schedule:
 - a. Submit an interim schedule indicating CONTRACTOR's anticipated schedule for the Work for the first three (3) months in detail and for the remainder of the Work in summary form in accordance with Article 1.4 of the General Conditions.
 - 2. Progress Schedules:
 - a. Submit preliminary Progress Schedule in accordance with the General Conditions, Section VIII, Article 1.6. Submit in accordance with Specification 01 33 00, Submittal Procedures and Specification 01 31 26, Electronic Communication Protocols.
 - b. Preliminary Progress Schedule shall consist of a CPM Diagram and schedule narrative.
 - c. After making revisions in accordance with ENGINEER's comments on the preliminary Progress Schedule, submit the Progress Schedule in accordance with the General Conditions. Submit in accordance with Specification 01 33 00, Submittal Procedures. This schedule will constitute the Baseline Schedule.
 - d. Bi-monthly (every two weeks) project schedules with a 2-week look ahead shall be submitted in Excel format.

- e. Submit updated Baseline Progress Schedule with schedule narrative as part of the monthly Contractor's Application for Payment. If a Progress Schedule remains unchanged from one payment application to the next, submit a written statement to that effect.
- f. Furnish each Progress Schedule submittal with letter of transmittal complying with requirements of Specification 01 33 00, Submittal Procedures, and specifically indicating the following:
 - 1) Listing of activities and dates that have changed since the previous Progress Schedule submittal.
 - 2) Discussion of problems causing delays, anticipated duration of delays, and proposed countermeasures.
- 3. Recovery Schedules: Submit in accordance with this Section, and other provisions of the General Conditions.
- 4. Accelerated Schedules may be submitted in accordance with General Conditions Section VIII, Article 5.3
- 5. Adjusted Project Schedules shall be submitted in accordance with General Conditions Section VIII, Article 5.6
- 6. If CONTRACTOR doesn't intend to perform Work on the date with the Contract Time commences, CONTRACTOR must notify the DEPARTMENT as soon as possible in writing when work will commence. An interim schedule shall be submitted in accordance with Section VIII, Article 1.4. Within 20 days after starting work at the site, an updated Baseline Project Schedule shall be provided to the ENGINEER for review.
- 7. ENGINEER reviewed project schedules shall be managed as Record Documentation.

1.3 PROGRESS SCHEDULE FORMAT AND CONTENT

A. Format:

- 1. Type:
 - Gantt chart prepared using software such as Microsoft Project 2007 or later edition, Oracle Primavera P6, Oracle Primavera Project Planner – P3, or similar software.
- 2. Sheet Size: 11x17, unless otherwise accepted by ENGINEER.
- 3. Time Scale: Indicate first date of each work week.
- 4. Organization:
 - a. Indicate on the separate Schedule of Submittals dates for submitting and reviewing Shop Drawings, Samples, and other submittals.
 - b. Group deliveries of materials and equipment into a separate sub-schedule that is part of the Progress Schedule.
 - c. Group construction into a separate sub-schedule (that is part of the Progress Schedule) by activity.
 - d. Group critical activities that dictate the rate of progress (the "critical path") into a separate sub-schedule that is part of the Progress Schedule.

Clearly indicate the critical path on the Progress Schedule. At minimum activities should align with Bid Form.

- e. Organize each sub-schedule item in accordance with the approved Schedule of Values.
- 5. Activity Designations: Indicate title and related Specification Section number.
- 6. Deliver schedules in both working file and PDF formats with the accompanying narrative.
- B. Content: Progress Schedules shall indicate the following:
 - 1. Dates for shop-testing, as applicable.
 - 2. Delivery dates for materials and equipment to be incorporated into the Work.
 - 3. Dates for beginning and completing each phase of the Work by activity and by trade.
 - 4. Dates for start-up and check-out, field-testing, and instruction of operations and maintenance personnel.
 - 5. Dates corresponding to the Contract Times, and planned completion date associated with each Milestone (if any), Substantial Completion, and readiness for final payment.
- C. Coordinate the Progress Schedule with the Schedule of Submittals.
- D. Progress Schedules anticipating achievement of Substantial Completion ahead of the corresponding Contract Time(s), but with zero Contract Float as opposed to positive Contract Float, will be returned as either "Approved as Corrected," "Approved as Corrected Resubmit", "Revise and Resubmit", or "Not Approved." Submittals stamped as "Approved as Corrected" will indicate ENGINEER's approval thereof, subject to the limitations set forth, including ENGINEER's computation of the appropriate Contract Float implied by the anticipated early completion.
- Any float identified in the approved (or approved as noted) Baseline Schedule will be E. available for the project. The use of float shall be documented in each progress payment. If the CONTRACTOR disputes the availability of Contract Float and proposes that compensation for delay shall be measured from the anticipated early completion date(s) as opposed to the corresponding Contract Time(s), CONTRACTOR agrees and understands that said proposal will represent a request to the DEPARTMENT that the approved Progress Schedule be evaluated as a substitute Progress Schedule for the purposes of changing the Contract Time(s) to those supported by the CONTRACTOR's early-completion Progress Schedule. Evaluation of that substitution will be in accordance with the requirements of the General Conditions and will require additional supporting data that explains and substantiates the basis of the anticipated Early Schedules. Such supporting data shall consist of: 1) notice of any scheduled Work during hours other than normal work hours, 2) information related to rates of production including pertinent quantities, crew sizes, man-day requirements, major items of equipment, etc., for Critical and other

significant Activities, 3) express or implied contingency allowances figured in for Activities for such factors as weather, delays, activities of DEPARTMENT and ENGINEER to respond to reports of differing site conditions, and other relevant factors. Acceptance of that substitution will be evidenced by a Change Order shortening the Contract Time, or Contract Times accordingly, but maintaining the Contract Price and the provisions for liquidated and actual damages set forth in the Agreement.

1.4 RECOVERY SCHEDULES

- A. Recovery Schedules General:
 - 1. When updated Progress Schedule indicates that the ability to comply with the Contract Times falls five or more days behind schedule, and the delay is within the control of CONTRACTOR, and there is no corresponding Change Order or Work Change Directive to support an extension of the Contract Times, CONTRACTOR shall prepare and submit a Progress Schedule demonstrating CONTRACTOR's plan to accelerate the Work to achieve compliance with the Contract Times ("recovery schedule") for ENGINEER's acceptance.
 - 2. Submit recovery schedule within five days after submittal of updated Progress Schedule where need for recovery schedule is indicated.
- B. Implementation of Recovery Schedule:
 - 1. At no additional cost to DEPARMENT, do one or more of the following: furnish additional resources (additional workers, additional construction equipment, increased work hours or additional shifts, and other resources), provide suitable materials, expedite procurement of materials and equipment to be incorporated into the Work, and other measures necessary to complete the Work within the Contract Times.
 - 2. Upon acceptance of recovery schedule by ENGINEER, incorporate recovery schedule into the next Progress Schedule update.
- C. Lack of Action:
 - 1. CONTRACTOR's refusal, failure, or neglect to take appropriate recovery action, or to submit a recovery schedule, shall constitute reasonable evidence that CONTRACTOR is not prosecuting the Work or separable part thereof with the diligence that will ensure completion within the Contract Times. Such lack of action shall constitute sufficient basis for Department to exercise remedies available to Department under the General Conditions.

PART 2 – PRODUCTS (NOT USED)

PART 3 – EXECUTION (NOT USED)

++ END OF SECTION ++

01 32 16 - 4

SPECIFICATION 01 32 33

PHOTOGRAPHIC DOCUMENTATION

PART 1 – GENERAL

1.1 DESCRIPTION

A. Scope:

- 1. Furnish photographic documentation for the following:
 - a. Pre-construction.
 - b. Construction progress.
 - c. Final.

B. Image Quality:

- 1. Photographic documentation shall be in color.
- 2. Photographic images shall be suitably staged and set up ("framed"), focused, and shall have adequate lighting to illuminate the Work and conditions that are the subject of the photograph.

1.2 QUALITY ASSURANCE

A. At the Site, CONTRACTOR shall be responsible for photo documenting daily activity, the photographic subjects, views, and angles will vary with progress of the Work.

1.3 SUBMITTALS

- A. Informational Submittals: Submit the following:
 - 1. Pre-construction Photographic Documentation: Submit acceptable preconstruction photographic documentation (prints and digital files) prior to mobilizing to and disturbing the Site. Submit pre-construction photographic documentation not later than the first Application for Payment, unless other schedule for pre-construction photographic documentation is accepted by ENGINEER.
 - 2. Construction Progress Photographic Documentation: Submit acceptable construction progress photographic documentation (prints and digital files) not less-often than monthly. Progress Photographic Documentation shall include aerial photography using a drone. Submit with each Application for Payment, unless otherwise agreed to by ENGINEER.
 - 3. Qualifications Statements:
 - a. When requested by ENGINEER, prior to starting photographic documentation, submit photographer qualifications and record of

experience and drone pilot license/certification. List of construction photography experience shall include the following for each project:

- 1) Project name and location
- 2) Nature of construction.
- 3) Photographer's client with contract information.
- 4) Approximate duration of photographer's services.
- C. Closeout Submittals: Submit the following:
 - 1. Final Photographic Documentation: Submit acceptable final photographic documentation (prints and digital files) prior to requesting the final inspection by ENGINEER, not otherwise provided under Paragraph A (2.).
 - 2. Photographic Documentation shall be considered part of the Record Documentation.

1.4 PHOTOGRAPHIC DOCUMENTATION – GENERAL

- A. Digital Files of Photographs:
 - 1. For each photograph taken, furnish high-quality digital image in "JPG" file format compatible with Microsoft Windows 7 and higher operating systems.
 - 2. Image resolution shall be sufficient for clear, high-resolution prints. Minimum resolution shall be 150 dots per inch (dpi). Minimum size of digital images shall be equal to specified print size.
 - 3. Do not imprint date and time in the image.
 - 4. Electronic image filename shall describe the image; do not submit filenames automatically created by digital camera. For example, an acceptable electronic filename would be, "Dewatering Building Looking West at Centrifuge No. 2.jpg".
 - 5. Form of Digital Submittal Images on temporary storage devices or through file transfer:
 - a. Submit digital files on compact discs (CD).
 - b. Submit three copies of each temporary storage device with digital files of photographic images.
 - c. Include file index for each file transfer containing photographic documentation:
 - 1) Date(s) photographs were taken.
 - 2) Name of Owner.
 - 3) Name of the Site.
 - 4) Project name.
 - 5) Photographer name and address.

1.5 PRE-CONSTRUCTION PHOTOGRAPHIC DOCUMENTATION

A. Pre-construction Photographic Documentation:

- 1. Obtain and submit pre-construction photographic documentation to record Site conditions prior to construction. Photographs shall document work areas of all prime contracts under the Project.
- 2. Pre-construction photographs are not part of required number of construction progress photographs specified in Article 1.6 of this Section.
- 3. Furnish pre-construction video of all work areas included in all prime contracts on the Project, including indoor and outdoor work areas and staging areas.
- B. If disagreement arises on the condition of the Site and insufficient pre-construction photographic documentation was submitted prior to the disagreement, restore the grounds or area in question to extent directed by ENGINEER and to satisfaction of ENGINEER.

1.6 CONSTRUCTION PROGRESS PHOTOGRAPHIC DOCUMENTATION

- A. Progress Photographs:
 - 1. Take photographs not less often than twice per month and monthly for drone footage.
 - 2. Take not less than 20 photographs each time photographer is at the Site.
 - 3. Obtain and submit interior and exterior photographic documentation of each structure in the work area as directed by ENGINEER at the time photographic documentation is taken.

1.7 FINAL PHOTOGRAPHIC DOCUMENTATION

- A. Final Photographs:
 - 1. Take photographs at time and day acceptable to ENGINEER. Work documented in final (record) photographs shall be generally complete, including major features of completed work, as determined by the ENGINEER and DEPARTMENT.

PART 2 – PRODUCTS (NOT USED)

PART 3 – EXECUTION (NOT USED)

+ + END OF SECTION + +

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SPECIFICATION 01 33 00

SUBMITTAL PROCEDURES

PART 1 – GENERAL

1.1 DESCRIPTION

- A. Scope:
 - 1. CONTRACTOR shall prepare and furnish submittals in accordance with the General Conditions, Section VIII, Article 5.24 through 5.30.
 - 2. Provide submittals well in advance of need for the material or equipment, or procedure (as applicable), in the Work and with ample time required for delivery of materials and equipment and to implement procedures following ENGINEER's approval or acceptance of the associated submittal. Work covered by a submittal will not be included in progress payments until approval or acceptance of related submittals has been obtained in accordance with the Contract Documents.
 - 3. CONTRACTOR is responsible for dimensions to be confirmed and corrected at the Site; quantities; information pertaining solely to fabrication processes; means, methods, sequences, procedures, and techniques of construction; safety precautions and programs incident thereto; and for coordinating the work of all trades.
 - 4. CONTRACTOR's signature of submittal's stamp and letter of transmittal shall be CONTRACTOR's representation that CONTRACTOR has complied with his obligations under the Contract Documents relative to that submittal. ENGINEER and OWNER shall be entitled to rely on such representations by CONTRACTOR.
 - 5. Provisions of the General Conditions, as may be modified by the Supplementary Conditions, apply to all CONTRACTOR-furnished submittals required by the Contract Documents, regardless of whether such submittals are other than Shop Drawings or Samples.
- B. Samples:
 - 1. Submittal of Samples shall comply with the General Conditions, as may be modified by the Supplementary Conditions, this Section, and the Specifications Section in which the Sample is specified.
 - 2. Furnish at the same time those Samples and submittals that are related to the same element of the Work or Specifications Section. ENGINEER will not review submittals without associated Samples and will not review Samples without associated submittals.
 - 3. Samples shall clearly illustrate functional characteristics of materials, all related parts and attachments, and full range of color, texture, pattern, and materials.

- C. Restrictions on Quantity of Submittals and Compensation of OWNER:
 - 1. CONTRACTOR shall furnish required submittals with sufficient information and accuracy to obtain required approval or acceptance of submittal by ENGINEER with not more than the number of resubmittals indicated in the General Conditions (as may be modified by the Supplementary Conditions).
 - 2. Total number of CONTRACTOR's submittals shall not exceed 25 percent above the total number of first-time submittals indicated in the Schedule of Submittals initially accepted by ENGINEER in accordance with the General Conditions. ENGINEER will record ENGINEER's time for reviewing submittals of Shop Drawings, Samples, and other submittals and items requiring approval or acceptance, beyond the quantity of first-time submittals indicated in the Schedule of Submittals initially accepted by ENGINEER, and CONTRACTOR shall reimburse OWNER for ENGINEER's charges for such time.
 - 3. In the event that CONTRACTOR requests a substitution for a previously approved item, Contractor shall reimburse OWNER for ENGINEER's charges for such time unless the need for such substitution is beyond the control of CONTRACTOR.
 - 4. OWNER may impose set-offs against CONTRACTOR for the costs for which CONTRACTOR is to reimburse or compensate OWNER, in accordance with the General Conditions.

1.2 TYPES OF SUBMITTALS

- A. Submittal types are classified as follows: 1) Action Submittals, 2) Informational Submittals, 3) Closeout Submittals, and 4) Maintenance Material submittals. Type of each required submittal is designated in the respective Specifications Sections; when type of submittal is not designated in the associated Specification Section, submittal will be classified as follows:
 - 1. Action Submittals include:
 - a. Shop Drawings.
 - b. Product data.
 - c. Delegated design submittals, which include documents prepared, sealed, and signed by a design professional retained by CONTRACTOR, Subcontractor, or Supplier for materials and equipment to be incorporated into the completed Work. Delegated design submittals do not include submittals related to temporary construction unless specified otherwise in the related Specifications Section. Delegated design submittals include: design drawings, design data including calculations, specifications, certifications, and other submittals prepared by such design professional.
 - d. Samples.
 - e. Testing plans, procedures, and testing limitations.

01 33 00 - 2

- 2. Informational Submittals include:
 - a. Certificates.
 - b. Design data not sealed and signed by a design professional retained by CONTRACTOR, Subcontractor, or Supplier.
 - c. Pre-construction test and evaluation reports, such as reports on pilot testing, subsurface investigations, testing for a potential Hazardous Environmental Condition, and similar reports.
 - d. Supplier instructions, including installation data, and instructions for handling, starting-up, and troubleshooting.
 - e. Source quality control submittals (other than testing plans, procedures, and testing limitations), including results of shop testing.
 - f. Field or Site quality control submittals (other than testing plans, procedures, and testing limitations), including results of operating and acceptability tests at the Site.
 - g. Supplier reports.
 - h. Sustainable design submittals (other than sustainable design closeout documentation).
 - i. Special procedure submittals, including plans for shutdowns and tieins and other procedural submittals.
 - j. Qualifications statements.
 - k. Administrative submittals including:
 - 1) Progress Schedules.
 - 2) Schedules of Submittals.
 - 3) Schedules of Values.
 - 4) Photographic documentation.
 - 5) Coordination drawings, when submittal of such is required.
 - 6) Copies of permits obtained by CONTRACTOR.
 - 7) Field engineering reports, survey data, and similar information.
- 3. Closeout Submittals include:
 - a. Maintenance contracts.
 - b. Operations and maintenance data.
 - c. Bonds, such as special maintenance bonds and bonds for a specific material, equipment item, or system.
 - d. Warranty documentation.
 - e. Record documentation.
 - f. Sustainable design closeout documentation.
 - g. Software.
 - h. Keying.
- 4. Maintenance Material Submittals include:
 - a. Spare parts.
 - b. Extra stock materials.
 - c. Tools.
- 5. When type of submittal is not specified and is not included in the list above, request an interpretation from ENGINEER and ENGINEER will determine

the type of submittal.

- B. Not Included in this Section: Administrative and procedural requirements for following are covered elsewhere in the Contract Documents:
 - 1. Requests for interpretations of the Contract Documents.
 - 2. Change Orders, Work Change Directives, and Field Orders.
 - 3. Applications for Payment
 - 4. Reports, documentation, and permit applications required to be furnished by CONTRACTOR to authorities having jurisdiction.
- C. In accordance with Section III, Article 5, the Apparent Low Bidder shall, at a minimum, submit the following with the required five-day submittal package, 5 days following the Notice of Apparent Low Bidder.
 - 1. Health and Safety Plan
 - a. Health and Safety.
 - b. Decontamination of Equipment and Personnel.
 - c. Contingency Measures.
 - d. Community Air Monitoring.
 - e. Odor Control Plan.
 - 2. Work Plan at minimum shall include:
 - a. Procedures for adequate and safe excavation of soils and materials including a contingency plan detailing procedures and methods to be employed to prevent, contain, and recover spills during the work.
 - b. Description of equipment to be used on site with appropriate safety devices needed to undertake the remediation of the site.
 - c. Identification of the permitted treatment, storage, and disposal facilities (TSDF) proposed to receive liquid or solid wastes to be transported offsite.
 - d. Identification of permits required to conduct the work.
 - e. Worksite layout showing, at a minimum, equipment and material staging areas, trailers, decontamination station, and staging procedures.
 - f. Detailed construction drawing(s) of the proposed decontamination station.
 - g. Procedures for excavating, handling, storing, and placing soils.
 - h. Procedures for handling liquid wastes and groundwater.
 - i. Provisions for control of fugitive air emissions and dust control.
 - j. Other requirements necessary to provide security, staging, sampling, testing, removal, and disposal of wastes.
 - k. Procedures for completing any other major aspect of the work including:1) Sampling and Quality Control Plan.
 - 2) Sequencing of Work.
 - 3) Soil Erosion and Sedimentation Control Measures.
 - 4) Monitoring Well Decommissioning and Installation Plan.
 - 5) Transportation Plans.

- 6) Site Security.
- 7) Miscellaneous Requirements.
- D. Required for Notice of Intent to Award and Notice to Proceed. The CONTRACTOR shall submit the following plans for the Work by the time of the Notice to Proceed, following receipt of the Notice to Intent to Award:
 - 1. Bid Breakdown of items reflecting adjusted contract amount as reflected in Section III- Bidding Information and Requirements, Article 12- Bid Breakdown.
 - 2. Six (6) Executed copies of the contract agreements with original signatures.
 - 3. Performance Bond and Insurances.
 - 4. M/WBE waiver form if contract goals are not expected to be met.
 - 5. Completed NYS Office of State Comptroller Substitute Form W-9.
 - 6. Service-Disabled Veteran-Owned Business SDVOB Utilization Plan on Form SDVOC 100.
 - 7. Acceptable 5-day submittal package as described in Paragraph 1.2.C above.
 - 8. Authorizing resolution for (Authority to sign Contract on behalf of the firm).
- E. Submittals following Notice to Proceed. Major submittal requirements identified in other sections of the Specifications are listed below, however, this list is not inclusive of all submittals required elsewhere:
 - 1. Final plans, engineered approved plans, as described in Paragraph 1.2.C.
 - 2. Interim progress schedule, schedule of values, and technical submittals detailed in the first three months of the progress schedule
 - 3. All other technical submittals required by the contract in accordance with the approved Submittal Registry and in accordance with General Conditions, Articles 5.24 through 5.30.
 - 4. All other submittals as required by the Supplementary Specifications applicable to the Work being performed or as requested by the ENGINEER.

1.3 REQUIREMENTS FOR SCHEDULE OF SUBMITTALS

- A. Informational Submittals: Submit the following:
 - 1. Schedule of Submittals:
 - a. Timing:
 - 1) Furnish submittal within time frames indicated in the Contract Documents.
 - 2) Submit updated Schedule of Submittals with each submittal of the updated Progress Schedule.
 - b. Content: In accordance with the General Conditions, as may be modified by the Supplementary Conditions, and this Section. Requirements for content of preliminary Schedule of Submittals and subsequent submittals of the Schedule of Submittals are identical. Identify on Schedule of Submittals all submittals required in the Contract Documents. Updates of

Schedule of Submittals shall show scheduled dates and actual dates for completed tasks. Indicate submittals that are on the Project's critical path. Indicate the following for each submittal:

1) Date by which submittal will be received by ENGINEER.

- 2) Whether submittal will be for a substitution or "or-equal". Procedures for requesting approval of substitutes and "or-equals" are specified in the General Conditions, Section 01 25 00, Substitution Procedures, and Section 01 62 00, Product Options (for "or-equals").
- 3) Date by which ENGINEER's response is required. Not less than 14 days shall be allowed for ENGINEER's review, starting upon ENGINEER's actual receipt of each submittal. Allow increased time for large or complex submittals.
- 4) For submittals for materials or equipment, date by which material or equipment must be at the Site to avoid delaying the Work and to avoid delaying the work of other contractors, if any.
- c. Prepare Schedule of Submittals using same software, and in same format, specified for Progress Schedules in Section 01 32 16, Progress Schedule.
- d. Coordinate Schedule of Submittals with the Progress Schedule.
- e. Schedule of Submittals that is not compatible with the Progress Schedule, or that does not indicate submittals on the Project's critical path, or that that places extraordinary demands on ENGINEER for time and resources, is unacceptable. Do not include submittals not required by the Contract Documents.
- f. In preparing Schedule of Submittals:
 - 1) Considering the nature and complexity of each submittal, allow sufficient time for review and revision.
 - 2) Reasonable time shall be allowed for: ENGINEER's review and processing of submittals, for submittals to be revised and resubmitted, and for returning submittals to CONTRACTOR.
 - 3) Identify and accordingly schedule submittals that are expected to have long anticipated review times.

1.4 PROCEDURE FOR SUBMITTALS

- A. Submittal Identification System: Use the following submittal identification system, consisting of submittal number and review cycle number.
 - 1. Submittal Number: Shall be separate and unique number correlating to each individual submittal required. Assign submittal numbers as follows:
 - a. First part of submittal number shall be the applicable Specifications Section number, followed by a hyphen.
 - b. Second part of submittal number shall be a three-digit number (sequentially numbered from 001 through 999) assigned to each separate and unique submittal furnished under the associated Specifications Section.

- c. Typical submittal number for the third submittal furnished for Section 40 05 19, Ductile Iron Process Pipe, would be "40 05 19-003".
- 2. Review Cycle Number: Shall be a number indicating the initial submittal or resubmittal associated with each submittal number:
 - a. "01" = Initial (first) submittal.
 - b. "02" = Second submittal (e.g., first re-submittal).
 - c. "03" = Third submittal (e.g., second re-submittal).
- 3. Examples:

	Submittal Identification		
Example Description	Submittal No.	Review Cycle	
Initial (first) review cycle of the third submittal provided under Section 40 05 19, Ductile Iron Process Pipe	40 05 19-003-	01	
Second review cycle (first re-submittal) of third submittal provided under Section 40 05 19, Ductile Iron Process Pipe	40 05 19-003-	02	

- B. Letter of Transmittal for Submittals:
 - 1. Furnish separate letter of transmittal with each submittal. Each submittal shall be for one Specifications Section.
 - 2. At beginning of each letter of transmittal, include a reference heading indicating: CONTRACTOR's name, OWNER's name, Project name, Contract designation, transmittal number, and submittal number.
 - 3. For submittals with proposed deviations from requirements of the Contract Documents, letter of transmittal shall specifically describe each proposed variation.
- C. Contractor's Review and Stamp:
 - 1. Contractor's Review: Before transmitting submittals to ENGINEER, review submittals to:
 - a. ensure proper coordination of the Work;
 - b. determine that each submittal is in accordance with CONTRACTOR's desires;
 - c. verify that submittal contains sufficient information for ENGINEER to determine compliance with the Contract Documents.
 - 2. Incomplete or inadequate submittals will be returned without review.
 - 3. Contractor's Stamp and Signature:
 - a. Each submittal furnished shall bear CONTRACTOR's stamp of approval and signature, as evidence that submittal has been reviewed by CONTRACTOR and verified as complete and in accordance with the Contract Documents.
 - b. Submittals without CONTRACTOR's stamp and signature will be returned without review. Signatures that appear to be computer-

generated will be regarded as unsigned and the associated submittal will be returned without review.

c. CONTRACTOR's stamp shall contain the following:

"Pro	oject Name:
	tractor's Name:
Con	tract Designation:
Dat	e:
	Reference
Sub	mittal Title:
	cifications:
1	Section:
	Page No.:
	Paragraph No.:
Dra	wing No.: of
	ation of Work:
	mittal No. and Review Cycle:
	reby certify that the Contractor has satisfied Contractor's obligations under the tract Documents relative to Contractor's review and approval of this submittal.
App	proved for Contractor by:"
Sub 1.	mittal Marking and Organization: Mark on each page of submittal and each individual component submitted with submittal number and applicable Specifications paragraph. Mark each page of
2.	each submittal with the submittal page number. Arrange submittal information in same order as requirements are written in the associated Specifications Section.
3.	Each Shop Drawing sheet shall have title block with complete identifying information satisfactory to ENGINEER.
4.	Package together submittals for the same Specifications Section. Do not furnish required information piecemeal.

E. Format of Submittal and Recipients:

D.

1. Action Submittals and Informational Submittals: Furnish in accordance with Table 01 33 00-A, except that submittals of Samples shall be as specified elsewhere in this Section:

	Address for Deliveries	Contact Person	E-mail Address	Format*	No. of Printed Copies	
a.	Engineer: (TBD)	(TBD)	(TBD)	Е	Zero	
b.	Resident Project Representative: At	(TBD)	(TBD)	E & P	One	
	the Site.					
* Format: E = Electronic files; P = Printed copies.						
TB	TBD = To Be Determined					

TABLE 01 33 00-A: SUBMITTAL CONTACTSAND REQUIRED FORMAT

- 2. Samples:
 - a. Securely label or tag Samples with submittal identification number. Label or tag shall include clear space at least four inches by four inches in size for affixing ENGINEER's review stamp. Label or tag shall not cover, conceal, or alter appearance or features of Sample. Label or tag shall not be separated from the Sample.
 - b. Submit quantity of Samples required in Specifications. If quantity of Samples is not indicated in the associated Specifications Section, furnish not less than two identical Samples of each item required for ENGINEER's approval. Samples will not be returned to CONTRACTOR. If CONTRACTOR requires Sample(s) for CONTRACTOR's use, so advise ENGINEER in writing and furnish additional Sample(s). CONTRACTOR is responsible for furnishing, shipping, and transporting additional Samples.
 - c. Deliver one Sample to ENGINEER's field office at the Site. Deliver balance of Samples to ENGINEER at address indicated in Table 01 33 00-A, unless otherwise directed by ENGINEER.
- 3. Closeout Submittals:
 - a. Furnish the following Closeout Submittals in accordance with Table 01 33 00-A: maintenance contracts; bonds for specific materials, equipment, or systems; warranty documentation; and sustainable design closeout documentation. On documents such as maintenance contracts and bonds, include on each document furnished original ("wet") signature of entity issuing said document. When original "wet" signatures are required, furnish such submittals in printed form and electronic form to ENGINEER, and to other entities furnish as indicated in Table 01 33 00-A.
 - b. Record Documentation: Submit in accordance with Specification 01 78 39, Project Record Documentation.
 - c. Software: Submit number of copies required in Specifications Section

where the software is specified. If number of copies is not specified, provide two copies on compact disc in addition to software loaded on OWNER's computer(s) or microprocessor(s).

- 4. Maintenance Material Submittals: For spare parts, extra stock materials, and tools, furnish quantity of items specified in associated Specifications Section.
- F. Electronic Submittals:
 - 1. Format: Electronic files shall be in "portable document format" (.PDF). Files shall be electronically searchable.
 - 2. Organization and Content:
 - a. Each electronic submittal shall be one file; do not divide individual submittals into multiple files each.
 - b. When submittal is large or contains multiple parts, furnish PDF file with bookmark for each section of submittal.
 - c. Content shall be identical to printed submittal. First page of electronic submittal shall be CONTRACTOR's letter of transmittal.
 - 3. Quality and Legibility: Electronic submittal files shall be made from the original and shall be clear and legible. Do not submit scans of faxed copies. Electronic file shall be full size of original, printed documents. Properly orient all pages for reading on a computer screen.
 - 4. Provide sufficient Internet service and e-mail capability for CONTRACTOR's use in transferring electronic submittals, receiving responses to electronic submittals, and associated electronic correspondence. Check not less than once per day for distribution of electronic submittals, electronic responses to submittal, and electronic correspondence related to submittals.
 - 5. Submitting Electronic Files:
 - a. Transmit electronic files in accordance with Specification 01 31 26, Electronic Communication Protocols.
- G. Distribution:
 - 1. Distribution of ENGINEER's Response via Electronic Files: Upon completion of ENGINEER's review, electronic submittal response will be distributed by ENGINEER to
 - a. CONTRACTOR.
 - b. Other prime contractors.
 - c. OWNER.
 - d. Resident Project Representative (RPR).
 - e. ENGINEER's file.
- H. Resubmittals: Refer to the General Conditions for requirements regarding resubmitting required submittals.
- I. CONTRACTOR shall furnish required submittals with complete information and accuracy in order to achieve required approval of an item within two submittals. All

costs to ENGINEER involved with subsequent submittals of Shop Drawings, Samples or other items requiring approval, will be back-charged to CONTRACTOR, at the rate equal to the ENGINEER's charges to the DEPARTMENT under the terms of the ENGINEER's agreement with the DEPARTMENT. In the event CONTRACTOR fails to pay such costs within 30 days after receipt of an invoice from DEPARTMENT, funds will be withheld from payment requests and at the completion of Work, a Change Order or proposed Change Order will be issued incorporating the unpaid amount, and DEPARTMENT will be entitled to an appropriate decrease in Contract price. In the event that CONTRACTOR requests a substitution for a previously approved item, all of ENGINEER'S costs in the reviewing and approval of the substitution will be back-charged to CONTRACTOR unless the need for such substitution is beyond the control of CONTRACTOR.

- J. Shop Drawings shall be submitted well in advance of the need for the material or equipment for construction and with ample allowance for the time required to make delivery of material or equipment after data covering such is approved. CONTRACTOR shall assume the risk for all materials or equipment which are fabricated or delivered prior to the approval of Shop Drawings. Materials or equipment will not be included in periodic progress payments until approval thereof has been obtained in the specified manner.
- K. ENGINEER will review and approve or disapprove Shop Drawings and samples within 14 days of receipt from CONTRACTOR. The ENGINEER will process all submittals promptly, but a reasonable time should be allowed for this, for the Shop Drawings being revised and resubmitted, and for time required to return the approved Shop Drawings to CONTRACTOR.
- L. It is CONTRACTOR'S responsibility to review submittals made by his suppliers and Subcontractors before transmitting them to ENGINEER to assure proper coordination of the Work and to determine that each submittal is in accordance with his desires and that there is sufficient information about materials and equipment for ENGINEER to determine compliance with the Contract Documents. Incomplete or inadequate submittals will be returned for revision without review.
- M. Any related Work performed or equipment installed without an "Approved" or "Approved as Noted" Shop Drawing will be at the sole responsibility of the CONTRACTOR.

1.5 ENGINEER'S REVIEW

A. Timing: ENGINEER's review will conform with timing indicated in the Schedule of Submittals accepted by ENGINEER.

- B. Submittals not required by the Contract Documents will not be reviewed by ENGINEER and will not be recorded in ENGINEER's submittal log. All printed copies of such submittals will be returned to CONTRACTOR. Electronic copies of such submittals, if any, will not be retained by ENGINEER.
- C. Action Submittals, Results of ENGINEER's Review: Each submittal will be given one of the following dispositions by ENGINEER:
 - 1. Approved: Upon return of submittal marked "Approved", order, ship, or fabricate materials and equipment included in the submittal (pending ENGINEER's approval or acceptance, as applicable, of source quality control submittals) or otherwise proceed with the Work in accordance with the submittal and the Contract Documents.
 - 2. Approved as Corrected: Upon return of submittal marked "Approved as Corrected", order, ship, or fabricate materials and equipment included in the submittal (pending ENGINEER's approval or acceptance, as applicable, of source quality control submittals) or otherwise proceed with the Work in accordance with the submittal and the Contract Documents, and in accordance with the corrections indicated in the ENGINEER's submittal response.
 - 3. Approved as Corrected Resubmit: Upon return of submittal marked "Approved as Corrected – Resubmit", order, ship, or fabricate materials and equipment included in the submittal (pending ENGINEER's approval or acceptance, as applicable, of source quality control submittals) or otherwise proceed with the Work in accordance with the submittal and the Contract Documents, and in accordance with corrections indicated in ENGINEER's submittal response. Furnish to ENGINEER record re-submittal with all corrections made. Receipt of corrected re-submittal is required before materials or equipment covered in the submittal will be eligible for payment.
 - 4. Revise and Resubmit: Upon return of submittal marked "Revise and Resubmit", make the corrections indicated and re-submit to ENGINEER for approval.
 - 5. Not Approved: This disposition indicates material or equipment that cannot be approved. "Not Approved" disposition may also be applied to submittals that are incomplete. Upon return of submittal marked "Not Approved", repeat initial submittal procedure utilizing approvable material or equipment, with a complete submittal clearly indicating all information required.
- D. Informational Submittals, Results of ENGINEER's Review:
 - Each submittal will be given one of the following dispositions:
 - a. Accepted: Information included in submittal complies with the applicable requirements of the Contract Documents and is acceptable. No further action by CONTRACTOR is required relative to this submittal, and the Work covered by the submittal may proceed, and materials and equipment with submittals with this disposition may be shipped or operated, as applicable.

1.

- b. Not Accepted: Submittal does not indicate compliance with applicable requirements of the Contract Documents and is not acceptable. Revise submittal and re-submit to indicate acceptability and compliance with the Contract Documents.
- E. Closeout Submittals, Results of ENGINEER's Review: Dispositions and meanings are the same as specified for Informational Submittals. When acceptable, Closeout Submittals will not receive a written response from ENGINEER. Disposition as "accepted" will be recorded in ENGINEER's submittal log. When Closeout Submittal is not acceptable, ENGINEER will provide written response to CONTRACTOR.
- F. Maintenance Material Submittals, Results of ENGINEER's Review: Dispositions and meanings are the same as specified for Informational Submittals. When acceptable, Maintenance Material Submittals will not receive a written response from ENGINEER. Disposition as "accepted" will be recorded in ENGINEER's submittal log. When Maintenance Material Submittal is not acceptable, ENGINEER will provide written response to CONTRACTOR, and CONTRACTOR is responsible for costs associated with transporting and handling of maintenance materials until compliance with the Contract Documents is achieved.

PART 2 – PRODUCTS (NOT USED)

PART 3 – EXECUTION (NOT USED)

+ + END OF SECTION + +

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No.	Specification Section	Specification Sub-Part	Submittal Item	Schedule
1	00001	5b	Table to be completed for later submission, Preliminary Bar Chart Diagram, Schedule of Values, and supporting narrative	Within 15 days of Apparent Low Bidder notification
2	00001	5c	Interim Bar Chart Diagram, Schedule of Values, Schedule of Shop Drawing Submissions, and supporting narrative	Prior to commencing construction
3	00001	5d	Detailed Bar Chart Diagram, Schedule of Values, Schedule of Shop Drawing Submissions, and supporting narrative	To accompany each request for progress payment
4	00001	5h	As-Built Bar Chart Diagram and Schedule Reconciliation Report	To accompany request for final payment
5	01 11 00	1.03A	Construction Work Plan (Plan of Operations)	30 days Prior to commencing construction
6	01 25 00	1.2B	Requests for Substitution	14 days prior to date approval is required
7	01 29 73	1.2A	Schedule of Values	Within 10 days of notice of award
8	01 31 13	1.02A	Subcontractor List Including Disposal Facilities and the type and quantity of waste that will be shipped to them.	Within 15 days of notice of award and every time a new subcontractor is employed
9	01 31 13	1.02A	Vendor Responsibility Questionnaire's	At least two weeks prior to using any subcontractor valued at greater than \$10,000.
10	01 31 13	1.02A	Project Schedule Status Reports	Biweekly 48 hours prior to project meetings
11	01 31 13	1.02A	Project Schedule Updates	Prior to updating project schedule
12	01 32 16	1.02A	Interim Project Schedule	Prior to mobilization to Site
13	01 32 33	1.03A	Pre-Construction Photographic Documentation	Prior to mobilizing to and disturbing Site

No.	Specification Section	Specification Sub-Part	Submittal Item	Schedule	
14	01 32 33	1.03A	Construction Progress Photographic Documentation	Not less often than monthly	
15	01 32 33	1.03A	Photographic Documentation Qualification Statements	As requested by ENGINEER	
16	01 32 33	1.03B	Final Photographic Documentation	Prior to requesting final inspection by ENGINEER	
17	01 35 29	1.3A	Site Specific Health and Safety Plan (SSHASP)	Seven days prior to pre- construction conference, or 30 days prior to scheduled mobilization at the Site	
18	01 35 29	1.3A	Job Safety Analysis	Each action required for the Work that is not covered is Contractors SSHASP	
19	01 35 29	1.3A	Health and Safety and Accident Reports	Once reports are made available	
20	01 35 29	1.3A	SSHASP Preparer Qualifications	As part of SSHASP	
21	01 35 29	1.5C	Community Protection Program	As part of SSHASP	
22	01 35 29	1.7A	Daily Health and Safety Field Reports	Once reports are made available	
23	01 35 29	1.7B	Daily Air Monitoring Results	As part of Daily Health and Safety Field Report and available for Engineer to review	
24	01 35 33	1.6A	COVID-19 Management Plan	As a supplement to Contractor's Health and Safety Plan	
25	01 35 43.13	1.1A	Hazardous Materials Management Plan (HMMP)	As part of SSHASP	
26	01 35 43.13	1.3A	Proposed Constituents of Concern for use at Site	As part of HMMP	
27	01 35 43.13	1.3A	Permits for storing, handling, using, transporting, and disposing of Materials Containing Constituents of Concern	As part of HMMP	
28	01 41 00	1.4A	Copies of approved permits	Prior to commencing construction associated with the permit	

Specification Specification No. **Submittal Item** Schedule Section **Sub-Part** 14 days prior to commencing 01 45 00 CONTRACTOR Quality Control (CQC) Plan 29 1.4A construction 30 01 45 00 1.4A Quality Assurance Project Plan Part of CQC Plan Weekly CQC Reports, Test Reports, Deficiency 31 01 45 00 1.4B As soon as the report is available Reports, and/or Project Summaries 01 45 28 As soon as Results are available 32 1.4A Preliminary Laboratory Analysis Results 01 45 28 1.4B Sampling and Analysis Reports 33 As soon as Reports are available 34 01 45 28 1.4C Sample Locations Once the survey is completed 35 1.4A 01 45 29.13 Sampling Plan Prior to commencing construction 36 01 45 29.13 1.4A **Ouality Assurance Project Plan (OAPP)** Prior to commencing construction Once results become available 37 01 45 29.13 1.4A **Test Reports** from approved laboratory 1.4A Submit for each laboratory utilized 38 01 45 29.13 **Qualifications Statements** Staging Areas, Shop drawings for the proposed trailer and facilities location and installation 01 51 05 1.2G Prior to commencing work 39 including the layout of foundations, staging areas, approaches, and instrumentation Shop drawings for proposed decontamination 40 01 51 05 1.2H Prior to commencing work trailer and/or facilities Field Office shop drawings/figures (location, 1.2A size, interior and exterior layout, office 41 01 52 11 Prior to staging field office to Site equipment, etc.) 01 55 26 Traffic Control Plan As part of Construction Work Plan 1.04A 42 01 57 33 43 1.2A Temporary Site Fencing drawings As part of Construction Work Plan 01 57 33 1.2A Security firm experience and personnel resumes 44 Electronic of Site Security log and watchman Monthly and include as part of 45 01 57 53 1.2A **Project Record Documents** logs

No.	Specification Section	Specification Sub-Part	Submittal Item	Schedule
46	01 57 33	1.2B	Employee Information and list of personnel where security badges have been issued	Prior to commencing work and Update within 24 hours of change to Employee Information or Site access status
47	01 58 00	1.3A	Shop Drawings indicating layout of project signs	As part of Construction Work Plan
48	01 71 23	1.2A	Certified elevations or locations of Work	Within two days of completion of surveying work
49	01 71 23	1.2A	Field Engineering Daily Reports	By 9:00AM after the associated work day
50	01 71 23	1.2A	Survey work procedures	As part of the Construction Work Plan, not less than 10 days prior to beginning survey work
51	01 71 23	1.2A	Qualification Statements of Field Engineer and Surveyor	Not less than 10 days prior to start of survey Work
52	01 71 23	1.02A & 1.5C	Results of the field verification survey and results of the comparison with the Construction Contract Drawings	Prior to commencing excavation
53	01 71 23	1.2A & 1.5E	Survey data in support of payment quantity measurements	Prior to or along with payment requisitions
54	01 71 23	1.2A & 1.5F	Final as-built survey drawings in support of establishing Record Documents	At project completion along with request for final payment
55	01 76 50	1.4A	Nuisance Controls and Management Plan	As Part of Contractor's Health and Safety Plan
56	01 76 50	1.4C	Nuisance Monitoring Reports	As soon as reports are available
57	01 77 19	1.2A	Acceptance of Inspections, Field QC tests, final operations and maintenance manuals	Prior to request for Substantial Completion

No.	Specification Section	Specification Sub-Part	Submittal Item	Schedule
58	01 77 19	1.2A	Request for Substantial Completion	ENGINEERS Acceptance of Inspections, Field QC tests, final operations, and maintenance manuals
59	01 77 19	1.3	Request for Final Inspection	Punch list work items have been completed
60	01 77 23	1.1D	Request for Final Payment	Once all final inspection has been completed
61	01 78 39	1.2A	Project record documents/Certifications	At project completion along with request for final payment
62	01 92 13	1.3B	Winter Shutdown Plan	As part of the Construction Work Plan
63	01 92 13	1.3C	Winter Shutdown Inspection Forms	Within 10 days of completed Inspections
64	02 41 13	1.03A	Demolition Laboratory Reports	As required by waste characterization program
65	02 51 00	1.03A	Proposed method(s) of decontamination	As part of the Construction Work Plan
66	02 51 00	1.03B	Decontamination Pad Shop Drawings	14 days prior to date approval is required
67	02 61 13	1.03A	Plan for management of removed or generated waste	As part of the Construction Work Plan
68	02 72 00	1.03A	Construction Water Management Plan	As part of the Construction Work Plan
69	02 72 00	1.03B	Analytical test reports	As soon as the report is available
70	02 81 00	1.04A	Means and methods for transportation and disposal of all wastes	As part of the Construction Work Plan

No.	Specification Section	Specification Sub-Part	Submittal Item	Schedule
71	02 81 00	1.04B	Video record of existing and final conditions of haul roads	At project completion along with request for final payment
72	02 81 00	1.04C	Sample Bill of Lading and Uniform Hazardous Waste Manifest	14 days prior to date approval is required
73	02 81 00	1.04D	Completed and signed Bill of Lading and Manifests for all transported waste loads	As work progresses and as an attachment in support of payment requisitions
74	02 81 00	1.04E	Certified weight slips for each load transported to the disposal facility	As work progresses and as an attachment in support of payment requisitions
75	02 81 00	1.04F	Weekly transportation reports	Weekly as work progresses
76	31 00 00	1.04A	Borrow source information: • Name; and • Location	14 days prior to date approval is required
77	31 00 00	1.04B	Contractor's Quality Control Testing Laboratory(ies) information: • Name and Qualifications	7 days following Notice to Proceed
78	31 00 00	1.04D	Soil and Stone Materials Borrow Source Test Reports – Geotechnical	14 days prior to date approval is required
79	31 00 00	1.04C	Description of equipment and methods proposed for use in compaction	
80	31 00 00	1.04D	Soil Fill and Backfill Materials Field Moisture/Density (Compaction) Test Reports	As soon as the report is available
81	31 00 00	1.07D	Analytical results for off-site Soil Fill and Backfill materials for Unrestricted Soil Cleanup Objectives as described in 6 NYCRR 375, Table 375-6.8(a)	14 days prior to date approval is required and prior to bring material onsite
82	31 00 00	1.04E	Current copies of materials tracking sheets	Daily

No.	Specification Section	Specification Sub-Part	Submittal Item	Schedule
83	31 01 50	1.05A	Shoring Plan	At least 14 days prior to beginning excavation work
84	31 09 13	1.05A	Daily Geotechnical Monitoring Reports	By 9:00AM the next working day
85	31 09 13	1.05A	Pre- and Post- Remedial Construction Survey report	No later than 5 business days from completion of survey event
86	31 09 13	1.05B	Geotechnical Instrumentation and Monitoring Plan	As part of Construction Work Plan
87	31 23 19	1.03A	Dewatering Discharge and/or Disposal Methods	As part of Construction Work Plan
88	31 25 00	1.05A	Manufacturer's Product Data for all erosion and sediment control products	14 days prior to date approval is required
89	32 12 16	1.04A	Job Mix Formula (JMF), Tack Coat/Joint Sealant, Production Quality Control	14 days prior to HMA operations,10 days prior to HMA operations,and daily respectively
90	32 31 13	1.04A	Manufacturers technical data and installation instructions for chain link fences and gates and Portland cement	As part of Construction Work Plan
No.	Specification Section	Specification Sub-Part	Submittal Item	Schedule
91	32 92 26	1.04A	Topsoil Source Testing Reports	For each source used
92	32 92 26	1.04B	Topsoil Source Certification	
93	32 92 26	1.04C	Grass Seed Vendor's Certificate	14 days prior to date approval is required
94	32 92 26	1.04D	Fertilizer Manufacturer's Product Data showing chemical analysis and percent composition	14 days prior to date approval is required
95	32 93 00	1.04A+B	Product certificates, Qualifications Data	
96	32 93 00	1.04D	Planting Schedule	As Part of Construction Work Plan

No.	Specification Section	Specification Sub-Part	Submittal Item	Schedule	
97	32 93 00	1.04E	Maintenance Instructions	Before expiration of required maintenance periods	
98	33 11 53	1.04A	Well Abandonment Completion Form	After well abandonment has been completed	
99	34 78 13	1.04A	Truck Scale Shop Drawings and Product Data	As part of Construction Work Plan	
100	34 78 13	1.04B	Site and Source Quality Control Records	Once records become available	
101	34 78 13	1.04C	Truck Scale Operation and Maintenance Manuals	Prior to Use	
102	34 78 13	1.04D	Load Cell Fluid Specification	As part of Construction Work Plan	

Note: The CONTRACTOR is responsible for all submittals indicated in the Contract Documents, whether listed in the Submittal Summary Table or not.

++ END OF SECTION ++

SPECIFICATION 01 35 29

CONTRACTOR'S HEALTH AND SAFETY PLAN

PART 1 – GENERAL

1.1 DESCRIPTION

A. Scope:

- 1. CONTRACTOR shall prepare and maintain a written Site-Specific Health and Safety Plan (SSHASP), and conduct all construction activities in safe manner that avoids:
 - a. injuries to employees, Subcontractors, and other persons with an interest at or near the Site.
 - b. employee exposures to health hazards above occupational limits established by Laws or Regulations, American Conference of Governmental Industrial Hygienists (ACGIH), and Nuclear Regulatory Commission (NRC), as applicable.
 - c. exposure of the public and DEPARTMENT's employees to air contaminants above levels established for public exposure by the USEPA, NRC, and by other authorities having jurisdiction at the Site.
 - d. significant increases in concentrations of contaminants in soil, water, or sediment near the Site; or
 - e. violations of OSHA Regulations, or other Laws or Regulations.
- 2. The CONTRACTOR is solely responsible and liable for the health and safety of all on-site personnel and any off-site community potentially impacted by the remediation.
- 3. This section describes the minimum health and safety requirements for this project including the requirements for the development of a written Health and Safety Plan (HASP). All on-site workers must comply with the requirements of the HASP. The CONTRACTOR's HASP must comply with all applicable federal and state regulations protecting human health and the environment from the hazards posed by activities during this site remediation. The HASP is a required deliverable for this project. The HASP will be reviewed by the ENGINEER. The CONTRACTOR will resubmit the HASP, addressing all review comments from the ENGINEER. The CONTRACTOR shall not initiate on-site work in contaminated areas until an acceptable HASP addressing all comments has been developed.
- 4. Consistent disregard for the provision of these health and safety specifications shall be deemed just and sufficient cause for immediate stoppage of work and/or termination of the Contract or any Subcontract without compromise or prejudice to the rights of the DEPARTMENT or the ENGINEER.
- 5. The safety and health of the public and project personnel and the protection of the environment will take precedence over cost and schedule considerations for all project work. Any additional costs will be considered only after the cause for

suspension of operations is addressed and work is resumed. The ENGINEER's onsite representative and the CONTRACTOR's Superintendent will be kept appraised, by the Safety Officer, of conditions which may adversely affect the safety and health of project personnel and the community. The ENGINEER may stop work for health and safety reasons. If work is suspended for health and/or safety reasons, it shall not resume until approval is obtained from the ENGINEER. The cost of work stoppage due to health and safety is the responsibility of the CONTRACTOR under this Contract.

- B. Related Sections:
 - 1. Specification 01 35 43.13, Environmental Procedures for Hazardous Materials.

1.2 QUALITY ASSURANCE

- A. Qualifications:
 - 1. Preparer of SSHASP:
 - a. Engage a Certified Industrial Hygienist (CIH), accredited by the American Board of Industrial Hygiene, or Certified Safety Professional certified by the Board of Certified Safety Professionals, to prepare or supervise preparation of SSHASP. The CIH must have a minimum of two years of experience in hazardous waste site remediations or related industries and have a working knowledge of federal and state occupational health and safety regulations.
 - b. SSHASP preparer shall be thoroughly familiar with: (i) Laws and Regulations and industry standards of safety and protection relating to health and safety pertaining to the Work; (ii) the requirements of the Contract Documents relative to health, safety, and protection; (iii) health and safety hazards associated with the Work and appropriate protections therefor; and (iv) CONTRACTOR's and DEPARTMENT's safety programs.
 - c. SSHASP preparer shall have previously prepared site-specific health and safety plans for not less than five construction projects similar in nature, scope, and complexity to the Work.
 - d. Submit preparer's qualifications with SSHASP.
 - 2. Safety Officer:
 - a. The designated Safety Officer (SO) must have, at a minimum, two years of experience in the remediation of hazardous waste sites or related field experience. The SO must have formal training in health and safety and be conversant with federal and state regulations governing occupational health and safety. The SO must be certified in CPR and first aid and have experience and training in the implementation of personal protection and air monitoring programs. The SO must have "hands-on" experience with the operation and maintenance of real-time air monitoring equipment and collection of airborne PCB samples using NIOSH Method 5503. The SO must be thoroughly knowledgeable of the operation and maintenance of air-purifying respirators

(APR) and supplied-air respirators (SAR) including SCBA and airline respirators.

- 3. Health and Safety Technicians:
 - a. The Health and Safety Technician (HST) must have one year of hazardous waste site or related experience and be knowledgeable of applicable occupational health and safety regulations. The HST must be certified in CPR and first aid. The HST will be under direct supervision of the SO during onsite work. The HST must be familiar with the operations, maintenance and calibration of monitoring equipment used in this remediation. An HST will be assigned to each work crew or task in potentially hazardous areas.
- B. Regulatory Requirements: Laws and Regulations applying to the Work under this Section include, but are not limited to:
 - 1. 29 CFR 1904 (OSHA), Recording and Reporting Occupational Injuries and Illnesses.
 - 2. 29 CFR 1910 (OSHA), Occupational Safety and Health Standards.
 - 3. 29 CFR 1926 (OSHA), Safety and Health Regulations for Construction.
 - 4. 49 CFR 171.8, Transportation, Definitions and Abbreviations.
 - 5. 40 CFR 261.3, 264, and 265, Resource Conservation and Recovery Act (RCRA).

1.3 SUBMITTALS

- A. Informational Submittals: Submit the following:
 - 1. CONTRACTOR's SSHASP, in accordance with this Section. Submit within times indicated in Article 1.4 of this Section.
 - 2. Job safety analyses (JSA) submittals for each action required for the Work that is not covered in CONTRACTOR's SSHASP.
 - 3. Reports:
 - a. Health and safety reports.
 - b. Accident reports.
 - 4. Qualifications Statements:
 - a. Qualifications for SSHASP preparer, including copy of valid, applicable certifications.

1.4 SSHASP AND JSA SUBMITTALS

- A. Timing of Submittals:
 - 1. Submit SSHASP the sooner of: seven days prior to pre-construction conference, or 30 days prior to CONTRACTOR's scheduled mobilization at the Site.
 - 2. Do not perform Work at the Site until written SSHASP has been accepted by ENGINEER.
 - 3. When an element of the Work or work activity is not covered by the SSHASP, prepare and submit a JSA and obtain ENGINEER's acceptance of JSA before performing the work activity or activities covered by such JSA.
 - 4. Delays in the Work Associated with Submittal or Review of SSHASP and JSAs:

- a. Notwithstanding other provisions of the Contract Documents, changes in the Contract Price or Contract Times will not be authorized due to delay by CONTRACTOR in developing, submitting, revising, or obtaining acceptance of the SSHASP.
- B. Limitations of ENGINEER's Review of SSHASP and JSAs:
 - 1. ENGINEER's review and acceptance of SSHASP and JSAs (if any) will be only to determine if the topics covered in SSHASP comply with the Contract Documents and specific requirements of safety documents referenced therein (such as DEPARTMENT's safety programs, if any).
 - 2. ENGINEER's review and acceptance will not extend to safety measures, means, methods, techniques, procedures of construction, or whether representations made in the SSHASP and JSAs (if any) comply with Laws and Regulations, or standards of good practice.
 - 3. CONTRACTOR's responsibility for safety and protection at the Site shall be as indicated in the Contract Documents. Nothing associated with ENGINEER's review or acceptance of SSHASP or JSAs will create or imply any obligation by ENGINEER to oversee or become, in any way, responsible for CONTRACTOR's safety obligations under the Contract Documents.

1.5 CONTRACTOR'S HEALTH AND SAFETY PROGRAM

- A. General:
 - 1. Known prior use(s) of the Site are indicated.
 - 2. The Site is classified as hazardous waste site. Presence of Constituents of Concern (if any), where known to DEPARTMENT and ENGINEER, are indicated in the reports and drawings (if any) of such Hazardous Environmental Conditions listed in the Supplementary Conditions and/or Limited Site Data.
 - 3. Each employer working at the Site shall develop and implement a written HASP for their employees and other individuals for whom such employer is responsible.
 - 4. When applicable (including when the Site includes one or more Hazardous Environmental Conditions), HASP shall comply with 29 CFR 1904, 29 CFR 1910, 29 CFR 1926, and other Laws and Regulations.
 - 5. Include in the HASP requirements for complying with DEPARTMENT's Sitespecific hazard/emergency response plans, if any. During the Project, comply with DEPARTMENT's hazard/emergency response plans.
 - 6. The SSHASP is a deliverable product of this project. The ENGINEER will review and comment on the CONTRACTOR'S HASP. Agreed upon responses to all comments will be incorporated into the final copy of the HASP. The HASP shall govern all work performed for this contract. The HASP shall address, at a minimum, the items in accordance with 29 CFR 1910.120(I)(2).
- B. Location:
 - 1. Retain at the Site a copy of complete SSHASP, JSAs (if any), and related information.

- 2. Retain copy of SSHASP, JSAs (if any), and related information at CONTRACTOR's project office.
- 3. Throughout the Project, update as necessary all copies of SSHASP, JSAs, and related information.
- 4. Copies of SSHASP, JSAs, and other related information shall be made available to CONTRACTOR's employees, Subcontractors, Suppliers, DEPARTMENT, and ENGINEER immediately upon request.
- C. SSHASP Content: SSHASP shall address and include the following:
 - 1. Address safety and health hazards of each phase of operations at the Site and shall include requirements and procedures for employee protection.
 - 2. CONTRACTOR's organizational structure and other information required by Paragraph 1.5.D of this Section.
 - 3. Comprehensive work plan.
 - 4. Job safety and health risk or hazard analysis for each task and operation found in the work plan.
 - 5. Employee training assignments including copies of OSHA 40-hour, 24-hour supervised field activities, eight-hour supervisors, and eight-hour refresher training certificates for each CONTRACTOR and Subcontractor employee assigned to the Project.
 - 6. Personal protective equipment (PPE) to be used by employees for each task and activity performed. Include respirator fit test certificates for CONTRACTOR and Subcontractor employees assigned to the Project.
 - 7. Medical Surveillance Requirements: Medical clearance certificates for all CONTRACTOR and Subcontractor employees assigned to the Project. The physical examination shall also include but not be limited to the following minimum requirements:
 - a. Complete blood profile;
 - b. Blood chemistry to include: chloride, CO2, potassium, sodium, BUN, glucose, globulin, total protein, albumin, calcium, cholesterol, alkaline phosphatase, triglycerides, uric acid, creatinine, total bilirubin, phosphorous, lactic dehydrogenase, SGPT, SGOT;
 - c. Urine analysis;
 - d. "Hands on" physical examination to include a complete evaluation of all organ systems including any follow-up appointments deemed necessary in the clinical judgement of the examining physician to monitor any chronic conditions or abnormalities;
 - e. Electrocardiogram;
 - f. Chest X-ray (if recommended by examining physician in accordance with good medical practice);
 - g. Pulmonary function;
 - h. Audiometry To be performed by a certified technician, audiologist, or physician. The range of 500 to 8,000 hertz should be assessed.

- i. Vision screening Use a battery (TITMUS) instrument to screen the individual's ability to see test targets well at 13 to 16 inches and at 20 feet. Tests should include an assessment of muscle balance, eye coordination, depth perception, peripheral vision, color discrimination, and tonometry.
- j. Tetanus booster shot (if no inoculation has been received within the last five years); and
- k. Complete medical history.
- 8. Frequency and types of air monitoring, personnel monitoring, and environmental sampling techniques and instrumentation to be used, including methods of maintenance and calibration of monitoring and sampling equipment.
- 9. Site control measures, including procedures for:
 - a. preventing trespassing;
 - b. preventing unqualified or unprotected workers from entering restricted areas;
 - c. preventing "tracking" of contaminants out of the Site;
 - d. maintaining log of employees at the Site and visitors to the Site;
 - e. communicating routes of escape and gathering points.
 - f. ensuring safe handling of Constituents of Concern during the Work, including excavating, handling, loading, and transporting activities. Include procedures for ensuring safety when working in or proximity to Hazardous Environmental Conditions,
 - g. delineating "hot" (e.g., contaminated), "cold", and support zones;
 - h. locating personnel and equipment decontamination zones; and
 - i. decontamination.
 - j. first aid facilities including fully equipped first air station and routine replenishment of supplies.
 - k. sanitary facilities including potable drinking water, washing facilities and portable toilets.
 - 1. The CONTRACTOR shall be responsible for maintaining a log of security incidents and visitor access granted.
 - m. The CONTRACTOR shall require all personnel having access to the project site to sign-in and sign-out and shall keep a record of all site access.
 - n. All approved visitors to the site shall be briefed by the SO on safety and security, provided with temporary identification and safety equipment, and escorted throughout their visit.
 - o. Site visitors shall not be permitted to enter the hazardous work zone unless approved by the DEPARTMENT.
 - p. Project sites shall be posted, "Warning Hazardous Work Area, Do Not Enter Unless Authorized," and access restricted by the use of a snow fence or equal at a minimum. Warning signs shall be posted at a minimum of every 500 feet.
- 10. Plan for safe and effective responses to emergencies, including necessary PPE and other equipment.
- 11. Community Protection Plan consisting of the following:

- a. Develop, as part of this HASP, a Community Protection Plan (CPP). The CPP shall outline those steps to be implemented to protect the health and safety of surrounding human population and the environment.
- b. Air Monitoring consisting of the following:
 - 1) As part of the Air Monitoring Program, use real-time monitoring and documentation sampling as described in the Subpart "Air Monitoring Program" of this section to determine if off-site emission, as a result of site work, poses a threat to the surrounding community.
 - 2) Provide real-time air monitoring for volatile compounds and particulate levels as the perimeter of the work area as necessary. Include the following:
 - a) Volatile organic compounds must be monitored at the downwind perimeter of the work area on a continuous basis. If total organic vapor levels exceed 5 ppm above background, work activities shall be halted and monitoring continued under the provisions of a Vapor Emission Response Plan. All readings shall be recorded and be available for State (DEC & DOH) personnel to review.
 - b) Particulates shall be continuously monitored at the 4 documentation sampling stations for a total of 4 dust monitors. If the downwind particulate level is 150 ug/m3 greater than the upwind particulate level, dust suppression techniques shall be employed. All readings shall be recorded and be available for State (DEC & DOH) personnel to review.
- c. Vapor Emission Response Plan consisting of the following:
 - 1) If the ambient air concentration of organic vapors exceed 5 ppm above background at the perimeter of the work area, activities shall be halted and monitoring continued. If the organic vapor level decreases below 5 ppm above background, work activities may resume. If the organic vapor levels are greater than 5 ppm over background but less than 225 ppm over background at the perimeter of the work area, activities may resume provided the organic vapor level 200 feet downwind of the work area or half the distance to the nearest residential or commercial structure, whichever is less, is below 5 ppm over background.
 - 2) If the organic vapor level is above 25 ppm at the perimeter of the work area, activities shall be shutdown. When work shutdown occurs, downwind air monitoring as directed by the SO shall be implemented to ensure that vapor emission does not impact the nearest residential or commercial structure at levels exceeding those specified in the Major Vapor Emission section.
- d. Major Vapor Emission consisting of the following:
 - 1) If any organic levels greater than 5 ppm over background are identified 200 feet downwind from the work area or half the distance to the nearest residential or commercial property, whichever is less, all work activities shall be halted.

- 2) If, following the cessation of the work activities, or as the result of an emergency, organic levels persist above 5 ppm above background 200 feet downwind or half the distance to the nearest residential or commercial property from the work area, the air quality shall be monitored within 20 feet of the perimeter of the nearest residential or commercial structure (20 Foot Zone).
- 3) If efforts to abate the emission source are unsuccessful and if organic vapor levels are approaching 5 ppm above background and persist for more than 30 minutes in the 20 Foot Zone, the Major Vapor Emission Response Plan shall automatically be placed into effect.
- 4) However, the Major Vapor Emission Response Plan shall be immediately placed into effect if organic vapor levels are greater than 10 ppm above background levels.
- e. Major Vapor Emission Response Plan consisting of the following:
 - 1) Upon activation, the following shall be undertaken:
 - a) All Emergency Response Contracts as listed in the Subpart titled "Emergency Response and Contingency Plan" paragraph titled "Telephone List."
 - b) The local police authorities shall immediately be contacted by the SO and advised of the situation. Coordinate with local officials to arrange for notification and evacuation of the surrounding community.
 - c) Frequent air monitoring shall be conducted at 30 minutes intervals within the 20 Foot Zone. If two successive readings below action levels are measured, air monitoring say be halted or modified by the SO.
 - 2) The Air Monitoring Program shall include real-time air monitoring and shall be conducted at the perimeter of the site. Particulates should be continuously monitored upwind, downwind and within the Exclusion Zone at temporary particulate monitoring stations. If the downwind particulate level is more than 2.5 times greater than the upwind particulate level and greater than 150 ug/m3, then dust suppression techniques shall be employed. This is a general action level. Additionally, airborne PCB samples shall be collected at a frequency describe in Attachment 1 of this specification and compared against site-specific action levels identified in the attachment. All readings shall be recorded and be available for ENGINEER, DEPARTMENT, and NYSDOH personnel to review.
 - 3) Coordinate with local officials to arrange for notification and evacuation of the surrounding community in the event that off-site emissions pose a threat.
- f. Odor control consisting of the following:
 - 1) Foam active work areas to reduce odors if odor complaints are received from nearby residences during site activities. Odor masking agents or other odor control methods may be used subject to ENGINEER's review. Continue odor suppression during each day that odor complaints are received.

- g. Off-Site Spill Response consisting of the following:
 - Produce as part of the HASP a Spill Response Plan, also coordinated with local officials, in case of an off-site spill of either liquid or solid wastes. The plan shall include transportation routes and times, as well as the minimum requirements set forth in the Subpart titled "On-Site Spill Containment Plan." The driver shall be supplied with Material Safety Data Sheets (MSDSs), a 24-hour emergency phone number, and instructions for reporting emergencies to local agencies and the project site.
- 12. Spill containment program. Comply with Part 1.4.C of Specification 01 35 43.13, Environmental Procedures for Hazardous Materials.
- 13. Requirements for complying with Specification 01 35 43.13, Environmental Procedures for Hazardous Materials.
- D. CONTRACTOR's Organizational Structure:
 - 1. Organizational structure portion of the SSHASP shall refer to or incorporate information on specific chain of command and specify the overall responsibilities of supervisors and employees, and shall include the following:
 - a. Name and contact information for CONTRACTOR's "competent person(s)" for various work-related activities.
 - b. Name and contact information for CONTRACTOR's safety representative.
 - c. Designation of general supervisor who has responsibility and authority to direct operations involving handling of Constituents of Concern and work in or near Hazardous Environmental Conditions.
 - d. Other personnel required for operations involving Constituents of Concern and Hazardous Environmental Conditions and emergency response, and general functions and responsibilities of each.
 - e. Lines of authority, responsibility, and communication.
 - 2. Review and update organizational structure as necessary to reflect current status of work activities on the Project and status of personnel.
- E. Work Plan:
 - 1. Comprehensive work plan portion of SSHASP shall refer to or incorporate information on the following:
 - a. Tasks and objectives of work activities, onsite operations, and logistics and resources necessary to achieve such tasks and objectives.
 - b. Anticipated activities and CONTRACTOR's normal operating procedures.
 - c. Personnel and equipment requirements for implementing the work plan.

1.6 ACCIDENT REPORTING AND INVESTIGATION

- A. Comply with 29 CFR 1904.29, including using OSHA Forms 300, 300A, and 301 (or equivalent) to document all accidents that result in bodily injury.
- B. Accident Report Submittals:

- 1. Submit copies of completed accident reports to DEPARTMENT and ENGINEER within 24 hours of the accident.
- 2. By the tenth day of each month, submit monthly summary of accident reports from the prior month. Monthly summary report shall indicate for each accident the root cause and descriptions of corrective actions to reduce the probability of similar accidents.
- 3. Submit to DEPARTMENT and ENGINEER a copy of all accident and health or safety hazard reports received from OSHA or other authority having jurisdiction within 24 hours of CONTRACTOR's receipt.
- C. Based upon results of accident investigation, modify the SSHASP as required by changing tasks or procedures to prevent reoccurrence of accident.
- D. Post current copy of CONTRACTOR's OSHA 300A report, Summary of Work-related Injuries and Illnesses, at conspicuous place at the Site during period of February 1 through April 30 of each year.

1.7 DAILY HEALTH AND SAFETY FIELD REPORTS

- A. Submit to DEPARTMENT and ENGINEER daily health and safety field reports.
- B. Content of CONTRACTOR's Daily Health and Safety Field Reports: Reports shall include, but not necessarily be limited to, the following:
 - 1. Weather conditions.
 - 2. Delays encountered in construction
 - 3. Acknowledgment of deficiencies noted along with corrective actions taken on current and previous deficiencies.
 - 4. Daily health and safety air monitoring results (when air monitoring is performed).
 - 5. Documentation of instrument calibrations performed.
 - 6. New hazards encountered.
 - 7. PPE utilized.
 - 8. Description of problems, real or anticipated, encountered during the Work that should be brought to attention of DEPARTMENT and ENGINEER and notification of deviations from planned Work shown in previously submitted daily health and safety field report(s).

1.8 STANDARD OPERATING PROCEDURES

- A. The following are Standard Operating Procedures (SOPs) that should be employed as part of the H&S program:
 - 1. During periods of prolonged respirator usage in contaminated areas, respirator filters will be changed upon breakthrough. Respirator filters will always be changed daily.
 - 2. All respirators will be individually assigned and not interchanged between

workers without cleaning and sanitizing.

- 3. CONTRACTOR, subcontractor and service personnel unable to pass a fit test as a result of facial hair or facial configuration shall not enter or work in an area that requires respiratory protection.
- 4. Footwear used on site will be covered by rubber overboots or booties when entering or working in the Exclusion Zone area or Contamination Reduction Zone. Boots or booties will be washed with water and detergents to remove dirt and contaminated sediment before leaving the Exclusion Zone or Contamination Reduction Zone.
- 5. The CONTRACTOR will ensure that all project personnel shall have vision or corrected vision to at least 20/40 in one eye.
- 6. Eating, drinking, chewing gum or tobacco, smoking, etc., will be prohibited in the hazardous work zones and neutral zones.
- 7. No alcohol, firearms or drugs (without prescriptions) will be allowed on site at any time.
- 8. All personnel who are on medication should report it to the SO who will make a determination whether or not the individual will be allowed to work and in what capacity. The SO may require a letter from the individual's personal physician stating what limitations (if any) the medication may impose on the individual.
- 9. The CONTRACTOR shall provide all equipment and personnel necessary to monitor and control air emissions. The determination of the proper level of protection for each task and safety equipment shall be the responsibility of the CONTRACTOR. These task specific levels of protection shall be stated in the CONTRACTOR's HASP.
- 10. The CONTRACTOR shall provide a hygiene facility on site. The hygiene facility shall include the following:
 - a. Adequate lighting and heat;
 - b. Shower facilities for project personnel;
 - c. Laundry facilities for washing work clothes and towels;
 - d. Areas for changing into and out of work clothing. Work clothing should be stored separately from street clothing;
 - e. Clean and "dirty" locker facilities; and
 - f. Storage area for work clothing, etc.
- 11. The CONTRACTOR shall provide a portable decontamination station, commonly referred to as a "Boot Wash" facility for each hazardous work zone requiring decontamination for project personnel. These facilities shall be constructed to contain spent wash water, contain a reservoir of clean wash water, a power supply to operate a pump for the wash water, a separate entrance and exit to the decontamination platform, with the equipment being mobile, allowing easy transport from one hazardous work zone to the next. All such wash water shall be disposed of at the dewatering facility. An appropriate detergent such as trisodium phosphate shall be used.
- 12. The CONTRACTOR shall provide full decontamination facilities at all hazardous zones. Decontamination facilities must be described in detail in the HASP.

- 13. Contaminated clothing used respirator cartridges, and other disposable items will be put into drums/containers for transport and proper disposal in accordance with TSCA and RCRA requirements.
- 14. All equipment and material used in this project shall be thoroughly washed down in accordance with established federal and state procedures before it is removed from the project. With the exception of the excavated materials, all other contaminated debris, clothing, etc. that cannot be decontaminated shall be disposed at the CONTRACTOR's expense by a method permitted by appropriate regulatory agencies. The cost for this element of work shall be incorporated in the lump sum bid for mobilization/demobilization the unit prices bid for disposal of decontamination liquids or as otherwise directed on this project. All vehicles and equipment used in the "Dirty Area" will be decontaminated to the satisfaction of the SO in the decontamination area on site prior to leaving the project. The CONTRACTOR will certify, in writing, that each piece of equipment has been decontaminated prior to removal from the site.
- 15. The CONTRACTOR shall develop, as part of the HASP, an air monitoring program (AMP). The purpose of the AMP is to determine that the proper level of personnel protective equipment is used, to document that the level of worker protection is adequate, and to assess the migration of contaminants to off-site receptors as a result of site work.
- 16. The CONTRACTOR shall supply all personnel, equipment, facilities, and supplies to develop and implement the air monitoring program described in this section. Equipment shall include at a minimum real-time aerosol monitors, depending on work activities and environmental conditions.
- 17. The CONTRACTOR's AMP shall include both real-time and documentation air monitoring (personal and area sampling as needed). The purpose of real-time monitoring will be to determine if an upgrade (or downgrade) of PPE is required while performing on-site work and to implement engineering controls, protocols, or emergency procedures if CONTRACTOR-established action levels are encountered.
- 18. The CONTRACTOR shall also use documentation monitoring to ensure that adequate PPE is being used and to determine if engineering controls are mitigating the migration of contamination to off-site receptors. Documentation monitoring shall include the collection and analysis of samples for total nuisance dust.
- 19. Real-time monitoring shall be conducted using the following equipment:
 - a. Organic vapor photoionizers shall be Photovac TIP, total organic vapor analyzer as manufactured by Photovac International, 739B Park Avenue, Huntington, New York 11743 or equal. The CONTRACTOR shall provide one Photovac TIP for each and every hazardous work zone operation.
 - b. Particulate monitoring must be performed using real-time particulate monitors (MiniRam Model MIEPDM-3, or equal) and shall monitor particulate matter in the range of 0-10 microns diameter (PM10) with the

following minimum performance standards:

Object to be measured: Dust, Mists, Aerosols

Measurement Ranges: 0.001 to 400 mg/m3 (1 to 400,000 μ g/m3)

Precision (2-sigma) at constant temperature: +/- 10 μ g/m3 for one second averaging; +/- 1.5 μ g/m3 for sixty second averaging

Accuracy: +/- 5% of reading +/- precision (Referred to gravimetric calibration with SAE fine test dust (mmd= 2 to 3 $\mu m,$ g= 2.5, as aerosolized)

Resolution: 0.1% of reading or 1 μ g/m3, whichever is larger

Particle Size Range of Maximum Response: 0.1-10 µ

Total Number of Data Points in Memory: 10,000

Logged Data: Each Data Point: average concentration, time/date, and data point number Run Summary: overall average, maximum concentrations, time/date of maximum, total number of logged points, start time/date, total elapsed time (run duration), STEL concentration and time/date occurrence, averaging (logging) period, calibration factor, and tag number.

Alarm Averaging Time (user selectable): real-time (1-60 seconds) or STEL (15 minutes)

Operating Time: 48 hours (fully charged NiMH battery); continuously with charger

Operating Temperature: -10 to 50°C (14 to 122°F)

Automatic alarms are suggested.

c. Particulate levels will be monitored and integrated over a period not to exceed 15 minutes. Consequently, instrumentation shall require necessary averaging hardware to accomplish this task. A monitor such as the personal DataRAM, manufactured by Monitoring Instruments for the Environment, Inc., or equivalent, can be used as a real time particulate screening tool. Although the instrument's design does not allow it to make a sharp differentiation of particulates at the PM10 standard, the instrument could be

used in the passive mode without a pump to provide readings in the 0.1 to 10μ range in the immediate vicinity of construction activities.

- Monitor the air, using the same equipment, for 10-15 minutes upwind of the d. work site to establish background level. The background level shall be established before the start of each shift every day. In the event that downwind particulates are detected at levels in excess of 150 ug/m3 or 2.5 times the established background level at the work site, re-measure the background concentrations upwind of the work zone using the same equipment. If the measured particulate level at the work zone is 100 ug/m3 above background, monitor the downwind site perimeter and implement additional dust controls in the work zone. Continue to take hourly measurements of the upwind background concentrations and compare such concentrations with the particulate level at the work zone, until the downwind level at the work zone is less than 100 ug/m3 above the upwind level. If at any time the measured particulate level at the work zone is more than 150 ug/m3 over background concentration, the CONTRACTOR shall immediately suspend work at the site, promptly notify the Safety Officer, and implement suitable corrective action or engineering controls before work resumes.
- e. Real-time monitoring will be conducted at any excavation of contaminated soil or sediments. Real-time monitoring will also be conducted at perimeter locations including an upwind (background) and three downwind locations. A background reading will be established daily at the beginning of the work shift. If the wind direction changes during the course of the day, a new background reading will be made. Downwind readings at the perimeter will be made when CONTRACTOR action levels have been exceeded at the excavation face or at a minimum of twice a day.
- f. If action levels are exceeded at the perimeter location for fugitive dust, work must be suspended and engineering controls must be implemented to bring concentrations back down to acceptable levels.
- g. Construction activities generate dust which could potentially transport contaminants off site. There may be situations when visible dust is being generated and leaving the site and the monitoring equipment does not measure PM10 at or above the action level. Therefore, if dust is observed leaving the working site, additional dust suppression techniques must be employed by the CONTRACTOR.
- 20. The following master telephone list will be completed and prominently posted at the field office. At minimum, the list will have telephone numbers of all project personnel, emergency services including hospital, fire, police, and utilities. In addition, two copies with telephone numbers are to be given to the DEPARTMENT for emergency reference purposes.

Emergency Service

Telephone Number

Fire Department	911	
Police Department	911	
Ambulance		911
Hospital/Emergency Care Facility (United Memorial Medical Center)		(585) 343-6030
Poison Control Center		(800) 336-6997
Chemical Emergency Advice (CHEMTREC)		(800) 424-9300
NYSDEC Central Office	Work Hours After Hours	(518) 457-7878 (800) 342-9296 (leave message)
NYSDEC Regional Office	Work Hours	(585) 226-5353
Genesee County Dept. of Health	(585) 344-2580	
New York State Dept. of Health - Alba	(518) 402-7890	
New York State Dept. of Health – Wes	(585) 423-8100	

PART 2 – PRODUCTS (NOT USED)

PART 3 – EXECUTION (NOT USED)

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01 35 29 – Attachment A SUPPLEMENTAL PCB AIR MONITORING PROGRAM Batavia Iron and Metal- #819018

The New York State Department of Environmental Conservation (NYSDEC) approved remedial design for the Batavia Iron and Metal Site located at 301 Bank Street, Batavia, New York (NYSDEC Site No. 819018) included a Community Air Monitoring Program (CAMP). The approved CAMP included real time, continuous monitoring for particulates, as well as organic vapors during intrusive construction activities associated with the proposed remediation. However, due to the lack of organic vapors, additional air monitoring for polychlorinated biphenyls (PCBs) be performed as part of the particulate air monitoring activities. These time-integrated samples will be used for assessing the potential for off-site exposures.

Air monitoring for particulates (PM-10) will include four Air Monitoring Stations (AM) (this could be reduced upon concurrence with DOH – minimum one background and one predominant downwind) in accordance with 01 35 29.

PM-10 DusTRAKTM aerosol monitoring devices (or equivalent) in weatherproof enclosures on tripods located at perimeter AM stations. The tripods will be adjusted to a height of approximately 4 to 6 feet above ground surface to monitor the breathing zone. Air monitoring station AM-1 will be located upwind of the excavation/loading area and will serve as the background monitoring station. Up to three air monitoring stations will be located downwind of the work zone near the Site perimeter. The DusTRAKsTM will be set to record particulate levels at a frequency no less than every five minutes during working hours, and the minimum, maximum, average, and time weighted average (TWA) of detected particulate concentrations in milligram per cubic meter (mg/m³) from each of the three AM DusTRAKsTM will be recorded daily in the field logbook and tabulated.

- Total airborne PCBs will be sampled using a sampling train consisting of a small pump, tubing, and sample media (glass fiber and Florisil). The pump will be placed in the environmental enclosure with the DusTRAKTM to protect it from weather. The tubing inlet will be placed outside the enclosure near the inlet of the DusTRAKTM. The calibration of the air monitoring pumps will be checked prior to each day of sampling using a rotameter. The pump will be operated at a flow rate of 0.2 liters per minute, for a period of 8 hours. Air volume equivalent to 96 liters will be needed to achieve detection limit of 0. 52 ug/m³ PCB (this will require special coordination with the lab)
- . Logging data such as flow rate, operating time, and total volume from each of the sample trains will be recorded on a field form for every NIOSH Method 5503

sample. After each day of sampling, the sample media will be removed and labeled with a unique sample identifier (to include at a minimum the station location and date). Samples will be shipped overnight under chain of custody to the laboratory with a request for rush (48- to 72-hour) turnaround time on the analysis. N

- Frequency: Air monitoring will commence one week prior to excavation activities to establish baseline conditions. Air monitoring for particulates will be conducted 5 operating days one-week baseline period. In addition, samples for PCB analysis by NIOSH Method 5503 will be collected on three days of the baseline monitoring period at two AM stations – one upwind (background) and one predominant downwind. During the first two weeks of excavation operations, perimeter air monitoring for particulates will occur at each of the perimeter AM stations during each workday. PCB documentation shall be collected for 10 operating days at two stations (Background and Pre-dominant Downwind). As feasible, the samples will be collected on days when the potential is higher for PCB exposure, i.e., sample on days when excavation is taking place.
- Following the initial 10-day operating period, particulate monitoring will continue to occur daily for the duration of excavation and loading activities, PCB data collection shall continue once per week as directed by the Engineer.

The contractor shall provide a weekly summary of air monitoring results including

- Daily summary of PM-10, VOC and PCB concentrations from designated upwind and downwind air monitoring stations.
- Figure showing direction and locations of AM stations
- NIOSH 5503 analytical reporting forms
- The particulate and PCB lab data will be reviewed following receipt. PCB concentrations in air (above background) will be compared to the design assumptions to determine if supplemental sampling and/or adjustment to action PM-10 action levels are warranted.
- The particulate and PCB lab data will be reviewed by the Engineer following receipt. PCB concentrations in air (above background) will be compared to the design assumptions to determine if supplemental sampling and/or adjustment to action PM- 10 action levels are warranted.

SPECIFICATION 01 35 33

COVID-19 RISK MANAGEMENT

PART 1 – GENERAL

1.1 SUMMARY

- A. This Section includes requirements for managing and minimizing the potential for transmission of the COVID-19 (coronavirus disease 2019). COVID-19 is a disease caused by a virus named SARS-CoV-2 and was discovered in December 2019 in Wuhan, China. It is very contagious and has quickly spread around the world.
- B. <u>Transmission</u>: COVID-19 spreads when an infected person breathes out droplets and very small particles that contain the virus. These droplets and particles can be breathed in by other people or land on their eyes, noses, or mouth. In some circumstances, they may contaminate surfaces they touch. People who are closer than 6 feet from the infected person are most likely to get infected.
- C. <u>Symptoms</u>: COVID-19 most often causes respiratory symptoms that can feel much like a cold, a flu, or pneumonia. COVID-19 may attack more than your lungs and respiratory system. Other parts of your body may also be affected by the disease.
- D. <u>Best Practices to Prevent Infection</u>: CDC recommends everyday actions to help prevent the spread of any respiratory viruses
 - 1. Wash your hands often with soap and water for at least 20 seconds. If soap and water are not available, use an alcohol-based hand sanitizer, containing at least 60% alcohol.
 - 2. Avoid touching your eyes, nose, and mouth with unwashed hands.
 - 3. Avoid close contact with people who are sick
 - 4. Stay home when you are sick
 - 5. Cover your cough or sneeze with a tissue, then throw the tissue in the trash can and wash hands or use hand sanitizer.
 - 6. Clean and disinfect frequently touched objects and surfaces.
 - 7. Wear face masks.
 - 8. Safe social distancing (e.g., maintain a distance of 6 feet between people, limited group meetings).

1.2 OBJECTIVE

A. The objective of this specification is to minimize transmission and subsequent infections of COVID-19 in project staff that may arise as a result of exposure to SARS-CoV-2 released into the environment during construction and renovation activities. Controlling the dispersal of airborne infectious agents is critical to achieving this objective.

1.3 PERFORMANCE REQUIREMENTS AND RESPONSIBILITIES

- A. The intent of this Section is to document and formalize the Contractor's requirements for minimizing the risk of transmission of COVID-19 among site workers, project staff, and the surrounding community during construction per the latest recommendations of federal, state and local health agencies. This includes developing a COVID-19 Management Plan, establishing procedures for conducting onsite work activities to prevent virus transmission, monitoring staff health, and reporting requirements.
- B. The Contractor is expected to communicate the requirements described in this section to all site workers, subcontractors, and visitors to the site daily, during daily Health and Safety meetings as well as through site postings (see attachment).
- C. Contractors and their subcontractors are required at all times to guard the safety and health of all persons on and in the vicinity of the work site.
- D. Contractors and their subcontractors are required to comply with all applicable rules, regulations, codes, and bulletins of the New York State Department of Labor and the standards imposed under the Federal Occupational Safety and Health Act of 1970, as amended ("OSHA").
- E. Contractors and their subcontractors must comply with all City or State of New York safety requirements for projects within the City or State of New York constructed in accordance with the applicable building code.
- F. Contractors and their subcontractors shall stay current and immediately implement the most up-to-date government issued practices to protect the safety and health of your employees, clients, and the general public.

1.4 RELATED SECTIONS

A. Section X, Specification 01 35 29 - Contractor's Health and Safety Plan

1.5 REFERENCES

- A. Occupational Safety and Health Administration (OSHA) Guidance on Preparing Workplaces for COVID-19
- B. New York State Department of Health
- C. Centers for Disease Control and Prevention (CDC)
- D. National Institute for Occupational Safety and Health (NIOSH)
- E. Health Insurance Portability and Accountability Act (HIPAA)

1.6 SUBMITTALS

- A. The Contractor shall prepare a COVID-19 Management Plan which can be a Supplement, or Addendum, to the Contractor' Health and Safety Plan
- B. The CONTRACTOR shall develop a one-page summary of site-specific practices for COVID-19 management and clearly display on site. Operating hours, delivery times, and extra considerations for works involving a high volume of personnel or potential for interaction with community members could also be included in the summary.
- C. The Contractor's Daily Field Report shall include a Daily Health Checklist, with the following questions at a minimum:

Is social distancing being practiced?	Yes 🗆	No 🗆
Is the tail gate safety meeting held outdoors?	Yes 🗆	No 🗆
Are remote/call-in job meetings being held in lieu of meeting in person where possible?	Yes 🗆	No 🗆
Were personal protective gloves, masks, and eye protection being used?	Yes 🗆	No 🗆
Are sanitizing wipes, wash stations or spray available?	Yes 🗆	No 🗆
Have any workers/visitors been excluded based on close contact with individuals diagnosed with COVID-19, have recently traveled to restricted areas or countries, or are symptomatic (fever, chills, cough/shortness of breath)?	Yes 🗆	No 🗆
Comments:		

DAILY HEALTH CHECKLIST

1.7 COVID-19 MANAGEMENT PLAN

- A. At a minimum, the COVID-19 Management Plan shall include:
 - 1. Identification of potential exposure pathways and exposure risks associated with work tasks, e.g. activity hazard analysis (AHA).
 - 2. Detailed written description of the onsite personnel protection measures that will be utilized and a detailed explanation of how they will be implemented, monitored, and communicated.
 - 3. Detailed written description of measures that will be taken to prevent transmission to or from the surrounding community and how they will be implemented and communicated.
 - 4. Procedures to be followed in the event a site worker is diagnosed with or is suspected of having COVID-19, including identification of all personnel potentially exposed and isolation requirements.

- 5. Daily cleaning schedules and disinfection procedures per the most recent CDC guidelines.
- 6. Cleaning and disinfection procedures in the event there is/are suspected COVID-19 case(s) among site personnel.
- 7. Site access controls and entry/exit procedures.
- 8. Plan view of points of egress and delivery locations.
- B. The COVID-19 Management Plan must be updated following any issued current change(s) in federal, state, or local health agency guidance.
- 1.8 PRECONSTRUCTION CONFERENCE
 - A. Pre-Construction Conference shall include a review of methods and procedures related to COVID-19 risk management including, but not limited to the following:
 - 1. Review of COVID-19 Management Plan
 - 2. Review infection control procedures
 - 3. Review staff monitoring and reporting requirements.

PART 2 - PRODUCTS - Not Used

PART 3 – EXECUTION

- 3.1 RISK IDENTIFICATION
 - A. COVID-19 is a disease caused by a virus named SARS-CoV-2 and was discovered in December 2019 in Wuhan, China. It is very contagious and has quickly spread around the world. Health agencies are continuously learning and providing updates on best guidance. The Contractor shall adjust site policies based on the most up to date government issued guidance regarding transmission.
 - B. Contractor shall confirm staff do not have COVID-19 symptoms and have not been in close contact with anyone who has COVID-19 prior to mobilizing to site.
 - C. Contractor shall monitor staff daily, to confirm onsite staff do not exhibit COVID-19 symptoms.

3.2 RISK MINIMIZATION

- A. Engineering Controls
 - 1. Increasing ventilation rates of interior workspaces.
 - 2. Access controls, including fences and locking gates.
 - 3. Maintain 6 feet distances.
- B. Administrative Controls

- 1. Continuous and effective communication of administrative controls/requirements to all site personnel and visitors, through the posting of site signage, preparation and distribution of site plans, presented during site meetings, and verbal warnings if necessary.
- 2. Require that all employees exhibiting any COVID-19 symptom do not enter the site and provide sick leave policies to support this requirement.
- 3. Staffing: Work shall be scheduled to minimize the density of personnel in any given area at any given time.
- 4. Face-to-face meetings shall be replaced with video or phone conferences when practicable.
- 5. Social distancing shall be exercised for face-to-face meetings e.g. daily Health and Safety tailgate meeting. The Health and Safety officer will keep a record of all present for each face-to-face meeting on the Health and Safety log.
- 6. Staff that have been in close contact with anyone that tested positive, shall follow current CDC guidelines for face coverings and/or testing.
- C. Safe Work Practices
 - 1. The Contractor shall employ social distancing protocol for all onsite activities when able.
 - 2. The Contractor provide PPE and adequate hand washing stations and hand sanitizer (containing a minimum of 60% alcohol) to allow site personnel and visitors to practice good personal hygiene.
 - 3. The Contractor shall provide tissues, paper towels, no-touch trash cans, and disinfectants to maintain site cleanliness.
 - 4. Sharing of tools and heavy equipment shall be limited to the extent practicable; handles of shared tools and equipment shall be sanitized regularly.
- D. Personal Protective Equipment
 - 1. Employees shall be provided disposable personal protective equipment (PPE), including gloves, goggles, face shields, face masks, and respiratory protection, as appropriate based on work environment and current recommendations by OSHA and CDC.
 - 2. All PPE must be selected based on hazard to the worker, properly fitted and periodically refitted, consistently and properly worn when required, regularly inspected, maintained, and replaced, as necessary, and properly removed, cleaned, and stored or disposed of, to avoid contamination of self, others, or the environment.
 - 3. PPE worn to prevent transmission of COVID-19 is not to be confused with PPE for protection against site contaminants.
 - 4. PPE must be worn, removed, and disposed of correctly in order to remain effective.

- a. Face masks should fit snugly but comfortable against the side of the face and over the nose and be secured with ties or ear loops; cloth masks must include multiple layers of fabric, allow for breathing without restriction, and be able to be laundered and machine dried without damage.
- b. Face masks should be worn consistently and removed without touching eyes, nose, and mouth. An individual should wash their hands after handling a used face mask.
- c. Cloth face coverings should be sterilized by machine washing between use; disposable face masks shall be disposed of properly after using.
- d. Gloves are only effective if changed and disposed of frequently, to avoid crosscontamination.

3.3 NOTIFICATION OF POTENTIAL OR CONFIRMED INFECTION

- A. The Contractor shall notify the Department immediately upon identification of a suspected or confirmed infection of COVID-19. This notification shall comply with HIPAA regulations.
- B. The Contractor shall remove an individual suspected to have COVID-19 from the site immediately (to the individuals' hotel or local place of residence if transport home is not immediately feasible). The individual with suspected infection shall contact their health care provider and/or follow local health department testing procedures and protocol.
- C. While in the process of removing an employee exhibiting symptoms, steps should be taken to isolate the individual, place a surgical mask on the individual and inform the local health department and the NYSDEC.
- D. In the event the individual with suspected infection cannot get home right away, they shall isolate in their hotel room (notifying hotel management of their symptoms) and schedule an appointment to get tested for COVID-19. Pending severity of the symptoms, individual shall contact their health care provider, and/or seek local medical attention. The individual may also call the New York State Hotline and 1-888-364-3065.
- E. The Contractor shall maintain communication with potentially infected individual(s) and notify the Engineer upon receipt of COVID-19 test results.
- F. Positively infected individuals may return to work at the site 5 days after a positive test or 5 days after first symptoms appeared so long as they have been 24 hours fever free (without the use of fever-reducing medication) and symptoms are improving. Upon return, individuals will need to wear a well-fitting mask for an additional 5 days when around others or in accordance with the current federal, state, and local guidelines.
- G. OSHA recordkeeping requirements at 29 CFR Part 1904 mandate covered employers record certain work-related injuries and illnesses on their OSHA 300 log. COVID-19 can be a recordable illness if a worker is infected as a result of performing their work-related

duties. However, employers are only responsible for recording cases of COVID-19 if all the following are met:

- 1. The case is a confirmed case of COVID-19 (see CDC information on persons under investigation and presumptive positive and laboratory-confirmed cases of COVID-19).
- 2. The case is work-related, as defined by 29 CFR 1904.5; and
- 3. The case involves one or more of the general recording criteria set forth in 29 CFR 1904.7 (e.g. medical treatment beyond first-aid, days away from work).

++ END OF SECTION ++

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SPECIFICATION 01 35 43.13

ENVIRONMENTAL PROCEDURES FOR HAZARDOUS MATERIALS

PART 1 – GENERAL

1.1 DESCRIPTION

A. Scope:

- 1. CONTRACTOR shall provide all labor, materials, equipment, tools, and incidentals necessary to comply with environmental procedures for Constituents of Concern.
- 2. CONTRACTOR shall develop, implement, and maintain throughout the Project a hazardous materials management program (HMMP) as part of the SSHASP in accordance with Laws and Regulations.
- 3. Constituents of Concern Brought to Site by CONTRACTOR: Transport, handle, store, label, use, and dispose of in accordance with this Section, other applicable provisions of the Contract Documents, and Laws and Regulations.
- 4. Constituents of Concern Generated by CONTRACTOR:
 - a. Materials containing Constituents of Concern shall be properly handled, stored, labeled, transported, and disposed of by CONTRACTOR in accordance with Laws and Regulations, and this Section.
 - b. If CONTRACTOR will generate or has generated materials containing Constituents of Concern at the Site, obtain a USEPA identification number listing CONTRACTOR's name and address of the Site as generator of the Constituents of Concern. Obtain identification number from state environmental agency or similar authority having jurisdiction at the Site. Submit identification number within time frame specified in Article 1.3 of this Section.
 - c. CONTRACTOR shall be responsible for identifying, analyzing, profiling, transporting, and disposing of Constituents of Concern generated by CONTRACTOR.
- 5. Fines or civil penalties levied against DEPARTMENT for violations committed at the Site by CONTRACTOR, and costs to DEPARTMENT (if any) associated with cleanup of a Hazardous Environmental Condition created by CONTRACTOR shall be paid by CONTRACTOR. If CONTRACTOR has exacerbated a Hazardous Environmental Condition existing at the Site prior to the start of the Work, CONTRACTOR shall pay a share of costs associated with fines, civil penalties, and cleanup costs to in proportion equal to the extent of CONTRACTOR's responsibility for creating the Hazardous Environmental Condition and fines and civil penalties associated therewith.

- B. Enforcement of Laws and Regulations:
 - 1. Interests of DEPARTMENT are that accidental spills and emissions, Site contamination, and injury of personnel at and near the Site are to be avoided.
 - 2. When DEPARTMENT is aware of suspected violations, DEPARTMENT will notify CONTRACTOR, and authorities having jurisdiction if DEPARTMENT reasonably concludes that doing so is required by Laws or Regulations.
 - 3. Responsibilities regarding Laws and Regulations shall be in accordance with the General Conditions, as may be modified by the Supplementary Conditions.

1.2 QUALITY ASSURANCE

A. Regulatory Requirements: Comply with applicable Laws and Regulations.

1.3 SUBMITTALS

- A. Informational Submittals: Submit the following to the entity(ies) specified for each:
 - 1. Constituents of Concern (including Chemicals) Proposed for Use at the Site:
 - a. Content:
 - 1) Current (dated within the past two years) material safety data sheets (MSDS) in accordance with 29 CFR 1910.1200 (OSHA Hazard Communication Standard).
 - 2) Manufacturer of material or equipment containing such substance.
 - 3) Supplier (if different than manufacturer).
 - 4) Container size(s) and number of containers proposed to be at the Site.
 - 5) Minimum and maximum volume of material intended to be stored at the Site.
 - 6) Description of process or procedures in which Constituent of Concern will be used at the Site.
 - b. Furnish the information required above in sufficient time to obtain DEPARTMENT's acceptance not later least three days before bringing Constituent of Concern to the Site.
 - c. Submit to ENGINEER.
 - 2. Material Containing Constituents of Concern Generated at the Site:
 - a. Submit for each Constituent of Concern generated at the Site identification number, analysis results, and number and size of storage containers at the Site.
 - b. Furnish such information within not less than 48 hours after CONTRACTOR's receipt of analytical results.
 - c. Submit to ENGINEER.

- 3. Permits:
 - a. Submit copies of permits for storing, handling, using, transporting, and disposing of materials containing Constituents of Concern, obtained from authorities having jurisdiction.
 - b. Submit to ENGINEER.
- 4. Other Documents required for the HMMP: Submit to ENGINEER and/or DEPARTMENT's environmental representative the requested documents within 72 hours of CONTRACTOR's receipt of such request. HMMP documents may include emergency/spill response plan, communication plan, and other documents.

1.4 HAZARDOUS MATERIALS MANAGEMENT

- A. Obtain ENGINEER's and/or DEPARTMENT's environmental representative's acceptance before bringing to the Site each material containing a Constituent of Concern.
- B. Communication Plan:
 - 1. CONTRACTOR shall develop a communication plan relative to materials containing one or more Constituents of Concern.
 - 2. MSDS Notebooks:
 - a. At minimum, maintain at the Site two notebooks containing: 1) Inventory of materials containing a Constituent of Concern (including all chemicals); and, 2) Current (dated within the past two years) material safety data sheets (MSDS) for all materials being used to accomplish the Work, whether or not defined as a Constituent of Concern.
 - b. Keep one notebook in CONTRACTOR's field office at the Site; keep second notebook at location acceptable to ENGINEER.
 - c. Keep notebooks up-to-date as materials are brought to and removed from the Site.
- C. Emergency/Spill Response Plan: Develop, implement, and maintain an emergency/spill response plan, for each Constituent of Concern or each class/group of material containing a Constituent of Concern, as applicable. At minimum, response plan shall include the following:
 - 1. Description of equipment available at the Site to contain or respond to emergency related to or spill of the material.
 - 2. Procedures for notifying, and contact information for: authorities having jurisdiction, emergency responders, DEPARTMENT, ENGINEER, the public as applicable, and other entities as required.
 - 3. Response coordination procedures between CONTRACTOR, DEPARTMENT, and others as appropriate.

- 4. Site plan showing proposed location of Constituents of Concern storage area and location of spill containment/response equipment, and location of storm water drainage inlets and drainage routes, including storm sewers, ditches and swales, and surface waters.
- 5. Description of Constituent of Concern handling and spill response training provided to CONTRACTOR's and Subcontractors' employees, in accordance with 29 CFR 1926.21(b) and other Laws and Regulations.
- D. Storage of Materials Containing Constituents of Concern and Storage of Non-Hazardous Materials:
 - 1. Vessels containing materials with a Constituent of Concern shall bear applicable hazard diamond(s).
 - 2. Container Labeling:
 - a. Properly label each container of consumable materials, whether or not classified as containing a Constituent of Concern.
 - b. Stencil CONTRACTOR's name and, as applicable, Subcontractor's name, on each vessel containing a Constituent of Concern and, for non-hazardous materials, on each container over five-gallon capacity. Containers shall bear securely-attached label clearly identifying contents. Label containers that are filled from larger containers.
 - c. If DEPARTMENT becomes aware of unlabeled containers at the Site, ENGINER and/or DEPARTMENT's environmental representative will so advise CONTRACTOR. Properly label container(s) within one hour of receipt of such notice from DEPARTMENT or remove container from the Site.
 - 3. To greatest extent possible, store off-Site materials containing a Constituent of Concern until required for use in the Work.
- E. Area for Storing Materials Containing a Constituent of Concern:
 - 1. Maintain designated storage area for materials containing a Constituent of Concern. Storage area shall include secondary containment to prevent release of spilled or leaking substances. Storage area shall include barriers to prevent vehicles from colliding with storage containers and shall include protection from environmental factors such as weather.
 - 2. Provide signage in accordance with Laws and Regulations, clearly identifying the storage area.
- F. Not less than monthly, CONTRACTOR's safety representative shall meet with the Engineer and/or DEPARTMENT's environmental representative to review CONTRACTOR's HMMP documents, procedures, and inspect storage areas and the Site in general, to verify compliance with this Section.

PART 2 – PRODUCTS (NOT USED)

PART 3 – EXECUTION (NOT USED)

+ + END OF SECTION + +

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SPECIFICATION 01 42 00

REFERENCES

PART 1 – GENERAL

1.1 DESCRIPTION

A. Scope:

- 1. Section includes the following:
 - a. Definitions and terminology in general use in the Contract Documents.
 - b. Applicable codes.
 - c. DEPARTMENTS's referenced specifications, where applicable.
 - d. Abbreviations in general use throughout the Contract Documents.
 - e. General requirements regarding reference standards, including a listing of standard-issuing organizations (and their acronyms) used in the Contract Documents.

1.2 DEFINITIONS AND TERMINOLOGY

- A. Definitions and terminology applicable to all the Contract Documents are included in the General Conditions, as may be modified by the Supplementary Conditions.
- B. Additional terminology used in the Contract Documents includes the following:
 - 1. "Indicated" refers to graphic representations, notes, or schedules on the Drawings, or to other paragraphs, provisions, tables, or schedules in the Specifications and similar locations in the other Contract Documents. Terminology such as "shown", "noted", "scheduled", and "specified" are used to help the user locate the reference without limitation on the location.
 - 2. "Installer", "applicator", or "erector" is CONTRACTOR or another person or entity engaged by CONTRACTOR, either as an employee or Subcontractor, to perform a particular construction activity, including installation, erection, application, or similar Work. Installers shall be experienced in the Work that installer is engaged to perform.
 - a. The term "experienced", when used in conjunction with the term "installer", means having successfully completed not less than five previous projects similar in size and scope to this Project; being familiar with the special requirements indicated and required; being familiar with Laws and Regulations; and having complied with requirements of authorities having jurisdiction, and complying with requirements of the Supplier of the material or equipment being installed, unless other experience requirements specific to that element of the Work are indicated elsewhere in the Contract Documents.

- 3. Trades: Use of terms such as "carpentry" does not imply that certain construction activities must be performed by accredited or unionized individuals of a corresponding generic name, such as "carpenter", unless otherwise indicated in the Contract Documents or required by Laws or Regulations. Such terminology also does not imply that specified requirements apply exclusively to trade personnel of the corresponding generic name.
- 4. "Assigned specialists" and similar terms: Certain Sections of the Specifications require that specific construction activities be performed by specialists with recognized, extensive experience in such operations. Engage said specialists for such activities, and their engagement is a requirement over which CONTRACTOR has no option. These requirements do not conflict with enforcement of building codes and other Laws and Regulations. Also, such requirements are not intended to interfere with local trade union jurisdictional settlements and similar conventions. Such assignments shall not relieve CONTRACTOR of responsibility for complying with the requirements of the Contract Documents.

1.3 APPLICABLE CODES

- A. References in the Contract Documents to local code(s) shall mean the following:
 - 1. National Electric Code in effect at the location of the Project.
 - 2. NFPA 101, Life Safety Code.

1.4 ABBREVIATIONS

A. Common abbreviations that may be found in the Contract Documents are indicated below, alphabetically by their written-out meaning:

a-c	alternating current
А	ampere
a.m.	antemeridian
ABA	Architectural Barriers Act
ADA	Americans with Disabilities Act
ADAAG	Americans with Disabilities Act Accessibility Guidelines
a.m.	ante meridian
avg	average
BOD	biochemical oxygen demand
BOD ₅	five-day biochemical oxygen demand
bhp	brake horsepower
Btu	British thermal unit

BIM	building information model
CBOD	carbonaceous biochemical oxygen demand
CBOD ₅	five-day carbonaceous biochemical oxygen demand
COD	chemical oxygen demand
С	Centigrade (or Celsius)
CPVC	chlorinated polyvinyl chloride
CFC	chlorofluorocarbons
CFR	Code of Federal Regulations
CADD, or CAD	computer-aided drafting and design
cu in	cubic inch
cu ft	cubic foot
cu yd, or CY	cubic yard
cfm	cubic feet per minute
cfs	cubic feet per second
db	decibel
degrees C, °C, or deg C	degree Centigrade (or Celsius)
degrees F, °F, or deg F	degrees Fahrenheit
dia	diameter
d-c	direct current
DUSC	Data usability summary report
\$	dollars
ea	each
EDD	electronic data deliverable
eff	efficiency
F	Fahrenheit
ft	feet
fph, or ft/hr	feet per hour
fpm	feet per minute
fps, or ft/min	feet per second
fig	figure
flg	flange
ft-lb	foot-pound

gal	gallon
gph, or gal/hr	gallons per hour
gpm	gallons per minute
gps	gallons per second
g	gram
g/L	grams per liter
Hz	Hertz
hp or HP	horsepower
hr	hour
HMI	human-machine interface
in.	inch
in. Hg	inches of mercury
in. w.g.	inches water gage
inlb	inch-pound
ID	inside diameter
IPS	iron pipe size
kips	thousand pounds
ksi	thousand pounds per square inch
kva	kilovolt-ampere
kw	kilowatt
kwhr or kwh	kilowatt-hour
lb	pound
lin ft or LF	linear foot
L	liter
LEED	Leadership in Energy and Environmental Design (USGBC)
max	maximum
Hg	mercury
mg	milligram
mg/kg	milligram per kilogram
mg/l or mg/L	milligrams per liter
ml	milliliter
mm	millimeter
mgd or MGD	million gallons per day

MG	million gallon
min	minimum
NPT	national pipe threads
NPSH	net positive suction head
NPSHA	net positive suction head available
NPSHR	net positive suction head required
NOx	nitrogen oxide (total concentration of mono-nitrogen oxides such as nitric oxide (NO) and nitrogen dioxide (NO ₂))
NPS	nominal pipe size
no.	number
OIT	operator interface terminal
OZ	ounce
ozf	ounce-force
OD	outside diameter
pph	parts per hundred
ppm	parts per million
ppb	parts per billion
PVC	polyvinyl chloride
p.m.	post meridian
lb	pound
psi	pounds per square inch
psia	pounds per square inch absolute
psig	pounds per square inch gauge
psf	pounds per square foot
PCB	polychlorinated biphenyls
PCS	process control system
PLC	programmable logic controller
rpm	revolutions per minute
sec	second
sp gr, or SG	specific gravity
sq	square
sq ft, sf, or ft ²	square foot
sq in., or in ²	square inch
sq yd, or SY	square yard

std	standard
scfm	standard cubic feet per minute
TDH	total dynamic head
TEFC	totally-enclosed fan-cooled
V	volt
vac	volts alternating current
vdc	volts direct current
VOC	volatile organic compounds

1.6 REFERENCE STANDARDS

- A. Refer to Article 3 of the General Conditions, as may be modified by the Supplementary Conditions, relative to reference standards and resolving discrepancies between reference standards and the Contract Documents. Provisions of reference standards are in effect in accordance with the Specifications.
- B. Copies of Standards: Each entity engaged in the Work shall be familiar with reference standards applicable to its construction activity. Copies of applicable reference standards are not bound with the Contract Documents. Where reference standards are needed for a construction activity, obtain copies of standards from the publication source.
- C. Abbreviations and Names: Where reference standards, specifications, codes, manuals, Laws or Regulations, or other published data of international, national, regional, or local organizations are referred to in the Contract Documents, the organization issuing the standard may be referred to by their acronym or abbreviation only. The following acronyms or abbreviations that may appear in the Contract Documents shall have the meanings indicated below. Listing is alphabetical by acronym.

AA	Aluminum Association
AABC	Associated Air Balance Council
AAMA	American Architectural Manufacturers Association
AASHTO	American Association of State Highway and Transportation Officials
ACI	American Concrete Institute
ACS	American Chemical Society
ADSC-IAFD	International Association of Foundation Drilling.
AEIC	Association of Edison Illuminating Companies
AF&PA	American Forest and Paper Association

ABMA	American Bearing Manufacturers Association (formerly Anti-Friction Bearing Manufacturers Association (AFBMA))
AGMA	American Gear Manufacturers Association
AI	Asphalt Institute
AIA	American Institute of Architects
AIChE	American Institute of Chemical Engineers
AISC	American Institute of Steel Construction
AISI	American Iron and Steel Institute
AITC	American Institute of Timber Construction
ALSC	American Lumber Standards Committee
AMA	Acoustical Materials Association
AMCA	Air Movement and Control Association
AMP	National Association of Architectural Metal Manufacturers, Architectural Metal Products Division
ANSI	American National Standards Institute
APA	The Engineered Wood Association
APHA	American Public Health Association
API	American Petroleum Institute
AREA	American Railway Engineering Association
ARI	Air Conditioning and Refrigeration Institute
ASAE	American Society of Agricultural Engineers
ASCE	American Society of Civil Engineers
ASHRAE	American Society of Heating, Refrigerating and Air Conditioning Engineers
ASME	American Society of Mechanical Engineers
ASNT	American Society for Non-Destructive Testing
ASQ	American Society for Quality
ASSE	American Society of Safety Engineers
ASTM	American Society for Testing and Materials
AWCI	Association of the Wall and Ceiling Industry
AWI	Architectural Woodwork Institute
AWPA	American Wood Protection Association
AWPI	American Wood Preservers Institute
AWS	American Welding Society
AWWA	American Water Works Association
BAAQMD	Bay Area Air Quality Management District

BHMA	Builders Hardware Manufacturers Association
BIA	Brick Industry Association
CBMA	Certified Ballast Manufacturers Association
CDA	Copper Development Association
CEMA	Conveyor Equipment Manufacturers Association
CGA	Compressed Gas Association
CISCA	Ceilings and Interior Systems Construction Association
CISPI	Cast Iron Soil Pipe Institute
CLFMI	Chain Link Fence Manufacturers Institute
CMAA	Crane Manufacturers Association of America
CRSI	Concrete Reinforcing Steel Institute
CSI	Construction Specifications Institute
DIN	Deutsches Institut fur Normung eV (German Institute for Standardization)
DIPRA	Ductile Iron Pipe Research Association
EJCDC	Engineers Joint Contract Documents Committee
EJMA	Expansion Joint Manufacturers Association, Inc.
ETL	Intertek Testing Services, Inc. (formerly ETL Testing Laboratories, Inc.)
FCC	Federal Communications Commission
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
FM	Factory Mutual (FM Global)
FRPI	Fiberglass Reinforced Plastics Institute
FS	Federal Specification
GA	Gypsum Association
GANA	Glass Association of North America
HEW	United States Department of Health, Education and Welfare
HI	Hydraulic Institute
HMI	Hoist Manufacturers Institute
HUD	United States Department of Housing and Urban Development
IBC	International Building Code
ICC	International Code Council
ICEA	Insulated Cable Engineers Association
IEEE	Institute of Electrical and Electronics Engineers
IESNA	Illuminating Engineering Society of North America
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IFI	Industrial Fasteners Institute
IRI	Industrial Risk Insurers
ISA	Instrumentation, Systems, and Automation Society (formerly Instrument Society of America)
ISO	Insurance Services Office
ISO	International Organization for Standardization
LPI	Lightning Protection Institute
MIA	Marble Institute of America
ML/SFA	Metal Lath/Steel Framing Association
MS	Military Specifications
MSS	Manufacturers' Standardization Society
MMA	Monorail Manufacturers Association
NAAMM	National Association of Architectural Metal Manufacturers
NACE	National Association of Corrosion Engineers
NAPF	National Association of Pipe Fabricators, Inc.
NARUC	National Association of Regulatory Utilities Commissioners
NBHA	National Builders Hardware Association
NBS	United States Department of Commerce, National Bureau of Standards
NCMA	National Concrete Masonry Association
NEC	National Electric Code
NELMA	Northeastern Lumber Manufacturers' Association
NEMA	National Electrical Manufacturers Association
NESC	National Electrical Safety Code
NETA	International Electrical Testing Association
NFPA	National Fire Protection Association
NFRC	National Fenestration Rating Council
NGA	National Glass Association
NHLA	National Hardwood Lumber Association
NHPMA	Northern Hardwood and Pine Manufacturers Association
NIST	United States Department of Commerce, National Institute of Standards and Technology
NLGA	National Lumber Grades Authority
NRCA	National Roofing Contractors Association
NRMCA	National Ready Mixed Concrete Association
NSF	National Sanitation Foundation
NSSGA	National Stone, Sand, and Gravel Association

OSHA Occupational Safety and Health Administration PCA Portland Cement Association	
PCA Portland Cement Association	
PCI Precast/Prestressed Concrete Institute	
PEI Porcelain Enamel Institute	
PFI Pipe Fabrication Institute	
PPI Plastics Pipe Institute	
PGMC Primary Glass Manufacturers Council	
PS Product Standards Section, United States Department of Commerce	
RCSC Research Council on Structural Connections (part of AIS	C)
RMA Rubber Manufacturers Association	
SAE Society of Automotive Engineers	
SCAQMD Southern California Air Quality Management District	
SCPRF Structural Clay Products Research Foundation	
SCTE Society of Cable Telecommunications Engineers	
SDI Steel Deck Institute	
SDI Steel Door Institute	
SIGMA Sealed Insulating Glass Manufacturing Association	
SJI Steel Joist Institute	
SMACNASheet Metal and Air Conditioning Contractor's National Association	
SPI Society of the Plastics Industry	
SPIB Southern Pine Inspection Bureau	
SSPC Society for Protective Coatings	
SWI Steel Window Institute	
TCNA Tile Council of North America	
TEMA Tubular Exchanger Manufacturers Association	
TIA/EIA Telecommunications Industry Association/Electronic Industries Alliance	
TSCA Toxic Substances Control Act	
UL Underwriters Laboratories, Inc.	
USAB United States Access Board	
USDOE United States Department of Energy	
USEPA United States Environmental Protection Agency	
USGBC United States Green Building Council	
USGS United States Geological Survey	

USPHS	United States Public Health Service
WCLIB	West Coast Lumber Inspection Bureau
WCMA	Window Covering Manufacturers Association
WCMA	Wood Component Manufacturers Association
WDMA	Window and Door Manufacturers Association
WEF	Water Environment Federation
WWEMA	Water and Wastewater Equipment Manufacturers Association
WWPA	Western Wood Products Association

PART 2 – PRODUCTS (NOT USED)

PART 3 – EXECUTION (NOT USED)

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SPECIFICATION 01 45 29.13

TESTING LABORATORY SERVICES FURNISHED BY CONTRACTOR

PART 1 – GENERAL

1.1 DESCRIPTION

- A. Scope:
 - 1. This section includes requirements for sampling services furnished by the CONTRACTOR for sampling, analysis, and reporting, or as provided in the supplementary conditions.
 - 2. CONTRACTOR shall employ and pay for services of independent testing laboratory to perform specified services.
 - 3. Inspection, sampling, and testing shall be as specified in the Specifications including but not limited to:
 - a. Section XI, Specification 01 45 28 Chemical Sampling and Analysis
 - b. Section XI, Specification 02 51 00 Decontamination Procedures
 - c. Section XI, Specification 02 61 13 Impacted Soil Removal, Handling, and Storage
 - d. Section XI, Specification 02 72 00 Construction Water Management
 - e. Section XI, Specification 02 81 00 Offsite Transportation and Disposal
 - f. Section XI, Specification 31 00 00 Earthworks
 - 4. CONTRACTOR shall pay for:
 - a. Tests not specifically indicated in the Contract Documents as being DEPARTMENT 's or ENGINEER's responsibility.
 - b. Tests made for CONTRACTOR's convenience.
 - c. Repeat tests required because of CONTRACTOR's negligence or defective Work and retesting after failure of test for the same item to comply with the Contract Documents.
 - 5. Testing laboratory is not authorized to approve or accept any portion of the Work or defective Work; rescind, alter, or augment requirements of Contract Documents; and perform duties of CONTRACTOR.

1.2 REFERENCES

- A. Standards referenced in this Section are:
 - 1. New York State Analytical Services Protocol (ASP)
 - 2. NYSDEC Technical Guidance for Site Investigation and Remediation DER-10, Appendix 2-B

1.3 QUALITY ASSURANCE

- A. Qualifications:
 - 1. Testing Laboratory:
 - a. Comply with applicable requirements of New York State Department of Environmental Conservation, DER-10 Technical Guidance for Site Investigation and Remediation (May 2010)
 - b. Testing laboratory shall be NYSDOH ELAP certified.

1.4 SUBMITTALS

- A. Informational Submittals: Submit the following:
 - 1. Sampling Plan and Quality Control Project Plan Submittals: The Sampling Plan shall include the following:
 - a. A chart and/or map indicating the approximate number of samples to be collected and the matrices of each, including anticipated QA/QC samples.
 - b. Procedures for sample collection.
 - c. Description of sampling equipment and maintenance procedures for the equipment.
 - d. Procedures for decontamination of sampling equipment.
 - e. Sample handling, labeling and regulatory compliance procedures for shipping.
 - f. Training requirements for environmental sampling for new employees and refresher training requirements for current employees.
 - 2. The QAPP shall be project specific and include the following:
 - a. Organizational chart, including a designated QA Officer.
 - b. Data quality objectives for the site.
 - c. A chart reflecting types of samples, approximate number of samples, matrices, holding times, analytical protocols and anticipated QA/QC samples to be collected or analyzed.
 - d. Specific limits of concern for each analyte for each matrix to be sampled.
 - e. The matrix specific method detection limit that must be obtained for each of the analytes and matrices listed.
 - f. The analytical laboratory to be used and evidence of their certification for all subcategories of solid and hazardous waste, including CLP metals, under the NYSDOH ELAP CLP.
 - g. Criteria for laboratory selection and audits.
 - h. Criteria for field sampling audits.
 - i. Record maintenance and archive methods.
 - j. Review and checking procedures for the sampling plan and the analytical results reporting.
 - k. Copy of the QAO's resume and training certificates. QAO must be proficient in analytical methodology, data interpretation and validation,

quality control procedures and auditing techniques. The QAO shall interface with laboratory and data validator to make requests and or resolve issues specific to data usability.

- 3. Test Reports: Testing laboratory shall promptly submit to CONTRACTOR results of testing and inspections, including:
 - a. Date issued.
 - b. Project title, number, and name of the Site.
 - c. Testing laboratory name and address.
 - d. Name and signature of inspector or person obtaining samples.
 - e. Date of inspection or sampling.
 - f. Date of test.
 - g. Identification of material or item tested, and associated Specifications Section.
 - h. Location in the Project.
 - i. Type of inspection or test.
 - j. Results of tests and observations regarding compliance with this section and supplementary sections, as applicable
 - k. Category B deliverables for the reporting of deliverables package as per Volume 1 of the NYSDEC ASP.
 - Electronic data deliverables (EDD) shall conform to DER-10, Appendix 2B requirements. In addition, a second EDD shall be supplied that conforms with ENGINEER's EZ-EDD format as noted in Specification 01 45 28.
- 4. Qualifications Statements:
 - a. Testing Laboratory:
 - 1) NYSDOH ELAP certification. Analytical Labs
 - 2) Statement of Qualifications Geotechnical Labs

1.5 TESTING LABORATORY DUTIES

- A. Testing laboratory shall:
 - 1. Complete analytical services in compliance with NYSDOH ELAP certification and NYSDEC ASP Protocol.
 - 2. Perform required inspections, sampling, and testing of materials and methods of construction; comply with applicable reference standards and the Contract Documents; and ascertain compliance with requirements of the Contract Documents.
 - 3. Promptly notify ENGINEER and CONTRACTOR of irregularities or deficiencies in the Work that are observed during performance of services.
 - 4. Promptly submit to CONTRACTOR reports of inspections and tests.
 - 5. Perform additional tests and services, as required by CONTRACTOR.
 - 6. Data deliverables shall conform to Guidance for Data Deliverables, DER-10 Appendix 2-B.

1.6 CONTRACTOR'S RESPONSIBILITIES

A. CONTRACTOR shall:

- 1. Cooperate with testing laboratory personnel.
- 2. Provide to testing laboratory preliminary representative samples of materials and items to be tested, in required quantities.
- 3. Promptly submit to ENGINEER results of tests and inspections received from testing laboratory.
- 4. Provide labor and facilities:
 - a. For access to the Work to be tested, and where required, to Suppliers' operations.
 - b. For obtaining and handling samples at the Site.
 - c. For facilitating inspections and tests.
- 5. Notify laboratory and ENGINEER sufficiently in advance of operations to allow assignment of personnel and scheduling of tests.
- 6. Arrange with laboratory and pay for additional services, sampling, and testing required for CONTRACTOR's convenience.
- 7. Confirm that analytical data deliverables conform to DER-10, Appendix 2B prior to submittal to the ENGINEER for review, as per Specification 01 45 28.

PART 2 – PRODUCTS (NOT USED)

PART 3 – EXECUTION (NOT USED)

+ + END OF SECTION + +

SPECIFICATION 01 51 05

TEMPORARY UTILITIES AND CONTROLS

PART 1 – GENERAL

1.1 DESCRIPTION

- A. Scope:
 - 1. CONTRACTOR shall provide all temporary utilities and temporary facilities required for the Project, including the following:
 - a. Electricity.
 - b. Lighting.
 - c. Telephone and communications.
 - d. Heating, cooling, ventilating, and temporary enclosures.
 - e. Water.
 - f. Fire protection.
 - 2. Make all arrangements with utility owners for temporary utilities and with others as appropriate for temporary facilities. Obtain required permits and approvals for temporary utilities and temporary facilities.
 - 3. Pay all service costs for utilities and facilities indicated in this Section as CONTRACTOR's responsibility, including cost of electricity, water, fuel, and other utility services and temporary facilities required for the Work.
 - 4. At minimum, provide and maintain temporary utilities and temporary facilities through Substantial Completion unless otherwise approved in writing by ENGINEER.
 - 5. Maintain, including cleaning, temporary utilities and temporary facilities, and continuously provide consumables (i.e. potable water, soap, paper towels, toilet paper, etc.) as required.
 - 6. Temporary utilities and temporary facilities shall be adequate for personnel using the Site and the needs of the Project.
 - 7. Provide temporary utilities and temporary facilities in compliance with Laws and Regulations and, when applicable, requirements of utility owners.

1.2 REQUIREMENTS FOR TEMPORARY UTILITIES AND TEMPORARY FACILITIES

- A. Electrical:
 - 1. Provide temporary electrical service required for the Work, including continuous power for temporary field offices and sheds. Provide temporary outlets with circuit breaker protection and ground fault protection.
 - 2. Provide written plan for electrical service including; approved service requests and work orders; as applicable

- 3. Provide materials that comply with applicable NEMA, NECA, and UL standards and governing regulations of temporary electrical services.
- 4. Provide grounded extension cords with waterproof connectors. Use "hard service" cords where there is exposure to abrasion and traffic.
- 5. Provide general service lamps and guard cages or tempered glass enclosures where lamp is exposed to breakage by removal operations. Use liquid-tight enclosures or boxes for the devices.
- 6. The CONTRACTOR shall provide a weatherproof, grounded temporary electrical power service and distribution system of sufficient size, capacity, and power characteristics to accommodate performance of the work.
- 7. Install overload protection and disconnect switches for each temporary circuit at the power source.
- 8. Install all cable or extension cords in the work area in such a manner that visual surveillance is easily accomplished.
- B. Lighting.
 - 1. Provide lighting at the Site of not less than five foot-candles for open areas and not less than ten foot-candles for stairs and shops. Provide not less than one, 300-watt lamp every 15 feet in indoor work areas. Provide night security lighting of not less than five foot-candles within 50 feet of all parts of the Site during hours of darkness, controlled by photocell.
 - 2. Do not work in areas with insufficient lighting. Where lighting is insufficient for the work activities to be performed, provide additional temporary lighting.
 - 3. Provide temporary lighting sufficient for observation of the Work by ENGINEER and inspection by CONTRACTOR and authorities having jurisdiction. Where required by ENGINEER, provide additional temporary lighting.
 - 4. Provide temporary lighting for ENGINEER's field office in accordance with Specification 01 52 11, ENGINEER's Field Office.
- C. Telephone and Communications.
 - 1. Provide temporary telephone and communications required for CONTRACTOR's operations at the Site and for summoning emergency medical assistance.
 - 2. Provide temporary telephone and communications for ENGINEER's field office in accordance with Specification 01 52 11, ENGINEER's Field Office.
- D. Heating, Ventilating, and Enclosures.
 - 1. Provide sufficient temporary heating, cooling, ventilating, and enclosures to ensure safe working conditions and prevent damage to existing facilities and the Work.
 - 2. Maintain temperature of areas occupied by DEPARTMENT 's personnel or electronic equipment, including offices, lunch rooms, locker rooms, toilet rooms, and rooms containing computers, microprocessors, and control

equipment, between 65 degrees F and 80 degrees F with relative humidity less than 75 percent.

- 3. Required temperature range for storage areas and certain elements of the Work, including preparation of materials and surfaces, installation or application, and curing as applicable, shall be in accordance with the supplementary conditions for the associated Work and/or the Supplier's recommended temperature range for storage, application, or installation, as appropriate.
- 4. Provide temporary ventilation sufficient to prevent accumulation in construction areas and areas occupied by DEPARTMENT of hazardous and nuisance levels or concentrations of dust and particulates, mist, fumes or vapors, odors, and gases, associated with construction.
- 5. Provide temporary enclosures and partitions required to maintain required temperature and humidity.
- 6. Provide temporary heating, ventilating, and cooling for ENGINEER's field office in accordance with Specification 01 52 11, ENGINEER's Field Office.
- E. Water:
 - 1. General:
 - a. Provide temporary water facilities including piping, valves, meters if not provided by DEPARTMENT of existing waterline, backflow preventers, pressure regulators, and other appurtenances. Provide freeze-protection as required.
 - b. Continuously maintain adequate water flow and pressure for all purposes during the Project, until removal of temporary water systems.
 - 2. Water for Construction Purposes:
 - a. Provide water for Site maintenance and cleaning and, water necessary for construction activities, and water for disinfecting and testing of systems.
 - b. CONTRACTOR may use existing hose bibbs for short-term wash-downs and intermittent use of water for work areas in the existing building. Obtain consent of ENGINEER and DEPARTMENT if connections to existing hose bibbs and similar existing connections will be used for more than one day at a time.
 - 3. Water for Human Consumption and Sanitation:
 - a. Provide potable water in accordance with NYSDOH Laws and Regulations for consumption by personnel at the Site, for field offices, and for sanitary facilities.
 - b. When necessary, provide bottled, potable water for use and consumption by personnel at the Site, including CONTRACTOR, ENGINEER, and visitors to the Site.
 - c. Provide temporary water for ENGINEER's field office in accordance with Specification 01 52 11, ENGINEER's Field Office.
 - d. Provide separate sanitary facilities for males and females.

- F. Fire Protection.
 - 1. Provide temporary fire protection, including portable fire extinguishers rated not less than 2A or 5B in accordance with NFPA 10, Portable Fire Extinguishers, for each temporary building and for every 3,000 square feet of floor area under construction.
 - 2. Provide Class A (ordinary combustibles), Class B (combustible liquids and gases), and Class C (electrical equipment) fire extinguishers as necessary.
 - 3. Comply with NFPA 241, Standard for Safeguarding Construction, Alternation, and Demolition Operations, and requirements of fire marshals and authorities having jurisdiction at the Site.
 - 4. Provide temporary fire protection for ENGINEER's field office in accordance with Specification 01 52 11, ENGINEER's Field Office.
- G. Staging Ares:
 - 1. Staging areas (if required) shall be located on the site in areas (exclusion zone) approved by the ENGINEER in order to minimize possible cross contamination.
 - 2. The staging areas for waste materials shall have a lined bottom with a minimum 40-mil sealed, HDPE watertight liner or 20-mil pre-seamed LLDPE liner, as approved by the ENGINEER. Remove the liners when the staging area is no longer needed and dispose off-site.
 - 3. Waste materials shall be covered at all times with a minimum 6-mil poly liner sealed, watertight liner to prevent contaminated runoff. Remove the liners when the staging area is no longer needed and dispose off-site.
 - 4. All staging areas shall be constructed to prevent the spread of any contamination to the surrounding soils, surfaces, and/or groundwater.
 - 5. Water spray or equivalent shall be utilized as necessary to prevent dust generation. Monitoring shall be provided to ensure that unacceptable levels of dust generated from the movement and handling of soil do not migrate from the site.
 - 6. Shop Drawings of all staging areas shall be submitted by the CONTRACTOR to the ENGINEER for review and approval prior to the start of work.
 - 7. The CONTRACTOR shall decontaminate staging areas on concrete pads as directed by the ENGINEER.
 - 8. Clean soil staging areas: Can be located outside the exclusion zone over nonremedial areas, as applicable, erosion controls shall be maintained at the perimeter of piles. Long-term storage of piles may require additional stabilization measures, as directed by the ENGINEER or required in the supplementary conditions.
 - 9. Materials staging area: provide and maintain material staging areas as needed in locations indicated on the CONTRACTOR's work site layout, or as approved by the ENGINEER.

- H. Decontamination Trailer and Personal Hygiene Facility:
 - 1. A separate trailer for personnel decontamination shall be provided. The equipment and fixtures specified below shall be provided:
 - a. Shower facilities with at least one shower for every six on-site personnel. Separate showers shall be provided for men and women.
 - b. Locker room with one locker for each employee.
 - c. A room where all personnel safety equipment and protective clothing can be stored.
 - d. Laundry area equipped with automatic washing and drying machines or sub-contract laundering to a service firm approved by the ENGINEER.
 - e. Boot rack for wash boots to drain.
 - f. Toilet facilities in accordance with OSHA and local health organizations.
 - g. Sanitary waste holding tank and piping from the decontamination facility and site offices.
 - 2. All equipment and fixtures shall be maintained in clean condition. No storage of any equipment will be allowed in the decontamination trailer. The installation shall be in accordance with the HASP.
 - 3. Shop drawing of the trailer and facilities shall be submitted by the CONTRACTOR to the ENGINEER for review and approval.
- I. Temporary (Work Zone) Fencing:
 - 1. Work Zone Fencing, unless otherwise detailed in the supplementary conditions, provide a temporary, secure 4-foot high, high strength polyethylene orange plastic fence around the operations and work areas to control access. Fence posts shall be a minimum of 5- feet in total length and shall adequately support the fence and prevent leaning. Fence posts shall be set a maximum 10 feet apart.
 - 2. Perimeter Fencing, unless otherwise detailed in the supplementary conditions, shall consist of temporary or driven post fence panels a minimum of 6-feet in height. Privacy screening shall be provided
- J. Water Control:
 - 1. Comply with procedures outlined in the NYSDEC Stormwater Management Design Manual.
- K. Pollution Control:
 - 1. Maintain work areas on and off site free from further environmental pollution that would be in violation of any federal, state, or local regulations.
 - 2. Minimize air pollution by wetting down bare soils with clean water, requiring use of properly operating combustion emission control devices on construction vehicles and equipment used by CONTRACTORS, and encouraging shutdown of motorized equipment not actually in use.
 - 3. Any emissions during site activities that may have an adverse health effect on workers or the community shall be suppressed to the extent possible.

- 4. Chemicals used, whether herbicide, pesticide, disinfectant, polymer, reactant, or other classification, must be approved by either the DEPARTMENT or any other applicable regulatory agency and the ENGINEER and be used in a manner as their original purpose was intended.
- 5. Use of such chemicals and disposal of residues shall be in conformance with manufacturers' instructions.
- 6. Use of chemicals must be approved in advance by the ENGINEER.
- 7. Disposal of volatile fluid wastes (such as mineral spirits, oil, or paint thinner) in storm or sanitary sewer system or into streams or waterways is not permitted.
- 8. Volatile wastes generated will be handled as hazardous wastes and reported to NYSDEC.
- 9. The CONTRACTOR shall provide that the generated project hazardous waste (if any) and any existing hazard waste to be removed under this project shall be transported, manifested, and disposed in accordance with the current regulations.
- 10. More specific requirements are given in other sections of this document.
- L. Traffic Control:
 - 1. The CONTRACTOR shall maintain all on-site temporary roads necessary for performance of the Work. Temporary access roads will be repaired as necessary to insure unimpeded daily operations. This may include at a minimum, routine grading and repairs to areas subject to settling resulting from site-related traffic.
 - 2. Park vehicles in areas designated and approved in the Work Plan.
 - 3. Keep the designated parking areas clear of dirt and debris resulting from the work.
- M. Rubbish Control (Noncontaminated)
 - 1. Clean up the debris resulting from the work at the end of each day and leave work areas broom clean. Locate containers where directed.
 - 2. Remove debris from the site at least once a week or more often if it presents a fire hazard or becomes excessive. Burning of waste material will not be permitted.
 - 3. Containers shall have secure tops.
- N. Protection of Natural Resources:
 - 1. General:
 - a. Preserve the natural resources within the project site that are not specified for removal or change or in accordance with supplementary permit conditions.
 - b. Preserve the natural resources outside the project site impacted by the work.
 - c. Conform to federal, state and local permitting requirements.

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- d. Restore disturbed resources to an equivalent or improved condition upon completion of work.
- e. Vehicles, equipment and machinery delivered or used at the site that have visible oil or hydraulic leaks will not be allowed on site. Clean up any oil or hydraulic fluid spills immediately.
- 2. Land Resources:
 - a. Except in areas specified to be cleared, do not remove, cut, deface, injure, or destroy existing vegetation.
 - b. Protect vegetation, that is to remain, from damage by construction operations.
 - c. Vegetation, intended to remain, that is scarred or damaged by construction operations shall be removed and replaced with equivalent undamaged vegetation.
 - d. Removal of scarred or damaged vegetation shall be in accordance with the specifications.
 - e. Trees or shrubs with 30 percent or more of their root systems damaged shall require removal and replacement.
 - f. Replacement vegetation shall be approved by the ENGINEER before replacement.
- 3. Water Resources:
 - a. Prevent oily or hazardous substances from entering the ground, drainage areas, or local bodies of water.
 - b. Provide secondary containment of temporary fuel oil, petroleum, or hazardous substance storage tanks of sufficient size and strength to contain the contents of the tanks.
- 4. Fish and Wildlife Resources:
 - a. Do not alter or significantly disturb water flows on or adjacent to the project site, except as indicated or specified.
 - b. Do not alter or significantly disturb native habitat on or adjacent to the project site, except as indicated or specified.
 - c. Conformance with supplementary permit conditions, as applicable.
- O. Noise, Vibration and Dust Control:
 - 1. Conduct operations in compliance with applicable local noise ordinance.
 - 2. Dust shall be controlled in compliance with approved CONTRACTOR's Vapor Control Emissions Plan, Community Health and Safety Plan, and Site-Specific Health and Safety Plan (SSHASP), or otherwise directed by the DEPARTMENT.
 - 3. Equip compressors, hoists, and other apparatus with such mechanical devices as may be necessary to minimize noise, vibration, and dust. Equip compressors with silencers on intake lines.
 - 4. Equip gasoline or oil-operated equipment with silencers or mufflers on intake and exhaust lines.

- 5. Provide unpaved roads, detours, or haul roads used in construction areas with water treatment to minimize dust. No visible dust, as determined by the ENGINEER, will be permitted beyond the limits of the exclusion zone.
- 6. CONTRACTOR is responsible for providing all sound barriers needed to meet the requirements of these specifications. CONTRACTOR is responsible for all costs related to the manufacturer's representatives or consultants (contractors) who specialize in addressing such problems.
- 7. Control noise levels associated with site operations in accordance with local noise ordinances.
- 8. Measure noise levels in decibels with a sound level meter conforming to the American National Standard Specification.
- 9. Measurements shall be made at site perimeter.
- 10. Measurements shall be continuous during the first week of construction activities. Additional measurements may be directed by the ENGINEER throughout the course of the project.
- 11. Measurements shall be documented and reported to the ENGINEER.
- 12. If the Leq levels are not maintained the CONTRACTOR shall take appropriate measures to bring the noise under control at no additional cost to the DEPARTMENT.
- 13. Comply with DER-10, Appendix 1A.

PART 2 – PRODUCTS

2.1 MATERIALS AND EQUIPMENT

- A. Materials and equipment for temporary utilities and temporary facilities may be new or used but shall be adequate for purposes intended and shall not create unsafe conditions and shall comply with Laws and Regulations.
- B. Provide required materials, equipment, and facilities, including piping, cabling, controls, and appurtenances.

PART 3 – EXECUTION

3.1 INSTALLATION

- A. Install temporary utilities and temporary facilities in neat, orderly, manner, and make structurally, mechanically, and electrically sound throughout.
- B. Location of Temporary Utilities and Temporary Facilities:
 - 1. Locate temporary systems for proper function and service.
 - 2. Temporary systems shall not interfere with or provide hazards or nuisances to: the Work under this and other contracts, movement of personnel, traffic areas,

materials handling, hoisting systems, storage areas, finishes, and work of utility DEPARTMENT s and others.

- 3. Do not install temporary utilities on the ground, with the exception of temporary extension cords, hoses, and similar systems in place for short durations.
- C. Modify and extend temporary systems as required by progress of the Work.

3.2 USE

- A. Maintain temporary systems to provide safe, continuous service as required.
- B. Properly supervise operation of temporary systems:
 - 1. Enforce compliance with Laws and Regulations.
 - 2. Enforce safe practices.
 - 3. Prevent abuse of services.
 - 4. Prevent nuisances and hazards caused by temporary systems and their use.
 - 5. Prevent damage to finishes.
 - 6. Ensure that temporary systems and equipment do not interrupt continuous progress of construction.
- C. At end of each workday check temporary systems and verify that sufficient consumables are available to maintain operation until work is resumed at the Site. Provide additional consumables if the supply on hand is insufficient.

3.3 REMOVAL

- A. Completely remove temporary utilities, temporary facilities, equipment, and materials when no longer required. Repair damage caused by temporary systems and their removal and restore the Site to condition required by the Contract Documents; if restoration of damaged areas is not specified, restore to preconstruction condition.
- B. Where temporary utilities are disconnected from existing utility, provide suitable, watertight or gastight (as applicable) cap or blind flange, as applicable, on service line, in accordance with requirements of utility owner.
- C. Where permanent utilities and systems were used for temporary utilities, upon Substantial Completion replace all consumables such as filters and light bulbs and parts used during the Work.

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SPECIFICATION 01 52 11

ENGINEER'S FIELD OFFICE

PART 1 – GENERAL

1.1 DESCRIPTION

- A. Scope:
 - 1. This Section includes requirements for CONTRACTOR-provided field office, with furnishings, equipment, and consumables, for use by ENGINEER.
 - 2. CONTRACTOR shall provide and maintain field office for ENGINEER's sole use. Provide field office at location approved by ENGINEER, near CONTRACTOR's field office.
 - 3. Field office shall be complete and fully functional within 10 days after date on which the Contract Times commence or ENGINEER approved mobilization date, unless the schedule is otherwise modified in accordance with the General Conditions.
 - 4. Obtain required permits for field offices, as applicable.

1.2 SUBMITTALS

- A. Action Submittals: Obtain ENGINEER's approval of the following prior to staging field office to the Site:
 - 1. Field Office Submittal: Submit the following under one submittal cover:
 - a. Site plan indicating proposed location of field office, parking for field office, facilities related to the field office, and material of both field office parking and sidewalk or walkway to field office.
 - b. Information on proposed field office size, construction, exterior appearance, interior finishes, and field office security measures.
 - c. Proposed layout of field office interior, showing location of offices, common areas, restroom, closet, other areas specified (if any), with dimensions indicated for each.
 - d. Proposed layout of field office exterior identifying sign, showing all text, font, colors, and graphics (if any).
 - e. Proposed type of Internet service; name of proposed Internet service provider; and product data and technical information on equipment (if any) required for Internet service.
 - f. Office Equipment: Product data and technical information for copier, telephones, and other office equipment.

PART 2 – PRODUCTS

2.1 FIELD OFFICE CONSTRUCTION AND SITE REQUIREMENTS

- A. Site at Field Office:
 - 1. Allocate total of four reserved parking spaces for use by ENGINEER and DEPARTMENT in close proximity to ENGINEER's field office. Parking area shall be paved with bituminous paving, concrete, crushed stone, or other material approved by ENGINEER. Parking area shall be suitably drained and free of standing water during wet weather.
 - 2. Provide sidewalk or walkway, not less than four feet wide, of bituminous pavement, concrete, crushed stone, or other material approved by ENGINEER, for the full distance between parking area and field office.
- B. Field Office, Minimum Construction: Field office shall comply with the following:
 - 1. Structurally sound foundation and superstructure.
 - 2. Size: Floor area of not less than 430 square feet, and not less than 10 feet wide.
 - 3. Completely weather-tight and insulated, with minimum R-19 insulation.
 - 4. Exterior finish approved by ENGINEER.
 - 5. New interior finishes approved by ENGINEER, including resilient floor covering in good condition.
 - 6. Field Office Ingress and Egress:
 - a. Two doors for ingress and egress for each field office unit, each with landing, stairs, and railing complying with building codes and other Laws and Regulations in effect at the Site.
 - b. Landing and stairs shall have slip-resistant walking surfaces, and be metal, pressure-treated wood, fiberglass, or concrete.
 - c. Railing shall be metal, wood, or fiberglass.
 - d. Door Security:
 - 1) Doors shall be secure and lockable.
 - 2) Furnish each door with suitable, lockable security bar. Security bar shall be Master Lock 265DCCSEN Dual-Function Security Bar, or equal.
 - 7. Windows:
 - a. Window area equal to not less than ten percent of floor area.
 - b. Windows shall each have insect screen and operable sash.
 - c. Provide each window with lock and exterior security bars approved by ENGINEER.
 - 8. One lockable closet for storage.
 - 9. Keys:
 - a. Furnish to ENGINEER two identical sets of keys suitable for operating all keyed locks, including ingress/egress door locks, security bars for doors, window locks, closets, and office furnishings.
 - b. Permanently label each key to indicate its associated lock.

- 10. Restroom:
 - a. Provide in field office one private restroom including one lavatory, one toilet, medicine cabinet with mirror, soap dispenser, and paper towel holder.
 - b. Provide each restroom with appropriate electric ventilation fan with positive discharge to location outside the field office.
 - c. Portable units and hand washing stations may be provided, as equivalent, as approved by the ENGINEER.
- 11. Exterior Sign:
 - a. Field office identifying exterior sign, approved by ENGINEER. Sign shall be durable, weatherproof, suitable for long-term exposure to sunlight.
 - b. Exterior sign shall be not less than 1.5 feet high by four feet wide, installed at location determined in field and acceptable to ENGINEER.
 - c. Sign shall be in color, as presented in the layout below.
 - d. Sign layout and general proportions shall be as presented below. Text of first line and last line shall be Arial. Text size and size of graphic shall be proportionate to the graphic below. ENGINEER will furnish graphic as JPG file for use by CONTRACTOR in preparing the sign.
- C. Field Office Optional Construction:
 - 1. Provide mobile office trailer in first-class condition approved by ENGINEER, specifically designed for use as construction field office and complying with requirements of this Section.
 - 2. Provide skirting around perimeter of each mobile field office trailer.
 - 3. Supplier: Provide field office by one of the following:
 - a. Pac-Van, Inc.
 - b. Modular Space Corporation (ModSpace).
 - c. Williams Scotsman, Inc.
 - d. Or equal.

2.2 FIELD OFFICE UTILITIES

- A. Comply with Specification 01 51 05, Temporary Utilities.
- B. Provide the following for the ENGINEER's field office:
 - 1. Electrical System and Lighting:
 - a. Electric service as required, including paying all costs. Provide electrical submeter if electrical service is obtained from DEPARTMENT's system.
 - b. Interior lighting of not less than 50 foot-candles at desktop height.
 - c. Minimum of eight 120-volt, wall-mounted, duplex convenience electrical receptacles.
 - d. Exterior, wall-mounted lighting at each entrance to field office, not less than 250 watts each.

- e. Exterior security light for ENGINEER's field office parking area. Provide one 1000-watt, pole-mounted fixture with photocell control.
- 2. Heating, Ventilating, and Air Conditioning System:
 - a. Provide automatic heating to maintain indoor temperature in field office of not less than 65 degrees F in cold weather. Furnish all fuel and pay all utility costs.
 - b. Automatic cooling to maintain indoor temperature in field office of not warmer than 75 degrees F in warm weather.
- 3. Water and Sewerage:
 - a. Provide potable water service for each plumbing fixture associated with field office.
 - b. Provide sanitary sewerage for each lavatory/sink and toilet.
 - c. Utility Connections General:
 - 1) Comply with Laws and Regulations, including plumbing and sewer codes, and requirements of authorities having jurisdiction.
 - 2) Protect plumbing from freezing.
 - d. Potable Water Service: Provide the following:
 - 1) Type K copper waterline from potable water main to each plumbing fixture.
 - 2) Reduced pressure zone (RPZ)-type backflow preventer in accordance with Laws and Regulations and requirements of authorities having jurisdiction.
 - 3) Provide 15-gallon electric hot water tank or tankless hot water heater, and hot water piping to serve each lavatory/sink in field office.
 - 4) Not less than one exterior hose bib, with not less than 50 feet of hose, located adjacent to field office sidewalk or walkway, near field office ingress/egress doors. Provide wall-mounted hose reel or hose caddy.
 - 5) Before placing potable water system into service, disinfect piping and appurtenances in accordance with Laws and Regulations.
 - e. Sanitary Sewerage:
 - 1) Provide PVC or other appropriate piping, arranged in accordance with Laws and Regulations, to convey wastewater from field office to sanitary sewer that discharges to a permitted wastewater treatment facility, or to holding tank provided by CONTRACTOR.
 - 2) When holding tank is provided, also provide pumping and disposal of holding tank contents at appropriate, regular intervals.
- 4. Telephone Service:
 - a. Land Lines:
 - 1) Private telephone service for ENGINEER's sole use, including payment of installation, monthly, and service costs.

- 2) Provide two telephone lines as follows: one for phone Each line shall have separate telephone number assigned by the telephone service provider.
- 3) Pay for unlimited local and domestic long-distance service for duration of the Project.
- 4) As approved by the ENGINEER, mobile devices may replace Land Service Lines. Portable Bluetooth conferencing capabilities shall be provided to facilitate group conferencing.
- b. Cellular Telephones and Service: ENGINEER will provide cellular telephones and service for ENGINEER's employees assigned to the field office, as approved by the ENGINEER, may substitute land lines. Portable Bluetooth conferencing capabilities shall be furnished to the CONTRACTOR to facilitate
- 5. Internet Access:
 - a. Obtain and pay for Internet service until removal of the field office, with unlimited (untimed) Internet access, for ENGINEER's sole use.
 - b. Set up system and appurtenances required and verify functionality in the field office.
 - c. Internet service shall be one of the following, listed in order of preference; provide a lower type of access only when the next-higher level is unavailable:
 - 1) Fiber-optic or Cable Provider Service:
 - a) Provide service via communication service provider via either cable or fiber-optic service at download speed of not less than 15 megabytes per second (Mbps) and upload speed of not less than 1 Mbps.
 - b) Provide appropriate modem, cabling, and appurtenances.
 - 2) DSL:
 - a) Provide service via symmetrical digital subscriber line with download speed of not less than 1.5 Mbps and upload speed of not less than 384 kilobits per second (Kbps).
 - b) Provide dedicated telephone line for Internet access.
 - c) Provide DSL filters on each non-DSL outlet in the field office telephone system.
 - 3) Mobile Broadband Wireless:
 - a) Provide mobile broadband wireless 4G network by AT&T, Verizon, Sprint, T-Mobile, or equal, with download speed of not less than 37 Mbps and upload speed of not less than 17 Mbps.
 - b) Provide mobile broadband wireless router. Product and Manufacturer: Linksys Wireless-G Router for Mobile Broadband, or equal.
 - c) Mobile broadband air-card for field office. Product and Manufacturer: Sierra Wireless 597E, Novatel Merlin EX720,

or equal.

- d) Router and air-card will remain CONTRACTOR's property upon removal of field office from the Site.
- 4) Satellite:
 - a) Provide 4G network service with download speed of not less than 12 Mbps.
 - b) Provide required equipment, including outdoor unit (dish) and indoor satellite modem equipment, together with required cabling.
 - c) Provide telephone modem in computer, together with telephone line and service, for file uploading.
- C. Should actions of utility companies delay the complete set up of field office, CONTRACTOR shall provide temporary electricity, heat, water supply, sanitary facilities, and telephone service as required at no additional cost to DEPARTMENT.

2.3 FURNISHINGS AND EQUIPMENT

- A. Provide the following furnishings and equipment:
 - 1. Desks: Two 5-drawer desks, each with desktop surface five feet long by 2.5 feet wide with not less than one file drawer per desk, suitable for storing 8.5-inch by 11-inch documents.
 - 2. Desk Chairs: Two new or used (in good condition) five-point, high backed, cushioned swivel chairs with seat-height adjustment.
 - 3. Other Chairs: Four side chairs with arm rests and padded seats and backs, and eight metal folding chairs without arm rests.
 - 4. Two new or used (in good condition) folding tables each eight feet long by 2.5 feet wide.
 - 5. Two new or used (in good condition) folding tables each four feet long by 2.5 feet wide.
 - 6. Plan rack(s) to hold not less than eight sets of the Drawings.
 - 7. Two 4-drawer file cabinets.
 - 8. One 2-door storage cabinet.
 - 9. Shelving or bookcase with a total of 12 feet of shelf length and not less than 12 inches deep.
 - 10. Four polyethylene waste baskets, each with capacity of not less than seven gallons.
 - 11. Suitable doormat at each exterior ingress/egress door.
 - 12. Two cork tack-boards, each 2.5 feet by three feet, with thumbtacks.
 - 13. One white board for use with dry markers, approximately six feet by four feet, with marker holding tray, installed by CONTRACTOR at location directed by ENGINEER in the field office. Furnish supply of colored markers and eraser for the white board.
 - 14. Safety Equipment: Provide the following:

01 52 11 - 6

- a. Fire extinguishers with associated signage.
- b. Smoke detector with supply of batteries.
- c. Carbon monoxide detector with power supply.
- d. Provide in accordance with Laws and Regulations. For each field office structure, provide not less than two wall-mounted fire extinguishers, one battery-operated ceiling-mounted smoke detector, and one carbon monoxide detector suitably installed.
- 15. First-Aid Station:
 - a. In addition to first-aid stations otherwise required by the Contract Documents, provide for ENGINEER's sole use a first-aid station in ENGINEER's field office.
 - b. Product and Manufacturer: Zee Medical USA, Item 0152, "Medium Four-Shelf Plastic Cabinet", <u>www.zeemedical.com</u>; or equal.
- 16. Weather Monitoring Station:
 - a. Monitoring Capability: System shall measure: wind speed, wind direction, outdoor temperature, wind chill, time, date, indoor temperature, and rainfall.
 - b. Manufacturer and Product:
 - 1) Weather Monitoring Station: Provide Peet Bros. ULTIMETER 100; or equal.
 - 2) Rain Gauge: Provide Peet Bros. ULTIMETER PRO Rain Gauge, or equal.
 - c. Sensors:
 - 1) Cable-mounted sensors installed outdoors. Wireless systems are unacceptable.
 - 2) Vane-type wind sensor equipped with 40-foot cable, accurate to wind speeds as low as 1.5 mph.
 - 3) Temperature sensor, installed in the shade, equipped with 25-foot cable.
 - 4) Provide rain gauge for monitoring rainfall/precipitation, with 40-foot cable. Rain gauge shall be suitable for use in winter weather and accurate to 0.01-inch.
 - 5) Sensors and cabling shall be compatible with the weather monitoring recording/display unit.
 - 6) Install sensors at appropriate locations, agreed upon at the Site with ENGINEER, for optimal monitoring of weather. Provide required poles and mounting brackets as required for installation of sensors.
 - d. Recording/Display Unit: Unit shall have keyboard and data display, featuring maximums and minimums of all data monitored, displayed and stored in-unit for the following periods: current day, each of the previous seven days, and long-term. Display and record time and date for each recorded maximum and minimum. Individually-resettable memories and master-reset capability to clear all memory.
 - e. Appurtenances:

- 1) Provide data logging capability to allow data to be transmitted to and displayed on personal computer in ENGINEER's field office. Provide data relay capability to transmit data to such computer.
- 2) Provide required appurtenances including junction boxes, 120-volt power supply with transformer, all required cords and cabling, and mounting brackets and hardware.
- f. Provide all items and Work necessary for a fully-operational unit with properly-functioning capability as specified.
- 17. Personal Protective Equipment for Visitors: Furnish the following:
 - a. Protective Helmets (Hard Hats): Four, each with full brim, of fiberglass or thermoplastic; each with ratchet suspension; white in color.
 - b. Safety Glasses: Four, each with clear lenses, polycarbonate, anti-fog and anti-scratch coating, suitable to fit over personal eyewear.
 - c. Reflective Safety Vest: Four, each of polyester mesh or other material acceptable to ENGINEER, color to be high-visibility orange, with one-inch-wide reflective tape, one-size-fits-all design.
 - d. Earplugs: Supply of foam, disposable earplugs. Promptly resupply when stock is depleted.
- 18. Two electric clocks.
- 19. One electric coffee maker, with ten-cup capacity or larger.
- 20. Bottled water with electric cooler dispenser for five-gallon bottles, with cup dispenser.
- 21. Telephone System:
 - a. Telephone System Features:
 - 1) Provide one cordless telephone with hands-free speaker.
 - 2) Telephone shall have speed dialing with minimum of 20 programmable numbers, volume control, mute, redial, and hold button.
 - b. Provide one digital telephone answering machine.
- 22. Multi-function Copier:
 - a. One new or used (in good condition) machine with the following functions: photocopying, network printing, scanning to produce PDF and JPG files, and e-mail.
 - b. Products and Manufacturers: Provide one of the following:
 - 1) Xerox WorkCentre 5845.
 - 2) Or equal.
 - c. Minimum Memory: 2 GB.
 - d. Ten-bin sort capacity, 8.5-inch by 11-inch, 8.5-inch by 14-inch, and 11inch by 17-inch paper capacity, enlarging and reducing capabilities, stream-feed capability, bypass feeder, stapling capability, and doublesided copying capability. Copier shall produce not less than 40 copies per minute.
 - e. Provide necessary cables and appurtenances to enable all functions specified in this Section, including scan-and-email and printing from field

office computers. Furnish services of manufacturer's representative to set up and service copier.

- 23. Kitchen Area Appliances: Provide the following in the field office kitchen area:
 - a. One new, frost-free, refrigerator-freezer, with capacity of not less than six cubic feet.
 - b. One new microwave oven, not less than 1.2 cubic foot size.
 - c. Kitchen area appliances will remain property of CONTRACTOR upon removal of field office."

PART 3 – EXECUTION

3.1 INSTALLATION

- A. Install field office and related facilities in accordance with Laws and Regulations.
- B. Install materials and equipment, including prefabricated structures, in accordance with manufacturer's instructions, and to provide optimal performance and accuracy.

3.2 CLEANING, MAINTENANCE, AND SUPPLIES

- A. Furnish the following maintenance services:
 - 1. Immediately repair malfunctioning, damaged, leaking, or defective field office structure, site improvements, systems, and equipment.
 - 2. Provide computer supplies and pay for maintenance on CONTRACTORfurnished computer system and copier.
 - 3. Promptly provide snow and ice removal for ENGINEER's field office, including parking area, walkways, and stairs and landings.
 - 4. Provide continuous maintenance and janitorial service of field office and sanitary facilities. Clean field office not less than once per week Sweep or vacuum field office not less than daily, or more-frequently when site conditions are such that dirt or mud is frequently tracked into field office. Clean and wax (as appropriate) flooring every six months.
 - 5. Waste Disposal:
 - a. Properly dispose of trash and waste as needed, not less than twice per week.
 - b. Properly handle and dispose of recyclables. Do not dispose of recyclables as trash.
 - c. Dispose of other waste, if any, as required, to avoid creation of nuisances and adverse environmental effects. Properly dispose of electronic waste, when necessary, at proper waste receiving facility.
- B. Consumables: Provide the following consumables as needed:

- 1. Toner and ink cartridges for printers and copier, as required.
- 2. Paper supplies for printer and copier. Always maintain in field office not less than one ream of each size of paper for which printer and copier are capable.
- 3. Dry markers in six colors and white board eraser set. Replace markers when exhausted or lost.
- 4. Bottled water suitable for water dispenser and disposable cups.
- 5. Coffee supplies, including coffee, filters, cups, sugar, creamer, and stir-sticks.
- 6. Hand-soap, paper towels, toilet paper, cleansers, and janitorial implements, including broom.
- 7. Batteries for smoke detector and other battery-powered items furnished by CONTRACTOR.
- 8. Replace fire extinguishers upon expiration.
- 9. Not less-often than monthly, inspect first-aid kit and inventory items consumed or used and remove items that are at or near their expiration date. Promptly replace and restock consumed and expired items.

3.3 REMOVAL

A. Remove field office and furnishings when directed by ENGINEER, prior to inspection for final completion. Deliver specified equipment to DEPARTMENT.

SPECIFICATION 01 52 13

CONTRACTOR'S FIELD OFFICE AND SHEDS

PART 1 – GENERAL

1.1 DESCRIPTION

- A. Scope:
 - 1. CONTRACTOR shall provide a temporary field office for CONTRACTOR's use with not less than the minimum facilities specified in the Contract Documents.
 - 2. Provide required temporary storage and work sheds, as applicable.
 - 3. Obtain and pay for required permits and utilities. Field offices and sheds shall comply with local ordinances unless otherwise modified in the Supplementary Conditions.
- B. Coordination:
 - 1. Coordinate with DEPARTMENT and ENGINEER use of the Site including the location of field offices and sheds.
- C. Location:
 - 1. Locate field offices and sheds in accordance with the Contract Documents and in accordance with the approved submittals.
- D. Furnish in CONTRACTOR's field office one complete set of the Contract Documents for ready reference by interested persons. In addition to the reference set, comply with Specification 01 78 39, Project Record Documents, and related provisions of the General Conditions, as may be modified by the Supplementary Conditions.

PART 2 – PRODUCTS

2.1 FIELD OFFICE AND SHEDS – FURNISHINGS, AND EQUIPMENT

- A. Contractor's Field Office and Furnishings:
 - 1. Construction: As required by CONTRACTOR and sufficient for Project meetings.
 - 2. Utilities and Services: Provide the following:
 - a. Telephone service, capable of group teleconference
 - b. Computer network and related facilities as required for CONTRACTOR's needs.
 - c. Utilities and related facilities for lighting and maintaining temperature, in accordance with Specification 01 52 11, ENGINEER's Field Office.

- 3. Furnishings:
 - a. Conference Facilities: Provide conference area with conference table and chairs sufficient for 10 people. Conference facilities and furnishings shall be provided with suitable utilities, lighting, ventilation, and temperature controls prior to the first progress meeting, unless otherwise approved by ENGINEER.
 - b. Other furnishings required by CONTRACTOR.
- 4. Provide on field office's exterior an identification sign displaying CONTRACTOR's company name and emergency contact number. Maximum size of sign shall be four feet by four feet. Sign shall be suitable for outdoor use for the duration of the Project.
- 5. Furnish and maintain at CONTRACTOR's field office six (6) protective helmets ('hard hats") for use by visitors to the Site.
- B. Contractor's Storage and Work Sheds:
 - 1. Provide storage and work sheds sized, furnished, and equipped to accommodate personnel, materials, and equipment involved in the Work, including temporary utility services and facilities required for environmental controls sufficient for personnel, materials, and equipment.

PART 3 – EXECUTION

3.1 INSTALLATION

- A. Installation:
 - 1. Install CONTRACTOR's temporary field offices, sheds, and related facilities in accordance with Laws and Regulations.
 - 2. Install materials and equipment, including prefabricated structures, in accordance with manufacturer's instructions.

3.2 MAINTENANCE AND REMOVAL

- A. Maintenance:
 - 1. Clean and maintain field offices and sheds as required.
 - 2. Provide consumables as required.
- B. Removal:
 - 1. Do not remove temporary field offices and sheds until after Substantial Completion of the entire Work, unless otherwise approved by ENGINEER.
 - 2. Remove field offices and sheds and restore areas prior to final inspection.

SPECIFICATION 01 55 13

ACCESS ROADS AND PARKING AREAS

PART 1 – GENERAL

1.1 DESCRIPTION

- A. Scope:
 - 1. CONTRACTOR shall provide temporary construction roads, walks, parking areas, and appurtenances required during the Project for use by CONTRACTOR DEPARTMENT and emergency vehicles.
 - 2. Temporary roads and parking areas shall be designed and maintained by CONTRACTOR and shall be fully passable to vehicles in all weather conditions.
- B. Use of Existing Access Roads:
 - 1. CONTRACTOR is allowed to use DEPARTMENT's existing roads starting on the Effective Date of the Contract and satisfying other Contract requirements relative to starting the Work.
 - 2. Prevent interference with traffic on existing roads and parking areas. Always keep access roads and entrances serving the Site clear and available to DEPARTMENT and their respective employees; emergency vehicles; and other contractors. Do not use access roads or Site entrances for parking or storage of materials or equipment.
 - 3. CONTRACTOR shall indemnify and hold harmless DEPARTMENT and ENGINEER from expenses and losses caused by CONTRACTOR's operations over existing roads, drives, and parking areas.
 - 4. Schedule deliveries to minimize use of driveways and Site entrances.

1.2 SITE ACCESS

- A. Site Access:
 - 1. CONTRACTOR access to the Site shall be as shown on the drawings.

1.3 CONTRACTOR PARKING

- A. CONTRACTOR employee vehicles shall park in area(s) as shown on the drawings.
- B. Park construction vehicles and equipment in work areas off of permanent roads and parking areas, in areas of the Site designated for CONTRACTOR staging.

PART 2 – PRODUCTS

2.1 MATERIALS

- A. Materials for temporary roads and parking areas shall comply with the Contract Documents' requirements for permanent roads, drives, and parking areas.
- B. Traffic controls shall comply with requirements of authorities having jurisdiction. When such authority is the DEPARTMENT or facility manager, and no requirements are indicated, comply with the standard specifications of the state department of transportation in the area of the Project.

PART 3 – EXECUTION

3.1 TEMPORARY ROADS AND PARKING AREAS

- A. Temporary Roads and Parking in Areas Different from Permanent Pavement:
 - 1. Provide temporary roads and parking areas adequate to support and withstand traffic loads during the Project. Locate temporary roads and parking areas.
 - 2. Provide reasonably-level, graded, well-drained subgrade of satisfactory soil material, compacted to not less than 95 percent of maximum dry density in the upper six inches.
 - 3. Where required to support loads and provide separation between subgrade and subbase materials, provide geosynthetic separation fabric as required.
 - 4. Subbase:
 - a. Provide crushed stone subbase material not less than six inches thick, roller-compacted to a level, smooth, dense surface.
 - b. Subbase for temporary roads and areas traveled by construction vehicles shall be adequate for loads and traffic served.
- B. Temporary Roads and Parking in Same Areas as Permanent Pavement:
 - 1. Provide temporary roads and parking areas adequate to support and withstand traffic and construction loads during the Project. Locate temporary roads and parking areas in same location as permanent roads and parking areas. Extend temporary roads and parking areas, within construction limits indicated, as required for construction operations.
 - 2. Coordinate elevations of temporary roads and parking areas with permanent roads and parking areas.
 - 3. Prepare subgrade, subbase, and base for temporary roads and parking areas in accordance with the Contract Documents requirements for permanent roads, drives, and parking areas.

- 4. Where required by subgrade conditions and construction loads and traffic, provide geosynthetic separation fabric as required on compacted subgrade for subbase support and separation of subbase and subgrade materials.
- 5. Re-condition granular subbase of temporary roads and parking areas, including removing and properly disposing of granular material that has become intermixed with soil, re-grading, proof-rolling, compacting, and testing.

3.2 TRAFFIC CONTROLS

A. Traffic Controls:

- 1. Provide temporary traffic controls at intersections of temporary roads with each other and with parking areas, including intersections with other temporary roads, intersections with public roads, and intersections with permanent access roads at the Site.
- 2. Provide temporary warning signs on permanent roads and drives and provide temporary "STOP" AND "TRUCKS ENTERING" signs for traffic on temporary roads where required and at entrances to public roadways.
- 3. Comply with requirements of authorities having jurisdiction. When such authority is the DEPARTMENT or facility manager, and no requirements are indicated, comply with the standard specifications of the state department of transportation in the area of the Project

3.3 MAINTENANCE OF ROADS

- A. General:
 - 1. Maintain temporary roads and parking to continuously provide at the Site access for construction vehicles and trucks, DEPARTMENT and facility manager vehicles, deliveries for DEPARTMENT and facility manager, emergency vehicles, and parking areas for DEPARTMENT's and facility manager's personnel.
 - 2. Public roads shall be passable at all times unless a road closure is allowed in writing by authority having jurisdiction.
 - 3. When granular material of temporary roads and parking without hard surfacing become intermixed with soil or when temporary roads otherwise create a nuisance, remove intermixed granular-and-soil material and replace with clean granular material as required.
 - 4. Provide snow and ice removal for temporary roads and parking areas.
- B. Cleaning and Dust Control:
 - 1. Cleaning: Clean paved surfaces over which construction vehicles travel.
 - 2. Clean the following surfaces:
 - a. Roads within limits of the Project.

- b. Permanent roads at the Site between the Site entrance and the work areas, and between the Site entrance and construction parking and staging areas.
- c. Public roads that require sweeping and cleaning due to construction operations.
- 3. Dust Control:
 - a. Control dust resulting from construction activities to prevent nuisances at the Site and in nearby areas.
- C. Protection of Underground Facilities: Comply with the General Conditions, as may be modified by the Supplementary Conditions, and other requirements of the Contract Documents.

3.4 REMOVALS AND RESTORATION

- A. Removals:
 - 1. Remove temporary roads, drives, walks, and parking areas that are not intended for, or acceptable for, integration into permanent pavement. Return areas of temporary roads, drives, walks, and parking to pre-construction condition unless otherwise required by the Contract Documents.
 - 2. Remove temporary gates, fencing, and traffic controls associated with temporary roads and parking areas.
 - 3. Where areas of temporary roads and parking will be permanently landscaped, remove pavement, granular subbase, geosynthetic (where required by ENGINEER), soil, and other materials that do not comply with the Contract Documents regarding fill, subsoil, and landscaping.
 - 4. Collect confirmation samples after removal of temporary roads, drives, parking areas, as described in specification 01 45 28.
 - 5. Remove and properly dispose of materials contaminated with oil, bitumen, and other petrochemical compounds resulting from CONTRACTOR's operations, and other substances that might impair growth of plants and lawns.
- B. Restoration:
 - 1. Repair or replace paving, curbs, gutters, and sidewalks affected by temporary roads and parking, and restore to required conditions in accordance with authorities having jurisdiction.
 - 2. Restore to pre-construction conditions existing roads, walks, and parking areas damaged by CONTRACTOR, subject to approval of the DEPARTMENT of affected roads, drives, walks, and parking areas.

SPECIFICATION 01 57 33

SECURITY

<u>PART 1 – GENERAL</u>

1.1 DESCRIPTION

- A. Scope:
 - 1. This Section includes general requirements for security at the Site, including accessing the Site, securing the Work, temporary fencing, and other requirements.
 - 2. CONTRACTOR shall safely guard all the Work, the Project, materials, equipment, and property from loss, theft, damage, and vandalism until Substantial Completion, unless otherwise agreed upon by the parties.
 - 3. CONTRACTOR's duty includes safely guarding DEPARTMENT's property in vicinity of the Work and Project, and other private property in the vicinity of the Project from injury and loss in connection with performance of the Project.
 - 4. Employ watchmen as required to provide required security and prevent unauthorized entry.
 - 5. Costs for security required under this Section shall be paid by CONTRACTOR.
 - 6. Make no claim against DEPARTMENT for damage resulting from trespass.
 - 7. Remedy damage to property of DEPARTMENT and others arising from failure to furnish adequate security.
 - 8. Provide temporary fencing in accordance with the Contract Documents.
 - 9. The CONTRACTOR is solely responsible for the security of the ENGINEER's and CONTRACTOR's work areas, equipment, materials, and supplies provided under this contract. Furthermore, CONTRACTOR is responsible for ensuring site visitors related to this contract are escorted as necessary (to get where they are going) and do not enter contaminated areas without authorization.
 - 10. If the CONTRACTOR furnishes uniformed watchman or other security personnel, the CONTRACTOR shall provide that person(s) with accommodations separate from the DEPARTMENT and ENGINEER. The ENGINEER will have the right of approval and rejection of the CONTRACTOR's security personnel.

1.2 SUBMITTALS

- A. Action Submittals: Submit the following:
 - 1. Shop Drawings:

- a. Temporary Fencing: Submit site plan drawings showing proposed locations and extent of temporary site security fencing and each breach therein.
- 2. Product Data:
 - a. Temporary Fencing: Manufacturer's literature, specifications, and installation instructions for temporary site security fencing proposed.
- 3. Qualifications:
 - a. Submit security firm experience and personnel resumes.
- 4. Routine Submittals
 - a. Submit monthly security logs.
 - b. Submit 3 copies of all site entrance/exit log and the watchman logs as part of the project record documents.
- B. Informational Submittals: Submit the following:
 - 1. Employee Information: Submit to DEPARTMENT, as applicable under the supplementary conditions:
 - a. Format of employee background data.
 - b. Background data for employees to whom identification badges will be furnished.
 - c. Updated listing of personnel to whom identification badges have been issued. Submit updated listing within 24 hours of a change in the list or change in an employee's Site access status.

1.3 CONTRACTOR'S SITE ACCESS AND SECURITY PROCEDURES

- A. Comply with Section 01 55 13, Access Roads, and Parking Areas.
- B. Comply with DEPARTMENT's security procedures and access restrictions at the Site throughout the Project. Comply with the following:
 - 1. Personnel Identification:
 - a. All CONTRACTOR personnel, including Subcontractors, Suppliers, and others associated with the Project shall wear, at a visible location, at all times at the Site a durable, waterproof badge bearing CONTRACTOR's name, employer (if other than CONTRACTOR), employee's name and, as applicable, employee number.
 - 2. General Provisions Regarding Personnel Identification, as applicable under the Supplementary Conditions:
 - a. Prerequisites to Issuance of Personnel Identification Badges:
 - 1) Do not issue personnel identification badge until the person receiving the badge is documented by CONTRACTOR as:
 - a) Being eligible to perform work in the jurisdiction where the Project is located.

- b) Has received all required safety instructions, training, and equipment.
- c) Is known to CONTRACTOR as being qualified to perform the Work to which the person will be assigned.
- b. Listing of Personnel to Whom Badges are Issued:
 - 1) Maintain and continuously update a listing or log of all personnel to whom personnel identification badges have been issued.
 - 2) Listing or log shall indicate each person's full name, home address, personal telephone number, employer name, and employer address and telephone number.
 - 3) Submit copy of listing or to DEPARTMENT in accordance with Article 1.2 of this Section.
- 3. Parking:
 - a. Do not park outside of designated CONTRACTOR parking area.
 - b. Prepare and maintain parking area as required.

PART 2 – PRODUCTS

2.1 TEMPORARY FENCING

A. When security fencing or barriers are breached or temporarily removed for the Project, provide, and maintain temporary security fencing equal to existing, unless otherwise specified, in manner satisfactory to ENGINEER and DEPARTMENT.

PART 3 – EXECUTION

3.1 TEMPORARY FENCING

A. Installation:

- 1. Provide temporary fencing for site security so that integrity of site security is maintained throughout the Project.
- 2. Install temporary fencing used for site security in accordance with the Contract Documents, Section 01 51 05, Temporary Utilities and Controls and fence manufacturer's instructions.
- B. Maintenance:
 - 1. Maintain temporary fencing throughout the Project.
 - 2. Repair damage to temporary fencing and replace fencing when required to preserve Site security.
- C. Removal:
 - 1. Remove temporary fencing when permanent site security fencing is in place and fully functional, or when otherwise directed or ENGINEER.

3.2 LOGS

- A. Site Entrance/Exit Log:
 - 1. Log shall contain signed entry and exit record for project personnel and visitors.
 - 2. Log shall record time of entry and exit and firm of the individual.
- B. Watchman Log/Activities:
 - 1. Log shall record all security checks performed by security personnel and shall contain date and time, problem notes, and CONTRACTOR personnel notified of problems. Allow inspection of log by ENGINEER or DEPARTMENT.
 - 2. Conduct three security checks during non-working hours.
- C. Site Access/Control:
 - 1. The CONTRACTOR shall be responsible for the control of all persons and vehicles entering and leaving the project site, and shall:
 - a. Require personnel to print full name and employer and sign in on entering the project site and to sign out when leaving and maintain the logs.
 - b. Maintain a log of project-related vehicles and equipment entering and leaving the work areas.
 - c. Persons not associated with the project will require the ENGINEER's acceptance to be admitted on site.
 - d. Maintain a log of visitors, separate from the project personnel log.
 - 2. A log of all security incidents shall be maintained and furnished to the ENGINEER upon request.
 - 3. The CONTRACTOR shall ensure that all warning signs are in place and temporary fences around work areas are closed and any breaks or gaps are attended immediately. The ENGINEER shall be informed immediately of any incident of vandalism in the work areas.
 - 4. The CONTRACTOR shall contact law enforcement officials, emergency medical care units, local fire departments and utility emergency teams to ascertain the type of response required in any emergency situation and to coordinate the responses of the various units. A standard operating procedure describing security force response to foreseeable contingencies shall be developed. The CONTRACTOR shall also prepare and update a list of emergency points of contact, telephone numbers, radio frequencies, and call signs to ensure dependable responses.
 - 5. The CONTRACTOR shall maintain a current list of authorized persons and shall submit copies of the updated list to the ENGINEER.

SPECIFICATION 01 58 00

PROJECT IDENTIFICATION AND SIGNS

PART 1 – GENERAL

1.1 DESCRIPTION

- A. Scope:
 - 1. CONTRACTOR shall furnish, install, and maintain temporary signage for Project identification and construction site information.
 - 2. Temporary signs required are indicated in Part 2 of this Section.
 - 3. Do not display any other temporary signs, other than those specified, without prior approved of DEPARTMENT.

1.2 QUALITY ASSURANCE

- A. Qualifications:
 - 1. Sign Painter:
 - a. Shall be a professional in the type of Work required, regularly engaged in work similar to that required.

1.3 SUBMITTALS

- A. Action Submittals: Submit the following:
 - 1. Shop Drawings:
 - a. Layout of each sign (sign proof), indicating layout, text, font, character size, graphics (if any), type and grade of materials, including sign materials, supports, and bracing.
 - 2. Product Data:
 - a. Specifications and product data for finishes proposed for use, when requested by ENGINEER.
 - 3. Samples: Submit color Samples when requested by ENGINEER.

PART 2 – PRODUCTS

2.1 MATERIALS AND CONSTRUCTION

- A. Performance Criteria:
 - 1. Temporary signs, including supports and bracing, shall withstand sustained winds of 75 miles per hour.

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- B. Temporary Signage Required: Provide the following temporary signs:
 - 1. Project Sign: as further defined in the project sign guidance attachment.

PART 3 – EXECUTION

3.1 INSTALLATION, MAINTENANCE, AND REMOVAL

- A. Installation:
 - 1. Location of signs shall be as shown or indicated on the Contract Documents, or as directed by ENGINEER. Signs shall be plainly visible to vehicular traffic.
 - 2. Install signs in a neat, professional, workmanlike manner to withstand the performance criteria indicated in this Section.
 - 3. Install signs within two weeks of the Mobilization to the site.
 - 4. Fasten sign, in a level position, securely to posts or fenceline. The center of the sign should be located approximately 6 to 7 feet from ground level.
- B. Maintenance:
 - 1. Maintain temporary signage so that signs are clean, legible, and upright.
 - 2. Cut grass, weeds, and other plants so that temporary signs are not covered or obscured.
 - 3. Repair and repaint damaged temporary signs.
 - 4. Relocate signs as required by progress of the Project.
- C. Remove temporary signage prior to final inspection of the Work, or when directed by ENGINEER.

Signs at Sites in the Division of Environmental Remediation's Remedial Programs

Program signs are required at State Superfund Sites that meet the following criteria:

- Entering remedial construction, and
- State funded, and
- Remedial construction will cost at least \$1 million.

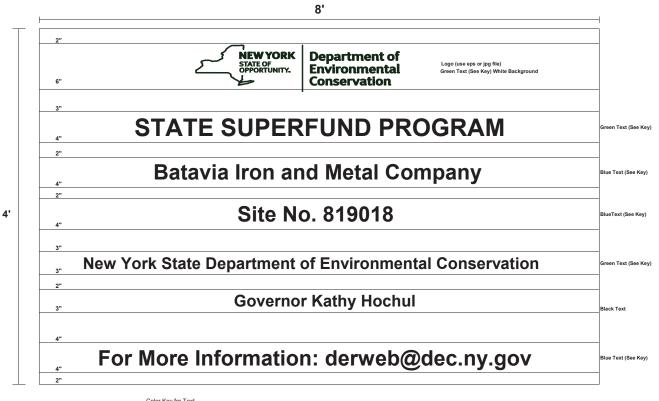
Site signs will not be required for State Superfund Sites at other points in the remedial process. Signs will not be required for sites being addressed in any other remedial programs. Exceptions can be made on a case-by-case basis, and require the prior review and approval of the DER Division Director.

The intention is for a sign to remain for the duration of the remedial construction, and to be removed upon project completion.

To ensure consistency, instructions, specifications, and a generic sign format begin on page 2:

Sign Requirements

Size:	Horizontal format – 96" wide by 48" high	
Construction Materials:	Aluminum or wood blank sign boards with vinyl sheeting.	
Inserts:	"New York State and DEC logo", "STATE SUPERFUND PROGRAM", "{Site Name}", "{Site No.}", "New York State Department of Environmental Conservation", "Governor {First Name, Middle Initial, Last Name}", "For More Information: derweb@dec.ny.gov".	
Color Scheme:	All body font should be black or green Pantone 350 C or CMYK 80/43/83/42. If blue is desired, use following values: Pantone 288 C or CMYK 100/87/27/19.	
	L:/DER/DER Shared/ sign shops would pre	DEC logo: The logo is available as .eps and .jpg files at: <u>DER Site Sign Policy</u> . Both utilize the correct color. Most fer the .eps file as it is the intended for professional offset etely scalable. If a vendor needs a different format, use the
Text:	STATE SUPERFUNE	0 PROGRAM: Green text (PANTONE 350C or CMYK 100/43/83/42
	{Site Name}:	Blue text (PANTONE 288C or CMYK 100/87/27/19)
	{Site Number}:	Blue text (PANTONE 288C or CMYK 100/87/27/19)
	New York State Depa	artment of Environmental Conservation: Green text (PANTONE 350C or CMYK 100/43/83/42)
	Governor {First Name, Middle Initial, Last Name}: Black text	
	For More Information	: derweb@dec.ny.gov: Blue text (PANTONE 288C or CMYK 100/87/27/19)
Type Specifications:	All type is Ariel. Format is: Center each line of copy with initial caps and small Letters.	
Production Notes:	96" wide x 48" high aluminum blanks will be covered with vinyl sheeting to achieve background color. Copy and logo will be silk screened on this surface.	
Sign Format:	See page 3.	



Color Key for Text Green Text = Pantone 350C or CMYK 80/43/83/42 Blue Text = Pantone 288C or CMYK 100/87/27/19

Project Sign Format

Page 3

SPECIFICATION 01 62 00

PRODUCT OPTIONS

PART 1 – GENERAL

1.1 DESCRIPTION

- A. Scope:
 - 1. This Section includes:
 - a. CONTRACTOR's options for selecting materials and equipment.
 - b. Requirements for consideration of "or-equal" materials and equipment as further defined in the General Conditions.

1.2 PRODUCT OPTIONS

- A. For materials and equipment specified only by reference standard or description, without reference to Supplier, furnish materials and equipment complying with such standard, by a Supplier or from a source that complies with the Contract Documents.
- B. For materials and equipment specified by naming one or more items or Suppliers, furnish the named materials and equipment that comply with the Contract Documents, unless an "or-equal" or substitute item is approved by ENGINEER.
- C. For materials and equipment specified by naming one or more items or Suppliers and the term, "or-equal", when CONTRACTOR proposes a material or equipment item or Supplier as an "or-equal", submit to ENGINEER a request for approval of an "or-equal" item or Supplier.

1.3 "OR-EQUAL" ITEMS

- A. Procedure:
 - 1. For proposed materials and equipment not named in the Contract Documents and considered as an "or-equal" in accordance with the General Conditions, CONTRACTOR shall request in writing ENGINEER's approval of the "orequal".
 - 2. Request for approval of an "or-equal" item shall accompany the Shop Drawing or product data submittal for the proposed item
- B. Requests for approval of "or-equals" shall include:
 - 1. CONTRACTOR's written request that the proposed item be considered as an "or-equal" in accordance with the General Conditions, accompanied by CONTRACTOR's certifications required in the General Conditions.

- 2. Documentation adequate to demonstrate to ENGINEER that proposed item does not require extensive revisions to the Contract Documents, that proposed item is consistent with the Contract Documents, and that proposed item will produce results and performance required in the Contract Documents, and that proposed item is compatible with other portions of the Work.
- 3. Detailed comparison of significant qualities of proposed item with the materials and equipment and manufacturers named in the Contract Documents. Significant qualities include attributes such as performance, weight, size, durability, visual effect, and specific features and requirements shown or indicated.
- 4. Evidence that proposed item's manufacturer will furnish warranty equal to or better than that specified, if any.
- 5. List of similar installations for completed projects with project names and addresses, and names and address of design professionals and owners, when requested.
- 6. Samples, when requested by ENGINEER.
- 7. Other information requested by ENGINEER.

PART 2 – PRODUCTS (NOT USED)

PART 3 – EXECUTION (NOT USED)

SPECIFICATION 01 65 00

PRODUCT DELIVERY REQUIREMENTS

<u>PART 1 – GENERAL</u>

1.1 DESCRIPTION

- A. Scope:
 - 1. This Section includes general requirements for preparing for shipping, delivering, and handling materials and equipment to be incorporated into the Work.
 - 2. CONTRACTOR shall make all arrangements for transporting, delivering, and handling of materials and equipment required for prosecution and completion of the Work.
 - 3. When required, move stored materials and equipment without changes to the Contract Price or Contract Times.

1.2 SUBMITTALS

A. Refer to individual Specifications Sections for submittal requirements relative to delivering and handling materials and equipment.

1.3 PREPARING FOR SHIPMENT

- A. When practical, factory-assemble materials and equipment. Mark or tag separate parts and assemblies to facilitate field-assembly. Cover machined and unpainted parts that may be damaged by the elements or climate with strippable, protective coating.
- B. Package materials and equipment to facilitate handling, and protect materials and equipment from damage during shipping, handling, and storage. Mark or tag outside of each package and crate to indicate the associated purchase order number, bill of lading number, contents by name, DEPARTMENT's contract designation, CONTRACTOR name, equipment number, and approximate weight. Include complete packing lists and bills of materials with each shipment.
- C. Protect materials and equipment from exposure to the elements and damage by climate and keep thoroughly dry and dust-free at all times. Protect painted surfaces against impact, abrasion, discoloration, and other damage. Lubricate bearings and other items requiring lubrication in accordance with manufacturer's instructions.

- D. Do not ship materials and equipment until:
 - 1. Related Shop Drawings, Samples, and other submittals required by the Contract Documents have been approved or accepted (as applicable) by ENGINEER, including, but not necessarily limited to, all Action Submittals associated with the materials and equipment being delivered.
 - 2. Manufacturer's instructions for handling, storing, and installing the associated materials and equipment have been submitted to and accepted by ENGINEER in accordance with the Specifications.
 - 3. Results of source quality control testing (factory testing), when required by the Contract Documents for the associated materials or equipment, have been submitted to and accepted by ENGINEER.
 - 4. Facilities required for handling materials and equipment in accordance with the Contract Documents and manufacturer's instructions are in place and available.
 - 5. Required storage facilities have been provided.

1.4 DELIVERY

- A. Scheduling and Timing of Deliveries:
 - 1. Arrange deliveries of materials and equipment in accordance with the Progress Schedule accepted by ENGINEER and in ample time to facilitate inspection and observation prior to installation.
 - 2. Schedule deliveries to minimize space required for and duration of storage of materials and equipment at the Site or other delivery location, as applicable.
 - 3. Coordinate deliveries to avoid conflicting with the Work and conditions at Site, and to accommodate the following:
 - a. Work of other contractors and DEPARTMENT.
 - b. Storage space limitations.
 - c. Availability of equipment and personnel for handling materials and equipment.
 - d. DEPARTMENT's use of premises.
 - 4. Deliver materials and equipment to the Site during regular working hours.
 - 5. Deliver materials and equipment to avoid delaying the Work and the Project, including work of other contractors, as applicable. Deliver anchor system materials, including anchor bolts to be embedded in concrete or masonry, in ample time to avoid delaying the Work.
- B. Deliveries:
 - 1. Shipments shall be delivered with CONTRACTOR's name, Subcontractor's name (if applicable), Site name, Project name, and contract designation clearly marked.

- 2. Site may be listed as the "ship to" or "delivery" address; but DEPARTMENT shall not be listed as recipient of shipment unless otherwise directed in writing by ENGINEER.
- 3. Provide CONTRACTOR's telephone number to shipper; do not provide DEPARTMENT's telephone number.
- 4. Arrange for deliveries while CONTRACTOR's personnel are at the Site. CONTRACTOR shall receive and coordinate shipments upon delivery. Shipments delivered to the Site when CONTRACTOR is not present will be refused by DEPARTMENT, and CONTRACTOR shall be responsible for the associated delays and additional costs, if incurred.
- 5. Comply with Specification 01 35 43.13, Environmental Procedures for Hazardous Materials.
- C. Containers and Marking:
 - 1. Have materials and equipment delivered in manufacturer's original, unopened, labeled containers.
 - 2. Clearly mark partial deliveries of component parts of materials and equipment to identify materials and equipment, to allow easy accumulation of parts, and to facilitate assembly.
- D. Inspection of Deliveries:
 - 1. Immediately upon delivery, inspect shipment to verify that:
 - a. Materials and equipment comply with the Contract Documents and approved or accepted (as applicable) submittals.
 - b. Quantities are correct.
 - c. Materials and equipment are undamaged and of the required quality.
 - d. Containers and packages are intact, and labels are legible.
 - e. Materials and equipment are properly protected.
 - 2. Promptly remove damaged materials and equipment from the Site and expedite delivery of new, undamaged materials and equipment, and remedy incomplete or lost materials and equipment. Furnish materials and equipment in accordance with the Contract Documents, to avoid delaying progress of the Work.
 - 3. Advise ENGINEER in writing when damaged, incomplete, or defective materials and equipment are delivered, and advise ENGINEER of the associated impact on the Progress Schedule.

1.5 HANDLING OF MATERIALS AND EQUIPMENT

A. Provide equipment and personnel necessary to handle materials and equipment, including those furnished by DEPARTMENT, by methods that prevent soiling or damaging materials and equipment and packaging.

- B. Provide additional protection during handling as necessary to prevent scraping, marring, and otherwise damaging materials and equipment and surrounding surfaces.
- C. Handle materials and equipment by methods that prevent bending and overstressing.
- D. Lift heavy components only at designated lifting points.
- E. Handle materials and equipment in safe manner and as recommended by the manufacturer to prevent damage. Do not drop, roll, or skid materials and equipment off delivery vehicles or at other times during handling. Hand-carry or use suitable handling equipment.

PART 2 – PRODUCTS (NOT USED)

PART 3 – EXECUTION (NOT USED)

SPECIFICATION 01 66 00

PRODUCT STORAGE AND HANDLING REQUIREMENTS

PART 1 – GENERAL

1.1 DESCRIPTION

- A. Scope:
 - 1. This Section includes general requirements for storing and protecting materials and equipment.
 - 2. CONTRACTOR shall provide all labor, materials, tools, equipment, and incidentals to store and handle materials and equipment to be incorporated into the Work, and other materials and equipment at the Site.

1.2 STORAGE

- A. Store and protect materials and equipment in accordance with manufacturer's recommendations and the Contract Documents.
- B. General:
 - 1. CONTRACTOR shall make all arrangements and provisions necessary for, and pay all costs for, storing materials and equipment.
 - 2. Excavated materials, construction equipment, and materials and equipment to be incorporated into the Work shall be placed to avoid injuring the Work and existing facilities and property, and so that free access is maintained at all times to all parts of the Work and to public utility installations in vicinity of the Work.
 - 3. Store materials and equipment neatly and compactly in locations that cause minimum inconvenience to DEPARTMENT, facility manager, other contractors, public travel, and tenants, and occupants of adjoining property.
 - 4. Arrange storage in manner to allow easy access for inspection by ENGINEER.
- C. Storage Location:
 - 1. Areas available at the Site for storing materials and equipment are shown or indicated in the Contract Documents, or as acceptable to ENGINEER.
 - 2. Restrictions:
 - a. Do not store materials or equipment in structures being constructed unless approved by ENGINEER in writing.
 - b. Do not use lawns or other private property for storage without written permission of the DEPARTMENT or other person in possession or control of such premises.

- D. Protection of Stored Materials:
 - 1. Store materials and equipment to become DEPARTMENT's property to ensure preservation of quality and fitness of the Work, including proper protection against damage by freezing, moisture, and with outdoor ambient air high temperatures as high as 120 degrees F; temperature and humidity inside crates, containers, storage sheds, and packaging may be significantly higher than the outdoor ambient air temperature.
 - 2. Store in indoor, climate-controlled storage areas all materials and equipment subject to damage by moisture, humidity, heat, cold, and other elements, unless otherwise acceptable to DEPARTMENT.
 - 3. When placing orders to Suppliers for equipment and controls containing computer chips, electronics, and solid-state devices, CONTRACTOR shall obtain, coordinate, and comply with specific temperature and humidity limitations on materials and equipment, because temperature inside cabinets and components stored in warm temperatures can approach 200 degrees F.
 - 4. CONTRACTOR shall be fully responsible for loss or damage (including theft) to stored materials and equipment.
 - 5. Do not open manufacturer's containers until time of installation, unless recommended by the manufacturer or otherwise specified in the Contract Documents.
 - 6. Comply with requirements of Article 1.3 of this Section.

<u>1.3 PROTECTION – GENERAL</u>

- A. Equipment to be incorporated into the Work shall be boxed, crated, or otherwise completely enclosed and protected during shipping, handling, and storage, in accordance with Specification 01 65 00, Product Delivery Requirements.
- B. Store all materials and equipment off the ground (or floor) on raised supports such as skids or pallets.
- C. Protect painted surfaces against impact, abrasion, discoloration, and other damage. Painted equipment surfaces that are damaged or marred shall be repainted in their entirety in accordance with equipment manufacturer and paint manufacturer requirements, to the satisfaction of ENGINEER.
- D. Protect electrical equipment, controls, and instrumentation against moisture, water damage, humidity, heat, cold, and dust. Space heaters provided in equipment shall be connected and operating at all times until equipment is placed in operation and permanently connected.

1.4 UNCOVERED STORAGE

- A. The following types of materials may be stored outdoors without cover on supports so there is no contact with the ground:
 - 1. Reinforcing steel.
 - 2. Precast concrete materials.
 - 3. Structural steel.
 - 4. Metal stairs.
 - 5. Handrails and railings.
 - 6. Grating.
 - 7. Checker plate.
 - 8. Metal access hatches.
 - 9. Castings.
 - 10. Fiberglass items.
 - 11. Rigid electrical conduit, except PVC-coated conduit.
 - 12. Piping, except PVC or chlorinated PVC (CPVC) pipe.

1.5 COVERED STORAGE

- A. The following materials and equipment may be stored outdoors on supports and completely covered with covering impervious to water:
 - 1. Grout and mortar materials.
 - 2. Masonry units.
 - 3. Rough lumber.
 - 4. Soil materials and granular materials such as aggregate.
 - 5. PVC and CPVC pipe.
 - 6. PVC-coated electrical conduit.
 - 7. Filter media.
- B. Tie down covers with rope and install covering properly sloped to prevent accumulation of water.
- C. Store loose granular materials, with covering impervious to water, in well-drained area or on solid surfaces to prevent mixing with foreign matter.

1.6 FULLY PROTECTED STORAGE

A. Store all material and equipment not indicated in Articles 1.4 and 1.5 of this Section on supports in buildings or trailers that have concrete or wooden flooring, roof, and fully closed walls on all sides. Covering with visquine plastic sheeting or similar material in space without floor, roof, and walls is unacceptable. Comply with the following:

- 1. Provide heated storage for materials and equipment that could be damaged by low temperatures or freezing.
- 2. Provide air-conditioned storage for materials and equipment that could be damaged by high temperatures or humidity.
- 3. Protect mechanical and electrical equipment from being contaminated by dust, dirt, and moisture.
- 4. Maintain humidity at levels recommended by manufacturers for electrical and electronic equipment.

1.7 HAZARDOUS MATERIALS AND EQUIPMENT

A. Prevent contamination of personnel, storage areas, and the Site. Comply with Laws and Regulations, manufacturer's instructions, Specification 01 35 29, CONTRACTOR's Health and Safety Plan and Specification 01 35 43.13, Environmental Procedures for Hazardous Materials, and other provisions of the Contract Documents.

1.8 MAINTENANCE OF STORAGE

- A. On a scheduled basis, periodically inspect stored materials and equipment to ensure that:
 - 1. Condition and status of storage facilities is adequate to provide required storage conditions.
 - 2. Required environmental conditions are maintained on continuing basis.
 - 3. Materials and equipment exposed to elements are not adversely affected.

1.9 RECORDS

A. Keep up-to-date account of materials and equipment in storage to facilitate preparation of Applications for Payment, if the Contract Documents provide for payment for materials and equipment not incorporated in the Work but delivered and suitably stored at the Site or at another location agreed to in writing.

PART 2 – PRODUCTS (NOT USED)

PART 3 – EXECUTION (NOT USED)

SPECIFICATION 01 71 23

FIELD ENGINEERING

PART 1 – GENERAL

1.1 DESCRIPTION

A. Scope:

- 1. This Section includes field engineering, surveying, and layouts by CONTRACTOR, and associated requirements. This Section supplements the Agreement and General Conditions' provisions on reference points and other matters.
- 2. CONTRACTOR shall provide field engineering services, surveying and layout services, and professional services of the types indicated for the Project, including:
 - a. Furnishing civil, structural, and other delegated professional engineering services specified or required to execute CONTRACTOR's construction methods.
 - b. Developing and making all detail surveys and measurements required for construction; including slope stakes, batter boards, and all other working lines, elevations, and cut sheets.
 - c. Providing materials required for benchmarks, control points, batter boards, grade stakes, structure and pipeline elevation stakes, and other items.
 - d. Keeping a total station; survey grade global positioning system (GPS); leveling instrument; and related surveying equipment at the Site at all times and having a skilled instrument person available when necessary for laying out the Work.
 - e. Being solely responsible for all locations, dimensions and levels. No data other than Change Order, Work Change Directive, or Field Order shall justify departure from dimensions and levels required by the Contract Documents.
 - f. Rectifying all Work improperly installed because of not maintaining, not protecting, or removing without authorization established reference points, stakes, marks, and monuments.
 - g. Providing such facilities and assistance necessary for ENGINEER and/or DEPARTMENT to check lines and grade points placed by CONTRACTOR. Do not perform excavation or embankment work until all cross-sectioning necessary for determining payment quantities for Unit Price Work have been completed and accepted by ENGINEER.

- h. All survey work shall be certified by a New York State Professional Land Surveyor (PLS).
- i. PLS shall also work with contractor to develop a Quality Assurance program and necessary certification of GPS guided equipment to ensure accuracy. The use of GPS data from equipment will not replace the required record surveys.
- B. Coordination:
 - 1. Review requirements of this and other Sections and coordinate installation of items to be installed with or before field engineering, surveying, and layout Work.

1.2 SUBMITTALS

- A. Informational Submittals: Submit the following:
 - 1. Certificates:
 - a. When requested by ENGINEER, submit certificate signed by professional engineer or professional surveyor, as applicable, certifying that elevations and locations of the Work comply with the Contract Documents. Explain each deviation, if any.
 - 2. Field Engineering:
 - a. Submit daily reports as indicated in this Section.
 - b. When requested by ENGINEER, submit documentation verifying accuracy of field engineering.
 - 3. Surveying:
 - a. Complete plan for performing survey work, submitted not less than 10 days prior to beginning survey Work.
 - b. Example of survey data to be maintained by CONTRACTOR's surveyor. Example shall have sufficient information and detail, including example instrument output, calculations, and notes.
 - c. Submit raw instrument data or field data within two days after completing survey Work.
 - d. Submit certified surveys in accordance with this Section.
 - 4. Qualifications Statements:
 - a. Field Engineer: Name, employer, and professional address. When requested by ENGINEER, submit qualifications, including resume'.
 - b. Surveyor: Name, employer, and professional address of firm, and resumes of each professional land surveyor and crew chief that will be engaged in survey Work. Submit not less than 10 days prior to beginning survey Work. During the Project, submit resume for each new registered, licensed land surveyor and crew chief employed by or retained by CONTRACTOR not less than 10 days prior to starting on the survey Work.

1.3 CONTRACTOR'S ENGINEERS

- A. Qualifications of Field Engineer:
 - 1. Employ and retain at the Site a field engineer with experience and capability of performing all field engineering tasks required of CONTRACTOR, as indicated in this Article and elsewhere in the Contract Documents.
 - 2. CONTRACTOR's field engineer shall possess experience performing duties similar in scope and extent to those required of CONTRACTOR's field engineer on this Project. Qualifications of the CONTRACTOR's field engineer shall be subject to review and approval by the DEPARTMENT.
- B. Responsibilities of CONTRACTOR's Field Engineer:
 - 1. Daily Reports:
 - a. Prepare and maintaining daily reports of activity on the Contract. Submit reports to ENGINEER including the following information:
 - 1) Number of employees at the Site.
 - 2) Number employees at the Site for each Subcontractor.
 - 3) Breakdown of employees by trades.
 - 4) Major equipment and materials installed as part of the Work.
 - 5) Major construction equipment utilized.
 - 6) Location of areas in which construction was performed.
 - 7) Materials and equipment delivered to the Site or suitable, offsite storage location.
 - 8) Work performed, including field quality control and testing.
 - 9) Weather conditions.
 - 10) Safety concerns, events, and precautions taken.
 - 11) Delays encountered, extent of delay incurred, reasons for the delay, and measures that will be taken to rectify delays encountered.
 - 12) Acknowledgement of specific instructions received from ENGINEER or DEPARTMENT.
 - b. Daily reports shall be signed and dated by responsible member of CONTRACTOR's staff, such as CONTRACTOR's project manager, field engineer, or superintendent, or foreman designated by CONTRACTOR as having authority to sign daily reports.
 - c. Submit CONTRACTOR's daily reports in accordance with Specification 01 31 26, Electronic Communication Protocols, by 9:00 a.m. the next working day after the day covered in the associated report.
 - 2. Continually inspect the Work to ensure that the quality and quantities required by the Contract Documents are provided.

- 3. Cooperate as required with ENGINEER in observing the Work and performing field inspections.
- 4. Check and coordinate the Work for conflicts and interferences, and immediately advise ENGINEER of all discrepancies of which CONTRACTOR is aware.
- 5. Maintain field office files and drawings, record documents, and coordinate field engineering services with Subcontractors and Suppliers as appropriate, and other prime contractors (if any).
- 6. Prepare layout and coordination drawings for construction operations.
- 7. Review and coordinate the Work with Shop Drawings and CONTRACTOR's other submittals approved or accepted, as applicable, by ENGINEER.
- C. Professionals Retained by CONTRACTOR (whether or not stationed at the Site):
 - 1. Delegated Professional Design Services:
 - a. Where the Contract Documents require CONTRACTOR to furnish professional engineering or architecture services as delegated professional design, the provisions of the General Conditions regarding delegated professional design services, and the Contract Documents' requirements applicable to the specific delegated professional design, shall apply.
 - 2. Professional Services that are Not Delegated as Professional Design of the Completed Work:
 - a. Where the Contract Documents require that the CONTRACTOR retain a design professional for to carry out the CONTRACTOR's responsibilities for construction means, methods, techniques, sequences, and procedures (including temporary construction that will not remain as part of the completed Work), such services shall be performed by a registered professional of the discipline required for specific service on the Project, with valid license in the same jurisdiction as the Site.
 - b. DEPARTMENT and ENGINEER shall be entitled to rely upon the adequacy, accuracy, and completeness of the services, certifications, and approvals performed by such design professionals.

1.4 CONTRACTOR'S SURVEYOR

- A. Qualifications:
 - 1. Employ or retain the services, as needed, at the Site a surveyor with experience and capability of performing surveying and layout tasks required in the Contract Documents and as required for the Work. Surveyor qualifications will be subject to review and acceptance by the ENGINEER.
 - 2. Surveyor shall be a professional land surveyor registered and licensed in the State of New York.
- B. Responsibility of CONRACTOR's Surveyor:

- 1. Providing required surveying equipment, including transit, theodolite, or total station; level; stakes; and surveying accessories.
- 2. Establishing required lines and grades for constructing all facilities, structures, pipelines, and site improvements, including outdoor electrical equipment and feeders.
- 3. Preparing and maintaining professional-quality, accurate, well-organized, legible notes of all measurements and calculations made while surveying and laying out the Work.
- 4. Prior to backfilling operations, survey, locate, and record on a copy of the Contract Documents accurate representation of buried Work and Underground Facilities provided and encountered.
- 5. Locate on a site plan the actual location of above-ground Work to be indicated on record documents.
- 6. Complying with requirements of the Contract Documents relative to surveying and related Work, including requirements of this Section's Articles 1.5 and 3.1.
- 7. Prepare all surveys in AutoCAD format with 1-foot contour intervals and a 1inch to 40-foot scale. Coordinate version with ENGINEER.

1.5 RECORDS

- A. Records General:
 - 1. Maintain at the Site a complete and accurate log of control and survey Work as such Work progresses.
- B. Field Books and Records:
 - 1. Survey data and records shall be in accordance with recognized professional surveying standards, Laws and Regulations, and prevailing standards of practice in the locality where the Site is located.
 - 2. Photographic Documentation
 - a. Photograph and video record (in high definition) all pre-construction site conditions, including adjacent residences, commercial and recreational properties, front lawns, foliage, driveways, sewer grates, slope soils, surface and above grade utilities, appurtenances, guardrails, and trees.
 - b. Document completed work areas and pre-existing site conditions.
- C. Initial Survey:
 - 1. Provide topographic survey of site property and any CONTACTOR use areas, property boundary survey and utilities prior to site disturbance. Elevations will be provided for all control points.
 - 2. Compute the coordinates of each surveyed point on the New York State Plane Coordinate System using the 1983 North American Datum. The elevations shall be on the National Geodetic Vertical Datum.
 - 3. Provide facility mobilization and demobilization sampling locations for CONTRACTOR operations such as:
 - a. Decontamination facilities

- b. Support zones
- c. Stockpile areas
- d. Contact water staging and treatment areas
- D. Site Control:
 - 1. Provide one permanent site control monument with elevations referenced to a National Geodetic Vertical Datum (NGVD) benchmark and coordinates referenced to the New York State Plane (NAD 83) Datum. The monument locations and elevations shall meet the Federal Geodetic Control Committee Standard for second order (horizontal and vertical). Final locations will be reviewed by the ENGINEER for acceptability.
- E. Payment Surveys:
 - 1. Surveys required for the verification of payment quantities will be signed and sealed by the professional surveyor.
 - 2. Compute the coordinates of each surveyed point on the New York State Plane Coordinate System using the 1983 North American Datum. The elevations shall be on the National Geodetic Vertical Datum.
- F. Final Survey:
 - 1. Provide topographic survey of site property and any CONTRACTOR use areas, property boundary survey and utilities prior to site disturbance. Elevations will be provided for all control points.
 - 2. Compute the coordinates of each surveyed point on the New York State Plane Coordinate System using the 1983 North American Datum. The elevations shall be on the National Geodetic Vertical Datum.
 - 3. Provide facility mobilization and demobilization sampling locations for CONTRACTOR operations such as:
 - a. Decontamination facilities
 - b. Support zones
 - c. Stockpile areas
 - d. Contact water staging and treatment areas
- G. Certified Survey of Surface Structures:
 - 1. Upon completion of foundation walls and major site improvements, prepare a certified survey, signed, and sealed by professional surveyor, showing, or indicating dimensions, locations, angles and elevations of construction and locations and elevations of Underground Facilities installed and encountered during the Work.
 - 2. Compute the coordinates of each surveyed point on the New York State Plane Coordinate System using the 1983 North American Datum. The elevations shall be on the National Geodetic Vertical Datum.
 - 3. During construction of any concrete slab, the subbase will be surveyed before installation of the concrete, and the concrete surface will be surveyed.
 - 4. Well locations and their corresponding elevations of the top of casing shall be surveyed in.

PART 2 – PRODUCTS (NOT USED)

PART 3 – EXECUTION

3.1 SURVEYING

- A. Reference Points:
 - 1. Refer the General Conditions, as may be modified by the Supplementary Conditions, for requirements regarding reference points.
 - 2. DEPARTMENT's established reference points that are damaged or destroyed by CONTRACTOR will be re-established by DEPARTMENT at CONTRACTOR's expense. DEPARTMENT may deduct from payments owed CONTRACTOR such amounts as set-offs in accordance with the Contract Documents.
 - 3. From DEPARTMENT-established reference points, establish lines, grades, and elevations necessary to control the Work. Obtain measurements required for executing the Work to tolerances specified in the Contract Documents.
 - 4. Establish, place, and replace as required, such additional stakes, markers, and other reference points necessary for control, intermediate checks, and guidance of construction operations.
- B. Surveys to Determine Quantities for Payment:
 - 1. For each application for progress payment, perform such surveys and computations necessary to determine quantities of Work performed or placed. Perform surveys necessary for ENGINEER to determine final quantities of Work in place.
 - 2. Notify ENGINEER not less than 24 hours before performing survey services for determining quantities to be included in Application for Payment. Unless waived in writing by ENGINEER, perform quantity surveys in presence of ENGINEER or Resident Project Representative (if any).
- C. Construction Surveying: Comply with the following:
 - 1. Alignment Staking: Provide alignment stakes at 50-foot intervals on tangent, and at 25-foot intervals on curves.
 - 2. Slope Staking: Provide slope staking at 50-foot intervals on tangent, and at 25foot intervals on curves. Re-stake at every ten-foot difference in elevation.
 - 3. Structure: Stake-out structures, including elevations, and check prior to and during construction.
 - 4. Pipelines: Stake-out pipelines including elevations and check prior to and during construction.
 - 5. Roads, Drives, and Paved Areas: Stake-out roadway, driveway, and paved area elevations at 50-foot intervals on tangent, and at 25-foot intervals on curves.
 - 6. Cross-sections: Provide original, intermediate, and final staking as required, for site work other locations as necessary for quantity surveys.

- 7. Easement Staking: Provide easement staking at 50-foot intervals on tangent, and at 25-foot intervals on curves. Also provide wooden laths with flagging at maximum intervals of 100 feet.
- 8. Record Staking: Provide permanent stake at each blind flange and each utility cap provided for future connections. Stakes for record staking shall be material acceptable to ENGINEER.
- D. Accuracy:
 - 1. Establish CONTRACTOR's temporary survey references points for CONTRACTOR's use to not greater than second-order accuracy (e.g., 1:10000). Construction staking used as a guide for the Work shall be set at not greater than third-order accuracy (e.g., 1:5000). Basis on which such orders are established shall provide the absolute margin for error specified below.
 - 2. Horizontal accuracy of easement staking shall be plus or minus 0.1 feet. Accuracy of other staking shall be plus or minus 0.04 feet horizontally and plus or minus 0.02 feet vertically.
 - 3. Survey calculations shall include an error analysis sufficient to demonstrate required accuracy.

+ + END OF SECTION + +

01 71 23 - 8

SPECIFICATION 01 71 33

PROTECTION OF THE WORK AND PROPERTY

PART 1 – GENERAL

1.1 DESCRIPTION

- A. Scope:
 - 1. This Section includes general requirements for safety and protection that augment the requirements of the General Conditions, as may be modified by the Supplementary Conditions. This Section also includes requirements for barricades and warning signals, and protection of trees and plants, existing structures, floors, roofs, installed items, and landscaping.
 - 2. CONTRACTOR shall be responsible for taking all precautions, providing all programs, and taking all actions necessary to protect personnel health and safety, and to protect the Work and all public and private property and facilities from damage, as specified in the General Conditions, Supplementary Conditions, and the Specifications.
 - 3. To prevent damage, injury, or loss, CONTRACTOR's actions shall include the following:
 - a. Provide measures for safety of personnel at the Site, including workers engaged in the Work, delivery personnel, testing and inspection personnel, personnel of authorities having jurisdiction, other visitors to the Site, the public, DEPARTMENT's personnel, facility manager's personnel (if different from DEPARTMENT), ENGINEER, and Resident Project Representative (if any).
 - b. Storing apparatus, materials, supplies, and equipment in an orderly, safe manner that does not unduly interfere with progress of the Work or work of other contractors, utility owners, and owners of transportation rights-of-way.
 - c. Providing suitable storage facilities for materials and equipment subject to damage or degradation by exposure to climate, temperature, theft, breakage, or other cause.
 - d. Placing upon the Work or any part thereof only loads consistent with the safety and integrity of that portion of the Work and existing construction.
 - e. Frequently removing and disposing of refuse, rubbish, scrap materials, and debris caused by CONTRACTOR's operations so that, at all times, the Site is safe, orderly, and workmanlike in appearance.
 - f. Providing temporary barricades, fencing, and guard rails around the following: openings, scaffolding, temporary stairs and ramps, around excavations, for elevated walkways, and other areas that may present a fall-hazard or hazard to vehicles.

- 4. Do not, except after written consent from proper parties, enter or occupy privately-owned property or premises with personnel, tools, materials, or equipment, except on lands and easements provided by DEPARTMENT.
- 5. CONTRACTOR has full responsibility for preserving public and private property and facilities on and adjacent to the Site. Direct or indirect damage done by, or on account of, any act, omission, neglect, or misconduct by CONTRACTOR in executing the Work, shall be remedied by CONTRACTOR, at his expense, to condition equal to that existing before damage was done.
- 6. DEPARTMENT May Remedy:
 - a. Should CONTRACTOR fail to protect and safeguard property and the Work after requests from ENGINEER or DEPARTMENT, DEPARTMENT may implement measures to protect property and the Work.
 - b. Cost of such DEPARTMENT-implemented measures shall be paid by CONTRACTOR. DEPARTMENT may deduct from payments due CONTRACTOR such amounts as set-offs in accordance with the Contract Documents.
 - c. Such right, however, shall not result in any obligation by DEPARTMENT or ENGINEER to continuously monitor or have responsibility for protection of property and the Work, which responsibility is exclusively CONTRACTOR's.

PART 2 – PRODUCTS (NOT USED)

PART 3 – EXECUTION

3.1 BARRICADES AND WARNING SIGNALS

- A. Barricades and Warning Signals General:
 - 1. Where the Work is performed on or adjacent to roadway, access road or driveway, right-of-way, or public place:
 - a. Provide temporary barricades, fences, lights, warning signs, danger signals, watchmen, and take other precautionary measures for protecting persons, property, and the Work.
 - b. Use appropriately colored and reflective barricades, or paint barricades accordingly, to be visible at night.
 - c. From sunset to sunrise, provide and maintain not less than one temporary light at each barricade.
 - d. Erect sufficient barricades to keep vehicles from being driven on or into Work under construction.

- e. Furnish watchmen in sufficient numbers to protect the Work.
- 2. Provide temporary barricades to protect personnel and property for Work not in or adjacent to transportation routes and vehicular travel areas, including indoor work, in accordance with Laws and Regulations.
- 3. CONTRACTOR's responsibility for maintaining temporary barricades, signs, lights, and for providing watchmen shall continue until the Work is substantially complete in accordance with the Contract Documents, unless other provision for security and protection is agreed to by the parties. After Substantial Completion, protect Work and property during periods when final Work or corrective Work is underway.
- B. Temporary Fencing: Refer to Specification 01 57 33, Security.

3.2 TREE AND PLANT PROTECTION

- A. Tree and Plant Protection General:
 - 1. Protect existing trees, shrubs, and plants on or adjacent to the Site, shown or designated to remain in place, against unnecessary cutting, breaking, damage, or skinning of trunk, branches, bark, and roots.
 - 2. Do not store materials or equipment or park construction equipment and vehicles within foliage drip lines.
 - 3. In areas subject to traffic, provide temporary fencing or temporary barricades to protect trees and plants.
 - 4. Open fires are not allowed onsite.
 - 5. Within the limits of the Work, water trees and plants that are to remain to maintain their health during construction operations.
 - 6. Cover exposed roots with burlap and keep such burlap continuously wet. Cover exposed roots with earth as soon as possible. Protect root systems from mechanical damage and damage by erosion, flooding, runoff, and noxious materials in solution.
 - 7. If branches or trunks are damaged, prune branches immediately and protect cut or damaged areas with emulsified asphalt compounded specifically for horticultural use, in manner acceptable to ENGINEER.
 - 8. When directed by ENGINEER, remove and dispose of at location away from the Site damaged trees and plants that die or suffer permanent injury, and replace each damaged tree or plant with specimen of equal or better species and quality.
 - 9. Coordinate Work in this Article with the following Specifications:
 - a. Section 31 11 00, Clearing and Grubbing.

3.3 PROTECTION OF EXISTING STRUCTURES

A. Underground Facilities:

- 1. Underground Facilities known to DEPARTMENT and ENGINEER, except water, gas, sewer, electric, and communications services to individual buildings and properties, are shown. Information shown for Underground Facilities is the best available to DEPARTMENT and ENGINEER but, in accordance with the General Conditions, as may be modified by the Supplementary Conditions, is not guaranteed to be correct or complete.
- 2. CONTRACTOR shall explore ahead of trenching and excavating Work and shall sufficiently uncover Underground Facilities that will or may interfere with the Work to determine their location, to prevent damage to Underground Facilities, and to prevent service interruption to structures and properties served by Underground Facilities. If CONTRACTOR damages an Underground Facility, CONTRACTOR shall restore it to its pre-construction condition, in accordance with requirements of the owner of the damaged facility and the Contract Documents.
- 3. Necessary changes in the location of the Work may be directed by ENGINEER to avoid Underground Facilities not shown or indicated on the Contract Documents.
- 4. If permanent relocation of an existing Underground Facilities is required and is not otherwise shown or indicated in the Contract Documents, CONTRACTOR may be directed in writing to perform the required work. When such relocation Work results in a change in the Contract Price, Contract Times, the associated Contract modification procedures and payment for such Work shall be in accordance with the Contract Documents.
- B. Surface Structures:
 - 1. Surface structures are existing buildings, structures, and other facilities at or above ground surface, including their foundations and any extension below ground surface. Surface structures include, but are not limited to, buildings, tanks, walls, bridges, roads, dams, channels, open drainage routes, exposed piping and utilities, poles, exposed wires, posts, signs, markers, curbs, walks, fencing, and other facilities visible at or above ground surface.
 - 2. Existing surface facilities, including but not limited to guard rails, posts, guard cables, signs, poles, markers, curbs, and fencing, that are temporarily removed to facilitate the Work shall be replaced and restored to their pre-construction condition at CONTRACTOR's expense.
- C. Protection of Underground Facilities and Surface Structures:
 - 1. CONTRACTOR shall sustain in their places and protect from direct or indirect injury all Underground Facilities and surface structures located within or adjacent to the limits of the Work. Such sustaining and supporting shall be done carefully and as required by the party owning or controlling such structure or facility.

- 2. Before proceeding with the Work of sustaining and supporting such structure or facility, CONTRACTOR shall satisfy ENGINEER that methods and procedures to be used have been approved by party owning same.
- 3. CONTRACTOR shall bear all risks attending the presence or proximity of all Underground Facilities and surface structures within or adjacent to limits of the Work, in accordance with the Contract Documents.
- 4. CONTRACTOR shall be responsible for damage and expense for direct or indirect injury, caused by CONTRACTOR's activities, to structures and facilities. CONTRACTOR shall promptly repair damage caused by CONTRACTOR's activities, to the satisfaction of owner of damaged structure or facility.
- 5. Protection of Underground Facilities Under Roads and Parking Areas: Provide temporary, heavy-duty steel roadway plates to protect existing manholes, handholes, valve boxes, vaults, and other Underground Facilities near to or visible at the ground surface.

3.4 PROTECTION OF FLOORS AND ROOFS

- A. Protection of Floors and Roofs General:
 - 1. Use proper protective covering when moving equipment, handling materials or other loads, when painting, handling mortar or grout, and when cleaning walls, ceilings, or structure contents.
 - 2. Use metal pans to collect oil and cuttings from piping, conduits, and rod threading machines, and under metal cutting machines.
 - 3. Do not load concrete floors less than 28 days old without written permission of ENGINEER. Do not load floors, roofs, or slabs in excess of design loading.
 - 4. Do not load roofs without written permission of ENGINEER.
 - 5. Restrict access to roofs, and keep CONTRACTOR personnel off existing roofs, except as required for the Work.
 - 6. If access to roofs is required, roofing, parapets, openings, and all other construction on or adjacent to roof shall be protected with suitable plywood or other acceptable means.

3.5 PROTECTION OF INSTALLED MATERIALS, EQUIPMENT, AND LANDSCAPING

- A. Protect installed Work to prevent damage from subsequent operations. Remove protective items when no longer needed, prior to Substantial Completion of the Work.
- B. Control traffic to prevent damage to equipment, materials, and surfaces.
- C. Coverings:
 - 1. Provide temporary coverings to protect materials and equipment from damage.

2. Cover projections, wall corners and jambs, sills, and soffits of openings, in areas used for traffic and for passage of materials and equipment in subsequent work.

+ + END OF SECTION + +

SPECIFICATION 01 76 50

NUISANCE CONTROLS

PART 1 – GENERAL

1.1 SUMMARY

- A. This Section includes requirements for managing, controlling nuisance issues and associated corrective measures during construction. Consideration of equipment noise, vibration levels shall be part of each stage of project planning.
- B. The work zones for this project are on, adjacent to or in close proximity to sensitive receptors such as schools, businesses, and residential properties. The DEPARTMENT has zero tolerance for nuisance emissions, including fugitive dust, noise, vibration, turbidity, disruptive lighting, or other situations which may give rise to complaints from the community.
- C. The requirements presented in this specification supplement other nuisance monitoring requirements in the contract, e.g. air monitoring. This specification does not relieve the CONTRACTOR from other contract requirements and where there is a conflict in monitoring requirements, the more stringent action level shall be applied.
- D. The CONTRACTOR is responsible for developing means and methods as well as accounting for these requirements or proposing alternate best management practices which meet the intent of these provisions (i.e., minimizing nuisance conditions which may adversely impact the public or the environment through appropriate engineering controls).

1.2 PERFORMANCE REQUIREMENTS

- A. The intent of this Section is to document and formalize the CONTRACTOR's plan for managing, controlling nuisance issues and associated corrective measures during construction per the Contract Documents.
- B. The CONTRACTOR shall provide advance notification to the community of any work activities that will generate nuisances in accordance with this specification. The minimum notification period is 48 hours before noisy work is scheduled. Longer notification periods of a week or more may apply to work likely to exceed the local regulation noise or other levels or at the start of a project.
- C. The point of compliance for fugitive dust, turbidity, vibration, noise, lighting, or other nuisance management issues will be at the limit of the work zone. At the point of compliance, no visible dust (or visible contrast in water clarity) is allowed. Complaints from the

community will result in work stoppage until corrective measures are implemented to the satisfaction of the ENGINEER.

D. The CONTRACTOR shall provide a competent and reliable community relations liaison, who shall not be replaced without written approval of DEPARTMENT. The community relations liaison will be the CONTRACTOR's Representative and shall interface with the ENGINEER and the DEPARTMENT's Public Participation Specialist. The intent is to increase public awareness and understanding of remedial activities taking place in their community, as well as understand environmental data developed during the project.

1.3 REFERENCES

- A. 42 US Code, Chapter 65 Noise Control
- B. Local Government Noise Ordinances
- C. Turbidity 6NYCRR 703.2 No increase that will cause a substantial visible contrast to natural conditions.
- D. Light Trespass In accordance with Local Ordinances
- E. Odor TITLE 6. DEPARTMENT OF ENVIRONMENTAL CONSERVATION CHAPTER III. AIR RESOURCES SUBCHAPTER A. PREVENTION AND CONTROL OF AIR CONTAMINATION AND AIR POLLUTION - Air pollution is the presence of an air contaminant, including odor, "which unreasonably interferes with the comfortable enjoyment of life and property."
- F. Fugitive Dust Clean Air Act Particulate Matter (PM) Air Quality Standards.
- G. Vibration New York State Department of Transportation Engineering Instruction 05-045.

1.4 SUBMITTALS

- A. Nuisance Controls and Management Plan
 - 1. Plan to provide advance notification
 - 2. Nuisance monitoring plan
 - 3. Complaint resolution approach (and Summary Form)
 - 4. Issues of concern with existing and anticipated nuisances must be defined within the Nuisance Control and Management Plan, including the CONTRACTOR's resolution to complete the work of the Contract Documents
- B. The CONTRACTOR shall develop a one-page summary of general practices for nuisance management and clearly display at the Site. Operating hours, delivery times, truck routes, and

extra considerations for works during sensitive times could also be included in the summary.

- C. Monitoring Reports
- D. Community Relations Liaison Qualifications
 - 1. The CONTRACTOR will submit resume/qualifications of their Community Relations Liaison person.

PART 2 - PRODUCTS – (NOT USED)

PART 3 – EXECUTION

- 3.1 COMMUNITY CONSULTATION
- A. Community consultation is an essential part of managing nuisances associated with the construction project. All communications shall be coordinated with the ENGINEER and the DEPARTMENT. CONTRACTOR shall:
 - 1. Establish good working relationships with community stakeholders such as nearby residents, the school district, and businesses
 - 2. Give and receive feedback on construction activity and performance during a project
 - 3. Discuss the community's concerns and be proactive in complaint resolution.
- B. As part of a community consultation strategy, neighboring premises shall be given written notification of upcoming work activities in their vicinity. The information should outline the type and duration of works, likely nuisance impacts, and provide contact details (mobile phone number of Community Liaison Person) for feedback and/or complaints resolution.
- C. The minimum notification period shall be 48 hours before noisy work is scheduled. Longer notification periods of a week or more may apply to work likely to exceed the local regulation noise or other levels or at the start of a Project.
- D. Methods of notification for work and ongoing communication about Project progress can include:
 - 1. Letterbox drops
 - 2. Meetings
 - 3. Individual contact
 - 4. Direct emails to all stakeholders.
- 3.2 COMPLAINT RESOLUTION
- A. The CONTRACTOR shall immediately notify DEPARTMENT and the ENGINEER and

respond respectfully to a complaint and implement all feasible and reasonable measures to address the issue.

- B. It is particularly important to respond when the complaint refers to disturbed sleep and/or noise that is tonal (beeping, metal-on-metal), impulsive (hammering, pile driving) or low frequency (truck engine, heavy machinery).
- C. The CONTRACTOR shall have a readily accessible contact point (mobile phone number of Community Liaison Person) for managing complaints. The CONTRACTOR shall call back as soon as possible, and then maintain communication about how the issue is to be resolved.
- D. The complaint management process shall be well documented, with details about the following:
 - 1. The nuisance in question
 - 2. The time of the complaint and the person making it.
 - 3. The person dealing with the complaint and planned corrective action.
 - 4. How resolution of the complaint is to be communicated to the person who made the complaint, the community, and the ENGINEER
 - 5. Who shall be contacted if the complaint cannot be resolved, and
 - 6. The time taken for responses.

3.3 SCHEDULING WORK AND RESPITE PERIODS

- A. In general, the instance and duration of work expected to adversely disturb the community should be minimized. This is particularly important for night and other out- of-hours work.
- B. Scheduling work to provide respite and avoid sensitive times is a vital part of responsible nuisance management.
- C. The following are examples of sensitive times that may require special consideration:
 - a. Resident sleep periods
 - b. Shopping plaza deliveries
 - c. School activities (e.g. outdoor classes, sporting events, exams, etc.)
- D. The CONTRACTOR shall consult with affected parties, such as the examples given above, and them arrange appropriate periods of respite from work likely to disturb them. The scheduled respite times shall then be communicated to the relevant parties.
- E. On a typical weekday, more frequent respite periods shall be provided where possible, especially during very disturbing work. For example, a break of 15-20 minutes for every hour of jack-hammering may be a suitable way to manage noise impacts, if there has been appropriate communication.

- F. The CONTRACTOR shall consider the option of relocating people for short periods of time, such as when high noise levels from construction occur at night and there is no other feasible or reasonable way to reduce noise levels.
- G. The CONTRACTOR shall weigh the benefits of avoiding sensitive periods against the increased costs and additional time taken on the job. Explaining the various options to affected parties will help develop a fair and balanced approach.

3.4 WORK PRACTICES

A. General

- 1. CONTRACTOR shall communicate nuisance reduction commitments to staff. Workers and Subcontractors shall be trained to follow nuisance management practices. Nuisance management issues shall be integrated into H&S "tail-gate" meetings.
- 2. The CONTRACTOR shall develop a one-page summary of general practices for nuisance management and clearly display on site. Operating hours, delivery times, truck routes, and extra considerations for works during sensitive times could also be included in the summary. Workers shall be reminded about these commitments during daily "tail-gate" meetings.
- 3. Monitoring The CONTRACTOR shall periodically check the site and local area for nuisance problems and actively manage nuisance issues before and as they arise.
- B. Noise and Vibration
 - 1. The CONTRACTOR shall implement work practices to reduce noise complaints, particularly important at night or during sensitive times.
 - 2. General construction activities shall be carried out in the following ways:
 - a. Minimize metal-on-metal contact.
 - b. Avoid dropping items from a height.
 - c. Use equipment sensibly: Turn off equipment when not in use. Throttle settings shall be reduced if possible.
 - d. Require appropriate staff conduct: Staff shall not use loud radios and/or stereos outdoors during sensitive times, such as early in the morning in a residential area. Shouting or swearing, loud talking, and slamming vehicle doors should be avoided.
 - e. Public Announcement (PA) systems are not allowed.
 - f. Use noise shields/acoustic curtains around higher noise operations.
 - g. Manage truck noise: Noise from trucks is a common issue, especially near residences. Scheduling and management of truck movements is important to reduce issues associated with reverse beepers, engine noise and general off-site activity.
 - 3. Plant and equipment CONTRACTOR shall endeavor to use low-noise, low- vibration well-maintained equipment where feasible and reasonable.
 - 4. Equipment Selection Consideration of equipment noise and vibration levels shall be

part of each stage of Project planning and Contract specification. The CONTRACTOR shall evaluate different types of equipment that do the same job and compare the noise and vibration level data. Noise and vibration emission labels are often provided on equipment and can be used to assist in this process. The following items shall be considered in the evaluation; high-quality mufflers, acoustic enclosures, low-noise tool bits/blades and inquire from suppliers about lower-noise equipment.

- 5. Alternative equipment Compressors for pneumatic equipment shall be silenced, enclosed and located appropriately. Hydraulic or electrical equipment shall be considered as viable alternatives. Care must be taken with the location of any generators and supply lines when electrical equipment is proposed to be used to replace diesel or petrol engines. Impacts from noisy excavation and demolition works shall be reduced by alternative work methods.
- 6. Maintenance A key commitment for any project is to ensure that:
 - a. Equipment is not operated if maintenance or repairs would eliminate or significantly reduce a characteristic of noise, vibration or other disturbance resulting from its operation'.
 - b. Equipment shall be in good working order, and where there is a fault or maintenance issue creating the disturbance, it must be dealt with before it is used.
 - c. CONTRACTOR shall regularly check the condition of mufflers, enclosures and air lines, for example, to make sure they are in good working order and that there are no gaps or leaks. An ongoing inspection and maintenance process shall be established and included in the Work Plan.
 - d. Equipment that is causing excessive nuisance impacts in a manner that is not typical for the equipment shall be removed from the site.
- 7. Alternatives to traditional 'beeper' alarms
 - a. The traditional 'beeper' alarms for mobile equipment can create a nuisance during projects where there is a lot of movement (such as prolonged use of scissor lifts) or if works are being conducted at night.
 - b. Some examples of alternatives that are less disturbing include:
 - c. Smart alarms' that adjust their volume depending on the ambient level of noise. These are particularly useful during operations in quieter suburban areas, where other noise on the site is less, or when works take place during quieter periods such as early morning.
 - d. 'Broadband' or 'quacker' alarms. These emit a less annoying sound and are more directional. This means the sound is focused to the area of concern and is less likely to travel to noise-sensitive areas.
 - e. The use of these alternative technologies must be determined by a competent person based on an assessment of the site, its conditions and on the machines involved compatible with the machines so it does not adversely affect their operation accompanied by specific procedures for installation and maintenance to ensure correct operation communicated to all site staff to ensure they are aware of the new alarm and how it works.
 - f. The requirements of relevant occupational health and safety must be complied

with in all cases

- 8. Site planning, barriers, and layout
 - a. Disturbances shall be managed by appropriately arranging site orientation and operations. These principles need to be addressed during early project stages, when there is greater flexibility to plan for nuisance management.
- 9. Managing disturbances from trucks/mobile equipment
 - a. The site layout shall be arranged to avoid the need for truck reversing. Drivethrough parking and deliveries with a one-way thoroughfare is one method that shall be investigated.
 - b. An area away from residential dwellings shall be selected for off-site truck parking when vehicles arrive before site opening hours. ENGINEER may require that trucks wait away from the site in a less sensitive area or other areas/options may be suggested depending on the nature of the site. For larger projects, traffic controllers can be used to direct trucks that arrive out of approved times or to instruct drivers to turn off their engines when stationary.
 - c. The CONTRACTOR shall designate a truck route that minimizes noise impacts and clearly communicate to drivers the requirements for arrival times, vehicle movements, idling reduction and general conduct, and/or include these requirements as a condition of the sub-contract.
 - d. Deliveries to construction sites shall be scheduled to occur only within the allowed times. Fewer vehicles with larger loads, rather than a number of smaller vehicles, can help reduce noise impacts. Options may be limited by site access and scale, with larger sites usually providing a greater level of flexibility.
 - e. Other considerations, such as safety and traffic impacts, will apply when looking at truck access and routes.
- 10. Location of plant and equipment
 - a. The CONTRACTOR shall aim to locate plant and equipment away from sensitive sites, thereby maximizing the distance from affected parties. When plant and equipment needs to be located close to noise sensitive areas, restricting the hours of operation should be considered.
 - b. When possible, noisy fabrication work shall be done off site and transported to the site at a later date.
- 11. Use the site to shield sources of noise
 - a. Temporary barriers shall be constructed, and existing site materials may be useful in this regard.
- 12. General principles for barriers breaking 'line of sight'
 - a. Barriers shall be used to break the 'line of sight' between the noisy works and the noise-sensitive areas (when looking towards the noise source from the location receiving the noise).
 - b. Barriers shall be located as close as possible to the noise source or sensitive receiver. There shall be no gaps or openings at joints in the barrier material and barriers need to be sufficiently dense. In general, material weighing at least 10 kg/m^2 should be used.

- c. Barriers shall be sufficiently high and wide, as sound can carry around the structure. In cases where the affected location is in a high-rise development, barriers may not be useful, as the height will not be enough to break 'line of site' to the noise received.
- d. Barriers around a noise source shall be constructed with a length at least 10 times greater than its height. For shorter barriers, it may help to bend or wrap the barrier around the equipment.
- e. Acoustic sheds shall be considered for very noisy operations where it is possible to contain the plant and equipment. As with barriers, the shed shall be of sufficient density and suitable construction, with seals on doors and internal treatments to reduce noise reverberation. Ventilation and general occupational health and safety requirements also need to be considered.
- f. It is important to recognize that large reflecting surfaces, such as concrete or glass walls, may increase noise levels, as the sound can 'bounce' off and be magnified. The CONTRACTOR shall avoid placing equipment in locations where reflected noise will increase noise exposure.
- 13. In most cases, vibration induced by typical construction equipment may not result in adverse effects on people or structures. Noise from the equipment typically overshadows any meaningful ground vibration effects on people. Some equipment, however, including vibratory rollers, can create high vibration levels.
 - a. Because of the nature of these types of devices, the options for reducing vibration may be limited. Maximizing the distance between the source and receiver should be considered to the extent practical. Conducting work when most people are not in the area (e.g., at work) or when sensitive equipment is not operating can avoid or minimize adverse impacts.
 - b. In some circumstances, temporary relocation of residents during these operations may be appropriate. In the absence of measures that can physically reduce induced ground vibration, informing the public about the project and potential vibratory impacts should be performed to avoid adverse reactions from the public. The CONTRACTOR must be sensitive to the needs of the community, including testing timeframes at the schools and other nearby activities which may result in adverse reactions from the public.
- 14. Requiring trucks delivering and picking up at the site to reduce unnecessary engine idling.
- C. Fugitive Dust
 - 1. Control of dust will be a high priority during remediation activities. The primary mechanism for dust control will be the use of water trucks for example with a spray bar and hose(s) or other appropriate methods for the work being performed. Only potable water will be used for dust control purposes. Proactive controls will be instituted to reduce the amount of dust generation during Site activities, including enforcement of low speed limits for vehicular traffic, decontamination of trucks leaving the remediation work areas and height limits for stockpiles, if applicable.

- 2. The CONTRACTOR will implement a dust control training program for all Site personnel. This training program will review the potential sources of dust, individual responsibilities, and actions for controlling dust as described in this plan. The training will emphasize the importance of dust control to the overall success of the remedial activities and familiarize Site personnel with the air monitoring requirements and appropriate dust control procedures that must be adhered to in accordance with this plan to minimize dust generation.
- 3. Bulk material piles will not be created other than while gathering material to load into trucks (e.g., pulling soil into a pile for the excavator to load into trucks). If any bulk material piles are left on the site overnight (e.g., due to equipment failure, transportation delays, etc.), they will be tarped as necessary to limit wind- blown dust. All trucks being utilized for transport and disposal of excavated material at the Site are required to be fitted with solid, sliding or slot-top type covers with no gaps when fully deployed. Trucks shall be covered immediately after loading and are to remain covered throughout the transportation and disposal of excavated material. The cover must not contact the excavated material and must be installed in such a way to prevent wind from entering over the leading edge of the trailer rim.
- 4. Following the soil excavation, a geotextile marker barrier will be installed prior to backfilling the excavated area with clean fill material. The geotextile barrier will minimize any visible dust generation from this soil layer during backfilling activities.
- 5. The CONTRACTOR shall conduct operations and maintain the Site as to minimize the creation and dispersion of visible dust. Clean water, provided by the CONTRACTOR, shall be applied to the Site as necessary to prevent dust during excavation, loading/unloading, and backfilling activities. Excavation areas and on-site roadways will be kept damp, as necessary, without creating ponding or mists that travel beyond the defined boundaries of the work. The watering operations shall be sufficient to control fugitive dust. Tanker trucks will be utilized to provide and apply clean water as needed.
- 6. Water shall be applied in a manner to prevent runoff. As a contingency measure, the CONTRACTOR will have erosion and sedimentation controls, such as silt fencing, sediment logs, or manhole silt screens, installed as necessary to manage runoff.
- 7. Transfer points refer to any time material is loaded or unloaded during removal activities. For the purposes of this project, the primary transfer points of concern will be the transfer of soil material from the excavator or processing area to a waiting truck. The secondary transfer points of concern will be the unloading of the clean soil for use in backfilling of excavated areas. At all transfer points, the following guidelines will be maintained:
 - a. During loading of impacted soil, the material must be moist during the transfer, and the transfer shall be into an overhead truck trailer only. The material drop into the trailer must not exceed 4 feet.
 - b. All trucks entering and leaving the Site will adhere to the posted speed limit, which shall be no more than 8 miles per hour (mph).
 - c. All trucks shall adhere to the established tarping policy.

- d. All trucks leaving unpaved areas to paved areas of the public ROW (i.e., sidewalk or street), whether full or empty, will be visually inspected for loose material. Stabilized construction exits (e.g., 3- to 6-inch cobblestone or rip rap placed on top of a geotextile) will be used to assist with cleaning of truck tires as the vehicles leave unpaved areas. Any loose material is to be removed and placed into the truck trailer.
- 8. In order to keep roadways clean and free of accumulation, the CONTRACTOR will coordinate with the Town of Islip and the local waste disposal facility for routine street sweeping during removal activities. The street sweeper must be equipped with a water spray and vacuum system to prevent fugitive dust. Street sweeping must be completed at the end of every day or as needed, but at a minimum of once a day.
- 9. Sidewalks and rights of way and public, where trucks will need to cross the sidewalk to enter/exit the Site, will be maintained in a "broom clean" condition at all times by using a skid steer loader (e.g., BobCat) equipped with a power broom or manual tools (e.g., push broom, shovels, etc.).
- 10. All trucks are to take the most efficient and direct route to the disposal facility as possible.
- 11. Spraying dusty wastes with water as they are unloaded.
- 12. Ensuring that street sweeping operations use enough water to avoid kicking up dust.
- D. Odor
 - 1. Proper Drainage: Standing water is a potential source of odors. The operations area will be on a surface that is sloped to facilitate drainage and prevent standing water. The grade will be maintained to prevent ponding. General spill control programs and curbing will be in place as appropriate. The material handling areas are covered by a canopy and protected from storm water if needed to control ponding of water which has been in contact with contaminated sediments.
 - 2. Personnel training: Personnel will be trained in the proper use of equipment. Potential hazards and safety features will be stressed as well as handling procedures to minimize the potential production of odors, such as leaving stockpiled sediments uncovered unnecessarily.
 - 3. Some of the operating procedures that can help reduce odors include:
 - a. "First-in, first-out" waste handling practices that keep waste on site only for short periods of time.
 - b. Removing all waste from loading areas by the end of each operating day so that these surfaces can be swept clean and washed down as needed.
 - c. "Good housekeeping" measures, including regular cleaning and disinfecting of surfaces if appropriate and equipment that come into contact with waste.
 - d. Water misting and/or deodorizing systems.
 - 4. Below are the activities that can cause odor nuisances on-site along with Reasonable Available Control Measures & Methods to help reduce potential odors:
 - a. Movement of Transport Trucks Entering/ Exiting Site Hauling materials in properly tarped or watertight containers to prevent odor; Limit haul trucks to 3

minutes idle time; and Applying foam suppressant such as BioSolve.

- b. Equipment Operating On-Site Turning off equipment that is not in active use; Limiting the amount of equipment used at one time while on-site; and Applying foam suppressant such as BioSolve.
- c. Excavated Materials Limiting amount of exposed areas or amount of time materials are exposed to the open atmosphere; and Applying foam suppressant such as BioSolve.
- d. Soil/Debris moved by equipment to Stockpile Areas Limiting amount of exposed areas or amount of time materials is exposed to the open atmosphere; Turning off equipment that is not in active use; Limiting the amount of equipment used at one time while on-site; and Applying foam suppressant such as BioSolve.
- e. Stockpiles Covering stockpiles and material after activity ceases with Poly Sheeting & securing with sandbags (or equivalent); and Applying foam suppressant such as BioSolve.
- f. Removed water prior to treatment or disposal Setting up site drainage & preventing standing water.
- g. Work Zones (Exclusion Zone) -Performing Housekeeping; Daily cleaning up (Free of trash, garbage, & debris); Properly disposing of any odorous material; and Applying foam suppressant such as BioSolve.

3.5 CORRECTIVE MEASURES

- A. Nuisance conditions which represent a potential health and safety concern and/or migration of contaminated materials (e.g., visible dust or visible contrast from turbidity) will result in an immediate stoppage of the work.
- B. Following a work stoppage, appropriate corrective measures as determined by ENGINEER will be implemented prior to work resuming.
- C. Chronic or repeated incidents of nuisance issues will result in the disallowance of a day of compensation for site services and health and safety.
- D. A written corrective measures plan will be substituted for any work stoppage, or chronic or repeated incidents of nuisance issues, if requested by the ENGINEER.

+ + END OF SECTION + +

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SPECIFICATION 01 77 19

CLOSEOUT REQUIREMENTS

PART 1 – GENERAL

1.1 GENERAL

- A. Scope:
 - 1. Close-out procedures shall conform with General Conditions, Section VIII, Article 13 for:
 - a. Substantial Completion.
 - b. Final inspection.
 - c. Request for final payment and acceptance of the Work.

1.2 SUBSTANTIAL COMPLETION

- A. Substantial Completion General:
 - 1. Prior to requesting Substantial Completion, perform the following for the substantially completed Work:
 - a. Materials and equipment for which Substantial Completion is requested shall be fully ready for their intended use, including full operating and monitoring capability in automatic and manual modes.
 - b. Complete field quality control Work, including testing at the Site, indicated in Specifications Sections for individual materials and equipment items. Submit results of, and obtain ENGINEER's acceptance of, field quality control tests required by the Contract Documents.
 - c. Submit and obtain ENGINEER's acceptance of final operations and maintenance manuals.
 - d. Obtain and submit to ENGINEER all required permits, inspections, and approvals of authorities having jurisdiction for the substantially completed Work to be occupied and used by DEPARTMENT.
 - e. Complete other tasks that the Contract require be completed prior to Substantial Completion.
 - 2. Procedures for requesting and documenting Substantial Completion are in the General Conditions, Section VIII, Article 13.6.
 - 3. Sample letter for CONTRACTOR to request inspection for Substantial Completion is attached to this Specifications Section. Use the model language of the sample letter, modified to suit the Project.
 - 4. Unless decided otherwise by DEPARTMENT and ENGINEER, form of certificate of Substantial Completion will be EJCDC[®] C-625, "Certificate of Substantial Completion" (2013 edition), prepared by ENGINEER.

5. Refer to the General Conditions, Section V111, Article 13.8, for requirements regarding consent of surety to partial release of or reduction in retainage.

1.3 FINAL INSPECTION

- A. Final Inspection shall be performed in accordance with General Conditions, Article 13.9:
 - 1. Prior to requesting final inspection, CONTRACTOR verify that all Work is fully complete and ready for final payment. A checklist for this purpose is attached to this Specifications Section.
 - 2. Sample letter for CONTRACTOR to request final inspection is attached to this Specifications Section. Use the model language of the sample letter, modified to suit the Project.
 - 3. Procedures for requesting and documenting the final inspection are in the General Conditions, as may be modified by the Supplementary Conditions, and as augmented in this Section.

1.4 REQUEST FOR FINAL PAYMENT AND ACCEPTANCE OF THE WORK

- A. Procedure:
 - 1. Submit request for final payment in accordance with the Agreement and General Conditions, as may be modified by the Supplementary Conditions, and using procedure specified in Article 13 of Section VIII, Payments to Contractor and Completion and this Section.
 - 2. Acceptance of the Work:
 - a. Upon ENGINEER's receipt of the final Application for Payment, accompanied by other required Contract closeout documentation in accordance with the Contract Documents, ENGINEER will issue to DEPARTMENT and CONTRACTOR a notice of acceptability of the Work, in accordance with the General Conditions, as may be modified by the Supplementary Conditions.
 - b. Nothing other than receipt of such notice of acceptability from ENGINEER constitutes acceptance of the Work.
 - c. Unless decided otherwise by DEPARTMENT and ENGINEER, form of acceptance will be EJCDC® C-626, "Notice of Acceptability of Work", (2014 edition).
- B. Request for final payment shall include:
 - 1. Documents required for progress payments in accordance with Contract Section VIII Article 13, Payments to Contractor and Completion.
 - 2. Documents required in the General Conditions, as may be modified by the Supplementary Conditions.
 - 3. List of all disputes that CONTRACTOR believes are unsettled.

- 4. Consent of Surety to Final Payment:
 - a. Acceptable form includes AIA® G707TM, "Consent of Surety to Final Payment" (1994 or later edition), or other form acceptable to DEPARTMENT.
- 5. Releases or Waivers of Lien Rights:
 - a. When submitting releases or waivers of Lien rights, furnish release or waiver by CONTRACTOR and each Subcontractor and Supplier that provided CONTRACTOR, Subcontractor, or Supplier with labor, material, or equipment totaling \$1,000.00 or more for the Contract.
 - b. Furnish final list of Subcontractors and Suppliers, using the form included in Article 13 of Section VIII, Payments to Contractor and Completion, indicating final amount of the associated subcontract or purchase order for each. Include on the list all lower-tier Subcontractors and Suppliers retained by Subcontractors and Suppliers with direct subcontract or purchase order with CONTRACTOR.
 - c. Each release or waiver of Lien shall be signed by an authorized representative of the entity submitting release or waiver of Lien, and shall include CONTRACTOR's, Subcontractor's, or Supplier's (as applicable) corporate seal, when applicable.
 - d. Release or waiver of Lien may be conditional upon receipt of final payment.
- 6. Affidavits:
 - a. In lieu of the release or waiver of Liens, CONTRACTOR may submit the following, for CONTRACTOR and each Subcontractor and Supplier that provided CONTRACTOR, Subcontractor, or Supplier with labor, material, or equipment totaling \$1000 or more, to DEPARTMENT's satisfaction:
 - Affidavit of payment of debts and claims. Acceptable form includes AIA® G706TM, "Contractor's Affidavit of Payment of Debts and Claims" (1994 or later edition), or other form acceptable to DEPARTMENT, and;
 - 2) Affidavit of release of Liens. Acceptable form includes AIA® G706ATM, "Affidavit of Release of Liens" (1994 or later edition), or other form acceptable to DEPARTMENT.
 - b. Affidavits and supporting documents furnished under this Paragraph 1.4.B.6 shall comply with the requirements of the General Conditions, as may be modified by the Supplementary Conditions.
 - c. Each affidavit furnished shall be signed by an authorized representative of the entity furnishing the affidavit, and shall include CONTRACTOR's, Subcontractor's, or Supplier's (as applicable) corporate seal, when applicable.
- 7. Evidence satisfactory to DEPARTMENT that all title issues have been resolved such that title to all Work, materials, and equipment has passed to

DEPARTMENT free and clear of Liens or other title defects or will so pass upon final payment.

PART 2 – PRODUCTS (NOT USED)

PART 3 – EXECUTION

3.1 ATTACHMENTS

- A. The documents listed below, following this Section's "End of Section" designation, are part of this Specifications Section:
 - 1. Sample letter for CONTRACTOR's use in requesting inspection for Substantial Completion (two pages).
 - 2. Sample partial checklist to identify readiness for final inspection (four pages).
 - 3. Sample letter for CONTRACTOR's use in requesting final inspection (one page).
- B. In the model language of the attached sample letters for the CONTRACTOR to request inspection for Substantial Completion and the final inspection, italicized language in brackets, e.g., "[*insert date*]" indicates instructions to the drafter of the letter and often indicates specific information to be inserted by CONTRACTOR; do not include bracketed, italicized text in the final version of the letter(s) prepared for the Project. Non-italicized language in brackets is optional language; use the appropriate language to complete the actual letter for the Project and edit where required to suit the specific circumstances.

+ + END OF SECTION + +

SAMPLE LETTER FOR CONTRACTOR'S USE IN REQUESTING INSPECTION FOR SUBSTANTIAL COMPLETION

SENT VIA E-MAIL AND U.S. CERTIFIED MAIL/RETURN RECEIPT REQUESTED

[Date]

[Name of Engineer's contact person] [Engineer's Name] [Street address] [City, state, postal code]

Subject: [*Project name, Contract designation*] Request for Inspection for Substantial Completion

Dear [addressee]:

In our opinion, [all of] [*or*] [a portion of] the Work under the above-referenced Contract is substantially complete as of [*insert month, day, year on which Substantial Completion was achieved*]. [The specific portion of the Work that we believe is substantially complete is [*insert identification of that portion of the Work that is substantially complete*].]

Enclosed is our listing of uncompleted Work items ("punch list"). In accordance with the General Conditions, we hereby request: 1) That the Engineer schedule and perform the inspection for Substantial Completion as soon as possible, and 2) Issuance of the certificate of Substantial Completion.

In accordance with the General Conditions, upon Substantial Completion, we propose the following relative to apportionment of responsibilities between the DEPARTMENT and the CONTRACTOR:

- 1. Security, Protection, Insurance:
 - a. Site Security: [insert proposal; address whether DEPARTMENT or CONTRACTOR will be responsible for security of the Site].
 - b. Protection of the Substantially Completed Work: [*insert proposal; address* whether DEPARTMENT or CONTRACTOR will be responsible for protection].
 - c. Property Insurance: [insert proposal; typically DEPARTMENT assumes responsibility for property insurance upon Substantial Completion]
- 2. Operation and Maintenance:
 - a. Operation: [insert proposal; address whether DEPARTMENT or CONTRACTOR will be responsible for operating the substantially completed Work].

- b. Maintenance: [insert proposal; address whether DEPARTMENT or CONTRACTOR will be responsible for maintaining the substantially completed Work].
- 3. Utilities: [for each of the following, indicate whether DEPARTMENT or CONTRACTOR will be responsible for utilities and services, or whether responsibility will be shared; if shared, indicate proposed cost-sharing]
 - a. Electricity: [insert proposal].
 - b. Natural Gas/Fuel/Heating: [insert proposal].
 - c. Water Supply: [insert proposal].
 - d. Wastewater: [insert proposal].
 - e. Communications (Telephone, Internet, Video): [insert proposal].

In accordance with the General Conditions, we understand that the Contract's correction period for the Work covered by the certificate of Substantial Completion commences on the Substantial Completion date documented in said certificate

Should you have questions or comments regarding this notice, please contact [the undersigned] [*or*] [*insert other contact person's name*], at [*insert telephone number and e-mail address*].

Sincerely,

[CONTRACTOR's company name]

[Signatory name] [Signatory's title]

Attachments: Preliminary list of uncompleted Work items ("punch list"; [##] pages)

Copies: [DEPARTMENT's project manager]

SAMPLE CHECKLIST TO IDENTIFY READINESS FOR FINAL INSPECTION

Project:	
Contract:	
Contractor:	

		In	Not	Not		
Item No./Description	Completed/Date	Progress	Started	Applicable	Target Date	Responsible Entity/Person
1. All Shop Drawings, Samples, and Submittals approved by Engineer						
Remarks:						
2. Final services completed by Suppliers						
Remarks:						
3. Final Work completed by Subcontractors						
Remarks:						
4. Permits closed out and regulatory compliance transitioned from construction to operations						
Remarks:						
5. All outstanding change issues are addressed and all Change Proposals submitted						
Remarks:						

		In	Not	Not		
Item No./Description	Completed/Date	Progress	Started	Applicable	Target Date	Responsible Entity/Person
6. All Claims are resolved						
Remarks:						
7. All defective Work of which Contractor is aware has been corrected in accordance with the Contract Documents						
Remarks:						
8. Issues related to Constituents of Concern and potential Hazardous Environmental Condition have been fully addressed						
Remarks:						
9. All spare parts, tools, and extra stock materials have been furnished in accordance with the Contract Documents, and documentation thereof submitted to Engineer						
Remarks:						
10. All final Operations & Maintenance manuals have been submitted and accepted by Engineer						
Remarks:						
11. Manufacturer warranties and						

Item No./Description	Completed/Date	In Progress	Not Started	Not Applicable	Target Date	Responsible Entity/Person
software license(s) furnished		11051055	Startea	Tippileuble	Turget Dute	
Remarks:						
12. Instruction and training of operations and maintenance personnel is complete and records of training submitted						
Remarks:						
13. MBE/WBE/DBE compliance report(s) submitted (when applicable)						
Remarks:						
14. All field engineering submittals, including survey data, furnished						
Remarks:						
15. All Work on "punch list" is complete in accordance with the Contract Documents						
Remarks:						
16. All record documents submitted to and accepted by Engineer						
Remarks:						
17. Contractor is fully demobilized from Site						
Remarks:						

		In	Not	Not		
Item No./Description	Completed/Date	Progress	Started	Applicable	Target Date	Responsible Entity/Person
18. All Site restoration is complete						
Remarks:						
19. Final cleaning of all work areas						
is complete						
Remarks:						
20. Lien waivers or affidavits of						
payment obtained from						
Subcontractors and Suppliers						
Remarks:						
21. Evidence of Contractor liability						
insurance furnished for						
correction period						
Remarks:						
22. All other required Contract						
closeout documents obtained						
Remarks:						

SAMPLE LETTER FOR CONTRACTOR'S USE IN REQUESTING FINAL INSPECTION

SENT VIA E-MAIL AND U.S. CERTIFIED MAIL/RETURN RECEIPT REQUESTED

[Date]

[Name of Engineer's contact person] [Engineer's Name] [Street address] [City, state, postal code]

Subject: [*Project name, Contract designation*] Request for Final Inspection

Dear [addressee]:

In our opinion, all of the Work under the above-referenced Contract is complete and ready for final payment as of [*insert month, day, year on which final completion was achieved*]. In accordance with the General Conditions, we hereby request that the Engineer schedule and perform the final inspection as soon as possible. Upon successful completion of the final inspection, we will submit our final Application for Payment accompanied by the required Contract closeout documentation in accordance with the Contract Documents.

Should you have questions or comments regarding this notice, please contact [the undersigned] [or] [insert other contact person's name], at [insert telephone number and *e-mail address*].

Sincerely,

[Contractor's company name]

[Signatory name] [Signatory's title]

Attachments: None

Copies: [DEPARTMENT's project manager] THIS PAGE WAS LEFT INTENTIONALLY BLANK

SPECIFICATION 01 77 23

INSPECTIONS

<u>PART 1 – GENERAL</u>

1.1 DESCRIPTION

- A. Scope:
 - 1. This Section includes requirements for the Substantial Completion, Final Completion, and any specified Warranty inspections and is coordinated with the payment provisions of the General Conditions, Section VIII, Articles 13.6 through 13.13.
 - 2. When CONTRACTOR considers all or part of the Work ready for its intended use, CONTRACTOR shall notify DEPARTMENT and ENGINEER in writing that the Work specified is substantially complete. Within a reasonable time thereafter, not to exceed 30 days, DEPARTMENT, CONTRACTOR, and ENGINEER shall make an inspection of the Work, or portion thereof, to determine status of completion. A tentative certificate of Substantial Completion shall fix the date of Substantial Completion, with an attached list of items to be completed or corrected prior to final payment.
 - 3. Shortly before the end of the Substantial completion period required under the General Conditions, ENGINEER will schedule with DEPARTMENT and CONTRACTOR the inspection and will advise DEPARTMENT and CONTRACTOR in writing of the date and time for the inspection.
- B. CONTRACTOR's project manager shall attend the inspection.
- C. Upon written notice from CONTRACTOR that the entire Work or agreed portion is complete, ENGINEER will make a final inspection with DEPARTMENT and CONTRACTOR. ENGINEER will notify CONTRACTOR in writing of all particulars in which this inspection reveals that work is either accepted or incomplete or defective.
- D. After the final inspection, CONTRACTOR shall submit "final" Application for Payment in accordance with the final Application for Payment procedures of the General Conditions, as may be modified by the Supplementary Conditions, and the Specifications, including furnishing all required Contract closeout documentation and completion of all Work except for the inspection and associated correction Work (if any). DEPARTMENT will release remaining retainage withheld for the inspection following the inspection and completion of correction Work (if any), in

accordance with progress payment procedures of the Contract, except that consent of surety to final payment shall accompany the last Application for Payment.

PART 2 – PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

+ + END OF SECTION + +

SPECIFICATION 01 78 39

PROJECT RECORD DOCUMENTS

<u>PART 1 – GENERAL</u>

1.1 DESCRIPTION

- A. Scope:
 - 1. This Section includes requirements for Project record documents, to supplement the requirements of the Section VI Agreement including the General Conditions, as may be modified by the Supplementary Conditions.
 - 2. CONTRACTOR shall provide all labor, materials, equipment, and services to maintain and submit to ENGINEER Project record documents in accordance with the Contract Documents.
 - 3. Supplemental requirements to those stated in Section VIII, Article 5.19 for recording of field modifications made during construction, to be marked on a clean set of Contract documents by the Contractor (As-Built Documents) and for preparing Supplemental Record Drawings by the Surveyor to be submitted to the DEPARTMENT and ENGINEER. The As-Built Documents and Supplemental Record Drawings shall constitute the Project Record Documents.
- B. Maintenance of Record Documents:
 - 1. Maintain in CONTRACTOR's field office, in clean, dry, legible condition, complete sets of the following record documents: Drawings, Specifications, Addenda, written amendments, Change Orders, Proposed Change Orders, field test records, construction photographs, Field Orders and written interpretations and clarifications in good order and annotated to show all changes made during construction. Contractor will be required to review with Engineer the status of all as-built documents in connection with Engineer's evaluation of an Application for Payment. All changes from the contract which are made in the work, or additional information which might be uncovered during construction shall be accurately and neatly recorded as they occur by means of details and notes.
 - 2. Provide files and racks for proper storage and easy access to record documents. File record documents in accordance with the edition of the Construction Specification Institute's MasterFormatTM used for organizing the Project Manual, unless otherwise accepted by ENGINEER.
 - 3. Promptly make record documents available for observation and review upon request of ENGINEER or DEPARTMENT. Requirements for review of record documents status as a condition precedent to progress payments in conformance with Section VIII, Article 13.

- 4. Maintain in Contractor's field office in clean, dry, legible condition complete sets of the following:
 - a. Drawings
 - b. Specifications
 - c. Addenda
 - d. Approved Shop Drawings
 - e. Samples, Photographs
 - f. Change Orders
 - g. Other modifications to Contract Documents
 - h. Test Records
 - i. Survey Data
 - j. Field Orders
 - k. Other documents pertinent to Contractor's work
 - 1. Contractor Daily Work Reports
- 5. Do not use record documents for any purpose other than serving as Project record. Do not remove record documents from CONTRACTOR's field office without ENGINEER's approval.
- 6. Make documents available at all times for inspection by ENGINEER and DEPARTMENT.

1.2 SUBMITTALS

- A. Closeout Submittals: Submit the following:
 - 1. Preliminary Record Documents:
 - a. The Contractor shall prepare As-Built Documents and the Surveyor shall prepare Supplemental Record Drawings. These documents (Project Record Documents) shall be submitted to the ENGINEER following substantial completion of the work (within 7 calendar days) for review and approval.
 - b. These documents shall be neat, legible and accurate.
 - c. If upon review, the documents are found to contain errors and/or omissions, they shall be returned to the Contractor and or Surveyor for corrections.
 - d. The Contractor and/or Surveyor shall complete the corrections and return the drawings to the ENGINEER within 10 calendar days for subsequent review.
 - e. Submit certified PDF electronic files.
 - f. Submit both printed record documents and electronic record documents, in accordance with Specification 01 31 26, Electronic Communication Protocols.
 - g. Submit record documents with transmittal letter on CONTRACTOR letterhead in accordance with requirements in Specification 01 33 00, Submittal Procedures.
 - 2. Certifications:

a. Record documents submittal shall include certification, with original signature of official authorized to execute legal agreements on behalf of CONTRACTOR, reading as follows:

"[*Insert Contractor's corporate name*] has maintained and submitted Project record documentation in accordance with the General Conditions and Supplementary Conditions, Specification 01 78 39, Project Record Documents, and other elements of Contract Documents, for the New York State Department of Environmental Conservation, City of Rome, Oneida County, New York, Remedial Construction Project – Former Rome Cable Site. We certify that each record document submitted is complete, accurate, and legible relative to the Work performed under our Contract, and that the record documents comply with the requirements of the Contract Documents.

[*Provide signature, print name, print signing party's corporate title, and date*]"

1.3 RECORDING CHANGES

- A. Recording Changes General:
 - 1. At the start of the Project, label each record document to be submitted as, "PROJECT RECORD" using legible, printed letters. Letters on record copy of the Drawings shall be two inches high.
 - 2. Keep record documents current consistent with the progress of the Work. Make entries on record documents within two working days of receipt of information required to record the change.
 - 3. Do not permanently conceal the Work until required information has been recorded for Project record documents.
 - 4. Accuracy of record documents shall be such that future searches for items shown on the record documents may rely reasonably on information obtained from ENGINEER-accepted record documents.
 - 5. Marking of Entries:
 - a. Use erasable, colored pencils (not ink or indelible pencil) for marking changes, revisions, additions, and deletions to record documents.
 - b. Clearly describe the change by graphic line and make notations as required. Use straight-edge to mark straight lines. Writing shall be legible and sufficiently dark to allow scanning of record documents into legible electronic files in portable document format (".PDF").
 - c. Date each entry on record documents.
 - d. Indicate changes by drawing a "cloud" around the change(s) indicated.
 - e. Mark initial revisions in red. In the event of overlapping changes, use different colors for subsequent changes.

- B. Drawings:
 - 1. Record changes on copy of the Drawings. Submittal of CONTRACTORoriginated or -produced drawings as a substitute for recording changes on a copy of the Drawings is unacceptable.
 - 2. Record changes on plans, sections, elevations, schematics, schedules, and details as required for clarity, making reference dimensions and elevations (to Project datum) for complete record documentation.
 - 3. Record actual construction including:
 - a. Installations of any kind or description known to exist within the construction area. The locations shall include dimensions to permanent features.
 - b. The location and dimensions of any changes within the design features of any kind or description known to exist within the construction area. The locations shall include dimensions to permanent features.
 - c. Correct grade or alignment of roads, structures, utilities, or project components.
 - d. Correct elevations.
 - e. Changes in details or dimensions.
 - f. The topography and grades of all drainage structures installed or affected as part of the project construction.
 - g. Additional information obtained from working drawings.
 - h. Where contract drawings or specifications allow options, only the option selected for construction shall be shown on the As-Built Documents.
 - i. Additional work ordered by the ENGINEER or DEPARTMENT.
 - j. Depths of various elements of foundation in relation to datum.
 - k. Horizontal and vertical location of underground utilities and appurtenances referenced to permanent surface improvement.
 - 1. Location of internal utilities and appurtenances concealed in construction referenced to visible and accessible features of structure.
 - m. The Surveyor retained by the Contractor shall prepare Supplemental Record Drawings (see Specification 01 71 23, Field Engineering). A topographic survey of the site prior to and following earthwork. The survey should, at a minimum, show ground surface elevations on the specified grid and at all grade changes and also indicate the thickness of cover layers. The survey should adequately extend beyond the limits of work to properly overlap existing conditions. Locations and elevations of all groundwater monitoring wells and survey control points.
 - 4. Recording Changes for Schematic Layouts:
 - a. In some cases, on the Drawings, arrangements of conduits, circuits, piping, ducts, and similar items are shown schematically and are not intended to portray physical layout. For such cases, the final physical arrangement shall be determined by CONTRACTOR subject to acceptance by ENGINEER.

- b. Record on the Project record documents all revisions to schematics on the Drawings, including: piping schematics, ducting schematics, process and instrumentation diagrams, control and circuitry diagrams, electrical oneline diagrams, motor control center layouts, and other schematics when included in the Drawings. Show and indicate actual locations of equipment, lighting fixtures, in-place grounding system, and other pertinent data.
- c. When dimensioned plans and dimensioned sections or elevations on the Drawings show the Work schematically, indicate on the record documents, by dimensions accurate to within one inch in the field, centerline location of items of Work such as conduit, piping, ducts, and similar items
 - 1) Clearly identify each item of the Work by accurate notations such as "cast iron drain", "rigid electrical conduit", "copper waterline", and similar descriptions.
 - 2) Show by symbol or by note the vertical location of each item of the Work; for example, "embedded in slab", "under slab", "in ceiling plenum", "exposed", and similar designations. For piping not embedded, also indicate elevation dimension relative to Project elevation datum.
 - 3) Descriptions shall be sufficiently detailed to be related to the Specifications.
- d. ENGINEER may furnish written waiver of requirements relative to schematic layouts shown on plans, sections, and elevations when, in ENGINEER's judgment, dimensioned layouts of Work shown schematically will serve no useful purpose. Do not rely on such waiver(s) being issued.
- 5. Supplemental Drawings:
 - a. In some cases, drawings produced during construction by ENGINEER or CONTRACTOR supplement the Drawings and shall be included with Project record documents submitted by CONTRACTOR. Supplemental record drawings shall include drawings or sketches that are part of Change Orders, Work Change Directives, and Field Orders and that cannot be incorporated into the Drawings because of space limitations.
 - b. Supplemental drawings submitted with record drawings shall be integrated with the Drawings and include necessary cross-references between drawings. Supplemental record drawings shall be on sheets the same size as the Drawings.
 - c. When supplemental drawings developed by CONTRACTOR using computer-aided drafting/design (CADD) software are to be included in record drawings, submit electronic files for such drawings in accordance with Specification 01 31 26, Electronic Communication Protocols, as part of record drawing submittal. Label such files, "Supplemental Record

Drawings", including with CONTRACTOR's name, Project name, and Contract designation.

- C. Specifications and Addenda:
 - 1. Mark each Specifications Section to record:
 - a. Manufacturer, trade name, catalog number, and Supplier of each material and equipment item actually provided.
 - b. Changes made by Addendum, Change Orders, Work Change Directives, and Field Orders.

1.4 ELECTRONIC FILES FURNISHED BY ENGINEER

- A. CADD files of the Drawings will be furnished by ENGINEER upon the following conditions:
 - 1. CONTRACTOR shall submit to ENGINEER a letter on CONTRACTOR letterhead requesting CADD files of the Drawings and indicating specific definition(s) or description(s) of how such files will be used, and specific description of benefits to DEPARTMENT (including credit proposal, if applicable) if the request is granted.
 - 2. CONTRACTOR shall execute ENGINEER's standard agreement for release of electronic files and shall abide by the provisions of such agreement for release of electronic files.
 - 3. Layering system incorporated in CADD files shall be maintained as transmitted by ENGINEER. CADD files transmitted by ENGINEER containing crossreferenced files shall not be bound by CONTRACTOR. Drawing crossreferences and paths shall be maintained. If CONTRACTOR alters layers or cross-reference files, CONTRACTOR shall restore all layers and crossreferences prior to submitting record documents to ENGINEER.
 - 4. CONTRACTOR shall submit record drawings to ENGINEER in same CADD format that files were furnished to CONTRACTOR.

PART 2 – PRODUCTS (NOT USED)

PART 3 – EXECUTION (NOT USED)

+ + END OF SECTION + +

SECTION 01 89 29

GREEN REMEDIATION PRACTICES

PART 1 - GENERAL

1.1 SUMMARY

- A. Work includes, practices related to reducing waste generation; energy usage; emissions including greenhouse gases (GHGs), nitrogen oxides (NOx), sulfur oxides (SOx), particulate matter and hazardous air pollutants (HAPs); water usage; and land and ecosystem disturbance.
- B. The CONTRACTOR shall implement practices in the performance of the requirements of the Work to maximize sustainability, reduce energy and water usage, promote carbon neutrality, promote industrial materials reuse and recycling, and protect and preserve natural resources.
- C. The CONTRACTOR shall utilize concepts and techniques presented in the New York State Department of Environmental Conservation (NYSDEC) Program Policy DER-31/Green Remediation, August 11, 2010.
- D. The CONTRACTOR shall implement practices and procedures to meet the environmental performance goals of the DEPARTMENT consistent with NYSDEC Program Policy DER-31/Green Remediation. In general, such practices and procedures shall include, but are not limited to:
 - 1. Reducing direct and indirect Green House Gas (GHG) and other air emissions.
 - 2. Increasing energy efficiency and minimizing use of non-renewable energy and resources.
 - 3. Conserving and efficiently managing natural resources such as soil, water, and habitat, while giving special attention to habitats for critical species (i.e., pollinators), and threatened or endangered species.
 - 4. Minimizing waste, increasing recycling, increasing reuse of materials, furnishing materials from local sources, and minimizing the disposal transport distance using local facilities.
 - 5. Maximizing the reuse of land and the recycling of on-site materials.
 - 6. Applying green remediation concepts, such as minimizing energy intensive operations, which, at a minimum shall include:
 - a. Protect public health and the environment.
 - b. Address source removal and control.
 - c. Address groundwater protection and restoration.
 - d. Achieve the cleanup goals for the Site remediation.
- E. Specifically, CONTRACTOR shall consider inclusion of the following provisions:

01 89 29 - 1

- 1. Beneficial reuse materials that would otherwise be considered a waste (e.g., crushed clean concrete as base or fill).
- 2. Establish the support zone and storage/laydown areas to minimize the disturbance of habitats and vegetated areas outside of the work zone.
- 3. Include energy saving measures in all proposed structures, facilities, and operating systems to minimize electricity and water consumption/disposal, such as using variable speed drives for motors, incorporation of appropriately selected insulation and energy saving fixtures, or using extracted groundwater to provide heating and cooling through the use of heat exchangers.
- 4. Use of renewable energy and/or the purchase of renewable energy credits (RECs) or a combination of the two techniques to offset electrical usage at the site.
- 5. Reduce vehicle idling. All vehicles, both on and off road (including construction equipment) shall be shut off when not in use for more than 5 minutes, consistent with <u>6 NYCRR Part 217 Motor Vehicle Emissions</u>, Subpart 217-3 Idling <u>Prohibition For Heavy Duty Vehicles</u>.
- 6. Use equipment and vehicles that reduce emissions, specifically from compressionignition engines, and especially in urban areas.
- 7. Incorporate the use of blended bio-diesel fuel for all compression-ignition powered equipment.
- 8. Establish minimally invasive and well-designed traffic patterns for on-site activities to reduce impacts to land and ecosystems.
- 9. Use native drought resistant species for re-vegetation during site restoration.
- F. CONTRACTOR shall comply with the DEPARTMENT'S policy to utilize, as approved by the DEPARTMENT, recycled content materials, locally manufactured materials, and low-emitting materials.
- G. CONTRACTOR shall ensure that the requirements related to the goals of the DEPARTMENT and as defined in the Contract Documents, are implemented to the fullest extent.
- H. Solid Waste Management
 - 1. Develop and implement a waste management program in accordance with ASTM E1609 and as specified herein.
 - 2. Collection: Implement a recycling/reuse program that includes separate collection of waste materials of the following types as appropriate to the project waste and to the available recycling and reuse programs in the project area:
 - a. Land clearing debris re-use for habitat development to the extent practicable.
 - b. Spent Activated Carbon send to regeneration facility for reuse rather than a landfill for disposal.
 - c. Recovered LNAPL separate from aqueous fraction and send to a recycling facility.
 - d. Shipping containers use bulk sized containers (i.e. drums or totes) that can be recycled or re-used for chemical deliveries.

e. Masonry/Asphalt – sample and re-use or recycle these materials if uncontaminated.

1.2 DEFINITIONS:

- A. Green Remediation Definitions
 - 1. Renewable Energy: Energy from a source which is not depleted when used, such as solar, wind, geothermal, biomass and biogas.
 - 2. Locally Manufactured: manufactured within 150 miles of the work.
 - 3. Recovered Materials: Waste materials and by-products that have been recovered from solid waste streams, but does not include materials and by-products generated from, and commonly reused within, an original manufacturing process.
 - 4. Biobased Materials: As defined in the Farm Security and Rural Investment Act, for purposes of Federal procurement of biobased products, "biobased" means a "commercial or industrial product (other than food or feed) that is composed, in whole or in significant part, of biological products or renewable domestic agricultural materials (including plant, animal, and marine materials) or forestry materials." Biobased materials also include fuels, chemicals, building materials, or electric power or heat produced from biomass as defined by The Biomass Research and Development Act of 2000.
 - 5. Biobased Content: The amount of biobased carbon in the material or product as a percentage of weight (mass) of the total organic carbon in the material or product.
 - 6. Recovered Materials: Waste materials and by-products that have been recovered from solid waste, but does not include materials and by-products generated from, and commonly reused within, an original manufacturing process.
- B. Part 248 Annual Reporting Requirements
 - 1. Consistent with NYSDEC's Part 248 Annual Emission Reporting requirements, CONTRACTOR is required to report annual emission for those vehicles used under Contract reporting period (even those exempt from Best Available Retrofit Technology [BART] requirements) on both the Annual Report and Vehicle Inventory forms. These forms are not intended to be cumulative lists of a Prime Contractor's fleet over time and should only reflect vehicles used during the Contract or Reporting period. Reporting forms and requirements can be accessed at <u>https://www.dec.ny.gov/chemical/118127.html</u>.

1.3 REFERENCES

- A. NYSDEC DER-31 Green Remediation, New York State Department of Environmental Conservation, DEC Program Policy.
- B. CP-49 Climate Change and DEC Action, New York State Department of Environmental Conservation, DEC Policy.

- C. United States Environmental Protection Agency (USEPA):
 - 1. Consider USEPA Best Management Practices (BMPs) related to green remediation for the applicable program elements listed below:
 - a. Site investigation:
 - 1) <u>https://clu-in.org/greenremediation/docs/GR_Fact_Sheet_SI&EM.pdf</u>.
 - b. Excavation and surface restoration:
 1) <u>https://clu-in.org/greenremediation/docs/GR_Quick_Ref_FS_exc_rest.pdf</u>
 - c. Soil vapor extraction and air sparging technologies:
 1) https://clu-in.org/greenremediation/docs/GR factsheet SVE AS 032410.
 - pdf.
 - d. Pump and treat technologies:
 - 1) <u>https://clu-in.org/greenremediation/docs/GR_Fact_Sheet_P&T_12-31-200</u> 9.pdf.
 - e. Bioremediation:
 - 1) <u>https://clu-in.org/greenremediation/docs/GR_factsheet_biorem_32410.pdf</u>.
 - f. In situ thermal technologies:
 - 1) <u>https://clu-in.org/greenremediation/docs/GR_factsheet_IST.pdf</u>.
 - g. Landfill cover systems and associated energy production:
 - 1) <u>https://clu-in.org/greenremediation/docs/GR_factsheet_landfill_covers_an_d_energy.pdf.</u>
 - h. Materials and waste management:
 - 1) <u>https://clu-in.org/greenremediation/docs/GR%20BMP%20fact%20sheet</u> <u>materials&waste.pdf.</u>
 - 2. Consider USEPA climate resiliency fact sheets related to:
 - a. Sediment cleanups:
 - 1) <u>https://www.epa.gov/sites/default/files/2019-12/documents/cr_sediment_si</u> <u>tes_fact_sheet_update.pdf</u>.
 - b. Containment remedies:
 - 1) <u>https://www.epa.gov/sites/default/files/2019-12/documents/cr_containmen</u> <u>t_fact_sheet_2019_update.pdf</u>.
 - c. Groundwater treatment remedies:
 - 1) <u>https://www.epa.gov/sites/default/files/2019-12/documents/cr_groundwate</u> <u>r_systems_fact_sheet_2019_update.pdf</u>.
- D. ITRC Green and Sustainable Remediation, A Practical Framework:
 - 1. <u>https://connect.itrcweb.org/HigherLogic/System/DownloadDocumentFile.ashx?Doc</u> <u>umentFileKey=8e842294-64ce-4e56-a80b-cd3dc1aa4af3</u>.
- E. ASTM E2893-16e1: Standard Guide for Greener Cleanups:
 - 1. https://www.astm.org/e2893-16e01.html.
- F. Naval Facilities Engineering Command (NAVFAC), Department of the Navy Guidance on Green and Sustainable Remediation:

- 1. <u>https://www.navfac.navy.mil/content/dam/navfac/Specialty%20Centers/Engineering%20and%20Expeditionary%20Warfare%20Center/Environmental/Restoration/er_pdfs/gpr/navfacesc-ev-ug-2093-env-gsr-20120405r1.pdf.</u>
- G. EPA Energy Smart Resources Guide:
 - 1. <u>https://cfpub.epa.gov/si/si_public_record_report.cfm?Lab=NRMRL&dirEntryId=19</u> 0014.
- H. Sustainable Remediation Forum (SURF):
 - 1. <u>https://www.sustainableremediation.org/</u>.
- I. US Army Corps of Engineers Evaluation of Consideration and Incorporation of Green and Sustainable Remediation Practices in Army Environmental Remediation:
 - 1. https://usace.contentdm.oclc.org/digital/collection/p266001coll1/id/2298/.

1.4 ENVIRONMENTAL GOALS

- A. The CONTRACTOR, to the extent practicable, shall:
 - 1. Minimize the amount of waste generated from the site and maximize the use of recycling/reuse facilities for disposal of the waste to the extent practicable and as approved by the DEPARTMENT.
 - 2. Maximize use of energy derived from renewable resources.
 - 3. Minimize on- and off-site fuel combustion.
 - 4. Minimize use of water and maximize water recycling.
 - 5. Minimize disturbance to land and ecosystems.
 - 6. Minimize use of water for dust control and utilize sustainable dust control products.
 - 7. Green Power Requirements
 - a. Arrange for Green Power sufficient to provide minimum ten percent of the project's total energy needs.
 - b. Comply with renewable energy requirements in accordance with the Center for Resource Solutions (CRS) Green-e Standard for Electricity Products.
 - 8. Long-Term Operation and Maintenance (Not Applicable for this Contract)
 - a. Green Power: Provide service contract(s) for two years with options for annual renewal thereafter.
 - 1) Comply with the Center for Resource Solutions (CRS) Green-e Standard for Electricity Products for the duration of the Contract. Comply with requirements of the CRS Green-e Annual Verification Protocol.
 - 2) Immediately notify Owner if electricity product fails to comply with Green-e certification criteria during Contract period.
 - b. On an annual basis, or at the end of the Contract period, submit:

- 1) A report that includes data on the resources used to generate the electricity consumed during the Contract or over the past year.
- 2) Disclosure statement that lists the resources or fuel sources from which the electricity will be generated in the following year.
- 9. Use the Electronic Product Environmental Assessment Tool (EPEAT) to find electronic products with reduced impacts on the environment.
- 10. Resource Conservation and Green Materials
 - a. During construction activities and associated landscape alteration activities, green building strategies such as those outlined in the USGBC LEED should be considered. LEED includes guidelines and recommendations for new construction, and existing building operations and management that fall under six categories important for reducing the environmental impact of facilities of all types:
 - 1) Sustainable sites.
 - 2) Water efficiency.
 - 3) Energy and atmosphere.
 - 4) Materials and resources.
 - 5) Indoor environmental quality.
 - 6) Innovation in operations.
- 11. As noted across the LEED categories, resources other than energy that can be conserved include water, raw materials for articles consumed, topsoil, paper for reports and landfill space. Conserving one resource typically conserves other resources and has other sustainability benefits. For example, recycling of construction and demolition debris or metal recovered at a munitions site will reduce consumption of landfill space and may also save energy and reduce air emissions by minimizing material transportation. Another example is the use of waste-to-energy plants for waste disposal rather than landfills in states where these plants are currently operating. This too reduces the consumption of landfill space and also results in energy production from the waste processing. Other examples of resource conservation include treated water reuse or reinjection, the reuse of treated soil onsite, and the beneficial reuse of sediments.
- 12. The use of "green" construction and project management tools and materials such as eco-friendly concrete or the use of native plants for site restoration also advances the sustainability objectives of the project. It is important to understand that green remediation implies minimizing the entire footprint of the remediation project, which includes the environmental impacts of products and materials associated with the project. For example, eco-friendly concrete refers to concrete that is produced with a certain percentage of cement replaced by recovered cementitious materials such as fly ash, slag, or glass. This type of reduced cement concrete takes a problematic substance out of the waste stream and reduces the cumulative amount of energy associated with the production of concrete. The use of native plants for site

restoration helps to conserve water and eliminate the need for potentially harmful fertilizers and pesticides.

1.5 SUBMITTALS

- A. Form "A" Summary of Green Remediation Metrics:
 - 1. Consistent with NYSDEC Program Policy DER-31/Green Remediation requirements, the CONTRACTOR shall complete Form A Summary of Green Remediation Metrics, in its entirety and sign the certification as to its accuracy.
 - 2. The CONTRACTOR shall submit properly completed Form A to the DEPARTMENT along with the CONTRACTOR'S Application for Payment.
 - 3. Consistent with NYSDEC's Part 248 Annual Emission Reporting requirements, CONTRACTOR is required to report annual emission for those vehicles used under Contract reporting period (even those exempt from BART requirements) on both the Annual Report and Vehicle Inventory forms. These forms are not intended to be cumulative lists of a Prime Contractor's fleet over time and should only reflect vehicles used during the Contract period. Reporting forms and requirements can be accessed at https://www.dec.ny.gov/chemical/118127.html.
 - 4. Submit product data for all products and equipment specified within this specification and other project specifications. As appropriate, include data presenting energy consumption ratings, air discharge ratings, bio-content analysis, and other sustainability measures indicated in this section.

1.6 QUALITY ASSURANCE

- A. Environmental Project Management and Coordination:
 - 1. CONTRACTOR shall designate an employee who shall be responsible for implementation of green remediation elements; coordinate work of subcontractors and suppliers; instruct workers relating to environmental issues; ensure that green remediation metrics are collected, recorded on *Form A Summary of Green Remediation Metrics* and submitted with the CONTRACTOR'S Application for Payment, and oversee Project environmental goals.

PART 2 – PRODUCTS

A. Evaluate the products and materials needed for the project and identify "sustainable" materials to be used. Focused effort shall be directed to identify materials and products that are needed in large quantities that will have the largest impact on the project. For example, projects requiring a large amount of crushed stone for temporary roadway

construction shall be evaluated for sustainable solutions (e.g., recycled crushed concrete and local sources).

- B. Materials with a high carbon footprint (such as concrete, because of the manufacture of the Portland cement in the material) shall also be evaluated to identify more sustainable solutions. Green concrete shall be considered for such situations.
- C. CONTRACTOR shall use environmentally preferable products, where appropriate and as approved by the DEPARTMENT, including, but not limited to:
 - 1. Compact Fluorescent Lights (CFL) or LED.
 - 2. Reused PVC pipe.
 - 3. Environmentally friendly electronics (e.g., ENERGY STAR).
 - 4. Items composed of recovered materials such as recycled asphalt, concrete, and rubble; recycled wood including mulch products; recycled metals including steel, copper, and brass; and items/products composed of recycled cardboard.
 - 5. Items constructed using renewable resources such as biomass energy (such as ethanol), hydropower, geothermal power, wind energy, and solar energy.
 - 6. Bio-based cleaning products.
 - 7. Bio-based dust control agents and dust suppressants: Products formulated to reduce or eliminate the spread of dust associated with gravel roads, dirt parking lots, open excavations, stockpiled materials, or similar sources of dust. Provide minimum 85% biobased content.
 - 8. Geotextile fabrics/tarps made of recycled or recovered material.
 - 9. Hydraulic fluids that are biodegradable for operating hydraulic equipment such as excavators, bulldozers, and drill rigs.
 - 10. Phosphate-free detergents instead of organic solvents or acids to decontaminate equipment not used directly for sample collection.
 - 11. Substitute temporary silt fences with biodegradable erosion controls such as tubular devices filled with organic materials.
 - 12. Products must be certified environmentally clean before delivery to the project site. ENGINEER'S approval shall be required for all products.

PART 3 - EXECUTION

- A. The CONTRACTOR shall, to the extent practicable:
 - 1. General Site Requirements:
 - a. Set up an on-Site recycling program for CONTRACTOR-generated wastes.
 - b. Provide all required documentation in electronic format, eliminating the need for printing, inks, paper, and mail/delivery impacts.
 - c. Sequence work to minimize double-handling (e.g., direct loading of waste, direct placement of backfill, etc.) of materials.
 - d. Provide locally made materials that are composed of recovered materials to the maximum amount practicable.

- e. Provide materials that generate the least amount of pollution during mining, manufacturing, transport, installation, use and disposal.
- f. Maintain office trailer heating and cooling systems at efficient set points. Utilize renewable energy for trailer power and lighting when possible. Utilize programmable or smart devices to efficiently control lights and HVAC equipment.
- g. If alternatives are available, do not use materials that contain ozone-depleting chemicals (e.g., CFCs or HCFCs) and that emit potentially harmful volatile organic compounds (VOCs).
- h. Employ construction practices that minimize the generation of excessive dust and combustion by-products.
- i. Contract shall not use or cause to be used scarce, irreplaceable and endangered resources.
- j. Reduce impact to land and ecosystems.
- k. Reuse treated wastewater for non-potable uses on site such as sanitary facilities, dust control additives, and decontamination. Contain and reuse water on site, to the extent practicable, as approved by the DEPARTMENT.
- 1. Ensure temporary facilities (e.g., field offices and sanitary facilities) and permanent structures (e.g., treatment plants and offices) are thoroughly and properly insulated.
- m. Design structures to take full advantage of passive solar heating and cooling.
- n. Identify onsite or nearby sources of backfill material such as crushed concrete.
- o. Incorporate green requirements into cleanup and supporting service procurements.
- p. Choose service providers with local offices, to minimize the distance of worker commutes and machinery transport.
- q. Choose equipment and product vendors with nearby production or distribution centers, to minimize delivery-related fuel use.
- 2. Equipment Requirements:
 - a. Minimize equipment engine idling.
 - b. Utilize properly sized equipment and minimize the number of mobilizations needed to deliver and remove heavy equipment. Utilize an automated coupling system for equipment, rather than a manual pin-on system for changing excavator attachments, to reduce machine operating time.
 - c. Use machine models capable of performing assorted tasks, whenever feasible, to avoid field deployment of multiple types of machines. For instance, a single excavator can be equipped with a bucket for digging, a breaker for demolition or a grapple for land clearing.
 - d. Incorporate electronic intelligence systems to improve productivity within and among field machines. "Smart" systems enable work managers to remotely monitor field operations via machine-to-machine communications and identify changes to be made by machinery operators accordingly.
 - e. Use machines with variable-speed control technology, which automatically reduces engine speed during low workload requirements, or with pump torque

control, which allows a machine operator to change a machine's hydraulic pump torque.

- f. Use machines with repowered or newer engines that are more fuel efficient.
- g. Implement an engine idle reduction plan to avoid fuel consumption when machinery is not actively engaged. Options include manual shutdown after a specified time such as five minutes, engagement of automatic shutdown devices, or use of auxiliary power units to heat or cool machinery cabs.
- h. Minimize emissions during site work (e.g., replace or retrofit older engines or use newer efficient models or use low-sulfur fuel).
- i. Deploy direct-push technology (DPT) instead of rotary drilling rigs whenever feasible for additional subsurface sampling or for monitoring well installation. DPT can reduce drilling duration by as much as 50-60% while eliminating generation of drill cuttings or the need to dispose of drilling fluids.
- j. Employ transportation methods, such as rail, which have demonstrated low emissions.
- k. Choose trucking methods and fleets that use vehicles equipped with fuel efficiency options such as tractor trailer skirts and air tabs, as well as clean diesel technology.
- 1. Practice engine maintenance in accordance with manufacturers' recommendations and properly train operators to run equipment efficiently.
- m. Perform all required equipment inspections to reduce the potential for breakdowns, hydraulic fluid spills, and other negative impacts due to lack of inspections.
- n. Use 2007 or newer on-road diesel trucks or retrofitted diesel trucks with equivalent emissions reductions that get better fuel mileage, reduce air toxics, and use low sulfur fuel or alternative fuel.
- o. Identify onsite or nearby sources of topsoil, to avoid long-distance transport of clean soil. Options may include onsite manufacturing of topsoil through use of locally sourced industrial byproducts such as compost or silica-based spent foundry sands.
- p. Use solar power packs to recharge batteries in small electronic devices such as small hand tools, cell phones, laptop computers and sensors.
- q. Deploy mobile power systems to operate construction equipment or tools such as electricity generators, chainsaws, woodchippers, refrigeration units, or temporary lighting fixtures. Use maneuverable photovoltaic (PV) panels or small wind turbines that can be easily transported via carts, pick-up trucks, or trailers.
- r. Install a ground-mounted PV array, wind turbine or mechanical windmill to power equipment needed for long-term site monitoring or maintenance. Properly scale and configure such equipment to provide power to other remediation equipment if possible.
- s. Use high efficiency variable speed pumps for groundwater extraction and treatment plant operations.

- t. Optimize pump-and-treat systems using properly sized equipment to minimize excess extraction or energy usage.
- 3. Restoration and Revegetation Requirements:
 - a. Revegetate backfilled areas as quickly as possible through use of a diverse mix of native grasses, shrubs, forbs, and trees supporting many habitat types.
 - b. Include plant species that promote colonization of bees and other pollinators.
 - c. Seed or install native rather than non-native species, which typically increases the rate of plant survival and minimizes the need for irrigation and soil or plant inputs.
 - d. Choose grass species requiring little or no mowing.
 - e. Substitute chemical fertilizers, herbicides or pesticides with non-synthetic inputs, integrated pest management methods, and soil solarizing techniques during vegetation planting, transplanting or ongoing maintenance.
 - f. Retrieve native, noninvasive plants for later replanting.

++ END OF SECTION ++

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Form A Summary of Green Remediation Metrics

Site Name:	Site C	Code:	Operable Unit:
Address:		City:	
State: Zip:	County:		
Reporting Period			
Contract Period From:	To:		
Reporting Period From:	To:	Is this a F	inal Report? Yes 🗌 No 🗌
Contact Information			
Preparer's Name:		Phone No.:	
Preparer's Affiliation:		Company Co	
Contract No.		,	

Materials & Waste Generation: Quantify the materials used or consumed and the management of waste generated on-site.

	Current Reporting Period (Include Units)	Total to Date (Include Units)
Materials Brought to the Site		· · · · · · · · · · · · · · · · · · ·
• Topsoil		
• Fill		
Silt Fence		
Silt Logs		
Aggregate Base Course		
Geotextile		
Solidification Additives		
Activated carbon		
Other:		
Total Wastes Generated On-Site		
 Remedy Generated Waste 		
Contractor Generated Waste		
Other:		

Provide a description of any implemented waste reduction programs appropriate for this project in the space provided on the certification page.

Recycled and Bio-Based Content in Imported Products and Materials: Quantify all materials and products imported to the site, including cost of materials/dollar values. Provide total percentages of recycled and bio-based of products and materials.

List Products and Materials Below	Total \$ Value Provided	Total Percent of Recycled Content	Total Percent of Bio-based Content

Provide additional descriptions, as necessary, in the space provided on certification page.

Solid Waste Disposal and Diversion: Quantify all solid wastes generated, and indicate whether material was disposed or diverted for recycling or reuse.

Solid Waste Material	Date	Disposed or Diverted	Volume (Ton or CY)	Disposal/Recycling Facility Name	Comments (if not diverted, state why)
TSCA Contaminated Sediment					
Non-TSCA Contaminated Sediment					
Cleared Vegetation					
Spent Granular Activated Carbon					
Monitoring Well Removal Debris					
Other:					

Provide descriptions in the space provided on the certification page of all wastes that were redirected for recycling or reuse. Indicate full names and addresses of facilities.

Energy Usage: Quantify the amount of energy used on-site and portion of that voluntarily derived from renewable energy sources.

	Current Reporting Period (KWh)	Total to Date (KWh)
Total electricity usage		
Of that total amount, provide quantity:		
• Derived from renewable source (i.e., solar, wind)		
Other:		

Provide descriptions in the space provided on the certification page of all reported energy use reduction programs appropriate to this project, including use of electricity derived from renewable sources.

Water Usage: Quantify the volume of water used on-site from difference sources.

	Current Reporting Period (Gallons)	Total to Date (Gallons)
Total quantity of water used on-site		
Of that total amount, provide the quantity ob	tained from:	
Public potable water supply		
Surface water		
On-site treated groundwater		
Reclaimed treated water		
Collected or diverted storm water		
 Re-Injected groundwater 		
Other:		
Other:		

Provide descriptions in the space provided on the certification page of any reported water use reduction programs applied. Please note if reused/injected groundwater is pre-treated.

Emissions: Quantify the distance traveled for delivery of supplies and removal of waste.

	Current Reporting Period (Miles)	Total to Date (Miles)
Off-site mobile fuel combustion		
Other:		

Provide descriptions in the space provided on the certification page of practices such as use of local vendors within 150 miles of the site and on-site stationary fuel use reduction programs.

Quantify the number of hours that diesel and other equipment with the potential to emit hazardous air pollutants (HAPs) or greenhouse gas (GHG) emissions was operated on-site.

	Current Reporting Period (Hours)	Total to Date (Hours)
On-site diesel excavation/construction		
equipment usage		
Other on-site processes generating		
emissions		
Other:		

Quantify the VOC emissions from active remediation systems on-site.

	Current Reporting Period (Ibs VOCs emitted)	Total to Date (Ibs VOCs emitted)
Operating soil remediation equipment		
Operating groundwater remediation equipment		
Other:		

Provide descriptions in the space provided on the certification page of the type of equipment used, rating, emission control devices used and other means to reduce emissions.

Land and Ecosystem: Quantify the amount of land and/or ecosystems disturbed by construction and the area of land and/or ecosystems restored to a natural condition.

	Current Reporting Period (Acres)	Total to Date (Acres)
Total land area disturbed		
Total land area restored		
Increase in area for storm water infiltration (vs pre-disturbed conditions)		
Increase in area of native species plantings (vs pre-disturbed conditions)		
Other:		

Quantify the amount of land and/or ecosystems remediated.

	Current Reporting Period (Acres)	Total to Date (Acres)
Total area of land impacted by contamination		
Total area of land remediated to unrestricted use		
Total area of land remediated to other future site use		

Additional Comments on Green Remediation Programs Implemented: Provide descriptions in the space provided of other green remediation practices performed during the project.

Descriptions of green remediation programs reported above (Attach additional sheet if needed)

Materials and Products Imported:

Waste Generation:

Descriptions o	f green remediation programs reported above (Attach additional sheet if needed)
Recycled and	Bio-Based Content in Imported Products and Materials:
Solid Waste D	isposal and Diversion:
Energy Use:	
Water Use:	
Emissions:	
Land and Ecos	system:
Other:	

CERTIFICATION BY CONTRACTOR

I, ______(Name) do hereby certify that I am ______(Title) of the Company/Corporation herein referenced and contractor for the work described in the foregoing application for payment. According to my knowledge and belief, all items and amounts shown on the face of this application for payment are correct, all work has been performed and/or materials supplied, the foregoing is a true and correct statement of the contract account up to and including the last day of the period covered by this application.

Date

Contractor

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SPECIFICATION 34 78 13

PORTABLE TRUCK SCALES

PART 1 - GENERAL

1.1 DESCRIPTION

- A. Scope:
 - 1. CONTRACTOR shall provide all labor, materials, equipment, and incidentals as shown, specified and required to furnish and install and operate a minimum of one portable truck scale.
 - 2. Included are necessary foundation, weigh deck, load cells, control panel, anchorage systems, and all appurtenances.
 - 3. CONTRACTOR shall obtain necessary weights and measures certifications and operate scale with a certified weigh master.

1.2 REFERENCES

- A. Standards referenced in this Section are listed below:
 - 1. American Welding Society, (AWS).
 - a. AWS D1.1, Structural Welding Code.
 - 2. National Bureau of Standards, (NBS).
 - 3. National Electrical Code, (NEC).
 - 4. National Electrical Manufacturers Association, (NEMA).
 - 5. Scale Manufacturers Association, (SMA)

1.3 QUALITY ASSURANCE

- A. Equipment Manufacturer's Qualifications:
 - 1. Manufacturer shall have a minimum of five years of experience of producing substantially similar equipment and shall be able to show evidence of at least five installations in satisfactory operation for at least five years.
- B. Component Supply and Compatibility:
 - 1. Obtain all equipment included in this Section, regardless of the component manufacturer, from a single portable truck scale equipment manufacturer.
 - 2. The portable truck scale equipment manufacturer shall review and approve or shall prepare all Shop Drawings and other submittals for all components furnished under this Section.
 - 3. All components shall be specifically designed for portable truck weighing service and shall be integrated into the overall equipment design by the portable truck scale equipment manufacturer.

- C. Source Quality Control:
 - 1. Visual Inspection: Verify that equipment complies with these Specifications and approved Shop Drawings.
 - 2. Packing:
 - a. Inspect prior to packing to ensure that assemblies and components are complete and undamaged.
 - b. Protect machined surfaces and mating connections.
 - c. Protect bearings with a shop applied corrosion prevention coating.
 - d. Crate in a manner which will prevent damage during shipment, delivery, and storage.
 - e. Identify crate contents by a packing slip fastened to the outside of the crate.

1.4 SUBMITTALS

- A. Action Submittals: Submit the following:
 - 1. Product Data:
 - a. Manufacturer's literature, illustrations, specifications, and engineering data.
 - 2. Shop Drawings:
 - a. Drawings showing fabrication methods, assembly, installation and wiring diagrams.
 - b. Setting drawings, templates, and directions for the installation of anchor bolts and other anchorages.
- B. Informational Submittals: Submit the following:
 - 1. Source Quality Control Submittals:
 - a. Submit results of required control panel shop tests.
 - b. Site Quality Control Submittals:
 - c. Submit a written report providing the results of the required field tests.
 - d. Submit a written report of the results of each visit by a manufacturer's serviceman, including purpose and time of visit, tasks performed, and results obtained.
- C. Prior to Use: Submit the following:
 - 1. Operation and Maintenance Manuals:
 - a. Submit complete installation, operation and maintenance manuals including test reports, maintenance data and schedules, description of operation and spare parts information.
- D. Maintenance Material Submittals: Submit the following:
 - 1. Extra Stock Materials:

a. Load Cell Fluid: Furnish a load cell fluid specification for the type and grade necessary to meet the requirements of the equipment if required.

1.5 PRODUCT DELIVERY, STORAGE AND HANDLING

- A. Deliver materials to the Site to ensure uninterrupted progress of the Work. Deliver anchor bolts and anchorage devices, which are to be embedded in cast-in-place concrete in ample time to not delay that Work.
- B. All boxes, crates and packages shall be inspected by CONTRACTOR upon delivery to the Site. CONTRACTOR shall notify ENGINEER, in writing, of any loss or damage to equipment or components. Replace losses and repair damage to new condition, in accordance with manufacturer's instructions.
- C. Store materials to permit easy access for inspection and identification. Keep all material off the ground using pallets, platforms, or other supports. Protect equipment including packaged materials from corrosion and deterioration.

PART 2 - PRODUCTS

2.1 SERVICE CONDITIONS

- A. General: Equipment shall be designed to be suitable for the process and service conditions described below and in the Schedule of Service Conditions.
 - 1. Portable scale shall be of capable of weighing trucks and being certified by weights and measures.

B. Schedule of Service Conditions:

6. No. of Scales:	1 (Minimum)
7. Platform Size:	Determined by CONTRACTOR
8. Total Capacity:	Determined by CONTRACTOR
9. Sectional Capacity:	Determined by CONTRACTOR
10. Mid-Span Capacity:	
a. Single Axle	Determined by CONTRACTOR
b. Tandem Axle	Determined by CONTRACTOR
c. Tri-axle	Determined by CONTRACTOR

2.2 PRODUCT AND MANUFACTURER

- A. Products and Manufacturers: Provide one of the following:
 - 1. Cardinal Scales.

- 2. Fairbanks Scales.
- 3. Or equal.

PART 3 - EXECUTION

3.1 INSPECTION

- A. Inspection:
 - 1. Inspect and verify that structures or surfaces on which the equipment will be installed have no defects which will adversely affect installation.
 - 2. Inspect all equipment prior to installation.
 - 3. Promptly report defects which may affect the Work to the ENGINEER, in writing.

3.2 START-UP AND TEST

- A. Perform operating tests to demonstrate that the equipment operates properly.
- B. Make adjustments required to place equipment in proper operating condition.
- C. Submit report of test results.

3.3 MANUFACTURER'S FIELD SERVICES

- A. A factory trained representative shall be provided for installation supervision, startup and test services and operation and maintenance personnel training services. Manufacturer's representative shall test operate the system in the presence of the ENGINEER and verify that the equipment conforms to requirements. Representative shall revisit the Site as often as necessary until all trouble is corrected and the installation is entirely satisfactory.
- B. All costs, including travel, lodging, meals and incidentals, shall be considered as included in CONTRACTOR'S bid price.

3.4 MANUFACTURER'S REPAIR SERVICES

A. Provide services of factory-trained representatives of the manufacturer to maintain the scale during the contract period.

+ + END OF SECTION + +

SECTION XI

Supplemental Specifications

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SPECIFICATION 00 33 00

EXISTING CONDITIONS

PART 1 – GENERAL

1.01 DESCRIPTION

A. The Batavia Iron and Metal Company, Inc. Site is an abandoned former commercial/industrial property located at 301-305 Bank Street, Batavia, New York. The Site is currently zoned as residential. The property size is approximately 6.8 acres and contains an approximately 8,000 square foot building. Most of the Site is unpaved and consists of either gravel areas or overgrown vegetation.

The site is adjoined by residential homes to the southeast (303 and 305 Bank Street), and bordered to the south by Bank Street, to the west by Dwyer Stadium (299 Bank Street, owned by the City of Batavia), to the northwest by MacArthur Park and Batavia High School, and to the north by wetlands. The Site was formerly used to reclaim iron, metals, and wire materials for sale to recycling and manufacturing firms.

The majority of the work will take place on the 301 Street Property, with a portion of the work to be conducted at 299, 303 and 305 Bank Street under existing access agreements.

- B. Remedial investigations to date have been conducted for the sole purpose of assisting the DEPARTMENT and the ENGINEER in the evaluation of the extent of on-site contamination, depth to groundwater, and estimates of initial groundwater inflow rates. This data is included in MACTEC's 2019 Field Activities Report Phase II Pre-Design Investigation as well as GZA's earlier 2012 Site Investigation & Remedial Alternatives Report, portions of which are available in the Limited Site Data document.
- C. Analytical testing of soil and water samples collected at the Site have been performed for the sole purpose of assisting the DEPARTMENT and the ENGINEER in the evaluation of the type, concentrations, and extent of contamination present in the vicinity of the Site. This data is included in MACTEC's 2019 Field Activities Report – Phase II Pre-Design Investigation and GZA's 2012 Site Investigation & Remedial Alternatives Report, available in the Limited Site Data document.
- D. Existing features for the Site are shown on the Contract Drawings and based on field work and a survey completed by GPI Engineering, Landscape, Architecture & Surveying, LLP dated June 5, 2019.
- E. To date, remedial investigations on Site have not included a survey of existing underground utilities. Any known existing utilities are shown on the Construction Contract Drawings. The proposed scope of this Work, as identified in Section XI,

Specification 01 11 00 Summary of Work, does not include excavation activities or subsurface disturbances that should affect underground utilities. If the ENGINEER or DEPARTMENT requests additional work below grade, the CONTRACTOR must accurately locate utilities and subsurface features in the affected area.

1.02 LIMITATIONS OF SUBSURFACE EXPLORATIONS

A. Indemnify and hold the ENGINEER and DEPARTMENT harmless from all claims, damages, expense, or costs resulting from reuse or interpretation of data and logs from all previous Site investigations.

1.03 LIMITATIONS OF EXISTING KNOWN UTILITIES

A. Do not infer that utility locations shown on the Construction Contract Drawings are precise, or that all existing utilities or structures are depicted. As necessary, identify the location of the utilities required to complete the Work. Field verify the type, size, and precise locations of those utilities.

PART 2 – PRODUCTS

Not Applicable

PART 3 – EXECUTION

3.01 SUPPLEMENTAL UTILITY LOCATION AND RESPONSIBILITY

- A. If the ENGINEER or DEPARTMENT requests additional work below grade, locate all existing utilities or underground structures in the vicinity of the work.
- B. Identify and mark all utilities in the field in accordance with required New York regulations. Contact DIG SAFELY NEW YORK at 811 or 1-800-962-7962 prior to commencing any on-site excavation.
- C. The CONTRACTOR is responsible for any and all work-related damage to any existing utilities which are to remain in service.
- D. Contact the affected utility or property owner as soon as any damage is discovered.
- E. The cost for performing the Work described in Sub-Part 3.01 is considered incidental to the Work.

++ END OF SECTION ++

00 33 00 -2

SPECIFICATION 01 11 00

SUMMARY OF WORK

PART 1 – GENERAL

1.01 DESCRIPTION

- A. This section summarizes the project and remedial work associated with it. This section describes the Work and provides an overall view of the separate tasks and how they relate. Use this summary with other specification sections, the Construction Contract Drawings, and other project documents. This section does not provide the technical detail of the referenced sections for particular work activities.
- B. The New York State Department of Environmental Conservation (DEPARTMENT) classifies the Batavia Site as a Class 2 inactive hazardous waste disposal Site due to past metal recycling and other industrial activities. Polychlorinated biphenyls (PCBs), polycyclic aromatic hydrocarbons (PAHs), metals, and volatile organic compounds (VOCs) have impacted soil and groundwater at the Site.
- C. The Work is being performed in accordance with the "Record of Decision" (hereinafter referred to as the "ROD") for the Batavia Iron and Metal Company, Inc. Site, City of Batavia, Genesee County, New York, Site Number E819018 by the DEPARTMENT dated April 2013. The remediation is being undertaken by the DEPARTMENT under the State Superfund Program.
- D. The scope of work for remedial action includes the excavation, handling, removal, transportation, and proper off-site disposal of PCB, PAH, VOC, and metal impacted soil from the Batavia Iron and Metal Company, Inc. Site.
- E. Additional Site information relevant to the remediation measures is provided in the Limited Site Data document.

1.02 DEFINITIONS

- A. "DEPARTMENT": the New York State Department of Environmental Conservation (NYSDEC).
- B. "ENGINEER": MACTEC Engineering and Geology, P.C. (MACTEC).
- C. "Owner": the owner(s) of the properties adjacent to and comprising the Site.

1.03 WORK COVERED BY THE CONTRACT DOCUMENTS

The Work primarily consists of the following activities:

- A. Comply with the requirements of all permits and provide all services, utilities, equipment, and facilities required to perform the work activities in accordance with these Specifications, the Construction Contract Drawings, and the ROD.
- B. Yield to all City of Batavia, Genesee County, State of New York, and/or Federal government inspections without change in work schedule.
- C. Submit a Construction Work Plan (Plan of Operation) for review and acceptance by the ENGINEER and DEPARTMENT, which contains, at a minimum:
 - 1. Contractor Quality Control (CQC) Plan detailing quality control procedures for construction, sampling, and testing activities. The CQC Plan must include a Site-specific Quality Assurance Project Plan (QAPP) prepared in accordance with NYSDEC DER-10 and proposed project analytical laboratory and certifications. The analytical laboratory must be certified for solid and hazardous waste analyses by the New York State Department of Health Environmental Lab Approval Program (ELAP).
 - 2. Traffic Control Plan including discussion of vehicle entrance/exit locations, Site security, and hours of operation. The Traffic Control Plan must identify controls for anticipated traffic impacts, equipment and procedures to remove earthen materials tracked onto public roads by construction vehicles, and procedures for cleaning debris and spillage from public roads.
 - Proposed method(s) for implementing Green Remediation Practices during construction to meet the departments goals as described in Specification 01 89 29 Green Remediation Practices.
 - 4. Proposed sequence, equipment, and methods for the performance of Site preparation (e.g., temporary Site facilities and controls including utilities, soil erosion and sediment control requirements, water diversion/barriers, decontamination procedures, construction water management and treatment, moving stabilized entrance and access roads as needed to support excavation activities, etc.). Sequence shall include timing and duration of work conducted on the city of Batavia property, 299 Bank Street.
 - 5. Proposed methods to prepare for Winter Shutdown and conducting associated inspections during Winter Shutdown.
 - 6. Proposed method(s) for excavation, excavation support, dewatering, and sampling.
 - 7. Proposed method(s) of handling, management, transportation, and disposal of all identified waste materials.
 - 8. Proposed method(s) of decontamination procedures for small equipment and hand tools; waste material and personal protective equipment; and large equipment and vehicles as described in Section XI Specification 02 51 00 Decontamination Procedures.

D. Pre-Construction Activities:

Prepare, submit, and implement the required plans prior to commencing construction.

- E. Mobilization and Site Preparation: preparation activities include furnishing all labor, material, and equipment to provide the following:
 - 1. Necessary CONTRACTOR utilities (e.g., power, water, and sanitary)
 - 2. Site support facilities (e.g., trailer, wastewater storage tank)
 - 3. Remove existing fence in poor conditions around the property boundary and install temporary chain link fence
 - 4. Equipment and material staging and storage areas
 - 5. Personnel decontamination and hygiene facilities as required per the Health and Safety Plan (HASP)
 - 6. Access and Site controls (e.g., temporary fencing and barricades) to isolate the work area
 - 7. Decontamination pad(s) for equipment and vehicles
 - 8. Construction water management and treatment facilities.
- F. Erosion and Sedimentation Control: Provide all labor, material, and equipment to:
 - 1. Provide the means and methods required to minimize erosion and sedimentation in accordance with Section XI Specification 31 25 00 Erosion and Sedimentation Control.
 - 2. Install temporary soil erosion and sedimentation control as directed by the ENGINEER or the DEPARTMENT.
 - 3. Install temporary water diversion barriers to prevent surface water from entering excavations.
- G. Removal of Surficial and Subsurface Waste and Impacted Soil: Provide all labor, equipment, and materials to perform the following:
 - 1. Characterize and remove the wastes in accordance with Section XI Specification 02 61 13 Impacted Soil Removal, Handling, and Storage.
 - 2. Clear surface vegetation as necessary to access the wastes. Chip cleared shrubs and small trees and leave as mulch on-site. Large trees and stumps to be removed off-site.
 - 3. Remove all impacted soil as indicated on the Contract Documents to the depths indicated. If refusal is met using traditional excavation methods, CONTRACTOR shall clearly expose the bottom of the excavation, free of soil and water, and obtain confirmation from the ENGINEER that the bottom of the excavation is the top of the bedrock surface. If bedrock cannot be confirmed, an excavator hammer attachment or other means shall be used to remove boulders or dense till to reach the design excavation depths.

- 4. Conduct dewatering in accordance with Section XI Specification 31 23 19 Dewatering. Ensure excavations and trenches are dry during excavation, sampling and during backfilling activities.
- 5. Perform verification sampling to confirm all soil cleanup objectives have been met.
- 6. Conduct additional excavation, generally 6 inches deep, should analytical results indicate that soil cleanup objectives have not been met.
- 7. Abandon monitoring wells and install new monitoring wells within the excavation limits as shown on the Contract Drawings.
- 8. Perform surveys of completed excavations.
- 9. Segregate excavated soil based on re-use and/or disposal requirements. Allow soil to dry and add amendments to ensure there are no free liquids in the soil prior to loading for off-site transportation and disposal. Sample excavated soil for profiling purposes and prior to and after further amendments are added to render soil non-hazardous for TCLP metals as needed.
- 10. Properly transport and dispose of all wastes off-site in accordance with Section XI Specification 02 81 00 Off-Site Transportation and Disposal.
- 11. Control dust, odor, and noise as needed and as directed by the ENGINEER/DEPARTMENT.
- H. Areas not Requiring Excavation:
 - 1. Remove asphalt, concrete and/or surface soil in areas that do not require excavation as necessary to meet the requirements of the final restoration plan.
 - 2. Where soil is required to be removed for restoration purposes only, the soil shall be re-used as backfill in nearby excavations no shallower than one foot below final grade.
 - 3. Asphalt and or concrete removed from these areas shall be transported off-site for disposal or recycling.
- I. Backfilling and Restoration: provide all labor, equipment and materials to perform the following:
 - 1. Backfill excavation areas generally to existing grades while providing positive drainage and preventing depressions, in accordance with 31 00 00 Earthwork and as indicated on the Contract Drawings.
 - 2. Conduct final restoration as indicated in the specifications and Contract Drawings for all disturbed areas.
 - 3. Install new permanent chain link fencing in accordance with 32 31 13 Chain Link Fence and Gates and as shown on the Contract Drawings
 - 4. Perform final as-built survey of the Site.
- J. Demobilize from the Site provide all labor, equipment, and materials to perform the following:
 - 1. Decontaminate Site equipment and vehicles as required prior to removing from Site.

2. Remove temporary facilities, Site/access controls, and erosion and sedimentation controls.

1.04 WORK SEQUENCE

- A. Plan, schedule, and perform the Work in stages to meet the requirements of the Contract Documents and the appropriate regulatory agencies and permits.
- B. Use a work sequence that minimizes the on-site storage of waste materials, reduce to the extent possible the amount of time required for work on the City of Batavia Property, and do not include any staging of equipment or waste materials on the City of Batavia Property.
- C. Project Startup:
 - 1. Project startup must include the following activities, which are not necessarily in chronological order:
 - a. Develop and submit all required pre-construction submittals for acceptance.
 - b. Complete assessments and plans as outlined in Sub-Part 1.03C and submit to ENGINEER and DEPARTMENT for review.
 - c. Provide required entrance medical examinations for employees designated to work on the project in accordance with the HASP.
 - d. Conduct Site-specific safety training in accordance with the HASP.
 - e. Secure permits outlined in Section XI Specification 01 41 00 Regulatory Requirements
 - 2. Begin construction after receipt of and meeting the conditions noted in the Notice to Proceed.
- D. Remedial Construction:
 - 1. The remedial construction includes the activities described in Item 1.03 (Work Covered by the Contract Documents) above.
- E. Project Closeout:
 - 1. Request a Certificate of Substantial Completion.
 - 2. Perform a Site inspection with the DEPARTMENT and ENGINEER to accept work and identify remaining work to be completed (punch list).
 - 3. Complete all remaining work noted in the punch list.
 - 4. Perform a final Site inspection with the DEPARTMENT and ENGINEER to verify all work is complete.
 - 5. Submit final record documents including final certification report with Record Drawings to the ENGINEER and DEPARTMENT.
 - 6. Complete final pay requisition with accompanying balancing change order as required.
 - 7. Achieve Final Completion.

1.05 OTHER GENERAL REQUIREMENTS

- A. Comply with all project related permits and apply/obtain all CONTRACTOR responsible permits prior to the commencement of work. Refer to Section XI Specification 01 41 00 Regulatory Requirements for a list of applicable permits.
- B. Plan for temporary storage of materials and supplies and for timely delivery to the job Site.
- C. Assist the ENGINEER/DEPARTMENT and City/County/State inspectors as required in the review of construction.
- D. Maintain up-to-date records on-site.
- E. Maintain the project Site in a neat condition.

PART 2 – PRODUCTS

Not Applicable

PART 3 – EXECUTION

3.01 HEALTH AND SAFETY

- A. Work will be performed on a Site that may contain hazardous waste. The CONTRACTOR must develop a Site-Specific HASP for its operations. Implement this plan, taking precautions as necessary, to protect the public and work force personnel from potential hazards. Use personnel with approved hazardous waste training as required.
- B. Refer to Attachment 1 NYSDEC Section X Specification 01 35 29 Contractor's Health and Safety Plan.

3.02 PROTECTION OF PROPERTY AND OPERATIONS

- A. Use every precaution to protect the property and adjacent off-site properties from damage during execution of the work. Any damage that the CONTRACTOR may inflict must be repaired or replaced in a prompt manner as directed by the ENGINEER/DEPARTMENT at no additional cost to the DEPARTMENT.
- B. Minimize adverse impacts from execution of the work on adjacent off-site properties and do not interfere with their operations.

- C. Coordinate Site restrictions and vehicular/pedestrian traffic control plans with the adjacent property owners as appropriate.
- D. Record baseline video and take photos of the Site structures, transportation routes, and surroundings prior to commencing work.

3.03 CONTRACTOR'S USE OF PREMISES

- A. The DEPARTMENT will secure access agreements with the Site and adjacent property owners as needed. Only use designated areas of the Site for staging and storage. Staging and storage areas are to be agreed upon and accepted by ENGINEER/DEPARTMENT and the OWNER(S).
- B. **NO SMOKING** will be allowed within the Site work area.
- C. Assume full responsibility for the protection and safe keeping of products and equipment under this Contract that are stored on-site and off-site during the remedial construction.

3.04 OTHER REQUIREMENTS

- A. Notify the appropriate local authority in the City and/or County when construction or associated impacts will occur within the road right-of-way and/or may affect roadways or sidewalks.
- B. Use special care and/or special considerations for proper execution of the Work, which may be necessary but not specifically identified in this section. Comply with all requirements of the Contract Documents.
- C. Comply with all the requirements of any permits, which have been obtained, or applied for by the ENGINEER or DEPARTMENT and are included (permit or application) as part of Contract Documents.
- D. Work of others at the Site is not to interfere with CONTRACTOR schedule.

++ END OF SECTION ++

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SPECIFICATION 01 14 00

WORK RESTRICTIONS

<u>PART 1 – GENERAL</u>

1.01 USE OF PREMISES

- A. Limit use of premises to Work in areas indicated. Do not disturb portions of Site beyond areas in which Work is indicated.
 - 1. Limits: Confine construction operations to within the Limit of Work, as designated on Construction Contract Drawings. Provide storage areas and support facilities, on the site property, as necessary for execution of the Work. Do not enter areas located outside the Limit of Work. The CONTRACTER shall coordinate work activities with the DEPARTMENT and property Owners. Work on the City of Batavia Property shall be conducted all at once to minimize duration of impacts on the City's property.
 - 2. Public Streets, Driveways, and Entrances: Always keep streets, driveways, and entrances serving the public, adjacent properties, and premises clear and available the public, adjacent property Owner's, and emergency vehicles. Do not use areas outside of the limit of work for parking or storage of materials unless otherwise approved by the ENGINEEER or DEPARTMENT. Vehicle and pedestrian access shall always be available for adjacent residential owners and business owners' employees and patrons.
 - a. Schedule deliveries to minimize use of driveways and entrances.
 - b. Schedule deliveries to minimize space and time requirements for onsite storage of materials and equipment.
 - c. Schedule deliveries to minimize disruption to the residences and business(es) within the areas of Work.
 - d. Replacement of asphalt pavement removed as part of the remediation activities.
 - e. Areas available for CONTRACTOR's use for construction support areas where DEPARTMENT access agreements have been obtained.
- B. Use of and Access to Properties: The DEPARTMENT will be responsible for obtaining access permission from the Owners or other landowners for other potential properties for construction access and/or for use by the CONTRACTOR. Protect buildings and its occupants during construction.
- C. Promptly repair damage to premises caused by construction operations. Upon completion of the Work, restore premises to original condition.

PART 2 – PRODUCTS

Not Applicable.

PART 3 – EXECUTION

Not Applicable.

++ END OF SECTION ++

SPECIFICATION 01 31 13

COORDINATION

PART 1 – GENERAL

1.01 DESCRIPTION

A. This section includes requirements for CONTRACTOR coordination, subcontractor approvals, and Project schedule status and updating.

1.02 SUBMITTALS

- A. Submit the following in accordance with Section X, Specification 01 33 00 Submittal Procedures.
 - 1. Subcontractor List: submit for review and approval. This list shall be updated and submitted each time a new subcontractor is proposed for employment on the Project (see Section VIII, Article 5.8.1).
 - 2. Vendor Responsibility Questionnaire: submit in accordance with instructions in Section V, Article 2(c). Submit properly executed New York State Vendor Responsibility Questionnaire for subcontracts valued at greater than \$10,000. The DEPARTMENT requires a minimum of two (2) weeks to review.
 - 3. Project Schedule Status Reports: Refer to Section X, Specification 01 32 16 Progress Schedule.
 - 4. Project Schedule Updates: submit proposed updates for approval prior to updating the Project schedule.

PART 2 – PRODUCTS

2.01 SUBCONTRACTOR LIST

- A. The CONTRACTOR shall submit a complete list of proposed subcontractors (including disposal facilities) identifying name, address, telephone number, contact, type of work to be subcontracted, dollar amount and Minority and Women Business Enterprises status. No subcontractors can begin work without the prior written approval of the DEPARTMENT.
- B. The subcontractor list shall include each proposed disposal facilities and the type and quantity of waste material that the disposal facility has committed to receive from the Site during the duration of the project.

2.02 PROJECT SCHEDULE STATUS REPORTS AND UPDATES

A. Project Schedule status reports shall be based on the current approved Project Schedule and shall show the previous two weeks and succeeding two weeks as of the corresponding Project meeting date. The schedule shall be updated for actual progress. Project schedule updates shall be in accordance with Section X, Specification 01 32 16 - Progress Schedule.

PART 3 – EXECUTION

3.01 SCHEDULE

- A. The CONTRACTOR shall be solely responsible for coordinating the schedules of their subcontractors. The ENGINEER shall approve schedules and the CONTRACTOR shall coordinate with the ENGINEER to make appropriate changes to the schedule.
- B. The CONTRACTOR shall cooperate with the ENGINEER'S review of the Project schedule and promptly furnish the ENGINEER with such data as may be requested in accordance with ENGINEER's review of the Project schedule and incorporate required revisions.
- C. The CONTRACTOR shall conform to the specified schedule and arrange work in such a manner that it will be completed within the time limits indicated.
- D. The CONTRACTOR shall coordinate his letting of subcontracts (if any), material purchases, and delivery of materials and sequence of operations to conform to the schedule and shall furnish proof of same as required by the ENGINEER.
- E. See Section X, Specification 01 32 16 Progress Schedule for further requirements.

3.02 SHOP DRAWINGS, PRODUCT DATA, AND SAMPLES

- A. The CONTRACTOR shall coordinate a list of required submittal packages with the ENGINEER prior to any submittals being made, beyond those described in Section III, Article 5 as Required Bid Submittals.
- B. The CONTRACTOR shall coordinate with the ENGINEER the transmittal form and content prior to any submittals.
- C. Refer to Section X, Specification 01 33 00 Submittal Procedures for further information.

3.03 TIME AND MATERIAL (T&M) WORK

- A. If T&M work is initiated, the CONTRACTOR shall submit labor classes, materials, and equipment, along with associated rates for time and material work to the ENGINEER for review and approval.
- B. The ENGINEER and CONTRACTOR shall agree on the format of a time and material work sheet prior to initiating any T&M work.
- C. ENGINEER'S and CONTRACTOR'S field representatives will sign a T&M summary worksheet daily. Signatures from field representatives do not represent that the work shown is added scope or that rates are acceptable; rather, it is merely to document that the materials, labor, and equipment shown were in fact used for the work in question.

- D. Agreements for additional costs (if any) will be formalized in a change order in accordance with the terms of the Contract Documents.
- E. Daily T&M worksheets without the signature of the ENGINEER'S representative will not be the basis for a claim for additional compensation. The CONTRACTOR is solely responsible for the costs arising from the CONTRACTOR'S own inefficiencies.

++ END OF SECTION ++

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SPECIFICATION 01 41 00

REGULATORY REQUIREMENTS

PART 1 – GENERAL

1.01 DESCRIPTION

A. Comply with local, State, and Federal regulations appropriate or applicable to the proposed work.

1.02 RELATED WORK SPECIFIED ELSEWHERE

- A. Section X, Section 01 35 29 Contractor's Health and Safety Plan.
- B. Section X, Specification 01 35 43.13 Environmental Procedures for Hazardous Materials.
- C. Section XI, Specification 01 11 00 Summary of Work.
- D. Section XI, Specification 02 81 00 Off-Site Transportation and Disposal.
- E. Section XI, Specification 31 25 00 Erosion and Sedimentation Control.

1.03 GENERAL REQUIREMENTS

- A. Regulations applicable to remediation activities will include but not necessarily be limited to those promulgated by the following regulating authorities:
 - 1. United States Environmental Protection Agency (USEPA)
 - a. Clean Air Act (CAA).
 - b. Clean Water Act (CWA).
 - c. Toxic Substances Control Act of 1976 (TSCA): The USEPA approval letter for the self-implementing cleanup and disposal of PCB remediation waste for this site is included as Attachment 1 to this specification.
 - 2. United States Department of Labor (USDOL)
 - a. Occupational Safety and Health Administration (OSHA).
 - 3. New York State Department of Environmental Conservation (NYSDEC)
 - a. 6 NYCRR Part 375 Environmental Remediation Programs (SSF, BCP, ERP)
 - b. 6 NYCRR Part 480 Environmental Regulatory Program Fees
 - c. 6 NYCRR Part 481 Program Fees-General
 - d. 6 NYCRR Part 483 Hazardous Waste Program Fees
 - e. 6 NYCRR Part 750 State Pollutant Discharge Elimination System (SPDES)
 - f. 6 NYCRR Part 364 Waste Transporter Permits
 - g. 6 NYCRR Part 372 Hazardous Waste Manifest System and Related Standards for Generators, Transporters and Facilities
 - h. 6 NYCRR Part 376 Land Disposal Restrictions

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- i. 6 NYCRR Part 257 Air Quality Standards.
- j. Article 24, Freshwater Wetlands, Title 23 of Article 71 of the Environmental Conservation Law
- 4. Genesee County
 - a. Genesee County Soil and Water Conservation District (GCSWCD).
- 5. City of Batavia
 - a. Zoning Regulations
 - b. Batavia Department of Water and Wastewater Discharge Permit

1.04 PERMIT APPLICATION BY CONTRACTOR

A. Permits that must be applied for by CONTRACTOR and approved by regulating authority before commencing associated work include all permits as necessary to perform the work not otherwise obtained by the DEPARTMENT or ENGINEER as described in the Contract Documents.

1.05 PERMIT APPLICATION BY DEPARTMENT/ENGINEER

- A. Batavia Department of Water and Wastewater Discharge Permit.
- B. State Pollutant Discharge Elimination System (SPDES) Permit.

PART 2 - PRODUCTS

Not Applicable

PART 3 - EXECUTION

Not Applicable

++ END OF SECTION ++



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 2 290 BROADWAY NEW YORK, NY 10007-1866

June 9, 2020

Mr. David Chiusano Project Manager New York State Department of Environmental Conservation Division of Environmental Remediation 625 Broadway, 12th Floor Albany, New York 12233-7017

 Re: Batavia Iron and Metals Company Site Batavia, New York 14020
 Approval for Cleanup and Disposal of PCB Remediation Waste under 40 CFR §761.6l(a) and for Characterization and Verification Sampling under 40 CFR §761.6l(c) and Approval for Alternative Decontamination under 40 CFR §761.79(h)

Dear Mr. Chiusano:

This is in response to the May 22, 2020 letter transmitting the May 2020 document entitled "Self-Implementing On-Site Cleanup and Disposal of PCB Remediation Waste, Batavia Iron and Metals Company Site," prepared by MACTEC Engineering and Geology, P.C. (MACTEC), on behalf of the New York State Department of Environmental Conservation (NYSDEC), for the above-referenced site. This document will be referred to as the "Application." The polychlorinated biphenyl (PCB) contamination onsite is considered to be PCB remediation waste that is subject to the applicable cleanup levels under the federal regulations at 40 CFR §761.6l(a)(4).

PCBs were detected at this 6.8 acre site at concentrations up to 560 parts per million (ppm). The proposed remedial action is to remove and dispose of all PCB remediation waste in excess of 1 ppm. Soils with PCB concentrations greater than 1 ppm but less than 50 ppm will be disposed of as PCB remediation waste at an approved, non-hazardous, off-site disposal facility in accordance with 40 CFR §761.61(a)(5)(v)(A); soils that exceed 50 ppm will be disposed of at a permitted hazardous waste facility in accordance with 40 CFR §761.61(a)(5)(v)(A); soils that exceed 50 ppm will be disposed of at a permitted hazardous waste facility in accordance with 40 CFR §761.61(a)(5)(i)(B)(2)(ii).

With the exception of the characterization sampling requirements under Subpart N of 40 CFR §761 and the verification sampling requirements under Subpart O of 40 CFR §761, the proposed removal of PCB remediation waste meets the self-implementing cleanup and disposal requirements under 40 CFR §761.61(a). In addition, based on the characterization and proposed verification sampling, in accordance with 40 CFR §761.61(c), the United States Environmental Protection Agency (EPA) finds that this sampling, in this proposed remediation

context, is acceptable for purposes of determining compliance with the High Occupancy Area PCB cleanup standard of 1 ppm.

NYSDEC has also requested, in accordance with 40 CFR §761.79(h), approval for an alternative procedure for decontamination of heavy equipment. The alternate decontamination method includes the use of a pressure washer and an aqueous-based solvent. As described in the Application, verification samples will be collected to confirm compliance with a decontamination standard of 10 micrograms per 100 square centimeters (i.e., the unrestricted use standard for non-porous surfaces previously in contact with liquid PCBs). EPA finds that the proposed alternative decontamination procedures are acceptable for the cleanup activities that will be performed at the site

EPA hereby approves the NYSDEC's Application, and it may proceed with the cleanup and disposal under 40 CFR §761.6l(a) and (c) and the Application, subject to this Approval. This Approval also constitutes order under the authority of Section 6 of the Toxic Substances Control Act (TSCA), 15 U.S.C. §2605. This approval only specifies the applicable requirements under TSCA and does not cite to or make any determinations regarding the requirements that may be applicable under other federal, state, or local law. TSCA disposal requirements do not supersede other, more stringent, applicable federal, state or local laws.

Please note that this Approval does not constitute a determination by EPA that the transporters or the disposal facilities selected by the NYSDEC are authorized to conduct the activities set forth in the Application. The NYSDEC is responsible for ensuring that its selected transporters and disposal facilities are authorized to conduct any such activities in accordance with all applicable federal, state and local statutes and regulations.

Should you have any questions concerning this matter, please feel free to contact me at (212) 637-3315 or have your staff contact Steve Ferreira at (212) 637-3759 or at <u>ferreira.steve@epa.gov.</u>

Sincerely,

Ariel Iglesias, Director Land, Chemicals and Redevelopment Division

cc: Mark Stelmack, MASTEC

SPECIFICATION 01 45 00

CONTRACTOR QUALITY CONTROL

PART 1 – GENERAL

1.01 DESCRIPTION

This section covers quality control procedures and testing to be completed by the CONTRACTOR during the Work. Prior to commencement of the Work, the CONTRACTOR shall prepare a CONTRACTOR Quality Control (CQC) Plan detailing the procedures to be followed and testing to be completed. Quality control testing shall be executed as required in the Contract Documents.

1.02 RELATED WORK SPECIFIED ELSEWHERE

- A. Section X, Specification 01 32 33 Photographic Documentation
- B. Section X, Specification 01 33 00 Submittal Procedures
- C. Section X, Specification 01 35 29 Contractor's Health and Safety Plan
- D. Section X, Specification 01 45 29.13 Testing Laboratory Services Furnished by Contractor
- E. Section X, Specification 01 77 19 Closeout Requirements
- F. Section XI, Specification 01 45 28 Chemical Sampling and Analysis

1.03 REFERENCES AND STANDARDS

A. Conform to referenced standards with date of issue current on the date of the bid, except where stated otherwise or referenced differently by code.

1.04 SUBMITTALS

A. Pre-Construction Submittals:

Contractor Quality Control (CQC) Plan shall identify personnel, procedures, instructions, records, and forms to be used in carrying out the requirements of the Work. The CQC Plan shall provide the CONTRACTOR with a means to provide and maintain effective Quality Control for construction, sampling, and testing activities. No work on-site shall be permitted until comments received are adequately addressed by the CONTRACTOR and the CQC Plan is approved by the ENGINEER and the DEPARTMENT.

- B. Quality Assurance Project Plan (may be included as a component of the CQC Plan):
 - 1. Submit the following two weeks prior to start of the work:
 - a. Site-specific Quality Assurance Project Plan (QAPP) prepared in accordance with NYSDEC DER-10
 - b. Proposed Project Analytical Laboratory and certifications. Documentation shall be provided that the analytical laboratory is certified for solid and hazardous waste analyses by the New York State Department of Health Environmental Lab Approval Program (ELAP).
- C. Construction Submittals:
 - 1. Weekly CQC Reports, Test Reports, Deficiency Reports, and Project Summaries.

1.05 DEFINITIONS

A. Quality Control: Activities undertaken by the CONTRACTOR including observing, measuring, sampling, and testing undertaken by the CONTRACTOR to determine that work performed and/or products/materials provided and installed meet the requirements of the Contract Documents and the quality specified therein.

1.06 QUALITY CONTROL SAMPLING AND TESTING

- A. The CONTRACTOR shall notify the ENGINEER and the DEPARTMENT a minimum of 72 hours prior to any quality control sampling and testing activities. The ENGINEER and DEPARTMENT reserve the right to collect duplicate quality control samples.
- B. All third-party quality control test reports shall be reported/sent directly to the ENGINEER and the DEPARTMENT and shall not be routed through the CONTRACTOR. The CONTRACTOR shall give their subcontracted laboratory permission to send reports directly to the ENGINEER and the DEPARTMENT.

PART 2 – PRODUCTS

Not Applicable.

PART 3 – EXECUTION

3.01 GENERAL REQUIREMENTS

A. The quality of all Work shall be the responsibility of the CONTRACTOR.

- B. Perform sufficient inspections and tests of all items of work, on a continuing basis, including that of subcontractors, to ensure conformance to applicable specifications and Construction Contract Drawings with respect to the quality of materials, workmanship, construction, and functional performance.
- C. Provide qualified personnel, appropriate facilities, instruments, and testing devices necessary for the performance of the quality control function.
- D. Controls shall be adequate to cover all construction operations, shall be keyed to the proposed construction sequence, and shall be coordinated by the CONTRACTOR's quality control personnel.

3.02 CQC PLAN

- A. Prepare and submit a CQC Plan to the ENGINEER and the DEPARTMENT for approval.
- B. Comments or approval from the ENGINEER and DEPARTMENT will be submitted to the CONTRACTOR within 14 calendar days following receipt of the plan. The CONTRACTOR shall adequately respond to comments to the satisfaction of the ENGINEER and the DEPARTMENT within 14 calendar days following receipt of any comments from the ENGINEER and/or the DEPARTMENT.
- C. No work on-site shall be permitted until the comments received are adequately addressed by the CONTRACTOR and the CQC Plan is approved by the ENGINEER and the DEPARTMENT.
- D. The CQC Plan, at a minimum, shall include the following:
 - 1. A description of the Quality Control Organization, including charts showing lines of internal CONTRACTOR authority, and external CONTRACTOR, subcontractor, and ENGINEER relationships. The Quality Control Organization shall include the names, qualifications, duties, and responsibilities of each person assigned to a quality control function. The Quality Control Organization chart shall identify a CONTRACTOR's Quality Control Manager whose responsibilities and qualifications are described in Sub-Part 3.04 Contractor Quality Control Organization.
 - 2. Method of performing, documenting, and enforcing quality control operations of both CONTRACTOR and subcontract work including inspection and testing.
 - 3. Inspections as described in the Sub-Part 3.05 Inspections.
 - 4. Provide a list of analytical or testing laboratories to be used by the CONTRACTOR for testing required by the Specifications with listed test methods to be performed by each laboratory indicated. The analytical or testing laboratories to be used by the CONTRACTOR must be certified by the NYDOH ELAP.
 - 5. Protocol describing corrective actions to be taken by the CONTRACTOR with

specifically defined feedback systems. The ENGINEER will then decide what further corrective action, if any, shall be taken by the CONTRACTOR. Personnel responsible for initiating and carrying out corrective action shall be indicated in the protocol.

E. Submit Weekly CQC Reports, Test Reports, Deficiency Reports and Project Summaries as required by this Specification.

3.03 NOTIFICATION OF CHANGE

A. After submittal and approval of the CQC Plan, the ENGINEER and DEPARTMENT shall be notified in writing of any proposed changes to the CQC Plan and implement the changes only after the DEPARTMENT's approval.

3.04 CQC ORGANIZATION

- A. CQC Manager:
 - 1. Identify an individual, within the CONTRACTOR's organization at the Site who shall be responsible for overall management of the CQC Plan and have the authority to act in all CQC matters for the CONTRACTOR.
 - 2. The CQC Manager for this Contract shall be a qualified construction manager/engineer or comparable individual with a minimum of 2 years of applicable experience, at the Project Manager, Project Engineer, Superintendent, or CQC Manager level, whose responsibility is to ensure compliance with the Construction Documents. The CQC Manager shall be independent of the Project Superintendent.
 - 3. The CQC Manager shall be on-site whenever work is in progress so that he/she may be in charge of the CQC Plan for the project.
 - 4. All submittals for approval shall be reviewed and modified or corrected as needed by the CQC Manager or authorized assigns prior to forwarding to the ENGINEER.

3.05 INSPECTIONS

- A. The CQC Plan shall include the following inspections and tests:
 - 1. The CONTRACTOR shall perform preparatory inspections prior to beginning each feature of work on any on-site construction conducted by the CONTRACTOR or a subcontractor. Preparatory inspections for the applicable feature of work shall include:
 - a. Review of submittal requirements and all other Contract requirements with the performance of the work
 - b. Check to assure that provisions have been made to provide required field quality control testing
 - c. Examine the work area to ascertain that all preliminary work has been completed

- 2. Perform initial inspection as soon as work begins on a representative portion of the particular feature of work and include examination of the quality of workmanship as well as review of quality control testing for compliance with the Construction Document requirements.
- 3. Perform follow-up inspections continuously as any feature of work progresses to ensure compliance with Contract requirements, including quality control testing, until completion of that feature of work.

3.06 QUALITY CONTOL TESTING

- A. The CONTRACTOR shall be responsible for all required testing, documentation, and corrective measures. The CONTRACTOR shall perform tests specified or required to verify that control measures are adequate to provide a product which conforms to Contract requirements.
- B. Specific quality control testing requirements including types of tests, frequency of tests, and performance outcomes measured by the tests are indicated in each specification section associated with that component of the work.

3.07 CONSTRUCTION MONITORING

- A. Existing conditions assessment Prior to commencing invasive construction activities that include but not limited to installing shoring and excavating adjacent to property structures, install the monitoring devices at the abutting existing buildings. Alternate installation locations may be selected based on the recommendation of the CONTRACTOR's shoring design engineer. Complete an assessment to record conditions of existing conditions and surrounding infrastructure within 50 feet of this limit of work or as directed by the ENGINEER due to site conditions. Record condition with video or photographs noting existing deficiencies or damage as observed prior to construction. Refer to Section X, Specification 01 32 33 Photographic Documentation for additional information. The assessment shall, at a minimum, include the following components:
 - 1. Building facade adjacent to the Work.
 - 2. Foundation walls adjacent to the Work.
 - 3. Doors and windows of buildings adjacent to the Work.
 - 4. Roof overhang, fascia, and/or general roof line of buildings adjacent to the Work.
 - 5. Pavement and concrete surface treatments of properties adjacent to the Work
 - 6. Prominent exterior Site features within 50 feet of the limit of work including retaining walls, stairs, bollards, utility poles, railroad tracks, etc.
 - 7. Interior finishes of buildings adjacent to the Work.
- B. During installation of shoring and excavating adjacent to property structures, maintain continuous vibration monitoring and recording at locations approved by the ENGINEER during the following work:

- 1. Monitor/record at the abutting property at a location adjacent to the exterior face of the building during shoring and/or sheeting installation (as required for excavation support and/or cofferdams), and excavating, backfilling, compacting, and all other activities utilizing heavy construction equipment likely to cause strong vibrations when work within 50 feet of the buildings are conducted.
- C. Perform soil sampling and chemical analysis as specified in Section X, Specification 01 45 29.13 – Testing Laboratory Services Furnished by Contractor and Section XI, Specification 01 45 28 – Chemical Sampling and Analysis.
- D. Perform Community Air Monitoring as specified in Section X, Specification 01 35 29 – Contractor's Health and Safety Plan.

3.08 NONCONFORMING WORK

- A. If inspections or testing by the CQC Manager or other member of the CQC Organization identify Work as not meeting the required quality standard of the Contract Documents, the work shall be considered nonconforming.
- B. If quality assurance inspections or testing performed by the ENGINEER or the DEPARTMENT identify Work as not meeting the required quality standard of the Contract Documents, the work shall be considered nonconforming.
- C. Nonconforming work shall be remedied by the CONTRACTOR through corrective action.
- D. Nonconforming work shall be reported in the CQC Weekly Report.

3.09 CORRECTIVE ACTION

- A. Corrective action of nonconforming work shall take place as soon as possible after identification of the nonconformance.
- B. Corrective action plans shall be communicated with the ENGINEER and shall include rework, as necessary along with all associated CQC Plan requirements including inspection and testing.
- C. At least 72 hours advance notification shall be provided to the ENGINEER for any additional testing to be performed. The ENGINEER/DEPARTMENT reserves the right to collect duplicate samples for quality assurance testing.
- D. The corrective action performed to remedy the nonconforming work shall be reported in the CQC Weekly Report. Descriptions of differences in work means, methods, or testing protocols shall be included.

3.10 ACCEPTANCE OF THE WORK

- A. The ENGINEER/DEPARTMENT will accept the Work completed by the CONTRACTOR as meeting the quality requirements for the Project as set forth in the Contract Documents.
- B. The basis of acceptance shall be inspections and observations by the ENGINEER/DEPARTMENT; reported test results submitted to, reviewed by, and accepted by the ENGINEER; and the reported results of any ENGINEER/DEPARTMENT performed quality assurance testing.

++ END OF SECTION ++

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SPECIFICATION 01 45 28

CHEMICAL SAMPLING AND ANALYSIS

PART 1 – GENERAL

1.1 DESCRIPTION

- A. Provide all necessary personnel, equipment, materials, and subcontracting required to perform chemical sampling and analysis associated with the remedial action at the Batavia Iron and Metals Site in Batavia, New York. The sampling and analyses shall be conducted for:
 - 1. Off-Site Disposal
 - a. Waste characterization of contaminated soil from the Site.
 - b. Sampling and analysis of construction water to be disposed off-site.
 - 2. On-Site Remediation and Use
 - a. Confirmation testing at the limit of excavation (horizontal and vertical) of soil to confirm that remaining soil satisfies Soil Cleanup Objectives after excavation and before backfilling.
 - b. Documentation testing at the limit of excavation (horizontal and vertical) where Site constraints limit further excavation regardless of whether the soil cleanup objectives have been met.
 - c. Borrow Source testing of imported materials for use in remedial action construction.
- B. The sampling and analysis shall be conducted in accordance with United States Environmental Protection Agency (USEPA) and New York State Department of Environmental Conservation (the DEPARTMENT) standards and requirements for environmental sampling and analysis.

1.2 RELATED WORK SPECIFIED ELSEWHERE

- A. Section X, Specification 01 33 00 Submittal Procedures
- B. Section X, Specification 01 45 29.13 Testing Laboratory Services
- C. Section X, Specification 01 71 23 Field Engineering
- D. Section XI, Specification 01 45 00 Contractor Quality Control
- E. Section XI, Specification 02 51 00 Decontamination Procedures
- F. Section XI, Specification 02 61 13 Impacted Soil Removal, Handling, and Storage

- G. Section XI, Specification 02 72 00 Construction Water Management
- H. Section XI, Specification 02 81 00 Off-Site Transportation and Disposal
- I. Section XI, Specification 31 00 00 Earthwork

1.3 REFERENCES

- A. The publications listed below, latest edition unless otherwise noted, form a part of this specification to the extent referenced. The publications are referred to in the text by the basic designation only.
- B. New York State:
 - 1. New York State Department of Environmental Conservation "Analytical Services Protocol." (NYSDEC ASP) June 2000 revised July 2005.
 - 2. New York State Department of Environmental Conservation "Technical Guidance for Site Investigation and Remediation"; DER-10 (NYSDEC DER-10); May 3, 2010.
 - 3. Guidance for the Development of Data Usability Reports; NYSDEC Division of Environmental Remediation; Appendix 2B; DER-10; May 3, 2010.
- C. Other:
 - 1. State Pollutant Discharge Elimination System (SPDES) Permit Equivalent for discharge to surface water.

1.4 SUBMITTALS

- A. Preliminary Laboratory Analysis Results:
 - 1. Provide preliminary (verbal) laboratory analysis results for the following:
 - a. Confirmatory sample testing results.
- B. Sampling and Analysis Reports:
 - 1. Submit the following reports/deliverables:
 - a. Field sampling data records including copies of completed field sheets, chain-of-custodies, and field logbook entries
 - b. Laboratory Data Deliverable, including electronic and hard-copy data deliverables
 - c. Data Usability Summary Report (DUSR).
 - d. Electronic data deliverables (EDD) that conforms to DER-10, Appendix 2B requirements. In addition, a second EDD shall be supplied that conforms with ENGINEER's EQUIS EZEDD format as presented in Attachment 1 of Specification 01 45 28 - Electronic Data Deliverable Requirements.

- C. Sample Locations:
 - 1. Submit an excel spreadsheet containing the compiled surveyed locations and elevations of each confirmation and documentation sample. Provide northings, eastings, and elevations as described in Section X, Specification 01 71 23 Field Engineering.
- D. Additional submittal requirements are described in Section X, Specification 01 33 00 Submittal Procedures.

1.5 DEFINITIONS

- A. Composite Sample: a combination of three (3) to five (5) discrete samples collected at random locations and homogenized (mixed) into a single sample for the purpose of analytical testing.
- B. Discrete Sample: a grab sample taken at a single location for the purpose of analytical testing.
- C. Confirmation Sample: a sample taken during a remedial action to determine whether cleanup objectives have been achieved or whether further remediation is required. For a final delineation sample, the analysis must be by an ELAP-accredited laboratory (as defined by NYSDEC DER-10).
- D. Documentation Sample: a sample taken after remedial action is complete to document the level of contamination remaining. For a final delineation sample, the analysis must be by an ELAP-accredited laboratory (as defined by NYSDEC DER-10).
- E. Electronic Data Deliverable (EDD): a standardized format required for confirmation sample analytical data submitted. Data must be formatted to meet the guidelines specified by the DEPARTMENT. Requirements are provided at the link provided http://www.dec.ny.gov/chemical/62440.html and in Section VI, Article 15 (Agreement). An additional EDD must be formatted to meet ENGINEER's guidelines as provided in Attachment 01 of Specification 01 45 28.
- F. Data Usability Summary Report (DUSR): a document that provides a thorough evaluation of the analytical data to determine whether or not the data, as presented, meets the Site/project specific criteria for data quality and use (as defined by NYSDEC DER-10).
- G. Refer to Section XI, Specification 02 61 13 Impacted Soil Removal, Handling, and Storage for additional definitions of waste materials.

PART 2 – PRODUCTS (NOT USED)

PART 3 – EXECUTION

3.1 HEALTH AND SAFETY

- Field personnel will be required to utilize the personnel protection as defined in 01 35 29 – Contractor's Health and Safety Plan.
- B. CONTRACTOR personnel will be required to review the Site or task-specific Health and Safety Plan (HASP) prepared for this project and acknowledge that they have done so before initiating work.

3.2 REMEDIATION WASTE CHARACTERIZATION SAMPLE COLLECTION

- A. Remediation Waste, Hazardous and Non-Hazardous, as defined in Section XI, Specification 02 61 13 – Impacted Soil Removal, Handling, and Storage generated during execution of the Work shall be stored/stockpiled within designated separate storage/stockpile areas as agreed upon with the ENGINEER.
- B. Waste characterization samples may be collected from stockpiled excavated material or from test pits/borings completed prior to excavation.
- C. Composite samples shall be collected at frequencies consistent with the Chemical Sampling and Analysis Summary Table included as Attachment 2 of Specification 01 45 28, as applicable.
- D. Discrete samples shall be collected using manual methods, such a hand auger, trowel, or spoon to obtain the necessary volume of material for each composite sample.
- E. The required volume, containerization methods, and sample preservation methods shall be as directed by the Project Analytical Laboratory.
- F. Turn-around time for laboratory analytical results shall be coordinated with allowable on-site storage and staging space but is generally requested to be within 48 hours.
- G. Remediation Waste excavated from areas identified in the drawings that contain high concentrations of lead shall be segregated and sampled for TCLP Lead to determine if amending is required to render the soil non-hazardous. Is amendments are required, the soil shall be once again tested for TCLP Lead following the

addition of amendments

H. TCLP Lead samples shall be collected from stockpiled excavated material as a composite sample at frequencies consistent with the Chemical Sampling and Analysis Summary Table included as Attachment 2 of Specification 01 45 28, as applicable.

3.4 DEMOLITION DEBRIS SAMPLE COLLECTION

- A. Each type of demolition debris (e.g., asphalt, concrete, bricks), encountered shall be stored/stockpiled within designated separate storage/stockpile areas as agreed upon with the ENGINEER.
- B. Demolition debris characterization samples may be collected from stockpiled excavated material.
- C. Composite samples of demolition debris shall be collected at frequencies consistent with the Chemical Sampling and Analysis Summary Table included as Attachment 2 of Specification 01 45 28, as applicable.
- D. Turn-around time for laboratory analytical results shall be coordinated with allowable on-site storage and staging space but is generally requested to be within 48 hours.

3.3 CONSTRUCTION WATER SAMPLE COLLECTION

- A. During discharge to the wetland, per the SPDES equivalency permit, perform all required monitoring identified in the SPDES equivalency permit.
- B. Construction water as defined in Section XI, Specification 02 61 13 Impacted Soil Removal, Handling, and Storage generated during execution of the Work that cannot be treated and discharged to surface water shall be containerized on-site in approved portable storage facilities not exceeding 25,000 gallons each (i.e. Frac Tanks).
- C. Discrete samples shall be collected using manual methods from each tank at frequencies consistent with the Chemical Sampling and Analysis Summary Table included as Attachment 2 of Specification 01 45 28.
- D. The required volume, containerization methods, and sample preservation methods shall be as directed by the Project Analytical Laboratory.
- E. Turn-around time for laboratory analytical results shall be 24-hours.

3.4 CONFIRMATION SOIL SAMPLE COLLECTION

- A. Confirmation and documentation soil samples shall be collected from the bottom one foot of the exposed sidewall and bottom surface of the contaminated soil excavation grids depicted on the Construction Contract Drawings. If sidewalls between excavation grids/cells are less than six inches, sidewall samples are not required.
- B. If bottom of the excavation is confirmed to be bedrock, no sample will be collected in the grid.
- C. Discrete samples shall be collected at frequencies consistent with the Chemical Sampling and Analysis Summary Table included as Attachment 2 of Specification 01 45 28. Note that sampling frequencies are higher for excavation grids located within the wetland area (depicted in the drawings) and excavation grids located on the City of Batavia Property.
- D. Samples shall be collected by using manual methods, such as a hand auger, trowel, or spoon to obtain the necessary volume of soil for each discrete sample. Excavation may not have any standing water in them at the time of sampling.
- E. The required volume, containerization methods, and sample preservation methods shall be as directed by the Project Analytical Laboratory.
- F. Turn-around time for laboratory analytical results shall be a maximum 24-hours to limit the length of time excavations remain open.

3.5 IMPORTED BORROW SOURCE SOIL SAMPLE COLLECTION

- A. Imported borrow source soil samples shall be collected from the borrow source (off-site borrow pit bank or stockpile) prior to delivery of the material to the Site for incorporation into the Work as part of the remedial action construction.
- B. Imported materials with a gradation of 10 percent or less by weight passing the number 80 sieve as determined by ASTM D 422 can be imported without chemical sampling and analysis consistent with NYSDEC DER-10 Paragraph 5.4(e)(5).
- C. Discrete samples shall be collected at frequencies consistent with the Chemical Sampling and Analysis Summary Table included as Attachment 2 of Specification 01 45 28, as applicable, based on estimated volume of material to be imported. At a minimum, one sample shall be collected per each borrow source.
- D. Discrete samples shall be collected using manual methods, such as a hand auger,

trowel, or spoon to obtain the necessary volume of soil for each sample.

- E. The required volume, containerization methods, and sample preservation methods shall be as directed by the Project Analytical Laboratory.
- F. Turn-around time for laboratory analytical results shall be coordinated with the material use requirements for the project.
- G. The ENGINEER/DEPARTMENT may request access to, and observation of, offsite borrow source sample collection. The ENGINEER/DEPARTMENT reserves the right to sample and test material delivered to Site for quality assurance purposes.

3.6 DECONTAMINATED HEAVY EQUIPMENT SAMPLE COLLECTION

- A. Samples collected to confirm that heavy equipment has been sufficiently decontaminated shall be collected in accordance with Section XI Specification 02 51 00 Decontamination Procedures.
- B. The required volume, containerization methods, and sample preservation methods shall be as directed by the Project Analytical Laboratory.
- C. Turn-around time for laboratory analytical results shall be as needed by the CONTRACTOR but is generally requested to be within 24 hours.

3.7 LABORATORY ANALYSIS

- A. The United States Environmental Protection Agency (USEPA), Office of Solid Waste (OSW) publication SW-846, entitled Test Methods for Evaluating Solid Waste, Physical/Chemical Methods specifies the analytical test methods in compliance with the Resource Conservation and Recovery Act (RCRA) regulations.
- B. Contaminated soil samples for waste characterization shall be analyzed by the Project Analytical Laboratory in accordance with NYSDEC ASP for the following:
 - 1. PCBs using Method 8082
 - 2. TAL metals using USEPA Method 6010B.
 - 3. Additional contaminant(s) required by the selected licensed treatment, storage, and/or disposal facility.
- C. Construction water samples for off-site disposal shall be analyzed by the Project Analytical Laboratory in accordance with NYSDEC ASP for the constituents required by the designated disposal facility. Otherwise, testing shall be consistent with the SPDES discharge permit equivalent, Section XI, Specification 02 72 00 Attachment 1.

- D. Soil confirmation samples following excavation and removal of contaminated soil shall be analyzed by the Project Analytical Laboratory in accordance with NYDEC ASP for the following, based on applicable soil cleanup criteria, as approved by the ENGINEER:
 - 1. PCBs using USEPA Method 8082.
 - 2. TAL metals using USEPA Method 6010B.
- E. Imported soil borrow source samples and topsoil shall be analyzed by the Project Analytical Laboratory in accordance with NYSDEC ASP for the following, based on material use, in accordance with this section, as approved by the ENGINEER:
 - 1. TAL metals using USEPA Method 6010B.
 - 2. Mercury using USEPA Method 7471B.
 - 3. Total Cyanide using USEPA Method 9010C.
 - 4. Chromium (hexavalent) using USEPA Method 7199.
 - 5. TAL Pesticides using USEPA Method 8081
 - 6. PCBs using USEPA Method 9082
 - 7. 2,4,5-TP Acid (Silvex) using USEPA Method 8151A.
 - 8. TAL SVOCs using USEPA Method 8270C.
 - 9. TAL VOCs using USEPA Method 5035A/8260C.
 - 10. 1,4-dioxane using USEPA Method 8270D Selected Ion Monitoring (SIM).
 - 11. Per- and polyfluoroalkyl substances (PFAS) using USEPA Modified Method 537.
- F. Wipe samples from decontaminated heavy equipment shall be analyzed by the Project Analytical Laboratory in accordance with NYSDEC ASP for PCBs using USEPA Method 8082.

3.9 REPORTING

- A. The CONTRACTOR shall prepare a DUSR in accordance with the "Guidance for Data Deliverables and the Development of Data Usability Reports" provided in Appendix 2B of the NYSDEC DER-10 and included as Attachment 3 of Specification 01 45 28. The DUSR shall be prepared for confirmation and documentation soil samples specified in Sub-Parts 3.4 of this Specification.
- B. The CONTRACTOR shall deliver to the DEPARTMENT confirmation and documentation soil sample analytical reports in an electronic data deliverable (EDD) format that complies with the DEPARTMENT's Electronic Document Standards (EDS), or as otherwise directed by the DEPARTMENT, following Section 1.15, Electronic Submissions, of the NYSDEC DER-10 as summarized below:
 - 1. All data generated shall be submitted in an electronic data deliverable (EDD) that complies with the DEPARTMENT's Electronic Data Warehouse

Standards (EDWS) or as otherwise directed by the DEPARTMENT.

- 2. Additional information relative to the EDS, EDD and EDWS is available on the NYSDEC website.
- C. The CONTRACTOR shall also deliver to the ENGINEER confirmation and documentation soil sample analytical reports in an EDD format that complies with the ENGINEER's EDD requirements as presented in Attachment 1 of Specification 01 45 28. This shall include validation qualifiers based on the DUSR. Fields to be updated in the EDD by the validator include: final_result; final_qualifier; val_reason_code; val_level; val_date; and, refuse_flag.
- D. Laboratory analyses for confirmation soil samples shall include Category B deliverables as defined in the NYSDEC ASP.

3.10 ANALYTICAL TEST RESULT EVALUATION

- A. Waste Characterization soil sample analytical results shall be compared to the allowable limits for waste acceptance specific to the permitted treatment, storage, and/or disposal facility designated to receive the waste.
- B. Borrow source soil sample analytical results shall be compared to the Unrestricted Use Soil Cleanup Objectives provided in 6 NYCRR Part 375 Table 375-6.8(a), Commercial Restricted Use Soil Cleanup Objectives provided in 6 NYCRR Part 375 Table 375-6.8(d).
- C. Confirmation soil sample analytical results shall be compared to the applicable Soil Cleanup Objectives (SCOs) for the "Protection of Human Health – Residential" criteria for the identified primary contaminants of concern for the Site. Attachment 4 of Specification 01 45 28 contains a table of the SCOs as adapted from 6 NYCRR Part 375 Table 375-6.8(b).
- D. Construction water analytical results shall be compared to one of the following criteria:
 - 1. The SPDES Permit Equivalent for treatment and discharge of water to the wetland adjacent to the Site effluent limitations and monitoring requirements as listed in Attachment 1 of Section XI, Specification 02 72 00 Construction Water Management, or
 - The POTW Permit for treatment and discharge of water to the City of Batavia combined sewer effluent limitations and monitoring requirements as listed in Attachment 2 of Section XI, Specification 02 72 00 – Construction Water Management, or
 - 3. The disposal facility's requirements if water is deemed unsuitable for onsite treatment and discharge.

3.11 ACCEPTANCE OF ANALYTICAL RESULTS AND CORRESPONDING ACTION

- A. The ENGINEER/DEPARTMENT will review the analytical results and the associated DUSR submitted and based on the information, indicate approval and/or provide direction to the CONTRACTOR.
- B. Waste characterization analytical results require the review and approval of the DEPARTMENT/ENGINEER and the designated off-site treatment, storage, and/or disposal facility. Once approval has been granted and acceptance of the waste has been confirmed, the soil may be transported off-site for disposal in accordance with Section XI, Specification 02 81 00 Off-Site Transportation and Disposal.
- C. Confirmation sample analytical results reporting contaminant concentration values less than each of the SCOs verifies that the cleanup is complete, and the excavation limit has been achieved. If any one of the results is greater than or equal to its SCO, the excavation limit has not been achieved and additional excavation of soil surrounding the failed sample location shall be conducted at the direction of the DEPARTMENT/ENGINEER. Additional confirmation testing shall be required once the additional impacted material has been removed.
- D. Borrow source sample analytical results meeting the required SCOs is accepted for remedial construction use and may be imported and incorporated into the Work. No materials shall be delivered to the Site until analytical results are accepted by ENGINEER/DEPARTMENT.
- E. Construction water sample analytical results reporting contaminant concentrations less than the discharge limits of the Discharge Permit may be discharged at designated locations in the Permit.
- F. Construction water not meeting these criteria may be treated on-site to meet these project requirements or disposed off-site at a licensed treatment, storage, or disposal facility.

3.12 DISPOSAL OF WORK DERIVED WASTES

A. Disposable sampling equipment and personnel protective equipment (PPE) associated with sample collection shall be classified as PCB remediation waste and handled as described in Section XI, Specification 02 61 13 – Waste Removal, Handling, and Storage and Section XI, Specification 02 81 00 – Off-Site Transportation and Disposal.

3.13 DECONTAMINATION

A. Contaminated sampling equipment can be washed with a Liquinox ®, or equivalent soap and water solution, rinsed with clean potable water, and finally rinsed with deionized water. Decontamination wastewater shall be treated in the on-site water treatment facility and sampled accordingly prior to discharge. If discharge criteria cannot be met, the water shall be handled as described in Section XI, Specification 02 61 13 – Impacted Soil Removal, Handling, and Storage and Specification 02 81 00 – Off-Site Transportation and Disposal.

++ END OF SECTION ++

ATTACHMENTS:

Attachment 1 of 01 45 28: Electronic Data Deliverable Requirements

Attachment 2 of 01 45 28: Chemical Sampling and Analysis Summary Table

Attachment 3 of 01 45 28: Guidance for Data Deliverables and the Development of Data Usability Reports" provided in Appendix 2B of the NYSDEC DER-10

Attachment 4 of 01 45 28: Restricted Residential Use Soil Cleanup Objectives provided in 6 NYCRR Part 375 Table 375-6.8(a)

SPECIFICATION 01 45 28: ATTACHMENT 1 DATA DELIVERABLE REQUIREMENTS

Equis "EZEDD01" Field Name	data type	Required For "EDD"	Description	"TED" Table	"TED" Column	
project_code	1 Text20		This field contains the internal project_code used by TED to identify a unique site. This will be added during data loading.	Location	Site_id	
sample_name	2 Text30	x	This field contains the sample number as written in the Analysis Request and Chain of Custody (AR/COC) form sent to the laboratory with the field samples for analysis. This is a unique number assigned to each sample by sampling personnel. For laboratory samples enter "LAB QC".	sample_collection	field_sample_id	
sys_sample_code	3 Text20					
sample_date	4 Date	x	mm/dd/yyyy. Date sample was collected in the field. Date information must be identical with the date from the AR/COC form. Leave blank for lab samples. Year may be entered as yyyy.	sample_collection	field_sample_date	
sample time	5 Time					
analysis location	6 Text2					
lab_name_code	7 Text10	Х	Laboratory that performed the analysis.	sample_analysis	lab_id	
lab_sample_id	8 Text20	Х	Unique sample ID internally assigned by the laboratory.	sample_analysis	lab_sample_id	
sample_type_code	9 Text10	x	Specifies sample type. For field samples, enter FS (regular environmental sample), otherwise, use values listed in the LOV. For example, normal field samples must be distinguished from laboratory method blank samples, etc.	sample_collection	qc_code	
Lab_Del_Group	10 Text20	Х	Tracking code used by the laboratory. Commonly called Sample Delivery Group (SDG).	sample_analysis	lab_sample_delivery_group	
Lab_Batch_Number	11 Text20		Tracking number used by the laboratory to identify a group of samples analyzed in the same batch. This field, in conjunction with laboratory blank ID, is used to link the relationship between field samples and laboratory blank and other QC samples.			
lab_anl_method_name	12 Text35	Х	Test method used in the analysis of the analyte.	sample_analysis	analysis_method	
cas_rn	13 Text15	x	Unique analyte identifier. Use assigned CAS number when one is identified for an analyte. Tentatively Identified Compounds (TICs) and a number of other analytes are not assigned a standard CAS number. The laboratory is required to assign a UNIQUE identifier for all chemical names.	sample_analysis_results	casno	
chemical_name	14 Text60	Х	Name of analyte or parameter analyzed.			

SPECIFICATION 01 45 28: ATTACHMENT 1 DATA DELIVERABLE REQUIREMENTS

Equis "EZEDD01" Field Name	data type	Required For "EDD"	Description	"TED" Table	"TED" Column
result_value	15 Text20	x	Must only be a numeric value. It is stored as a string of characters so that significant digits can be retained. Must be identical with values presented in the hard copy. Analytical result is reported left justified. Reported as the reporting_detection_limit for non-detects.	sample_analysis_results	lab_result
lab_qualifiers	16 Text7	Х	Qualifier flags assigned by the laboratory.	sample analysis results	lab_qualifier
result_unit	17 Text15	х		sample_analysis_results	result_uom
result_type_code	18 Text10	Х	Parameter list type. Valid Values = Targer analytes (TCL, TAL or TRG); Surrogates (SUR); and TICs	sample_analysis_results	result_type
detect_flag	19 Text2	Х	Enter "Y" for detected analytes or "N" for non-detected analytes.	sample_analysis_results	report_hit_flag
reporting_detection_limit	20 Text20	х	Must only be a numeric value. Use the value of the Reported Detection Limit (RDL), Practical Quantitation Limit (PQL), or Contract Required Quantitation Limit. Value is stored as a string to retain significant figures. Unit of measure must be identical with result_unit value.	sample_analysis_results	detection_limit
Initiation_factor 21 Text6 Must be a numeric entry. The factor by which the sample was diluted as part of the preparation process. If no dilution was done, enter the value 1. Value is stored as a string to retain significant figures.		sample_analysis	dilution_factor		
sample_matrix_code	22 Text10	x	Code which distinguishes between different type of sample matrix. For example, soil samples must be distinguished from ground water samples, etc. Valid codes for HESE are "G" (gas), "L" (liquid), "S" (solid), and "P" (free or raw liquid product).	sample_collection	matrix
total_or_dissolved (or fraction) 23 Text1 Must be "T" for total metal concentration, "D" for dissolved or filtered metal concentration, or "N" for organic (or other) parameters for which neither "total" nor "dissolved" is applicable. Also, HESE requires "C" for TCLP and "S" for SPI fractions.		sample_analysis	fraction		

mm/dd/yyyy. Date sample was analyzed.

Description of sample preparation or extraction method.

sample_analysis

sample_analysis

analysis_date

prep_method_name

Х

24 Text10

25 Date

26 Time

27 Text20

28 Text35

basis

analysis_date

analysis time

method_detection_limit

lab_prep_method_name

SPECIFICATION 01 45 28: ATTACHMENT 1 DATA DELIVERABLE REQUIREMENTS

Equis "EZEDD01" Field Name	data type	Required For "EDD"	Description	"TED" Table	"TED" Column
prep_date	29 Date	Х	mm/dd/yyyy. This field is used to determine whether holding times for field samples have been exceeded.	sample_analysis	extraction_date
prep_time	30 Time				
test_batch_id	31 Text20	х	Default is 1 for primary results. Other valid values are 2, 3, 4, 5, and RE. Primary use is for reanalyses and dilutions where more than one result may be reported.	sample_analysis	run_id
result_error_delta	32 Text20		Uncertainty value - required for radiological data		
TIC_retention_time	33 Text8				
qc_level	34 Text10		Laboratory QC level associated with the analysis	sample_analysis	qc_level
result_comment	35 Text255		Any comments related to the analysis.	sample_analysis_results	comments
sample_quantitation_limit (may be REQUIRED FIELD for certain projects)	36 Text20		Must only be a numeric value. Use the value of the Sample Quantitation Limit (SQL). Value is stored as a string to retain significant figures. Unit of measure must be identical with result unit value.	sample_analysis_results	TBD
final_result	37 Text20		Must only be a numeric value. It is stored as a string of characters so that significant digits can be retained. This is the final result value determined during validation. FInal result is reported left justified. Reported as the reporting_detection_limit for non-detects.	sample_analysis_results	final_result
final_qualifier	38 Text7	Х			final_qualifier
val_reason_code	39 Text20		Must be added where any result has been qualified by chemist during validation, to indicate QA/QC failures responsible for qualification. List of commonly used val_reason_codes attached. Multiple val reason codes may be included, separated by commas, as this is a text field	sample_analysis_results	val_reason_code
val_level	40 Text20	Х	Level of validation completed by chemist. sample_analysis_results values and the sample_analysis_res and the sample_analysis_results va		val_level
val_date	41 Date	Х			val_date
refuse_flag	42 Text1	Х	Y for any results to be excluded from final data set (i.e. multiple runs, diluted results). Blank or N for all other results.	sample_analysis_results	refuse_flag

Note: All "X" marked fields are minimum data required to load data to "TED".

Specification 01 45 28: Attachment 1 - Common Valid Value Items

sample_type_code	Description
EB	Equipment blank
FB	Field Blank
FD	Field Duplicate
FS	Field Samples
MB	method blank
MS	matrix spike
MSD	matrix spike duplicate
ТВ	Trip blank
	a -

total_or_dissolved	
(or fraction)	Description
N	Not applicable or Not specified
Т	Total
D	Dissolved
С	TCLP
S	SPLP

project_code	Description
402	GE Wilmington NC

Val_reason_code	Definition			
BL1	Method Blank qualifier			
BL2	Field Blank qualifier			
CCV	Continuing Calibration Verification recovery outside limit			
CCV%D	Continuing Calibration Verification percent Difference exceeds goal			
CCVRRF	Continuing Calibration Relative Response Factor low			
DCPD	Dual Column Percent Difference exceeds limit			
E	Result Exceeds calibration range			
FD	Field Duplicate precision goal exceeded			
HT	Holding Time for prep or analysis exceeded			
HTG	Holding Time for prep or analysis Grossly exceeded			
ICV	Initial Calibration Verification recovery outside limit			
ICV%D	Initial Calibration Verification second source recovery outside limit			
ICVRRF	Initial Calibration Verification Relative Response Factor low			
ICVRSD	Initial Calibration Verification percent Relative Standard Deviation exceeds goal			
ISH	Internal Standard response greater than limit			
ISL	Internal Standard response less than limit			
LCSH	Lab Control Sample recovery High			
LCSL	Lab Control Sample recovery Low			
LCSRPD	Lab Control Sample/Lab Control Sample Duplicate Relative Percent Difference precision goal exceeded			
LD	Lab Duplicate precision goal exceeded			
MSH	Matrix Spike and/or Matrix Spike duplicate recovery High			
MSL	Matrix Spike and/or Matrix Spike duplicate recovery Low			
MSRPD	Matrix Spike and/or Matrix Spike duplicate Relative Percent Difference precision goal exceeded			
PDSH	Post Digestion Spike recovery High			
PDSL	Post Digestion Spike recovery Low			
SD	Serial Dilution result exceeds percent difference limit			
SSH	Surrogate recovery High			
SSL	Surrogate recovery Low			

Attachment 2 of Specification 01 45 28 Chemical Sampling and Analysis Summary Table

Matrix	Sample Frequency	QA/QC Frequency	Sample Type	Turn Around Time ^{2,3}	Analytical Method
WASTE CHARACTERIZAT	TON SAMPLE COLLECTION ¹				
Land Clearing Debris	Per TSDF	Per TSDF	Composite	48 hours ⁴	Lab analysis for constituents required by the designated TSDF.
Non-Hazardous PCB Impacted Material	Per TSDF	Per TSDF	Composite	48 hours ⁴	Lab analysis for constituents required by the designated TSDF.
Hazardous PCB Impacted Material	Per TSDF	Per TSDF	Composite	48 hours ⁴	Lab analysis for constituents required by the designated TSDF.
Soil with high lead concentrations	At least one (1) sample per 500 CY, prior to and after amending to render non-hazardous for TCLP Metals.	NA	Composite	49 hours ⁴	Lab analysis for TCLP RCRA-8 Metals (in addition to Lab analysis for constituents required by the designated TSDF for non- hazardous and hazardous PCB-Impacted material).
Demolition Debris	Per TSDF, at least one sample for each type of demoltion debris.	Per TSDF	Composite	48 hours ⁴	Lab analysis for constituents required by the designated TSDF.
Construction Water ⁵	Per TSDF or SPDES Equivelency Permit requirements	Per TSDF	Discrete	24 hours	Lab analysis for constituents required by the designated TSDF for off-site disposal or permitted discharge limits for on-site disposal (See Contract Section IX for SPDES Permit Equivalent)
CONFIRMATION/DOCUM	ENTATION SAMPLE COLLECTION				
On-Property Soil	One (1) sample per 25 linear feet of sidewall; one (1) sample per 625 square feet of bottom area.	Dup/MS/MSD One per 20 samples	Discrete	24 hours	TAL PCBs-8082 ⁶ ; TAL metals-6010B; Mercury-7471B.
Wetland Soil	One (1) sample per 12.5 linear feet of sidewall; one (1) sample per 155.25 square feet of bottom area.	Dup/MS/MSD One per 20 samples	Discrete	24 hours	TAL PCBs-8082 ⁶ ; TAL metals-6010B; Mercury-7471B.
City of Batavia Property Soil	One (1) sample per 12.5 linear feet of sidewall; one (1) sample per 155.25 square feet of bottom area.	Dup/MS/MSD One per 20 samples	Discrete	24 hours	TAL PCBs-8082 ⁶ ; TAL metals-6010B; Mercury-7471B.
Cross Contaminated Soils underneath access roads, waste handling and decontamination site features.	One (1) sample per 625 square feet of bottom area.	Dup/MS/MSD One per 20 samples	Discrete	24 hours	TAL PCBs-8082 ⁶ ; TAL metals-6010B; Mercury-7471B.
IMPORTED BORROW SOL	IRCE SOIL SAMPLE COLLECTION				
Imported Soil (Including Topsoil)	1 sample per 2,000 Cubic Yards Imported.	Dup/MS/MSD One per 20 samples	Composite (3-5 discrete samples from different locations in the borrow source will comprise a composite sample)	Shall be coordinated with the material use requirements for the project.	 TAL Metals-6010B, Mercury-7471B, Total Cyanide-9010C, Chromium (+6)-7199, TAL Pesticides-8081, 2,4,5-TP Acid (Silvex)-8151A, TAL PCBs-8082, TAL SVOCs- 8270C, 1,4-Dioxane-8270 SIM. Imported materials with a gradation of 10 percent or less by weight passing the number 80 sieve as determined by ASTM D 422 can be imported without chemical sampling and analysis consistent with NYSDEC DER-10 Paragraph 5.4(e)(5).
Imported Soil (Including Topsoil)	1 sample per 2,000 Cubic Yards Imported.	Dup/MS/MSD One per 20 samples	Discrete sample	Shall be coordinated with the material use requirements for the project.	TAL VOCs-5035A/8260B. Imported materials with a gradation of 10 percent or less by weight passing the number 80 sieve as determined by ASTM D 422 can be imported without chemical sampling and analysis consistent with NYSDEC DER-10 Paragraph 5.4(e)(5).
Imported Soil (Including Topsoil)	1 sample per 2,000 Cubic Yards Imported.	Dup/MS/MSD One per 20 samples	Composite (3-5 discrete samples from different locations in the borrow source will comprise a composite sample)	Shall be coordinated with the material use requirements for the project.	PFAS via EPA 1633. If PFOA or PFOS is detected in any sample at or above 1 $\mu g/kg$, then soil should be tested by SPLP and the leachate analyzed for PFAS. If the SPLP results exceed 10 ppt for either PFOA or PFOS (individually) then the source of backfill should be rejected, unless a site-specific exemption is provided by DER. SPLP leachate criteria is based on the Maximum Contaminant Levels proposed for drinking water by New York State's Department of Health, this value may be updated based on future Federal or State promulgated regulatory standards. Remedial parties have the option of analyzing samples concurrently for both PFAS in soil and in the SPLP leachate to minimize project delays. Category B deliverables should be submitted for backfill samples, though a DUSR is not required.

Attachment 2 of Specification 01 45 28 Chemical Sampling and Analysis Summary Table

Matrix	Sample Frequency	QA/QC Frequency	Sample Type	Turn Around Time ^{2,3}	Analytical Method
DECONTAMINATION VERIFICATION					
Wipe Samples	3 - 100 cm ² wipe samples per piece of equipment	Dup/MS/MSD One per 20 samples	Discrete	24 hours	TAL PCBs-8082

Notes:

- 1. Discrete and composite samples shall be collected for analytical testing defined by the receiving treatment, storage and/or disposal facility (TSDF) to establish a waste profile that satisfies the permit/license requirements of the TSDF.
- 2. Standard level of reporting shall consist of Category B deliverables for Confirmation, Imported Borrow Source Soil, and Decontamination Verification samples; a summary of laboratory results, laboratory QA/QC results, and a copy of the chain-of custody submitted to the laboratory is sufficient for Waste Characterization samples.
- 3. Turn-Around-Time is the amount of time between submittal of samples to the analytical laboratory and receipt of analytical results.
- 4. TAT shall be coordinated with on-site waste handling and storage limitations.
- 5. Construction Water samples should be identified as waste characterization samples for any quantities disposed off-site at a TSDF. For Construction Water treated and disposed on-site, the sample should be identified as discharge limit/confirmation samples.
- 6. Sample preparation shall be in compliance with 40 CFR 761.272.

7. This table includes analytical requirments for DER-10, but does not include other lab requirements identified for other requirements such as geotechnical requirements identified in the specifications.

Abbreviations: cm, centimeter; DER, Division of Environmental Remediation; Dup, duplicates; MSD, matrix spike; MSD, matrix spike duplicate; NYSDEC, New York State Department of Environmental Conservation; PCB, polychlorinated biphenyls; SVOC, semi-volatile organic compound; SW, solid waste; TAL, target analyte list; TCLP, toxicity characteristic leaching procedure; TAT, Turn-Around-Time; USEPA, United States Environmental Protection Agency.

Attachment 01 45 28 - 3

Appendix 2B New York State Department of Environmental Conservation "Technical Guidance for Site Investigation and Remediation"; DER-10; May 3, 2010

Attachment 2 of Specification 01 45 28 Appendix 2B Guidance for Data Deliverables and the Development of Data Usability Summary Reports

1.0 Data Deliverables

(a) DEC Analytical Services Protocol Category A Data Deliverables:

1. A Category A Data Deliverable as described in the most current DEC Analytical Services Protocol (ASP) includes:

i. a Sample Delivery Group Narrative;

ii. contract Lab Sample Information sheets;

iii. DEC Data Package Summary Forms;

iv. chain-of-custody forms; and,

v. test analyses results (including tentatively identified compounds for analysis of volatile and semi-volatile organic compounds)

2. For a DEC Category A Data Deliverable, a data applicability report may be requested, in which case it will be prepared, to the extent possible, in accordance with the DUSR guidance detailed below.

(b) DEC Analytical Services Protocol Category B Data Deliverables

1. A Category B Data Deliverable is includes the information provided for the Category A Data Deliverable, identified in subdivision (a) above, plus related QA/QC information and documentation consisting of:

i. calibration standards;

ii. surrogate recoveries;

iii. blank results;

iv. spike recoveries;

v. duplicate results;

vi. confirmation (lab check/QC) samples;

vii. internal standard area and retention time summary;

viii. chromatograms;

Final DER-10 Technical Guidance for Site Investigation and Remediation Page 213 of 226 May 2010 ix. raw data files; and

x. other specific information as described in the most current DEC ASP.

2. A DEC Category B Data Deliverable is required for the development of a Data Usability Summary Report (DUSR).

2.0 Data Usability Summary Reports (DUSRs)

(a) Background. The Data Usability Summary Report (DUSR) provides a thorough evaluation of analytical data with the primary objective to determine whether or not the data, as presented, meets the site/project specific criteria for data quality and data use.

1. The development of the DUSR must be carried out by an experienced environmental scientist, such as the project Quality Assurance Officer, who is fully capable of conducting a full data validation. The DUSR is developed from:

i. a DEC ASP Category B Data Deliverable; or

ii. the USEPA Contract Laboratory Program National Functional Data Validation Standard Operating Procedures for Data Evaluation and Validation.

2. The DUSR and the data deliverables package will be reviewed by DER staff. If full third party data validation is found to be necessary (e.g. pending litigation) this can be carried out at a later date on the same data package used for the development of the DUSR.

(b) Personnel Requirements. The person preparing the DUSR must be pre-approved by DER. The person must submit their qualifications to DER documenting experience in analysis and data validation. Data validator qualifications are available on DEC's website identified in the table of contents.

(c) Preparation of a DUSR. The DUSR is developed by reviewing and evaluating the analytical data package. In order for the DUSR to be acceptable, during the course of this review the following questions applicable to the analysis being reviewed must be answered in the affirmative.

1. Is the data package complete as defined under the requirements for the most current DEC ASP Category B or USEPA CLP data deliverables?

2. Have all holding times been met?

3. Do all the QC data; blanks, instrument tunings, calibration standards, calibration verifications, surrogate recoveries, spike recoveries, replicate analyses, laboratory controls and sample data fall within the protocol required limits and specifications?

4. Have all of the data been generated using established and agreed upon analytical protocols?

5. Does an evaluation of the raw data confirm the results provided in the data summary sheets and quality control verification forms?

6. Have the correct data qualifiers been used and are they consistent with the most current DEC ASP?

7. Have any quality control (QC) exceedances been specifically noted in the DUSR and have the corresponding QC summary sheets from the data package been attached to the DUSR?

(d) Documenting the validation process in the DUSR. Once the data package has been reviewed and the above questions asked and answered the DUSR proceeds to describe the samples and the analytical parameters, including data deficiencies, analytical protocol deviations and quality control problems are identified and their effect on the data is discussed.

Attachment 01 45 28 -2

Attachment 4 of Specification 01 45 28

Restricted Residential Use Soil Cleanup Objectives [Adapted from 6 NYCRR Part 375 Table 375-6.8(b)]

Contaminant	Residential Use SCO ^{a,b} (ppm ^c)
Inorganics	
Arsenic	16.0
Barium	350.0
Cadmium	2.5
Chromium	22.0
Copper	270.0
Lead	400.0
Mercury	0.81
Nickel	140.0
Selenium	36.0
Silver	36.0
Zinc	2200.0
РСВ	
Total PCBs	1.0

Attachment 01 45 28- 4 Soil Cleanup Objectives

a - SCG: Part 375-6.8(b) Restricted Use Soil Cleanup Objectives for

the Protection of Public Health for Residential Use b- Applies to confirmation sampling

c - ppm: parts per million, which is equivalent to milligrams per kilogram, mg/kg, in soil;

SPECIFICATION 01 55 26

TRAFFIC CONTROL

PART 1 – GENERAL

1.01 DESCRIPTION

A. This section covers minimum requirements for temporary traffic regulation, maintenance, protection, and control during the Project.

1.02 RELATED WORK SPECIFIED ELSEWHERE

- A. Section X, Specification 01 33 00 Submittal Procedures
- B. Section X, Specification 01 55 13 Access Roads and Parking Areas
- C. Section X, Specification 01 71 33 Protection of Work and Property
- D. Section X, Specification 01 76 50 Nuisance Controls
- E. Section XI, Specification 01 11 00 Summary of Work

1.03 REFERENCES

- A. The publications listed below forms a part of this specification to the extent referenced. The publication is referred to in the text by basic designation only.
 - 1. MUTCD: Manual of Uniform Traffic Control Devises
 - 2. NYSDOT: New York State DEPARTMENT of Transportation Standard Specifications (17 NY CRR, Chapter V)

1.04 SUBMITTALS

- A. Submit the following in accordance with Section X, Specification 01 33 00 Submittal Procedures.
 - 1. Traffic Control Plan: incorporate the anticipated impacts of traffic controls into the Work Plan for various work areas. The Plan shall include, but not be limited to:
 - a. Access routes for Project traffic to each work area.
 - b. Protection and maintenance of traffic for the active businesses and residences in the immediate vicinity of the limits of work.
 - c. Estimated daily Project traffic flows for each phase of the work.
 - d. Procedures for cleaning debris and spillage from affected property owners and public roads.

e. This plan shall identify equipment and describe procedures to minimize the creation and dispersion of dust and the removal of earthen materials tracked onto site and off-site roadways by construction vehicles. The plan shall address major construction activities that will contribute to these situations and the CONTRACTOR's approach to control them.

<u>1.05 INTENT</u>

- A. Maintain safe conditions for the CONTRACTOR's workers, the general public and all vehicles.
- B. Maintenance and protection of safe traffic for the active businesses in the immediate vicinity of the limits of work and surrounding areas. Refer to Section X, Specification 01 71 33 Protection of Work and Property for additional requirements.
- C. Minimize nuisance issues and the inconvenience to the Site and adjacent property owners and the general public. Refer to Section X, Specification 01 76 50 Nuisance Controls for additional requirements.
- D. Give the right of way to emergency vehicles in all situations.

PART 2 – PRODUCTS

2.01 OWNERSHIP

A. The products specified herein shall be leased or owned by the CONTRACTOR and will not become the property of the DEPARTMENT. All products specified herein shall be removed from the work site when no longer needed.

2.02 TRAFFIC CONTROL DEVICES

- A. All the following items shall conform to NYSDOT Section 619-02 and MUTCD requirements:
 - 1. Flashing barricade lights
 - 2. Construction and maintenance signs
 - 3. Channelizing devices
 - 4. Arrow boards
 - 5. Barricades
 - 6. Traffic cones

2.03 MISCELLANEOUS EQUIPMENT

A. Other items, which include orange safety vests, flags or signs for flagmen, and communication devices, shall be standard and adequate for their intended function. They shall be in accordance with the NYSDOT-MUTCD where applicable or as required by

NYSDOT Work Permit.

PART 3 – EXECUTION

3.01 GENERAL

- A. All work under this Section shall be performed in accordance with other Contract Documents, NYSDOT Standard Specifications, the MUTCD, and as stated herein.
- B. Protect workers and provide for safe and convenient property owner and public travel by furnishing, erecting, and maintaining all signs, signals, markings, traffic cones, barricades, warning lights, flaggers, and other traffic control devices required for the type of operation being performed.
- C. Keep all affected property driveways and parking lots, as well as public roads free of debris and spillage from hauling equipment at all times. Haul routes shall be cleaned at least once per day to limit dust generation. Dry brooming is prohibited.
- D. Always provide access to private businesses and residential properties.
- E. All work-related vehicles and non-operating equipment that are parked for a short period of time (2 hours or less) shall be parked at the support area. Longer periods of time shall be in accordance with requirements for non-working hours.
- F. Furnish the name of the individual in direct employ of the CONTRACTOR who is to be responsible for the installation and maintenance of the traffic control for the project. If the installation and maintenance are to be accomplished by a subcontractor, consent shall be requested of the ENGINEER at the time of the pre-construction conference. This shall not relieve the CONTRACTOR of the foregoing requirement for a responsible individual in his direct employ.
- G. The CONTRACTOR shall take necessary measures, in addition to those required by Federal, State and local laws and regulations, to minimize the migration of dust and earthen material from construction areas including the utilization of wind indicators and air monitoring.
- H. Dust generating surfaces within the active work limits shall be sprayed with water to provide complete moistening of the ground, or as otherwise directed by the ENGINEER.
- I. The CONTRACTOR shall be responsible for the removal and disposal of earthen material that is tracked onto Site driveways and parking lots and off-site roadways by construction vehicles. The CONTRACTOR shall continually inspect Site driveways and parking lots and public roadways and remove the materials immediately to maintain a clean and hazard free driving surface.

3.02 COORDINATION AND SCHEDULE

- A. No traffic shall be disrupted over holiday weekends.
- B. Permits for work in all rights of way shall be prepared, submitted and accepted prior to any work in the areas affected.

++ END OF SECTION ++

SECTION 01 92 13

WINTER SHUTDOWN

PART 1 – GENERAL

1.1 SCOPE

- A. The CONTRACTOR shall furnish all labor, materials, equipment and incidentals necessary to prepare, protect, and maintain the site during winter shutdown from the third Saturday of December through the second Sunday of March the following year. The winter shutdown shall not be construed as the basis for an extension in contract time. No written notification will be required for the specified dates above to be effective.
- B. The DEPARTMENT reserves the right to adjust the start date and end date of the Winter Shutdown as site conditions may require. The DEPARTMENT shall provide written notice to the CONTRACTOR of a date adjustment no less than seven calendar days before the revised date.
- C. The CONTRACTOR may request, in writing, that the start date be delayed, or the end date be advanced provided that the site conditions will allow effective work to be performed. The CONTRACTOR shall provide written request 14 days prior to the proposed dates. DEPARTMENT approval is required to adjust the Winter Shutdown.
- D. The CONTRACTOR shall comply will all applicable specification sections in preparing the site for Winter Shutdown and securing the integrity of the constructed work.
- E. All site damages sustained during Winter Shutdown, in accordance with these specifications, shall be repaired at no additional cost to the DEPARTMENT.
- F. The CONTRACTOR shall perform a comprehensive Site inspection in the presence of the ENGINEER and DEPARTMENT prior to the agreed start of the winter shutdown to confirm that appropriate protections and controls have been installed in accordance with the CONTRACTOR's approved Winter Shutdown Plan. The CONTRACTOR shall notify the DEPARTMENT in writing that the Winter Shutdown Plan protections and controls including those detailed in the Winter Erosion and Sediment Control Plan, have been installed and are ready to be inspected.
- G. The CONTRACTOR shall be required to perform site security during winter shutdown in accordance with Section 01 57 33 Security.
- H. The CONTRACTOR shall be required to maintain necessary temporary facilities in accordance with Section 01 51 05 Temporary Utilities and Controls. At a minimum, the CONTRACTOR shall maintain the field trailers and telephone service. Electrical power and lighting shall be provided, as required, to facilitate site inspections and perform any required work during winter shutdown.

- I. The CONTRACTOR shall install and maintain winter erosion and sediment controls to augment/supplement those already in place to protect the completed work and the Site and prevent sedimentation during the wet winter and early spring weather. The controls shall be in accordance with Section 31 35 00 Erosion and Sedimentation Control and/or as identified and described in the CONTRACTOR's Winter Erosion and Sediment Control Plan.
- J. Payments for Site Services and Health and Safety shall be suspended during the period of thewinter shutdown.
- K. Related Sections:
 - 1. Section X Standard Specifications
 - a. Section 01 33 00 Submittal Procedures
 - b. Section 01 51 05 Temporary Utilities and Controls
 - c. Section 01 57 33 Security
 - 2. Section XI Supplementary Specifications
 - a. Section 31 35 00 Erosion and Sedimentation Controls

1.2 REFERNCES

- A. New York State Department of Environmental Conversation:
 - 1. SPDES State Pollutant Discharge Elimination System General Permit for Storm WaterDischarges from Construction Activities (Permit Number GP-0-20-001).
 - 2. New York Standards and Specifications for Erosion and Sediment Control, August 2005 by the NYS Soil and Water Conservation Committee.

1.3 SUBMITTALS

- A. The CONTRACTOR shall submit a Winter Shutdown Plan, as part of the Construction Work Plan (Plan of Operations) as specified in Section III – Bidding Information and Requirements, Article 5 – Required Bid Submittals, Paragraph b) that shall include:
 - 1. Description of remaining manpower, temporary facilities including utilities and equipment tobe left on-site during the winter shutdown.
 - 2. Procedures for performance of site inspections.
 - 3. Schedule for inspections to be performed during winter shutdown.
 - 4. A sample inspection form with accompanying Site sketch to be used during winter shutdowninspections.
 - 5. Description of how structural or building instability items will be handled or secured beforeand during the winter shutdown period;
 - 6. Description of securing or closure of areas of open contamination of soils and site items for the protection of human health and safety over the winter shutdown period. Closure and protection of site utilities over the winter shutdown period.
 - 7. Description of how dewatering and protection of excavated areas will be handled

during the shutdown period;

- 8. Description of the protection of roadways and utilities exposed prior to the winter shutdown;
- 9. Describe maintenance activities to be performed during winter shutdown and provide aschedule to complete them.
- 10. Provision in the plan for snow plowing in case of access is required to the facility for general or security inspections or to secure components of the facility during the winter shutdown period.
- 11. A presentation of the sequence of work such that the capture and treatment of construction water during the shutdown is not required.
- B. Manufacturer's data for new materials/products proposed for use during the Winter Shutdown period. Submit at least 14 days prior to use of these materials onsite.
- C. Completed Site inspection forms with photographs, and Site sketches noting the condition of the Site and the locations of required deficiencies or repairs. Forms with photographs and sketches shall be submitted to the ENGINEER within 10 days of the completed inspection.
- D. Notification of erosion or sedimentation evidence that indicates the migration of contaminated materialshall be reported to the ENGINEER immediately for assessment.

PART 2 – PRODUCTS

2.1 GENERAL

A. Products/materials shall be as specified in related specifications, such as Section 31 35 00 - Erosion and Sedimentation Controls.

PART 3 – EXECUTION

3.1 GENERAL

- A. Provide closure and protection of all public utilities exposed resulting from the facility demolitionprocess.
- B. Security inspections and reporting during the winter shutdown period in accordance with therequirements of Section 01 57 33- Security.
- C. No open excavations shall be allowed to remain over the winter shutdown. Excavations shall be permanently backfilled prior to the winter shutdown. All disturbed areas shall be graded to drain and stabilized.
- D. Construction water management shall not include active measures (i.e. pumping, treatment) duringwinter shutdown. The following controls shall be in place:
 - 1. Control measures shall be installed to prevent stormwater runoff from

contaminated areasflowing into clean areas.

- 2. Contaminated soil surfaces shall be covered and stabilized to prevent the direct contact ofstormwater runoff with contaminated soil.
- E. Exposed contaminated soil surfaces shall be covered in a manner that minimizes contact of stormwater with contamination and stabilized in a manner that protects against erosion. Perimetersediment control measures shall be installed to prevent the migration of sediment from contaminated areas to clean areas, of sediment to areas outside the limit of work.
- F. Contaminated soil surface shall not be present onsite during the Winter Shutdown.

3.2 INSPECTION

A. The CONTRACTOR shall conduct inspections as specified in Section 31 35 00 – Erosion and Sedimentation Controls.

3.3 REPAIRS

- A. The CONTRACTOR shall check within the limit of work for damage during inspections and complete repairs as necessary. This is especially important during, heavy snowfalls, high wind events, thaws, and prior to spring rain events.
- B. Required and completed repairs shall be documented on the inspection forms, noted on the inspection Site sketch, and photographed.
- C. Notify the ENGINEER/DEPARTMENT immediately if the cover/stabilization materials are observed to be eroded to a degree that risks the migration of contaminated soil (sediment) from contaminated areas into clean areas, outside the limit of work. The ENGINEER will assess the risk from the CONTRACTOR's photographic documentation and may require the CONTRACTOR torepair within 48 hours.
- D. Noncritical repairs shall be completed within 7 calendar days.

3.4 ON-SITE STORED MATERIALS

A. All stockpiled materials shall be suitably protected in accordance with manufacturer's recommendations in order to maintain the integrity of the materials during winter shutdown and the following season after the winter shutdown period.

++END OF SECTION 01 92 13++

SPECIFICATION 02 41 13

SELECTIVE DEMOLITION

PART 1 – GENERAL

1.01 DESCRIPTION

- A. The CONTRACTOR shall furnish all labor, equipment, and materials necessary for the selective demolition, removal, and/or abandonment of some existing structures, as shown on the Construction Contract Drawings and as approved by the ENGINEER. Work includes, but is not limited to, the following:
 - 1. Protection of pavement, facilities, structures, utilities, etc. designated to remain
 - 2. Demolition and removal of concrete pads, pavement (e.g., asphalt concrete), utility piping, fencing, shoring, and other minor structures as required to facilitate the Work and as approved by the ENGINEER.
 - 3. Demolition work performed for the convenience of the CONTRACTOR will not be considered for payment.
- B. Sampling, analysis, characterization, transportation, and disposal of demolished materials is included in and shall be in accordance with Section X, Specification 01 45 29.13: Testing Laboratory Services Furnished by Contractor, Section XI, Specification 01 45 28 – Chemical Sampling and Analysis and Section XI, Specification 02 81 00 - Off-Site Transportation and Disposal.

1.02 RELATED WORK SPECIFIED ELSEWHERE

- A. Section X, Specification 01 33 00 Submittal Procedures
- B. Section X, Specification 01 45 29.13 Testing Laboratory Services Furnished by Contractor
- C. Section XI, Specification 01 11 00 Summary of Work
- D. Section XI, Specification 01 45 28 Chemical Sampling and Analysis
- E. Section XI, Specification 02 81 00 Off-Site Transportation and Disposal
- F. Section XI, Specification 31 00 00 Earthwork
- G. Section XI, Specification 31 25 00 Erosion and Sedimentation Control

1.03 SUBMITTALS

- A. Laboratory Reports: Provide laboratory reports of analytical testing performed as required by the waste characterization program for demolition debris.
- B. Certified weight slips and signed manifests from the TSDF, or reclamation, recycling, and salvage facility for each load transported off-site.

PART 2 – PRODUCTS

Not Applicable.

PART 3 – EXECUTION

3.01 PROTECTION

- A. General:
 - 1. Conduct operations to prevent injury to persons.
 - 2. Ensure safe passage of workers/persons around area of demolition.
- B. Streets, Roads, Adjacent Property, Existing Facilities/Structures, and Other Works to Remain:
 - 1. Protect throughout the work by temporary fences/barricades and exercise special care to avoid unnecessary damage.
 - 2. Demolition operations shall be conducted such that existing facilities or structures indicated to remain are not damaged. Existing features or structures that are indicated or made known prior to the start of demolition operations shall be repaired in the event of any damage during such operations.
 - 3. Keep public streets and private driveways or roadways accessible to emergency vehicles, patrols, and construction vehicles at all times. Provide street/road cleaning as necessary to prevent hazards.
- C. Utility Lines:
 - 1. Protect existing utility lines that are indicated to remain from damage.
 - 2. When utility lines to be removed or relocated are encountered, the CONTRACTOR shall notify the associated utility company in ample time to minimize impact to schedule and interruption of the service.
 - 3. The CONTRACTOR shall notify the ENGINEER and/or Owner immediately of damage to or an encounter with an unknown existing utility line.
 - 4. The CONTRACTOR shall be responsible for the repairs of damage to existing utility lines that are indicated or made known to the CONTRACTOR prior to start of demolition.

3.02 DEMOLITION

- A. General:
 - 1. Structures to be demolished or removed shall be discontinued in use prior to start of work.
 - 2. The use of explosives will not be permitted.
 - 3. Asphalt or concrete demolition debris shall be reduced to manageable sections. Debris pieces shall be crushed to reduce the pieces to a maximum of 2 feet in size in any dimension prior to removal from Site.
 - 4. Demolished pavement may be characterized as non-hazardous.
 - 5. Dispose of other types of demolition debris that may be encountered during the work, including utility piping and shoring, shall be disposed of in accordance with the requirements for the adjacent soils.
- B. Pollution Controls:
 - 1. Use water sprinkling, temporary enclosures, and other suitable methods to limit dust and dirt rising and scattering in air to lowest practical level.
 - 2. Comply with governing regulations and environmental protection.
 - 3. Do not use water when it may create hazardous or objectionable conditions such as runoff, ice, flooding, and pollution.
- C. Utility Piping:
 - 1. Where indicated on the Construction Contract Drawings or approved by the ENGINEER, the CONTRACTOR shall remove existing piping and/or utilities as required to perform the remediation Work.
 - a. Do not interrupt existing utilities serving occupied or used facilities without at least 5 days prior notification to the ENGINEER/DEPARTMENT and property owner. Include a schedule for removal and replacement of affected utilities including the time frame required to complete the Work. Provide alternate utilities during periods of existing utility service interruption.
 - b. Pipe shall be completely removed and cut and/or broken/crushed to an appropriate size for handling, temporary on-site storage, transportation, and disposal.

3.03 SAMPLING, ANALYSIS, AND CHARACTERIZATION

- A. Each type of demolition debris (e.g., asphalt concrete, Portland cement concrete, piping), shall be sampled individually for disposal characterization.
- B. Sampling, analysis, and disposal shall be in accordance with Section X, Specification 01 45 29.13: Testing Laboratory Services Furnished by Contractor and Section XI, Specification 02 81 00 Off-Site Transportation and Disposal.

3.04 TRANSPORTATION AND DISPOSAL

A. Transportation disposal shall be in accordance with Section XI, Specification 02 81 00 - Off-Site Transportation and Disposal.

++ END OF SECTION ++

SPECIFICATION 02 51 00

DECONTAMINATION PROCEDURES

PART 1 – GENERAL

1.01 GENERAL REQUIREMENTS

- A. Perform decontamination procedures based on the United States Environmental Protection Agency (USEPA) Site-specific Alternative Decontamination Approval following 40 CFR 761.79(b) and 40 CFR 761.79 (h).
- B. Perform decontamination of personnel, hand tools, small equipment, large equipment, and vehicles (trucks) as required to prevent off-site migration of contamination and cross contamination of non-hazardous PCB and metal impacted materials with hazardous PCB and metal impacted materials as defined in Sub-Part 1.8 of Section XI, Specification 02 61 13 Impacted Soil Removal, Handling, and Storage.
- C. Construct and place a vehicle decontamination pad. Equip the decontamination pad with a drainage system and holding tank on a level area with no deleterious material.
- D. Two separate operational decontamination pads may be required depending on the CONTRACTOR's selected sequence of work and implemented means and methods. Coordinate with the DEPARTMENT/ENGINEER to ensure decontamination procedures are being followed at all times.

1.02 RELATED WORK SPECIFIED ELSEWHERE

- A. Section X, Specification 01 33 00 Submittal Procedures
- B. Section X, Specification 01 35 29 Contractor's Health and Safety Plan.
- C. Section X, Specification 01 45 29.13 Testing Laboratory Services Furnished by Contractor.
- D. Section X, Specification 01 51 05 Temporary Utilities and Controls.
- E. Section X, Specification 01 66 00 Product Storage and Handling Requirements.
- F. Section XI, Specification 01 45 28 Chemical Sampling and Analysis
- G. Section XI, Specification 02 61 13 Impacted Soil Removal, Handling, and Storage.
- H. Section XI, Specification 02 81 00 Off-Site Transportation and Disposal
- I. Section XI, Specification 02 72 00 Construction Water Management

J. Section XI, Specification 31 00 00 – Earthwork

1.03 SUBMITTALS

- A. Proposed method(s) of decontamination procedures for small equipment and hand tools; waste material and personal protective equipment; and large equipment and vehicles included as a component of the Construction Work Plan as described in Section XI, Specification 01 11 00 Summary of Work.
- B. Submit shop drawings of the decontamination pad to the ENGINEER for approval following Specification Section X, Specification 01 33 00 Submittal Procedures.
- C. Submit product data for Sand, crushed stone, geomembrane and geotextiles to be used to the ENGINEER for approval.

PART 2 – PRODUCTS

2.01 DECONTAMINATION PRODUCTS

- A. Vehicle Decontamination Pad must be constructed as shown on the Construction Contract Drawings.
 - 1. Sand and 2-inch crushed stone materials as described in Section XI, Specification 31 00 00 Earthwork.
 - 2. Geomembrane must be minimum 40-mil scrim-reinforced high-density polyethylene. Panels must be sized so that no seams are required.
 - 3. Geotextile must be a minimum 16 ounce per square yard nonwoven geotextile.
- B. Hydraulic high-pressure wash equipment with ability to provide hot water and steam.
- C. Clean water and construction water storage facilities as described in Section X, Specification 01 51 05 Temporary Utilities and Controls.
- D. Construction water treatment facility as described in Section XI, Specification 02 72 00 – Construction Water Management.
- E. Truck loading staging areas: areas lined with 40-mil scrim reinforced high density polyethylene geomembrane.
- F. Cleaning appurtenances including brushes, brooms, and industrial detergent or solvent such as Capsur by Integrated Chemistries, Inc. or an approved equal.

PART 3 – EXECUTION

3.01 DECONTAMINATION PAD

- A. Construct decontamination pad as shown on Construction Contract Drawings.
- B. Construct to facilitate the cleaning of equipment and trucks before leaving the Site. Provide adequate dimensions to contain wash water and debris from the largest sized vehicles to be used for the Work. All impacted vehicles and construction equipment leaving the exclusion zone must be decontaminated.
- C. Locate at the exit of each contaminated zone top prevent contamination of noncontaminated areas during remedial activities. Construct and use multiple decontamination pads as needed.
- D. Locate as close to the active work as possible to prevent tracking of contaminated material beyond the contaminated areas of the Site.
- E. Decontamination Pad must consist of an aggregate (sand and crushed stone) working base, impervious geomembrane liner, nonwoven geotextile, hard-surfaced tire tracks or timber mat for tracking tires, and a collection sump and pumping system as shown on the Construction Contract Drawings.
- F. The subgrade surface beneath the liner must be free of stones, debris, and other objects greater than one half inch in size.
- G. Collect and store decontamination fluids from the sump in a construction water storage facility adjacent to the Decontamination Pad.
- H. Sumps, pumping facilities, and temporary storage facilities to be adequate for anticipated use.
- I. Temporary storage facility may be mobile tankers or suitable fixed tanks. Locate fixed tanks within secondary containment areas sized to contain 100% of the tank capacity, or 110% of the largest tank where the secondary containment area holds more than one tank. The secondary containment area must have a permeability of 1.0×10^{-7} cm/sec or less.
- J. Manage construction water following Section XI, Specification 02 72 00 Construction Water Management.
- K. Clean the decontamination pad periodically as follows:
 - 1. Daily if used.
 - 2. Before each transition of handling hazardous PCB or metal impacted waste to non-hazardous PCB or metal impacted waste or other non-hazardous waste.
 - 3. When accumulated soil reduce the storage capacity of the sump.
 - 4. When accumulated soil begin clogging and reducing the permeability of the crushed stone layer.

- L. Containerize, characterize, stage, and transport all generated decontamination water and materials off-site for disposal at a licensed and permitted facility.
- M. Dismantle, remove, and dispose of the pad upon completion of the project.

3.02 VEHICLES AND EQUIPMENT

- A. Trucks loaded on truck loading staging areas and traveling exclusively on clean temporary on-site access roads may follow the following decontamination procedure:
 - 1. Remove loose, dry soil from the exterior truck body using brooms and other hand implements.
 - 2. Sweep the staging area liner clean of loose soil that has fallen outside of the truck/excavator bucket during loading.
 - 3. Proceed to the stabilized construction entrance using a defined route over clean on-site access roads.
 - 4. Sweep the staging area liner clean for the next truck to be loaded.
- B. Trucks must pass through the on-site decontamination pad for rinsing with high pressure water if additional decontamination measures are called for based on the following conditions:
 - 1. Wet soil creates a film on the vehicle due to work during wet working conditions.
 - 2. A vehicle drives outside the defined clean access route.
- C. Trucks and equipment removed from the Site that have handled or contacted hazardous or non-hazardous PCB and metal impacted materials must be decontaminated using the following procedures:
 - 1. Wash large equipment and vehicles with CAPSUR or approved equivalent product. Follow washing with a high-pressure, hot-water power-wash rinse. Perform cleaning on the decontamination pad to collect and treat rinsate.
 - 2. After the decontamination wash and rinse, collect wipe samples from equipment surfaces to provide a representative residual PCB concentration. Collect at least one wipe sample from each unique portion of the equipment (e.g. bucket, tracks) in contact with soil from excavation areas or construction water. Collect an additional sample from another unique surface of the equipment where there is the potential for particulate accumulation (e.g., top of cap or undercarriage).
 - Wipe tests must meet the standard of ≤10 µg/100 cm2 for PCBs as stated in 40 CFR 761.79(b)(3)(i)(A) using a standard wipe test as described in 40 CFR 761.123. Test standard wipe test samples following 40 CFR 761.272.
 - 4. If the decontamination standard has not been met, repeat the decontamination procedure and testing until the standard is confirmed.

- D. When heavy equipment and trucks on-site transition between handling of either nonhazardous waste or hazardous waste, or transition into clean areas or transport of clean material, use the following procedures outline to determine when wipe testing is required:
 - 1. If heavy equipment or trucks are transitioning from handling hazardous waste to handling non-hazardous waste or clean backfill materials, wipe testing is required after decontamination procedures outlined above.
 - 2. If heavy equipment or trucks are transitioning from handling non-hazardous waste to handling clean backfill materials, wipe testing is required after decontamination procedures outlined above.
 - 3. If heavy equipment or trucks are transitioning from handling non-hazardous waste to handling hazardous waste, wipe testing is not required after decontamination procedures outlined above.
 - 4. If heavy equipment or trucks are transported across an area that has been classified as one containing a lesser concentration of PCBs, with the intent to transition between two similarly characterized areas of waste (e.g., moving between two hazardous waste areas), wipe testing is not required after decontamination procedures outlined above.

3.03 SMALL EQUIPMENT AND HAND TOOLS

- A. Use disposable sampling equipment to the extent practicable to minimize costs and reduce the risk of cross contamination between samples.
- B. Non-disposable small equipment and hand tools that have contacted hazardous or non-hazardous PCB impacted materials must be decontaminated using the procedures defined in Sub-Part 3.2. For non-disposable sampling equipment, collect rinse samples at every new sample location and submit for analysis in accordance with Section X, Specification 01 45 29.13 Test Laboratory Services Furnished by Contractor.
- C. Decontamination procedures must follow 40 CFR 761.79(c).

3.04 WASTE MATERIAL AND PERSONNEL PROTECTIVE EQUIPMENT (PPE)

- A. Waste material and PPE that have contacted hazardous or non-hazardous PCB impacted materials must be decontaminated using the procedures defined in Sub-Part 3.2.
- B. Decontamination procedures must follow 40 CFR 761.79(g).

3.05 CLEAN DETERMINATION

A. All trucks and equipment that have been used to handle hazardous PCB impacted materials must be decontaminated as described in Sub-Part 3.2. The equipment and trucks must be inspected by the CONTRACTOR and visually confirmed clean before

leaving the Site. Additional decontamination methods must be employed if cleaning is determined inadequate by the ENGINEER.

- B. All trucks and equipment that have been used to handle non-hazardous PCB impacted materials must be tested using the standard wipe test described in 40 CFR 761.123 to confirm that the decontamination standard has been met. The decontamination standard of less than or equal to 10 micrograms per 100 square centimeters (10 μ g/ 100 sq. cm) as defined in 40 CFR 761.79(b)(3)(i)(A) must be used for confirmation that decontamination is complete.
- C. Wipe test frequency: wipe testing must include at least one (1) sample from each distinct surface of the equipment in direct contact with the hazardous PCB impacted materials or construction water associated with it (e.g., tracks and excavator bucket) and at least one (1) sample from a distinct surface of the equipment where particulate (dust) accumulation is likely (e.g., top of cap or undercarriage).
- D. Wipe test standard: testing of collected standard wipe test samples will be performed following 40 CFR 761.272. Refer to Section X, Specification 01 45 29.13 – Laboratory Testing Services Furnished by Contractor and Section XI, Specification 01 45 28.

3.06 TEMPORARY WORKS REMOVAL

- A. Regularly containerize, characterize, stage, and transport all generated construction water and materials following Section XI, Specification 02 61 13 – Impacted Soil Removal, Handling, and Storage, Section XI, Specification 02 81 00 – Off-Site Transportation and Disposal, and Section XI, Specification 02 72 00 – Construction Water Management.
- B. The subgrade surface beneath the area where the decontamination pad was located must be sampled and tested to ensure no cross contamination of wastes contained within the decontamination pad has occurred. Sampling and analysis must be performed following Section XI, Specification 01 45 28 Chemical Sampling and Analysis.
- C. If subgrade beneath the decontamination pad is determined to be contaminated with PCBs, perform excavation, removal, and confirmation testing as described in Section XI, Specification 31 00 00 Earthwork.

++ END OF SECTION ++

SPECIFICATION 02 61 13

IMPACTED SOIL REMOVAL, HANDLING, AND STORAGE

PART 1 – GENERAL

1.01 SUMMARY

- A. This Section includes a description of responsibilities and Project requirements for on-site management of impacted material, including removal, handling, and storage. For the Batavia Iron and Metal Site, these materials and wastes are identified as the following:
 - 1. Land Clearing Debris (See Section XI, Specification 31 11 00 Clearing and Grubbing)
 - 2. Non-TSCA PCB Impacted Material
 - 3. Amended Non-TSCA PCB Impacted Material
 - 4. TSCA-PCB Impacted Material
 - 5. Amended TSCA-PCB Impacted Material
 - 6. Construction Water (See Section XI, Specification 02 72 00 Construction Water Management)
 - 7. Sanitary Waste
 - 8. Site Refuse

1.02 RELATED WORK SPECIFIED ELSEWHERE

- A. Section X, Specification 01 33 00 Submittal Procedures
- B. Section X, Specification 01 35 29 –Contractor's Health and Safety Plan
- C. Section X, Specification 01 35 43.13 Environmental Procedures for Hazardous Materials
- D. Section X, Specification 01 45 29.13 Testing Laboratory Services Furnished by Contractor
- E. Section X, Specification 01 51 05 Temporary Utilities and Controls
- F. Section XI, Specification 01 11 00 Summary of Work
- G. Section XI, Specification 01 45 28 Chemical Sampling and Analysis
- H. Section XI, Specification 02 51 00 Decontamination Procedures
- I. Section XI, Specification 02 72 00 Construction Water Management

- J. Section XI, Specification 02 81 00 Off-Site Transportation and Disposal
- K. Section XI, Specification 31 00 00 Earthwork
- L. Section XI, Specification 31 11 00 Clearing and Grubbing
- M. Section XI, Specification 31 23 19 Dewatering

1.03 SUBMITTALS

- A. A description of planned means and methods for management of waste materials removed or generated as a component of the Work as a component of the Construction Work Plan (described in Section XI, Specification 01 11 00 Summary of Work). Include the following information:
 - 1. Proposed sequence of work including excavation and on-site transport of contaminated materials.
 - 2. Proposed methods for segregation of re-usable, non-hazardous and hazardous excavated materials.
 - 3. Means and methods for establishing and managing excavated material stockpiles.
 - 4. Description of proposed on-site processing means and methods for dewatering and/or stabilization of excavated soil for disposal requirements.

1.04 DEFINITIONS

- A. Land Clearing Debris: refer to Section XI, Specification 31 11 00 Clearing and Grubbing for definition.
- B. Re-Usable Material: Soil that does not contain PCBs greater than 1 ppm. This includes soil in grid areas that are not identified to be excavated, and soil in excavation areas at the Batavia property that was previously used as backfill, which included soil at elevations shallower than 2 feet above the indicated bottom of excavation.
- C. Non-TSCA PCB Impacted Material: non-hazardous soil, demolition debris, sludge, treatment system byproducts, and associated debris that have contacted polychlorinated biphenyl (PCB) contamination or have been characterized to be contaminated with PCBs at concentrations greater than 1 ppm and less than 50 ppm. Debris includes materials generated during remediation work as a result of environmental protections, worker protections, and sampling procedures including disposable personal protective equipment (PPE), plastic sheeting, and sampling equipment. PCB wastes are regulated under the Toxic Substances Control Act (TSCA) by the United States Environmental Protection Agency (USEPA). This waste is managed while implementing Site cleanup associated with the remedial action.

- D. TSCA-PCB Impacted Material: hazardous soil, demolition debris, sludge, treatment system byproducts, and associated debris that have contacted polychlorinated biphenyl (PCB) contamination or have been characterized to be contaminated with PCBs at concentrations greater than or equal to 50 ppm. Debris includes materials generated during remediation work as a result of environmental protections, worker protections, and sampling procedures, including disposable personal protective equipment (PPE), plastic sheeting, and sampling equipment. PCB wastes are regulated under the Toxic Substances Control Act (TSCA) by the USEPA. This waste is managed while implementing Site cleanup associated with the remedial action.
- E. Amended Non-TSCA PCB Impacted material: soil, demolition debris, sludge, treatment system byproducts, and associated debris that have contacted metals (Lead) and have been characterized to be potentially hazardous due to TCLP Lead and that have PCB concentrations less than 50 ppm. These soils will be sampled and emended to render them non-hazardous for PCBs.
- F. Amended TSCA PCB Impacted material: soil, demolition debris, sludge, treatment system byproducts, and associated debris that have contacted metals (Lead) and have been characterized to be potentially hazardous due to TCLP Lead and that have PCB concentrations greater than 50 ppm. These soils will be sampled and emended to render them non-hazardous for PCBs.
- G. Construction Water: wastes in liquid form collected during construction that may be generated from ex-situ dewatering activities, decontamination activities, and stormwater runoff.
- H. Sanitary Wastes: wastes characterized as sanitary sewage. Refer to Section X, Specification 01 51 05 Temporary Utilities and Controls.
- I. Site Refuse: typical municipal residential, commercial, and industrial waste in solid form and not classified as PCB impacted materials, including rubbish/trash, garbage, and other miscellaneous discarded material/debris. Includes waste generated during the course of remedial action construction from site workers, equipment, temporary facilities and controls, and imported materials.
- J. Contaminated Materials: waste types requiring special handling including land clearing debris grubbings, non-hazardous and hazardous PCB and metals impacted materials, and construction water. Other materials in direct contact with these waste types are also classified as contaminated.
- K. Clean: work or areas where direct contact with contaminated material does not occur. Clean areas include areas where remediation is not required as determined by remedial investigation testing; areas where remediation has been completed as verified by confirmation testing, and areas where separation between clean and impacted has been maintained with an engineered control.

- L. Impacted: work or areas where direct contact with contaminated materials does occur. This includes soil, construction areas and equipment, and equipment cleaning pads where PCBs, metals, or other contaminant concentrations are greater than or equal to the cleanup criteria.
- M. Engineered Control: physical barrier or method employed by the CONTRACTOR to actively or passively contain, stabilize, or monitor contamination, restrict the movement of contamination, or eliminate potential exposure pathways to contamination. Examples may include clean temporary access roads, stockpile containment areas, and tarps.

1.05 WASTE CONTAINERS

- A. Provide necessary equipment and materials to manage wastes following the Contract Documents, including:
 - 1. Trucks or other equipment as required for on-site management and handling of waste in a manner that minimizes comingling and cross contamination.
 - 2. Containers (e.g., traditional or intermodal / rail-type roll-off containers) or trucks for the off-site transportation disposal of wastes.
 - 3. Portable, temporary storage tanks (e.g. Frac tanks.) for the storage or treatment of collected construction water.
 - 4. Containers (e.g., roll-off containers) for site refuse collected during the course of the Project and during final site cleanup activities.
 - 5. Plastic bags for disposable of one-time use personnel protective equipment (PPE). Plastic bags must have a minimum thickness of six (6) mils.

1.06 HEALTH AND SAFETY

- A. Protect worker health and safety when removing, handling, and storing impacted materials.
- B. Follow the approved site specific SSHASP as described in Section X, Specification 01 35 29 Contractor's Health and Safety Plan. Monitor site conditions for changes and modify PPE when action levels have been reached.
- C. Conduct work following Section X, Specification 01 35 43.13 Environmental Procedures for Hazardous Materials.

1.07 SOIL REMOVAL

- A. Locate excavated materials away from top edges of the excavation. Maintain temporary stockpiles a sufficient distance from the excavation to prevent loading of the slope and to provide stability.
- B. Dewater excavations to maintain stability as described in Section XI, Specification 31 23 19 Dewatering.

C. Divert stormwater runoff from entering active soil excavation areas as shown on the Construction Drawings and described in Section XI, Specification 02 72 00 - Construction Water Management.

1.08 IMPACTED SOIL HANDLING

- A. Handle soil in a manner that prevents cross-contamination of the Project site with impacted soil and related construction materials.
- B. Direct impacted soil removed from excavations to roll-off containers or trucks to the extent practical.
- C. Segregate waste material types. Establish means and methods to prevent the comingling of impacted and non-impacted waste types.
- D. Minimize the generation of additional construction waste by comingling or contacting waste materials with other uncontaminated or non-hazardous site media.
- E. Provide temporary on-site access roads, as required, within the Exclusion Zone to maintain separation between clean handling activities and contaminated soil and construction materials.
- F. Decontaminate equipment and personnel in direct contact with impacted soil during handling activities before exiting the Exclusion Zone. Refer to Section XI, Specification 02 51 00 Decontamination Procedures.
- G. Soil handling activities are classified as clean if contaminated materials are confined in secure containers where spillage, leakage, or direct contact with equipment and personnel is not required. Soil and related materials transported in a truck, roll-off container, or frac tank over clean temporary access roads within the Exclusion Zone meets this criterion.
- H. Soil handling activities are classified as impacted if the impacted soil and related materials are transported in an unsecured manner where direct contact with equipment and personnel occurs. Impacted soil and related materials transported by front end loader, excavator, or bulldozer within the Exclusion Zone meets this criterion. Impacted soil and related materials confined in a secure container but transported within the Exclusion Zone outside of designated clean areas meets this criterion.
- I. Decontaminate vehicles, equipment, and personnel involved in impacted soil and related materials handling activities before exiting the Exclusion Zone.

1.09 ON-SITE WASTE MANAGEMENT AND STORAGE

A. Do not store waste on the City of Batavia property.

- B. Manage and store wastes in a manner that prevents cross-contamination of the Project site with impacted soil and related materials.
- C. Manage wastes in compliance with Federal, State, and local regulations. Management includes removal, handling, segregating, testing, and storing for the wastes listed in SubPart 1.1A of this Specification.
- D. Move containers, trucks, etc. into positions required for loading and management of soil and related material.
- E. Segregate materials and individual waste types as required for on-site management and off-site disposal.
- F. Materials identified as Amended non-TSCA or Amended TSCA PCB impacted materials shall be tested for TCLP lead, and if needed, mixed with suitable amendments and quantity to render the materials non-hazardous prior to being either moved to the non-TSCA or TSCA PCB impacted material stockpiles or directly loaded off-site for disposal.
- G. Load waste containers, trucks, etc. with removed and collected wastes. Fit disposal trucks with plastic liners to help prevent the spread of contamination outside the impacted excavation and soil handling areas.
- H. Manage wastes to limit on-site stockpiling of waste materials.
- I. Do not load waste containers, trucks, etc. with non-contaminated materials before inspection and determination by the ENGINEER that decontamination of the waste containers has been achieved.
- J. Do not load TSCA PCB Impacted Material waste containers, trucks, etc. with other waste materials before inspection and determination by the ENGINEER that decontamination of the waste containers has been achieved.
- K. Coordinate the schedule for delivery and pick-up of supplied waste containers. Manage the movement and storage of containers within the Site to allow the progress of the Work.
- L. Construct stockpiles of contaminated materials to isolate contaminated materials from the environment, including a bottom liner and cover. Cover waste stockpiles with plastic sheeting and anchoring system to prevent stormwater runoff from contacting the waste material. Water-tight roll-off units may be used to temporarily store separately TSCA and non-TSCA PCB Impacted Materials and.
- M. Dewater and/or stabilize (mixing cement) excavated/stockpiled materials to meet the moisture content and workability requirements of the facility chosen for off-site disposal. Submit a mix design for stabilizing materials as part of the Construction

Work Plan to ENGINEER for approval if stabilization methods are used.

N. Dispose of waste materials as specified here and following Section XI, Specification 02 81 00 – Off-Site Transportation and Disposal.

1.10 WASTE CHARACTERIZATION SAMPLING AND TESTING

- A. Collect samples and perform testing following Section X, Specification 01 45 29.13
 Testing Laboratory Services Furnished by Contractor, Section XI, Specification 01
 45 28 Chemical Analysis and Testing, the designated off-site treatment, storage, and disposal facility (TSDF), and the ENGINEER/DEPARTMENT.
- B. Testing is not required for the following types of wastes:
 - 1. Land Clearing Debris
 - 2. Sanitary Waste
 - 3. Site Refuse
- C. Collect samples and perform laboratory testing for the following wastes:
 - 1. Non-TSCA PCB Impacted Material
 - 2. Amended Non-TSCA PCB Impacted Material
 - 3. TSCA-PCB Impacted Material
 - 4. Amended TSCA-PCB Impacted Material
 - 5. Each type of demolition debris.
 - 6. Construction Water
- D. Laboratory testing of wastes must be performed by a certified laboratory as required by the selected TSDF.
- E. Laboratory reports must be prepared by the subcontracted laboratory following requirements of the DEPARTMENT and USEPA.
- F. All laboratory test methods and frequencies must follow DEPARTMENT and USEPA requirements.

PART 2 – PRODUCTS

Not Applicable

PART 3 – EXECUTION

Not Applicable

++ END OF SECTION ++

02 61 13–7

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SPECIFICATION 02 72 00

CONSTRUCTION WATER MANAGEMENT

PART 1 – GENERAL

1.01 DESCRIPTION

- A. Provide, operate, and maintain construction water management measures and equipment for the control, collection, treatment, and disposal of construction related water, including:
 - 1. groundwater from excavation dewatering operations
 - 2. storm water and/or groundwater that has collected in the bottom of excavations
 - 3. surface water diversion or barrier control to prevent surface water from adjacent wetlands entering excavations
 - 4. water generated from dewatering saturated soil/sediment stockpiles
 - 5. decontamination water from vehicle and equipment decontamination facilities
 - 6. water collected from stockpile containment areas
 - 7. stormwater runoff from contaminated areas of the Site
 - 8. other incidental water that contacts contaminated material or equipment.
- B. The DEPARTMENT has secured conditional Groundwater Remediation Discharge permission from the Batavia Bureau of Water and Wastewater (Wastewater Bureau) for disposal of construction water by the city municipal wastewater treatment facility. The proposed discharge location is the existing Site building sewer. The CONTRACTOR shall contact the Wastewater Bureau to confirm approval and to provide CONTRACTOR information requested by the Wastewater Bureau. The conditional approval and discharge limits are included as Attachment 1 to this specification.
- C. The CONTRACTOR may elect to dispose of construction water by any combination of the following means:
 - 1. On-site discharge to the Wastewater Bureau sanitary sewer: The requirements of the Wastewater Bureau must be met. A copy of the conditional permission is included as Attachment 1 to this specification.
 - 2. On-site surface water discharge: The effluent limitations and monitoring program for Discharge to Surface Water requirements of the State of New York must be met according to the State Pollutant Discharge Elimination System (SPDES) Permit listed as Attachment 2 to this specification.
 - 3. Off-site disposal to a properly permitted Treatment, Storage, and/or Disposal Facility (TSDF) as described in Section XI, Specification 02 81 00 Off Site Transportation and Disposal.

1.02 RELATED WORK SPECIFIED ELSEWHERE

- A. Section X, Specification 01 33 00 Submittal Procedures
- B. Section X, Specification 01 35 43.13 Environmental Procedures for Hazardous Materials
- C. Section X, Specification 01 45 29.13 Testing Laboratory Services Furnished by Contractor
- D. Section XI, Specification 01 41 00 Regulatory Requirements
- E. Section XI, Specification 01 45 28 Chemical Sampling and Analysis
- F. Section XI, Specification 02 61 13 Impacted Soil Removal, Handling, and Storage
- G. Section XI, Specification 02 81 00 Off-Site Transportation and Disposal
- H. Section XI, Specification 31 00 00 Earthwork
- I. Section XI, Specification 31 23 19 Dewatering
- J. Section XI, Specification 31 25 00 Erosion and Sediment Control

1.03 SUBMITTALS

- A. Before starting work, supply a Construction Water Management Plan (CWMP) for the Site. The CWMP must discuss the measures to minimize construction water generation, the manner for collection and handling of construction generated water, the treatment of construction water, and the disposal of construction water. The CWMP shall include schematics of the treatment facility, cut sheets for major pieces of equipment and product information for any chemicals to be added as part of the treatment system.
- B. Analytical test reports in accordance with Section X, Specification 01 45 29.13 Testing Laboratory Services Furnished by Contractor, Section XI, Specification 01 45 28 – Chemical Sampling and Analysis and applicable permits.
- C. Bill of ladings or manifests for off-site disposal of construction water or spent treatment supplies as described in Section XI, Specification 02 81 00- Off-Site Transportation and Disposal.

1.04 PERMITS

A. If the CONTRACTOR elects on-site disposal of construction water to the city sanitary sewer, a revised permission document in the name of the CONTRACTOR shall be secured

through the Wastewater Bureau. An email giving conditional approval is in place with MACTEC named as the permittee. The conditional permission shall be updated to list the CONTRACTOR as the permittee. The conditional discharge permission is included as Attachment 1 to this specification.

- B. The modified/transferred Wastewater Bureau permission shall be in place prior to authorizing discharges to the city sanitary sewer.
- C. Otherwise, the CONTRACTOR may use the SPDES equivalent permit included as Attachment 2 to this specification

1.05 FEES

A. The CONTRACTOR must pay fees associated with permitting on-site disposal of construction water or violations associated with secured permits.

PART 2 – PRODUCTS

2.01 GENERAL

- A. Provide, operate, and maintain a construction water management system. Size the system to store and treat sufficient quantities of water so that water management does not impact construction work. In general, the system may include some combination of the following components:
 - 1. Pumping systems from excavations, dewatering facilities, and/or decontamination facilities.
 - 2. Piping to convey water from the point of generation to storage/treatment systems.
 - 3. Diversions or barriers to prevent surface water from adjacent wetlands from entering excavations.
 - 4. Construction water storage facilities to temporarily store untreated water, treated water, and/or water designated for off-site disposal.
 - 5. A treatment system designed to treat construction water to the required disposal standard of the Wastewater Bureau or the State of New York standards for surface water discharges.

PART 3 – EXECUTION

3.01 PERFORMANCE

A. Minimize generation of construction related water using engineering controls and best management practices, maintaining temporary bypass storm water controls, dewatering operations, and other related work.

- B. If the ENGINEER or DEPARTMENT believes that construction water is being mishandled or there is insufficient management of the construction water, the ENGINEER or DEPARTMENT may stop work until the CONTRACTOR corrects the problem.
- C. On-site discharge of construction water to surface water locations approved by the ENGINEER/DEPARTMENT may be allowed following Section X, Specification 01 45 29.13 Testing Laboratory Services Furnished by Contractor and Section XI, Specification 01 45 28 Chemical Sampling and Analysis.
- D. Off-site disposal of construction water due to the CONTRACTOR's inability to treat water through temporary treatment facilities that meets the requirements for on-site discharge will not be paid by the DEPARTMENT.

3.02 ON-SITE DISCHARGE

- A. On-site discharge of construction water to the sanitary sewer and/or surface water requires that the conditions of the associated permits be met.
- B. Collect treated construction water for temporary on-site storage and sampling in construction water storage facilities until analytical results confirm discharge criteria have been met. This shall be conducted for the first batch of treated water and if/when the treatment system has been revised due to failed sampling results.
- C. Test and confirm that construction water meets permission requirements before discharge to the Wastewater Bureau sanitary sewer or to the New York State Discharge to Surface Water requirements to discharge to the surface water downstream of active dewatering areas. Coordinate reporting of analytical results to regulating authorities with the ENGINEER. After initial testing, perform at least one test per week of collected/treated construction water, unless negotiated otherwise with the regulating authority. Follow the requirements of Section X, Specification 01 45 29.13 Testing Laboratory Services Furnished by Contractor and Section XI, Specification 01 45 28 Chemical Sampling and Analysis.
- D. Discontinue discharge immediately if treated water is visibly turbid, contains oily sheens or contains odors.
- E. Treat construction water on-site, as necessary, to meet permit and applicable regulatory requirements.
- F. Treat and discharge construction water continuously, as needed, to keep the Site and and excavation areas dry.

- G. Record quantities of water discharged to the nearest gallon using an in-line flow meter.
- H. Provide back-up on-site storage or alternate disposal options as a contingency in case:
 - 1. Significant storm events generate above average construction water quantities.
 - 2. Discharge restrictions at receiving body during wet weather or other emergency conditions.
 - 3. Treatment system fails or has downtime for maintenance.
 - 4. Treatment system does not meet discharge requirements.

3.03 OFF-SITE DISPOSAL

- A. Refer to Section XI, Specification 02 81 00 Off-Site Transportation and Disposal. Construction water may be disposed off-site at an approved TSDF. No additional payment will be made to the CONTRACTOR for transportation or off-site disposal fees.
- B. Characterize construction water in accordance with the designated TSDF requirements.
- C. Characterize and dispose of treatment systems wastes, including spent media such as activated carbon or removed sediment, as directed by the designated TSDF.

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DER Site: Batavia Iron and Metal No. 819018 Page | 1

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning: August 2017 with the start of each discharge event 7 days from the start of the discharge. and lasting until: August 2018

The discharges from the treatment facility to Surface water shall be limited and monitored by the operator as specified below (only highlighted parameters shall be analyzed for):

Outfall and Parameters	CAS No.	Limitations	Units	Minimum Monitoring Requirements		FN	
Outfall 001 – Containerized Well Development Water and/or Pump Test Water	CAS I.U.	Daily Max.	Units	Measurement Frequency	Sample Type		
171	NA	Monitor	CDD	Continuous	December		
Flow			GPD		Recorder		
pH (range) Oil and Grease	NA NA	6.5 - 8.5	SU	1	Grab Grab		
		15	mg/l	1			
BOD, 5-day	NA	5	mg/l	1	Grab		
Solids, Total Suspended	NA	10	mg/l	-	Grab		
Solids, Total Dissolved	NA	200	mg/l	1	Grab		
Acenaphthene	83-32-9	5.3	µg/l	1	Grab		
Acenaphthylene	208-96-8	10	μg/l	1	Grab		
Acetaldehyde	75-07-0	8	μg/l	1	Grab		
Acetone	67-64-1	100	μg/l	1	Grab	2	
Acrolein	107-02-8	5	μg/l	1	Grab		
Acrylamide	79-06-1	5	μg/l	1	Grab		
Acrylic acid	79-10-7	50	μg/l	1	Grab		
Acrylonitrile	107-13-1	2	µg/l	1	Grab	2	
Alachlor	15972-60-8	0.5	µg/l	1	Grab		
Aldicarb	116-06-3	7	µg/l	1	Grab	2	
Aldicarb sulfone	1646-88-4	2	μg/l	1	Grab		
Aldicarb sulfoxide	1646-87-3	4	µg/l	1	Grab		
Aldrin	309-00-2	0.02	μg/l	1	Grab	2	
Alkyl dimethyl benzyl ammonium chloride	68391-01-5	50	μg/l	1	Grab		
Alkyl diphenyl oxide sulfonates	NA	50	μg/l	1	Grab		
Allyl chloride	107-05-1	5	μg/l	1	Grab		
Aluminum, ionic	NA	100	μg/l	1	Grab		
Ametryn	834-12-8	50	μg/l	1	Grab		
4-Aminobiphenyl	92-67-1	5	μg/l	1	Grab		
Aminocresols	95-84-1; 2835-95-2;	*	μg/l	1	Grab		
*see Phenolic compounds – total phenols	2835-99-6		<i>µ</i> в, 1	-	Giuo		
Aminomethylene phosphonic acids salts	NA	50 [*]	µg/l	1	Grab		
* applies to each aminomethylene phosphonic acid salt	1111	50	r.9.1	-	0.00		
individually							
Aminopyridines	462-08-8; 504-24-5;	1*	µg/l	1	Grab		
* applies to sum of these substances	504-29-0; 26445-05-6		10	-			
3-Aminotoluene	108-44-1	5	µg/l	1	Grab		
4-Aminotoluene	106-49-0	5	μg/l	1	Grab		
Ammonia, Total (as NH ₃)	7664-41-7	660	μg/l	1	Grab		

New permit will be required, previously were required to sample for everything listed for initial sample, then highlighted parameters routinely.

Outfall and Parameters	CASN	Limitations	T T •4	Minimum Monitoring Requirements		EN
Outfall 001 – Containerized Well Development Water and/or Pump Test Water	CAS No.	Daily Max.	Units	Measurement Sample Typ Frequency		FN
Ammonia and Ammonium ($NH_3 + NH_4^+$ as N)	7664-41-7; NA	2200	μg/l	1	Grab	
Aniline	62-53-3	10	μg/l	1	Grab	2
Anthracene	120-12-7	3.8	μg/l	1	Grab	
Antimony	NA	10	μg/l	1	Grab	2
Arsenic	NA	50	μg/l	1	Grab	
Aryltiazoles	NA	50*	μg/l	1	Grab	
* applies to each aryltiazole individually	1171	50	PB 1	1	Giuo	
Asbestos	NA	7,000,000	Fibers/L	1	Grab	
Atrazine	1912-24-9	8	μg/l	1	Grab	2
Azinphosmethyl	86-50-0	0.6	μg/1	1	Grab	2
Azobenzene	103-33-3	0.5	μg/l	1	Grab	_
Barium	NA	1,000	μg/l	1	Grab	
Benz(a)anthracene	56-55-3	0.05	μg/l	1	Grab	2
Benzene	71-43-2	1	μg/l	1	Grab	_
Benzidine	92-87-5	0.3	μg/l	1	Grab	2
Benzisothiazole	271-61-4	50	μg/l	1	Grab	
Benzo(b)flouranthene	205-99-2	0.07	μg/l	1	Grab	2
Benzo(k)fluoranthene	207-08-9	0.07	μg/l	1	Grab	2
Benzo(a)pyrene	50-32-8	0.02	μg/l	1	Grab	2
Benzo(ghi)perylene	191-24-2	10	$\mu g/l$	1	Grab	
Beryllium	NA	3	μg/l	1	Grab	
1-1'-Biphenyl	92-52-4	5	$\mu g/l$	1	Grab	
Bis(2-chloroethoxy)methane	111-91-1	5	$\mu g/l$	1	Grab	
Bis(2-chloroethyl)ether	111-44-4	0.03	$\mu g/l$	1	Grab	
Bis(chloromethyl)ether	542-88-1	5	$\mu g/l$	1	Grab	
Bis(2-chloro-1-methylethyl)ether	108-60-1	5	$\mu g/l$	1	Grab	
Bis(2-ethylhexl)phthalate	117-81-7	8	μg/1 μg/l	1	Grab	2
Boric acid, Borates & Metaborates	NA	125*	μg/1 μg/l	1	Grab	
* apply to the sum of these substances	INA	125	μg/1	1	Glab	
Boron	NA	1,000	μg/l	1	Grab	
Bromide	NA	2,000	μg/l	1	Grab	
Bromobenzene	108-86-1	5	μg/l	1	Grab	
Bromochloromethane	74-97-5	5	$\mu g/l$	1	Grab	
Bromodichloromethane	75-27-4	50	$\mu g/l$	1	Grab	
Bromoform	75-25-2	50	$\mu g/l$	1	Grab	
Bromomethane	74-83-9	5	$\mu g/l$	1	Grab	
n-Butanol	71-36-3	50	$\mu g/l$	1	Grab	
cis-2-Butenal	15798-64-8	5	$\mu g/l$	1	Grab	
trans-2-Butenal	123-73-9	5	μg/1 μg/l	1	Grab	<u> </u>
cis-2-Butenenitrile	1190-76-7	5	μg/1 μg/l	1	Grab	<u> </u>
trans-2-Butenenitrile	627-26-9	5	μg/1 μg/l	1	Grab	<u> </u>
Butoxyethoxyethanol	112-34-5	50	μg/1 μg/l	1	Grab	<u> </u>
	5131-66-8	50		1	Grab	┝───┤
Butoxypropanol		50	μg/l	1	Grab	┝──┤
Butylate	2008-41-5		μg/l	1	Grab	┝───┤
n-Butylbenzene	104-51-8	5	μg/l	1	Grab	<u> </u>
sec-Butylbenzene	135-98-8		μg/l	-		<u> </u>
Tert-Butylbenzene	98-06-6	5	µg/l	1	Grab	

Outfall and Parameters	= CAS No.	Limitations	TT •4	Minimum Monitoring Requirements		ENI
Outfall 001 – Containerized Well Development Water and/or Pump Test Water	= CAS No.	Daily Max.	Units	Measurement Frequency	Sample Type	FN
Butyl benzyl phthalate	85-68-7	50	µg/l	1	Grab	
Butyl isopropyl phthalate	NA	50	μg/l	1	Grab	
Cadmium	NA	1.2	μg/l	1	Grab	
Carbofuran	1563-66-2	1.0	μg/l	1	Grab	
Carbon disulfilde	75-15-0	60	μg/l	1	Grab	
Carbon tetrachloride	56-23-5	0.5	μg/l	1	Grab	2
Carboxin	5234-68-4	50	μg/l	1	Grab	
Chloramben	NA	50	μg/l	1	Grab	
Chloranil	118-75-2	5	μg/l	1	Grab	
Chlordane	57-74-9	0.05	μg/l	1	Grab	
Chloride	NA	250,000	μg/l	1	Grab	
Chlorinateddibenzo-p-dioxins and Chlorinated	NA	0.008	μg/l	1	Grab	2
dibenzofurans	1 12 1	0.000	r-8' 1		5.40	_
Chlorine, Total Residual	NA	13	µg/l	1	Grab	
2-Chloroaniline	95-51-2	5	μg/l	1	Grab	
3- Chloroaniline	108-42-9	5	μg/l	1	Grab	
4- Chloroaniline	106-7-8	5	μg/l	1	Grab	
Chlorobenzene	108-90-7	5	μg/l	1	Grab	
4-Chlorobenzotrifluoride	98-56-6	5	μg/l	1	Grab	
1-Chlorobutane	109-69-3	5	μg/l	1	Grab	
Chloroethane	75-00-3	5	μg/l	1	Grab	
Chloroform	67-66-3	7	μg/l	1	Grab	
Chloromethyl methyl ether	107-30-2	5	μg/l	1	Grab	
2-Chloronaphthalene	91-58-7	10	μg/l	1	Grab	
2-Chloronitrobenzene	88-73-3	5	μg/l	1	Grab	
3-Chloronitrobenzene	121-73-3	5	μg/l	1	Grab	
4-Chloronitrobenzene	100-00-5	5	μg/l	1	Grab	
Chloroprene	126-99-8	5	μg/l	1	Grab	
Chlorothalonil	1897-45-6	5	μg/l	1	Grab	
2-Chlorotoluene	95-49-8	5	μg/l	1	Grab	
3-Chlorotoluene	108-41-8	5	μg/l	1	Grab	
4-Chlorotoluene	106-43-4	5	μg/l	1	Grab	
4-Chloro-o-toluidine	95-69-2	5	μg/l	1	Grab	
5-Chloro-o-toluidine	95-79-4	0.7	μg/l	1	Grab	
3-Chloro-1,1,1-trifuoropropane	460-35-5	5	μg/l	1	Grab	
Chromium	NA	50	μg/1 μg/l	1	Grab	├
Chromium (hexavalent)	NA	30	μg/1 μg/l	1	Grab	2
Chrysene	218-01-9	0.6	μg/1 μg/l	1	Grab	2
Cobalt	NA	5	μg/l	1	Grab	
Copper	NA	*	μg/1 μg/l	1	Grab	
*Limit is 4.8 ug/l except in New York/New Jersey			μ6/1		Giuo	
Harbor where it is 7.9 ug/l		1.0		1	Cert	──
Cyanide (PQL) Sum of HCN and CN ⁻ expressed as CN	NA	1.0	µg/l	1	Grab	
Cyanogen bromide	506-68-3	5	<u>ца/1</u>	1	Grab	╂───
Cyanogen bromide Cyanogen chloride	506-68-3	5	μg/l μg/l	1	Grab	┢───

Outfall and Parameters	CACN	Limitations	T	Minimum Monitoring Requirements		EN
Outfall 001 – Containerized Well Development Water and/or Pump Test Water	CAS No.	Daily Max.	Units	Measurement Frequency	Sample Type	FN
Dalapon	NA	50*	μg/l	1	Grab	<u> </u>
* Includes related forms that convert to the organic acid upon acidification to a pH of 2 or less; and esters of the organic acid	1111		1.9.1		5140	
p,p'-DDD	72-54-8	0.02	μg/l	1	Grab	2
p,p'-DDE	72-55-9	0.02	μg/l	1	Grab	2
p,p'-DDL p,p'-DDT	50-29-3	0.01	μg/1 μg/l	1	Grab	2
Dechlorane Plus	13560-89-9	5	μg/l	1	Grab	2
Demton	8065-48-3; 298-03-3;	0.1	μg/1	1	0140	
FN: apply to the sum of these substances	126-75-0	0.1				
Diazinon	333-41-5	0.08	μg/l	1	Grab	
Dibenzo(a,h) anthracene	53-70-3	0.08	μg/l	1	Grab	2
1,2-Dibromobenzene	583-53-9	5	μg/1 μg/l	1	Grab	
1,3-Dibromobenzene	108-36-1	5		1	Grab	
1,4-Dibromobenzene	106-37-6	5	μg/l	1	Grab	<u> </u>
Dibromochloromethane	124-48-1	10	μg/l	1	Grab	<u> </u>
			μg/l	1	Grab	┝───
1,2-Dibromo-3-chloropropane	96-12-8	0.04	μg/l	1		<u> </u>
Dibromodichloromethane	594-18-3	5	μg/l	1	Grab	<u> </u>
Dibromomethane	74-95-3	5	μg/l	-	Grab	<u> </u>
2,2-Dibromo-3-nitrilopropionamide	10222-01-2	50	µg/l	1	Grab	<u> </u>
Di-n-butyl phthalate	84-74-2	50	µg/l	1	Grab	<u> </u>
Dichlorobenzenes	95-50-1; 541-73-1;	3*	µg/l	1	Grab	
* applies to each isomer (1,2-, 1,3- and 1,4-	106-46-7					
dichlorobenzene) individually.	01.04.1	~		1	Grab	<u> </u>
3,3'-Dichlorobenzidine	91-94-1	5	μg/l	1		<u> </u>
3,4-Dichlorobenzotriflouride	328-84-7	5	µg/l	1	Grab	<u> </u>
cis-1,4-Dichloro-2-butene	1476-11-5	5	µg/l	1	Grab	<u> </u>
trans-1,4-Dichloro-2-butene	110-57-6	5	µg/l	1	Grab	<u> </u>
Dichlorodifluoromethane	75-71-8	5	µg/l	1	Grab	<u> </u>
1,1-Dichloroethane	75-34-3	5	µg/l	1	Grab	Ļ
1,2-Dichloroethane	107-06-2	0.6	μg/l	1	Grab	
1,1-Dichloroethene	75-35-4	0.5	μg/l	1	Grab	
cis-1,2-Dichloroethene	156-59-2	5	μg/l	1	Grab	
trans-1,2-Dichloroethene	156-60-5	5	μg/l	1	Grab	
Dichloroflouromethane	75-43-4	5	μg/l	1	Grab	
2,4-Dichlorophenol	120-83-2	*	μg/l	1	Grab	
*See limit for Phenolic compounds (total phenols)						
2,4-Dichlorophenoxyacetic acid	94-75-7	10	μg/l	1	Grab	
1,1-Dichloropropane	78-99-9	5	μg/l	1	Grab	
1,2-Dichloropropane	78-87-5	0.5	μg/l	1	Grab	
1,3-Dichloropropane	142-28-9	5	µg/l	1	Grab	
2,2-Dichloropropane	594-20-7	5	µg/l	1	Grab	
1,1-Dichloropropene	563-58-6	5	μg/l	1	Grab	
1,3-Dichoropropene	542-75-6	0.4*	μg/l	1	Grab	
FN: applies to the sum of cis- and trans- 1,3- Dichoropropene, CAS Nos. 10061-01-5 and 10061-02-6 respectively						

Outfall and Parameters		Limitations	T T •4	Minimum Monitoring Requirements		ENI
Outfall 001 – Containerized Well Development Water and/or Pump Test Water	CAS No.	Daily Max.	Units	Measurement Sample Ty Frequency		FN
2,3-Dichlorotoluene	32768-54-0	5	µg/l	1	Grab	
2,4-Dichlorotoluene	95-73-8	5	μg/l	1	Grab	
2,5-Dichlorotoluene	19398-61-9	5	μg/l	1	Grab	
2,6-Dichlorotoluene	118-69-4	5	μg/l	1	Grab	
3,4-Dichlorotoluene	95-75-0	5	μg/l	1	Grab	
3.5-Dichlorotoluene	25186-47-4	5	μg/l	1	Grab	
Dieldrin	60-57-1	0.005	μg/l	1	Grab	2
Di(2-ethylhexyl)adipate	103-23-1	20	μg/l	1	Grab	_
Diethyl phthalate	84-66-2	50	μg/l	1	Grab	
1,2-Diflouro-1,1,2,2-tetrachloroethane	76-12-0	5	μg/l	1	Grab	
1,2-Diriouro-1,12,2-tetraemoroethane	577-55-9	5	μg/l	1	Grab	
1,3-Diisopropylbenzene	99-62-7	5	μg/1 μg/l	1	Grab	
1,4-Diisopropylbenzene	100-18-5	5		1	Grab	
N,N-Dimethylaniline	121-69-7		μg/l	1	Grab	
		1	μg/l	-		
2,3-Dimethylaniline	87-59-2	5	μg/l	1	Grab	
2,4-Dimethylaniline	95-68-1	5	μg/l	1	Grab	
2,5-Dimethylaniline	95-78-3	5	µg/l	1	Grab	
2,6-Dimethylaniline	87-62-7	5	µg/l	1	Grab	
3,4-Dimethylaniline	95-64-7	5	µg/l	1	Grab	
3,5-Dimethylaniline	108-69-0	5	μg/l	1	Grab	
3,3'-Dimethylbenzidine	119-93-7	5	μg/l	1	Grab	
4,4'-Dimethylbibemzyl	538-39-6	5	μg/l	1	Grab	
4,4'-Dimethyldiphenylmethane	4957-14-6	5	μg/l	1	Grab	
Dimethylformamide	68-12-2	50	μg/l	1	Grab	
alpha, alpha-Dimethyl phenethylanime	122-09-8	5	μg/l	1	Grab	
2,4-Dimethylphenol	105-67-9	*	μg/l	1	Grab	
*See limit for Phenolic compounds (total phenols)						
Dimethyl phthalate	131-11-3	50	μg/l	1	Grab	
Dimethyl tetrachloroterephthalate	1861-32-1	50	μg/l	1	Grab	
1,3-Dinitrobenzene	99-65-0	5	μg/l	1	Grab	
2,4-Dinitrophenol *See limit for Phenolic compounds (total phenols)	51-28-5	*	µg/l	1	Grab	
2,3-Dinitrotoluene	602-01-7	5	μg/l	1	Grab	
2,4-Dinitrololuene	121-14-2	5	μg/l	1	Grab	
2,5-Dinitrololuene	619-15-8	5	µg/l	1	Grab	
2,6-Dinitrololuene	606-20-2	5	μg/l	1	Grab	
3,4-Dinitrololuene	610-39-9	5	μg/l	1	Grab	
3,5-Dinitrololuene	618-85-9	5	μg/l	1	Grab	
Di-n-octyl phthalate	117-84-0	50	μg/l	1	Grab	
Dinoseb	88-85-7	*	μg/1 μg/l	1	Grab	L
*See limit for Phenolic compounds (total phenols)	00-03-7		μ8/1	L 1	5140	
Dioxin	NA	*	µg/l	1	Grab	
*See Chlorinated dibenzo-9-dioxins and Chlorinated	11/1		μ <u>6</u> /1		Giuo	
dibenzofurans						
Diphenamid	957-51-7	50	µg/l	1	Grab	
Diphenylamine	122-39-4	5	μg/1 μg/l	1	Grab	
1,2-Diphenylhydrazine	122-59-4	10		1	Grab	2
1,2-Dipitenyinyarazine	122-00-/	10	µg/l		Orau	7

Outfall and Parameters	CASN	Limitations	T T •4	Minimum Monitoring Requirements		
Outfall 001 – Containerized Well Development Water and/or Pump Test Water	= CAS No.	Daily Max.	Units	Measurement Frequency	Sample Type	FN
Diquet	2764-72-9	20*	μg/l	1	Grab	1
Diquat * Applies to the concentration of diquat ion whether free		201	μg/1	1	Glab	
or as an undissociated salt.						
Dodecylguanidine acetate and Dodecylguanidine	2439-10-3; 13590-97-1	50*	μg/l	1	Grab	
hydrochloride	2137 10 3, 13390 97 1	50	P-8-1	-	0100	
* Applies to the sum of these substances						
Dyphylline	479-18-5	50	μg/l	1	Grab	
Endosulfan	115-29-7	.001	μg/l	1	Grab	
Endothall	145-73-3	50	µg/l	1	Grab	
Endrin	72-20-8	0.05	μg/l	1	Grab	2
Endrin aldehyde	7421-93-4	5	μg/l	1	Grab	
Endrin ketone	53494-70-5	5	μg/l	1	Grab	
Ethylbenzene	100-41-4	4.5	μg/l	1	Grab	
Ethylene chlorohydrin	107-07-3	50	µg/l	1	Grab	
Ethylene dibromide	106-93-4	6 x 10 ⁻⁴	μg/l	1	Grab	
Ethylene glycol	107-21-1	50	μg/l	1	Grab	
Ethylene oxide	75-21-8	0.05	μg/l	1	Grab	
Fluometuron	2164-17-2	50	μg/l	1	Grab	
Fluoranthene	206-44-0	50	$\mu g/l$	1	Grab	
Fluorene	86-73-7	50	$\mu g/l$	1	Grab	
Fluoride	NA	1500	μg/l	1	Grab	
Formaldehyde	50-00-0	8	μg/1 μg/l	1	Grab	┝───┦
Glyphosate	1071-83-6	50	μg/1 μg/l	1	Grab	┢───┦
Guaifenesin	93-14-1	50	μg/1 μg/l	1	Grab	
Heptachlor	76-44-8	0.01	μg/1 μg/l	1	Grab	2
Heptachlor epoxide	1024-57-3	0.01		1	Grab	2
Hexachlorobenzene	118-74-1	0.2	μg/l	1	Grab	2
Hexachlorobutadiene			μg/l			2
	87-68-3	1	μg/l	1	Grab Grab	2
alpha-Hexachlorocyclohexane	319-84-6	0.01	μg/l			
beta-Hexachlorocyclohexane	319-85-7	0.02	μg/l	1	Grab	2
delta-Hexachlorocyclohexane	319-86-8	0.04	µg/l	1	Grab	2
epsilon-Hexachlorohexane	6108-10-7	0.02	µg/l	1	Grab	2
gamma-Hexachlorohexane	58-89-9	0.02	µg/l	1	Grab	2
Hexachloropentadiene	77-47-4	2.0	µg/l	1	Grab	2
Hexachloroethane	67-72-1	0.6	µg/l	1	Grab	
Hexachlorophene	70-30-4	*	µg/l	1	Grab	
* See limit for Phenolic Compounds (total phenols)	1000 51 5	-	/1	1	0.1	
Hexachloropropene	1888-71-7	5	µg/l	1	Grab	
2-Hexanone	591-78-6	50	µg/l	1	Grab	
Hexazinone	51235-04-2	50	µg/l	1	Grab	
Hydrazine	302-01-2	5	µg/l	1	Grab	
Hydrogen sulfide	7783-04-2	2	μg/l	1	Grab	
Hydroquinone	123-31-9	*	μg/l	1	Grab	
* See limit for Phenolic Compounds (total phenols)			/4			
1-Hydroxyethylidene-1,1-diphosphonic acid	2809-21-4	50	µg/l	1	Grab	
2-(2-Hydroxy-3,5-di-tert-pentylphenyl)-benzotriazole	25973-55-1	*	µg/l	1	Grab	
* See limit for Phenolic Compounds (total phenols)				1		

Outfall and Parameters	CACN	Limitations	TT •4	Minimum Monitoring Requirements		ENI
Outfall 001 – Containerized Well Development Water and/or Pump Test Water	CAS No.	Daily Max.	Units	Measurement Sample Ty Frequency		FN
Indeno(1,2,3-cd)pyrene	193-39-5	0.2	µg/l	1	Grab	2
Iron	NA	300	μg/l	1	Grab	
Isodecyl diphenyl phosphate	29761-21-5	1.7	μg/l	1	Grab	
Isodrin	465-73-6	5	μg/l	1	Grab	
Isophorone	78-59-1	50	μg/l	1	Grab	┝──┦
Isopropalin	33820-53-0	5	μg/l	1	Grab	┝──┤
Isopropylbenzene	98-82-8	2.6	μg/l	1	Grab	
2-Isopropyltoluene	527-84-4	5	μg/l	1	Grab	
3-Isopropyltoluene	535-77-3	5	μg/l	1	Grab	
4-Isopropyltoluene	99-87-6	5	μg/1 μg/l	1	Grab	
Isothiazolones, total (isothiazolinones) (includes 5- chloro-2-methyl-4-isothiazolin-3-one & 2-methyl-4-	NA	1	$\mu g/l$	1	Grab	
isothiazolin-3-one)						
Lead	NA	4	µg/l	1	Grab	
Linear alkyl benzene sulfonates (LAS)	NA	40	μg/l	1	Grab	
Magnesium	NA	35,000	μg/l	1	Grab	
Malathion	121-75-5	0.6	μg/l	1	Grab	2
Manganese	NA	300	μg/l	1	Grab	
Mercaptobenzothiazole	149-30-4	50	μg/l	1	Grab	
Mercury	NA	5 x 10 ⁻²	μg/l	1	Grab	4
Methacrylic acid	79-41-4	50	μg/l	1	Grab	
Methacrylonitrile	126-98-7	5	μg/l	1	Grab	
Methoxychlor	72-43-5	0.4	µg/l	1	Grab	2
(1-Methoxyethyl) benzene	4013-34-7	50	μg/l	1	Grab	
(2-Methoxyethyl) benzene	3558-60-6	50	μg/l	1	Grab	
N-Methylaniline	100-61-8	5	μg/l	1	Grab	
Methylbenz(a)anthracenes * Applies to the sum of these substances	NA	0.002*	µg/l	1	Grab	
Methyl chloride	74-87-3	5	μg/l	1	Grab	
4,4'-Methylene-bis-(2-chloroaniline)	101-14-4	5	µg/l	1	Grab	
4,4'-Methylene-bis-(N-methyl)aniline	1807-55-2	5	μg/l	1	Grab	
4,4'-Methylene-bis-(N,N'-dimethyl) aniline	101-61-1	5	μg/l	1	Grab	
Methylene bisthiocyanate	6317-18-6	50	µg/l	1	Grab	
Methylene chloride	75-09-2	5	μg/l	1	Grab	
4-(1-Methylethoxy)-1-butanol	31600-69-8	50	µg/l	1	Grab	
2-Methylethyl-1,3-dioxolane	126-39-6	50	μg/l	1	Grab	
Methyl ethyl ketone	78-93-3	50	μg/l	1	Grab	
Methyl iodide	74-88-4	5	μg/l	1	Grab	
2-Methylnapthalene	91-57-6	4.2	μg/l	1	Grab	
Methyl parathion * see Parathion and Methyl parathion	298-00-0	*	µg/l	1	Grab	
alpha-Methylstyrene	98-83-9	5	µg/l	1	Grab	
2-Methylstyrene	611-15-4	5	μg/l	1	Grab	
3-Methylstyrene	100-80-1	5	μg/l	1	Grab	
4-Methylstyrene	622-97-9	5	μg/l	1	Grab	
Methyl tert-butyl ether (MTBE)	1634-04-4	10	μg/l	1	Grab	
Metolachlor ESA	171118-09-5	50	μg/l	1	Grab	┝──┤

Outfall and Parameters	= CAS No.	Limitations	U: 4a	Minimum Monitoring Requirements		FN
Outfall 001 – Containerized Well Development Water and/or Pump Test Water	= CAS NO.	Daily Max.	Units	Measurement Sample Ty Frequency		FN
Metolachlor OA	152019-73-3	50	µg/l	1	Grab	
Metribuzin	21087-64-9	50	μg/l	1	Grab	
Mirex	2385-85-5	0.4	μg/l	1	Grab	2
Naphthalene	91-20-3	10	μg/1 μg/l	1	Grab	
Niacinamide	91-20-3	500		1	Grab	<u> </u>
Nickel	98-92-0 NA	8.2	μg/l	1	Grab	
Nitrate	NA	10,000	μg/l	1	Grab	
Nitrate and Nitrite (as N)	NA NA	10,000	μg/l	1	Grab	
Nitrilotriacetic acid	NA	3*	μg/l	1	Grab	
*Includes realted forms that convert to nitrilotriacetic acid upon acidification to a pH of 2.3 or less	INA	5.	µg/l	-		
Nitrite (as N)	NA	1,000	μg/l	1	Grab	
2-Nitroaniline	88-74-4	5	μg/l	1	Grab	
3-Nitroaniline	99-09-2	5	μg/l	1	Grab	
4-Nitroaniline	100-01-6	5	μg/l	1	Grab	
Nitrobenzene	98-95-3	0.4	μg/l	1	Grab	
N-Nitrosodiphenylamine	86-30-6	50	μg/l	1	Grab	
2-Nitrotoluene	88-72-2	5	μg/l	1	Grab	
3-Nitrotoluene	99-08-1	5	μg/l	1	Grab	
4-Nitrotoluene	99-99-0	5	μg/l	1	Grab	
5-Nitro-o-toluidine	99-55-8	5	μg/l	1	Grab	
Octachlorostyrene	29082-74-4	6 x 10 ⁻⁶	μg/l	1	Grab	
Oxamyl	23135-22-0	50	μg/l	1	Grab	
Parathion	56-38-2	0.065	µg/l	1	Grab	
Parathion and Methyl parathion ** Applies to the sum of these substances. For the waters of the Great Lakes System, the Department will substitute a guidance value for the aquatic Type standard if so determined under 702.15 (c).	5638-2; 298-00-0	0.008**	μg/l	1	Grab	
Pendimethalin	40487-42-1	5	μg/l	1	Grab	
Pentachlorobenzene	608-93-5	5	μg/l	1	Grab	
Pentachloroethane	76-01-7	5	μg/l	1	Grab	
Pentachlorophenol	87-86-5	*	μg/l	1	Grab	
* See limit for Phenolic Compounds (total phenols)						
Phenanthrene	85-01-8	1.5	μg/l	1	Grab	
Phenol * See limit for Phenolic Compounds (total phenols)	108-95-2	*	µg/l	1	Grab	
Phenolic compounds – Total Phenols * Applies to the sum of these substances	NA	8	µg/l	1	Grab	2,8
Phenols, total chlorinated * See limit for Phenolic Compounds (total phenols)	NA	*	µg/l	1	Grab	
Phenols, total unchlorinated * See limit for Phenolic Compounds (total phenols)	NA	*	µg/l	1	Grab	
1,2-Phenylenediamine	95-54-5	5	μg/l	1	Grab	
1,3-Phenylenediamine	108-45-2	5	μg/l	1	Grab	
1,4-Phenylenediamine	108-45-2	5	μg/l	1	Grab	<u> </u>
Phenyl ether	101-84-8	10	μg/l	1	Grab	

Outfall and Parameters	CASNo	Limitations	U: 4a	Minimum Monitoring Requirements		DNI
Outfall 001 – Containerized Well Development Water and/or Pump Test Water	CAS No.	Daily Max.	Units	Measurement Sample Typ Frequency		FN
Phenylhydrazine	100-63-0	5	μg/l	1	Grab	
Phenylpropanolamine	14838-15-4	50	μg/l	1	Grab	
3-Phenyl-1-propene	637-50-3	5	μg/l	1	Grab	
cis-1-Phenyl-1-propene	766-90-5	5	μg/1	1	Grab	
trans-1-Phenyl-1-propene	873-66-5	5	μg/l	1	Grab	
Phosphorus	NA	20	μg/l	1	Grab	
Picloram	NA	50	μg/l	1	Grab	
Polybrominated biphenyls	NA	5*	μg/l	1	Grab	
*Applies to each congener individually		C C	10	_		
PCB-1016	12674-11-2	0.20	μg/l	1	Grab	2,3
PCB-1221	11104-28-2	0.20	μg/1	1	Grab	2,3
PCB-1232	11141-16-5	0.20	μg/l	1	Grab	2,3
PCB-1242	53469-21-9	0.20	μg/l	1	Grab	2,3
PCB-1248	12672-29-6	0.20	μg/l	1	Grab	2,3
PCB-1254	11097-69-1	0.20	μg/l	1	Grab	2,3
PCB-1260	11096-82-5	0.20	μg/l	1	Grab	2,3
Prometon	1610-18-0	50	μg/l	1	Grab	_,_
Propham	122-42-9	50	μg/l	1	Grab	
n-Propylbenzene	103-65-1	5	μg/l	1	Grab	
Propulene glycol	57-55-6	1000	μg/l	1	Grab	
Pyrene	129-00-0	4.6	μg/l	1	Grab	
Pyridine	110-86-1	50	μg/l	1	Grab	
Quaternary ammonium compounds (including dimethy)	NA	10*	μg/l	1	Grab	
benzyl ammonium chloride & dimethyl ethyl benzyl ammonium chloride) *Applies to the sum of these substances	1774		<i>PB</i> 1		Grae	
Selenium	NA	4.6	μg/l	1	Grab	
Silver, Total	NA	50	μg/l	1	Grab	
Simazine	122-34-9	0.5	μg/l	1	Grab	
Styrene	100-42-5	5	μg/l	1	Grab	
Sulfate	NA	250,000	µg/l	1	Grab	
Sulfides, Total	NA	50	µg/l	1	Grab	
Tebuthiuron	34014-18-1	50	μg/l	1	Grab	
Terbufos	13071-79-9	100	μg/l	1	Grab	2
Tetrachlorobenzenes * Applies to the sum of 1,2,3,4-, 1,2,3,5- and 1,2,4,5- tetrachlorobenzene.	636-66-2; 634-90-2; 95-94-3; 12408-10-5	5*	µg/l	1	Grab	
1,1,1,2-Tetrachloroethane	630-20-6	5	µg/l	1	Grab	
1,1,2,2-Tetrachloroethane	79-34-5	0.2	μg/l	1	Grab	
Tetrachloroethene	127-18-4	0.7	μg/l	1	Grab	
alpha, alpha, alpha, 4-Tetrachlorotoluene	5216-25-1	5	μg/l	1	Grab	
Tetrahydrofuran	109-99-9	50	μg/l	1	Grab	
1,2,3,4-Tetramethylbenzene	488-23-3	5	μg/l	1	Grab	
1,2,3,5-Tetramethylbenzene	527-53-7	5	μg/l	1	Grab	
1,2,4,5-Tetramethylbenzene	95-93-2	5	μg/l	1	Grab	
Thallium	NA	0.5	μg/l	1	Grab	
Theophylline	58-55-9	40	μg/l	1	Grab	

Outfall and Parameters	= CAS No.	Limitations	T I * 4	Minimum Monitoring Requirements		EN
Outfall 001 – Containerized Well Development Water and/or Pump Test Water	CAS NO.	Daily Max.	Units	Measurement Sample Typ Frequency		FN
Toluene	108-88-3	5	µg/l	1	Grab	
Toluene-2,4-diamine	95-80-7	5	μg/l	1	Grab	
Toluene-2,5-diamine	95-70-5	5	μg/l	1	Grab	
Toluene-2,6-diamine	823-40-5	5	μg/l	1	Grab	
o-Toluidine	95-53-4	0.6	$\mu g/l$	1	Grab	
Tolytriazole	29385-43-1	50	$\frac{\mu g}{l}$	1	Grab	
Toxaphene	8001-35-2	1	μg/l	1	Grab	2
1,2,4-Tribromobenzene	615-54-3	5	μg/l	1	Grab	
Tributyltin oxide	56-35-9	50	μg/l	1	Grab	├ ──┤
2,4,6-Trichloroaniline	634-93-5	5	μg/l	1	Grab	
Trichlorobenzenes	87-61-6; 120-82-1;	5*	μg/l	1	Grab	
*Applies to the sum of 1,2,3-, 1,2,4- and 1,3,5-	108-70-3; 12002-48-1	5	r8-	-	0140	
trichlorobenzene	100 70 5, 12002 10 1					
1,1,1-Trichloroethane	71-55-6	5	μg/l	1	Grab	
1,1,2-Trichloroethane	79-00-5	1	μg/l	1	Grab	
Trichloroethene	79-01-6	5	μg/l	1	Grab	
Trichlorofluoromethane	75-69-4	5	μg/l	1	Grab	
2,4,5-Trichlorophenoxypropionic acid	93-72-1	10	μg/l	1	Grab	
1,1,2-Trichloropropane	598-77-6	5	μg/l	1	Grab	
1,2,3-Trichloropropane	96-18-4	0.04	μg/l	1	Grab	
cis-1,2,3-Trichloropropene	13116-57-9	5	μg/l	1	Grab	
trans-1,2,3-trichloropropene	13116-58-0	5	μg/l	1	Grab	
alpha,2,4-Trichlorotoluene	94-99-5	5	μg/l	1	Grab	
alpha,2,6-Trichlorotoluene	2014-83-7	5	μg/l	1	Grab	
alpha,3,4-Trichlorotoluene	102-47-6	5	μg/l	1	Grab	
alpha, alpha,2-Trichlorotoluene	88-66-4	5	μg/l	1	Grab	
alpha, alpha,4-Trichlorotoluene	13940-94-8	5	μg/l	1	Grab	
2,3,4-Trichlorotoluene	7359-72-0	0.34	μg/l	1	Grab	
2.3.5-Trichlorotoluene	56961-86-5	0.34	μg/l	1	Grab	
2,3,6-Trichlorotoluene	2077-46-5	0.34	μg/l	1	Grab	
2,4,5-Trichlorotoluene	6639-30-1	0.34	μg/l	1	Grab	
2,4,6-Trichlorotoluene	23749-65-7	0.34	μg/l	1	Grab	
1,1,1-Trichloro-2,2,2-trifluoethane	354-58-5	5	μg/l	1	Grab	
1,1,2-Trichloro-1,2,2-trifluoethane	76-13-1	5	μg/l	1	Grab	
1,2,3-Trimethylbenzene	526-73-8	5	μg/l	1	Grab	
1,2,4-Trimethylbenzene	95-63-6	5	μg/l	1	Grab	
1,3,5-Trimethylbenzene	108-67-8	5	μg/l	1	Grab	
2,3,6-Trimethylpyridine	1462-84-6	50	μg/l	1	Grab	
2,4,6-Trimethylpyridine	108-75-8	50	μg/l	1	Grab	
sym-Trinitrobenzene	99-35-4	5	μg/l	1	Grab	┟──┤
2,3,4-Trinitrotoluene	602-29-9	5	μg/l	1	Grab	┟──┤
2,3,6-Trinitrotoluene	18292-97-2	5	μg/l	1	Grab	┝──┤
2,4,5-Trinitrotoluene	610-25-3	5	μg/l	1	Grab	┟──┤
2,4,6-Trinitrotoluene	118-96-7	5	μg/l	1	Grab	┢───┦
3,4,5-Trinitrotoluene	603-15-6	5	μg/l	1	Grab	┝──┤
Triphenyl phosphate	115-86-6	4	$\mu g/l$	1	Grab	┝──┤
Vanadium	NA	14	μg/l	1	Grab	

Outfall and Parameters	= CAS No.	Limitations	T	Minimum Requir			
Outfall 001 – Containerized Well Development Water and/or Pump Test Water	CAS NO.	Daily Max.	Units	Measurement Frequency	Sample Type	FN	
Vinyl chloride	75-01-4	2	μg/l	1	Grab		
1,2-Xylene	95-47-6	5	μg/l	1	Grab		
1,3-Xylene	108-38-3	5	µg/l	1	Grab		
1,4-Xylene	106-42-3	5	μg/l	1	Grab		
Zinc	NA	66	µg/l	1	Grab		

Footnotes:

- 1. Samples must be collected prior to each discharge event. Discharge may not commence until the sample results show compliance with the above discharge limitations.
- 2. Discharge limit is set at the Practical Quantitation Limit (PQL). Actual surface water effluent standard/limitation is below this limit. Analysis of this parameter shall be of the most stringent USEPA approved method in accordance with 40 CFR 136.

3. For PCBs:

- a. The treatment plant operator must monitor this discharge for PCBs using USEPA laboratory method 608. The laboratory must make all reasonable attempts to achieve a Minimum Detection Level (MDL) of 0.065 µg/l.
- b. 0.065 µg/l is the discharge goal. The treatment plant operator shall report all values above the MDL (0.065 µg/l per Aroclor). If the level of any Aroclor is above 0.65 µg/l, the treatment must evaluate the treatment system and identify the cause of the detectable level of PCBs in the discharge.
- c. If the Department determines that effluent monitoring results above can be prevented by implementation of additional measures as proposed by the treatment plant operator in footnote 3.b 9above, and approved by the Department, the treatment plant operator shall implement such additional measures.
- 4. The water quality based effluent limit for mercury is $7 \times 10^{-4} \mu g/l$. The enforceable limit is set at 0.05 $\mu g/l$ for the purposes of compliance. The enforceable limit maybe revised in the future if DEC determines another limit is more appropriate. Mercury must be analyzed using USEPA Method 1631.
- 5. Only waters generated at remediation sites during sampling, pump tests, well development, or dewatering of excavations are authorized for treatment and discharge.
- 6. Samples and measurements, to comply with the monitoring requirements specified above, must be taken from the holding tank prior to discharge to the receiving waterbody.
- 7. Discharge is not authorized until such time as an engineering submission showing the method of treatment and discharge is approved by the Department. The discharge rate may not exceed the effective treatment system or ground adsorptive capacity. All monitoring data, engineering submissions and modification requests must be submitted to the following DER contact person: <u>David J. Chiusano; david.chiusano@dec.ny.gov; (518)402-9813.</u>
- 8. Total phenolics must be analyzed using EPA Methods 420.1 or 420.2.
- 9. Discharge to a surface waterbody within the New York City Watershed is not authorized by these effluent criteria. Separate review of any proposed discharge to surface water within the New York City Watershed is required.

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Water, Bureau of Water Permits 625 Broadway, Albany, New York 12233 www.dec.ny.gov

M E M O R A N D U M SPDES Permit Equivalent

TO: Ms. Lisa Gorton, DER

FROM: Douglas Ashline, Bureau of Water Permits, DOW

SUBJECT: SPDES Permit Equivalent: Batavia Iron & Metal Company, Inc., DER Site

ID# 819018

DRAINAGE BASIN: 01 / 02

DATE: November 17, 2020

In response to your request dated September 28, 2020, attached please find the effluent limitations and monitoring requirements for the above noted remediation discharge.

The discharge consists of treated water from groundwater and stormwater infiltration into excavation pits. The treatment system consists of screening settling and carbon filtration.

The DOW does not have any regulatory authority over a discharge from a State, PRP, or Federal Superfund Site. DER will be responsible for ensuring compliance with the attached effluent limitations and monitoring requirements, and approval of all engineering submissions. The additional conditions identifies the appropriate DER contact person who will receive all effluent results, engineering submissions, and modification requests. The Regional Water Engineer should be kept appraised of the status of this discharge and, in accordance with the attached criteria, receive a copy of the effluent results for informational purposes.

If you have any questions, please call Douglas Ashline at 518-402-8247.

Attachment (Effluent Limitations and Monitoring Requirements)

cc: Region 8 Regional Water Engineer (via email, w/attach) BWP Section Chief, DOW (via email, w/attach)



EFFLUENT LIMITATIONS & MONITORING REQUIREMENTS

OUTFALL	DISCHARGE TYPE	LATITUDE/ LONGITUDE	RECEIVING WATER and CLASS	EFFECTIVE	EXPIRING
001	Treated Remediation Wastewater	43° 00' 40" N 78° 10' 32" W	Wetland to an unnamed tributary of Tonawanda Creek, Class C	1/1/2021	12/31/2023

The discharges from the treatment facility shall be limited and monitored by the operator as specified below:

Outfall and Parameters Outfall 001	CAS No.	Monthly Avg. Limits	Daily Max Limits	Units	Minimum Monitoring Requirements		
					Measurement Frequency	Sample Type	FN
Flow	NA	NA	11550	GPD	Continuous	Recorder	
pН	NA	NA	6.5 - 8.5	SU	Monthly	Grab	1
Oil and Grease	NA	NA	15	mg/L	Monthly	Grab	1
Total Suspended Solids	NA	NA	40	mg/L	Monthly	Grab	1
Turbidity	NA	NA	5	NTU	Continuous	Recorder	1
Copper, Total	NA	NA	9	ug/l	Monthly	Grab	1
Lead, Total	NA	NA	5	ug/l	Monthly	Grab	1
Zinc, Total	NA	NA	84	ug/l	Monthly	Grab	1
Manganese	N/A	NA	300	ug/l	Monthly	Grab	1
Barium	N/A	NA	1000	ug/l	Monthly	Grab	1
arsenic	N/A	NA	150	ug/l	Monthly	Grab	1
Cis-1,2-Dichloroethene	156-59-2	NA	5	ug/l	Monthly	Grab	1
tetrachloroethene (PCE)	127-18-4	NA	1	ug/l	Monthly	Grab	1
trichloroethene (TCE)	79-01-6	NA	10	ug/l	Monthly	Grab	1
1,4-Dichlorobenzene	106-46-7	NA	5	ug/l	Monthly	Grab	1
Vinyl chloride	75-01-4	NA	2	ug/l	Monthly	Grab	1
Chlorobenzene	108-90-7	NA	5	ug/l	Monthly	Grab	1
Aroclor-1016	126+74-11- 2	NA	0.20	ug/l	Monthly	Grab	1,2
Aroclor-1221	11104-28-2	NA	0.20	ug/l	Monthly	Grab	1,2
Aroclor-1232	11141-16-5	NA	0.20	ug/l	Monthly	Grab	1,2
Aroclor-1242	53469-21-9	NA	0.20	ug/l	Monthly	Grab	1,2
Aroclor-1248	12672-29-6	NA	0.20	ug/l	Monthly	Grab	1,2
Aroclor-1254	11097-69-1	NA	0.20	ug/l	Monthly	Grab	1,2
Aroclor-1260	11096-82-5	NA	0.20	ug/l	Monthly	Grab	1,2
Perfluorooctane sulfonic acid (PFOS)	375-92-8	-	-	ug/l	Monthly	Grab	1,3
Perfluorooctanoic acid (PFOA)	335-67-1	-	-	ug/l	Monthly	Grab	1,3
Phenol Total	108-95-2	NA	5	ug/l	Monthly	Grab	1,4



Site Name: Batavia Iron & Metal Company, Inc. DER Site ID#: 819018 Page 2 of 4 Footnotes:

- The measurement frequency of parameters listed on this page shall be Monthly following a period of 12 (twelve) consecutive weekly sampling events showing no exceedances of the stated discharge limitations. If discharge limitation of any parameter listed on this page exceeds the stated limit, the measurement frequency for all parameters listed on this page shall again be weekly, until a period of four consecutive sampling events showing no exceedances at which point monthly monitoring may resume.
- 2. PCBs:
 - a. The treatment plant operator must monitor this discharge for PCBs using USEPA laboratory method 608. The laboratory must make all reasonable attempts to achieve a Minimum Detection Level (MDL) of 0.065 µg/l.
 - b. $0.065 \ \mu g/l$ is the discharge goal. The treatment plant operator shall report all values above the MDL ($0.065 \ \mu g/l$ per Aroclor). If the level of any Aroclor is above $0.065 \ \mu g/l$, the treatment must evaluate the treatment system and identify the cause of the detectable level of PCBs in the discharge.
 - c. If the Department determines that effluent monitoring results above can be prevented by implementation of additional measures as proposed by the treatment plant operator in footnote 3.b above, and approved by the Department, the treatment plant operator shall implement such additional measures.
- 3. PFOA/PFOS:
 - a. Treatment for PFOA/PFOS shall consist of a minimum of two GAC filters in series, with a sampling port located prior to the final GAC filter.
 - b. Monitoring for PFOS and PFOA shall use EPA Method 537, Version 1.1 and shall occur after the first of two granular activated carbon (GAC) filters in series. Upon receipt of analytical results for PFOS or PFOA with detectable levels at or above the Lowest Concentration Minimum Reporting Level (LCMRL), a confirmatory sample shall immediately be collected from the same location and analyzed to verify exceedance of the LCMRL action level.
 - c. If the confirmatory sample yields results for PFOS or PFOA at or above the EPA Method 537, Version 1.1 LCMRL, the lead GAC filter shall be replaced within 30 days of receipt of the confirmatory results, using the following step-wise procedure: the lead GAC filter shall be removed, the lag GAC filter shall become the lead filter, and a new GAC filter shall be installed in the lag position. If the lead GAC filter that had exceeded the action limit for PFOS or PFOA in the confirmatory sample is not changed out within 30 days of receipt of the sample results, discharge shall be temporarily ceased until GAC filter change out as noted above occurs.
 - d. If the confirmatory sample results are below the EPA Method 537, Version 1.1 LCMRL for PFOS and PFOA, sampling frequency will continue 1/month as indicated in the table above.
- 4. See limit for Phenolic Compounds (total phenols).



Site Name: Batavia Iron & Metal Company, Inc. DER Site ID#: 819018 Page 3 of 4 Additional Conditions:

1. Discharge is not authorized until such time as an engineering submission showing the method of treatment is approved by the Department. The discharge rate may not exceed the effective or design treatment system capacity. All monitoring data, engineering submissions and modification requests must be submitted to:

Ms. Lisa Gorton Division of Environmental Remediation NYSDEC, 625 Broadway, Albany, New York 12233- 7015, Tel: 518-402- 9574

With a copy sent to:

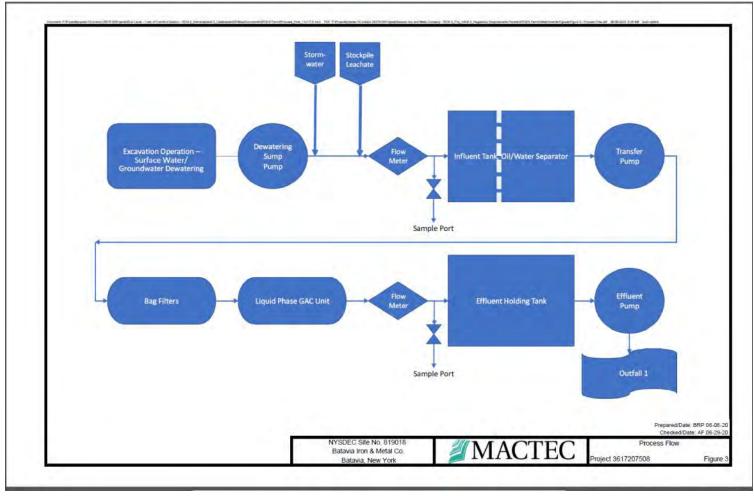
Regional Water Engineer, Region 8 6274 E. Avon-Lima Road, Avon, New York, 14414-9519 Phone: (585) 226-5450

- 2. Samples and measurements, to comply with the monitoring requirements specified above, must be taken from the effluent side of the final treatment unit prior to discharge to the receiving water body unless otherwise noted above.
- 3. Only site generated wastewater is authorized for treatment and discharge.
- 4. Authorization to discharge is valid only for the period noted above but may be renewed if appropriate. A request for renewal must be received 6 months prior to the expiration date to allow for a review of monitoring data and reassessment of monitoring requirements.
- 5. Both concentration (mg/l or µg/l) and mass loadings (lbs/day) must be reported to the Department for all parameters except flow and pH.
- 6. Any use of corrosion/scale inhibitors, biocidal-type compounds, or other water treatment chemicals used in the treatment process must be approved by the department prior to use.
- 7. This discharge and administration of this discharge must comply with the substantive requirements of 6NYCRR Part 750.



Site Name: Batavia Iron & Metal Company, Inc. DER Site ID#: 819018 Page 4 of 4

MONITORING LOCATIONS





SPECIFICATION 02 81 00

OFF-SITE TRANSPORTATION AND DISPOSAL

PART 1 – GENERAL

1.01 SUMMARY

- A. This section describes requirements and responsibilities for transportation and disposal of waste materials for off-site disposal, including the following materials. Each of these waste materials is further described in Section XI, Specification 02 61 13 Impacted Soil Removal, Handling, and Storage.
 - 1. Land Clearing Debris
 - 2. Non-TSCA PCB Impacted Material
 - 3. Amended Non-TSCA PCB Impacted Material
 - 4. TSCA-PCB Impacted Material
 - 5. Amended TSCA-PCB Impacted Material
 - 6. Construction Water
 - 7. Sanitary Waste
 - 8. Site Refuse.
- B. Transport and dispose of wastes, generally classified as hazardous and nonhazardous solid wastes, to licensed disposal facilities. This includes existing wastes and wastes generated during construction.
- C. Ensure that sampling, analysis, transportation, and disposal activities comply with requirements of the Treatment, Storage and/or Disposal Facility (TSDF), Solid Waste Management Facility (SWMF), Publically Owned Treatment Works (POTW), reclamation/recycling/salvage facility, and Federal, State, and local governments. Document all activities.
- D. Record the local roads proposed for use as haul routes to transport waste to off-site disposal with video before starting work. Document the existing condition of local roads before exposure to Project traffic.

1.02 RELATED WORK SPECIFIED ELSEWHERE

- A. Section X, Specification 01 32 33 Photographic Documentation
- B. Section X, Specification 01 33 00 Submittal Procedures
- C. Section X, Specification 01 35 29 Contractor's Health and Safety Plan
- D. Section X, Specification 01 35 43.13 Environmental Procedures for Hazardous Materials

- E. Section X, Specification 01 45 29.13 Testing Laboratory Services Furnished by Contractor
- F. Section X, Specification 01 66 00 Product Storage and Handling Requirements
- G. Section XI, Specification 01 11 00 Summary of Work
- H. Section XI, Specification 01 45 28 Chemical Sampling and Analysis
- I. Section XI, Specification 02 51 00 Decontamination Procedures
- J. Section XI, Specification 02 72 00 Construction Water Management
- K. Section XI, Specification 02 61 13 Impacted Soil Removal, Handling, and Storage

1.03 REFERENCES

- A. The publications listed below are pertinent in whole or part to the Work. The publications are referred to within the text by basic designation only.
 - 1. Code of Federal Regulations (CFR)
 - a. 40 CFR 262: Standards Applicable to Generators of Hazardous Waste
 - b. 40 CFR 761: Polychlorinated Biphenyls (PCBs) Manufacturing, Processing, Distribution in Commerce, and Use Prohibitions.
 - c. 49 CFR 172: Tables, Hazardous Material Communication Requirements, and Emergency Response Information Requirements
 - 2. New York Codes, Rules, and Regulations (NYCRR)
 - a. 6 NYCRR 364: Waste Transportation Permits
 - b. 6 NYCRR 372: Hazardous Waste Manifest System and Related Standards for Generators, Transporters, and Facilities
 - c. 6 NYCRR 248: Use of Ultra Low Sulfur Diesel Fuel and Best Available Retrofit Technology for Heavy Duty Vehicles
- B. Comply with applicable Federal, State, and local requirements regarding transportation and disposal of hazardous and nonhazardous material.

1.04 SUBMITTALS

- A. A description of planned means and methods for transporting and disposing of soil removed from the Site or generated as a component of the Work. Include with Construction Work Plan (described in Section XI, Specification 01 11 00 Summary of Work) and identify the following:
 - 1. Locations of identified TSDFs, SWMFs, POTWs, and reclamation, recycling, and salvage facilities.
 - 2. Permit profile of each identified disposal facility.
 - 3. The proposed haul route over local roads to each of the identified facilities.

- B. Video records of the existing condition of the local roads proposed for haul routes.
- C. Sample Bill of Lading and Uniform Hazardous Waste Manifest to be used for the Project.
- D. Completed and signed Bill of Ladings and Manifests for transported waste loads.
- E. Certified weight slips from the TSDF, POTW, or reclamation, recycling, and salvage facility for each load transported to the disposal facility.
- F. Weekly transportation report that includes the type of waste material, weight, volume, disposal/recycle location, date of shipment, date of receipt, and responsible transporter.

1.05 DEFINITIONS

- Refer to the definitions for classifications of wastes in Section XI, Specification 02 61 13 – Impacted Soil Removal, Handling, and Storage.
- B. Local Road: for the purpose of this specification, it must mean those roads within the Town of Frankfort, Herkimer County, New York and City of Utica, Oneida County, New York.
- C. Generator: The Site is an abandoned hazardous waste site and the actual generator of the waste is not participating in the remedial action. For the purpose of the project, the DEPARTMENT or the ENGINEER on behalf of the DEPARTMENT will assume the role of generator and must sign required documentation and recordkeeping.
- D. Transporter: person or firm engaged in the off-site transportation of solid waste by air, rail, highway or water.
- A. Non-TSCA PCB Impacted Material: non-hazardous soil, demolition debris, sludge, treatment system byproducts, and associated debris including grubbings that have contacted polychlorinated biphenyl (PCB) contamination or have been characterized to be contaminated with PCBs at concentrations greater than 1 ppm and less than 50 ppm. Debris includes materials generated during remediation work as a result of environmental protections, worker protections, and sampling procedures including disposable personal protective equipment (PPE), plastic sheeting, and sampling equipment. PCB wastes are regulated under the Toxic Substances Control Act (TSCA) by the United States Environmental Protection Agency (USEPA). This waste is managed while implementing Site cleanup associated with the remedial action. For simplicity these soils may also be referred to as non-hazardous wastes.
- B. TSCA-PCB Impacted Material: hazardous soil, demolition debris, sludge, treatment

system byproducts, and associated debris including grubbings that have contacted polychlorinated biphenyl (PCB) contamination or have been characterized to be contaminated with PCBs at concentrations greater than or equal to 50 ppm. Debris includes materials generated during remediation work as a result of environmental protections, worker protections, and sampling procedures, including disposable personal protective equipment (PPE), plastic sheeting, and sampling equipment. PCB wastes are regulated under the Toxic Substances Control Act (TSCA) by the USEPA. This waste is managed while implementing Site cleanup associated with the remedial action. For simplicity these soils may also be referred to as non-hazardous wastes.

C. Amended Non-TSCA PCB Impacted material: soil, demolition debris, sludge, treatment system byproducts, and associated debris including grubbings that have contacted metals (Lead) and have been characterized to be potentially hazardous due to TCLP Lead and that have PCB concentrations less than 50 ppm. These soils will be sampled and emended to render them non-hazardous for PCBs.

Amended TSCA PCB Impacted material: soil, demolition debris, sludge, treatment system byproducts, and associated debris including grubbings that have contacted metals (Lead) and have been characterized to be potentially hazardous due to TCLP Lead and that have PCB concentrations greater than 50 ppm. These soils will be sampled and emended to render them non-hazardous for PCBs.

1.06 WASTE CONTAINERS

A. Provide waste containers specific to the individual waste as described in Section XI, Specification 02 61 13 – Impacted Soil Removal, Handling, and Storage.

1.07 TRANSPORTATION OF NON-HAZARDOUS WASTES

- A. This section applies to wastes identified in Subpart 1.01A except TSCA-PCB Impacted or Amended TSCA-PCB Impacted soil.
- B. Transport wastes specified or generated as a result of the Work. This includes materials generated by final Site cleanup activities including the dismantling of the temporary facilities and controls.
- C. Comply with the New York State Diesel Emissions Reduction Act (DERA), Environmental Conservation Law 19-0323, and 6 NYCRR 248 when using heavy duty vehicles, as described in Section X, Specification - 01 35 43.13 – Environmental Procedures for Hazardous Materials.
- D. Consider the use of transportation via rail as indicated in Section X, Specification 01 89 29 Green Remediation Practices.
- E. Coordinate the number and schedule of vehicles required for off-site transportation

of waste materials generated during the execution of the specified work.

- F. Inspect the transportation vehicles before and after loading to ensure compliance with local, State, and Federal regulations for the safe transport of wastes from the Site to the receiving facility. Provide the necessary labor and materials to ensure trucks, containers, etc. are lined with plastic before filling, as required; foamed or stabilized with an agent, if necessary; and covered before departure. Wastes must contain no free water unless the receiving facility allows otherwise. See Section XI, Specification - 02 61 13 – Impacted Soil Removal, Handling, and Storage for dewatering and stabilization requirements.
- G. Ensure that the transporters arriving at the Site for loading do not cause undue congestion to local roads. Stage trucks either within the perimeter of the Site or at an off-site staging area approved by the ENGINEER or DEPARTMENT. Transporters must not be accepted at the site before 7:00 AM and after 5:00 PM.
- H. Weigh each load with the on-site truck scale and modify the load as required to meet the weight limitations for the local roads along the designated route. Calculate the net weight of the waste load measured in tons by subtracting the vehicle tare weight from the total gross weight (vehicle and load).
- I. Record weights on bill of ladings and compare to certified weight slips reported by the disposal facility as a quality control check.
- J. Proceed directly from the Site to the designated receiving facility identified by the CONTRACTOR in the Construction Work Plan. Temporary staging or storage of soil at intermediate locations between the Site and the receiving facility is prohibited.
- K. Travel from the Site along traffic routes established by the CONTRACTOR and documented in the Construction Work Plan and videos.
- L. Originate, maintain, and provide the Engineer with a copy of each executed bill of lading for each load shipped off-site. In addition, provide the ENGINEER or DEPARTMENT documentation and records verifying receipt of each truck load by the receiving facility. Documentation must indicate the actual certified weight of each load shipped.

1.08 TRANSPORTATION OF HAZARDOUS MATERIALS

- A. This section applies to TSCA-PCB Impacted or Amended TSCA-PCB Impacted soil.
- B. Transport Hazardous Materials as specified or generated as a result of the Work. This includes materials generated by final Site cleanup activities including the dismantling of the temporary facilities and controls.

- C. Comply with the New York State Diesel Emissions Reduction Act (DERA), Environmental Conservation Law 19-0323, and 6 NYCRR 248 when using heavy duty vehicles, as described in Section X, Specification 01 35 43.13 – Environmental Procedures for Hazardous Materials.
- D. Consider the use of transportation via rail as indicated in Section X, Specification 01 89 29 Green Remediation Practices.
- E. Coordinate the number and schedule of vehicles required for off-site transportation of waste materials generated during the execution of the specified work.
- F. Inspect the transportation vehicles before and after loading to ensure compliance with all local, State, and Federal regulations for the safe transport of wastes from the Site to the receiving facility. Provide the necessary labor and materials to ensure all trucks, containers, etc. are lined with plastic before filling, as required; foamed or stabilized with an agent, if necessary; and covered before departure. Wastes must contain no free water unless the receiving facility allows otherwise. See Section XI, Specification 02 61 13 – Impacted Soil Removal, Handling, and Storage for dewatering and stabilization requirements.
- G. Ensure that the transporters arriving at the Site for loading do not cause undue congestion to local roads. Stage trucks either within the perimeter of the Site or at an off-site staging area approved by the ENGINEER/DEPARTMENT. Transporters must not be accepted at the site before 7:00 AM and after 5:00 PM.
- H. Decontaminate loaded trucks as specified in Section XI, Specification 02 61 13 Impacted Soil Removal Handling, and Storage before transporting off site.
- I. Weigh each load with the on-site truck scale, and modify the load as required to meet the weight limitations for the local roads along the designated route. Record weight of the total waste quantity on the Uniform Hazardous Waste Manifest. Calculate the net weight of the waste load measured in tons by subtracting the vehicle tare weight from the total gross weight (vehicle and load).
- J. Proceed directly from the Site to the designated receiving facility identified by the CONTRACTOR in the Construction Work Plan. Temporary staging or storage of material at intermediate locations between the Site and the receiving facility is prohibited.
- K. Travel from the Site along traffic routes established by the CONTRACTOR and documented in the Construction Work Plan and videos.
- L. Originate, maintain, and provide the ENGINEER/DEPARTMENT with a copy of each executed manifest for each load shipped off-site. In addition, provide the DEPARTMENT and ENGINEER documentation and records verifying receipt of

each truck load by the receiving facility. Documentation must indicate the actual weight of each load shipped.

1.09 RECORDKEEPING FOR NON-HAZARDOUS WASTES

- A. This section applies to wastes identified in Subpart 1.01A except TSCA-PCB Impacted or Amended TSCA-PCB Impacted soil.
- B. Document each waste load shipped off-site.
 - 1. Complete a bill of lading provided by the transporter or TSDF for nonhazardous wastes. Other forms as approved by the Engineer may be used. The form must generally include the following information:
 - a. Unique identifying tracking number.
 - b. Generator/generator representative contract information.
 - c. Transporter contract information.
 - d. TSDF contact information.
 - e. Date of shipment.
 - f. Quantity of shipment.
 - g. Signatures of generator/generator representative, transporter, and TSDF.
 - 2. Complete a Uniform Hazardous Waste Manifest for hazardous waste in accordance with Subpart 1.10.

1.10 RECORDKEEPING FOR HAZARDOUS MATERIALS

- A. Document each load of TSCA-PCB Impacted or Amended TSCA-PCB Impacted material shipped off-site in accordance with the requirements of 40 CFR 761 Subpart K and 6 NYCRR 372.
- B. Complete a Uniform Hazardous Waste Manifest (United States Environmental Protection Agency, USEPA Form 8700-22) for each shipped load of Hazardous Materials. Obtain forms from USEPA Manifest Registry approved registered printers identified in the Table of Approved Registrants found at the website: http://www.epa.gov/wastes/hazard/transportation/manifest/registry/printers.htm.
- C. Include Site's USEPA Identification Number on manifests.
- D. Follow the USEPA "Instructions for Completing the Hazardous Waste Manifest"; Attachment 1 to this specification.
- E. Provide signed manifests to the noted recipient on each copy of the form including the generator, transporter, and designated TSDF.

1.11 DISPOSAL OF NON-HAZARDOUS WASTES

A. Dispose of wastes that are specified as a component of the Work or that are generated

during the execution of the Work in conformance with Federal, State, and local regulations and requirements.

- B. The ENGINEER or DEPARTMENT must approve of designated TSDFs before offsite transportation and disposal. Do not change facilities without prior consent of the ENGINEER or DEPARTMENT.
- C. Complete waste characterization testing and prepare waste profiles following the requirements of the TSDF/POTW as described in Section X, Specification 01 45 29.13 Testing Laboratory Services Furnished by Contractor and Section XI, Specification 01 45 28 Chemical Sampling and Analysis.
- D. Approved TSDFs, POTWs, and reclamation/recycling/salvage facilities must be licensed to accept the wastes profiled/characterized by the CONTRACTOR.
- E. Maintain waste on-site until approval of the waste profile has been granted by the TSDF/POTW.
- F. CONTRACTOR or TSDF representative is responsible for approving wastes for loading and TSDF acceptance. Once trucks leave the site, the CONTRACTOR owns the liabilities and costs for rejected loads.
- G. Dispose non-hazardous wastes at approved TSDFs, including state-licensed SWMFs including Municipal Solid Waste Landfills and Construction and Demolition Debris Landfills; Waste Tire Disposal facilities; and POTWs.
- H. Document certified weights of each waste load measured by the TSDF, POTW, or reclamation/recycling/salvage facility at the time of disposal. The certified weight slips must include at a minimum, the name and location of the TSDF, the date and time of measure, and the net weight of the load measured in tons calculated by subtracting the vehicle tare weight from the total gross weight (vehicle and load). For POTWs, the unit of measure must be gallons.

1.12 DISPOSAL OF HAZARDOUS MATERIALS

- A. Dispose of wastes that are specified as a component of the Work or that are generated during the execution of the Work in conformance with Federal, State, and local regulations and requirements.
- B. The ENGINEER or DEPARTMENT must approve of designated TSDFs before offsite transportation and disposal. Do not change facilities without prior consent of the ENGINEER/DEPARTMENT.
- C. Complete waste characterization testing and prepare waste profiles following the requirements of the TSDF as described in Section XI, Specification 02 61 13 -

Impacted Soil Removal, Handling, and Storage.

- D. Approved TSDFs must be licensed to accept the wastes profiled/characterized by the CONTRACTOR.
- E. Maintain waste on-site until approval of the waste profile has been granted by the TSDF.
- F. CONTRACTOR or TSDF representative is responsible for approving wastes for loading and TSDF acceptance. Once trucks leave the site, the CONTRACTOR owns the liabilities and costs for rejected loads.
- G. Dispose Hazardous Materials at approved state-licensed TSDFs including:
 - 1. High temperature incinerators approved under 40 CFR 761.70(b).
 - 2. Chemical waste landfills approved under 40 CFR 761.75.
 - 3. Facilities with coordinated approval issued under 40 CFR 761.77.
 - 4. Alternate disposal methods approved under 40 CFR 761.60(e).
- H. Document certified weights of each waste load measured by the TSDF. The certified weight slips must include at a minimum, the name and location of the TSDF, the date and time of measure, and the net weight of the load measured in tons calculated by subtracting the vehicle tare weight from the total gross weight (vehicle and load).

PART 2 – PRODUCTS

Not Applicable

PART 3 – EXECUTION

Not Applicable

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SPECIFICATION 31 00 00

EARTHWORK

PART 1 – GENERAL

1.01 DESCRIPTION

- A. This Section covers excavation/trenching, filling/backfilling, compaction, and grading. The work includes:
 - 1. Excavation of contaminated soils and uncontaminated cover soils.
 - 2. Subgrade preparations associated with installation of pavement (e.g., asphalt concrete, Portland cement concrete).
 - 3. Placement and compaction of the following materials:
 - a. Subgrade Fill
 - b. Crushed Stone
 - c. Gravel Subbase
 - 4. Finish grading of all disturbed areas.
 - 5. Laboratory testing of borrow source materials.
 - 6. Other miscellaneous earthwork activities.
- B. Control of surface water run-off during construction shall be in accordance with Section XI, Specification 31 25 00 Erosion and Sedimentation Control.

1.02 RELATED WORK SPECIFIED ELSEWHERE

- A. Section X, Specification 01 33 00 Submittal Procedures
- B. Section X, Specification 01 35 29 Contractor's Health and Safety Plan
- C. Section X, Specification 01 35 43.13 Environmental Procedures for Hazardous Materials
- D. Section X, Specification 01 45 29.13 Testing Laboratory Services Furnished by Contractor
- E. Section X, Specification 01 71 33 Protection of Work and Property
- F. Section X, Specification 01 76 50 Nuisance Controls
- G. Section XI, Specification 00 33 00 Existing Conditions
- H. Section XI, Specification 01 11 00 Summary of Work
- I. Section XI, Specification 01 45 28 Chemical Sampling and Analysis

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- J. Section XI, Specification 02 51 00 Decontamination Procedures
- K. Section XI, Specification 02 61 13 Impacted Soil Removal, Handling, and Storage
- L. Section XI, Specification 02 81 00 Off-Site Transportation and Disposal
- M. Section XI, Specification 02 72 00 Construction Water Management
- N. Section XI, Specification 31 01 50 Shoring (Sheeting and Bracing)
- O. Section XI, Specification 31 23 19 Dewatering
- P. Section XI, Specification 31 25 00 Erosion and Sediment Control
- Q. Section XI, Specification 32 12 16 Hot-Mix Asphalt Pavement
- R. Section XI, Specification 32 92 26 Topsoil and Seeding
- S. Section XI, Specification 32 93 00 Exterior Plants

1.03 REFERENCES

- A. ASTM International (ASTM):
 - 1. ASTM C 33 Standard Specification for Concrete Aggregates
 - 2. ASTM C 88 Standard Test for Soundness of Aggregates by Use of Sodium Sulfate or Magnesium Sulfate
 - 3. ASTM C 127 Test Method for Specific Gravity and Absorption of Coarse Aggregate
 - 4. ASTM C 131 Standard Test Method for Resistance to Degradation of Small-Size Coarse Aggregate by Abrasion and Impact in the Los Angeles Machine
 - 5. ASTM C 136 Sieve Analysis of Fine and Coarse Aggregates
 - 6. ASTM D 422 Standard Test Method for Particle-Size Analysis of Soils
 - 7. ASTM D 535 Test Method for Resistance to Degradation of Large-Size Coarse Aggregate by Abrasion and Impact in the Los Angeles Machine
 - 8. ASTM D 698 Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Standard Effort (12,400 ft-lbf/ft3)
 - 9. ASTM D 854 Test Method for Specific Gravity of Soils
 - 10. ASTM D 1140 Amount of Material in Soils Finer than the No. 200 (75-micrometer) Sieve
 - 11. ASTM D 1557 Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Modified Effort (56,000 ft-lbf/ft3)
 - 12. ASTM D 2216 Standard Test Methods for Laboratory Determination of Water (Moisture) Content of Soil and Rock by Mass
 - 13. ASTM D 2487 Standard Classification of Soils for Engineering Purposes (Unified Soil Classification System)

- 14. ASTM D 2974 Standard Test Method for Moisture, Ash, and Organic Matter of Peat and Other Organic Soils
- 15. ASTM D 3017 Standard Test Method for Water Content of Soil and Rock by Nuclear Methods (Shallow Depth)
- 16. ASTM D 3740 Standard Practice for Minimum Requirements for Agencies Engaged in the Testing and/or Inspection of Soil and Rock as Used in Engineering Design and Construction
- 17. ASTM D 4318 Standard Test Methods for Liquid Limit, Plastic Limit, and Plasticity Index of Soils
- 18. ASTM D 4972 Standard Test Method for pH of Soils
- 19. ASTM D 5101 Standard Test Method for Measuring the Soil-Geotextile System Clogging Potential by the Gradient Ratio
- 20. ASTM D 6938 Standard Test Methods for In-Place Density and Water Content of Soil and Soil-Aggregate by Nuclear Methods (Shallow Depth)
- B. New York State Department of Transportation Standard Specifications (NYSDOT SS) latest edition.
- C. DER-10/Technical Guidance for Site Investigation and Remediation (New York State DEPARTMENT of Environmental Conservation, DEC Program Policy, issued May 3, 2010).
- D. New York Codes, Rules, and Regulations (NYCRR): 6 NYCRR Part 375.
- E. Other applicable Federal, State, or local regulations.

1.04 SUBMITTALS

- A. Submit to the ENGINEER/DEPARTMENT for approval the following in accordance with Section X, Specification 01 33 00 Submittal Procedures:
 - 1. Borrow Source(s): The CONTRACTOR shall provide the proposed source(s) for borrow material prior to initiation of work. Soil shall be sampled and analyzed for the full Target Compound List (TCL) in accordance with DER-10. The laboratory chosen shall be New York State Environmental Laboratory Approval Program (NYS ELAP) certified following current Analytical Services Protocols (ASPs). Available/previous laboratory testing data may be provided for consideration.
 - 2. CONTRACTOR's Quality Control Testing Laboratory: The name and qualifications of an independent third-party commercial testing laboratory to be used for borrow source and in-place soil/construction materials testing shall be submitted as soon as possible, but no later than 7 days following notice to proceed.
 - 3. Submit in writing a description of the equipment and methods proposed to be used for compaction.
 - 4. Test Reports: Submit 2 copies of the following reports from the testing laboratory to the ENGINEER and the DEPARTMENT, with copy to the CONTRACTOR:

- a. All test reports for borrow source materials. The testing includes geotechnical properties and environmental sampling as specified in Sub-Part 2.05.
- b. At least one moisture density curve for each type of borrow source material and native soil to be utilized.
- c. Field in-place density (compaction) test reports. The test reports shall include the test methods used, results, a narrative of tests conducted, locations, elevations, material tested, equipment used, the name of the technician conducting the tests, and a signed certification from the laboratory.

1.05 JOB CONDITIONS

- A. Site Information:
 - 1. Subsurface soil test pit and boring logs are included in the Limited Site Data document. However, variations may exist in the subsurface conditions between boring locations. Data provided on subsurface conditions are not intended as representations or warranties of accuracy or continuity between soil borings. It is expressly understood that neither the DEPARTMENT nor the ENGINEER will be responsible for interpretations or conclusions drawn from there by CONTRACTOR. Data are made available for the convenience and information of the CONTRACTOR. Additional test borings and other exploratory operations may be made by CONTRACTOR at no cost to DEPARTMENT.
- B. Existing Utilities
 - 1. The CONTRACTOR shall locate existing underground utilities in the areas of work. If utilities are to remain in place, provide adequate means of protection during earthwork operations.
 - 2. Should uncharted, or incorrectly charted, piping or other utilities be encountered during excavation, consult the Utility Owner immediately for directions. Cooperate with Owner and utility companies in keeping respective services and facilities in operation. The CONTRACTOR shall repair damaged utilities to satisfaction of the Utility Owner.
 - 3. Do not interrupt existing utilities serving facilities occupied and used by Owner or others, except when permitted in writing by ENGINEER/DEPARTMENT and then only after acceptable temporary utility services have been provided.
 - 4. See Section XI, Specification 00 33 00 Existing Conditions for additional information.
- C. Use of Explosives:
 - 1. Use of explosives shall not be allowed.
- D. Protection of Persons and Property:
 - 1. Barricade and mark open excavations occurring as part of this work in accordance with applicable standards.

- 2. Protect structures, utilities, sidewalks, pavements, and other facilities designated to remain from damage caused by settlement, lateral movement, undermining, washout, and other hazards created by earthwork operations and truck traffic.
- 3. Refer to Section X, Specification 01 71 33 Protection of Work and Property for additional requirements.

1.06 DEFINITIONS

- A. Contaminated Soil/Material:
 - 1. Contaminated soils/materials include but are not limited to materials that contain PCBs or metals as noted by visual observation and/or testing.
 - 2. The extent of contamination to be removed was determined by a Remedial Investigation/Feasibility Study and pre-design site investigation. The limit of excavation shown on the Construction Contract Drawings is based on that information.
- B. Unsatisfactory Soil/Material: Unsatisfactory soils/materials include but are not limited to peat and/or highly organic soils (classified as OL, OH, or PT by ASTM D 2487), stumps/brush, trash, refuse, debris, frozen soils, soils containing materials greater than the allowable size (see below), saturated soils, fine-grained soils above their liquid limit at the time of compaction, and soils which when left in place are either too wet or too dry to compact, as determined by the ENGINEER/DEPARTMENT.
- C. Satisfactory Soil/Material: Satisfactory soils/materials shall meet the requirements specified in Part 2 of this Section and shall be used in areas as shown on the Construction Contract Drawings or as directed by the ENGINEER/DEPARTMENT. In addition, satisfactory soils/materials shall satisfy the following conditions:
 - 1. Satisfactory soils/materials shall be free of all Unsatisfactory Soil/Material conditions listed above.
 - 2. Satisfactory soils from on-site sources shall be free of material greater than 6 inches any direction, unless otherwise specified or approved by the ENGINEER/DEPARTMENT. Furthermore, the maximum particle size shall not exceed ½ of the specified maximum lift thickness and contain a maximum of 50% (by weight) passing the 200 sieve, unless otherwise specified.
 - 3. Satisfactory soils from off-site borrow sources shall be free of materials greater than 6 inches in any direction, unless otherwise specified or approved by the ENGINEER/DEPARTMENT. Furthermore, the maximum particle size shall not exceed ½ of the specified maximum lift thickness and contain a maximum of 50% (by weight) passing the 200 sieve, unless otherwise specified.
 - 4. Environmental sampling will be conducted on all soil materials provided as backfill to show conformance to NYSDEC Unrestricted Use Soil Cleanup Objective prior to acceptance and delivery of soil materials to the site. Soils will be tested for the full Target Compound List (TCL), including volatile organic compounds, semi-volatile organic compounds, PCBs, metals, pesticides/herbicides, per- and Polyfluorooctanoic acid (PFAS), and 1-4 Dioxane as described paragraph 1.07D.

- D. Cohesionless and Cohesive Soils: Cohesionless soils include gravels, sand-gravel mixtures, sands, and gravelly-sands, classified as GW, GP, SW, or SP by the Unified Soil Classification System (ASTM D 2487). Cohesive soils include clayey gravels, sand-clay mixtures, clayey sands, clays, and silts, classified as GC, SC, CL, CH, ML, or MH by the Unified Soil Classification System (ASTM D 2487). Soils classified as GM and SM will be identified as cohesionless only when the "fines" are determined to be non-plastic. Testing required for the classification of soil shall be in accordance with ASTM D 4318, ASTM C 136, ASTM D 422, and ASTM D 1140.
- E. Degree of Compaction: Degree of compaction (percent compaction) required is expressed as a percentage of the maximum dry density, at the optimum moisture content. The maximum dry density and optimum moisture content shall be obtained by the test procedure presented in ASTM D 698 as specified.
- F. Excavation Limit: The horizontal and vertical limits of impacted soil and remediation waste as defined on the Construction Contract Drawings based on investigation data. Excavation Limit may increase based on the results of pre-construction characterization sampling and post excavation confirmation sampling.

1.07 QUALITY ASSURANCE

- A. Codes and Standards: Perform excavation work in compliance with applicable requirements of governing authorities having jurisdiction.
- B. The DEPARTMENT and the ENGINEER reserve the right to inspect proposed sources of off-site granular material and to order such tests of the materials deemed necessary to ascertain its quality and gradation of particle size. The CONTRACTOR shall, at its own expense, engage an approved testing laboratory to perform such tests, and submit certified test results to the ENGINEER. If similar tests of the material from a particular source were performed previously, submit results of these tests to the ENGINEER for consideration.
- C. No materials shall be used on this project for fill, backfill, subbase, or other purpose until approval is obtained from the ENGINEER. Only material from approved sources shall be used.
- D. Imported soil material shall be sampled and analyzed for the full TCL in accordance with DER-10 and following EPA SW 846 methods. Analytical results shall be provided to the ENGINEER prior to delivery. Sampling frequency shall be in accordance with DER-10. The CONTRACTOR shall demonstrate that imported fill and topsoil are clean and does not exceed the most stringent NYSDEC Part 375 unrestricted use soil cleanup objectives for compounds including, but not limited to: volatile organic compounds, semi-volatile organic compounds, PCBs, metals, pesticides/herbicides, per- and Polyfluorooctanoic acid (PFAS), and 1-4 Dioxane. Refer to Table 01 45 28-2 in Section XI, Specification 01 45 28 Chemical Sampling and Analysis for sampling frequency and analytical methods.

- E. The CONTRACTOR shall provide in place moisture-density testing for compaction of material to verify the quality of the work.
- F. The CONTRACTOR shall adopt compaction methods which will produce the degree of compaction specified herein, prevent subsequent settlement, and provide adequate support for the structures and piping to be placed thereon, or therein, without damage to the new or existing facilities.

1.08 RE-USE AND DISPOSAL OF EXCAVATED MATERIALS

- A. Re-Usable Soil:
 - 1. Soil in areas that do not require excavation because they do not contain PCBs greater than 1 ppm, can be used as backfill in excavated areas to enable meeting requirements of the final restoration plan. These areas shall be approved by the Engineer.
 - 2. Soil (mostly gravel) on the City of Batavia property, shallower than two above the bottom elevation in the various excavation areas can be reused as backfill from location that it is excavated. These areas were previously excavated and backfilled with clean imported material, however, the cleanup objectives at the bottom of the excavations were not met.
 - 3. No other material within the limits of work may be reused on site for backfill without approval by the ENGINEER and the DEPARTMENT and sampling indicates that the material meets the cleanup criteria and meets the requirements in Part 3.09 of this section.
- B. Contaminated Soil/Material:
 - 1. The designated Contaminated soils/materials removed from the excavation limits indicated on the Construction Contract Drawings shall be transported and properly disposed as per Section XI, Specification 02 81 00 Off-Site Transportation and Disposal.

PART 2 – PRODUCTS

2.01 GENERAL

- A. The ENGINEER will determine acceptability of the excavated overburden material for backfill. The CONTRACTOR will be required to bring in material from off-site sources.
- B. Off-site material required for fill or backfill of excavations shall be natural material, from off-site sources, free from trash, debris, deleterious materials, snow, or ice.

2.02 SUBGRADE FILL

A. Subgrade Fill shall be used to achieve the subgrade elevations indicated on the Construction Contract Drawings. Subgrade Fill shall consist of earth, suitable for

embankment construction. It shall be free from frozen materials, perishable rubbish, peat, and other Unsatisfactory Soil/Material. It shall be of such a nature and character that it can be compacted to the specified density (Sub-Part 3.10).

- B. See Specification 32 92 26 Topsoil and Seeding for additional requirements related to Topsoil testing.
- C. The moisture content shall be sufficient to provide the required compaction and a stable embankment. In no case shall the moisture content exceed 4% above optimum, which shall be determined in accordance with ASTM D 698.
- D. Materials obtained from on-site excavations and/or re-grading may be re-used on site as Subgrade Fill, subject to the following criteria and/or limitations:
 - 1. Contaminated Soil/Material: May not be used as Subgrade Fill.
 - 2. Satisfactory Soil/Material: All Subgrade Fill shall meet the requirements of Satisfactory Soils/Materials in accordance with Part 1.06 of this Section.
- E. Subgrade Fill shall not be imported to the Site or transported off the Site without specific written authorization from the ENGINEER/DEPARTMENT.
 - 1. During the work, the CONTRACTOR shall notify the ENGINEER/DEPARTMENT of a potential shortage (or excess) of on-site Subgrade Fill materials necessary to achieve the subgrade elevations required to complete the work.

2.03 CRUSHED STONE AND SAND

- A. Crushed Stone shall be used for vehicle decontamination pad installations. 3/8" crushed stone shall consist of material meeting the requirements of NYSDOT SS Type1A.
- B. SAND used in the construction of decontamination pads shall consist of material meeting the requirements of NYSDOT SS 703-03, Mortar Sand.

2.04 GRAVEL SUBBASE

- A. Gravel Subbase shall be provided beneath hot-mix asphalt paved parking areas for pavement replacement as shown on the Construction Contract Drawings.
- B. Gravel Subbase shall meet the requirements of NYSDOT SS Type 2 aggregate.

2.05 BORROW SOURCE TESTING

A. Borrow source testing, including geotechnical characterization requirements, shall be conducted on all soil materials proposed for construction. Third-party geotechnical laboratory testing requirements and frequency for materials shall be as listed below.

B. 3/8" Crushed Stone:

	<u>Test⁴</u> Sieve Analysis	<u>Methodology¹</u> ASTM C 136	<u>Frequency²</u> 1 test/source/material
C.	Gravel Subbase:		
	<u>Test⁴</u> Particle-Size Analysis (to #200 Sieve)	Methodology ¹ ASTM D 422	<u>Frequency²</u> 1 test/source/material
	Standard Proctor	ASTM D 698	1 test/source/material
D.	Subgrade Fill:		
	Test	Methodology ¹	Frequency ²
	<u>Test</u> Particle-Size Analysis (to #200 Sieve)	Methodology ¹ ASTM D 422	<u>Frequency²</u> 1 test/source/material
	Particle-Size Analysis		
	Particle-Size Analysis (to #200 Sieve)	ASTM D 422	1 test/source/material
	Particle-Size Analysis (to #200 Sieve) Standard Proctor	ASTM D 422 ASTM D 698	1 test/source/material 1 test/source/material
	Particle-Size Analysis (to #200 Sieve) Standard Proctor TCL VOCs TCL SVOCs PFAs	ASTM D 422 ASTM D 698 8260B	1 test/source/material 1 test/source/material Note 3
	Particle-Size Analysis (to #200 Sieve) Standard Proctor TCL VOCs TCL SVOCs PFAs TCL Pesticides/PCBs	ASTM D 422 ASTM D 698 8260B 8270C EPA 1633 8081/8082	1 test/source/material 1 test/source/material Note 3 Note 3 Note 3 Note 3
	Particle-Size Analysis (to #200 Sieve) Standard Proctor TCL VOCs TCL SVOCs PFAs TCL Pesticides/PCBs TAL Metals	ASTM D 422 ASTM D 698 8260B 8270C EPA 1633 8081/8082 6010B	1 test/source/material 1 test/source/material Note 3 Note 3 Note 3 Note 3 Note 3 Note 3
	Particle-Size Analysis (to #200 Sieve) Standard Proctor TCL VOCs TCL SVOCs PFAs TCL Pesticides/PCBs	ASTM D 422 ASTM D 698 8260B 8270C EPA 1633 8081/8082	1 test/source/material 1 test/source/material Note 3 Note 3 Note 3 Note 3

E. Notes:

- Other testing methods may be considered acceptable, based on prior approval of the 1. ENGINEER/DEPARTMENT.
- 2. Testing frequency shall be as listed, at any change in borrow source, or at any discernable change in material delivered to the site (as determined by the ENGINEER/DEPARTMENT).
- Sampling frequency shall be in accordance with DER-10 Table 5.4(e)(10). Per DER-3. 10, discrete samples must be collected for VOCs and composite samples must be collected for SVOCs, pesticides/PCBs, and inorganics.
- 4. Sieve analysis required for No. 80 sieve. Consistent with DER-10 Paragraph 5.4(e)(5), material other than Subgrade Fill imported for use as backfill requires chemical testing (i.e., full TCL) if it contains more than 10% by weight passing through a size 80 sieve. If chemical testing is required, chemical testing shall be as specified in Sub-Part 2.05(D).

PART 3 – EXECUTION

3.01 INSPECTION

A. Examine the areas and conditions under which excavating, filling, and grading are to be performed and notify the ENGINEER/DEPARTMENT, in writing of conditions detrimental to the proper and timely completion of the work. Do not proceed with the work until unsatisfactory conditions have been corrected in an acceptable manner.

3.02 EXCAVATION

- A. General: Excavation consists of removal and disposal of material encountered when establishing required subgrade elevations. During construction, excavation shall be performed in a manner and sequence that will provide proper drainage at all times.
- B. Most material to be excavated for the project is soil impacted with Polychlorinated biphenyls (PCBs) with total concentrations above the Restricted Residential SCO of 1 part per million and up to 560 parts per million. In addition, impacted soil may also contain metals including cadmium, copper, lead, and mercury at concentrations that exceed the respective Restricted Residential Soil Cleanup Objectives (SCOs) listed in Specification 01 45 28, Attachment 4.
- C. Site Excavation:
 - 1. Conform to elevations and dimensions shown on the Construction Drawings within a vertical tolerance of one tenth of a foot (0.1 foot).
 - 2. Final horizontal and vertical excavation limits shall be determined by confirmation testing results as described in Section XI, Specification 01 45 28 Chemical Sampling and Analysis and approved by the ENGINEER.

3.03 STABILITY OF EXCAVATIONS

- A. Slope sides of excavations to comply with applicable codes and ordinances. Shore and brace where sloping is not possible because of space restrictions or stability of material excavated.
- B. Maintain sides and slopes of excavations in a safe condition until completion of backfilling, or longer if specified or directed by the ENGINEER/DEPARTMENT.
- C. Where excavation sidewalls cannot be sloped properly to meet safety requirements, excavations must be supported by an engineered shoring system in accordance with Section XI, Specification 31 01 50 Shoring (Sheeting and Bracing).

3.04 SHORING AND BRACING

A. Provide materials for shoring and bracing, such as trench boxes, slide rail system, sheet piling, uprights, stringers, and cross-braces, in good serviceable condition.

- B. Establish requirements for excavation shoring and bracing to comply with codes and ordinances of authorities having jurisdiction.
- C. See Section XI, Specification 31 01 50 Shoring (Sheeting and Bracing) for additional information.

3.05 SOIL/MATERIAL HANDLING AND STORAGE

- A. During daily excavation activities, locate and retain soil materials away from edge of excavations. All temporary/daily stockpiles shall be maintained a sufficient distance from the excavation to prevent loading of the slope and to provide for stability of the slope.
- B. During excavation Soil/Material shall be segregated as non-contaminated, non-TSCA PCB impacted, TSCA PCB impacted, amended non-TSCA PCB impacted and amended TSCA PCB impacted as described in Specification 02 61 13 Impacted Soil Removal, Handling and Storage, and Specification 02 81 00 Off-Site Transportation and Disposal from Non-Contaminated Soil/Material.
- C. Excavated Soil/Materials from areas anticipated to contain high levels of lead, designated as either amended non-TSCA PCB impacted or amended TSCA PCB impacted, shall be tested for TCLP metals, and if needed mixed with amendments to render the soil nonhazardous based on additional TCLP metals results, prior to disposal as TSCA PCB-impacted or non-TSCA PCB impacted materials.
- D. If approved by the ENGINEER and DEPARTMENT, the CONTRACTOR may store/stockpile excavated materials within designated storage/stockpile areas established for the following soils/materials:
 - 1. Contaminated Soil/Material excavated during execution of the Work. Contaminated soil shall be segregated and stockpiled separately from soil expected to be clean.
 - 2. Imported soils and aggregates as required.
- E. The CONTRACTOR shall place, grade, and shape stockpiles to provide for proper drainage. Furthermore, stockpiles shall incorporate appropriate erosion and sedimentation controls in accordance with Section XI, Specification 31 25 00 Erosion and Sedimentation Control, to prevent the off-site migration of soil and sediments.
- F. Storage of Contaminated Soils/Materials:
 - 1. If approved by the ENGINEER and DEPARTMENT, onsite stockpile areas of Contaminated Soil/Material may be constructed to isolate contaminated material from the environment. The maximum individual stockpile size shall be 200 cubic yards. Stockpiles shall be constructed to include:

- a. A chemically resistant geomembrane liner. Non-reinforced geomembrane liners shall have a minimum thickness of 20 mils. Scrim reinforced geomembrane liners shall have a minimum weight of 40 lbs. per 1000 square feet. The ground surface on which the geomembrane is to be placed shall be free of rocks greater than 0.5 inches in diameter and any other object which could damage the membrane.
- b. Geomembrane cover to prevent precipitation from entering the stockpile. Nonreinforced geomembrane covers shall have a minimum thickness of 10 mils. Scrim reinforced geomembrane covers shall have a minimum weight of 26 lbs. per 1000 square feet. The cover material shall be anchored to prevent it from being removed by wind.
- c. Berms surrounding the stockpile, a minimum of 12 inches in height. Vehicle access points shall also be bermed.
- d. Storage and removal of liquid which collects in the stockpile shall be in accordance with Part 3.05E.3, "Liquid Storage".
- e. Inspection of the stockpile areas will be conducted on a weekly basis (at a minimum) or following a significant precipitation event and/or as requested by the ENGINEER/DEPARTMENT.
- 2. Roll-Off Units (Traditional or Intermodal to support transportation by rail):
 - a. Water-tight roll-off units may be used to temporarily store Contaminated Soil/Material.
 - b. An impermeable cover shall be placed over the units to prevent precipitation from contacting the stored material.
 - c. The units shall be located in the staging/storage area, as shown on the Construction Contract Drawings or as directed by the ENGINEER/DEPARTMENT.
 - d. Liquid which collects inside the units shall be removed and stored in accordance with Sub-Part 3.05E.3, "Liquid Storage".
- 3. Liquid Storage
 - a. Liquid collected from excavations and stockpiles shall be temporarily stored in 55-gallon barrels.
 - b. Liquid storage containers shall be water-tight and shall be located in the staging/storage area, as shown on the Construction Contract Drawings or as directed by the ENGINEER/DEPARTMENT.
- G. Dispose of soil material and waste materials as specified herein and in accordance with Section XI, Specification 02 81 00 Off-Site Transportation and Disposal.

3.06 COLD WEATHER PROTECTION

A. Protect excavation bottoms against freezing when atmospheric temperature is less than $35^{\circ}F$.

3.07 GRADING

- A. General: The CONTRACTOR shall uniformly grade areas within the limits of work. Smooth finished surface within specified tolerances, compact with uniform levels or slopes between points where elevations are shown, or between such points and existing grades.
- B. Finish surfaces to be free from irregular surface changes. For parking areas finish surface not more than one-half (1/2) inch above or below the required subgrade elevation.

3.08 SUBGRADE PREPARATION

- A. Remove vegetation, debris, unsatisfactory soil materials, obstructions, and deleterious materials from ground surface prior to placement of fills. Bench, plow, strip, scarify, or break-up sloped surfaces steeper than 1 vertical to 4 horizontal so that fill material will bond with existing surface.
- B. Subgrade Compaction:
 - 1. Paved Areas (e.g., parking areas, driveways):
 - a. Compact exposed subgrade surfaces to at least 95% of maximum dry density (determined in accordance with ASTM D 698).
 - b. Any loose, soft, wet, frozen, or otherwise unsuitable soils observed should either be re-compacted or undercut to a suitable subgrade, as determined by the ENGINEER/DEPARTMENT.
 - c. Any undercut/excavated material should be replaced/backfilled with granular Subgrade Fill. Fill materials should be placed and compacted as specified herein.

3.09 BACKFILL AND FILL

- A. General:
 - 1. Place acceptable soil material of the type indicated on the Construction Contract Drawings in layers to required subgrade elevations. Do not place backfill or fill material on surfaces that are muddy, frozen, or contain frost or ice. Placement of backfill or fill shall not be allowed.
 - 2. Verify that fill materials to be used are acceptable to that specified. Any crushed stone stockpiles which have undergone excessive particle segregation shall be removed prior to backfilling.
 - 3. Verify that all subsurface installations for the project have been inspected and are ready for backfilling.
 - 4. Generally, compact subgrade to density requirements for subsequent backfill materials. Cut out soft areas of subgrade not capable of in-situ compaction. Backfill with a material as specified in Part 205 (above) and compact to density equal to or greater than requirements for subsequent backfill material.
 - 5. Backfill spaces shall be inspected prior to backfilling operations and all unsuitable materials, including sheeting, bracing forms and debris, shall be removed. Remove all water, snow, and ice and debris from surfaces to accept backfill material. No backfill shall be placed against foundation walls of structural members unless they

are properly shored and braced or of sufficient strength to withstand lateral soil pressures.

- 6. Backfill material shall be inspected prior to placement and all roots, vegetation, organic matter, or other foreign debris shall be removed. Stones larger than two (2) inches in any dimension shall be removed or broken. Stones shall not be allowed to form clusters with voids.
- 7. Backfilling shall be started as soon as practicable as approved by the ENGINEER. Backfilling shall be carried on expeditiously thereafter. Backfill shall be started at the lowest section of the area to be backfilled. Natural drainage shall not be obstructed at any time.
- 8. No backfill material shall be placed on frozen ground nor shall the material itself be frozen or contain frozen soil fragments when placed unless approved by the ENGINEER. No calcium chloride or other chemicals shall be added to prevent freezing. Material incorporated in the backfilling operation which is not in satisfactory condition shall be subject to rejection and removal at the CONTRACTOR's expense.
- 9. Backfill material shall not be placed when moisture content is more than two percent above optimum or is otherwise too high to allow proper compaction. When material is too dry for adequate compaction, water shall be added to the extent necessary. Maintain within two percent of optimum moisture content of backfill materials to attain required compaction density.
- 10. All areas shall be backfilled to required contours, grades, and elevations.
- 11. Hydraulic compaction by ponding or jetting will not be permitted.
- 12. Compaction using heavy equipment will not be permitted.
- 13. Place and compact fill materials in continuous layers to meet appropriate requirements of Sub-Part 3.10.
- 14. Employ a placement and compaction method consistent with Sub-Part 3.10 that does not disturbed or damage adjacent walls, utilities, or underground conduits.
- 15. Remove surplus backfill materials from site.
- B. Backfill excavations as promptly as work permits, but not until completion of the following:
 - 1. Acceptance by ENGINEER/DEPARTMENT of the organic substrate application.
 - 2. Acceptance by the ENGINEER/DEPARTMENT of all subsurface installations, including the installation of the reagent inject point and infiltration piping as shown on the Construction Contract Drawings.
 - 3. Inspection, testing, approval, and recording locations of underground utilities.
 - 4. Removal of trash and debris.
- C. Fill/Backfill Placement:
 - 1. Place granular backfill and fill materials in layers not more than 12 inches in loose depth for material compacted by heavy compaction equipment (e.g., paved areas), unless otherwise specified.

- 2. Place granular backfill and fill materials in layers not more than 6 inches in loose depth for material compacted by hand-operated tampers or hydraulic equipment (e.g., pipe trenches), unless otherwise specified.
- D. Before compaction, moisten or aerate each layer as necessary to provide the optimum moisture content. Compact each layer to required percentage of maximum dry density (Subpart 3.10).
- E. Place backfill and fill materials evenly adjacent to structures, to required elevations. Take care to prevent wedging action of backfill against structures by carrying the material uniformly around structure to approximately same elevation in each lift.

3.10 COMPACTION

- A. General: Control soil compaction during construction providing minimum percentage of density specified for each area classification.
- B. Preparation:
 - 1. Brace walls and slabs of structures to support surcharge loads and construction loads imposed by compaction operations.
 - 2. Each layer of fill or backfill shall be compacted to the specified density the same day it is placed. The moisture content of backfill or fill material shall be adjusted, if necessary, to achieve the required degree of compaction.
 - 3. Match compaction equipment and methods to the material and location being compacted in order to obtain the specified compaction, with consideration of the following guidelines:
 - a. Vibratory compaction is preferred for dry, granular materials.
 - 4. Hand compaction equipment such as impact rammers, plate or small drum vibrators, or pneumatic buttonhead compactors should be used in confined areas.
 - 5. Hydraulic compaction by pounding or jetting will not be permitted except in unusual conditions, and then only upon written approval by the ENGINEER and after a demonstration of effectiveness.
- C. Compaction Requirements: Compact soil to not less than the percentages of maximum dry density (determined in accordance with ASTM D 698) and at the frequency of testing specified in in Table 31 00 00-1.
- D. The CONTRACTOR shall dig test holes and provide access to all backfill areas at no additional compensation when requested by the ENGINEER if an area has been covered without approval or is suspected of not meeting the specifications.
- E. For each test which does not meet the specifications, the CONTRACTOR shall pay for the cost of the test and shall replace all material included in that lift or sector with acceptable material and compact to specification, at no additional compensation.

- F. Nuclear moisture density testing by "probe" methods will be acceptable for compacted layers not exceeding 8 inches of thickness.
- G. Moisture Control:
 - 1. Where subgrade or a layer of soil material must be moisture conditioned before compaction, uniformly apply water to surface of subgrade, or layer of soil material, in proper quantities to prevent free water appearing on surface during or subsequent to compaction operations.
 - 2. Remove and replace, or scarify and air dry, soil material that is too wet to permit compaction to specified density.
 - 3. Soil material that has been removed because it is too wet to permit compaction may be stockpiled or spread and allowed to dry. Assist drying by discing, harrowing, or pulverizing until moisture content is reduced to a satisfactory level.
- H. Method:
 - 1. At depths greater than five (5) feet below final grade elevation, static methods of compaction may be employed using equipment capable of producing a kneading action applied with pressure (i.e. the bucket of the excavator may be used). The maximum loose lift depth shall be 12 inches.
 - 2. At depths of five (5) feet or less below final grade elevation, vibratory methods of compaction shall be employed to achieve the measured percentages of maximum density as indicated in Subpart 3.10.B. The maximum loose lift depth shall be 8 inches.
- I. Alternate Methods of Compaction The CONTRACTOR may employ alternate methods of compaction if the desired degree of compaction can be successfully demonstrated to the ENGINEER'S satisfaction

TABLE 31 00 00 - 1

Construction Element	Maximum Loose Lift Thickness (inches)	Minimum % Compaction (ASTM D 698)	Frequency of Testing
Vegetated Area	12	88	1 per 2,500 sf/lift
Paved Areas	8	98	1 per 1,250 sf/lift

MINIMUM COMPACTION REQUIREMENTS

3.11 GRAVEL SUBBASE IN PAVED AREAS

A. General: This work consists of placing Gravel Subbase, in layers of specified thickness, over subgrade surface to support pavements. See Section XI, Specification 32 12 16 – Hot Mix Asphalt Pavement for asphalt concrete pavement restoration.

- B. Grade Control: During construction maintain lines and grades, including crown and crossslope of Gravel Subbase.
- C. Placing: Place Gravel Subbase on prepared surfaces in layers of uniform thickness, conforming to indicated cross-section and thickness. Maintain optimum moisture content for compacting material during placement operations.
- D. When a compacted Gravel Subbase material is shown to be 8 inches thick or less, place material in a single layer. When shown to be more than 8 inches thick, place material in equal layers, except no single layer more than 8 inches or less than 3 inches in thickness when compacted.

3.12 FIELD QUALITY CONTROL TESTING

- A. Quality Control Testing During Construction:
 - 1. Testing shall be performed by a qualified, independent firm contracted and paid for in full by the CONTRACTOR.
 - 2. The CONTRACTOR shall be responsible for scheduling compaction testing.
 - 3. Allow testing service to examine and test subgrade surfaces and fill/backfill layers. Before further construction work is performed, test results meeting the requirements of Sub-Part 3.10B of this Section shall be obtained.
 - 4. Perform field density tests in accordance with ASTM D 6938 (nuclear method), or other ENGINEER/DEPARTMENT approved methods, as applicable.
 - 5. Only certified personnel will conduct nuclear testing.
 - 6. If in opinion of ENGINEER/DEPARTMENT, based on testing service reports and inspection, subgrade or fills which have been placed are below specified density, provide additional compaction and testing at no additional expense to the Owner.
- B. Tests and analysis of fill material will be performed in accordance with this section.
- C. If tests indicate the Work does not meet the specified requirements, the CONTRACTOR shall remove, replace, and retest the work at his own expense.

3.13 **PROTECTION**

- A. Prior to terminating work for the day, the final layer of compacted fill shall be rolled with a smooth-drum roller if necessary to eliminate ridges of soil and depressions left by tractors or equipment used for compaction or installing the material.
- B. As backfill progresses, the surface shall be graded so as to drain during incidence of rain such that no ponding of water shall occur on the surface of the fill.
- C. The CONTRACTOR shall not place a layer of fill on snow, ice or frozen soil. Unsatisfactory materials shall be removed prior to fill placement.

3.14 MAINTENANCE

- A. Protection of Graded Areas:
 - 1. Protect newly graded areas from traffic and erosion. Keep free of trash and debris.
- B. Repair and re-establish grades in settled, eroded, and rutted areas to specified tolerances.
- C. Reconditioning Compacted Areas:
 - 1. Where completed compacted areas are disturbed by subsequent construction operations or adverse weather, scarify surface, re-shape, and compact to required density prior to further construction.
- 3.15 DISPOSAL OF EXCESS AND WASTE MATERIALS
 - A. Remove waste materials, including excess and unacceptable excavated material, trash, and debris, and properly dispose of it off-site in accordance with Section XI, Specification 02 81 00 Off-Site Transportation and Disposal.

++ END OF SECTION ++

SPECIFICATION 31 01 50

SHORING (SHEETING AND BRACING)

PART 1 – GENERAL

1.01 DESCRIPTION

- A. Furnish and install an excavation support system or an engineered shoring system where called for on the Construction Contract Drawings, where directed by the ENGINEER for protection of existing features or structures, and where required to meet safety requirements of the U.S. Department of Labor's Construction Safety Act designated as Title 29-LABOR-Part 1926 Safety and Health Regulations for Construction, Subpart P, Sections 653 through 926.650.
- B. Excavations in areas where excavation sidewalls cannot be sloped properly to meet safety requirements must be supported by trench boxes, slide rail systems or a CONTRACTOR provided engineered shoring system (sheeting, shoring, bracing, or other methods).
- C. The planning, design, and monitoring of an engineered shoring systems shall be submitted and stamped by a structural/geotechnical engineer registered in the State of New York.

1.02 RELATED WORK SPECIFIED ELSEWHERE

- A. Section X, Specification 01 33 00 Submittal Procedures
- B. Section XI, Specification 31 00 00 Earthwork
- C. Section XI, Specification 31 25 00 Erosion and Sedimentation Control

1.03 QUALITY ASSURANCE

- A. The consequences of an excavation failure, the location/configuration/depth of the excavation, and the desire to limit the disturbance associated with the excavation necessitates the use of an excavation support system or engineered shoring system to safely support excavations during excavation and backfilling.
- B. Where an excavation shoring system is required to meet safety requirements, is called for on the Construction Contract Drawings, and/or is required by the ENGINEER/DEPARTMENT due to changed or unforeseen conditions, the CONTRACTOR shall provide appropriate support systems. For an engineered shoring system, a registered professional engineer shall design a system that will safely support the excavation and all adjacent structures/buildings during excavating and backfilling activities. In addition to the design of lateral support, the following points must be addressed in the design(s):

- 1. Stability of the excavation against blow-in or bottom heave;
- 2. Protection of adjacent structure(s) from settlement; and/or
- 3. Desire to minimize internal bracing to the extent practical in order to facilitate access to perform the work required within the excavation.

1.04 MONITORING

A. Perform optical and vibration monitoring during installation of the shoring system and subsequent excavation and compaction of fill.

1.05 SUBMITTALS

A. Submit a shoring plan, and if used, an engineered shoring system design plan, sealed by a registered New York Professional Engineer, to the ENGINEER for informational purposes at least 14 business days prior to beginning excavation work.

1.06 SITE INFORMATION

A. Subsurface soil boring information is also included in the Limited Site Data document. However, variations may exist in the subsurface conditions between boring locations. Data provided on subsurface conditions are not intended as representations or warranties of accuracy or continuity between soil borings. It is expressly understood that neither the DEPARTMENT nor the ENGINEER will be responsible for interpretations or conclusions drawn from there by CONTRACTOR. Data are made available for the convenience and information of the CONTRACTOR. Additional test borings and other exploratory operations may be made by CONTRACTOR at no cost to DEPARTMENT.

PART 2 – PRODUCTS

2.01 MATERIALS

- A. Trench box or slide rail system, as necessary, best adapted to site specific design requirements.
- B. Steel Sheeting: Interlocking type with section best adapted to site specific design requirements.
- C. Bracing/Walers, as necessary, best adapted to site specific design requirements.
- D. Anchors, as necessary, best adapted to site specific design requirements.

PART 3 – EXECUTION

3.01 INVESTIGATION/DATA COLLECTION

- A. Test pitting:
 - 1. Test pit, as deemed necessary, to gather information/data required to perform the shoring system design.
- B. Soil Sample and Testing:
 - 1. Perform in situ testing to identify soil properties, as required to perform the sheeting and shoring design.
 - 2. Collect soil samples and perform laboratory analysis to evaluate the soil properties, as required, to perform the sheeting and shoring system design.

3.02 INSTALLATION

- A. Sheeting and Shoring:
 - 1. Install shoring and/or sheeting and bracing in accordance with accepted practices and in compliance with State and Federal safety requirements.
 - 2. Furnish skilled and experienced workmen with adequate equipment to produce a safe structure.
 - 3. Provide shoring and/or sheeting prior to excavation to the depths required to excavations safely.
 - 4. Fill voids outside the driven sheeting and compact, as necessary, to hold trench sides in place.
- B. Withdrawal of Sheeting/Shoring:
 - 1. Remove as the work progresses in a manner to prevent loosening and caving of the sides of the excavation and to prevent damage to finished work or adjacent structures and property.
 - 2. Fill all voids as soon as sheeting is withdrawn.

++ END OF SECTION ++

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SPECIFICATION 31 11 00

CLEARING AND GRUBBING

PART 1 – GENERAL

1.01 DESCRIPTION

- A. Work Included:
 - 1. Clearing includes cutting at the ground surface trees and general woody growth including shrubs, bushes, vines, and general brush.
 - 2. Grubbing includes removal of vegetative cover (grass) with root systems, stumps with root systems, and other organic matter surficial or buried within the top organic layer (topsoil).
- B. Limit of Work:
 - 1. Perform clearing within the limit of clearing as shown on the Construction Contract Drawings.
 - 2. Before beginning remediation construction, grub within the limit of grading and additional areas as required to install the construction temporary facilities and controls.
- C. Clearing performed outside the defined limit of clearing is not permitted without permission of the ENGINEER or DEPARTMENT.

1.02 RELATED WORK SPECIFIED ELSEWHERE

- A. Section X, Specification 01 71 33 Protection of Work and Property
- B. Section X, Specification 01 45 29.13 Testing Laboratory Services Furnished by Contractor
- C. Section XI, Specification 01 45 28 Chemical Sampling and Analysis
- D. Section XI, Specification 02 81 00 Off-Site Transportation and Disposal
- E. Section XI, Specification 31 00 00 Earthwork
- F. Section XI, Specification 31 25 00 Erosion and Sedimentation Control

1.03 QUALITY ASSURANCE

A. Requirements of Regulatory Agencies:

- 1. Dispose of combustible material by burning only when in accordance with applicable local and state laws, ordinances, and code requirements.
- B. Remove and dispose of non-salvageable timber or structures, and material in accordance with applicable local and state laws, ordinances, and code requirements.

PART 2 – PRODUCTS

2.01 MATERIALS

- A. Wrapping materials:
 - 1. Burlap, in line with AASHTO M182.
 - 2. Polyethylene film, in line with ASTM D 2103.
 - 3. Paper.
- B. Herbicides: used only for treating poison ivy.

PART 3 – EXECURTION

3.01 PROTECTION

- A. Streets, Roads, Adjacent Property, Existing Facilities, and Other Works to Remain:
 - 1. Protect throughout the work and exercise care to avoid unnecessary damage.
 - 2. Clear and grub such that existing facilities and structures indicated to remain are not damaged. Repair damage to existing features and structures that are indicated or made known before the start of clearing and grubbing.
 - 3. Keep streets and roads accessible to emergency vehicles, patrols, and construction vehicles at all times.
- B. Utility Lines:
 - 1. Protect existing utility lines that are indicated to remain from damage.
 - 2. When utility lines to be removed or relocated are encountered within the area of clearing and grubbing operations, notify the associated utility company in ample time to minimize interruption of the service.
 - 3. Notify the ENGINEER and DEPARMENT immediately of damage to or an encounter with an unknown existing utility line.
 - 4. Repair damage to existing utility lines that are indicated or made known to the CONTRACTOR before the start of clearing and grubbing.

3.02 PERFORMANCE

A. Layout and Marking:

- 1. Employ a New York State licensed surveyor to field locate and mark the property boundaries.
- 2. Flag the clearing limit as delineated on the Construction Contract Drawing.
- B. Clearing:
 - 1. Remove trees, shrubs, and brush above the ground surface within the Limit of Clearing.
 - 2. Segregate clearing debris, as required if on-site chipping is proposed.
 - 3. Cleared material may be stockpiled within the limit of work but outside the existing/new solid waste boundary until off-site disposal is arranged.
- C. Grubbing:
 - 1. Remove stumps, roots over 2 inches in diameter, matted roots, and vegetative matter including grasses and weeds within the limit of grading.
 - 2. Segregate grubbings (e.g. stumps) greater than 6 inches in diameter from other grubbed materials.
 - 3. Stockpile grubbings and characterize for proper off-site disposal in accordance disposal facility requirements. Keep stockpile covered to prevent wind-blown dust.
- D. Disposal:
 - 1. Consider cleared vegetation as non-impacted waste. Remove from the Site and legally dispose of the vegetation. Alternately, smaller cleared material may be chipped and disposed on-site in a location approved by the ENGINEER and DEPARTMENT.
 - 2. Consider grubbed materials, including roots and stumps, as impacted and properly dispose off-site following Section XI, Specification 02 81 00 Off-Site Transportation and Disposal.
 - 3. Burning of woody materials is not permitted unless approved by the DEPARTMENT and required local permits are obtained.

3.03 RESTORATION

A. Restore items damaged by this work to their original condition.

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SPECIFICATION 31 23 19

DEWATERING

PART 1 – GENERAL

1.01 DESCRIPTION

A. As necessary furnish, operate, and maintain dewatering measures and/or equipment for the control, collection, and disposal of ground and surface water entering trenches, excavations, and during backfilling. Disposal of construction generated water may be by treatment and disposal to the sanitary sewer with required permit approval or transportation and proper offsite disposal; refer to Section XI, Specification 02 72 00 – Construction Water Management.

1.02 RELATED WORK SPECIFIED ELSEWHERE

- A. Section X, Specification 01 33 00 Submittal Procedures
- B. Section XI, Specification 02 72 00 Construction Water Management
- C. Section XI, Specification 31 00 00 Earthwork
- D. Section XI, Specification 31 25 00 Erosion and Sedimentation Control

1.03 SUBMITTALS

A. Prior to excavation in areas where dewatering may be required, submit the dewatering and discharge and/or disposal methods which are to be utilized to the ENGINEER/ DEPARTMENT for review.

PART 2 – PRODUCTS

2.01 GENERAL

- A. Provide, operate, and maintain a dewatering system to remove all water from excavations and trenches using sumps, pumps, drains, well points, piping, and any other facilities necessary to keep the excavations and trenches free of water, as required by these Specifications or by the ENGINEER/DEPARTMENT. Have spare units available for immediate use in the event of equipment breakdowns.
- B. Provide diversion/barrier measures to prevent surface water from entering excavations.

C. Excavation areas must be dry during the collection of confirmation sampling and during backfilling operations.

PART 3 – EXECUTION

3.01 PERFORMANCE

- A. General:
 - 1. Keep excavations and trenches dry to allow for confirmation sampling and backfill of soil to be conducted in the dry to allow for appropriate compaction.
 - 2. Perform dewatering work continuously as necessary to keep the site in an orderly condition at no additional cost to the DEPARTMENT.
 - 3. Segregate and contain in separate fractional tanks/containers, groundwater or surface water collected from dewatering operations that has been in contact with contaminated soil or materials from water collected from non-contact (not impacted by contaminated soil or materials) dewatering operations. Water collected from non-contact dewatering operations, may at the approval of the ENGINEER, be used for site operations such as dust control to decontaminating equipment.
- B. Disposal/Discharge of Water:
 - Sampling, Analysis, and Containment. All collected water shall be sampled and analyzed prior to discharge after treatment. Analysis for treated contaminated water to be discharged to the municipal sanitary sewer shall meet the requirements of the Batavia Department of Water and Wastewater discharge requirements. Analysis for treated contaminated water to be discharged to surface water shall meet the requirements of the SPDES Equivalent Permit. Additional sampling information provided in Specification 02 72 00 – Construction Waster Management and in 01 45 28 – Chemical Sampling Analysis.
 - 2. Treatment. On-site treatment systems for contaminated water shall require approval by the ENGINEER/DEPARTMENT. The proposed treatment shall be specified in the Work Plan and submitted for approval. Refer to Section XI, Specification 02 72 00 – Construction Water Management for additional requirements.
- C. Damage:
 - 1. All damage resulting from the dewatering operations or the failure of the CONTRACTOR to maintain the Work in a suitable dry condition shall be repaired by the CONTRACTOR, at no additional cost to the DEPARTMENT.
 - 2. Take all necessary precautions to protect new work from flooding during storms or from other causes.
 - 3. Thoroughly brace or otherwise protect all pipelines and structures which are not stable, against floatation, when necessary.
- D. Diversion Berms/Barriers:
 - 1. Design, construct, maintain, relocate as required, and remove diversion berms or

barriers where necessary for diverting runoff away from open excavations and trenches to minimize the generation of liquid wastes

- 2. Design and construct diversion berms or barriers to withstand all imposed loads to prevent injury to adjacent structures or property.
- E. Temporary Under Drains:
 - 1. When necessary, lay temporary under drains in the excavation.
 - 2. Excavate trenches to suitable dimensions to provide space for the under drains and surrounding gravel.
 - 3. Install under drains a distance of at least 3 inches below the bottom of the pipe or structure and the top of the bells of the under drainpipes.
 - 4. Under drainpipe shall be concrete, HDPE, or PVC pipe of standard thickness with open joints wrapped in geotextile fabric to prevent the admission of sand and other soil. Sewer pipe of the quality known as "seconds" will be acceptable.
 - 5. Entirely surround the under drain and fill the space between the under drain and the pipe or structure with crushed stone.
 - 6. Compact the crushed stone, if necessary, and leave the surface suitable for laying the pipe or building the structure.

3.02 DEWATERING THE CONSTRUCTION SITE

- A. Dewater excavations or trenches, and other parts of the construction site and keep free of standing water or excessively muddy conditions as needed for proper execution of the construction Work.
- B. Furnish, install, operate, and maintain all drains, sumps, pumps, and other equipment needed to perform the dewatering as specified.
- C. Dewatering methods that cause a loss of fines adjacent to foundation areas will not be permitted.
- D. Discharge of water pumped from excavations shall be limited to appropriate on-site storage containers, until water is properly treated, sampled and discharged.

3.03 REMOVAL OF TEMPORARY WORKS

- A. After the temporary works have served their purposes, remove them to prevent obstruction of the flow of water from storm events to the wetlands.
- B. Remove any temporary under drainpipes and well-point dewatering systems.

++ END OF SECTION ++

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SPECIFICATION 31 25 00

EROSION AND SEDIMENTATION CONTROL

PART 1 – GENERAL

1.01 DESCRIPTION

- A. Work Included: Provide and install all materials, equipment, and labor necessary for the removal of storm runoff/surface water and to place erosion and sedimentation control measures in accordance with the applicable erosion and sediment control regulatory requirements and standards, as shown on the Construction Contract Drawings and specified herein. At the completion of the construction, provide all materials, equipment, and labor necessary for the removal, transport and disposal of temporary erosion and sediment control structures not specified to remain. Downgradient from disturbed areas, remove, transport, and dispose of sediment resulting from erosion control measures in a manner consistent with overall intent of this specification and which does not result in additional erosion.
- B. Provide and install all erosion and sediment control measures in accordance with the applicable erosion and sediment control regulatory requirements, standards and specifications and as required by field conditions during the execution of the Work. Conducting the Work in accordance with the control measures shown on the Construction Contract Drawings does not relieve the CONTRACTOR of responsibility for completing the Work in a manner that minimizes erosion when field conditions occur that require additional or different measures.
- C. Temporary erosion and sediment control measures shall be installed as the first step in construction, shall be continuously maintained, and shall not be removed until permanent surface stabilization of all disturbed areas is to the ENGINEER's or DEPARTMENT's satisfaction.
- D. Permanent controls or surface stabilization shall commence within 5 days of completion of filling and grading activities.
- E. Not all erosion and sedimentation control measures described in this specification are shown or referenced on the Construction Contract Drawings. Other measures as described and specified herein may be used to augment the proposed measures referenced on the Construction Contract Drawings based on actual field conditions encountered.

1.02 RELATED WORK SPECIFIED ELSEWHERE

- A. Section X, Specification 01 33 00 Submittal Procedures
- B. Section X, Specification 01 71 33 Protection of Work and Property

- C. Section X, Specification 01 76 50 Nuisance Controls
- D. Section XI, Specification 01 11 00 Summary of Work
- E. Section X1; Specification 02 72 00 Construction Water Management
- F. Section XI, Specification 31 00 00 Earthwork
- G. Section XI, Specification 31 23 19 Dewatering
- H. Section XI, Specification 32 92 26 Topsoil and Seeding

1.03 REFERENCES AND GUIDELINES

- A. <u>New York Standards and Specifications for Erosion and Sediment Control</u>, July 2016 by the NYS Soil and Water Conservation Committee.
- B. <u>Standards Specifications, State of New York Department of Transportation</u>, by the New York State DEPARTMENT of Transportation (NYSDOT), latest edition.

1.04 REVIEW AND/OR INSPECTION OF SEDIMENTATION CONTROL MEASURES

A. All construction under this project shall be subject to review and/or inspection by the appropriate local, State, and Federal agencies responsible for ensuring the adequacy of sedimentation control measures.

1.05 SUBMITTALS

- A. The CONTRACTOR shall submit to the ENGINEER the following information:
 - 1. Manufacturer's data for catch basin inlet filters.
 - 2. Manufacturer's data on filter berm material.
 - 3. Manufacturer's data for silt fence and turbidity curtain if used.
- B. Submit a Winter Shutdown Inspection and Maintenance Plan to address any erosion and sedimentation issues that main arise during the winter months as detailed in 01 92 13 Winter Shutdown.

PART 2 – PRODUCTS

2.01 MATERIALS

A. Silt Fence:

1. Fabric – Silt fence geotextile shall meet the following properties:

Fabric Properties	Minimum Value	Test Method
Grab Tensile Strength (lbs)	90	ASTM D1682
Elongation at Failure (%)	50	ASTM D1682
Mullen Burst Strength (psi)	190	ASTM D3786
Puncture Strength (lbs)	40	ASTM D751
Slurry Flow Rate	0.3	
(gal/min/sf)		
Equivalent Opening Size	40-80	US Standard Sieve
Ultraviolet Stability (%)	90	ASTM G26

- 2. Fence Posts The length shall be a minimum of 36 inches long. Wood posts will be of sound quality hardwood with a cross sectional area of 3.0 square inches. Steel posts will be standard "T" or "U" section weighing not less than 1.0 pounds per linear foot.
- 3. Wire fence for reinforced silt fence (fabricated units) Wire fencing shall be a minimum 14-1/2 gauge with a maximum 6-inch mesh opening.
- 4. Prefabricated reinforced silt fence Envirofence or approved equal may be used for reinforced silt fence in lieu of reinforced fence fabricated with wire fence.
- B. Mulch: For protection of newly seeded areas where erosion control blanket is not used:
 - 1. Straw or hay free from primary noxious weed seeds and rough or woody materials and having not more than 15% moisture content. Provide hay or straw meeting the requirements of subsection 713-18 and/or 713-19 in the NYSDOT Standard Specifications.
 - 2. Wood chips used for mulch or erosion control shall not exceed 3 inches in the greatest dimension and shall meet the requirements of subsection 713-05 in the NYSDOT Standard Specifications.
 - 3. Wood fiber for use as mulch in conjunction with establishment of vegetation, shall meet the requirements of subsection 713-11 in the NYSDOT Standard Specifications.
- C. Hay Bales: Hay bales shall consist of rectangular-shaped bales of hay or straw weighing approximately 40 pounds per bale and shall be free from primary noxious weed seeds and rough or woody materials.
- D. Temporary Protective Sheeting: Temporary sheeting material shall consist of minimum 6mil polyethylene sheeting or a suitable approved alternative and of sufficient size to minimize seams.
- E. Seed for Erosion Control:

- 1. Temporary Control: Annual or perennial ryegrass or winter rye (cereal rye). Use winter rye if seeding in October or later.
- F. Filter Berm:
 - 1. Shall consist of shredded bark, stump grindings, composted bark, or acceptable manufactured products. Wood and bark chips, ground construction debris or reprocessed wood products will not be acceptable as the organic component of the mix.
 - 2. Erosion control mix shall contain a well-graded mixture of particle sizes and may contain rocks less than 4" in diameter. Erosion control mix must be free of refuse, physical contaminants, and material toxic to plant growth.
 - 3. Wood chips generated during clearing and grubbing may be used if deemed suitable by the ENGINEER.
- G. Turbidity Curtain
 - 1. Type I Economy Curtain.
 - 2. PVC Laminated polyester fabric of filter fabric skirt.
 - 3. 4-in expanded polystyrene (EPS) foam contained in individually sealed float pockets.
 - 4. 3/16-inch steel chain or tension cable.
 - 5. 3/16-inch galvanized ballast chain.
- H. Filter Sock
 - 1. The filter sock shall consist of a mesh tube (or sock) filled with a filter media consisting of wood waste compost/bark.
 - 2. The filter sock (inclusive of the mesh and filter media) shall be specifically designed for soil erosion and sedimentation control purposes.

PART 3 – EXECUTION

3.01 PERFORMANCE

- A. It is the CONTRACTOR's responsibility to implement and maintain erosion and sedimentation control measures which effectively prevent accelerated erosion and sedimentation.
- B. Earth moving activities shall be conducted in such a manner as to prevent accelerated erosion and sedimentation.
- C. Land disturbance shall be kept to a minimum. Stabilization activities shall be scheduled immediately after any disturbance.
- D. Diverting Surface Water:
 - 1. Build, maintain, and operate any temporary berms, barriers, ditches channels, flumes, sumps, and other temporary diversion and protection works needed to divert surface

water through or around the work area and away from open excavations and other Work until surface stabilization has occurred.

- 2. Storm runoff from disturbed areas must discharge through temporary erosion control measures shown on the Construction Contract Drawings prior to discharge from the Site.
- E. Erosion Control Provisions (as necessary):
 - 1. Protect areas where existing banks are to be disturbed by constructing straw/hay bale or earth dikes at the top of slope to divert storm runoff from the disturbed area or at the toe of the slope to retain sediments, as conditions permit.
 - 2. All discharge from any necessary pumping operations during dewatering operations shall be conveyed to an on-site storage tank for treatment. Discharge to surface water after treatment must not result in scouring or sedimentation of the downstream areas.
 - 3. Prior to removal of sediment barriers, remove retained silt or other materials at no additional cost to the Contract.
- F. Silt Fence: Install silt fence, if required, as a supplementary measure. The silt fence shall be installed on a level line (parallel to contours) to avoid concentrated flow areas along the fence. The area below the fence must be undisturbed or stabilized.
- G. Temporary Protective Sheeting: Soil stockpiles shall be protected with sheeting prior to forecasted significant rain events (0.5 inches or more) or as conditions require based on observed slope conditions. Overlap adjacent sheets by a minimum of 12 inches and securely anchor sheeting with sandbags and/or soil pegs, staples, or stakes.
- H. Filter Berms: Sediment barriers constructed from berms of erosion control mix, compost/bark, or compost-filled filter socks may be used at locations suitable for their use and as approved by the ENGINEER.
- I. Turbidity Curtain: Turbidity curtain may be required in lieu of other sediment barriers at locations suitable for their use where surface water depth in the wetlands adjacent to excavations is 2 feet or greater and as approved by ENGINEER.
- J. Mulch: Conduct mulching immediately following seeding. For the mulching type used, apply mulch materials at the rate specified in Table 3.7 and anchor as specified in Table 3.8 in the <u>New York Standards and Specifications for Erosion and Sediment Control.</u>
- K. Seed for Erosion Control:
 - 1. Temporary Seeding: Minimum application rate of ryegrass (annual or perennial) shall be 30 pounds per acre and minimum application rate for winter rye shall be 100 pounds per acre.

3.02 MAINTENANCE

- A. The CONTRACTOR shall be held responsible for the implementation and maintenance of all erosion control measures on the Site.
- B. Throughout construction and until the Site has been stabilized upon completion of the Work, all erosion and sediment control measures will require periodic inspection and maintenance to ensure that such measures are providing effective service. At a minimum, the following inspection and maintenance shall be required during execution of this project:
 - 1. All erosion and sediment control will be inspected at least once a week and after all rain events. Conduct required repairs to installed measures immediately to ensure continued effective operation.
 - 2. Remove sediment that has accumulated in the filter bag of the catch basin inlet filters when it has reached the capacity limit recommended by the manufacturer.
 - 3. Remove sediment that has accumulated behind the sedimentation fencing when it has reached a depth of approximately 0.5 feet deep or removed as needed when bulges develop in the fence. The sedimentation fence shall be repaired as necessary to maintain the barrier as intended.
 - 4. Sediment removed from control measures shall be collected and segregated as waste to be characterized, and properly disposed of off-site. No sediment shall be disposed of on-site.
 - 5. All seeded areas will be protected from traffic and shall receive appropriate watering during germination and growth establishment. Areas that do not establish a vigorous, dense vegetative cover (at least 85% surface coverage) shall be reseeded and mulched.
- C. During Winter Shutdown, site visits shall take place at least once every two weeks, or within 24 hours of a rainfall event greater than 0.5 inches. Inspection reports shall be submitted within 48 hours of the inspection and maintenance to address any erosion issues shall be conducted. A winter shutdown plan shall be prepared and approved by the ENGINEER and the DEPARTMENT.
- D. Maintain the integrity of all erosion control measures throughout construction period including winter shutdown.

3.03 SPECIAL CONDITIONS

- A. Prohibited Construction Practices Prohibited construction practices include but shall not be limited to the following:
 - 1. Dumping of spoil material into any stream corridor, any wetlands, any surface waters, storm drain system, or at any other unspecified locations.
 - 2. Indiscriminate, arbitrary, or capricious operation of equipment in any stream corridors, any wetlands, or any surface waters.
 - 3. Pumping of silt-laden water from trenches or other excavations into any surface waters, any stream corridors, any wetlands, or any storm drain system.
 - 4. Disposal of trees, brush and other debris in any stream corridors, any wetlands, any surface water or at unspecified locations.
 - 5. Permanent or unspecified alteration of the flow line of any stream.

6. Open burning of construction debris.

3.04 ADJUSTMENT OF PRACTICES

- A. If the planned measures do not result in effective control of erosion and sediment runoff to the satisfaction of the ENGINEER or regulatory agencies having jurisdiction over the project, the CONTRACTOR shall immediately adjust their program and/or institute additional measures so as to eliminate excessive erosion and sediment runoff.
- B. If the CONTRACTOR fails or refuses to comply promptly, the DEPARTMENT may issue an order stopping all or part of the work until satisfactory corrective action has been taken. No time lost due to any such stop orders shall be made the subject of a claim for extension of time or for excess costs or damages by the CONTRACTOR.

3.05 REMOVAL OF TEMPORARY WORKS

A. Remove or level and grade to the extent required to present an acceptable appearance and to prevent any obstruction of the flow of water or any other interference with the operation of or access to the restored site.

++ END OF SECTION ++

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SPECIFICATION 32 12 16

HOT-MIX ASPHALT PAVEMENT

PART 1 – GENERAL

1.01 DESCRIPTION

- A. The CONTRACTOR shall furnish all labor, equipment, materials, and incidentals necessary to construct one or more courses of hot-mix asphalt to patch, overlay, repair, and/or restore existing asphaltic concrete driveway, parking lot, and road pavements, in accordance with the lines, grades, thicknesses, and typical sections shown on the Construction Contract Drawings or as modified by the ENGINEER or DEPARTMENT.
- B. Hot-mix asphalt materials and workmanship shall be in accordance with the <u>Standards</u> <u>Specifications</u>, <u>State of New York</u>, <u>Department of Transportation</u>, latest edition.

1.02 RELATED WORK SPECIFIED ELSEWHERE

- A. Section X, Specification 01 33 00 Submittal Procedures.
- B. Section X, Specification 01 71 33 Protection of Work and Property.
- C. Section XI, Specification 02 81 00 Off-Site Transportation and Disposal.
- D. Section XI, Specification 31 00 00 Earthwork.

1.03 REFERENCES

- A. The publications listed below shall form part of this Section to the extent referenced. The most recent issue of each publication shall apply, unless otherwise noted. The publications are referred herein by the basic designation only.
 - 1. American Association of State Highway and Transportation Officials (AASHTO)
 - a. MP1 Standard Specification for Performance-Graded Asphalt Binder.
 - 2. ASTM International (ASTM):
 - a. ASTM D 3549 Standard Test Method for Thickness or Height of Compacted Bituminous Paving Mixture Specimens.
 - b. ASTM D 6690 Standard Specification for Joint and Crack Sealants, Hot Applied, for Concrete and Asphalt Pavements.
 - 3. New York State Department of Transportation (NYSDOT):
 - a. NYSDOT SS <u>Standards Specifications, State of New York, Department of</u> <u>Transportation</u>, latest edition.

1.04 SUBMITTALS

- A. The CONTRACTOR shall submit the following items to the ENGINEER and DEPARTMENT in accordance with Section X, Specification 01 33 00 Submittal Procedures:
 - 1. Job Mix Formula (JMF): For each proposed mix, submit JMF to the ENGINEER and DEPARTMENT for approval at least 14 days prior to hot-mix asphalt paving operations. Include the following information, at a minimum:
 - a. Mix type.
 - b. Proposed plant.
 - c. Source(s) and gradations of coarse and fine aggregate, mineral filler, and recycled materials, as applicable.
 - d. Percentage of each aggregate, filler, and recycled material combined to produce JMF.
 - e. Type and source of Performance-Graded Binder (PG Binder).
 - f. Manufacturer's/supplier's certification that the PG Binder meets the Project specifications.
 - g. Recent (within the past year, relative to proposed placement date) mix design report.
 - h. Recent (within the past month, relative to proposed placement date) production quality control reports/data.
 - 2. Tack Coat/Joint Sealant: For each item, submit the following data to the ENGINEER and DEPARTMENT for approval at least 10 days prior to hot-mix asphalt paving operations:
 - a. Manufacturer's name.
 - b. Trade name of the product.
 - c. Manufacturer's/supplier's certification that the tack coat/joint sealant meets the project requirements.
 - d. Maximum heating temperature.
 - e. Minimum application temperature.
 - 3. Production Quality Control: Submit the following items/data daily (during production) to the ENGINEER and DEPARTMENT for each mix supplied:
 - a. Plant production monitoring/quality control data, including temperature, extraction, gradation, theoretical maximum specific gravity/density, bulk specific gravity/density, percent voids, stability, and flow.
 - b. Batch tickets.
 - c. Delivery tickets, with:
 - i. Ticket No.
 - ii. Mix identification/description, including PG Binder grade.
 - iii. Delivered quantity.
 - iv. Date and time.

1.05 QUALITY ASSURANCE/QUALITY CONTROL

- A. Plant Qualifications: The plant shall be a hot-mix asphalt manufacturer regularly engaged in the production of hot-mix and hot-laid asphalt pavement.
- B. All materials used in the Work shall meet or exceed the requirements of Section 700 of the NYSDOT SS, unless otherwise noted.

1.06 PROTECTION OF FACILITIES

- A. The CONTRACTOR shall protect existing site features, including utilities, trees, vegetation, drainage ways, and walls, which are to remain. The CONTRACTOR shall employ similar precautions, as necessary, to prevent damage to or pollution of adjoining properties or rights of way. Refer to Section X, Specification 01 71 33 Protection of Work and Property for additional requirements.
- B. The CONTRACTOR shall use the necessary precautions to prevent damage to pipes, conduits, and other underground facilities.
- C. The CONTRACTOR shall repair and/or replace, at no additional cost, any site features, utilities, or property damaged by its employees or subcontractors during construction.

PART 2 – PRODUCTS

2.01 SUBGRADE FILL

A. Subgrade Fill shall be as specified in Section XI, Specification 31 00 00 - Earthwork.

2.02 GRAVEL SUBBASE

A. Gravel Subbase shall be as specified in Section XI, Specification 31 00 00 - Earthwork.

2.03 TACK COAT AND JOINT SEALANT

- A. Where asphalt placement is conducted in two or more layers or placed over existing pavement, a tack coat shall be applied between layers or on the existing pavement. Tack coat materials shall meet or exceed the requirements of NYSDOT SS Section 407, unless otherwise noted on the Construction Contract Drawings
- B. Joint sealant materials shall meet or exceed the requirements of ASTM D6690, Type II or Type IV or NYSDOT SS Section 705-02, unless otherwise noted on the Construction Contract Drawings.

2.04 HOT-MIX ASPHALT

- A. Provide hot-mix asphalt in accordance with the applicable requirements of the NYSDOT SS Section 402. Recycled asphalt pavement (RAP) may be used as permitted by NYSDOT SS.
 - 1. Binder Course: Binder Course shall be in accordance with NYSDOT SS Mix 25 F9 Binder Course Compaction Series 50.
 - 2. Surface Course: Surface Course shall be in accordance with NYSDOT SS Mix 9.5 F1 Top Course Compaction Series 50. Surface Course shall be used for overlay (1inch minimum thickness) if required for pavement restoration due to damage during construction activities.

PART 3 – EXECUTION

3.01 SUBGRADE PREPARATION

- A. The CONTRACTOR shall form and trim all subgrade surfaces to the lines and grades shown on the Construction Contract Drawings or as modified by the ENGINEER or DEPARTMENT.
- B. Subgrade surfaces on which Subgrade Fill and/or Gravel Subbase are to be placed shall be thoroughly compacted as specified in Section XI, Specification 31 00 00 Earthwork and as approved by the ENGINEER/DEPARTMENT.
- C. Furnish, place, and compact Subgrade Fill in accordance with the lines, grades, thicknesses, and typical sections, as shown on the Construction Contract Drawings or as modified by the ENGINEER or DEPARTMENT.
 - 1. Subgrade Fill material for subgrade construction shall be as specified in Section XI, Specification 31 00 00 Earthwork.
 - 2. Subgrade Fill placement and compaction requirements shall be as specified in Section XI, Specification 31 00 00 Earthwork.
 - 3. Subgrade Fill quality control testing requirements shall be as specified in Section XI, Specification 31 00 00 Earthwork.

3.02 GRAVEL SUBBASE

- A. Furnish, place, and compact Gravel Subbase in accordance with the lines, grades, thicknesses, and typical sections, as shown on the Construction Contract Drawings or as modified by the ENGINEER or DEPARTMENT.
 - Gravel Subbase materials shall be as specified in Section XI, Specification 31 00 00

 Earthwork.
 - 2. Gravel Subbase placement and compaction requirements shall be as specified in Section XI, Specification 31 00 00 Earthwork.

3. Gravel Subbase quality control testing requirements shall be as specified in Section XI, Specification 31 00 00 - Earthwork.

3.03 SAW CUTS

- A. The CONTRACTOR shall saw cut existing pavement along the edges of patching, repair, and/or replacement as shown on the Construction Contract Drawings or as specified by the ENGINEER or DEPARTMENT.
- B. Equipment shall be power-operated circular wet saw capable of cutting existing pavement to the specified depth and yielding a vertical and smooth edge.

3.04 COLD MILLING

- A. The CONTRACTOR shall mill, grind, and/or scarify existing pavement for pavement repair areas, along edges of pavement patching, repair, overlay, and/or replacement where shown on the Construction Contract Drawings or as specified by the ENGINEER or DEPARTMENT.
- B. Equipment shall be power-operated milling machine or planer capable of removing existing pavement to the specified depth.
- C. Disposal of milled materials shall be in accordance with Section XI, Specification 02 81 00 Off-Site Transportation and Disposal.

3.05 CONDITIONING EXISTING PAVEMENT PRIOR TO HOT MIX ASPHALT OVERLAY

- A. Conditioning of existing pavement prior to placement of asphalt overlay includes cleaning, sealing, and filling joints and cracks in the existing pavement, removal and repair of deteriorated pavement sections, stress-relieving pavement repairs, and cleaning the existing pavement and shoulders prior to the application of a new HMA course.
- B. Conditioning of existing pavement for overlay shall be conducted in accordance with Section 633 of the NYSDOT SS.
- C. Prior to placement of overlay, apply tack coat as described in the following paragraph.

3.06 TACK COAT/JOINT SEALANT

- A. All exposed/contact surfaces of existing pavements, including top surface, saw cut edges, and milled surfaces, shall receive a thin uniform layer of tack coat ant immediately prior to placement of new hot-mix asphalt. Prior to tack coat application, pavement joints and/or cracks greater than 0.1 inches shall be sealed.
 - 1. Tack coat and joint sealant shall be as specified in Part 2 herein.

- 2. Tack Coat and joint sealant application rates shall be in accordance with Section 407 and Section 418 respectively, of the NYSDOT SS.
- 3. Temperature and seasonal limitations/requirements for tack coat and joint sealant shall be in accordance with Section 407 and Section 419 respectively, of the NYSDOT SS.
- B. Surface Preparation:
 - 1. The surface areas where the tack coat and/or joint sealant are to be applied shall be cleaned of all dirt, sand, and loose material.
 - 2. Cleaning shall be accomplished via revolving brooms, mechanical sweepers, or other devices as approved by the ENGINEER/DEPARTMENT.
 - 3. Undesirable materials not removed by above means shall be further cleaned by hand sweeping and/or scraping.
 - 4. Small areas otherwise inaccessible by mechanized equipment may be cleaned by hand sweeping.
 - 5. The tack coat and/or joint sealant shall only be applied when the prepared surface is both clean and dry.

3.07 HOT-MIX ASPHALT

- A. Construct each course of hot-mix asphalt in accordance with the lines, grades, thicknesses, and typical sections shown on the Construction Contract Drawings or as established by the ENGINEER or DEPARTMENT.
- B. Construction shall be in accordance with Section 402 of NYSDOT SS, unless otherwise noted.
- C. Surface Tolerances:
 - 1. Paving Surface Smoothness: Maximum allowable 10-foot straightedge tolerance for smoothness.
 - 2. Binder Course Surface: 1/4 inch.
 - 3. Top Course Surface: 3/16 inch.

3.08 ROLLING AND COMPACTION

- A. The mixture, after being spread, shall be thoroughly compacted by rolling as soon as it will bear the weight of the rollers without undue displacement. The number, weight, and types of rollers and sequences of rolling operations shall be such that the required density and surface are consistently attained while the mixture is in a workable condition.
- B. Compact mixture with hot hand tampers or vibrating plate compactors in areas inaccessible to rollers.

- C. Breakdown Rolling: Accomplish breakdown or initial rolling immediately following rolling of joints and outside edge. Check surface after breakdown rolling, and repair displaced areas by loosening and filling with hot material.
- D. Second Rolling: Follow breakdown rolling as soon as possible, while mixture is hot. Continue second rolling until mixture has been thoroughly compacted.
- E. Finish Rolling: Perform finish rolling while mixture is still warm enough for removal of roller marks. Continue rolling until roller marks are eliminated and course has attained maximum density.
- F. Patching: Remove and replace paving areas mixed with foreign materials and defective areas. Cut out such areas and fill with fresh, hot bituminous concrete. Compact by rolling to maximum surface density and smoothness.
- G. Protection: After final rolling, do not permit vehicular traffic on pavement until it has cooled and hardened. Erect barricades to protect paving from traffic until mixture has cooled enough not to become marked.

3.09 PAVEMENT MARKING

- A. The Contractor shall furnish and apply white or yellow painted reflectorized pavement marking paint for parking lot markings and striping to restore existing markings and patterns or as directed by the ENGINEER, and in accordance with the MUTCD.
- B. Pavement marking shall be conducted in accordance with Section 635 of NYSDOT SS, unless otherwise noted.
- C. All paints shall conform to Federal, State, and local air pollution regulations, including those for the control (emission) of volatile organic compounds (VOC) as established by the U.S. Environmental Protection Agency, and the New York State Department of Environmental Conservation.

3.10 QUALITY ASSURANCE/QUALITY CONTROL

- A. Quality Control Testing:
 - 1. Thickness: ASTM D 3549; Thickness shall not be less than thickness specified on Construction Contract Drawings.
 - 2. Surface Smoothness: Testing shall be performed on the finished surface of each asphalt paving course using 10-foot straightedge applied parallel with, and at right angles to centerline of paved areas. Smoothness shall not be less than tolerances specified herein.
 - 3. Compaction: Field in place density test for placed asphalt materials shall be performed by density gauge. Gauge shall be properly calibrated and standardized at the start of each day. Provide a minimum of 2 density tests per asphalt lift.

- B. Repair and/or Replacement:
 - 1. Work found to deviate from the project requirements, as shown on the Construction Contract Drawings and/or as specified herein, shall be repaired or replaced by the CONTRACTOR at no additional cost to the DEPARTMENT.
 - 2. Additional inspections and testing necessary to evaluate compliance of repaired, replaced, or additional work shall be conducted by the third-party testing agency at the expense of the CONTRACTOR.

3.11 CLEANUP

A. Upon completion of the installation of new asphalt pavement, all debris and surplus materials resulting from the work shall be removed.

++ END OF SECTION ++

SPECIFICATION 32 31 13

CHAIN LINK FENCE AND GATES

PART 1 – GENERAL

1.01 DESCRIPTION

A. Furnish materials, equipment, and labor necessary for the temporary installation and removal of chain link fence and swing gates as shown on the Contract Drawings.

1.02 RELATED WORK SPECIFIED ELSEWHERE

- A. Section X, Specification 01 33 00 Submittal Procedures
- B. Section XI, Specification 02 81 00 Off-Site Transportation and Disposal

1.03 REFERENCES

- A. The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by the basic designation only.
 - 1. CHAIN LINK FENCE MANUFACTURER'S INSTITUTE (CLF)
 - a. CLF 2445 Chain Link Fence Manufacturers Institute Product Manual
 - b. Standard Guide for Metallic-Coated Steel Chain Link Fence & Fabric
 - c. Industrial Steel Guide for Fence Rails, Posts, Gates, and Accessories
 - 2. ASTM International (ASTM)
 - a. ASTM A 53/A 53M Pipe, Steel, Black and Hot-Dipped Zinc-Coated, Welded and Seamless
 - b. ASTM A 153/ A 153M Zinc Coating (Hot-Dip) on Iron and Steel Hardware
 - c. ASTM A 392 Zinc-Coated Steel Chain-Link Fence Fabric
 - d. ASTM F567 Standard Practice for Installation of Chain-Link Fence
 - e. ASTM C 33 Concrete Aggregates
 - f. ASTM C 150 Portland Cement

1.04 SUBMITTALS

- A. Submit the following in accordance with Section X, Specification 01 33 00 Submittal Procedures.
 - 1. Product Data: submit manufacturer's technical data and installation instructions for galvanized steel chain link fences and gates.
 - 2. Product Data: submit manufacturer's technical data for Portland Cement.

1.05 QUALITY CONTROL

- A. Standards of Manufacture:
 - 1. Comply with the Chain Link Fence Manufacturer's Institute "Standard Guide for Metallic-Coated Steel Chain Link Fence & Fabric," "Industrial Steel Guide for Fence Rails, Posts, Gates, and Accessories," and as herein specified. Provide galvanized steel chain link fence and gates as a complete unit produced by a single manufacturer, including necessary erection accessories, fittings, and fastenings.
- B. Standards of Installation:
 - 1. Fencing system construction and installation must provide suitable structural integrity over the service life of the fence with minimal maintenance.

PART 2 – PRODUCTS

2.01 GENERAL

A. Install chain link fence, gates, and other appurtenances as indicated on the Contract Drawings and specified herein. Pipe sizes indicated are nominal outside diameter (OD) commercial pipe sizes.

2.02 FINISH FOR FRAMEWORK AND APPURTENANCES

- A. Furnish the following finishes for steel framework and appurtenances. Galvanized finish with not less than minimum weight of zinc per square foot, complying with the following:
 - 1. Pipe: ASTM A 53 (1.8 ounces zinc per square foot).
 - 2. Hardware and Accessories: ASTM A 153 zinc weight 1.2 ounce per square foot.

2.03 FABRIC

A. Furnish chain link fabric 8 feet high, 9 gage and 2-inch mesh as shown on the drawings. Galvanized finish with not less than 1.2 ounces zinc per square foot, complying with ASTM A 392, Class I.

2.04 POSTS

- A. Furnish 2.875-inch OD schedule 40 galvanized end, corner, and pull posts.
- B. Furnish 2.375-inch OD schedule 40 galvanized intermediate /line posts.
- C. Furnish 1.66-inch OD schedule 40 galvanized post braces.

2.05 GATE POSTS

A. Furnish 3-inch OD schedule 40 galvanized gate posts for double leaf swing gates.

2.06 GATE FRAMING AND INTERNAL BRACING

A. Furnish 1.90-inch OD galvanized tubular steel gate frame and 1.66-inch OD internal bracing as required to provide adequate structural support for the 6-foot-wide swing gate leafs.

2.07 POST BRACE ASSEMBLY

- A. Furnish brace assemblies at all terminal (end, corner, pull) and gate posts. For end and gate posts provide on one side and for corner and pull posts provide on both sides.
- B. Furnish horizontal post brace located at one-half the above ground height of the terminal post. Post brace shall be 1.66 OD schedule 40 galvanized steel pipe.
- C. Furnish diagonal truss rod installed from the post brace to the adjacent intermediate/line post. Provide 3/8-inch (minimum) diameter galvanized steel rod with a turnbuckle or other equivalent provision for adjustment. Adjustment mechanism shall be capable of providing a minimum of 3 inches of take up.

2.08 TOP RAILS

- A. Top Rails
 - 1. Top rails shall be 1.66 OD schedule 40 galvanized steel pipe in lengths not less than 18 feet and shall be fitted with couplings or swedged for connecting the lengths into a continuous run.
 - 2. The couplings shall not be less than 6 inches long with 0.070-inch minimum wall thickness and shall allow for the expansion and contraction of the rail.
- B. Means shall be provided for attaching the top rails to each gate, corner, pull, and end post. Accessories (e.g., line and end rail clamps, brackets, and cups) shall be constructed of galvanized steel.
- C. Suitable ties or clips shall be provided in sufficient number for attaching the fabric securely to the top rails at intervals not exceeding 24 inches.

2.09 POST (LOOP AND DOME) TOPS

- A. Pressed steel, designed as a weather-tight closure cap (for tubular posts).
- B. Loop tops shall have a hole suitable for the through passage of the top rail.

2.10 TENSION/STRETCHER BARS

- A. One-piece lengths equal to 1-inch less than full height of fabric, with a minimum crosssection of 3/16 inch by 3/4 inch.
- B. Provide one galvanized stretcher bar for each gate and end post, and two for each corner and pull post, except where fabric is integrally woven into the post.

2.11 TENSION BANDS

- A. Flat or beveled steel or malleable iron with a minimum thickness of 0.108 inches after galvanizing and minimum width of ³/₄ inches for posts 4 inches OD or less.
- B. Tension bands shall be spaced not over 15 inches on center to secure stretcher bars to end, corner, pull, and gate posts.
- C. Bands may also be used with special fittings for securing post braces to end, corner, pull, and gate posts.

2.12 GATES

- A. Furnish as shown on the drawings and as required to match existing gate.
 - 1. Frame:
 - a. Fabricate gate perimeter frames of tubular steel members.
 - b. Provide additional horizontal/vertical interior bracing to ensure proper gate operation and for attachment of fabric, hardware, and accessories.
 - c. Space so that internal bracing is not more than 8 feet apart.
 - d. Fabricate with 1.90-inch OD schedule 40 galvanized pipe.
 - 2. Gate Frame Assembly:
 - a. Weld or use special malleable or pressed steel fittings and rivets for rigid connections.
 - b. Use same fabric as for fence.
 - c. Install fabric with tension bars at vertical edges.
 - d. Tension bars may also be used at top and bottom edges.
 - e. Attach tension bars to gate frame at 15 inches on center.
 - f. Attach hardware with rivets or by other means which will provide security against removal or breakage.
 - 3. Diagonal Bracing:
 - a. Install 3/8-inch (minimum) diameter galvanized steel diagonal truss rods with turnbuckle or other equivalent provision for adjustment on gates where necessary to ensure frame rigidity without sag or twist. Adjustment mechanism shall be capable of providing a minimum of 3 inches of take up.
 - 4. Gate Hardware
 - a. Hinges:

- i. Hinges shall be structurally capable of supporting the gate leaf and allow the gate to open and close without binding.
- ii. Pressed or forged steel or malleable iron to suit gate size, non-lift-off type, offset to permit 180-degree gate opening.
- iii. Provide 1 1/2 pair of hinges for each leaf over 6 feet nominal height.
- b. Latch:
 - i. Drop rod type to permit operation from either side of gate, with padlock eye as integral part of latch.
- c. Double Gates:
 - i. Provide gate center stop for double gates, consisting of flush plate with soil anchor.
 - ii. Set center stop in existing gravel surface with suitable anchor to secure it in place.
 - iii. Include locking device and padlock eyes as an integral part of latch, using one padlock for locking both gate leaves.
- d. Center Stop:
 - i. Provide a steel center stop or approved equal.
- 5. Padlocks:
 - a. Provide an exterior grade padlock.
 - b. Provide three sets of keys for the padlock.
 - c. Padlock shall work with the installed latch system.

2.13 CONCRETE

- A. Provide concrete consisting of Portland cement complying with ASTM C 150, aggregates complying with ASTM C 33, and water from a potable water supply.
- B. Mix materials to obtain concrete with a minimum 28-day compressive strength of 2500 psi, using at least 4 sacks of Type I or II cement per cubic yard, 1-inch maximum size aggregate, maximum 3 inch slump, and 2 percent to 4 percent entrained air.

PART 3 – EXECUTION

3.01 EXAMINATION

A. Examine conditions under which fences and gates are to be installed and notify ENGINEER in writing of conditions detrimental to proper and timely completion of work. <u>Do not proceed with work until unsatisfactory conditions have been corrected in a manner acceptable to ENGINEER.</u>

3.02 INSTALLATION

- A. General:
 - 1. The ENGINEER shall approve the final proposed fence layout prior to installation.

2. Mechanical drive methods shall not be used.

3.03 EXCAVATION

- A. All soil/material excavated from within the Limit of Work shall be considered contaminated.
- B. Excavate by drill/auger method for post holes in firm, undisturbed or compacted soil. Increase post lengths and post hole depths as required to provide adequate structural stability for the fence.
- C. Post holes shall be of a sufficient size to accommodate the required concrete fence footing size: 12-inch diameter and 66 inches below surface for all post installations.

3.04 CONCRETE FENCE FOOTINGS

- A. Remove loose and foreign materials from sides and bottoms of excavated post holes and moisten soil prior to placing concrete.
- B. Center and align posts in post holes 6 inches above bottom of excavation.
- C. Place concrete around posts in a continuous pour and vibrate or tamp for consolidation. Check each post for vertical and top alignment and hold in position during placement and finishing operations.
- D. Top of footings shall be approximately 6 inches below grade.
- E. Keep exposed concrete surfaces moist for at least 7 days after placement, or cure with membrane curing materials, or other acceptable curing method.

3.05 CONCRETE STRENGTH

A. Allow concrete to attain at least 75 percent of its minimum 28-day compressive strength, but in no case sooner than 5 days after placement, before post braces, top/bottom rails, or fabric is installed.

3.06 POST BRACES

A. Install in one piece between posts and flush with post on fabric side, using special offset fittings where necessary.

3.07 BRACE ASSEMBLIES

A. Install braces so posts are plumb when truss rod is under proper tension.

3.08 TOP AND BOTTOM RAILS

- A. Top rails shall be supported at each intermediate/line post so that a continuous brace from end to end of each stretch of fence is formed. Securely fasten the top rail to the terminal posts and join with sleeve or coupling to allow for expansion and contraction.
- B. Securely fasten the bottom rail to each intermediate/line post with a line rail clamp and to each terminal post with an end rail clamp or an end rail band and cup. Connections shall allow for expansion and contraction.

3.09 FABRIC

A. Leave a maximum of 6 inches between existing grade and bottom selvage. Pull fabric taut and tie to posts, braces, and rails. Install fabric on outside of fence, and anchor to framework so that fabric remains in tension after pulling force is released.

3.10 TENSION BARS

A. Thread through or clamp to fabric 4 inches on center, and secure to posts with metal tension bands spaced 15 inches (maximum) on center.

3.11 GATES

- A. Install gates plumb, level, and secure for full opening without interference. Install groundset items as recommended by fence manufacturer. Adjust hardware for smooth operation and lubricate where necessary.
- B. Locking device shall be constructed so that the center drop rod cannot be raised when the gate is locked.

3.12 TIE WIRES

A. Use U-shaped wire, conforming to diameter of pipe. Clasp pipe and fabric firmly with ends twisted at least two full turns. Bend ends of wire to minimize hazard.

3.13 FASTENERS

A. Install nuts for tension bar and hardware bolts on side of fence opposite fabric side. Peen ends of bolts or score threads to prevent removal of nuts.

++ END OF SECTION ++

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SPECIFICATION 32 92 26

TOPSOIL AND SEEDING

<u>PART 1 – GENERAL</u>

1.01 DESCRIPTION

- A. Provide labor, equipment, and materials necessary for topsoil and seeding where indicated on the Construction Drawings or as directed by the ENGINEER or DEPARTMENT. Work includes:
 - 1. Providing and placing topsoil, seed, lime, fertilizer, and mulch in the areas indicated on the Construction Drawings or in other areas disturbed during construction (e.g., staging and storage areas)
 - 2. Source testing of topsoil materials as specified herein.
 - 3. Maintaining topsoil and seeded areas throughout the contract maintenance period.

1.02 RELATED WORK SPECIFIED ELSEWHERE

- A. Section X, Specification 01 33 00 Submittals Procedures.
- B. Section XI, Specification 01 11 00 Summary of Work.
- C. Section XI, Specification 31 00 00 Earthwork.
- D. Section XI, Specification 31 25 00 Erosion and Sedimentation Control.
- E. Section XI, Specification 32 93 00 Exterior Plants

1.03 REFERENCES

- A. The publications listed below form a part of this specification to the extent referenced and unless otherwise noted, the latest publication applies. The publications are referred to in the text by the basic designation only.
- B. ASTM International (ASTM)
 - 1. ASTM D 422 Standard Test Method for Particle-Size Analysis of Soils
 - 2. ASTM D 2974 Standard Test Method for Moisture, Ash, and Organic Matter of Peat and Other Organic Soils
 - 3. ASTM D 4972 Standard Test Method for pH of Soils
- C. New York Guidelines for Urban Erosion and Sediment Control, April 1997 by the Urban Soil Erosion and Sediment Control Committee which includes the following

contributors: New York State Soil & Water Conservation Committee; Agronomy Department, Cornell University; Agricultural Engineering Department, Cornell University; New York State Department of Environmental Conservation; New York State Department of Transportation; New York Chapter of Land Improvement Contractors of America; O'Brien and Gere Engineers, Inc.; and USDA-Natural Resources Conservation Service (formerly the Soil Conservation Service).

- D. New York Standards and Specifications for Erosion and Sediment Control, August 2005 by the NYS Soil and Water Conservation Committee.
- E. Standards Specifications, State of New York Department of Transportation, by the New York State Department of Transportation (NYSDOT), latest edition.
- F. DER-10/Technical Guidance for Site Investigation and Remediation (New York State Department of Environmental Conservation, DEC Program Policy, issued May 3, 2010).
- G. Other applicable Federal, State, and local requirements.

1.04 SUBMITTALS

- A. Topsoil: Analysis for the full Target Compound List (TCL) must be performed in accordance with DER-10. EPA SW 846 methods must be followed. In addition to the target list in DER-10, samples must be analyzed for 1,4-dioxane and per- and polyfluoroalkyl substances (PFAS) EPA 1633. The laboratory chosen must be New York State Environmental Laboratory Approval Program (NYS ELAP) certified following current Analytical Services Protocols (ASPs). Submit topsoil source testing reports to the ENGINEER and the DEPARTMENT for approval.
- B. Topsoil Source Certification: topsoil provided from off-site sources must be certified that it meets DEPARTMENT Unrestricted Use Soil Cleanup Objective standards outlined in 6 NYCRR Part 375.
- C. Grass Seed Vendor's Certificate: Submit the seed vendor's certified statement for the grass seed mixture required to the ENGINEER and DEPARTMENT for approval. Include common name, percentage of seed mix by weight, percentages of purity and germination, year of production, date of packaging, and location of packaging.
- D. Fertilizer: Submit the fertilizer manufacturer's product data showing chemical analysis and percent composition to the ENGINEER and DEPARTMENT for approval.

PART 2 – PRODUCTS

2.01 MATERIALS

- A. General: obtain and retain as part of the project records, certifications, and/or labels of materials supplied.
- B. Topsoil: Topsoil must consist of good quality friable soil consisting of a sandy loam, loam or silty loam that is free of stones over 1-1/2 inches and meeting the following requirements:
 - 1. Provide soil material with a minimum 20 percent and a maximum of 80 percent passing the No. 200 sieve and not more than 15 percent clay and not more than 10 percent gravel by volume.
 - 2. Reasonably free from subsoil, clay lumps, stones, brush, objectionable stumps, roots, litter, toxic substances, and other material or substances which may be harmful to plant growth or be a hindrance to grading, planting and maintenance operations.
 - 3. The pH of the material is recommended to be between 5.5 and 7.6 as guidance.
 - 4. The organic content must be not less than 2 percent nor more than 6 percent.
 - 5. Topsoil containing soluble salts greater than 500 parts per million must not be used.
- C. Fertilizer: Subsection 713-03 in the NYSDOT Standard Specifications, Type No. 3: 10-6-4 grade containing at least 10 percent available nitrogen, 6 percent readily available phosphoric acid and 4 percent total available potash in conformity with the Standards of the Association of Official Agricultural Chemists. Supply in unopened bags with the weight, contents and guaranteed analysis shown thereon or on a securely attached tag.
- D. Lime: Subsection 713-02 in the NYSDOT Standard Specifications Ground limestone composed of not less than 88 percent calcium and magnesium carbonate; at least 60 percent must pass a No. 100 mesh screen, 90 percent must pass a No. 20 mesh screen.
- E. Seed: must meet the minimum requirements approved by the Department of Seeds Investigations, New York State Agricultural Experiment Station, Geneva, New York.
 - 1. The grass seed mixture must include no "primary noxious weed seeds."
 - 2. Furnish in fully labeled, standard sealed containers.
 - 3. Percentage and germination of each seed type in the mixture, purity, and weed seed content of the mixture must be clearly stated on the label.
 - 4. The weight of pure live seed (PLS) is computed by the labeled purity percent times the labeled germination percent times the weight. To illustrate the method of computing to PLS from the tag basis, the following example is given: required: 20 pounds PLS of a particular variety--stock available is 99.41 percent pure and 92 percent germination--20 divided by the product of 0.9941 and 0.92 equals 21.8 pounds on the tag basis to furnish 20 pounds of PLS.

- 5. Subject to the testing provisions of the Association of Official Seed Analysis, with the month and year of test clearly stated on the label. May be tested after it has been delivered to the project.
- 6. Seed which has become wet, moldy, or otherwise damaged will not be acceptable.
- 7. Use seed mixtures as specified below; add inoculant immediately before seeding.
 - BOTANICAL NAME COMMON NAME Festuca Rubra Creeping Red Fescue Elymus Canadensis Canada Wild Rye Lolium Multiflorum Annual Ryegrass Lolium Perenne Perrenial Ryegrass **Bouteloua** Gracilis Blue Grama Schizachyrium Scoparium Little Bluestem Sorghastrum Nutans Indian Grass Rough Bentgrass/Ticklegrass Agrostis Scabra Agrostis Perennans Upland Bentgrass
 - a. Upland Seed Mix

b. Riparian Seed Mix

BOTANICAL NAME	COMMON NAME	
Elymus Virginicus	Virginia Wild Rye	
Schizachyrium Scoparium	Little Bluestem, NY Ecotypes	
Andropogon Gerardii	Big Bluestem	
Festuca Rubra	Creeping Red Fescue	
Panicum Virgatum	Switch Grass	
Chamaecrista Fasciculata	Partridge Pea	
Panicum Clandestinum	Deer Tongue	
Sorghastrum Nutans	Indian Grass	
Asclepias Syriaca	Common Milkweed	
Heliopsis Helianthoides	Ox Eye Sunflower	
Eupatorium Purpureum	Purple Joe Pye Weed	
Euthamia Graminifolia	Grass Leaved Goldenrod	
Verbena Hastata	Blue Vervain	
Zizia Aurea	Golden Alexanders	
Aster Umbellatus	Flat Topped/Umbrella Aster	
Solidago Juncea	Early Goldenrod	

- c. For temporary seeding requirements see Section XI, Specification 31 25 00 Erosion and Sedimentation Control.
- F. Mulch: see Section XI, Specification 31 25 00 Erosion and Sedimentation Control.

2.02 TOPSOIL SOURCE TESTING

A. Topsoil:

Test	Methodology	Frequency
Grain Size	ASTM D 422	2 test/source/material
(to the #200 Sieve)		
pH	ASTM D 4972	2 test/source/material
Organic percent	ADTM D 2974	2 test/source/material
	Ignition Test	
TCL VOCs	8260B	Note 1
TCL SVOCs	8270C	Note 1
TCL Pesticides/PCBs	8081/8082	Note 1
PFAs	EPA 1633	Note 1
TAL Metals	6010B	Note 1
Mercury	7471B	Note 1
Cyanide	9010 or equivalent	Note 1

Note 1: Environment sampling frequency must follow DER-10 Table 5.4(e)(10). Per DER-10, discrete samples must be collected for volatile organic compounds, semi-volatile organic compounds, PCBs, metals, pesticides/herbicides, per- and Polyfluorooctanoic acid (PFAS), and 1-4 Dioxane.

PART 3 – EXECUTION

3.01 PREPARATION

- A. All Areas to be Seeded:
 - 1. Must be worked with a disk, harrow, dragged with a chain, mat or blade, machine-raked, or hand-worked as necessary to provide a reasonably firm but friable seedbed.
 - 2. Must meet the specified grades or blend and match existing grades and are free of growth and debris.
 - 3. Take care to prevent the formation of low places and pockets where water will stand.
- B. Depth of Tillage: 2 inches or as directed by the ENGINEER or DEPARTMENT.
- C. Where ryegrass has been planted for temporary erosion control and has not been eliminated before the completion of the work, disc at least 4 inches deep and seed to permanent grasses.

3.02 APPLICATION

- A. Topsoil: deposit topsoil on prepared areas to obtain a reasonable uniform depth (4" minimum upland and 12" minimum wetland) as shown on the Construction Drawings. Spread and till, raking out pieces of sod, roots, and grass if they are in abundance. Spread into an even uniform layer by rolling to prepare for liming, fertilizing, and seeding.
- B. Fertilizer and Lime:
 - 1. Apply by means of a mechanical spreader or other acceptable method which can maintain a uniform rate of application.
 - 2. Conduct when the soil is in a moist condition and at least 24 hours before sowing the seed.
 - 3. Fertilizer must be applied at the rate based on the results of the Nutrient Analysis when conducted or at a rate of 18 pounds per 1000 square feet.
- C. Seeding:
 - 1. Perform erosion control items of work such as seeding and mulching upon completion of a unit or portion of the project.
 - 2. When immediate protection of newly graded areas is necessary at a time which is outside of the normal seeding season, apply hay mulch with the seeding done at the same time or done later, or both, as ordered.
 - 3. When immediate seeding is required on areas of the project which are not to be regraded or disturbed, use specified seed mixture.
 - 4. Apply permanent seed mix at the following rates:
 - 5. Upland Seed Mix: 35 lbs per acre
 - 6. Riparian Seed Mix: 25 lbs per acre
 - 7. Areas of the project which are to be left temporarily and which will be regraded or otherwise disturbed later during construction may be ordered to be seeded with temporary seed to obtain temporary control, in accordance with Section XI, Specification 31 25 00 Erosion and Sedimentation Control.
 - 8. The DEPARTMENT reserves the right to prohibit the use of any equipment that is unsuitable or inadequate for the proper performance of the work; immediately remove all rejected equipment from the project.
- D. Mulch:
 - 1. Undertake immediately after each area has been properly prepared.
 - 2. Apply mulch at the rate as specified in Section XI, Specification 31 25 00 Erosion and Sedimentation Control.
 - 3. Blowing chopped mulch will be permitted when authorized.
 - 4. Authorization will be given when it can be determined that the mulch fibers will be of such length and applied in such a manner that there will be a minimum amount of matting that would retard the growth of plants.

- 5. Straw or hay mulch should cover the ground enough to shade it, but the mulch should not be so thick that a person standing cannot see ground through the mulch.
- 6. Remove matted mulch or bunches.
- When specified, anchor mulch in accordance with Section XI, Specification 31 25 00 - Erosion and Sedimentation Control.
- 8. Properly dispose of all baling wire or rope off-site.

3.03 SEEDING SEASONS

- A. Conduct permanent seeding between May 15 and June 30, between August 15 and September 1, or as directed or permitted by the ENGINEER or Department.
- B. Do not seed during windy weather or when the ground is frozen, excessively wet, or otherwise untillable.

3.04 SEEDING METHODS

- A. Fertilizer, limestone, mulch material if required, and seed of the type specified may be placed at the locations shown or ordered by one of the following methods, provided an even distribution is obtained. The maximum seeding depth must be 1/4-inch when using methods other than hydroseeding.
 - 1. Dry Method:
 - a. Power Equipment: use mechanical seeders, seed drills, landscape seeders, cultipacker seeders, fertilizer spreaders, or other approved mechanical seeding equipment or attachments when seed, limestone, and fertilizer are to be applied in dry form.
 - b. Manual Equipment: on areas which are inaccessible to power equipment, permission may be given to use hand-operated mechanical equipment when the materials are to be applied in dry form. The use of hand shovels to spread the materials will not be allowed.
 - c. Do not mix limestone and fertilizer together before their application but work into the soil together to the specified depth.
 - d. After seeding, compact the entire area by a suitable roller weighing 60 to 90 pounds per lineal foot.
 - e. Allow at least 24 hours between fertilizing and seeding.
 - f. Unless otherwise ordered, mulch areas covered with seed.
 - 2. Hydraulic Method:
 - a. The application of grass, seed, fertilizer, limestone, and a suitable mulch, if approved, may be accomplished in one operation using an approved spraying machine.
 - b. Mix materials with water in the machine and keep in an agitated state in order that the materials may be uniformly suspended in the water.

- c. The spraying equipment must be so designed that when the solution is sprayed over an area, the resulting deposits of limestone, fertilizer, and grass seed are equal in quantity to the required rates.
- d. Flush and clean hydraulic seeding and fertilizing machine each day before seeding is to be started, and thoroughly flush of all residue after the completion of application on every 10 acres.
- e. If the results of the spray operations are unsatisfactory, abandon this method and apply the materials by the dry method.
- f. When inoculum is required, mix with the seed and spray.
- g. Compaction or rolling not required.
- h. Unless mulch material required is applied during the seeding operation or within 1/2 hour following the seeding operation, take measures to protect the seed from sunlight and heat such as the use of a light brush dragged over the seeded areas to stir the seed into the soil, taking care not to carry the seed ahead.

3.05 CARE AFTER SEEDING

- A. Protect and care for seeded areas until final acceptance of the work and repair any damage to seeded areas caused by pedestrian or vehicular traffic or other causes at the CONTRACTOR's expense.
- B. If necessary, place barricades and suitable signs to protect the seeded areas.
- C. Apply water to maintain proper moisture to promote growth. Use approved water wagons or tanks or other approved devices to apply water in the form of a spray or sprinkle without erosive force. The CONTRACTOR may not use Carriage Cleaner's water supply. Apply water before 10:00 a.m. and after 4:00 p.m. to minimize losses due to evaporation.
- D. Cut back weeds growing in seeded areas to prevent them from dominating the desired grass plants.
- E. Hay mulch to be provided as described on the Construction Drawings.
- F. To be acceptable, a stand of grass must show a reasonably thick, uniform stand, free from sizable areas of thin or bare spots, with a uniform coverage of at least 90 percent of grass.
- G. Reseed any parts of seeded areas which fail to show a uniform stand until all areas are covered with grass, at the CONTRACTOR's expense.
- H. Maintenance Period:

- 1. This period must extend for 60 days or until the turf has been mowed 3 times or until all work on the entire area has been completed and accepted.
- 2. In this time do all necessary mowing to keep the grass between 3 and 6 inches in height.
- 3. Acceptable grass areas must have coverage of not less than 90 percent of permanent grasses at the termination of the maintenance period.

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SPECIFICATION 32 93 00

EXTERIOR PLANTS

PART 1 – GENERAL

1.01 DESCRIPTION

- A. Work described in this Section includes:
 - 1. Wetland planting program prepared in accordance with Article 24, Freshwater Wetlands, Title 23 of Article 71 of the Environmental Conservation Law, New York State Department of Environmental Conservation.
 - 2. Planting of Trees and Shrubs in the upland and wetland planting areas as shown on Contract Drawing C-504.

1.02 RELATED WORK SPECIFIED ELSEWHERE

- A. Section X, Specification 01 33 00 Submittal Procedures
- B. Section XI, Specification 31 00 00 Earthwork
- C. Section XI, Specification 31 25 00 Erosion and Sediment Control
- D. Section XI, Specification 32 92 26 Topsoil and Seeding

1.03 DEFINITIONS

- A. Balled and Burlapped Stock: Exterior plants dug with firm, natural balls of earth in which they are grown, with ball size not less than diameter and depth recommended by ANSI Z60.1 for type and size of tree or shrub required; wrapped, tied, rigidly supported, and drum-laced as recommended by ANSI Z60.1.
- B. Balled and Potted Stock: Exterior plants dug with firm, natural balls of earth in which they are grown and placed, unbroken, in a container. Ball size is not less than diameter and depth recommended by ANSI Z60.1 for type and size of exterior plant required.
- C. Container-Grown Stock: Healthy, vigorous, well-rooted exterior plants grown in a container with well-established root system reaching sides of container and maintaining a firm ball when removed from container. Container shall be rigid enough to hold ball shape and protect root mass during shipping and be sized according to ANSI Z60.1 for kind, type, and size of exterior plant required.
- D. Fabric Bag-Grown Stock: Healthy, vigorous, well-rooted exterior plants established and grown in-ground in a porous fabric bag with well-established root system reaching

sides of fabric bag. Fabric bag size is not less than diameter, depth, and volume required by ANSI Z60.1 for type and size of exterior plant.

- E. Final Grade: Elevation of final or finish surface of topsoil or planting soil.
- F. Manufactured Topsoil: Soil produced off-site by homogeneously blending mineral soils or sand with stabilized organic soil amendments to produce topsoil or planting soil.
- G. Planting Soil: Native or imported topsoil, manufactured topsoil, or surface soil modified to become topsoil; mixed with soil amendments.
- H. Subgrade: Surface or elevation of subsoil remaining after completing excavation, or top surface of a fill or backfill, before placing planting soil.

1.04 SUBMITTALS

- A. Product Certificates: For each type of product, signed by vendor, nursery, or product manufacturer, and complying with the following:
 - 1. Manufacturer's certified analysis for standard products.
 - 2. Analysis of other materials by a recognized laboratory made according to methods established by the Association of Official Analytical Chemists, where applicable.
 - 3. Provide quality, size, genus, species, and variety of exterior plants complying with applicable requirements in ANSI Z60.1, "American Standard for Nursery Stock
- B. Qualification Data: For landscape installer.
- C. Material Test Reports: For imported topsoil. See Section XI, Specification 32 92 26 Topsoil and Seeding.
- D. Planting Schedule: Indicating anticipated planting dates for exterior plants.
- E. Maintenance Instructions: Recommended procedures to be established by Owner for maintenance of exterior plants during a calendar year. Submit before expiration of required maintenance periods.

1.05 QUALITY CONTROL

- A. Installer Qualifications: A qualified landscape installer whose work has resulted in successful establishment of exterior plants.
 - 1. Installer's Field Supervision: Require Installer to maintain an experienced fulltime supervisor on Project Site when exterior planting is in progress.

- B. Topsoil Analysis: Furnish soil analysis as described in Section XI, Specification 32 92 26 – Topsoil and Seeding.
- C. Provide quality, size, genus, species, and variety of exterior plants indicated, complying with applicable requirements in ANSI Z60.1, "American Standard for Nursery Stock."
 - 1. Selection of CONTRACTOR purchased exterior plant specimens may be made by ENGINEER at their location of purchase.
- D. Tree and Shrub Measurements: Measure according to ANSI Z60.1 with branches and trunks or canes in their normal position. Do not prune to obtain required sizes. Take caliper measurements 6 inches above ground for trees up to 4-inch caliper size, and 12 inches above ground for larger sizes. Measure main body of tree or shrub for height and spread; do not measure branches or roots tip-to-tip.
- E. Observation: ENGINEER may observe trees and shrubs either at place of growth or at Site before planting for compliance with requirements for genus, species, variety, size, and quality. ENGINEER retains right to observe trees and shrubs further for size and condition of balls and root systems, insects, injuries, and latent defects and to reject unsatisfactory or defective material at any time during progress of Work. Remove rejected trees or shrubs immediately from Project Site.
 - 1. Notify ENGINEER of sources of planting materials 30 days in advance of delivery to Site.

1.06 DELIVERY, STORAGE, AND HANDLING

- A. Deliver exterior plants freshly dug.
- B. Do not prune trees and shrubs before delivery, except as approved by ENGINEER. Protect bark, branches, and root systems from sun scald, drying, sweating, whipping, and other handling and tying damage. Do not bend or bind-tie trees or shrubs in such a manner as to destroy their natural shape. Provide protective covering of exterior plants during delivery. Do not drop exterior plants during delivery.
- C. Handle planting stock by root ball.
- D. Deliver exterior plants after preparations for planting have been completed and install immediately. If planting is delayed more than six hours after delivery, set exterior plants trees in shade, protect from weather and mechanical damage, and keep roots moist.
 - 1. Heel-in bare-root stock. Soak roots in water for two hours if dried out.
 - 2. Set balled stock on ground and cover ball with soil, peat moss, sawdust, or other acceptable material.
 - 3. Do not remove container-grown stock from containers before time of planting.

4. Water root systems of exterior plants stored on-site with a fine-mist spray. Water as often as necessary to maintain root systems in a moist condition.

1.07 COORDINATION

- A. Planting Restrictions: Plant during one of the following periods. Coordinate planting periods with maintenance periods to provide required maintenance from date of Substantial Completion.
 - 1. Spring Planting: April 1– July 1.
 - 2. Fall Planting: September 1 October 21.
- B. Weather Limitations: Proceed with planting only when existing and forecasted weather conditions permit.
- C. Coordination with Site Restoration: Plant trees and shrubs after final grades are established and before seeding, unless otherwise acceptable to ENGINEER.
 - 1. When planting trees and shrubs after seeding, protect seeded areas and promptly repair damage caused by planting operations.

1.08 WARRANTY

- A. Special Warranty: Warrant the following exterior plants, for the warranty period indicated, against defects including death and unsatisfactory growth, except for defects resulting from lack of adequate maintenance, neglect, or abuse by Owner, or incidents that are beyond CONTRACTOR's control.
 - 1. Warranty Period for Trees and Shrubs: One year from date of Substantial Completion.
 - 2. Remove dead exterior plants immediately. Replace immediately unless required to plant in the succeeding planting season.
 - 3. Replace exterior plants that are more than 25 percent dead or in an unhealthy condition at end of warranty period.
 - 4. A limit of one replacement of each exterior plant will be required, except for losses or replacements due to failure to comply with requirements.

1.09 MAINTENANCE

- A. Trees and Shrubs: Maintain for the following maintenance period by pruning, cultivating, watering, weeding, fertilizing, restoring planting saucers, tightening and repairing stakes and guy supports, and resetting to proper grades or vertical position, as required to establish healthy, viable plantings. Spray as required to keep trees and shrubs free of insects and disease. Restore or replace damaged tree wrappings.
 - 1. Maintenance Period: Six months from date of Substantial Completion.

PART 2 – PRODUCTS

2.01 TREE AND SHRUB MATERIAL

- A. General: Furnish nursery-grown trees and shrubs complying with ANSI Z60.1, with healthy root systems developed by transplanting or root pruning. Provide well-shaped, fully branched, healthy, vigorous stock free of disease, insects, eggs, larvae, and defects such as knots, sun scald, injuries, abrasions, and disfigurement. Trees shall be balled and burlapped stock or balled and potted stock.
- B. Grade: Provide trees and shrubs of sizes and grades complying with ANSI Z60.1 for type of trees and shrubs required. Trees and shrubs of a larger size may be used if acceptable to ENGINEER, with a proportionate increase in size of roots or balls.
- C. Label each tree and shrub with securely attached waterproof tag bearing legible designation of botanical and common name.
- D. If formal arrangements or consecutive order of trees or shrubs is shown, select stock for uniform height and spread, and number label to assure symmetry in planting.

2.02 DECIDUOUS SHRUBS

A. Form and Size: Deciduous shrubs with not less than the minimum number of canes required by and measured according to ANSI Z60.1 for type, shape, and height of shrub. Deciduous shrubs shall be balled and burlapped stock, balled and potted stock, or potted container-grown.

2.03 GRASSES

A. Grasses shall be provided in seed form as described in Section XI, Specification 32 92 26 – Topsoil and Seeding.

2.04 INORGANIC SOIL AMENDMENTS

- A. Lime: ASTM C 602, agricultural limestone containing a minimum 80 percent calcium carbonate equivalent and as follows:
 - 1. Class: Class T, with a minimum 99 percent passing through No. 8 sieve and a minimum 75 percent passing through No. 60 sieve.

2.05 ORGANIC SOIL AMENDMENTS

A. Compost: Well-composted, stable, and weed-free organic matter, pH range of 5.5 to 8; moisture content 35 to 55 percent by weight; 100 percent passing through 1-inch

sieve; soluble salt content of 5 to 10 decisiemens/m; not exceeding 0.5 percent inert contaminants and free of substances toxic to plantings; and as follows:

- 1. Organic Matter Content: 60 percent of dry weight.
- B. Bone meal: Commercial, raw or steamed, finely ground; a minimum of 4 percent nitrogen and 10 percent phosphoric acid.

2.06 MULCHES

- A. Pine Bark Mulch: Free from deleterious materials and suitable as a top dressing of trees and shrubs, consisting of one of the following:
 - 1. Type: Ground or shredded pine bark.
- B. Compost Mulch: Well-composted, stable, and weed-free organic matter, pH range of 5.5 to 8; moisture content 35 to 55 percent by weight; 100 percent passing through 1-inch sieve; soluble salt content of 5 to 10 decisiemens/m; not exceeding 0.5 percent inert contaminants and free of substances toxic to plantings; and as follows:
 - 1. Organic Matter Content: 50 to 60 percent of dry weight.

2.07 STAKES AND GUYS

- A. Upright and Guy Stakes: Rough-sawn, sound, new hardwood, redwood, or pressurepreservative-treated softwood, free of knots, holes, cross grain, and other defects, 2 by 2 inches by length indicated, pointed at one end.
- B. Guy and Tie Wire: ASTM A 641/A 641M, Class 1, galvanized-steel wire, 2-strand, twisted, 0.106 inch in diameter.
- C. Guy Cable: 5-strand, 3/16-inch- diameter, galvanized-steel cable, with zinc-coated turnbuckles, a minimum of 3 inches long, with two 3/8-inch galvanized eyebolts.
- D. Hose Chafing Guard: Reinforced rubber or plastic hose at least 1/2 inch in diameter, black, cut to lengths required to protect tree trunks from damage.
- E. Flags: Standard surveyor's plastic flagging tape, white, 6 inches long.

2.08 MISCELLANEOUS PRODUCTS

A. Trunk-Wrap Tape: Two layers of crinkled paper cemented together with bituminous material, 4-inch- wide minimum, with stretch factor of 33 percent.

2.09 PLANTING SOIL MIX

- A. Planting Soil Mix: Mix topsoil with the following soil amendments and fertilizers in the following quantities:
 - 1. Ratio of Loose Compost to Topsoil by Volume: 1:4.

- 2. Ratio of Loose Peat to Topsoil by Volume: 1:4.
- 3. Weight of Bone meal per 1000 Sq. Ft.: 50 lbs.

PART 3 – EXECUTION

3.01 EXAMINATION

A. Examine areas to receive exterior plants for compliance with requirements and conditions affecting installation and performance. Proceed with installation only after unsatisfactory conditions have been corrected.

3.02 PREPARATION

- A. Protect structures, utilities, sidewalks, pavements, and other facilities, and lawns and existing exterior plants from damage caused by planting operations.
- B. Provide erosion-control measures to prevent erosion or displacement of soils and discharge of soil-bearing water runoff or airborne dust to adjacent properties and walkways.
- C. Lay out individual tree and shrub locations and areas for multiple exterior plantings. Stake locations, outline areas, adjust locations when requested, and obtain ENGINEER's acceptance of layout before planting. Make minor adjustments as required.

3.03 TREE AND SHRUB EXCAVATION

- A. Pits and Trenches: Excavate circular pits with sides sloped inward. Trim base leaving center area raised slightly to support root ball and assist in drainage. Do not further disturb base. Scarify sides of plant pit smeared or smoothed during excavation.
 - 1. Excavate approximately three times as wide as ball diameter for balled and burlapped stock.
 - 2. Excavate at least 12 inches wider than root spread and deep enough to accommodate vertical roots for bare-root stock.
 - 3. If drain tile is shown or required under planted areas, excavate to top of porous backfill over tile.
- B. Subsoil removed from excavations may not be used as backfill.
- C. Obstructions: Notify ENGINEER if unexpected rock or obstructions detrimental to trees or shrubs are encountered in excavations.
- D. Fill excavations with water and allow to percolate away before positioning trees and shrubs.

3.04 TREE AND SHRUB PLANTING

- A. Set balled and burlapped stock plumb and in center of pit or trench with top of root ball flush with adjacent finish grades.
 - 1. Remove burlap and wire baskets from tops of root balls and partially from sides, but do not remove from under root balls. Remove pallets, if any, before setting. Do not use planting stock if root ball is cracked or broken before or during planting operation.
 - 2. Place planting soil mix around root ball in layers, tamping to settle mix and eliminate voids and air pockets. When pit is approximately one-half backfilled, water thoroughly before placing remainder of backfill. Repeat watering until no more water is absorbed. Water again after placing and tamping final layer of planting soil mix.
- B. Set balled and potted container-grown stock plumb and in center of pit or trench with top of root ball flush with adjacent finish grades.
 - 1. Carefully remove root ball from container without damaging root ball or plant.
 - 2. Place planting soil mix around root ball in layers, tamping to settle mix and eliminate voids and air pockets. When pit is approximately one-half backfilled, water thoroughly before placing remainder of backfill. Repeat watering until no more water is absorbed. Water again after placing and tamping final layer of planting soil mix.
- C. Organic Mulching: Apply 3-inch average thickness of organic mulch extending 12 inches beyond edge of planting pit or trench. Do not place mulch within 3 inches of trunks or stems.
- D. Wrap trees of 2-inch caliper and larger with trunk-wrap tape. Start at base of trunk and spiral cover trunk to height of first branches. Overlap wrap, exposing half the width, and securely attach without causing girdling. Inspect tree trunks for injury, improper pruning, and insect infestation; take corrective measures required before wrapping.

3.05 TREE AND SHRUB PRUNING

- A. Prune, thin, and shape trees and shrubs as directed by ENGINEER.
- B. Prune, thin, and shape trees and shrubs according to standard horticultural practice. Prune trees to retain required height and spread. Unless otherwise indicated by ENGINEER, do not cut tree leaders; remove only injured or dead branches from flowering trees. Prune shrubs to retain natural character. Shrub sizes indicated are sizes after pruning.

3.06 GUYING AND STAKING

- A. Upright Staking and Tying: Stake trees of 2- through 5-inch caliper. Stake trees of less than 2-inch caliper only as required to prevent wind tip-out. Use a minimum of 2 stakes of length required to penetrate at least 18 inches below bottom of backfilled excavation and to extend at least 72 inches above grade. Set vertical stakes and space to avoid penetrating root balls or root masses. Support trees with two strands of tie wire encased in hose sections at contact points with tree trunk. Allow enough slack to avoid rigid restraint of tree. Use the number of stakes as follows:
 - 1. Use 2 stakes for trees up to 12 feet high and 2-1/2 inches or less in caliper. Use 3 stakes for trees less than 14 feet high and up to 4 inches in caliper. Space stakes equally around trees.
- B. Guying and Staking: Guy and stake trees exceeding 14 feet in height and more than 3 inches in caliper, unless otherwise indicated. Securely attach no fewer than 3 guys to stakes 30 inches long, driven to grade.

3.07 CLEANUP AND PROTECTION

- A. During exterior planting, keep adjacent pavement and construction clean and work area in an orderly condition.
- B. Protect exterior plants from damage due to landscape operations, operations by other CONTRACTORs and trades, and others. Maintain protection during installation and maintenance periods. Treat, repair, or replace damaged exterior planting.

3.08 DISPOSAL

A. Disposal: Remove surplus soil and waste material, including excess subsoil, unsuitable soil, trash, and debris, and legally dispose of them off Owner's property.

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SPECIFICATION 33 11 53

WELL ABANDONMENT

PART 1 – GENERAL

1.01 DESCRIPTION

A. This specification establishes the requirements for monitoring well and piezometer abandonment. Wells and piezometers to be abandoned must be fully sealed in a manner appropriate for the geologic conditions to prevent contaminant migration through the borehole. For the purpose of this specification, the term well shall refer to both monitoring wells and piezometers unless otherwise noted.

Location ID	Ground Elevation	Top of Riser (tor) or Monitoring Point Elevation	Depth of Well (feet below tor)	Screen Length (feet)
MW-4	901.88	903.00	11.5	5.0
MW-5	899.25	901.81	8.5	4.0
MW-7	900.77	902.89	10.0	5.0
MW-8	905.24	907.69	15.0	10.0
MW-9	902.66	902.21	11.9	5.0
MW-102	899.23	901.33	9.9	5.0
MW-103	900.33	901.42	11.8	5.0
MW-105	905.29	904.97	10.0	5.0
MW-106	903.38	903.72	11.2	5.0
MW-107	899.94	899.95	9.9	5.0
SP-12	899.12	901.26	9.9	5.0
MW- Unknown	Well Identified on surveyor drawing, but no information available.			

B. Existing wells within the limit of work to be abandoned are as follows:

C. Additional borehole and well information can be found in the Limited Site Data Document.

1.02 RELATED WORK SPECIFIED ELSEWHERE

- A. Section X, Specification 01 33 00 Submittal Procedures
- B. Section XI, Specification 02 51 00 Decontamination Procedures

- C. Section XI, Specification 02 81 00 Off-Site Transportation and Disposal
- D. Section XI, Specification 31 00 00 Earthwork

1.03 REFERENCES AND GUIDELINES

- A. New York State Register and Official Compilation of Codes, Rules and Regulations (NYCRR), Chapter IV Quality Services, Sub-Part 360-2.11, Hydrologic Report (4 NYCRR Sub-Part 360-2.11).
- B. New York State Department of Environmental Conservation Commissioner Policy (CP)-43: Groundwater Monitoring Well Decommissioning Policy, dated November 3, 2009.

1.04 SUBMITTALS

- A. Submit the following in accordance with Section X, Specification 01 33 00 Submittal Procedures.
 - 1. Well Abandonment Completion Form: Complete and submit a form detailing the material types, quantities, and methods used along with any components of the well removed.

PART 2 – PRODUCTS

2.01 WELL PLUGGING MATERIALS

- A. Type 1 cement/bentonite grout:
 - 1. Type 1 cement/bentonite grout with 4% (by weight) powdered bentonite may be used in the riser pipe interval of screen and riser pipe wells.
- B. Microfine cement grout:
 - 1. Microfine cement grout will be used for screened sections of wells and may be used for riser sections. The microfine cement should be similar or equal to MC 500 microfine cement distributed by Geochemical Corporation, Ridgewood, New Jersey.

PART 3 – EXECUTION

3.01 WELL PLUGGING AND ABANDONMENT REQUIREMENTS

A. Monitoring wells shall be abandoned according to the requirements of the New York State Department of Environmental Conservation (the DEPARTMENT) and these Specifications.

- B. The CONTRACTOR shall maintain a well abandonment record. Groundwater levels shall be measured in all wells prior to abandonment. These water levels shall be included in the well abandonment records.
- C. Overbore or remove the casing to the greatest extent possible. All casing and well installations within five feet of the proposed final grade must be removed. Perforate casing left in place.
- D. Seal by pressure injection with Type 1 cement/bentonite grout (riser sections only) or microfine cement grout (screened or riser sections) using a tremie pipe or other method acceptable to the DEPARTMENT. Grout must extend the entire length of the boring, from the bottom of the well to five feet below the proposed final grade. The screened interval of the borehole must be sealed separately and tested to ensure its adequacy before sealing the remainder of the borehole. Where the surrounding geologic deposits are highly permeable, alternate methods of sealing may be required to prevent the migration of the grout into the surrounding geologic formation. Grout shall continue to be added to fill gaps created by settlement until the plugging material sets.
- E. Backfill and compact the upper five feet with subgrade fill as specified in Section XI, Specification 31 00 00 Earthwork.
- F. Restore the Site to a safe condition. The Site must be inspected periodically after sealing for settlement or other conditions which require remediation.
- G. Locations of abandoned wells shall be surveyed as a requirement of the Record Drawing submission.

3.02 WASTE DISPOSAL

- A. Waste materials derived from well abandonment may include removed casing, removed riser pipe, soil cuttings, and/or excess grout.
 - 1. Casing and riser pipe shall be cleaned of soil as required per Section XI, Specification 02 51 00 – Decontamination Procedures. Decontaminated material may be disposed off-site as construction and demolition debris in accordance with Section XI, Specification 02 81 00 – Off-Site Transportation and Disposal.
 - 2. Excess grout or soil cuttings shall be classified as Non-Hazardous Soil and shall be handled and disposed in accordance with that classification.

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SPECIFICATION 33 51 39

GROUNDWATER MONITORING WELLS

PART 1 – GENERAL

1.01 DESCRIPTION

- A. The CONTRACTOR shall provide all necessary personnel, equipment, and materials required to perform drilling, well installation, and well development services associated with the remedial action at the Batavia Iron and Metals Site in Batavia, New York for the purpose of completing seven overburden boreholes and installing seven groundwater monitoring wells to a maximum depth of 15 feet below ground surface (unless drilling refusal is shallower than 15 feet).
- B. The CONTRACTOR shall obtain approval for the borehole and well locations from the ENGINEER prior to drilling.
- C. The wells should be installed in accordance with ASTM International (ASTM), the Unites States Environmental Protection Agency (USEPA), The New York State Department of Environmental Conservation (the DEPARTMENT), and generally accepted industry standards and requirements for well installation.

1.02 RELATED WORK SPECIFIED ELSEWHERE

- A. Section X, Specification 01 33 00 Submittal Procedures.
- B. Section XI, Specification 02 72 00 Construction Water Management

1.03 REFERENCES

- A. ASTM International, 2017a. Standard Practice for Classification of Soils for Engineering Purposes (Unified Soil Classification System); ASTM D2487-17e1.
- B. ASTM, 2017b. Standard Practice for Description and Identification of Soils (Visual-Manual Procedure); ASTM D2488-17e1.

1.04 SUBMITTALS

- A. Submit the following in accordance with Section X, Specification 01 33 00 Submittal Procedures:
 - 1. Groundwater monitoring well borehole drilling and well installation methodology.
 - 2. The type and size of drilling and sampling equipment to be used at each location.

- 3. Recommended material for well housing and justification.
- 4. Number of personnel to be deployed during the work and the proposed schedule/logistics for completing the work.
- B. Field Test Reports: Submit the following field test reports:
 - 1. Written assurance each well meets the requirements specified herein for materials, depths, plumbness and alignment
 - 2. Drilling records including, cement-bentonite grout, well screens, well risers, penetration, and filter pack.

1.05 DELIVERY, STORAGE, AND HANDLING

A. Deliver screen, riser, and all materials in an undamaged condition. Materials must be approved by the ENGINEER prior to use. Replace defective or damaged materials with new materials.

1.06 SITE MAINTENANCE

- A. The site shall be maintained in a neat and orderly condition, free from trash and waste construction materials at all times. Unattended construction materials, equipment, and trash shall be left in a manner such that they do not constitute fire hazards or become or cause nuisance or danger due to forces of nature, such as rain or wind. All vehicles shall be loaded in a manner which shall prevent spillage, dripping, or loss of materials and debris.
- B. Provide, maintain, and remove upon completion of work all temporary rigging, equipment, barricades, fences, staging, treatment, containment, decontamination, and all other temporary facilities. All temporary facilities shall conform to the requirements of the ENGINEER, and Federal, State, and local authorities.

PART 2 – PRODUCTS

2.01 EQUIPMENT, MATERIAL, TOOLS, CONTAINERS

A. Drill Rig and Tools: to be used for completion of seven 8-inch boreholes (4 ¹/₄ inch inside diameter hollow stem augers) for installation of the overburden monitoring wells referenced in Sub-Part 1.01.A.1 shall be capable of reaching depths of at least 15 feet. Drill rig and tools that are not adequate, in the opinion of the ENGINEER, will not be permitted. The drill rig and chosen methods shall be capable of creating sufficient annular space to install the monitoring well as shown on the Contract Drawings and as directed by the ENGINEER.

B. Well Materials

1. Monitoring well riser and well screen shall be flush-threaded 2-inch diameter,

polyvinyl chloride.

- 2. Well screens shall be machine-slotted 0.010-inch screen openings and shall be tenfeet in length, unless target depth cannot be reached, in which case five-feet in length will be acceptable.
- C. Filter Pack and Grout:
 - 1. Filter pack shall be placed around the well screens, extending a minimum of two feet above the top of the screen slots or to a depth specified by the ENGINEER. The CONTRACTOR shall supply the particle size and uniformity specifications of the filter pack prior to mobilization and the filter pack shall be reviewed and approved by the ENGINEER prior to placement.
 - 2. Bentonite chips or pellets shall fill the annular space above the filter pack for a 2.0foot depth. The bentonite shall be hydrated if placed above the water table.
 - 3. Bentonite shall fill the annular space above the bentonite chip/pellet layer to within one foot of the surface. The top one foot will be sand.
- D. Protective Well Covers:
 - 1. Provide six-inch diameter protective steel casing.
 - 2. Set protective casing in place with a concrete seal as shown on the Construction Contract Drawings.
 - 3. Provide a removable, water-tight expansion well cap to seal the top of each monitoring well riser.
- E. Identification Tags:
 - 1. Provide durable weather-resistant well identification tags with legible well identification numbers at each well.
 - 2. Attach tags at least 24 inches above ground level using one of the following methods:
 - a. Strap the tag to the well casing using stainless steel bands or large hose clamps designed for exterior applications.
 - b. Strap the tag to the well casing using ultraviolet resistant nylon straps designed for exterior applications.
 - c. Rivet or bolt the tag to the well casing using stainless steel rivets or bolts.
- F. Locks and Keys:
 - 1. Provide durable weather-resistant exterior grade padlocks for each (seven total) new well cover.
 - 2. All well padlocks shall be keyed alike. A minimum of two sets of keys shall be provided to the DEPARTMENT.

2.02 QUALITY CONTROL

A. Well materials shall be new and undamaged and where possible factory cleaned and wrapped. Materials which are damaged or determined to be not in accordance with desired specifications will be rejected. Equipment and materials will be decontaminated and stored

in a fashion that will adequately protect them from contamination or degradation.

PART 3 – EXECUTION

3.01 BORING LOGS

- A. During the progress of each boring, the CONTRACTOR shall keep a continuous and accurate log of soil descriptions following ASTM guidelines, drilling technique, sample blow counts, downhole equipment, and materials used. Borings are to be completed to 15 feet below ground surface unless refusal on identified or apparent bedrock is reached prior to that depth. If target depth is not reached, wells must be deep enough to penetrate the water table.
- B. Data to be provided:
 - 1. Names of driller and inspector.
 - 2. Dates and times of beginning and completion of work.
 - 3. Identifying number and location of boring.
 - 4. Diameter and description of drilling equipment.
 - 5. Total length and size of drilling equipment and/or casing.
 - 6. Length of drilling equipment or casing extending below ground surface at the complete
 - 7. Depth to top of each different material penetrated, as noted by split spoon observations, drilling performance or observation of drill cuttings.
 - 8. Depth to water surface in borehole at completion and at end of each major work stoppage.
 - 9. Depth of drilling refusal if the target depth of 15 feet is not reached.

3.02 CONSTRUCTION

A. Overburden Monitoring Well Boreholes: The boreholes completed for installation of the overburden monitoring wells shall be completed using hollow-stem auger or other method to be approved by the ENGINEER that will advance the borings to the required depths in a timely manner, limit production of waste soil and water, and allow for appropriate construction of the well and surrounding material.

3.03 PERMITS, REGULATIONS, AND PUBLIC RELATIONS

A. Permits and licenses of a temporary nature necessary for the execution of the CONTRACTOR's work shall be secured and paid for by the CONTRACTOR. The CONTRACTOR shall give all notices and comply with all laws, ordinances, rules, and public regulations bearing on the conduct of the work as described in the scope of work specified.

- B. If the CONTRACTOR performs any Work without giving notice to the ENGINEER and does not receive written notification from the ENGINEER to proceed with Work, which is later determined to be contrary to any laws, ordinances, or regulations, the CONTRACTOR proceeds at their own risk, and shall bear all penalties and costs arising from such actions.
- C. The CONTRACTOR shall be solely responsible for compliance with laws, ordinances, and regulations during the Work, including those relating to safety to personnel and property and the handling of wastes and/or hazardous material. No off-site shipment of wastes will be allowed without authorization from the ENGINEER. Copies of all permits, manifests, and other documentation shall be forwarded in a timely manner to the ENGINEER.

3.04 PROTECTION OF WORK, PUBLIC AND PROPERTY

- A. The means, methods, procedures, and techniques to be used by the CONTRACTOR are the responsibility of the CONTRACTOR and shall be designed to meet the intent of the specifications.
- B. The CONTRACTOR shall continuously protect its work from damage and protect adjacent property as provided by law. The CONTRACTOR shall maintain lights and other safety devices as required. The CONTRACTOR shall promptly repair all damages caused by its operations. When using internal combustion equipment, the CONTRACTOR shall always have available at the work site emergency fire extinguishers or other approved firefighting apparatus.
- C. During its operations, the CONTRACTOR may occupy only those portions of the public right-of-way for which the required permits have been obtained by the CONTRACTOR. If the CONTRACTOR desires to use additional areas outside of those required for the borings, it shall arrange for such areas at its own coordination and expense.
- D. Fill all drill holes, ruts, low spots, and areas of disturbed grade created as a result of the work. Grade disturbed areas smooth, seed, and mulch, if wells are installed after final grading of the property has been completed. Any property which is damaged as the result of the CONTRACTOR's operations shall be repaired at the CONTRACTOR's expense to the satisfaction of the ENGINEER. Remove and properly dispose of all unused or wasted construction materials and equipment.
- E. All drilling casings shall be withdrawn from the drill holes unless directed to be left in place by the ENGINEER.
- F. The CONTRACTOR shall secure the work site and any other potential hazards overnight.

3.05 WELL DEVELOPMENT

A. The CONTRACTOR shall develop each monitoring well no sooner than 48-hours after

completion and no later than one week after completion to remove fines and demonstrate a hydraulic connection with the surrounding aquifer. Furnish pumps, compressors, plungers, bailers, and other equipment required to develop the well. Pump the well free of sand, mud, drillings, and other foreign matter. Record the rate of groundwater rise after pumping to document a connection with the aquifer. The ENGINEER will use the following criteria to evaluate well development progress:

- 1. Increase in well water clarity.
- 2. Stability of specific conductance, pH, and temperature measurements (e.g., vary by no more than 10 percent).
- 3. Turbidity measurements show no significant decrease.

3.06 DISPOSAL OF CUTTINGS AND WELL DEVELOPMENT WATER

- A. Soil cuttings are to be spread on the site in an area agreed upon by the engineer.
- B. Collect, handle, store, and dispose all well development water and decontamination fluids in accordance with Section XI, Specification 02 72 00 Construction Water Management.

3.07 DECONTAMINATION

- A. Clean and decontaminate all equipment at the designated decontamination pad. All water will be containerized and sampled for contamination by the CONTRACTOR as specified in Section XI, Specification 02 72 00 Construction Water Management.
- B. Decontaminate all rigs and equipment upon arrival at site, between each borehole, and upon completion of work. All down-hole sampling equipment shall be decontaminated between sample locations using a steam cleaner or high-pressure wash, clean water, laboratory-grade detergent, and alconox or similar means. All drilling equipment shall be rinsed thoroughly with tap water. All sampling equipment shall be rinsed water.

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SECTION XII

Measurement for Payment

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SECTION XII

MEASUREMENT FOR PAYMENT

PART 1 – GENERAL

1.01 DESCRIPTION

- A. This section covers the methods and procedures that the **DEPARTMENT** will use to measure the **CONTRACTOR'S** work and provide payment. This general outline of the measurement and payment features will not, in any way, limit the Responsibility of the **CONTRACTOR** for making a thorough investigation of the Contract Documents to determine the scope of the work included in each bid task.
- B. Payment will be made to the **CONTRACTOR** in accordance with the specified methods of measurement and the unit or lump sum prices stipulated in the accepted bid. Payment will constitute complete compensation for all work required by the Contract Documents including all costs of accepting the general risks, liabilities, and obligations, expressed or implied. Payment under all tasks will include, but necessarily be limited to, compensation for furnishing all supervision, labor, equipment, overhead, profit, material, services, applicable taxes, and for performing all other related work required. No other payment will be made.
- C. No payment will be made for work performed by the **CONTRACTOR** to replace defective work, work which is not required by the Contract Documents, work outside the limits of the Contract and additional work necessary due to actions of the **CONTRACTOR**, unless ordered by the **ENGINEER** in writing.
- D. For unit price items, the **CONTRACTOR** shall be paid for the actual amount of work accepted and for the actual amount of materials in place during the period of construction. After the work is completed and before final payment is made, the **ENGINEER** or **CONTRACTOR** as specified in the pay items will make final measurements to determine the quantities of the various items of work accepted as the basis for final payment. The **CONTRACTOR** shall accept compensation, as herein provided, in full payment for furnishing all materials, labor, tools, equipment, and incidentals necessary to the completed work and for performing all work contemplated and embraced by the Contract.
- E. For lump sum items, the **CONTRACTOR** will be paid based on actual work accepted until the work item is completed. Upon completion of the item, 100 percent of the lump sum price may be paid, subject to the terms of the Agreement. The pay items listed below describe the measurement of and payment for the Work to be done under the respective items listed in the Bid as outlined in the approved schedule of values.

F. All units of measurement shall be standard United States convention, as applied to the specific items of work by tradition and as interpreted by the **ENGINEER**. Each unit or lump sum price stated in the Bid shall constitute full compensation, as herein specified, for each item of the Work completed.

1.02 ENGINEER'S ESTIMATE OF QUANTITIES

A. The Estimated quantities for unit price items, as listed in the bid schedule, are only approximate and are included solely for the purposes of the comparison of bids. The **ENGINEER** does not expressly, or by implication, agree that the nature of the materials encountered or required shall correspond therewith and reserves the right to increase or decrease any such quantity or to eliminate any quantity as the **ENGINEER** may deem necessary.

1.03 INCIDENTAL ITEMS

A. Except for the items designated hereunder for Measurement and Payment, the costs of items necessary to complete the work as specified are considered incidental to the items specified for Measurement and Payment. The costs of incidental items shall be included in the prices of items specified for Measurement and Payment.

1.04 QUANTITIES

A. The Estimated quantities indicated in the Bid Schedule are the quantities for the evaluation of bids. The actual quantities of items to be paid for on a unit price basis may vary significantly from the quantities indicated in the Bid Schedule.

1.05 RELATED PROVISIONS SPECIFIED ELSEWHERE

- A. Payment to **CONTRACTOR**: Refer to General Conditions and Contract Agreement Section 6.
- B. Changes in the Contract Price: Refer to General Conditions and Contract Agreement Section 6.

1.06 SUBMITTALS

A. Bid Breakdowns/Schedule of Values: Submit in accordance with Section VIII, Article 1.4, 1.6 and Article 13.

1.07 MEASUREMENT

A. Under this Contract, the **CONTRACTOR** shall provide all labor, equipment, and materials and shall complete all work as shown and described in the Contract Documents and as directed by the **ENGINEER**, in accordance with the expressed

intent of the contract to secure a complete construction of a functionally complete project. The bid items described in Part 3 BID ITEMS shall together include all work set forth in the Contract Documents or required to properly complete the work. Any necessary work that is not described shall be considered included in the item to which it properly belongs. Where used in the Contract Documents, the word "including" ("includes", "include") shall mean "including (includes, include) but not restricted to". Each item includes:

- 1. All labor, material, equipment, plant services, bonds and insurance, tests, adjustments, warranties, overhead, and other expenses required to perform the work.
- 2. All accessories, manuals, and services pertinent to the proper installation of materials and equipment.
- 3. All accessories, manuals, and services pertinent to the proper start-up, operation, and maintenance of materials and equipment.
- B. Lump Sum Items: Measurement of all Lump Sum Items will be on a total job basis.
 - 1. The quantities of work performed under lump sum items will not be measured except for the purpose of determining reasonable interim payments. Interim payments will be made in accordance with the estimated value of work performed and found acceptable as determined by the **ENGINEER**, or as specified in this section.
 - 2. Where indicated for a lump sum item, the **CONTRACTOR** shall provide a schedule of values per Subpart 1.06 of this Section. The schedule of values shall include a breakdown of major cost items included within the lump sum in sufficient detail to document specific costs of all items included in the lump sum item. The schedule of values shall be provided to the **ENGINEER** prior to initiation of work.
 - 3. Measurement for Progress Payments of all lump sum items will be on a percent complete basis as established in the General Conditions and Section VI, Article 9.
- C. Unit Price Items: Where items are specified to be measured on a unit basis, measurement will be of each particular unit as specified.
 - 1. **Volume Basis -** Where items are specified to be measured on a volume basis, the volume will be determined on an in-place basis (prior to excavation for excavation or after placement and compaction for imported fill) between the existing and final ground surfaces or grade lines shown on the drawings. If no tolerance is specified, the tolerance shall be interpreted to be 0.00 foot.
 - 2. Area Basis Where items are specified to be measured on an area basis, the area will be measured as the actual surface area within the specified limits based on a plan view. If a specified width of an item is indicated, the area will be determined by the actual length along the centerline multiplied by the specified width. No adjustments will be made for the required overlap of materials.
 - 3. **Length Basis -** Where items are specified to be measured on a length basis, the length will be measured as the actual length along the centerline within

specified limits based on a plan view. No adjustments will be made for the required overlap of materials

- 4. Weight Basis Where items are specified to be measured on a weight basis, the weight will be measured based on certified weigh scale tickets obtained from a weigh scale certified by the County Office of Weights and Measures and approved by the ENGINEER. The weights shall be taken in the presence of a DEPARTMENT representative. When the weight is per ton, trucks shall be weighed entering the site and exiting the site, using either an on-site or off-site scale. The measured tonnage will be the difference between the measured truck weight upon entering and exiting the certified weight scale.
- D. Measurement and payment will be made only for work that has been acceptably performed within the limits shown on the Construction Contract Drawings and in conformance with the Contract Specifications, as specified, or ordered by the **ENGINEER**.

1.08 DESCRIPTION OF BID ITEMS

A. Bid Item Lump Sum (LS) -1: Mobilization/Demobilization

- 1. Bid Item LS-1 shall be the bid **lump sum** price for the completion of performance of Mobilization/Demobilization in accordance with the Contract Documents.
- 2. Provide all labor, materials, equipment, and incidentals necessary for the work described below, in accordance with Section X Standard Specifications 01 32 33 - Photographic Documentation, 01 51 05 -Temporary Utilities and Controls, 01 52 11 - Engineer's Field Office, 01 52 13 - Contractors Field Office and Sheds, 01 55 13 - Access Roads and Parking Areas, 01 57 33 - Security, and 01 58 00 - Project Identification and Signs, 01 71 33 - Protection of Work and Property, 01 76 50 - Nuisance Controls, 01 77 19 - Closeout Requirements, and 34 78 13 - Portable Truck Scales; and Section XI Supplemental Specifications 01 11 13 – Summary of Work, 01 45 00 - Contractor Quality Control, 01 55 26 - Traffic Control, 02 41 13 - Select Demolition, 01 92 13 - Winter Shutdown, 02 51 00 -Decontamination Procedures, 02 61 13 - Impacted Material Removal, Handling, and Storage, 31 11 00 - Clearing and Grubbing, and Section 31 25 00 - Erosion and Sediment Control; and described below but not limited to:
 - a. Mobilization of personnel, equipment, and project facilities.
 - b. Establish all temporary utilities and services including electric service, mobile phone, internet access, sanitary facilities, and potable water.
 - c. Provide ENGINEER and CONTRACTOR field offices and support areas.
 - d. Permitting.
 - e. Project work plans (Construction Work Plan, Health and Safety

Plan and Contractor Quality Control Plan).

- f. Schedules, submittals (shop drawings), and record drawings.
- g. Bonds and insurance.
- h. Perform an existing conditions assessment of buildings, adjacent roads, and/or other infrastructure adjacent to the work.
- i. Clearing trees and brush within the limit of clearing delineation shown on the Construction Contract Drawings.
- j. Grubbing stumps and roots within the remediation excavation limits shown on the Construction Contract Drawings is not included under this Item. Refer to Bid Item UP-4.
- k. Grubbing stumps and roots outside of the remediation excavation limits shown on the Construction Contract Drawings is included under this Item.
- 1. Select demolition of miscellaneous pavement, pads or demolition debris items encountered within the remediation excavation limits shown on the Construction Contract Drawings.
- m. Abandonment of 12 monitoring wells ranging depth from 9 to 15 feet deep.
- n. Other preparation work not specifically included in other items including compliance with applicable regulatory requirements, preconstruction and construction period planning, scheduling, submittals, reporting, administration and documentation, quality control, environmental protection, and spill control.
- o. Providing vehicle decontamination pads.
- p. Installing required erosion and sedimentation controls including but not limited to stabilized construction accesses, silt fence, augmented silt fence, hay bales, and stone check dams and/or turbidity curtains.
- q. Prepare, protect, inspect and maintain the site during winter shutdown.
- r. Installing and maintaining temporary access roads.
- s. Installing temporary project signage.
- t. Installing temporary fencing and barricades.
- u. Installing soil stockpile containment areas and contractor equipment and materials staging areas.
- v. Providing an on-site truck scale.
- w. Installation of seven new 15-foot deep monitoring wells.
- x. Augmenting temporary facilities and controls as required for supporting the sequence of project work.
- y. Repair of damage to adjacent roads, as required.
- z. Removing temporary facilities and controls when the work associated with them is complete, and properly disposing the materials off-site.
- aa. Removal, transportation and disposal of materials uses for decontamination pads and construction access.

- bb. Demobilization of project personnel, equipment, and project facilities.
- cc. Project closeout.
- dd. Final site cleanup.
- 3. The CONTRACTOR shall submit a separate bid breakdown (See Paragraph 1.06 of this Section) that lists the individual costs required to complete this bid item as well as miscellaneous items not specified elsewhere that are necessary for proper completion of the work (provide detail).
- 4. Measurement for payment for Bid Item LS-1 shall be the bid <u>lump sum</u> price for the above Mobilization/Demobilization items completed as documented and approved by the ENGINEER.
- B. <u>Bid Item LS-2: Construction Monitoring</u>
 - 1. Bid Item LS-2 shall be the bid <u>lump sum</u> price for completion of Construction Monitoring activities in accordance with the Contract Documents.
 - Provide all labor, materials, equipment, and incidentals necessary for the work described below, in accordance with Section X Standard Specifications - 01 71 23 - Field Engineering, 01 76 50 - Nuisance Controls, and Section X1 Supplemental Specifications 01 11 00 – Summary of Work and 01 45 00 – Contractor Quality Control, and described below but not limited to:
 - a. Perform nuisance control and monitoring as required during the execution of the work.
 - b. Surveying required for initial field verification, establishing horizontal and vertical control, providing construction layout, providing quality control field measurements, supporting the calculation of measurement for payment, and documenting final as-built conditions.
 - c. Providing completed as-built survey to the ENGINEER for review and approval.
 - 3. The CONTRACTOR shall submit a separate bid breakdown (See Paragraph 1.06 of this Section) that lists the individual costs required to complete this bid item as well as miscellaneous items not specified elsewhere that are necessary for proper completion of the work (provide detail).
 - 4. Measurement for payment for Bid Item LS-2 shall be the bid <u>lump sum</u> price for the above Construction Monitoring items completed as documented and approved by the ENGINEER.
- C. Bid Item LS-3: Wetland Restoration
 - 1. Bid Item LS-3 shall be the bid <u>lump sum</u> price for completion of Wetland Restoration activities in accordance with the Contract Documents.

- Provide all labor, materials, equipment, and incidentals necessary for the work described below, in accordance with Section XI Supplemental Specifications 01 11 00 Summary of Work, 31 00 00 Earthwork, 31 25 00 Erosion and Sediment Control, 32 92 26 Topsoil and Seeding, and 32 93 00 Exterior Plants, and described below but not limited to:
 - a. Borrow source testing of topsoil geotechnical, soil nutrient, and chemical testing of material meeting unrestricted use criteria.
 - b. Providing and installing topsoil.
 - c. Staging and storing topsoil on-site as required to coordinate with construction sequence.
 - d. Planting of trees and shrubs.
 - e. Wetland seeding and mulching.
- 3. The CONTRACTOR shall submit a separate bid breakdown (See Paragraph 1.06 of this Section) that lists the individual costs required to complete this bid item as well as miscellaneous items not specified elsewhere that are necessary for proper completion of the work (provide detail).
- 4. Measurement for payment for Bid Item LS-3 shall be the bid <u>lump sum</u> price for Wetland Restoration as documented and approved by the ENGINEER.

D. Bid Item LS-4: Upland Area Restoration

- 1. Bid Item LS-4 shall be the bid <u>lump sum</u> price for completion of Upland Area Restoration activities in accordance with the Contract Documents.
- Provide all labor, materials, equipment, and incidentals necessary for the work described below, in accordance with Section XI Supplemental Specifications 01 11 00 Summary of Work, 31 00 00 Earthwork, 31 25 00 Erosion and Sediment Control, and 32 92 26 Topsoil and Seeding, and described below but not limited to:
 - a. Restoration of disturbed upland areas with topsoil and seeding as shown on the drawings.
 - b. Borrow source testing of topsoil geotechnical, soil nutrient, and chemical testing of material meeting unrestricted use criteria.
 - c. Providing and installing topsoil.
 - d. Seeding and mulching all vegetated areas.
 - e. Planting of trees.
 - f. Staging and storing topsoil on-site as required to coordinate with construction sequence.
- 3. The CONTRACTOR shall submit a separate bid breakdown (See Paragraph 1.06 of this Section) that lists the individual costs required to complete this bid item as well as miscellaneous items not specified elsewhere that are necessary for proper completion of the work (provide detail).
- 4. Measurement for payment for Bid Item LS-4 shall be the bid <u>lump sum</u> price for Upland Area Restoration as documented and approved by the ENGINEER.

E. Bid Item Unit Price (UP)-1: Site Services

- 1. Bid Item UP-1 shall be the bid <u>unit cost</u> price per calendar day for Site Services performed in accordance with the Contract Documents.
- 2. Provide all labor, materials, equipment, and incidentals necessary for each calendar day of site services in accordance with Section X Standard Specifications 01 51 05 Temporary Utilities and Controls, 01 55 13 Access Roads and Parking Areas, 01 57 33 Security, and 01 71 33 Protection of Work and Property; and Section XI Supplemental Specifications 01 11 00 Summary of Work, 01 41 00 Regulatory Requirements, 01 45 00 Contractor Quality Control, 01 55 26 Traffic Control, 02 61 13 Impacted Material Removal, Handling, and Storage, and described below but not limited to:
 - a. Site Security.
 - b. Controlling on-site access and traffic.
 - c. Site access roadway maintenance.
 - d. Maintaining soil/sediment stockpile containment areas and CONTRACTOR equipment and materials staging areas.
 - e. Maintaining all constructed temporary facilities and controls.
 - f. Cleaning the project site and disposing CONTRACTOR generated solid waste.
 - g. Coordinating with the City of Batavia and adjacent commercial and residential property owners/tenants.
 - h. Compliance with permits.
 - i. Attending project meetings.
 - j. Providing Site Superintendence.
 - k. Providing quality control management.
 - 1. Providing field engineering services.
 - m. Maintaining vehicle decontamination pads including collection and analysis of decontamination verification samples.
 - n. Maintenance of temporary utilities and services.
 - o. Sanitary facilities maintenance.
- 3. Measurement for payment for Bid Item UP-1: Site Services shall be paid the bid <u>unit price</u> for each calendar day beginning with initiation of site services and ending with Substantial Completion or at the end of the Contract Time specified in Contract Documents Section VI Article 6.1, whichever is sooner, but will not include calendar days within Winter Shutdown. Progress payments for this Item shall be based on the number of units completed. A fifty percent reduction in payment would occur for each calendar day that operation and/or maintenance of any item included in this Bid Item was unsatisfactory or unused as determined by the ENGINEER.
- F. Bid Item UP-2: Contractor Health and Safety
 - 1. Bid Item UP-2 shall be the bid <u>unit cost</u> price per working day for Contractor

Health and Safety activities performed in accordance with the Contract Documents.

- 2. Provide all labor, materials, equipment and incidentals necessary for each calendar day for health and safety during proper execution of the Contract and in accordance with Section X Standard Specifications 01 35 29 Contractor's Health and Safety Plan, 01 35 33 COVID-19 Risk Management, 01 35 43.13 Environmental Procedures for Hazardous Materials, and 01 76 50 Nuisance Controls; and Section XI Supplemental Specifications 01 11 00 Summary of Work and Section 02 51 00 Decontamination Procedures, and as described below but not limited to:
 - a. Providing a Health and Safety Officer.
 - b. Providing and maintaining personnel decontamination facilities.
 - c. Providing and maintaining personnel health and safety equipment.
 - d. Providing COVID 19 management and controls.
 - e. Providing emergency response.
 - f. Air monitoring as required by the Community Air Monitoring Program (CAMP). Collecting samples up and downwind of the Site, testing for the required parameters, and reporting laboratory results.
 - g. Sampling, analyzing, and handling/disposing personal protective equipment (PPE) and remediation wastes not specifically included in other bid items.
- Measurement for payment for Bid Item UP-2: Contractor Health and Safety 3. shall be paid the bid **unit price** for each working day the Health and safety Plan (HASP) has been adhered to in the opinion of the ENGINEER. Work included in this item shall be by calendar day ending at Substantial Completion or at the end of the Contract Time specified in Contract Documents Section VI Article 6.1, whichever is sooner, but will not include calendar days within Winter Shutdown. All daily maintenance costs for health and safety are part of this Bid Item including everything required for the HASP and Community Air Monitoring Program (CAMP). Progress payments for this Item shall be based on the number of units completed. A reduction in the payment for this item will occur for each day the CONTRACTOR fails to adhere (in the opinion of the ENGINEER) to the HASP. There would be a one hundred (100) percent reduction in this Bid Item for days where no remediation work occurs in the exclusion zone. No payment will be made for Sundays and holidays specified in Contract Documents Section XIII.

G. <u>Bid Item UP-3: Construction Water Management, Treatment, Sampling, and</u> <u>Disposal</u>

- 1. Bid Item UP-3 shall be the bid <u>unit price</u> per gallons of water treated for Construction Water Management, Treatment, Sampling, and Disposal activities in accordance with the Contract Documents.
- 2. Provide all labor, materials, equipment, and incidentals necessary for the

work described below in accordance with Section X Standard Specification 01 45 29.13 - Testing Laboratory Services Furnished by Contractor; and Section XI Supplemental Sections 01 11 00 – Summary of Work, 01 45 28 – Chemical Sampling and Analysis, 02 72 00 - Construction Water Management, 02 81 00 - Off-Site Transportation and Disposal, and 31 23 19 – Dewatering; and described below but not limited to the activities associated with the available construction water disposal options, including on-site storage as necessary:

- a. Storage, treatment, testing, and discharge to either surface water discharge or to the Batavia Water and Wastewater Bureau (Wastewater Bureau) sanitary sewer for treatment of construction water at the publicly owned treatment works (POTW):
 - i. Coordinating with the Wastewater Bureau, and the DEPARTMENT, as required.
 - ii. Furnishing an on-site treatment system, including mechanical treatment and chemical addition as necessary, capable of treating construction water to concentrations meeting the DEPARTMENT requirements for surface water discharge or alternatively to the Wastewater Bureau Permit requirements.
 - iii. Treating construction water generated throughout the duration of the work to the standards required for the selected method of on-site disposal (surface water discharge).
 - iv. Providing dry excavations to enable collection of confirmation soil samples and detailed visual observations of excavation bottom.
 - v. Providing a safe and secure means to discharge treated construction water to surface water or to the Wastewater Bureau sanitary sewer.
 - vi. Performing treatment system start-up.
 - vii. Providing sufficient water storage to ensure discharge flows are not exceeded.
 - viii. Completing prove-out of the treatment system to demonstrate its capability to meet the performance requirements of the Contract Documents.
 - ix. Performing all analytical testing requirements at the prescribed frequencies.
 - x. Provide surface water diversion or barrier control to prevent surface water from adjacent wetlands entering excavations.
 - xi. Maintaining the systems throughout the contract duration.
- b. Decommissioning, decontaminating, and deconstructing the treatment system at the end of the contract duration:
 - i. Off-site transportation and disposal of waste material generated as part of the treatment process, including, but not limited to spent carbon or other media, accumulated

sediment, water generated during final cleanout of the treatment system.

- ii. Demobilizing all components of the treatment system from the site.
- 3. The CONTRACTOR shall submit a separate bid breakdown (See Paragraph 1.06 of this Section) that lists the individual costs required to complete this bid item as well as miscellaneous items not specified elsewhere that are necessary for proper completion of the work (provide detail).
- 4. Measurement for payment for Bid Item UP-3 shall be the bid <u>unit price</u> for each gallon of water treated as measured at the discharge end of the water treatment system and as approved by the ENGINEER.

H. Bid Item UP-4: Confirmation Sampling and Analysis (Metals and PCBs)

- 1. Bid Item UP-4 shall be the bid unit cost price per each soil sample taken for Confirmation Sampling and Analysis for Total Metals and PCBs in accordance with the Contract Documents.
- 2. Provide all labor, materials, equipment and incidentals necessary for conducting chemical sampling and analysis of soil samples in accordance with Section X Standard Specification 01 45 29.13 Testing Laboratory Services Furnished by Contractor; and Section XI Supplemental Specifications 01 11 00 Summary of Work, 01 45 28 Chemical Sampling and Analysis, and 31 00 00 Earthwork, and described below but not limited to:
 - a. Collecting confirmation samples at the specified frequency indicated on the drawings and in specification 01 45 28. Samples must be analyzed with a 24-hour turn-around-time testing for the required parameters and within the laboratory reporting limits needed to meet the cleanup criteria.
 - b. Complete additional confirmation testing for additional samples collected following additional excavation require for samples that do not meet cleanup criteria.
 - c. Collect and submit QA/QC samples at the frequency identified in specification 01 45 28.
 - d. Provide electronic data deliverables as indicated in specification 01 45 28.
 - e. Provide data usability summary reports as indicated in specification 01 45 28.
- 3. Measurement for payment of Bid Item UP-4: Confirmation Sampling and Analysis (Metals and PCBs) shall be the bid <u>unit price</u> for each sample collected, analyzed, and laboratory results submitted to the ENGINEER for approval.
- I. Bid Item UP-5: Excavation Impacted Soil Materials

- Bid Item UP-5 shall be the bid unit cost price per cubic yard for Excavation

 Impacted Soil Materials activities associated with soil materials impacted with metals and PCBs in accordance with the Contract Documents.
- Provide all labor, materials, equipment, and incidentals necessary for the work described below in accordance with Section X Standard Specifications 01 35 43.13 Environmental Procedures for Hazardous Materials and 01 66 00 Product Storage and Handling Requirements; and Section XI Supplemental Specifications 01 11 00 Summary of Work, 02 61 13 Impacted Material Removal, Handling, and Storage, 31 00 00 Earthwork, and 31 25 00 Erosion and Sediment Control, and described below but not limited to:
 - a. Excavating to the horizontal and elevation limits specified on the drawings.
 - b. Additional excavation as required based on the results of confirmation sampling and as directed by the engineer.
 - c. In the event of excavation refusal, confirm that the bottom of the excavation is bedrock by fully exposing a clean bottom. Continue to excavate using alternate methods such as using an excavator hammer attachment to remove boulders to reach excavation limits if bedrock cannot be confirmed.
 - d. Grubbing stumps and roots within the remediation limits is included under this Item.
 - e. Handling the excavated materials as required for dewatering, waste characterization, stockpiling, and storage.
 - f. Segregating non-TSCA, non-hazardous, TSCA, and hazardous excavated soil materials based on the extents shown on the drawings.
 - g. Loading excavated soil materials into trucks for on-site transport to storage area.
- 3. Measurement for payment of Bid Item UP-5: Excavation Impacted Soil Materials shall be the bid <u>unit cost</u> for each cubic yard of soil materials excavated in accordance with the Contract Documents. Excavation volume measurement shall be determined on an in-place basis by survey prior to and after the excavation of waste, as documented and approved by the ENGINEER.

J. Bid Item UP-6: Clean Imported Backfill

- 1. Bid Item UP-6 shall be the bid <u>unit cost</u> price per cubic yard for furnishing and installing Clean Imported Backfill in accordance with the Contract Documents.
- Provide all labor, materials, equipment, and incidentals necessary for each cubic yard of subgrade fill imported and placed in accordance with Section X Standard Specification 01 45 29.13 - Testing Laboratory Services Furnished by Contractor; and Section XI Supplemental Specifications 01 11

00 - Summary of Work, $01\ 45\ 28 -$ Chemical Sampling and Analysis, and $31\ 00\ 00 -$ Earthwork, and described below but not limited to:

- a. Geotechnical and chemical testing of borrow source.
- b. Processing the soil, if required.
- c. Delivering soil to site.
- d. Staging and storing soil on-site as required to coordinate with construction sequence.
- e. Placing soil in lifts, grading, and compacting soil to the grading limits shown on the drawings.
- f. Field testing for compaction.
- 3. Measurement for payment of Bid Item UP-6: Clean Imported Backfill shall be the bid <u>unit cost</u> for each cubic yard of subgrade fill delivered, placed, and compacted in accordance with the Contract Documents. Volume measurement shall be determined on an in-place basis by survey prior to and after placement and compaction of subgrade fill, as documented and approved by the ENGINEER.

K. <u>Bid Item UP-7: Non-TSCA PCB Impacted Material Off-Site Transportation and</u> <u>Disposal</u>

- 1. Bid Item UP-7 shall be the bid unit cost price per ton for Non-TSCA PCB Impacted Material Off-Site Transportation and Disposal in accordance with the Contract Documents.
- Provide all labor, materials, equipment, and incidentals necessary for the work described below in accordance with Section X Standard Specification 01 45 29.13 Testing Laboratory Services Furnished by Contractor; and Section XI Supplemental Specifications 01 11 00 Summary of Work, 01 45 28 Chemical Sampling and Analysis, and 02 81 00 Off-Site Transportation and Disposal, and described below but not limited to:
 - a. Dewatering excavated material as required to make suitable for transportation and to meet the moisture content and workability requirements of the disposal facility.
 - b. Full waste characterization testing, including paint filter and minimum strength testing requirements to meet the treatment, storage, and disposal facility's (TSDF) disposal requirements and frequencies.
 - c. Preparation of soil profiles for disposal at each TSDF.
 - d. Loading Non-TSCA PCB impacted materials into trucks for transport.
 - e. Transporting Non-TSCA PCB impacted materials to an approved licensed off-site disposal facility.
 - f. Off-loading Non-TSCA PCB impacted materials at disposal facility.
- 3. Measurement for payment for Bid Item UP-7: Non-TSCA PCB Impacted Material Transportation Off-Site and Disposal shall be the bid <u>unit cost</u> price for each ton of Non-TSCA PCB Waste transported to and disposed at the

approved disposal facility. Weight measurement shall be by certified scale and documented by certified weight ticket issued by the disposal facility. Certified weight tickets, and final manifests shall be submitted to the ENGINEER for comparison to on-site weight measurement prior to approval.

- L. <u>Bid Item UP-8: Amended Non-TSCA PCB Impacted Material Off-Site</u> Transportation and Disposal
 - 1. Bid Item UP-8 shall be the bid <u>unit cost</u> price per ton for Amended Non-TSCA PCB Impacted Material Off-Site Transportation and Disposal in accordance with the Contract Documents.
 - Provide all labor, materials, equipment, and incidentals necessary for the work described below in accordance with Section X Standard Specification 01 45 29.13 Testing Laboratory Services Furnished by Contractor; and Section XI Supplemental Specifications 01 11 00 Summary of Work, 01 45 28 Chemical Sampling and Analysis, and 02 81 00 Off-Site Transportation and Disposal, and described below but not limited to:
 - a. Dewatering excavated material as required to make suitable for transportation and to meet the moisture content and workability requirements of the disposal facility.
 - b. Test soil, 1 per 500 CY, for TCLP metals.
 - c. If soil is deemed hazardous based on results of TCLP metals (specifically lead), add amendments to render the soil non-leachable.
 - d. Full waste characterization testing, including TCLP to confirm no longer hazardous due to leaching, paint filter and minimum strength testing requirements to meet TSDF disposal requirements and frequencies.
 - e. Preparation of soil profiles for disposal at each TSDF.
 - f. Loading amended non-TSCA PCB impacted materials into trucks for transport.
 - g. Transporting amended non-TSCA PCB impacted materials to an approved licensed off-site disposal facility.
 - h. Off-loading amended non-TSCA PCB impacted materials at disposal facility.
 - 3. Measurement for payment for Bid Item UP-8: Amended Non-TSCA PCB Impacted Material Transportation Off-Site and Disposal shall be the bid <u>unit</u> <u>cost</u> price for each ton of Amended Non-TSCA Waste transported to and disposed at the approved disposal facility. Weight measurement shall be by certified scale and documented by certified weight ticket and final waste manifests issued by the disposal facility. Certified weight tickets shall be submitted to the ENGINEER for comparison to on-site weight measurement prior to approval.
- M. <u>Bid Item UP-9: TSCA PCB Impacted Material (PCBs >50ppm) Off-Site</u> <u>Transportation and Disposal</u>

- 1. Bid Item UP-9 shall be the bid <u>unit cost</u> price per ton for TSCA PCB Impacted Material (PCBs >50ppm) Off-Site Transportation and Disposal in accordance with the Contract Documents.
- Provide all labor, materials, equipment, and incidentals necessary for the work described below in accordance with Section X Standard Specification 01 45 29.13 Testing Laboratory Services Furnished by Contractor; and Section XI Supplemental Specifications 01 11 00 Summary of Work, 01 45 28 Chemical Sampling and Analysis, and 02 81 00 Off-Site Transportation and Disposal, and described below but not limited to:
 - a. Dewatering excavated material as required to make suitable for transportation and to meet the moisture content and workability requirements of the disposal facility.
 - b. Full waste characterization testing, including paint filter and minimum strength testing requirements to meet TSDF disposal requirements and frequencies.
 - c. Preparation of soil profiles for disposal at each TSDF.
 - d. Loading TSCA PCB impacted materials into trucks for transport.
 - e. Transporting TSCA PCB impacted materials to an approved licensed off-site disposal facility.
 - f. Off-loading TSCA PCB impacted materials at disposal facility.
- 4. Measurement for payment for Bid Item UP-9: TSCA PCB Impacted Material (PCBs >50ppm) Off-Site Transportation and Disposal shall be the bid <u>unit</u> <u>cost</u> price for each ton of TSCA PCB Waste transported to and disposed at the approved disposal facility. Weight measurement shall be by certified scale and documented by certified weight ticket and final waste manifests issued by the disposal facility. Certified weight tickets shall be submitted to the ENGINEER for comparison to on-site weight measurement prior to approval.

N. <u>Bid Item UP-10: Amended TSCA PCB Impacted Material (PCBs >50ppm) Off-Site</u> <u>Transportation and Disposal</u>

- 1. Bid Item UP-10 shall be the bid <u>unit cost</u> price per ton for Amended TSCA PCB Impacted Material (PCBs >50ppm) Off-Site Transportation and Disposal in accordance with the Contract Documents.
- Provide all labor, materials, equipment, and incidentals necessary for the work described below in accordance with Section X Standard Specification 01 45 29.13 Testing Laboratory Services Furnished by Contractor; and Section XI Supplemental Specifications 01 11 00 Summary of Work, 01 45 28 Chemical Sampling and Analysis, and 02 81 00 Off-Site Transportation and Disposal, and described below but not limited to:

- a. Dewatering excavated material as required to make suitable for transportation and to meet the moisture content and workability requirements of the disposal facility.
- b. Test soil, 1 per 500 CY, for TCLP metals.
- c. If soil is deemed hazardous based on results of TCLP metals (specifically lead), add amendments to render the soil non-leachable.
- d. Full waste characterization testing, including TCLP to confirm no longer hazardous due to leaching, paint filter and minimum strength testing requirements to meet TSDF disposal requirements and frequencies.
- e. Preparation of soil profiles for disposal at each TSDF.
- f. Loading amended TSCA PCB impacted materials into trucks for transport.
- g. Transporting amended TSCA PCB impacted materials to an approved licensed off-site disposal facility.
- h. Off-loading amended TSCA PCB impacted materials at disposal facility.
- 3. Measurement for payment for Bid Item UP-10: Amended TSCA PCB Impacted Material (PCBs >50ppm) Transportation Off-Site and Disposal shall be the bid <u>unit cost</u> price for each ton of Amended TSCA PCB Waste transported to and disposed at the approved disposal facility. Weight measurement shall be by certified scale and documented by certified weight ticket, and waste manifests issued by the disposal facility. Certified weight tickets shall be submitted to the ENGINEER for comparison to on-site weight measurement prior to approval.

+ + END OF SECTION + +

SECTION XIII

Wages Rates and Associated Contract Requirement

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SECTION XIII

Wage Rates and Associated Contract Requirements

Wages and Supplements

The wages and supplements to be paid and/or provided to laborers, workers, and mechanics employed on a public work project shall be not less than those listed in the current Prevailing Rate Schedule for the locality where the work is performed. As attached to this section. If a prime contractor on a public work project has not been provided with a Prevailing Rate Schedule, the contractor must notify the Department of Jurisdiction (Contracting Agency) who in turn must request an original Prevailing Rate Schedule form the Bureau of Public Work. Requests may be submitted by: mail to NYSDOL, Bureau of Public Work, State Office Bldg. Campus, Bldg. 12, Rm. 130, Albany, NY 12240; Fax to Bureau of Public Work (518) 485-1870; or electronically at the NYSDOL website www.labor.ny.gov.

Upon receiving the original schedule, the Department of Jurisdiction (Contracting Agency) is REQUIRED to provide complete copies to all prime contractors who in turn MUST, by law, provide copies of all applicable county schedules to each subcontractor and obtain from each subcontractor, an affidavit certifying such schedules were received. If the original schedule expired, the contractor may obtain a copy of the new annual determination from the NYSDOL website

www.labor.ny.gov.

The Commissioner of Labor makes an annual determination of the prevailing rates. This determination is in effect from July 1st through June 30th of the following year. The annual determination is available on the NYSDOL website www.labor.ny.gov/public-work-and-prevailing-wage.

Reference PRC # 2022006964, for up to date prevailing rates.

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Roberta Reardon, Commissioner



Kathy Hochul, Governor

NYSDEC

Lisa Gorton, PE-1 625 Broadway Albany NY 12233 Schedule Year Date Requested 06/21/2022 PRC#

2021 through 2022 2022006964

301 Bank Street Location Proiect ID# D011945 Superfund remediation activity under NYSDEC contract Site No. 819018 Project Type

PREVAILING WAGE SCHEDULE FOR ARTICLE 8 PUBLIC WORK PROJECT

Attached is the current schedule(s) of the prevailing wage rates and prevailing hourly supplements for the project referenced above. A unique Prevailing Wage Case Number (PRC#) has been assigned to the schedule(s) for your project.

The schedule is effective from July 2021 through June 2022. All updates, corrections, posted on the 1st business day of each month, and future copies of the annual determination are available on the Department's website www.labor.ny.gov. Updated PDF copies of your schedule can be accessed by entering your assigned PRC# at the proper location on the website.

It is the responsibility of the contracting agency or its agent to annex and make part, the attached schedule, to the specifications for this project, when it is advertised for bids and /or to forward said schedules to the successful bidder(s), immediately upon receipt, in order to insure the proper payment of wages.

Please refer to the "General Provisions of Laws Covering Workers on Public Work Contracts" provided with this schedule, for the specific details relating to other responsibilities of the Department of Jurisdiction.

Upon completion or cancellation of this project, enter the required information and mail **OR** fax this form to the office shown at the bottom of this notice. **OR** fill out the electronic version via the NYSDOL website.

NOTICE OF COMPLETION / CANCELLATION OF PROJECT

Date Completed:

Date Cancelled:

Name & Title of Representative:

Phone: (518) 457-5589 Fax: (518) 485-1870 W. Averell Harriman State Office Campus, Bldg. 12, Room 130, Albany, NY 12240

General Provisions of Laws Covering Workers on Article 8 Public Work Contracts

Introduction

The Labor Law requires public work contractors and subcontractors to pay laborers, workers, or mechanics employed in the performance of a public work contract not less than the prevailing rate of wage and supplements (fringe benefits) in the locality where the work is performed.

Responsibilities of the Department of Jurisdiction

A Department of Jurisdiction (Contracting Agency) includes a state department, agency, board or commission: a county, city, town or village; a school district, board of education or board of cooperative educational services; a sewer, water, fire, improvement and other district corporation; a public benefit corporation; and a public authority awarding a public work contract.

The Department of Jurisdiction (Contracting Agency) awarding a public work contract MUST obtain a Prevailing Rate Schedule listing the hourly rates of wages and supplements due the workers to be employed on a public work project. This schedule may be obtained by completing and forwarding a "Request for wage and Supplement Information" form (PW 39) to the Bureau of Public Work. The Prevailing Rate Schedule MUST be included in the specifications for the contract to be awarded and is deemed part of the public work contract.

Upon the awarding of the contract, the law requires that the Department of Jurisdiction (Contracting Agency) furnish the following information to the Bureau: the name and address of the contractor, the date the contract was let and the approximate dollar value of the contract. To facilitate compliance with this provision of the Labor Law, a copy of the Department's "Notice of Contract Award" form (PW 16) is provided with the original Prevailing Rate Schedule.

The Department of Jurisdiction (Contracting Agency) is required to notify the Bureau of the completion or cancellation of any public work project. The Department's PW 200 form is provided for that purpose.

Both the PW 16 and PW 200 forms are available for completion online.

Hours

No laborer, worker, or mechanic in the employ of a contractor or subcontractor engaged in the performance of any public work project shall be permitted to work more than eight hours in any day or more than five days in any week, except in cases of extraordinary emergency. The contractor and the Department of Jurisdiction (Contracting Agency) may apply to the Bureau of Public Work for a dispensation permitting workers to work additional hours or days per week on a particular public work project.

There are very few exceptions to this rule. Complete information regarding these exceptions is available on the "Request for a dispensation to work overtime" form (PW30) and "4 Day / 10 Hour Work Schedule" form (PW 30.1).

Wages and Supplements

The wages and supplements to be paid and/or provided to laborers, workers, and mechanics employed on a public work project shall be not less than those listed in the current Prevailing Rate Schedule for the locality where the work is performed. If a prime contractor on a public work project has not been provided with a Prevailing Rate Schedule, the contractor must notify the Department of Jurisdiction (Contracting Agency) who in turn must request an original Prevailing Rate Schedule form the Bureau of Public Work. Requests may be submitted by: mail to NYSDOL, Bureau of Public Work, State Office Bldg. Campus, Bldg. 12, Rm. 130, Albany, NY 12240; Fax to Bureau of Public Work (518) 485-1870; or electronically at the NYSDOL website www.labor.ny.gov.

Upon receiving the original schedule, the Department of Jurisdiction (Contracting Agency) is REQUIRED to provide complete copies to all prime contractors who in turn MUST, by law, provide copies of all applicable county schedules to each subcontractor and obtain from each subcontractor, an affidavit certifying such schedules were received. If the original schedule expired, the contractor may obtain a copy of the new annual determination from the NYSDOL website www.labor.ny.gov.

The Commissioner of Labor makes an annual determination of the prevailing rates. This determination is in effect from July 1st through June 30th of the following year. The annual determination is available on the NYSDOL website www.labor.ny.gov.

Payrolls and Payroll Records

Every contractor and subcontractor MUST keep original payrolls or transcripts subscribed and affirmed as true under penalty of perjury. As per Article 6 of the Labor law, contractors and subcontractors are required to establish, maintain, and preserve for not less than six (6) years, contemperaneous, true, and accurate payroll records. At a minimum, payrolls must show the following information for each person employed on a public work project: Name, Address, Last 4 Digits of Social Security Number, Classification(s) in which the worker was employed, Hourly wage rate(s) paid, Supplements paid

or provided, and Daily and weekly number of hours worked in each classification.

The filing of payrolls to the Department of Jurisdiction is a condition of payment. Every contractor and subcontractor shall submit to the Department of Jurisdiction (Contracting Agency), within thirty (30) days after issuance of its first payroll and every thirty (30) days thereafter, a transcript of the original payrolls, subscribed and affirmed as true under penalty of perjury. The Department of Jurisdiction (Contracting Agency) shall collect, review for facial validity, and maintain such payrolls.

In addition, the Commissioner of Labor may require contractors to furnish, with ten (10) days of a request, payroll records sworn to as their validity and accuracy for public work and private work. Payroll records include, but are not limited to time cards, work description sheets, proof that supplements were provided, cancelled payroll checks and payrolls. Failure to provide the requested information within the allotted ten (10) days will result in the withholding of up to 25% of the contract, not to exceed \$100,000.00. If the contractor or subcontractor does not maintain a place of business in New York State and the amount of the contract exceeds \$25,000.00, payroll records and certifications must be kept on the project worksite.

The prime contractor is responsible for any underpayments of prevailing wages or supplements by any subcontractor.

All contractors or their subcontractors shall provide to their subcontractors a copy of the Prevailing Rate Schedule specified in the public work contract as well as any subsequently issued schedules. A failure to provide these schedules by a contractor or subcontractor is a violation of Article 8, Section 220-a of the Labor Law.

All subcontractors engaged by a public work project contractor or its subcontractor, upon receipt of the original schedule and any subsequently issued schedules, shall provide to such contractor a verified statement attesting that the subcontractor has received the Prevailing Rate Schedule and will pay or provide the applicable rates of wages and supplements specified therein. (See NYS Labor Laws, Article 8. Section 220-a).

Determination of Prevailing Wage and Supplement Rate Updates Applicable to All Counties

The wages and supplements contained in the annual determination become effective July 1st whether or not the new determination has been received by a given contractor. Care should be taken to review the rates for obvious errors. Any corrections should be brought to the Department's attention immediately. It is the responsibility of the public work contractor to use the proper rates. If there is a question on the proper classification to be used, please call the district office located nearest the project. Any errors in the annual determination will be corrected and posted to the NYSDOL website on the first business day of each month. Contractors are responsible for paying these updated rates as well, retroactive to July 1st.

When you review the schedule for a particular occupation, your attention should be directed to the dates above the column of rates. These are the dates for which a given set of rates is effective. To the extent possible, the Department posts rates in its possession that cover periods of time beyond the July 1st to June 30th time frame covered by a particular annual determination. Rates that extend beyond that instant time period are informational ONLY and may be updated in future annual determinations that actually cover the then appropriate July 1st to June 30th time period.

Withholding of Payments

When a complaint is filed with the Commissioner of Labor alleging the failure of a contractor or subcontractor to pay or provide the prevailing wages or supplements, or when the Commissioner of Labor believes that unpaid wages or supplements may be due, payments on the public work contract shall be withheld from the prime contractor in a sufficient amount to satisfy the alleged unpaid wages and supplements, including interest and civil penalty, pending a final determination.

When the Bureau of Public Work finds that a contractor or subcontractor on a public work project failed to pay or provide the requisite prevailing wages or supplements, the Bureau is authorized by Sections 220-b and 235.2 of the Labor Law to so notify the financial officer of the Department of Jurisdiction (Contracting Agency) that awarded the public work contract. Such officer MUST then withhold or cause to be withheld from any payment due the prime contractor on account of such contract the amount indicated by the Bureau as sufficient to satisfy the unpaid wages and supplements, including interest and any civil penalty that may be assessed by the Commissioner of Labor. The withholding continues until there is a final determination of the underpayment by the Commissioner of Labor or by the court in the event a legal proceeding is instituted for review of the determination of the Commissioner of Labor.

The Department of Jurisdiction (Contracting Agency) shall comply with this order of the Commissioner of Labor or of the court with respect to the release of the funds so withheld.

Summary of Notice Posting Requirements

The current Prevailing Rate Schedule must be posted in a prominent and accessible place on the site of the public work project. The prevailing wage schedule must be encased in, or constructed of, materials capable of withstanding adverse weather conditions and be titled "PREVAILING RATE OF WAGES" in letters no smaller than two (2) inches by two (2) inches.

The "Public Work Project" notice must be posted at the beginning of the performance of every public work contract, on each job site.

Every employer providing workers. compensation insurance and disability benefits must post notices of such coverage in the format prescribed by the Workers. Compensation Board in a conspicuous place on the jobsite.

Every employer subject to the NYS Human Rights Law must conspicuously post at its offices, places of employment, or employment training centers, notices furnished by the State Division of Human Rights.

Employers liable for contributions under the Unemployment Insurance Law must conspicuously post on the jobsite notices furnished by the NYS Department of Labor.

Apprentices

Employees cannot be paid apprentice rates unless they are individually registered in a program registered with the NYS Commissioner of Labor. The allowable ratio of apprentices to journeyworkers in any craft classification can be no greater than the statewide building trade ratios promulgated by the Department of Labor and included with the Prevailing Rate Schedule. An employee listed on a payroll as an apprentice who is not registered as above or is performing work outside the classification of work for which the apprentice is indentured, must be paid the prevailing journeyworker's wage rate for the classification of work the employee is actually performing.

NYSDOL Labor Law, Article 8, Section 220-3, require that only apprentices individually registered with the NYS Department of Labor may be paid apprenticeship rates on a public work project. No other Federal or State Agency of office registers apprentices in New York State.

Persons wishing to verify the apprentice registration of any person must do so in writing by mail, to the NYSDOL Office of Employability Development / Apprenticeship Training, State Office Bldg. Campus, Bldg. 12, Albany, NY 12240 or by Fax to NYSDOL Apprenticeship Training (518) 457-7154. All requests for verification must include the name and social security number of the person for whom the information is requested.

The only conclusive proof of individual apprentice registration is written verification from the NYSDOL Apprenticeship Training Albany Central office. Neither Federal nor State Apprenticeship Training offices outside of Albany can provide conclusive registration information.

It should be noted that the existence of a registered apprenticeship program is not conclusive proof that any person is registered in that program. Furthermore, the existence or possession of wallet cards, identification cards, or copies of state forms is not conclusive proof of the registration of any person as an apprentice.

Interest and Penalties

In the event that an underpayment of wages and/or supplements is found:

- Interest shall be assessed at the rate then in effect as prescribed by the Superintendent of Banks pursuant to section 14-a of the Banking Law, per annum from the date of underpayment to the date restitution is made.
- A Civil Penalty may also be assessed, not to exceed 25% of the total of wages, supplements, and interest due.

Debarment

Any contractor or subcontractor and/or its successor shall be ineligible to submit a bid on or be awarded any public work contract or subcontract with any state, municipal corporation or public body for a period of five (5) years when:

- Two (2) willful determinations have been rendered against that contractor or subcontractor and/or its successor within any consecutive six (6) year period.
- There is any willful determination that involves the falsification of payroll records or the kickback of wages or supplements.

Criminal Sanctions

Willful violations of the Prevailing Wage Law (Article 8 of the Labor Law) may be a felony punishable by fine or imprisonment of up to 15 years, or both.

Discrimination

No employee or applicant for employment may be discriminated against on account of age, race, creed, color, national origin, sex, disability or marital status.

No contractor, subcontractor nor any person acting on its behalf, shall by reason of race, creed, color, disability, sex or national origin discriminate against any citizen of the State of New York who is qualified and available to perform the work to which the employment relates (NYS Labor Law, Article 8, Section 220-e(a)).

No contractor, subcontractor, nor any person acting on its behalf, shall in any manner, discriminate against or intimidate any employee on account of race, creed, color, disability, sex, or national origin (NYS Labor Law, Article 8, Section 220e(b)).

The Human Rights Law also prohibits discrimination in employment because of age, marital status, or religion.

There may be deducted from the amount payable to the contractor under the contract a penalty of \$50.00 for each calendar day during which such person was discriminated against or intimidated in violation of the provision of the contract (NYS Labor Law, Article 8, Section 220-e(c)).

The contract may be cancelled or terminated by the State or municipality. All monies due or to become due thereunder may be forfeited for a second or any subsequent violation of the terms or conditions of the anti-discrimination sections of the contract (NYS Labor Law, Article 8, Section 220-e(d)).

Every employer subject to the New York State Human Rights Law must conspicuously post at its offices, places of employment, or employment training centers notices furnished by the State Division of Human Rights.

Workers' Compensation

In accordance with Section 142 of the State Finance Law, the contractor shall maintain coverage during the life of the contract for the benefit of such employees as required by the provisions of the New York State Workers' Compensation Law.

A contractor who is awarded a public work contract must provide proof of workers' compensation coverage prior to being allowed to begin work.

The insurance policy must be issued by a company authorized to provide workers' compensation coverage in New York State. Proof of coverage must be on form C-105.2 (Certificate of Workers' Compensation Insurance) and must name this agency as a certificate holder.

If New York State coverage is added to an existing out-of-state policy, it can only be added to a policy from a company authorized to write workers' compensation coverage in this state. The coverage must be listed under item 3A of the information page.

The contractor must maintain proof that subcontractors doing work covered under this contract secured and maintained a workers' compensation policy for all employees working in New York State.

Every employer providing worker's compensation insurance and disability benefits must post notices of such coverage in the format prescribed by the Workers' Compensation Board in a conspicuous place on the jobsite.

Unemployment Insurance

Employers liable for contributions under the Unemployment Insurance Law must conspicuously post on the jobsite notices furnished by the New York State Department of Labor.

Roberta Reardon, Commissioner



Kathy Hochul, Governor

NYSDEC

Lisa Gorton, PE-1 625 Broadway Albany NY 12233 Schedule Year Date Requested PRC#

2021 through 2022 06/21/2022 2022006964

Location301 Bank StreetProject ID#D011945Project TypeSuperfund remediation activity under NYSDEC contract Site No. 819018

Notice of Contract Award

New York State Labor Law, Article 8, Section 220.3a requires that certain information regarding the awarding of public work contracts, be furnished to the Commissioner of Labor. One "Notice of Contract Award" (PW 16, which may be photocopied), **MUST** be completed for **EACH** prime contractor on the above referenced project.

Upon notifying the successful bidder(s) of this contract, enter the required information and mail **OR** fax this form to the office shown at the bottom of this notice, **OR** fill out the electronic version via the NYSDOL website.

Federal Employer Identification N	umber:		
Name:Address:			
City:		State:	Zip:
Amount of Contract:	<u>\$</u>		Contract Type:
Approximate Starting Date: Approximate Completion Date:	//		 (01) General Construction (02) Heating/Ventilation (03) Electrical (04) Plumbing
			[] (04) Plumbing [] (05) Other :

Contractor Information All information must be supplied

Phone: (518) 457-5589 Fax: (518) 485-1870 W. Averell Harriman State Office Campus, Bldg. 12, Room 130, Albany, NY 12240

Social Security Numbers on Certified Payrolls:

The Department of Labor is cognizant of the concerns of the potential for misuse or inadvertent disclosure of social security numbers. Identity theft is a growing problem and we are sympathetic to contractors' concern regarding inclusion of this information on payrolls if another identifier will suffice.

For these reasons, the substitution of the use of the last four digits of the social security number on certified payrolls submitted to contracting agencies on public work projects is now acceptable to the Department of Labor. This change does not affect the Department's ability to request and receive the entire social security number from employers during its public work/ prevailing wage investigations.

Construction Industry Fair Play Act: Required Posting for Labor Law Article 25-B § 861-d

Construction industry employers must post the "Construction Industry Fair Play Act" notice in a prominent and accessible place on the job site. Failure to post the notice can result in penalties of up to \$1,500 for a first offense and up to \$5,000 for a second offense. The posting is included as part of this wage schedule. Additional copies may be obtained from the NYS DOL website, www.labor.ny.gov. https://labor.ny.gov/formsdocs/ui/IA999.pdf

If you have any questions concerning the Fair Play Act, please call the State Labor Department toll-free at 1-866-435-1499 or email us at: <u>dol.misclassified@labor.ny.gov</u>.

Worker Notification: (Labor Law §220, paragraph a of subdivision 3-a)

Effective June 23, 2020

This provision is an addition to the existing wage rate law, Labor Law §220, paragraph a of subdivision 3-a. It requires contractors and subcontractors to provide written notice to all laborers, workers or mechanics of the *prevailing wage and supplement rate* for their particular job classification *on each pay stub**. It also requires contractors and subcontractors to *post a notice* at the beginning of the performance of every public work contract *on each job site* that includes the telephone number and address for the Department of Labor and a statement informing laborers, workers or mechanics of their right to contact the Department of Labor if he/she is not receiving the proper prevailing rate of wages and/or supplements for his/her job classification. The required notification will be provided with each wage schedule, may be downloaded from our website *www.labor.ny.gov* or be made available upon request by contacting the Bureau of Public Work at 518-457-5589. *In the event the required information will suffice.

(12.20)

To all State Departments, Agency Heads and Public Benefit Corporations IMPORTANT NOTICE REGARDING PUBLIC WORK ENFORCEMENT FUND

Budget Policy & Reporting Manual

B-610

Public Work Enforcement Fund

effective date December 7, 2005

1. Purpose and Scope:

This Item describes the Public Work Enforcement Fund (the Fund, PWEF) and its relevance to State agencies and public benefit corporations engaged in construction or reconstruction contracts, maintenance and repair, and announces the recently-enacted increase to the percentage of the dollar value of such contracts that must be deposited into the Fund. This item also describes the roles of the following entities with respect to the Fund:

- New York State Department of Labor (DOL),
- The Office of the State of Comptroller (OSC), and
- State agencies and public benefit corporations.

2. Background and Statutory References:

DOL uses the Fund to enforce the State's Labor Law as it relates to contracts for construction or reconstruction, maintenance and repair, as defined in subdivision two of Section 220 of the Labor Law. State agencies and public benefit corporations participating in such contracts are required to make payments to the Fund.

Chapter 511 of the Laws of 1995 (as amended by Chapter 513 of the Laws of 1997, Chapter 655 of the Laws of 1999, Chapter 376 of the Laws of 2003 and Chapter 407 of the Laws of 2005) established the Fund.

3. Procedures and Agency Responsibilities:

The Fund is supported by transfers and deposits based on the value of contracts for construction and reconstruction, maintenance and repair, as defined in subdivision two of Section 220 of the Labor Law, into which all State agencies and public benefit corporations enter.

Chapter 407 of the Laws of 2005 increased the amount required to be provided to this fund to .10 of one-percent of the total cost of each such contract, to be calculated at the time agencies or public benefit corporations enter into a new contract or if a contract is amended. The provisions of this bill became effective August 2, 2005.

To all State Departments, Agency Heads and Public Benefit Corporations IMPORTANT NOTICE REGARDING PUBLIC WORK ENFORCEMENT FUND

OSC will report to DOL on all construction-related ("D") contracts approved during the month, including contract amendments, and then DOL will bill agencies the appropriate assessment monthly. An agency may then make a determination if any of the billed contracts are exempt and so note on the bill submitted back to DOL. For any instance where an agency is unsure if a contract is or is not exempt, they can call the Bureau of Public Work at the number noted below for a determination. Payment by check or journal voucher is due to DOL within thirty days from the date of the billing. DOL will verify the amounts and forward them to OSC for processing.

For those contracts which are not approved or administered by the Comptroller, monthly reports and payments for deposit into the Public Work Enforcement Fund must be provided to the Administrative Finance Bureau at the DOL within 30 days of the end of each month or on a payment schedule mutually agreed upon with DOL.

Reports should contain the following information:

- Name and billing address of State agency or public benefit corporation;
- State agency or public benefit corporation contact and phone number;
- Name and address of contractor receiving the award;
- Contract number and effective dates;
- Contract amount and PWEF assessment charge (if contract amount has been amended, reflect increase or decrease to original contract and the adjustment in the PWEF charge); and
- Brief description of the work to be performed under each contract.

Checks and Journal Vouchers, payable to the "New York State Department of Labor" should be sent to:

Department of Labor Administrative Finance Bureau-PWEF Unit Building 12, Room 464 State Office Campus Albany, NY 12240

Any questions regarding billing should be directed to NYSDOL's Administrative Finance Bureau-PWEF Unit at (518) 457-3624 and any questions regarding Public Work Contracts should be directed to the Bureau of Public Work at (518) 457-5589.



Required Notice under Article 25-B of the Labor Law

Attention All Employees, Contractors and Subcontractors: You are Covered by the Construction Industry Fair Play Act

The law says that you are an employee unless:

- You are free from direction and control in performing your job, and
- You perform work that is not part of the usual work done by the business that hired you, and
- You have an independently established business.

Your employer cannot consider you to be an independent contractor unless all three of these facts apply to your work.

It is against the law for an employer to misclassify employees as independent contractors or pay employees off the books.

Employee Rights: If you are an employee, you are entitled to state and federal worker protections. These include:

- Unemployment Insurance benefits, if you are unemployed through no fault of your own, able to work, and otherwise qualified,
- Workers' compensation benefits for on-the-job injuries,
- Payment for wages earned, minimum wage, and overtime (under certain conditions),
- Prevailing wages on public work projects,
- The provisions of the National Labor Relations Act, and
- A safe work environment.

It is a violation of this law for employers to retaliate against anyone who asserts their rights under the law. Retaliation subjects an employer to civil penalties, a private lawsuit or both.

Independent Contractors: If you are an independent contractor, you must pay all taxes and Unemployment Insurance contributions required by New York State and Federal Law.

Penalties for paying workers off the books or improperly treating employees as independent contractors:

Civil Penalty	First offense: Up to \$2,500 per employee
	Subsequent offense(s): Up to \$5,000 per employee
Criminal Penalty	First offense: Misdemeanor - up to 30 days in jail, up to a \$25,000 fine and debarment from performing public work for up to one year.
	Subsequent offense(s): Misdemeanor - up to 60 days in jail or up to a \$50,000 fine and debarment from performing public work for up to 5 years.

If you have questions about your employment status or believe that your employer may have violated your rights and you want to file a complaint, call the Department of Labor at (866) 435-1499 or send an email to <u>dol.misclassified@labor.ny.gov</u>. All complaints of fraud and violations are taken seriously. You can remain anonymous.

Employer Name: IA 999 (09/16)

New York State Department of Labor Bureau of Public Work

Attention Employees

THIS IS A:

PUBLIC WORK PROJECT

If you are employed on this project as a **worker, laborer, or mechanic** you are entitled to receive the **prevailing wage and supplements rate** for the classification at which you are working.

Chapter 629 of the Labor Laws of 2007: These wages are set by law and must be posted at the work site. They can also be found at: <u>www.labor.ny.gov</u>

If you feel that you have not received proper wages or benefits, please call our nearest office.*

Albany Binghamton Buffalo Garden City New York City Newburgh

(518) 457-2744 (607) 721-8005 (716) 847-7159 (516) 228-3915 (212) 932-2419 (845) 568-5156 Patchogue Rochester Syracuse Utica White Plains

(631) 687-4882 (585) 258-4505 (315) 428-4056 (315) 793-2314 (914) 997-9507

 For New York City government agency construction projects, please contact the Office of the NYC Comptroller at (212) 669-4443, or <u>www.comptroller.nyc.gov</u> – click on Bureau of Labor Law.

Contractor Name:

Project Location:

Requirements for OSHA 10 Compliance

Article 8 §220-h requires that when the advertised specifications, for every contract for public work, is \$250,000.00 or more the contract must contain a provision requiring that every worker employed in the performance of a public work contract shall be certified as having completed an OSHA 10 safety training course. The clear intent of this provision is to require that all employees of public work contractors, required to be paid prevailing rates, receive such training "prior to the performing any work on the project."

The Bureau will enforce the statute as follows:

All contractors and sub contractors must attach a copy of proof of completion of the OSHA 10 course to the first certified payroll submitted to the contracting agency and on each succeeding payroll where any new or additional employee is first listed.

Proof of completion may include but is not limited to:

- Copies of bona fide course completion card (Note: Completion cards do not have an expiration date.)
- Training roster, attendance record of other documentation from the certified trainer pending the issuance of the card.
- Other valid proof

**A certification by the employer attesting that all employees have completed such a course is not sufficient proof that the course has been completed.

Any questions regarding this statute may be directed to the New York State Department of Labor, Bureau of Public Work at 518-457-5589.

WICKS

Public work projects are subject to the Wicks Law requiring separate specifications and bidding for the plumbing, heating and electrical work, when the total project's threshold is \$3 million in Bronx, Kings, New York, Queens and, Richmond counties; \$1.5 million in Nassau, Suffolk and Westchester counties; and \$500,000 in all other counties.

For projects below the monetary threshold, bidders must submit a sealed list naming each subcontractor for the plumbing, HVAC and electrical and the amount to be paid to each. The list may not be changed unless the public owner finds a legitimate construction need, including a change in specifications or costs or the use of a Project Labor Agreement (PLA), and must be open to public inspection.

Allows the state and local agencies and authorities to waive the Wicks Law and use a PLA if it will provide the best work at the lowest possible price. If a PLA is used, all contractors shall participate in apprentice training programs in the trades of work it employs that have been approved by the Department of Labor (DOL) for not less than three years. They shall also have at least one graduate in the last three years and use affirmative efforts to retain minority apprentices. PLA's would be exempt from Wicks, but deemed to be public work subject to prevailing wage enforcement.

The Commissioner of Labor shall have the power to enforce separate specification requirement s on projects, and may issue stopbid orders against public owners for non-compliance.

Other new monetary thresholds, and similar sealed bidding for non-Wicks projects, would apply to certain public authorities including municipal housing authorities, NYC Construction Fund, Yonkers Educational Construction Fund, NYC Municipal Water Finance Authority, Buffalo Municipal Water Finance Authority, Westchester County Health Care Association, Nassau County Health Care Corp., Clifton-Fine Health Care Corp., Erie County Medical Center Corp., NYC Solid Waste Management Facilities, and the Dormitory Authority.

Contractors must pay subcontractors within a 7 days period.

(07.19)

Introduction to the Prevailing Rate Schedule

Information About Prevailing Rate Schedule

This information is provided to assist you in the interpretation of particular requirements for each classification of worker contained in the attached Schedule of Prevailing Rates.

Classification

It is the duty of the Commissioner of Labor to make the proper classification of workers taking into account whether the work is heavy and highway, building, sewer and water, tunnel work, or residential, and to make a determination of wages and supplements to be paid or provided. It is the responsibility of the public work contractor to use the proper rate. If there is a question on the proper classification to be used, please call the district office located nearest the project. District office locations and phone numbers are listed below.

Prevailing Wage Schedules are issued separately for "General Construction Projects" and "Residential Construction Projects" on a countyby-county basis.

General Construction Rates apply to projects such as: Buildings, Heavy & Highway, and Tunnel and Water & Sewer rates.

Residential Construction Rates generally apply to construction, reconstruction, repair, alteration, or demolition of one family, two family, row housing, or rental type units intended for residential use.

Some rates listed in the Residential Construction Rate Schedule have a very limited applicability listed along with the rate. Rates for occupations or locations not shown on the residential schedule must be obtained from the General Construction Rate Schedule. Please contact the local Bureau of Public Work office before using Residential Rate Schedules, to ensure that the project meets the required criteria.

Payrolls and Payroll Records

Contractors and subcontractors are required to establish, maintain, and preserve for not less that six (6) years, contemporaneous, true, and accurate payroll records.

Every contractor and subcontractor shall submit to the Department of Jurisdiction (Contracting Agency), within thirty (30) days after issuance of its first payroll and every thirty (30) days thereafter, a transcript of the original payrolls, subscribed and affirmed as true under penalty of perjury.

Paid Holidays

Paid Holidays are days for which an eligible employee receives a regular day's pay, but is not required to perform work. If an employee works on a day listed as a paid holiday, this remuneration is in addition to payment of the required prevailing rate for the work actually performed.

Overtime

At a minimum, all work performed on a public work project in excess of eight hours in any one day or more than five days in any workweek is overtime. However, the specific overtime requirements for each trade or occupation on a public work project may differ. Specific overtime requirements for each trade or occupation are contained in the prevailing rate schedules.

Overtime holiday pay is the premium pay that is required for work performed on specified holidays. It is only required where the employee actually performs work on such holidays.

The applicable holidays are listed under HOLIDAYS: OVERTIME. The required rate of pay for these covered holidays can be found in the OVERTIME PAY section listings for each classification.

Supplemental Benefits

Particular attention should be given to the supplemental benefit requirements. Although in most cases the payment or provision of supplements is straight time for all hours worked, some classifications require the payment or provision of supplements, or a portion of the supplements, to be paid or provided at a premium rate for premium hours worked. Supplements may also be required to be paid or provided on paid holidays, regardless of whether the day is worked. The Overtime Codes and Notes listed on the particular wage classification will indicate these conditions as required.

Effective Dates

When you review the schedule for a particular occupation, your attention should be directed to the dates above the column of rates. These are the dates for which a given set of rates is effective. The rate listed is valid until the next effective rate change or until the new annual determination which takes effect on July 1 of each year. All contractors and subcontractors are required to pay the current prevailing rates of wages and supplements. If you have any questions please contact the Bureau of Public Work or visit the New York State Department of Labor website (www.labor.ny.gov) for current wage rate information.

Apprentice Training Ratios

The following are the allowable ratios of registered Apprentices to Journey-workers.

For example, the ratio 1:1,1:3 indicates the allowable initial ratio is one Apprentice to one Journeyworker. The Journeyworker must be in place on the project before an Apprentice is allowed. Then three additional Journeyworkers are needed before a second Apprentice is allowed. The last ratio repeats indefinitely. Therefore, three more Journeyworkers must be present before a third Apprentice can be hired, and so on.

Please call Apprentice Training Central Office at (518) 457-6820 if you have any questions.

Title (Trade)	Ratio
Boilermaker (Construction)	1:1,1:4
Boilermaker (Shop)	1:1,1:3
Carpenter (Bldg.,H&H, Pile Driver/Dockbuilder)	1:1,1:4
Carpenter (Residential)	1:1,1:3
Electrical (Outside) Lineman	1:1,1:2
Electrician (Inside)	1:1,1:3
Elevator/Escalator Construction & Modernizer	1:1,1:2
Glazier	1:1,1:3
Insulation & Asbestos Worker	1:1,1:3
Iron Worker	1:1,1:4
Laborer	1:1,1:3
Mason	1:1,1:4
Millwright	1:1,1:4
Op Engineer	1:1,1:5
Painter	1:1,1:3
Plumber & Steamfitter	1:1,1:3
Roofer	1:1,1:2
Sheet Metal Worker	1:1,1:3
Sprinkler Fitter	1:1,1:2

If you have any questions concerning the attached schedule or would like additional information, please contact the nearest BUREAU of PUBLIC WORK District Office or write to:

New York State Department of Labor Bureau of Public Work State Office Campus, Bldg. 12 Albany, NY 12240

District Office Locations:	Telephone #	FAX #
Bureau of Public Work - Albany	518-457-2744	518-485-0240
Bureau of Public Work - Binghamton	607-721-8005	607-721-8004
Bureau of Public Work - Buffalo	716-847-7159	716-847-7650
Bureau of Public Work - Garden City	516-228-3915	516-794-3518
Bureau of Public Work - Newburgh	845-568-5287	845-568-5332
Bureau of Public Work - New York City	212-932-2419	212-775-3579
Bureau of Public Work - Patchogue	631-687-4882	631-687-4902
Bureau of Public Work - Rochester	585-258-4505	585-258-4708
Bureau of Public Work - Syracuse	315-428-4056	315-428-4671
Bureau of Public Work - Utica	315-793-2314	315-793-2514
Bureau of Public Work - White Plains	914-997-9507	914-997-9523
Bureau of Public Work - Central Office	518-457-5589	518-485-1870

Genesee County General Construction

Boilermaker

JOB DESCRIPTION Boilermaker

DISTRICT 12

** Diver rate applies to all hours worked 0' to 80' Depth pay for diver:

Hazardous Waste Worker: Hazardous sites requiring personal protective equipment.

06/01/2022

DISTRICT 12

ENTIRE COUNTIES Allegany, Cattaraugus, Chautauqua, Chemung, Erie, Genesee, Livingston, Monroe, Niagara, Ontario, Orleans, Schuyler, Steuben, Wayne, Wyoming, Yates

WAGES

Per hours: 07/0

Boilermaker \$ 35.10

The wage rate will be 90% of the above for Maintenance work on boilers less than 100,000 pph.

Four (4), ten (10) hour days may be worked at straight time during a week, Monday thru Thursday. Friday may be used as a make-up day.

NOTE - In order to use the '4 Day/10 Hour Work schedule', as your normal schedule, you must submit an 'Employer Registration for Use of 4 Day/10 Hour Work Schedule,' form PW30.1; and there must be a dispensation of hours in place on the project. If the PW30.1 is not submitted you may be liable for overtime payments for work over 8 hours per day.

SUPPLEMENTAL BENEFITS

	* • • • • • •
Per hour:	\$ 31.04*

*NOTE: \$29.85 of this amount is for every Hour "Paid"

OVERTIME PAY

See (B, E, Q) on OVERTIME PAGE	

NULIDAT	
	See (1) on HOLIDAY PAGE
Overtime:	See (5, 6) on HOLIDAY PAGE

REGISTERED APPRENTICES

1st Term at 12 Months Terms 3-8 at 6 Months Per Hour: 1st 65% 3rd 70% 4th 75% 5th 80% 6th 85% 7th 90% 8th 95%

Supplemental Benefits per hour:

\$ 31.04** All Terms

**NOTE: \$29.85 of this amount is for every Hour "Paid"

Carpenter - Building

JOB DESCRIPTION Carpenter - Building

ENTIRE COUNTIES

Genesee, Niagara, Orleans

PARTIAL COUNTIES

Wyoming: Only the Townships of Arcade, Attica, Bennington, Covington, Eagle, Java, Middlebury, Orangeville, Sheldon and Wethersfield. WAGES

Per hour:	07/01/2021
Carpenter Floorlayer Certified Welder Hazardous Waste Worker Diver-Dry Day Diver Tender	\$ 32.58 32.58 33.58 34.58 33.58 33.58 33.58
Diver-Wet Day**	61.25

on the day of dive.		

no additional fee

12-7

06/01/2022

	81' to 100' 101' to 150' 151' and deeper	additional \$0.50 per foot additional \$0.75 per foot additional \$1.25 per foot
Penetration pay:	0' to 50' 51' to 100' 101' and deeper	no additional fee additional \$0.75 per foot additional \$1.00 per foot

Four (4), ten (10) hour days may be worked at straight time during a week, Monday thru Thursday. Friday may be used as a make-up day.

NOTE - In order to use the '4 Day/10 Hour Work schedule', as your normal schedule, you must submit an 'Employer Registration for Use of 4 Day/10 Hour Work Schedule,' form PW30.1; and there must be a dispensation of hours in place on the project. If the PW30.1 is not submitted you may be liable for overtime payments for work over 8 hours per day.

SUPPLEMENTAL BENEFITS

Per hour worked:

Carpenter(s)	\$ 26.37
Diver Wet	26.37
Diver Dry & Tender	26.37

OVERTIME PAY

See (B, E, E2, Q) on OVERTIME PAGE

HOLIDAY

HULIDAT	
Paid:	See (1) on HOLIDAY PAGE
Overtime:	See (5, 6) on HOLIDAY PAGE

REGISTERED APPRENTICES

Wages per hour:

One year terms at the following percentage of Journeyman's wage:

Floorlayer Ap	prentices:			
1st	2nd	3rd	4th	
55%	60%	70%	80%	
Carpenter Ap	prentices:			
1st	2nd	3rd	4th	5th
55%	60%	65%	70%	80%
Supplemental Benefits All per hour worked:				

1st	2nd	3rd	4th	5th
\$12.36	\$12.37	\$15.05	\$15.06	\$15.09

12-276B-Gen

06/01/2022

DISTRICT 2

Carpenter - Building / Heavy&Highway

JOB DESCRIPTION Carpenter - Building / Heavy&Highway

ENTIRE COUNTIES

Albany, Allegany, Broome, Cattaraugus, Cayuga, Chautauqua, Chemung, Chenango, Clinton, Columbia, Cortland, Delaware, Erie, Essex, Franklin, Fulton, Genesee, Greene, Hamilton, Herkimer, Jefferson, Lewis, Livingston, Madison, Monroe, Montgomery, Niagara, Oneida, Onondaga, Ontario, Orleans, Oswego, Otsego, Rensselaer, Saratoga, Schenectady, Schoharie, Schuyler, Seneca, St. Lawrence, Steuben, Sullivan, Tioga, Tompkins, Ulster, Warren, Washington, Wayne, Wyoming, Yates

PARTIAL COUNTIES

Orange: The area lying on Northern side of Orange County demarcated by a line drawn from the Bear Mountain Bridge continuing west to the Bear Mountain Circle, continue North on 9W to the town of Cornwall where County Road 107 (also known as Quaker Rd) crosses under 9W, then east on County Road 107 to Route 32, then north on Route 32 to Orrs Mills Rd, then west on Orrs Mills Rd to Route 94, continue west and south on Route 94 to the Town of Chester, to the intersection of Kings Highway, continue south on Kings Highway to Bellvale Rd, west on Bellvale Rd to Bellvale Lakes Rd, then south on Bellvale Lakes Rd to Kain Rd, southeast on Kain Rd to Route 17A, then north and southeast along Route 17A to Route 210, then follow Route 210 to NJ Border.

WAGES

Wages per hour:07/01/2021Carpenter - ONLY for
Artificial Turf/Synthetic
Sport Surface\$ 32.08

Note - Does not include the operation of equipment. Please see Operating Engineers rates.

SUPPLEMENTAL BENEFITS

Per hour:

Journeyman

\$ 24.20

OVERTIME PAY See (B, E, Q, X) on OVERTIME PAGE

HOLIDAY

Paid:

Overtime:

See (5) on HOLIDAY PAGE

See (5, 6, 16) on HOLIDAY PAGE

Notes: When a holiday falls upon a Saturday, it shall be observed on the preceding Friday. Whan a holiday falls upon a Sunday, it shall be observed on the following Monday.

An employee taking an unexcused day off the regularly scheduled day before or after a paid Holiday shall not receive Holiday pay.

REGISTERED APPRENTICES

Wages per hour:

One year terms at the following percentage of Journeyman's wage:

1st	2nd	3rd	4th
55%	60%	70%	80%
Suppleme	ntal Benefits	per hour:	
1st year te	erm		\$ 12.15
2nd year term			12.15
3rd year term			14.80
4th year te	erm		14.80
,			

Carpenter - Heavy&Highway

JOB DESCRIPTION Carpenter - Heavy&Highway

ENTIRE COUNTIES

Genesee, Niagara, Orleans, Wyoming

WAGES Per hour: Heavy Highway:	07/01/2021
Carpenter Certified Welder Diver-Dry Day Diver-Wet Day** Diver Tender Hazardous Material Worker Piledriver Effluent & Slurry Diver-Dry Day	\$ 36.39 37.89 37.39 61.39 37.39 38.39 36.39 56.08
Effluent & Slurry Diver-Wet Day	92.08

Hazardous Waste Worker: Hazardous sites requiring personal protective equipment.

** Diver rate applies to all hours worked on the day of dive.

Depth pay for divers:	0' to 50' 51'to 100' 101' to 150' 151' to 200'	no additional fee additional \$0.50 per foot additional \$0.75 per foot additional \$1.25 per foot
Penetration pay:	0' to 50' 51' to 100' 101' to deeper	no additional fee additional \$0.75 per foot additional \$1.00 per foot

Four (4), ten (10) hour days may be worked at straight time during a week, Monday thru Thursday. Friday may be used as a make-up day.

NOTE - In order to use the '4 Day/10 Hour Work schedule', as your normal schedule, you must submit an 'Employer Registration for Use of 4 Day/10 Hour Work Schedule,' form PW30.1; and there must be a dispensation of hours in place on the project. If the PW30.1 is not submitted you may be liable for overtime payments for work over 8 hours per day.

SUPPLEMENTAL BENEFITS

Per hour worked:

Carpenter(s) Diver Wet 2-42AtSS 06/01/2022

10

DISTRICT 12

Prevailing Wage Rates for 07 Last Published on Jun 01 202		0/2022		Published by the New York State Department of Labor PRC Number 2022006964 Genesee County
Diver Dry & Tender Pile Driver			29.89 29.89	
OVERTIME PAY See (B, E, Q) on OVERTIN	1E PAGE			
HOLIDAY Paid: Overtime:		n Holiday F Holiday Pa		
REGISTERED APPREN Wages per hour:	TICES			
One year terms at the follo Carpenter Apprentices:	wing percenta	ge of Journey	man's wage:	
1st 2nd 55% 60%	3rd 65%	4th 70%	5th 80%	
Pile Driver Apprentices(13)0hour terms a	it percentage	of Pile Driver Rate)	
1st 2nd 55% 60%	3rd 70%	4th 80%		
Supplemental benefits (All)	per hour work	ked:		
1st 2nd \$ 12.15 \$ 12.15	3rd \$ 14.80	4th \$ 14.80	5th \$14.80	12-276HH-Gen

Electrician

JOB DESCRIPTION Electrician

ENTIRE COUNTIES

Erie

PARTIAL COUNTIES

Cattaraugus: Only the Townships of Ashford, East Otto, Ellicottville, Farmersville, Freedom, Franklinville, Lyndon, Machias, Mansfield, New Albion, Otto, Perrysburg, Persia and Yorkshire. Genesee: Only the Townships of Alabama, Alexander, Darien, Oakfield, Pembroke and that portion of the Towns of Batavia and Elba that

06/01/2022

DISTRICT 3

Genesee: Only the Townships of Alabama, Alexander, Darien, Oakfield, Pembroke and that portion of the Towns of Batavia and Elba that are west of Little Tonawanda Creek; Tonawanda Creek; the City limits of Batavia (in effect prior to Feb. 1, 1970) and State Highway 98 north of the City of Batavia, then north on Highway 98 to the Orleans County line.

Wyoming: Only the Townships of Arcade, Attica, Bennington, Eagle, Java, Orangeville, Sheldon and Wethersfield.

WAGES

Per hour:	07/01/2021	05/30/2022
		Additional
Electrician*	\$ 37.49	\$ 2.00

* Includes teledata work

When shift work is mandated either in the job specification or by the contracting agency the following premiums apply:

17.3% for work from 4:30PM - 1:00AM

31.4% for work from 12:30AM - 9:00AM

Additional \$0.50/hr in shafts over 25 ft. deep and in underground tunnels over 75 ft. long.

Additional \$0.75/hr for work on toothpicks, structural steel, temporary platforms, swinging scaffolds, boatswain chairs, smoke stacks or water towers 30 ft above the floor or for work on rolling scaffolds and ladders over 50 ft.

Additional \$1.50/hr for Cable Splicers on such work as lead, and shielded cable and splices or terminations on cable 5KV and above. Additional \$1.00/hr for Hot work (Atomic plants).

Additional \$1.00/nr for Hot work (Atomic plants).

Additional \$2.00/hr for work on radio, TV, light towers and floating platforms or climbing ladders in excess of 100 ft. high.

SUPPLEMENTAL BENEFITS

Per hour:

\$ 30.05*

* NOTE - add 3% of the posted straight time or applicable premium wage rate.

OVERTIME PAY

See (B, E, Q) on OVERTIME PAGE

HOLIDAY Paid: Overtime:

See (1) on HOLIDAY PAGE See (5, 6) on HOLIDAY PAGE

REGISTERED APPRENTICES

Wages per hour:

Hour terms at the following wages:

0 to 1000 to 2000 to 3500 to 5000 to 6500 to 8000 \$ 13.85 \$ 15.00 \$ 16.85 \$ 20.60 \$ 26.25 \$ 30.00

Supplemental benefits per hour:

0 to 2000 to 6500 to 8200 \$ 13.51* \$ 24.30* \$ 30.05* * NOTE - add 3% of the posted straight time or applicable premium wage rate.

Electrician

WACES

JOB DESCRIPTION Electrician

ENTIRE COUNTIES

Livingston, Monroe

PARTIAL COUNTIES

Genesee: Only the Townships of Bergen, Bethany, Byron, Leroy, Pavillion, Stafford, and that portion of the Townships of Batavia and Elba which lie east of a line following the Little Tonawanda Creek, north on the Tonawanda Creek to the City limits of Batavia, northwest and northeast around the City limits, but including the City of Batavia (in effect prior to 02/01/70), to State Highway 98, north on 98 to Orleans County.

Ontario: Only the Townships of Bristol, Canadice, Naples, West Bloomfield, Richmond, South Bristol, East Bloomfield and Victor. Orleans: Only the townships of Clarendon, Kendall, and Murray

Wayne: Only the Townships of Macedon, Marion, Ontario, Palmyra, Sodus, Walworth, Williamson

Wyoming: Only the Townships of Castile, Covington, Gainesville, Genesee Falls, Middlebury, Perry, Pike and Warsaw.

Per hour:	07/01/2021	05/30/2022	05/29/2023 Additional
Electrician	\$ 36.00	\$ 37.50	\$ 2.50
Teledata, Sound Wireman	36.00	37.50	

NOTE: THE FOLLOWING RATES WILL APPLY ON ALL CONTRACTING AGENCY MANDATED MULTIPLE SHIFTS OF EIGHT (8) HOURS FOR AT LEAST FIVE (5) DAYS DURATION WHICH MAY HAVE BEEN WORKED. WHEN TWO (2) SHIFTS OR THREE (3) SHIFTS ARE WORKED:

Work from 4:30 PM - 1:00 AM**	\$ 42.23	\$ 43.99
Work from 12:30 AM - 9:00 AM**	47.30	49.28

Four (4), ten (10) hour days may be worked at straight time during a week, Monday thru Thursday, with one-half (1/2) hour allowed for a lunch period.

NOTE - In order to use the '4 Day/10 Hour Work schedule', as your normal schedule, you must submit an 'Employer Registration for Use of 4 Day/10 Hour Work Schedule,' form PW30.1; and there must be a dispensation of hours in place on the project. If the PW30.1 is not submitted you may be liable for overtime payments for work over 8 hours per day.

SUPPLEMENTAL BENEFITS

Per hour:

Journeyman	\$ 24.81	\$ 25.31
	plus 5.25% of wage paid	plus 5.25% of wage paid

OVERTIME PAY

See (B, E, Q) on OVERTIME PAGE

NOTE: WAGE CAP - Double the straight time hourly base wage shall be the maximum hourly wage compensation for any hour worked. Contractor is still responsible to pay the hourly benefit amount for each hour worked.

HOLIDAY	,
Paid	

See (1) on HOLIDAY PAGE

Overtime: See (5, 6) on HOLIDAY PAGE

If a Holiday falls on Saturday, it will be celebrated on the Friday preceding and if it falls on Sunday, it will be celebrated on the Monday following the Holiday.

REGISTE	RED APPR	ENTICES				
	RENTICES: H	ourly terms as	follows:			
1st term: 0-1000 hrs			2nd term	: 1001-2000 hr	3rd term: 2001-3500 hrs	
4th term: 3501-5000 hrs			5th term: 5001-6500 hrs			6th term: 6501-8200 hrs
		ITURED PRIO		-		
Wages pe	r hour at the t	following perce	entage of Jour	neyman's wag	e:	
	1st	2nd	3rd	4th	5th	6th
40% 45%			50%	60%	70%	80%
Suppleme	ntal Benefits	per hour worke	ed:			
07/01/202	07/01/2021					

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06/01/2022

DISTRICT 7

DISTRICT 3

05/30/2022	Appr. 1st and 2nd term Appr. 3rd-6th term			\$ 11.58 plus 5.25% of wage paid \$ 24.81 plus 5.25% of wage paid			
03/30/2022	Appr. 1st ar Appr. 3rd-6t			\$ 11.68 plus \$ 25.31 plus		0 1	
	CES INDENT		8 4/1/2021 Itage of Journe	vman's wade:			
wayes per i		01	0	, ,		Cth	
	1st	2nd	3rd	4th	5th	6th	
	50%	55%	60%	65%	70%	80%	
Supplement	al Benefits pe	r hour worked	d:				
07/01/2021	·						
	Appr. 1st-3r	d term		\$ 11.16 plus	s 5.25% of w	/age paid	
	Appr. 4th-6t	th term		\$ 21.84 plus	s 5.25% of w	vage paid	
05/30/2022				4 i bior		ago para	
	Appr. 1st-3r	d term		\$ 11.26 plus	s 5.25% of w	/age paid	
	Appr. 4th-6t	th term		\$ 22.27 plus	s 5.25% of w	age paid	

Elevator Constructor

JOB DESCRIPTION Elevator Constructor

ENTIRE COUNTIES

Allegany, Cattaraugus, Chautauqua, Erie, Genesee, Niagara, Orleans, Wyoming

WAGES	
Per hour:	07/01/2021
Elevator Constructor	\$ 53.16
Helper	37.21

** IMPORTANT NOTICE - EFFECTIVE 04/01/2009 **

Four (4), ten (10) hour days may be worked at straight time during a week, Monday thru Thursday or Tuesday thru Friday.

NOTE - In order to use the '4 Day/10 Hour Work schedule', as your normal schedule, you must submit an 'Employer Registration for Use of 4 Day/10 Hour Work Schedule,' form PW30.1; and there must be a dispensation of hours in place on the project. If the PW30.1 is not submitted you may be liable for overtime payments for work over 8 hours per day.

SUPPLEMENTAL BENEFITS

Per hour:

\$ 35.83 Note - add 6% of regular hourly rate for all hours worked.

OVERTIME PAY See (D, O) on OVERTIME PAGE

HOLIDAYPaid:See (5, 6, 15, 16) on HOLIDAY PAGEOvertime:See (5, 6, 15, 16) on HOLIDAY PAGE

REGISTERED APPRENTICES

Wages per hour:

One year (1,700 hour each) terms at the following percentage of Journeyman's wage:

1st*	2nd	3rd	4th
55%	65%	70%	80%

Supplemental benefits per hour:

\$ 35.83

* Note - 0-6 months of the 1st year term is paid at 50% of Journeyman's wage with no Supplemental benefits.

Note - add 6% of regular hourly rate for all hours worked.

Glazier

JOB DESCRIPTION Glazier

ENTIRE COUNTIES Allegany, Cattaraugus, Chautauqua, Erie, Genesee, Niagara, Orleans, Wyoming 06/01/2022

3-14

DISTRICT 3

7-86

06/01/2022

WAGES

Per hour:	07/01/2021
Glazier	\$ 27.88
Working off Suspended	
Scaffold (Swing Stage)	28.88
Maintenance	17.50*

* Note - This rate to be used only for all repair and replacement work such as glass breakage, glass replacement, door repair and board ups.

** IMPORTANT NOTICE **

Four (4), ten (10) hour days may be worked at straight time during a week, Monday thru Thursday. Friday may be used as a make-up day.

NOTE - In order to use the '4 Day/10 Hour Work schedule', as your normal schedule, you must submit an 'Employer Registration for Use of 4 Day/10 Hour Work Schedule,' form PW30.1; and there must be a dispensation of hours in place on the project. If the PW30.1 is not submitted you may be liable for overtime payments for work over 8 hours per day.

SUPPLEMENTAL BENEFITS

Journeymen Glazier	\$ 24.19
Maintenance	15.49

OVERTIME PAY See (B, E2, F, R) on OVERTIME PAGE

HOLIDAY	
Paid:	See (1) on HOLIDAY PAGE for Glazier and Glazier Apprentices.
Paid:	See (5, 6) on HOLIDAY PAGE for Maintenance

Overtime: See (5, 6) on HOLIDAY PAGE.

REGISTERED APPRENTICES

Wages per hour:

Glazier: 1000 hour terms at the following percentage of Journeyman's wage:

1st	2nd	3rd	4th	5th	6th	7th	8th
50%	55%	60%	65%	70%	75%	80%	90%

Supplemental benefits per hour:

1st & 2nd terms	\$ 8.00
3rd & 4th terms	8.85
All other terms	10.25

3-660

06/01/2022

Insulator - Heat & Frost

JOB DESCRIPTION Insulator - Heat & Frost

DISTRICT 3

ENTIRE COUNTIES

Allegany, Cattaraugus, Chautauqua, Erie, Niagara, Wyoming

PARTIAL COUNTIES

Genesee: Only the Townships of Alabama, Alexander, Darien, Oakfield and Pembroke.

WAGES	
Per Hour:	

Per Hour:	07/01/2021
Heat & Frost Insulator	\$ 34.15

SUPPLEMENTAL BENEFITS

Per hour:

\$ 26.14

OVERTIME PAY

See (B, *E, **Q) on OVERTIME PAGE

* Note - Double time after 10 hours on Saturday.

** Note - Triple time on Labor Day if WORKED.

HOLIDAY

Paid:	See (1) on HOLIDAY PAGE
Overtime:	See (5, 6) on HOLIDAY PAGE

REGISTERED APPRENTICES

Wages per hour:

One year terms at the following percentage of Journeyman's wage:

	70%	4th 80%			
Supplemental Benefit	s per hour:				
1st and 2nd		\$ 21.09			
All other terms		\$ 26.14			3-4
Insulator - Heat &	Frost				06/01/2022
JOB DESCRIPTION	Insulator - He	eat & Frost		DISTRICT 7	
ENTIRE COUNTIES		, Steuben, Wayne, Yates			
PARTIAL COUNTIE Genesee: Only the T		tavia, Bergen, Bethany, By	vron, Elba, Leroy, Pavilion S	tafford and City of Batavia.	
WAGES					
Per hour:		07/01/2021	06/01/2022	06/01/2023 Additional	06/01/2024 Additional
Asbestos Installer Insulation Installer (On mechanical syste	ms only)	\$ 33.26	\$ 34.66	\$ 1.55	\$ 1.55
SUPPLEMENTAL E	BENEFITS				
Journeyman		\$ 24.61	\$ 24.76		
OVERTIME PAY See (B, E, *Q) on OV ^t Triple time for Labor					
HOLIDAY Paid: Overtime: When a holiday falls o previous Friday shall	See (̀5́, 6 on a Sunday, the		e observed as the holiday. \	When a holiday falls on a Sat	urday, then the
REGISTERED APP WAGES: (1) year terr		ng wage rates.			
1st year		\$ 16.63	\$ 17.33		
2nd year		19.96	20.80		
3rd year		23.28	24.26		
4th year 5th year		26.61 29.93	27.73 31.19		
SUPPLEMENTAL BE	NEFITS per ho	ur worked:			
Appr. First 1000 Hour	S	\$ 12.07	\$ 12.17		
Appr. Rest of 1st year		13.54	13.64		
Appr. 2nd year		23.11	23.26		
Appr. 3rd year		24.11	24.26		
Appr. 4th year		24.11	24.26		
Appr. 5th year		24.11	24.26		7-26
Ironworker					06/01/2022
	Ironworker			DISTRICT 5	

ENTIRE COUNTIES

Chemung, Livingston, Monroe, Ontario, Yates

PARTIAL COUNTIES

Allegany: Only the Townships of Birdsall, Burns and Grove. Genesse: Only the Townships of Batavia, Bergen, Bethany, Byron, Elba, LeRoy, Oakfield, Pavillion, Stafford. Orleans: Only the Townships of Albion, Barre, Carlton, Clarendon, Gaines, Kendall, Murray, and Village of Holley. Schuyler: Only the Townships of Dix, Orange, Reading and Tyron. Steuben: Only the Townships of Addison, Avoca, Bath, Bradford, Cameron, Campbell, Caton, Cohocton, Corning, Dansville, Erwin, Hornby, Lindley, Prattsburg, Pulteney, Rathbone, Thurston, Tuscarora, Urbana, Wayland, Wayne, Wheeler, Woodhull.

Wayne: Only the Townships of Arcadia, Lyons, Macedon, Marion, Ontario, Palmyra, Sodus, Walworth, Willamson and Village of Newark. Wyoming: Only the Townships of Castile, Covington, Middlebury, Perry.

WAGES

WAGES	
Per hour:	07/01/2021
• • • •	
Structural	\$ 29.50
Reinforcing	29.50
Ornamental	29.50
Fence Erector	29.50
Welder	29.50
Sheeter	29.75
Stone Derrick Man	29.50
Mach. Mov./Rigger	29.50
Precast Concrete Erector	29.50
Window/Curtainwall Erector	29.50
Pre-Engineered Building	29.50

When shift work is mandated either in the job specification or by the contracting agency the following premiums apply 10% for second shift work from 2:00PM - 7:00PM 15% for third shift work from 7:00PM - 12:00AM

When a single irregular shift is worked outside the standard workday with the start times based on second and third shifts, a 10% premium on hours worked applies.

SUPPLEMENTAL BENEFITS

Per hour:

Journeyman \$30	
OVERTIME PAY See (B, E, Q) on OVERTIME PAGE	
HOLIDAYPaid:See (1) on HOLIDAY PAGEOvertime:See (5, 6) on HOLIDAY PAGE	

REGISTERED APPRENTICES

One year terms at the following rates.

1st.	2nd.	3rd.	4th.
19.50	21.50	23.50	25.50

Supplemental Benefits per hour:

Appr. 1st year Appr. 2nd year	\$ 12.23 19.90
Appr. 3rd year	20.96
Appr. 4th year	22.02

Ironworker

JOB DESCRIPTION Ironworker

ENTIRE COUNTIES

Cattaraugus, Chautaugua

PARTIAL COUNTIES

Allegany: Entire county except the Towns of Birdsall, Burns and Grove.

Erie: All except the Town of Grand Island north of Whitehaven Road.

Genesee: Only the Townships of Alabama, Alexander, Darien and Pembroke Steuben: Only the Townships of Canisteo, Freemont, Greenwood,Hartsville, Hornell, Hornellsville, Howard, Jasper, Troupsburg and West Union

Wyoming: Only the Townships of Arcade, Attica, Bennington, Eagle, Gainsville, Java, Orangeville, Pike, Sheldon, Warsaw and Wethersfield.

WA	GES
Per	hour:

Structural

07/01/2021
\$ 31.90
31.90

Ornamental	31.90
Layout	31.90
Rodmen	31.90
Reinforcing	31.90

5-33.1

DISTRICT 3

06/01/2022

Welders	31.90
Riggers & Mach. Movers	31.90
Curtain Wall Erector	31.90
Window Erector	29.55
Fence Erector	30.47

When shift work is mandated either in the job specification or by the contracting agency the following premiums apply: 10% for second shift work from 2:00PM - 7:00PM - 12:00AM 15% for third shift work from 7:00PM - 12:00AM

When a single irregular shift is worked outside the standard workday with the start times based on second and third shifts, a 10% premium on hours worked applies.

SUPPLEMENTAL BENEFITS

Per hour:

Fence erectors	\$ 29.13
All others	30.63

OVERTIME PAY

See (B, E, Q) on OVERTIME PAGE

HOLI	DAY
Daid	

Paid:	See (1) on HOLIDAY PAGE
Overtime:	See (5, 6) on HOLIDAY PAGE

REGISTERED APPRENTICES

Wages per hour:

One year terms at the following wage:			
1st	2nd	3rd	4th
\$ 19.50	\$ 21.50	\$ 23.50	\$ 25.50

Supplemental benefits per hour:

1st	2nd	3rd	4th
\$ 13.38	\$ 23.18	\$ 24.58	\$ 25.98

Laborer - Building

JOB DESCRIPTION Laborer - Building

ENTIRE COUNTIES

Genesee, Livingston, Monroe, Ontario, Orleans, Seneca, Wayne, Wyoming, Yates

WAGES

GROUP A: Basic Rate

GROUP D: Blaster

GROUP E: Powder Monkey

GROUP F: Air track drill, wagon drill and asphalt rakers

GROUP G: Chuck tender, all work on hanging or swinging scaffold, work at heights outside the building where safety lines and belts are required, boson's chair.

GROUP H: Jack hammers, mortar mixers, paving breakers, concrete vibrators operators other than in (J), Barco tampers, jumping jacks.

GROUP I: Pipe layers, burners and cutters for wrecking and demolition.

GROUP J: Concrete vibrators for architectural concrete.

GROUP K: Yardmen, Landscaping; Cleaning, Clean-up (not demolition related).

Per hour:	07/01/2021
Building Laborer:	
Group A	\$ 27.37
Group D	28.70
Group E	28.24

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PRC Number 2022006964 Genesee County

Group F	27.77
Group G	27.57
Group H	27.67
Group I	27.67
Group J	27.81
Group K	24.52

New Chimney Work:

Base to 100 feet	\$ 27.37
101 to 150 feet	27.62
151 to 200 feet	27.87
201 to 250 feet	28.12
251 and higher	28.37

Asbestos removal \$1.00 over basic rate.

There shall be a twelve (12) month carryover from the bid date of the posted proposal wage and benefit rate. However, if the project documents contain multiyear rate schedules, the Employer shall be obligated to pay wage rates therein as they become effective.

SUPPLEMENTAL BENEFITS

Per hour:

Journeyman \$ 21.48

OVERTIME PAY

See (B, E, E2, Q) on OVERTIME PAGE

HOLIDAY	
Paid:	See (1) on HOLIDAY PAGE
Overtime:	See (5, 6) on HOLIDAY PAGE

REGISTERED APPRENTICES

1000 hour terms at the following wage.

Indentured before May 1, 2020

1st term	\$ 17.03
2nd term	21.92
3rd term	23.10
4th term	22.49

Asbestos removal \$ 1.00 over basic rate.

Supplemental Benefits per hour:

Appr. 1st year	\$ 12.28
Appr. 2nd year	12.28
Appr. 3rd year	15.98
Appr. 4th year	21.48

1000 hour terms at the following wage.

Indentured after May 1, 2020

1st term	\$ 17.03
2nd term	19.03
3rd term	21.03
4th term	23.03

Supplemental benefits per hour worked:

Appr. 1st year	\$ 12.28
Appr. 2nd year	12.28
Appr. 3rd year	15.98
Appr. 4th year	21.48

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JOB DESCRIPTION Laborer - Heavy&Highway

DISTRICT 5

ENTIRE COUNTIES

Genesee, Livingston, Monroe, Ontario, Orleans, Seneca, Wayne, Wyoming, Yates

WAGES

GROUP A: Flagperson.

GROUP B: Basic rate, Bull Float, Chain saw, Concrete aggregate bin, Concrete bootmen, Gin buggy, Hand or Machine vibrator, Jack hammer, Mason tender, Mortar mixer, Pavement breaker, Handlers of steel mesh, Small generators for Laborer's tools, Installation of bridge drainage pipe, Vibrator type rollers, Tamper, Drill doctor, Tail or Screw operator on asphalt paver, Water pump operators (1 1/2" & single Diaph.) Nozzle (asphalt, seeding, rubbing concrete & sandblasting), Laborers on chain link fence, Rock splitter & Power unit, Pusher type concrete saw, All other Gas, Electric, Oil and Air tool opers., Form setters, Stone or Granite curb setters, Relining of Existing Pipe.

GROUP C: All Rock or Drilling machine operators (Except Quarry master and Similar type), Acetylene torch operators, Powderman, Gunite nozzleman, Pipe layer, Wrecking laborer, Asphalt rakers (Top only).

GROUP D: Blasters.

Per hour:	07/01/2021	07/01/2022	07/01/2023
Heavy/Highway Laborer:		Additional	Additional
Group A	\$ 30.01	\$ 1.25	\$ 1.25
Group B	30.71		
Group C	30.91		
Group D	31.74		

12 month carry over from bid date of the wage rates effective at the time of bid.

Hazardous Waste \$1.50 over basic rate.

There will be an additional \$1.75 for mandated night work. This amount is not subject to overtime premiums.

SUPPLEMENTAL BENEFITS

Per hour:

Journeyman

OVERTIME PAY

See (B, E, Q) on OVERTIME PAGE

HOLIDAY

Paid:See (5, 6) on HOLIDAY PAGEOvertime:See (5, 6) on HOLIDAY PAGE

\$ 24.25

REGISTERED APPRENTICES

1000 hour terms at the following wage.

Indentured before July 1, 2020.

1st term	\$ 19.48
2nd term	24.97
3rd term	25.47
4th term	25.21

Supplemetal Benefits per hour:

Appr. 1st term	\$ 13.50
Appr. 2nd term	13.50
Appr. 3rd term	18.50
Appr. 4th term	24.25

1000 hour terms at the following wage.

Indentured after July 1, 2020.

1st term	\$ 19.48
2nd term	21.48
3rd term	23.48
4th term	25.48

Supplemental benefits per hour worked:

Appr. 1st term	\$ 13.50
Appr. 2nd term	13.50
Appr. 3rd term	18.50
Appr. 4th term	24.25

Laborer - Tunnel

JOB DESCRIPTION Laborer - Tunnel

ENTIRE COUNTIES

Genesee, Livingston, Monroe, Ontario, Orleans, Seneca, Wayne, Wyoming, Yates

WAGES

GROUP A :Change House Man.

GROUP B :Miners and all Machine Men, Safety Miner, All Shaftwork and Caisson work, Pit/Dumpmen, Chuck tender, Brakeman, Powderman, Drilling, Blow Pipe, all Air Tools, Tugger, Scaling, Nipper, Guniting pot to nozzle, Bit Grinder, Signal Man (top and bottom), Concrete Men, Shield driven tunnels, mixed face and soft ground, liner plate tunnels in free air.

GROUP C :Blaster.

GROUP D :Hazardous/Waste Work.

Per hour:	07/01/2021
Tunnel Laborer:	
Group A	\$ 31.42
Group B	31.62
Group C	32.62
Group D*	35.62

*Work site required to be designated by State/Federal as hazardous waste site and relevant regulations require employees to use personal protection before rate applies.

There shall be a twelve (12) month carryover from the bid date of the posted proposal wage and fringe benefit rates. However, if the project documents contain multiyear wage rate schedules, the Employer shall be obligated to pay the wage rates therein as they become effective.

SUPPLEMENTAL BENEFITS

Per hour:

Journeyman \$22.77

OVERTIME PAY See (B, E, Q) on OVERTIME PAGE

HOLIDAY

Paid:	See (5, 6) on HOLIDAY PAGE
Overtime:	See (5, 6) on HOLIDAY PAGE

REGISTERED APPRENTICES

1000 hour terms at the following wage.

Indentured before July 1, 2019

1st term	\$ 18.86
2nd term	24.30
3rd term	26.49
4th term	26.18

Supplemental Benefits per hour:

Appr. 1st term	\$ 13.77
Appr. 2nd term	13.77
Appr. 3rd term	17.02
Appr. 4th term	22.77

1000 hour terms at the following wage.

Indentured after July 1, 2019

1st term	\$ 18.86
2nd term	20.86

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DISTRICT 5

3rd term	22.86
4th term	24.86

Supplemental benefits per hour:

1st term	\$ 13.77
2nd term	13.77
3rd term	17.02
4th term	22.77

Lineman Electrician

JOB DESCRIPTION Lineman Electrician

ENTIRE COUNTIES

Albany, Allegany, Broome, Cattaraugus, Cayuga, Chautauqua, Chemung, Chenango, Clinton, Columbia, Cortland, Delaware, Dutchess, Erie, Essex, Franklin, Fulton, Genesee, Greene, Hamilton, Herkimer, Jefferson, Lewis, Livingston, Madison, Monroe, Montgomery, Niagara, Oneida, Onondaga, Ontario, Orange, Orleans, Oswego, Otsego, Putnam, Rensselaer, Rockland, Saratoga, Schenectady, Schoharie, Schuyler, Seneca, St. Lawrence, Steuben, Sullivan, Tioga, Tompkins, Ulster, Warren, Washington, Wayne, Wyoming, Yates

WAGES

Per hour:

NOTE: Includes Teledata Work within ten (10) feet of High Voltage Transmission Lines

Below rates applicable on all overhead and underground distribution and maintenance work, and all overhead and underground transmission line work and the installation of fiber optic cable where no other construction trades are or have been involved. (Ref #14.01.01)

	07/01/2021	05/02/2022	05/01/2023	05/06/2024
Lineman, Technician	\$ 54.70	\$ 56.00	\$ 57.40	\$ 58.90
Crane, Crawler Backhoe	54.70	56.00	57.40	58.90
Welder, Cable Splicer	54.70	56.00	57.40	58.90
Digging Mach. Operator	49.23	50.40	51.66	53.01
Tractor Trailer Driver	46.50	47.60	48.79	50.07
Groundman, Truck Driver	43.76	44.80	45.92	47.12
Equipment Mechanic	43.76	44.80	45.92	47.12
Flagman	32.82	33.60	34.44	35.34

Additional \$1.00 per hour for entire crew when a helicopter is used.

Below rates applicable on all electrical sub-stations, switching structures, fiber optic cable and all other work not defined as "Utility outside electrical work". (Ref #14.02.01-A)

Lineman, Technician	\$ 54.70	\$ 56.00	\$ 57.40	\$ 58.90
Crane, Crawler Backhoe	54.70	56.00	57.40	58.90
Cable Splicer	60.17	61.60	63.14	64.79
Certified Welder -				
Pipe Type Cable	57.44	58.80	60.27	61.85
Digging Mach. Operator	49.23	50.40	51.66	53.01
Tractor Trailer Driver	46.50	47.60	48.79	50.07
Groundman, Truck Driver	43.76	44.80	45.92	47.12
Equipment Mechanic	43.76	44.80	45.92	47.12
Flagman	32.82	33.60	34.44	35.34

Additional \$1.00 per hour for entire crew when a helicopter is used.

Below rates apply on switching structures, maintenance projects, railroad catenary install/maintenance third rail installation, bonding of rails and pipe type cable and installation of fiber optic cable. (Ref #14.02.01-B)

Lineman, Tech, Welder	\$ 56.02	\$ 57.32	\$ 58.72	\$ 60.22
Crane, Crawler Backhoe	56.02	57.32	58.72	60.22
Cable Splicer	61.62	63.05	64.59	66.24
Certified Welder -				
Pipe Type Cable	58.82	60.19	61.66	63.23
Digging Mach. Operator	50.42	51.59	52.85	54.20
Tractor Trailer Driver	47.62	48.72	49.91	51.19
Groundman, Truck Driver	44.82	45.86	46.98	48.18

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DISTRICT 6

Prevailing Wage Rates for 07/01/2021 - 06/30/2022			Published by the New York State Department of Labor		
Last Published on Jun 01 2022		PRC Number 202200	6964 Genesee County		
Equipment Mechanic	44.82	45.86	46.98	48.18	
Flagman	33.61	34.39	35.23	36.13	

Additional \$1.00 per hour for entire crew when a helicopter is used.

Below rates applicable on all overhead and underground transmission line work & fiber optic cable where other construction trades are or have been involved. This applies to transmission line work only, not other construction. (Ref #14.03.01)

Lineman, Tech, Welder	\$ 57.21	\$ 58.51	\$ 59.91	\$ 61.41
Crane, Crawler Backhoe	57.21	58.51	59.91	61.41
Cable Splicer	57.21	58.51	59.91	61.41
Digging Mach. Operator	51.49	52.66	53.92	55.27
Tractor Trailer Driver	48.63	49.73	50.92	52.20
Groundman, Truck Driver	45.77	46.81	47.93	49.13
Equipment Mechanic	45.77	46.81	47.93	49.13
Flagman	34.33	35.11	35.95	36.85

Additional \$1.00 per hour for entire crew when a helicopter is used.

NOTE: THE FOLLOWING RATES WILL APPLY ON ALL CONTRACTING AGENCY MANDATED MULTIPLE SHIFTS OF AT LEAST FIVE (5) DAYS DURATION WORKED BETWEEN THE HOURS LISTED BELOW:

1ST SHIFT	8:00 AM to 4:30 PM REGULAR RATE
2ND SHIFT	4:30 PM to 1:00 AM REGULAR RATE PLUS 17.3 %
3RD SHIFT	12:30 AM to 9:00 AM REGULAR RATE PLUS 31.4 %

Four (4), ten (10) hour days may be worked at straight time during a week, Monday thru Thursday. Friday may be used as a make-up day. Tuesday thru Friday may be worked with no make-up day.

NOTE - In order to use the '4 Day/10 Hour Work schedule', as your normal schedule, you must submit an 'Employer Registration for Use of 4 Day/10 Hour Work Schedule,' form PW30.1; and there must be a dispensation of hours in place on the project. If the PW30.1 is not submitted you may be liable for overtime payments for work over 8 hours per day.

SUPPLEMENTAL BENEFITS

Per hour worked (but also required on non-worked holidays):

	\$25.40	\$ 25.90	\$ 26.40	\$ 26.90
	*plus 7% of	*plus 7% of	*plus 7% of	*plus 7% of
	hourly Wage	hourly wage	hourly wage	hourly wage
Journeyman Lineman or	\$ 26.40	\$ 27.90	\$ 29.40	\$ 30.90
Equipment Operators	*plus 7% of	*plus 7% of	*plus 7% of	*plus 7% of
with Crane License	hourly wage	hourly wage	hourly wage	hourly wage

*The 7% is based on the hourly wage paid, straight time or premium time.

OVERTIME PAY

See (B, E, Q,) on OVERTIME PAGE. *Note* Double time for all emergency work designated by the Dept. of Jurisdiction. NOTE: WAGE CAP - Double the straight time hourly base wage shall be the maximum hourly wage compensation for any hour worked. Contractor is still responsible to pay the hourly benefit amount for each hour worked.

HOLIDAY

PaidSee (5, 6, 8, 13, 25) on HOLIDAY PAGE plus Governor of NYS Election Day.OvertimeSee (5, 6, 8, 13, 25) on HOLIDAY PAGE plus Governor of NYS Election Day.

NOTE: All paid holidays falling on Saturday shall be observed on the preceding Friday. All paid holidays falling on Sunday shall be observed on the following Monday. Supplements for holidays paid at straight time.

REGISTERED APPRENTICES

WAGES per hour: 1000 hour terms at the following percentage of the applicable Journeyman Lineman wage.

1st 60%	2nd 65%	3rd 70%	4th 75%	5th 80%	6th 85%	7th 90%		
SUPPLE	MENTAL BENE	FITS per hour	07/01/202	21	05/02/20	22	05/01/2023	05/06/2024
			\$25.40 plus 7% o* hourly Wag		25.90 \$ plus 7% c* hourly wag	of	\$ 26.40 *plus 7% of hourly wage	\$ 26.90 *plus 7% of hourly wage

DISTRICT 6

*The 7% is based on the hourly wage paid, straight time or premium time.

Lineman Electrician - Teledata

JOB DESCRIPTION Lineman Electrician - Teledata

ENTIRE COUNTIES

Albany, Allegany, Broome, Cattaraugus, Cayuga, Chautauqua, Chemung, Chenango, Clinton, Columbia, Cortland, Delaware, Dutchess, Erie, Essex, Franklin, Fulton, Genesee, Greene, Hamilton, Herkimer, Jefferson, Lewis, Livingston, Madison, Monroe, Montgomery, Niagara, Oneida, Onondaga, Ontario, Orange, Orleans, Oswego, Otsego, Putnam, Rensselaer, Rockland, Saratoga, Schenectady, Schoharie, Schuyler, Seneca, St. Lawrence, Steuben, Sullivan, Tioga, Tompkins, Ulster, Warren, Washington, Wayne, Westchester, Wyoming, Yates

WAGES

Per hour:

For outside work, stopping at first point of attachment (demarcation). 07/01/2021

Cable Splicer	\$ 34.78
Installer, Repairman	\$ 33.01
Teledata Lineman	\$ 33.01
Tech., Equip. Operator	\$ 33.01
Groundman	\$ 17.50

NOTE: EXCLUDES Teledata work within ten (10) feet of High Voltage (600 volts and over) transmission lines. For this work please see LINEMAN.

NOTE: THE FOLLOWING RATES WILL APPLY ON ALL CONTRACTING AGENCY MANDATED MULTIPLE SHIFTS OF AT LEAST FIVE (5) DAYS DURATION WORKED:

1ST SHIFT	REGULAR RATE
2ND SHIFT	REGULAR RATE PLUS 10%
3RD SHIFT	REGULAR RATE PLUS 15%

SUPPLEMENTAL BENEFITS

Per nour.	
Journeyman	\$ 5.14
	*plus 3% of
	wage paid

*The 3% is based on the hourly wage paid, straight time rate or premium rate.

OVERTIME PAY

See (B, E, Q) on OVERTIME PAGE

NOTE: WAGE CAP - Double the straight time hourly base wage shall be the maximum hourly wage compensation for any hour worked. Contractor is still responsible to pay the hourly benefit amount for each hour worked.

HOLIDAY

Paid:	See (1) on HOLIDAY PAGE
Overtime:	See (5, 6, 16) on HOLIDAY PAGE

6-1249LT - Teledata

06/01/2022

Lineman Electrician - Traffic Signal, Lighting

JOB DESCRIPTION Lineman Electrician - Traffic Signal, Lighting

ENTIRE COUNTIES

Albany, Allegany, Broome, Cattaraugus, Cayuga, Chautauqua, Chemung, Chenango, Clinton, Cortland, Delaware, Erie, Essex, Franklin, Fulton, Genesee, Greene, Hamilton, Herkimer, Jefferson, Lewis, Livingston, Madison, Monroe, Montgomery, Niagara, Oneida, Onondaga, Ontario, Orleans, Oswego, Otsego, Rensselaer, Saratoga, Schenectady, Schoharie, Schuyler, Seneca, St. Lawrence, Steuben, Sullivan, Tioga, Tompkins, Warren, Washington, Wayne, Wyoming, Yates

WAGES

Lineman/Technician shall perform all overhead aerial work. A Lineman/Technician on the ground will install all electrical panels, connect all grounds, install and connect all electrical conductors which includes, but is not limited to road loop wires; conduit and plastic or other type pipes that carry conductors, flex cables and connectors, and to oversee the encasement or burial of such conduits or pipes.

DISTRICT 6

6-1249a

06/01/2022

A Groundman/Groundman Truck Driver shall: Build and set concrete forms, handle steel mesh, set footer cages, transport concrete in a wheelbarrow, hand or machine concrete vibrator, finish concrete footers, mix mortar, grout pole bases, cover and maintain footers while curing in cold weather, operate jack hammer, operate hand pavement breaker, tamper, concrete and other motorized saws, as a drill helper, operate and maintain generators, water pumps, chainsaws, sand blasting, operate mulching and seeding machine, air tools, electric tools, gas tools, load and unload materials, hand shovel and/or broom, prepare and pour mastic and other fillers, assist digger operator equipment operator in ground excavation and restoration, landscape work and painting. Only when assisting a lineman technician, a groundman/groundman truck driver may assist in installing conduit, pipe, cables and equipment.

A flagger's duties shall consist of traffic control only. (Ref #14.01.01)

Per hour:	07/01/2021	05/02/2022	05/01/2023	05/06/2024
Lineman, Technician	\$ 47.15	\$ 48.19	\$ 49.32	\$ 50.54
Crane, Crawler Backhoe	47.15	48.19	49.32	50.54
Certified Welder	49.51	50.60	51.79	53.07
Digging Machine	42.44	43.37	44.39	45.49
Tractor Trailer Driver	40.08	40.96	41.92	42.96
Groundman, Truck Driver	37.72	38.55	39.46	40.43
Equipment Mechanic	37.72	38.55	39.46	40.43
Flagman	28.29	28.91	29.59	30.32

Above rates are applicable for installation, testing, operation, maintenance and repair on all Traffic Control (Signal) and Illumination (Lighting) projects, Traffic Monitoring Systems, and Road Weather Information Systems. Includes digging of holes for poles, anchors, footer foundations for electrical equipment; assembly of all electrical materials or raceway; placing of fish wire; pulling of cables, wires or fiber optic cable through such raceways; splicing of conductors; dismantling of such structures, lines or equipment.

NOTE: THE FOLLOWING RATES WILL APPLY ON ALL CONTRACTING AGENCY MANDATED MULTIPLE SHIFTS OF AT LEAST FIVE (5) DAYS DURATION WORKED BETWEEN THE HOURS LISTED BELOW:

1ST SHIFT	8:00 AM TO 4:30 PM	REGULAR RATE
2ND SHIFT	4:30 PM TO 1:00 AM	REGULAR RATE PLUS 17.3%
3RD SHIFT	12:30 AM TO 9:00 AM	REGULAR RATE PLUS 31.4%

Four (4), ten (10) hour days may be worked at straight time during a week, Monday thru Thursday. Friday may be used as a make-up day. Tuesday thru Friday may be worked with no make-up day.

NOTE - In order to use the '4 Day/10 Hour Work schedule', as your normal schedule, you must submit an 'Employer Registration for Use of 4 Day/10 Hour Work Schedule,' form PW30.1; and there must be a dispensation of hours in place on the project. If the PW30.1 is not submitted you may be liable for overtime payments for work over 8 hours per day.

SUPPLEMENTAL BENEFITS

Per hour worked (but also required on non-worked holidays):

	\$25.40	\$ 25.90	\$ 26.40	\$ 26.90
	*plus 7% of	*plus 7% of	*plus 7% of	*plus 7% of
	hourly Wage	hourly wage	hourly wage	hourly wage
Journeyman Lineman or	\$ 26.40	\$ 27.90	\$ 29.40	\$ 30.90
Equipment Operators	*plus 7% of	*plus 7% of	*plus 7% of	*plus 7% of
with Crane License	hourly wage	hourly wage	hourly wage	hourly wage

*The 7% is based on the hourly wage paid, straight time or premium time.

OVERTIME PAY

See (B, E, Q) on OVERTIME PAGE. *Note* Double time for all emergency work designated by the Dept. of Jurisdiction. NOTE: WAGE CAP - Double the straight time hourly base wage shall be the maximum hourly wage compensation for any hour worked. Contractor is still responsible to pay the hourly benefit amount for each hour worked.

HOLIDAY

Paid: See (5, 6, 8, 13, 25) on HOLIDAY PAGE plus Governor of NYS Election Day. Overtime: See (5, 6, 8, 13, 25) on HOLIDAY PAGE plus Governor of NYS Election Day.

NOTE: All paid holidays falling on Saturday shall be observed on the preceding Friday. All paid holidays falling on Sunday shall be observed on the following Monday. Supplements for holidays paid at straight time.

REGISTERED APPRENTICES

WAGES per hour: 1000 hour terms at the following percentage of the applicable Journeyman Lineman wage.

1st	2nd	3rd	4th	5th	6th	7th
60%	65%	70%	75%	80%	85%	90%

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DISTRICT 6

6-1249a-LT

06/01/2022

6-1249TT

06/01/2022

SUPPLEMENTAL BENEFITS per hour:

07/01/2021	05/02/2022	05/01/2023	05/06/2024
\$25.40 *plus 7% of	\$ 25.90 *plus 7% of	\$ 26.40 *plus 7% of	\$ 26.90 *plus 7% of
hourly Wage	hourly wage	hourly wage	hourly wage

*The 7% is based on the hourly wage paid, straight time or premium time.

Lineman Electrician - Tree Trimmer

JOB DESCRIPTION Lineman Electrician - Tree Trimmer

ENTIRE COUNTIES

Albany, Allegany, Broome, Cattaraugus, Cayuga, Chautauqua, Chemung, Chenango, Clinton, Columbia, Cortland, Delaware, Dutchess, Erie, Essex, Franklin, Fulton, Genesee, Greene, Hamilton, Herkimer, Jefferson, Lewis, Livingston, Madison, Monroe, Montgomery, Niagara, Oneida, Onondaga, Ontario, Orange, Orleans, Oswego, Otsego, Putnam, Rensselaer, Rockland, Saratoga, Schenectady, Schoharie, Schuyler, Seneca, St. Lawrence, Steuben, Sullivan, Tioga, Tompkins, Ulster, Warren, Washington, Wayne, Wyoming, Yates

WAGES

Applies to line clearance, tree work and right-of-way preparation on all new or existing energized overhead or underground electrical, telephone and CATV lines. This also would include stump removal near underground energized electrical lines, including telephone and CATV lines.

Per hour:	07/01/2021	01/02/2022	12/31/2023
Tree Trimmer	\$ 27.36	\$ 28.25	\$ 29.80
Equipment Operator	24.19	24.98	26.35
Equipment Mechanic	24.19	24.98	26.35
Truck Driver	20.15	20.80	21.94
Groundman	16.59	17.13	18.07
Flag person	12.50*	12.50*	13.03*

*NOTE: Subject to change due to any minimum wage increases. Rate effective 12/31/2021: \$13.20

SUPPLEMENTAL BENEFITS

Per hour worked (but also required on non-worked holidays):

Journeyman	\$ 9.98	\$ 10.23	\$ 10.48
-	*plus 3% of	*plus 3% of	*plus 3% of
	hourly wage	hourly wage	hourly wage

* The 3% is based on the hourly wage paid, straight time rate or premium rate.

OVERTIME PAY

See (B, E, Q) on OVERTIME PAGE

NOTE: WAGE CAP - Double the straight time hourly base wage shall be the maximum hourly wage compensation for any hour worked. Contractor is still responsible to pay the hourly benefit amount for each hour worked.

HOLIDAY

Paid: See (5, 6, 8, 15) on HOLIDAY PAGE Overtime: See (5, 6, 8, 15, 16, 25) on HOLIDAY PAGE NOTE: All paid holidays falling on a Saturday shall be observed on the preceding Friday. All paid holidays falling on a Sunday shall be observed on the following Monday.

Mason - Building

JOB DESCRIPTION Mason - Building

ENTIRE COUNTIES

Genesee, Livingston, Monroe, Ontario, Seneca, Wayne, Wyoming, Yates

Per Hour:	07/01/2021
Building:	
Bricklayer	\$ 30.56
Cement Mason	30.56
Plasterer	30.56
Stone Mason	30.56
Tuck Pointer	30.56

DISTRICT 5

Four (4), ten (10) hour days may be worked at straight time during a week, Monday thru Thursday. Friday may be used as a make-up day.

NOTE - In order to use the '4 Day/10 Hour Work schedule', as your normal schedule, you must submit an 'Employer Registration for Use of 4 Day/10 Hour Work Schedule,' form PW30.1; and there must be a dispensation of hours in place on the project. If the PW30.1 is not submitted you may be liable for overtime payments for work over 8 hours per day.

SUPPLEMENTAL BENEFITS

Per hour:

Journeyman \$ 25.13

OVERTIME PAY

See (B,E,E2*,Q) on OVERTIME PAGE

*Note - Or other conditions beyond the employer's control such as fire or natural disaster.

HOLIDAY

Paid:	See (1) on HOLIDAY PAGE
Overtime:	See (5, 6) on HOLIDAY PAGE

REGISTERED APPRENTICES

Wages per hour:

1st, 2nd and 3rd term 1500 hours and 4th term 1525 hours at the following wage:

1st	2nd	3rd	4th
\$ 21.57	\$ 22.90	\$ 25.12	\$ 27.73

Supplemental Benefits per hour:

1st	2nd	3rd	4th
\$ 8.94	\$ 13.21	\$ 16.58	\$ 19.57

5-3B - Z1

06/01/2022

Mason - Heavy&Highway

JOB DESCRIPTION Mason - Heavy&Highway

DISTRICT 5

ENTIRE COUNTIES

Allegany, Broome, Chautauqua, Chemung, Chenango, Cortland, Delaware, Genesee, Livingston, Monroe, Ontario, Orleans, Otsego, Schuyler, Seneca, Steuben, Tioga, Tompkins, Wayne, Wyoming, Yates

PARTIAL COUNTIES

Cattaraugus: Enitre county except in the Township of Perrysburg and the Village of Gowanda only the Bricklayer classification applies. Erie: Only the Bricklayer classification applies.

Niagara: Only the Bricklayer classification applies.

WAGES

07/01/2021
\$ 32.53
32.53

Four (4), ten (10) hour days may be worked at straight time during a week, Monday thru Thursday. Friday may be used as a make-up day.

NOTE - In order to use the '4 Day/10 Hour Work schedule', as your normal schedule, you must submit an 'Employer Registration for Use of 4 Day/10 Hour Work Schedule,' form PW30.1; and there must be a dispensation of hours in place on the project. If the PW30.1 is not submitted you may be liable for overtime payments for work over 8 hours per day.

SUPPLEMENTAL BENEFITS

Per hour:

Journeyman

OVERTIME PAY

See (B, E, E2, Q) on OVERTIME PAGE

HOLIDAYPaid:See (1) on HOLIDAY PAGEOvertime:See (5, 6) on HOLIDAY PAGE

REGISTERED APPRENTICES

Wages per hour:

1500 hour terms at the following percentage of Journeyman's wage:

\$23.13

Prevailing Wage Rates for 07/01/2021 - 06/30/2022

Supplemental benefits per hour:

Last Published on Jun 01 2022

1st term	\$ 14.13
2nd - 4th term	23.13

Mason - Tile Finisher

JOB DESCRIPTION Mason - Tile Finisher

ENTIRE COUNTIES

Genesee, Livingston, Monroe, C	Ontario, Seneca, Wayne, Wyoming,
WAGES	
Per hour:	07/01/2021
Building:	
Marble, Slate, Terrazzo	\$ 25.98
and Tile Finisher	

Four (4), ten (10) hour days may be worked at straight time during a week, Monday thru Thursday. Friday may be used as a make-up day.

Yates

NOTE - In order to use the '4 Day/10 Hour Work schedule', as your normal schedule, you must submit an 'Employer Registration for Use of 4 Day/10 Hour Work Schedule,' form PW30.1; and there must be a dispensation of hours in place on the project. If the PW30.1 is not submitted you may be liable for overtime payments for work over 8 hours per day.

SUPPLEMENTAL BENEFITS

Per hour: \$19.69

OVERTIME PAY

See (B,E,E2*,Q) on OVERTIME PAGE

*Note - Or other conditions beyond the employer's control such as fire or natural disaster.

HOLIDAY

Paid:	See (1) on HOLIDAY PAGE
Overtime:	See (5, 6) on HOLIDAY PAGE

REGISTERED APPRENTICES

Wages per hour:

1700 hrs for 1st and 2nd term, 1600 hrs for 3rd term at the following wage:

1st	2nd	3rd
\$ 20.76	\$ 22.00	\$ 23.80

Supplemental benefits per hour:

1st	2nd	3rd
\$ 6.54	\$ 9.89	\$ 12.68

Mason - Tile Setter

JOB DESCRIPTION Mason - Tile Setter

ENTIRE COUNTIES Genesee, Livingston, Monroe, Ontario, Seneca, Wayne, Wyoming, Yates

WAGES	
Per hour:	07/01/2021
Building:	
Marble, Slate, Terrazzo	\$ 32.12
and Tile Setter	

Four (4), ten (10) hour days may be worked at straight time during a week, Monday thru Thursday. Friday may be used as a make-up day.

NOTE - In order to use the '4 Day/10 Hour Work schedule', as your normal schedule, you must submit an 'Employer Registration for Use of 4 Day/10 Hour Work Schedule,' form PW30.1; and there must be a dispensation of hours in place on the project. If the PW30.1 is not submitted you may be liable for overtime payments for work over 8 hours per day.

SUPPLEMENTAL BENEFITS

Per hour:

DISTRICT 5

DISTRICT 5

5-3TF - Z1

06/01/2022

5-3h

06/01/2022

DISTRICT 12

06/01/2022

Journeyman

\$ 24.38

OVERTIME PAY See (B,E,E2*,Q) on OVERTIME PAGE

*Note - Or other conditions beyond the employer's control such as fire or natural disaster.

n HOLIDAY PAGE) on HOLIDAY PAGE

REGISTERED APPRENTICES

Wages per hour:

1000 hour terms at the following wage:

1st \$ 19.50	2nd \$ 21.57	3rd \$ 22.82	4th \$ 24.43	5th \$ 26.39	6th \$ 28.16	7th \$ 30.24	8th \$ 31.42	
Supplementa	I benefits per l	hour:						
1st	2nd	3rd	4th	5th	6th	7th	8th	
\$ 11.46	\$ 12.23	\$ 13.81	\$ 15.04	\$ 15.92	\$ 16.99	\$ 20.58	\$ 22.24	

Millwright

JOB DESCRIPTION Millwright

ENTIRE COUNTIES Erie, Genesee, Niagara

WAGES Per hour:	07/01/2021
Building	\$ 34.25
Heavy & Highway*	36.25

*All Heavy & Highway Millwright construction will be paid at the rate indicated above. H/H work performed on hazardous waste sites where employees are required to wear protective gear shall receive an additional \$2.00 per hour over the Millwright H/H rate for all hours worked on the day protective gear was worn.

NOTE ADDITIONAL PREMIUMS PAID FOR THE FOLLOWING WORK LISTED BELOW (amount subject to any overtime premiums): - Certified Welders shall receive \$1.75 per hour in addition to the current Millwright's rate provided he/she is directed to perform certified welding.

- If a building work site has been declared a hazardous site by the Owner and the use of protective gear (including, as a minimum, air purifying canister-type chemical respirators) are required, then that employee shall receive a \$1.50 premium per hour.

- An employee performing the work of a machinist shall receive \$2.00 per hour in addition to the current Building Millwright's rate. For the purposes of this premium to apply, a "machinist" is a person who uses a lathe, Bridgeport, milling machine or similar type of tool to make or modify parts.

- When performing work underground at 500 feet and below, the employee shall receive an additional \$1.00 per hour.

SUPPLEMENTAL BENEFITS

Per hour Paid:

All Classifications \$ 30.35

OVERTIME PAY See (B, E, E2, Q) on OVERTIME PAGE

HOLIDAY	
Paid:	See (1) on HOLIDAY PAGE
Overtime:	See (5, 6) on HOLIDAY PAGE

REGISTERED APPRENTICES

Wages per hour:

1300 hour terms at the following percentage of Journeyman's wage:

1st	2nd	3rd	4th
60%	70%	80%	90%

Supplemental Benefits per hour worked:

1st	2nd	3rd	4th
\$12.26	\$ 24.92	\$ 26.73	\$ 28.54

Operating Engineer - Building

JOB DESCRIPTION Operating Engineer - Building

ENTIRE COUNTIES

Cattaraugus, Chautauqua, Erie, Orleans, Wyoming

PARTIAL COUNTIES

Genesee: Only that portion of the county that lies west of a line down the center of Route 98 excluding that area that lies within the City of Batavia.

WAGES

CLASS A: Air Hoist, All Boom Type Equipment, All Pans and Carry-Alls, Archer Hoist, Asphalt Curb and Gutter Machines, Asphalt Roller, Asphalt Spreader or Paver, Automatic Fine Grade Machine (CMI or similar, first and second operator), Backhoe and Pullhoe, Backhoe and Pullhoe (tractor mounted, rubber tired), Back Filling Machine, Belt Placer (CMI or similar type), Bending Machine (Pipe), Bituminous Spreader and Mixer, Blacktop Plants (Automated and Non-automated), Blast or Rotary Drill (Truck or Track Mounted), Blower for Burning Brush, Boiler (when used for power), Boom Truck (excluding pick-up and delivery), Boring Machine, Bulldozer, Cableway, Cage Hoist, Caisson Auger, Central Mix Plant (and all concrete batching plants), Cherry Picker, Concrete Cleaning Decontamination Machine Operator, Concrete Curb and Gutter Machine, Concrete Curing Machine, Concrete Cutters (Vermeer or Similar Type), Concrete Mixer (over 1/2 cu yd.), Concrete Pavement Spreaders and Finishers, Concrete Paver, Concrete Pump, Conveyor, Core Drill, Crane, Crusher, Decon of Equipment, Derrick, Dragline, Dredge, Drill Rig (Tractor Mounted), Dual Drum Paver, Electric Pump used in conjunction with Well Point Systems, Elevating Grader (self propelled or towed), Elevator, Excavator (all purpose, hydraulically operated), Farm Tractor with Accessories, Fine Grade Machine, Forklift, Front End Loader, Generator (10 outlets or more), Gradall, Grader, Grout or Gunite Machine, Head Tower, Heavy Equipment Robotics Operator/Mechanic, Helicopter (when used for hoisting), Hoist (one drum), Hoisting Engine, Horizontal Directional Drill Locator, Horizontal Directional Drill Operator, Hydraulic Boom, Hydraulic Hammer (self-propelled), Hydraulic Pipe Jack Machine (or similar type machine), Hydraulic Rock Expander (or similar type machine), Hydraulic System Pumps, Hydro Crane, Hydro Hammer (or similar type), Industrial Tractor, Jersey Spreader, Kolman Plant Loader (and similar type loaders), Laser Screed, Locomotive, Lubrication Truck, Maintenance Engineer, Maintenance, Lubrication Unit or Truck, Mine Hoist, Mixer for Stabilized Base (self-propelled). Monorail, Motorized Hydraulic Pin Puller, Motorized Hydraulic Seeder, Mucking Machine, Mulching Machine, Multiple Drum Hoist (more than one drum in use), Overhead Crane, Peine Crane (or similar type), Pile Driver, Plant Engineer, Pneumatic Mixer, Post Hole Digger and Driver, Power Broom, Pump Crete, Push Button Hoist, Push or Snatch Cat, Quarry Master or equivalent, Road Widener, Rock Bit Sharpener (all types), Roller (all), Rolling Machine (pipe), Rotomill, Scissors Trucks, Lift, or Boom Lift of any type (when used for hoisting), Scoopmobile, Shovel, SideBoom, Skidsteer/Bobcat (Similar Type), Skimmer, Slip Form Paver (CMI or similar type), Snorkel/Vacuum Truck, Strato-Tower, Stump Chipping Machine, Tire Truck and Drivers performing tire repair (exclude outside vendor), Towed Roller, Tractor Drawn Belt-Type Grader/Loader, Tractor Shovel, Tractor with Towed Accessories, Tractor (when using winch power), Tractors, Trencher, Truck Crane, Truck Mechanic and Helper (exclude Teamsters when repairing their own trucks), Tunnel Shovel, Tube Finisher (CMI and similar type), Ultra High Pressure Wateriet Cutting Tool System Operator/Mechanic, Vacuum Blasting Machine Operator/Mechanic, Vibratory Compactor, Vibro Tamp, Well Drilling Machine, Well Point, Winch, Winch Truck with A Frame.

CLASS B: Aggregate Bin, Aggregate Plant, Apprentice Engineer, Apprentice Engineer Driver, Articulated Off Road Material Hauler, Boiler (used in conjunction with production), CMI and similar type Concrete Spreads (Apprentice Engineer), Cement Bin, Chipping Machine and Chip Spreader, Compressors (4 or less), Compressors (any size, but subject to other provisions for Compressors, Dust Collectors, Generators, Mechanical Heaters, Pumps, Welding Machines - four of any type or combination), Concrete Mixer (1/2 cu. yd. and under), Fireman, Form Tamper, Form Trucks (excluding Teamster or delivery), Fuel Truck or Drivers (exclude Teamster or delivery), Heaters, Heating Boiler (used for temporary heat), Helper on Lubrication Unit or Truck, Jeep Trencher, Power Heaterman, Power Plant in excess of 10 K.W., Pumps, Revinius Widener, Steam Boilers (if manning or license by local law is required), Steam Cleaner (when used for cleaning equipment on the job site), Welding Machine (1 machine over 300 amps or 2 or 3 machines regardless of amps).

Operating Engineer- Building:

Per hour:	07/01/2021
Class A	\$ 38.51
Class B	34.03
Crane(Up to 60 Tons)	40.01
" (61 to 199 Tons)	42.01
" (200 to 399 Tons)	42.51
" (400 Tons or more)	43.01

Additional \$5.00/hr. for Any Tower Crane Additional \$2.50/hr. for Hazardous Work Site Additional \$1.00/hr. for Tunnel Work

SUPPLEMENTAL BENEFITS Per Hour:

Journeyman

\$ 31.55**

12-1163-Gen/Nia/Orl/Wyo

DISTRICT 12

**Note: For Overtime Hours \$23.35 of this amount is paid a straight time, the remaining balance of \$8.20 is paid at the same premium as the wage.

OVERTIME PAY

See (B, E, *E2, P, **V) on OVERTIME PAGE * Only Saturdays between October 15th and April 15th.

HOLIDAY

Paid:See (5, 6) on HOLIDAY PAGEOvertime:See (5, 6) on HOLIDAY PAGE

REGISTERED APPRENTICES

Wages per hour: 1 year Terms

1st	2nd	3rd	4th
\$28.35	\$29.24	\$30.12	\$31.01

Supplemental benefits Per Hour: All Apprentices \$30.65**

**Note: For Overtime Hours \$23.35 of this amount to be paid a straight time rate remaining balance of \$7.30 is paid at same premium as the wage.

Operating Engineer - Building	

JOB DESCRIPTION Operating Engineer - Building

ENTIRE COUNTIES

Allegany, Chemung, Livingston, Monroe, Ontario, Schuyler, Steuben, Wayne, Yates

PARTIAL COUNTIES

Genesee: Only that portion of the county that lies east of a line drawn down the center of Route 98, and the entirety of the City of Batavia.

WAGES

CLASS 1: Air Tugger; All terrain telescoping material handler; Barber Green and similar type machines; Clamshell; Dragline Shovel and similar machines over three-eighths cu.yd. capacity (Factory rating); Carrier mounted Backhoes that swing 360 degrees; Big Generator Plant Hoist (on steel erection); Bridge Crane (all types); Cableway; Caisson auger and similar type machine; Crane (only those under 5 ton with no NYS license required. All others, see CRANE rates below); Derrick; Dredge; Excavator all purpose hydraulically operated; Forklift (with Factory rating of 15' or more of lift); Hoist (on steel erection); Hydraulic/Krupp Drill; Mucking Machines; Remote controlled Excavator with attachments (Brokk type or similar); Ross Carrier (and similar type); Three-Drum Hoist (when all three drums are in use)

CLASS 2: A-Frame Truck; Backfilling Machine; Backhoe (tractor mounted); Belt Crete (and similar type machines); Bituminous spreading machine (3/8 yd. capacity or less factory rating); Bulldozer; Carry-all type Scraper; Compressors (four (4) not to exceed 2000 CFM combined capacity) or (three (3) or less with more than 1200 CFM but not to exceed 2000 CFM); Concrete Mixer; Concrete Placer; Concrete Pump; Mini Locomotives (all types); Elevating Grader; Elevator; Fine Grade and Finish Rollers; Fine Grade Machines (all kinds); Forklift with factory rating of less than 15' of lift; Front End Loader; Gunite Pumping Machine; High Pressure Boiler; Hoist (1 or 2 drums); Maintenance Engineer (Mechanic); Mechanical Slurry Machine (all kinds); Mega Mixers and similar type machines; Motor Grader; Post Hole Digger; Pumps (regardless of motive power) no more than four (4) in number not to exceed twenty (20) inches in total capacity (not to include single electric pumps up to and including four (4) inches); Shot Crete Pumping Machine; Side Boom; Tractor; Skid Steer Loader (including attachments); Stoner Crusher; Tournadozer and similar types; Tournapull and similar types; Trenching Machines; Welder; Well Drill; Well Point System

CLASS 3: Compressors - any combination (Not to exceed three (3) pieces of equipment or not to exceed 1200 CFM combined capacity); Fireman; Longitudinal Float; Mechanical Heater; Pumps (regardless of motive power, no more than three (3) in number, not to exceed twelve (12) inches total capacity); Roller (fill and grade); Rubber Tired Tractor; Welding Machine (except gas driven up to 300 amp); Mechanical Conveyor (over 12 ft. in length)

CLASS 4: Junior Engineers/Oilers

Per hour:	07/01/2021	07/01/2022
Master Mechanic	\$ 37.73	\$ 38.66
CLASS 1	35.73	36.66
CLASS 2	34.93	35.86
CLASS 3	32.23	33.16
CLASS 4	27.67	28.60

CRANES: Cable and Hydraulic, Climbing and Tower:

DISTRICT 7

12-17b

06/01/2022

NOTE: Additional \$2.50 per hour if work requires Personal Protective Equipment for hazardous waste site activities with a level C or over rating.

40.89

** TONNAGE PREMIUMS:
All cranes 5-64 tons: no premium
All cranes 65-199 tons: Add \$1.50
All cranes 200-399 tons: Add \$2.50
All cranes 400 tons and over: Add \$3.50

*** For Boom Trucks up to and including 99 tons.

SUPPLEMENTAL BENEFITS

Per hour:

Tower Crane

Boom Truck***

Journeyman \$ 31.49 \$ 32.59

42.73

39.96

OVERTIME PAY

See (B, E, Q) on OVERTIME PAGE

HOLIDAY

See (5, 6) on HOLIDAY PAGE Paid: Overtime: See (5, 6) on HOLIDAY PAGE

REGISTERED APPRENTICES

WAGES: One year terms at the following percentage of the Journeyman's wage listed below.

1st year	60% of CLASS 3 rate
2nd year	65% of CLASS 3 rate
3rd year	75% of CLASS 2 rate
4th year	80% of CLASS 1 rate

Additional \$2.50 per hour if work requires Personal Protective Equipment for hazardous waste site activities with a level C or over rating.

SUPPLEMENTAL BENEFITS per hour: Same as Journeyman

7-158-832B

DISTRICT 7

Operating Engineer - Building - Excavating & Paving	06/01/2022

JOB DESCRIPTION Operating Engineer - Building - Excavating & Paving

ENTIRE COUNTIES

Allegany, Chemung, Livingston, Monroe, Ontario, Schuyler, Steuben, Wayne, Yates

PARTIAL COUNTIES

Genesee: Only that portion of the county that lies east of a line drawn down the center of Route 98, and the entirety of the City of Batavia.

WAGES

NOTE: The following rates apply to "Site Work" which may include site preparation, grading, underground work, athletic fields, paving, skateboard parks and all other work outside the footprint of any building.

This wage schedule does not cover Hazardous Waste Removal work, See Heavy/Highway schedule (7-158-832H)

CLASS A: All terrain Telescoping Material Handler; Asphalt Paver; Automatic Fine Grader; Backhoe (except tractor mounted-rubber tired); Blacktop Plant (automated); Cableway; Caisson Auger; Central Mix Concrete Plant (automated); Cherry Picker (over 5 ton capacity); Crane; Cranes and Derricks (steel erection); Dragline; Dual Drum Paver; Excavator (all purpose-hydraulically operated); Front End Loader (4 cu. yd. and over); Hoist (two or three drum); Hydro-Axe; Hydraulic/Krupp Drill; Pile Driver; Power Grader (with elevating loader attachment); Quarry Master (or equivalent); Remote controlled Excavator with attachments; Shovel; Slip Form Paver (if a second man is needed, he shall be an Oiler); Tractor Drawn Belt-Type Loader; Truck Crane; Tunnel Shovel

CLASS B: Articulated off-road Material Hauler; Backhoe (tractor mounted-rubber tired); Bituminous Spreader and Mixer; Blacktop Plant (non -automated); Boring Machine; Cage Hoist; Central Mix Plant (non-automated) and all Concrete Batching Plants; Cherry Picker (5 tons and under); Compressor (4 or less exceeding 2,000 c.f.m. combined capacity); Concrete Paver (over 16'); Concrete Pump; Crusher; Drill Rigs (tractor mounted); Front-end Loader (under 4 cu. yd.); Hi-pressure Boiler (15 lbs. and over); Hoist (one drum); Kolman Plant Loader and similar type loaders (if Employer requires another man to clean the screen or to maintain the equipment, he shall be an Oiler); Maintenance Engineer; Maintenance Grease Man; Mechanical Slurry Machine; Mixer for stabilized base (self-propelled); Monorail Machine; Plant Engineer; Power Broom; Power Grader; Pump Crete, Ready Mix Concrete Plant; Road Widener; Roller (all above sub-grade); Side Boom; Skid Steer Loader (including attachments); Tractor Scraper; Tractor with Dozer and/or Pusher; Trencher; Vacuum Truck; Winch

CLASS C: Compressors (4 not to exceed 2,000 c.f.m. combined capacity) or (3 or less with more than 1,200 c.f.m. but not to exceed 2,000 c.f.m.); Compressors (any size but subject to other provisions for compressors), Dust Collectors, Generators, Welding Machines (four of any type or combination); Concrete Pavement Spreaders and Finishers; Conveyor; Drill (core); Drill (well); Electric Pump used in conjunction with Well Point Systems; Farm Tractor with accessories; Fine Grade Machine; Fork Lift; Gunite Machine; Hammers (Hydraulic self-propelled); Locomotive; Post Hole Digger and Post Driver; Pumps (regardless of motive power, not more than 4 in number not to exceed 20" in total capacity); Submersible Electric Pumps (when used in lieu of well Points); Tractor with towed accessories; Vibrator Compactor; Vibro Tamp; Well Point

CLASS D: Compressor (any size, but subject to other provisions for compressors), Dust Collectors, Generator, Welding machines (three or less of any type or combination); Concrete Mixer (16' and under); Concrete Saw (self-propelled); Form Tamper; Mulching Machine; Power Heaterman; Pumps (regardless of motive power no more than 3 in number not to exceed 12" in total capacity); Revinius Widener; Steam Cleaner; Tractor

CLASS E: Junior Engineer/Oiler

Per hour:	07/01/2021	07/01/2022
Master Mechanic	\$ 35.74	\$ 36.62
CLASS A	33.74	34.62
CLASS B	33.27	34.15
CLASS C	32.58	33.46
CLASS D	29.09	29.97
CLASS E	27.86	28.74

SUPPLEMENTAL BENEFITS

Per hour:

Journeyman	\$ 31.14	\$ 32.24

OVERTIME PAY

See (B, E, Q) on OVERTIME PAGE

HOLIDAY Paid:

Paid: See (5, 6) on HOLIDAY PAGE Overtime: See (5, 6) on HOLIDAY PAGE

Operating Engineer - Heavy&Highway

JOB DESCRIPTION Operating Engineer - Heavy&Highway

ENTIRE COUNTIES

Allegany, Chemung, Livingston, Monroe, Ontario, Schuyler, Steuben, Wayne, Yates

PARTIAL COUNTIES

Genesee: Only that portion of the county that lies east of a line drawn down the center of Route 98, and the entirety of the City of Batavia.

WAGES

NOTE:

---In the event that equipment listed below is operated by robotic control, the classification covering the operation will be the same as if manually operated.

---If a second employee is required by the employer for operation of any covered machine, they shall be an Engineer Class C

CLASS A: Asphalt Curb Machine (self-propelled, slipform); Asphalt Paver; Automated Concrete Spreader (CMI type); Automatic Fine Grader; Backhoe (except tractor mounted, rubber tired); Backhoe Excavator, Full Swing (CAT 212 or similar type); Back Filling Machine; Belt Placer (CMI type); Blacktop Plant (automated); Boom Truck; Bulldozer (being operated with active GPS); Cableway; Caisson Auger; Central Mix Concrete Plant (automated); Cherry Picker*; Concrete Curb Machine (self-propelled, slipform); Concrete Pump; Crane*; Derricks*; Directional Boring/Drilling Machine; Dragline*; Dredge; Dual Drum Paver; Excavator (all purpose-hydraulic, Gradall or similar); Front End Loader (4 cu. yd. & over); Head Tower (Sauerman or equal); Hoist (two or three drum); Holland Loader; Maintenance Engineer; Mine Hoist; Mucking Machine or Mole; Overhead Crane* (gantry or straddle type); Pavement Breaker (SP Wertgen; PB-4 and similar type); Profiler (over 105 h.p.); Pile Driver*; Power Grader; Quad 9; Quarry Master (or equivalent); Scraper; Shovel; Side Boom; Slip Form Paver; Tractor Drawn Belt-Type Loader; Truck Crane*; Truck or Trailer Mounted Chipper (self-feeder); Tug Operator (manned rented equipment excluded); Tunnel Shovel

DISTRICT 7

06/01/2022

7-158-832BEX

CLASS B: Backhoe (tractor mounted, rubber tired); Bituminous Recycler Machine; Bituminous Spreader and Mixer; Blacktop Plant (nonautomated); Blast or Rotary Drill (truck or tractor mounted); Boring Machine; Bridge Deck Finishing Machine; Brokk; Cage Hoist; Central Mix Plant (non-automated) and All Concrete Batching Plants; Concrete Paver (over 16'); Crawler Drill (self-contained); Crusher; Diesel Power Unit; Drill Rigs (truck or tractor mounted); Front End Loader (under 4 cu. yd.); Greaseman - Lubrication Engineer; HiPressure Boiler (15 lbs & over); Hoist (one drum); Hydro-Axe; Kolman Plant Loader & similar type loaders; Locomotive; Material Handling Knuckle Boom; Mini-Excavator (under 18,000lbs); Mixer (for stabilized base, self-propelled); Monorail Machine; Profiler (105 h.p. and under); Plant Engineer; Prentice Loader; Pug Mill; Pump Crete; Ready Mix Concrete Plant; Refrigeration Equipment (for soil stabilization); Road Widener; Roller (all above subgrade); Sea Mule; Self-contained ride-on Rock Drill (excluding Air-Track type drill); Skidder; Tractor with Dozer and/or Pusher; Trencher; Tugger Hoist; Vacuum Machine (mounted or towed); Vermeer Saws (ride-on, any size or type); Welder; Winch and Winch Cat; Work Boat Operator including L.C.M.'s

CLASS C: "A" Frame Winch Hoist (On Truck); Aggregate Plant; Articulated Heavy Hauler; Asphalt or Concrete Grooving Machine (ride-on); Ballast Regulator (ride-on); Bituminous Heater (self-propelled); Boat (powered); Boiler (used in conjunction with production); Cement & Bin Operator; Compressors**; Concrete Pavement Spreader and Finisher; Concrete Paver or Mixer (16' & under); Concrete Saw (self-propelled); Conveyor; Deck Hand; Directional Boring/Drilling Machine Locator; Drill (Core); Drill (Well); Dust Collectors**; Electric Pump When Used in Conjunction with Well Point System; Farm Tractor with accessories; Fine Grade Machine; Fireman; Fork Lift; Form Tamper; Generators**; Grout Pump; Gunite Machine; Hammers (hydraulic self-propelled); Heaters**; Hydra-Spiker (ride-on); Hydraulic Pump (jacking system); Hydro-Blaster (water); Light Plants**; Mulching Machine; Oiler; Parapet Concrete or Pavement Grinder; Post Hole Digger (excluding handheld); Post Driver; Power Broom (towed); Power Heaterman; Power Sweeper; Pumps**; Revinius Widener; Roller (subgrade & fill); Scarifier (ride-on); Shell Winder; Skid Steer Loader (Bobcat or similar); Span Saw (ride-on); Steam Cleaner; Tamper (ride-on); Tie Extractor (ride-on); Tie Handlers (ride-on); Tie Inserters (ride-on); Tie Spacers (ride-on); Tire Repair; Track Liner (ride-on); Tractor; Tractor (with towed accessories); Vacuum Machine (self-propelled); Vibratory Compactor; Vibro Tamp; Welding Machines**; Well Point

**CLASS C NOTE: Considered Hands-Off(unmanned). Includes only operation and maintenance of the equipment.

Per hour:	07/01/2021	07/01/2022
Master Mechanic	\$ 47.29	\$ 48.89
CLASS A*	45.86	47.46
CLASS B	45.15	46.75
CLASS C	42.29	43.89

(*) Premiums for CRANES are based upon Class A rates with the following premiums:

---Additional \$4.00 per hr for Tower Cranes, including self erecting.

---Additional \$3.00 per hr for Lattice Boom Cranes and all other cranes with a manufacturers rating of fifty (50) tons and over.

---Additional \$2.00 per hr for all Hydraulic Cranes and Derricks with a manufacturer's rating of 49 ton and below, including boom trucks.

Additional \$2.50 per hour for hazardous waste removal work on a State and/or Federally designated waste site which requires employees to wear Level C or above forms of personal protection.

SINGLE IRREGULAR WORK SHIFT: Additional \$2.50 per hour for all employees who work a single irregular work shift starting from 5:00 PM to 1:00 AM that is mandated by the Contracting Agency.

Four (4), ten (10) hour days may be worked at straight time during a week, Monday thru Friday.

NOTE - In order to use the '4 Day/10 Hour Work schedule', as your normal schedule, you must submit an 'Employer Registration for Use of 4 Day/10 Hour Work Schedule,' form PW30.1; and there must be a dispensation of hours in place on the project. If the PW30.1 is not submitted you may be liable for overtime payments for work over 8 hours per day.

SUPPLEMENTAL BENEFITS			
Per hour:	07/01/2021	07/01/2022	
Journeyman	\$ 31.93	\$ 33.08	
OVERTIME PAY See (B, E, Q) on OVERTIME PAGE			
HOLIDAY Paid: Overtime:	See (5, 6) on HOLIDAY PAG See (5, 6) on HOLIDAY PAG	iE iE	

NOTE: If a holiday falls on Sunday, it will be celebrated on Monday.

REGISTERED APPRENTICES

WAGES: (1000) hour terms at the following percentage of Journeyman's CLASS B wage.

1st term	60%
2nd term	70%
3rd term	80%
4th Term	90%

Additional \$2.50 per hour for hazardous waste removal work on a State and/or Federally designated waste site which requires employees to wear Level C or above forms of personal protection.

SUPPLEMENTAL BENEFITS per hour: Same as Journeyman

7-158-832H

06/01/2022

Operating Engineer - Heavy&Highway

JOB DESCRIPTION Operating Engineer - Heavy&Highway

DISTRICT 12

ENTIRE COUNTIES

Cattaraugus, Chautauqua, Erie, Niagara, Orleans, Wyoming

PARTIAL COUNTIES

Genesee: Only that portion of the county that lies west of a line down the center of Route 98 excluding that area that lies within the City of Batavia.

WAGES

CLASS A: Air Hoist, All Boom Type Equipment, All Pans and Carry-Alls, Asphalt Curb and Cutter Machines, Asphalt Roller, Asphalt Spreader or Paver, Automatic Fine Grade Machine (CMI or similar, first and second operator), Backhoe and Pullhoe (all), Back Filling Machine, Belt Placer (CMI or similar type), Bending Machine (pipe), Bituminous Spreader and Mixer, Blacktop Plant (all), Blast or Rotary Drill (Truck or Track Mounted), Blower for Burning Brush, Boiler (when used for power), Boom Truck, Boring Machine, Bulldozer, Cableway, Cage Hoist, Caisson Auger, Central Mix Plant (and all Concrete Batching Plants), Cherry Picker, Concrete Cleaning Decontamination Machine, Concrete Curb and Gutter Machine, Concrete Curing Machine, Concrete Mixer (over 1/2 cu. yd.), Concrete Pavement Spreaders and Finishers, Concrete Paver, Concrete Pump, Concrete Saw (self propelled), Conveyor, Convoying Vehicles Convoying Engineer's Equipment, Core Drill, Crane, Crusher, Decontamination of Equipment, Derrick, Dragline, Dredge, Drill Rig (Tractor Mounted), Dual Drum Paver, Electric Pump used in conjunction with Well Point Systems, Elevating Grader (self propelled or towed), Elevator, Excavator (all purpose, hydraulically operated), Farm Tractor with Accessories, Fine Grade Machine, Forklift, Front End Loader, Gradall, Grader, Grout or Gunite Machine, Head Tower, Heavy Equipment Robotics Operator/Mechanic, Hoist (all types), Hoisting Engine, Horizontal Directional Drill Locator, Horizontal Directional Drill Operator, Hydraulic Boom, Hydraulic Hammer (self propelled), Hydraulic Pipe Jack Machine, (or similar type machine), Hydraulic Rock Expander (or similar type machine), Hydraulic System Pumps, Industrial Tractor, Jersey Spreader, Kolman Plant Loader (and similar type Loaders), Laser Screed, Locomotive, Log Skidder (similar type), Maintenance Engineer, Maintenance, Lubrication Unit or Truck, Mine Hoist, Mixer for Stabilized Base (self propelled), Monorail, Motorized Hydraulic Pin Puller, Motorized Hydraulic Seeder, Mucking Machine, Mulching Machine, Overhead Crane, Parts Chasing, Peine Crane (or similar type), Pile Driver, Plant Engineer, Pneumatic Mixer, Post Hole Digger and Post Driver, Power Broom, Pump Crete, Push Button Hoist, Push or Snatch Cat, Quarry Master (or equivalent), Road Widener, Rock Bit Sharpener (all types), Roller (all), Rolling Machine (Pipe), Rotomill, Scoopmobile, Shovel, Side Boom, Skidsteer/Bobcat (similar type), Skimmer, Slip Form Paver (CMI or similar, first and second operator), Snorkel/Vacuum Truck, Strato-Tower, Tire Truck & Repair, Towed Roller, Tractor Drawn Belt-Type Grader/Loader, Tractor Shovel, Tractor with Towed Accessories, Tractors (when using winch power), Trencher, Truck Crane, Tug Boats, Tunnel Shovel, Tube Finisher (CMI and similar), Vacuum Blasting Machine Operator/Mechanic, Vibratory Compactor, Vibro Tamp, Waterjet Cutting Tool System Operator/Mechanic (Ultra High Pressure), Well Drilling Machine, Well Point, Winch, Winch Truck with A Frame.

CLASS B: Aggregate Bin, Aggregate Plant, Apprentice Engineer, Apprentice Engineer Driver, Articulated Off Road Material Hauler, CMI and similar type Concrete Spreads (Apprentice Engineer), Cement Bin, Chipping Machine and Chip Spreader, Compressors (4 or less), Compressors: any size, but subject to other provisions for Compressors, Dust Collectors, Generators, Mechanical Heaters, Pumps, Welding Machines (four of any type or combination), Concrete Mixer (1/2 cu. yd. and under), Fireman, Form Tamper, Fuel Truck, Heating Boiler (used for temporary heat), Helper on Lubrication Unit or Truck, Jeep Trencher, Power Heaterman, Power Plant in excess of 10 K.W., Pumps (4" or over), Revinius Widener, Steam Cleaner, Stump Chipping Machine, Welding Machine (1 machine over 300 amps or 2 or 3 machines regardless of amps).

Operating Engineer- Heavy/Highway, Sewer/Water, Tunnel:

07/01/2021
\$ 40.64
36.14
43.64
44.14
44.64
45.14

Additional \$2.50/hr. for Hazardous Work Site Additional \$1.00/hr. for Tunnel Work Additional \$4.00/hr. for Mandated Off-Shift Work

SUPPLEMENTAL BENEFITS

Per hour:

Journeymen \$ 33.16*

*Note: For Overtime Hours \$25.21 of the amount paid at straight time, the

remaining balance of 7.95 is paid at the same premium as the wage.

OVERTIME PAY

See (B, E, Q, W) on OVERTIME PAGE

HOLIDAY

Paid: See (*5, **6) on HOLIDAY PAGE Overtime: See (5, 6) on HOLIDAY PAGE *Saturday Holidays will be recognized on the Friday before **Sunday Holidays will be recognized on the Monday after

REGISTERED APPRENTICES

Wages per hour: Apprentices at 1 year terms

1st	2nd	3rd	4th
\$33.14	\$34.14	\$35.14	\$36.14

Supplemental Benefits

All Apprentices \$ 32.76*

*Note: For Overtime Hours \$25.21 of the amount paid at straight time, the remaining balance of \$7.55 is paid at same premium as the wage.

Operating Engineer - Survey Crew

JOB DESCRIPTION Operating Engineer - Survey Crew ENTIRE COUNTIES

Cattaraugus, Chautauqua, Erie, Niagara, Orleans, Wyoming

PARTIAL COUNTIES

Genesee: Only that portion of the county that lies west of a line down the center of Route 98 excluding that area that lies within the City of Batavia.

WAGES

These rates apply to Building, Heavy and Highway Construction.

Per hour:

SURVEY CLASSIFICATIONS:

Party Chief - One who directs a survey party. Instrument Person - One who operates the surveying instruments. Rod Person - One who holds the rods and assists the Instrument Person.

Party Chief	\$ 44.09
Instrument Person	41.57
Rod Person	28.75

Additional \$3.00 per hr. for work in a Tunnel. Additional \$2.50 per hr. for EPA or DEC certified toxic or hazardous waste work.

SUPPLEMENTAL BENEFITS

Per hour worked:

Journeyman

\$ 28.75

07/01/2021

OVERTIME PAY See (B, E, Q, *X) on OVERTIME PAGE *Note: \$23.75 Only for "ALL" premium hours when worked.

HOLIDAY

Paid:See (5, 6) on HOLIDAY PAGEOvertime:See (5, 6) on HOLIDAY PAGE

REGISTERED APPRENTICES

WAGES:1000 hour terms based on the Percentage of Rod Person wage:

07/01/2021

12-17 hh/sw/t

DISTRICT 12

0-1000 Hrs	60%
1001-2000 Hrs	70%
2001-3000 Hrs	80%

SUPPLEMENTAL BENEFITS per hour worked:

0-1000 Hrs	\$ 17.25 / PHP \$13.29	
1001-2000 Hrs	20.13 / " 15.51	
2001-3000 Hrs	23.00 / " 18.12	
NOTE: PHP is premium hours paid when worked.		

Operating Engineer - Survey Crew

JOB DESCRIPTION Operating Engineer - Survey Crew

Published by the New York State Department of Labor PRC Number 2022006964 Genesee County

DISTRICT 12

12-17D Sur

06/01/2022

ENTIRE COUNTIES

Albany, Alegany, Broome, Cayuga, Chemung, Chenango, Clinton, Columbia, Cortland, Essex, Franklin, Fulton, Greene, Hamilton, Herkimer, Jefferson, Lewis, Livingston, Madison, Monroe, Montgomery, Oneida, Onondaga, Ontario, Oswego, Otsego, Rensselaer, Saratoga, Schenectady, Schoharie, Schuyler, Seneca, St. Lawrence, Steuben, Tioga, Tompkins, Warren, Washington, Wayne, Yates

PARTIAL COUNTIES

Dutchess: The northern portion of the county from the northern boundary line of the City of Poughkeepsie, north. Genesee: Only the portion of the county that lies east of a line down the center of Route 98 to include all area that lies within the City of Batavia.

WAGES

These rates apply to Building, Tunnel and Heavy Highway.

Per hour: SURVEY CLASSIFICATIONS:

Party Chief - One who directs a survey party. Instrument Person - One who operates the surveying instruments. Rod Person - One who holds the rods and assists the Instrument Person.

	07/01/2021
Party Chief	\$ 45.84
Instrument Person	42.11
Rod Person	31.21

Additional \$3.00/hr. for Tunnel Work Additional \$2.50/hr. for Hazardous Work Site

SUPPLEMENTAL BENEFITS

Per hour worked:

Journeyman \$27.20

OVERTIME PAY

80%

See (B, E, P, *X) on OVERTIME PAGE

*Note: \$23.60/Hr. Only for "ALL" premium hours paid when worked.

HOLIDAY

0-1000 1001-2000

2001-3000

Paid:	See (5, 6) on HOLIDAY PAGE
Overtime:	See (5, 6) on HOLIDAY PAGE

REGISTERED APPRENTICES

WAGES: 1000 hour terms based on the Percentage of Rod Persons Wage:

07/01/2021
60%
70%

SUPPLEMENTAL BENEFIT per hour worked:

0-1000	\$ 18.73 /	PHF	P \$16.53
1001-2000	21.85 /	"	18.95
2001-3000	24.97 /	"	21.43
NOTE: PHP is premium hours paid when worked.			

12-158-545 D.H.H.

06/01/2022

Operating Engineer - Survey Crew - Consulting Engineer

JOB DESCRIPTION Operating Engineer - Survey Crew - Consulting Engineer

ENTIRE COUNTIES

Cattaraugus, Chautauqua, Erie, Niagara, Orleans, Wyoming

PARTIAL COUNTIES

Genesee: Only that portion of the county that lies west of a line down the center of Route 98 excluding that area that lies within the City of Batavia.

WAGES

These rates apply to feasibility and preliminary design surveying, line of grade surveying for inspection or supervision of construction when performed under a Consulting Engineer Agreement.

Per hour: SURVEY CLASSIFICATIONS:

Party Chief - One who directs a survey party. Instrument Person - One who operates the surveying instruments. Rod Person - One who holds the rods and assists the Instrument Person.

	07/01/2021
Party Chief	\$ 44.09
Instrument Person	41.57
Rod Person	28.75

SUPPLEMENTAL BENEFITS

Per hour worked:

Journeyman	\$ 28.75
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OVERTIME PAY

See (B, E, Q, *X) on OVERTIME PAGE *Note: \$23.75 Only for "ALL" premium hours paid.

HOLIDAY

Paid:	See (5, 6) on HOLIDAY PAGE
Overtime:	See (5, 6) on HOLIDAY PAGE

REGISTERED APPRENTICES

WAGES: 1000 hour terms based on the Percentage of Rod Persons Wage:

	07/01/2021
0-1000 1001-2000 2001-3000	60% 70% 80%

SUPPLEMENTAL BENEFITS per hour worked:

0-1000	\$ 17.25 /	PHP	\$13.29
1001-2000	20.13 /	"	15.51
2001-3000	23.00 /	"	18.12
NOTE: PHP is premium hours paid when	worked.		

Operating Engineer - Survey Crew - Consulting Engineer

JOB DESCRIPTION Operating Engineer - Survey Crew - Consulting Engineer

ENTIRE COUNTIES

Albany, Alegany, Broome, Cayuga, Chemung, Chenango, Clinton, Columbia, Cortland, Essex, Franklin, Fulton, Greene, Hamilton, Herkimer, Jefferson, Lewis, Livingston, Madison, Monroe, Montgomery, Oneida, Onondaga, Ontario, Oswego, Otsego, Rensselaer, Saratoga, Schenectady, Schoharie, Schuyler, Seneca, St. Lawrence, Steuben, Tioga, Tompkins, Warren, Washington, Wayne, Yates

PARTIAL COUNTIES

Dutchess: The northern portion of the county from the northern boundary line of the City of Poughkeepsie, north.

Genesee: Only the portion of the county that lies east of a line down the center of Route 98 to include all area that lies within the City of Batavia.

WAGES

These rates apply to feasibility and preliminary design surveying, line and grade surveying for inspection or supervision of construction

12-17D Con Eng

06/01/2022

DISTRICT 12

DISTRICT 12

when performed under a Consulting Engineer Agreement.

Per hour: SURVEY CLASSIFICATIONS:

Party Chief - One who directs a survey party. Instrument Person - One who operates the surveying instruments. Rod Person - One who holds the rods and assists the Instrument Person.

	07/01/2021
Party Chief	\$ 45.84
Instrument Person	42.11
Rod Person	31.21

Additional \$3.00/hr. for Tunnel Work.

Additional \$2.50/hr. for EPA or DEC certified toxic or hazardous waste work.

SUPPLEMENTAL BENEFITS

Per hour worked:

Journeyman

OVERTIME PAY

See (B, E, Q, *X) on OVERTIME PAGE

*Note: \$23.60/Hr. Only for "ALL" premium hours paid when worked.

HOLIDAY

Paid:See (5, 6) on HOLIDAY PAGEOvertime:See (5, 6) on HOLIDAY PAGE

REGISTERED APPRENTICES

WAGES: 1000 hour terms based on percentage of Rod Persons Wage:

07/01/2021

\$27.20

0-1000	60%
1001-2000	70%
2001-3000	80%

JOB DESCRIPTION Operating Engineer - Tunnel

SUPPLEMENTAL BENEFIT per hour worked:

0-1000	\$ 18.73 / PHP \$16.53
1001-2000	\$ 21.85 / " 18.95
2001-3000	\$ 24.97 / " 21.43
NOTE: PHP is premium hours paid when	n worked.

12-158-545 DCE

06/01/2022

Operating Engineer - Tunnel

DISTRICT 7

ENTIRE COUNTIES

Albany, Allegany, Broome, Cayuga, Chemung, Chenango, Clinton, Columbia, Cortland, Essex, Franklin, Fulton, Greene, Hamilton, Herkimer, Jefferson, Lewis, Livingston, Madison, Monroe, Montgomery, Oneida, Onondaga, Ontario, Oswego, Otsego, Rensselaer, Saratoga, Schenectady, Schoharie, Schuyler, Seneca, St. Lawrence, Steuben, Tioga, Tompkins, Warren, Washington, Wayne, Yates

PARTIAL COUNTIES

Dutchess: Northern part of Dutchess, to the northern boundary line of the City of Poughkeepie, then due east to Route 115 to Bedell Road, then east along Bedell Road to VanWagner Road, then north along VanWagner Road to Bower Road, then east along Bower Road to Rte. 44 east to Rte. 343, then along Rte. 343 east to the northern boundary of the Town of Dover Plains and east along the northern boundary of the Town of Dover Plains, to the borderline of the State of Connecticut.

Genesee: Only that portion of the county that lies east of a line drawn down the center of Route 98 and the entirety of the City of Batavia.

WAGES

CLASS A: Automatic Concrete Spreader (CMI Type); Automatic Fine Grader; Backhoe (except tractor mounted,rubber tired); Belt Placer (CMI Type); Blacktop Plant (automated); Cableway; Caisson Auger; Central Mix Concrete Plant (automated); Concrete Curb Machine (self-propelled slipform); Concrete Pump (8" or over); Dredge; Dual Drum Paver; Excavator; Front End Loader (4 cu. yd & over); Gradall; Head Tower (Sauerman or Equal); Hoist (shaft); Hoist (two or three Drum); Log Chipper/Loader (self-feeder); Maintenance Engineer (shaft and tunnel); any Mechanical Shaft Drill; Mine Hoist; Mining Machine(Mole and similar types); Mucking Machine or Mole; Overhead Crane (Gantry or Straddle Type); Pile Driver; Power Grader; Remote Controlled Mole or Tunnel Machine; Scraper; Shovel; Side Boom; Slip Form Paver (If a second man is needed, they shall be an Oiler); Tripper/Maintenance Engineer (shaft & tunnel); Tractor Drawn Belt-Type Loader; Tug Operator (manned rented equipment excluded); Tunnel Shovel

CLASS B: Automated Central Mix Concrete Plant; Backhoe (topside); Backhoe (track mounted, rubber tired); Backhoe (topside); Bituminous Spreader and Mixer, Blacktop Plant (non-automated); Blast or Rotary Drill (truck or tractor mounted); Boring Machine; Cage Hoist; Central Mix Plant(non-automated); all Concrete Batching Plants; Compressors (4 or less exceeding 2,000 c.f.m. combined capacity); Concrete Pump; Crusher; Diesel Power Unit; Drill Rigs (tractor mounted); Front End Loader (under 4 cu. yd.); Grayco Epoxy Machine; Hoist (One Drum); Hoist (2 or 3 drum topside); Knuckle Boom material handler; Kolman Plant Loader & similar type Loaders (if employer requires another person to clean the screen or to maintain the equipment, they shall be an Oiler); L.C.M. Work Boat Operator; Locomotive; Maintenance Engineer (topside); Maintenance Grease Man; Mixer (for stabilized base-self propelled); Monorail Machine; Plant Engineer; Personnel Hoist; Pump Crete; Ready Mix Concrete Plant; Refrigeration Equipment (for soil stabilization); Road Widener; Roller (all above sub-grade); Sea Mule; Shotcrete Machine; Shovel (topside); Tractor with Dozer and/or Pusher; Trencher; Tugger Hoist; Tunnel Locomotive; Vacuum Machine (mounted or towed); Welder; Winch; Winch Cat

CLASS C: A Frame Truck; All Terrain Telescoping Material Handler; Ballast Regulator (ride-on); Compressors (4 not to exceed 2,000 c.f.m. combined capacity; or 3 or less with more than 1200 c.f.m. but not to exceed 2,000 c.f.m.); Compressors ((any size, but subject to other provisions for compressors), Dust Collectors, Generators, Pumps, Welding Machines, Light Plants (4 or any type combination)); Concrete Pavement Spreaders and Finishers; Conveyor; Drill (core); Drill (well); Electric Pump used in conjunction with Well Point System; Farm Tractor with Accessories; Fine Grade Machine; Fork Lift; Grout Pump (over 5 cu. ft.); Gunite Machine; Hammers (hydraulic-self-propelled); Hydra-Spiker (ride-on); Hydra-Blaster (water); Hydro-Blaster; Motorized Form Carrier; Post Hole Digger and Post Driver; Power Sweeper; Roller grade & fill); Scarifer (ride-on); Span-Saw (ride-on); Submersible Electric Pump (when used in lieu of well points); Tamper (ride-on); Tie-Extractor (ride-on), Tie Handler (ride-on), Tie Inserter (ride-on), Tie Spacer (ride-on); Track Liner (ride-on); Tractor with towed accessories; Vibratory Compactor; Vibro Tamp, Well Point

CLASS D: Aggregate Plant; Cement & Bin Operator; Compressors (3 or less not to exceed 1,200 c.f.m. combined capacity); Compressors ((any size, but subject to other provisions for compressors), Dust Collectors, Generators, Pumps, Welding Machines, Light Plants (3 or less or any type or combination)); Concrete Saw (self-propelled); Form Tamper; Greaseman; Hydraulic Pump (jacking system); Junior Engineer; Light Plants; Mulching Machine; Oiler; Parapet Concrete or Pavement Grinder; Power Broom (towed); Power Heaterman (when used for production); Revinius Widener; Shell Winder; Steam Cleaner; Tractor

Per hour:	07/01/2021	07/01/2022
Master Mechanic	\$ 51.00	\$ 52.60
CLASS A	48.59	50.19
CLASS B	47.37	48.97
CLASS C	44.58	46.18
CLASS D	41.57	43.17

Additional \$5.00 per hour for Hazardous Waste Work on a state or federally designated hazardous waste site where the Operating Engineer is in direct contact with hazardous material and when personal protective equipment is required for respiratory, skin and eye protection. Fringe benefits will be paid at the hourly wage premium.

CRANES:

Crane 1: All cranes, including self-erecting to be paid \$4.00 per hour over the Class A rate.

Crane 2: All Lattice Boom Cranes and all cranes with a manufacturer's rating of fifty (50) ton and over to be paid \$3.00 per hour over Class A rate.

Crane 3: All hydraulic cranes and derricks with a manufacturer's rating of forty nine (49) ton and below, including boom trucks, to be paid \$2.00 per hour over Class A rate.

Crane 1	\$ 52.59	\$ 54.19
Crane 2	51.59	53.19
Crane 3	50.59	52.19

SUPPLEMENTAL BENEFITS

Per hour:

\$ 22.80	\$ 23.70
+ 9.10*	+ 9.35*

* This portion of benefits subject to same premium rate as shown for overtime wages.

OVERTIME PAY

See (B, B2, E, Q, X) on OVERTIME PAGE

HOLIDAY

Paid:	See (5, 6) on HOLIDAY PAGE
Overtime:	See (5, 6) on HOLIDAY PAGE
If a holiday falls on Sunday,	it shall be observed on Monday.

REGISTERED APPRENTICES

WAGES:(1000) hours terms at the following percentage of Journeyman's Class B wage.

1st term	60%
2nd term	65%

3rd term	70%		
4th term	75%		

SUPPLEMENTAL BENEFITS per hour: Same as Journeyman

DISTRICT 3

7-158-832TL.

06/01/2022

JOB DESCRIPTION Painter

ENTIRE COUNTIES

Allegany, Erie, Genesee, Niagara, Orleans, Wyoming

PARTIAL COUNTIES

Cattaraugus: Entire County except the Townships of Conewango, Leon, Napoli, New Albion, Randolph and South Valley. Chautauqua: Only the Townships of Awkright, Dunkirk, Hanover, Pomfret, Portland, Sheridan and Villenova. Livingston: Only the Townships of North Dansville, Nunda, Ossian,Portage, Sparta, Spring Water and West Sparta. Steuben: Only the Townships of Avoca, Canisteo, Cohocton, Dansville,Fremont, Greenwood, Hartsville, Hornellsville, Howard, Jasper, Prattsburg, Pulteney, Troupsburg, Tuscarora, Urbana, Wayland, Wayne, Woodhull, West Union, Wheeler, and the City of Hornell.

WAGES

Painter

Per hour:	07/01/2021
Basic Rate (Brush & Roll)	\$ 28.00
Spray painting, wallcovering	28.00
Abrasive and hydroblasting	28.00
Taping/DryWall Finisher	28.50
Skeleton Steel*	28.75

* Skeleton Steel: No floors, walls or ceiling are constructed, including radio and television towers, flagpoles, smokestacks, cranes and the abatement of coatings with lead, asbestos and/or arsenic, etc. All work within the confines of a plant shall be paid the skeleton steel rate (except in-plant tank work (see Tank Rate)).

Four (4), ten (10) hour days may be worked at straight time during a week, Monday thru Thursday. Friday may be used as a make-up day.

NOTE - In order to use the '4 Day/10 Hour Work schedule', as your normal schedule, you must submit an 'Employer Registration for Use of 4 Day/10 Hour Work Schedule,' form PW30.1; and there must be a dispensation of hours in place on the project. If the PW30.1 is not submitted you may be liable for overtime payments for work over 8 hours per day.

SUPPLEMENTAL BENEFITS

Per hour:

\$ 25.79

OVERTIME PAY

Exterior work only See (B, E4, F*, R) on OVERTIME PAGE.

All other work See (B, F*, R) on OVERTIME PAGE.

* Note - Saturday is payable at straight time if the employee misses work, except where a doctor's or hospital verification of illness is produced Monday through Friday when work was available to the employee.

HOLIDAY

REGISTERED APPRENTICES

Wages per hour:

Painter/D	ecorator: 750	hour terms at	the following p	ercentage of .	Journeyman's	Basic wage ra	te:	
1st	2nd	3rd	4th	5th	6th	7th	8th	
50%	55%	60%	65%	70%	75%	80%	90%	
Taper/Drywall Finisher: 750 hour terms at the following percentage of Journeyman's Taper wage:								
1st	2nd	3rd	4th	5th	6th			
50%	55%	60%	65%	75%	85%			
Supplemental benefits per hour:								

Painter/Decorator and	Taper/Drywall Einisher	•••
Fainter/Decorator and	Tabel/Drywall Fillistier	

tot and and the Eth Oth 7	7th 8th	
1st 2nd 3rd 4th 5th 6th 7 ^r	ui oui	
\$ 2.35 \$ 4.35 \$ 5.35 \$ 5.85 \$ 6.35 \$ 6.85 \$ 7	7.35 \$ 7.60	2

3-4-Buf, Nia, Olean

DISTRICT 3

JOB DESCRIPTION Painter

ENTIRE COUNTIES

Allegany, Broome, Cattaraugus, Cayuga, Chautauqua, Chemung, Chenango, Cortland, Delaware, Erie, Genesee, Herkimer, Jefferson, Lewis, Livingston, Madison, Monroe, Niagara, Oneida, Onondaga, Ontario, Orleans, Oswego, Otsego, Schuyler, Seneca, St. Lawrence, Steuben, Tioga, Tompkins, Wayne, Wyoming, Yates

WAGES

Tank*

Per hour:	07/01/2021
Bridge	\$ 40.00
Tunnel	40.00

For Bridge Painting Contracts, ALL WORKERS on and off the bridge (including Flagmen) are to be paid Painter's Rate; the contract must be ONLY for Bridge Painting.

Tank rate applies to indoor and outdoor tanks, tank towers, standpipes, digesters, waste water treatment tanks, chlorinator tanks, etc. Covers all types of tanks including but not limited to steel tanks, concrete tanks, fiberglass tanks, etc.

Note an additional \$1.00 per hour is required when the contracting agency or project specification requires any shift to start prior to 6:00am or after 12:00 noon.

SUPPLEMENTAL BENEFITS

Per hour:

\$ 29.20

38.00

OVERTIME PAY

Exterior work only See (B, E4, F*, R) on OVERTIME PAGE. All other work See (B, F*, R) on OVERTIME PAGE.

*Note - Saturday is payable at straight time if the employee misses work, except where a doctor's or hospital verification of illness is produced Monday through Friday when work was available to the employee.

> 5.51 6.51

HOLIDAY

Paid:	See (1) on HOLIDAY PAGE
Overtime:	See (5, 6) on HOLIDAY PAGE

REGISTERED APPRENTICES

Wages per hour:

750 hour terms at the following percentage of Journeyman's wage rate:

1st 50%	2nd 55%	3rd 60%	4th 65%	5th 75%	6th 85%
Supplem	ental benefits	per hour:			
1st & 2nd	d terms	\$ 5.50		\$ 5.5 [^]	1

\$ 5.50	\$
5.50	
6.50	
	5.50

3-4-Bridge, Tunnel, Tank

06/01/2022

Painter - Metal Polisher

JOB DESCRIPTION Painter - Metal Polisher

ENTIRE COUNTIES

Albany, Allegany, Bronx, Broome, Cattaraugus, Cayuga, Chautauqua, Chemung, Chenango, Clinton, Columbia, Cortland, Delaware, Dutchess, Erie, Essex, Franklin, Fulton, Genesee, Greene, Hamilton, Herkimer, Jefferson, Kings, Lewis, Livingston, Madison, Monroe, Montgomery, Nassau, New York, Niagara, Oneida, Onondaga, Ontario, Orange, Orleans, Oswego, Otsego, Putnam, Queens, Rensselaer, Richmond, Rockland, Saratoga, Schenectady, Schoharie, Schuyler, Seneca, St. Lawrence, Steuben, Suffolk, Sullivan, Tioga, Tompkins, Ulster, Warren, Washington, Wayne, Westchester, Wyoming, Yates

WAGES

	07/01/2021
Metal Polisher	\$ 37.13
Metal Polisher*	38.23
Metal Polisher**	41.13

*Note: Applies on New Construction & complete renovation ** Note: Applies when working on scaffolds over 34 feet.

SUPPLEMENTAL BENEFITS

Per Hour:	07/01/2021

Journeyworker:

DISTRICT 8

All classification

\$ 10.64

OVERTIME PAY

See (B, E, P, T) on OVERTIME PAGE

HOLIDAY

Paid: Overtime: See (5, 6, 11, 15, 16, 25, 26) on HOLIDAY PAGE See (5, 6, 9, 11, 15, 16, 25, 26) on HOLIDAY PAGE

REGISTERED APPRENTICES

Wages per hour:

One (1) year term at the following wage rates:

	07/01/2021
1st year	\$ 16.00
2nd year	17.00
3rd year	18.00
1st year*	\$ 16.39
2nd year*	17.44
3rd year*	18.54
1st year**	\$ 18.50
2nd year**	19.50
3rd year**	20.50

*Note: Applies on New Construction & complete renovation ** Note: Applies when working on scaffolds over 34 feet.

Supplemental benefits: Per hour:

1st year	\$ 7.39
2nd year	7.39
3rd year	7.39

Plumber

JOB DESCRIPTION Plumber

ENTIRE COUNTIES

Livingston, Monroe, Ontario, Yates

PARTIAL COUNTIES

Allegany: Only the Townships of Alfred, Almond, Andover, Birdsall, Burns, Grove, Independence, that portion of Scio which lies east of RT.

Allegany: Only the Townships of Alfred, Almond, Andover, Birdsall, Burns, Grove, Independence, that portion of Scio which lies east of R1. 19, Ward, Wellsville, W. Almond and Willing Genesee: Only the Townships of Bergen, Bethany, Byron, Leroy, Pavillion and Stafford. Orleans: Only the Townships of Albion, Barre, Carlton, Clarendon, Gaines, Kendall and Murray. Seneca: Only the Townships of Fayette, Junius, Ovid, Romulus, Seneca Falls, Tyre, Varick and Waterloo. Steuben: Only the Townships of Avoca, Cameron, Canisteo, Cohocton, Dansville, N. Dansville, Freemont, Greenwood, Hartsville, City of Hornell, Hornelsville, Howard, Jasper, Pulteney, Prattsburg, Rathbone, Troopsburg, Tuscarora, W. Union, Wayland, Wheeler and Woodhull. Wayne: Only the Townships of Arcadia (Newark), Galen (Clyde), Huron, Macedon, Marion, Lyons, Ontario, Palmyra, Rose, Sodus, Walworth and Williamson Walworth and Williamson.

WAGES

Per hour	07/01/2021	05/01/2022 Additional \$ 1.50	05/01/2023 Additional \$ 1.50
Plumber	\$ 35.38		
Steamfitter	35.38		
SUPPLEMENTAL BENEFITS Per hour:			

Journeyman \$ 25.03

NOTE-\$ 4.00 of this amount must be paid at the same premium as the wage for overtime hours.

OVERTIME PAY

Site work & New const. See (B*, E,E2,Q)on OVERTIME PAGE.

All other work See (B*, E, Q)on OVERTIME PAGE.

DISTRICT 5

8-8A/28A-MP

06/01/2022

DISTRICT 3

*Time and one half for work on the day after Thanksgiving.

HOLIDAY	
Paid:	See (1) on HOLIDAY PAGE
Overtime:	See (5, 6) on HOLIDAY PAGE

REGISTERED APPRENTICES

One year terms at the following percentage of Journeyman's wage.

1st.	2nd.	3rd.	4th.	5th.
45%	50%	59%	66%	75%

Supplemental Benefits per hour:

1st year	\$ 7.70
2nd year	10.23 *
3rd year	11.34**
4th year	12.38***
5th year	14.33****

*NOTE-2nd year \$0.75 of this amount must be paid at the same premium as the wage for overtime hours.

**NOTE-3rd year \$1.00 of this amount must be paid at the same premium as the wage for overtime hours.

***NOTE-4th year \$1.35 of this amount must be paid at the same premium as the wage for overtime hours.

****NOTE-5th year \$2.40 of this amount must be paid at the same premium as the wage for overtime hours.

5-13-SF

06/01/2022

Plumber

JOB DESCRIPTION Plumber

ENTIRE COUNTIES

Erie, Niagara, Wyoming

PARTIAL COUNTIES

Allegany: Only the Townships of Allen, Angelica, Belfast, Caneadea, Centerville, Granger, Hume, New Hudson and Rushford Cattaraugus: Only the Townships of Ashford, Dayton, East Otto, Ellicottville, Farmersville, Franklinville, Freedom, Leon, Lyndon, Machias, Mansfield, New Albion, Otto, Perrysburg, Persia and Yorkshire.

Chautauqua: Only the Townships of Arkwright, Charlotte, Cherry Creek, Dunkirk, Hanover, Pomfret, Portland, Ripley, Sheridan, Stockton, Villenova, Westfield, City of Dunkirk and Village of Fredonia.

Genesee: Only the Townships of Alabama, Alexander, Batavia, Darien, Elba, Oakfield, Pembroke and the City of Batavia. Orleans: Only the Townships of Ridgeway, Shelby and Yates.

WAGES

Per hour:	07/01/2021
Plumber	\$ 37.15
Steamfitter	\$ 37.15

Note - Add 10% (ten-percent) to wage when HAZMAT training is required or when OSHA compliant respirator protection is required.

SUPPLEMENTAL BENEFITS

Per hour:

\$27.51

Note - \$4.38 of this amount must be paid at the same premium as the wage.

OVERTIME PAY

See (*B, **E, Q) on OVERTIME PAGE

* Double time after 11 hours per day on Weekdays.

** Double time after 10 hours per day on Saturday.

HOLIDAY

Paid:	See (1) on HOLIDAY PAGE
Overtime:	See (5, 6, 16) on HOLIDAY PAGE

REGISTERED APPRENTICES

Wages per hour:

One year terms at the following percentage of Journeyman's wage:

1st	2nd	3rd	4th	5th
45%	55%	65%	75%	90%
Mate	A -1 -1 400/ (take in			

Note - Add 10% (ten-percent) to wage when HAZMAT training is required or when OSHA compliant respirator protection is required.

Supplemental benefits per hour:

\$ 22.82

Note - \$4.38 of this amount must be paid at the same premium as the wage.

Note - \$4.30 of this amount must be paid at the same premium as the wage.	3-22-Buffalo, Niagara
Roofer	06/01/2022
JOB DESCRIPTION Roofer DISTRIC	ст з
ENTIRE COUNTIES Erie, Genesee, Niagara, Orleans, Wyoming	
WAGES	
Per hour: 07/01/2021	
Asbestos Removal \$ 33.96	
Slate, Tile 31.11 Precast tile / slabs 31.11	
Precast tile / slabs 31.11 Crete / gypsum planks 31.11	
Damp and waterproofer 30.96	
Composition, sprayers, 30.96	
Aspalt mastic, 30.96	
Steep roofers 30.96	
When shift work is mandated either in the job specification or by the contracting agency the following premiu 15.0% for work from 4:30PM - 1:00AM or second shift 20.0% for work from 12:30AM - 9:00AM or third shift SUPPLEMENTAL BENEFITS	ms apply:
Per hour:	
\$ 23.01	
OVERTIME PAY See (B, *E, **E2, Q) on OVERTIME PAGE * and ** Double time after 8 hours on Saturday.	
HOLIDAY	
Paid: See (1) on HOLIDAY PAGE	
Overtime: See (5, 6) on HOLIDAY PAGE REGISTERED APPRENTICES Wages per hour:	
Hour terms at the following percentage of Journeyman's wage:	
0 to 499 to 999 to 1499 to 1999 to 2499 to 2999 to 3499 to 4499 60% 65% 70% 75% 80% 85% 90% 95%	
Supplemental benefits per hour:	
0 to 499 to 999 to 1499 to 1999 to 2499 to 2999 to 3499 to 4499	
\$8.21 \$8.21 \$12.34 \$12.54 \$20.32 \$20.99 \$21.66 \$22.34	3-74
	-
Sheetmetal Worker	06/01/2022
JOB DESCRIPTION Sheetmetal Worker DISTRIC	3
ENTIRE COUNTIES Erie, Genesee, Niagara, Orleans, Wyoming	
WAGES	
Per hour: 07/01/2021	
Sheet Metal Worker \$ 35.00	
Additional \$0.50 per hour for work more than 30" above floor on boatswain chair. Additional \$1.00 per hour for work in "Hot" areas of atomic laboratories, atomic plants, or any premises wher stored or handled and personal protective equipment is required. Additional \$1.00 per hour for work when required to have 40-hour HAZMAT training or the use of OSHA corr	

When shift work is mandated either in the job specification or by the contracting agency the following premiums apply: Shift Premium per hour:

Second Shift	\$ 3.25
Third Shift	\$ 5.00

SUPPLEMENTAL BENEFITS

Per hour:

\$ 27.47*

* Note - \$17.57 of this amount must be paid at the same premium as the wages per overtime hours.

OVERTIME PAY

See (B, E, E2, Q) on OVERTIME PAGE

HOLIDAY

Paid:	See (1) on HOLIDAY PAGE
Overtime:	See (5, 6, 16) on HOLIDAY PAGE

REGISTERED APPRENTICES

Wages per hour: One year terms at the following wage:

1st term	\$ 15.75
2nd term	20.60
3rd term	22.04
4th term	26.36
5th term	29.24

Supplemental benefits per hour:

2nd term19.04Note - \$11.14 of this amount must be paid at the same premium as the way3rd term24.68Note - \$14.78 of this amount must be paid at the same premium as the way	1st term	\$ 15.94 Note - \$8.04 of this amount must be paid at the same premium as the wag	e.
3rd term 24.68 Note - \$14.78 of this amount must be paid at the same premium as the way	2nd term	19.04 Note - \$11.14 of this amount must be paid at the same premium as the wa	ge.
	3rd term	24.68 Note - \$14.78 of this amount must be paid at the same premium as the wa	ge.
4th term 25.61 Note - \$15.71 of this amount must be paid at the same premium as the wag	4th term	25.61 Note - \$15.71 of this amount must be paid at the same premium as the wa	ge.
5th term 26.23 Note - \$16.33 of this amount must be paid at the same premium as the way	5th term	26.23 Note - \$16.33 of this amount must be paid at the same premium as the wa	ge.

When shift work is mandated either in the job specification or by the contracting agency the following premiums apply; Shift Premium per hour:

Second Shift		
1st term	\$ 1.46	
2nd term	\$ 1.63	
3rd term	\$ 1.79	
4th term	\$ 2.28	
5th term	\$ 2.60	
Third Shift		
	* • • • • •	
1st term	\$ 2.25	
2nd term	\$ 2.50	
3rd term	\$ 2.75	
4th term	\$ 3.50	
5th term	\$ 4.00	
		3-71

Sprinkler Fitter

JOB DESCRIPTION Sprinkler Fitter

DISTRICT 1

06/01/2022

ENTIRE COUNTIES

Allegany, Broome, Cattaraugus, Cayuga, Chautauqua, Chemung, Chenango, Clinton, Columbia, Cortland, Delaware, Erie, Essex, Franklin, Fulton, Genesee, Greene, Hamilton, Herkimer, Jefferson, Lewis, Livingston, Madison, Monroe, Montgomery, Niagara, Oneida, Onondaga, Ontario, Orleans, Oswego, Otsego, Schoharie, Schuyler, Seneca, St. Lawrence, Steuben, Tioga, Tompkins, Washington, Wayne, Wyoming, Yates

WAGES

Per hour	07/01/2021
1 Of HOUL	01/01/2021

Sprinkler \$ 36.33 Fitter

SUPPLEMENTAL BENEFITS

Per hour

Journeyperson \$27.14

OVERTIME PAY See (B, E, Q) on OVERTIME PAGE

HOLIDAY

Paid: Overtime:

See (1) on HOLIDAY PAGE

See (5, 6) on HOLIDAY PAGE

Note: When a holiday falls on Sunday, the following Monday shall be considered a holiday and all work performed on either day shall be at the double time rate. When a holiday falls on Saturday, the preceding Friday shall be considered a holiday and all work performed on either day shall be at the double time rate.

REGISTERED APPRENTICES

Wages per hour

One Half Year terms at the following wage.

1st \$ 17.48	2nd \$ 19.43	3rd \$ 21.12	4th \$ 23.06	5th \$ 25.00	6th \$ 26.95	7th \$ 28.89	8th \$ 30.83	9th \$ 32.77	10th \$ 34.72
Supplemental	Benefits per l	hour							
1st \$ 8.27	2nd \$ 8.27	3rd \$ 19.22	4th \$ 19.22	5th \$ 19.47	6th \$ 19.47	7th \$ 19.47	8th \$ 19.47	9th \$ 19.47	10th \$ 19.47 1-669

Teamster - Building / Heavy&Highway

JOB DESCRIPTION Teamster - Building / Heavy&Highway

ENTIRE COUNTIES

Erie, Niagara

PARTIAL COUNTIES

Genesee: Only in the Townships of Alabama, Darien and Pembroke. Orleans: Only the Townships of Ridgeway, Shelby and Yates. Wyoming: Only in the Townships of Arcade, Bennington, Java and Sheldon.

WAGES

GROUP 1: Warehousemen, Yardmen, Truck Helpers, Pickups, Panel Trucks, Flatboy Material Trucks (straight jobs), Single Axle Dump Trucks, Dumpsters, Material Checkers and Receivers, Greasers, Truck Tiremen, Mechanics Helpers and Parts Chasers.

GROUP 2: Tandems and Batch Trucks, Mechanics, Dispatcher.

GROUP 3: Semi-Trailers, Low-Boy Trucks, Asphalt Distributor Trucks and Agitator, Mixer Trucks and dumpcrete type vehicles, Truck Mechanic, Fuel Trucks

GROUP 4: Specialized Earth Moving Equipment, Euclid type, or similar off-highway, where not self-loading, Straddle (Ross) Carrier, and self -contained concrete mobile truck.

GROUP 5: Off-highway Tandem Back-Dump, Twin Engine Equipment and Double-Hitched Equipment where not self-loading.

Per hour:	07/01/2021
All GROUPS	\$ 41.22

Add \$2.00 when required to use personal protection when performing hazardous waste removal work. An additional \$3.00 per hour is required when a single irregular work shift starting any time from 5:00PM to 1:00AM is mandated either in the job specification or by the contracting agency.

SUPPLEMENTAL BENEFITS

Per hour:

\$ 15.36*

*Note - Only \$ 7.16 per hour needs to be paid for overtime hours.

OVERTIME PAY See (B, G, P) on OVERTIME PAGE

HOLIDAY Paid: See (5, 6) on HOLIDAY PAGE Overtime: See (5, 6) on HOLIDAY PAGE

Teamster - Building / Heavy&Highway

JOB DESCRIPTION Teamster - Building / Heavy&Highway

ENTIRE COUNTIES Chemung, Livingston, Monroe, Ontario, Schuyler, Wayne

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06/01/2022

06/01/2022

DISTRICT 7

DISTRICT 3

PARTIAL COUNTIES

Genesee: Only in the townships of Oakfield, Elba, Batavia, Byron, Alexander, Bethany, Pavilion, Leroy, Stafford, and Bergen Orleans: Only in the townships of Gaines, Carlton, Barre, Kendall, Murray, Clarendon, and Albion Steuben: Only the Townships of: Addison, Avoca, Bath, Bradford, Cameron, Campbell, Caton, Corning, Erwin, Hornby, Howard, Lindley, Pulteney, Rathbone, Thurston, Tuscarora, Urbana, Wayland, Wayne, Wheeler, and Woodhull Tioga: Only from Nichols/Smithboro towards the City of Elmira (west). Wyoming: Only in the townships of Attica, Orangeville, Wethersfield, Eagle, Genesee Falls, Castile, Ganesville, Perry, Warsaw, Middlebury, Covington, and Pike.

WAGES

There shall be a twelve (12) month carryover from the bid date of the posted wage and fringe benefit rates. However, if the project document contains multivear rate schedules, the Employer shall be obligated to pay wage rates therein as they become effective.

*NOTE - THIS RATE APPLIES ONLY TO MILLING OPERATIONS (ASPHALT or CONCRETE) WHEN MATERIALS ARE TO BE REMOVED FROM THE PROJECT SITE.

Per hour:	07/01/2021	07/01/2022	07/01/2023	
Teamster - Mill Rate SUPPLEMENTAL BENI Per hour:	\$ 21.67 EFITS	\$ 22.16	\$ 22.64	
Journeyman OVERTIME PAY See (B, E, Q) on OVERTIN	\$ 12.07 //E PAGE	\$ 12.38	\$ 12.70	
HOLIDAY Paid: Overtime:	See (1) on HOLIDAY PAGE See (5, 6) on HOLIDAY PAGE			7-118-Mill

Teamster - Building / Heavy&Highway

JOB DESCRIPTION Teamster - Building / Heavy&Highway

DISTRICT 7

06/01/2022

ENTIRE COUNTIES

Chemung, Livingston, Monroe, Ontario, Schuyler, Wayne

PARTIAL COUNTIES

Genesee: Only in the townships of Oakfield, Elba, Batavia, Byron, Alexander, Bethany, Pavilion, Leroy, Stafford, and Bergen Orleans: Only in the townships of Gaines, Carlton, Barre, Kendall, Murray, Clarendon, and Albion. Steuben: Only the Townships of: Addison, Avoca, Bath, Bradford, Cameron, Campbell, Caton, Corning, Erwin, Hornby, Howard, Lindley, Pulteney, Rathbone, Thurston, Tuscarora, Urbana, Wayland, Wayne, Wheeler, and Woodhull Tioga: Only from Nichols/Smithboro towards the City of Elmira (west).

Wyoming: Only in the townships of Attica, Orangeville, Wethersfield, Eagle, Genesee Falls, Castile, Ganesville, Perry, Warsaw, Middlebury, Covington, and Pike.

WAGES

There shall be a twelve (12) month carryover from the bid date of the posted wage and fringe benefit rates. However, if the project document contains multiyear rate schedules, the Employer shall be obligated to pay wage rates therein as they become effective.

GROUP #1: Warehousemen*. Yardmen*. Truck helpers. Pickups. Panel trucks. Flatbov material trucks (straight jobs). Single Axle dump trucks. Dumpsters. Material Checkers/Receivers*. Greasers. Tiremen. Mechanics Helpers/Parts Chasers. GROUP #2: Tandems and Batch Trucks, Mechanics.

GROUP #3: Semi-trailers, Low-Boy trucks, Asphalt distributor trucks, and Agitator, Mixer trucks and Dumpcrete type vehicles, Truck mechanic, Fuel trucks.

GROUP #4: Articulated off-road material hauler, Specialized earth moving equipment, Euclid type, or similar off-highway equipment, where not self-loaded, Straddle (Ross) carrier, and self-contained concrete mobile truck.

GROUP #5: Off-highway Tandem back-dump, Twin engine equipment and double-hitched equipment where not self-loaded.

*NOTE - Applies when a temporary warehouse structure is built/utilized specifically for a public work project.

Per hour:	07/01/2021	07/01/2022	07/01/2023
GROUP #1	\$ 25.38	\$ 26.09	\$ 26.78
GROUP #2	25.43	26.14	26.83
GROUP #3	25.48	26.19	26.88
GROUP #4	25.63	26.34	27.03
GROUP #5	25.78	26.49	27.18

Additional \$1.50 per hour for hazardous waste removal work on a City, County, State and/or Federal Designated waste site and regulations require employee to use or wear personal protection.

SUPPLEMENTAL BENEFITS

Per hour:

Journeyman	\$ 25.27	\$ 25.81	\$ 26.37	
OVERTIME PAY See (B, E, Q) on OV	/ERTIME PAGE			
HOLIDAY Paid: Overtime:	See (1) on HOLIDAY PAGE See (5, 6) on HOLIDAY PAGE			7-118
Welder				06/01/2022

JOB DESCRIPTION Welder

DISTRICT 1

ENTIRE COUNTIES

Albany, Allegany, Bronx, Broome, Cattaraugus, Cayuga, Chautauqua, Chemung, Chenango, Clinton, Columbia, Cortland, Delaware, Dutchess, Erie, Essex, Franklin, Fulton, Genesee, Greene, Hamilton, Herkimer, Jefferson, Kings, Lewis, Livingston, Madison, Monroe, Montgomery, Nassau, New York, Niagara, Oneida, Onondaga, Ontario, Orange, Orleans, Oswego, Otsego, Putnam, Queens, Rensselaer, Richmond, Rockland, Saratoga, Schenectady, Schoharie, Schuyler, Seneca, St. Lawrence, Steuben, Suffolk, Sullivan, Tioga, Tompkins, Ulster, Warren, Washington, Wayne, Westchester, Wyoming, Yates

WAGES

Per hour 07/01/2021

Welder: To be paid the same rate of the mechanic performing the work.*

*EXCEPTION: If a specific welder certification is required, then the 'Certified Welder' rate in that trade tag will be paid.

OVERTIME PAY HOLIDAY

1-As Per Trade

Overtime Codes

Following is an explanation of the code(s) listed in the OVERTIME section of each classification contained in the attached schedule. Additional requirements may also be listed in the HOLIDAY section.

NOTE: Supplemental Benefits are 'Per hour worked' (for each hour worked) unless otherwise noted

- (AA) Time and one half of the hourly rate after 7 and one half hours per day
- (A) Time and one half of the hourly rate after 7 hours per day
- (B) Time and one half of the hourly rate after 8 hours per day
- (B1) Time and one half of the hourly rate for the 9th & 10th hours week days and the 1st 8 hours on Saturday. Double the hourly rate for all additional hours
- (B2) Time and one half of the hourly rate after 40 hours per week
- (C) Double the hourly rate after 7 hours per day
- (C1) Double the hourly rate after 7 and one half hours per day
- (D) Double the hourly rate after 8 hours per day
- (D1) Double the hourly rate after 9 hours per day
- (E) Time and one half of the hourly rate on Saturday
- (E1) Time and one half 1st 4 hours on Saturday; Double the hourly rate all additional Saturday hours
- (E2) Saturday may be used as a make-up day at straight time when a day is lost during that week due to inclement weather
- (E3) Between November 1st and March 3rd Saturday may be used as a make-up day at straight time when a day is lost during that week due to inclement weather, provided a given employee has worked between 16 and 32 hours that week
- (E4) Saturday and Sunday may be used as a make-up day at straight time when a day is lost during that week due to inclement weather
- (E5) Double time after 8 hours on Saturdays
- (F) Time and one half of the hourly rate on Saturday and Sunday
- (G) Time and one half of the hourly rate on Saturday and Holidays
- (H) Time and one half of the hourly rate on Saturday, Sunday, and Holidays
- (I) Time and one half of the hourly rate on Sunday
- (J) Time and one half of the hourly rate on Sunday and Holidays
- (K) Time and one half of the hourly rate on Holidays
- (L) Double the hourly rate on Saturday
- (M) Double the hourly rate on Saturday and Sunday
- (N) Double the hourly rate on Saturday and Holidays
- (O) Double the hourly rate on Saturday, Sunday, and Holidays
- (P) Double the hourly rate on Sunday
- (Q) Double the hourly rate on Sunday and Holidays
- (R) Double the hourly rate on Holidays
- (S) Two and one half times the hourly rate for Holidays

- (S1) Two and one half times the hourly rate the first 8 hours on Sunday or Holidays One and one half times the hourly rate all additional hours.
- (T) Triple the hourly rate for Holidays
- (U) Four times the hourly rate for Holidays
- (V) Including benefits at SAME PREMIUM as shown for overtime
- (W) Time and one half for benefits on all overtime hours.
- (X) Benefits payable on Paid Holiday at straight time. If worked, additional benefit amount will be required for worked hours. (Refer to other codes listed.)

Holiday Codes

PAID Holidays:

Paid Holidays are days for which an eligible employee receives a regular day's pay, but is not required to perform work. If an employee works on a day listed as a paid holiday, this remuneration is in addition to payment of the required prevailing rate for the work actually performed.

OVERTIME Holiday Pay:

Overtime holiday pay is the premium pay that is required for work performed on specified holidays. It is only required where the employee actually performs work on such holidays. The applicable holidays are listed under HOLIDAYS: OVERTIME. The required rate of pay for these covered holidays can be found in the OVERTIME PAY section listings for each classification.

Following is an explanation of the code(s) listed in the HOLIDAY section of each classification contained in the attached schedule. The Holidays as listed below are to be paid at the wage rates at which the employee is normally classified.

- (1) None
- (2) Labor Day
- (3) Memorial Day and Labor Day
- (4) Memorial Day and July 4th
- (5) Memorial Day, July 4th, and Labor Day
- (6) New Year's, Thanksgiving, and Christmas
- (7) Lincoln's Birthday, Washington's Birthday, and Veterans Day
- (8) Good Friday
- (9) Lincoln's Birthday
- (10) Washington's Birthday
- (11) Columbus Day
- (12) Election Day
- (13) Presidential Election Day
- (14) 1/2 Day on Presidential Election Day
- (15) Veterans Day
- (16) Day after Thanksgiving
- (17) July 4th
- (18) 1/2 Day before Christmas
- (19) 1/2 Day before New Years
- (20) Thanksgiving
- (21) New Year's Day
- (22) Christmas
- (23) Day before Christmas
- (24) Day before New Year's
- (25) Presidents' Day
- (26) Martin Luther King, Jr. Day
- (27) Memorial Day
- (28) Easter Sunday

(29) Juneteenth

New York State Department of Labor - Bureau of Public Work State Office Building Campus Building 12 - Room 130 Albany, New York 12240REQUEST FOR WAGE AND SUPPLEMENT INFORMATION As Required by Articles 8 and 9 of the NYS Labor LawFax (518) 485-1870 or mail this form for new schedules or for determination for additional occupations.This Form Must Be Typed								
Submitted By: (Check Only One) Contracting Agency Architect or Engineering	Firm Public Work District Office Date:							
A. Public Work Contract to be let by: (Enter Data Pertaining to C	Contracting/Public Agency)							
1. Name and complete address [(Check if new or change) Telephone: () E-Mail:	2. NY State Units (see Item 5) 07 City 01 DOT 08 Local School District 02 OGS 09 Special Local District, i.e., 03 Dormitory Authority Fire, Sewer, Water District 04 State University 10 Village Construction Fund 11 Town 05 Mental Hygiene 12 County Facilities Corp. 13 Other Non-N.Y. State 06 OTHER N.Y. STATE UNIT (Describe)							
3. SEND REPLY TO ,	 4. SERVICE REQUIRED. Check appropriate box and provide project information. New Schedule of Wages and Supplements. APPROXIMATE BID DATE : Additional Occupation and/or Redetermination 							
Telephone:()	PRC NUMBER ISSUED PREVIOUSLY FOR THIS PROJECT : OFFICE USE ONLY							
B. PROJECT PARTICULARS								
Froject Title Description of Work Contract Identification Number Note: For NYS units, the OSC Contract No.	6. Location of Project: Location on Site Route No/Street Address Village or City Town County							
 7. Nature of Project - Check One: 1. New Building 2. Addition to Existing Structure 3. Heavy and Highway Construction (New and Repair) 4. New Sewer or Waterline 5. Other New Construction (Explain) 6. Other Reconstruction, Maintenance, Repair or Alteration 7. Demolition 8. Building Service Contract 	 8. OCCUPATION FOR PROJECT : Construction (Building, Heavy Highway/Sewer/Water) Tunnel Residential Landscape Maintenance Elevator maintenance Exterminators, Fumigators Fire Safety Director, NYC Only 							
9. Has this project been reviewed for compliance with the Wick	s Law involving separate bidding? YES NO							
10.Name and Title of Requester	Signature							



LIST OF EMPLOYERS INELIGIBLE TO BID ON OR BE AWARDED ANY PUBLIC WORK CONTRACT

Under Article 8 and Article 9 of the NYS Labor Law, a contractor, sub-contractor and/or its successor shall be debarred and ineligible to submit a bid on or be awarded any public work or public building service contract/sub-contract with the state, any municipal corporation or public body for a period of five (5) years from the date of debarment when:

- Two (2) final determinations have been rendered within any consecutive six-year (6) period determining that such contractor, sub-contractor and/or its successor has WILLFULLY failed to pay the prevailing wage and/or supplements;
- One (1) final determination involves falsification of payroll records or the kickback of wages and/or supplements.

The agency issuing the determination and providing the information, is denoted under the heading 'Fiscal Officer'. DOL = New York State Department of Labor; NYC = New York City Comptroller's Office; AG = New York State Attorney General's Office; DA = County District Attorney's Office.

Debarment Database: To search for contractors, sub-contractors and/or their successors debarred from bidding or being awarded any public work contract or subcontract under NYS Labor Law Articles 8 and 9, <u>or</u> under NYS Workers' Compensation Law Section 141-b, access the database at this link: <u>https://applications.labor.ny.gov/EDList/searchPage.do</u>

For inquiries where WCB is listed as the "Agency", please call 1-866-546-9322

AGENCY	Fiscal Officer	FEIN	EMPLOYER NAME	EMPLOYER DBA NAME	ADDRESS	DEBARMENT START DATE	DEBARMENT END DATE
DOL	DOL	*****5754	0369 CONTRACTORS, LLC		515 WEST AVE UNIT PH 13NORWALK CT 06850	05/12/2021	05/12/2026
DOL	DOL	****4018	ADIRONDACK BUILDING RESTORATION INC.		4156 WILSON ROAD EAST TABERG NY 13471	03/26/2019	03/26/2024
DOL	AG	*****1812	ADVANCED BUILDERS & LAND DEVELOPMENT, INC.		400 OSER AVE #2300HAUPPAUGE NY 11788	09/11/2019	09/11/2024
DOL	DOL	*****1687	ADVANCED SAFETY SPRINKLER INC		261 MILL ROAD P.O BOX 296EAST AURORA NY 14052	05/29/2019	05/29/2024
DOL	NYC	****6775	ADVENTURE MASONRY CORP.		1535 RICHMOND AVENUE STATEN ISLAND NY 10314	12/13/2017	12/13/2022
DOL	NYC		AGOSTINHO TOME		405 BARRETTO ST BRONX NY 10474	05/31/2018	05/31/2023
DOL	NYC		AMJED PARVEZ		401 HANOVER AVENUE STATEN ISLAND NY 10304	01/11/2021	01/11/2026
DOL	DOL		ANGELO F COKER		2610 SOUTH SALINA STREET SUITE 14SYRACUSE NY 13205	09/17/2020	09/17/2025
DOL	DOL		ANGELO F COKER		2610 SOUTH SALINA STREET SUITE 14SYRACUSE NY 13205	12/04/2018	12/04/2023
DOL	DOL		ANGELO GARCIA		515 WEST AVE UNIT PH 13NORWALK CT 06850	05/12/2021	05/12/2026
DOL	DOL		ANITA SALERNO		158 SOLAR ST SYRACUSE NY 13204	01/07/2019	01/07/2024
DOL	DOL		ANTONIO ESTIVEZ		442 ARMONK RD MOUNT KISCO NY 10549	06/12/2018	06/12/2023
DOL	NYC		ARADCO CONSTRUCTION CORP		115-46 132RD ST SOUTH OZONE PARK NY 11420	09/17/2020	09/17/2025
DOL	DOL		ARNOLD A. PAOLINI		1250 BROADWAY ST BUFFALO NY 14212	02/03/2020	02/03/2025
DOL	NYC		ARSHAD MEHMOOD		168-42 88TH AVENUE JAMAICA NY 11432	11/20/2019	11/20/2024
DOL	DOL		ARVINDER ATWAL		65 KENNETH PLACE NEW HYDE PARK NY 11040	07/19/2017	07/19/2022
DOL	NYC	*****6683	ATLAS RESTORATION CORP.		35-12 19TH AVENUE ASTORIA NY 11105	08/02/2017	08/02/2022
DOL	NYC	****5532	ATWAL MECHANICALS, INC		65 KENNETH PLACE NEW HYDE PARK NY 11040	07/19/2017	07/19/2022
DOL	NYC	*****2591	AVI 212 INC.		260 CROPSEY AVENUE APT 11GBROOKLYN NY 11214	10/30/2018	10/30/2023
DOL	NYC		AVM CONSTRUCTION CORP		117-72 123RD ST SOUTH OZONE PARK NY 11420	09/17/2020	09/17/2025
DOL	NYC		AZIDABEGUM		524 MCDONALD AVENUE BROOKLYN NY 11218	09/17/2020	09/17/2025
DOL	DOL	*****8421	B & B DRYWALL, INC		206 WARREN AVE APT 1WHITE PLAINS NY 10603	12/14/2021	12/14/2026
DOL	NYC		BALWINDER SINGH		421 HUDSON ST SUITE C5NEW YORK NY 10014	02/20/2019	02/20/2024
DOL	NYC	*****8416	BEAM CONSTRUCTION, INC.		50 MAIN ST WHITE PLAINS NY 10606	01/04/2019	01/04/2024
DOL	DOL		BERNARD BEGLEY		38 LONG RIDGE ROAD BEDFORD NY 10506	12/18/2019	12/18/2024
DOL	NYC	*****2113	BHW CONTRACTING, INC.		401 HANOVER AVENUE STATEN ISLAND NY 10304	01/11/2021	01/11/2026
DOL	DOL		BIAGIO CANTISANI			06/12/2018	06/12/2023
DOL	DOL	*****3627	BJB CONSTRUCTION CORP.		38 LONG RIDGE ROAD BEDFORD NY 10506	12/18/2019	12/18/2024
DOL	DOL	*****4512	BOB BRUNO EXCAVATING, INC		5 MORNINGSIDE DR AUBURN NY 13021	05/28/2019	05/28/2024
DOL	DOL		BOGDAN MARKOVSKI		370 W. PLEASANTVIEW AVE SUITE 2.329HACKENSACK NJ 07601	02/11/2019	02/11/2024
DOL	DOL		BRADLEY J SCHUKA		4 BROTHERS ROAD WAPPINGERS FALLS NY 12590	10/20/2020	10/20/2025
DOL	DOL		BRUCE P. NASH JR.		5841 BUTTERNUT ROAD EAST SYRACUSE NY 13057	09/12/2018	09/12/2023
DOL	DOL	*****0225	C&D LAFACE CONSTRUCTION, INC.		8531 OSWEGO RD BALDWINSVILLE NY 13027	02/03/2020	01/09/2023
DOL	DOL	****9383	C.C. PAVING AND EXCAVATING, INC.		2610 SOUTH SALINA ST SUITE 12SYRACUSE NY 13205	09/17/2020	09/17/2025

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DOL	DOL	*****9383	C.C. PAVING AND EXCAVATING, INC.		2610 SOUTH SALINA ST SUITE 12SYRACUSE NY 13205	12/04/2018	12/04/2023
DOL	DOL	*****4083	C.P.D. ENTERPRISES, INC		P.O BOX 281 WALDEN NY 12586	03/03/2020	03/03/2025
DOL	DOL	****5161	CALADRI DEVELOPMENT CORP.		1223 PARK ST. PEEKSKILL NY 10566	05/17/2021	05/17/2026
DOL	DOL	*****3391	CALI ENTERPRISES, INC.		1223 PARK STREET PEEKSKILL NY 10566	05/17/2021	05/17/2026
DOL	NYC		CALVIN WALTERS		465 EAST THIRD ST MT. VERNON NY 10550	09/09/2019	09/09/2024
DOL	DOL		CANTISANI & ASSOCIATES LTD		442 ARMONK RD MOUNT KISCSO NY 10549	06/12/2018	06/12/2023
DOL	DOL		CANTISANI HOLDING LLC			06/12/2018	06/12/2023
DOL	DOL		CARMEN RACHETTA		8531 OSWEGO RD BALDWINSVILLE NY 13027	02/03/2020	02/03/2025
DOL	DOL		CARMENA RACHETTA		8531 OSWEGO ROAD BALDWINSVILLE NY 13027	02/03/2020	01/09/2023
DOL	DOL	****3812	CARMODY "2" INC		DALDWINGVILLE INT 13027	06/12/2018	06/12/2023
DOL	DOL	****1143	CARMODY BUILDING CORP	CARMODY CONTRACTIN G AND CARMODY CONTRACTIN G CORP.	442 ARMONK RD MOUNT KISCO NY 10549	06/12/2018	06/12/2023
DOL	DOL		CARMODY CONCRETE CORPORATION			06/12/2018	06/12/2023
DOL	DOL		CARMODY ENTERPRISES, LTD.		442 ARMONK RD MOUNT KISCO NY 10549	06/12/2018	06/12/2023
DOL	DOL		CARMODY INC		442 ARMONK RD MOUNT KISCO NY 10549	06/12/2018	06/12/2023
DOL	DOL	*****3812	CARMODY INDUSTRIES INC			06/12/2018	06/12/2023
DOL	DOL		CARMODY MAINTENANCE CORPORATION		442 ARMONK RD MOUNT KISCO NY 10549	06/12/2018	06/12/2023
DOL	DOL		CARMODY MASONRY CORP		442 ARMONK RD MOUNT KISCO NY 10549	06/12/2018	06/12/2023
DOL	AG		CESAR J. AGUDELO		81-06 34TH AVENUE APT. 6EJACKSON HEIGHTS NY 11372	02/07/2018	02/07/2023
DOL	DOL	*****0026	CHANTICLEER CONSTRUCTION LLC		4 BROTHERS ROAD WAPPINGERS FALLS NY 12590	10/20/2020	10/20/2025
DOL	NYC		CHARLES ZAHRADKA		863 WASHINGTON STREET FRANKLIN SQUARE NY 11010	03/10/2020	03/10/2025
DOL	DOL		CHRISTOPHER GRECO		26 NORTH MYRTLE AVENUE SPRING VALLEY NY 10956	02/18/2021	02/18/2026
DOL	DOL		CHRISTOPHER J MAINI		19 CAITLIN AVE JAMESTOWN NY 14701	09/17/2018	09/17/2023
DOL	DOL		CHRISTOPHER PAPASTEFANOU A/K/A CHRIS PAPASTEFANOU		1445 COMMERCE AVE BRONX NY 10461	05/30/2019	05/30/2024
DOL	DOL	*****1927	CONSTRUCTION PARTS WAREHOUSE, INC.	CPW	5841 BUTTERNUT ROAD EAST SYRACUSE NY 13057	09/12/2018	09/12/2023
DOL	DOL	*****3228	CROSS-COUNTY LANDSCAPING AND TREE SERVICE, INC.	ROCKLAND TREE SERVICE	26 NORTH MYRTLE AVENUE SPRING VALLEY NY 10956	02/18/2021	02/18/2026
DOL	DOL	*****2524	CSI ELECTRICAL & MECHANICAL INC		42-32 235TH ST DOUGLASTON NY 11363	01/14/2019	01/14/2024
DOL	NYC		DALJIT KAUR BOPARAI		185-06 56TH AVE FRESH MEADOW NY 11365	10/17/2017	10/17/2022
DOL	DOL	****7619	DANCO CONSTRUCTION UNLIMITED INC.		485 RAFT AVENUE HOLBROOK NY 11741	10/19/2021	10/19/2026
DOL	DOL		DARIAN L COKER		2610 SOUTH SALINA ST SUITE 2CSYRACUSE NY 13205	09/17/2020	09/17/2025
DOL	DOL		DARIAN L COKER		2610 SOUTH SALINA ST SUITE 2CSYRACUSE NY 13205	12/04/2018	12/04/2023
DOL	NYC		DAVID WEINER		14 NEW DROP LANE 2ND FLOORSTATEN ISLAND NY 10306	11/14/2019	11/14/2024
DOL	AG		DEBRA MARTINEZ		31 BAY ST BROOKLYN NY 11231	03/28/2018	03/28/2023
DOL	DOL		DELPHI PAINTING & DECORATING CO INC		1445 COMMERCE AVE BRONX NY 10461	05/30/2019	05/30/2024
DOL	NYC		DIMITRIOS TSOUMAS		35-12 19TH AVENUE ASTORIA NY 11105	08/02/2017	08/02/2022

DOL	DOL		DOMENICO LAFACE		8531 OSWEGO RD BALDWINSVILLE NY 13027	02/03/2020	01/09/2023
DOL	DOL	****5175	EAGLE MECHANICAL AND GENERAL CONSTRUCTION LLC		11371 RIDGE RD WOLCOTT NY 14590	02/03/2020	02/03/2025
DOL	DOL		EAST COAST PAVING		2238 BAKER RD GILLETT PA 16923	03/12/2018	03/12/2023
DOL	DA		EDWIN HUTZLER		2375 RAYNOR STREET RONKONKOMA NY 11779	08/04/2021	08/04/2026
DOL	DOL	****0780	EMES HEATING & PLUMBING CONTR		5 EMES LANE MONSEY NY 10952	01/20/2002	01/20/3002
DOL	NYC	****5917	EPOCH ELECTRICAL, INC		97-18 50TH AVE CORONA NY 11368	04/19/2018	04/19/2024
DOL	DOL		FAIGY LOWINGER		11 MOUNTAIN RD 28 VAN BUREN DRMONROE NY 10950	03/20/2019	03/20/2024
DOL	DOL		FRANK BENEDETTO		19 CATLIN AVE JAMESTOWN NY 14701	09/17/2018	09/17/2023
DOL	DOL	*****4722	FRANK BENEDETTO AND CHRISTOPHER J MAINI	B & M CONCRETE	19 CAITLIN AVE JAMESTOWN NY 14701	09/17/2018	09/17/2023
DOL	NYC		FRANK MAINI		1766 FRONT ST YORKTOWN HEIGHTS NY 10598	01/17/2018	01/17/2023
DOL	DA		FREDERICK HUTZLER		2375 RAYNOR STREET RONKONKOMA NY 11779	08/04/2021	08/04/2026
DOL	NYC	*****6616	G & G MECHANICAL ENTERPRISES, LLC.		1936 HEMPSTEAD TURNPIKE EAST MEDOW NY 11554	11/29/2019	11/29/2024
DOL	DOL		GABRIEL FRASSETTI			04/10/2019	04/10/2024
DOL	NYC		GAYATRI MANGRU		21 DAREWOOD LANE VALLEY STREAM NY 11581	09/17/2020	09/17/2025
DOL	DOL		GEOFF CORLETT		415 FLAGGER AVE #302STUART FL 34994	10/31/2018	10/31/2023
DOL	DA		GEORGE LUCEY		150 KINGS STREET BROOKLYN NY 11231	01/19/1998	01/19/2998
DOL	DOL		GIGI SCHNECKENBURGER		261 MILL RD EAST AURORA NY 14052	05/29/2019	05/29/2024
DOL	DOL		GIOVANNI LAFACE		8531 OSWEGO RD BALDWINSVILLE NY 13027	02/03/2020	01/09/2023
DOL	NYC	*****3164	GLOBE GATES INC	GLOBAL OVERHEAD DOORS	405 BARRETTO ST BRONX NY 10474	05/31/2018	05/31/2023
DOL	NYC		GREAT ESTATE CONSTRUCTION, INC.		327 STAGG ST BROOKLYN NY 11206	10/10/2017	10/10/2022
DOL	DOL		GREGORY S. OLSON		P.O BOX 100 200 LATTA BROOK PARKHORSEHEADS NY 14845	03/08/2018	03/08/2023
DOL	DOL		HANS RATH		24 ELDOR AVENUE NEW CITY NY 10956	02/03/2020	02/03/2025
DOL	NYC	*****3228	HEIGHTS ELEVATOR CORP.		1766 FRONT ST YORKTOWN HEIGHTS NY 10598	01/17/2018	01/17/2023
DOL	DOL	****5131	INTEGRITY MASONRY, INC.	M&R CONCRETE	722 8TH AVE WATERVLIET NY 12189	06/05/2018	06/05/2023
DOL	DOL		IRENE KASELIS		32 PENNINGTON AVE WALDWICK NJ 07463	05/30/2019	05/30/2024
DOL	DOL	*****9211	J. WASE CONSTRUCTION CORP.		8545 RT 9W ATHENS NY 12015	03/09/2021	03/09/2026
DOL	DOL		J.A. HIRES CADWALLADER		P.O BOX 100 200 LATTA BROOK PARKHORSEHEADS NY 14845	03/08/2018	03/08/2023
DOL	DOL		JAMES C. DELGIACCO		722 8TH AVE WATERVLIET NY 12189	06/05/2018	06/05/2023
DOL	DOL		JAMES J. BAKER		7901 GEE ROAD CANASTOTA NY 13032	08/17/2021	08/17/2026
DOL	DOL		JAMES LIACONE		9365 WASHINGTON ST LOCKPORT IL 60441	07/23/2018	07/23/2023
DOL	DOL		JAMES RACHEL		9365 WASHINGTON ST LOCKPORT IL 60441	07/23/2018	07/23/2023
DOL	DOL		JASON P. RACE		3469 STATE RT. 69 PERISH NY 13131	09/29/2021	09/29/2026
DOL	DOL		JASON P. RACE		3469 STATE RT. 69 PERISH NY 13131	02/09/2022	02/09/2027
DOL	DOL		JASON P. RACE		3469 STATE RT. 69 PERISH NY 13131	03/01/2022	03/01/2027

DOL	DOL	****7993	JBS DIRT, INC.		7901 GEE ROAD CANASTOTA NY 13032	08/17/2021	08/17/2026
DOL	DOL	*****5368	JCH MASONRY & LANDSCAPING INC.		35 CLINTON AVE OSSINING NY 10562	09/12/2018	09/12/2023
DOL	NYC		JENNIFER GUERRERO		1936 HEMPSTEAD TURNPIKE EAST MEADOW NY 11554	11/29/2019	11/29/2024
DOL	DOL		JIM PLAUGHER		17613 SANTE FE LINE ROAD WAYNEFIELD OH 45896	07/16/2021	07/16/2026
DOL	AG		JOHN ANTHONY MASSINO		36-49 204TH STREET BAYSIDE NY 11372	02/07/2018	02/07/2023
DOL	DOL		JOHN F. CADWALLADER		200 LATTA BROOK PARK HORSEHEADS NY 14845	03/08/2018	03/08/2023
DOL	DOL	****4612	JOHN F. CADWALLADER, INC.	THE GLASS COMPANY	P.O BOX 100 200 LATTA BROOK PARKHORSEHEADS NY 14845	03/08/2018	03/08/2023
DOL	DOL		JOHN GOCEK		14B COMMERCIAL AVE ALBANY NY 12065	11/14/2019	11/14/2024
DOL	DOL		JOHN LUCIANO			05/14/2018	05/14/2023
DOL	DOL		JOHN MARKOVIC		47 MANDON TERRACE HAWTHORN NJ 07506	03/29/2021	03/29/2026
DOL	DOL		JOHN WASE		8545 RT 9W ATHENS NY 12015	03/09/2021	03/09/2026
DOL	AG	*****0600	JOHNCO CONTRACTING, INC.		36-49 204TH STREET BAYSIDE NY 11372	02/07/2018	02/07/2023
DOL	DOL		JON E DEYOUNG		261 MILL RD P.O BOX 296EAST AURORA NY 14052	05/29/2019	05/29/2024
DOL	DOL		JORGE RAMOS		8970 MIKE GARCIA DR MANASSAS VA 20109	07/16/2021	07/16/2026
DOL	DOL		JORI PEDERSEN		415 FLAGER AVE #302STUART FL 34994	10/31/2018	10/31/2023
DOL	DOL		JOSE CHUCHUCA		35 CLINTON AVE OSSINING NY 10562	09/12/2018	09/12/2023
DOL	NYC		JOSEPH MARTINO		1535 RICHMOND AVENUE STATEN ISLAND NY 10314	12/13/2017	12/13/2022
DOL	DOL		JOY MARTIN		2404 DELAWARE AVE NIGARA FALLS NY 14305	09/12/2018	09/12/2023
DOL	DOL	*****5116	JP RACE PAINTING, INC. T/A RACE PAINTING		3469 STATE RT. 69 PERISH NY 13131	02/09/2022	02/09/2027
DOL	DOL	****5116	JP RACE PAINTING, INC. T/A RACE PAINTING		3469 STATE RT. 69 PERISH NY 13131	09/29/2021	09/29/2026
DOL	DOL	****5116	JP RACE PAINTING, INC. T/A RACE PAINTING		3469 STATE RT. 69 PERISH NY 13131	03/01/2022	03/01/2027
DOL	DOL	****5116	JP RACE PAINTING, INC. T/A RACE PAINTING		3469 STATE RT. 69 PERISH NY 13131	03/01/2022	03/01/2027
DOL	DOL		JULIUS AND GITA BEHREND		5 EMES LANE MONSEY NY 10952	11/20/2002	11/20/3002
DOL	DOL		KARIN MANGIN		796 PHELPS ROAD FRANKLIN LAKES NJ 07417	12/01/2020	12/01/2025
DOL	DOL		KATE E. CONNOR		7088 INTERSTATE ISLAND RD SYRACUSE NY 13209	03/31/2021	03/31/2026
DOL	DOL		KATIE BURDICK		2238 BAKER RD GILLETT PA 16923	03/12/2018	03/12/2023
DOL	DOL	*****2959	KELC DEVELOPMENT, INC		7088 INTERSTATE ISLAND RD SYRACUSE NY 13209	03/31/2021	03/31/2026
DOL	DOL		KIMBERLY F. BAKER		7901 GEE ROAD CANASTOTA NY 13032	08/17/2021	08/17/2026
DOL	DOL	*****3490	L & M CONSTRUCTION/DRYWALL INC.		1079 YONKERS AVE YONKERS NY 10704	08/07/2018	08/07/2023
DOL	DA	*****8816	LAKE CONSTRUCTION AND DEVELOPMENT CORPORATION		150 KINGS STREET BROOKLYN NY 11231	08/19/1998	08/19/2998
DOL	DOL		LAVERN GLAVE		161 ROBYN RD MONROE NY 10950	01/30/2018	01/30/2023
DOL	DOL	****4388	LEN.J CONSTRUCTION, LLC		PO BOX 10007 ALBANY NY 12201	06/24/2016	09/19/2022
DOL	DOL	*****4388	LEN.J CONSTRUCTION, LLC		PO BOX 10007 ALBANY NY 12201	06/24/2016	09/19/2022
DOL	DOL	****4388	LEN.J CONSTRUCTION, LLC		PO BOX 10007 ALBANY NY 12201	09/19/2017	09/19/2022
DOL	DOL	****4388	LEN.J CONSTRUCTION, LLC		PO BOX 10007 ALBANY NY 12201	09/19/2017	09/19/2022

DOL	DOL	*****4388	LEN.J CONSTRUCTION, LLC	PO BOX 10007 ALBANY NY 12201	01/17/2017	09/19/2022
DOL	DOL	*****4388	LEN.J CONSTRUCTION, LLC	PO BOX 10007 ALBANY NY 12201	09/19/2017	09/19/2022
DOL	DOL	*****4388	LEN.J CONSTRUCTION, LLC	PO BOX 10007 ALBANY NY 12201	09/19/2017	09/19/2022
DOL	DOL	*****4388	LEN.J CONSTRUCTION, LLC	PO BOX 10007 ALBANY NY 12201	08/14/2017	09/19/2022
DOL	DOL		LEROY NELSON JR	PO BOX 10007 ALBANY NY 12201	09/19/2017	09/19/2022
DOL	DOL		LEROY NELSON JR	PO BOX 10007 ALBANY NY 12201	09/19/2017	09/19/2022
DOL	DOL		LEROY NELSON JR	PO BOX 10007 ALBANY NY 12201	09/19/2017	09/19/2022
DOL	DOL		LEROY NELSON JR	PO BOX 10007 ALBANY NY 12201	09/19/2017	09/19/2022
DOL	DOL		LEROY NELSON JR	PO BOX 10007 ALBANY NY 12201	08/14/2017	08/14/2022
DOL	DOL		LEROY NELSON JR	PO BOX 10007 ALBANY NY 12201	01/17/2017	09/19/2022
DOL	AG	*****3291	LINTECH ELECTRIC, INC.	3006 TILDEN AVE BROOKLYN NY 11226	02/16/2022	02/16/2027
DOL	DA	*****4460	LONG ISLAND GLASS & STOREFRONTS, LLC	4 MANHASSET TRL RIDGE NY 11961	09/06/2018	09/06/2023
DOL	AG	*****4216	LOTUS-C CORP.	81-06 34TH AVENUE APT. 6EJACKSON HEIGHTS NY 11372	02/07/2018	02/07/2023
DOL	DOL		LOUIS A. CALICCHIA	1223 PARK ST. PEEKSKILL NY 10566	05/17/2021	05/17/2026
DOL	NYC		LUBOMIR PETER SVOBODA	27 HOUSMAN AVE STATEN ISLAND NY 10303	12/26/2019	12/26/2024
DOL	NYC		M & L STEEL & ORNAMENTAL IRON CORP.	27 HOUSMAN AVE STATEN ISLAND NY 10303	12/26/2019	12/26/2024
DOL	DOL	*****2196	MAINSTREAM SPECIALTIES, INC.	11 OLD TOWN RD SELKIRK NY 12158	02/02/2021	02/02/2026
DOL	DA		MANUEL P TOBIO	150 KINGS STREET BROOKLYN NY 14444	08/19/1998	08/19/2998
DOL	DA		MANUEL TOBIO	150 KINGS STREET BROOKLYN NY 11231	08/19/1998	08/19/2998
DOL	NYC		MAREK FABIJANOWSKI	50 MAIN ST WHITE PLAINS NY 10606	01/04/2019	01/04/2024
DOL	NYC		MARIA NUBILE	84-22 GRAND AVENUE ELMHURST NY 11373	03/10/2020	03/10/2025
DOL	DOL		MASONRY CONSTRUCTION, INC.	442 ARMONK RD MOUNT KISCO NY 10549	06/12/2018	06/12/2023
DOL	DOL	*****3333	MASONRY INDUSTRIES, INC.	442 ARMONK RD MOUNT KISCO NY 10549	06/12/2018	06/12/2023
DOL	NYC		MATINA KARAGIANNIS	97-18 50TH AVE CORONA NY 11368	04/19/2018	04/19/2023
DOL	DOL		MATTHEW P. KILGORE	4156 WILSON ROAD EAST TABERG NY 13471	03/26/2019	03/26/2024
DOL	DOL		MAURICE GAWENO	442 ARMONK RD MOUNT KISCO NY 10549	06/12/2018	06/12/2023
DOL	DOL		MICHAEL LENIHAN	1079 YONKERS AVE UNIT 4YONKERS NY 10704	08/07/2018	08/07/2023
DOL	AG		MICHAEL RIGLIETTI	31 BAY ST BROOKLYN NY 11231	03/28/2018	03/28/2023
DOL	DOL	*****4829	MILESTONE ENVIRONMENTAL CORPORATION	704 GINESI DRIVE SUITE 29MORGANVILLE NJ 07751	04/10/2019	04/10/2024
DOL	NYC	*****9926	MILLENNIUM FIRE PROTECTION, LLC	325 W. 38TH STREET SUITE 204NEW YORK NY 10018	11/14/2019	11/14/2024
DOL	NYC	*****0627	MILLENNIUM FIRE SERVICES, LLC	14 NEW DROP LNE 2ND FLOORSTATEN ISLAND NY 10306	11/14/2019	11/14/2024
DOL	AG		MSR ELECTRICAL CONSTRUCTION CORP.	31 BAY ST BROOKLYN NY 11231	03/28/2018	03/28/2023
DOL	NYC		MUHAMMED A. HASHEM	524 MCDONALD AVENUE BROOKLYN NY 11218	09/17/2020	09/17/2025
DOL	NYC		NAMOW, INC.	84-22 GRAND AVENUE ELMHURST NY 11373	03/10/2020	03/10/2025
DOL	DA	*****9786	NATIONAL INSULATION & GC CORP	180 MILLER PLACE HICKSVILLE NY 11801	12/12/2018	12/12/2023

DOL	DOL	*****3684	NATIONAL LAWN SPRINKLERS, INC.		645 N BROADWAY WHITE PLAINS NY 10603	05/14/2018	05/14/2023
DOL	DOL		NICHOLE E. FRASER A/K/A NICHOLE RACE		3469 STATE RT. 69 PERISH NY 13131	03/01/2022	03/01/2027
DOL	DOL		NICHOLE E. FRASER A/K/A NICHOLE RACE		3469 STATE RT. 69 PERISH NY 13131	09/29/2021	09/29/2026
DOL	DOL		NICHOLE E. FRASER A/K/A NICHOLE RACE		3469 STATE RT. 69 PERISH NY 13131	02/09/2022	02/09/2027
DOL	DOL	****7429	NICOLAE I. BARBIR	BESTUCCO CONSTRUCTI ON, INC.	444 SCHANTZ ROAD ALLENTOWN PA 18104	09/17/2020	09/17/2025
DOL	DOL	*****1845	OC ERECTERS, LLC A/K/A OC ERECTERS OF NY INC.		1207 SW 48TH TERRACE DEERFIELD BEACH FL 33442	01/16/2018	01/16/2023
DOL	DOL		PAULINE CHAHALES		935 S LAKE BLVD MAHOPAC NY 10541	03/02/2021	03/02/2026
DOL	DOL		PETER STEVENS		11 OLD TOWN ROAD SELKIRK NY 12158	02/02/2021	02/02/2026
DOL	DOL	*****0466	PRECISION BUILT FENCES, INC.		1617 MAIN ST PEEKSKILL NY 10566	03/03/2020	03/03/2025
DOL	NYC		RASHEL CONSTRUCTION CORP		524 MCDONALD AVENUE BROOKLYN NY 11218	09/17/2020	09/17/2025
DOL	DOL	*****1068	RATH MECHANICAL CONTRACTORS, INC.		24 ELDOR AVENUE NEW CITY NY 10956	02/03/2020	02/03/2025
DOL	DOL	*****2633	RAW POWER ELECTRIC CORP		3 PARK CIRCLE MIDDLETOWN NY 10940	01/30/2018	01/30/2023
DOL	AG	*****7015	RCM PAINTING INC.		69-06 GRAND AVENUE 2ND FLOORMASPETH NY 11378	02/07/2018	02/07/2023
DOL	DA	****7559	REGAL CONTRACTING INC.		24 WOODBINE AVE NORTHPORT NY 11768	10/01/2020	10/01/2025
DOL	DOL		REGINALD WARREN		161 ROBYN RD MONROE NY 10950	01/30/2018	01/30/2023
DOL	DOL	*****9148	RICH T CONSTRUCTION		107 WILLOW WOOD LANE CAMILLUS NY 13031	11/13/2018	11/13/2023
DOL	DOL		RICHARD MACONE		8617 THIRD AVE BROOKLYN NY 11209	09/17/2018	09/17/2023
DOL	DOL		RICHARD REGGIO		1617 MAIN ST PEEKSKILL NY 10566	03/03/2020	03/03/2025
DOL	DOL	*****9148	RICHARD TIMIAN	RICH T CONSTRUCTI ON	108 LAMONT AVE SYRACUSE NY 13209	10/16/2018	10/16/2023
DOL	DOL		RICHARD TIMIAN JR.	-	108 LAMONT AVE SYRACUSE NY 13209	10/16/2018	10/16/2023
DOL	DOL		RICHARD TIMIAN JR.		108 LAMONT AVE SYRACUSE NY 13209	11/13/2018	11/13/2023
DOL	DOL		ROBBYE BISSESAR		89-51 SPRINGFIELD BLVD QUEENS VILLAGE NY 11427	01/11/2003	01/11/3003
DOL	DOL		ROBERT A. VALERINO		3841 LANYARD COURT NEW PORT RICHEY FL 34652	07/09/2019	07/09/2024
DOL	DOL		ROBERT BRUNO		5 MORNINGSIDE DRIVE AUBURN NY 13021	05/28/2019	05/28/2024
DOL	DOL		RODERICK PUGH		404 OAK ST SUITE 101SYRACUSE NY 13203	07/23/2018	07/23/2023
DOL	DOL	*****4880	RODERICK PUGH CONSTRUCTION INC.		404 OAK ST SUITE 101SYRACUSE NY 13203	07/23/2018	07/23/2023
DOL	DOL		ROMEO WARREN		161 ROBYN RD MONROE NY 10950	01/30/2018	01/30/2023
DOL	DOL		RONALD MESSEN		14B COMMERCIAL AVE ALBANY NY 12065	11/14/2019	11/14/2024
DOL	DOL		ROSEANNE CANTISANI			06/12/2018	06/12/2023
DOL	DOL	*****1365	S & L PAINTING, INC.		11 MOUNTAIN ROAD P.O BOX 408MONROE NY 10950	03/20/2019	03/20/2024
DOL	DOL	****7730	S C MARTIN GROUP INC.		2404 DELAWARE AVE NIAGARA FALLS NY 14305	09/12/2018	09/12/2023
DOL	DOL		SAL FRESINA MASONRY CONTRACTORS, INC.		1935 TEALL AVENUE SYRACUSE NY 13206	07/16/2021	07/16/2026
DOL	DOL		SAL MASONRY CONTRACTORS, INC.		(SEE COMMENTS) SYRACUSE NY 13202	07/16/2021	07/16/2026
DOL	DOL	*****9874	SALFREE ENTERPRISES INC		P.O BOX 14 2821 GARDNER RDPOMPEI NY 13138	07/16/2021	07/16/2026

DOL	DOL		SALVATORE A FRESINA A/K/A SAM FRESINA		107 FACTORY AVE P.O BOX 11070SYRACUSE NY 13218	07/16/2021	07/16/2026
DOL	DOL		SAM FRESINA		107 FACTORY AVE P.O BOX 11070SYRACUSE NY 13218	07/16/2021	07/16/2026
DOL	NYC	****0349	SAM WATERPROOFING INC		168-42 88TH AVENUE APT.1 AJAMAICA NY 11432	11/20/2019	11/20/2024
DOL	NYC		SANDEEP BOPARAI		185-06 56TH AVE FRESH MEADOW NY 11365	10/17/2017	10/17/2022
DOL	NYC	*****1130	SCANA CONSTRUCTION CORP.		863 WASHINGTON STREET FRANKLIN SQUARE NY 11010	03/10/2020	03/10/2025
DOL	DOL	*****2045	SCOTT DUFFIE	DUFFIE'S ELECTRIC, INC.	P.O BOX 111 CORNWALL NY 12518	03/03/2020	03/03/2025
DOL	DOL		SCOTT DUFFIE		P.O BOX 111 CORNWALL NY 12518	03/03/2020	03/03/2025
DOL	NYC	*****6597	SHAIRA CONSTRUCTION CORP.		421 HUDSON STREET SUITE C5NEW YORK NY 10014	02/20/2019	02/20/2024
DOL	DOL	*****1961	SHANE BURDICK	CENTRAL TRAFFIC CONTROL, LLC.	2238 BAKER ROAD GILLETT PA 16923	03/12/2018	03/12/2023
DOL	DOL		SHANE BURDICK		2238 BAKER ROAD GILLETT PA 16923	03/12/2018	03/12/2023
DOL	DOL		SHANE NOLAN		9365 WASHINGTON ST LOCKPORT IL 60441	07/23/2018	07/23/2023
DOL	DOL		SHULEM LOWINGER		11 MOUNTAIN ROAD 28 VAN BUREN DRMONROE NY 10950	03/20/2019	03/20/2024
DOL	DOL	*****0816	SOLAR ARRAY SOLUTIONS, LLC		9365 WASHINGTON ST LOCKPORT IL 60441	07/23/2018	07/23/2023
DOL	DOL	*****0440	SOLAR GUYS INC.		8970 MIKE GARCIA DR MANASSAS VA 20109	07/16/2021	07/16/2026
DOL	NYC		SOMATIE RAMSUNAHAI		115-46 132ND ST SOUTH OZONE PARK NY 11420	09/17/2020	09/17/2025
DOL	DOL	*****2221	SOUTH BUFFALO ELECTRIC, INC.		1250 BROADWAY ST BUFFALO NY 14212	02/03/2020	02/03/2025
DOL	DOL	*****3661	SPANIER BUILDING MAINTENANCE CORP		200 OAK DRIVE SYOSSET NY 11791	03/14/2022	03/14/2027
DOL	DOL		STANADOS KALOGELAS		485 RAFT AVENUE HOLBROOK NY 11741	10/19/2021	10/19/2026
DOL	DOL	*****3496	STAR INTERNATIONAL INC		89-51 SPRINGFIELD BLVD QUEENS VILLAGE NY 11427	08/11/2003	08/11/3003
DOL	DOL	*****6844	STEAM PLANT AND CHX SYSTEMS INC.		14B COMMERCIAL AVENUE ALBANY NY 12065	11/14/2019	11/14/2024
DOL	DOL	*****9933	STEED GENERAL CONTRACTORS, INC.		1445 COMMERCE AVE BRONX NY 10461	05/30/2019	05/30/2024
DOL	DOL	*****9528	STEEL-IT, LLC.		17613 SANTE FE LINE ROAD WAYNESFIELD OH 45896	07/16/2021	07/16/2026
DOL	DOL		STEFANOS PAPASTEFANOU, JR. A/K/A STEVE PAPASTEFANOU, JR.		256 WEST SADDLE RIVER RD UPPER SADDLE RIVER NJ 07458	05/30/2019	05/30/2024
DOL	DOL		STEVE TATE		415 FLAGER AVE #302STUART FL 34994	10/31/2018	10/31/2023
DOL	DOL		STEVEN MARTIN		2404 DELWARE AVE NIAGARA FALLS NY 14305	09/12/2018	09/12/2023
DOL	DOL	*****3800	SUBURBAN RESTORATION CO. INC.		5-10 BANTA PLACE FAIR LAWN PLACE NJ 07410	03/29/2021	03/29/2026
DOL	NYC	*****5863	SUKHMANY CONSTRUCTION, INC.		185-06 56TH AVE FRESH MEADOW NY 11365	10/17/2017	10/17/2022
DOL	DOL	*****1060	SUNN ENTERPRISES GROUP, LLC		370 W. PLEASANTVIEW AVE SUITE 2.329HACKENSACK NJ 07601	02/11/2019	02/11/2024
DOL	DOL	*****8209	SYRACUSE SCALES, INC.		158 SOLAR ST SYRACUSE NY 13204	01/07/2019	01/07/2024
DOL	DOL		TALAILA OCAMPA		1207 SW 48TH TERRACE DEERFIELD BEACH FL 33442	01/16/2018	01/16/2023
DOL	DOL		TERRY THOMPSON		11371 RIDGE RD WOLCOTT NY 14590	02/03/2020	02/03/2025
DOL	DOL	****9733	TERSAL CONSTRUCTION SERVICES INC		107 FACTORY AVE P.O BOX 11070SYRACUSE NY 13208	07/16/2021	07/16/2026
DOL	DOL		TERSAL CONTRACTORS, INC.		221 GARDNER RD P.O BOX 14POMPEI NY 13138	07/16/2021	07/16/2026

DOL	DOL		TERSAL DEVELOPMENT CORP.		1935 TEALL AVENUE SYRACUSE NY 13206	07/16/2021	07/16/2026
DOL	DOL		TEST		P.O BOX 123 ALBANY NY 12204	05/20/2020	05/20/2025
DOL	DOL	*****6789	TEST1000		P.O BOX 123 ALBANY NY 12044	03/01/2021	03/01/2026
DOL	DOL	****5766	THE COKER CORPORATION	COKER CORPORATIO N	2610 SOUTH SALINA ST SUITE 14SYRACUSE NY 13205	12/04/2018	12/04/2023
DOL	DOL	****5766	THE COKER CORPORATION	COKER CORPORATIO N	2610 SOUTH SALINA ST SUITE 14SYRACUSE NY 13205	09/17/2020	09/17/2025
DOL	DA	*****4106	TRIPLE H CONCRETE CORP		2375 RAYNOR STREET RONKONKOMA NY 11779	08/04/2021	08/04/2026
DOL	DOL	*****6392	V.M.K CORP.		8617 THIRD AVE BROOKLYN NY 11209	09/17/2018	09/17/2023
DOL	DOL	*****6418	VALHALLA CONSTRUCTION, LLC.		796 PHLEPS ROAD FRANKLIN LAKES NJ 07417	12/01/2020	12/01/2025
DOL	NYC	*****2426	VICKRAM MANGRU	VICK CONSTRUCTI ON	21 DAREWOOD LANE VALLEY STREAM NY 11581	09/17/2020	09/17/2025
DOL	NYC		VICKRAM MANGRU		21 DAREWOOD LANE VALLEY STREAM NY 11581	09/17/2020	09/17/2025
DOL	DOL		VICTOR ALICANTI		42-32 235TH ST DOUGLASTON NY 11363	01/14/2019	01/14/2024
DOL	NYC		VIKTAR PATONICH		2630 CROPSEY AVE BROOKLYN NY 11214	10/30/2018	10/30/2023
DOL	DOL		VIKTORIA RATH		24 ELDOR AVENUE NEW CITY NY 10956	02/03/2020	02/03/2025
DOL	NYC		VITO GARGANO		1535 RICHMOND AVE STATEN ISLAND NY 10314	12/13/2017	12/13/2022
DOL	NYC	****3673	WALTERS AND WALTERS, INC.		465 EAST AND THIRD ST MT. VERNON NY 10550	09/09/2019	09/09/2024
DOL	DOL	*****3296	WESTERN NEW YORK CONTRACTORS, INC.		3841 LAYNARD COURT NEW PORT RICHEY FL 34652	07/09/2019	07/09/2024
DOL	DOL		WHITE PLAINS CARPENTRY CORP		442 ARMONK RD	06/12/2018	06/12/2023
DOL	DOL		WILLIAM G. PROERFRIEDT		85 SPRUCEWOOD ROAD WEST BABYLON NY 11704	01/19/2021	01/19/2026
DOL	DOL	*****5924	WILLIAM G. PROPHY, LLC	WGP CONTRACTIN G, INC.	54 PENTAQUIT AVE BAYSHORE NY 11706	01/19/2021	01/19/2026
DOL	DOL	*****4043	WINDSHIELD INSTALLATION NETWORK, INC.		200 LATTA BROOK PARK HORSEHEADS NY 14845	03/08/2018	03/08/2023
DOL	DOL	*****4730	XGD SYSTEMS, LLC	TDI GOLF	415 GLAGE AVE #302STUART FL 34994	10/31/2018	10/31/2023
DOL	NYC		ZAKIR NASEEM		30 MEADOW ST BROOKLYN NY 11206	10/10/2017	10/10/2022
DOL	NYC	****8277	ZHN CONTRACTING CORP		30 MEADOW ST BROOKLYN NY 11206	10/10/2017	10/10/2022

AGENCY	Fiscal Officer	FEIN	EMPLOYER NAME	EMPLOYER DBA NAME	ADDRESS	DEBARMENT START DATE	DEBARMENT END DATE
DOL	NYC	*****5732	COMMERCIAL BUILDING MAINTENANCE CORPORATION		65 BILTMORE DR MASTIC BEACH NY 11951	03/14/2022	03/14/2027
DOL	NYC		DAVID PARSONS		200 OAK DR SYOSSET NY 11791	03/14/2022	03/14/2027
DOL	DOL		DENNISDAN OGBEIDE		P.O BOX 50028 BRONX NY 10458	04/24/2018	04/24/2023
DOL	DOL	*****5067	DENOG PROTECTIVE SECURITY SERVICES INC		P. O BOX 50028 BRONX NY 10458	04/24/2018	04/24/2023
DOL	DOL	*****9060	PEC GROUP OF N.Y., INC.		9.35 S LAKE BLVD SUITE 7MAHOPAC NY 10541	03/02/2021	03/02/2026
DOL	DOL		RUSSELL NEEDHAM		532 NEPTUNE AVENUE BROOKLYN NY 11224	01/12/2022	01/12/2027
DOL	DOL	*****7007	SHOREFRONT MENTAL HEALTH BOARD	BROOKLYN BRIGHT	532 NEPTUNE AVENUE BROOKLYN NY 11224	01/12/2022	01/12/2027