Reynolds Metals Company, LLC
St. Lawrence Reduction Plant
194 County Route 45
P.O. Box 500
Massena, NY 13662 USA

August 6, 2025

Kelly Hale, I.G.
Assistant Geologist, Environmental Remediation
New York State Department of Environmental Conservation
207 Genesee St, Utica NY 13501

SUBJECT: Response to Comments on the Self Implementing Plan (SIP) for PCB Remediation Buildings 722A (Pitch Pump House), 735 (Channel Press Building) and 722 (Paste Plant) Reynolds Metals Company LLC, Massena NY

Via Electronic Mail

Dear Ms. Hale:

This letter contains responses to comments received from New York State Department of Environmental Conservation (NYSDEC), Division of Environmental Remediation (DER) and Division of Water (DOW) on the Remediation Plan (Plan) for PCB impacts at three building areas located in the North Yard of the former Reynolds Metal Company LLC (RMC) St. Lawrence Reduction Plant located at 194 County Road 45 in Massena, New York ("Site").

The Plan was submitted electronically on June 6, 2025. Comments from DER were received on July 8, 2025, and comments from DOW were received on July 10, 2025. The comments from DOW were focused on the Pitch Pump House Basement Water Pre-treatment system.

Comments on the Plan from United States Environmental Protection Agency (USEPA) were received on July 11, 2025. The comments from USEPA will be addressed via a Self Implementing Plan (SIP) for just building 735, which will be provided under separate cover.

REVISED APPROACH

Based on discussions with USEPA and NYSDEC DER on July 24th and 29th, 2025, PCB remediation for the buildings included in the June 6th Plan will be handled separately as three different Areas of Concern (AOC), rather than under a single Plan. The implementation details of the remediation plan provided on June 6th will not substantially change; however, the cleanup end points will be revised to be in accordance with the cleanup option selected.

The AOCs will be managed as follows:

AOC-735: Building 735 is the former Pin and Channel Press Building. This AOC will be remediated under a Self-Implementing Cleanup and Disposal Plan (40 CFR section 761.61(a). A SIP is being prepared that includes only AOC-735 for EPA authorization, which will also be submitted to NYSDEC.

AOC-722: Building 722 is the former Paste or Carbon Plant. The remediation will be deferred to a later date. This AOC will be isolated using fencing with ML marking to prevent access until additional characterization and a remedial plan for this AOC has been finalized.

AOC-722A: Building 722A is the former pitch and fuel oil pump house with associated pitch tank vault (also known as G-Vault). This AOC will be remediated using performance-based cleanup of PCB remediation waste (40 CFR section 761.61(b)(1)) and performance-based disposal (40 CFR section 761.61(b)(2)) for generated waste. Concrete and soils with total PCB concentrations greater than 1 mg/kg will be removed and sent for off-site disposal at a permitted facility.

RESPONSE TO AGENCY COMMENTS

The following section contains responses to the DER comments on the SIP.

General Comments

1. Please note that while the EPA SIP procedure is acknowledged for this remediation, the site is subjected to the NYCRR 6 and should adhere to all Department regulations and requirements.

RMC Response: Acknowledged, the remediation will adhere to NYCRR-6 in addition to 40 CFR 761.

2. As stated in the 1995 amendment to the Record of Decision (ROD), “all areas where PCB contamination in the soil equals or exceeds 10 parts per million (ppm) will be capped with an impervious cap. Final remediation in the North Yard will be undertaken upon plant closure.” The Department acknowledges this cleanup action; however further PCB remediation may be warranted in the North Yard Area upon plant closure.

RMC Response: Acknowledged. As discussed on July 25th, 2025, a comprehensive analysis of remaining PCB impacts in areas that are not currently used by tenants is being completed with the intention of determining final remedial actions for those PCB impacts.

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Specific Comments

1. Section 2.2.2.1 Excavation Area (p. 12) – Beneath building 722 is an area identified as having PCBs greater than 10 ppm at depth. The Department acknowledges the constraints of the building footers but requests that as much soil be safely removed from the area outlined in orange from Figure 7.

RMC Response: As discussed above, the remediation for building 722 will not happen in 2025. Instead, additional characterization will be conducted to determine the impacts of PCBs at depth and the appropriate remedial pathway.

2. Section 3.1.3 Permits and Notifications (p. 17) – The SIP's pre-treatment design report(s)/analysis needs to be reviewed by the Department's Division of Water. A determination will be made if the project can be approved and if the SPDES permit, NY0000132, requires modification. The remediation project shall not be started until approval and/or modification of the SPDES permit has been completed.

RMC Response: Understood. Comments on the Basement Water Pre-Treatment Plan were received from DOW in an email from Peter Maier, P.E. NYS Department of Environmental Conservation Division of Water on July 10, 2025. Responses to those comments are included in this letter below.

3. Section 3.4 Confirmation Sampling (p. 22) – The Department guidance on confirmation sampling is outline in DER-10 Section 5.4.b. Please refer to this to ensure compliance with Department sampling requirements.

RMC Response: The EPA requirements for verification sampling at the base of the excavation are more stringent than the requirements of DER-10 Section 5.4.b, therefore the department sampling requirements will be met for the base of the excavation. Where sidewall sample requirements are not met by the pre-excavation characterization sampling, additional samples will be collected to meet the requirements of DER-10 Section 5.4.b.

4. Section 3.5 Backfilling, Compaction, and Site Restoration (p. 23) – Beneficial Use Determinations (BUD) must be submitted for Department review prior to the remediation. There are various types of BUD, given the history of the site; here are two examples:

a. On-site reuse of concrete and brick from demolition of on-site buildings is encouraged as a "green remediation" practice consistent with DER-31. Since the "recognizable,

uncontaminated concrete and brick" is not "placed into commerce," it is not covered under the predetermined BUD in Part 360, so a site-specific BUD needs to be provided.

RMC Response: As discussed with DEC on the previous demolition project (refer to email from K. Hale to C. Peets dated October 7, 2021), a Site-specific BUD is not needed for clean concrete demolition and re-use as on-site backfill as long as we adhere to the following conditions.

1) The concrete or brick must be re-used on-site.
2) The concrete or brick must be uncontaminated. No painted or stained concrete will be used as backfill. Painted concrete will be disposed of at the appropriate off-site disposal facility. Stained concrete will be segregated from clean during removal process and disposed of at the appropriate off-site disposal facility.
3) Prior to demolition, a complete evaluation for asbestos and asbestos containing material (ACM), and abatement of any such materials must be completed in compliance with requirements of the NYS Department of Labor and/or local municipal agency.
4) Sampling of concrete designated for re-use prior to demolition. Samples will be collected in accordance with the Reynolds Metals Company LLC Concrete Re-Use Plan.rev1. The samples will be analyzed for TCLP VOCs, SVOCs, Pest/PCBs and metals plus total PCBs. All testing will be performed by a laboratory certified in New York State.

If soil contains PCBs at concentrations over 1 ppm, then TSCA regulations prohibit its use as fill material. Material imported to a site cannot contain PCBs over 1 ppm, even if it would be consistent with the remedy.

RMC Response: Acknowledged. Imported backfill will be sampled to ensure it meets the standards in DER 10 section 5.4 and DER-10 Appendix 5.

5. Figure 7, Note 1 – Provided this site is zoned industrial, the necessary backfill requirements for industrial use sites per Part 375 is as follows “for industrial use sites, use the lower of the protection of groundwater or the protection of public health soil cleanup objectives for commercial use as set forth in Table 375-6.8(b).”

RMC Response: Acknowledged. Imported backfill will be sampled to ensure it meets the standards in DER 10 section 5.4 and DER-10 Appendix 5.

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6. Appendix B. Community Air Monitoring Plan (CAMP; p. 65) – For the remedial work proposed above, please include an additional downwind location for the temporary staging area(s) mentioned in Section 3.1.8.

RMC Response: RMC will add an additional sample point downwind from any temporary staging areas. The location will be determined in the field with the Site Manager, Remediation Contractor and Air Monitoring Contractor prior to the work.

Specific Comments NYSDEC Division of Water (DOW)

As stated in DOW's email: NYSDEC Division of Water (DOW) has the following comments on the proposed Pitch Pump House pre-treatment system as outlined in RMC's *PCB Remediation Plan* that was submitted on June 6, 2025. DOW's review only focused on PDF pages 73 through 83. DOW does not require the submission of any revised version of *Plan*, so this cover letter is responding/acknowledging the comments below or providing further documentation.

1. Section 2.1, page 77 – Please revise the reference to Outfall 002 as it has been removed from the SPDES permit.

   RMC Response: Agree. References to Outfall 002 have been removed from the Basement Water Pre-Treatment Plan.

   Section 2.2, page 78 – Same comment as above.

   RMC Response: Agree.

2. Section 2.2, page 78 – Please ensure all sampling frequencies match the sampling frequencies required in the SPDES permit for any given parameter.

   RMC Response: The Pre-Treatment System is a batch system. Water will be treated through the system and effluent held in one of two Frac or Baker Tanks. A water sample will be collected from each tank and analyzed to confirm if treatment was successful and if effluent can be discharge to Outfall 003 Treatment System. Details are provided below.

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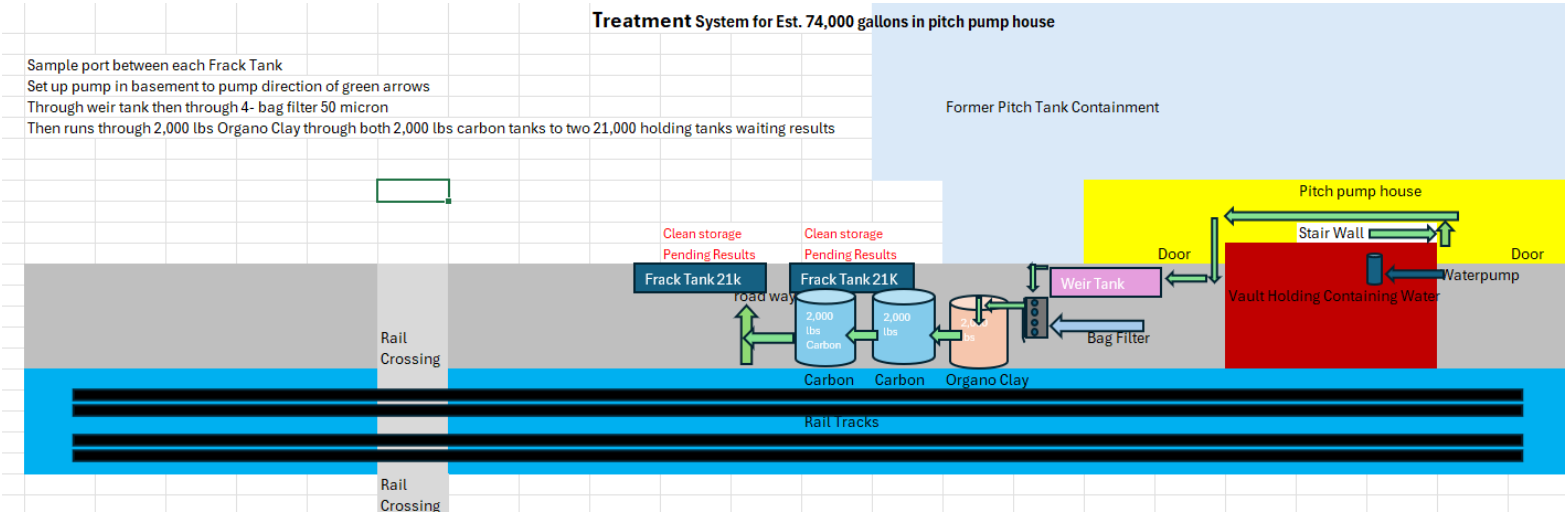

Water Treatment System Operation

A. Prior to pumping basement water into the pre-treatment system, the Contractor will skim the free product from the top of water. The Free Product will be concentrated into a central location utilizing containment boom and leaf blowers to facilitate its removal.

B. The Contractor shall containerize the skimmed Free Product into DOT shippable 55-gallon drums for subsequent disposal by RMC.

C. The Contractor shall operate the 50 GPM water treatment system consisting of 1-Duplex filter skid, 1-2000# Organoclay filter unit, 2-2000# LGAC Carbon Vessels 1-21,000 gallon-weir tank and 1-flowmeter.

D. The Contractor shall pump the water through the treatment system into two (2) 20,000-gallon holding frac tanks at a rate of 50 GPM to increase carbon contact time and improve system efficiency.

E. RMC shall collect samples from each holding frac tank and provide the analysis to the Contractor to ensure treatment objectives are obtained prior to discharge.

F. The Contractor shall discharge the treated water into RMC's Outfall 003 System determined by RMC representative upon receipt of satisfactory analytical results.

G. The Contractor shall provide daily reports at the end of each week detailing labor, equipment and materials utilized each day and a description of work performed each day.

H. If the water doesn't meet criteria, the water will be pumped from Frac holding Tank back to Weir Tank and the process repeated. Filter Bags will be changed out prior to re-treatment.

Decontamination

A. Following completion of the work, The Contractor shall remove the media from the carbon vessels and organo-clay filter for subsequent disposal.
B. The Contractor shall decontaminate the treatment system, weir tank, holding frac tanks, bag filter assemblies and pumps.
C. Sediment from the weir tank and holding tanks will be collected during decontamination process by The Contractor and sent for off-site disposal.
D. All equipment will be wipe tested and satisfactory results (less than PCB limit of 10 µg/100cm^2) received prior to equipment demobilization from the site.
E. Hoses, PPE and other single use or non-reusable equipment that cannot be decontaminated such as absorbent pads, booms, used treatment media and other impacted equipment, will be disposed at an appropriate off-site disposal facility.

Treatment Carbon, Organo Clay, Sediment & Debris PCB Hazardous Waste Disposal

A. The Contractor will obtain waste approvals, transportation documents and coordinate the disposal of 30 CY roll off containing PCB hazardous debris. The final destination is US Ecology's hazardous waste landfill facility in Belleville Michigan.

3. Please discuss the ability of the proposed treatment system to recycle the waste stream to the influent should pre-treatment effluent quality be unacceptable for discharge to Outfall 003's existing treatment system.

   RMC Response: the System is designed to allow for the return on Effluent water held in the holding tanks back to the Wier Tank for re-treatment using pump/hoses. This equipment will be either decontaminated and/or disposed of as detailed above.

4. Section 2.4, page 79 - Please discuss the extent of U.S. EPA's and NYSDEC's Division of Environmental Remediation involvement in the review of this de-watering project.

RMC Response: Refer to No. 6 below.

5. Section 2.4, page 79 – If available, please provide DOW an Operations & Maintenance Plan for the project. Of particular interest to DOW is information on the disposal of sediment originating from the frac tanks, any sampling points, and any provisions to haul the waste stream off-site should the need arise.

   RMC Response: The Pre-Treatment System is temporary; therefore, no O&M Plan was prepared. RMC has planned for, and is prepared for off-site disposal of sediment, free product and equipment.

6. General - Please provide an updated timeline of the proposed de-watering activities. Please note any action items that require coordination (e.g., outreach, review, approval/authorization, etc.) from either U.S. EPA and/or NYSDEC.

   RMC Response: Dewatering activities will commence immediately following DEC authorization to proceed.

Conclusion

Action required from DEC include:

1) Approval of this letter which addresses DEC previous concerns, describes deviation from previously submitted Soil Remediation Work Plan and details the use of a SIP for Building 735.
2) Review and acceptance of the SIP for Building 735.

Actions Required from EPA

1) Review and authorization of the SIP for Building 735.

Actions Required from DEC and EPA

1) Review and approval of remedial obligations for deferred work at the Carbon Plant (722).
2) Review and approval of additional remediation needed based on confirmation sampling results in 722A and 722 following demolition. This information will be communicated, and the remediation plans will be transmitted under a separate submittal.

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Thank you for your consideration and assistance in completing this work.

Sincerely,

Robyn L. Gross
Vice President Reynolds Metals Company LLC

cc: Jason Mibroda, RMC
Craig Peets, RMC
Matt Kraeuter RMC

Reynolds Metals Company, LLC
St. Lawrence Reduction Plant

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June 6, 2025

Ariel Iglesias
Director - Land, Chemicals and Redevelopment Division
United States Environmental Protection Agency, Region 2
290 Broadway, 25th Floor
New York, New York 10007-1866

Submitted via electronic mail

Subject: Self-Implementing Cleanup and Disposal of PCB Remediation Waste Notification
Pin and Channel Buildings, Carbon Plant, and Pitch and Fuel Oil Pump House
Reynolds Metals Company LLC – Former St Lawerence Reduction Facility

Dear Ariel Iglesias:

The purpose of this correspondence is to notify the United States Environmental Protection Agency (EPA) of plans to manage polychlorinated biphenyl (PCB) remediation wastes generated during demolition and removal/remediation activities at the Reynolds Metals Company, LLC (Reynolds) former St. Lawerence Reduction Facility (Massena East). This notification and certification are provided pursuant to Code of Federal Regulations (CFR) Title 40 Part 761.61(a)(3) and is a follow up to a pre-submission meeting conducted with Region 2 and New York State Department of Environmental Conservation (DEC) staff on March 14, 2025.

Obsolete infrastructure at Massena East has been systematically demolished since closure of the facility in 2014. Much of the remaining infrastructure is leased to a tenant; however, a few buildings have been undergoing characterization in preparation for demolition and remediation. These buildings had known uses of, or impacts associated with, PCB containing materials and interim remedial activities have been performed to address potential worker exposure or environmental impacts. Now that operations are no longer, and characterization is complete (or proposed as a function of remediation) the demolition and remediation has been scheduled to occur later in 2025. The proposed scope includes:

- Complete removal of the Pitch Pump House (building 722A) and associated soil remediation.
- Removal of Channel Press building (building 735) and the partial removal of concrete slab and foundation, and partial soil removal and cap installation.
- Removal of concrete containment structures for the former Pitch Tanks and Fuel Storage Tank (buildings 722B, C, &F & 767B).

- Partial removal of the Carbon Plant (building 722) concrete slab and foundations and partial soil removal and cap installation.

The proposed remedial activity is described in the enclosed *Remediation Plan* (Plan). The Plan also summarizes the characterization activity performed to date or to be completed as part of the proposed project. Appended to the Plan are a historical information summary, a *Community Air Monitoring Plan*, and the *Pitch Pump House (722A) Basement Water Removal & Pre-treatment Scope of Work*.

This project will occur at or near an area referred to as the "North Yard" as defined by a 1992 *Record of Decision* (ROD) and subsequent amendments, which is overseen by DEC. Remedial activities were conducted in this area in 1995 & 1996. The enclosed *North Yard Technical Memorandum, dated January 30*, 2017, provides a high-level summary of the remediation and concludes that remedial activity should continue upon gaining access in conjunction with Site demolition activity.

Because the proposed demolition activity will again cease with some infrastructure remaining in place (i.e., leased buildings) the soil in these areas will not be remediated fully in accordance with 40 CFR 761.61(a)(4) but will follow the remedial obligations as prescribed in the ROD and subsequent revisions. Chiefly PCB-impacted soils with concentrations greater than 10 parts per million (ppm) may remain adjacent to the former smelter building. However, these soils will be capped to prevent environmental and human exposure pending the future ability to access without compromising the structural integrity of remaining infrastructure. The previous use of this approach has been demonstrated successful based on annual groundwater monitoring which shows PCBs are not present nor migrating from the North Yard in groundwater. Groundwater monitoring will continue to demonstrate success.

Therefore, in accordance with 40 CFR Part 761.61(a)(3), Alcoa respectfully requests EPA's review and approval of the attached *Remediation Plan*. The 2025 D*emolition & Remediation Project Scope of Work* (narrative) is also attached to aid in the comprehensive understanding of the project.

As outlined in 40 CFR Part 761.61(a)(3), the nature of the contamination, the location and extent of the identified contaminated area, and plans for removal and off-site disposal of the PCB wastes generated during the project are described in the *Remediation Plan* and the *Demolition Scope of Work* documents. Also, in accordance with 40 CFR Part 761.61(a)(3), I am certifying that sampling plans, sample collection procedures, sample preparation procedures, extraction procedures, and instrumental/chemical analysis procedures used to assess or characterize the PCB contamination at the site are on file at the Massena East facility or available electronically.

If you have any questions about this project, please contact me or the Site Manager, Craig Peets who can coordinate with the project team.

Very truly yours,

Robyn L. Gross
Sr. Global Director, Transformation
Alcoa Corporation/Reynolds Metals Company, LLC

cc:
Jason Mibroda, Alcoa Corporation
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Andy Park, EPA
Benny Conetta, EPA
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Region2_PCB_Cleanup@epa.gov
Jacqueline Smith-Gagnon, NYSDEC
Kelly Hale, NYSDEC
Paula Jacobs, NYSDEC
William Ottaway, NYSDEC

Enclosures:

1. PCB Remediation Plan - Buildings 722A, 722, and 735
2. North Yard Technical Memorandum, January 30, 2017
3. 2025 Demolition & Remediation Project Scope of Work

Buildings 722A, 722, and 735 PCB Remediation Plan

Massena East
New York
NYSDEC Site Code #645009

Prepared for:

Alcoa Corporation
Reynolds Metals Company, LLC

Prepared by:

EHS Support

May 2025

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Acronyms

bgs	below ground surface
CAMP	Community Air Monitoring Plan
CFR	Code of Federal Regulations
ft	feet
HASP	health and safety plan
HDPE	high-density polyethylene
mg/kg	milligram per kilogram
NYSDEC	New York State Department of Environmental Conservation
PCB	polychlorinated biphenyl
ppm	part per million
RCRA	Resource Conservation and Recovery Act
RMC	Reynolds Metals Company
ROD	Record of Decision
SCO	soil cleanup objective
SOW	scope of work
TSCA	Toxic Substances Control Act
UHW	Uniform Hazardous Waste Manifest
USEPA	United Stated Environmental Protection Agency

1 Introduction

This Remediation Plan (Plan) has been prepared to describe the scope of work (SOW) for the removal of polychlorinated biphenyl (PCB)-impacted soil at the former Reynolds Metal Company LLC (RMC) St. Lawrence Reduction Plant located at 194 County Road 45 in Massena, New York ("Site").

This Plan is intended to supplement the Notification and Certification submittal to the New York State Department of Environmental Conservation (NYSDEC) and the United States Environmental Protection Agency (USEPA) Regional Coordinator, consistent with the requirements under the Code of Federal Regulations (CFR) Title 40 Part 761.61(a)(3). It is also intended to satisfy the requirement under 40 CFR 761.61(3)(i)(D) to provide a cleanup plan for the Site that describes the approach, disposal technology, and schedule, and provides for contingency measures should unanticipated conditions be encountered during remedial action.

A Site background and regulatory overview is provided in **Section 1** of this Plan and a summary of PCB characterization effort for the three defined areas under this SOW, (former Buildings 735, 722, and 722A) is provided in **Section 2**. The remedial requirements for excavating accessible soils where PCB concentrations exceed soil cleanup objectives (SCOs), confirmation sampling procedures, and Site restoration and future management obligations are described in **Section 3**. Contingency measures to be implemented if confirmation samples do not meet the SCOs are discussed in **Section 4**. Post-excavation reporting and recordkeeping are discussed in **Section 5**.

1.1 Objectives

The objective of this project is to remove PCB-impacted concrete and to remediate, to the extent practicable, PCB-impacted soil to achieve soil cleanup goals at the former Buildings 722A, 722, and 735 areas as follows:

- Remove PCB-impacted concrete in excess of 25 milligrams per kilogram (mg/kg) total PCBs.
- Remove soil that exceeds 10 mg/kg total PCBs under Building 722A (pending investigation) and at Building 735.
- Where underlying soils with PCB concentrations exceeding, or potentially in excess, of 10 mg/kg cannot be removed in order to protect the stability of remaining infrastructure, remove soil and concrete foundations to a depth to support placement of a high-density polyethylene (HDPE) liner and clean fill cap.
- Segregate materials based on the PCB concentrations above and below 50 mg/kg to facilitate appropriate handling and disposal.
- Conduct confirmation sampling.
- Restore excavation areas.
- Document the extent of remediation at each location.

1.2 Site Background and Investigation Summary

The RMC St. Lawrence Reduction Plant began aluminum smelting operations in 1958 and operated continuously until March 31, 2014. The property was formerly owned and operated by Reynolds Metals Company. In 2001, Alcoa purchased the Reynolds Company and at that time Alcoa took responsibility for post-closure activities. Reynolds Metals Company has remained as a wholly owned subsidiary company.

Commencing in 2014 when the plant idled, demolition projects have been undertaken to remove surplus equipment and buildings. Site investigation and remediation activities commenced in the 1980s, and decommissioning and remediation activities are ongoing. Currently, select building areas are leased by a long-term tenant, and utilities remain at the Site to support the tenant. The layout of the Site operations buildings is shown on **Figure 1**.

Demolition and remediation work that will be implemented in 2025 comprises demolishing several buildings and completing associated soil remediation at the former Pitch and Fuel Oil Pump House (Building 722A), Carbon Plant (Building 722), and Pin and Channel Building (Building 735), shown on **Figure 1**.

Previous Site investigations identified PCB-impacted soil at former Buildings 722 and 735, detailed further in **Section 2**. Due to physical constraints and access issues, investigations could not be completed at Building 722A. Heat transfer media containing PCBs were used in the building, and oil samples from water collected in the underground vault portion of 722A contained PCBs; therefore, for the purposes of this work, it is assumed that PCB-impacted soil is present beneath the building.

1.3 Regulatory Basis and Soil Cleanup Goals

The soil excavation work will be completed in accordance with the self-implementing cleanup provisions of the Toxic Substances Control Act (TSCA), 40 CFR 761.61, and with consideration of NYSDEC Part 375 regulations and the SCOs in the 1992 Record of Decision (ROD).

According to 40 CFR 761.61(a), cleanup levels for porous media (such as concrete) are based on the kind of material and potential exposures to residual PCBs once cleanup is completed. Potential exposures are classified as occurring in either high-occupancy areas or low-occupancy areas. In low-occupancy areas (such as Building 722 and Building 735), multiple thresholds are listed for porous surfaces (40 CFR 761.61[a][4][iii][1]):

- PCB concentrations ≤ 25 parts per million (ppm) – no additional controls
- PCB concentrations > 25 ppm and ≤ 50 ppm – area secured by a fence and marked with a sign including the M_L Mark
- PCB concentrations > 50 ppm and ≤ 100 ppm if covered with a cap

Where possible, 25 mg/kg (ppm) will be used as the cleanup goal for concrete.

The Site ROD established 10 mg/kg (or parts per million) total PCBs as the historical remediation standard for soil in defined areas, including the area where Building 722, 722a, and 735 are located.. This SCO is used to define soil excavation and capping limits, as described in the remediation plan.

Where excavation extents are limited due to the requirement to protect existing infrastructure, soil that remains in-place with greater than 10 mg/kg total PCBs will be graded and capped to provide proper drainage and reduce infiltration and migration of contaminants.

[1] According to 40 CFR 761.61(a)(4)(iii), the cleanup levels for porous surfaces are consistent with the bulk PCB remediation wastes found in 40 CFR 761.61(a)(4)(i).

2 Characterization & Work Scope Overview

Soil delineation activities were completed between October 2022 and March 2025 in general compliance with 40 CFR 761.61. Investigation activities included sampling concrete and soil to characterize and delineate PCB impacts. The scope and specific considerations for each former building area are described in **Section 2.1** through **Section 2.3**.

2.1 Building 735 Pin and Channel Building

Building 735 is commonly referred to as the Pin Reconditioning and Channel Press. This building formerly housed the pin straightener and the channel press or channel straightener and is located on the northern side of the facility. The pins and channels were used in pots to hold the anode in place during the aluminum reduction process. Hydraulic oil used in support of this equipment was found to contain PCBs in excess of 50 ppm in the late 1970's early 1980's. The facility undertook a PCB removal program that replaced hydraulic oils and later invested in further characterization and remedial actions. Previous remedial work included cleaning of equipment, columns, and floors; removal and replacement of PCB-impacted concrete, and management of porous concrete in accordance with 40 CFR 761.30(p) using a steel decking material.

2.1.1 Concrete

The extent of impacts in concrete at Building 735 are shown on **Figure 2**. Samples were obtained from the top 4-inches of the concrete slab. PCB results varied from less than 10 mg/kg to greater than 50 mg/kg. The vertical extent of impacts was not delineated at locations 735-COL.3A5556-W, 02, 03, 06, 14, 16–18, 20, 34–37, 40, 42, PR-8, and PR-16.

Results from samples obtained from 02, 20, and 36 show that PCB concentrations are between 10 mg/kg and 25 mg/kg from the deepest sample collected. Results from samples obtained from 03, 14, 34, 35, 37, 40, 42, and PR-16 show that PCB concentrations are between 25 mg/kg and 50 mg/kg from the deepest sample collected.

Results from samples obtained from 06, 16–18, and PR-8 show that PCB concentrations are greater than 50 mg/kg from the deepest sample collected. These locations are located adjacent to the former Channel Press area. PCB concentrations greater than 50 mg/kg are also observed at locations 735-P, 735-COL.3A5556-W, and 735-COL.3A5556-S.

2.1.2 Soil

Soil sampling results for Building 735 are shown on **Figure 3** and summarized in **Table 1**. Most samples were collected from the 0–3-feet (ft) depth interval. Samples were collected at depths of up to 6 ft at four locations, B735-BH2, B735-BH18, B735-BH3, and B735-BH5.

As shown on **Figure 3**, PCB results are less than 10 mg/kg at all locations except B735-BH2, B735-BH18, B735-BH3, and B735-BH5. PCB concentrations are between 10 and 25 mg/kg from the 0–3-ft depth at B735-BH3 and the 0–2-ft depth at B735-BH18; below these depths, PCB concentrations drop below 10 mg/kg.

PCB concentrations at B735-BH2 from 1 to 3 ft and B735-BH5 from 0 to 2 ft exceed 50 mg/kg. Samples were not collected within the footprint of the former Channel Press; therefore, this area, in addition to the area surrounding B735-BH2 and B735-BH5, is assumed to have PCB concentrations greater than 50 mg/kg and will be managed accordingly.

2.1.2.1 Excavation Area

The areal extent of planned excavation at Building 735 is shown on **Figure 4**. The excavation encompasses the area around the former Channel Press area, where PCBs above 10 mg/kg were measured in concrete and soil samples. The depth of excavation will extend to 3 ft below ground surface (bgs) based on the available soil data, which show concentrations decline to below 10 mg/kg within 3 ft bgs.

Before soil excavation commences, the Building 735 superstructure will be demolished, the slab will be separated from the adjacent and remaining buildings to the south, and portions of the concrete slab, footers, and foundations will be removed, as shown on **Figure 2**. The foundations for Buildings 780A and 735B to the north will also remain. This work will be completed by the Demolition Contractor.

As shown on **Figure 3**, the excavation limit is bound by characterization soil samples to the northeast, east, and south that meet the SCOs. To the northwest, the excavation will continue up to the foundation of Building 780A. To the west, the excavation extends to the historical extent of impacted concrete.

The excavation will be restored by backfilling with a dense-grade aggregate material (or equivalent) and compacted as described in **Section 3.5**. An HDPE cap is not anticipated to be required in this area; however, if confirmation sampling identifies impacts that cannot be removed, then an HDPE cap will be installed over impacted remaining material.

2.2 Building 722 Carbon Plant

Building 722, commonly referred to as the Carbon Plant, formerly consisted of several tanks and supporting equipment which culminated in the manufacturing of anodes for the reduction process. Building 722, Building 722A and Pitch Tanks 722 B, C, and F supported the process by assisting with the storage and transfer of coal tar pitch. The primary use of PCBs in this area was the Heat Transfer Media (HTM). The HTM fluid was pumped through the jacket of the piping system routed between the Pitch Pump House (Building 722A), the pitch storage tanks (Tanks 722 B, C and F) and the Carbon Plant. The facility undertook a PCB purging program in the late 1970's and early 1980's to reduce the PCB concentrations in the HTM to less than 1 ppm. The pitch storage tanks and the Building 722 superstructure has been demolished. Building 722A is addressed in this Plan.

2.2.1 Concrete

Samples were obtained from the 12-inch-thick concrete slab at Building 722 and analyzed for PCBs. Results of the PCB sampling are shown on **Figure 5**, with the maximum concentration of PCBs shown on the top half of the circle and the deepest concentration of PCBs on the bottom half of the circle. PCB impacts are dispersed throughout Building 722, with PCB concentrations in concrete ranging from below 10 mg/kg to above 50 mg/kg. Vertical delineation was determined at 15 locations: 722-COL.A2, 722-COL.BC2, 722C-COL.CD2, 722-COL.EF1, 722-COL.EF1-SS, 722-COL.ELV.A, 722-COL.HI1-SE,

722-COL.I3, 722-COL.H2I3, 722-COL.G4, AA2300271, 722-COL.E2F3, AA2300250, 722-COL.E34, and 722-COL.F5. These 15 locations have PCB results less than 10 mg/kg at the deepest concrete sample obtained.

Vertical delineation was not determined at 33 locations. The total PCB concentration from the deepest concrete sample obtained is greater than 10 mg/kg at these locations. Of the 33 locations, the total PCB concentration of the deepest concrete sample obtained is greater than 50 mg/kg for six locations, between 25 mg/kg and 50 mg/kg at five locations, and between 10 mg/kg and 25 mg/kg at 22 locations.

All concrete removed from the areas shown on **Figure 2** will be assumed to contain greater than 50 mg/kg PCB and will be managed accordingly.

2.2.2 Soil

PCB impacts at Building 722 are shown on **Figure 6**. Sample results show that all but four of the sample locations had PCB concentrations less than 10 mg/kg. The four locations—722-COL.GH1, B722-BH12, B722-BH29, and B722-BH9 each have PCB impacts greater than 50 mg/kg.

2.2.2.1 Excavation Area

The areal extent of the Building 722 excavation shown on **Figure 6** was defined based on available soil sampling data (**Table 1**) and historical knowledge. Building 722 was previously demolished; however the concrete slab on grade foundation remains in-place. Before soil excavation commences, the Building 722 concrete slab will be separated from adjacent buildings that will remain to the south. The concrete slab will be sawcut 3 ft north of the columns and footers of the adjacent southern buildings, and the concrete slab and mixer foundations in the Building 722 footprint will be removed. This work will be conducted by the Demolition Contractor.

The excavation limits and dimensions are shown on **Figure 7.** It is abutted to the south by an existing building and will terminate at the sawcut slab. To protect the integrity of the adjacent building foundation, soil will only be removed to an extent to support the construction of an isolation barrier and will not exceed a depth of 1 ft below slab grade. Based on knowledge of construction, it's assumed that some PCB impacts may be located below the bottom of the mixer foundations; therefore, the excavation extends across the entire area where the former mixers were located.

The mixers have deep foundations that were constructed after the surrounding walls and buildings by excavating the area around the mixers to approximately 12 ft below the finished floor elevation. The mixer foundations were constructed, and then the excavated area was backfilled with sand. Sample location B722-BH29 had a total PCB concentration of 102 mg/kg at the 9–10-ft interval, despite higher elevation intervals having concentrations less than 10 mg/kg. Based on this evidence, there is the possibility of deep impacts at the base of the mixer foundations. To be conservative, the entire mixer area will be capped until such time as the building to the south is demolished, and the area can be characterized and remediated.

The excavated area will be capped with an HDPE liner placed between two layers of non-woven geotextile as shown on **Figure 7**. After placing the HDPE liner, the excavation will be backfilled using dense-grade aggregate material (or equivalent) and compacted as described in **Section 3.5**.

2.3 Building 722A Pitch and Fuel Oil Pump House

Building 722A, commonly referred to as the Pitch and Fuel Oil Pump House, housed the equipment which supported the manufacturing of anodes for the reduction process by assisting with the storage and transfer of coal tar pitch. The northern portion of the building is single-story, with a finished floor grade approximately 4 ft bgs. The pitch vault is oriented perpendicular to the building and extends to the south approximately 40 ft past the above-grade portions of the building. The pitch vault extends approximately 18 ft below grade and underlies existing railroad track lines (**Figure 8**). The vault contains a steel tank which facilitated the transfer of pitch to the storage tanks.

The primary use of PCBs in this area was in the HTM that was pumped through the jacket of the piping system routed between the Building 722A, the pitch storage tanks (Tanks 722 B, C and F) and the Carbon Plant. The facility undertook a PCB purging program in the late 1970's early 1980's to reduce the PCB concentrations in the HTM to less than 1 ppm.

2.3.1 Concrete

Concrete removed from the Building 722A footprint will be assumed to contain greater than 50 mg/kg PCB and will be managed accordingly.

2.3.2 Soil

Limited soil data are available for this structure; due to space constraints, one soil sample was collected from Building 722A from a depth of 0.66–1.66 ft as shown on **Figure 8**. Additional characterization sampling will be completed following demolition of the above- and at-grade portions of the structure to determine the extent of impacts. A characterization sampling plan for Building 722A is provided on **Figure 9**.

2.3.2.1 Excavation Area

Building 722A is surrounded by remediation work that was completed in 1996. Soils containing greater than 10 mg/kg PCBs were excavated around the entire perimeter of the building. Excavation depths varied: the average excavation depth around the building was between 5 and 10 ft; however, in some areas, the excavation extended up to 18 ft bgs. Historical drawings and as-builts from the excavation around Building 722A are included in **Appendix A**.

As described in **Section 3**, characterization work will be completed after demolition of the above- and at-grade portions of the structure. The extent to which characterization, and potential remediation, may be performed is limited to the area under the building footprint as shown on **Figure 9**.

For the purposes of remediation planning, soil beneath the building is assumed to be impacted by PCBs above cleanup goals to an average depth of 5 ft; however, the Remedial Contractor shall be prepared to excavate up to 10 ft below the former building and vault footprint. The excavation may be shored or sloped; quantities are included for both options in **Table 2**.

3 Remedial Activities

Proposed remedial activities include excavating soil, installing impermeable liners where soil PCB concentrations greater than 10 mg/kg will remain in-situ, and backfilling with clean fill to match surrounding grades. Anticipated tasks to complete the remediation activities are outlined in this section.

The SOW will involve collaborative efforts by multiple parties to ensure successful implementation. **Table 3-1** provides an overview of the anticipated roles and responsibilities for key tasks to assist with project planning and bid development.

Table 3-1 Stakeholder Roles and Responsibilities

Stakeholder	Role and Responsibilities
Facility Owner (or designee)	• Regulatory coordination and liaison • Notification and Certification in accordance with 40 CFR 761.61(a)(3) • Obtaining permits, as required • Developing bid specification • Contractor selection • Waste management planning and coordination • Disposal facility selection and waste profile establishment • Water treatment and discharge • Construction management • Reporting and recordkeeping
Demolition Contractor	• PCB remediation waste segregation and management • Materials staging for remediation waste, imported fill, and other materials • Demolition and removal of on-grade structures and concrete slabs before excavation • Demolition and removal of subgrade concrete structures • Support of excavation (if needed) for Building 722A pitch vault
Remedial Contractor	• Site preparation tasks (**Section 3.1**) • Placement and maintenance of erosion controls around PCB excavation areas • Supplying materials including soil and erosion control material, 40-mil HDPE liner, geotextile fabric, and dense-grade aggregate (or approved equivalent) backfill conforming to NYSDEC standards for clean fill • Soil excavation and segregation by concentration • Stockpiling or direct loading of excavated soil • Facilitating confirmation sampling • Installing impermeable liners in excavations • Backfill and compaction • Post-excavation survey and as-built development

Stakeholder	Role and Responsibilities
Local Environmental Contractor(s)	• Waste characterization and profiling • Implementing the Community Air Monitoring Plan (CAMP) • Characterizing the extent of PCB-impacted soil at the former Building 722A pitch vault, including determining the excavation limits and methodology. • Post-excavation verification sampling in accordance with 40 CFR Part 761 Subpart O • Dewatering and pre-treatment of water from the Building 722A pitch vault and excavation

Notes:
(1) NYSDEC. (2010, May 3). *DER-10/Technical Guidance for Site Investigation and Remediation*. https://extapps.dec.ny.gov/docs/remediation_hudson_pdf/der10.pdf
CFR = Code of Federal Regulations
HDPE = high-density polyethylene
NYSDEC = New York State Department of Environmental Conservation
PCB = polychlorinated biphenyl
SOW = scope of work

Remedial activities that are primarily the responsibility of the Remedial Contractor are further described in the following Sections.

3.1 Site Preparation and Pre-Remediation Activities

Site preparation and pre-excavation tasks to be completed by the Remedial Contractor will include the following:

- Develop a project-specific Health and Safety Plan (HASP)
- Develop a project schedule for integration with the project execution plan
- Public and private utility identification, protection, and management
- Establish temporary fencing and/or barricades around excavation areas to prevent unauthorized access to the work zone, as identified.

As outlined in **Table 3-1**, the Owner, their assigned designee, or other contractors will be responsible for completing the following preparatory tasks before excavation activities commence:

- Submit notice to the United States Environmental Protection Agency (USEPA) Regional Administrator, NYSDEC, and St. Lawrence County in accordance with 40 CFR 761.61(a)(3).
- Develop a plan to segregate PCB remediation waste based on concentration. Materials containing 50 mg/kg PCBs or greater will be transported for disposal at a TSCA facility permitted in accordance with 40 CFR 761.45 or a Resource Conservation and Recovery Act (RCRA) Subtitle C landfill. Materials with PCB concentrations less than 50 mg/kg will be disposed of at an approved PCB disposal facility, a permitted municipal solid waste or non-municipal non-hazardous waste facility, or a RCRA-permitted hazardous waste landfill.
- Establish material management areas and procedures for remediation waste, imported fill, and other materials during excavation and backfilling.
- Coordination of waste transport and off-site disposal of PCB remediation wastes, including establishing profiles, contracting transporter and receiving facilities, and establishing procedures for tracking shipments and waste manifests.

- Establish air monitoring requirements through a Community Air Monitoring Plan (CAMP) in accordance with NYSDEC DER-10.[2]
- Complete required building demolition and separate the concrete foundations from adjacent buildings and remove the concrete foundations at the Building 735 and Building 722 excavation areas.
- Manage construction activities and provide oversight to the Remedial Contractor and others responsible for execution of tasks associated with this SOW.

Site preparation tasks that are the responsibility of the Contractor are further described in **Section 3.1.1** through **Section 3.1.9.**

3.1.1 Construction Management

The Owner will provide direct management of activities described in the SOW. The Remedial Contractor will be required to designate key project personnel and establish a point of contact for communicating work activities, status, and any challenges to the Owner. Routine meetings should occur at a frequency that is consistent with the final schedule. Project personnel shall be assigned by the Remedial Contractor to oversee key aspects of the work and ensure compliance with specifications, permits, and contract requirements.

Routine meetings should include (but may not be limited to) the following:

- Daily on-site construction meetings
- Progress meetings with key project personnel (daily, weekly, or as effective for project)

The Remedial Contractor is expected to designate key personnel responsible for communicating progress, challenges that may affect scope and budget, and other relevant project progress information. This should include the following:

- Remediation Contractor Project Manager/Budget Manager
- Remediation Contractor Field Manager
- Project Health and Safety Officer

3.1.2 Schedule

A project schedule for project activities and phasing of the work will be developed and maintained by Owner. It is expected that remedial activities in the three remediation areas will be phased, with tasks conducted across the areas sequentially or concurrently to accommodate required time for receipt of confirmation sample analytical results prior to placement of HDPE caps or backfilling or other stop points required for the work as defined for each area.

The project schedule will serve as a living document and will include the most up-to-date timing and milestones for all activities anticipated throughout the project duration. A weekly “look ahead” SOW effort and planned milestones will be reviewed and the schedule updated as applicable over the duration of the work.

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[2] NYSDEC. (2010, May 3). *DER-10/Technical Guidance for Site Investigation and Remediation*. https://extapps.dec.ny.gov/docs/remediation_hudson_pdf/der10.pdf

The Remedial Contractor will provide daily and weekly work progress reports and schedule updates to be included in the overarching project schedule.

3.1.3 Permits and Notifications

A 30-day notice will be submitted to the USEPA Regional Administrator, NYSDEC, and St. Lawrence County in accordance with the PCB self-implementing cleanup requirements under 40 CFR 761.61(a)(3) and will communicate with the agencies regarding approvals and schedules.

No permits have been identified as needed for this SOW. An erosion and sediment control permit is not required for the remedial activities because most of the work area and surrounding surfaces are concrete paved, and the work areas are less than 1 acre in size. The Remedial Contractor is expected, however, to implement sedimentation and erosion control measures to reduce the potential for excavated soil to migrate from the work areas or enter nearby stormwater conveyances. Sediment and erosion control measures are further described in **Section 3.1.9**.

3.1.4 Health and Safety Plan

The Contractor will prepare a site-specific HASP for the work that complies with New York Occupational Safety and Health Administration and 29 CFR 1910.120 regulations. The HASP is to be submitted to Alcoa for review prior to the work and include task-specific Job Safety Analysis and activity hazard analysis; communication plans, evacuation routes, and emergency response procedures; personal protective equipment and safety monitoring requirements; safety data sheets for any materials that will be brought to and used on-site; and other relevant information for the project. A Spill Response Plan should also be incorporated or included as a stand-alone document to support the field activities.

The primary anticipated hazards include potential worker exposure to construction hazards and potential chemical exposure. Worker hazards include those typically found at a construction site using heavy equipment. Potential chemical exposures are anticipated to derive from inhalation of particulates containing PCBs and direct dermal contact with soil containing PCBs. Engineering controls such as the following should be considered by the Remedial Contractor to minimize these exposures:

- Use water spray as necessary to dampen excavation surfaces to minimize dust generation.
- Use bench excavations to prevent collapse and protect structural integrity of adjacent buildings and/or infrastructure.
- Conduct continuous air monitoring during active excavation to reliably measure airborne contaminants and to verify that control measures are adequate.
- Establish appropriate work zones, including exclusion zones, contaminant reduction zones, and support zones.
- Wear appropriate personal protective equipment, which should be specified in the HASP.

The Contractor is required to have a copy of their HASP available at the Site during the excavation activities.

3.1.5 Community Air Monitoring Plan

A site-specific CAMP, as required by New York Department of Health or NYSDEC (in accordance with DER-10[2]), was prepared by EHS Support for the work outlined in this remediation plan. The CAMP,

provided as **Appendix B,** identifies measures and actions to ensure that employees and visitors entering the Site, as well as the public living and working near the Site, are protected from PCB exposure during the remedial activities.

The CAMP will be implemented by a local environmental contractor throughout the remedial work. In general, the CAMP requires particulate air monitoring for particulate matter 10 micrometers and smaller (PM10) using real-time meters (i.e., DustTrak II Aerosol Monitor Model 8530 by TSI, Inc. or equivalent), with data logging capabilities. The device selected will be suitable for detecting airborne particulates at levels below the CAMP particulate action level. Airborne PCB monitoring will also be conducted during intrusive activities comprising low-volume sampling and analysis in accordance with established USEPA methods. The Remedial Contractor will be responsible for managing dust from the excavation to meet the action limits of the CAMP.

3.1.6 Subsurface Utilities

The Remedial Contractor will be responsible for coordinating with New York 811 one-call to request public utility marking. The Remedial Contractor will work with the Owner's representative to locate and confirm the presence or absence of any utilities. The Remedial Contractor will obtain dig permits from the Alcoa representative prior to disturbing the subsurface.

3.1.7 Demarcation of Excavation Limits and Work Zone Establishment

The Remedial Contractor will establish a work zone around each excavation area using temporary fencing or barricades that serve to prevent unauthorized access to the remediation areas. The work zone will serve an exclusion zone for PCB-impacted soil.

The Remedial Contractor will mark the excavation limits in the field with flags, stakes, and paint before commencing excavation. These marks must be maintained throughout the excavation and restoration activities. The final limits of excavation shall be surveyed prior to placement of backfill.

3.1.8 Temporary Support Facilities

The Remedial Contractor will establish temporary facilities at the Site for equipment and personnel, including staging area(s), decontamination areas, and ancillary support facilities, such as bathroom and handwashing stations and a field office. The Remedial Contractor should also plan for temporary water storage facilities to support dust suppression activities as needed, as water is available on-site but is not available at every building.

Temporary staging area(s) may be used for the storage of imported backfill, liner materials, and equipment. Temporary facilities for contaminated materials may include roll-off containers, gondolas, or dedicated material management areas. Temporary staging areas used by the Remedial Contractor will be coordinated with the Owner.

During Site preparation activities, the Remedial Contractor will establish a decontamination area for each building for personnel and equipment that have contact with impacted materials during the excavation activities. The area is primarily expected to be used to wash soil from excavation equipment throughout the excavation implementation. The size of the decontamination area will consider the size

of the proposed equipment and measures needed to allow containment of sprayed wash water during decontamination activities. Water that accumulates in the decontamination area will be collected and managed in accordance with the procedures outlined in **Section 3.3.6**.

3.1.9 Erosion and Sediment Control

The Remedial Contractor will implement specific sediment and erosion control measures at each excavation area in accordance with the New York State *Stormwater Management Design Manual*.[3] In general, the Contractor is required to use best management practices to limit the amount of erosion and sediment in surface water runoff. Control measures should include, at a minimum, placing silt fencing and straw wattle around the perimeter of the remediation area and diverting surface water away from the work area and any stockpiled materials. Soil berms or hay bales may be constructed around the upgradient sides of the excavations as necessary to prevent surface water from entering open excavations.

Excavated soil that requires temporary stockpiling will be placed only in designated staging areas that are designed to prevent contamination of the ground surface. Wherever possible, excavated soil will be directly loaded into trucks for off-site disposal or placed in roll-off containers and covered with tarps. Excavated soil is not to be stockpiled overnight on the ground surface.

The Remedial Contractor will be responsible for ensuring that vehicle wheels are free of dirt and mud from the construction activities before they leave the Site. Also, the Remedial Contractor will ensure that trucks and roll-off containers are properly tarped to minimize the potential for dirt becoming airborne during transportation.

3.2 Building 722A Preparation

The demolition contractor will be responsible for demolishing the above- and at-grade structures, including removing the railroad tracks above the pitch vault and the roof of the pitch vault. A local environmental contractor will be responsible for removing accumulated oily water from the vault, managing the liquid waste, and any ongoing dewatering throughout excavation activities. A local environmental contractor will also complete the proposed characterization work following demolition. The characterization work will determine the PCB concentrations in soil beneath the Building 722A and the pitch vault footprint and establish the limits of excavation where soil data show remediation is necessary.

3.3 Soil Excavation

The Remedial Contractor will provide labor, materials, equipment, and incidentals required to complete excavation and restoration of the areas with PCB-impacted soil. On-grade structures and concrete slabs will have been removed or will be removed before excavation commences by the Demolition Contractor.

The Remedial Contractor will be responsible for the following excavation-related activities:

[3] NYSDEC. (2024, July 31). *Stormwater Management Design Manual*. https://extapps.dec.ny.gov/fs/projects/24-25DraftCGPDesignManual/Manual.SW.CGP.2024-07-31.Design_Manual_Issued_2024-07-31.pdf

- Excavation of material within identified excavation limits.
- Segregation of wastes based on material type and if the total PCB concentration is (1) equal to or greater than or (2) less than 50 mg/kg.
- Soil removal, management, and loading for off-site disposal. If trucks are unlined dump trucks, the Contractor will be responsible for installing burrito-style truck bed liners prior to loading.

Soils excavation is anticipated to be completed by mechanical means (machine excavating). Materials removed may be direct-loaded for off-site transport or stockpiled temporarily pending off-site disposal, as directed by the Owner or their designee.

3.3.1 Soil Stockpiling

Excavated soil may be temporarily stockpiled to facilitate loading and transport off-site for disposal. Soil excavated from locations with concentrations at or above 50 mg/kg PCBs (TSCA waste) must be segregated from soils with concentrations below 50 mg/kg. The location and construction of temporary staging areas for impacted soil will be managed on impervious surfaces and as directed by the Owner or their designee.

Waste characterization and the selection of off-site disposal facilities will be directly managed by the Owner.

3.3.2 Dust Management

The Remedial Contractor should maintain damp excavation surfaces and apply additional dust suppressant, as necessary, to prevent or reduce dust emissions resulting from construction activities. Dust suppressant will be potable water applied using a mobile broadcast applicator in a controlled manner. Dust suppressant will be applied when:

- Exposed ground surfaces are dry
- Wind or vehicular traffic cause visible dust generation; or
- Action levels in the HASP or CAMP are exceeded.

3.3.3 Benching and Shoring

Excavations shall be benched, shored, or otherwise stabilized as needed to maintain the structural stability of surrounding ground, buildings, and infrastructure over the course of the work when the excavation is greater than 4 ft in depth (anticipated to only occur at Building 722A). Excavation stabilization plans should be established in advance and approved by a licensed Professional Engineer and the Owner or designated representative. Excavation inspections by a competent person should be conducted daily before starting work and as needed over the workday, after every rainstorm, or during any hazard-increasing occurrence.

3.3.4 Cap Construction

Where soil with PCB impacts above 10 mg/kg will remain in place, a cap will be installed. The cap will comprise a 40-mil HDPE geomembrane liner placed between two layers of non-woven geotextile liners. The liner system will be installed on the base and the south wall of the excavation in the area where PCB-impacted soils remain. In order to facilitate drainage above the liner, a 4-in slotted HDPE pipe

running East-West will be installed along the northern wall of the excavation as shown on **Figure 7**. The pipe will discharge water to ground surface to the north of Building 722. A cap is required to be placed across the entire excavation area in Building 722. A cap may be required at the northern wall of the Building 735 excavation, pending confirmation sample results.

3.3.5 Decontamination

All excavation equipment components that encounter PCB-contaminated soil will be cleaned in the designated decontamination area upon leaving the work zone using an all-purpose cleaner and degreaser (e.g., Simple Green All Purpose Cleaner) and power washing with potable water. The Remedial Contractor will follow the decontamination procedures for self-implementing cleanup in 40 CFR 761.79(c)(2).

Reusable equipment and tools will be cleaned with Alconox and potable water solution followed by distilled water rinse between uses. The Remedial Contractor will employ appropriate waste storage and disposal practices to minimize the volume of water generated and to reduce the amount of sediment in the wash water. Wash water generated will be handled as described in **Section 3.3.6**.

3.3.6 Water Management

During the course of the work, it is anticipated that the following types of water will be generated: decon water from the decontamination of equipment, dust control water, excavation dewatering water, and potentially stormwater during a rain event. Excavations at Buildings 735 and 722 are anticipated to be above the water table. The Building 722A vault will likely extend below the water table.

The Remedial Contractor shall collect water as needed to maintain a dry excavation during the work. Appropriate controls shall be installed to minimize the amount of stormwater that enters the excavation by preventing run-on into the excavation.

All water collected from the Building 722 and Building 735 excavations shall be containerized and solids allowed to settle out. The water shall be decanted, characterized, and discharged in accordance with the Miscellaneous Wastewater Management Plan **(Appendix C)** and as directed by the Owner into the on-site stormwater system for treatment prior to discharge.

At Building 722A, dewatering and pretreatment of water from the excavation will be conducted by a local environmental contractor. The Remedial Contractor is responsible for coordinating with the dewatering contractor to place sumps and minimize the amount of sediment that is entrained in the system as directed by the Owner.

3.3.7 Waste Management

Concrete from the removal of the building foundations and structures, and excavated soil containing PCB concentrations greater than 50 mg/kg, or not tested to determine PCB content, will be managed as TSCA hazardous waste and either directly loaded to a lined container or temporarily stockpiled on a concrete pad prior to disposition to a RCRA Section 3004 or 3006 permitted hazardous waste landfill or other TSCA facility permitted in accordance with 40 CFR 761.45. The Owner will select the facility and establish waste profiles before excavation commences.

A Uniform Hazardous Waste Manifest (UHW) will accompany the TSCA hazardous waste, per 40 CFR 761.208, and a signed copy of each UHW will be retained, subject to recordkeeping requirements under 40 CFR 761.209. The Owner (the generator), or their authorized agent, will sign each manifest, and the documentation will be included in the final remedial action report, as described in **Section 5**.

Soil and other materials containing less than 50 mg/kg total PCBs will be segregated from TSCA waste, either directly loaded into a waste container or temporarily stockpiled, and disposed of at an approved PCB disposal facility, a permitted municipal solid waste or non-municipal non-hazardous waste facility, or a RCRA-permitted hazardous waste landfill. manifest documentation will be retained for non-TSCA off-site waste shipments in lieu of a UHW manifest, which is not required. The documentation will be included with the remediation report, as described in **Section 5**.

3.4 Confirmation Sampling

Soils will be monitored for evidence of PCB impacts over the course of the excavation activities, and confirmation soil samples will be collected from the walls and floor of excavations where required, to demonstrate soil remedial objectives have been met. When requested, the Remedial Contractor shall facilitate confirmation sampling by collecting soil using the excavator bucket and transferring the soil to a safe location on the ground outside of the excavation; the Owner or designated representative may use this soil to inspect and collect samples for laboratory analysis.

Confirmation sampling will be conducted at each excavation area, except Building 722. As described in **Section 2.2**, existing characterization data previously collected at Building 722 shows that PCB-impacted soil will remain in-situ beneath the terminal depth of excavation activities and will be subject to remedial action during a later phase of work. As such, confirmation samples will not be obtained, and capping will be installed (**Section 3.3.4**).

Excavation confirmation samples will be obtained from the base of each excavation on a 5-ft by 5-ft grid (1.5 meter), with a minimum of three samples collected in accordance with 40 CFR Part 761 Subpart O. Confirmation samples will be collected from the excavation perimeter walls that were not bound by a delineation sample at a frequency of one per 5 ft (1.5 meters). **Figure 10** shows the planned confirmation sampling plan for Building 735. **Figure 11** shows a similar confirmation sampling plan map for Building 722A. However, this figure may be revised following characterization and determination of the extent of excavation.

The Remedial Contractor shall maintain open excavations until the confirmation sample results have been received and the Owner representative has either directed the Remedial Contractor to continue excavation or communicated that the SCOs have been met and the excavation can be backfilled. The contractor shall assume that 10 days will be required to receive results after confirmation sampling is conducted.

If confirmation samples exceed the SCO, additional soil will be excavated from the confirmation grid area that did not meet SCOs, if feasible. Secondary confirmation sampling will then be completed at the same minimum frequency as the initial phase in those areas subject to further excavation. If it is not feasible to remove additional soil because of infrastructure or structures, then contingency measures will be implemented in accordance with **Section 4.**

3.5 Backfilling, Compaction, and Site Restoration

Backfilling excavations will be completed using dense grade aggregate material (or equivalent material). All soil used as excavation backfill will meet the requirements of 6 New York Codes, Rules, and Regulations (NYCRR) 375-6.7(d) and will be confirmed suitable in accordance with the requirements in Section 5.4 of DER-10.[2] Dense-grade aggregate will be imported from a NYSDEC-permitted quarry and is not subject to the imported fill testing requirements of DER-10. Approved equivalent material, such as repurposed crushed concrete with a beneficial use determination, may be used in substitute.

Backfill material shall be placed in a maximum of 12-inch lifts and mechanically compacted with a minimum of three passes with placement machinery. Backfill shall be placed to meet surrounding grade.

At Building 722A, the excavation void will be backfilled to establish a grade consistent with surrounding grade. Restoration of areas to support returning the rail to service must be coordinated with the Owner.

3.6 Survey and Documentation of Excavation and Cap Extents

Following excavation completion, the limits of the excavated area will be surveyed by a Professional Land Surveyor licensed in New York State, and a plat map showing the excavation boundaries and excavation grades will be generated. Where capping is installed, the cap will also be surveyed and included on the excavation plat map.

The survey data will be in New York State Plane coordinates with vertical and horizontal survey tolerances to be maintained in accordance with the project specifications. The plat maps and survey data will be submitted to the Owner in both PDF and electronic formats.

4 Contingency Measures

Contingency measures will be implemented if confirmation samples do not meet the SCOs and additional remediation is impractical. Confirmation sampling will be completed in accordance with the procedures outlined in **Section 3.4.** If confirmation samples contain PCBs greater than the SCO, the excavation limit will be extended within the specified grid area, and confirmation samples will be re-collected and analyzed. If it is impractical to extend the excavation limits—for example, where building foundations or structures preclude access—then capping consistent with **Section 3.3.4** will be installed as an interim measure.

Contingency measures will also be implemented if demolition and excavation cause stability concerns for adjacent structures and necessitate altering the planned excavation extents and/or approach. Contingency measures may include benching excavations or using an appropriate shoring system to stabilize excavations and protect adjacent structures.

Contingency measures will be selected by the Owner and the Remedial Contractor on an as-needed basis and will be documented.

5 Post-Excavation Reporting and Recordkeeping

Reporting and recordkeeping will meet the requirements under 40 CFR Part 761. Within 30 days of sending the final shipment of waste off-site, the Cleanup Completion Notification will be submitted to the USEPA Regional Administrator, NYSDEC, and St. Lawrence County in accordance with 40 CFR 761.61(b)(1)(v).

A report will be prepared that documents the characterization work, concrete remediation, soil remediation, confirmation sampling and analyses, cap construction and extents, and demobilization activities. Included with the report will be waste manifests, bills of lading, certificates of disposal, laboratory data, cap construction as-builts and survey plats, and any other relevant documentation related to the remediation and waste management. The final report will also include recommendations for future actions associated with remediation activities. The final report will be certified by a professional engineer licensed in the state of New York. Relevant records will be maintained in accordance with the requirements specified in 40 CFR Part 761 Subpart K. Signed UHW manifests will be retained for at least 3 years (40 CFR 761.214[a][1]). The notification and certification and cleanup records will be retained for a period of 5 years from the date of the final remediation report, consistent with 40 CFR 761.125(c)(5).

A PCB management plan is being prepared under a separate scope and will include provisions for ongoing management of PCB-impacted soil that remains in-situ following remediation and capping. Provisions to be included in the management plan that are specific to the activities in this remediation plan are annual inspections of capped areas in the spring and the maintenance and notification requirements for when conditions are observed that require active cap maintenance.

Tables

Table 1
Polychlorinated Biphenyl Concentrations in Soil
Buildings 722A, 722, and 735
Reynolds Metal Company St. Lawrence Reduction Plant
Massena, New York

			PCB-1016 (Aroclor 1016) mg/kg	PCB-1221 (Aroclor 1221) mg/kg	PCB-1232 (Aroclor 1232) mg/kg	PCB-1242 (Aroclor 1242) mg/kg	PCB-1248 (Aroclor 1248) mg/kg	PCB-1254 (Aroclor 1254) mg/kg	PCB-1260 (Aroclor 1260) mg/kg	PCB-1262 (Aroclor 1262) mg/kg	PCB-1268 (Aroclor 1268) mg/kg	Total Detected PCBs mg/kg
Site-Specific Soil Cleanup Objective			10	10	10	10	10	10	10	10	10	10
TSCA Hazardous Waste			≥50	≥50	≥50	≥50	≥50	≥50	≥50	≥50	≥50	≥50
Location	**Sample Depth (ft)**	**Date**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**
BUILDING 722A SOIL SAMPLE RESULTS												
722A-PUMP.E	0.66–1.16	10/07/2022	0.027 U	0.032 U	0.023 U	0.021 U	0.35	0.023 U	0.04 J	0.024 U	0.017 U	<10
722A-PUMP.E	1.16–1.66	10/07/2022	0.028 U	0.034 U	0.024 U	0.021 U	0.051 J	0.024 U	0.024 U	0.025 U	0.018 U	<10
BUILDING 722 SOIL SAMPLE RESULTS												
722-COL.A2	0.75–1.25	10/06/2022	0.026 U	0.031 U	0.022 U	0.02 U	1.1 E	0.022 U	0.14	0.023 U	0.017 U	<10
722-COL.A2	1.25–1.75	10/06/2022	0.026 U	0.031 U	0.022 U	0.43	0.018 U	0.022 U	0.022 U	0.023 U	0.017 U	<10
722-COL.DE1	0.83–1.33	10/05/2022	0.025 U	0.03 U	0.021 U	0.019 U	0.017 U	0.021 U	0.021 U	0.022 U	0.016 U	ND
722-COL.DE1	1.33–1.83	10/05/2022	0.025 U	0.03 U	0.021 U	0.019 U	0.017 U	0.021 U	0.021 U	0.022 U	0.016 U	ND
722-COL.E2F3	0.92–1.42	10/06/2022	0.027 U	0.032 U	0.023 U	0.02 U	0.051 J	0.023 U	0.023 U	0.024 U	0.017 U	<10
722-COL.E2F3	1.42–1.92	10/06/2022	0.028 U	0.033 U	0.023 U	0.021 U	0.019 U	0.023 U	0.023 U	0.024 U	0.018 U	ND
722-COL.E34	0.83–1.33	10/06/2022	0.028 U	0.033 U	0.023 U	0.021 U	0.039 J	0.023 U	0.023 U	0.024 U	0.018 U	<10
722-COL.E34	1.33–1.83	10/06/2022	0.027 U	0.032 U	0.022 U	0.02 U	0.018 U	0.028 J	0.022 U	0.024 U	0.017 U	<10
722-COL.EF1	1–1.5	10/05/2022	0.026 U	0.031 U	0.022 U	0.02 U	0.027 J	0.022 U	0.022 U	0.023 U	0.017 U	<10
722-COL.EF1	1.5–2	10/05/2022	0.026 U	0.031 U	0.022 U	0.02 U	0.018 U	0.022 U	0.022 U	0.023 U	0.017 U	ND
722-COL.F5	0.75–1.25	10/06/2022	0.027 U	0.032 U	0.023 U	0.02 U	0.018 U	0.023 U	0.023 U	0.024 U	0.017 U	ND
722-COL.F5	1.25–1.75	10/06/2022	0.027 U	0.033 U	0.023 U	0.021 U	0.018 U	0.023 U	0.023 U	0.024 U	0.017 U	ND
722-COL.G4	0.66–1.16	10/06/2022	0.027 U	0.033 U	0.023 U	0.021 U	0.034 J	0.023 U	0.023 U	0.024 U	0.017 U	<10
722-COL.G4	1.16–1.66	10/06/2022	0.027 U	0.032 U	0.023 U	0.021 U	0.018 U	0.023 U	0.023 U	0.024 U	0.017 U	ND
722-COL.GH1	1–1.5	10/05/2022	250 U	310 U	210 U	190 U	3400	210 U	310 J	220 U	160 U	3710
722-COL.GH1	1.5–2	10/05/2022	240 U	290 U	200 U	180 U	4200	200 U	200 U	210 U	150 U	4200
722-COL.HI1	0.92–1.42	10/05/2022	0.12 U	0.14 U	0.1 U	0.091 U	2.30	0.1 U	0.27	0.11 U	0.077 U	<10
722-COL.HI1	1.42–1.92	10/05/2022	0.025 U	0.031 U	0.021 U	0.019 U	0.94	0.021 U	0.021 U	0.022 U	0.016 U	<10
722-COL.I3	0.58–1.08	10/06/2022	0.029 U	0.035 U	0.024 U	0.022 U	0.12	0.024 U	0.024 U	0.025 U	0.018 U	<10
722-COL.I3	1.08–1.58	10/06/2022	0.027 U	0.032 U	0.023 U	0.02 U	0.17	0.023 U	0.031 J	0.024 U	0.017 U	<10
722-COL.J12	0.58–1.08	10/06/2022	0.028 U	0.033 U	0.023 U	0.021 U	0.019 U	0.023 U	0.023 U	0.024 U	0.018 U	0.033 U
722-COL.J12	1.08–1.58	10/07/2022	0.026 U	0.031 U	0.022 U	0.02 U	0.018 U	0.022 U	0.022 U	0.023 U	0.017 U	0.031 U
B722-BH1	0–1	12/19/2024	0.0241 U	0.0272 U	0.0576 U	0.0366 U	2.12	0.0297 U	0.29	--	--	<10
B722-BH1	1–2	12/19/2024	0.00434 U	0.0049 U	0.0104 U	0.00659 U	0.10	0.00535 U	0.0125 J	--	--	<10
B722-BH1	2–3	12/19/2024	0.00468 U	0.00528 U	0.0112 U	0.0071 U	0.0133 J	0.00576 U	0.00973 U	--	--	ND
B722-BH2	0–1	12/19/2024	0.00511 U	0.00576 U	0.0122 U	0.00775 U	0.28	0.00629 U	0.0302 J	--	--	<10
B722-BH2	1–2	12/19/2024	0.0047 U	0.0053 U	0.0112 U	0.00713 U	0.00915 J	0.00579 U	0.00978 U	--	--	ND
B722-BH2	2–3	12/19/2024	0.00486 U	0.00549 U	0.0116 U	0.032 J	0.00821 U	0.00599 U	0.0101 U	--	--	ND
B722-BH3	0–1	12/19/2024	0.00488 U	0.0055 U	0.0116 U	0.00741 U	0.12	0.00601 U	0.0102 U	--	--	<10
B722-BH3	1–2	12/19/2024	0.00487 U	0.0055 U	0.0116 U	0.00739 U	1.28	0.006 U	0.17	--	--	<10

Table 1
Polychlorinated Biphenyl Concentrations in Soil
Buildings 722A, 722, and 735
Reynolds Metal Company St. Lawrence Reduction Plant
Massena, New York

			PCB-1016 (Aroclor 1016) mg/kg	PCB-1221 (Aroclor 1221) mg/kg	PCB-1232 (Aroclor 1232) mg/kg	PCB-1242 (Aroclor 1242) mg/kg	PCB-1248 (Aroclor 1248) mg/kg	PCB-1254 (Aroclor 1254) mg/kg	PCB-1260 (Aroclor 1260) mg/kg	PCB-1262 (Aroclor 1262) mg/kg	PCB-1268 (Aroclor 1268) mg/kg	Total Detected PCBs mg/kg
Site-Specific Soil Cleanup Objective			10	10	10	10	10	10	10	10	10	10
TSCA Hazardous Waste			≥50	≥50	≥50	≥50	≥50	≥50	≥50	≥50	≥50	≥50
Location	**Sample Depth (ft)**	**Date**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**
B722-BH3	2–2.5	12/19/2024	0.00469 U	0.00529 U	0.0112 U	0.00712 U	1.46	0.00578 U	0.18	--	--	<10
B722-BH4	0–1	12/18/2024	0.0233 U	0.0262 U	0.0555 U	0.94	0.0393 U	0.0286 U	0.0484 U	--	--	<10
B722-BH4	1–2	12/18/2024	0.00456 U	0.00515 U	0.0109 U	0.00693 U	0.0153 J	0.00562 U	0.0095 U	--	--	ND
B722-BH4	2–3	12/18/2024	0.0046 U	0.00519 U	0.011 U	0.00698 U	0.00777 U	0.00567 U	0.00957 U	--	--	ND
B722-BH5	0–1	12/19/2024	0.00452 U	0.0051 U	0.0108 U	0.00686 U	0.70	0.00557 U	0.0094 U	--	--	<10
B722-BH5	1–2	12/19/2024	0.00458 U	0.00517 U	0.0109 U	0.00695 U	0.06	0.00564 U	0.00953 U	--	--	<10
B722-BH5	2–3	12/19/2024	0.00448 U	0.00505 U	0.0107 U	0.0068 U	0.00757 U	0.00552 U	0.00932 U	--	--	ND
B722-BH6	0–1	12/19/2024	0.0228 U	0.0257 U	0.0543 U	0.0346 U	3.44	1.46	0.37	--	--	<10
B722-BH6	1–2	12/19/2024	0.00434 U	0.0049 U	0.0104 U	0.27	0.00733 U	0.00534 U	0.00903 U	--	--	<10
B722-BH6	2–3	12/19/2024	0.00449 U	0.00507 U	0.0107 U	0.62	0.00758 U	0.00553 U	0.00934 U	--	--	<10
B722-BH7	0–1	12/19/2024	0.0914 U	0.103 U	0.218 U	0.139 U	7.28	0.113 U	0.711 J	--	--	<10
B722-BH7	1–2	12/19/2024	0.0221 U	0.025 U	0.0528 U	0.0336 U	0.0374 U	0.97	0.046 U	--	--	<10
B722-BH7	2–3	12/19/2024	0.0237 U	0.0267 U	0.0566 U	0.036 U	0.04 U	0.62	0.0493 U	--	--	<10
B722-BH8	0–1	12/19/2024	0.022 U	0.0249 U	0.0526 U	0.0334 U	2.66	0.0271 U	0.194 J	--	--	<10
B722-BH8	0–1	12/20/2024	0.00457 U	0.00516 U	0.0109 U	0.00694 U	1.37	0.00563 U	0.07	--	--	<10
B722-BH8	0–1	12/20/2024	0.00474 U	0.00535 U	0.0113 U	0.0072 U	0.63	0.00584 U	0.0362 J	--	--	<10
B722-BH8	1–2	12/19/2024	0.00466 U	0.00526 U	0.0111 U	0.00708 U	0.0103 J	0.00575 U	0.00971 U	--	--	ND
B722-BH8	2–3	12/19/2024	0.00476 U	0.00537 U	0.0114 U	0.00723 U	0.00804 U	0.00587 U	0.00991 U	--	--	ND
B722-BH9	0–1	12/19/2024	2.41 U	2.72 U	5.75 U	3.66 U	90.2	2.97 U	5.02 U	--	--	90
B722-BH9	1–2	12/19/2024	0.452 U	0.51 U	1.08 U	0.686 U	45.2	0.557 U	0.941 U	--	--	45
B722-BH9	2–3	12/19/2024	2.37 U	2.67 U	5.65 U	3.59 U	114	2.92 U	4.92 U	--	--	114
B722-BH9	3–4	02/05/2025	0.0925 U	0.104 U	0.221 U	0.14 U	9.73	0.114 U	0.192 U	--	--	<10
B722-BH9	3–4	02/05/2025	0.0936 U	0.106 U	0.224 U	0.142 U	9.20	0.115 U	0.195 U	--	--	<10
B722-BH9	4–5	02/05/2025	0.446 U	0.503 U	1.06 U	0.677 U	39.3	0.55 U	0.928 U	--	--	39
B722-BH9	5–6	02/20/2025	0.451 U	0.509 U	1.08 U	0.685 U	43.6	0.556 U	0.939 U	--	--	44
B722-BH9	6–7	02/20/2025	2.22 U	2.51 U	5.31 U	3.38 U	428	2.74 U	4.63 U	--	--	428
B722-BH9	7–8	03/06/2025	2.18 U	2.46 U	5.22 U	3.32 U	507	2.69 U	68.6	--	--	576
B722-BH9	8–9	03/06/2025	0.0234 U	0.0264 U	0.0559 U	0.0355 U	3.86	0.0288 U	0.41	--	--	<10
B722-BH9	8–9	03/06/2025	0.0244 U	0.0275 U	0.0582 U	0.037 U	3.17	0.03 U	0.42	--	--	<10
B722-BH10	0–1	12/19/2024	0.0233 U	0.0263 U	0.0556 U	0.0354 U	2.80	0.0287 U	0.0485 U	--	--	<10
B722-BH10	1–2	12/19/2024	0.0234 U	0.0265 U	0.056 U	1.67	0.0396 U	0.0289 U	0.0488 U	--	--	<10
B722-BH10	2–3	12/19/2024	0.00445 U	0.00502 U	0.0106 U	0.31	0.00752 U	0.00549 U	0.00927 U	--	--	<10
B722-BH11	0–1	12/19/2024	0.00447 U	0.00505 U	0.0107 U	0.00679 U	0.20	0.00551 U	0.0135 J	--	--	<10
B722-BH11	1–2	12/19/2024	0.00461 U	0.0052 U	0.011 U	0.007 U	0.00779 U	0.00568 U	0.0096 U	--	--	ND

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Buildings 722A, 722, and 735
Reynolds Metal Company St. Lawrence Reduction Plant
Massena, New York

			PCB-1016 (Aroclor 1016) mg/kg	PCB-1221 (Aroclor 1221) mg/kg	PCB-1232 (Aroclor 1232) mg/kg	PCB-1242 (Aroclor 1242) mg/kg	PCB-1248 (Aroclor 1248) mg/kg	PCB-1254 (Aroclor 1254) mg/kg	PCB-1260 (Aroclor 1260) mg/kg	PCB-1262 (Aroclor 1262) mg/kg	PCB-1268 (Aroclor 1268) mg/kg	Total Detected PCBs mg/kg
Site-Specific Soil Cleanup Objective			10	10	10	10	10	10	10	10	10	10
TSCA Hazardous Waste			≥50	≥50	≥50	≥50	≥50	≥50	≥50	≥50	≥50	≥50
Location	**Sample Depth (ft)**	**Date**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**
B722-BH11	1–2	12/20/2024	0.0044 U	0.00497 U	0.0105 U	0.00669 U	0.00744 U	0.00543 U	0.00917 U	--	--	ND
B722-BH11	1–2	12/20/2024	0.00463 U	0.00522 U	0.011 U	0.00703 U	0.00782 U	0.0057 U	0.00964 U	--	--	ND
B722-BH11	2–3	12/19/2024	0.00437 U	0.00494 U	0.0104 U	0.00664 U	0.00739 U	0.00539 U	0.0091 U	--	--	ND
B722-BH12	0–1	12/19/2024	2.37 U	2.67 U	5.66 U	3.6 U	356	2.92 U	4.93 U	--	--	356
B722-BH12	1–2	12/19/2024	2.36 U	2.67 U	5.64 U	3.59 U	269	2.91 U	4.92 U	--	--	269
B722-BH12	2–3	12/19/2024	2.38 U	2.68 U	5.68 U	3.61 U	205	2.93 U	4.95 U	--	--	205
B722-BH12	2–3	12/20/2024	2.42 U	2.72 U	5.77 U	3.67 U	226	2.98 U	5.03 U	--	--	226
B722-BH12	2–3	12/20/2024	2.46 U	2.78 U	5.87 U	3.73 U	237	3.03 U	5.12 U	--	--	237
B722-BH12	3–4	02/05/2025	0.47 U	0.53 U	1.12 U	0.713 U	134	0.579 U	0.978 U	--	--	134
B722-BH12	4–5	02/05/2025	0.0923 U	0.104 U	0.22 U	0.14 U	23.4	0.114 U	0.192 U	--	--	23
B722-BH12	5–6	02/20/2025	0.455 U	0.514 U	1.09 U	0.691 U	178	0.561 U	0.948 U	--	--	178
B722-BH12	6–7	02/20/2025	0.471 U	0.532 U	1.12 U	0.715 U	70	0.58 U	0.98 U	--	--	70
B722-BH12	7–8	03/06/2025	0.00452 U	0.0051 U	0.0108 U	0.00686 U	0.19	0.00557 U	0.0212 J	--	--	<10
B722-BH12	8–9	03/06/2025	0.00462 U	0.00522 U	0.011 U	0.00702 U	0.11	0.0057 U	0.0302 J	--	--	<10
B722-BH12	9–10	03/06/2025	0.0237 U	0.0268 U	0.0566 U	0.036 U	3.42	0.0292 U	0.59	--	--	<10
B722-BH13	0–1	02/20/2025	0.00448 U	0.00506 U	0.0107 U	0.00681 U	0.14	0.00552 U	0.0324 J	--	--	<10
B722-BH13	1–2	02/20/2025	0.00434 U	0.0049 U	0.0104 U	0.0066 U	0.00734 U	0.00535 U	0.00904 U	--	--	ND
B722-BH13	7–8	02/20/2025	0.00467 U	0.00527 U	0.0111 U	0.00709 U	0.00789 U	0.00575 U	0.00972 U	--	--	ND
B722-BH13	9–10	02/20/2025	0.00449 U	0.00507 U	0.0107 U	0.00682 U	0.00759 U	0.00553 U	0.00935 U	--	--	ND
B722-BH13	9–10	02/20/2025	0.0048 U	0.00542 U	0.0115 U	0.00729 U	0.0494 J	0.00592 U	0.00999 U	--	--	ND
B722-BH22	0–1	02/20/2025	0.00445 U	0.00502 U	0.0106 U	0.00676 U	0.99	0.00548 U	0.22	--	--	<10
B722-BH22	1–2	02/20/2025	0.00448 U	0.00505 U	0.0107 U	0.0068 U	0.98	0.00552 U	0.16	--	--	<10
B722-BH22	2–3	02/20/2025	0.00462 U	0.00521 U	0.011 U	0.00701 U	0.17	0.00569 U	0.00961 U	--	--	<10
B722-BH22	7–8	02/20/2025	0.00446 U	0.00503 U	0.0106 U	0.00676 U	0.19	0.00549 U	0.0319 J	--	--	<10
B722-BH22	8–9	02/20/2025	0.00468 U	0.00528 U	0.0112 U	0.0071 U	0.0255 J	0.00576 U	0.00973 U	--	--	ND
B722-BH22	9–10	02/20/2025	0.00432 U	0.00487 U	0.0103 U	0.00655 U	0.0194 J	0.00532 U	0.00898 U	--	--	ND
B722-BH29	0–1	02/20/2025	0.0232 U	0.0261 U	0.0553 U	0.0351 U	2.49	0.0285 U	0.0482 U	--	--	<10
B722-BH29	1–2	02/20/2025	0.00471 U	0.00532 U	0.0112 U	0.00715 U	0.06	0.0058 U	0.00981 U	--	--	<10
B722-BH29	7–8	02/05/2025	0.00449 U	0.00506 U	0.0107 U	0.00681 U	0.19	0.00553 U	0.00934 U	--	--	<10
B722-BH29	7–8	02/05/2025	0.00449 U	0.00507 U	0.0107 U	0.00682 U	0.14	0.00553 U	0.00935 U	--	--	<10
B722-BH29	8–9	02/05/2025	0.00465 U	0.00524 U	0.0111 U	0.00705 U	0.15	0.00572 U	0.00967 U	--	--	<10
B722-BH29	9–10	02/05/2025	0.477 U	0.538 U	1.14 U	0.724 U	102	0.588 U	0.993 U	--	--	102

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Massena, New York

			PCB-1016 (Aroclor 1016) mg/kg	PCB-1221 (Aroclor 1221) mg/kg	PCB-1232 (Aroclor 1232) mg/kg	PCB-1242 (Aroclor 1242) mg/kg	PCB-1248 (Aroclor 1248) mg/kg	PCB-1254 (Aroclor 1254) mg/kg	PCB-1260 (Aroclor 1260) mg/kg	PCB-1262 (Aroclor 1262) mg/kg	PCB-1268 (Aroclor 1268) mg/kg	Total Detected PCBs mg/kg
Site-Specific Soil Cleanup Objective			10	10	10	10	10	10	10	10	10	10
TSCA Hazardous Waste			≥50	≥50	≥50	≥50	≥50	≥50	≥50	≥50	≥50	≥50
Location	**Sample Depth (ft)**	**Date**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**
BUILDING 735 RESULTS												
735-C.E	0.66–1.16	10/07/2022	0.14 U	0.17 U	0.12 U	3.20	0.097 U	0.12 U	0.12 U	0.13 U	0.091 U	<10
735-C.E	1.16–1.66	10/07/2022	0.026 U	0.031 U	0.022 U	0.14	0.017 U	0.022 U	0.022 U	0.023 U	0.016 U	<10
735-C.S	1.5–2	10/07/2022	0.026 U	0.031 U	0.022 U	0.17	0.018 U	0.022 U	0.022 U	0.023 U	0.017 U	<10
735-C.S	1–1.5	10/07/2022	0.28 U	0.34 U	0.24 U	2.20	0.19 U	0.24 U	0.24 U	0.25 U	0.18 U	<10
735-P	1.08–1.58	10/07/2022	0.025 U	0.03 U	0.021 U	0.019 U	0.017 U	0.021 U	0.021 U	0.022 U	0.016 U	0.03 U
735-P	1.08–1.58	10/07/2022	0.027 U	0.032 U	0.022 U	0.02 U	0.018 U	0.022 U	0.022 U	0.023 U	0.017 U	0.032 U
735-P	1.58–2.08	10/07/2022	0.026 U	0.031 U	0.021 U	0.019 U	0.017 U	0.021 U	0.021 U	0.022 U	0.016 U	0.031 U
B735-BH1	0–1	12/18/2024	0.00448 U	0.00506 U	0.0107 U	0.0068 U	0.12	0.00552 U	0.00933 U	--	--	<10
B735-BH1	1–2	12/18/2024	0.00438 U	0.00494 U	0.0104 U	0.00664 U	0.10	0.00539 U	0.0091 U	--	--	<10
B735-BH1	2–3	12/18/2024	0.00436 U	0.00492 U	0.0104 U	0.00661 U	0.18	0.00537 U	0.00907 U	--	--	<10
B735-BH2	0–1	12/17/2024	0.104 U	0.117 U	0.248 U	11.4	0.176 U	0.128 U	0.216 U	--	--	11.4
B735-BH2	1–2	12/17/2024	2.32 U	2.62 U	5.55 U	3.53 U	413	2.86 U	4.84 U	--	--	413
B735-BH2	2–3	12/17/2024	0.457 U	0.516 U	1.09 U	74.5	0.772 U	0.563 U	0.951 U	--	--	74.5
B735-BH2	3–4	02/05/2025	0.0218 U	0.0245 U	0.0519 U	0.033 U	1.87	0.0268 U	0.0453 U	--	--	<10
B735-BH2	4–5	02/05/2025	0.00422 U	0.00476 U	0.0101 U	0.00641 U	0.24	0.0052 U	0.00879 U	--	--	<10
B735-BH3	0–1	12/09/2024	0.112 U	0.126 U	0.268 U	0.17 U	7.54	7.74	2.03	--	--	17.3
B735-BH3	1–2	12/09/2024	0.472 U	0.533 U	1.13 U	0.717 U	7.57	11.9	3.36 J	--	--	19.5
B735-BH3	2–3	12/09/2024	0.468 U	0.528 U	1.12 U	0.711 U	23.2	0.577 U	0.974 U	--	--	23.2
B735-BH3	3–4	12/09/2024	0.0906 U	0.102 U	0.216 U	0.138 U	6.36	0.112 U	0.189 U	--	--	<10
B735-BH3	4–5	12/09/2024	0.00462 U	0.00521 U	0.011 U	0.00701 U	0.28	0.08	0.014 JIP	--	--	<10
B735-BH4	0–1	12/18/2024	0.00449 U	0.00507 U	0.0107 U	0.28	0.00759 U	0.00554 U	0.00935 U	--	--	<10
B735-BH4	1–2	12/18/2024	0.00437 U	0.00493 U	0.0104 U	0.0196 J	0.00738 U	0.00538 U	0.00909 U	--	--	ND
B735-BH4	2–3	12/18/2024	0.00437 U	0.00493 U	0.0104 U	0.00871 J	0.00738 U	0.00538 U	0.00909 U	--	--	ND
B735-BH5	0–1	12/09/2024	2.71 U	3.06 U	6.48 U	4.12 U	180	3.34 U	31.2	--	--	211
B735-BH5	1–2	12/09/2024	2.29 U	2.58 U	5.46 U	3.48 U	132	2.82 U	20.4 J	--	--	132
B735-BH5	2–3	12/09/2024	0.45 U	0.508 U	1.07 U	0.683 U	25.6	0.554 U	0.936 U	--	--	26
B735-BH5	3–4	12/09/2024	0.0246 U	0.0277 U	0.0587 U	0.0373 U	3.48	0.0303 U	0.0512 U	--	--	<10
B735-BH5	4–5	12/09/2024	0.00469 U	0.00529 U	0.0112 U	0.00712 U	0.48	0.00578 U	0.00976 U	--	--	<10
B735-BH6	0–1	12/18/2024	0.00441 U	0.00498 U	0.0105 U	0.68	0.00745 U	0.00544 U	0.00918 U	--	--	<10
B735-BH6	1–2	12/18/2024	0.00434 U	0.00489 U	0.0104 U	0.09	0.00733 U	0.00534 U	0.00903 U	--	--	<10
B735-BH6	2–3	12/18/2024	0.00422 U	0.00476 U	0.0101 U	0.08	0.00713 U	0.0052 U	0.00878 U	--	--	<10
B735-BH7	0–1	12/09/2024	0.0053 U	0.00599 U	0.0127 U	0.00805 U	0.27	0.24	0.09	--	--	<10
B735-BH7	1–2	12/09/2024	0.00429 U	0.00484 U	0.0102 U	0.00651 U	0.18	0.00528 U	0.00892 U	--	--	<10

Table 1
Polychlorinated Biphenyl Concentrations in Soil
Buildings 722A, 722, and 735
Reynolds Metal Company St. Lawrence Reduction Plant
Massena, New York

			PCB-1016 (Aroclor 1016) mg/kg	PCB-1221 (Aroclor 1221) mg/kg	PCB-1232 (Aroclor 1232) mg/kg	PCB-1242 (Aroclor 1242) mg/kg	PCB-1248 (Aroclor 1248) mg/kg	PCB-1254 (Aroclor 1254) mg/kg	PCB-1260 (Aroclor 1260) mg/kg	PCB-1262 (Aroclor 1262) mg/kg	PCB-1268 (Aroclor 1268) mg/kg	Total Detected PCBs mg/kg
Site-Specific Soil Cleanup Objective			10	10	10	10	10	10	10	10	10	10
TSCA Hazardous Waste			≥50	≥50	≥50	≥50	≥50	≥50	≥50	≥50	≥50	≥50
Location	Sample Depth (ft)	Date	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
B735-BH7	2–3	12/09/2024	0.0044 U	0.00496 U	0.0105 U	0.00667 U	0.13	0.00541 U	0.00915 U	--	--	<10
B735-BH8	0–1	12/18/2024	0.00455 U	0.00514 U	0.0109 U	0.0313 J	0.00769 U	0.00561 U	0.00947 U	--	--	ND
B735-BH8	1–2	12/18/2024	0.00409 U	0.00462 U	0.00977 U	0.00621 U	0.00691 U	0.00504 U	0.00852 U	--	--	ND
B735-BH8	2–3	12/18/2024	0.00427 U	0.00482 U	0.0102 U	0.00648 U	0.00722 U	0.00526 U	0.00889 U	--	--	ND
B735-BH9	0–1	12/09/2024	0.00481 U	0.00543 U	0.0115 U	0.0073 U	1.12	0.75	0.59	--	--	<10
B735-BH9	1–2	12/09/2024	0.0236 U	0.0266 U	0.0562 U	0.0358 U	2.43	1.41	1.03	--	--	<10
B735-BH9	2–3	12/09/2024	0.00428 U	0.00483 U	0.0102 U	0.0065 U	0.36	0.14	0.0398 J	--	--	<10
B735-BH10	0–1	12/18/2024	0.0044 U	0.00496 U	0.0105 U	0.09	0.00743 U	0.00542 U	0.00916 U	--	--	<10
B735-BH10	1–2	12/18/2024	0.00425 U	0.0048 U	0.0102 U	0.013 J	0.00718 U	0.00524 U	0.00885 U	--	--	ND
B735-BH10	1–2	12/18/2024	0.0042 U	0.00474 U	0.01 U	0.0161 J	0.00709 U	0.00517 U	0.00873 U	--	--	ND
B735-BH10	2–3	12/18/2024	0.00444 U	0.00501 U	0.0106 U	0.0148 J	0.0075 U	0.00547 U	0.00923 U	--	--	ND
B735-BH11	0–1	12/09/2024	0.00478 U	0.0054 U	0.0114 U	0.00726 U	0.67	0.30	0.14	--	--	<10
B735-BH11	1–2	12/09/2024	0.00475 U	0.00536 U	0.0113 U	0.00721 U	0.97	0.45	0.24	--	--	<10
B735-BH11	2–3	12/09/2024	0.023 U	0.0259 U	0.0549 U	0.0349 U	2.75	1.87	1.23	--	--	<10
B735-BH11	2–3	12/09/2024	0.0233 U	0.0263 U	0.0556 U	0.0353 U	2.62	1.74	1.27	--	--	<10
B735-BH12	0–1	12/18/2024	0.00445 U	0.00502 U	0.0106 U	0.00713 J	0.00751 U	0.00548 U	0.00925 U	--	--	ND
B735-BH12	1–2	12/18/2024	0.00439 U	0.00496 U	0.0105 U	0.00667 U	0.00742 U	0.00541 U	0.00914 U	--	--	ND
B735-BH12	2–3	12/18/2024	0.00413 U	0.00466 U	0.00986 U	0.00627 U	0.00698 U	0.00509 U	0.00859 U	--	--	ND
B735-BH13	0–1	12/09/2024	0.00455 U	0.00513 U	0.0109 U	0.00691 U	0.69	0.32	0.13	--	--	<10
B735-BH13	1–2	12/09/2024	0.0214 U	0.0241 U	0.051 U	0.0324 U	1.77	1.01	0.65	--	--	<10
B735-BH13	2–3	12/09/2024	0.0234 U	0.0264 U	0.0558 U	0.0355 U	2.16	1.32	0.85	--	--	<10
B735-BH14	0–1	12/18/2024	0.00445 U	0.00503 U	0.0106 U	0.00676 U	0.00752 U	0.00549 U	0.00927 U	--	--	ND
B735-BH14	1–2	12/18/2024	0.00412 U	0.00464 U	0.00982 U	0.00625 U	0.00695 U	0.00507 U	0.00856 U	--	--	ND
B735-BH14	2–3	12/18/2024	0.00426 U	0.0048 U	0.0102 U	0.00646 U	0.00719 U	0.00524 U	0.00886 U	--	--	ND
B735-BH15	0–1	12/10/2024	0.00453 U	0.00511 U	0.0108 U	0.00688 U	0.14	0.00558 U	0.00943 U	--	--	<10
B735-BH15	1–2	12/10/2024	0.00413 U	0.00466 U	0.00985 U	0.00626 U	0.0342 J	0.00508 U	0.00859 U	--	--	ND
B735-BH15	2–3	12/10/2024	0.00439 U	0.00495 U	0.0105 U	0.00666 U	0.00741 U	0.00541 U	0.00913 U	--	--	ND
B735-BH16	0–1	12/18/2024	0.025 U	0.0283 U	0.0598 U	0.038 U	2.39	1.43	1.26	--	--	<10
B735-BH16	1–2	12/18/2024	0.0235 U	0.0265 U	0.0561 U	0.0357 U	2.17	1.22	1.08	--	--	<10
B735-BH16	2–3	12/18/2024	0.0235 U	0.0265 U	0.0561 U	0.0357 U	3.26	1.62	1.18	--	--	<10
B735-BH18	0–1	12/09/2024	0.094 U	0.106 U	0.224 U	0.143 U	14.8	0.116 U	0.196 U	--	--	14.8
B735-BH18	1–2	12/09/2024	0.0942 U	0.106 U	0.225 U	0.143 U	21.7	0.116 U	0.196 U	--	--	21.7
B735-BH18	2–3	12/09/2024	0.0046 U	0.00519 U	0.011 U	0.00698 U	0.49	0.00567 U	0.00958 U	--	--	<10
B735-BH18	5–6	12/09/2024	0.0234 U	0.0264 U	0.056 U	0.0356 U	2.70	0.0289 U	0.0488 U	--	--	<10

Table 1
Polychlorinated Biphenyl Concentrations in Soil
Buildings 722A, 722, and 735
Reynolds Metal Company St. Lawrence Reduction Plant
Massena, New York

			PCB-1016 (Aroclor 1016) mg/kg	PCB-1221 (Aroclor 1221) mg/kg	PCB-1232 (Aroclor 1232) mg/kg	PCB-1242 (Aroclor 1242) mg/kg	PCB-1248 (Aroclor 1248) mg/kg	PCB-1254 (Aroclor 1254) mg/kg	PCB-1260 (Aroclor 1260) mg/kg	PCB-1262 (Aroclor 1262) mg/kg	PCB-1268 (Aroclor 1268) mg/kg	Total Detected PCBs mg/kg
Site-Specific Soil Cleanup Objective			10	10	10	10	10	10	10	10	10	10
TSCA Hazardous Waste			≥50	≥50	≥50	≥50	≥50	≥50	≥50	≥50	≥50	≥50
Location	**Sample Depth (ft)**	**Date**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**
B735-BH19	0–1	12/18/2024	0.00444 U	0.005 U	0.0106 U	0.00673 U	0.09	0.00546 U	0.00923 U	--	--	<10
B735-BH19	1–2	12/18/2024	0.00428 U	0.00483 U	0.0102 U	0.0065 U	0.0226 J	0.00969 J	0.00891 U	--	--	ND
B735-BH19	2–3	12/18/2024	0.0045 U	0.00508 U	0.0107 U	0.00683 U	0.0076 U	0.00554 U	0.00936 U	--	--	ND
B735-BH19	3–4	02/05/2025	0.00434 U	0.0049 U	0.0104 U	0.0066 U	0.028 J	0.00675 J	0.00904 U	--	--	ND
B735-BH19	4–5	02/05/2025	0.0043 U	0.00485 U	0.0102 U	0.00652 U	0.06	0.00807 J	0.00894 U	--	--	<10

Notes:
-- = not analyzed
< = less than
ft = feet
J = concentration is estimated
mg/kg = milligram per kilogram
PCB = polychlorinated biphenyl
Total Detected PCBs = sum of all detections and reporting limit for non-detect results
TSCA = Toxic Substance Control Act
U = non-detect

Table 2
Quantity Take-Offs
Reynolds Metal Company St Lawrence Reduction Plant
Massena, New York

Building	Material	Unit	Quantity	
735	Excavation			
	Waste Category		**Less than 50 mg/kg PCB**	**Greater than 50 mg/kg PCB**
	Excavation area	SF	1,535	520
	Excavation volume (3 ft removal)	CY	171	58
	Concrete removal area	SF	3,015	3,790
	Concrete volume (12-inch thick slab)	CY	112	140
	Restoration			
	Backfill volume	CY	480	
722	Excavation			
	Waste Category		**Less than 50 mg/kg PCB**	**Greater than 50 mg/kg PCB**
	Excavation area	SF	1,870	435
	Excavation volume (1 ft removal)	CY	69	16
	Concrete removal area	SF	-	5,215
	Concrete volume (12-inch thick slab)	CY	-	193
	Restoration			
	Non-woven geotextile	SF	3,740	
	40-mil HDPE Liner	SF	1,870	
	Backfill volume	CY	279	

Notes:

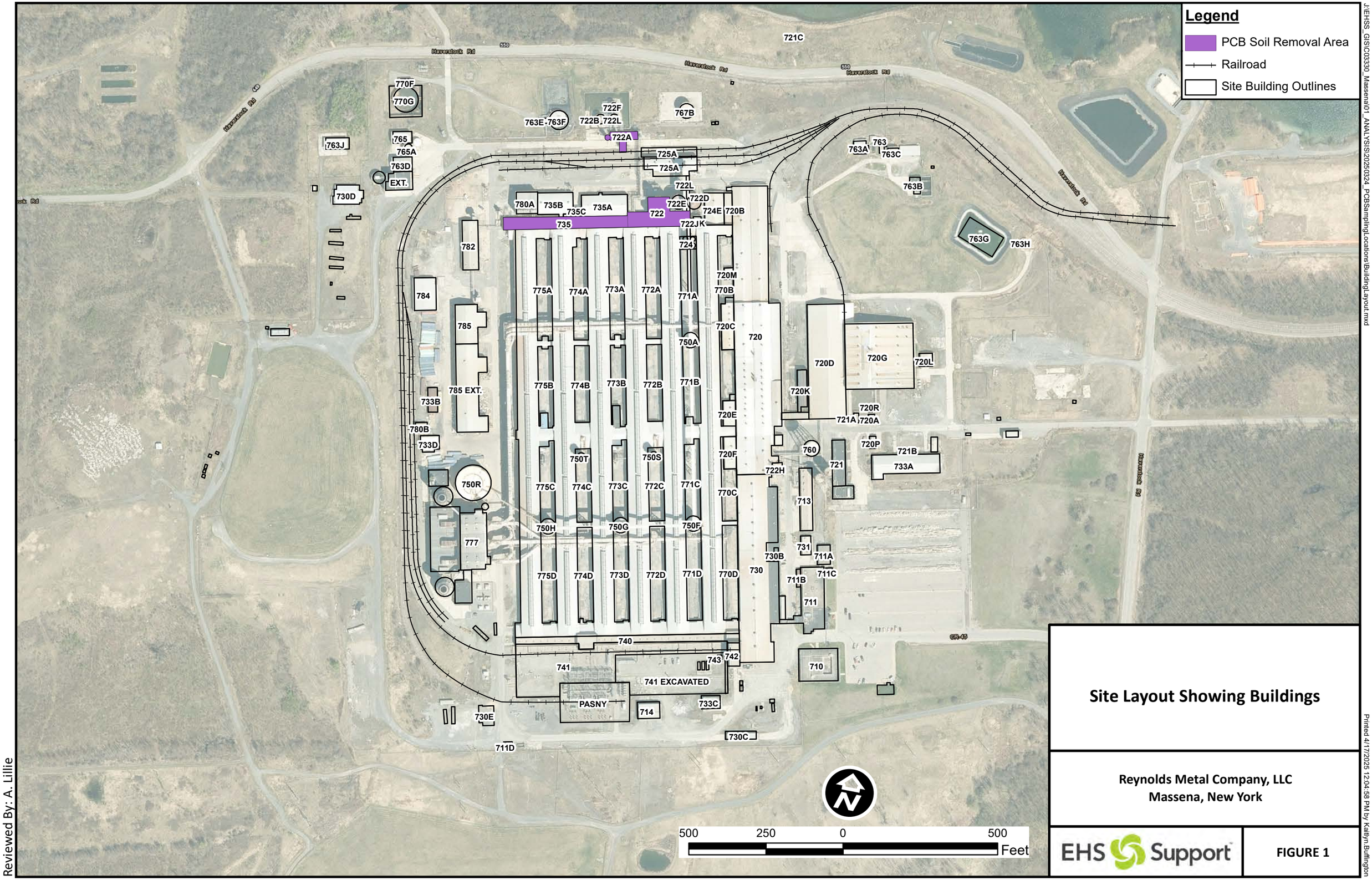
CY = cubic yard

HDPE = high-density polyethylene

SF = square feet

1. Building 722A quantities are not estimated.

Figures



Reviewed By: A. Lillie

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Site Layout Showing Buildings

Reynolds Metal Company, LLC
Massena, New York

EHS Support

FIGURE 1

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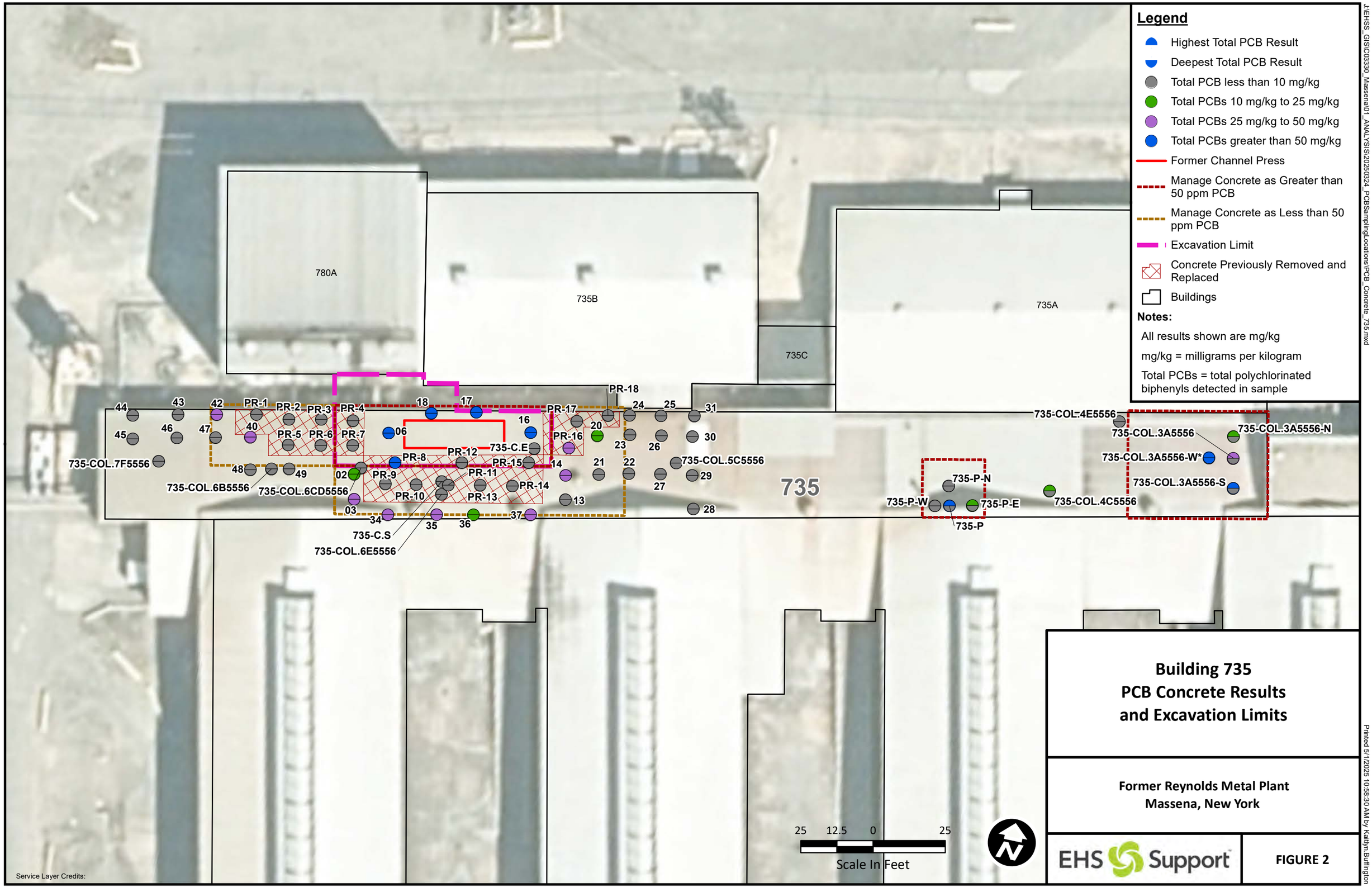

Legend

- Highest Total PCB Result
- Deepest Total PCB Result
- Total PCB less than 10 mg/kg
- Total PCBs 10 mg/kg to 25 mg/kg
- Total PCBs 25 mg/kg to 50 mg/kg
- Total PCBs greater than 50 mg/kg
- Former Channel Press
- Manage Concrete as Greater than 50 ppm PCB
- Manage Concrete as Less than 50 ppm PCB
- Excavation Limit
- Concrete Previously Removed and Replaced
- Buildings

Notes:

All results shown are mg/kg

mg/kg = milligrams per kilogram

Total PCBs = total polychlorinated biphenyls detected in sample

25 12.5 0 25

Scale In Feet

Service Layer Credits:

Building 735
PCB Concrete Results and Excavation Limits

Former Reynolds Metal Plant
Massena, New York

EHS Support

FIGURE 2

J:\EHS_GIS\CI0330_Massena\01_ANALYSIS\20250324_PCBSamplingLocations\PCB_Concrete_735.mxd

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B735-BH5

Total PCBs (0-1 ft)	211.2
Total PCBs (1-2 ft)	152.4
Total PCBs (2-3 ft)	25.6
Total PCBs (3-4 ft)	3.48
Total PCBs (4-5 ft)	0.481

B735-BH3

Total PCBs (0-1 ft)	17.31
Total PCBs (1-2 ft)	22.83
Total PCBs (2-3 ft)	23.2
Total PCBs (3-4 ft)	6.36
Total PCBs (4-5 ft)	0.3674

B735-BH18

Total PCBs (0-1 ft)	14.8
Total PCBs (1-2 ft)	21.7
Total PCBs (2-3 ft)	0.49
Total PCBs (5-6 ft)	2.7

B735-BH2

Total PCBs (0-1 ft)	11.4
Total PCBs (1-2 ft)	413
Total PCBs (2-3 ft)	74.5
Total PCBs (3-4 ft)	1.87
Total PCBs (4-5 ft)	0.238

B735-BH7
Sampled Depth Interval: 0-3 FT

B735-BH9
Sampled Depth Interval: 0-3 FT

B735-BH11
Sampled Depth Interval: 0-3 FT

B735-BH13
Sampled Depth Interval: 0-3 FT

B735-BH16
Sampled Depth Interval: 0-3 FT

B735-BH1
Sampled Depth Interval: 0-3 FT

B735-BH14
Sampled Depth Interval: 0-3 FT

735-C.E.
Sampled Depth Interval: 0.66-1.66 FT

B735-BH15
Sampled Depth Interval: 0-3 FT

735-P
Sampled Depth Interval: 1.08-2.08 FT

B735-BH12
Sampled Depth Interval: 0-3 FT

B735-BH19
Sampled Depth Interval: 0-5 FT

B735-BH10
Sampled Depth Interval: 0-3 FT

B735-BH4
Sampled Depth Interval: 0-3 FT

B735-BH8
Sampled Depth Interval: 0-3 FT

B735-BH6
Sampled Depth Interval: 0-3 FT

735-C.S.
Sampled Depth Interval: 1-2 FT

780A
735B
735A
735C
735
782
774A
773A
775A

Legend

- Total PCB less than 10 mg/kg
- Total PCBs 10 mg/kg to 25 mg/kg
- Total PCBs 25 mg/kg to 50 mg/kg
- Total PCBs greater than 50 mg/kg
- Manage Soil as Greater than 50 ppm PCB
- Excavation Limit
- Former Channel Press
- Site Building Outlines

Note:

All results shown are mg/kg

mg/kg = milligrams per kilogram

Total PCBs = total polychlorinated biphenyls detected in sample

Sample Depth Interval is top and bottom of sampled interval (successive 0.5 or 1-foot intervals sampled) for laboratory analysis

Total PCB results shown for locations where a criteria exceedence was identified. Concentration is total PCBs detected above reporting limits

Data from sampling events completed between October 2022 and March 2025

50 25 0 50
Feet

Building 735 PCB Soil Results and Excavation Limits

Reynolds Metal Company, LLC
Massena, New York

EHS Support

FIGURE 3

Reviewed By: A. Lillie

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LEGEND

- LIMIT OF 3' SOIL EXCAVATION
- MANAGE SOIL AS GREATER THAN 50 PPM PCB
- MANAGE CONCRETE AS LESS THAN 50 PPM PCB
- MANAGE CONCRETE AS GREATER THAN 50 PPM PCB

LIMIT OF 3' SOIL EXCAVATION
3' CUT STARTS AT TOP OF SOIL BELOW SLAB

LIMIT OF SOIL WITH TOTAL PCBS GREATER THAN 50 MG/KG

FOLLOW EDGE OF ADJACENT BUILDING FOUNDATION TO NORTH

COLUMN 6E, 56

EXCAVATION STOPS AT EDGE OF BUILDING 735

41.8'

COLUMN 6C, 56

21.0'

COLUMN 5A, 56

24.9'

20.6'

AREA PREVIOUSLY COVERED IN STEEL SHEETING

CHANNEL PRESS

75.0'

LIMIT OF CONCRETE REMOVAL FOR CONCRETE WITH TOTAL PCBS LESS THAN 50 MG/KG

EHS Support

5 0 10

GRAPHIC SCALE IN FEET

N

REYNOLD METALS COMPANY MASSENA EAST PLAN MASSENA, NY	BUILDING 735 CONCRETE REMOVAL AND SOIL EXCAVATION AREA
DATE: 04/09/25	DRAWN BY: AC

FIGURE 4A

LEGEND

- LIMIT OF 3' SOIL EXCAVATION
- MANAGE SOIL AS GREATER THAN 50 PPM PCB
- MANAGE CONCRETE AS LESS THAN 50 PPM PCB
- MANAGE CONCRETE AS GREATER THAN 50 PPM PCB

LIMIT OF CONCRETE WITH TOTAL PCBS GREATER THAN 50 MG/KG

EHS Support

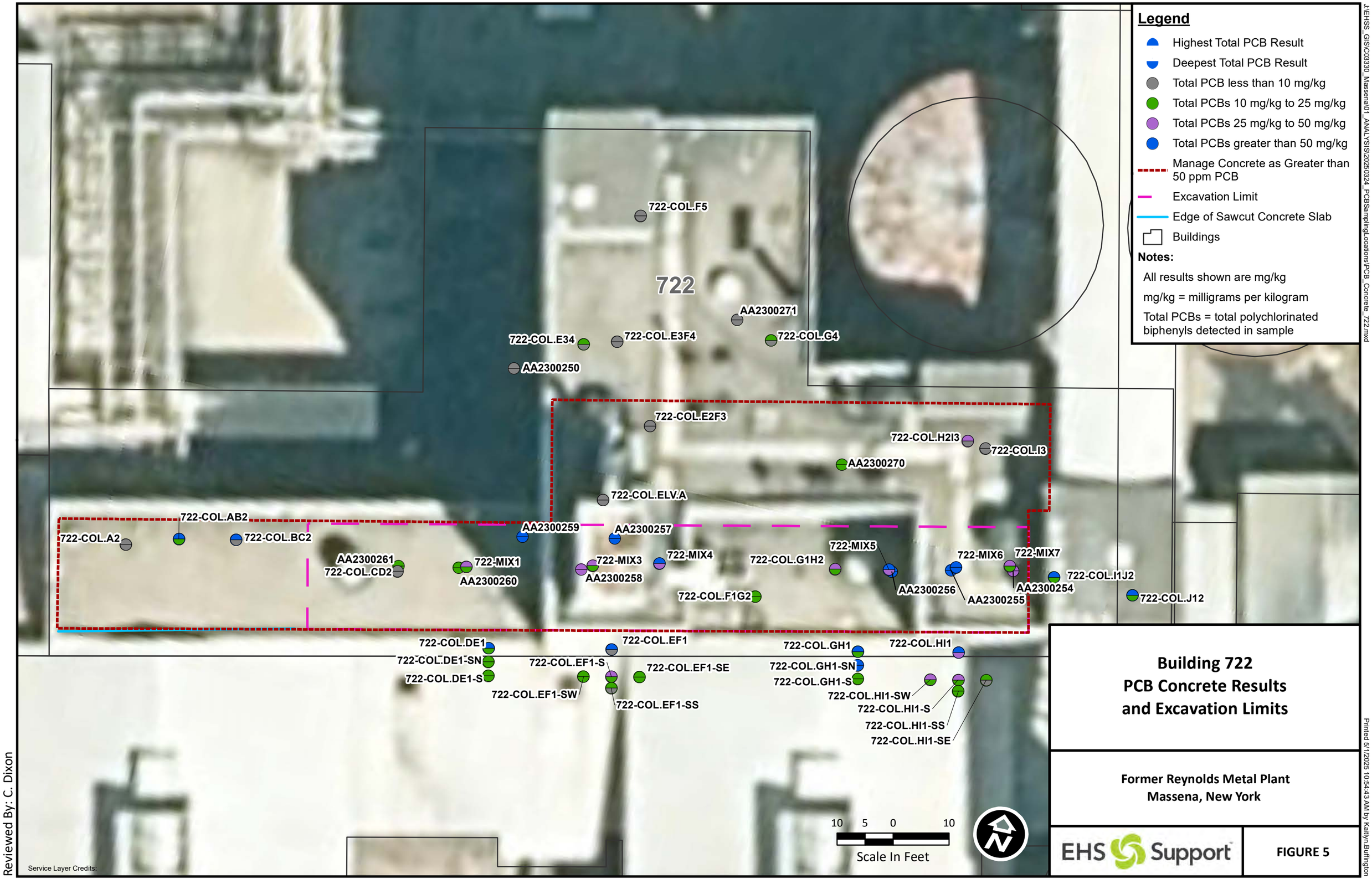
5 0 10

GRAPHIC SCALE IN FEET

N

REYNOLD METALS COMPANY MASSENA EAST PLAN MASSENA, NY		BUILDING 735 CONCRETE REMOVAL AREA	
	DATE: 04/09/25	DRAWN BY: AC	**FIGURE 4B**

File: C:\Users\Abby.Chin\EHS Support LLC\EHS Support Document Center - Alcoa\Massena East\CADD\20_SHEETS\PCB\2025 PCB Remediation Limits.dwg Layout: B735-B User: Abby.Chin Plotted: May 01, 2025 - 11:20



Legend

- Highest Total PCB Result
- Deepest Total PCB Result
- Total PCB less than 10 mg/kg
- Total PCBs 10 mg/kg to 25 mg/kg
- Total PCBs 25 mg/kg to 50 mg/kg
- Total PCBs greater than 50 mg/kg
- Manage Concrete as Greater than 50 ppm PCB
- Excavation Limit
- Edge of Sawcut Concrete Slab
- Buildings

Notes:

All results shown are mg/kg

mg/kg = milligrams per kilogram

Total PCBs = total polychlorinated biphenyls detected in sample

Building 722
PCB Concrete Results and Excavation Limits

Former Reynolds Metal Plant
Massena, New York

EHS Support

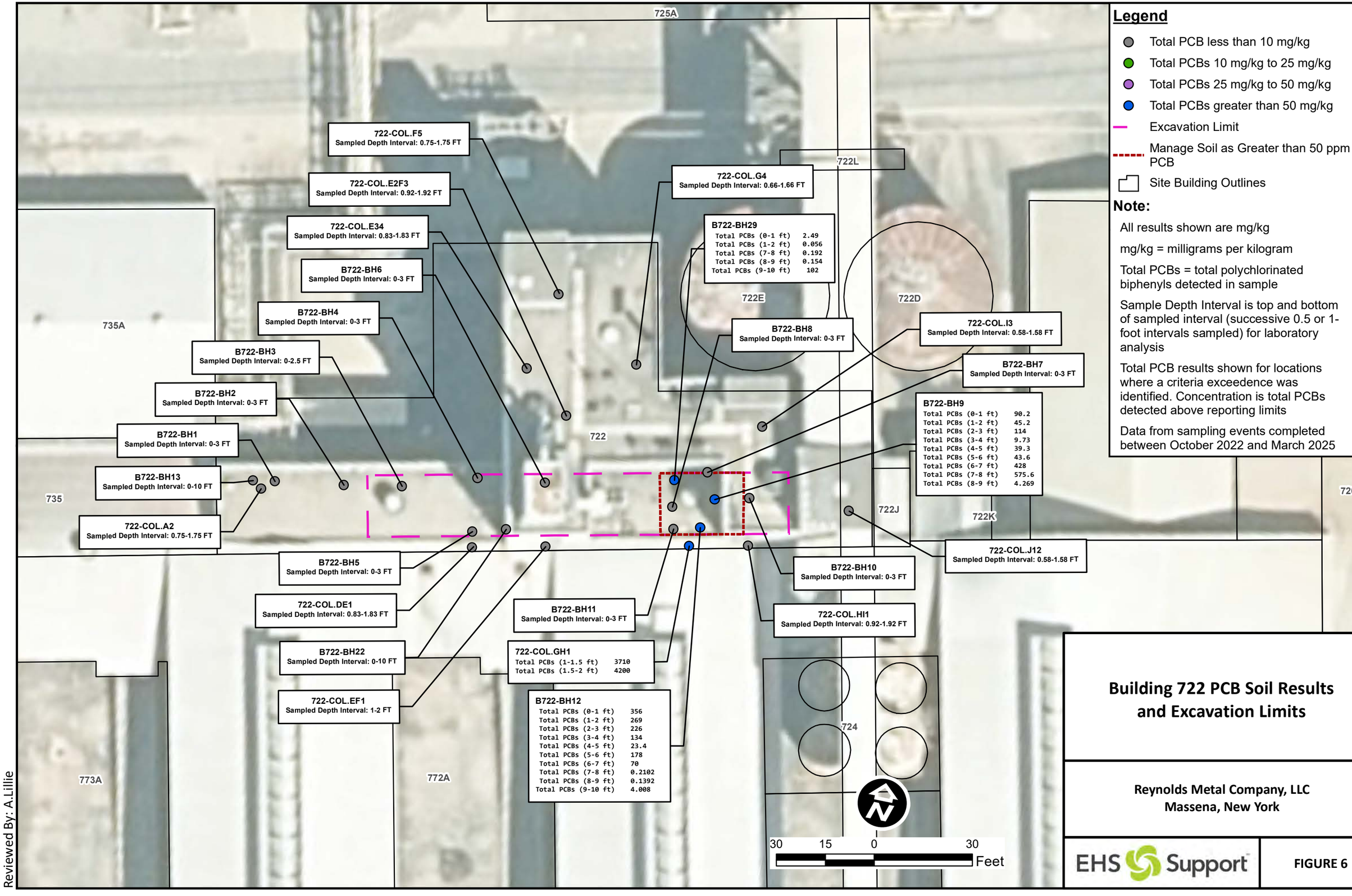
FIGURE 5

Reviewed By: C. Dixon

Service Layer Credits:

J:\EHSS_GIS\C03330_Massena\01_ANALYSIS\20250324_PCBSamplingLocations\PCB_Concrete_722.mxd

Printed 5/1/2025 10:54:43 AM by Kaitlyn.Buffington



Legend

- Total PCB less than 10 mg/kg
- Total PCBs 10 mg/kg to 25 mg/kg
- Total PCBs 25 mg/kg to 50 mg/kg
- Total PCBs greater than 50 mg/kg
- Excavation Limit
- Manage Soil as Greater than 50 ppm PCB
- Site Building Outlines

Note:

All results shown are mg/kg

mg/kg = milligrams per kilogram

Total PCBs = total polychlorinated biphenyls detected in sample

Sample Depth Interval is top and bottom of sampled interval (successive 0.5 or 1-foot intervals sampled) for laboratory analysis

Total PCB results shown for locations where a criteria exceedence was identified. Concentration is total PCBs detected above reporting limits

Data from sampling events completed between October 2022 and March 2025

Building 722 PCB Soil Results and Excavation Limits

Reynolds Metal Company, LLC
Massena, New York

EHS Support

FIGURE 6

Reviewed By: A.Lillie

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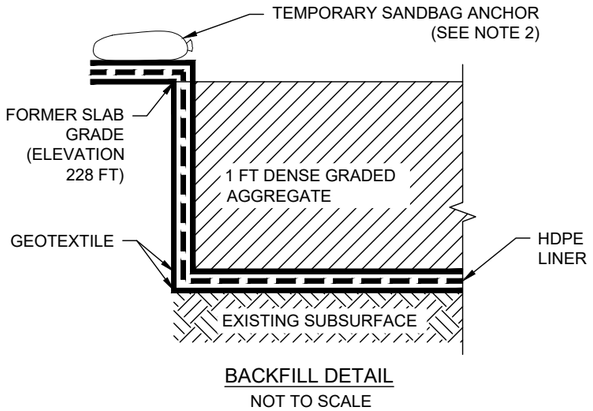
J:\EHSS_GIS\CO3330_Massena\01_ANALYSIS\20250324_PCBSamplingLocations\PCBLocations_722.mxd



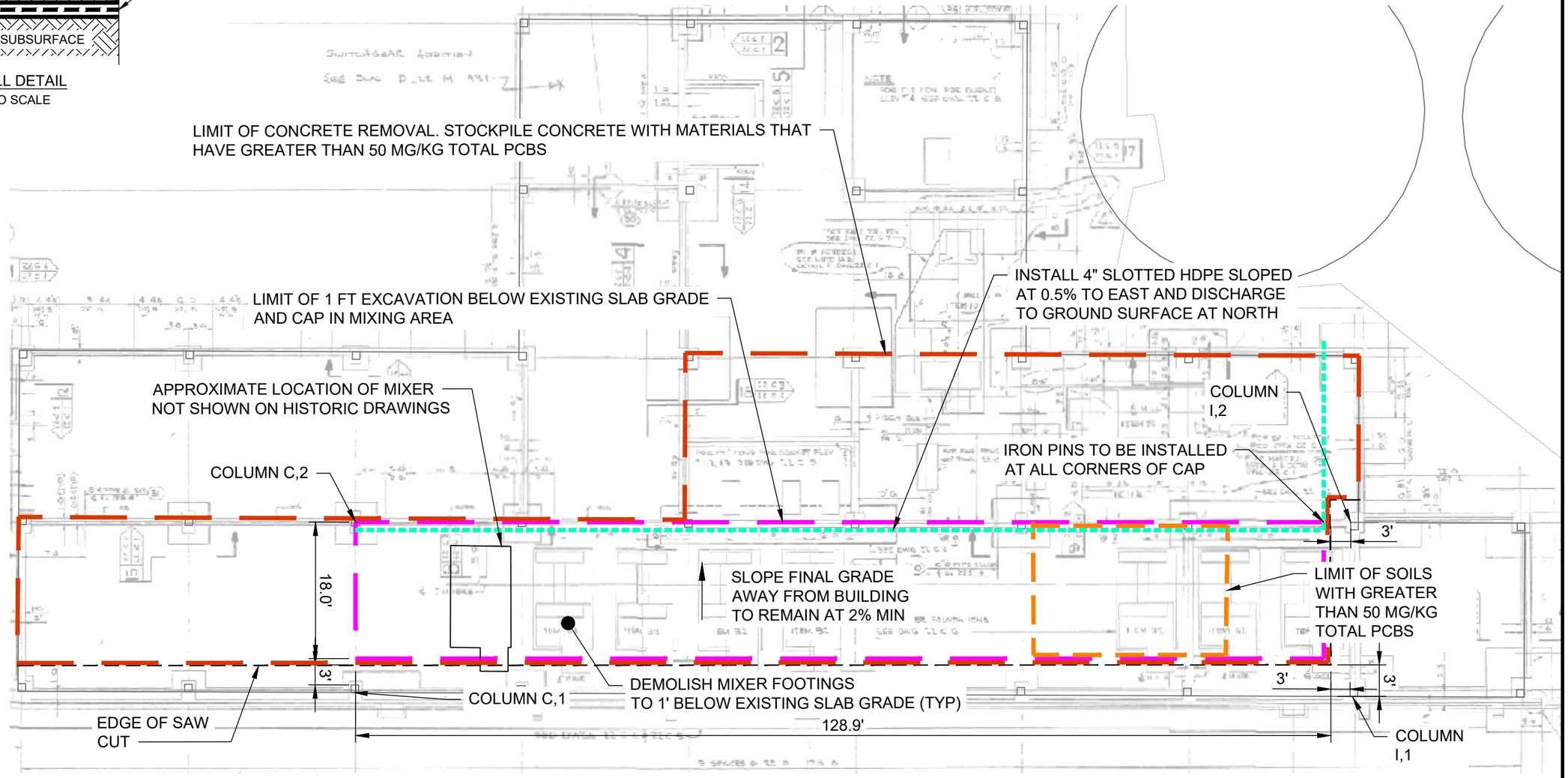
BACKFILL DETAIL
NOT TO SCALE

NOTES

1. IMPORTED FILL SHALL MEET THE REQUIREMENTS OF 6 NYCRR 375-6.7(D) FOR COMMERCIAL OR INDUSTRIAL USE.
2. ANCHOR LINER WITH SAND BAGS PRIOR TO PLACING BACKFILL. CUT LINER AT GRADE AND REMOVE SAND BAGS AFTER PLACEMENT OF BACKFILL IS COMPLETE.

LEGEND

- LIMIT OF 1' EXCAVATION AND CAP
- 4" SLOTTED HDPE
- MANAGE SOIL AS GREATER THAN 50 PPM PCB
- MANAGE CONCRETE AS GREATER THAN 50 PPM PCB

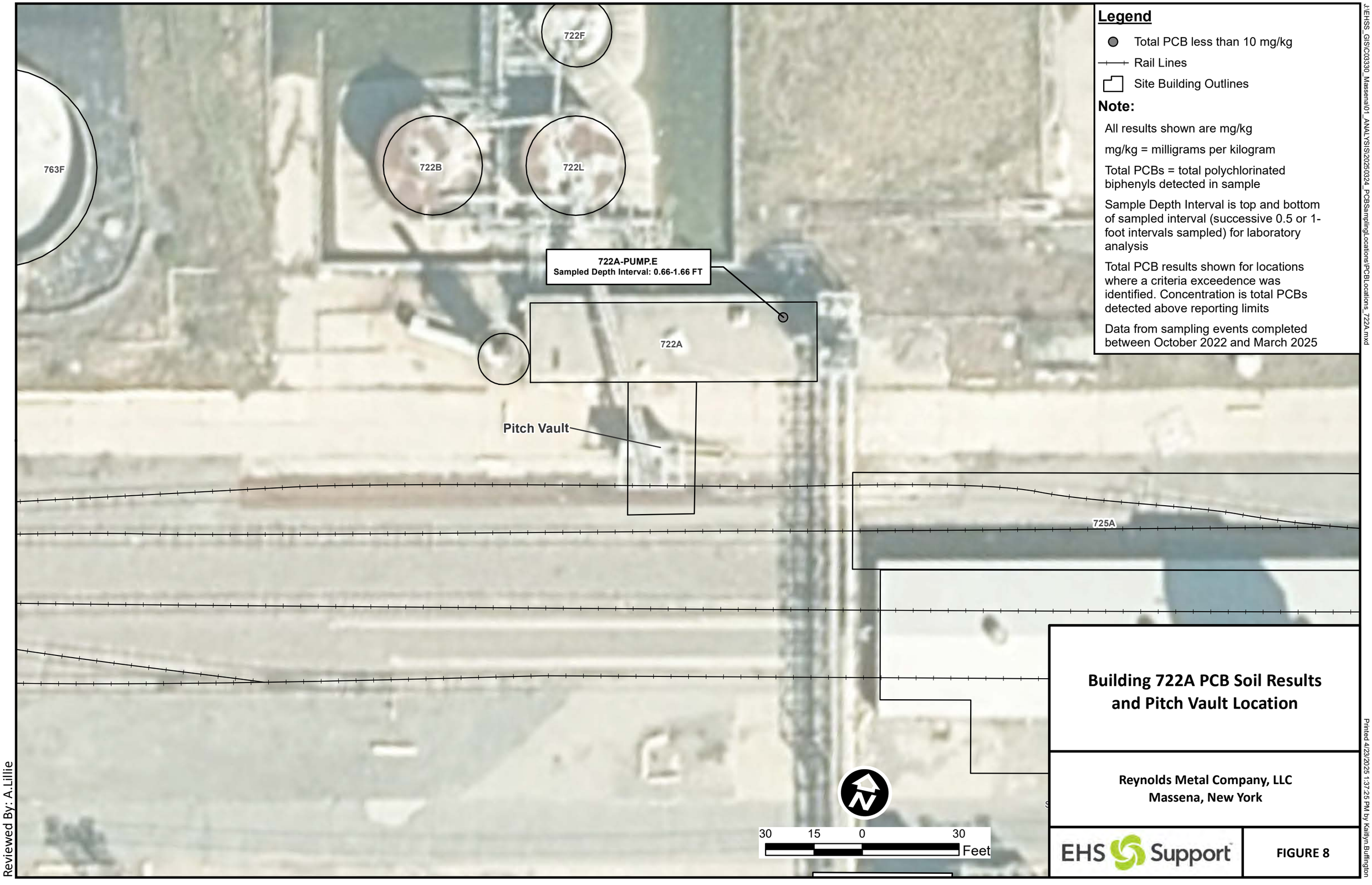


EHS Support

7.5 0 15
GRAPHIC SCALE IN FEET

REYNOLD METALS COMPANY MASSENA EAST PLAN MASSENA, NY	BUILDING 722 CONCRETE REMOVAL AND CAP AREA
DATE: 04/09/25	DRAWN BY: AC
	FIGURE 7

File: C:\Users\Abby.Chin\EHS Support LLC\EHS Support Document Center - Alcoa\Massena East\CADD\20_SHEETS\PCB\2025 PCB Remediation Limits.dwg Layout: B722 User: Abby.Chin Plotted: May 02, 2025 - 12:53pm



Legend

- Total PCB less than 10 mg/kg
- Rail Lines
- Site Building Outlines

Note:

All results shown are mg/kg

mg/kg = milligrams per kilogram

Total PCBs = total polychlorinated biphenyls detected in sample

Sample Depth Interval is top and bottom of sampled interval (successive 0.5 or 1-foot intervals sampled) for laboratory analysis

Total PCB results shown for locations where a criteria exceedence was identified. Concentration is total PCBs detected above reporting limits

Data from sampling events completed between October 2022 and March 2025

Building 722A PCB Soil Results and Pitch Vault Location

Reynolds Metal Company, LLC
Massena, New York

EHS Support

FIGURE 8

Reviewed By: A.Lillie

J:\EHSS_GIS\CI03330_Massena\01_ANALYSIS\20250324_PCBSamplingLocations\PCBLocations_722A.mxd

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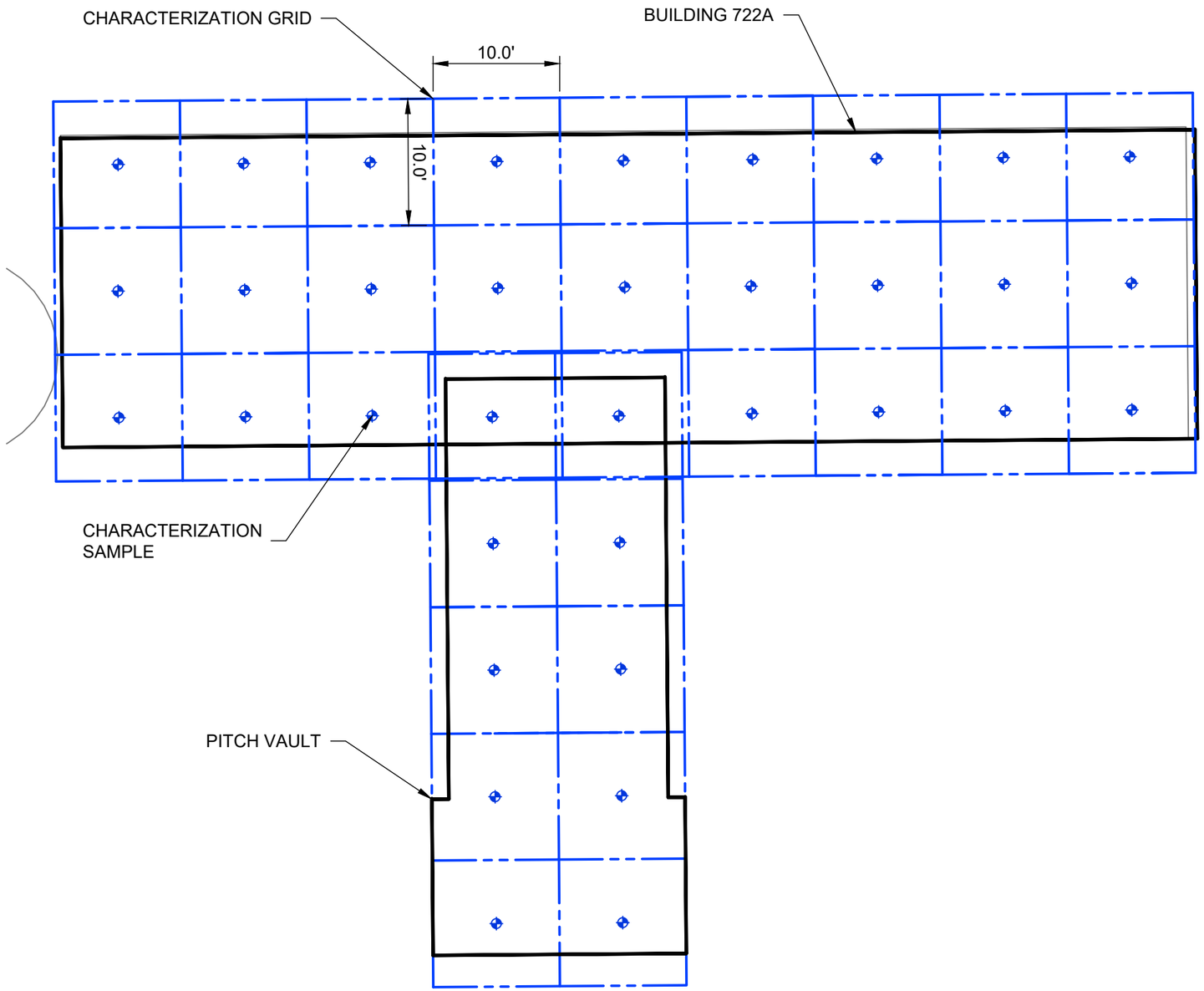


LEGEND

- BUILDING
- CHARACTERIZATION SAMPLING GRID
- PROPOSED CHARACTERIZATION SAMPLE LOCATION

EHS Support

5 0 10

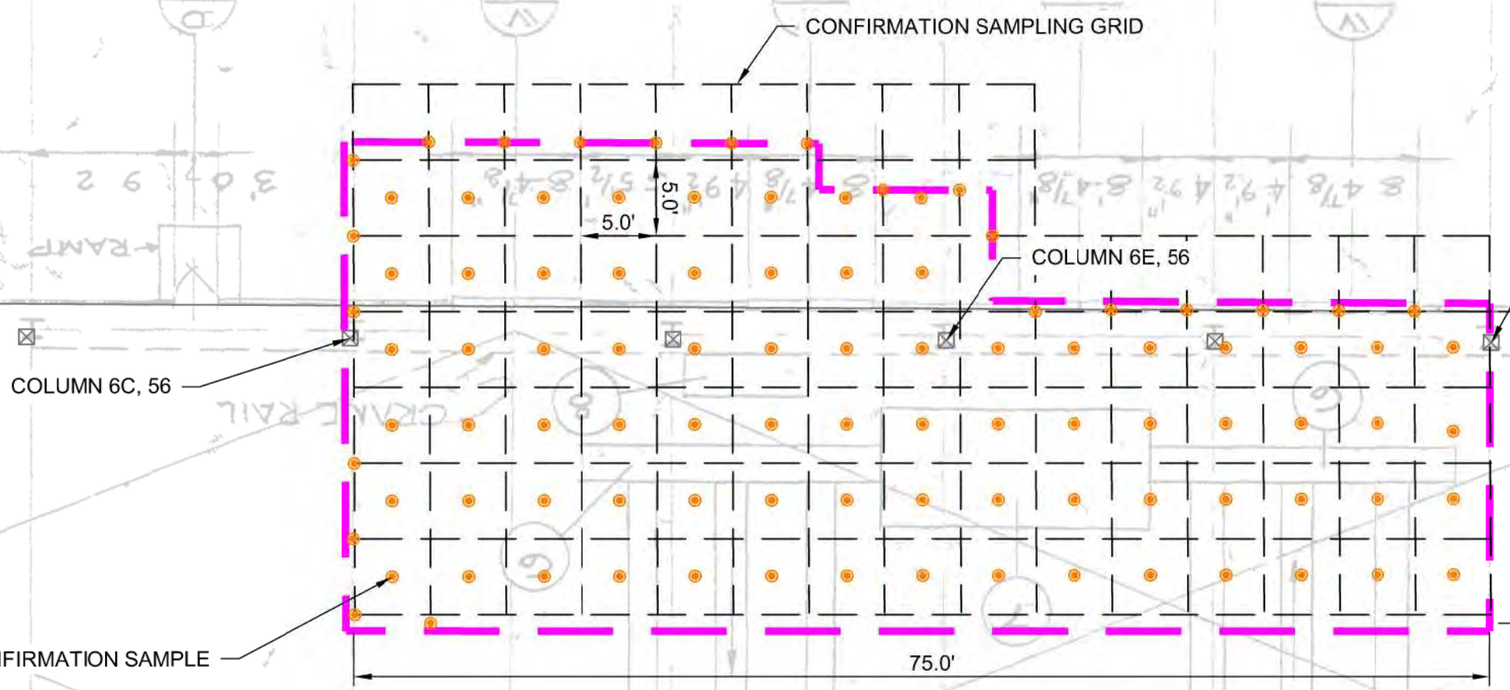
GRAPHIC SCALE IN FEET

N

REYNOLDS METALS COMPANY MASSENA EAST PLAN MASSENA, NY		BUILDING 722A CONCEPTUAL PCB SAMPLING CHARACTERIZATION GRID LAYOUT	
	DATE: 04/25/2025	DRAWN BY: AC	**FIGURE 9**

LEGEND

- LIMIT OF EXCAVATION
- CONFIRMATION SAMPLING GRID
- EXISTING COLUMN
- CONFIRMATION SAMPLE LOCATION



EHS Support

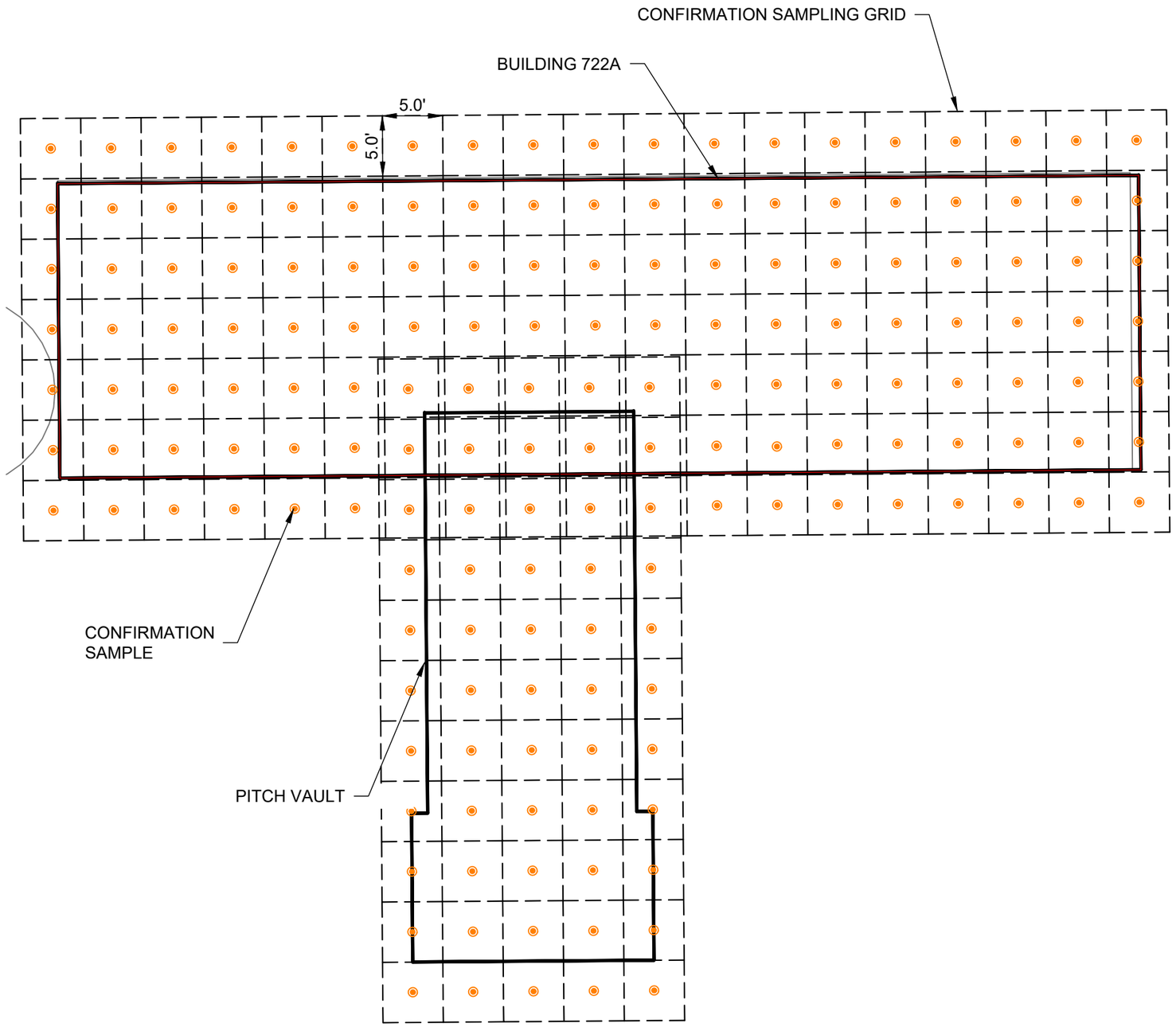
5 0 10

GRAPHIC SCALE IN FEET

N

REYNOLD METALS COMPANY MASSENA EAST PLAN MASSENA, NY	BUILDING 735 CONFIRMATION SAMPLING PLAN
DATE: 04/23/25	DRAWN BY: AC

FIGURE 10



LEGEND

- BUILDING
- CONFIRMATION SAMPLING GRID
- CONFIRMATION SAMPLE LOCATION

EHS Support

5 0 10

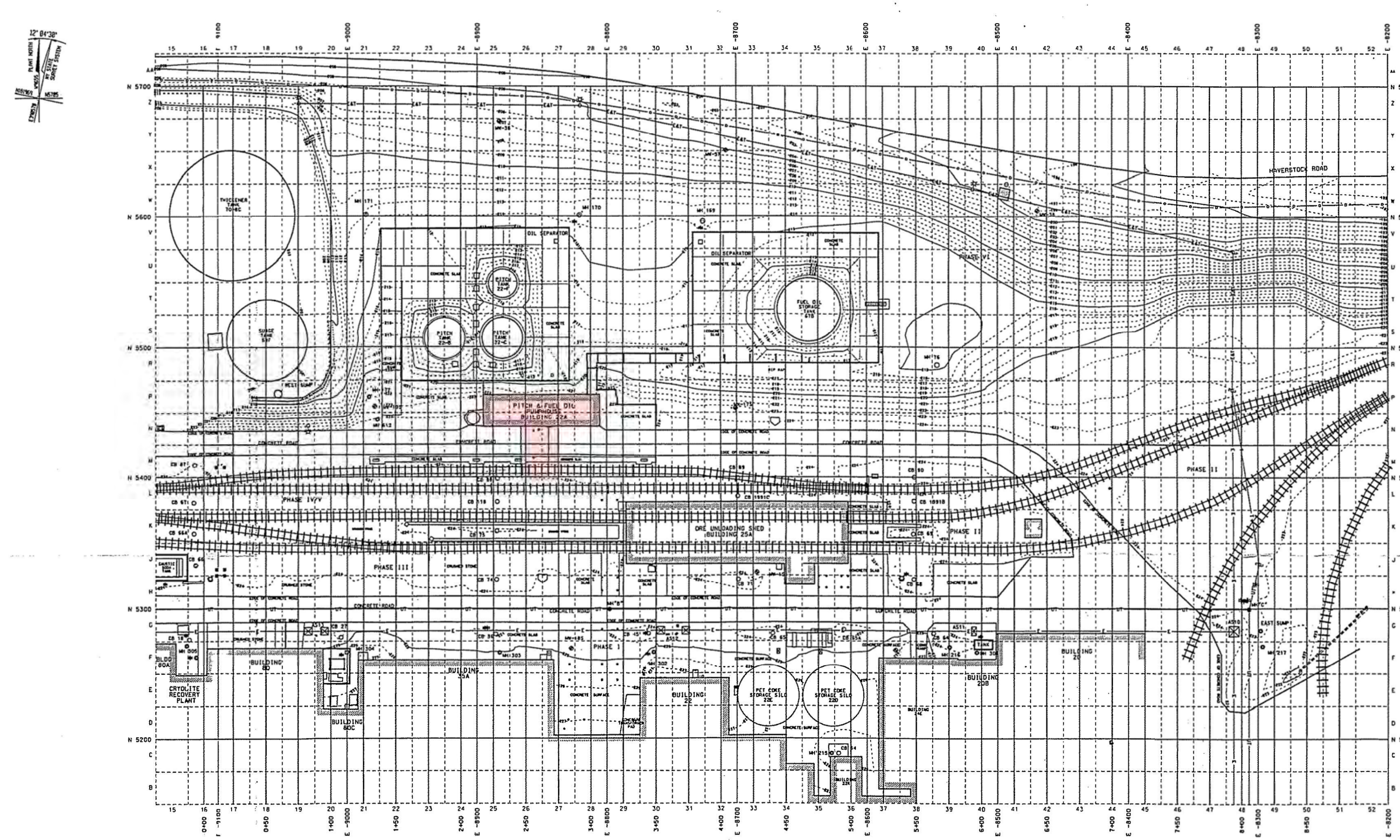
GRAPHIC SCALE IN FEET

N

REYNOLDS METALS COMPANY MASSENA EAST PLANT MASSENA, NY		BUILDING 722A CONCEPTUAL CONFIRMATION SAMPLING PLAN	
	DATE: 04/25/2025	DRAWN BY: AC	**FIGURE 11**

Appendix A Historical Information

Appendix A.1 Building 722A Historical Documents



LEGEND:

0+00 ———	SECTION LOCATION LINE
E -9100 ———	REYNOLDS COORDINATE GRID
- - - - - - -	SAMPLING GRID
———225———	INDEX CONTOUR LINE
- - - -224- - - -	INTERMEDIATE CONTOUR LINE
	FIRE HYDRANT
	WATER VALVE
MH 305	MANHOLE
CB 18	CATCH BASIN
RCP	REINFORCED CONCRETE PIPE
HDPE	HIGH DENSITY POLYETHYLENE
PVC	POLYVINYL CHLORIDE
	PIPE RACK SUPPORT
	LIGHT POLE
	POWER POLE
———UT———	UNDERGROUND TELEPHONE
———T———	OVERHEAD TELEPHONE
———E———	OVERHEAD ELECTRIC
———EAT———	OVERHEAD ELECTRIC AND TELEPHONE

NOTES:

1.) REFER TO DRAWING ATL-NYD-01 FOR ORIGINAL GROUND SURFACE AND GENERAL NOTES.

2.) REFER TO DRAWING ALT-NYD-02 FOR PLAN VIEW OF THE EXCAVATED GROUND SURFACE.

3.) REFER TO DRAWINGS ATL-NYD-03 AND ATL-NYD-04 FOR PLAN VIEW OF THE RESTORED GROUND SURFACE.

Graphic Scale

(In Feet)
1 inch = 30 ft.

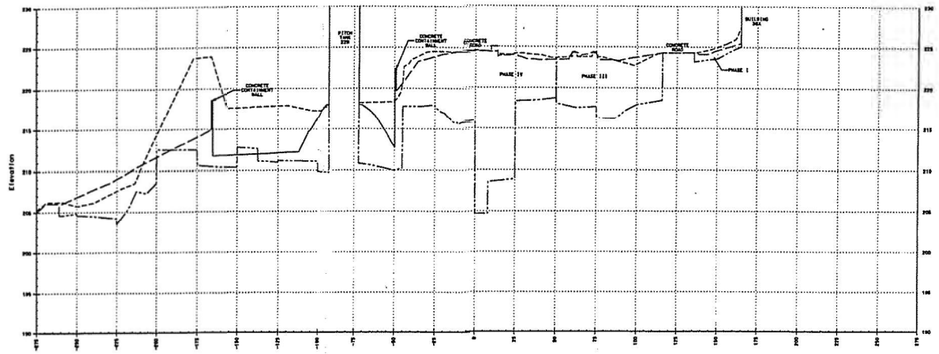
REV	DESCRIPTION	DATE

DRAWN: DHO
CHECKED: ——
SCALE: 1"=30'
DATE: 4/9/97
DRAWING NUMBER: ATL-NYD-X1
PROJECT NUMBER: CK2060-4-94

NORTH YARD AREA
CROSS-SECTION LOCATION MAP
SHEET 1 OF 7

ST. LAWRENCE REDUCTION PLANT
REYNOLDS METALS COMPANY
MASSENA, NEW YORK

SPENCER F. THEW, P.E. L.S.
PROFESSIONAL ENGINEER - LICENSED LAND SURVEYOR
MALONE, N.Y. CANTON, N.Y. CICERO, N.Y.



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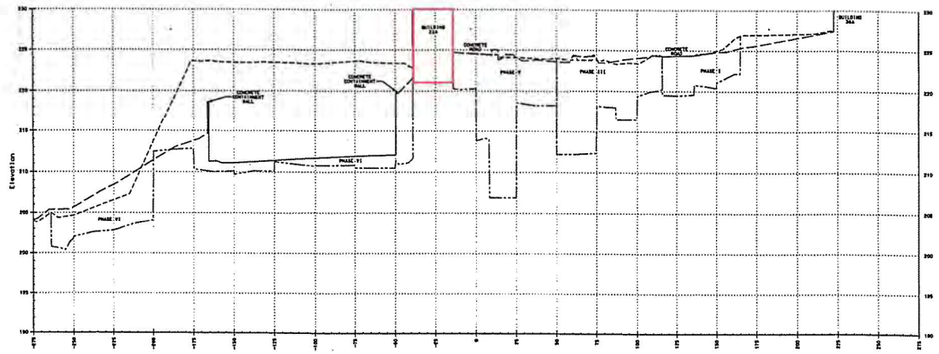

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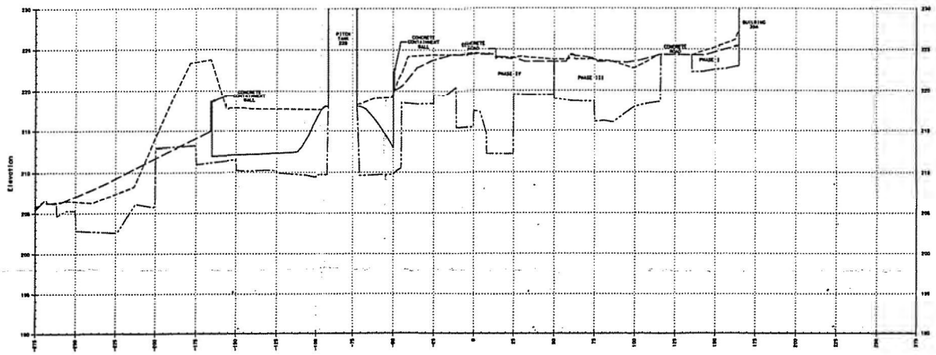
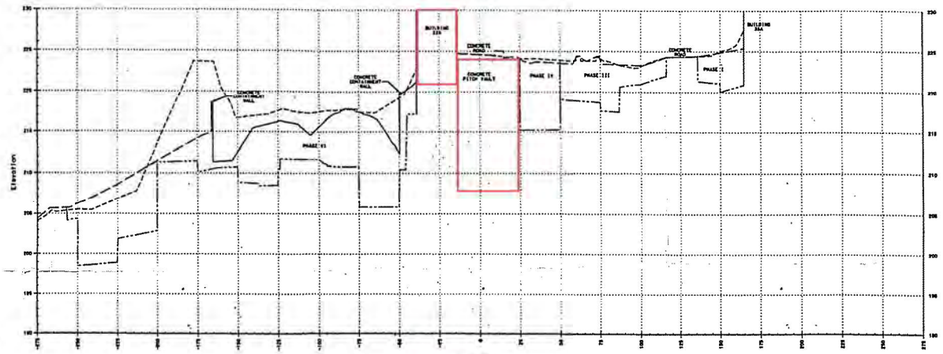


1+75



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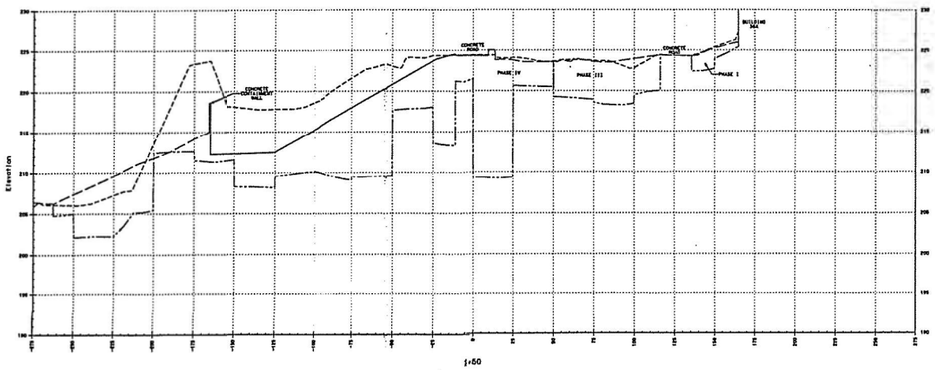

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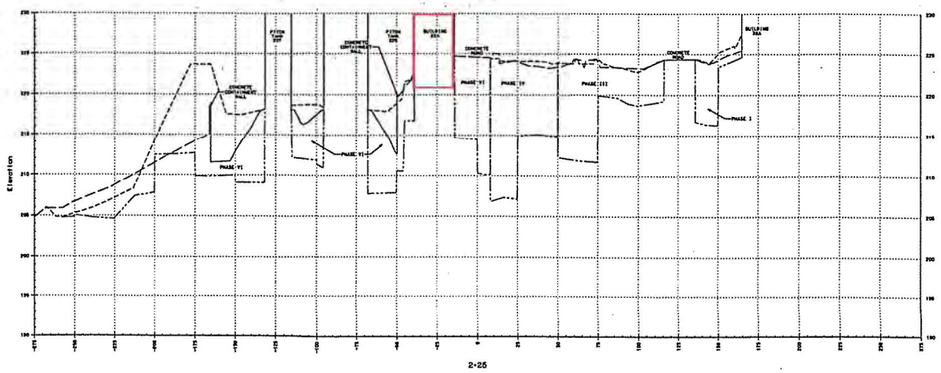


2+25

LEGEND:

- ORIGINAL GROUND SURFACE (6/14/95)
- RESTORATION SURFACE (11/4/96)
- FINAL EXCAVATION SURFACE (9/4/96)
- CONCRETE SLAB OR WALL (11/4/96)

NOTES:

1.) REFER TO DRAWING ATL-NYD-01 FOR ORIGINAL GROUND SURFACE AND GENERAL NOTES.

2.) REFER TO DRAWING ALT-NYD-02 FOR PLAN VIEW OF THE EXCAVATED GROUND SURFACE.

3.) REFER TO DRAWINGS ATL-NYD-03 AND ATL-NYD-04 FOR PLAN VIEW OF THE RESTORED GROUND SURFACE.

4.) REFER TO DRAWING ATL-NYD-01 FOR CROSS-SECTION LOCATIONS.

HORIZONTAL SCALE: 1"=20'
VERTICAL SCALE: 1"=8'

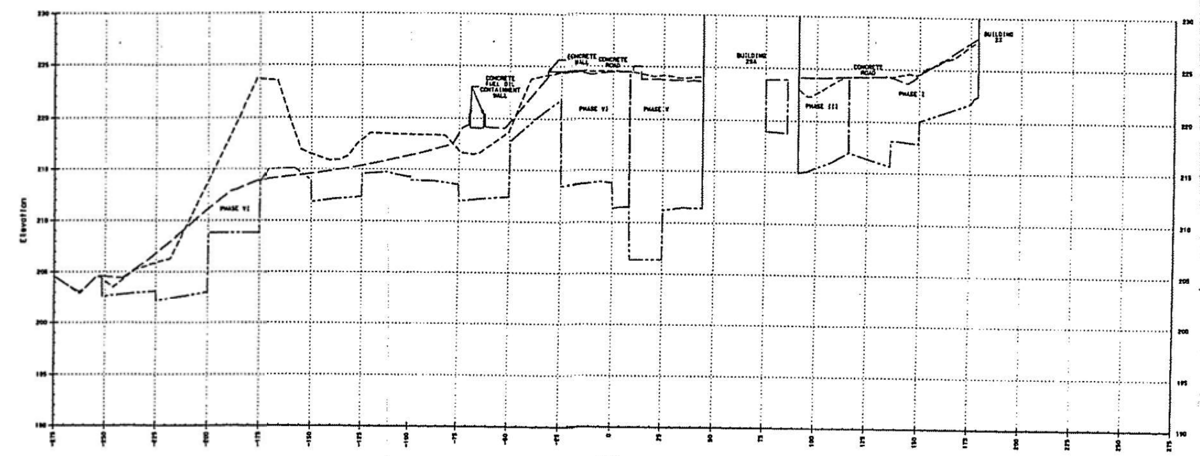
REV	DESCRIPTION	DATE

DRAWN: DHD
ENGINEER: —
SCALE: AS NOTED
DIGITAL SOURCE: ATL-NYD-X3
DATE: 4/9/97
PROJECT NUMBER: CK2060-4-94

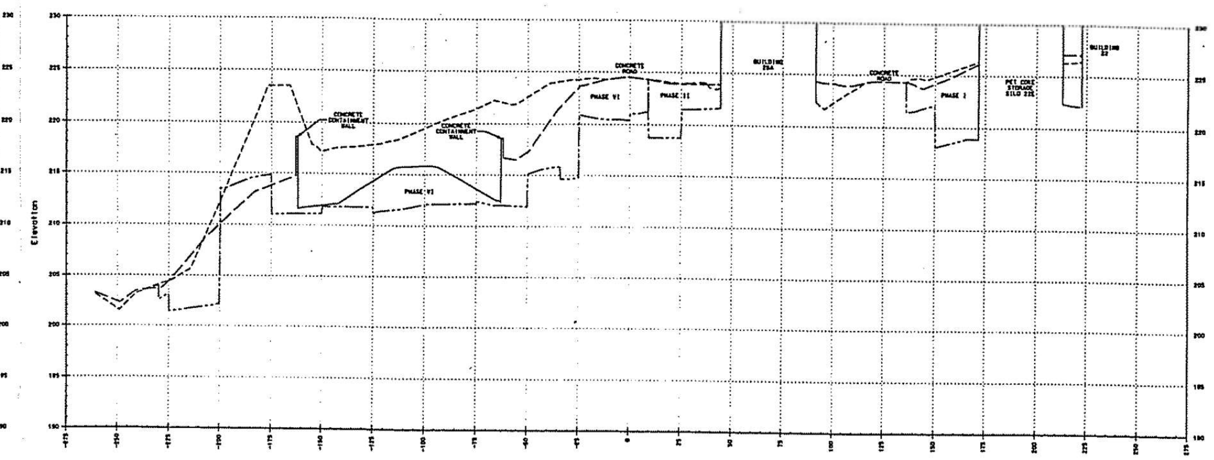
NORTH YARD AREA CROSS-SECTIONS SHEET 3 OF 7

ST. LAWRENCE REDUCTION PLANT
REYNOLDS METALS COMPANY
MASSENA, NEW YORK

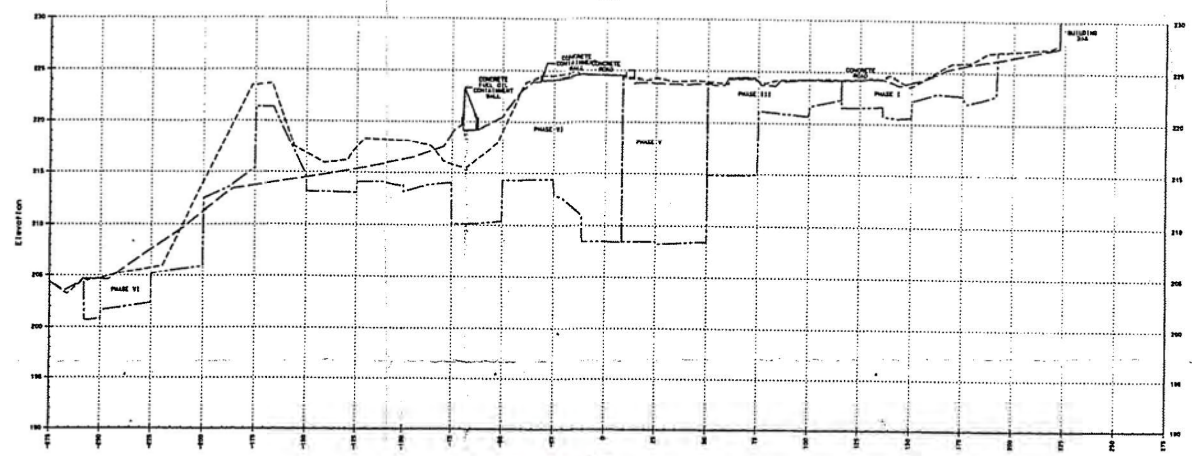
SPENCER F. THEW, P.E. L.S.
PROFESSIONAL ENGINEER + LICENSED LAND SURVEYOR
MASSENA, N.Y. CANTON, N.Y. CLEVELAND, N.Y.



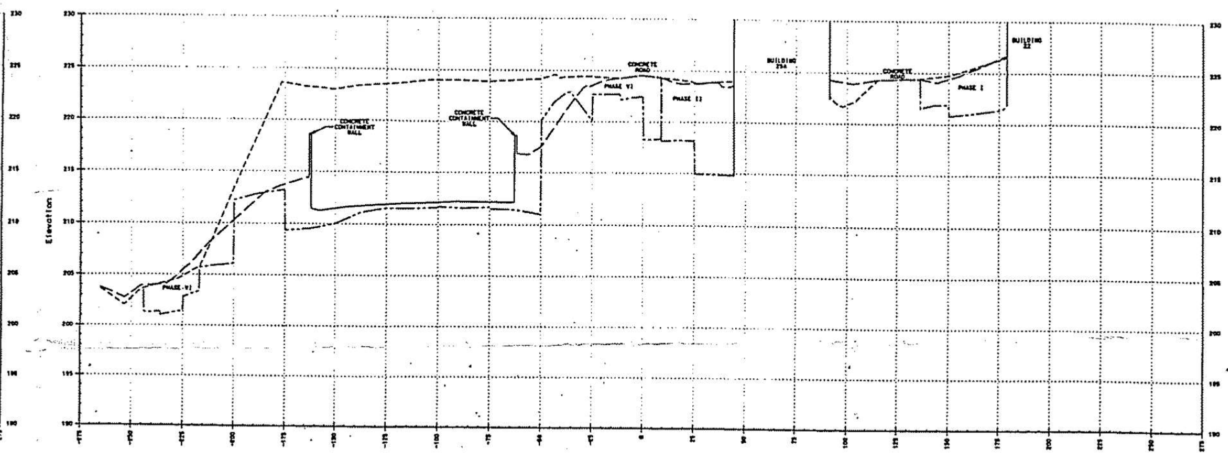
3+50



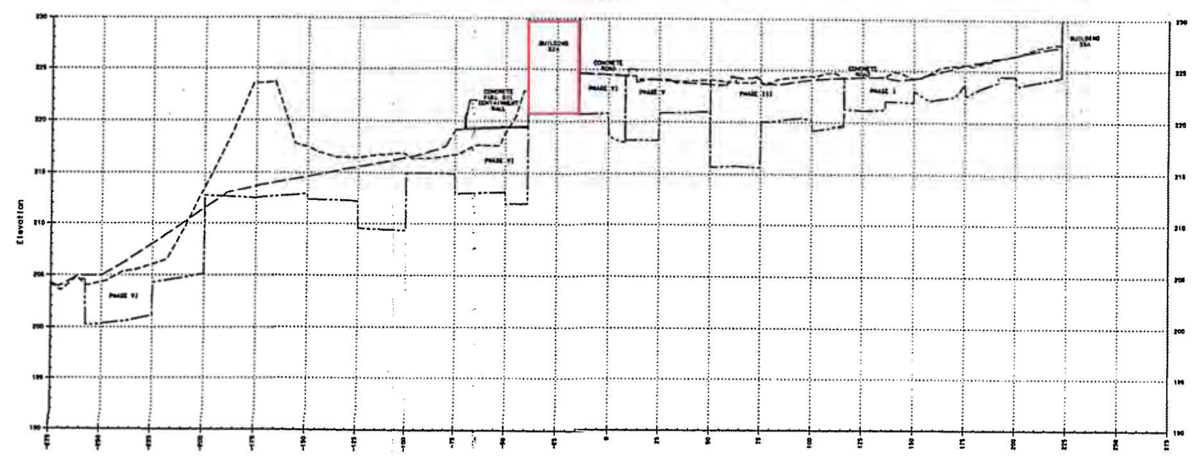
4+25



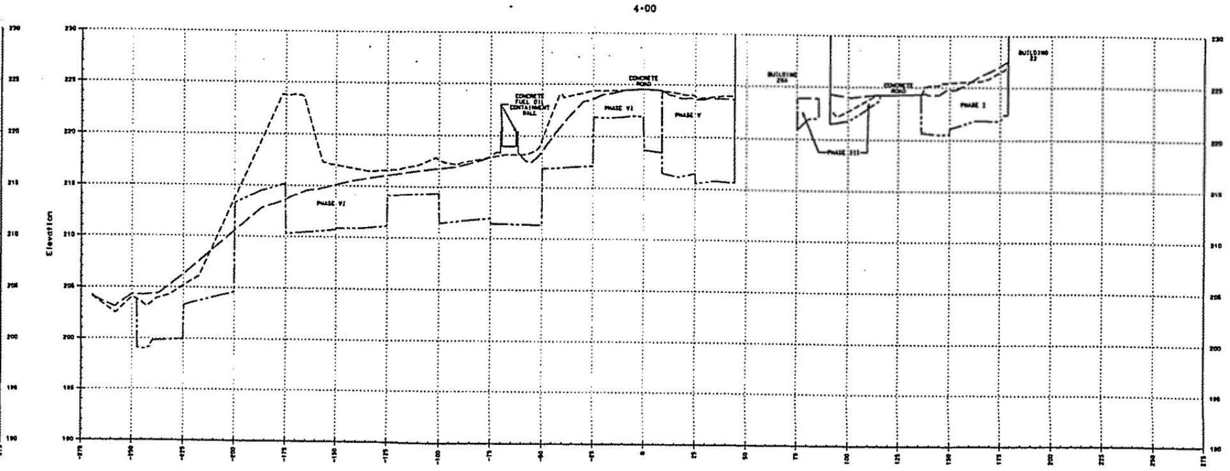
3+25



4+00



3+00



3+75

LEGEND:

- ORIGINAL GROUND SURFACE (6/14/95)
- RESTORATION SURFACE (11/4/96)
- FINAL EXCAVATION SURFACE (9/4/96)
- CONCRETE SLAB OR WALL (11/4/96)

NOTES:

1.) REFER TO DRAWING ATL-NYD-01 FOR ORIGINAL GROUND SURFACE AND GENERAL NOTES.

2.) REFER TO DRAWING ALT-NYD-02 FOR PLAN VIEW OF THE EXCAVATED GROUND SURFACE.

3.) REFER TO DRAWINGS ATL-NYD-03 AND ATL-NYD-04 FOR PLAN VIEW OF THE RESTORED GROUND SURFACE.

4.) REFER TO DRAWING ATL-NYD-X1 FOR CROSS-SECTION LOCATIONS.

HORIZONTAL SCALE: 1"=30'
VERTICAL SCALE: 1"=6'

LICENSED LAND SURVEYOR · STATE OF NEW YORK

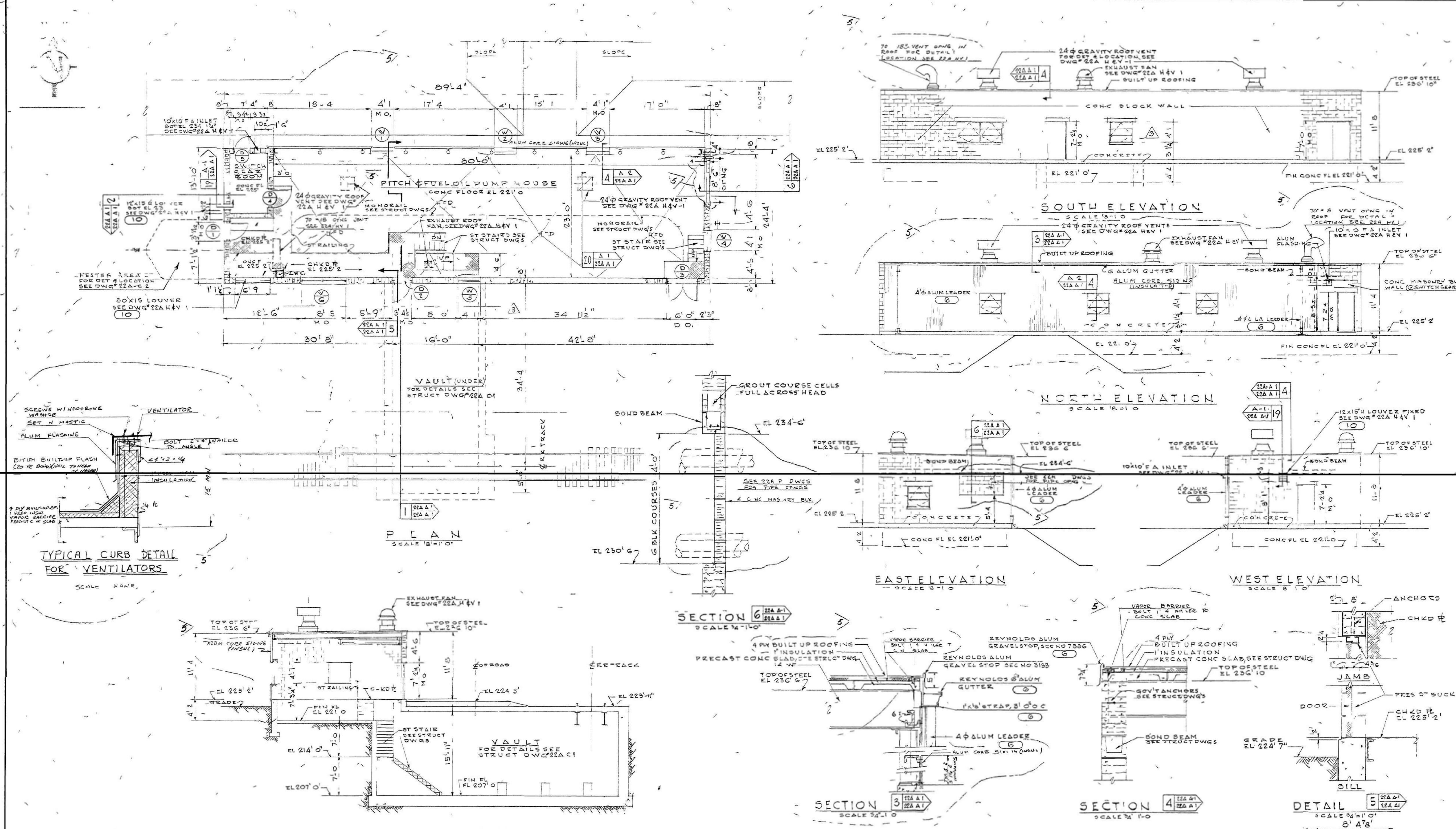
REV.	DESCRIPTION	DATE

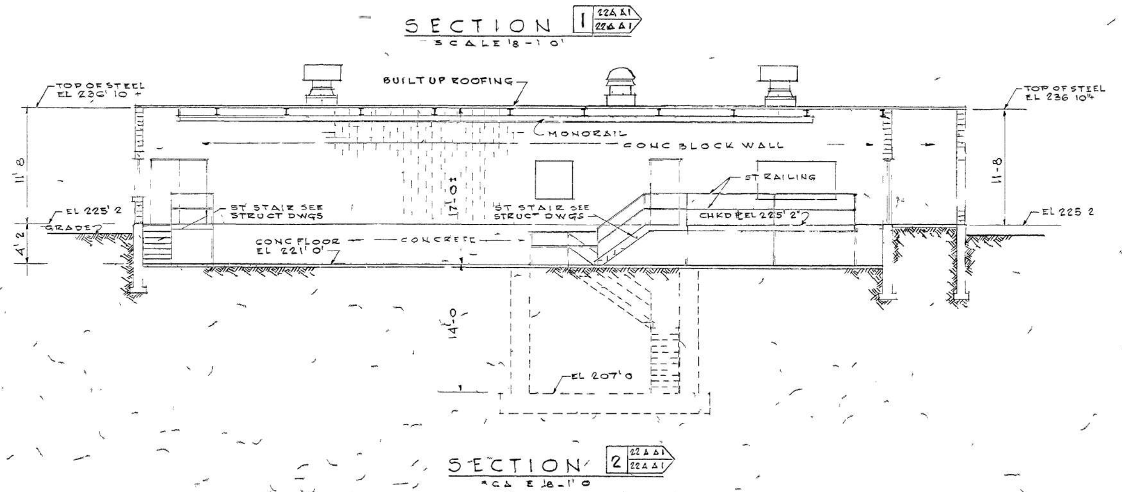
DRAWN:	DHO
CHECKED:	—
SCALE:	AS NOTED
DRAWING NUMBER:	ATL-NYD-X4
DATE:	4/9/97
PROJECT NUMBER:	CK2060-4-94

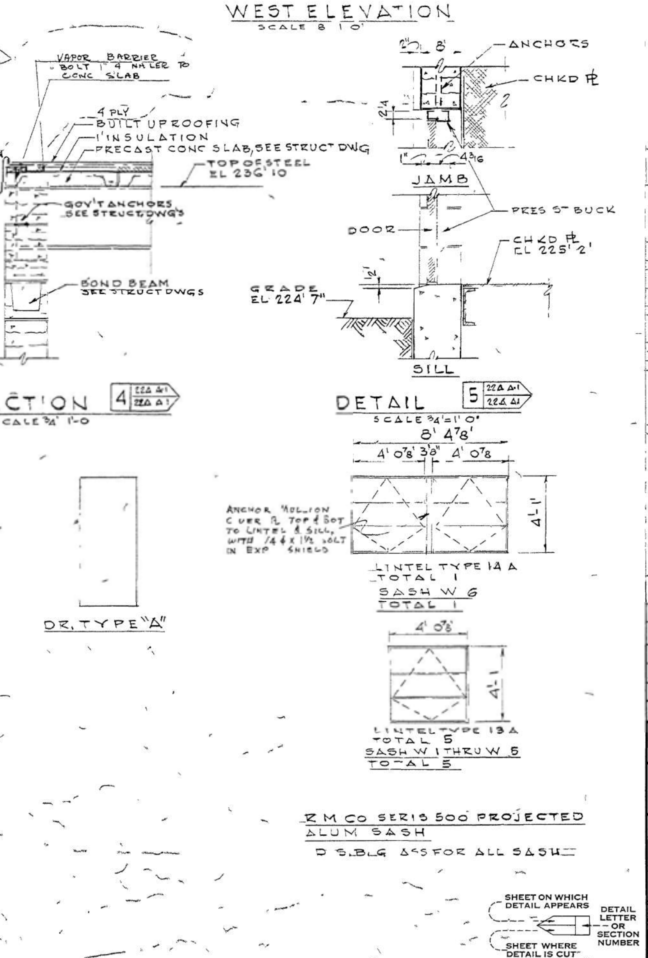
NORTH YARD AREA
CROSS-SECTIONS
SHEET 4 OF 7

ST. LAWRENCE REDUCTION PLANT
REYNOLDS METALS COMPANY
MASSENA, NEW YORK

SPENCER F. THEW, P.E. L.S.
PROFESSIONAL ENGINEER - LICENSED LAND SURVEYOR
MALONE, N.Y. CANTON, N.Y. CICERO, N.Y.







LIST OF MATERIALS.

ITEM NO	QUAN	DESCRIPTION	ORDER NO
1	1 LOT	CONC BLOCK MASONRY	A 10
2	1 LOT	ALUM DOORS	A-14
3	1 LOT	ALUM. WINDOWS	A-21
4	1 LOT	GLASS & GLAZING	A-22
5	1 LOT	PRESSED ST DOOR FRAME	A-18
6	1 LOT	STAND REVNO SHT METL & FLASHG	FIELD
7	1 LOT	CAULKING	FIELD
8	1 LOT	BUILDERS FIN. HARDWARE	A 17
9	1 LOT	BUILT UP ROOFING & INSULATION	A-26
10	1 LOT	SHEET METAL & FLASHING	A-20
11	1 LOT	MISCELLANEOUS METALS	S 8
12	1 LOT	CEMENT PLASTER	A-25
13			

NOTE NUMBERS IN ◯ REFERS TO THE ITEM NO IN LIST OF MATERIALS

DOOR SCHEDULE

MARK	TYPE	DOOR SIZE	THICK	MATERIAL DOOR	FRAME	SADDLE	HDW'R SET	LT'L TYPE	REMARKS
1	A	3'0"x7'0"	1¾"	ALUM	PRS'D STEEL	NONE	6	L-6A	
2	A	3'0"x7'0	1¾"	ALUM	PRS'D STEEL	NONE	18	L6A	
3	A	2 3'0"x7'0"	1¾"	ALUM	STEEL CHANNEL	NONE	11		
4	A	3'0"x8'0"	1¾"	ALUM	PRS'D STEEL	NONE	3	L6A	
5	A	3'0x7 0	1¾	ALUM	PRS'D STEEL	NONE	18	L6A	

NOTE
FOR LINTEL TYPE DETAILS SEE DWG # A 3

REFERENCE DRAWINGS:

22A-C-1 PITCH UNLOADING VAULT DETAILS
22A-C2 FOUNDATION PLAN AND DETAILS
22A-S-2 ROOF FRAMING PLANS & DETAILS
22A-P4 LOWER PLAN
22A-P5 UPPER PLAN
22A-P6 SECTIONS
22A-P-7 SECTIONS
A-1-TYPICAL EXTERIOR DETAILS
A 2-TYPICAL DETAILS
A 3 TYPICAL DETAILS
22A H&V. 1 PLAN, SECTIONS & DETAILS
22A-E 2 ELEC DETAILS

N	DATE	REVISIONS	DFT	HK	DEPT HEAD	R J EN	CHIEF EN R	L E
5	4/11/59	REVISED AS PER FCO 183, 219 306 395, 409	FEH	[illegible]				
4	[illegible]	ADDED ITEM No	SH	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
3	7-29 58	REVISED MAT LIST RELOCATED W 5, ADD D 5	SH	HR	[illegible]	[illegible]	[illegible]	[illegible]
2	[illegible]	ADDED LOUVER, DOOR CLOSURE, OUTLET, REV OPNG HGT	VL	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
1	[illegible]	ISSUED FOR CONSTRUCTION	VL	WAS	[illegible]	[illegible]	[illegible]	[illegible]
0	12/9 57	ISSUED FOR APPROVAL	CW	WS	[illegible]	[illegible]	[illegible]	

BECHTEL CORPORATION
SAN FRANCISCO NEW YORK LOS ANGELES

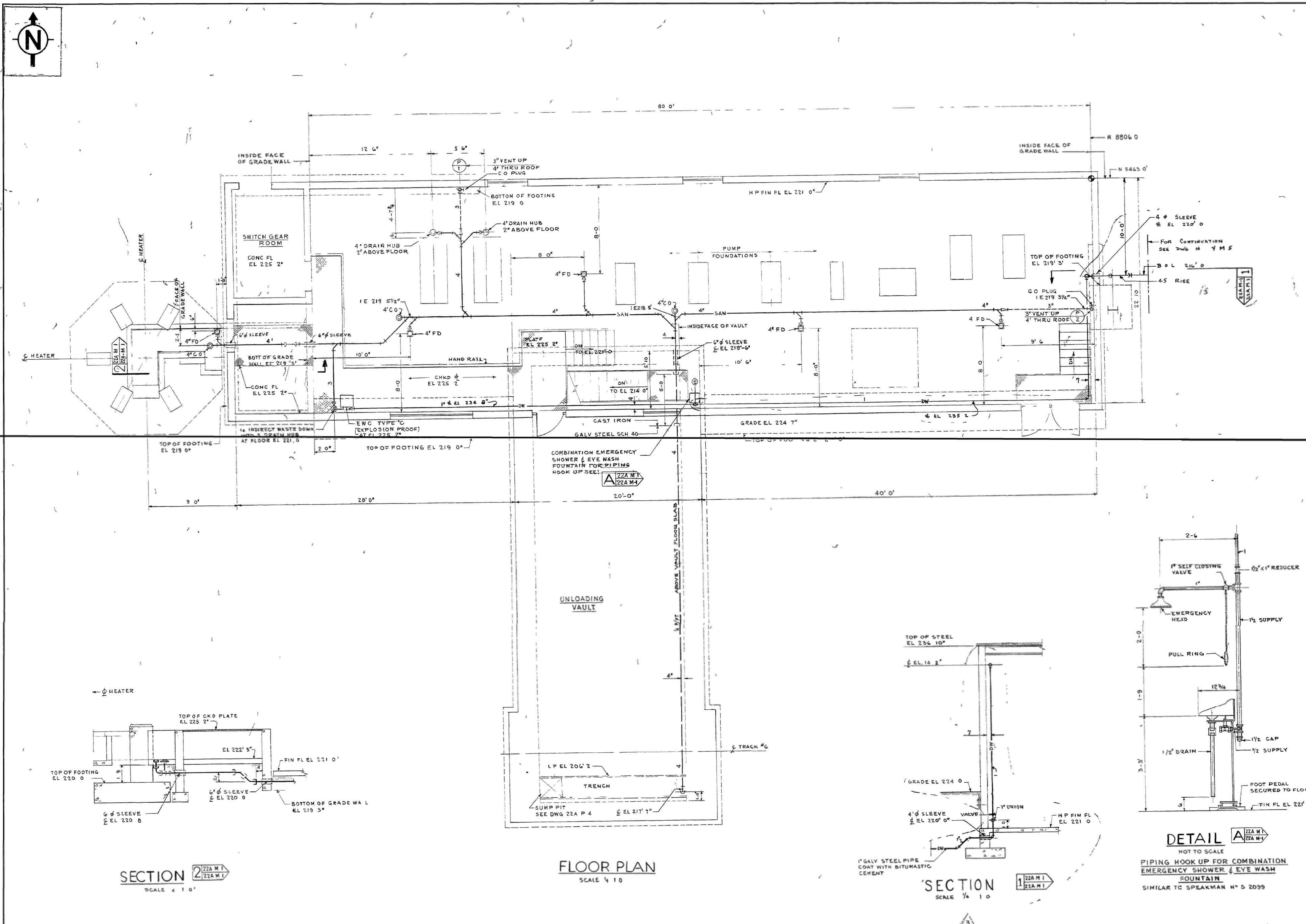
REYNOLDS METALS COMPANY
ENGINEERING DIVISION RICHMOND VIRGINIA

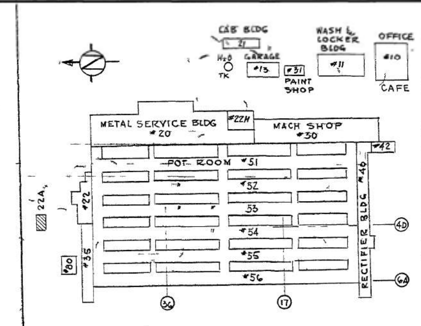
PITCH & FUEL OIL PUMPHOUSE
ARCH PLANS, SECTIONS, ELEVATIONS & DETAILS

ENGINEERING BY BECHTEL ASSOCIATES | BECHTEL JOB 2677 | PLANT MASSENA REDUCTION

SCALE AS NOTED | DRAWING NO 19 6225 22A-A-1 | REV 5

A-190023-JM





KEY PLAN

LIST OF MATERIAL

SPEC N	QUANT	DESCRIPTION	ORDER No
A 23	1 LOT	VALVES	2677-P- 40
"	"	PLUMBING FIXTURES	" P 98
"	"	HOT WATER HEATING EQUIPMENT & ACCESSORIES	" P-111
"	"	DRAINS, CLEANOUT ACCESS PLATES, HOSE BIBBS	" P-112
"	"	CAST IRON SOIL PIPE & FITTINGS	" P-119
	"	DRAINAGE & WATER PIPE FTG'S	" P-156
"	"	GALV STEEL PIPE	" P-137
"	"	MECH JOINT FITTINGS	" Y-19
"	"	—"— —"— PIPE	" Y-21
"	"	INSULATION	" P-100

SYMBOL LIST

—— DW ——	DOMESTIC WATER (POTABLE)
—— SAN ——	SANITARY DRAINAGE
— — —	SANITARY DRAINAGE ABOVE GROUND
- - - - - -	VENT
FD	FLOOR DRAIN
C.O	CLEANOUT
E W C.	ELECTRIC WATER COOLER
	GATE VALVE

CONSTRUCTION NOTES

1	ALL CLEANOUT ACCESS PLATES TO BE TYPE-"A" UNLESS NOTED OTHERWISE
2	DRAINAGE LINES TO PITCH ¼ P/FT UNLESS NOTED OTHERWISE
3	ELEVATIONS FOR ABOVE GROUND PIPING ARE DISTANCES ABOVE FIN FL
4	OUTSIDE PIPING TO TERMINATE 5 0' FROM FOUNDATION WALL UNLESS NOTED OTHERWISE
5	FOR FLOOR DRAIN "TOP OF STRAINER" ELEVATIONS SEE STRUCTURAL DRAWINGS
6	ALL FLOOR DRAINS TO BE TYPE "C" UNLESS NOTED OTHERWISE

REFERENCE DRAWINGS

22A A 1	ARCHITECTURAL PLAN & DETAILS
22A C 2	FOUNDATION PLAN
22A HV 1	HEATING & VENTILATING PLAN & SECTIONS
M-1	PLUMBING FIXTURE ROUGHING & DETAILS
22A P 4	PROCESS PIPING PLAN
Y M 5	YARD DRAWING

N	DATE	REVISIONS	DFT	CHK	DEPT HEAD	PROJ EN R	CHIEF EN R	CLIENT
3	[illegible]	FLD REV AS PER FCO #45 & REV AS 3 LT	WJM	AM				
2	[illegible]	ADDED COMB. EMERGENCY SHOWER & EYE WASH FOUNT	H.O	WAS	[illegible]	[illegible]	[illegible]	[illegible]
1	[illegible]	ISSUED FOR CONSTRUCTION	SS	WAS	LOS	[illegible]	[illegible]	[illegible]
0	[illegible]	ISSUED FOR APPROVAL	HO	SS		[illegible]	[illegible]	

BECHTEL CORPORATION
SAN FRANCISCO NEW YORK LOS ANGELES

REYNOLDS METALS COMPANY
ENGINEERING DIVISION RICHMOND VIRGINIA

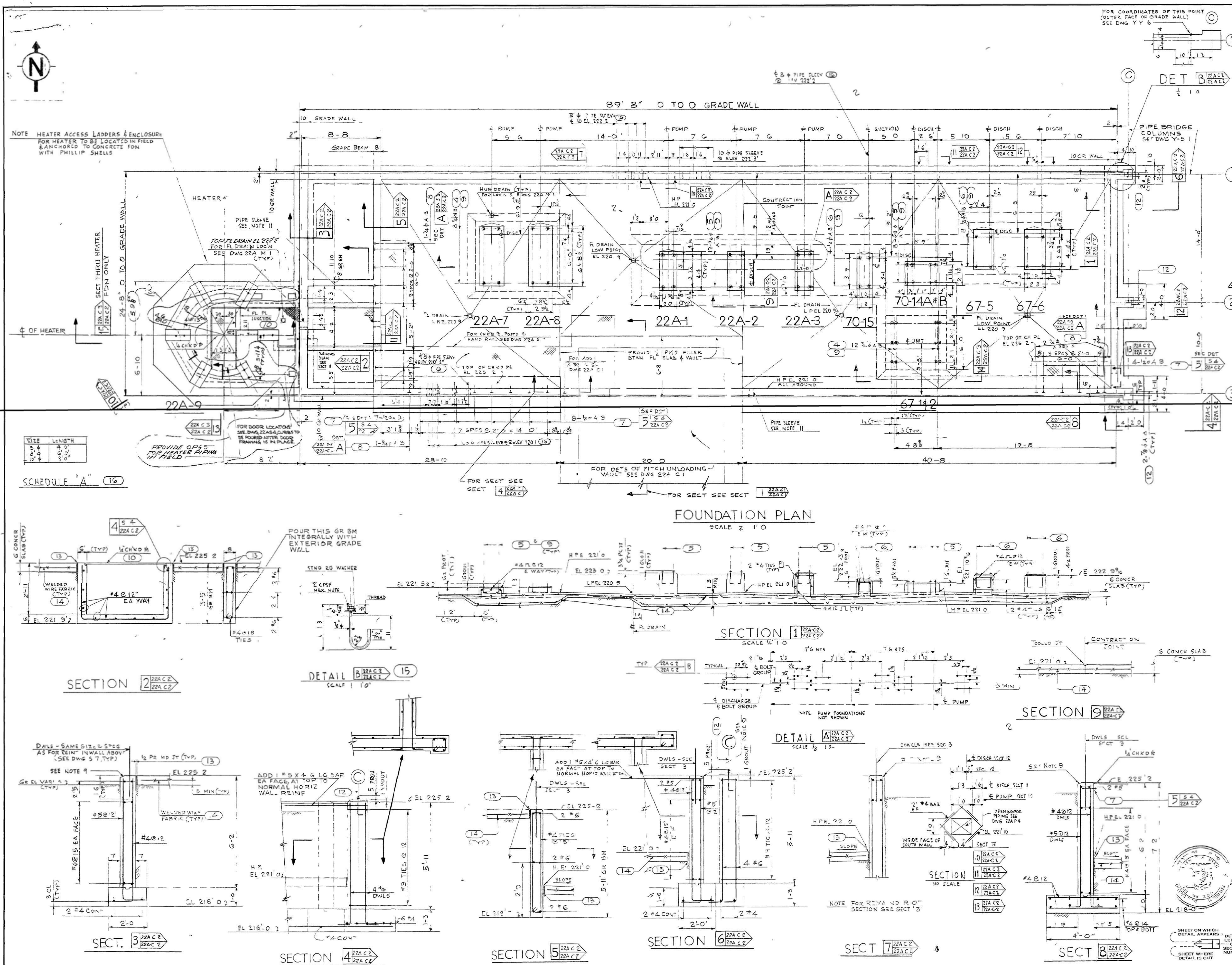
PLUMBING PITCH & FUEL OIL PUMPHOUSE

SHEET ON WHICH DETAIL APPEARS — DETAIL LETTER OR SECTION NUMBER — SHEET WHERE DETAIL IS CUT

ENGINEERING BY	BECHTEL JOB N	PLANT
BECHTEL ASSOCIATES	2677	MASSENA REDUCTION

SCALE	DRAWING N	REV
AS SHOWN	19-6225-22A-M-1	3

A-190043-JM



LIST OF MATERIALS

ITEM	QUAN	DESCRIPTION	ORDER No
1	132	CU YDS CONCR TE	2677 C 1
2	1 LOT	FABRICATED REINF BARS	2677 S-3
3	12	1 3/8" Φ × 2' 10" (L) LG TYPE 3 ANCHOR BOLTS & 2 CPSF HEX NUT	2677 S 8
4	20	3/4 Φ × 1' 2 (L) LG TYPE 2 ANCHOR BOLTS & 1 CPSF HEX NUT	BY FIELD
5	20	5/8 Φ × 1' 6 (L) LG TYPE 2 ANCHOR BOLTS & 1 CPSF HEX NUT	BY FIELD
6	12	1/2" Φ × 1 8 (L) LG TYPE 2 ANCHOR BOLTS & 1-CPSF HEX NUT	BY FIELD
7	25	1/2 Φ TYPE 2 AB, L 8, B 2 ANCHOR BOLTS & 1 CPSF HEX NUT	BY FIELD
8	8	3/4 Φ TYPE 2 AB, L 8, B 2 ANCHOR BOLTS & 1 CPSF HEX NUT	BY FIELD
9	31 LIN FT	3" Φ GALV META PIPE SLEEVE SEE DWG S 1	2677 S 8
10	1 LOT	MISC FAB STRUCT STEEL	2677 S 8
11	1 LOT	JOINT SEALER	2677-C5
12	6	3" Φ × 1'-7" LG TYPE 2 AB & 2 CPSF HEX NUTS	BY FIELD
13	260	LIN FT 2"×6" PREMOLDED JOINT FILLER	2677 C 7
14	4	ROLLS OF 6'0" WIDE × 150 0 LG 6×6 6/6 PLAIN WELDED WIR FABR C	2677 S 14
15	28	7/8" Φ × 1 3 LONG AS PER DETAIL "B" THIS SHEET	BY FIELD
16	1 LOT	PIPE SLEEVES AS PER SCHEDULE 'A' THIS SHEET	BY FIELD
17	1 LOT	3/4 PHILLIPS CONC FASTENERS (F34)	BY FIELD

DESIGN & CONSTR NOTES

1. DESIGN & CONSTRUCTION OF REINFORCED CONCRETE SHALL BE IN ACCORDANCE WITH SPECIFICATION SP 6225 C 3 AS WELL AS AMERICAN CONCRETE INSTITUTE BUILDING CODE REQUIREMENTS (ACI 318 56)
2. ALL CONCRETE SHALL HAVE A MINIMUM ULTIMATE COMPRESSIVE STRENGTH OF 3000 PSI IN 28 DAYS
3. SOIL UNDER FOUNDATIONS SHOULD BE CAPABLE OF WITHSTANDING 5000 PSF
4. PRIOR TO POURING OF CONCRETE ALL UTILITIES SHALL BE IN PLACE AND VERIFIED
5. ALL ELEVATIONS SHOWN ON DRAWINGS ARE TO THE U S LAKE SURVEY 1935 DATUM
6. NUMBERS IN ( ) REFER TO THE ITEM NUMBERS IN THE LIST OF MATERIALS
7. FOR LOCATION, SEE PLOT PLAN DRWG Y Y 6
8. LOCATE #6 DOWELS 3'0 LONG TO SUIT CONC BLOCK WALL REINF SEE DWG S 7
9. FINISH WALL TOP AS PER DETAIL 'B' DWG 22A C 1
10. 6 CONCR SLAB TO BE PLACED ON WELL COMPACTED BACKFILL PER SPEC 6225 Y-10.
11. LOCATION & SIZE OF PIPE SLEEVES FOR PLUMBING ARE SHOWN ON DWG 22A M 1

REFERENCE DRAWING

PLOT PLAN	Y Y 6
YARD PIPE BRIDGE SECTIONS & DETAILS	Y-S-1
STANDARD STRUCTURAL DETAILS ANCHOR BOLTS & GENERAL NOTES	S 1
FUEL PUMP HOUSE ARCHITECTS PLANS, SECTIONS, ELEVATIONS & DETAILS	22A A 1
PITCH AND FUEL OIL PUMP HOUSE, PITCH UNLOADING VAULT DETAILS	22A C 1
PITCH AND FUEL OIL PUMP HOUSE, FOUNDATION DETAILS	22A C 3
PITCH PUMP HOUSE & TANK CAR UNLOADING PIPING ARRGT	22A P 4
STANDARD DETAILS MASONRY BLOCK WALLS REINFORCED	S 7
PLUMBING PLAN & DETAILS	22A M 1
PUMP 70 15	P 63 1
PUMP 67 5 & 67 6	P 22 1
PUMP 70 14A & 70 14B	P 89 1
PUMP 22A 7 & 22A 8	P 51 29
ASSEMBLY OF ENCO FUEL OIL PUMPING & HEATING UNIT 67 1 & 2	P 121 & P 122
STANDARD STRUCT DETAILS FLOOR PLATES	S 4
PITCH & FUEL OIL PUMP HOUSE WALKWAYS & STAIRS	22A S 3
ELECTRICAL POWER & GROUNDING PLAN	22A E 2

NO	DATE	REVISIONS	DFT	CHK
3	[illegible]	ADDED CURBS & ITEM 17	GS	[illegible]
2	[illegible]	ADDED DETAILS 'A & B', PIPE SLEEVES & REV PUMPS	S 6	[illegible]
1	7/8/58	ISSUED FOR CONSTRUCTION	SK	H S
0	[illegible]	ISSUED FOR APPROVAL	TF	SK NT

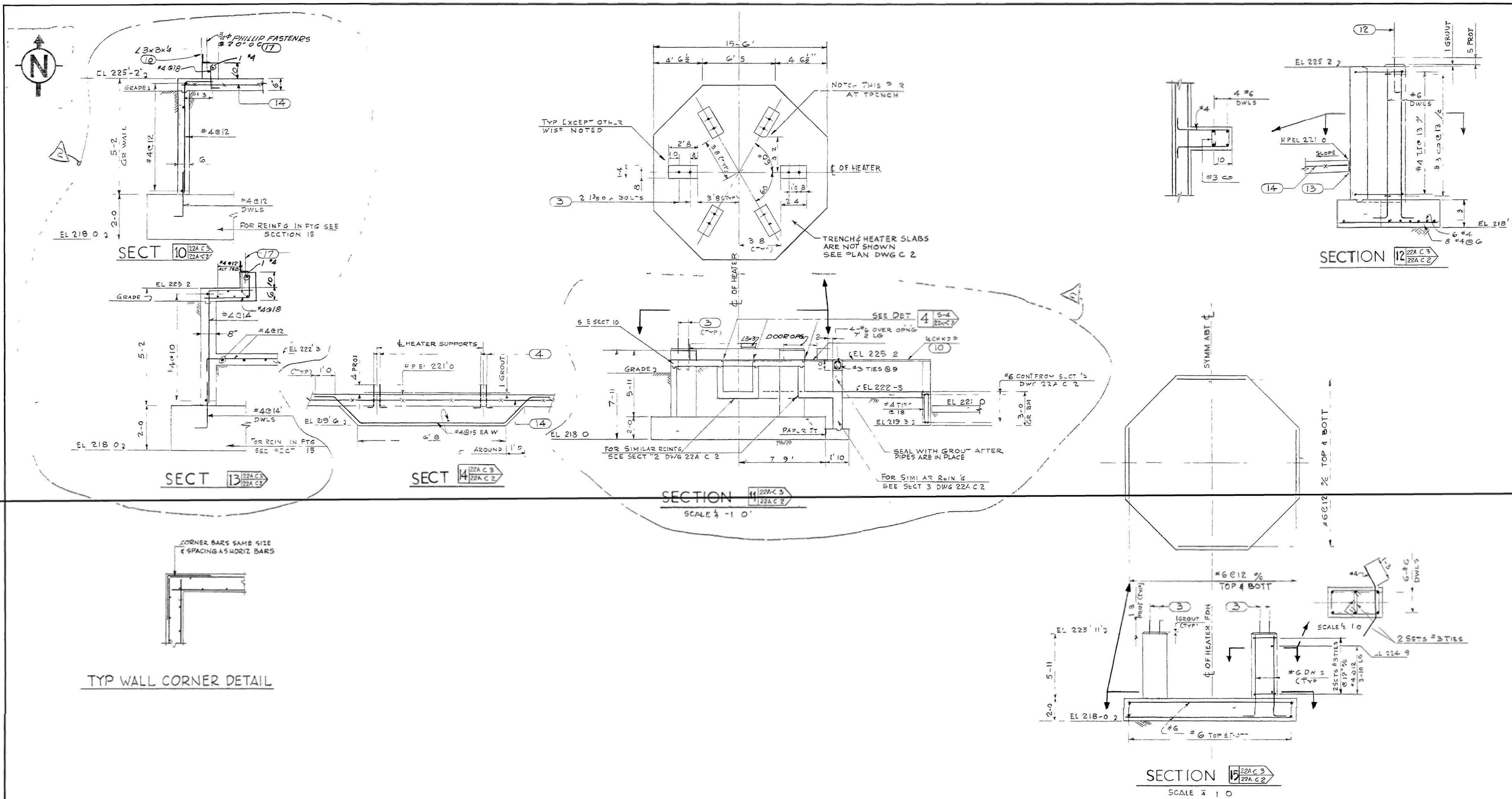
BECHTEL CORPORATION
SAN FRANCISCO NEW YORK LOS ANGELES

REYNOLDS METALS COMPANY
ENGINEERING DIVISION RICHMOND VIRGINIA

PITCH & FUEL OIL PUMP HOUSE FOUNDATION PLAN & DETAILS

ENGINEERING BY BECHTEL ASSOCIATES
BECHTEL JOB No 2677
PLANT MASSENA REDUCTION
SCALE 1/2" - 1'0 UNLESS NOTED
DRAWING No 19 6225 22A-C-2 REV 3

A-190026-JM



LIST OF MATERIALS

FOR LIST OF MATERIALS SEE 22A-C-2

DESIGN & CONSTR. NOTES

FOR DESIGN & CONSTRUCTION NOTES SEE 22A-C-2
WORK THIS DWG TOGETHER WITH DWG 22A-C-2

REFERENCE DRAWINGS

FOR REFERENCE DRAWINGS SEE 22A-C-2

WORK THIS DWG WITH DWG 22A-C-2

N	DATE	REVISIONS	DFT	CHK	D PT HEAD	PROJ MGR	H E EN R	CLI
2	[illegible]	REV SECTS 10 11 & 13 TO ACCOM NTB ENCL.	GS	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
1	[illegible]	ISSUED FOR CONSTRUCTION	[illegible]	HS	[illegible]	[illegible]	[illegible]	[illegible]
0	[illegible]	ISSUED FOR APPROVAL	TF	GK NT	[illegible]	[illegible]	[illegible]	

BECHTEL CORPORATION
SAN FRANCISCO NEW YORK LOS ANGELES

REYNOLDS METALS COMPANY
ENGINEERING DIVISION RICHMOND VIRGINIA

PITCH & FUEL OIL PUMP HOUSE FOUNDATION & DETAILS

SHEET ON WHICH DETAIL APPEARS — DETAIL LETTER OR SECTION NUMBER — SHEET WHERE DETAIL IS CUT

ENGINEERING BY BECHTEL ASSOCIATES | BECHTEL JOB N 2677 | PLANT MASSENA REDUCTION

SCALE ½" = 1'-0" UNLESS NOTED | DRAWING N 19 6225 22A-C-3 | REV 2

A-190027-JM

Appendix A.2 Building 722 Historical Documents

8th mixer not shown on original plans

LIST OF MATERIALS (CONT.)

ITEM	QUANT	DESCRIPTION	ORDER NO
20	12	[illegible]	FIELD
21	24	6"x6"x1/2" STEEL TUBE W/ 3/4" STUD	3677 W17
22	4	[illegible]	3677 S 8
23	850	[illegible]	3677 W 17
24	1150	[illegible]	3677 C 7
25	2	[illegible]	FIELD
26	17	[illegible]	FIELD
27	15	[illegible]	3677 S 14
28	1 LOT	[illegible]	3677 S 8
29	1	CAST IRON [illegible]	3677 S 8
30	2	48"x7.0 PIPE SLEEVES	FIELD
31	1	8'-6"x6.0 PIPE SLEEVES	FIELD
32	1	4'-6"x7.5 PIPE SLEEVES	FIELD
33	1	8.9x0.5 PIPE SLEEVE	FIELD
34	1	10'-4"x0.5 PIPE SLEEVE	FIELD

LIST OF MATERIALS

ITEM	QUANT	DESCRIPTION	ORDER No
1		CU YDS 3000 PSI CONCRETE	3677 C 1
2	1 LOT	REINFORCING STEEL	3677 S 7
3	1 LOT	MISC STRUCTURAL STEEL	3677 S 8
4	4	[illegible]	3677 S 17
5	38	[illegible]	FIELD
6	4	[illegible]	FIELD
7	37	[illegible]	FIELD
8	6	[illegible]	FIELD
9	4	[illegible]	FIELD
10	4	[illegible]	FIELD
11	19	[illegible]	3677 S 17
12	16	[illegible]	3677 S 17
13	8	[illegible]	3677 S 17
14	8	[illegible]	3677 S 17
15	8	[illegible]	3677 S 17
16	10	[illegible]	FIELD
17	305	[illegible]	3677 S 17
18	7	[illegible]	3677 S 17
19	65	[illegible]	3677 S 17

DESIGN & CONSTR NOTES

1. DESIGN & CONSTRUCTION SHALL BE IN ACCORDANCE WITH SPECIFICATIONS OF AISC & AWS AS THE ASSEMBLAGE, CONCRETE INSTITUTE BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE (ACI 318-63)
2. ALL CONCRETE SHALL HAVE A MINIMUM ULTIMATE COMPRESSIVE STRENGTH OF 3000 PSI IN 28 DAYS
3. STRAIGHT BARS SHALL HAVE A MINIMUM LAP OF 30 DIAMETERS AT SPLICES & CORNERS & 40 DIAMETERS AT CHANGE OF DIRECTION & CORNERS, UNLESS OTHERWISE NOTED
4. ALLOWABLE SOIL BEARING PRESSURES IN ACCORDANCE WITH SOIL REPORT BY DAMES & MOORE
   EL 214.0 13 KSF — EL 230.0 8 KSF
   EL 220.0 10 KSF — EL 232.0 6 KSF
5. ALL ELEVATIONS SHOWN ON DRAWINGS REFER TO U S LAKE SURVEY 1955 DATUM
6. COLUMN PIERS REQUIRING LEVELING TO BASIC PLANE PLATES SHALL BE GROUTED READY TO RECEIVE STEEL COLUMNS
7. CONCRETE TO BE PLACED IN THE DRY MATERIAL THICKNESSES
8. UNDERGROUND PIPING TO BE IN TRENCH BEFORE FOUNDATION CONCRETE IS POURED
9. ALL PIPE SLEEVES SHOWN ON MECHANICAL AND ELECTRICAL DWGS TO BE IN PLACE BEFORE CONCRETE IS POURED
10. ALL FOOTINGS SHALL BE POURED ON FIRM & UNDISTURBED SOIL SPOTS ARE ENCOUNTERED FOOTING DEPTHS SHALL BE INCREASED
11. ALL PIERS TO BE CHAMFERED TO ELEVATION 4' TOP OF SLAB AFTER STEEL IS IN PLACE
12. WALL REQUIREMENT TO BE MADE OUT AT PIER POCKETS UNTIL STEEL IS IN PLACE. POUR WALLS & DIES POCKETS LATER
13. A [illegible] CONC PIERS EXCEEDING 6'-0" IN HEIGHT SHALL HAVE SHORT DOWELS IN FOOTING PAD
14. BALL MILLS, EE 20 & EE 24 SHALL BE PROVIDED WITH HAND RAIL FOR PERSONNEL PROTECTION. USE 1½" STD GALV PIPE FOR HANDRAIL, POSTS, & INTERMEDIATE. ALL OMITS TO BE WELDED EXCEPT AT FL. SLIP-ON CONNECTION

REFERENCE DRAWINGS

CARBON PASTE PLANT - OVERALL SCHEDULES	33 C 8
CARBON PASTE PLANT - CROSS SECTIONS SH 1 OF 4	33 C 8
PIER & CHANNEL BLDG - PENDING PLANS & DETAILS	33 C 1
PIER & CHANNEL BLDG - PENDING SECTIONS	33 C 2
CARBON PASTE PLANT - MISC. PIERS, MISC. VAULT & DRY SUMP	33 C 3
CARBON PASTE PLANT - BUILDING FOUNDATION PLAN	33 C 4
CARBON PASTE PLANT - EQUIP. PIERS SH 1	33 C 5
CARBON PASTE PLANT - EQUIP. PIERS SH 2	33 C 6
CARBON PASTE PLANT - PIT FOR SURGE SUPPRESSOR & CARBON PASTE PLANT - PITCHER BASKET SUPPRESSOR & PERSONNEL ELEVATOR	33 C 7
AIRCON HOUSE PLANT - GROUND FLOOR SLABS	33 C 9
PIER & CHANNEL BLDG - CONCRETE FOR PLAN & DETAILS SH 1	33 C 10
PIER & CHANNEL BLDG - EQUIP. COOL LINES - TEMPS	33 C 11
PIER & CHANNEL BLDG - PIERS, SLABS & PENS - SUPERSTRUCTURE	33 C 12
POT ROOM PIERS - SECTIONS & DETAILS	33 C 13
STANDARD DETAILS - ANCHOR BOLTS & SLAB JOINTS	33 C 14
STAIRS & WALKWAYS	33 C 15
HANDRAILS	33 C 16
LADDERS	33 C 17
MISC. NOTES, SYMBOLS, PLAN & SECTIONS, & DETAILS	33 C 18
PLAT N GAGE PLANT - MAIN BUILDING FOUNDATION PLAN	33 C 19
CARBON PASTE PLANT - PLUMBING PLAN	33 C 20

NO	DESCRIPTION	DATE	BY	CHK	ENGR	PROJ ENGR
4	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
5	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
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BECHTEL CORPORATION
SAN FRANCISCO NEW YORK LOS ANGELES

REYNOLDS METALS COMPANY
ENGINEERING DIVISION RICHMOND VIRGINIA

CARBON PASTE PLANT BUILDING FDN PLAN

E. ENGINEERING BY	JOB NO.	PLANT
BECHTEL ASSOCIATES	2677	MADISONA REDUCTION

SCALE	DWG. NO.	SHEET
1" = 10'	19 6225 22-C-1	5

A-18943-3M

COLUMN FOOTING SCHEDULE

FOOTING	ELEV Y	A	b	c	d	e	f	g	h	j	m	n **	p	SEE DWG. 33 C 5 LEVEL TYPE	SEE DWG. 33 C 5 W.P. MAT.	CONTINUOUS OPERATION LOADS LOAD (KIPS)	LOAD (K)	UPLIFT (K)	SHEAR (K)
A 1	226.0	GRL DWG 11 C 4 & 5						1'9	8'8"	7"	DWG 22 C 4 & 5		6"S	—	AS 3	38	14		30 K
A 3	221.0	5'3	1'7½	9'3	1'7½	2'1	1'7	1'0"	4'0	45	—	*6.90	8"S	—	AS 1	8	—		—
B 1	226.0	SEE DWG 22 C 4 & 5						1'9	8'8	7"	DWG 22 C 4 & 5		6"S	—	AS 3	77	22		30 K
B 2	221.0	5'3	1'9	9'0	1'9	2'4	1'6	1'8	3'8	7'8	—	*7.90	6"S	—	AS 4	110	45		35 K
B 3	221.0	5'3	1'7½	9'3	1'7½	2'1	1'6	1'0"	4'0	45	—	*6.30	6"S	—	AS 1	18	4		10 K
C 1	226.0	SEE DWG 22 C 4 & 5						1'9	8'8	7"	DWG 22 C 4 & 5		6"S	—	AS 3	77	22		30 K
C 2	221.0	5'3	1'9	9'0	1'9	2'4	1'6	1'8	3'8	7'8	—	*7.9	6"S	—	AS 4	116	45		35 K
C 3	221.0	5'3	1'7½	9'3	1'7½	2'1	1'6	1'0"	4'0"	45	—	*6.91	6"S	—	AS 1	18	4		10 K
D 1	226.0	SEE DWG 22 C 4 & 5						1'9	8'8	7"	DWG 22 C 4 & 5		6"S	—	AS 3	65	3		30 K
D 2	226.0	5'6	1'6	9'0	1'6	2'0	1'6	1'8	4'6	45	—	*8.90	6"S	—	AS 1	80	—		—
D 3	221.0	5'3	1'7½	9'3	1'7½	2'1	1'7	1'0	4'0	45	—	*8.90	6"S	—	AS 1	33	2		10 K
D 4	221.0	5'3	1'7½	9'3	1'7½	1'8	1'7	1'0	4'0	45	—	*8.90	6"S	—	AS 1	8	—		—
E 1	226.0	SEE DWG 22 C 4 & 5						1'9	8'8	7'8"	DWG 22 C 4 & 5		6"S	—	AS 4	116	44		30 K
E 2	226.0	SEE DWG 22 C 5					2'7	1'4	1'0	7'6	9"	—	—	—	AS 2	380	—		75 K
E 3	226.0	11'0	5'6	11'0"	5'6	5'0	5'0	1'0"	7'6	105	—	*8.0	8"S	—	AS 5	691	—		75 K
E 4	226.0	8'0	4'0	8'0	4'0"	3'7	2'7	1'0	4'6	9"	—	*7.0	8"S	—	AS 1	214	—		40 K
E 5	226.0	4'0	1'8	4'0	1'8	1'0	2'7	1'0"	5'0	7"	—	*4.91	8"S	—	AS 3	75	—		—
F 1	226.0	SEE DWG 22 C 4 & 5						1'9	8'8	7'8	DWG 22 C 4 & 5		6"S	—	AS 4	119	44		30 K
F 2	226.0	SEE DWG 11 C 5					3'0	1'1	1'0"	7'0	9"	—	—	—	AS 1	444	—		60 K
F 3	226.0	10'6	5'3	13'0	6'6	5'0	5'0	2'3	7'8	105	—	*8.0	8"S	—	AS 5	689	—		60 K
F 4	226.0	SEE DWG 22 C 5						1'0	7'6	9"	—	—	—	—	AS 3	474	—		60 K
F 5	226.0	SEE DWG 22 C 5						1'0	7'6	9"	—	—	—	—	AS 3	300	—		40 K
G 1	226.0	SEE DWG 22 C 4 & 5						1'9	8'8	7'8"	DWG 22 C 4 & 5		6"S	—	AS 3	58	13		30 K
G 2	226.0	7'3	3'6	6'6	3'3	2'8	1'6	1'6	8'0	105	—	*6.0	6"T	—	AS 2	223	71		—
G 3	226.0	7'9	3'10½	7'9	3'10½	3'0	2'7	1'6	8'0	9"	—	*6.8	8"S	—	AS 1	283	—		85 K
G 4	226.0	SEE DWG 22 C 5								9"	—	—	—	—	AS 4	193	61		35 K
G 5	226.0	SEE DWG 11 C 5								9"	—	—	—	—	AS 3	146	—		35 K
H 1	226.0	SEE DWG 22 C 4 & 5						1'9	8'8	7'8"	DWG 22 C 4 & 5		6"S	—	AS 3	157	—		30 K
H 2	226.0	SEE DWG 22 C 5				3'0	2'7	1'0	6'6	9"	—	—	—	—	AS 1	362	—		80 K
H 3	226.0	10'3	5'3	12'6	5'6	5'0	5'0	1'0"	7'6	105	—	*8.0	8"S	—	AS 5	362	40		85 K
I 1	226.0	SEE DWG 22 C 4 & 5						1'9	8'8	7'8"	DWG 22 C 4 & 5		10"S	—	AS 5	555	—		64 K
I 2	226.0	SEE DWG 22 C 5				3'0	2'7	1'0	6'6	9"	—	—	—	—	AS 3	611	—		90 K
I 3	226.0	9'0	4'6	9'0	4'6	3'7	3'7	1'0"	7'6	9"	—	*8.0	8"S	—	AS 5	356	75		90 K
J 1	226.0	SEE DWG 22 C 4 & 5						1'9	8'8	7'8	DWG 22 C 4 & 5		6"S	—	AS 4	574	179		61 K
J 2	226.0	9'0	4'6	9'0	4'6	3'7	3'7	1'0	7'6	9"	—	*8.0	8"S	—	AS 4	417	7		61 K
46 46	1.70	SEE PLAN ABOVE					2'0	1'2	1'3	—	—	—	*4.90	6"S	SEE DWGS. 33 C 5 & 33 C 6	22	—		5 K
K 45 55	226.0	SEE DWG 22 C 4 & 5						1'9	—	—	DWG 22 C 4 & 5			—		22	—		5 K

* TOP OF CONC FOR COLS 46 55 & 45 55 TO BE AT EL 228.9 W/ 1" GROUT & 4" LEVEL ☗ (SEE DWGS 33 C 5 & 33 C 6)

** WHERE TWO SPACINGS ARE SHOWN TOP FIGURE REFERS TO 50 PILES & BOT FIG TO 40 PILES

TYPICAL COL FTG

SECTION

DETAIL A — STANDARD DETAIL OF CURTAIN WALL

DETAIL B — CURTAIN WALL DETAIL @ WINDOW OPENINGS

SECTION 2

SECTION 3

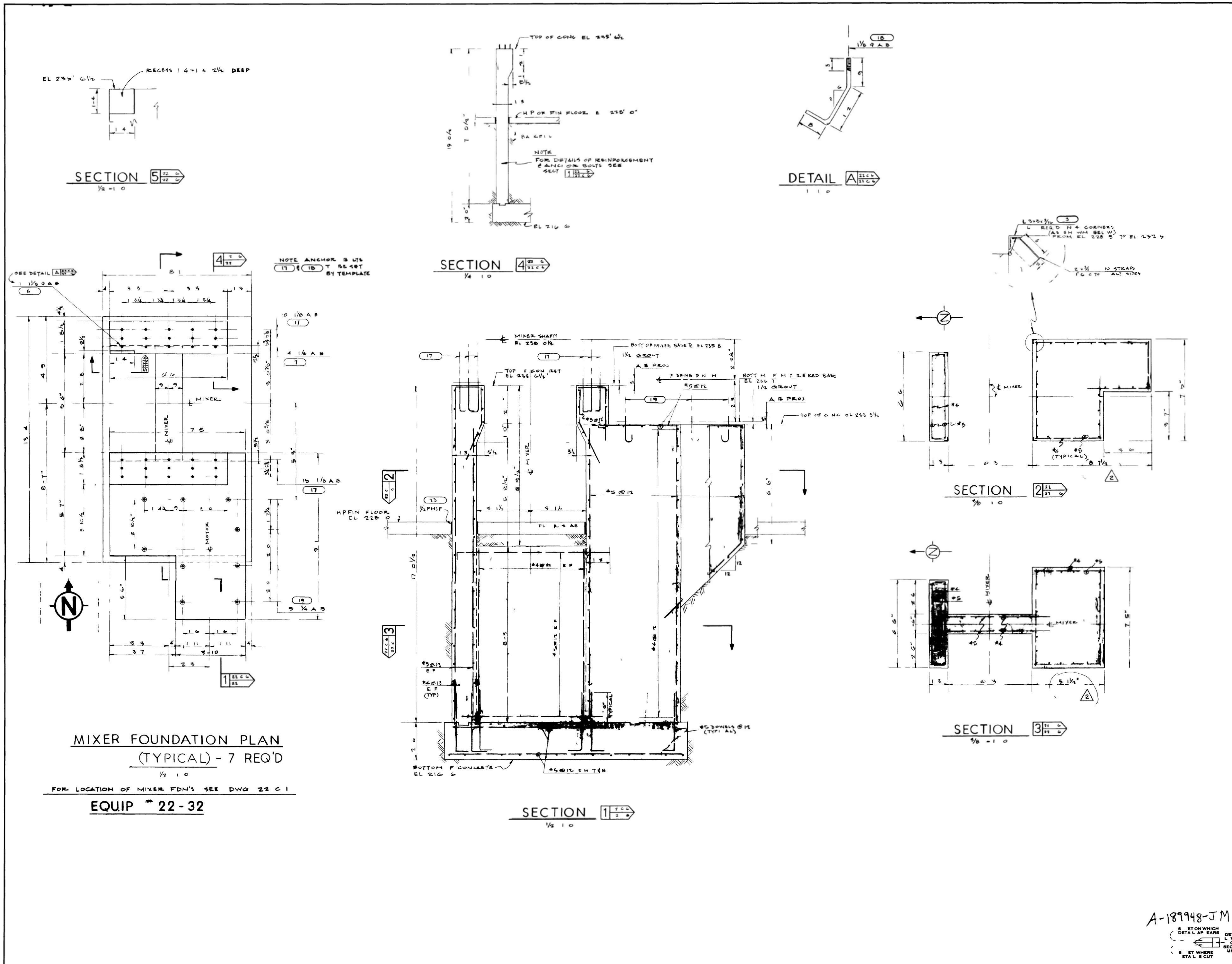
SECTION 4

DETAIL C — CURTAIN WALL DETAIL @ LOUVERS

DETAIL D — PLAN (TYP FOR LOUVER FRMG)

DETAIL E — PLAN (TYP FOR EXT DOOR OPNG)

DETAIL F (TYP FOR POT FL CONN)



LIST OF MATERIALS

FOR LIST OF MATERIALS SEE DWG NO 22 C 1

DESIGN & CONST NOTES

FOR DESIGN & CONSTRUCTION NOTES SEE DWG N 22 C 1

REFERENCE DRAWINGS

FOR LIST F REFERENCES SEE DWG NO 22 C 1

	DAT	REVISIONS	DFT	K	DEPT HEAD	P J	CHIEF ENG'R	CLIENT
2	3/4/58	CORRECTED DIMENSIONS SECT. 2 & SECT. 3	JHS	R.C.A.				
1		ISSUED F R C NSTRUCTION	JHS	AJB	S.V.			
0		ISSUED FOR APPROVAL	JHS	AJB	S.V.			

BECHTEL CORPORATION
SAN FRA IS O NEW YORK LOS ANGE S

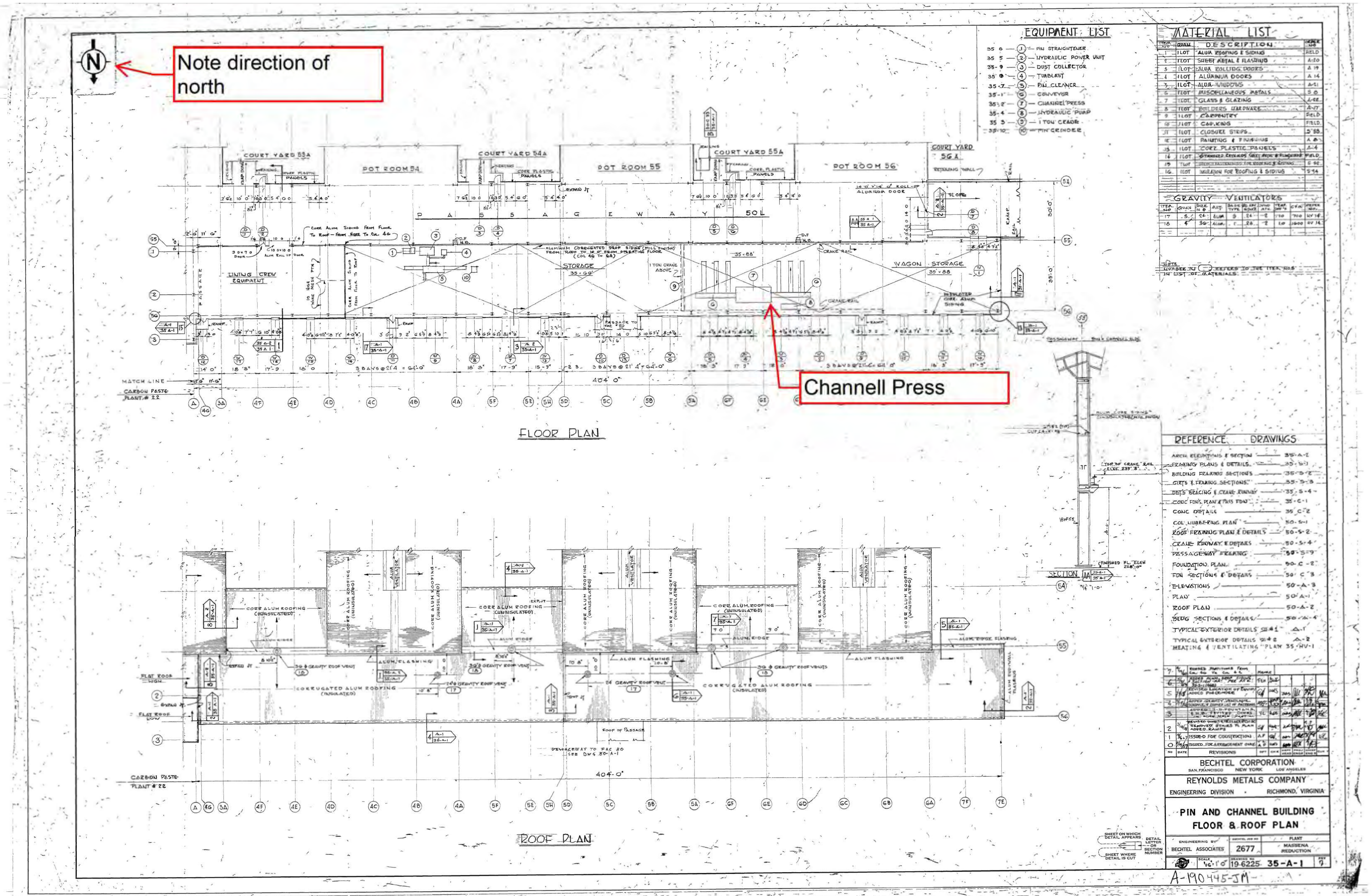
REYNOLDS METALS COMPANY
ENGINEERING DIVISION RICHMOND VIRGINIA

CARBON PASTE PLANT
EQUIPMENT FOUNDATIONS
SHEET #1

E GINEERI G Y	T J	PLANT
BECHTEL ASSOCIATES	2677	MASSENA REDUCTION

S A	D AW N		EV
AS NOTED	19 6225	22-C-6	2

Appendix A.3 Building 735 Historical Documents


Note direction of north
Channell Press
EQUIPMENT LIST
MATERIAL LIST
FLOOR PLAN
ROOF PLAN
REFERENCE DRAWINGS
BECHTEL CORPORATION
SAN FRANCISCO NEW YORK LOS ANGELES
REYNOLDS METALS COMPANY
ENGINEERING DIVISION · RICHMOND, VIRGINIA
PIN AND CHANNEL BUILDING
FLOOR & ROOF PLAN
ENGINEERING BY BECHTEL ASSOCIATES
2677
MASSENA REDUCTION
19-6225 35-A-1
A-190445-JM

Appendix B Community Air Monitoring Plan

Community Air Monitoring Plan (CAMP)

Former Reynolds Metal Plant
Massena East, New York
NYSDEC Site Code #645009

Prepared for:

Alcoa Corporation
Reynolds Metals Company, LLC

Prepared by:

EHS Support℠

April 2025

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Appendix

Acronyms

BMP	Black Mud Pond
CAMP	Community Air Monitoring Plan
ILF	Industrial Landfill
L/min	liters per minute
µg/m^3	micrograms per cubic meter
mg/m^3	milligrams per cubic meter
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
OU	operable unit
PCB	polychlorinated biphenyl
PM10	particulate matter less than 10 micrometers in size
PSP	Potliner Storage Pad
ROD	Record of Decision

1 Introduction

This Community Action Monitoring Plan (CAMP) was prepared to describe the real-time air monitoring to be implemented during intrusive activities at the former Reynolds Metals Company, LLC facility (RMC) (Site #645009) ("Site" or "Facility") in Massena, New York. This CAMP shall be implemented during intrusive activities (disturbance of the subsurface) within the boundaries of remediation sites at the Reynolds Metals facility.

The activities are anticipated to include the following components:

- Mobilizing equipment and personnel
- Collecting soil samples with a hand auger, and/or drill rig, and/or directly from excavation surfaces or the excavator bucket where excavations cannot be entered
- Building and infrastructure demolition
- Mechanical soil excavation
- Mechanical soil, backfill, and cap material stockpiling
- Mechanical loading of soil into trucks
- Heavy equipment and truck transport and movement on-site
- Off-site transport of impacted soil

Continuous air monitoring for particulate matter less than 10 micrometers in size (PM10) will be performed during intrusive activities in known remediated areas and zones of actual and/or potential contamination. The CAMP has been developed to provide a measure of protection for the downwind community (i.e., off-site receptors including residences, businesses, and off-site workers not directly involved with construction activities) from potential airborne particulate releases as a direct result of these activities. Additionally, the CAMP will provide the necessary data to help confirm that these activities did not result in particulate releases through the air to the off-site receptors.

The CAMP has been prepared in accordance with New York State Department of Environmental Conservation (NYSDEC) Technical Guidance for Site Investigation and Remediation (DER-10; NYSDEC 2010), specifically including the New York State Department of Health (NYSDOH) Generic Community Air Monitoring Plan in Appendix 1A and the Fugitive Dust and Particulate Monitoring in Appendix 1B. The NYSDOH Generic Community Air Monitoring Plan is included in **Appendix A**.

1.1 Site Description

The Reynolds Metal Company LLC Massena East Operations is located at 194 County Road 45 in Massena, New York. Aluminum smelting operations (Soderberg technology) began in 1958 and operated continuously until March 31, 2014. Demolition activities, including removing surplus equipment and buildings, commenced in 2014 when the RMC facility ceased operations. Site investigation and remediation activities commenced in the 1980s. Decommissioning and remediation activities are ongoing.

In 1992, NYSDEC issued a Record of Decision (ROD) that summarized the selected remediation activities for each of the hazardous waste sites, which are presently described as operable units (OUs). The following remediated OUs are at the former RMC facility:

- Closed Industrial Landfill (ILF) (OU-1)

- Black Mud Pond (BMP) (OU-2)
- North Yard (OU-3)
- Wetlands (OU-4)
- Former Potliner Storage Pad (PSP) (OU-5)
- Miscellaneous areas including the Rectifier Yard, West Ditch Outfall, and Area North of Haverstock Road (OU-6)

Detailed descriptions and locations of the OUs have been provided to NYSDEC in numerous Periodic Annual Review Reports, most recently EHS Support (2024).

Site investigations identified PCB-impacted soil at the former Carbon Plant (building 722) and former Pin and Channell Building (building 735). Investigations could not be completed at the Fuel Oil Pump House (building 722A); however, heat transfer media containing PCBs were used in the building, and oil samples from water collected in the underground vault portion of 722A contained PCBs and it is assumed that PCB-impacted soil is present beneath the building.

1.2 Remediation Activities and Schedule

Demolition and remediation work that are scheduled to be completed in 2025 comprises demolishing several buildings and completing associated investigation and soil remediation at the former Pitch and Fuel Oil Pump House (building 722A), Carbon Plant (Building 722), and Pin and Channell Building (Building 735), which are in the north of the Site near Haverstock Road.

The remedial work will comprise the following activities:

- Dismantling/demolishing the buildings and structures, including:
  - Removing concrete slabs structures, pedestals, bollards, foundations and footers
  - Removing the crushed concrete working platform at building 722
  - Loading building demolition wastes for recycling or disposal
- Characterization soil sampling at Building 722A
- Mechanical soil excavation and loading PCB-impacted soil into trucks
- Transporting impacted soil off-site and importation of clean fill on-site
- Stockpiling excavated soil and clean fill in designated laydown areas
- Maintaining and securing open excavations and material stockpiles throughout remedial activities
- Confirmation soil sampling
- Backfilling and compaction of excavations
- Site restoration

The activities are anticipated to be completed over a period not to exceed six months, commencing in the summer of 2025.

2 Air Monitoring Program

The air monitoring program will include continuous particulate air monitoring. Continuous air monitoring (monitoring for PM10) will be initiated at the start of intrusive activities and will be evaluated against corrective action criteria described below. Visual observation of dust will also be performed, implementing dust suppression techniques when necessary.

2.1 Air Monitoring Stations

Two fixed air monitoring stations for PM10 will be set-up based on the location of intrusive activities, potential receptor locations, and consideration of daily wind direction. As requested by NYSDOH during previous work at the facility, the air monitoring stations will be established no more than approximately 200 feet from the work area.

An upwind (AIR1) and downwind (AIR2) station will be established at the start of intrusive activities each day to monitor for PM10. Monitoring locations will consider activities and the prevailing wind direction. If the prevailing wind direction changes during the day, the monitors may be re-positioned to provide accurate PM readings. The locations of the air monitoring stations will be documented on each daily report, as well as the predominant wind direction obtained from the local Massena Airport Meteorological Station #94725.

Volatile organic compounds will not be monitored since they are not known or potential Site constituents.

2.2 Particulates

Particulate monitoring will be conducted using real-time meters for PM10 (i.e., DustTrak II Aerosol Monitor Model 8530 by TSI, Inc. or equivalent). The meters selected for use during these monitoring activities will be capable of calculating 15-minute running average concentrations. The meters will be equipped with alarms that will indicate if concentrations exceed an established level. Data from these meters will be checked at least once daily during activities. If visible dust is observed leaving the work area, the appropriate meters will be checked and corrective actions taken in accordance with the 2010 NYSDOH Generic CAMP (**Appendix A**), if necessary.

2.2.1 Corrective Action Level and Actions for Particulates

The corrective action level has been established with respect to of the NYSDOH Generic Community Air Monitoring Plan provided in DER-10 (NYSDEC, 2010) and other Massena projects. The corrective action level will apply at the downwind location only. A summary of the corrective action level is provided below.

Particulate (PM10) – 0.10 milligrams per cubic meter (mg/m^3) above upwind station for a 15-minute period:

- If the downwind PM10 level is 0.10 mg/m^3 above the upwind station for the 15-minute period or if airborne dust is observed leaving the work area, then dust-suppression techniques must be employed. Work may continue with dust-suppression techniques provided that downwind

PM10 particulate levels do not exceed 0.15 mg/m^3 above the upwind level and no visible dust is migrating from the work area.

- If, after implementation of dust-suppression techniques, the downwind PM10 levels are greater than 0.15 mg/m^3 above the upwind station, work must be stopped, and site activities must be evaluated. Work may resume only if dust-suppression measures and other controls are successful in reducing PM10 levels to less than 0.15 mg/m^3 above the upwind levels and if no visible dust is observed leaving the site.
- An initial level of 0.10 mg/m^3 at any of the monitoring stations will be established as a conservative assessment level. Readings greater than this conservative assessment level will result in on-site personnel performing a review of the background (upwind perimeter) site level. If the downwind level is determined to be greater than 0.10 mg/m^3 above the upwind level, dust-suppression techniques will be employed to avoid exceeding the corrective action level.

Exceedances of the corrective action level will result in an immediate review of intrusive activities with adjustments made as needed in consultation with the selected contractor. The first step of this review will be to evaluate the result to determine whether it is site related or an issue with the meter (e.g., high humidity impacting the meter and readings) or local conditions (e.g., mowing in the vicinity of the meter). Once an exceedance has been verified to be site related, the site lead will immediately be notified and an investigation will be performed to identify the conditions causing the exceedance (e.g., site conditions, contractor site activities, and weather conditions).

If initial monitoring results indicate no exceedances of the corrective action triggers listed above, a request may be made to NYSDEC/NYSDOH to modify the frequency or duration of monitoring at certain locations.

2.3 Polychlorinated Biphenyls

As it is not possible collect instantaneous readings of PCB concentrations in ambient air, PCBs will be monitored through the deployment of samplers during intrusive activities and laboratory analysis, as described following.

PCB monitoring will include low-volume PCB sampling in accordance with USEPA Method TO-10A. PCB samples will be collected using a low-volume personal sampling pump equipped with a glass cylinder containing a polyurethane sorbent (i.e. PUF cartridge). Samples will be collected at a flow rate of approximately 5 liters per minute (L/min) with a sampling period of approximately 8 hours (i.e. duration of the workday). Low volume stations will run on battery and will not require a continuous power source.

Samples will be submitted for PCB (Aroclor) analysis using Method SW846-8082 as required by NYSDEC/NYSDOH. Results will be requested on an accelerated analytical turn-around-time (48 hours).

2.3.1 PCB Corrective Action Level and Response Actions

If the concentration of PCBs is greater than 0.1 micrograms per cubic meter (µg/m^3) for a typical 8-hour workday, NYSDEC and NYSDOH will be notified prior to the continuation of intrusive activities. The health and safety coordinator will evaluate work activities ongoing at the time of measurement that

might be the cause of elevated PCB detections in ambient air. Adjustments will be made to reduce liberation of PCBs to the extent practicable.

2.4 Reporting

A daily summary of the air monitoring results will be maintained onsite and available to NYSDEC and NYSDOH personnel upon request.

2.4.1 Particulates

The report will include the monitoring period, predominant wind direction, identification of the upwind and downwind stations, daily wind rose, daily maximum 15-minute levels for PM10 at each station, and an assessment of the corrective action level, and any comments or notes.

2.4.2 PCBs

The report will include the monitoring period, identification of the downwind station, sample results (once received), an assessment of the corrective action level, and any comments or notes.

3 References

EHS Support, 2022. Periodic Review Report for the Reynolds Metals Company, LLC. Massena East, New York, NYSDEC Site Code #645009. Prepared for Alcoa Corporation Reynolds Metals Company LLC. April.

NYSDEC. 2010. DER-10, Technical Guidance for Site Investigation and Remediation, Division of Environmental Remediation. Appendix 1A – New York State Department of Health Generic Community Air Monitoring Plan; Appendix 1B – Fugitive Dust and Particulate Monitoring.

Appendix A New York State Department of Health – Generic Community Air Monitoring Plan

Appendix 1A
New York State Department of Health
Generic Community Air Monitoring Plan

Overview

A Community Air Monitoring Plan (CAMP) requires real-time monitoring for volatile organic compounds (VOCs) and particulates (i.e., dust) at the downwind perimeter of each designated work area when certain activities are in progress at contaminated sites. The CAMP is not intended for use in establishing action levels for worker respiratory protection. Rather, its intent is to provide a measure of protection for the downwind community (i.e., off-site receptors including residences and businesses and on-site workers not directly involved with the subject work activities) from potential airborne contaminant releases as a direct result of investigative and remedial work activities. The action levels specified herein require increased monitoring, corrective actions to abate emissions, and/or work shutdown. Additionally, the CAMP helps to confirm that work activities did not spread contamination off-site through the air.

The generic CAMP presented below will be sufficient to cover many, if not most, sites. Specific requirements should be reviewed for each situation in consultation with NYSDOH to ensure proper applicability. In some cases, a separate site-specific CAMP or supplement may be required. Depending upon the nature of contamination, chemical- specific monitoring with appropriately-sensitive methods may be required. Depending upon the proximity of potentially exposed individuals, more stringent monitoring or response levels than those presented below may be required. Special requirements will be necessary for work within 20 feet of potentially exposed individuals or structures and for indoor work with co-located residences or facilities. These requirements should be determined in consultation with NYSDOH.

Reliance on the CAMP should not preclude simple, common-sense measures to keep VOCs, dust, and odors at a minimum around the work areas.

Community Air Monitoring Plan

Depending upon the nature of known or potential contaminants at each site, real-time air monitoring for VOCs and/or particulate levels at the perimeter of the exclusion zone or work area will be necessary. Most sites will involve VOC and particulate monitoring; sites known to be contaminated with heavy metals alone may only require particulate monitoring. If radiological contamination is a concern, additional monitoring requirements may be necessary per consultation with appropriate DEC/NYSDOH staff.

Continuous monitoring will be required for all ground intrusive activities and during the demolition of contaminated or potentially contaminated structures. Ground intrusive activities include, but are not limited to, soil/waste excavation and handling, test pitting or trenching, and the installation of soil borings or monitoring wells.

Periodic monitoring for VOCs will be required during non-intrusive activities such as the collection of soil and sediment samples or the collection of groundwater samples from existing monitoring wells. “Periodic” monitoring during sample collection might reasonably consist of taking a reading upon arrival at a sample location, monitoring while opening a well cap or

overturning soil, monitoring during well baling/purging, and taking a reading prior to leaving a sample location. In some instances, depending upon the proximity of potentially exposed individuals, continuous monitoring may be required during sampling activities. Examples of such situations include groundwater sampling at wells on the curb of a busy urban street, in the midst of a public park, or adjacent to a school or residence.

VOC Monitoring, Response Levels, and Actions

Volatile organic compounds (VOCs) must be monitored at the downwind perimeter of the immediate work area (i.e., the exclusion zone) on a continuous basis or as otherwise specified. Upwind concentrations should be measured at the start of each workday and periodically thereafter to establish background conditions, particularly if wind direction changes. The monitoring work should be performed using equipment appropriate to measure the types of contaminants known or suspected to be present. The equipment should be calibrated at least daily for the contaminant(s) of concern or for an appropriate surrogate. The equipment should be capable of calculating 15-minute running average concentrations, which will be compared to the levels specified below.

1. If the ambient air concentration of total organic vapors at the downwind perimeter of the work area or exclusion zone exceeds 5 parts per million (ppm) above background for the 15-minute average, work activities must be temporarily halted and monitoring continued. If the total organic vapor level readily decreases (per instantaneous readings) below 5 ppm over background, work activities can resume with continued monitoring.

2. If total organic vapor levels at the downwind perimeter of the work area or exclusion zone persist at levels in excess of 5 ppm over background but less than 25 ppm, work activities must be halted, the source of vapors identified, corrective actions taken to abate emissions, and monitoring continued. After these steps, work activities can resume provided that the total organic vapor level 200 feet downwind of the exclusion zone or half the distance to the nearest potential receptor or residential/commercial structure, whichever is less - but in no case less than 20 feet, is below 5 ppm over background for the 15-minute average.

3. If the organic vapor level is above 25 ppm at the perimeter of the work area, activities must be shutdown.

4. All 15-minute readings must be recorded and be available for State (DEC and NYSDOH) personnel to review. Instantaneous readings, if any, used for decision purposes should also be recorded.

Particulate Monitoring, Response Levels, and Actions

Particulate concentrations should be monitored continuously at the upwind and downwind perimeters of the exclusion zone at temporary particulate monitoring stations. The particulate monitoring should be performed using real-time monitoring equipment capable of measuring particulate matter less than 10 micrometers in size (PM-10) and capable of integrating over a period of 15 minutes (or less) for comparison to the airborne particulate action level. The equipment must be equipped with an audible alarm to indicate exceedance of the action level. In addition, fugitive dust migration should be visually assessed during all work activities.

1. If the downwind PM-10 particulate level is 100 micrograms per cubic meter (mcg/m^3) greater than background (upwind perimeter) for the 15-minute period or if airborne dust is observed leaving the work area, then dust suppression techniques must be employed. Work may continue with dust suppression techniques provided that downwind PM-10 particulate levels do not exceed 150 mcg/m^3 above the upwind level and provided that no visible dust is migrating from the work area.

2. If, after implementation of dust suppression techniques, downwind PM-10 particulate levels are greater than 150 mcg/m^3 above the upwind level, work must be stopped and a re-evaluation of activities initiated. Work can resume provided that dust suppression measures and other controls are successful in reducing the downwind PM-10 particulate concentration to within 150 mcg/m^3 of the upwind level and in preventing visible dust migration.

3. All readings must be recorded and be available for State (DEC and NYSDOH) and County Health personnel to review.

December 2009

Appendix C Pitch Pump House 722a Basement Water Removal & Pre-Treatment Scope Of Work

PITCH PUMP HOUSE 722A
BASEMENT WATER REMOVAL &
PRE-TREATMENT SCOPE OF WORK
REYNOLDS METALS LLC MASSENA EAST FACILITY

Reynolds Metals Company LLC
Massena NY

April 7, 2025

Document	Date	Prepared by:
Final for RFP	April 7, 2025	Teresa Royke/Jasom Mibroda

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Appendices

1. Introduction

This Scope of Work (SOW) details the requirements for removal, system design, treatment, and on-site discharge of water is support of planned demolition and soil remediation work at the former Reynolds Metal Company LLC (RMC) St Lawrence Reduction Plant located at 194 County Road 45 in Massena, New York. This SOW was prepared in accordance with the updated Miscellaneous Wastewater Management Plan (RMC 2025).

The RMC St. Lawrence Reduction Plant began aluminum smelting operations in 1958 and operated continuously until March 31, 2014. Since the plant idled, a series of demolition projects have been undertaken between 2015 and 2024 to remove surplus equipment and buildings. The final phase will be implemented in 2025 and consists of the demolition of several buildings and remediation of associated soils including the former Pitch Pump House (building 722A).

Prior to the 722A Building demolition, however, water that has accumulated in the basement of the building (i.e. Basement Water) needs to be removed. Non-Aqueous Phase Liquid (NAPL) has been observed in and on the basement water. The NAPL is an organic liquid, in this case most likely a Heat Transfer Media Liquid (HTML) oil fluid, that has a density that differs from water and therefore immiscible with it.

This SOW requires the Supplier to remove water from the basement, treat on-site, and discharge to RMC Outfall 002 Impoundment or Outfall 003 treatment system, as agreed to by the Site Manager.

This discharge water must be demonstrated to meet the pretreatment requirements of this facility prior to transfer. No other discharge will be permitted without approval by Alcoa's Representative.

The Supplier will provide but is not limited to, all labor, materials, equipment and incidentals relative to designing, furnishing, installing, operating, and maintaining the system to maintain dewatering effluent within applicable requirements of this plan and the Site SPDES permit.

1.1. Current Conditions

1.1.1. Water Quality Data

A representative sample of the accumulated basement water was collected and analyzed in August 2023. Solids (sediment and NAPL) were allowed to settle and analyzed separately from the liquid. The data are summarized below in Table 1.

Table 1: Basement Water Quality					
Sample No.	**Media**	**Method**	**Analyte (Liquid)**	**Results**	**Unit of Measure**
L2344943-01	Water	Total Semi-Volatiles	Benzo(b)fluoranthene	320	µg/l
			Benzo(k)fluoranthene	82	µg/l
			Chrysene	130	µg/l
			Benzo(ghi)Perylene	86	µg/l
			Indeno(1,2,3-cd)pyrene	88	µg/l
			Pyrene	170	µg/l
L2344943-02	water	TCLP	1,4-Dichlorobenzene	0.49J	µg/l
		Total Volatiles	1,3-Dicholorbenzene	0.80J	µg/l
			1,4-Dichlorobenzene	0.71J	µg/l
			acetone	3.8J	µg/l
			Naphthalene	0.99J	µg/l
		Total Semi-Volatiles	Anthracene	1.2	µg/l
			Acenaphthene	0.48J	µg/l
			Benzo(a)anthracene	4.4	µg/l
			Benzo(a)pyrene	2.9	µg/l
			Benzo(b)fluoranthene	9.8	µg/l
			Benzo(ghi)perylene	4.4	µg/l
			Benzo(k)fluoranthene	2.8	µg/l
			Chrysene	8.2	µg/l
			Dibenzo(a,h)anthracene	0.78J	µg/l
			Fluoranthene	15	µg/l
			Fluorene	1.3	µg/l
			Indeno(1,2,3-cd)pyrene	4.2	µg/l
			Naphthalene	1.2	µg/l
			Phenanthrene	4.4	µg/l
			Pyrene	8.1	µg/l
		Total PCBs	Total PCBs	7.6	µg/l
		TPH	TPH	33.2	mg/l
L2344943-03	Oil	Total Semi-Volatiles	Benzo(b)fluoranthene	13,000J	µg/kg
		Total PCBs	Total PCBs	133	mg/kg

1.1.2. Physical Separation Assessment - 2024

An assessment was performed in 2024 by CDM Smith (CDM) to determine if potential pretreatment methods would satisfy conditions to support the discharge through the Site's Outfall 003 treatment system. The results indicate that allowing the oil water mixture to remain in a tank under quiescent conditions, enhances the separation of the NAPL from the water. It was observed that the density of the NAPL is low enough that it can be removed from the oil-water mixture. It was also demonstrated

that removal of the NAPL would result in water that could meet the Outfall 003 SPDES effluent discharge limits. CDM Smith's treatability study is presented as Appendix A for reference.

2. Scope of Work

2.1. Design Criteria

Approximately 75,000 gallons of impacted water are estimated to have accumulated in the 722A basement. Additionally, an unknown quantity of water may potentially accumulate into the soil excavation following demolition of the Pitch Pump House and prior to soils remediation and site restoration.

The Supplier will design and provide an on-site treatment system that:

- consists of the necessary equipment to properly remove, treat, store, and transfer upon confirmation that the pretreatment criteria are met. The system must be properly sized anticipating varying flowrates throughout the project and with sufficient holding capacity so that demolition and soil remediation will not be delayed.
- will remove NAPL and solids from basement water such that the treated water meets the treatment criteria and discharge limits in Section 2.2.
- protects against contaminant breakthrough, system failure, vandalism, or other incidents that may result in inadvertent discharges.
- Allows for the collection of all free-phase products, sludge, sediments and treatment residues. These solids will be collected, and properly solidified as needed such that waste meets the paint filter test and landfill criteria. The solidified waste will be packaged/containerized and transported to the Satellite Waste Accumulation building in coordination with Alcoa for disposal by Alcoa.

At a minimum, the following components are required for the treatment system:

- Physical separation of free product (NAPL)
- Primary filtration
- Secondary filtration
- Holding tanks
- Sample collection and confirmation
- Equipment to release to 002 Impoundment or Outfall 003 system at authorized release rate

The Supplier will provide a minimum 24-hours' notice prior to system start-up.

The Supplier will convey the discharge to the RMC Outfall 002 Impoundment or Outfall 003 treatment system only as directed. The discharge water must meet the pretreatment requirements of this facility. No other discharge will be permitted without approval by Alcoa's Representative.

The system will be designed and operated in accordance with:

- Alcoa Environmental, Health, and Safety (EHS) Standards.
- Discharge shall be consistent with the pre-treatment requirements listed below and not cause any violations of NY0000132 SPDES Discharge Permit.

2.2. Discharge Criteria

The Supplier will comply with federal, state, and local codes, ordinances, regulations, and permits for disposal of discharge effluent and collected sediment. The Supplier will provide means and measures to meet the pretreatment requirements as follows:

1) Process discharge sampling will be required to establish that the process is operating within the expected limit. This must be completed by the Supplier prior to conveying flow to the Outfall 002 Impoundment or 003 Treatment System.
2) If the treatment criteria are not met, no conveyance to the Outfall 002 Impoundment or Outfall 003 Treatment System will be permitted, and the water will be re-treated at Supplier's expense.
3) In anticipation of varying water quality as pumping progresses, the Supplier is required to install a post-treatment tank where effluent from the treatment system can be sampled to confirm that discharge limits are met prior to discharge. The design flow will be the Supplier's responsibility and will be directly affected by the treatment technology that is employed. Additionally, the size of the system and treated water tank will be determined by the Supplier.

The process discharge sampling requirements will be as follows:

1. Prior to each effluent batch leaving the project site to the Outfall Impoundment 002 or 003 Treatment System, one (1) water sample will be collected by the Supplier, submitted to Pace Analytical and analyzed for constituents in Table 2 to confirm that they process met the discharge criteria. The Supplier will rush the sample analysis using a 48-hour turnaround time.

This frequency can be modified with Alcoa's approval.

Table 2: Treatment Requirements and Discharge Limits

Analyte	Limit	Units of Measure
Total Suspended Solids	<20	mg/L (ppm)
Total PCBs	<0.5	µg/L (ppb)

Once water quality has been confirmed and the discharge approved by the Alcoa Representative, the Supplier is free to discharge water to the 002 Impoundment or Outfall 003 Treatment System, as agreed to by the Site Manager.

The release rate will be coordinated with the Site Manager so that the 002 Impoundment or Outfall 003 Treatment System are not overwhelmed with project water in combination with regular site storm water.

2.3. Decontamination

The Supplier is responsible for decontamination of holding tanks and all rental equipment and reuseable equipment that came in contact with untreated water prior to demobilization. The Supplier will clean according to the requirements of the equipment vendors and in accordance with applicable regulations.

At a minimum, the Supplier will document the effectiveness of decontamination methods by collecting wipe samples from equipment surface to confirm that the tanks, pumps etc. are below the PCB limit of 10 µg/100cm^2 in accordance with applicable regulation. Results of the wipe samples analysis shall be provided prior to equipment leaving the site.

Hoses, PPE and other single use or non-reusable equipment such as absorbent pads, booms, used treatment media and other impacted equipment, will be disposed by Alcoa. The Supplier is required to collect/package materials, load containers provided by Alcoa and move them to the Satellite Waste Building.

2.4. Deliverables

Prior to the work, the Supplier will provide drawings, schematics, details, and supporting engineering calculations for the proposed dewatering, storage, and pretreatment system including all sediment control tanks, pumps, hoses/piping, bag filters, and additional treatment systems, etc. including the following:

1) Arrangements, sizes, capacities, locations and depths of all elements of the proposed system,
2) Details regarding schedule and procedure for cleaning sedimentation tanks, treatment equipment, and other reuseable equipment upon completion of the work,
3) Methods and procedures for testing for discharge water,
4) Anticipated release rates including peak and average discharge rates, and
5) A Health and Safety Plan describing methods and procedures for protecting health and safety of workers and the environment,
6) Spill cleanup equipment and procedures in the event of an unscheduled release; and
7) Other safety related documentation described in Section 3.

3. EHS Statement and Requirements

Safety is a key factor considered in Supplier selection and expected in performance. All work will be performed in accordance with applicable federal, state, and local safety regulations, and Alcoa's environmental, health and safety standards. The work is subject to audit for conformity at any time.

The Supplier will be aware that some of the work will take place in a hazardous environment including chemical and physical hazards such as PCBs (HTML fluid, impacted concrete and soils), Asbestos Containing Materials (ACM) inside the building, low light, working at heights, slippery surfaces and uneven work surface.

The Supplier is responsible for the health and safety of its employees as well as those of any Subcontractor.

All Work will be performed in accordance with federal, state, and Alcoa requirements pertaining to worker safety. This includes, but not limited to, 29 CFR 1910 (General Industry Standards), 29 CFR 1926 (Construction Industry Standards). In addition, Supplier will also comply with the Alcoa's Supplier pre-qualification standards.

If the Supplier has a bilingual staff, it will provide adequate translation of work and safety related information as well as a translator for daily safety meetings and presentations.

The Supplier will be required to submit the following documentation prior to mobilization to the site:

A. Project Specific Health and Safety Plan (HASP)
B. Job Safety Analyses (JSAs) for each major task, including those necessary for mobilization to the site and delivery of any equipment. The JSA must provide "Stop Work" criteria, see example JSA provided in Appendix B.
C. Evacuation and Emergency Response Plan (Can be part of the HASP)
D. Copies of training certificates and licenses for personnel involved tasks that require specific training or credentials.
E. SDS Inventory for materials being mobilized to the site
F. Hearing Conservation Program (can be part of a Corporate Health and Safety Program)
G. OSHA 300 Series Logs and Federal Postings Federal Postings do not have to be submitted but must be posted on site in a conspicuous location
H. Worker Health Standard (Covid-19 management/expectations)

The Supplier shall forward submittals to Alcoa a minimum of two week prior to any planned Work related to the Suppliers' submittals.

The Supplier will be aware that the Work includes potential exposure to the following:

- Oils and Petroleum Products
- Polychlorinated Biphenyls (PCBs) solids and HTML liquids

The Supplier is required to provide all necessary training for its personnel and compliance with OSHA standards.

HAZWOPER training is necessary for the work. All site personnel will have completed the training and have up to date certificates.

The Alcoa will provide the mandatory Site-Specific Orientation ONLY 1 day per week on a weekday mutually agreed (for clarification this is a set day i.e., Monday and will not change weekly). The orientation is about 6 hours. The Supplier should plan accordingly.

Although unlikely that these methods will be used, all Supplier and Subcontractor employees actively engaged in torch cutting of steel or other metal coated with lead-based paint will be required to have

completed all medical surveillance and training mandated by 29 CFR 1926 and all other federal and state regulations.

At least two members of the crew will be current in first-aid training as required by OSHA and Alcoa standards.

3.1. Emergency/Contingency Procedures

The Supplier will submit an Evacuation and Emergency Response Plan (part of the HASP) that describes the procedures used by the Supplier in seeking emergency medical services and for evacuation of the project site in the event of a project or plant emergency.

3.2. Health and Safety Plan (HASP)

The HASP will, at a minimum, describe the levels of protection that the Supplier's personnel will wear for the specific activities in which they will be engaged. The HASP will include procedures for protecting employees against exposure to PCBs, petroleum products, mobile equipment, and physical hazards.

The Supplier must specify procedures for upgrading the level of protection, including specifying at what concentration (based on the monitoring) such upgrades will occur. The HASP will include action levels at which the level of personnel protection will be modified and/or engineering controls implemented.

Prior to performing a major task or activity, the Supplier will submit a Job Safety Analysis (JSA). A sample copy of a JSA is included in Appendix B for the Supplier to use as a guideline in preparation of the JSAs for this project. The JSA will describe the work feature to be performed, the steps involved in performing the work and provide an assessment of all anticipated hazards with appropriate methods to control, eliminate or reduce any hazards using adequate levels and types of personal protective equipment (PPE), layers of protection or administrative controls as required to execute the work safely. JSAs will be prepared by the Supplier and submitted to the ARP for review prior to performing any work covered by the JSA.

Daily pre-job safety briefings will be held each morning by the Supplier to discuss the day's activities, identify anticipated hazards and high-risk work and to address any safety issues.

The Supplier will also attend the one-hour weekly progress meeting.

3.3. Health and Safety Officer

The Supplier will designate one person on site as the Project Health and Safety Officer (HSO) to verify compliance with the HASP by all on-site personnel. The HSO will also interact with the ARP as required to update the project status.

The HSO will:

- Review, understand and implement Alcoa EHS standards.
- Perform daily inspections of all work activities as well as weekly scored audits of all work

procedures and areas and maintain records of the inspections and audits.

- Maintain a SDS inventory and update the inventory as required throughout the duration of the project.
- Perform daily project safety (tailgate) briefings each day prior to initiating any work activities.
- Maintain all training and medical records
- Develop, modify, and maintain the JSAs required for the project
- Control site access, security, signage, barricades, and project lighting
- Perform required project specific training for all site personnel
- Maintain the project's visitor log
- Oversee subcontractors, venders, and site visitors
- Assist Alcoa personnel and the ARP in performance of any project audits
- Perform air and noise monitoring as required
- Schedule required medical monitoring and maintain medical clearances
- Select, order, and maintain adequate PPE for the project personnel and site visitors

The Supplier will submit the qualifications of its HSO to Alcoa for review in the Technical Proposal.

3.4. Personal Protective Equipment

All operations have the potential for encountering hazardous conditions and Level D will be the minimum protection allowed. Supplier will comply with PPE requirements of Alcoa Site Conditions.

To adequately protect personnel in areas of higher potential contaminant exposure, an upgrade to Level C may be required if action levels are exceeded. The HSO will be responsible for monitoring conditions and upgrading protection equipment as required. The Supplier will supply properly trained personnel with approved safety equipment.

3.5. Environmental Health and Safety Audits and Reports

During the performance of the Work, the Supplier will be required to actively participate in the performance of Environmental, Health and Safety audits and inspections to ensure the project is being performed in accordance with applicable regulatory and Alcoa EHS Standards (Appendix C). This will include audits performed in the field by the ARP and potentially, audits by Alcoa's corporate audit group.

3.6. Working at Elevation

Alcoa has very strict rules regarding working at elevation relating to accessing truck and transport deliveries. This includes accessing the top of Frac Tanks.

All truck and transport drivers and delivery personnel, all site personnel involved with loading and unloading equipment (this includes water into Frac Tanks), materials and supplies and all personnel maintaining or working on mobile equipment must obey the sites policies and procedures. The site-specific requirements are detailed below:

Fall Protection/prevention is required any time a driver or worker is exposed to fall hazard of **48 inches or more** – this includes any truck, trailer, or flat bed and Frac Tanks.

Standing on top of a load or tank is always prohibited.

Climbing on truck bed to secure tarps is always prohibited.

Drivers are not allowed to operate Alcoa owned or leased equipment (i.e., fork trucks, mobile or fixed rail cranes) to load or unload their truck/trailer without approval from the ARP or Alcoa Safety. If Alcoa owned equipment is made available for use by the Supplier, the Alcoa's hold harmless equipment use indemnification must be executed prior to using the equipment.

Any driver or employee not in compliance with fall protection/prevention protocols will be removed and banned from this site and its Company notified.

Reynolds Metals Company
Massena East Plant,
P.O. Box 500, Massena, New York 13662

January 30, 2017

Mr. Lincoln B. Fancher
Engineering Geologist II
NYSDEC, Region 6
Division of Environmental Remediation
317 Washington Street
Watertown, New York 13601

Subject: Reynolds Metals Company, LLC
North Yard Technical Memorandum

Dear Mr. Fancher:

During our meeting in Watertown on October 27th, we discussed past remediation efforts of the North Yard at the former Reynolds Metals Company, LLC plant in Massena, New York. CDM Smith and Alcoa have prepared the attached technical memorandum to provide NYSDEC with additional information. Much of this information comes from the *Area Specific Completion Report for Remediation of the North Yard at the Reynolds Metals Company St. Lawrence Reduction Plant*, prepared by Bechtel Associates, dated July 1998. Although, we understand that NYSDEC has this report, you may find the figures in the attachment to this letter easier to view as we were able to locate the CAD files for them.

If you have any questions, please contact me.

Very truly yours,

Ronald M. Morosky

Director, Corp. Remediation

EA:tmp

Attachments

cc: Ernest Ashley, CDM Smith
p:\east\pc\2017\17018.doc

CDM Smith

Memorandum

To: *Ron Morosky*

From: *Ernest Ashley*
Hallie Thornburrow

Date: *January 30, 2017*

Subject: *Reynolds Metals Company, LLC*
North Yard Technical Memorandum

The purpose of this memo is to summarize the remedial actions that have been implemented at the North Yard site at the Reynolds Metals Company, LLC. The North Yard is located north of the main plant buildings. This area was the center for receiving, storing and distributing raw materials for the plant's operation. Figure 1 and Figure 2 show a plan view of the former Reynolds Metals Company, LLC facility which include the highlighted utilities and a detailed view of the North Yard, respectively

Interim Remedial Measures

In 1988 Woodward-Clyde Consultants conducted a four-phase investigation in the northern portion of the plant to characterize the extent of PCB contamination. The specific investigated areas included the pitch and fuel oil tank diked areas, areas north of the dikes, drainage ditch along Haverstock Road, areas by the Pitch Pump House, railroad track area, Carbon Plant area and thickener system area. Following receipt of these results, actions were taken to prevent the spread of PCBs prior to remediation efforts. These actions included covering non-traffic areas with polyethylene sheeting and installing barriers, excavation along the 004 Outfall drainage area and installation of an interceptor ditch, installation of a GAC filter system and rerouting of storm drainage to this system and installation of the North Yard carbon filtration facility.

Summary of Remediation

Remediation construction phases at the North Yard began with Phase II in July of 1995. Construction Phase VI, the final phase, was completed in 1996. The remediation was performed of six different construction phases delineated by region as shown on Figure 3. Photos off the remediation work are included in Attachment A.

Excavation limits were decided on prior to construction and were based upon extensive sampling results from 1994 and 1995 field sampling. Samples were collected on 25 foot centers and at depths to delineate removal areas. The results were also used to categorize disposal requirements prior to excavation.

The North Yard was divided into two separate areas as defined in the Amendment to the ROD (made in May 1995), these areas are shown in Figure 4. This division was defined by operational constraints of the plant, so remediation could be completed with minimal

interruptions to plant processes. Area 1, which was crucial to plant production and operation, consisted of the Pitch Pump House, the rail yard, unloading shed and the pitch and fuel oil tank area. The cleanup goal for this area was set as 25 ppm.

Area 1 was further divided into two separate areas, defined by the 100 ppm sample footprint. Within the 100 ppm sample footprint, soils were excavated to the 25 ppm cleanup goal. Verification samples were taken at 50 foot intervals within the 100 ppm footprint. Most of this area was excavated until concentrations of 10 ppm total PCBs in soil were achieved. Outside of the 100 ppm footprint in Area 1, excavation was performed to a depth of one to two feet in most areas, to facilitate capping. Verification sampling was not performed in this area as per the Remedial Design.

Remedial cleanup goals were achieved consistently throughout Area 1 except for two grids; one in the rail yard and one at the north edge of the loading shed. Soils with a residual concentration > 25 ppm were left in place and were backfilled, capped with a geomembrane and then covered with crushed stone. These are shown on Figure 5.

Area 2 consisted of the remainder of the North Yard which had a cleanup goal of 10 ppm. Verification sampling for this area was based on a statistical model which included 31 post excavation PCB samples at randomly selected grid locations. If sample results were greater than 10 ppm additional excavation was performed to achieve the goal.

Changes were made to the original Remedial Design in the pitch and fuel oil storage tanks area. Supplementary sampling was performed in the diked areas. Additionally, excavation limits were increased in order to replace the earthen dikes with below-grade concrete slabs and walls, to improve long-term maintenance.

Total depth of excavation in the North Yard ranged from 3 to 23 feet as shown on Figure 6. A total of approximately 45,000 cubic yards of soil were removed from the North Yard. 25,332 cubic yards (at concentrations <50 ppm PCBs) were disposed on in the onsite landfill and the remaining 19,528 cubic yards that were shipped offsite for disposal.

The remediation of the North Yard did not include removal of structures, foundations or active underground piping. As a result, significant areas of the North Yard were capped to reduce mobility of the potential remaining PCBs. Specifically, concrete caps were installed near the Pump house, Carbon Plant and pitch storage tanks. The railroad area was capped using reinforced plastic geomembrane under a geonet composite.

Attachment A includes photographs taken during remediation. Photo No 999 shows that the remedial excavations were completed right up to building foundations. Photo No 1118 and 1166 shows excavations around the Pitch tanks.

Conclusions

CDM Smith understands there is potential for soils to contain PCBs with residual levels higher than the cleanup goals adjacent to existing structures such as the Pitch Pump House and potentially beneath the pitch tanks. Based on the North Yard Completion Report, we understand that soils with residual PCB contamination have been capped to prevent environmental and

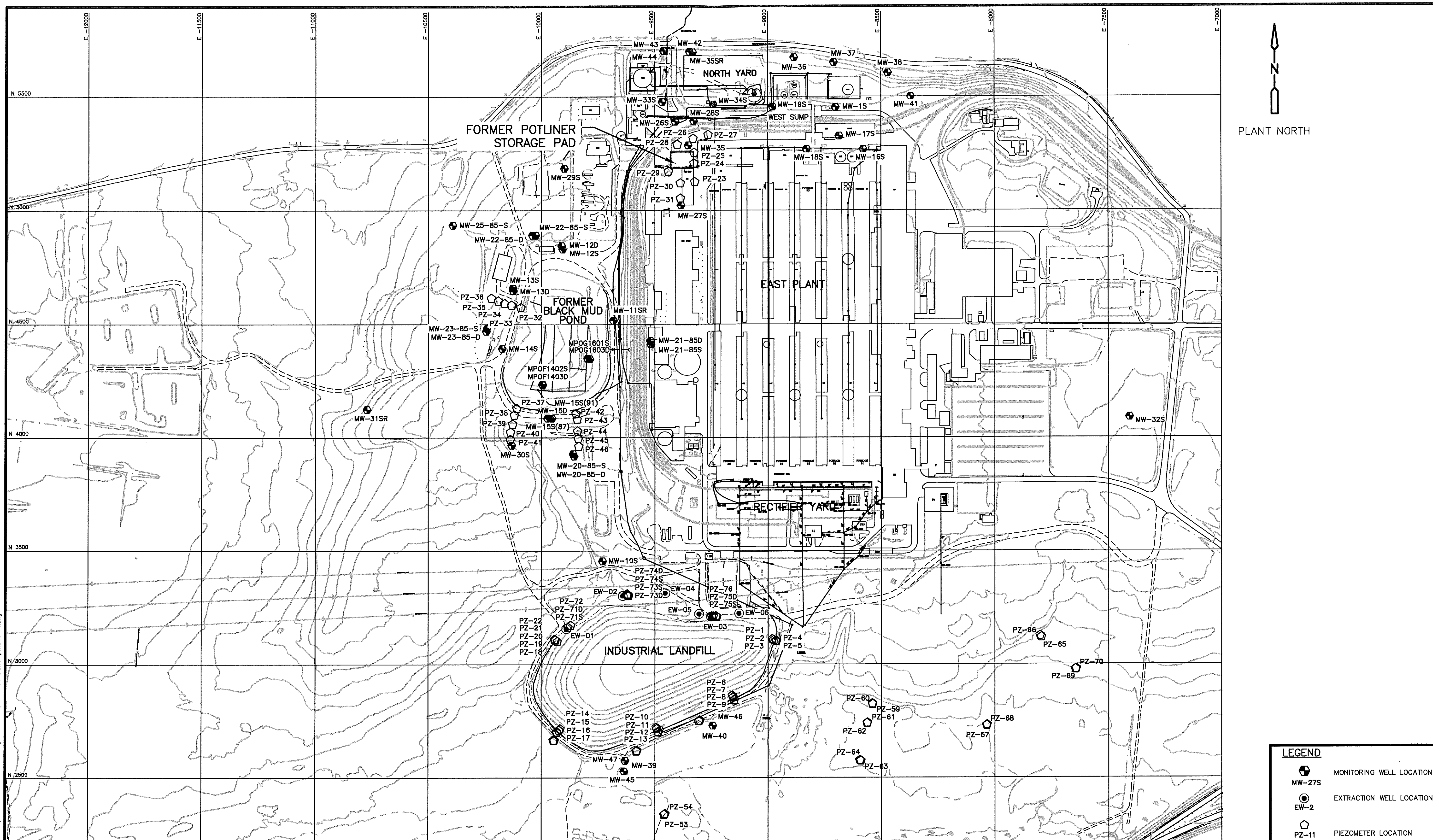
human exposure. Based on annual groundwater monitoring PCBs are not present nor migrating from the North Yard in groundwater. Until demolition is complete, additional characterization beneath existing structures would be difficult and likely incomplete.

p:\eastplantpc\17017.doc

Figure 1

Figure 1-1 Massena East Plant Site Remediation Areas

2015 Periodic Review Report for the Reynolds Metals Company, LLC – CDM Smith



CDM Smith

Camp Dresser McKee & Smith

1" = 400'

200 0 400

Alcoa Inc. - Massena, New York

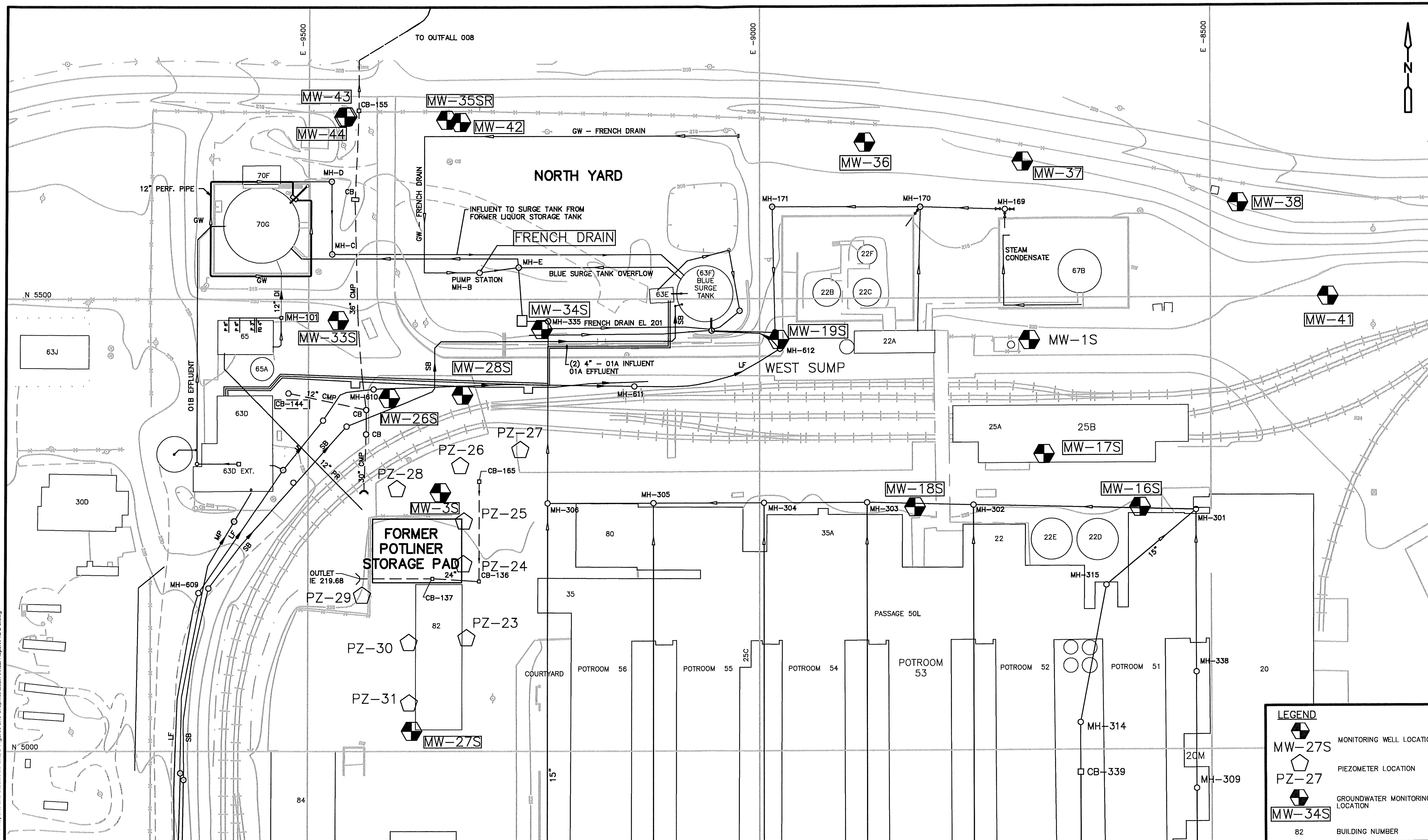
FIGURE 1-1
MASSENA EAST PLANT
SITE REMEDIATION AREAS

XREFs: [CSTPL001, F11X17] Images: []
Last saved by: KOSKIAR Time: 9/28/2016 8:09:05 AM
pw:\\dacpwapp1:PW_XM11\02\60599\03 Reports and Studies\09 CADD Figures and Graphics\East Annual Report\FIG 1-1.dwg

Figure 2

Figure 2-8 North Yard and Former Potliner Storage Pad Location Plan

2015 Periodic Review Report for the Reynolds Metals Company, LLC – CDM Smith


TO OUTFALL 008
E -9500
E -9000
E -8500
N
MW-43
MW-44
CB-155
MW-35SR
MW-42
GW - FRENCH DRAIN
MW-36
MW-37
MW-38
NORTH YARD
12" PERF. PIPE
70F
70G
MH-D
CB
MH-C
GW
FRENCH DRAIN
INFLUENT TO SURGE TANK FROM FORMER LIQUOR STORAGE TANK
MH-171
MH-170
MH-169
22F
STEAM CONDENSATE
67B
MH-E
BLUE SURGE TANK OVERFLOW
PUMP STATION MH-B
(63F) BLUE SURGE TANK
63E
22B
22C
N 5500
12" DI
36" CMP
MH-101
MW-33S
65
63J
MW-34S
MH-335 FRENCH DRAIN EL 201
SB
MW-19S
MH-612
22A
MW-1S
MW-41
(2) 4" - 01A INFLUENT 01A EFFLUENT
LF
WEST SUMP
65A
MW-28S
01B EFFLUENT
12" CMP
CB-144
MH-610
MH-611
63D
CB
MW-26S
25A
25B
PZ-27
PZ-26
MW-17S
63D EXT.
12" PR
30" CMP
PZ-28
CB-165
30D
MW-3S
MW-18S
MW-16S
MH-305
MH-306
MH-304
MH-303
MH-302
MH-301
PZ-25
80
35A
22
22E
22D
FORMER POTLINER STORAGE PAD
PZ-24
MP
LF
SB
OUTLET IE 219.68
24"
CB-136
15"
MH-315
MH-609
PZ-29
CB-137
35
PASSAGE 50L
82
PZ-23
PZ-30
COURTYARD
POTROOM 56
POTROOM 55
25C
POTROOM 54
POTROOM 53
POTROOM 52
POTROOM 51
MH-338
20
PZ-31
MH-314
MW-27S
N 5000
LF
SB
15"
20M
CB-339
MH-309
84
LEGEND
MW-27S MONITORING WELL LOCATION
PZ-27 PIEZOMETER LOCATION
MW-34S GROUNDWATER MONITORING LOCATION
82 BUILDING NUMBER

CDM Smith

Camp Dresser McKee & Smith

1" = 100'

50 0 100

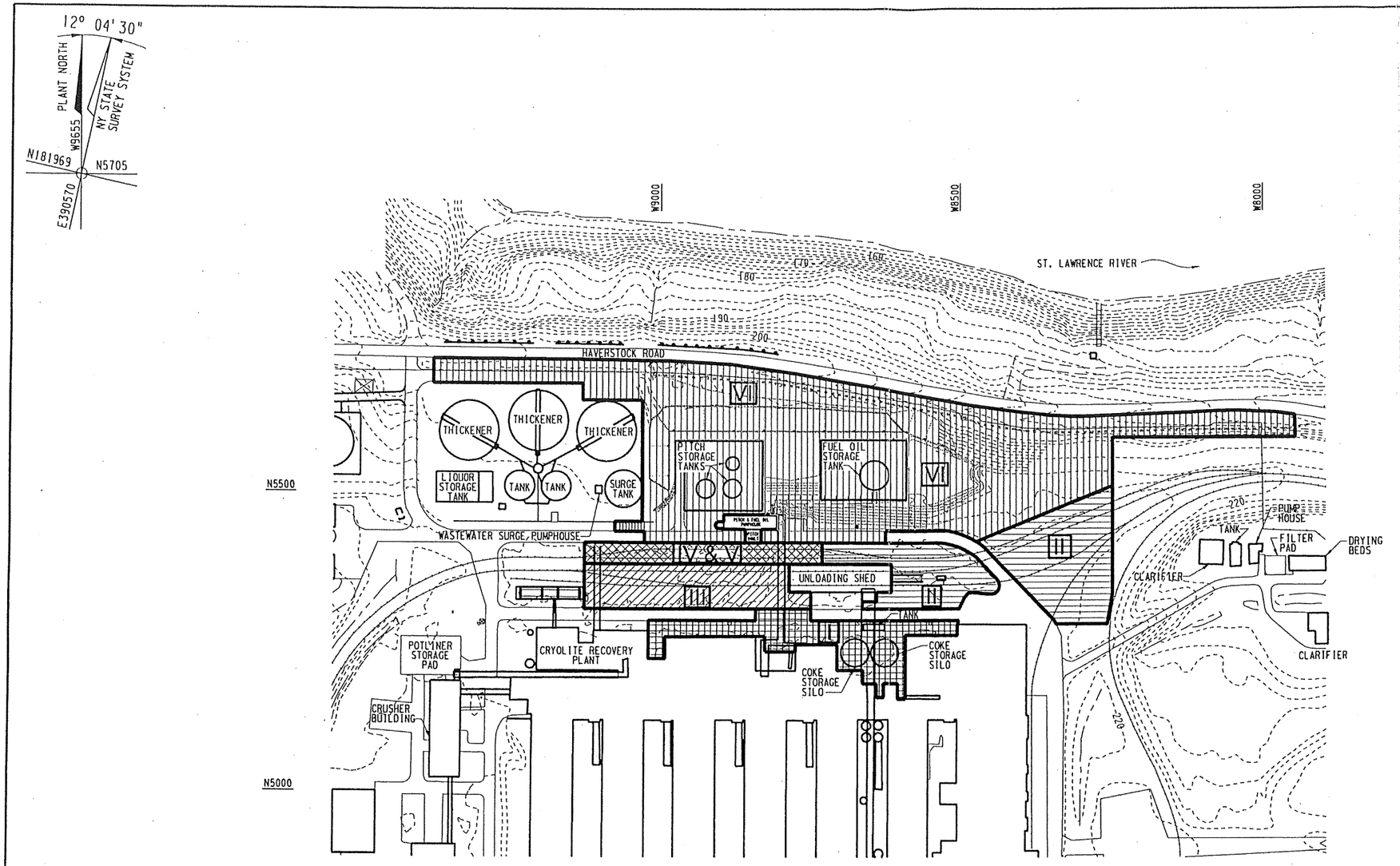
Alcoa Inc. - Massena, New York

FIGURE 2-8
NORTH YARD AND FORMER POTLINER
STORAGE PAD LOCATION PLAN

Figure 3

Figure 3 North Yard Construction Phases

Area-Specific Completion Report for Remediation of the North Yard at the Reynolds Metals Company St. Lawrence Reduction Plant Massena, New York (Volume I, Revision 1, October 1988) – Bechtel Associates Professional Corporation New York



LEGEND

- CONSTRUCTION PHASE I
- CONSTRUCTION PHASE II
- CONSTRUCTION PHASE III
- CONSTRUCTION PHASE IV
- CONSTRUCTION PHASE V
- CONSTRUCTION PHASE VI

0 200 400

1"=200'

BECHTEL ASSOCIATES PROFESSIONAL CORPORATION - NY
FOR BECHTEL ENVIRONMENTAL, INC
OAK RIDGE, TENNESSEE

FIGURE 3
NORTH YARD CONSTRUCTION PHASES

7/27/98 20384 FIG-370A.DGN

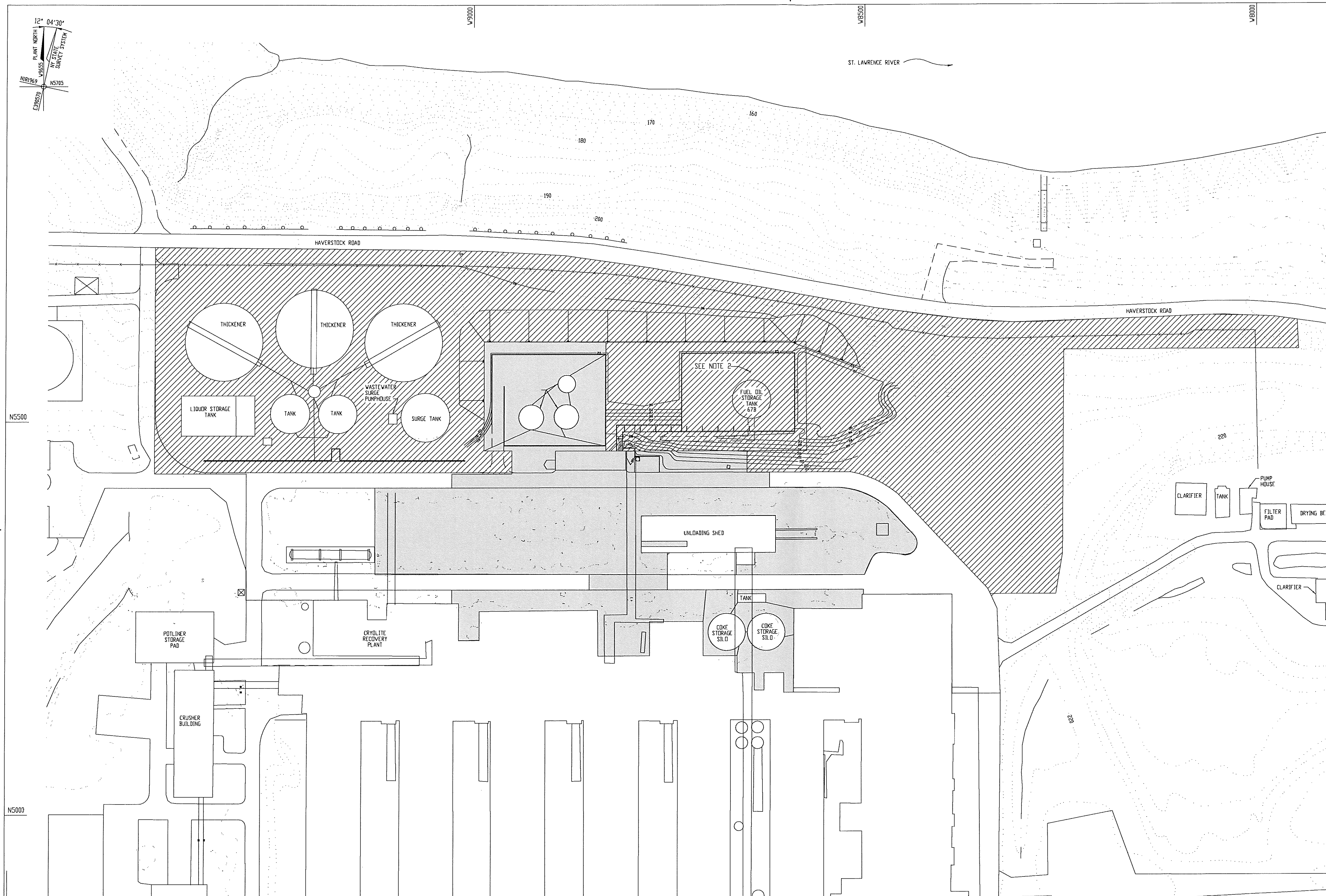
REV 8/93

11 X 17

Figure 4

Drawing Number Y-NYY-002 – North Yard Remediation Project Area 1 and Area 2

Appendix A of Area-Specific Completion Report for Remediation of the North Yard at the Reynolds Metals Company St. Lawrence Reduction Plant Massena, New York (Volume I, Revision 1, October 1988) – Bechtel Associates Professional Corporation New York



NOTES

1. FOR GENERAL ABBREVIATIONS, NOTES, AND LEGEND, REFER TO DRAWING NO. Y-NYY-001.
2. AREA AROUND FUEL OIL STORAGE TANK 678 WAS COVERED WITH CONCRETE (FOR SECONDARY CONTAINMENT OF TANK).

REFERENCE DRAWINGS

NORTH YARD REMEDIATION PROJECT SITE PLAN	Y-NYY-001

LEGEND

NORTH YARD AREA WORK LIMITS

AREA 1 WORK LIMIT (TO BE CAPPED)

AREA 2 WORK LIMIT (CAP NOT REQUIRED)

0 50' 100' 150'

SCALE IN FEET

NO.	DATE	REVISIONS	CADD BY	CADD CHKR	DESIGN BY	DESIGN CHKR	DESIGN SUPV	PROJ ENGR	RHC
2	1/21/98	AS-BUILT, INCORPORATED FCR 167	CH	JED	DES	GAC	DES	JWG	DFB
1	7/12/95	REVISED & RE-ISSUED FOR CONSTRUCTION	KCL	DWE	JJF	WCF	DES	JWG	DFB
0	6/2/95	ISSUED FOR CONSTRUCTION	KCL	DWE	JJF	BKM	DES	JWG	DFB

SCALE: AS SHOWN

BECHTEL ASSOCIATES PROFESSIONAL CORPORATION-NY
FOR BECHTEL ENVIRONMENTAL, INC.
OAK RIDGE, TENNESSEE

REYNOLDS METALS COMPANY - MASSENA N.Y.
ST. LAWRENCE REDUCTION PLANT

NORTH YARD REMEDIATION PROJECT
AREA 1 AND AREA 2

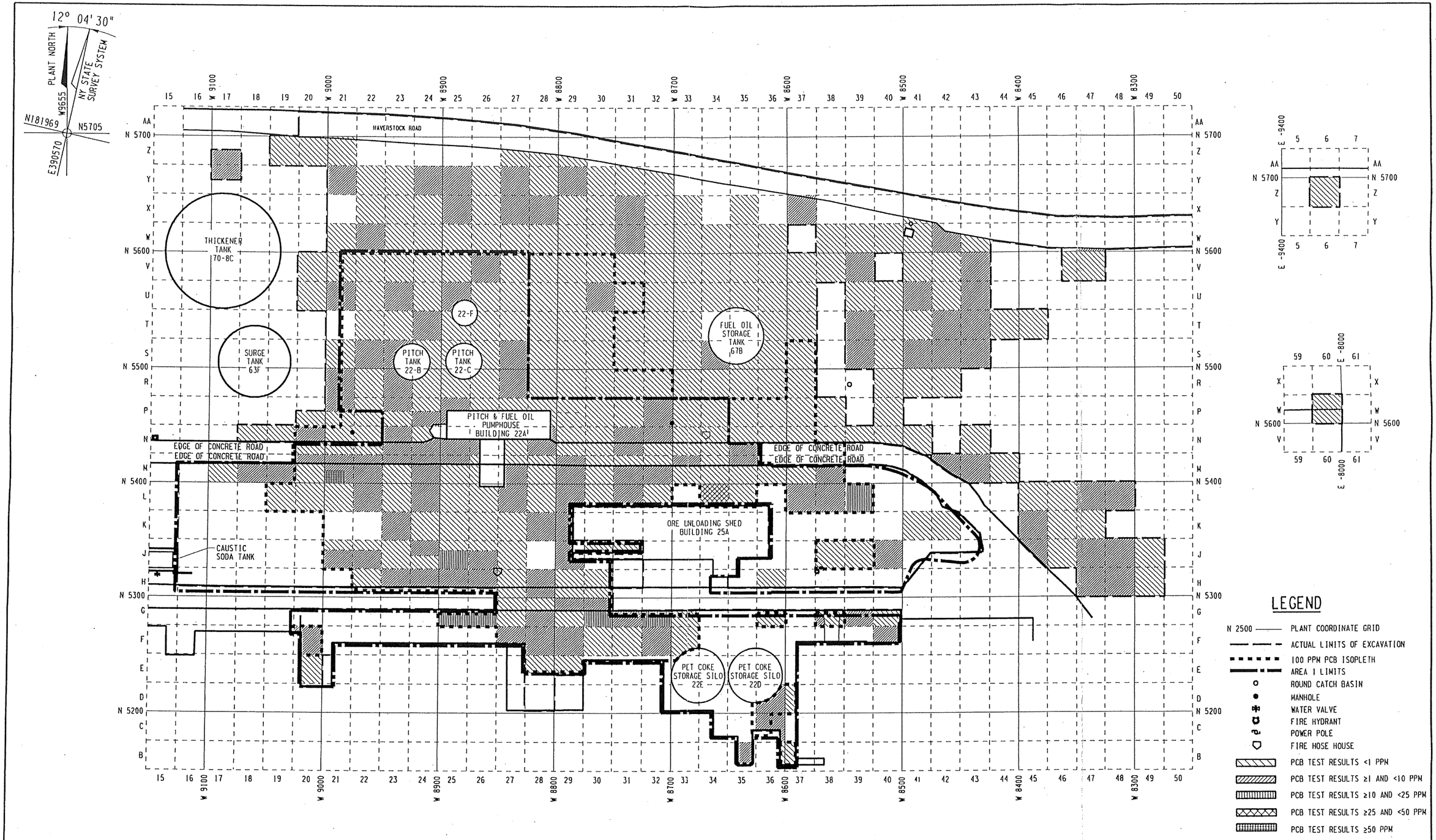
JOB NO.	DRAWING NO.	REV
20384	Y-NYY-002	2

28 X 42

Figure 5

Figure 4 – North Yard Post-Excavation Sample Results

Area-Specific Completion Report for Remediation of the North Yard at the Reynolds Metals Company St. Lawrence Reduction Plant Massena, New York (Volume I, Revision 1, October 1988) – Bechtel Associates Professional Corporation New York



0 80 160 240

SCALE IN FEET

BECHTEL ASSOCIATES PROFESSIONAL CORPORATION - NY
FOR BECHTEL ENVIRONMENTAL, INC
OAK RIDGE, TENNESSEE

FIGURE 4
NORTH YARD
POST-EXCAVATION SAMPLE RESULTS

7/31/98 20384 FIG-371.DGN

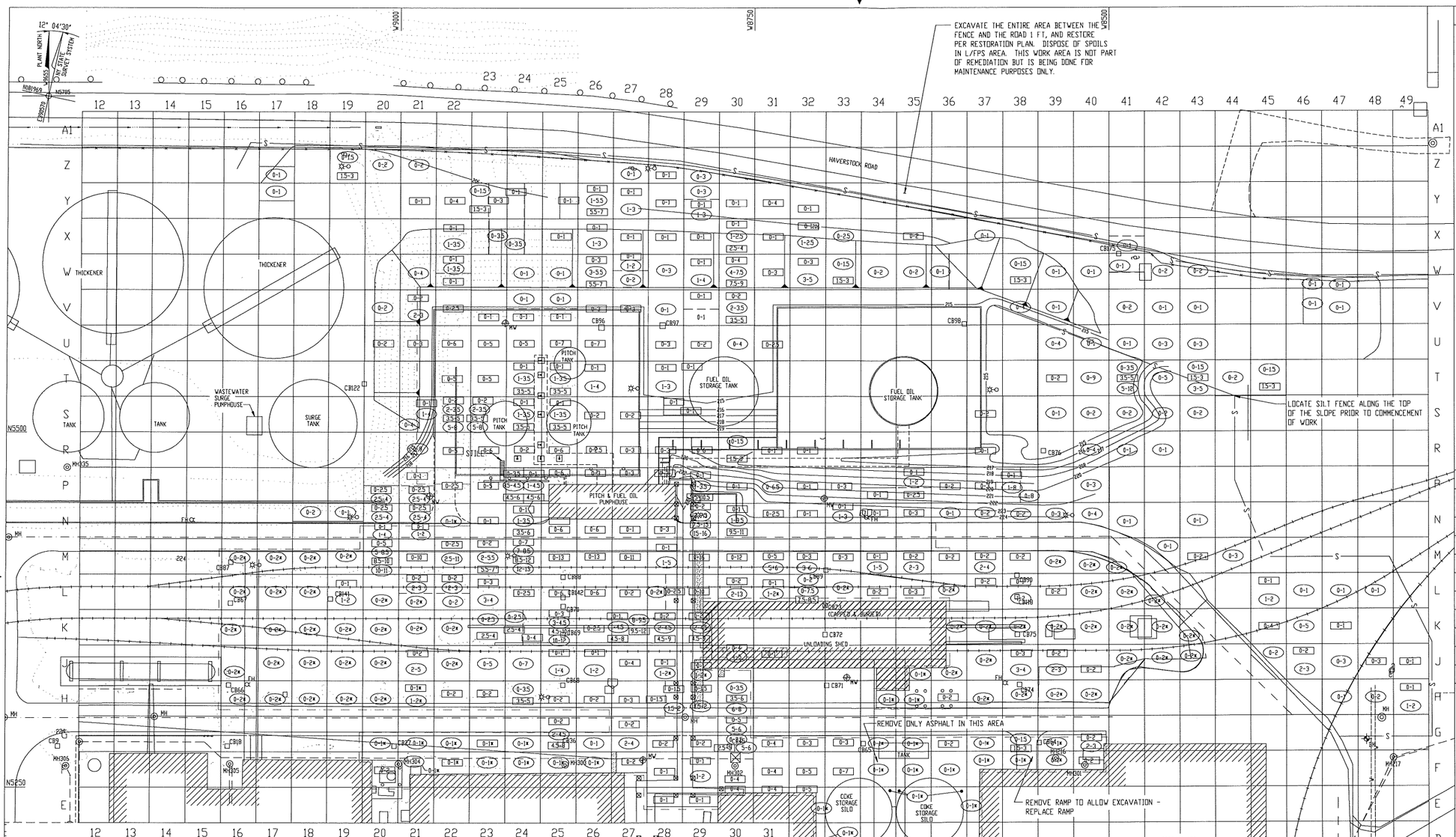
REV 8/93

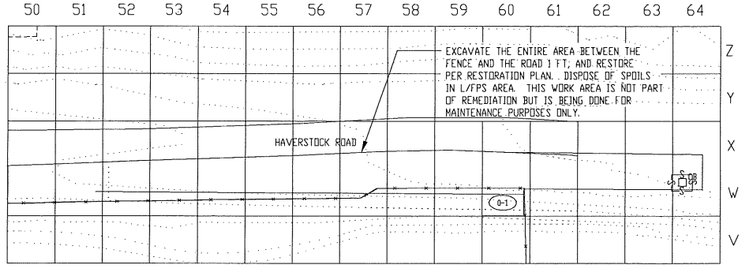
11 X 17

Figure 6

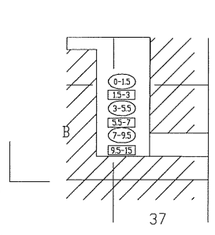
Drawing Number Y-NYY-006 – North Yard Remediation Project Grid Excavation Summary

Appendix A of Area-Specific Completion Report for Remediation of the North Yard at the Reynolds Metals Company St. Lawrence Reduction Plant Massena, New York (Volume I, Revision 1, October 1988) – Bechtel Associated Professional Corporation New York





DETAIL ROWS V - Z & COLUMNS 50 - 61



DETAIL ROW B, COLUMN 36 & 37

DETAIL ROW Z, COLUMN 6

NOTES

1. FOR GENERAL ABBREVIATIONS, NOTES, AND LEGEND, REFER TO DRAWING NO. Y-NYY-001.
2. THE 100 PPM PCB ISOPLETH SHOWN IS FOR AREA 1 ONLY, AND IS NOT APPLICABLE TO AREA 2.
3. RAILROAD TRACKS THAT FALL WITHIN THE LIMITS OF EXCAVATION SHALL BE REMOVED. THE RAILS WHICH ARE REMOVED ARE TO BE USED FOR RESTORATION OF THE TRACKS. THE EXISTING TIES SHALL BE CONSIDERED AS CONTAMINATED 150 PPM PCBs AND SHALL BE DISPOSED OF ACCORDINGLY. BALLAST SHALL BE DISPOSED OF BASED UPON ITS LEVEL OF CONTAMINATION.
4. REFER TO DRAWING Y-NYY-005 FOR STRUCTURES, PAVEMENT, RAILROAD TRACKS, AND PIPES TO BE REMOVED.
5. REFER TO ATTACHED REFERENCE DRAWINGS FOR ADDITIONAL INFORMATION REGARDING LOCATIONS OF UTILITIES.
6. PCB SAMPLES WERE GENERALLY TAKEN AT THE CENTER OF EACH GRID WITHIN THE EXCAVATION AREA. EXCAVATION LIMITS EXTEND TO THE BOUNDARY OF EACH GRID, OR TO PHYSICAL CONSTRAINTS SUCH AS BUILDINGS, ROADS, OR FENCES. COORDINATES ARE PROVIDED ONLY WHEN THE EXCAVATION LIMITS DEVIATE FROM THIS RULE.
7. CONCRETE FOOTINGS FOR THE PIPE BRIDGE AND THE PITCH TANK ARE NOT TO BE DISTURBED UNLESS OTHERWISE NOTED ON THE PLANS. REFER TO DETAIL D, ON DRAWING NO. Y-NYY-013.
8. BACKFILL MATERIAL PLACED UNDER PROPOSED ROADS, RAILROADS BIKE AREAS, LINERS, FOOTINGS, OR FOUNDATIONS SHALL BE PLACED AS 'GENERAL FILL FOR ROADS' OR 'GENERAL FILL FOR RAILROADS.' BACKFILL UNDER FUTURE GRASS AREAS SHALL BE PLACED AS 'GENERAL FILL.'
9. REFER TO DRAWING Y-NYY-013 FOR TYPICAL DETAILS OF EXCAVATION ADJACENT TO ROADS AND BUILDINGS (DETAILS C & D). THESE DETAILS ARE NOT APPLICABLE, HOWEVER, TO THE EXCAVATION IN COLUMNS 28 & 29, ROWS I–P. DUE TO THE DEPTH AND CONCENTRATION OF CONTAMINATION IN THIS AREA, NEARLY VERTICAL CUTS WILL BE REQUIRED. THEREFORE, ADEQUATE SHORING FOR THESE CUTS IS TO BE PROVIDED.
10. ASPHALT PAVEMENT EXCAVATED WITH SOIL DESIGNATED FOR ONSITE DISPOSAL WILL BE TRANSPORTED TO ONSITE LANDFILL. ASPHALT EASILY SEPARATED FROM SUB-BASE IN AREAS DESIGNATED FOR OFFSITE SHIPMENT WILL BE TRANSPORTED TO ONSITE LANDFILL. ASPHALT NOT EASILY SEPARATED FROM SUB-BASE IN AREAS DESIGNATED FOR OFFSITE SHIPMENT WILL BE SHIPPED OFFSITE.
11. FOR ACTUAL EXCAVATION LIMITS, SEE ATL DRAWING ATL-NYD-07.

REFERENCE DRAWINGS

NORTH YARD REMEDIATION PROJECT PAVEMENT, RAILROAD TRACK, AND STORM STRUCTURE DEMOLITION PLAN	Y-NYY-005
NORTH YARD REMEDIATION PROJECT GRADING AND RESTORATION PLAN	Y-NYY-007
YARD PIPING PLAN-AREA 4	19-6225-Y-M-4
YARD PIPING PLAN-AREA 5	19-6225-Y-M-5
YARD PIPING PLAN-AREA 6	19-6225-Y-M-6
YARD PIPING PLAN-AREA 7	19-6225-Y-M-7
NORTH YARD REMEDIATION PROJECT SITE PLAN	Y-NYY-001
NORTH YARD REMEDIATION PROJECT PITCH PUMPHOUSE PIPING DEMOLITION PLAN	Y-NYY-004
NORTH YARD REMEDIATION PROJECT SECTIONS AND DETAILS	Y-NYY-013

LEGEND

- 0-2 — EXCAVATION DEPTH (FT) 150 PPM PCB
- (2-3) — EXCAVATION DEPTH (FT) <50 PPM PCB
- 100 PPM PCB ISOPLETH (SEE NOTE 2)
- – – – – – AREA 1 LIMITS
- x — INDICATES EXCAVATION REQUIRED ONLY FOR INSTALLATION OF LINER OR PAVING, NOT FOR REMEDIATION

0 30' 60' 90'
SCALE IN FEET

NO.	DATE	REVISIONS						
3	7/28/98	ADDED NOTE 11	CH	JED	JVG	JED	JVG	JVG	DFB
2	1/21/98	INCORPORATED FCRs 117 163 & 167, AND FCNs 116, 120, & 133	CH	JED	DCS	GAC	DCS	JVG	DFB
1	7/19/95	REVISED & RE-ISSUED FOR CONSTRUCTION	KCL	KEL FOR DWE	JJF	VCF	JVG FOR DCS	JVG	DFB
0	6/2/95	ISSUED FOR CONSTRUCTION	DWE	DWE	JJF	BKM	DCS	JVG	DFB

SCALE: AS SHOWN

BECHTEL ASSOCIATES PROFESSIONAL CORPORATION-NY
FOR BECHTEL ENVIRONMENTAL, INC.
OAK RIDGE, TENNESSEE

REYNOLDS METALS COMPANY - MASSENA N.Y.
ST. LAWRENCE REDUCTION PLANT

NORTH YARD REMEDIATION PROJECT GRID EXCAVATION SUMMARY

JOB NO.	DRAWING NO.	REV
20384	Y-NYY-006	3

20384/YNYY-006.DGN

28 X 42

Attachment A

North Yard Remediation

Photo No: 977 ***Date/Time:*** 07/27/95 @ 2:30 p.m.
Description: North Yard – Excavation along west end of construction phase II

Photo No: 982 ***Date/Time:*** 07/28/95 @ 9:30 a.m.
Description: North Yard - Flowable fill being contoured with long-arm trackhoe

Photo No: 985 ***Date/Time:*** 07/29/95 p.m.
Description: North Yard – Installation of geomembrane liner around catch basin in construction phase II

Photo No: 999 ***Date/Time:*** 08/22/95 @ 5:00 p.m.
Description: North Yard – Center section on construction phase I, looking east

Photo No: 1008 ***Date/Time:*** 08/30/95 @ 6:05 p.m.
Description: North Yard – Excavation in construction phase III, looking north

Photo No: 1018 ***Date/Time:*** 09/19/95 @ 6:40 a.m.
Description: North Yard – Completed excavation of south road, looking east

Photo No: 1021 ***Date/Time:*** 09/28/95 @ 1:55 p.m.
Description: North Yard – Excavation of construction phase IV/V, looking west

Photo No: 1089 ***Date/Time:*** 04/24/96 @ 11:50 a.m.
Description: North Yard – Placing flowable fill in excavated North Road near east end of Pitch Pumphouse

Photo No: 1103 ***Date/Time:*** 05/08/96 @ 5:00 p.m.
Description: North Yard - Excavation north of Fuel Tank 67B

Photo No: 1118 ***Date/Time:*** 05/22/96 @ 11:40 a.m.
Description: North Yard - Grading for restoration of Fuel Tank area

Photo No: 1166 ***Date/Time:*** 07/10/96 @ 6:40 a.m.
Description: North Yard - Remediation along northwest corner of pitch dikes

Photo No: 1181 ***Date/Time:*** 07/30/96 @ 5:20 p.m.
Description: North Yard – Grading completed and formwork started in pitch containment area

RMC MASSENA EAST

2025 DEMOLITION & REMEDIATION PROJECT
SCOPE OF WORK

Version DATE	NATURE OF REVISION	NAME(S) OF DOCUMENT REVIEW PARTICIPANT(S)
04.15.2025	FINAL FOR RFP	T. Royek. C. Peets, J. Mibroda
05.16.2025	Revision 1.0 SOW	T. Royek

TABLE OF CONTENTS

Appendices

Tables

Figures

ACRONYMS

Acronym	Description
ACM	Asbestos Containing Material
AER	Alcoa Environmental Remediation
AHA	Activity Hazard Analysis
ANSI	American National Standards Institute
ARP	Alcoa Responsible Person
BMP	Best Management Practice
CDL	Commercial Driver's License
CFR	Code of Federal Regulations
CID	Contractor Interface Document
CPM	Critical Path Management
CRP	Contractor Responsible Person
CTP	Coal Tar Pitch
DOT	Department of Transportation
EHS	Environmental, Health, and Safety
EPP	Environmental Protection Plan
ESD	Alcoa Engineering Standard
HASP	Health and Safety Plan
HAZWOPER	Hazardous Waste Operations and Emergency Response (OSHA 29 CFR 1910.120)
HSO	Health and Safety Officer
HTM	Heat Transfer Material
IT	Information Technology
JSA	Job Safety Analysis
JSP	Job Safety Plan
MSDS	Material Safety Data Sheet
MT	Metric Ton
OSHA	Occupational Safety and Health Administration
PEHSR	Project Environmental, Health, and Safety Review
PM	Contractor Project Manager
PPE	Personal Protective Equipment
RCRA	Resource Conservation and Recovery Act
RMC	Reynolds Metals Company LLC (a separate entity within Alcoa Corp USA)
SPA	Single Point of Accountability
SPCC	Spill Prevention, Control, and Countermeasure
SPL	Spent Pot Liner (Lining) K088 Hazardous Waste
SWPP	Stormwater Pollution Prevention
SWPPP	Stormwater Pollution Prevention Plan
TLT	Tag Lock Try
TLV	Tag Lock Verify
TSDF	Treatment, Storage and Disposal Facility

1 INTRODUCTION

1.1 Description of the 2025 Demolition Scope of Work

This Scope of Work (SOW) contained herein comprises the work for 2025 at Reynolds Metal LLC Massena NY facility and consist of the following:

1) Demolition:

    a. Removal of the Pitch Pump House 722A (building, below grade G-vault and pitch tank) in its entirety. This includes floor slab, footers, foundations, G-vault walls and base and equipment pedestals ancillary equipment, equipment pedestals, and foundations. Pre-demolition activities include the removal and on-site treatment of basement water (by Others) and asbestos abatement. This work also includes cleaning of oily substance and stabilization of G-Vault concrete walls prior to soil sample collection (by Others) and subsequent demolition of G-Vault sidewalls and bottom slab.

    b. Removal of the Former Pitch Tanks (722B, C and F) and Fuel Storage Tank (767B) Containment concrete in its entirety.

    c. Removal of Building 735 Channel Press Building in its entirety to slab on grade including asbestos abatement, separation from the adjacent Potroom buildings (753-756), , clean out trash/debris prior to demo, equipment removal (primarily the channel press and seven (7) pin hole plugging material hoppers and the plug material in 3 of the hoppers). The work also includes the removal of the PCB-impacted concrete floor slab and associated footers, and foundations only.

    d. Removal of the former Clarifier 763K Tank and Potable Water Tank 765A, and ancillary equipment in their entirety. There is no concrete pad under the tanks.

    e. Removal of 722 Paste Plant PCB-impacted concrete slab and associated footers and foundations. This work includes saw cutting the slab approximately 3 feet from Potroom (752, 753) and the Conveyor Tower (722J) buildings that remain. The remaining concrete slab (and associated footers, foundations) will be left in place.

    f. Loading for disposal approximately 1200 tons of crushed concrete that was used as a working platform during Paste Plant Building demo in 2024 and a small pile of concrete staged on 722 Paste Plant slab.

    g. Removal and recycling of the superstructure stored on south end of the plant.

2) Remediation:

    a. Excavation and removal of PCB impacted soils including but not limited to worker and environmental protection from 722 Paste Plant, 735 Channel Press Building and the 722A Pitch Pump House and G-Vault Areas in accordance with the attached **Remediation Work Plan (Appendix A)**. This work includes impacted soil removal, loading for disposal, installation of liner and fill, decontamination and site restoration.

The scope of work includes verification of necessary utility isolations (isolation performed previously by Others), asbestos abatement, waste removal (including clearing out trash/debris in the Channel Press Building), demolition of all buildings, tanks and structures, final cleaning of the work area, subsurface soil remediation and site restoration. The disturbances in surrounding areas caused by the work will be rough graded to prevent future safety issues.

The SOW is shown on Figure 1.

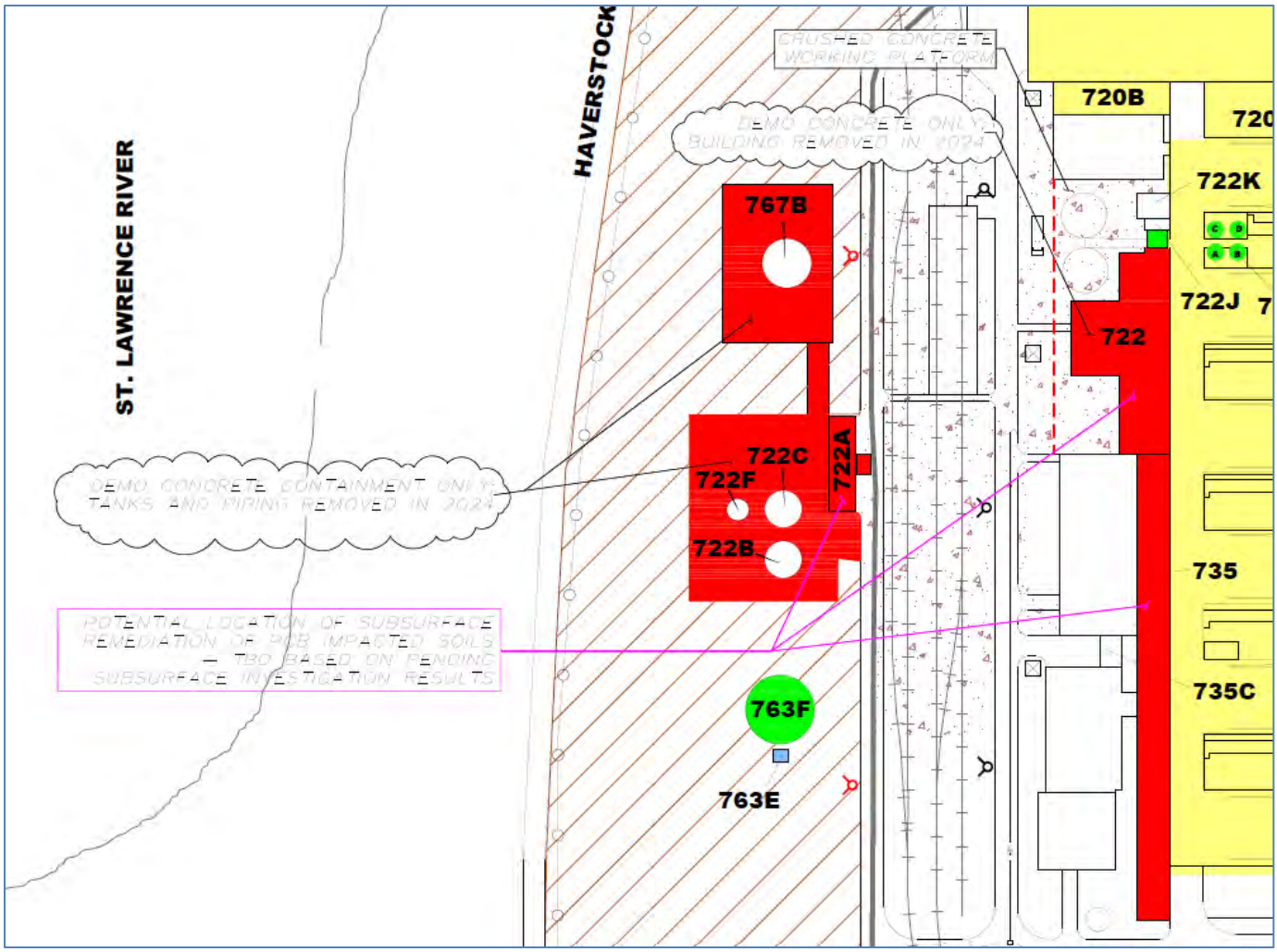


Figure 1 – 2025 SOW (North is to right to left)

The Supplier will furnish all project management, engineering, design, supervision, labor, materials, employee training, tools, equipment, unloading, loading, hauling, taxes, insurance, records, documentation, demolition permit and all other things (unless otherwise noted) necessary to perform the demolition and removal of the buildings and structures and subsurface soil remediation defined in this SOW.

The Supplier will review the attached Remediation Work Plan and understand the location, depth and degree of PCB impacts to building components/concrete, equipment and soils so that the Supplier can provide appropriate levels of worker and environment protection (i.e. decontamination, Stormwater protection and prevention of cross contamination, etc.).

The work sequence is important to the successful completion of the work. Soils samples need to be collected (by Others) under the Pitch Pump House/G-Vault concrete following demolition so that the subsurface soil remediation can be finalized.

2 CURRENT CONDITIONS

2.1 Site Background

The Reynolds Metal Company LLC Massena East Operations is located at 194 County Road 45 in Massena, New York. Aluminum smelting operations (Soderberg technology) began in 1958 and operated continuously until March 31, 2014. The first of three potlines was idled beginning in August 2013 and the remaining two potlines were idled in the first quarter of 2014.

Alcoa operations remaining at the facility are related to on-going leachate treatment at buildings 763, 763A, 763B, 763C, 763D, 763E and potable water treatment in 765. Leachate water from the black mud pond is pumped into 3 tanks located in building 763D and when full pumped into the tanker for offsite disposal.

The potline buildings, courtyards, high yard, water tower, former cast house, laboratory, metal storage, fire station and pot relining buildings are leased to a third party.

Previous environmental investigations identified the presence of polychlorinated biphenyls (PCBs) impacts in concrete within buildings at the Site and, in limited areas, subsurface soils. An extensive remediation was performed in the late 1990s and impacted soils were removed in open areas around buildings/structures and backfilled with flowable fill.

The Reynolds facility is a separate entity within Alcoa Corp. USA.

3 SUMMARY OF 2025 SCOPE OF WORK

Supplier will perform the demolition of buildings and structures, and remediation as defined herein. The following provides a summary of the Scope:

1. Mobilization
2. Demobilization
3. Submittals
4. Demolition of Buildings and Structures:
   - 4.1. Site preparation including verification of Erosion and Sedimentation Controls (i.e. Stormwater BMPs and manhole protection by Others). Please note the collapsed manhole on North Road.
   - 4.2. Verification of Utility Isolation and Existing Subsurface Utilities: including electrical, air, gas, oil, water, and sanitary systems. Utility isolations including water, plant air, natural gas and electricity were previously performed by Others.
   - 4.3. Cleaning of buildings and structures prior to demolition including remove process materials and wastes, Universal and E-wastes, hazardous and non-hazardous wastes, dust on floors and superstructure, loose equipment, furnishings, miscellaneous supplies and equipment and debris/trash and the cleaning of oily substance from walls and floor of G-Vault.
   - 4.4. Asbestos abatement, packaging, labelling and loading ACM waste for disposal
   - 4.5. Dismantling/Demolition of buildings 735 Channel Press and 722A Pitch Pump House.
   - 4.6. Removal of PCB-impacted concrete slabs, structures, and associated pedestal, bollards, foundations and footers from former Paste Plant 722, Channel Press 735, Tank Containment 767B and 722B, C and F, and Pitch Pump House/G-Vault 722A.
   - 4.7. Removal of the 722 Crushed Concrete Working Platform, loading for disposal and a final hand sweep of the area.
   - 4.8. Removal and recycling of the superstructure stored on south side of plant.
   - 4.9. Final cleaning of demolition and general work areas to ensure all materials have been removed to grade and the area is safe for future use.
5. Subsurface Soil Remediation in accordance with the Soil Remediation Work Plan (Appendix A).
6. Maintenance of the work locations including security, dust control, road cleaning, general housekeeping.
7. Runoff Control from work areas such that it continues to drain to the location's existing storm drainage system (ditch or sewer depending on location).

Supplier will remove the Hazardous Waste and Non-Hazardous Wastes and either store in designated areas as specified, or live load the waste onto transport vehicles for off-site disposal. The Supplier's cost estimate must include the costs for handling these wastes including sizing requirements and re-bar removal. Refer to Section 8 Waste Management for details.

Supplier will handle these materials as specified and can also create temporary stockpiles in active work areas if required (location to be agreed with Alcoa). Supplier will coordinate the manifesting and disposal with Alcoa Responsible Person (ARP) but the Supplier has primary responsibility for coordinating transportation and ordering containers/trucks/gondolas with WMI.

All materials removed during the demolition project will need to be weighed and recorded prior to recycling, reuse, or disposal. The Supplier is required to certify, maintain and operate the existing truck scale during the work.

The Supplier will manage scale and print weight tickets. Alcoa or its representative will complete waste manifests for waste disposal.

All materials shipped off site must be in a **secured or in tarped condition**. Shipping loose materials will not be allowed. Supplier will comply with state and federal regulations regarding transport and shipment of all offsite materials.

4 CONTRACTOR ACCESS TO SITE

Alcoa will provide the Supplier with physical and legal access to the site to perform the Work as described. The Supplier will comply with Alcoa's access requirements and restrictions. Alcoa has the right to bar access to any Supplier employees that do not conform to Supplier and Facility rules.

The Supplier will have access to the site through the main gate (plant entrance) located at address 194 County Route 45, Massena, NY 13662. The Supplier and workforce will park all personal vehicles in the main parking lot. Personal vehicles are not allowed beyond the security gate. Only essential work vehicles will be given a site access permit. Figure 2 shows the Facility site access.

The Supplier's employees and Subcontractors will be issued a site access prox card by the tenant. Each employee must swipe their own card for access.

The Supplier will have designated laydown areas for equipment, stockpiled materials, processing, and loading. These areas must be within the boundary of the demolition areas as outlined in Figure 3 and will be determined in the field between Supplier's and Alcoa Responsible Person.

Supplier will supply necessary temporary facilities, potable water, showers, and toilet facilities for all its personnel. If the Supplier elects to install temporary offices/trailers, Alcoa will identify potential locations to connect to electricity. Supplier will be responsible for utility hook ups to its offices/trailers. Utilities will not be provided by Alcoa for locations other than those identified by Alcoa.

Alcoa will identify locations where the Supplier can access non-potable water for use during the demolition activities.

Alcoa will allow the Supplier to use electrical and non-potable water services at no cost. Supplier is required to use these services economically/efficiently and any abuse or excessive use will result in termination of these services with the requirement that Supplier will provide these at its own expense. Alcoa reserves the right to terminate, shutoff or isolate plant utilities as required if they become damaged or if it is not economically feasible to maintain use.

The site has a NY State Pollution Discharge Elimination System (SPDES) permit to manage discharges of clean wastewater and stormwater to the St. Lawrence River. Any stormwater or cleaning water generated during demolition activities must be managed according to the SPDES permit. The SPDES permit for the site is in Appendix B.

A site specific SWPPP will be developed by the Supplier in compliance with the SPDES permit and include with the Demolition Work Plan. The Supplier's HSO will ensure compliance will all requirements, including BMPs and the

permit. This is a critical task for the work.

5 SITE CONTROLS

The Supplier must perform the Work understanding that site controls and use of active roads will require coordination and management so as not to interfere with active on-site operations. The Supplier will isolate active work areas and provide visible barriers to restrict access. All Supplier activities will be performed in a manner that will limit interference with routine site operations.

Massena East Site Conditions are provided in Appendix C. Supplier will comply with all site conditions. Supplier will provide to Alcoa a list of all employees (including subcontractors) and contact information for security purposes. The Supplier will update this list as necessary throughout the project.

The Supplier will keep roads clear of debris, soil, mud, or other material from mobile equipment. The Supplier will confine its operations to the areas of demolition. Supplier will coordinate with Alcoa to identify reasonable locations on the site to stage equipment and materials. Access to these will be provided by Alcoa; however, if necessary, the Supplier will provide barriers and flagmen as required by Alcoa. Personal vehicles are not allowed inside the facility and Supplier work vehicles are only allowed with permission from Alcoa.

All New York Department of Transportation (NYDOT) traffic regulations apply on the Facility property, including the wearing of seat belts and complying with posted roadway speed limits and right-of-way requirements. All vehicles used onsite must comply with applicable NYDOT requirements.

The Facility onsite speed limit is 15 miles per hour. Supplier will follow all posted stop signs and other signage for vehicles.

The standard work hours at the Facility are Monday through Friday, 10-12 hours per day. Any work scheduled other than Monday through Friday must be approved by Alcoa 2 weeks prior to those dates so that Alcoa can coordinate site supervision.

Anticipated workdays/hours for the Project need to be provided in the Technical Proposal.

At no time will the Supplier be allowed to work more than 16 hours per shift or 64 hours per week in compliance with Alcoa Standard.

The information and estimated quantities provided in the SOW are believed to be accurate, however the Supplier is responsible for verification of quantities and ensuring its estimate includes demolition of all structures defined in the SOW. Volume estimates provided are meant as guidance and are as accurate as the information available at the time of scope preparation. The Supplier should confirm and perform their own take offs and volume estimates.

As with all Alcoa projects, safety is the most important factor that dictates Supplier selection and performance. All work shall be performed in accordance with applicable federal, state, and local safety regulations, and Alcoa's environmental, health and safety standards, and will be subject to daily audit for conformity at any time.

6 DETAILED SCOPE OF WORK

The following details the major activities required during the project following contract award and is intended to help the Supplier understand the anticipated flow of work.

6.1 Project Plans and Deliverables

The Supplier will prepare and submit for review and approval the certifications, records, documentation, Job Safety Analyses (JSA), permits, notifications, and work plans outlined in this Specification in accordance with the project schedule and as outlined in the submittal register. Pre-mobilization documents must be submitted before Alcoa will allow mobilization activities to begin. The Supplier will allow one week for submittal review and incorporate this

time period into its project schedule.

The Schedule of Values (SOV) must be submitted within two weeks of contract signing. The SOV should follow the Bid Item Sheet with expanded detail and cross reference this Specification. The SOV will allocate the entire contract sum among the various portions of the Work and provide sufficient detail to allow for accurate determination of earned value on a monthly basis. The Supplier will submit the draft schedule to the ARP at least 2 weeks before mobilization. A baseline schedule will include the critical path for completion of the Work and will be agreed upon by Supplier and Alcoa prior to mobilization. Monthly forecast revisions will be submitted to the ARP.

6.2 Mobilization

The Supplier will mobilize personnel, equipment, supplies, temporary offices and facilities, fencing, barricades, signage, fuel cells, and storage units as necessary to properly support the project and isolate the work areas from the active plant. Mobilization will include all necessary training for project personnel, including site orientation/safety training and badging as required by Alcoa.

Supplier will supply one full time safety person whose sole responsibility is to monitor project safety, conduct self-audits to inspect tools and equipment, and to ensure that all safety rules and regulations are enforced.

As a part of mobilization and ongoing work activities Supplier will prepare the site for demolition activities. Site preparation will consist of establishing boundaries between buildings/structures to be demolished and buildings/structures that will remain, equipment storage and field office mobilization, preparing access routes and staging areas, installing signage at the Supplier gate entrance, establishing construction layout controls, establishing storm water controls, establishing a decontamination area, and removing or temporarily relocating existing facilities as required.

Designated access routes where necessary, will be established for transportation of all materials. Site preparation activities, access roads, staging and stockpiling areas are strictly prohibited in certain areas of the site, either because interaction with current operations, the need for environmental protection, and/or permit conditions.

6.3 Site Preparation and Pre-Demolition Work

6.3.1 Permits and Pre-Demolition Survey

The Supplier is responsible for acquiring the required permits and payment of fees for asbestos abatement (notification and variance if required) and the demolition permit from the Village of Massena. Alcoa will provide the proper contact for the Village of Massena.

The Supplier will perform and document a pre-demolition survey as required by OSHA Standard 1929.856(a).

A new Alcoa EHS Standard was developed to manage high-risk work and it is titled “Permit to Work”. There is a checklist and pre-demolition form to be completed prior to work. Refer to Appendix D EHS Standards.

Massena requires Hot Work permits and dig permits as detailed in the Site Conditions document (Appendix C). The Supplier will work with Alcoa representative to complete, implement, and revise as needed during the course of the work.

6.3.2 Asbestos Abatement

Supplier will remove and handle all asbestos containing material from the interior of buildings or from structures and equipment. This work needs to be completed prior to demolition activities of a building or structures and complies with applicable regulations.

Alcoa has included relevant tables from Alcoa East Plant ACM Survey May 2016 report that are updated to delete the abatement work performed in 2019. In the event that additional suspect materials are observed, the Supplier

will assist Alcoa in the collection of additional suspect ACM for analysis, as needed.

The Supplier will assume that Suspect Materials listed on the table contain ACM and will be abated as part of the Work. The Supplier will include in their proposal and bid sheet an estimated number of gaskets, electrical panels etc. that require proper ACM management by the Supplier.

Abatement of the identified ACMs must be performed prior to initiating any demolition activities on that structure unless a variance is obtained by the Supplier.

Additionally, the built-up roof over the concrete panels of the pitch pump house 722A was tested in 2023. Only the flashing around the vents on east end of building tested positive for ACM. The sample report and results are provided in Appendix J. .

The hard pack fittings in 735 Channel Press Building were abated in 2019.

The Supplier is responsible for obtaining any and all variances if the Supplier decides to abate the gaskets on the ground following controlled demolition.

For the purposes of preparing the cost estimate the Supplier must include the following minimum quantities in its estimate.

Supplier needs to include in its offer, abatement of the items identified in the report and any ACMs identified during its assessment. As part of Supplier's Technical Proposal, it must provide estimated quantities of ACMs (or parts of the structure which have ACM) and the cost for asbestos abatement by area/building.

Estimated quantities are to be provided in units of linear feet and square feet as applicable. There are worksheets provided in the Bid Item Spreadsheet Excel File for the Supplier to provide assumptions for its cost estimates and for unit costs of the most commonly occurring asbestos material types. Supplier should provide unit pricing for typical asbestos abatement including floor tiles, thermal system piping, non-friable and friable insulation, window caulking, drywall, acoustical ceiling tiles, pipe flange gaskets and electrical components in the event that additional materials are discovered during the work.

As part of the work, the Supplier will prepare and submit an Asbestos Abatement Work Plan for review and approval by the ARP. No abatement will occur at the site until the Asbestos Abatement Work Plan has been reviewed and accepted by Alcoa.

The Asbestos Abatement Work Plan will document the Supplier's methods, procedures, equipment, and schedule for the various components of the Work, including, but not limited to:

1. The methods that will be used to abate the asbestos.
2. The order in which the Work is to be performed, indicating the sequence of abatement at the various areas of the site.
3. A list of key personnel and the supervisory chain of responsibility.
4. Procedures and equipment for coordinating and performing transportation and placement of the asbestos wastes in an onsite landfill.

The Supplier will submit the required state notifications and send copies of the notification to the ARP. Notification of asbestos abatement will be posted as prescribed by law before the scheduled abatement of ACMs requiring such notification.

The Supplier will complete all asbestos removal and abatement work in conformance with all local, state, and federal regulations, as well as Alcoa standards and supplements included in Appendix D.

The Supplier will supply copies of abatement worker licenses, certifications, medical clearance to work and respirator fit tests one week prior to the work and immediately when a new worker is brought to the site.

Table 1 – Excerpts from Alcoa 2016 ACM Survey*; Updated to delete 2019 abatement work*

Table 24
Homogeneous Areas

Alcoa, Inc.
Alcoa East Plant Massena Operations
Massena, New York

722A Pitch and Fuel Oil Pump House

HA No.	Material Description	Room(s)/Location	Sample Number	Condition	Friability	Asbestos Content	Estimated Quantity	Unit	Notes
Interior									
HA-1	Pipe Flange Gaskets	Throughout	Not Sampled	Good	Non-Friable	Suspect ACM	210	SF	
HA-2	Electrical Components	Throughout	Not Sampled	Good	Non-Friable	Suspect ACM	35	EA	Internal materials associated with safety switches, manual shut offs, breaker panels, sub stations and electrical boxes. Material is assumed asbestos-containing until laboratory analysis can confirm or deny the presence of asbestos.
HA-3	Yellow Block Pipe Insulation	Pipes Throughout	722A-3-1 722A-3-2 722A-3-3	Damaged	Friable	NAD	1,200	LF	
Exterior									
HA-4	White Exterior Window Glazing	Exterior Windows	722A-4-1 722A-4-2 722A-4-3	Good	Non-Friable	1.1% Anthophyllite	7	EA	Window size approximately 4' x 5'.
HA-5	Gray Exterior Window Caulking	Exterior Windows	722A-5-1 722A-5-2 722A-5-3	Damaged	Non-Friable	5.6% Anthophyllite	126	LF	
HA-6	Gray CMU Mortar	Exterior Walls	722A-6-1 722A-6-2	Good	Non-Friable	NAD	3,000	SF	
HA-7	Gray Caulking at Top and Bottom of Corrugated Metal Panels	Exterior Exhaust Stack	722A-7-1 722A-7-2	Good	Non-Friable	1.7% Chrysotile	100	LF	
Roof									

Additional Roof samples were collected in 2023 and confirmed that the built-up roof over concrete panels is Non-ACM but the black flashing on the east end vent is positive for chrysotile.

HA No.	Material Description	Room(s)/Location	Sample Number	Condition	Friability	Asbestos Content	Estimated Quantity	Unit	Notes
HA-8	Roof Felt Paper	Roof	722A-8-1 722A-8-2	Good	Non-Friable	NAD	3,170	SF	
HA-9	Black Flashing	Vent Hood Penetration	722A-9-1 722A-9-2	Good	Non-Friable	4.6% Chrysotile	3	SF	
HA-10	Black Flashing	Vent Stack Penetration	722A-10-1 722A-10-2	Good	Non-Friable	7.8% Chrysotile	4	SF	
Notes:									
EA = Each									
LF = Linear Foot									
NAD = No Asbestos Detected									
SF = Square Foot									
Suspect ACM = Suspect Material that is assumed to be asbestos-containing until laboratory analysis can confirm or deny the presence of asbestos.									
*Material containing greater than 1% asbestos is regulated by United States Environmental Protection Agency (USEPA) National Emission Standards for Hazardous Air Pollutants (NESHAP) Standard 40 CFR 61									

Table 41
Homogeneous Areas

Alcoa, Inc.
Alcoa East Plant Massena Operations
Massena, New York

735 Pin and Channel Building

HA No.	Material Description	Room(s)/Location	Sample Number	Condition	Friability	Asbestos Content	Estimated Quantity	Unit	Notes
Interior									
HA-9	Pipe Flange Gaskets	Throughout	Not Sampled	Good	Non-Friable	Suspect ACM	18	EA	
HA-10	Electrical Wire Insulation associated with Old Hanging Lights	Throughout	Not Sampled	Good	Non-Friable	Suspect ACM	61	EA	Each light contains approximately 5 LF of suspect wire insulation.

HA No.	Material Description	Room(s)/Location	Sample Number	Condition	Friability	Asbestos Content	Estimated Quantity	Unit	Notes
HA-11	Metal Packed Fittings	Pipe Flue Throughout	Not Sampled	Good	Friable	Suspect ACM	62	EA	
HA-12	Electrical Components	Throughout	Not Sampled	Good	Non-Friable	Suspect ACM	67	EA	Internal materials associated with safety switches, manual shut offs, breaker panels, sub stations and electrical boxes. Material is assumed asbestos-containing until laboratory analysis can confirm or deny the presence of asbestos.
Exterior									
No suspect ACM observed.									
Roof									
No suspect ACM observed.									
Notes:									
EA = Each									
LF = Linear Foot									
NAD = No Asbestos Detected									

Upon completion of the work, the Supplier will provide the following information:

- Project scope.
- Notifications to regulatory agencies (original and amendments).
- Air sampling records.
- Inspection records.
- Daily logs with quantities and types of ACM abated.
- Sign in and sign out logs.
- Clearance documentation.
- Abatement employee fitness records, training certificates and licenses.

The information will be compiled into a binder; copies will be clear and legible.

6.3.3 Environmental Controls

This section describes requirements for maintaining environmental controls to avoid loss of pollutants or undesirable materials to the surrounding environment and storm water during the time of dismantling activities.

Supplier is required to adhere to Alcoa's SPDES permit and all required plans. It is critical for maintaining environmental compliance that the Supplier complies with these requirements.

Prior to mobilization to the site, the Supplier will submit with the Work Plan and include procedures to protect the environment.

These procedures will describe in detail:

A. Procedures for emergency spill prevention, containment, and removal operations.
B. Methods of dust control to protect tenants' equipment in rooms 753, 754, 755 and 756.
C. Procedures for environmental controls during demolition and site restoration.

Supplier will determine the best method(s) and material(s) to be used to effectively control all work and processing areas to ensure that stormwater run-on and run-off do not allow for the transport of residual material and debris off site or into the existing stormwater drains. Staging of unprotected material outside is not allowed.

Stormwater drains must be identified and protected by the Supplier and the location of laydown and processing areas will be sited with this in mind. The Supplier will include a description of the materials to be used in its Stormwater Pollution Prevention Plan. All manhole fabric will be maintained and changed as needed.

The Supplier will be required to provide sufficient spill prevention and control materials to handle any type of release that may occur during the Work. This will include spill kits for all mobile equipment used at the site and for any bulk liquid storage (fuel and oil).

The Supplier will store scrap, materials and equipment in a manner that minimizes exposure to weather and prevents contamination of stormwater runoff. The Supplier will manage materials and equipment in a manner that prevents contamination of the site through spills, leaks, overfilling, poor housekeeping, or any other means. Removed equipment and scrap stockpiled for processing will be protected against wind and rain and control run on and run off from these areas.

6.3.4 Housekeeping and Courtyard Cleaning

This section describes the standard of cleanliness to be maintained at the Project site by the Contractor throughout the work period at any location where Work is carried out.

A. Inspection: The Supplier will conduct daily (or more frequent if necessary) inspections to verify that requirements for cleanliness are being met. The HSO is responsible for performing the daily inspections.

B. Codes and Standards: In addition to complying with the standard of cleanliness described in this section, the Supplier will comply with all pertinent requirements of governmental agencies having jurisdiction.

The Supplier will keep the work area neat and tidy.

6.3.5 Utility Isolation Verification

The Supplier will work with the Alcoa representative to **verify and document** utility disconnections and those existing utilities that require protection (i.e. ring buss, subsurface stormwater/water lines.

The Supplier will note that an active water line is present under the Paste Plant 722 concrete.

6.3.6 Building and Structure Cleaning

Prior to demolition activities the Supplier will remove all process materials, universal and electronic wastes, loose equipment, and furniture, regulated waste materials, ACMs, residual products, oil and grease, loose debris and dust from the interior of the building superstructures and structural components (I-Beams etc.). The methods used will be determined by the Supplier but must minimize the use of water and the generation of additional waste streams.

This work includes the removal of dust on structure beams and roof trusses in Channel Press 735 and the Plug material in 3 hoppers in 735 Channel Press. **The Supplier is required to use a vacuum truck/system to remove this material.**

Gear box, motor oil and hydraulic systems in Pitch Pump House 722A and Channel Press Building 735 must be drained prior to demo. The Supplier will also remove the oil from the vertical and horizontal cylinders of the Channel Press. The Supplier will note that the oil was previously drained from cylinders in 2015. This oil contains PCBs and the Supplier will manage accordingly. Alcoa will provide either drums or totes for the Supplier to fill but the Supplier will move and stage these filled containers to the Drum Storage Building 733C.

Except for hydraulic/gear box oil and basement water removal, no other pre-demolition cleaning of the pitch pump house in needed except as noted below. The entire building and its contents will be demolished and loaded out for disposal.

The Pitch Tank and its contents in the G-Vault of the Pitch Pump House will be removed and managed during demolition. The walls and floor of the G-Vault will be cleaned of the oily substance coating the walls and floor after removal of the tank and prior to soils sample collection.

6.4 Demolition

6.4.1 Task 01 – Pitch Pump House 722A Demolition

Following the completion of pre-demolition tasks, the Pitch Pump House 722A will be removed in its entirety including the building, below grade G-vault and the G-Vault pitch tank. This work includes the removal of the floor slab, footers, foundations, G-vault concrete walls and base, ancillary equipment (i.e. stairs, platform, piping motors/pumps etc.), equipment pedestals, and foundations.

The Supplier will remove the rails and railroad ties over the G-Vault. The rail lines do not need to be replaced. Rails can be recycled and the ties will be loaded for disposal.

The Supplier will be prepared to conduct demolition immediately after basement water and oil removal so that water will not be allowed to re-enter the basement. The removal and treatment of the basement water will be performed by Others. The Supplier is required to coordinate their demolition work with the Water Treatment Vendor.

The Supplier is aware that the Pitch Pump House built-up roof flashing is constructed of non-friable ACM.. Asbestos abatement will be performed prior to demolition.

6.4.1.1 G-Vault Work Sequence and Temporary Shoring

The sequencing of this work is important as subsurface soil samples under the Pitch Pump House building and G-vault need to be collected by Others so that the remediation of any PCB impacted soils can be designed and implemented with no break in this work schedule.

The Supplier will coordinate with the Basement Water Treatment Vendor so that water that enters the excavation is removed prior to soils remediation.

The Supplier will assume that the G-Vault Pitch Tank is full of Pitch and will manage accordingly. Alcoa cannot sample the Pitch for disposal until the tank is removed. The Supplier will remove and open the tank, and place the pitch into

a double lined roll-off container so that Alcoa can sample and profile the waste for disposal.

The Supplier will tarp this container so that water cannot enter into the roll-off. The Supplier will move and stage this container into the designated staging area.

The Supplier will remove the north portion of the G-Vault Wall only and create a ramp into G-Vault so that a van or truck mounted Geoprobe or Small Auger drill rig can access vault and collect subsurface soils samples (Figure 2). The south, east and west walls will remain in place until soils testing by Others is completed.

A structural engineering evaluation of the G-Vault wall strength was performed. The Engineer concluded that the G-Vault roof stab is essential to the wall stability and if removed, the walls may cantilever in.

For the base bid, the Supplier will install temporary shoring on the east and west walls to prevent wall movement or collapse during sample collection. The shoring needs to be installed in a way that doesn't interfere with drilling equipment. The Shoring methods will be approved by Alcoa prior to the Work.

Alcoa is open to other alternate methods of stabilizing the walls such as a relief cut around exterior of G-Vault. The Supplier will include these options in their Technical Proposal.

Once the G-Vault is stabilized and tank/pedestals/rebar removed, the Supplier will wash the concrete walls and floor to remove oily substance from concrete surfaces to reduce the potential slip/fall hazard during sample collection. The Supplier will work with the Basement Water Treatment vendor to remove the cleaning water for pre-treatment.

Once sample collection and a soils remediation plan are completed, the Supplier will remove the remainder of the G-Vault Walls and concrete floor. The Soils Remediation Plan will be implemented by the Supplier and impacted soils removed and loaded for disposal. The Supplier will be paid for this work on a unit rate basis.

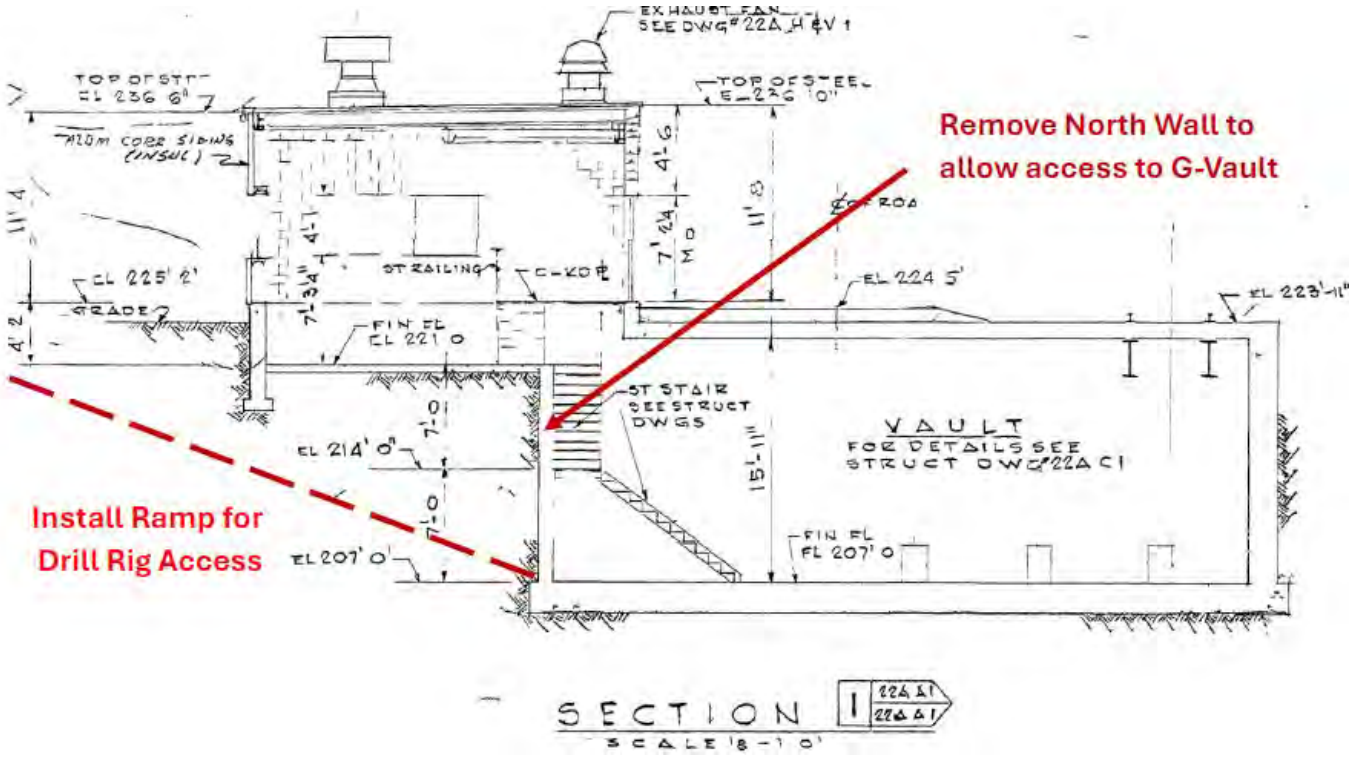


Figure 2 Pitch Pump House G-Vault Access for Sample Collection -Drawing 190023-A

6.4.2 Task 02 - Former Pitch Tanks (722B,C&F) & Fuel Storage Tank (767B) Concrete Containment Demolition

The Former Pitch Tanks (722B, C & F) and Fuel Storage Tank (767B) and associated piping were removed in 2024. In

this SOW, the tank containments will be removed in their entirety. The Supplier will demolish the concrete, sized appropriately (see Waste Management Section) and load for disposal. Following concrete removal, the Supplier will machine grade the area to smooth out depressions/humps created by concrete removal. This concrete does not contain PCBs and can be used for backfill of the G-Vault provided that all re-bar is removed, and it is sized to 4-inch minus.

The sand under the former tanks will be left in place and levelled off.

6.4.3 Task 03 - Building 735 Channel Press Building Demolition

Following the pre-demolition tasks of building cleaning and asbestos abatement, the Supplier will remove 735 Channel Press Building in its entirety. Pre-demolition work includes:

1) .
2) the separation of 735 building from the adjacent Potroom buildings (the potroom wall will remain in place), any damage to the potroom wall during demolition will be repaired at Supplier's expense.
3) Removal of dusts on structural beams and roof trusses, accumulated trash and debris on the floor,
4) the removal of gear box oil/hydraulic oil from channel press hydraulic cylinders etc.,
5) removal of the plugging material***** from 3 of the 7-pin hole plugging material hoppers, and
6) ACM abatement.

*** Note – the plugging material is highly flammable, and NO TORCH work is allowed.**

Following the completion of the pre-demo tasks, the Supplier will demolish the building and equipment including the Channel Press, overhead crane and seven (7) Plug Material Hoppers.

The Supplier will note that PCB in Paint on the Channel Press is greater than 50ppm so this unit will be sent for disposal to CWMI Emelle, AL. The Supplier will size appropriately for disposal and load into rail gondolas.

The Supplier will note that PCBs in concrete around the channel press were covered with steel plate following a remediation in 2012. The steel plate is included in the SOW and will be removed and recycled by the Supplier.

Following demolition of the building, the Supplier will remove the PCB-impacted concrete floor slab and associated footers, and foundations. Some of the concrete contains PCBs > 50ppm.This concrete will be sized appropriately with rebar removed and loaded into rail cars for disposal at CMWI facility in Emelle AL.

The concrete with PCBs < less than 50 ppm will be removed, sized, rebar removed and loaded into trucks or containers for disposal at a regional landfill. Details are included in the Waste Management Section.

The remaining concrete slabs will left in place.

Following the completion of the demo work, the Supplier will remove any PCB-impacted soil as designated in the Remediation Work Plan.

6.4.4 Task 04 - Former Clarifier 763K and Potable Water Tank 765A Demolition

The Supplier will demolish and remove in their entirety the former Clarifier 763K, former Potable Water Tank 765A, and all ancillary equipment. There are no concrete tank pads. The Supplier will machine grade the area following demolition to smooth out any depressions created by the demolition work.

There is also an old pot superstructure located on the southside of the plant that will be removed and recycled by the Supplier.

Figure 3 – Old Superstructure

6.4.5 Task 05 – Removal of the 722 Paste Plant Concrete

The Paste Plant building was demolished in 2024. The 2025 work includes the removal of 722 Paste Plant PCB-impacted concrete slab, and associated footers, foundations and theupper portion of the 8 mixer foundations.

Pre-demolition work includes saw cutting the slab approximately 3 feet from Potroom and conveyor tower buildings that remain. This work is performed to ensure the structural stability of the remaining structures. The location of the saw cut is shown on Figure 4.

The Supplier will remove the PCB-impacted concrete floor slab, associated footers, and foundations and the top of the 8 deep mixers. This concrete contains PCBs > 50ppm. This concrete will be sized appropriately with rebar removed and loaded into rail cars for disposal at CMWI facility in Emelle AL. Refer to Section 8 Waste Management.

The top 2-foot portion of the eight (8) Mixer foundations will be removed by the Supplier in accordance with the Soil Remediation Plan to match the elevation of the soil surface following slab removal. Rebar must be cut flush with remaining concrete. This work is necessary to create a level surface for placement of the liner.

Following slab removal, subsurface soils will be remediated in accordance with the Remediation Work Plan (Section 6.5) which includes the placement of fabric/liner and aggregate backfill.

6.4.6 Task 06 – Load for Disposal Crushed Concrete Working Platform

The Supplier will remove and load for disposal approximately 1200 tons of crushed concrete that was used as a working platform during paste Plant Building demo in 2024. This also includes small pile of concrete staged on 722 Paste Plant slab. The supplier will perform a final hand sweep of the area.

6.5 Remediation of PCB Impacted Soils

PCB impacted soils were identified beneath the concrete slabs of the 722 Paste Plant, 722A Pitch Pump House and the 735 Channel Press building. A Remediation Work Plan was designed to remove PCB impacted soils from these areas and is detailed in the Remediation Work Plan included as Appendix A. The Supplier will implement the plan including equipment and personnel decontamination, training, staging of materials and loading for disposal.

The Supplier will be responsible for pumping water from the excavation into holding tanks supplied by the Basement Water Treatment vendor. Treatment and discharge will be performed by the Basement Water Treatment vendor.

6.6 Dust Control During Demolition

The Supplier will maintain dust control during the Work and use whatever appropriate means are necessary to

ensure that dust does not become an issue. Dust control will be achieved primarily through effective cleaning and removal of residual materials prior to demolition. The use of water during demolition activities is an absolute requirement for dust suppression. Pre-wetting structures and the use of water cannons is an expectation.

The Supplier will use **vacuum sweepers at a minimum once daily** for roadways, stockpiling, staging and process areas, if necessary. The vacuum sweeper is non-negotiable; no alternatives will be entertained.

If during demolition and processing activities visible dust emissions are observed by the ARP, the Supplier will halt work and implement dust control measures, such as water spraying. The Supplier must achieve a balance between effective dust control and over-watering.

6.7 Site Restoration

Unless otherwise detailed in the Remediation Work Plan, all areas disturbed by the demolition work will be restored to a reasonable level surface by machine grading depressions and humps to eliminate any safety hazards.

6.8 Demobilization

The Supplier will remove all equipment, materials, personnel, and supplies from the project site. The Supplier will restore any areas disturbed during the performance of the project particularly damaged asphalt roadways.

Pre-final and final close out inspections will be performed by the ARP and be completed by the Supplier prior to demobilization of equipment and labor from the project site. The Supplier is not to leave any of its equipment or wastes on site without written approval from Alcoa.

6.9 Project Closeout

Following demobilization and completion of the Project Close Out Punchlist, the Supplier will submit an invoice that includes supplying original copies of notarized Unconditional Waiver and Release of Liens for all subcontractors, vendor, and suppliers with contract values in excess of $25,000 and provide an affidavit listing all subcontractors, vendors, and suppliers used during the project. The Supplier will comply with all contract requirements regarding project close out.

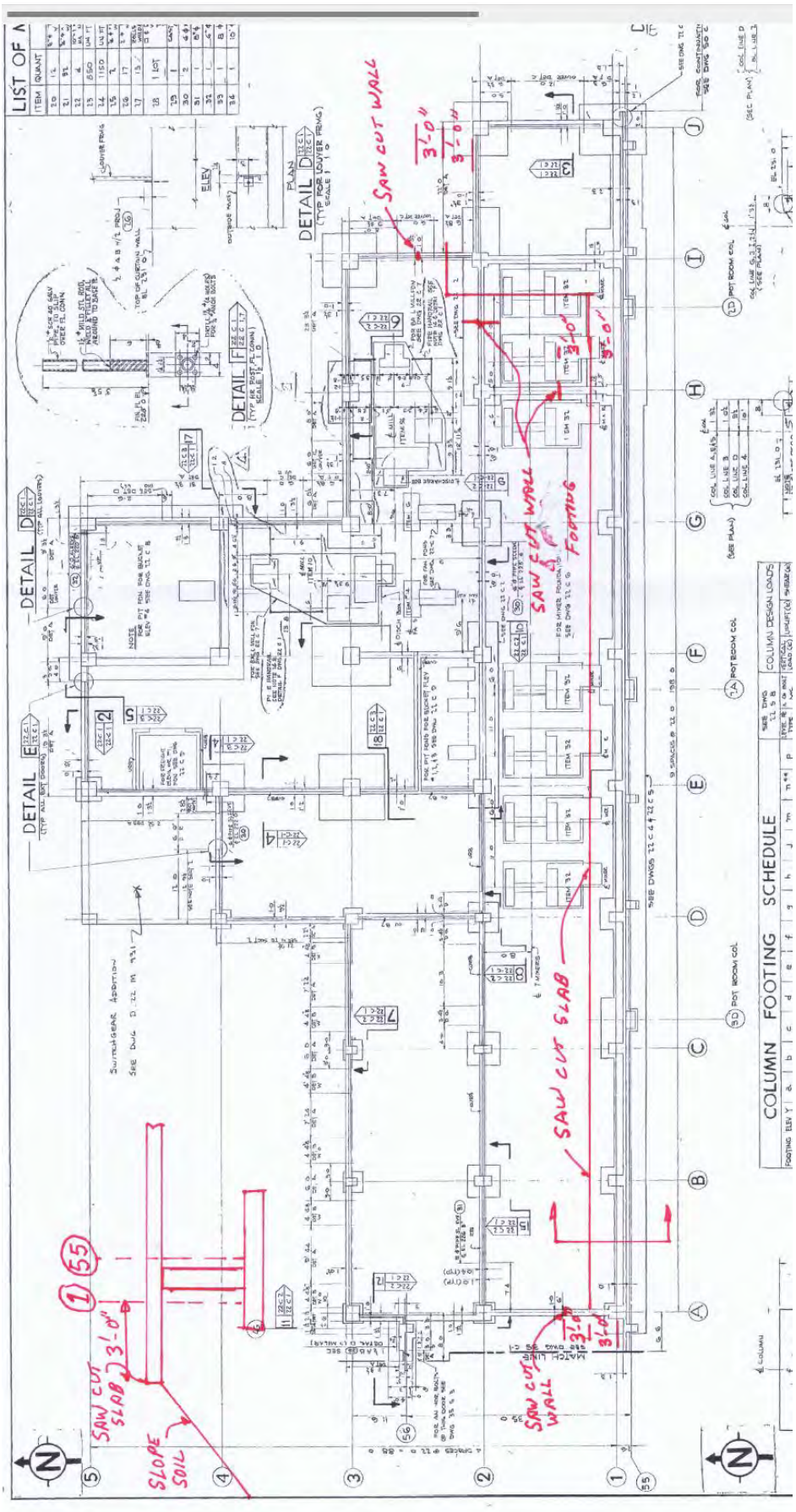


Figure 4 Saw Cut Line in 722 Paste Plant Concrete Slab

7 WORK SEQUENCE

The Supplier will demolish the Pitch Pump House first so that the Environmental Consultant can collect soil samples below the slabs of the Pitch Pump House and G-Vault.

The Supplier will move to another area while we await data and the design of the remediation for the pitch pump house soils.

The subsurface soils remediation at the pitch pump house will be the last task performed.

Refer to Section 6.4.1 - Task 01 – Pitch Pump House 722A Demolition for additional information.

8 WASTE MANAGEMENT

Alcoa will contract directly with the appropriate waste disposal firms and pay for transportation and disposal of the waste, profiling and manifesting of loads **except for wastes generated by Supplier including**:

- Decontamination wastewaters associated with asbestos abatement
- Human wastes (Port-o-John Wastes)
- Wastes generated while servicing equipment
- Spills or discharges caused by the Supplier

Trash disposal bins are available to the Supplier for general trash and lunchroom waste and uncontaminated PPE.

The Supplier is responsible for quantifying, removal, container staging, movement of full containers from work area to staging area, loading (including the placement of liners as required), tarping, and container labeling. The Supplier will provide the appropriate equipment to move empty and full containers from staging area to work area and back.

Roll-off containers are not to be moved using excavators. Damage done to containers including damaged doors, tarps, missing cross bars for tarps etc. will be at the expense of Supplier. Likewise, damage to rail gondolas during loading will also be at the expense of the Supplier. **The Supplier will maintain a photo log and inspection sheet of all container/gondola condition as they are delivered to the site.**

Alcoa will provide containers for the Universal and E- Wastes including gaylord boxes obtained through WMI, open top drums (17-H), light tube boxes, plastic containers (Mercury and battery wastes), and pallets. The Supplier is responsible for removal of Universal and E-Waste, loading containers, labelling and movement to a storage area designated by Alcoa. Supplier will coordinate with Alcoa to determine the best shipping and storage containers.

Wastes will be stored in designated area as directed by Alcoa. Satellite accumulation areas can be determined as the work is performed and established in mutually agreed areas.

Supplier is responsible for compliance with 40 CFR part 273 in handling and storage of Universal wastes and will **conduct and document inspections** during the work to ensure compliance with the regulations.

Regarding decontamination and cleaning wastewater, Supplier is expected to recycle and reuse water and provide for filtration of the water during cleaning and decontamination activities. The solid waste generated during these activities will be handled as described above with the wastes being transported and disposed offsite and a Alcoa approved TSDF.

8.1 Coordination with WMI

The Supplier is required to order containers, schedule and coordinate the pick-up and delivery of waste containers directly with the Waste Management Inc. Alcoa will not serve as the middleman. The Supplier is required to identify the Supplier individual who will assume these responsibilities.

WMI will require a minimum of 2-week notification on the quantity of gondolas needed and containers and dump trucks (for live loading). The Supplier will develop a schedule, and a three week look ahead for waste management with the estimated quantities and number of transport vehicles that are needed.

The Supplier will note that WMI has a limited number of transport vehicles and the turnaround times to landfills are lengthy. The Supplier should assume:

- 2 trucks/4 loads per day provided the trucks are loaded prior to 7am
- 2 trucks/4 loads Roll-off containers per day provided the trucks are loaded prior to 7am
- 8 Gondolas per week

8.2 Scale Maintenance and Scale Management

The Supplier is responsible for scale calibrations and scale maintenance. The calibration company is Precision Scale and Balance, Syracuse NY.

The Supplier is responsible for weighing all waste loads.

Manifests will be prepared by Alcoa or its representative. The Supplier will weigh and create BOLs for all recycled materials.

8.3 Loading and Weighing Waste into Rail Gondolas

The Supplier is responsible for loading rail gondolas for shipment to CWMI in Emelle AL. The Supplier will weigh the material to be loaded into the rail car so an accurate weight can be recorded on the manifest. Load cells on excavators are **not sufficiently accurate** so the Supplier will devise a method to weigh materials either with a temporary scale at the loading area or using the existing facility truck scale.

The Supplier will be responsible for placing the liner into the rail car prior to loading. The work will be performed using lifts and no one will climb onto rail car ladders. The liners will be provided by Waste Management Inc.

8.4 Live Loading Trucks

Dump trucks and dump trailers will be live loaded for off-site waste disposal. The Supplier understands that the trucks will need to be loaded first thing in morning (7am or earlier) in order for the truck to return to site for a second load mid-day. It is a 4-hour round trip to the landfill.

8.5 Container Staging Area

The Supplier will place empty and full containers in a mutually agreed upon location so that the waste disposal firm can easily access for transportation off-site.

8.6 Sizing of Concrete

Concrete for waste disposal will be sized into pieces no greater than 3 foot by 3 foot by 3 foot for TSCA waste to CMWI Emelle, AL. Rebar will be cut flush or removed completely.

For non-TSCA <50ppm PCB waste to CCLF or DANC, the concrete will be sized into pieces no greater than “basketball size” or smaller or less than 1 foot by 1 foot by 1 foot. Rebar will be cut flush or removed completely.

8.7 Sizing of Painted Steel

All Steel with PCBs in paint that require disposal will be sized into lengths no greater than 3 feet by 3 feet.

8.8 Manifests

Alcoa has contracted to a third party to generate and manage waste manifests. The Supplier will work closely with this individual so that accurate weights (Supplier responsibility) are used to complete manifests.

Table 2 2025 Waste Summary Table

2025 Demolition Project Massena East			
Location of Waste	**Unit**	**UOM**	**Disposal Location**
Paste Plant 722			
Concrete <50ppm PCBs	0	tons	
Concrete >50ppm PCBs	600	tons	CWMI Emelle
Anode Lunchroom Painted Concrete Blocks	65	tons	CCLF or DANC
Working platform crushed concrete	1,200	tons	CCLF or DANC
Pitch Pump House (Building & Concrete), 722B, C, F and 767B Containment			
Basement Water	70000	gallons	Treated On-Site and Discharge to 003 by Others
Steel/equipment/Concrete >50ppm PCBs	1500	tons	CWMI Emelle
Non-Friable /Friable ACM	100	tons	Roll-offs CCLF
Tank 722B, C, F and 767 Concrete, Non-PCBs	2000	tons	CCLF or DANC
Gear Box and Pump Motor Oil	110	gallons	Drums - Veolia
Pitch and Pitch Tank in G-Vault	TBD but not greater than 75 Tons	tons	Roll-off CCLF
Channel Press Building 735 demolition including Concrete Slabs, Foundation, Footers			
ACM Waste (Non-Friable)	50	tons	Roll-offs CCLF
Concrete <50ppm	250	tons	CCLF or DANC
Concrete >50ppm	325	tons	CWMI Emelle
PCB in Paint on Steel – yellow/tan paint on superstructure and hoppers	200	tons	PCBs <50ppm but Hazardous for TCLP Lead - CWMI Emelle
Channel Press Equipment PCBs in Paint on Steel	~10	tons	PCBs>50ppm CWMI Emelle
Gear Box and pump Oil	<50	gallons	Veolia
Building Dust on structural beams and floor	20	Tons	CCLF or DANC
Hopper Contents - plugging materials	20	Tons	CCLF or DANC
Task 05 - Clarifier 763K and Potable Water Tank 765A			
Waste Management			
Paint on Steel 763K	20	tons	Recycle
Potable water tank-765A solids in bottom of tank	500	pounds	CCLF or DANC
PCB impacted Soils from Remediation Work Plan			
PCB Impacted Soil <50ppm	450	tons	CCLF or DANC
PCB Impacted >50ppm	150	tons	CWMI Emelle
KEY: CCLF – Clinton County Landfill, Casella Morrisville, NY DANC – Development Authority of the North Country Landfill Rodman NY CWMI - Chemical Waste Management Inc. Emelle AL			

9 GENERAL APPLICABILITY OF U.S. CODES, REGULATIONS AND STANDARDS

Alcoa standards and supplements to the standards related to asbestos in Appendix D are applicable, except where more stringent requirements are applicable as required by state and federal regulations.

Site specific activities and conditions may require alternative methods and procedures not covered, addressed, or feasible as described in the referenced regulations. In such cases, deviations from these standards must be approved by the project management team.

For specific site activities that may not be addressed by the referenced regulations, a project plan must be submitted and approved by the project management team. Project plans must include:

1. Specific scope of abatement/demolition activity.
2. Establishment of a regulated area for temporary waste storage.
3. Methods that will be used to confirm dusts and debris are controlled in accordance with the specific site plan.
4. Controls and procedures that will be used to protect employees directly involved with the specific activities, employees and Suppliers that may be in proximity of the activities, and the environment.
5. Contingency/emergency plans to address unanticipated events or releases.
6. Documentation of demolition/abatement activities, control strategies, and monitoring reports.

Those regulations which govern asbestos abatement work or hauling, and disposal of asbestos waste materials include but are not limited to the following:

1. US Department of Labor, Occupational Safety and Health Administration, (OSHA), including but not limited to:
    a. Asbestos Regulations - Title 29, Part 1910, Section 1001 of the Code of Federal Regulations
    b. Respiratory Protection - Title 29, Part 1910, Section 134 of the Code of Federal Regulations
    c. Construction Industry - Title 29, Part 1926, Section 1101 of the Code of Federal Regulations
    d. Access to Employee Exposure & Medical Records - Title 29, Part 1910, Section 1020 of the Code of Federal Regulations
    e. Hazard Communication - Title 29, Part 1910, Section 1200 of the Code of Federal Regulations
    f. Specifications for Accident Prevention Signs and Tags - Title 29, Part 1910, Section 145 of the Code of Federal Regulations
2. US Environmental Protection Agency (EPA) including but not limited to:
    a. Worker Protection Rule 40 CFR Part 763, Subpart G CPTS 62044, FLR 2843-9 Federal Register, Vol. 50,
    b. No. 134, 7/12/85 P28530-28540
    c. Regulation for Asbestos - Title 40, Part 61, Subpart A of the Code of Federal Regulations
    d. National Emission Standard for Asbestos - Title 40, Part 61, Subpart M of the Code of Federal Regulations including Asbestos NESHAP Revision; Final Rule, Federal Register; Tuesday, November 20, 1990.
    e. Asbestos Hazard Emergency Response Act (AHERA) - 15 USC II 2641-2656
3. Alcoa standards and supplements to the standards related to Asbestos:
    a. EHS STD 18.18 Asbestos Management
    b. EHS SUP 18.18.1 Asbestos Abatement
    c. EHS SUP 18.18.3 Suppliers Specifications for Asbestos Work

In addition, for asbestos abatement, Supplier must possess the necessary licenses and certifications to perform

Asbestos Abatement activities, and all employees must be certified and duly possess a Certificate of Asbestos Abatement Training. Notification requirements, if any, to government authorities should be arranged by Supplier.

10 EHS STATEMENT AND REQUIREMENTS

Safety is a key factor that dictates Supplier selection and performance. All work shall be performed in accordance with applicable federal, state, and local safety regulations, and Alcoa's environmental, health and safety standards, and is subject to audit for conformity at any time.

The Supplier will be aware that some of the work will take place in a hazardous environment including chemical and physical hazards such as PCBs (HTML fluid, impacted concrete and soils), ACM, low light, working at heights and uneven work surface.

The Supplier is responsible for the health and safety of its employees as well as those of any Subcontractor.

All Work completed as part of these Specifications will be performed in accordance with federal, state, and Alcoa requirements pertaining to worker safety. This includes, but not be limited to, 29 CFR 1910 (General Industry Standards), 29 CFR 1926 (Construction Industry Standards). In addition, Supplier will also comply with Alcoa's Supplier pre-qualification standards.

If the Supplier has a bilingual staff, it will provide adequate translation of work and safety related information as well as a translator for daily safety meetings and presentations.

The Supplier will be required to submit the following documentation prior to mobilization to the site:

A. Project Specific Health and Safety Plan (HASP)
C. Project Specific Work Plan (WP) including Project specific SPCCC, SWPPP and BMPs
D. Asbestos Abatement Work Plan (AAWP)
E. Job Safety Analyses (JSAs) for each major task, including those necessary for mobilization to the site and delivery of any equipment. The JSA must provide "Stop Work" criteria, see example JSA provided in Appendix E.
F. Evacuation and Emergency Response Plan (Can be part of the HASP)
G. Listing of Competent persons by area of expertise for the project - At a minimum this includes the following areas: fall protection, rigging, mobile equipment operation and structural demolition
H. List of personnel with First Aid/CPR training (can be part of the HASP)
I. List of Personnel with Medical Clearances as applicable for asbestos abatement
J. Copies of training certificates and licenses for personnel involved tasks that require specific training or credentials.
K. SDS Inventory for materials being mobilized to the site
L. Hearing Conservation Program (can be part of a Corporate Health and Safety Program)
M. Safety Officer Qualifications
N. OSHA 300 Series Logs and Federal Postings Federal Postings do not have to be submitted but must be posted on site in a conspicuous location
O. Worker Health Standard (Covid-19 management/expectations)

The Supplier will be aware that the Work includes potential exposure to the following:

- ACMs (Multiple forms, friable and non-friable)
- Petroleum Coke
- Coal Tar Pitch
- Oils and Petroleum Products

- Mercury
- Nuisance dusts
- Polychlorinated Biphenyls (PCBs) solids and HTML liquids

Safety Data Safety Sheets for various materials and products are included in Appendix F.

The Supplier is required to provide all necessary training for its personnel and compliance with OSHA standards.

HAZWOPPER training is necessary for the work. All site personnel will have completed the training and have up to date certificates.

All Supplier and Subcontractor employees actively engaged in asbestos abatement will be required to have completed all training mandated by federal and state regulations. Copies of training certificates and licenses, medical clearance, all air monitoring data and a log of employee names and hours worked on abatement will be provided to Alcoa at the completion of the work.

Alcoa will provide the mandatory Site-Specific Orientation ONLY 1 day per week on a weekday mutually agreed (for clarification this is a set day i.e., Monday and will not change weekly). The orientation is about 6 hours. The Supplier should plan accordingly.

All Supplier and Subcontractor employees actively engaged in torch cutting of steel or other metal coated with lead-based paint will be required to have completed all medical surveillance and training mandated by 29 CFR 1926 and all other federal and state regulations.

At least two members of the crew will be current in first-aid training as required by OSHA and Alcoa standards.

10.1 Emergency/Contingency Procedures

In the event of an on-site emergency, the Supplier will follow the emergency procedures as outlined in the site-specific HASP and Alcoa Site Conditions Document (Appendix C). The Supplier will submit an Evacuation and Emergency Response Plan (part of the HASP) that describes the procedures used by the Supplier in seeking emergency medical services and for evacuation of the project site in the event of a project or plant emergency.

10.2 Health and Safety Plan (HASP)

Included in Appendix G of this specification is a copy of the "Environmental, Health, and Safety Program Document – Alcoa Environmental Remediation" Rev. 8, dated March 4, 2010. This document was written to ensure EH&S compliance for all Alcoa projects. Although it is primarily directed at Alcoa personnel, it provides Suppliers with job site expectations and is included for reference only.

The HASP will, at a minimum, describe the levels of protection that the Supplier's personnel will wear for the specific activities in which they will be engaged. The HASP will include procedures for protecting employees against exposure to asbestos, caustics, acids, lead, mobile equipment, and physical hazards.

The HASP will include procedures for personnel and perimeter areas related to building cleaning, asbestos abatement and hot work performed on materials that contain lead-based paint around the limits of the work area. The Supplier must specify procedures for upgrading the level of protection, including specifying at what concentration (based on the monitoring) such upgrades will occur. The HASP will include action levels at which the level of personnel protection will be modified and/or engineering controls implemented.

Prior to performing a major task or activity the Supplier will submit a Job Safety Analysis (JSA). A sample copy of a JSA is included in Appendix E for the Supplier to use as a guideline in preparation of the JSAs for this project. The JSA will describe the work feature to be performed, the steps involved in performing the work and provide an assessment of

all anticipated hazards with appropriate methods to control, eliminate or reduce any hazards using adequate levels and types of personal protective equipment (PPE), layers of protection or administrative controls as required to execute the work safely. JSAs will be prepared by the Supplier and submitted to the ARP for review prior to performing any work covered by the JSA.

Daily pre-job safety meetings will be held each morning by the Supplier to discuss the day's activities, identify anticipated hazards and high-risk work and to address any safety issues.

10.3 Health and Safety Officer

The Supplier will designate one person on site as the Project Health and Safety Officer (HSO) to verify compliance with the HASP by all on-site personnel. The HSO will also interact with the ARP as required to update the project status. **The HSO will have no other responsibilities other than the health and welfare of the workers and will be on-site full time. This is non-negotiable.**

The HSO will:

- Review, understand and implement Alcoa EHS standards.
- Perform daily inspections of all work activities as well as weekly scored audits of all work procedures and areas and maintain records of the inspections and audits.
- Maintain a SDS inventory and update the inventory as required throughout the duration of the project.
- Perform daily project safety (tailgate) meetings each day prior to initiating any work activities.
- Maintain all training and medical records
- Develop, modify, and maintain the JSAs required for the project
- Control site access, security, signage, barricades, and project lighting
- Perform required project specific training for all site personnel
- Maintain the project's visitor log
- Oversee subcontractors, venders, and site visitors
- Assist Alcoa personnel and the ARP in performance of any project audits
- Perform air and noise monitoring as required
- Schedule required medical monitoring and maintain medical clearances
- Select, order, and maintain adequate PPE for the project personnel and site visitors

The Supplier will submit the qualifications of its HSO to Alcoa for review in the Technical Proposal.

10.4 Personal Protective Equipment

All operations have the potential for encountering hazardous conditions and Level D will be the minimum protection allowed. Supplier will comply with PPE requirements of Alcoa Site Conditions.

To adequately protect personnel in areas of higher potential contaminant exposure, an upgrade to Level C may be required if action levels are exceeded. The HSO will be responsible for monitoring conditions and upgrading protection equipment as required. The Supplier will supply properly trained personnel with approved safety equipment.

10.5 Environmental Health and Safety Audits and Reports

During the performance of the Work, the Supplier will be required to actively participate in the performance of Environmental, Health and Safety audits and inspections to ensure the project is being performed in accordance with applicable regulatory and Alcoa EHS Standards (Appendix D). This will include audits performed in the field by the ARP and potentially, audits by Alcoa's corporate audit group.

10.6 Working at Elevation

Alcoa has very strict rules regarding working at elevation relating to accessing truck and transport deliveries. All truck and transport drivers and delivery personnel, all site personnel involved with loading and unloading equipment, materials and supplies and all personnel maintaining or working on mobile equipment must obey the sites policies and procedures. The site-specific requirements are detailed below:

10.7 Loading/Unloading Trucks and Trailers

- Fall Protection/prevention is required any time a driver is exposed to fall hazard of **48 inches or more** – this includes any truck, trailer, or flat bed.
- Standing on top of a load is always prohibited.
- Climbing on truck bed to secure tarps is always prohibited.
- Drivers are not allowed to operate Alcoa owned or leased equipment (i.e., fork trucks, mobile or fixed rail cranes) to load or unload their truck/trailer without approval from the ARP or Alcoa Safety. If Alcoa owned equipment is made available for use by the Supplier Alcoa's hold harmless equipment use indemnification must be executed prior to using the equipment.
- Any driver or employee not in compliance with fall protection/prevention protocols will be removed and banned from this site and its Alcoa will be notified.

10.8 Excavator Maintenance and Fueling

Supplier will strictly adhere to the fall protection/prevention rules when performing maintenance/fueling on excavators or otherwise equip with handrails and guarding.

11 COORDINATION AND PROJECT MEETINGS

A preconstruction meeting will be scheduled after issuance of the executed Contract. Project Meetings will be held weekly at the job site or via conference call in accordance with a mutually acceptable schedule. The Suppliers designee will conduct Project Meetings throughout the work period. The purpose of the Project Meetings is to review progress of the work and to provide for discussion and analysis of problems that might arise relative to execution of the Work.

Persons designated by the Supplier to attend and participate in Project meetings will have all required authority to commit the Supplier to solutions as agreed upon in the Project meetings.

Alcoa will maintain minutes of project meetings and distribute to the Supplier for review and comment. The Supplier is allowed a 2-day review period for comments after receiving them from Alcoa.

11.1 Pre-Construction Meeting

1. Date: Alcoa will schedule this meeting after issuance of the executed Contract.
2. Location: Preconstruction meeting will be held at the site.
3. Attendees (At a minimum) are to be:
    a. Alcoa Responsible Person (ARP)/Construction Manager/ Alcoa Project leader (APL)
    b. Alcoa EHS Manager
    c. Supplier's Project Manager
    d. Supplier's Superintendent
    e. Supplier's HSO

f. Major Subcontractors
g. Major suppliers, as appropriate

4. Typical Agenda:
    a. Team introduction, roles, and responsibilities
    b. List of major Subcontractors and suppliers
    c. Preliminary progress schedule
    d. Project overview, including Contract Documents
    e. Critical Work sequencing
    f. Status of permits (as required)
    g. Parking, staging, and laydown requirements
    h. Major equipment deliveries and priorities, Alcoa-furnished materials
    i. Project coordination
    j. Communications and emergency contacts
    k. Designation of responsible personnel
    l. Procedures for and processing of field decisions
5. Submittals
6. Change Orders
7. Applications for payment
8. Schedules and reports
9. Weekly Progress Meetings
10. Procedures for maintaining record documents including Supplier hours
11. Special site conditions and constraints Use of Premises:
12. Office, work, and storage areas
13. Owner's requirements temporary utilities and utility shutdowns
14. Environmental protection
15. Implementation and Conformance to the Site SWPPP
16. Safety and first-aid procedures
17. Security procedures Housekeeping procedures
18. Closeout

11.2 Weekly Progress Meetings

1. Purpose: The Supplier Project Manager will conduct weekly meetings to coordinate the Work, answer questions, and resolve problems.
2. Location: Field office at the Project site or via conference call.
3. Attendees are to be:
    a) APL/ARP/Demolition Manager/ EHS Manager
    b) Supplier's Project Manager
    c) Supplier's Superintendent
    d) Supplier's Site Safety Officer
    e) Others, as appropriate
4. Such meetings may include, but are not limited to, review of:
    a) Health and Safety
    b) Outstanding action items
    c) Technical concerns (e.g., structural, mechanical, or civil)
    d) Submittals

e) Schedule review and Corrective Actions as needed
f) Projection of Work
g) Procurement
h) Job concerns
i) New Action items
j) Summary

All matters to be discussed at a Project meeting will be raised when the appropriate agenda item is discussed. All attendees will familiarize themselves with the agenda for a given meeting and prepare their items for discussion in advance.

Alcoa may call special meetings at the Project site or at other locations to coordinate the Work, answer questions, and resolve problems.

Alcoa will compile minutes (unless other arrangements have been made and agreed to) of each Project meeting. The ARP will review the minutes and will distribute copies of the minutes to all interested parties for review and comment. The comment period is 2 days from issuance.

The minutes distributed by the ARP will be the official record minutes and all clarifications and/or corrections will be transmitted in writing to the Supplier's Project Manager within 2 days of the date of receipt of the minutes unless the clarification or correction has already been placed on the agenda for the next scheduled Project meeting. Corrections to the minutes will be legibly submitted electronically.

12 SUBMITTAL PROCEDURES

The Supplier will prepare the required project submittals as detailed in this specification. All submittals will bear the Contract name and number, the date of submission the nature of the submittal, and the Supplier's signature.

The **Contractor Interface Document (CID)** will be used for transmission of any questions, clarifications, or Changed Conditions. A copy of this document is provided in Appendix H.

13 INVOICE PROCEDURES

Supplier must prepare a draft invoice and send to Alcoa prior to the 25th day of each month. If the Supplier does work in the month that involves a subcontractor, the Supplier will issue the draft invoice for that month's work and sends to Alcoa for review. In that email correspondence, the Supplier will need to identify what portion (dollar amount) of work has been subcontracted and to whom.

The Supplier and Alcoa will agree to the percent completion prior to submittal of the final invoice for processing.

For any work in that month that was performed by a Subcontractor that is over $100K, Alcoa will require a release of liens before the invoice pays.

A 10% retainage will be held from each invoice payable at the end of the project when all required documentation including but not limited to release of liens and affidavit for subcontractor work exceeding $25,000.

Supplier will submit the Final invoice pending Alcoa approval, in the days between when Supplier invoices and when the invoice is paid, Supplier will need to provide Alcoa with a release of liens from their subcontractor for that work.

14 FORECASTING AND FINANCIAL REPORTING

Alcoa has specific requirements for forecasting and financial reporting that the Supplier must complete as part of the contract. Upon award, Supplier will provide a projected cashflow including expenses and anticipated revenue

generated, for inclusion in the contract. The line items listed in the bid schedule will serve as the basis for the cashflow. Each line item will be categorized as either expense or reserve by Alcoa and will be tracked separately.

The Supplier will provide a monthly forecast update, updating expenses and revenue for the remainder of the project. Any changes to the project timing / status must be reflected in these monthly updates.

1. Price and quantity assumptions should be provided for revenue.
2. Forecasts provided to the location should reflect known shifts in project timeline.

The updated monthly forecast is due at the end of each month. The forecast will accurately reflect the Supplier's current understanding of the project and provide realistic projections. The Monthly revised forecast is due no later than the 21st day of the month.

Cashflow and schedule of values is due within 2 days following award for inclusion with the contract.

15 BASIS OF PAYMENT AND SCHEDULE

This section describes requirements for submittals, applications for payment, including the final Application for Payment, and provides measurement and payment descriptions. Any unit prices listed on the Bid Schedule are complete including labor, equipment, products, fees, and any incidental charges, including allowance for overhead and profit.

Supplier will be paid for the actual quantity associated with the bid items. No discussion regarding unit rate adjustments will occur unless the actual quantity is + / - 10% of the estimated quantity.

Estimates have been provided for process materials. Supplier must include in their base bid the management of these materials. If the actual quantity of process materials is over the estimate provided, Alcoa will pay Supplier an agreed upon unit rate for the additional quantity. Unit rate(s) must be provided in the bid sheet.

Supplier will own all Recyclable Material recovered during execution of the Work once approved and released by Alcoa based on evaluation of monthly progress against the schedule of values and are to be removed from the site at that time.

Scrap shipments constitute payments to Supplier. Alcoa will monitor the shipment of scrap against project progress to ensure a balance between estimated payments and percent completion. Alcoa reserves the right to restrict scrap shipments if scrap revenue becomes out of balance against project completion percentage.

Measurement and payment descriptions for each item listed on the Bid Schedule are as set forth throughout. the applicable sections of the Contract Documents and as noted herein.

All Bid Items of Work acceptably completed under the Contract will be measured by Alcoa according to United States standard measure. Measurements will be made as hereinafter provided unless otherwise provided for by their individual measurement specifications.

The method of measurement and computations to be used in determination of quantities of material furnished or of Work performed under the Contract will be those methods generally recognized as conforming to accepted engineering practice and will be carried to the proper significant figures or fractions of units for each item.

Items of Work for which payment is made by a lump sum will be measured as a complete unit. Partial payment, if made, will be made according to the completed percentage of the various components of the lump sum item

15.1 Measurement of Quantities

Trucks used to haul material being measured by weight will be weighed empty at least daily at such times as the

ARP directs, and each truck will bear a plainly legible identification mark.

All scrap metal, process materials and wastes will be scaled and weighed prior to shipment. The Supplier will maintain trucking logs to document all materials and material weights. This information must be maintained electronically using Excel software and provided to Alcoa at the end of each month. Accurate descriptions and weights will be maintained by metal type, waste stream and process material.

Alcoa considers scrap shipments as payment to the Supplier and will monitor the shipment of scrap against project progress to ensure a balance between estimated payments and percent completion. Alcoa reserves the right to restrict scrap shipments if scrap revenue becomes out of balance against project completion percentage.

Materials to be measured by volume in the hauling vehicle will be hauled in approved vehicles and measured therein at the point of delivery. Vehicles for this purpose may be of any size or type acceptable to the ARP, provided that the body is of such shape that the actual contents may be readily and accurately determined. When required by the ARP, the loads will be levelled to facilitate measurement when the vehicles arrive at the point of delivery.

Unless otherwise specified, lump sum measurements will be measured as a complete unit. Partial payment, if made, will be made according to the completed percentage of the various components of the lump sum item.

The Supplier will maintain logs to document all materials and material weights. This information must be maintained electronically using Excel software and provided to Alcoa as requested. Accurate descriptions and weights will be maintained by metal type, waste stream and process material.

When weight is used as the measurement standard, certified tickets, invoices, or tags for such items will be furnished to the APL/ARP. The term “ton” means the short ton consisting of 2,000 pounds.

Quantity will be determined based on documented truck weight tickets generated from the on-site scale. The on-site scale will be provided by Supplier and the Supplier will maintain and operated it during the period of work. A mutually acceptable method for identification of trucks and collection and tabulation of truck tickets daily will be established by the Supplier and Alcoa.

The quantity of Work done will be paid at the contract bid price or lump sum price, which price and payment will be full compensation for doing all the Work herein described in a workman-like manner, including furnishing all labor, materials, tools, equipment, supplies, and incidentals necessary to complete the Work.

The Work is comprised of the individual Bid Items presented on the Bid Item Schedule.

The Supplier will provide lump sum and unit price for defined items. Changed Conditions may be handled on a T&M basis as approved by the ARP. Items which are yet undefined will be handled as contract modifications later.

15.2 Bid Schedule

The Supplier will complete the Excel spreadsheet that contains the 2025 Massena East Demolition Bid Item Sheet for this project. The completed spreadsheet must be submitted electronically with the Supplier’s bid submission as a separate document from its Technical Proposal.

16 DRAWINGS

Available construction drawings are provided in Appendix I – Building and Foundation Drawings.