1061 North Broadway

YONKERS, NEW YORK

Final Engineering Report

Lot @ S. End of Elizabeth Seton Campus
NYSDEC Site Number: V00687-3

Prepared for:

The City of Yonkers
40 South Broadway
Yonkers, NY 10701

Prepared by:

The City of Yonkers
Department of Engineering
40 South Broadway – Room 315
Yonkers, NY 10701

JUNE 2016

CERTIFICATIONS

I, Paul N. Summerfield, P.E., am currently a registered professional engineer licensed by the State of New York, I had primary direct responsibility for implementation of the remedial program activities, and I certify that the Remedial Action Work Plan and the Remedial Closure Work Plan were implemented and that all construction activities were completed in substantial conformance with the Department-approved Remedial Action Work Plan and Remedial Closure Work Plan.

I certify that the data submitted to the Department with this Final Engineering Report demonstrates that the remediation requirements set forth in the Remedial Action Work Plan and the Remedial Closure Work Plan and in all applicable statutes and regulations have been or will be achieved in accordance with the time frames, if any, established in for the remedy.

I certify that all use restrictions, Institutional Controls, Engineering Controls, and/or any operation and maintenance requirements applicable to the Site are contained in a deed restriction created and recorded in Westchester County, as recording identifier No. 533573366, and that all affected local governments have been notified that such deed restriction has been recorded.

I certify that a Site Management Plan has been submitted for the continual and proper operation, maintenance, and monitoring of all Engineering Controls employed at the Site, including the proper maintenance of all remaining monitoring wells, and that such plan has been approved by Department.

I certify that all documents generated in support of this report have been submitted in accordance with the DER's electronic submission protocols and have been accepted by the Department.

I certify that all data generated in support of this report have been submitted in accordance with the Department's electronic data deliverable and have been accepted by the Department.

I certify that all information and statements in this certification form are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law. I, Paul N. Summerfield, P.E., of The City of Yonkers, am certifying as Owner's Designated Site Representative.

PE 064542
NYS Professional Engineer #

7/26/16
Date

Signature

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LIST OF ACRONYMS

Acronym	Definition
CAMP	Community Air Monitoring Plan
COY	City of Yonkers
EC	Engineering Controls
FER	Final Engineering Report
HASP	Health and Safety Plan
IC	Institutional Controls
LKB	Lockwood, Kessler & Bartlett Consulting Engineers
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
OSHA	Occupational Safety and Health Administration
PID	Photo Ionization Detector
RAO	Remedial Action Objectives
RAWP	Remedial Action Work Plan
RCWP	Remedial Closure Work Plan
SCO	Soil Cleanup Objectives
SEQRA	State Environmental Quality Review Act
SGC	Standards, Guidance and Criteria
SMP	Site Management Plan
SOP	Site Operations Plan
SVOC	Semi Volatile Organic Compounds
SWPPP	Stormwater Pollution Prevention Plan
USEPA	United States Environmental Protection Agency
UST	Underground Storage Tank
VCA	Voluntary Cleanup Agreement
VOC	Volatile Organic Compounds

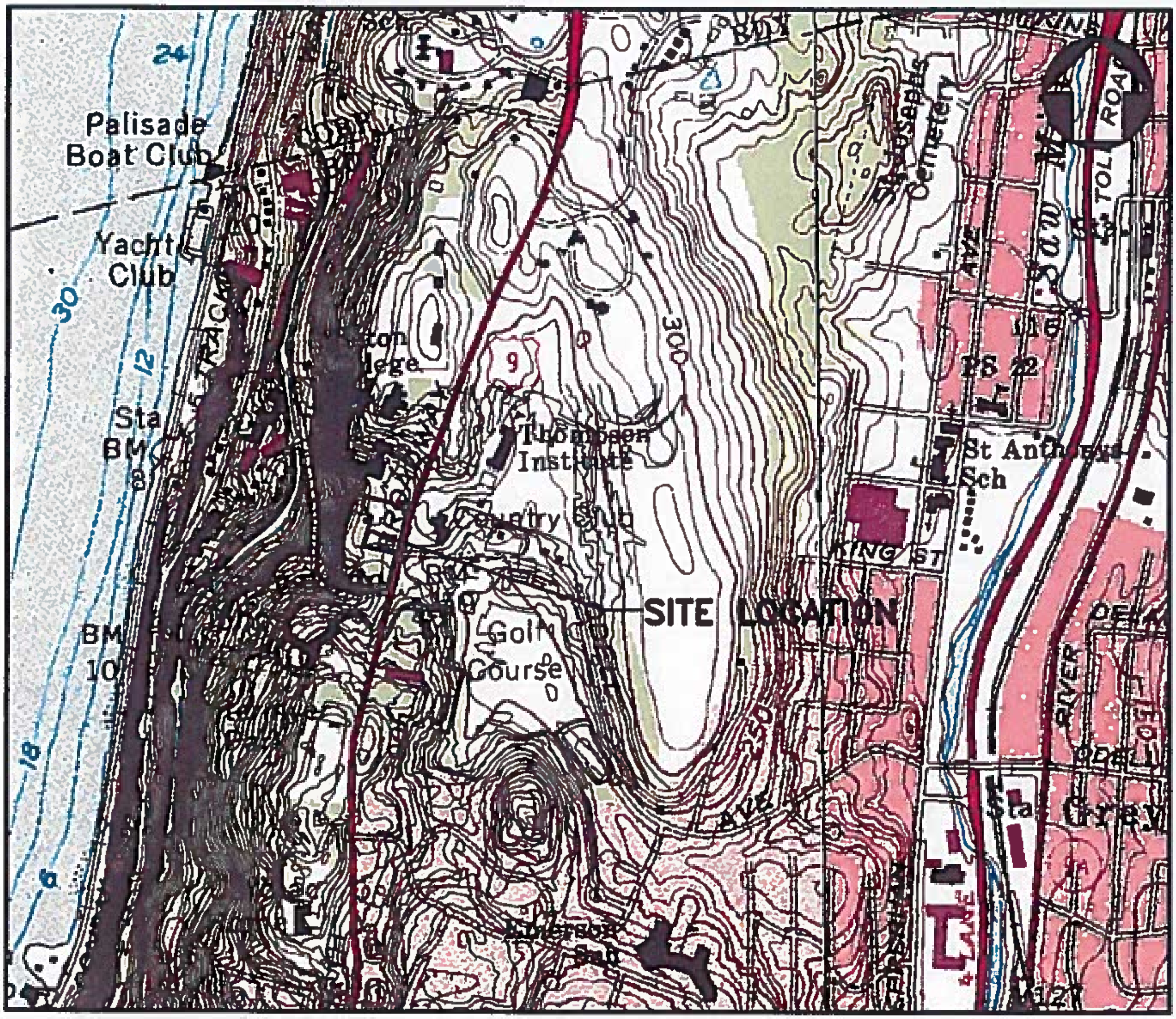
FINAL ENGINEERING REPORT

1.0 BACKGROUND AND SITE DESCRIPTION

On January 20, 2004 Iona College entered into a Voluntary Cleanup Agreement (VCA) with the New York State Department of Environmental Conservation (NYSDEC) to investigate and remediate a 3.73-acre portion of a 7.708-acre property located in the City of Yonkers, Westchester County, New York. Subsequent to that agreement, The City of Yonkers took over the property and was added to the Voluntary Cleanup Agreement on January 2, 2009. The property was remediated to allow Commercial use, and will be used for open/green space for the foreseeable future. Future uses will adhere to the regulations of Commercial use.

The site is located in the County of Westchester, New York and is identified as a portion of Block 3515 and Lots 115 and 090 on the City of Yonkers Tax Map Section 3. The site is situated on an approximate 7.708-acre area bounded by the Foxfire School to the north, Odell Avenue to the south and west, North Broadway to the east,(see Figure 1-Location Map). The boundaries of the site are fully described in Appendix A: As-Built Survey Map.

An electronic copy of this FER with all supporting Documentation is included as Appendix B: Final Engineering Report.



APPROX. SCALE: 1"=2000'

FIGURE 1

LKB

SITE LOCATION
1061 NORTH BROADWAY, YONKERS, N.Y.

2.0 SUMMARY OF SITE REMEDY

2.1 REMEDIAL ACTION OBJECTIVES

Based on the results of the Remedial Investigation, the following Remedial Action Objectives (RAOs) were identified for this site.

2.1.1 Groundwater RAOs

- Prevent usage of groundwater without adequate monitoring, and if necessary, treatment.

2.1.2 Soil RAOs

- Prevent ingestion/direct contact with contaminated fill materials.

2.2 DESCRIPTION OF SELECTED REMEDY

The site was remediated in accordance with the remedy selected by the NYSDEC in the Decision Document dated March 20, 2008, as well as in accordance with the following documents: Remedial Action Work Plan (RAWP) dated October 29, 2004-Revised March 24, 2005 (located in Appendix C); Remedial Closure Work Plan (RCWP) dated November 28, 2007 and approved by the NYSDEC March 20, 2008; and the Final Biddable Design Specifications and Plans (RD) dated December 10, 2010 and approved by NYSDEC.

The following standards, guidance and criteria (SGC's) apply to the remedial actions conducted at the Site:

- 29 CFR Part 1910.120 – Hazardous Waste Operations and Emergency Response;
- 6 NYCRR Part 750 through 758 – Implementation of NPDES Program in NYS ("SPDES Regulations");
- TAGM 4031 – Fugitive Dust Suppression and Particulate Monitoring Program at Inactive Hazardous Waste Sites (Oct 1989);
- 6NYCRR Part 375 Table 375-6.8(b) – Restricted Use Soil Cleanup Criteria;
- TOGS 1.1.1 – Ambient Water Quality Standards & Guidance Values and Groundwater Effluent Limitations;
- Air Guide 1 – Guidelines for the Control of Toxic Ambient Air Contaminants; and NYSDOH Generic Community Air Monitoring Plan.

The following list of remedial actions was completed as per the approved RAWP and RCWP:

1. The above-grade fill pile that was thought to be composed primarily of broken asphalt, was found - during construction operations – to be composed of only a minor amount of asphaltic material. As the fill pile characteristics were found to be visually similar to the rest of the existing site material, the pile material was spread out and graded as part of action 5 below. Further information regarding the above-grade fill pile can be found in Section 4.5 herein.
2. We note that the project site did not contain any miscellaneous debris (i.e. tires, etc.) that would have required separate disposal.
3. Removed the several large dead trees that died as a result of fill being placed around their bases.
4. Explored the subsurface of the site at the probable location of the root cellar, cited in the RCWP as possibly existing on site. No evidence of a root cellar was discovered.
5. Re-graded the existing Site material as necessary to maintain proper drainage.
6. Performed a topographic survey of the Site to establish grade elevations.
7. Covered the fill in accessible (i.e., relatively flat) areas of the Site with a minimum of one foot of clean soil and established vegetative cover (grass and wildflower mix).
8. Covered the steep western slope of the Site with crushed rock, including removal of existing trees.
9. Prevented public access to the steep western slope using fencing and signage.
10. Performed another topographic survey of the Site to verify the thickness of the clean soil cover.
11. Registered an appropriate property deed restriction for the Site.

3.0 INTERIM REMEDIAL MEASURES, OPERABLE UNITS AND REMEDIAL CONTRACTS

The remedy for this site was performed as a single project, and no interim remedial measures, operable units or separate construction contracts were performed.

4.0 DESCRIPTION OF REMEDIAL ACTIONS PERFORMED

Remedial activities completed at the Site were conducted in accordance with the NYSDEC-approved Remedial Action Work Plan (RAWP) for the 1061 North Broadway site October 29, 2004 (Revised March 24, 2005), as well as the Remedial Closure Work Plan (RCWP) November 28, 2007. All deviations from the RAWP and RCWP are noted below.

4.1 GOVERNING DOCUMENTS

4.1.1 Site Specific Health & Safety Plan (HASP)

The Health and Safety Plan (HASP) was developed by Lockwood, Kessler & Bartlett Consulting Engineers (LKB) for The City of Yonkers (CoY) and adopted for use by the site contractor R. Pugni and Sons, Inc. and the Environmental Engineering Sub-contractor G.C. Environmental, Inc.

The Health and Safety Plan (HASP) was developed to protect the health and safety of the on-site personnel and the general public during remediation of the fill at the site. This HASP addressed the potential physical and chemical hazards that workers and/or the public could have faced while the planned activities were performed. It established procedures to minimize their exposure through safe work practices and personal protective equipment. The HASP was developed to conform with the requirements of the United States Environmental Protection Agency Standard Operating Safety Guide (USEPA, 1988) and the United States Department of Labor, Occupational Safety and Health Administration (OSHA) regulation, Title 29 Code of Federal Regulations, Part 1910.120 (29 CFR Part 1910.120), "Hazardous Waste Operations and Emergency Response" and (29 CFR Part 1929.21), "Safety and Health Regulations for Construction-Confined or Enclosed Space".

All remedial work performed under this Remedial Action was in full compliance with governmental requirements, including Site and worker safety requirements mandated by Federal OSHA. The Health and Safety Plan (HASP) was complied with for all remedial and invasive work performed at the Site.

4.1.2 Storm-Water Pollution Prevention Plan (SWPPP)

The erosion and sediment controls for all remedial construction were performed in conformance with requirements presented in the New York State Guidelines for Urban Erosion and Sediment Control and the site-specific Storm Water Pollution Prevention Plan [4/14/2011]. A copy of the approved SWPPP plan and weekly inspection reports are included in Appendix I: Approved SWPPP and Weekly Inspection Reports.

4.1.3 Community Air Monitoring Plan (CAMP)

As required under the approved CAMP, real time air monitoring for volatile organic compounds (VOC's) and particulates (dust) was performed during all intrusive work activities on site. The Photo Ionization Detector (PID) utilized for this project was a MultiRAE Systems portable PID with a 10.6 e.V. lamp, calibrated for isobutylene standards. This type of PID is a five (5) gas multi-meter, capable of detecting total volatiles, hydrogen sulfide, carbon monoxide, oxygen and combustible gas. The PID was operated in accordance with the MultiRAE Systems operations manual. Prior to the start of work each day, the PID was calibrated using the isobutylene standard, and readings were recorded for every one-half hour in the field. The monitoring was performed by G.C. Environmental Inc. as a sub-contractor on site for R. Pugni and Sons Inc.

The following specific procedures and methods were utilized: The PID was used for the field screening of VOC's, and for measuring Combustible Gas - Lower Exposure Limit (LEL), Oxygen, Carbon Monoxide, and Hydrogen Sulfide. Two Dust Trak II real time dust monitors were used at both upwind and downwind locations to monitor the dust. Daily reports were kept by G.C. Environmental Inc, copies of which are included in Appendix F: CAMP Field Data Sheets & Final Monitoring Report.

4.1.4 Contractors Site Operations Plans (SOPs)

The Remediation Engineer reviewed all plans and submittals for this remedial project (i.e. those listed above plus contractor and subcontractor submittals) and confirmed that they were in compliance with the RAWP. All remedial documents were submitted to NYSDEC and NYSDOH in a timely manner and prior to the start of work.

4.2 REMEDIAL PROGRAM ELEMENTS

4.2.1 CONTRACTORS AND CONSULTANTS

- City of Yonkers – Engineer of Record & Inspections
- L.K.B. Inc. - Consulting Engineer
- R. Pugni & Sons, Inc.- General Contractor
- G.C. Environmental, Inc.- Environmental Sub Contractor
- Yaboo Fence Co. - Fence Sub Contractor
- R&J Tree Service, Inc.- Clearing and Grubbing Sub Contractor
- Contractors' Line and Grade South, LLC. - Surveyor

4.2.2 Site Preparation

- The mobilization was performed in two stages. The clearing and grubbing subcontractor (R&J Tree Service, Inc) mobilized his equipment to the site on 3/31/2011. The general contractor (R. Pugni & Sons, Inc.) mobilized his equipment to the site on 7/18/2011.
- Clearing and Grubbing throughout the site as per the remedial construction plans was performed by R&J Tree Service, Inc. beginning on 4/4/2011 and completed on 4/12/2011.
- Erosion and sedimentation controls such as silt fencing and the anti-tracking pad were initially installed by R. Pugni & Sons, Inc. between 4/8/2011 and 4/14/2011 and maintained throughout the duration of the remediation project.
- An initial Utility Markout was requested by R. Pugni & Sons, Inc. under NYS Code Rule 753 on 3/29/2011 (ticket reference # 032911-044-075)
- A City of Yonkers Building Permit was obtained prior to commencing work. (Permit # 2011098B005)
- A NYSDEC SWPPP Notice of Intent was filed on 4/14/2011, and assigned Stormwater Permit Number NYR 10U059.

A pre-construction meeting was held with NYSDEC and all contractors on 3/9/2011.

Documentation of agency approvals required by the RAWP is included in Appendix C: Agency Approvals Required by RAWP. Other non-agency permits relating to the remediation project are provided in Appendix D: Non-Agency Approvals relating to the project.

All SEQRA requirements and all substantive compliance requirements for attainment of applicable natural resource or other permits were achieved during this Remedial Action.

A NYSDEC-approved project sign was erected at the project entrance and remained in place during all phases of the Remedial Action.

4.2.3 General Site Controls

- Site security: The site is enclosed by an existing stone wall along the East, West, and South perimeter. Temporary construction fencing was installed along the North side of the site during remedial work completion. A permanent 6' high chain link fence was installed along the North side of the site once the remedial work was completed.
- Job site record keeping: A City of Yonkers field engineer was on site daily during all remedial work. Daily field reports were kept and are included in Appendix G: Daily Reports.
- Erosion and sedimentation controls: Silt fencing was installed along the entire site perimeter and maintained throughout the entire project length. An anti-tracking pad consisting of 3" crushed stone was installed at the site entrance.
- Soil screening results: Results submitted in Appendix E: Imported Fill Sampling Results.
- Stockpile methods: Clean fill and top soil were neatly stockpiled within the enclosed site perimeter.
- Problems encountered: Record summer/fall rainfall created constant challenges, and required continuous SWPPP maintenance. Also the existing slope grade along the west side of the site exceeded the capacity of the proposed method of slope stabilization (Geogrid material), therefore requiring a re-design. A stone slope stabilization method was submitted to and approved by the NYSDEC, and was installed accordingly.

4.2.4 Nuisance Controls

- Egress housekeeping: The crushed stone anti-tracking pad was routinely inspected and maintained.
- Dust control: Dust monitoring stations were set up daily by the site environmental engineering sub-contractor (G.C. Environmental, Inc.). A truck mounted 500 gallon water tank was utilized to maintain dust levels below that of the approved NYSDOH Generic CAMP.
- Odor control: N/A
- Truck routing: All trucks entered and exited the site through the stabilized construction entrance.
- Responding to complaints: No site specific complaints were received during the duration of the project.

4.2.5 CAMP results

G.C. Environmental Inc. was on site providing air monitoring services as per the New York State Department of Health Generic Community Air Monitoring Plan (CAMP). They performed air monitoring services during all intrusive work activities on site between July 25, 2011 and October 07, 2011.

During this monitoring period the Total Dust monitoring (PM_1, PM2.5, PM4, & PM10) and PM10 (15-minute average) results were within the action response levels. Dust suppression techniques were employed at the site such as reducing the speed of the vehicles within the site and spraying water throughout the site.

During the monitoring period, the PM10 (15-minute average) concentration exceeded the response level once. The exceeded concentration level decreased within a 15 minute period.

All Gas monitoring results were within the action response levels.

Copies of all field data sheets relating to the CAMP and a copy of G.C. Environmental, Inc. final monitoring report are provided in electronic format in Appendix F.

4.2.6 Reporting

- Daily reports: A City of Yonkers field engineer was assigned to the site. Daily inspector's reports were kept for the entire project duration.

  All daily reports are included in electronic format in Appendix G.

  The digital photo log required by the RAWP is included in electronic format in Appendix H: Project Digital Photo Log.

4.3 CONTAMINATED MATERIALS REMOVAL

No materials were removed from the site. All existing material was graded on site and covered with the approved Capping System.

4.4 IMPORTED BACKFILL

- Volumes and sources: The approved source for both the imported clean fill and topsoil to be utilized in the proposed capping system was the currently ongoing NYCDEP Eastview Wetland Mitigation Project.

  The clean fill and topsoil was acquired by R. Pugni & Sons, Inc. from Halmar International. A total of 4370 cubic yards of clean fill, and 1273 cubic yards of top soil were imported from the approved site.

- On-site placement locations, both horizontal and vertical: The clean fill and topsoil were installed as per the approved capping system. This system was installed on the top portion of the site and the southern slope portion of the site. It was not used on the western slope portion of the site as originally proposed.

- Sampling results: Test results of the imported fill material for the one-foot thick clean soil cover indicates that the material meets or exceeds criteria for the commercial use soil cleanup objectives (SCO's), and protection of groundwater SCO's, and almost nearly all contaminants are below the unrestricted use SCO's, too. Some of the contaminants detected above unrestricted SCO's, but below the intended use of commercial SCO's, included: 4,4' DDT at 0.111 and 0.00961 ppm (unrestricted SCO is 0.0033 ppm, imported fill commercial SCO is 47 ppm); 4,4' DDE at 0.0387, 0.198, 0.0665 and 0.0142 ppm (unrestricted SCO is 0.0033 ppm, imported fill commercial SCO is 17 ppm).

- Approvals: Uncontaminated soil, such as the fill imported for the project, is not considered solid waste according to the pre-determined beneficial use determination in 6NYCRR 360-1.15(b)(7). As such, importation and use of this material required no disposal or truck hauling permits

The source and quantity of imported backfill are shown above. Chemical analytical results for backfill, in comparison to allowable levels, are provided in Appendix E. The site location where backfill was used is shown in Appendix A.

4.5 CONTAMINATION REMAINING AT THE SITE

- All existing materials that were on the site prior to commencing the project were left on site and included construction and demolition debris such as asphalt, concrete and ash. The volume of this material is estimated to be approximately 17,700 cubic yards. These materials are the source of the semi-volatile organic compounds and metal contaminants present on the site.

  An above-grade fill pile was initially thought to be comprised primarily of broken asphalt, through a previous surficial visual observation by the City's consulting engineer, LKB. During construction operations, City inspectors observed the excavation of the pile; visually inspected the volume of pile material; and found it to be composed of only a minor amount of asphalt. As the fill pile material characteristics were found to be visually similar to the rest of the on-site material, the pile was spread out with the on-site material for grading purposes.

- An indicator layer was installed over all existing fill areas that were to be "Capped". The indicator layer consists of orange colored high density polyethylene material. The indicator layer is located a minimum of 12" below the surface of the imported capping materials.

There is an existing 6" vitrified clay sanitary sewer pipe that flows almost due north through the property, from the upstream manhole located midway down the northern end of the crushed rock stabilized, sloped portion of the project site, to the next downstream manhole located approximately 200 feet offsite to the north. We were not able to confirm whether this sanitary sewer line is active, and as such we are assuming that it is part of the City's active sanitary sewer system. All existing piping and structures were left undisturbed, and will be maintained in the future as part of the sanitary sewer collection system of the City. Contaminated material remaining on-site contains substances which include: VOC's; SVOC's; pesticide related compounds; PCB's; and metals in varying concentrations, as more fully described in the Site Investigation Report for the property by LKB Consulting Engineers dated May 3, 2004 and revised June 29, 2004, and provided in Appendix M. The Site Investigation Report was previously submitted and on file with the NYSDEC.

Since contaminated soil remains beneath the site after completion of the Remedial Action, Institutional and Engineering Controls are required to protect human health and the environment. These Engineering and Institutional Controls (ECs/ICs) are described in the following sections. Long-term management of these EC/ICs and residual contamination will be performed under the Site Management Plan (SMP) approved by the NYSDEC.

4.6 SOIL COVER CAP SYSTEM

Exposure to remaining contamination in soil/fill at the site is prevented by a soil cover system placed over the site. This cover system is comprised of a minimum of 12 inches of clean soil. Sheet 2 of the Project Plans in Appendix J: Project Plans shows the as-built cross sections for each remedial cover type used on the site. Sheet 1 of the Project Plans in Appendix J, as well as the As-Built Survey Map in Appendix A, shows the location of the cover type built at the Site. An Excavation Work Plan, which outlines the procedures required in the event the cover system and/or underlying residual contamination are disturbed, is provided in Appendix A of the SMP.

4.7 OTHER ENGINEERING CONTROLS

Since remaining contaminated soil exists beneath the site, Engineering Controls (EC's) are required to protect human health and the environment. The site has the following primary Engineering Controls, as described in the following subsections.

Conceptual Remedial Approach: The primary engineering controls for the project are employed to: 1) Prevent ingestion/direct contact with contaminated fill material, and 2) Prevent usage of groundwater without adequate monitoring and, if necessary, treatment. These controls will prevent direct contact and/or ingestion of contaminants and, at the same time, allow the site to be utilized by the City as open space.

- Cover System – Accessible Areas: A 1-foot thick cover system has been installed over the accessible areas of the project site. Specific components of this system are described below.

Surface Drainage - The first component of the cover system is to establish adequate surface drainage capability, achieved by re-grading the existing site ground surface. Adequate ground surface drainage will ensure that the cover system will remain stable during rainfall events.

Indicator Layer - The second component of the cover system is the installation of a layer of high density polyethylene directly on top of the re-graded, pre-existing site material. This material is bright orange in color, and is intended to provide a physical warning to anyone that may inadvertently perform excavation activity at the site in the future. Product information for the indicator layer material can be found in Appendix K: Indicator Layer Product Information.

Soil Cap Material - The third component of the cover system is the 12-inch thick clean soil layer. This material is composed of 1) a minimum 8-inch thick layer of clean soil material, conforming to the Restricted Use Soil Cleanup Objectives for the Protection of Public Health – Commercial and Protection of Groundwater, as per Table 375-6.8(b) of the 6NYCRR Part 375 Regulations, and 2) a 4-inch thick layer of topsoil, capable of sustaining vegetative cover on the site.

Both of these soil cap material components were obtained from the NYCDEP Eastview Wetland Mitigation Project, located in Greenburgh, New York. The volume of this approved, imported material totaled 4370 cubic yards of clean fill, and 1273 cubic yards of top soil. Test results describing these materials are found in Appendix E. The as-built topographic survey, when compared to the pre-existing surface topography, confirmed that the actual thickness of the installed soil cap material was at least 12-inches thick.

Surface Cover - The finished surface of the cap system consists of grass and wild flower vegetation, which covers virtually all areas of the site that contain granular surface material.

Procedures for monitoring, operating and maintaining the site cover system in accessible areas are provided in the Site Monitoring Plan in Section 3 of the Site Management Plan (SMP). The Site Monitoring Plan also addresses inspection procedures that must occur after any severe weather condition has taken place that may affect on-site EC's.

- Cover System – Steep Side Slopes: The project Remedial Closure Work Plan originally proposed that the steep, western slope of the site be stabilized with a geosynthetic, soil and vegetation system. During construction, however, intense rainfall events made the installation of this type of system very difficult.

  A design change request was made by the City to the NYSDEC June 27, 2011, to replace the geosynthetic system with a crushed rock stabilized side slope, for approximately 0.85 acres of the slope. This request was approved by the NYSDEC, and the side slope surface was permanently stabilized by the installation of crushed rock. Refer to Appendix L: Rock Slope Configuration and Approval, for rock slope configuration and approval details.

  Procedures for monitoring, operating and maintaining the site cover system along steep side slope areas are provided in the Site Monitoring Plan in Section 3 of the Site Management Plan (SMP). The Monitoring Plan also addresses inspection procedures that must occur after any severe weather condition has taken place that may affect on-site EC's.

- Site Security Measures: In order to prevent public access to the site, a 6-foot high chain link fence was installed at portions of the site perimeter, augmenting existing site fencing and rock walls. Additionally, eight (8) "No Trespassing" signs were installed at intervals along the site perimeter. Details of these site security measures are indicated in the project plans in Appendix J.

  Procedures for monitoring, operating and maintaining the site security measures are provided in the Site Monitoring Plan in Section 3 of the Site Management Plan (SMP). The Monitoring Plan also addresses inspection procedures that must occur after any severe weather condition has taken place that may affect on-site EC's.

- Appendices A through N provide details on supporting documentation for: project elements; as-built drawings and surveys; calculations, and; Manufacturer documentation.

4.8 INSTITUTIONAL CONTROLS

The site remedy requires that a deed restriction be placed on the property to (1) implement, maintain and monitor the Engineering Controls; (2) prevent future exposure to remaining contamination by controlling disturbances of the subsurface contamination; and, (3) limit the use and development of the site to Commercial – Open Space uses only.

The deed restriction for the site was executed by the Department on December 11, 2013, and filed with the Westchester County Clerk on January 30, 2014. The County Recording Identifier number for this filing is No. 533573366. A copy of the easement and proof of filing is provided in Appendix M.

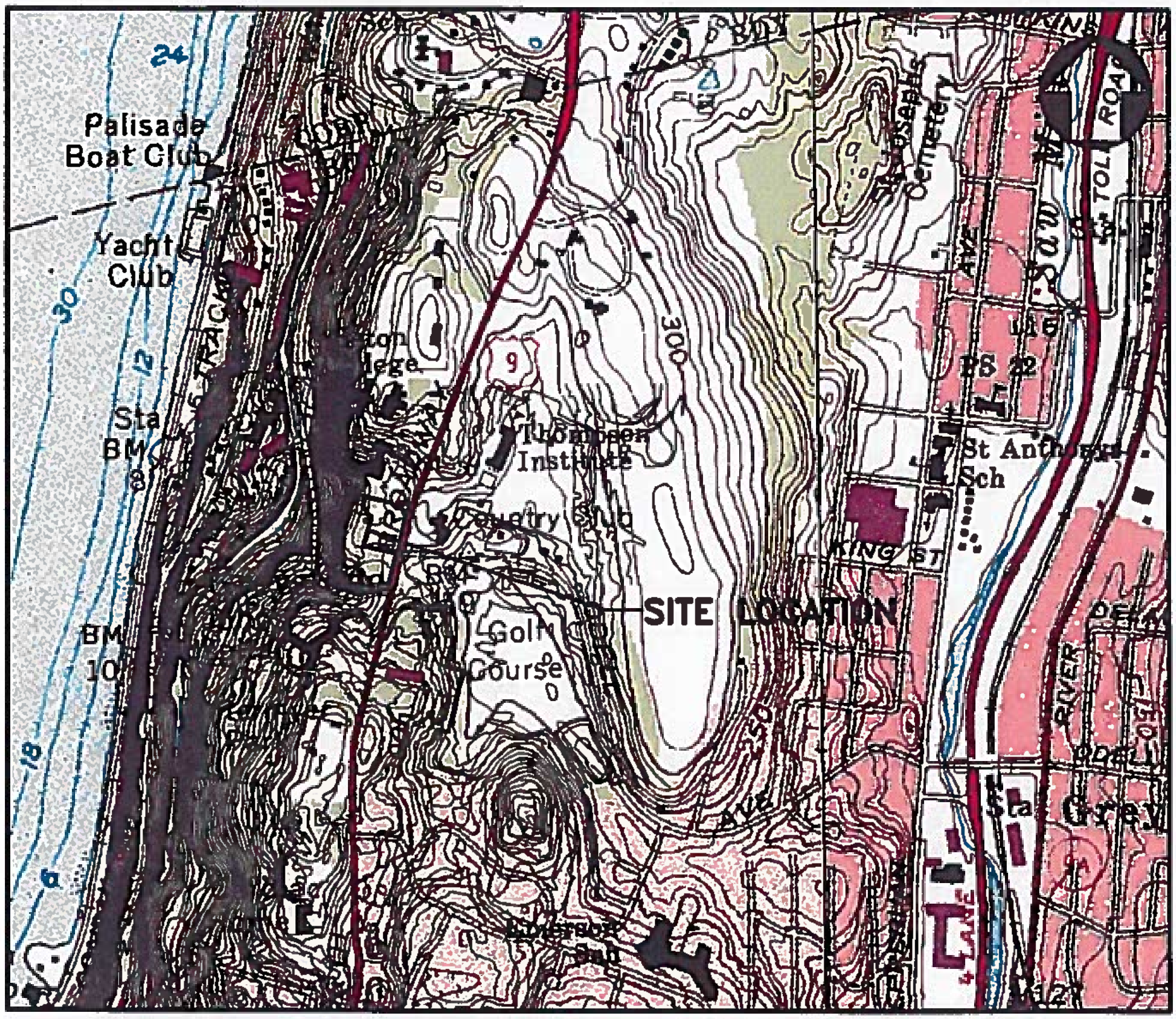
4.9 DEVIATIONS FROM THE REMEDIAL ACTION WORK PLAN

During the commencement of the project it was determined that the existing slope along the western side of the site was a steeper grade and a larger area than the plans originally showed. Originally the slope was to be stabilized using a "GeoWeb" slope protection system. Due to the conditions encountered, a stone slope stabilization method was proposed, approved and installed. Refer to Appendix L for rock slope configuration details and approval.

The RCWP noted that a historical drawing of the site indicated that a root cellar was possibly located approximately 50 feet west of the western edge of the off-site asphalt parking area directly adjacent to the project site. Although subsurface explorations were conducted in the probable location of the root cellar, no evidence of a root cellar was discovered.

The RCWP identified an above-grade fill pile, initially thought to be comprised primarily of broken asphalt, through a previous surficial visual observation by the City's consulting engineer, LKB. During construction operations, City inspectors observed the excavation of the pile; visually inspected the volume of pile material; and found it to be composed of only a minor amount of asphalt. As the fill pile material characteristics were found to be visually similar to the rest of the on-site material, the pile was spread out with the on-site material for grading purposes.

LIST OF FIGURES



APPROX. SCALE: 1"=2000'

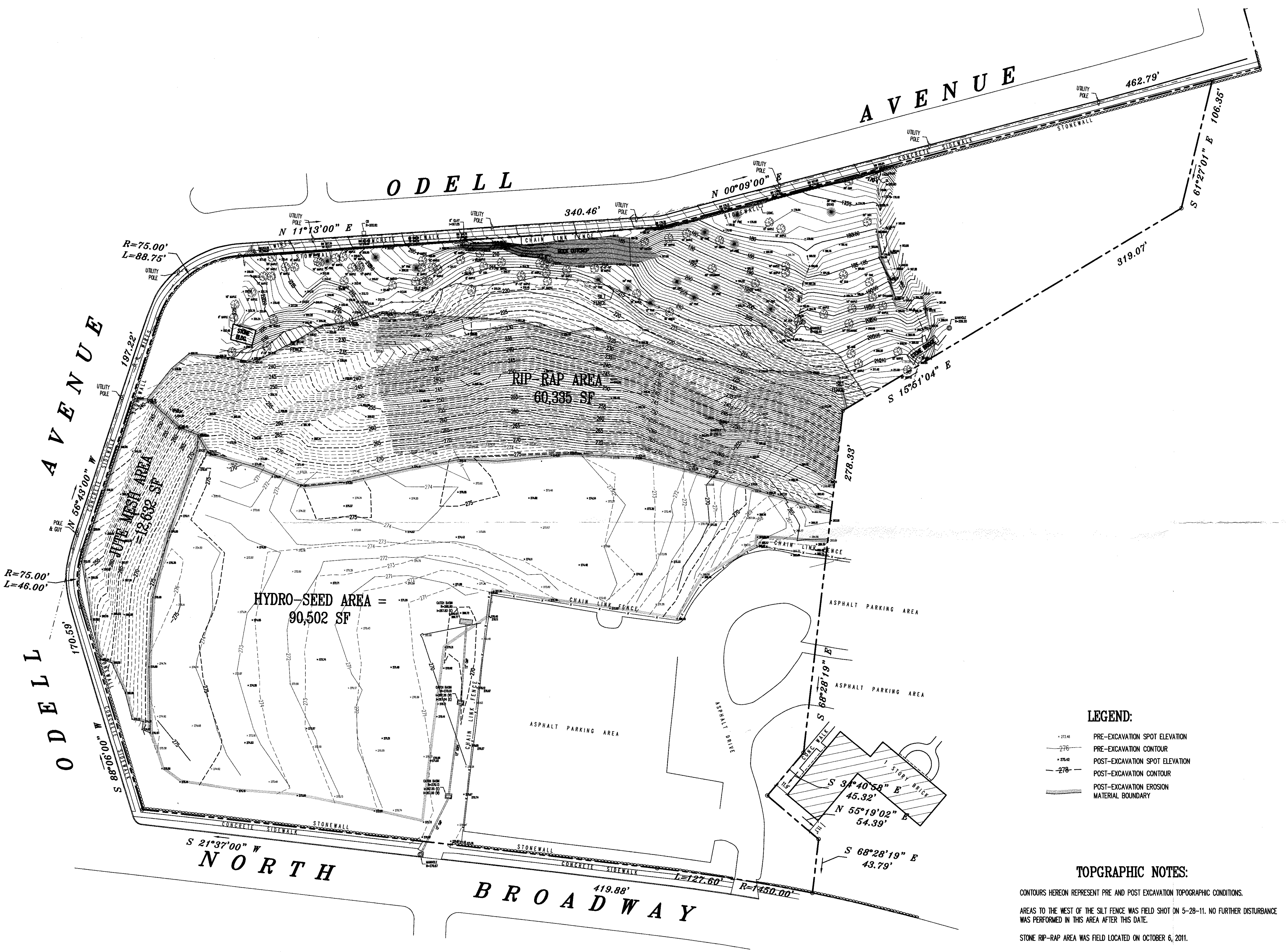
FIGURE 1

SITE LOCATION
1061 NORTH BROADWAY, YONKERS, N.Y.

LIST OF APPENDICES

Appendix A

As-Built Survey Map



PREMISES HEREON BEING KNOWN AS LOT 115, BLOCK 3515, SECTION 3 ON THE OFFICIAL TAX MAPS OF THE CITY OF YONKERS.

THE SURVEYOR'S SEAL, SIGNATURE AND ANY CERTIFICATION APPEARING HEREON SIGNIFY THAT, TO THE BEST OF HIS KNOWLEDGE AND BELIEF, THIS SURVEY WAS PREPARED IN ACCORDANCE WITH THE MINIMUM STANDARDS FOR LAND SURVEYS AS SET FORTH IN THE CODE OF PRACTICE ADOPTED BY THE NEW YORK STATE ASSOCIATION OF PROFESSIONAL LAND SURVEYORS, INC.

CERTIFICATIONS SHALL RUN ONLY TO THE PERSON FOR WHOM THIS SURVEY WAS PREPARED, AND ON HIS BEHALF, TO THE TITLE COMPANY, LENDING INSTITUTION AND GOVERNMENTAL AGENCY LISTED HEREON; SAID CERTIFICATIONS ARE NOT INTENDED TO RUN TO ADDITIONAL TITLE COMPANIES, LENDING INSTITUTIONS, SUBSEQUENT OWNERS OR FUTURE CONTRACT VENDEES.

CONTOURS AND SPOT ELEVATIONS HEREON WERE INTERPOLATED FROM AN ACTUAL FIELD SURVEY PERFORMED BY THE OFFICE OF CONTRACTORS' LINE & GRADE SOUTH IN U.S.G.S. DATUM NAVD 88.

UNDERGROUND IMPROVEMENTS, STRUCTURES, UTILITIES OR ENCROACHMENTS, AND ANY EASEMENTS RELATED THERETO, ARE NOT SHOWN HEREON UNLESS OTHERWISE NOTED. ANY UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND EXISTING DRAWINGS AND IS NOT CERTIFIED TO ACCURACY OR COMPLETENESS.

UNAUTHORIZED ALTERATION OR ADDITION TO A SURVEY MAP BEARING A LICENSED LAND SURVEYOR'S SEAL IS A VIOLATION OF SECTION 7209, SUB-DIVISION 2 OF THE NEW YORK STATE EDUCATION LAW.

SUBJECT PARCEL DESCRIPTION

All that certain piece or parcel of land situate, lying and being in the City of Yonkers, County of Westchester, State of New York being more particularly bounded and described as follows:

BEGINNING at a point formed by the intersection of the westerly side of North Broadway (U.S. Route 9) and the northerly side of Odell Avenue, said point marking the southeast corner of the herein described parcel;

RUNNING THENCE along the northerly side of Odell Avenue the following six-6 courses and distances:

1) South 88 degrees 06 minutes 00 seconds West a distance of 170.59 feet;

2) Along a curve to the right having a radius of 75.00 feet and an arc length of 46.00 feet;

3) North 56 degrees 43 minutes 00 seconds West a distance of 197.22 feet;

4) Along a curve to the right having a radius of 75.00 feet and an arc length of 88.75 feet;

5) North 11 degrees 13 minutes 00 seconds East a distance of 340.46 feet;

6) North 00 degrees 09 minutes 00 seconds East a distance of 462.79 feet;

THENCE along the northerly boundary of the herein described parcel the following six-6 courses and distances:

1) South 61 degrees 27 minutes 01 seconds East a distance of 106.35 feet;

2) South 15 degrees 51 minutes 04 seconds East a distance of 319.07 feet;

3) South 68 degrees 28 minutes 19 seconds East a distance of 278.33 feet;

4) South 34 degrees 40 minutes 58 seconds East a distance of 45.32 feet;

5) North 55 degrees 19 minutes 02 seconds East a distance of 54.39 feet;

6) South 68 degrees 28 minutes 19 seconds East a distance of 43.79 feet;

THENCE along the westerly side of North Broadway (U.S. Route 9) the following two-2 courses and distances;

1) Along a curve to the left having a radius of 1450.00 feet and an arc length of 127.60 feet;

2) South 21 degrees 37 minutes 00 seconds West a distance of 419.88 feet to the point and place of BEGINNING.

LEGEND:

× 273.46	PRE-EXCAVATION SPOT ELEVATION
—276—	PRE-EXCAVATION CONTOUR
× 275.42	POST-EXCAVATION SPOT ELEVATION
— -278- —	POST-EXCAVATION CONTOUR
▨	POST-EXCAVATION EROSION MATERIAL BOUNDARY

TOPGRAPHIC NOTES:

CONTOURS HEREON REPRESENT PRE AND POST EXCAVATION TOPOGRAPHIC CONDITIONS.

AREAS TO THE WEST OF THE SILT FENCE WAS FIELD SHOT ON 5-28-11. NO FURTHER DISTURBANCE WAS PERFORMED IN THIS AREA AFTER THIS DATE.

STONE RIP-RAP AREA WAS FIELD LOCATED ON OCTOBER 6, 2011.

HYDROSEED AND JUTE MESH AREA WAS FIELD LOCATED ON COTOBER 16, 2011.

NO.	DATE	DESCRIPTION	BY
1	11-17-11	PRE & POST CONDITIONS	TH

FINAL ASBUILT
TOPOGRAPHIC SURVEY
PREPARED FOR
1061 NORTH BROADWAY
PROPERTY SITUATE IN THE
CITY OF YONKERS
COUNTY OF WESTCHESTER
STATE OF NEW YORK

GRAPHIC SCALE

40 0 20 40 80 160

(IN FEET)
1 inch = 40 ft.

Date: OCTOBER 19, 2011

Land Projects R2004\11-1934 Pugni 1061 NORTH BROADWAY\dwg\1934-Base.dwg

CONTRACTORS' LINE & GRADE SOUTH, LLC
23 Nepperhan Avenue
Elmsford, New York 10523
Phone: (914) 347-3141 Fax: (914) 347-3120
Office@lineandgrade.net

STEVEN J. WILLARD
050054

Appendix B

Final Engineering Report

Appendix C

RAWP and Agency Approvals Required by the RAWP & RCWP

New York State Department of Environmental Conservation
Division of Environmental Remediation
Remedial Bureau C, 11th Floor
625 Broadway, Albany, New York 12233-7014
Phone: (518) 402-9662 • **FAX:** (518) 402-9679
Website: www.dec.ny.gov

Alexander B. Grannis
Commissioner

March 20, 2008

Christine Sculti
Assistant to the Mayor for Economic Development
City Hall, Room 414
Yonkers, NY 10701

Re: Lot at the South End of Elizabeth Seton Campus
Site ID No. V00687
City of Yonkers, Westchester County
Remedial Closure Work Plan

Dear Ms. Sculti:

The New York State Department of Environmental Conservation (Department) has completed its review of the Remediation Work Plan for the subject site. Based upon the information and representations given in the Work Plan and previous reports, including the Site Investigation Report dated June 2004, the Work Plan is hereby approved. The Work Plan consists of the Remedial Closure Work Plan dated November 2007.

Also enclosed is the Department's Decision Document for the site. Please note, any changes in the design of the cover system must be approved by the Department prior to implementation. If the project is to be made available for bid, a copy of the technical specifications and drawings must be submitted to the Department for review and approval prior to the package being released for bid.

If you have questions, please contact the Department's Project Manager, Joshua Cook, at (518) 402-9564.

Sincerely,

Robert W. Schick

Robert W. Schick, P.E.
Director
Remedial Bureau C
Division of Environmental Remediation

c: J. Cook/file
John Gerlach

ec: R. Schick
M. Ryan
J. Cook
B. Maglienti
F. Navratil
M. Rivara
eDocs

VOLUNTARY CLEANUP PROGRAM
DECISION DOCUMENT

Lot at the South End of Elizabeth Seton Campus
City of Yonkers, Westchester County, New York
Site No. V00687-3
March 2008

Statement of Purpose and Basis

This Voluntary Cleanup Program (VCP) Decision Document presents the remedy identified by the Department of Environmental Conservation (Department) for of the Lot at the South End of Elizabeth Seton Campus site.

Description of the Site

The Lot at the South End of Elizabeth Seton Campus site is located at 1061 North Broadway in the City of Yonkers, Westchester County. It is bordered to the east by North Broadway, to the south and west by Odell Boulevard, and to the north by the Foxfire School. The site is owned by the City of Yonkers, but was formerly part of Iona College's Elizabeth Seton Campus. Iona College applied to the VCP and conducted the investigation of the site, and the City intends to complete the remediation. This site is approximately 3.4 acres in size.

The west side of the subject property falls steeply to the west. Most of the site area is at the top of this slope and is relatively flat; however, the site does extend part way down the slope. The Hudson River is located approximately 1000 feet to the west of the site. The site is currently undeveloped, with the exception of a small portion in the northeast corner of the site, which is paved and used as a parking lot. See the attached figure showing the site location.

Surrounding property usage includes St. John's Riverside Hospital to the south, the Foxfire School to the north, residential properties to the west, and commercial properties to the east.

Assessment of the Site

Contamination was identified by the Remedial Investigation of this site, which represents a threat to public health and the environment, requiring a remedial program to address the contamination identified below.

Nature of contamination: The Remedial Investigation identified the presence of semi-volatile organic compounds and metals in soil at the site. These contaminants are attributed to on-site fill material consisting of construction and demolition debris, asphalt, concrete, ash, etc.

Extent of contamination: The fill brought to the site covers approximately 3.4-acres and ranges in thickness from a few inches to approximately 10 feet. A pile of asphalt/fill is also present that had been stockpiled in anticipation of grading across the site. The total volume of fill is estimated at 17,700 cubic yards.

Description of Selected Remedy

The components of the proposed remedy set forth in the Remedial Closure Work Plan, are as follows:

1. The pile of asphalt will be removed from the site for disposal or recycling. Miscellaneous debris will be removed from the site for disposal.

2. A soil cover will be constructed over all vegetated areas to prevent exposure to contaminated soils. The one-foot thick cover will consist of clean soil underlain by an indicator such as orange plastic snow fence to demarcate the cover soil from the subsurface soil. The top six inches of soil will be of sufficient quality to support vegetation. Clean soil will constitute soil that meets the Division of Environmental Remediation's criteria for backfill. Non-vegetated areas (buildings, roadways, parking lots, etc.) will be covered by a paving system or concrete at least 6 inches thick.

3. Imposition of an institutional control in the form of a deed restriction that will require (a) limiting the use and development of the property to commercial use, (this will not prohibit passive recreational use); (b) compliance with the approved site management plan; (c) restricting the use of groundwater as a source of potable or process water, without necessary water quality treatment as determined by NYSDOH; and (d) the property owner to complete and submit to the Department a periodic certification of institutional and engineering controls.

4. Development of a site management plan which will include the following institutional and engineering controls: (a) management of the final cover system to restrict excavation below the soil cover's demarcation layer, pavement, or buildings. Excavated soil will be tested, properly handled to protect the health and safety of workers and the nearby community, and will be properly managed in a manner acceptable to the Department; (b) identification of any use restrictions on the site; and (c) provisions for the continued proper maintenance of the components of the remedy.

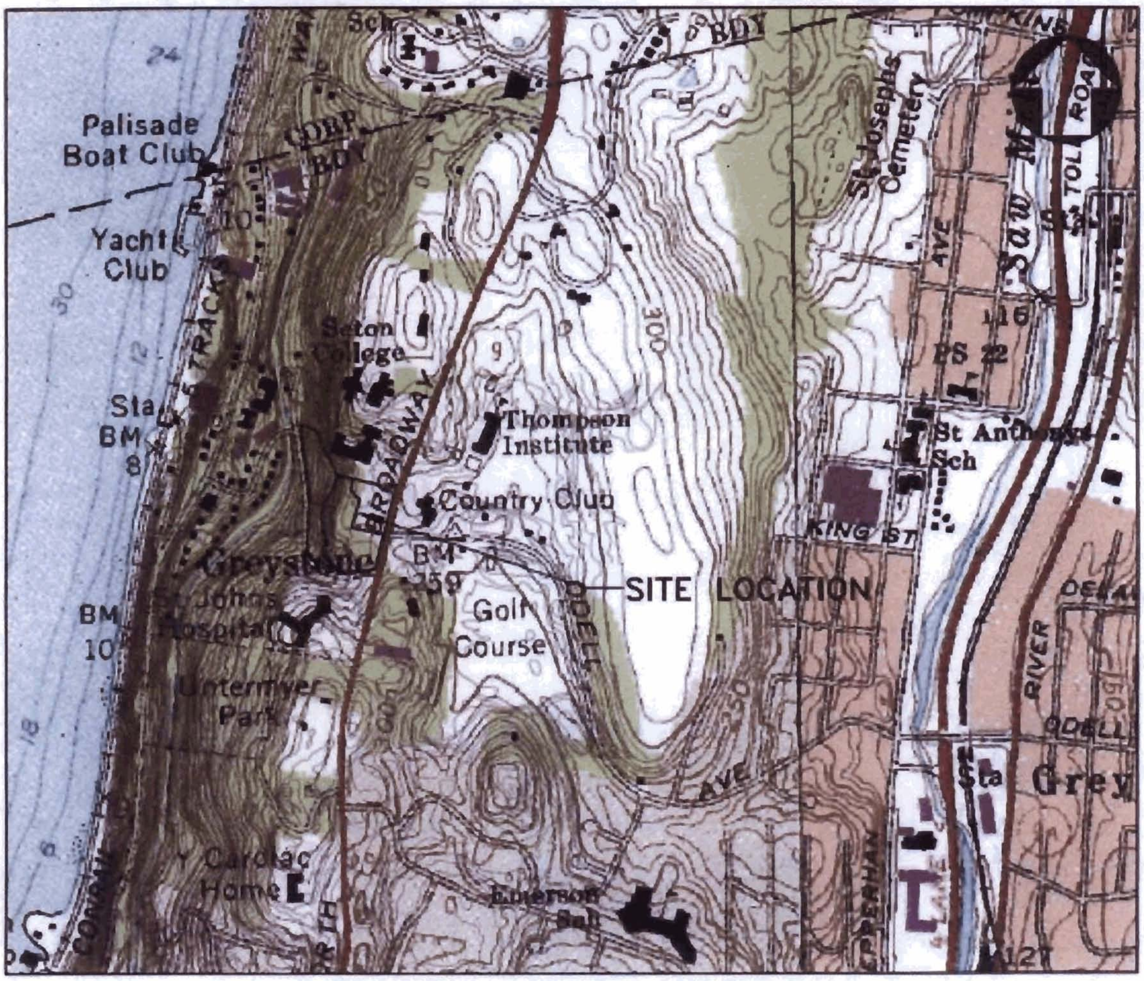
5. The property owner will provide a periodic certification of institutional and engineering controls, prepared and submitted by a professional engineer or such other expert acceptable to the Department, until the Department notifies the property owner in writing that this certification is no longer needed. This submittal will: (a) contain certification that the institutional controls and engineering controls put in place are still in place and are either unchanged from the previous certification or are compliant with Department-approved modifications; (b) allow the Department access to the site; and (c) state that nothing has occurred that will impair the ability of the control to protect public health or the environment, or constitute a violation or failure to comply with the site management plan unless otherwise approved by the Department.

Declaration

The selected remedy is protective of human health and the environment, complies with State and Federal requirements that are legally applicable or relevant and appropriate to the remedial action and will allow for the identified use of the site. This remedy utilizes permanent solutions and alternative treatment to the maximum extent practicable, and satisfies the preference for remedies that reduce, remove or otherwise treat or contain sources of contamination and protection of groundwater.

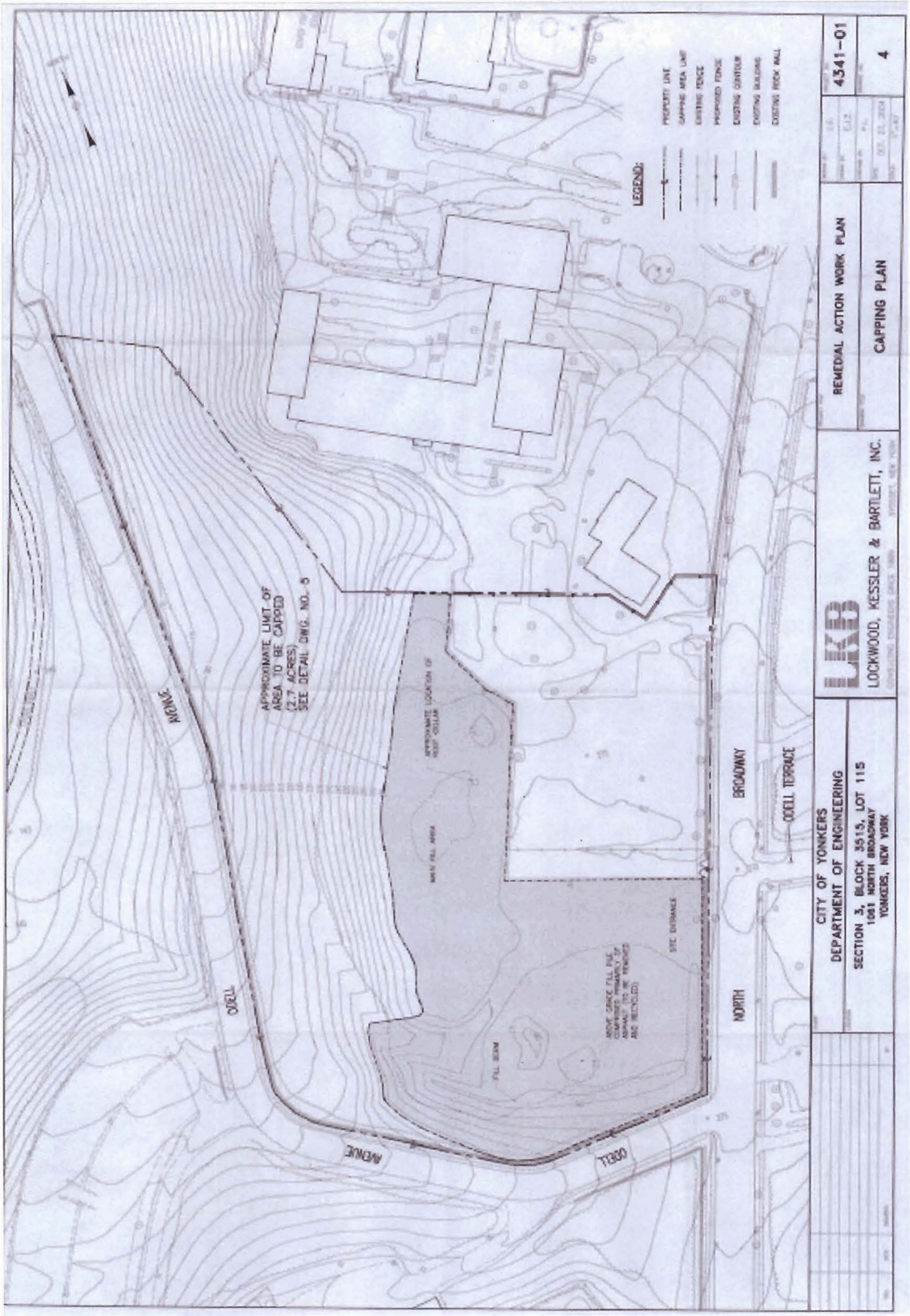
MARCH 20, 2008
Date

Director
Remedial Bureau C
Division of Environmental Remediation



APPROX. SCALE: 1"=2000'

FIGURE 1


APPROXIMATE LIMIT OF AREA TO BE CAPPED (2.7 ACRES) SEE DETAIL DWG. NO. 5
APPROXIMATE LOCATION OF ROOT CELLAR
MAIN FILL AREA
FILL BERM
ABOVE GRADE FILL PILE COMPRISED PRIMARILY OF ASPHALT (TO BE REMOVED AND RECYCLED)
SITE ENTRANCE
ODELL AVENUE
ODELL AVENUE
NORTH BROADWAY
ODELL TERRACE
LEGEND:
PROPERTY LINE
CAPPING AREA LIMIT
EXISTING FENCE
PROPOSED FENCE
EXISTING CONTOUR
EXISTING BUILDING
EXISTING ROCK WALL
CITY OF YONKERS
DEPARTMENT OF ENGINEERING
SECTION 3, BLOCK 3515, LOT 115
1061 NORTH BROADWAY
YONKERS, NEW YORK
LKB
LOCKWOOD, KESSLER & BARTLETT, INC.
REMEDIAL ACTION WORK PLAN
CAPPING PLAN
4341-01
4

New York State Department of Environmental Conservation
Division of Water
Bureau of Water Permits, 4th Floor
625 Broadway, Albany, New York 12233-3505
Phone: (518) 402-8111 ▪ **Fax:** (518) 402-9029
Website: www.dec.state.ny.us

Joe Martens
Commissioner

3/29/2011

YONKERS, CITY OF
PAUL SUMMERFIELD
40 SOUTH BROADWAY
YONKERS NY 10701-3888

Re: ACKNOWLEDGMENT of NOTICE of INTENT for Coverage Under SPDES General Permit for Storm Water Discharges from CONSTRUCTION ACTIVITY General Permit No. GP-0-10-001

Dear Prospective Permittee:

This is to acknowledge that the New York State Department of Environmental Conservation (Department) has received a complete Notice of Intent (NOI) for coverage under General Permit No. GP-0-10-001 for the construction activities located at:

REMEDIAL CLOSURE WORK PLAN
1061 NORTH BROADWAY
YONKERS NY 10701- **County: WESTCHESTER**

Pursuant to Environmental Conservation Law (ECL) Article 17, Titles 7 and 8, ECL Article 70, discharges in accordance with GP-0-10-001 from the above construction site will be authorized **5** business days from **3/14/2011** which is the date we received your final NOI, unless notified differently by the Department.

The permit identification number for this site is: NYR **10U059** . Be sure to include this permit identification number on any forms or correspondence you send us. When coverage under the permit is no longer needed, you must submit a Notice of Termination to the Department.

This authorization is conditioned upon the following:

1. The information submitted in the NOI received by the Department on **3/14/2011** is accurate and complete.

2. You have developed a Storm Water Pollution Prevention Plan (SWPPP) that complies with GP-0-10-001 which must be implemented as the first element of construction at the above-noted construction site.

3. Activities related to the above construction site comply with all other requirements of GP-0-10-001.

4. Payment of the annual $100 regulatory fee, which is billed separately by the Department in the late fall. The regulatory fee covers a period of one calendar year. In addition, since September 1, 2004, construction stormwater permittees have been assessed an initial authorization fee which is now $100 per acre of land disturbed and $600 per acre of future impervious area. The initial authorization fee covers the duration of the authorized disturbance.

5. When applicable, project review pursuant to the State Environmental Quality Review Act (SEQRA) has been satisifed.

6. You have obtained all necessary Department permits subject to the Uniform Procedures Act (UPA). You should check with your Regional Permit Administrator for further information.

*Note: Construction activities cannot commence until project review pursuant to SEQRA has been satisfied, when SEQRA is applicable; and, where required, all necessary Department permits subject to the UPA have been obtained.

Please be advised that the Department may request a copy of your SWPPP for review.

Should you have any questions regarding any aspect of the requirements specified in GP-0-10-001, please contact Dave Gasper at (518) 402-8114 or the undersigned at (518) 402-8109.

Sincerely,

Toni Cioffi

Toni Cioffi
Environmental Program Specialist 1

cc: RWE - 3
SWPPP Preparer

LOCKWOOD, KESSLER & BARTLETT, INC.
PAUL LAPPANO
1 AERIAL WAY
SYOSSET NY 11791-

Appendix D

Non-Agency Approvals

BUILDING PERMIT

DEPARTMENT OF BUILDINGS
CITY OF YONKERS, N.Y. 10701
87 NEPPERHAN AVENUE
PERMIT TYPE: Building

APPLICATION NUMBER: B0008931
PERMIT NUMBER: 2011098B005
ZONE DISTRICT: CU

APPLICATION DATE: 04/08/2011
EXPIRATION DATE: 05/22/2012
BLOCK: 3515 LOT: 115

PERMISSION IS GRANTED TO OWNER OR LESSEE: **CITY OF YONKERS**

TO: **REGRADE FILL AREA AND CAP (VOLUNTARY DEC CLEAN UP) AND INSTALL DRAINAGE IMPROVEMENTS FOR STORM WATER MANAGEMENT AS PER PLANS AND INFORMATION PROVIDED.**

***IMPORTANT*, PLEASE READ: UPON RECEIVING BUILDING PERMIT, NO WORK SHALL BEGIN UNTIL OWNER, CONTRACTOR, LESSEE, LESSOR CONTACTS BUILDING INSPECTOR MATTHEW FOLEY, 914-377-6518.**

JOB ADDRESS: **1061 NORTH BROADWAY**

IN ACCORDANCE WITH APPROVED PLANS AND AS SPECIFIED IN THE APPLICATION ON FILE AT THE OFFICE OF THE DEPARTMENT OF BUILDINGS AND IN ACCORDANCE WITH ALL APPLICABLE CITY ORDINANCES AND STATE LAWS AFFECTING SUCH CONSTRUCTION.
APPROVED PLANS MUST BE RETAINED ON JOB FOR INSPECTOR'S USE.
THIS BUILDING OR ANY PORTION THEREOF FOR WHICH THIS PERMIT SHALL BE ISSUED SHALL NOT BE OCCUPIED UNTIL A CERTIFICATE OF OCCUPANCY IS ISSUED.

INSPECTIONS REQUIRED:
A. FRAME CONSTRUCTION

1. FOOTING AND FOUNDATION INSPECTION TO BE MADE AFTER FOOTING TRENCHES ARE EXCAVATED AND THE NECESSARY FORMS ERECTED.
2. FRAME & MASONRY INSPECTIONS TO BE MADE PRIOR TO LATHING OR INSTALLING OF DRY WALLS.
3. MECHANICAL INSPECTION TO BE MADE AFTER ALL PIPES, DUCTS & WIRING.
4. FINAL INSPECTION TO BE MADE AFTER IT IS COMPLETED.

B. ORDINARY & FIRE RESISTIVE CONSTRUCTION: ALL OF THE ABOVE INSPECTIONS, PLUS INSPECTION AT CRITICAL POINTS, PRIOR TO COVERING UP OF ANY WORK

1. NO REINFORCING OR STRUCTURE STEEL OF ANY PART OF ANY WALL, BUILDING OR STRUCTURE SHALL BE COVERED OR CONCEALED IN ANY MANNER WHATSOEVER, WITHOUT FIRST BEING INSPECTED AND APPROVED BY THE DEPT. OF BUILDINGS.
2. NO MECHANICAL INSTALLATION IN ANY BUILDING OR STRUCTURE SHALL BE COVERED OR CONCEALED IN ANY MANNER WHATSOEVER WITHOUT FIRST BEING INSPECTED & APPROVED BY THE DEPT. OF BUILDINGS.

THIS PERMIT IS ISSUED PURSUANT TO APPROVAL BY:

	CASE NO.	RES. NO.	DATE
ZONING BOARD OF APPEALS	-	-	-
PLANNING BOARD	-	-	-
CITY COUNCIL	-	-	-
LANDMARKS BOARD	-	-	-

SPECIAL CONDITIONS: SEE ATTACHED SHEET(S) FOR DESCRIPTION OF THESE SPECIAL CONDITION CODES.

JOHN P. MEYER, COMMISSIONER
DEPT. OF HOUSING & BUILDINGS

POST IN A CONSPICOUS PLACE

SPECIAL CONDITIONS

APPLICATION NUMBER : B0008931
PERMIT NUMBER: 2011098B005
ZONE DISTRICT: CU

DATE: May 23, 2011
EXPIRATION DATE: 05/22/2012
BLOCK: 3515 LOT: 115

Owner or Lessee accepts permit and is required to comply with all conditions listed below. Any waiver from the conditions listed must be made by the owner or lessee, prior to any work listed under this permit.

***IMPORTANT*, PLEASE READ: UPON RECEIVING BUILDING PERMIT, NO WORK SHALL BEGIN UNTIL OWNER,CONTRACTOR, LESSEE, LESSOR CONTACTS BUILDING INSPECTOR MATTHEW FOLEY, 914-377-6518.**

"This Permit is issued because of the owner's or applicant's representation that the building or structure herein described shall be built in accordance with the State Uniform Fire Prevention and Local Law, the Zoning Law, the Multiple Residence Law, and any other ordinances affecting buildings or their use and that the statements contained in the application or information required by the Department of Buildings are true. In the event that the building or structure is not built in accordance with the State Uniform Fire Prevention Code, Local Laws, the Zoning Law, the Multiple Residence Law, and other ordinances affecting building or their use, or in the event that any of the statements of the applicant are not true, then this Permit shall be deemed REVOKED and no notice of revocation need be given."

It shall be unlawful to engage in an asbestos project unless and until satisfactory proof of compliance with Article 30 of the Labor Law of the State of New York is filed with the Department of Buildings.

Inspectors responsible for compliance of all conditions listed below:

Approval of framing inspection by MATTHEW FOLEY, 377-6518.

Engineer of record to inspect and certify all work upon completion complies with NYS Building Code.

Certificate of Completion required when work done. Owner to file when work completed.

Final survey to indicate garage floor elevation and driveway grade and drainage, height of building if required - all decks, retaining walls - garages, and outside parking spaces. Submit 3 copies of final survey.

Prior to issuance of Certificate of Completion the following inspections and approvals are required: Building & Engineering.

Owner responsible to maintain offsets off property lines and protect adjacent properties at all times during the construction.

Only uses permitted in BA Zone.

All parking areas to be drained and inspected by Plumbing Inspector prior to back fill.

Driveway grade maximum 15% and provide drainage as required by Plumbing Inspector.

JOHN P. MEYER, COMMISSIONER
DEPT. OF HOUSING & BUILDINGS

POST IN A CONSPICOUS PLACE

SPECIAL CONDITIONS

APPLICATION NUMBER : B0008931
PERMIT NUMBER: 2011098B005
ZONE DISTRICT: CU

DATE: May 23, 2011
EXPIRATION DATE: 05/22/2012
BLOCK: 3515 LOT: 115

All work to be done in accordance with the New York Standards and Specifications for Erosion and Sediment Control (August 2005 edition) pursuant to Section 56-178 of the Code of the City of Yonkers.

Prior to work done in street area, approval required from the Engineering Department.

Contractor to proceed and place dirt piles, grade cuts, shoring and barricading in a safe manner and according to standard engineering practices.

"NOTE: No work shall be concealed until a Licensed Electrician and Licensed Master Plumber have been engaged, necessary permits for each trade have been issued, and the work inspected."

File an Amendment indicating location of swale and drainage information at base of slope.

Engineering Department conditions:

1. Flagman must be deployed during sidewalk crossing and closing.
2. Asphalt/concrete gutter location will be specified by Engineering Department project manager.

Section 66-4F Code of the City of Yonkers, Prohibited Noises. Construction, repair and demolition: operating or permitting the operation of any tool or equipment used in construction, repair, demolition or excavation between the hours of 6:00 p.m. and 7:00 a.m. the following day or at any time on weekends or legal holidays is not permitted. Such operation does not constitute a violation if the tool or equipment is used in an emergency situation or if the tool or equipment is equipped with a functioning muffler or if the operator is issued a variance pursuant to Article II of this chapter.

JOHN P. MEYER, COMMISSIONER
DEPT. OF HOUSING & BUILDINGS

POST IN A CONSPICOUS PLACE

CITY OF YONKERS
Department of Housing & Buildings
87 Nepperhan Ave, Fifth Floor
Yonkers, New York 10701

APPLICATION FOR CERTIFICATE OF COMPLETION

Date 5/23/11

District Zone CU

Application No. B8931

Location 1061 North Broadway

Block 3515 Lot 115

☐ Owner
☐ Lessee City of Yonkers

Address

Telephone

Social Security No.

Description of Work Completed Regraded fill area & cap (voluntary DEC Cleanup) and installed drainage improvements for storm water management as per plans and information provided.

Zoning Board Case No.

☐ Special Exception

☐ Variance

Application is hereby made to the Department of Housing and Buildings, City of Yonkers, N.Y. for the Certificate of Completion to be issued for the premises at the above mentioned location. All applicable provisions of the Zoning Ordinance, New York State and Yonkers Building Codes, Electrical Code, and all other laws, rules and regulations have been complied with.

Signed
Owner, Lessee, or Authorized Agent.

THIS SHEET IS TO BE KEPT WITH THE BUILDING PERMIT AND A BUILDING INSPECTION WILL BE MADE ONLY AFTER THE NECESSARY SIGNATURES ARE OBTAINED:

Address: 1061 NORTH BROADWAY
YONKERS, NEW YORK 10701

Application # B0008931
Block: 3515 Lot: 115
Date Issued: May 23, 2011

Owner/Contractor to have inspectors sign off sheet:
Building, Housing, Plumbing, Electrical, Elevator, Sign, Fire Prevention, Engineering, Traffic Engineer, Water Department, etc.

	Permit Number	Sign off	Date
Plumbing			
Electrical			
Elevator			
Sign			
Footing			
Roughing			
Plumbing			
Electrical			
Building			
Framing and Insulation			
Finals			
Plumbing			
Electrical			
Sign			
Elevator			
Engineering			
Traffic Engineering			
Fire Prevention			
Water Bureau			
Building Inspection			
Temporary C/O (Receipt No.)			
Final C/O			

NOTE: THIS ORIGINAL SHEET WITH SIGN OFFS TO BE FILED WITH TEMPORARY C/O OR C/O APPLICATION.

JOHN P. MEYER, COMMISSIONER
DEPT. OF HOUSING & BUILDINGS

POST IN A CONSPICOUS PLACE

CITY OF YONKERS ENGINEERING DEPARTMENT
EROSION AND SEDIMENT CONTROL INSPECTION

LOCATION/STREET: 1061 North Broadway
SPDES Permit Number
OWNER/PERMITTEE. City of Yonkers
CONTRACTOR: R. Pugni & Sons
THIRD PARTY INSPECTION: Engineering Department – Stormwater Management Officer
DATE OF INSPECTION: 9/23/11
WEATHER: RAIN 80°
CONDUCTED BY: JUAN C. DEJESUS
COMPLIANCE INSPECTION: [✓ YES] NO COMPLIAINT REC'D
[✓ ANNOUNCED] UNANNOUNCED
NOTICE OF INTENT ON SITE: YES
STORMWATER POLLUTION PREVENTION PLAN ON SITE: N/A
INSPECTION RECORDS ON FILE:
PHASING PLAN:
CONSTRUCTION SEQUENCE:

MAINTAINING WATER QUALITY:

YES	NO	N/A	
☑	☐	☐	IS THERE AN INCREASE IN TURBIDITY CAUSING A SUBSTANTIAL VISIBLE CONTRAST TO NATURAL CONDITIONS?
☐	☑	☐	IS THERE RESIDUE FROM OIL AND FLOATING SUBSTANCES, VISIBLE OIL FILM, OR GLOBULES OR GREASE?
☑	☐	☐	ALL DISTURBANCES IS WITHIN THE LIMITS OF THE APPROVED PLANS.
☑	☐	☐	HAVE RECEIVING WATERS BEEN IMPACTED BY SILT/RUNOFF FROM THE PROJECT?

HOUSEKEEPING/SMP:

☑	☐	☐	IS THE CONSTRUCTION SITE LITTER AND DEBRIS APPROPRIATELY MANAGED?
☑	☐	☐	ARE FACILTIES AND EQUIPMENT NECESSARY FOR IMPLEMENTATION OF EROSION AND SEDIMENT CONTROL IN WORKING ORDER OR PROPERLY MAINTAINED?
☑	☐	☐	IS CONSTRUCTION IMPACTING THE ADJACENT PROPERTY?
☑	☐	☐	IS DUST ADEQUATELY CONTROLLED?

SOIL STABILIZATION:

☐	☑	☐	STOCKPILES ARE STABILIZED WITH VEGETATION AND/OR MULCH.
☑	☐	☐	SEDIMENT CONTROL IS INSTALLED AT THE TOE OF THE SLOPE.
☐	☑	☐	TEMPORARY SEEDINGS AND MULCH HAVE BEEN APPLIED TO


09/14/2011

IDLE AREAS.

☐ ☐ ☑ 4 INCHES MINIMUM OF TOPSOIL HAS BEEN APPLIED UNDER PERMANENT SEEDINGS.

SEDIMENT CONTROL PRACTICES:

☑ ☐ ☐ STABILIZED CONTRUCTION ENTRANCE:

☐ ☑ ☐ STONE IS CLEAN ENOUGH TO EFFECTIVELY REMOVE MUD FROM VEHICLES.

☑ ☐ ☐ INSTALLED PER STANDARDS AND SPECIFICATIONS?

☑ ☐ ☐ DOES ALL TRAFFIC USE THE STABILIZED ENTRANCE TO ENTER +AND LEAVE SITE?

☐ ☑ ☐ IS ADEQUATE DRAINAGE PROVIDED TO PREVENT PONDING AT ENTRANCE?

SILT FENCE:

☑ ☐ ☐ INSTALLED ON CONTOUR, 10 FEET FROM TOE OF SLOPE (NOT ACROSS CONVEYANCE CHANNELS).

☑ ☐ ☐ JOINTS CONSTRUCTED BY WRAPPING THE TWO ENDS TOGETHER FOR CONTINUOUS SUPPORT.

☑ ☐ ☐ FABRIC BURIED 6 INCHES MINIMUM.

☑ ☐ ☐ POSTS ARE STABLE, FABRIC IS TIGHT AND WITHOUT RIPS OR FRAYED AREAS.

☐ ☐ ☑ SEDIMENT ACCUMULATION IS ____% OF DESIGN CAPACITY.

OBSERVATIONS:

1) WATER PONDING AT SITE ENTRANCE (SITE DRAINAGE NOT COMPLETE DUE TO CON-ED INTERFERENCE)
2) SEDIMENT FROM STOCKPILES WAS RUNNING ONTO ADJACENT PARKING LOT. (SILT FENCE AN STOCKPILE WAS KNOCKED DOWN, CONTRACTOR REPAIRED FENCE AS I WAS COMPLETING INSPECTION)
3) DISCOLORED WATER SEEN LEAVING SITE THROUGH SWALE / BASIN AT N.W. CORNER OF SITE
4) ANTI-TRACKING PAD NEEDS TO BE RE-FRESHED

RECOMMENDATIONS:

1) STABILIZE SOIL AT N.W. CORNER (SEEDING) TO ELIMINATE SOIL EROSION PROBLEM/DISCOLORE WATER
2) REPAIR ANY DAMAGED SILT FENCING
3) RE-ESTABLISH ANTI-TRACKING PAD AT SITE ENTRANCE

SKETCH/SITE PLAN:

See attached pictures depicting work detailed in the observations section of this report.

CERTIFICATION:

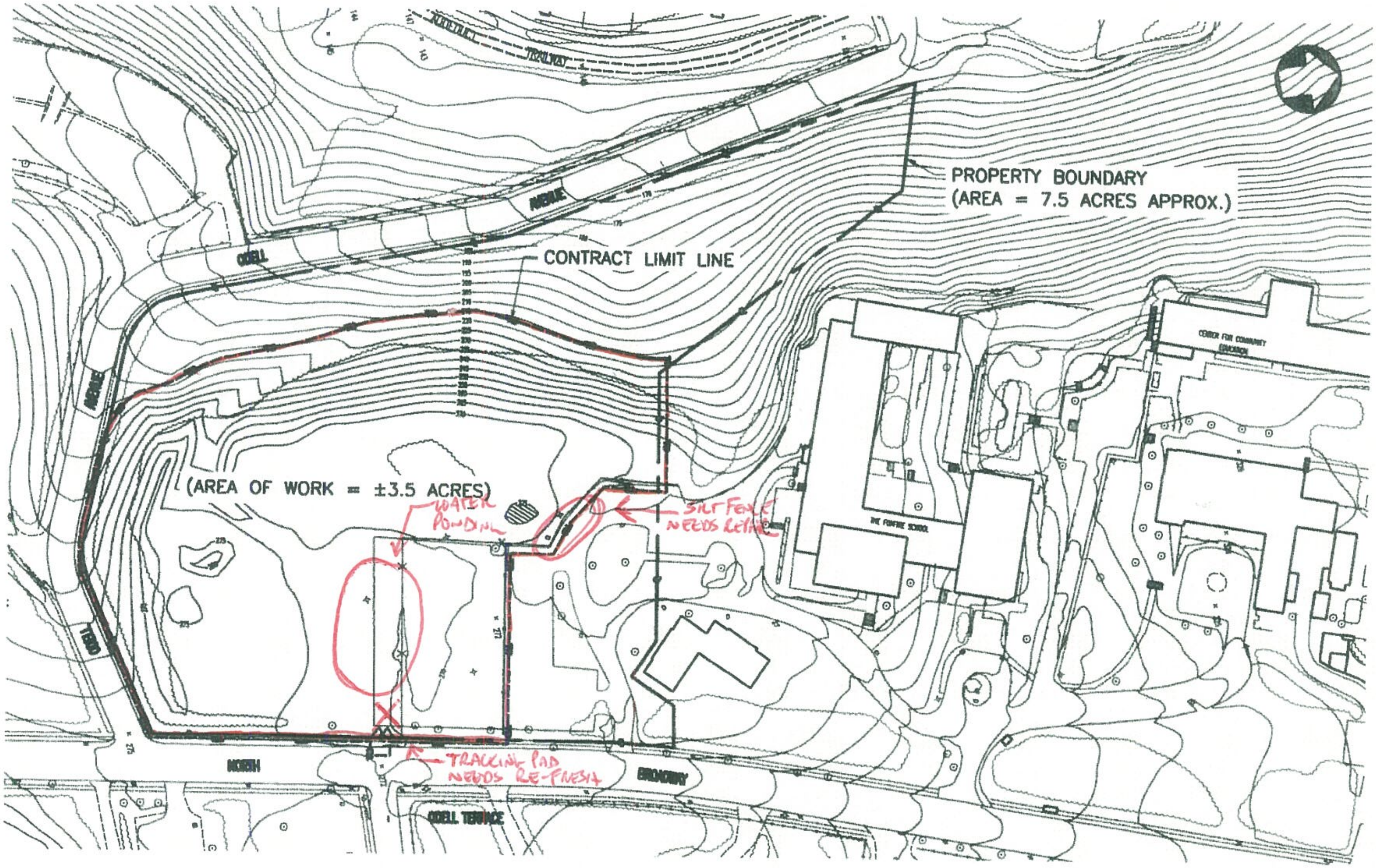
TO THE BEST OF MY KNOWLEDGE, THIS SITE IS IN COMPLIANCE WITH THE GENERAL PERMIT

JUAN C. DeJESUS

QUALIFIED PROFESSIONAL (PRINT)

QUALIFIED PROFESSIONAL SIGN.

THE ABOVE SIGNED ACKNOWLEDGES THAT, TO THE BEST OF HIS KNOWLEDGE, ALL INFORMATION PROVIDED ON THE FORMS IS ACCURATE AND COMPLETE.



SCALE: 1"=100'

LKB

FIGURE 3

SITE BOUNDARY

1061 NORTH BROADWAY, YONKERS, NY


09/23/2011


09/23/2011


09/23/2011

Appendix E

Imported Fill Sampling Results

Soil Results and Disposal
Greenburgh Site West of Mine Brook

Per the contract specifications, Eastview soil was anticipated to be uncontaminated, and compared to the NYSDEC Part 375-6(a) Unrestricted Use Cleanup Objective criteria, as well as additional Restricted Use Cleanup objectives.

In conversation with DEC Region 3 (attached email correspondence), it is noted that although there are some minor exceedences of the Unrestricted Use Cleanup Objectives, soil at the Greenburgh West site is native and under mature natural vegetation.

The NYSDEC Part 375 Criteria are not meant to be the sole factor in classifying waste. For this reason, the fact that the soil from the Greenburgh West work area is 100% native combined with the fact that nearly all contaminats are below the unrestricted use criteria, for the purposes of disposal on this contract we find that the soil from Greenburgh West is classified **uncontaminated.**

Uncontaminated soil exits regulation under pre-determined Beneficial Use Determination (BUD) found in 6 NYCRR 360-1.15(b)(7). For this reason, it is not restricted by the New York State Solid Waste regulatory system. The disposal of material that is not solid waste requires no disposal permit on the part of the destination facility, nor Part 360 hauling permits for trucking to the destination facility. This has been further discussed in the narrative attached by the environmental consultant/sampling subcontractor, Stantec.

Anthony Manganiello

From: Steve Parisio [sxparisi@gw.dec.state.ny.us]
Sent: Wednesday, January 12, 2011 11:41 AM
To: Anthony Manganiello
Cc: Brand, Martin; Prather, Kathleen; Reiff, Lee
Subject: Re: Beneficial Use Determination for Soil on NYCDEP Project
Attachments: ATT00001.png

Anthony:

The following is offered as guidance in response to your questions:

If the soil in question is indeed 100% native/natural as you have said, under mature natural vegetation, with no evidence or history of site disturbance or contamination, there are no restrictions on its use or requirements for testing posed by our state (Part 360) solid waste management regulations. Uncontaminated soil exits the solid waste regulatory scheme through the pre-determined beneficial use determination (BUD) at 6 NYCRR 360-1.15(b)(7).

All soils exhibit some degree of chemical variability. The fact that 4 out of 46 test results exceeded a Part 375 unrestricted use SCO is not, in itself, evidence that the soil is contaminated for the purposes of Part 360 regulations. The Part 375 criteria were not intended to be used as a basis for waste classification. These are cleanup objectives which were developed for use in remediation at brownfields and other contaminated sites.

If you project meets the criteria of 360-1.15(b)(7), there is not review or approval by the Department required. As with any regulatory exemption, it is the responsibility of the person who relies on this BUD to make sure that the soil in question is uncontaminated. Department staff are available to assist and provide guidance if requested. If have further questions regarding the applicability or interpretation of 360-1.15(b)(7) for projects in Region 3, please feel free to contact me.

Steve

>>> Anthony Manganiello <AManganiello@halmarinternational.com> 1/11/2011 2:51 PM >>>
Steve,

I have a general question for you, if you can find the time to answer it. We worked together last year on the NYCDEP compensatory wetland project in Armonk for hauling to the Southeast Landfill. We are currently in the process of sampling the second part of our project, which is a forested site in Greenburgh/Mount Pleasant comprised of 100% native soil.

We have done testing in accordance with NYSDEC part 375 SCO's, and the majority of the soil is uncontaminated (0 exceedences), with 4 samples (out of 46) that have slight exceedences of unrestricted use but meet the 375-6(b) Residential SCO.

As I am not too experienced in working with Region 3 with regard to Beneficial Use Determinations, however, we have a project in mind that we'd like to take all of the material to from this site. Is there a specific department at Region 3 that handles these requests, and in general, is it a lengthy process?

You were exceptionally knowledgeable and helpful during the last portion of the project, so I thought I would reach out to you first. I can be reached at (917) 804-6619 if you'd like to discuss.

Best Regards,

Anthony Manganiello, LEED Green Associate | Engineer
NYCDEP Project CAT-210WL: Wetland Mitigation
amanganiello@halmarinternational.com
1 George Smith Place | Armonk, NY 10504

ph. (914) 219-5755 | fax. (914) 219-5757 | cell. (917) 804-6619

Client:

Halmar International, LLC.
1 Blue Hill Plaza
Pearl River, NY 10965

FIELD SAMPLING SUMMARY REPORT
To the
NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION (NYCDEP)
EASTVIEW - GREENBURGH SITE, GREENBURGH, NEW YORK
SOUTHERN PARCEL, WESTERN PORTION
HALMAR INTERNATIONAL CONTRACT # CAT-210WL

Prepared by

Stantec Consulting Services Inc.
365 W. Passaic Street, Suite 175
Rochelle Park, New Jersey 07662

FEBRUARY 2011

FIELD SAMPLING SUMMARY REPORT
NYCDEP
EASTVIEW - GREENBURGH SITE, GREENBURGH, NEW YORK
SOUTHERN PARCEL, WESTERN PORTION
CONTRACT # CAT-210WL

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FIELD SAMPLING SUMMARY REPORT
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SOUTHERN PARCEL, WESTERN PORTION
CONTRACT # CAT-210WL

1.0 INTRODUCTION

Stantec Consulting Services Inc. (Stantec) was contracted by Halmar International, LLC (Halmar) to prepare this Field Sampling Summary Report (Report) following the collection and chemical analyses of soil samples from in-situ soil sampling prior to the excavation of soils for the purpose of creating new wetlands in accordance with Halmar's wetlands creation program at the following location:

- EASTVIEW - GREENBURGH SITE, South of Route 100C near Mine Brook, Greenburgh, New York.

This Eastview - Greenburgh Site is located south of Route 100C near Mine Brook in Westchester County, Greenburgh, New York. The location is depicted on the Overall Clearing/Erosion and Sediment Control Plan (Dwg. No. C-CW-300). The Eastview Site consists of two parcels, a Northern and Southern Parcel. The Northern Parcel located in Mount Pleasant, New York consists of sampling locations EMP-1 through EMP-9 and is located north of Route 100C. The Southern Parcel located in Greenburgh, New York consists of sampling locations EG-1 through EG-49 and is located south of Route 100C. The Eastview – Greenburgh Site is further divided into the Eastern and Western Portions. These two portions are separated by a small stream that runs through the Greenburgh Site. This Report provides the data associated with the Western Portion of the Southern Parcel (twenty-one (21) cells). These include the following cells: EG-1 through EG-4, EG-6, EG-9, EG-10, EG-14, EG-15, EG-18, EG-19, EG-26 thru EG-28, EG-43 thru EG-49. Figure 1, dated July 2008 and prepared by Hazen and Sawyer/Camp Dresser & McGee, illustrates the parcel and was provided to Stantec by Halmar.

This Report documents the in-situ soil sampling and analytical testing activities from the Eastview - Greenburgh (Southern Parcel, Western Portion) Site to determine if the material is hazardous waste, industrial waste, petroleum-contaminated waste contaminated waste, or contains construction and demolition debris. Following receipt, the analytical results were tabulated, evaluated in accordance with the checklist and compared to New York State Department of Environmental Conservation (NYSDEC) Unrestricted Use Soil Cleanup Objectives Table 375-6.8(a) under New York Codes, Rules and Regulations (NYCRR) Subpart 375-6.

The Field Sampling Summary Report was prepared in accordance with the Halmar's General Specification 02105 – In-situ Soil Sampling, Testing and Laboratory Analysis, Section 1.06 Submittals, Subsection A.3 under Contract CAT-210WL.

The sampling program was completed in accordance with the Contract requirements with the following modifications. The soil samples on the Eastview - Greenburgh (Southern Parcel, Western Portion) Site were collected using a Geoprobe® unit to minimize ground disturbance in the heavily wooded area, which presented difficult access to the area with an excavator.

The remainder of this document is formatted as follows: Section 2.0 outlines the scope of work implemented as outlined in the Field Sampling Plan (FSP) and the In-situ Soil Sampling and Analysis Plan (ISSAP) and Section 3.0 discusses the analytical data generated from the soil sampling and testing activities.

2.0 SCOPE OF WORK

2.1 PROJECT SET-UP

Prior to the start of intrusive field activities, Stantec prepared a Site-specific Environmental, Health and Safety Plan (EHASP) to be followed by all of its employees during the field activities at the Site. The EHASP addresses each field task and the appropriate level of personnel protection and monitoring requirements. In addition, a Job Hazard Analysis (JHA) as prepared by Halmar was distributed to all on-site workers for implementation.

2.2 SOIL SAMPLING

On December 8, 2010, Stantec mobilized its personnel, sampling and health & safety equipment to the Eastview – Greenburgh site to implement the in-situ soil sampling program. Prior to mobilization on-site, Halmar surveyor surveyed and flagged the soil sampling locations. Soil sampling in the Southern Parcel (Western Portion) was completed on December 15, 2010.

A total of sixty-two (62) soil sampling locations in twenty-one (21) cells (see Figure 2) were proposed for the Southern Parcel (Western Portion). The cells included: EG-1 through EG-4, EG-6, EG-9, EG-10, EG-14, EG-15, EG-18, EG-19, EG-26 thru EG-28, EG-43 thru EG-49. No deviations from the FSP occurred during sampling activities performed in the Southern Parcel, Western Portion with the exception of using a Geoprobe® provided by Halmar vs. an excavator to collect the samples as explained above.

The sampling approach is based on the sampling frequency as per Page 02105G-2 of Detailed Specification 02105G – In-situ Soil Sampling, Testing and Laboratory Analyses, clarification from the NYCDEP, and requirements of the proposed disposal facilities. The most stringent frequency was used in order to satisfy the requirements from the various parties. The sampling frequency for the Eastview - Greenburgh Site is one sample/1,000 cubic yards of in-place soils.

2.2.1 Sample Collection Procedures

On December 8, 2010, Stantec representatives and Halmar's Geoprobe® operator began sampling at each soil sampling location shown on Figure 2. The Geoprobe® sampling equipment consisted of a metal rod with an inner acetate clear sleeve that would contain the soil sample. The rod was approximately 4 feet in length and would comprise the sampling interval. The rod was advanced into the subsurface by hydraulic vibration. Upon achieving the desired depth, the rod is removed from the subsurface with the soil sample securely contained within the acetate sleeve. The one piece, 4-foot long acetate inner sleeve was removed from the rod and placed on the ground surface. Based on the required depth, more than one individual sleeve would be collected. Each acetate sleeve is cut open length-wise with a decontaminated knife on both sides of the sleeve and the top of the sleeve is removed. The soil is scanned with a photoinization detector (PID) to determine if any of the soil collected within the sleeve is impacted. If impacted soil was detected by the Stantec Geologist based on elevated PID reading, odor, or visual staining, an individual grab sample from that impacted interval is collected with a stainless steel spoon and placed directly into a laboratory supplied glass jar for VOC analyses. From the remaining soil in the acetate sleeve, a composited soil sample consisting of a grab soil sample from each one foot interval (0 to 1 foot, 1 to 2 feet, 2 to 3 feet, 3 to 4 feet, etc) was collected. The cells in Figure 2 represent 1,000 cubic yards of soil that will be excavated based on the targeted depth from the ground surface to the bottom of the fill layer. Table 2 lists relative cut depth, number of composite samples, sampling date, and survey coordinates for each sampling location. The following table below summarizes the number of soil samples that will be collected to generate the composite sample and to represent each 1,000 cubic yard area based on fill thickness for the cell:

Average Soil Fill Thickness Representing the Fill Depth Across a 1,000 Cubic Yard Area	**Number of Sampling Locations Within an Aerial Extent Representing a 1,000 Cubic Yard Area**
0 to 1 feet	5
1 to 2 feet	4
2 to 3 feet	3
3 to 4 feet	2
4 to 5 feet	2
5 to 6 feet	1
6 to 7 feet	1
7 to 8 feet	1

All composite soil samples were placed into laboratory-supplied jars, and labeled. The discrete soil samples were collected from one interval (biased toward olfactory, visual, and elevated PID readings) of impacted material and were placed in laboratory-supplied jar for analysis, sealed and labeled.

The soil samples were placed into an ice-filled cooler maintained at 4°C, and couriered to Spectrum Analytical, Inc. (Spectrum) in Agawam, Massachusetts for chemical testing. The chain-of-custody (see Appendix A) form was completed after each day's sampling activities. Discrete soil samples were analyzed for VOCs by Method 8260B. The composite soil samples were analyzed for the parameters listed below (NYSDEC 6 NYCRR Part 375-6.8 (a) Unrestricted Use Soil Cleanup Objective Parameters). The methods stated below can achieve the required detection limits for Unrestricted Use.

NYSDEC 6 NYCRR Part 375-6.8 (a) Unrestricted Use Soil Cleanup Objective Testing Parameter List

Analysis	Methodology
Metals (15)	6010B/7471A
PCBs	8082
Pesticides	8081A
SVOCs	8270C
VOCs	8260B
Ignitability	SW846 1010
Corrosivity	9045
Reactivity	SW846 Section 7.3

The remaining fraction of the composite soil was placed into a sealable plastic bag for characterization of physical and contaminant properties (visual, olfactory, headspace readings) by the Stantec Geologist. Headspace analysis was performed using a PID calibrated at the start of each work day using 100 parts per million (ppm) isobutylene standard calibration gas. The field observations, PID readings and findings were documented in a field logbook on a daily basis. Those field notes are provided in Appendix B.

The Geoprobe® and other sampling equipment, which came into direct contact with the soil samples was decontaminated between each sample location. Decontamination was achieved by washing the outer Geoprobe® rods, sampling spoons, and stainless steel bowls with Simple Green™. This equipment was triple rinsed with tap water. This decontamination process was performed over a 5-gallon plastic bucket. The contents of the bucket were containerized in a 55-gallon drum for disposal by Halmar. The drum was properly labeled of its contents. A total of one liquid drum was generated during the field activities. Two bags of solid waste were generated from the field activities consisting of acetate sleeves, spent personnel protective equipment (PPE), paper towels, etc.

2.2.2 Quality Assurance/Quality Control (QA/QC) Samples

During the field activities, QA/QC samples were collected during implementation of the FSP to evaluate data quality. Field (equipment) blanks and soil sample duplicates were each collected at a frequency of 1 per 10 samples. The QA/QC samples were analyzed for the parameters listed above. A total of one field blank and two duplicate soil samples (two grab and two composite soil sample) were collected during sampling activities in the Southern Parcel, Western Portion at the Eastview - Greenburgh site. The duplicate samples are noted as follows:

Soil Sample ID	Duplicate Sample ID
EG-1 (0-2)	EG-91 (0-2)
EG-1A (0-1)	EG-91A (0-1)
EG-14 (0-3)	EG-914 (0-3)
EG-14A (1-2)	EG-914A (1-2)

The field blank sample was labeled as FB-1. The analytical data associated with the duplicate soil samples is provided in Table 1 and the raw data is provided in Appendix D. The analytical data associated with the field blank sample is provided in Appendix D.

3.0 RESULTS

3.1 GEOLOGY

During the collection of soil samples from the Southern Parcel, Western Portion a Stantec Geologist characterized the soil from each sampling location. The description of the material, odors encountered, staining observed, grain size distribution, material composition, moisture content, and cohesive properties were documented in the field logbook (see Appendix B). That data is also provided on the Soil Boring Logs provided in Appendix C.

In general, the material primarily consisted of fine to medium sand, with the occasional observation of coarse sand and silty sand. In addition, varying percentages of gravel, roots, rock fragments, and organic material were observed. No manmade material was observed in the Geoprobe® samples collected.

3.2 HYDROGEOLOGY

Based on the observations noted in the Soil Boring Logs (see Appendix C), groundwater was encountered in only two cells at sampling locations EG-14C (3 ft bgs) and EG-15 (5 ft bgs) during advancement of the Geoprobe® in the Southern Parcel, Western Portion.

3.3 ANALYTICAL RESULTS

Following receipt of the analytical data from the analytical laboratory, the data (see Appendix D) was tabulated (see Table 1). In addition, the laboratory data packages, which contained the analytical data and the backup documentation was compared against the data evaluation checklist contained within the NYCDEP-approved QA/QC Plan. Table 1 contains both composite soil sample results and discrete grab soil sample results. The analytical soil data was compared to the NYSDEC Unrestricted Use Soil Cleanup Objectives Table 375-6.8(a) under NYCRR Subpart 375-6. A discussion follows below.

3.3.1 Volatile Organic Compounds (VOCs)

Composite Soil Samples

No VOCs were detected in the composite soil samples collected from the Southern Parcel, Western Portion that exceeded their respective soil cleanup objectives.

Grab Soil Samples

No VOCs were detected in the composite soil samples collected from the Southern Parcel, Western Portion that exceeded their respective soil cleanup objectives.

3.3.2 Semi-volatile Organic Compounds (SVOCs)

Composite Soil Samples

No SVOCs were detected in the composite soil samples collected from the Southern Parcel, Western Portion that exceeded their respective soil cleanup objectives.

Grab Soil Samples

Grab soil samples were not required to be analyzed for SVOCs.

3.3.3 Pesticides/PCBs

Composite Soil Samples

A total of two pesticides (4,4'-DDT, and 4,4'-DDE) were detected in two and four, respective composite soil samples collected from the Southern Parcel, Western Portion that exceeded their respective soil cleanup objective. 4,4'-DDT was detected at 0.111 ppm (EG-43) and 0.00961 ppm (EG-44) that exceeded the soil cleanup objective of 0.0033 ppm. 4,4'-DDE was detected at 0.0387 ppm (EG-1), 0.198 ppm (EG-43), 0.0665 ppm (EG-44), and 0.0142 ppm (EG-45) that exceeded the soil cleanup objective of 0.0033 ppm. No PCBs were detected in the composite samples.

Grab Soil Samples

Grab soil samples were not required to be analyzed for pesticides/PCBs.

3.3.4 Metals

Composite Soil Samples

No metals were detected in the composite soil samples collected from the Southern Parcel, Western Portion that exceeded their respective soil cleanup objective (NYSDEC unrestricted use criteria).

Grab Soil Samples

Grab soil samples were not required to be analyzed for metals.

3.3.5 RCRA Characteristics

Soil samples were analyzed for ignitability, corrosivity, and reactivity. The results are presented below.

Ignitability

Composite Soil Samples

Ignitability of all the soil samples collected from the Southern Parcel, Western Portion were negative.

Grab Soil Samples
Grab soil samples were not required to be analyzed for ignitability.

Corrosivity

Composite Soil Samples
Corrosivity of the soil samples ranged from of 4.77 to 6.17.

Grab Soil Samples
Grab soil samples were not required to be analyzed for corrosivity.

Reactivity

Composite Soil Samples
Reactivity of the composite soil samples collected from the Southern Parcel, Western Portion was all non-reactive. Reactive cyanide values ranged from 23.0 to 24.9 ppm. Reactive sulfide values ranged from 46.0 to 49.8 ppm.

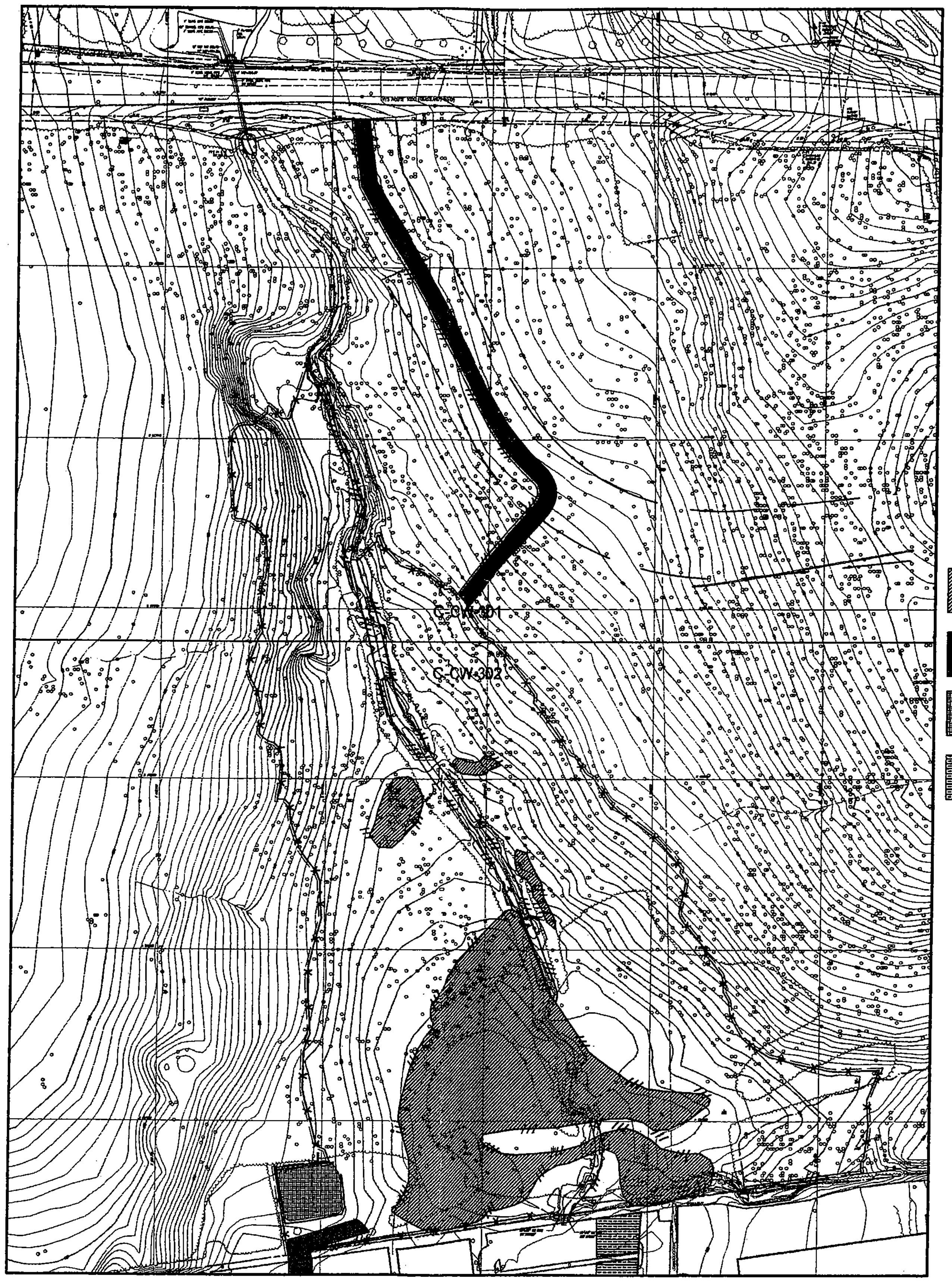
Grab Soil Samples
Grab soil samples were not required to be analyzed for reactivity (reactive cyanide and reactive sulfide).

Based on the data outlined above, all cells in the Southern Parcel, Western Portion on Figure 2, were below the NYSDEC Part 375-6.8(a) unrestricted use soil cleanup objectives with the exception of cells EG-1, EG-43, EG-44, and EG-45. No cells were labeled as hazardous.

3.3.6 Analytical Discussion

The detection of two pesticides (4,4'-DDT, and 4,4'-DDE) above the unrestricted soil cleanup objective of 0.0033 ppm were in cells EG-1, EG-43, EG-44, and EG-45. Because the Southern Parcel, Western Portion appears to be an undisturbed wooded area, with homogenous, natural soil, the source of these impacts cannot be determined. The designation of the material from the Southern Parcel, Western Portion should be designated as uncontaminated, as there is no evidence of contamination on the Site or indication that fill material was disposed of on-site.

FIGURES

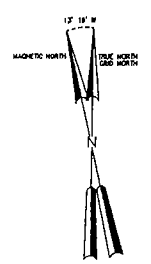


▨ OUTSIDE WORK LIMITS

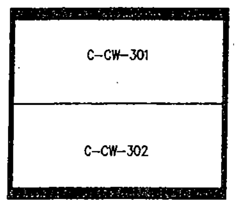
■ TEMPORARY CONSTRUCTION ACCESS ROAD

▦ STOCK PILE AREA

▤ PROPOSED PARKING AREA FOR CONSTRUCTION WORKERS



NOTE:
TREE LOCATIONS OBTAINED WITH GPS DATA RECORDER WITH AN ACCURACY OF ± 20 FEET.



KEYPLAN

1"=100'-0"
100 50 0 100'

NO.	DATE	ISSUED FOR	BY

WARNING
IT IS A VIOLATION OF SECTION 7209.2 OF THE NEW YORK STATE EDUCATION LAW FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER IN ANY WAY PLANS, SPECIFICATIONS, PLATS OR REPORTS TO WHICH THE SEAL OF A PROFESSIONAL ENGINEER HAS BEEN APPLIED. IF AN ITEM BEARING THE SEAL OF A PROFESSIONAL ENGINEER IS ALTERED, THE ALTERING ENGINEER SHALL AFFIX TO THE ITEM HIS SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS SIGNATURE, THE DATE, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

DESIGNED TB
DRAWN JAF
CHECKED KW
SECT.CHIEF SM
PROJ.ENGR. RF

SCALE
1"=100'-0"

RICHARD EDWARD PETERS
066186
P.E.

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P.E.
PROJECT MANAGER
P.E.
CHIEF, UPSTATE WATER SUPPLY TREATMENT & FACILITIES DIVISION

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CITY OF NEW YORK
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF ENVIRONMENTAL ENGINEERING
DIVISION OF FACILITIES DESIGN
WM-30 CATSKILL AND DELAWARE WATER TREATMENT
ULTRAVIOLET LIGHT DISINFECTION FACILITY

ULTRAVIOLET LIGHT DISINFECTION FACILITY CONSTRUCTION
CONTRACT CAT-210WL
CIVIL
GREENBURGH
OVERALL CLEARING/EROSION AND SEDIMENT CONTROL PLAN
(SHEET 1 OF 1)

DATE JULY 2008
DWG NO: C-CW-300
SHEET NO: 24 OF 83
FILE NAME: CCW3000

PLOT DATE 07/23/08 10:27am FILE= H:\6000-9999\9470\WETLAND MITIGATION\FINAL DESIGN\CIVIL\CCW3000 by JFORZANO XREFs=9470\WETLAND MITIGATION\FINAL DESIGN\CIVIL\BASE FILES\CB-SPTPEC_W, 9470\WETLAND MITIGATION\FINAL DESIGN\MISC\UVBDRJV_W, 9470\WETLAND MITIGATION\FINAL DESIGN\CIVIL\BASE FILES\CB-SP-LDC_W,

Figure 1

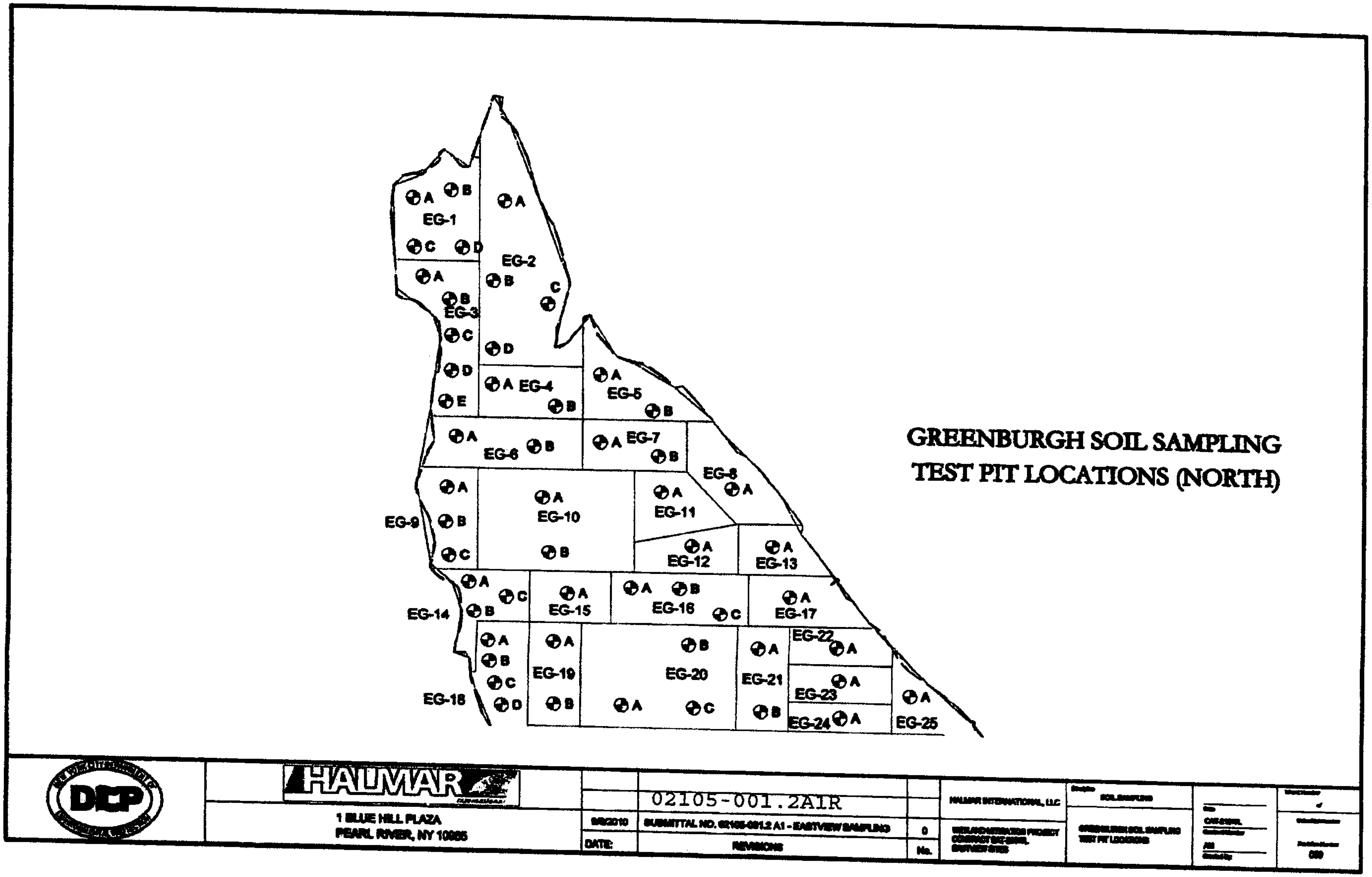

FIGURE 2

EASTVIEW - GREENBURGH (Southern Parcel, Western Portion) SAMPLING LOCATION MAP

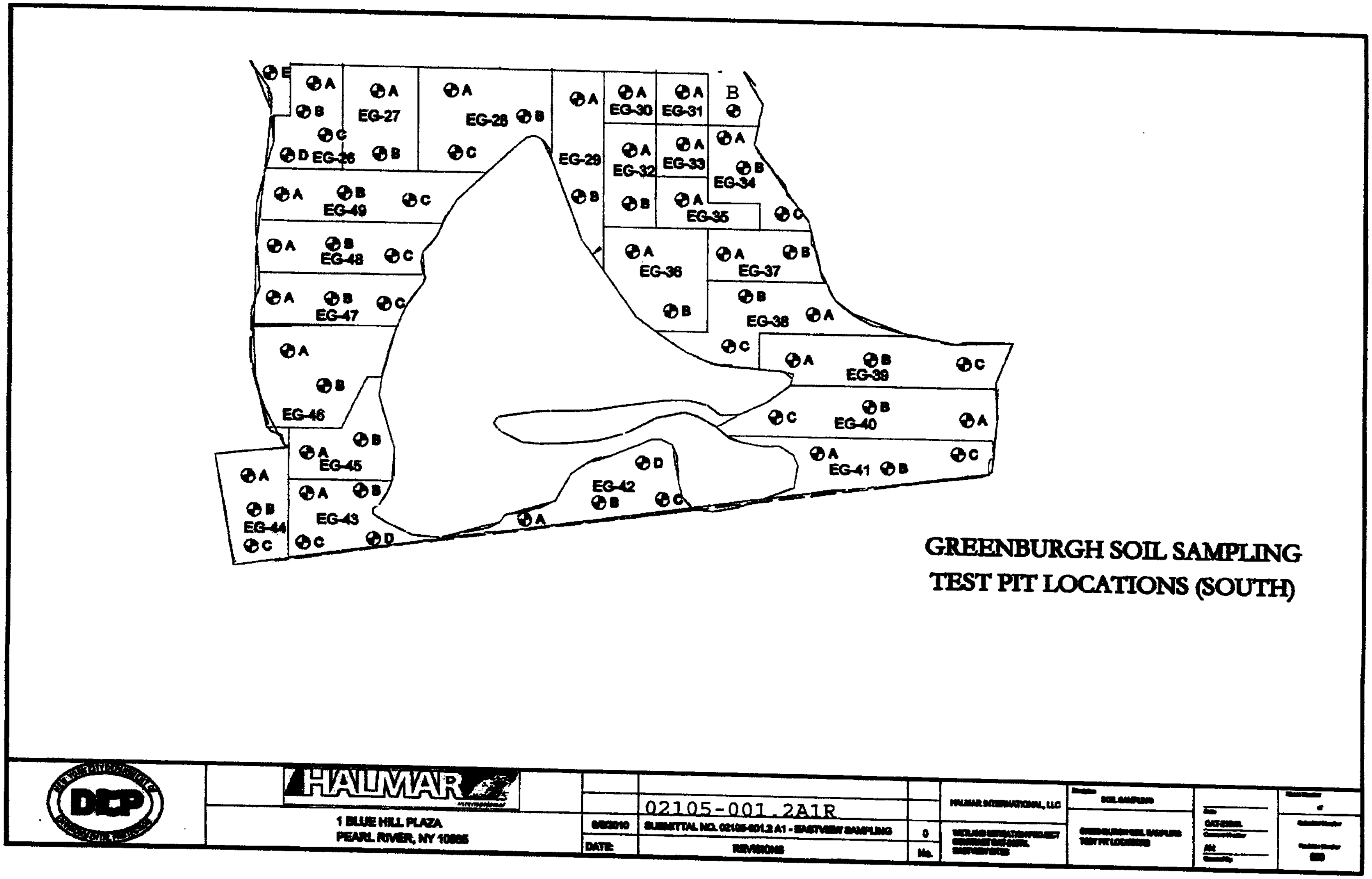

FIGURE 2 (cont'd)

EASTVIEW - GREENBURGH (Southern Parcel, Western Portion) SAMPLING LOCATION MAP

TABLES

Table 1

NYSDEC PART 375-6.8(a) – METALS

Eastview Site
NYCDEP Project CAT-210WL
Greenburgh and Mount Pleasant, New York

CONTAMINANTS: **METALS**
Organized by: Site

Estimated Concentrations are denoted with a **'J'** following the detection concentration.
Instead of a '<' notation, Non-Detect and BDL Display the RDL *Unbolded and Italicized*
Detects in Exceedence of NYSDEC Part 375-6.8(a) Unrestricted Use Criteria are shown in **BOLD, UNDERLINED RED**
Detects not in Exceedence of NYSDEC Part 375-6.8(a) Unrestricted Use Criteria are **BOLD BLACK**
For Laboratory MDL's see Spectrum Lab Reports

			Silver	**Arsenic**	**Barium**	**Beryllium**	**Cadmium**	**Chromium**
NYSDEC UNRESTRICTED USE CRITERIA (ppm)			**2**	**13**	**350**	**350**	**2.5**	**30**
NYSDEC RESIDENTIAL SCO (ppm)			**36**	**16**	**350**	**350**	**2.5**	**36**
NYSDEC RESTRICTED RESIDENTIAL SCO (ppm)			**180**	**16**	**400**	**400**	**4.3**	**180**
NYSDEC COMMERCIAL SCO (ppm)			**1500**	**16**	**400**	**400**	**9.3**	**1500**
CELL ID	**LAB ID**	**SITE**						
EG-1	SB22338-13	Greenburgh - West	**0.848 J**	**3.43**	**57.3**	**0.421 J**	**0.52**	**19.8**
EG-91	SB22338-15	Greenburgh - West	**0.739 J**	**3.58**	**54.3**	**0.410 J**	**0.518 J**	**18.5**
EG-2	SB22338-11	Greenburgh - West	**0.626 J**	**2.76**	**47.3**	**0.328 J**	**0.415 J**	**16.6**
EG-3	SB22338-09	Greenburgh - West	**0.802 J**	**3.15**	**53.7**	*0.347*	**0.479 J**	**18.7**
EG-4	SB22279-18	Greenburgh - West	**0.836 J**	**2.67**	**56.3**	**0.269 J**	**0.433 J**	**17.3**
EG-6	SB22338-01	Greenburgh - West	**0.642 J**	**3.22**	**43.2**	**0.307 J**	**0.435 J**	**18.9**
EG-9	SB22338-03	Greenburgh - West	**0.855 J**	**2.85**	**64.1**	**0.345 J**	**0.475 J**	**18.5**
EG-10	SB22279-04	Greenburgh - West	**0.69 J**	**1.53 J**	**45.8**	*0.543*	**0.326 J**	**11.9**
EG-14	SB22338-05	Greenburgh - West	**0.975 J**	**2.61**	**62.3**	**0.231 J**	**0.49 J**	**20.8**
EG-914	SB22338-07	Greenburgh - West	**0.839 J**	**3.5**	**52.8**	**0.337 J**	**0.524 J**	**18.5**
EG-15	SB22279-16	Greenburgh - West	**0.623 J**	**2.43**	**58.2**	**0.214 J**	**0.423 J**	**14.8**
EG-18	SB22279-20	Greenburgh - West	**0.653 J**	**3**	**47.7**	**0.304 J**	**0.441 J**	**16.1**
EG-19B	SB22279-02	Greenburgh - West	**1.28 J**	**2.51**	**69.7**	*0.578*	**0.52 J**	**28**
EG-26	SB22280-01	Greenburgh - West	**0.777 J**	**2.33**	**47.1**	*0.518*	**0.358 J**	**12.8**
EG-27	SB22280-07	Greenburgh - West	**0.67 J**	**2.42**	**67.8**	**0.392 J**	**0.449 J**	**15.6**
EG-28	SB22280-05	Greenburgh - West	**0.679 J**	**2.15**	**64.2**	**0.274 J**	**0.405 J**	**14.1**
EG-43	SB22279-12	Greenburgh - West	**1.52 J**	**2.49**	**73.7**	**0.189 J**	**0.604**	**23.8**
EG-44	SB22279-14	Greenburgh - West	**0.887 J**	**0.994 J**	**43.2**	*0.51*	**0.291 J**	**12.9**
EG-45	SB22279-10	Greenburgh - West	**1.37 J**	**2.52**	**59.7**	*0.558*	**0.564**	**21.9**
EG-46	SB22279-08	Greenburgh - West	**1.31 J**	**2.59**	**65.7**	*0.543*	**0.549**	**20.9**
EG-47	SB22279-06	Greenburgh - West	**0.710 J**	**2.69**	**73.2**	**0.337 J**	**0.457 J**	**14.6**
EG-48	SB22280-09	Greenburgh - West	**0.646 J**	**2.24**	**60.2**	**0.271 J**	**0.380 J**	**15.1**
EG-49	SB22280-03	Greenburgh - West	**0.762 J**	**2.28**	**57.9**	**0.264 J**	**0.418 J**	**15.3**

DEFINITIONS

WASTE CATEGORIZATIONS

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Meets Commericial SCO	All Contaminants Are Found to Be Below NYSDEC Part 375-6.8 (b) - Commercial Cleanup Objective

Eastview Site
NYCDEP Project CAT-210WL
Greenburgh and Mount Pleasant, New York

CONTAMINANTS: **METALS**
Organized by: Site

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			Copper	**Total Mercury**	**Manganese**	**Nickel**	**Lead**	**Selenium**
NYSDEC UNRESTRICTED USE CRITERIA (ppm)			**30**	**0.18**	**1600**	**30**	**63**	**3.9**
NYSDEC RESIDENTIAL SCO (ppm)			**36**	**0.81**	**2000**	**140**	**400**	**36**
NYSDEC RESTRICTED RESIDENTIAL SCO (ppm)			**180**	**0.81**	**2000**	**310**	**400**	**180**
NYSDEC COMMERCIAL SCO (ppm)			**1500**	**2.8**	**10000**	**310**	**1000**	**1500**
CELL	**LAB ID**	**SITE**						
EG-1	SB22338-13	Greenburgh - West	**11.7**	**0.0667**	**530**	**13.2**	**23.1**	*1.56*
EG-91	SB22338-15	Greenburgh - West	**11.5**	**0.0701**	**561**	**12.8**	**26.4**	**0.281**
EG-2	SB22338-11	Greenburgh - West	**9.96**	**0.0624**	**479**	**11**	**20.9**	*1.86*
EG-3	SB22338-09	Greenburgh - West	**12.6**	**0.0925**	**477**	**14.2**	**30.2**	*1.8*
EG-4	SB22279-18	Greenburgh - West	**10.7**	**0.0395**	**370**	**12**	**16.9**	*1.75*
EG-6	SB22338-01	Greenburgh - West	**10.9**	**0.0219 J**	**249**	**11.8**	**10.5**	*1.67*
EG-9	SB22338-03	Greenburgh - West	**13.9**	**0.0336 J**	**487**	**12.8**	**15.4**	*1.7*
EG-10	SB22279-04	Greenburgh - West	**11.5**	**0.0076 J**	**247**	**9.96**	**4.74**	*1.63*
EG-14	SB22338-05	Greenburgh - West	**14.3**	**0.0187 J**	**377**	**12.3**	**8.67**	*1.69*
EG-914	SB22338-07	Greenburgh - West	**11.6**	**0.0348**	**552**	**11.3**	**25.7**	*1.66*
EG-15	SB22279-16	Greenburgh - West	**12.2**	**0.023 J**	**408**	**10.6**	**9.94**	*1.46*
EG-18	SB22279-20	Greenburgh - West	**9.07**	**0.07**	**464**	**10.5**	**31.9**	**0.355 J**
EG-19B	SB22279-02	Greenburgh - West	**19.3**	**0.0169 J**	**597**	**15.8**	**9.53**	*1.73*
EG-26	SB22280-01	Greenburgh - West	**7.6**	**0.0261 J**	**322**	**8.74**	**9.22**	*1.55*
EG-27	SB22280-07	Greenburgh - West	**8.26**	**0.0287 J**	**620**	**10.7**	**12.1**	**0.316 J**
EG-28	SB22280-05	Greenburgh - West	**8.92**	**0.0501**	**394**	**10.7**	**15.9**	**0.305 J**
EG-43	SB22279-12	Greenburgh - West	**14.2**	**0.0367**	**277**	**13.3**	**15.7**	*1.62*
EG-44	SB22279-14	Greenburgh - West	**11**	**0.0104 J**	**219**	**9.5**	**4.57**	*1.53*
EG-45	SB22279-10	Greenburgh - West	**12.4**	**0.0295 J**	**424**	**15.1**	**12.8**	*1.67*
EG-46	SB22279-08	Greenburgh - West	**12.4**	**0.0567**	**457**	**12.6**	**18.7**	**0.250 J**
EG-47	SB22279-06	Greenburgh - West	**8.78**	**0.0506**	**534**	**9.49**	**18**	**0.385 J**
EG-48	SB22280-09	Greenburgh - West	**8.13**	**0.0541**	**436**	**9.64**	**15.1**	**0.244 J**
EG-49	SB22280-03	Greenburgh - West	**9.6**	**0.0385**	**326**	**11.2**	**11.2**	*1.84*

DEFINITIONS

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Eastview Site
NYCDEP Project CAT-210WL
Greenburgh and Mount Pleasant, New York

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Organized by: Site

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			Zinc	**Total Cyanide**	**Chromium (Hexavalent)**	**NYSDEC CLASSIFICATION FOR DISPOSAL OR AND/OR RE-USE**
NYSDEC UNRESTRICTED USE CRITERIA (ppm)			**109**	**27**	**1**	
NYSDEC RESIDENTIAL SCO (ppm)			**2200**	**27**	**22**	
NYSDEC RESTRICTED RESIDENTIAL SCO (ppm)			**10000**	**27**	**110**	
NYSDEC COMMERCIAL SCO (ppm)			**10000**	**27**	**400**	
CELL	**LAB ID**	**SITE**				
EG-1	SB22338-13	Greenburgh - West	**54.6**	*1.27*	*0.48*	Unrestricted
EG-91	SB22338-15	Greenburgh - West	**54.6**	**0.407 J**	*0.51*	Unrestricted
EG-2	SB22338-11	Greenburgh - West	**45.2**	*1.26*	*0.51*	Unrestricted
EG-3	SB22338-09	Greenburgh - West	**52.2**	**0.853 J**	*0.49*	Unrestricted
EG-4	SB22279-18	Greenburgh - West	**48.1**	**0.431 J**	*0.56*	Unrestricted
EG-6	SB22338-01	Greenburgh - West	**50.1**	*1.22*	*0.48*	Unrestricted
EG-9	SB22338-03	Greenburgh - West	**44.9**	*1.15*	*0.43*	Unrestricted
EG-10	SB22279-04	Greenburgh - West	**30.1**	*1.07*	*0.54*	Unrestricted
EG-14	SB22338-05	Greenburgh - West	**42.9**	*1.27*	*0.47*	Unrestricted
EG-914	SB22338-07	Greenburgh - West	**42.4**	*1.13*	*0.42*	Unrestricted
EG-15	SB22279-16	Greenburgh - West	**39.6**	**0.516 J**	*0.52*	Unrestricted
EG-18	SB22279-20	Greenburgh - West	**49.1**	*1.09*	*0.55*	Unrestricted
EG-19B	SB22279-02	Greenburgh - West	**50.9**	*1.03*	*0.52*	Unrestricted
EG-26	SB22280-01	Greenburgh - West	**42.4**	*1.06*	*0.54*	Unrestricted
EG-27	SB22280-07	Greenburgh - West	**45.6**	**0.413 J**	*0.58*	Unrestricted
EG-28	SB22280-05	Greenburgh - West	**43.1**	*1.1*	*0.58*	Unrestricted
EG-43	SB22279-12	Greenburgh - West	**55.5**	*1.08*	*0.52*	Unrestricted
EG-44	SB22279-14	Greenburgh - West	**25.5**	*1.08*	*0.52*	Unrestricted
EG-45	SB22279-10	Greenburgh - West	**45.1**	*1.19*	*0.54*	Unrestricted
EG-46	SB22279-08	Greenburgh - West	**51.1**	*1.2*	*0.56*	Unrestricted
EG-47	SB22279-06	Greenburgh - West	**49**	*1.06*	*0.5*	Unrestricted
EG-48	SB22280-09	Greenburgh - West	**40.9**	*1.07*	*0.54*	Unrestricted
EG-49	SB22280-03	Greenburgh - West	**43.4**	**0.868 J**	*0.56*	Unrestricted

DEFINITIONS

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NYSDEC PART 375-6.8(a) – PCB’s/PESTICIDES/HERBICIDES

Eastview Site
NYCDEP Project CAT-210WL
Greenburgh and Mount Pleasant, New York

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Organized by:

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			alpha-BHC	**beta-BHC**	**delta-BHC**	**Lindane**	**Heptachlor**	**Aldrin**
NYSDEC UNRESTRICTED USE CRITERIA (ppm)			**0.02**	**0.036**	**1.8**	**0.1**	**0.042**	**0.005**
NYSDEC RESIDENTIAL SCO (ppm)			**0.097**	**0.072**	**100**	**0.28**	**0.42**	**0.019**
NYSDEC RESTRICTED RESIDENTIAL SCO (ppm)			**0.48**	**0.36**	**100**	**1.3**	**2.1**	**0.097**
NYSDEC COMMERCIAL SCO (ppm)			**3.4**	**3**	**500**	**9.2**	**15**	**0.68**
CELL ID	**LAB ID**	**SITE**						
EG-1	SB22338-13	Greenburgh - West	*0.00557*	*0.00557*	*0.00557*	*0.00557*	*0.00557*	*0.00557*
EG-91	SB22338-15	Greenburgh - West	*0.006*	*0.006*	*0.006*	*0.006*	*0.006*	*0.006*
EG-2	SB22338-11	Greenburgh - West	*0.00608*	*0.00608*	*0.00608*	*0.00608*	*0.00608*	*0.00608*
EG-3	SB22338-09	Greenburgh - West	*0.00635*	*0.00635*	*0.00635*	*0.00635*	*0.00635*	*0.00635*
EG-4	SB22279-18	Greenburgh - West	*0.0066*	*0.0066*	*0.0066*	*0.0066*	*0.0066*	*0.0066*
EG-6	SB22338-01	Greenburgh - West	*0.00565*	*0.00565*	*0.00565*	*0.00565*	*0.00565*	*0.00565*
EG-9	SB22338-03	Greenburgh - West	*0.0059*	*0.0059*	*0.0059*	*0.0059*	*0.0059*	*0.0059*
EG-10	SB22279-04	Greenburgh - West	*0.0054*	*0.0054*	*0.0054*	*0.0054*	*0.0054*	*0.0054*
EG-14	SB22338-05	Greenburgh - West	*0.00581*	*0.00581*	*0.00581*	*0.00581*	*0.00581*	*0.00581*
EG-914	SB22338-07	Greenburgh - West	*0.00601*	*0.00601*	*0.00601*	*0.00601*	*0.00601*	*0.00601*
EG-15	SB22279-16	Greenburgh - West	*0.00544*	*0.00544*	*0.00544*	*0.00544*	*0.00544*	*0.00544*
EG-18	SB22279-20	Greenburgh - West	*0.0057*	*0.0057*	*0.0057*	*0.0057*	*0.0057*	*0.0057*
EG-19	SB22279-01	Greenburgh - West	*0.00551*	*0.00551*	*0.00551*	*0.00551*	*0.00551*	*0.0051*
EG-26	SB22280-01	Greenburgh - West	*0.00565*	*0.00565*	*0.00565*	*0.00565*	*0.00565*	*0.00565*
EG-27	SB22280-07	Greenburgh - West	*0.00609*	*0.00609*	*0.00609*	*0.00609*	*0.00609*	*0.00609*
EG-28	SB22280-05	Greenburgh - West	*0.00557*	*0.00557*	*0.00557*	*0.00557*	*0.00557*	*0.00557*
EG-43	SB22279-12	Greenburgh - West	*0.00592*	*0.00592*	*0.00592*	*0.00592*	*0.00592*	*0.00592*
EG-44	SB22279-14	Greenburgh - West	*0.00528*	*0.00528*	*0.00528*	*0.00528*	*0.00528*	*0.00528*
EG-45	SB22279-10	Greenburgh - West	*0.00541*	*0.00541*	*0.00541*	*0.00541*	*0.00541*	*0.00541*
EG-46	SB22279-08	Greenburgh - West	*0.00573*	*0.00573*	*0.00573*	*0.00573*	*0.00573*	*0.00573*
EG-47	SB22279-06	Greenburgh - West	*0.0059*	*0.0059*	*0.0059*	*0.0059*	*0.0059*	*0.0059*
EG-48	SB22280-09	Greenburgh - West	*0.00539*	*0.00539*	*0.00539*	*0.00539*	*0.00539*	*0.00539*
EG-49	SB22280-03	Greenburgh - West	*0.00613*	*0.00613*	*0.00613*	*0.00613*	*0.00613*	*0.00613*

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Eastview Site **PCBS/PESTICIDES** CONTAMINANTS: **PESTICIDES/PCBS/HERBICIDES**

NYCDEP Project CAT-210WL Site Organized By: Site

Greenburgh and Mount Pleasant, New York

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			Endosulfan I	**Dieldrin**	**4,4' - DDE**	**Endrin**	**Endosulfan II**	**4,4' - DDD**	**Endosulfan Sulfate**
NYSDEC UNRESTRICTED USE CRITERIA (ppm)			**2.4**	**0.005**	**0.0033**	**0.014**	**2.4**	**0.0033**	**2.4**
NYSDEC RESIDENTIAL SCO (ppm)			**4.8**	**0.039**	**1.8**	**2.2**	**4.8**	**36**	**2.6**
NYSDEC RESTRICTED RESIDENTIAL SCO (ppm)			**24**	**0.2**	**8.9**	**11**	**24**	**180**	**13**
NYSDEC COMMERCIAL SCO (ppm)			**200**	**1.4**	**62**	**89**	**200**	**1500**	**92**
CELL	**LAB ID**	**SITE**							
EG-1	SB22338-13	Greenburgh - West	*0.00557*	*0.00557*	**0.0387**	*0.0089*	*0.0089*	0.0089	0.0089
EG-91	SB22338-15	Greenburgh - West	*0.006*	*0.006*	*0.006*	*0.00961*	*0.00961*	*0.00961*	*0.00961*
EG-2	SB22338-11	Greenburgh - West	*0.00608*	*0.00608*	*0.00608*	*0.00973*	*0.00973*	*0.00973*	*0.00973*
EG-3	SB22338-09	Greenburgh - West	*0.00635*	*0.00635*	*0.00635*	*0.0102*	*0.0102*	*0.0102*	*0.0102*
EG-4	SB22279-18	Greenburgh - West	*0.0066*	*0.0066*	**0.00517 J**	*0.0097*	*0.0097*	*0.0097*	*0.0097*
EG-6	SB22338-01	Greenburgh - West	*0.00565*	*0.00565*	*0.00565*	*0.00905*	*0.00905*	*0.00905*	*0.00905*
EG-9	SB22338-03	Greenburgh - West	*0.0059*	*0.0059*	*0.0059*	*0.00944*	*0.00944*	*0.00944*	*0.00944*
EG-10	SB22279-04	Greenburgh - West	*0.0054*	*0.0054*	*0.0054*	*0.00864*	*0.00864*	*0.00864*	*0.00864*
EG-14	SB22338-05	Greenburgh - West	*0.00581*	*0.00581*	*0.00581*	*0.0093*	*0.0093*	*0.0093*	*0.0093*
EG-914	SB22338-07	Greenburgh - West	*0.00601*	*0.00601*	*0.00601*	*0.00962*	*0.00962*	*0.00962*	*0.00962*
EG-15	SB22279-16	Greenburgh - West	*0.00544*	*0.00544*	*0.00544*	*0.00871*	*0.00871*	*0.00871*	*0.00871*
EG-18	SB22279-20	Greenburgh - West	*0.0057*	*0.0057*	*0.0057*	*0.00912*	*0.00912*	*0.00912*	*0.00912*
EG-19	SB22279-01	Greenburgh - West	*0.0051*	*0.0051*	*0.0051*	*0.0082*	*0.0082*	*0.0082*	*0.0082*
EG-26	SB22280-01	Greenburgh - West	*0.00565*	*0.00565*	*0.00565*	*0.00904*	*0.00904*	*0.00904*	*0.00904*
EG-27	SB22280-07	Greenburgh - West	*0.00609*	*0.00609*	*0.00609*	*0.00975*	*0.00975*	*0.00975*	*0.00975*
EG-28	SB22280-05	Greenburgh - West	*0.00557*	*0.00557*	*0.00557*	*0.00891*	*0.00891*	*0.00891*	*0.00891*
EG-43	SB22279-12	Greenburgh - West	*0.00592*	*0.00592*	**0.198**	*0.00947*	*0.00947*	*0.00947*	*0.00947*
EG-44	SB22279-14	Greenburgh - West	*0.00528*	*0.00528*	**0.0665**	*0.00845*	*0.00845*	*0.00845*	*0.00845*
EG-45	SB22279-10	Greenburgh - West	*0.00541*	*0.00541*	**0.0142**	*0.00865*	*0.00865*	*0.00865*	*0.00865*
EG-46	SB22279-08	Greenburgh - West	*0.00573*	*0.00573*	*0.00573*	*0.0097*	*0.0097*	*0.0097*	*0.0097*
EG-47	SB22279-06	Greenburgh - West	*0.0059*	*0.0059*	*0.00944*	*0.00944*	*0.00944*	*0.00944*	*0.00944*
EG-48	SB22280-09	Greenburgh - West	*0.00539*	*0.00539*	*0.00539*	*0.00862*	*0.00862*	*0.00862*	*0.00862*
EG-49	SB22280-03	Greenburgh - West	*0.00613*	**0.00402 J**	*0.00613*	*0.00981*	*0.00981*	*0.00981*	*0.00981*

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NYCDEP Project CAT-210WL Site Organized By: Site
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			4,4' - DDT	Chlordane	2,4,5 - TP Acid (Silvex)	PCBs (total)	NYSDEC CLASSIFICATION
NYSDEC UNRESTRICTED USE CRITERIA (ppm)			**0.0033**	**0.094**	**3.8**	**0.1**	**FOR DISPOSAL OR**
NYSDEC RESIDENTIAL SCO (ppm)			**1.7**	**0.91**	**58**	**1**	**AND/OR RE-USE**
NYSDEC RESTRICTED RESIDENTIAL SCO (ppm)			**7.9**	**4.2**	**100**	**1**	
NYSDEC COMMERCIAL SCO (ppm)			**47**	**24**	**500**	**1**	
CELL	**LAB BATCH#**	**SITE**					
EG-1	SB22338-13	Greenburgh - West	**0.00795 J**	*0.023*	*0.00795*	*0*	Meets Residential SCO
EG-91	SB22338-15	Greenburgh - West	*0.00961*	*0.024*	*0.00831*	*0*	Unrestricted
EG-2	SB22338-11	Greenburgh - West	*0.00973*	*0.0243*	*0.00841*	*0*	Unrestricted
EG-3	SB22338-09	Greenburgh - West	*0.0102*	*0.0254*	*0.0895*	*0*	Unrestricted
EG-4	SB22279-18	Greenburgh - West	*0.0097*	*0.0243*	*0.00794*	*0*	Unrestricted
EG-6	SB22338-01	Greenburgh - West	*0.00905*	*0.0226*	*0.00791*	*0*	Unrestricted
EG-9	SB22338-03	Greenburgh - West	*0.00944*	*0.0236*	*0.00818*	*0*	Unrestricted
EG-10	SB22279-04	Greenburgh - West	*0.00864*	*0.0216*	*0.0076*	*0*	Unrestricted
EG-14	SB22338-05	Greenburgh - West	*0.0093*	*0.0233*	*0.00758*	*0*	Unrestricted
EG-914	SB22338-07	Greenburgh - West	*0.00962*	*0.024*	*0.00816*	*0*	Unrestricted
EG-15	SB22279-16	Greenburgh - West	*0.00871*	*0.0218*	*0.00724*	*0*	Unrestricted
EG-18	SB22279-20	Greenburgh - West	*0.00912*	*0.0228*	*0.00785*	*0*	Unrestricted
EG-19	SB22279-01	Greenburgh - West	*0.0082*	*0.022*	*0.00745*	*0*	Unrestricted
EG-26	SB22280-01	Greenburgh - West	*0.00904*	*0.0226*	*0.00777*	*0*	Unrestricted
EG-27	SB22280-07	Greenburgh - West	*0.00975*	*0.0244*	*0.00805*	*0*	Unrestricted
EG-28	SB22280-05	Greenburgh - West	*0.00891*	*0.0223*	*0.00761*	*0*	Unrestricted
EG-43	SB22279-12	Greenburgh - West	**0.111**	*0.00947*	*0.00801*	*0*	Meets Residential SCO
EG-44	SB22279-14	Greenburgh - West	**0.00961**	*0.0211*	*0.00723*	*0*	Meets Residential SCO
EG-45	SB22279-10	Greenburgh - West	*0.00865*	*0.0216*	*0.00736*	*0*	Meets Residential SCO
EG-46	SB22279-08	Greenburgh - West	*0.0097*	*0.0229*	*0.00783*	*0*	Unrestricted
EG-47	SB22279-06	Greenburgh - West	*0.00944*	*0.0236*	*0.00794*	*0*	Unrestricted
EG-48	SB22280-09	Greenburgh - West	*0.00862*	*0.0216*	*0.00714*	*0*	Unrestricted
EG-49	SB22280-03	Greenburgh - West	*0.00981*	*0.0245*	*0.00819*	*0*	Unrestricted

DEFINITIONS

WASTE CATEGORIZATIONS

Unregulated	All Contaminants Are Found to Be Below NYSDEC Part 375-6.8 (a) - Unrestricted Use Criteria
Meets Residential SCO	All Contaminants Are Found to Be Below NYSDEC Part 375-6.8 (b) - Residential Cleanup Objective
Meets Restricted- Residential SCO	All Contaminants Are Found to Be Below NYSDEC Part 375-6.8 (b) - Restricted-Residential Cleanup Objective
Meets Commericial SCO	All Contaminants Are Found to Be Below NYSDEC Part 375-6.8 (b) - Commercial Cleanup Objective

NYSDEC PART 375-6.8(a) – SVOC COMPOSITES

Eastview Site

NYCDEP Project CAT-210WL

Greenburgh and Mount Pleasant, New York

CONTAMINANTS: **SEMI VOLATILES**

Organized by: Site

Estimated Concentrations are denoted with a **'J'** following the detection concentration.

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For Laboratory MDL's see Spectrum Lab Reports

	Acenapthene	Acenapthylene	Anthracene	Benz(a)anthracene	Benzo(a)pyrene	Benzo(a)Fluroanthene	Benzo(g,h,i)perylene
NYSDEC UNRESTRICTED USE CRITERIA (ppm)	**20**	**100**	**100**	**1**	**1**	**1**	**100**
NYSDEC RESIDENTIAL SCO (ppm)	**100**	**100**	**100**	**1**	**1**	**1**	**100**
NYSDEC RESTRICTED RESIDENTIAL SCO (ppm)	**100**	**100**	**100**	**1**	**1**	**1**	**100**
NYSDEC COMMERCIAL SCO (ppm)	**500**	**500**	**500**	**5.6**	**1**	**5.6**	**500**

CELL ID	**LAB ID**	**SITE**	Acenapthene	Acenapthylene	Anthracene	Benz(a)anthracene	Benzo(a)pyrene	Benzo(a)Fluroanthene	Benzo(g,h,i)perylene
EG-1	SB22338-13	Greenburgh - West	*0.202*	*0.202*	*0.202*	*0.202*	*0.202*	*0.202*	*0.202*
EG-91	SB22338-15	Greenburgh - West	*0.205*	*0.205*	*0.205*	*0.205*	*0.205*	*0.205*	*0.205*
EG-2	SB22338-11	Greenburgh - West	*0.205*	*0.205*	*0.205*	*0.205*	*0.205*	*0.205*	*0.205*
EG-3	SB22338-09	Greenburgh - West	*0.220*	*0.220*	*0.220*	*0.220*	*0.220*	*0.220*	*0.220*
EG-4	SB22279-18	Greenburgh - West	*0.204*	*0.204*	*0.204*	*0.204*	*0.204*	*0.204*	*0.204*
EG-6	SB22338-01	Greenburgh - West	*0.192*	*0.192*	*0.192*	*0.192*	*0.192*	*0.192*	*0.192*
EG-9	SB22338-03	Greenburgh - West	*0.201*	*0.201*	*0.201*	*0.201*	*0.201*	*0.201*	*0.201*
EG-10	SB22279-04	Greenburgh - West	*0.192*	*0.192*	*0.192*	*0.192*	*0.192*	*0.192*	*0.192*
EG-14	SB22338-05	Greenburgh - West	*0.198*	*0.198*	*0.198*	*0.198*	*0.198*	*0.198*	*0.198*
EG-914	SB22338-07	Greenburgh - West	*0.197*	*0.197*	*0.197*	*0.197*	*0.197*	*0.197*	*0.197*
EG-15	SB22279-16	Greenburgh - West	*0.183*	*0.183*	*0.183*	*0.183*	*0.183*	*0.183*	*0.183*
EG-18	SB22279-20	Greenburgh - West	*0.196*	*0.196*	*0.196*	*0.196*	*0.196*	*0.196*	*0.196*
EG-19	SB22279-02	Greenburgh - West	*0.187*	*0.187*	*0.187*	*0.187*	*0.187*	*0.187*	*0.187*
EG-26	SB22280-01	Greenburgh - West	*0.195*	*0.195*	*0.195*	*0.195*	*0.195*	*0.195*	*0.195*
EG-27	SB22280-07	Greenburgh - West	*0.205*	*0.205*	*0.205*	*0.205*	*0.205*	*0.205*	*0.205*
EG-28	SB22280-05	Greenburgh - West	*0.185*	*0.185*	*0.185*	*0.185*	*0.185*	*0.185*	*0.185*
EG-43	SB22279-12	Greenburgh - West	*0.197*	*0.197*	*0.197*	*0.197*	*0.197*	*0.197*	*0.197*
EG-44	SB22279-14	Greenburgh - West	*0.197*	*0.197*	*0.197*	*0.197*	*0.197*	*0.197*	*0.197*
EG-45	SB22279-10	Greenburgh - West	*0.190*	*0.190*	*0.190*	*0.190*	*0.190*	*0.190*	*0.190*
EG-46	SB22279-08	Greenburgh - West	*0.197*	*0.197*	*0.197*	*0.197*	*0.197*	*0.197*	*0.197*
EG-47	SB22279-06	Greenburgh - West	*0.199*	*0.199*	*0.199*	*0.199*	*0.199*	*0.199*	*0.199*
EG-48	SB22280-09	Greenburgh - West	*0.183*	*0.183*	*0.183*	*0.183*	*0.183*	*0.183*	*0.183*
EG-49	SB22280-03	Greenburgh - West	*0.206*	*0.206*	*0.206*	*0.206*	*0.206*	*0.206*	*0.206*

Eastview Site
NYCDEP Project CAT-210WL
Greenburgh and Mount Pleasant, New York

CONTAMINANTS: **SEMI VOLATILES**
Organized by: Site

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			Benzo(k)fluoranthene	**Chrysene**	**Dibenz(a,h)anthracene**	**Fluoranthene**	**Fluorene**	**Hexachlorobenzene (VOC under SVOC series)**	**Indeno (1,2,3-cd) pyrene**
NYSDEC UNRESTRICTED USE CRITERIA (ppm)			**0.8**	**1**	**0.33**	**100**	**30**	**0.33**	**0.5**
NYSDEC RESIDENTIAL SCO (ppm)			**1**	**1**	**0.33**	**100**	**100**	**0.33**	**0.5**
NYSDEC RESTRICTED RESIDENTIAL SCO (ppm)			**3.9**	**3.9**	**0.33**	**100**	**100**	**1.2**	**0.5**
NYSDEC COMMERCIAL SCO (ppm)			**56**	**56**	**0.56**	**500**	**500**	**6**	**5.6**
CELL	**LAB ID**	**SITE**							
EG-1	SB22338-13	Greenburgh - West	*0.202*	*0.202*	*0.202*	*0.202*	*0.202*	*0.202*	*0.202*
EG-91	SB22338-15	Greenburgh - West	*0.205*	*0.205*	*0.205*	*0.205*	*0.205*	*0.205*	*0.202*
EG-2	SB22338-11	Greenburgh - West	*0.205*	*0.205*	*0.205*	*0.205*	*0.205*	*0.205*	*0.205*
EG-3	SB22338-09	Greenburgh - West	*0.220*	*0.220*	*0.220*	*0.220*	*0.220*	*0.220*	*0.220*
EG-4	SB22279-18	Greenburgh - West	*0.204*	*0.204*	*0.204*	*0.204*	*0.204*	*0.204*	*0.204*
EG-6	SB22338-01	Greenburgh - West	*0.192*	*0.192*	*0.192*	*0.192*	*0.192*	*0.192*	*0.192*
EG-9	SB22338-03	Greenburgh - West	*0.201*	*0.201*	*0.201*	*0.201*	*0.201*	*0.201*	*0.201*
EG-10	SB22279-04	Greenburgh - West	*0.192*	*0.192*	*0.192*	*0.192*	*0.192*	*0.192*	*0.192*
EG-14	SB22338-05	Greenburgh - West	*0.198*	*0.198*	*0.198*	*0.198*	*0.198*	*0.198*	*0.198*
EG-914	SB22338-07	Greenburgh - West	*0.197*	*0.197*	*0.197*	*0.197*	*0.197*	*0.197*	*0.197*
EG-15	SB22279-16	Greenburgh - West	*0.183*	*0.183*	*0.183*	*0.183*	*0.183*	*0.183*	*0.183*
EG-18	SB22279-20	Greenburgh - West	*0.196*	*0.196*	*0.196*	*0.196*	*0.196*	*0.196*	*0.196*
EG-19	SB22279-02	Greenburgh - West	*0.187*	*0.187*	*0.187*	*0.187*	*0.187*	*0.187*	*0.187*
EG-26	SB22280-01	Greenburgh - West	*0.195*	*0.195*	*0.195*	*0.195*	*0.195*	*0.195*	*0.195*
EG-27	SB22280-07	Greenburgh - West	*0.205*	*0.205*	*0.205*	*0.205*	*0.205*	*0.205*	*0.205*
EG-28	SB22280-05	Greenburgh - West	*0.185*	*0.185*	*0.185*	*0.185*	*0.185*	*0.185*	*0.185*
EG-43	SB22279-12	Greenburgh - West	*0.197*	*0.197*	*0.197*	*0.197*	*0.197*	*0.197*	*0.197*
EG-44	SB22279-14	Greenburgh - West	*0.197*	*0.197*	*0.197*	*0.197*	*0.197*	*0.197*	*0.197*
EG-45	SB22279-10	Greenburgh - West	*0.190*	*0.190*	*0.190*	*0.190*	*0.190*	*0.190*	*0.190*
EG-46	SB22279-08	Greenburgh - West	*0.197*	*0.197*	*0.197*	*0.197*	*0.197*	*0.197*	*0.197*
EG-47	SB22279-06	Greenburgh - West	*0.199*	*0.199*	*0.199*	*0.199*	*0.199*	*0.199*	*0.199*
EG-48	SB22280-09	Greenburgh - West	*0.183*	*0.183*	*0.183*	*0.183*	*0.183*	*0.183*	*0.183*
EG-49	SB22280-03	Greenburgh - West	*0.206*	*0.206*	*0.206*	*0.206*	*0.206*	*0.206*	*0.206*

Eastview Site
NYCDEP Project CAT-210WL
Greenburgh and Mount Pleasant, New York

CONTAMINANTS: **SEMI VOLATILES**
Organized by: Site

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			o-Cresol (2-methylphenol)	**m/p-Cresol (3 & 4-methylphenol)**	**Naphthalene**	**Pentachlorophenol**	**Phenanthrene**
NYSDEC UNRESTRICTED USE CRITERIA (ppm)			**0.33**	**0.33**	**0.33**	**0.8**	**100**
NYSDEC RESIDENTIAL SCO (ppm)			**100**	**34**	**100**	**2.4**	**100**
NYSDEC RESTRICTED RESIDENTIAL SCO (ppm)			**100**	**100**	**100**	**6.7**	**100**
NYSDEC COMMERCIAL SCO (ppm)			**500**	**500**	**500**	**6.7**	**500**
CELL	**LAB ID**	**SITE**					
EG-1	SB22338-13	Greenburgh - West	*0.403*	*0.403*	*0.202*	*0.403*	*0.202*
EG-91	SB22338-15	Greenburgh - West	*0.411*	*0.411*	*0.205*	*0.411*	*0.205*
EG-2	SB22338-11	Greenburgh - West	*0.410*	*0.410*	*0.205*	*0.410*	*0.205*
EG-3	SB22338-09	Greenburgh - West	*0.441*	*0.441*	*0.220*	*0.441*	*0.220*
EG-4	SB22279-18	Greenburgh - West	*0.408*	*0.408*	*0.204*	*0.408*	*0.204*
EG-6	SB22338-01	Greenburgh - West	*0.392*	*0.392*	*0.192*	*0.392*	*0.192*
EG-9	SB22338-03	Greenburgh - West	*0.401*	*0.401*	*0.201*	*0.401*	*0.201*
EG-10	SB22279-04	Greenburgh - West	*0.383*	*0.383*	*0.192*	*0.383*	*0.192*
EG-14	SB22338-05	Greenburgh - West	*0.396*	*0.396*	*0.198*	*0.396*	*0.198*
EG-914	SB22338-07	Greenburgh - West	*0.394*	*0.394*	*0.197*	*0.394*	*0.197*
EG-15	SB22279-16	Greenburgh - West	*0.366*	*0.366*	*0.183*	*0.366*	*0.183*
EG-18	SB22279-20	Greenburgh - West	*0.393*	*0.393*	*0.196*	*0.393*	*0.196*
EG-19	SB22279-02	Greenburgh - West	*0.375*	*0.375*	*0.187*	*0.375*	*0.187*
EG-26	SB22280-01	Greenburgh - West	*0.389*	*0.389*	*0.195*	*0.389*	*0.195*
EG-27	SB22280-07	Greenburgh - West	0.409	0.409	*0.205*	0.409	*0.205*
EG-28	SB22280-05	Greenburgh - West	*0.371*	*0.371*	*0.185*	*0.371*	*0.185*
EG-43	SB22279-12	Greenburgh - West	*0.393*	*0.393*	*0.197*	*0.393*	*0.197*
EG-44	SB22279-14	Greenburgh - West	*0.393*	*0.393*	*0.197*	*0.393*	*0.197*
EG-45	SB22279-10	Greenburgh - West	*0.381*	*0.381*	*0.190*	*0.381*	*0.190*
EG-46	SB22279-08	Greenburgh - West	*0.394*	*0.394*	*0.197*	*0.394*	*0.197*
EG-47	SB22279-06	Greenburgh - West	*0.398*	*0.398*	*0.199*	*0.398*	*0.199*
EG-48	SB22280-09	Greenburgh - West	*0.365*	*0.365*	*0.183*	*0.365*	*0.183*
EG-49	SB22280-03	Greenburgh - West	*0.412*	*0.412*	*0.206*	*0.412*	*0.206*

Eastview Site
NYCDEP Project CAT-210WL
Greenburgh and Mount Pleasant, New York

CONTAMINANTS: **SEMI VOLATILES**
Organized by: Site

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	Phenol	Pyrene	NYSDEC CLASSIFICATION FOR DISPOSAL OR AND/OR RE-USE
NYSDEC UNRESTRICTED USE CRITERIA (ppm)	**0.33**	**100**	
NYSDEC RESIDENTIAL SCO (ppm)	**100**	**100**	
NYSDEC RESTRICTED RESIDENTIAL SCO (ppm)	**100**	**100**	
NYSDEC COMMERCIAL SCO (ppm)	**500**	**500**	

CELL	LAB ID	SITE	Phenol	Pyrene	NYSDEC CLASSIFICATION FOR DISPOSAL OR AND/OR RE-USE
EG-1	SB22338-13	Greenburgh - West	*0.403*	*0.202*	Unrestricted
EG-91	SB22338-15	Greenburgh - West	*0.411*	*0.205*	Unrestricted
EG-2	SB22338-11	Greenburgh - West	*0.410*	*0.205*	Unrestricted
EG-3	SB22338-09	Greenburgh - West	*0.441*	*0.220*	Unrestricted
EG-4	SB22279-18	Greenburgh - West	*0.408*	*0.204*	Unrestricted
EG-6	SB22338-01	Greenburgh - West	*0.392*	*0.192*	Unrestricted
EG-9	SB22338-03	Greenburgh - West	*0.401*	*0.201*	Unrestricted
EG-10	SB22279-04	Greenburgh - West	*0.383*	*0.192*	Unrestricted
EG-14	SB22338-05	Greenburgh - West	*0.396*	*0.198*	Unrestricted
EG-914	SB22338-07	Greenburgh - West	*0.398*	*0.197*	Unrestricted
EG-15	SB22279-16	Greenburgh - West	*0.366*	*0.183*	Unrestricted
EG-18	SB22279-20	Greenburgh - West	*0.393*	*0.196*	Unrestricted
EG-19	SB22279-02	Greenburgh - West	*0.375*	*0.187*	Unrestricted
EG-26	SB22280-01	Greenburgh - West	*0.389*	*0.195*	Unrestricted
EG-27	SB22280-07	Greenburgh - West	0.409	*0.205*	Unrestricted
EG-28	SB22280-05	Greenburgh - West	*0.371*	*0.185*	Unrestricted
EG-43	SB22279-12	Greenburgh - West	*0.393*	*0.197*	Unrestricted
EG-44	SB22279-14	Greenburgh - West	*0.393*	*0.197*	Unrestricted
EG-45	SB22279-10	Greenburgh - West	*0.381*	*0.190*	Unrestricted
EG-46	SB22279-08	Greenburgh - West	*0.394*	*0.197*	Unrestricted
EG-47	SB22279-06	Greenburgh - West	*0.398*	*0.199*	Unrestricted
EG-48	SB22280-09	Greenburgh - West	*0.365*	*0.183*	Unrestricted
EG-49	SB22280-03	Greenburgh - West	*0.412*	*0.206*	Unrestricted

DEFINITIONS

WASTE CATEGORIZATIONS

Unregulated	All Contaminants Are Found to Be Below NYSDEC Part 375-6.8 (a) - Unrestricted Use Criteria
Meets Residential SCO	All Contaminants Are Found to Be Below NYSDEC Part 375-6.8 (b) - Residential Cleanup Objective
Meets Restricted- Residential SCO	All Contaminants Are Found to Be Below NYSDEC Part 375-6.8 (b) - Restricted-Residential Cleanup Objective
Meets Commericial SCO	All Contaminants Are Found to Be Below NYSDEC Part 375-6.8 (b) - Commercial Cleanup Objective

NYSDEC PART 375-6.8(a) – VOC COMPOSITES

Eastview Site
NYCDEP Project CAT-210WL
Greenburgh and Mount Pleasant, New York

CONTAMINANTS: **VOC COMPOSITES**
Organized by: Site

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	Acetone	**Benzene**	**2-Butanone (MEK)**	**n-Butylbenzene**	**sec-Butylbenzene**	**tert-Butylbenzene**	**Carbon tetrachloride**
NYSDEC UNRESTRICTED USE CRITERIA (ppm)	**0.05**	**0.06**	**0.12**	**12**	**11**	**5.9**	**0.76**
NYSDEC RESIDENTIAL SCO (ppm)	**100**	**2.9**	**100**	**100**	**100**	**100**	**1.4**
NYSDEC RESTRICTED RESIDENTIAL SCO (ppm)	**100**	**4.8**	**100**	**100**	**100**	**100**	**2.4**
NYSDEC COMMERCIAL SCO (ppm)	**500**	**44**	**500**	**500**	**500**	**500**	**22**

CELL ID	**LAB ID**	**SITE**							
EG-1	SB22338-13	Greenburgh - West	*0.0583*	*0.0058*	*0.0583*	*0.0058*	*0.0058*	*0.0058*	*0.0058*
EG-91	SB22338-15	Greenburgh - West	*0.068*	*0.0068*	*0.068*	*0.0068*	*0.0068*	*0.0068*	*0.0068*
EG-2	SB22338-11	Greenburgh - West	*0.0747*	*0.0075*	*0.0747*	*0.0075*	*0.0075*	*0.0075*	*0.0075*
EG-3	SB22338-09	Greenburgh - West	*0.0688*	*0.0069*	*0.0688*	*0.0069*	*0.0069*	*0.0069*	*0.0069*
EG-4	SB22279-18	Greenburgh - West	*0.0659*	*0.0066*	*0.0659*	*0.0066*	*0.0066*	*0.0066*	*0.0066*
EG-6	SB22338-01	Greenburgh - West	*0.067*	*0.0067*	*0.067*	*0.0067*	*0.0067*	*0.0067*	*0.0067*
EG-9	SB22338-03	Greenburgh - West	*0.0713*	*0.0071*	*0.0713*	*0.0071*	*0.0071*	*0.0071*	*0.0071*
EG-10	SB22279-04	Greenburgh - West	*0.068*	*0.0068*	*0.068*	*0.0068*	*0.0068*	*0.0068*	*0.0068*
EG-14	SB22338-05	Greenburgh - West	*0.0598*	*0.006*	*0.0598*	*0.006*	*0.006*	*0.006*	*0.006*
EG-914	SB22338-07	Greenburgh - West	*0.0665*	*0.0067*	*0.0665*	*0.0067*	*0.0067*	*0.0067*	*0.0067*
EG-15	SB22279-16	Greenburgh - West	*0.0566*	*0.0057*	*0.0566*	*0.0057*	*0.0057*	*0.0057*	*0.0057*
EG-18	SB22279-20	Greenburgh - West	0.065	*0.0065*	*0.065*	*0.0065*	*0.0065*	*0.0065*	*0.0065*
EG-19	SB22279-02	Greenburgh - West	*0.0451*	*0.0045*	*0.0451*	*0.0045*	*0.0045*	*0.0045*	*0.0045*
EG-26	SB22280-01	Greenburgh - West	*0.069*	*0.0069*	*0.069*	*0.0069*	*0.0069*	*0.0069*	*0.0069*
EG-27	SB22280-07	Greenburgh - West	*0.0631*	*0.0063*	*0.0631*	*0.0063*	*0.0063*	*0.0063*	*0.0063*
EG-28	SB22280-05	Greenburgh - West	*0.05*	*0.005*	*0.05*	*0.005*	*0.005*	*0.005*	*0.005*
EG-43	SB22279-12	Greenburgh - West	*0.0669*	*0.0067*	*0.0669*	*0.0067*	*0.0067*	*0.0067*	*0.0067*
EG-44	SB22279-14	Greenburgh - West	*0.0487*	*0.0049*	*0.0487*	*0.0049*	*0.0049*	*0.0049*	*0.0049*
EG-45	SB22279-10	Greenburgh - West	*0.0594*	*0.0059*	*0.0594*	*0.0059*	*0.0059*	*0.0059*	*0.0059*
EG-46	SB22279-08	Greenburgh - West	*0.0628*	*0.0063*	*0.0628*	*0.0063*	*0.0063*	*0.0063*	*0.0063*
EG-47	SB22279-06	Greenburgh - West	*0.0682*	*0.0068*	*0.0682*	*0.0068*	*0.0068*	*0.0068*	*0.0068*
EG-48	SB22280-09	Greenburgh - West	*0.0485*	*0.0048*	*0.0485*	*0.0048*	*0.0048*	*0.0048*	*0.0048*
EG-49	SB22280-03	Greenburgh - West	*0.0776*	*0.0078*	*0.0776*	*0.0078*	*0.0078*	*0.0078*	*0.0078*

Eastview Site

NYCDEP Project CAT-210WL

Greenburgh and Mount Pleasant, New York

CONTAINMANTS: **VOC COMPOSITES**

Organized by: Site

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			Chlorobenzene	**Chloroform**	**1,2-Dichlorobenzene**	**1,3-Dichlorobenzene**	**1,1-Dichloroethane**	**1,2-Dichloroethane**
NYSDEC UNRESTRICTED USE CRITERIA (ppm)			**1.1**	**0.37**	**1.1**	**2.4**	**0.27**	**0.02**
NYSDEC RESIDENTIAL SCO (ppm)			**100**	**10**	**100**	**17**	**19**	**2.3**
NYSDEC RESTRICTED RESIDENTIAL SCO (ppm)			**100**	**49**	**100**	**49**	**26**	**3.1**
NYSDEC COMMERCIAL SCO (ppm)			**500**	**350**	**500**	**280**	**240**	**30**
CELL	**LAB ID**	**SITE**						
EG-1	SB22338-13	Greenburgh - West	*0.0058*	*0.0058*	*0.0058*	*0.0058*	*0.0058*	*0.0058*
EG-91	SB22338-15	Greenburgh - West	*0.0068*	*0.0068*	*0.0068*	*0.0068*	*0.0068*	*0.0068*
EG-2	SB22338-11	Greenburgh - West	*0.0075*	*0.0075*	*0.0075*	*0.0075*	*0.0075*	*0.0075*
EG-3	SB22338-09	Greenburgh - West	*0.0069*	*0.0069*	*0.0069*	*0.0069*	*0.0069*	*0.0069*
EG-4	SB22279-18	Greenburgh - West	*0.0066*	*0.0066*	*0.0066*	*0.0066*	*0.0066*	*0.0066*
EG-6	SB22338-01	Greenburgh - West	*0.0067*	*0.0067*	*0.0067*	*0.0067*	*0.0067*	*0.0067*
EG-9	SB22338-03	Greenburgh - West	*0.0071*	*0.0071*	*0.0071*	*0.0071*	*0.0071*	*0.0071*
EG-10	SB22279-04	Greenburgh - West	*0.0068*	*0.0068*	*0.0068*	*0.0068*	*0.0068*	*0.0068*
EG-14	SB22338-05	Greenburgh - West	*0.006*	*0.006*	*0.006*	*0.006*	*0.006*	*0.006*
EG-914	SB22338-07	Greenburgh - West	*0.0067*	*0.0067*	*0.0067*	*0.0067*	*0.0067*	*0.0067*
EG-15	SB22279-16	Greenburgh - West	*0.0057*	*0.0057*	*0.0057*	*0.0057*	*0.0057*	*0.0057*
EG-18	SB22279-20	Greenburgh - West	*0.0065*	*0.0065*	*0.0065*	*0.0065*	*0.0065*	*0.0065*
EG-19	SB22279-02	Greenburgh - West	*0.0045*	*0.0045*	*0.0045*	*0.0045*	*0.0045*	*0.0045*
EG-26	SB22280-01	Greenburgh - West	*0.0069*	*0.0069*	*0.0069*	*0.0069*	*0.0069*	*0.0069*
EG-27	SB22280-07	Greenburgh - West	*0.0063*	*0.0063*	*0.0063*	*0.0063*	*0.0063*	*0.0063*
EG-28	SB22280-05	Greenburgh - West	*0.005*	*0.005*	*0.005*	*0.005*	*0.005*	*0.005*
EG-43	SB22279-12	Greenburgh - West	*0.0067*	*0.0067*	*0.0067*	*0.0067*	*0.0067*	*0.0067*
EG-44	SB22279-14	Greenburgh - West	*0.0049*	*0.0049*	*0.0049*	*0.0049*	*0.0049*	*0.0049*
EG-45	SB22279-10	Greenburgh - West	*0.0059*	*0.0059*	*0.0059*	*0.0059*	*0.0059*	*0.0059*
EG-46	SB22279-08	Greenburgh - West	*0.0063*	*0.0063*	*0.0063*	*0.0063*	*0.0063*	*0.0063*
EG-47	SB22279-06	Greenburgh - West	*0.0068*	*0.0068*	*0.0068*	*0.0068*	*0.0068*	*0.0068*
EG-48	SB22280-09	Greenburgh - West	*0.0048*	*0.0048*	*0.0048*	*0.0048*	*0.0048*	*0.0048*
EG-49	SB22280-03	Greenburgh - West	*0.0078*	*0.0078*	*0.0078*	*0.0078*	*0.0078*	*0.0078*

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			1,1-Dichloroethene	**cis-1,2-Dichloroethene**	**trans-1,2-Dichloroethene**	**Ethylbenzene**	**Methyl tert-butyl ether**	**Methylene Chloride**
NYSDEC UNRESTRICTED USE CRITERIA (ppm)			**0.33**	**0.25**	**0.19**	**1**	**0.93**	**0.05**
NYSDEC RESIDENTIAL SCO (ppm)			**100**	**59**	**100**	**30**	**62**	**51**
NYSDEC RESTRICTED RESIDENTIAL SCO (ppm)			**100**	**100**	**100**	**41**	**100**	**100**
NYSDEC COMMERCIAL SCO (ppm)			**500**	**500**	**500**	**390**	**500**	**500**
CELL	**LAB ID**	**SITE**						
EG-1	SB22338-13	Greenburgh - West	*0.0058*	*0.0058*	*0.0058*	*0.0058*	*0.0058*	*0.0117*
EG-91	SB22338-15	Greenburgh - West	*0.0068*	*0.0068*	*0.0068*	*0.0068*	*0.0068*	*0.0136*
EG-2	SB22338-11	Greenburgh - West	*0.0075*	*0.0075*	*0.0075*	*0.0075*	*0.0075*	*0.0149*
EG-3	SB22338-09	Greenburgh - West	*0.0069*	*0.0069*	*0.0069*	*0.0069*	*0.0069*	*0.0138*
EG-4	SB22279-18	Greenburgh - West	*0.0066*	*0.0066*	*0.0066*	*0.0066*	*0.0066*	*0.0132*
EG-6	SB22338-01	Greenburgh - West	*0.0067*	*0.0067*	*0.0067*	*0.0067*	*0.0067*	*0.0134*
EG-9	SB22338-03	Greenburgh - West	*0.0071*	*0.0071*	*0.0071*	*0.0071*	*0.0071*	*0.0143*
EG-10	SB22279-04	Greenburgh - West	*0.0068*	*0.0068*	*0.0068*	*0.0068*	*0.0068*	*0.0136*
EG-14	SB22338-05	Greenburgh - West	*0.006*	*0.006*	*0.006*	*0.006*	*0.006*	*0.012*
EG-914	SB22338-07	Greenburgh - West	*0.0067*	*0.0067*	*0.0067*	*0.0067*	*0.0067*	*0.0133*
EG-15	SB22279-16	Greenburgh - West	*0.0057*	*0.0057*	*0.0057*	*0.0057*	*0.0057*	*0.0113*
EG-18	SB22279-20	Greenburgh - West	*0.0065*	*0.0065*	*0.0065*	*0.0065*	*0.0065*	*0.013*
EG-19	SB22279-02	Greenburgh - West	*0.0045*	*0.0045*	*0.0045*	*0.0045*	*0.0045*	*0.009*
EG-26	SB22280-01	Greenburgh - West	*0.0069*	*0.0069*	*0.0069*	*0.0069*	*0.0069*	*0.0138*
EG-27	SB22280-07	Greenburgh - West	*0.0063*	*0.0063*	*0.0063*	*0.0063*	*0.0063*	*0.0126*
EG-28	SB22280-05	Greenburgh - West	*0.005*	*0.005*	*0.005*	*0.005*	*0.005*	*0.010*
EG-43	SB22279-12	Greenburgh - West	*0.0067*	*0.0067*	*0.0067*	*0.0067*	*0.0067*	*0.0134*
EG-44	SB22279-14	Greenburgh - West	*0.0049*	*0.0049*	*0.0049*	*0.0049*	*0.0049*	*0.0097*
EG-45	SB22279-10	Greenburgh - West	*0.0059*	*0.0059*	*0.0059*	*0.0059*	*0.0059*	*0.0119*
EG-46	SB22279-08	Greenburgh - West	*0.0063*	*0.0063*	*0.0063*	*0.0063*	*0.0063*	*0.0126*
EG-47	SB22279-06	Greenburgh - West	*0.0068*	*0.0068*	*0.0068*	*0.0068*	*0.0068*	*0.0136*
EG-48	SB22280-09	Greenburgh - West	*0.0048*	*0.0048*	*0.0048*	*0.0048*	*0.0048*	*0.0097*
EG-49	SB22280-03	Greenburgh - West	*0.0078*	*0.0078*	*0.0078*	*0.0078*	*0.0078*	*0.0155*

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			n-Propylbenzene	**Tetrachloroethene**	**Toluene**	**1,1,1-Trichloroethane**	**1,2,4-Trimethylbenzene**
NYSDEC UNRESTRICTED USE CRITERIA (ppm)			**3.9**	**1.3**	**0.7**	**0.68**	**3.6**
NYSDEC RESIDENTIAL SCO (ppm)			**100**	**10**	**100**	**100**	**47**
NYSDEC RESTRICTED RESIDENTIAL SCO (ppm)			**100**	**21**	**100**	**100**	**52**
NYSDEC COMMERCIAL SCO (ppm)			**500**	**200**	**500**	**500**	**190**
CELL	**LAB ID**	**SITE**					
EG-1	SB22338-13	Greenburgh - West	*0.0058*	*0.0058*	*0.0058*	*0.0058*	*0.0058*
EG-91	SB22338-15	Greenburgh - West	*0.0068*	*0.0068*	*0.0068*	*0.0068*	*0.0068*
EG-2	SB22338-11	Greenburgh - West	*0.0075*	*0.0075*	*0.0075*	*0.0075*	*0.0075*
EG-3	SB22338-09	Greenburgh - West	*0.0069*	*0.0069*	*0.0069*	*0.0069*	*0.0069*
EG-4	SB22279-18	Greenburgh - West	*0.0066*	*0.0066*	*0.0066*	*0.0066*	*0.0066*
EG-6	SB22338-01	Greenburgh - West	*0.0067*	*0.0067*	*0.0067*	*0.0067*	*0.0067*
EG-9	SB22338-03	Greenburgh - West	*0.0071*	*0.0071*	*0.0071*	*0.0071*	*0.0071*
EG-10	SB22279-04	Greenburgh - West	*0.0068*	*0.0068*	*0.0068*	*0.0068*	*0.0068*
EG-14	SB22338-05	Greenburgh - West	*0.006*	*0.006*	*0.006*	*0.006*	*0.006*
EG-914	SB22338-07	Greenburgh - West	*0.0067*	*0.0067*	*0.0067*	*0.0067*	*0.0067*
EG-15	SB22279-16	Greenburgh - West	*0.0057*	*0.0057*	*0.0057*	*0.0057*	*0.0057*
EG-18	SB22279-20	Greenburgh - West	*0.0065*	*0.0065*	*0.0065*	*0.0065*	*0.0065*
EG-19	SB22279-02	Greenburgh - West	*0.0045*	*0.0045*	*0.0045*	*0.0045*	*0.0045*
EG-26	SB22280-01	Greenburgh - West	*0.0069*	*0.0069*	*0.0069*	*0.0069*	*0.0069*
EG-27	SB22280-07	Greenburgh - West	*0.0063*	*0.0063*	*0.0063*	*0.0063*	*0.0063*
EG-28	SB22280-05	Greenburgh - West	*0.005*	*0.005*	*0.005*	*0.005*	*0.005*
EG-43	SB22279-12	Greenburgh - West	*0.0067*	*0.0067*	*0.0067*	*0.0067*	*0.0067*
EG-44	SB22279-14	Greenburgh - West	*0.0049*	*0.0049*	*0.0049*	*0.0049*	*0.0049*
EG-45	SB22279-10	Greenburgh - West	*0.0059*	*0.0059*	*0.0059*	*0.0059*	*0.0059*
EG-46	SB22279-08	Greenburgh - West	*0.0063*	*0.0063*	*0.0063*	*0.0063*	*0.0063*
EG-47	SB22279-06	Greenburgh - West	*0.0068*	*0.0068*	*0.0068*	*0.0068*	*0.0068*
EG-48	SB22280-09	Greenburgh - West	*0.0048*	*0.0048*	*0.0048*	*0.0048*	*0.0048*
EG-49	SB22280-03	Greenburgh - West	*0.0078*	*0.0078*	*0.0078*	*0.0078*	*0.0078*

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			1,3,5-Trimethylbenzene	**Vinyl chloride**	**Xylene**	**1,4-Dioxane**	**NYSDEC CLASSIFICATION BASED ON CLEANUP OBJECTIVES**
NYSDEC UNRESTRICTED USE CRITERIA (ppm)			**8.4**	**0.02**	**0.26**	**0.1**	
NYSDEC RESIDENTIAL SCO (ppm)			**47**	**0.21**	**100**	**9.8**	
NYSDEC RESTRICTED RESIDENTIAL SCO (ppm)			**52**	**0.9**	**100**	**13**	
NYSDEC COMMERCIAL SCO (ppm)			**190**	**13**	**500**	**130**	
CELL	**LAB ID**	**SITE**					
EG-1	SB22338-13	Greenburgh - West	*0.0058*	*0.0058*	*0.0117*	*0.117*	Unrestricted
EG-91	SB22338-15	Greenburgh - West	*0.0068*	*0.0068*	*0.0136*	*0.136*	Unrestricted
EG-2	SB22338-11	Greenburgh - West	*0.0075*	*0.0075*	*0.0149*	*0.149*	Unrestricted
EG-3	SB22338-09	Greenburgh - West	*0.0069*	*0.0069*	*0.0138*	*0.138*	Unrestricted
EG-4	SB22279-18	Greenburgh - West	*0.0066*	*0.0066*	*0.0132*	*0.132*	Unrestricted
EG-6	SB22338-01	Greenburgh - West	*0.0067*	*0.0067*	*0.0134*	*0.134*	Unrestricted
EG-9	SB22338-03	Greenburgh - West	*0.0071*	*0.0071*	*0.0143*	*0.143*	Unrestricted
EG-10	SB22279-04	Greenburgh - West	*0.0068*	*0.0068*	*0.0136*	*0.136*	Unrestricted
EG-14	SB22338-05	Greenburgh - West	*0.006*	*0.006*	*0.012*	*0.120*	Unrestricted
EG-914	SB22338-07	Greenburgh - West	*0.0067*	*0.0067*	*0.0133*	*0.133*	Unrestricted
EG-15	SB22279-16	Greenburgh - West	*0.0057*	*0.0057*	*0.0113*	*0.113*	Unrestricted
EG-18	SB22279-20	Greenburgh - West	*0.0065*	*0.0065*	*0.013*	*0.130*	Unrestricted
EG-19	SB22279-02	Greenburgh - West	*0.0045*	*0.0045*	*0.009*	*0.092*	Unrestricted
EG-26	SB22280-01	Greenburgh - West	*0.0069*	*0.0069*	*0.0138*	*0.138*	Unrestricted
EG-27	SB22280-07	Greenburgh - West	*0.0063*	*0.0063*	*0.0126*	*0.126*	Unrestricted
EG-28	SB22280-05	Greenburgh - West	*0.005*	*0.005*	*0.01*	*0.1*	Unrestricted
EG-43	SB22279-12	Greenburgh - West	*0.0067*	*0.0067*	*0.0134*	*0.134*	Unrestricted
EG-44	SB22279-14	Greenburgh - West	*0.0049*	*0.0049*	*0.0097*	*0.0974*	Unrestricted
EG-45	SB22279-10	Greenburgh - West	*0.0059*	*0.0059*	*0.0119*	*0.119*	Unrestricted
EG-46	SB22279-08	Greenburgh - West	*0.0063*	*0.0063*	*0.0126*	*0.126*	Unrestricted
EG-47	SB22279-06	Greenburgh - West	*0.0068*	*0.0068*	*0.0136*	*0.136*	Unrestricted
EG-48	SB22280-09	Greenburgh - West	*0.0048*	*0.0048*	*0.0097*	*0.0969*	Unrestricted
EG-49	SB22280-03	Greenburgh - West	*0.0078*	*0.0078*	*0.0155*	*0.155*	Unrestricted

DEFINITIONS

WASTE CATEGORIZATIONS

Unrestricted	All Contaminants Are Found to Be Below NYSDEC Part 375-6.8 (a) - Unrestricted Use Criteria or are Not Detected
Meets Residential SCO	All Contaminants Are Found to Be Below NYSDEC Part 375-6.8 (b) - Residential Cleanup Objective
Meets Restricted- Residential SCO	All Contaminants Are Found to Be Below NYSDEC Part 375-6.8 (b) - Restricted-Residential Cleanup Objective
Meets Commericial SCO	All Contaminants Are Found to Be Below NYSDEC Part 375-6.8 (b) - Commercial Cleanup Objective

NYSDEC PART 375-6.8(a) – VOC GRABS

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				Acetone	**Benzene**	**2-Butanone (MEK)**	**n-Butylbenzene**	**sec-Butylbenzene**	**tert-Butylbenzene**
NYSDEC UNRESTRICTED USE CRITERIA (ppm)				**0.05**	**0.06**	**0.12**	**12**	**11**	**5.9**
NYSDEC RESIDENTIAL SCO (ppm)				**100**	**2.9**	**100**	**100**	**100**	**100**
NYSDEC RESTRICTED RESIDENTIAL SCO (ppm)				**100**	**4.8**	**100**	**100**	**100**	**100**
NYSDEC COMMERCIAL SCO (ppm)				**500**	**44**	**500**	**500**	**500**	**500**
CELL ID	**GRAB INTERVAL**	**LAB ID**	**SITE**						
EG-1A	(0' - 1')	SB22338-13	Greenburgh - West	*0.0608*	*0.0061*	*0.0608*	*0.0061*	*0.0061*	*0.0061*
EG-91A	(0' - 1')	SB22338-15	Greenburgh - West	*0.0635*	*0.0063*	*0.0635*	*0.0063*	*0.0063*	*0.0063*
EG-2B	(1' - 2')	SB22338-11	Greenburgh - West	*0.074*	*0.0074*	*0.074*	*0.0074*	*0.0074*	*0.0074*
EG-3E	(0' - 1')	SB22338-09	Greenburgh - West	*0.0895*	*0.009*	*0.0895*	*0.009*	*0.009*	*0.009*
EG-4B	(3' - 4')	SB22279-18	Greenburgh - West	*0.0477*	*0.0048*	*0.0477*	*0.0048*	*0.0048*	*0.0048*
EG-6B	(2' - 3')	SB22338-01	Greenburgh - West	*0.0789*	*0.0079*	*0.0789*	*0.0079*	*0.0079*	*0.0079*
EG-9A	(1' - 2')	SB22338-03	Greenburgh - West	*0.0655*	*0.0066*	*0.0655*	*0.0066*	*0.0066*	*0.0066*
EG-10A	(1' - 2')	SB22279-04	Greenburgh - West	*0.0781*	*0.0078*	*0.0781*	*0.0078*	*0.0078*	*0.0078*
EG-14A	(1' - 2')	SB22338-05	Greenburgh - West	*0.0603*	*0.006*	*0.0603*	*0.006*	*0.006*	*0.006*
EG-914A	(0' - 1')	SB22338-07	Greenburgh - West	*0.0641*	*0.0064*	*0.0641*	*0.0064*	*0.0064*	*0.0064*
EG-15A**	(1' - 2')	SB22279-16	Greenburgh - West	*0.0612*	*0.0061*	*0.0612*	*0.0061*	*0.0061*	*0.0061*
EG-18B	(0' - 1')	SB22279-20	Greenburgh - West	*0.0605*	*0.0061*	*0.0605*	*0.0061*	*0.0061*	*0.0061*
EG-19B	(0' - 1')	SB22279-02	Greenburgh - West	*0.0613*	*0.0061*	*0.0613*	*0.0061*	*0.0061*	*0.0061*
EG-26D	(0' - 1')	SB22280-01	Greenburgh - West	*0.0616*	*0.0062*	*0.0616*	*0.0062*	*0.0062*	*0.0062*
EG-27B	(0' - 1')	SB22280-07	Greenburgh - West	*0.0606*	*0.0061*	*0.0606*	*0.0061*	*0.0061*	*0.0061*
EG-28A	(0' - 1')	SB22280-05	Greenburgh - West	*0.0628*	*0.0063*	*0.0628*	*0.0063*	*0.0063*	*0.0063*
EG-43D	(1' - 2')	SB22279-12	Greenburgh - West	*0.0552*	*0.0055*	*0.0552*	*0.0055*	*0.0055*	*0.0055*
EG-44B*	(1' - 2')	SB22279-14	Greenburgh - West	*0.0522*	*0.0052*	*0.0522*	*0.0052*	*0.0052*	*0.0052*
EG-45A	(0' - 1')	SB22279-10	Greenburgh - West	*0.0658*	*0.0066*	*0.0658*	*0.0066*	*0.0066*	*0.0066*
EG-46B	(1' - 2')	SB22279-08	Greenburgh - West	*0.0615*	*0.0062*	*0.0615*	*0.0062*	*0.0062*	*0.0062*
EG-47A	(3' - 4')	SB22279-06	Greenburgh - West	*0.0532*	*0.0053*	*0.0532*	*0.0053*	*0.0053*	*0.0053*
EG-48A	(2' - 3')	SB22280-09	Greenburgh - West	*0.0491*	*0.0049*	*0.0491*	*0.0049*	*0.0049*	*0.0049*
EG-49C	(1' - 2')	SB22280-03	Greenburgh - West	*0.0747*	*0.0075*	*0.0747*	*0.0075*	*0.0075*	*0.0075*

Eastview Site
NYCDEP Project CAT-210WL
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CONTAMINANTS: **VOC GRABS**
Organized by: Site

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				Carbon tetrachloride	**Chlorobenzene**	**Chloroform**	**1,2-Dichlorobenzene**	**1,3-Dichlorobenzene**
NYSDEC UNRESTRICTED USE CRITERIA (ppm)				**0.76**	**1.1**	**0.37**	**1.1**	**2.4**
NYSDEC RESIDENTIAL SCO (ppm)				**1.4**	**100**	**10**	**100**	**17**
NYSDEC RESTRICTED RESIDENTIAL SCO (ppm)				**2.4**	**100**	**49**	**100**	**49**
NYSDEC COMMERCIAL SCO (ppm)				**22**	**500**	**350**	**500**	**280**
CELL	**GRAB INTERVAL**	**LAB ID**	**SITE**					
EG-1A	(0' - 1')	SB22338-13	Greenburgh - West	*0.0061*	*0.0061*	*0.0061*	*0.0061*	*0.0061*
EG-91A	(0' - 1')	SB22338-15	Greenburgh - West	*0.0063*	*0.0063*	*0.0063*	*0.0063*	*0.0063*
EG-2B	(1' - 2')	SB22338-11	Greenburgh - West	*0.0074*	*0.0074*	*0.0074*	*0.0074*	*0.0074*
EG-3E	(0' - 1')	SB22338-09	Greenburgh - West	*0.009*	*0.009*	*0.009*	*0.009*	*0.009*
EG-4B	(3' - 4')	SB22279-18	Greenburgh - West	*0.0048*	*0.0048*	*0.0048*	*0.0048*	*0.0048*
EG-6B	(2' - 3')	SB22338-01	Greenburgh - West	*0.0079*	*0.0079*	*0.0079*	*0.0079*	*0.0079*
EG-9A	(1' - 2')	SB22338-03	Greenburgh - West	*0.0066*	*0.0066*	*0.0066*	*0.0066*	*0.0066*
EG-10A	(1' - 2')	SB22279-04	Greenburgh - West	*0.0078*	*0.0078*	*0.0078*	*0.0078*	*0.0078*
EG-14A	(1' - 2')	SB22338-05	Greenburgh - West	*0.006*	*0.006*	*0.006*	*0.006*	*0.006*
EG-914A	(0' - 1')	SB22338-07	Greenburgh - West	*0.0064*	*0.0064*	*0.0064*	*0.0064*	*0.0064*
EG-15A**	(1' - 2')	SB22279-16	Greenburgh - West	*0.0061*	*0.0061*	*0.0061*	*0.0061*	*0.0061*
EG-18B	(0' - 1')	SB22279-20	Greenburgh - West	*0.0061*	*0.0061*	*0.0061*	*0.0061*	*0.0061*
EG-19B	(0' - 1')	SB22279-02	Greenburgh - West	*0.0061*	*0.0061*	*0.0061*	*0.0061*	*0.0061*
EG-26D	(0' - 1')	SB22280-01	Greenburgh - West	*0.0062*	*0.0062*	*0.0062*	*0.0062*	*0.0062*
EG-27B	(0' - 1')	SB22280-07	Greenburgh - West	*0.0061*	*0.0061*	*0.0061*	*0.0061*	*0.0061*
EG-28A	(0' - 1')	SB22280-05	Greenburgh - West	*0.0063*	*0.0063*	*0.0063*	*0.0063*	*0.0063*
EG-43D	(1' - 2')	SB22279-12	Greenburgh - West	*0.0055*	*0.0055*	*0.0055*	*0.0055*	*0.0055*
EG-44D*	(1' - 2')	SB22279-14	Greenburgh - West	*0.0052*	*0.0052*	*0.0052*	*0.0052*	*0.0052*
EG-45A	(0' - 1')	SB22279-10	Greenburgh - West	*0.0066*	*0.0066*	*0.0066*	*0.0066*	*0.0066*
EG-46B	(1' - 2')	SB22279-08	Greenburgh - West	*0.0062*	*0.0062*	*0.0062*	*0.0062*	*0.0062*
EG-47A	(3' - 4')	SB22279-06	Greenburgh - West	*0.0053*	*0.0053*	*0.0053*	*0.0053*	*0.0053*
EG-48A	(2' - 3')	SB22280-09	Greenburgh - West	*0.0049*	*0.0049*	*0.0049*	*0.0049*	*0.0049*
EG-49C	(1' - 2')	SB22280-03	Greenburgh - West	*0.0075*	*0.0075*	*0.0075*	*0.0075*	*0.0075*

Eastview Site
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				1,1-Dichloroethane	**1,2-Dichloroethane**	**1,1-Dichloroethene**	**cis-1,2-Dichloroethene**	**trans-1,2-Dichloroethene**
NYSDEC UNRESTRICTED USE CRITERIA (ppm)				**0.27**	**0.02**	**0.33**	**0.25**	**0.19**
NYSDEC RESIDENTIAL SCO (ppm)				**19**	**2.3**	**100**	**59**	**100**
NYSDEC RESTRICTED RESIDENTIAL SCO (ppm)				**26**	**3.1**	**100**	**100**	**100**
NYSDEC COMMERCIAL SCO (ppm)				**240**	**30**	**500**	**500**	**500**
CELL	**GRAB INTERVAL**	**LAB ID**	**SITE**					
EG-1A	(0' - 1')	SB22338-13	Greenburgh - West	*0.0061*	*0.0061*	*0.0061*	*0.0061*	*0.0061*
EG-91A	(0' - 1')	SB22338-15	Greenburgh - West	*0.0063*	*0.0063*	*0.0063*	*0.0063*	*0.0063*
EG-2B	(1' - 2')	SB22338-11	Greenburgh - West	*0.0074*	*0.0074*	*0.0074*	*0.0074*	*0.0074*
EG-3E	(0' - 1')	SB22338-09	Greenburgh - West	*0.009*	*0.009*	*0.009*	*0.009*	*0.009*
EG-4B	(3' - 4')	SB22279-18	Greenburgh - West	*0.0048*	*0.0048*	*0.0048*	*0.0048*	*0.0048*
EG-6B	(2' - 3')	SB22338-01	Greenburgh - West	*0.0079*	*0.0079*	*0.0079*	*0.0079*	*0.0079*
EG-9A	(1' - 2')	SB22338-03	Greenburgh - West	*0.0066*	*0.0066*	*0.0066*	*0.0066*	*0.0066*
EG-10A	(1' - 2')	SB22279-04	Greenburgh - West	*0.0078*	*0.0078*	*0.0078*	*0.0078*	*0.0078*
EG-14A	(1' - 2')	SB22338-05	Greenburgh - West	*0.006*	*0.006*	*0.006*	*0.006*	*0.006*
EG-914A	(0' - 1')	SB22338-07	Greenburgh - West	*0.0064*	*0.0064*	*0.0064*	*0.0064*	*0.0064*
EG-15A**	(1' - 2')	SB22279-16	Greenburgh - West	*0.0061*	*0.0061*	*0.0061*	*0.0061*	*0.0061*
EG-18B	(0' - 1')	SB22279-20	Greenburgh - West	*0.0061*	*0.0061*	*0.0061*	*0.0061*	*0.0061*
EG-19B	(0' - 1')	SB22279-02	Greenburgh - West	*0.0061*	*0.0061*	*0.0061*	*0.0061*	*0.0061*
EG-26D	(0' - 1')	SB22280-01	Greenburgh - West	*0.0062*	*0.0062*	*0.0062*	*0.0062*	*0.0062*
EG-27B	(0' - 1')	SB22280-07	Greenburgh - West	*0.0061*	*0.0061*	*0.0061*	*0.0061*	*0.0061*
EG-28A	(0' - 1')	SB22280-05	Greenburgh - West	*0.0063*	*0.0063*	*0.0063*	*0.0063*	*0.0063*
EG-43D	(1' - 2')	SB22279-12	Greenburgh - West	*0.0055*	*0.0055*	*0.0055*	*0.0055*	*0.0055*
EG-44D*	(1' - 2')	SB22279-14	Greenburgh - West	*0.0052*	*0.0052*	*0.0052*	*0.0052*	*0.0052*
EG-45A	(0' - 1')	SB22279-10	Greenburgh - West	*0.0066*	*0.0066*	*0.0066*	*0.0066*	*0.0066*
EG-46B	(1' - 2')	SB22279-08	Greenburgh - West	*0.0062*	*0.0062*	*0.0062*	*0.0062*	*0.0062*
EG-47A	(3' - 4')	SB22279-06	Greenburgh - West	*0.0053*	*0.0053*	*0.0053*	*0.0053*	*0.0053*
EG-48A	(2' - 3')	SB22280-09	Greenburgh - West	*0.0049*	*0.0049*	*0.0049*	*0.0049*	*0.0049*
EG-49C	(1' - 2')	SB22280-03	Greenburgh - West	*0.0075*	*0.0075*	*0.0075*	*0.0075*	*0.0075*

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	Ethylbenzene	Methyl tert-butyl ether	Methylene Chloride	n-Propylbenzene	Tetrachloroethene	Toluene
NYSDEC UNRESTRICTED USE CRITERIA (ppm)	**1**	**0.93**	**0.05**	**3.9**	**1.3**	**0.7**
NYSDEC RESIDENTIAL SCO (ppm)	**30**	**62**	**51**	**100**	**10**	**100**
NYSDEC RESTRICTED RESIDENTIAL SCO (ppm)	**41**	**100**	**100**	**100**	**21**	**100**
NYSDEC COMMERCIAL SCO (ppm)	**390**	**500**	**500**	**500**	**200**	**500**

CELL	GRAB INTERVAL	LAB ID	SITE	Ethylbenzene	Methyl tert-butyl ether	Methylene Chloride	n-Propylbenzene	Tetrachloroethene	Toluene
EG-1A	(0' - 1')	SB22338-13	Greenburgh - West	*0.0061*	*0.0061*	*0.0122*	*0.0061*	*0.0061*	*0.0061*
EG-91A	(0' - 1')	SB22338-15	Greenburgh - West	*0.0063*	*0.0063*	*0.0127*	*0.0063*	*0.0063*	*0.0063*
EG-2B	(1' - 2')	SB22338-11	Greenburgh - West	*0.0074*	*0.0074*	*0.0148*	*0.0074*	*0.0074*	*0.0074*
EG-3E	(0' - 1')	SB22338-09	Greenburgh - West	*0.009*	*0.009*	*0.0179*	*0.009*	*0.009*	*0.009*
EG-4B	(3' - 4')	SB22279-18	Greenburgh - West	*0.0048*	*0.0048*	*0.0095*	*0.0048*	*0.0048*	*0.0048*
EG-6B	(2' - 3')	SB22338-01	Greenburgh - West	*0.0079*	*0.0079*	*0.0158*	*0.0079*	*0.0079*	*0.0079*
EG-9A	(1' - 2')	SB22338-03	Greenburgh - West	*0.0066*	*0.0066*	*0.0131*	*0.0066*	*0.0066*	*0.0066*
EG-10A	(1' - 2')	SB22279-04	Greenburgh - West	*0.0078*	*0.0078*	*0.0156*	*0.0078*	*0.0078*	*0.0078*
EG-14A	(1' - 2')	SB22338-05	Greenburgh - West	*0.006*	*0.006*	*0.0121*	*0.006*	*0.006*	*0.006*
EG-914A	(0' - 1')	SB22338-07	Greenburgh - West	*0.0064*	*0.0064*	*0.0128*	*0.0064*	*0.0064*	*0.0064*
EG-15A**	(1' - 2')	SB22279-16	Greenburgh - West	*0.0061*	*0.0061*	*0.0122*	*0.0061*	*0.0061*	*0.0061*
EG-18B	(0' - 1')	SB22279-20	Greenburgh - West	*0.0061*	*0.0061*	*0.0121*	*0.0061*	*0.0061*	*0.0061*
EG-19B	(0' - 1')	SB22279-02	Greenburgh - West	*0.0061*	*0.0061*	*0.0123*	*0.0061*	*0.0061*	*0.0061*
EG-26D	(0' - 1')	SB22280-01	Greenburgh - West	*0.0062*	*0.0062*	*0.0123*	*0.0062*	*0.0062*	*0.0062*
EG-27B	(0' - 1')	SB22280-07	Greenburgh - West	*0.0061*	*0.0061*	*0.0126*	*0.0061*	*0.0061*	*0.0061*
EG-28A	(0' - 1')	SB22280-05	Greenburgh - West	*0.0063*	*0.0063*	*0.0121*	*0.0063*	*0.0063*	*0.0063*
EG-43D	(1' - 2')	SB22279-12	Greenburgh - West	*0.0055*	*0.0055*	*0.011*	*0.0055*	*0.0055*	*0.0055*
EG-44D*	(1' - 2')	SB22279-14	Greenburgh - West	*0.0052*	*0.0052*	*0.0104*	*0.0052*	*0.0052*	*0.0052*
EG-45A	(0' - 1')	SB22279-10	Greenburgh - West	*0.0066*	*0.0066*	*0.0132*	*0.0066*	*0.0066*	*0.0066*
EG-46B	(1' - 2')	SB22279-08	Greenburgh - West	*0.0062*	*0.0062*	*0.0123*	*0.0062*	*0.0062*	*0.0062*
EG-47A	(3' - 4')	SB22279-06	Greenburgh - West	*0.0053*	*0.0053*	*0.0106*	*0.0053*	*0.0053*	*0.0053*
EG-48A	(2' - 3')	SB22280-09	Greenburgh - West	*0.0049*	*0.0049*	*0.0098*	*0.0049*	*0.0049*	*0.0049*
EG-49C	(1' - 2')	SB22280-03	Greenburgh - West	*0.0075*	*0.0075*	*0.0149*	*0.0075*	*0.0075*	*0.0075*

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CONTAMINAN **VOC GRABS**
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				1,1,1-Trichloroethane	**1,2,4-Trimethylbenzene**	**1,3,5-Trimethylbenzene**	**Vinyl chloride**	**Xylene**	**1,4-Dioxane**	**NYSDEC CLASSIFICATION**
NYSDEC UNRESTRICTED USE CRITERIA (ppm)				**0.68**	**3.6**	**8.4**	**0.02**	**0.26**	**0.1**	**BASED ON CLEANUP**
NYSDEC RESIDENTIAL SCO (ppm)				**100**	**47**	**47**	**0.21**	**100**	**9.8**	**OBJECTIVES**
NYSDEC RESTRICTED RESIDENTIAL SCO (ppm)				**100**	**52**	**52**	**0.9**	**100**	**13**	
NYSDEC COMMERCIAL SCO (ppm)				**500**	**190**	**190**	**13**	**500**	**130**	
CELL	**INTERVAL**	**LAB ID**	**SITE**							
EG-1A	(0' - 1')	SB22338-13	Greenburgh - West	*0.0061*	*0.0061*	*0.0061*	*0.0061*	*0.0122*	*0.122*	Unrestricted
EG-91A	(0' - 1')	SB22338-15	Greenburgh - West	*0.0063*	*0.0063*	*0.0063*	*0.0063*	*0.0127*	*0.127*	Unrestricted
EG-2B	(1' - 2')	SB22338-11	Greenburgh - West	*0.0074*	*0.0074*	*0.0074*	*0.0074*	*0.0148*	*0.148*	Unrestricted
EG-3E	(0' - 1')	SB22338-09	Greenburgh - West	*0.009*	*0.009*	*0.009*	*0.009*	*0.0179*	*0.179*	Unrestricted
EG-4B	(3' - 4')	SB22279-18	Greenburgh - West	*0.0048*	*0.0048*	*0.0048*	*0.0048*	*0.0095*	*0.0954*	Unrestricted
EG-6B	(2' - 3')	SB22338-01	Greenburgh - West	*0.0079*	*0.0079*	*0.0079*	*0.0079*	*0.0158*	*0.158*	Unrestricted
EG-9A	(1' - 2')	SB22338-03	Greenburgh - West	*0.0066*	*0.0066*	*0.0066*	*0.0066*	*0.0131*	*0.131*	Unrestricted
EG-10A	(1' - 2')	SB22279-04	Greenburgh - West	*0.0078*	*0.0078*	*0.0078*	*0.0078*	*0.0156*	*0.156*	Unrestricted
EG-14A	(1' - 2')	SB22338-05	Greenburgh - West	*0.006*	*0.006*	*0.006*	*0.006*	*0.0121*	*0.121*	Unrestricted
EG-914A	(0' - 1')	SB22338-07	Greenburgh - West	*0.0064*	*0.0064*	*0.0064*	*0.0064*	*0.0128*	*0.128*	Unrestricted
EG-15A**	(1' - 2')	SB22279-16	Greenburgh - West	*0.0061*	*0.0061*	*0.0061*	*0.0061*	*0.0122*	*0.122*	Unrestricted
EG-18B	(0' - 1')	SB22279-20	Greenburgh - West	*0.0061*	*0.0061*	*0.0061*	*0.0061*	*0.0121*	*0.121*	Unrestricted
EG-19B	(0' - 1')	SB22279-02	Greenburgh - West	*0.0061*	*0.0061*	*0.0061*	*0.0123*	*0.0123*	*0.123*	Unrestricted
EG-26D	(0' - 1')	SB22280-01	Greenburgh - West	*0.0062*	*0.0062*	*0.0062*	*0.0062*	*0.0123*	*0.123*	Unrestricted
EG-27B	(0' - 1')	SB22280-07	Greenburgh - West	*0.0061*	*0.0061*	*0.0061*	*0.0061*	*0.0126*	*0.121*	Unrestricted
EG-28A	(0' - 1')	SB22280-05	Greenburgh - West	*0.0063*	*0.0063*	*0.0063*	*0.0063*	*0.0121*	*0.126*	Unrestricted
EG-43D	(1' - 2')	SB22279-12	Greenburgh - West	*0.0055*	*0.0055*	*0.0055*	*0.0055*	*0.011*	*0.11*	Unrestricted
EG-44D*	(1' - 2')	SB22279-14	Greenburgh - West	*0.0052*	*0.0052*	*0.0052*	*0.0052*	*0.0104*	*0.104*	Unrestricted
EG-45A	(0' - 1')	SB22279-10	Greenburgh - West	*0.0066*	*0.0066*	*0.0066*	*0.0066*	*0.0132*	*0.132*	Unrestricted
EG-46B	(1' - 2')	SB22279-08	Greenburgh - West	*0.0062*	*0.0062*	*0.0062*	*0.0062*	*0.0123*	*0.123*	Unrestricted
EG-47A	(3' - 4')	SB22279-06	Greenburgh - West	*0.0053*	*0.0053*	*0.0053*	*0.0053*	*0.0106*	*0.106*	Unrestricted
EG-48A	(2' - 3')	SB22280-09	Greenburgh - West	*0.0049*	*0.0049*	*0.0049*	*0.0049*	*0.0098*	*0.0981*	Unrestricted
EG-49C	(1' - 2')	SB22280-03	Greenburgh - West	*0.0075*	*0.0075*	*0.0075*	*0.0075*	*0.0149*	*0.149*	Unrestricted

* Clarification in Summary Report on Actual Grab Sampling Point. 44D does not exist as reported, reconciled in Field Notes.

** Lab reports report only the cell number and the sample depth for grab and composite.
For clarification, a grab sample from Cell 33 listed as "33 (4' - 5')" can be alternatively labeled 33A (4' -5') as there is only one sampling location at A.

DEFINITIONS
WASTE CATEGORIZATIONS

Unrestricted	All Contaminants Are Found to Be Below NYSDEC Part 375-6.8 (a) - Unrestricted Use Criteria or are Not Detected
Meets Residential SCO	All Contaminants Are Found to Be Below NYSDEC Part 375-6.8 (b) - Residential Cleanup Objective
Meets Restricted- Residential SCO	All Contaminants Are Found to Be Below NYSDEC Part 375-6.8 (b) - Restricted-Residential Cleanup Objective
Meets Commericial SCO	All Contaminants Are Found to Be Below NYSDEC Part 375-6.8 (b) - Commercial Cleanup Objective

Eastview Site
NYCDEP Project CAT-210WL
Greenburgh and Mount Pleasant, New York

CONTAMINANTS: **RCRA Characteristics**
Organized by: Site

Estimated Concentrations are denoted with a **'J'** following the detection concentration.
Instead of a '<' notation, Non-Detect and BDL Display the RDL *Unbolded and Italicized*
Detects are shown in **BOLD, UNDERLINED RED**
For Laboratory MDL's see Spectrum Lab Reports

CELL ID	**LAB ID**	**SITE**	**Corrosivity (pH)**	**Ignitability**	**Reactivity**	**Reactive Cyanide (ppm)**	**Reactive Sulfide (ppm)**
EG-1	SB22338-13	Greenburgh - West	4.98 - Non-Corrosive	Negative	Nonreactive	*24.3*	*48.5*
EG-91	SB22338-15	Greenburgh - West	4.84 - Non-Corrosive	Negative	Nonreactive	*24.6*	*49.2*
EG-2	SB22338-11	Greenburgh - West	5.42 - Non-Corrosive	Negative	Nonreactive	*24.2*	*48.5*
EG-3	SB22338-09	Greenburgh - West	5.13 - Non-Corrosive	Negative	Nonreactive	*23.1*	*46.3*
EG-4	SB22279-18	Greenburgh - West	5.06 - Non-Corrosive	Negative	Nonreactive	*23.9*	*47.6*
EG-6	SB22338-01	Greenburgh - West	5.85 - Non Corrosive	Negative	Nonreactive	*24.7*	*49.4*
EG-9	SB22338-03	Greenburgh - West	5.23 - Non-Corrosive	Negative	Nonreactive	*23.7*	*47.4*
EG-10	SB22279-04	Greenburgh - West	6.16 - Non-Corrosive	Negative	Nonreactive	*23.9*	*47.8*
EG-14	SB22338-05	Greenburgh - West	5.73 - Non-Corrosive	Negative	Nonreactive	*24.7*	*49.4*
EG-914	SB22338-07	Greenburgh - West	5.93 - Non-Corrosive	Negative	Nonreactive	*24.1*	*48.1*
EG-15	SB22279-16	Greenburgh - West	6.17 - Non-Corrosive	Negative	Nonreactive	*23.4*	*46.9*
EG-18	SB22279-20	Greenburgh - West	4.77 - Non-Corrosive	Negative	Nonreactive	*24.7*	*49.5*
EG-19	SB22279-02	Greenburgh - West	5.46 - Non-Corrosive	Negative	Nonreactive	*24.9*	*49.8*
EG-26	SB22280-01	Greenburgh - West	5.53 - Non-Corrosive	Negative	Nonreactive	*23.8*	*47.7*
EG-27	SB22280-07	Greenburgh - West	4.94 - Non-Corrosive	Negative	Nonreactive	*24.8*	*49.6*
EG-28	SB22280-05	Greenburgh - West	5.29 - Non-Corrosive	Negative	Nonreactive	*24.8*	*49.6*
EG-43	SB22279-12	Greenburgh - West	5.36 - Non-Corrosive	Negative	Nonreactive	*23.1*	*46.3*
EG-44	SB22279-14	Greenburgh - West	5.99 - Non-Corrosive	Negative	Nonreactive	*23.8*	*47.7*
EG-45	SB22279-10	Greenburgh - West	5.54 - Non-Corrosive	Negative	Nonreactive	*24.5*	*49.0*
EG-46	SB22279-08	Greenburgh - West	5.28 - Non-Corrosive	Negative	Nonreactive	*24.8*	*49.6*
EG-47	SB22279-06	Greenburgh - West	5.99 - Non-Corrosive	Negative	Nonreactive	*24.1*	*48.2*
EG-48	SB22280-09	Greenburgh - West	5.56 - Non-Corrosive	Negative	Nonreactive	*23.0*	*46.0*
EG-49	SB22280-03	Greenburgh - West	5.08 - Non-Corrosive	Negative	Nonreactive	*24.2*	*48.3*

TABLE 2

GREENBURGH WEST SAMPLE ID AND DEPTH		NUMBER OF SAMPLING LOCATIONS PER CELL		
	RELATIVE (AVG) CUT DEPTH		**NORTHING**	**EASTING**
EG-1	**1 to 2 Feet**	**4**		
A			816988.4	682374.7
B			816998.1	682418.4
C			816931.8	682376.4
D			816931.8	682431.4
EG-2	**1 to 2 Feet**	**4**		
A			816986.8	682479.9
B			816894.6	682466.9
C			816868.8	682530.0
D			816815.5	682466.9
EG-3	**0 to 1 Feet**	**5**		
A			816897.9	682386.1
B			816872.0	682416.8
C			816830.0	682420.0
D			816789.6	682420.0
E			816754.1	682413.6
EG-4	**3 to 4 Feet**	**2**		
A			816775.1	682466.9
B			816750.8	682539.7
EG-5	**3 to 4 Feet**	**2**		
A			816713.6	682425.8
B			816703.4	682515.2
EG-9	**2 to 3 Feet**	**3**		
A			816653.7	682415.6
B			816612.9	682414.3
C			816573.4	682418.2
EG-10	**3 to 4 Feet**	**2**		
A			816643.5	682525.4
B			816578.5	682533.0
EG-14	**2 to 3 Feet**	**3**		
A			816542.8	682441.1
B			816508.3	682447.5
C			816526.2	682484.5
EG-15	**5 Feet +**	**1**		

GREENBURGH WEST SAMPLE ID AND DEPTH

	RELATIVE (AVG) CUT DEPTH	NUMBER OF SAMPLING LOCATIONS PER CELL	**NORTHING**	**EASTING**
A			816531.3	682554.7
EG-18	**0 to 1 Feet**	**5**		
A			816473.9	682464.1
B			816449.7	682466.7
C			816424.2	682473.0
D			816398.7	682480.7
E			816366.8	682488.3
EG-19	**3 to 4 Feet**	**2**		
A			816473.9	682539.4
B			816401.2	682540.7
EG-26	**1 to 2 Feet**	**4**		
A			816355.9	682538.4
B			816322.7	682526.3
C			816296.5	682551.5
D			816272.3	682508.2
EG-27	**3 to 4 Feet**	**2**		
A			816348.8	682610.9
B			816276.4	682613.9
EG-28	**2 to 3 Feet**	**3**		
A			816351.8	682695.5
B			816322.7	682779.1
C			816279.4	682700.6

GREENBURGH WEST SAMPLE ID AND DEPTH	**RELATIVE (AVG) CUT DEPTH**	NUMBER OF SAMPLING LOCATIONS PER CELL	**NORTHING**	**EASTING**
EG-43	**1 to 2 Feet**	**4**		
A			815880.8	682532.3
B			815884.8	682593.5
C			815822.7	682528.3
D			815828.7	682608.5
EG-44	**2 to 3 Feet**	**3**		

GREENBURGH WEST SAMPLE ID AND DEPTH

	RELATIVE (AVG) CUT DEPTH	NUMBER OF SAMPLING LOCATIONS PER CELL	NORTHING	EASTING
A			815899.8	682465.1
B			815860.7	682472.1
C			815817.7	682469.1
EG-45	**3 to 4 Feet**	**2**		
A			815927.9	682532.3
B			815943.9	682593.5
EG-46	**3 to 4 Feet**	**2**		
A			816045.4	682509.6
B			816005.8	682551.4
EG-47	**3 to 4 Feet**	**3**		
A			816107.5	682492.6
B			816107.5	682559.4
C			816103.0	682619.3
EG-48	**2 to 3 Feet**	**3**		
A			816167.5	682493.7
B			816170.8	682560.5
C			816158.4	682628.4
EG-49	**2 to 3 Feet**	**3**		
A			816227.1	682502.1
B			816230.1	682573.6
C			816223.0	682648.2

62 Total Sample Locations

21 **Total Composite/Grab Samples**

APPENDIX A

Chain-of-Custody Forms

SB22280 [illegible]

SPECTRUM ANALYTICAL, INC.
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CHAIN OF CUSTODY RECORD

Page 1 of 1

Special Handling:

☑ Standard TAT - 7 to 10 business days
☐ Rush TAT - Date Needed:

- All TATs subject to laboratory approval. Min. 24-hour notification needed for rushes.
- Samples disposed of after 60 days unless otherwise instructed.

Report To: **Greg DelMastro**
Stantec Consulting Services
365 West Passaic Street
Rochelle Park, NJ 07662
Project Mgr. **Greg DelMastro**
Telephone #: **(201) 587-9040**

Invoice To:
Stantec Consulting Services
365 West Passaic Street
Rochelle Park, NJ 07662
P.O. No.: **191610165 TASK 200** 6

Project No.: ~~191610165~~ 191610166 Per client email 12/14/10 DW
Site Name: **Eastview**
Location: Greenburgh
State: **NY**
Sampler(s): L. Moller / S. Saldutti

1=$Na_2S_2O_3$ 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid 7=CH_3OH
8= $NaHSO_4$ 9 = **ice** 10= 11=

DW=Drinking Water GW=Groundwater WW=Wastewater
O=Oil SW= Surface Water SO=Soil SL=Sludge A=Air
X1= X2= X3=

G=Grab C=Composite

List preservative code below: 9 9

Lab Id:	Sample Id:	Date:	Time:	Type	Matrix	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	VOCs 8260	Comp analysis list
22280-01	EG-26 (0'-2')	12-8-10	1130	G/C	SO		4			☒	☒
02	EG-26B (0'-1')		1130	G			1			☒	
03	EG-49 (0'-3')		1210	G/C			4			☒	☒
04	EG-49C (1'-2')		1210	G			1			☒	
05	EG-28 (0'-3')		1245	G/C			4			☒	☒
06	EG-28A (0'-1')		1245	G			1			☒	
07	EG-27 (0'-4')		1350	G/C			4			☒	☒
08	EG-27B (0'-1')		1350	G			*1			☒	
09	EG-48 (0'-3')		1420	G/C			4			☒	☒
10	EG-48A (2'-3')		1420	G			1			☒	

QA/QC Reporting Notes:
(check as needed)

QA/QC Reporting Level
☑ Standard ☐ No QC
☐ Other

State specific reporting standards:

Comp sample analysis list:
Total VOCs by 8260
8081/8082/8151
SVOCs 8270
RCRA8 + Be,Cu,Mn,Ni,Zn
Cr+6, Cr+3
Total Cyanide

Relinquished by:	Received by:	Date:	Time:	Temp°C
		12-9-10	1041	4.2
		12/9/10	1722	30

☒ EDD Format XCEL
☐ E-mail to **gregory.delmastro@stantec.com**

☐ Ambient ☒ Iced ☐ Refrigerated ☐ Fridge blank temp ___ °C

SB22279 By

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CHAIN OF CUSTODY RECORD

Page 2 of 3

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☐ Rush TAT - Date Needed:
- All TATs subject to laboratory approval. Min. 24-hour notification needed for rushes.
- Samples disposed of after 60 days unless otherwise instructed.

Report To: **Greg DelMastro**
Stantec Consulting Services
365 West Passaic Street
Rochelle Park, NJ 07662
Project Mgr. **Greg DelMastro**
Telephone #: **(201) 587-9040**

Invoice To:
Stantec Consulting Services
365 West Passaic Street
Rochelle Park, NJ 07662
P.O. No.: ~~**191610165**~~ 191610166 **TASK 200**

Project No.: ~~**191610165**~~ 191610166 per client email 12/16/10 JH
Site Name: **Eastview**
Location: Greenburgh
State: **NY**
Sampler(s): L. Moller / S. Saldutti

1=$Na_2S_2O_3$ 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid 7=CH_3OH
8= $NaHSO_4$ 9 = **ice** 10=____ 11=____

DW=Drinking Water GW=Groundwater WW=Wastewater
O=Oil SW= Surface Water SO=Soil SL=Sludge A=Air
X1=____ X2=____ X3=____

G=Grab C=Composite

Lab Id:	Sample Id:	Date:	Time:	Type	Matrix	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	VOCs 8260	Comp analysis list
List preservative code below:										9	9
22279-06	EG-47 (0'-4')	12-9-10	1115	G/C	SO		4			X	X
07	EG-47A (3'-4')		1115	G			1			X	
08	EG-46 (0'-4')		1130	G/C			4			X	X
09	EG-46B (1'-2')		1130	G			1			X	
10	EG-45 (0'-4')		1150	G/C			4			X	X
11	EG-45A (0'-1')		1150	G			1			X	
12	EG-43 (0'-2')		1320	G/C			4			X	X
13	EG-43D (1'-2')		1320	G			1			X	
14	EG-44 (0'-3')		1345	G/C			4			X	X
15	EG-44B (1'-2')		1345	G			1			X	

QA/QC Reporting Notes:
(check as needed)

QA/QC Reporting Level
☑ Standard ☐ No QC
☐ Other ____

State specific reporting standards: ____

Comp sample analysis list:
Total VOCs by 8260
8081/8082/8151
SVOCs 8270
RCRA8 + Be,Cu,Mn,Ni,Zn
Cr+6, Cr+3
Total Cyanide

Matrix added per client request

Relinquished by:	Received by:	Date:	Time:	Temp°C
		12-10-10	1242	2.8
		12/10/10	15:00	1.6

☐ EDD Format ____
☐ E-mail to **gregory.delmastro@stantec.com**

☐ Ambient ☑ Iced ☐ Refrigerated ☐ Fridge blank temp ___ °C

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SB22279

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CHAIN OF CUSTODY RECORD

Page 3 of 3

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☑ Standard TAT - 7 to 10 business days
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Report To: **Greg DelMastro**
Stantec Consulting Services
365 West Passaic Street
Rochelle Park, NJ 07662
Project Mgr. **Greg DelMastro**
Telephone #: **(201) 587-9040**

Invoice To:
Stantec Consulting Services
365 West Passaic Street
Rochelle Park, NJ 07662
P.O. No.: 191610166 **~~191610165~~ TASK 200**

Project No.: **191610165** 191610166 Per client email 12/10/10
Site Name: **Eastview**
Location: Greenburgh State: **NY**
Sampler(s): L. Moller / S. Saldutti

1=Na_2S2O_3 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid 7=CH_3OH
8= $NaHSO_4$ 9 = **ice** 10=____ 11=____

DW=Drinking Water GW=Groundwater WW=Wastewater
O=Oil SW= Surface Water SO=Soil SL=Sludge A=Air
X1=____ X2=____ X3=____

G=Grab C=Composite

List preservative code below: 9 9

Lab Id:	Sample Id:	Date:	Time:	Type	Matrix	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	VOCs 8260	Comp analysis list
22279-16	EG-15(0'-6')	12-9-10	1415	G/C	SO		4			X	X
17	EG-15(1'-2')	12-9-10	1415	G			1			X	
18	EG-4(0'-4')	12-10-10	1050	G/C			4			X	X
19	EG-4B(3'-4')	12-10-10	1050	G			1			X	
20	EG-18(0'-1')		1205	G/C			4			X	X
21	EG-18B(0'-1')		1205	G			1			X	

QA/QC Reporting Notes:
(check as needed)

QA/QC Reporting Level
☑ Standard ☐ No QC
☐ Other ____

State specific reporting standards: ____

Comp sample analysis list:
Total VOCs by 8260
8081/8082/8151
SVOCs 8270
RCRA8 + Be,Cu,Mn,Ni,Zn
Cr+6, Cr+3
Total Cyanide
Matrix added per client request

Relinquished by:	Received by:	Date:	Time:	Temp°C
Scott Saldutti		12-10-10	1242	2.8
		12/10/10	1500	1.6

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☐ E-mail to **gregory.delmastro@stantec.com**

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CHAIN OF CUSTODY RECORD

Page 1 of 2

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Report To: **Greg DelMastro**
Stantec Consulting Services
365 West Passaic Street
Rochelle Park, NJ 07662
Project Mgr. **Greg DelMastro**
Telephone #: **(201) 587-9040**

Invoice To:
Stantec Consulting Services
365 West Passaic Street
Rochelle Park, NJ 07662
P.O. No.: **191610165 TASK 200** 191610166 per client email 12/16/10

Project No.: ~~191610165~~ 191610166 per client email 12/16/10
Site Name: **Eastview**
Location: Greenburgh State: **NY**
Sampler(s): L. Miller / S. Salduffi

1=Na_2S2O_3 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid 7=CH_3OH
8= $NaHSO_4$ 9 = **ice** 10=____ 11=____

DW=Drinking Water GW=Groundwater WW=Wastewater
O=Oil SW= Surface Water SO=Soil SL=Sludge A=Air
X1=____ X2=____ X3=____

G=Grab C=Composite

List preservative code below: 9 9

Lab Id:	Sample Id:	Date:	Time:	Type	Matrix	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	VOCs 8260	Comp analysis list
22279-01	EG-19(0'-4')	12-10-10	0900	G/C	SO		4			X	X
02	EG-19B(0'-1')	12-10-10	0906	G	SO		1			X	
03	FB-1		0915	G	X1	3				X	
04	EG-10(0'-4')		0930	G/C	SO		4			X	X
05	EG-10A(1'-2')		0930	G	SO		1			X	
	EG-14										
	EG-14										
	EG-9										
	EG-9										

QA/QC Reporting Notes:
(check as needed)

QA/QC Reporting Level
☑ Standard ☐ No QC
☐ Other ____

State specific reporting standards: ____

Comp sample analysis list:
Total VOCs by 8260
8081/8082/8151
SVOCs 8270
RCRA8 + Be,Cu,Mn,Ni,Zn
Cr+6, Cr+3
Total Cyanide
Matrix added per client request

Relinquished by:	Received by:	Date:	Time:	Temp°C
Suzett Salduffi		12-10-10	1242	2.8
		12/10/10	15:00	1.6

☒ EDD Format XCEL
☐ E-mail to **gregory.delmastro@stantec.com**

☐ Ambient ☒ Iced ☐ Refrigerated ☐ Fridge blank temp ___ °C

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Featuring
HANIBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page 1 of 3

Special Handling:
☑ Standard TAT - 7 to 10 business days
☐ Rush TAT - Date Needed:
· All TATs subject to laboratory approval. Min. 24-hour notification needed for rushes.
· Samples disposed of after 60 days unless otherwise instructed.

Report To: **Greg DelMastro**
Stantec Consulting Services
365 West Passaic Street
Rochelle Park, NJ 07662
Project Mgr. **Greg DelMastro**
Telephone #: **(201) 587-9040**

Invoice To:
Stantec Consulting Services
365 West Passaic Street
Rochelle Park, NJ 07662
P.O. No.: **19161016~~5~~6 TASK 200**

Project No.: 191610166 ~~191610165~~ Per client email 12/14/10 (DR)
Site Name: **Eastview**
Location: Greenburgh
State: **NY**
Sampler(s): L. Moller / S. Saldutti

1=$Na_2S_2O_3$ 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid 7=CH_3OH
8= $NaHSO_4$ 9 = **ice** 10=____ 11=____

DW=Drinking Water GW=Groundwater WW=Wastewater
O=Oil SW= Surface Water SO=Soil SL=Sludge A=Air
X1=____ X2=____ X3=____

G=Grab C=Composite

List preservative code below: 9 9

Per client fax 12/14/10 (DR)

Lab Id:	Sample Id:	Date:	Time:	Type	Matrix	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	**VOCs 8260**	**Comp analysis list**
22338-01	EG-6(0'-4')	12-10-10	1310	G/C	SO		4			X	X
02	EG-6B(2'-3')	↓	1310	G	↓		1			X	
03	EG-9(0'-3')		1330	G/C			4			X	X
04	EG-9A(1'-2')		1330	G			1			X	
05	EG-14(0'-3')		1355	G/C			4			X	X
06	EG-14A(1'-2')		1355	G			1			X	
07	EG-914(0'-3')			G/C			4			X	X
08	EG-914A(1'-2')	↓		G			1			X	
09	EG-3(0'-1')	12-11-10	1140	G/C			4			X	X
10	EG-3E(0'-1')	↓	1140	G	↓		1			X	

QA/QC Reporting Notes:
(check as needed)

QA/QC Reporting Level
☑ Standard ☐ No QC
☐ Other ____

State specific reporting standards: ____

Comp sample analysis list:
Total VOCs by 8260
8081/8082/8151
SVOCs 8270
RCRA8 + Be,Cu,Mn,Ni,Zn
Cr+6, Cr+3
Total Cyanide

Relinquished by:	Received by:	Date:	Time:	Temp°C
		12/13/10	1400	3,9
		12-13-10	5:50	3,5

☒ EDD Format XCEL
☐ E-mail to **gregory.delmastro@stantec.com**

☐ Ambient ☐ Iced ☐ Refrigerated ☐ Fridge blank temp ___ °C

SB22338 By

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page 2 of 3

Special Handling:
☑ Standard TAT - 7 to 10 business days
☐ Rush TAT - Date Needed:
- All TATs subject to laboratory approval. Min. 24-hour notification needed for rushes.
- Samples disposed of after 60 days unless otherwise instructed.

Report To: **Greg DelMastro**
Stantec Consulting Services
365 West Passaic Street
Rochelle Park, NJ 07662
Project Mgr. **Greg DelMastro**
Telephone #: **(201) 587-9040**

Invoice To:
Stantec Consulting Services
365 West Passaic Street
Rochelle Park, NJ 07662
P.O. No.: **19161016~~5~~4 TASK 200**

Project No.: 191610164 ~~191610165~~ Per Client Email 12/16/10 DH
Site Name: **Eastview**
Location: Greenburgh State: **NY**
Sampler(s): L. Moller / S. Saldutti

1=$Na_2S_2O_3$ 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid 7=CH_3OH
8= $NaHSO_4$ 9 = **ice** 10= 11=

DW=Drinking Water GW=Groundwater WW=Wastewater
O=Oil SW= Surface Water SO=Soil SL=Sludge A=Air
X1= X2= X3=

G=Grab C=Composite

List preservative code below: 9 (VOCs 8260), 9 (Comp analysis list)

Lab Id:	Sample Id:	Date:	Time:	Type	Matrix	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	VOCs 8260	Comp analysis list
22338-11	EG-2 (0'-2')	12-11-10	1230	G/C	SO		4			X	X
12	EG-2B (1'-2')	↓	1230	G	↓		1			X	
13	EG-1 (0'-2')		1305	G/C			4			X	X
14	EG-1A (0'-1')		1305	G			1			X	
15	EG-91 (0'-2')			G/C			4			X	X
16	EG-91A (0'-1')			G			1			X	

QA/QC Reporting Notes: (check as needed)

QA/QC Reporting Level
☑ Standard ☐ No QC
☐ Other

State specific reporting standards:

Comp sample analysis list:
Total VOCs by 8260
8081/8082/8151
SVOCs 8270
RCRA8 + Be,Cu,Mn,Ni,Zn
Cr+6, Cr+3
Total Cyanide

Relinquished by:	Received by:	Date:	Time:	Temp °C
		12/13/10	1400	3.9
		12-13-10	5:50	3.5

☒ EDD Format XCEL
☐ E-mail to **gregory.delmastro@stantec.com**

☐ Ambient ☐ Iced ☐ Refrigerated ☐ Fridge blank temp ___ °C

APPENDIX B

Field Logbook Notes

EG-26 (D) PID 0.0 1'-2': f. SAND, Brn-gray, with fines trace Gravel, moist (SP-SM)

0.0 2'-3' S.A.A.

*During sample collection/logging A. Mangiano informs us that work efforts are on hold due to deviations from the work on the first day of work (11/29/10)

Halmar · Greenburgh 12-8-10

Clear, NW wind 0-10mph, T = 40°s

0750 L. Moller on-site to perform soil sampling activities.

↳ Begin set-up for work activities.

0805 A. Mangiano (HALMAR) on site.

0820 S. Saldutti (Stantec) on-site.
↳ Assist w/ set-up.

0830 PID cal'd w/100 ppm isobutylene
↳ A. Bandos (TSC) on-site.
0845 Set-up in at cell EG-18 for HA borings while A. Mangiano sets up probe at next cell.

↳ Perform H+S tailgate w/ all workers.

0840 During set-up at EG-18, A. Mangiano informs us that work cannot continue until DEP/CMJ personnel arrive on-site + inspect work functions.

0940 Russ Bittinger (DEP) + Arielle (CMJ) on-site to discuss work scope/sampling efforts vis a vis DEP Work Plan.

↳ From now on, an inspector (CMJ/DEP) must watch work activities to ensure proper sample collection techniques are being implemented. All previously collected samples are to be re-sampled, per DEP/CMJ.

0955 Anders (CMJ) on-site.

1000 Workers head to central portion of site to begin sample collection (cell EG-26)

EG-26 (A)
(B) → Same as previously logged
(C)
(D)
All PID=0.0

1130 Collect samples at EG-26
[EG-26(0'-2') + EG-26D(0'-1')]

EG-49 (A) : Rec: 36"/36"

PID
0.0 0'-1': Brn, f-m SAND with fines, trace to little root, trace Gravel (SP-SM)
0.0 1'-2': S.A.A.
0.0 2'-3': Top 6" Brn orange-to gray, f-m SAND, trace Gravel (SP)
Bottom 6" Same as EG-49A 0'-1'

EG-49 (B) Rec: 36"/36"
PID
0.0 0'-1' : Same as 49A 0'-1'
0.0 1'-2' : S.A.A.
0.0 2'-3' : S.A.A., no roots

EG-49 (C) Rec: 36"/36"
0.0 0'-1' Same as 49A 0'-1'
0.0 1'-2' S.A.A.
0.0 2'-3' Dark gray, f-m/ ~~SAND w/ fines~~ Silty SAND (SM) moist. ~~[illegible]~~

1210 Collect samples ~~at~~ EG-49 (EG-49(0'-3') + EG-49C(1'-2'))

↳ A. Mangiano moves to next cell, EG-28.

EG-28 (C)
Rec: 36"/36"

	PID		
EG-28 (C) Rec: 36"/36"	0.0	0'-1':	Brn f-SAND with fines, trace root, trace Gravel (SP-SM)
	0.0	1'-2':	S.A.A.
	0.0	2'-3':	Gray, to brn f-m SAND with little to some fines, Gravel moist (SP-SM)
EG-28 (B) Rec: 36"/36"	0.0	0'-1':	Same profile as 28-C
	0.0	1'-2':	
	0.0	2'-3':	

EG-28 (A)

1245 Collect samples at EG-28
[EG-28(0'-3') + EG-28A(0'-1')]
LM

Halmar 12-8-10

	PID	
EG-27 (A) Rec: 48"/48"	0.0 ↓	Same soil as prev. logged
EG-27(B) Rec: 48"/48"	0.0 ↓	Same soil as prev. logged.

1350 Collect soil samples in EG-27 (EG-27(0'-4') + EG-27B(0'-1'))

↳ Decon equip. + move to next area, where probe is being advanced.

	PID		
EG-48(C) Rec: 36"/36"	0.0	0'-1'	Brn f-SAND with fines, trace fine root, trace Gravel (SP-SM)
	0.0	1'-2'	TOP 4" → Gray, f-c SAND (SW)
	0.0	2'-3'	Bottom: Gray-brn, f-SAND with fines, trace fine root, trace Gravel (SP-SM, SM) ↳ S.A.A.

EG-48(B) PID

0.0 0'-1': Brn ~~Plum~~ f-SAND with fines, trace fine root (SP-SM)

0.0 1'-2': Orange-brn to gray ~~trace~~ f-SAND, trace to little fines, trace Gravel (~~SP~~, SP-SM)

0.0 2'-3' → S.A.A.

EG-48(A) PID

0.0 0'-1': Orange-brn to gray, f-SAND with fines, trace fine root (SP-SM)

0.0 1'-2': Gray to brn, f-m SAND, with fines, trace root, trace Gravel (SP-SM)

0.0 2'-3' → S.A.A.

1420 Collect samples at EG-48 (EG-48 (0'-3') + EG-48A (2'-3'))

LM

12-8-10 Halmar - Greenburgh

1425 Geoprobe needs fuel, as a result, begin to breakdown for the day.
Decon equipment + prepare to M&B ~~SP~~ site.

1455 L. Moller + S. Salduti off-site following breakdown + securing of work site.

Halmar - Greenburgh 12-9-10

Clear, wind 0-10mph, T ≈ 30's°

0730 S. Salducci on-site to perform soil sampling activities.
↳ A. Mangiano (Halmar) + A. Bando (TSC) on-site.
→ C. Begley on-site (Inspector for CHJV)

0800 L. Moller (Stantec) on-site.

0815 Tailgate meeting to discuss contradiction of work plan & 12-8-10 meeting w/ Russ Bittinger (CHJV) concerning a change in field sampling activities.
↳ A. Mangiano calls Greg DelMastro to discuss issue. G. DelMastro advises to contact Russ about the change in sampl~~ing~~ SLS collection.

0920 A. Mangiano talks to Russ on the phone.
↳ Russ wants ~~an auth~~ SLS a

SLS

12-9-10

written document from G. DelMastro on the new sampling methodologies discussed on 12-8-10.

0955 Phone call from G. DelMastro informing us to proceed w/ field activities w/ the verbal authorization of Russ Bittinger.

1000 Begin set-up for work activities
↳ PID calibrated w/ 100 ppm isobutylene

1005 A. Mangiano begins advancing probe in cell EG-47

1015 Set-up in southern portion of site, where A. Mangiano will set-up geoprobe next

1035 Courier on-site (Spectrum) to pick up samples.

SLS

12-9-10

1045 courier off-site w/ collected samples

EG-47 (A)

Rec: 45"/48"

PID / Soil Description

0.0 0'-1': Brn, f-m SAND with fines, little to some root, trace gravel (SP-SM)

0.0 1'-2': lt. brn, f-m SAND with fine to ~~f-m silty~~ sand, trace roots, trace gravel (SP-SM, SM)

0.0 2'-3': grey-org brown S.A.A

0.0 3'-4': S.A.A

EG-47 (B)

Rec: 39"/48"

PID / Description

0.0 0'-1': top inch-topsoil DK brn, f-m SAND with fines, little fine root, trace gravel (SP-SM) SM

0.0 1'-2': S.A.A

0.0 2'-3': Brn, f-m SAND with fines, little gravel/rock fragment

12-9-10

EG-47(B)

PID / Description

0.0 3'-4': grey, org-brn to dk-brn, f-c SAND with fines, little gravel, trace fine root (SP-SM, SM)

EG-47(C)

Rec: 28"/48"

PID / Description

0'-1': brn, f-m SAND with fines, little root, trace fine gravel (SP-SM, SM)

1'-2': S.A.A + trace root trace gravel

2'-3': brn to grey, f-m SAND with fines, trace gravel (SP-SM)

3'-4': brn, f-c SAND with fines, trace gravel (SP-SM)

1115 Samples collected at EG-47. (EG-47 (0'-4') + EG-47A (3'-4'))

1120 Decon equipment + begin soil sampling activities at EG-46

12-9-10

EG-46 (A) PID 0.0 0'-1': ~~"Description~~ top 1" - topsoil Brn, f SAND
with fines,
little fine root,
trace gravel
(SP-SM, SM)

Rec : 40"/48"

0.0 1'-2' : Brn, f-m SAND
with fines,
little fine gravel,
little rock
fragment (shist, gneiss),
trace ~~of~~ root (SP-SM)

0.0 2'-3' : brn to grey, f-m
SAND with
fines, trace
fine gravel,
trace fine root
(SP-SM)

0.0 3'-4' : brn, f-m SAND
with fines,
trace fine
gravel (SP-SM)
*Moist

X SNS

12-9-10

EG-46 (B) PID 0.0 0'-1': Brn, f SAND
with fines, little
fine root, trace
fine gravel (SP-SM)

Rec: 46"/48"

0.0 1'-2': Brn, f-m SAND
with fines, little
gravel, little
fine root (SP-SM)

0.0 2'-3': Dk brn to brn,
f-m SAND
with fines,
little gravel, trace
fine root (SP-SM)

0.0 3'-4': Brn to Dk brn,
f-~~m~~c SAND with
fines, little gravel,
trace organics,
trace rock
fragments (SP-SM)

SNS
~~EG-46 (B) PID~~

~~Rec~~ 1130 Samples collected at
EG-46 (EG-46 (0'-4') +
EG-46 B (~~3'-4'~~ 1'-2')) SNS
↳ Decon equipment +
begin logging EG-45

SNS

12-9-10

EG-45 (B) PID

Rec: 44"/48"

0.0 0'-1': Dk brn to brn, f-m SAND, trace to little fines little fine root, trace gravel (SP, SP-SM)

0.0 1'-2': Dk brn to lt. brown org, f-m SAND with fines, trace root, trace rock frag, ~~T~~(SP-SM)

0.0 2'-3': Brn to dk brn, f-c SAND with fines, little gravel, trace fine root (SP-SM)

0.0 3'-4': Brn, f-~~m~~c SAND, trace gravel, trace root (SP-SM)

EG-45 (A) PID

Rec: 46"/48"

0.1 0'-1': Dk Brn, f SAND with fines, little fine root (SP-SM)

12-9-10

EG-45(A) PID

0.0 1'-2': Brn, f-m SAND with fines, trace to little gravel (SP-SM)

0.0 2'-3': gray to org-brn, f SAND with fines, little gravel, trace fine gravel (SP-SM)

0.0 3'-4': S.A.A

1150 Collect samples at EG-45 (EG-45(0'-4') + (EG-45A(0'-1'))
→ Decon equipment

1200 Break for lunch

1235 Resume work efforts
↳ A. Mangiaro begins advancing borings w/ probe at cell EG-43.

EG-43(A) PID Description

Rec: 30"/~~48~~ 24"

0-0 0'-1': Brn, f SAND with fines, little fine root, trace fine gravel (SP-SM)

12-9-10

EG-43(A) PID
0.0 1'-2': Brn to dk brn, f-C SAND, little silt, little gravel (SP-SM)

1300 A. Mangiano moves to cell 44 w/ geoprobe

EG-43(B)
Rec: 39"/~~48~~" 24
0.0 0'-1': S.A. EG-43(A) 0'-1'
0.0 1'-2': S.A.A. + little rock fragment

EG-43(C)
Rec: 40"/~~48~~" 24
0.0 0'-1': S.A EG-43(A) 0'-1'
0.0 1'-2': Brn to dk brn, f-m SAND with fines, trace gravel (SP-SM, SM)

EG-43(D)
Rec: 24"/~~48~~" 24
0.0 0'-1': S.A EG-43(C) 0'-1'
0.0 1'-2': S.A EG-43(C) 1'-2'

12-9-10

1320 samples collected at cell EG-43
(EG-43(0'-2') + (EG-43D(1'-2'))
→ Decon equipment + begin set-up for ~~hand~~ sampling activities of cell EG-44
→ A. Mangiano begins to breakdown + will finish w/ cell EG-15

EG-44(A) PID
Rec: 36"/36"
0.0 0'-1': Brn. f SAND with fines, little fine root, trace fine gravel (SP-SM)
0.0 1'-2': top 6" - S.A.A bottom 6" - Brn-gray, f-C SAND, some rock frag., trace silt, (SP) trace fine root
0.0 2'-3': S.A.A (bottom 6")

12-9-10

EG-44(B) PID
0.0 0'-1': S.A EG-44(A)$^{0'-1'}$
Rec: 30"/36" 0.0 1'-2': Brn, f-m SAND
with fines, some
rock frag, trace
fine root (SP-SM)
0.0 2'-3': S.A.A

EG-44(C) PID
0.0 0'-1': Brn, f SAND with
Rec: 29"/36" fines, trace fine
root, trace gravel
(SP-SM)
0.0 1'-2': top 6" - Brn to gray
f-C SAND, some rock
frags, some fine
gravel, trace fine
root (SP), trace silt
~~2'-3'~~ bottom 6": Gray to brn, f-m
SAND, little silt,
trace fine gravel
(SP-SM)
0.0 2'-3': S.A.A (bottom 6")

12-9-10

1345 Samples collected at
cell EG-44 (EG-44(0'-3') +
EG-44B (1'-2'))
↳ Decon equipment + begin
sampling activities on
cell- EG-15
↳ A. Mangiaro advancing
borings at cell EG-15

EG-15 (0'-6') PID
(0'-4') 0.0 0'-5': Same as
Rec: 30"/48" previously logged
(4'-6') 0.0 5'-6': gray to gray-
Rec: 24"/24" brn, f-m
SAND with
fines, little
quartzite frag,
trace ~~little~~ gravel,
trace fine roots
* moist to wet
(SP-SM/SP-SC,
SM-SC)

1415 Samples collected at cell
cell EG-15 (EG-15 (0'-6') +
(EG-15 (1'-2'))

12-9-10

1430 Begin to breakdown
↳ Decon equipment

1435 L. Moller + S. Saldutti off-site

Halmar - Greenburgh 12-10-10

- Clear, lt breeze, T = 20°s

0725 L. Moller arrives on-site to perform soil sampling activities.
S. Saldutti on-site to assist.
A. Mangiano, F. (Halmar)
A. Bando (TSC) on-site.
C. Begley (C2HM) on-site as well.

0730 Perform H+S tailgate.
↳ Begin set-up for sampling.

0735 PID cal'd w/ 100ppm isobutylene

0745 A. Mangiano begins to set-up probe at cell EG-19.

0805 Begin advancing probe at EG-19A.

EG-19 (A)	PID		
Rec: 37"/48"	0.0	0'-1'	Same as prev. EG-19A (0'-1')
	0.0	1'-2'	S.A.A.

LM

Halmar 12-10-10

EG-19 (A) PID 0.0 2'-3' S.A.A.
0.0 3'-4' S.A.A. but little Gravel

EG-19 (B) PID 0.0 0'-1' TOP Same as prev. 19B 0'-1'
Rec: 40"/48"
0.0 1'-2' S.A.A.
0.0 2'-3 TOP 6" S.A.A.
Bottom 6"
Orange-brn, f-c SAND, little Gravel, trace fine root, trace to little Silt, trace Rock Frag (SP, SP-SM)
3'-4' S.A.A.

0845 A. Mangiano Moving to cell EG-10.
0900 Samples Collected at EG-19 (EG-19 (0'-4') + EG-19B (0'-1'))

LM

Halmar 12-10-10

0910 Following decon of sampling equipment prepare for collection of Field Blank sample.

0915 Collect FB-1

0920 Begin logging EG-10 (B)

EG-10 (B) PID 6.0 0'-1' Brn, f-m SAND with fines, little root, little Gravel (SP-SM,
Rec: 48"/48"
0.0 1'-2' TOP 6" S.A.A.
Bottom 6"
Brn, f-c SAND with fines, trace Gravel, trace root (SP-SM)
8.0 2'-3'
0.0 3'-4'
> Same as prev. done EG-10B (Bottom 4ft 2'-4' moist)

0925 R. Bittinger (C2HM) on-site to view work efforts.

LM

Halmar 12-10-10

EG-10(A) PID
0.0 0'-1' Same as 10B 0'-1'
0.0 1'-4' Same as 10B 1'-2'
0.0
0.0 (moist from approx 2.5'-4')

0930 Collect samples at EG-10
(EG-10 (0'-4') + EG-10A (1'-2'))

0945 Holly (CMJV) on-site

↳ A. Mangano begins advancing probe at EG-4.

EG-4 (A) Rec: 42"/48" PID
0.0 0'-1' TOP 1" TOPSOIL Brn, f-m SAND with fines, trace fine root, trace Gravel (SP-SM)
0.0 1'-2' TOP 6": S.A.A. Bottom 6" Gray to Orange-brn, f-SAND, little silt, trace Gravel, trace fine root (SP-SM)

LM

EG-4(A) PID
0.0 2'-3' S.A.A.
0.0 3'-4' S.A.A.

EG-4(B) Rec: 48"/48" PID
0.0 0-1'
0.0 1'-2'
0.0 2'-3'
0.0 3'-4'
Same profile as prev. EG-4B

1050 Collect EG-4 samples
(EG-4 (0'-4') + EG-4B (3'-4'))

1120 A. Mangiano informs me that probe is having trouble moving around in cell EG-

↳ As a result, he asks us to perform Hand Auger borings in cell EG-18 since depth is only 1-foot.

LM

1135 Begin to setup in EG-18 for HA advancement.

EG-18

	PID		
A)	0.0	0'-1'	Brn f-SAND, with fines, little Root, trace Gravel (SP-SM)
B)	0.0	0'-1'	S.A.A.
C)	0.0	0'-1'	S.A.A.
D)	0.0	0'-1'	S.A.A.
E)	0.0	0'-1'	S.A.A.

1205 Collect EG-18 samples
(EG-18(0'-1') + EG-18B(0'-1'))

↳ A. Mangiano advancing holes in EG-6.

1235 Spectrum courier on-site.

LM

1245 Spectrum courier off-site w/ samples.

EG-6(A)
Rec: 48"/48"

PID		
0.0	0'-1'	
0.0	1'-2'	Same profile as prev. EG-6 (A)
0.0	2'-3'	
0.0	3'-4'	

EG-6(B)
Rec= 48"/48"

0.0	0'-1'	
0.0	1'-2'	Same as prev. EG-6 (B)
0.0	2'-3'	
0.0	3'-4'	

1310 Collect EG-6 Samples
(EG-6(0'-4') + EG-6B(2'-3'))

EG-14:
3'-4' Brn-orange, f-SAND, little Silt, little Gravel (SP-SM)

	PID		
(A) Rec= 39"/48"	All 0.0	0'-4'	Same profile as prev. EG-14 A
(B) Rec= 40"/48"	All 0.0	0'-3'	Same profile as prev. EG-14 B.
(C) Same profile as prev.	All 0.0		

Halmar - G'burgh 12-10-10

1330 Samples collected at EG-9
(EG-9 (0'-3') + EG-9A (1'-2'))

~~1345~~ VLM

1355 Samples collected at cell EG-14.
*(EG-14 (0'-3') + EG-14A (1'-2')
↳ *DUP Sample collected from EG-14 and labeled EG-914

Soil profiles at EG-9 loc'ts were same as previously logged, and all PID readings were 0.0 ppm

Halmar - G'burgh 12-11-10

Clear, lt wind, T ≈ 40°s

1040 L. Moller arrives on-site to perform soil sampling activities.
A. Mangiano (Halmar)
A. Bando (TSC) > on-site
C. Begley (CH2M)

1045 Conduct H+S tailgate

1055 Begin setting up efforts. Anticipated work today is completing HA cells (Hand Auger) EG-1 thru EG-3,

1055 PID cal'd w/ 100 ppm isobutylene

1115 Begin to move work efforts to Northern portion of Site and set-up at cell EG-3.

LM

Halmar 12-11-10

EG-3

		PID	
All loc'ts → 0'-1'	(A)	0.0	Same soil profile as prev. EG-3 borings.
	(B)	0.0	
	(C)	0.0	
	(D)	0.0	
	(E)	0.0	

Collect EG-3 samples

↳ Decon equipment + prepare for next HA loc'ts, EG-2.

EG-2

	PID 0-1'	1-2'	
(A)	0.0	0.0	
(B)	0.0	0.0	Same soil as prev. logged at EG-2 loc'ts
(C)	0.0	0.0	
(D)	0.0	0.0	

Collect Samples at EG-2

LM

Halmar 12-11-10

Decon Sampling equipment and prepare for final ~~HA~~ loc't, EG-1.

EG-1

		PID	
(A)	0'-1'	0.0	Same profile as prev. EG-1.
	1'-2'	0.0	
(B)	0'-1'	0.0	Brn. f. SAND with fines, trace Gravel, trace fine Root, trace Coal/slag (FILL) (SW-SM)
	1'-2'	0.0	Same as prev. EG-1B 1'-2'
(C)	0'-1'	0.0	> Same profile as prev. EG-1C
	1'-2'	0.0	
(D)	0'-1'	0.0	> Same as prev. EG-1 D
	1'-2'	0.0	

1305 Collect EG-1 Samples [EG-1(0'-2') + EG-1A (0'-1')

1310 Begin to breakdown for day

1400 L. Moller off-site.

APPENDIX C

Soil Boring Logs

Stantec SOIL BORING LOG

EG-1A

CLIENT **Halmar**
LOCATION **Greenburgh, NY**
DATES: DUG **12-11-2010** WATER LEVEL **Not encountered**
PROJECT No. **191610166**
LOCATION No. **EG-1A**
DATUM

DEPTH (ft)	ELEVATION (ft)	SOIL DESCRIPTION	STRATA PLOT	WATER LEVEL	TYPE	NUMBER	VOC CONCENTRATION (ppm or % LEL)	REMARKS
0		Brown, fine SAND, little to some Silt, trace Gravel, trace Root. (SP-SM, SM)					0.0	
1		Orange-brown, fine SAND, little to some Silt, trace Gravel. (SP-SM, SM) Bottom of boring at 2 feet					0.0	
2								
3								
4								
5								
6								
7								
8								
9								
10								

Stantec

SOIL BORING LOG

EG-1B

CLIENT Halmar

LOCATION Greenburgh, NY

DATES: DUG 12-11-2010

WATER LEVEL Not encountered

PROJECT No. 191610166

LOCATION No. EG-1B

DATUM

DEPTH (ft)	ELEVATION (ft)	SOIL DESCRIPTION	STRATA PLOT	WATER LEVEL	TYPE	NUMBER	VOC CONCENTRATION (ppm or % LEL)	REMARKS
0		Brown, fine SAND, little to some Silt, trace Gravel, trace fine Root. (SP-SM, SM)					0.0	
1		Light brown, fine Silty SAND, trace Gravel, trace Root. (SM) Bottom of boring at 2 feet					0.0	
2								
3								
4								
5								
6								
7								
8								
9								
10								

Stantec SOIL BORING LOG **EG-1C**

CLIENT **Halmar**

LOCATION **Greenburgh, NY**

DATES: DUG **12-11-2010** WATER LEVEL **Not encountered**

PROJECT No. **191610166**

LOCATION No. **EG-1C**

DATUM

DEPTH (ft)	ELEVATION (ft)	SOIL DESCRIPTION	STRATA PLOT	WATER LEVEL	TYPE	NUMBER	VOC CONCENTRATION (ppm or % LEL)	REMARKS
0		Brown, fine to medium SAND, little Silt, trace Gravel, trace Root. (SW-SM)					0.0	
1		Orange-brown, fine to medium SAND, little Silt, trace Gravel. (SW-SM) Bottom of boring at 2 feet					0.0	
2								
3								
4								
5								
6								
7								
8								
9								
10								

Stantec

SOIL BORING LOG

EG-1D

CLIENT Halmar

LOCATION Greenburgh, NY

DATES: DUG 12-11-2010

WATER LEVEL Not encountered

PROJECT No. 191610166

LOCATION No. EG-1D

DATUM

DEPTH (ft)	ELEVATION (ft)	SOIL DESCRIPTION	STRATA PLOT	WATER LEVEL	TYPE	NUMBER	VOC CONCENTRATION (ppm or % LEL)	REMARKS
0		Brown, fine SAND, little to some Silt, trace Root, trace Gravel. (SP-SM, SM)	▨				0.0	
1			▨				0.0	
2		Bottom of boring at 2 feet						
3								
4								
5								
6								
7								
8								
9								
10								

Stantec

SOIL BORING LOG

EG-2A

CLIENT **Halmar**

LOCATION **Greenburgh, NY**

DATES: DUG **12-11-2010**

WATER LEVEL **Not encountered**

PROJECT No. **191610166**

LOCATION No. **EG-2A**

DATUM

DEPTH (ft)	ELEVATION (ft)	SOIL DESCRIPTION	STRATA PLOT	WATER LEVEL	TYPE	NUMBER	VOC CONCENTRATION (ppm or % LEL)	REMARKS
0		Gray, Silty fine SAND to fine Sandy SILT, little fine Root. (SM, ML)	░					
			░				0.0	
1			░					
			░				0.0	
		Bottom of boring at 2 feet	░					
2								
3								
4								
5								
6								
7								
8								
9								
10								

Stantec SOIL BORING LOG **EG-2B**

CLIENT Halmar

LOCATION Greenburgh, NY

DATES: DUG 12-11-2010 WATER LEVEL Not encountered

PROJECT No. 191610166

LOCATION No. EG-2B

DATUM

DEPTH (ft)	ELEVATION (ft)	SOIL DESCRIPTION	STRATA PLOT	WATER LEVEL	TYPE	NUMBER	VOC CONCENTRATION (ppm or % LEL)	REMARKS
0		Brown, Silty fine SAND, little fine Root, trace Gravel. (SM)	⁘					
			⁘				0.0	
1			⁘					
			⁘				0.0	
		Bottom of boring at 2 feet						
2								
3								
4								
5								
6								
7								
8								
9								
10								

Stantec

SOIL BORING LOG

EG-2C

CLIENT Halmar

LOCATION Greenburgh, NY

DATES: DUG 12-11-2010

WATER LEVEL Not encountered

PROJECT No. 191610166

LOCATION No. EG-2C

DATUM

DEPTH (ft)	ELEVATION (ft)	SOIL DESCRIPTION	STRATA PLOT	WATER LEVEL	TYPE	NUMBER	VOC CONCENTRATION (ppm or % LEL)	REMARKS
0		Brown, Silty fine SAND, little fine Root, trace Gravel. (SM)	░				0.0	
1		Bottom of boring at 2 feet	░				0.0	
2								
3								
4								
5								
6								
7								
8								
9								
10								

Stantec SOIL BORING LOG **EG-2D**

CLIENT Halmar

LOCATION Greenburgh, NY

DATES: DUG 12-11-2010

WATER LEVEL Not encountered

PROJECT No. 191610166

LOCATION No. EG-2D

DATUM

DEPTH (ft)	ELEVATION (ft)	SOIL DESCRIPTION	STRATA PLOT	WATER LEVEL	TYPE	NUMBER	VOC CONCENTRATION (ppm or % LEL)	REMARKS
0		Brown, Silty fine SAND, little fine Root, trace Gravel. (SM)						
							0.0	
1								
							0.0	
		Bottom of boring at 2 feet						
2								
3								
4								
5								
6								
7								
8								
9								
10								

Stantec SOIL BORING LOG **EG-3A**

CLIENT **Halmar** PROJECT No. **191610166**

LOCATION **Greenburgh, NY** LOCATION No. **EG-3A**

DATES: DUG **12-11-2010** WATER LEVEL **Not encountered** DATUM

DEPTH (ft)	ELEVATION (ft)	SOIL DESCRIPTION	STRATA PLOT	WATER LEVEL	TYPE	NUMBER	VOC CONCENTRATION (ppm or % LEL)	REMARKS
0		Brown, fine to medium SAND, little Silt, little Root, little Gravel. (SW-SM) Bottom of boring at 1 foot					0.0	
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								

Stantec

SOIL BORING LOG

EG-3B

CLIENT **Halmar**

LOCATION **Greenburgh, NY**

DATES: DUG **12-11-2010**

WATER LEVEL **Not encountered**

PROJECT No. **191610166**

LOCATION No. **EG-3B**

DATUM

DEPTH (ft)	ELEVATION (ft)	SOIL DESCRIPTION	STRATA PLOT	WATER LEVEL	TYPE	NUMBER	VOC CONCENTRATION (ppm or % LEL)	REMARKS
0		Brown, fine to medium SAND, little Silt, trace to little Gravel, trace Root. (SW-SM) Bottom of boring at 1 foot	▨				0.0	
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								

Stantec

SOIL BORING LOG

EG-3C

CLIENT Halmar

LOCATION Greenburgh, NY

DATES: DUG 12-11-2010

WATER LEVEL Not encountered

PROJECT No. 191610166

LOCATION No. EG-3C

DATUM

DEPTH (ft)	ELEVATION (ft)	SOIL DESCRIPTION	STRATA PLOT	WATER LEVEL	TYPE	NUMBER	VOC CONCENTRATION (ppm or % LEL)	REMARKS
0		Brown, fine to medium SAND, little Silt, trace to little Gravel, trace Root. (SW-SM) Bottom of boring at 1 foot					0.0	
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								

Stantec

SOIL BORING LOG

EG-3D

CLIENT **Halmar**

LOCATION **Greenburgh, NY**

DATES: DUG **12-11-2010**

WATER LEVEL **Not encountered**

PROJECT No. **191610166**

LOCATION No. **EG-3D**

DATUM

DEPTH (ft)	ELEVATION (ft)	SOIL DESCRIPTION	STRATA PLOT	WATER LEVEL	TYPE	NUMBER	VOC CONCENTRATION (ppm or % LEL)	REMARKS
0		Brown, fine to medium SAND, little Silt, trace to little Gravel, trace Root. (SW-SM) Bottom of boring at 1 foot					0.0	
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								

Stantec SOIL BORING LOG

EG-3E

CLIENT **Halmar**
LOCATION **Greenburgh, NY**
DATES: DUG **12-11-2010**
WATER LEVEL **Not encountered**
PROJECT No. **191610166**
LOCATION No. **EG-3E**
DATUM

DEPTH (ft)	ELEVATION (ft)	SOIL DESCRIPTION	STRATA PLOT	WATER LEVEL	TYPE	NUMBER	VOC CONCENTRATION (ppm or % LEL)	REMARKS
0		Brown, fine to medium SAND, little Silt, trace to little Gravel, trace Root. (SW-SM) Bottom of boring at 1 foot	░				0.0	
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								

Stantec

SOIL BORING LOG

EG-4A

CLIENT **Halmar**

LOCATION **Greenburgh, NY**

DATES: DUG **12-10-2010**

WATER LEVEL **Not encountered**

PROJECT No. **191610166**

LOCATION No. **EG-4A**

DATUM

DEPTH (ft)	ELEVATION (ft)	SOIL DESCRIPTION	STRATA PLOT	WATER LEVEL	TYPE	NUMBER	VOC CONCENTRATION (ppm or % LEL)	REMARKS
0		Dark brown, TOPSOIL and Organic Material (leaf, twig, etc.).						
		Brown, fine to medium SAND, little Silt, trace fine Root, trace Gravel. (SW-SM)						
1								
		Gray to orange-brown, fine SAND, little Silt, trace Gravel, trace fine Root. (SP-SM)						
2								
3								
4		Bottom of boring at 4 feet						
5								
6								
7								
8								
9								
10								

Stantec

SOIL BORING LOG

EG-4B

CLIENT Halmar

LOCATION Greenburgh, NY

DATES: DUG 12-10-2010

WATER LEVEL Not encountered

PROJECT No. 191610166

LOCATION No. EG-4B

DATUM

DEPTH (ft)	ELEVATION (ft)	SOIL DESCRIPTION	STRATA PLOT	WATER LEVEL	TYPE	NUMBER	VOC CONCENTRATION (ppm or % LEL)	REMARKS
0		Dark brown, TOPSOIL and Organic Material (leaf, twig, etc.).						
		Brown, fine SAND, little to some Silt, trace Gravel, trace Root. (SP-SM, SM)						
1								
2								
3		Brown, fine SAND, little to some Silt, trace Gravel, moist. (SP-SM, SM)						
4		Bottom of boring at 4 feet						
5								
6								
7								
8								
9								
10								

Stantec

SOIL BORING LOG

EG-6A

CLIENT **Halmar**

LOCATION **Greenburgh, NY**

DATES: DUG **12-10-2010**

WATER LEVEL **Not encountered**

PROJECT No. **191610166**

LOCATION No. **EG-6A**

DATUM

DEPTH (ft)	ELEVATION (ft)	SOIL DESCRIPTION	STRATA PLOT	WATER LEVEL	TYPE	NUMBER	VOC CONCENTRATION (ppm or % LEL)	REMARKS
0		Dark brown, TOPSOIL and Organic Material (leaf, twig, etc.).						
		Brown, fine SAND, little to some Silt, trace Gravel, trace Root. (SP-SM, SM)						
1		Brown to gray, fine to medium SAND, little to some Silt, trace Gravel. (SW-SM, SM)						
2								
3								
4		Bottom of boring at 4 feet						
5								
6								
7								
8								
9								
10								

Stantec

SOIL BORING LOG

EG-6B

CLIENT **Halmar**

PROJECT No. **191610166**

LOCATION **Greenburgh, NY**

LOCATION No. **EG-6B**

DATES: DUG **12-10-2010**

WATER LEVEL **Not encountered**

DATUM

DEPTH (ft)	ELEVATION (ft)	SOIL DESCRIPTION	STRATA PLOT	WATER LEVEL	TYPE	NUMBER	VOC CONCENTRATION (ppm or % LEL)	REMARKS
0		Dark brown, TOPSOIL.						
		Brown, fine SAND, little to some Silt, trace Gravel, trace Root. (SP-SM, SM)					0.0	
1								
							0.0	
2								
							0.0	
3		Dark brown, fine SAND, some Silt, trace Gravel. (SM)						
							0.0	
4		Bottom of boring at 4 feet						
5								
6								
7								
8								
9								
10								

Stantec SOIL BORING LOG **EG-9A**

CLIENT **Halmar**
PROJECT No. **191610166**
LOCATION **Greenburgh, NY**
LOCATION No. **EG-9A**
DATES: DUG **12-10-2010**
WATER LEVEL **Not encountered**
DATUM

DEPTH (ft)	ELEVATION (ft)	SOIL DESCRIPTION	STRATA PLOT	WATER LEVEL	TYPE	NUMBER	VOC CONCENTRATION (ppm or % LEL)	REMARKS
0		Dark brown, TOPSOIL.						
		Brown, fine to medium SAND, little Rock Fragments, little fine Root, trace fines. (SW)						
1								
2								
3								
4		Bottom of boring at 4 feet						
5								
6								
7								
8								
9								
10								

Stantec

SOIL BORING LOG

EG-9B

CLIENT **Halmar**

LOCATION **Greenburgh, NY**

DATES: DUG **12-10-2010**

WATER LEVEL **Not encountered**

PROJECT No. **191610166**

LOCATION No. **EG-9B**

DATUM

DEPTH (ft)	ELEVATION (ft)	SOIL DESCRIPTION	STRATA PLOT	WATER LEVEL	TYPE	NUMBER	VOC CONCENTRATION (ppm or % LEL)	REMARKS
0		Dark brown, TOPSOIL. Gray, fine to medium SAND, little to some Silt, trace Rock Fragments, trace Root, trace Gravel. (SW-SM, SM)					0.0	
1							0.0	
2							0.0	
3							0.0	
4		Bottom of boring at 4 feet						
5								
6								
7								
8								
9								
10								

Stantec SOIL BORING LOG

EG-9C

CLIENT Halmar

LOCATION Greenburgh, NY

DATES: DUG 12-10-2010 WATER LEVEL Not encountered

PROJECT No. 191610166

LOCATION No. EG-9C

DATUM

DEPTH (ft)	ELEVATION (ft)	SOIL DESCRIPTION	STRATA PLOT	WATER LEVEL	TYPE	NUMBER	VOC CONCENTRATION (ppm or % LEL)	REMARKS
0		Dark brown, TOPSOIL.						
		Brown, fine SAND, little to some Silt, trace Gravel, trace Root. (SP-SM, SM)					0.0	
1							0.0	
2							0.0	
3								
		Brown, fine SAND, little to some Silt, trace Gravel. (SP-SM, SM)					0.0	
4		Bottom of boring at 4 feet						
5								
6								
7								
8								
9								
10								

Stantec

SOIL BORING LOG

EG-10A

CLIENT **Halmar**

LOCATION **Greenburgh, NY**

DATES: DUG **12-10-2010**

WATER LEVEL **Not encountered**

PROJECT No. **191610166**

LOCATION No. **EG-10A**

DATUM

DEPTH (ft)	ELEVATION (ft)	SOIL DESCRIPTION	STRATA PLOT	WATER LEVEL	TYPE	NUMBER	VOC CONCENTRATION (ppm or % LEL)	REMARKS
0		Dark brown, TOPSOIL.						
		Brown, fine to medium SAND, little to some Silt, little Root, little Gravel, moist. (SW-SM, SM)					0.0	
1		Brown, fine to coarse SAND, little Silt, trace Gravel, trace Root. (SW-SM)					0.0	
2							0.0	
3							0.0	
4		Bottom of boring at 4 feet						
5								
6								
7								
8								
9								
10								

Stantec

SOIL BORING LOG

EG-10B

CLIENT Halmar

LOCATION Greenburgh, NY

DATES: DUG 12-10-2010

WATER LEVEL Not encountered

PROJECT No. 191610166

LOCATION No. EG-10B

DATUM

DEPTH (ft)	ELEVATION (ft)	SOIL DESCRIPTION	STRATA PLOT	WATER LEVEL	TYPE	NUMBER	VOC CONCENTRATION (ppm or % LEL)	REMARKS
0		Dark brown, TOPSOIL.						
		Brown, fine to medium SAND, little to some Silt, little Root, little Gravel. (SW-SM, SM)					0.0	
1								
		Brown, fine to coarse SAND, little Silt, trace Gravel, trace Root. (SW-SM)					0.0	
2		Brown to gray, fine to medium SAND, little to some Silt, trace Gravel. (SW-SM, SM)						
							0.0	
3								
							0.0	
4		Bottom of boring at 4 feet						
5								
6								
7								
8								
9								
10								

Stantec SOIL BORING LOG **EG-14A**

CLIENT Halmar

LOCATION Greenburgh, NY

DATES: DUG 12-10-2010

WATER LEVEL Not encountered

PROJECT No. 191610166

LOCATION No. EG-14A

DATUM

DEPTH (ft)	ELEVATION (ft)	SOIL DESCRIPTION	STRATA PLOT	WATER LEVEL	TYPE	NUMBER	VOC CONCENTRATION (ppm or % LEL)	REMARKS
0		Light brown to gray, fine to medium SAND, little to some Silt, little Gravel, trace fine Root. (SW-SM, SM)					0.0	
1							0.0	
2							0.0	
3							0.0	
4		Bottom of boring at 4 feet						
5								
6								
7								
8								
9								
10								

Stantec SOIL BORING LOG **EG-14B**

CLIENT Halmar

LOCATION Greenburgh, NY

DATES: DUG 12-10-2010 WATER LEVEL Not encountered

PROJECT No. 191610166

LOCATION No. EG-14B

DATUM

DEPTH (ft)	ELEVATION (ft)	SOIL DESCRIPTION	STRATA PLOT	WATER LEVEL	TYPE	NUMBER	VOC CONCENTRATION (ppm or % LEL)	REMARKS
0		Light brown to gray, fine to medium SAND, little to some Silt, little Gravel, trace fine Root. (SW-SM, SM)					0.0	
1		Light brown to gray, fine to medium SAND, little to some Silt, little Gravel. (SW-SM, SM)					0.0	
2							0.0	
3		Brown-orange, fine SAND, little Silt, little Gravel. (SP-SM)					0.0	
4		Bottom of boring at 4 feet						
5								
6								
7								
8								
9								
10								

SOIL BORING LOG

EG-14C

CLIENT **Halmar**

LOCATION **Greenburgh, NY**

DATES: DUG **12-10-2010**

WATER LEVEL **3 feet**

PROJECT No. **191610166**

LOCATION No. **EG-14C**

DATUM

DEPTH (ft)	ELEVATION (ft)	SOIL DESCRIPTION	STRATA PLOT	WATER LEVEL	TYPE	NUMBER	VOC CONCENTRATION (ppm or % LEL)	REMARKS
0		Light brown to gray, fine to medium SAND, little to some Silt, little Gravel, trace fine Root. (SW-SM, SM)						
							0.0	
1		Light brown to gray, fine to medium SAND, little to some Silt, little Gravel, moist to wet. (SW-SM, SM)						
							0.0	
2								
							0.0	
3				∇				
							0.0	
4		Bottom of boring at 4 feet						
5								
6								
7								
8								
9								
10								

Stantec **SOIL BORING LOG** **EG-15**

CLIENT **Halmar** PROJECT No. **191610166**
LOCATION **Greenburgh, NY** LOCATION No. **EG-15**
DATES: DUG **12-09-2010** WATER LEVEL **5 feet** DATUM

DEPTH (ft)	ELEVATION (ft)	SOIL DESCRIPTION	STRATA PLOT	WATER LEVEL	TYPE	NUMBER	VOC CONCENTRATION (ppm or % LEL)	REMARKS
0		Dark brown, TOPSOIL.						
		Brown to gray, fine to medium SAND, little Clay/Silt, trace Gravel, trace fine Root. (SW-SM/SW-SC, SM/SC)						
1								
2								
3								
4		Brown, fine SAND, some Silt, trace fine Gravel, trace Organic Material, moist to wet. (SM)						
5		Gray to brown, fine to medium SAND, little Clay/Silt, little quartzite Fragments, trace Gravel, trace fine Root. (SW-SM/SW-SC, SM/SC)		∇				
6		Bottom of boring at 6 feet						
7								
8								
9								
10								

Stantec

SOIL BORING LOG

EG-18A

CLIENT **Halmar**

LOCATION **Greenburgh, NY**

DATES: DUG **12-10-2010**

WATER LEVEL **Not encountered**

PROJECT No. **191610166**

LOCATION No. **EG-18A**

DATUM

DEPTH (ft)	ELEVATION (ft)	SOIL DESCRIPTION	STRATA PLOT	WATER LEVEL	TYPE	NUMBER	VOC CONCENTRATION (ppm or % LEL)	REMARKS
0		Brown, fine SAND, little Silt, little Root, trace Gravel. (SP-SM) Bottom of boring at 1 foot	▨				0.0	
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								

Stantec SOIL BORING LOG EG-18B

CLIENT **Halmar**
LOCATION **Greenburgh, NY**
DATES: DUG **12-10-2010**
WATER LEVEL **Not encountered**
PROJECT No. **191610166**
LOCATION No. **EG-18B**
DATUM

DEPTH (ft)	ELEVATION (ft)	SOIL DESCRIPTION	STRATA PLOT	WATER LEVEL	TYPE	NUMBER	VOC CONCENTRATION (ppm or % LEL)	REMARKS
0		Brown, fine SAND, little Silt, little Root, trace Gravel. (SP-SM) Bottom of boring at 1 foot	▨				0.0	
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								

Stantec SOIL BORING LOG

EG-18C

CLIENT Halmar

LOCATION Greenburgh, NY

DATES: DUG 12-10-2010

WATER LEVEL Not encountered

PROJECT No. 191610166

LOCATION No. EG-18C

DATUM

DEPTH (ft)	ELEVATION (ft)	SOIL DESCRIPTION	STRATA PLOT	WATER LEVEL	TYPE	NUMBER	VOC CONCENTRATION (ppm or % LEL)	REMARKS
0		Brown, fine SAND, little Silt, little Root, trace Gravel. (SP-SM) Bottom of boring at 1 foot	▨				0.0	
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								

Stantec

SOIL BORING LOG

EG-18D

CLIENT **Halmar**

LOCATION **Greenburgh, NY**

DATES: DUG **12-10-2010**

WATER LEVEL **Not encountered**

PROJECT No. **191610166**

LOCATION No. **EG-18D**

DATUM

DEPTH (ft)	ELEVATION (ft)	SOIL DESCRIPTION	STRATA PLOT	WATER LEVEL	TYPE	NUMBER	VOC CONCENTRATION (ppm or % LEL)	REMARKS
0		Brown, fine SAND, little Silt, little Root, trace Gravel. (SP-SM) Bottom of boring at 1 foot	▨				0.0	
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								

Stantec SOIL BORING LOG **EG-18E**

CLIENT **Halmar** PROJECT No. **191610166**

LOCATION **Greenburgh, NY** LOCATION No. **EG-18E**

DATES: DUG **12-10-2010** WATER LEVEL **Not encountered** DATUM

DEPTH (ft)	ELEVATION (ft)	SOIL DESCRIPTION	STRATA PLOT	WATER LEVEL	TYPE	NUMBER	VOC CONCENTRATION (ppm or % LEL)	REMARKS
0		Brown, fine SAND, little Silt, little Root, trace Gravel. (SP-SM)	▨				0.0	
		Bottom of boring at 1 foot						
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								

Stantec SOIL BORING LOG

EG-19A

CLIENT Halmar
LOCATION Greenburgh, NY
DATES: DUG 12-10-2010
WATER LEVEL Not encountered
PROJECT No. 191610166
LOCATION No. EG-19A
DATUM

DEPTH (ft)	ELEVATION (ft)	SOIL DESCRIPTION	STRATA PLOT	WATER LEVEL	TYPE	NUMBER	VOC CONCENTRATION (ppm or % LEL)	REMARKS
0		Brown, fine to medium SAND, little Silt, trace Gravel, trace fine Root. (SW-SM)					0.0 0.0	
2		Brown to gray, fine to medium SAND, little Silt, little Gravel. (SW-SM)					0.0 0.0	
4		Bottom of boring at 4 feet						
5								
6								
7								
8								
9								
10								

Stantec SOIL BORING LOG

EG-19B

CLIENT **Halmar**

LOCATION **Greenburgh, NY**

DATES: DUG **12-10-2010**

WATER LEVEL **Not encountered**

PROJECT No. **191610166**

LOCATION No. **EG-19B**

DATUM

DEPTH (ft)	ELEVATION (ft)	SOIL DESCRIPTION	STRATA PLOT	WATER LEVEL	TYPE	NUMBER	VOC CONCENTRATION (ppm or % LEL)	REMARKS
0		Brown, fine SAND, little Silt, little fine Root, trace Gravel. (SP-SM)					0.0	
1							0.0	
2								
		Orange-brown, fine to coarse SAND, little Gravel, trace to little Silt, trace fine Root, trace Rock Fragments. (SW, SW-SM)					0.0	
3							0.0	
4		Bottom of boring at 4 feet						
5								
6								
7								
8								
9								
10								

Stantec

SOIL BORING LOG

EG-26A

CLIENT Halmar

LOCATION Greenburgh, NY

DATES: DUG 12-08-2010

WATER LEVEL Not encountered

PROJECT No. 191610166

LOCATION No. EG-26A

DATUM

DEPTH (ft)	ELEVATION (ft)	SOIL DESCRIPTION	STRATA PLOT	WATER LEVEL	TYPE	NUMBER	VOC CONCENTRATION (ppm or % LEL)	REMARKS
0		Brown, fine SAND, little to some Silt, trace Root, trace Gravel. (SP-SM, SM)					0.0	
1							0.0	
2		Orange-brown, fine SAND, little Silt, trace Gravel. (SP-SM) Bottom of boring at 3 feet					0.0	
3								
4								
5								
6								
7								
8								
9								
10								

Stantec SOIL BORING LOG

EG-26B

CLIENT Halmar
LOCATION Greenburgh, NY
DATES: DUG 12-08-2010
WATER LEVEL Not encountered
PROJECT No. 191610166
LOCATION No. EG-26B
DATUM

DEPTH (ft)	ELEVATION (ft)	SOIL DESCRIPTION	STRATA PLOT	WATER LEVEL	TYPE	NUMBER	VOC CONCENTRATION (ppm or % LEL)	REMARKS
0		Brown, fine SAND, little to some Silt, trace Root, trace Gravel. (SP-SM, SM)					0.0	
1		Orange-brown, fine SAND, little Silt, trace Gravel, trace Rock Fragments, moist. (SP-SM)					0.0	
2							0.0	
		Bottom of boring at 3 feet						
3								
4								
5								
6								
7								
8								
9								
10								

Stantec

SOIL BORING LOG

EG-26C

CLIENT **Halmar**

PROJECT No. **191610166**

LOCATION **Greenburgh, NY**

LOCATION No. **EG-26C**

DATES: DUG **12-08-2010**

WATER LEVEL **Not encountered**

DATUM

DEPTH (ft)	ELEVATION (ft)	SOIL DESCRIPTION	STRATA PLOT	WATER LEVEL	TYPE	NUMBER	VOC CONCENTRATION (ppm or % LEL)	REMARKS
0		Brown, fine SAND, little to some Silt, trace Root, trace Gravel. (SP-SM, SM)					0.0	
1							0.0	
2		Orange-brown, fine SAND, little Silt, trace Gravel. (SP-SM) Bottom of boring at 3 feet					0.0	
3								
4								
5								
6								
7								
8								
9								
10								

Stantec

SOIL BORING LOG

EG-26D

CLIENT Halmar

LOCATION Greenburgh, NY

DATES: DUG 12-08-2010

WATER LEVEL Not encountered

PROJECT No. 191610166

LOCATION No. EG-26D

DATUM

DEPTH (ft)	ELEVATION (ft)	SOIL DESCRIPTION	STRATA PLOT	WATER LEVEL	TYPE	NUMBER	VOC CONCENTRATION (ppm or % LEL)	REMARKS
0		Brown, fine to medium SAND, little to some Silt, trace fine Root, trace Gravel. (SW-SM, SM)					0.0	
1		Brown-gray, fine SAND, little Silt, trace Gravel, moist. (SP-SM)					0.0	
2							0.0	
		Bottom of boring at 3 feet						
3								
4								
5								
6								
7								
8								
9								
10								

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Stantec SOIL BORING LOG

EG-27A

CLIENT Halmar

LOCATION Greenburgh, NY

DATES: DUG 12-08-2010

WATER LEVEL Not encountered

PROJECT No. 191610166

LOCATION No. EG-27A

DATUM

DEPTH (ft)	ELEVATION (ft)	SOIL DESCRIPTION	STRATA PLOT	WATER LEVEL	TYPE	NUMBER	VOC CONCENTRATION (ppm or % LEL)	REMARKS
0		Brown, fine to medium SAND, little Silt, little Gravel, trace fine Root. (SW-SM)						
							0.0	
1								
							0.0	
2		Brown to gray, fine to medium SAND, little Silt, little Gravel, trace fine Root. (SW-SM)						
							0.1	
3								
							0.0	
4		Bottom of boring at 4 feet						
5								
6								
7								
8								
9								
10								

Stantec

SOIL BORING LOG

EG-27B

CLIENT **Halmar**

LOCATION **Greenburgh, NY**

DATES: DUG **12-08-2010**

WATER LEVEL **Not encountered**

PROJECT No. **191610166**

LOCATION No. **EG-27B**

DATUM

DEPTH (ft)	ELEVATION (ft)	SOIL DESCRIPTION	STRATA PLOT	WATER LEVEL	TYPE	NUMBER	VOC CONCENTRATION (ppm or % LEL)	REMARKS
0		Brown, fine to medium SAND, little Silt, little Gravel, trace fine Root. (SW-SM)					0.0	
1							0.0	
2		Brown to gray, fine to medium SAND, little Silt, little Gravel, trace fine Root. (SW-SM)					0.0	
3							0.0	
4		Bottom of boring at 4 feet						
5								
6								
7								
8								
9								
10								

Stantec SOIL BORING LOG

EG-28A

CLIENT **Halmar**

LOCATION **Greenburgh, NY**

DATES: DUG **12-08-2010** WATER LEVEL **Not encountered**

PROJECT No. **191610166**

LOCATION No. **EG-28A**

DATUM

DEPTH (ft)	ELEVATION (ft)	SOIL DESCRIPTION	STRATA PLOT	WATER LEVEL	TYPE	NUMBER	VOC CONCENTRATION (ppm or % LEL)	REMARKS
0		Brown, fine SAND, little Silt, trace Root, trace Gravel. (SP-SM)						
							0.0	
1								
							0.0	
2		Gray to brown, fine to medium SAND, little Silt, little to some Gravel, moist. (SW-SM)						
							0.0	
		Bottom of boring at 3 feet						
3								
4								
5								
6								
7								
8								
9								
10								

Stantec

SOIL BORING LOG

EG-28B

CLIENT **Halmar**

LOCATION **Greenburgh, NY**

DATES: DUG **12-08-2010**

WATER LEVEL **Not encountered**

PROJECT No. **191610166**

LOCATION No. **EG-28B**

DATUM

DEPTH (ft)	ELEVATION (ft)	SOIL DESCRIPTION	STRATA PLOT	WATER LEVEL	TYPE	NUMBER	VOC CONCENTRATION (ppm or % LEL)	REMARKS
0		Brown, fine SAND, little Silt, trace Root, trace Gravel. (SP-SM)						
							0.0	
1								
							0.0	
2		Gray to brown, fine to medium SAND, little Silt, little to some Gravel, moist. (SW-SM) Bottom of boring at 3 feet						
							0.0	
3								
4								
5								
6								
7								
8								
9								
10								

Stantec

SOIL BORING LOG

EG-28C

CLIENT Halmar

LOCATION Greenburgh, NY

DATES: DUG 12-08-2010 WATER LEVEL Not encountered

PROJECT No. 191610166

LOCATION No. EG-28C

DATUM

DEPTH (ft)	ELEVATION (ft)	SOIL DESCRIPTION	STRATA PLOT	WATER LEVEL	TYPE	NUMBER	VOC CONCENTRATION (ppm or % LEL)	REMARKS
0		Brown, fine SAND, little Silt, trace Root, trace Gravel. (SP-SM)					0.0	
1							0.0	
2		Gray to brown, fine to medium SAND, little Silt, little to some Gravel, moist. (SW-SM) Bottom of boring at 3 feet					0.0	
3								
4								
5								
6								
7								
8								
9								
10								

Stantec SOIL BORING LOG **EG-43A**

CLIENT **Halmar**
LOCATION **Greenburgh, NY**
DATES: DUG **12-09-2010**
WATER LEVEL **Not encountered**
PROJECT No. **191610166**
LOCATION No. **EG-43A**
DATUM

DEPTH (ft)	ELEVATION (ft)	SOIL DESCRIPTION	STRATA PLOT	WATER LEVEL	TYPE	NUMBER	VOC CONCENTRATION (ppm or % LEL)	REMARKS
0		Brown, fine SAND, little Silt, little fine Root, trace fine Gravel. (SP-SM)					0.0	
1		Brown to dark brown, fine to coarse SAND, little Silt, little Gravel. (SW-SM) Bottom of boring at 2 feet					0.0	
2								
3								
4								
5								
6								
7								
8								
9								
10								

Stantec SOIL BORING LOG **EG-43B**

CLIENT Halmar
LOCATION Greenburgh, NY
DATES: DUG 12-09-2010 WATER LEVEL Not encountered
PROJECT No. 191610166
LOCATION No. EG-43B
DATUM

DEPTH (ft)	ELEVATION (ft)	SOIL DESCRIPTION	STRATA PLOT	WATER LEVEL	TYPE	NUMBER	VOC CONCENTRATION (ppm or % LEL)	REMARKS
0		Brown, fine SAND, little Silt, little fine Root, little Rock Fragments, trace fine Gravel. (SP-SM)						
							0.0	
1								
		Bottom of boring at 2 feet					0.0	
2								
3								
4								
5								
6								
7								
8								
9								
10								

Stantec SOIL BORING LOG **EG-43C**

CLIENT Halmar
LOCATION Greenburgh, NY
DATES: DUG 12-09-2010 WATER LEVEL Not encountered
PROJECT No. 191610166
LOCATION No. EG-43C
DATUM

DEPTH (ft)	ELEVATION (ft)	SOIL DESCRIPTION	STRATA PLOT	WATER LEVEL	TYPE	NUMBER	VOC CONCENTRATION (ppm or % LEL)	REMARKS
0		Brown, fine SAND, little Silt, little fine Root, trace fine Gravel. (SP-SM)					0.0	
1		Brown to dark brown, fine to medium SAND, little Silt, trace Gravel. (SW-SM, SM) Bottom of boring at 2 feet					0.0	
2								
3								
4								
5								
6								
7								
8								
9								
10								

Stantec **SOIL BORING LOG** **EG-43D**

CLIENT Halmar PROJECT No. 191610166
LOCATION Greenburgh, NY LOCATION No. EG-43D
DATES: DUG 12-09-2010 WATER LEVEL Not encountered DATUM

DEPTH (ft)	ELEVATION (ft)	SOIL DESCRIPTION	STRATA PLOT	WATER LEVEL	TYPE	NUMBER	VOC CONCENTRATION (ppm or % LEL)	REMARKS
0		Brown, fine SAND, little Silt, little fine Root, trace fine Gravel. (SP-SM)					0.0	
1		Brown to dark brown, fine to medium SAND, little to some Silt, trace Gravel. (SW-SM, SM) Bottom of boring at 2 feet					0.0	
2								
3								
4								
5								
6								
7								
8								
9								
10								

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Stantec

SOIL BORING LOG

EG-44A

CLIENT **Halmar**
PROJECT No. **191610166**
LOCATION **Greenburgh, NY**
LOCATION No. **EG-44A**
DATES: DUG **12-09-2010**
WATER LEVEL **Not encountered**
DATUM

DEPTH (ft)	ELEVATION (ft)	SOIL DESCRIPTION	STRATA PLOT	WATER LEVEL	TYPE	NUMBER	VOC CONCENTRATION (ppm or % LEL)	REMARKS
0		Brown, fine SAND, little Silt, little fine Root, trace fine Gravel. (SP-SM)					0.0	
1								
		Brown-gray, fine to coarse SAND, some Rock Fragments, trace Silt, trace fine Root. (SW)					0.0	
2							0.0	
		Bottom of boring at 3 feet						
3								
4								
5								
6								
7								
8								
9								
10								

Stantec **SOIL BORING LOG** **EG-44B**

CLIENT Halmar

LOCATION Greenburgh, NY

DATES: DUG 12-09-2010

WATER LEVEL Not encountered

PROJECT No. 191610166

LOCATION No. EG-44B

DATUM

DEPTH (ft)	ELEVATION (ft)	SOIL DESCRIPTION	STRATA PLOT	WATER LEVEL	TYPE	NUMBER	VOC CONCENTRATION (ppm or % LEL)	REMARKS
0		Brown, fine SAND, little Silt, little fine Root, trace fine Gravel. (SP-SM)					0.0	
1		Brown, fine to medium SAND, little Silt, some Rock Fragments, trace fine Root. (SW-SM)					0.0	
2		Bottom of boring at 3 feet					0.0	
3								
4								
5								
6								
7								
8								
9								
10								

Stantec # SOIL BORING LOG

EG-44C

CLIENT Halmar

LOCATION Greenburgh, NY

DATES: DUG 12-09-2010

WATER LEVEL Not encountered

PROJECT No. 191610166

LOCATION No. EG-44C

DATUM

DEPTH (ft)	ELEVATION (ft)	SOIL DESCRIPTION	STRATA PLOT	WATER LEVEL	TYPE	NUMBER	VOC CONCENTRATION (ppm or % LEL)	REMARKS
0		Brown, fine SAND, little Silt, trace fine Root, trace Gravel. (SP-SM)					0.0	
1		Brown to gray, fine to coarse SAND, some Rock Fragments, some fine Gravel, trace fine Root, trace Silt. (SW)						
		Gray to brown, fine to medium SAND, little Silt, trace fine Gravel. (SW-SM)					0.0	
2							0.0	
		Bottom of boring at 3 feet						
3								
4								
5								
6								
7								
8								
9								
10								

Stantec **SOIL BORING LOG** **EG-45A**

CLIENT Halmar

LOCATION Greenburgh, NY

DATES: DUG 12-09-2010

WATER LEVEL Not encountered

PROJECT No. 191610166

LOCATION No. EG-45A

DATUM

DEPTH (ft)	ELEVATION (ft)	SOIL DESCRIPTION	STRATA PLOT	WATER LEVEL	TYPE	NUMBER	VOC CONCENTRATION (ppm or % LEL)	REMARKS
0		Dark brown, fine SAND, little Silt, little fine Root. (SP-SM)					0.1	
1		Brown, fine to medium SAND, little Silt, trace to little Gravel. (SW-SM)					0.0	
2		Gray to orange-brown, fine SAND, little Silt, little Gravel. (SP-SM)					0.0	
3							0.0	
4		Bottom of boring at 4 feet						
5								
6								
7								
8								
9								
10								

Stantec

SOIL BORING LOG

EG-45B

CLIENT **Halmar**

PROJECT No. **191610166**

LOCATION **Greenburgh, NY**

LOCATION No. **EG-45B**

DATES: DUG **12-09-2010**

WATER LEVEL **Not encountered**

DATUM

DEPTH (ft)	ELEVATION (ft)	SOIL DESCRIPTION	STRATA PLOT	WATER LEVEL	TYPE	NUMBER	VOC CONCENTRATION (ppm or % LEL)	REMARKS
0		Dark brown to brown, fine to medium SAND, little fine Root, trace to little Silt, trace Gravel. (SW, SW-SM)					0.0	
1		Dark brown to light orange-brown, fine to medium SAND, little Silt, trace Root, trace Rock Fragments. (SW-SM)					0.0	
2		Brown to dark brown, fine to coarse SAND, little Silt, little Gravel, trace fine Root. (SW-SM)					0.0	
3		Brown, fine to coarse SAND, little Silt, trace Gravel, trace Root. (SW-SM) Bottom of boring at 4 feet					0.0	
4								
5								
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7								
8								
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10								

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Stantec SOIL BORING LOG

EG-46A

CLIENT Halmar

LOCATION Greenburgh, NY

DATES: DUG 12-09-2010

WATER LEVEL Not encountered

PROJECT No. 191610166

LOCATION No. EG-46A

DATUM

DEPTH (ft)	ELEVATION (ft)	SOIL DESCRIPTION	STRATA PLOT	WATER LEVEL	TYPE	NUMBER	VOC CONCENTRATION (ppm or % LEL)	REMARKS
0		Dark brown, TOPSOIL.						
		Brown, fine SAND, little to some Silt, little fine Root, trace Gravel. (SP-SM, SM)					0.0	
1		Brown, fine to medium SAND, little Silt, little fine Gravel, little Rock Fragments ~~(schist or gneiss)~~, trace Root. (SW-SM)					0.0	
2		Brown to gray, fine to medium SAND, little Silt, trace fine Gravel, trace fine Root. (SW-SM)					0.0	
3		Brown, fine to medium SAND, little Silt, trace fine Gravel, moist. (SW-SM)					0.0	
4		Bottom of boring at 4 feet						
5								
6								
7								
8								
9								
10								

Stantec

SOIL BORING LOG

EG-46B

CLIENT **Halmar**

PROJECT No. **191610166**

LOCATION **Greenburgh, NY**

LOCATION No. **EG-46B**

DATES: DUG **12-09-2010**

WATER LEVEL **Not encountered**

DATUM

DEPTH (ft)	ELEVATION (ft)	SOIL DESCRIPTION	STRATA PLOT	WATER LEVEL	TYPE	NUMBER	VOC CONCENTRATION (ppm or % LEL)	REMARKS
0		Brown, fine SAND, little Silt, little fine Root, trace fine Gravel. (SP-SM)	▨				0.0	
1		Brown, fine to medium SAND, little Silt, little Gravel, little fine Root. (SW-SM)	▨				0.0	
2		Dark brown to brown, fine to medium SAND, little Silt, little Gravel, trace fine Root. (SW-SM)	▨				0.0	
3		Brown to dark brown, fine to coarse SAND, little Silt, little Gravel, trace Organic Material, trace Rock Fragments. (SW-SM) Bottom of boring at 4 feet	▨				0.0	
4								
5								
6								
7								
8								
9								
10								

Stantec SOIL BORING LOG

EG-47A

CLIENT Halmar

LOCATION Greenburgh, NY

DATES: DUG 12-09-2010

WATER LEVEL Not encountered

PROJECT No. 191610166

LOCATION No. EG-47A

DATUM

DEPTH (ft)	ELEVATION (ft)	SOIL DESCRIPTION	STRATA PLOT	WATER LEVEL	TYPE	NUMBER	VOC CONCENTRATION (ppm or % LEL)	REMARKS
0		Brown, fine to medium SAND, little Silt, little to some Root, trace Gravel. (SW-SM)					0.0	
1		Light brown, fine to medium SAND, little to some Silt, trace Root, trace Gravel. (SW-SM, SM)					0.0	
2		Gray to orange-brown, fine to medium SAND, little to some Silt, trace Gravel. (SW-SM, SM)					0.0	
3							0.0	
4		Bottom of boring at 4 feet						
5								
6								
7								
8								
9								
10								

Stantec SOIL BORING LOG

EG-47B

CLIENT **Halmar**

PROJECT No. **191610166**

LOCATION **Greenburgh, NY**

LOCATION No. **EG-47B**

DATES: DUG **12-09-2010**

WATER LEVEL **Not encountered**

DATUM

DEPTH (ft)	ELEVATION (ft)	SOIL DESCRIPTION	STRATA PLOT	WATER LEVEL	TYPE	NUMBER	VOC CONCENTRATION (ppm or % LEL)	REMARKS
0		Dark brown, TOPSOIL. Dark brown, fine to medium SAND, little to some Silt, little fine Root, trace Gravel. (SW-SM, SM)					0.0	
1							0.0	
2		Brown, fine to medium SAND, little to some Silt, little Gravel, little Rock Fragments. (SW-SM, SM)					0.0	
3		Gray to orange-brown to dark brown, fine to coarse SAND, little to some Silt, little Gravel, trace fine Root. (SW-SM, SM)					0.0	
4		Bottom of boring at 4 feet						
5								
6								
7								
8								
9								
10								

Stantec

SOIL BORING LOG

EG-47C

CLIENT Halmar

PROJECT No. 191610166

LOCATION Greenburgh, NY

LOCATION No. EG-47C

DATES: DUG 12-09-2010

WATER LEVEL Not encountered

DATUM

DEPTH (ft)	ELEVATION (ft)	SOIL DESCRIPTION	STRATA PLOT	WATER LEVEL	TYPE	NUMBER	VOC CONCENTRATION (ppm or % LEL)	REMARKS
0		Brown, fine to medium SAND, little to some Silt, little to trace Root, trace fine Gravel. (SW-SM, SM)						
							0.0	
1								
							0.0	
2		Brown to gray, fine to medium SAND, little Silt, trace Gravel. (SW-SM)						
							0.0	
3		Brown, fine to coarse SAND, little Silt, trace Gravel. (SW-SM)						
							0.0	
4		Bottom of boring at 4 feet						
5								
6								
7								
8								
9								
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Stantec

SOIL BORING LOG

EG-48A

CLIENT Halmar

PROJECT No. 191610166

LOCATION Greenburgh, NY

LOCATION No. EG-48A

DATES: DUG 12-08-2010

WATER LEVEL Not encountered

DATUM

DEPTH (ft)	ELEVATION (ft)	SOIL DESCRIPTION	STRATA PLOT	WATER LEVEL	TYPE	NUMBER	VOC CONCENTRATION (ppm or % LEL)	REMARKS
0		Orange-brown to gray, fine SAND, little Silt, trace fine Root. (SP-SM)						
							0.0	
1		Gray to brown, fine to medium SAND, little Silt, trace Root, trace Gravel. (SW-SM)						
							0.0	
2								
							0.0	
		Bottom of boring at 3 feet						
3								
4								
5								
6								
7								
8								
9								
10								

Stantec SOIL BORING LOG **EG-48B**

CLIENT **Halmar**
PROJECT No. **191610166**
LOCATION **Greenburgh, NY**
LOCATION No. **EG-48B**
DATES: DUG **12-08-2010**
WATER LEVEL **Not encountered**
DATUM

DEPTH (ft)	ELEVATION (ft)	SOIL DESCRIPTION	STRATA PLOT	WATER LEVEL	TYPE	NUMBER	VOC CONCENTRATION (ppm or % LEL)	REMARKS
0		Brown, fine SAND, little Silt, trace fine Root. (SP-SM)					0.0	
1		Orange-brown to gray, fine SAND, trace to little Silt, trace Gravel. (SP, SP-SM)					0.0	
2		Bottom of boring at 3 feet					0.0	
3								
4								
5								
6								
7								
8								
9								
10								

Stantec

SOIL BORING LOG

EG-48C

CLIENT **Halmar**

LOCATION **Greenburgh, NY**

DATES: DUG **12-08-2010**

WATER LEVEL **Not encountered**

PROJECT No. **191610166**

LOCATION No. **EG-48C**

DATUM

DEPTH (ft)	ELEVATION (ft)	SOIL DESCRIPTION	STRATA PLOT	WATER LEVEL	TYPE	NUMBER	VOC CONCENTRATION (ppm or % LEL)	REMARKS
0		Brown, fine SAND, little Silt, trace fine Root, trace Gravel. (SP-SM)					0.0	
1		Gray, fine to coarse SAND. (SW)						
		Gray-brown, fine SAND, little to some Silt, trace fine Root, trace Gravel. (SP-SM, SM)					0.0	
2							0.0	
		Bottom of boring at 3 feet						
3								
4								
5								
6								
7								
8								
9								
10								

Stantec

SOIL BORING LOG

EG-49A

CLIENT **Halmar**

LOCATION **Greenburgh, NY**

DATES: DUG **12-08-2010**

WATER LEVEL **Not encountered**

PROJECT No. **191610166**

LOCATION No. **EG-49A**

DATUM

DEPTH (ft)	ELEVATION (ft)	SOIL DESCRIPTION	STRATA PLOT	WATER LEVEL	TYPE	NUMBER	VOC CONCENTRATION (ppm or % LEL)	REMARKS
0		Brown, fine to medium SAND, little Silt, trace to little Root, trace Gravel. (SW-SM)					0.0	
1							0.0	
2		Orange-brown to gray, fine to medium SAND, trace Gravel. (SW)						
		Brown, fine to medium SAND, little Silt, trace Gravel. (SW-SM) Bottom of boring at 3 feet					0.0	
3								
4								
5								
6								
7								
8								
9								
10								

Stantec SOIL BORING LOG

EG-49B

CLIENT **Halmar**

LOCATION **Greenburgh, NY**

DATES: DUG **12-08-2010**

WATER LEVEL **Not encountered**

PROJECT No. **191610166**

LOCATION No. **EG-49B**

DATUM

DEPTH (ft)	ELEVATION (ft)	SOIL DESCRIPTION	STRATA PLOT	WATER LEVEL	TYPE	NUMBER	VOC CONCENTRATION (ppm or % LEL)	REMARKS
0		Brown, fine to medium SAND, little Silt, trace to little Root, trace Gravel. (SW-SM)					0.0	
1							0.0	
2		Brown, fine to medium SAND, little Silt, trace Gravel. (SW-SM) Bottom of boring at 3 feet					0.0	
3								
4								
5								
6								
7								
8								
9								
10								

Stantec SOIL BORING LOG **EG-49C**

CLIENT Halmar

PROJECT No. 191610166

LOCATION Greenburgh, NY

LOCATION No. EG-49C

DATES: DUG 12-08-2010

WATER LEVEL Not encountered

DATUM

DEPTH (ft)	ELEVATION (ft)	SOIL DESCRIPTION	STRATA PLOT	WATER LEVEL	TYPE	NUMBER	VOC CONCENTRATION (ppm or % LEL)	REMARKS
0		Brown, fine to medium SAND, little Silt, trace to little Root, trace Gravel. (SW-SM)					0.0	
1							0.0	
2		Dark gray, fine to medium SILTY SAND, moist. (SM) Bottom of boring at 3 feet					0.0	
3								
4								
5								
6								
7								
8								
9								
10								

APPENDIX D

Analytical Data Packages

INCLUDED ON CD AS PDF DOCUMENTS
HARD COPIES PREVIOUSLY SUBMITTED

Appendix F

CAMP Field Data Sheets and Final Monitoring Report

G. C. ENVIRONMENTAL, INC.
CONSULTANTS CONTRACTORS

November 21, 2011

Mr. R. Pugni
R. Pugni & Sons, Inc.
25 Bedell Road,
Katonah, NY 10536

Subject: Health & Safety Monitoring
1061 North Broadway,
Yonkers, New York 10701
GCE Project No. 11-166-00

Dear Mr. Pugni:

Please find the enclosed Health & Safety Monitoring Report prepared by G. C. Environmental, Inc. (GCE) for the subject Property.

If you have any questions concerning this project, please feel free to call me at (631) 206-3700, ext. 111.

Very truly yours,

Greg Collins
President

22 Oak Street • Bay Shore, NY 11706 • TEL: (631) 206-3700 • FAX: (631) 206-3729
WWW.GCENVIRONMENTAL.COM

G. C. ENVIRONMENTAL, INC.
CONSULTANTS CONTRACTORS

HEALTH & SAFETY MONITORING REPORT

1061 NORTH BROADWAY,
YONKERS, WESTCHESTER COUNTY, NEW YORK 10701

PREPARED FOR:

R. PUGNI & SONS, INC.
25 BEDELL ROAD,
KATONAH, NY 10536

DATE ISSUED: NOVEMBER 21, 2011

GCE PROJECT NUMBER: 11-166-00

22 OAK STREET • BAY SHORE, NY 11706 • TEL: (631) 206-3700 • FAX: (631) 206-3729
WWW.GCENVIRONMENTAL.COM

TABLE OF CONTENTS

Tables

1.0 INTRODUCTION

GC Environmental Inc (GCE) is pleased to provide R. Pugni & Sons, Inc. with this Health and Safety Monitoring Report in compliance with New York State Department of Health Generic Community Air Monitoring Plan (CAMP) (dust monitoring and monitoring of four (4) types of gas) for the Site located at 1061 North Broadway, Yonkers, NY (the Site). The Site Plan is included as Figure 1 in Appendix A.

Dust monitoring and the monitoring of four (4) types of gas was carried out at the Site from July 25, 2011 through October 07, 2011.

1.1 Purpose and Scope

The purpose of this project was to provide dust monitoring data and volatile organic compounds data to R. Pugni & Sons, Inc. as part of remedial activities conducted at the Site.

GCE completed the following scope of work:

- Select and locate sampling locations on daily basis based on the wind directions.
- Assess the wind direction using a wind sock before start of work on everyday basis.
- Install two (2) Dust Traks II Desktop Model 8530 units (upwind and downwind) for collection of (PM_1, $PM_{2.5}$, PM_4 & PM_{10}) and PM_{10} (15-minute average) dust data during the site operations.
- Record the Volatile Organic Compounds (VOCs) and other gases (carbon monoxide, hydrogen sulphide and LEL gas) everyday using a Photoionization detector (4 gas meter)
- Perform dust monitoring (upwind and downwind) within the Site.
- Report weekly dust data reports and VOC data (field data) to City of Yonkers Engineer.
- Prepare a report detailing the dust monitoring procedures and results, including a discussion of VOC concentrations and potential sources.

2.0 SITE DESCRIPTION

The location of the Site is shown in figure 1. The Site is situated at the top of the slope that forms the east bank of the Hudson River, approximately 1,300 feet away, in the City of Yonkers, Westchester County, New York. It is bordered on the north approximately 140 feet to the Foxfire School, approximately 350 feet on the east to North Broadway, approximately 350 feet on the west to nearest residence and approximately 125 feet on the south to St. Johns Riverside Hospital. The Site encompasses approximately 3.5 acres of filled land on a 7.5-acre parcel. Faculty parking is located between the school and the Site.

2.1 Existing Site Conditions

The Site consists of a relatively recent unauthorized fill, subject to a Voluntary Cleanup Agreement (VCA) between the prior owner, Iona College, and the New York State Department of Environmental Conservation (NYSDEC) Region 3. The City of Yonkers purchased the Property from Iona College on September 17, 2004.

The Site is currently well vegetated, although several trees have died as a result of excessive fill being placed around their bases. The steep western slope of the main fill area is stable. Fence and/ walls separate the Site from adjacent properties and roadways.

2.2 Remedial Activities/ Work at the Site

The remedial activities consist of clearing and grubbing, installing fencing and drainage, stabilizing the steep western slope of the main fill area, capping the fill areas with clean soil.

2.3 Dust Background

Fugitive dust is a particulate matter - a generic term for a broad class of chemically and physically diverse substances that exist as discrete particles, liquid droplets or solids, over a wide image of sizes - which becomes airborne and contributes to air quality as a nuisance and threat to human health and environment.

On July 1, 1987, The United States Environmental Protection Agency (USEPA) revised the ambient air quality standard for particulates so as to reflect direct impact on human health by setting the standard for particulate matter less than ten microns in diameter (PM_{10}); this involves fugitive dust whether contaminated or not. Based upon the examination of air quality composition, respiratory tract deposition and health effects, PM_{10} is considered conservative for the primary standard- that requisite to protect public health with an adequate margin of safety. The primary standards are 150 ug/m^3 over a 24- hour averaging time and 50 ug/m^3 over an annual averaging time. Both of these standards are to be averaged arithmetically. The consideration of meteorological data is also a requirement for the dust monitoring. Before commencing of monitoring, the direction of wind at the Site is examined. The dust tracks monitors are placed upwind and downwind direction of the Site (in the work area), which will provide a good representation of dust concentrations.

Dust monitoring using dust tracks and VOC monitoring using a Photoionization detector commenced on July 25th 2011 within the Site. The reports were issued to City of Yonkers Engineer on weekly basis. In the weekly report, any elevated dust levels (suspended and depositional) and volatiles (including gases) are examined and where mitigation measures need to be reviewed, this is communicated to City of Yonkers Engineer and R. Pugni & Sons Inc. personnel.

This report summarizes the data collected from July 25th, 2011 to October 7th, 2011.

3.0 METHODOLOGY

3.1 Monitoring Locations

GCE selected dust sampling points (upwind and downwind) based on wind direction. For the purpose of establishing the sampling points, wind direction was predicted using the "wind sock" type method (holding sock with hand) prior to start of each day's work. Based upon this data, the prevailing wind direction for the Site is from south to north.

The dust monitoring locations installed within the Site on behalf of R. Pugni & Sons Inc. are shown in the Property Plan, Photographs and descriptions of the locations are also presented in Appendix A.

Meters	Locations
Upwind(Dust Trak II)	All along Slope area, inside fence
Downwind(Dust Trak II)	Asphalt area, outside fence, catch basins
Gas meter(Photoionisation)	All around the work area.

Upwind

Upwind position dust monitors were established near the top of the slope (mostly along the slope) and below the slope in the vicinity of work area.

Downwind

Downwind position dust monitors were established near the asphalt paved land adjacent to the existing chain link fence, near the Foxfire School parking lot and on the existing paved area near the catch basins (mostly along the slope) in the vicinity of work area.

Volatile organics

Total Volatile organic compounds were detected using MultiRAE systems portable Photoionization Detector (PID). The PID meter was hand held and the data was recorded for VOCs and other gases throughout the work area.

3.2 Particulate Monitoring Response Levels and Actions

The United States Environmental Protection Agency (USEPA) revised the ambient air quality standard for particulates so as to reflect direct impact on human health by setting the standard for particulate matter less than ten microns in diameter (PM_{10}).

If the downwind PM_{10} particulate level is 100 micrograms per cubic meter (ug/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 ug/m^3 above the upwind level and provided that no visible dust is migrating from the work area.

If, after implementation of dust suppression techniques, downwind PM_{10} particulate levels are greater than 150 ug/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 ug/m^3 of the upwind level and in preventing visible dust migration.

Particulate matter	**(USEPA Standards, Concentration (ug/m^3)**	**Response Action taken**
PM_{10}	>100 ug/m^3 above upwind for 15 minute period	Employ dust suppression techniques Work may continue.
PM_{10}	>150 ug/m^3 above upwind even after dust suppression techniques	Work must be stopped. Re-evaluation of activities. Work can resume provided that dust suppression measures and other controls are successful in reducing the downwind PM-10 within 150 ug/m^3

3.3 VOC Monitoring Response Levels and Actions

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.

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.

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

Parameter	**Concentration (ppm)**	**Response Action taken**
Total VOCs	> 5 ppm above upwind for 15 minute period	Work activities must be halted temporarily. Work may continue.
Total VOCs	> 5 ppm but < 25 ppm above upwind for 15 minute period	Work must be stopped. Identify the sources of vapors. Take corrective action. Work can resume provided that total voc level is below 5 ppm above background level.
Total VOCs	> 25 ppm above upwind for 15 minute period	Halt the work.

3.4 Sampling

Dust monitoring activities (Total Dust- PM_1, $PM_{2.5}$, PM_4 & PM_{10}) and PM_{10} 15- minute Average) and VOC monitoring were initiated on July 25th, 2011 and continued through October 07, 2011.

Description of Dust Track

On July 25th, 2011, the portable Dust Traks II Desktop Model 8530 provided by Pine Environmental Inc, was deployed at the Site by G C Environmental personnel to measure and record dust particulates. The dust traks were operated in accordance with the procedures in the operations manual provided by Pine Environmental Inc. Before start of each day's work, the dust tracks were zero calibrated using zero calibration tube. Two (2) dust traks, one for upwind direction and the other for downwind direction, were established in the work area. The readings from both dust traks were recorded for every one (1) hour in the field data form. Stored data (Total dust and PM_{10} 15-minute average) from the dust tracks were periodically downloaded by GCE personnel.

Description of Photoionization Detector

A photoionization detector (PID) is a 5 gas multimeter capable of detecting total volatiles, hydrogen sulphide, carbon monoxide, oxygen and combustible gas. The meter is a MultiRAE systems portable photoionization detector (PID) with a 10.6 e.V. lamp, calibrated for isobutylene standards. PID meter is operated in accordance with Multi RAE systems operation manual. Prior to start of each day's work, the PID meter is calibrated using the isobutylene standard. The readings from PID meter were recorded for every one half (1/2) hour in the field.

4.0 RESULTS

4.1 Dust Monitoring Results

Total Dust monitoring results (PM_1, $PM_{2.5}$, PM_4 & PM_{10}) and PM_{10} (15-minute average) monitoring was undertaken during all the site activities including clearing and grubbing, installing fencing and drainage, stabilizing the steep western slope of the main fill area, leveling with fabrics and capping the fill areas with clean soil. City of Yonkers Personnel was on site during monitoring. The weekly dust monitoring reports were submitted to City of Yonkers personnel.

Total Dust monitoring (PM_1, $PM_{2.5}$, PM_4 & PM_{10}) and PM_{10} (15-minute average) monitoring results for all monitoring periods (from July 25th 2011 to October 07, 2011) were within the action response levels.

Dust suppression techniques were employed at the site such as using hard surfaces and water at exits from internal working areas, reducing the speed of vehicles within the Site, and spraying water on the wheels and buckets of machines. Also, frequent rain during the monitoring periods helped dampen the Site, minimizing the dust particle dispersal.

The results of dust monitoring for PM_{10} (15 minute average) are presented in tables:

Location	**Monitoring Periods**	**Approximate Average PM_{10} (ug/m^3)**	**Maximum 24 hour PM_{10} concentration (ug/m^3)**	**Number of times the maximum 24 hr PM_{10} concentration exceeded response level of 100 ug/m^3)**
Upwind Downwind	07/25/11-07/28/11	29	113	-
Upwind Downwind	08/01/11-08/04/11	31	136	-
Upwind Downwind	08/08/11-08/11/11	43	73	-
Upwind Downwind	08/12/11-08/23/11	12	38	-
Upwind Downwind	08/24/11-08/31/11	21	47	-
Upwind Downwind	09/01/11-09/13/11	36	96	-
Upwind Downwind	09/14/11-09/19/11	32	222	1
Upwind Downwind	09/20/11-09/27/11	27	107	-
Upwind Downwind	09/28/11-10/07/11	15	48	-

From the above table, it is evident that the PM_{10} concentration exceeded the response level only once during the monitoring periods. As the exceeded concentration decreased within a 15-minute period, the work was not halted.

However, spraying of water was done during this period and also frequently during each day's work to minimize the dust levels. To minimize dust levels, frequent spraying of water was completed during each day's work for the duration of the monitoring period.

4.2 VOC Monitoring Results

Gas monitoring was undertaken during all the Site activities including clearing and grubbing, installing fencing and drainage, stabilizing the steep western slope of the main fill area, leveling with fabrics and capping the fill areas with clean soil. City of Yonkers Personnel was on site during monitoring. The weekly gas monitoring reports were submitted to City of Yonkers personnel.

Location	**Type of Gas**	**PID reading (ppm)**	**Action Level of 5 ppm**
Work Area	Total VOC	0	Below action level
Work Area	Carbon Monoxide	0	Below action level
Work Area	Hydrogen Sulphide	0	Below action level
Work Area	LEL gas	0	Below action level

Gas monitoring results for all monitoring periods (from July 25th 2011 to October 07, 2011) were within the action response levels.

4.3 Health & Safety Monitoring

No health related issues and safety issues such as explosions or accidents have occurred during this monitoring.

5.0 DISCUSSION OF RESULTS

Total Dust monitoring (PM_1, $PM_{2.5}$, PM_4 & PM_{10}) and PM_{10} (15-minute average) monitoring results for all monitoring periods (from July 25th 2011 to October 07, 2011) were within the action response levels.

Dust suppression techniques were employed at the site like using hard surfaces and water at exits from internal working areas, reducing the speed of vehicles within the site, and spraying water on the wheels and buckets of machines. Also, frequent rain during the monitoring periods helped dampen the site.

During the monitoring period, the PM_{10} concentration exceeded the response level once. However, since the exceeded concentration decreased within a 15-minute period, the work was not halted.

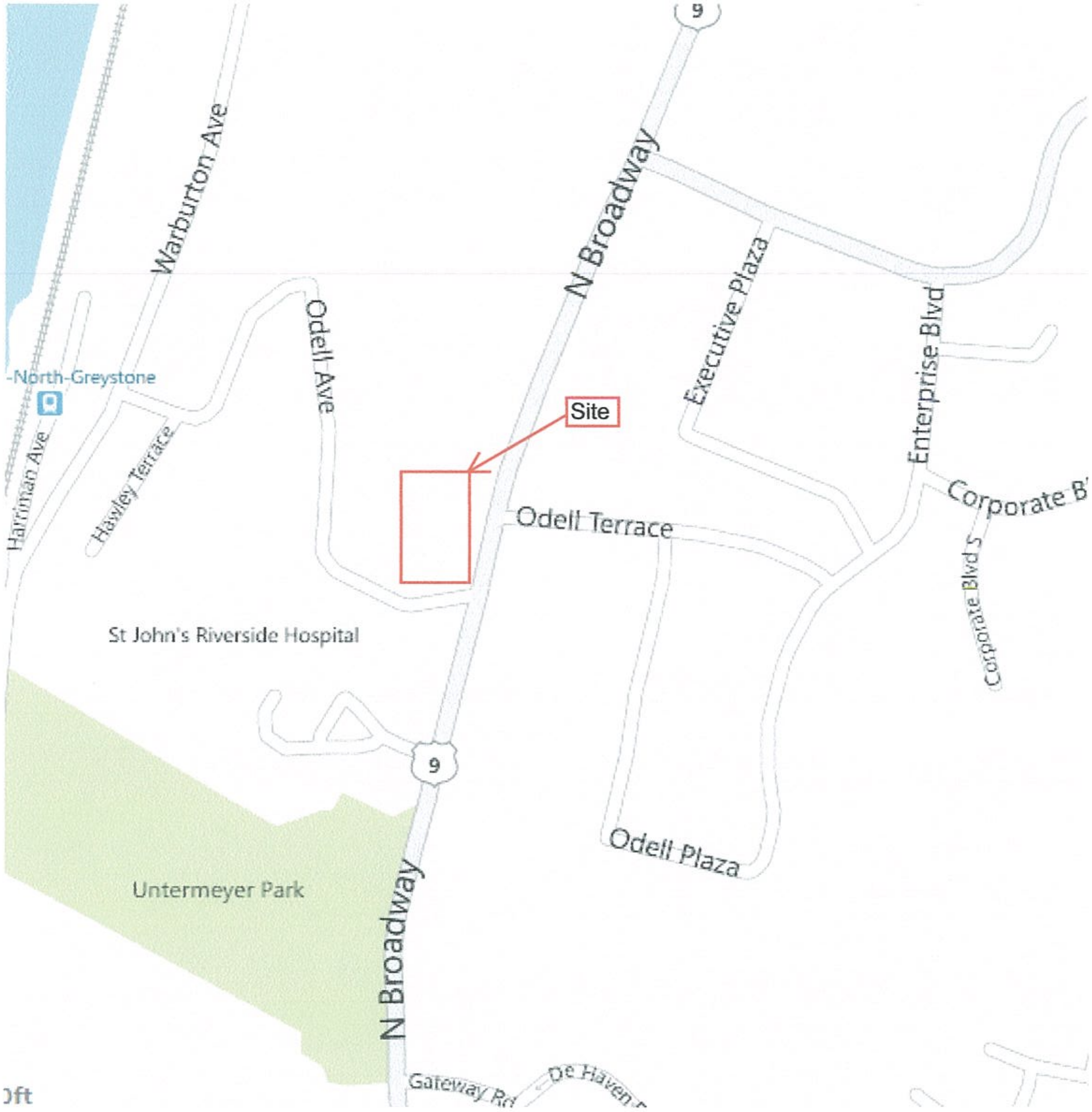
Gas monitoring results for all monitoring periods (from July 25th 2011 to October 07, 2011) were within the action response levels.

6.0 CONCLUSION

Results of dust monitoring and VOC monitoring within the Site have indicated that dust levels and VOC levels resulting from on site activities did not exceed the response action levels.

Overall it can be concluded that the on-site remedial activities at 1061 North Broadway, Yonkers, New York, are having no significant impact on the receiving environment in terms of dust and VOC emissions.

APPENDIX A



G. C. ENVIRONMENTAL, INC.
CONSULTANTS CONTRACTORS

22 OAK STREET
BAY SHORE, NEW YORK 11706

TEL: (631) 206-3700
FAX: (631) 206-3729

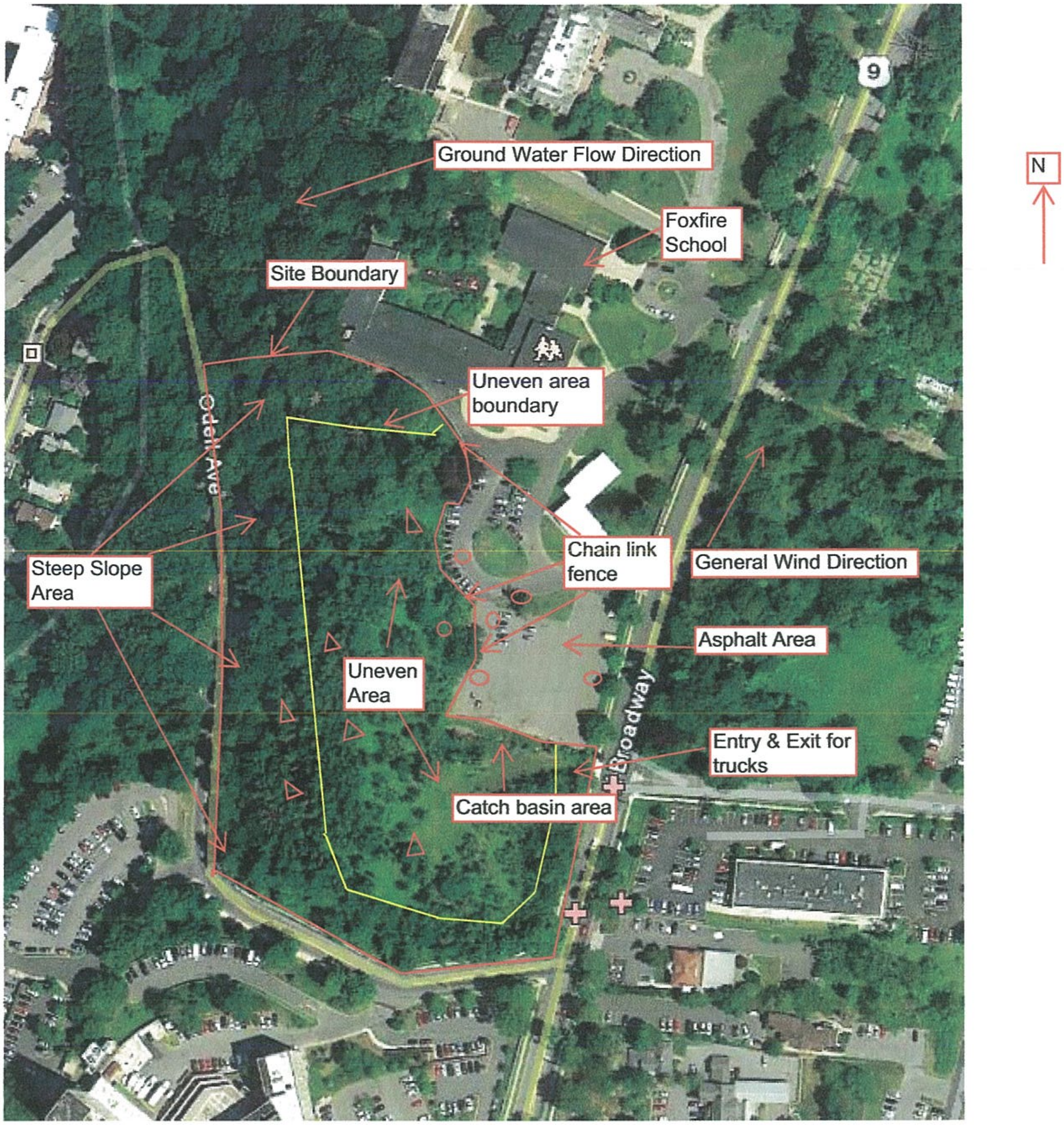
LOCUS MAP

1061 NORTH BROADWAY
YONKERS
NY 10701

GCE PROJECT NO.: 11-166-00

FIGURE 1

STREET
MAP



○ → Downwind Dust Sampling Point

△ → Upwind Dust Sampling Point

G. C. ENVIRONMENTAL, INC. CONSULTANTS CONTRACTORS 22 OAK STREET BAY SHORE, NEW YORK 11706 TEL: (631) 206-3700 FAX: (631) 206-3729	**PROPERTY PLAN** 1061 NORTH BROADWAY YONKERS NY 10701 GCE PROJECT NO.: 11-166-00	FIGURE 2 **PROPERTY PLAN**

G. C. ENVIRONMENTAL, INC.
CONSULTANTS CONTRACTORS

22 OAK STREET
BAY SHORE, NEW YORK 11706

TEL: (631) 206-3700
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TOPO MAP

1061 NORTH BROADWAY
YONKERS
NY 10701

GCE PROJECT NO.: 11-166-00

FIGURE 3

TOPO
MAP

APPENDIX B

1. **Site location.**

2. **Site area location with machines.**

3. **Trucks dumping stones for fill.**

4. **Stones used to create slope.**

5. **Onsite slope.**

6. Using fabric paper to reduce dust.

7. Upwind dust monitor as set-up.

8. Upwind dust monitor below the slope as set-up.

9. Downwind dust monitor as set-up.

10. Downwind dust monitor near the catch basins.

10. Spraying water as part of dust suppression.

12. Rain water was helpful in reducing dust onsite.

13. Dust Track monitor model 8530 used onsite.

14. Photoionization Detector used onsite.

APPENDIX C

Table 1. PM10 15-minute average monitoring results dated 07/25/11 to 07/28/11.

	25-Jul		26-Jul		27-Jul		28-Jul	
Elapsed Time (min)	**upwind Mass [mg/m3]**	**downwind Mass [mg/m3]**	**upwind Mass [mg/m3]**	**downwind Mass [mg/m3]**	**upwind Mass [mg/m3]**	**downwind Mass [mg/m3]**	**upwind Mass [mg/m3]**	**downwind Mass [mg/m3]**
1	0.026	0.027	0.02	0.027	0.02	0.021	0.017	0.034
15	0.028	0.059	0.021	0.023	0.031	0.033	0.017	0.017
30	0.026	0.067	0.024	0.022	0.019	0.029	0.023	0.015
45	0.026	0.032	0.021	0.022	0.021	0.022	0.02	0.016
60	0.025	0.073	0.02	0.021	0.014	0.015	0.017	0.03
75	0.025	0.069	0.026	0.022	0.026	0.028	0.035	0.027
90	0.025	0.025	0.028	0.025	0.028	0.025	0.017	0.016
105	0.029	0.039	0.031	0.03	0.031	0.03	0.036	0.017
120	0.026	0.052	0.031	0.031	0.028	0.031	0.016	0.032
135	0.025	0.047	0.046	0.032	0.046	0.032	0.019	0.016
150	0.026	0.039	0.035	0.032	0.035	0.032	0.025	0.016
165	0.026	0.033	0.053	0.034	0.053	0.034	0.017	0.016
180	0.021	0.029	0.039	0.034	0.032	0.034	0.017	0.03
195	0.2	0.026	0.041	0.033	0.041	0.033	0.042	0.018
210	0.03	0.045	0.033	0.031	0.033	0.031	0.018	0.017
225	0.027	0.045	0.05	0.113	0.031	0.03	0.021	0.017
240	0.025	0.033	0.033	0.028	0.03	0.033	0.017	0.02
255	0.024	0.02	0.026	0.025	0.026	0.025	0.018	0.016
270	0.019	0.015	0.026	0.023	0.026	0.023	0.027	0.017
285	0.022	0.014	0.024	0.023	0.024	0.023	0.025	0.023
300	0.017	0.013	0.029	0.029	0.029	0.033	0.027	0.031
315	0.023	0.048	0.023	0.02	0.023	0.02	0.023	0.023
330	0.014	0.019	0.021	0.021	0.021	0.021	0.022	0.027
345	0.018	0.031	0.024	0.02	0.024	0.02	0.022	0.025
360	0.011	0.039	0.031	0.027	0.026	0.037	0.019	0.029
375	0.067	0.078	0.027	0.026	0.027	0.026	0.027	0.024
390	0.014	0.044	0.03	0.074	0.03	0.074	0.018	0.027
405	0.012	0.061	0.028	0.023	0.028	0.023	0.035	0.026
420	0.016	0.022	0.027	0.029	0.026	0.029	0.02	0.023

Table 2. PM10 15-minute average monitoring results dated 08/01/11 to 08/04/11.

	1-Aug		2-Aug		3-Aug		4-Aug	
Elapsed Time [min]	upwind Mass [mg/m3]	downwind Mass [mg/m3]	upwind Mass [mg/m3]	downwind Mass [mg/m3]	upwind Mass [mg/m3]	downwind Mass [mg/m3]	upwind Mass [mg/m3]	downwind Mass [mg/m3]
1	0.028	0.031	0.02	0.037	0.018	0.02	0.041	0.056
15	0.038	0.037	0.084	0.057	0.018	0.04	0.035	0.031
30	0.033	0.037	0.05	0.058	0.054	0.024	0.029	0.027
45	0.034	0.037	0.05	0.059	0.037	0.019	0.032	0.026
60	0.027	0.038	0.048	0.06	0.015	0.04	0.029	0.029
75	0.034	0.04	0.052	0.057	0.015	0.013	0.028	0.026
90	0.037	0.04	0.052	0.06	0.017	0.011	0.026	0.024
105	0.032	0.038	0.052	0.063	0.016	0.013	0.027	0.025
120	0.031	0.04	0.046	0.068	0.016	0.038	0.024	0.028
135	0.032	0.036	0.066	0.08	0.016	0.012	0.025	0.022
150	0.034	0.04	0.066	0.078	0.015	0.014	0.025	0.022
165	0.039	0.041	0.07	0.077	0.016	0.012	0.02	0.018
180	0.027	0.03	0.066	0.073	0.016	0.043	0.02	0.02
195	0.033	0.037	0.09	0.101	0.016	0.013	0.021	0.015
210	0.034	0.037	0.089	0.104	0.015	0.013	0.018	0.015
225	0.035	0.038	0.087	0.102	0.067	0.013	0.017	0.014
240	0.037	0.051	0.088	0.108	0.013	0.069	0.014	0.019
255	0.033	0.042	0.08	0.098	0.02	0.015	0.021	0.018
270	0.031	0.035	0.082	0.091	0.022	0.016	0.022	0.016
285	0.038	0.04	0.091	0.108	0.023	0.018	0.021	0.018
300	0.042	0.047	0.091	0.102	0.021	0.027	0.017	0.019
315	0.03	0.036	0.113	0.136	0.029	0.023	0.025	0.021
330	0.036	0.037	0.1	0.124	0.029	0.025	0.023	0.02
345	0.043	0.037	0.093	0.107	0.021	0.02	0.021	0.018
360	0.028	0.05	0.102	0.133	0.024	0.029	0.02	0.021
375	0.034	0.04	0.065	0.079	0.026	0.021	0.023	0.02
390	0.034	0.04	0.047	0.068	0.026	0.02	0.022	0.018
405	0.032	0.037	0.05	0.066	0.027	0.022	0.024	0.021
420	0.019	0.024	0.044	0.06	0.022	0.028	0.017	0.018

Table 3. PM10 15-minute average monitoring results dated 08/08/11 to 08/11/11.

	8-Aug		9-Aug		10-Aug		11-Aug		
Elapsed Time [min]	upwind Mass [mg/m3]	downwind Mass [mg/m3]	upwind Mass [mg/m3]	downwind Mass [mg/m3]	upwind Mass [mg/m3]	downwind Mass [mg/m3]	upwind Mass [mg/m3]	downwind Mass [mg/m3]	
1	0.067	0.07	0.049	0.047	0.034	0.053	0.016	0.047	
15	0.06	0.063	0.037	0.031	0.023	0.049	0.006	0.02	
30	0.058	0.065	0.036	0.027	0.022	0.024	0.033	0.005	
45	0.059	0.067	0.032	0.028	0.022	0.037	0.008	0.004	
60	0.062	0.062	0.027	0.031	0.023	0.026	0.005	0.005	
75	0.056	0.064	0.031	0.028	0.023	0.023	0.004	0.004	
90	0.06	0.073	0.031	0.027	0.025	0.027	0.004	0.004	
105	0.059	0.07	0.031	0.029	0.024	0.029	0.004	0.003	
120	0.067	0.062	0.028	0.032	0.024	0.024	0.003	0.004	
135	0.056	0.06	0.034	0.03	0.026	0.029	0.005	0.002	
150	0.062	0.063	0.035	0.032	0.026	0.033	0.003	0.008	
165	0.056	0.061	0.035	0.033	0.027	0.033	0.003	0.002	
180	0.071	0.066	0.033	0.037	0.028	0.029	0.004	0.002	
195	0.059	0.059	0.041	0.037	0.029	0.029	0.008	0.002	
210	0.061	0.061	0.042	0.037	0.03	0.03	0.004	0.002	
225	0.06	0.066	0.044	0.039	0.029	0.032	0.006	0.003	
240	0.067	0.062	0.046	0.04	0.027	0.027	0.02	0.002	
255	0.051	0.061	0.046	0.038	0.031	0.031	0.005	0.003	
270	0.05	0.057	0.045	0.039	0.031	0.03	0.005	0.002	
285	0.052	0.061	0.046	0.038	0.032	0.032	0.005	0.007	
300	0.055	0.061	0.041	0.048	0.029	0.029	0.021	0.005	
315	0.05	0.104	0.048	0.04	0.024	0.023	0.004	0.014	
330	0.05	0.071	0.048	0.042	0.024	0.023	0.007	0.002	
345	0.048	0.064	0.048	0.043	0.025	0.02	0.013	0.003	
360	0.047	0.063	0.051	0.043	0.03	0.031	0.005	0.006	
375	0.064	0.065	0.046	0.038	0.03	0.03	0.006	0.003	
390	0.038	0.037	0.045	0.04	0.031	0.032	0.005	0.005	
405	0.047	0.059	0.046	0.039	0.03	0.03	0.002	0.003	
420	0.045	0.055	0.043	0.052	0.03	0.03	0.005	0.004	

Table 4. PM10 15-minute average monitoring results dated 08/12/11 to 08/23/11.

	12-Aug		18-Aug		22-Aug		23-Aug	
Elapsed Time (min)	upwind Mass (mg/m3)	downwind Mass (mg/m3)	upwind Mass (mg/m3)	downwind Mass (mg/m3)	upwind Mass (mg/m3)	downwind Mass (mg/m3)	upwind Mass (mg/m3)	downwind Mass (mg/m3)
1	0.01	0.01	0.007	0.023	0.005	0.012	0.008	0.021
15	0.006	0.013	0.03	0.036	0.007	0.029	0.017	0.013
30	0.008	0.015	0.032	0.033	0.006	0.009	0.015	0.009
45	0.009	0.017	0.032	0.034	0.007	0.026	0.009	0.004
60	0.009	0.018	0.007	0.025	0.006	0.022	0.009	0.013
75	0.016	0.014	0.027	0.035	0.005	0.017	0.01	0.01
90	0.006	0.013	0.041	0.038	0.005	0.012	0.009	0.017
105	0.009	0.007	0.031	0.034	0.005	0.012	0.01	0.013
120	0.009	0.009	0.009	0.029	0.005	0.019	0.01	0.011
135	0.016	0.016	0.04	0.033	0.005	0.019	0.009	0.015
150	0.012	0.013	0.026	0.029	0.005	0.028	0.01	0.005
165	0.015	0.011	0.026	0.03	0.005	0.018	0.009	0.004
180	0.009	0.02	0.009	0.024	0.005	0.021	0.011	0.013
195	0.019	0.019	0.023	0.031	0.01	0.019	0.009	0.005
210	0.011	0.011	0.027	0.028	0.005	0.026	0.01	0.005
225	0.006	0.016	0.021	0.024	0.005	0.037	0.008	0.013
240	0.007	0.01	0.005	0.012	0.005	0.012	0.002	0.008
255	0.011	0.013	0.023	0.025	0.005	0.012	0.009	0.01
270	0.005	0.017	0.016	0.026	0.005	0.012	0.009	0.06
300	0.005	0.01	0.005	0.018	0.005	0.009	0.01	0.011
315	0.005	0.014	0.013	0.023	0.006	0.015	0.013	0.013
330	0.005	0.011	0.021	0.025	0.006	0.026	0.009	0.001
345	0.018	0.014	0.017	0.022	0.07	0.029	0.009	0.001
360	0.003	0.01	0.005	0.022	0.009	0.01	0.009	0.007
375	0.014	0.015	0.021	0.023	0.008	0.015	0.017	0.002
390	0.018	0.019	0.025	0.026	0.005	0.019	0.009	0.002
405	0.012	0.013	0.021	0.023	0.007	0.049	0.009	0.009
420	0.005	0.08	0.008	0.014	0.005	0.012	0.005	0.012

Table 5. PM10 15-minute average monitoring results dated 08/24/11 to 08/31/11.

	24-Aug		25-Aug		30-Aug		31-Aug	
Elapsed Time (min)	upwind Mass (mg/m3)	downwind Mass (mg/m3)	upwind Mass (mg/m3)	downwind Mass (mg/m3)	upwind Mass (mg/m3)	downwind Mass (mg/m3)	upwind Mass (mg/m3)	downwind Mass (mg/m3)
1	0.029	0.017	0.02	0.047	0.007	0.011	0.033	0.044
15	0.012	0.014	0.019	0.019	0.01	0.007	0.034	0.033
30	0.012	0.019	0.021	0.02	0.006	0.007	0.025	0.095
45	0.015	0.014	0.018	0.019	0.011	0.008	0.027	0.026
60	0.022	0.041	0.018	0.021	0.006	0.009	0.027	0.03
75	0.016	0.033	0.021	0.027	0.01	0.007	0.029	0.022
90	0.017	0.027	0.021	0.045	0.01	0.009	0.03	0.024
105	0.017	0.022	0.023	0.027	0.01	0.007	0.025	0.027
120	0.017	0.029	0.024	0.028	0.006	0.008	0.03	0.019
135	0.018	0.009	0.024	0.028	0.009	0.005	0.03	0.031
150	0.015	0.017	0.025	0.029	0.011	0.004	0.026	0.016
165	0.019	0.029	0.026	0.03	0.009	0.004	0.025	0.013
180	0.014	0.028	0.026	0.03	0.003	0.01	0.013	0.024
195	0.013	0.017	0.029	0.042	0.008	0.001	0.022	0.009
210	0.012	0.019	0.033	0.135	0.009	0.002	0.022	0.011
225	0.021	0.026	0.031	0.04	0.009	0.007	0.016	0.013
240	0.015	0.025	0.02	0.03	0.003	0.01	0.013	0.022
255	0.025	0.026	0.026	0.038	0.001	0.002	0.024	0.013
270	0.027	0.027	0.03	0.047	0.002	0.004	0.025	0.013
285	0.017	0.019	0.02	0.027	0.012	0.004	0.021	0.01
300	0.015	0.029	0.028	0.038	0.002	0.003	0.023	0.008
315	0.016	0.017	0.021	0.022	0.003	0.008	0.011	0.021
330	0.015	0.017	0.02	0.021	0.002	0.003	0.025	0.011
345	0.035	0.037	0.021	0.023	0.002	0.002	0.027	0.031
360	0.018	0.029	0.021	0.029	0.012	0.004	0.013	0.023
375	0.023	0.027	0.021	0.021	0.013	0.009	0.026	0.016
390	0.013	0.015	0.02	0.027	0.013	0.003	0.028	0.025
405	0.011	0.021	0.02	0.022	0.003	0.009	0.019	0.025
420	0.017	0.026	0.021	0.043	0.004	0.013	0.012	0.029

Table 6. PM10 15-minute average monitoring results dated 09/01/11 to 09/13/11.

	1-Sep		2-Sep		12-Sep		13-Sep	
Elapsed Time [min]	upwind Mass [mg/m3]	downwind Mass [mg/m3]	upwind Mass [mg/m3]	downwind Mass [mg/m3]	upwind Mass [mg/m3]	downwind Mass [mg/m3]	upwind Mass [mg/m3]	downwind Mass [mg/m3]
1	0.04	0.07	0.032	0.033	0.028	0.066	0.081	0.096
15	0.035	0.054	0.019	0.019	0.064	0.067	0.092	0.098
30	0.032	0.028	0.021	0.02	0.057	0.064	0.076	0.079
45	0.037	0.044	0.018	0.019	0.06	0.061	0.072	0.08
60	0.029	0.034	0.031	0.094	0.022	0.093	0.07	0.087
75	0.027	0.04	0.021	0.027	0.054	0.055	0.064	0.073
90	0.058	0.033	0.021	0.045	0.05	0.054	0.059	0.07
105	0.04	0.033	0.023	0.027	0.049	0.055	0.055	0.067
120	0.024	0.034	0.024	0.038	0.029	0.05	0.054	0.076
135	0.022	0.029	0.024	0.028	0.066	0.046	0.058	0.073
150	0.022	0.05	0.025	0.029	0.055	0.046	0.054	0.065
165	0.022	0.033	0.026	0.03	0.047	0.043	0.046	0.094
180	0.023	0.033	0.021	0.079	0.029	0.057	0.049	0.065
195	0.017	0.059	0.029	0.042	0.046	0.052	0.047	0.094
210	0.012	0.019	0.033	0.035	0.009	0.002	0.022	0.071
225	0.014	0.047	0.033	0.035	0.054	0.045	0.043	0.086
240	0.037	0.043	0.019	0.095	0.031	0.056	0.047	0.06
255	0.021	0.039	0.01	0.001	0.017	0.046	0.05	0.057
270	0.018	0.059	0.012	0.037	0.038	0.048	0.049	0.076
285	0.018	0.024	0.012	0.004	0.024	0.04	0.049	0.059
300	0.018	0.029	0.031	0.048	0.037	0.047	0.05	0.058
315	0.022	0.022	0.012	0.003	0.023	0.063	0.043	0.055
330	0.018	0.022	0.012	0.003	0.026	0.036	0.04	0.061
345	0.03	0.02	0.012	0.002	0.026	0.066	0.063	0.098
360	0.018	0.023	0.014	0.003	0.016	0.036	0.037	0.093
375	0.013	0.018	0.013	0.003	0.031	0.041	0.038	0.057
390	0.01	0.02	0.013	0.003	0.023	0.034	0.041	0.086
405	0.02	0.017	0.013	0.019	0.023	0.037	0.037	0.049
420	0.023	0.029	0.016	0.021	0.039	0.044	0.038	0.048

Table 7. PM10 15-minute average monitoring results dated 09/14/11 to 09/19/11.

	14-Sep		15-Sep		16-Sep		19-Sep	
Elapsed Time (min)	upwind Mass (mg/m3)	downwind Mass (mg/m3)	upwind Mass (mg/m3)	downwind Mass (mg/m3)	upwind Mass (mg/m3)	downwind Mass (mg/m3)	upwind Mass (mg/m3)	downwind Mass (mg/m3)
1	0.044	0.097	0.077	0.083	0.004	0.015	0.017	0.065
15	0.045	0.101	0.078	0.082	0.007	0.037	0.033	0.032
30	0.036	0.06	0.112	0.189	0.022	0.034	0.03	0.031
45	0.037	0.09	0.082	0.087	0.008	0.035	0.028	0.03
60	0.042	0.222	0.076	0.081	0.075	0.077	0.03	0.027
75	0.036	0.062	0.056	0.058	0.022	0.032	0.028	0.028
90	0.025	0.082	0.038	0.042	0.009	0.033	0.027	0.028
105	0.029	0.078	0.034	0.052	0.007	0.031	0.028	0.029
120	0.026	0.057	0.051	0.094	0.055	0.072	0.007	0.019
135	0.016	0.056	0.04	0.042	0.022	0.033	0.029	0.029
150	0.019	0.052	0.036	0.04	0.004	0.032	0.029	0.03
165	0.014	0.05	0.033	0.037	0.022	0.032	0.03	0.031
180	0.019	0.054	0.052	0.143	0.052	0.056	0.003	0.007
195	0.012	0.075	0.048	0.071	0.001	0.033	0.091	0.037
210	0.01	0.063	0.042	0.047	0.022	0.046	0.03	0.03
225	0.014	0.051	0.042	0.045	0.002	0.035	0.031	0.031
240	0.017	0.053	0.049	0.057	0.044	0.055	0.03	0.007
255	0.014	0.048	0.044	0.055	0.022	0.034	0.031	0.031
270	0.012	0.052	0.036	0.037	0.004	0.034	0.03	0.032
285	0.029	0.05	0.032	0.034	0.004	0.034	0.03	0.031
300	0.022	0.054	0.03	0.043	0.033	0.044	0.004	0.015
315	0.019	0.102	0.023	0.024	0.022	0.035	0.03	0.03
330	0.025	0.054	0.012	0.013	0.023	0.034	0.028	0.03
345	0.019	0.051	0.011	0.011	0.032	0.033	0.028	0.03
360	0.016	0.053	0.037	0.054	0.034	0.051	0.007	0.011
375	0.018	0.053	0.029	0.04	0.033	0.044	0.03	0.015
390	0.015	0.054	0.022	0.025	0.034	0.037	0.029	0.015
405	0.016	0.051	0.023	0.021	0.023	0.039	0.027	0.01
420	0.014	0.051	0.033	0.047	0.033	0.044	0.003	0.007

Table 8. PM10 15-minute average monitoring results dated 09/20/11 to 09/27/11.

	20-Sep		21-Sep		26-Sep		27-Sep	
Elapsed Time (min)	upwind Mass (mg/m3)	downwind Mass (mg/m3)	upwind Mass (mg/m3)	downwind Mass (mg/m3)	upwind Mass (mg/m3)	downwind Mass (mg/m3)	upwind Mass (mg/m3)	downwind Mass (mg/m3)
1	0.033	0.044	0.095	0.107	0.021	0.037	0.081	0.097
15	0.045	0.101	0.078	0.082	0.007	0.037	0.033	0.032
30	0.013	0.017	0.073	0.076	0.022	0.023	0.075	0.052
45	0.012	0.014	0.067	0.069	0.021	0.022	0.063	0.048
60	0.029	0.045	0.073	0.081	0.024	0.042	0.065	0.051
75	0.012	0.014	0.058	0.059	0.016	0.017	0.064	0.049
90	0.011	0.012	0.055	0.062	0.015	0.016	0.064	0.047
105	0.013	0.014	0.051	0.053	0.014	0.015	0.066	0.046
120	0.027	0.035	0.049	0.065	0.017	0.021	0.064	0.046
135	0.013	0.014	0.05	0.065	0.015	0.016	0.06	0.046
150	0.013	0.014	0.04	0.042	0.015	0.016	0.069	0.051
165	0.013	0.014	0.036	0.038	0.016	0.017	0.067	0.045
180	0.013	0.019	0.037	0.059	0.017	0.018	0.069	0.052
195	0.014	0.015	0.039	0.043	0.02	0.021	0.065	0.047
210	0.018	0.019	0.04	0.042	0.019	0.02	0.069	0.046
225	0.016	0.019	0.037	0.038	0.025	0.026	0.067	0.05
240	0.019	0.021	0.038	0.051	0.031	0.042	0.058	0.05
255	0.019	0.02	0.046	0.07	0.026	0.027	0.058	0.054
270	0.015	0.017	0.038	0.049	0.026	0.027	0.071	0.046
285	0.015	0.016	0.029	0.032	0.026	0.027	0.057	0.045
300	0.012	0.014	0.03	0.041	0.025	0.026	0.057	0.041
315	0.012	0.015	0.026	0.03	0.025	0.026	0.075	0.04
330	0.016	0.017	0.026	0.027	0.028	0.029	0.058	0.044
345	0.019	0.021	0.029	0.033	0.012	0.032	0.056	0.046
360	0.014	0.016	0.035	0.04	0.012	0.026	0.045	0.054
375	0.014	0.004	0.024	0.026	0.013	0.032	0.053	0.045
390	0.019	0.021	0.029	0.031	0.013	0.03	0.048	0.043
405	0.018	0.02	0.029	0.033	0.013	0.044	0.059	0.047
420	0.025	0.037	0.031	0.04	0.032	0.04	0.057	0.066

Table 9. PM10 15-minute average monitoring results dated 09/28/11 to 10/07/11.

	28-Sep		5-Oct		6-Oct		7-Oct	
Elapsed Time (min)	upwind Mass (mg/m3)	downwind Mass (mg/m3)	upwind Mass (mg/m3)	downwind Mass (mg/m3)	upwind Mass (mg/m3)	downwind Mass (mg/m3)	upwind Mass (mg/m3)	downwind Mass (mg/m3)
1	0.033	0.051	0.009	0.011	0.013	0.027	0.008	0.012
15	0.033	0.037	0.023	0.024	0.022	0.024	0.016	0.017
30	0.034	0.035	0.007	0.008	0.007	0.008	0.014	0.015
45	0.028	0.037	0.017	0.019	0.016	0.019	0.007	0.009
60	0.03	0.037	0.017	0.028	0.018	0.021	0.007	0.009
75	0.027	0.033	0.014	0.014	0.014	0.014	0.008	0.01
90	0.043	0.033	0.01	0.01	0.01	0.01	0.008	0.009
105	0.031	0.032	0.011	0.011	0.011	0.011	0.008	0.009
120	0.031	0.037	0.012	0.01	0.028	0.03	0.009	0.01
135	0.029	0.034	0.016	0.017	0.015	0.017	0.009	0.009
150	0.03	0.033	0.022	0.023	0.021	0.023	0.009	0.01
165	0.031	0.033	0.015	0.015	0.015	0.015	0.009	0.009
180	0.032	0.035	0.012	0.013	0.012	0.013	0.008	0.009
195	0.033	0.033	0.016	0.017	0.016	0.017	0.008	0.009
210	0.037	0.048	0.018	0.019	0.018	0.019	0.008	0.009
225	0.04	0.035	0.02	0.022	0.02	0.022	0.007	0.008
240	0.036	0.033	0.011	0.012	0.011	0.012	0.007	0.008
255	0.032	0.035	0.011	0.011	0.011	0.011	0.008	0.008
270	0.038	0.034	0.012	0.012	0.011	0.012	0.008	0.008
285	0.032	0.034	0.012	0.012	0.011	0.012	0.007	0.008
300	0.032	0.035	0.02	0.022	0.02	0.022	0.009	0.01
315	0.031	0.036	0.012	0.012	0.012	0.012	0.01	0.012
330	0.032	0.034	0.015	0.016	0.015	0.016	0.009	0.009
345	0.031	0.034	0.019	0.02	0.019	0.02	0.008	0.009
360	0.03	0.032	0.014	0.014	0.014	0.014	0.008	0.009
375	0.064	0.05	0.014	0.014	0.014	0.014	0.011	0.013
390	0.03	0.032	0.016	0.017	0.016	0.017	0.009	0.009
405	0.031	0.031	0.025	0.028	0.024	0.028	0.009	0.009
420	0.032	0.033	0.018	0.019	0.018	0.019	0.009	0.01

Table 10. Total Dust Monitoring results dated 07/25/11 to 07/28/11.

	25-Jul		26-Jul		27-Jul		28-Jul	
Elapsed Time [s]	upwind Mass [mg/m3]	downwind Mass [mg/m3]	upwind Mass [mg/m3]	downwind Mass [mg/m3]	upwind Mass [mg/m3]	downwind Mass [mg/m3]	upwind Mass [mg/m3]	downwind Mass [mg/m3]
60	0.03	0.057	0.025	0.027	0.027	0.033	0.021	0.051
120	0.031	0.039	0.025	0.026	0.022	0.026	0.021	0.016
180	0.03	0.045	0.023	0.025	0.023	0.025	0.017	0.023
240	0.029	0.05	0.023	0.026	0.026	0.026	0.023	0.018
300	0.04	0.051	0.024	0.026	0.019	0.028	0.019	0.017
360	0.041	0.074	0.077	0.024	0.027	0.024	0.016	0.016
420	0.03	0.066	0.026	0.024	0.026	0.024	0.016	0.017
480	0.029	0.051	0.21	0.023	0.21	0.023	0.016	0.016
540	0.028	0.06	0.015	0.023	0.017	0.023	0.016	0.016
600	0.029	0.061	0.13	0.022	0.023	0.022	0.017	0.016
660	0.028	0.049	0.02	0.023	0.019	0.023	0.016	0.016
720	0.029	0.061	0.021	0.022	0.021	0.027	0.016	0.017
780	0.028	0.057	0.022	0.023	0.022	0.023	0.016	0.019
840	0.028	0.065	0.83	0.022	0.33	0.042	0.016	0.019
900	0.028	0.059	0.021	0.023	0.031	0.033	0.017	0.017
960	0.027	0.041	0.047	0.023	0.047	0.023	0.019	0.015
1020	0.028	0.043	0.025	0.025	0.025	0.025	0.017	0.016
1080	0.027	0.058	0.023	0.025	0.023	0.025	0.017	0.015
1140	0.028	0.072	0.023	0.025	0.023	0.025	0.017	0.015
1200	0.027	0.078	0.021	0.023	0.022	0.023	0.017	0.015
1260	0.029	0.056	0.022	0.024	0.028	0.034	0.017	0.016
1320	0.027	0.087	0.022	0.024	0.022	0.024	0.018	0.016
1380	0.027	0.049	0.023	0.023	0.023	0.023	0.021	0.016
1440	0.027	0.041	0.022	0.022	0.022	0.022	0.022	0.015
1500	0.027	0.094	0.023	0.021	0.023	0.021	0.027	0.016
1560	0.027	0.058	0.023	0.023	0.023	0.023	0.025	0.015
1620	0.027	0.053	0.023	0.021	0.023	0.027	0.021	0.015
1680	0.027	0.062	0.022	0.022	0.022	0.028	0.027	0.015
1740	0.026	0.064	0.023	0.022	0.023	0.022	0.022	0.015
1800	0.026	0.067	0.024	0.022	0.019	0.029	0.023	0.015
1860	0.026	0.056	0.023	0.022	0.023	0.022	0.019	0.015
1920	0.027	0.068	0.023	0.022	0.023	0.022	0.018	0.015
1980	0.026	0.061	0.023	0.022	0.023	0.022	0.021	0.016
2040	0.027	0.065	0.023	0.022	0.023	0.022	0.019	0.016
2100	0.028	0.039	0.023	0.022	0.023	0.022	0.025	0.016
2160	0.027	0.036	0.022	0.022	0.022	0.022	0.025	0.015
2220	0.027	0.064	0.022	0.023	0.022	0.023	0.029	0.016
2280	0.027	0.049	0.023	0.022	0.023	0.022	0.025	0.016
2340	0.026	0.077	0.023	0.022	0.023	0.022	0.027	0.016
2400	0.027	0.082	0.022	0.022	0.022	0.022	0.027	0.016
2460	0.026	0.046	0.022	0.022	0.022	0.022	0.021	0.016
2520	0.026	0.068	0.022	0.022	0.022	0.022	0.019	0.016
2580	0.026	0.04	0.022	0.023	0.022	0.023	0.037	0.016
2640	0.027	0.073	0.022	0.022	0.022	0.022	0.03	0.016
2700	0.026	0.032	0.021	0.022	0.021	0.022	0.02	0.016
2760	0.027	0.032	0.021	0.022	0.021	0.022	0.022	0.016
2820	0.027	0.027	0.021	0.022	0.021	0.022	0.021	0.016
2880	0.028	0.032	0.021	0.022	0.021	0.022	0.019	0.017
2940	0.027	0.05	0.022	0.022	0.022	0.022	0.017	0.016
3000	0.027	0.041	0.021	0.021	0.021	0.021	0.017	0.016
3060	0.027	0.036	0.022	0.021	0.019	0.021	0.021	0.016
3120	0.025	0.036	0.021	0.021	0.021	0.021	0.018	0.016
3180	0.026	0.031	0.021	0.02	0.021	0.02	0.02	0.016
3240	0.027	0.035	0.021	0.021	0.021	0.021	0.017	0.015
3300	0.026	0.031	0.021	0.021	0.021	0.021	0.018	0.016
3360	0.026	0.029	0.022	0.02	0.022	0.02	0.017	0.015
3420	0.026	0.035	0.022	0.02	0.022	0.02	0.017	0.015
3480	0.026	0.069	0.021	0.023	0.019	0.023	0.016	0.015
3540	0.026	0.083	0.021	0.021	0.021	0.021	0.017	0.016
3600	0.025	0.029	0.021	0.021	0.021	0.031	0.02	0.017
3660	0.025	0.09	0.022	0.021	0.022	0.021	0.02	0.016
3720	0.026	0.091	0.023	0.021	0.023	0.021	0.017	0.016
3780	0.025	0.042	0.022	0.021	0.022	0.021	0.017	0.016
3840	0.026	0.039	0.022	0.021	0.022	0.021	0.02	0.016
3900	0.026	0.03	0.022	0.021	0.022	0.021	0.025	0.016
3960	0.025	0.076	0.022	0.021	0.022	0.021	0.029	0.017
4020	0.025	0.057	0.022	0.021	0.022	0.021	0.019	0.016
4080	0.026	0.044	0.022	0.02	0.022	0.02	0.017	0.016
4140	0.026	0.053	0.022	0.021	0.022	0.027	0.031	0.015
4200	0.025	0.049	0.024	0.022	0.02	0.022	0.029	0.015
4260	0.025	0.055	0.025	0.021	0.025	0.021	0.017	0.015
4320	0.025	0.039	0.027	0.021	0.027	0.021	0.019	0.015
4380	0.026	0.088	0.025	0.022	0.025	0.022	0.035	0.017
4440	0.026	0.043	0.027	0.021	0.027	0.021	0.052	0.025
4500	0.025	0.069	0.026	0.022	0.026	0.028	0.035	0.027
4560	0.025	0.048	0.026	0.023	0.026	0.023	0.019	0.03
4620	0.026	0.032	0.025	0.022	0.025	0.022	0.02	0.019
4680	0.025	0.038	0.024	0.024	0.024	0.024	0.026	0.018
4740	0.025	0.038	0.024	0.025	0.024	0.025	0.025	0.017
4800	0.025	0.065	0.025	0.026	0.025	0.026	0.033	0.016
4860	0.025	0.053	0.025	0.03	0.025	0.03	0.019	0.015
4920	0.025	0.069	0.026	0.024	0.026	0.024	0.018	0.015
4980	0.026	0.063	0.026	0.024	0.026	0.024	0.018	0.015
5040	0.025	0.087	0.026	0.023	0.026	0.023	0.018	0.015
5100	0.025	0.037	0.026	0.023	0.026	0.023	0.019	0.015
5160	0.025	0.047	0.026	0.023	0.026	0.023	0.018	0.016
5220	0.025	0.071	0.026	0.023	0.026	0.023	0.027	0.016
5280	0.026	0.045	0.027	0.024	0.027	0.024	0.018	0.016
5340	0.026	0.035	0.027	0.025	0.027	0.025	0.017	0.015
5400	0.025	0.025	0.028	0.025	0.028	0.025	0.017	0.016
5460	0.026	0.036	0.028	0.024	0.028	0.024	0.018	0.015
5520	0.026	0.03	0.028	0.024	0.028	0.024	0.017	0.016
5580	0.024	0.031	0.028	0.025	0.028	0.025	0.018	0.016
5640	0.025	0.051	0.029	0.025	0.029	0.025	0.071	0.016
5700	0.025	0.039	0.031	0.025	0.031	0.025	0.029	0.016
5760	0.025	0.047	0.03	0.026	0.03	0.026	0.018	0.016
5820	0.026	0.048	0.031	0.027	0.031	0.027	0.026	0.016
5880	0.026	0.031	0.031	0.027	0.031	0.027	0.021	0.018
5940	0.026	0.042	0.031	0.027	0.031	0.027	0.025	0.016
6000	0.026	0.075	0.031	0.027	0.031	0.027	0.029	0.016
6060	0.025	0.07	0.031	0.027	0.031	0.027	0.032	0.016
6120	0.026	0.057	0.031	0.029	0.031	0.029	0.03	0.017
6180	0.025	0.085	0.032	0.03	0.032	0.03	0.026	0.016
6240	0.025	0.061	0.033	0.03	0.033	0.03	0.03	0.016
6300	0.029	0.039	0.031	0.03	0.031	0.03	0.036	0.017
6360	0.026	0.08	0.031	0.031	0.031	0.031	0.025	0.016
6420	0.026	0.06	0.034	0.031	0.034	0.031	0.04	0.016
6480	0.025	0.039	0.034	0.032	0.034	0.032	0.017	0.016
6540	0.026	0.033	0.036	0.031	0.036	0.031	0.022	0.016
6600	0.026	0.032	0.038	0.031	0.038	0.031	0.027	0.015

6660	0.025	0.065	0.031	0.031	0.031	0.031	0.018	0.015
6720	0.026	0.043	0.031	0.031	0.031	0.031	0.023	0.015
6780	0.026	0.047	0.031	0.032	0.031	0.032	0.024	0.032
6840	0.026	0.053	0.031	0.031	0.031	0.031	0.026	0.044
6900	0.037	0.092	0.041	0.031	0.041	0.031	0.031	0.017
6960	0.027	0.09	0.046	0.031	0.046	0.031	0.034	0.016
7020	0.026	0.047	0.048	0.031	0.048	0.031	0.026	0.016
7080	0.026	0.087	0.039	0.03	0.039	0.03	0.02	0.017
7140	0.027	0.104	0.031	0.03	0.031	0.03	0.025	0.028
7200	0.026	0.045	0.033	0.031	0.033	0.031	0.019	0.032
7260	0.026	0.109	0.033	0.033	0.033	0.033	0.019	0.016
7320	0.026	0.088	0.031	0.034	0.031	0.034	0.017	0.016
7380	0.026	0.066	0.043	0.032	0.043	0.032	0.019	0.016
7440	0.026	0.036	0.031	0.032	0.031	0.032	0.02	0.016
7500	0.026	0.027	0.038	0.032	0.038	0.032	0.022	0.016
7560	0.026	0.039	0.033	0.032	0.033	0.032	0.026	0.022
7620	0.026	0.081	0.032	0.031	0.032	0.031	0.033	0.016
7680	0.031	0.064	0.031	0.033	0.031	0.033	0.019	0.016
7740	0.028	0.044	0.032	0.031	0.032	0.031	0.017	0.016
7800	0.027	0.027	0.032	0.031	0.032	0.031	0.017	0.016
7860	0.028	0.127	0.033	0.034	0.033	0.034	0.02	0.017
7920	0.049	0.048	0.042	0.033	0.042	0.033	0.03	0.016
7980	0.029	0.078	0.043	0.032	0.043	0.032	0.018	0.016
8040	0.033	0.209	0.076	0.033	0.076	0.033	0.017	0.016
8100	0.025	0.047	0.046	0.032	0.046	0.032	0.019	0.016
8160	0.027	0.071	0.034	0.033	0.034	0.033	0.032	0.016
8220	0.029	0.127	0.033	0.034	0.033	0.034	0.02	0.016
8280	0.027	0.152	0.033	0.044	0.033	0.044	0.033	0.016
8340	0.025	0.046	0.033	0.041	0.033	0.041	0.019	0.016
8400	0.025	0.058	0.034	0.033	0.034	0.033	0.018	0.126
8460	0.025	0.074	0.033	0.033	0.033	0.033	0.02	0.016
8520	0.027	0.063	0.056	0.056	0.056	0.056	0.021	0.016
8580	0.026	0.052	0.033	0.038	0.033	0.038	0.041	0.016
8640	0.026	0.041	0.033	0.033	0.033	0.033	0.034	0.017
8700	0.026	0.038	0.032	0.032	0.032	0.032	0.022	0.016
8760	0.026	0.038	0.032	0.034	0.032	0.034	0.039	0.016
8820	0.025	0.034	0.032	0.032	0.032	0.032	0.022	0.016
8880	0.026	0.061	0.032	0.033	0.032	0.033	0.024	0.016
8940	0.027	0.037	0.05	0.032	0.05	0.032	0.024	0.016
9000	0.026	0.039	0.035	0.032	0.035	0.032	0.025	0.016
9060	0.026	0.038	0.043	0.033	0.043	0.033	0.019	0.016
9120	0.027	0.035	0.039	0.033	0.039	0.033	0.022	0.015
9180	0.026	0.039	0.039	0.032	0.039	0.032	0.019	0.015
9240	0.027	0.049	0.038	0.032	0.038	0.032	0.021	0.016
9300	0.026	0.029	0.036	0.032	0.036	0.032	0.023	0.016
9360	0.026	0.039	0.034	0.032	0.034	0.032	0.024	0.016
9420	0.028	0.027	0.036	0.033	0.036	0.033	0.03	0.015
9480	0.026	0.039	0.036	0.033	0.036	0.033	0.018	0.016
9540	0.026	0.028	0.034	0.033	0.034	0.033	0.043	0.016
9600	0.027	0.027	0.034	0.033	0.034	0.033	0.028	0.016
9660	0.027	0.026	0.036	0.034	0.036	0.034	0.018	0.016
9720	0.035	0.025	0.037	0.034	0.037	0.034	0.018	0.016
9780	0.032	0.025	0.034	0.034	0.034	0.034	0.018	0.016
9840	0.038	0.043	0.035	0.035	0.035	0.035	0.017	0.017
9900	0.026	0.033	0.053	0.034	0.053	0.034	0.017	0.016
9960	0.03	0.029	0.034	0.035	0.034	0.035	0.017	0.015
10020	0.026	0.029	0.033	0.037	0.033	0.037	0.021	0.016
10080	0.026	0.028	0.034	0.034	0.034	0.034	0.031	0.016
10140	0.025	0.031	0.049	0.032	0.049	0.032	0.028	0.016
10200	0.026	0.026	0.059	0.033	0.059	0.033	0.03	0.017
10260	0.025	0.033	0.042	0.034	0.042	0.034	0.041	0.016
10320	0.026	0.026	0.037	0.033	0.037	0.033	0.03	0.016
10380	0.027	0.025	0.037	0.033	0.037	0.033	0.022	0.016
10440	0.027	0.026	0.048	0.033	0.048	0.033	0.025	0.015
10500	0.025	0.032	0.056	0.034	0.056	0.034	0.03	0.016
10560	0.036	0.032	0.037	0.033	0.037	0.033	0.023	0.016
10620	0.125	0.028	0.054	0.033	0.054	0.033	0.022	0.015
10680	0.027	0.031	0.042	0.033	0.042	0.033	0.035	0.016
10740	0.026	0.028	0.036	0.034	0.036	0.034	0.027	0.016
10800	0.025	0.03	0.043	0.034	0.043	0.034	0.024	0.015
10860	0.026	0.027	0.051	0.033	0.051	0.033	0.03	0.016
10920	0.027	0.027	0.039	0.033	0.039	0.033	0.027	0.016
10980	0.027	0.026	0.035	0.033	0.035	0.033	0.019	0.016
11040	0.028	0.027	0.035	0.033	0.035	0.033	0.018	0.016
11100	0.027	0.026	0.055	0.034	0.055	0.034	0.019	0.016
11160	0.026	0.028	0.041	0.033	0.041	0.033	0.028	0.016
11220	0.026	0.035	0.087	0.033	0.087	0.033	0.026	0.016
11280	0.059	0.044	0.071	0.033	0.071	0.033	0.028	0.016
11340	0.027	0.027	0.043	0.033	0.043	0.033	0.02	0.017
11400	0.026	0.027	0.048	0.033	0.048	0.033	0.019	0.016
11460	0.026	0.025	0.035	0.04	0.035	0.04	0.025	0.016
11520	0.026	0.03	0.048	0.034	0.048	0.034	0.021	0.016
11580	0.026	0.026	0.048	0.033	0.048	0.033	0.092	0.017
11640	0.027	0.025	0.04	0.033	0.04	0.033	0.025	0.018
11700	0.2	0.026	0.041	0.033	0.041	0.033	0.042	0.018
11760	0.032	0.043	0.036	0.032	0.036	0.032	0.024	0.023
11820	0.026	0.035	0.035	0.033	0.035	0.033	0.024	0.029
11880	0.029	0.03	0.034	0.033	0.034	0.033	0.018	0.018
11940	0.032	0.037	0.034	0.033	0.034	0.033	0.031	0.017
12000	0.027	0.038	0.034	0.034	0.034	0.034	0.019	0.016
12060	0.026	0.035	0.034	0.034	0.034	0.034	0.019	0.017
12120	0.026	0.046	0.034	0.034	0.034	0.034	0.035	0.017
12180	0.09	0.044	0.034	0.073	0.034	0.043	0.038	0.016
12240	0.029	0.057	0.033	0.045	0.033	0.045	0.028	0.016
12300	0.027	0.046	0.033	0.034	0.03	0.034	0.019	0.017
12360	0.027	0.03	0.033	0.035	0.033	0.035	0.024	0.016
12420	0.028	0.05	0.033	0.033	0.031	0.033	0.022	0.016
12480	0.034	0.03	0.033	0.032	0.033	0.032	0.02	0.016
12540	0.028	0.04	0.033	0.031	0.029	0.031	0.023	0.016
12600	0.03	0.045	0.033	0.031	0.033	0.031	0.018	0.017
12660	0.031	0.045	0.033	0.032	0.031	0.032	0.018	0.017
12720	0.028	0.03	0.034	0.032	0.034	0.032	0.027	0.017
12780	0.028	0.028	0.033	0.031	0.033	0.035	0.034	0.016
12840	0.03	0.038	0.034	0.031	0.034	0.034	0.024	0.019
12900	0.03	0.027	0.037	0.031	0.037	0.037	0.021	0.017
12960	0.028	0.029	0.033	0.031	0.033	0.031	0.018	0.016
13020	0.03	0.028	0.033	0.031	0.033	0.031	0.02	0.016
13080	0.027	0.032	0.048	0.032	0.048	0.032	0.025	0.016
13140	0.03	0.025	0.032	0.032	0.032	0.032	0.023	0.016
13200	0.028	0.031	0.039	0.04	0.039	0.04	0.018	0.016
13260	0.029	0.032	0.053	0.031	0.053	0.031	0.023	0.016
13320	0.028	0.026	0.034	0.035	0.034	0.035	0.019	0.016
13380	0.027	0.026	0.031	0.07	0.031	0.07	0.02	0.018

13440	0.028	0.032	0.031	0.032	0.031	0.032	0.022	0.017
13500	0.027	0.045	0.05	0.113	0.05	0.113	0.021	0.017
13560	0.027	0.033	0.035	0.031	0.035	0.031	0.018	0.017
13620	0.027	0.031	0.034	0.029	0.034	0.029	0.018	0.017
13680	0.027	0.026	0.041	0.029	0.041	0.029	0.022	0.016
13740	0.028	0.031	0.032	0.029	0.032	0.029	0.024	0.016
13800	0.028	0.043	0.036	0.049	0.036	0.049	0.032	0.016
13860	0.027	0.032	0.041	0.029	0.041	0.029	0.024	0.016
13920	0.026	0.028	0.039	0.038	0.039	0.038	0.024	0.016
13980	0.028	0.029	0.047	0.093	0.047	0.093	0.023	0.016
14040	0.032	0.036	0.048	0.099	0.048	0.099	0.019	0.016
14100	0.031	0.035	0.032	0.031	0.032	0.031	0.018	0.017
14160	0.028	0.025	0.032	0.028	0.032	0.028	0.019	0.016
14220	0.026	0.036	0.031	0.028	0.031	0.028	0.018	0.017
14280	0.026	0.037	0.031	0.028	0.031	0.028	0.018	0.016
14340	0.026	0.041	0.031	0.028	0.031	0.028	0.033	0.017
14400	0.025	0.033	0.031	0.028	0.031	0.028	0.022	0.016
14460	0.026	0.045	0.031	0.029	0.031	0.029	0.021	0.016
14520	0.027	0.038	0.031	0.028	0.031	0.028	0.019	0.017
14580	0.028	0.049	0.03	0.028	0.03	0.028	0.018	0.016
14640	0.029	0.03	0.031	0.028	0.031	0.028	0.02	0.017
14700	0.025	0.024	0.031	0.028	0.031	0.028	0.018	0.017
14760	0.025	0.023	0.031	0.037	0.031	0.037	0.019	0.017
14820	0.026	0.023	0.032	0.028	0.032	0.028	0.022	0.016
14880	0.027	0.023	0.045	0.028	0.045	0.028	0.018	0.017
14940	0.028	0.023	0.049	0.028	0.049	0.028	0.019	0.017
15000	0.079	0.022	0.025	0.028	0.025	0.028	0.018	0.016
15060	0.026	0.022	0.026	0.028	0.026	0.028	0.019	0.016
15120	0.029	0.022	0.027	0.061	0.027	0.061	0.018	0.016
15180	0.024	0.021	0.028	0.026	0.028	0.026	0.018	0.016
15240	0.023	0.021	0.028	0.026	0.028	0.026	0.017	0.016
15300	0.024	0.02	0.026	0.025	0.026	0.025	0.018	0.016
15360	0.024	0.019	0.026	0.023	0.026	0.023	0.018	0.016
15420	0.024	0.019	0.027	0.023	0.027	0.023	0.018	0.017
15480	0.025	0.019	0.028	0.024	0.028	0.024	0.018	0.018
15540	0.024	0.019	0.026	0.024	0.026	0.024	0.018	0.016
15600	0.026	0.018	0.025	0.041	0.025	0.041	0.019	0.017
15660	0.028	0.017	0.027	0.092	0.027	0.092	0.018	0.017
15720	0.025	0.017	0.026	0.024	0.026	0.024	0.018	0.017
15780	0.025	0.018	0.027	0.023	0.027	0.023	0.019	0.016
15840	0.02	0.019	0.027	0.022	0.027	0.022	0.018	0.016
15900	0.02	0.027	0.026	0.026	0.026	0.026	0.018	0.016
15960	0.019	0.02	0.024	0.03	0.024	0.03	0.019	0.016
16020	0.019	0.029	0.025	0.034	0.025	0.034	0.018	0.017
16080	0.026	0.035	0.025	0.025	0.025	0.025	0.018	0.016
16140	0.018	0.02	0.025	0.025	0.025	0.025	0.018	0.017
16200	0.019	0.015	0.026	0.023	0.026	0.023	0.027	0.017
16260	0.018	0.016	0.026	0.022	0.026	0.022	0.033	0.017
16320	0.018	0.015	0.026	0.022	0.026	0.022	0.022	0.017
16380	0.018	0.015	0.025	0.023	0.025	0.023	0.022	0.016
16440	0.018	0.014	0.025	0.023	0.025	0.023	0.022	0.021
16500	0.024	0.024	0.026	0.023	0.026	0.023	0.022	0.02
16560	0.028	0.016	0.025	0.024	0.025	0.024	0.023	0.02
16620	0.025	0.015	0.024	0.023	0.024	0.023	0.022	0.02
16680	0.022	0.014	0.025	0.024	0.025	0.024	0.021	0.02
16740	0.017	0.015	0.027	0.025	0.027	0.025	0.023	0.022
16800	0.02	0.015	0.024	0.023	0.024	0.023	0.024	0.021
16860	0.019	0.015	0.024	0.024	0.024	0.024	0.028	0.021
16920	0.019	0.015	0.024	0.023	0.024	0.023	0.026	0.021
16980	0.017	0.014	0.024	0.023	0.024	0.023	0.028	0.021
17040	0.02	0.014	0.024	0.026	0.024	0.026	0.025	0.022
17100	0.022	0.014	0.024	0.023	0.024	0.023	0.025	0.023
17160	0.018	0.013	0.023	0.021	0.023	0.021	0.025	0.021
17220	0.02	0.014	0.023	0.022	0.023	0.022	0.024	0.023
17280	0.02	0.015	0.023	0.021	0.023	0.021	0.027	0.029
17340	0.042	0.016	0.023	0.022	0.023	0.022	0.023	0.025
17400	0.022	0.015	0.023	0.021	0.023	0.021	0.025	0.043
17460	0.017	0.016	0.022	0.022	0.022	0.022	0.025	0.025
17520	0.018	0.019	0.022	0.021	0.022	0.021	0.025	0.025
17580	0.018	0.013	0.022	0.02	0.022	0.02	0.029	0.023
17640	0.021	0.014	0.022	0.021	0.022	0.021	0.024	0.084
17700	0.03	0.014	0.022	0.021	0.022	0.021	0.026	0.029
17760	0.025	0.014	0.022	0.021	0.022	0.021	0.023	0.025
17820	0.023	0.013	0.024	0.02	0.024	0.02	0.023	0.024
17880	0.018	0.013	0.021	0.02	0.021	0.02	0.023	0.024
17940	0.017	0.013	0.021	0.02	0.021	0.02	0.023	0.023
18000	0.017	0.013	0.021	0.022	0.021	0.022	0.022	0.026
18060	0.021	0.013	0.023	0.019	0.023	0.019	0.024	0.025
18120	0.016	0.014	0.026	0.019	0.026	0.019	0.022	0.025
18180	0.022	0.014	0.025	0.02	0.025	0.02	0.024	0.027
18240	0.017	0.014	0.023	0.019	0.023	0.019	0.022	0.027
18300	0.018	0.014	0.023	0.021	0.023	0.021	0.023	0.027
18360	0.022	0.057	0.022	0.02	0.022	0.027	0.022	0.03
18420	0.026	0.054	0.024	0.02	0.023	0.025	0.022	0.028
18480	0.031	0.036	0.024	0.021	0.024	0.021	0.022	0.026
18540	0.024	0.086	0.023	0.02	0.023	0.02	0.022	0.027
18600	0.026	0.025	0.023	0.021	0.023	0.021	0.023	0.022
18660	0.021	0.029	0.023	0.021	0.023	0.021	0.023	0.032
18720	0.015	0.033	0.023	0.02	0.023	0.02	0.024	0.033
18780	0.015	0.036	0.034	0.02	0.034	0.02	0.022	0.036
18840	0.015	0.041	0.027	0.02	0.027	0.02	0.022	0.024
18900	0.023	0.048	0.023	0.02	0.023	0.02	0.023	0.023
18960	0.014	0.03	0.024	0.021	0.024	0.021	0.022	0.023
19020	0.014	0.059	0.036	0.021	0.036	0.021	0.024	0.024
19080	0.026	0.031	0.025	0.021	0.025	0.021	0.022	0.023
19140	0.021	0.039	0.025	0.023	0.025	0.023	0.024	0.023
19200	0.019	0.023	0.024	0.021	0.024	0.021	0.022	0.021
19260	0.019	0.035	0.023	0.021	0.023	0.021	0.023	0.026
19320	0.018	0.018	0.025	0.02	0.025	0.02	0.022	0.026
19380	0.015	0.019	0.024	0.02	0.024	0.02	0.022	0.025
19440	0.015	0.025	0.024	0.021	0.024	0.021	0.022	0.027
19500	0.016	0.031	0.025	0.021	0.025	0.021	0.022	0.027
19560	0.018	0.031	0.025	0.025	0.025	0.025	0.023	0.027
19620	0.016	0.024	0.024	0.021	0.024	0.021	0.023	0.03
19680	0.018	0.023	0.025	0.021	0.025	0.021	0.024	0.028
19740	0.018	0.019	0.022	0.021	0.022	0.021	0.022	0.026
19800	0.014	0.019	0.021	0.021	0.021	0.021	0.022	0.027
19860	0.014	0.019	0.023	0.022	0.023	0.022	0.023	0.062
19920	0.014	0.029	0.022	0.022	0.022	0.022	0.03	0.032
19980	0.015	0.033	0.021	0.021	0.021	0.021	0.027	0.033
20040	0.015	0.023	0.024	0.021	0.024	0.021	0.022	0.036
20100	0.026	0.019	0.025	0.021	0.025	0.021	0.021	0.024
20160	0.022	0.027	0.024	0.018	0.024	0.018	0.02	0.023

20220	0.019	0.018	0.025	0.019	0.025	0.019	0.022	0.023
20280	0.021	0.053	0.025	0.019	0.025	0.019	0.024	0.023
20340	0.018	0.015	0.025	0.019	0.025	0.019	0.022	0.025
20400	0.015	0.021	0.026	0.021	0.026	0.021	0.024	0.025
20460	0.015	0.017	0.028	0.023	0.028	0.023	0.022	0.026
20520	0.014	0.024	0.025	0.022	0.025	0.022	0.023	0.023
20580	0.099	0.014	0.032	0.021	0.032	0.021	0.022	0.023
20640	0.044	0.017	0.026	0.021	0.026	0.021	0.022	0.025
20700	0.018	0.031	0.024	0.02	0.024	0.02	0.022	0.025
20760	0.015	0.016	0.024	0.022	0.024	0.022	0.022	0.026
20820	0.012	0.022	0.024	0.022	0.024	0.022	0.023	0.023
20880	0.019	0.016	0.024	0.021	0.024	0.021	0.023	0.023
20940	0.018	0.016	0.025	0.02	0.025	0.02	0.024	0.025
21000	0.023	0.106	0.025	0.02	0.025	0.02	0.022	0.025
21060	0.012	0.024	0.025	0.021	0.025	0.021	0.022	0.026
21120	0.012	0.028	0.026	0.02	0.026	0.02	0.023	0.021
21180	0.012	0.026	0.026	0.02	0.026	0.02	0.03	0.021
21240	0.02	0.028	0.024	0.022	0.024	0.022	0.029	0.021
21300	0.014	0.03	0.024	0.037	0.023	0.037	0.027	0.021
21360	0.014	0.037	0.024	0.021	0.024	0.021	0.027	0.022
21420	0.013	0.02	0.026	0.023	0.026	0.023	0.02	0.023
21480	0.016	0.021	0.027	0.022	0.027	0.022	0.022	0.021
21540	0.012	0.031	0.03	0.021	0.03	0.021	0.024	0.023
21600	0.011	0.039	0.026	0.022	0.026	0.022	0.022	0.029
21660	0.013	0.021	0.026	0.02	0.026	0.02	0.024	0.025
21720	0.013	0.031	0.026	0.02	0.026	0.02	0.022	0.043
21780	0.011	0.027	0.027	0.023	0.027	0.023	0.023	0.025
21840	0.012	0.019	0.027	0.023	0.027	0.023	0.022	0.025
21900	0.012	0.021	0.028	0.03	0.028	0.03	0.022	0.023
21960	0.012	0.03	0.031	0.023	0.031	0.023	0.022	0.084
22020	0.011	0.034	0.028	0.023	0.028	0.023	0.022	0.029
22080	0.012	0.092	0.028	0.022	0.028	0.022	0.023	0.025
22140	0.012	0.015	0.027	0.023	0.027	0.023	0.023	0.024
22200	0.012	0.088	0.028	0.024	0.028	0.024	0.024	0.024
22260	0.014	0.014	0.03	0.062	0.03	0.062	0.022	0.023
22320	0.076	0.084	0.028	0.025	0.028	0.025	0.022	0.022
22380	0.014	0.017	0.027	0.025	0.027	0.025	0.023	0.024
22440	0.142	0.01	0.027	0.023	0.027	0.023	0.03	0.022
22500	0.067	0.078	0.027	0.026	0.027	0.026	0.027	0.024
22560	0.023	0.038	0.026	0.025	0.026	0.025	0.022	0.022
22620	0.031	0.073	0.076	0.041	0.076	0.041	0.021	0.023
22680	0.015	0.011	0.038	0.035	0.038	0.035	0.02	0.022
22740	0.271	0.083	0.028	0.027	0.028	0.027	0.022	0.022
22800	0.028	0.024	0.046	0.026	0.046	0.026	0.019	0.022
22860	0.153	0.207	0.027	0.024	0.027	0.024	0.021	0.022
22920	0.064	0.063	0.032	0.025	0.032	0.025	0.023	0.023
22980	0.05	0.13	0.032	0.026	0.032	0.026	0.024	0.023
23040	0.015	0.083	0.057	0.037	0.057	0.037	0.03	0.024
23100	0.159	0.028	0.056	0.023	0.056	0.023	0.018	0.022
23160	0.023	0.049	0.032	0.023	0.032	0.023	0.043	0.022
23220	0.024	0.082	0.082	0.022	0.082	0.022	0.028	0.023
23280	0.014	0.094	0.054	0.022	0.054	0.022	0.018	0.03
23340	0.014	0.045	0.031	0.028	0.031	0.028	0.018	0.029
23400	0.014	0.144	0.03	0.074	0.03	0.074	0.018	0.027
23460	0.012	0.041	0.083	0.393	0.083	0.393	0.017	0.027
23520	0.021	0.082	0.038	0.048	0.038	0.048	0.017	0.02
23580	0.012	0.085	0.03	0.214	0.03	0.214	0.017	0.023
23640	0.016	0.332	0.05	0.055	0.05	0.055	0.021	0.023
23700	0.1	0.091	0.028	0.027	0.028	0.027	0.031	0.025
23760	0.073	0.089	0.027	0.034	0.027	0.034	0.028	0.025
23820	0.019	0.045	0.028	0.152	0.028	0.152	0.03	0.026
23880	0.016	0.035	0.027	0.243	0.027	0.243	0.041	0.022
23940	0.027	0.083	0.026	0.037	0.029	0.037	0.03	0.021
24000	0.016	0.015	0.026	0.07	0.026	0.07	0.022	0.021
24060	0.013	0.038	0.026	0.028	0.026	0.028	0.025	0.021
24120	0.032	0.059	0.026	0.024	0.026	0.024	0.03	0.021
24180	0.014	0.024	0.027	0.024	0.027	0.024	0.023	0.022
24240	0.014	0.036	0.027	0.023	0.022	0.023	0.022	0.026
24300	0.012	0.061	0.028	0.023	0.028	0.023	0.035	0.026
24360	0.02	0.013	0.028	0.023	0.028	0.023	0.027	0.026
24420	0.014	0.046	0.037	0.022	0.037	0.022	0.024	0.025
24480	0.013	0.078	0.034	0.023	0.034	0.023	0.03	0.027
24540	0.014	0.032	0.033	0.025	0.033	0.025	0.027	0.027
24600	0.013	0.035	0.036	0.026	0.036	0.026	0.019	0.027
24660	0.017	0.044	0.039	0.024	0.039	0.024	0.018	0.03
24720	0.016	0.139	0.032	0.027	0.032	0.027	0.019	0.028
24780	0.015	0.065	0.067	0.025	0.027	0.025	0.028	0.026
24840	0.011	0.046	0.029	0.024	0.026	0.034	0.026	0.027
24900	0.013	0.078	0.033	0.025	0.033	0.025	0.028	0.062
24960	0.014	0.032	0.014	0.025	0.014	0.025	0.02	0.032
25020	0.012	0.033	0.028	0.025	0.028	0.035	0.019	0.033
25080	0.016	0.037	0.026	0.021	0.026	0.021	0.025	0.036
25140	0.016	0.059	0.026	0.024	0.026	0.024	0.021	0.024

Table 11. Total Dust Monitoring results dated 08/01/11 to 08/04/11.

	1-Aug		2-Aug		3-Aug		4-Aug	
Elapsed Time [s]	upwind Mass [mg/m3]	downwind Mass [mg/m3]	upwind Mass [mg/m3]	downwind Mass [mg/m3]	upwind Mass [mg/m3]	downwind Mass [mg/m3]	upwind Mass [mg/m3]	downwind Mass [mg/m3]
60	0.048	0.039	0.066	0.04	0.021	0.026	0.076	0.039
120	0.033	0.036	0.088	0.064	0.019	0.044	0.049	0.035
180	0.032	0.037	0.077	0.056	0.018	0.022	0.044	0.035
240	0.036	0.036	0.104	0.057	0.019	0.016	0.045	0.035
300	0.032	0.036	0.079	0.057	0.019	0.046	0.05	0.034
360	0.035	0.035	0.074	0.056	0.019	0.021	0.045	0.032
420	0.033	0.034	0.062	0.055	0.018	0.024	0.039	0.032
480	0.031	0.035	0.06	0.055	0.017	0.029	0.044	0.032
540	0.032	0.038	0.056	0.055	0.018	0.066	0.051	0.032
600	0.03	0.035	0.049	0.056	0.018	0.023	0.041	0.032
660	0.03	0.035	0.048	0.055	0.018	0.027	0.039	0.033
720	0.03	0.036	0.05	0.056	0.018	0.019	0.047	0.032
780	0.031	0.038	0.113	0.055	0.017	0.043	0.041	0.031
840	0.032	0.036	0.187	0.056	0.018	0.066	0.033	0.031
900	0.038	0.037	0.084	0.057	0.018	0.016	0.035	0.031
960	0.036	0.037	0.074	0.065	0.021	0.015	0.036	0.031
1020	0.032	0.037	0.048	0.06	0.02	0.015	0.032	0.03
1080	0.035	0.036	0.048	0.057	0.019	0.014	0.032	0.031
1140	0.032	0.037	0.067	0.057	0.023	0.017	0.031	0.03
1200	0.032	0.038	0.045	0.058	0.022	0.016	0.032	0.03
1260	0.033	0.036	0.045	0.058	0.019	0.019	0.033	0.029
1320	0.033	0.037	0.049	0.058	0.018	0.015	0.059	0.028
1380	0.032	0.047	0.054	0.058	0.019	0.024	0.045	0.029
1440	0.032	0.036	0.054	0.058	0.021	0.017	0.03	0.028
1500	0.032	0.054	0.059	0.056	0.02	0.027	0.03	0.027
1560	0.032	0.037	0.057	0.056	0.028	0.042	0.029	0.028
1620	0.033	0.037	0.051	0.057	0.046	0.03	0.03	0.026
1680	0.033	0.037	0.051	0.057	0.052	0.024	0.03	0.027
1740	0.033	0.037	0.049	0.055	0.022	0.034	0.03	0.027
1800	0.033	0.037	0.05	0.058	0.054	0.024	0.029	0.027
1860	0.033	0.038	0.05	0.063	0.038	0.026	0.03	0.027
1920	0.033	0.037	0.057	0.08	0.028	0.041	0.03	0.026
1980	0.034	0.037	0.06	0.079	0.018	0.036	0.03	0.026
2040	0.032	0.038	0.052	0.065	0.018	0.025	0.029	0.026
2100	0.032	0.037	0.051	0.059	0.029	0.028	0.029	0.026
2160	0.033	0.044	0.048	0.06	0.027	0.024	0.028	0.027
2220	0.033	0.058	0.048	0.06	0.016	0.038	0.029	0.026
2280	0.033	0.039	0.048	0.062	0.018	0.026	0.029	0.027
2340	0.037	0.043	0.048	0.059	0.019	0.021	0.029	0.027
2400	0.039	0.037	0.048	0.061	0.018	0.016	0.03	0.027
2460	0.033	0.036	0.048	0.06	0.018	0.015	0.032	0.027
2520	0.046	0.037	0.048	0.06	0.016	0.015	0.029	0.027
2580	0.043	0.037	0.048	0.058	0.015	0.019	0.029	0.027
2640	0.042	0.041	0.048	0.06	0.015	0.033	0.037	0.026
2700	0.034	0.037	0.05	0.059	0.037	0.019	0.032	0.026
2760	0	0.038	0.101	0.058	0.042	0.023	0.029	0.026
2820	0.079	0.036	0.175	0.057	0.083	0.042	0.03	0.027
2880	0.078	0.087	0.193	0.057	0.032	0.018	0.033	0.027
2940	0.035	0.043	0.089	0.057	0.015	0.018	0.038	0.027
3000	0.034	0.039	0.064	0.057	0.022	0.033	0.029	0.027
3060	0.039	0.041	0.053	0.057	0.02	0.021	0.031	0.026
3120	0.04	0.048	0.049	0.056	0.016	0.028	0.036	0.028
3180	0.037	0.037	0.052	0.058	0.015	0.021	0.03	0.027
3240	0.035	0.037	0.053	0.097	0.015	0.016	0.03	0.027
3300	0.057	0.06	0.054	0.092	0.016	0.016	0.034	0.028
3360	0.058	0.07	0.049	0.069	0.016	0.015	0.029	0.027
3420	0.04	0.041	0.047	0.077	0.016	0.015	0.029	0.027
3480	0.051	0.056	0.05	0.066	0.016	0.014	0.03	0.026
3540	0.042	0.043	0.048	0.063	0.016	0.018	0.039	0.026
3600	0.035	0.038	0.048	0.06	0.015	0.016	0.031	0.026
3660	0.037	0.039	0.047	0.064	0.015	0.014	0.03	0.028
3720	0.038	0.039	0.047	0.059	0.016	0.014	0.03	0.031
3780	0.038	0.039	0.049	0.056	0.016	0.012	0.03	0.027
3840	0.037	0.039	0.047	0.056	0.016	0.013	0.029	0.026
3900	0.035	0.039	0.048	0.055	0.015	0.013	0.029	0.026
3960	0.034	0.039	0.048	0.057	0.016	0.013	0.031	0.027
4020	0.034	0.04	0.047	0.056	0.016	0.013	0.029	0.028
4080	0.037	0.039	0.048	0.056	0.015	0.013	0.031	0.027
4140	0.034	0.04	0.05	0.06	0.015	0.013	0.03	0.026
4200	0.04	0.041	0.048	0.055	0.016	0.013	0.03	0.026
4260	0.04	0.04	0.055	0.054	0.014	0.013	0.03	0.027
4320	0.039	0.041	0.058	0.055	0.014	0.013	0.029	0.026
4380	0.037	0.04	0.053	0.055	0.014	0.012	0.028	0.026
4440	0.056	0.074	0.051	0.055	0.015	0.013	0.027	0.026
4500	0.034	0.04	0.052	0.057	0.015	0.013	0.028	0.026
4560	0.034	0.04	0.05	0.056	0.015	0.013	0.027	0.025
4620	0.036	0.041	0.049	0.059	0.018	0.012	0.028	0.027
4680	0.038	0.04	0.052	0.059	0.016	0.012	0.026	0.025
4740	0.031	0.04	0.05	0.058	0.015	0.02	0.027	0.025
4800	0.032	0.04	0.05	0.058	0.015	0.012	0.027	0.025
4860	0.032	0.043	0.05	0.058	0.014	0.011	0.028	0.025
4920	0.031	0.037	0.05	0.058	0.014	0.012	0.028	0.024
4980	0.029	0.04	0.05	0.06	0.014	0.011	0.027	0.024
5040	0.033	0.042	0.05	0.059	0.014	0.012	0.027	0.024
5100	0.057	0.092	0.051	0.061	0.014	0.012	0.028	0.024
5160	0.04	0.043	0.05	0.062	0.014	0.012	0.027	0.024
5220	0.032	0.038	0.051	0.059	0.014	0.012	0.027	0.024
5280	0.032	0.037	0.05	0.06	0.014	0.012	0.027	0.024
5340	0.033	0.044	0.051	0.06	0.014	0.012	0.026	0.024
5400	0.033	0.058	0.052	0.06	0.017	0.011	0.026	0.024
5460	0.033	0.039	0.052	0.06	0.014	0.011	0.027	0.024
5520	0.037	0.043	0.052	0.061	0.015	0.011	0.027	0.024
5580	0.039	0.037	0.051	0.06	0.016	0.011	0.028	0.024
5640	0.033	0.036	0.052	0.061	0.016	0.011	0.027	0.024
5700	0.046	0.037	0.054	0.063	0.015	0.013	0.027	0.025
5760	0.043	0.037	0.053	0.105	0.016	0.012	0.027	0.025
5820	0.042	0.041	0.117	0.1	0.016	0.012	0.027	0.025
5880	0.034	0.037	0.052	0.07	0.016	0.012	0.027	0.024
5940	0.029	0.04	0.051	0.063	0.017	0.012	0.027	0.025
6000	0.033	0.042	0.051	0.062	0.016	0.011	0.027	0.025
6060	0.032	0.036	0.052	0.094	0.016	0.012	0.027	0.025

6120	0.035	0.035	0.051	0.068	0.016	0.012	0.027	0.025
6180	0.033	0.034	0.052	0.063	0.016	0.012	0.027	0.025
6240	0.031	0.035	0.052	0.063	0.016	0.013	0.027	0.025
6300	0.032	0.038	0.052	0.063	0.016	0.013	0.027	0.025
6360	0.03	0.035	0.052	0.063	0.016	0.013	0.027	0.024
6420	0.03	0.035	0.053	0.064	0.016	0.013	0.028	0.024
6480	0.03	0.036	0.053	0.063	0.015	0.013	0.029	0.025
6540	0.031	0.038	0.053	0.063	0.016	0.013	0.028	0.024
6600	0.032	0.036	0.056	0.064	0.016	0.013	0.027	0.024
6660	0.038	0.037	0.054	0.064	0.016	0.013	0.028	0.024
6720	0.036	0.037	0.054	0.064	0.016	0.015	0.027	0.023
6780	0.032	0.037	0.053	0.065	0.016	0.013	0.027	0.023
6840	0.035	0.036	0.053	0.066	0.016	0.013	0.026	0.023
6900	0.032	0.037	0.055	0.066	0.017	0.013	0.027	0.023
6960	0.034	0.04	0.056	0.072	0.016	0.013	0.026	0.023
7020	0.034	0.04	0.064	0.07	0.016	0.013	0.027	0.023
7080	0.036	0.041	0.057	0.068	0.017	0.014	0.032	0.023
7140	0.038	0.04	0.057	0.072	0.016	0.013	0.035	0.022
7200	0.031	0.04	0.057	0.068	0.016	0.013	0.033	0.023
7260	0.032	0.04	0.057	0.077	0.016	0.013	0.03	0.022
7320	0.032	0.043	0.057	0.077	0.015	0.014	0.029	0.022
7380	0.031	0.037	0.057	0.073	0.016	0.013	0.061	0.022
7440	0.029	0.04	0.089	0.068	0.015	0.013	0.033	0.023
7500	0.033	0.042	0.061	0.069	0.015	0.014	0.028	0.021
7560	0.032	0.036	0.058	0.07	0.015	0.013	0.024	0.021
7620	0.035	0.035	0.075	0.069	0.015	0.013	0.028	0.022
7680	0.033	0.034	0.073	0.07	0.016	0.013	0.024	0.022
7740	0.031	0.035	0.207	0.07	0.015	0.013	0.027	0.022
7800	0.032	0.038	0.258	0.077	0.016	0.012	0.027	0.023
7860	0.03	0.035	0.108	0.075	0.016	0.012	0.024	0.022
7920	0.03	0.035	0.061	0.072	0.017	0.013	0.029	0.022
7980	0.03	0.036	0.061	0.075	0.017	0.013	0.025	0.022
8040	0.031	0.038	0.059	0.09	0.017	0.012	0.025	0.022
8100	0.032	0.036	0.066	0.08	0.016	0.012	0.025	0.022
8160	0.038	0.037	0.091	0.074	0.016	0.012	0.024	0.022
8220	0.036	0.037	0.449	0.088	0.017	0.014	0.025	0.022
8280	0.032	0.037	0.154	0.077	0.017	0.014	0.026	0.022
8340	0.035	0.036	0.192	0.074	0.016	0.02	0.023	0.022
8400	0.032	0.037	0.107	0.073	0.016	0.017	0.024	0.022
8460	0.032	0.038	0.098	0.073	0.016	0.014	0.024	0.022
8520	0.033	0.036	0.068	0.073	0.016	0.013	0.026	0.022
8580	0.033	0.037	0.066	0.083	0.016	0.013	0.028	0.022
8640	0.032	0.047	0.066	0.076	0.016	0.013	0.026	0.022
8700	0.032	0.036	0.065	0.077	0.016	0.013	0.024	0.022
8760	0.032	0.054	0.064	0.078	0.015	0.014	0.024	0.022
8820	0.032	0.037	0.067	0.077	0.015	0.014	0.025	0.022
8880	0.033	0.037	0.067	0.079	0.016	0.013	0.025	0.022
8940	0.034	0.04	0.066	0.078	0.015	0.013	0.025	0.022
9000	0.034	0.04	0.066	0.078	0.015	0.014	0.025	0.022
9060	0.036	0.041	0.066	0.076	0.016	0.013	0.025	0.025
9120	0.038	0.04	0.065	0.077	0.016	0.013	0.025	0.022
9180	0.031	0.04	0.064	0.078	0.015	0.013	0.024	0.021
9240	0.032	0.04	0.063	0.079	0.016	0.013	0.025	0.02
9300	0.032	0.043	0.064	0.077	0.016	0.013	0.027	0.019
9360	0.031	0.037	0.064	0.077	0.016	0.013	0.023	0.019
9420	0.035	0.037	0.065	0.078	0.016	0.013	0.023	0.018
9480	0.057	0.06	0.073	0.078	0.015	0.013	0.02	0.018
9540	0.058	0.07	0.064	0.078	0.016	0.014	0.02	0.018
9600	0.04	0.041	0.066	0.078	0.016	0.014	0.02	0.018
9660	0.051	0.056	0.065	0.077	0.016	0.013	0.021	0.018
9720	0.042	0.043	0.066	0.078	0.016	0.013	0.02	0.018
9780	0.035	0.038	0.066	0.087	0.016	0.013	0.02	0.018
9840	0.037	0.039	0.068	0.083	0.016	0.013	0.02	0.018
9900	0.039	0.041	0.07	0.077	0.016	0.012	0.02	0.018
9960	0.04	0.048	0.071	0.078	0.015	0.012	0.02	0.018
10020	0.037	0.037	0.069	0.084	0.015	0.012	0.02	0.018
10080	0.035	0.037	0.076	0.081	0.016	0.014	0.02	0.018
10140	0.057	0.06	0.075	0.081	0.016	0.013	0.02	0.018
10200	0.058	0.07	0.077	0.081	0.015	0.012	0.02	0.018
10260	0.04	0.041	0.078	0.082	0.016	0.013	0.02	0.018
10320	0.035	0.036	0.072	0.085	0.016	0.013	0.02	0.018
10380	0.032	0.037	0.071	0.085	0.016	0.013	0.02	0.018
10440	0.034	0.04	0.078	0.088	0.015	0.012	0.02	0.018
10500	0.034	0.04	0.078	0.094	0.015	0.013	0.02	0.017
10560	0.036	0.041	0.083	0.093	0.015	0.012	0.02	0.017
10620	0.038	0.04	0.084	0.107	0.015	0.012	0.02	0.021
10680	0.031	0.04	0.084	0.111	0.015	0.012	0.02	0.019
10740	0.032	0.04	0.084	0.113	0.015	0.013	0.02	0.017
10800	0.032	0.043	0.085	0.097	0.016	0.02	0.02	0.017
10860	0.031	0.037	0.087	0.099	0.015	0.012	0.02	0.017
10920	0.029	0.04	0.085	0.104	0.014	0.012	0.021	0.017
10980	0.033	0.042	0.089	0.114	0.014	0.012	0.019	0.017
11040	0.032	0.036	0.088	0.101	0.014	0.012	0.019	0.017
11100	0.035	0.035	0.09	0.098	0.015	0.012	0.019	0.017
11160	0.033	0.034	0.089	0.1	0.015	0.014	0.02	0.017
11220	0.031	0.035	0.089	0.102	0.015	0.012	0.02	0.017
11280	0.032	0.038	0.089	0.097	0.015	0.014	0.019	0.017
11340	0.032	0.036	0.089	0.102	0.015	0.013	0.019	0.017
11400	0.032	0.054	0.092	0.103	0.015	0.013	0.02	0.016
11460	0.032	0.037	0.09	0.104	0.015	0.013	0.02	0.016
11520	0.033	0.037	0.088	0.102	0.015	0.012	0.02	0.018
11580	0.033	0.037	0.089	0.101	0.017	0.012	0.02	0.016
11640	0.033	0.037	0.089	0.103	0.028	0.012	0.024	0.016
11700	0.033	0.037	0.09	0.101	0.016	0.013	0.021	0.015
11760	0.033	0.038	0.091	0.101	0.02	0.013	0.02	0.015
11820	0.033	0.037	0.091	0.101	0.017	0.013	0.019	0.015
11880	0.034	0.037	0.09	0.1	0.016	0.013	0.019	0.015
11940	0.032	0.038	0.09	0.101	0.015	0.012	0.018	0.015
12000	0.032	0.037	0.089	0.102	0.015	0.012	0.018	0.015
12060	0.033	0.044	0.089	0.103	0.015	0.012	0.018	0.016
12120	0.033	0.058	0.089	0.104	0.016	0.013	0.018	0.015
12180	0.033	0.039	0.089	0.104	0.016	0.014	0.018	0.015
12240	0.037	0.043	0.089	0.105	0.015	0.014	0.019	0.015
12300	0.039	0.037	0.089	0.104	0.024	0.014	0.018	0.015
12360	0.033	0.036	0.091	0.104	0.022	0.013	0.018	0.015

12420	0.046	0.037	0.09	0.103	0.104	0.013	0.018	0.015
12480	0.043	0.037	0.09	0.135	0.042	0.014	0.024	0.015
12540	0.042	0.041	0.089	0.106	0.016	0.013	0.018	0.016
12600	0.034	0.037	0.089	0.104	0.015	0.013	0.018	0.015
12660	0	0.038	0.088	0.106	0.015	0.012	0.019	0.015
12720	0.079	0.036	0.09	0.106	0.02	0.012	0.019	0.015
12780	0.078	0.087	0.088	0.104	0.016	0.013	0.019	0.015
12840	0.035	0.043	0.091	0.11	0.022	0.013	0.02	0.015
12900	0.034	0.039	0.089	0.105	0.017	0.013	0.018	0.015
12960	0.039	0.041	0.089	0.103	0.029	0.013	0.019	0.016
13020	0.04	0.048	0.089	0.102	0.025	0.012	0.019	0.015
13080	0.037	0.037	0.089	0.102	0.019	0.013	0.019	0.015
13140	0.035	0.037	0.089	0.102	0.02	0.013	0.025	0.015
13200	0.057	0.06	0.088	0.102	0.017	0.013	0.019	0.014
13260	0.058	0.07	0.088	0.102	0.026	0.013	0.019	0.014
13320	0.04	0.041	0.088	0.102	0.044	0.013	0.019	0.014
13380	0.051	0.056	0.088	0.102	0.017	0.013	0.017	0.014
13440	0.042	0.043	0.087	0.102	0.064	0.013	0.017	0.014
13500	0.035	0.038	0.087	0.102	0.067	0.013	0.017	0.014
13560	0.032	0.036	0.087	0.102	0.018	0.013	0.022	0.014
13620	0.032	0.054	0.087	0.102	0.043	0.014	0.018	0.014
13680	0.032	0.037	0.087	0.102	0.068	0.013	0.018	0.015
13740	0.033	0.037	0.087	0.101	0.059	0.014	0.018	0.015
13800	0.033	0.037	0.087	0.1	0.021	0.013	0.024	0.015
13860	0.033	0.037	0.087	0.1	0.017	0.031	0.018	0.014
13920	0.033	0.037	0.086	0.1	0.022	0.019	0.021	0.014
13980	0.033	0.038	0.086	0.101	0.019	0.013	0.018	0.017
14040	0.033	0.037	0.086	0.1	0.058	0.013	0.017	0.016
14100	0.034	0.037	0.086	0.1	0.022	0.013	0.018	0.015
14160	0.032	0.038	0.085	0.102	0.019	0.014	0.02	0.015
14220	0.032	0.037	0.084	0.102	0.031	0.014	0.018	0.013
14280	0.033	0.044	0.083	0.109	0.022	0.013	0.019	0.013
14340	0.033	0.058	0.083	0.1	0.028	0.013	0.02	0.014
14400	0.033	0.039	0.083	0.108	0.021	0.014	0.016	0.014
14460	0.037	0.043	0.084	0.1	0.019	0.016	0.016	0.017
14520	0.039	0.037	0.083	0.101	0.02	0.014	0.018	0.016
14580	0.033	0.036	0.083	0.099	0.018	0.014	0.017	0.016
14640	0.046	0.037	0.083	0.097	0.019	0.014	0.017	0.016
14700	0.043	0.037	0.083	0.097	0.018	0.015	0.017	0.016
14760	0.042	0.041	0.083	0.098	0.019	0.015	0.02	0.016
14820	0.034	0.04	0.082	0.098	0.027	0.014	0.02	0.017
14880	0.036	0.041	0.084	0.098	0.019	0.019	0.02	0.017
14940	0.038	0.04	0.082	0.097	0.019	0.043	0.021	0.016
15000	0.031	0.04	0.081	0.098	0.019	0.055	0.02	0.017
15060	0.032	0.04	0.081	0.099	0.019	0.022	0.02	0.019
15120	0.032	0.043	0.081	0.1	0.021	0.032	0.02	0.018
15180	0.031	0.037	0.08	0.098	0.023	0.015	0.021	0.018
15240	0.029	0.04	0.081	0.098	0.02	0.015	0.021	0.017
15300	0.033	0.042	0.08	0.098	0.02	0.015	0.021	0.018
15360	0.032	0.036	0.08	0.096	0.02	0.015	0.021	0.018
15420	0.035	0.035	0.08	0.095	0.021	0.014	0.021	0.018
15480	0.033	0.034	0.08	0.094	0.02	0.015	0.021	0.018
15540	0.031	0.035	0.079	0.095	0.02	0.014	0.021	0.019
15600	0.032	0.038	0.079	0.095	0.02	0.014	0.021	0.018
15660	0.046	0.037	0.078	0.095	0.024	0.014	0.022	0.018
15720	0.043	0.037	0.078	0.094	0.02	0.016	0.021	0.019
15780	0.042	0.041	0.078	0.093	0.02	0.019	0.021	0.018
15840	0.034	0.037	0.078	0.093	0.02	0.016	0.021	0.019
15900	0.029	0.04	0.079	0.092	0.02	0.015	0.022	0.019
15960	0.033	0.042	0.079	0.092	0.02	0.015	0.022	0.019
16020	0.032	0.036	0.08	0.092	0.02	0.015	0.022	0.019
16080	0.035	0.035	0.081	0.092	0.021	0.015	0.022	0.018
16140	0.033	0.034	0.082	0.092	0.021	0.015	0.022	0.017
16200	0.031	0.035	0.082	0.091	0.022	0.016	0.022	0.016
16260	0.032	0.038	0.083	0.093	0.021	0.015	0.019	0.016
16320	0.03	0.035	0.086	0.093	0.022	0.016	0.019	0.016
16380	0.03	0.035	0.085	0.094	0.022	0.015	0.02	0.017
16440	0.03	0.036	0.084	0.095	0.022	0.016	0.02	0.017
16500	0.031	0.038	0.084	0.095	0.023	0.016	0.022	0.017
16560	0.032	0.036	0.085	0.096	0.023	0.016	0.025	0.017
16620	0.038	0.037	0.088	0.096	0.022	0.016	0.02	0.017
16680	0.036	0.037	0.089	0.096	0.022	0.016	0.02	0.018
16740	0.032	0.037	0.091	0.098	0.023	0.016	0.02	0.019
16800	0.035	0.036	0.093	0.099	0.023	0.017	0.028	0.02
16860	0.032	0.037	0.091	0.102	0.023	0.017	0.024	0.019
16920	0.034	0.04	0.089	0.105	0.023	0.017	0.034	0.019
16980	0.034	0.04	0.088	0.104	0.023	0.017	0.021	0.019
17040	0.036	0.041	0.09	0.105	0.023	0.017	0.022	0.018
17100	0.038	0.04	0.091	0.108	0.023	0.018	0.021	0.018
17160	0.033	0.037	0.108	0.109	0.023	0.018	0.022	0.019
17220	0.033	0.037	0.108	0.108	0.024	0.017	0.022	0.021
17280	0.033	0.037	0.104	0.109	0.025	0.017	0.022	0.02
17340	0.033	0.037	0.108	0.106	0.026	0.017	0.022	0.02
17400	0.033	0.038	0.109	0.105	0.025	0.017	0.022	0.02
17460	0.046	0.037	0.115	0.112	0.024	0.018	0.023	0.02
17520	0.043	0.037	0.117	0.127	0.024	0.018	0.023	0.02
17580	0.042	0.041	0.118	0.13	0.024	0.018	0.023	0.02
17640	0.034	0.037	0.119	0.132	0.024	0.018	0.023	0.02
17700	0.029	0.04	0.118	0.133	0.023	0.018	0.023	0.021
17760	0.033	0.042	0.117	0.135	0.024	0.019	0.024	0.02
17820	0.032	0.036	0.116	0.138	0.024	0.018	0.023	0.021
17880	0.035	0.035	0.11	0.138	0.024	0.019	0.023	0.021
17940	0.033	0.034	0.098	0.138	0.024	0.022	0.024	0.02
18000	0.031	0.035	0.17	0.139	0.025	0.018	0.024	0.023
18060	0.032	0.038	0.144	0.14	0.026	0.018	0.024	0.021
18120	0.032	0.036	0.112	0.137	0.027	0.018	0.024	0.021
18180	0.032	0.054	0.115	0.145	0.028	0.019	0.025	0.02
18240	0.032	0.037	0.106	0.124	0.028	0.018	0.027	0.02
18300	0.033	0.037	0.136	0.121	0.028	0.019	0.024	0.02
18360	0.033	0.037	0.138	0.167	0.028	0.018	0.025	0.02
18420	0.033	0.037	0.117	0.137	0.028	0.018	0.025	0.02
18480	0.033	0.037	0.114	0.125	0.028	0.018	0.024	0.021
18540	0.033	0.038	0.112	0.141	0.029	0.018	0.025	0.021
18600	0.033	0.037	0.113	0.162	0.028	0.019	0.024	0.021
18660	0.034	0.037	0.113	0.134	0.028	0.02	0.025	0.021

18720	0.032	0.038	0.114	0.181	0.03	0.02	0.024	0.021
18780	0.03	0.035	0.114	0.137	0.032	0.023	0.025	0.021
18840	0.03	0.035	0.113	0.136	0.027	0.053	0.025	0.021
18900	0.03	0.036	0.113	0.136	0.029	0.023	0.025	0.021
18960	0.031	0.038	0.112	0.138	0.029	0.024	0.025	0.021
19020	0.032	0.036	0.111	0.13	0.028	0.024	0.026	0.021
19080	0.038	0.037	0.105	0.13	0.029	0.024	0.022	0.019
19140	0.036	0.037	0.104	0.133	0.029	0.024	0.022	0.021
19200	0.032	0.037	0.109	0.131	0.03	0.024	0.022	0.02
19260	0.035	0.036	0.114	0.129	0.03	0.024	0.022	0.02
19320	0.032	0.037	0.115	0.128	0.029	0.023	0.022	0.02
19380	0.034	0.04	0.11	0.14	0.03	0.023	0.023	0.02
19440	0.034	0.04	0.108	0.121	0.03	0.034	0.026	0.021
19500	0.036	0.041	0.103	0.119	0.03	0.024	0.022	0.019
19560	0.03	0.036	0.104	0.122	0.03	0.024	0.022	0.021
19620	0.031	0.038	0.126	0.121	0.03	0.026	0.022	0.02
19680	0.032	0.036	0.103	0.125	0.03	0.024	0.022	0.02
19740	0.038	0.037	0.099	0.125	0.03	0.025	0.022	0.02
19800	0.036	0.037	0.1	0.124	0.029	0.025	0.023	0.02
19860	0.032	0.037	0.099	0.117	0.028	0.025	0.025	0.021
19920	0.035	0.036	0.098	0.117	0.028	0.027	0.025	0.021
19980	0.032	0.037	0.099	0.123	0.025	0.027	0.025	0.021
20040	0.034	0.04	0.099	0.114	0.023	0.025	0.022	0.017
20100	0.034	0.04	0.099	0.112	0.022	0.025	0.022	0.016
20160	0.036	0.041	0.101	0.112	0.022	0.026	0.024	0.023
20220	0.038	0.04	0.098	0.113	0.021	0.025	0.024	0.021
20280	0.031	0.038	0.098	0.113	0.021	0.025	0.024	0.021
20340	0.032	0.036	0.097	0.113	0.021	0.025	0.025	0.02
20400	0.038	0.037	0.093	0.113	0.021	0.025	0.027	0.02
20460	0.036	0.037	0.093	0.115	0.021	0.03	0.021	0.019
20520	0.032	0.037	0.092	0.112	0.02	0.026	0.021	0.018
20580	0.033	0.038	0.089	0.112	0.021	0.023	0.022	0.018
20640	0.046	0.037	0.086	0.111	0.021	0.024	0.021	0.019
20700	0.043	0.037	0.093	0.107	0.021	0.02	0.021	0.018
20760	0.042	0.041	0.083	0.107	0.021	0.021	0.021	0.019
20820	0.034	0.037	0.087	0.107	0.022	0.029	0.022	0.019
20880	0.029	0.04	0.085	0.116	0.022	0.018	0.022	0.019
20940	0.033	0.042	0.083	0.101	0.022	0.017	0.022	0.019
21000	0.032	0.036	0.079	0.103	0.022	0.018	0.022	0.018
21060	0.035	0.035	0.077	0.1	0.022	0.017	0.022	0.017
21120	0.033	0.034	0.078	0.098	0.022	0.017	0.022	0.016
21180	0.031	0.035	0.075	0.099	0.022	0.016	0.024	0.023
21240	0.032	0.038	0.075	0.097	0.022	0.017	0.024	0.021
21300	0.032	0.036	0.074	0.096	0.023	0.019	0.024	0.021
21360	0.032	0.054	0.074	0.091	0.023	0.018	0.025	0.02
21420	0.035	0.036	0.072	0.091	0.022	0.018	0.027	0.02
21480	0.032	0.037	0.07	0.087	0.022	0.018	0.024	0.02
21540	0.034	0.04	0.071	0.087	0.022	0.018	0.025	0.02
21600	0.034	0.04	0.071	0.09	0.024	0.018	0.025	0.02
21660	0.036	0.041	0.07	0.087	0.024	0.018	0.024	0.021
21720	0.04	0.048	0.07	0.085	0.024	0.018	0.025	0.021
21780	0.037	0.037	0.07	0.084	0.026	0.018	0.024	0.021
21840	0.035	0.037	0.07	0.082	0.025	0.019	0.025	0.021
21900	0.057	0.06	0.07	0.081	0.026	0.019	0.024	0.021
21960	0.058	0.07	0.071	0.081	0.027	0.018	0.022	0.018
22020	0.04	0.041	0.069	0.08	0.025	0.019	0.021	0.018
22080	0.035	0.036	0.069	0.081	0.026	0.019	0.022	0.019
22140	0.032	0.037	0.068	0.082	0.026	0.019	0.022	0.021
22200	0.034	0.04	0.082	0.082	0.026	0.022	0.022	0.02
22260	0.034	0.04	0.071	0.081	0.027	0.021	0.022	0.02
22320	0.032	0.043	0.067	0.082	0.026	0.02	0.022	0.02
22380	0.031	0.037	0.066	0.081	0.026	0.02	0.023	0.02
22440	0.034	0.04	0.065	0.079	0.026	0.022	0.023	0.02
22500	0.034	0.04	0.065	0.079	0.026	0.021	0.023	0.02
22560	0.036	0.041	0.067	0.096	0.026	0.022	0.023	0.02
22620	0.032	0.037	0.064	0.118	0.027	0.022	0.023	0.02
22680	0.034	0.04	0.06	0.092	0.027	0.022	0.025	0.021
22740	0.034	0.04	0.058	0.08	0.028	0.022	0.025	0.021
22800	0.036	0.041	0.055	0.076	0.027	0.022	0.025	0.021
22860	0.038	0.04	0.055	0.075	0.028	0.018	0.022	0.017
22920	0.031	0.038	0.054	0.077	0.028	0.018	0.022	0.016
22980	0.032	0.036	0.054	0.103	0.029	0.018	0.024	0.023
23040	0.038	0.037	0.051	0.094	0.028	0.019	0.024	0.021
23100	0.036	0.037	0.051	0.095	0.028	0.02	0.024	0.021
23160	0.034	0.04	0.051	0.115	0.03	0.02	0.025	0.02
23220	0.032	0.043	0.05	0.074	0.026	0.019	0.027	0.02
23280	0.031	0.037	0.049	0.076	0.026	0.022	0.021	0.019
23340	0.034	0.04	0.048	0.151	0.027	0.021	0.021	0.018
23400	0.034	0.04	0.047	0.068	0.026	0.02	0.022	0.018
23460	0.058	0.07	0.046	0.063	0.026	0.02	0.021	0.019
23520	0.04	0.041	0.047	0.12	0.026	0.022	0.021	0.018
23580	0.051	0.056	0.047	0.066	0.025	0.017	0.021	0.019
23640	0.042	0.043	0.047	0.061	0.026	0.017	0.022	0.019
23700	0.035	0.038	0.047	0.092	0.025	0.017	0.022	0.019
23760	0.037	0.039	0.045	0.06	0.024	0.018	0.022	0.019
23820	0.039	0.041	0.045	0.056	0.024	0.018	0.022	0.018
23880	0.04	0.048	0.045	0.056	0.024	0.018	0.022	0.017
23940	0.037	0.037	0.045	0.056	0.024	0.018	0.022	0.016
24000	0.035	0.037	0.045	0.027	0.026	0.02	0.025	0.02
24060	0.057	0.06	0.044	0.057	0.026	0.02	0.027	0.02
24120	0.058	0.07	0.044	0.06	0.026	0.022	0.024	0.02
24180	0.04	0.041	0.042	0.026	0.026	0.021	0.025	0.02
24240	0.035	0.036	0.04	0.086	0.026	0.022	0.025	0.02
24300	0.032	0.037	0.05	0.066	0.027	0.022	0.024	0.021
24360	0.034	0.04	0.057	0.099	0.027	0.022	0.025	0.021
24420	0.034	0.04	0.092	0.126	0.027	0.022	0.024	0.021
24480	0.036	0.041	0.071	0.092	0.027	0.022	0.025	0.021
24540	0.038	0.04	0.045	0.053	0.027	0.022	0.024	0.021
24600	0.031	0.04	0.041	0.048	0.028	0.022	0.022	0.018
24660	0.032	0.04	0.043	0.049	0.027	0.022	0.021	0.018
24720	0.032	0.043	0.041	0.049	0.028	0.018	0.022	0.019
24780	0.031	0.037	0.042	0.049	0.021	0.03	0.021	0.019
24840	0.034	0.04	0.045	0.047	0.02	0.026	0.021	0.018
24900	0.034	0.04	0.041	0.048	0.021	0.023	0.021	0.019
24960	0.036	0.041	0.043	0.049	0.021	0.024	0.022	0.019

25020	0.038	0.04	0.041	0.049	0.021	0.02	0.022	0.019
25080	0.031	0.04	0.042	0.049	0.021	0.021	0.022	0.019
25140	0.032	0.04	0.044	0.057	0.022	0.029	0.022	0.018
25200	0.032	0.043	0.044	0.06	0.022	0.017	0.021	0.018

Table 12. Total Dust Monitoring results dated 08/08/11 to 08/11/11.

	8-Aug		9-Aug		10-Aug		11-Aug	
Elapsed Time [s]	upwind Mass [mg/m3]	downwind Mass [mg/m3]	upwind Mass [mg/m3]	downwind Mass [mg/m3]	upwind Mass [mg/m3]	downwind Mass [mg/m3]	upwind Mass [mg/m3]	downwind Mass [mg/m3]
60	0.071	0.07	0.044	0.043	0.034	0.053	0.019	0.009
120	0.066	0.068	0.042	0.037	0.025	0.044	0.009	0.022
180	0.065	0.067	0.041	0.036	0.025	0.063	0.007	0.005
240	0.064	0.069	0.039	0.042	0.026	0.035	0.038	0.022
300	0.062	0.068	0.038	0.031	0.025	0.029	0.009	0.006
360	0.066	0.066	0.038	0.031	0.025	0.053	0.014	0.017
420	0.066	0.066	0.038	0.03	0.026	0.049	0.007	0.008
480	0.064	0.066	0.038	0.03	0.025	0.057	0.007	0.009
540	0.063	0.065	0.038	0.03	0.024	0.037	0.007	0.011
600	0.062	0.064	0.038	0.03	0.024	0.036	0.007	0.009
660	0.061	0.064	0.038	0.03	0.024	0.046	0.007	0.01
720	0.063	0.065	0.038	0.029	0.024	0.048	0.007	0.005
780	0.063	0.065	0.038	0.029	0.024	0.05	0.01	0.019
840	0.064	0.065	0.037	0.03	0.023	0.029	0.007	0.01
900	0.06	0.063	0.037	0.031	0.023	0.049	0.006	0.02
960	0.061	0.062	0.036	0.03	0.024	0.031	0.006	0.026
1020	0.061	0.063	0.037	0.03	0.024	0.026	0.005	0.023
1080	0.06	0.063	0.038	0.029	0.023	0.024	0.006	0.022
1140	0.059	0.061	0.036	0.029	0.023	0.027	0.006	0.005
1200	0.061	0.066	0.037	0.028	0.023	0.03	0.007	0.01
1260	0.058	0.064	0.037	0.028	0.023	0.042	0.006	0.015
1320	0.057	0.062	0.037	0.027	0.024	0.028	0.006	0.019
1380	0.059	0.061	0.037	0.04	0.025	0.025	0.006	0.008
1440	0.061	0.063	0.037	0.037	0.025	0.023	0.006	0.008
1500	0.059	0.062	0.036	0.027	0.024	0.029	0.007	0.005
1560	0.059	0.064	0.035	0.026	0.023	0.038	0.01	0.011
1620	0.058	0.066	0.034	0.027	0.023	0.023	0.006	0.01
1680	0.057	0.064	0.034	0.027	0.023	0.024	0.007	0.005
1740	0.056	0.066	0.034	0.027	0.022	0.032	0.014	0.005
1800	0.058	0.065	0.036	0.027	0.022	0.024	0.033	0.005
1860	0.057	0.064	0.034	0.027	0.022	0.03	1.18	0.008
1920	0.057	0.068	0.032	0.027	0.023	0.043	0.057	0.012
1980	0.055	0.069	0.033	0.027	0.022	0.029	0.06	0.007
2040	0.059	0.069	0.033	0.027	0.022	0.029	0.015	0.007
2100	0.058	0.066	0.033	0.027	0.025	0.026	0.007	0.005
2160	0.054	0.069	0.034	0.027	0.039	0.047	0.016	0.004
2220	0.056	0.066	0.033	0.027	0.042	0.058	0.115	0.004
2280	0.056	0.071	0.033	0.028	0.027	0.025	0.01	0.004
2340	0.059	0.066	0.033	0.027	0.024	0.021	0.015	0.004
2400	0.063	0.071	0.033	0.027	0.024	0.021	0.008	0.004
2460	0.073	0.066	0.034	0.027	0.024	0.023	0.006	0.004
2520	0.059	0.071	0.033	0.028	0.025	0.024	0.005	0.004
2580	0.058	0.068	0.032	0.027	0.023	0.023	0.004	0.004
2640	0.06	0.068	0.032	0.028	0.023	0.024	0.005	0.004
2700	0.059	0.067	0.032	0.028	0.022	0.037	0.008	0.004
2760	0.059	0.068	0.032	0.028	0.023	0.035	0.006	0.004
2820	0.057	0.07	0.032	0.028	0.023	0.025	0.008	0.004
2880	0.056	0.068	0.032	0.028	0.022	0.03	0.034	0.006
2940	0.059	0.068	0.032	0.027	0.024	0.021	0.007	0.005
3000	0.06	0.068	0.032	0.028	0.023	0.021	0.007	0.005
3060	0.059	0.067	0.032	0.027	0.024	0.021	0.005	0.006
3120	0.058	0.065	0.032	0.028	0.025	0.023	0.006	0.007
3180	0.062	0.069	0.032	0.028	0.022	0.022	0.012	0.02
3240	0.062	0.067	0.031	0.028	0.022	0.023	0.005	0.005
3300	0.06	0.067	0.031	0.027	0.023	0.022	0.016	0.005
3360	0.059	0.066	0.031	0.027	0.023	0.021	0.005	0.006
3420	0.06	0.062	0.032	0.027	0.023	0.022	0.007	0.006
3480	0.056	0.065	0.032	0.027	0.023	0.023	0.006	0.02
3540	0.056	0.063	0.031	0.027	0.022	0.034	0.009	0.014
3600	0.062	0.062	0.031	0.027	0.023	0.022	0.005	0.005
3660	0.061	0.062	0.031	0.027	0.024	0.022	0.005	0.005
3720	0.059	0.063	0.03	0.027	0.023	0.022	0.005	0.015
3780	0.059	0.064	0.031	0.027	0.023	0.025	0.005	0.007
3840	0.057	0.062	0.03	0.03	0.023	0.031	0.007	0.004
3900	0.057	0.063	0.03	0.029	0.023	0.023	0.007	0.012
3960	0.058	0.064	0.03	0.027	0.024	0.023	0.005	0.006
4020	0.06	0.063	0.03	0.027	0.024	0.023	0.006	0.009
4080	0.061	0.062	0.03	0.028	0.023	0.026	0.004	0.013
4140	0.06	0.063	0.031	0.027	0.023	0.03	0.004	0.013
4200	0.057	0.063	0.031	0.027	0.022	0.031	0.004	0.006
4260	0.059	0.063	0.033	0.029	0.023	0.023	0.004	0.011
4320	0.059	0.065	0.031	0.029	0.024	0.034	0.004	0.01
4380	0.058	0.062	0.03	0.037	0.022	0.041	0.005	0.021
4440	0.059	0.062	0.031	0.029	0.022	0.027	0.006	0.004
4500	0.056	0.064	0.031	0.028	0.023	0.023	0.004	0.004
4560	0.057	0.064	0.031	0.027	0.023	0.023	0.006	0.013
4620	0.058	0.061	0.032	0.027	0.022	0.026	0.004	0.01
4680	0.06	0.062	0.031	0.028	0.024	0.023	0.004	0.012
4740	0.058	0.064	0.034	0.035	0.023	0.023	0.004	0.004
4800	0.058	0.064	0.038	0.034	0.023	0.024	0.004	0.003
4860	0.057	0.063	0.032	0.027	0.023	0.026	0.039	0.003
4920	0.059	0.063	0.032	0.028	0.022	0.036	0.007	0.009
4980	0.06	0.066	0.031	0.028	0.027	0.026	0.004	0.006
5040	0.061	0.065	0.032	0.027	0.026	0.026	0.004	0.006
5100	0.063	0.065	0.032	0.027	0.024	0.027	0.004	0.011
5160	0.061	0.065	0.032	0.027	0.023	0.025	0.004	0.007
5220	0.063	0.067	0.032	0.029	0.024	0.025	0.005	0.003
5280	0.06	0.066	0.031	0.035	0.024	0.027	0.004	0.004
5340	0.06	0.066	0.031	0.028	0.024	0.028	0.005	0.005
5400	0.06	0.073	0.031	0.027	0.025	0.027	0.004	0.004
5460	0.063	0.075	0.031	0.027	0.024	0.029	0.004	0.01
5520	0.078	0.069	0.034	0.027	0.024	0.025	0.004	0.017
5580	0.061	0.069	0.032	0.027	0.024	0.026	0.004	0.006
5640	0.061	0.072	0.034	0.027	0.025	0.026	0.003	0.003
5700	0.063	0.072	0.033	0.027	0.024	0.026	0.004	0.004
5760	0.061	0.074	0.031	0.027	0.024	0.025	0.003	0.008
5820	0.059	0.073	0.031	0.027	0.024	0.026	0.004	0.003
5880	0.058	0.071	0.031	0.027	0.025	0.025	0.003	0.004
5940	0.058	0.07	0.032	0.027	0.025	0.025	0.003	0.003
6000	0.06	0.069	0.032	0.027	0.023	0.025	0.003	0.004
6060	0.06	0.07	0.031	0.027	0.024	0.025	0.006	0.004
6120	0.062	0.07	0.031	0.027	0.042	0.025	0.004	0.005
6180	0.059	0.068	0.031	0.027	0.024	0.025	0.004	0.004
6240	0.057	0.068	0.031	0.027	0.024	0.025	0.004	0.004
6300	0.059	0.07	0.031	0.029	0.024	0.029	0.004	0.003

6360	0.06	0.069	0.031	0.03	0.024	0.027	0.004	0.003
6420	0.066	0.067	0.031	0.029	0.024	0.026	0.004	0.007
6480	0.062	0.067	0.031	0.029	0.025	0.03	0.013	0.005
6540	0.058	0.066	0.032	0.029	0.026	0.029	0.004	0.003
6600	0.062	0.064	0.032	0.03	0.025	0.034	0.006	0.004
6660	0.065	0.066	0.031	0.029	0.026	0.037	0.004	0.009
6720	0.058	0.066	0.032	0.028	0.027	0.038	0.003	0.003
6780	0.057	0.065	0.034	0.028	0.027	0.034	0.003	0.006
6840	0.06	0.061	0.032	0.028	0.026	0.031	0.004	0.002
6900	0.058	0.068	0.033	0.028	0.027	0.044	0.003	0.002
6960	0.058	0.062	0.032	0.028	0.025	0.03	0.004	0.003
7020	0.057	0.063	0.033	0.029	0.025	0.027	0.003	0.003
7080	0.065	0.063	0.032	0.03	0.025	0.027	0.003	0.012
7140	0.058	0.064	0.032	0.029	0.025	0.029	0.004	0.004
7200	0.059	0.062	0.032	0.029	0.025	0.031	0.003	0.004
7260	0.06	0.065	0.032	0.029	0.025	0.027	0.003	0.004
7320	0.058	0.063	0.033	0.03	0.026	0.028	0.003	0.009
7380	0.057	0.063	0.036	0.029	0.025	0.028	0.003	0.003
7440	0.059	0.062	0.033	0.03	0.025	0.026	0.004	0.004
7500	0.058	0.065	0.033	0.031	0.026	0.026	0.005	0.011
7560	0.058	0.062	0.033	0.03	0.025	0.026	0.005	0.005
7620	0.058	0.062	0.033	0.03	0.026	0.027	0.004	0.003
7680	0.059	0.06	0.034	0.03	0.026	0.027	0.003	0.004
7740	0.058	0.063	0.033	0.03	0.025	0.027	0.003	0.003
7800	0.064	0.064	0.034	0.03	0.025	0.026	0.003	0.002
7860	0.061	0.063	0.033	0.03	0.025	0.028	0.003	0.002
7920	0.06	0.062	0.034	0.031	0.026	0.029	0.003	0.002
7980	0.055	0.061	0.034	0.03	0.025	0.027	0.006	0.002
8040	0.056	0.061	0.034	0.03	0.025	0.033	0.004	0.002
8100	0.056	0.06	0.034	0.03	0.026	0.029	0.005	0.002
8160	0.056	0.061	0.044	0.031	0.026	0.027	0.004	0.002
8220	0.058	0.06	0.034	0.031	0.026	0.029	0.005	0.002
8280	0.058	0.061	0.033	0.031	0.027	0.03	0.005	0.003
8340	0.061	0.059	0.035	0.031	0.027	0.032	0.003	0.002
8400	0.056	0.061	0.042	0.032	0.028	0.03	0.005	0.002
8460	0.054	0.061	0.043	0.031	0.026	0.032	0.006	0.008
8520	0.056	0.062	0.056	0.031	0.027	0.029	0.011	0.006
8580	0.06	0.063	0.034	0.033	0.027	0.029	0.005	0.004
8640	0.057	0.065	0.064	0.032	0.029	0.029	0.004	0.002
8700	0.059	0.063	0.057	0.032	0.029	0.03	0.004	0.003
8760	0.056	0.063	0.088	0.032	0.027	0.029	0.005	0.002
8820	0.058	0.062	0.035	0.032	0.026	0.03	0.004	0.003
8880	0.055	0.062	0.053	0.032	0.027	0.029	0.003	0.002
8940	0.059	0.063	0.046	0.032	0.027	0.029	0.004	0.002
9000	0.062	0.063	0.035	0.032	0.026	0.033	0.003	0.008
9060	0.06	0.063	0.035	0.032	0.026	0.03	0.003	0.003
9120	0.056	0.062	0.034	0.032	0.026	0.038	0.003	0.002
9180	0.06	0.061	0.035	0.032	0.026	0.031	0.003	0.002
9240	0.056	0.063	0.035	0.045	0.027	0.031	0.018	0.001
9300	0.057	0.064	0.034	0.089	0.032	0.037	0.003	0.002
9360	0.057	0.06	0.035	0.047	0.027	0.053	0.003	0.008
9420	0.058	0.064	0.035	0.033	0.026	0.04	0.003	0.004
9480	0.059	0.063	0.034	0.032	0.026	0.033	0.005	0.002
9540	0.059	0.062	0.036	0.035	0.025	0.041	0.006	0.005
9600	0.056	0.061	0.042	0.042	0.026	0.032	0.004	0.017
9660	0.057	0.061	0.036	0.033	0.027	0.03	0.004	0.004
9720	0.058	0.064	0.039	0.032	0.029	0.04	0.003	0.037
9780	0.057	0.06	0.035	0.033	0.027	0.04	0.004	0.029
9840	0.065	0.06	0.035	0.033	0.027	0.031	0.003	0.006
9900	0.056	0.061	0.035	0.033	0.027	0.033	0.003	0.002
9960	0.056	0.062	0.036	0.033	0.027	0.032	0.004	0.002
10020	0.062	0.061	0.036	0.034	0.028	0.03	0.003	0.002
10080	0.07	0.062	0.036	0.033	0.029	0.029	0.003	0.002
10140	0.063	0.062	0.036	0.033	0.029	0.029	0.003	0.002
10200	0.06	0.059	0.036	0.035	0.029	0.032	0.003	0.004
10260	0.057	0.062	0.036	0.033	0.029	0.034	0.003	0.007
10320	0.058	0.062	0.037	0.034	0.029	0.035	0.005	0.002
10380	0.06	0.061	0.037	0.034	0.03	0.039	0.005	0.002
10440	0.061	0.062	0.037	0.036	0.029	0.039	0.005	0.006
10500	0.056	0.067	0.038	0.04	0.03	0.03	0.012	0.002
10560	0.057	0.061	0.038	0.037	0.029	0.037	0.008	0.002
10620	0.068	0.062	0.038	0.044	0.029	0.029	0.004	0.002
10680	0.059	0.061	0.037	0.041	0.029	0.029	0.004	0.007
10740	0.086	0.059	0.038	0.035	0.028	0.028	0.005	0.005
10800	0.065	0.066	0.038	0.037	0.028	0.029	0.014	0.002
10860	0.06	0.072	0.044	0.036	0.028	0.033	0.006	0.002
10920	0.071	0.06	0.038	0.038	0.027	0.038	0.004	0.002
10980	0.056	0.06	0.038	0.038	0.027	0.033	0.035	0.003
11040	0.061	0.06	0.038	0.04	0.028	0.032	0.004	0.003
11100	0.059	0.061	0.039	0.04	0.03	0.037	0.015	0.002
11160	0.061	0.06	0.038	0.037	0.03	0.036	0.007	0.002
11220	0.057	0.062	0.051	0.038	0.028	0.03	0.004	0.002
11280	0.058	0.059	0.04	0.037	0.029	0.03	0.004	0.003
11340	0.061	0.059	0.04	0.036	0.029	0.031	0.007	0.003
11400	0.058	0.059	0.042	0.035	0.029	0.029	0.007	0.003
11460	0.062	0.061	0.043	0.035	0.029	0.029	0.005	0.002
11520	0.063	0.061	0.042	0.036	0.028	0.029	0.004	0.003
11580	0.055	0.062	0.043	0.038	0.029	0.033	0.005	0.003
11640	0.059	0.062	0.043	0.038	0.028	0.03	0.015	0.002
11700	0.059	0.059	0.041	0.037	0.029	0.029	0.048	0.002
11760	0.058	0.059	0.04	0.038	0.029	0.03	0.009	0.003
11820	0.055	0.056	0.04	0.038	0.029	0.042	0.005	0.002
11880	0.055	0.062	0.04	0.038	0.029	0.032	0.007	0.002
11940	0.053	0.062	0.042	0.037	0.029	0.03	0.005	0.003
12000	0.06	0.06	0.044	0.039	0.027	0.029	0.004	0.002
12060	0.058	0.063	0.043	0.039	0.028	0.029	0.004	0.002
12120	0.058	0.062	0.042	0.04	0.028	0.03	0.004	0.003
12180	0.057	0.062	0.043	0.039	0.027	0.03	0.004	0.002
12240	0.059	0.062	0.043	0.037	0.028	0.029	0.004	0.002
12300	0.066	0.062	0.043	0.038	0.029	0.029	0.004	0.002
12360	0.06	0.063	0.043	0.039	0.03	0.03	0.005	0.002
12420	0.057	0.064	0.043	0.039	0.029	0.03	0.004	0.003
12480	0.067	0.062	0.044	0.038	0.03	0.03	0.005	0.003
12540	0.064	0.063	0.043	0.038	0.03	0.03	0.012	0.003
12600	0.061	0.061	0.042	0.037	0.03	0.03	0.004	0.002
12660	0.056	0.065	0.044	0.038	0.029	0.03	0.005	0.003
12720	0.055	0.063	0.044	0.04	0.029	0.03	0.004	0.002
12780	0.056	0.062	0.045	0.04	0.029	0.031	0.004	0.002
12840	0.056	0.064	0.045	0.04	0.028	0.031	0.004	0.003

12900	0.055	0.062	0.044	0.04	0.028	0.031	0.004	0.003
12960	0.057	0.064	0.043	0.039	0.028	0.031	0.005	0.003
13020	0.055	0.061	0.044	0.039	0.028	0.03	0.005	0.003
13080	1.44	0.062	0.044	0.039	0.028	0.03	0.004	0.003
13140	0.982	0.062	0.046	0.038	0.027	0.03	0.004	0.003
13200	0.122	0.061	0.046	0.04	0.028	0.031	0.004	0.003
13260	0.064	0.061	0.053	0.039	0.037	0.032	0.005	0.004
13320	0.063	0.062	0.049	0.039	0.03	0.032	0.005	0.004
13380	0.119	0.064	0.044	0.039	0.03	0.032	0.005	0.004
13440	0.061	0.066	0.045	0.039	0.029	0.033	0.006	0.004
13500	0.06	0.066	0.044	0.039	0.029	0.032	0.006	0.003
13560	0.061	0.062	0.044	0.039	0.029	0.031	0.005	0.003
13620	0.062	0.065	0.045	0.04	0.03	0.033	0.005	0.003
13680	0.06	0.062	0.044	0.04	0.03	0.031	0.005	0.003
13740	0.059	0.063	0.045	0.039	0.03	0.032	0.005	0.003
13800	0.057	0.062	0.045	0.042	0.031	0.031	0.006	0.004
13860	0.056	0.064	0.044	0.046	0.031	0.03	0.006	0.003
13920	0.056	0.062	0.045	0.04	0.031	0.031	0.006	0.003
13980	0.056	0.062	0.046	0.039	0.032	0.031	0.006	0.003
14040	0.055	0.059	0.046	0.04	0.034	0.032	0.005	0.003
14100	0.054	0.059	0.046	0.064	0.032	0.031	0.005	0.003
14160	0.054	0.062	0.047	0.042	0.032	0.032	0.005	0.003
14220	0.053	0.062	0.05	0.042	0.031	0.031	0.005	0.003
14280	0.053	0.061	0.049	0.041	0.031	0.031	0.006	0.003
14340	0.053	0.062	0.046	0.041	0.03	0.031	0.005	0.003
14400	0.051	0.062	0.046	0.04	0.031	0.031	0.005	0.003
14460	0.054	0.06	0.05	0.04	0.031	0.033	0.006	0.003
14520	0.052	0.06	0.049	0.04	0.031	0.035	0.006	0.003
14580	0.051	0.062	0.048	0.039	0.031	0.031	0.005	0.003
14640	0.052	0.061	0.052	0.04	0.032	0.031	0.005	0.002
14700	0.053	0.062	0.049	0.042	0.032	0.031	0.005	0.002
14760	0.052	0.061	0.048	0.04	0.032	0.031	0.005	0.003
14820	0.054	0.06	0.046	0.039	0.031	0.031	0.005	0.002
14880	0.053	0.061	0.045	0.04	0.031	0.031	0.005	0.003
14940	0.053	0.061	0.046	0.039	0.032	0.03	0.005	0.002
15000	0.052	0.058	0.045	0.039	0.032	0.032	0.005	0.002
15060	0.052	0.061	0.046	0.039	0.03	0.031	0.005	0.003
15120	0.051	0.062	0.048	0.039	0.03	0.031	0.005	0.002
15180	0.052	0.061	0.046	0.039	0.031	0.031	0.005	0.002
15240	0.051	0.062	0.045	0.039	0.03	0.031	0.005	0.002
15300	0.051	0.061	0.046	0.038	0.031	0.031	0.005	0.003
15360	0.05	0.06	0.046	0.04	0.031	0.032	0.005	0.002
15420	0.05	0.06	0.046	0.04	0.032	0.031	0.005	0.012
15480	0.05	0.061	0.046	0.039	0.032	0.031	0.005	0.003
15540	0.049	0.057	0.046	0.039	0.032	0.031	0.005	0.002
15600	0.049	0.059	0.046	0.039	0.031	0.03	0.006	0.002
15660	0.049	0.059	0.045	0.045	0.031	0.03	0.005	0.002
15720	0.049	0.057	0.05	0.04	0.03	0.03	0.005	0.002
15780	0.062	0.062	0.05	0.039	0.03	0.03	0.005	0.002
15840	0.052	0.059	0.046	0.039	0.03	0.03	0.005	0.002
15900	0.053	0.059	0.045	0.038	0.03	0.03	0.005	0.002
15960	0.051	0.06	0.044	0.039	0.031	0.03	0.005	0.004
16020	0.05	0.06	0.045	0.039	0.03	0.03	0.005	0.002
16080	0.05	0.058	0.045	0.039	0.031	0.029	0.005	0.002
16140	0.05	0.058	0.044	0.038	0.03	0.029	0.005	0.002
16200	0.05	0.057	0.045	0.039	0.031	0.03	0.005	0.002
16260	0.049	0.06	0.045	0.039	0.031	0.03	0.005	0.002
16320	0.049	0.057	0.045	0.039	0.031	0.03	0.006	0.002
16380	0.049	0.06	0.045	0.039	0.031	0.037	0.009	0.002
16440	0.048	0.058	0.045	0.042	0.03	0.033	0.005	0.002
16500	0.048	0.058	0.045	0.038	0.034	0.029	0.006	0.014
16560	0.048	0.062	0.045	0.04	0.031	0.028	0.005	0.003
16620	0.048	0.06	0.048	0.038	0.031	0.031	0.005	0.003
16680	0.047	0.066	0.046	0.038	0.032	0.03	0.004	0.01
16740	0.048	0.062	0.045	0.038	0.032	0.049	0.005	0.002
16800	0.048	0.063	0.047	0.038	0.032	0.029	0.005	0.002
16860	0.049	0.059	0.047	0.037	0.033	0.028	0.005	0.002
16920	0.057	0.06	0.046	0.037	0.033	0.036	0.005	0.006
16980	0.053	0.059	0.05	0.038	0.031	0.03	0.005	0.006
17040	0.056	0.062	0.05	0.037	0.033	0.046	0.005	0.005
17100	0.052	0.061	0.046	0.038	0.032	0.032	0.005	0.007
17160	0.05	0.063	0.044	0.039	0.032	0.083	0.005	0.004
17220	0.05	0.063	0.044	0.038	0.031	0.053	0.005	0.005
17280	0.052	0.061	0.045	0.04	0.03	0.043	0.009	0.003
17340	0.052	0.061	0.045	0.04	0.03	0.027	0.014	0.004
17400	0.051	0.064	0.045	0.038	0.03	0.025	0.005	0.007
17460	0.051	0.063	0.045	0.037	0.029	0.025	0.006	0.014
17520	0.051	0.062	0.046	0.038	0.029	0.024	0.005	0.014
17580	0.05	0.06	0.046	0.037	0.03	0.024	0.016	0.002
17640	0.05	0.058	0.046	0.038	0.03	0.025	0.013	0.002
17700	0.05	0.06	0.047	0.037	0.029	0.027	0.004	0.002
17760	0.047	0.061	0.045	0.038	0.03	0.03	0.005	0.002
17820	0.048	0.059	0.045	0.038	0.03	0.027	0.004	0.011
17880	0.051	0.059	0.045	0.041	0.032	0.056	0.004	0.002
17940	0.05	0.061	0.045	0.039	0.029	0.09	0.004	0.006
18000	0.05	0.061	0.045	0.039	0.029	0.042	0.004	0.005
18060	0.049	0.061	0.045	0.038	0.029	0.028	0.004	0.008
18120	0.048	0.089	0.045	0.039	0.029	0.035	0.006	0.006
18180	0.049	0.077	0.045	0.039	0.03	0.049	0.005	0.011
18240	0.048	0.062	0.045	0.039	0.03	0.042	0.005	0.011
18300	0.049	0.061	0.045	0.039	0.03	0.024	0.004	0.003
18360	0.048	0.061	0.046	0.039	0.032	0.024	0.004	0.001
18420	0.049	0.068	0.047	0.04	0.032	0.024	0.004	0.002
18480	0.049	0.066	0.046	0.04	0.031	0.033	0.004	0.004
18540	0.049	0.061	0.046	0.039	0.03	0.034	0.004	0.01
18600	0.049	0.063	0.045	0.04	0.029	0.05	0.004	0.003
18660	0.049	0.06	0.046	0.041	0.029	0.038	0.004	0.003
18720	0.049	0.061	0.046	0.04	0.036	0.024	0.004	0.001
18780	0.049	0.062	0.047	0.041	0.027	0.024	0.004	0.001
18840	0.049	0.08	0.048	0.041	0.025	0.023	0.004	0.002
18900	0.05	0.104	0.048	0.04	0.024	0.023	0.004	0.014
18960	0.051	0.082	0.049	0.04	0.025	0.024	0.004	0.016
19020	0.048	0.085	0.052	0.04	0.025	0.027	0.021	0.001
19080	0.049	0.072	0.048	0.04	0.025	0.027	0.009	0.004
19140	0.05	0.062	0.048	0.041	0.029	0.043	0.005	0.005
19200	0.05	0.062	0.047	0.04	0.037	0.026	0.004	0.027
19260	0.049	0.061	0.047	0.041	0.028	0.024	0.004	0.008
19320	0.047	0.062	0.046	0.045	0.026	0.023	0.005	0.002
19380	0.048	0.06	0.046	0.04	0.027	0.024	0.005	0.002

19440	0.049	0.065	0.046	0.04	0.025	0.024	0.004	0.002
19500	0.048	0.063	0.047	0.041	0.025	0.023	0.006	0.003
19560	0.05	0.064	0.046	0.041	0.023	0.023	0.007	0.016
19620	0.049	0.071	0.046	0.041	0.023	0.022	0.005	0.005
19680	0.048	0.063	0.048	0.041	0.024	0.025	0.005	0.011
19740	0.049	0.063	0.047	0.041	0.024	0.032	0.005	0.009
19800	0.05	0.071	0.048	0.042	0.024	0.023	0.007	0.002
19860	0.054	0.069	0.047	0.041	0.024	0.031	0.004	0.002
19920	0.051	0.072	0.048	0.042	0.024	0.046	0.006	0.006
19980	0.051	0.064	0.048	0.042	0.024	0.026	0.004	0.002
20040	0.049	0.064	0.048	0.042	0.024	0.022	0.005	0.016
20100	0.05	0.066	0.048	0.041	0.024	0.022	0.006	0.003
20160	0.049	0.083	0.049	0.042	0.024	0.03	0.005	0.002
20220	0.05	0.067	0.048	0.042	0.023	0.034	0.005	0.002
20280	0.05	0.061	0.049	0.042	0.025	0.024	0.005	0.02
20340	0.051	0.061	0.05	0.042	0.026	0.022	0.01	0.009
20400	0.05	0.061	0.049	0.043	0.027	0.022	0.013	0.002
20460	0.052	0.059	0.049	0.042	0.026	0.022	0.007	0.002
20520	0.051	0.06	0.049	0.043	0.026	0.022	0.005	0.003
20580	0.055	0.063	0.048	0.042	0.025	0.022	0.004	0.007
20640	0.051	0.072	0.049	0.043	0.025	0.021	0.004	0.005
20700	0.048	0.064	0.048	0.043	0.025	0.02	0.013	0.003
20760	0.048	0.063	0.05	0.045	0.024	0.03	0.009	0.01
20820	0.047	0.062	0.05	0.044	0.025	0.029	0.01	0.007
20880	0.05	0.061	0.05	0.044	0.026	0.023	0.003	0.007
20940	0.047	0.059	0.049	0.043	0.026	0.021	0.007	0.012
21000	0.046	0.059	0.051	0.043	0.024	0.021	0.005	0.003
21060	0.049	0.058	0.049	0.043	0.026	0.022	0.004	0.007
21120	0.045	0.059	0.051	0.045	0.025	0.021	0.007	0.01
21180	0.045	0.06	0.051	0.042	0.025	0.021	0.009	0.006
21240	0.045	0.062	0.052	0.043	0.026	0.021	0.006	0.003
21300	0.046	0.06	0.051	0.045	0.024	0.02	0.005	0.003
21360	0.046	0.06	0.052	0.043	0.025	0.02	0.005	0.003
21420	0.047	0.06	0.052	0.044	0.023	0.02	0.005	0.003
21480	0.047	0.063	0.053	0.043	0.023	0.02	0.005	0.01
21540	0.047	0.063	0.052	0.042	0.023	0.021	0.006	0.003
21600	0.047	0.063	0.051	0.043	0.022	0.022	0.005	0.006
21660	0.046	0.063	0.046	0.039	0.022	0.021	0.006	0.009
21720	0.046	0.062	0.045	0.038	0.024	0.025	0.006	0.018
21780	0.047	0.064	0.044	0.039	0.025	0.023	0.006	0.018
21840	0.048	0.062	0.045	0.039	0.024	0.022	0.005	0.017
21900	0.049	0.061	0.045	0.039	0.024	0.022	0.005	0.008
21960	0.049	0.06	0.044	0.038	0.024	0.022	0.006	0.033
22020	0.049	0.06	0.045	0.039	0.028	0.022	0.005	0.014
22080	0.058	0.06	0.045	0.039	0.022	0.022	0.006	0.01
22140	0.073	0.059	0.045	0.039	0.022	0.021	0.005	0.006
22200	0.061	0.06	0.045	0.039	0.023	0.023	0.006	0.008
22260	0.048	0.06	0.045	0.042	0.023	0.024	0.01	0.003
22320	0.049	0.067	0.045	0.038	0.023	0.023	0.006	0.003
22380	0.059	0.064	0.045	0.04	0.021	0.022	0.007	0.003
22440	0.058	0.065	0.048	0.038	0.022	0.022	0.006	0.015
22500	0.064	0.065	0.046	0.038	0.023	0.23	0.006	0.003
22560	0.049	0.058	0.045	0.038	0.024	0.025	0.006	0.013
22620	0.046	0.075	0.047	0.038	0.022	0.023	0.332	0.005
22680	0.055	0.121	0.047	0.037	0.022	0.021	0.837	0.006
22740	0.044	0.061	0.053	0.039	0.022	0.023	0.005	0.004
22800	0.043	0.055	0.049	0.039	0.021	0.023	0.005	0.003
22860	0.042	0.054	0.044	0.039	0.021	0.023	0.005	0.007
22920	0.042	0.053	0.045	0.039	0.021	0.022	0.005	0.004
22980	0.064	0.055	0.044	0.039	0.021	0.022	0.005	0.005
23040	0.053	0.055	0.044	0.039	0.022	0.023	0.005	0.005
23100	0.043	0.06	0.045	0.04	0.023	0.02	0.005	0.01
23160	0.048	0.057	0.044	0.04	0.023	0.02	0.005	0.004
23220	0.04	0.042	0.045	0.039	0.023	0.021	0.002	0.012
23280	0.039	0.036	0.045	0.042	0.022	0.022	0.005	0.017
23340	0.041	0.037	0.044	0.046	0.022	0.021	0.004	0.011
23400	0.038	0.037	0.045	0.04	0.024	0.025	0.005	0.005
23460	0.039	0.037	0.046	0.039	0.025	0.023	0.005	0.003
23520	0.049	0.083	0.046	0.04	0.024	0.022	0.004	0.003
23580	0.05	0.067	0.046	0.064	0.024	0.022	0.005	0.006
23640	0.05	0.061	0.047	0.042	0.028	0.022	0.002	0.003
23700	0.051	0.061	0.05	0.042	0.022	0.022	0.002	0.004
23760	0.05	0.061	0.049	0.041	0.022	0.021	0.005	0.004
23820	0.052	0.059	0.046	0.041	0.023	0.023	0.005	0.003
23880	0.051	0.06	0.046	0.04	0.023	0.024	0.005	0.007
23940	0.055	0.063	0.05	0.04	0.023	0.023	0.005	0.004
24000	0.051	0.072	0.049	0.04	0.021	0.022	0.004	0.011
24060	0.048	0.064	0.048	0.039	0.022	0.022	0.005	0.005
24120	0.048	0.063	0.052	0.04	0.023	0.23	0.005	0.003
24180	0.047	0.062	0.049	0.042	0.024	0.025	0.004	0.003
24240	0.05	0.061	0.048	0.04	0.022	0.023	0.005	0.006
24300	0.047	0.059	0.046	0.039	0.022	0.021	0.002	0.003
24360	0.046	0.059	0.046	0.04	0.022	0.023	0.002	0.004
24420	0.049	0.058	0.046	0.039	0.021	0.023	0.005	0.004
24480	0.045	0.059	0.045	0.039	0.021	0.023	0.002	0.012
24540	0.045	0.06	0.046	0.039	0.021	0.022	0.005	0.017
24600	0.045	0.062	0.048	0.039	0.021	0.022	0.004	0.011
24660	0.064	0.055	0.046	0.039	0.022	0.023	0.005	0.005
24720	0.053	0.055	0.045	0.039	0.021	0.023	0.005	0.003
24780	0.043	0.06	0.046	0.038	0.021	0.022	0.004	0.003
24840	0.048	0.057	0.046	0.04	0.021	0.022	0.005	0.006
24900	0.04	0.042	0.046	0.04	0.022	0.023	0.004	0.003
24960	0.039	0.036	0.046	0.039	0.021	0.023	0.004	0.003
25020	0.048	0.057	0.046	0.039	0.021	0.022	0.005	0.006
25080	0.04	0.042	0.046	0.039	0.022	0.023	0.002	0.003
25140	0.039	0.036	0.046	0.039	0.021	0.023	0.002	0.004
25200	0.037	0.037	0.045	0.038	0.021	0.023	0.005	0.004

Table 13. Total Dust Monitoring results dated 08/12/11 to 08/23/11.

	12-Aug		18-Aug		22-Aug		23-Aug	
Elapsed Time [s]	upwind Mass [mg/m3]	downwind Mass [mg/m3]	upwind Mass [mg/m3]	downwind Mass [mg/m3]	upwind Mass [mg/m3]	downwind Mass [mg/m3]	upwind Mass [mg/m3]	downwind Mass [mg/m3]
60	0.071	0.07	0.03	0.036	0.014	0.044	0.022	0.084
120	0.066	0.068	0.023	0.035	0.009	0.017	0.008	0.028
180	0.065	0.067	0.024	0.035	0.006	0.029	0.008	0.022
240	0.064	0.069	0.025	0.036	0.007	0.049	0.01	0.02
300	0.062	0.068	0.027	0.037	0.031	0.062	0.011	0.012
360	0.066	0.066	0.027	0.034	0.007	0.033	0.009	0.009
420	0.066	0.066	0.029	0.037	0.008	0.028	0.01	0.015
480	0.064	0.066	0.027	0.037	0.006	0.023	0.019	0.01
540	0.063	0.065	0.026	0.035	0.006	0.024	0.016	0.014
600	0.062	0.064	0.026	0.033	0.006	0.036	0.017	0.026
660	0.061	0.064	0.027	0.041	0.006	0.05	0.017	0.012
720	0.063	0.065	0.031	0.04	0.007	0.022	0.017	0.022
780	0.063	0.065	0.031	0.035	0.006	0.043	0.018	0.033
840	0.064	0.065	0.029	0.032	0.006	0.026	0.017	0.021
900	0.06	0.063	0.03	0.036	0.007	0.029	0.017	0.013
960	0.061	0.062	0.031	0.038	0.009	0.034	0.016	0.008
1020	0.061	0.063	0.041	0.033	0.006	0.008	0.016	0.012
1080	0.06	0.063	0.031	0.036	0.005	0.009	0.017	0.023
1140	0.059	0.061	0.031	0.034	0.006	0.009	0.015	0.012
1200	0.061	0.066	0.033	0.035	0.007	0.009	0.016	0.054
1260	0.058	0.064	0.059	0.034	0.005	0.01	0.017	0.011
1320	0.057	0.062	0.039	0.036	0.006	0.013	0.016	0.008
1380	0.059	0.061	0.032	0.035	0.005	0.013	0.016	0.008
1440	0.061	0.063	0.032	0.036	0.005	0.009	0.016	0.01
1500	0.059	0.062	0.029	0.032	0.006	0.011	0.016	0.041
1560	0.059	0.064	0.031	0.032	0.005	0.012	0.017	0.016
1620	0.058	0.066	0.029	0.033	0.005	0.009	0.022	0.013
1680	0.057	0.064	0.029	0.033	0.005	0.01	0.015	0.014
1740	0.056	0.066	0.033	0.033	0.006	0.009	0.016	0.006
1800	0.058	0.065	0.032	0.033	0.006	0.009	0.015	0.009
1860	0.057	0.064	0.037	0.032	0.006	0.008	0.016	0.005
1920	0.057	0.068	0.031	0.033	0.006	0.008	0.015	0.004
1980	0.055	0.069	0.035	0.034	0.006	0.01	0.015	0.003
2040	0.059	0.069	0.034	0.037	0.006	0.009	0.016	0.005
2100	0.058	0.066	0.033	0.039	0.005	0.01	0.013	0.039
2160	0.054	0.069	0.03	0.038	0.005	0.011	0.007	0.006
2220	0.056	0.066	0.028	0.037	0.007	0.01	0.007	0.011
2280	0.056	0.071	0.029	0.033	0.006	0.009	0.008	0.003
2340	0.059	0.066	0.031	0.037	0.006	0.009	0.008	0.012
2400	0.063	0.071	0.032	0.036	0.005	0.011	0.008	0.004
2460	0.073	0.066	0.042	0.035	0.005	0.046	0.009	0.003
2520	0.059	0.071	0.032	0.037	0.008	0.031	0.009	0.004
2580	0.058	0.068	0.037	0.034	0.008	0.017	0.008	0.003
2640	0.06	0.068	0.045	0.033	0.089	0.012	0.009	0.003
2700	0.059	0.067	0.032	0.034	0.007	0.026	0.009	0.004
2760	0.059	0.068	0.033	0.034	0.006	0.026	0.008	0.005
2820	0.057	0.07	0.036	0.035	0.005	0.023	0.016	0.003
2880	0.056	0.068	0.037	0.034	0.006	0.024	0.043	0.004
2940	0.059	0.068	0.033	0.037	0.01	0.042	0.008	0.004
3000	0.06	0.068	0.036	0.037	0.005	0.018	0.009	0.004
3060	0.059	0.067	0.033	0.035	0.005	0.009	0.01	0.003
3120	0.058	0.065	0.035	0.037	0.005	0.017	0.009	0.006
3180	0.062	0.069	0.031	0.035	0.006	0.013	0.008	0.005
3240	0.062	0.067	0.034	0.036	0.006	0.029	0.01	0.004
3300	0.06	0.067	0.034	0.039	0.006	0.023	0.008	0.005
3360	0.059	0.066	0.044	0.036	0.01	0.017	0.028	0.007
3420	0.06	0.062	0.039	0.038	0.006	0.014	0.052	0.007
3480	0.056	0.065	0.034	0.04	0.006	0.016	0.011	0.005
3540	0.056	0.063	0.035	0.039	0.007	0.014	0.008	0.01
3600	0.062	0.062	0.043	0.035	0.006	0.027	0.009	0.008
3660	0.061	0.062	0.033	0.037	0.006	0.018	0.01	0.011
3720	0.059	0.063	0.04	0.068	0.005	0.011	0.01	0.009
3780	0.059	0.064	0.08	0.048	0.005	0.015	0.012	0.006
3840	0.057	0.062	0.044	0.039	0.005	0.019	0.009	0.005
3900	0.057	0.063	0.041	0.036	0.005	0.016	0.009	0.006
3960	0.058	0.064	0.034	0.036	0.006	0.02	0.01	0.017
4020	0.06	0.063	0.036	0.036	0.005	0.019	0.01	0.013
4080	0.061	0.062	0.041	0.044	0.005	0.028	0.009	0.008
4140	0.06	0.063	0.083	0.037	0.005	0.025	0.011	0.012
4200	0.057	0.063	0.091	0.036	0.004	0.027	0.011	0.009
4260	0.059	0.063	0.046	0.042	0.006	0.016	0.009	0.008
4320	0.059	0.065	0.056	0.045	0.006	0.023	0.009	0.009
4380	0.058	0.062	0.047	0.044	0.006	0.037	0.009	0.016
4440	0.059	0.062	0.024	0.035	0.005	0.03	0.01	0.015
4500	0.056	0.064	0.027	0.035	0.005	0.017	0.01	0.01
4560	0.057	0.064	0.03	0.039	0.005	0.024	0.01	0.007
4620	0.058	0.061	0.031	0.038	0.005	0.016	0.01	0.006
4680	0.06	0.062	0.029	0.036	0.005	0.018	0.009	0.007
4740	0.058	0.064	0.025	0.034	0.005	0.023	0.013	0.012
4800	0.058	0.064	0.029	0.035	0.005	0.015	0.01	0.014
4860	0.057	0.063	0.028	0.036	0.005	0.013	0.011	0.011
4920	0.059	0.063	0.036	0.04	0.005	0.015	0.01	0.012
4980	0.06	0.066	0.033	0.036	0.004	0.016	0.01	0.006
5040	0.061	0.065	0.031	0.037	0.004	0.014	0.01	0.005
5100	0.063	0.065	0.038	0.041	0.005	0.022	0.013	0.007
5160	0.061	0.065	0.031	0.037	0.005	0.022	0.012	0.006
5220	0.063	0.067	0.031	0.038	0.005	0.037	0.01	0.005
5280	0.06	0.066	0.032	0.036	0.005	0.033	0.01	0.006
5340	0.06	0.066	0.034	0.037	0.005	0.015	0.01	0.022
5400	0.06	0.073	0.041	0.038	0.005	0.012	0.009	0.017
5460	0.063	0.075	0.036	0.053	0.005	0.012	0.009	0.011
5520	0.078	0.069	0.035	0.046	0.032	0.014	0.01	0.01
5580	0.061	0.069	0.033	0.037	0.005	0.011	0.009	0.008
5640	0.061	0.072	0.034	0.038	0.005	0.012	0.01	0.005
5700	0.063	0.072	0.037	0.037	0.005	0.021	0.013	0.005
5760	0.061	0.074	0.032	0.038	0.005	0.019	0.011	0.006
5820	0.059	0.073	0.033	0.036	0.005	0.027	0.01	0.008
5880	0.058	0.071	0.031	0.037	0.004	0.016	0.009	0.007
5940	0.058	0.07	0.032	0.036	0.005	0.023	0.009	0.005
6000	0.06	0.069	0.031	0.037	0.005	0.014	0.009	0.004
6060	0.06	0.07	0.034	0.038	0.005	0.012	0.011	0.005
6120	0.062	0.07	0.033	0.036	0.005	0.014	0.01	0.004
6180	0.059	0.068	0.032	0.035	0.005	0.016	0.009	0.005
6240	0.057	0.068	0.036	0.034	0.015	0.016	0.009	0.005
6300	0.059	0.07	0.031	0.034	0.005	0.012	0.01	0.005

6360	0.06	0.069	0.035	0.034	0.004	0.015	0.009	0.004
6420	0.066	0.067	0.037	0.033	0.004	0.012	0.009	0.005
6480	0.062	0.067	0.033	0.035	0.005	0.019	0.009	0.005
6540	0.058	0.066	0.032	0.034	0.006	0.018	0.011	0.005
6600	0.062	0.064	0.029	0.034	0.005	0.018	0.009	0.004
6660	0.065	0.066	0.03	0.038	0.004	0.019	0.009	0.007
6720	0.058	0.066	0.037	0.041	0.005	0.012	0.009	0.006
6780	0.057	0.065	0.034	0.04	0.005	0.019	0.01	0.006
6840	0.06	0.061	0.041	0.035	0.004	0.023	0.01	0.005
6900	0.058	0.068	0.032	0.041	0.005	0.021	0.01	0.005
6960	0.058	0.062	0.035	0.041	0.005	0.024	0.011	0.005
7020	0.057	0.063	0.043	0.036	0.007	0.033	0.01	0.005
7080	0.065	0.063	0.039	0.035	0.006	0.023	0.01	0.005
7140	0.058	0.064	0.037	0.035	0.005	0.02	0.011	0.007
7200	0.059	0.062	0.034	0.036	0.005	0.033	0.01	0.008
7260	0.06	0.065	0.037	0.035	0.005	0.025	0.012	0.031
7320	0.058	0.063	0.033	0.036	0.005	0.023	0.044	0.1
7380	0.057	0.063	0.039	0.036	0.005	0.015	0.011	0.011
7440	0.059	0.062	0.031	0.035	0.005	0.015	0.009	0.144
7500	0.058	0.065	0.033	0.036	0.006	0.025	0.01	0.021
7560	0.058	0.062	0.034	0.035	0.005	0.017	0.01	0.014
7620	0.058	0.062	0.03	0.034	0.005	0.022	0.01	0.011
7680	0.059	0.06	0.034	0.034	0.005	0.03	0.01	0.008
7740	0.058	0.063	0.034	0.035	0.005	0.03	0.039	0.005
7800	0.064	0.064	0.039	0.035	0.005	0.072	0.01	0.004
7860	0.061	0.063	0.035	0.035	0.005	0.024	0.01	0.005
7920	0.06	0.062	0.039	0.034	0.005	0.017	0.009	0.004
7980	0.055	0.061	0.041	0.035	0.005	0.017	0.01	0.005
8040	0.056	0.061	0.033	0.035	0.005	0.015	0.01	0.005
8100	0.056	0.06	0.04	0.033	0.005	0.019	0.009	0.005
8160	0.056	0.061	0.043	0.033	0.005	0.019	0.01	0.005
8220	0.058	0.06	0.037	0.034	0.005	0.016	0.01	0.005
8280	0.058	0.061	0.04	0.033	0.005	0.03	0.011	0.006
8340	0.061	0.059	0.034	0.032	0.005	0.026	0.01	0.004
8400	0.056	0.061	0.036	0.031	0.005	0.029	0.01	0.004
8460	0.054	0.061	0.031	0.03	0.005	0.025	0.011	0.004
8520	0.056	0.062	0.033	0.03	0.005	0.021	0.011	0.005
8580	0.06	0.063	0.031	0.029	0.005	0.023	0.009	0.006
8640	0.057	0.065	0.036	0.029	0.005	0.053	0.01	0.005
8700	0.059	0.063	0.046	0.031	0.004	0.03	0.011	0.004
8760	0.056	0.063	0.027	0.03	0.005	0.023	0.011	0.004
8820	0.058	0.062	0.024	0.03	0.005	0.018	0.009	0.004
8880	0.055	0.062	0.026	0.028	0.004	0.016	0.012	0.005
8940	0.059	0.063	0.027	0.029	0.004	0.046	0.01	0.005
9000	0.062	0.063	0.026	0.029	0.005	0.028	0.01	0.005
9060	0.06	0.063	0.025	0.029	0.007	0.03	0.01	0.005
9120	0.056	0.062	0.027	0.029	0.004	0.014	0.01	0.005
9180	0.06	0.061	0.03	0.031	0.005	0.028	0.01	0.006
9240	0.056	0.063	0.027	0.03	0.004	0.023	0.01	0.005
9300	0.057	0.064	0.028	0.029	0.005	0.019	0.012	0.005
9360	0.057	0.06	0.027	0.029	0.005	0.021	0.01	0.004
9420	0.058	0.064	0.03	0.033	0.005	0.033	0.01	0.004
9480	0.059	0.063	0.027	0.03	0.005	0.021	0.01	0.004
9540	0.059	0.062	0.029	0.03	0.005	0.02	0.01	0.004
9600	0.056	0.061	0.027	0.029	0.006	0.021	0.022	0.013
9660	0.057	0.061	0.026	0.029	0.005	0.033	0.014	0.005
9720	0.058	0.064	0.028	0.028	0.004	0.023	0.011	0.004
9780	0.057	0.06	0.03	0.029	0.005	0.018	0.01	0.006
9840	0.065	0.06	0.027	0.03	0.005	0.02	0.01	0.004
9900	0.056	0.061	0.026	0.03	0.005	0.018	0.009	0.004
9960	0.056	0.062	0.027	0.029	0.005	0.025	0.009	0.006
10020	0.062	0.061	0.028	0.029	0.006	0.019	0.01	0.004
10080	0.07	0.062	0.03	0.032	0.005	0.016	0.057	0.004
10140	0.063	0.062	0.03	0.031	0.005	0.024	0.01	0.004
10200	0.06	0.059	0.028	0.031	0.005	0.022	0.009	0.004
10260	0.057	0.062	0.027	0.031	0.005	0.027	0.009	0.004
10320	0.058	0.062	0.026	0.029	0.006	0.019	0.009	0.004
10380	0.06	0.061	0.025	0.029	0.004	0.023	0.009	0.004
10440	0.061	0.062	0.028	0.03	0.004	0.031	0.01	0.003
10500	0.056	0.067	0.025	0.029	0.005	0.025	0.009	0.002
10560	0.057	0.061	0.026	0.029	0.005	0.019	0.009	0.003
10620	0.068	0.062	0.027	0.03	0.005	0.021	0.009	0.003
10680	0.059	0.061	0.026	0.03	0.005	0.03	0.009	0.029
10740	0.086	0.059	0.029	0.03	0.004	0.023	0.009	0.01
10800	0.065	0.066	0.029	0.03	0.005	0.013	0.009	0.003
10860	0.06	0.072	0.021	0.03	0.006	0.017	0.01	0.005
10920	0.071	0.06	0.023	0.03	0.004	0.017	0.009	0.004
10980	0.056	0.06	0.022	0.03	0.005	0.022	0.01	0.085
11040	0.061	0.06	0.025	0.029	0.005	0.02	0.008	0.01
11100	0.059	0.061	0.02	0.029	0.005	0.031	0.01	0.042
11160	0.061	0.06	0.027	0.039	0.005	0.026	0.01	0.007
11220	0.057	0.062	0.021	0.03	0.004	0.025	0.008	0.018
11280	0.058	0.059	0.021	0.03	0.004	0.018	0.014	0.005
11340	0.061	0.059	0.027	0.029	0.005	0.021	0.01	0.004
11400	0.058	0.059	0.03	0.031	0.006	0.03	0.009	0.002
11460	0.062	0.061	0.021	0.03	0.005	0.018	0.009	0.002
11520	0.063	0.061	0.027	0.029	0.005	0.02	0.009	0.002
11580	0.055	0.062	0.025	0.03	0.005	0.022	0.009	0.043
11640	0.059	0.062	0.029	0.03	0.006	0.019	0.009	0.031
11700	0.059	0.059	0.023	0.031	0.01	0.019	0.009	0.005
11760	0.058	0.059	0.025	0.032	0.005	0.014	0.009	0.004
11820	0.055	0.056	0.027	0.029	0.005	0.014	0.009	0.002
11880	0.055	0.062	0.03	0.031	0.005	0.013	0.009	0.022
11940	0.053	0.062	0.027	0.029	0.005	0.012	0.01	0.012
12000	0.06	0.06	0.031	0.033	0.005	0.027	0.009	0.002
12060	0.058	0.063	0.03	0.031	0.005	0.027	0.009	0.001
12120	0.058	0.062	0.025	0.028	0.005	0.021	0.009	0.006
12180	0.057	0.062	0.027	0.029	0.005	0.028	0.009	0.02
12240	0.059	0.062	0.03	0.031	0.005	0.025	0.01	0.076
12300	0.066	0.062	0.023	0.028	0.005	0.048	0.009	0.019
12360	0.06	0.063	0.021	0.024	0.005	0.041	0.008	0.008
12420	0.057	0.064	0.021	0.027	0.006	0.022	0.008	0.005
12480	0.067	0.062	0.023	0.024	0.005	0.03	0.009	0.005
12540	0.064	0.063	0.024	0.025	0.005	0.026	0.008	0.036
12600	0.061	0.061	0.027	0.028	0.005	0.026	0.01	0.005
12660	0.056	0.065	0.023	0.025	0.008	0.026	0.009	0.007
12720	0.055	0.063	0.024	0.026	0.005	0.021	0.009	0.006
12780	0.056	0.062	0.022	0.024	0.005	0.03	0.009	0.008
12840	0.056	0.064	0.025	0.026	0.005	0.029	0.009	0.016

12900	0.055	0.062	0.027	0.028	0.006	0.04	0.009	0.009
12960	0.057	0.064	0.023	0.026	0.005	0.031	0.008	0.007
13020	0.055	0.061	0.022	0.023	0.057	0.033	0.009	0.007
13080	1.44	0.062	0.023	0.025	0.005	0.021	0.009	0.003
13140	0.982	0.062	0.02	0.025	0.005	0.018	0.008	0.001
13200	0.122	0.061	0.019	0.025	0.005	0.014	0.007	0.006
13260	0.064	0.061	0.013	0.023	0.006	0.015	0.008	0.003
13320	0.063	0.062	0.016	0.022	0.006	0.013	0.007	0.003
13380	0.119	0.064	0.02	0.023	0.006	0.014	0.009	0.003
13440	0.061	0.066	0.022	0.025	0.005	0.013	0.008	0.003
13500	0.06	0.066	0.021	0.024	0.005	0.037	0.008	0.004
13560	0.061	0.062	0.013	0.023	0.005	0.013	0.008	0.003
13620	0.062	0.065	0.021	0.024	0.005	0.013	0.01	0.17
13680	0.06	0.062	0.014	0.024	0.005	0.013	0.009	0.005
13740	0.059	0.063	0.02	0.023	0.005	0.013	0.008	0.002
13800	0.057	0.062	0.019	0.024	0.005	0.011	0.01	0.002
13860	0.056	0.064	0.017	0.024	0.005	0.012	0.044	0.003
13920	0.056	0.062	0.016	0.024	0.005	0.013	0.021	0.006
13980	0.056	0.062	0.022	0.024	0.005	0.017	0.008	0.005
14040	0.055	0.059	0.02	0.022	0.005	0.012	0.008	0.001
14100	0.054	0.059	0.017	0.022	0.017	0.015	0.008	0.002
14160	0.054	0.062	0.016	0.023	0.008	0.013	0.008	0.007
14220	0.053	0.062	0.02	0.023	0.035	0.013	0.008	0.005
14280	0.053	0.061	0.015	0.023	0.005	0.016	0.008	0.001
14340	0.053	0.062	0.028	0.028	0.005	0.014	0.008	0.001
14400	0.051	0.062	0.011	0.025	0.005	0.012	0.008	0
14460	0.054	0.06	0.019	0.024	0.005	0.012	0.007	0
14520	0.052	0.06	0.021	0.023	0.005	0.013	0.007	0
14580	0.051	0.062	0.022	0.024	0.005	0.017	0.008	0.009
14640	0.052	0.061	0.021	0.023	0.005	0.029	0.008	0.005
14700	0.053	0.062	0.02	0.024	0.005	0.018	0.008	0.004
14760	0.052	0.061	0.023	0.023	0.005	0.014	0.009	0.002
14820	0.054	0.06	0.021	0.023	0.005	0.028	0.008	0.007
14880	0.053	0.061	0.022	0.024	0.006	0.024	0.008	0.002
14940	0.053	0.061	0.025	0.026	0.005	0.038	0.008	0.005
15000	0.052	0.058	0.024	0.024	0.005	0.047	0.008	0.003
15060	0.052	0.061	0.01	0.028	0.005	0.035	0.008	0.004
15120	0.051	0.062	0.022	0.024	0.005	0.034	0.008	0.002
15180	0.052	0.061	0.021	0.025	0.006	0.014	0.009	0.008
15240	0.051	0.062	0.02	0.026	0.005	0.013	0.009	0.003
15300	0.051	0.061	0.023	0.025	0.005	0.012	0.009	0.001
15360	0.05	0.06	0.021	0.025	0.005	0.012	0.01	0.001
15420	0.05	0.06	0.031	0.041	0.005	0.014	0.016	0
15480	0.05	0.061	0.021	0.025	0.009	0.014	0.012	0
15540	0.049	0.057	0.023	0.027	0.005	0.013	0.008	0
15600	0.049	0.059	0.021	0.025	0.005	0.012	0.008	0
15660	0.049	0.059	0.025	0.026	0.005	0.012	0.009	0.001
15720	0.049	0.057	0.025	0.026	0.005	0.014	0.009	0.003
15780	0.062	0.062	0.021	0.026	0.005	0.014	0.009	0.013
15840	0.052	0.059	0.02	0.027	0.005	0.012	0.008	0.002
15900	0.053	0.059	0.026	0.026	0.005	0.013	0.008	0.004
15960	0.051	0.06	0.03	0.03	0.005	0.013	0.009	0
16020	0.05	0.06	0.021	0.027	0.005	0.013	0.009	0.005
16080	0.05	0.058	0.018	0.026	0.006	0.013	0.009	0.001
16140	0.05	0.058	0.017	0.028	0.005	0.013	0.008	0.041
16200	0.05	0.057	0.016	0.026	0.005	0.012	0.009	0.06
16260	0.049	0.06	0.024	0.026	0.005	0.012	0.008	0.001
16320	0.049	0.057	0.021	0.026	0.005	0.012	0.009	0.001
16380	0.049	0.06	0.023	0.025	0.005	0.012	0.008	0.005
16440	0.048	0.058	0.022	0.027	0.005	0.012	0.008	0.001
16500	0.048	0.058	0.022	0.025	0.005	0.012	0.008	0
16560	0.048	0.062	0.021	0.024	0.006	0.012	0.008	0.003
16620	0.048	0.06	0.013	0.023	0.005	0.012	0.008	0.002
16680	0.047	0.066	0.021	0.024	0.005	0.011	0.008	0.002
16740	0.048	0.062	0.014	0.024	0.005	0.012	0.008	0.003
16800	0.048	0.063	0.02	0.023	0.005	0.012	0.008	0.026
16860	0.049	0.059	0.019	0.024	0.006	0.015	0.008	0.009
16920	0.057	0.06	0.017	0.024	0.007	0.013	0.008	0.21
16980	0.053	0.059	0.016	0.024	0.005	0.012	0.008	0.073
17040	0.056	0.062	0.022	0.024	0.005	0.014	0.008	0.009
17100	0.052	0.061	0.02	0.022	0.005	0.013	0.008	0.014
17160	0.05	0.063	0.017	0.022	0.005	0.012	0.008	0.019
17220	0.05	0.063	0.016	0.023	0.006	0.02	0.008	0.01
17280	0.052	0.061	0.02	0.023	0.007	0.029	0.008	0.012
17340	0.052	0.061	0.015	0.023	0.005	0.027	0.008	0.056
17400	0.051	0.064	0.028	0.028	0.006	0.023	0.008	0.012
17460	0.051	0.063	0.011	0.025	0.005	0.016	0.008	0.01
17520	0.051	0.062	0.019	0.024	0.005	0.031	0.008	0.039
17580	0.05	0.06	0.021	0.023	0.005	0.014	0.008	0.004
17640	0.05	0.058	0.022	0.024	0.005	0.012	0.009	0.024
17700	0.05	0.06	0.021	0.023	0.005	0.013	0.008	0.007
17760	0.047	0.061	0.02	0.024	0.005	0.015	0.011	0.027
17820	0.048	0.059	0.023	0.023	0.005	0.017	0.011	0.031
17880	0.051	0.059	0.021	0.023	0.005	0.015	0.008	0.037
17940	0.05	0.061	0.022	0.024	0.005	0.014	0.024	0.009
18000	0.05	0.061	0.025	0.026	0.005	0.031	0.01	0.044
18060	0.049	0.061	0.024	0.024	0.005	0.017	0.012	0.034
18120	0.048	0.089	0.01	0.028	0.122	0.028	0.017	0.004
18180	0.049	0.077	0.017	0.024	0.005	0.026	0.012	0.002
18240	0.048	0.062	0.016	0.024	0.005	0.017	0.01	0.002
18300	0.049	0.061	0.022	0.024	0.005	0.021	0.009	0.001
18360	0.048	0.061	0.02	0.022	0.005	0.017	0.008	0.001
18420	0.049	0.068	0.017	0.022	0.005	0.015	0.008	0.006
18480	0.049	0.066	0.022	0.024	0.005	0.02	0.008	0.003
18540	0.049	0.061	0.021	0.025	0.005	0.02	0.009	0
18600	0.049	0.063	0.02	0.026	0.006	0.021	0.008	0.003
18660	0.049	0.06	0.016	0.022	0.005	0.016	0.009	0.002
18720	0.049	0.061	0.02	0.023	0.005	0.031	0.01	0
18780	0.049	0.062	0.022	0.025	0.005	0.023	0.013	0
18840	0.049	0.08	0.021	0.024	0.005	0.028	0.014	0.002
18900	0.05	0.104	0.013	0.023	0.006	0.015	0.013	0
18960	0.051	0.082	0.021	0.024	0.006	0.013	0.013	0
19020	0.048	0.085	0.014	0.024	0.007	0.02	0.011	0.001
19080	0.049	0.072	0.019	0.024	0.007	0.014	0.01	0.001
19140	0.05	0.062	0.021	0.023	0.005	0.027	0.01	0.006
19200	0.05	0.062	0.022	0.024	0.012	0.014	0.009	0.001
19260	0.049	0.061	0.021	0.023	0.005	0.02	0.009	0.001
19320	0.047	0.062	0.02	0.024	0.005	0.028	0.009	0.001
19380	0.048	0.06	0.023	0.023	0.005	0.024	0.009	0

19440	0.049	0.065	0.021	0.023	0.004	0.013	0.01	0.001
19500	0.048	0.063	0.022	0.024	0.005	0.013	0.009	0
19560	0.05	0.064	0.025	0.026	0.005	0.012	0.009	0
19620	0.049	0.071	0.024	0.024	0.004	0.017	0.01	0
19680	0.048	0.063	0.01	0.028	0.005	0.023	0.008	0.001
19740	0.049	0.063	0.022	0.024	0.081	0.013	0.01	0.001
19800	0.05	0.071	0.021	0.025	0.006	0.026	0.009	0.001
19860	0.054	0.069	0.02	0.026	0.005	0.016	0.009	0
19920	0.051	0.072	0.016	0.022	0.005	0.019	0.009	0.002
19980	0.051	0.064	0.02	0.023	0.004	0.015	0.009	0
20040	0.049	0.064	0.022	0.025	0.004	0.014	0.009	0
20100	0.05	0.066	0.021	0.024	0.005	0.015	0.009	0
20160	0.049	0.083	0.013	0.023	0.005	0.013	0.009	0
20220	0.05	0.067	0.021	0.024	0.005	0.012	0.009	0
20280	0.05	0.061	0.014	0.024	0.005	0.012	0.018	0
20340	0.051	0.061	0.02	0.023	0.005	0.016	0.011	0.004
20400	0.05	0.061	0.019	0.024	0.004	0.026	0.011	0.003
20460	0.052	0.059	0.017	0.024	0.004	0.019	0.009	0.001
20520	0.051	0.06	0.016	0.024	0.004	0.012	0.009	0.015
20580	0.055	0.063	0.022	0.024	0.008	0.012	0.009	0.001
20640	0.051	0.072	0.02	0.022	0.104	0.022	0.008	0
20700	0.048	0.064	0.017	0.022	0.07	0.029	0.009	0.001
20760	0.048	0.063	0.019	0.025	0.004	0.022	0.01	0
20820	0.047	0.062	0.013	0.023	0.009	0.027	0.011	0.001
20880	0.05	0.061	0.016	0.022	0.007	0.017	0.012	0.001
20940	0.047	0.059	0.02	0.023	0.004	0.024	0.011	0
21000	0.046	0.059	0.022	0.025	0.005	0.029	0.1	0.005
21060	0.049	0.058	0.021	0.024	0.006	0.016	0.285	0.002
21120	0.045	0.059	0.021	0.023	0.006	0.019	0.028	0.002
21180	0.045	0.06	0.022	0.024	0.005	0.012	0.065	0.002
21240	0.045	0.062	0.025	0.026	0.009	0.035	0.017	0.001
21300	0.046	0.06	0.024	0.024	0.01	0.023	1.72	0.005
21360	0.046	0.06	0.01	0.028	0.005	0.018	0.057	0
21420	0.047	0.06	0.022	0.024	0.006	0.017	0.009	0.001
21480	0.047	0.063	0.021	0.025	0.005	0.018	0.01	0
21540	0.047	0.063	0.02	0.026	0.006	0.016	0.01	0.006
21600	0.047	0.063	0.016	0.022	0.009	0.015	0.009	0.007
21660	0.045	0.063	0.02	0.023	0.021	0.017	0.009	0.008
21720	0.046	0.062	0.023	0.023	0.039	0.014	0.009	0.002
21780	0.047	0.064	0.021	0.023	0.006	0.022	0.01	0.03
21840	0.048	0.062	0.022	0.024	0.005	0.014	0.01	0.27
21900	0.049	0.061	0.025	0.026	0.005	0.013	0.009	0.003
21960	0.049	0.06	0.024	0.024	0.006	0.016	0.009	0.003
22020	0.049	0.06	0.01	0.028	0.01	0.014	0.009	0.002
22080	0.058	0.06	0.017	0.024	0.011	0.013	0.01	0.004
22140	0.073	0.059	0.016	0.024	0.007	0.018	0.014	0.003
22200	0.061	0.06	0.028	0.028	0.005	0.016	0.193	0.005
22260	0.048	0.06	0.011	0.025	0.005	0.017	0.696	0.009
22320	0.049	0.067	0.019	0.024	0.005	0.013	0.018	0.005
22380	0.059	0.064	0.021	0.023	0.007	0.014	0.012	0.003
22440	0.058	0.065	0.022	0.024	0.007	0.014	0.009	0.001
22500	0.064	0.065	0.021	0.023	0.008	0.015	0.017	0.002
22560	0.049	0.058	0.02	0.024	0.009	0.013	0.361	0.001
22620	0.046	0.075	0.023	0.023	0.006	0.015	0.069	0
22680	0.055	0.121	0.021	0.023	0.007	0.02	0.111	0
22740	0.044	0.061	0.022	0.024	0.006	0.021	0.409	0.002
22800	0.043	0.055	0.025	0.026	0.005	0.015	0.112	0.001
22860	0.042	0.054	0.024	0.024	0.008	0.013	0.012	0.001
22920	0.042	0.053	0.025	0.026	0.004	0.015	0.013	0
22980	0.064	0.055	0.024	0.024	0.006	0.015	0.01	0.001
23040	0.053	0.055	0.01	0.028	0.006	0.017	0.009	0.001
23100	0.043	0.06	0.022	0.024	0.005	0.014	0.009	0.001
23160	0.048	0.057	0.021	0.025	0.006	0.016	0.009	0
23220	0.04	0.042	0.02	0.026	0.007	0.015	0.009	0.001
23280	0.039	0.036	0.016	0.022	0.005	0.015	0.01	0.001
23340	0.041	0.037	0.02	0.023	0.006	0.016	0.009	0.002
23400	0.038	0.037	0.025	0.026	0.005	0.019	0.009	0.002
23460	0.039	0.037	0.024	0.024	0.008	0.019	0.009	0.004
23520	0.051	0.059	0.01	0.028	0.007	0.016	0.009	0.01
23580	0.05	0.061	0.021	0.023	0.007	0.022	0.01	0.003
23640	0.05	0.061	0.02	0.024	0.007	0.022	0.009	0
23700	0.049	0.061	0.023	0.023	0.006	0.03	0.009	0
23760	0.048	0.089	0.021	0.023	0.008	0.023	0.01	0
23820	0.049	0.077	0.022	0.024	0.01	0.033	0.01	0
23880	0.048	0.062	0.025	0.026	0.02	0.017	0.01	0
23940	0.049	0.061	0.024	0.024	0.009	0.016	0.01	0.002
24000	0.048	0.061	0.025	0.026	0.021	0.017	0.01	0.001
24060	0.049	0.068	0.022	0.024	0.014	0.017	0.009	0.012
24120	0.044	0.061	0.021	0.025	0.018	0.022	0.01	0.015
24180	0.043	0.055	0.02	0.026	0.008	0.021	0.009	0.008
24240	0.042	0.054	0.016	0.022	0.006	0.026	0.009	0.003
24300	0.042	0.053	0.021	0.023	0.007	0.049	0.009	0
24360	0.064	0.055	0.022	0.024	0.037	0.024	0.009	0.005
24420	0.053	0.055	0.021	0.023	0.006	0.046	0.01	0
24480	0.043	0.06	0.02	0.024	0.006	0.039	0.01	0
24540	0.048	0.057	0.023	0.023	0.006	0.017	0.01	0
24600	0.04	0.042	0.021	0.023	0.006	0.044	0.01	0.001
24660	0.048	0.085	0.022	0.024	0.016	0.059	0.01	0
24720	0.049	0.072	0.025	0.026	0.007	0.025	0.01	0
24780	0.05	0.062	0.024	0.024	0.006	0.066	0.01	0
24840	0.064	0.055	0.01	0.028	0.007	0.045	0.015	0.001
24900	0.053	0.055	0.017	0.024	0.005	0.032	0.015	0
24960	0.043	0.06	0.016	0.024	0.006	0.016	0.014	0
25020	0.048	0.057	0.022	0.024	0.005	0.039	0.009	0.001
25080	0.04	0.042	0.02	0.022	0.005	0.056	0.01	0
25140	0.048	0.051	0.017	0.022	0.006	0.076	0.009	0
25200	0.04	0.042	0.015	0.021	0.005	0.031	0.01	0

Table 14. Total Dust Monitoring results dated 08/24/11 to 08/31/11.

	24-Aug		25-Aug		30-Aug		31-Aug	
Elapsed Time [s]	upwind Mass [mg/m3]	downwind Mass [mg/m3]	upwind Mass [mg/m3]	downwind Mass [mg/m3]	upwind Mass [mg/m3]	downwind Mass [mg/m3]	upwind Mass [mg/m3]	downwind Mass [mg/m3]
60	0.129	0.051	0.137	0.061	0.061	0.011	0.101	0.044
120	0.022	0.015	0.021	0.047	0.005	0.009	0.036	0.042
180	0.017	0.013	0.022	0.115	0.006	0.01	0.035	0.041
240	0.177	0.02	0.023	0.026	0.007	0.009	0.034	0.041
300	0.018	0.015	0.086	0.022	0.007	0.009	0.034	0.04
360	0.014	0.011	0.021	0.023	0.009	0.008	0.035	0.039
420	0.013	0.025	0.025	0.022	0.01	0.011	0.035	0.039
480	0.013	0.12	0.022	0.021	0.009	0.009	0.033	0.038
540	0.013	0.012	0.02	0.02	0.009	0.008	0.033	0.037
600	0.014	0.019	0.02	0.019	0.016	0.008	0.033	0.036
660	0.012	0.015	0.019	0.02	0.011	0.007	0.035	0.038
720	0.012	0.089	0.02	0.019	0.011	0.008	0.034	0.036
780	0.012	0.021	0.02	0.021	0.026	0.008	0.034	0.034
840	0.012	0.027	0.025	0.02	0.036	0.007	0.036	0.033
900	0.012	0.014	0.019	0.019	0.01	0.007	0.034	0.033
960	0.014	0.012	0.013	0.019	0.01	0.013	0.149	0.033
1020	0.016	0.025	0.015	0.026	0.008	0.007	0.032	0.036
1080	0.013	0.017	0.018	0.02	0.007	0.007	0.031	0.165
1140	0.011	0.016	0.019	0.019	0.006	0.008	0.032	0.149
1200	0.011	0.018	0.019	0.02	0.007	0.014	0.033	0.041
1260	0.011	0.019	0.018	0.019	0.008	0.015	0.029	0.033
1320	0.012	0.017	0.019	0.024	0.007	0.009	0.03	0.032
1380	0.012	0.015	0.019	0.023	0.007	0.007	0.028	0.053
1440	0.013	0.011	0.019	0.019	0.007	0.006	0.027	0.031
1500	0.011	0.015	0.019	0.023	0.007	0.006	0.026	0.03
1560	0.014	0.026	0.021	0.022	0.007	0.006	0.027	0.03
1620	0.012	0.023	0.02	0.02	0.007	0.006	0.026	0.029
1680	0.012	0.04	0.02	0.021	0.008	0.006	0.026	0.032
1740	0.012	0.022	0.02	0.021	0.008	0.007	0.026	0.031
1800	0.012	0.019	0.021	0.02	0.136	0.007	0.025	0.095
1860	0.011	0.023	0.019	0.019	0.009	0.007	0.027	0.126
1920	0.012	0.015	0.019	0.018	0.009	0.008	0.03	0.145
1980	0.011	0.014	0.018	0.02	0.01	0.006	0.029	0.118
2040	0.012	0.021	0.019	0.02	0.009	0.007	0.03	0.093
2100	0.011	0.025	0.019	0.023	0.01	0.007	0.03	0.039
2160	0.012	0.022	0.018	0.025	0.01	0.008	0.03	0.039
2220	0.012	0.017	0.017	0.021	0.01	0.008	0.035	0.031
2280	0.012	0.013	0.019	0.02	0.009	0.006	0.031	0.028
2340	0.014	0.013	0.019	0.023	0.009	0.007	0.029	0.029
2400	0.014	0.013	0.018	0.02	0.008	0.007	0.029	0.027
2460	0.014	0.015	0.018	0.019	0.009	0.007	0.026	0.03
2520	0.014	0.027	0.018	0.019	0.01	0.008	0.161	0.026
2580	0.014	0.03	0.017	0.021	0.008	0.008	0.05	0.024
2640	0.014	0.032	0.019	0.025	0.009	0.008	0.027	0.024
2700	0.015	0.014	0.018	0.019	0.011	0.008	0.027	0.026
2760	0.014	0.024	0.02	0.019	0.009	0.008	0.028	0.026
2820	0.016	0.014	0.019	0.023	0.009	0.009	0.028	0.025
2880	0.015	0.025	0.018	0.02	0.009	0.008	0.028	0.036
2940	0.016	0.024	0.018	0.019	0.01	0.007	0.028	0.025
3000	0.018	0.025	0.017	0.019	0.009	0.009	0.028	0.025
3060	0.017	0.019	0.019	0.019	0.009	0.008	0.029	0.027
3120	0.016	0.021	0.018	0.021	0.009	0.008	0.029	0.026
3180	0.015	0.013	0.019	0.019	0.009	0.008	0.032	0.025
3240	0.015	0.014	0.018	0.023	0.009	0.007	0.08	0.025
3300	0.014	0.019	0.019	0.024	0.008	0.008	0.214	0.026
3360	0.016	0.015	0.02	0.03	0.011	0.008	0.027	0.061
3420	0.016	0.015	0.019	0.037	0.009	0.007	0.027	0.024
3480	0.015	0.017	0.019	0.022	0.009	0.008	0.026	0.025
3540	0.016	0.019	0.019	0.028	0.008	0.009	0.029	0.023
3600	0.015	0.017	0.018	0.02	0.008	0.007	0.027	0.024
3660	0.018	0.017	0.02	0.021	0.01	0.007	0.028	0.025
3720	0.016	0.018	0.019	0.022	0.008	0.008	0.025	0.024
3780	0.016	0.018	0.02	0.021	0.008	0.008	0.027	0.024
3840	0.038	0.042	0.019	0.02	0.009	0.008	0.026	0.025
3900	0.016	0.02	0.019	0.022	0.008	0.008	0.026	0.025
3960	0.016	0.02	0.02	0.031	0.008	0.007	0.027	0.025
4020	0.016	0.018	0.021	0.033	0.008	0.006	0.026	0.024
4080	0.016	0.04	0.021	0.026	0.008	0.007	0.027	0.024
4140	0.016	0.024	0.019	0.027	0.009	0.008	0.026	0.024
4200	0.016	0.027	0.019	0.024	0.008	0.007	0.028	0.023
4260	0.019	0.021	0.02	0.026	0.01	0.007	0.028	0.023
4320	0.017	0.097	0.021	0.021	0.009	0.008	0.028	0.024
4380	0.017	0.062	0.02	0.021	0.013	0.007	0.027	0.112
4440	0.016	0.027	0.02	0.027	0.139	0.007	0.028	0.023
4500	0.016	0.033	0.021	0.027	0.01	0.007	0.029	0.022
4560	0.017	0.029	0.021	0.022	0.009	0.008	0.028	0.023
4620	0.016	0.034	0.021	0.029	0.01	0.007	0.028	0.023
4680	0.017	0.034	0.021	0.023	0.01	0.006	0.028	0.029
4740	0.016	0.018	0.109	0.021	0.009	0.006	0.028	0.033
4800	0.02	0.018	0.02	0.022	0.01	0.007	0.029	0.023
4860	0.018	0.018	0.021	0.026	0.01	0.006	0.028	0.025
4920	0.017	0.027	0.02	0.027	0.01	0.007	0.031	0.025
4980	0.016	0.019	0.02	0.029	0.01	0.007	0.028	0.023
5040	0.018	0.055	0.02	0.042	0.01	0.006	0.029	0.024
5100	0.018	0.025	0.021	0.043	0.009	0.007	0.028	0.024
5160	0.017	0.028	0.021	0.044	0.009	0.007	0.029	0.024
5220	0.017	0.042	0.021	0.048	0.009	0.007	0.029	0.025
5280	0.018	0.031	0.021	0.03	0.01	0.006	0.028	0.024
5340	0.017	0.036	0.024	0.029	0.009	0.006	0.028	0.024
5400	0.017	0.027	0.021	0.045	0.01	0.009	0.03	0.024
5460	0.016	0.021	0.023	0.045	0.01	0.007	0.029	0.024
5520	0.018	0.019	0.021	0.028	0.01	0.008	0.028	0.023
5580	0.018	0.02	0.02	0.027	0.01	0.006	0.028	0.022
5640	0.016	0.023	0.021	0.025	0.009	0.006	0.029	0.022
5700	0.016	0.043	0.02	0.035	0.009	0.008	0.028	0.023
5760	0.017	0.021	0.021	0.035	0.008	0.008	0.031	0.023
5820	0.021	0.054	0.02	0.097	0.007	0.006	0.028	0.025
5880	0.018	0.024	0.022	0.028	0.01	0.006	0.028	0.023
5940	0.018	0.021	0.022	0.025	0.009	0.008	0.028	0.023
6000	0.018	0.026	0.022	0.029	0.343	0.007	0.029	0.025
6060	0.017	0.023	0.023	0.027	0.01	0.006	0.028	0.025
6120	0.017	0.023	0.032	0.034	0.008	0.006	0.029	0.023
6180	0.02	0.04	0.028	0.038	0.008	0.006	0.028	0.025
6240	0.021	0.022	0.024	0.031	0.008	0.006	0.028	0.026
6300	0.017	0.022	0.023	0.027	0.01	0.007	0.03	0.027

6360	0.017	0.029	0.023	0.03	0.008	0.006	0.029	0.026
6420	0.017	0.033	0.022	0.034	0.008	0.007	0.029	0.026
6480	0.018	0.033	0.022	0.028	0.008	0.007	0.03	0.025
6540	0.017	0.029	0.022	0.025	0.008	0.006	0.409	0.027
6600	0.015	0.028	0.021	0.024	0.009	0.006	0.031	0.027
6660	0.022	0.021	0.022	0.046	0.009	0.007	0.031	0.026
6720	0.022	0.021	0.024	0.025	0.009	0.006	0.031	0.052
6780	0.018	0.023	0.022	0.046	0.008	0.006	0.033	0.025
6840	0.017	0.029	0.021	0.039	0.008	0.009	0.031	0.023
6900	0.034	0.026	0.023	0.03	0.009	0.006	0.036	0.021
6960	0.021	0.029	0.023	0.027	0.009	0.006	0.031	0.021
7020	0.02	0.027	0.079	0.026	0.01	0.006	0.031	0.02
7080	0.02	0.022	0.023	0.029	0.009	0.006	0.031	0.02
7140	0.019	0.02	0.023	0.039	0.009	0.006	0.03	0.019
7200	0.017	0.022	0.024	0.057	0.009	0.005	0.03	0.019
7260	0.021	0.02	0.023	0.033	0.009	0.006	0.028	0.02
7320	0.018	0.011	0.023	0.037	0.009	0.005	0.028	0.019
7380	0.023	0.01	0.023	0.026	0.009	0.006	0.028	0.018
7440	0.032	0.01	0.022	0.03	0.008	0.006	0.029	0.02
7500	0.02	0.008	0.022	0.029	0.009	0.006	0.029	0.019
7560	0.016	0.008	0.025	0.027	0.008	0.005	0.027	0.019
7620	0.015	0.008	0.022	0.027	0.008	0.006	0.026	0.018
7680	0.016	0.005	0.024	0.028	0.009	0.006	0.027	0.016
7740	0.015	0	0.086	0.031	0.009	0.006	0.027	0.019
7800	0.015	0.003	0.026	0.031	0.009	0.005	0.026	0.018
7860	0.017	0.005	0.029	0.027	0.01	0.007	0.025	0.097
7920	0.027	0.003	0.03	0.028	0.01	0.006	0.026	0.04
7980	0.018	0.004	0.024	0.027	0.009	0.006	0.026	0.022
8040	0.016	0.006	0.023	0.027	0.009	0.005	0.027	0.017
8100	0.018	0.009	0.024	0.028	0.009	0.005	0.03	0.031
8160	0.014	0.015	0.023	0.035	0.009	0.005	0.026	0.016
8220	0.015	0.017	0.023	0.038	0.009	0.006	0.027	0.017
8280	0.018	0.028	0.024	0.041	0.009	0.005	0.026	0.016
8340	0.014	0.019	0.023	0.031	0.009	0.004	0.028	0.023
8400	0.017	0.019	0.024	0.031	0.01	0.005	0.027	0.016
8460	0.015	0.017	0.023	0.042	0.01	0.005	0.031	0.016
8520	0.013	0.013	0.024	0.05	0.009	0.004	0.027	0.016
8580	0.014	0.016	0.024	0.042	0.009	0.004	0.026	0.017
8640	0.014	0.018	0.023	0.05	0.01	0.005	0.028	0.015
8700	0.016	0.017	0.024	0.034	0.009	0.003	0.027	0.015
8760	0.014	0.015	0.026	0.038	0.009	0.004	0.027	0.015
8820	0.017	0.017	0.025	0.03	0.009	0.004	0.027	0.015
8880	0.023	0.026	0.025	0.058	0.01	0.003	0.027	0.014
8940	0.013	0.018	0.025	0.031	0.009	0.006	0.027	0.016
9000	0.015	0.017	0.025	0.029	0.011	0.004	0.026	0.016
9060	0.016	0.019	0.023	0.074	0.01	0.004	0.029	0.015
9120	0.019	0.021	0.025	0.032	0.01	0.005	0.026	0.016
9180	0.04	0.042	0.026	0.033	0.01	0.005	0.025	0.016
9240	0.017	0.027	0.024	0.036	0.011	0.005	0.026	0.016
9300	0.014	0.024	0.026	0.03	0.011	0.004	0.026	0.015
9360	0.013	0.023	0.025	0.029	0.01	0.004	0.026	0.014
9420	0.022	0.024	0.027	0.031	0.01	0.007	0.026	0.015
9480	0.012	0.022	0.025	0.047	0.011	0.004	0.027	0.016
9540	0.017	0.027	0.026	0.037	0.01	0.005	0.026	0.014
9600	0.018	0.024	0.026	0.03	0.009	0.005	0.028	0.013
9660	0.012	0.022	0.026	0.03	0.01	0.004	0.027	0.023
9720	0.013	0.023	0.025	0.036	0.01	0.005	0.026	0.013
9780	0.017	0.027	0.025	0.032	0.009	0.005	0.025	0.013
9840	0.023	0.025	0.026	0.028	0.009	0.004	0.024	0.014
9900	0.019	0.029	0.026	0.03	0.009	0.004	0.025	0.013
9960	0.016	0.018	0.027	0.074	0.01	0.003	0.025	0.015
10020	0.014	0.016	0.026	0.046	0.01	0.004	0.025	0.013
10080	0.015	0.025	0.026	0.03	0.01	0.003	0.115	0.016
10140	0.014	0.024	0.026	0.031	0.011	0.004	0.026	0.013
10200	0.015	0.025	0.026	0.05	0.01	0.003	0.026	0.013
10260	0.018	0.028	0.027	0.043	0.01	0.003	0.025	0.014
10320	0.018	0.019	0.026	0.041	0.012	0.003	0.029	0.014
10380	0.016	0.019	0.026	0.032	0.011	0.005	0.026	0.015
10440	0.015	0.025	0.026	0.044	0.01	0.004	0.027	0.012
10500	0.015	0.025	0.026	0.037	0.011	0.004	0.026	0.033
10560	0.025	0.027	0.027	0.093	0.01	0.005	0.025	0.033
10620	0.017	0.027	0.026	0.032	0.01	0.004	0.025	0.011
10680	0.015	0.025	0.026	0.031	0.06	0.003	0.025	0.01
10740	0.015	0.019	0.027	0.032	0.01	0.004	0.026	0.017
10800	0.014	0.017	0.026	0.03	0.009	0.002	0.025	0.01
10860	0.015	0.018	0.027	0.035	0.008	0.003	0.024	0.01
10920	0.016	0.017	0.027	0.031	0.01	0.002	0.023	0.011
10980	0.015	0.019	0.028	0.032	0.008	0.003	0.024	0.009
11040	0.014	0.015	0.026	0.038	0.008	0.003	0.024	0.01
11100	0.015	0.017	0.029	0.063	0.008	0.004	0.022	0.009
11160	0.016	0.019	0.031	0.033	0.01	0.004	0.023	0.009
11220	0.015	0.025	0.029	0.042	0.008	0.004	0.022	0.009
11280	0.014	0.024	0.186	0.072	0.008	0.003	0.021	0.009
11340	0.022	0.022	0.029	0.097	0.008	0.004	0.023	0.011
11400	0.018	0.02	0.028	0.08	0.009	0.003	0.021	0.009
11460	0.015	0.017	0.028	0.036	0.008	0.001	0.021	0.012
11520	0.016	0.019	0.028	0.038	0.009	0.003	0.022	0.009
11580	0.013	0.016	0.028	0.037	0.01	0.007	0.024	0.01
11640	0.013	0.015	0.028	0.035	0.009	0.002	0.022	0.01
11700	0.013	0.017	0.029	0.042	0.008	0.001	0.022	0.009
11760	0.012	0.014	0.029	0.037	0.008	0.002	0.022	0.01
11820	0.011	0.019	0.031	0.04	0.009	0.001	0.02	0.01
11880	0.011	0.018	0.029	0.038	0.009	0.001	0.021	0.01
11940	0.012	0.014	0.03	0.047	0.008	0.003	0.023	0.011
12000	0.013	0.019	0.035	0.07	0.008	0.002	0.022	0.01
12060	0.019	0.029	0.031	0.067	0.015	0.003	0.022	0.014
12120	0.013	0.023	0.03	0.148	0.011	0.002	0.022	0.011
12180	0.02	0.024	0.031	0.057	0.009	0.001	0.022	0.019
12240	0.025	0.028	0.03	0.095	0.009	0.002	0.022	0.009
12300	0.012	0.022	0.031	0.147	0.009	0.002	0.023	0.012
12360	0.011	0.017	0.031	0.151	0.01	0.001	0.023	0.011
12420	0.012	0.014	0.032	0.083	0.008	0.012	0.022	0.01
12480	0.013	0.019	0.032	0.045	0.009	0.003	0.025	0.01
12540	0.016	0.017	0.032	0.504	0.009	0.001	0.022	0.011
12600	0.012	0.019	0.033	0.135	0.009	0.002	0.022	0.011
12660	0.035	0.039	0.033	0.113	0.009	0.002	0.022	0.12
12720	0.013	0.033	0.026	0.044	0.009	0.011	0.022	0.011
12780	0.034	0.037	0.026	0.037	0.008	0.003	0.022	0.011
12840	0.014	0.034	0.027	0.093	0.009	0.001	0.023	0.011

12900	0.012	0.032	0.026	0.032	0.01	0.001	0.022	0.012
12960	0.013	0.033	0.026	0.031	0.009	0.001	0.023	0.012
13020	0.012	0.022	0.027	0.032	0.009	0.001	0.023	0.013
13080	0.012	0.021	0.026	0.03	0.009	0.001	0.022	0.023
13140	0.013	0.017	0.027	0.035	0.01	0.003	0.021	0.013
13200	0.019	0.029	0.027	0.031	0.009	0.001	0.026	0.013
13260	0.013	0.023	0.028	0.032	0.008	0.001	0.024	0.014
13320	0.011	0.021	0.026	0.038	0.009	0.001	0.024	0.014
13380	0.014	0.024	0.029	0.063	0.01	0.002	0.033	0.011
13440	0.015	0.017	0.031	0.033	0.009	0	0.023	0.012
13500	0.021	0.026	0.031	0.04	0.009	0.002	0.477	0.013
13560	0.023	0.027	0.029	0.038	0.009	0.001	0.036	0.012
13620	0.012	0.022	0.03	0.047	0.01	0.001	0.03	0.012
13680	0.082	0.087	0.035	0.07	0.01	0.001	0.026	0.013
13740	0.019	0.029	0.031	0.067	0.009	0	0.025	0.012
13800	0.016	0.019	0.03	0.148	0.01	0.003	0.024	0.011
13860	0.01	0.017	0.031	0.057	0.01	0.001	0.023	0.011
13920	0.013	0.023	0.03	0.095	0.01	0.002	0.024	0.012
13980	0.013	0.016	0.031	0.147	0.01	0.002	0.023	0.012
14040	0.012	0.014	0.017	0.019	0.01	0.002	0.024	0.019
14100	0.015	0.019	0.019	0.019	0.01	0.001	0.024	0.012
14160	0.017	0.019	0.018	0.021	0.011	0.001	0.023	0.012
14220	0	0.01	0.019	0.019	0.01	0.002	0.024	0.012
14280	0.077	0.079	0.018	0.023	0.011	0.001	0.023	0.013
14340	0.035	0.037	0.019	0.024	0.01	0.002	0.027	0.011
14400	0.015	0.025	0.02	0.03	0.01	0.001	0.025	0.014
14460	0.014	0.024	0.019	0.037	0.009	0.001	0.025	0.012
14520	0.048	0.048	0.019	0.022	0.011	0.003	0.025	0.012
14580	0.014	0.014	0.019	0.028	0.01	0.002	0.024	0.011
14640	0.068	0.077	0.018	0.02	0.011	0.001	0.024	0.012
14700	0.012	0.017	0.02	0.021	0.014	0.002	0.024	0.011
14760	0.017	0.019	0.019	0.022	0.01	0.001	0.025	0.012
14820	0.079	0.079	0.02	0.021	0.011	0	0.024	0.012
14880	0.013	0.017	0.033	0.135	0.011	0.002	0.024	0.011
14940	0.013	0.015	0.033	0.113	0.01	0.001	0.025	0.012
15000	0.023	0.027	0.018	0.02	0.011	0.002	0.024	0.021
15060	0.039	0.049	0.018	0.02	0.011	0.002	0.024	0.012
15120	0.031	0.034	0.027	0.035	0.011	0.002	0.024	0.01
15180	0.037	0.039	0.027	0.031	0.011	0.002	0.023	0.011
15240	0.028	0.029	0.028	0.032	0.01	0.001	0.023	0.012
15300	0.025	0.026	0.026	0.038	0.011	0.002	0.024	0.013
15360	0.02	0.024	0.029	0.063	0.012	0.001	0.023	0.013
15420	0.016	0.026	0.031	0.033	0.011	0.003	0.022	0.012
15480	0.017	0.027	0.029	0.042	0.011	0.002	0.023	0.013
15540	0.018	0.028	0.186	0.072	0.012	0.001	0.024	0.016
15600	0.073	0.076	0.029	0.097	0.011	0.002	0.024	0.017
15660	0.014	0.024	0.028	0.08	0.013	0.002	0.023	0.014
15720	0.013	0.023	0.028	0.036	0.013	0.003	0.025	0.015
15780	0.026	0.027	0.028	0.038	0.012	0.002	0.024	0.014
15840	0.015	0.015	0.028	0.037	0.012	0.002	0.028	0.013
15900	0.024	0.029	0.028	0.035	0.012	0.003	0.026	0.014
15960	0.017	0.017	0.029	0.042	0.012	0.003	0.025	0.012
16020	0.016	0.015	0.029	0.037	0.012	0.004	0.028	0.014
16080	0.02	0.02	0.031	0.04	0.013	0.004	0.024	0.015
16140	0.058	0.055	0.029	0.038	0.012	0.004	0.024	0.01
16200	0.027	0.027	0.03	0.047	0.012	0.004	0.025	0.013
16260	0.021	0.023	0.035	0.07	0.012	0.004	0.025	0.011
16320	0.015	0.015	0.031	0.067	0.012	0.004	0.028	0.009
16380	0.008	0.008	0.03	0.148	0.012	0.004	0.026	0.01
16440	0.008	0.01	0.031	0.057	0.012	0.004	0.024	0.011
16500	0.006	0.006	0.03	0.095	0.011	0.004	0.024	0.011
16560	0.007	0.009	0.031	0.147	0.012	0.004	0.023	0.01
16620	0.008	0.008	0.031	0.151	0.013	0.003	0.023	0.011
16680	0.01	0.01	0.032	0.083	0.012	0.003	0.024	0.012
16740	0.008	0.009	0.032	0.045	0.011	0.003	0.024	0.012
16800	0.007	0.007	0.021	0.029	0.012	0.003	0.023	0.012
16860	0.048	0.048	0.021	0.023	0.012	0.004	0.022	0.01
16920	0.014	0.014	0.109	0.021	0.012	0.005	0.023	0.01
16980	0.068	0.077	0.02	0.022	0.012	0.003	0.023	0.012
17040	0.012	0.017	0.021	0.026	0.012	0.004	0.024	0.01
17100	0.017	0.019	0.02	0.027	0.012	0.004	0.021	0.01
17160	0.079	0.079	0.02	0.029	0.013	0.004	0.023	0.01
17220	0.013	0.017	0.02	0.042	0.012	0.004	0.022	0.01
17280	0.013	0.015	0.021	0.043	0.012	0.003	0.023	0.009
17340	0.013	0.033	0.021	0.044	0.013	0.004	0.023	0.008
17400	0.034	0.037	0.021	0.048	0.013	0.003	0.023	0.008
17460	0.014	0.034	0.021	0.03	0.013	0.005	0.022	0.008
17520	0.012	0.032	0.026	0.038	0.013	0.004	0.023	0.008
17580	0.015	0.015	0.029	0.063	0.012	0.004	0.022	0.009
17640	0.008	0.008	0.031	0.033	0.012	0.004	0.022	0.009
17700	0.008	0.01	0.029	0.042	0.013	0.004	0.024	0.01
17760	0.006	0.006	0.186	0.072	0.012	0.004	0.022	0.013
17820	0.007	0.009	0.029	0.097	0.012	0.003	0.021	0.034
17880	0.008	0.008	0.028	0.08	0.013	0.005	0.024	0.023
17940	0.01	0.01	0.028	0.036	0.116	0.008	0.022	0.009
18000	0.008	0.009	0.028	0.038	0.012	0.003	0.023	0.008
18060	0.028	0.029	0.019	0.02	0.013	0.003	0.022	0.009
18120	0.025	0.026	0.019	0.022	0.014	0.004	0.022	0.009
18180	0.02	0.024	0.02	0.031	0.012	0.004	0.022	0.008
18240	0.016	0.026	0.021	0.033	0.012	0.003	0.022	0.01
18300	0.017	0.027	0.021	0.026	0.012	0.003	0.022	0.011
18360	0.018	0.028	0.019	0.027	0.012	0.003	0.022	0.011
18420	0.073	0.076	0.019	0.024	0.012	0.003	0.023	0.012
18480	0.014	0.024	0.02	0.026	0.012	0.003	0.023	0.011
18540	0.02	0.024	0.021	0.021	0.012	0.004	0.022	0.011
18600	0.025	0.028	0.02	0.021	0.012	0.003	0.022	0.011
18660	0.012	0.022	0.021	0.021	0.011	0.003	0.023	0.011
18720	0.011	0.017	0.02	0.021	0.012	0.003	0.024	0.011
18780	0.012	0.014	0.02	0.027	0.012	0.003	0.023	0.011
18840	0.013	0.019	0.021	0.027	0.012	0.003	0.024	0.013
18900	0.016	0.017	0.021	0.022	0.013	0.002	0.024	0.063
18960	0.012	0.019	0.021	0.029	0.012	0.003	0.025	0.026
19020	0.035	0.039	0.021	0.023	0.013	0.002	0.025	0.011
19080	0.013	0.033	0.109	0.021	0.012	0.003	0.024	0.012
19140	0.034	0.037	0.02	0.022	0.012	0.003	0.024	0.016
19200	0.014	0.034	0.021	0.026	0.012	0.003	0.025	0.012
19260	0.012	0.032	0.02	0.027	0.013	0.003	0.023	0.012
19320	0.013	0.033	0.02	0.029	0.013	0.004	0.024	0.01
19380	0.012	0.022	0.02	0.03	0.013	0.003	0.035	0.012

19440	0.012	0.021	0.019	0.037	0.012	0.004	0.024	0.009
19500	0.013	0.017	0.019	0.022	0.012	0.003	0.061	0.012
19560	0.019	0.029	0.019	0.028	0.012	0.003	0.026	0.01
19620	0.013	0.023	0.018	0.02	0.013	0.003	0.025	0.011
19680	0.011	0.021	0.02	0.021	0.012	0.002	0.024	0.01
19740	0.014	0.024	0.019	0.022	0.012	0.003	0.023	0.011
19800	0.015	0.017	0.02	0.021	0.372	0.003	0.025	0.011
19860	0.021	0.026	0.019	0.02	0.098	0.004	0.022	0.01
19920	0.023	0.027	0.019	0.022	0.013	0.004	0.023	0.012
19980	0.012	0.022	0.02	0.031	0.012	0.003	0.022	0.01
20040	0.082	0.087	0.021	0.033	0.012	0.003	0.02	0.01
20100	0.019	0.029	0.021	0.026	0.013	0.002	0.023	0.01
20160	0.016	0.019	0.019	0.027	0.012	0.004	0.016	0.016
20220	0.01	0.017	0.019	0.024	0.012	0.003	0.015	0.02
20280	0.013	0.023	0.02	0.026	0.012	0.003	0.014	0.011
20340	0.013	0.016	0.021	0.021	0.013	0.002	0.028	0.025
20400	0.012	0.014	0.02	0.021	0.012	0.003	0.029	0.027
20460	0.015	0.019	0.02	0.027	0.012	0.003	0.029	0.026
20520	0.017	0.019	0.021	0.027	0.012	0.002	0.032	0.025
20580	0	0.01	0.021	0.022	0.012	0.003	0.08	0.025
20640	0.077	0.079	0.021	0.029	0.012	0.002	0.214	0.026
20700	0.035	0.037	0.021	0.023	0.012	0.002	0.027	0.061
20760	0.015	0.025	0.029	0.042	0.012	0.003	0.027	0.024
20820	0.014	0.024	0.029	0.037	0.013	0.002	0.026	0.025
20880	0.048	0.048	0.031	0.04	0.013	0.003	0.029	0.023
20940	0.014	0.014	0.029	0.038	0.012	0.004	0.027	0.024
21000	0.068	0.077	0.03	0.047	0.012	0.004	0.028	0.025
21060	0.012	0.017	0.035	0.07	0.013	0.003	0.025	0.024
21120	0.017	0.019	0.031	0.067	0.014	0.004	0.027	0.024
21180	0.079	0.079	0.03	0.148	0.013	0.003	0.026	0.025
21240	0.013	0.017	0.031	0.057	0.012	0.003	0.026	0.025
21300	0.013	0.015	0.03	0.095	0.013	0.003	0.027	0.025
21360	0.023	0.027	0.031	0.147	0.013	0.003	0.026	0.024
21420	0.039	0.049	0.031	0.151	0.014	0.003	0.027	0.024
21480	0.031	0.034	0.032	0.083	0.013	0.003	0.026	0.024
21540	0.037	0.039	0.032	0.045	0.014	0.003	0.028	0.023
21600	0.028	0.029	0.021	0.029	0.012	0.004	0.028	0.023
21660	0.025	0.026	0.021	0.023	0.012	0.003	0.028	0.024
21720	0.011	0.021	0.109	0.021	0.013	0.003	0.027	0.112
21780	0.014	0.024	0.02	0.022	0.016	0.003	0.028	0.023
21840	0.015	0.017	0.021	0.026	0.012	0.003	0.029	0.022
21900	0.021	0.026	0.02	0.027	0.012	0.003	0.028	0.023
21960	0.014	0.024	0.02	0.029	0.012	0.003	0.028	0.023
22020	0.014	0.024	0.02	0.042	0.012	0.003	0.028	0.029
22080	0.015	0.017	0.019	0.022	0.013	0.003	0.028	0.033
22140	0.021	0.026	0.02	0.031	0.013	0.003	0.029	0.023
22200	0.023	0.027	0.021	0.033	0.014	0.003	0.028	0.025
22260	0.012	0.022	0.021	0.026	0.013	0.003	0.031	0.025
22320	0.082	0.087	0.019	0.027	0.014	0.003	0.027	0.016
22380	0.019	0.029	0.019	0.024	0.013	0.003	0.026	0.016
22440	0.013	0.015	0.02	0.026	0.013	0.003	0.029	0.015
22500	0.023	0.027	0.021	0.021	0.013	0.003	0.026	0.016
22560	0.039	0.049	0.02	0.021	0.013	0.003	0.025	0.016
22620	0.013	0.023	0.02	0.027	0.012	0.004	0.026	0.016
22680	0.011	0.021	0.021	0.027	0.012	0.004	0.026	0.015
22740	0.014	0.024	0.02	0.021	0.013	0.003	0.026	0.014
22800	0.015	0.017	0.019	0.02	0.012	0.005	0.026	0.015
22860	0.021	0.026	0.019	0.022	0.013	0.003	0.025	0.011
22920	0.023	0.027	0.02	0.031	0.014	0.005	0.024	0.01
22980	0.012	0.022	0.021	0.033	0.013	0.004	0.029	0.026
23040	0.082	0.087	0.021	0.026	0.014	0.004	0.032	0.025
23100	0.019	0.029	0.019	0.027	0.013	0.003	0.08	0.025
23160	0.016	0.019	0.019	0.024	0.013	0.003	0.214	0.026
23220	0.01	0.017	0.02	0.026	0.013	0.003	0.027	0.061
23280	0.013	0.023	0.021	0.021	0.013	0.003	0.027	0.024
23340	0.013	0.017	0.02	0.021	0.013	0.003	0.026	0.025
23400	0.013	0.015	0.02	0.027	0.013	0.003	0.028	0.025
23460	0.023	0.027	0.021	0.027	0.015	0.004	0.028	0.023
23520	0.039	0.049	0.021	0.022	0.013	0.003	0.028	0.023
23580	0.031	0.034	0.021	0.029	0.013	0.003	0.029	0.025
23640	0.037	0.039	0.021	0.023	0.014	0.003	0.028	0.025
23700	0.028	0.029	0.109	0.021	0.013	0.004	0.029	0.023
23760	0.025	0.026	0.02	0.022	0.014	0.004	0.028	0.025
23820	0.012	0.022	0.021	0.026	0.016	0.003	0.028	0.026
23880	0.082	0.087	0.02	0.027	0.014	0.003	0.03	0.027
23940	0.019	0.029	0.02	0.029	0.014	0.004	0.029	0.026
24000	0.016	0.019	0.02	0.042	0.013	0.003	0.029	0.026
24060	0.01	0.017	0.021	0.043	0.013	0.003	0.03	0.025
24120	0.013	0.023	0.021	0.044	0.013	0.003	0.409	0.027
24180	0.013	0.017	0.021	0.048	0.013	0.004	0.031	0.027
24240	0.013	0.023	0.021	0.03	0.013	0.004	0.031	0.026
24300	0.011	0.021	0.02	0.022	0.013	0.004	0.031	0.052
24360	0.014	0.024	0.021	0.026	0.014	0.004	0.033	0.025
24420	0.015	0.017	0.02	0.027	0.014	0.003	0.031	0.023
24480	0.013	0.017	0.02	0.029	0.014	0.005	0.036	0.021
24540	0.013	0.015	0.02	0.042	0.014	0.004	0.029	0.118
24600	0.013	0.033	0.021	0.043	0.014	0.004	0.03	0.093
24660	0.034	0.037	0.021	0.022	0.014	0.004	0.03	0.039
24720	0.014	0.034	0.021	0.029	0.014	0.004	0.03	0.039
24780	0.012	0.032	0.021	0.023	0.014	0.004	0.023	0.012
24840	0.015	0.015	0.109	0.021	0.014	0.004	0.024	0.01
24900	0.008	0.008	0.02	0.022	0.014	0.004	0.035	0.012
24960	0.008	0.01	0.021	0.026	0.014	0.003	0.024	0.009
25020	0.006	0.006	0.02	0.027	0.013	0.004	0.061	0.012
25080	0.007	0.009	0.02	0.029	0.014	0.004	0.026	0.01
25140	0.008	0.008	0.02	0.042	0.014	0.003	0.025	0.011
25200	0.007	0.008	0.021	0.043	0.013	0.004	0.024	0.01

Table 15. Total Dust Monitoring results dated 09/01/11 to 09/13/11.

	1-Sep		2-Sep		12-Sep		13-Sep	
Elapsed Time [s]	upwind Mass [mg/m3]	downwind Mass [mg/m3]	upwind Mass [mg/m3]	downwind Mass [mg/m3]	upwind Mass [mg/m3]	downwind Mass [mg/m3]	upwind Mass [mg/m3]	downwind Mass [mg/m3]
60	0.04	0.07	0.032	0.033	0.028	0.066	0.081	0.096
120	0.036	0.043	0.021	0.045	0.022	0.069	0.084	0.08
180	0.033	0.043	0.023	0.045	0.021	0.069	0.091	0.071
240	0.035	0.038	0.019	0.025	0.028	0.067	0.104	0.108
300	0.034	0.053	0.016	0.022	0.027	0.068	0.105	0.11
360	0.036	0.073	0.021	0.023	0.057	0.067	0.118	0.108
420	0.05	0.062	0.025	0.029	0.056	0.068	0.105	0.11
480	0.033	0.043	0.022	0.021	0.065	0.067	0.104	0.105
540	0.031	0.045	0.02	0.02	0.068	0.066	0.103	0.116
600	0.034	0.045	0.02	0.019	0.09	0.063	0.099	0.11
660	0.039	0.049	0.019	0.025	0.059	0.065	0.098	0.114
720	0.036	0.043	0.02	0.019	0.071	0.069	0.097	0.114
780	0.034	0.06	0.02	0.021	0.071	0.066	0.095	0.095
840	0.033	0.038	0.025	0.02	0.066	0.065	0.095	0.102
900	0.035	0.054	0.019	0.019	0.064	0.067	0.092	0.098
960	0.032	0.04	0.013	0.019	0.055	0.066	0.091	0.088
1020	0.033	0.035	0.015	0.026	0.059	0.065	0.088	0.092
1080	0.206	0.035	0.018	0.02	0.056	0.067	0.092	0.092
1140	0.038	0.035	0.019	0.019	0.062	0.066	0.084	0.089
1200	0.034	0.035	0.019	0.02	0.063	0.065	0.083	0.095
1260	0.037	0.034	0.018	0.049	0.058	0.067	0.083	0.096
1320	0.032	0.033	0.019	0.024	0.067	0.065	0.085	0.099
1380	0.034	0.032	0.019	0.023	0.055	0.067	0.081	0.092
1440	0.031	0.036	0.019	0.019	0.08	0.067	0.079	0.085
1500	0.032	0.03	0.019	0.023	0.057	0.066	0.08	0.088
1560	0.031	0.03	0.021	0.022	0.056	0.065	0.083	0.087
1620	0.032	0.03	0.02	0.02	0.057	0.065	0.077	0.086
1680	0.032	0.029	0.02	0.021	0.057	0.067	0.077	0.081
1740	0.032	0.028	0.02	0.021	0.057	0.066	0.079	0.081
1800	0.032	0.028	0.021	0.02	0.057	0.064	0.076	0.079
1860	0.03	0.032	0.019	0.019	0.058	0.069	0.074	0.076
1920	0.03	0.029	0.019	0.018	0.06	0.067	0.074	0.077
1980	0.031	0.03	0.018	0.02	0.066	0.065	0.071	0.076
2040	0.03	0.033	0.019	0.02	0.055	0.065	0.07	0.075
2100	0.031	0.031	0.019	0.023	0.06	0.065	0.07	0.078
2160	0.028	0.033	0.018	0.025	0.065	0.064	0.07	0.077
2220	0.03	0.033	0.017	0.021	0.071	0.064	0.068	0.078
2280	0.032	0.04	0.019	0.02	0.057	0.064	0.07	0.078
2340	0.031	0.079	0.019	0.023	0.059	0.063	0.069	0.077
2400	0.031	0.067	0.018	0.02	0.067	0.063	0.069	0.079
2460	0.032	0.062	0.018	0.019	0.058	0.063	0.068	0.078
2520	0.03	0.073	0.018	0.019	0.058	0.063	0.067	0.078
2580	0.033	0.041	0.017	0.021	0.089	0.062	0.065	0.078
2640	0.034	0.048	0.019	0.025	0.085	0.061	0.067	0.083
2700	0.037	0.044	0.018	0.019	0.06	0.061	0.072	0.08
2760	0.037	0.06	0.02	0.019	0.055	0.06	0.068	0.079
2820	0.034	0.081	0.019	0.023	0.055	0.06	0.066	0.078
2880	0.032	0.064	0.018	0.02	0.064	0.063	0.069	0.081
2940	0.034	0.04	0.018	0.019	0.058	0.059	0.067	0.08
3000	0.032	0.054	0.017	0.019	0.055	0.059	0.066	0.083
3060	0.034	0.042	0.019	0.019	0.086	0.058	0.07	0.074
3120	0.031	0.044	0.018	0.021	0.062	0.058	0.067	0.076
3180	0.03	0.036	0.019	0.019	0.059	0.057	0.067	0.076
3240	0.031	0.031	0.018	0.023	0.054	0.058	0.069	0.075
3300	0.031	0.037	0.019	0.024	0.055	0.059	0.066	0.074
3360	0.03	0.033	0.02	0.03	0.055	0.057	0.068	0.074
3420	0.03	0.032	0.019	0.037	0.054	0.057	0.068	0.074
3480	0.029	0.031	0.029	0.072	0.056	0.058	0.067	0.075
3540	0.029	0.033	0.031	0.091	0.057	0.057	0.065	0.074
3600	0.143	0.03	0.031	0.094	0.057	0.057	0.07	0.087
3660	0.028	0.039	0.02	0.021	0.055	0.058	0.069	0.075
3720	0.029	0.042	0.019	0.022	0.054	0.058	0.069	0.075
3780	0.028	0.037	0.02	0.021	0.056	0.058	0.065	0.075
3840	0.028	0.045	0.019	0.02	0.054	0.057	0.071	0.075
3900	0.03	0.047	0.019	0.022	0.055	0.057	0.07	0.076
3960	0.028	0.062	0.02	0.031	0.056	0.055	0.067	0.076
4020	0.029	0.039	0.021	0.033	0.055	0.057	0.067	0.075
4080	0.028	0.034	0.021	0.026	0.055	0.058	0.066	0.075
4140	0.028	0.029	0.019	0.027	0.055	0.055	0.065	0.074
4200	0.028	0.033	0.019	0.024	0.055	0.057	0.065	0.074
4260	0.027	0.031	0.02	0.026	0.056	0.054	0.065	0.074
4320	0.027	0.032	0.021	0.021	0.055	0.053	0.066	0.074
4380	0.027	0.031	0.02	0.021	0.055	0.055	0.065	0.073
4440	0.026	0.035	0.02	0.027	0.055	0.054	0.065	0.072
4500	0.027	0.04	0.021	0.027	0.054	0.055	0.064	0.073
4560	0.028	0.044	0.021	0.022	0.055	0.054	0.064	0.071
4620	0.027	0.035	0.021	0.029	0.054	0.054	0.064	0.07
4680	0.027	0.033	0.021	0.023	0.055	0.054	0.063	0.069
4740	0.027	0.031	0.109	0.021	0.057	0.053	0.061	0.069
4800	0.027	0.035	0.02	0.022	0.054	0.054	0.062	0.068
4860	0.027	0.036	0.021	0.026	0.053	0.054	0.065	0.068
4920	0.03	0.035	0.02	0.027	0.052	0.052	0.061	0.069
4980	0.043	0.031	0.02	0.029	0.053	0.051	0.061	0.07
5040	0.028	0.035	0.02	0.042	0.052	0.052	0.06	0.069
5100	0.029	0.036	0.021	0.043	0.052	0.058	0.06	0.068
5160	0.029	0.034	0.021	0.044	0.052	0.051	0.059	0.071
5220	0.027	0.032	0.021	0.045	0.051	0.059	0.061	0.07
5280	0.032	0.032	0.021	0.03	0.052	0.053	0.061	0.068
5340	0.027	0.039	0.027	0.029	0.063	0.054	0.058	0.071
5400	0.158	0.033	0.021	0.045	0.05	0.054	0.059	0.07
5460	0.026	0.032	0.023	0.045	0.049	0.058	0.06	0.068
5520	0.028	0.034	0.021	0.028	0.05	0.054	0.06	0.071
5580	0.026	0.031	0.02	0.027	0.05	0.054	0.06	0.071
5640	0.027	0.035	0.021	0.025	0.05	0.053	0.059	0.068
5700	0.026	0.039	0.02	0.035	0.049	0.053	0.06	0.07
5760	0.028	0.038	0.021	0.035	0.049	0.053	0.06	0.071
5820	0.029	0.037	0.02	0.097	0.051	0.054	0.059	0.069
5880	0.028	0.037	0.022	0.028	0.065	0.055	0.059	0.071
5940	0.044	0.038	0.022	0.025	0.049	0.06	0.056	0.075
6000	0.049	0.031	0.022	0.029	0.049	0.057	0.058	0.069
6060	0.048	0.028	0.023	0.027	0.049	0.056	0.059	0.07
6120	0.038	0.027	0.032	0.034	0.053	0.057	0.056	0.068
6180	0.043	0.027	0.021	0.038	0.055	0.055	0.058	0.071
6240	0.03	0.044	0.024	0.031	0.049	0.054	0.057	0.071
6300	0.04	0.033	0.023	0.027	0.049	0.055	0.055	0.067

6360	0.16	0.032	0.023	0.03	0.128	0.055	0.058	0.068
6420	0.021	0.031	0.02	0.034	0.063	0.055	0.056	0.067
6480	0.027	0.031	0.022	0.028	0.053	0.054	0.056	0.068
6540	0.026	0.031	0.022	0.025	0.064	0.053	0.055	0.068
6600	0.024	0.034	0.021	0.024	0.058	0.053	0.056	0.067
6660	0.024	0.03	0.022	0.056	0.06	0.055	0.055	0.068
6720	0.023	0.031	0.024	0.025	0.05	0.053	0.055	0.068
6780	0.024	0.032	0.022	0.046	0.056	0.052	0.056	0.065
6840	0.024	0.031	0.021	0.039	0.05	0.052	0.055	0.065
6900	0.024	0.03	0.023	0.03	0.056	0.053	0.056	0.065
6960	0.023	0.031	0.023	0.027	0.06	0.052	0.052	0.066
7020	0.026	0.029	0.079	0.026	0.051	0.053	0.054	0.068
7080	0.026	0.031	0.023	0.029	0.051	0.057	0.06	0.072
7140	0.023	0.03	0.023	0.039	0.08	0.051	0.053	0.071
7200	0.024	0.028	0.024	0.071	0.048	0.05	0.054	0.076
7260	0.023	0.029	0.023	0.033	0.056	0.047	0.054	0.083
7320	0.024	0.028	0.023	0.037	0.078	0.05	0.056	0.082
7380	0.021	0.029	0.023	0.026	0.062	0.049	0.056	0.07
7440	0.022	0.028	0.022	0.03	0.052	0.047	0.059	0.07
7500	0.021	0.029	0.022	0.029	0.057	0.047	0.056	0.071
7560	0.023	0.029	0.025	0.027	0.052	0.046	0.057	0.07
7620	0.022	0.029	0.022	0.027	0.053	0.046	0.053	0.07
7680	0.022	0.03	0.024	0.028	0.05	0.046	0.055	0.071
7740	0.021	0.03	0.086	0.031	0.048	0.05	0.054	0.075
7800	0.021	0.029	0.026	0.031	0.05	0.046	0.056	0.074
7860	0.021	0.031	0.029	0.027	0.051	0.048	0.057	0.072
7920	0.024	0.03	0.03	0.028	0.052	0.045	0.062	0.071
7980	0.022	0.03	0.024	0.027	0.052	0.046	0.059	0.07
8040	0.021	0.031	0.023	0.027	0.049	0.044	0.059	0.07
8100	0.022	0.029	0.024	0.028	0.066	0.046	0.058	0.073
8160	0.023	0.029	0.023	0.035	0.046	0.044	0.056	0.07
8220	0.023	0.031	0.023	0.038	0.045	0.047	0.055	0.068
8280	0.023	0.04	0.024	0.041	0.063	0.047	0.058	0.07
8340	0.023	0.049	0.023	0.031	0.047	0.045	0.055	0.069
8400	0.023	0.043	0.024	0.031	0.063	0.045	0.057	0.068
8460	0.024	0.033	0.023	0.042	0.051	0.045	0.055	0.067
8520	0.023	0.032	0.024	0.05	0.053	0.044	0.053	0.068
8580	0.023	0.051	0.024	0.042	0.06	0.044	0.055	0.067
8640	0.023	0.035	0.023	0.05	0.048	0.044	0.056	0.068
8700	0.023	0.034	0.024	0.034	0.047	0.045	0.057	0.067
8760	0.022	0.046	0.026	0.038	0.045	0.046	0.054	0.066
8820	0.025	0.038	0.025	0.03	0.049	0.046	0.054	0.066
8880	0.023	0.066	0.025	0.058	0.048	0.044	0.056	0.066
8940	0.024	0.038	0.025	0.031	0.046	0.045	0.053	0.066
9000	0.022	0.05	0.025	0.029	0.055	0.046	0.054	0.065
9060	0.024	0.146	0.023	0.074	0.051	0.045	0.06	0.061
9120	0.023	0.036	0.025	0.032	0.049	0.047	0.053	0.06
9180	0.024	0.048	0.026	0.033	0.047	0.047	0.052	0.06
9240	0.022	0.054	0.024	0.036	0.059	0.046	0.048	0.062
9300	0.023	0.033	0.026	0.03	0.051	0.044	0.051	0.061
9360	0.021	0.055	0.025	0.029	0.047	0.045	0.051	0.062
9420	0.023	0.074	0.027	0.031	0.056	0.044	0.049	0.061
9480	0.021	0.05	0.025	0.047	0.048	0.047	0.049	0.059
9540	0.021	0.048	0.026	0.037	0.065	0.044	0.048	0.06
9600	0.022	0.042	0.026	0.03	0.055	0.045	0.048	0.064
9660	0.022	0.048	0.026	0.03	0.045	0.044	0.048	0.061
9720	0.022	0.043	0.025	0.036	0.051	0.044	0.051	0.062
9780	0.023	0.057	0.025	0.032	0.046	0.043	0.047	0.062
9840	0.023	0.043	0.026	0.028	0.05	0.044	0.049	0.061
9900	0.022	0.033	0.026	0.03	0.047	0.043	0.046	0.194
9960	0.02	0.042	0.027	0.074	0.049	0.042	0.047	0.063
10020	0.021	0.032	0.026	0.046	0.05	0.046	0.045	0.066
10080	0.022	0.05	0.026	0.03	0.056	0.044	0.049	0.061
10140	0.021	0.053	0.026	0.031	0.122	0.042	0.046	0.067
10200	0.021	0.064	0.026	0.05	0.056	0.043	0.05	0.08
10260	0.022	0.046	0.027	0.043	0.046	0.042	0.049	0.095
10320	0.024	0.046	0.026	0.041	0.052	0.042	0.046	0.074
10380	0.053	0.077	0.026	0.032	0.05	0.042	0.047	0.089
10440	0.021	0.035	0.026	0.044	0.046	0.044	0.047	0.11
10500	0.022	0.058	0.026	0.037	0.045	0.043	0.046	0.102
10560	0.02	0.05	0.027	0.093	0.046	0.041	0.046	0.065
10620	0.016	0.027	0.026	0.072	0.045	0.041	0.045	0.071
10680	0.014	0.026	0.026	0.071	0.046	0.043	0.046	0.08
10740	0.016	0.036	0.027	0.082	0.045	0.041	0.049	0.1
10800	0.016	0.041	0.021	0.094	0.045	0.045	0.049	0.065
10860	0.014	0.039	0.027	0.035	0.047	0.042	0.046	0.065
10920	0.014	0.04	0.027	0.031	0.048	0.043	0.047	0.14
10980	0.017	0.023	0.028	0.032	0.047	0.041	0.047	0.082
11040	0.016	0.037	0.026	0.038	0.047	0.042	0.047	0.07
11100	0.016	0.039	0.029	0.063	0.046	0.041	0.048	0.068
11160	0.018	0.031	0.031	0.033	0.046	0.043	0.049	0.091
11220	0.015	0.039	0.029	0.042	0.047	0.043	0.047	0.071
11280	0.013	0.029	0.186	0.072	0.048	0.043	0.046	0.077
11340	0.015	0.07	0.029	0.097	0.047	0.043	0.048	0.066
11400	0.015	0.054	0.028	0.08	0.047	0.044	0.045	0.12
11460	0.015	0.067	0.028	0.036	0.046	0.044	0.05	0.064
11520	0.016	0.045	0.028	0.038	0.052	0.053	0.046	0.073
11580	0.016	0.032	0.028	0.037	0.049	0.057	0.046	0.071
11640	0.016	0.031	0.028	0.035	0.045	0.045	0.045	0.063
11700	0.017	0.059	0.029	0.042	0.046	0.052	0.047	0.094
11760	0.017	0.051	0.029	0.037	0.047	0.046	0.044	0.073
11820	0.018	0.062	0.031	0.04	0.049	0.046	0.046	0.108
11880	0.02	0.054	0.029	0.038	0.045	0.065	0.044	0.059
11940	0.018	0.059	0.03	0.047	0.046	0.046	0.043	0.059
12000	0.017	0.024	0.035	0.07	0.049	0.046	0.052	0.082
12060	0.017	0.102	0.031	0.067	0.046	0.047	0.047	0.064
12120	0.018	0.04	0.03	0.148	0.044	0.048	0.043	0.06
12180	0.018	0.031	0.031	0.057	0.047	0.047	0.045	0.059
12240	0.015	0.029	0.03	0.095	0.043	0.051	0.045	0.086
12300	0.016	0.025	0.031	0.147	0.047	0.049	0.043	0.065
12360	0.031	0.035	0.031	0.151	0.052	0.044	0.043	0.061
12420	0.018	0.037	0.032	0.083	0.05	0.044	0.045	0.069
12480	0.015	0.023	0.032	0.045	0.049	0.046	0.044	0.058
12540	0.02	0.027	0.032	0.504	0.045	0.046	0.042	0.059
12600	0.014	0.047	0.033	0.135	0.054	0.045	0.043	0.086
12660	0.018	0.026	0.033	0.113	0.053	0.046	0.044	0.063
12720	0.064	0.028	0.029	0.032	0.052	0.046	0.042	0.058
12780	0.021	0.03	0.019	0.029	0.048	0.046	0.05	0.062
12840	0.019	0.023	0.014	0.023	0.025	0.049	0.044	0.112

12900	0.022	0.025	0.011	0.022	0.028	0.058	0.045	0.11
12960	0.021	0.044	0.021	0.02	0.031	0.047	0.043	0.098
13020	0.016	0.08	0.02	0.021	0.035	0.045	0.043	0.061
13080	0.013	0.067	0.02	0.027	0.026	0.046	0.042	0.068
13140	0.016	0.033	0.021	0.02	0.036	0.046	0.044	0.072
13200	0.013	0.036	0.016	0.029	0.035	0.045	0.044	0.065
13260	0.013	0.026	0.019	0.028	0.028	0.046	0.044	0.116
13320	0.015	0.04	0.019	0.024	0.027	0.047	0.045	0.07
13380	0.023	0.033	0.019	0.02	0.025	0.045	0.046	0.064
13440	0.074	0.04	0.019	0.023	0.031	0.046	0.045	0.063
13500	0.094	0.033	0.018	0.025	0.015	0.085	0.06	0.065
13560	0.029	0.027	0.011	0.021	0.013	0.073	0.07	0.061
13620	0.017	0.027	0.019	0.02	0.026	0.046	0.048	0.059
13680	0.068	0.043	0.019	0.023	0.016	0.046	0.075	0.059
13740	0.003	0.04	0.018	0.021	0.027	0.047	0.047	0.058
13800	0.019	0.026	0.018	0.019	0.037	0.057	0.048	0.085
13860	0.035	0.038	0.016	0.019	0.041	0.061	0.112	0.102
13920	0.836	0.031	0.017	0.021	0.035	0.045	0.049	0.154
13980	0.071	0.04	0.019	0.025	0.022	0.052	0.048	0.067
14040	0.021	0.037	0.018	0.019	0.027	0.047	0.05	0.114
14100	0.666	0.034	0.02	0.019	0.056	0.061	0.049	0.106
14160	0.065	0.029	0.019	0.023	0.043	0.044	0.049	0.105
14220	0.04	0.029	0.018	0.02	0.036	0.046	0.061	0.089
14280	0.025	0.028	0.018	0.019	0.032	0.044	0.058	0.058
14340	0.024	0.065	0.017	0.019	0.035	0.045	0.045	0.073
14400	0.021	0.034	0.019	0.019	0.031	0.044	0.047	0.06
14460	0.025	0.039	0.018	0.021	0.032	0.046	0.047	0.08
14520	0.021	0.03	0.019	0.019	0.038	0.048	0.048	0.086
14580	0.022	0.027	0.018	0.023	0.025	0.045	0.047	0.065
14640	0.023	0.026	0.019	0.024	0.026	0.046	0.047	0.082
14700	0.025	0.029	0.02	0.03	0.027	0.047	0.048	0.058
14760	0.02	0.03	0.019	0.037	0.026	0.046	0.048	0.157
14820	0.018	0.03	0.029	0.072	0.025	0.045	0.05	0.059
14880	0.022	0.029	0.011	0	0.026	0.046	0.065	0.059
14940	0.019	0.031	0.015	0.002	0.027	0.047	0.049	0.062
15000	0.02	0.028	0.013	0.001	0.031	0.045	0.047	0.06
15060	0.022	0.029	0.011	0.002	0.03	0.047	0.047	0.061
15120	0.023	0.039	0.011	0.002	0.026	0.046	0.048	0.061
15180	0.023	0.041	0.014	0.002	0.027	0.047	0.046	0.065
15240	0.021	0.04	0.011	0.002	0.017	0.046	0.047	0.075
15300	0.021	0.039	0.01	0.001	0.017	0.046	0.05	0.103
15360	0.021	0.309	0.011	0.002	0.025	0.045	0.046	0.059
15420	0.024	0.725	0.012	0.001	0.024	0.047	0.047	0.072
15480	0.021	0.032	0.011	0.003	0.021	0.045	0.173	0.089
15540	0.037	0.031	0.011	0.002	0.026	0.046	0.101	0.127
15600	0.021	0.031	0.012	0.001	0.027	0.047	0.047	0.068
15660	0.054	0.031	0.011	0.002	0.026	0.046	0.047	0.073
15720	0.025	0.054	0.013	0.002	0.027	0.047	0.048	0.107
15780	0.034	0.028	0.013	0.003	0.023	0.046	0.078	0.075
15840	0.025	0.029	0.012	0.002	0.026	0.046	0.074	0.073
15900	0.024	0.027	0.012	0.002	0.021	0.046	0.047	0.211
15960	0.023	0.028	0.012	0.003	0.026	0.046	0.071	0.2
16020	0.021	0.028	0.012	0.002	0.028	0.048	0.054	0.077
16080	0.021	0.026	0.012	0.004	0.026	0.046	0.107	0.061
16140	0.03	0.03	0.013	0.0041	0.031	0.061	0.048	0.059
16200	0.018	0.059	0.012	0.037	0.038	0.048	0.049	0.076
16260	0.02	0.033	0.012	0.035	0.037	0.047	0.046	0.067
16320	0.017	0.034	0.012	0.033	0.025	0.045	0.049	0.062
16380	0.031	0.032	0.012	0.004	0.023	0.043	0.045	0.157
16440	0.021	0.031	0.012	0.004	0.035	0.045	0.047	0.077
16500	0.019	0.116	0.012	0.004	0.033	0.043	0.05	0.076
16560	0.043	0.039	0.011	0.004	0.04	0.042	0.046	0.056
16620	0.029	0.132	0.012	0.004	0.022	0.042	0.049	0.058
16680	0.018	0.03	0.013	0.003	0.029	0.042	0.053	0.057
16740	0.02	0.028	0.012	0.003	0.033	0.043	0.049	0.057
16800	0.018	0.029	0.011	0.003	0.021	0.041	0.046	0.065
16860	0.024	0.028	0.012	0.003	0.032	0.042	0.047	0.061
16920	0.023	0.032	0.012	0.004	0.031	0.041	0.048	0.059
16980	0.023	0.032	0.012	0.045	0.037	0.041	0.046	0.058
17040	0.02	0.079	0.012	0.003	0.031	0.041	0.048	0.056
17100	0.018	0.024	0.012	0.004	0.024	0.04	0.049	0.059
17160	0.018	0.024	0.012	0.004	0.027	0.041	0.056	0.057
17220	0.023	0.027	0.013	0.004	0.028	0.041	0.049	0.058
17280	0.078	0.027	0.012	0.004	0.029	0.042	0.047	0.059
17340	0.037	0.025	0.012	0.003	0.037	0.04	0.047	0.058
17400	0.026	0.026	0.013	0.004	0.03	0.039	0.048	0.058
17460	0.022	0.035	0.013	0.003	0.033	0.039	0.048	0.057
17520	0.04	0.046	0.013	0.005	0.023	0.039	0.049	0.057
17580	0.061	0.035	0.013	0.004	0.031	0.039	0.051	0.06
17640	0.03	0.026	0.012	0.004	0.021	0.041	0.048	0.058
17700	0.033	0.026	0.017	0.004	0.031	0.039	0.05	0.059
17760	0.25	0.029	0.013	0.004	0.033	0.04	0.048	0.059
17820	0.016	0.025	0.012	0.004	0.036	0.039	0.051	0.057
17880	0.038	0.025	0.012	0.003	0.034	0.039	0.048	0.058
17940	0.018	0.026	0.013	0.005	0.04	0.041	0.048	0.057
18000	0.018	0.036	0.116	0.008	0.037	0.047	0.05	0.058
18060	0.021	0.053	0.012	0.003	0.038	0.04	0.048	0.07
18120	0.018	0.067	0.013	0.003	0.033	0.049	0.121	0.058
18180	0.017	0.024	0.014	0.004	0.023	0.063	0.056	0.056
18240	0.019	0.024	0.016	0.024	0.044	0.044	0.049	0.055
18300	0.033	0.033	0.012	0.003	0.037	0.04	0.049	0.056
18360	0.041	0.026	0.012	0.003	0.023	0.043	0.044	0.054
18420	0.027	0.023	0.012	0.003	0.027	0.041	0.045	0.057
18480	0.019	0.021	0.012	0.003	0.034	0.054	0.045	0.055
18540	0.021	0.022	0.012	0.003	0.022	0.052	0.043	0.055
18600	0.018	0.025	0.012	0.004	0.026	0.046	0.044	0.057
18660	0.016	0.038	0.012	0.003	0.033	0.038	0.044	0.116
18720	0.014	0.031	0.011	0.003	0.023	0.043	0.044	0.052
18780	0.014	0.03	0.012	0.003	0.026	0.046	0.043	0.052
18840	0.019	0.025	0.012	0.003	0.031	0.037	0.045	0.053
18900	0.022	0.022	0.012	0.003	0.023	0.063	0.043	0.055
18960	0.036	0.026	0.013	0.002	0.031	0.037	0.043	0.053
19020	0.047	0.022	0.012	0.003	0.051	0.055	0.042	0.053
19080	0.014	0.02	0.013	0.002	0.02	0.04	0.042	0.053
19140	0.025	0.026	0.012	0.003	0.028	0.038	0.044	0.058
19200	0.034	0.023	0.012	0.003	0.028	0.078	0.045	0.125
19260	0.018	0.026	0.012	0.003	0.03	0.06	0.044	0.054
19320	0.02	0.022	0.013	0.003	0.024	0.044	0.041	0.052
19380	0.014	0.021	0.013	0.004	0.041	0.048	0.041	0.055

19440	0.021	0.104	0.013	0.003	0.031	0.038	0.041	0.071
19500	0.03	0.026	0.012	0.004	0.023	0.042	0.04	0.078
19560	0.016	0.068	0.012	0.003	0.023	0.049	0.04	0.053
19620	0.015	0.031	0.012	0.003	0.031	0.035	0.043	0.052
19680	0.016	0.022	0.013	0.003	0.029	0.049	0.039	0.349
19740	0.805	0.074	0.012	0.002	0.031	0.081	0.041	0.092
19800	1.29	0.022	0.012	0.003	0.026	0.036	0.04	0.061
19860	0.053	0.025	0.372	0.003	0.037	0.057	0.041	0.098
19920	0.052	0.021	0.098	0.004	0.025	0.035	0.046	0.077
19980	0.014	0.021	0.013	0.004	0.047	0.057	0.064	0.074
20040	0.063	0.041	0.012	0.003	0.035	0.045	0.045	0.055
20100	0.07	0.038	0.012	0.003	0.034	0.04	0.077	0.069
20160	0.016	0.02	0.013	0.002	0.036	0.056	0.133	0.054
20220	0.02	0.02	0.012	0.004	0.025	0.035	0.055	0.064
20280	0.023	0.021	0.012	0.003	0.026	0.036	0.045	0.083
20340	0.021	0.024	0.012	0.003	0.027	0.04	0.05	0.063
20400	0.032	0.053	0.013	0.002	0.04	0.05	0.042	0.058
20460	0.015	0.035	0.012	0.003	0.041	0.054	0.087	0.164
20520	0.012	0.024	0.012	0.003	0.042	0.082	0.068	0.053
20580	0.012	0.021	0.012	0.002	0.025	0.04	0.07	0.071
20640	0.043	0.021	0.012	0.003	0.027	0.04	0.042	0.145
20700	0.03	0.02	0.012	0.002	0.026	0.066	0.063	0.098
20760	0.036	0.021	0.012	0.002	0.029	0.039	0.072	0.067
20820	0.015	0.019	0.012	0.003	0.041	0.071	0.038	0.086
20880	0.011	0.023	0.013	0.002	0.026	0.036	0.118	0.07
20940	0.012	0.02	0.013	0.003	0.035	0.055	0.039	0.076
21000	0.014	0.023	0.012	0.004	0.024	0.054	0.1	0.059
21060	0.051	0.02	0.012	0.004	0.027	0.037	0.055	0.055
21120	1.65	0.022	0.013	0.003	0.037	0.047	0.041	0.064
21180	0.607	0.036	0.014	0.004	0.028	0.038	0.18	0.074
21240	0.465	0.025	0.013	0.003	0.019	0.039	0.116	0.073
21300	0.3	0.046	0.012	0.003	0.017	0.037	0.07	0.078
21360	0.305	0.021	0.013	0.003	0.029	0.04	0.077	0.066
21420	1.21	0.042	0.013	0.003	0.017	0.037	0.044	0.122
21480	0.021	0.019	0.014	0.003	0.016	0.036	0.056	0.05
21540	0.083	0.021	0.013	0.003	0.026	0.036	0.09	0.052
21600	0.018	0.023	0.014	0.003	0.016	0.036	0.037	0.103
21660	0.015	0.023	0.012	0.004	0.015	0.035	0.066	0.056
21720	0.019	0.021	0.012	0.003	0.016	0.036	0.209	0.111
21780	0.012	0.021	0.013	0.003	0.026	0.036	0.039	0.073
21840	0.012	0.024	0.016	0.003	0.016	0.036	0.115	0.075
21900	0.023	0.019	0.012	0.003	0.026	0.036	0.037	0.176
21960	0.039	0.02	0.012	0.003	0.029	0.039	0.116	0.058
22020	0.028	0.019	0.012	0.003	0.023	0.053	0.073	0.054
22080	0.072	0.019	0.012	0.003	0.033	0.043	0.05	0.047
22140	0.041	0.018	0.013	0.003	0.023	0.04	0.109	0.059
22200	0.013	0.019	0.013	0.003	0.031	0.035	0.036	0.063
22260	0.066	0.018	0.014	0.003	0.031	0.035	0.041	0.049
22320	0.65	0.019	0.013	0.003	0.031	0.036	0.052	0.086
22380	0.017	0.018	0.014	0.003	0.023	0.037	0.089	0.07
22440	0.016	0.018	0.013	0.003	0.027	0.038	0.116	0.062
22500	0.013	0.018	0.013	0.003	0.031	0.041	0.198	0.057
22560	0.002	0.018	0.011	0.003	0.028	0.037	0.054	0.091
22620	0.021	0.023	0.013	0.003	0.018	0.038	0.053	0.066
22680	0.044	0.02	0.015	0.019	0.016	0.036	0.146	0.054
22740	0.052	0.018	0.016	0.02	0.027	0.037	0.044	0.082
22800	0.014	0.018	0.013	0.003	0.018	0.038	0.175	0.054
22860	0.066	0.017	0.019	0.025	0.027	0.037	0.039	0.114
22920	0.036	0.017	0.013	0.003	0.017	0.037	0.102	0.087
22980	0.037	0.017	0.014	0.024	0.027	0.037	0.108	0.048
23040	0.009	0.019	0.013	0.004	0.017	0.037	0.042	0.062
23100	0.049	0.018	0.014	0.004	0.026	0.036	0.083	0.049
23160	0.014	0.018	0.013	0.003	0.017	0.037	0.041	0.071
23220	0.012	0.02	0.013	0.003	0.031	0.036	0.049	0.051
23280	0.06	0.02	0.013	0.003	0.026	0.036	0.04	0.058
23340	0.012	0.018	0.013	0.003	0.029	0.035	0.051	0.058
23400	0.01	0.02	0.013	0.003	0.023	0.034	0.041	0.086
23460	0.006	0.019	0.013	0.003	0.021	0.035	0.039	0.371
23520	0.012	0.02	0.015	0.004	0.021	0.041	0.036	0.084
23580	0.01	0.019	0.013	0.003	0.026	0.034	0.037	0.051
23640	0.017	0.021	0.013	0.003	0.023	0.033	0.037	0.066
23700	0.013	0.018	0.014	0.003	0.024	0.04	0.037	0.062
23760	0.015	0.019	0.013	0.021	0.027	0.034	0.037	0.049
23820	0.01	0.017	0.014	0.029	0.014	0.034	0.037	0.048
23880	0.016	0.018	0.016	0.003	0.015	0.035	0.037	0.053
23940	0.012	0.018	0.014	0.003	0.015	0.035	0.047	0.047
24000	0.011	0.018	0.014	0.024	0.039	0.044	0.1	0.051
24060	0.014	0.018	0.013	0.003	0.023	0.04	0.067	0.047
24120	0.223	0.019	0.013	0.023	0.031	0.035	0.055	0.047
24180	0.012	0.019	0.013	0.023	0.031	0.035	0.038	0.049
24240	0.009	0.019	0.013	0.021	0.031	0.036	0.037	0.05
24300	0.02	0.017	0.013	0.019	0.023	0.037	0.037	0.049
24360	0.076	0.018	0.013	0.021	0.027	0.038	0.039	0.049
24420	0.084	0.017	0.014	0.024	0.031	0.041	0.039	0.048
24480	0.007	0.019	0.014	0.023	0.028	0.037	0.043	0.047
24540	0.02	0.064	0.014	0.025	0.018	0.038	0.039	0.05
24600	0.076	0.118	0.014	0.027	0.016	0.036	0.039	0.05
24660	0.084	0.024	0.014	0.025	0.027	0.037	0.039	0.049
24720	0.014	0.056	0.014	0.024	0.016	0.036	0.038	0.049
24780	0.016	0.027	0.014	0.024	0.023	0.033	0.042	0.048
24840	0.023	0.029	0.014	0.02	0.024	0.04	0.042	0.075
24900	0.01	0.017	0.016	0.021	0.027	0.034	0.039	0.056
24960	0.016	0.018	0.014	0.024	0.014	0.034	0.039	0.048
25020	0.012	0.018	0.013	0.003	0.015	0.035	0.038	0.048
25080	0.014	0.026	0.013	0.023	0.015	0.035	0.038	0.052
25140	0.016	0.027	0.013	0.023	0.039	0.044	0.038	0.06
25200	0.023	0.029	0.013	0.021	0.019	0.034	0.038	0.048

Table 16. Total Dust Monitoring results dated 09/14/11 to 09/19/11

	14-Sep		15-Sep		16-Sep		19-Sep	
Elapsed Time [s]	upwind Mass [mg/m3]	downwind Mass [mg/m3]	upwind Mass [mg/m3]	downwind Mass [mg/m3]	upwind Mass [mg/m3]	downwind Mass [mg/m3]	upwind Mass [mg/m3]	downwind Mass [mg/m3]
60	0.044	0.097	0.077	0.083	0.004	0.015	0.031	0.065
120	0.049	0.084	0.022	0.027	0.009	0.04	0.031	0.032
180	0.05	0.069	0.102	0.185	0.01	0.04	0.031	0.032
240	0.046	0.077	0.086	0.113	0.009	0.043	0.031	0.031
300	0.047	0.092	0.079	0.083	0.009	0.05	0.031	0.032
360	0.045	0.089	0.08	0.091	0.008	0.065	0.031	0.032
420	0.045	0.071	0.08	0.09	0.011	0.046	0.032	0.031
480	0.048	0.068	0.09	0.14	0.009	0.043	0.032	0.033
540	0.05	0.068	0.078	0.081	0.008	0.049	0.03	0.033
600	0.049	0.231	0.077	0.082	0.008	0.038	0.03	0.031
660	0.049	0.064	0.079	0.082	0.007	0.039	0.03	0.031
720	0.055	0.064	0.081	0.083	0.008	0.042	0.031	0.03
780	0.048	0.081	0.081	0.084	0.008	0.038	0.03	0.031
840	0.043	0.077	0.087	0.109	0.007	0.04	0.031	0.031
900	0.045	0.101	0.078	0.082	0.007	0.037	0.033	0.032
960	0.056	0.057	0.079	0.083	0.013	0.037	0.03	0.034
1020	0.044	0.057	0.086	0.088	0.007	0.039	0.03	0.031
1080	0.076	0.14	0.077	0.081	0.007	0.036	0.031	0.031
1140	0.058	0.092	0.083	0.098	0.008	0.038	0.03	0.032
1200	0.046	0.079	0.089	0.114	0.014	0.048	0.029	0.031
1260	0.114	0.065	0.088	0.105	0.015	0.037	0.029	0.03
1320	0.156	0.064	0.084	0.089	0.009	0.035	0.03	0.03
1380	0.095	0.065	0.092	0.123	0.007	0.035	0.03	0.031
1440	0.07	0.061	0.148	0.4	0.006	0.036	0.03	0.031
1500	0.053	0.062	0.176	0.479	0.006	0.036	0.038	0.031
1560	0.106	0.063	0.188	0.537	0.006	0.035	0.03	0.039
1620	0.041	0.069	0.092	0.098	0.006	0.035	0.031	0.031
1680	0.04	0.066	0.091	0.095	0.006	0.033	0.03	0.031
1740	0.038	0.062	0.11	0.183	0.007	0.035	0.03	0.03
1800	0.036	0.06	0.112	0.189	0.007	0.034	0.03	0.031
1860	0.037	0.06	0.092	0.096	0.007	0.035	0.03	0.031
1920	0.038	0.06	0.093	0.103	0.008	0.035	0.03	0.031
1980	0.039	0.061	0.092	0.098	0.006	0.035	0.03	0.031
2040	0.038	0.061	0.09	0.095	0.007	0.034	0.03	0.031
2100	0.042	0.063	0.089	0.092	0.007	0.037	0.03	0.031
2160	0.046	0.061	0.088	0.092	0.008	0.036	0.03	0.031
2220	0.038	0.064	0.086	0.088	0.008	0.034	0.029	0.031
2280	0.038	0.062	0.084	0.087	0.006	0.033	0.029	0.029
2340	0.054	0.061	0.084	0.086	0.007	0.032	0.031	0.03
2400	0.039	0.074	0.084	0.085	0.007	0.035	0.029	0.032
2460	0.034	0.062	0.083	0.086	0.007	0.034	0.029	0.03
2520	0.035	0.06	0.08	0.082	0.008	0.035	0.028	0.03
2580	0.035	0.075	0.079	0.082	0.008	0.037	0.028	0.029
2640	0.033	0.14	0.081	0.082	0.008	0.034	0.029	0.028
2700	0.037	0.09	0.082	0.087	0.008	0.035	0.028	0.03
2760	0.032	0.086	0.085	0.099	0.008	0.035	0.029	0.029
2820	0.031	0.078	0.084	0.103	0.009	0.034	0.028	0.03
2880	0.034	0.112	0.083	0.095	0.008	0.033	0.029	0.029
2940	0.051	0.065	0.081	0.086	0.007	0.033	0.029	0.03
3000	0.042	0.065	0.08	0.088	0.009	0.034	0.03	0.03
3060	0.044	0.072	0.078	0.082	0.008	0.034	0.029	0.031
3120	0.105	0.133	0.078	0.081	0.008	0.035	0.036	0.03
3180	0.04	0.081	0.08	0.088	0.008	0.045	0.036	0.037
3240	0.039	0.348	0.078	0.082	0.007	0.034	0.031	0.037
3300	0.055	0.174	0.073	0.076	0.008	0.034	0.033	0.031
3360	0.046	0.17	0.075	0.077	0.008	0.034	0.033	0.034
3420	0.044	0.722	0.074	0.077	0.007	0.034	0.03	0.034
3480	0.043	0.122	0.077	0.094	0.008	0.033	0.037	0.031
3540	0.031	0.161	0.072	0.081	0.009	0.034	0.031	0.037
3600	0.042	0.057	0.076	0.081	0.075	0.077	0.03	0.031
3660	0.029	0.064	0.069	0.071	0.007	0.035	0.029	0.031
3720	0.031	0.067	0.061	0.073	0.008	0.036	0.029	0.03
3780	0.032	0.069	0.074	0.095	0.008	0.035	0.031	0.029
3840	0.033	0.083	0.063	0.068	0.008	0.036	0.028	0.032
3900	0.042	0.065	0.058	0.06	0.008	0.033	0.028	0.029
3960	0.032	0.062	0.065	0.103	0.007	0.033	0.027	0.029
4020	0.029	0.064	0.062	0.08	0.006	0.036	0.028	0.028
4080	0.032	0.091	0.055	0.058	0.007	0.035	0.029	0.029
4140	0.032	0.082	0.056	0.058	0.008	0.033	0.028	0.03
4200	0.037	0.105	0.057	0.06	0.007	0.032	0.028	0.029
4260	0.046	0.098	0.061	0.066	0.007	0.031	0.027	0.029
4320	0.069	0.077	0.058	0.061	0.008	0.034	0.028	0.028
4380	0.041	0.068	0.054	0.056	0.007	0.032	0.027	0.028
4440	0.047	0.063	0.056	0.06	0.007	0.032	0.027	0.028
4500	0.036	0.062	0.056	0.058	0.007	0.032	0.028	0.028
4560	0.034	0.062	0.06	0.064	0.008	0.032	0.028	0.029
4620	0.031	0.095	0.056	0.058	0.007	0.034	0.027	0.029
4680	0.031	0.074	0.053	0.056	0.006	0.034	0.027	0.028
4740	0.026	0.062	0.044	0.048	0.006	0.033	0.028	0.028
4800	0.025	0.061	0.042	0.045	0.007	0.04	0.028	0.029
4860	0.025	0.062	0.042	0.048	0.006	0.04	0.027	0.028
4920	0.03	0.063	0.04	0.048	0.007	0.034	0.027	0.028
4980	0.034	0.062	0.049	0.075	0.007	0.036	0.028	0.028
5040	0.023	0.062	0.148	0.532	0.006	0.037	0.027	0.029
5100	0.023	0.062	0.057	0.102	0.007	0.034	0.027	0.028
5160	0.024	0.08	0.051	0.079	0.007	0.04	0.027	0.028
5220	0.024	0.088	0.041	0.046	0.007	0.035	0.027	0.028
5280	0.025	0.09	0.041	0.053	0.006	0.035	0.027	0.028
5340	0.023	0.082	0.039	0.042	0.006	0.032	0.028	0.028
5400	0.025	0.082	0.038	0.042	0.009	0.033	0.027	0.028
5460	0.029	0.101	0.035	0.037	0.007	0.034	0.028	0.028
5520	0.037	0.058	0.055	0.15	0.008	0.032	0.027	0.028
5580	0.03	0.061	0.037	0.045	0.006	0.032	0.027	0.028
5640	0.043	0.084	0.15	0.589	0.006	0.029	0.027	0.027
5700	0.074	0.093	0.042	0.085	0.008	0.031	0.027	0.028
5760	0.031	0.075	0.067	0.185	0.008	0.032	0.027	0.028
5820	0.021	0.064	0.154	0.626	0.006	0.032	0.027	0.028
5880	0.019	0.187	0.088	0.31	0.006	0.031	0.027	0.028
5940	0.032	0.104	0.045	0.119	0.008	0.031	0.028	0.028
6000	0.026	0.094	0.044	0.09	0.007	0.031	0.028	0.029
6060	0.03	0.104	0.047	0.132	0.006	0.031	0.027	0.029
6120	0.024	0.071	0.038	0.06	0.006	0.031	0.027	0.028
6180	0.029	0.057	0.051	0.102	0.006	0.032	0.028	0.028
6240	0.026	0.073	0.041	0.09	0.006	0.032	0.028	0.029
6300	0.029	0.078	0.034	0.052	0.007	0.031	0.028	0.029

6360	0.037	0.11	0.03	0.033	0.006	0.031	0.028	0.029
6420	0.021	0.081	0.03	0.032	0.007	0.032	0.028	0.029
6480	0.019	0.064	0.03	0.036	0.007	0.032	0.028	0.029
6540	0.022	0.056	0.028	0.031	0.006	0.031	0.028	0.029
6600	0.025	0.058	0.028	0.03	0.006	0.031	0.028	0.028
6660	0.022	0.053	0.028	0.032	0.007	0.032	0.029	0.028
6720	0.021	0.059	0.029	0.032	0.006	0.031	0.028	0.029
6780	0.022	0.069	0.036	0.054	0.006	0.03	0.028	0.029
6840	0.024	0.072	0.06	0.202	0.009	0.031	0.027	0.029
6900	0.021	0.062	0.033	0.056	0.006	0.031	0.028	0.028
6960	0.02	0.054	0.031	0.04	0.006	0.031	0.028	0.028
7020	0.023	0.056	0.03	0.035	0.006	0.031	0.028	0.029
7080	0.021	0.053	0.03	0.034	0.006	0.031	0.028	0.029
7140	0.019	0.054	0.03	0.034	0.006	0.032	0.028	0.029
7200	0.026	0.057	0.032	0.041	0.055	0.072	0.028	0.029
7260	0.019	0.058	0.032	0.04	0.006	0.03	0.027	0.029
7320	0.018	0.061	0.039	0.056	0.005	0.031	0.029	0.028
7380	0.016	0.079	0.032	0.035	0.006	0.03	0.028	0.029
7440	0.014	0.055	0.039	0.045	0.006	0.03	0.028	0.029
7500	0.018	0.062	0.054	0.061	0.006	0.03	0.028	0.029
7560	0.021	0.058	0.049	0.052	0.005	0.031	0.028	0.029
7620	0.02	0.055	0.053	0.056	0.006	0.032	0.028	0.029
7680	0.021	0.052	0.053	0.057	0.006	0.033	0.028	0.029
7740	0.02	0.069	0.051	0.056	0.006	0.031	0.028	0.028
7800	0.015	0.051	0.05	0.054	0.005	0.031	0.029	0.029
7860	0.015	0.052	0.047	0.048	0.007	0.032	0.029	0.029
7920	0.022	0.05	0.045	0.05	0.006	0.032	0.029	0.029
7980	0.021	0.05	0.045	0.055	0.006	0.032	0.029	0.029
8040	0.032	0.052	0.042	0.044	0.005	0.032	0.028	0.03
8100	0.016	0.056	0.04	0.042	0.005	0.033	0.029	0.029
8160	0.016	0.055	0.039	0.042	0.005	0.032	0.029	0.03
8220	0.015	0.056	0.048	0.083	0.006	0.031	0.029	0.03
8280	0.016	0.053	0.042	0.059	0.005	0.031	0.029	0.03
8340	0.016	0.059	0.05	0.105	0.004	0.033	0.029	0.03
8400	0.016	0.057	0.039	0.049	0.005	0.032	0.03	0.03
8460	0.021	0.066	0.038	0.043	0.005	0.032	0.029	0.031
8520	0.018	0.059	0.058	0.134	0.004	0.031	0.029	0.03
8580	0.023	0.051	0.128	0.462	0.004	0.032	0.03	0.03
8640	0.022	0.049	0.038	0.043	0.005	0.032	0.03	0.031
8700	0.02	0.06	0.042	0.073	0.003	0.032	0.03	0.031
8760	0.019	0.056	0.037	0.044	0.004	0.032	0.029	0.031
8820	0.019	0.053	0.036	0.044	0.004	0.032	0.029	0.03
8880	0.013	0.059	0.035	0.042	0.003	0.033	0.029	0.03
8940	0.014	0.057	0.045	0.096	0.006	0.031	0.029	0.03
9000	0.019	0.052	0.036	0.04	0.004	0.032	0.029	0.03
9060	0.017	0.051	0.034	0.039	0.004	0.032	0.03	0.03
9120	0.016	0.053	0.034	0.038	0.005	0.033	0.03	0.031
9180	0.019	0.054	0.035	0.038	0.005	0.032	0.029	0.031
9240	0.021	0.053	0.035	0.037	0.005	0.032	0.029	0.03
9300	0.018	0.051	0.035	0.037	0.004	0.032	0.029	0.03
9360	0.015	0.051	0.034	0.036	0.004	0.031	0.03	0.03
9420	0.015	0.056	0.035	0.039	0.007	0.032	0.03	0.031
9480	0.016	0.057	0.034	0.036	0.004	0.032	0.03	0.031
9540	0.016	0.075	0.035	0.043	0.005	0.033	0.029	0.031
9600	0.013	0.051	0.033	0.036	0.005	0.032	0.03	0.03
9660	0.027	0.05	0.033	0.038	0.004	0.034	0.03	0.031
9720	0.049	0.049	0.034	0.04	0.005	0.033	0.03	0.03
9780	0.021	0.051	0.033	0.036	0.005	0.033	0.029	0.031
9840	0.019	0.054	0.034	0.037	0.004	0.033	0.03	0.03
9900	0.014	0.05	0.033	0.037	0.004	0.032	0.03	0.031
9960	0.014	0.053	0.034	0.037	0.003	0.033	0.03	0.031
10020	0.015	0.055	0.035	0.042	0.004	0.033	0.029	0.031
10080	0.014	0.052	0.035	0.041	0.003	0.034	0.029	0.03
10140	0.016	0.051	0.036	0.04	0.004	0.033	0.03	0.03
10200	0.013	0.056	0.037	0.044	0.003	0.034	0.03	0.031
10260	0.02	0.057	0.04	0.059	0.003	0.034	0.03	0.031
10320	0.017	0.055	0.054	0.118	0.003	0.035	0.03	0.031
10380	0.015	0.057	0.042	0.065	0.005	0.034	0.029	0.031
10440	0.018	0.055	0.059	0.145	0.004	0.032	0.03	0.03
10500	0.018	0.053	0.044	0.066	0.004	0.034	0.03	0.031
10560	0.02	0.06	0.04	0.047	0.005	0.032	0.029	0.031
10620	0.024	0.053	0.043	0.056	0.004	0.033	0.033	0.03
10680	0.023	0.062	0.041	0.045	0.003	0.034	0.041	0.033
10740	0.025	0.085	0.059	0.133	0.004	0.034	0.052	0.042
10800	0.019	0.054	0.052	0.12	0.002	0.034	0.057	0.053
10860	0.015	0.048	0.05	0.09	0.003	0.034	0.043	0.058
10920	0.016	0.054	0.042	0.048	0.002	0.033	0.042	0.044
10980	0.024	0.052	0.042	0.049	0.003	0.034	0.031	0.043
11040	0.026	0.07	0.042	0.047	0.003	0.034	0.03	0.032
11100	0.019	0.056	0.05	0.085	0.004	0.034	0.03	0.031
11160	0.013	0.089	0.044	0.055	0.004	0.033	0.03	0.031
11220	0.016	0.054	0.044	0.05	0.004	0.034	0.029	0.031
11280	0.012	0.066	0.044	0.053	0.003	0.035	0.03	0.03
11340	0.014	0.057	0.067	0.159	0.004	0.033	0.029	0.031
11400	0.016	0.063	0.044	0.052	0.003	0.033	0.03	0.03
11460	0.016	0.054	0.043	0.045	0.001	0.034	0.031	0.03
11520	0.015	0.051	0.043	0.047	0.003	0.035	0.035	0.032
11580	0.021	0.049	0.044	0.051	0.007	0.035	0.037	0.035
11640	0.014	0.054	0.043	0.046	0.002	0.034	0.036	0.038
11700	0.012	0.075	0.048	0.071	0.001	0.033	0.031	0.037
11760	0.098	0.055	0.068	0.155	0.002	0.033	0.03	0.032
11820	0.02	0.064	0.05	0.086	0.001	0.034	0.031	0.03
11880	0.014	0.12	0.046	0.065	0.001	0.033	0.03	0.032
11940	0.022	0.069	0.048	0.067	0.003	0.034	0.03	0.031
12000	0.019	0.154	0.05	0.092	0.002	0.034	0.029	0.03
12060	0.014	0.06	0.059	0.13	0.003	0.034	0.029	0.029
12120	0.037	0.059	0.068	0.153	0.002	0.034	0.029	0.03
12180	0.014	0.134	0.043	0.047	0.001	0.033	0.029	0.03
12240	0.025	0.05	0.044	0.049	0.002	0.033	0.029	0.03
12300	0.018	0.048	0.042	0.046	0.002	0.036	0.029	0.03
12360	0.016	0.052	0.042	0.044	0.001	0.045	0.03	0.03
12420	0.014	0.048	0.043	0.048	0.012	0.056	0.039	0.031
12480	0.027	0.048	0.041	0.043	0.003	0.06	0.035	0.04
12540	0.015	0.05	0.042	0.044	0.001	0.047	0.03	0.036
12600	0.01	0.063	0.042	0.047	0.002	0.046	0.03	0.03
12660	0.011	0.064	0.045	0.055	0.002	0.035	0.031	0.031
12720	0.011	0.049	0.042	0.047	0.011	0.033	0.029	0.031
12780	0.012	0.051	0.042	0.048	0.003	0.034	0.03	0.03
12840	0.01	0.055	0.044	0.052	0.001	0.033	0.03	0.031

12900	0.015	0.051	0.043	0.047	0.001	0.034	0.03	0.031
12960	0.016	0.048	0.043	0.05	0.001	0.035	0.031	0.031
13020	0.012	0.066	0.042	0.045	0.001	0.034	0.031	0.032
13080	0.012	0.062	0.043	0.046	0.001	0.034	0.03	0.031
13140	0.013	0.048	0.043	0.045	0.003	0.035	0.031	0.031
13200	0.016	0.051	0.043	0.046	0.001	0.039	0.029	0.031
13260	0.012	0.049	0.043	0.046	0.001	0.042	0.03	0.03
13320	0.013	0.05	0.043	0.046	0.001	0.04	0.03	0.03
13380	0.014	0.049	0.043	0.053	0.002	0.036	0.031	0.03
13440	0.011	0.049	0.042	0.044	0	0.033	0.03	0.032
13500	0.014	0.051	0.042	0.045	0.002	0.035	0.031	0.031
13560	0.012	0.048	0.048	0.066	0.001	0.035	0.03	0.032
13620	0.02	0.088	0.043	0.046	0.001	0.034	0.03	0.031
13680	0.018	0.052	0.043	0.046	0.001	0.032	0.03	0.031
13740	0.013	0.056	0.044	0.047	0	0.034	0.03	0.031
13800	0.014	0.05	0.045	0.049	0.003	0.034	0.03	0.031
13860	0.014	0.057	0.044	0.047	0.001	0.033	0.03	0.031
13920	0.02	0.049	0.046	0.05	0.002	0.033	0.03	0.031
13980	0.015	0.058	0.045	0.048	0.002	0.034	0.029	0.031
14040	0.015	0.079	0.045	0.051	0.002	0.034	0.03	0.03
14100	0.018	0.066	0.046	0.049	0.001	0.044	0.029	0.031
14160	0.014	0.059	0.045	0.048	0.001	0.039	0.03	0.03
14220	0.012	0.063	0.047	0.054	0.002	0.034	0.031	0.031
14280	0.013	0.064	0.047	0.058	0.001	0.035	0.032	0.032
14340	0.015	0.053	0.045	0.052	0.002	0.034	0.031	0.033
14400	0.025	0.053	0.044	0.048	0.001	0.033	0.03	0.031
14460	0.017	0.051	0.043	0.046	0.001	0.033	0.031	0.031
14520	0.049	0.05	0.046	0.057	0.003	0.034	0.03	0.032
14580	0.034	0.05	0.045	0.054	0.002	0.034	0.029	0.031
14640	0.019	0.05	0.041	0.044	0.001	0.036	0.03	0.03
14700	0.016	0.05	0.041	0.048	0.002	0.035	0.03	0.031
14760	0.025	0.051	0.04	0.045	0.001	0.036	0.029	0.03
14820	0.018	0.053	0.04	0.045	0	0.036	0.029	0.03
14880	0.013	0.051	0.04	0.048	0.002	0.033	0.03	0.03
14940	0.014	0.051	0.039	0.043	0.001	0.033	0.03	0.031
15000	0.013	0.05	0.038	0.042	0.002	0.034	0.029	0.031
15060	0.014	0.05	0.038	0.041	0.002	0.035	0.03	0.03
15120	0.014	0.049	0.04	0.047	0.002	0.034	0.03	0.031
15180	0.015	0.051	0.039	0.047	0.002	0.035	0.03	0.031
15240	0.014	0.048	0.038	0.043	0.001	0.033	0.03	0.031
15300	0.014	0.048	0.044	0.055	0.002	0.034	0.031	0.031
15360	0.014	0.048	0.042	0.069	0.001	0.034	0.03	0.032
15420	0.014	0.051	0.037	0.041	0.003	0.035	0.03	0.031
15480	0.012	0.048	0.036	0.039	0.002	0.035	0.03	0.031
15540	0.013	0.048	0.037	0.041	0.001	0.034	0.03	0.031
15600	0.015	0.05	0.037	0.042	0.002	0.033	0.03	0.03
15660	0.013	0.047	0.039	0.051	0.002	0.034	0.03	0.031
15720	0.014	0.049	0.045	0.079	0.003	0.034	0.029	0.031
15780	0.012	0.048	0.037	0.043	0.002	0.033	0.03	0.03
15840	0.013	0.049	0.036	0.039	0.002	0.034	0.031	0.03
15900	0.013	0.049	0.037	0.039	0.003	0.036	0.033	0.032
15960	0.014	0.05	0.037	0.04	0.003	0.039	0.035	0.034
16020	0.011	0.05	0.036	0.04	0.004	0.035	0.031	0.036
16080	0.01	0.051	0.036	0.038	0.004	0.034	0.03	0.032
16140	0.012	0.051	0.036	0.038	0.004	0.036	0.031	0.031
16200	0.012	0.052	0.036	0.037	0.004	0.034	0.03	0.032
16260	0.011	0.05	0.036	0.04	0.004	0.033	0.03	0.031
16320	0.012	0.052	0.035	0.038	0.004	0.034	0.03	0.031
16380	0.013	0.05	0.036	0.042	0.004	0.034	0.03	0.031
16440	0.013	0.051	0.035	0.039	0.004	0.032	0.03	0.031
16500	0.015	0.052	0.035	0.039	0.004	0.034	0.032	0.03
16560	0.013	0.05	0.035	0.037	0.004	0.035	0.031	0.033
16620	0.014	0.05	0.034	0.036	0.003	0.035	0.031	0.032
16680	0.013	0.049	0.034	0.037	0.003	0.034	0.03	0.032
16740	0.016	0.05	0.033	0.035	0.003	0.034	0.03	0.031
16800	0.128	0.05	0.034	0.045	0.003	0.034	0.029	0.03
16860	0.033	0.05	0.032	0.036	0.004	0.034	0.029	0.03
16920	0.06	0.051	0.032	0.036	0.005	0.035	0.03	0.03
16980	0.042	0.051	0.033	0.038	0.003	0.035	0.03	0.031
17040	0.02	0.054	0.032	0.035	0.004	0.034	0.03	0.031
17100	0.029	0.05	0.032	0.034	0.004	0.034	0.03	0.031
17160	0.015	0.051	0.031	0.033	0.004	0.034	0.03	0.031
17220	0.013	0.051	0.031	0.034	0.004	0.034	0.03	0.031
17280	0.016	0.067	0.031	0.033	0.003	0.035	0.029	0.031
17340	0.03	0.05	0.034	0.051	0.004	0.036	0.03	0.03
17400	0.017	0.049	0.033	0.046	0.003	0.033	0.03	0.031
17460	0.021	0.049	0.031	0.04	0.005	0.034	0.03	0.031
17520	0.025	0.05	0.031	0.034	0.004	0.036	0.03	0.031
17580	0.034	0.052	0.03	0.033	0.004	0.037	0.03	0.03
17640	0.087	0.049	0.03	0.033	0.004	0.039	0.031	0.031
17700	0.021	0.049	0.03	0.033	0.004	0.035	0.03	0.032
17760	0.03	0.05	0.031	0.035	0.004	0.034	0.03	0.031
17820	0.059	0.05	0.03	0.033	0.003	0.035	0.029	0.031
17880	0.093	0.052	0.03	0.032	0.005	0.034	0.03	0.03
17940	0.028	0.05	0.03	0.032	0.008	0.035	0.03	0.031
18000	0.022	0.054	0.03	0.033	0.003	0.034	0.029	0.03
18060	0.021	0.051	0.029	0.031	0.003	0.034	0.031	0.03
18120	0.015	0.052	0.03	0.036	0.004	0.033	0.03	0.032
18180	0.017	0.052	0.031	0.043	0.004	0.037	0.03	0.031
18240	0.08	0.051	0.03	0.034	0.003	0.035	0.03	0.031
18300	0.019	0.055	0.031	0.036	0.003	0.035	0.029	0.031
18360	0.018	0.058	0.031	0.038	0.003	0.035	0.029	0.03
18420	0.019	0.052	0.032	0.045	0.003	0.034	0.03	0.03
18480	0.018	0.071	0.032	0.039	0.003	0.033	0.03	0.03
18540	0.021	0.113	0.031	0.043	0.004	0.033	0.029	0.03
18600	0.025	0.051	0.035	0.066	0.003	0.034	0.03	0.03
18660	0.034	0.058	0.032	0.042	0.003	0.035	0.03	0.031
18720	0.018	0.065	0.035	0.042	0.003	0.034	0.03	0.031
18780	0.02	0.061	0.046	0.09	0.003	0.035	0.029	0.03
18840	0.038	0.057	0.009	0.012	0.003	0.034	0.029	0.03
18900	0.019	0.102	0.023	0.024	0.002	0.035	0.03	0.03
18960	0.018	0.06	0.011	0.011	0.003	0.033	0.031	0.031
19020	0.062	0.105	0.012	0.013	0.002	0.035	0.029	0.032
19080	0.028	0.106	0.007	0.007	0.003	0.034	0.029	0.03
19140	0.025	0.058	0.008	0.008	0.003	0.034	0.029	0.03
19200	0.054	0.053	0.015	0.018	0.003	0.034	0.03	0.03
19260	0.032	0.066	0.014	0.018	0.003	0.034	0.029	0.031
19320	0.04	0.055	0.016	0.017	0.004	0.036	0.03	0.03
19380	0.03	0.055	0.018	0.018	0.003	0.033	0.03	0.03

19440	0.063	0.057	0.014	0.015	0.004	0.034	0.03	0.031
19500	0.057	0.055	0.014	0.015	0.003	0.033	0.029	0.031
19560	0.058	0.051	0.013	0.014	0.003	0.033	0.029	0.03
19620	0.1	0.066	0.013	0.014	0.003	0.034	0.029	0.029
19680	0.024	0.066	0.013	0.013	0.002	0.033	0.029	0.03
19740	0.017	0.053	0.013	0.014	0.003	0.035	0.029	0.03
19800	0.025	0.054	0.012	0.013	0.003	0.034	0.028	0.03
19860	0.037	0.052	0.011	0.011	0.004	0.035	0.029	0.029
19920	0.022	0.062	0.012	0.012	0.004	0.034	0.029	0.029
19980	0.022	0.061	0.012	0.014	0.003	0.033	0.028	0.029
20040	0.019	0.052	0.012	0.012	0.003	0.033	0.028	0.029
20100	0.028	0.052	0.012	0.013	0.002	0.034	0.032	0.029
20160	0.02	0.064	0.011	0.011	0.004	0.034	0.03	0.033
20220	0.054	0.054	0.012	0.012	0.003	0.034	0.029	0.031
20280	0.018	0.052	0.012	0.012	0.003	0.034	0.03	0.03
20340	0.018	0.052	0.015	0.016	0.002	0.034	0.029	0.03
20400	0.02	0.051	0.013	0.013	0.003	0.034	0.029	0.03
20460	0.028	0.062	0.012	0.012	0.003	0.033	0.028	0.03
20520	0.025	0.068	0.012	0.012	0.002	0.034	0.029	0.029
20580	0.021	0.057	0.011	0.011	0.003	0.034	0.034	0.03
20640	0.019	0.053	0.011	0.011	0.002	0.036	0.029	0.035
20700	0.019	0.051	0.011	0.011	0.002	0.033	0.028	0.03
20760	0.025	0.051	0.011	0.013	0.003	0.032	0.029	0.029
20820	0.028	0.051	0.011	0.011	0.002	0.033	0.033	0.03
20880	0.018	0.052	0.01	0.011	0.003	0.033	0.033	0.034
20940	0.016	0.062	0.01	0.011	0.004	0.033	0.032	0.034
21000	0.021	0.072	0.01	0.011	0.004	0.034	0.031	0.033
21060	0.019	0.062	0.011	0.011	0.003	0.035	0.029	0.032
21120	0.019	0.056	0.011	0.012	0.004	0.034	0.029	0.03
21180	0.017	0.059	0.011	0.012	0.003	0.033	0.03	0.03
21240	0.018	0.054	0.011	0.011	0.003	0.032	0.029	0.031
21300	0.023	0.053	0.011	0.011	0.003	0.032	0.03	0.03
21360	0.021	0.059	0.011	0.012	0.003	0.033	0.029	0.031
21420	0.026	0.055	0.01	0.011	0.003	0.033	0.03	0.03
21480	0.02	0.054	0.011	0.011	0.003	0.032	0.03	0.031
21540	0.016	0.056	0.01	0.011	0.003	0.032	0.029	0
21600	0.016	0.053	0.011	0.011	0.004	0.032	0.03	0
21660	0.019	0.053	0.01	0.01	0.003	0.032	0.029	0
21720	0.021	0.062	0.01	0.011	0.003	0.033	0.029	0
21780	0.018	0.055	0.012	0.013	0.003	0.038	0.028	0.001
21840	0.017	0.054	0.022	0.038	0.003	0.035	0.029	0
21900	0.018	0.062	0.027	0.03	0.003	0.034	0.034	0
21960	0.017	0.052	0.028	0.03	0.003	0.034	0.029	0
22020	0.021	0.054	0.031	0.036	0.003	0.033	0.028	0.013
22080	0.018	0.061	0.028	0.03	0.003	0.033	0.029	0.003
22140	0.017	0.052	0.028	0.029	0.003	0.032	0.033	0
22200	0.022	0.066	0.027	0.028	0.003	0.033	0.033	0.002
22260	0.018	0.054	0.027	0.029	0.003	0.039	0.032	0.004
22320	0.016	0.052	0.027	0.028	0.003	0.035	0.031	0
22380	0.023	0.051	0.026	0.029	0.003	0.032	0.029	0
22440	0.016	0.052	0.029	0.04	0.003	0.033	0.029	0
22500	0.018	0.053	0.029	0.04	0.003	0.044	0.03	0
22560	0.015	0.053	0.026	0.031	0.003	0.047	0.029	0.001
22620	0.017	0.052	0.026	0.031	0.004	0.044	0.03	0.001
22680	0.016	0.055	0.035	0.062	0.004	0.04	0.031	0.001
22740	0.016	0.055	0.029	0.042	0.003	0.034	0.029	0
22800	0.015	0.053	0.026	0.037	0.005	0.033	0.029	0.008
22860	0.016	0.052	0.025	0.029	0.003	0.034	0.029	0.012
22920	0.016	0.052	0.024	0.028	0.005	0.033	0.03	0.016
22980	0.016	0.053	0.024	0.026	0.004	0.035	0.029	0.001
23040	0.015	0.053	0.024	0.028	0.004	0.034	0.03	0.002
23100	0.017	0.055	0.023	0.026	0.033	0.045	0.03	0.006
23160	0.015	0.053	0.023	0.025			0.03	0.044
23220	0.015	0.052	0.022	0.025			0.029	0.007
23280	0.015	0.052	0.022	0.024	0.002	0.034	0.029	0.001
23340	0.016	0.051	0.022	0.024	0.003	0.034	0.029	0
23400	0.015	0.054	0.022	0.025	0.003	0.033	0.029	0
23460	0.015	0.053	0.021	0.023	0.002	0.034	0.029	0
23520	0.017	0.076	0.021	0.023	0.003	0.034	0.028	0
23580	0.016	0.052	0.021	0.022	0.002	0.036	0.029	0.097
23640	0.015	0.053	0.02	0.022	0.002	0.033	0.003	0.007
23700	0.017	0.055	0.02	0.022	0.003	0.032	0.029	0
23760	0.015	0.053	0.022	0.027	0.003	0.033	0.029	0.001
23820	0.015	0.052	0.021	0.023	0.002	0.034	0.028	0.001
23880	0.015	0.052	0.021	0.023	0.003	0.034	0.029	0.001
23940	0.016	0.051	0.021	0.022	0.005	0.035	0.03	0.016
24000	0.015	0.053	0.032	0.049	0.003	0.035	0.029	0.001
24060	0.017	0.052	0.021	0.025	0.004	0.034	0.032	0.004
24120	0.016	0.055	0.021	0.024	0.004	0.034	0.031	0
24180	0.018	0.061	0.021	0.022	0.004	0.034	0.029	0
24240	0.017	0.052	0.021	0.022	0.004	0.034	0.029	0
24300	0.022	0.066	0.021	0.023	0.003	0.034	0.03	0
24360	0.018	0.054	0.022	0.026	0.003	0.033	0.029	0.001
24420	0.016	0.052	0.021	0.022	0.003	0.039	0.03	0.016
24480	0.023	0.051	0.021	0.022	0.003	0.034	0.029	0.001
24540	0.016	0.052	0.021	0.022	0.003	0.034	0.029	0.012
24600	0.018	0.053	0.021	0.022	0.003	0.034	0.03	0.016
24660	0.015	0.053	0.021	0.023	0.003	0.033	0.029	0.001
24720	0.017	0.052	0.033	0.047	0.003	0.039	0.03	0.002
24780	0.016	0.055	0.021	0.023	0.003	0.035	0.03	0.006
24840	0.016	0.055	0.021	0.022	0.003	0.032	0.03	0.044
24900	0.015	0.053	0.032	0.049	0.003	0.033	0.029	0.007
24960	0.016	0.052	0.021	0.025	0.004	0.034	0.029	0.001
25020	0.016	0.052	0.021	0.023	0.004	0.034	0.029	0
25080	0.016	0.055	0.021	0.023	0.003	0.035	0.029	0.008
25140	0.016	0.051	0.021	0.022	0.004	0.036	0.029	0.012
25200	0.015	0.05	0.021	0.022	0.003	0.033	0.03	0.016

Table 17. Total Dust Monitoring results dated 09/20/11 to 09/27/11.

	20-Sep		21-Sep		26-Sep		27-Sep	
Elapsed Time [s]	upwind Mass [mg/m3]	downwind Mass [mg/m3]	upwind Mass [mg/m3]	downwind Mass [mg/m3]	upwind Mass [mg/m3]	downwind Mass [mg/m3]	upwind Mass [mg/m3]	downwind Mass [mg/m3]
60	0.033	0.044	0.095	0.107	0.021	0.037	0.075	0.087
120	0.016	0.019	0.108	0.11	0.028	0.029	0.072	0.08
180	0.016	0.018	0.105	0.107	0.028	0.029	0.068	0.077
240	0.017	0.019	0.104	0.106	0.027	0.028	0.072	0.071
300	0.02	0.022	0.097	0.099	0.026	0.027	0.068	0.07
360	0.028	0.031	0.092	0.094	0.025	0.026	0.069	0.068
420	0.021	0.026	0.088	0.09	0.025	0.026	0.068	0.065
480	0.018	0.02	0.085	0.086	0.024	0.026	0.074	0.063
540	0.019	0.022	0.085	0.086	0.024	0.024	0.071	0.063
600	0.019	0.021	0.083	0.085	0.023	0.025	0.071	0.063
660	0.019	0.021	0.081	0.084	0.023	0.024	0.067	0.058
720	0.018	0.02	0.084	0.087	0.022	0.024	0.066	0.056
780	0.015	0.018	0.083	0.085	0.022	0.023	0.065	0.055
840	0.014	0.017	0.082	0.084	0.022	0.023	0.069	0.056
900	0.014	0.016	0.104	0.107	0.021	0.023	0.065	0.056
960	0.014	0.017	0.082	0.083	0.021	0.023	0.066	0.055
1020	0.014	0.016	0.088	0.09	0.021	0.023	0.067	0.056
1080	0.015	0.017	0.076	0.078	0.022	0.023	0.068	0.055
1140	0.015	0.017	0.072	0.074	0.022	0.023	0.071	0.058
1200	0.016	0.021	0.068	0.069	0.022	0.024	0.064	0.052
1260	0.016	0.02	0.065	0.067	0.021	0.023	0.066	0.052
1320	0.015	0.018	0.064	0.071	0.022	0.023	0.067	0.055
1380	0.014	0.016	0.062	0.063	0.022	0.024	0.064	0.053
1440	0.012	0.014	0.061	0.063	0.037	0.039	0.064	0.052
1500	0.012	0.015	0.063	0.065	0.022	0.023	0.066	0.051
1560	0.013	0.018	0.068	0.069	0.023	0.024	0.07	0.053
1620	0.013	0.016	0.072	0.074	0.022	0.024	0.065	0.051
1680	0.013	0.015	0.073	0.074	0.022	0.023	0.064	0.053
1740	0.013	0.015	0.072	0.073	0.022	0.023	0.066	0.053
1800	0.013	0.017	0.073	0.076	0.022	0.023	0.075	0.052
1860	0.012	0.015	0.072	0.075	0.022	0.023	0.069	0.052
1920	0.013	0.016	0.068	0.072	0.022	0.023	0.073	0.053
1980	0.012	0.014	0.068	0.071	0.022	0.022	0.069	0.053
2040	0.011	0.013	0.069	0.071	0.021	0.022	0.067	0.051
2100	0.012	0.016	0.069	0.072	0.021	0.022	0.064	0.05
2160	0.012	0.014	0.067	0.069	0.021	0.023	0.066	0.051
2220	0.012	0.015	0.067	0.069	0.021	0.023	0.064	0.05
2280	0.011	0.013	0.068	0.07	0.021	0.022	0.061	0.048
2340	0.012	0.014	0.067	0.071	0.021	0.022	0.061	0.05
2400	0.012	0.015	0.066	0.07	0.022	0.023	0.059	0.052
2460	0.012	0.015	0.066	0.068	0.021	0.022	0.061	0.05
2520	0.011	0.013	0.066	0.07	0.02	0.021	0.061	0.049
2580	0.012	0.014	0.066	0.068	0.02	0.022	0.061	0.048
2640	0.012	0.014	0.066	0.069	0.021	0.023	0.062	0.047
2700	0.012	0.014	0.067	0.069	0.021	0.022	0.063	0.048
2760	0.011	0.013	0.068	0.07	0.021	0.022	0.062	0.048
2820	0.012	0.014	0.068	0.07	0.02	0.021	0.064	0.049
2880	0.014	0.015	0.067	0.069	0.02	0.021	0.062	0.049
2940	0.012	0.014	0.066	0.068	0.02	0.021	0.065	0.048
3000	0.013	0.016	0.065	0.066	0.028	0.03	0.066	0.048
3060	0.013	0.015	0.064	0.066	0.019	0.02	0.065	0.049
3120	0.014	0.016	0.062	0.064	0.02	0.022	0.063	0.047
3180	0.013	0.015	0.061	0.063	0.019	0.02	0.061	0.048
3240	0.016	0.019	0.062	0.064	0.018	0.02	0.061	0.049
3300	0.014	0.017	0.061	0.062	0.018	0.019	0.061	0.049
3360	0.014	0.016	0.06	0.062	0.018	0.019	0.06	0.049
3420	0.014	0.017	0.06	0.062	0.018	0.019	0.063	0.049
3480	0.013	0.014	0.06	0.063	0.018	0.019	0.062	0.049
3540	0.012	0.015	0.053	0.055	0.018	0.019	0.067	0.049
3600	0.029	0.045	0.073	0.024	0.042	0.019	0.065	0.051
3660	0.015	0.017	0.052	0.055	0.018	0.019	0.07	0.053
3720	0.014	0.017	0.053	0.055	0.017	0.018	0.066	0.051
3780	0.013	0.015	0.053	0.055	0.017	0.018	0.07	0.051
3840	0.013	0.019	0.056	0.058	0.017	0.018	0.068	0.05
3900	0.013	0.015	0.057	0.059	0.016	0.017	0.066	0.053
3960	0.012	0.014	0.058	0.059	0.017	0.018	0.064	0.05
4020	0.011	0.012	0.058	0.06	0.016	0.018	0.062	0.048
4080	0.012	0.015	0.056	0.057	0.016	0.017	0.06	0.048
4140	0.012	0.013	0.055	0.056	0.016	0.018	0.06	0.046
4200	0.012	0.013	0.051	0.052	0.015	0.017	0.062	0.045
4260	0.01	0.012	0.054	0.056	0.016	0.017	0.061	0.045
4320	0.011	0.012	0.053	0.054	0.016	0.017	0.062	0.044
4380	0.012	0.014	0.051	0.053	0.016	0.016	0.063	0.044
4440	0.011	0.013	0.054	0.056	0.015	0.016	0.064	0.045
4500	0.012	0.014	0.058	0.059	0.016	0.017	0.064	0.049
4560	0.012	0.015	0.052	0.054	0.015	0.016	0.064	0.049
4620	0.011	0.012	0.048	0.05	0.015	0.016	0.068	0.049
4680	0.011	0.012	0.049	0.051	0.015	0.016	0.065	0.048
4740	0.01	0.012	0.048	0.05	0.015	0.016	0.063	0.049
4800	0.011	0.012	0.047	0.049	0.016	0.018	0.065	0.064
4860	0.01	0.01	0.047	0.048	0.016	0.017	0.067	0.059
4920	0.009	0.011	0.047	0.048	0.015	0.016	0.066	0.049
4980	0.01	0.011	0.046	0.049	0.015	0.016	0.063	0.049
5040	0.011	0.012	0.046	0.047	0.015	0.016	0.066	0.046
5100	0.011	0.012	0.046	0.048	0.016	0.018	0.063	0.046
5160	0.011	0.012	0.045	0.047	0.016	0.017	0.063	0.045
5220	0.012	0.013	0.045	0.047	0.015	0.016	0.065	0.045
5280	0.01	0.012	0.044	0.045	0.015	0.017	0.063	0.045
5340	0.01	0.012	0.047	0.049	0.017	0.022	0.063	0.046
5400	0.011	0.012	0.055	0.062	0.015	0.016	0.064	0.047
5460	0.011	0.012	0.057	0.069	0.015	0.016	0.066	0.048
5520	0.01	0.012	0.058	0.075	0.015	0.016	0.065	0.046
5580	0.01	0.012	0.052	0.055	0.015	0.015	0.07	0.045
5640	0.013	0.014	0.05	0.052	0.015	0.015	0.065	0.047
5700	0.011	0.012	0.043	0.044	0.015	0.016	0.066	0.046
5760	0.013	0.014	0.044	0.046	0.015	0.016	0.063	0.046
5820	0.013	0.015	0.049	0.052	0.015	0.016	0.066	0.047
5880	0.011	0.013	0.049	0.052	0.015	0.016	0.063	0.045
5940	0.011	0.012	0.051	0.053	0.015	0.016	0.066	0.046
6000	0.011	0.013	0.052	0.053	0.015	0.017	0.068	0.045
6060	0.011	0.012	0.053	0.055	0.014	0.015	0.067	0.045
6120	0.011	0.012	0.055	0.056	0.014	0.016	0.069	0.047
6180	0.012	0.013	0.053	0.057	0.015	0.016	0.067	0.048
6240	0.012	0.013	0.051	0.053	0.015	0.016	0.063	0.047
6300	0.013	0.014	0.051	0.053	0.014	0.015	0.066	0.046

6360	0.015	0.017	0.052	0.054	0.014	0.015	0.065	0.047
6420	0.014	0.015	0.052	0.053	0.015	0.016	0.063	0.048
6480	0.013	0.014	0.051	0.053	0.015	0.016	0.063	0.046
6540	0.018	0.021	0.049	0.051	0.015	0.016	0.063	0.047
6600	0.012	0.014	0.051	0.053	0.015	0.016	0.064	0.046
6660	0.015	0.021	0.052	0.055	0.015	0.017	0.064	0.048
6720	0.012	0.015	0.052	0.053	0.016	0.017	0.063	0.047
6780	0.013	0.016	0.048	0.049	0.016	0.017	0.064	0.047
6840	0.016	0.018	0.042	0.043	0.015	0.016	0.064	0.046
6900	0.013	0.015	0.041	0.042	0.016	0.016	0.067	0.047
6960	0.013	0.015	0.046	0.048	0.016	0.017	0.064	0.047
7020	0.013	0.015	0.046	0.049	0.015	0.016	0.064	0.046
7080	0.013	0.014	0.043	0.044	0.015	0.017	0.063	0.047
7140	0.013	0.015	0.043	0.044	0.015	0.016	0.063	0.046
7200	0.027	0.035	0.049	0.065	0.015	0.016	0.064	0.046
7260	0.013	0.014	0.046	0.049	0.015	0.016	0.072	0.046
7320	0.015	0.016	0.047	0.048	0.015	0.016	0.068	0.046
7380	0.014	0.015	0.05	0.053	0.015	0.015	0.073	0.051
7440	0.015	0.016	0.054	0.057	0.015	0.016	0.068	0.047
7500	0.016	0.017	0.049	0.051	0.015	0.017	0.069	0.046
7560	0.012	0.013	0.047	0.049	0.015	0.015	0.063	0.046
7620	0.011	0.013	0.048	0.05	0.014	0.015	0.063	0.046
7680	0.012	0.012	0.047	0.048	0.015	0.016	0.061	0.047
7740	0.013	0.014	0.049	0.051	0.015	0.016	0.061	0.047
7800	0.014	0.015	0.051	0.054	0.015	0.016	0.061	0.058
7860	0.014	0.015	0.052	0.053	0.015	0.016	0.061	0.053
7920	0.015	0.016	0.05	0.052	0.015	0.015	0.059	0.056
7980	0.014	0.015	0.047	0.049	0.015	0.016	0.06	0.054
8040	0.013	0.015	0.047	0.049	0.015	0.016	0.064	0.049
8100	0.013	0.014	0.05	0.065	0.015	0.016	0.06	0.046
8160	0.013	0.014	0.052	0.055	0.015	0.017	0.062	0.048
8220	0.012	0.013	0.05	0.06	0.015	0.016	0.069	0.048
8280	0.012	0.013	0.043	0.047	0.016	0.016	0.07	0.052
8340	0.011	0.012	0.043	0.044	0.016	0.017	0.07	0.053
8400	0.011	0.012	0.043	0.045	0.015	0.017	0.07	0.052
8460	0.013	0.014	0.042	0.043	0.016	0.017	0.066	0.05
8520	0.014	0.015	0.042	0.044	0.016	0.016	0.065	0.047
8580	0.013	0.014	0.044	0.046	0.015	0.016	0.063	0.047
8640	0.014	0.015	0.043	0.045	0.015	0.016	0.065	0.051
8700	0.013	0.014	0.043	0.045	0.015	0.017	0.078	0.052
8760	0.013	0.015	0.042	0.044	0.016	0.016	0.079	0.05
8820	0.013	0.015	0.042	0.043	0.015	0.016	0.07	0.052
8880	0.014	0.015	0.048	0.077	0.016	0.017	0.067	0.053
8940	0.015	0.016	0.04	0.043	0.015	0.016	0.068	0.052
9000	0.013	0.014	0.04	0.042	0.015	0.016	0.069	0.051
9060	0.012	0.013	0.039	0.042	0.016	0.017	0.068	0.052
9120	0.013	0.015	0.038	0.039	0.016	0.017	0.069	0.051
9180	0.012	0.013	0.037	0.038	0.015	0.016	0.07	0.05
9240	0.012	0.013	0.035	0.037	0.016	0.017	0.08	0.05
9300	0.015	0.016	0.035	0.036	0.016	0.017	0.07	0.049
9360	0.013	0.014	0.033	0.034	0.016	0.018	0.069	0.049
9420	0.014	0.015	0.039	0.052	0.016	0.017	0.069	0.049
9480	0.014	0.016	0.038	0.047	0.016	0.017	0.072	0.049
9540	0.013	0.014	0.037	0.04	0.016	0.017	0.072	0.047
9600	0.014	0.015	0.035	0.042	0.016	0.017	0.067	0.048
9660	0.015	0.016	0.036	0.038	0.02	0.024	0.067	0.047
9720	0.013	0.014	0.036	0.037	0.017	0.018	0.066	0.045
9780	0.014	0.015	0.034	0.036	0.016	0.018	0.065	0.045
9840	0.015	0.017	0.035	0.037	0.016	0.017	0.065	0.044
9900	0.013	0.014	0.036	0.038	0.016	0.017	0.067	0.045
9960	0.012	0.014	0.036	0.037	0.016	0.016	0.065	0.045
10020	0.013	0.014	0.045	0.066	0.016	0.017	0.064	0.045
10080	0.013	0.014	0.036	0.038	0.016	0.017	0.064	0.045
10140	0.012	0.013	0.037	0.039	0.016	0.016	0.064	0.045
10200	0.012	0.013	0.038	0.039	0.016	0.016	0.062	0.045
10260	0.011	0.014	0.038	0.04	0.015	0.016	0.062	0.046
10320	0.016	0.017	0.042	0.064	0.016	0.017	0.062	0.046
10380	0.037	0.04	0.038	0.047	0.016	0.017	0.061	0.045
10440	0.014	0.016	0.036	0.038	0.016	0.017	0.061	0.048
10500	0.012	0.013	0.036	0.037	0.016	0.017	0.061	0.05
10560	0.014	0.015	0.037	0.039	0.016	0.017	0.061	0.049
10620	0.014	0.016	0.037	0.038	0.017	0.017	0.065	0.049
10680	0.015	0.016	0.037	0.04	0.017	0.018	0.08	0.05
10740	0.013	0.014	0.037	0.039	0.017	0.018	0.067	0.048
10800	0.013	0.019	0.037	0.039	0.017	0.018	0.069	0.052
10860	0.013	0.015	0.038	0.039	0.017	0.018	0.063	0.052
10920	0.013	0.014	0.038	0.04	0.018	0.019	0.066	0.049
10980	0.014	0.015	0.038	0.041	0.017	0.018	0.062	0.051
11040	0.014	0.015	0.038	0.04	0.018	0.019	0.061	0.051
11100	0.014	0.015	0.038	0.039	0.018	0.018	0.061	0.051
11160	0.014	0.015	0.037	0.039	0.017	0.018	0.062	0.051
11220	0.014	0.015	0.036	0.037	0.02	0.021	0.063	0.051
11280	0.013	0.015	0.036	0.038	0.019	0.02	0.071	0.051
11340	0.013	0.014	0.037	0.039	0.018	0.019	0.072	0.051
11400	0.015	0.016	0.039	0.041	0.019	0.02	0.065	0.05
11460	0.015	0.016	0.038	0.041	0.02	0.021	0.065	0.048
11520	0.014	0.016	0.039	0.04	0.021	0.021	0.065	0.05
11580	0.015	0.016	0.037	0.039	0.02	0.021	0.079	0.049
11640	0.013	0.015	0.039	0.047	0.02	0.02	0.064	0.049
11700	0.014	0.015	0.039	0.043	0.02	0.021	0.065	0.047
11760	0.015	0.016	0.04	0.042	0.02	0.021	0.065	0.048
11820	0.016	0.017	0.043	0.052	0.02	0.02	0.066	0.047
11880	0.015	0.016	0.041	0.044	0.02	0.021	0.064	0.048
11940	0.016	0.017	0.039	0.044	0.02	0.021	0.066	0.047
12000	0.015	0.017	0.079	0.233	0.02	0.02	0.067	0.045
12060	0.014	0.016	0.042	0.043	0.02	0.021	0.067	0.046
12120	0.016	0.017	0.043	0.044	0.02	0.021	0.066	0.046
12180	0.015	0.016	0.042	0.045	0.019	0.02	0.067	0.046
12240	0.016	0.016	0.041	0.042	0.019	0.02	0.067	0.046
12300	0.015	0.017	0.041	0.042	0.019	0.019	0.063	0.045
12360	0.017	0.018	0.041	0.042	0.019	0.02	0.064	0.045
12420	0.018	0.021	0.043	0.045	0.019	0.02	0.066	0.046
12480	0.015	0.016	0.043	0.045	0.019	0.02	0.067	0.043
12540	0.015	0.016	0.042	0.043	0.019	0.02	0.066	0.044
12600	0.018	0.019	0.04	0.042	0.019	0.02	0.069	0.046
12660	0.016	0.017	0.041	0.043	0.02	0.021	0.068	0.045
12720	0.016	0.017	0.046	0.068	0.021	0.022	0.066	0.044
12780	0.016	0.017	0.04	0.045	0.022	0.023	0.065	0.043
12840	0.016	0.018	0.07	0.17	0.025	0.026	0.064	0.045

12900	0.015	0.016	0.042	0.045	0.025	0.026	0.066	0.044
12960	0.016	0.018	0.04	0.042	0.025	0.026	0.068	0.045
13020	0.02	0.021	0.041	0.043	0.025	0.026	0.069	0.048
13080	0.015	0.017	0.043	0.049	0.025	0.025	0.063	0.049
13140	0.017	0.018	0.042	0.049	0.024	0.025	0.062	0.05
13200	0.016	0.017	0.039	0.04	0.024	0.025	0.07	0.052
13260	0.016	0.017	0.039	0.04	0.023	0.024	0.063	0.052
13320	0.016	0.017	0.039	0.041	0.024	0.025	0.063	0.049
13380	0.016	0.017	0.039	0.042	0.024	0.025	0.068	0.049
13440	0.017	0.018	0.039	0.041	0.026	0.027	0.068	0.05
13500	0.016	0.019	0.037	0.038	0.025	0.026	0.067	0.05
13560	0.016	0.018	0.04	0.042	0.024	0.025	0.064	0.048
13620	0.015	0.016	0.038	0.04	0.025	0.026	0.067	0.049
13680	0.017	0.018	0.039	0.04	0.024	0.024	0.062	0.051
13740	0.016	0.017	0.04	0.045	0.024	0.025	0.062	0.051
13800	0.018	0.019	0.042	0.046	0.025	0.026	0.062	0.051
13860	0.021	0.022	0.042	0.043	0.024	0.025	0.059	0.05
13920	0.018	0.02	0.053	0.054	0.024	0.024	0.062	0.049
13980	0.018	0.019	0.061	0.133	0.024	0.024	0.078	0.05
14040	0.018	0.019	0.059	0.121	0.025	0.026	0.058	0.05
14100	0.02	0.021	0.059	0.107	0.024	0.025	0.086	0.049
14160	0.017	0.018	0.041	0.043	0.024	0.025	0.062	0.049
14220	0.017	0.019	0.044	0.046	0.025	0.026	0.063	0.049
14280	0.019	0.02	0.043	0.049	0.025	0.026	0.059	0.05
14340	0.018	0.019	0.039	0.041	0.024	0.025	0.058	0.05
14400	0.019	0.021	0.038	0.04	0.025	0.026	0.058	0.05
14460	0.017	0.018	0.039	0.041	0.025	0.027	0.061	0.051
14520	0.019	0.022	0.038	0.04	0.025	0.026	0.088	0.047
14580	0.02	0.022	0.037	0.04	0.025	0.026	0.06	0.05
14640	0.018	0.018	0.037	0.039	0.026	0.027	0.058	0.05
14700	0.018	0.019	0.035	0.044	0.025	0.026	0.059	0.052
14760	0.018	0.018	0.034	0.035	0.026	0.027	0.058	0.052
14820	0.017	0.018	0.034	0.036	0.025	0.026	0.055	0.052
14880	0.019	0.022	0.035	0.037	0.025	0.026	0.054	0.05
14940	0.018	0.02	0.035	0.037	0.026	0.026	0.05	0.05
15000	0.018	0.02	0.038	0.039	0.026	0.028	0.074	0.049
15060	0.018	0.019	0.039	0.04	0.026	0.027	0.063	0.05
15120	0.02	0.02	0.041	0.044	0.026	0.027	0.061	0.048
15180	0.021	0.022	0.039	0.04	0.027	0.028	0.061	0.049
15240	0.02	0.02	0.04	0.046	0.026	0.027	0.065	0.05
15300	0.019	0.02	0.046	0.07	0.026	0.027	0.058	0.054
15360	0.019	0.021	0.038	0.041	0.025	0.026	0.059	0.049
15420	0.019	0.021	0.05	0.079	0.025	0.025	0.057	0.05
15480	0.028	0.031	0.046	0.049	0.026	0.027	0.055	0.049
15540	0.021	0.026	0.041	0.051	0.027	0.027	0.051	0.048
15600	0.018	0.02	0.04	0.05	0.027	0.028	0.053	0.047
15660	0.019	0.022	0.043	0.07	0.027	0.028	0.059	0.046
15720	0.019	0.021	0.037	0.043	0.026	0.027	0.057	0.047
15780	0.019	0.021	0.036	0.037	0.026	0.027	0.058	0.05
15840	0.018	0.02	0.035	0.036	0.024	0.025	0.054	0.047
15900	0.015	0.018	0.034	0.034	0.027	0.028	0.059	0.045
15960	0.014	0.017	0.035	0.036	0.026	0.027	0.063	0.046
16020	0.014	0.016	0.036	0.038	0.027	0.028	0.053	0.046
16080	0.014	0.017	0.035	0.037	0.026	0.028	0.054	0.046
16140	0.014	0.016	0.035	0.036	0.026	0.027	0.056	0.044
16200	0.015	0.017	0.038	0.049	0.026	0.027	0.071	0.046
16260	0.015	0.017	0.043	0.059	0.027	0.028	0.056	0.045
16320	0.016	0.021	0.039	0.046	0.026	0.026	0.051	0.056
16380	0.015	0.016	0.037	0.038	0.025	0.026	0.082	0.049
16440	0.016	0.018	0.037	0.038	0.025	0.026	0.093	0.058
16500	0.02	0.021	0.036	0.038	0.025	0.026	0.071	0.057
16560	0.015	0.017	0.036	0.038	0.025	0.026	0.051	0.048
16620	0.017	0.018	0.036	0.037	0.025	0.026	0.058	0.043
16680	0.016	0.017	0.035	0.039	0.026	0.027	0.053	0.042
16740	0.016	0.017	0.038	0.041	0.026	0.027	0.056	0.039
16800	0.016	0.017	0.031	0.033	0.025	0.026	0.052	0.04
16860	0.016	0.017	0.038	0.063	0.027	0.028	0.059	0.048
16920	0.017	0.018	0.032	0.033	0.026	0.027	0.051	0.047
16980	0.016	0.019	0.032	0.039	0.026	0.028	0.064	0.045
17040	0.016	0.018	0.03	0.033	0.027	0.028	0.052	0.044
17100	0.015	0.016	0.029	0.032	0.026	0.027	0.057	0.045
17160	0.017	0.018	0.028	0.031	0.026	0.027	0.062	0.045
17220	0.016	0.017	0.037	0.079	0.026	0.027	0.056	0.045
17280	0.018	0.019	0.028	0.04	0.026	0.026	0.067	0.043
17340	0.011	0.013	0.031	0.049	0.025	0.026	0.1	0.039
17400	0.012	0.016	0.037	0.063	0.025	0.026	0.079	0.038
17460	0.012	0.014	0.047	0.133	0.025	0.026	0.056	0.039
17520	0.012	0.015	0.029	0.033	0.025	0.026	0.055	0.042
17580	0.011	0.013	0.029	0.032	0.025	0.025	0.053	0.04
17640	0.012	0.014	0.035	0.078	0.025	0.026	0.052	0.042
17700	0.012	0.015	0.037	0.087	0.025	0.026	0.055	0.041
17760	0.012	0.015	0.032	0.033	0.025	0.026	0.054	0.039
17820	0.011	0.013	0.032	0.038	0.025	0.027	0.057	0.04
17880	0.012	0.014	0.029	0.035	0.025	0.026	0.108	0.039
17940	0.012	0.014	0.03	0.039	0.026	0.026	0.066	0.039
18000	0.012	0.014	0.03	0.036	0.025	0.026	0.057	0.041
18060	0.011	0.013	0.029	0.034	0.025	0.026	0.056	0.038
18120	0.012	0.014	0.031	0.035	0.025	0.026	0.06	0.039
18180	0.012	0.014	0.039	0.042	0.025	0.025	0.058	0.038
18240	0.011	0.013	0.04	0.041	0.025	0.026	0.066	0.037
18300	0.012	0.016	0.03	0.038	0.025	0.025	0.062	0.038
18360	0.013	0.015	0.027	0.028	0.025	0.026	0.056	0.038
18420	0.014	0.016	0.029	0.043	0.025	0.025	0.057	0.039
18480	0.013	0.015	0.024	0.024	0.025	0.026	0.062	0.04
18540	0.016	0.019	0.024	0.025	0.025	0.026	0.066	0.04
18600	0.013	0.016	0.026	0.04	0.025	0.025	0.084	0.041
18660	0.012	0.014	0.024	0.028	0.025	0.026	0.057	0.039
18720	0.011	0.013	0.025	0.027	0.025	0.026	0.06	0.041
18780	0.012	0.016	0.024	0.025	0.025	0.025	0.061	0.042
18840	0.012	0.014	0.026	0.033	0.025	0.025	0.062	0.04
18900	0.012	0.015	0.026	0.03	0.025	0.026	0.075	0.04
18960	0.012	0.015	0.032	0.049	0.026	0.026	0.061	0.04
19020	0.013	0.016	0.027	0.033	0.025	0.026	0.058	0.04
19080	0.012	0.014	0.031	0.032	0.026	0.027	0.059	0.042
19140	0.011	0.013	0.028	0.031	0.026	0.027	0.056	0.041
19200	0.012	0.016	0.027	0.028	0.026	0.026	0.063	0.041
19260	0.012	0.014	0.027	0.028	0.028	0.028	0.058	0.042
19320	0.012	0.015	0.027	0.028	0.027	0.027	0.061	0.042
19380	0.011	0.013	0.026	0.027	0.026	0.026	0.06	0.042

19440	0.012	0.014	0.034	0.057	0.026	0.027	0.058	0.042
19500	0.012	0.014	0.04	0.097	0.027	0.029	0.058	0.043
19560	0.011	0.013	0.026	0.028	0.028	0.029	0.059	0.043
19620	0.012	0.016	0.026	0.028	0.029	0.03	0.065	0.043
19680	0.015	0.016	0.025	0.026	0.028	0.029	0.069	0.044
19740	0.017	0.018	0.026	0.027	0.028	0.029	0.057	0.044
19800	0.016	0.017	0.026	0.027	0.028	0.029	0.058	0.044
19860	0.016	0.019	0.026	0.027	0.028	0.029	0.061	0.044
19920	0.016	0.018	0.027	0.028	0.028	0.029	0.061	0.043
19980	0.015	0.016	0.028	0.029	0.029	0.029	0.065	0.047
20040	0.017	0.018	0.029	0.03	0.028	0.029	0.062	0.046
20100	0.016	0.017	0.029	0.029	0.028	0.029	0.057	0.047
20160	0.018	0.019	0.03	0.039	0.028	0.029	0.062	0.046
20220	0.021	0.022	0.029	0.036	0.028	0.029	0.059	0.045
20280	0.018	0.02	0.028	0.029			0.059	0.045
20340	0.014	0.015	0.029	0.031	0.013	0.002	0.061	0.045
20400	0.012	0.014	0.029	0.029	0.012	0.003	0.059	0.045
20460	0.013	0.016	0.028	0.029	0.012	0.003	0.06	0.045
20520	0.013	0.015	0.028	0.029	0.012	0.002	0.058	0.045
20580	0.019	0.022	0.028	0.029	0.012	0.003	0.058	0.045
20640	0.019	0.021	0.029	0.031	0.012	0.002	0.058	0.046
20700	0.019	0.021	0.029	0.033	0.012	0.002	0.056	0.046
20760	0.018	0.02	0.028	0.03	0.012	0.003	0.057	0.046
20820	0.015	0.018	0.031	0.033	0.013	0.002	0.056	0.045
20880	0.014	0.017	0.029	0.031	0.013	0.003	0.128	0.047
20940	0.014	0.016	0.031	0.039	0.012	0.004	0.057	0.045
21000	0.014	0.017	0.032	0.039	0.012	0.004	0.057	0.045
21060	0.014	0.016	0.03	0.036	0.013	0.003	0.055	0.045
21120	0.015	0.017	0.03	0.033	0.014	0.004	0.057	0.05
21180	0.015	0.017	0.036	0.057	0.013	0.003	0.054	0.058
21240	0.016	0.021	0.03	0.035	0.012	0.003	0.055	0.046
21300	0.019	0.021	0.031	0.033	0.013	0.003	0.053	0.055
21360	0.019	0.021	0.034	0.043	0.013	0.003	0.057	0.045
21420	0.018	0.02	0.03	0.033	0.014	0.003	0.055	0.047
21480	0.015	0.018	0.058	0.156	0.013	0.003	0.056	0.046
21540	0.014	0.017	0.047	0.093	0.014	0.003	0.056	0.044
21600	0.014	0.016	0.035	0.04	0.012	0.004	0.066	0.045
21660	0.014	0.017	0.055	0.073	0.012	0.003	0.055	0.047
21720	0.014	0.016	0.045	0.049	0.013	0.003	0.055	0.047
21780	0.015	0.017	0.034	0.041	0.016	0.003	0.054	0.046
21840	0.015	0.017	0.034	0.04	0.012	0.003	0.058	0.046
21900	0.016	0.021	0.034	0.042	0.012	0.003	0.054	0.046
21960	0.015	0.016	0.046	0.056	0.012	0.003	0.055	0.046
22020	0.016	0.018	0.065	0.084	0.012	0.003	0.056	0.048
22080	0.02	0.021	0.053	0.06	0.013	0.003	0.057	0.047
22140	0.013	0.016	0.037	0.046	0.013	0.003	0.057	0.045
22200	0.014	0.015	0.034	0.05	0.014	0.003	0.054	0.048
22260	0.012	0.014	0.031	0.035	0.013	0.003	0.051	0.046
22320	0.013	0.016	0.028	0.031	0.014	0.003	0.053	0.046
22380	0.013	0.015	0.027	0.032	0.013	0.003	0.053	0.045
22440	0.014	0.003	0.025	0.026	0.013	0.003	0.056	0.045
22500	0.014	0.004	0.024	0.026	0.013	0.003	0.053	0.045
22560	0.013	0.003	0.023	0.024	0.013	0.003	0.052	0.046
22620	0.013	0.003	0.03	0.046	0.012	0.004	0.052	0.044
22680	0.013	0.003	0.024	0.026	0.012	0.004	0.05	0.045
22740	0.013	0.004	0.025	0.027	0.013	0.003	0.05	0.048
22800	0.013	0.004	0.026	0.029	0.012	0.005	0.056	0.043
22860	0.013	0.004	0.025	0.027	0.013	0.003	0.054	0.044
22920	0.014	0.004	0.026	0.028	0.014	0.005	0.05	0.043
22980	0.013	0.004	0.026	0.028	0.013	0.004	0.049	0.043
23040	0.013	0.015	0.026	0.028	0.014	0.004	0.05	0.042
23100	0.014	0.003	0.026	0.028	0.013	0.003	0.048	0.042
23160	0.014	0.004	0.026	0.029	0.013	0.003	0.05	0.042
23220	0.013	0.003	0.027	0.029	0.013	0.003	0.049	0.042
23280	0.013	0.003	0.027	0.028	0.013	0.003	0.049	0.043
23340	0.016	0.021	0.027	0.031	0.013	0.003	0.048	0.043
23400	0.019	0.021	0.029	0.031	0.013	0.003	0.048	0.043
23460	0.019	0.021	0.029	0.035	0.015	0.004	0.048	0.043
23520	0.018	0.02	0.032	0.047	0.013	0.003	0.051	0.042
23580	0.014	0.015	0.029	0.033	0.013	0.003	0.049	0.042
23640	0.012	0.014	0.029	0.031	0.014	0.003	0.054	0.043
23700	0.014	0.015	0.058	0.18	0.013	0.004	0.059	0.043
23760	0.012	0.014	0.029	0.035	0.014	0.004	0.057	0.042
23820	0.012	0.014	0.031	0.033	0.016	0.003	0.052	0.042
23880	0.011	0.013	0.029	0.031	0.014	0.003	0.053	0.042
23940	0.012	0.016	0.031	0.039	0.014	0.004	0.062	0.043
24000	0.012	0.014	0.032	0.039	0.013	0.003	0.079	0.041
24060	0.014	0.015	0.03	0.036	0.013	0.003	0.053	0.04
24120	0.016	0.021	0.03	0.033	0.013	0.003	0.088	0.04
24180	0.019	0.021	0.036	0.057	0.013	0.004	0.083	0.039
24240	0.019	0.021	0.032	0.047	0.013	0.004	0.057	0.039
24300	0.018	0.02	0.029	0.033	0.013	0.004	0.059	0.047
24360	0.012	0.014	0.029	0.031	0.014	0.004	0.071	0.041
24420	0.012	0.014	0.058	0.18	0.014	0.003	0.061	0.037
24480	0.011	0.013	0.029	0.035	0.014	0.005	0.063	0.034
24540	0.012	0.016	0.024	0.026	0.014	0.004	0.058	0.035
24600	0.016	0.021	0.025	0.027	0.014	0.004	0.057	0.035
24660	0.019	0.021	0.026	0.029	0.014	0.004	0.056	0.036
24720	0.019	0.021	0.025	0.027	0.014	0.004	0.06	0.037
24780	0.018	0.02	0.026	0.028	0.014	0.004	0.067	0.038
24840	0.012	0.014	0.026	0.028	0.014	0.004	0.048	0.043
24900	0.013	0.016	0.026	0.028	0.014	0.004	0.048	0.043
24960	0.013	0.015	0.026	0.028	0.014	0.003	0.048	0.043
25020	0.014	0.016	0.026	0.029	0.013	0.004	0.05	0.042
25080	0.013	0.015	0.025	0.026	0.014	0.004	0.048	0.042
25140	0.016	0.019	0.024	0.026	0.014	0.003	0.05	0.042
25200	0.012	0.014	0.023	0.024	0.013	0.004	0.049	0.042

Table 18. Total Dust Monitoring results dated 09/28/11 to 10/07/11.

	28-Sep		5-Oct		6-Oct		7-Oct	
Elapsed Time [s]	upwind Mass [mg/m3]	downwind Mass [mg/m3]	upwind Mass [mg/m3]	downwind Mass [mg/m3]	upwind Mass [mg/m3]	downwind Mass [mg/m3]	upwind Mass [mg/m3]	downwind Mass [mg/m3]
60	0.033	0.051	0.009	0.011	0.013	0.027	0.008	0.012
120	0.029	0.041	0.013	0.014	0.009	0.021	0.007	0.008
180	0.029	0.04	0.017	0.019	0.011	0.019	0.007	0.008
240	0.03	0.045	0.03	0.034	0.028	0.034	0.008	0.009
300	0.028	0.05	0.034	0.039	0.031	0.039	0.01	0.01
360	0.03	0.066	0.02	0.023	0.019	0.023	0.007	0.008
420	0.039	0.047	0.017	0.019	0.016	0.019	0.008	0.009
480	0.033	0.043	0.016	0.018	0.015	0.018	0.013	0.015
540	0.036	0.051	0.016	0.018	0.015	0.018	0.016	0.016
600	0.029	0.038	0.021	0.024	0.02	0.024	0.016	0.016
660	0.029	0.039	0.029	0.032	0.027	0.032	0.016	0.016
720	0.029	0.042	0.015	0.016	0.014	0.016	0.015	0.016
780	0.029	0.038	0.025	0.029	0.023	0.029	0.016	0.017
840	0.029	0.041	0.02	0.021	0.019	0.021	0.016	0.017
900	0.033	0.037	0.023	0.024	0.022	0.024	0.016	0.017
960	0.031	0.038	0.02	0.023	0.019	0.023	0.015	0.016
1020	0.029	0.041	0.006	0.007	0.006	0.007	0.015	0.016
1080	0.029	0.036	0.007	0.008	0.007	0.008	0.015	0.016
1140	0.028	0.04	0.007	0.007	0.006	0.007	0.014	0.015
1200	0.03	0.049	0.007	0.008	0.007	0.008	0.015	0.016
1260	0.029	0.037	0.008	0.008	0.008	0.008	0.015	0.016
1320	0.028	0.035	0.011	0.012	0.011	0.012	0.015	0.016
1380	0.03	0.035	0.009	0.01	0.009	0.01	0.015	0.016
1440	0.032	0.036	0.008	0.008	0.008	0.008	0.014	0.016
1500	0.028	0.038	0.01	0.01	0.009	0.01	0.014	0.015
1560	0.029	0.035	0.01	0.011	0.01	0.011	0.015	0.017
1620	0.03	0.036	0.007	0.008	0.007	0.008	0.015	0.017
1680	0.032	0.033	0.007	0.008	0.007	0.008	0.014	0.015
1740	0.032	0.038	0.007	0.008	0.007	0.008	0.014	0.015
1800	0.034	0.035	0.007	0.008	0.007	0.008	0.014	0.015
1860	0.029	0.035	0.006	0.007	0.006	0.007	0.015	0.016
1920	0.028	0.035	0.007	0.007	0.006	0.007	0.014	0.015
1980	0.029	0.037	0.008	0.009	0.008	0.009	0.014	0.015
2040	0.028	0.035	0.008	0.008	0.008	0.008	0.014	0.016
2100	0.036	0.037	0.008	0.008	0.008	0.008	0.011	0.013
2160	0.03	0.036	0.008	0.009	0.008	0.009	0.006	0.007
2220	0.029	0.035	0.008	0.009	0.008	0.009	0.007	0.007
2280	0.029	0.033	0.008	0.008	0.007	0.008	0.007	0.008
2340	0.029	0.034	0.008	0.008	0.008	0.008	0.007	0.008
2400	0.029	0.039	0.009	0.01	0.009	0.01	0.007	0.007
2460	0.031	0.036	0.028	0.031	0.027	0.031	0.007	0.009
2520	0.028	0.036	0.022	0.023	0.021	0.023	0.007	0.009
2580	0.027	0.038	0.013	0.013	0.012	0.013	0.007	0.008
2640	0.032	0.034	0.008	0.009	0.008	0.009	0.007	0.009
2700	0.028	0.037	0.017	0.019	0.016	0.019	0.007	0.009
2760	0.06	0.037	0.017	0.018	0.016	0.018	0.007	0.007
2820	0.029	0.035	0.015	0.016	0.014	0.016	0.011	0.014
2880	0.033	0.033	0.014	0.015	0.013	0.015	0.017	0.034
2940	0.028	0.035	0.024	0.027	0.023	0.027	0.007	0.008
3000	0.028	0.036	0.013	0.014	0.012	0.014	0.008	0.009
3060	0.029	0.035	0.007	0.008	0.007	0.008	0.009	0.01
3120	0.028	0.035	0.015	0.015	0.014	0.015	0.007	0.008
3180	0.03	0.049	0.008	0.009	0.007	0.009	0.007	0.008
3240	0.027	0.035	0.017	0.019	0.016	0.019	0.007	0.009
3300	0.03	0.035	0.015	0.017	0.014	0.017	0.007	0.008
3360	0.033	0.034	0.012	0.013	0.012	0.013	0.017	0.026
3420	0.028	0.035	0.01	0.011	0.01	0.011	0.023	0.041
3480	0.03	0.034	0.012	0.013	0.012	0.013	0.009	0.01
3540	0.029	0.035	0.011	0.011	0.01	0.011	0.007	0.008
3600	0.03	0.037	0.017	0.028	0.018	0.021	0.007	0.009
3660	0.029	0.036	0.013	0.014	0.012	0.014	0.008	0.009
3720	0.029	0.037	0.009	0.009	0.009	0.009	0.008	0.009
3780	0.031	0.038	0.013	0.013	0.013	0.013	0.009	0.011
3840	0.031	0.039	0.018	0.018	0.018	0.018	0.008	0.009
3900	0.031	0.034	0.013	0.014	0.013	0.014	0.008	0.009
3960	0.033	0.035	0.018	0.019	0.018	0.019	0.008	0.01
4020	0.029	0.038	0.015	0.016	0.015	0.016	0.008	0.01
4080	0.028	0.036	0.019	0.021	0.019	0.021	0.008	0.009
4140	0.028	0.035	0.016	0.018	0.015	0.018	0.01	0.011
4200	0.029	0.034	0.018	0.02	0.018	0.02	0.009	0.011
4260	0.034	0.032	0.014	0.014	0.014	0.014	0.008	0.009
4320	0.03	0.034	0.019	0.019	0.018	0.019	0.008	0.009
4380	0.028	0.034	0.024	0.027	0.023	0.027	0.008	0.009
4440	0.029	0.032	0.024	0.025	0.024	0.025	0.009	0.01
4500	0.027	0.033	0.014	0.014	0.014	0.014	0.008	0.01
4560	0.031	0.033	0.016	0.017	0.015	0.017	0.008	0.01
4620	0.028	0.036	0.014	0.014	0.014	0.014	0.009	0.01
4680	0.035	0.034	0.016	0.016	0.015	0.016	0.009	0.009
4740	0.028	0.033	0.018	0.019	0.018	0.019	0.009	0.011
4800	0.033	0.04	0.013	0.014	0.013	0.014	0.009	0.01
4860	0.032	0.041	0.011	0.011	0.01	0.011	0.009	0.01
4920	0.033	0.035	0.014	0.014	0.013	0.014	0.009	0.01
4980	0.036	0.036	0.014	0.014	0.013	0.014	0.009	0.01
5040	0.045	0.038	0.011	0.012	0.011	0.012	0.009	0.01
5100	0.042	0.034	0.018	0.019	0.017	0.019	0.01	0.012
5160	0.032	0.041	0.018	0.019	0.018	0.019	0.009	0.011
5220	0.037	0.035	0.034	0.035	0.034	0.035	0.009	0.01
5280	0.035	0.035	0.023	0.024	0.023	0.024	0.009	0.01
5340	0.033	0.033	0.013	0.014	0.013	0.014	0.009	0.009
5400	0.043	0.033	0.01	0.01	0.01	0.01	0.008	0.009
5460	0.036	0.034	0.01	0.011	0.01	0.011	0.008	0.009
5520	0.034	0.033	0.011	0.012	0.011	0.012	0.009	0.01
5580	0.032	0.032	0.01	0.011	0.01	0.011	0.008	0.009
5640	0.029	0.029	0.01	0.011	0.01	0.011	0.008	0.009
5700	0.032	0.034	0.02	0.02	0.02	0.02	0.01	0.013
5760	0.035	0.035	0.017	0.018	0.017	0.018	0.009	0.01
5820	0.03	0.033	0.02	0.021	0.019	0.021	0.009	0.01
5880	0.027	0.031	0.014	0.014	0.013	0.014	0.008	0.009
5940	0.032	0.031	0.02	0.021	0.02	0.021	0.008	0.009
6000	0.03	0.032	0.013	0.013	0.012	0.013	0.008	0.009
6060	0.03	0.032	0.011	0.011	0.011	0.011	0.009	0.01
6120	0.031	0.031	0.012	0.012	0.012	0.012	0.008	0.009
6180	0.031	0.032	0.014	0.015	0.014	0.015	0.008	0.009
6240	0.032	0.033	0.014	0.014	0.014	0.014	0.008	0.009
6300	0.031	0.032	0.011	0.011	0.011	0.011	0.008	0.009

6360	0.03	0.031	0.013	0.014	0.013	0.014	0.008	0.009
6420	0.03	0.033	0.011	0.011	0.011	0.011	0.008	0.009
6480	0.029	0.032	0.015	0.015	0.014	0.015	0.008	0.009
6540	0.029	0.035	0.015	0.015	0.014	0.015	0.009	0.01
6600	0.031	0.031	0.016	0.017	0.016	0.017	0.008	0.009
6660	0.029	0.033	0.016	0.017	0.016	0.017	0.008	0.009
6720	0.029	0.031	0.011	0.011	0.011	0.011	0.008	0.009
6780	0.03	0.031	0.017	0.018	0.017	0.018	0.008	0.01
6840	0.03	0.033	0.018	0.019	0.018	0.019	0.009	0.01
6900	0.03	0.035	0.02	0.02	0.019	0.02	0.009	0.01
6960	0.03	0.031	0.017	0.018	0.017	0.018	0.009	0.01
7020	0.028	0.032	0.026	0.028	0.025	0.028	0.009	0.01
7080	0.028	0.032	0.02	0.021	0.02	0.021	0.009	0.01
7140	0.03	0.034	0.017	0.017	0.017	0.017	0.009	0.01
7200	0.031	0.037	0.012	0.01	0.028	0.03	0.009	0.01
7260	0.031	0.03	0.021	0.021	0.02	0.021	0.01	0.011
7320	0.029	0.032	0.02	0.02	0.019	0.02	0.042	0.043
7380	0.029	0.03	0.013	0.013	0.013	0.013	0.009	0.01
7440	0.029	0.031	0.013	0.014	0.013	0.014	0.009	0.009
7500	0.029	0.031	0.02	0.021	0.02	0.021	0.009	0.01
7560	0.03	0.031	0.015	0.015	0.015	0.015	0.009	0.01
7620	0.028	0.034	0.018	0.019	0.018	0.019	0.009	0.01
7680	0.028	0.034	0.022	0.024	0.022	0.024	0.009	0.01
7740	0.029	0.031	0.022	0.023	0.022	0.023	0.039	0.039
7800	0.03	0.031	0.016	0.017	0.016	0.017	0.009	0.01
7860	0.031	0.033	0.021	0.022	0.021	0.022	0.009	0.01
7920	0.034	0.032	0.014	0.015	0.014	0.015	0.009	0.009
7980	0.031	0.034	0.015	0.016	0.015	0.016	0.009	0.01
8040	0.029	0.033	0.013	0.014	0.013	0.014	0.009	0.01
8100	0.029	0.034	0.016	0.017	0.015	0.017	0.009	0.009
8160	0.03	0.036	0.015	0.016	0.014	0.016	0.009	0.01
8220	0.031	0.032	0.013	0.014	0.013	0.014	0.009	0.009
8280	0.029	0.033	0.027	0.027	0.026	0.027	0.009	0.01
8340	0.03	0.036	0.02	0.021	0.02	0.021	0.009	0.01
8400	0.031	0.033	0.02	0.021	0.019	0.021	0.009	0.01
8460	0.03	0.032	0.02	0.021	0.02	0.021	0.01	0.011
8520	0.03	0.032	0.017	0.017	0.017	0.017	0.009	0.01
8580	0.033	0.033	0.017	0.018	0.017	0.018	0.009	0.009
8640	0.031	0.033	0.032	0.035	0.031	0.035	0.01	0.01
8700	0.033	0.032	0.023	0.024	0.022	0.024	0.01	0.011
8760	0.032	0.034	0.018	0.019	0.018	0.019	0.01	0.01
8820	0.031	0.032	0.015	0.016	0.015	0.016	0.009	0.009
8880	0.03	0.033	0.014	0.015	0.014	0.015	0.009	0.011
8940	0.031	0.031	0.028	0.03	0.027	0.03	0.009	0.01
9000	0.03	0.033	0.022	0.023	0.021	0.023	0.009	0.01
9060	0.031	0.033	0.025	0.026	0.024	0.026	0.009	0.01
9120	0.03	0.033	0.013	0.013	0.013	0.013	0.01	0.01
9180	0.03	0.032	0.025	0.025	0.024	0.025	0.009	0.01
9240	0.036	0.033	0.02	0.021	0.02	0.021	0.009	0.01
9300	0.033	0.034	0.017	0.018	0.017	0.018	0.011	0.012
9360	0.031	0.033	0.019	0.02	0.019	0.02	0.009	0.01
9420	0.03	0.033	0.023	0.024	0.022	0.024	0.009	0.01
9480	0.031	0.034	0.014	0.015	0.014	0.015	0.009	0.01
9540	0.031	0.034	0.017	0.018	0.017	0.018	0.009	0.01
9600	0.03	0.033	0.018	0.018	0.017	0.018	0.021	0.022
9660	0.03	0.034	0.023	0.024	0.022	0.024	0.01	0.012
9720	0.031	0.033	0.02	0.021	0.02	0.021	0.01	0.01
9780	0.031	0.034	0.015	0.015	0.015	0.015	0.009	0.01
9840	0.031	0.034	0.016	0.017	0.016	0.017	0.009	0.01
9900	0.031	0.033	0.015	0.015	0.015	0.015	0.009	0.009
9960	0.032	0.033	0.021	0.022	0.021	0.022	0.008	0.009
10020	0.03	0.035	0.017	0.018	0.017	0.018	0.009	0.01
10080	0.031	0.036	0.015	0.015	0.015	0.015	0.054	0.056
10140	0.03	0.033	0.022	0.023	0.022	0.023	0.009	0.01
10200	0.033	0.035	0.018	0.018	0.017	0.018	0.009	0.009
10260	0.031	0.034	0.023	0.024	0.023	0.024	0.009	0.009
10320	0.032	0.037	0.016	0.016	0.016	0.016	0.009	0.009
10380	0.032	0.035	0.021	0.021	0.021	0.021	0.009	0.009
10440	0.031	0.032	0.028	0.029	0.028	0.029	0.009	0.01
10500	0.035	0.034	0.022	0.022	0.022	0.022	0.009	0.009
10560	0.033	0.034	0.018	0.018	0.018	0.018	0.008	0.009
10620	0.032	0.033	0.017	0.018	0.017	0.018	0.009	0.009
10680	0.032	0.034	0.028	0.029	0.028	0.029	0.008	0.009
10740	0.032	0.034	0.019	0.019	0.018	0.019	0.009	0.009
10800	0.032	0.035	0.012	0.013	0.012	0.013	0.008	0.009
10860	0.032	0.034	0.015	0.016	0.015	0.016	0.008	0.009
10920	0.031	0.034	0.016	0.016	0.015	0.016	0.008	0.008
10980	0.031	0.034	0.017	0.017	0.017	0.017	0.008	0.009
11040	0.033	0.035	0.017	0.017	0.016	0.017	0.008	0.008
11100	0.031	0.035	0.022	0.023	0.022	0.023	0.009	0.009
11160	0.031	0.035	0.021	0.022	0.021	0.022	0.008	0.009
11220	0.032	0.035	0.019	0.02	0.019	0.02	0.008	0.008
11280	0.032	0.035	0.015	0.015	0.015	0.015	0.01	0.012
11340	0.032	0.034	0.016	0.017	0.016	0.017	0.009	0.01
11400	0.033	0.034	0.024	0.025	0.024	0.025	0.008	0.009
11460	0.03	0.037	0.015	0.015	0.014	0.015	0.008	0.009
11520	0.036	0.036	0.016	0.017	0.016	0.017	0.008	0.009
11580	0.032	0.037	0.02	0.02	0.02	0.02	0.008	0.009
11640	0.032	0.035	0.018	0.018	0.017	0.018	0.008	0.009
11700	0.033	0.033	0.016	0.017	0.016	0.017	0.008	0.009
11760	0.033	0.034	0.013	0.013	0.013	0.013	0.008	0.009
11820	0.034	0.035	0.012	0.012	0.012	0.012	0.008	0.009
11880	0.033	0.035	0.012	0.012	0.011	0.012	0.008	0.009
11940	0.034	0.036	0.012	0.012	0.012	0.012	0.009	0.01
12000	0.032	0.036	0.019	0.019	0.018	0.019	0.008	0.009
12060	0.032	0.036	0.023	0.024	0.023	0.024	0.008	0.009
12120	0.032	0.034	0.019	0.019	0.019	0.019	0.008	0.009
12180	0.032	0.034	0.023	0.023	0.022	0.023	0.008	0.009
12240	0.032	0.035	0.019	0.021	0.018	0.021	0.008	0.009
12300	0.032	0.037	0.038	0.041	0.036	0.041	0.008	0.009
12360	0.032	0.047	0.026	0.027	0.025	0.027	0.008	0.008
12420	0.034	0.058	0.019	0.019	0.018	0.019	0.008	0.008
12480	0.032	0.061	0.024	0.025	0.023	0.025	0.008	0.009
12540	0.033	0.048	0.022	0.023	0.022	0.023	0.008	0.008
12600	0.037	0.048	0.018	0.019	0.018	0.019	0.008	0.009
12660	0.071	0.036	0.022	0.022	0.021	0.022	0.008	0.009
12720	0.107	0.034	0.019	0.019	0.019	0.019	0.008	0.008
12780	0.051	0.034	0.022	0.022	0.021	0.022	0.008	0.008
12840	0.052	0.035	0.025	0.026	0.025	0.026	0.008	0.008

12900	0.036	0.035	0.026	0.027	0.025	0.027	0.008	0.008
12960	0.034	0.039	0.021	0.022	0.02	0.022	0.008	0.008
13020	0.031	0.034	0.02	0.021	0.02	0.021	0.008	0.009
13080	0.032	0.036	0.019	0.02	0.019	0.02	0.008	0.008
13140	0.032	0.036	0.017	0.017	0.016	0.017	0.007	0.008
13200	0.035	0.042	0.012	0.012	0.012	0.012	0.007	0.007
13260	0.033	0.046	0.012	0.012	0.012	0.012	0.008	0.008
13320	0.034	0.042	0.011	0.012	0.011	0.012	0.007	0.007
13380	0.031	0.036	0.012	0.012	0.012	0.012	0.007	0.009
13440	0.049	0.034	0.011	0.012	0.011	0.012	0.007	0.008
13500	0.04	0.035	0.02	0.022	0.02	0.022	0.007	0.008
13560	0.044	0.038	0.011	0.012	0.011	0.012	0.007	0.008
13620	0.033	0.036	0.011	0.012	0.011	0.012	0.008	0.009
13680	0.033	0.033	0.011	0.012	0.011	0.012	0.008	0.008
13740	0.035	0.035	0.011	0.012	0.011	0.012	0.008	0.008
13800	0.032	0.035	0.011	0.011	0.011	0.011	0.008	0.009
13860	0.033	0.033	0.011	0.011	0.011	0.011	0.019	0.032
13920	0.032	0.034	0.011	0.012	0.011	0.012	0.016	0.019
13980	0.032	0.035	0.013	0.013	0.013	0.013	0.008	0.008
14040	0.032	0.037	0.011	0.011	0.011	0.011	0.008	0.008
14100	0.032	0.048	0.012	0.012	0.011	0.012	0.007	0.008
14160	0.033	0.04	0.011	0.011	0.011	0.011	0.007	0.008
14220	0.032	0.035	0.011	0.012	0.011	0.012	0.007	0.008
14280	0.032	0.035	0.012	0.012	0.012	0.012	0.008	0.008
14340	0.056	0.035	0.012	0.012	0.012	0.012	0.007	0.008
14400	0.036	0.033	0.011	0.012	0.011	0.012	0.007	0.008
14460	0.031	0.034	0.012	0.012	0.011	0.012	0.007	0.007
14520	0.037	0.034	0.012	0.012	0.012	0.012	0.007	0.007
14580	0.032	0.035	0.014	0.014	0.014	0.014	0.007	0.008
14640	0.031	0.038	0.024	0.024	0.023	0.024	0.007	0.007
14700	0.031	0.036	0.015	0.015	0.014	0.015	0.008	0.008
14760	0.031	0.037	0.012	0.012	0.012	0.012	0.008	0.009
14820	0.032	0.037	0.019	0.02	0.019	0.02	0.007	0.008
14880	0.038	0.033	0.017	0.018	0.017	0.018	0.007	0.008
14940	0.033	0.035	0.022	0.024	0.022	0.024	0.007	0.008
15000	0.033	0.035	0.03	0.033	0.029	0.033	0.008	0.008
15060	0.035	0.037	0.02	0.022	0.019	0.022	0.008	0.008
15120	0.034	0.035	0.022	0.023	0.021	0.023	0.009	0.008
15180	0.031	0.037	0.012	0.012	0.012	0.012	0.008	0.008
15240	0.031	0.034	0.012	0.012	0.011	0.012	0.008	0.009
15300	0.032	0.035	0.011	0.011	0.011	0.011	0.008	0.008
15360	0.033	0.034	0.011	0.012	0.011	0.012	0.008	0.01
15420	0.033	0.035	0.012	0.012	0.011	0.012	0.01	0.015
15480	0.032	0.037	0.012	0.012	0.012	0.012	0.009	0.012
15540	0.031	0.034	0.012	0.012	0.011	0.012	0.008	0.008
15600	0.037	0.034	0.012	0.012	0.011	0.012	0.008	0.008
15660	0.033	0.035	0.011	0.012	0.011	0.012	0.008	0.009
15720	0.035	0.034	0.012	0.012	0.012	0.012	0.008	0.009
15780	0.032	0.034	0.012	0.012	0.012	0.012	0.008	0.009
15840	0.032	0.034	0.011	0.012	0.011	0.012	0.008	0.008
15900	0.034	0.038	0.012	0.012	0.012	0.012	0.008	0.008
15960	0.031	0.043	0.012	0.012	0.012	0.012	0.008	0.008
16020	0.032	0.036	0.012	0.012	0.012	0.012	0.008	0.009
16080	0.033	0.035	0.012	0.012	0.012	0.012	0.008	0.008
16140	0.037	0.037	0.012	0.012	0.012	0.012	0.008	0.008
16200	0.038	0.034	0.012	0.012	0.011	0.012	0.008	0.008
16260	0.031	0.033	0.012	0.012	0.012	0.012	0.008	0.008
16320	0.036	0.035	0.011	0.012	0.011	0.012	0.008	0.009
16380	0.033	0.034	0.011	0.011	0.011	0.011	0.007	0.008
16440	0.032	0.032	0.011	0.011	0.011	0.011	0.007	0.007
16500	0.031	0.034	0.011	0.011	0.011	0.011	0.007	0.007
16560	0.033	0.036	0.011	0.012	0.011	0.012	0.007	0.008
16620	0.032	0.036	0.011	0.011	0.011	0.011	0.007	0.008
16680	0.032	0.034	0.011	0.011	0.011	0.011	0.007	0.008
16740	0.032	0.036	0.011	0.011	0.011	0.011	0.007	0.008
16800	0.032	0.035	0.011	0.011	0.011	0.011	0.007	0.008
16860	0.032	0.034	0.012	0.012	0.012	0.012	0.007	0.008
16920	0.032	0.035	0.011	0.012	0.011	0.012	0.007	0.008
16980	0.034	0.036	0.012	0.012	0.011	0.012	0.008	0.008
17040	0.031	0.035	0.012	0.012	0.012	0.012	0.007	0.008
17100	0.032	0.034	0.012	0.012	0.011	0.012	0.007	0.008
17160	0.037	0.034	0.011	0.012	0.011	0.012	0.007	0.008
17220	0.033	0.035	0.015	0.015	0.014	0.015	0.007	0.008
17280	0.031	0.036	0.02	0.021	0.019	0.021	0.008	0.008
17340	0.031	0.04	0.018	0.019	0.017	0.019	0.007	0.008
17400	0.032	0.033	0.019	0.019	0.018	0.019	0.007	0.008
17460	0.031	0.036	0.015	0.015	0.015	0.015	0.007	0.008
17520	0.034	0.039	0.02	0.021	0.02	0.021	0.007	0.008
17580	0.034	0.037	0.012	0.012	0.011	0.012	0.007	0.008
17640	0.033	0.04	0.011	0.012	0.011	0.012	0.007	0.008
17700	0.034	0.038	0.012	0.012	0.012	0.012	0.007	0.008
17760	0.032	0.034	0.012	0.013	0.012	0.013	0.009	0.01
17820	0.038	0.036	0.013	0.014	0.013	0.014	0.008	0.009
17880	0.044	0.036	0.013	0.013	0.013	0.013	0.008	0.008
17940	0.033	0.035	0.012	0.012	0.012	0.012	0.012	0.019
18000	0.032	0.035	0.02	0.022	0.02	0.022	0.009	0.01
18060	0.032	0.035	0.014	0.015	0.014	0.015	0.011	0.012
18120	0.034	0.034	0.02	0.021	0.02	0.021	0.015	0.016
18180	0.038	0.037	0.016	0.017	0.015	0.017	0.011	0.012
18240	0.033	0.035	0.014	0.014	0.014	0.014	0.009	0.01
18300	0.033	0.037	0.015	0.015	0.014	0.015	0.008	0.009
18360	0.036	0.036	0.014	0.015	0.014	0.015	0.008	0.008
18420	0.033	0.036	0.013	0.013	0.013	0.013	0.008	0.008
18480	0.035	0.035	0.014	0.015	0.014	0.015	0.008	0.008
18540	0.035	0.035	0.014	0.015	0.014	0.015	0.008	0.008
18600	0.034	0.035	0.015	0.016	0.015	0.016	0.008	0.008
18660	0.033	0.035	0.013	0.013	0.013	0.013	0.008	0.008
18720	0.034	0.035	0.02	0.021	0.02	0.021	0.009	0.01
18780	0.031	0.036	0.015	0.016	0.015	0.016	0.01	0.011
18840	0.031	0.034	0.021	0.022	0.02	0.022	0.012	0.013
18900	0.031	0.036	0.012	0.012	0.012	0.012	0.01	0.012
18960	0.034	0.033	0.012	0.012	0.011	0.012	0.01	0.012
19020	0.033	0.035	0.014	0.015	0.014	0.015	0.009	0.01
19080	0.032	0.036	0.012	0.012	0.012	0.012	0.009	0.01
19140	0.035	0.034	0.016	0.017	0.016	0.017	0.009	0.009
19200	0.032	0.035	0.013	0.013	0.013	0.013	0.009	0.009
19260	0.031	0.034	0.016	0.017	0.016	0.017	0.008	0.009
19320	0.031	0.037	0.017	0.018	0.017	0.018	0.008	0.009
19380	0.032	0.035	0.02	0.02	0.019	0.02	0.008	0.009

19440	0.036	0.035	0.012	0.012	0.012	0.012	0.008	0.009
19500	0.031	0.033	0.012	0.012	0.012	0.012	0.008	0.008
19560	0.031	0.035	0.011	0.011	0.011	0.011	0.008	0.009
19620	0.032	0.035	0.014	0.015	0.014	0.015	0.009	0.01
19680	0.031	0.033	0.018	0.018	0.017	0.018	0.008	0.008
19740	0.031	0.036	0.012	0.012	0.012	0.012	0.009	0.01
19800	0.032	0.034	0.015	0.016	0.015	0.016	0.009	0.009
19860	0.034	0.039	0.012	0.013	0.012	0.013	0.008	0.009
19920	0.031	0.034	0.014	0.014	0.013	0.014	0.008	0.009
19980	0.037	0.033	0.013	0.014	0.013	0.014	0.008	0.009
20040	0.034	0.033	0.012	0.013	0.012	0.013	0.008	0.009
20100	0.032	0.034	0.012	0.013	0.012	0.013	0.009	0.009
20160	0.033	0.037	0.011	0.012	0.011	0.012	0.008	0.009
20220	0.03	0.034	0.011	0.011	0.011	0.011	0.008	0.009
20280	0.031	0.035	0.011	0.011	0.011	0.011	0.017	0.017
20340	0.03	0.035	0.013	0.013	0.012	0.013	0.009	0.01
20400	0.032	0.036	0.017	0.018	0.017	0.018	0.01	0.011
20460	0.031	0.037	0.015	0.016	0.015	0.016	0.008	0.009
20520	0.032	0.036	0.012	0.012	0.011	0.012	0.008	0.009
20580	0.031	0.035	0.012	0.012	0.011	0.012	0.008	0.009
20640	0.031	0.036	0.016	0.016	0.015	0.016	0.008	0.008
20700	0.031	0.034	0.019	0.02	0.019	0.02	0.008	0.009
20760	0.031	0.032	0.015	0.016	0.015	0.016	0.009	0.01
20820	0.033	0.033	0.021	0.022	0.02	0.022	0.009	0.011
20880	0.033	0.033	0.013	0.014	0.013	0.014	0.009	0.011
20940	0.032	0.037	0.017	0.018	0.017	0.018	0.009	0.01
21000	0.034	0.035	0.022	0.023	0.022	0.023	0.036	0.075
21060	0.037	0.036	0.014	0.014	0.014	0.014	0.101	0.214
21120	0.039	0.039	0.013	0.014	0.013	0.014	0.015	0.022
21180	0.029	0.034	0.012	0.012	0.012	0.012	0.028	0.054
21240	0.035	0.033	0.021	0.023	0.021	0.023	0.011	0.014
21300	0.032	0.034	0.019	0.02	0.019	0.02	0.554	1.37
21360	0.032	0.035	0.015	0.016	0.015	0.016	0.023	0.047
21420	0.032	0.04	0.015	0.015	0.015	0.015	0.009	0.009
21480	0.03	0.034	0.017	0.017	0.016	0.017	0.009	0.009
21540	0.031	0.034	0.015	0.015	0.015	0.015	0.009	0.01
21600	0.03	0.032	0.014	0.014	0.014	0.014	0.008	0.009
21660	0.035	0.032	0.015	0.015	0.015	0.015	0.009	0.009
21720	0.031	0.034	0.013	0.014	0.013	0.014	0.008	0.009
21780	0.03	0.038	0.017	0.017	0.016	0.017	0.009	0.01
21840	0.03	0.037	0.013	0.014	0.013	0.014	0.009	0.01
21900	0.03	0.035	0.012	0.013	0.012	0.013	0.008	0.009
21960	0.032	0.034	0.013	0.013	0.013	0.013	0.009	0.009
22020	0.037	0.035	0.013	0.013	0.013	0.013	0.009	0.009
22080	0.033	0.034	0.012	0.012	0.012	0.012	0.009	0.01
22140	0.038	0.032	0.014	0.015	0.014	0.015	0.013	0.014
22200	0.036	0.037	0.014	0.015	0.014	0.015	0.07	0.15
22260	0.033	0.039	0.014	0.015	0.014	0.015	0.236	0.556
22320	0.031	0.036	0.012	0.012	0.012	0.012	0.013	0.016
22380	0.03	0.032	0.013	0.013	0.013	0.013	0.009	0.011
22440	0.035	0.033	0.012	0.013	0.012	0.013	0.008	0.009
22500	0.064	0.05	0.014	0.014	0.014	0.014	0.011	0.013
22560	0.032	0.052	0.012	0.012	0.012	0.012	0.125	0.288
22620	0.03	0.048	0.012	0.013	0.012	0.013	0.044	0.063
22680	0.031	0.042	0.017	0.018	0.017	0.018	0.042	0.086
22740	0.035	0.035	0.02	0.02	0.02	0.02	0.139	0.322
22800	0.037	0.034	0.014	0.015	0.014	0.015	0.041	0.09
22860	0.047	0.036	0.012	0.012	0.012	0.012	0.01	0.012
22920	0.039	0.034	0.014	0.015	0.014	0.015	0.01	0.012
22980	0.031	0.036	0.013	0.013	0.013	0.013	0.009	0.01
23040	0.032	0.036	0.014	0.014	0.013	0.014	0.009	0.009
23100	0.031	0.038	0.013	0.013	0.012	0.013	0.009	0.009
23160	0.029	0.034	0.015	0.015	0.015	0.015	0.008	0.009
23220	0.035	0.033	0.015	0.015	0.014	0.015	0.009	0.009
23280	0.032	0.034	0.014	0.014	0.014	0.014	0.009	0.009
23340	0.032	0.035	0.015	0.015	0.015	0.015	0.009	0.009
23400	0.032	0.04	0.016	0.017	0.016	0.017	0.009	0.009
23460	0.03	0.034	0.016	0.017	0.016	0.017	0.009	0.009
23520	0.031	0.034	0.013	0.013	0.013	0.013	0.009	0.009
23580	0.03	0.032	0.019	0.02	0.019	0.02	0.009	0.01
23640	0.035	0.032	0.018	0.018	0.018	0.018	0.008	0.009
23700	0.031	0.034	0.027	0.027	0.026	0.027	0.009	0.009
23760	0.03	0.038	0.017	0.018	0.017	0.018	0.009	0.01
23820	0.03	0.037	0.026	0.027	0.026	0.027	0.009	0.009
23880	0.03	0.035	0.015	0.015	0.015	0.015	0.009	0.01
23940	0.032	0.034	0.014	0.015	0.014	0.015	0.009	0.01
24000	0.037	0.035	0.013	0.014	0.013	0.014	0.009	0.01
24060	0.033	0.034	0.014	0.015	0.014	0.015	0.009	0.009
24120	0.038	0.032	0.021	0.021	0.02	0.021	0.009	0.01
24180	0.036	0.037	0.019	0.02	0.019	0.02	0.009	0.009
24240	0.033	0.039	0.016	0.017	0.016	0.017	0.009	0.009
24300	0.031	0.036	0.025	0.028	0.024	0.028	0.009	0.009
24360	0.03	0.032	0.016	0.017	0.016	0.017	0.008	0.009
24420	0.035	0.033	0.022	0.025	0.021	0.025	0.009	0.01
24480	0.064	0.05	0.02	0.022	0.02	0.022	0.009	0.01
24540	0.032	0.052	0.013	0.013	0.013	0.013	0.009	0.01
24600	0.03	0.048	0.027	0.029	0.026	0.029	0.009	0.01
24660	0.031	0.042	0.031	0.035	0.03	0.035	0.009	0.01
24720	0.035	0.035	0.017	0.018	0.017	0.018	0.009	0.009
24780	0.037	0.034	0.033	0.037	0.032	0.037	0.01	0.01
24840	0.047	0.036	0.028	0.03	0.027	0.03	0.012	0.013
24900	0.03	0.034	0.021	0.022	0.02	0.022	0.014	0.015
24960	0.031	0.034	0.013	0.014	0.013	0.014	0.013	0.014
25020	0.03	0.032	0.024	0.026	0.023	0.026	0.009	0.009
25080	0.035	0.032	0.031	0.034	0.029	0.034	0.009	0.009
25140	0.031	0.031	0.035	0.04	0.033	0.04	0.009	0.009
25200	0.032	0.033	0.018	0.019	0.018	0.019	0.009	0.01

Appendix G

Daily Reports

CITY OF YONKERS
DEPARTMENT OF ENGINEERING

INSPECTOR'S REPORT

DATE: 10/3/11

DAY OF WEEK : S [✓ M] T W T F S

Permit No: ______ Bid No: ______

Project Description: #1061 NORTH BROADWAY REMEDIAL CLOSURE

Owner: CITY OF YONKERS

Contractor: R. PUGNI + SONS

Inspector Name: JUAN C. DEJESUS

PERMIT/INSPECTOR REPORT NO: ______

SHEET NO. ______ of ______

Work Activity Time: (Start 7^{00}AM End 3^{30}PM)

Inspector Time: (Start 7^{00}AM End 3^{30}PM)

Temp.	Low 54	High 64
General Weather Conditions	AM PARTLY CLOUDY	PM PARTLY CLOUDY

DETAILED ACTIVITIES	From Sta.	To Sta.	Details	
Saw cut				
Pavement removed			Ave. Width	Type/Thickness
Trench excavated			Width	Depth
Trench sheeted			Sheeting Required -> Y/N	Sheeting type
Pipe installed			Pipe diameter	Pipe type
			Lot #	
Pipe bedding			Type	
Trench backfilling				
and compaction				
Temp. pavement			Ave. Width	Min. thickness
Final pavement:				
KCRETE			Ave. Width	Min. thickness
BINDER			Ave. Width	Min. thickness
ASPHALT			Ave. Width	Min. thickness
CONCRETE			Ave. Width	Min. thickness

DESCRIPTION OF WORK PERFORMED AND INSPECTED

SPECIFY FOR EACH OPERATION: ITEM NO., SUB-CONTRACTOR (IF ANY), LOCATION, NATURE OF WORK, RESULTS AND DETAILS.

·NO WORK ON SITE 9/29 → 9/30 DUE TO RAIN

- T+M WORK AT EXISTING DRAINAGE SWALE AT OLD CROTON AQUEDUCT TRAILWAY (OUTLET SYSTEM FOR ON SITE DRAINAGE)
- REMOVED SILT ACCUMULATION FROM EXISTING SWALE, EXTENDED BERM ALONG SWALE.
- INSTALLED RIP-RAP STONE AROUND EXISTING DRAINAGE STRUCTURE AT SWALE

Sketches

NORTH

End of Day MPT/Safety Check List	Y	N	Remarks
Plastic Barrels	✓		
Pedestrian Barricades		✓	
Timber Curbs		✓	
Timber/Breakaway Barricades		✓	
General Safety Conditions	✓		
Local Emergency Access	✓		
Fencing		✓	
Plates		✓	
Arrow Board		✓	
Site cleaned and secured at end of day	✓		

Equipment Used	
CAT 304 MINI EXCAVATOR	(2) OPERATORS
CAT 279C SKID STEER	(2) LABORERS

Inspector Signature

CITY OF YONKERS
DEPARTMENT OF ENGINEERING

INSPECTOR'S REPORT

DATE: 10/4/11

DAY OF WEEK : S M [✓ T] W T F S

Permit No: ______ Bid No: ______

Project Description: #1061 NORTH BROADWAY REMEDIAL CLOSURE

Owner: CITY OF YONKERS

Contractor: R. PUGNI + SONS

Inspector Name: JUAN C. DEJESUS

PERMIT/INSPECTOR REPORT NO: ______

SHEET NO. ______ of ______

Work Activity Time: (Start 7^{00} AM End 3^{30} PM)

Inspector Time: (Start 7^{00} AM End 3^{30} PM)

Temp.	Low	High
General Weather Conditions	AM	PM

DETAILED ACTIVITIES	From Sta.	To Sta.	Details
Saw cut			
Pavement removed			Ave. Width Type/Thickness
Trench excavated			Width Depth
Trench sheeted			Sheeting Required -> Y/N Sheeting type
Pipe installed			Pipe diameter Pipe type
			Lot #
Pipe bedding			Type
Trench backfilling			
and compaction			
Temp. pavement			Ave. Width Min. thickness
Final pavement:			
KCRETE			Ave. Width Min. thickness
BINDER			Ave. Width Min. thickness
ASPHALT			Ave. Width Min. thickness
CONCRETE			Ave. Width Min. thickness

DESCRIPTION OF WORK PERFORMED AND INSPECTED

SPECIFY FOR EACH OPERATION: ITEM NO., SUB-CONTRACTOR (IF ANY), LOCATION, NATURE OF WORK, RESULTS AND DETAILS.

- EXCAVATED TRENCH BETWEEN EXISTING CATCH BASIN IN ROADWAY AT SITE ENTRANCE AND NEW CATCH BASIN ON SITE (CON-ED RELOCATED DUCTS ON 9/30/11)
- INSTALLED 51 L.F. 12" DIP BETWEEN C.B.'S. ELEVATION FOR THE INVERT OUT AT THE NEW C.B. IS ≈6" HIGH DUE TO EXISTING FIELD CONDITIONS. WATER HAS TO BUILD UP IN BASIN.
- INSTALLED 3/4" STONE AT DRIVEWAY ENTRANCE

Sketches

NORTH

End of Day MPT/Safety Check List	Y	N	Remarks
Plastic Barrels	✓		
Pedestrian Barricades		✓	
Timber Curbs		✓	
Timber/Breakaway Barricades		✓	
General Safety Conditions	✓		
Local Emergency Access	✓		
Fencing		✓	
Plates		✓	
Arrow Board		✓	
Site cleaned and secured at end of day	✓		

Equipment Used

Inspector Signature

CITY OF YONKERS
DEPARTMENT OF ENGINEERING

INSPECTOR'S REPORT

DATE: 10/5/11

DAY OF WEEK : S M T [✓ W] T F S

Permit No: Bid No:

Project Description: #1061 NORTH BROADWAY REMEDIAL CLOSURE

Owner: CITY OF YONKERS

Contractor: R. PUGNI + SONS

Inspector Name: JUAN C. DEJESUS

PERMIT/INSPECTOR REPORT NO:

SHEET NO. of

Work Activity Time: (Start 7^{00} AM End 3^{30} PM)

Inspector Time: (Start 7^{00} AM End 3^{30} PM)

Temp.	Low 54°	High 72°
General Weather Conditions	AM SUNNY	PM SUNNY

DETAILED ACTIVITIES	From Sta.	To Sta.	Details
Saw cut			
Pavement removed			Ave. Width Type/Thickness
Trench excavated			Width Depth
Trench sheeted			Sheeting Required -> Y/N Sheeting type
Pipe installed			Pipe diameter Pipe type
			Lot #
Pipe bedding			Type
Trench backfilling			
and compaction			
Temp. pavement			Ave. Width Min. thickness
Final pavement:			
KCRETE			Ave. Width Min. thickness
BINDER			Ave. Width Min. thickness
ASPHALT			Ave. Width Min. thickness
CONCRETE			Ave. Width Min. thickness

DESCRIPTION OF WORK PERFORMED AND INSPECTED

SPECIFY FOR EACH OPERATION: ITEM NO., SUB-CONTRACTOR (IF ANY), LOCATION, NATURE OF WORK, RESULTS AND DETAILS.

- INSTALLED CLEAN FILL OVER SLOPE AT S.W. CORNER OF SITE FROM END OF ROCK SLOPE HEADING EAST. INCLUDING THE INSTALLATION OF THE INDICATOR LAYER
- G.C. ENVIRONMENTAL ON SITE => CONTINUED AIR MONITORING

Sketches

NORTH

End of Day MPT/Safety Check List	Y	N	Remarks
Plastic Barrels	✓		
Pedestrian Barricades		✓	
Timber Curbs		✓	
Timber/Breakaway Barricades		✓	
General Safety Conditions	✓		
Local Emergency Access	✓		
Fencing		✓	
Plates		✓	
Arrow Board		✓	
Site cleaned and secured at end of day	✓		

Equipment Used	
CAT 938G LOADER	(2) OPERATORS
CAT 322 EXCAVATOR	(2) LABORERS

Inspector Signature

CITY OF YONKERS
DEPARTMENT OF ENGINEERING

INSPECTOR'S REPORT

DATE: 10/6/11

DAY OF WEEK : S M T W [✓ T] F S

Permit No: ____ Bid No: ____

Project Description: #1061 NORTH BROADWAY REMEDIAL CLOSURE

Owner: CITY OF YONKERS

Contractor: R. PUGNI + SONS

Inspector Name: JUAN C. DEJESUS

PERMIT/INSPECTOR REPORT NO: ____

SHEET NO. ____ of ____

Work Activity Time: (Start 7^{00} AM End 3^{30} PM)

Inspector Time: (Start 7^{00} AM End 3^{30} PM)

Temp.	Low 55	High 75
General Weather Conditions	AM SUNNY	PM SUNNY

DETAILED ACTIVITIES	From Sta.	To Sta.	Details	
Saw cut				
Pavement removed			Ave. Width	Type/Thickness
Trench excavated			Width	Depth
Trench sheeted			Sheeting Required -> Y/N	Sheeting type
Pipe installed			Pipe diameter	Pipe type
			Lot #	
Pipe bedding			Type	
Trench backfilling				
and compaction				
Temp. pavement			Ave. Width	Min. thickness
Final pavement:				
KCRETE			Ave. Width	Min. thickness
BINDER			Ave. Width	Min. thickness
ASPHALT			Ave. Width	Min. thickness
CONCRETE			Ave. Width	Min. thickness

DESCRIPTION OF WORK PERFORMED AND INSPECTED

SPECIFY FOR EACH OPERATION: ITEM NO., SUB-CONTRACTOR (IF ANY), LOCATION, NATURE OF WORK, RESULTS AND DETAILS.

- INSTALLED TOP SOIL @ ≈ 4" OVER SLOPE AREA AT S.W. CORNER OF SITE
- INSTALLED EROSION BLANKET ON SLOPE AT S.W. CORNER
- INSTALLED CLEAN FILL THROUGHOUT TOP SECTION OF SITE, INCLUDING INDICATOR LAYER INSTALLATION
- DELIVERED CLEAN FILL TO JOBSITE
- G.C. ENVIRONMENTAL ON SITE => CONTINUED AIR MONITORING

Sketches

NORTH

End of Day MPT/Safety Check List	Y	N	Remarks
Plastic Barrels	✓		
Pedestrian Barricades		✓	
Timber Curbs		✓	
Timber/Breakaway Barricades		✓	
General Safety Conditions	✓		
Local Emergency Access	✓		
Fencing		✓	
Plates		✓	
Arrow Board		✓	
Site cleaned and secured at end of day	✓		

Equipment Used	
CAT 322 EXCAVATOR	(3) OPERATORS
CAT 938G LOADER	(2) LABORERS
CAT D4 DOZER	

Inspector Signature

CITY OF YONKERS
DEPARTMENT OF ENGINEERING

INSPECTOR'S REPORT

DATE: 10/7/11

DAY OF WEEK : S M T W T [✓ F] S

Permit No: ____ Bid No: ____

Project Description: #1061 North Broadway Remedial Closure

Owner: City of Yonkers

Contractor: R. Pugni + Sons

Inspector Name: Juan C. DeJesus

PERMIT/INSPECTOR REPORT NO: ____

SHEET NO. ____ of ____

Work Activity Time: (Start 7^{00}AM End 3^{30}PM)

Inspector Time: (Start 7^{00}AM End 3^{30}PM)

Temp.	Low 62°	High 80°
General Weather Conditions	AM Sunny	PM Sunny

DETAILED ACTIVITIES	From Sta.	To Sta.	Details	
Saw cut				
Pavement removed			Ave. Width	Type/Thickness
Trench excavated			Width	Depth
Trench sheeted			Sheeting Required -> Y/N	Sheeting type
Pipe installed			Pipe diameter	Pipe type
			Lot #	
Pipe bedding			Type	
Trench backfilling				
and compaction				
Temp. pavement			Ave. Width	Min. thickness
Final pavement:				
KCRETE			Ave. Width	Min. thickness
BINDER			Ave. Width	Min. thickness
ASPHALT			Ave. Width	Min. thickness
CONCRETE			Ave. Width	Min. thickness

DESCRIPTION OF WORK PERFORMED AND INSPECTED

SPECIFY FOR EACH OPERATION: ITEM NO., SUB-CONTRACTOR (IF ANY), LOCATION, NATURE OF WORK, RESULTS AND DETAILS.

- DELIVERED CLEAN FILL / TOP SOIL TO JOBSITE (LAST DAY)
- SPREAD CLEAN FILL @ ≈ 8" THICKNESS AND TOP SOIL @ ≈ 4" THICKNESS INCLUDING INSTALLATION OF INDICATOR LAYER OVER NATIVE MATERIAL
- INSTALLED EROSION CONTROL BLANKET OVER CLEAN FILL / TOPSOIL ON SLOPE ALONG SOUTH END OF SITE
- G.C. ENVIRONMENTAL ON SITE => CONTINUED AIR MONITORING.

Sketches

NORTH

End of Day MPT/Safety Check List	Y	N	Remarks
Plastic Barrels	✓		
Pedestrian Barricades		✓	
Timber Curbs		✓	
Timber/Breakaway Barricades		✓	
General Safety Conditions	✓		
Local Emergency Access	✓		
Fencing		✓	
Plates		✓	
Arrow Board		✓	
Site cleaned and secured at end of day	✓		

Equipment Used	
CAT 322 EXCAVATOR	(2) OPERATORS
CAT D4 DOZER	(2) LABORERS

Inspector Signature

CITY OF YONKERS
DEPARTMENT OF ENGINEERING

INSPECTOR'S REPORT

DATE: 10/18/11

DAY OF WEEK : S [✓ M] T W T F S

Permit No: ______ Bid No: ______

PERMIT/INSPECTOR REPORT NO: ______

Project Description: #1061 NORTH BROADWAY REMEDIAL CLOSURE

Owner: CITY OF YONKERS

Contractor: R. PUGNI + SONS

SHEET NO. ______ of ______

Work Activity Time: (Start 7^{00} AM End 3^{30} PM)

Inspector Time: (Start 7^{00} AM End 3^{30} PM)

Inspector Name: JUAN C. DEJESUS

Temp.	Low 60	High 80
General Weather Conditions	AM SUNNY	PM SUNNY

DETAILED ACTIVITIES	From Sta.	To Sta.	Details
Saw cut			
Pavement removed			Ave. Width Type/Thickness
Trench excavated			Width Depth
Trench sheeted			Sheeting Required -> Y/N Sheeting type
Pipe installed			Pipe diameter Pipe type
			Lot #
Pipe bedding			Type
Trench backfilling			
and compaction			
Temp. pavement			Ave. Width Min. thickness
Final pavement:			
KCRETE			Ave. Width Min. thickness
BINDER			Ave. Width Min. thickness
ASPHALT			Ave. Width Min. thickness
CONCRETE			Ave. Width Min. thickness

DESCRIPTION OF WORK PERFORMED AND INSPECTED

SPECIFY FOR EACH OPERATION: ITEM NO., SUB-CONTRACTOR (IF ANY), LOCATION, NATURE OF WORK, RESULTS AND DETAILS.

- SPREAD REMAINING CLEAN FILL ON TOP PORTION OF SITE OVER INDICATOR LAYER
- SPREAD REMAINING TOP SOIL OVER CLEAN FILL ON TOP PORTION OF SITE

Sketches

NORTH

End of Day MPT/Safety Check List	Y	N	Remarks
Plastic Barrels	✓		
Pedestrian Barricades		✓	
Timber Curbs		✓	
Timber/Breakaway Barricades		✓	
General Safety Conditions	✓		
Local Emergency Access	✓		
Fencing		✓	
Plates		✓	
Arrow Board		✓	
Site cleaned and secured at end of day	✓		

Equipment Used	
CAT 322 EXCAVATOR	(2) OPERATORS
CAT D4 DOZER	(2) LABORERS

Inspector Signature

CITY OF YONKERS
DEPARTMENT OF ENGINEERING

INSPECTOR'S REPORT

DATE: 10/11/11

DAY OF WEEK : S M [✓ T] W T F S

Permit No: ______ Bid No: ______

Project Description: #1061 NORTH BROADWAY REMEDIAL CLOSURE

Owner: CITY OF YONKERS

Contractor: R. PUGNI +SONS

Inspector Name: JUAN C. DEJESUS

PERMIT/INSPECTOR REPORT NO: ______

SHEET NO. ______ of ______

Work Activity Time: (Start 7^{00} AM End 3^{30} PM)

Inspector Time: (Start 7^{00} AM End 3^{30} PM)

Temp.	Low	High
General Weather Conditions	AM	PM

DETAILED ACTIVITIES	From Sta.	To Sta.	Details	
Saw cut				
Pavement removed			Ave. Width	Type/Thickness
Trench excavated			Width	Depth
Trench sheeted			Sheeting Required -> Y/N	Sheeting type
Pipe installed			Pipe diameter	Pipe type
			Lot #	
Pipe bedding			Type	
Trench backfilling				
and compaction				
Temp. pavement			Ave. Width	Min. thickness
Final pavement:				
KCRETE			Ave. Width	Min. thickness
BINDER			Ave. Width	Min. thickness
ASPHALT			Ave. Width	Min. thickness
CONCRETE			Ave. Width	Min. thickness

DESCRIPTION OF WORK PERFORMED AND INSPECTED

SPECIFY FOR EACH OPERATION: ITEM NO., SUB-CONTRACTOR (IF ANY), LOCATION, NATURE OF WORK, RESULTS AND DETAILS.

- FINE GRADED TOP SOIL ON TOP PORTION OF SITE
- GRADED AREA AROUND NEW CATCH BASINS ON TOP OF SITE FOR GRAVEL INSTALLATION
- CLEANED UP PARKING LOT

Sketches

NORTH

End of Day MPT/Safety Check List	Y	N	Remarks
Plastic Barrels	✓		
Pedestrian Barricades		✓	
Timber Curbs		✓	
Timber/Breakaway Barricades		✓	
General Safety Conditions	✓		
Local Emergency Access	✓		
Fencing		✓	
Plates		✓	
Arrow Board		✓	
Site cleaned and secured at end of day	✓		

Equipment Used	
CAT 322 EXCAVATOR	(2) OPERATORS
CAT D4 DOZER	(2) LABORERS
CAT SKID STEER	

Inspector Signature

CITY OF YONKERS
DEPARTMENT OF ENGINEERING

INSPECTOR'S REPORT

DATE: 10/12/11

DAY OF WEEK: S M T [✓ W] T F S

Permit No: ______ Bid No: ______

Project Description: #1061 NORTH BROADWAY REMEDIAL CLOSURE

Owner: CITY OF YONKERS

Contractor: R. PUGNI + SONS

Inspector Name: JUAN C. DEJESUS

PERMIT/INSPECTOR REPORT NO: ______

SHEET NO. ______ of ______

Work Activity Time: (Start 7^{00} AM End 3^{30} PM)

Inspector Time: (Start 7^{00} AM End 3^{30} PM)

Temp.	Low 61	High 75
General Weather Conditions	AM CLOUDY	PM CLOUDY

DETAILED ACTIVITIES	From Sta.	To Sta.	Details
Saw cut			
Pavement removed			Ave. Width Type/Thickness
Trench excavated			Width Depth
Trench sheeted			Sheeting Required -> Y/N Sheeting type
Pipe installed			Pipe diameter Pipe type
			Lot #
Pipe bedding			Type
Trench backfilling			
and compaction			
Temp. pavement			Ave. Width Min. thickness
Final pavement:			
KCRETE			Ave. Width Min. thickness
BINDER			Ave. Width Min. thickness
ASPHALT			Ave. Width Min. thickness
CONCRETE			Ave. Width Min. thickness

DESCRIPTION OF WORK PERFORMED AND INSPECTED

SPECIFY FOR EACH OPERATION: ITEM NO., SUB-CONTRACTOR (IF ANY), LOCATION, NATURE OF WORK, RESULTS AND DETAILS.

- SPRAYED "HYDRO-SEED" OVER NEWLY INSTALLED TOP SOIL ON TOP SECTION OF SITE
- INSTALLED #GRAVEL BED AT ≈ 6' THICKNESS AROUND CATCH BASINS AT SITE ENTRANCE

Sketches

NORTH

End of Day MPT/Safety Check List	Y	N	Remarks
Plastic Barrels	✓		
Pedestrian Barricades		✓	
Timber Curbs		✓	
Timber/Breakaway Barricades		✓	
General Safety Conditions	✓		
Local Emergency Access	✓		
Fencing		✓	
Plates		✓	
Arrow Board		✓	
Site cleaned and secured at end of day	✓		

Equipment Used	
CAT 304 MINI EXCAVATOR	(2) OPERATORS
CAT SKID STEER	(2) LABORERS
	(1) DRIVER }
	(2) LABORERS } HYDRO-SEED SUB-CONTRACTOR

Inspector Signature

CITY OF YONKERS
DEPARTMENT OF ENGINEERING

INSPECTOR'S REPORT

DATE: 10/13/11

DAY OF WEEK: S M T W [✓ T] F S

Permit No: ______ Bid No: ______

PERMIT/INSPECTOR REPORT NO: ______

Project Description: #1061 NORTH BROADWAY REMEDIAL CLOSURE

SHEET NO. ______ of ______

Work Activity Time: (Start 7^{00} AM End 3^{30} PM)

Inspector Time: (Start 7^{00} AM End 3^{30} PM)

Owner: CITY OF YONKERS

Contractor: R. PUGNI + SONS

Inspector Name: JUAN C. DEJESUS

Temp.	Low	High
General Weather Conditions	AM	PM

DETAILED ACTIVITIES	From Sta.	To Sta.	Details
Saw cut			
Pavement removed			Ave. Width Type/Thickness
Trench excavated			Width Depth
Trench sheeted			Sheeting Required -> Y/N Sheeting type
Pipe installed			Pipe diameter Pipe type
			Lot #
Pipe bedding			Type
Trench backfilling			
and compaction			
Temp. pavement			Ave. Width Min. thickness
Final pavement:			
KCRETE			Ave. Width Min. thickness
BINDER			Ave. Width Min. thickness
ASPHALT			Ave. Width Min. thickness
CONCRETE			Ave. Width Min. thickness

DESCRIPTION OF WORK PERFORMED AND INSPECTED

SPECIFY FOR EACH OPERATION: ITEM NO., SUB-CONTRACTOR (IF ANY), LOCATION, NATURE OF WORK, RESULTS AND DETAILS.

- BEGAN REMOVING EQUIPMENT / MATERIALS FROM JOBSITE
- CLEANED CITY PARKING LOT

Sketches

NORTH

End of Day MPT/Safety Check List	Y	N	Remarks
Plastic Barrels			
Pedestrian Barricades			
Timber Curbs			
Timber/Breakaway Barricades			
General Safety Conditions			
Local Emergency Access			
Fencing			
Plates			
Arrow Board			
Site cleaned and secured at end of day			

Equipment Used	
	(2) OPERATOR
	(1) LABORER

Inspector Signature

Appendix H

Project Digital Photo Log

Appendix I

Approved SWPPP & Weekly Inspection Reports

New York State Department of Environmental Conservation
Division of Water
Bureau of Water Permits, 4th Floor
625 Broadway, Albany, New York 12233-3505
Phone: (518) 402-8111 • **Fax:** (518) 402-9029
Website: www.dec.state.ny.us

Joe Martens
Commissioner

3/29/2011

YONKERS, CITY OF
PAUL SUMMERFIELD
40 SOUTH BROADWAY
YONKERS NY 10701-3888

Re: ACKNOWLEDGMENT of NOTICE of INTENT for Coverage Under SPDES General Permit for Storm Water Discharges from CONSTRUCTION ACTIVITY General Permit No. GP-0-10-001

Dear Prospective Permittee:

This is to acknowledge that the New York State Department of Environmental Conservation (Department) has received a complete Notice of Intent (NOI) for coverage under General Permit No. GP-0-10-001 for the construction activities located at:

REMEDIAL CLOSURE WORK PLAN
1061 NORTH BROADWAY
YONKERS NY 10701- **County: WESTCHESTER**

Pursuant to Environmental Conservation Law (ECL) Article 17, Titles 7 and 8, ECL Article 70, discharges in accordance with GP-0-10-001 from the above construction site will be authorized **5** business days from **3/14/2011** which is the date we received your final NOI, unless notified differently by the Department.

The permit identification number for this site is: NYR **10U059** . Be sure to include this permit identification number on any forms or correspondence you send us. When coverage under the permit is no longer needed, you must submit a Notice of Termination to the Department.

This authorization is conditioned upon the following:

1. The information submitted in the NOI received by the Department on **3/14/2011** is accurate and complete.

2. You have developed a Storm Water Pollution Prevention Plan (SWPPP) that complies with GP-0-10-001 which must be implemented as the first element of construction at the above-noted construction site.

3. Activities related to the above construction site comply with all other requirements of GP-0-10-001.

4. Payment of the annual $100 regulatory fee, which is billed separately by the Department in the late fall. The regulatory fee covers a period of one calendar year. In addition, since September 1, 2004, construction stormwater permittees have been assessed an initial authorization fee which is now $100 per acre of land disturbed and $600 per acre of future impervious area. The initial authorization fee covers the duration of the authorized disturbance.

5. When applicable, project review pursuant to the State Environmental Quality Review Act (SEQRA) has been satisifed.

6. You have obtained all necessary Department permits subject to the Uniform Procedures Act (UPA). You should check with your Regional Permit Administrator for further information.

*Note: Construction activities cannot commence until project review pursuant to SEQRA has been satisfied, when SEQRA is applicable; and, where required, all necessary Department permits subject to the UPA have been obtained.

Please be advised that the Department may request a copy of your SWPPP for review.

Should you have any questions regarding any aspect of the requirements specified in GP-0-10-001, please contact Dave Gasper at (518) 402-8114 or the undersigned at (518) 402-8109.

Sincerely,

Toni Cioffi

Toni Cioffi
Environmental Program Specialist 1

cc: RWE - 3
SWPPP Preparer

LOCKWOOD, KESSLER & BARTLETT, INC.
PAUL LAPPANO
1 AERIAL WAY
SYOSSET NY 11791-

CITY OF YONKERS ENGINEERING DEPARTMENT
EROSION AND SEDIMENT CONTROL INSPECTION

LOCATION/STREET: 1061 North Broadway
SPDES Permit Number
OWNER/PERMITTEE. City of Yonkers
CONTRACTOR: R. Pugni & Sons
THIRD PARTY INSPECTION: Engineering Department – Stormwater Management Officer
DATE OF INSPECTION: 9/23/11
WEATHER: RAIN 80°
CONDUCTED BY: JUAN C. DEJESUS
COMPLIANCE INSPECTION: [✓ YES] NO COMPLIAINT REC'D
[✓ ANNOUNCED] UNANNOUNCED
NOTICE OF INTENT ON SITE: YES
STORMWATER POLLUTION PREVENTION PLAN ON SITE: N/A
INSPECTION RECORDS ON FILE:
PHASING PLAN:
CONSTRUCTION SEQUENCE:

MAINTAINING WATER QUALITY:

YES	NO	N/A	
☑	☐	☐	IS THERE AN INCREASE IN TURBIDITY CAUSING A SUBSTANTIAL VISIBLE CONTRAST TO NATURAL CONDITIONS?
☐	☑	☐	IS THERE RESIDUE FROM OIL AND FLOATING SUBSTANCES, VISIBLE OIL FILM, OR GLOBULES OR GREASE?
☑	☐	☐	ALL DISTURBANCES IS WITHIN THE LIMITS OF THE APPROVED PLANS.
☑	☐	☐	HAVE RECEIVING WATERS BEEN IMPACTED BY SILT/RUNOFF FROM THE PROJECT?

HOUSEKEEPING/SMP:

☑	☐	☐	IS THE CONSTRUCTION SITE LITTER AND DEBRIS APPROPRIATELY MANAGED?
☑	☐	☐	ARE FACILTIES AND EQUIPMENT NECESSARY FOR IMPLEMENTATION OF EROSION AND SEDIMENT CONTROL IN WORKING ORDER OR PROPERLY MAINTAINED?
☑	☐	☐	IS CONSTRUCTION IMPACTING THE ADJACENT PROPERTY?
☑	☐	☐	IS DUST ADEQUATELY CONTROLLED?

SOIL STABILIZATION:

☐	☑	☐	STOCKPILES ARE STABILIZED WITH VEGETATION AND/OR MULCH.
☑	☐	☐	SEDIMENT CONTROL IS INSTALLED AT THE TOE OF THE SLOPE.
☐	☑	☐	TEMPORARY SEEDINGS AND MULCH HAVE BEEN APPLIED TO


09/14/2011

IDLE AREAS.

☐ ☐ ☑ 4 INCHES MINIMUM OF TOPSOIL HAS BEEN APPLIED UNDER PERMANENT SEEDINGS.

SEDIMENT CONTROL PRACTICES:

☑ ☐ ☐ STABILIZED CONTRUCTION ENTRANCE:

☐ ☑ ☐ STONE IS CLEAN ENOUGH TO EFFECTIVELY REMOVE MUD FROM VEHICLES.

☑ ☐ ☐ INSTALLED PER STANDARDS AND SPECIFICATIONS?

☑ ☐ ☐ DOES ALL TRAFFIC USE THE STABILIZED ENTRANCE TO ENTER +AND LEAVE SITE?

☐ ☑ ☐ IS ADEQUATE DRAINAGE PROVIDED TO PREVENT PONDING AT ENTRANCE?

SILT FENCE:

☑ ☐ ☐ INSTALLED ON CONTOUR, 10 FEET FROM TOE OF SLOPE (NOT ACROSS CONVEYANCE CHANNELS).

☑ ☐ ☐ JOINTS CONSTRUCTED BY WRAPPING THE TWO ENDS TOGETHER FOR CONTINUOUS SUPPORT.

☑ ☐ ☐ FABRIC BURIED 6 INCHES MINIMUM.

☑ ☐ ☐ POSTS ARE STABLE, FABRIC IS TIGHT AND WITHOUT RIPS OR FRAYED AREAS.

☐ ☐ ☑ SEDIMENT ACCUMULATION IS ____% OF DESIGN CAPACITY.

OBSERVATIONS:

1) WATER PONDING AT SITE ENTRANCE (SITE DRAINAGE NOT COMPLETE DUE TO CON-ED INTERFERENCE)
2) SEDIMENT FROM STOCKPILES WAS RUNNING ONTO ADJACENT PARKING LOT. (SILT FENCE AND STOCKPILE WAS KNOCKED DOWN, CONTRACTOR REPAIRED FENCE AS I WAS COMPLETING INSPECTION)
3) DISCOLORED WATER SEEN LEAVING SITE THROUGH SWALE /BASIN AT N.W. CORNER OF SITE
4) ANTI-TRACKING PAD NEEDS TO BE RE-FRESHED

RECOMMENDATIONS:

1) STABILIZE SOIL AT N.W. CORNER (SEEDING) TO ELIMINATE SOIL EROSION PROBLEM/DISCOLORED WATER
2) REPAIR ANY DAMAGED SILT FENCING
3) RE-ESTABLISH ANTI-TRACKING PAD AT SITE ENTRANCE

SKETCH/SITE PLAN:

See attached pictures depicting work detailed in the observations section of this report.

CERTIFICATION:

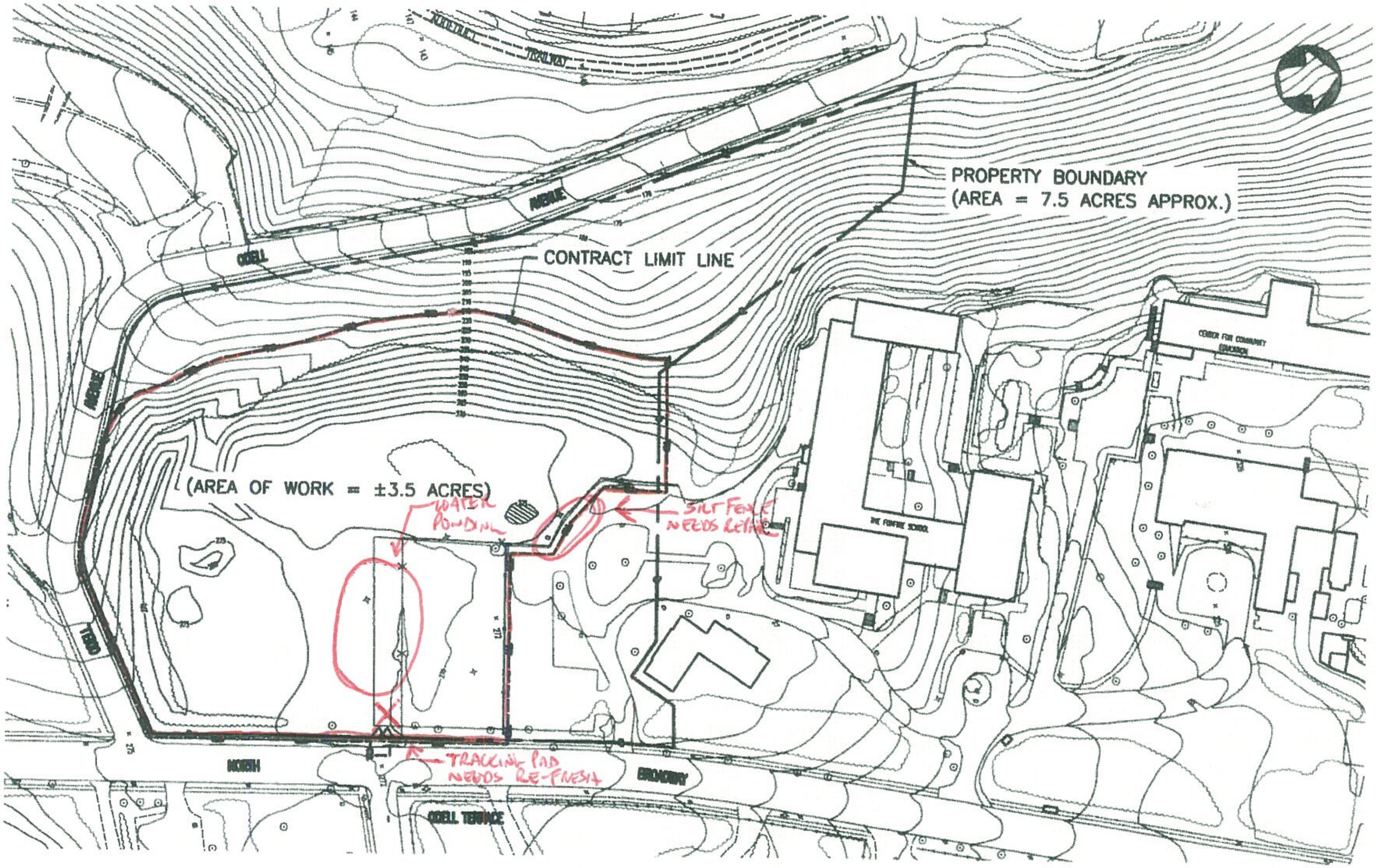
TO THE BEST OF MY KNOWLEDGE, THIS SITE IS IN COMPLIANCE WITH THE GENERAL PERMIT

Juan C. DeJesus

QUALIFIED PROFESSIONAL (PRINT)

QUALIFIED PROFESSIONAL SIGN.

THE ABOVE SIGNED ACKNOWLEDGES THAT, TO THE BEST OF HIS KNOWLEDGE, ALL INFORMATION PROVIDED ON THE FORMS IS ACCURATE AND COMPLETE.



SCALE: 1"=100'

LKB

FIGURE 3

SITE BOUNDARY

1061 NORTH BROADWAY, YONKERS, N.Y.


09/23/2011


09/23/2011

09/23/2011

Appendix J

Project Plans

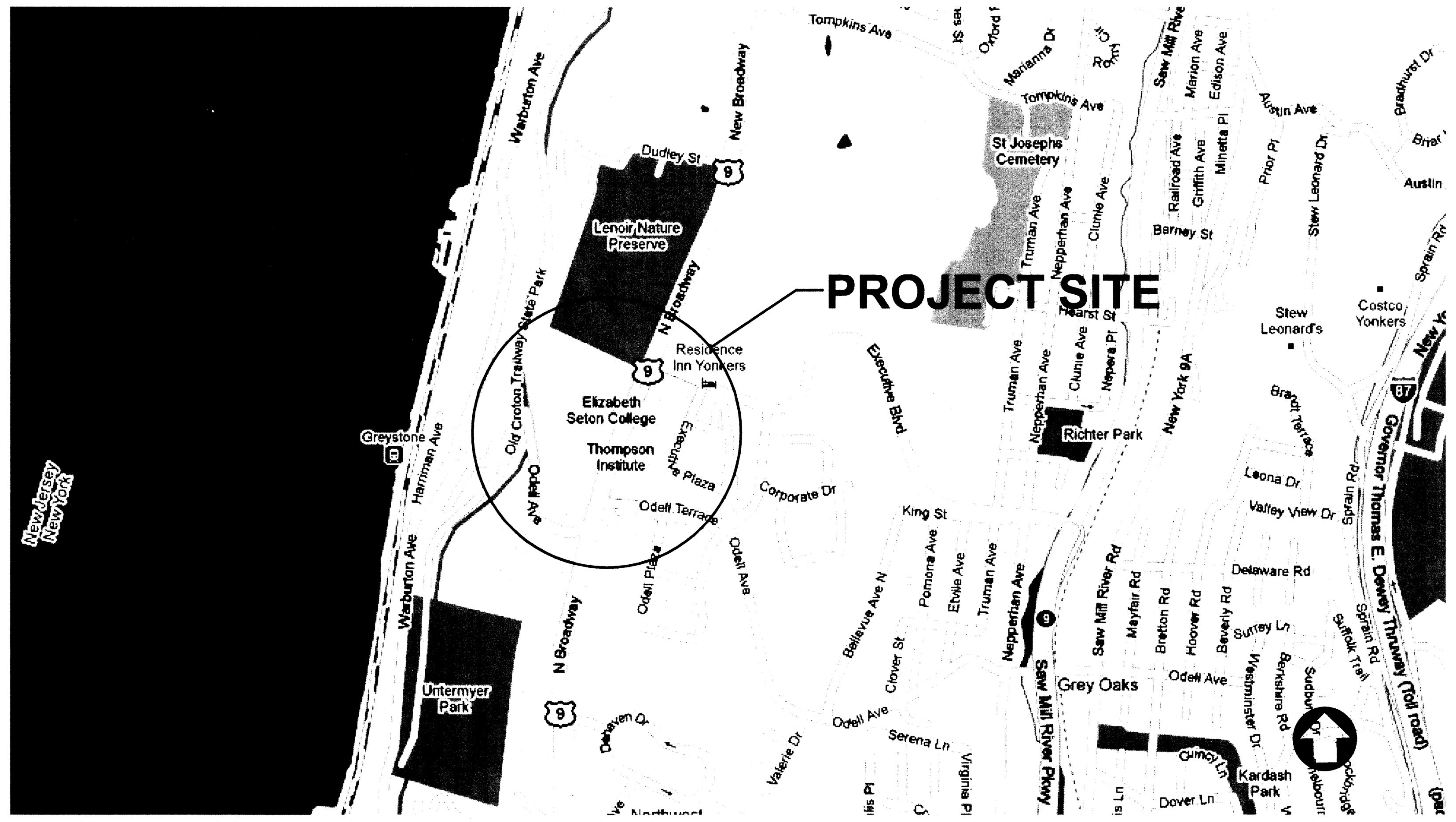
CITY OF YONKERS
WESTCHESTER COUNTY, NEW YORK

CONSTRUCTION DRAWINGS
FOR
REMEDIAL CLOSURE WORK PLAN FOR THE FILL AT
SECTION 3, BLOCK 3515, LOT 115
1061 NORTH BROADWAY, YONKERS, NY 10701

LIST OF DRAWINGS:

COVER SHEET

1. GRADING, LAYOUT AND MATERIALS PLAN
2. CROSS SECTIONs A & B AND MISCELLANEOUS DETAILS
3. GEOWEB DETAILS
4. DRAINAGE STRUCTURES AND TRENCHING DETAILS
5. MISCELLANEOUS SITE DETAILS



LOCATION PLAN

NTS

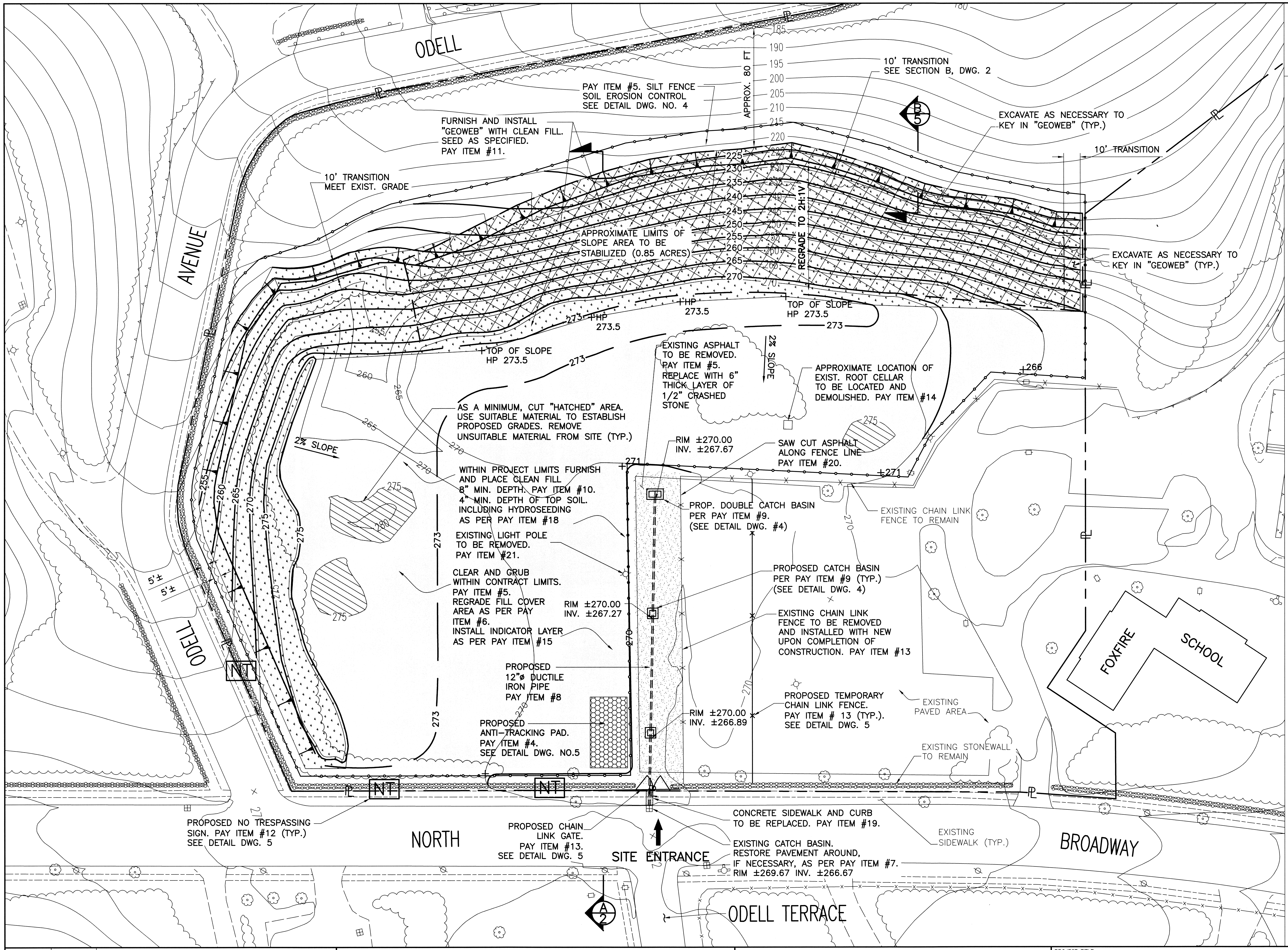
LOCKWOOD, KESSLER & BARTLETT, INC.
CONSULTING ENGINEERS
PLEASANTVILLE, N.Y.

4/14/11

PAUL LAPPANO, P.E., L.E.E.D. A.P. Date
VICE PRESIDENT OF ENVIRONMENTAL SERVICES
LOCKWOOD, KESSLER & BARTLETT, INC.

WARNING – IT IS A VIOLATION OF THE EDUCATION LAW FOR ANY PERSON,
UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL
ENGINEER/ARCHITECT TO ALTER AN ITEM ON THESE PLANS IN ANY WAY.

4341



LEGEND

▨	EXISTING STOCK PILE AREA
—226—	EXIST. CONTOUR
—226—	PROPOSED CONTOUR
+ 273.5	PROPOSED SPOT GRADE
▦	PROPOSED "GEOWEB"
⌒⌒⌒	EXISTING VEGETATED AREA
▭	PROPOSED 12" MIN. DEPTH COVER WITH UNDERLYING INDICATOR LAYER.
—o—o—	PROPOSED SILT FENCE
========	PROPOSED DRAINAGE PIPE
—x—x—	PROPOSED CHAIN LINK FENCE
—x—x—	EXISTING CHAIN LINK FENCE
∞∞∞	EXISTING STONE WALL
+ HP 265	PROPOSED HIGH POINT
— —273— —	PROPOSED CONTOUR 273
----P----	PROPERTY LINE
▣	PROPOSED SINGLE CATCH BASIN
▣	PROPOSED DOUBLE CATCH BASIN
NT	NO TRESPASSING SIGN
▦	ANTI-TRACKING PAD
░	AREA OF ASPHALT TO BE REMOVED APPROXIMATELY 720 SY
░	INSTALLATION OF EROSION CONTROL BLANKET AREA, APPROX. 7000 SY

PAUL J. LAPPANO
Paul J. Lappano 4/14/11

NOTES:

1) PROVIDE FILTER FABRIC DROP INLET PROTECTION TO ALL CATCH BASINS ON SITE DURING CONSTRUCTION IN ACCORDING WITH PAY ITEM #4. (SEE DETAIL DWG. 5)

2) EXISTING GRADE SHALL BE MET FOR THE ENTIRE FILL COVER PERIMETER.

3) EXISTING CATCH BASIN ON NORTH BROADWAY, WHERE THE NEW 12" DRAINAGE PIPE WILL BE CONNECTED, TO BE CLEANED AS PER CONTRACT SPECIFICATIONS, PAY ITEM #9.

REV.	DATE	REMARKS
1	4/14/11	Revised to address Building Department comments

CLIENT
CITY OF YONKERS
DEPARTMENT OF ENGINEERING

LOCATION
SECTION 3, BLOCK 3515, LOT 115
1061 NORTH BROADWAY

LKB
LOCKWOOD, KESSLER & BARTLETT, INC.
CONSULTING ENGINEERS SINCE 1889 SYOSSET, NEW YORK

PROJECT TITLE
REMEDIAL CLOSURE WORK PLAN

DRAWING TITLE
GRADING, LAYOUT AND MATERIALS PLAN

DESIGN BY: N.C.
DRAWN BY: N.C.
CHECKED BY: P.L.
DATE: DECEMBER 10, 2010
SCALE: 1"=30'

PROJECT NO.
4341-01

DRAWING NO.
1

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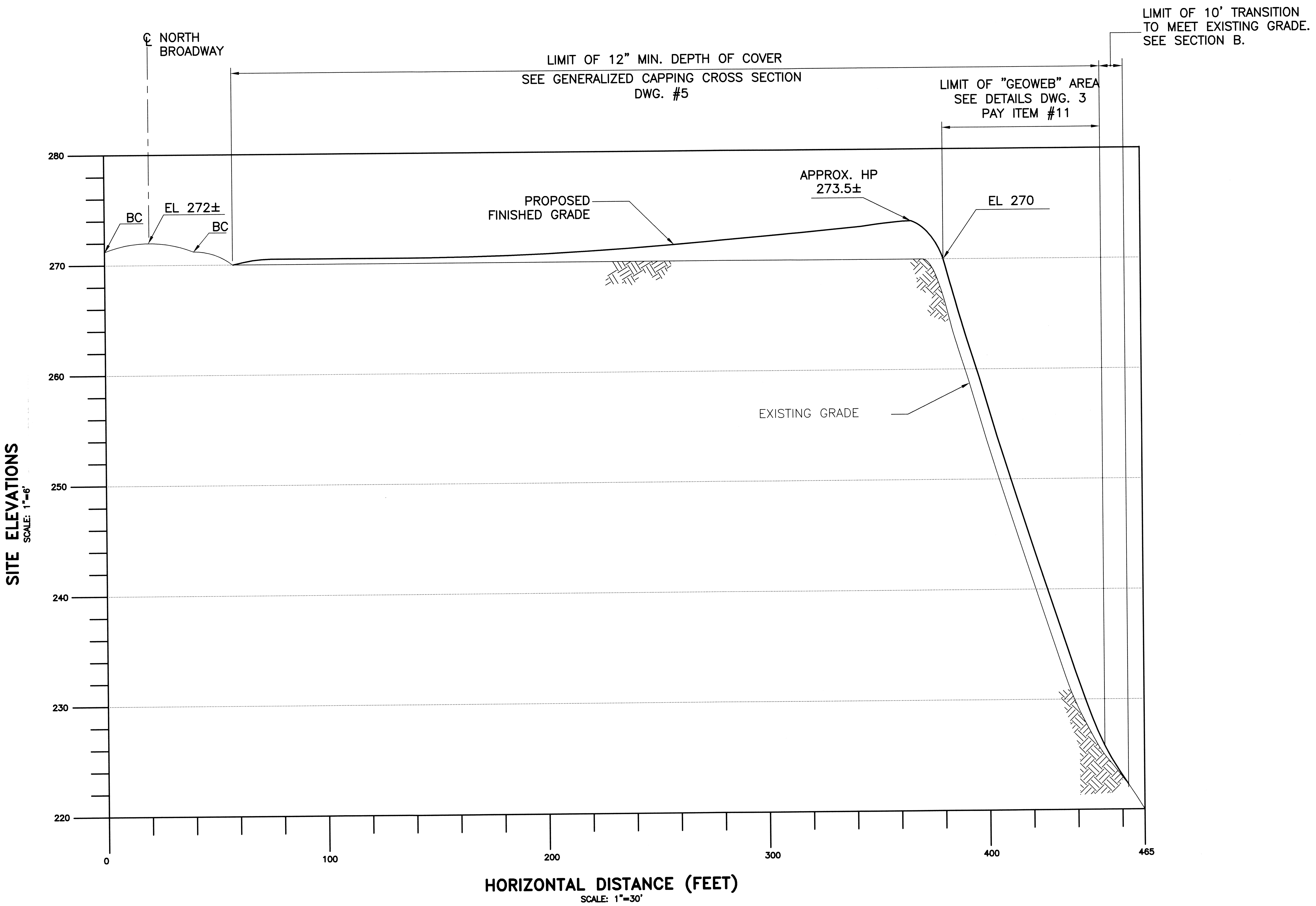
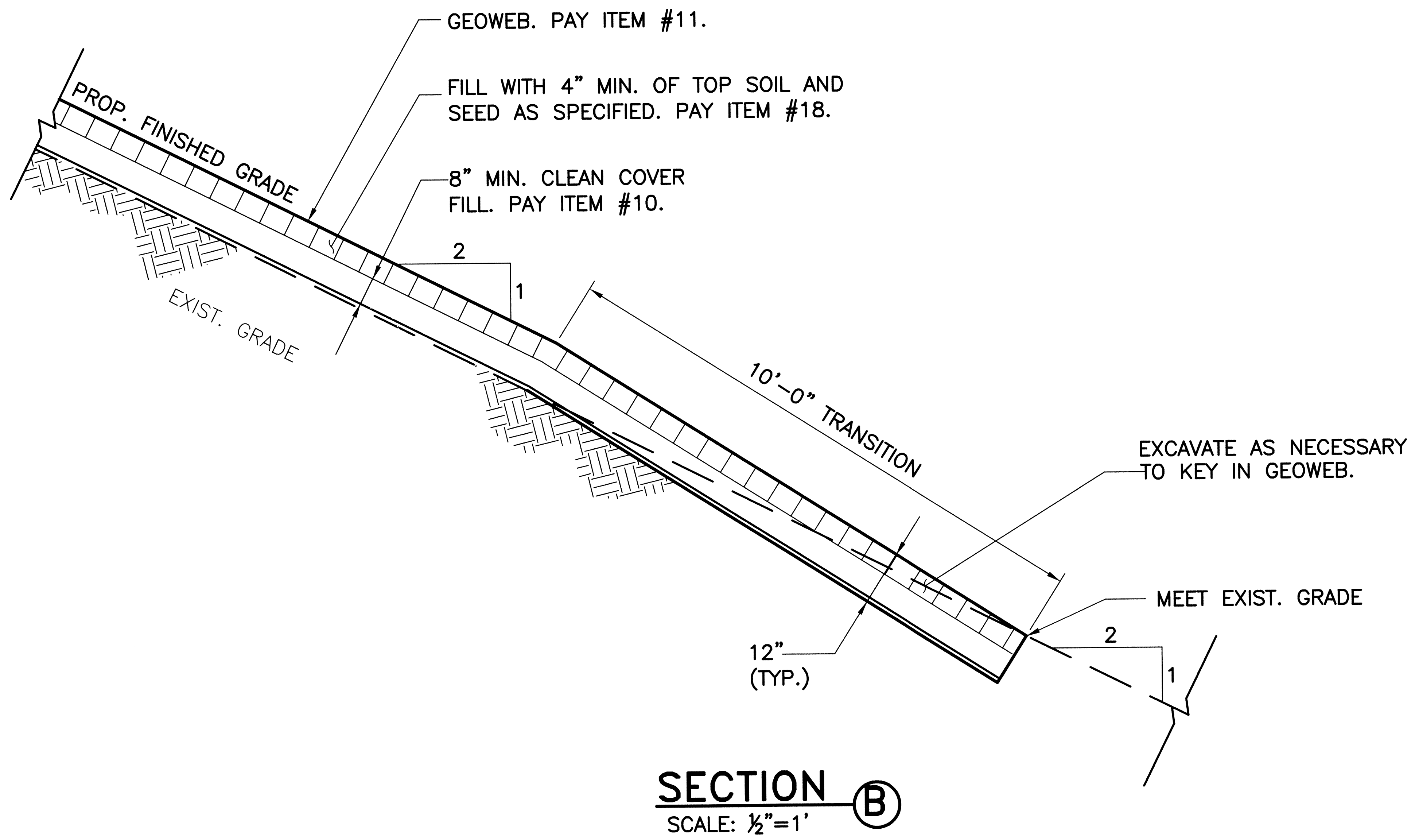
Plotted By: Callipo, Nazzareno



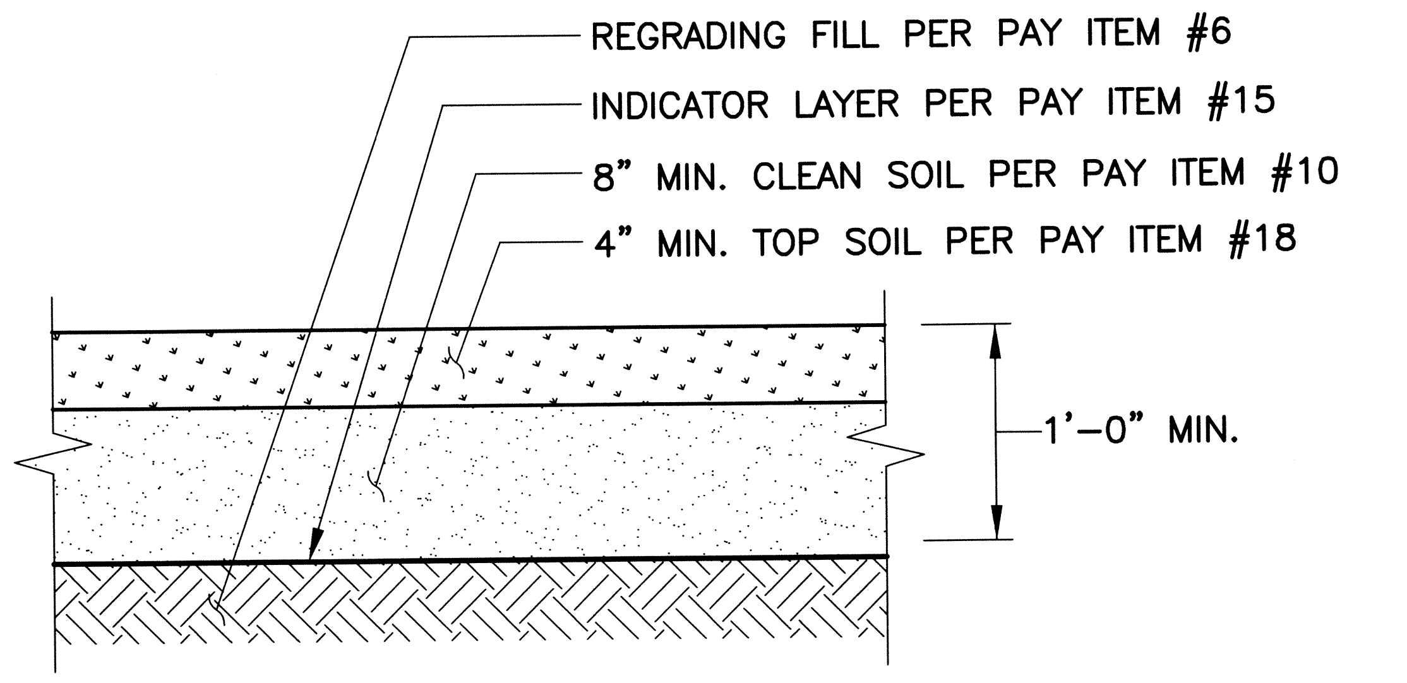
SECTION A

SCALE: AS SHOWN



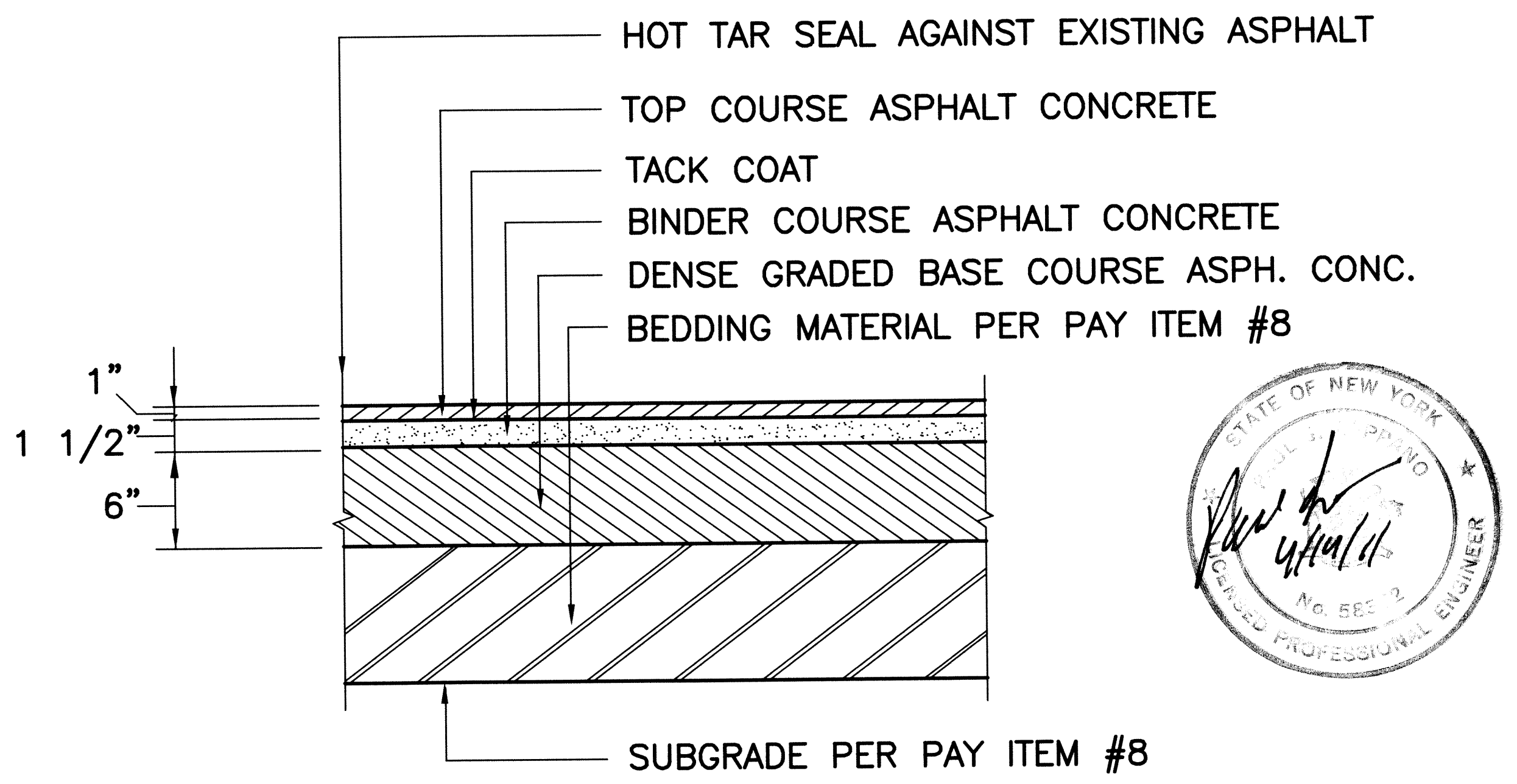
SECTION B

SCALE: ½"=1'



GENERALIZED CAPPING CROSS-SECTION

N.T.S.



HOT MIX ASPHALT PAVEMENT RESTORATION PAY ITEM #7

N.T.S.

REV.	DATE	REMARKS

CLIENT
CITY OF YONKERS
DEPARTMENT OF ENGINEERING

LOCATION
SECTION 3, BLOCK 3515, LOT 115
1061 NORTH BROADWAY

LOCKWOOD, KESSLER & BARTLETT, INC.
CONSULTING ENGINEERS SINCE 1889 SYOSSET, NEW YORK

PROJECT TITLE
REMEDIAL CLOSURE WORK PLAN

DRAWING TITLE
CROSS SECTION A & B
AND MISCELLANEOUS DETAILS

DESIGN BY: N.C.
DRAWN BY: N.C.
CHECKED BY: P.L.
DATE: DECEMBER 10, 2010
SCALE: AS NOTED

PROJECT NO. 4341-01
DRAWING NO. 2

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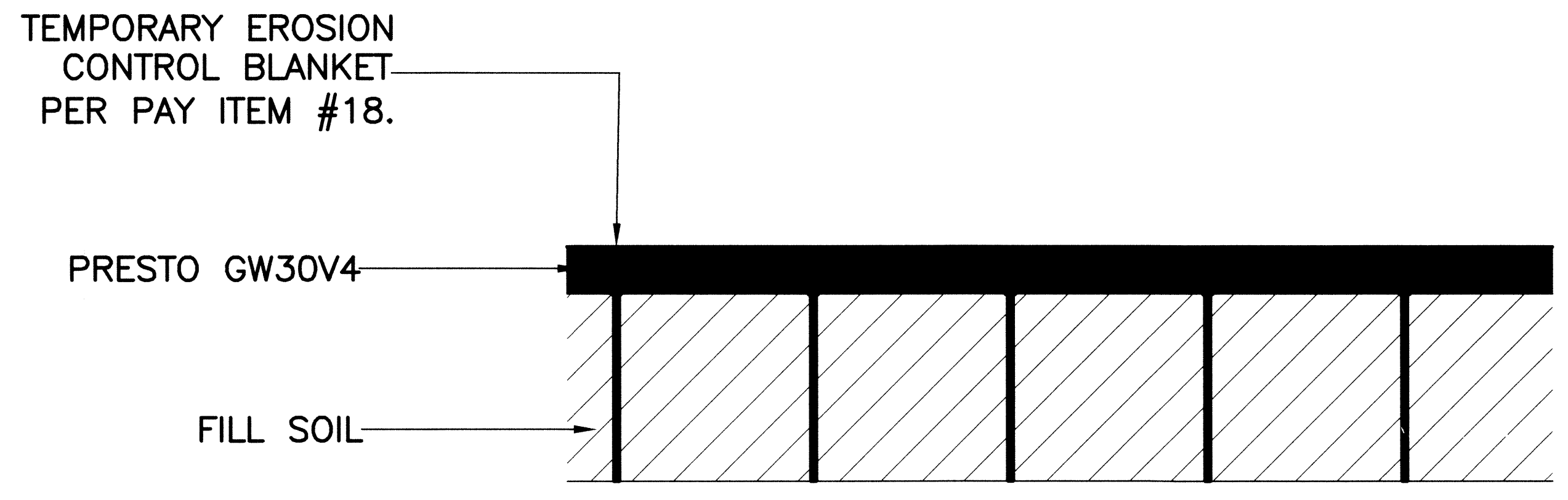
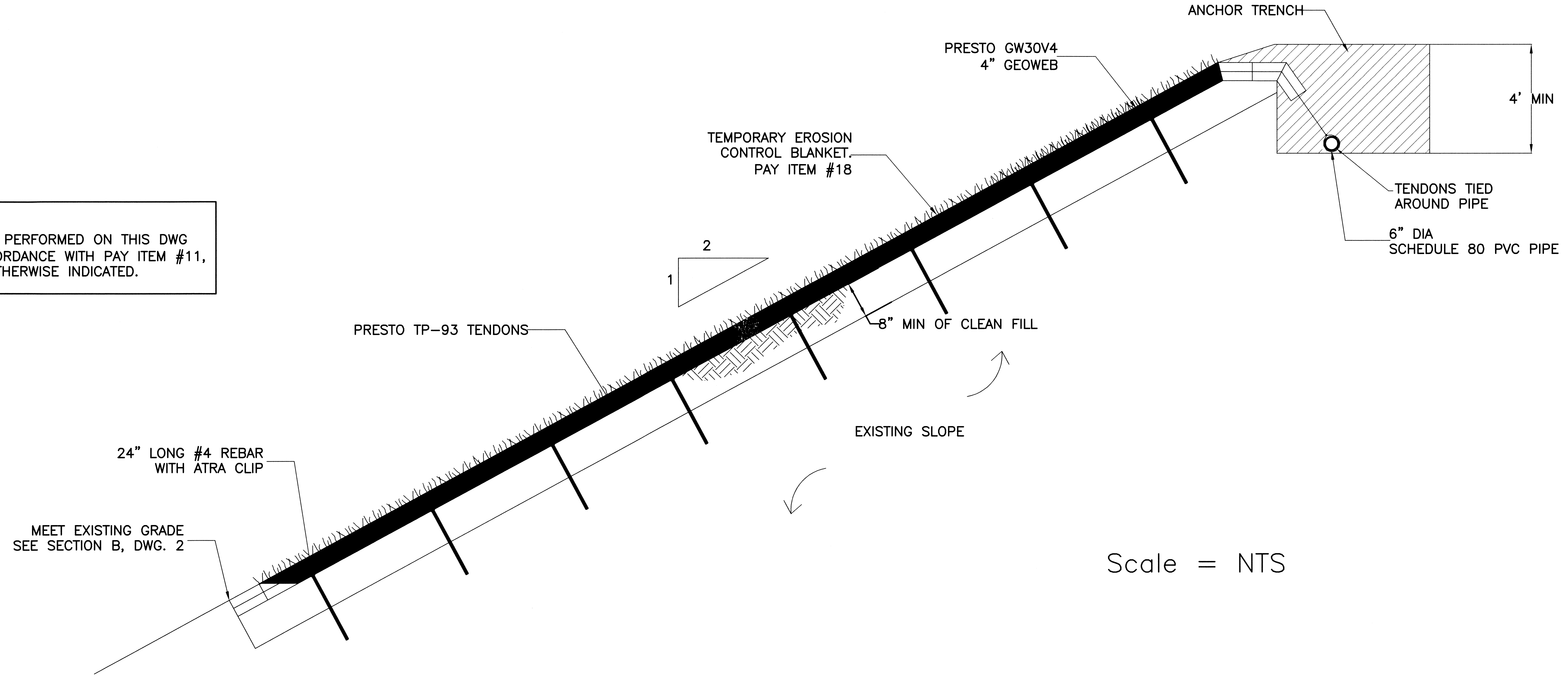


SECTION AA

NOTES:
ALL WORK PERFORMED ON THIS DWG IS IN ACCORDANCE WITH PAY ITEM #11, UNLESS OTHERWISE INDICATED.



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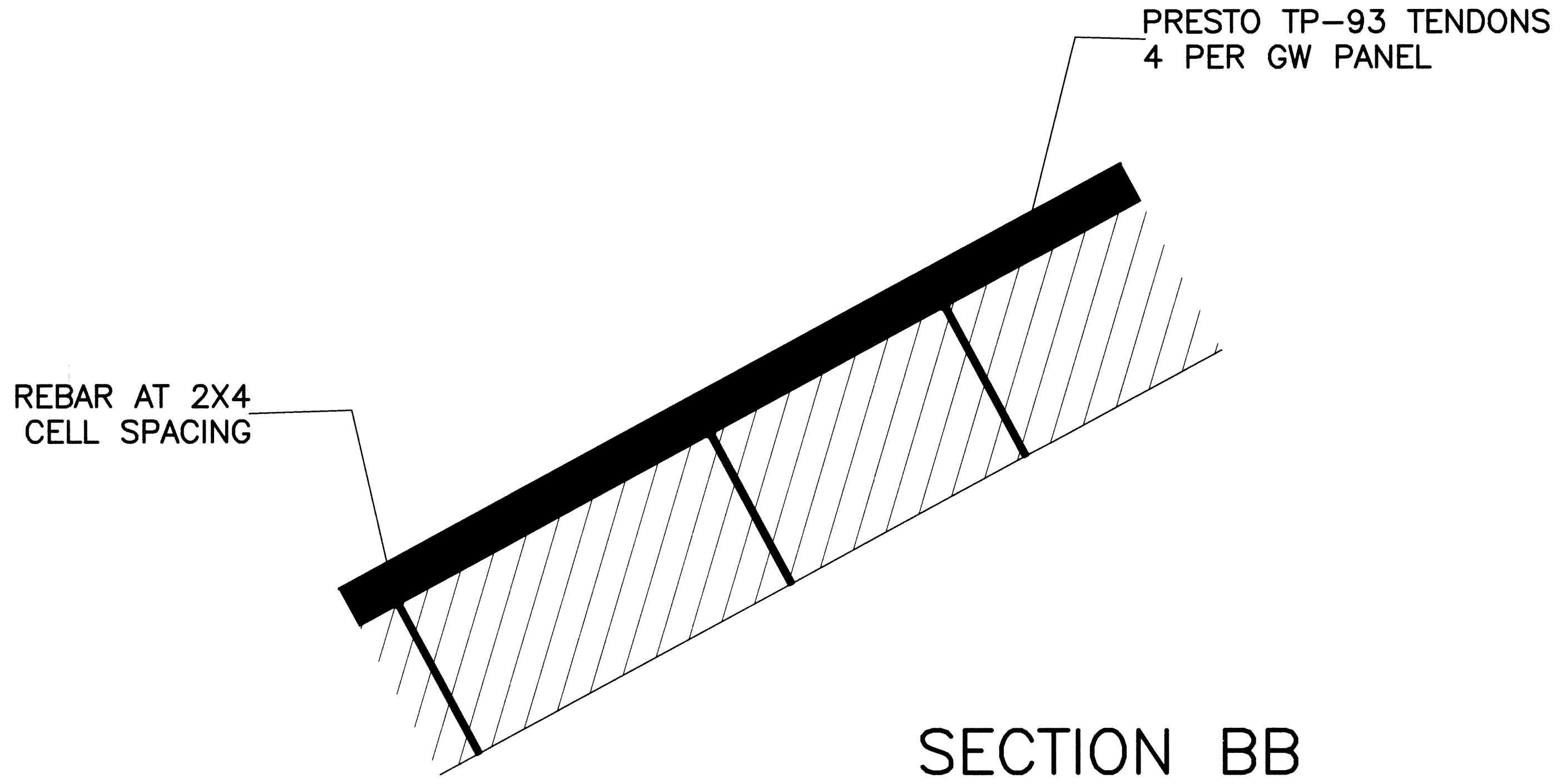
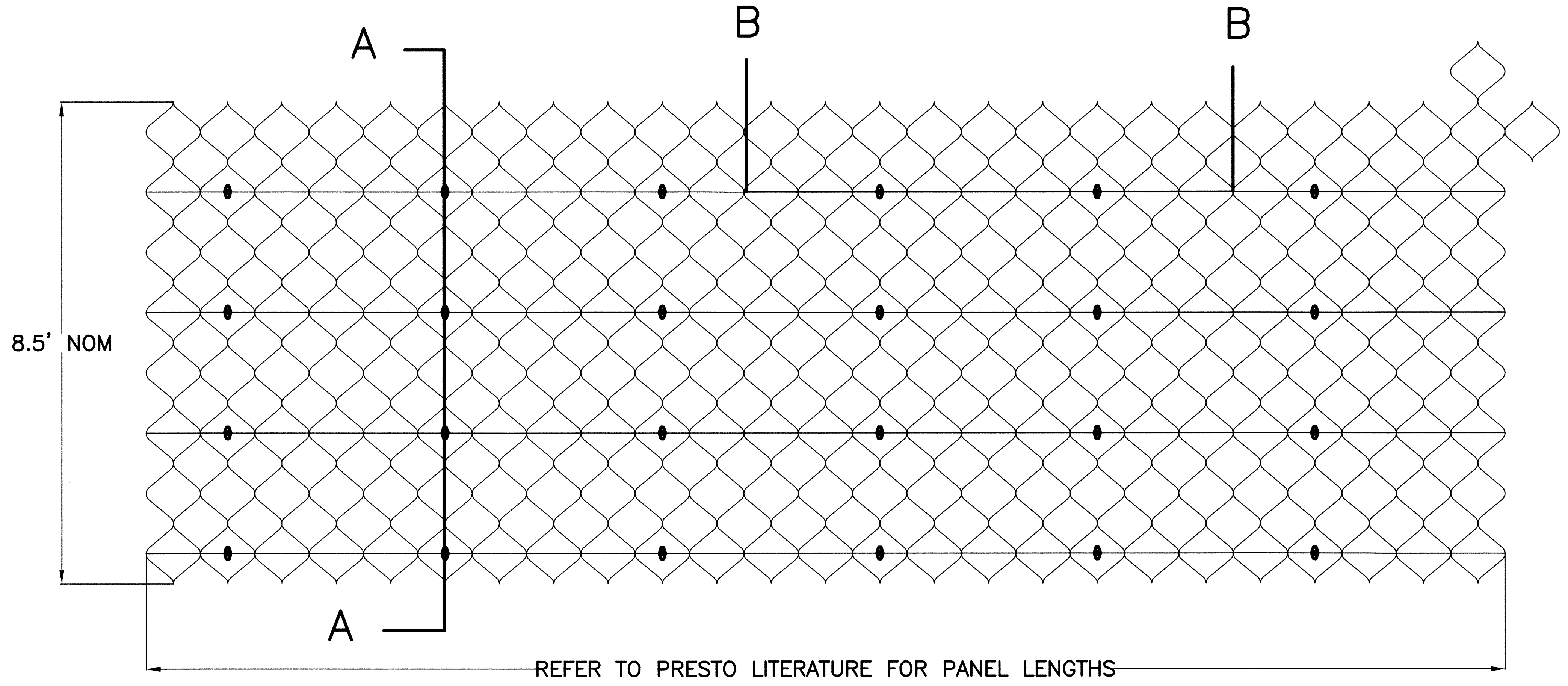
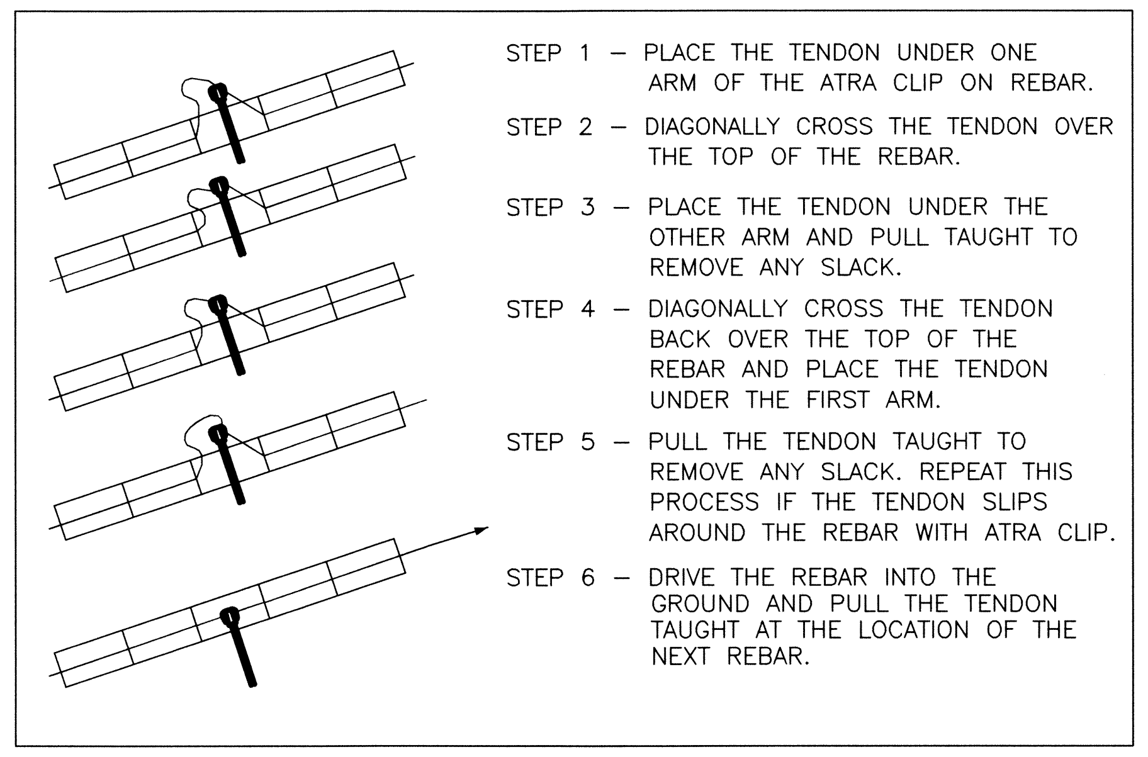


SECTION BB



PLAN VIEW OF A SINGLE PANEL



STEP 1 – PLACE THE TENDON UNDER ONE ARM OF THE ATRA CLIP ON REBAR.

STEP 2 – DIAGONALLY CROSS THE TENDON OVER THE TOP OF THE REBAR.

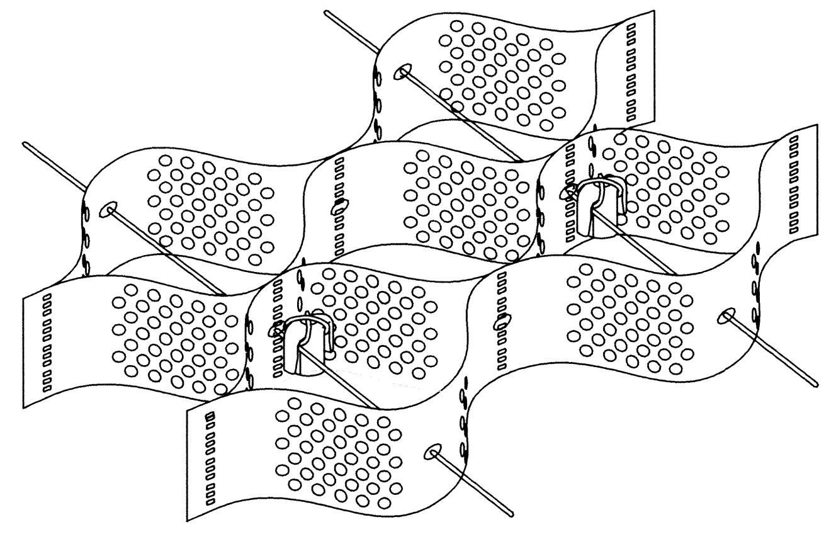
STEP 3 – PLACE THE TENDON UNDER THE OTHER ARM AND PULL TAUGHT TO REMOVE ANY SLACK.

STEP 4 – DIAGONALLY CROSS THE TENDON BACK OVER THE TOP OF THE REBAR AND PLACE THE TENDON UNDER THE FIRST ARM.

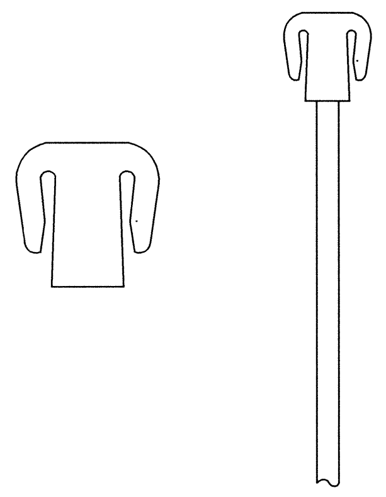
STEP 5 – PULL THE TENDON TAUGHT TO REMOVE ANY SLACK. REPEAT THIS PROCESS IF THE TENDON SLIPS AROUND THE REBAR WITH ATRA CLIP.

STEP 6 – DRIVE THE REBAR INTO THE GROUND AND PULL THE TENDON TAUGHT AT THE LOCATION OF THE NEXT REBAR.

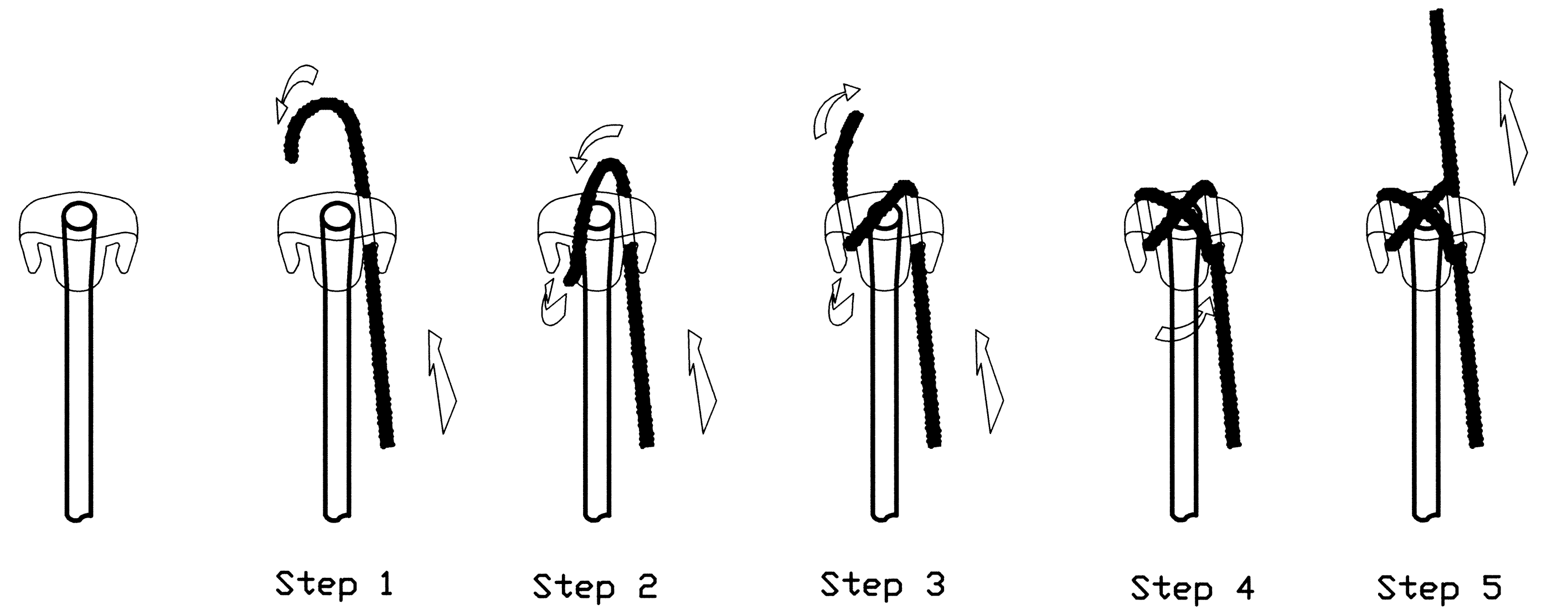
REBAR INSTALLATION WITH TENDONS



TYPICAL TENDON DETAIL



ATRA CLIP WITH REBAR



MOORE HITCH DETAIL

REV.	DATE	REMARKS

CLIENT
CITY OF YONKERS
DEPARTMENT OF ENGINEERING

LOCATION
SECTION 3, BLOCK 3515, LOT 115
1061 NORTH BROADWAY

LOCKWOOD, KESSLER & BARTLETT, INC.
CONSULTING ENGINEERS SINCE 1889 SYOSSET, NEW YORK

PROJECT TITLE
REMEDIAL CLOSURE WORK PLAN

DRAWING TITLE
GEOWEB DETAILS

DESIGN BY: N.C.
DRAWN BY: N.C.
CHECKED BY: P.L.
DATE: DECEMBER 10, 2010
SCALE: AS NOTED

PROJECT NO. 4341-01
DRAWING NO. 3

File Name: i:\projects\4341 01 rawp\eng-draft\work\dwg\final – january 2010\final – 12-10-2010\4341_03_geoweb details.dwg
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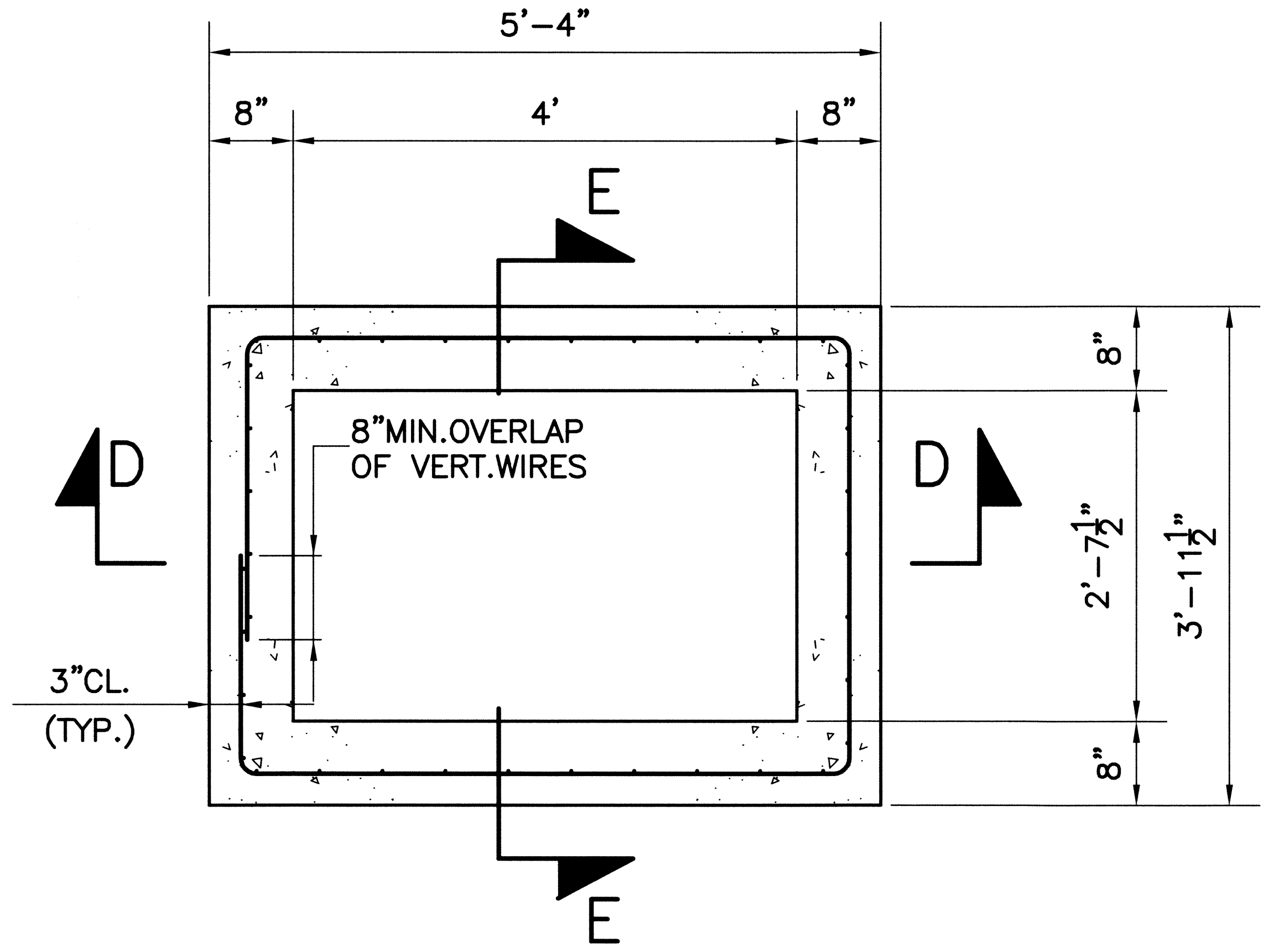
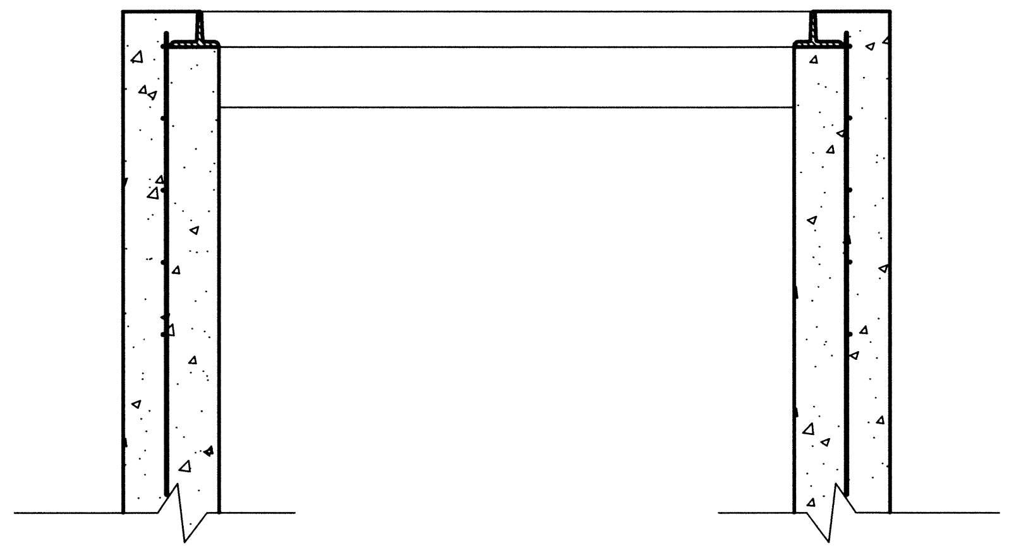
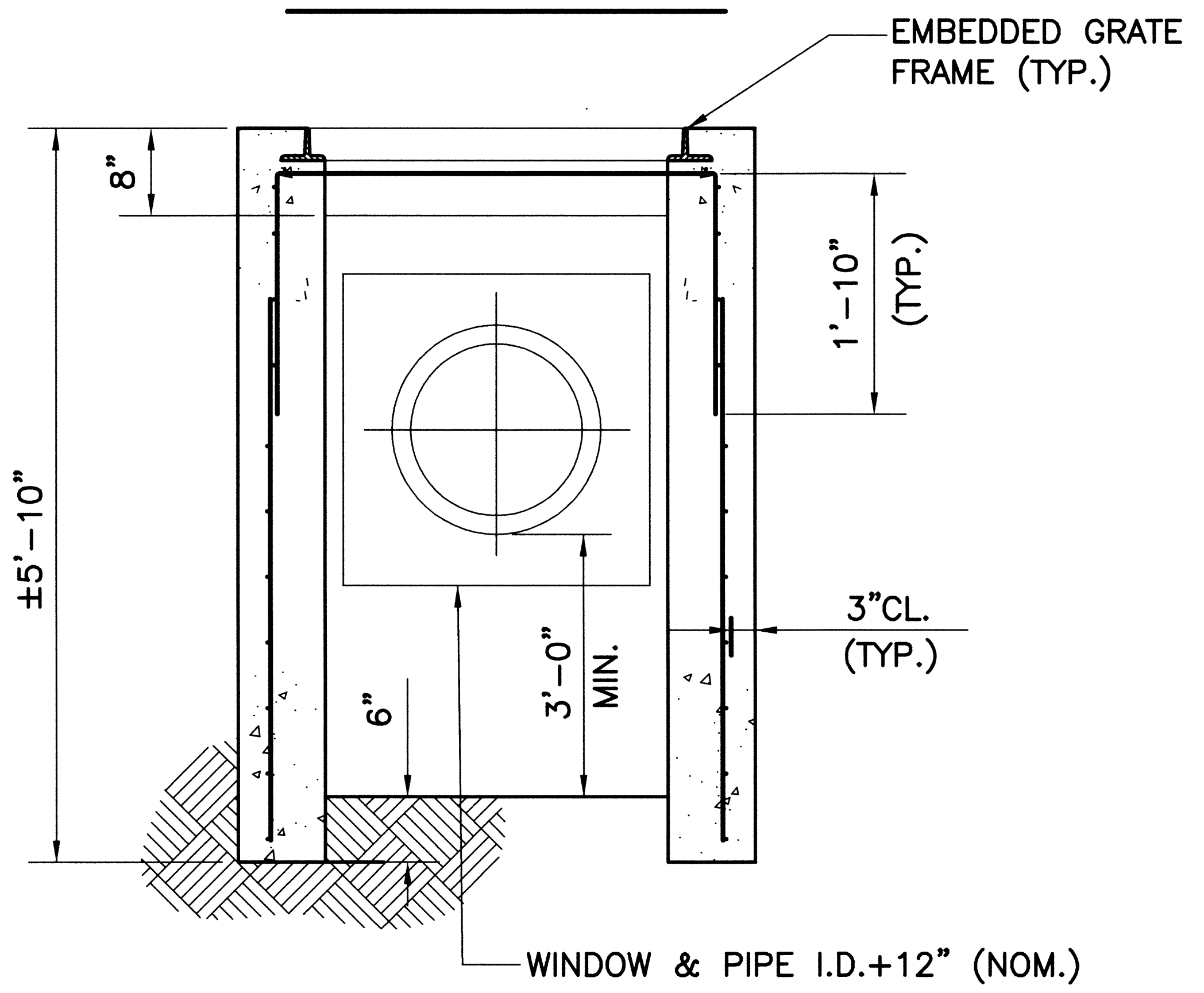
Plotted By: Callipo, Nazzareno



PLAN



SECTION D–D



SECTION E–E

REINFORCED CONCRETE CATCH BASIN

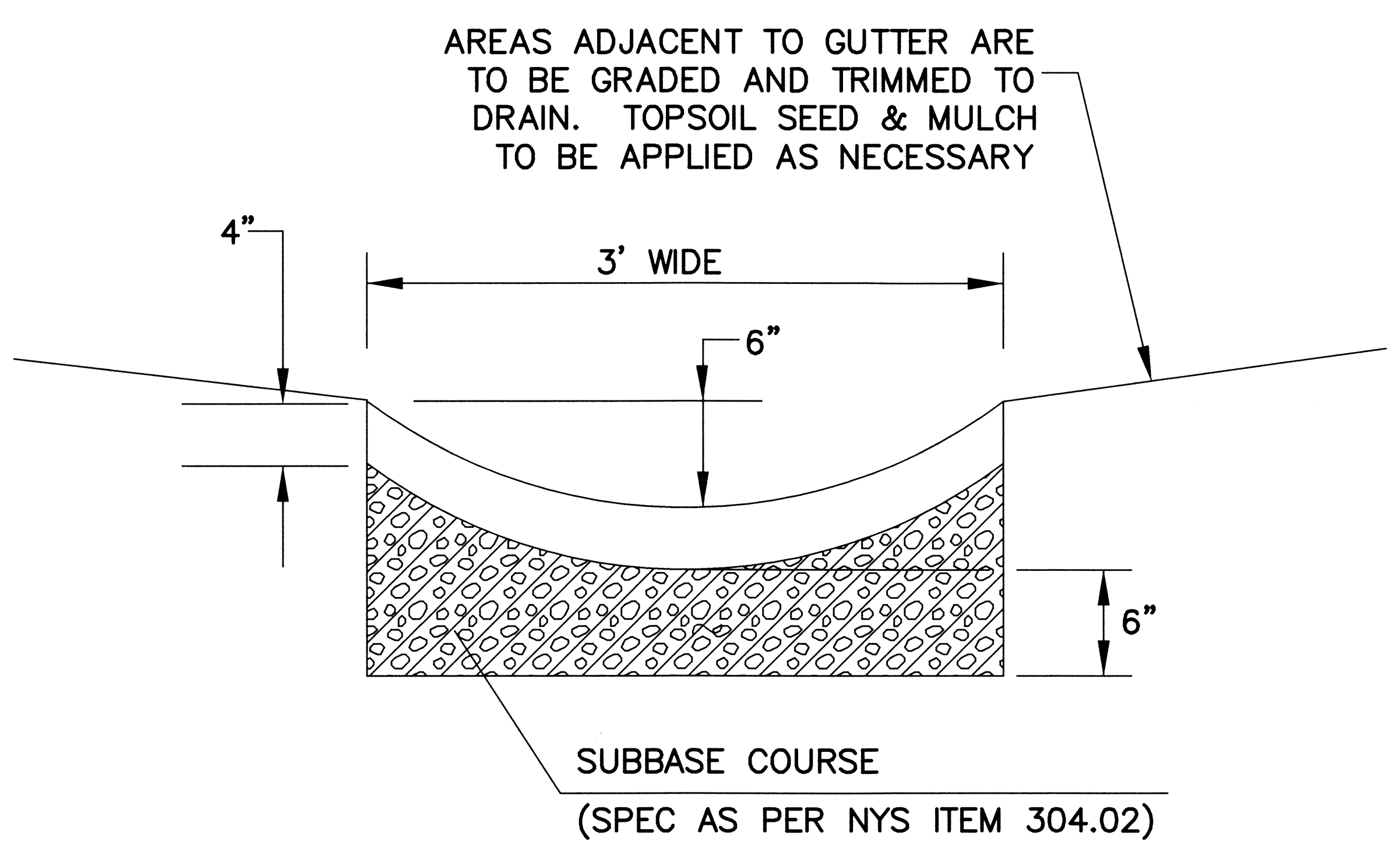
PAY ITEM #9

② DETAIL
N.T.S.

NOTES:

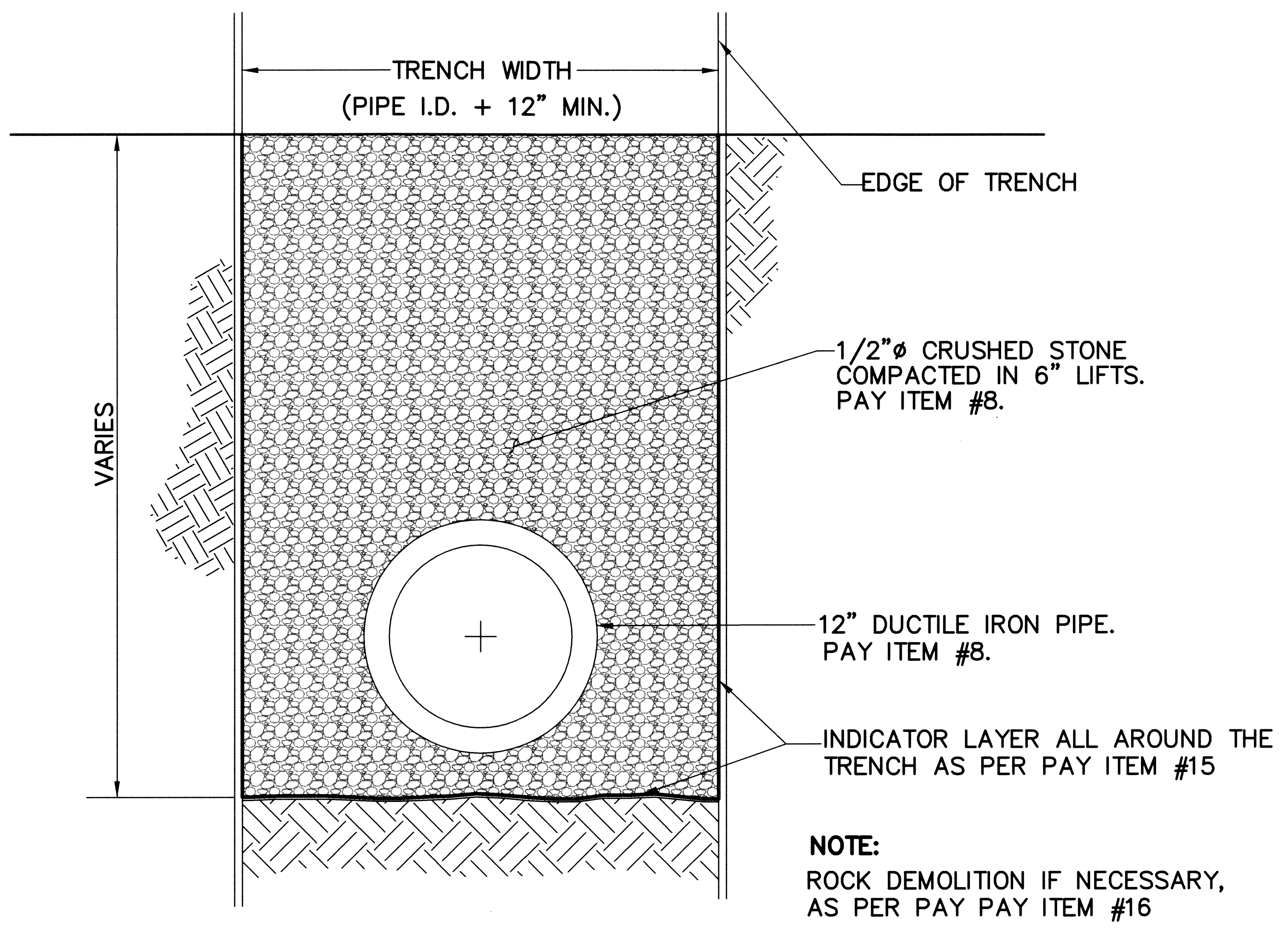
1. REBARS f =40.000 p.s.i., A.S.T.M. A–615
2. W.W.M. 6"x6" f =60,000 p.s.i., A.S.T.M. A–185 PROVIDE 2" COVER AT ENDS OF WIRE, 1" RADIUS BENDS AT CORNERS
3. 3000 PSI CONCRETE AT 28 DAYS. PAY ITEM # 9
4. WINDOW TO BE CAST IN STRUCTURE AS REQUIRED. KNOCK–OUT PANELS WILL NOT BE PERMITTED.
5. GRATE TO BE NEENAH GRATES MODEL #R–3574–2Q OR EQUAL. PAY ITEM #9

NOTE:
ASPHALT CONCRETE GUTTER TO BE BUILT ALONG ODELL AVENUE. TOTAL LENGTH APPOX. 600 LF.



ASPHALT CONCRETE GUTTER (SPECIFICATION AS PER NYS DOT ITEM 624.020101)

N.T.S.

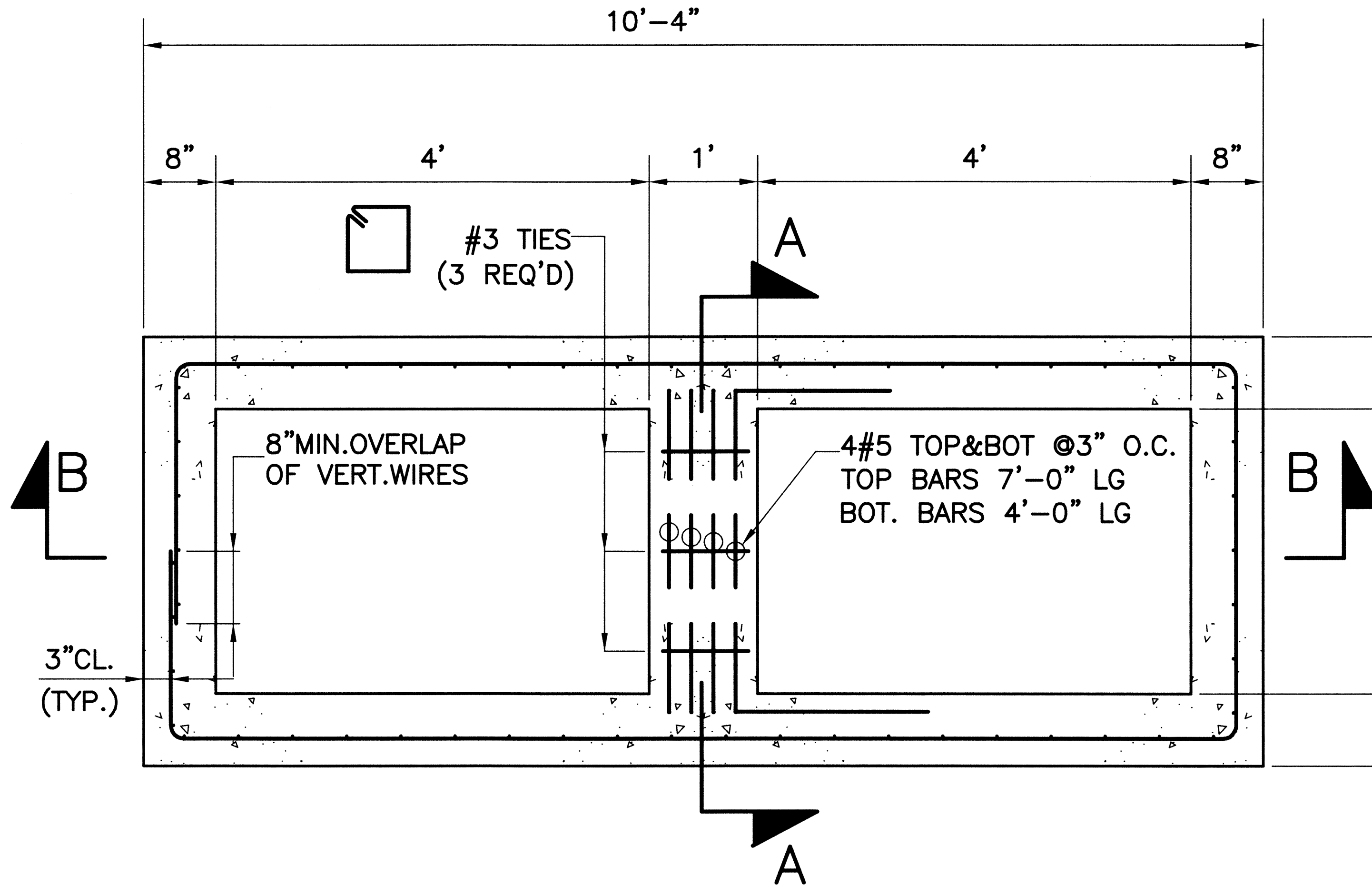


NOTE:
ROCK DEMOLITION IF NECESSARY, AS PER PAY PAY ITEM #16

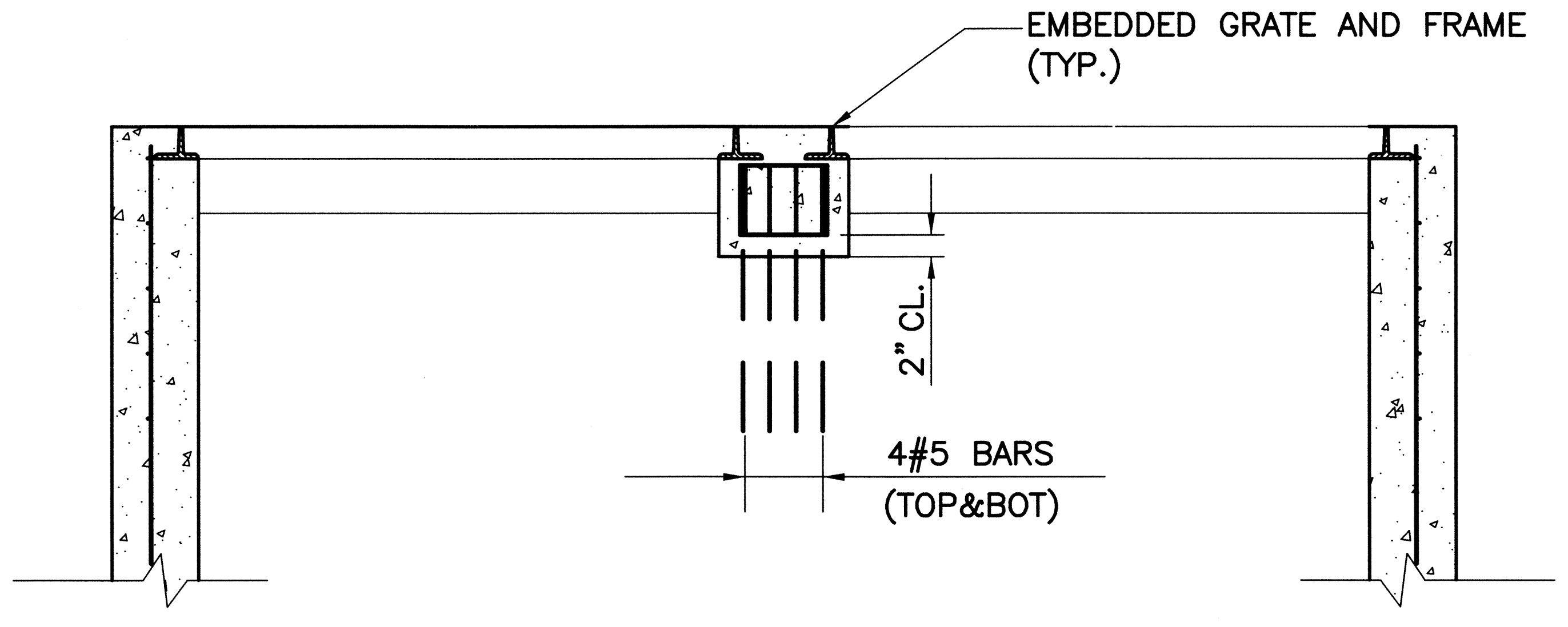
TYPICAL TRENCH SECTION

STORM DRAINS

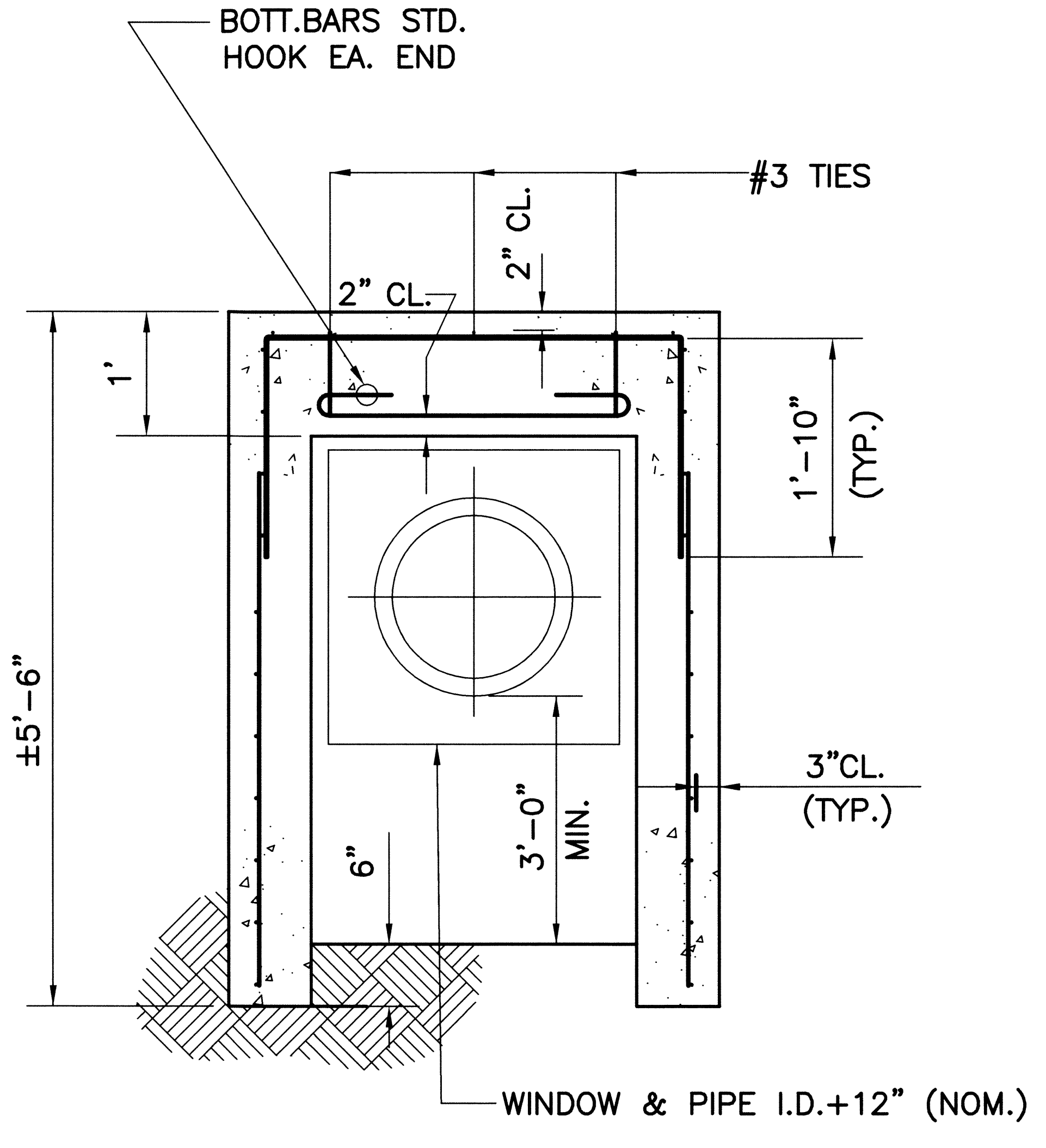
N.T.S.



PLAN



SECTION B–B

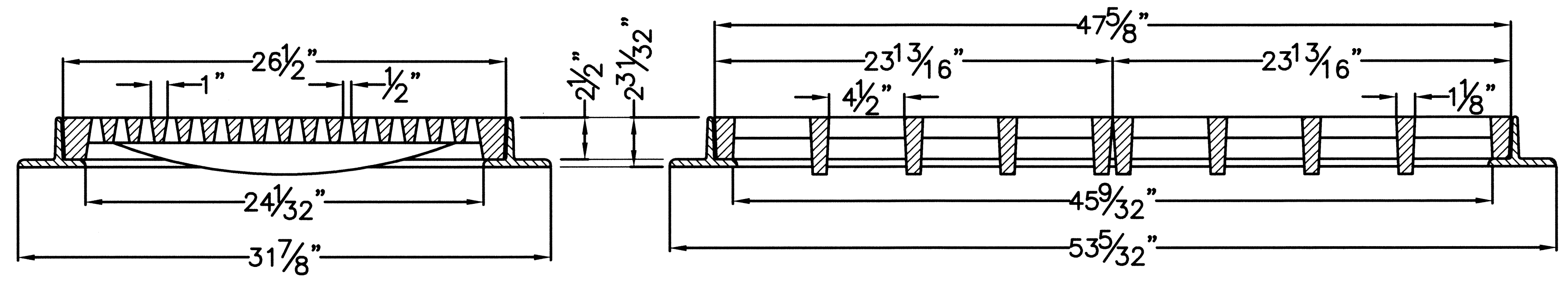


SECTION A–A

REINFORCED CONCRETE DOUBLE CATCH BASIN

PAY ITEM #9

① DETAIL
N.T.S.



NEW HEAVY DUTY INLET FRAME AND DOUBLE GRATE DETAILS

PAY ITEM #9

③ DETAIL
N.T.S.

STATE OF NEW YORK
REGISTERED PROFESSIONAL ENGINEER

REV.	DATE	REMARKS	BY
1	7/27/2010	INDICATOR LAYER SHOWN IN TYPICAL TRENCH SECTION	N.C.

CLIENT
CITY OF YONKERS
DEPARTMENT OF ENGINEERING

LOCATION
SECTION 3, BLOCK 3515, LOT 115
1061 NORTH BROADWAY
YONKERS, NEW YORK

LOCKWOOD, KESSLER & BARTLETT, INC.
CONSULTING ENGINEERS SINCE 1889 SYOSSET, NEW YORK

PROJECT TITLE
REMEDIAL CLOSURE WORK PLAN

DRAWING TITLE
DRAINAGE STRUCTURES AND TRENCHING DETAILS

DESIGN BY: N.C.
DRAWN BY: N.C.
CHECKED BY: P.L.
DATE: DECEMBER 10, 2010
SCALE: N.T.S.

PROJECT NO. 4341–01
DRAWING NO. 4

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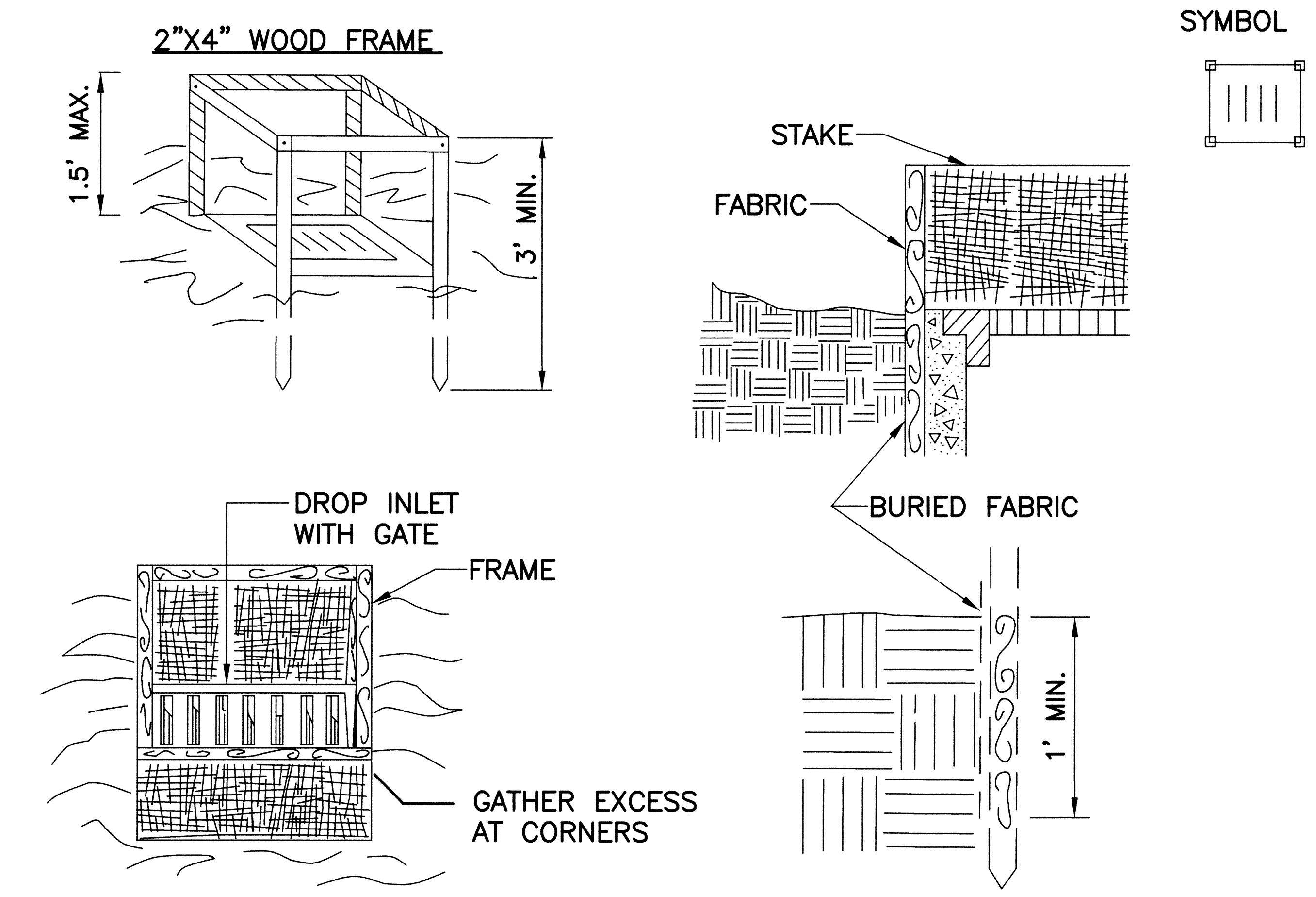
Plotted By: Callipo, Nazzareno



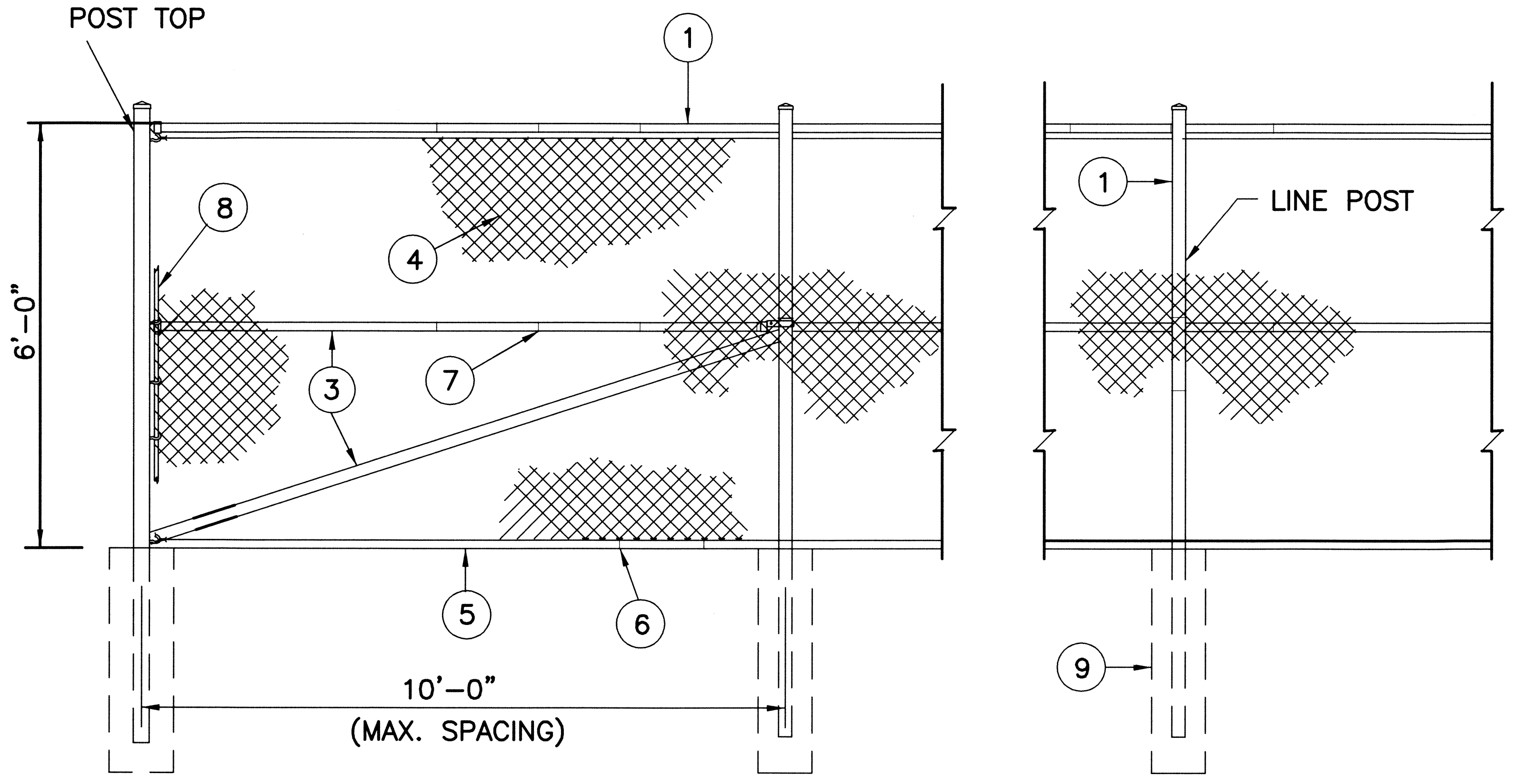
CONSTRUCTION SPECIFICATIONS:

1. FILTER FABRIC SHALL HAVE AN EOS OF 40–85. BURLAP MAY BE USED FOR SHORT TERM APPLICATIONS.
2. CUT FABRIC FROM A CONTINUOUS ROLL TO ELIMINATE JOINTS. IF JOINTS ARE NEEDED THEY WILL BE OVERLAPPED TO THE NEXT STAKE.
3. STAKE MATERIALS WILL BE STANDARD 2" x 4" WOOD OR EQUIVALENT. METAL WITH A MINIMUM LENGTH OF 3 FEET.
4. SPACE STAKES EVENLY AROUND INLET 3 FEET APART AND DRIVE A MINIMUM 18 INCHES DEEP. SPANS GREATER THAN 3 FEET MAY BE BRIDGED WITH THE USE OF WIRE MESH BEHIND THE FILTER FABRIC FOR SUPPORT.
5. FABRIC SHALL BE EMBEDDED 1 FOOT MINIMUM BELOW GROUND AND BACKFILLED. IT SHALL BE SECURELY FASTENED TO THE STAKES AND FRAME.
6. A 2" x 4" WOOD FRAME SHALL BE COMPLETED AROUND THE CREST OF THE FABRIC FOR OVER FLOW STABILITY.

MAXIMUM DRAINAGE AREA 1 ACRE

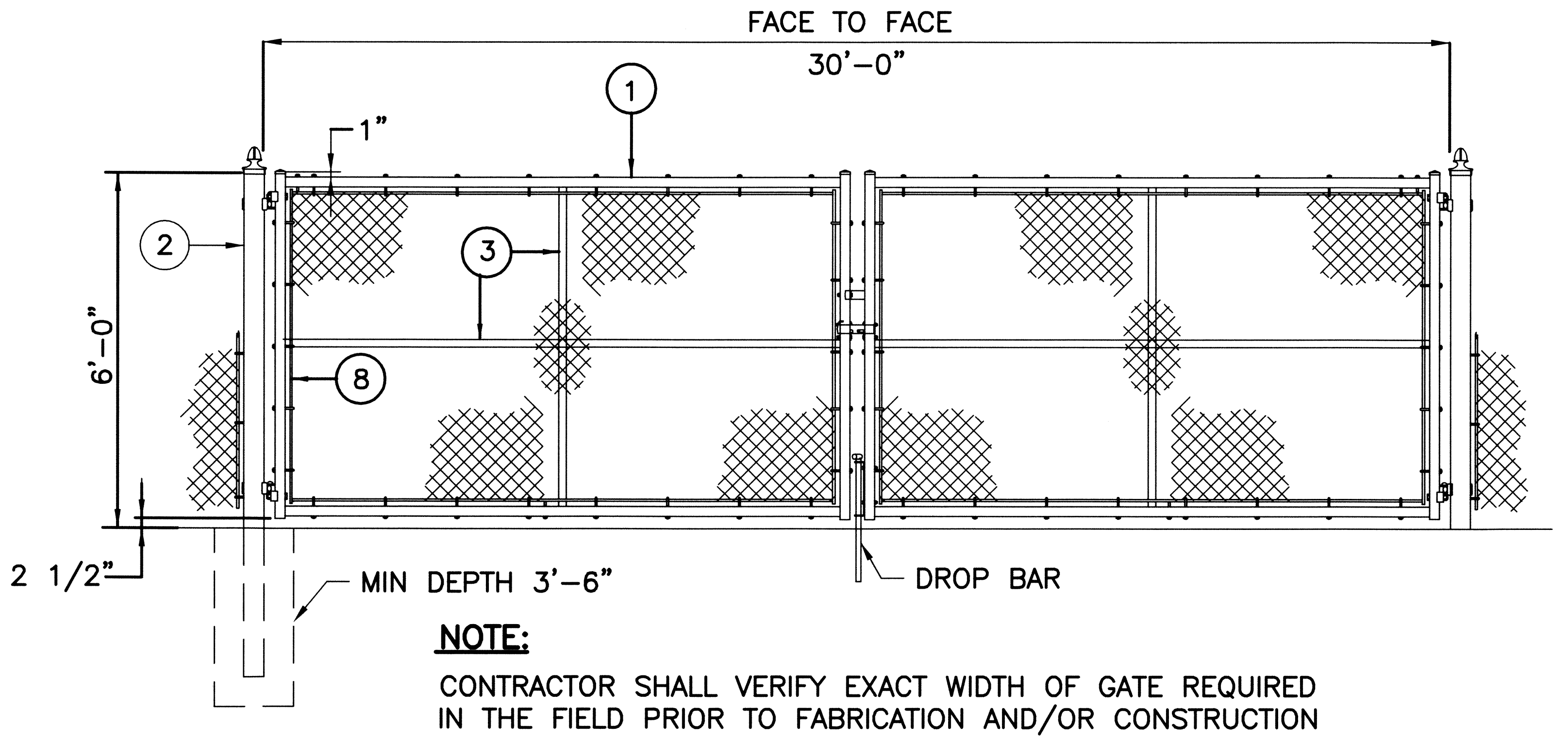
FILTER FABRIC DROP INLET PROTECTION
PAY ITEM #4

N.T.S.



FENCE ELEVATION
PAY ITEM #13

N.T.S



NOTE:

CONTRACTOR SHALL VERIFY EXACT WIDTH OF GATE REQUIRED IN THE FIELD PRIOR TO FABRICATION AND/OR CONSTRUCTION

GATE ELEVATION – DOUBLE SWING GATE
PAY ITEM #13

N.T.S.

FENCE KEY

GENERAL ALL MATERIALS AND GALVANIZING AND PVC COATING WHEN REQUIRED, SHALL CONFORM TO THE SPECIFICATIONS FOR THESE ITEMS. ALL CONCRETE TO BE CLASS B CONCRETE.

① 2" O.D. SEAMLESS STEEL PIPE 2.72 LB. PER L.F. LINE POST AND GATE MEMBERS. LINE POST TO BE SPACED EQUIDISTANT ON 10 FOOT MAXIMUM CENTERS.

② STANDARD 4" O.D. SEAMLESS STEEL PIPE NOT LESS THAN 9.1 LB. PER L.F. TERMINAL, CORNER, ANGLE, PULL, INTERMEDIATE POSTS, AND GATE POSTS 4' WIDE AND UNDER. 6–5/8" O.D. SEAMLESS STEEL PIPE 18.97 LB. PER L.F. FOR GATE POSTS WHEN GATES ARE OVER 4' WIDE.

③ STANDARD 1–5/8" O.D. SEAMLESS STEEL PIPE 2.27 LB. PER L.F. TOP AND BRACE RAILS. BRACE RAILS TO BE POSITIONED AS SHOWN UNLESS OTHERWISE ORDERED BY ENGINEER.

④ FENCE FABRIC #6 GAUGE OPEN HEARTH STEEL WIRE MINIMUM TENSILE STRENGTH 70,000 LBS. PER SQ. IN. HELICALLY WOVEN IN 2" CHAIN LINK DIAMOND PATTERN.

⑤ TENSION WIRE #7 GAUGE STEEL WIRE.

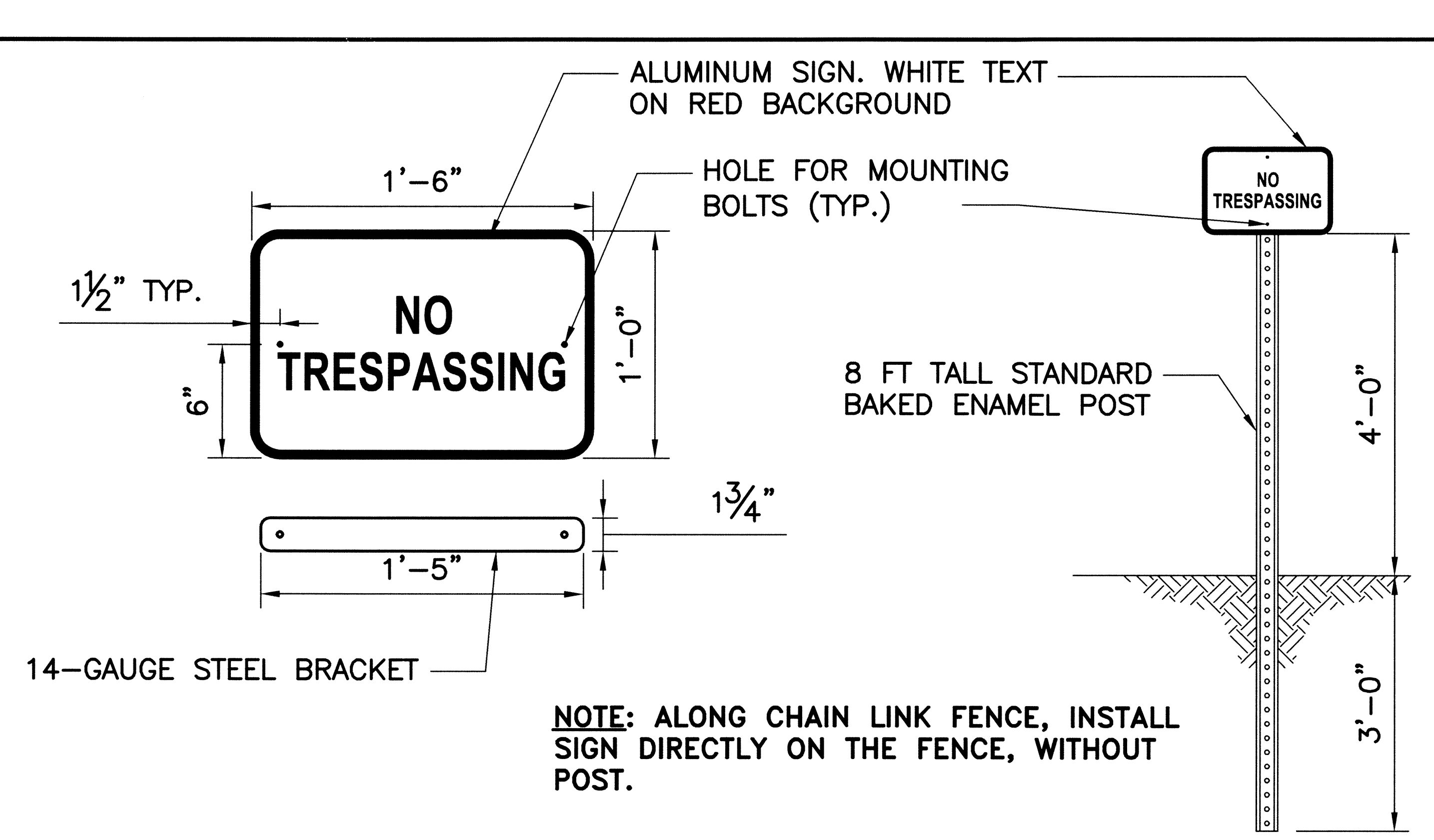
⑥ HOG RINGS #11 GAUGE STEEL WIRE SPACED AT 24" INTERVALS.

⑦ 1–9" GAUGE STEEL WIRE FABRIC TIES SPACED AT INTERVALS OF 18" ON RAILS AND 12" ON LINE POSTS.

⑧ STEEL TENSION BAR 1/4" x 3/4" WITH BANDS SPACED AT INTERVALS OF 15" MAXIMUM TO BE PROVIDED ON VERTICAL MEMBERS OF GATE FRAMES AND ALL FENCE POSTS EXCEPT LINE POST.

⑨ CONCRETE FOOTING – 3500 PSI CONCRETE AT 28 DAYS.

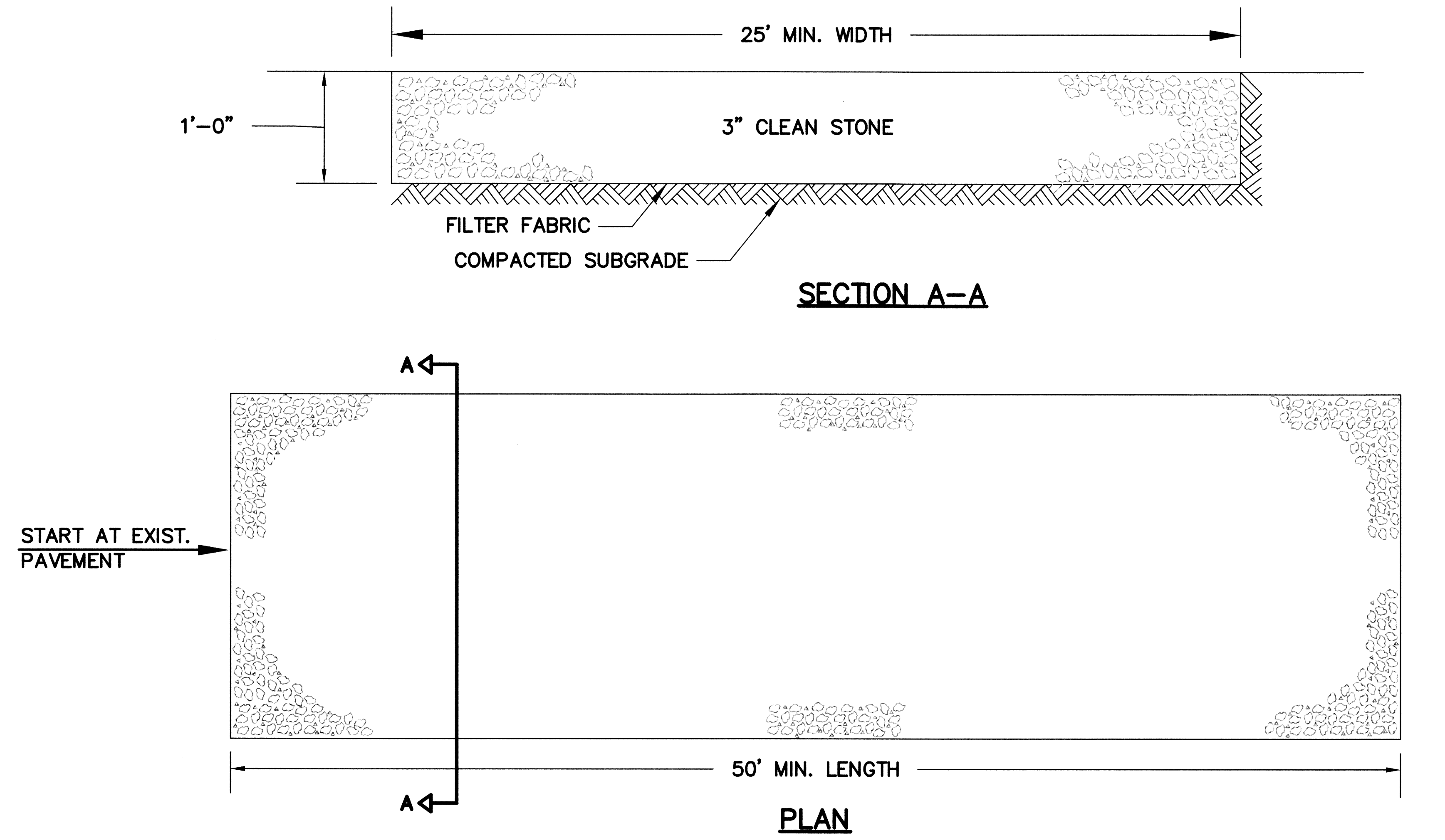
⑩ FOR GATE STOPS, LOCKING DEVICE AND PADLOCK, SEE SPECIFICATIONS.



NOTE: ALONG CHAIN LINK FENCE, INSTALL SIGN DIRECTLY ON THE FENCE, WITHOUT POST.

"NO TRESPASSING" SIGN
PAY ITEM #12

N.T.S.

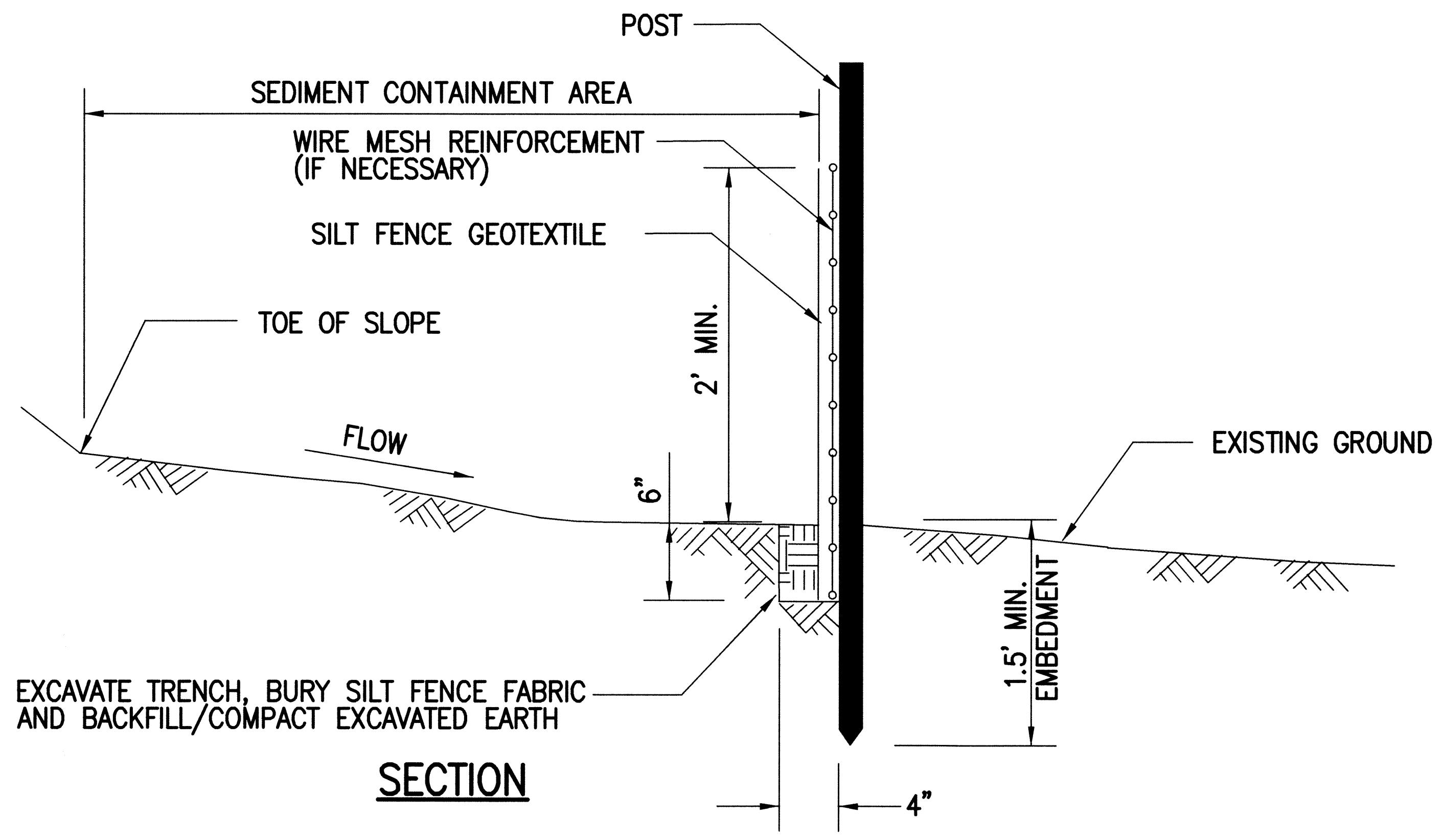


INSTALLATION NOTES

1. STONE SIZE – USE 3" STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
2. LENGHT – AS REQUIRED, BUT NOT LESS THAN 50 FEET (EXCEPT ON A SINGLE RESIDENCE LOT WHERE A 30 FOOT MINIMUM LENGTH WOULD APPLY.
3. THICKNESS – NOT LESS THAN SIX (6) INCHES.
4. WIDTH – 25 FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCUR.
5. FILTER CLOTH – WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE. FILTER CLOTH WILL NOT BE REQUIRED ON A SINGLE FAMILY RESIDENCE LOT.
6. SURFACE WATER – ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED ACROSS THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.
7. MAINTENANCE – THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT OF WAY THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHT OF WAY MUST BE REMOVED IMMEDIATELY.
8. WASHING – WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHT OF WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
9. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.

ANTI–TRACKING PAD
PAY ITEM #4

N.T.S.



SILT FENCE – TEMPORARY
PAY ITEM #4

N.T.S.

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Plot Date: 4/14/2011 1:58 PM
Plotted By: Callipo, Nazzareno

REV.	DATE	REMARKS	BY

CLIENT
CITY OF YONKERS
DEPARTMENT OF ENGINEERING

LOCATION
SECTION 3, BLOCK 3515, LOT 115
1061 NORTH BROADWAY
YONKERS, NEW YORK

LKB
LOCKWOOD, KESSLER & BARTLETT, INC.
CONSULTING ENGINEERS SINCE 1889 SYOSSET, NEW YORK

PROJECT TITLE
REMEDIAL CLOSURE WORK PLAN

DRAWING TITLE
MISCELLANEOUS SITE DETAILS

DESIGN BY: N.C.
DRAWN BY: N.C.
CHECKED BY: P.L.
DATE: DECEMBER 10, 2010
SCALE: N.T.S.

PROJECT NO. 4341–01
DRAWING NO. 5

Appendix K

Indicator Layer Product Information

ITEM 15

INDICATOR LAYER

1. Description

The Contractor shall provide all labor, materials, equipment, supervision and services, and performance of all operations required for the complete installation of the indicator layer, as shown on the Plans and specified herein.

2. Details

A. General

1. An indicator layer will be installed on top of the cover area as shown on the Plans, to provide a physical warning to anyone who may inadvertently perform future excavation in the capped area. This layer will consist of a cost-effective material such as plastic barrier fencing.

2. Products

    a. The indicator layer shall be US-Fence.com "Safety and Barrier Fence" or approved equal and as follows:

FENCE PROPERTIES	QUALIFIER	PROPERTY
Material	-	High Density Polyethelene
Ultraviolet Resistance	-	Fully Stabilized
Effective Temperature Range	-	-60°F to 180°F
Tensile Yield	Minimum	3200 PSI
Ultimate Tensile Strength	Minimum	2600 PSI
Nominal Mesh Openings	-	3 ½" x 1 ½"
Color	-	Orange

B. Execution

1. Barrier Fence shall be installed in accordance with the lines and grades shown on the Plans, as described under this ITEM, and as directed by the Engineer.

2. The indicator layer shall be handled and placed in such a manner as to ensure it is not damaged in any way during its installation or during the installation of other items of the project or by other construction activities.

3. After unwrapping the indicator layer it shall not be left exposed for a period in excess of 30 days.

4. In the presence of wind, all indicator layers shall be weighted with sandbags or the equivalent. Such sandbags shall be installed during placement and shall remain until the indicator layer is sufficiently covered with another material shown on the drawings.
5. Contractor shall inspect and remove all foreign objects on top of the placed indicator layer prior to backfill under separate ITEM herein.
6. In the event of damage, the Contractor shall immediately make all repairs and replacements necessary, to the approval of the Engineer and at no additional cost to the Owner.

3. Method of Measurement

The quantity to be paid under this ITEM will for each square foot of indicator layer placed to the satisfaction of the Engineer, as described herein and as shown on the Plans, and as follows:

ITEM No.:	**Description**	**Method of Measurement**
ITEM 15	Indicator Layer, Installed	Square Feet, (SY)

4. Basis for Payment

The unit price bid for this ITEM shall include the cost of furnishing all labor, materials and equipment necessary to install the indicator layer as shown on the Plans, described herein, and to the satisfaction of the Engineer.

No additional costs will be paid for under this ITEM above the unit price bid for this ITEM.

This ITEM does not include the work specified under other items, which are paid under those items.

END OF ITEM

U.S. Fence

fencing products for commercial, agricultural, and residential applications

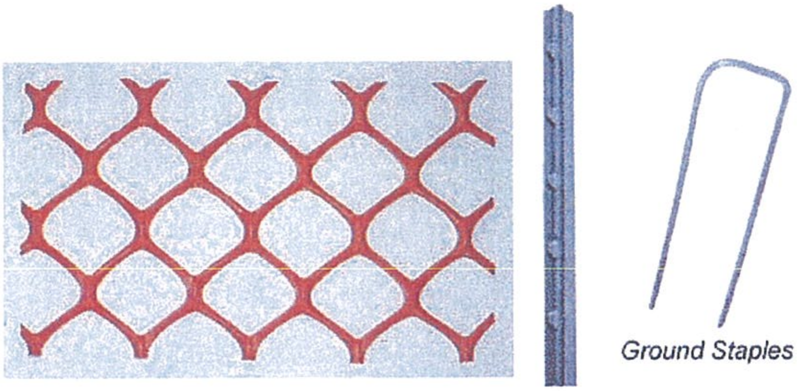
GSA
Federal Supply Schedule
GSA # GS-06F-0031M

Home
View Cart
Index
Categories

Sentry Construction/Security Fence

Secura

Color: ORANGE



Safe, smooth, and attractive construction and/or security fence. Its diamond mesh ensures aesthetic appeal, while smooth top and bottom borders make it less likely to cut and scrape adjacent materials during construction. Use where safety is a top priority!

We recommend using Steel T-Posts for most installations.

Email this to a friend

Item No.	Description	Amount	Qty.
	4' x 50'	$52.90	0
	4' x 100'	$105.90	0
	5' x 50'	$66.50	0
	6' x 50'	$82.25	0
	5-Foot Galvanized Heavy Duty T-Post	$8.55	0
	6-Foot Galvanized Heavy Duty T-Post	$10.25	0
	7-Foot Galvanized Heavy Duty T-Post	$11.75	0
	8-Foot Galvanized Heavy Duty T-Post	$13.25	0
	Ground Staples 6 Inch - For Securing Fence, 25 per Box	$19.90	0

Click Here to:
Add To Cart

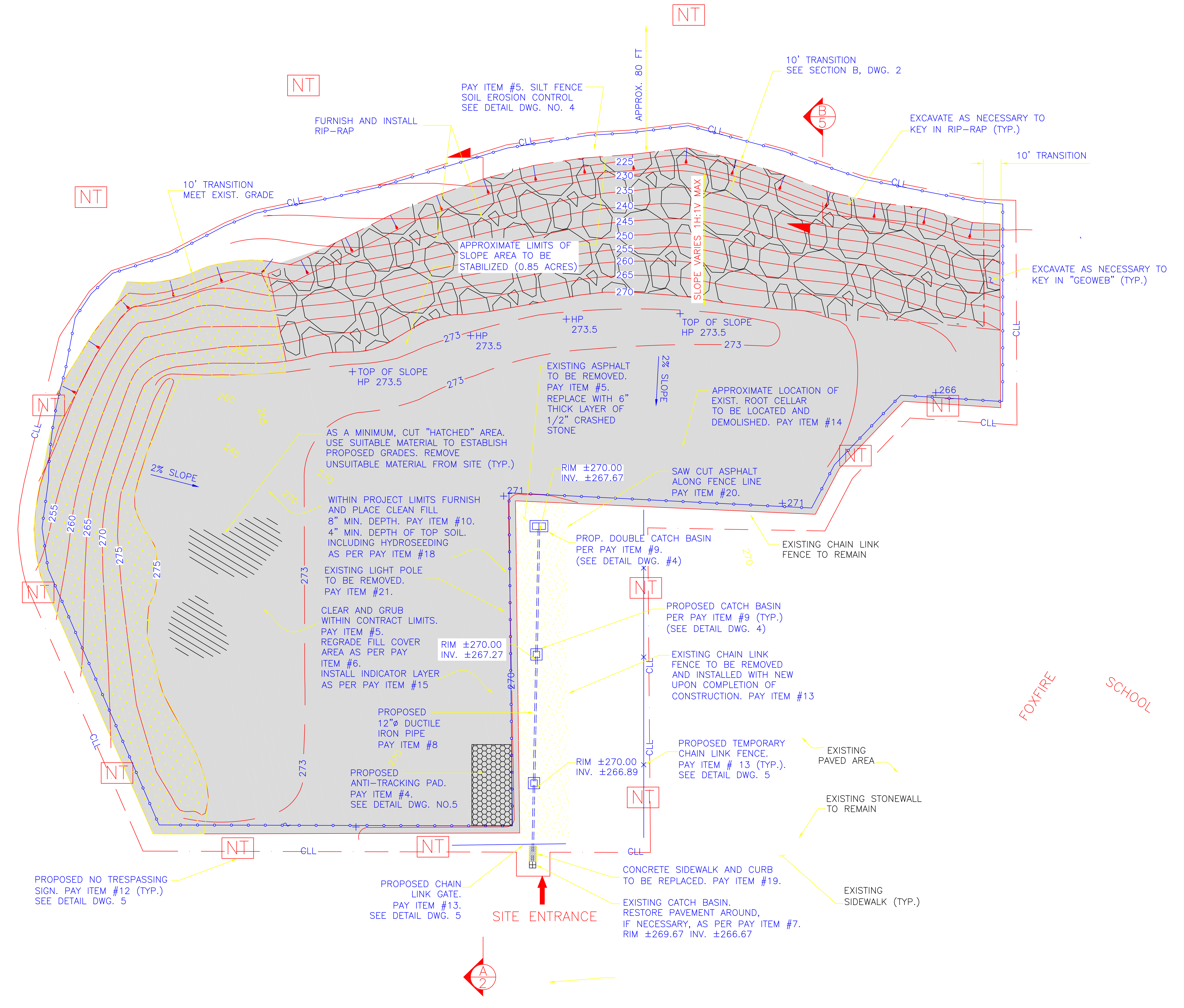
Previous

Next

Appendix L

Rock Slope Configuration & Approval

File Name: g:\users\psummerfield\elizabeth seton\contract documents\final bid documents\contract drawings\grading and layout with rip-rap.dwg
Plot Date: 9/14/2011 6:21 PM
Plotted By: Paul Summerfield



LEGEND

▨	EXISTING STOCK PILE AREA
—226—	EXIST. CONTOUR
—226—	PROPOSED CONTOUR
+ 273.5	PROPOSED SPOT GRADE
▩	PROPOSED RIP-RAP
～～～	EXISTING VEGETATED AREA
▒	PROPOSED 12" MIN. DEPTH COVER WITH UNDERLYING INDICATOR LAYER.
—○—○—	PROPOSED SILT FENCE
========	PROPOSED DRAINAGE PIPE
—×—×—	PROPOSED CHAIN LINK FENCE
—×—×—	EXISTING CHAIN LINK FENCE
▦	EXISTING STONE WALL
+ HP 265	PROPOSED HIGH POINT
— —273— —	PROPOSED CONTOUR 273
---℄---	PROPERTY LINE
—CLL—	CONTRACT LIMIT LINE
▣	PROPOSED SINGLE CATCH BASIN
▣	PROPOSED DOUBLE CATCH BASIN
NT	NO TRESPASSING SIGN
▦	ANTI-TRACKING PAD
☐	AREA OF ASPHALT TO BE REMOVED APPROXIMATELY 720 SY
▒	INSTALLATION OF EROSION CONTROL BLANKET AREA, APPROX. 7000 SY

NOTES:

1) PROVIDE FILTER FABRIC DROP INLET PROTECTION TO ALL CATCH BASINS ON SITE DURING CONSTRUCTION IN ACCORDING WITH PAY ITEM #4. (SEE DETAIL DWG. 5)

2) EXISTING GRADE SHALL BE MET FOR THE ENTIRE FILL COVER PERIMETER.

3) EXISTING CATCH BASIN ON NORTH BROADWAY, WHERE THE NEW 12" DRAINAGE PIPE WILL BE CONNECTED, TO BE CLEANED AS PER CONTRACT SPECIFICATIONS, PAY ITEM #9.

REV.	DATE	REMARKS

CLIENT
CITY OF YONKERS
DEPARTMENT OF ENGINEERING

LOCATION
SECTION 3, BLOCK 3515, LOT 115
1061 NORTH BROADWAY

RIP-RAP SLOPE PROTECTION OPTION

PROJECT TITLE
REMEDIAL CLOSURE WORK PLAN

DRAWING TITLE
GRADING, LAYOUT AND
MATERIALS PLAN

DESIGN BY: N.C.
DRAWN BY: N.C.
CHECKED BY: P.L.
DATE: JUNE 27, 2011
SCALE: 1"=30'

PROJECT NO. 4341-01
DRAWING NO. 1r

George Heitzman - Re: 1061 N Broadway Limits of Rip Rap

From: George Heitzman
To: Paul Summerfield
Date: 6/27/2011 3:16 PM
Subject: Re: 1061 N Broadway Limits of Rip Rap
CC: 'richardpugni@hotmail.com'; Carlos DeJesus; Paul' 'Lappano; Vincent M...

Paul,

The extent and construction detail of the proposed rip rap slope is acceptable to the Department.

George Heitzman, P.E.
Chief, Remedial Section A
Division of Environmental Remediation
NYSDEC

>>> Paul Summerfield <paul.summerfield@YonkersNY.gov> 6/27/2011 2:45 PM >>>
George,

Attached is a plan showing the approximate limits of proposed Rip-Rap cover for the 1061 North Broadway site.

Please review. Thanks.

Paul

Paul N. Summerfield, P.E.
Deputy City Engineer
(914) 377-6214

George Heitzman - 1061 N Broadway Limits of Rip Rap

From: Paul Summerfield <paul.summerfield@YonkersNY.gov>
To: 'George Heitzman' <gwheitzm@gw.dec.state.ny.us>
Date: 6/27/2011 2:46 PM
Subject: 1061 N Broadway Limits of Rip Rap
CC: "'Lappano, Paul'" <plappano@lkbinc.com>, Vincent Massaro <vincent.massar...
Attachments: GRADING AND LAYOUT with Rip-Rap Layout1 (1).pdf

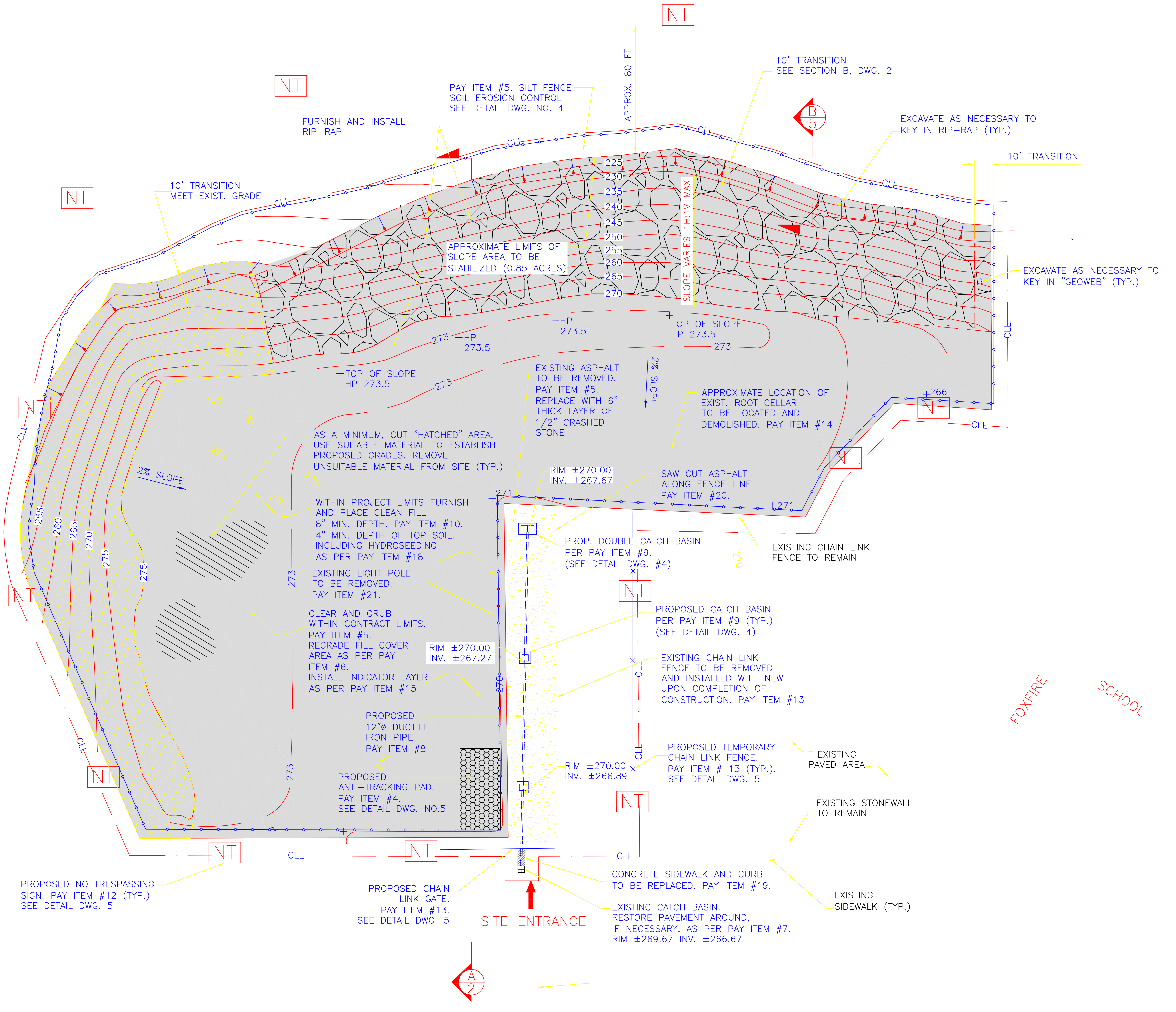
George,

Attached is a plan showing the approximate limits of proposed Rip-Rap cover for the 1061 North Broadway site.

Please review. Thanks.

Paul

Paul N. Summerfield, P.E.
Deputy City Engineer
(914) 377-6214



LEGEND

▨	EXISTING STOCK PILE AREA
—226—	EXIST. CONTOUR
—226—	PROPOSED CONTOUR
+ 273.5	PROPOSED SPOT GRADE
▩	PROPOSED RIP-RAP
~~	EXISTING VEGETATED AREA
▒	PROPOSED 12" MIN. DEPTH COVER WITH UNDERLYING INDICATOR LAYER.
—o—o—o—	PROPOSED SILT FENCE
========	PROPOSED DRAINAGE PIPE
—x—x—	PROPOSED CHAIN LINK FENCE
—x—x—	EXISTING CHAIN LINK FENCE
⌇⌇⌇	EXISTING STONE WALL
+ HP 265	PROPOSED HIGH POINT
— —273— —	PROPOSED CONTOUR 273
----PL----	PROPERTY LINE
—CLL—	CONTRACT LIMIT LINE
▣	PROPOSED SINGLE CATCH BASIN
▣▣	PROPOSED DOUBLE CATCH BASIN
NT	NO TRESPASSING SIGN
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REV.	DATE	REMARKS

CLIENT
CITY OF YONKERS
DEPARTMENT OF ENGINEERING

LOCATION
SECTION 3, BLOCK 3515, LOT 115
1061 NORTH BROADWAY

RIP-RAP SLOPE PROTECTION OPTION

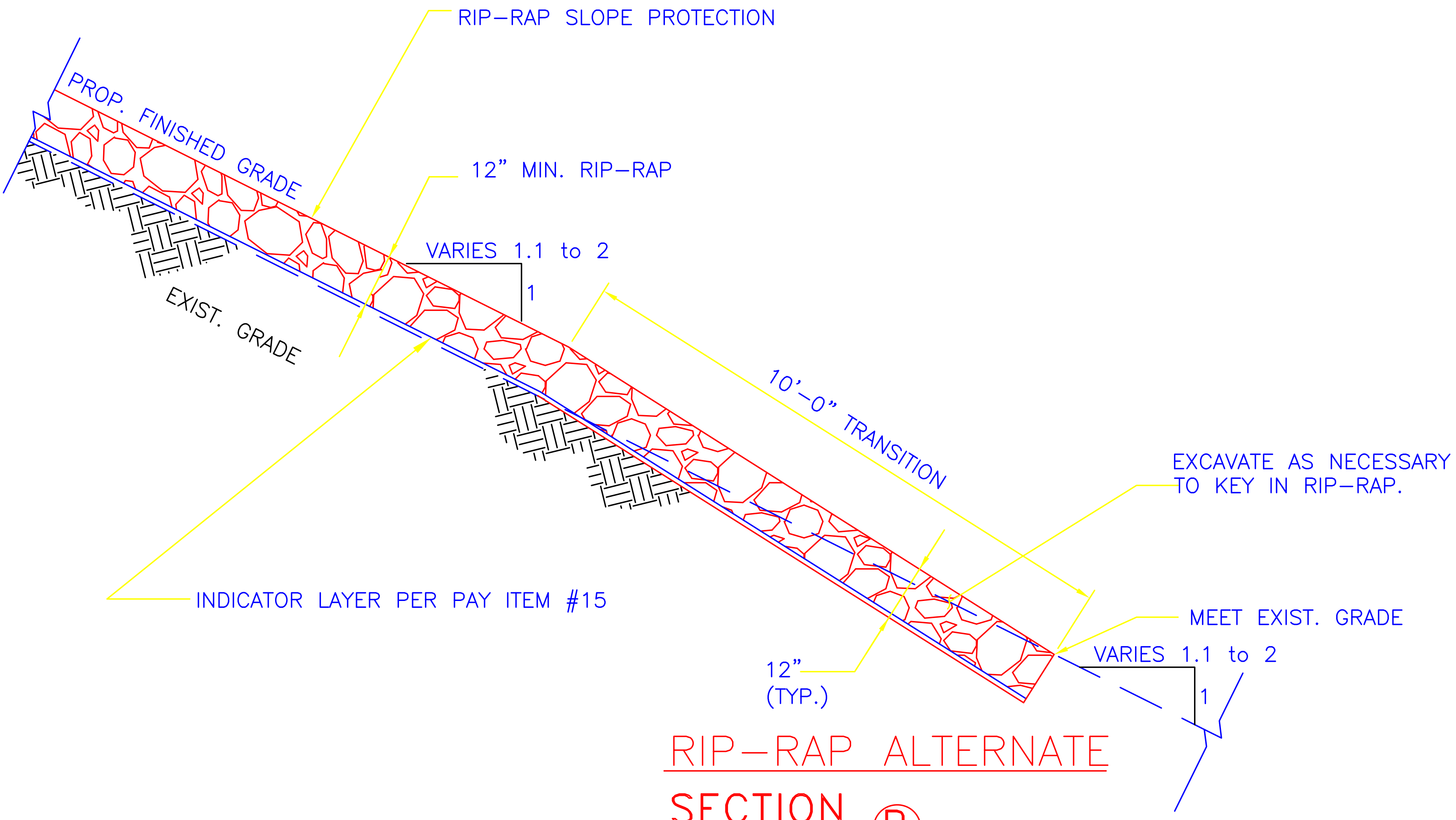
PROJECT TITLE
REMEDIAL CLOSURE WORK PLAN

DRAWING TITLE
GRADING, LAYOUT AND
MATERIALS PLAN

DESIGN BY: N.C.
DRAWN BY: N.C.
CHECKED BY: P.L.
DATE: JUNE 27, 2011
SCALE: 1"=30'

PROJECT NO. 4341-01
DRAWING NO. 1r

File Name: g:\users\psummerfield\elizabeth seton\contract documents\final bid documents\contract drawings\grading and layout with rip-rap.dwg
Plot Date: 6/27/2011 2:39 PM
Plotted By: Paul Summerfield



RIP–RAP ALTERNATE

SECTION B

SCALE: ½"=1'

Appendix M

Project Site Deed Restriction

The Office of the Westchester County Clerk: This page is part of the instrument; the County Clerk will rely on the information provided on this page for purposes of indexing this instrument. To the best of submitter's knowledge, the information contained on this Recording and Endorsement Cover Page is consistent with the information contained in the attached document.

533573366DLR0015

Westchester County Recording & Endorsement Page

Submitter Information

Name:	Benchmark Title Agency, LLC	Phone:	914-250-2400
Address 1:	Domenica Stancato	Fax:	914-422-1550
Address 2:	222 Bloomingdale Road	Email:	dstancato@benchmarkta.com
City/State/Zip:	White Plains NY 10605	Reference for Submitter:	BRS1201730C

Document Details

Control Number: **533573366**

Document Type: **Declaration (DLR)**

Package ID: 2013122300158001001

Document Page Count: **7**

Total Page Count: **8**

Parties

☐ **Additional Parties on Continuation page**

	1st PARTY			2nd PARTY	
1:	YONKERS CITY OF	- Other	1:	YONKERS CITY OF	- Other
2:			2:		

Property

☐ **Additional Properties on Continuation page**

Street Address: 1061 NORTH BROADWAY

Tax Designation: 3-3515-115

City/Town: YONKERS

Village:

Cross- References

☐ **Additional Cross-Refs on Continuation page**

1: 442951235 2: 3: 4:

Supporting Documents

Recording Fees

Statutory Recording Fee:	$40.00
Page Fee:	$40.00
Cross-Reference Fee:	$0.50
Mortgage Affidavit Filing Fee:	$0.00
RP-5217 Filing Fee:	$0.00
TP-584 Filing Fee:	$0.00
Total Recording Fees Paid:	**$80.50**

Transfer Taxes

Consideration:	$0.00
Transfer Tax:	$0.00
Mansion Tax:	$0.00
Transfer Tax Number:	

Mortgage Taxes

Document Date:

Mortgage Amount:

Basic:	$0.00
Westchester:	$0.00
Additional:	$0.00
MTA:	$0.00
Special:	$0.00
Yonkers:	$0.00
Total Mortgage Tax:	**$0.00**

Dwelling Type:

Exempt: ☐

Serial #:

RECORDED IN THE OFFICE OF THE WESTCHESTER COUNTY CLERK

Recorded: 01/30/2014 at 10:30 AM

Control Number: **533573366**

Witness my hand and official seal

Timothy C Idoni
Westchester County Clerk

Record and Return To

☐ Pick-up at County Clerk's office

BENCHMARK TITLE AGENCY LLC
222 BLOOMINGDALE RD
SUITE 102
WHITE PLAINS, NY 10605

BKS1201750c

DECLARATION of COVENANTS and RESTRICTIONS

THIS COVENANT is made the 11th day of December, 2013, by The City of Yonkers and having an office for the transaction of business at City Hall, 40 South Broadway, Yonkers, NY 10701.

WHEREAS, the Lot at the South End of Elizabeth Seton Campus (Site No. V00687), is the subject of a Voluntary Cleanup Agreement executed by The City of Yonkers as part of the New York State Department of Environmental Conservation's (the "Department's) Voluntary Cleanup Program, namely that parcel of real property located on 1061 North Broadway in The City of Yonkers, County of Westchester, State of New York, which is part of lands conveyed by Iona College to The City of Yonkers by deed dated 9/17/2004 and recorded in the Westchester County Clerks Office under Control Number 442951235 and being more particularly described in Schedule "A," attached to this declaration and made a part hereof, and hereinafter referred to as "the Property"; and

WHEREAS, the Department approved a remedy to eliminate or mitigate all significant threats to the environment presented by the contamination disposed at the Property and such remedy requires that the Property be subject to restrictive covenants.

NOW, THEREFORE, The City of Yonkers, for itself and its successors and/or assigns, covenants that:

First, the Property subject to this Declaration of Covenants and Restrictions is as shown on a map attached to this declaration as Schedule "B" and made a part hereof.

Second, unless prior written approval by the Department or, if the Department shall no longer exist, any New York State agency or agencies subsequently created to protect the environment of the State and the health of the State's citizens, hereinafter referred to as "the Relevant Agency," is first obtained, where contamination remains at the Property subject to the provisions of the Site Management Plan ("SMP"), there shall be no construction, use or occupancy of the Property that results in the disturbance or excavation of the Property which threatens the integrity of the engineering controls or which results in unacceptable human exposure to contaminated soils.

Third, the owner of the Property shall not disturb, remove, or otherwise interfere with the installation, use, operation, and maintenance of engineering controls required for the Remedy, which are described in the SMP, unless in each instance the owner first obtains a written waiver of such prohibition from the Department or Relevant Agency.

Fourth, the owner of the Property shall prohibit the Property from ever being used for purposes other than for Commercial Use as described in 6 NYCRR Part 375-1.8(g)(2)(iii) and Industrial Use as described in 6 NYCRR Part 375-1.8(g)(2)(iv) without the express written waiver of such prohibition by the Department or Relevant Agency.

Fifth, the owner of the Property shall prohibit the use of the groundwater underlying the Property without treatment rendering it safe for drinking water or industrial purposes, as appropriate, unless the user first obtains permission to do so from the Department or the Westchester County Department of Health.

Sixth, the owner of the Property shall provide a periodic certification, prepared and submitted by a professional engineer or environmental professional acceptable to the Department or Relevant Agency, which will certify that the institutional and engineering controls put in place are unchanged from the previous certification, comply with the SMP, and have not been impaired.

Seventh, the owner of the Property shall continue in full force and effect any institutional and engineering controls required for the Remedy and maintain such controls, unless the owner first obtains permission to discontinue such controls from the Department or Relevant Agency, in compliance with the approved SMP, which is incorporated and made enforceable hereto, subject to modifications as approved by the Department or Relevant Agency.

Eighth, this Declaration is and shall be deemed a covenant that shall run with the land and shall be binding upon all future owners of the Property, and shall provide that the owner and its successors and assigns consent to enforcement by the Department or Relevant Agency of the prohibitions and restrictions that the Voluntary Cleanup Agreement requires to be recorded, and hereby covenant not to contest the authority of the Department or Relevant Agency to seek enforcement.

Ninth, any deed of conveyance of the Property, or any portion thereof, shall recite, unless the Department or Relevant Agency has consented to the termination of such covenants and restrictions, that said conveyance is subject to this Declaration of Covenants and Restrictions.

IN WITNESS WHEREOF, the undersigned has executed this instrument the day written below.

By: ______________________

Print Name: Susan Gerry

Title: Deputy Mayor Date: 12-11-13

premises:

1061 N. Broadway
Yonkers, NY 10701
Sec 3
BL 3515
Lot 115

STATE OF NEW YORK)

) s.s.:

COUNTY OF WESTCHESTER)

On the 11th day of December, in the year 2015 before me, the undersigned, personally appeared Susan Gerry, personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name is (are) subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their capacity(ies), and that by his/her/their signature(s) on the instrument, the individual(s), or the person upon behalf of which the individual(s) acted, executed the instrument.

Michael V. Curti

Notary Public State of New York

MICHAEL V CURTI
Notary Public, State of New York
No 02CU6221652
Qualified in Westchester County
My Commission Expires May 2014

SCHEDULE A
LINER LIMITS

All that certain piece or parcel of land situate, lying and being in the City of Yonkers, County of Westchester, State of New York being more particularly described as follows:

FROM A POINT formed by the intersection of the westerly side of North Broadway and the northerly side of Odell Avenue, THENCE North 21 degrees 44 minutes 53 seconds West a distance of 38.60 feet to the POINT OF BEGINNING;

RUNNING THENCE through the subject parcel known as Section 3, Block 3515, Lot 115 the following twenty five—(25) courses and distances:

1) THENCE South 51 degrees 19 minutes 53 seconds West a distance of 17.64 feet to a point;
2) THENCE South 74 degrees 04 minutes 46 seconds West a distance of 46.95 feet to a point;
3) THENCE South 77 degrees 20 minutes 31 seconds West a distance of 54.20 feet to a point;
4) THENCE North 88 degrees 47 minutes 17 seconds West a distance of 32.65 feet to a point;
5) THENCE North 84 degrees 00 minutes 50 seconds West a distance of 47.04 feet to a point;
6) THENCE North 56 degrees 47 minutes 48 seconds West a distance of 137.53 feet to a point;
7) THENCE North 25 degrees 02 minutes 41 seconds West a distance of 38.33 feet to a point;
8) THENCE North 25 degrees 10 minutes 33 seconds West a distance of 18.27 feet to a point;
9) THENCE North 19 degrees 38 minutes 30 seconds East a distance of 22.34 feet to a point;
10) THENCE North 24 degrees 31 minutes 53 seconds East a distance of 31.11 feet to a point;
11) THENCE North 11 degrees 59 minutes 35 seconds West a distance of 36.19 feet to a point;
12) THENCE North 15 degrees 37 minutes 03 seconds West a distance of 27.06 feet to a point;
13) THENCE North 10 degrees 33 minutes 21 seconds East a distance of 21.53 feet to a point;
14) THENCE North 03 degrees 26 minutes 37 seconds West a distance of 28.11 feet to a point;
15) THENCE North 20 degrees 40 minutes 21 seconds East a distance of 25.48 feet to a point;
16) THENCE North 18 degrees 17 minutes 57 seconds East a distance of 42.69 feet to a point;
17) THENCE North 18 degrees 16 minutes 01 seconds East a distance of 39.78 feet to a point;
18) THENCE North 31 degrees 18 minutes 05 seconds East a distance of 39.49 feet to a point;
19) THENCE North 03 degrees 40 minutes 55 seconds East a distance of 25.90 feet to a point;
20) THENCE North 32 degrees 24 minutes 48 seconds East a distance of 37.98 feet to a point;
21) THENCE North 32 degrees 08 minutes 54 seconds East a distance of 47.75 feet to a point;
22) THENCE North 25 degrees 10 minutes 22 seconds East a distance of 53.10 feet to a point;
23) THENCE North 17 degrees 04 minutes 05 seconds East a distance of 42.09 feet to a point;
24) THENCE North 23 degrees 57 minutes 36 seconds East a distance of 21.81 feet to a point;
25) THENCE South 82 degrees 38 minutes 44 seconds East a distance of 27.02 feet to a point;

THENCE along the boundary of the subject parcel South 68 degrees 28 minutes 19 seconds East a distance of 117.32 feet to a point;

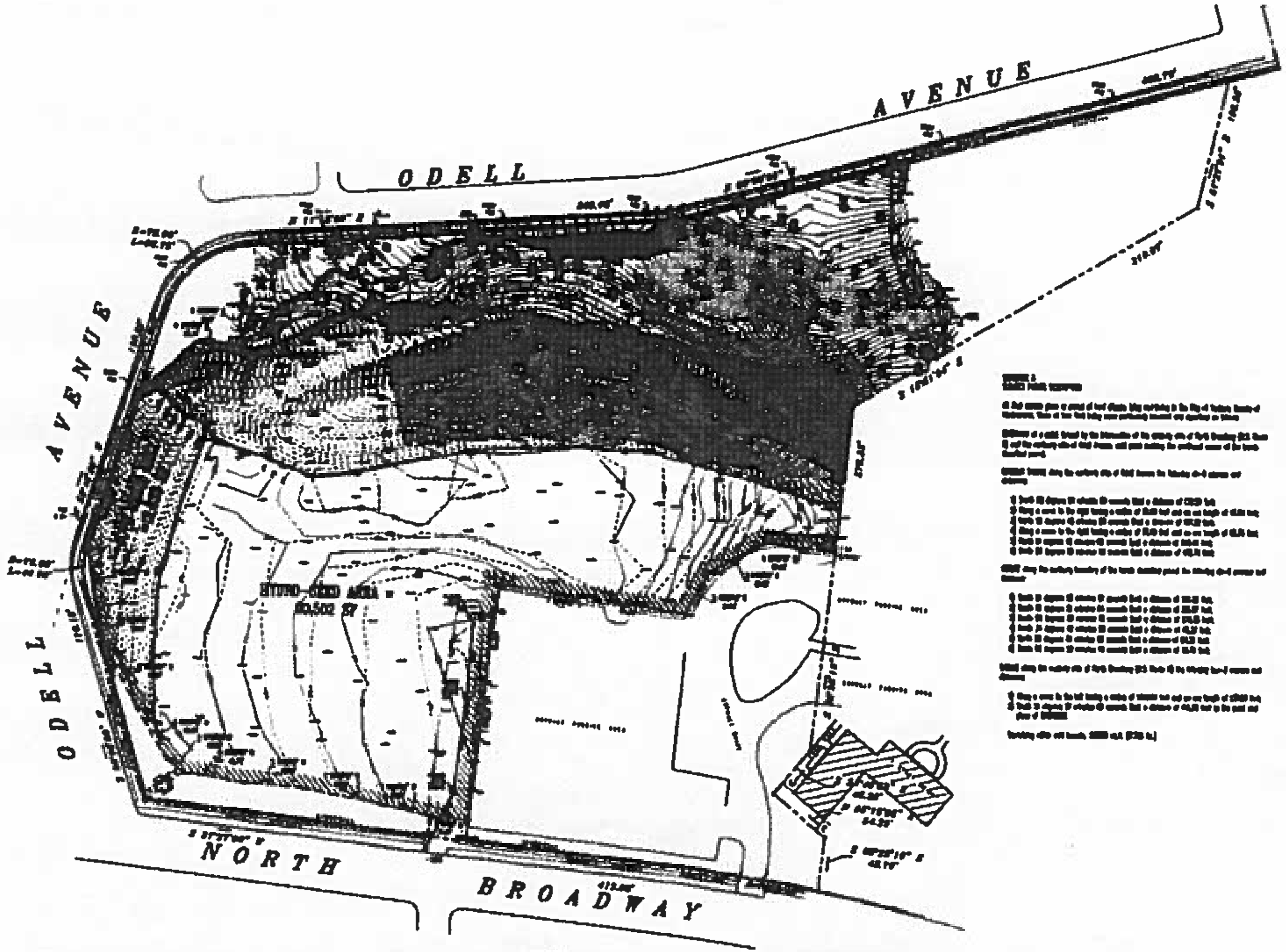
THENCE continuing through the subject parcel following the ten—(10) courses and distances;

26) THENCE South 22 degrees 49 minutes 25 seconds West a distance of 57.53 feet to a point;
27) THENCE South 14 degrees 45 minutes 29 seconds East a distance of 50.56 feet to a point;

28) THENCE South 43 degrees 25 minutes 48 seconds East a distance of 39.18 feet to a point;
29) THENCE South 23 degrees 42 minutes 08 seconds West a distance of 154.83 feet to a point;
30) THENCE South 68 degrees 33 minutes 11 seconds East a distance of 191.85 feet to a point;
31) THENCE South 21 degrees 37 minutes 00 seconds West a distance of 31.20 feet to a point;
32) THENCE South 28 degrees 01 minutes 03 seconds West a distance of 39.86 feet to a point;
33) THENCE South 26 degrees 23 minutes 42 seconds West a distance of 63.71 feet to a point;
34) THENCE South 19 degrees 31 minutes 22 seconds West a distance of 48.95 feet to a point;
35) THENCE South 24 degrees 02 minutes 49 seconds West a distance of 46.74 feet to the point and place of BEGINNING.

Containing within said bounds 163038 sq. ft. (3.743Ac.)

SCHEDULE B



LEGEND

TOPOGRAPHIC NOTES

FINAL ASBUILT
TOPOGRAPHIC SURVEY
PREPARED FOR
1061 NORTH BROADWAY
PROPERTY SITUATE IN THE
CITY OF YONKERS
COUNTY OF WESTCHESTER
STATE OF NEW YORK
GRAPHIC SCALE

CONTRACTORS' LIFT & CRANE SERVICE, LLC
Phone (914) 347-3101 Fax (914) 347-3130

Appendix N

Site Investigation Report – 2004

LOCKWOOD,
KESSLER &
BARTLETT, INC.

CONSULTING ENGINEERS SINCE 1889

ONE AERIAL WAY, SYOSSET, NEW YORK 11791 (516) 938-0600
TELEFAX (516) 931-6344

June 30, 2004
LKB #2328-01

Mr. Andrew D. Lent
Engineering Geologist II
NYSDEC Region 3
Division of Solid & Hazardous Materials
200 White Plains Road – 5th Floor
Tarrytown, NY 10591-5805

Re: Elizabeth Seton Campus of Iona College Parking Lot
VCP Site # V-00687-3, Index # W3-0981-03-12

Dear Mr. Lent,

On behalf of Iona College, I would like to thank you for your timely review of the Site Investigation Report (Report) dated May 3, 2004, and issuance of the comment letter dated June 16, 2004 (copy attached). The Report has been revised in accordance with the comment letter. Four copies (one unbound) of the revised Report are enclosed. A summary of the specific revisions made to the Report, following the format of the comment letter, is provided below:

1. Site Area: The horizontal extent of the site has been identified on Figures 2 through 5 as a dashed line labeled "SITE BOUNDARY".

2. Fill Berm Area: Two additional test pits, designated TP-15 and TP-16, were completed within the fill berm area on Thursday, June 17, 2004. One soil sample was collected from each test pit utilizing the work plan protocols. The samples were delivered to STL-Connecticut in Shelton, CT the following morning. The samples were analyzed for the same parameters and methods as the other subsurface-soil samples. Please note, however, that the TOC results for these two samples could not be completed in time for this report due to a laboratory instrument malfunction. They will be forwarded under separate cover when completed. Based on field observations, TOC levels in these samples are expected to be similar to the other subsurface-soil samples.

Please note that no evidence of processed C&D debris was observed in these test pits. Therefore, as per the work plan protocols, waste characterization analyses were not performed.

The Report has been revised to incorporate the results from these two test pits. Basically, this entailed updating Figure 4, Tables 1, 3, 5, 6, 7, 8, 10 and 13, and Sections 1.0, 3.0 and 4.0 of the Report. The results from these two test pits verify that the fill berm is similar in composition and quality to the fill in other areas of the site. Consequently, no changes to Section 5.0 of the Report (Conclusions and Recommendations) were necessary.

3. Community Air Monitoring: Text explicitly mentioning implementation of the community air monitoring program has been added to the third paragraph in Section 3.0.

4. Test Pit Excavation Sample Depth: Text explicitly mentioning the test pit excavation sample intervals has been added to the second paragraph in Section 4.0.

5. Data Tables: As requested, the data tables have been modified to include the analytical reporting limits (RLs) rather than the method detection limits (MDLs). Specifically, Tables 2, 3, 4, 5, 6, 9, 10, 11, 12 and 13 have been modified to present the results for non-detected parameters as less than the RLs. The results for detected parameters, including estimated concentrations that are above the MDL but lower than the RL, are unchanged by this modification. This modification does not effect Table 1 as TOC was detected above the RL in all samples, and Tables 7 and 8, which list either detected concentrations or estimated concentrations equivalent to one-half the MDL for cPAH evaluation purposes.

6. Volatile Organic Compound Evaluation: The report text, specifically the last paragraph of Section 4.2, has been modified to clarify that only the detected concentrations of acetone, which was also detected in laboratory blanks, are attributed to laboratory contamination. The text identifying other VOCs as solvents and/or laboratory contaminants was provided to give non-technical readers with some background information regarding these parameters and the reference to their being laboratory contaminants has been deleted as requested.

7. Recommended Soil Cleanup Objectives (Semivolatile Organic Compounds): Please note that the statement at the end of Paragraph 10 in Section 4.3 regarding the need for "further evaluation" pertains to the fact that three cPAHs were detected at levels above their USEPA health-based TAGM 4046 RSCOs. The further evaluation is provided in the subsequent paragraphs of Section 4.3. Paragraph 10 in Section 4.3 has been revised to reflect this association.

<u>8. Recommended Soil Cleanup Objectives (Metals)</u>: The conclusion in the last paragraph of Section 4.6 that *"...metals concentrations in the fill do not pose a significant threat to human heath or the environment*" is based on the fact that although above-background concentrations of several metals were detected at two locations, the average concentrations of these metals are within background ranges. Moreover, this conclusion took into account the fact that the need to prevent direct contact with the fill was previously discussed Section 4.3 to eliminate potential risks associated with cPAHs as this remedy would also address the localized above-background metals concentrations. The last paragraph of Section 4.6 has been revised to clarify this conclusion.

<u>9. Contemplated Use</u>: The category of "Restricted Residential" was obtained from the May 2002 Draft Voluntary Cleanup Program Guide, and is one of four possible land use categories under the VCP. It was specified for the Voluntary Cleanup Agreement because it most closely matches the proposed use of the site as open space accessible to the public and is consistent with the anticipated remedial activities for the Site. Specifically, this category is defined as "Residential uses such as homes, apartments, mobile home parks, dormitories, schools and day-care facilities are allowed but require engineering and/or institutional controls for the use to be protective". The other three categories are not appropriate for the Site because of its anticipated use and remedial activities. Text explaining the selection of this land use category has been added to the end of Section 2.0 of the Report.

<u>10. Conceptual Site Remediation Plan</u>: This Plan is presented with the Report to provide the NYSDEC and the NYSDOH with information up front on the anticipated remedial plan for this site so that the basics aspects of the Plan can be agreed upon prior to the development of the Remedial Closure Work Plan (RCWP). Please note that, in keeping with your request, the Plan has been revised to include covering the steep western slope of the site with a non-eroding grade stabilizing material such as crushed rock.

<u>11. Remedial Action Selection Report:</u> This document is presented with the Report to support the Conceptual Site Remediation Plan. A final version of this document will be provided in the RCWP as requested.

<u>12. Qualitative Exposure Assessment</u>: This document is presented with the Report pursuant to the VCP and to support the Conceptual Site Remediation Plan. A final version of this document will be provided in the RCWP as requested. Please note that information regarding the geology of the site area and ground water occurrence and use has been added to Section 2.0 of the Report. This information supports the assessment of exposures associated with the ground water pathway presented in Section 6.0 of the Qualitative Exposure Assessment.

We look forward to receiving your approval of the revised Report. In the meantime, please call or e-mail me if I can be of assistance.

Sincerely,

John Gerlach, C.G.W.P.
Senior Hydrogeologist

C.c., Anthony Dougherty, Esq., Dougherty & Associates (w/ 2 copies of report)
Kimberlea S. Rea, Esq, (w/ 1 copy of report)
Paul Lappano, P.E., LKB, Inc.
Denise D'Ambrosio, Esq., NYSDEC Region 3, Tarrytown, NY
Michael F. Rivara, NYSDOH (w/ 2 copies of report)

SITE INVESTIGATION REPORT

FOR THE

FILL IN THE PARKING LOT AT THE SOUTH END OF IONA COLLEGE'S ELIZABETH SETON CAMPUS
1061 NORTH BROADWAY, YONKERS, NY 10701
(Site # V-00687-3, Index # W3-0981-12)

Prepared By:

Lockwood, Kessler & Bartlett, Inc.
Consulting Engineers
1 Aerial Way
Syosset, NY 11791

Prepared For:

Iona College
c/o
Dougherty & Associates
450 Seventh Avenue, Suite 1308
New York, NY 10123

Submitted To:

New York State Department of Environmental Conservation
Division of Solid and Hazardous Materials, Region 3
200 White Plains Road – 5th Floor
Tarrytown, NY 10591

May 3, 2004 (Revised June 29, 2004)

ENGINEER'S CERTIFICATION

STATE OF NEW YORK
PAUL J. LAPPANO
No. 58962
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1.0 Introduction

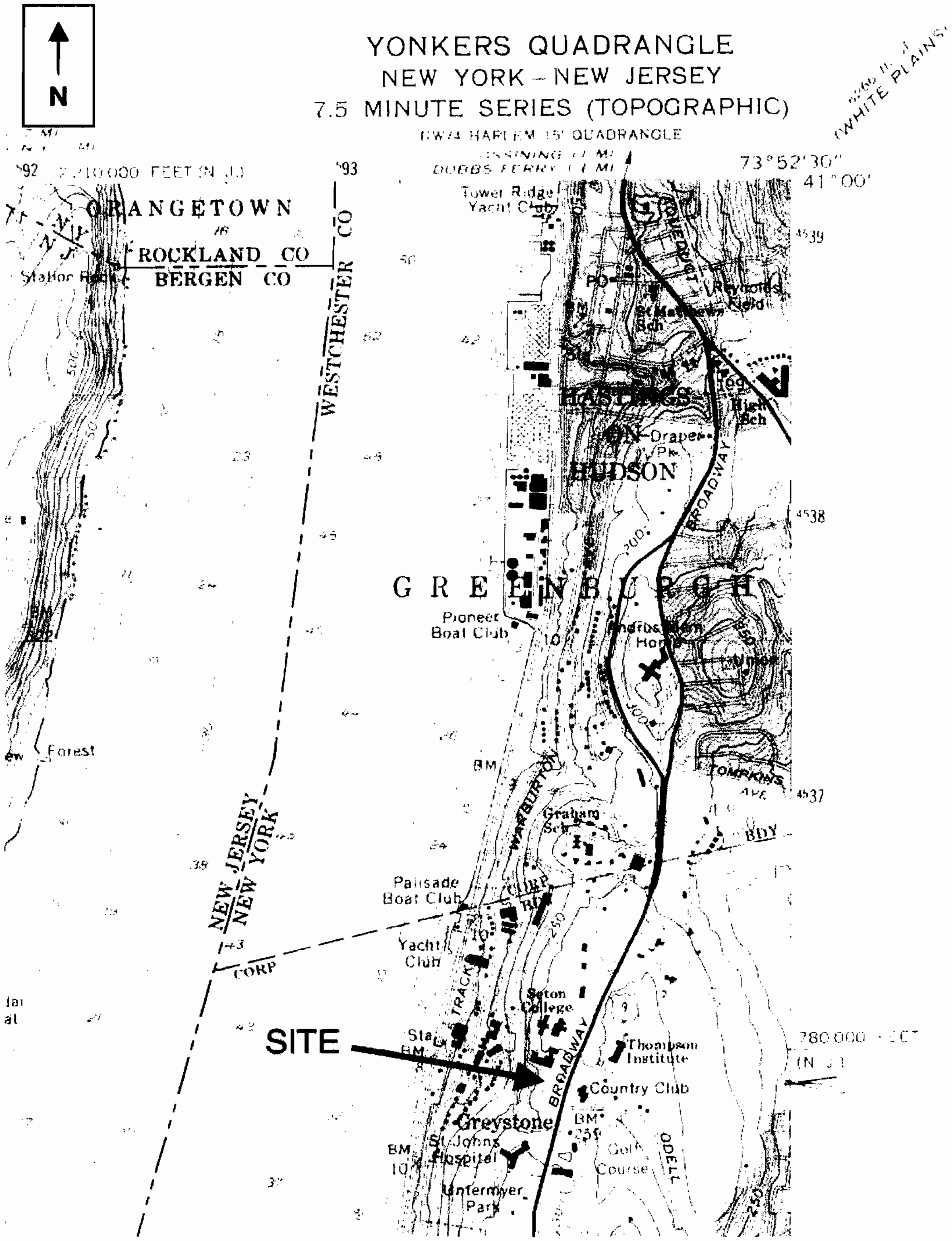
This revised Site Investigation Report (Report) was prepared by Lockwood, Kessler & Bartlett, Inc. (LKB) for Dougherty & Associates and Iona College. It presents the results of the site investigation performed by LKB on March 26 and 29, 2004, and the additional work performed on June 17, 2004 at the request of the New York State Department of Environmental Conservation (NYSDEC) Region 3. The purpose of the site investigation and additional work was to characterize the fill material located in the vicinity of the parking lot at the south end of Iona College's Elizabeth Seton Campus in Yonkers, New York (Site). The location of the Site is shown in Figure 1. The fill was brought to the Site to raise the grade and extend the parking lot.

The Site consists of an obvious and visible main fill area that borders the existing parking lot on the west and southwest, as well as an unpaved area located south of the existing parking lot. Based on observations made during the site investigation, the main fill area contains the majority of the fill at the Site. However, a thin surface layer of fill and several above-grade piles of fill are present in the unpaved area located south of the existing parking lot. These two areas were investigated during the site investigation performed on March 26 and 29, 2004. During that site investigation, a berm constructed of fill was discovered along a portion of the south boundary of the Site. The fill berm was investigated during the additional work performed on June 17, 2004.

This Report is submitted pursuant to a Voluntary Cleanup Agreement (VCA) with the NYSDEC Region 3 under the State's Voluntary Cleanup Program (VCP). The site investigation was performed pursuant to the Site Investigation Work Plan (Work Plan) dated January 8, 2004 and revised February 26, 2004. The revised Work Plan was approved by the NYSDEC in a letter dated March 18, 2004. The revisions in this report were made pursuant to a comment letter from the NYSDEC dated June 16, 2004, on the Site Investigation Report dated May 3, 2004. Copies of these letters are provided in Appendix A. The additional work performed on June 17, 2004 was performed pursuant to Item 2 of the comment letter and followed the methods and procedures in the approved Work Plan.

2.0 Site Background Information and Current Conditions

As shown in Figure 1, the Site is situated at the top of the slope that forms the east bank of the Hudson River. Note that the elevation of the Site is approximately 250 feet higher than that of the river, and that the Site is located approximately 1,300 feet from the river. Also note that the topographic contours of the Site shown in this figure are similar to existing spot elevations in the unpaved area (see Appendix B), which indicates that the land surface elevation in the unpaved area has not changed appreciably since 1966, the date of the USGS map. Moreover, review of Figure 1 indicates that the steep western slope of the Site area is a pre-existing feature. Similarly steep western slopes are present at adjacent properties and are the norm for this area.



SCALE: 1 INCH = 2,000 FEET

FIGURE 1

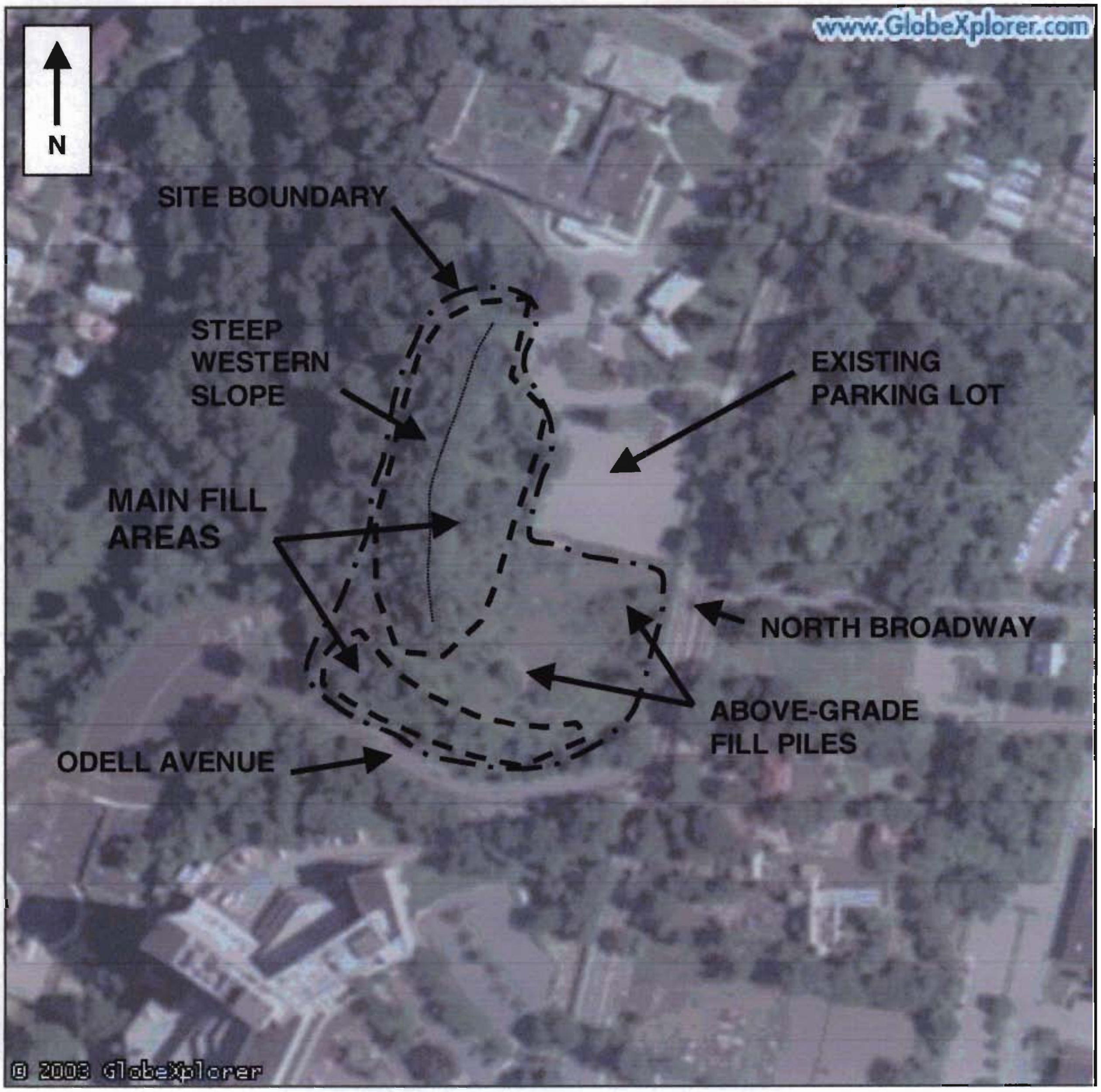
SITE LOCATION MAP

Review of the geologic map of this area, specifically the New York State Museum and Science Service Map and Chart Series No. 15 Lower Hudson Sheet, indicates that the bedrock underlying the Site is the Fordham Gneiss, a type of regional metamorphic rock comprised of quartz, feldspar and various dark minerals (e.g., biotite).

Review of the surficial geologic map of this area, specifically the New York State Museum – Geological Survey Map and Chart Series #40 Lower Hudson Sheet, indicates that the surficial geology of this area is characterized by discontinuous layer of glacial till of variable thickness. The till was deposited beneath glacial ice and consists of a compact, relatively impermeable mixture of unconsolidated materials that can range in grain size from clay to boulders. Bedrock outcrops where the till is absent.

Consistent with the geology of the area, the occurrence of ground water in the site area is limited as neither the gneiss bedrock nor the overlying glacial till is known to produce appreciable amounts of ground water. Specifically, United States Geological Survey Bulletin GW-35, titled "The Ground Water Resources of Westchester County, New York", states that wells screened in the gneiss produce "small to moderate quantities of water" and that wells screened in the till "generally yield less than 5 gallons of water per minute". Moreover, based on the fact that no groundwater seeps were observed along the steep western slope of the Site, the height of the slope, and the fact that bedrock outcrops are present along the portion of Odell Avenue bordering the Site to the west, the depth to ground water at the Site is at least 60 feet and the water table is located in bedrock. Moreover, it should be noted that ground water in the site area is not used as a potable water supply. Specifically, according to the City of Yonkers 2003 Annual Water Quality Report, the entire supply for the City of Yonkers is provided by the New York City Reservoir System.

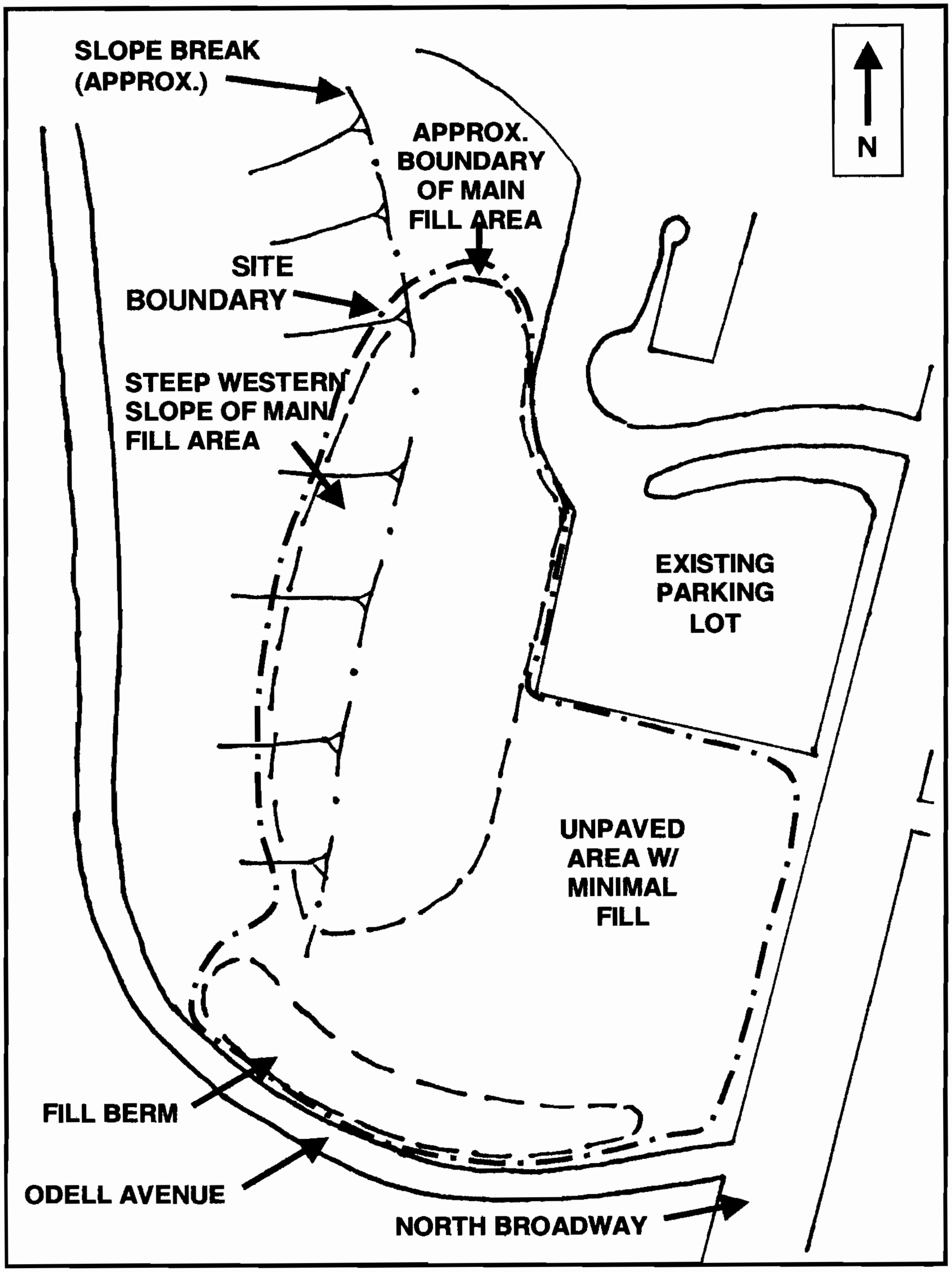
A current aerial photo of the Site is provided in Figure 2. A Site Plan, based on the current aerial photo and field observations, is provided in Figure 3. The lateral extent of the Site is indicated in these figures by a dashed line labeled "SITE BOUNDARY". The obvious and visible main fill area is evident in Figure 2 as the well-vegetated oval-shaped area bordering the parking lot on the west and southwest. A separate dashed line indicates the approximate boundary of this area. The main fill area begins at the edge of the existing parking lot and extends to the west and south, out onto the pre-existing slope. The approximate lateral dimensions of the main fill area are 350 feet long by 150 feet wide. Assuming that this fill area has a wedge-shaped distribution and a maximum thickness of ten feet, the volume of the fill in this area is estimated to be approximately 10,000 cubic yards. Also note in Figure 2 that the unpaved area bordering the existing parking lot to the south appears to be undisturbed. However, during the site investigation, a thin surface layer of fill and several above-grade piles of fill material were noted in this area. The volume of fill in the unpaved area is estimated to be 2,500 cubic yards. This estimate is based on an average fill thickness of two feet over this area of approximately 30,625 square feet, and an additional 250 cubic yards for the above-grade fill piles. A berm constructed of the same fill is also present along a portion of the south boundary of the Site. Another dashed line shows the location of the fill berm. The total volume of fill comprising the berm is estimated to be 4,000 cubic



APPROXIMATE SCALE: 1 INCH = 175 FEET

FIGURE 2

CURRENT AERIAL PHOTO OF SITE



APPROXIMATE SCALE: 1 INCH = 90 FEET

FIGURE 3

SITE PLAN

yards. This estimate assumes that the average thickness of the berm is ten feet, the same as the main fill area. The total volume of fill at the Site is therefore estimated to be 16,500 cubic yards.

According to available information, the fill was brought to the Site around 1990 for the purpose of raising the grade to extend the existing parking lot. The total volume of fill estimated to be required for this project was 36,000 cubic yards. However, the work was halted by the College due to concerns about the quality of the fill before all of the fill could be delivered.

In December 1990, Dunn Geoscience collected and analyzed samples of the fill material at the Site. Their study concluded that there were no significant environmental concerns associated with the fill material. LKB concurs with their findings (see Appendix C), however, we note that their study appears to have addressed only a portion of the fill (2,800 cubic yards) that is currently estimated to be present at the Site.

In July 1992, additional sampling and analysis of the fill was performed by Stallone Testing Laboratories, Inc. and Independent Testing Laboratories, Inc. LKB's review of these findings determined that the majority of these results are TCLP data that cannot be directly compared to current NYSDEC requirements (see Appendix D). We note, however, that analyses were performed for total concentrations of polychlorinated biphenyls (PCBs) and that PCBs were not detected (see Appendix E). Based on these results, PCBs were not expected to be a concern for subsurface soil at the Site.

The Site is bordered on the north by the Foxfire School, on the east by North Broadway, and on the south and west by Odell Avenue. Faculty parking is located between the school and the Site. No private residences are located immediately adjacent to the Site. The approximate linear distances to the closest receptors are listed below:

- North: 140 feet to the Foxfire School;
- South: 125 feet to St. Johns Riverside Hospital;
- East: 350 feet to nearest residence; and
- West: 350 feet to nearest residence.

The Site is currently well vegetated, although several trees have died as a result of fill being placed around their bases. The steep western slope of the main fill area is stable. Fence and/or walls separate the Site from adjacent properties and roadways. Some representative photographs of the Site are provided in Appendix F.

The contemplated end use of the Site specified in the VCA is "Restricted Residential". This category was selected because of the four categories available under the VCP, it most closely matched the planned use of the Site as open space accessible to the public and was consistent with the anticipated level of remedial activities at the Site. Specifically, as per the May 2002 Draft Voluntary Cleanup Program Guide, the category of "Restricted Residential" is defined as "Residential uses such as homes, apartments, mobile home parks, dormitories, schools and day-care facilities are allowed but require engineering and/or institutional controls for the use to be protective". This is the second most restrictive land use category under the VCP. The other three categories available under the VCP are "Unrestricted", "Restricted Commercial" and "Restricted Industrial". The most restrictive land use category of "Unrestricted" was not applicable to this Site because engineering and/or institutional controls were expected to be utilized. The other two less restrictive categories were not applicable to this Site because of the planned use of the Site as open space.

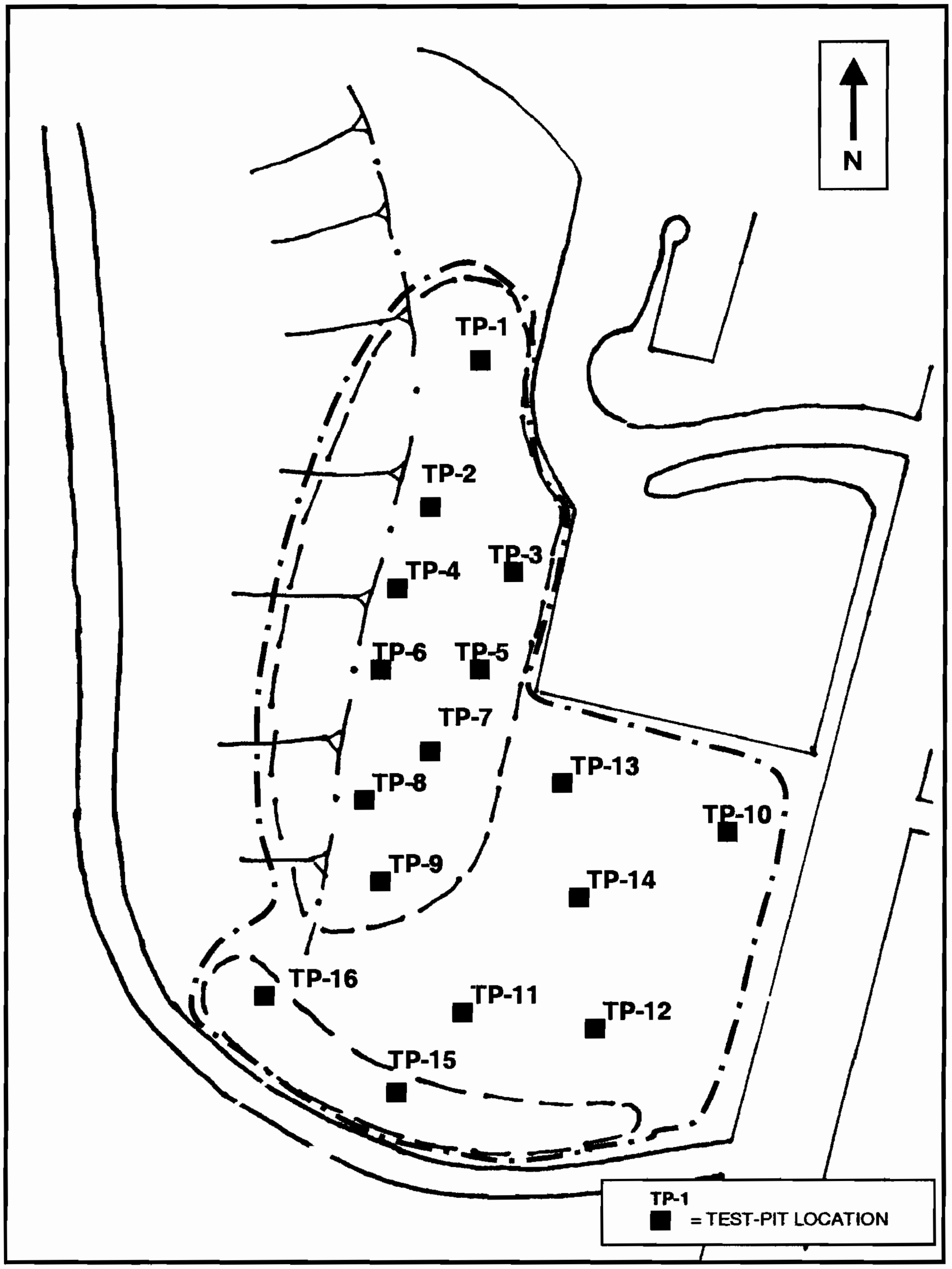
3.0 Results of Fill Characterization

The fill was characterized utilizing test pits, fill/soil sampling and analysis, and visual observation. Specifically, on March 26, 2004, a total of 14 test pits, designated TP-1 through TP-14, were made at the locations shown in Figure 4. As indicated in Figure 4, Test Pits 1 through 9 were made within the main fill area, and were uniformly spaced throughout the accessible portion of this area. Test Pits 10 through 14 were made in the unpaved area bordering the existing parking lot to the south, and confirmed that additional fill is present in this area. At the request of the NYSDEC, on June 17, 2004 two additional test pits, designated Test Pits TP-15 and TP-16, were made in the fill berm area. The existing parking lot pre-dates the fill in question; therefore no test pits were made in the parking lot. The primary purpose of the test pits was to confirm the presence/absence of fill, investigate its nature and depth, and collect samples for laboratory analysis. The lateral extent of the fill was estimated based on visual observation of terrain and vegetation patterns.

Iona College personnel, utilizing a backhoe, made the test pits under LKB's supervision. Where possible, the test pits penetrated the fill and reached undisturbed soil or bedrock. The excavated materials were placed next to each test pit to permit close examination, logging and sampling. The depths of the test pits ranged from one foot to seven feet. Test pit logs are provided in Appendix G. Photographs of Test Pit TP-1 through TP-15 are also provided in Appendix G. No photographs of Test Pit TP-16 were taken due to heavy rainfall that began shortly after this test pit was excavated.

The material from each test pit was screened for volatile organic compounds (VOCs), combustible gas (methane, CH_4) and hydrogen sulfide (H_2S) utilizing a RAE 2000, a Gascope Model 60 and a Jerome 631-X, respectively. VOCs and methane were not detected at any of the test pit locations, and H_2S was not detected above background concentrations (i.e., 5 to 10 parts per billion). In addition, a Community Air Monitoring Program was implemented during the test pit excavation as per the Work Plan. Specifically, in addition to the above test pit monitoring, downwind dust concentrations were monitored utilizing a DustTrak Model 8520 instrument equipped with a 10-micron filter and an environmental enclosure with an omni-directional sampling inlet. Dust levels downwind of the work area were negligible (i.e., <0.1 milligrams per cubic meter).

With the exception of one above-grade pile of fill that is comprised primarily of asphalt, the fill consists of a compact mixture of brown sandy soil, rock fragments, pieces of



APPROXIMATE SCALE: 1 INCH = 90 FEET

FIGURE 4

TEST PIT LOCATIONS

concrete, pieces of asphalt, bricks and some small pieces of ceramic tile. A small amount (less than one cubic yard) of a gray ash-like material was also noted at Test Pit TP-3, and a small piece of deformed metal was noted in Test Pit TP-15. No obviously processed wood was observed in the fill, although small amount of what appeared to be wood that had been buried with the fill was noted. The thickness of the fill ranged from approximately one to two feet at Test Pits TP-12, TP-13 and TP-14, where bedrock was encountered at shallow depth, to more than six feet at all of the other test pits except Test Pit TP-5. At Test Pit TP-5, 3.5 feet of fill overlying natural soil was observed. A thin water-bearing zone on top of the bedrock was observed at Test Pits TP-12, TP-13 and TP-14. Given the Site's setting on a steep hillside, this zone is expected to be discontinuous and seasonal.

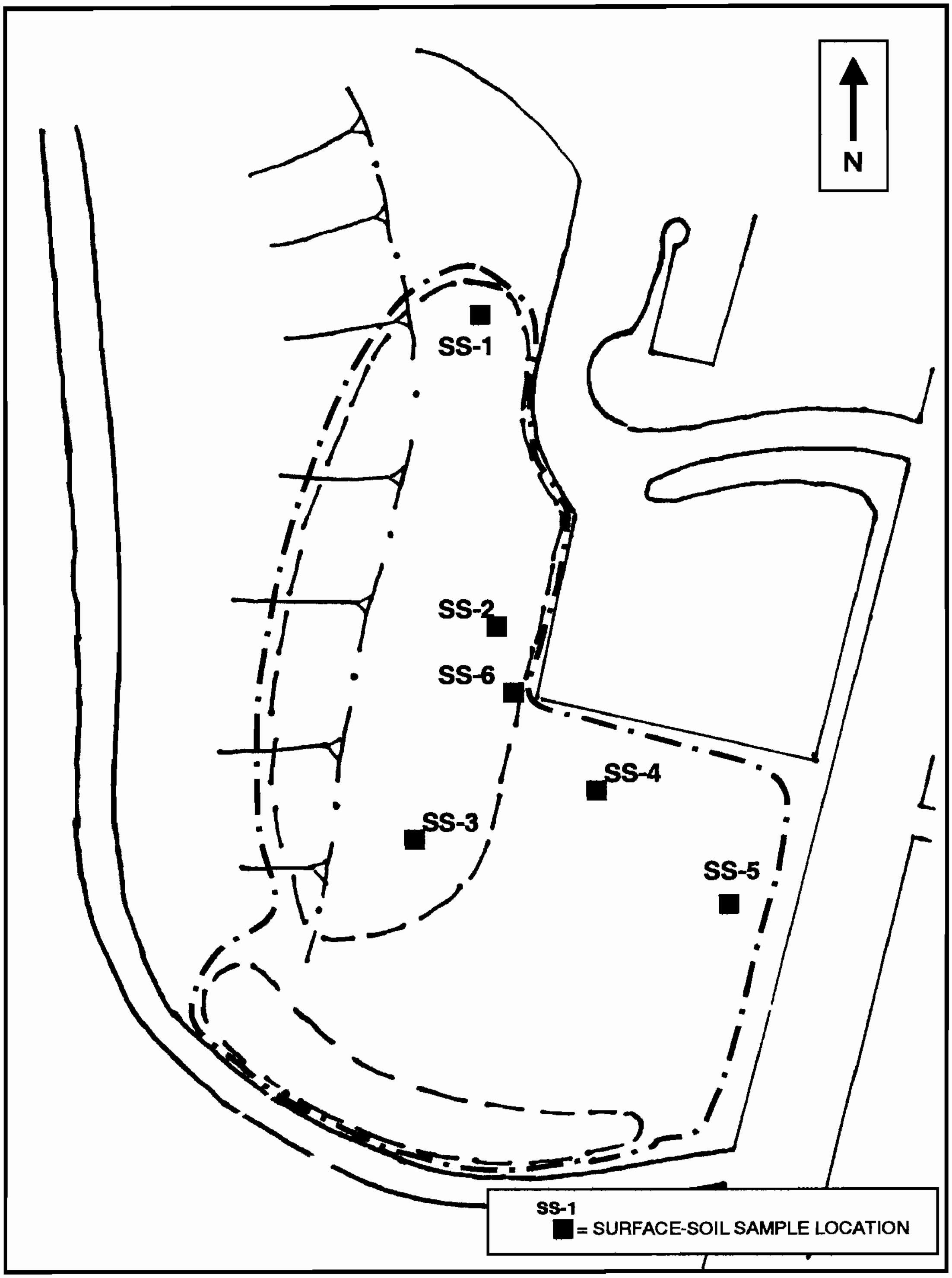
4.0 Results of Fill Sampling and Analysis

A total of 14 subsurface-soil samples were collected. Specifically, one sample per test pit was collected from Test Pits TP-1 though TP-12 and Test Pits TP-15 and TP-16. Test Pits TP-13 and TP-14 were not sampled because only a thin surface layer of fill was encountered at these locations. The samples were designated Subsurface-Soil Samples TP-1 through TP-12, and TP-15 and TP-16, respectively. No discrete layers warranting additional samples were noted. Each sample was collected from the test pit excavation utilizing decontaminated stainless steel sampling equipment. Samples collected for VOC analyses were collected from the lower portion of the sidewall of each excavation directly into 4-ounce glass jars. The sample collection depths of the VOC samples ranged from approximately two to five feet. Samples collected for the other parameters were collected as composites from representative areas of the material excavated from each test pit and homogenized prior to being placed in the appropriate sample bottles. The samples were labeled with the appropriate information (e.g., sample #, date and time collected, etc.), placed in coolers with ice and delivered to STL-Connecticut, a state-certified laboratory in Shelton, CT, under chain of custody protocol.

In addition to the 14 subsurface-soil samples, a total of six surface-soil samples were collected on March 29, 2004 and designated Surface-Soil Samples SS-1 through SS-6. The locations of these samples are shown in Figure 5. Surface-Soil Samples SS-1 through SS-5 were collected from random locations around the Site. Surface-Soil Sample SS-6 was collected from an area near the southwest corner of the parking lot where some debris (e.g., tires) had been thrown over the fence separating the Site from the parking lot. These samples were also collected utilizing decontaminated stainless steel sampling equipment, and were collected from the 0-2" depth interval below vegetation.

The subsurface-soil samples were analyzed for the following parameters:

- Total organic carbon (TOC);
- Volatile organic compounds (VOCs);
- Semivolatile organic compounds (SVOCs);



APPROXIMATE SCALE: 1 INCH = 90 FEET

FIGURE 5

SURFACE-SOIL SAMPLE LOCATIONS

- Pesticides; and
- Inorganic parameters (metals).

The subsurface-soil samples were analyzed for the specific list of parameters contained in Appendices A and B of NYSDEC TAGM 4046, eight additional VOCs that are on the NYSDEC STARS Memo #1 parameter list, and methyl tert-butyl ether (MTBE). These nine VOCs were included pursuant to a December 20, 2000 NYSDEC memorandum consolidating the parameter lists for TAGM 4046 and STARS Memo #1. The surface-soil samples were analyzed for the above list of parameters and polychlorinated biphenyls (PCBs).

The VOC, SVOC, pesticide and PCB results were evaluated by comparing them to the Recommended Soil Cleanup Objectives (RSCOs) listed in Tables 1 through 3 of TAGM 4046. Note that the majority of these RSCOs are for protection of ground water, and are based on a conservative low soil TOC content of 1%. The other RSCOs are based on USEPA health-based criteria dating to 1994, which is when TAGM 4046 was issued. There is a direct correlation between the TOC content of soil and its ability to hold onto contamination. RSCOs calculated using a higher soil TOC content are less stringent. TAGM 4046 states that RSCOs should be based on actual soil TOC content if it is known. Therefore, for each organic parameter detected at concentrations higher than an RSCO for protection of ground water, the RSCO was recalculated using the actual average soil TOC concentrations of the surface-soil samples and Subsurface-Soil Samples TP-1 through TP-12. The TOC results for Subsurface-Soil Samples TP-15 and TP-16 were not available for this report due to a laboratory instrument malfunction but will be provided separately when available. Polycyclic aromatic hydrocarbons (PAHs) detected at concentrations higher than an RSCO based on USEPA health-based criteria were also compared to publicly available information on background concentrations. The inorganic parameter (metals) results were evaluated by comparing them to the RSCOs and/or Eastern USA background concentrations listed in Table 4 of TAGM 4046, as well as other publicly available information on background concentrations.

The subsurface-soil samples were also analyzed for leachable concentrations of PAHs and lead utilizing the ASTM Shake Test and the USEPA Synthetic Precipitation Leaching Procedure (SPLP), respectively. It was anticipated that the total concentrations of some of these parameters might exceed the low RSCOs specified in NYSDEC TAGM 4046 for protection of groundwater. These extract analyses were performed to determine whether they actually leach out of the fill at significant concentrations. These results were compared to the New York State Ambient Water Quality Standards and Guidance Values for Class GA (potable) ground water listed in NYSDEC TOGS 1.1.1. There was no evidence of pulverized C&D debris in the fill, therefore, as per the Work Plan, waste composition analyses were not performed.

The laboratory reports are provided in Appendix H, and summarized in Tables 1 through 13. Note that in these tables the results for non-detected parameters are presented relative to laboratory reporting limits (RLs) rather than method detection limits (MDLs).

The specific results for the surface- and subsurface-soil samples are summarized and discussed in the following subsections.

4.1 Results of Total Organic Carbon (TOC) Analyses

The six surface-soil samples and 14 subsurface-soil samples were analyzed by USEPA Method 9060 for total organic carbon (TOC) content. The results, in percent (%), are summarized in Table 1. As shown in Table 1, the TOC content of the surface-soil samples ranged from 2.9% to 8.1% and averaged 4.8%. The TOC content of the Subsurface-Soil Samples TP-1 through TP-12 ranged from 0.7% to 4.5% and averaged 2.2%. As noted above, the TOC results for Subsurface-Soil Samples TP-15 and TP-16 will be provided separately when available, but are expected to be similar to the results for the other subsurface-soil samples.

4.2 Results of Volatile Organic Compound (VOC) Analyses

The six surface-soil samples and 14 subsurface-soil samples were analyzed by USEPA Method 8260B for the 30 VOCs listed in Table 1 of TAGM 4046, the eight additional VOCs included in NYSDEC STARS Memo #1, and MTBE. The results, in micrograms per kilogram (ug/kg), are summarized and compared to the applicable TAGM 4046 RSCOs in Tables 2 and 3.

Review of Tables 2 and 3 indicates that the fill is not a significant source of VOCs and is not a significant threat to human health or the environment with respect to VOC contamination. Specifically, VOC detections in the surface- and subsurface-soil samples were limited to sporadic, low concentrations of only seven VOCs: acetone, methylene chloride, 2-butanone, toluene, ethylbenzene, xylenes and p-isopropyltoluene. The remaining 32 VOCs were not detected. The concentrations of all seven detected VOCs were lower than their respective TAGM 4046 RSCO.

The VOC detections are summarized in the following table:

Detected VOC	Frequency of Detection		Range of Detection (ug/kg)	
	Surface Soil	Subsurface Soil	Surface Soil	Subsurface Soil
Acetone	2/6	6/14	12JB to 120B	2JB to 7JB
Methylene chloride	1/6	3/14	3J	3J to 4J
2-Butanone	1/6	0/14	10J	NA
Toluene	1/6	11/14	1J	0.6J to 1J
Ethylbenzene	0/6	6/14	NA	0.6J to 1J
Xylene	1/6	6/14	2J	2J to 5J
p-Isopropyltoluene	2/6	0/14	0.8J to 6J	NA

ug/kg – Micrograms per kilogram.
NA – Not applicable.
J – Estimated concentration above MDL but below RL.
B – Parameter also detected in laboratory blank.

TABLE 1

Summary of Total Organic Carbon Results for Soil Samples

Iona College Site, 1061 North Broadway, Yonkers, NY 10701 (Site # V-00687-3, Index # W3-0981-12)

Surface Soil Sample Number and Result (%)						
SS-1	SS-2	SS-3	SS-4	SS-5	SS-6	Average
8.1	4.1	5.0	2.9	4.8	4.0	4.8

Subsurface-Soil Sample Number and Result (%)						
TP-1	TP-2	TP-3	TP-4	TP-5	TP-6	TP-7
2.6	1.8	1.8	1.6	1.7	2.4	2.4

Subsurface-Soil Sample Number and Result (%)						
TP-8	TP-9	TP-10	TP-11	TP-12	TP-13	TP-14
4.5	0.7	1.8	1.2	4.0	Not Sampled	Not Sampled

Subsurface-Soil Sample Number and Result (%)			
TP-15	TP-16	Average	
Not Available	Not Available	2.2	

TABLE 2

Summary of Volatile Organic Compound Results for Surface-Soil Samples

Iona College Site, 1061 North Broadway, Yonkers, NY 10701 (Site # V-00687-3, Index # W3-0981-12)

TAGM 4046 VOLATILE ORGANIC COMPOUND	TAGM 4046[1] RSCO (ug/kg)	Surface-Soil Sample Number and Result (ug/kg)					
		SS-1	SS-2	SS-3	SS-4	SS-5	SS-6
Vinyl Chloride	200	<8	<7	<7	<7	<8	<8
Chloroethane	1,900	<8	<7	<7	<7	<8	<8
1,1 Dichloroethene	400	<8	<7	<7	<7	<8	<8
Trichlorotrifluoroethane	6,000	<8	<7	<7	<7	<8	<8
Carbon disulfide	2,700	<8	<7	<7	<7	<8	<8
Acetone	200	<15	<14	120B	<13	12JB	<15
Methylene chloride	100	<8	<7	<7	3J	<8	<8
trans-1,2-Dichloroethene	300	<8	<7	<7	<7	<8	<8
1,1-Dichloroethane	200	<8	<7	<7	<7	<8	<8
2-Butanone (MEK)	300	<15	<14	10J	<13	<15	<15
Chloroform	300	<8	<7	<7	<7	<8	<8
1,1,1-Trichloroethane	800	<8	<7	<7	<7	<8	<8
Carbon tetrachloride	600	<8	<7	<7	<7	<8	<8
Benzene	60	<8	<7	<7	<7	<8	<8
1,2-Dichloroethane	100	<8	<7	<7	<7	<8	<8
Trichloroethene	700	<8	<7	<7	<7	<8	<8
4-Methyl-2-pentanone	1,000	<15	<14	<14	<13	<15	<15
Toluene	1,500	<8	<7	<7	1J	<8	<8
Tetrachloroethene	1,400	<8	<7	<7	<7	<8	<8
1,3-Dichloropropane	300	<8	<7	<7	<7	<8	<8
Dibromochloromethane	N/A	<8	<7	<7	<7	<8	<8
Chlorobenzene	1,700	<8	<7	<7	<7	<8	<8
Ethylbenzene	5,500	<8	<7	<7	<7	<8	<8
1,1,2,2-Tetrachloroethane	600	<8	<7	<7	<7	<8	<8
1,2,3-Trichloropropane	400	<8	<7	<7	<7	<8	<8
Xylenes (total)	1,200	<8	<7	<7	2J	<8	<8
1,3-Dichlorobenzene	1,600	<8	<7	<7	<7	<8	<8
1,4-Dichlorobenzene	8,500	<8	<7	<7	<7	<8	<8
1,2-Dichlorobenzene	7,900	<8	<7	<7	<7	<8	<8
1,2,4-Trichlorobenzene	3,400	<8	<7	<7	<7	<8	<8
Isopropylbenzene	2,300	<8	<7	<7	<7	<8	<8
n-Propylbenzene	3,700	<8	<7	<7	<7	<8	<8
p-Isopropyltoluene	10,000	<8	<7	0.8J	<7	6J	<8
1,2,4-Trimethylbenzene	10,000	<8	<7	<7	<7	<8	<8
1,3,5-Trimethylbenzene	3,300	<8	<7	<7	<7	<8	<8
n-Butylbenzene	10,000	<8	<7	<7	<7	<8	<8
sec-Butylbenzene	10,000	<8	<7	<7	<7	<8	<8
tert-Butylbenzene	10,000	<8	<7	<7	<7	<8	<8
Methyl tert-butyl ether (MTBE)	120	<8	<7	<7	<7	<8	<8

Notes:

1 - From Appendix A, Table 1 of NYSDEC TAGM 4046.
RSCO - Recommended Soil Cleanup Objective.
ug/kg - Micrograms per kilogram, results presented relative to reporting limits (RLs).
N/A - Not available.
J - Estimated concentration above MDL but below RL.
B - Parameter also detected in laboratory blank.

TABLE 3 (Page 1 of 3)

Summary of Volatile Organic Compound Results for Subsurface-Soil Samples

Iona College Site, 1061 North Broadway, Yonkers, NY 10701 (Site # V-00687-3, Index # W3-0981-12)

TAGM 4046 VOLATILE[1] ORGANIC COMPOUND	TAGM 4046[1] RSCO (ug/kg)	Subsurface-Soil Sample Number and Result (ug/kg)					
		TP-1	TP-2	TP-3	TP-4	TP-5	TP-6
Vinyl Chloride	200	<6	<6	<6	<6	<6	<6
Chloroethane	1,900	<6	<6	<6	<6	<6	<6
1,1 Dichloroethene	400	<6	<6	<6	<6	<6	<6
Trichlorotrifluoroethane	6,000	<6	<6	<6	<6	<6	<6
Carbon disulfide	2,700	<6	<6	<6	<6	<6	<6
Acetone	200	3JB	<11	3JB	5JB	7JB	7JB
Methylene chloride	100	<6	3J	<6	<6	<6	<6
trans-1,2-Dichloroethene	300	<6	<6	<6	<6	<6	<6
1,1-Dichloroethane	200	<6	<6	<6	<6	<6	<6
2-Butanone (MEK)	300	<12	<11	<11	<11	<12	<11
Chloroform	300	<6	<6	<6	<6	<6	<6
1,1,1-Trichloroethane	800	<6	<6	<6	<6	<6	<6
Carbon tetrachloride	600	<6	<6	<6	<6	<6	<6
Benzene	60	<6	<6	<6	<6	<6	<6
1,2-Dichloroethane	100	<6	<6	<6	<6	<6	<6
Trichloroethene	700	<6	<6	<6	<6	<6	<6
4-Methyl-2-pentanone	1,000	<12	<11	<11	<11	<12	<11
Toluene	1,500	0.6J	0.8J	0.6J	0.8J	0.8J	0.9J
Tetrachloroethene	1,400	<6	<6	<6	<6	<6	<6
1,3-Dichloropropane	300	<6	<6	<6	<6	<6	<6
Dibromochloromethane	N/A	<6	<6	<6	<6	<6	<6
Chlorobenzene	1,700	<6	<6	<6	<6	<6	<6
Ethylbenzene	5,500	<6	1J	<6	<6	<6	<6
1,1,2,2-Tetrachloroethane	600	<6	<6	<6	<6	<6	<6
1,2,3-Trichloropropane	400	<6	<6	<6	<6	<6	<6
Xylenes (total)	1,200	<6	4J	<6	<6	<6	<6
1,3-Dichlorobenzene	1,600	<6	<6	<6	<6	<6	<6
1,4-Dichlorobenzene	8,500	<6	<6	<6	<6	<6	<6
1,2-Dichlorobenzene	7,900	<6	<6	<6	<6	<6	<6
1,2,4-Trichlorobenzene	3,400	<6	<6	<6	<6	<6	<6
Isopropylbenzene	2,300	<6	<6	<6	<6	<6	<6
n-Propylbenzene	3,700	<6	<6	<6	<6	<6	<6
p-Isopropyltoluene	10,000	<6	<6	<6	<6	<6	<6
1,2,4-Trimethylbenzene	10,000	<6	<6	<6	<6	<6	<6
1,3,5-Trimethylbenzene	3,300	<6	<6	<6	<6	<6	<6
n-Butylbenzene	10,000	<6	<6	<6	<6	<6	<6
sec-Butylbenzene	10,000	<6	<6	<6	<6	<6	<6
tert-Butylbenzene	10,000	<6	<6	<6	<6	<6	<6
Metyl tert-butyl ether (MTBE)	120	<6	<6	<6	<6	<6	<6

<u>Notes:</u>

1 - From Appendix A, Table 1 of NYSDEC TAGM 4046.
RSCO - Recommended Soil Cleanup Objective.
ug/kg - Micrograms per kilogram, results are presented relative to reporting limits (RLs).
N/A - Not available.
J - Estimated concentration above MDL but below RL.
B - Parameter also detected in laboratory blank.

TABLE 3 (Page 2 of 3)

Summary of Volatile Organic Compound Results for Subsurface-Soil Samples

Iona College Site, 1061 North Broadway, Yonkers, NY 10701 (Site # V-00687-3, Index # W3-0981-12)

TAGM 4046 VOLATILE[1] ORGANIC COMPOUND	TAGM 4046[1] RSCO (ug/kg)	Subsurface-Soil Sample Number and Result (ug/kg)					
		TP-7	TP-8	TP-9	TP-10	TP-11	TP-12
Vinyl Chloride	200	<6	<6	<6	<6	<6	<5
Chloroethane	1,900	<6	<6	<6	<6	<6	<5
1,1 Dichloroethene	400	<6	<6	<6	<6	<6	<5
Trichlorotrifluoroethane	6,000	<6	<6	<6	<6	<6	<5
Carbon disulfide	2,700	<6	<6	<6	<6	<6	<5
Acetone	200	<11	2JB	<11	<11	<12	<11
Methylene chloride	100	<6	<6	<6	4J	<6	4J
trans-1,2-Dichloroethene	300	<6	<6	<6	<6	<6	<5
1,1-Dichloroethane	200	<6	<6	<6	<6	<6	<5
2-Butanone (MEK)	300	<11	<11	<11	<11	<12	<11
Chloroform	300	<6	<6	<6	<6	<6	<5
1,1,1-Trichloroethane	800	<6	<6	<6	<6	<6	<5
Carbon tetrachloride	600	<6	<6	<6	<6	<6	<5
Benzene	60	<6	<6	<6	<6	<6	<5
1,2-Dichloroethane	100	<6	<6	<6	<6	<6	<5
Trichloroethene	700	<6	<6	<6	<6	<6	<5
4-Methyl-2-pentanone	1,000	<11	<11	<11	<11	<12	<11
Toluene	1,500	0.6J	0.6J	0.6J	1J	<6	1J
Tetrachloroethene	1,400	<6	<6	<6	<6	<6	<5
1,3-Dichloropropane	300	<6	<6	<6	<6	<6	<5
Dibromochloromethane	N/A	<6	<6	<6	<6	<6	<5
Chlorobenzene	1,700	<6	<6	<6	<6	<6	<5
Ethylbenzene	5,500	0.6J	<6	0.8J	2J	0.5J	0.8J
1,1,2,2-Tetrachloroethane	600	<6	<6	<6	<6	<6	<5
1,2,3-Trichloropropane	400	<6	<6	<6	<6	<6	<5
Xylenes (total)	1,200	2J	<6	3J	5J	2J	2J
1,3-Dichlorobenzene	1,600	<6	<6	<6	<6	<6	<5
1,4-Dichlorobenzene	8,500	<6	<6	<6	<6	<6	<5
1,2-Dichlorobenzene	7,900	<6	<6	<6	<6	<6	<5
1,2,4-Trichlorobenzene	3,400	<6	<6	<6	<6	<6	<5
Isopropylbenzene	2,300	<6	<6	<6	<6	<6	<5
n-Propylbenzene	3,700	<6	<6	<6	<6	<6	<5
p-Isopropyltoluene	10,000	<6	<6	<6	<6	<6	<5
1,2,4-Trimethylbenzene	10,000	<6	<6	<6	<6	<6	<5
1,3,5-Trimethylbenzene	3,300	<6	<6	<6	<6	<6	<5
n-Butylbenzene	10,000	<6	<6	<6	<6	<6	<5
sec-Butylbenzene	10,000	<6	<6	<6	<6	<6	<5
tert-Butylbenzene	10,000	<6	<6	<6	<6	<6	<5
Metyl tert-butyl ether (MTBE)	120	<6	<6	<6	<6	<6	<5

<u>Notes:</u>

1 - From Appendix A, Table 1 of NYSDEC TAGM 4046.
RSCO - Recommended Soil Cleanup Objective.
ug/kg - Micrograms per kilogram, results are presented relative to reporting limits (RLs).
N/A - Not available.
J - Estimated concentration above MDL but below RL.
B - Parameter also detected in laboratory blank.

TABLE 3 (Page 3 of 3)

Summary of Volatile Organic Compound Results for Subsurface-Soil Samples

Iona College Site, 1061 North Broadway, Yonkers, NY 10701 (Site # V-00687-3, Index # W3-0981-12)

TAGM 4046 VOLATILE[1] ORGANIC COMPOUND	TAGM 4046[1] RSCO (ug/kg)	Subsurface-Soil Sample Number and Result (ug/kg)				
		TP-13	TP-14	TP-15	TP-16	
Vinyl Chloride	200	Not Sampled	Not Sampled	<5	<6	
Chloroethane	1,900			<5	<6	
1,1 Dichloroethene	400			<5	<6	
Trichlorotrifluoroethane	6,000			<5	<6	
Carbon disulfide	2,700			<5	<6	
Acetone	200			<11	<11	
Methylene chloride	100			<5	<6	
trans-1,2-Dichloroethene	300			<5	<6	
1,1-Dichloroethane	200			<5	<6	
2-Butanone (MEK)	300			<11	<11	
Chloroform	300			<5	<6	
1,1,1-Trichloroethane	800			<5	<6	
Carbon tetrachloride	600			<5	<6	
Benzene	60			<5	<6	
1,2-Dichloroethane	100			<5	<6	
Trichloroethene	700			<5	<6	
4-Methyl-2-pentanone	1,000			<11	<11	
Toluene	1,500			<5	<6	
Tetrachloroethene	1,400			<5	<6	
1,3-Dichloropropane	300			<5	<6	
Dibromochloromethane	N/A			<5	<6	
Chlorobenzene	1,700			<5	<6	
Ethylbenzene	5,500			<5	<6	
1,1,2,2-Tetrachloroethane	600			<5	<6	
1,2,3-Trichloropropane	400			<5	<6	
Xylenes (total)	1,200			<5	<6	
1,3-Dichlorobenzene	1,600			<5	<6	
1,4-Dichlorobenzene	8,500			<5	<6	
1,2-Dichlorobenzene	7,900			<5	<6	
1,2,4-Trichlorobenzene	3,400			<5	<6	
Isopropylbenzene	2,300			<5	<6	
n-Propylbenzene	3,700			<5	<6	
p-Isopropyltoluene	10,000			<5	<6	
1,2,4-Trimethylbenzene	10,000			<5	<6	
1,3,5-Trimethylbenzene	3,300			<5	<6	
n-Butylbenzene	10,000			<5	<6	
sec-Butylbenzene	10,000			<5	<6	
tert-Butylbenzene	10,000			<5	<6	
Metyl tert-butyl ether (MTBE)	120			<5	<6	

Notes:

1 - From Appendix A, Table 1 of NYSDEC TAGM 4046.
RSCO - Recommended Soil Cleanup Objective.
ug/kg - Micrograms per kilogram, results are presented relative to reporting limits (RLs).
N/A - Not available.
J - Estimated concentration above MDL but below RL.
B - Parameter also detected in laboratory blank.

Review of the above table indicates that toluene, ethylbenzene and xylene, which are aromatic hydrocarbons, were detected at greater frequency in the subsurface-soil samples, but that overall, similar low concentrations were detected in the surface- and subsurface-soil samples. Acetone, a solvent, was detected in the laboratory blanks. As such, its presence is attributed to laboratory contamination. Methylene chloride, which is also a solvent, was detected at low concentrations in one surface-soil sample and three subsurface-soil samples. 2-butanone, a solvent, was detected at a low concentration in one surface-soil sample. p-Isopropyltoluene was only detected at low concentrations in two surface-soil samples.

4.3 Results of Semivolatile Organic Compound (SVOC) Analyses

The six surface-soil samples and 14 subsurface-soil samples were analyzed by USEPA Method 8270C for the 45 SVOCs listed in Table 2 of TAGM 4046. The results, in ug/kg, are summarized and compared to the applicable TAGM 4046 RSCOs in Tables 4 and 5.

Review of Tables 4 and 5 indicates that 25 of the 45 SVOCs analyzed for were detected in at least one soil sample. In general, the results are similar for the surface- and subsurface-soil samples. All 17 of the PAHs listed in Table 2 of TAGM 4046 were detected, and overall PAHs are the SVOCs that were detected most frequently and at the highest concentrations. The other SVOCs detected were aniline, phenol, 4-chloroaniline, dibenzofuran, diethyl phthalate, di-n-butyl phthalate, butyl benzyl phthalate and bis(2-ethylhexyl)phthalate. However, these eight SVOCs were generally detected in relatively few samples and/or at relatively low concentrations. Aniline, phenol and diethyl phthalate were only detected in one or two surface-soil samples.

The concentrations of 16 of the 25 detected SVOCs were lower than their respective TAGM 4046 RSCO, and therefore are not a significant threat to human health or the environment. Therefore, the following discussion focuses on these nine SVOCs that were detected at concentrations higher than their respective TAGM 4046 RSCO:

- Aniline
- Phenol
- Benzo(a)anthracene
- Chrysene
- Benzo(b)fluoranthene
- Benzo(k)fluoranthene
- Benzo(a)pyrene
- Indeno(1,2,3-cd)pyrene
- Dibenzo(a,h)anthracene

The RSCOs for six of these SVOCs, specifically aniline, phenol, chrysene, benzo(b)fluoranthene, benzo(k)fluoranthene and indeno(1,2,3-cd)pyrene, are based on

TABLE 4

Summary of Semivolatile Organic Compound Results for Surface-Soil Samples

Iona College Site, 1061 North Broadway, Yonkers, NY 10701 (Site # V-00687-3, Index # W3-0981-12)

TAGM 4046 SEMIVOLATILE[1] ORGANIC COMPOUND	TAGM 4046[1] RSCO (ug/kg)	Surface-Soil Sample Number and Result (ug/kg)					
		SS-1	SS-2	SS-3	SS-4	SS-5	SS-6
Aniline	100	<970	<870	**500J**	<1,700	<3,800	<1,000
Phenol	30 or MDL	<970	<870	**87J**	<1,700	<3,800	**76J**
2-Methylphenol	100 or MDL	<970	<870	<860	<1,700	<3,800	<1,000
4-Methylphenol	900 or MDL	<970	<870	<860	<1,700	<3,800	<1,000
2-Chlorophenol	800	<970	<870	<860	<1,700	<3,800	<1,000
Nitrobenzene	200 or MDL	<970	<870	<860	<1,700	<3,800	<1,000
Benzoic acid	2,700	<4,700	<4,200	<4,200	<8,200	<19,000	<4,800
Isophorone	4,400	<970	<870	<860	<1,700	<3,800	<1,000
Napthalene	13,000	<970	<870	<860	<1,700	470J	330J
2,4-Dichlorophenol	400	<970	<870	<860	<1,700	<3,800	<1,000
4-Chloroaniline	220 or MDL	<970	<870	<860	<1,700	<3,800	<1,000
2,4,5-Trichlorophenol	100	<4,700	<4,200	<4,200	<8,200	<19,000	<4,800
2-Methylnapthalene	36,400	<970	<870	<860	<1,700	<3,800	120J
2-Nitroaniline	430 or MDL	<4,700	<4,200	<4,200	<8,200	<19,000	<4,800
4-Chloro-3-methylphenol	240 or MDL	<970	<870	<860	<1,700	<3,800	<1,000
2,6-Dinitrotoluene	1,000	<970	<870	<860	<1,700	<3,800	<1,000
2-Nitrophenol	330 or MDL	<970	<870	<860	<1,700	<3,800	<1,000
3-Nitroaniline	500 or MDL	<4,700	<4,200	<4,200	<8,200	<19,000	<4,800
Dimethyl phthalate	2,000	<970	<870	<860	<1,700	<3,800	<1,000
2,4-Dinitrophenol	200 or MDL	<4,700	<4,200	<4,200	<8,200	<19,000	<4,800
Acenapthylene	41,000	140J	340J	100J	1,400J	1,600J	1,100
Acenapthene	50,000	<970	63J	58J	<1,700	920J	130J
Dibenzofuran	6,200	<970	40J	<860	160J	920J	95J
4-Nitrophenol	100 or MDL	<4,700	<4,200	<4,200	<8,200	<19,000	<4,800
Fluorene	50,000	60J	83J	53J	230J	940J	180J
Hexachlorobenzene	410	<970	<870	<860	<1,700	<3,800	<1,000
Diethyl phthalate	7,100	<970	91J	<860	<1,700	<3,800	<1,000
Pentachlorophenol	1,000 or MDL	<4,700	<4,200	<4,200	<8,200	<19,000	<4,800
Phenanthrene	50,000	560J	720J	530J	4,200	15,000	1,800
Anthracene	50,000	260J	420J	220J	1,000J	3,100J	1,200
Di-n-butyl phthalate	8,100	<970	<870	<860	<1,700	<3,800	<1,000
Fluoranthene	50,000	1,100	1,600	860	6,600	16,000	4,100
Pyrene	50,000	950J	1,400	890	6,400	19,000	3,700
Butyl benzyl phthalate	50,000	<970	<870	<860	<1,700	1,100J	<1,000
Benzo(a)anthracene	224 or MDL	**610J**	**960**	**530J**	**3,600**	**7,700**	**2,300**
Chrysene	400	**620J**	**970**	**600J**	**4,100**	**8,000**	**2,600**
3,3-Dichlorobenzidine	N/A	<1,900	<1,700	<1,700	<3,400	<7,600	<2,000
Bis(2-ethylhexyl)phthalate	50,000	810J	<870	180J	<1,700	<3,800	<1,000
Di-n-octyl phthalate	50,000	<970	<870	<860	<1,700	<3,800	<1,000
Benzo(b)fluoranthene	1,100	620J	860J	540J	**3,500**	**5,700**	**2,800**
Benzo(k)fluoranthene	1,100	620J	**1,200**	540J	**3,100**	**6,300**	**3,300**
Benzo(a)pyrene	61 or MDL	**640J**	**1,100**	**570J**	**3,500**	**6,500**	**3,600**
Indeno(1,2,3-cd)pyrene	3,200	240J	360J	210J	2,300	**4,700**	1,300
Dibenzo(a,h)anthracene	14 or MDL	**100J**	**140J**	**81J**	**830J**	**1,700J**	**360J**
Benzo(g,h,i)perylene	50,000	230J	340J	210J	2,500	5,700	1,200

Notes:
1 - From Appendix A, Table 2 of NYSDEC TAGM 4046.
ug/kg - Micrograms per kilogram, results are presented relative to reporting limits (RLs).
MDL - Method detection limit.
J - Estimated concentration above MDL but below RL.
Bold values denote results that are higher than their respective RSCO.

TABLE 5 (Page 1 of 3)

Summary of Semivolatile Organic Compound Results for Subsurface-Soil Samples

Iona College Site, 1061 North Broadway, Yonkers, NY 10701 (Site # V-00687-3, Index # W3-0981-12)

TAGM 4046 SEMIVOLATILE[1] ORGANIC COMPOUND	TAGM 4046[1] RSCO (ug/kg)	Subsurface-Soil Sample Number and Result (ug/kg)					
		TP-1	TP-2	TP-3	TP-4	TP-5	TP-6
Aniline	100	<3,800	<1,500	<3,000	<1,500	<1,600	<1,500
Phenol	30 or MDL	<3,800	<1,500	<3,000	<1,500	<1,600	<1,500
2-Methylphenol	100 or MDL	<3,800	<1,500	<3,000	<1,500	<1,600	<1,500
4-Methylphenol	900 or MDL	<3,800	<1,500	<3,000	<1,500	<1,600	<1,500
2-Chlorophenol	800	<3,800	<1,500	<3,000	<1,500	<1,600	<1,500
Nitrobenzene	200 or MDL	<3,800	<1,500	<3,000	<1,500	<1,600	<1,500
Benzoic acid	2,700	<18,000	<7,200	<14,000	<7,100	<7,500	<7,200
Isophorone	4,400	<3,800	<1,500	<3,000	<1,500	<1,600	<1,500
Napthalene	13,000	<3,800	380J	710J	170J	<1,600	170J
2,4-Dichlorophenol	400	<3,800	<1,500	<3,000	<1,500	<1,600	<1,500
4-Chloroaniline	220 or MDL	<3,800	<1,500	<3,000	<1,500	<1,600	<1,500
2,4,5-Trichlorophenol	100	<18,000	<7,200	<14,000	<7,100	<7,500	<7,200
2-Methylnapthalene	36,400	<3,800	270J	410J	<1,500	<1,600	<1,500
2-Nitroaniline	430 or MDL	<18,000	<7,200	<14,000	<7,100	<7,500	<7,200
4-Chloro-3-methylphenol	240 or MDL	<3,800	<1,500	<3,000	<1,500	<1,600	<1,500
2,6-Dinitrotoluene	1,000	<3,800	<1,500	<3,000	<1,500	<1,600	<1,500
2-Nitrophenol	330 or MDL	<3,800	<1,500	<3,000	<1,500	<1,600	<1,500
3-Nitroaniline	500 or MDL	<18,000	<7,200	<14,000	<7,100	<7,500	<7,200
Dimethyl phthalate	2,000	<3,800	<1,500	<3,000	<1,500	<1,600	<1,500
2,4-Dinitrophenol	200 or MDL	<18,000	<7,200	<14,000	<7,100	<7,500	<7,200
Acenapthylene	41,000	<3,800	1,200J	1,300J	650J	<1,600	360J
Acenapthene	50,000	<3,800	280J	850J	100J	<1,600	180J
Dibenzofuran	6,200	<3,800	290J	610J	100J	<1,600	120J
4-Nitrophenol	100 or MDL	<18,000	<7,200	<14,000	<7,100	<7,500	<7,200
Fluorene	50,000	<3,800	680J	1,100J	200J	<1,600	210J
Hexachlorobenzene	410	<3,800	<1,500	<3,000	<1,500	<1,600	<1,500
Diethyl phthalate	7,100	<3,800	<1,500	<3,000	<1,500	<1,600	<1,500
Pentachlorophenol	1,000 or MDL	<18,000	<7,200	<14,000	<7,100	<7,500	<7,200
Phenanthrene	50,000	1,100J	5,000	12,000	1,600	<1,600	1,600
Anthracene	50,000	510J	2,100	3,300	790J	<1,600	560J
Di-n-butyl phthalate	8,100	<3,800	<1,500	<3,000	<1,500	<1,600	<1,500
Fluoranthene	50,000	2,100J	5,900	15,000	2,300	240J	2,300
Pyrene	50,000	2,100J	5,800	15,000	2,100	310J	2,200
Butyl benzyl phthalate	50,000	<3,800	<1,500	270J	<1,500	<1,600	<1,500
Benzo(a)anthracene	224 or MDL	**1,500J**	**3,300**	**8,700**	**1,400J**	170J	**1,300J**
Chrysene	400	**1,600J**	**3,400**	**9,000**	**1,400J**	230J	**1,400J**
3,3-Dichlorobenzidine	N/A	<7,600	<3,000	<5,900	<2,900	<3,100	<3,000
Bis(2-ethylhexyl)phthalate	50,000	<3,800	<1,500	<3,000	<1,500	<1,600	<1,500
Di-n-octyl phthalate	50,000	<3,800	<1,500	<3,000	<1,500	<1,600	<1,500
Benzo(b)fluoranthene	1,100	**1,400J**	**2,500**	**6,500**	1,100J	<1,600	950J
Benzo(k)fluoranthene	1,100	**1,200J**	**3,100**	**7,400**	**1,700**	<1,600	**1,300J**
Benzo(a)pyrene	61 or MDL	**1,500J**	**3,300**	**8,500**	**1,500**	**200J**	**1,400J**
Indeno(1,2,3-cd)pyrene	3,200	460J	1,100J	**3,500**	510J	110J	830J
Dibenzo(a,h)anthracene	14 or MDL	**280J**	**460J**	**1,200J**	**220J**	<1,600	**420J**
Benzo(g,h,i)perylene	50,000	510J	1,100J	3,300	510J	140J	930J

<u>Notes:</u>

1 - From Appendix A, Table 2 of NYSDEC TAGM 4046.

ug/kg - Micrograms per kilogram, results presented relative to reporting limits (RLs).

MDL - Method detection limit.

J - Estimated concentration above MDL but below RL.

Bold values denote results that are higher than their respective RSCO.

TABLE 5 (Page 2 of 3)

Summary of Semivolatile Organic Compound Results for Subsurface-Soil Samples

Iona College Site, 1061 North Broadway, Yonkers, NY 10701 (Site # V-00687-3, Index # W3-0981-12)

TAGM 4046 SEMIVOLATILE[1] ORGANIC COMPOUND	TAGM 4046[1] RSCO (ug/kg)	Subsurface-Soil Sample Number and Result (ug/kg)					
		TP-7	TP-8	TP-9	TP-10	TP-11	TP-12
Aniline	100	<1,500	<1,400	<2,900	<3,700	<1,500	<1,400
Phenol	30 or MDL	<1,500	<1,400	<2,900	<3,700	<1,500	<1,400
2-Methylphenol	100 or MDL	<1,500	<1,400	<2,900	<3,700	<1,500	<1,400
4-Methylphenol	900 or MDL	<1,500	<1,400	<2,900	<3,700	<1,500	<1,400
2-Chlorophenol	800	<1,500	<1,400	<2,900	<3,700	<1,500	<1,400
Nitrobenzene	200 or MDL	<1,500	<1,400	<2,900	<3,700	<1,500	<1,400
Benzoic acid	2,700	<7,100	<7,000	<14,000	<18,000	<7,300	<6,700
Isophorone	4,400	<1,500	<1,400	<2,900	<3,700	<1,500	<1,400
Napthalene	13,000	150J	150J	580J	<3,700	<1,500	910J
2,4-Dichlorophenol	400	<1,500	<1,400	<2,900	<3,700	<1,500	<1,400
4-Chloroaniline	220 or MDL	<1,500	<1,400	<2,900	<3,700	<1,500	<1,400
2,4,5-Trichlorophenol	100	<7,100	<7,000	<14,000	<18,000	<7,300	<6,700
2-Methylnapthalene	36,400	<1,500	<1,400	510J	<3,700	<1,500	410J
2-Nitroaniline	430 or MDL	<7,100	<7,000	<14,000	<18,000	<7,300	<6,700
4-Chloro-3-methylphenol	240 or MDL	<1,500	<1,400	<2,900	<3,700	<1,500	<1,400
2,6-Dinitrotoluene	1,000	<1,500	<1,400	<2,900	<3,700	<1,500	<1,400
2-Nitrophenol	330 or MDL	<1,500	<1,400	<2,900	<3,700	<1,500	<1,400
3-Nitroaniline	500 or MDL	<7,100	<7,000	<14,000	<18,000	<7,300	<6,700
Dimethyl phthalate	2,000	<1,500	<1,400	<2,900	<3,700	<1,500	<1,400
2,4-Dinitrophenol	200 or MDL	<7,100	<7,000	<14,000	<18,000	<7,300	<6,700
Acenapthylene	41,000	270J	330J	1,400J	600J	540J	1,100J
Acenapthene	50,000	110J	90J	770J	<3,700	100J	380J
Dibenzofuran	6,200	88J	81J	750J	<3,700	<1,500	430J
4-Nitrophenol	100 or MDL	<7,100	<7,000	<14,000	<18,000	<7,300	<6,700
Fluorene	50,000	160J	140J	1,400J	<3,700	160J	650J
Hexachlorobenzene	410	<1,500	<1,400	<2,900	<3,700	<1,500	<1,400
Diethyl phthalate	7,100	<1,500	<1,400	<2,900	<3,700	<1,500	<1,400
Pentachlorophenol	1,000 or MDL	<7,100	<7,000	<14,000	<18,000	<7,300	<6,700
Phenanthrene	50,000	1,200J	1,300J	7,400	1,800J	1,500	4,600
Anthracene	50,000	510J	710J	3,500	1,000J	810J	2,100
Di-n-butyl phthalate	8,100	<1,500	<1,400	<2,900	<3,700	<1,500	<1,400
Fluoranthene	50,000	1,700	2,700	9,200	3,600J	2,900	7,200
Pyrene	50,000	1,800	3,000	11,000	4,700	3,400	8,100
Butyl benzyl phthalate	50,000	<1,500	<1,400	<2,900	<3,700	<1,500	<1,400
Benzo(a)anthracene	224 or MDL	**1,100J**	**1,800**	**6,000**	**2,700J**	**1,900**	**4,600**
Chrysene	400	**1,100J**	**1,900**	**6,200**	**2,600J**	**2,000**	**4,600**
3,3-Dichlorobenzidine	N/A	<2,900	<2,900	<5,800	<7,500	<3,000	<2,800
Bis(2-ethylhexyl)phthalate	50,000	<1,500	320J	<2,900	<3,700	1,200J	520J
Di-n-octyl phthalate	50,000	<1,500	<1,400	<2,900	<3,700	<1,500	<1,400
Benzo(b)fluoranthene	1,100	700J	**1,300J**	**4,200**	**2,300J**	**1,300J**	**3,500**
Benzo(k)fluoranthene	1,100	1,100J	**1,500**	**6,800**	**2,200J**	**1,900**	**4,800**
Benzo(a)pyrene	61 or MDL	**1,100J**	**1,800**	**7,000**	**2,700J**	**1,900**	**5,000**
Indeno(1,2,3-cd)pyrene	3,200	630J	930J	**4,200**	1,700J	1,100J	2,600
Dibenzo(a,h)anthracene	14 or MDL	**220J**	**410J**	**1,600J**	**880J**	**590J**	**1,300J**
Benzo(g,h,i)perylene	50,000	640J	880J	4,300	1,600J	1,100J	2,500

Notes:

1 -	From Appendix A, Table 2 of NYSDEC TAGM 4046.
ug/kg -	Micrograms per kilogram, results are presented relative to reporting limits (RLs).
MDL -	Method detection limit.
J -	Estimated concentration above MDL but below RL.
	Bold values denote results that are higher than their respective RSCO.

TABLE 5 (Page 3 of 3)
Summary of Semivolatile Organic Compound Results for Subsurface-Soil Samples
Iona College Site, 1061 North Broadway, Yonkers, NY 10701 (Site # V-00687-3, Index # W3-0981-12)

TAGM 4046 SEMIVOLATILE[1] ORGANIC COMPOUND	TAGM 4046[1] RSCO (ug/kg)	Subsurface-Soil Sample Number and Result (ug/kg)				
		TP-13	TP-14	TP-15	TP-16	
Aniline	100	Not Sampled	Not Sampled	<1,400	<1,400	
Phenol	30 or MDL			<1,400	<1,400	
2-Methylphenol	100 or MDL			<1,400	<1,400	
4-Methylphenol	900 or MDL			<1,400	<1,400	
2-Chlorophenol	800			<1,400	<1,400	
Nitrobenzene	200 or MDL			<1,400	<1,400	
Benzoic acid	2,700			<6,900	<6,900	
Isophorone	4,400			<1,400	<1,400	
Napthalene	13,000			410J	700J	
2,4-Dichlorophenol	400			<1,400	<1,400	
4-Chloroaniline	220 or MDL			120J	220J	
2,4,5-Trichlorophenol	100			<6,900	<7,000	
2-Methylnapthalene	36,400			240J	380J	
2-Nitroaniline	430 or MDL			<6,900	<7,000	
4-Chloro-3-methylphenol	240 or MDL			<1,400	<1,400	
2,6-Dinitrotoluene	1,000			<1,400	<1,400	
2-Nitrophenol	330 or MDL			<1,400	<1,400	
3-Nitroaniline	500 or MDL			<6,900	<7,000	
Dimethyl phthalate	2,000			<1,400	<1,400	
2,4-Dinitrophenol	200 or MDL			<6,900	<7,000	
Acenapthylene	41,000			790J	580J	
Acenapthene	50,000			660J	780J	
Dibenzofuran	6,200			350J	660J	
4-Nitrophenol	100 or MDL			<6,900	<7,000	
Fluorene	50,000			950J	940J	
Hexachlorobenzene	410			<1,400	<1,400	
Diethyl phthalate	7,100			<1,400	<1,400	
Pentachlorophenol	1,000 or MDL			<6,900	<7,000	
Phenanthrene	50,000			8,300	7,400	
Anthracene	50,000			3,300	2,400	
Di-n-butyl phthalate	8,100			140J	<1,400	
Fluoranthene	50,000			15,000	8,800	
Pyrene	50,000			11,000	6,700	
Butyl benzyl phthalate	50,000			<1,400	<1,400	
Benzo(a)anthracene	224 or MDL			**8,300**	**4,200**	
Chrysene	400			**7,800**	**4,200**	
3,3-Dichlorobenzidine	N/A			<2,800	<2,900	
Bis(2-ethylhexyl)phthalate	50,000			<1,400	<1,400	
Di-n-octyl phthalate	50,000			<1,400	<1,400	
Benzo(b)fluoranthene	1,100			**6,200**	**3,400**	
Benzo(k)fluoranthene	1,100			**7,200**	**3,600**	
Benzo(a)pyrene	61 or MDL			**7,800**	**4,000**	
Indeno(1,2,3-cd)pyrene	3,200			1,600	1,000J	
Dibenzo(a,h)anthracene	14 or MDL			**710J**	**440J**	
Benzo(g,h,i)perylene	50,000			1,100J	790J	

Notes:
1 - From Appendix A, Table 2 of NYSDEC TAGM 4046.
ug/kg - Micrograms per kilogram, results are presented relative to reporting limits (RLs).
MDL - Method detection limit.
J - Estimated concentration above MDL but below RL.
Bold values denote results that are higher than their respective RSCO.

protection of ground water. The RSCOs for the other three SVOCs are based on USEPA health-based criteria, although TAGM 4046 provides soil cleanup objectives to protect ground water for these SVOCs as well. As noted previously in Section 4.0, the RSCOs and soil cleanup objectives to protect ground water were calculated using a conservative low soil TOC content of 1%. As noted previously in Section 4.1, the actual TOC content of the soil samples was considerably higher and averaged 4.8% for the surface-soil samples and 2.2% for the Subsurface-Soil Samples TP-1 through TP-12. Therefore, the RSCOs and soil cleanup objectives to protect ground water for these nine SVOCs were recalculated according to the formula provided in TAGM 4046 using the average TOC contents of the surface-soil samples and Subsurface-Soil Samples TP-1 through TP-12.

The recalculated RSCOs and soil cleanup objectives for surface and subsurface soil are compared to the maximum concentration of each SVOC in the following table:

SVOC	Surface Soil RSCO (ug/kg)	Surface Soil Max. (ug/kg)	Subsurface Soil RSCO (ug/kg)	Subsurface Soil Max. (ug/kg)
Aniline	331	500J	152	ND
Phenol	130	87J	59	ND
Benzo(a)anthracene	13,248	7,700	6,072	8,700
Chrysene	1,920	8,000	880	9,000
Benzo(b)fluoranthene	5,280	5,700	2,420	6,500
Benzo(k)fluoranthene	5,280	6,300	2,420	7,400
Benzo(a)pyrene	52,800	6,500	24,200	8,500
Indeno(1,2,3-cd)pyrene	15,360	4,700	7,040	4,200
Dibenzo(a,h)anthracene	7.9×10^9	1,700	3.6×10^9	1,600

ug/kg – Micrograms per kilogram.
ND – Not detected.
J – Estimated concentration above MDL but below RL.

Review of the above table indicates that the maximum concentration of aniline detected in surface soil is still higher than the recalculated surface-soil RSCO. However, it is important to note that aniline was only detected in one surface-soil sample. As such, the average concentration of aniline in the fill is much lower than this RSCO and therefore not a significant threat to public health or the environment. The maximum concentrations of phenol, benzo(a)anthracene, benzo(a)pyrene, indeno(1,2,3-cd)pyrene and dibenzo(a,h)anthracene in surface soil are lower than their recalculated surface-soil RSCOs. The maximum concentrations of benzo(b)fluoranthene, benzo(k)fluoranthene and chrysene in surface soil are still higher than their recalculated surface-soil RSCOs. The maximum concentrations benzo(a)pyrene, indeno(1,2,3-cd)pyrene and dibenzo-(a,h)anthracene in subsurface soil are lower than their recalculated subsurface-soil RSCOs. However, the maximum concentrations of benzo(a)anthracene, chrysene, benzo(b)fluoranthene and benzo(k)fluoranthene in subsurface soil are higher than their recalculated subsurface-soil RSCOs.

The above RSCOs and soil cleanup objectives to protect ground water are conservative values that assume that the soil is in direct contact with ground water. In anticipation of the above results, the subsurface-soil samples were also analyzed by ASTM shake test extraction and USEPA Method 8270C for leachable concentrations of the 17 PAHs listed in Table 2 of TAGM 4046. These PAHs include the above PAHs whose maximum concentrations are still higher than the recalculated subsurface-soil RSCOs, as well as the majority of the SVOCs that were detected in the soil samples. These results, in micrograms per liter (ug/L), are summarized and compared to the New York State Ambient Water Quality Standards and Guidance Values for potable (Class GA) ground water in Table 6.

As shown in Table 6, except for a single detection of a low estimated concentration of phenanthrene in Subsurface-Soil Sample TP-11, none of the 17 PAHs analyzed for were detected. Based on these results, the subsurface soil does not leach significant concentrations of PAHs. The surface-soil samples were not analyzed for leachable PAHs. However, the average TOC content of the surface-soil samples is more than twice as high as that of the Subsurface-Soil Samples TP-1 through TP-12. Moreover, the maximum concentration of chrysene, which is the only PAH whose maximum concentration is higher than the recalculated surface-soil RSCO, detected in surface soil is lower than the maximum concentration detected in subsurface soil. Therefore, it can be reasonably concluded that the surface soil will also not leach significant concentrations of PAHs.

In summary, the above analysis indicates that the concentrations of these nine SVOCs in the fill are not a significant threat to public health or the environment via the ground water pathway.

The three SVOCs with RSCOs based on USEPA health-based criteria, specifically benzo(a)anthracene, benzo(a)pyrene and dibenzo(a,h)anthracene, are PAHs that are classified by USEPA as possible or probable human carcinogens. The RSCOs for these SVOCs correspond to excess lifetime cancer risks of one in one million, and are obtained from USEPA's Health Effects Assessment Summary Tables (HEASTs). It should be noted that although TAGM 4046 states that the NYSDEC compiles and updates the HEASTs on a quarterly basis, the USEPA health-based criteria RSCOs listed in TAGM 4046 date to 1994 when the TAGM was issued. It is likely that some or all of the HEAST-derived values have changed since then. For example, in 1997, the 1993 oral slope factor for benzo(a)pyrene was revised to reflect updated information indicating that this PAH is not as toxic as previously thought. However, it is LKB's understanding that the NYSDEC uses the 1994 USEPA health-based RSCOs as a screening tool to evaluate soil quality. Since the concentrations of benzo(a)anthracene, benzo(a)pyrene and dibenzo(a,h)anthracene detected in the soil samples are higher than their respective RSCOs, a further evaluation of the threat they may pose to human health and the environment is provided in the following paragraphs.

Benzo(a)anthracene, benzo(a)pyrene and dibenzo(a,h)anthracene are three of seven carcinogenic PAHs (cPAHs) that are typically evaluated by NYSDEC and NYSDOH. The other four cPAHs are benzo(k)fluoranthene, benzo(k)fluoranthene, chrysene and indeno(1,2,3-cd)pyrene, which were evaluated above relative to their RSCOs for

TABLE 6

Summary of Leachable PAH Results for Subsurface-Soil Samples

Iona College Site, 1061 North Broadway, Yonkers, NY 10701 (Site # V-00687-3, Index # W3-0981-12)

Polycyclic Aromatic Hydrocarbon (PAH)	Ground Water[1] Std./GV (ug/L)	Subsurface-Soil Sample Number and Result (ug/L)						
		TP-1	TP-2	TP-3	TP-4	TP-5	TP-6	TP-7
Napthalene	10$_{GV}$	<20	<20	<20	<20	<20	<20	<20
2-Methylnapthalene	N/A	<20	<20	<20	<20	<20	<20	<20
Acenapthylene	N/A	<20	<20	<20	<20	<20	<20	<20
Acenapthene	20$_{GV}$	<20	<20	<20	<20	<20	<20	<20
Fluorene	50$_{GV}$	<20	<20	<20	<20	<20	<20	<20
Phenanthrene	50$_{GV}$	<20	<20	<20	<20	<20	<20	<20
Anthracene	50$_{GV}$	<20	<20	<20	<20	<20	<20	<20
Fluoranthene	50$_{GV}$	<20	<20	<20	<20	<20	<20	<20
Pyrene	50$_{GV}$	<20	<20	<20	<20	<20	<20	<20
Benzo(a)anthracene	0.002$_{GV}$	<20	<20	<20	<20	<20	<20	<20
Chrysene	0.002$_{GV}$	<20	<20	<20	<20	<20	<20	<20
Benzo(b)fluoranthene	0.002$_{GV}$	<20	<20	<20	<20	<20	<20	<20
Benzo(k)fluoranthene	0.002$_{GV}$	<20	<20	<20	<20	<20	<20	<20
Benzo(a)pyrene	ND	<20	<20	<20	<20	<20	<20	<20
Indeno(1,2,3-cd)pyrene	0.002$_{GV}$	<20	<20	<20	<20	<20	<20	<20
Dibenzo(a,h)anthracene	N/A	<20	<20	<20	<20	<20	<20	<20
Benzo(g,h,i)perylene	N/A	<20	<20	<20	<20	<20	<20	<20

Polycyclic Aromatic Hydrocarbon (PAH)	Ground Water[1] Std./GV (ug/L)	Subsurface-Soil Sample Number and Result (ug/L)						
		TP-8	TP-9	TP-10	TP-11	TP-12	TP-15	TP-16
Napthalene	10$_{GV}$	<20	<20	<20	<20	<20	<20	<20
2-Methylnapthalene	N/A	<20	<20	<20	<20	<20	<20	<20
Acenapthylene	N/A	<20	<20	<20	<20	<20	<20	<20
Acenapthene	20$_{GV}$	<20	<20	<20	<20	<20	<20	<20
Fluorene	50$_{GV}$	<20	<20	<20	<20	<20	<20	<20
Phenanthrene	50$_{GV}$	<20	<20	<20	2J	<20	<20	<20
Anthracene	50$_{GV}$	<20	<20	<20	<20	<20	<20	<20
Fluoranthene	50$_{GV}$	<20	<20	<20	<20	<20	<20	<20
Pyrene	50$_{GV}$	<20	<20	<20	<20	<20	<20	<20
Benzo(a)anthracene	0.002$_{GV}$	<20	<20	<20	<20	<20	<20	<20
Chrysene	0.002$_{GV}$	<20	<20	<20	<20	<20	<20	<20
Benzo(b)fluoranthene	0.002$_{GV}$	<20	<20	<20	<20	<20	<20	<20
Benzo(k)fluoranthene	0.002$_{GV}$	<20	<20	<20	<20	<20	<20	<20
Benzo(a)pyrene	ND	<20	<20	<20	<20	<20	<20	<20
Indeno(1,2,3-cd)pyrene	0.002$_{GV}$	<20	<20	<20	<20	<20	<20	<20
Dibenzo(a,h)anthracene	N/A	<20	<20	<20	<20	<20	<20	<20
Benzo(g,h,i)perylene	N/A	<20	<20	<20	<20	<20	<20	<20

Notes:
1 - Ambient Water Quality Standard or Guidance Value (GV) from NYSDEC TOGS 1.1.1.
ug/kg - Micrograms per Liter, results are presented relative to reporting limits (RLs).
N/A - Not available.
ND - Not detectable.
J - Estimated concentration above MDL but below RL.
Test Pits TP-13 and TP-14 not sampled.

protection of ground water. Of these cPAHs, benzo(a)pyrene is generally considered to be the most toxic, and the concentrations of the other cPAHs were converted to benzo(a)pyrene toxicity equivalents by multiplying them by factors ranging from 0.01 to 1 depending on their relative toxicity. The results for these cPAHs are summarized, totaled and converted to total cPAH as benzo(a)pyrene equivalents in Table 7.

Review of Table 7 indicates that total cPAH concentrations in the surface-soil samples ranged from 3,071 ug/kg in Surface-Soil Sample SS-3, to 40,600 ug/kg in Surface-Soil Sample SS-5. Total cPAH concentrations as benzo(a)pyrene equivalent ranged from 790 ug/kg in Surface-Soil Sample SS-3 to 10,153 in Surface-Soil Sample SS-5. Surface-Soil Sample SS-5 was collected near North Broadway. The results for this sample may reflect roadway-related influences (e.g., the presence of road dust in the surface soil). Total cPAH concentrations in the subsurface-soil samples ranged from 933 ug/kg in Subsurface-Soil Sample TP-5 to 44,800 ug/kg in Subsurface-Soil Sample TP-3. Total cPAH concentrations as benzo(a)pyrene equivalent ranged from 283 ug/kg to 11,734 ug/kg in these same two samples, respectively. The results for Subsurface-Soil Sample TP-3 are attributed to the small amount of ash-like material observed in this test pit. The average total cPAH concentration of the surface-soil samples (14,984 ug/kg) is approximately 16 percent lower than the average total cPAH concentration of the subsurface-soil samples (17,891 ug/kg). The average total cPAH concentration as benzo(a)pyrene equivalent of the surface-soil samples (3,887 ug/kg) is approximately 13 percent lower than the average total cPAH concentration as benzo(a)pyrene equivalent of the subsurface-soil samples (4,468 ug/kg). These differences are attributed to the fact that PAH degradation rates are typically higher in surface soil than in subsurface soil.

To assess the environmental significance of the cPAH results, they were compared to available information on background levels of cPAHs. Specifically, the results were compared to the urban soil background levels provided in the following two documents:

- A guidance document issued by the Illinois Environmental Protection Agency (IL-EPA) entitled "Urban Area Polycyclic Aromatic Hydrocarbons Study Tiered Approach to Corrective Action Objectives". (The specific data compared were the 95th percentiles for soil within Metropolitan Statistical Areas (MSAs)); and
- A technical update issued by the Massachusetts Department of Environmental Protection (MADEP) entitled "Background Levels of Polycyclic Aromatic Hydrocarbons and Metals in Soil" (The specific data compared were the 90th percentiles for both "natural" soil and soil containing fill with wood ash and/or coal ash).

Copies of these documents are provided in Appendix I of this report. The results are compared to these background levels in Table 8.

As shown in Table 8, with respect to the individual cPAHs the minimum concentration of each cPAH detected in the soil samples is lower than the IL-DEP and MADEP data. The maximum concentration of each cPAH detected in the soil samples is comparable to the MADEP data for urban soils containing fill with wood ash and/or coal ash. The average

TABLE 7

Summary of Carcinogenic Polycyclic Aromatic Hydrocarbon Results for Soil Samples

Iona College Site, 1061 North Broadway, Yonkers, NY 10701 (Site # V-00687-3, Index # W3-0981-12)

NYSDEC CARCINOGENIC[1] PAHS (cPAHs)	BaP Equiv.[1] Factor	Surface-Soil Sample Number and Result (ug/kg)					
		SS-1	SS-2	SS-3	SS-4	SS-5	SS-6
Benzo(a)anthracene	0.1	610	960	530	3,600	7,700	2,300
Chrysene	0.01	620	970	600	4,100	8,000	2,600
Benzo(b)fluoranthene	0.1	620	860	540	3,500	5,700	2,800
Benzo(k)fluoranthene	0.01	620	1,200	540	3,100	6,300	3,300
Benzo(a)pyrene (BaP)	1	640	1,100	570	3,500	6,500	3,600
Indeno(1,2,3-cd)pyrene	0.1	240	360	210	2,300	4,700	1,300
Dibenzo(a,h)anthracene	1	100	140	81	830	1,700	360
Total cPAHs:		3,450	5,590	3,071	20,930	40,600	16,260
Total cPAHs as BaP Equivalent:		899	1,480	790	5,342	10,153	4,659

NYSDEC CARCINOGENIC[1] PAHS (cPAHs)	BaP Equiv.[1] Factor	Subsurface-Soil Sample Number and Result (ug/kg)						
		TP-1	TP-2	TP-3	TP-4	TP-5	TP-6	TP-7
Benzo(a)anthracene	0.1	1,500	3,300	8,700	1,400	170	1,300	1,100
Chrysene	0.01	1,600	3,400	9,000	1,400	230	1,400	1,100
Benzo(b)fluoranthene	0.1	1,400	2,500	6,500	1,100	90	950	700
Benzo(k)fluoranthene	0.01	1,200	3,100	7,400	1,700	90	1,300	1,100
Benzo(a)pyrene (BaP)	1	1,500	3,300	8,500	1,500	200	1,400	1,100
Indeno(1,2,3-cd)pyrene	0.1	460	1,100	3,500	510	110	830	630
Dibenzo(a,h)anthracene	1	280	460	1,200	220	43	420	220
Total cPAHs:		7,940	17,160	44,800	7,830	933	7,600	5,950
Total cPAHs as BaP Equivalent:		2,144	1,216	11,734	2,052	283	2,155	1,585

NYSDEC CARCINOGENIC[1] PAHS (cPAHs)	BaP Equiv.[1] Factor	Subsurface-Soil Sample Number and Result (ug/kg)						
		TP-8	TP-9	TP-10	TP-11	TP-12	TP-15	TP-16
Benzo(a)anthracene	0.1	1,800	6,000	2,700	1,900	4,600	8,300	4,200
Chrysene	0.01	1,900	6,200	2,600	2,000	4,600	7,800	4,200
Benzo(b)fluoranthene	0.1	1,300	4,200	2,300	1,300	3,500	6,200	3,400
Benzo(k)fluoranthene	0.01	1,500	6,800	2,200	1,900	4,800	7,200	3,600
Benzo(a)pyrene (BaP)	1	1,800	7,000	2,700	1,900	5,000	7,800	4,000
Indeno(1,2,3-cd)pyrene	0.1	930	4,200	1,700	1,100	2,600	1,600	1,000
Dibenzo(a,h)anthracene	1	410	1,600	880	590	1,300	710	440
Total cPAHs:		9,640	36,000	15,080	10,690	26,400	39,610	20,840
Total cPAHs as BaP Equivalent:		848	10,170	4,298	2,959	7,464	10,270	5,378

Notes:

1 -	From NYSDEC document provided in Appendix I.
ug/kg -	Micrograms per kilogram.
	Estimated results used at face value, non-detectable concentrations are reported as detectable concentrations equal to one-half the MDL for calculation purposes.
	Test Pits TP-13 and TP-14 not sampled.

TABLE 8

Comparison of cPAH Results to Illinois EPA and Massachusetts DEP Background Levels[1]

Iona College Site, 1061 North Broadway, Yonkers, NY 10701 (Site # V-00687-3, Index # W3-0981-12)

NYSDEC CARCINOGENIC[2] PAHS (cPAHs)	Surface-Soil Sample Results (ug/kg)[3]			IL-EPA MSAs	MADEP Nat. Soil	MADEP Soil w/ Ash
	Minimum	Maximum	Average			
Benzo(a)anthracene	530	7,700	2,617	1,800	2,000	8,500
Chrysene	600	8,000	2,815	2,700	2,000	7,300
Benzo(b)fluoranthene	540	5,700	2,337	2,000	2,000	8,400
Benzo(k)fluoranthene	540	6,300	2,510	1,700	1,000	4,000
Benzo(a)pyrene (BaP)	570	6,500	2,652	2,100	2,000	7,400
Indeno(1,2,3-cd)pyrene	210	4,700	1,518	1,600	1,000	2,800
Dibenzo(a,h)anthracene	81	1,700	535	420	500	1,100
Total cPAH:	3,071	40,600	14,984	12,320	10,500	39,500
Total cPAH as BaP Equivalent:	790	10,153	3,887	3,104	3,030	10,583

NYSDEC CARCINOGENIC[2] PAHS (cPAHs)	Subsurface-Soil Sample Results (ug/kg)[3]			IL-EPA MSAs	MADEP Nat. Soil	MADEP Soil w/ Ash
	Minimum	Maximum	Average			
Benzo(a)anthracene	170	8,700	3,355	1,800	2,000	8,500
Chrysene	230	9,000	3,388	2,700	2,000	7,300
Benzo(b)fluoranthene	90	6,500	2,531	2,000	2,000	8,400
Benzo(k)fluoranthene	90	7,400	3,135	1,700	1,000	4,000
Benzo(a)pyrene (BaP)	200	8,500	3,407	2,100	2,000	7,400
Indeno(1,2,3-cd)pyrene	110	4,200	1,448	1,600	1,000	2,800
Dibenzo(a,h)anthracene	43	1,600	627	420	500	1,100
Total cPAH:	933	44,800	17,891	12,320	10,500	39,500
Total cPAH as BaP Equivalent:	283	11,734	4,468	3,818	2,440	8,439

Notes:

1 - See Appendix I.
2 - From NYSDEC document provided in Appendix I.
3 - From Table 7.
ug/kg - Micrograms per kilogram.
Estimated results used at face value, non-detectable concentrations are reported as detectable concentrations equal to one-half the MDL for calculation purposes.

concentration of each cPAH detected in the soil samples is higher than the IL-EPA data for MSAs and/or the MADEP data for "natural" soil, but lower than the MADEP data for soil containing fill with wood ash and/or coal ash. The same relative relationships exist for the total cPAH and total cPAH as benzo(a)pyrene equivalent concentrations.

Based on the above comparison, the concentrations of cPAHs in the fill do not appear to be a significant threat to public health or the environment. However, since the average concentrations of individual cPAHs, total cPAH and total cPAH as benzo(a)pyrene equivalent are higher than the IL-EPA data and the MA-DEP data for "natural" soil, the concentrations of cPAHs in the fill may pose a slightly higher risk relative to other nearby areas that do not contain the fill. The cPAHs in the fill will continue to break down over time. However, in the meantime, preventing direct contact with the fill would eliminate this potential risk.

4.4 Results of Pesticide Analyses

The six surface-soil samples and 14 subsurface-soil samples were analyzed by USEPA Method 8081A for the 19 pesticides listed in Table 3 of TAGM 4046. The results, in ug/kg, are summarized and compared to the TAGM 4046 RSCOs in Tables 9 and 10.

Review of these tables indicates that the fill contains low levels of several pesticide compounds, but that the concentrations detected are not a significant threat to human health or the environment. Specifically, 15 of the 19 pesticides compounds analyzed for were detected in the soil samples, however, the concentrations of all 15 detected pesticides compounds are lower than their respective TAGM 4046 RSCOs. The pesticide detections are summarized in the following table:

Detected Pesticide	Frequency of Detection		Range of Detection (ug/kg)	
	Surface Soil	Subsurface Soil	Surface Soil	Subsurface Soil
Alpha-BHC	0/6	3/14	NA	0.042 to 0.51J
Beta-BHC	3/6	4/14	0.43J to 1.8J	0.33J to 0.76J
Delta-BHC	0/6	2/14	NA	0.30J to 0.40J
Heptachlor	1/6	1/14	1.2J	0.41J
Aldrin	3/6	3/14	0.62J to 5.0	0.77J to 1.1J
Heptachlor epoxide	6/6	12/14	0.58J to 3.9	0.48J to 5.1J
Dieldrin	1/6	3/14	5.2	0.010 to 3.6J
4,4'-DDE	6/6	13/14	3.1J to 50	0.012 to 75
Endrin	1/6	0/14	22	NA
4,4'-DDD	6/6	14/14	2.0J to 54	0.038 to 100
4,4'-DDT	6/6	13/14	5.3 to 73	0.058 to 85
Methoxychlor	5/6	8/14	3.0J to 21J	11J to 55J
Gamma-Chlordane	4/6	11/14	1.7J to 3.7	0.50J to 12J
Endrin ketone	3/6	6/14	2.4J to 19	2.4J to 24J
Chlordane	4/6	9/14	14J to 34	17J to 360

ug/kg	– Micrograms per kilogram.
NA	– Not applicable.
J	– Estimated concentration above MDL but below RL.

TABLE 9
Summary of Pesticide Results for Surface-Soil Samples
Iona College Site, 1061 North Broadway, Yonkers, NY 10701 (Site # V-00687-3, Index # W3-0981-12)

TAGM 4046 PESTICIDE[1]	TAGM 4046[1] RSCO (ug/kg)	Surface-Soil Sample Number and Result (ug/kg)					
		SS-1	SS-2	SS-3	SS-4	SS-5	SS-6
alpha-BHC	110	<2.5	<2.3	<2.3	<2.2	<2.5	<2.5
beta-BHC	200	<2.5	0.43J	<2.3	<2.2	0.89J	1.8J
delta-BHC	300	<2.5	<2.3	<2.3	<2.2	<2.5	<2.5
gamma-BHC (Lindane)	60	<2.5	<2.3	<2.3	<2.2	<2.5	<2.5
Heptachlor	100	<2.5	<2.3	<2.3	<2.2	1.2J	<2.5
Aldrin	41	1.3J	<2.7	<2.7	0.62J	<2.9	5.0
Heptachlor epoxide	20	1.5J	0.88J	0.58J	0.99J	2.5J	3.9
Endosulfan I	900	<2.5	<2.3	<2.3	<2.2	<2.5	<2.5
Dieldrin	44	<4.9	<4.5	<4.4	<4.3	5.2	<4.9
4,4'-DDE	2,100	40	4.6	3.1J	10	45	50
Endrin	100	<7.5	<6.9	<6.6	<6.6	<7.3	22
Endosulfan II	900	<4.9	<4.5	<4.4	<4.3	<4.8	<4.9
4,4'-DDD	2,900	18	2.0J	2.9J	9.0	54	17
Endosulfan sulfate	1,000	<4.9	<4.5	<4.4	<4.3	<4.8	<4.9
4,4'-DDT	2,100	69	7.8	5.3	20	73	34
Methoxychlor	<10,000	20J	<23	3.0J	21J	12J	15J
gamma-Chlordane	540	3.7	<2.3	1.7J	1.9J	3.3	<2.5
Endrin ketone	N/A	<4.9	<4.5	2.4J	9.1	<4.8	19
Chlordane	540	34	<23	14J	14J	32	<25

Notes:

1 - From Appendix A, Table 3 of NYSDEC TAGM 4046.
RSCO - Recommended Soil Cleanup Objective.
ug/kg - Micrograms per kilogram, results presented relative to reporting limits (RLs).
N/A - Not available.
J - Estimated concentration above MDL but below RL.

TABLE 10 (Page 1 of 3)
Summary of Pesticide Results for Subsurface-Soil Samples
Iona College Site, 1061 North Broadway, Yonkers, NY 10701 (Site # V-00687-3, Index # W3-0981-12)

TAGM 4046 PESTICIDE[1]	TAGM 4046[1] RSCO (ug/kg)	Subsurface-Soil Sample Number and Result (ug/kg)					
		TP-1	TP-2	TP-3	TP-4	TP-5	TP-6
alpha-BHC	110	<20	<1.9	<19	<1.9	<2.0	0.51J
beta-BHC	200	<20	0.76J	<19	0.39J	<2.0	0.33J
delta-BHC	300	<20	<1.9	<19	0.30J	<2.0	<1.9
gamma-BHC (Lindane)	60	<20	<1.9	<19	<1.9	<2.0	<1.9
Heptachlor	100	<20	<1.9	<19	<1.9	<2.0	<1.9
Aldrin	41	<23	<2.2	<23	<2.3	<2.3	0.77J
Heptachlor epoxide	20	2.1J	1.8J	5.1J	1.1J	0.48J	1.3J
Endosulfan I	900	<20	<1.9	<19	<1.9	<2.0	<1.9
Dieldrin	44	<38	3.6J	<37	<3.8	<3.9	<3.7
4,4'-DDE	2,100	39	11	75	11	14	12
Endrin	100	<57	<5.6	<57	<5.7	<5.8	<5.6
Endosulfan II	900	<38	<3.7	<37	<3.8	<3.9	<3.7
4,4'-DDD	2,900	68	4.3	100	8.5	5.4	5.0
Endosulfan sulfate	1,000	<38	<3.7	<37	<3.8	<3.9	<3.7
4,4'-DDT	2,100	80	2.8J	79	4.3	9.4	4.6
Methoxychlor	<10,000	<200	13J	55J	23	<20	17J
gamma-Chlordane	540	6.4J	1.6J	12J	1.8J	0.50J	8.5
Endrin ketone	N/A	24J	<3.7	18J	6.8	<3.9	<3.7
Chlordane	540	67J	<19	360	27	<20	54

<u>Notes:</u>
1 - From Appendix A, Table 3 of NYSDEC TAGM 4046.
RSCO - Recommended Soil Cleanup Objective.
ug/kg - Micrograms per kilogram, results presented relative to reporting limits (RLs).
N/A - Not available.
J - Estimated concentration above MDL but below RL.

TABLE 10 (Page 2 of 3)
Summary of Pesticide Results for Subsurface-Soil Samples
Iona College Site, 1061 North Broadway, Yonkers, NY 10701 (Site # V-00687-3, Index # W3-0981-12)

TAGM 4046 PESTICIDE[1]	TAGM 4046[1] RSCO (ug/kg)	Subsurface-Soil Sample Number and Result (ug/kg)					
		TP-7	TP-8	TP-9	TP-10	TP-11	TP-12
alpha-BHC	110	<1.9	<3.8	<1.9	<19	<2.0	<18
beta-BHC	200	<1.9	<3.8	0.70J	<19	<2.0	<18
delta-BHC	300	<1.9	<3.8	0.40J	<19	<2.0	<18
gamma-BHC (Lindane)	60	<1.9	<3.8	<1.9	<19	<2.0	<18
Heptachlor	100	<1.9	<3.8	0.41J	<19	<2.0	<18
Aldrin	41	1.0J	<4.4	<2.2	<23	1.1J	<21
Heptachlor epoxide	20	0.84J	1.0J	4.8	2.0J	1.8J	1.6J
Endosulfan I	900	<1.9	<3.8	<1.9	<19	<2.0	<18
Dieldrin	44	<3.6	<7.3	<3.7	<38	<3.9	<35
4,4'-DDE	2,100	12	15	26	18J	9.4	15J
Endrin	100	<5.5	<11	<5.6	<57	<5.9	<52
Endosulfan II	900	<3.6	<7.3	<3.7	<38	<3.9	<35
4,4'-DDD	2,900	22	17	2.6J	19J	6.3	17J
Endosulfan sulfate	1,000	<3.6	<7.3	<3.7	<38	<3.9	<35
4,4'-DDT	2,100	20	36	<3.7	57	14	85
Methoxychlor	<10,000	11J	11J	39	<190	19J	<180
gamma-Chlordane	540	2.7	1.9J	<1.9	5.1J	1.7J	3.7J
Endrin ketone	N/A	<3.6	2.4J	<3.7	23J	<3.9	6.3J
Chlordane	540	24	26J	<19	41J	17J	30J

<u>Notes:</u>

1 - From Appendix A, Table 3 of NYSDEC TAGM 4046.
RSCO - Recommended Soil Cleanup Objective.
ug/kg - Micrograms per kilogram, results are presented relative to reporting limits (RLs).
N/A - Not available.
J - Estimated concentration above MDL but below RL.

TABLE 10 (Page 3 of 3)
Summary of Pesticide Results for Subsurface-Soil Samples
Iona College Site, 1061 North Broadway, Yonkers, NY 10701 (Site # V-00687-3, Index # W3-0981-12)

TAGM 4046 PESTICIDE[1]	TAGM 4046[1] RSCO (ug/kg)	Subsurface-Soil Sample Number and Result (ug/kg)				
		TP-13	TP-14	TP-15	TP-16	
alpha-BHC	110	Not Sampled	Not Sampled	0.044	0.042	
beta-BHC	200			<0.0088	<0.0089	
delta-BHC	300			<0.0088	<0.0089	
gamma-BHC (Lindane)	60			<0.0088	<0.0089	
Heptachlor	100			<0.0088	<0.0089	
Aldrin	41			<0.0088	<0.0089	
Heptachlor epoxide	20			<0.0088	<0.0089	
Endosulfan I	900			<0.0088	<0.0089	
Dieldrin	44			0.010	0.011	
4,4'-DDE	2,100			0.012	<0.0089	
Endrin	100			<0.0088	<0.0089	
Endosulfan II	900			<0.0088	<0.0089	
4,4'-DDD	2,900			0.099	0.038	
Endosulfan sulfate	1,000			<0.0088	<0.0089	
4,4'-DDT	2,100			0.18	0.058	
Methoxychlor	<10,000			<0.0088	<0.0089	
gamma-Chlordane	540			<0.0088	<0.0089	
Endrin ketone	N/A			<0.0088	<0.0089	
Chlordane	540			<0.088	<0.089	

<u>Notes:</u>

1 -	From Appendix A, Table 3 of NYSDEC TAGM 4046.
RSCO -	Recommended Soil Cleanup Objective.
ug/kg -	Micrograms per kilogram, results are presented relative to reporting limits (RLs).
N/A -	Not available.
J -	Estimated concentration above MDL but below RL.

Review of the above table indicates that overall, the frequency of detection of each pesticide was similar for the surface- and subsurface-soil samples. Heptachlor epoxide, 4,4'-DDE, 4,4'-DDD, 4,4'-DDT and gamma-Chlordane are the pesticides that were detected most frequently. As shown by the ranges of detection, the concentrations of most of the detected pesticides were higher in the subsurface-soil samples than in the surface-soil samples.

4.5 Results of Polychlorinated Biphenyl (PCB) Analyses

The six surface-soil samples were analyzed by USEPA Method 8082 for the individual PCB Aroclors. The results, in ug/kg, are summarized, totaled, and compared to the TAGM 4046 RSCO for total PCBs in surface soil in Table 11. Note that there are no TAGM 4046 RSCOs for the individual PCB Aroclors.

Review of Table 11 indicates that the surface soil at the Site is not a significant source of PCBs, and that the levels of PCBs in the surface soil are not a significant threat to human health or the environment. Specifically, PCB detections were limited to sporadic, low concentrations of Aroclors 1248, 1254 and/or 1260 in five of the six samples. Total PCB concentrations were lower than the 1,000-ug/kg TAGM 4046 RSCO for surface soil in all six samples, and ranged from not-detected in Surface-Soil Sample SS-2 to 114 ug/kg in Surface-Soil Sample SS-6.

The subsurface-soil samples were not analyzed for PCBs because the results of previous investigations indicate that subsurface soils at the Site are not a significant source of PCBs, and that the levels of PCBs in subsurface soil are not a significant risk to human health or the environment. Specifically, PCBs were not detected in nine subsurface-soil samples collected from three soil borings drilled in July 1992. A copy of these results is provided in Appendix E of this report. The NYSDEC TAGM RSCO for total PCBs in subsurface soil is 10,000 ug/kg.

4.6 Results of Inorganic Parameter (Metals) Analyses

The six surface-soil samples and 14 subsurface-soil samples were analyzed by USEPA Methods 6010B and 9012 (cyanide) for the 24 inorganic parameters listed in Table 4 of TAGM 4046. The 14 subsurface-soil samples were also analyzed by USEPA Synthetic Precipitation Leaching Procedure (SPLP) and Method 6010B for leachable lead. The results, in milligrams per kilogram (mg/kg) and micrograms per liter (ug/L), respectively, are summarized and compared to the applicable TAGM 4046 RSCOs, the Class GA (potable) ground water standard for lead, and/or published background concentrations in Tables 12 and 13.

Overall, the results for the inorganic parameters indicate that the concentrations of these parameters in soil are not a significant threat to human health or the environment. The specific findings are discussed below for each parameter.

TABLE 11

Summary of Polychlorinated Biphenyl (PCB) Results for Surface-Soil Samples

Iona College Site, 1061 North Broadway, Yonkers, NY 10701 (Site # V-00687-3, Index # W3-0981-12)

PCB Aroclor	TAGM 4046[1] RSCO (ug/kg)	Surface-Soil Sample Number and Result (ug/kg)					
		SS-1	SS-2	SS-3	SS-4	SS-5	SS-6
Aroclor 1016	N/A	<25	<23	<23	<22	<25	<25
Aroclor 1221	N/A	<49	<45	<44	<43	<48	<49
Aroclor 1232	N/A	<25	<23	<23	<22	<25	<25
Aroclor 1242	N/A	<25	<23	<23	<22	<25	<25
Aroclor 1248	N/A	<25	<23	<23	<22	25J	39
Aroclor 1254	N/A	34	<23	<23	26	30	58
Aroclor 1260	N/A	26	<23	7.5J	<22	14J	17J
Total PCB	1,000	60	ND	7.5	26	69	114

Notes:

1 - From Appendix A, Table 3 of NYSDEC TAGM 4046.

ug/kg - Micrograms per kilogram, results are presented relative to reporting limits (RLs).

N/A - Not available.

ND - Not detected.

J - Estimated concentration above MDL but below RL.

TABLE 12

Summary of Inorganic Parameter (Metals) Results for Surface-Soil Samples

Iona College Site, 1061 North Broadway, Yonkers, NY 10701 (Site # V-00687-3, Index # W3-0981-12)

Inorganic^1 Parameter	Surface-Soil Sample Number and Result (mg/kg)						TAGM 4046^1 RSCO (mg/kg)	Eastern USA^1 Bkgd. (mg/kg)	NYSDEC^2 Study (mg/kg)	MADEP^2 Study (mg/kg)	NJDEPE^2 Bkgd. (mg/kg)
	SS-1	SS-2	SS-3	SS-4	SS-5	SS-6					
Aluminum	6,390	10,200	6,960	8,710	7,810	9,240	SB	33,000	N/A	10,000	N/A
Antimony	<21.1N	<18.9N	<17.1N	<18.0N	<20.2N	<19.1N	SB	N/A	7.4	1	0.1
Arsenic	5.2JB	4.9JB	4.1JB	3.4JB	5.2JB	5.6JB	7.5 or SB	3 to 12	5.8	20	10.9
Barium	127	121	101	106	783	125	300 or SB	15 to 600	81.1	50	N/A
Beryllium	<3.6	<3.2	<2.9	<3.1	<3.4	<3.3	0.16 (HEAST) or SB	0 to 1.75	0.75	0.4	2.55
Cadmium	<5.4	<4.8	<4.4	<4.6	<5.2	<4.9	1 or SB	0.1 to 1	0.22	2	1.61
Calcium	22,300*	16,500*	45,500*	27,900*	27,200*	13,500*	SB	130 to 50,000	N/A	N/A	N/A
Chromium	18.9*	22.9*	22.4*	23.3*	25.6*	21.6*	10 or SB	1.5 to 40	20.9	30	18.7
Cobalt	5.9	8.6	6.5	7.6	7.8	8.7	30 or SB	2.5 to 60	N/A	4	N/A
Copper	33.5	35.1	586	31.1	42.1	37.0	25 or SB	1 to 50	23.4	40	102
Cyanide (ug/kg)	<723	<684	<679	<645	<752	<759	N/A	N/A	N/A	N/A	N/A
Iron	15,500	20,000	14,700	16,600	20,800	18,600	2,000 or SB	2,000 to 550,000	N/A	20,000	N/A
Lead	124*	181*	121*	114*	1,730*	219*	200 to 500	200 to 500	72.5	100	446
Magnesium	6,220	6,220	21,900	14,100	4,720	6,680	SB	100 to 5,000	N/A	5,000	N/A
Manganese	308	350	284	309	392	360	SB	50 to 5,000	N/A	300	515
Mercury	0.13JB	0.27JB	0.21JB	0.31JB	1.2JB	0.2JB	0.1	0.001 to 0.2	0.24	0.3	1.58
Nickel	16.7	22.9	19.1	25.0	21.9	21.6	13 or SB	0.5 to 25	21	20	28.7
Potassium	1,190	2,180	1,790	1,740	1,460	1,980	SB	8,500 to 43,000	N/A	N/A	N/A
Selenium	<28.9	<25.8	<23.4	<24.6	<27.6	<26.2	2 or SB	0.1 to 3.9	1	0.5	0.13
Silver	<5.4	<4.8	<4.4	<4.6	<5.2	<4.9	SB	N/A	N/A	0.6	0.34
Sodium	370N	185N	166N	156N	235N	137BN	SB	6,000 to 8,000	N/A	N/A	N/A
Thallium	<39.8	<35.5	<32.2	<33.8	<37.9	<36.0	SB	N/A	N/A	0.6	0.24
Vanadium	26.0	34.4	25.4	30.4	34.8	34.7	150 or SB	1 to 300	N/A	30	39.9
Zinc	188	116	118	95.6	493	119	20 or SB	9 to 50	87.1	100	317

<u>Notes:</u>

1 - From Appendix A, Table 4 of NYSDEC TAGM 4046.
2 - See Appendix I.
mg/kg - Milligrams per kilogram, results presented relative to reporting limits (RLs).
ug/kg - Micrograms per kilogram, results presented relative to RLs.
SB - Site background.
N/A - Not available.
J - Estimated concentration above MDL but below RL.
B - Parameter also detected in laboratory blank
N - Spiked sample recovery not within control limits.
* - Duplicate analysis not within control limits.

TABLE 13 (Page 1 of 3)
Summary of Inorganic Parameter (Metals) Results for Subsurface-Soil Samples
Iona College Site, 1061 North Broadway, Yonkers, NY 10701 (Site # V-00687-3, Index # W3-0981-12)

Inorganic[1] Parameter	Subsurface-Soil Sample Number and Result (mg/kg)						TAGM 4046[1] RSCO (mg/kg)	Eastern USA[1] Bkgd. (mg/kg)	NYSDEC[2] Study (mg/kg)	MADEP[2] Study (mg/kg)	NJDEPE[2] Bkgd. (mg/kg)
	TP-1	TP-2	TP-3	TP-4	TP-5	TP-6					
Aluminum	8,300	7,710	8,970	8,560	11,100	9,150	SB	33,000	N/A	10,000	N/A
Antimony	<15.9N	<14.8N	<16.0N	<15.5N	<16.5N	<14.8N	SB	N/A	7.4	1	0.1
Arsenic	5.6JB	5.2JB	6.7JB	8.0JB	6.2JB	4.5JB	7.5 or SB	3 to 12	5.8	20	10.9
Barium	200	119	332	154	159	216	300 or SB	15 to 600	81.1	50	N/A
Beryllium	<2.7	<2.5	<2.7	<2.6	<2.8	<2.5	0.16 (HEAST) or SB	0 to 1.75	0.75	0.4	2.55
Cadmium	<4.1	<3.8	<4.1	<4.0	<4.2	<3.8	1 or SB	0.1 to 1	0.22	2	1.61
Calcium	38,300	15,500	39,500	21,100	11,200	28,600	SB	130 to 50,000	N/A	N/A	N/A
Chromium	14.5	18.1	17.9	20.7	16.0	18.4	10 or SB	1.5 to 40	20.9	30	18.7
Cobalt	6.6*N	6.5*N	6.5*N	7.1*N	12.0*N	7.2*N	30 or SB	2.5 to 60	N/A	4	N/A
Copper	49.4*N	29.9*N	26.8*N	27.1*N	24.3*N	34.9*N	25 or SB	1 to 50	23.4	40	102
Cyanide (ug/kg)	<564	<546	<563	<549	<588	<545	N/A	N/A	N/A	N/A	N/A
Iron	14,000	16,300	15,600	16,700	16,300	16,100	2,000 or SB	2,000 to 550,000	N/A	20,000	N/A
Lead, total	144	85.2	269	73.8	64.2	93.2	200 to 500	200 to 500	72.5	100	446
Lead, SPLP[3]	4.3JB	<10	<10	<10	<10	<10	25 (ug/L)				
Magnesium	14,500*	7,410*	15,100*	11,900*	3,820*	14,000*	SB	100 to 5,000	N/A	5,000	N/A
Manganese	320	324	286	246	423	278	SB	50 to 5,000	N/A	300	515
Mercury	0.21JBN	0.19JBN	0.43JBN	0.21JBN	0.17JBN	0.15JBN	0.1	0.001 to 0.2	0.24	0.3	1.58
Nickel	16.2	19.1	16.9	21.7	12.9	19.6	13 or SB	0.5 to 25	21	20	28.7
Potassium	1,620	1,580	1,610	2,070	845	2,180	SB	8,500 to 43,000	N/A	N/A	N/A
Selenium	<21.7	<20.3	<21.9	<21.1	<22.6	<20.2	2 or SB	0.1 to 3.9	1	0.5	0.13
Silver	<4.1	<3.8	<4.1	<4.0	<4.2	<3.8	SB	N/A	N/A	0.6	0.34
Sodium	482N	143N	476N	168N	96.7BN	213N	SB	6,000 to 8,000	N/A	N/A	N/A
Thallium	<29.8	<27.9	<30.1	<29.1	<31.1	<27.8	SB	N/A	N/A	0.6	0.24
Vanadium	23.1	33.2	29.2	29.3	24.1	25.2	150 or SB	1 to 300	N/A	30	39.9
Zinc	232*N	107*N	230*N	106*N	101*N	203*N	20 or SB	9 to 50	87.1	100	317

Notes:
1 - From Appendix A, Table 4 of NYSDEC TAGM 4046.
2 - See Appendix I.
3 - Synthetic Precipitation Leaching Procedure, results are in units of micrograms per liter (ug/L), limit is Class GA standard from TOGS 1.1.1.
mg/kg - Milligrams per kilogram, results are presented relative to reporting limits (RLs).
ug/kg - Micrograms per kilogram, results are presented relative to RLs.
SB - Site background.
N/A - Not available.
J - Estimated concentration above MDL but below RL.
B - Parameter also detected in laboratory blank
N - Spiked sample recovery not within control limits.
* - Duplicate analysis not within control limits.

TABLE 13 (Page 2 of 3)

Summary of Inorganic Parameter (Metals) Results for Subsurface-Soil Samples

Iona College Site, 1061 North Broadway, Yonkers, NY 10701 (Site # V-00687-3, Index # W3-0981-12)

Inorganic^1 Parameter	Subsurface-Soil Sample Number and Result (mg/kg)						TAGM 4046^1 RSCO (mg/kg)	Eastern USA^1 Bkgd. (mg/kg)	NYSDEC^2 Study (mg/kg)	MADEP^2 Study (mg/kg)	NJDEPE^2 Bkgd. (mg/kg)
	TP-7	TP-8	TP-9	TP-10	TP-11	TP-12					
Aluminum	8,220	10,400	7,160	11,500	7,900	3,690	SB	33,000	N/A	10,000	N/A
Antimony	<16.3N	<14.5N	<15.1N	<16.0N	<16.7N	2.0JBN	SB	N/A	7.4	1	0.1
Arsenic	5.1JB	6.2JB	3.3JB	5.5JB	2.9JB	3.1JB	7.5 or SB	3 to 12	5.8	20	10.9
Barium	107	163	87.3	156	110	32.0	300 or SB	15 to 600	81.1	50	N/A
Beryllium	<2.8	<2.5	<2.6	<2.7	<2.9	<2.6	0.16 (HEAST) or SB	0 to 1.75	0.75	0.4	2.55
Cadmium	<4.2	<3.7	<3.9	<4.1	<4.3	<3.9	1 or SB	0.1 to 1	0.22	2	1.61
Calcium	16,300	26,700	19,600	21,400	14,900	34,000	SB	130 to 50,000	N/A	N/A	N/A
Chromium	17.3	18.6	15.4	22.4	17.6	6.7	10 or SB	1.5 to 40	20.9	30	18.7
Cobalt	6.6*N	6.7*N	5.9*N	8.0*N	6.3*N	4.3*N	30 or SB	2.5 to 60	N/A	4	N/A
Copper	30.7*N	52.2*N	42.5*N	35.6*N	25.5*N	32.9*N	25 or SB	1 to 50	23.4	40	102
Cyanide (ug/kg)	195JB	<561	<559	<574	<576	<519	N/A	N/A	N/A	N/A	N/A
Iron	17,700	15,500	13,600	19,200	13,400	8,730	2,000 or SB	2,000 to 550,000	N/A	20,000	N/A
Lead, total	99.9	205	88.5	197	76.6	43.9	200 to 500	200 to 500	72.5	100	446
Lead, SPLP^3	<10	<10	<10	4.0JB	<10	<10	25 (ug/L)				
Magnesium	6,290*	9,510*	6,310*	10,800*	4,340*	17,000*	SB	100 to 5,000	N/A	5,000	N/A
Manganese	320	297	228	356	265	129	SB	50 to 5,000	N/A	300	515
Mercury	0.20JBN	0.55JBN	0.16JBN	0.17JBN	0.12JBN	0.050JBN	0.1	0.001 to 0.2	0.24	0.3	1.58
Nickel	17.4	17.0	14.6	18.5	20.4	11.3	13 or SB	0.5 to 25	21	20	28.7
Potassium	1,470	1,440	1,680	2,190	1,180	677	SB	8,500 to 43,000	N/A	N/A	N/A
Selenium	<22.3	<19.9	<20.7	<21.9	<22.8	<20.5	2 or SB	0.1 to 3.9	1	0.5	0.13
Silver	<4.2	<3.7	<3.9	<4.1	<4.3	<3.9	SB	N/A	N/A	0.6	0.34
Sodium	163N	181N	206N	211N	206N	265N	SB	6,000 to 8,000	N/A	N/A	N/A
Thallium	<30.7	<27.3	<28.5	<30.1	<31.4	<28.3	SB	N/A	N/A	0.6	0.24
Vanadium	28.2	28.5	21.6	34.5	21.1	34.7	150 or SB	1 to 300	N/A	30	39.9
Zinc	95.6*N	162*N	73.2*N	119*N	98.3*N	47.5*N	20 or SB	9 to 50	87.1	100	317

Notes:
1 - From Appendix A, Table 4 of NYSDEC TAGM 4046.
2 - See Appendix I.
3 - Synthetic Precipitation Leaching Procedure, results are in units of micrograms per liter (ug/L), limit is Class GA standard from TOGS 1.1.1.
mg/kg - Milligrams per kilogram, results are presented relative to reporting limits (RLs).
ug/kg - Micrograms per kilogram, results are presented relative to RLs.
SB - Site background.
N/A - Not available.
J - Estimated concentration above MDL but below RL.
B - Parameter also detected in laboratory blank
N - Spiked sample recovery not within control limits.
* - Duplicate analysis not within control limits.

TABLE 13 (Page 3 of 3)

Summary of Inorganic Parameter (Metals) Results for Subsurface-Soil Samples

Iona College Site, 1061 North Broadway, Yonkers, NY 10701 (Site # V-00687-3, Index # W3-0981-12)

Inorganic[1] Parameter	Subsurface-Soil Sample Number and Result (mg/kg)					TAGM 4046[1] RSCO (mg/kg)	Eastern USA[1] Bkgd. (mg/kg)	NYSDEC[2] Study (mg/kg)	MADEP[2] Study (mg/kg)	NJDEPE[2] Bkgd. (mg/kg)
	TP-13	TP-14	TP-15	TP-16						
Aluminum	Not Sampled	Not Sampled	8,370	6,060		SB	33,000	N/A	10,000	N/A
Antimony			<14.3	<12.5		SB	N/A	7.4	1	0.1
Arsenic			2.8JB	2.6JB		7.5 or SB	3 to 12	5.8	20	10.9
Barium			137	91.6		300 or SB	15 to 600	81.1	50	N/A
Beryllium			<2.4	<2.1		0.16 (HEAST) or SB	0 to 1.75	0.75	0.4	2.55
Cadmium			<3.7	<3.2		1 or SB	0.1 to 1	0.22	2	1.61
Calcium			25,200	14,200		SB	130 to 50,000	N/A	N/A	N/A
Chromium			20.5	13		10 or SB	1.5 to 40	20.9	30	18.7
Cobalt			6.4	5.6		30 or SB	2.5 to 60	N/A	4	N/A
Copper			37.6	48.4		25 or SB	1 to 50	23.4	40	102
Cyanide (ug/kg)			N/A	N/A		N/A	N/A	N/A	N/A	N/A
Iron			14,700	12,900		2,000 or SB	2,000 to 550,000	N/A	20,000	N/A
Lead, total			125	90.2		200 to 500	200 to 500	72.5	100	446
Lead, SPLP[3]			<10	<10		25 (ug/L)				
Magnesium			11,500	4,720		SB	100 to 5,000	N/A	5,000	N/A
Manganese			266	207		SB	50 to 5,000	N/A	300	515
Mercury			0.20JB	0.21JB		0.1	0.001 to 0.2	0.24	0.3	1.58
Nickel			17.1	12.2		13 or SB	0.5 to 25	21	20	28.7
Potassium			2,100	1,370		SB	8,500 to 43,000	N/A	N/A	N/A
Selenium			<19.5	<17.1		2 or SB	0.1 to 3.9	1	0.5	0.13
Silver			<3.7	<3.2		SB	N/A	N/A	0.6	0.34
Sodium			148	150		SB	6,000 to 8,000	N/A	N/A	N/A
Thallium			<26.8	<23.5		SB	N/A	N/A	0.6	0.24
Vanadium			28.7	22.2		150 or SB	1 to 300	N/A	30	39.9
Zinc			131	99.8		20 or SB	9 to 50	87.1	100	317

Notes:
1 - From Appendix A, Table 4 of NYSDEC TAGM 4046.
2 - See Appendix I.
3 - Synthetic Precipitation Leaching Procedure, results are in units of micrograms per liter (ug/L), limit is Class GA standard from TOGS 1.1.1.
mg/kg - Milligrams per kilogram, results are presented relative to reporting limits (RLs).
ug/kg - Micrograms per kilogram, results are presented relative to RLs.
SB - Site background.
N/A - Not available.
J - Estimated concentration above MDL but below RL.
B - Parameter also detected in laboratory blank
N - Spiked sample recovery not within control limits.
* - Duplicate analysis not within control limits.

Aluminum: Detected in all 20 soil samples at concentrations ranging from 3,690 to 11,500 mg/kg. These concentrations are lower than the 33,000-mg/kg Eastern USA background value provided in Table 4 of TAGM 4046 and consistent with the 10,000-mg/kg value provided in Table 1 of the MADEP background study.

Antimony: Detected in only 1 of 20 soil samples at a low, estimated concentration of 2 mg/kg. Also detected in the laboratory blank for this sample.
Arsenic: Detected in all 20 soil samples at concentrations ranging from 2.6 to 8 mg/kg. Also detected in the laboratory blanks. These concentrations are consistent with the 7.5-mg/kg or SB (site background) RSCO listed in Table 4 of TAGM 4046, as well as the published background concentrations listed in Tables 12 and 13.

Barium: Detected in all 20 soil samples at concentrations ranging from 32 to 783 mg/kg. Except for the maximum concentration, which was detected in Surface-Soil Sample SS-5, the detected concentrations are consistent with the 300-mg/kg or SB RSCO and/or the 15 to 600 mg/kg Eastern USA background range listed in Table 4 of TAGM 4046. The average barium concentration detected in the soil samples (171.3 mg/kg) is consistent with the 300-mg/kg or SB RSCO and/or the 15 to 600 mg/kg Eastern USA background range listed in Table 4 of TAGM 4046.

Beryllium: Not detected in any of the 20 soil samples.

Cadmium: Not detected in any of the 20 soil samples.

Calcium: Detected in all 20 soil samples at concentrations ranging from 11,200 to 45,500 mg/kg. These concentrations are consistent with the 130 to 50,000 mg/kg Eastern USA background range listed in Table 4 of TAGM 4046.

Chromium: Detected in all 20 soil samples at concentrations ranging from 6.7 to 25.6 mg/kg. These concentrations are consistent with the 10-mg/kg or SB RSCO and/or the 1.5 to 40 mg/kg Eastern USA background range listed in Table 4 of TAGM 4046.

Cobalt: Detected in all 20 soil samples at concentrations ranging from 4.3 to 12 mg/kg. These concentrations are consistent with the 30-mg/kg or SB RSCO listed in Table 4 of TAGM 4046.

Copper: Detected in all 20 soil samples at concentrations ranging from 24.3 to 586 mg/kg. Except for the maximum concentration, which was detected in Surface-Soil Samples SS-3, these concentrations are consistent with the 25-mg/kg or SB RSCO and/or the 1 to 50 mg/kg Eastern USA background range listed in Table 4 of TAGM 4046. The average copper concentration detected in the soil samples (63 mg/kg) is consistent with the background value provided by the MADEP study.

Cyanide: Only detected in one soil sample, Subsurface-Soil Sample TP-7, at a concentration of 195 ug/kg. Also detected in the laboratory blank for this sample.

<u>Iron</u>: Detected in all 20 soil samples at concentrations ranging from 8,730 to 20,800 mg/kg. These concentrations are consistent with the 2,000 to 550,000 mg/kg Eastern USA background range listed in Table 4 of TAGM 4046, as well as the 20,000 mg/kg value provided in Table 1 of the MADEP background study.

<u>Lead</u>: Detected in all 20 soil samples at concentrations ranging from 43.9 to 1,730 mg/kg. Except for the maximum concentration, which was detected in Surface-Soil Sample SS-5, these concentrations are consistent with the 200 to 500 mg/kg urban background range listed in Table 4 of TAGM 4046. The average concentration of lead detected in the soil samples (207 mg/kg) is consistent with the 200 to 500 mg/kg urban background range listed in Table 4 of TAGM 4046. The results for leachable lead were non-detectable in 12 of the 14 subsurface-soil samples and much lower than the potable ground water standard for lead in the other two samples.

<u>Magnesium</u>: Detected in all 20 soil samples at concentrations ranging from 3,820 to 21,900 mg/kg. Concentrations in 16 of the 20 soil samples were higher than the 10 to 5,000 mg/kg Eastern USA background range listed in Table 4 of TAGM 4046 and the 5,000 mg/kg value provided in the MADEP background study. However, in the absence of information indicating that the concentrations detected are site-related, they are attributed to background levels.

<u>Manganese</u>: Detected in all 20 soil samples at concentrations ranging from 129 to 423 mg/kg. These concentrations are consistent with the 50 to 5,000 mg/kg Eastern USA background range listed in Table 4 of TAGM 4046.

<u>Mercury</u>: Detected in all 20 soil samples at concentrations ranging from 0.05 to 1.2 mg/kg. These concentrations are consistent with the 0.1-mg/kg RSCO and/or the 0.001 to 0.2 mg/kg Eastern USA background range listed in Table 4 of TAGM 4046, and/or the various background study values provided in Tables 12 and 13.

<u>Nickel</u>: Detected in all 20 soil samples at concentrations ranging from 11.3 to 25 mg/kg. These concentrations are consistent with 13 mg/kg or SB RSCO and/or the 0.5 to 25 mg/kg Eastern USA background range listed in Table 4 of TAGM 4046.

<u>Potassium</u>: Detected in all 20 soil samples at concentrations ranging from 677 to 2,190 mg/kg. These concentrations are lower than the 8,500 to 43,000 mg/kg Eastern USA background range listed in Table 4 of TAGM 4046.

<u>Selenium</u>: Not detected in any of the 20 soil samples.

<u>Silver</u>: Not detected in any of the 20 soil samples.

<u>Sodium</u>: Detected in all 20 soil samples at concentrations ranging from 96.7 to 482 mg/kg. These concentrations are lower than the 6,000 to 8,000 mg/kg Eastern USA background range listed in Table 4 of TAGM 4046.

Thallium: Not detected in any of the 20 soil samples.

Vanadium: Detected in all 20 samples at concentrations ranging from 21.1 to 34.7 mg/kg. These concentrations are consistent with the 150 mg/kg or SB RSCO and the 1 to 300 mg/kg Eastern USA background range listed in Table 4 of TAGM 4046.
Zinc: Detected in all 20 soil samples at concentrations ranging from 47.5 to 493 mg/kg. Except for the maximum concentration, which was detected in Surface-Soil Sample SS-5, these concentrations are consistent with the background ranges referenced in Tables 12 and 13. The average zinc concentration detected in the soil samples (147 mg/kg) is also consistent with the background ranges referenced in Tables 12 and 13.

Based on the above findings, as a whole, metals concentrations in the fill do not pose a significant threat to human health or the environment. The levels of barium, lead and zinc in the vicinity of Surface-Soil Sample SS-5 and copper in the vicinity of Surface-Soil Sample SS-3 are higher than background. However, the average concentrations of these metals are within background ranges. Moreover, preventing direct contact with the fill to eliminate potential risks associated with cPAHs will also eliminate the potential risk associated with the localized above-background metals concentrations at these two locations.

5.0 Conclusions and Recommendations

Based on the results of the site investigation, the following conclusions are made:

1. Fill is present throughout the majority of the Site. The current test pits indicate that the depth of the fill ranges from approximately one foot to more than seven feet. At three test pit locations the fill was underlain by bedrock, at one test pit location the fill was underlain by natural soil. The fill could not be penetrated at the other test pit locations. The volume of fill at the Site is estimated at 16,500 cubic yards.

2. With the exception of one fill pile located in the south portion of the Site, which consists primarily of asphalt, the fill consists of a compact mixture of brown sandy soil, rock fragments, large pieces of concrete, pieces of asphalt, bricks and some small pieces of ceramic tile. A small amount (less than one cubic yard) of gray ash-like material was also noted at Test Pit #3, and a small piece of deformed metal that may be ash was observed in Test Pit TP-15. No obviously processed wood was observed in the fill, although a small amount of what appeared to be natural wood that was buried by the fill was noted.

3. The fill is not a significant source of VOCs, non-cPAH SVOCs, pesticides or PCBs and based on comparison to the TAGM 4046 RSCOs the concentrations of these parameters in the fill are not a significant threat to public health or the environment.

4. All seven of the cPAHs were detected in the fill at concentrations higher than their respective TAGM 4046 RSCO. However, analysis of the subsurface-soil samples for

leachable PAHs indicates that the fill does not leach detectable concentrations of PAHs. Comparison of the range of individual cPAH concentrations, total cPAH concentrations and total cPAH concentrations as benzo(a)pyrene equivalent to the range of values from two urban area background studies indicates that while the ranges of cPAH concentrations detected in the fill are consistent with the ranges from the urban area background studies, the average cPAH concentrations in the fill are higher than values provided in the two background studies. Consequently, the concentrations of cPAHs in the fill may pose a slightly higher risk relative to other nearby areas that do not contain the fill. The cPAHs in the fill will break down over time. In the meantime, preventing direct contact with the fill would eliminate this potential risk.

5. The concentrations of inorganic parameters (metals) in the fill are consistent with the TAGM RSCOs and/or background levels except for the levels of barium, lead and zinc in Surface-Soil Sample SS-5 and copper in Surface-Soil Sample SS-3. However, the average concentrations of these metals are within background ranges. Moreover, preventing direct contact with the fill to eliminate the potential risk associated with cPAHs will also eliminate the potential risk associated with the above-background metals concentrations at these two locations.

In keeping with the above conclusions, and the proposed end use of the Site as open space under the VCP land use category of “restricted residential” it is recommended that direct contact with the fill be prevented. A conceptual site remediation plan for accomplishing this is provided in the following section.

6.0 Conceptual Site Remediation Plan

The objective of this conceptual site remediation plan is to prevent direct contact with the fill while maintaining the end use of the Site as open space. The key elements of the plan are presented below:

1. Remove and recycle the above-grade fill pile that is comprised primarily of asphalt, as it is a localized source of PAHs.

2. Remove and dispose of the miscellaneous debris (tires, etc.) located near the southwest corner of the parking lot.

3. Remove the several large dead trees that were killed as a result of fill being placed around their bases, as they are a potential hazard due to falling limbs.

4. Re-grade the Site as necessary to maintain proper drainage.

5. Perform a topographic survey of the Site to establish grade elevations.

6. Cover the fill in accessible (i.e., relatively flat) areas of the Site with a minimum of one foot of clean soil and establish vegetative cover (e.g., turf grass or a grass and wildflower mix, as appropriate).

7. Cover the steep western slope of the Site with non-eroding material such as crushed rock, including removal of existing trees.

8. Prevent public access to the steep western slope using fencing and signage, screen with landscaping as appropriate.

9. Perform another topographic survey of the Site to verify the thickness of the clean soil cover.

10. Register an appropriate property deed restriction for the Site.

A remedial action selection report and qualitative exposure assessment supporting this plan are provided in Appendices J and K, respectively.

APPENDIX A

NYSDEC March 18, 2004 Letter Approving Revised Work Plan
and
NYSDEC June 17, 2004 Letter Commenting on May 3, 2004 Site Investigation Report

New York State Department of Environmental Conservation
Division of Solid and Hazardous Materials, Region 3
200 White Plains Road – 5th Floor, Tarrytown, New York 10591-5805
Phone: (914) 332-1835 • **FAX:** (914) 332-4670
Website: www.dec.state.ny.us

Erin M. Crotty
Commissioner

March 18, 2004

ANTHONY D DOUGHERTY ESQ
DOUGHERTY & ASSOCIATES
450 SEVENTH AVENUE
NEW YORK, NY 10123

Re: Site Name: Elizabeth Seton Campus of Iona College Parking Lot
Volunteer: Iona College
Site #: V - 00687-3 Index #: W3-0981-03-12

Dear Mr. Dougherty:

Thank you for submitting the Elizabeth Seton Campus of Iona College Parking Lot revised Site Investigation Plan dated February 26, 2004. The revised Work Plan was submitted to the New York State Department of Environmental Conservation (DEC) and the New York State Department of Health (DOH) pursuant to the Voluntary Cleanup Agreement referenced above and our February 20, 2004 Site Investigation Work Plan technical comments letter. Lockwood, Kessler & Bartlett, Inc. of Syosset, New York submitted the revised Work Plan for Iona College.

The DEC and DOH have reviewed the revised Site Investigation Work Plan. The purpose of the investigation is to determine the nature and extent of contamination at the Iona College Parking Lot site. The Work Plan is approved because it provides a satisfactory outline to achieve this objective. Pursuant to the Agreement Paragraph II.B.2 the revised Work Plan is incorporated into and is an enforceable component of the Agreement. **According to the Work Plan Section 12.0 the Site Investigation Report must be submitted to the DEC and DOH by April 30, 2004.**

An acceptable Site Investigation Report must address the following conditions and technical comments.

1. *Prior Notice:* Prior written notice for the proposed field activities should be provided to DEC and DOH at least five days before commencing such activities. The prior notice may be provided to DEC via conventional mail or e-mail at adlent@gw.dec.state.ny.us and fsn01@health.state.ny.us.

2. *Progress Report:* Pursuant to Paragraph III of the Agreement please provide a site investigation progress report to DEC and DOH by April 10, 2004 for any activity conducted in March 2004.

3. *Background Soil Quality Evaluation:* The Work Plan recognizes that a background soil characterization may be applicable pending results of the other site investigation activities. The Work Plan suggests using publically available data in lieu of a site-specific background soil

characterization. Please note that the reference provided in Section 6.0 of the Work Plan is a preliminary report and has not been finalized. Calculated soil cleanup levels based on a preliminary report should be avoided. The Site Investigation Report should include a background soil characterization following the criteria listed in Section 3.6 of the Draft DER-10 Technical Guidance for Site Investigation and Remediation if Iona College is considering cleanup levels other than published in DEC/Division of Environmental Remediation Technical Administrative Guidance Memorandum (TAGM) 94-4046.

If you have any questions or need additional information, please call at (914) 332-1835 ext. 321.

Sincerely,

Andrew D. Lent

Andrew D. Lent
Engineering Geologist II

cc: L. Doyle (Westchester County DOH)
J. Gerlach (Lockwood, Kessler & Bartlett, Inc.)

GW-cc: F. Navratil (NYSDOH)
R. Baldwin
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Erin M. Crotty
Commissioner

June 16, 2004

ANTHONY D DOUGHERTY ESQ
DOUGHERTY & ASSOCIATES
450 SEVENTH AVENUE
NEW YORK, NY 10123

Re: Site Name: Elizabeth Seton Campus of Iona College Parking Lot
Volunteer: Iona College
Site #: V - 00687-3 Index #: W3-0981-03-12

Dear Mr. Dougherty:

Thank you for submitting the Elizabeth Seton Campus of Iona College Parking Lot Site Investigation Report dated May 3, 2004. Lockwood, Kessler & Bartlett, Inc. (LKB) of Syosset, New York prepared the Report for Iona College c/o Dougherty & Associates. The Report was submitted to the New York State Department of Environmental Conservation (DEC) and the New York State Department of Health (DOH) pursuant to the conditionally approved Site Investigation Work Plan and the above referenced Voluntary Cleanup Agreement between the Department and Iona College. The Work Plan was submitted to DEC on February 26, 2004 and conditionally approved in our correspondence dated March 18, 2004.

The Report satisfies many of the objectives listed in the Work Plan and facilitates better understanding of the on-site environmental conditions. There are a few data gaps and concerns which must be addressed prior to approval of the Report. These technical concerns are listed below for your information and action. Please satisfactorily address each of the technical concerns listed below in a revised Site Investigation Report. Based on a June 14, 2004 conversation with John Gerlach of LKB Iona College is planning to revise the Report to address the following concerns. If this understanding is incorrect please follow the procedures listed in Paragraph II.E.2.

✓ 1. Site Area: Figure 2 of the Report and subsequent figures do not clearly identify the horizontal extent of the site. Please clearly identify the horizontal limits of the site on Figures 2 - 5.

✓ 2. Fill Berm Area: The Report identifies an approximately 4,000 cubic yard fill berm area as a portion of the site. Analytical or physical testing was not conducted within the fill berm area. Please complete a minimum of two test pit excavations within the fill berm area and collect one sample from each excavation utilizing the protocols listed in the conditionally approved Work Plan. The samples should be analyzed for the same parameters and methods listed in the Work Plan.

3. Community Air Monitoring: The Report does not explicitly mention whether the New York State Department of Health Community Air Monitoring Plan was implemented during ground intrusive activities. Please clarify this matter in the revised Report.

4. Test Pit Excavation Sample Depth: The Report does not explicitly mention the test pit excavation sample intervals. Please provide this information in the revised Report.

5. Data Tables: The Department would prefer modifying the data tables to include the analytical reporting limits (RL) instead of the method detection limits (MDLs). The reporting limits for each parameter are readily found in the laboratory analytical report test result tables.

6. Volatile Organic Compound Evaluation: Section 4.2 of the Report discusses the results of Volatile Organic Compound (VOC) analyses. The Department concurs that VOCs are not a significant source of contamination on-site, based on existing data. Section 4.2 of the Report states that detected VOCs in the fill material is largely due to laboratory contamination. Supporting information for this conclusion is not provided in the Report except for acetone. Please remove the laboratory contamination suggestion or provide references to support the hypotheses.

7. Recommended Soil Cleanup Objectives (Semivolatile Organic Compounds): Section 4.3 of the Report states that the fill material contains elevated levels of selected semivolatile organic compounds (SVOCs) greater than the recommended soil cleanup objectives listed in DEC/Division of Environmental Remediation TAGM 94-4046. The Report also states that "further evaluation is required to assess the threat they (SVOCs) may pose to human health and the environment" without specifying the suggested further evaluation. Please include the suggested "further evaluation" into the Report or remove it from the document.

8. Recommend Soil Cleanup Objectives (Metals): Section 4.6 of the Report concludes that concentrations of analyzed metals in the fill do not pose a significant threat to human health or the environment. The Report also implies that no future action is required regarding the 23 analyzed metals. The Department does not concur with this conclusion based on the site investigation data. It appears that elevated concentrations of barium, copper, lead, mercury and zinc were detected at one or more locations at levels indicative of concern. Please modify the Report accordingly.

9. Contemplated Use: Section 5.0 of the Report states that the proposed end use of the site is open space. The contemplated end use for the site specified in the Agreement is "restricted residential". Please review the definitions listed in the New York State Environmental Conservation Law § 27-1401 - 1431 to ensure that open space contemplated use is consistent with the restricted residential. Including the specified contemplated restricted residential use in the Report is also recommended.

10. Conceptual Site Remediation Plan: The Department concurs with the Report that preventing direct contact with the fill material is required as part of site closure (remediation) activities based on the existing data. The proposed site closure requirements should be included in the Remedial Closure Work Plan

(RCWP) instead of this document. The RCWP should be submitted to the Department following final approval of the Report in accordance with the terms of the Agreement. Please note that the DEC will consider installation of fencing and signs to be inadequate for preventing direct contact with the subject fill material. Reviewing the remedial program requirements listed in ECL § 27-1415 is recommended before preparing the RCWP.

11. Remedial Selection Report: Appendix J of the Report includes a Remedial Selection Report. The Department will not provide technical comments regarding the proposed site closure requirements until the site investigation is completed and the Report is approved. Please include this information and the alternative evaluation in the RCWP as specified in the Agreement. Additional information will be necessary to support the remediation alternative selections.

12. Qualitative Exposure Assessment: Appendix K of the Report includes a Qualitative Exposure Assessment. The Department will not provide technical comments regarding the proposed site exposure assessments until the site investigation is completed and the site investigation report is approved. Please include a qualitative exposure assessment in the RCWP specified in the Agreement. Additional information will be necessary to support the exposure assessments especially the exposures associated with the ground water pathway.

Please submit a revised Report that fully addresses each of the above items **by August 16, 2004** or contact the DEC by July 6, 2004 to schedule a mutually acceptable submission deadline. As a reminder, please include the site number V-00687-3 on all plans, reports and other correspondence regarding this site.

If you have any questions or need additional information, please call at (914) 332-1835 ext. 321.

Sincerely,
Andrew D. Lent
Andrew D. Lent
Engineering Geologist II

cc: L. Doyle (Westchester County DOH)
J. Gerlach (Lockwood, Kessler & Bartlett, Inc.)

GW-cc: F. Navratil (NYSDOH)
R. Baldwin
D. D'Ambrosio
K. Grzyb
R. Pergadia
J. Schmitt

APPENDIX B

INDEPENDENT TESTING LABORATORY, INC.'S PROPOSED TEST BORING LOCATION PLAN

APPENDIX C

LKB Letter-Style Report Dated November 7, 2002 Reviewing 1990 Dunn Geoscience Fill Analysis Report

APPENDIX D

LKB Letter-Style Report Dated September 18, 2003 Reviewing Additional Information for Elizabeth Seton Campus of Iona College, Yonkers, NY

APPENDIX E

PCB Test Results From 1992 Studies

APPENDIX F

Representative Site Photographs

View of Site looking south from driveway on Foxfire School property:

View of Site looking north showing well vegetated state of land surface:

View of unpaved area south of existing parking lot:

Additional view of unpaved area south of existing parking lot:

View of Site in vicinity of south end of parking lot, looking west:

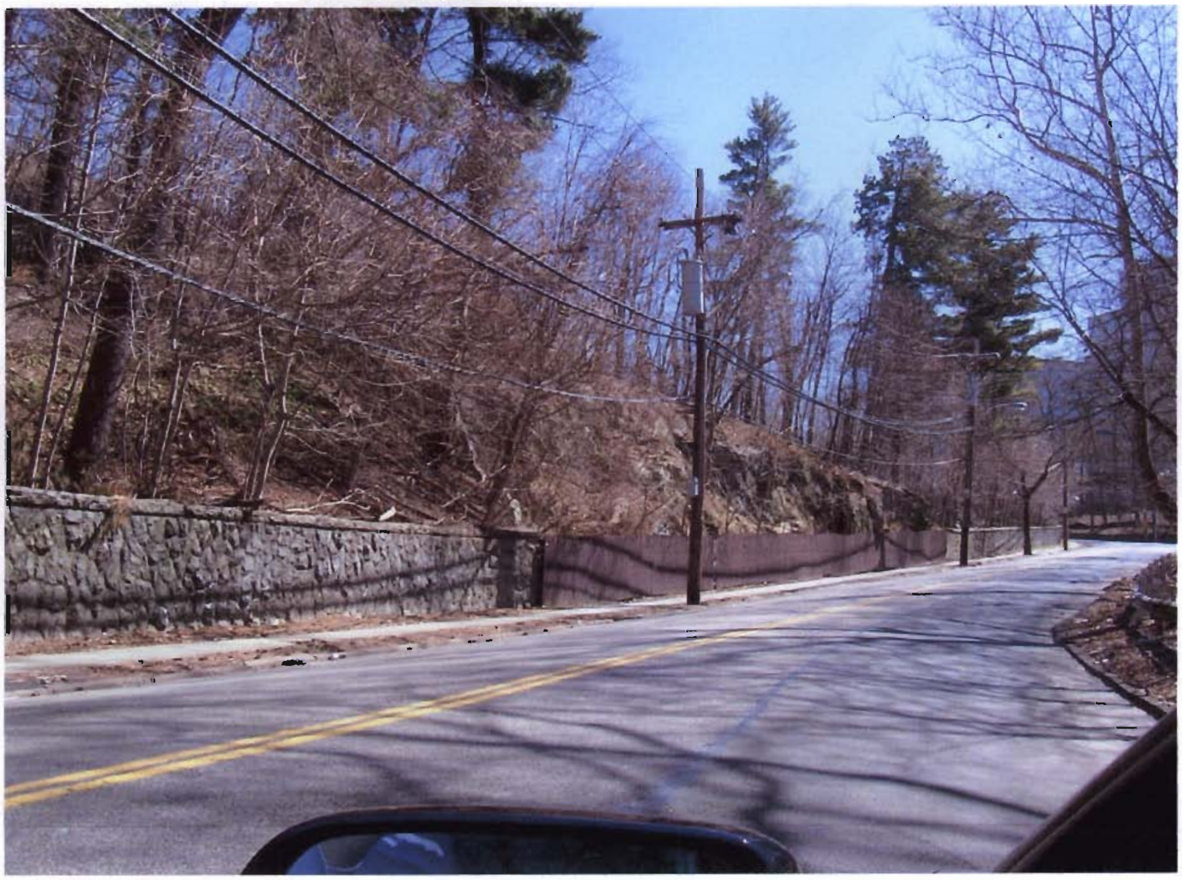
View of debris located near southwest corner of parking lot (Location of SS-6):

View of above-grade fill pile that is comprised primarily of asphalt:

View of steep western slope showing well vegetated condition of land surface:

View of steep western slope of Site looking southeast from Odell Avenue:

View of Site looking south from Odell Avenue showing bedrock outcrops:



APPENDIX G

Test Pit Logs and Photographs

Test Pit Logs

Test Pit TP-1: Located at fill pile just inside gate. Excavated through side of fill pile and 2.5 feet into underlying fill. Fill consisted of moist brown sandy with some fine to coarse gravel and traces of bricks, concrete, asphalt. No noticeable odors. Field screening shows 0.0 parts per million (ppm) volatile organic compounds (VOCs), 0 percent (%) combustible gas and hydrogen sulfide (H_2S) at background (0.007 ppm).

Test Pit TP-2: Excavated to 6 feet below grade. Encountered fill consisting of brown sandy soil mixed with rock fragments, large pieces of concrete and a few bricks and pieces of asphalt. No noticeable odors. Field screening shows 0.0 ppm VOCs, 0 % combustible gas and H_2S at background (0.007 ppm).

Test Pit TP-3: Fill consisting primarily of brown sandy soil, mixed with concrete, bricks and rock fragments. A small amount (less than one cubic yard) of gray ash-like material encountered at depth of three feet. Excavated around it to verify its limited extent. Field screening shows 0.0 ppm VOCs, 0 % combustible gas and H_2S at background (0.010 ppm).

Test Pit TP-4: Excavated to 5.5 feet below grade. Encountered fill consisting of brown sandy soil mixed with rock fragments, large pieces of concrete and a few bricks. No noticeable odors. Field screening shows 0.0 ppm VOCs, 0 % combustible gas and H_2S at background (0.007 ppm).

Test Pit TP-5: Excavated to 5.5 feet below grade. Encountered fill to 3.5 feet consisting of brown sandy soil mixed with rock fragments, pieces of concrete, a few bricks and a small amount of asphalt. No noticeable odors. Field screening shows 0.0 ppm VOCs, 0 % combustible gas and H_2S at background (0.007 ppm).

Test Pit TP-6: Excavated to 5.5 feet below grade. Encountered fill consisting of brown sandy soil mixed with rock fragments, pieces of concrete, a few bricks and some asphalt. No noticeable odors. Field screening shows 0.0 ppm VOCs, 0 % combustible gas and H_2S at background (0.007 ppm).

Test Pit TP-7: Excavated to 5 feet below grade. Encountered fill consisting of brown sandy soil mixed with rock fragments, a few bricks and some asphalt. No noticeable odors. Field screening shows 0.0 ppm VOCs, 0 % combustible gas and H_2S at background (0.008 ppm).

Test Pit TP-8: Excavated to 5 feet below grade. Encountered fill consisting of brown sandy soil mixed with rock fragments, some asphalt and a few bricks. No noticeable odors. Field screening shows 0.0 ppm VOCs, 0 % combustible gas and H_2S at background (0.008 ppm).

Test Pit TP-9: Excavated to 4.5 feet below grade. Encountered fill consisting of brown sandy soil mixed with rock fragments, concrete, some asphalt and numerous bricks. No noticeable odors. Field screening shows 0.0 ppm VOCs, 0 % combustible gas and H_2S at background (0.010 ppm).

Test Pit TP-10: Located at fill pile near northeast corner of unpaved area south of parking lot. Excavated into pile and two feet into underlying fill. Encountered fill consisting of brown sandy soil mixed with gravel and a few bricks. Field screening shows 0.0 ppm VOCs, 0 % combustible gas and H_2S at background (0.007 ppm).

Test Pit TP-11: Located at small fill pile on southwest corner of unpaved area south of parking lot. Excavated into pile and two feet into underlying fill. Encountered fill consisting of brown sandy soil mixed with gravel and concrete. Field screening shows 0.0 ppm VOCs, 0 % combustible gas and H_2S at background (0.009 ppm).

Test Pit TP-12: Located at small pile near southeast corner of unpaved area south of parking lot. Excavated into side of pile and two feet into underlying fill. Pile consists primarily of asphalt. Underlying fill consists of a thin surface layer of brown soil mixed with pieces of concrete, brick fragments and rocks, underlain by bedrock. A thin zone of ground water was noted on top of the bedrock.

Test Pits TP-13 and TP-14: Excavated to 1.5 to 2 feet. Encountered a thin surface layer of fill consisting of brown soil mixed with brick fragments and stones overlying bedrock. A small amount of ground water was noted on top of the bedrock at both locations, but is likely due to recent rainfall.

Test Pit TP-15: Located in easterly section of fill berm. Excavated into side of fill berm to approximately 4 feet below grade at backhoe. Encountered fill consisting of brown sandy soil mixed with rocks, concrete, brick fragments and asphalt. Also noted a small amount of wood and a small piece of deformed metal. Field readings indicate no VOCs, combustible gas or H_2S present.

Test Pit TP-16: Located in westerly section of fill berm. Excavated into side of fill berm to approximately 7 feet below grade. Encountered fill consisting of brown sandy soil mixed with rocks and some concrete. Field readings indicate no VOCs, combustible gas or H_2S present. No photo available due to heavy rainfall.

View of fill pile that is location of Test Pit #1, looking southwest from fence gate:

View of Test Pit #1 excavation:

View of Test Pit #2 excavation:

View of Test Pit #2 pile:

View of pile that is location of Test Pit #3 and excavation:

View of Test Pit #3 pile:

View of Test Pit #4 excavation:

View of Test Pit #4 pile:

View of Test Pit #5 excavation:

View of Test Pit #5 pile:

View of Test Pit #6 excavation:

View of Test Pit #6 pile:

View of Test Pit #7 excavation:

View of Test Pit #7 pile:

View of Test Pit #9 excavation:

View of Test Pit #9 pile:

View of pile that is location of Test Pit #10 and excavation:

View of Test Pit #10 pile:

View of Test Pit #11 excavation:

View of Test Pit #11 pile:

View of Test Pit #12 excavation:

View of Test Pit #12 pile:

View of Test Pit #13 excavation:

View of Test Pit #14 excavation:

View of Test Pit #15:

APPENDIX I

Documents Containing Information on Background Concentrations of Metals and/or Polycyclic Aromatic Hydrocarbons

APPENDIX H

STL-Connecticut Analytical Reports

APPENDIX J

Remedial Action Selection Report

REMEDIAL ACTION SELECTION REPORT
for
Fill In The Parking Lot At The South End Of
Iona College's Elizabeth Seton Campus
1061 North Broadway, Yonkers, NY 10701
(Site #V-00687-3, Index #W3-0981-12)

1.0 INTRODUCTION

This Remedial Action Selection Report (RASR) was prepared pursuant to New York State Department of Environmental of Environmental Conservation (NYSDEC) requirements. It pertains to the fill material located in the vicinity of the parking lot at the south end of Iona College's Elizabeth Seton Campus (Site). The location of the Site is shown in Figure 1.

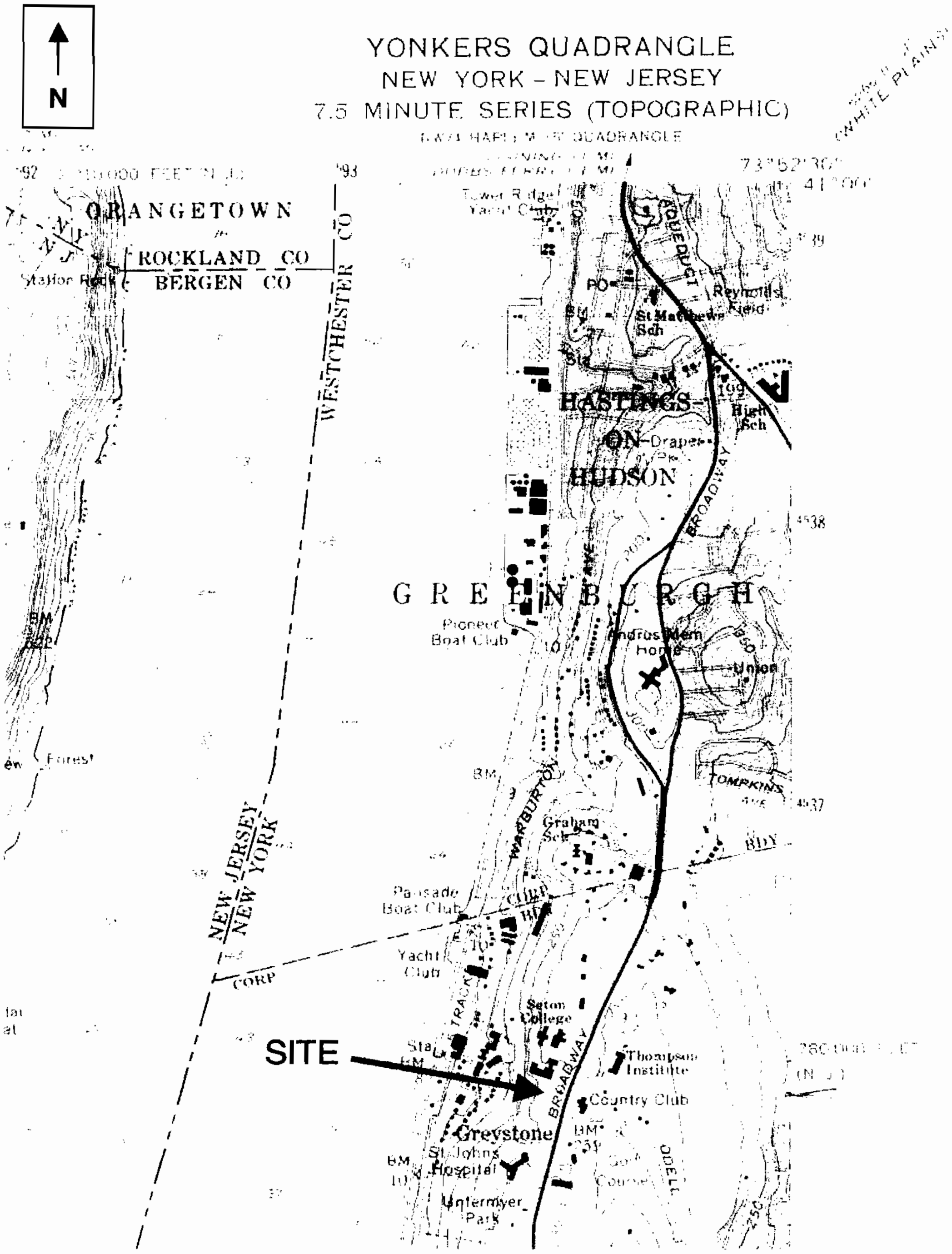
This RASR was performed as part of the remedy selection process for the Site. It complies with Section 375-1.10 (Remedy Selection) of the New York Code of Rules and Regulations, and meets the requirements of Section 7.4 (Remedial Action Selection (RAS) Report) of the NYSDEC Draft Voluntary Cleanup Guide, dated May 2002.

The following remedial remedies were considered for the Site:

- Alternative 1: No Action;
- Alternative 2: Installation of Clean Soil Cover and Institutional Controls; and
- Alternative 3: Complete Removal.

This RASR provides an analysis of the above remedial alternatives with respect to the following requirements:

- Standards, Criteria and Guidance;
- Overall Protectiveness of Human Health and the Environment;
- Short-term Effectiveness and Impacts;
- Long-term Effectiveness and Permanence;
- Reduction of Toxicity, Mobility and Volume; and



SCALE: 1 INCH = 2,000 FEET

FIGURE 1

SITE LOCATION MAP

- Feasibility.

Each of these requirements is discussed below in Sections 2.0 through 7.0, respectively. The scopes of the discussions are in keeping with the Site's size, setting and relatively benign nature. The conclusion of this analysis is presented in Section 8.0.

2.0 STANDARDS, CRITERIA AND GUIDANCE

The analysis of remedial alternatives was based on complying with the most stringent of the standards, criteria and guidance utilized by the United States Environmental Protection Agency, the NYSDEC, and the New York State Department of Health. The most stringent are those utilized by the NYSDEC. Specifically, they are the Recommended Soil Cleanup Objectives published in the Division of Environmental Remediation's Technical and Administrative Guidance Memorandum (TAGM) 4046, and the Ambient Water Quality Standards and Guidance Values published in the Division of Water's Technical and Operational Guidance Series (TOGS) 1.1.1. Site-specific conditions were also considered in determining compliance with these documents.

3.0 OVERALL PROTECTIVENESS OF HUMAN HEALTH AND ENVIRONMENT

The results of the site investigation determined that the Site currently is not a significant threat to human health or the environment. Specifically, there are no off-site impacts, and the only potential on-site impact is associated with above-background levels polycyclic aromatic hydrocarbons (PAHs) in soil. Due to their presence, direct contact with the soil may pose a slightly higher risk relative to other nearby areas that do no contain the fill. However, it should be noted that the Site is well vegetated and that the PAHs in the soil will continue to break down over time.

3.1 Alternative 1: No Action

Although the results of the site investigation determined that the Site currently is not a significant risk to public health or the environment, there is potential for future risks associated with the no action alternative due to direct contact with above-background levels of PAHs in soil.

3.2 Alternative 2: Installation of Clean Soil Cover and Institutional Controls

The key elements of this alternative are as follows:

1. Remove and recycle an above-grade fill pile that is comprised primarily of asphalt, as it is a localized source of PAHs.

2. Remove and dispose of the miscellaneous debris (tires, etc.) located near the southwest corner of the parking lot.

3. Remove the several large dead trees that were killed as a result of fill being placed around their bases, as they are a potential hazard due to falling limbs.

4. Re-grade the Site as necessary to maintain proper drainage.

5. Perform a topographic survey of the Site to establish grade elevations.

6. Cover the fill in accessible (i.e., relatively flat) areas of the Site with a minimum of one foot of clean soil and establish vegetative cover (e.g., turf grass or a grass and wildflower mix, as appropriate).

7. Perform another topographic survey of the Site to verify the thickness of the clean soil cover.

8. Prevent public access to the steep western slope using fencing and signage, screen with landscaping as appropriate. (Note: as this slope is stable and well vegetated, no further action is required.

9. Register an appropriate property deed restriction for the Site.

This alternative will prevent direct contact with the fill while maintaining the proposed end use of the Site, which is open space.

3.3 Alternative 3: Complete Removal

While complete removal would virtually eliminate potential future risks to human health and the environment, the work will result in short-term releases to the environment and there is potential to re-mobilize contaminants.

4.0 SHORT-TERM EFFECTIVENESS AND IMPACTS

4.1 Alternative 1: No Action

Although the Site is well vegetated and the PAHs in the fill will continue to break down over time, the short-term effectiveness of this alternative is limited by the fact that in the meantime the potential risk associated with the PAHs will remain.

4.2 Alternative 2: Installation of Clean Soil Cover and Institutional Controls

This alternative is effective in the short-term because it will eliminate the potential risk associated with the PAHs and will maintain the intended end use of the Site as open space.

4.3 Alternative 3: Complete Removal

This alternative would be effective in the long-term, but will have significant impacts on the adjacent community associated, for example, with noise, dust, runoff and potential re-mobilization of contaminants. Moreover, this alternative is not consistent with the proposed end use of the Site as open space.

5.0 LONG-TERM EFFECTIVENESS AND PERMANENCE

5.1 Alternative 1: No Action

This alternative is effective in the long term because the PAHs in the fill will continue to break down over time. However, in the meantime, there would remain a potential risk associated with the PAHs.

5.2 Alternative 2: Installation of Clean Soil Cover and Institutional Controls

This alternative is effective in the long term because it prevents direct contact with the fill while maintaining the proposed end use of the Site as open space.

5.3 Alternative 3: Complete Removal

This alternative is effective in the long term in that it entails permanent removal of the fill. However, has the Site is situated on a steep hillside, removal of the fill would eliminate the ability to use the Site as public open space.

6.0 REDUCTION OF TOXICITY, MOBILITY AND VOLUME

6.1 Alternative 1: No Action

This alternative does not provide for reduction of toxicity mobility and volume of the fill other than the gradual breakdown of the PAHs associated with natural processes.

6.2 Alternative 2: Installation of Clean Soil Cover and Institutional Controls

This alternative provides reduction in the toxicity, and accessibility of the waste by preventing direct contact with the soil while the PAHs break down over time.

6.3 Alternative 3: Complete Removal

This alternative ensures reduction in toxicity and volume, but may potentially increase mobility by exposing contaminants to the environment.

7.0 FEASIBILITY

7.1 Alternative 1: No Action

This alternative, while obviously feasible, does not meet the remedial objectives for the Site.

7.2 Alternative 2:Installation of Clean Soil Cover and Institutional Controls

This alternative is feasible because it is well suited to site conditions, is capable of being carried out with available technology, and is cost-effective. It also meets the remedial objectives for the Site.

7.3 Alternative 3: Complete Removal

This alternative is technically feasible but is not cost-effective and there is potential for re-mobilizing contaminants. Moreover, this alternative is not consistent with the proposed end use of the Site as open space.

8.0 CONCLUSION

The conclusion of this analysis is that Alternative 2: Installation of Clean Soil Cover and Institutional Controls is the preferred alternative for the Site. The specific reasons for this determination are as follows:

- Overall, it is protective of human health and the environment;
- It is effective both short-term and long-term;
- It provides for reduction in toxicity and accessibility; and
- It is feasible in that it is well suited to site conditions, technologically feasible and cost-effective.

APPENDIX K

Qualitative Exposure Assessment

QUALITATIVE EXPOSURE ASSESSMENT
for
Fill In The Parking Lot At The South End Of
Iona College's Elizabeth Seton Campus
1061 North Broadway, Yonkers, NY 10701
(Site #V-00687-3, Index #W3-0981-12)

1.0 INTRODUCTION

This qualitative exposure assessment (Assessment) was performed to support the Remedial Closure Work Plan (Plan). It is based on the information provided in the Site Investigation Report (SIR) and the Plan. Since this information is readily available, it is not reproduced verbatim in this assessment. Instead, a summary of the key information is provided and specific information in these documents is referenced by page number, as appropriate.

The overall finding of this assessment is that the Site does not currently pose a significant risk to public health and the environment, and will not do so in the future. This determination is based on the results of the environmental monitoring performed and the remedial plan for the Site, as described in the SIR and the Plan. The specific findings are detailed below in the form of assessments of current and future exposures associated with the various environmental pathways.

2.0 ASSESSMENT OF EXPOSURES ASSOCIATED WITH THE AIR PATHWAY

Based on the air monitoring performed during the site investigation, the air pathway is not currently a significant exposure pathway. This determination is based in the fact that no volatile organic compounds (VOCs) or combustible gas, and only background levels of hydrogen sulfide were detected during health and safety monitoring during the test pit excavation and sampling work (SIR, p. 3). These findings are consistent with available information regarding the composition and age of the Site. Moreover, based on visual observation, the Site is not currently a significant source of fugitive dust emissions as it is well-vegetated (SIR, p. 2).

Based on the scope of work specified in the Plan, the air pathway will not be a significant exposure pathway in the future either. Specifically, once closure is complete, conditions at the Site will be similar to current conditions except that a clean soil cover will be installed and seeded (SIR p. 16). There is potential for fugitive dust emissions during closure in conjunction with re-grading and installation of the soil cover. If necessary, the Owner will take appropriate steps, such as the use of tarps and/or water spraying, to minimize fugitive dust emissions and workers may wear dust masks during these activities. There is also potential for fugitive dust emissions from the soil cover until the new vegetation becomes well established. However, since this dust will be from clean soil, the only environmental concern associated with it is silica. If necessary, the Owner will take appropriate steps, such as installing erosion control blankets on the land surface, to minimize dust emissions until the new vegetation becomes established.

3.0 ASSESSMENT OF EXPOSURES ASSOCIATED WITH THE SOIL PATHWAY

Based on the soil-quality data collected during the site investigation, the soil pathway is not currently a significant exposure pathway. This determination is based on the fact that the Site is well vegetated (SIR, p. 2). As such, the potential for direct dermal contact by humans or animals with soil is low. This determination is also based on the results of the test pit soil sampling results, which showed that except for polycyclic aromatic carbons, the chemical quality of the soil is not a risk with respect to dermal exposure (SIR, p.15).

Based on the scope of work specified in the Plan, the soil pathway will not present a significant risk of exposure in the future. Specifically, the Site will then be covered by a minimum of one foot of clean soil and re-vegetated. In addition, a deed restriction will be placed on future excavation, and periodic inspections will be performed.

4.0 ASSESSMENT OF EXPOSURES ASSOCIATED WITH THE SURFACE WATER PATHWAY

There are no surface-water bodies in the vicinity of the Site which could potentially be impacted by the Site. Therefore, there is no potential current or future exposure associated with the surface-water pathway.

5.0 ASSESSMENT OF EXPOSURES ASSOCIATED WITH THE SEDIMENT PATHWAY

There are no surface-water bodies in the vicinity of the Site which could potentially be impacted by the Site. Therefore, there is no potential current or future exposure associated with the sediment pathway.

6.0 ASSESSMENT OF EXPOSURES ASSOCIATED WITH THE GROUND WATER PATHWAY

Based on the information contained in the SIR, the ground water pathway is not a viable exposure pathway. Specifically, based on field observations, the occurrence of groundwater is limited to a thin, discontinuous seasonal zone overlying bedrock. Moreover, the fill does not leach significant concentrations of PAHs or lead, and is not a significant source of VOCs, the non-PAH semivolatile organic compounds, pesticides, polychlorinated biphenyls (PCBs) or metals. Consequently, there is minimal potential for the Site to impact ground water.