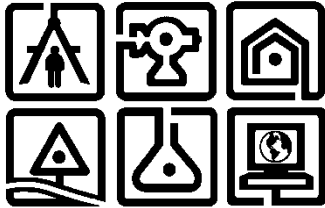


May 27, 2015



## NYS Brownfield Cleanup Program

### DRAFT Remedial Action Work Plan

USAI Lighting Facility  
Town of New Windsor  
Orange County, New York

*Prepared for:*

BDL, LLC  
1126 River Road  
New Windsor, New York 12553

*Prepared by:*

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**CERTIFICATIONS  
REMEDIAL ACTION WORK PLAN  
USAI LIGHTING FACILITY**

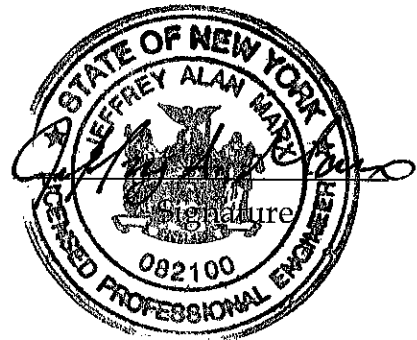
I, Jeffrey A. Marx, P.E., certify that I am a NYS registered professional engineer and that this Remedial Action Work Plan was prepared in accordance with all applicable statutes and regulations and in substantial conformance with the DER Technical Guidance for Site Investigation and Remediation (DER-10) dated May 3, 2010.

082100

NYS Professional Engineer #

5/27/2015

Date



**BROWNFIELD CLEANUP PROGRAM  
REMEDIAL ACTION WORK PLAN  
USAI LIGHTING FACILITY  
1116-1126 RIVER ROAD  
TOWN OF NEW WINDSOR, NEW YORK**

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## **FIGURES**

- Figure 1: Site Location Map
- Figure 2: Sampling Locations Map
- Figure 3: Parameters in Soil Above SCOs and Parameters in Groundwater Above SCGs
- Figure 4: Remedial Action Implementation Plan



**BROWNFIELD CLEANUP PROGRAM  
REMEDIAL ACTION WORK PLAN  
USAI LIGHTING FACILITY  
1116-1126 RIVER ROAD  
TOWN OF NEW WINDSOR, NEW YORK**

**APPENDICES**

Appendix A:	Site Development Plans
Appendix B:	Table 375-6.8(b) – (6 NYCRR Part 375)
Appendix C:	Allowable Constituent Levels for Imported Fill or Soil (Appendix 5 NYSDEC DER 10)

## **1.0 INTRODUCTION & PURPOSE**

### **1.1 Introduction**

On behalf of BDL, LLC (the “Applicant”), C.T. Male Associates Engineering, Surveying, Architecture & Landscape Architecture, D.P.C. (C.T. Male) has prepared this Remedial Action Work Plan (RAWP) pursuant to the New York State Department of Environmental Conservation (DEC) Brownfield Cleanup Program (BCP) in relationship to the property known as the USAI Lighting Facility located at 1116 – 1126 River Road in the Town of New Windsor, Orange County, New York (herein “the Site”). A Site Location Map showing the property boundaries is presented as Figure 1.

The Applicant is submitting this Draft RAWP together with the Brownfield Cleanup Program (BCP) Application for concurrent regulatory and public review. The proposed remedy will be consistent with ongoing site activity (industrial). Current plans to update the Site include renovations to the buildings, parking lot replacement and stormwater management improvements, as shown in the site development plans provided in Appendix A. Refer to the BCP application for additional details. Upon acceptance into the BCP, the Applicant intends to enter into a Brownfield Cleanup Agreement (BCA) with DEC to remediate the property.

A portion of the 1116-1126 River Road property to the east of the railroad tracks meets the definition of lands under water. Therefore, this portion of the Site is not included within the Site boundaries and is not subject to the Remedial Action Work Plan.

### **1.2 Purpose and Goal**

The purpose of the RAWP is to provide a conceptual plan for the selected remedy for the Site. With concurrence from NYSDEC, the preparation of a formal remedial design work plan is not warranted given the presumptive remedy applicable to the site under the guidance of Program Policy DER-10, Technical Guidance for Site Investigation and Remediation, and NYS DEC Regulations 6 NYCRR Part 375, Environmental Remediation Programs.

The goal of this RAWP is to provide guidance to the Applicant’s design and construction team for their preparation of technical specifications and construction

documents for this specific project. This guidance shall provide the means for incorporating the proposed remedial action requirements into the overall construction documents.

### **1.3 Remedial Action Approach**

#### **1.3.1 Applicable NYS Standards, Criteria and Guidance (SCGs)**

The contemplated use for the Site is Commercial Use. The applicable SCGs for each media subject to remedial action are summarized as follows:

<b>Table 1.3.1-1</b>		
<b>Media</b>	<b>Regulation</b>	<b>SCGs</b>
Soil	6 NYCRR Part 375 (December 14, 2007)	Table 375-6.8(b) Industrial/Commercial Use Soil Cleanup Objectives (SCOs)
Groundwater	NYSDEC Division of Water TOGS 1.1.1	Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations (June 1998)
Soil Vapor	None	Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York, dated October 2006

A copy of the December 14, 2007 6 NYCRR Part 375 Table 375-6.8(b) is included in Appendix B for reference. The SCOs (a.k.a. SCGs) for Commercial Use Sites are identified under the column heading "Protection of Public Health – Commercial". The DEC Division of Water TOGS 1.1.1 document is not included, but the standard or guidance values for the remedial action will be the GA class values. Currently, there is no regulation that establishes SCGs for soil vapor investigation or mitigation. In lieu of a regulation, the NYSDOH prepared guidance document listed in the Table 1.3.1-1 which will be used for applicable SCGs, if necessary.

There are no surface water bodies on the Site. Therefore applicable SCGs for surface water are not included in this RAWP.

### **1.3.2 Nature and Extent of Contamination**

The nature and extent of Site contaminants have been documented by William L. Going & Associates, Inc. of Gardiner, New York through the completion of a Site Investigation in 2008 and a Subsequent Groundwater Investigation in 2010. The Site Investigation included collection of subsurface soil and groundwater samples across the Site for subjective and laboratory analysis. The locations where the samples were collected are depicted in Figure 3: Sampling Locations Map. Those sampling locations where parameters were detected above their corresponding SCGs are identified in Figure 4: Parameters in Soils Above SCOs and Parameters in Groundwater Above SCGs. Based on the findings of the investigations by others, the remedial action will need to be implemented over the entire Site, up to the limits established by the property lines.

The site is identified with two spill numbers. Spill No. 9903745, which was created on April 30, 1999 in relation to removal and remediation of two (2) 1,000 gallon underground storage tanks formerly situated on the southern portion of the Littman Industries property and subsequently closed on December 10, 2009, as a result of the Site Investigation performed by the owner. Spill No. 0913553 was opened on March 23, 2010 for the purpose of investigating groundwater conditions across the entire Littman Industries property.

### **1.3.3 Remedy Selection**

The proposed remedy for the Site is based on the contemplated potential use of Industrial/Commercial Use incorporating engineering and institutional controls consistent with Track 4 cleanup levels promulgated at 6 NYCRR 375-3.8(e)(4). The remedy will consist of placement of capping materials (asphalt, concrete or vegetated soil) and localized excavation of grossly contaminated soils in conjunction with site development. The excavated material will be removed from the site and properly disposed of at a facility permitted to accept this type of waste.

### **1.3.4 Engineering and Institutional Controls**

The engineering and institutional controls for the Site will be outlined in an Environmental Easement to be prepared and recorded for the Site. The controls include the following:

*Engineering Controls*

- The installation/placement of a surface cover system over the entire Site. The surface cover system will be constructed of a one (1) foot soil; imported asphalt/subbase (i.e., parking and driveways of future construction) generally 10 inches; or poured in-place concrete/subbase (i.e., sidewalks and foundations/slabs of future construction) generally 8 inches. The soil component of the surface cover system would be underlain by a demarcation layer to identify the difference between imported tested clean soils and existing Site soils. Refer to Figure 4 – Remedial Action Implementation Plan for a distinction of where each of these materials may be placed. A demarcation layer is not required beneath existing asphalt and concrete cover materials being identified as acceptable surface cover provided they are not in a deteriorating condition. A demarcation layer is not required underneath newly placed asphalt and concrete cover materials as the subbase materials will be clearly different than existing site soils.
- Prior to initiating any renovations to the interior of the building or construction of future structures that do not have a mitigation system installed, indoor air quality will be assessed to determine if historic releases of petroleum products have impacted indoor air quality. If indications are that historic practices have impacted indoor air quality, sub-slab testing will be performed to evaluate methods for controlling vapor intrusion.
- Installation, operation and maintenance of a soil vapor mitigation system for any building developed on the Site. In lieu of such system, investigative sampling of the soil vapor within the footprint of any proposed building would need to be completed and presented to NYSDOH to support a petition to not install such system due to the absence of impacted soil vapor.
- Excavation and off-site disposal of petroleum contaminated soil (i.e., hot spots), if any is encountered during construction activities and site development. This work will be performed in compliance with the Soil Cleanup Objectives listed in 6 NYCRR Part 375-6 and the nuisance conditions specified in Commissioners Policy (CP) 51.

*Institutional Controls*

- Restrict the use of groundwater as a source of potable water and other uses without necessary water quality treatment as determined by NYSDOH.
- Restrict usage of the Site to Industrial/Commercial Use.
- The potential for vapor intrusion must be evaluated for any buildings developed on the site, and any potential impacts that are identified must be monitored or mitigated.
- Develop a DEC approved Site Management Plan (SMP) to establish guidelines and procedures for Site disturbance and monitoring. The SMP will be attached to, and become a part of, the Environmental Easement.
- Periodic certification by the property owner; prepared and submitted by a professional engineer or such other expert acceptable to the DEC, until the DEC notifies the property owner in writing that this certification is no longer needed. The submittal will contain certification that the institutional controls and engineering controls are still in place, allow the DEC access to the site, and that nothing has occurred that would impair the ability of the control to protect public health or the environment, or constitute a violation or failure to comply with the SMP.

## **1.4 Remedial Action Implementation**

The following sections provide the conceptual detail for the Site's proposed remedial action. Generally, the remedial action includes site clearing, building demolition, former transformer pad removal, monitoring well protection and decommissioning, Site grading, type of surface cover system, installation of vapor mitigation system, characterization of imported fill, discovery of impacted soils, and closure of above ground storage tanks.

### **1.4.1 Site Clearing and Grubbing**

Prior to any site clearing, grubbing or disturbance, the southern portion of the site will need to be observed for the presence of suspect asbestos containing materials on the

ground surface. Given the condition and age of the buildings two buildings planned for demolition, there is potential for building materials such as roofing, exterior paneling, etc. to be present on the ground from deterioration throughout the years. A formal asbestos survey shall be completed of the buildings prior to demolition (See Section 1.4.2), but this survey shall include an assessment of the ground surface in and around buildings or where building debris is present. If any asbestos containing materials are identified, they will be properly abated in accordance with NYS Department of Labor (DOL) 12 NYCRR Part 56 (Industrial Code Rule 56).

Existing Site vegetation and trees that would impede the installation of the surface cover will need to be cleared and grubbed prior to construction and if applicable, after asbestos materials are abated. Vegetation situated at and/or above the ground surface will be cleared and disposed of off-site at an approved disposal facility. Vegetation situated below the ground surface (i.e. roots) will be removed and the vegetation will be vigorously shaken and rolled over the ground surface to dislodge bulk soils clinging to the vegetation. Upon approval of satisfactory soil removal by the environmental engineer or designated representative, the subsurface vegetation will then be disposed of off-site along with the above grade vegetation at an approved disposal facility.

#### **1.4.2 Building Demolition**

There is one main warehouse building and two separate out buildings. The warehouse is actively being used and will be subject to renovations and upgrades. The two out buildings are unused and require demolition to allow for future parking lot upgrades. The Site's buildings and structures are primarily constructed of aluminum, concrete and masonry. There is a potential for asbestos containing building materials to be present as components of the buildings. A pre-demolition asbestos building survey will be conducted prior to building demolition in accordance with NYS Department of Labor (DOL) 12 NYCRR Part 56 (Industrial Code Rule 56). The survey shall also include assessment of the area of the main building planned for renovations. If the survey identifies the presence of asbestos, asbestos abatement will be performed as an element of building demolition. Asbestos project monitoring will be completed by C.T. Male Associates, as required by Industrial Code Rule 56, prior to and/or during the demolition activities.

Non-concrete and non-masonry building components will be segregated and disposed of off-Site at a permitted facility. Concrete and masonry building components including, but not limited to, floor slabs, above ground and below ground foundation walls and footers will be segregated, scraped of adhered soils, and crushed for use as Site backfill. The backfill will be placed on-site prior to installation of the surface cover system so there is no analytical testing required.

Concrete/masonry appearing visually impacted, as evidenced by petroleum staining and discoloration will be staged atop 12-mil poly and protected from the environmental elements (i.e., rain) until removed from the site. The concrete/masonry will then be characterized via sampling and laboratory analysis, and disposed of at a facility permitted to accept these wastes being generated.

#### **1.4.3 Former Transformer Pad Removal**

There is an exterior transformer pad located on the west side of the main building. Sampling has documented the PCB concentrations either in soil or on the pad. This will need further investigation and possible additional sampling to determine the full extent of remedial action. In concept, any concrete or soil with PCB concentrations greater than 1 ppm at the surface will be removed and properly disposed of off-site.

#### **1.4.4 Monitoring Well Protection and Decommissioning**

There are a number of groundwater monitoring wells installed on-site some that may fall within areas to be subjected to construction and remediation of petroleum impacted soils. Those wells that fall within excavation areas will be removed in their entirety by excavating the PVC piping. Those wells that are located outside of planned remedial excavation areas will be protected and left in-place at least until the remedial program is complete and an assessment can be made on the necessity of maintaining functional monitoring wells for long-term groundwater monitoring. If wells require abandoning, the wells will be decommissioned in accordance with the procedures outlined in DEC CP-43 Commissioner's Policy on Groundwater Monitoring Well Decommissioning. The monitoring wells are depicted on Figure 2; Sampling Locations Map.



#### **1.4.5 Initial Site Grading and Surveying**

The Site will be rough graded in preparation for the placement of the surface cover system whereby some areas of the Site will need to be cut to provide the necessary fill for petroleum impacted soil excavations. Crushed concrete and masonry from asbestos-cleared building demolition and not containing evidence of petroleum impacts may also be utilized in part to fill in low lying areas. Because impacted soils will be disturbed during Site grading, a NYSDOH community air monitoring plan (CAMP) will need to be developed and adhered to. Section 3.0 provides detail for the elements of the CAMP.

After completion of Site rough grading and prior to the placement of the demarcation layer/surface cover system, a professional surveyor licensed to practice in New York State will conduct an elevation survey of existing Site grades. The purpose of the survey will be to establish survey points prior to placing surface cover and horizontal limits of petroleum excavation areas for preparing as-built drawings. The same survey points will be utilized to re-survey the Site after placement of the surface cover system to confirm the required surface cover system thickness was achieved. The frequency of survey data points shall be no less than a 25 by 25 foot grid across the site, but may require more survey points on critical slopes or other variable topography (not flat).

Any fill imported onto the Site for grading purposes and placement beneath the surface cover system will require analytical testing as promulgated in Section 5.4(e) of NYSDEC DER-10. Section 1.4.8 further discusses the analytical testing requirements and sampling frequency.

#### **1.4.6 Surface Cover System**

The surface cover system will consist of one (1) foot of imported soil fill, imported asphalt/subbase (i.e., parking and driveways of future construction) to a thickness of generally 10 inches; or poured in-place concrete (i.e., sidewalks and utility foundations of future construction) to a thickness of generally 8 inches. Refer to Figure 4 – Remedial Action Implementation Plan for a distinction of where each of these materials may be placed.

The existing paved surfaces at the site that are not deteriorating and the existing sound building floor slabs should be considered acceptable surface cover system materials. The conditions of existing asphalt and concrete will be evaluated at the time of the field

work and NYSDEC will be consulted on the adequacy of the existing cover materials as surface cover. If acceptable, a demarcation layer will not be installed beneath these existing materials.

Prior to placement of the surface cover system, a demarcation layer (i.e., woven or non-woven filter fabric, or other material that is pre-approved by DEC) will be installed over existing soils to serve as a visual barrier between the bottom of the surface cover system and top of the existing soils. This allows for a clear distinction between the surface cover materials that doesn't require special handling to those existing soils that do require management in accordance with the Site Management Plan made part of the Environmental Easement.

After placement of the surface cover system, a licensed surveyor will conduct an elevation survey utilizing the similar survey points generated during the elevation survey conducted after rough grading (see Section 1.4.5) to document the surface cover system thickness.

Fill and topsoil imported onto the Site for placement for the surface cover system will require analytical testing as promulgated in Section 5.4(e) of NYSDEC DER-10. Section 1.4.8 further discusses the analytical testing requirements and sampling frequency.

#### **1.4.7 Vapor Mitigation System**

Buildings developed on the Site will require the installation and operation of soil vapor mitigation systems in general conformance with *Section 4: Soil Vapor Intrusion Mitigation* of the NYSDOH Guidance for Evaluating Soil Vapor Intrusion in the State of New York, dated October 2006, unless otherwise determined by NYSDOH to not be required. The soil vapor mitigation system may consist of a passive or active ventilation system or vapor barrier.

The existing building will be evaluated for impacts to indoor air quality. Since the site is impacted by petroleum related compounds, indoor air quality samples and sub-slab vapor samples will be obtained. A mitigation system will be designed to mitigate impacts to indoor air quality, if identified.

The determination to operate the mitigation system in a passive or active mode will be determined on the basis of the results of the indoor air and sub-slab vapor sampling,

with consideration given to the success of the petroleum impacted soil removal activities.

#### **1.4.8 Characterization of Imported Fill**

Fill (including topsoil) imported onto the Site for use as backfill or component of the surface cover system will need to be characterized.

The source of the fill (i.e., physical location, virgin vs. non-virgin source, DOT approved, etc.) and the analytical data will be provided to the DEC for review and approval prior to importing the fill to the site. The sampling and analysis requirements for fill imported to the site are set forth in Section 5.4(e)10 of NYSDEC DER-10. The following language will be included in construction specifications.

- All materials proposed for import onto the Site will be approved by the qualified environmental professional/and or Project Engineer and will be in compliance with provisions in 6 NYCRR Part 375 and NYSDEC DER-10 prior to receipt at the Site.
- Material from industrial sites, spill sites, or other environmental remediation sites or potentially contaminated sites will not be imported to the Site.
- All imported soils will meet the backfill and cover soil quality standards established in 6 NYCRR 375-6.7(d). Based on an evaluation of the land use, protection of groundwater and protection of ecological resources criteria, the resulting soil quality standards are listed under the Restricted Residential Use column heading in the table presented in Appendix C. Soils that meet 'exempt' fill requirements under 6 NYCRR Part 360, but do not meet backfill or cover soil objectives for this Site, will not be imported onto the Site without prior approval by DEC. Solid waste will not be imported onto the Site.
- Trucks entering the Site with imported soils will be securely covered with tight fitting covers. Imported soils will be stockpiled separately from excavated materials and covered to prevent dust releases.

#### **1.4.9 Discovery of Impacted Soils**

Petroleum-impacted soils are present beneath the Site in the vicinity of the southwest corner of the Site and near the northeast corner of the main building (see Figure 4). Should impacted soils be encountered at this location or at other locations across the Site during implementation of the remedial action and Site development, the following procedure should be followed.

- The impacted soils will be excavated and stockpiled atop 12-mil poly and covered with 12-mil poly. The soils will be characterized in accordance with the target disposal facility's permit requirements. Waste profile paperwork including manifests shall be reviewed by C.T. Male Associates and signed by an authorized representative of the Applicant.
- In the event that the excavation extends into groundwater, the groundwater will be evaluated for petroleum impacts by the environmental engineer or designated representative. If determined to be petroleum impacted and required to be removed, it will be evacuated, temporarily stored, characterized, treated (if necessary) and/or disposed of off-Site.
- The limits of the excavation and extent of impacted soils will be delineated by the environmental construction observer utilizing subjective methods of PID headspace analysis and organoleptic (sight and smell) perception.
- Upon completion of the excavation of impacted soils, the environmental construction observer will collect confirmatory end-point samples from either the excavation bottom and/or sidewalls of the excavation or biased towards the area of the excavation where the highest discernible concentration of contamination was observed. The sampling frequency will be in accordance with Section 5.4(b) of DER-10 and will consist of the collection of one (1) sample from the bottom of each sidewall for every 30 linear feet of sidewall and one (1) sample from the excavation bottom for every 900 square feet of bottom area. The samples will be analyzed for the contaminants of concern that were subjectively assessed. At a minimum, the samples will be analyzed for the Target Compound List (TCL) volatile and semi-volatile organic compounds and the Target Analyte List (TAL) of metals. If groundwater is present in the excavation bottom, one (1)

groundwater sample will be collected and analyzed for the same parameters identified for the soil samples.

#### **1.4.10 Above Ground Petroleum Storage Tanks**

There is one above ground petroleum storage tank that exists on-site, located adjacent to one of the two buildings planned for demolition. This tank and any others discovered must be properly cleaned and permanently closed in accordance with applicable Petroleum Bulk Storage Regulations. Any free liquids within the tank(s) will need to be drummed or bulked into a vacuum tank truck for proper disposal. Waste characterization is required prior to disposal and the waste disposal paperwork (profile and manifests) must be reviewed by C.T. Male Associates and signed by the Owner.

Any tank must be swabbed clean and rendered vapor free. The tank must also be rendered useless by cutting a hole in the side wall of the tank. All cleaning waste must be properly handled and disposed of at a facility permitted to accept this type of waste.

The site is not a registered petroleum bulk storage facility. Therefore, closure of any tanks will not require separate notification or registration to the Petroleum Bulk Storage department of NYSDEC. If the total storage capacity of the tanks found and closed during remedial action exceeds 1,100 gallons, the registration application will be completed and forwarded to the NYSDEC project manager and as applicable, the NYSDEC regional office.

### **1.5 Remedial Treatment Units**

The selected remedial action will be implemented at the Site of approximately 11.8 acres, and therefore the entire site must be considered one remedial treatment unit. The boundaries of remedial action being completed under the BCP are depicted on Figure 4, Remedial Action Implementation Plan. It should be noted that the eastern portion of the site is considered lands under water and are excluded from the BCP. No remedial action will be performed on the lands under water.

Within the overall Remedial Treatment Unit, there are two obvious areas of concern based on sampling and analysis by others to date. Area of Concern #1 is located in the southern portion of the site generally extending from monitoring well MW-11 eastward to the railroad tracks, northward no more than the southern wall of the main building,

and southward yet to be determined. Figure 3 shows the extent of impacts in soil and groundwater in this area which supports potential excavation of soil as an expected potential hot spot including observations by others that free-phase petroleum product was within monitoring well MW-11.

Area of Concern #2 is relatively smaller in plan size than Area of Concern #1, and is located along the driveway on the east or rear side of the building by the railroad tracks. There were a number of semi-volatile organic compounds detected above applicable SCGs that warranted impacted soil removal.

## **1.6 Remedial Action Schedule**

It is expected that the project field work will commence shortly after approval of the acceptance of the BCP application, required public comment period and approval of the RAWP. The Site development plans have been approved by local governmental boards and elements of the remedial action will be incorporated into the Site development.

The draft RAWP will be submitted to DEC concurrently with the BCP application thereby allowing 30 days for the public to review and comment in early July 2014. The approval of the final RAWP is anticipated in early August 2014. Site development incorporating the remedial action is anticipated to begin in late August 2014.

## **1.7 Citizen Participation**

Citizen participation for this portion of the project will include a public comment period, placing documents in the repository and issuing a notice/fact sheets, as follows:

- Place this RAWP and Brownfield Cleanup Application (BCA) in the document repositories prior to the public comment period. These documents will be preliminarily reviewed by DEC for general acceptance, then a more formal review will be performed by DEC during the comment period; providing comments before the documents are deemed final.
- Issue a notice for the start of a 30 day public comment period for this RAWP and BCA.

- Upon acceptance by the public and DEC of the documents, issue a public notice/fact sheet for the start of remedial/construction work.

DEC approval of the documents will follow the public comment period unless a public meeting is requested and deemed necessary by DEC. If needed, a public meeting will be held toward the end of the 30 day comment period to explain the project in further detail, answer public questions and hear public comments.

## **2.0 TEMPORARY CONSTRUCTION FACILITIES**

### **2.1 Site Security**

The Site is considered a single lot with respect to access and use and located on the east side of River Road. The Site area topography is relatively flat with a slight downward slope from River Road towards the Hudson River. Temporary fencing will be installed along the Site's western, northern and eastern property boundaries during the remedial action as railroad tracks and the Hudson River border the Site's eastern property boundary already limiting the public access.

### **2.2 Trailers**

During the completion of the remedial action, electronic monitoring equipment will be required to field screen soils for contamination and monitor the air for organic vapor and dust. This equipment is portable and operates on batteries. The person(s) completing this work will need access to a clean environment such as a construction trailer for field notes preparation, charging equipment batteries and downloading data logged on the equipment for record storage and possibly submission to DEC. The construction office trailer or office space within the building should be equipped in a manner that supports the use of electronic equipment such as a desk and multiple outlets for plugging in equipment chargers.

### **2.3 Decontamination Equipment**

During the remedial action, construction equipment will either come into contact with existing impacted surface soils during Site grading or will come into contact with petroleum impacted soils, should these be discovered. Prior to construction equipment being demobilized from the site or used for the placement of the surface cover system, the equipment is required to be decontaminated.

For equipment coming into contact with Site soils during grading, soils adhered to the equipment will be removed employing dry (sweeping) and if necessary wet methods and the adhered soils and cleaning liquids will be allowed to be deposited on the Site's surface beneath the surface cover system.



Equipment that comes into contact with petroleum impacted soils will be decontaminated in a manner that removes adhered soils and washes/rinses the equipment in a controlled manner thereby capturing soils and wash/rinse water for proper off-site disposal. The waste soils and wash/rinse water shall be captured using a stationary or movable decontamination pad. The accumulated soils and water shall be transferred to 55 gallon drums or similar vessel on a daily basis to mitigate the potential for intermixing with precipitation and increasing the volume for disposal or overflowing the decontamination pad. The drum contents shall be characterized through generator knowledge, analytical testing from the remedial investigation and/or additional lab testing of the actual waste in accordance with the target disposal facility's permit requirements. Waste paperwork (profiles and manifest) shall be reviewed by C.T. Male Associates and signed by an authorized representative of the Applicant.

#### **2.4 Petroleum Impacted Soil Handling**

During construction, any petroleum impacted soils discovered during the remedial action and Site development will require special handling. The handling will include temporarily staging the soil on a minimum of 12-mil plastic and covered with the same to mitigate washout by rainwater. The impacted soil stockpile shall remain covered until such time transportation is arranged.

Prior to off-Site disposal, the stockpiled soils will be characterized through generator knowledge, analytical testing from the remedial investigation and/or additional lab testing in accordance with the target disposal facility's permit requirements. Waste profile paperwork and manifest be reviewed by C.T. Male Associates and signed by an authorized representative of the Applicant.

#### **2.5 Groundwater Dewatering System During Impacted Soil Excavation**

New construction will entail parking lot upgrades which will likely not encounter groundwater. Excavation of petroleum impacted soil, however, may extend into the groundwater and therefore arrangements to dewater the excavation should be planned for. The method of dewatering will be left up to the contractor doing the excavation work, but the removed groundwater shall be treated through a carbon filtration system of sufficient size and flow rate to reduce contaminants to acceptable levels.

It would be the intention to discharge the treated water into the closest connection to the municipality's stormwater collection system (location to be determined). If this route is implemented, applicable discharge standards would be provided by the municipality (Town of New Windsor) and followed. If discharging to the municipal system is not allowed, NYSDEC SPDES Permit Equivalent Requirements for discharge may need to be sought, which would establish the monitoring parameters and concentrations for discharge to the surface. However, on-site discharge may be challenging with having such a small site. The discharge may not occur unless the ground is capable of accepting the treated effluent. The discharge water may not be ponded on top of saturated or frozen ground or permitted to flow across the ground surface. A minimum separation distance of 100 feet must be maintained between the discharge location and any surface waters (including wetlands).

### **3.0 SITE CONTROLS DURING REMEDIAL ACTION**

#### **3.1 Stormwater Management**

The majority of the site development is parking lot upgrades whereby the actual amount of soil being disturbed is less than one acre and therefore coverage under the State Pollutant Discharge Elimination System (SPDES) General Permit for Stormwater Discharges from Construction Activity is not required before commencing construction activity. At a minimum, there should be silt fence installed on the downgradient portions of the soil disturbance work, and a construction entrance or other means are necessary to prevent tracking of soil off-site.

If the cumulative area of soil disturbance from impacted soil removal exceeds one (1) acre, the Applicant shall consult with the Town of New Windsor and as necessary obtain coverage under the SPDES General Permit for Stormwater Discharges from Construction Activity before commencing construction activity.

If General Permit coverage is required by the Town of New Windsor, erosion and sediment control measures, pollution prevention measures, and if applicable, post-construction water quality treatment, shall be designed by the Applicant and presented in the form of a Stormwater Pollution Prevention Plan (SWPPP) in accordance with the New York Guidelines for Urban Erosion and Sediment Control and the New York State Stormwater Management Design Manual.

The following forms are needed to be completed and submitted to comply with the requirements of the General Permit for Stormwater Discharges from Construction Activity - GP-0-10-001:

- Notice of Intent (NOI), which is a request for coverage under the General Construction Stormwater Permit;
- SWPPP Acceptance Form, which is required along with the NOI because the site is located within the boundaries of an MS4. The SWPPP must be reviewed and accepted by the MS4 prior to submitting the NOI to the DEC; and
- Notice of Termination, which is a notification that the construction project is complete and has met the requirements of the construction permit.

A copy of the blank Notice of Intent, Notice of Termination and SWPP Acceptance forms are available through DEC's website. The Town of New Windsor, as the MS4 for this Site, would need to review and approve the site specific SWPPP. A copy, when and if prepared must be made available to NYSDEC upon request.

### **3.2 Air Monitoring**

A Community Air Monitoring Plan (CAMP) shall be followed during ground intrusive remedial activities (i.e., excavation and handling of site soil). The intent of the CAMP is to provide a measure of protection for the downwind community (i.e., off-site receptors including residences and businesses and on-site workers not directly involved with the subject work activities) from potential airborne contaminant releases as a direct result of remedial work activities. The CAMP is not intended for use in establishing action levels for worker respiratory protection. The CAMP will monitor the air for dust (particulate air monitoring, see Section 3.2.1) and volatile organic compound vapors (VOC air monitoring, see Section 3.2.2) at the downwind perimeter of the work area. The action levels specified herein require increased monitoring, corrective actions to abate emissions, and/or work shutdown.

#### **3.2.1 Particulate Air Monitoring**

Two (2) real-time particulate monitors capable of continuously measuring concentrations of particulate matter less than 10 micrometers in size (PM-10) and capable of integrating over a period of 15 minutes (or less) will be utilized. Three (3) monitors are commonly used but the work areas will be relatively small and therefore two (2) monitors will accomplish the same goal. The instruments will be placed at temporary monitoring stations based on the prevailing wind direction each day, one (1) upwind and one (1) downwind of the designated work areas. The particulate monitoring instruments will be capable of displaying the short term exposure limit (STEL) or 15 minute averaging period, which will be field checked and recorded for comparison to the NYSDOH Generic Community Air Monitoring Plan action levels for particulates, as listed below. The particulate readings will be manually monitored, but the instruments are programmed to alarm at preset action levels. Instantaneous readings will be recorded periodically throughout the work day. At the end of each day, the readings for each instrument will be downloaded to a PC and retained for future reference and reporting.

- If the downwind PM-10 particulate level is 100 micrograms per cubic meter (mcg/m<sup>3</sup>) greater than background (upwind perimeter) for the 15-minute period or if airborne dust is observed leaving the work area, then dust suppression techniques must be employed. Work may continue with dust suppression techniques provided that downwind PM-10 particulate levels do not exceed 150 mcg/m<sup>3</sup> 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 mcg/m<sup>3</sup> above the upwind level, work must be stopped and a re-evaluation of activities initiated. Work can resume provided that dust suppression measures and other controls are successful in reducing the downwind PM-10 particulate concentration to within 150 mcg/m<sup>3</sup> of the upwind level and in preventing visible dust migration.

In the event of poor weather such as heavy rain, particulate monitoring will not be performed for protection of instrumentation. These weather conditions would limit the effectiveness of the sensitive monitoring equipment and likely suppress particulate generation. Work activities will be halted if fugitive dust migration is visually observed for a sustained period of time.

### **3.2.2 Volatile Organic Compound Air Monitoring**

The contaminants of concern for the site include petroleum products, which are volatile and semi-volatile organic compounds that have the potential to be released to the environment when disturbed. C.T. Male Associates will monitor for volatile organic compounds (VOCs) at the downwind perimeter of the immediate work areas continuously with a MiniRAE 3000 handheld VOC monitor or equal during ground intrusive activities and handling of impacted stockpiled soil. Upwind concentrations will also be measured at the start of the work day and periodically thereafter to evaluate the site's background conditions. This unit is capable of displaying the STEL (15 minute averaging period) which will be field checked and recorded for comparison to the NYSDOH Generic Community Air Monitoring Plan action levels for VOCs, as listed below. The VOC readings (STEL) will be manually recorded for future reference and reporting. Instantaneous readings will be recorded periodically throughout the work day.

- 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 shutdown. Work activities will then be evaluated to determine the source and engineering controls required to reduce/eliminate organic vapors.

### **3.3 Dust Control**

Dust suppression techniques will be required as necessary to control fugitive dust to the extent practical during the remedial action. Such techniques must be employed, at a minimum, if the community air monitoring results indicate that particulate levels are above action levels. All reasonable attempts will be made to inhibit visible and/or fugitive dusts. Techniques to be utilized by the contractor may include one or more of the following:

- Applying water to haul roads.
- Wetting equipment and areas of Site disturbance.
- Spraying water on buckets during excavation and dumping.
- Hauling materials in properly tarped containers or vehicles.
- Restricting vehicle speeds on-site.
- Covering excavated areas and materials after excavation immediately after activity ceases.

The contractor will be required to perform dust control measure in a manner consistent with the applicable portions of the "New York Guidelines for Urban Erosion and Sediment Control" and the "New York State Stormwater Management Design Manual".

### **3.4 Construction Observation and Certification**

C.T. Male Associates will provide full-time observation during all of the remedial action work. Upon completion of the remedial action work such as no more removal of petroleum impacted soils, if any, have been remediated, CAMP monitoring is no longer required and excavation and grading of site soils is complete, full-time construction observation by C.T. Male Associates will be discontinued. The remaining above grade construction activities related to site development will be completed without environmental related construction observation. This transition for ending construction observation will be coordinated with the Applicant and DEC.

Periodic observation will be made by a registered professional engineer, specifically Jeffrey A. Marx, PE, in order to provide required certification of the Final Engineering Report. Mr. Marx will also have responsibility for direction of the construction observer during the remedial action to assure the project is implemented by the construction contractor in accordance with the DEC approved RAWP, and to provide engineering review of remedial related contractor submittals and field changes for the remedial related work.

#### **4.0 HEALTH AND SAFETY PLAN (HASP)**

The contractor for site development whom will be doing the remedial action will be required to provide a site specific Health and Safety Plan (HASP) that is certified by a Certified Industrial Hygienist or equivalent. The contractor's employees will be required to have read and understood their company's site specific HASP prior to completing the work.

Health and safety procedures to be followed by C.T. Male Associates will be conducted in accordance with a DEC approved site specific HASP that will be developed by C.T. Male Associates prior to the commencement of environmental construction observation during the remedial action.

A copy of the health and safety plans will be available at the Site during the performance of remedial activities to which they are applicable.



## **5.0 CONFIRMATION AND DOCUMENTATION SAMPLING**

### **5.1 Post-Excavation Confirmation Sampling**

The sampling methods and analytical requirements for soil samples collected from petroleum impacted soil excavations are detailed in Section 1.4.9.

The analytical results from the post-excavation confirmation sampling will be subjected to data validation. Data validation will be performed in accordance with the USEPA National and Regional Validation Guidelines/Procedures to determine the applicable qualifications of the data. The validator will then prepare a Data Usability Summary Report (DUSR) in accordance with DEC guidance.

### **5.2 Imported Fill Testing**

The sampling methods, frequency and analytical requirements for imported fill testing are detailed in Section 5.4(e)10 of NYSDEC DER-10. The analytical results for the imported fill testing will not require data validation. The analytical results will be provided to NYSDEC for their concurrence on fill acceptance.

### **5.3 Groundwater Treatment Documentation Sampling**

Groundwater treatment may be necessary during excavation of petroleum impacted soils. The documentation and sampling necessary for the groundwater treatment system will be dependent on the requirement of the applicable permit for such treatment system. It will likely include influent and effluent sampling which will be used to gauge groundwater contaminant levels, document conformance to applicable permit discharge limits, and set forth the frequency of change-out of groundwater treatment media (i.e., granular activated carbon). The proposed sampling frequency and analysis will be presented to DEC for concurrence prior to implementing.

The analytical results for groundwater treatment will not be subjected to data validation.

## **6.0 APPLICABLE PERMITS AND RELATED**

### **6.1 Building or Demolition Permit**

The Applicant shall obtain all Town required pertinent building and/or demolition permits required for development of the Site.

### **6.2 Sewer Discharge Permit**

Groundwater dewatering may be required should excavations be required to remediate petroleum impacted soils below the water table. Any impacted excavation water that is treated on Site, will likely be discharged to the publicly owned treatment works (POTW). The Applicant and/or C.T. Male Associates will coordinate with the Town to obtain and complete any required permits for discharge of treated groundwater to their POTW system.

An alternate to discharge to the sewer system would be on-site discharge under a NYSDEC SPDES Permit Equivalent Requirements. If deemed necessary, C.T. Male Associates will coordinate providing the paperwork necessary for approval from NYSDEC.

### **6.3 Asbestos Notifications**

Depending on the type and quantity of asbestos containing materials, if any, within the buildings planned for demolition, there may be State and Federal notifications which will be handled by the Asbestos Abatement Contractor

## **7.0 SITE RESTORATION**

### **7.1 General**

The Site will be restored upon completion of work in accordance with the plans and specifications for new construction previously approved by the Town of New Windsor. Initial grading of the Site will be minimal but additional excavation to remove petroleum contaminated soils will be necessary. Those areas will be restored with an imported backfill and graded to match design grades for the parking lot. Outside the paved parking areas, a surface cover system will be placed over the balance of the Site.

## **8.0 REPORTING AND CERTIFICATE OF COMPLETION**

### **8.1 Final Report**

Upon completion of the remedial action, a Final Engineering Report (FER) will be prepared summarizing the work completed, changes to the RAWP, and summarizing any confirmation sampling. The NYSDEC general template for preparation of FER's (March 2011) will be used. The FER will be certified by a registered professional engineer in accordance with DER-10.

### **8.2 Certificate of Completion**

A Certificate of Completion will be issued by NYSDEC after the FER and Environmental Easement (including the SMP) are reviewed and approved by NYSDEC, and the Environmental Easement is filed with the County Clerk.

## **9.0 PRE-REMEDIAL DESIGN INVESTIGATION**

It is the intention of the Applicant to perform the pre-remedial design investigation after learning of acceptance in the program but possibly prior to the completion of the public comment period. This is to advance the schedule and not delay the start of construction that is desired to start in the fall of 2014.

### **9.1 Surface Soil Sampling**

The site is 11.8 acres with the majority of it being covered by a 104,000 square foot building and surrounding pavement covered parking and driveways. This translates to approximately 200,000 square feet of vegetated surface cover which shall be sampled for chemical analysis. Using a 1 surface soil sample every 10,000 square feet, this translates into about twenty samples. The locations of the proposed surface soil samples are shown on Figure 4: Remedial Action Implementation Plan.

The surface soil samples will be collected from the 0 to 2 inch depth beneath the root zone of surface vegetation. If no vegetation, the sample will be collected right at the surface. The samples will be analyzed for the Target Compound List (TCL) of volatile organic compounds, semi-volatile organic compounds, pesticides, PCBs and the Target Analyte List (TAL) of metals.

If the surface soil sampling results for the 0 to 2 inches below grade meet applicable soil cleanup objectives, a subsequent sampling event will need to be performed in order for the surficial 12 inches of soil to qualify as the surface cover system. The sampling shall be performed of the 6 to 12 inch below grade interval. However, the specific frequency of this sampling will be determined once areas of the site where the 0 to 2 inches are deemed acceptable. The frequency and parameters of the additional sampling will be presented to NYSDEC for approval prior to implementation.

## **9.2 Monitoring Well Installation & Gauging**

### **9.2.1 Installation**

There are a number of monitoring wells installed on-site already. There does appear to be a data gap along the western property between the building and River Road. To determine if there are any impacts coming from upgradient parcels, three (3) additional monitoring wells shall be installed using a direct push technology (i.e., Geoprobe). The locations of the proposed monitoring wells are shown on Figure 4: Remedial Action Implementation Plan.

### **9.2.2 Tidal Influence Gauging**

According to New York Tide Chart for Newburgh, the Hudson River experiences up to three (3) feet in change on the water level. The site is located close enough to the Hudson River to experience the effects of tidal influence, although this has not been investigated. Applicable NYSDEC DER-10 guidance requires that if the area is influenced tidally, synoptic groundwater and surface water levels should be collected continuously for two tidal cycles during a fair weather sampling event. NYSDEC has mandated that this be performed and a 24 hour period should capture two cycles.

A few monitoring wells will be the target of collecting water levels to determine the level of tidal influence, if any. The water levels will be collected using data-logging pressure transducers that are temporarily installed in a well and continuously measure the pressure of the water column above the transducer and records the difference in pressure. This provides a positive or negative change from the base water level at the time of installation. If there is not sufficient water column within the well, this water level monitoring may not be possible.

Given the specialize nature of the equipment, it would not be cost effective to monitoring every well on-site at the same time. As such, groups of wells on-site will be monitored over a period of three (3) days while other work is occurring on-site and not necessarily sequential days. This will give an overview of potential water level changes from the river. The following groups of wells will be monitored for 24 hours with a pressure transducer.

- Test 1  
MW-1, MW-3 and MW-12
- Test 2  
MW-4, MW-5 and MW-6
- Test 3  
Surface Water Body, MW-9 and MW-10

### **9.3 Soil Vapor Sampling**

The existing building will be evaluated for impacts to indoor air quality. Since the site is impacted by petroleum related compounds, indoor air quality samples and sub-slab vapor samples will be obtained. A mitigation system will be designed to mitigate impacts to indoor air quality, if identified.

### **9.4 Waste Characterization Sampling**


Waste characterization is required to dispose of the petroleum impacted soil. The waste characterization can be performed of the soils in-place or after the soils have been excavated and temporarily stockpiled on-site. In order to pre-characterize the petroleum impacted soils, the Applicant may collect representative samples from the areas of concern. The frequency and parameters will be tailored to the disposal facility's requirements which is yet to be determined.

Reuse of existing asphalt will not be allowed as surface cover materials or on-site disposal. Because of the known composition of asphalt, waste characterization testing may not be performed provided the material is properly disposed of as asphalt. The waste characterization requirements will be set forth by the receiving facility. The receiving facility must be permitted to accept the spent asphalt. Disposal in a wetland or as residential clean fill will not be allowed. The disposal location shall be identified prior to transport for Applicant and, as necessary, NYSDEC approval.

**FIGURE 1**  
**SITE LOCATION MAP**







0200400  
FT  
1 inch = 200 feet

**Legend**

Lands of Littman Industries Inc & LOC Realty Corp

Orange County Tax Parcels







Project Number: 14.4337  
Data Source: NYSGIS Clearinghouse, BING  
Projection: State Plane NAD83 NYE (Feet)  
Date: June 25, 2014  
File: USAI\_Figure1\_11x17.mxd  
GIS: C Secor

**Map Note:** The locations and features depicted on this map are approximate and do not represent an actual field survey.

# Figure 1: Site Location Map

Town of New Windsor

Orange County, New York



**C.T. MALE ASSOCIATES**  
ENGINEERING, SURVEYING, ARCHITECTURE & LANDSCAPE ARCHITECTURE, D.P.C.  
50 CENTURY HILL DRIVE, LATHAM, NEW YORK 12110  
(518) 786-7400 \* FAX (518) 786-7299 \* WWW.CTMALE.COM  
FOUNDED IN 1910



**FIGURE 2**  
**SAMPLING LOCATIONS MAP**



0

150

300

FT

1 inch = 150 feet

Monitoring Well

Soil Boring

Test Pit

Lands of Littman Industries Inc & LOC Realty Corp

Orange County Tax Parcels

Project Number: 14.4337

Data Source: NYSGIS Clearinghouse, BING

Projection: State Plane NAD83 NYE (Feet)

Date: June 25, 2014

File: USAI\_Figure2\_11x17.mxd

GIS: C Secor

Map Note: The locations and features depicted on this map are approximate and do not represent an actual field survey.

Figure 2: Sampling Location Map

Town of New Windsor

Orange County, New York

FOUNDED IN 1910

C.T. MALE ASSOCIATES

ENGINEERING, SURVEYING, ARCHITECTURE & LANDSCAPE ARCHITECTURE, D.P.C

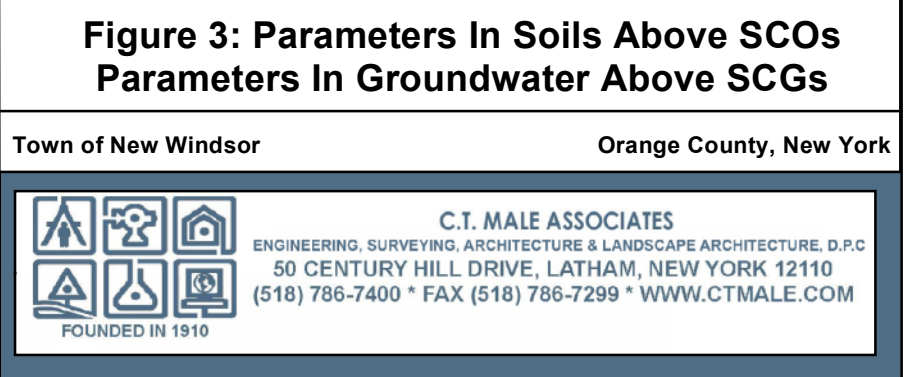
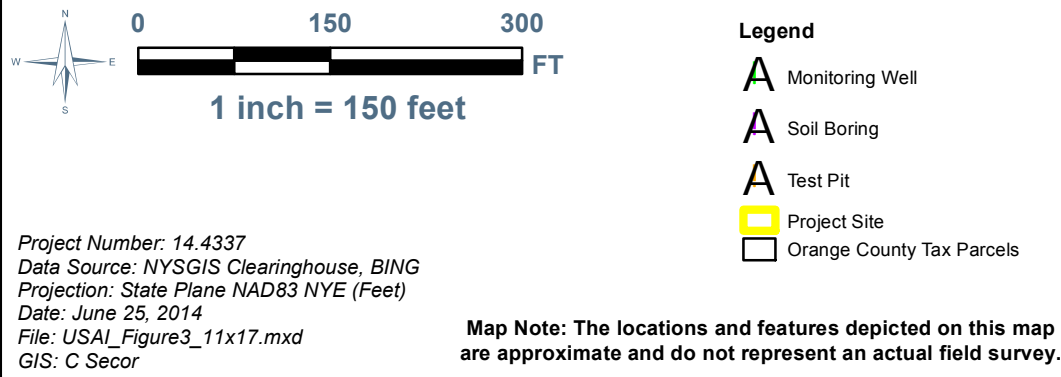
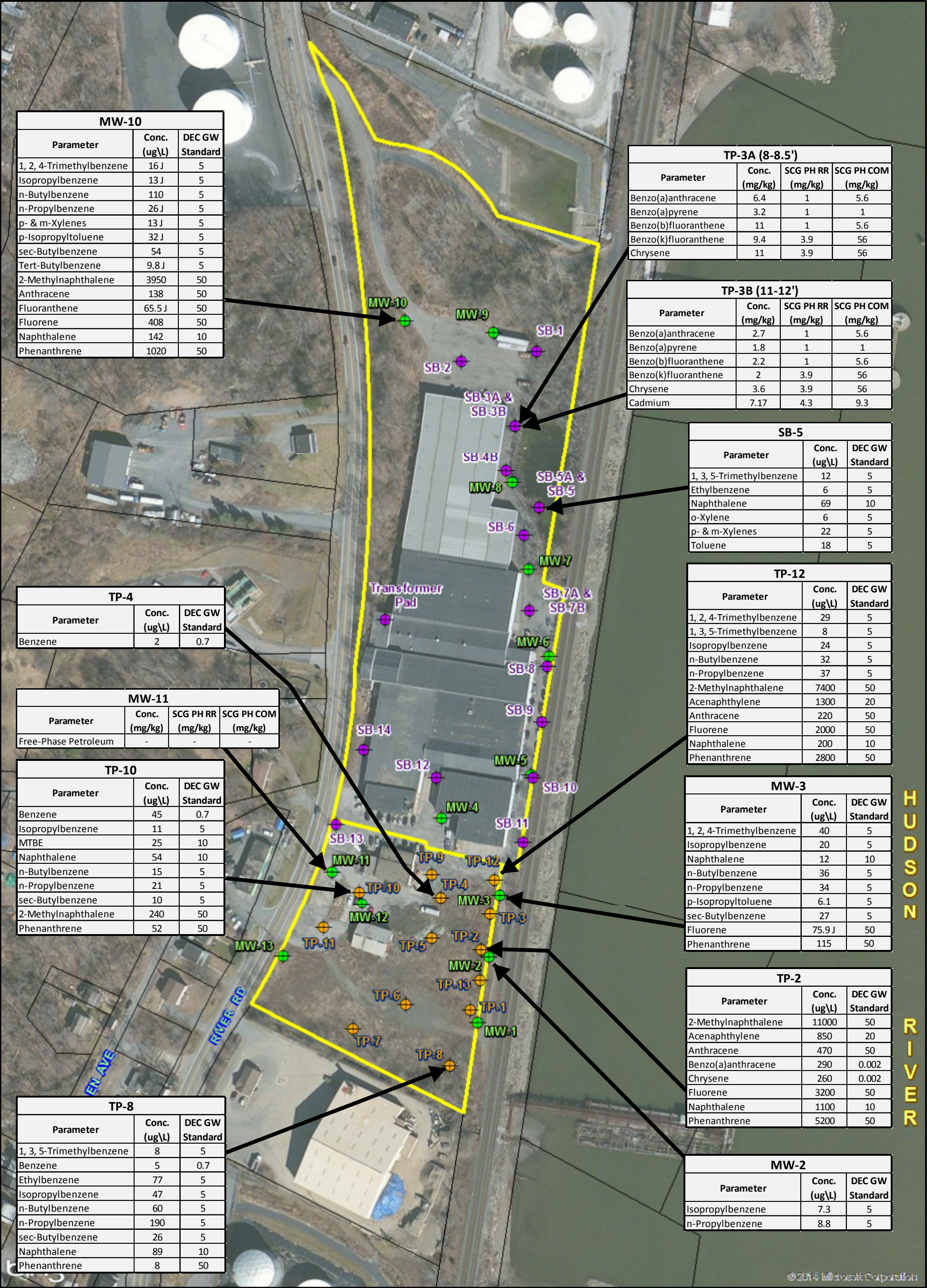
50 CENTURY HILL DRIVE, LATHAM, NEW YORK 12110

(518) 786-7400 \* FAX (518) 786-7299 \* WWW.CTMALE.COM

**FIGURE 3**

**PARAMETERS IN SOIL IN SOIL ABOVE SCOS AND  
PARAMETERS IN GROUNDWATER ABOVE SCGS**







**FIGURE 4**

**REMEDIAL ACTION IMPLEMENTATION PLAN**







**FIGURE 5**  
**PRE-REMEDIAL DESIGN INVESTIGATION**

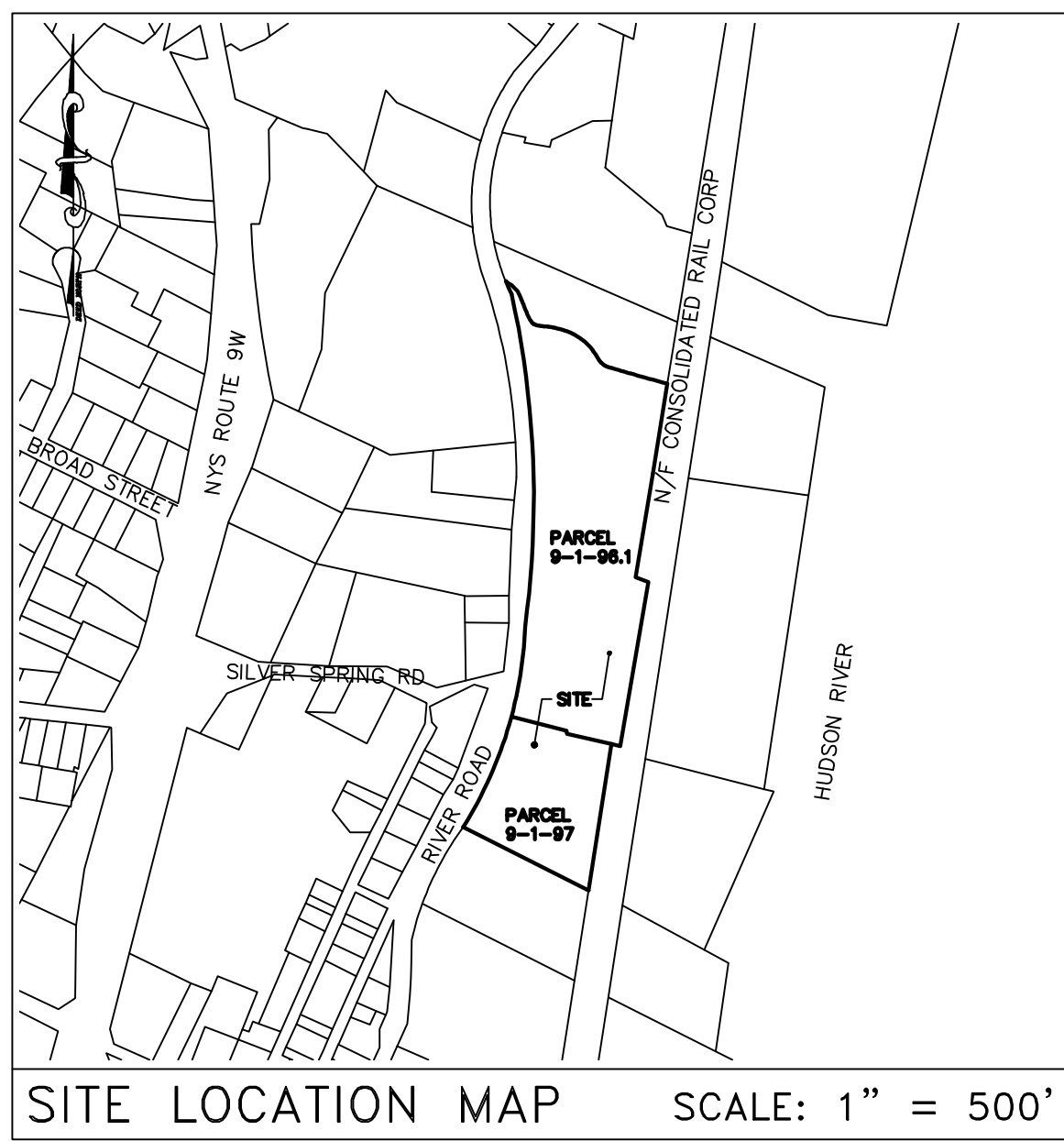






**APPENDIX A**  
**SITE DEVELOPMENT PLANS**





PROJECT INFORMATION:	
PROJECT OWNER:	UTMAN INDUSTRIES, INC. 1126 RIVER ROAD, NEW WINDSOR NY 12553
APPLICANT:	USAI, LLC, 1126 RIVER ROAD, NEW WINDSOR NY 12553
PROJECT ENGINEER:	HUDSON LAND DESIGN P.C., 174 MAIN STREET, BEACON NY 12508
PROJECT SURVEYOR:	TEC LAND SURVEYING, P.C., 174 MAIN STREET, BEACON NY 12508
PARCEL LOCATION:	1126 RIVER ROAD, NEW WINDSOR NY
TAX PARCEL ID:	9-1-96.1 & 9-1-96.2
PARCEL AREA:	±11.8-ACRES (PARCEL 96.1: ±8.9 ACRES; PARCEL 97: ±2.9 ACRES)
WATER SUPPLY:	MUNICIPAL
SEWAGE DISPOSAL:	MUNICIPAL

#### MAP REFERENCES:

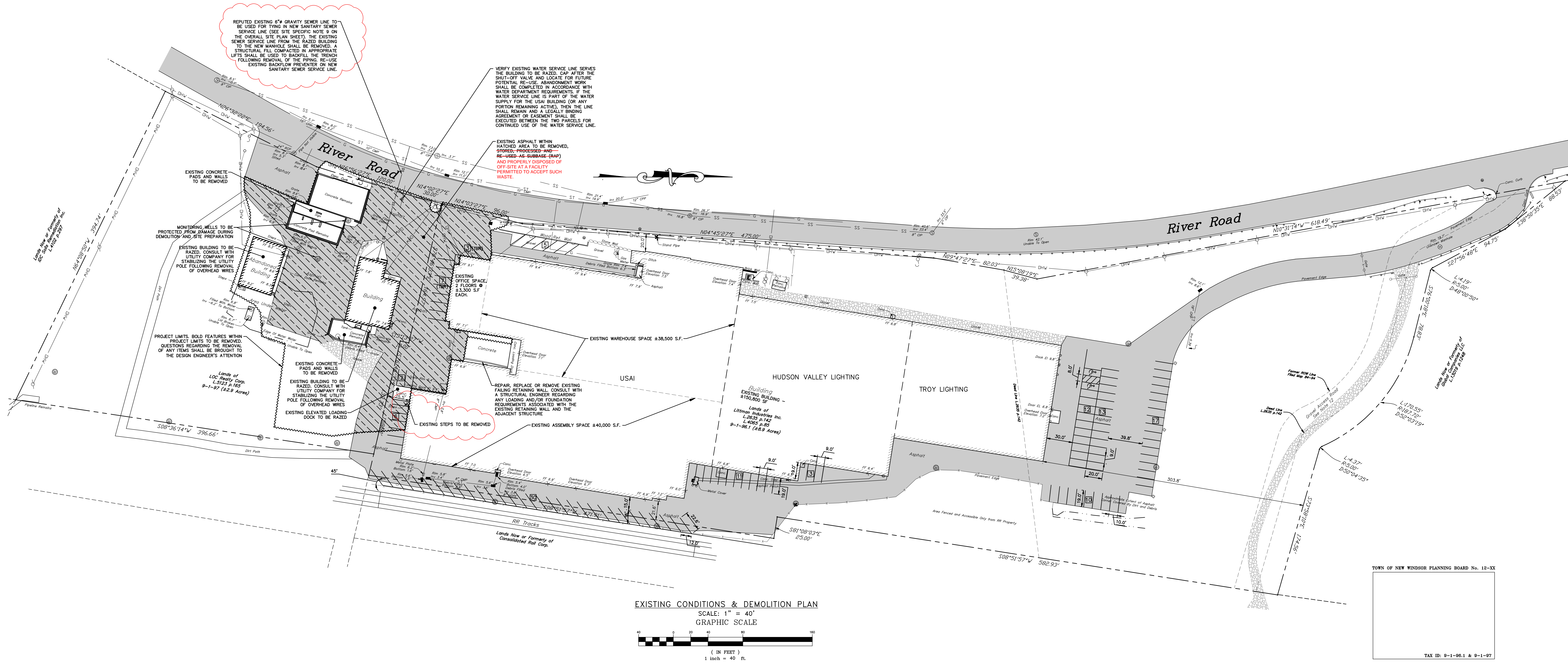
- EXISTING FEATURES AS SHOWN ON THIS SITE PLAN TAKEN FROM A MAP PREPARED BY TEC LAND SURVEYING, P.C. ENTITLED "SURVEY OF PROPERTY PREPARED FOR UTMAN INDUSTRIES INC.", DATED MARCH 15, 2012.
- EXISTING PARKING SPACES SHOWN ARE BASED ON THE TOWN OF NEW WINDSOR PLANNING BOARD APPROVAL OF OCTOBER 26, 1994 FROM A PLAN ENTITLED "SITE PLAN PHASES 1 THROUGH 3: NEW ADDITION FOR LIGHTING OF CORNWALL, INC." AS PREPARED BY SHAW ENGINEERING DATED MARCH 1, 1994 WITH A FINAL REVISION DATE OF MAY 31, 1994. THE PARKING LAYOUT PROVIDED ON THE APPROVED SITE PLAN WAS APPLIED TO THE UPDATED SURVEY TO GENERALLY SHOW THE LOCATION OF THE PREVIOUSLY APPROVED PARKING SPACES.

#### SCHEDULE OF REGULATIONS PLANNED INDUSTRIAL (PI) ZONING DISTRICT

PARAMETER	REQUIREMENT
LOT AREA:	40,000 SQUARE FEET MIN
LOT WIDTH:	150 FEET MINIMUM
FRONT YARD DEPTH:	50 FEET MINIMUM
SIDE YARD/BOTH YARDS:	15/40 FEET MINIMUM
REAR YARD DEPTH:	20 FEET MINIMUM
STREET FRONTAGE:	NA
MAX. BUILDING HEIGHT:	12' PER FOOT TO NEAREST PL
FLOOR AREA RATIO:	0.8
MIN LIVABLE FLOOR AREA:	NA
DEVELOPMENTAL COVERAGE:	85%

#### DEMOLITION NOTES:

- THE CONTRACTOR SHALL PERFORM A UTILITIES CALL-OUT PRIOR TO CONSTRUCTION TO VERIFY ALL UNDERGROUND UTILITY LOCATIONS BY CONTACTING UTPO @ 1-800-962-7962.
- PRIOR TO DEMOLISHING ANY BUILDINGS/STRUCTURES, THE CONTRACTOR SHALL PERFORM A PRE-DEMOLITION SURVEY IN ACCORDANCE WITH LOCAL, STATE AND/OR FEDERAL REGULATIONS GOVERNING THE DISPOSAL OF SOLID WASTE. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS AND APPROVALS BY THE AUTHORITY HAVING JURISDICTION. ALL DEBRIS RESULTING FROM DEMOLITION ACTIVITIES SHALL BE DISPOSED OF OFF-SITE AT A FACILITY APPROVED TO RECEIVE THE DEBRIS.
- CONFORM TO APPLICABLE CODE FOR DEMOLITION OF STRUCTURES, SAFETY OF ADJACENT STRUCTURES, DUST CONTROL, RUNOFF CONTROL, AND HAULING, DISPOSAL AND STORAGE OF DEBRIS.
- PROVIDE, ERECT, AND MAINTAIN TEMPORARY BARRIERS AND SECURITY DEVICES.
- MAINTAIN EXISTING UTILITIES TO REMAIN IN SERVICE AND PROTECT THEM AGAINST DAMAGE DURING SELECTIVE DEMOLITION OPERATIONS. DO NOT INTERRUPT EXISTING UTILITIES SERVING OPERATING FACILITIES, EXCEPT WHEN AUTHORIZED IN WRITING BY OWNER AND AUTHORITIES HAVING JURISDICTION.
- NOTIFY ADJACENT OWNERS OF WORK THAT MAY AFFECT THEIR PROPERTY, POTENTIAL NOISE, UTILITY OUTAGE, OR OBSTRUCTION. COORDINATE WITH OWNER.
- PREVENT MOVEMENT OR SETTLEMENT OF ADJACENT STRUCTURES. PROVIDE BRACING AND SHORING AS NECESSARY.
- LOCATE AND IDENTIFY ALL EXISTING UTILITIES WITHIN THE CONSTRUCTION AREA. DISCONNECT AND SEAL OR CAP OFF UTILITY SERVICES THAT WILL BE AFFECTED BY THIS PROJECT. NOTIFY AFFECTED UTILITY COMPANIES BEFORE STARTING WORK AND COMPLY WITH THEIR REQUIREMENTS. VERIFY THAT UTILITIES HAVE BEEN DISCONNECTED AND CAPPED.
- DEMOLISH AND REMOVE COMPONENTS IN AN ORDERLY AND CAREFUL MANNER.
- PROTECT EXISTING FEATURES THAT ARE NOT TO BE DEMOLISHED.
- CONDUCT OPERATIONS WITH MINIMUM INTERFERENCE TO PUBLIC OR PRIVATE ACCESSSES.
- MAINTAIN INGRESS AND EGRESS AT ALL TIMES. DO NOT CLOSE OR OBSTRUCT ROADWAYS, OR SIDEWALKS WITHOUT PERMITS.
- CEASE OPERATIONS IMMEDIATELY IF ADJACENT STRUCTURES APPEAR TO BE IN DANGER. NOTIFY AUTHORITY HAVING JURISDICTION.
- ROUGH GRADE AND COMPACT AREAS AFFECTED BY DEMOLITION TO MAINTAIN SITE GRADES AND CONTOURS.
- FIELD VERIFY EXISTING CONDITIONS AND CORRELATE WITH REQUIREMENTS INDICATED ON DEMOLITION PLAN TO DETERMINE EXTENT OF SELECTIVE DEMOLITION REQUIRED.
- MAINTAIN EXISTING UTILITIES TO REMAIN IN SERVICE AND PROTECT THEM AGAINST DAMAGE DURING SELECTIVE DEMOLITION OPERATION.
- CONDUCT DEMOLITION OPERATIONS AND REMOVE DEBRIS TO ENSURE MINIMUM INTERFERENCE WITH SELECTIVE DEMOLITION OPERATIONS.
- CONDUCT DEMOLITION OPERATIONS TO PREVENT INJURY TO PEOPLE AND DAMAGE TO ADJACENT BUILDINGS AND FACILITIES TO REMAIN. ENSURE SAFE PASSAGE OF PEOPLE AROUND SELECTIVE DEMOLITION AREA.
- USE WATER MIST, TEMPORARY ENCLOSURES AND OTHER SUITABLE METHODS TO LIMIT THE SPREAD OF DUST AND DIRT. COMPLY WITH GOVERNING ENVIRONMENTAL PROTECTION REGULATIONS. DO NOT USE WATER WHEN IT MAY DAMAGE EXISTING CONSTRUCTION, SUCH AS ICE, FLOODING, AND POLLUTION.
- REMOVE AND TRANSPORT DEBRIS IN A MANNER THAT WILL PREVENT SPILLAGE ON ADJACENT SURFACES AND AREAS.
- CLEAN ADJACENT STRUCTURES AND IMPROVEMENTS OF DUST, DIRT AND DEBRIS CAUSED BY SELECTIVE DEMOLITION OPERATIONS. RETURN ADJACENT AREAS TO CONDITION EXISTING BEFORE START OF SELECTIVE DEMOLITIONS.
- PROMPTLY DISPOSE OF DEMOLISHED MATERIALS. DO NOT ALLOW DEMOLISHED MATERIALS TO ACCUMULATE ON-SITE. DO NOT BURN OR BURY DEMOLISHED MATERIALS ON-SITE.



- DRAWING INDEX:**
- SHEET 1: EXISTING CONDITIONS & DEMOLITION PLAN
  - SHEET 2: OVERALL SITE PLAN
  - SHEET 3: PARTIAL SITE PLAN
  - SHEET 4: GRADING AND EROSION CONTROL PLAN
  - SHEET 5: LIGHTING AND LANDSCAPING PLAN
  - SHEET 6: CONSTRUCTION DETAILS

#### OWNER'S CONSENT:

THE UNDERSIGNED OWNER OF THE PROPERTY HEREON STATES THAT HE/SHE IS FAMILIAR WITH THIS MAP, ITS CONTENTS AND ITS LEGENDS AND HEREBY CONSENTS TO ALL SAID TERMS AND CONDITIONS AS STATED HEREON.

UTMAN INDUSTRIES INC.

DATE



DRAWN BY: DGK		CHECKED BY: JDB	JOB NO.:	2011:020
REVISIONS:				
NO.	DATE	DESCRIPTION		BY
1	1/22/13	PER WORKSHOP & CLIENT REVISIONS		DGK
2	4/12/13	PER CLIENT REVISIONS		DGK
3	9/27/13	FOR FINAL SIGNATURES		DGK

#### EXISTING CONDITIONS & DEMOLITION PLAN

### USAI, LLC

1126 RIVER ROAD  
TOWN OF NEW WINDSOR  
ORANGE COUNTY, NEW YORK  
TAX PARCELS 9-1-96.1 & 9-1-97  
SCALE: 1" = 40'  
OCTOBER 2, 2012



HUDSON LAND DESIGN  
PROFESSIONAL ENGINEERING P.C.  
174 MAIN STREET  
BEACON, NEW YORK 12508  
PH: 845-440-6926  
F: 845-440-6837



JON D. BODENDORF, P.E.  
NYS LICENSE NO. 070645  
DANIEL G. KOEHLER, P.E.  
NYS LICENSE NO. 082716

SHEET: 1 OF 6



PROJECT INFORMATION:		
PARCEL OWNER:	USAI, LLC, 1126 RIVER ROAD NEW WINDSOR NY 12553	
PROJECT ENGINEER:	HUDSON LAND DESIGN P.C., 174 MAIN STREET, BEACON NY 12508	
PROJECT SURVEYOR:	TEC LAND SURVEYING, P.C., 176 MAIN STREET, BEACON NY 12508	
PARCEL LOCATION:	1126 RIVER ROAD, NEW WINDSOR NY	
TAX PARCEL ID:	9-1-96.1 & 9-1-97	
PARCEL AREA:	411.8 ACRES (PARCEL 96.1: 48.9 ACRES; PARCEL 97: 32.9 ACRES)	
WATER SUPPLY:	MUNICIPAL	
SEWAGE DISPOSAL:	MUNICIPAL	

### MAP REFERENCES:

1. EXISTING FEATURES AS SHOWN ON THIS SITE PLAN TAKEN FROM A MAP PREPARED BY TEC LAND SURVEYING, P.C. ENTITLED "SURVEY OF PROPERTY PREPARED FOR LITMAN INDUSTRIES INC.", DATED MARCH 15, 2012.  
2. EXISTING PARKING SPACES SHOWN ARE BASED ON THE TOWN OF NEW WINDSOR PLANNING BOARD APPROVAL OF OCTOBER 26, 1994 FROM A PLAN ENTITLED "SITE PLAN PHASES 1 THROUGH 3: NEW ADDITION FOR LITMAN OF CORNWALL, INC." AS PREPARED BY SHAW ENGINEERING DATED MARCH 2, 1994 WITH A FINAL REVISION DATE OF MAY 31, 1994. THE PARKING LAYOUT PROVIDED ON THE APPROVED SITE PLAN WAS APPLIED TO THE UPDATED SURVEY TO SHOW THE LOCATION OF THE PREVIOUSLY APPROVED PARKING SPACES.

### PARKING NOTES:

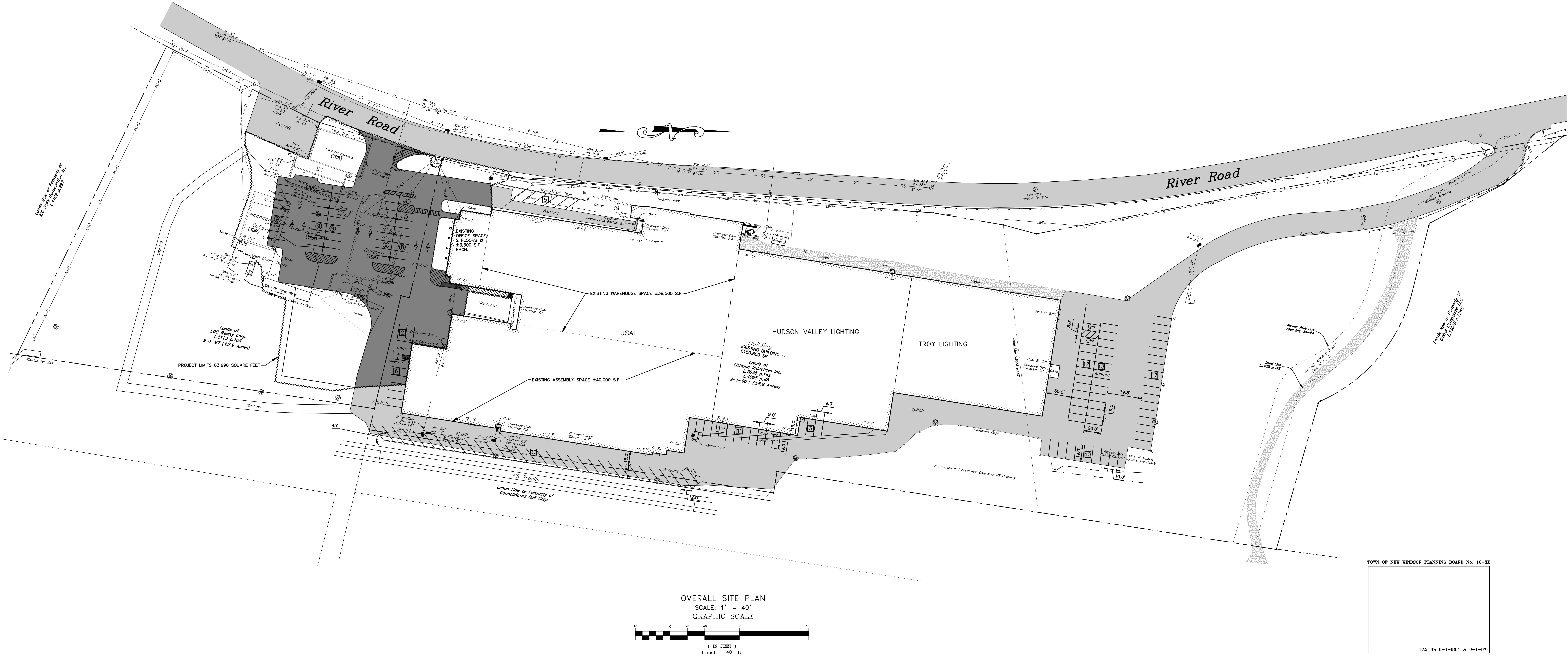
1. PER THE 1994 SITE PLAN (SEE MAP REFERENCE 2), THE PARKING PROPOSED AS PART OF THAT APPLICATION WAS SPECIFICALLY FOR PURPOSES OF SERVING THE NEW WAREHOUSE SPACES, AND THAT ANY PARKING DEFICIENCY WOULD BE TREATED AS A PRE-EXISTING NON-CONFORMING CONDITION. IT IS THE INTENT OF THIS PROPOSAL TO SHOW THAT THERE IS A NET INCREASE IN PARKING WHILE THERE IS NO CHANGE IN THE AREA OF ANY SPECIFIC USE ON THE SITE, NOT TO SHOW THAT THE REQUIRED PARKING PER CODE WILL BE MET BY THIS MINOR SITE MODIFICATION. THE ADDITIONAL PROPOSED PARKING WILL OFF-SET SOME OF THE PRE-EXISTING NON-CONFORMING PARKING DEFICIENCY.  
2. THERE ARE NO ADDITIONAL PARKING SPACES REQUIRED FOR THE INTERIOR RENOVATIONS. THE MAJORITY OF THE REVISED OFFICE SPACE WILL BE USED FOR A TRAINING ROOM, LOUNGE ROOM, BREAK ROOM, AND RECEPTION. USAI ANTICIPATES A MINOR INCREASE IN EMPLOYEES. THE PROPOSAL CALLS FOR REMOVAL OF 10 EXISTING PARKING SPACES, AND CONSTRUCTION OF 44 PARKING SPACES (A NET INCREASE OF 34 PARKING SPACES), WHICH THE APPLICANT BELIEVES WILL BETTER SERVE THEIR PURPOSE.  
3. THERE ARE NO PARKING SPACES REQUIRED FOR PARCEL 9-1-97 AS A RESULT OF THE DEMOLITION OF THE TWO EXISTING BUILDINGS LOCATED ON THIS PARCEL.  
4. THE 44 PROPOSED PARKING SPACES AND MAIN ENTRANCE TO PARCEL 9-1-96.1 ARE LOCATED ON THE PARCEL TO THE SOUTH (PARCEL 9-1-97). A CROSS-EASEMENT OR DEED RESTRICTION FOR THESE PROPOSED USES ON PARCEL 9-1-97 FOR THE BENEFIT OF THE BUILDING ON PARCEL 9-1-96.1 SHALL BE EXECUTED TO THE SATISFACTION OF THE TOWN ATTORNEY. THE CROSS-EASEMENT OR DEED RESTRICTION SHALL PROVIDE ACCESS RIGHTS AND A MINIMUM OF TEN PARKING SPACES RESERVED FOR PARCEL 9-1-96.1. THE TEN PARKING SPACE MINIMUM REPRESENTS THE NUMBER OF PREVIOUSLY APPROVED PARKING SPACES LOST AS A RESULT OF THIS MINOR SITE PLAN AMENDMENT. THE LEGALLY BINDING DOCUMENT SHALL INCLUDE LANGUAGE WITH REGARD TO ANY RESTRICTIONS FOR THE POTENTIAL FUTURE RE-DEVELOPMENT OF PARCEL 9-1-97 AND THE MAINTENANCE RESPONSIBILITIES OF THE TWO PARCEL OWNERS.

### GENERAL CONSTRUCTION NOTES:

1. THE CONTRACTOR SHALL PERFORM A UTILITIES CALL-OUT PRIOR TO CONSTRUCTION TO VERIFY ALL UNDERGROUND UTILITY LOCATIONS BY CONTACTING UTPO @ 1-800-962-7962.  
2. ANY UTILITY DESIGNS SHALL BE DEVELOPED IN COOPERATION WITH THE RESPECTIVE UTILITY COMPANIES.  
3. THE CONTRACTOR SHALL FIELD VERIFY THE SIZE, LOCATION, DEPTH AND CONDITION OF ALL UTILITIES AND REPORT ANY DISCREPANCIES TO THE ENGINEER. THE CONTRACTOR SHALL NOT ASSUME THAT ALL LOCATIONS AS SHOWN ON THE PLAN ARE CORRECT AND SHALL NOT ASSUME THAT THE LOCATION OF ALL UNDERGROUND FEATURES ARE SHOWN ON THIS PLAN.  
4. THE CONTRACTOR SHALL CONSTRUCT ALL IMPROVEMENTS AS SHOWN ON PLANS. ANY FIELD CONDITIONS THAT MAY RESULT IN A VARIATION FROM THE PLAN SET SHALL BE BROUGHT TO THE ENGINEERS ATTENTION IN WRITING. VARIATIONS FROM THE PLAN WITHOUT APPROVAL FROM THE ENGINEER WILL BE CONSIDERED DEFECTION.  
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ON-SITE OR OFF-SITE DAMAGES TO VEGETATION OR PROPERTY CAUSED BY HIS OPERATIONS. SUCH DAMAGES SHALL BE REPAIRED OR REPLACED AT THE CONTRACTORS COST TO THE SATISFACTION OF THE ENGINEER.  
6. THE CONTRACTOR SHALL SECURE ALL NECESSARY PERMITS PRIOR TO CONSTRUCTION.  
7. THE CONTRACTOR SHALL KEEP THE SITE IN A CLEAN AND ORDERLY MANNER.  
8. THE CONTRACTOR SHALL NOT INTERRUPT EXISTING ACCESS OR OPERATIONS FOR THE ADJACENT SITES.  
9. THE CONTRACTOR SHALL COORDINATE HIS EFFORTS WITH SITE MANAGEMENT TO ENSURE THAT NEITHER OPERATION IS UNNECESSARILY DELAYED. THIS MAY REQUIRE PHASING OF THE PROJECT AND/OR TEMPORARY SHUT DOWN OF THE BUILDING OPERATIONS.

### SITE SPECIFIC NOTES:

1. THE APPLICANT/OWNER IS PROPOSING TO RENOVATE A PORTION OF THE EXISTING BUILDING FOR OFFICE SPACE. THESE USES ARE CONSISTENT WITH CURRENT SITE USE. THE AREAS OF EACH USE ARE NOT BEING CHANGED. THE IMPROVEMENTS CONSIST OF THE INTERIOR RENOVATIONS, REMOVAL OF TWO EXISTING BUILDINGS ON THE SOUTH PARCEL (9-1-96.1), AND PROPOSED ROAD ACCESS AND/OR PARKING TO BENEFIT PARCEL 9-1-97 ON PARCEL 9-1-96.1.  
2. THESE PLANS HAVE BEEN PREPARED WITH THE INTENT OF OBTAINING AMENDED SITE PLAN APPROVAL FROM THE TOWN OF NEW WINDSOR PLANNING BOARD.  
3. THE EXISTING BUILDING FOOTPRINT WILL NOT CHANGE FROM THE PREVIOUSLY APPROVED SITE PLAN (TOWN OF NEW WINDSOR PROJECT 94-6, APPROVED BY THE PLANNING BOARD ON OCTOBER 26, 1994). THERE HAS RECENTLY BEEN AN INCREASE AND THERE ARE FUTURE ADDITIONAL ANTICIPATED INCREASES IN EMPLOYEES FROM THE CURRENT OPERATION.  
4. THE EXISTING STRUCTURES DENOTED AS "TBE" ON PARCEL 9-1-97 ARE TO BE REMOVED. THE SITE PROJECT LIMIT IS 463,690 SQUARE FEET. THE PROPOSED IMPERVIOUS AREA WITHIN THE PROJECT LIMITS AS A RESULT OF THE PROPOSAL, IS REDUCED BY APPROXIMATELY 9,941 SQUARE FEET (FROM 44,928 SQUARE FEET TO 34,987 SQUARE FEET).  
5. WHILE THE AREA OF THE PROJECT LIMITS EXCEEDS 1 ACRE (0.46 ACRES), THE ACTUAL SOIL DISTURBANCE IS LIMITED TO APPROXIMATELY 28,850 SQUARE FEET (0.66 ACRE). SINCE SOIL DISTURBANCE IS LIMITED TO 1 ACRE, AND THEIR PROJECT RESULTS IN THE REDUCTION IN IMPERVIOUS AREA, NO STORMWATER MANAGEMENT IS REQUIRED NOR PROPOSED.  
6. THERE IS 100-YEAR FLOODPLAIN ASSOCIATED WITH THE SITE.  
7. THERE ARE NO KNOWN STATE OR FEDERAL WETLANDS ASSOCIATED WITHIN 100 FEET OF THE PROPOSED LIMITS OF CONSTRUCTION.  
8. THERE ARE NO NEW WATER SERVICE CONNECTIONS PROPOSED. EXISTING WATER CONNECTIONS WILL BE UTILIZED. IF THE EXISTING WATER SERVICE LINE ON PARCEL 9-1-96.1 SERVES THE EXISTING BUILDING ON 9-1-97, THEN A LEGALLY BINDING AGREEMENT OR EASEMENT SHALL BE EXECUTED BETWEEN THE TWO PARCELS FOR CONTINUED USE OF THE WATER SERVICE LINE THROUGH PARCEL 9-1-96.1 TO BENEFIT PARCEL 9-1-97.  
9. A NEW GRAVITY LINE SERVING THE PROPOSED INTERIOR RENOVATIONS WILL BE RUN UNDER THE SLAB THAT WILL DISCHARGE INTO A NEW GRAVITY SEWER SERVICE LINE LOCATED ON THE WEST SIDE OF THE BUILDING THAT WILL DISCHARGE TO A NEW MANHOLE THAT WOULD BE PLACED ON AN EXISTING GRAVITY SEWER LINE THAT SERVED THE NORTHEAST BUILDING ON PARCEL 9-1-96.1 (WHICH IS TO BE RAZED AS PART OF THIS APPLICATION). THERE ARE NO ANTICIPATED MODIFICATIONS TO THE EXISTING PUMP STATION LOCATED ON THE EAST SIDE OF THE BUILDING. A LEGALLY BINDING AGREEMENT OR EASEMENT SHALL BE EXECUTED BETWEEN THE TWO PARCELS TO PERMIT USE OF THE SEWER LINE AND MANHOLE ON PARCEL 9-1-96.1 TO BENEFIT PARCEL 9-1-97.  
10. PROPOSED IMPROVEMENTS TO THE ENTRANCE WITHIN THE RIGHT-OF-WAY ON RIVER ROAD REQUIRES A HIGHWAY WORK PERMIT FROM THE NEW YORK STATE DEPARTMENT OF TRANSPORTATION. MILE MARKER LOCATED ON WEST SIDE OF RIVER ROAD ON AN EXISTING SIGN (SOUTHBOUND LANE).



SCHEDULE OF REGULATIONS & LOT CONFORMANCE TABLE PLANNED INDUSTRIAL (PI) ZONING DISTRICT		
PARAMETER	REQUIREMENT	PROVIDED
LOT AREA:	45,000 SQUARE FEET MIN	451,000 SQUARE FEET*
LOT WIDTH:	150 FEET MINIMUM	251.430 FEET
FRONT YARD DEPTH:	50 FEET MINIMUM	20.0 FEET**
SIDE YARD/BOTH YARDS:	15 & 40 FEET MINIMUM	30.2 & 303.8 FEET
REAR YARD DEPTH:	20 FEET MINIMUM	21.6 FEET
STREET FRONTAGE:	NA	NA
MAX BUILDING HEIGHT:	12' PER FOOT TO NEAREST PL	24 FEET**
FLOOR AREA RATIO:	0.6	0.30
MIN LIVABLE FLOOR AREA:	NA	NA
DEVELOPMENTAL COVERAGE:	85%	50%
*INCLUDES AREA OF BOTH PARCELS		
**PRE-EXISTING NON-CONFORMING		
NOTE: BUILDING SETBACKS FOR BUILDING LOCATED ON PARCEL 9-1-96.1		

### OWNER'S CONSENT:

THE UNDERSIGNED OWNER OF THE PROPERTY HEREON STATES THAT HE/SHE IS FAMILIAR WITH THIS MAP, ITS CONTENTS AND ITS LEGENDS AND HEREBY CONSENTS TO ALL SAID TERMS AND CONDITIONS AS STATED HEREON.

LITMAN INDUSTRIES, INC.

DATE



DRAWN BY: DGK		CHECKED BY: JDB	JOB NO.: 2011:020
REVISIONS:			
NO.	DATE	DESCRIPTION	BY
1	1/22/13	PER WORKSHOP & CLIENT REVISIONS	DGK
2	4/12/13	PER CLIENT REVISIONS	DGK
3	9/27/13	FOR FINAL SIGNATURES	DGK

TOWN OF NEW WINDSOR PLANNING BOARD NO. 12-XX

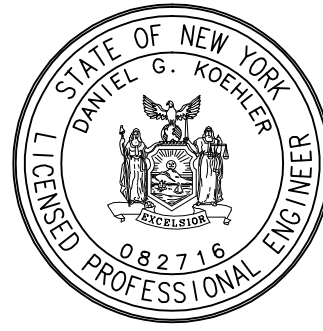
TAX ID: 9-1-96.1 & 9-1-97

## OVERALL SITE PLAN USAI, LLC

1126 RIVER ROAD  
TOWN OF NEW WINDSOR  
ORANGE COUNTY, NEW YORK  
TAX PARCELS 9-1-96.1 & 9-1-97  
SCALE: 1" = 40'  
OCTOBER 2, 2012



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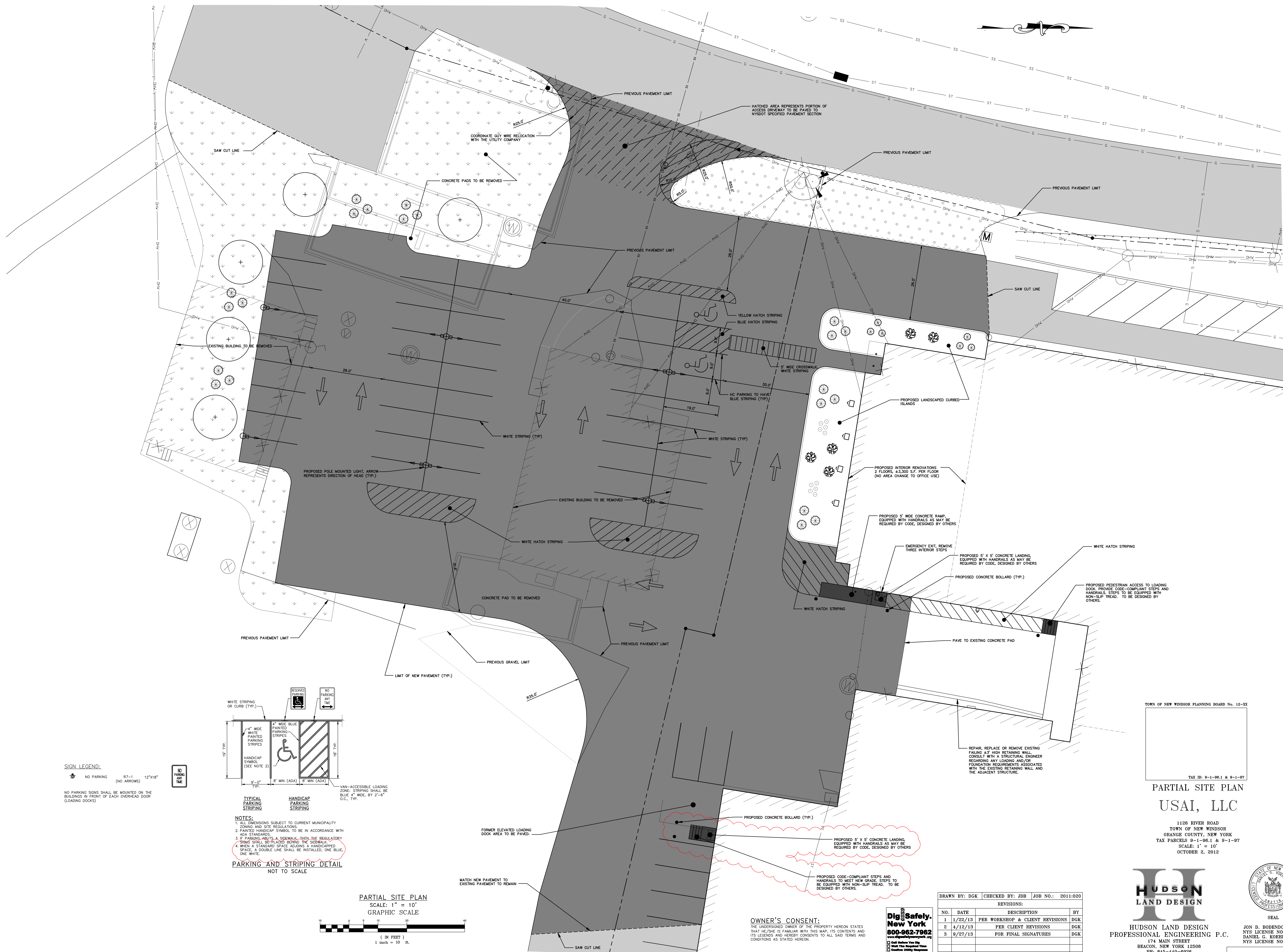


SEAL

JON D. BODENDORF, P.E.  
NYS LICENSE NO. 070845  
DANIEL G. KOEHLER, P.E.  
NYS LICENSE NO. 082716

SHEET: 2 OF 6



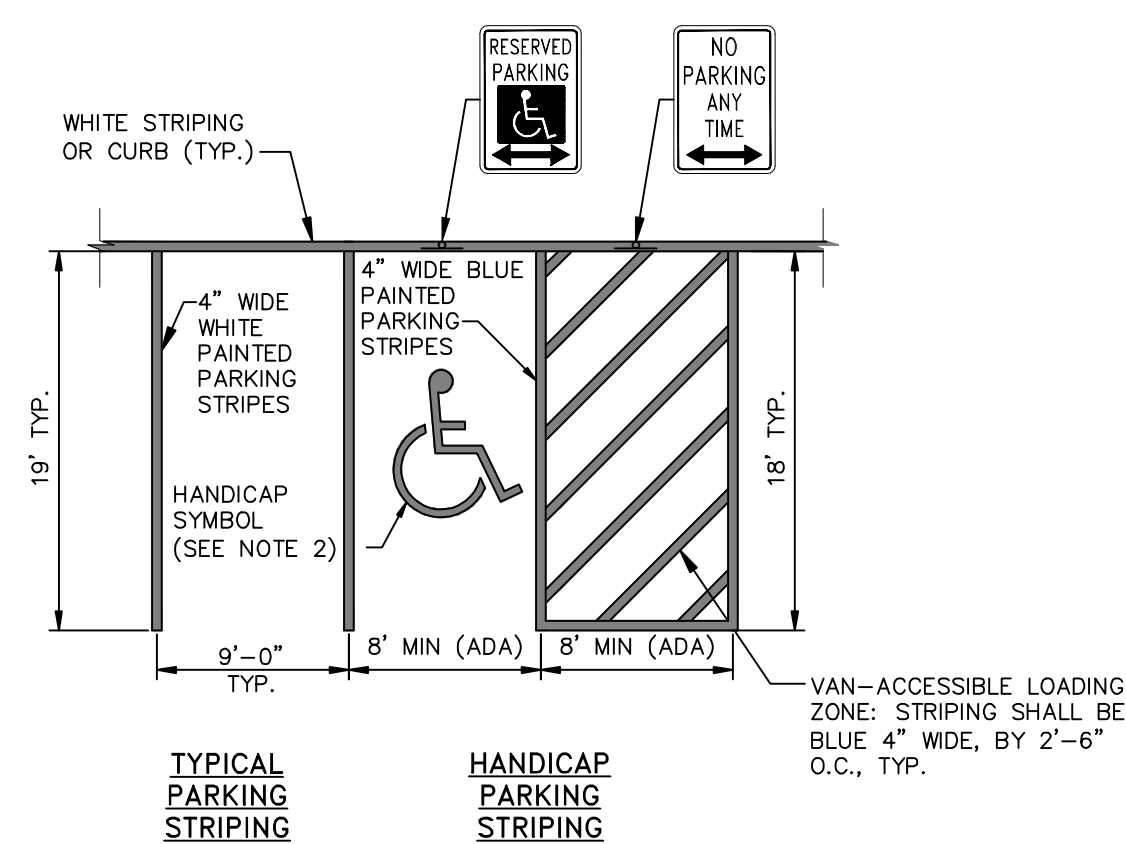


SIGN LEGEND:

NO PARKING  
R7-1 12"x18"  
(NO ARROWS)

NO PARKING SIGNS SHALL BE MOUNTED ON THE BUILDINGS IN FRONT OF EACH OVERHEAD DOOR (LOADING DOCKS)

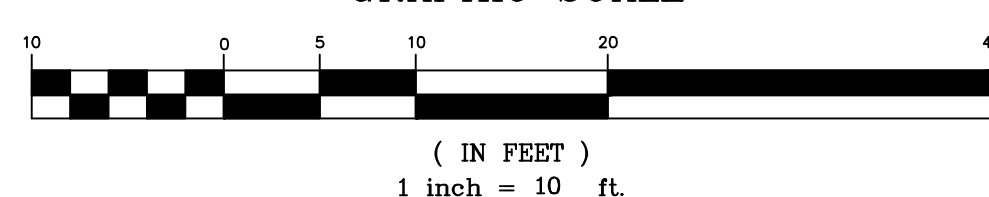
NO PARKING ANY TIME



- NOTES:
1. ALL DIMENSIONS SUBJECT TO CURRENT MUNICIPALITY ZONING AND SITE REGULATIONS
  2. PAINTED HANDICAP SYMBOL TO BE IN ACCORDANCE WITH ADA STANDARDS
  3. IF PARKING ADJACENT TO A SIDEWALK, THEN THE REGULATORY SIGNS SHALL BE PLACED BEHIND THE SIDEWALK
  4. WHEN A STANDARD SPACE ADJACENT TO A HANDICAPPED SPACE, A DOUBLE LINE SHALL BE INSTALLED, ONE BLUE, ONE WHITE

PARKING AND STRIPING DETAIL  
NOT TO SCALE

PARTIAL SITE PLAN  
SCALE: 1" = 10'  
GRAPHIC SCALE



OWNER'S CONSENT:

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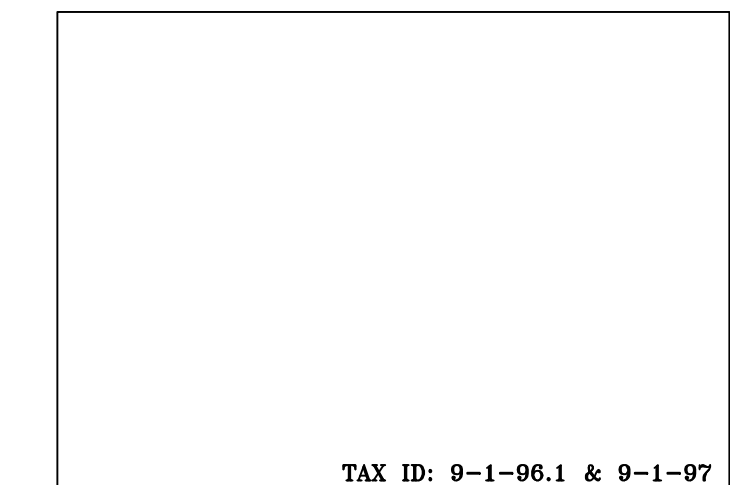
UTIMAN INDUSTRIES, INC.

DATE

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TOWN OF NEW WINDSOR PLANNING BOARD No. 12-XX



PARTIAL SITE PLAN  
USAI, LLC

1126 RIVER ROAD  
TOWN OF NEW WINDSOR  
ORANGE COUNTY, NEW YORK  
TAX PARCELS 9-1-96.1 & 9-1-97  
SCALE: 1" = 10'  
OCTOBER 2, 2012

**HUDSON**  
**LAND DESIGN**

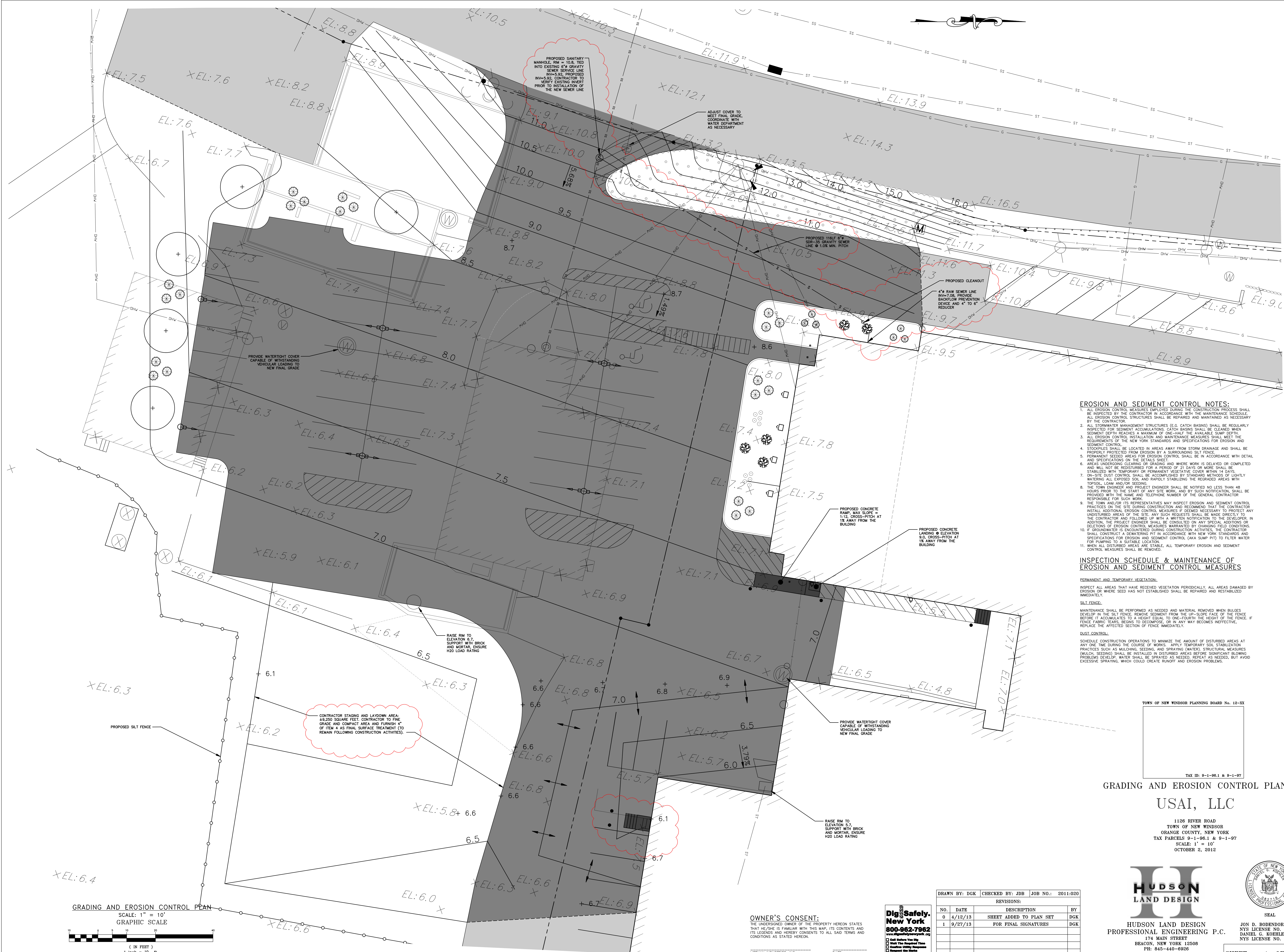
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SEAL

JON D. BODENDORF, P.E.  
NYS LICENSE NO. 076045  
DANIEL G. KOEHLER, P.E.  
NYS LICENSE NO. 082716





- EROSION AND SEDIMENT CONTROL NOTES:**
1. ALL EROSION CONTROL MEASURES EMPLOYED DURING THE CONSTRUCTION PROCESS SHALL BE INSPECTED BY THE CONTRACTOR IN ACCORDANCE WITH THE MAINTENANCE SCHEDULE. ALL EROSION CONTROL STRUCTURES SHALL BE REPAIRED AND MAINTAINED AS NECESSARY BY THE CONTRACTOR.
  2. ALL STORMWATER MANAGEMENT STRUCTURES (E.G. CATCH BASINS) SHALL BE REGULARLY INSPECTED FOR SEDIMENT ACCUMULATIONS. CATCH BASINS SHALL BE CLEANED WHEN SEDIMENT DEPTH REACHES A MAXIMUM OF ONE-HALF THE AVAILABLE DUMP DEPTH.
  3. ALL EROSION CONTROL INSTALLATION AND MAINTENANCE MEASURES SHALL MEET THE REQUIREMENTS OF THE NEW YORK STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL.
  4. STOCKPILES SHALL BE LOCATED IN AREAS AWAY FROM STORM DRAINAGE AND SHALL BE PROPERLY PROTECTED FROM EROSION BY A SURROUNDING SILT FENCE.
  5. PERMANENT SEEDING AREAS FOR EROSION CONTROL SHALL BE IN ACCORDANCE WITH DETAIL AND SPECIFICATIONS ON THE DETAILS SHEET.
  6. AREAS UNDERGOING CLEARING OR GRADING AND WHERE WORK IS DELAYED OR COMPLETED AND WILL NOT BE REDISTURBED FOR A PERIOD OF 21 DAYS OR MORE SHALL BE STABILIZED WITH TEMPORARY OR PERMANENT VEGETATIVE COVER WITHIN 14 DAYS.
  7. ON-SITE DUST CONTROL SHALL BE ACCOMPLISHED BY STANDARD METHODS OF LIGHTLY WATERING ALL EXPOSED SOIL AND RAPIDLY STABILIZING THE REPAIRED AREAS WITH TOPSOIL, LOAM AND/OR SEEDING.
  8. THE TOWN ENGINEER AND PROJECT ENGINEER SHALL BE NOTIFIED NO LESS THAN 48 HOURS PRIOR TO THE START OF ANY SITE WORK, AND BY SUCH NOTIFICATION, SHALL BE PROVIDED WITH THE NAME AND TELEPHONE NUMBER OF THE GENERAL CONTRACTOR RESPONSIBLE FOR SUCH WORK.
  9. THE TOWN AND/OR ITS REPRESENTATIVES MAY INSPECT EROSION AND SEDIMENT CONTROL PRACTICES ON THE SITE DURING CONSTRUCTION AND RECOMMEND THAT THE CONTRACTOR INSTALL ADDITIONAL EROSION CONTROL MEASURES IF DEEMED NECESSARY TO PROTECT ANY UNDISTURBED AREAS OF THE SITE. ANY SUCH REQUESTS SHALL BE MADE DIRECTLY TO THE CONTRACTOR AND FOLLOWED UP WITH A WRITTEN NOTIFICATION TO THE DEVELOPER. IN ADDITION, THE PROJECT ENGINEER SHALL BE CONSULTED ON ANY SPECIAL ADDITIONS OR DELETIONS OF EROSION CONTROL MEASURES WARRANTED BY CHANGING FIELD CONDITIONS.
  10. IF GROUNDWATER IS ENCOUNTERED DURING CONSTRUCTION ACTIVITIES, THE CONTRACTOR SHALL CONSTRUCT A Dewatering PIT IN ACCORDANCE WITH NEW YORK STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL (AKA SUMP PIT) TO FILTER WATER FOR PUMPING TO A SUITABLE LOCATION.
  11. WHEN ALL DISTURBED AREAS ARE STABLE, ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED.

**INSPECTION SCHEDULE & MAINTENANCE OF EROSION AND SEDIMENT CONTROL MEASURES**

**PERMANENT AND TEMPORARY VEGETATION:**

INSPECT ALL AREAS THAT HAVE RECEIVED VEGETATION PERIODICALLY. ALL AREAS DAMAGED BY EROSION OR WHERE SEED HAS NOT ESTABLISHED SHALL BE REPAIRED AND RESTABILIZED IMMEDIATELY.

**SILT FENCE:**

MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN BULGES DEVELOP IN THE SILT FENCE. REMOVE SEDIMENT FROM THE UP-SLOPE FACE OF THE FENCE BEFORE IT ACCUMULATES TO A HEIGHT EQUAL TO ONE-FOURTH THE HEIGHT OF THE FENCE. IF FENCE FABRIC TEARS, BEGINS TO DECOMPOSE, OR IN ANY WAY BECOMES INEFFECTIVE, REPLACE THE AFFECTED SECTION OF FENCE IMMEDIATELY.

**DUST CONTROL:**

SCHEDULE CONSTRUCTION OPERATIONS TO MINIMIZE THE AMOUNT OF DISTURBED AREAS AT ANY ONE TIME DURING THE COURSE OF WORKS. APPLY TEMPORARY SOIL STABILIZATION PRACTICES SUCH AS MULCHING, SEEDING, AND SPRAYING (WATERS). STRUCTURAL MEASURES (MULCH, SEEDING) SHALL BE INSTALLED IN DISTURBED AREAS BEFORE SIGNIFICANT BLOWING PROBLEMS DEVELOP. WATER SHALL BE SPRAYED AS NEEDED, REPEAT AS NEEDED, BUT AVOID EXCESSIVE SPRAYING, WHICH COULD CREATE RUNOFF AND EROSION PROBLEMS.

**GRADING AND EROSION CONTROL PLAN**

**USA, LLC**

1126 RIVER ROAD  
TOWN OF NEW WINDSOR  
ORANGE COUNTY, NEW YORK  
TAX ID: 9-1-96.1 & 9-1-97  
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**DANIEL G. KOEHLER, P.E.**  
NYS LICENSE NO. 076045  
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**OWNER'S CONSENT:**  
THE UNDERSIGNED OWNER OF THE PROPERTY HEREON, STATES THAT HE/SHE IS FAMILIAR WITH THIS MAP, ITS CONTENTS AND ITS LEGENDS AND HEREBY CONSENTS TO ALL SAID TERMS AND CONDITIONS AS STATED HEREON.

UTMAN INDUSTRIES, INC. DATE \_\_\_\_\_

**DRAWN BY:** DKG **CHECKED BY:** JDB **JOB NO.:** 2011-020

REVISIONS:			
NO.	DATE	DESCRIPTION	BY
0	4/12/13	SHEET ADDED TO PLAN SET	DKG
1	9/27/13	FOR FINAL SIGNATURES	DKG

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**TOWN OF NEW WINDSOR PLANNING BOARD NO. 12-XX**

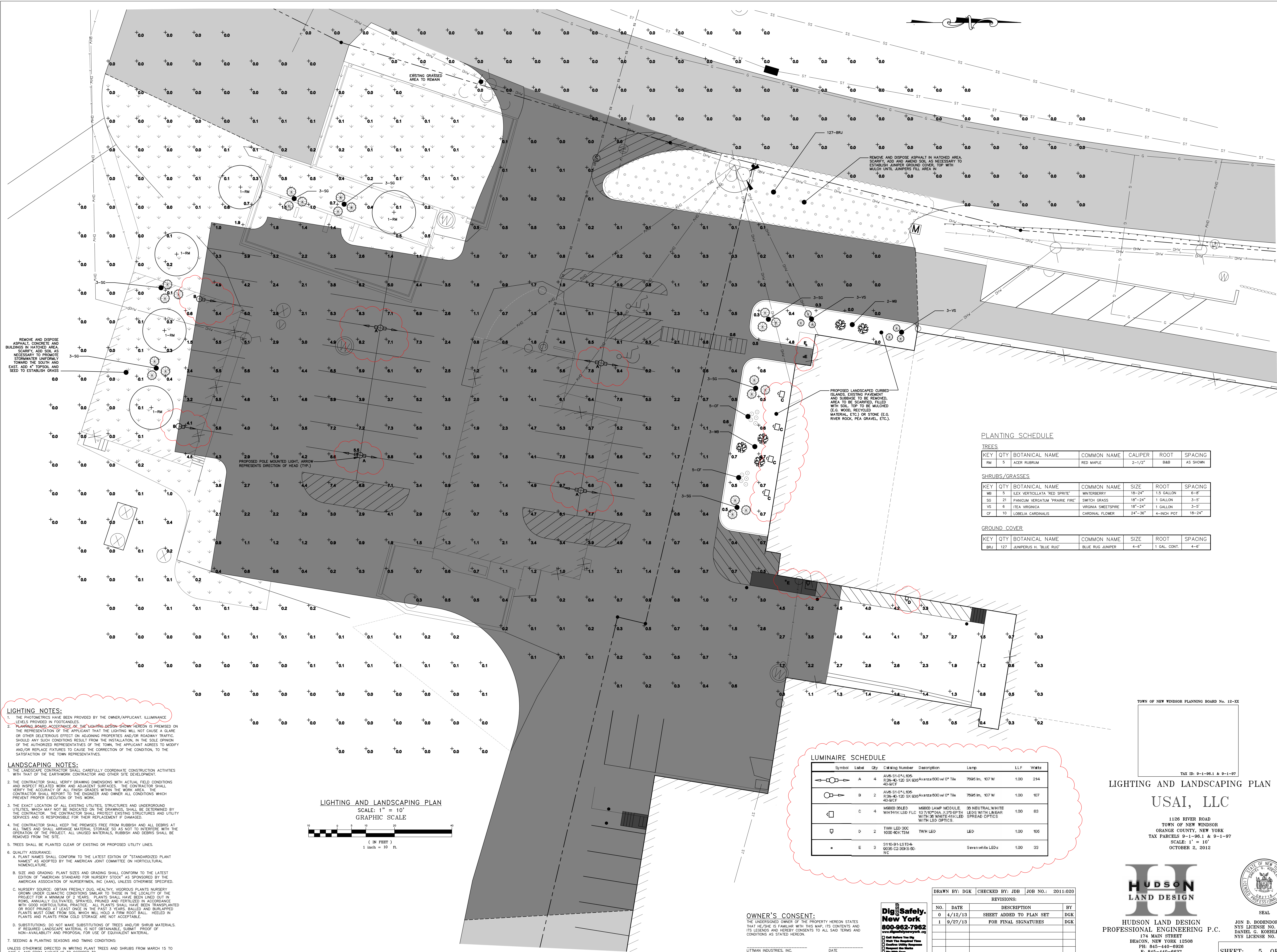
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**SEAL**

**JON D. BODENDORF, P.E.**  
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**SHEET: 4 OF 6**



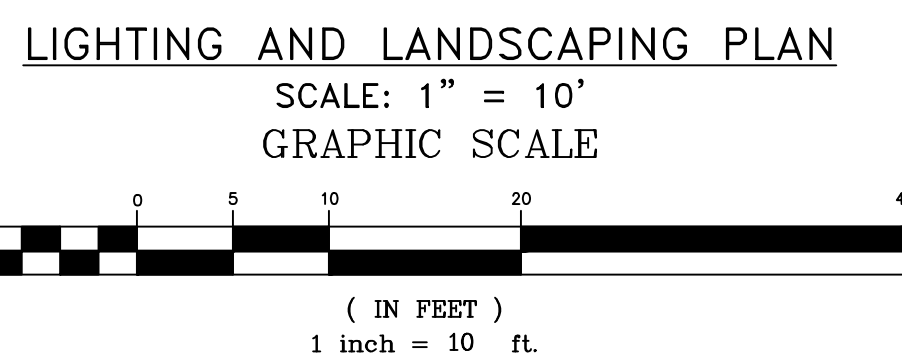


**LIGHTING NOTES:**

1. THE PHOTOMETRICS HAVE BEEN PROVIDED BY THE OWNER/APPLICANT. ILLUMINANCE LEVELS PROVIDED IN FOOTCANDLES.
2. PLANNING BOARD ACCEPTANCE OF THE LIGHTING DESIGN SHOWN HEREON IS PREMISED ON THE REPRESENTATION OF THE APPLICANT THAT THE LIGHTING WILL NOT CAUSE A GLARE OR OTHER DETRIMENTAL EFFECT ON ADJACENT PROPERTIES AND/OR ROADWAY TRAFFIC. SHOULD ANY SUCH CONDITIONS RESULT FROM THE INSTALLATION, IN THE SOLE OPINION OF THE AUTHORIZED REPRESENTATIVES OF THE TOWN, THE APPLICANT AGREES TO MODIFY AND/OR REPLACE FIXTURES TO CAUSE THE CORRECTION OF THE CONDITION, TO THE SATISFACTION OF THE TOWN REPRESENTATIVES.

**LANDSCAPING NOTES:**

1. THE LANDSCAPE CONTRACTOR SHALL CAREFULLY COORDINATE CONSTRUCTION ACTIVITIES WITH THAT OF THE EARTHWORK CONTRACTOR AND OTHER SITE DEVELOPMENT.
2. THE CONTRACTOR SHALL VERIFY DRAWING DIMENSIONS WITH ACTUAL FIELD CONDITIONS AND INSPECT RELATED WORK AND ADJACENT SURFACES. THE CONTRACTOR SHALL VERIFY THE ACCURACY OF ALL FINISH GRADES WITHIN THE WORK AREA. THE CONTRACTOR SHALL REPORT TO THE ENGINEER AND OWNER ALL CONDITIONS WHICH PREVENT PROPER EXECUTION OF THIS WORK.
3. THE EXACT LOCATION OF ALL EXISTING UTILITIES, STRUCTURES AND UNDERGROUND UTILITIES, WHICH MAY NOT BE INDICATED ON THE DRAWINGS, SHALL BE DETERMINED BY THE CONTRACTOR. THE CONTRACTOR SHALL PROTECT EXISTING STRUCTURES AND UTILITY SERVICES AND IS RESPONSIBLE FOR THEIR REPLACEMENT IF DAMAGED.
4. THE CONTRACTOR SHALL KEEP THE PREMISES FREE FROM RUBBISH AND ALL DEBRIS AT ALL TIMES AND SHALL ARRANGE MATERIAL STORAGE SO AS NOT TO INTERFERE WITH THE OPERATION OF THE PROJECT. ALL UNUSED MATERIALS, RUBBISH AND DEBRIS SHALL BE REMOVED FROM THE SITE.
5. TREES SHALL BE PLANTED CLEAR OF EXISTING OR PROPOSED UTILITY LINES.
6. QUALITY ASSURANCE:  
A. PLANT NAMES SHALL CONFORM TO THE LATEST EDITION OF "STANDARDIZED PLANT NAMES" AS ADOPTED BY THE AMERICAN JOINT COMMITTEE ON HORTICULTURAL NOMENCLATURE.  
B. SIZE AND GRADING: PLANT SIZES AND GRADING SHALL CONFORM TO THE LATEST EDITION OF "AMERICAN STANDARD FOR NURSERY STOCK" AS SPONSORED BY THE AMERICAN ASSOCIATION OF NURSERMEN, INC. (AAN), UNLESS OTHERWISE SPECIFIED.  
C. NURSERY SOURCE: OBTAIN FRESHLY GROWN, HEALTHY, VIGOROUS PLANTS NURSERY GROWN UNDER CLIMATIC CONDITIONS SIMILAR TO THOSE IN THE LOCALITY OF THE PROJECT FOR A MINIMUM OF 2 YEARS. PLANTS SHALL HAVE BEEN LINED OUT IN ROWS, ANNUALLY CULTIVATED, SPRAYED, PRUNED AND FERTILIZED IN ACCORDANCE WITH GOOD HORTICULTURAL PRACTICES. ALL PLANTS SHALL HAVE BEEN TRANSPORTED OR ROOT PRUNED AT LEAST ONCE IN THE PAST 3 YEARS. BALLED AND BURLAPPED PLANTS MUST COME FROM SOIL WHICH WILL HOLD AT LEAST 1000 PSI. HEeled IN PLANTS AND PLANTS FROM COLD STORAGE ARE NOT ACCEPTABLE.  
D. SUBSTITUTIONS: DO NOT MAKE SUBSTITUTIONS OF TREES AND/OR SHRUB MATERIALS. IF REQUIRED LANDSCAPE MATERIAL IS NOT OBTAINABLE, SUBMIT PROOF OF NON-AVAILABILITY AND PROPOSAL FOR USE OF EQUIVALENT MATERIAL.  
7. SEEDING & PLANTING SEASONS AND TIMING CONDITIONS:  
UNLESS OTHERWISE DIRECTED IN WRITING PLANT TREES AND SHRUBS FROM MARCH 15 TO JUNE 1, AND FROM AUGUST 15 TO OCTOBER 30.



**PLANTING SCHEDULE**

**TREES**

KEY	QTY	BOTANICAL NAME	COMMON NAME	CALIPER	ROOT	SPACING
RM	5	ACER RUBRUM	RED MAPLE	2-1/2"	B&B	AS SHOWN

**SHRUBS/GRASSES**

KEY	QTY	BOTANICAL NAME	COMMON NAME	SIZE	ROOT	SPACING
WB	5	ILEX VERTICILLATA 'RED SPRITE'	WINTERBERRY	18-24"	1.5 GALLON	6-8'
SG	21	PANICUM VERGATA 'PRAIRIE FIRE'	SWITCH GRASS	18"-24"	1 GALLON	3-5'
VS	6	ITEA VIRGINICA	VIRGINIA SWEETSPICE	18"-24"	1 GALLON	3-5'
CF	10	LOBELIA CARDINALIS	CARDINAL FLOWER	24"-36"	4-INCH POT	18-24"

**GROUND COVER**

KEY	QTY	BOTANICAL NAME	COMMON NAME	SIZE	ROOT	SPACING
BRJ	127	JUNIPERUS H. 'BLUE RUG'	BLUE RUG JUNIPER	4-6"	1 GAL. CONT.	4-6'

LUMINAIRE SCHEDULE

Symbol	Label	Qty	Catalog Number	Description	Lamp	LLF	Watts
	A	4	AVS-51-0-L105 R30-43-122 3in g35-AVA-A 900 lm 0° Tilt 43-9/C		7595 lm, 107 W	1.00	214
	B	2	AVS-51-0-L105 R30-43-122 3in g35-AVA-A 900 lm 0° Tilt 43-9/C		7595 lm, 107 W	1.00	107
	C	4	M0800 30LED WH1414K LED FLC	M0800 LAMP MODULE 137°W/DIA. X 30°EPH WITH 36 30 WHITE 41K LED WITH LED OPTICS	30 NEUTRAL WHITE LEDS WITH LINEAR SPREAD OPTICS	1.00	63
	D	2	TWN LED 30C 1030-40K/TWN	TWN LED	LED	1.00	105
	E	3	3110-B4-LSD-4 00-30-C2-30K-5 NC		Seven white LEDs	1.00	33

**OWNER'S CONSENT:**

THE UNDERSIGNED OWNER OF THE PROPERTY HEREON, STATES THAT HE/SHE IS FAMILIAR WITH THIS MAP, ITS CONTENTS AND ITS LEGENDS AND HEREBY CONSENTS TO ALL SAID TERMS AND CONDITIONS AS STATED HEREON.

**Dig Safely.**  
New York  
800-962-7962  
www.digsafelynewyork.com

☒ Call Before You Dig  
☒ Check The Proposed Trench  
☒ Check Utility Response  
☒ Report the Results  
☒ Dig With Care

DRAWN BY: DGK		CHECKED BY: JDB	JOB NO.: 2011-020
REVISIONS:			
NO.	DATE	DESCRIPTION	BY
0	4/12/13	SHEET ADDED TO PLAN SET	DGK
1	9/27/13	FOR FINAL SIGNATURES	DGK

TOWN OF NEW WINDSOR PLANNING BOARD No. 12-XX

TAX ID: 9-1-96.1 & 9-1-97

**LIGHTING AND LANDSCAPING PLAN**

**USAI, LLC**

1126 RIVER ROAD  
TOWN OF NEW WINDSOR  
ORANGE COUNTY, NEW YORK  
TAX PARCELS 9-1-96.1 & 9-1-97  
SCALE: 1" = 10'  
OCTOBER 2, 2012

**HUDSON LAND DESIGN**

BEACON, NEW YORK 12508  
PH: 845-440-6926  
F: 845-440-6937

**HUDSON LAND DESIGN**  
PROFESSIONAL ENGINEERING P.C.  
174 MAIN STREET  
BEACON, NEW YORK 12508  
PH: 845-440-6926  
F: 845-440-6937

**STATE OF NEW YORK**  
JON D. BODENDORF, P.E.  
NYS LICENSE NO. 070045  
DANIEL G. KOEHLER, P.E.  
NYS LICENSE NO. 082716

**SEAL**

SHEET: 5 OF 6







**APPENDIX B**

**TABLE 375-6.8(b)**

**(6 NYCRR PART 375)**

(b) Restricted use soil cleanup objectives.

**Table 375-6.8(b): Restricted Use Soil Cleanup Objectives**

Contaminant	CAS Number	Protection of Public Health				Protection of Ecological Resources	Protection of Ground-water
		Residential	Restricted-Residential	Commercial	Industrial		
Metals							
Arsenic	7440-38-2	16 <sup>f</sup>	16 <sup>f</sup>	16 <sup>f</sup>	16 <sup>f</sup>	13 <sup>f</sup>	16 <sup>f</sup>
Barium	7440-39-3	350 <sup>f</sup>	400	400	10,000 <sup>d</sup>	433	820
Beryllium	7440-41-7	14	72	590	2,700	10	47
Cadmium	7440-43-9	2.5 <sup>f</sup>	4.3	9.3	60	4	7.5
Chromium, hexavalent <sup>h</sup>	18540-29-9	22	110	400	800	1 <sup>e</sup>	19
Chromium, trivalent <sup>h</sup>	16065-83-1	36	180	1,500	6,800	41	NS
Copper	7440-50-8	270	270	270	10,000 <sup>d</sup>	50	1,720
Total Cyanide <sup>h</sup>		27	27	27	10,000 <sup>d</sup>	NS	40
Lead	7439-92-1	400	400	1,000	3,900	63 <sup>f</sup>	450
Manganese	7439-96-5	2,000 <sup>f</sup>	2,000 <sup>f</sup>	10,000 <sup>d</sup>	10,000 <sup>d</sup>	1600 <sup>f</sup>	2,000 <sup>f</sup>
Total Mercury		0.81 <sup>j</sup>	0.81 <sup>j</sup>	2.8 <sup>j</sup>	5.7 <sup>j</sup>	0.18 <sup>f</sup>	0.73
Nickel	7440-02-0	140	310	310	10,000 <sup>d</sup>	30	130
Selenium	7782-49-2	36	180	1,500	6,800	3.9 <sup>f</sup>	4 <sup>f</sup>
Silver	7440-22-4	36	180	1,500	6,800	2	8.3
Zinc	7440-66-6	2200	10,000 <sup>d</sup>	10,000 <sup>d</sup>	10,000 <sup>d</sup>	109 <sup>f</sup>	2,480
PCBs/Pesticides							
2,4,5-TP Acid (Silvex)	93-72-1	58	100 <sup>a</sup>	500 <sup>b</sup>	1,000 <sup>c</sup>	NS	3.8
4,4'-DDE	72-55-9	1.8	8.9	62	120	0.0033 <sup>e</sup>	17
4,4'-DDT	50-29-3	1.7	7.9	47	94	0.0033 <sup>e</sup>	136
4,4'- DDD	72-54-8	2.6	13	92	180	0.0033 <sup>e</sup>	14
Aldrin	309-00-2	0.019	0.097	0.68	1.4	0.14	0.19
alpha-BHC	319-84-6	0.097	0.48	3.4	6.8	0.04 <sup>g</sup>	0.02
beta-BHC	319-85-7	0.072	0.36	3	14	0.6	0.09
Chlordane (alpha)	5103-71-9	0.91	4.2	24	47	1.3	2.9

**Table 375-6.8(b): Restricted Use Soil Cleanup Objectives**

Contaminant	CAS Number	Protection of Public Health				Protection of Ecological Resources	Protection of Ground-water
		Residential	Restricted-Residential	Commercial	Industrial		
delta-BHC	319-86-8	100 <sup>a</sup>	100 <sup>a</sup>	500 <sup>b</sup>	1,000 <sup>c</sup>	0.04 <sup>g</sup>	0.25
Dibenzofuran	132-64-9	14	59	350	1,000 <sup>c</sup>	NS	210
Dieldrin	60-57-1	0.039	0.2	1.4	2.8	0.006	0.1
Endosulfan I	959-98-8	4.8 <sup>i</sup>	24 <sup>i</sup>	200 <sup>i</sup>	920 <sup>i</sup>	NS	102
Endosulfan II	33213-65-9	4.8 <sup>i</sup>	24 <sup>i</sup>	200 <sup>i</sup>	920 <sup>i</sup>	NS	102
Endosulfan sulfate	1031-07-8	4.8 <sup>i</sup>	24 <sup>i</sup>	200 <sup>i</sup>	920 <sup>i</sup>	NS	1,000 <sup>c</sup>
Endrin	72-20-8	2.2	11	89	410	0.014	0.06
Heptachlor	76-44-8	0.42	2.1	15	29	0.14	0.38
Lindane	58-89-9	0.28	1.3	9.2	23	6	0.1
Polychlorinated biphenyls	1336-36-3	1	1	1	25	1	3.2
<b>Semivolatiles</b>							
Acenaphthene	83-32-9	100 <sup>a</sup>	100 <sup>a</sup>	500 <sup>b</sup>	1,000 <sup>c</sup>	20	98
Acenaphthylene	208-96-8	100 <sup>a</sup>	100 <sup>a</sup>	500 <sup>b</sup>	1,000 <sup>c</sup>	NS	107
Anthracene	120-12-7	100 <sup>a</sup>	100 <sup>a</sup>	500 <sup>b</sup>	1,000 <sup>c</sup>	NS	1,000 <sup>c</sup>
Benz(a)anthracene	56-55-3	1 <sup>f</sup>	1 <sup>f</sup>	5.6	11	NS	1 <sup>f</sup>
Benzo(a)pyrene	50-32-8	1 <sup>f</sup>	1 <sup>f</sup>	1 <sup>f</sup>	1.1	2.6	22
Benzo(b)fluoranthene	205-99-2	1 <sup>f</sup>	1 <sup>f</sup>	5.6	11	NS	1.7
Benzo(g,h,i)perylene	191-24-2	100 <sup>a</sup>	100 <sup>a</sup>	500 <sup>b</sup>	1,000 <sup>c</sup>	NS	1,000 <sup>c</sup>
Benzo(k)fluoranthene	207-08-9	1	3.9	56	110	NS	1.7
Chrysene	218-01-9	1 <sup>f</sup>	3.9	56	110	NS	1 <sup>f</sup>
Dibenz(a,h)anthracene	53-70-3	0.33 <sup>e</sup>	0.33 <sup>e</sup>	0.56	1.1	NS	1,000 <sup>c</sup>
Fluoranthene	206-44-0	100 <sup>a</sup>	100 <sup>a</sup>	500 <sup>b</sup>	1,000 <sup>c</sup>	NS	1,000 <sup>c</sup>
Fluorene	86-73-7	100 <sup>a</sup>	100 <sup>a</sup>	500 <sup>b</sup>	1,000 <sup>c</sup>	30	386
Indeno(1,2,3-cd)pyrene	193-39-5	0.5 <sup>f</sup>	0.5 <sup>f</sup>	5.6	11	NS	8.2
m-Cresol	108-39-4	100 <sup>a</sup>	100 <sup>a</sup>	500 <sup>b</sup>	1,000 <sup>c</sup>	NS	0.33 <sup>e</sup>
Naphthalene	91-20-3	100 <sup>a</sup>	100 <sup>a</sup>	500 <sup>b</sup>	1,000 <sup>c</sup>	NS	12

**Table 375-6.8(b): Restricted Use Soil Cleanup Objectives**

Contaminant	CAS Number	Protection of Public Health				Protection of Ecological Resources	Protection of Ground-water
		Residential	Restricted-Residential	Commercial	Industrial		
o-Cresol	95-48-7	100 <sup>a</sup>	100 <sup>a</sup>	500 <sup>b</sup>	1,000 <sup>c</sup>	NS	0.33 <sup>e</sup>
p-Cresol	106-44-5	34	100 <sup>a</sup>	500 <sup>b</sup>	1,000 <sup>c</sup>	NS	0.33 <sup>e</sup>
Pentachlorophenol	87-86-5	2.4	6.7	6.7	55	0.8 <sup>e</sup>	0.8 <sup>e</sup>
Phenanthrene	85-01-8	100 <sup>a</sup>	100 <sup>a</sup>	500 <sup>b</sup>	1,000 <sup>c</sup>	NS	1,000 <sup>c</sup>
Phenol	108-95-2	100 <sup>a</sup>	100 <sup>a</sup>	500 <sup>b</sup>	1,000 <sup>c</sup>	30	0.33 <sup>e</sup>
Pyrene	129-00-0	100 <sup>a</sup>	100 <sup>a</sup>	500 <sup>b</sup>	1,000 <sup>c</sup>	NS	1,000 <sup>c</sup>
<b>Volatiles</b>							
1,1,1-Trichloroethane	71-55-6	100 <sup>a</sup>	100 <sup>a</sup>	500 <sup>b</sup>	1,000 <sup>c</sup>	NS	0.68
1,1-Dichloroethane	75-34-3	19	26	240	480	NS	0.27
1,1-Dichloroethene	75-35-4	100 <sup>a</sup>	100 <sup>a</sup>	500 <sup>b</sup>	1,000 <sup>c</sup>	NS	0.33
1,2-Dichlorobenzene	95-50-1	100 <sup>a</sup>	100 <sup>a</sup>	500 <sup>b</sup>	1,000 <sup>c</sup>	NS	1.1
1,2-Dichloroethane	107-06-2	2.3	3.1	30	60	10	0.02 <sup>f</sup>
cis-1,2-Dichloroethene	156-59-2	59	100 <sup>a</sup>	500 <sup>b</sup>	1,000 <sup>c</sup>	NS	0.25
trans-1,2-Dichloroethene	156-60-5	100 <sup>a</sup>	100 <sup>a</sup>	500 <sup>b</sup>	1,000 <sup>c</sup>	NS	0.19
1,3-Dichlorobenzene	541-73-1	17	49	280	560	NS	2.4
1,4-Dichlorobenzene	106-46-7	9.8	13	130	250	20	1.8
1,4-Dioxane	123-91-1	9.8	13	130	250	0.1 <sup>e</sup>	0.1 <sup>e</sup>
Acetone	67-64-1	100 <sup>a</sup>	100 <sup>b</sup>	500 <sup>b</sup>	1,000 <sup>c</sup>	2.2	0.05
Benzene	71-43-2	2.9	4.8	44	89	70	0.06
Butylbenzene	104-51-8	100 <sup>a</sup>	100 <sup>a</sup>	500 <sup>b</sup>	1,000 <sup>c</sup>	NS	12
Carbon tetrachloride	56-23-5	1.4	2.4	22	44	NS	0.76
Chlorobenzene	108-90-7	100 <sup>a</sup>	100 <sup>a</sup>	500 <sup>b</sup>	1,000 <sup>c</sup>	40	1.1
Chloroform	67-66-3	10	49	350	700	12	0.37
Ethylbenzene	100-41-4	30	41	390	780	NS	1
Hexachlorobenzene	118-74-1	0.33 <sup>e</sup>	1.2	6	12	NS	3.2
Methyl ethyl ketone	78-93-3	100 <sup>a</sup>	100 <sup>a</sup>	500 <sup>b</sup>	1,000 <sup>c</sup>	100 <sup>a</sup>	0.12

**Table 375-6.8(b): Restricted Use Soil Cleanup Objectives**

Contaminant	CAS Number	Protection of Public Health				Protection of Ecological Resources	Protection of Ground-water
		Residential	Restricted-Residential	Commercial	Industrial		
Methyl tert-butyl ether	1634-04-4	62	100 <sup>a</sup>	500 <sup>b</sup>	1,000 <sup>c</sup>	NS	0.93
Methylene chloride	75-09-2	51	100 <sup>a</sup>	500 <sup>b</sup>	1,000 <sup>c</sup>	12	0.05
n-Propylbenzene	103-65-1	100 <sup>a</sup>	100 <sup>a</sup>	500 <sup>b</sup>	1,000 <sup>c</sup>	NS	3.9
sec-Butylbenzene	135-98-8	100 <sup>a</sup>	100 <sup>a</sup>	500 <sup>b</sup>	1,000 <sup>c</sup>	NS	11
tert-Butylbenzene	98-06-6	100 <sup>a</sup>	100 <sup>a</sup>	500 <sup>b</sup>	1,000 <sup>c</sup>	NS	5.9
Tetrachloroethene	127-18-4	5.5	19	150	300	2	1.3
Toluene	108-88-3	100 <sup>a</sup>	100 <sup>a</sup>	500 <sup>b</sup>	1,000 <sup>c</sup>	36	0.7
Trichloroethene	79-01-6	10	21	200	400	2	0.47
1,2,4-Trimethylbenzene	95-63-6	47	52	190	380	NS	3.6
1,3,5- Trimethylbenzene	108-67-8	47	52	190	380	NS	8.4
Vinyl chloride	75-01-4	0.21	0.9	13	27	NS	0.02
Xylene (mixed)	1330-20-7	100 <sup>a</sup>	100 <sup>a</sup>	500 <sup>b</sup>	1,000 <sup>c</sup>	0.26	1.6

All soil cleanup objectives (SCOs) are in parts per million (ppm).

NS=Not specified. See [Technical Support Document \(TSD\)](#).

### Footnotes

<sup>a</sup> The SCOs for residential, restricted-residential and ecological resources use were capped at a maximum value of 100 ppm. See TSD section 9.3.

<sup>b</sup> The SCOs for commercial use were capped at a maximum value of 500 ppm. See TSD section 9.3.

<sup>c</sup> The SCOs for industrial use and the protection of groundwater were capped at a maximum value of 1000 ppm. See TSD section 9.3.

<sup>d</sup> The SCOs for metals were capped at a maximum value of 10,000 ppm. See TSD section 9.3.

<sup>e</sup> For constituents where the calculated SCO was lower than the contract required quantitation limit (CRQL), the CRQL is used as the SCO value.

<sup>f</sup> For constituents where the calculated SCO was lower than the rural soil background concentration as determined by the Department and Department of Health rural soil survey, the rural soil background concentration is used as the Track 2 SCO value for this use of the site.

<sup>g</sup> This SCO is derived from data on mixed isomers of BHC.

<sup>h</sup> The SCO for this specific compound (or family of compounds) is considered to be met if the analysis for the total species of this contaminant is below the specific SCO.

<sup>i</sup> This SCO is for the sum of endosulfan I, endosulfan II, and endosulfan sulfate.

<sup>j</sup> This SCO is the lower of the values for mercury (elemental) or mercury (inorganic salts). See TSD Table 5.6-1.

**APPENDIX C**

**ALLOWABLE CONSTITUENT LEVELS FOR  
IMPORTED FILL OR SOIL**

**(APPENDIX 5 OF NYSDEC DER-10)**

## Appendix 5

### Allowable Constituent Levels for Imported Fill or Soil

#### Subdivision 5.4(e)

Source: This table is derived from soil cleanup objective (SCO) tables in 6 NYCRR 375. Table 375-6.8(a) is the source for unrestricted use and Table 375-6.8(b) is the source for restricted use.

Note: For constituents not included in this table, refer to the contaminant for supplemental soil cleanup objectives (SSCOs) in the Commissioner Policy on Soil Cleanup Guidance. If an SSCO is not provided for a constituent, contact the DER PM to determine a site-specific level.

Constituent	Unrestricted Use	Residential Use	Restricted Residential Use	Commercial or Industrial Use	If Ecological Resources are Present
<b>Metals</b>					
Arsenic	13	16	16	16	13
Barium	350	350	400	400	433
Beryllium	7.2	14	47	47	10
Cadmium	2.5	2.5	4.3	7.5	4
Chromium, Hexavalent <sup>1</sup>	1 <sup>3</sup>	19	19	19	1 <sup>3</sup>
Chromium, Trivalent <sup>1</sup>	30	36	180	1500	41
Copper	50	270	270	270	50
Cyanide	27	27	27	27	NS
Lead	63	400	400	450	63
Manganese	1600	2000	2000	2000	1600
Mercury (total)	0.18	0.73	0.73	0.73	0.18
Nickel	30	130	130	130	30
Selenium	3.9	4	4	4	3.9
Silver	2	8.3	8.3	8.3	2
Zinc	109	2200	2480	2480	109
<b>PCBs/Pesticides</b>					
2,4,5-TP Acid (Silvex)	3.8	3.8	3.8	3.8	NS
4,4'-DDE	0.0033 <sup>3</sup>	1.8	8.9	17	0.0033 <sup>3</sup>
4,4'-DDT	0.0033 <sup>3</sup>	1.7	7.9	47	0.0033 <sup>3</sup>
4,4'-DDD	0.0033 <sup>3</sup>	2.6	13	14	0.0033 <sup>3</sup>
Aldrin	0.005	0.019	0.097	0.19	0.14
Alpha-BHC	0.02	0.02	0.02	0.02	0.04 <sup>4</sup>
Beta-BHC	0.036	0.072	0.09	0.09	0.6
Chlordane (alpha)	0.094	0.91	2.9	2.9	1.3
Delta-BHC	0.04	0.25	0.25	0.25	0.04 <sup>4</sup>
Dibenzofuran	7	14	59	210	NS
Dieldrin	0.005	0.039	0.1	0.1	0.006
Endosulfan I	2.4 <sup>2</sup>	4.8	24	102	NS
Endosulfan II	2.4 <sup>2</sup>	4.8	24	102	NS
Endosulfan sulfate	2.4 <sup>2</sup>	4.8	24	200	NS
Endrin	0.014	0.06	0.06	0.06	0.014
Heptachlor	0.042	0.38	0.38	0.38	0.14
Lindane	0.1	0.1	0.1	0.1	6
Polychlorinated biphenyls	0.1	1	1	1	1

Constituent	Unrestricted Use	Residential Use	Restricted Residential Use	Commercial or Industrial Use	If Ecological Resources are Present
<b>Semi-volatile Organic Compounds</b>					
Acenaphthene	20	98	98	98	20
Acenaphthylene	100	100	100	107	NS
Anthracene	100	100	100	500	NS
Benzo(a)anthracene	1	1	1	1	NS
Benzo(a)pyrene	1	1	1	1	2.6
Benzo(b)fluoranthene	1	1	1	1.7	NS
Benzo(g,h,i)perylene	100	100	100	500	NS
Benzo(k)fluoranthene	0.8	1	1.7	1.7	NS
Chrysene	1	1	1	1	NS
Dibenz(a,h)anthracene	0.33 <sup>3</sup>	0.33 <sup>3</sup>	0.33 <sup>3</sup>	0.56	NS
Fluoranthene	100	100	100	500	NS
Fluorene	30	100	100	386	30
Indeno(1,2,3-cd)pyrene	0.5	0.5	0.5	5.6	NS
m-Cresol(s)	0.33 <sup>3</sup>	0.33 <sup>3</sup>	0.33 <sup>3</sup>	0.33 <sup>3</sup>	NS
Naphthalene	12	12	12	12	NS
o-Cresol(s)	0.33 <sup>3</sup>	0.33 <sup>3</sup>	0.33 <sup>3</sup>	0.33 <sup>3</sup>	NS
p-Cresol(s)	0.33	0.33	0.33	0.33	NS
Pentachlorophenol	0.8 <sup>3</sup>	0.8 <sup>3</sup>	0.8 <sup>3</sup>	0.8 <sup>3</sup>	0.8 <sup>3</sup>
Phenanthrene	100	100	100	500	NS
Phenol	0.33 <sup>3</sup>	0.33 <sup>3</sup>	0.33 <sup>3</sup>	0.33 <sup>3</sup>	30
Pyrene	100	100	100	500	NS
<b>Volatile Organic Compounds</b>					
1,1,1-Trichloroethane	0.68	0.68	0.68	0.68	NS
1,1-Dichloroethane	0.27	0.27	0.27	0.27	NS
1,1-Dichloroethene	0.33	0.33	0.33	0.33	NS
1,2-Dichlorobenzene	1.1	1.1	1.1	1.1	NS
1,2-Dichloroethane	0.02	0.02	0.02	0.02	10
1,2-Dichloroethene(cis)	0.25	0.25	0.25	0.25	NS
1,2-Dichloroethene(trans)	0.19	0.19	0.19	0.19	NS
1,3-Dichlorobenzene	2.4	2.4	2.4	2.4	NS
1,4-Dichlorobenzene	1.8	1.8	1.8	1.8	20
1,4-Dioxane	0.1 <sup>3</sup>	0.1 <sup>3</sup>	0.1 <sup>3</sup>	0.1 <sup>3</sup>	0.1
Acetone	0.05	0.05	0.05	0.05	2.2
Benzene	0.06	0.06	0.06	0.06	70
Butylbenzene	12	12	12	12	NS
Carbon tetrachloride	0.76	0.76	0.76	0.76	NS
Chlorobenzene	1.1	1.1	1.1	1.1	40
Chloroform	0.37	0.37	0.37	0.37	12
Ethylbenzene	1	1	1	1	NS
Hexachlorobenzene	0.33 <sup>3</sup>	0.33 <sup>3</sup>	1.2	3.2	NS
Methyl ethyl ketone	0.12	0.12	0.12	0.12	100
Methyl tert-butyl ether	0.93	0.93	0.93	0.93	NS
Methylene chloride	0.05	0.05	0.05	0.05	12



<b>Volatile Organic Compounds</b> (continued)					
Propylbenzene-n	3.9	3.9	3.9	3.9	NS
Sec-Butylbenzene	11	11	11	11	NS
Tert-Butylbenzene	5.9	5.9	5.9	5.9	NS
Tetrachloroethene	1.3	1.3	1.3	1.3	2
Toluene	0.7	0.7	0.7	0.7	36
Trichloroethene	0.47	0.47	0.47	0.47	2
Trimethylbenzene-1,2,4	3.6	3.6	3.6	3.6	NS
Trimethylbenzene-1,3,5	8.4	8.4	8.4	8.4	NS
Vinyl chloride	0.02	0.02	0.02	0.02	NS
Xylene (mixed)	0.26	1.6	1.6	1.6	0.26

All concentrations are in parts per million (ppm)

NS = Not Specified

Footnotes:

<sup>1</sup> The SCO for Hexavalent or Trivalent Chromium is considered to be met if the analysis for the total species of this contaminant is below the specific SCO for Hexavalent Chromium.

<sup>2</sup> The SCO is the sum of endosulfan I, endosulfan II and endosulfan sulfate.

<sup>3</sup> For constituents where the calculated SCO was lower than the contract required quantitation limit (CRQL), the CRQL is used as the Track 1 SCO value.

<sup>4</sup> This SCO is derived from data on mixed isomers of BHC.