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**TOWN OF NEWBURGH
PLANNING BOARD
TECHNICAL REVIEW COMMENTS**

PROJECT: MATRIX NEWBURGH, LLC
PROJECT NO.: 2016-26
PROJECT LOCATION: SECTION 95 BLOCK 1 LOT (4.12,54.1, 69.25,49.12)
REVIEW DATE: 18 APRIL 2016
MEETING DATE: 21 APRIL 2016
PROJECT REPRESENTATIVE: LANGAN ENGINEERING

1. The Applicants are proposing to eliminate the emergency access drive to Corporate Boulevard. A mitigation plan has been provided identifying a wider access road section creating a minimum 40 foot wide drive aisle utilizing paved surfaces and expanded gravel shoulders, including truck pull off areas on the radiuses of the large turn coming off the site access road.
2. An analysis of the Stormwater impacts has been provided. This office takes no exception to the Stormwater impact analysis identified. The changes in impervious surface results in a deminimus increase in stormwater to the multiple stormwater management practices along the access drive.
3. Input from the Codes Office as well as the Jurisdictional Fire Department should be received regarding the emergency access.
4. Ken Wersted's comments regarding the proposed modifications should be received.
5. The stabilized stone shoulder pavement section should identify the manufacturer of the proposed Geo grid to be utilized below the 10 inches of stone.

Respectfully submitted,

**McGoey, Hauser and Edsall
Consulting Engineers, D.P.C.**

Patrick J. Hines
Principal

Stormwater Pollution Prevention Plan

Matrix Business Park at Newburgh

Town of Newburgh

Block 1, Lot 79 (Previously Lots 4.12, 54.1, 69.25, and 49.12)

Orange County, New York

APR 13 2016

Prepared For:

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CG-401	Grading and Drainage Plan
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CE-501	Soil Erosion and Sediment Control Details
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Appendix B	Notice of Intent
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Appendix K	Notice of Termination (Blank)

1.0 INTRODUCTION

The Matrix Business Park at Newburgh project is located in the Town of Newburgh, Orange County, New York. The approximately 72-acre property is bound by Interstate Route 87 to the east, Interstate Route 84 to the north, New York Route 17K to the south, and adjacent industrial facilities to the west (See Figure 1 – USGS Site Location Map and Figure 2 – Tax Map). The proposed development consists of a warehouse distribution building and associated roadway, car and truck parking areas, and infrastructure improvements.

The proposed project will disturb more than one acre of land and therefore the project must obtain coverage under the Phase II New York State Department of Environmental Conservation (NYSDEC) State Pollution Discharge Elimination System (SPDES) General Permit for Stormwater Discharges from Construction Activity No. GP-0-15-002 (Appendix A). The SPDES permit requires the preparation of a Stormwater Pollution Prevention Plan (SWPPP) and compliance with the NYS Stormwater Design Standards for Water Quality and Water Quantity. No more than 5 acres may be disturbed at one time during the course of construction without prior approval in the form of a 5-acre waiver. Due to the size of the proposed project and the existing topography (proposed 12 acre building and 100 foot elevation change), over 5 acres will need to be disturbed for most, if not all, of construction and a 5-acre waiver will be requested.

The SWPPP must be amended whenever there is a change in the contractor or change in design, operation or maintenance of the site, and which is not addressed in the SWPPP or if the actions required by the SWPPP fail to prevent pollution.

An owner or operator of a construction activity that is subject to the requirements of a regulated, traditional land-use control MS4 shall have their SWPPP reviewed and accepted prior to submitting the NOI to the NYSDEC. The owner or operator is required to have the MS4 acceptance form signed by the principal executive officer or ranking elected official from the MS4 and include the form with the NOI submission.

In accordance with requirements of the General Permit, a completed Notice of Intent (NOI) for Stormwater Discharges Associated with Construction Activities and a signed MS4 Acceptance form will be submitted to the NYSDEC upon approval by the MS4. A copy of the NOI and MS4 acceptance forms are provided in Appendix B and C respectively.

The stormwater analyses contained herein have been prepared in accordance with the following standards:

- New York State Standards and Specifications for Erosion and Sediment Control, August 2005;
- New York State Department of Environmental Conservation (NYSDEC) Stormwater Management Design Manual, January 2015;

- NYSDEC SPDES General Permit for Stormwater Discharges from Construction Activity requirements as updated for Permit No. GP-0-15-002; and
- Town of Newburgh design requirements.

2.0 DESIGN METHODOLOGY

The project's design methodology for stormwater management including compliance with water quantity and quality requirements is as follows:

2.1 Stormwater Management Design

Calculations for the site's runoff were prepared using the SCS Method as contained in the USDA Soil Conservation Service Publication TR-55 "Urban Hydrology for Small Watersheds." TR-55 outlines procedures for calculating peak rates of runoff resulting from precipitation events and procedures for developing runoff hydrographs. The TR-55 procedure simulates a watershed using the drainage area, curve number (CN), and time of concentration (Tc) for each watershed.

The curve number is a land sensitive coefficient that dictates the relationship between total rainfall depth and direct storm runoff. Based on the coverage of soil groups and land use in the area, an average CN was determined for each watershed for the existing and proposed conditions.

Using the NRCS Soil Survey for Orange County, New York, the soils within the watersheds were divided into hydrologic soil groups (A, B, C and D). The SCS classification system evaluates the runoff potential of a soil according to its infiltration and transmission rates. "A" soils have the lowest runoff potential and "D" soils have the greatest runoff potential.

The time of concentration is defined as the time for runoff to travel from the hydraulically most distant point of the watershed to a point of interest. Values of the time of concentration were determined for existing and proposed conditions based on land cover and slope of the flow path using methods described in TR-55.

The design storm used for the TR-55 study is the 24-hour SCS Type III cumulative rainfall distribution. For this site, the 1-, 10-, and 100-year storm events were considered in accordance with the NYSDEC Stormwater Management Design Manual. The rainfall values used in the hydrographs were taken from two different sources. Chapter 157-6. "Design Standards" of the Town of Newburgh code lists rainfall values for the various storm events. These precipitation values were compared to the latest information provided by the Northeast Regional Climate Center. The higher of the two precipitation

values was used in the hydrograph model. The precipitation dictated in the Town Code for the 1- and 10-year storm events was used, but for the 100-year storm event the precipitation value from the Northeast Regional Climate Center was higher, and therefore used.

Rainfall hydrographs developed from TR-55 methods for proposed conditions were routed through the stormwater management basins.

2.2 Water Quality

The water quality volume, denoted as WQ_v , is the volume of runoff dictated by NYSDEC methodology to capture and treat 90% of the average annual stormwater runoff volume to improve the quality of the runoff leaving the site. The WQ_v is directly related to the amount of contributory impervious coverage created at a project site. This volume is calculated using the following equation as prescribed by NYSDEC Stormwater Management Manual:

$$WQ_v = \frac{P R_v A}{12}$$

Where:

P = 90% rainfall event number (Figure 4.1 NYSDEC Manual)

R_v = $0.05 + 0.009(I)$, where I is percent impervious coverage

A = Contributory Site Area in Acres

There is an unnamed stream downstream of the site that is considered to be a high quality water source; therefore the stormwater management system has been designed to treat at least 110% of the water quality volume required by NYSDEC. In addition, the runoff reduction volume (RRv) requirement requires that the water quality volume is reduced by application of a combination of green infrastructure and standard stormwater management with RRv capacity practices. The RRv is calculated using the following equation as prescribed by NYSDEC Stormwater Management Manual:

$$RRv = \frac{P R_v A_i}{12}$$

Where:

P = 90% rainfall event number (Figure 4.1 NYSDEC Manual)

R_v = $0.05 + 0.009(I)$, where I is 100 percent impervious

A_i = $(S)(A_{ic})$

A_{ic} = Total area of new impervious cover

S = Hydrologic Soil Group Specific Reduction Factor

We evaluated the green infrastructure and WQ_v treatment methods identified in the current NYSDEC Stormwater Management Design Manual and selected the most

appropriate and more efficient methods to treat the stormwater for the project site. The site is designed to treat at least 110% of the WQ_v and meet at least the minimum RRV requirement, which is discussed in greater detail in section 4.3 of this report.

2.3 Water Quantity

Stormwater quantity design includes measures for stream channel protection (CPV), overbank flood protection (Q_p), and extreme flood control (Q_t) in accordance with the NYSDEC Stormwater Management Design Manual. Stream channel protection requires 24-hour extended detention of the 1-year storm event remaining after runoff reduction. Overbank flood control requires storage to attenuate the post-development 10-year, 24-hour peak discharge rate to the existing rate. The extreme flood control requires storage to attenuate the post-development 100-year, 24-hour peak discharge rate to the existing rate.

The 1-, 10-, and 100-year storm events were analyzed and detention provided to attenuate for the storms listed above in accordance with the State and local regulations. Our analysis is discussed in greater detail in section 4.4 of this report.

3.0 EXISTING CONDITIONS

3.1 Existing Site Description

The subject property is currently undeveloped and wooded. The elevation of the site is highest along a ridge which runs north to south roughly centered on the northern portion of the property, approximately 515 feet above mean sea level. The area topography decreases west toward Corporate Boulevard (to approximately 450 feet above mean sea level), east toward Interstate 87 (approximate 365 above mean sea level), and south toward state Route 17K (approximately 375 feet above mean sea level).

Various wetlands are also located on or adjacent to the site as confirmed by the U.S. Army Corps of Engineers New York District (USACE) in a letter dated May 10, 2011. In general, the delineated features include an existing detention basin in the western portion of the site near Corporate Boulevard, and wetlands along the eastern property line abutting Interstate Route 87. In addition there is a smaller unconfirmed wetland in the southern portion of the site near Route 17K. This wetland still needs to be confirmed with ACOE. This smaller wetland flows like a channel towards Route 17K where water gets piped across the interstate. None of the wetlands are proposed to be disturbed for the site improvements.

Under present-day conditions, stormwater discharges at seven different locations. These locations are listed by watershed (see Figure 4 - Existing Watershed Map):

- A. Existing wetland to the east of the site,
- B. Overland flow to the east of the site towards the Route 87 Ramp,
- C. Existing channel adjacent to Route 17K,
- D. Existing wetland that pipes flow under Route 17K,
- E. Overland flow to the west of the site,
- F. Existing detention basin to the west of the site, and
- G. Overland flow to the north east of the site towards Interstate Route 84.

3.2 Historic Structures, Archeological, and Cultural Resources

The Project Site is not mapped or contiguous to any listed or nominated historic building, archaeological site or district by the New York State Board of Historic Preservation for inclusion on the State or National Register of Historic Places as mapped by the New York State Office of Parks, Recreation and Historic Preservation (OPRHP) (Figure 27 in EAF). There are no existing structures on the Project Site. The Project Site is not mapped as being in or adjacent to an area designated as sensitive for archaeological sites on the archaeological site inventory.

As such there are no anticipated impacts by this project to the Historic Structures, Archeological, or Cultural Resources.

3.3 Soil Conditions

According to the Orange County GIS Division NRCS Soils Data, onsite soils consist primarily of Hydrologic Soil Group type D soils. A map of all the different soil types found on site can be found on Figure 3.

3.4 Existing Drainage Patterns

The SCS Method was used to determine existing runoff hydrographs for the 1-, 10- and 100-year, 24-hour storms. Overall watersheds, including associative off-site drainage where applicable, were analyzed to select downstream discharge locations. The analysis locations were chosen as a point in which comparison between the existing and proposed drainage can be reviewed for potential development impacts.

Based on survey information, aerial photographs, and site visits the site was divided into seven overall watershed areas, which were analyzed at the analysis points as shown in Figure 4.

Watershed A drains to the wetland located along the eastern property line of the site. Watershed B drains by way of sheetflow off the site, towards the Route 87 ramp. Watershed C drains south towards Route 17K, where the runoff is capture by a roadside swale. Watershed D drains into an onsite wetland and also flows south towards 17K. This flow is captured by a culvert along Route 17K and piped across the interstate.

Watershed E is a small area to the west of the existing detention basin, which flows away from the site and onto neighboring property. Watershed F drains into the existing onsite detention basin. Watershed G drains northwest, away from the site and onto neighboring property near Route 84. All of the existing drainage patterns consist primarily of overland flow since the site is undeveloped.

Based on survey information, aerial photographs, and site visits the existing on-site cover conditions are considered to be mainly woods in good condition with steep slopes, wetlands, and open water. Off-site areas were assessed based upon aerial photography and supplemental topographic information taken from available survey information.

The existing watershed data and calculations are summarized below. Summary watershed data and hydrographs are provided in Appendix E.

SUMMARY OF EXISTING PEAK DISCHARGES

Analysis Point	Existing Peak Runoff (cfs)		
	1 Year	10 Year	100 Year
A	20.9	68.6	127.3
B	3.7	11.9	21.6
C	1.5	4.5	8.1
D	11.5	36.6	66.9
E	0.2	0.8	1.6
F	16.2	49.8	90.1
G	0.5	1.7	3.3

4.0 PROPOSED CONDITIONS

4.1 Proposed Development

The proposed development will consist of a total of approximately 566,000 sf of proposed warehouse space. Along with the warehouse, the development will include associated site improvements such as internal roadways, trailer loading and parking areas, car parking areas, reserved parking areas, stormwater detention, surface sand filters and bioretention basins, stormwater conveyance system, utilities to service the

buildings (water, sanitary sewer, electric, and telephone), and landscaping. Access to the site will be provided via a new access drive from Route 17K from the south.

4.2 Proposed Watershed Description

The existing topography and watersheds will be maintained to the extent possible to minimize site disturbance and the associated effects on the existing drainage patterns and discharge locations. Similar to the existing watersheds, the site was separated into seven main watersheds (A through G) for the post-development analysis. The post-development analysis uses the same analysis points used for the existing analysis to allow for an equal comparison of existing and proposed conditions (see Figure 5 – Proposed Watershed Map).

The post-development watersheds were broken up into subwatersheds, as necessary, to model the runoff generated from undetained site areas that remain as well as the runoff from the areas of the site controlled by proposed stormwater management features.

In the post-development condition additional impervious coverage will be created. Runoff associated with the impervious coverage from the building and directly adjacent parking lots and circulation road will be collected and conveyed via conventional drainage inlets and underground piping to stormwater management basins for water quality and quantity treatment.

Runoff associated with the impervious coverage from the entrance driveway will drain into roadside swales where the stormwater will either flow directly into a stormwater management basin or be collected and be piped to water quality and quantity treatment.

The cumulative curve numbers and times of concentrations for the proposed development were determined based upon the proposed ground cover and the grading of the site (see Figure 5 – Proposed Watershed Map).

4.3 Proposed Water Quality

The NYSDEC Stormwater Management Design Manual (Manual) requires that water quality treatment of 90% of the average annual stormwater runoff volume be provided. The water quality volume (WQ_v) is directly associated to the quantity of proposed impervious area within a project site. All reserved parking areas were considered impervious area for the purposes of the water quality and quantity calculations.

The water quality design of this site is based off of 110% of the NYSDEC required water quality volume. The increased water quality treatment was provided to address

Newburghs' concerns about the potential sensitivity of this watershed. The Manual also includes a requirement to reduce the total WQv through application of specific green infrastructure techniques.

Treatment of the required water quality volumes is provided throughout the site utilizing green infrastructure techniques and standard stormwater management practices in accordance with the latest NYSDEC Stormwater Management Design Manual requirements. The majority of the site runoff is designed to flow through bioretention basins prior to entering the proposed detention basins.

For the largest bioretention basin (Basin Pr A1), runoff flows into a sedimentation basin prior to entering the bioretention basin. This will allow sediment to settle out of the runoff before entering the bioretention basin. Sediment shall be cleaned out of the sedimentation basin when it reaches a depth of more than six inches. This basin also has a one-foot wide gravel diaphragm located at the perimeter edge where runoff may flow in directly from the grass slope. For the other two proposed bioretention basins (Basin Pr D1 and Pr D3), runoff flows through grass channels and slopes and a one-foot wide gravel diaphragm before entering the bioretention basin. The gravel diaphragm runs the perimeter along any edges where runoff may enter the bioretention basin. These maintenance strategies should prevent excess sediment from building up in the bioretention basins and extend their service life.

Runoff reduction potential is limited in some areas onsite due to existing physical constraints, including existing steep slopes and wetland areas. In addition to bioretention, dry vegetated swales are provided for stormwater conveyance along the entrance drive but are not included in the WQv or RRv calculations. Credit was not taken because the swale slopes are steeper than desirable to provide RRv and WQv treatment (over 4% slope). The steeper swale slopes are due to the nature of the existing steep slopes on site. Although no credit is taken for the swales they were provided in order to add to the green infrastructure techniques used onsite. The RRv provided exceeds the minimum required even without including the swales.

In addition the following green infrastructure practices are provided:

Preservation of buffers, locating development in less sensitive areas, and reduction of clearing and grading:

The project is designed to minimize grading to only the minimum area needed for the proposed improvements. The project is located on the project site to avoid impacts to wetlands, streams, and to preserve as much vegetated area as possible.

Roadway, sidewalk, and parking reduction:

The project is designed to provide the minimum sidewalk and roadway needed for the development. Parking is reduced by reserving car parking and trailer spaces, which will only be built if needed. The stormwater quality and quantity measures were oversized in order to include those areas should they ever be needed, as such providing a further increase to the water treatment provided.

The remaining areas of the site, which were not treated using green infrastructure, were designed to be treated by surface sand filters before entering the proposed detention basins. Both of the sand filters (Pr C1 and Pr D2) are designed with sedimentation forebays. Runoff is directed into the sedimentation forebays prior to entering the sand filter. This will allow sediment to settle out of the runoff before entering the sand filters. Sediment shall be cleaned out of the sedimentation basin when it reaches a depth of more than six inches. This regular maintenance should prevent excess sediment from building up in the sand filter and extend its service life.

Water quality and runoff reduction calculations are included in Appendix D.

4.4 Proposed Stormwater Management

The SCS method was used to determine proposed peak discharges for the 1-, 10- and 100-year storms. The following table summarizes the proposed peak runoff.

SUMMARY OF EXISTING AND PROPOSED RUNOFF

Analysis Point	Existing Peak Runoff (cfs)			Proposed Peak Runoff (cfs)		
	1 Year	10 Year	100 Year	1 Year	10 Year	100 Year
A	20.9	68.6	127.3	13.5	45.4	108.9
B	3.7	11.9	21.6	1.0	3.2	5.7
C	1.5	4.5	8.1	1.0	2.9	5.5
D	11.5	36.6	66.9	8.2	26.8	62.9
E	0.2	0.8	1.6	0.2	0.8	1.6
F	16.2	49.8	90.1	12.7	37.7	67.1
G	0.5	1.7	3.3	0.4	1.3	2.4

A combination of aboveground detention basins were designed to attenuate the increase in discharge associated with new development. Channel protection is provided for each watershed by providing a low-flow orifice to detain runoff from the 1-year storm event. Sufficient capacity has been provided to meet the 24-hour extended detention requirement and the orifice is sized to be at least the minimum practicable to prevent clogging as recommended by the Manual.

The proposed detention systems have also been designed to attenuate the 1-year, 10-year, and 100-year storm events to keep the proposed discharge rates less than existing peak flow rates at each of the analysis points in accordance with NYSDEC. Water Quantity calculations are included in Appendix E.

4.5 Stormwater Conveyance

A combination of grass swales, inlet catch basins, and an underground pipe system collect and convey stormwater safely from the project site. The conveyance is designed using the rational method in accordance with Best Management Practices, local and state stormwater management regulations to safely convey the 25 year storm from the project site. Water conveyance calculations are included in Appendix F.

5.0 EROSION AND SEDIMENT CONTROL MEASURES

5.1 Erosion and Sediment Control Measures

Temporary and permanent soil erosion and sediment control measures have been designed and located to minimize the amount of sediment carried by stormwater runoff and discharge to adjacent surface waters or to on-site drainage structures. The soil erosion and sediment control design was completed in accordance with the "New York State Standards and Specifications for Erosion and Sediment Control," August 2005. The following summarizes the planned erosion and sediment control practices for the project.

Silt Fence

A 20-inch high silt fence shall be placed along the down gradient edge of the site. The purpose of the silt fencing is to reduce the runoff velocity and encourage deposition of any sediment before it leaves the site. The filter cloth shall be embedded securely in the ground as per the standard detail. Silt fencing shall be inspected regularly for fabric integrity, embedded depth and sediment accumulation. Additional silt fence shall encircle temporary stockpile areas and be placed in other locations throughout the site as needed as construction progresses to prevent sediment laden water from leaving the site.

Erosion Control Matting

Erosion control matting shall be used for slope stabilization on all slopes greater than 3H:1V as shown on the soil erosion and sediment control plans. The erosion control matting shall be installed per the manufacturer's instruction to insure proper functionality. Erosion control matting shall be inspected regularly for integrity and for evidence of failure. Repairs shall be completed as needed to maintain adequate erosion control.

Inlet Protection

All new catch basins and area drains within the limit of disturbance or in the vicinity of construction activities shall have fabric inlet protection installed to prevent sediment-laden runoff from entering the storm drain system. The fabric will be securely fastened on a frame and staked and embedded into the ground. The filter fabric inlet protection shall be inspected regularly for fabric integrity, embedded depth and sediment accumulation.

Temporary Sediment Traps

Temporary sediment traps intercept sediment laden runoff and trap and retain the sediment in order to reduce the total suspended solids leaving the project site. See the soil erosion and sediment control plan and Figure 6 – Sediment Trap Area Map for the anticipated temporary sediment trap locations.

The temporary sediment traps are anticipated to be located in the same general areas as the proposed water quality and quantity treatment locations. The traps will be sized to provide a volume of 3,600 cf of storage per acre and a surface area based on the disturbed area tributary to them in accordance with the NYS SESC requirements (see Appendix D for sizing). As the tributary areas and need for and location of sediment traps will vary over the course of construction the traps will need to be updated by the contractor to remain consistent with the NYS SESC requirements. The discharges from the temporary sediment traps will be through a temporary outlet consisting of a partially excavated channel lined with filter fabric and riprap. Additional rip rap and level spreaders will be added as needed to ensure the discharge leaves the site in a controlled non-erosive manner.

Temporary Swales

Temporary swales (with check dams and/or rip rap where required by slope) will be provided to route runoff from the disturbed areas to the temporary sediment traps. The swales will be constructed in accordance with NYS SESC requirements.

To protect the stabilized slopes from further disturbance temporary swales shall be installed uphill of completed areas to direct stormwater runoff into a designation sediment trap on site. These swales and sediment traps shall be modified and moved on site throughout construction depending on the location and phase of the work being done in order to prevent soil erosion.

Vegetative Measures

Any disturbed area where the earthwork is completed and not subject to construction traffic, should not be left exposed more than 14 days and shall immediately receive a temporary seeding in accordance with the "New York State Standards and

Specifications for Erosion and Sediment Control”, August 2005. Disturbed areas that are within wetlands or area adjacent to the wetland areas should use the seeding mix specified for wetland areas. Mulch may be used if the season prevents the establishment of a temporary cover. Permanent stabilization shall be performed as soon as possible after completion of grading.

Construction Entrance

A stabilized pad of aggregate underlain with filter fabric will be located at the site entrance to reduce or eliminate the tracking of sediment onto public streets. The pad thickness shall be constantly maintained to the specified dimensions by adding rock. At the end of each construction day, all sediment deposited on public streets will be removed and returned to the site.

Temporary Stockpile

All temporary stockpiles shall be within the work area and encircled with a silt fence to prevent the spread of sediment from the stockpile to the rest of the site outside of the work area. Any temporary stockpile inactive for more than 14 days shall be stabilized or covered.

Dust Control

Generation of dust shall be minimized by limiting the extent of exposed soils and re-establishing vegetative cover in these areas as soon as possible. Additional temporary methods to minimize dust may include wetting, mulching, spray adhesives, stone covering, and wind barriers. The Contractor shall maintain all stockpiles; haul roads, access roads, and equipment storage areas as necessary to keep the work area free from dust which would cause a hazard or nuisance.

5.2 Other Controls

Waste Disposal

Solid, sanitary and toxic waste must be disposed of in a proper manner in accordance with local, state and federal regulations. It is prohibited to burn, bury or pour out onto ground or into the storm sewers any solvents, paints, stains, gasoline, diesel fuel, used motor oil, hydraulic fluid, anti-freeze, cement curing compounds, or other toxic or hazardous wastes. Wash out of cement trucks should occur in a designated diked area where the washings can be collected and disposed of properly when they harden. Contractor shall be responsible for disposal of all waste off site.

5.3 Construction Sequence

The Contractor will be responsible for implementing the following Soil Erosion and Sediment Control and Storm Water Management control measures. The construction

dates, sequencing, and phasing details are currently being developed by the project team. The contractor is required to keep the SWPPP updated with the most current construction schedule. Refer to the Soil Erosion and Sediment Control Plan and Detail Sheet in the plan set for additional details. Regardless of the construction schedule, the following general construction sequence and guidelines are required to be implemented for the protection of water quality:

1. Install all soil erosion control measures as shown prior to any land development activities. Install sediment barriers/swales/ditches/dikes/traps at down slope areas from all proposed grading operations.
2. Land disturbance shall be limited to only that area necessary for development. No more than five (5) acres of unprotected soil shall be disturbed at one time without consent from the Town of Newburgh. When greater than 5 acres are disturbed two (2) inspections are required every seven (7) calendar days and the inspections must be separated by at least two (2) full calendar days. Refer to 5 acre waiver request and phasing plans for details and restrictions on construction disturbances. Completed areas shall be stabilized and protected from additional disturbance before additional area is exposed. Construct the site in phases in accordance with the soil erosion and sediment control plans to reduce the amount of land disturbed at any one time.
3. Install sediment traps and diversion swales as new areas of the site are disturbed. Installation of the temporary swales along steep slope areas are an integral part of keeping the phases properly stabilized. As lower sections of the proposed slopes are completed erosion control matting shall be installed where shown and stabilized and protected from additional disturbance. Locations of swales and traps shall be adjusted as needed to prevent soil erosion.
4. Protect all trees which are to remain and which are in or near construction areas as directed in the field with planking placed around the tree trunk. Place snow fencing at the drip line surrounding trees, if possible, or to maintain a minimum diameter of 10 feet around trees. Where fencing must be placed closer than the drip line, place 4 inches of wood chips over root zone to extend to the drip line. Maintain this wood chip protection for the duration of construction. Wooded areas to be protected by installing tree protection fencing along the disturbance limit line prior to construction. All tree protection fencing to be maintained in good condition until completion of all construction operations. Existing vegetation is to be maintained wherever possible.
5. Clear existing trees and vegetation from areas to be excavated or filled, then strip and stockpile topsoil from all areas to be disturbed. Seed stockpiled topsoil with temporary ryegrass cover as specified below (see note 12), and erect a silt fence around the stockpile.
6. Initial construction of retaining walls and storm drainage system. Install utilities/sleeves under the walls prior to wall construction.
7. Perform necessary excavation or fill operations to bring site to desired subgrade.

8. Install sediment barriers around all storm drain inlets as they are installed, or modify sediment control measures installed in #2 above and maintain until all disturbed areas are stabilized with vegetation and all pavements are paved with a base course.
9. Remove sediment traps once the stormwater detention systems have been installed. Divert overland flow and pipe flow to detention systems and block weirs and inlets to prevent flow into water quality basins.
10. Initiate installation of utilities, foundations and buildings.
11. Seed all disturbed areas which will remain undisturbed for a period of 15 days or more and which will not be under construction within 30 days with temporary ryegrass cover, as follows (method of seeding is optional):
 - a. Loosen seedbed by discing to a 4" depth.
 - b. Seed with 6 lb. Per acre perennial or annual ryegrass.
 - c. Mulch with 100-200 bales per acre of blown and chopped hay bound in place with 2000 lb. per acre cellulose fiber mulch, and with an approved tackifier binder.
12. If construction is suspended or completed, all disturbed areas shall be seeded and mulched immediately. All slopes steeper than one on three (v/h) and perimeter trenches and trap embankments shall, on completion, be immediately stabilized with slope stabilization matting.
13. Install curbs, curbed islands and complete final grading of areas to be paved.
14. After completion of site construction, fine grade and spread topsoil on all lawn areas and seed with permanent lawn mix as follows (see landscape plan for other planting information):
 - a. A minimum of 6" of topsoil should be spread on all disturbed areas.
 - b. Lime topsoil to pH 6.0.
 - c. Fertilize with 20 lb. Per 1000 sq. Ft. Of 5-10-10, 50% water soluble nitrogen fertilizer.
 - d. Seed with 5 lb. Per 1000 sq. Ft. Of the following mixture, or other mixture approved by the landscape architect: 40% Jamestown Chewings Fescue, 40% Baron Kentucky Bluegrass and 20% Yorktown Perennial Ryegrass.
 - e. Mulch as described for temporary seeding (note 12 above).
 - f. Fertilize 4 weeks after germination with 10 lb. 20-10-10 fertilizer per 1000 sq. Ft.
15. Completion of all site and off-site improvements.
16. During the progress of construction, maintain all sediment traps, barriers, and filters as necessary to prevent their being clogged up with sediment.
17. After pavements are installed and permanent vegetative cover and plantings are established, remove sediment barriers and seed the disturbed areas. Upon permanent stabilization the stormwater detention systems must be cleaned of sediment and then

the weirs and inlets to the water quality sand filters should be unblocked.

18. Maintain all seeded and planted areas to insure a viable stabilized vegetative cover.
19. Structural measures must be maintained to be effective. In general, these measures must be periodically inspected to insure structural integrity, to detect vandalism damage, and for cleaning and repair whenever necessary.
20. During construction, all structures should be inspected weekly and after every rain. Remove accumulated sediment and stockpile and stabilize in an area not subject to further erosion.
21. After construction is completed, permanent sediment or erosion control structures should be inspected at least semiannually and after every rain.

5.4 Stabilization

The contractor shall initiate stabilization measures as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, but in no case more than 14 days after the construction activity in that portion of the site has temporarily or permanently ceased. This requirement does not apply in the following instance:

Where the initiation of stabilization measures by the 14th day after construction activity temporarily or permanently ceased is precluded by snow cover or frozen ground conditions, stabilization measures shall be initiated as soon as practicable. Since greater than 5 acres of soil will be disturbed, soil stabilization measures shall be installed and/or implemented within seven (7) days from the date the soil disturbance activity ceased.

5.5 Inspections/Reporting

Unless notified by the Town of Newburgh, the owner or operator shall have a qualified inspector conduct site inspections in accordance with the permit requirements; for site with on-going soil disturbance activities, a qualified inspector shall conduct a site inspection at least once every seven (7) calendar days. Disturbances of greater than 5 acres require written approval from the Town of Newburgh as an MS4 prior to initiation. When more than 5 acres is disturbed at any one time during the course of construction, two (2) inspections are required every seven (7) calendar days and the inspections must be separated by at least two (2) full calendar days. The qualified inspector shall prepare an inspection report subsequent to each and every inspection. At a minimum, the inspection report shall include and/or address the following:

1. Date and time of inspection;
2. Name and title of person(s) performing inspection;
3. A description of the weather and soil conditions (e.g. dry, wet, saturated) at the

- time of inspection;
4. A description of the condition of the runoff at all points of discharge from the construction site. This shall include identification of any discharges of sediment from the construction site. Include discharges from conveyance systems (i.e. pipes, culverts, ditches, etc.) and overland flow;
 5. Identification of all erosion and sediment control practices that need repair or maintenance;
 6. Identification of all erosion and sediment control practice that were not installed properly or are not functioning as designed and need to be reinstalled or replaced;
 7. Description and sketch of areas that are disturbed at the time of the inspection and areas that have been stabilized (temporary and/or final) since the last inspection;
 8. Current phase of construction of all post-construction stormwater management practices and identification of all construction that is not in conformance with the SWPPP and technical standards; and
 9. Corrective action(s) that must be taken to install, repair, replace or maintain erosion and sediment control practices; and to correct deficiencies identified with the construction of the post-construction stormwater management practice(s).

The qualified inspector shall notify the owner or operator and appropriate contractor (or subcontractor) of any corrective actions that need to be taken. The contractor (or subcontractor) shall begin implementing the corrective action within one business day of this notification and shall complete the corrective actions in a reasonable time frame. All inspection reports shall be signed by the qualified inspector.

The Construction Manager shall maintain a record of all inspection reports in a site log book. An example is provided in Appendix G. The site log book shall be maintained on site and be made available to the permitting authority upon request. The Construction Manager shall post at the site in a publicly-accessible location, a summary of the site inspection activities on a monthly basis. The Construction Manager shall prepare a written summary confirming its compliance with the SWPPP at a minimum frequency of every month.

Prior to filing of the Notice of Termination (NOT) or the end of permit term, the Construction Manager shall have the qualified inspector perform a final site inspection. The qualified inspector shall certify that all disturbed areas have achieved final stabilization; and all temporary erosion and sediment control measures have been

removed; and that all post-construction stormwater management practices have been constructed in conformance with the SWPPP by signing the "Final Stabilization" and "Post-Construction Stormwater Management Practice" certification statements on the NOT.

As stated in the General Permit GP-0-15-002, if disturbance of more than 5 acres at any time occurs, the owner or operator must comply with the following requirements in order to be authorized to disturb more than 5 acres at one time:

- The owner or operator shall have a qualified inspector conduct at least two site inspections in accordance with Part IV.C. of the Permit every seven calendar days, for as long as greater than five acres of soil remain disturbed. The two inspections shall be separated by a minimum of two full calendar days.
- In areas where soil disturbance activity has temporarily or permanently ceased, the application of soil stabilization measures must be initiated by the end of the next business day and completed within seven days from the date the current soil disturbance activity ceased. The soil stabilization measures selected shall be in conformance with the technical standard, New York State Standards and Specifications for Erosion and Sediment Control, dated August 2005.
- The owner or operator shall prepare a phasing plan that defines the maximum disturbed area per phase and shows required cuts and fills.
- The owner or operator shall install any additional site specific practices needed to protect water quality.

5.6 Installation and Maintenance

The Contractor shall be responsible for the installation and maintenance of all temporary erosion control measures. The Contractor shall also be responsible for the installation of permanent control measures. The Operator shall be responsible for the maintenance of all permanent control measures.

All temporary erosion control measures installed on the project site shall be observed and maintained to ensure that they are operating as intended as follows:

1. Temporary measures will be inspected by the Contractor. Any necessary repairs, replacements, or upgrades will be made immediately.
2. Accumulated sediments will be removed as required to keep the measures functional. In the case of silt fencing and hay bales (if applicable), remove deposits where accumulations reach $\frac{1}{2}$ the height of the fence or bale. In the case of sediment traps, remove deposits whenever their capacity has been

reduced by fifty percent (50%) from the design capacity.

3. All erosion of the silt fence will be repaired immediately with compacted backfill materials.
4. The erosion control matting shall be regularly inspected and repaired when needed to prevent sediment laden runoff from leaving the site. Temporary swales shall be inspected regularly to insure they are functioning properly and are not filled with sediment. The sediment traps shall be inspected for sediment build up and cleaned out or otherwise maintained as needed. Any signs of erosion during these inspections shall be addressed immediately.
5. Disturbed areas, stockpile areas, areas used for storage of materials that are exposed to precipitation shall be inspected for evidence of, or the potential for, pollutants entering the drainage system or downstream.
6. Where discharge locations or points are accessible, they shall be inspected to ascertain whether erosion control measures are effective in preventing significant impacts to receiving waters.
7. Locations where vehicles enter or exit the site shall be inspected for evidence of offsite sediment tracking.
8. The permanent storm drainage system shall be inspected and cleaned of all sediment prior to the completion of project.

6.0 STORMWATER MANAGEMENT FACILITY MAINTENANCE

Stormwater management facilities for the project site have been designed for long-term water quality and water quantity performance. Below is a description of the methods to be implemented during and after construction. Sample checklists have been provided as part of Appendix G and H:

- Stormwater collection and conveyance systems (i.e., catch basins and pipes) will be inspected at least once annually and cleaned as necessary to maintain a free-flowing conveyance to stormwater basins. This includes a visual inspection and the clearing of any blockages within proposed swales and bioretention basins and subsurface drainage pipe to respective networks.
- Stormwater basins, bioretention basins, and sand filters will be visually inspected after every major storm event and at least semi-annually for the following items:
 - Clogging of orifice or overflow weirs;
 - Erosion of embankments and inlet/outlet pipes;
 - Substantial vegetative growth that may inhibit the volume or outflow;

- o Accumulation of sediment within the bottom and/or around the proposed outlet structure; and
- o Other items as identified on the checklists in Appendix G and H.

7.0 CONTRACTOR RESPONSIBILITY

Matrix Newburgh I LLC is responsible for ensuring all contractors and subcontractors associated with sitework construction activities identified within this SWPPP agree to implement applicable provisions of the SWPPP and sign a copy of the Contractor's certification statement (see Appendix I) before construction commences.

8.0 SWPPP CERTIFICATION STATEMENT

The Matrix Newburgh I LLC is the owner/operator of the project for the purpose of this permit (see Appendix J). The owner/operator must sign a copy of the Owner's/Operator certification statement before the NOI can be submitted. If the electronic NOI is submitted by the SWPPP preparer then the SWPPP Preparer Form must be filled out prior to submitting the electronic NOI.

9.0 RETENTION OF RECORDS

Matrix Newburgh I LLC shall retain a copy of the most current SWPPP at the construction site from the date construction is initiated at the site until the date of construction at the site is completed. Once work is completed, Matrix Newburgh I LLC shall submit to NYSDEC a Notice of Termination (see Appendix K).

Matrix Newburgh I LLC shall retain a copy of the NOI, NOI Acknowledgment Letter, SWPPP, MS4 SWPPP Acceptance form and any inspection reports that were prepared in conjunction with this permit for a period of at least five (5) years from the date that the site achieves final stabilization unless NYSDEC specifies another time period in writing.

10.0 CONCLUSION

The proposed management systems have been designed to attenuate peak discharges from the site to be equal to or below the existing peak discharge routes for the 1-, 10-, and 100-year storms in accordance with NYSDEC quality control requirements. Water quality measures have been provided in accordance with NYSDEC Stormwater Management Design Manual for the water quality volume (WQ_v) runoff (at least 110% WQ_v) and for the runoff reduction volume (RR_v). Channel protection has been provided within each detention area by providing a low-flow orifice to detain runoff from the 1-year storm event. The proposed conveyance system will include vegetated swales, inlet catch basins and an underground pipe system to collect and

convey stormwater runoff to the appropriate detention areas before being discharged from the site. Overall stormwater design is consistent with the existing drainage patterns on the site.

Temporary and permanent soil erosion and sediment control measures have been designed and located to minimize the amount of sediment carried by stormwater runoff to adjacent surface waters and onsite drainage structures. The soil erosion and sediment control design was completed in accordance with the "New York State Standards and Specifications for Erosion and Sediment Control", August 2005.

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ANDREASSEN ASSOCIATES, L.L.C.

Commercial / Residential Inspections--Estimating / Consulting
Reporting Meets ASHI (American Society of Home Inspectors) Standards
RETIRED NYS Building Official - Registration #0794-7115B
American Society of Home Inspectors Member # 099320
New York State Licensed Home Inspector # 16000008766
Member Historic Building Inspectors Association
Retired Building Official & Former NYS Dept. of State Code Instructor
Building Consulting & Other Inspection Services



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Mr. Kenneth Griffin
Matrix Development Group
CN 4000
Cranbury, NJ 08512

April 11, 2016

APR 13 2016

Re: Site Plan Revision
Matrix Business Park at Newburgh

Dear Mr. Griffin,

At your request, I have reviewed the revised site plans for Matrix Business Park at Newburgh, prepared by Langan and revised through April 11, 2016 for compliance with the Fire Code of NY State. Specifically, the revised site plans eliminate a previously proposed emergency access connection to Corporate Boulevard, and the entrance driveway from Route 17k has been widened and includes truck turn off areas. It is my opinion that the revised design obviates the need for an emergency access roadway to Corporate Boulevard.

By way of background, I am a retired building official. I was the senior building official in the Towns of New Paltz, Saugerties, Ulster and Woodstock. During my twenty year career I spent three years with the NY State Department of State Codes Division (now known as the Division of Building Standards and Codes) teaching the codes from Long Island to Buffalo. I continue to hold my Code Enforcement Certification and teach the building code course at Columbia Greene Community College, Dutchess County Community College and have taught the course in Syracuse at Onondaga County Community College. I also write and provide training for home inspectors, have published works on code related and construction issues and provide consulting to architects, engineers, attorneys and municipalities. I am currently acting as the CEO (code enforcement officer) for the Montgomery County Capital Project expansion of the County Sheriff's Department, Probation and Public Defenders offices in Fonda, NY. Furthermore, I provide expert witness testimony and written reports on construction litigation and other building and fire code related issues. I am currently a member of the Ulster County Planning Board and the Town of Saugerties Planning Board. I am on several committees regarding land use and zoning regulations as well as the Town of Saugerties Comprehensive Planning Committee and local Chamber of Commerce.

The Fire Code of New York State 2010, section 503.1.2 empowers the CEO, at his discretion, to require more than one fire apparatus access road based on potential impairment. The International Fire Code Commentary 2000 states that "additional access may be required by the code official based on that official's knowledge of traffic patterns, local weather conditions, terrain or anticipated magnitude of potential incident". In the case of this revised site plan application, it is my opinion that the proposed improvements are sufficient and that an additional emergency access road should not be required.

The revised site plan provides for an entrance roadway width, including stone shoulders, of no less than 40 feet with a maximum of 51 feet. In addition, several truck turnoff areas are provided that will allow for additional room for emergency vehicles or trucks to maneuver along the roadway. In accordance with the Fire Code of New York State 2010, emergency access roadways must be at least 20 feet wide. At 40 feet wide, the proposed entrance roadway is the equivalent of two access roadways. Furthermore, the lack of a central median in this 40 foot roadway will allow emergency vehicles additional room to maneuver around a potential accident on the roadway. Since the 40 foot roadway is the equivalent of two emergency access roadways, no further measures should be required for this project if the CEO determines that two access roadways are

necessary. However, as detailed below, this project includes abundant fire prevention features including improvements that go above and beyond the minimum requirements of the Fire Code, these features should be considered by the CEO when he evaluates the need for any improvements beyond one 20 foot emergency access roadway.

When the site plan for this project was approved, the building design was preliminary and the developer was not able to inform the CEO of certain fire safety design enhancements that should be considered when evaluating the need for a second emergency access road. The fire suppression system in the proposed 565,320 sf building has been designed to conform to Factory Mutual (FM) Fire protection standards. FM standards are more demanding than NY State Standards, which are based upon National Fire Protection Agency (NFPA) regulations. When the site plan was approved the fire suppression system had not been designed and the CEO was not told about the upgraded fire suppression system. The site design also includes a 12 inch water main with fire hydrants along the entrance road to 17k as well as around all four sides of the building.

The main access road is within three miles of the Orange Lake Fire District, and is significantly closer to the District than the previously proposed emergency access roadway. In order to reach the emergency access roadway, emergency vehicles would pass the entrance to Matrix Business Park and navigate through a congested business park. Trucks are often parked on both sides of Corporate Boulevard and around its cul-de-sac, potentially blocking access to the emergency access roadway. The emergency access roadway from Corporate Boulevard was designed at slightly less than a 10% slope, acceptable per the Fire Code but roughly twice the slope of the widened entrance off of Route 17k. Emergency services vehicles from the Orange Lake Fire District will realize more reliable access to the building via the widened access drive from Route 17k than from the previously proposed emergency access drive from Corporate Boulevard.

Another consideration for the CEO is the vertical and horizontal distance from the Matrix building to the nearest structure. Given its location on the top of a hill far from neighboring buildings there is virtually no chance of a conflagration of multiple buildings including the Matrix project.

The final building design has proven that the interior Means of Egress throughout the building will be in compliance with Chapter 10 of the Fire Code and the Building Code of NY State 2010. The building will be equipped with and in strict compliance with a Fire Alarm and early warning detection system and will be monitored by a central station (off premises) to notify 911 immediately of any drop in the sprinkler water pressure or the detection of any smoke, fire or carbon monoxide in compliance with NFPA 72. Finally, Matrix will provide space used as a site safety room in accordance with section 509.1 of the Fire Code of NY State 2010.

Other factors for the CEO to consider when evaluating the need for secondary access are the intensity of the roadway traffic and the accessibility of the entranceway to the property. This access roadway serves only one building, expected to be occupied by two tenants. The traffic report for the approved project indicates light traffic volumes throughout the day and good levels of service at the new traffic signal at Route 17k. The low traffic levels are factors to be considered by the CEO in his evaluation.

In summary, I believe the property will be very well protected without the need for an emergency access road to Corporate Boulevard. The widened access to Route 17k, which is the equivalent of two fire access roads, the building's above standard fire suppression system, the superior accessibility of the widened access road to emergency vehicles relative to the Corporate Boulevard access, the significant distance to neighboring buildings and the low projected traffic volume for the new access road are all factors to be considered by the CEO in his determination.

Respectfully Submitted,



Paul Andreasson
President
Andreassen Associates, LLC
pandreasseninspector@gmail.com



April 12, 2016

Mr. Kenneth A. Griffin
Principal
Matrix Development Group
3 Centre Drive
Monroe Township, NJ 08831

RE: Matrix Business Park at Newburgh - Newburgh, NY Fire Access Road Code Review
Precis Job #15233

Dear Mr. Griffin:

As you are aware, Precis Engineering, Inc. is the Engineer of Record for the design of the mechanical, electrical, plumbing, and fire suppression (MEP/FP) systems for the 565,320 square foot (SF) building located at 108 Route 17K in Newburgh, NY. The building contains 317,520 SF leased to AmerisourceBergen, a pharmaceutical distribution company, with the balance of 247,800 SF available for lease

Currently there is an issue regarding the fire apparatus access roads for the above listed project. New York State Fire Code states the following regarding fire department vehicle access:

503.1.2 Additional access. The code enforcement official is authorized to require more than one fire apparatus access road based on the potential for impairment of a single road by vehicle congestion, condition of terrain, climatic conditions or other factors that could limit access.

Furthermore, the State Fire Code has the following requirement for automatic sprinkler systems:

903.3.1.1 NFPA 13 sprinkler systems. Where the provisions of this code require that a building or portion thereof be equipped throughout with an automatic sprinkler system in accordance with this section, sprinklers shall be installed throughout in accordance with NFPA 13 except as provided in Section 903.3.1.1.1.

Currently, the site plan calls for a single access road to the proposed facility. The road meets all of the code requirements for Fire Apparatus Access Roads. Only at the code enforcement official's discretion are additional access roads required.

The facility's sprinkler design requirements are based on Factory Mutual (FM) standards, as opposed to NFPA standards as specified by the State Fire Code. NFPA standards are based on life safety. The intent is to control a fire long enough to facilitate evacuation to ensure the safety of the occupants. Factory Mutual (FM) standards are based on life safety as well as loss prevention/control. Occupant safety is critically important, but mitigation of damage to the facility and its contents is also an important element

Precis Engineering, Inc. 20 South Maple Street Suite 200 Ambler PA, 19002

215-540-9800 phone

215-540-9818 fax

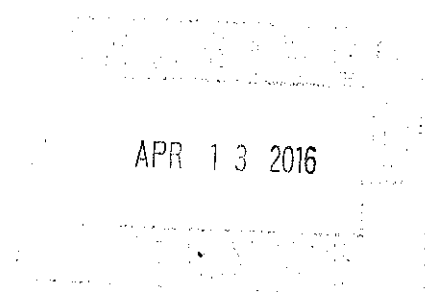
www.precisengineering.com

NFPA - FM Sprinkler Requirement Comparison

AREA DESIGNATION	AREA DESCRIPTION	HAZARD DESCRIPTION	SYSTEM TYPE	NFPA REQUIREMENTS			FM REQUIREMENTS			NOTES
				SPRINKLER WATER DEMAND	INSIDE/ OUTSIDE HOSE (GPM)	STANDARD REFERENCE	SPRINKLER WATER DEMAND	INSIDE/ OUTSIDE HOSE (GPM)	STANDARD REFERENCE	
A	GENERAL STORAGE WAREHOUSE	CLASS I-IV COMBUSTIBLES AND CARTONED, UNEXPANDED GROUP A PLASTICS IN RACKS W/ 8 FT AISLES	CEILING - ESFR	12 HEADS @ 40 PSI, K=22.4	250	NFPA 13: Table 17.2.3.1	12 HEADS @ 50 PSI, K=22.4	100/400	FMDS 8-9, TABLE 8	40' MAX. STORAGE HEIGHT, 45' MAX. CEILING HEIGHT
B	AEROSOL STORAGE	LEVEL 3 AEROSOL RACK STORAGE SINGLE DEEP RACK, 5 LEVELS HIGH	IN-RACK	K=5.6 OR 8.0, 8 HEADS @ 30 GPM	500	NFPA 30B: TABLE 6.3.2.7(f) W/ FIGURE 6.3.2.7(b)	8 (4 ON 2 LINES) FOR 2+ BARRIERS @ 57 GPM	100/400	FMDS 7-31, E.2 FIRE PROTECTION SCHEME A	40' MAX. STORAGE HEIGHT, 45' MAX. CEILING HEIGHT
C	FUTURE FLAMMABLE STORAGE ROOM	FLAMMABLE/COMBUSTIBLE LIQUIDS IN SRV/DRR RACKS	TBD	TBD	TBD	TBD	TBD	TBD	TBD	
D	DATA PROCESSING ROOM	ORDINARY HAZARD GROUP II	CEILING - PREACTION	0.20 GPM PER SQ.FT. /1950 SQ.FT.	250	NFPA 13: FIGURE 11.2.3.1.1	0.20 GPM PER SQ.FT. /1950 SQ.FT.	100/150	FMDS 2-0	PROVIDE FM-200 DRY CHEMICAL SUPPRESSION SYTEM ALSO.
E	FUTURE VAULT	CLASS I-IV COMBUSTIBLES AND CARTONED, UNEXPANDED GROUP A PLASTICS IN RACKS W/ 8 FT AISLES	CEILING - ESFR	12 HEADS @ 50 PSI, K=14.0	250	NFPA 13: Table 17.2.3.1	12 HEADS @ 50 PSI, K=14.0	100/150	FMDS 8-9, TABLE 8	20' MAX. STORAGE HEIGHT, 26' MAX. CEILING HEIGHT
F	FUTURE REFRIGERATOR (+40 F)	CLASS I-IV COMBUSTIBLES AND CARTONED, UNEXPANDED GROUP A PLASTICS IN RACKS W/ 8 FT AISLES	CEILING - ESFR	12 HEADS @ 50 PSI, K=14.0	250	NFPA 13: Table 17.2.3.1	12 HEADS @ 50 PSI, K=14.0	100/150	FMDS 8-9, TABLE 8	16' MAX. STORAGE HEIGHT, 20' MAX. CEILING HEIGHT
G	FUTURE FREEZER	CLASS I-IV COMBUSTIBLES AND CARTONED, UNEXPANDED GROUP A PLASTICS IN RACKS W/ 8 FT AISLES	CEILING - ESFR	12 HEADS @ 50 PSI, K=14.0	250	NFPA 13: Table 17.2.3.1	12 HEADS @ 50 PSI, K=14.0	100/150	FMDS 8-9, TABLE 8	16' MAX. STORAGE HEIGHT, 20' MAX. CEILING HEIGHT
H	FUTURE RACK	CLASS I-IV COMBUSTIBLES AND EXPOSED EXPANDED GROUP A PLASTICS IN RACKS W/ 8 FT AISLES	IN-RACK	N/A	N/A	OUTSIDE THE SCOPE OF NFPA 13	8 (4 EACH LEVEL FOR 2 LEVELS) @ 60 GPM, OR, K=8.0 OR GREATER, ORD. TEMP W/GUARD	100/400	FMDS 8-9	40' MAX. STORAGE HEIGHT, 45' MAX. CEILING HEIGHT
I	GENERAL OFFICE SPACE	LIGHT HAZARD	CEILING - WET	0.10 GPM PER SQ.FT./1500 SQ.FT.	100	NFPA 13: FIGURE 11.2.3.1.1	0.10 GPM PER SQ.FT./1500 SQ.FT.	100	FMDS 2-0	
J	RECEIVING WORK PLATFORMS	EXTRA HAZARD GROUP II	CEILING - WET	0.40 GPM PER SQ.FT. /2500 SQ.FT.	500	NFPA 13: FIGURE 11.2.3.1.1	0.40 GPM PER SQ.FT. /2500 SQ.FT.	100/400	FMDS 2-0	
K	DIESEL FIRE PUMP ROOM	EXTRA HAZARD GROUP I	CEILING - WET	0.30 GPM PER SQ.FT. /ENTIRE	500	NFPA 13: FIGURE 11.2.3.1.1	0.32 GPM PER SQ.FT. /ENTIRE	100/400	FMDS 2-0	
L	ELECT. & AIR COMPRESSOR ROOMS	ORDINARY HAZARD GROUP II	CEILING - WET	0.20 GPM PER SQ.FT. /ENTIRE	250	NFPA 13: FIGURE 11.2.3.1.1	0.20 GPM PER SQ.FT. /ENTIRE	0/250	FMDS 2-0	

12 April 2016

John P. Ewasutyn, Chairman
Town of Newburgh Planning Board
308 Gardnertown Road
Newburgh, New York 12550



**Re: Matrix Business Park at Newburgh – Route 17K
Langan Project No.: 9190601**

Dear Mr. Ewasutyn:

Please find attached the following items in support of this request for Amended Site Plan Approval for the Matrix Business Park at Newburgh:

- Site Plan Approval Application
- 15 sets of revised Site Plan Approval Drawings
- 1 copy of the revised portion of the SWPPP
- Letter from Andreassen Associates, LLC dated April 11, 2016
- Letter from Precis Engineering, Inc., dated April 12, 2016

Copies of the above listed items are also being sent directly to the Town's Consultants including; Pat Hines, Mike Donnelly, and Ken Wersted.

This application for Amended Site Plan Approval includes an alternative solution in order to provide adequate and code-conforming access to the site for emergency vehicles.

The plans have been revised to provide increased emergency access capacity along the site driveway to address access for emergency vehicles. Langan has studied several alternatives which might provide adequate access for emergency vehicles from Route 17k. However, due to limited site frontage, topography, and existing wetlands there are no other points where alternative access can be provided to the site.

Some of the alternatives we considered include; a boulevard-style entrance, or providing a median, Jersey barrier, or guiderails as ways to separate traffic. Ultimately we determined that providing a wider driveway gives us the most flexibility as it allows emergency vehicles to circumvent disabled or stalled vehicles whereas a physical barrier could actually impede access. In addition, a barrier or other physical separation would make it harder to maintain the open roadway widths during inclement weather conditions due to accumulation of snow banks on either side of the barrier as compared to a single open roadway.

We have concluded that a main access drive having a minimum width of 40' feet (equivalent to two 20 foot emergency access lanes) would provide the most reliable condition to ensure emergency vehicles could always gain access to the site. Because the wider portions of the roadway will only be used for emergency access, and, in the interest of preserving stormwater quality and quantity, we are proposing that the additional width be stabilized with stone shoulders designed to support emergency vehicles.

The revised plans provide for a paved driveway with stabilized stone shoulders such that at its narrowest point the driveway is at least 40' wide, which is the equivalent width of two fire apparatus access roads per NYS Fire Code.

Providing a 40 foot wide access way allows for two 10-ft' lanes for trucks to pull to the sides and still leave at least 20 feet clear for emergency vehicles. This design also provides in essence a second means of ingress and egress should a stalled vehicle or accident occur in one of the lanes by virtue of the widened roadway section which at 40 feet is equivalent to four 10-foot wide travel lanes.

In addition, we added several truck pull off areas so that trucks can pull off the road to provide even more room for emergency vehicles to pass should the need arise.

We would note that this distribution facility produces a relatively low number of trips as compared to other uses. The traffic study indicates that normally there will only be a few trucks on the site driveway at any time. It is our professional opinion that the driveway will not be congested due to normal vehicular usage. The redesigned driveway with stabilized shoulders is also wide enough for emergency vehicles to pass should a vehicle or truck become disabled along the driveway.

As a point of comparison, we would note the Route 17k bridge over the Thruway adjacent to our site, and portions of 17k in front of our site are only 38-39 feet wide, which is narrower than our site driveway will be with these changes.

The other significant factor to be considered is the design of the fire sprinkler system. As indicated in the attached letter from Precis Engineering, Inc., the fire sprinkler system for this building has been designed to meet Factory Mutual (FM) standard which are more stringent than the NFPA standards required by the New York State Fire Code.

Relative to the SEQRA determination made by the Planning Board and the proposed plan changes, in 2015, Matrix submitted a Long Form Environmental Assessment Form ("EAF") and detailed SEQRA narrative discussing the project. Subsequently, the Planning Board classified the project as a Type I action and completed Part 2 of the EAF. The Board then adopted a Negative Declaration under SEQRA on November 19, 2015, which it re-affirmed in a written Negative Declaration on December 17, 2015. The Negative Declaration concluded that the project would not create any significant adverse impacts on the environment. As discussed below, the amended plans will not create any additional environmental impacts that have not been previously evaluated by the Planning Board in the approved Negative Declaration. In fact, as noted below, the amended plans are expected to reduce environmental impacts over the approved plans

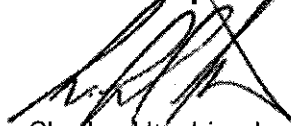
Under the amended site plans, the emergency access road to Corporate Blvd will be eliminated and the primary access road to Route 17k will be widened slightly to add shoulders to provide more room to accommodate emergency vehicles. As a result, the total site disturbance of the amended plans would not change from the approved plans. Moreover, the amended plans would not increase the total impervious surfaces on the site. The previously approved emergency access road was to be constructed with pervious pavers. Similarly, the shoulders to be added to the access drive on the amended plans will also contain pervious material. The amended plans will also eliminate the construction of retaining walls needed to support the emergency access road and any impacts related to those walls.

In addition, the slightly widened driveway will not create any additional impacts to the intersection with NY Route 17k, and thus will not affect traffic levels or improvements presently under review by the New York State Department of Transportation. Moreover, the amended site plan would not create any change in the stormwater design for the approved project other than to eliminate the stormwater controls related to the construction of the original emergency access road. The SWPPP has been revised to remove any discussion of the previously-approved secondary access road. Other than these changes, the SWPPP remains as approved. If anything, the amended plans will reduce potential environmental impacts on the site by eliminating the grading and potential for soil erosion related to the construction of the previously-approved secondary access road. Based on the foregoing, the previous EAF has not changed and remains valid and applicable to the amended plans. Moreover, the amended plans are expected to reduce environmental impacts from the approved plan and are consistent with the original SEQRA Negative Declaration adopted by the Planning Board.

We believe that the proposed change to the access drive provides for safe and code compliant access to the site and is consistent with the intent of the original Site Plan Approval issued by the Planning Board.

Please do not hesitate to contact us should you have any questions about the information provided in this submittal.

Sincerely,
**Langan Engineering, Environmental, Surveying
and Landscape Architecture, D.P.C.**



Charles Utschig, Jr., PE
Associate

CC:

**TOWN OF NEWBURGH
APPLICATION FOR
SUBDIVISION/SITE PLAN REVIEW**

**RETURN TO: Town of Newburgh Planning Board
308 Gardnertown Road
Newburgh, New York 12550**

APR 13 2016

DATE RECEIVED: _____ **TOWN FILE NO:** _____
(Application fee returnable with this application)

1. Title of Subdivision/Site Plan (Project name):

Matrix Business Park at Newburgh

2. Owner of Lands to be reviewed:

Name	Matrix Newburgh I, LLC
Address	Forsgate Drive, CN 4000 Cranbury NJ 08512
Phone	732 521-2900

3. Applicant Information (If different than owner):

Name	_____
Address	_____ _____ _____
Representative	Kenneth Griffin
Phone	732 521-2900
Fax	609 395-8289
Email	kgriffin@matrixcompanies.com

4. Subdivision/Site Plan prepared by:

Name	Langan Engineering
Address	707 Westchester Ave. Suite 104 White Plains, NY 10604
Phone/Fax	914 323-7400

5. Location of lands to be reviewed:

108 Rt. 17 K, Town of Newburgh NY

6. Zone	IB	Fire District	Orange Lake
Acreage	71.7 acres	School District	Newburgh Enlarged City School District

7. Tax Map: Section 95 **Block** 1 **Lot** 79

8. Project Description and Purpose of Review:


Number of existing lots 1 Number of proposed lots 1
Lot line change _____
Site plan review _____
Clearing and grading _____
Other Amended Site Plan for alternative emergency access

PROVIDE A WRITTEN SINGLE PAGE DESCRIPTION OR NARRATIVE OF THE PROJECT

9. Easements or other restrictions on property:

(Describe generally) Easements of Record

10. The undersigned hereby requests approval by the Planning Board of the above identified application and scheduling for an appearance on an agenda:

Signature  Title Manager, Matrix Newburgh I, LLC
Date: 7-11-76

NOTE: If property abuts and has its access to a County or State Highway or road, the following information must be placed on the subdivision map or site plan: entrance location, entrance profile, sizing of pipe (minimum length of pipe to be 24 feet).

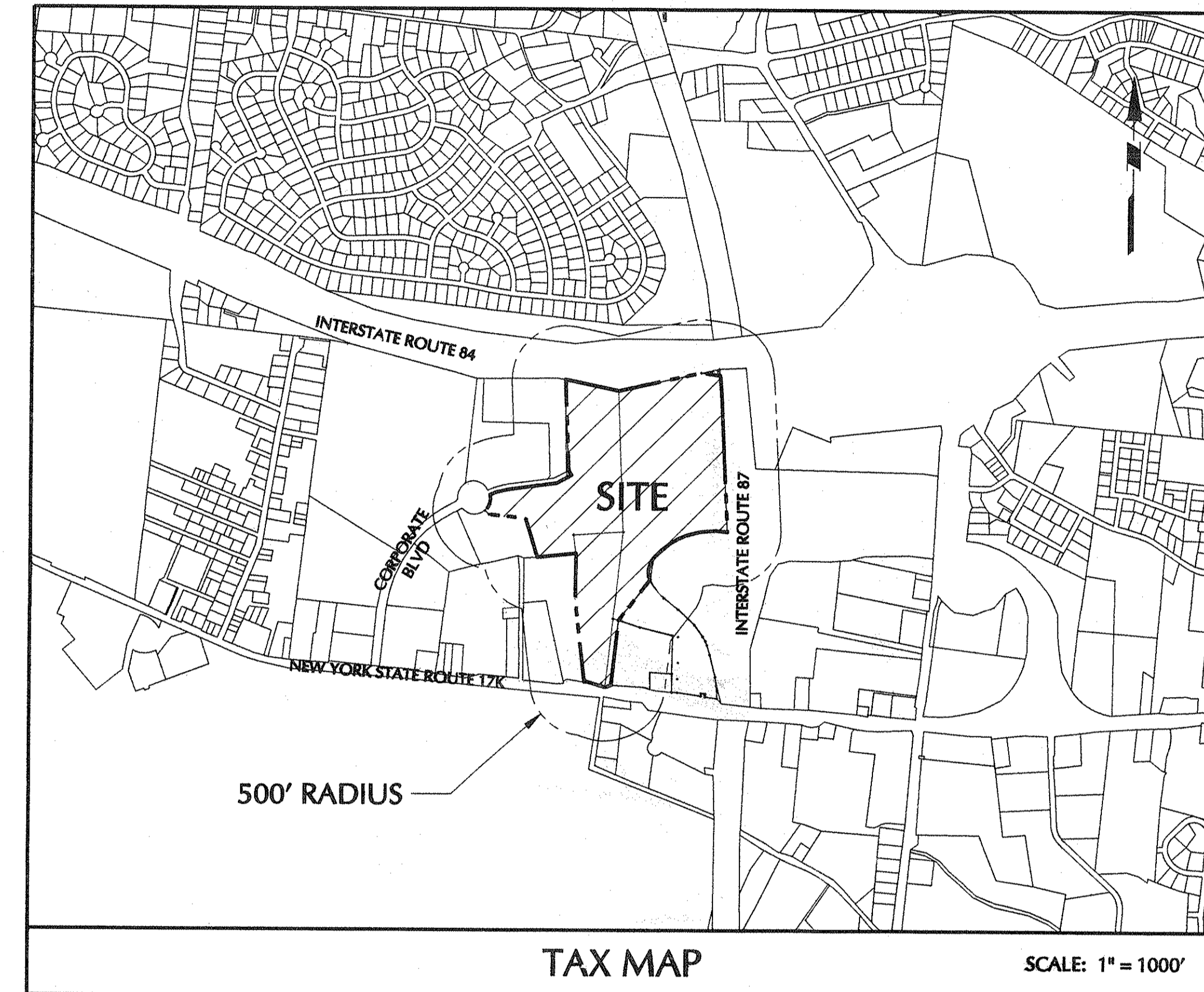
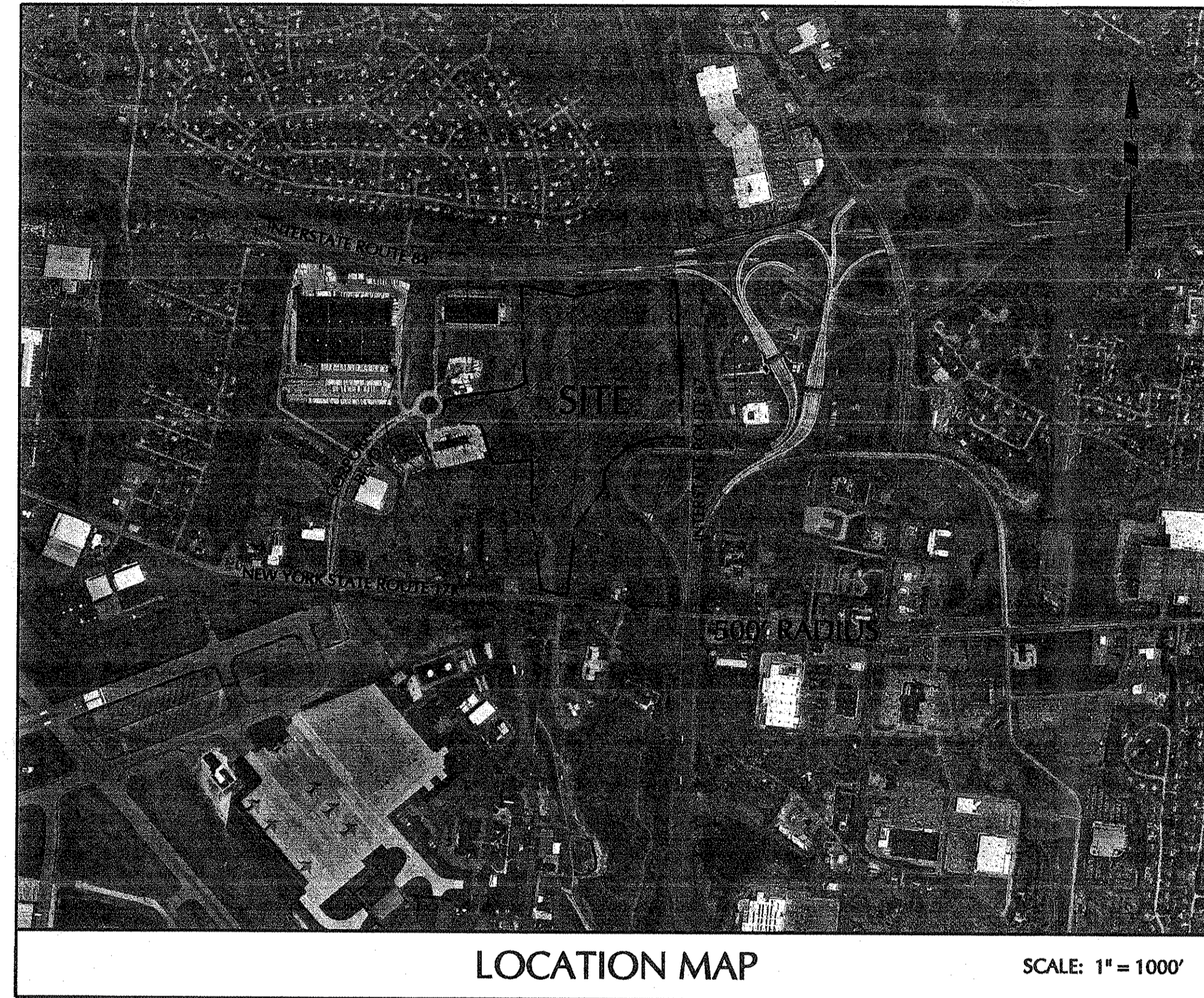
The applicant will also be required to submit an additional set of plans, narrative letter and EAF if referral to the Orange County Planning Department is required under General Municipal Law Section 239.

FINAL SITE PLAN APPROVAL DRAWINGS

MATRIX BUSINESS PARK AT NEWBURGH

SECTION 95, BLOCK 1, LOT 79 (PREVIOUSLY LOTS 4.12, 54.1, 69.25, AND 49.12)

TOWN OF NEWBURGH, ORANGE COUNTY, NEW YORK



TOWN OF NEWBURGH APPROVAL BOX
TOWN PROJECT #

PLANNING BOARD CHAIRPERSON _____ DATE _____
JOHN P. EWASUTYN

LIST OF CONTACTS	
<p>PLANNING BOARD CHAIRMAN John Ewasutin 308 Gardentown Road Newburgh, NY 12550 PHONE: (845) 564-7804 FAX: (845) 566-7802</p> <p>TOWN ENGINEER James W. Osborne 1496 Route 300 Newburgh, NY 12550 PHONE: (845) 564-7814 FAX: (845) 566-1432</p> <p>TOWN CLERK Andrew J. Zarutskie 1496 Route 300 Newburgh, NY 12550 PHONE: (845) 564-4554 FAX: (845) 564-8509</p> <p>ORANGE COUNTY HEALTH DEPARTMENT 124 Main Street Goshen, NY 10924 PHONE: (845) 291-2331</p> <p>SUPERVISOR Gil Plaquadro 1496 Route 300 Newburgh, NY 12550 PHONE: (845) 564-4552 FAX: (845) 566-9486</p>	<p>GAS AND ELECTRIC Central Hudson Gas & Electric Co. 610 Little Britain Road Newburgh, NY 12550 Mark Sciafani PHONE: (845) 563-4538</p> <p>TELEPHONE Verizon 449 Broadway, 4th Fl Kingston, NY 12401 PHONE: (845) 340-8036</p> <p>CABLE Time Warner Cable 109-15 14th Avenue College Point, NY 11356 PHONE: (845) 692-5339</p> <p>ORANGE COUNTY SOIL & WATER CONSERVATION DISTRICT 225 Dolson Avenue, Suite 103 Middletown, NY 10940 PHONE: (914) 343-1873/3811 FAX: (914) 344-1341</p> <p>WATER Town of Newburgh Orange County, NY</p>

PROPERTY OWNERS WITHIN 500 FT			
SECTION NO.	BLOCK	LOT	PROPERTY OWNER
60	3	41.21	1401 Route 300 Holdings, LLC
60	1	14.11	Town of Newburgh
60	3	41.1	NYS Department of Transportation
89	1	79	NYS Department of Transportation
95	1	17	Wabno, Hospitalities
95	1	49.2	Singh Realty Corp
95	1	73	G&M Orange, LLC
95	1	45.12	Crossroads Court Real Estate, LLC
95	1	67	Northeast, Distribution
95	1	48	Parten Cemetery
95	1	33	Mar Properties, LLC
95	1	16	WABNO Hospitalities, Inc.
95	1	7.2	NYS Department of Transportation
95	1	54.2	Biss Realty, Inc.
95	1	32.3	Newburgh Hotel Partners, LLC, Hotel Partners
95	1	77	Richichi, Susan
95	1	78	Richichi, Susan
95	1	7.1	NYS Department of Transportation
95	1	74	BRE East Mixed Asset Owner, LLC
95	1	47.2	Georemtech, LLC
95	1	53	County of Orange
95	1	49.12	Dibrizi, Angela
95	1	1.1	Northeast Business Center
95	1	1.32	Northeast, Business Center
95	1	58	Red Oak SOS, LLC
95	1	68	Newburgh Logistics LLC
95	1	8	Rt 300 Newburgh Partners LLC
95	1	4.12	Matrix Newburgh I LLC
95	1	69.25	Matrix Newburgh I, Inc.
95	1	54.1	COS17 LLC
95	1	69.1	A. Dule Pyle, Inc.

DRAWING LIST			
DRAWING NO.	DESCRIPTION	DATE	LAST REVISED
CS-001	COVER SHEET	9/9/2015	4/11/2016
VT-101	TOPOGRAPHIC AND BOUNDARY SURVEY	7/17/2015	8/24/2015
CB-101	LOT LINE CHANGE	7/17/2015	10/27/2015
CG-101	OVERALL SITE PLAN	9/9/2015	4/11/2016
CS-401	SITE PLAN	9/9/2015	4/11/2016
CS-402	SITE PLAN	9/9/2015	4/11/2016
CG-101	OVERALL GRADING AND DRAINAGE PLAN	9/9/2015	4/11/2016
CG-401	GRADING AND DRAINAGE PLAN	9/9/2015	4/11/2016
CG-402	GRADING AND DRAINAGE PLAN	9/9/2015	4/11/2016
CG-403	ROADWAY PROFILE AND TYPICAL SECTION	9/9/2015	1/25/2016
CG-410	GRADING DETAIL ENLARGEMENT PLAN	9/9/2015	4/11/2016
CU-101	OVERALL UTILITY PLAN	9/9/2015	4/11/2016
CU-401	UTILITY PLAN	9/9/2015	4/11/2016
CU-402	UTILITY PLAN	9/9/2015	4/11/2016
CE-101	OVERALL SOIL EROSION AND SEDIMENT CONTROL PLAN	9/9/2015	4/11/2016
CE-401	SOIL EROSION AND SEDIMENT CONTROL PLAN	9/9/2015	4/11/2016
CE-402	SOIL EROSION AND SEDIMENT CONTROL PLAN	9/9/2015	4/11/2016
CE-501	SOIL EROSION AND SEDIMENT CONTROL DETAILS	9/9/2015	1/25/2016
LP-101	OVERALL LANDSCAPE PLAN	9/9/2015	4/11/2016
LP-401	LANDSCAPE PLAN	9/9/2015	4/11/2016
LP-402	LANDSCAPE PLAN	9/9/2015	4/11/2016
LP-501	LANDSCAPE SCHEDULE, NOTES, AND DETAILS	9/9/2015	03/18/2016
LL-101	OVERALL LIGHTING PLAN	9/9/2015	4/11/2016
LL-401	LIGHTING PLAN	9/9/2015	4/11/2016
LL-402	LIGHTING PLAN	9/9/2015	4/11/2016
LL-501	LIGHTING SCHEDULE, NOTES, AND DETAILS	9/9/2015	03/18/2016
CS-501	DETAIL SHEET (1 OF 3)	9/9/2015	4/11/2016
CS-502	DETAIL SHEET (2 OF 3)	9/9/2015	1/25/2016
CS-503	DETAIL SHEET (3 OF 3)	9/9/2015	-

SITE INFORMATION

ADDRESS: N.Y. ROUTE 17K,
TOWN OF NEWBURGH, NY 12550

SECTION: 95

BLOCK: 1

LOT: 79 (PREVIOUSLY LOTS 4.12, 54.1, 69.25, AND 49.12)

ZONE: IB INTERCHANGE BUSINESS ZONE

APPLICANT

MATRIX NEWBURGH I LLC
FORSGATE DRIVE, CN 4000
CRANBURY, NJ 08512
TEL: (732) 521-2900

CONTACT:
KENNETH A. GRIFFIN

CIVIL ENGINEER

LANGAN ENGINEERING, ENVIRONMENTAL, SURVEYING AND LANDSCAPE ARCHITECTURE, D.P.C.
707 WESTCHESTER AVENUE, SUITE 304
WHITE PLAINS, NY 10604-3102

TEL: (914) 323-7400
FAX: (914) 323-7401

CONTACT:
CHARLES UTSCHIG, PE

SURVEYOR

LANGAN ENGINEERING, ENVIRONMENTAL, SURVEYING AND LANDSCAPE ARCHITECTURE, D.P.C.
300 KIMBALL DRIVE, 4TH FLOOR
PARSIPPANY, NJ 07054

TEL: (973) 560-4900
FAX: (973) 560-4901

CONTACT:
JOSEPH E. ROMANO

ARCHITECT

WARE MALCOMB
90 WOODBRIDGE CENTER DRIVE, SUITE 320
WOODBIDGE, NJ 07095

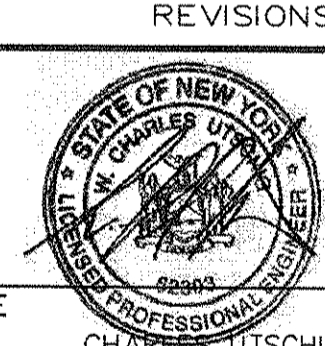
TEL: (732) 692-6802

CONTACT:
ADAM SMITH

NOTE:
AT LEAST 3 DAYS PRIOR TO ANY EXCAVATION OR CONSTRUCTION ACTIVITY CONTACT: "CALL BEFORE YOU DIG" 1-800-962-7962.

WARNING:
IT IS A VIOLATION OF THE NYS EDUCATION LAW ARTICLE 146 FOR ANY PERSON, UNLESS HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS ITEM IN ANY WAY.

4/11/2016	REVISED ACCESS ROADS	4
3/18/2016	REVISED PER MEP AND ARCH. COORDINATION AND TOWN COMMENTS	3
1/25/2016	REVISED PER MEP COMMENTS, NYS DOT DESIGN, AND EMERGENCY ACCESS PATH	2
11/9/2015	REVISED PER TOWN COMMENTS	1
Date	Description	No.



04/11/2016
DATE SIGNED

SIGNATURE _____
CHARLES UTSCHIG
PROFESSIONAL ENGINEER NY Lic. No. 062303

LANGAN
707 Westchester Avenue, Suite 304, White Plains, NY 10604
T: 914.323.7400 F: 914.323.7401 www.langan.com

NEW JERSEY NEW YORK CONNECTICUT PENNSYLVANIA
OHIO INDIANAPOLIS FLORIDA TEXAS CALIFORNIA
ARIZONA ARKANSAS MISSOURI ILLINOIS MISSISSIPPI ALABAMA
LOUISIANA MISSOURI MISSOURI MISSOURI MISSOURI MISSOURI
Landscape Architecture, Environmental, Surveying and Construction Administration, D.P.C. P.A.
Langan Engineering, Environmental, Surveying and Construction Administration, D.P.C. P.A.
Langan Engineering, Environmental, Surveying and Construction Administration, D.P.C. P.A.

Project: **MATRIX BUSINESS PARK AT NEWBURGH**
TOWN OF NEWBURGH
ORANGE COUNTY NEW YORK

Drawing Title: **COVER SHEET**

Project No. **9190601** Drawing No. **CS-001**

Date: **9/9/2015**

Scale: **AS SHOWN**

Drawn By: **BYT**

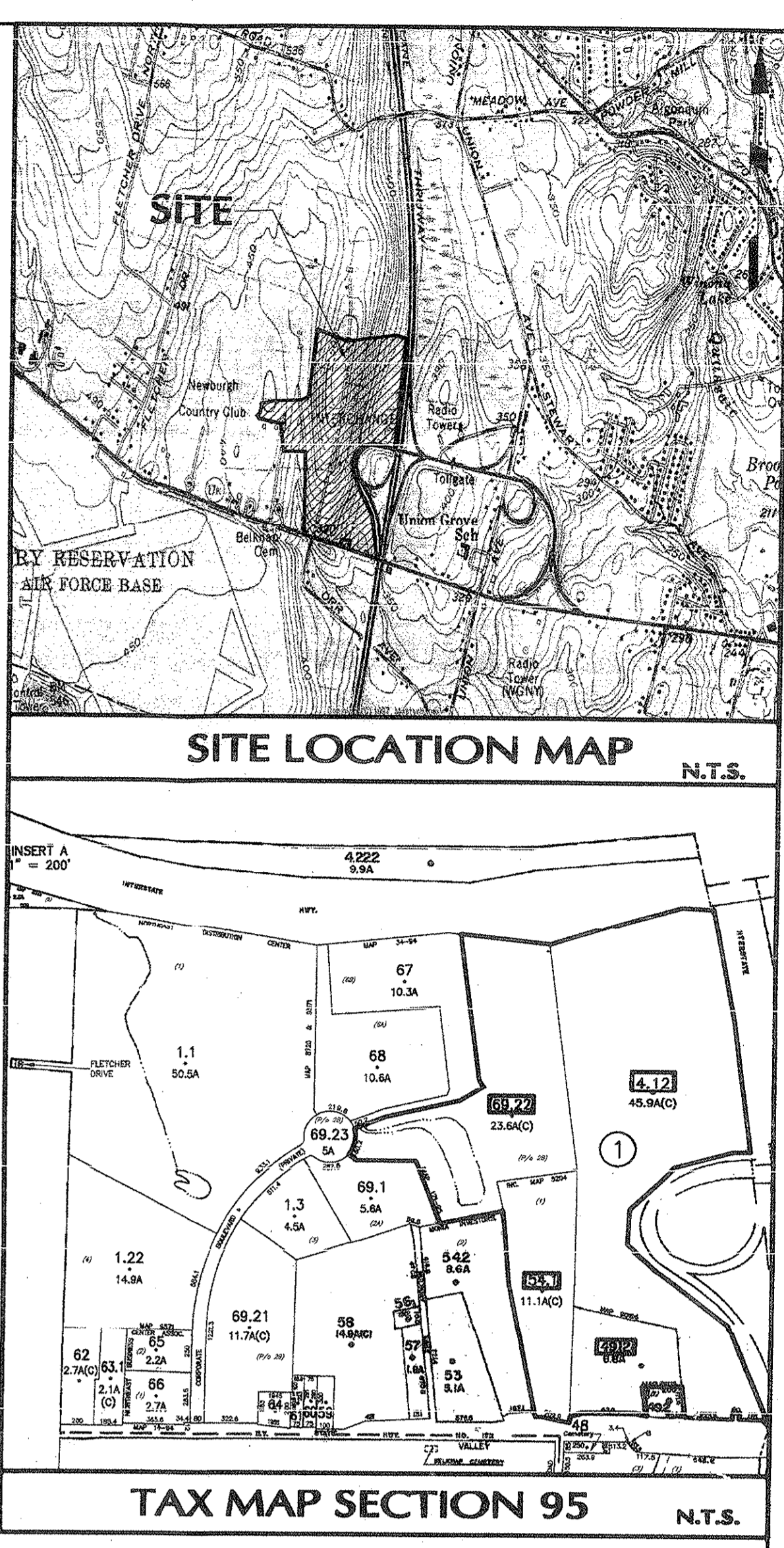
Submission Date: **04/11/2016**

NOTES:

- THIS SURVEY IS BASED UPON EXISTING PHYSICAL CONDITIONS FOUND AT THE SUBJECT SITE, AND THE FOLLOWING REFERENCES:
 - A PLAN ENTITLED "TOPOGRAPHIC AND BOUNDARY SURVEY OF MATRIX NEWBURGH, TOWN OF NEWBURGH, ORANGE COUNTY, NEW YORK" PREPARED BY LANGAN ENGINEERING, ENVIRONMENTAL, SURVEYING AND LANDSCAPE ARCHITECTURE, D.P.C. DATED SEPTEMBER 8, 2007, SHEETS 07-01 THRU 07-04.
- THE SURVEYED PROPERTY IS SUBJECT TO BUT NOT LIMITED TO THE FOLLOWING FACTS AS REVEALED BY THE HEREON REFERENCED INFORMATION. THE INFORMATION SHOWN HEREON DOES NOT CONSTITUTE A TITLE SEARCH BY THE SURVEYOR. ALL INFORMATION THAT MAY AFFECT THE QUALITY OF TITLE TO BOTH THE SUBJECT AND ADJOINING PARCELS SHOULD BE VERIFIED BY AN ACCURATE AND CURRENT TITLE REPORT (SEE EASEMENT TABLE - SHEET CB-101).
- THE MERIDIAN OF THIS SURVEY IS REFERENCED TO NEW YORK EAST STATE PLANE COORDINATE SYSTEM NAD 83 AS ESTABLISHED BY GPS METHODS.
- ELEVATIONS SHOWN ARE REFERENCED TO NAVD 88 AS ESTABLISHED BY GPS METHODS.
- STREET NAMES AND R.O.W. WIDTHS, BLOCK AND LOT NUMBERS AS PER CURRENT TAX MAPS.
- PLANIMETRIC INFORMATION SHOWN HEREON HAS BEEN OBTAINED FROM GROUND SURVEYS BY LANGAN ENGINEERING AND ENVIRONMENTAL SERVICES COMPLETED SEPTEMBER 1999, UPDATED AS PER VISUAL INSPECTION JULY 2007 AND AERIAL DATA SUPPLIED BY ADR.
- CONTOURS AND SPOT GRADES LABELED TO ONE DECIMAL PLACE HAVE BEEN OBTAINED FROM AERIAL TOPOGRAPHIC DATA AS NOTED HEREON. SPOT GRADES SHOWN TO TWO DECIMAL PLACES ARE THE RESULTS OF GROUND SURVEYS PERFORMED BY LANGAN ENGINEERING AND ENVIRONMENTAL SERVICES. ALL DATA IS BASED ON THE DESIGN MAPING CRITERIA (SCALE, ETC.) THE DATA SHOWN MEETS NATIONAL MAP ACCURACY STANDARDS.
- AS PER THE NATIONAL FLOOD INSURANCE PROGRAM FROM MAP TITLED "TOWN OF NEWBURGH, ORANGE COUNTY, NEW YORK, PANEL 139 OF 630 COMMUNITY PANEL NUMBER 360627 MAP NUMBER 99703006, EFFECTIVE DATE AUGUST 3, 2009, THE SUBJECT PROPERTY LIES WITHIN ZONE (UNSHADED) AN AREA DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN.
- ENVIRONMENTAL AND/OR HAZARDOUS MATERIALS LOCATION, IF ANY, ARE NOT COVERED UNDER THIS CONTRACT.
- STORM AND SANITARY SEWER INFORMATION WAS MEASURED AT FIELD LOCATED MANHOLES/CATCH BASINS AND RUNS WERE ASSUMED TO BE STRAIGHT BETWEEN LOCATED MANHOLES/CATCH BASINS.
- ALL SUBSURFACE UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND EXISTING DRAWINGS. NO EXCAVATIONS WERE MADE TO LOCATE SUBSURFACE UTILITIES. THE SURVEYOR MAKES NO GUARANTEES THAT THE UNDERGROUND UTILITIES COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION USED. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES.
- BEFORE ANY EXCAVATIONS ARE BEGUN, THE PROPER UTILITY AGENCIES MUST BE CONTACTED FOR VERIFICATION OF UTILITY TYPE AND FOR FIELD LOCATIONS.
- THIS IS TO CERTIFY THAT THERE ARE NO NATURAL WATERCOURSES ON THE PROPERTY EXCEPT AS SHOWN ON THIS SURVEY.
- THIS PLAN NOT VALID UNLESS INK STAMPED WITH THE SEAL OF THE PROFESSIONAL LAND SURVEYOR.
- UNAUTHORIZED ALTERATION OR ADDITION TO A SURVEY MAP BEARING A LICENSED LAND SURVEYOR'S SEAL, IS A VIOLATION OF SECTION 7209, SUB-DIVISION 2 OF N.Y. STATE EDUCATION LAW.

- LEGEND**
(SYMBOLS NOT SHOWN TO SCALE)
- HYDRANT
 - STREET LIGHT
 - SIGNAL POLE
 - MANHOLE
 - WATER VALVE
 - GAS VALVE
 - UNKNOWN VALVE
 - CATCH BASIN
 - METAL COVER
 - ELECTRIC BOX
 - DOOR
 - DOUBLE DOOR
 - GARAGE DOOR
 - PARKING METER
 - SPOT ELEVATION
 - CLEAN OUT
 - TREE
 - BENCH MARK
 - SIGN
 - POLE
 - ANCHOR POLE
 - DOLLARD
 - STORM DRAIN
 - SANITARY
 - COMBINED SEWER
 - CABLE TV TONE OUT
 - GAS TONE OUT
 - WATER TONE OUT
 - ELECTRIC TONE OUT
 - TELEPHONE TONE OUT
 - STEAM TONE OUT
 - UNKNOWN UTILITY TONE OUT
 - FENCE (TYPE AS NOTED)
 - OVERHEAD WIRE
 - GUIDE RAIL (TYPE AS NOTED)
 - TREE LINE
 - PROPERTY/RIGHT-OF-WAY LINE
 - REFERENCED UTILITY LINE (TYPE AS NOTED)-PLOTTED FROM EXISTING MAPPING

NOTE: FOR LOT LINE CHANGE CONFIGURATION SEE SHEET CB-101



8/24/15	Revised per Town's comments	1
Date	Description	No.
Revisions		
<p>I hereby state that this plan is based on the information furnished to me by the client and that I am not responsible for the accuracy of the information furnished to me by the client. I am not a professional engineer, architect, or other professional, and I am not licensed in any other state. My professional opinion, based on the information furnished to me, is that the plan is correct and that it complies with the laws and regulations of the State of New York. I am not responsible for the accuracy of the information furnished to me by the client.</p>		
<p>JOSEPH E. ROMANO PROFESSIONAL LAND SURVEYOR N.Y. Lic. No. 50130-1</p>		
<p>LANGAN Newburgh Office: 118 River Street, Newburgh, NY 10997 Tel: 201.784.8800 Fax: 201.784.0366 www.langan.com</p>		
<p>Project: MATRIX/DIBRIZZI TOWN OF NEWBURGH</p>		
<p>ORANGE COUNTY NEW YORK</p>		
<p>Drawing Title: TOPOGRAPHIC AND BOUNDARY SURVEY</p>		
<p>Block 1 SECTION 95 LOT 41.2, LOT 54.1, LOT 69.25 AND LOT 94.12</p>		
Project No.	9190601	Drawing No.
Date	JULY 17, 2015	VT-101
Scale	1"=100'	
Drawn By	FM	
Checked By	JR	Sheet 1 of 2

INTERSTATE ROUTE 84

CERTIFIED PROPERTY OWNERS LIST WITHIN 500' OF SUBJECT PROPERTY

SECTION 95 BLOCK 1 LOT 53 COUNTY OF ORANGE	SECTION 95 BLOCK 1 LOT 12 NORTHEAST BUSINESS CENTER
SECTION 95 BLOCK 1 LOT 52 MATRIX NEWBURGH I LLC	SECTION 95 BLOCK 1 LOT 13 NORTHEAST BUSINESS CENTER
SECTION 95 BLOCK 1 LOT 51 MATRIX NEWBURGH I LLC	SECTION 95 BLOCK 1 LOT 14 NORTHEAST BUSINESS CENTER
SECTION 95 BLOCK 1 LOT 50 MATRIX NEWBURGH I LLC	SECTION 95 BLOCK 1 LOT 15 NORTHEAST BUSINESS CENTER
SECTION 95 BLOCK 1 LOT 49 MATRIX NEWBURGH I LLC	SECTION 95 BLOCK 1 LOT 16 NORTHEAST BUSINESS CENTER
SECTION 95 BLOCK 1 LOT 48 MATRIX NEWBURGH I LLC	SECTION 95 BLOCK 1 LOT 17 NORTHEAST BUSINESS CENTER
SECTION 95 BLOCK 1 LOT 47 MATRIX NEWBURGH I LLC	SECTION 95 BLOCK 1 LOT 18 NORTHEAST BUSINESS CENTER
SECTION 95 BLOCK 1 LOT 46 MATRIX NEWBURGH I LLC	SECTION 95 BLOCK 1 LOT 19 NORTHEAST BUSINESS CENTER
SECTION 95 BLOCK 1 LOT 45 MATRIX NEWBURGH I LLC	SECTION 95 BLOCK 1 LOT 20 NORTHEAST BUSINESS CENTER
SECTION 95 BLOCK 1 LOT 44 MATRIX NEWBURGH I LLC	SECTION 95 BLOCK 1 LOT 21 NORTHEAST BUSINESS CENTER
SECTION 95 BLOCK 1 LOT 43 MATRIX NEWBURGH I LLC	SECTION 95 BLOCK 1 LOT 22 NORTHEAST BUSINESS CENTER
SECTION 95 BLOCK 1 LOT 42 MATRIX NEWBURGH I LLC	SECTION 95 BLOCK 1 LOT 23 NORTHEAST BUSINESS CENTER
SECTION 95 BLOCK 1 LOT 41 MATRIX NEWBURGH I LLC	SECTION 95 BLOCK 1 LOT 24 NORTHEAST BUSINESS CENTER
SECTION 95 BLOCK 1 LOT 40 MATRIX NEWBURGH I LLC	SECTION 95 BLOCK 1 LOT 25 NORTHEAST BUSINESS CENTER
SECTION 95 BLOCK 1 LOT 39 MATRIX NEWBURGH I LLC	SECTION 95 BLOCK 1 LOT 26 NORTHEAST BUSINESS CENTER
SECTION 95 BLOCK 1 LOT 38 MATRIX NEWBURGH I LLC	SECTION 95 BLOCK 1 LOT 27 NORTHEAST BUSINESS CENTER
SECTION 95 BLOCK 1 LOT 37 MATRIX NEWBURGH I LLC	SECTION 95 BLOCK 1 LOT 28 NORTHEAST BUSINESS CENTER
SECTION 95 BLOCK 1 LOT 36 MATRIX NEWBURGH I LLC	SECTION 95 BLOCK 1 LOT 29 NORTHEAST BUSINESS CENTER
SECTION 95 BLOCK 1 LOT 35 MATRIX NEWBURGH I LLC	SECTION 95 BLOCK 1 LOT 30 NORTHEAST BUSINESS CENTER
SECTION 95 BLOCK 1 LOT 34 MATRIX NEWBURGH I LLC	SECTION 95 BLOCK 1 LOT 31 NORTHEAST BUSINESS CENTER
SECTION 95 BLOCK 1 LOT 33 MATRIX NEWBURGH I LLC	SECTION 95 BLOCK 1 LOT 32 NORTHEAST BUSINESS CENTER
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SECTION 95 BLOCK 1 LOT 17 MATRIX NEWBURGH I LLC	SECTION 95 BLOCK 1 LOT 48 NORTHEAST BUSINESS CENTER
SECTION 95 BLOCK 1 LOT 16 MATRIX NEWBURGH I LLC	SECTION 95 BLOCK 1 LOT 49 NORTHEAST BUSINESS CENTER
SECTION 95 BLOCK 1 LOT 15 MATRIX NEWBURGH I LLC	SECTION 95 BLOCK 1 LOT 50 NORTHEAST BUSINESS CENTER
SECTION 95 BLOCK 1 LOT 14 MATRIX NEWBURGH I LLC	SECTION 95 BLOCK 1 LOT 51 NORTHEAST BUSINESS CENTER
SECTION 95 BLOCK 1 LOT 13 MATRIX NEWBURGH I LLC	SECTION 95 BLOCK 1 LOT 52 NORTHEAST BUSINESS CENTER
SECTION 95 BLOCK 1 LOT 12 MATRIX NEWBURGH I LLC	SECTION 95 BLOCK 1 LOT 53 NORTHEAST BUSINESS CENTER
SECTION 95 BLOCK 1 LOT 11 MATRIX NEWBURGH I LLC	SECTION 95 BLOCK 1 LOT 54 NORTHEAST BUSINESS CENTER
SECTION 95 BLOCK 1 LOT 10 MATRIX NEWBURGH I LLC	SECTION 95 BLOCK 1 LOT 55 NORTHEAST BUSINESS CENTER
SECTION 95 BLOCK 1 LOT 9 MATRIX NEWBURGH I LLC	SECTION 95 BLOCK 1 LOT 56 NORTHEAST BUSINESS CENTER
SECTION 95 BLOCK 1 LOT 8 MATRIX NEWBURGH I LLC	SECTION 95 BLOCK 1 LOT 57 NORTHEAST BUSINESS CENTER
SECTION 95 BLOCK 1 LOT 7 MATRIX NEWBURGH I LLC	SECTION 95 BLOCK 1 LOT 58 NORTHEAST BUSINESS CENTER
SECTION 95 BLOCK 1 LOT 6 MATRIX NEWBURGH I LLC	SECTION 95 BLOCK 1 LOT 59 NORTHEAST BUSINESS CENTER
SECTION 95 BLOCK 1 LOT 5 MATRIX NEWBURGH I LLC	SECTION 95 BLOCK 1 LOT 60 NORTHEAST BUSINESS CENTER
SECTION 95 BLOCK 1 LOT 4 MATRIX NEWBURGH I LLC	SECTION 95 BLOCK 1 LOT 61 NORTHEAST BUSINESS CENTER
SECTION 95 BLOCK 1 LOT 3 MATRIX NEWBURGH I LLC	SECTION 95 BLOCK 1 LOT 62 NORTHEAST BUSINESS CENTER
SECTION 95 BLOCK 1 LOT 2 MATRIX NEWBURGH I LLC	SECTION 95 BLOCK 1 LOT 63 NORTHEAST BUSINESS CENTER
SECTION 95 BLOCK 1 LOT 1 MATRIX NEWBURGH I LLC	SECTION 95 BLOCK 1 LOT 64 NORTHEAST BUSINESS CENTER

PROPOSED LOT A
3,124,332 SQ.FT. OR
71.725 ACRES, MORE OR LESS

EXISTING LOT CONFIGURATION
SCALE 1"=300'

NOTES:

- THIS PLAN IS BASED UPON THE FOLLOWING REFERENCES:
 - TITLE REPORT BY FIRST AMERICAN TITLE INSURANCE COMPANY POLICY NO. M-092824 COVERS LOT 49.12 AND LOT 54.1 EFFECTIVE DATE: APRIL 15, 2015
 - TITLE REPORT BY FIRST AMERICAN TITLE INSURANCE COMPANY POLICY NO. C29-0028181 COVERS SECTION 95 BLOCK 1 LOT 69.25 EFFECTIVE DATE: SEPTEMBER 7, 2007
 - TITLE REPORT BY LAWRENCE TITLE INSURANCE COMPANY POLICY NO. C29-0028181 COVERS SECTION 95 BLOCK 1 LOT 49.12 EFFECTIVE DATE: SEPTEMBER 17, 2000
 - A PLAN ENTITLED "BOUNDARY AND TOPOGRAPHIC SURVEY, MATRIX NEWBURGH, TOWN OF NEWBURGH, ORANGE COUNTY, NEW YORK" PREPARED BY LANGAN ENGINEERING, ENVIRONMENTAL SURVEYING AND LANDSCAPE ARCHITECTURE, D.P.C. DATED SEPTEMBER 6, 2007, SHEET NO. 07.00
 - A PLAN ENTITLED "BOUNDARY AND TOPOGRAPHIC SURVEY, MATRIX NEWBURGH, TOWN OF NEWBURGH, ORANGE COUNTY, NEW YORK" PREPARED BY LANGAN ENGINEERING, ENVIRONMENTAL SURVEYING AND LANDSCAPE ARCHITECTURE, D.P.C. DATED JULY 2, 2010, SHEET NO. 07.00
- THE SURVEYED PROPERTY IS SUBJECT TO BUT NOT LIMITED TO THE FOLLOWING FACTS AS REVEALED BY THE HERETO REFERENCED INFORMATION. THE INFORMATION SHOWN HEREON DOES NOT CONSTITUTE A TITLE SEARCH BY THE SURVEYOR. ALL INFORMATION THAT MAY AFFECT THE QUALITY OF TITLE TO BOTH THE SUBJECT AND ADJOINING PARCELS SHOULD BE VERIFIED BY AN APPROPRIATE AND CURRENT TITLE REPORT (SEE EASEMENT TABLE).
- THE MERIDIAN OF THIS SURVEY IS REFERENCED TO NEW YORK EAST STATE PLANE COORDINATE SYSTEM HAD 83 AS ESTABLISHED BY GPS METHODS.
- STREET NAMES AND R.O.W. WIDTHS, BLOCK AND LOT NUMBERS AS PER CURRENT TAX MAPS.
- PLANNING INFORMATION SHOWN ON-SITE HEREON HAS BEEN OBTAINED FROM GROUND SURVEYS BY LANGAN ENGINEERING, ENVIRONMENTAL SURVEYING AND LANDSCAPE ARCHITECTURE, D.P.C. COMPLETED SEPTEMBER 1996, UPDATED AS PER VISUAL INSPECTION 2007 AND AERIAL DATA SUPPLIED BY AER. ROADWAY DATA PER GROUND SURVEYS DURING JUNE 2014.
- AS PER THE NATIONAL FLOOD INSURANCE PROGRAM FIRM MAP TITLED "TOWN OF NEWBURGH, ORANGE COUNTY, NEW YORK" OFF-PANEL T35 OF 600 "COMMUNITY PANEL NUMBER 30007" WITH EFFECTIVE DATE AUGUST 1, 2009, THE SUBJECT PROPERTY IS NOT IN A FLOOD HAZARD AREA DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN.
- ENVIRONMENTAL AND/OR HAZARDOUS MATERIALS LOCATION, IF ANY, ARE NOT GUARANTEED BY THIS SURVEYOR. THE SURVEYOR MAKES NO GUARANTEE THAT UNDERGROUND UTILITIES, INCLUDING BUT NOT LIMITED TO, WATER, GAS, OIL, AND SEWER LINES, ARE NOT LOCATED IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR HAS CONDUCTED VISUAL INSPECTIONS OF THE PROPERTY AND ADJACENT PROPERTIES TO THE EXTENT FEASIBLE AND INDICATED THEREON. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES.
- BEFORE ANY EXCAVATIONS ARE BEGUN, THE PROPER UTILITY AGENCIES MUST BE CONTACTED FOR VERIFICATION OF UTILITY TYPE AND FOR FIELD LOCATIONS.
- THIS IS TO CERTIFY THAT THERE ARE NO NATURAL WATERCOURSES OR THE PROPERTY ENJOYS AS SHOWN ON THIS SURVEY.
- THIS PLAN DOES NOT VALID UNLESS EMBOSSED OR INK STAMPED WITH THE SEAL OF THE PROFESSIONAL LAND SURVEYOR.
- UNAUTHORIZED ALTERATION OR ADDITION TO A SURVEY MAP BEARING A LICENSED LAND SURVEYOR'S SEAL IS A VIOLATION OF SECTION 7209, SUB-DIVISION 2 OF N.Y. STATE EDUCATION LAW.
- WETLANDS SHOWN HEREON PER A PLAN ENTITLED "WETLAND DELINEATION PLAN" PREPARED BY LANGAN ENGINEERING, ENVIRONMENTAL SURVEYING AND LANDSCAPE ARCHITECTURE, D.P.C. DATED APRIL 18, 2007 AND LAST REVISED NOVEMBER 11, 2010.
- THE PURPOSE OF THIS SURVEY IS TO ADJUST THE BOUNDARY LINES OF FOUR EXISTING LOTS TO PROVIDE THREE RECONFIGURED LOTS. NO NEW LOTS WILL BE CREATED. EXISTING LOTS TO BE RECONFIGURED LOTS BEING RECONFIGURED LOTS INTO A LOT MORE NONCONFORMING OR MAKE ANY UNIMPROVED NONCONFORMING LOTS INTO A CONFORMING LOT.
- ZONING INFORMATION SHOWN HEREON PER TOWN OF NEWBURGH ZONING ORDINANCE.
- "ACCE WETLANDS" ARE WETLANDS CONFIRMED BY ACCE PER JURISDICTIONAL DETERMINATION DATED MAY 10, 2011, "WETLAND" PROPERTY NOT CONFIRMED BY ACCE.
- BASED ON FIELD OBSERVATIONS AND RESEARCH PERFORMED BY LANGAN ENGINEERING, ENVIRONMENTAL SURVEYING AND LANDSCAPE ARCHITECTURE, D.P.C. ON THE DATE OF THIS SURVEY, NO OTHER LOTS WILL BE CREATED. THE SURVEYOR HAS CONDUCTED VISUAL INSPECTIONS OF THE PROPERTY AND ADJACENT PROPERTIES TO THE EXTENT FEASIBLE AND INDICATED THEREON. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES.

LEGEND

- (SYMBOLS NOT SHOWN TO SCALE)
- PROPERTY/RIGHT-OF-WAY LINE
 - STREAM LOCATION
 - EXCEPTION FROM TITLE REPORT
 - EXCEPTION FROM TITLE REPORT SHOWN IN APPROXIMATE LOCATION
- GRAPHIC SCALE 1"=100'

THIS PLAN IS CERTIFIED TO:
CB101, LLC
FIRST AMERICAN TITLE INSURANCE COMPANY

OWNER/APPLICANT:

1. D. BRITZI, ET AL
1009 LITTLE BRITAN ROAD
NEW WINDSOR, NEW YORK 12553
2. MATRIX NEWBURGH I, LLC
FORSAITE DRIVE
CRANFORD, NEW JERSEY 08512
1-732-521-2900
3. COSTI, LLC
1009 LITTLE BRITAN ROAD
NEW WINDSOR, NEW YORK 12553

ZONING DATA TABLE
TOWN OF NEWBURGH
INTERCHANGE BUSINESS ZONE

ITEM	REQUIRED	PROPOSED LOT A	PROPOSED LOT B	PROPOSED LOT C
MIN. LOT AREA	5 ACRES	71.725 ACRES	9.014 ACRES	6.019 ACRES
MIN. LOT WIDTH	200 FT	251.69 FT	200 FT	200 FT
MIN. LOT DEPTH	200 FT	200 FT	429.39 FT	385.08 FT
BUILDING SETBACK	50 FT (60 FT ALONG RT.17K)	380 FT	250 FT	250 FT
REAR SETBACK	50 FT	380 FT	250 FT	250 FT
FRONT SETBACK	50 FT	250 FT	250 FT	250 FT
MAX. BUILDING HEIGHT	100 FT	2100 FT	2100 FT	2100 FT

Date	Description	No.
10-27-15	Revised to include property owners found or set	3
9-25-15	Revised per Town's comments	2
8-24-15	Revised per Town's comments	1

JOSEPH E. ROMANO
PROFESSIONAL LAND SURVEYOR N.Y. LIC. NO. 50130-1

LANGAN
Professional Land Surveyors

MATRIX
NEWBURGH I, L.L.C.
TOWN OF NEWBURGH

ORANGE COUNTY NEW YORK

LOT LINE CHANGE

SECTION 95
BLOCK 1
LOT 4.12, LOT 54.1, LOT 69.25
AND LOT 49.12

Project No. 9190601 Drawing No.

Date JULY 17, 2015 Scale AS SHOWN

Drn. BY SIGBP Checked by GAV Sheet 1 of 1

TOWN OF NEWBURGH APPROVAL BOX
TOWN PROJECT # 2015-20

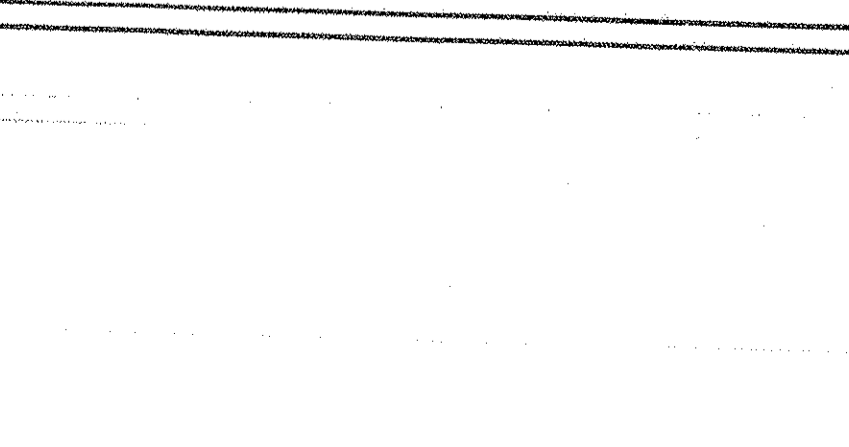
APPROVED BY THE
PLANNING BOARD, TOWN OF NEWBURGH
ORANGE COUNTY, NEW YORK

JOHN P. EWAST
CHAIRMAN
JOHN P. EWAST
DATE 11/04/2015

EASEMENT TABLE

- FIRST AMERICAN TITLE INSURANCE COMPANY TITLE REPORT NO. M-092824 COVERS LOT 49.12 AND LOT 54.1
- THE FOLLOWING EXCEPTIONS AFFECT PARCELS A LOT 49.12:
- UTILITY LINE EASEMENT - LB 1159 PG 239 - (UNABLE TO PLOT)
 - COVENANTS AND AGREEMENTS - LB 906 PG 239 - (UNABLE TO DETERMINE LOCATION)
 - AGREEMENT IN - LB 1130 PG 408 AND LB 1130 PG 519 (UNABLE TO PLOT)
 - HIGHWAY APPROPRIATIONS - LB 1163 PG 462 (UNABLE TO PLOT)
- FIRST AMERICAN TITLE INSURANCE COMPANY POLICY NUMBER: C29-0028181 COVERS LOT 69.25
- THE FOLLOWING EXCEPTIONS AFFECT PARCELS B LOT 54.1:
- UTILITY EASEMENTS - LB 1063 PG 462 AND LB 1130 PG 512 - (UNABLE TO PLOT)
 - FENCE AGREEMENT - LB 1159 PG 539 (UNABLE TO PLOT)
 - HIGHWAY APPROPRIATIONS - LB 1163 PG 461 (UNABLE TO PLOT)
- LAWRENCE TITLE INSURANCE COMPANY POLICY NUMBER: C29-0028181 COVERS LOT 69.25
- AVIGATION EASEMENT FOR STEWART AIRPORT - LB 1568 PG 21 BLANKET TYPE
 - DECLARATION OF RECIPROCAL EASEMENTS - LB 3158 PG 129
 - DRAINAGE EASEMENT & DETENTION BASIN - LB 4030 PG 72 & PG 141
 - ACCESS ROAD EASEMENT - LB 4030 PG 116
 - DRAINAGE EASEMENT - LB 4030 PG 141
 - GENERAL UTILITY EASEMENT - LB 4030 PG 188
 - GENERAL UTILITY EASEMENT - LB 4030 PG 193
 - LANDSCAPING AGREEMENT LB 4279 PG 44 - NOT PLOTTABLE
 - DRAINAGE EASEMENT - LB 4280 PG 317
- LAWRENCE TITLE INSURANCE COMPANY POLICY NUMBER: C29-0028181 COVERS LOT 69.25
- HIGHWAY APPROPRIATIONS - LB 1137 PG 1026
 - UTILITY LINE EASEMENT - LB 1159 PG 239 - (UNABLE TO PLOT)
- EASEMENTS PER REFERENCE NOTE 10
DRAINAGE EASEMENT - LB 2622 PG 97 - (PLOTTED)

SITE LOCATION MAP
SCALE 1"=2000'



INTERSTATE ROUTE 87 (NEW YORK STATE THRUWAY)
NORTH BOUND
SOUTH BOUND

LEGEND

[Symbol]	PROPERTY LINE
[Symbol]	PROPOSED BUILDING
[Symbol]	PROPOSED CURB
[Symbol]	MOUNTABLE CURB
[Symbol]	DEPRESSED CURB
[Symbol]	DEPRESSED CURB
[Symbol]	WETLAND BOUNDARY
[Symbol]	RETAINING WALL
[Symbol]	CHAIN LINK FENCE
[Symbol]	STEEL OR TIMBER GUIDE RAIL
[Symbol]	STORMWATER MANAGEMENT BASIN
[Symbol]	TRAFFIC DIRECTIONAL ARROW
[Symbol]	TRAFFIC DIRECTIONAL ARROW TO BE PAINTED
[Symbol]	BUILDING ENTRANCE
[Symbol]	SITE LIGHTING
[Symbol]	FIRE HYDRANT

- GENERAL NOTES**
- EXISTING BOUNDARY, UTILITY AND TOPOGRAPHIC INFORMATION OBTAINED FROM PLANS ENTITLED "TOPOGRAPHIC AND BOUNDARY SURVEY OF SECTION 95 BLOCK 1 LOT 4.12, LOT 54.1, LOT 69.25 AND LOT 49.12" DATED 7/17/2015, LAST REVISED 04/16/2015 AND "LOT LINE CHANGE OF SECTION 95 BLOCK 1 LOT 4.12, LOT 54.1, LOT 69.25, AND LOT 49.12" DATED 7/17/2015, LAST REVISED 10/27/2015, WITH ADDITIONAL INFORMATION INCLUDING PROPERTY CORNERS FOUND OR SET AND OFF-SITE DRAINAGE STRUCTURES FROM SUPPLIED MAPPING, AS PREPARED BY LANGAN ENGINEERING.
 - ELEVATIONS SHOWN ARE REFERENCED TO HAD 88 AS ESTABLISHED THROUGH GPS METHODS. THE MERIDIAN IS REFERENCED TO NEW YORK EAST STATE PLANE COORDINATE SYSTEM NAD 83 AS ESTABLISHED THROUGH GPS METHODS.
 - "ACE WETLANDS" ARE WETLANDS CONFIRMED BY ACEE PER JURISDICTIONAL DETERMINATION DATED MAY 10, 2011, BASED ON PLAN ENTITLED "WETLAND DELINEATION PLAN", AS PREPARED BY LANGAN ENGINEERING, DATED 04/16/2011, LAST REVISED 11/17/10. ACEE WETLAND AREA X DELINEATED BY LANGAN ENGINEERING WETLAND SCIENTISTS ON APRIL 16, 2013 AND JULY 2, 2015.
 - THESE PLANS REPRESENT THE OVERALL SITE WORK IMPROVEMENTS REQUIRED FOR PROJECT CONSTRUCTION. THE CONTRACTOR SHALL FURNISH, INSTALL, TEST AND COMPLETE ALL WORK TO THE SATISFACTION OF THE ENGINEER AND OWNER IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR MEANS AND METHODS OF CONSTRUCTION, AS SUCH, THESE PLANS DO NOT COMPLETELY REPRESENT, NOR ARE THEY INTENDED TO REPRESENT, ALL SPECIFIC INSTRUCTIONS REQUIRED FOR SITE WORK CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE TO CONSTRUCT ALL IMPROVEMENTS DEPICTED ON THESE PLANS IN ACCORDANCE WITH ALL APPLICABLE RULES, REGULATIONS AND LAWS IN EFFECT AT THE TIME OF CONSTRUCTION.
 - THE CONTRACTOR SHALL ACCEPT THE SITE AS IS. THE CONTRACTOR SHALL ASSESS CONDITIONS, AND THE KIND, QUALITY AND QUANTITY OF WORK REQUIRED. THE OWNER MAKES NO GUARANTEE IN REGARD TO THE ACCURACY OF ANY AVAILABLE INFORMATION WHICH WAS OBTAINED DURING INVESTIGATIONS. THE CONTRACTOR SHALL MAKE A THOROUGH SITE INSPECTION IN ORDER TO FIELD CHECK EXISTING SITE CONDITIONS, CORRELATE CONDITIONS WITH THE DRAWINGS AND RESOLVE ANY POSSIBLE CONFLICTS WITH THE OWNER AND ENGINEER PRIOR TO COMMENCEMENT OF WORK. THE CONTRACTOR SHALL MAKE ADDITIONAL TOPOGRAPHIC SURVEYS HE DEEMS NECESSARY, PROVIDED THEY ARE COORDINATED WITH THE OWNER. ANY CONDITIONS DETERMINED BY THE CONTRACTOR THAT DIFFER FROM THE INFORMATION SHOWN ON THE DRAWINGS THAT ARE NOT BROUGHT TO THE ATTENTION OF THE OWNER AND ENGINEER PRIOR TO THE START OF WORK SHALL NOT BE CONSIDERED GROUNDS FOR ADDITIONAL PAYMENT OR CHANGES TO THE CONTRACT DURATION, OR ANY OTHER CLAIMS AGAINST THE OWNER OR OWNER'S ENGINEER.
 - THE CONTRACTOR SHALL, WHEN THEY DEEM NECESSARY, PROVIDE WRITTEN REQUESTS FOR INFORMATION (RFIs) TO THE OWNER AND ENGINEER PRIOR TO THE CONSTRUCTION OF ANY SPECIFIC SITE WORK ITEM. THE (RFI) SHALL BE IN A FORM ACCEPTABLE TO OWNER AND ENGINEER AND SHALL ALLOW FOR A MINIMUM OF TWO WORK DAYS OR ADDITIONAL REASONABLE TIME FOR A WRITTEN REPLY. RFIs SHALL BE NUMBERED CONSECUTIVELY BY DATE SUBMITTED. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR SITE WORK ITEMS CONSTRUCTED DIFFERENTLY THAN INTENDED OR AS DEPICTED ON THE PLANS.
 - INFORMATION RELATED TO ELEVATIONS AND PROPOSED UTILITIES (SUCH AS ROADWAY GRADES, INVERT ELEVATIONS, RIM ELEVATIONS, GRADE ELEVATIONS, BUILDING FINISHED FLOOR GRADES, ETC.) MAY BE FOUND IN MORE THAN ONE LOCATION IN THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL THOROUGHLY REVIEW ALL PLANS, PROFILES AND ANY OTHER INFORMATION IN THE CONTRACT DOCUMENTS FOR CONSISTENCY PRIOR TO CONSTRUCTION. ANY INCONSISTENCIES OR DISCREPANCIES THAT ARE FOUND BY THE CONTRACTOR OR HIS ASSIGNS SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE OWNER AND ENGINEER IN WRITING, IN THE FORMAT OF AN RFI PRIOR TO CONSTRUCTION.
 - THERE ARE ADDITIONAL NOTES, SPECIFICATIONS AND REQUIREMENTS CONTAINED THROUGHOUT THE PLAN SET AS WELL AS REFERENCES TO SPECIFICATIONS FROM APPLICABLE GOVERNING AUTHORITIES AND INDUSTRY STANDARDS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN, REVIEW AND ADHERE TO ALL THESE DOCUMENTS.
 - CONTRACTOR SHALL REFER TO ARCHITECTURAL PLANS AND SPECIFICATIONS FOR ACTUAL LOCATIONS OF ALL DOORS, STAIRS, RAMPS, CANOPIES, SIDEWALKS, AND ARCHITECTURAL ELEMENTS AROUND THE BUILDING, AND SHALL COORDINATE INSTALLATION OF THESE ELEMENTS WITH THE SITE LAYOUT PRIOR TO INSTALLATION.
 - ALL WETLANDS SHOWN TO BE PROTECTED AND MAINTAINED, NO DISTURBANCE IS PERMITTED.

SEE DRAWINGS CS-401 AND CS-402 FOR DETAILED SITE INFORMATION

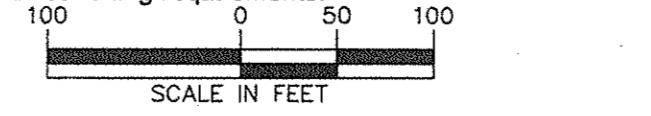
TOWN OF NEWBURGH ZONING TABLE
Section 95, Block 1, Lot 79 (PREVIOUSLY LOTS 4.12, 54.1, 69.25, AND 49.12)
IB Interchange Business Zone

ITEM	REQUIRED / PERMITTED	PROPOSED
Land Use	Warehouse	
Lot		
Minimum Lot Area	40,000 SF	3,124,333 SF (7.73 AC)
Minimum Lot Width	150 FT	282 FT
Minimum Lot Depth	150 FT	> 230 FT
Yard		
Minimum Front Yard	50 FT/60 FT	930 FT
Minimum Side Yard (1 Side Yard)	30 FT	150 FT
Minimum Side Yard (Both Side Yards)	40 FT	382 FT
Minimum Rear Yard	60 FT	69 FT
Minimum Landscape Buffer at 17K	35 FT	35 FT
Lot Coverage		
Maximum Lot Building Coverage	40%	18.1%
Maximum Lot Surface Coverage	80%	35%
Building		
Maximum Building Height*	40 FT	45 FT*
Maximum Accessory Building Height	15 FT	< 15 FT
Minimum Accessory Building Setback from Principal Building	10 FT	44 FT
Parking and Loading		
Minimum Number of Off-Street Truck Loading Spaces	16 Spaces	81 Spaces
Minimum Number of Car Parking Spaces	181 Spaces	365 Spaces (Including 62 Reserved Spaces, See Parking Summary Table)
Minimum Number of Accessible Parking Spaces	8 Spaces	11 Spaces
Signs		
Maximum Business Sign Area (freestanding or attached to building)	150 SF	614 sf*
Minimum Distance from Sign to Street Line	15 ft	15 ft
Maximum Number of Freestanding Signs	1	2*
Maximum Area of Directional Sign	3 sf	150 sf*
Maximum Height of Sign	40 ft	116.7 ft*

Parking Summary Table

ITEM	PROPOSED WAREHOUSE A 317,520 SF	PROPOSED WAREHOUSE B 247,800 SF	TOTAL
Car Parking Spaces	257 Spaces	46 Spaces	303 Spaces
Reserved Car Spaces*	0 Spaces	62 Spaces	62 Spaces
Truck Loading Spaces	30 Spaces	51 Spaces	81 Spaces
Trailer Spaces	0 Spaces	38 Spaces	38 Spaces
Reserved Trailer Spaces*	24 Spaces	20 Spaces	44 Spaces

* Reserved spaces provided to satisfy tenant requirements and not zoning requirements.



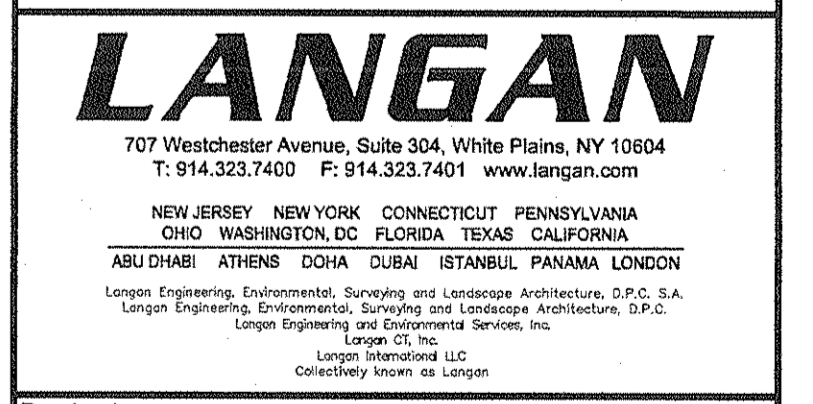
WARNING:
IT IS A VIOLATION OF THE NYS EDUCATION LAW ARTICLE 145 FOR ANY PERSON, UNLESS HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS ITEM IN ANY WAY.

REVISIONS

Date	Description	No.
4/11/2016	REVISED ACCESS ROADS	4
3/18/2016	REVISED PER MEP AND ARCH. COORDINATION AND TOWN COMMENTS	3
1/25/2016	REVISED PER MEP COMMENTS, NYS DOT AND INDUSTRY STANDARDS	2
11/9/2015	REVISED PER TOWN COMMENTS	1

SIGNATURE: CHAIKES UTSCHIG
PROFESSIONAL ENGINEER NY Lic. No. 062303

DATE SIGNED: 04/11/2016



Project: **MATRIX BUSINESS PARK AT NEWBURGH**

TOWN OF NEWBURGH NEW YORK

Drawing Title: **OVERALL SITE PLAN**

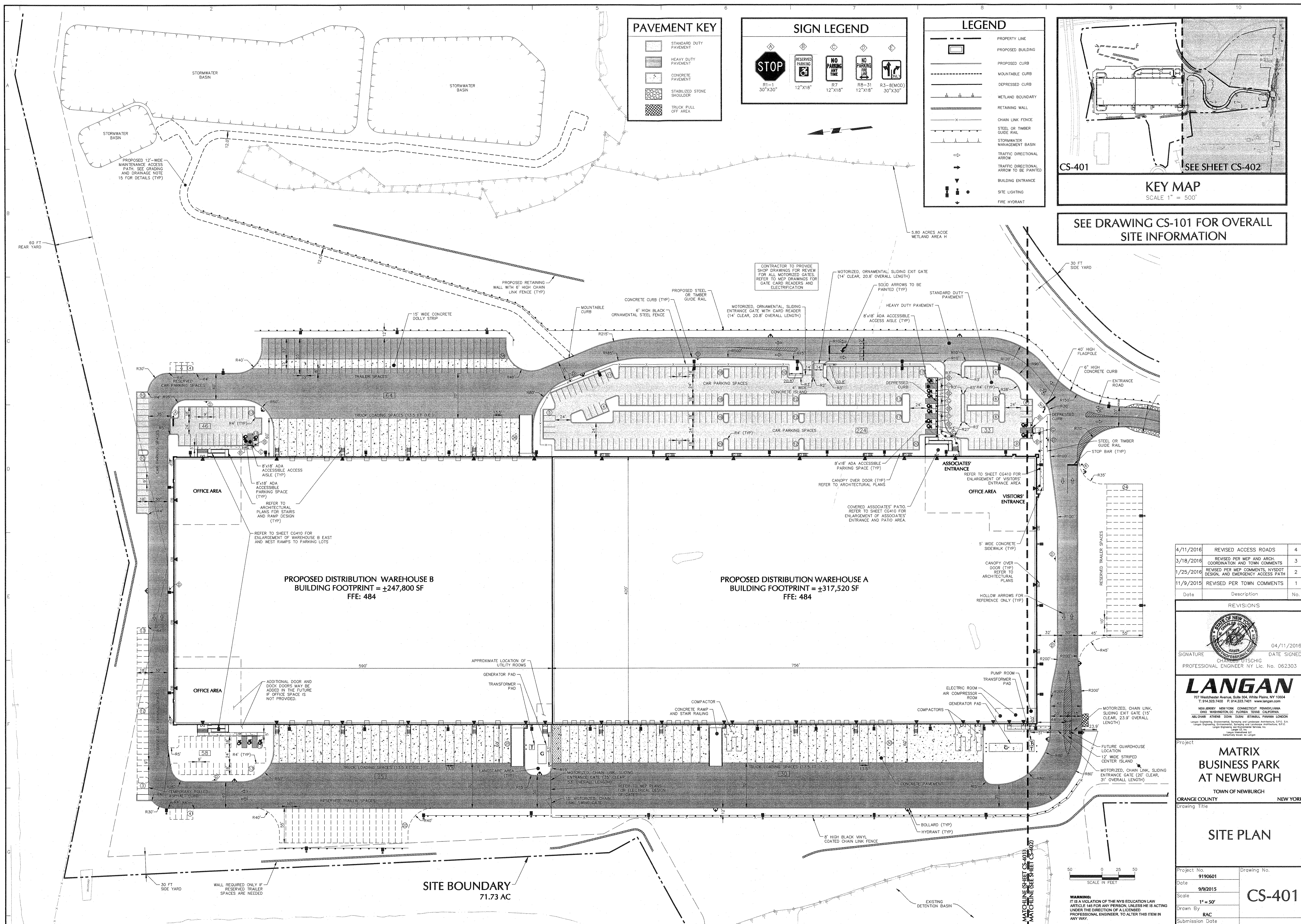
Project No. 9190601 Drawing No. CS-101

Date 9/9/2015

Scale 1" = 100'

Drawn By RAC

Submission Date 04/11/2016



PAVEMENT KEY

- STANDARD DUTY PAVEMENT
- HEAVY DUTY PAVEMENT
- CONCRETE PAVEMENT
- STABILIZED STONE SHOULDER
- TRUCK PULL OFF AREA

SIGN LEGEND

- STOP
R1-1 30"x30"
- RESERVED PARKING
12"x18"
- NO PARKING ANY TIME
R7 12"x18"
- NO PARKING FIRE LANE
R8-31 12"x18"
- BICYCLIST
R3-8(MOD) 30"x30"

LEGEND

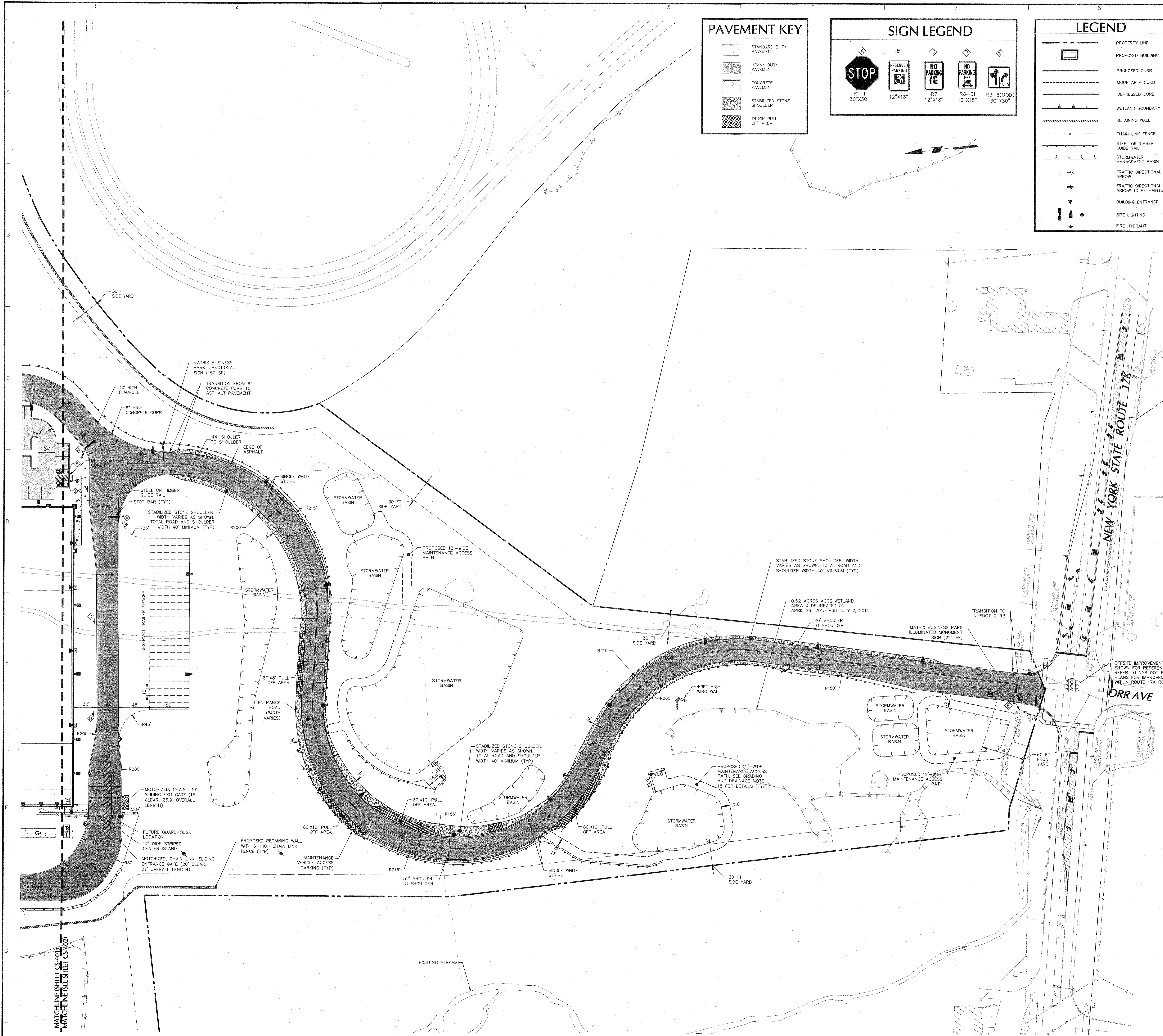
- PROPERTY LINE
- PROPOSED BUILDING
- PROPOSED CURB
- MOUNTABLE CURB
- DEPRESSED CURB
- WETLAND BOUNDARY
- RETAINING WALL
- CHAIN LINK FENCE
- STEEL OR TIMBER GUIDE RAIL
- STORMWATER MANAGEMENT BASIN
- TRAFFIC DIRECTIONAL ARROW
- TRAFFIC DIRECTIONAL ARROW TO BE PAINTED
- BUILDING ENTRANCE
- SITE LIGHTING
- FIRE HYDRANT

KEY MAP

SCALE 1" = 500'

SEE SHEET CS-401 CS-402

SEE DRAWING CS-101 FOR OVERALL SITE INFORMATION



Date	Description	No.
4/11/2016	REVISED ACCESS ROADS	4
3/18/2016	REVISED PER MEP AND ARCH COORDINATION AND TOWN COMMENTS	3
1/25/2016	REVISED PER MEP COMMENTS, NYSDOT DESIGN, AND EMERGENCY ACCESS PATH	2
11/9/2015	REVISED PER TOWN COMMENTS	1

REVISIONS

DATE SIGNED: 04/11/2016
SIGNATURE: CHANCELOT SCHIG
PROFESSIONAL ENGINEER NY Lic. No. 062303

LANGAN

707 Westchester Avenue, Suite 204, White Plains, NY 10604
T: 914.323.7400 F: 914.323.7401 www.langan.com

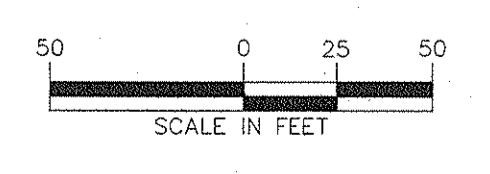
NEW JERSEY NEW YORK CONNECTICUT PENNSYLVANIA
OHIO WASHINGTON DC FLORIDA TEXAS CALIFORNIA

ARCHITECT ENGINEER GEOSCIENTIST ENVIRONMENTAL SCIENTIST
Langan Engineering, Construction, Planning and Architecture, P.C. is an Equal Opportunity Employer. Minorities and women are encouraged to apply.

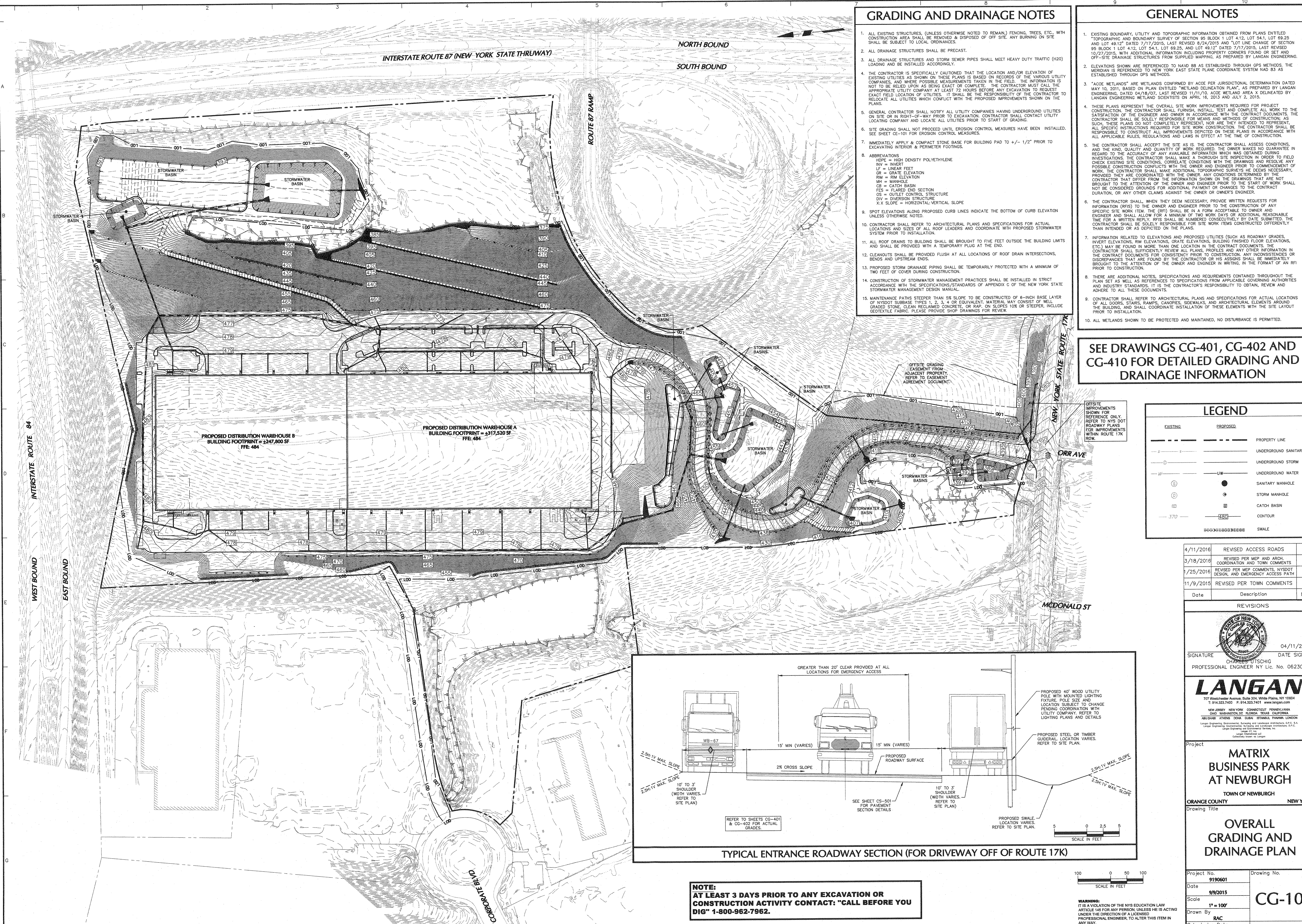
Project: **MATRIX BUSINESS PARK AT NEWBURGH**
TOWN OF NEWBURGH
ORANGE COUNTY NEW YORK

Drawing Title: **SITE PLAN**

Project No. 9190601 Drawing No. CS-402
Date: 9/9/2015
Scale: 1" = 50'
Drawn By: RAC
Submission Date: 04/11/2016



WARNING:
IT IS A VIOLATION OF THE NYS EDUCATION LAW ARTICLE 145 FOR ANY PERSON UNLESS HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS ITEM IN ANY WAY.



GRADING AND DRAINAGE NOTES

- ALL EXISTING STRUCTURES, (UNLESS OTHERWISE NOTED TO REMAIN) FENCING, TREES, ETC., WITH CONSTRUCTION AREA SHALL BE REMOVED & DISPOSED OF OFF SITE. ANY BURNING ON SITE SHALL BE SUBJECT TO LOCAL ORDINANCES.
- ALL DRAINAGE STRUCTURES SHALL BE PRECAST.
- ALL DRAINAGE STRUCTURES AND STORM SEWER PIPES SHALL MEET HEAVY DUTY TRAFFIC (H20) LOADING AND BE INSTALLED ACCORDING TO:
- THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES, AND WHERE POSSIBLE MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED UPON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANY AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.
- GENERAL CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES HAVING UNDERGROUND UTILITIES ON SITE OR IN RIGHT-OF-WAY PRIOR TO EXCAVATION. CONTRACTOR SHALL CONTACT UTILITY LOCATING COMPANY AND LOCATE ALL UTILITIES PRIOR TO START OF GRADING.
- SITE GRADING SHALL NOT PROCEED UNTIL EROSION CONTROL MEASURES HAVE BEEN INSTALLED.
- IMMEDIATELY APPLY & COMPACT STONE BASE FOR BUILDING PAD TO +/- 1/2" PRIOR TO EXCAVATING INTERIOR & PERIMETER FOOTINGS.
- ABBREVIATIONS
 HDPE = HIGH DENSITY POLYETHYLENE
 INV = INVERT
 LF = LINEAR FEET
 OR = ORATE ELEVATION
 RM = RIM ELEVATION
 MH = MANHOLE
 CB = CATCH BASIN
 FES = FLARED END SECTION
 OS = OUTLET CONTROL STRUCTURE
 DIV = DIVERSION STRUCTURE
 X:X SLOPE = HORIZONTAL VERTICAL SLOPE
- SPOT ELEVATIONS ALONG PROPOSED CURB LINES INDICATE THE BOTTOM OF CURB ELEVATION UNLESS OTHERWISE NOTED.
- CONTRACTOR SHALL REFER TO ARCHITECTURAL PLANS AND SPECIFICATIONS FOR ACTUAL LOCATIONS AND SIZES OF ALL ROOF LEADERS AND COORDINATE WITH PROPOSED STORMWATER SYSTEM PRIOR TO INSTALLATION.
- ALL ROOF DRAINS TO BUILDING SHALL BE BROUGHT TO FIVE FEET OUTSIDE THE BUILDING LIMITS AND SHALL BE PROVIDED WITH A TEMPORARY PLUG AT THE END.
- CLEANOUTS SHALL BE PROVIDED FLUSH AT ALL LOCATIONS OF ROOF DRAIN INTERSECTIONS, BENDS AND UPSTREAM ENDS.
- PROPOSED STORM DRAINAGE PIPING SHALL BE TEMPORARILY PROTECTED WITH A MINIMUM OF TWO FEET OF COVER DURING CONSTRUCTION.
- CONSTRUCTION OF STORMWATER MANAGEMENT PRACTICES SHALL BE INSTALLED IN STRICT ACCORDANCE WITH THE SPECIFICATIONS STANDARDS OF APPENDIX C OF THE NEW YORK STATE STORMWATER MANAGEMENT DESIGN MANUAL.
- MAINTENANCE PATHS STEEPER THAN 5% SLOPE TO BE CONSTRUCTED OF 6-INCH BASE LAYER OF NYSDOT SUBBASE TYPES 1, 2, 3, 4 OR EQUIVALENT. MATERIAL MAY CONSIST OF WELL GRADED STONE, CLEAN REINFORCED CONCRETE, OR RAP, ON SLOPES 10% OR STEEPER, INCLUDE GEOTEXTILE FABRIC. PLEASE PROVIDE SHOP DRAWINGS FOR REVIEW.

GENERAL NOTES

- EXISTING BOUNDARY, UTILITY AND TOPOGRAPHIC INFORMATION OBTAINED FROM PLANS ENTITLED "TOPOGRAPHIC AND BOUNDARY SURVEY OF SECTION 95 BLOCK 1 LOT 4.12, LOT 54.1, LOT 69.25 AND LOT 49.12" DATED 7/17/2015, LAST REVISED 8/24/2015 AND "LOT LINE CHANGE OF SECTION 95 BLOCK 1 LOT 4.12, LOT 54.1, LOT 69.25 AND LOT 49.12" DATED 7/17/2015, LAST REVISED 10/27/2015, WITH ADDITIONAL INFORMATION INCLUDING PROPERTY CORNERS FOUND OR SET AND OFF-SITE DRAINAGE STRUCTURES FROM SUPPLIED MAPPING, AS PREPARED BY LANGAN ENGINEERING.
- ELEVATIONS SHOWN ARE REFERENCED TO NAVD 88 AS ESTABLISHED THROUGH GPS METHODS. THE MERIDIAN IS REFERENCED TO NEW YORK EAST STATE PLANE COORDINATE SYSTEM NAD 83 AS ESTABLISHED THROUGH GPS METHODS.
- "ACCE WETLANDS" ARE WETLANDS CONFIRMED BY ACCE PER JURISDICTIONAL DETERMINATION DATED MAY 10, 2011, BASED ON PLAN ENTITLED "WETLAND DELINEATION PLAN", AS PREPARED BY LANGAN ENGINEERING, DATED 04/18/07, LAST REVISED 11/11/10. ACCE WETLAND AREA IS DELINEATED BY LANGAN ENGINEERING WETLAND SCIENTISTS ON APRIL 16, 2013 AND JULY 2, 2015.
- THESE PLANS REPRESENT THE OVERALL SITE WORK IMPROVEMENTS REQUIRED FOR PROJECT CONSTRUCTION. THE CONTRACTOR SHALL FURNISH, INSTALL, TEST AND COMPLETE ALL WORK TO THE ENGINEER AND OWNER IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR MEANS AND METHODS OF CONSTRUCTION; AS SUCH, THESE PLANS DO NOT COMPLETELY REPRESENT, NOR ARE THEY INTENDED TO REPRESENT, ALL SPECIFIC INSTRUCTIONS REQUIRED FOR SITE WORK CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE TO CONSTRUCT ALL IMPROVEMENTS DEPICTED ON THESE PLANS IN ACCORDANCE WITH ALL APPLICABLE RULES, REGULATIONS AND LAWS IN EFFECT AT THE TIME OF CONSTRUCTION.
- THE CONTRACTOR SHALL ACCEPT THE SITE AS IS. THE CONTRACTOR SHALL ASSESS CONDITIONS, AND THE KIND, QUALITY AND QUANTITY OF WORK REQUIRED. THE OWNER MAKES NO GUARANTEE IN REGARD TO THE ACCURACY OF ANY AVAILABLE INFORMATION WHICH WAS OBTAINED DURING INVESTIGATIONS. THE CONTRACTOR SHALL MAKE A THOROUGH SITE INSPECTION IN ORDER TO FIELD CHECK EXISTING SITE CONDITIONS, CORRELATE CONDITIONS WITH THE DRAWINGS AND RESOLVE ANY POSSIBLE CONSTRUCTION CONFLICTS WITH THE OWNER AND ENGINEER PRIOR TO COMMENCEMENT OF WORK. THE CONTRACTOR SHALL MAKE ADDITIONAL TOPOGRAPHIC SURVEYS HE DEEMS NECESSARY, PROVIDED THEY ARE COORDINATED WITH THE OWNER. ANY CONDITIONS DETERMINED BY THE CONTRACTOR THAT DIFFER FROM THE INFORMATION SHOWN ON THE DRAWINGS THAT ARE NOT BROUGHT TO THE ATTENTION OF THE OWNER AND ENGINEER PRIOR TO THE START OF WORK SHALL NOT BE CONSIDERED GROUNDS FOR ADDITIONAL PAYMENT OR CHANGES TO THE CONTRACT DURATION, OR ANY OTHER CLAIMS AGAINST THE OWNER OR OWNER'S ENGINEER.
- THE CONTRACTOR SHALL, WHEN THEY DEEM NECESSARY, PROVIDE WRITTEN REQUESTS FOR INFORMATION (RFIS) TO THE OWNER AND ENGINEER PRIOR TO THE CONSTRUCTION OF ANY SPECIFIC SITE WORK ITEM. THE (RFI) SHALL BE IN A FORM ACCEPTABLE TO OWNER AND ENGINEER AND SHALL ALLOW FOR A MINIMUM OF TWO WORK DAYS OR ADDITIONAL REASONABLE TIME FOR A WRITTEN REPLY. RFIS SHALL BE NUMBERED CONSECUTIVELY BY DATE SUBMITTED. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR SITE WORK ITEMS CONSTRUCTED DIFFERENTLY THAN INTENDED OR AS SPECIFIED ON THE PLANS.
- INFORMATION RELATED TO ELEVATIONS AND PROPOSED UTILITIES (SUCH AS ROADWAY GRADES, INVERT ELEVATIONS, RIM ELEVATIONS, GRATE ELEVATIONS, BUILDING FINISHED FLOOR ELEVATIONS, ETC.) MAY BE FOUND IN MORE THAN ONE LOCATION IN THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL SUFFICIENTLY REVIEW ALL PLANS, PROFILES AND ANY OTHER INFORMATION IN THE CONTRACT DOCUMENTS FOR CONSISTENCY PRIOR TO CONSTRUCTION. ANY INCONSISTENCIES OR DISCREPANCIES THAT ARE FOUND BY THE CONTRACTOR OR HIS AGENTS SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE OWNER AND ENGINEER IN WRITING, IN THE FORMAT OF AN RFI PRIOR TO CONSTRUCTION.
- THERE ARE ADDITIONAL NOTES, SPECIFICATIONS AND REQUIREMENTS CONTAINED THROUGHOUT THE PLAN SET AS WELL AS REFERENCES TO SPECIFICATIONS FROM APPLICABLE GOVERNING AUTHORITIES AND INDUSTRY STANDARDS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN, REVIEW AND ADHERE TO ALL THESE DOCUMENTS.
- CONTRACTOR SHALL REFER TO ARCHITECTURAL PLANS AND SPECIFICATIONS FOR ACTUAL LOCATIONS OF ALL DOORS, STAIRS, RAMPS, CANOPIES, SIDEWALKS, AND ARCHITECTURAL ELEMENTS AROUND THE BUILDING AND SHALL COORDINATE INSTALLATION OF THESE ELEMENTS WITH THE SITE LAYOUT PRIOR TO INSTALLATION.
- ALL WETLANDS SHOWN TO BE PROTECTED AND MAINTAINED, NO DISTURBANCE IS PERMITTED.

SEE DRAWINGS CG-401, CG-402 AND CG-410 FOR DETAILED GRADING AND DRAINAGE INFORMATION

LEGEND

EXISTING	PROPOSED	DESCRIPTION
---	---	PROPERTY LINE
---	---	UNDERGROUND SANITARY
---	---	UNDERGROUND STORM
---	---	UNDERGROUND WATER
○	○	SANITARY MANHOLE
○	○	STORM MANHOLE
○	○	CATCH BASIN
---	---	CONTOUR
---	---	SWALE

Date	Description	No.
4/11/2016	REVISED ACCESS ROADS	4
3/18/2016	REVISED PER MEP AND ARCH COORDINATION AND TOWN COMMENTS	3
1/25/2016	REVISED PER MEP COMMENTS, NYSDOT DESIGN, AND EMERGENCY ACCESS PATH	2
11/9/2015	REVISED PER TOWN COMMENTS	1

REVISIONS

Date	Description	No.
04/11/2016		

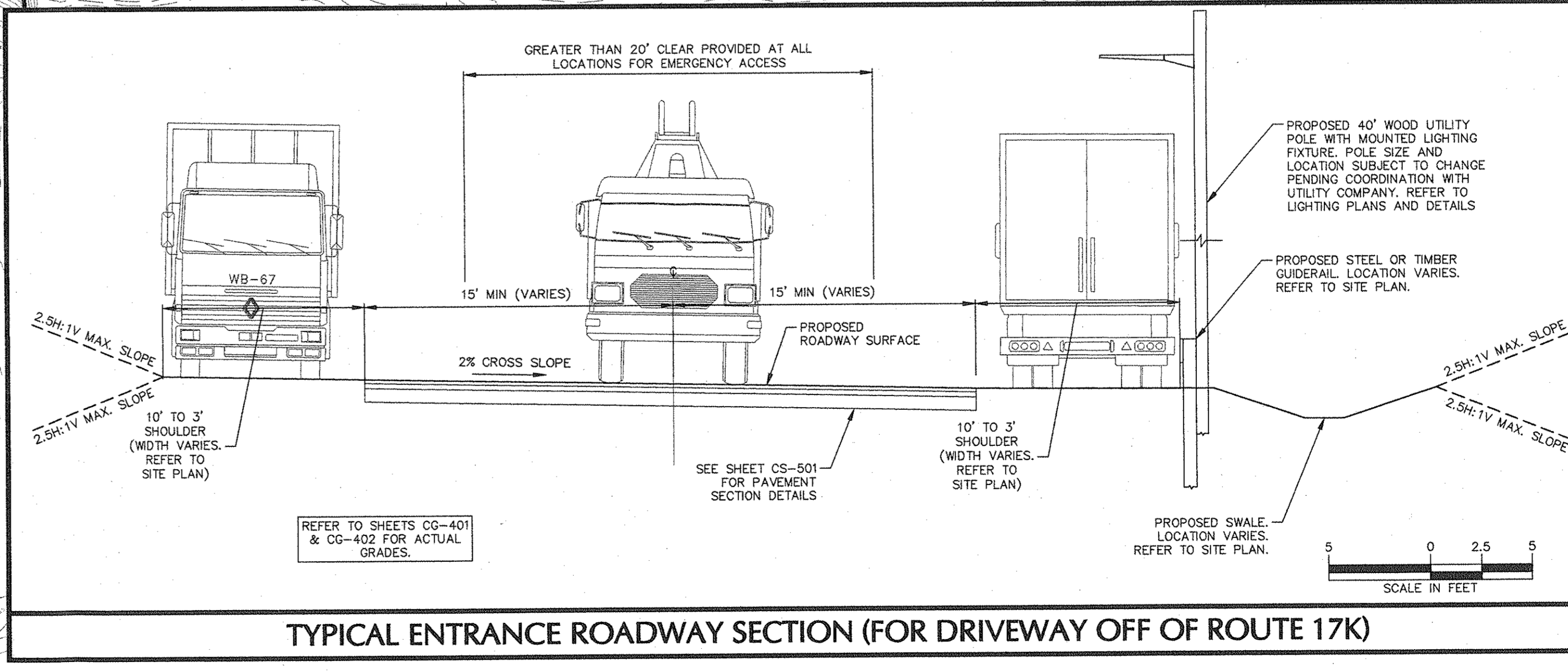

 SIGNATURE: **CHRISTOPHER SCHICH** DATE SIGNED: 04/11/2016
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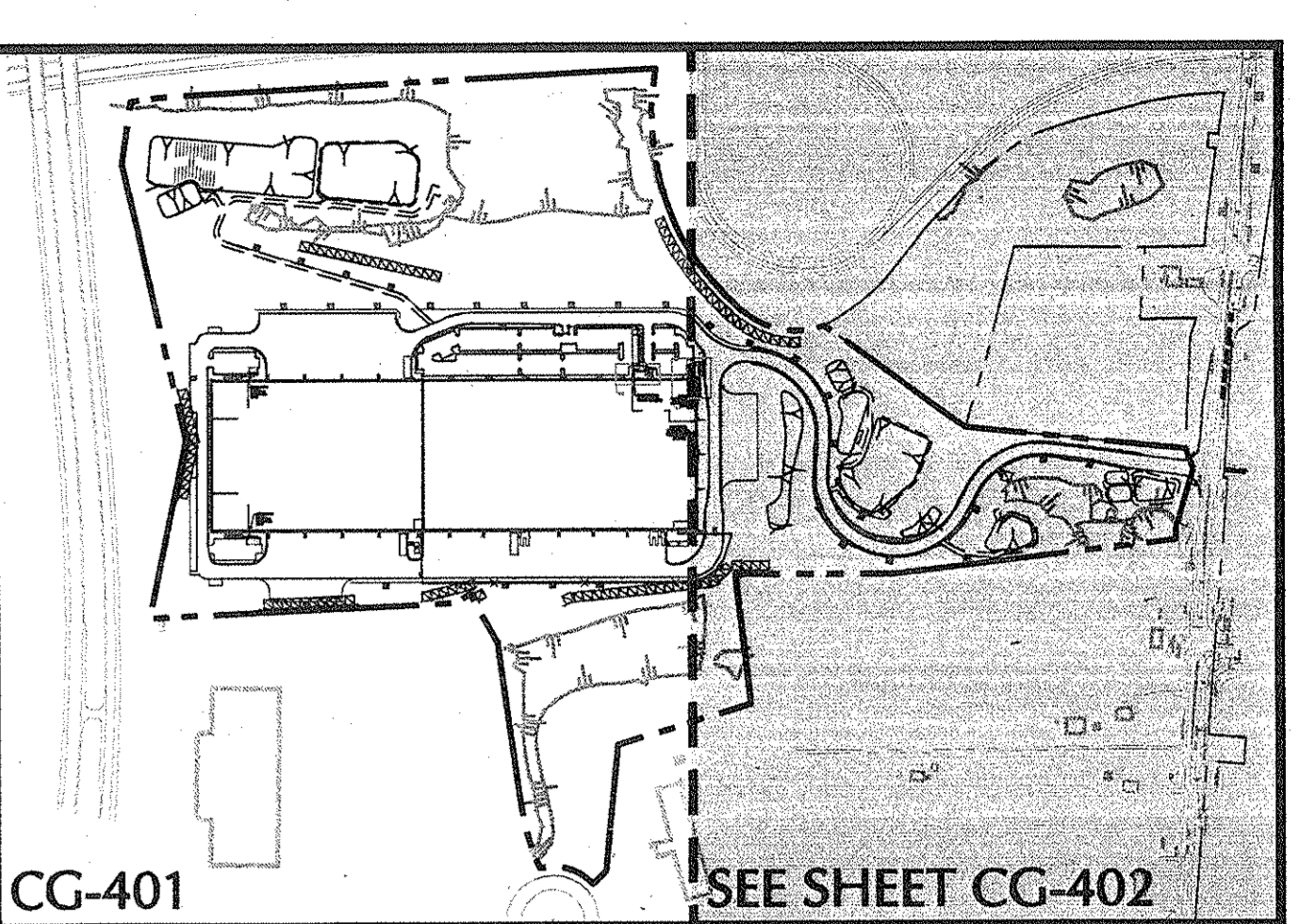
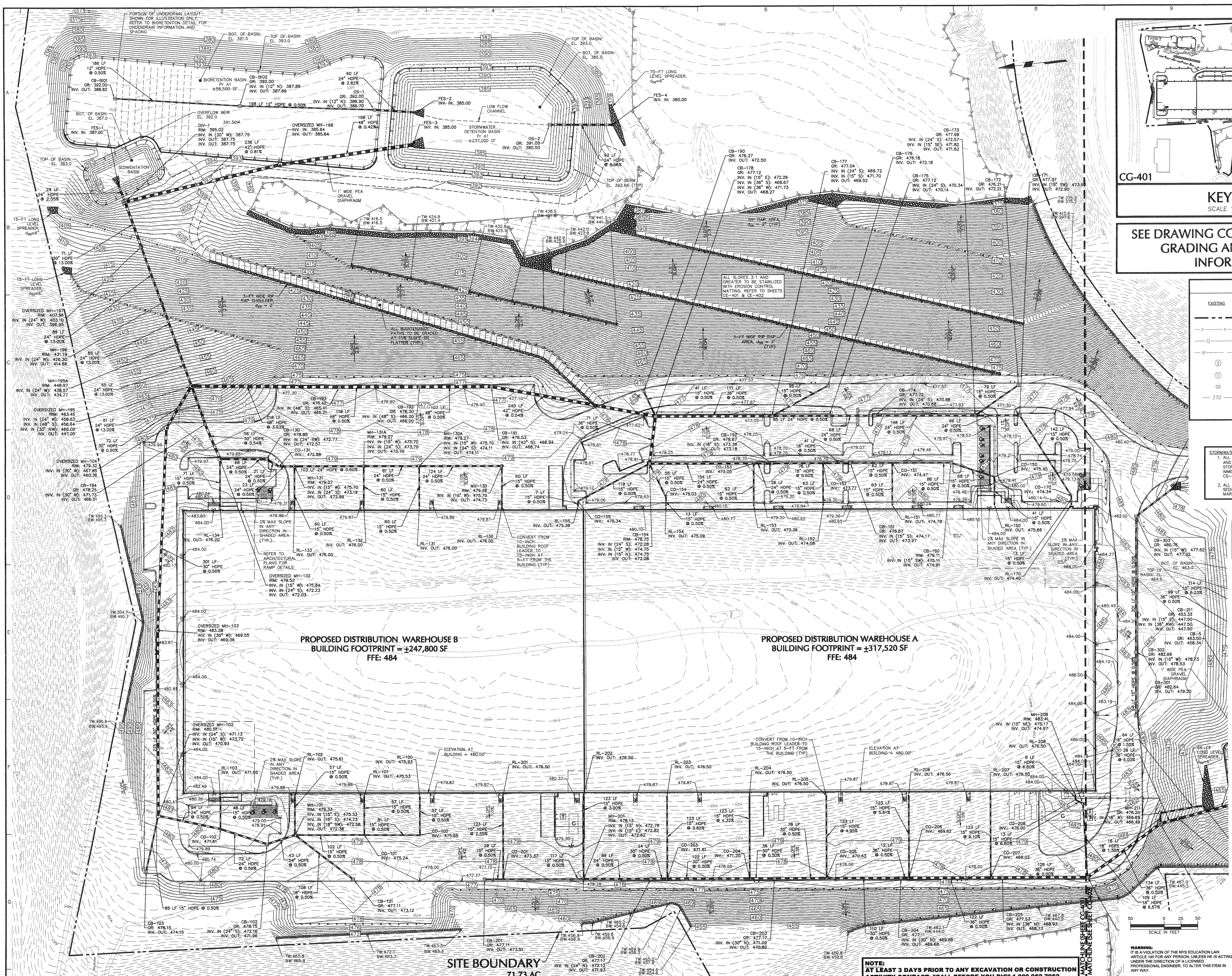
Project: **MATRIX BUSINESS PARK AT NEWBURGH**
 TOWN OF NEWBURGH
 ORANGE COUNTY NEW YORK
 Drawing Title:

OVERALL GRADING AND DRAINAGE PLAN

Project No.	9190601	Drawing No.	CG-101
Date	9/9/2015	Scale	1" = 100'
Drawn By	RAC	Submission Date	04/11/2016



NOTE:
 AT LEAST 3 DAYS PRIOR TO ANY EXCAVATION OR CONSTRUCTION ACTIVITY CONTACT: "CALL BEFORE YOU DIG" 1-800-962-7962.



KEY MAP
SCALE 1" = 500'
SEE DRAWING CG-101 FOR OVERALL GRADING AND DRAINAGE INFORMATION

LEGEND

EXISTING	PROPOSED	PROPERTY LINE
---	---	---
---	---	---
---	---	---
---	---	---
---	---	---
---	---	---
---	---	---
---	---	---
---	---	---
---	---	---

STORMWATER BASIN NOTES:
1. ALL STORMWATER BASINS (BIORETENTION, SAND FILTERS, AND DETENTION BASINS) ARE REQUIRED TO HAVE A STORMWATER MANAGEMENT PRACTICE SIGN PLACED IN THE IMMEDIATE VICINITY OF THE BASIN. SEE DETAIL ON SHEET CS-501 FOR SIGN DETAILS PER BASIN.
2. ALL SEDIMENT FOREBAYS ARE REQUIRED TO HAVE A SEDIMENT MARKER. SEE DETAIL ON SHEET CS-501 FOR MARKER DETAILS PER BASIN.

SEE SHEET CS-502 FOR DETAILS ON INDIVIDUAL OUTLET CONTROL AND DIVERSION STRUCTURES.

Date	Description	No.
4/11/2016	REVISED ACCESS ROADS	4
3/18/2016	REVISED PER MEP AND ARCH. COORDINATION AND TOWN COMMENTS	3
1/25/2016	REVISED PER MEP COMMENTS, NYSDOT DESIGN, AND EMERGENCY ACCESS PATH	2
11/9/2015	REVISED PER TOWN COMMENTS	1

Signature: CHARLES UTSCHIG
Professional Engineer NY Lic. No. 062303
Date Signed: 04/11/2016



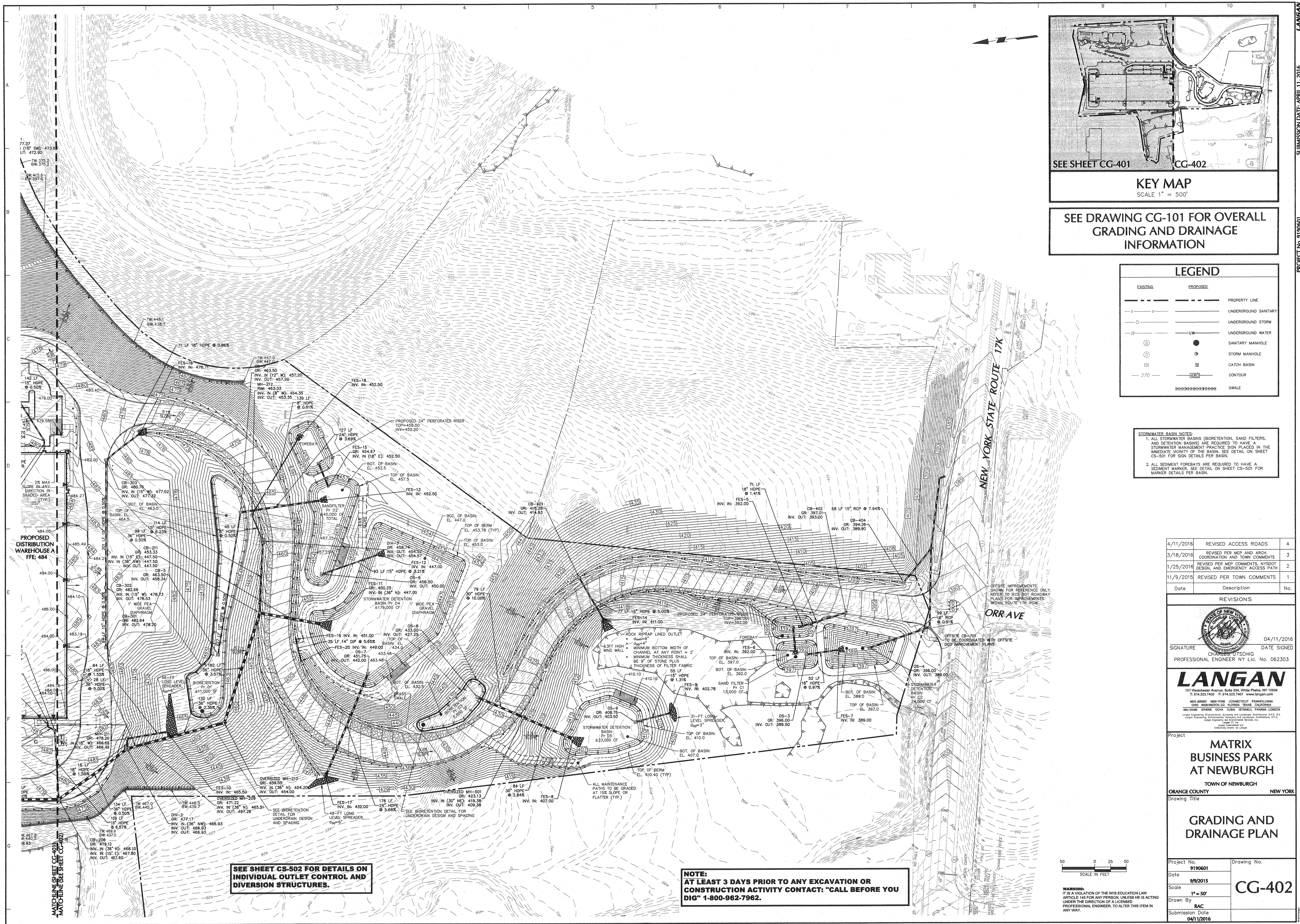
MATRIX BUSINESS PARK AT NEWBURGH
TOWN OF NEWBURGH
ORANGE COUNTY NEW YORK

GRADING AND DRAINAGE PLAN

Project No. 9190601 Drawing No. CG-401
Date 9/9/2015
Scale 1" = 50'
Drawn By RAC
Submission Date 04/11/2016

NOTE:
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WARNING:
IT IS A VIOLATION OF THE NYS EDUCATION LAW ARTICLE 146 FOR ANY PERSON UNLESS HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER TO ALTER THIS ITEM IN ANY WAY.



SEE SHEET CG-401

CG-402

KEY MAP
SCALE 1" = 500'

SEE DRAWING CG-101 FOR OVERALL GRADING AND DRAINAGE INFORMATION

LEGEND

EXISTING	PROPOSED	DESCRIPTION
---	---	PROPERTY LINE
---	---	UNDERGROUND SANITARY
---	---	UNDERGROUND STORM
---	---	UNDERGROUND WATER
○	●	SANITARY MANHOLE
○	●	STORM MANHOLE
□	□	CATCH BASIN
---	---	CONTOUR
---	---	SWALE

STORMWATER BASIN NOTES:

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Date	Description	No.
4/11/2016	REVISED ACCESS ROADS	4
3/18/2016	REVISED PER MEP AND ARCH COORDINATION AND TOWN COMMENTS	3
1/25/2016	REVISED PER MEP COMMENTS, NYSDOT DESIGN, AND EMERGENCY ACCESS PATH	2
11/9/2015	REVISED PER TOWN COMMENTS	1

DATE SIGNED: 04/11/2016
 SIGNATURE: CHARLES OTSCHIG
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 MONTANA NEBRASKA NEVADA NORTH CAROLINA NORTH DAKOTA OKLAHOMA
 OREGON SOUTH CAROLINA SOUTH DAKOTA UTAH VIRGINIA WISCONSIN WYOMING

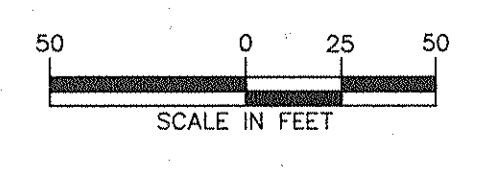
Project: **MATRIX BUSINESS PARK AT NEWBURGH**
 TOWN OF NEWBURGH
 ORANGE COUNTY NEW YORK

GRADING AND DRAINAGE PLAN

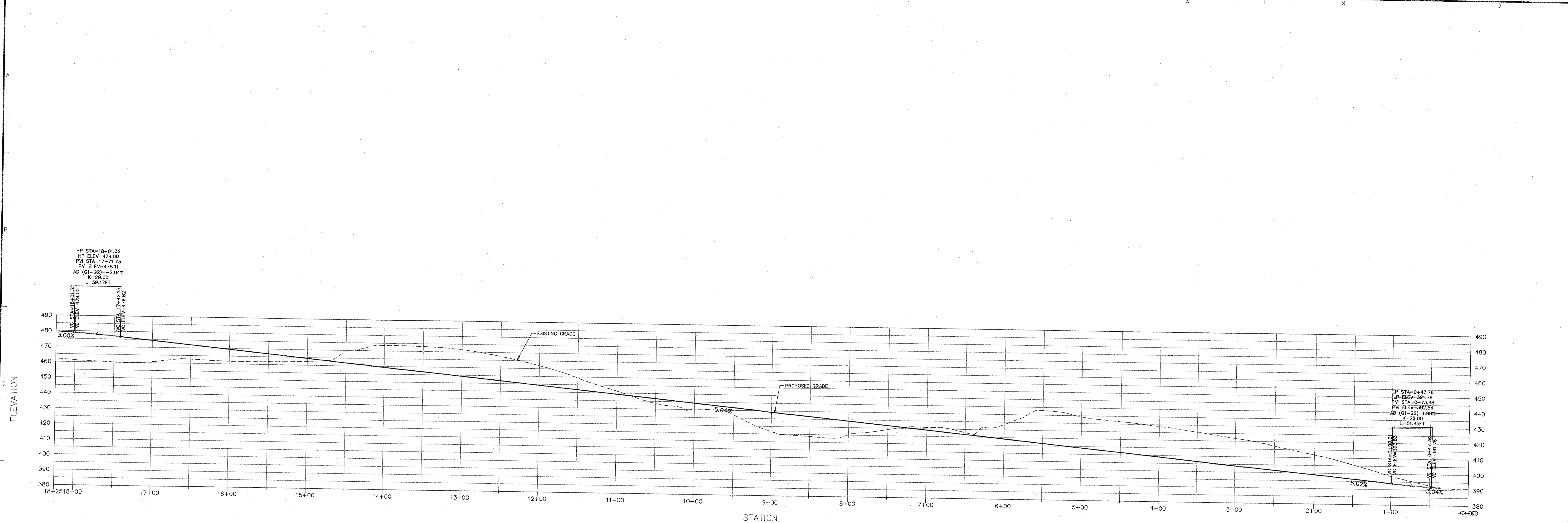
Project No.	9190601	Drawing No.	CG-402
Date	9/9/2015	Scale	1" = 50'
Drawn By	RAC	Submission Date	04/11/2016

SEE SHEET CS-502 FOR DETAILS ON INDIVIDUAL OUTLET CONTROL AND DIVERSION STRUCTURES.

NOTE:
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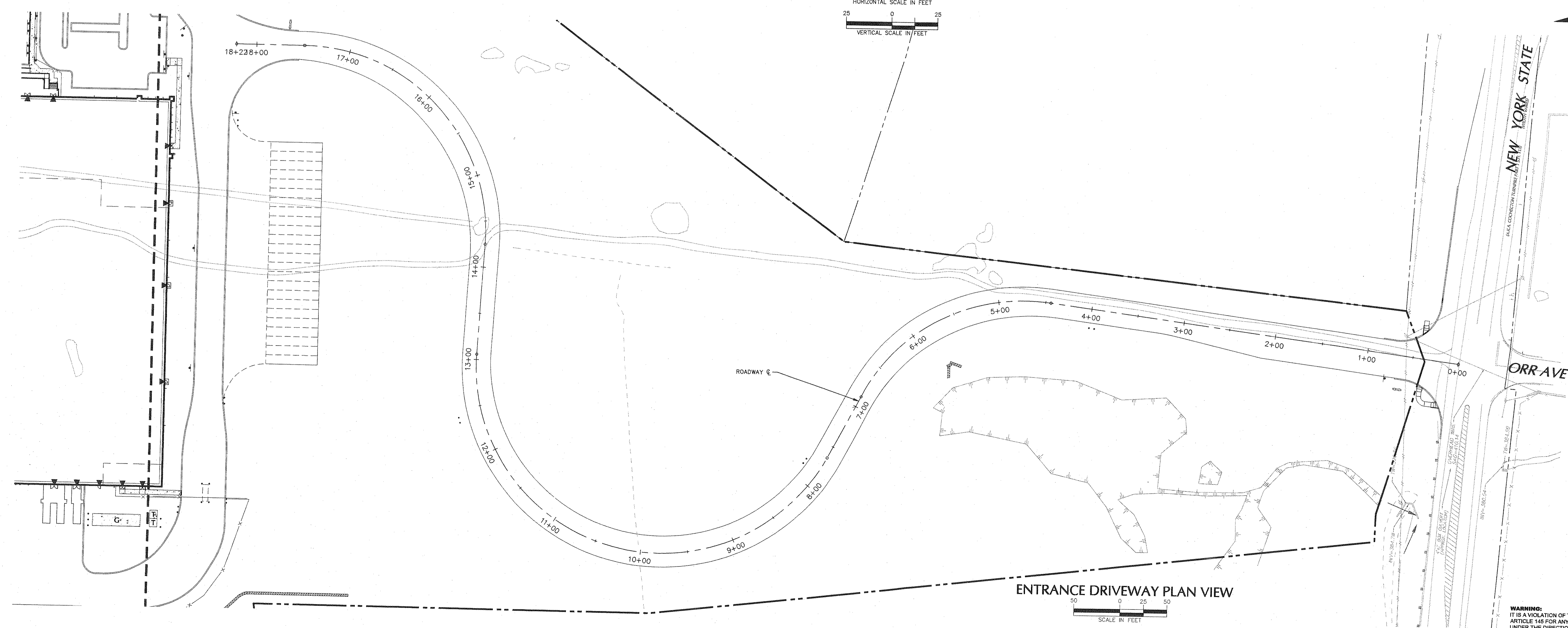
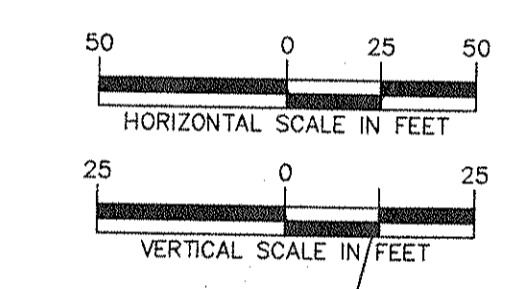


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ENTRANCE DRIVEWAY PROFILE

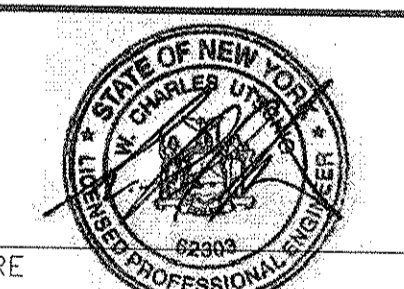
NOTE: VERTICAL SCALE IS EXAGGERATED TO BE TWICE THE HORIZONTAL SCALE.



ENTRANCE DRIVEWAY PLAN VIEW

Date	Description	No.
1/25/2016	REVISED PER MEP COMMENTS, NYSDOT DESIGN, AND EMERGENCY ACCESS PATH	2
11/9/2015	REVISED PER TOWN COMMENTS	1

REVISIONS



SIGNATURE: CHARLES J. SCHISCH
PROFESSIONAL ENGINEER NY Lic. No. 062303

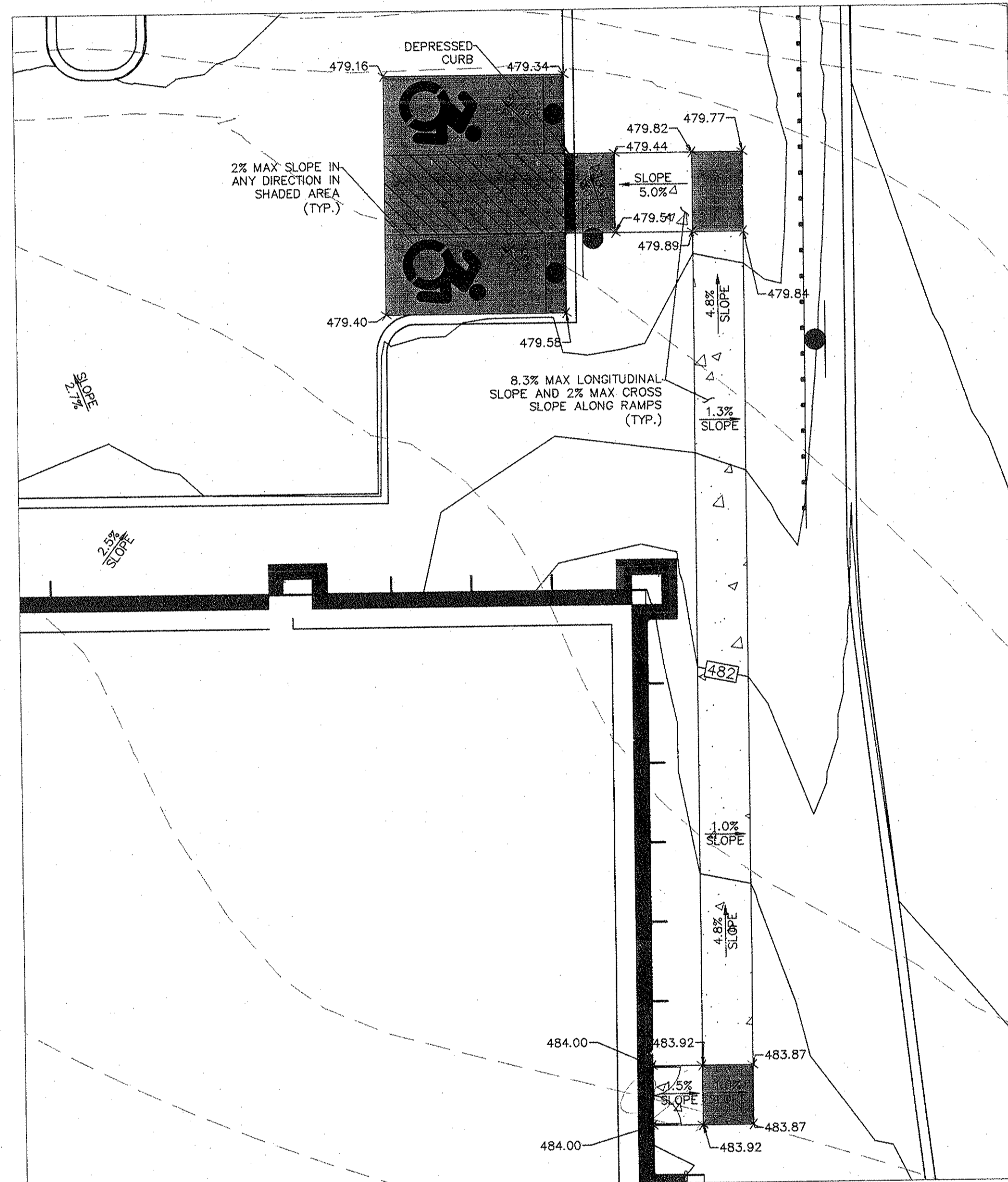
DATE SIGNED: 04/11/2016

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Tennessee Virginia West Virginia Wisconsin

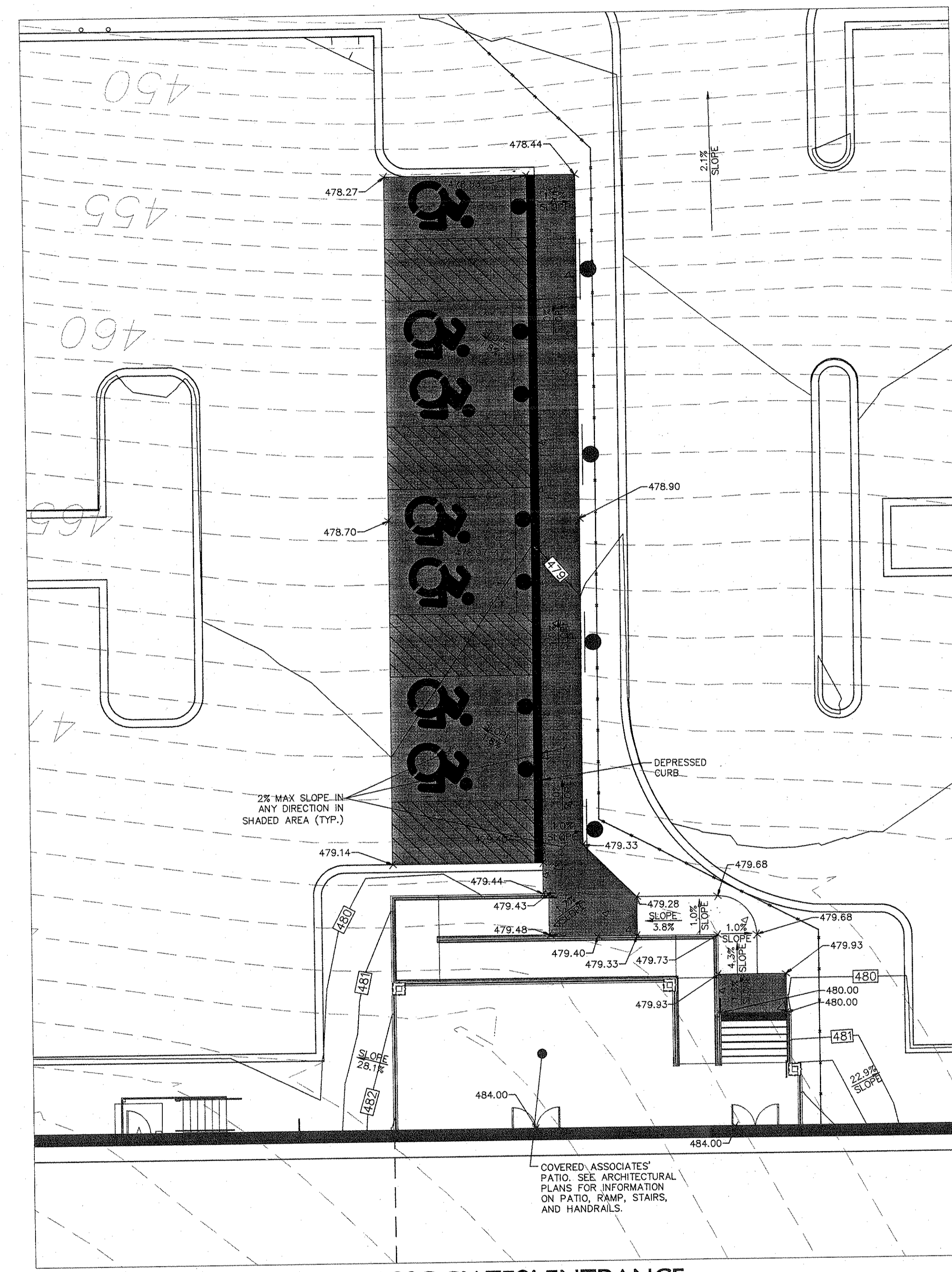
Project: **MATRIX BUSINESS PARK AT NEWBURGH**
TOWN OF NEWBURGH NEW YORK
Drawing Title: **ROADWAY PROFILE AND TYPICAL SECTION**

Project No.	9190601	Drawing No.	CG-403
Date	9/9/2015		
Scale	AS SHOWN		
Drawn By	RAC		
Submission Date	04/11/2016		

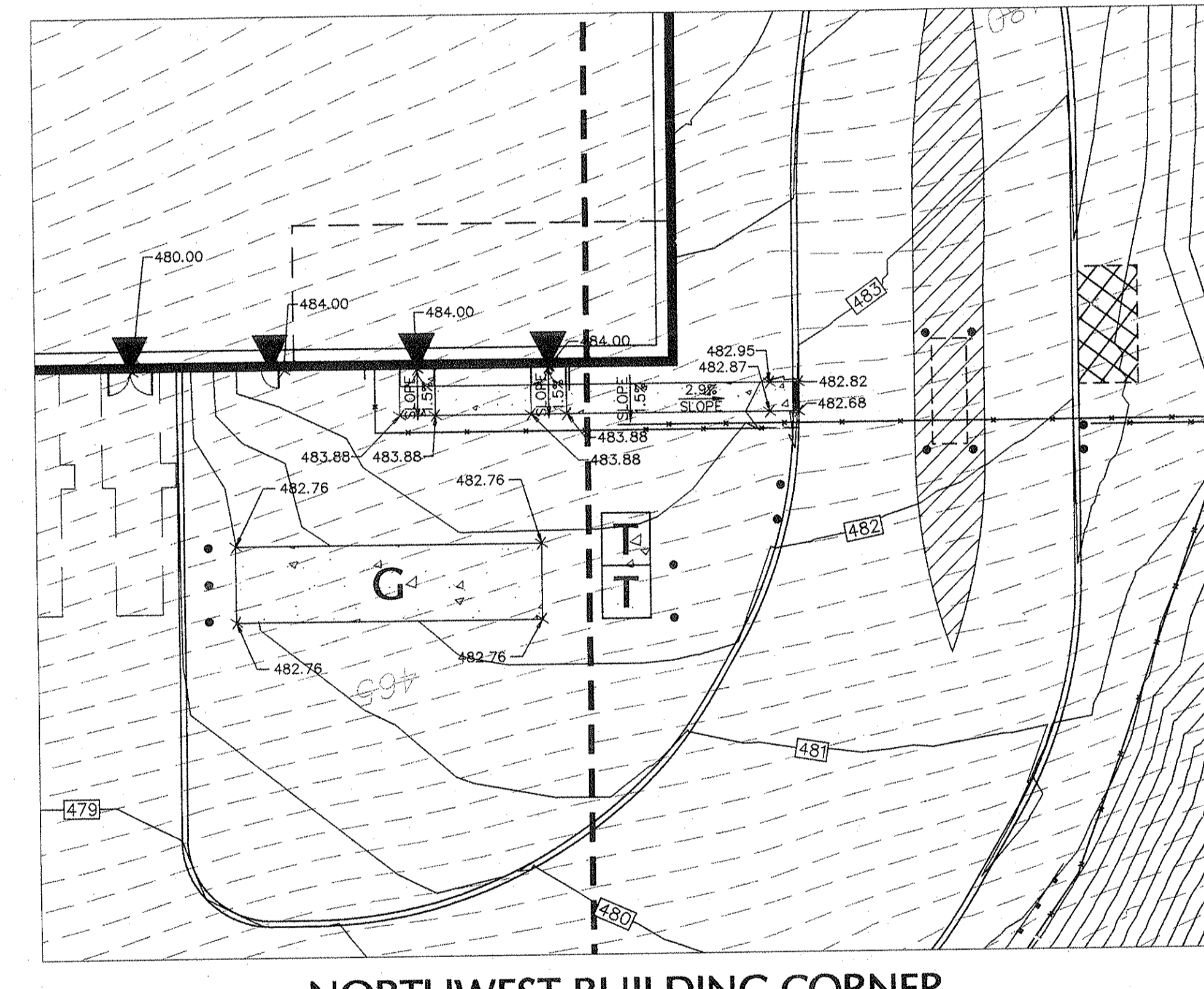
WARNING: IT IS A VIOLATION OF THE NYS EDUCATION LAW ARTICLE 148 FOR ANY PERSON, UNLESS HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS ITEM IN ANY WAY.



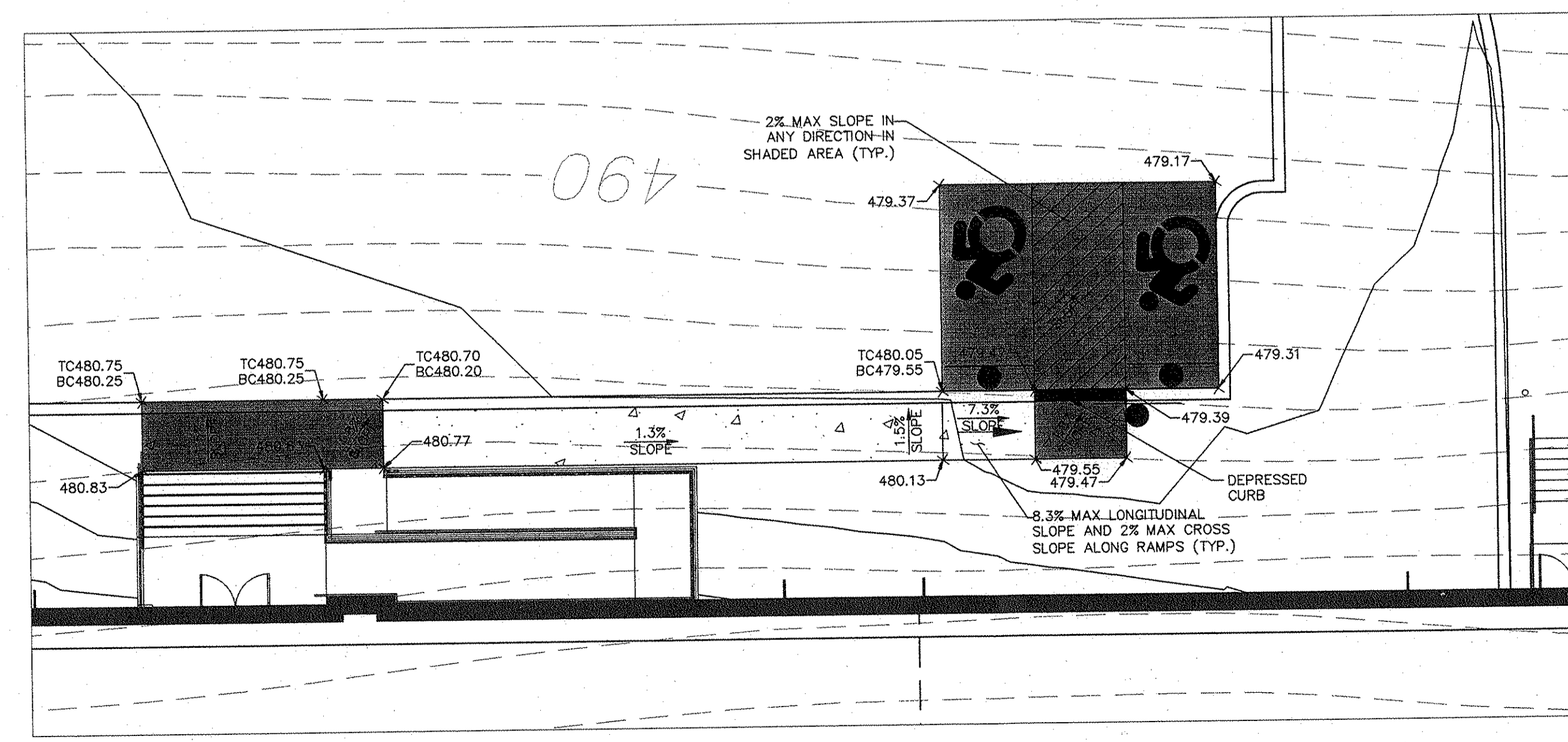
VISITORS' ENTRANCE
SCALE IN FEET



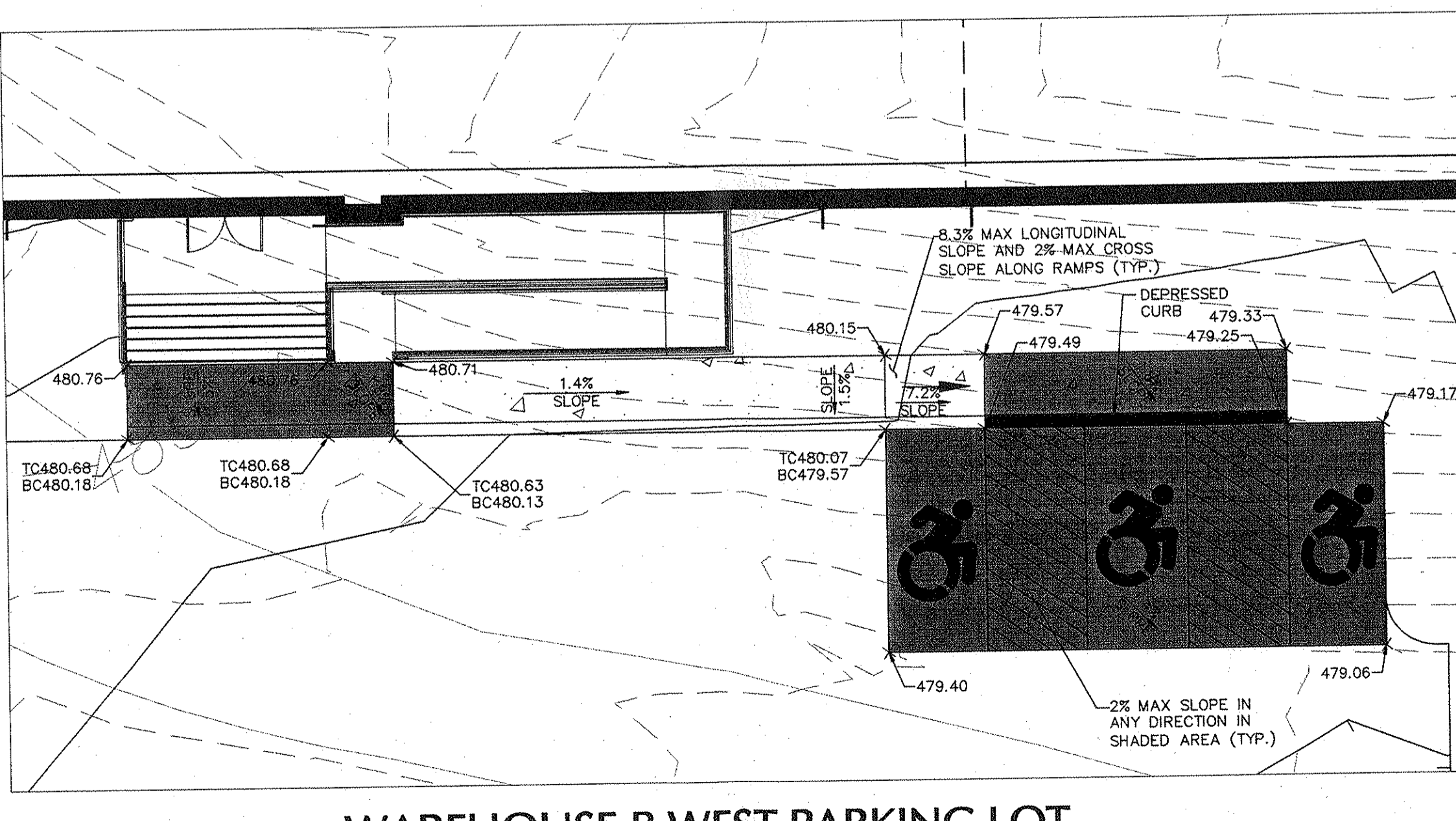
ASSOCIATES' ENTRANCE
SCALE IN FEET



NORTHWEST BUILDING CORNER
SCALE IN FEET



WAREHOUSE B EAST PARKING LOT
SCALE IN FEET




WAREHOUSE B WEST PARKING LOT
SCALE IN FEET

SEE DRAWING CG101 FOR OVERALL GRADING AND DRAINAGE INFORMATION

NOTE:
AT LEAST 3 DAYS PRIOR TO ANY EXCAVATION OR CONSTRUCTION ACTIVITY CONTACT: "CALL BEFORE YOU DIG" 1-800-962-7962.

Date	Description	No.
4/11/2016	REVISED ACCESS ROADS	4
3/18/2016	REVISED PER MEP AND ARCH. COORDINATION AND TOWN COMMENTS	3
1/25/2016	REVISED PER MEP COMMENTS, NYS DOT DESIGN, AND EMERGENCY ACCESS PATH	2
11/9/2015	REVISED PER TOWN COMMENTS	1

REVISIONS

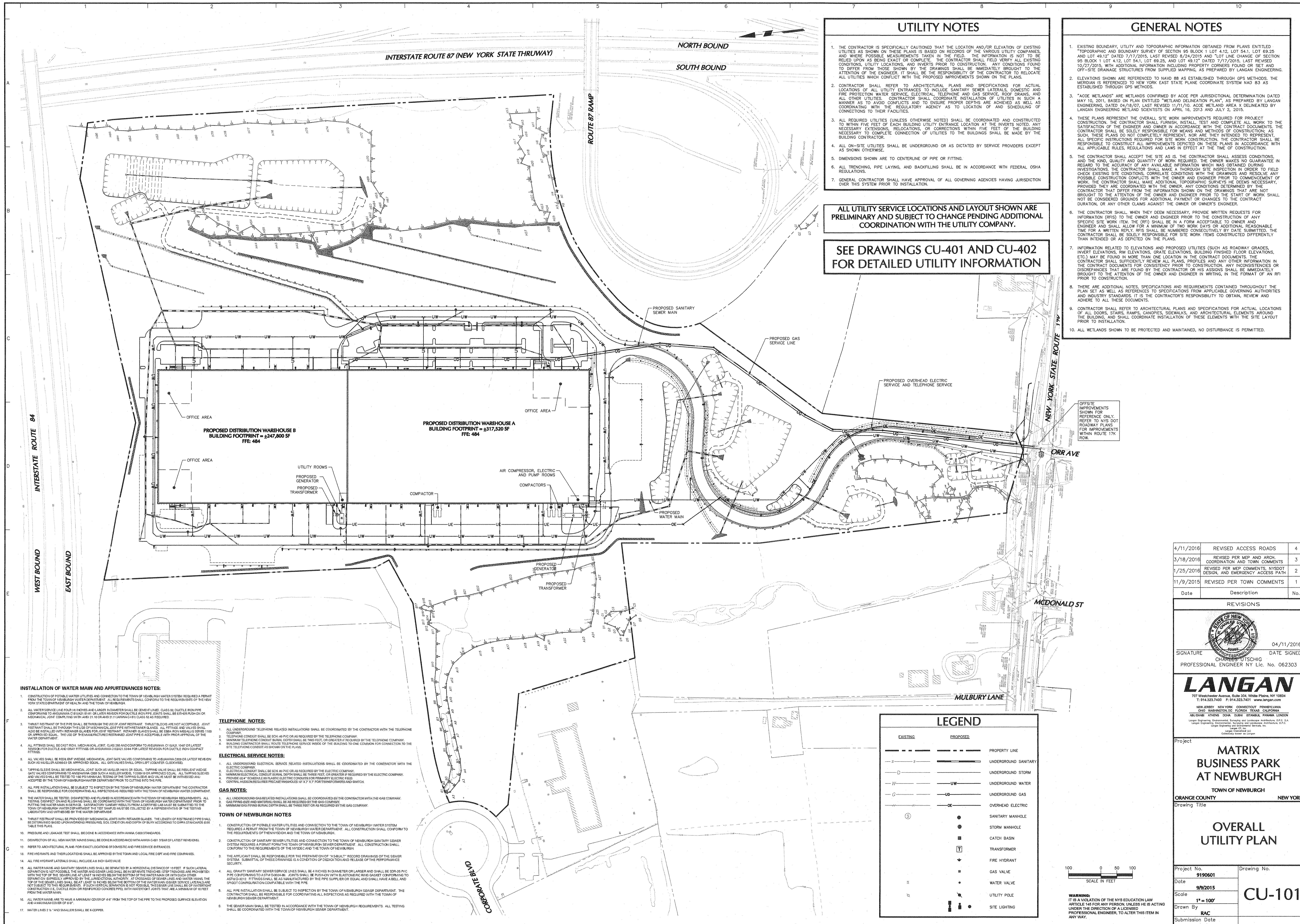

 04/11/2016
 SIGNATURE: CHARLES LUTSCHIG DATE SIGNED
 PROFESSIONAL ENGINEER NY Lic. No. 062303

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 UTAH VIRGINIA WISCONSIN WYOMING
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 Langan Environmental, Inc.
 Langan Construction, Inc.

Project: **MATRIX BUSINESS PARK AT NEWBURGH**
 TOWN OF NEWBURGH
 ORANGE COUNTY NEW YORK
 Drawing Title: **GRADING DETAIL ENLARGEMENT PLAN**

Project No. **9190601** Drawing No. **CG-410**
 Date: **9/9/2015**
 Scale: **AS SHOWN**
 Drawn By: **RAC**
 Submission Date: **04/11/2016**

WARNING:
IT IS A VIOLATION OF THE NYS EDUCATION LAW ARTICLE 145 FOR ANY PERSON, UNLESS HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS ITEM IN ANY WAY.



- ### UTILITY NOTES
1. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES, AND WHERE POSSIBLE MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED UPON AS BEING EXACT OR COMPLETE. THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS, UTILITY LOCATIONS, AND INVERTS PRIOR TO CONSTRUCTION. ANY CONDITIONS FOUND TO DIFFER FROM THOSE SHOWN BY THE DRAWINGS SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE ENGINEER. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.
 2. CONTRACTOR SHALL REFER TO ARCHITECTURAL PLANS AND SPECIFICATIONS FOR ACTUAL LOCATIONS OF ALL UTILITY ENTRANCES TO INCLUDE SANITARY SEWER, LATERALS, DOMESTIC AND FIRE PROTECTION WATER SERVICE, ELECTRICAL, TELEPHONE AND GAS SERVICE, ROOF DRAINS, AND ALL OTHER UTILITIES. CONTRACTOR SHALL COORDINATE INSTALLATION OF UTILITIES IN SUCH A MANNER AS TO AVOID CONFLICTS AND TO ENSURE PROPER DEPTHS ARE ACHIEVED AS WELL AS COORDINATING WITH THE REGULATORY AGENCY AS TO LOCATION OF AND SCHEDULING OF CONNECTIONS TO THEIR FACILITIES.
 3. ALL REQUIRED UTILITIES (UNLESS OTHERWISE NOTED) SHALL BE COORDINATED AND CONSTRUCTED TO WITHIN FIVE FEET OF EACH BUILDING UTILITY ENTRANCE LOCATION AT THE INVERTS NOTED. ANY NECESSARY EXTENSIONS, RELOCATIONS, OR CORRECTIONS WITHIN FIVE FEET OF THE BUILDING NECESSARY TO COMPLETE CONNECTION OF UTILITIES TO THE BUILDINGS SHALL BE MADE BY THE BUILDING CONTRACTOR.
 4. ALL ON-SITE UTILITIES SHALL BE UNDERGROUND OR AS DICTATED BY SERVICE PROVIDERS EXCEPT AS SHOWN OTHERWISE.
 5. DIMENSIONS SHOWN ARE TO CENTERLINE OF PIPE OR FITTING.
 6. ALL TRENCHING, PIPE LAYING, AND BACKFILLING SHALL BE IN ACCORDANCE WITH FEDERAL OSHA REGULATIONS.
 7. GENERAL CONTRACTOR SHALL HAVE APPROVAL OF ALL GOVERNING AGENCIES HAVING JURISDICTION OVER THIS SYSTEM PRIOR TO INSTALLATION.

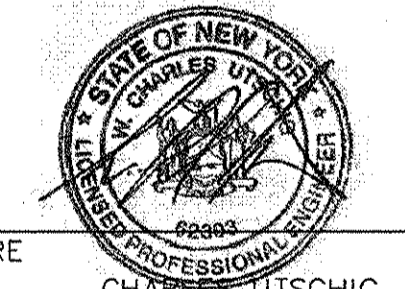
ALL UTILITY SERVICE LOCATIONS AND LAYOUT SHOWN ARE PRELIMINARY AND SUBJECT TO CHANGE PENDING ADDITIONAL COORDINATION WITH THE UTILITY COMPANY.

SEE DRAWINGS CU-401 AND CU-402 FOR DETAILED UTILITY INFORMATION

- ### GENERAL NOTES
1. EXISTING BOUNDARY, UTILITY AND TOPOGRAPHIC INFORMATION OBTAINED FROM PLANS ENTITLED "TOPOGRAPHIC AND BOUNDARY SURVEY OF SECTION 95 BLOCK 1 LOT 4.12, LOT 54.1, LOT 69.25 AND LOT 107.1 DATED 7/17/2015, LAST REVISED 8/24/2015 AND LOT LINE CHANGE OF SECTION 95 BLOCK 1 LOT 4.12, LOT 54.1, LOT 69.25, AND LOT 107.1 DATED 1/17/2016, LAST REVISED 10/27/2015, WITH ADDITIONAL INFORMATION INCLUDING PROPERTY CORNERS FOUND ON SET AND OFF-SITE DRAINAGE STRUCTURES FROM SUPPLIED MAPPING, AS PREPARED BY LANGAN ENGINEERING.
 2. ELEVATIONS SHOWN ARE REFERENCED TO NAVD 88 AS ESTABLISHED THROUGH GPS METHODS. THE MERIDIAN IS REFERENCED TO NEW YORK EAST STATE PLANE COORDINATE SYSTEM NAD 83 AS ESTABLISHED THROUGH GPS METHODS.
 3. "ACCURATE WETLANDS" ARE WETLANDS CONFIRMED BY ACCE PER JURISDICTIONAL DETERMINATION DATED MAY 10, 2011, BASED ON PLAN ENTITLED "WETLAND DELINEATION PLAN", AS PREPARED BY LANGAN ENGINEERING, DATED 04/18/07, LAST REVISED 11/11/10. ACCURATE WETLAND AREA IS DELINEATED BY LANGAN ENGINEERING WETLAND SCIENTISTS ON APRIL 18, 2013 AND JULY 2, 2015.
 4. THESE PLANS REPRESENT THE OVERALL SITE WORK IMPROVEMENTS REQUIRED FOR PROJECT CONSTRUCTION. THE CONTRACTOR SHALL FURNISH, INSTALL, TEST AND COMPLETE ALL WORK TO THE SATISFACTION OF THE ENGINEER AND OWNER IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR MEANS AND METHODS OF CONSTRUCTION; AS SUCH, THESE PLANS DO NOT COMPLETELY REPRESENT, NOR ARE THEY INTENDED TO REPRESENT, ALL SPECIFIC INSTRUCTIONS REQUIRED FOR SITE WORK CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE TO CONSTRUCT ALL IMPROVEMENTS DEPICTED ON THESE PLANS IN ACCORDANCE WITH ALL APPLICABLE RULES, REGULATIONS AND LAWS IN EFFECT AT THE TIME OF CONSTRUCTION.
 5. THE CONTRACTOR SHALL ACCEPT THE SITE AS IS. THE CONTRACTOR SHALL ASSESS CONDITIONS, AND THE KIND, QUALITY AND QUANTITY OF WORK REQUIRED, THE OWNER MAKES NO GUARANTEE IN REGARD TO THE ACCURACY OF ANY AVAILABLE INFORMATION WHICH WAS OBTAINED DURING INVESTIGATIONS. THE CONTRACTOR SHALL MAKE A THOROUGH SITE INSPECTION IN ORDER TO FIELD CHECK EXISTING SITE CONDITIONS, CORRELATE CONDITIONS WITH THE DRAWINGS AND RESOLVE ANY POSSIBLE CONSTRUCTION CONFLICTS WITH THE OWNER AND ENGINEER PRIOR TO COMMENCEMENT OF WORK. THE CONTRACTOR SHALL MAKE ADDITIONAL TOPOGRAPHIC SURVEYS HE DEEMS NECESSARY, PROVIDED THEY ARE COORDINATED WITH THE OWNER. ANY CONDITIONS DETERMINED BY THE CONTRACTOR THAT DIFFER FROM THE INFORMATION SHOWN ON THE DRAWINGS THAT ARE NOT BROUGHT TO THE ATTENTION OF THE OWNER AND ENGINEER PRIOR TO THE START OF WORK SHALL NOT BE CONSIDERED GROUNDS FOR ADDITIONAL PAYMENT OR CHANGES TO THE CONTRACT DURATION, OR ANY OTHER CLAIMS AGAINST THE OWNER OR OWNER'S ENGINEER.
 6. THE CONTRACTOR SHALL, WHEN THEY DEEM NECESSARY, PROVIDE WRITTEN REQUESTS FOR INFORMATION (RFIS) TO THE OWNER AND ENGINEER PRIOR TO THE CONSTRUCTION OF ANY SPECIFIC SITE WORK ITEM. THE (RFI) SHALL BE IN A FORM ACCEPTABLE TO OWNER AND ENGINEER AND SHALL ALLOW FOR A MINIMUM OF TWO WORK DAYS OR ADDITIONAL REASONABLE TIME FOR A WRITTEN REPLY. RFIS SHALL BE NUMBERED CONSECUTIVELY BY DATE SUBMITTED. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR SITE WORK ITEMS CONSTRUCTED DIFFERENTLY THAN INTENDED OR AS DEPICTED ON THE PLANS.
 7. INFORMATION RELATED TO ELEVATIONS AND PROPOSED UTILITIES (SUCH AS ROADWAY GRADES, INVERT ELEVATIONS, RM ELEVATIONS, GRATE ELEVATIONS, BUILDING FINISHED FLOOR ELEVATIONS, ETC.) MAY BE FOUND IN MORE THAN ONE LOCATION IN THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL SUFFICIENTLY REVIEW ALL PLANS, PROFILES AND ANY OTHER INFORMATION IN THE CONTRACT DOCUMENTS FOR CONSISTENCY PRIOR TO CONSTRUCTION. ANY INCONSISTENCIES OR DISCREPANCIES THAT ARE FOUND BY THE CONTRACTOR OR HIS ASSIGNS SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE OWNER AND ENGINEER IN WRITING, IN THE FORMAT OF AN RFI PRIOR TO CONSTRUCTION.
 8. THERE ARE ADDITIONAL NOTES, SPECIFICATIONS AND REQUIREMENTS CONTAINED THROUGHOUT THE PLAN SET AS WELL AS REFERENCES TO SPECIFICATIONS FROM APPLICABLE GOVERNING AUTHORITIES AND INDUSTRY STANDARDS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN, REVIEW AND ADHERE TO ALL THESE DOCUMENTS.
 9. CONTRACTOR SHALL REFER TO ARCHITECTURAL PLANS AND SPECIFICATIONS FOR ACTUAL LOCATIONS OF ALL DOORS, STAIRS, RAMPS, CANOPIES, SIDEWALKS, AND ARCHITECTURAL ELEMENTS AROUND THE BUILDING, AND SHALL COORDINATE INSTALLATION OF THESE ELEMENTS WITH THE SITE LAYOUT PRIOR TO INSTALLATION.
 10. ALL WETLANDS SHOWN TO BE PROTECTED AND MAINTAINED, NO DISTURBANCE IS PERMITTED.

Date	Description	No.
4/11/2016	REVISED ACCESS ROADS	4
3/18/2016	REVISED PER MEP AND ARCH. COORDINATION AND TOWN COMMENTS	3
1/25/2016	REVISED PER MEP COMMENTS, NYS DOT DESIGN, AND EMERGENCY ACCESS PATH	2
11/9/2015	REVISED PER TOWN COMMENTS	1

REVISIONS



DATE SIGNED: 04/11/2016
 SIGNATURE: G. J. SCHICH
 PROFESSIONAL ENGINEER NY Lic. No. 062303

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 OHIO PENNSYLVANIA MARYLAND VIRGINIA
 NORTH CAROLINA SOUTH CAROLINA GEORGIA
 LOUISIANA MISSISSIPPI ALABAMA ARIZONA
 ARKANSAS CALIFORNIA COLORADO CONNECTICUT
 DELAWARE FLORIDA GEORGIA ILLINOIS
 INDIANA IOWA KANSAS KENTUCKY LOUISIANA
 MARYLAND MASSACHUSETTS MICHIGAN MINNESOTA
 MISSISSIPPI MISSOURI NEBRASKA NEVADA
 NEW JERSEY NEW YORK NORTH CAROLINA
 NORTH DAKOTA OHIO OKLAHOMA OREGON
 PENNSYLVANIA RHODE ISLAND SOUTH CAROLINA
 SOUTH DAKOTA TENNESSEE TEXAS UTAH
 VERMONT VIRGINIA WISCONSIN WYOMING

Project: **MATRIX BUSINESS PARK AT NEWBURGH**
 TOWN OF NEWBURGH NEW YORK

Drawing Title: **OVERALL UTILITY PLAN**

Project No. **9190601** Drawing No. **CU-101**
 Date: **9/9/2015**
 Scale: **1" = 100'**
 Drawn By: **RAC**
 Submission Date: **04/11/2016**

Warnings: IT IS A VIOLATION OF THE NYS EDUCATION LAW ARTICLE 145 FOR ANY PERSON, UNLESS HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS ITEM IN ANY WAY.

- ### INSTALLATION OF WATER MAIN AND APPURTENANCES NOTES:
1. CONSTRUCTION OF POTABLE WATER UTILITIES AND CONNECTION TO THE TOWN OF NEWBURGH WATER SYSTEM REQUIRES A PERMIT FROM THE TOWN OF NEWBURGH WATER DEPARTMENT. ALL REQUIREMENTS SHALL CONFORM TO THE REQUIREMENTS OF THE NEW YORK STATE DEPARTMENT OF HEALTH AND THE TOWN OF NEWBURGH.
 2. ALL WATER SERVICE LINES FOUR INCHES AND LARGER IN DIAMETER SHALL BE CAST IRON PIPE. LINES LESS THAN FOUR INCHES SHALL BE EITHER POLYETHYLENE GLYCOL (PE) OR LATER REVISION FOR DUCTILE IRON PIPE JOINTS SHALL BE EITHER PUSH ON OR MECHANICAL JOINT COMPLY WITH ANSI A13.1 OR ANSI A13.11 WHICH EVER IS APPLICABLE.
 3. THURST RESTRAINT OF THE PIPE SHALL BE THROUGH THE USE OF JOINT RESTRAINT. THURST RESTRAINTS ARE NOT ACCEPTABLE. JOINT RESTRAINT SHALL BE THROUGH THE USE OF MECHANICAL JOINT PIPE WITH RETAINER GLANDS. ALL FITTINGS AND VALVES SHALL ALSO BE INSTALLED WITH RETAINER GLANDS FOR JOINT RESTRAINT. RETAINER GLANDS SHALL BE SOLELY MANUFACTURED BY THE TOWN OF NEWBURGH. THE USE OF THE MANUFACTURED RESTRAINT JOINT PIPE IS ACCEPTABLE WITH PRIOR APPROVAL OF THE WATER DEPARTMENT.
 4. ALL FITTINGS SHALL BE CAST IRON, MECHANICAL JOINT, CLASS 250 AND CONFORM TO ANSI/AWWA C1042, 1040 OR LATEST REVISION FOR DUCTILE IRON FITTINGS OR ANSI/AWWA C152A21, C152A21.04 FOR LATEST REVISION FOR DUCTILE IRON COMPACT FITTINGS.
 5. ALL VALVES SHALL BE RESILIENT WEDGE, MECHANICAL JOINT GATE VALVES CONFORMING TO ANSI/AWWA C200 OR LATEST REVISION SUCH AS MILLER A2300023 OR APPROVED EQUAL. ALL GATE VALVES SHALL OPEN LEFT COUNTER CLOCKWISE.
 6. TAPPING BLEEDS SHALL BE MECHANICAL JOINT SUCH AS MILLER HETS OR EQUAL. TAPPING VALVE SHALL BE RESILIENT WEDGE GATE VALVES CONFORMING TO ANSI/AWWA C200 SUCH AS MILLER BLEED, 72399 W OR APPROVED EQUAL. ALL TAPPING BLEEDS AND VALVES SHALL BE TESTED TO 150 PSI MINIMUM. TESTING OF THE TAPPING BLEED AND VALVE MUST BE WITNESSED AND ACCEPTED BY THE TOWN OF NEWBURGH OPERATOR PRIOR TO CUTTING INTO THE PIPE.
 7. ALL PIPE INSTALLATION SHALL BE SUBJECT TO INSPECTION BY THE TOWN OF NEWBURGH WATER DEPARTMENT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL INSPECTIONS WITH THE TOWN OF NEWBURGH WATER DEPARTMENT.
 8. THE WATER SHALL BE TESTED, DISINFECTED AND FLUSHED IN ACCORDANCE WITH THE TOWN OF NEWBURGH REQUIREMENTS. ALL TESTING, DISINFECTING AND FLUSHING SHALL BE COORDINATED WITH THE TOWN OF NEWBURGH WATER DEPARTMENT PRIOR TO PUTTING THE WATER MAIN IN SERVICE. SATISFACTORY SANITARY RESULTS MUST BE SUBMITTED TO THE TOWN OF NEWBURGH WATER DEPARTMENT. THE TEST SAMPLES MUST BE COLLECTED BY A REPRESENTATIVE OF THE TESTING LABORATORY AND WITNESSED BY THE WATER DEPARTMENT.
 9. THURST RESTRAINT SHALL BE PROVIDED BY MECHANICAL JOINTS WITH RETAINER GLANDS. THE LENGTH OF RESTRAINT PIPE SHALL BE DETERMINED BASED UPON WORKING PRESSURE, SOIL CONDITION AND DEPTH OF BURIAL ACCORDING TO DIPRA STANDARDS SEE TABLES IN PLAN.
 10. PRESSURE AND LEAKAGE TEST SHALL BE DONE IN ACCORDANCE WITH AWWA C600 STANDARDS.
 11. DISINFECTION OF ALL NEW WATER MAINS SHALL BE DONE IN ACCORDANCE WITH AWWA C651 YEAR OF LATEST REVISIONS.
 12. REFER TO ARCHITECTURAL PLANS FOR EXACT LOCATION OF DOMESTIC AND FIRE SERVICE ENTRANCES.
 13. FIRE HYDRANTS AND THEIR LOCATIONS SHALL BE APPROVED BY THE TOWN AND LOCAL FIRE DEPT AND FIRE COMPANIES.
 14. ALL FIRE HYDRANT LATERALS SHALL INCLUDE A 6 INCH GATE VALVE.
 15. ALL WATER MAINS AND SANITARY SEWER LINES SHALL BE SEPARATED BY A HORIZONTAL DISTANCE OF 18 FEET. IF SUCH LATERAL SEPARATION IS NOT POSSIBLE, THE WATER AND SEWER LINES SHALL BE IN SEPARATE TRENCHES (DIP THROUGH) AND PROHIBITION TO THE TOP OF THE SEWER LINE AT LEAST 18 INCHES BELOW THE BOTTOM OF THE WATER MAIN OR VICE VERSA OTHER SEPARATION OR PROHIBITION TO THE TOP OF THE WATER MAIN SHALL BE AT LEAST 18 INCHES ABOVE THE BOTTOM OF THE SEWER LINE. THE TOP OF THE SEWER LINE SHALL BE AT LEAST 18 INCHES ABOVE THE BOTTOM OF THE WATER MAIN. WATER SERVICE LATERALS SHALL BE INSTALLED WITH RESTRAINT JOINTS. SANITARY SEWER LINES SHALL BE INSTALLED WITH RESTRAINT JOINTS THAT ARE A MINIMUM OF 18 FEET FROM THE WATER MAIN.
 16. ALL WATER MAINS ARE TO HAVE A MINIMUM COVER OF 4'4" FROM THE TOP OF THE PIPE TO THE PROPOSED SURFACE ELEVATION AND A MAXIMUM COVER OF 6'0".
 17. WATER LINES 2 1/2" AND SMALLER SHALL BE K-PIPE.

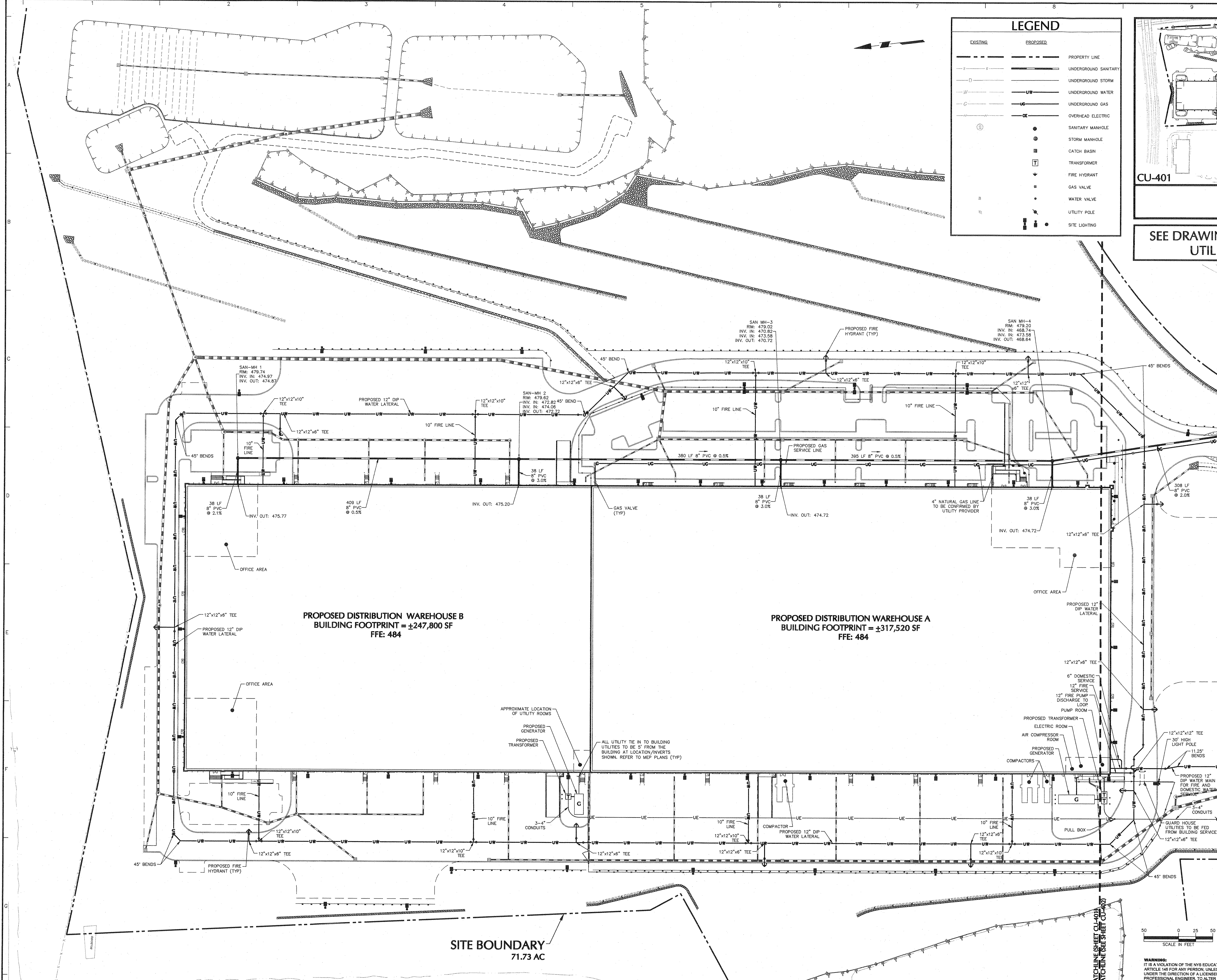
- ### TELEPHONE NOTES:
1. ALL UNDERGROUND TELEPHONE RELATED INSTALLATIONS SHALL BE COORDINATED BY THE CONTRACTOR WITH THE TELEPHONE COMPANY.
 2. ALL TELEPHONE CONDUIT SHALL BE 2" SCH 40 PVC OR AS REQUIRED BY THE TELEPHONE COMPANY.
 3. MINIMUM TELEPHONE CONDUIT BURIAL DEPTH SHALL BE THREE FEET, OR GREATER IF REQUIRED BY THE TELEPHONE COMPANY.
 4. BUILDING CONTRACTOR SHALL ROUTE TELEPHONE SERVICE WIRING OF THE BUILDING TO ONE COMMON FOR CONNECTION TO THE SITE TELEPHONE CONDUIT AS SHOWN ON THE PLANS.
- ### ELECTRICAL SERVICE NOTES:
1. ALL UNDERGROUND ELECTRICAL SERVICE RELATED INSTALLATIONS SHALL BE COORDINATED BY THE CONTRACTOR WITH THE ELECTRIC COMPANY.
 2. ELECTRICAL CONDUIT SHALL BE 2" SCH 40 PVC OR AS REQUIRED BY THE ELECTRIC COMPANY.
 3. MINIMUM ELECTRICAL CONDUIT BURIAL DEPTH SHALL BE THREE FEET, OR GREATER IF REQUIRED BY THE ELECTRIC COMPANY.
 4. PROVIDE 4" x 4" SCHEDULE 40 PLASTIC ELECTRICAL CONDUITS FOR PRIMARY ELECTRICAL FEEDS.
 5. CENTRAL, ACCESSORIES INCLUDES INCLUDES SHALL BE 1/2" x 1/2" FOR TRANSFORMERS AND SWITCH.
- ### GAS NOTES:
1. ALL UNDERGROUND GAS RELATED INSTALLATIONS SHALL BE COORDINATED BY THE CONTRACTOR WITH THE GAS COMPANY.
 2. GAS PIPE SIZE AND MATERIAL SHALL BE AS REQUIRED BY THE GAS COMPANY.
 3. MINIMUM GAS PIPE BURIAL DEPTH SHALL BE THREE FEET OR AS REQUIRED BY THE GAS COMPANY.
- ### TOWN OF NEWBURGH NOTES
1. CONSTRUCTION OF POTABLE WATER UTILITIES AND CONNECTION TO THE TOWN OF NEWBURGH WATER SYSTEM REQUIRES A PERMIT FROM THE TOWN OF NEWBURGH WATER DEPARTMENT. ALL CONSTRUCTION SHALL CONFORM TO THE REQUIREMENTS OF THE TOWN OF NEWBURGH.
 2. CONSTRUCTION OF SANITARY SEWER UTILITIES AND CONNECTION TO THE TOWN OF NEWBURGH SANITARY SEWER SYSTEM REQUIRES A PERMIT FROM THE TOWN OF NEWBURGH SEWER DEPARTMENT. ALL CONSTRUCTION SHALL CONFORM TO THE REQUIREMENTS OF THE TOWN OF NEWBURGH.
 3. THE APPLICANT SHALL BE RESPONSIBLE FOR THE PREPARATION OF A "AS-BUILT" RECORD DRAWINGS OF THE SEWER SYSTEM. SUBMITTAL OF THESE DRAWINGS IS A CONDITION OF DEDICATION AND RELEASE OF THE PERFORMANCE SECURITY.
 4. ALL SANITARY SEWER SEWER SEWER LINES SHALL BE 18 INCHES IN DIAMETER OR LARGER AND SHALL BE 300-300 PVC PIPE CONFORMING TO ASTM D3034-06. JOINTS SHALL BE PUSH ON WITH ELASTOMERIC GASKET CONFORMING TO ASTM D-3012. FITTINGS SHALL BE AS MANUFACTURED BY THE PIPE SUPPLIER OR EQUAL AND SHALL HAVE A BELL AND SPIGOT CONNECTION COMPATIBLE WITH THE PIPE.
 5. ALL PIPE INSTALLATION SHALL BE SUBJECT TO INSPECTION BY THE TOWN OF NEWBURGH SEWER DEPARTMENT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL INSPECTIONS AS REQUIRED WITH THE TOWN OF NEWBURGH SEWER DEPARTMENT.
 6. THE SEWER MAIN SHALL BE TESTED IN ACCORDANCE WITH THE TOWN OF NEWBURGH REQUIREMENTS. ALL TESTING SHALL BE COORDINATED WITH THE TOWN OF NEWBURGH SEWER DEPARTMENT.

LEGEND

EXISTING	PROPOSED	
---	---	PROPERTY LINE
---	---	UNDERGROUND SANITARY
---	---	UNDERGROUND STORM
---	---	UNDERGROUND WATER
---	---	UNDERGROUND GAS
---	---	OVERHEAD ELECTRIC
○	●	SANITARY MANHOLE
○	●	STORM MANHOLE
○	●	CATCH BASIN
○	○	TRANSFORMER
○	○	FIRE HYDRANT
○	○	GAS VALVE
○	○	WATER VALVE
○	○	UTILITY POLE
○	○	SITE LIGHTING

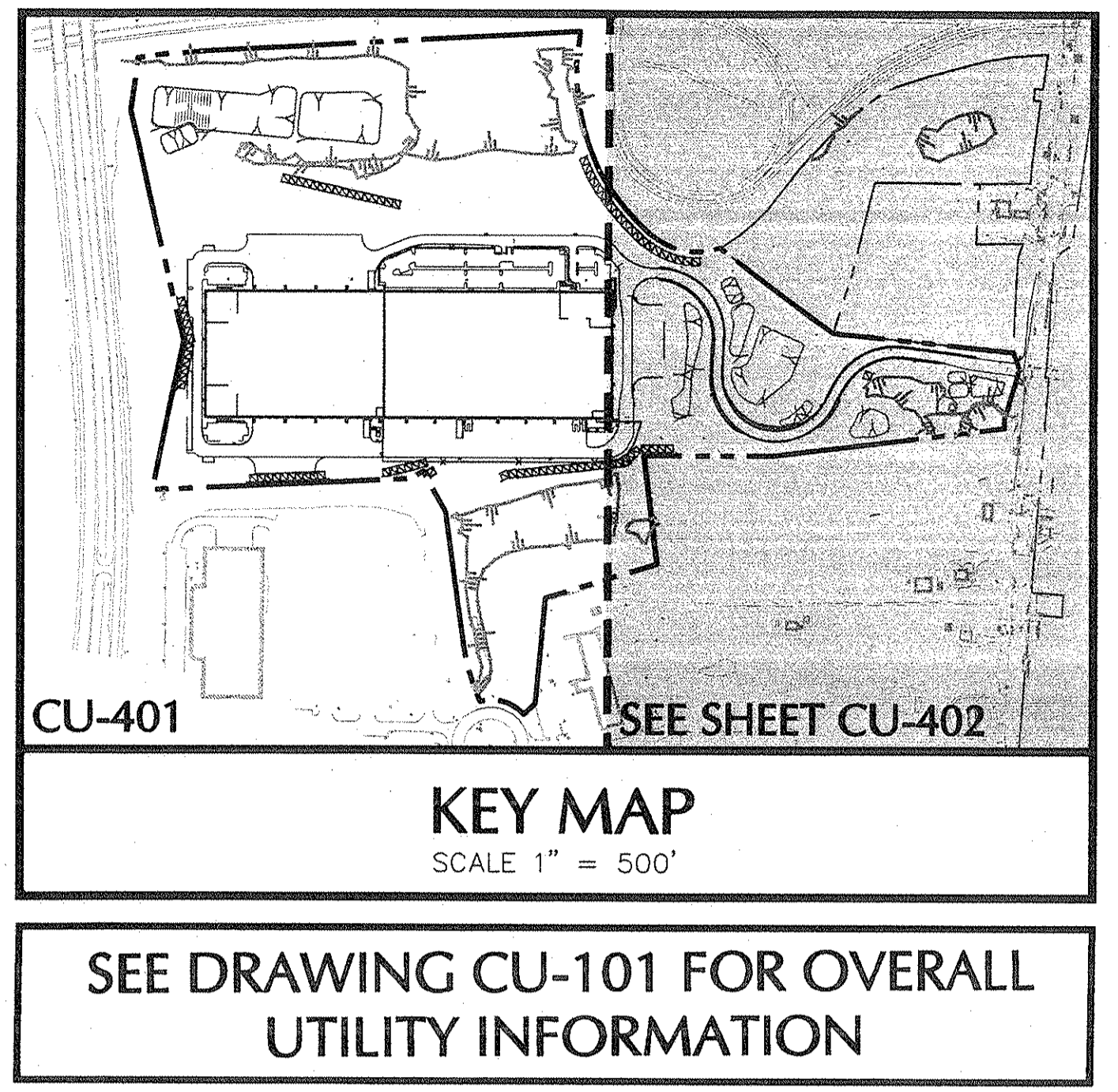
100 0 50 100
SCALE IN FEET

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LEGEND

EXISTING	PROPOSED	
- - - - -	---	PROPERTY LINE
- - - - -	---	UNDERGROUND SANITARY
- - - - -	---	UNDERGROUND STORM
- - - - -	---	UNDERGROUND WATER
- - - - -	---	UNDERGROUND GAS
- - - - -	---	OVERHEAD ELECTRIC
⊙	⊙	SANITARY MANHOLE
⊙	⊙	STORM MANHOLE
⊙	⊙	CATCH BASIN
⊙	⊙	TRANSFORMER
⊙	⊙	FIRE HYDRANT
⊙	⊙	GAS VALVE
⊙	⊙	WATER VALVE
⊙	⊙	UTILITY POLE
⊙	⊙	SITE LIGHTING



ALL UTILITY SERVICE LOCATIONS AND LAYOUT SHOWN ARE PRELIMINARY AND SUBJECT TO CHANGE PENDING ADDITIONAL COORDINATION WITH THE UTILITY COMPANY.

PROPOSED DISTRIBUTION WAREHOUSE B
BUILDING FOOTPRINT = ±247,800 SF
FFE: 484

PROPOSED DISTRIBUTION WAREHOUSE A
BUILDING FOOTPRINT = ±317,520 SF
FFE: 484

Date	Description	No.
4/11/2016	REVISED ACCESS ROADS	4
3/18/2016	REVISED PER MEP AND ARCH. COORDINATION AND TOWN COMMENTS	3
1/25/2016	REVISED PER MEP COMMENTS, NYS DOT DESIGN, AND EMERGENCY ACCESS PATH	2
11/9/2015	REVISED PER TOWN COMMENTS	1

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LANGAN ENGINEERING AND CONSULTANTS SERVICES, INC.

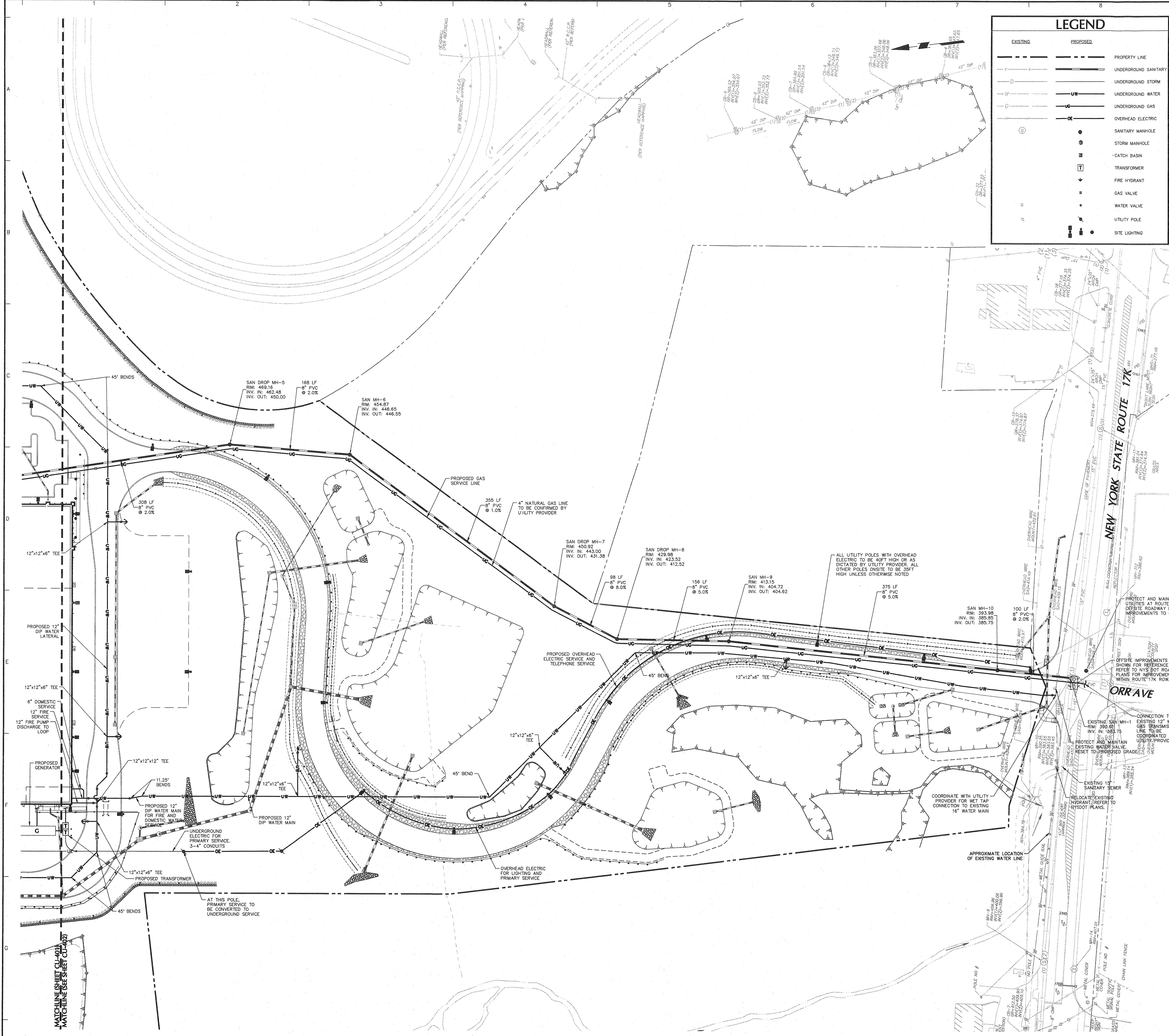
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MATRIX BUSINESS PARK AT NEWBURGH
TOWN OF NEWBURGH
ORANGE COUNTY NEW YORK

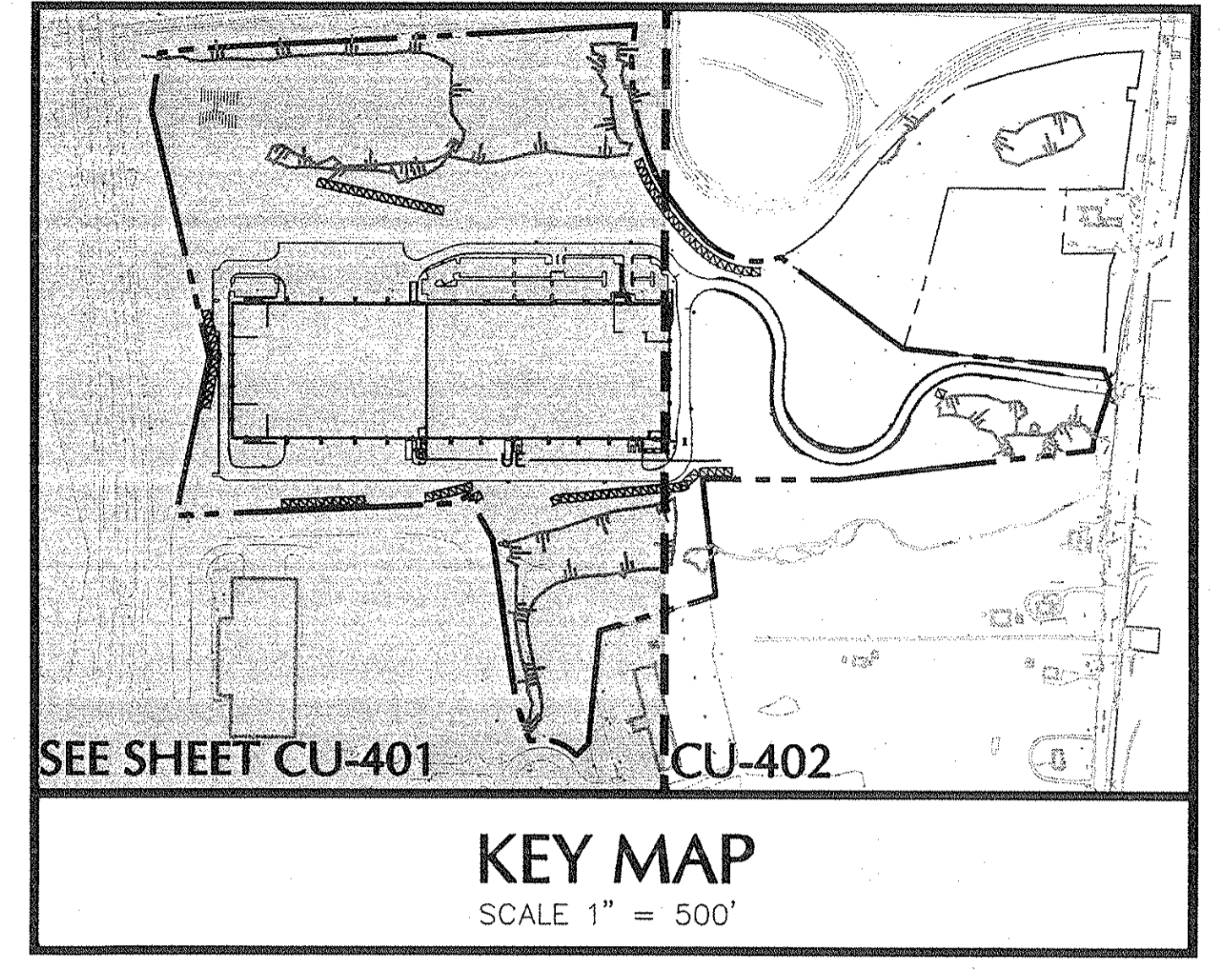
UTILITY PLAN

Project No. 9190601 Drawing No. CU-401
Date 9/9/2015 Scale 1" = 50'
Drawn By RAC
Submission Date 04/11/2016



LEGEND

EXISTING	PROPOSED	PROPERTY LINE



SEE DRAWING CU-101 FOR OVERALL UTILITY INFORMATION

ALL UTILITY SERVICE LOCATIONS AND LAYOUT SHOWN ARE PRELIMINARY AND SUBJECT TO CHANGE PENDING ADDITIONAL COORDINATION WITH THE UTILITY COMPANY.

Date	Description	No.
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11/9/2015	REVISED PER TOWN COMMENTS	1

REVISIONS

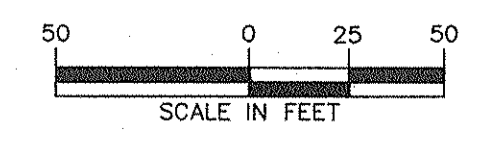
	04/11/2016
SIGNATURE: CHARLES UTSCHIG	DATE SIGNED
PROFESSIONAL ENGINEER NY Lic. No. 062303	

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Project **MATRIX BUSINESS PARK AT NEWBURGH**
TOWN OF NEWBURGH
ORANGE COUNTY NEW YORK
Drawing title

UTILITY PLAN

Project No.	9190601	Drawing No.	CU-402
Date	9/9/2015		
Scale	1" = 50'		
Drawn By	RAC		
Submission Date	04/11/2016		



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GENERAL NOTES

- EXISTING BOUNDARY, UTILITY AND TOPOGRAPHIC INFORMATION OBTAINED FROM PLANS ENTITLED "TOPOGRAPHIC AND BOUNDARY SURVEY OF SECTION 95 BLOCK 1 LOT 4.12, LOT 54.1, LOT 89.25 AND LOT 49.12 DATED 7/17/2015, LAST REVISED 8/24/2015 AND LOT LINE CHANGE OF SECTION 95 BLOCK 1 LOT 4.12, LOT 54.1, LOT 69.25, AND LOT 49.12 DATED 7/17/2015, LAST REVISED 10/27/2015, WITH ADDITIONAL INFORMATION INCLUDING PROPERTY CORNERS FOUND OR SET AND OFF-SITE DRAINAGE STRUCTURES FROM SUPPLIED MAPPING, AS PREPARED BY LANGAN ENGINEERING.
- ELEVATIONS SHOWN ARE REFERENCED TO NAVD 88 AS ESTABLISHED THROUGH GPS METHODS. THE MERIDIAN IS REFERENCED TO NEW YORK EAST STATE PLANE COORDINATE SYSTEM NAD 83 AS ESTABLISHED THROUGH GPS METHODS.
- "ACOE WETLANDS" ARE WETLANDS CONFIRMED BY ACOE PER JURISDICTIONAL DETERMINATION DATED MAY 10, 2011, BASED ON PLAN ENTITLED "WETLAND DELINEATION PLAN", AS PREPARED BY LANGAN ENGINEERING, DATED 04/18/07, LAST REVISED 11/11/10. ACOE WETLAND AREA X DELINEATED BY LANGAN ENGINEERING WETLAND SCIENTISTS ON APRIL 16, 2013 AND JULY 2, 2015.
- THESE PLANS REPRESENT THE OVERALL SITE WORK IMPROVEMENTS REQUIRED FOR PROJECT CONSTRUCTION. THE CONTRACTOR SHALL FURNISH, INSTALL, TEST AND COMPLETE ALL WORK TO THE SATISFACTION OF THE ENGINEER AND OWNER IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR MEANS AND METHODS OF CONSTRUCTION. AS SUCH, THESE PLANS DO NOT COMPLETELY REPRESENT, NOR ARE THEY INTENDED TO REPRESENT, ALL SPECIFIC INSTRUCTIONS REQUIRED FOR SITE WORK CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE TO CONSTRUCT ALL IMPROVEMENTS DEPICTED ON THESE PLANS IN ACCORDANCE WITH ALL APPLICABLE RULES, REGULATIONS AND LAWS IN EFFECT AT THE TIME OF CONSTRUCTION.
- THE CONTRACTOR SHALL ACCEPT THE SITE AS IS. THE CONTRACTOR SHALL ASSESS CONDITIONS, AND THE KIND, QUALITY AND QUANTITY OF WORK REQUIRED. THE OWNER MAKES NO GUARANTEE IN REGARD TO THE ACCURACY OF ANY AVAILABLE INFORMATION WHICH WAS OBTAINED DURING INVESTIGATIONS. THE CONTRACTOR SHALL MAKE A THOROUGH SITE INSPECTION IN ORDER TO FIELD CHECK EXISTING SITE CONDITIONS, CORRELATE THE DRAWINGS AND RESOLVE ANY POSSIBLE CONSTRUCTION CONFLICTS WITH THE OWNER AND ENGINEER PRIOR TO COMMENCEMENT OF WORK. THE CONTRACTOR SHALL MAKE ADDITIONAL TOPOGRAPHIC SURVEYS IF DEEMED NECESSARY, PROVIDED THEY ARE COORDINATED WITH THE OWNER. ANY CONDITIONS DETERMINED BY THE CONTRACTOR THAT DIFFER FROM THE INFORMATION SHOWN ON THE DRAWINGS THAT ARE NOT BROUGHT TO THE ATTENTION OF THE OWNER AND ENGINEER PRIOR TO START OF WORK SHALL NOT BE CONSIDERED GROUNDS FOR ADDITIONAL PAYMENT OR CHANGES TO THE CONTRACT DURATION, OR ANY OTHER CLAIMS AGAINST THE OWNER OR OWNER'S ENGINEER.
- THE CONTRACTOR SHALL, WHEN THEY DEEM NECESSARY, PROVIDE WRITTEN REQUESTS FOR INFORMATION (RFIs) TO THE OWNER AND ENGINEER PRIOR TO THE CONSTRUCTION OF ANY SPECIFIC SITE WORK ITEM. THE (RFI) SHALL BE IN A FORM ACCEPTABLE TO OWNER AND ENGINEER AND SHALL ALLOW FOR A MINIMUM OF TWO WORK DAYS OR ADDITIONAL REASONABLE TIME FOR A WRITTEN REPLY. RFIs SHALL BE NUMBERED CONSECUTIVELY BY DATE SUBMITTED. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR SITE WORK ITEMS CONSTRUCTED DIFFERENTLY THAN INTENDED OR AS DEPICTED ON THE PLANS.
- INFORMATION RELATED TO ELEVATIONS AND PROPOSED UTILITIES (SUCH AS ROADWAY GRADES, INVERT ELEVATIONS, RM ELEVATIONS, GRATE ELEVATIONS, BUILDING FINISHED FLOOR ELEVATIONS, ETC.) MAY BE FOUND IN MORE THAN ONE LOCATION IN THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL SUFFICIENTLY REVIEW ALL PLANS, PROFILES AND OTHER INFORMATION IN THE CONTRACT DOCUMENTS FOR CONSISTENCY PRIOR TO CONSTRUCTION. ANY INCONSISTENCIES OR DISCREPANCIES THAT ARE FOUND BY THE CONTRACTOR OR HIS ASSIGNS SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE OWNER AND ENGINEER IN WRITING, IN THE FORMAT OF AN RFI PRIOR TO CONSTRUCTION.
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- CONTRACTOR SHALL REFER TO ARCHITECTURAL PLANS AND SPECIFICATIONS FOR ACTUAL LOCATIONS OF ALL DOORS, STAIRS, RAMPS, CANOPIES, SIDEWALKS, AND ARCHITECTURAL ELEMENTS AROUND THE BUILDING, AND SHALL COORDINATE INSTALLATION OF THESE ELEMENTS WITH THE SITE LAYOUT PRIOR TO INSTALLATION.
- ALL WETLANDS SHOWN TO BE PROTECTED AND MAINTAINED. NO DISTURBANCE IS PERMITTED.

SOIL EROSION AND SEDIMENT CONTROL NOTES AND CONSTRUCTION SEQUENCING

- INSTALL ALL SOIL EROSION CONTROL MEASURES AS SHOWN PRIOR TO ANY LAND DEVELOPMENT ACTIVITIES. INSTALL SEDIMENT BARRIERS/SWALES/DITCHES/DIAPHRAGMS/TRAPS AT DOWN SLOPE AREAS FROM ALL PROPOSED GRADING OPERATIONS.
- LAND DISTURBANCE SHALL BE LIMITED TO ONLY THAT AREA NECESSARY FOR DEVELOPMENT. NO MORE THAN FIVE (5) ACRES OF UNPROTECTED SOIL SHALL BE DISTURBED AT ONE TIME WITHOUT CONSENT FROM THE TOWN OF NEWBURGH. WHEN GREATER THAN 5 ACRES ARE DISTURBED TWO (2) INSPECTIONS ARE REQUIRED EVERY SEVEN (7) CALENDAR DAYS AND THE INSPECTIONS MUST BE SEPARATED BY AT LEAST TWO (2) FULL CALENDAR DAYS. REFER TO 5 MORE WATER REQUEST AND PHASING PLANS FOR DETAILS AND RESTRICTIONS ON CONSTRUCTION DISTURBANCES. COMPLETED AREAS SHALL BE STABILIZED AND PROTECTED FROM ADDITIONAL DISTURBANCE BEFORE ADDITIONAL AREA IS DISTURBED. CONSTRUCT THE SILE IN PHASES IN ACCORDANCE WITH THE SOIL EROSION AND SEDIMENT CONTROL PLANS TO REDUCE THE AMOUNT OF LAND DISTURBED AT ANY ONE TIME.
- INSTALL SEDIMENT TRAPS AND DIVERSION SWALES AS NEW AREAS OF THE SITE ARE DISTURBED. INSTALLATION OF TEMPORARY SWALES ALONG STEEP SLOPE AREAS ARE AN INTEGRAL PART OF KEEPING THE PHASES PROPERLY STABILIZED AS LOWER SECTIONS OF THE PROPOSED SLOPES ARE COMPLETED. EROSION CONTROL MATTING SHALL BE INSTALLED WHERE SHOWN AND STABILIZED AND PROTECTED FROM ADDITIONAL DISTURBANCE.
- PROTECT ALL TREES WHICH ARE TO REMAIN AND WHICH ARE IN OR NEAR CONSTRUCTION AREAS AS DIRECTED IN THE FIELD WITH PLANKING PLACED AROUND THE TREE TRUNK. PLACE SNOW FENCING AT THE DRIP LINE SURROUNDING TREES, IF POSSIBLE, OR TO MAINTAIN A MINIMUM DIAMETER OF 10 FEET AROUND TREES. WHERE FENCING MUST BE PLACED CLOSER THAN THE DRIP LINE, PLACE 4 INCHES OF WOOD CHIPS OVER ROOT ZONE TO EXTEND TO THE DRIP LINE. MAINTAIN THE FENCING THROUGHOUT THE DURATION OF CONSTRUCTION. WOODED AREAS TO BE PROTECTED BY INSTALLING TREE PROTECTION FENCING ALONG THE DISTURBANCE LIMIT LINE PRIOR TO CONSTRUCTION. ALL TREE PROTECTION FENCING LINE BE MAINTAINED IN GOOD CONDITION UNTIL COMPLETION OF ALL CONSTRUCTION OPERATIONS. EXISTING VEGETATION IS TO BE MAINTAINED WHEREVER POSSIBLE.
- CLEAR EXISTING TREES AND VEGETATION FROM AREAS TO BE EXCAVATED OR FILLED, THEN STRIP AND STOCKPILE TOPSOIL FROM ALL AREAS TO BE DISTURBED. SEED STOCKPILE WITH TEMPORARY RYEGRASS COVER AS SPECIFIED BELOW (SEE NOTE 12), AND ERECT A SILT FENCE AROUND THE STOCKPILE.
- INITIAL CONSTRUCTION OF RETAINING WALLS AND STORM DRAINAGE SYSTEM. INSTALL UTILITIES/SLEEVES UNDER THE WALLS PRIOR TO WALL CONSTRUCTION.
- PERFORM NECESSARY EXCAVATION OR FILL OPERATIONS TO BRING SITE TO DESIRED SUBGRADE.
- INSTALL SEDIMENT BARRIERS AROUND ALL STORM DRAIN INLETS AS THEY ARE INSTALLED, OR MEASURES INSTALLED IN PLACE AND MAINTAIN UNTIL ALLEED. ALL DISTURBED AREAS ARE STABILIZED WITH VEGETATION AND ALL PAVEMENTS ARE PAVED WITH A BASE COURSE.
- REMOVE SEDIMENT TRAPS ONCE THE STORMWATER DETENTION SYSTEMS HAVE BEEN INSTALLED. DIVERT OVERLAND FLOW AND FINE FLOW TO DETENTION SYSTEMS AND BLOCK WEIRS AND INLETS TO PREVENT FLOW INTO WATER QUALITY BASINS.
- INITIATE INSTALLATION OF UTILITIES, FOUNDATIONS AND BUILDINGS.
- SEED ALL DISTURBED AREAS WHICH WILL REMAIN UNDISTURBED FOR A PERIOD OF 15 DAYS OR MORE AND WHICH WILL NOT BE UNDER CONSTRUCTION WITHIN 30 DAYS WITH TEMPORARY RYEGRASS COVER, AS FOLLOWS (METHOD OF SEEDING IS OPTIONAL):
 - LOOSEN SEEDBED BY DISCING TO A 4" DEPTH.
 - SEED WITH 6 LB. PER ACRE PERENNIAL OR ANNUAL RYEGRASS.
 - MULCH WITH 100-200 BALES PER ACRE OF BLOWN AND CHOPPED HAY BOUND IN PLACE WITH 2000 LB/PER ACRE CELLULOSE FIBER MULCH, AND WITH AN APPROVED TACKIFIER BINDER.
- IF CONSTRUCTION IS SUSPENDED OR COMPLETED, ALL DISTURBED AREAS SHALL BE SEED AND MULCHED IMMEDIATELY. ALL SLOPES STEEPER THAN ONE ON THREE (V/H) AND PERIMETER TRENCHES AND TRAP EMBANKMENTS SHALL, ON COMPLETION, BE IMMEDIATELY STABILIZED WITH SLOPE STABILIZATION MATTING.
- INSTALL CURBS, CURBED ISLANDS AND COMPLETE FINAL GRADING OF AREAS TO BE PAVED.
- AFTER COMPLETION OF SITE CONSTRUCTION, FINE GRADE AND SPREAD TOPSOIL ON ALL LAWN AREAS AND SEED WITH PERMANENT LAWN MIX AS FOLLOWS (SEE LANDSCAPE PLAN FOR OTHER PLANTING INFORMATION):
 - A MINIMUM OF 6" OF TOPSOIL SHOULD BE SPREAD ON ALL DISTURBED AREAS.
 - LIME TOPSOIL TO PH 6.0.
 - FERTILIZE WITH 20 LB. PER 1000 SQ. FT. OF 5-10-10, 50% WATER SOLUBLE NITROGEN FERTILIZER.
 - SEED WITH 5 LB. PER 1000 SQ. FT. OF THE FOLLOWING MIXTURE, OR OTHER MIXTURE APPROVED BY THE LANDSCAPE ARCHITECT: 40% JAMESTOWN CHEWINGS FESCUE, 40% BARON KENTUCKY BLUEGRASS AND 20% YORKTOWN PERENNIAL RYEGRASS.
 - MULCH AS DESCRIBED FOR TEMPORARY SEEDING (NOTE 12 ABOVE).
 - FERTILIZE 4 WEEKS AFTER GERMINATION WITH 10 LB. 20-10-10 FERTILIZER PER 1000 SQ. FT.
- COMPLETION OF ALL SITE AND OFF-SITE IMPROVEMENTS.
- DURING THE PROGRESS OF CONSTRUCTION, MAINTAIN ALL SEDIMENT TRAPS, BARRIERS, AND FILTERS AS NECESSARY TO PREVENT THEIR BEING CLOGGED UP WITH SEDIMENT.
- AFTER PAVEMENTS ARE INSTALLED AND PERMANENT VEGETATIVE COVER AND PLANTINGS ARE ESTABLISHED, REMOVE SEDIMENT BARRIERS AND SEED THE DISTURBED AREAS. UPON PERMANENT STABILIZATION THE STORMWATER DETENTION SYSTEMS MUST BE CLEANED OF SEDIMENT AND THEN THE WEIRS AND INLETS TO THE WATER QUALITY SAND FILTERS SHOULD BE UNBLOCKED.
- MAINTAIN ALL SEEDING AND PLANTING AREAS TO INSURE A VIABLE STABILIZED VEGETATIVE COVER.
- STRUCTURAL MEASURES MUST BE MAINTAINED TO BE EFFECTIVE. IN GENERAL, THESE MEASURES MUST BE PERIODICALLY INSPECTED TO INSURE STRUCTURAL INTEGRITY, TO DETECT VANDALISM DAMAGE, AND FOR CLEANING AND REPAIR WHENEVER NECESSARY.
- DURING CONSTRUCTION, ALL STRUCTURES SHOULD BE INSPECTED WEEKLY AND AFTER EVERY RAIN. REMOVE ACCUMULATED SEDIMENT AND STOCKPILE AND STABILIZE IN AN AREA NOT SUBJECT TO FURTHER EROSION.
- AFTER CONSTRUCTION IS COMPLETED, PERMANENT SEDIMENT OR EROSION CONTROL STRUCTURES SHOULD BE INSPECTED AT LEAST SEMIANNUALLY AND AFTER EVERY RAIN.

THE 3 PHASES SHOWN ARE OVERALL PROJECT PHASES. THESE PHASES SHALL BE BROKEN DOWN FURTHER WITH SLOPED AREAS CONSTRUCTED IN SECTIONS AS SHOWN ON CE-401 AND CE-402. COMPLETED SECTIONS SHALL BE STABILIZED IMMEDIATELY UPON COMPLETION AND PROTECTED FROM FUTURE DISTURBANCE. THE DELINEATION OF THE OVERALL PHASES WILL VARY OVER THE COURSE OF CONSTRUCTION HOWEVER AT NO TIME SHALL THE EXTENT OF DISTURBED AREA EXCEED THE EXTENT OF DISTURBED AREA PERMITTED IN THE 5 ACRE WAIVER.

LOCATIONS OF STAGING, LAYDOWN AND STOCKPILE AREAS WILL VARY OVER THE COURSE OF CONSTRUCTION. ADDITIONAL SESS MEASURES SHALL BE PROVIDED AS NEEDED TO PREVENT SOIL EROSION.

CONTRACTOR SHALL RESTORE, SEED, AND STABILIZE ALL DISTURBED AREAS WITHIN THE ACCESS EASEMENT. SESS MEASURES ALONG THE ACCESS EASEMENT SHALL BE REMOVED UPON STABILIZATION.

TOTAL LIMIT OF DISTURBANCE: 55.0 AC.

TREE REMOVAL NOTE:
ALL TREE REMOVAL SHALL BE COMPLETED FROM OCTOBER 1 TO MARCH 31, REMOVAL OF TREES FROM APRIL 1 TO SEPTEMBER 30 IS PROHIBITED.

NOTE:
AT LEAST 3 DAYS PRIOR TO ANY EXCAVATION OR CONSTRUCTION ACTIVITY CONTACT: "CALL BEFORE YOU DIG" 1-800-962-7962.

SEE DRAWINGS CE-401 AND CE-402 FOR DETAILED SOIL EROSION AND SEDIMENT CONTROL INFORMATION

LEGEND

---	PROPERTY LINE
▭	PROPOSED BUILDING
---	LIMIT OF DISTURBANCE
.....	SILT FENCE
▬▬▬▬	HAY BALES
---	TEMPORARY SEDIMENT TRAP
---	STOCKPILE/MATERIAL LAYDOWN
---	TEMPORARY SWALE
○	INLET PROTECTION
▭	CONSTRUCTION ENTRANCE
▭	EROSION CONTROL MATTING

SCALE IN FEET
100 0 50 100

Date	Description	No.
4/11/2016	REVISED ACCESS ROADS	5
3/18/2016	REVISED PER MEP AND ARCH. COORDINATION AND TOWN COMMENTS	4
1/25/2016	REVISED PER MEP COMMENTS, NYS DOT DESIGN AND EMERGENCY ACCESS PATH	3
11/23/2015	REVISED PER SEQR COMMENTS	2
11/9/2015	REVISED PER TOWN COMMENTS	1

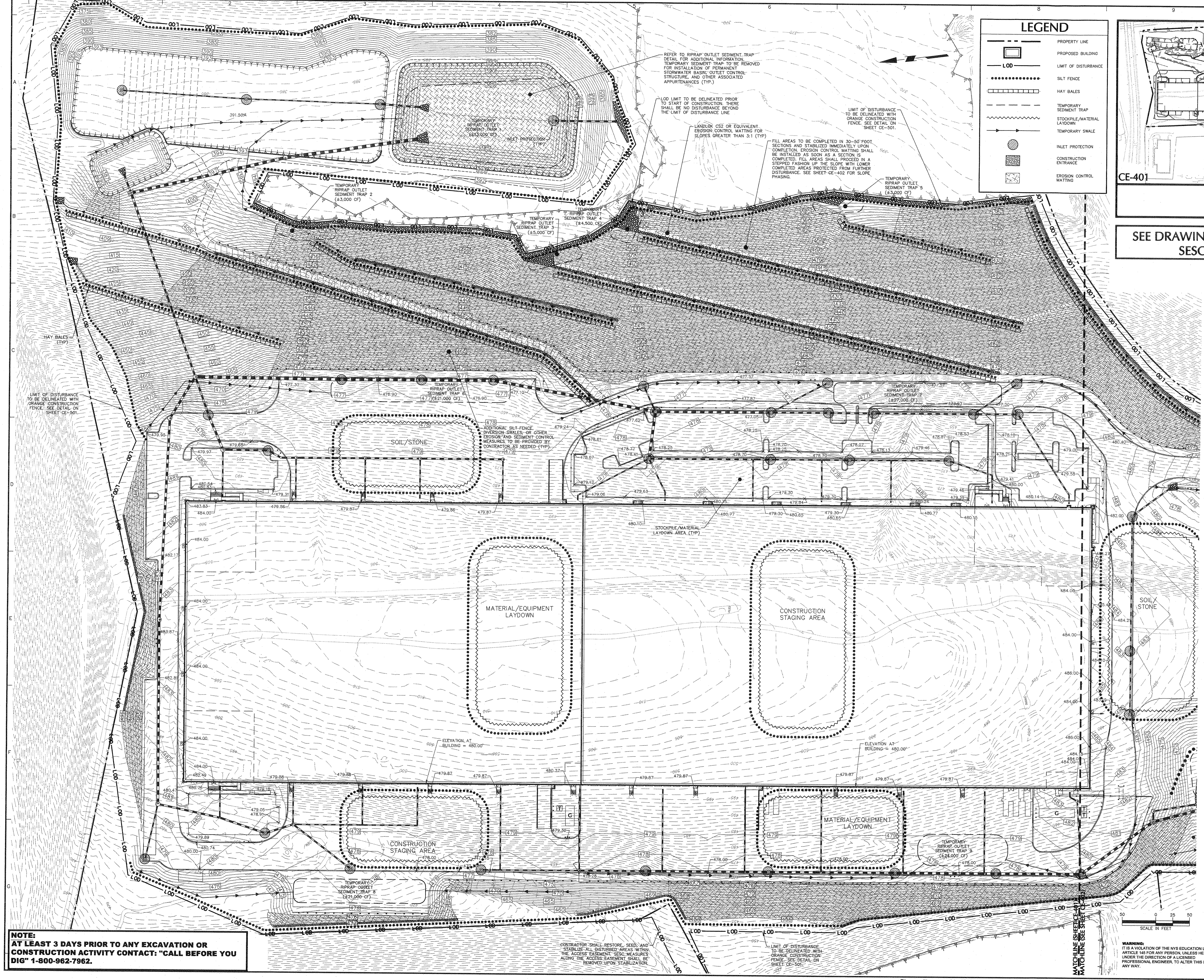
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SIGNATURE: CHARLES PUTSCHIG
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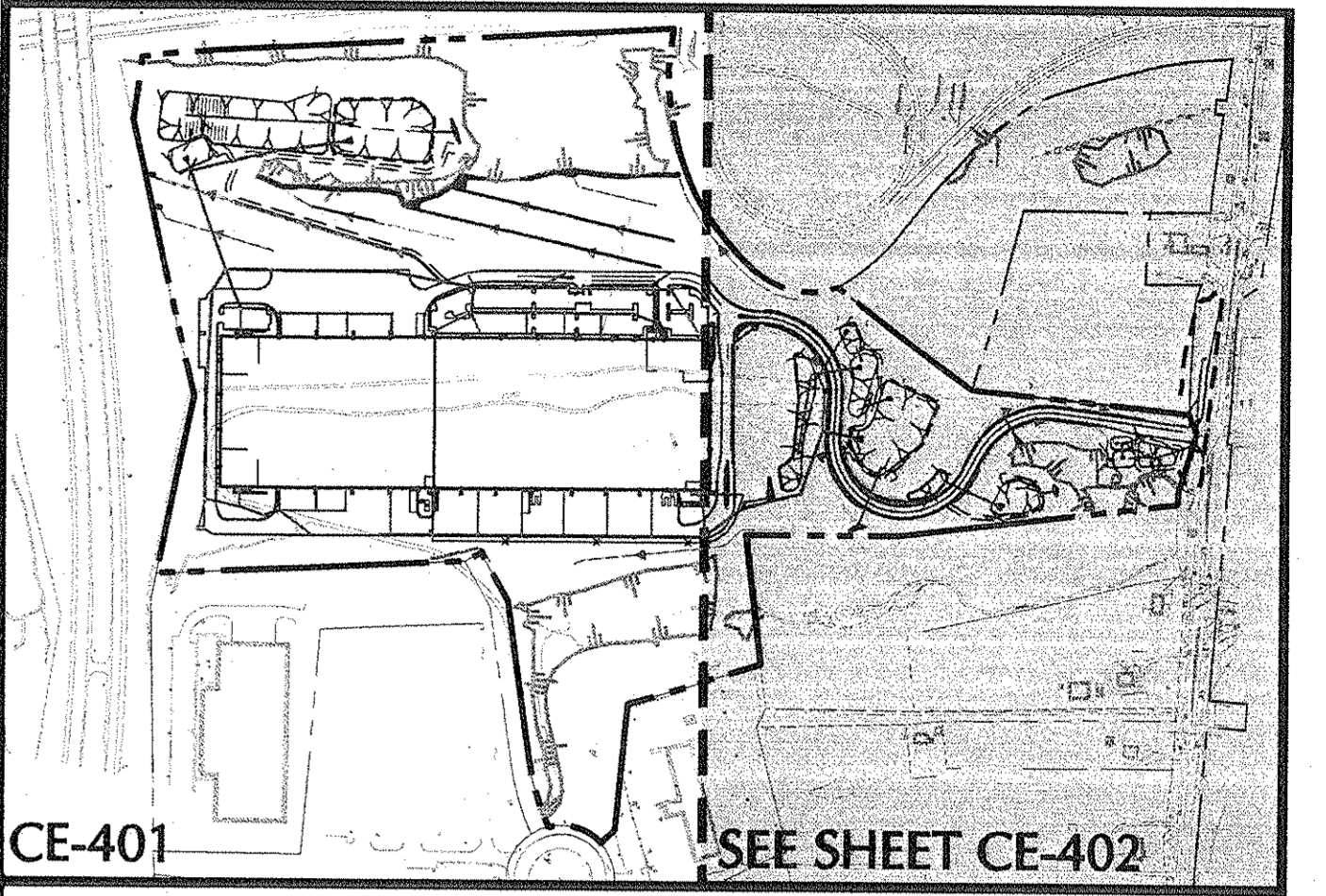
Project: **MATRIX BUSINESS PARK AT NEWBURGH**
TOWN OF NEWBURGH
ORANGE COUNTY NEW YORK
Drawing Title: **OVERALL SOIL EROSION AND SEDIMENT CONTROL PLAN**

Project No. **9190601** Drawing No. **CE-101**
Date: **9/9/2015**
Scale: **1" = 100'**
Drawn By: **RAC**
Submission Date: **04/11/2016**



LEGEND

- PROPERTY LINE
- PROPOSED BUILDING
- LIMIT OF DISTURBANCE
- SILT FENCE
- HAY BALES
- TEMPORARY SEDIMENT TRAP
- STOCKPILE/MATERIAL LAYDOWN
- TEMPORARY SWALE
- INLET PROTECTION
- CONSTRUCTION ENTRANCE
- EROSION CONTROL MATTING



KEY MAP
SCALE 1" = 500'

SEE DRAWING CE-101 FOR OVERALL SESC INFORMATION

Date	Description	No.
4/11/2016	REVISED ACCESS ROADS	4
3/18/2016	REVISED PER MEP AND ARCH. COORDINATION AND TOWN COMMENTS	3
1/25/2016	REVISED PER MEP COMMENTS, NYSDOT DESIGN, AND EMERGENCY ACCESS PATH	2
11/9/2015	REVISED PER TOWN COMMENTS	1

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MATRIX BUSINESS PARK AT NEWBURGH
TOWN OF NEWBURGH
ORANGE COUNTY NEW YORK

SOIL EROSION AND SEDIMENT CONTROL PLAN

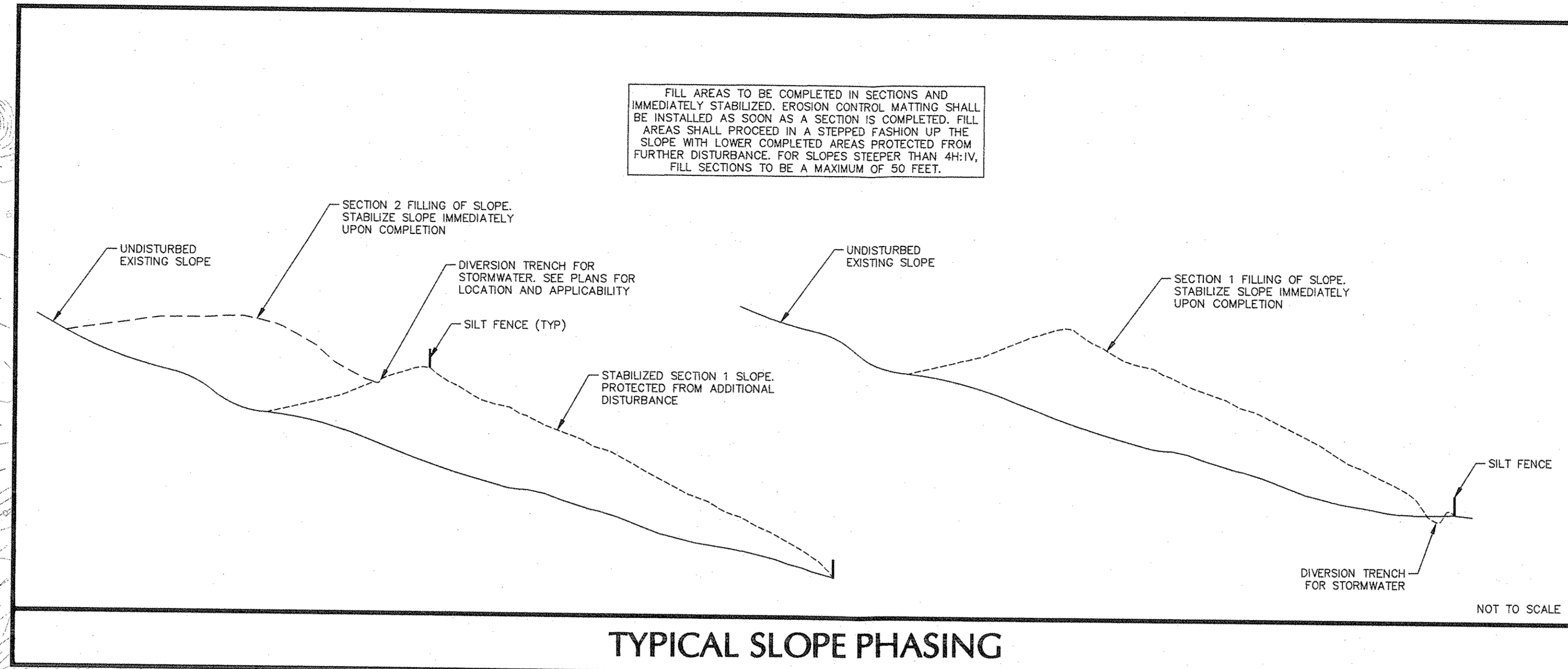
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Date 9/9/2015
Scale 1" = 50'
Drawing No. CE-401
Drawing Title
Project
Drawing No.
Date
Scale
Drawing By
Submission Date

NOTE:
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CONTRACTOR SHALL RESTORE SEED, AND STABILIZE ALL DISTURBED AREAS WITHIN THE ACCESS EASEMENT - SESC MEASURES SHALL BE REMOVED UPON STABILIZATION.

LIMIT OF DISTURBANCE TO BE DELINEATED WITH ORANGE CONSTRUCTION FENCE - SEE DETAIL ON SHEET CE-501.

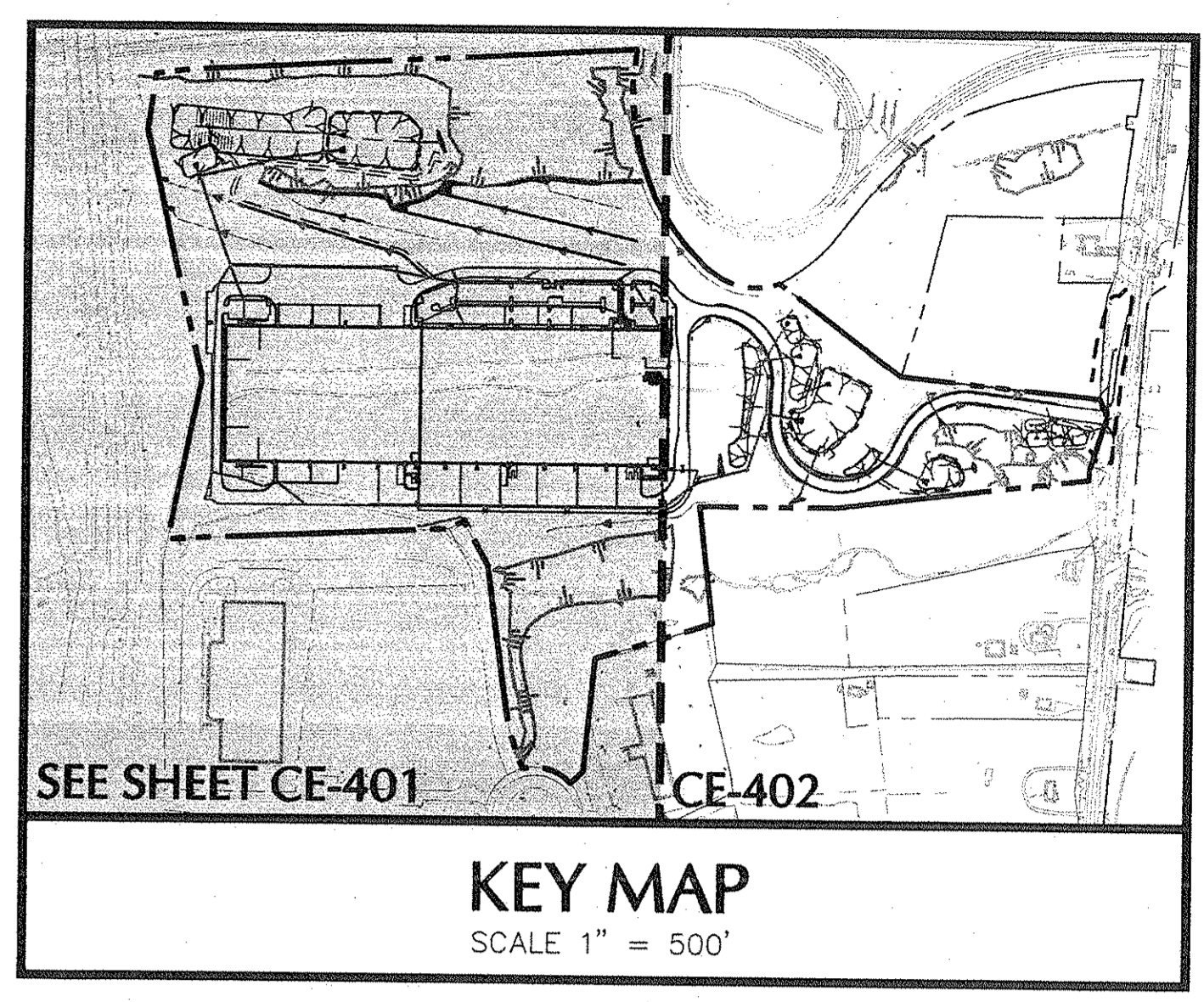
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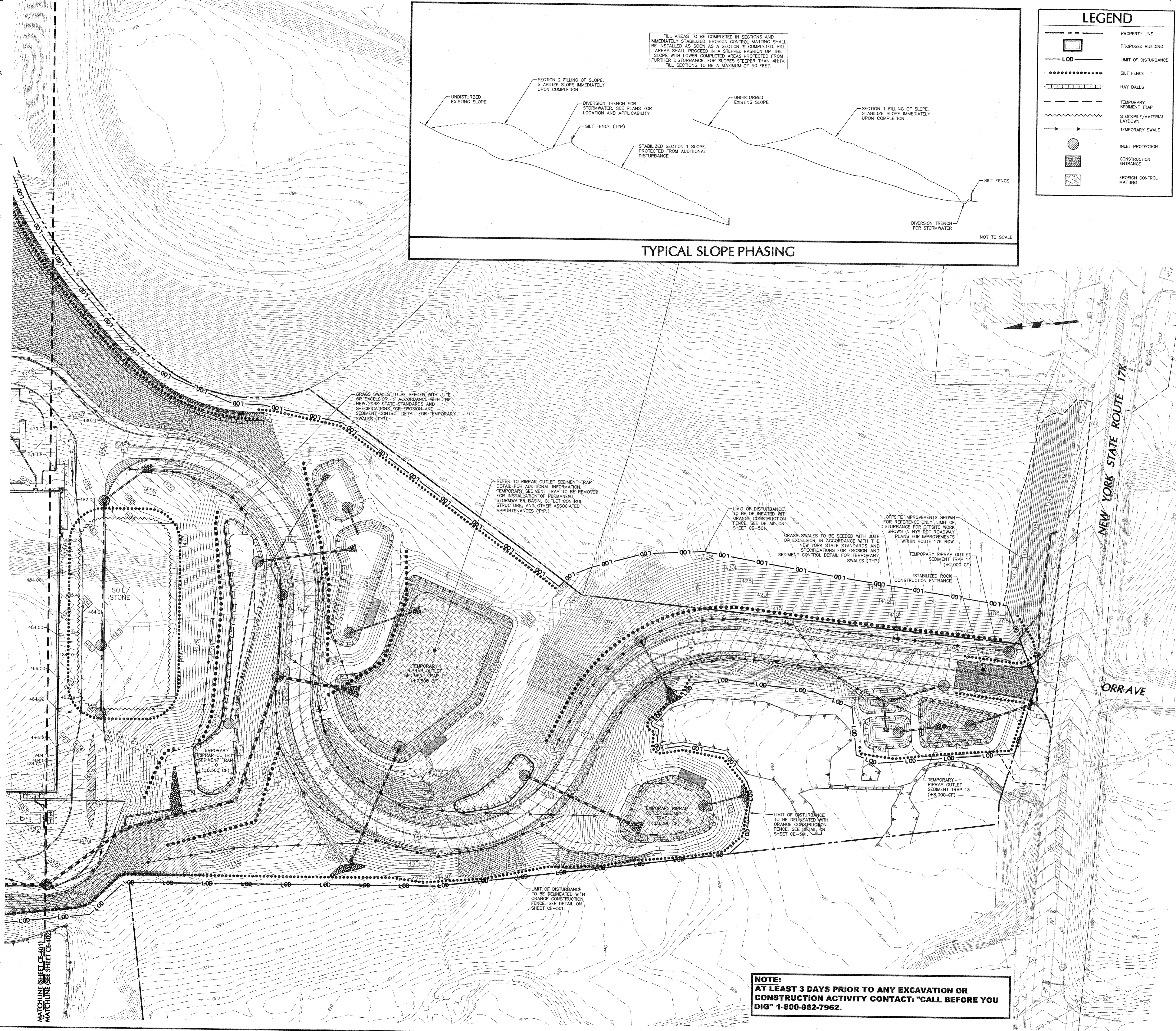
TYPICAL SLOPE PHASING

LEGEND

	PROPERTY LINE
	PROPOSED BUILDING
	LIMIT OF DISTURBANCE
	HAY BALES
	TEMPORARY SEDIMENT TRAP
	STOCKPILE/MATERIAL LAYDOWN
	TEMPORARY SWALE
	INLET PROTECTION
	CONSTRUCTION ENTRANCE
	EROSION CONTROL MATTING



SEE DRAWING CE-101 FOR OVERALL SESC INFORMATION



NOTE:
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Date	Description	No.
4/11/2016	REVISED ACCESS ROADS	4
3/18/2016	REVISED PER MEP AND ARCH. COORDINATION AND TOWN COMMENTS	3
1/25/2016	REVISED PER MEP COMMENTS, NYS DOT DESIGN, AND EMERGENCY ACCESS PATH	2
11/9/2015	REVISED PER TOWN COMMENTS	1

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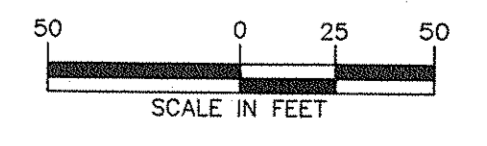
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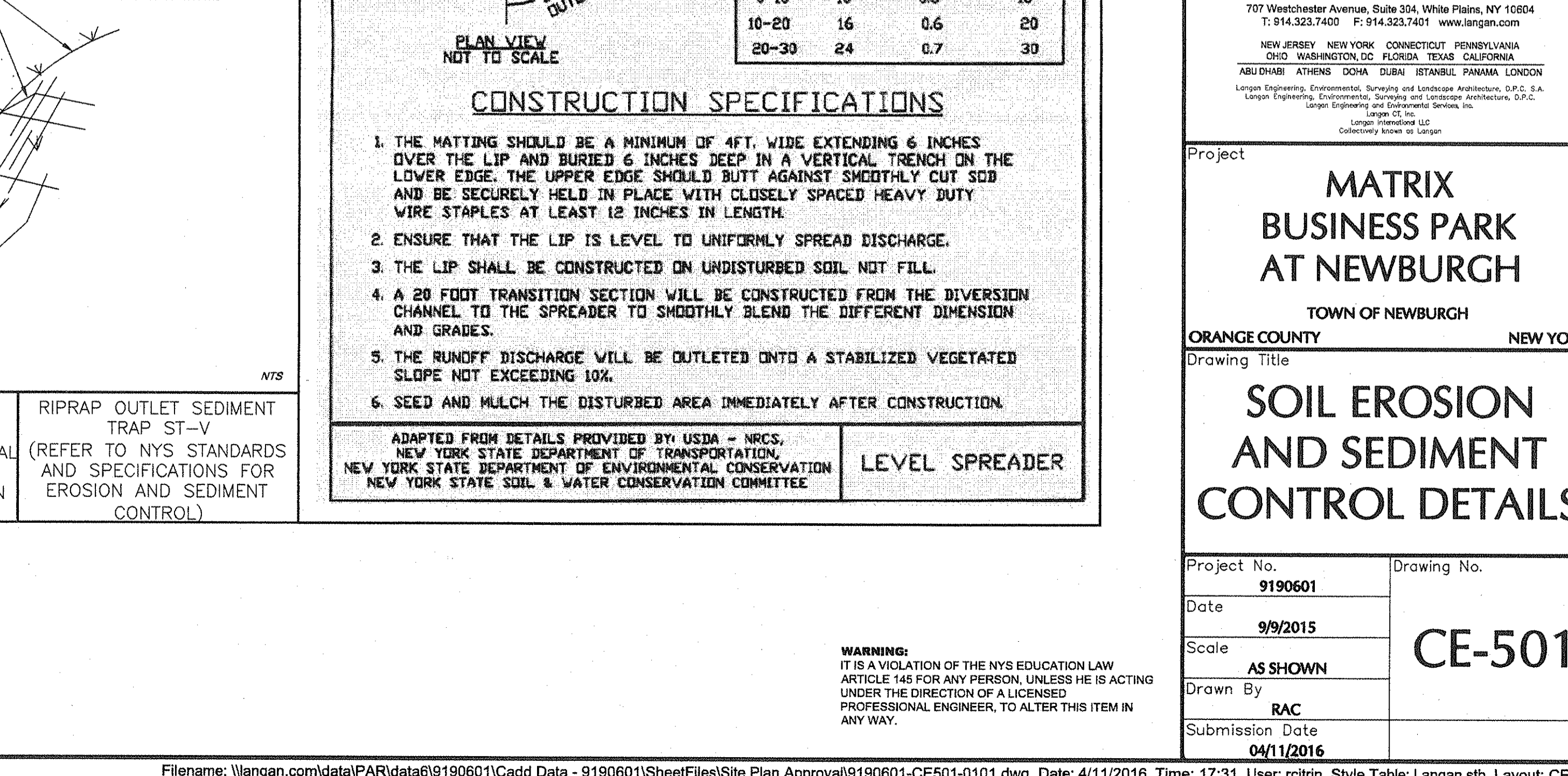
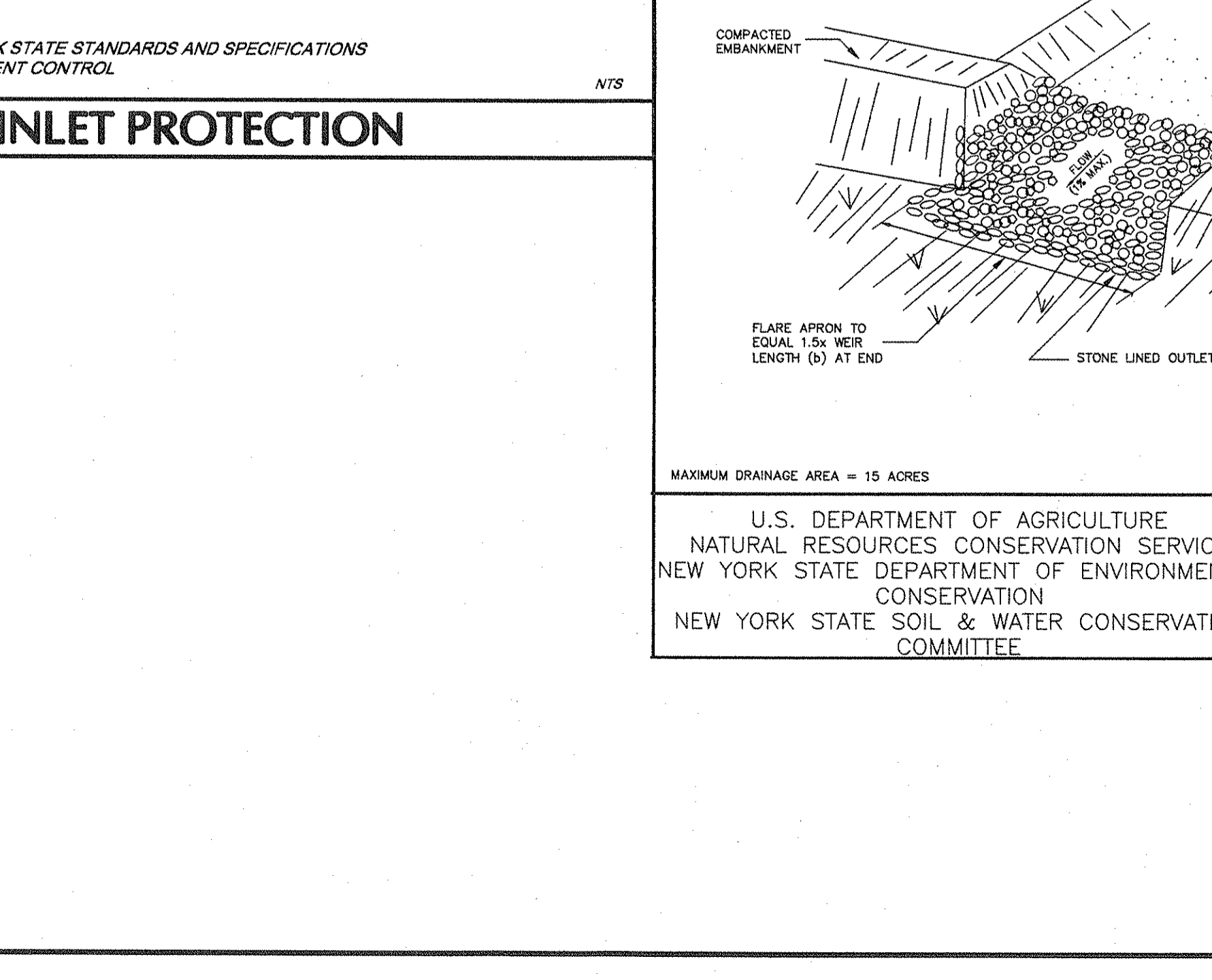
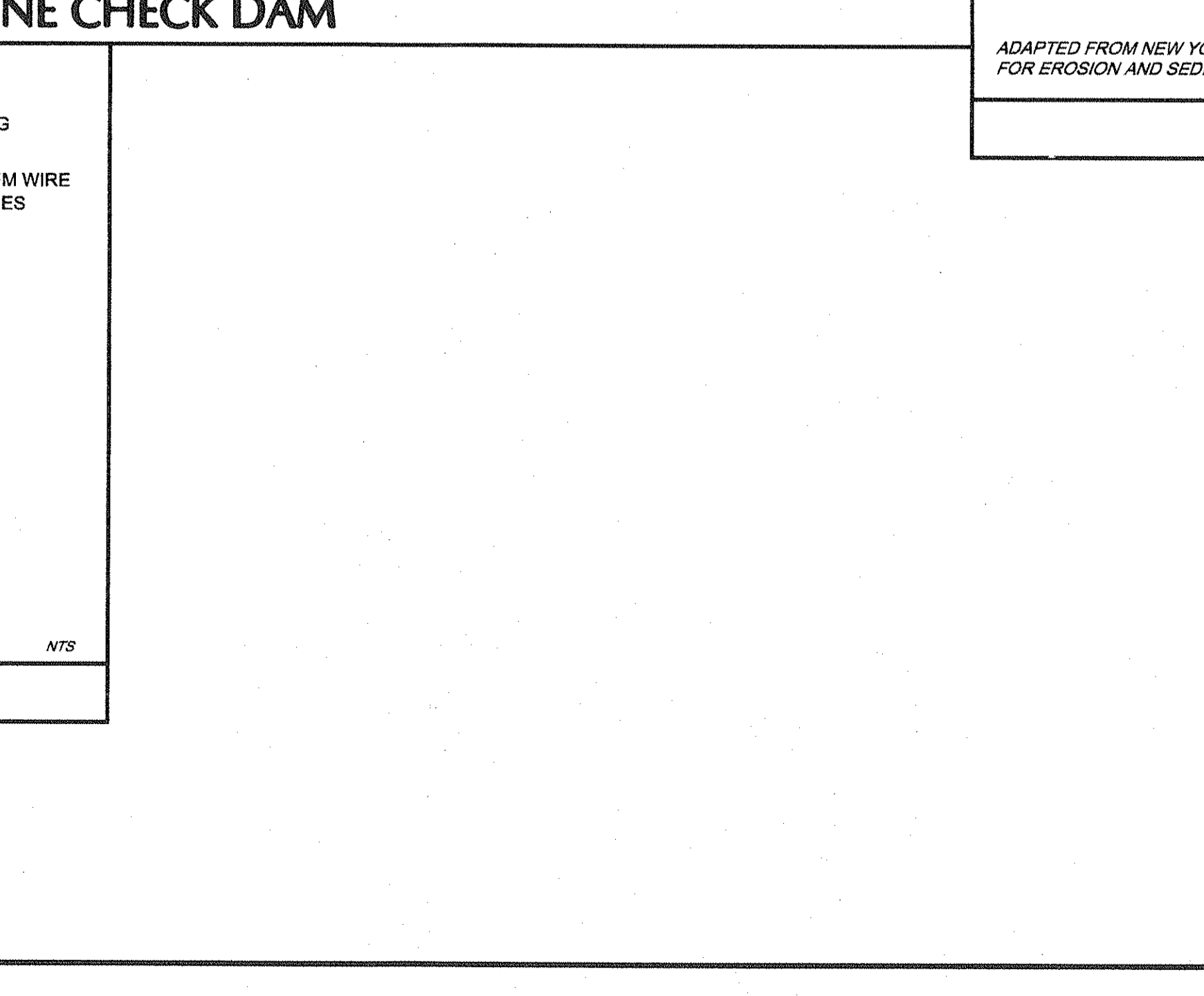
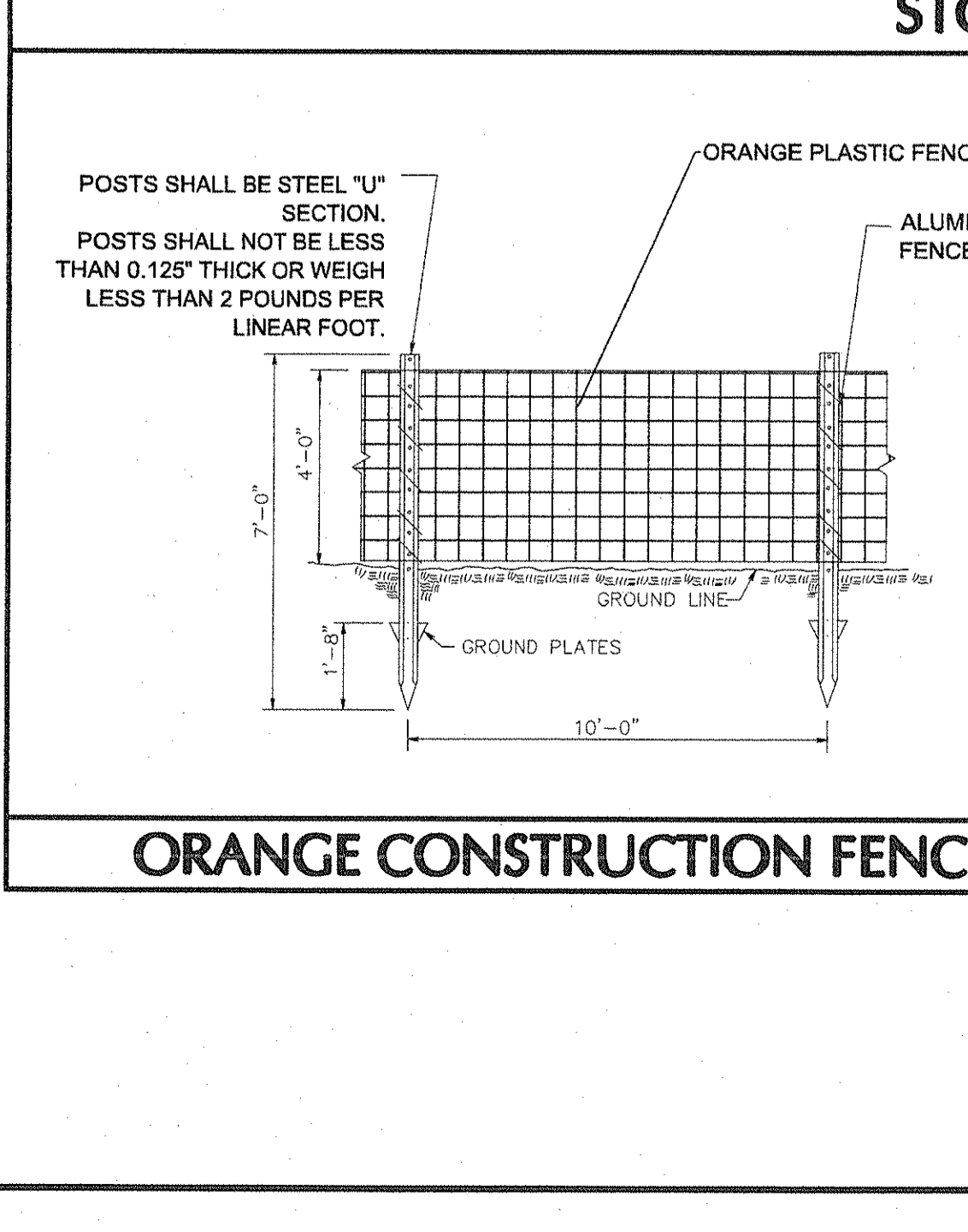
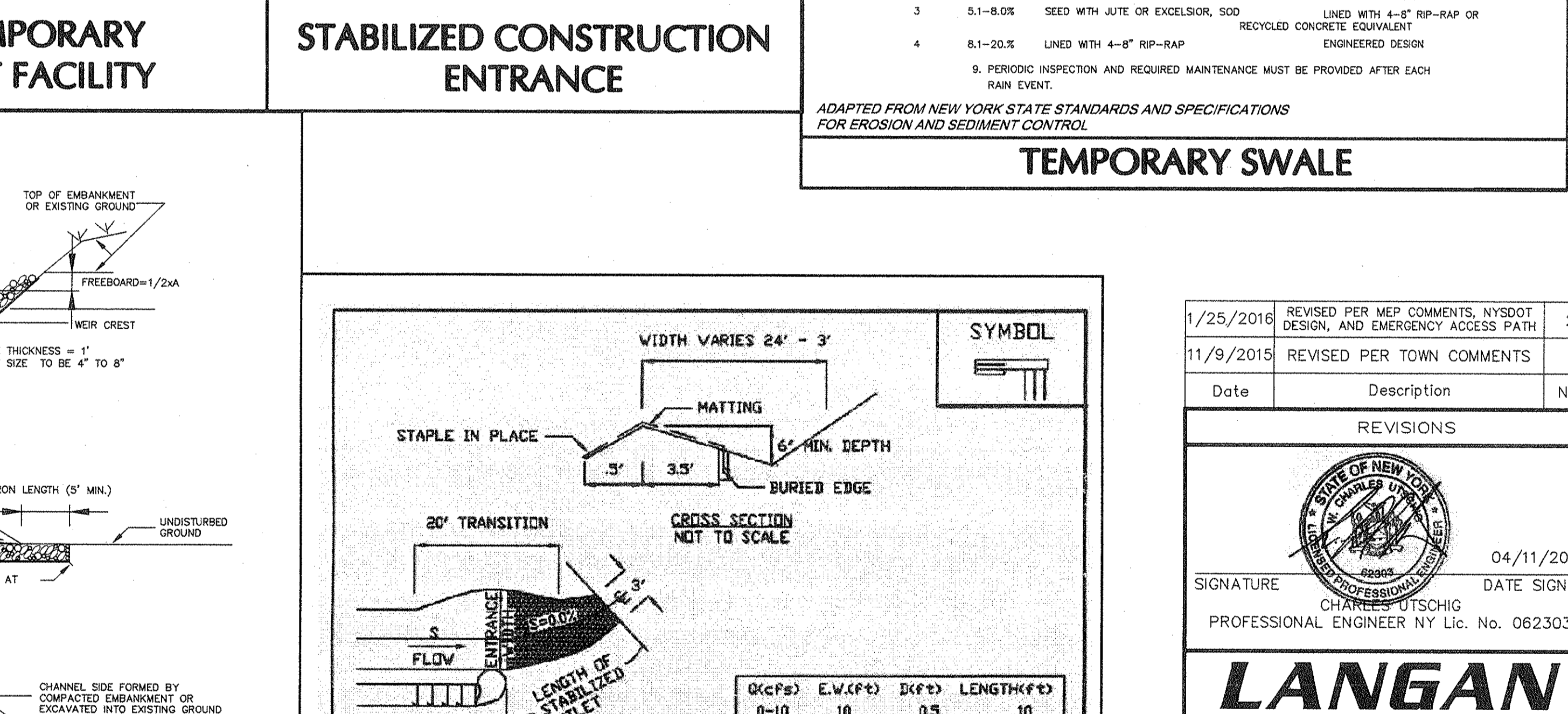
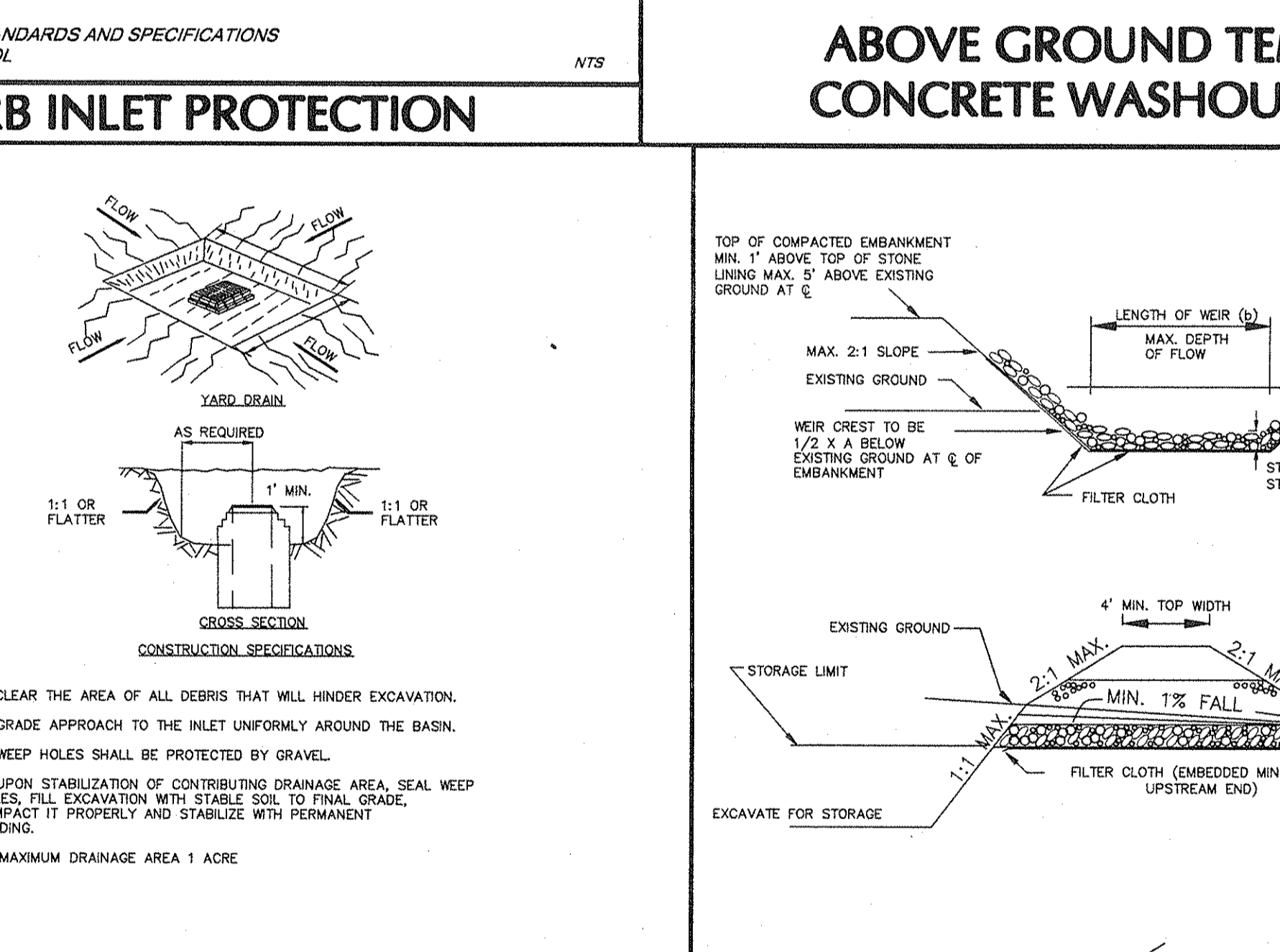
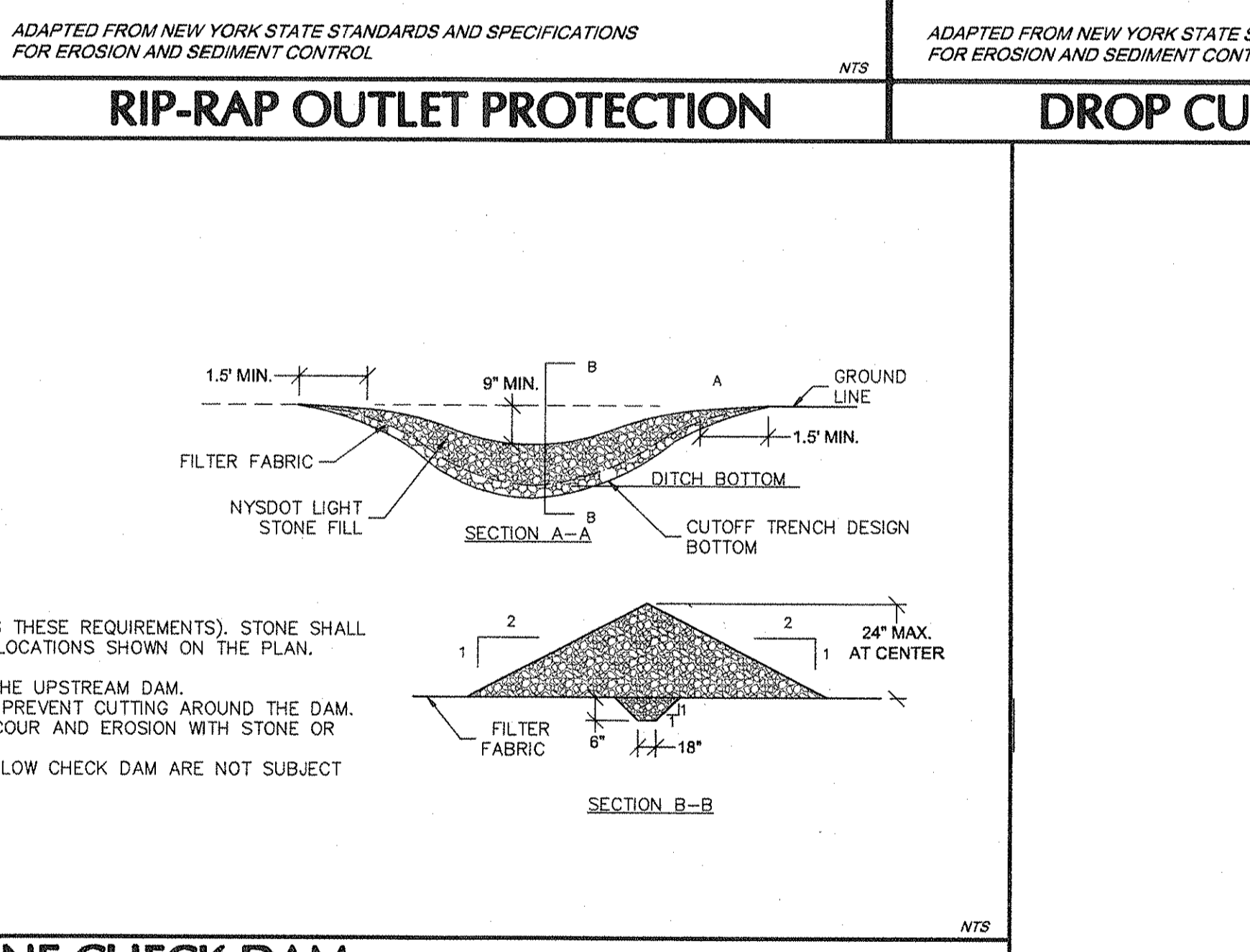
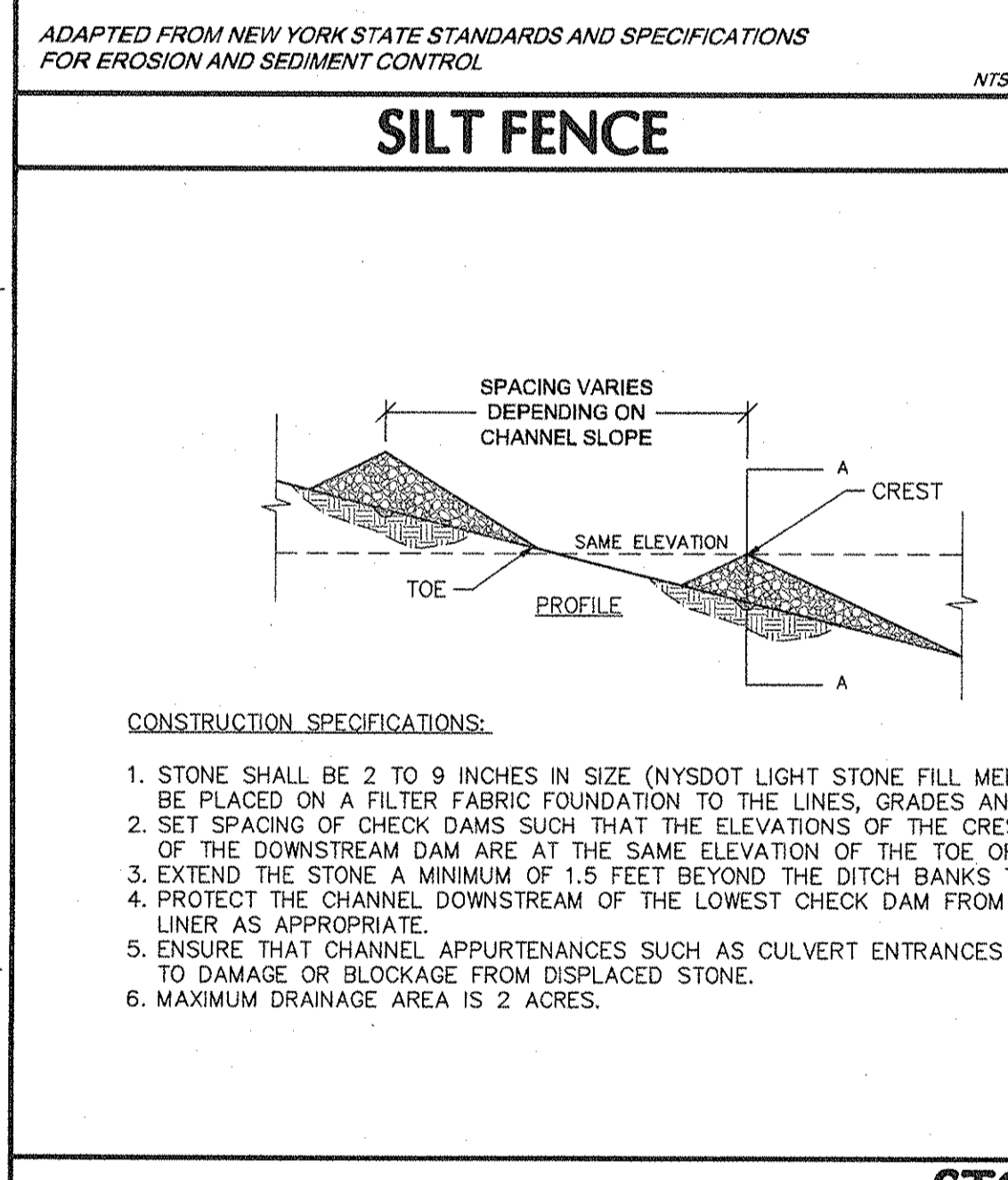
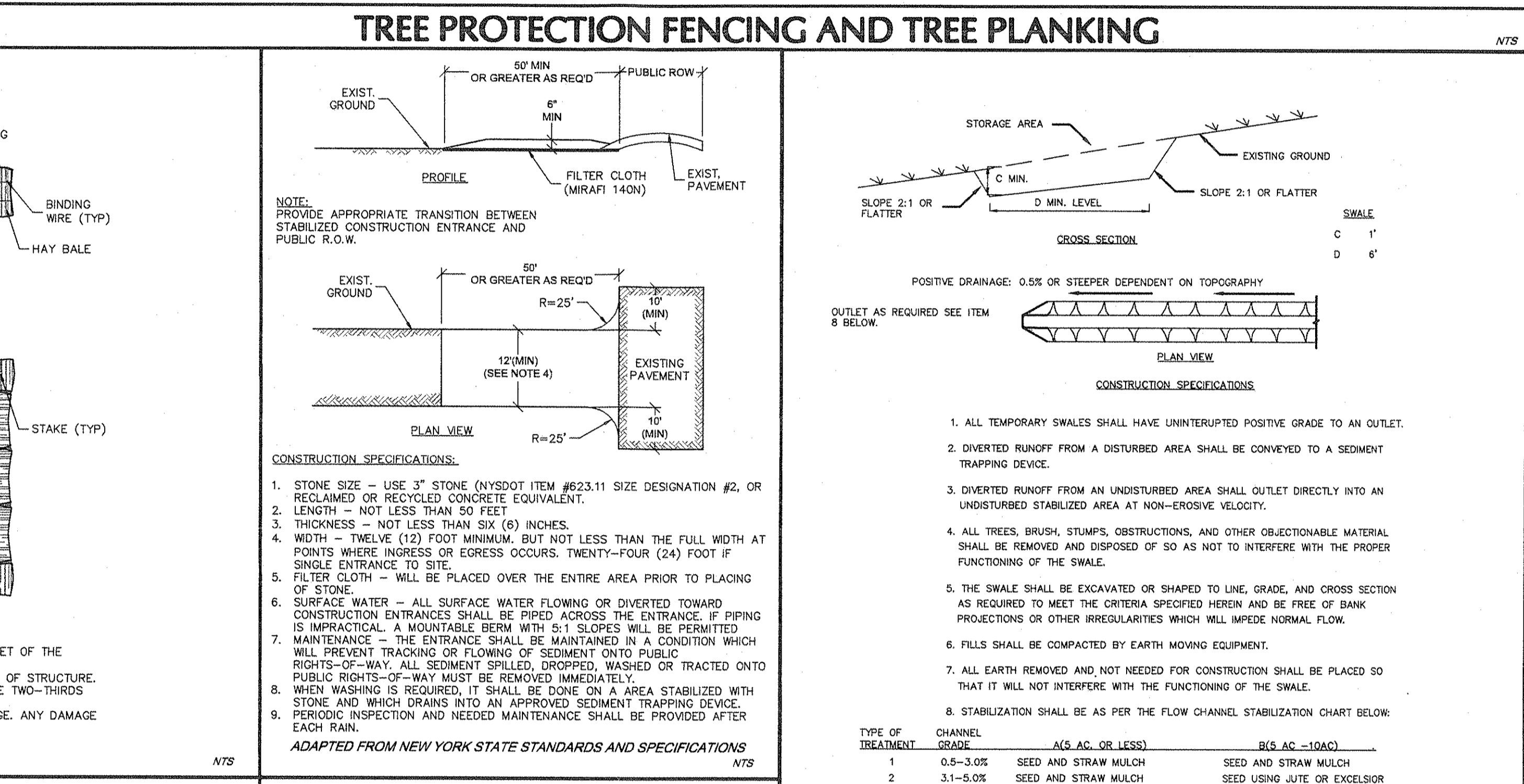
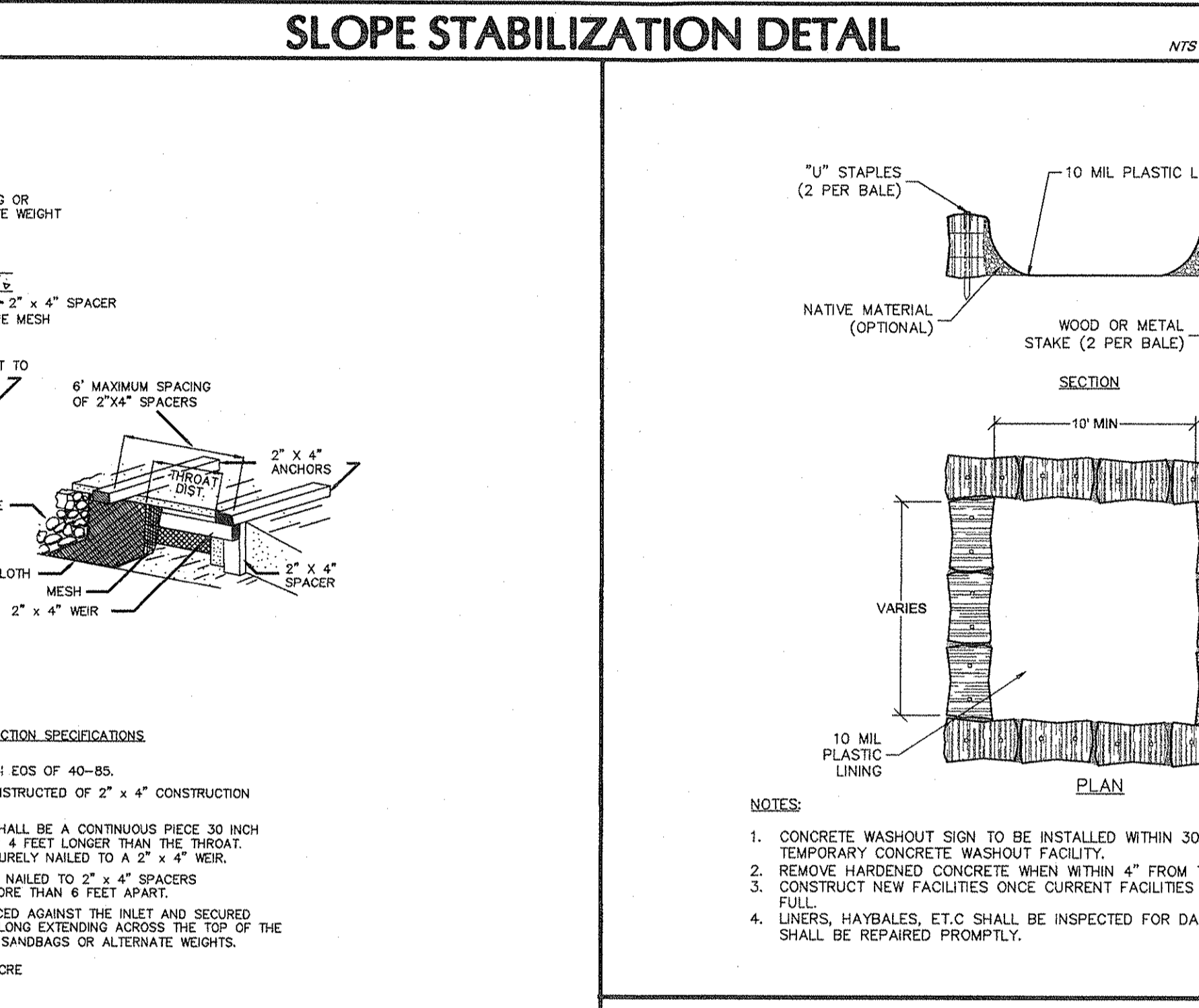
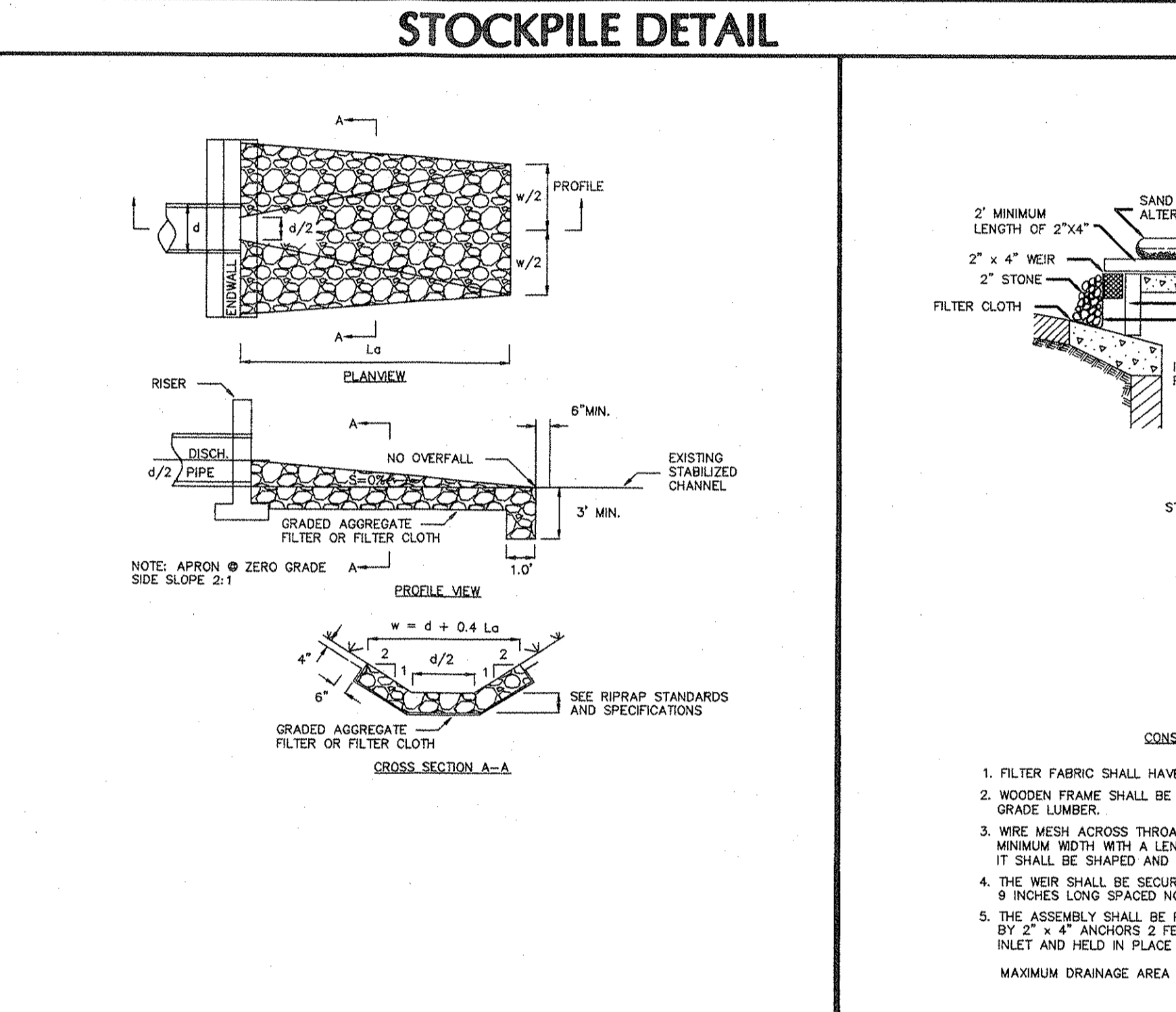
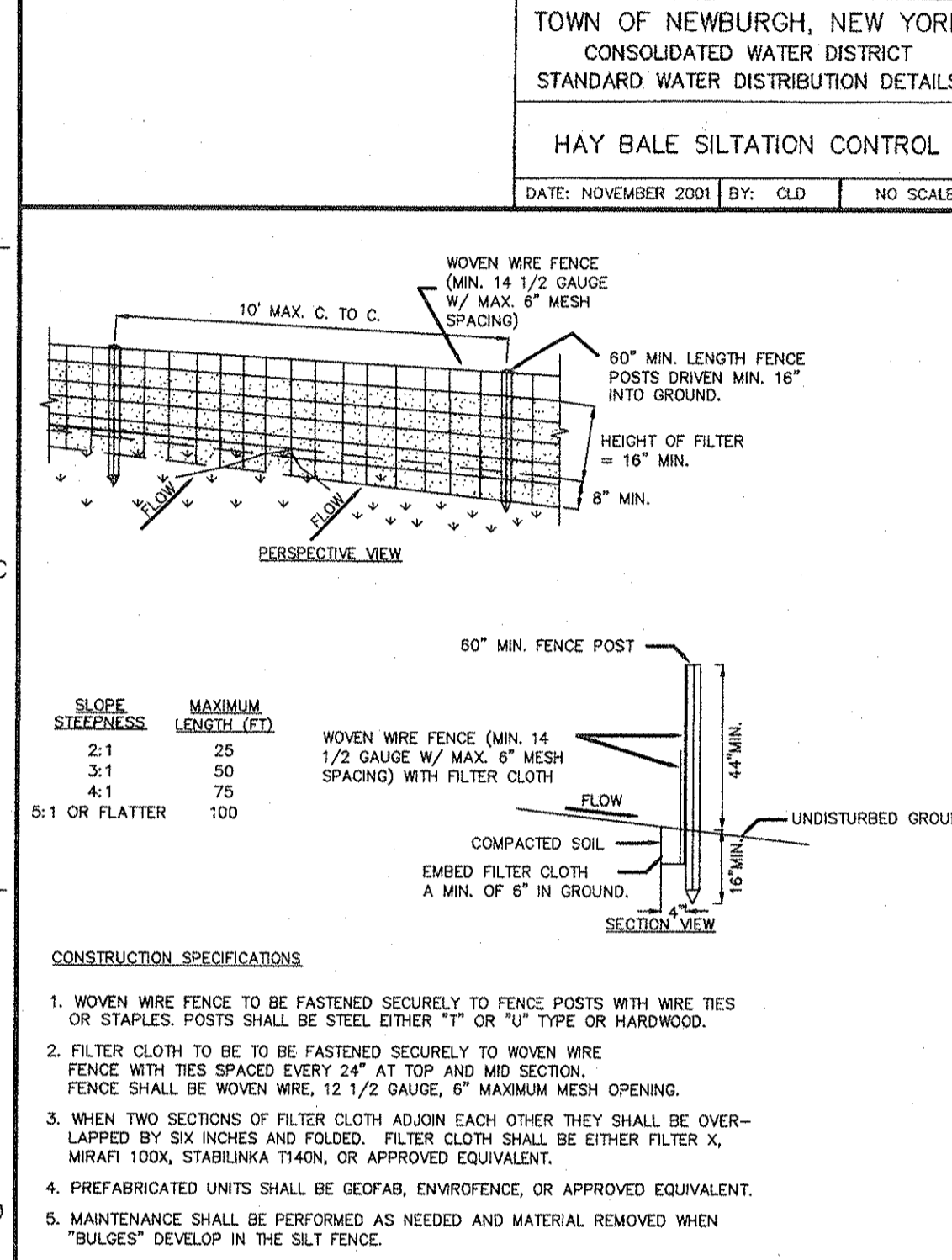
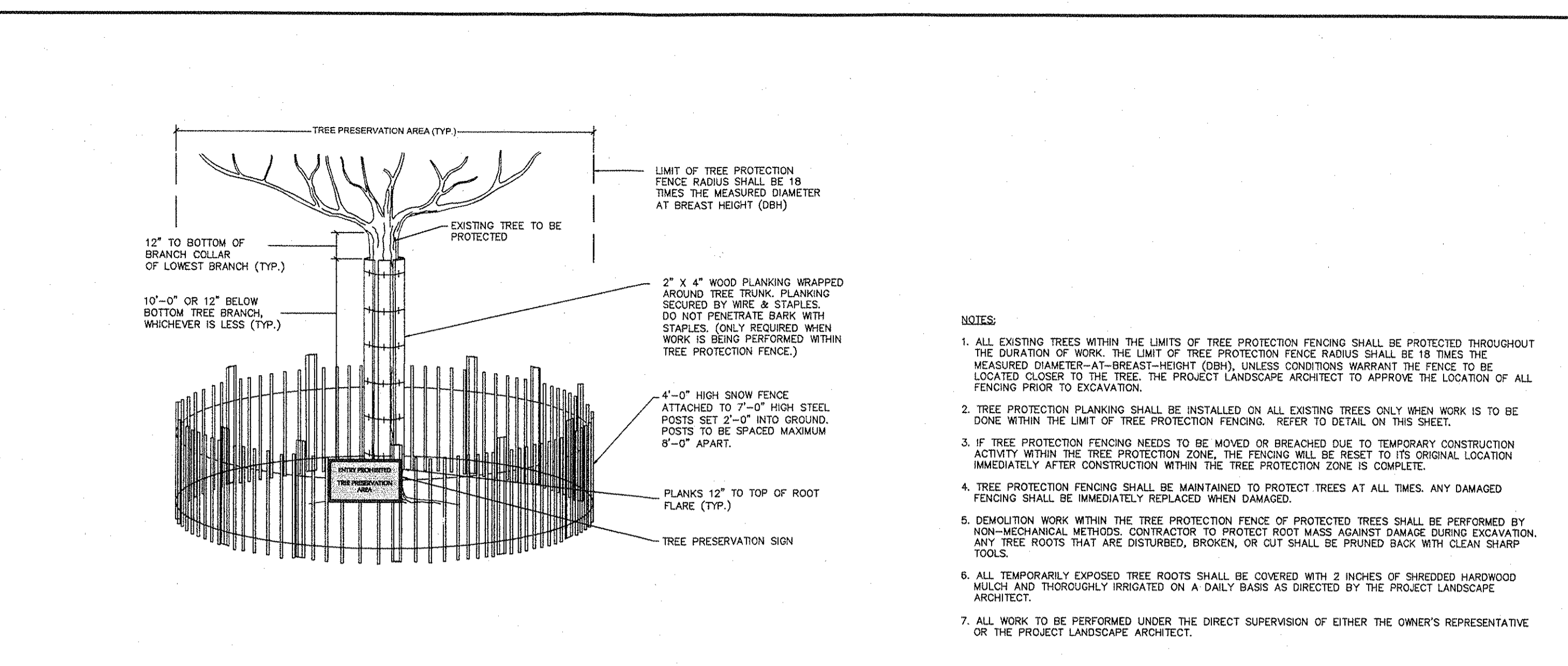
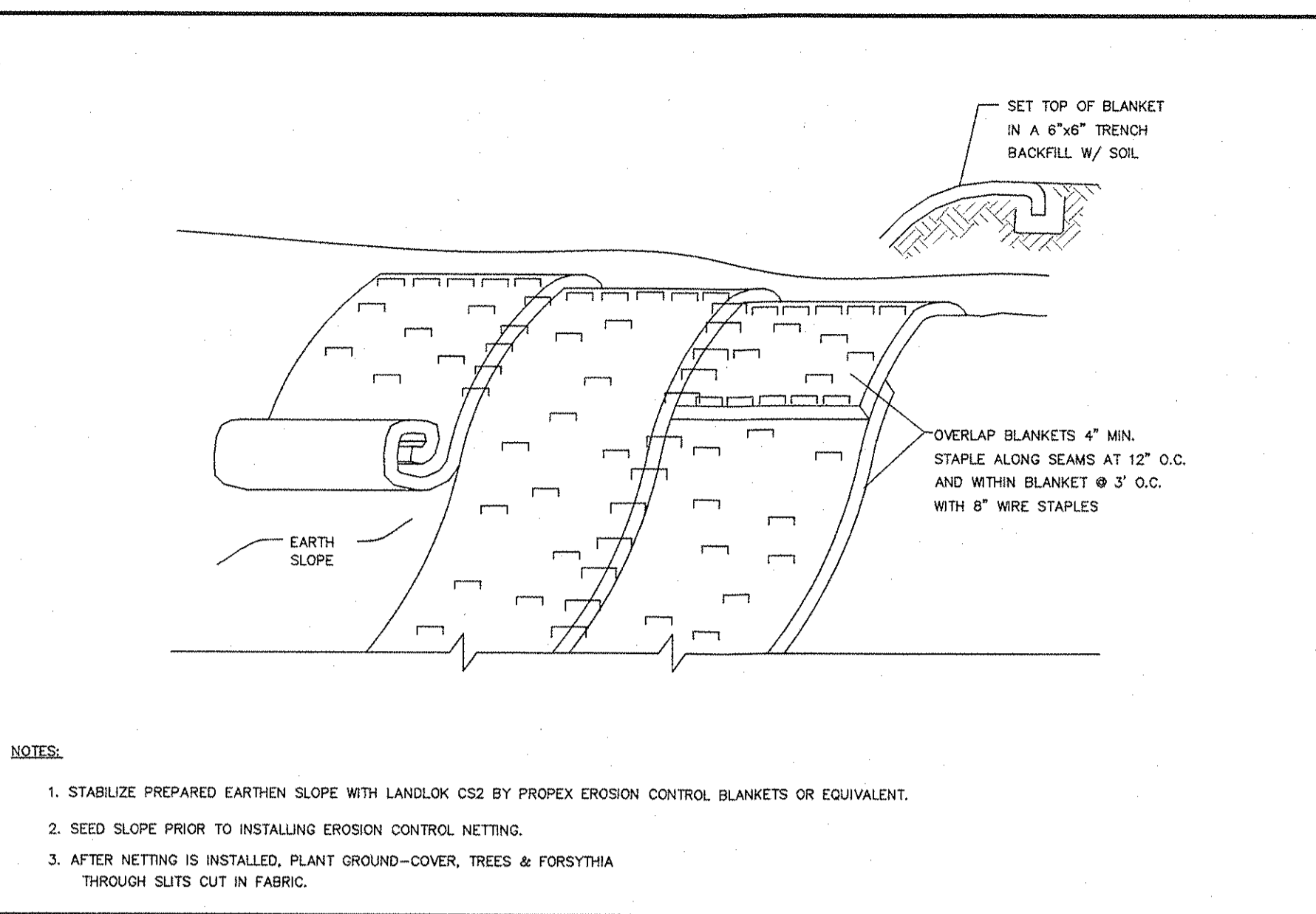
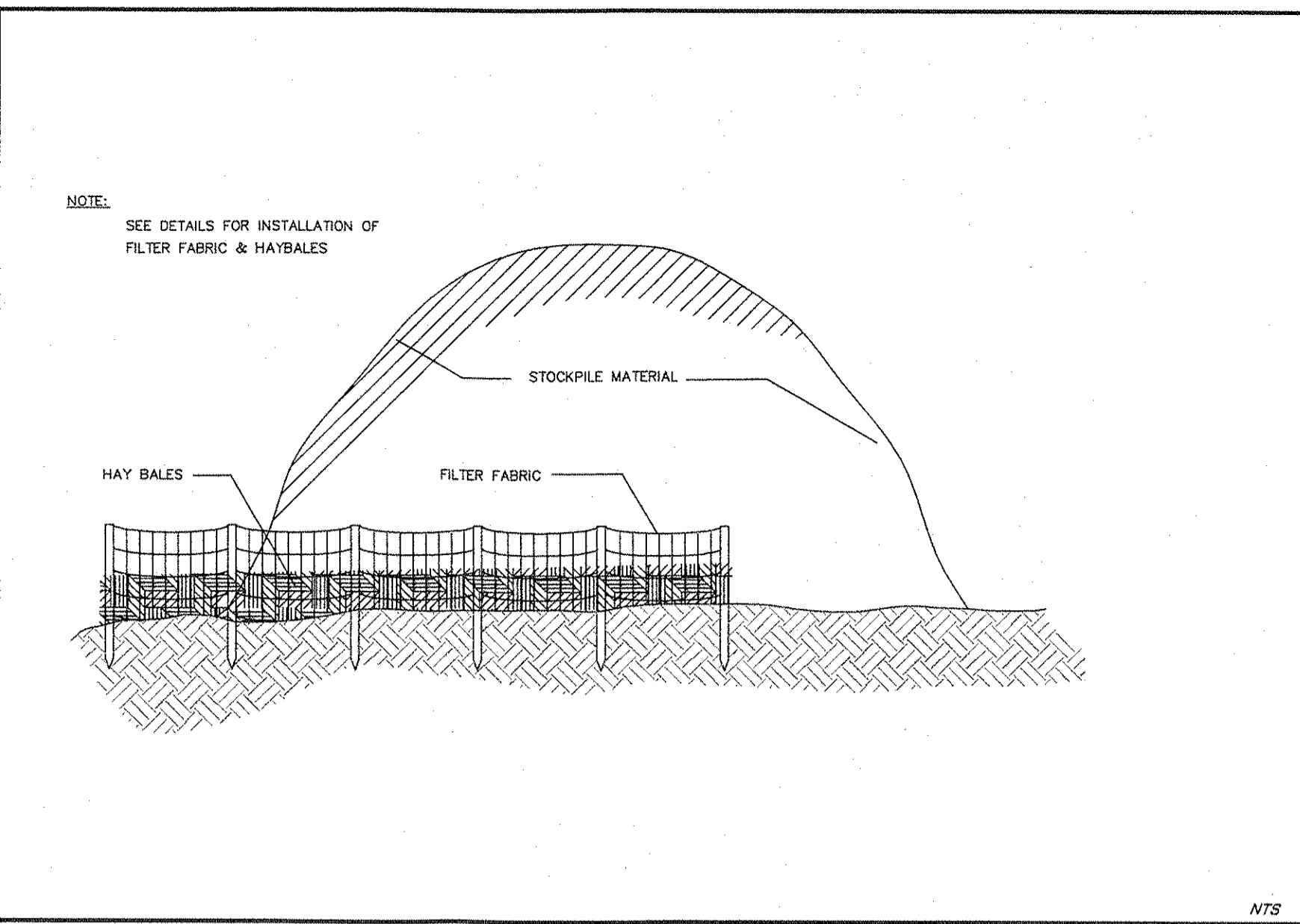
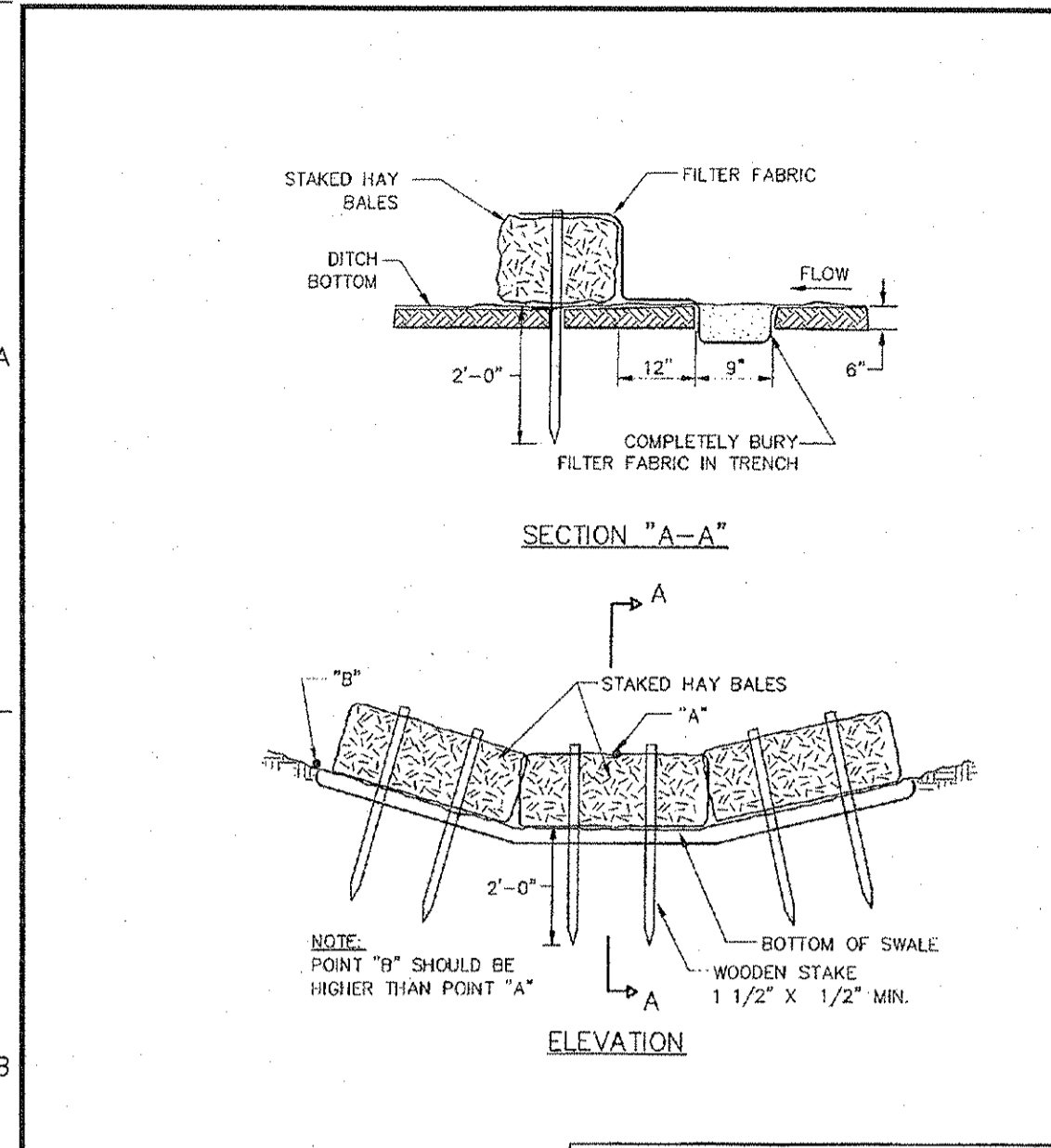
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Project: **MATRIX BUSINESS PARK AT NEWBURGH**
 TOWN OF NEWBURGH
 ORANGE COUNTY NEW YORK
 Drawing Title: **SOIL EROSION AND SEDIMENT CONTROL PLAN**

Project No. 9190601	Drawing No. CE-402
Date 9/9/2015	
Scale 1" = 50'	
Drawn By RAC	
Submission Date 04/11/2016	



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11/9/2015	REVISED PER TOWN COMMENTS	1

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DATE SIGNED: 04/11/2016

SIGNATURE: CHARLES UTSCHIG

PROFESSIONAL ENGINEER NY Lic. No. 062303

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Project: **MATRIX BUSINESS PARK AT NEWBURGH**

TOWN OF NEWBURGH NEW YORK

ORANGE COUNTY

Drawing Title: **SOIL EROSION AND SEDIMENT CONTROL DETAILS**

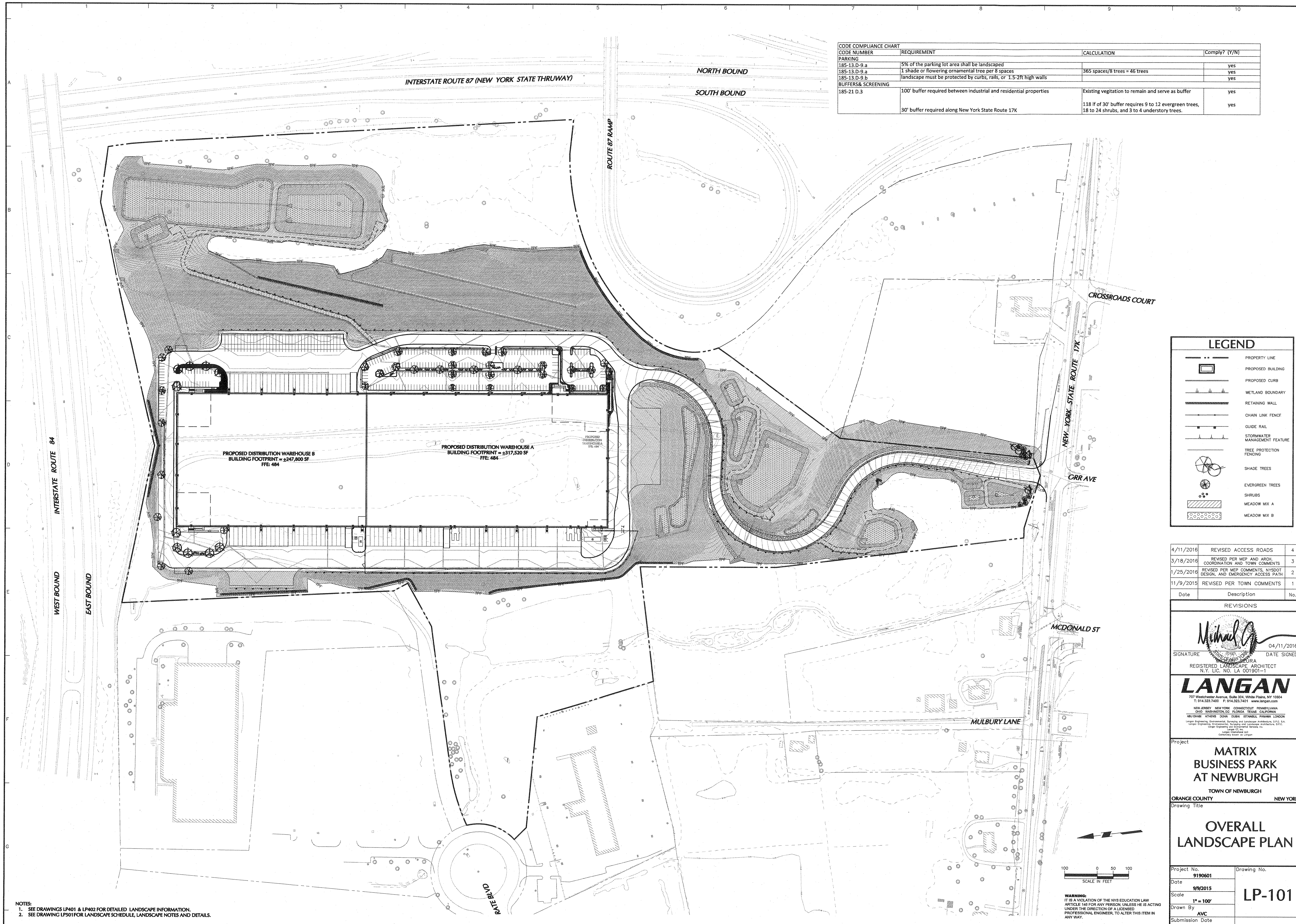
Project No. 9190601 Drawing No. CE-501

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CODE NUMBER	REQUIREMENT	CALCULATION	Comply? (Y/N)
PARKING			
185-13.D-9.a	5% of the parking lot area shall be landscaped		yes
185-13.D-9.a	1 shade or flowering ornamental tree per 8 spaces	365 spaces/8 trees = 46 trees	yes
185-13.D-9.b	landscape must be protected by curbs, rails, or 1.5'-2ft high walls		yes
BUFFERS & SCREENING			
185-21 D.3	100' buffer required between industrial and residential properties	Existing vegetation to remain and serve as buffer	yes
	30' buffer required along New York State Route 17K	118 lf of 30' buffer requires 9 to 12 evergreen trees, 18 to 24 shrubs, and 3 to 4 understory trees.	yes



LEGEND	
	PROPERTY LINE
	PROPOSED BUILDING
	PROPOSED CURB
	WETLAND BOUNDARY
	RETAINING WALL
	CHAIN LINK FENCE
	GUIDE RAIL
	STORMWATER MANAGEMENT FEATURE
	TREE PROTECTION FENCING
	SHADE TREES
	EVERGREEN TREES
	SHRUBS
	MEADOW MIX A
	MEADOW MIX B

Date	Description	No.
4/11/2016	REVISED ACCESS ROADS	4
3/18/2016	REVISED PER MEP AND ARCH. COORDINATION AND TOWN COMMENTS	3
1/25/2016	REVISED PER MEP COMMENTS, NYS DOT DESIGN, AND EMERGENCY ACCESS PATH	2
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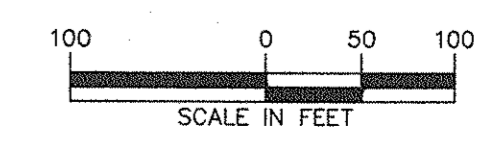
SIGNATURE: MICHAEL A. ... DATE SIGNED: 04/11/2016
 REGISTERED LANDSCAPE ARCHITECT
 N.Y. LIC. NO. LA 001901-1

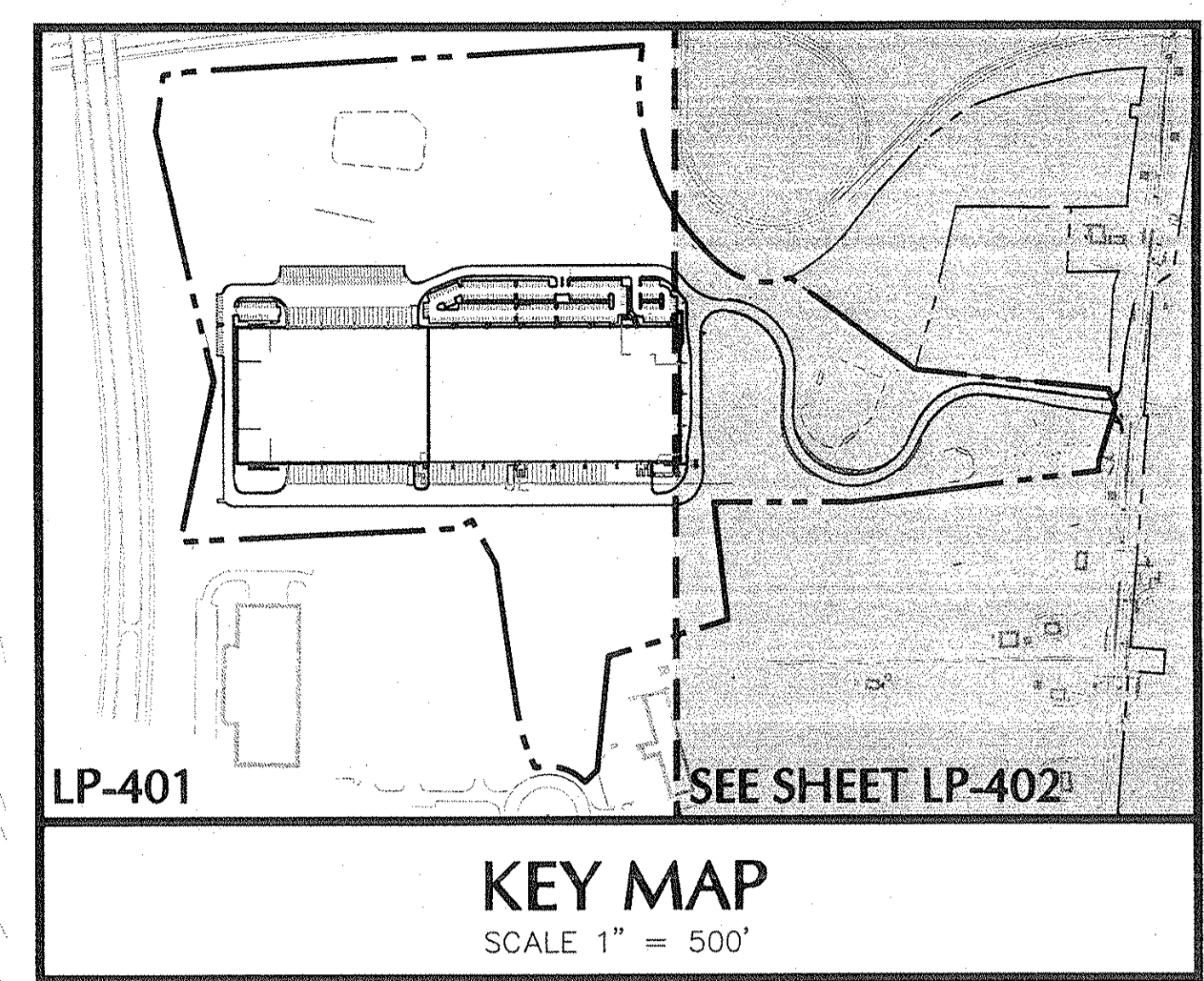
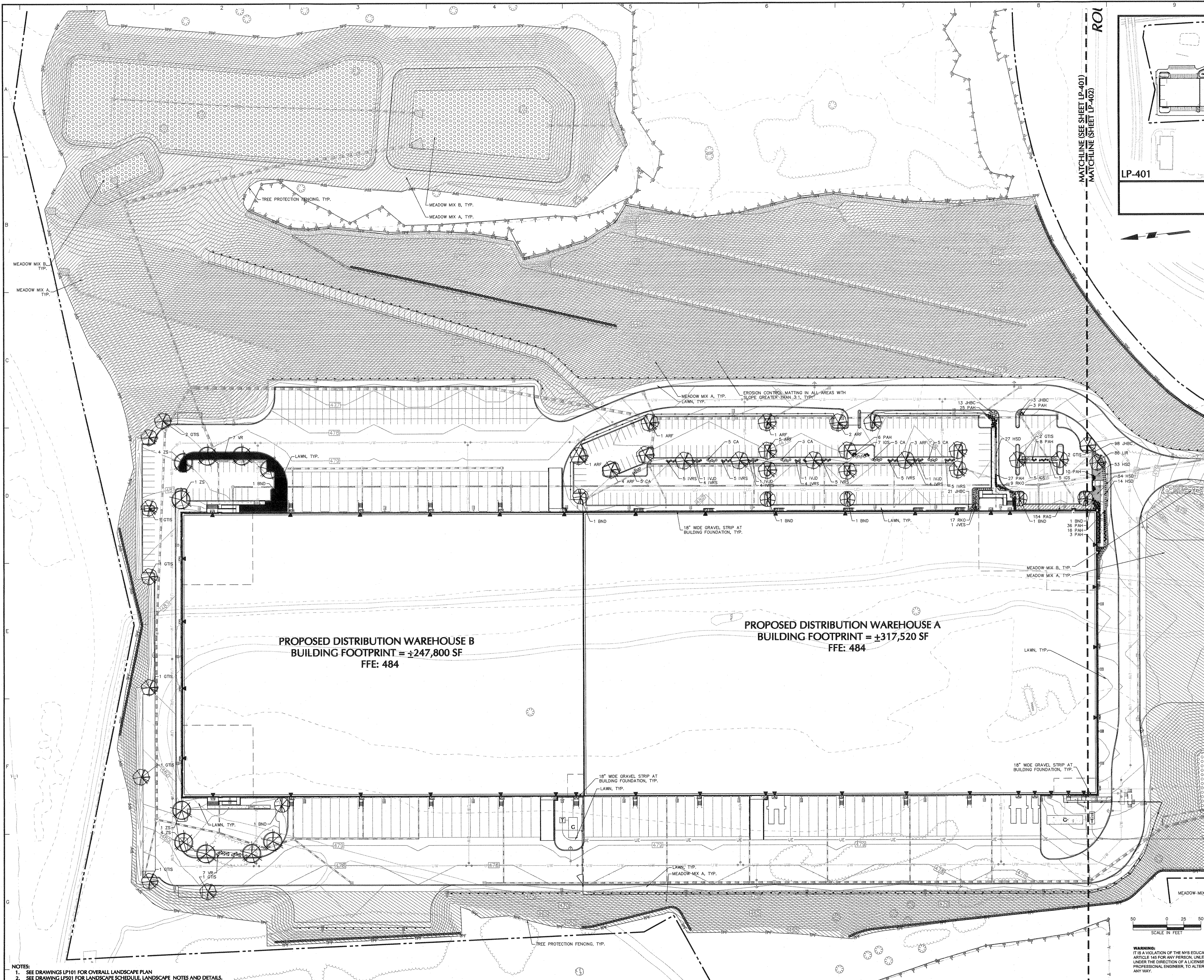
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Project **MATRIX BUSINESS PARK AT NEWBURGH**
 TOWN OF NEWBURGH
 ORANGE COUNTY NEW YORK
 Drawing Title **OVERALL LANDSCAPE PLAN**

Project No. **9190601** Drawing No. **LP-101**
 Date **9/9/2015**
 Scale **1" = 100'**
 Drawn By **AVC**
 Submission Date **04/11/2016**

NOTES:
 1. SEE DRAWINGS LP401 & LP402 FOR DETAILED LANDSCAPE INFORMATION.
 2. SEE DRAWING LP501 FOR LANDSCAPE SCHEDULE, LANDSCAPE NOTES AND DETAILS.



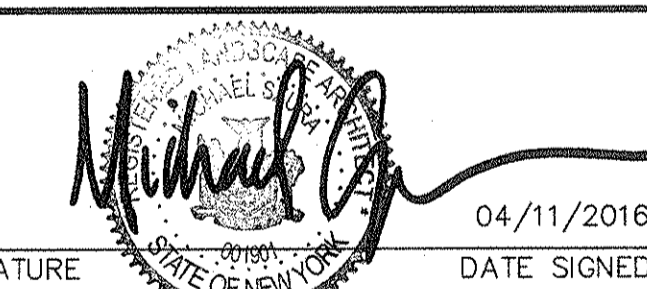


LEGEND

[Symbol]	PROPERTY LINE
[Symbol]	PROPOSED BUILDING
[Symbol]	PROPOSED CURB
[Symbol]	WETLAND BOUNDARY
[Symbol]	RETAINING WALL
[Symbol]	CHAIN LINK FENCE
[Symbol]	GUIDE RAIL
[Symbol]	STORMWATER MANAGEMENT FEATURE
[Symbol]	TREE PROTECTION FENCING
[Symbol]	SHADE TREES
[Symbol]	EVERGREEN TREES
[Symbol]	SHRUBS
[Symbol]	MEADOW MIX A
[Symbol]	MEADOW MIX B

Date	Description	No.
4/11/2016	REVISED ACCESS ROADS	4
3/18/2016	REVISED PER MEP AND ARCH. COORDINATION AND TOWN COMMENTS	3
1/25/2016	REVISED PER MEP COMMENTS, NYSDOT DESIGN, AND EMERGENCY ACCESS PATH	2
11/9/2015	REVISED PER TOWN COMMENTS	1

REVISIONS


 SIGNATURE: Michael Szura DATE SIGNED: 04/11/2016
 REGISTERED LANDSCAPE ARCHITECT
 N.Y. LIC. NO. LA 001901-1

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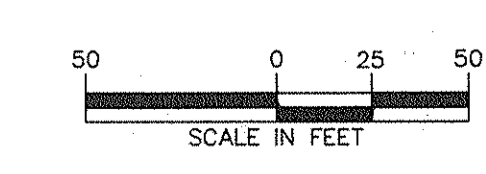
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Project: **MATRIX BUSINESS PARK AT NEWBURGH**
 TOWN OF NEWBURGH
 ORANGE COUNTY NEW YORK

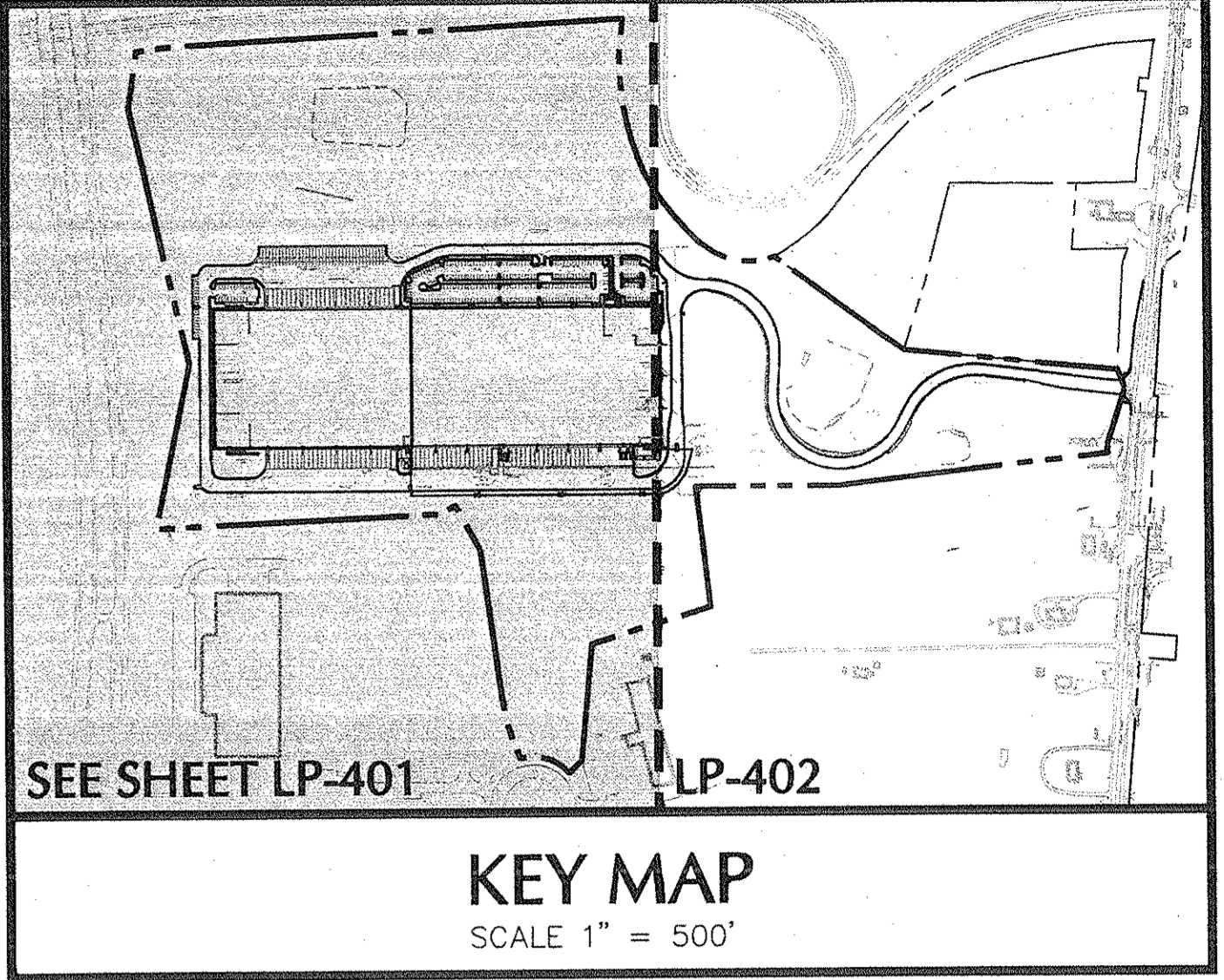
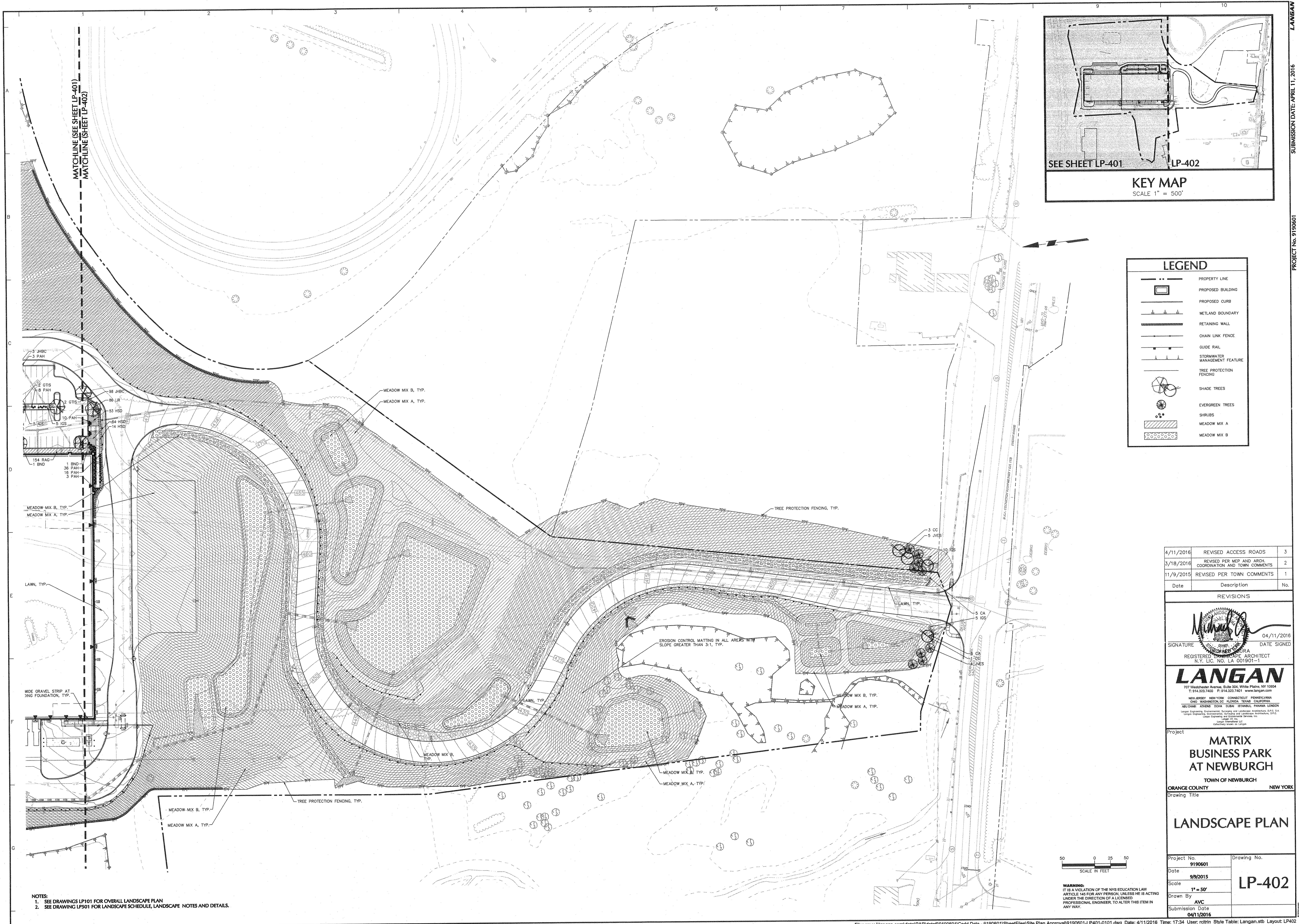
Drawing Title: **LANDSCAPE PLAN**

Project No.	9190601	Drawing No.	LP-401
Date	9/9/2015		
Scale	1" = 50'		
Drawn By	AVC		
Submission Date	04/11/2016		

NOTES:
 1. SEE DRAWINGS LP101 FOR OVERALL LANDSCAPE PLAN
 2. SEE DRAWING LP501 FOR LANDSCAPE SCHEDULE, LANDSCAPE NOTES AND DETAILS.



WARNING:
 IT IS A VIOLATION OF THE NYS EDUCATION LAW ARTICLE 145 FOR ANY PERSON, UNLESS HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS ITEM IN ANY WAY.




LEGEND

	PROPERTY LINE
	PROPOSED BUILDING
	PROPOSED CURB
	WETLAND BOUNDARY
	RETAINING WALL
	CHAIN LINK FENCE
	GLIDE RAIL
	STORMWATER MANAGEMENT FEATURE
	TREE PROTECTION FENCING
	SHADE TREES
	EVERGREEN TREES
	SHRUBS
	MEADOW MIX A
	MEADOW MIX B

Date	Description	No.
4/11/2016	REVISED ACCESS ROADS	3
3/18/2016	REVISED PER MEP AND ARCH. COORDINATION AND TOWN COMMENTS	2
11/9/2015	REVISED PER TOWN COMMENTS	1

REVISIONS


 SIGNATURE: *Michael A. Langan* DATE SIGNED: 04/11/2016
 REGISTERED LANDSCAPE ARCHITECT
 N.Y. LIC. NO. LA 001901-1

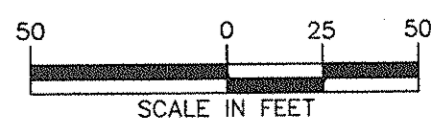
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Project: **MATRIX BUSINESS PARK AT NEWBURGH**
 TOWN OF NEWBURGH
 ORANGE COUNTY NEW YORK
 Drawing Title:

LANDSCAPE PLAN

Project No.	9190601	Drawing No.	LP-402
Date	9/9/2015		
Scale	1" = 50'		
Drawn By	AVC		
Submission Date	04/11/2016		

NOTES:
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 2. SEE DRAWING LP501 FOR LANDSCAPE SCHEDULE, LANDSCAPE NOTES AND DETAILS.



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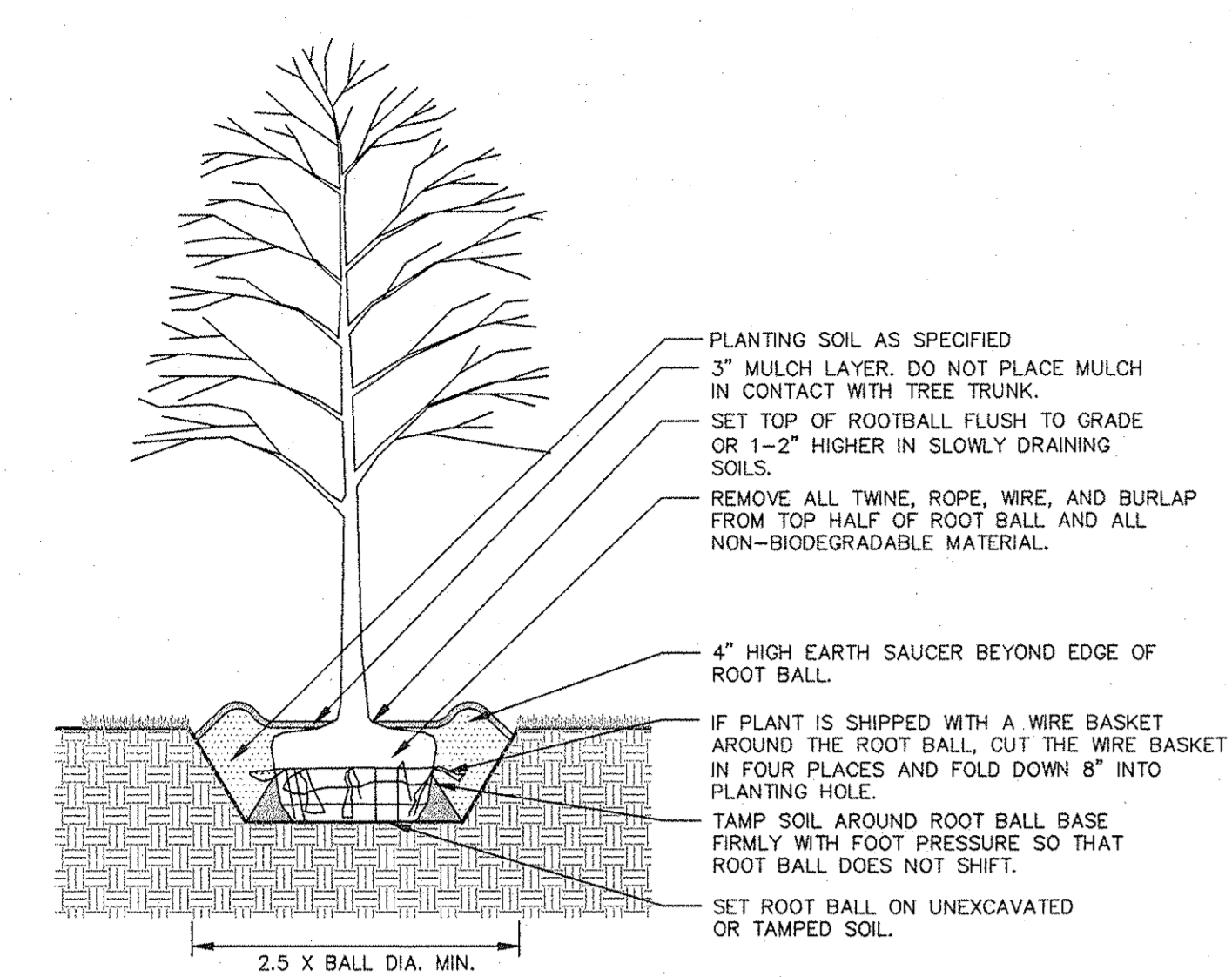
GENERAL PLANTING NOTES:

- 1. NAMES OF PLANTS AS DESCRIBED ON THIS PLAN CONFORM TO "STANDARDIZED PLANT NAMES" 1942 EDITION... 2. ALL EXPOSED GROUND SURFACES THAT ARE NOT PAVED WITHIN THE CONTRACT LIMIT LINE... 3. NO PLANT SHALL BE PUT INTO THE GROUND BEFORE ROUGH GRADING HAS BEEN COMPLETED... 4. STANDARDS FOR TYPE, SPREAD, HEIGHT, ROOT BALL AND QUANTITY OF NEW PLANT MATERIAL SHALL BE IN ACCORDANCE WITH GUIDELINES AS SET FORTH IN "THE AMERICAN STANDARD FOR NURSERY STOCK"...

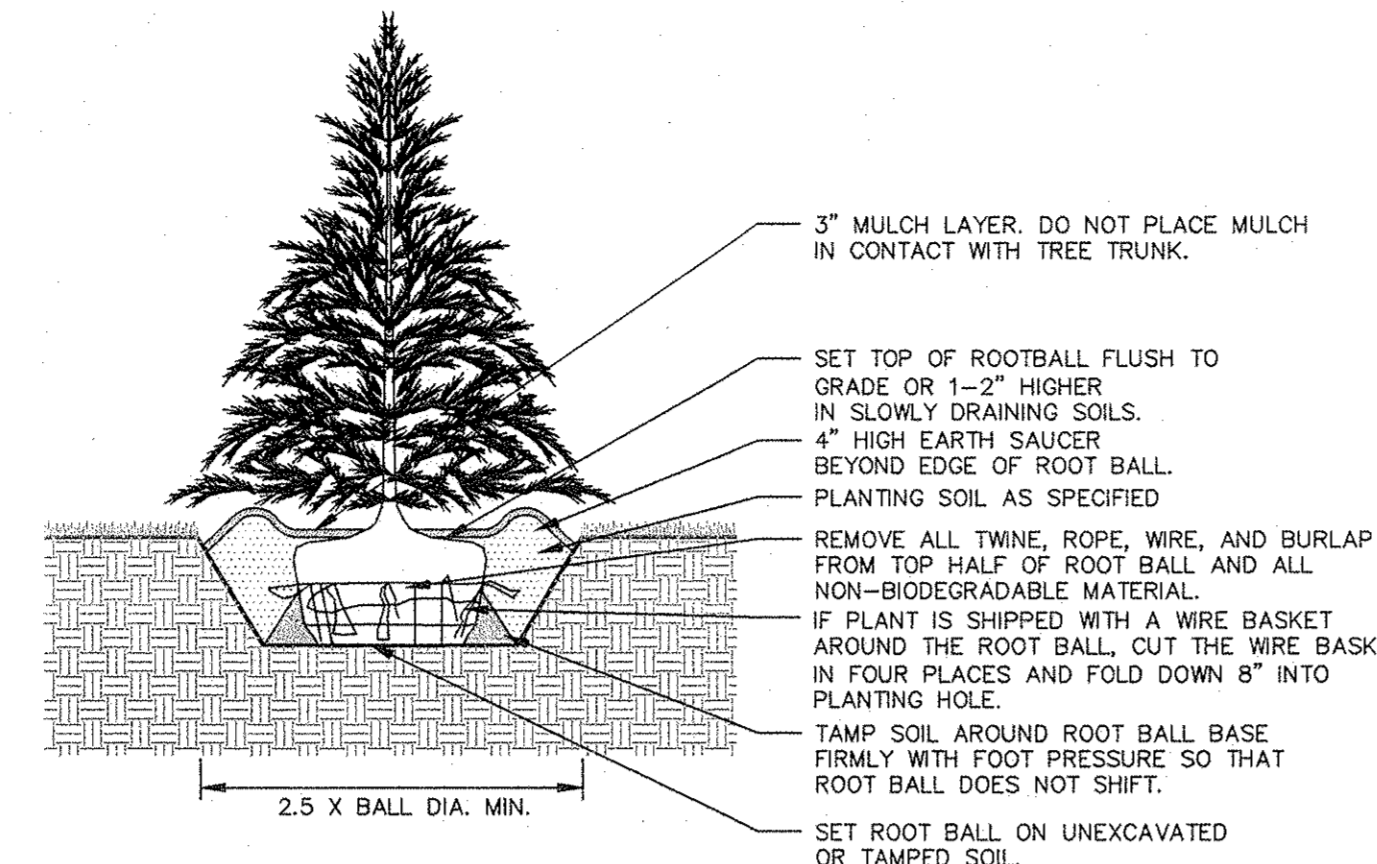
MEADOW SEEDING NOTES:

- 1. MEADOW SEED MIX A - ERNST SEED MIX ERNMX-181 "NATIVE STEEP SLOPE SLOPE MIX W/ ANNUAL RYE" 20% ANNUAL RYEGRASS 20% LITTLE BLUESTEM, CAMPER 20% ELIUMS CANADENSIS 10% SPROBOLUS ASPER 10% BROMUS CILIATUS 5% AGROSTIS PERENNANS 5% RUDEBECIA HIRTA 3% ASTER PRENANTHOIDES/NOV-BELGII 2% SOLIDAGO MEMORIALIS

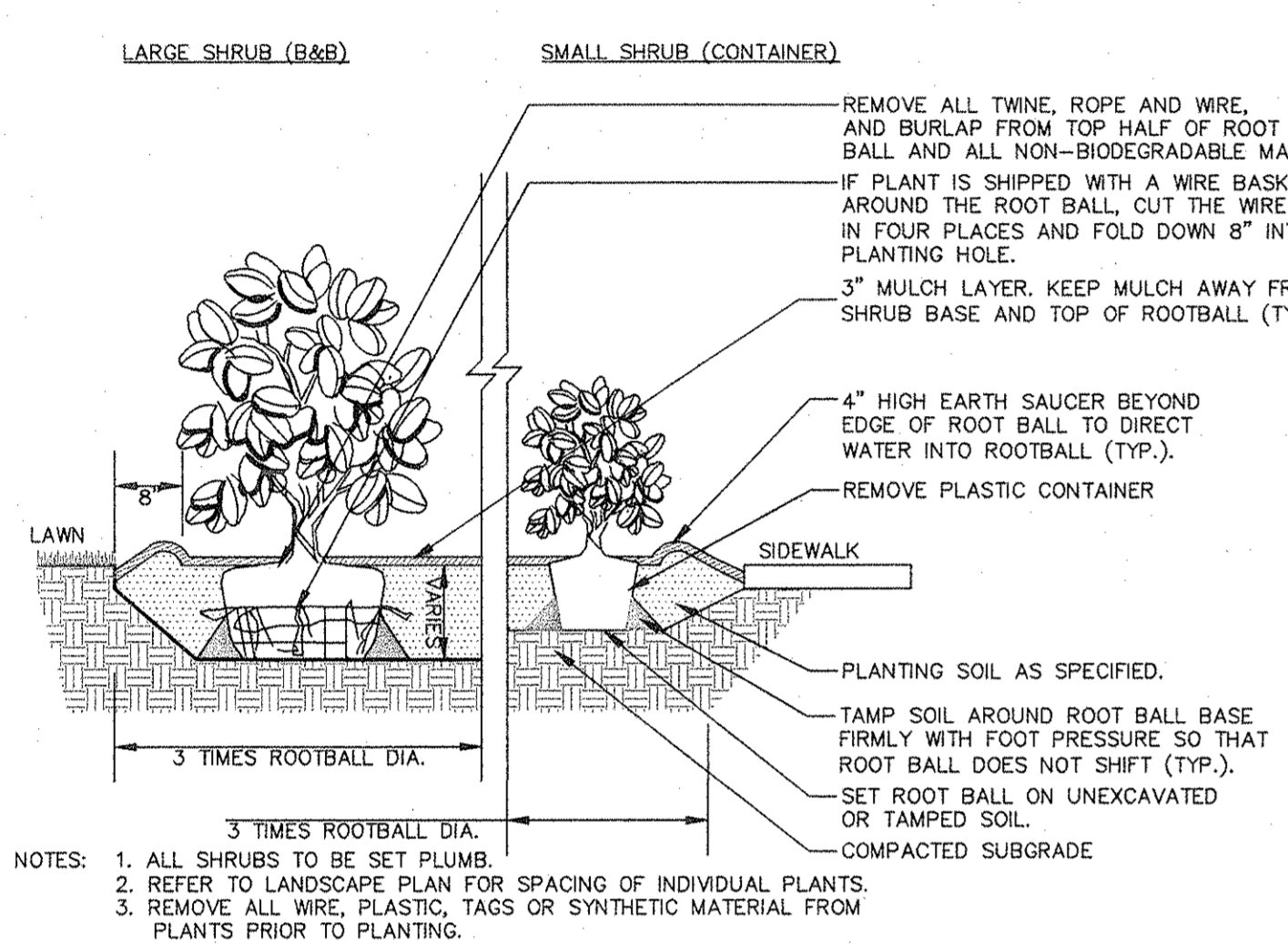
- 2. MEADOW SEED MIX B - ERNST SEED MIX ERNMX-127 "RETENTION BASIN FLOOR SEEDING MIX" 20% AGROSTIS STOLONIFERA 25% ALOPECURUS ALRUNDINACEUS 5% ELYMUS CANADENSIS 5% FESTUCA RUBRA 5% BROMUS CILIATUS 4% SPARGANIUM EURYCARPUM 4% SCRIPUS ATROVIRENS 4% SCRIPUS POLYTHYLUS 3% VERBERA HASTATA 3% SCRIPUS CILIATUS 1% MMULUS RINGENS 1% SOLIDAGO PATULA



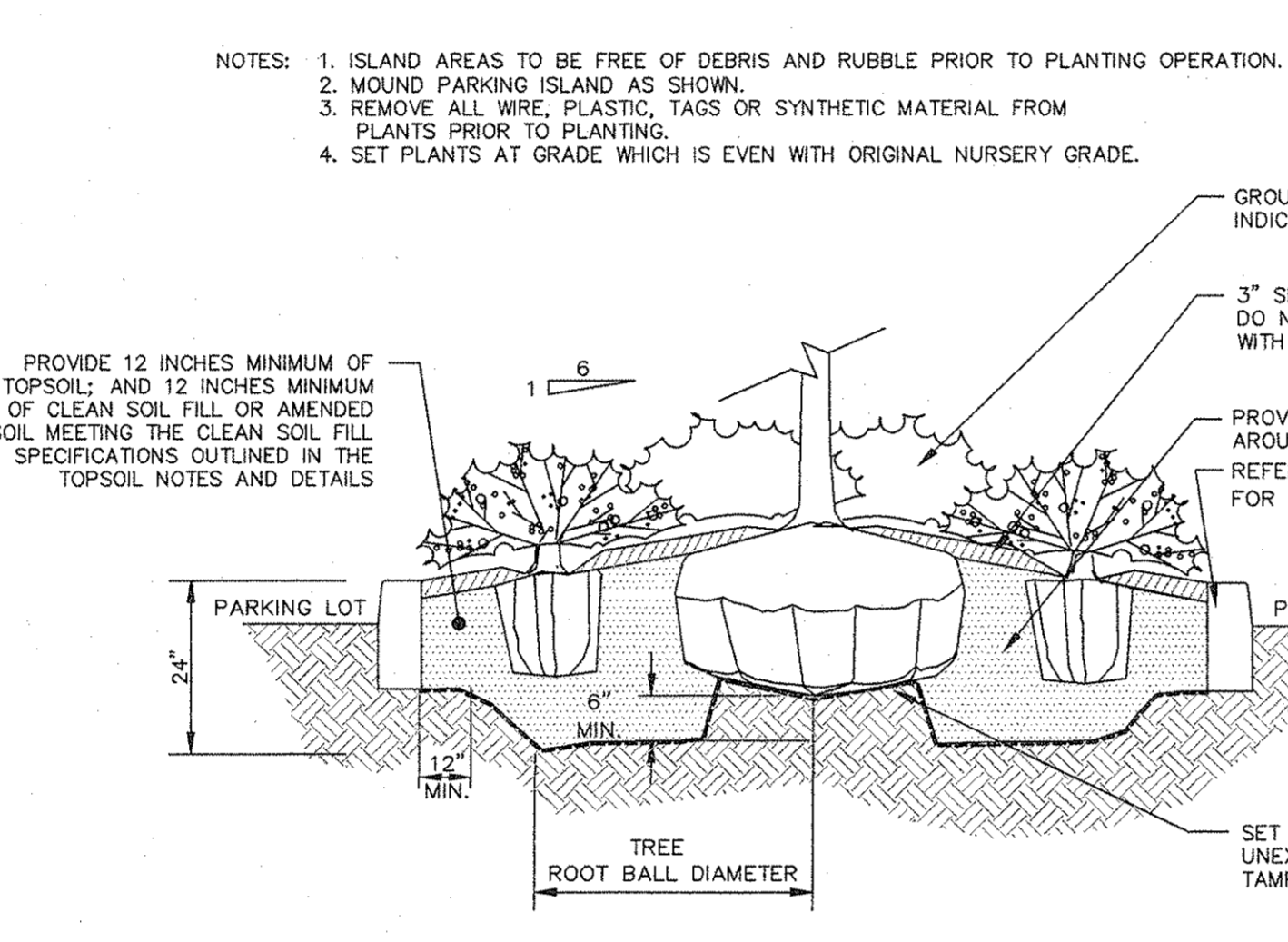
1 DECIDUOUS TREE PLANTING



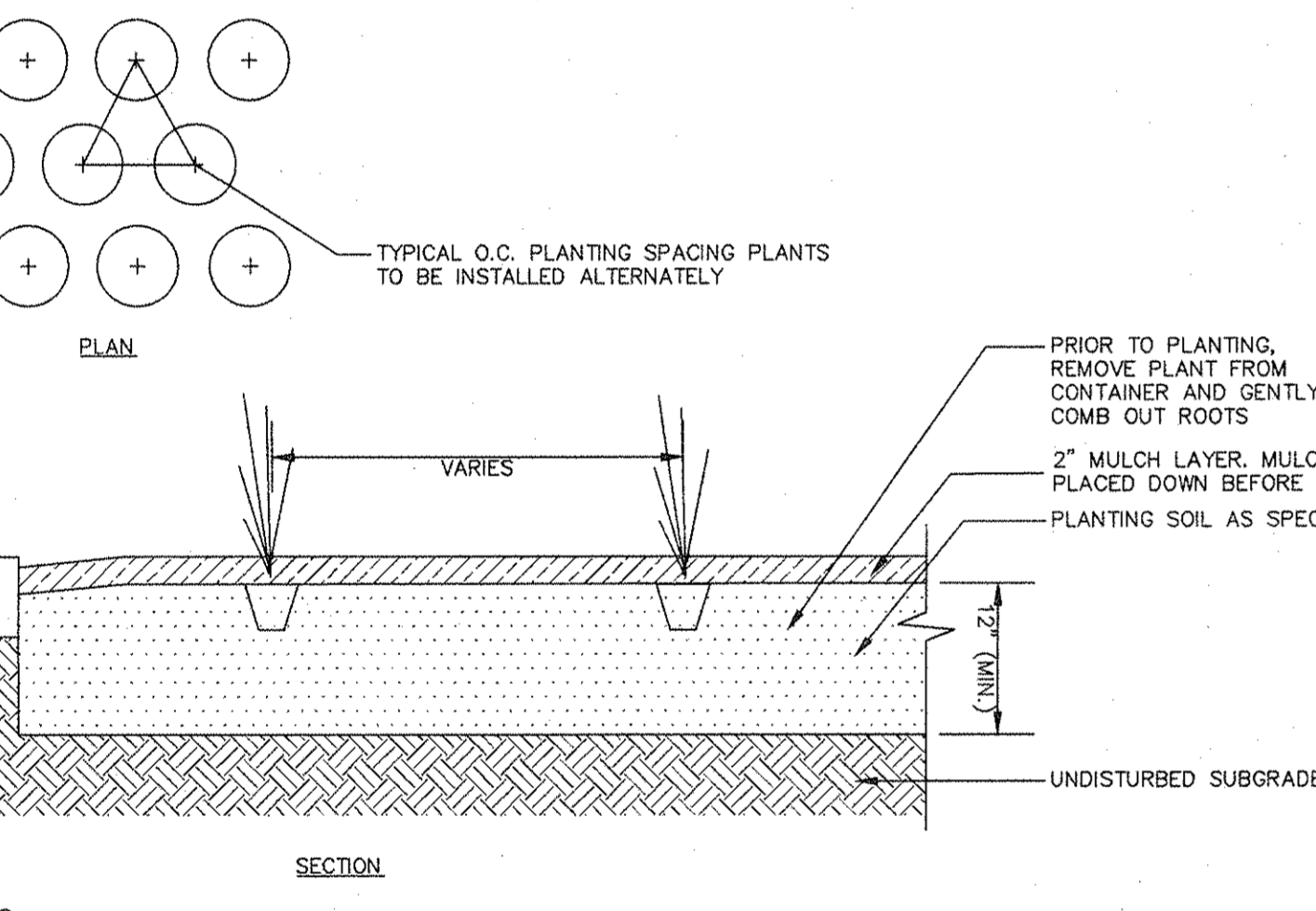
2 EVERGREEN TREE PLANTING



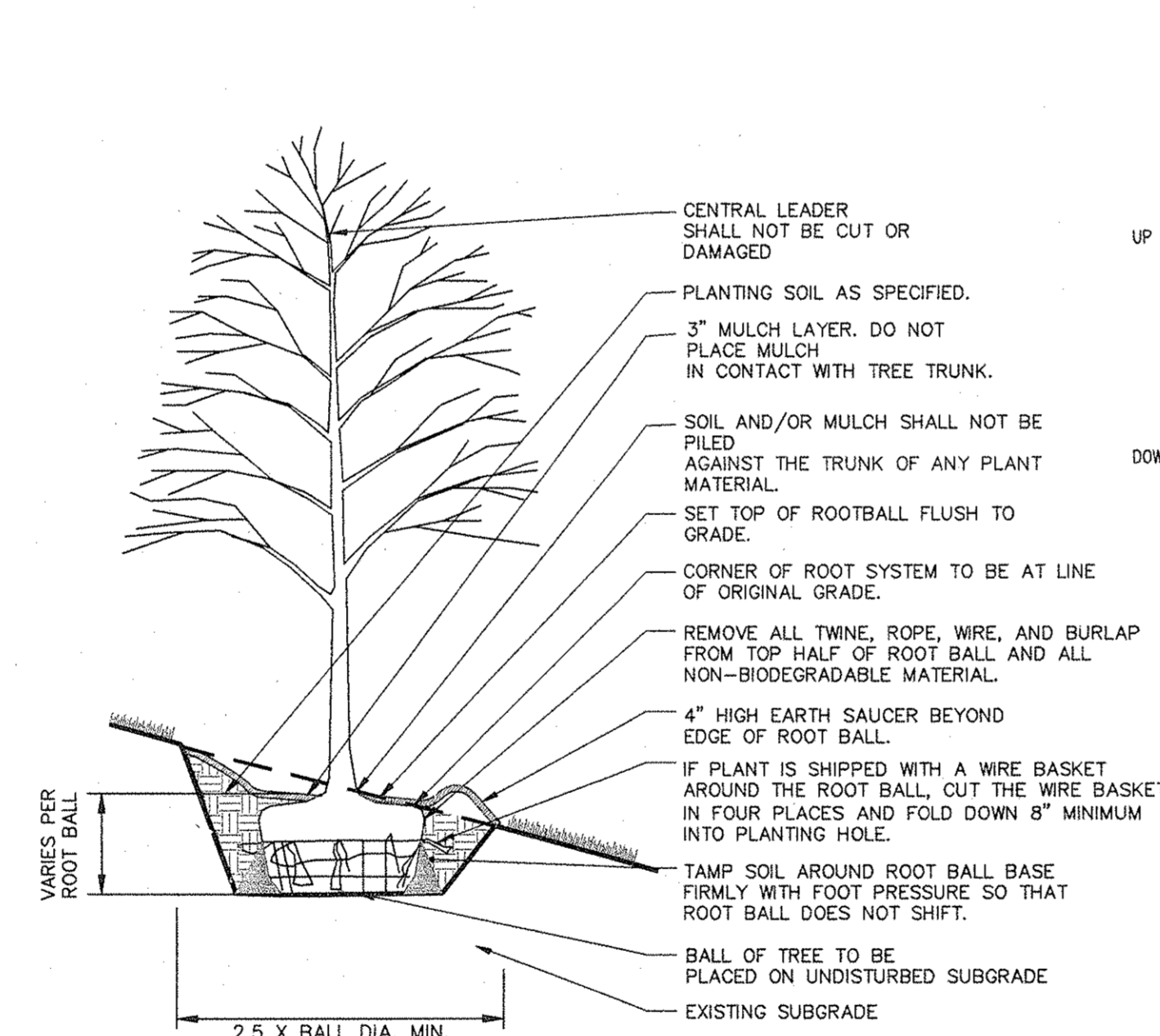
3 SHRUB PLANTING



4 PARKING ISLAND PLANTING



5 GROUNDCOVER/PERENNIAL PLANTING



6 TREE PLANTING ON SLOPE

PLANT SCHEDULE table with columns: KEY, QTY., BOTANICAL NAME, COMMON NAME, SIZE, ROOT, REMARKS. Lists various plants like Red Sunset Maple, Eastern Redbud, Dura Heat River Birch, etc.

LAWN SEED MIX:

- 1. PRIOR TO SEEDING, AREA IS TO BE TOPSOILED, FINE GRADED, AND RAKED OF ALL DEBRIS LARGER THAN 1" DIAMETER. 2. THE FOLLOWING SEED MIX SHALL BE SOWN AT THE RATES AS DEPICTED: RED FESCUE 1 1/2 LBS./1,000 SF. PERENNIAL RYEGRASS 1 LBS./1,000 SF. KENTUCKY BLUEGRASS 1 1/2 LBS./1,000 SF. SPREADING FESCUE 1 LBS./1,000 SF.

LAWN WATERING SCHEDULE:

- 1. SEEDING SHALL BE DONE DURING THE SEASONS SPECIFIED IN THE LAWN SEED MIX NOTES AND/OR PROJECT SPECIFICATIONS. 2. AFTER THE SEEDING IS PREPARED, SEED IS INSTALLED, AND MULCH IS APPLIED, WATER LIGHTLY TO KEEP THE TOP 2 INCHES OF SOIL CONSISTENTLY MOIST, NOT SATURATED, AT NO TIME SHOULD WATER BE APPLIED TO THE POINT OF RUNOFF OR THE DISPLACEMENT OF SEED.

SOIL NOTES:

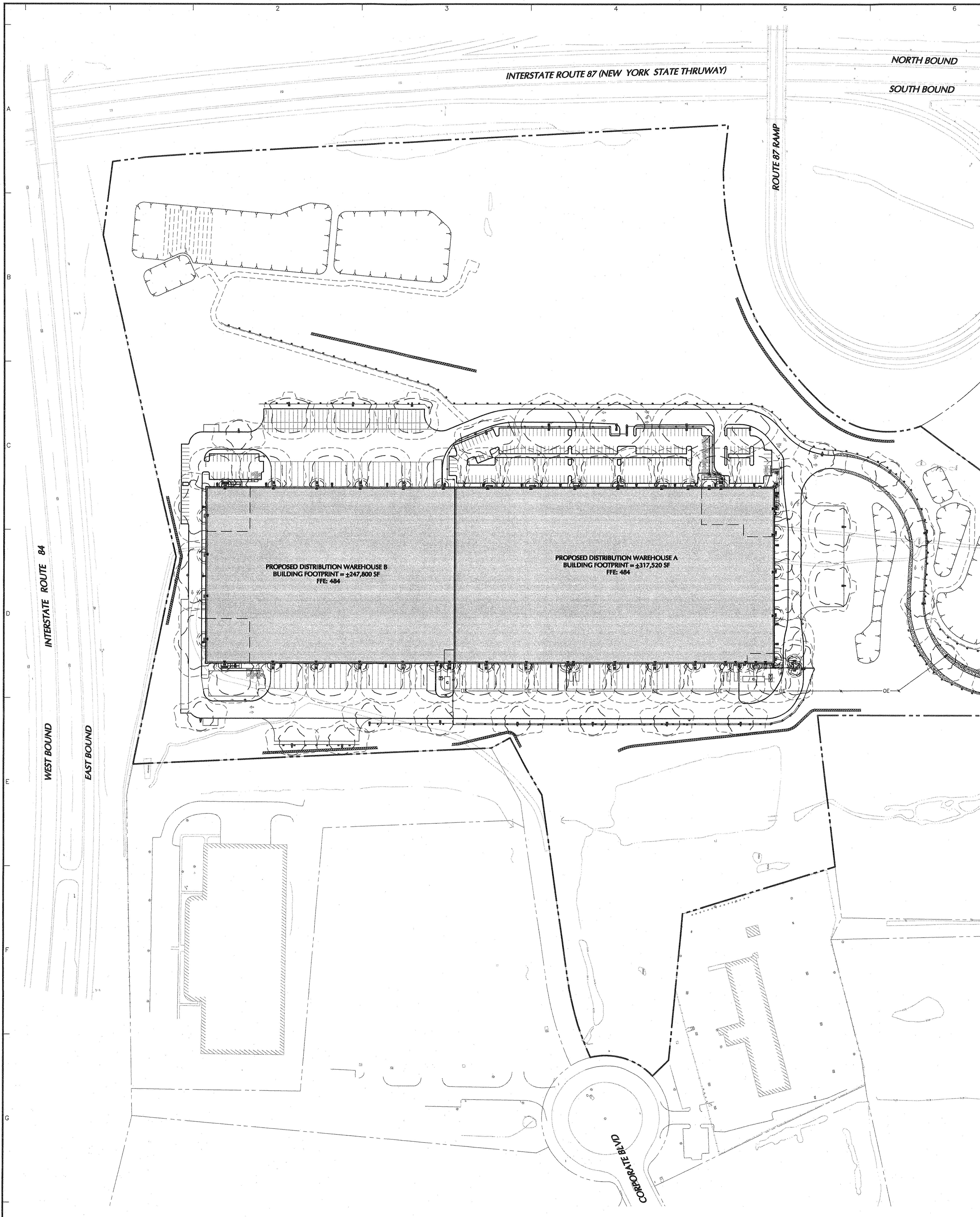
- 1. DUE TO GENERAL CONSTRUCTION ACTIVITIES AND ADJACENT SITE COMPACTION REQUIREMENTS, SUBGRADE SOILS WITHIN PROPOSED PLANTING AREAS TEND TO BECOME HIGHLY COMPACTED. IN ORDER TO CREATE A HEALTHY GROWTH MEDIUM TO ALLOW PROPOSED PLANTINGS TO ESTABLISH A VIGOROUS ROOT MASS, THIS SUBGRADE SOIL MUST UNDERGO A RESTORATION PROCESS.

Revisions table with columns: Date, Description, No. Shows two revisions from 3/18/2016 and 11/9/2015.

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Matrix Business Park at Newburgh project title block. Includes drawing title 'LANDSCAPE SCHEDULE, NOTES, AND DETAILS', project no. 9190601, date 9/9/2015, and drawing no. LP-501.

NOTE: IF ANY DISCREPANCIES OCCUR BETWEEN AMOUNTS SHOWN IN THE PLAN AND THE PLANT LIST, THE PLAN SHALL DICTATE.



SITE LIGHTING SCHEDULE

SYMBOL	KEY	QTY.	FIXTURE MANUFACTURER	FIXTURE MODEL	FIXTURE DESCRIPTION	FIXTURE MOUNTING HEIGHT	LAMP	OPTICS	LUMENS	LLF	IES FILE	FIXTURE CATALOGUE NO.	POLE/MOUNTING MANUFACTURER	POLE/MOUNTING DESCRIPTION	POLE LENGTH	POLE MOUNTING CATALOGUE NO.
[Symbol]	A	20	LSI INDUSTRIES	SLICE - SMALL	POLE-MOUNTED AREA LIGHT FIXTURE; COLOR - BLACK	35'-0"	140W LED	TYPE III	13,800	0.95	XLCS-3-LE D-HO-NW/IES	XLCS-3-LED-HO-NW-UE-BLK	LSI INDUSTRIES / GENERAL STRUCTURES INC.	WOODEN UTILITY POLE WITH TENON MOUNTED BRACKETS	N/A	BKS-NM-RD-2, 5-BLK/PCB-1
[Symbol]	A'	2	LSI INDUSTRIES	SLICE - SMALL	POLE-MOUNTED AREA LIGHT FIXTURE; COLOR - BLACK	35'-0"	140W LED	TYPE III	13,800	0.95	XLCS-3-LE D-HO-NW/IES	XLCS-3-LED-HO-NW-UE-BLK	LSI INDUSTRIES / GENERAL STRUCTURES INC.	WOODEN UTILITY POLE WITH TENON MOUNTED BRACKETS	N/A	BKS-NM-RD-2, 5-BLK/PCB-1
[Symbol]	B	1	LSI INDUSTRIES	SLICE - MEDIUM	POLE-MOUNTED AREA LIGHT FIXTURE; COLOR - BLACK	30'-0"	278W LED	TYPE III	26,300	0.95	XLCM-3-LE D-HO-NW/IES	XLCM-3-LED-HO-NW-UE-BLK	LSI INDUSTRIES / GENERAL STRUCTURES INC.	WOODEN UTILITY POLE WITH TENON MOUNTED BRACKETS	N/A	BKS-NM-RD-2, 5-BLK/PCB-1
[Symbol]	B*	1	LSI INDUSTRIES	SLICE - MEDIUM	POLE-MOUNTED AREA LIGHT FIXTURE; COLOR - BLACK	35'-0"	278W LED	TYPE III	26,300	0.95	XLCM-3-LE D-HO-NW/IES	XLCM-3-LED-HO-NW-UE-BLK	LSI INDUSTRIES / GENERAL STRUCTURES INC.	WOODEN UTILITY POLE WITH TENON MOUNTED BRACKETS	N/A	BKS-NM-RD-2, 5-BLK/PCB-1
[Symbol]	C	3	LSI INDUSTRIES	SLICE - MEDIUM	POLE-MOUNTED AREA LIGHT FIXTURE; COLOR - BLACK	35'-0"	278W LED	TYPE IV	24,100	0.95	XLCM-FT-L ED-HO-NW/IES	XLCM-FT-LED-HO-NW-UE-BLK	LSI INDUSTRIES / GENERAL STRUCTURES INC.	WOODEN UTILITY POLE WITH TENON MOUNTED BRACKETS	N/A	BKS-NM-RD-2, 5-BLK/PCB-1
[Symbol]	C*	2	LSI INDUSTRIES	SLICE - MEDIUM	POLE-MOUNTED AREA LIGHT FIXTURE; COLOR - BLACK	35'-0"	278W LED	TYPE IV	24,100	0.95	XLCM-FT-L ED-HO-NW/IES	XLCM-FT-LED-HO-NW-UE-BLK	LSI INDUSTRIES / GENERAL STRUCTURES INC.	WOODEN UTILITY POLE WITH TENON MOUNTED BRACKETS	N/A	BKS-NM-RD-2, 5-BLK/PCB-1
[Symbol]	D	1	LSI INDUSTRIES	SLICE - MEDIUM	POLE-MOUNTED AREA LIGHT FIXTURE; COLOR - BLACK	35'-0"	278W LED	TYPE V	23,900	0.95	XLCM-5-LE D-HO-NW/IES	XLCM-5-LED-HO-NW-UE-BLK	LSI INDUSTRIES / GENERAL STRUCTURES INC.	WOODEN UTILITY POLE WITH TENON MOUNTED BRACKETS	N/A	BKS-NM-RD-2, 5-BLK/PCB-1
[Symbol]	E	3	LSI INDUSTRIES	SLICE - MEDIUM	POLE-MOUNTED AREA LIGHT FIXTURE; COLOR - BLACK	35'-0"	278W LED	2Ø180° TYPE V	23,900	0.95	XLCM-5-LE D-HO-NW/IES	XLCM-5-LED-HO-NW-UE-BLK	LSI INDUSTRIES / GENERAL STRUCTURES INC.	WOODEN UTILITY POLE WITH TENON MOUNTED BRACKETS	N/A	BKS-NM-RD-2, 5-BLK/PCB-1
[Symbol]	F	7	LSI INDUSTRIES	SLICE - MEDIUM	WALL MOUNTED AREA LIGHT FIXTURE; COLOR - BLACK	40'-0" COORDINATE WITH ARCH. PLANS	278W LED	TYPE III	26,300	0.95	XLCM-3-LE D-HO-NW/IES	XLCM-3-LED-HO-NW-UE-BLK W/BKS-XBO-NW-M-C-L R WALL MOUNT BRACKET	N/A	N/A	N/A	N/A
[Symbol]	G	28	LSI INDUSTRIES	SLICE - MEDIUM	WALL MOUNTED AREA LIGHT FIXTURE; COLOR - BLACK	40'-0" COORDINATE WITH ARCH. PLANS	278W LED	TYPE IV	24,100	0.95	XLCM-FT-L ED-HO-NW/IES	XLCM-FT-LED-HO-NW-UE-BLK W/BKS-XBO-NW-M-C-L R WALL MOUNT BRACKET	N/A	N/A	N/A	N/A
[Symbol]	J	41	LSI INDUSTRIES	GREENBRIAR WALL SCONCE - MEDIUM	WALL MOUNTED SCONCE; COLOR - BLACK	10'-0" COORDINATE WITH ARCH. PLANS	70W CFL	TYPE IV	5,200	0.75	GBWM-FT-7 D-CFL-F/IES	GBWM-FT-70-CFL-F-UE-BLK-BB	N/A	N/A	N/A	N/A
[Symbol]	K	4	LSI INDUSTRIES	GREENBRIAR WALL SCONCE - MEDIUM	WALL MOUNTED SCONCE; COLOR - BLACK	8'-0" COORDINATE WITH ARCH. PLANS	70W CFL	TYPE IV	5,200	0.75	GBWM-FT-7 D-CFL-F/IES	GBWM-FT-70-CFL-F-UE-BLK-BB	N/A	N/A	N/A	N/A
[Symbol]	L	8	LSI INDUSTRIES	BOLLARD	6" SQUARE ILLUMINATED BOLLARD; COLOR - BLACK	3'-6"	36W CFL	---	2,200	0.75	VBS-IL-32-CFL-CP-ES	VBS-IL-32-CFL-CA-M T-BLK-R-42	N/A	N/A	N/A	N/A

NOTE(S):
* FIXTURES FOR RESERVED PARKING ARE TO BE INSTALLED ONLY WHEN RESERVED PARKING IS CONSTRUCTED.

STATISTICS

DESCRIPTION	AVG.	MAX.	MIN.	MAX./MIN.	AVG./MIN.
10' ABC BUILDING PERIMETER	5.0fc	12.5fc	2.0fc	6.3:1	2.5:1
40' ABC BUILDING PERIMETER	3.6fc	12.5fc	1.0fc	12.5:1	3.6:1
ABC DRIVE AND TRUCK COURT*	2.3fc	13.3fc	0.5fc	26.6:1	4.6:1
ABC GUARD HOUSE	9.4fc	16.8fc	4.3fc	3.9:1	2.2:1
ABC VISITOR PARKING	1.8fc	4.2fc	1.0fc	4.2:1	1.8:1
ABC ASSOCIATE PARKING	2.2fc	6.8fc	1.1fc	6.0:1	2.0:1
ABC TRAILER PARKING (RESERVED)	1.4fc	3.0fc	0.8fc	5.0:1	2.3:1
ENTRANCE DRIVEWAY	1.2fc	4.0fc	0.5fc	8.0:1	2.4:1
MATRIX OVERALL	1.4fc	8.3fc	0.2fc	41.5:1	7.0:1

NOTES:
1. ABC TRAILER RESERVED PARKING VALUES ARE NOT INCLUDED IN THE ABC DRIVE AND TRUCK COURT ZONE.
2. LIGHT PHOTOMETRY AND CALCULATIONS FOR EXISTING AND ADJACENT LIGHTING TO REMAIN ARE NOT INCLUDED IN THE ABOVE STATISTICS.

Date	Description	No.
4/11/2016	REVISED ACCESS ROADS	4
3/18/2016	REVISED PER MEP AND ARCH. COORDINATION AND TOWN COMMENTS	3
1/25/2016	REVISED PER MEP COMMENTS, NYS DOT DESIGN, AND EMERGENCY ACCESS PATH	2
11/9/2015	REVISED PER TOWN COMMENTS	1

REVISIONS

SIGNATURE: MICHAEL SZURA DATE SIGNED: 04/11/2016
REGISTERED LANDSCAPE ARCHITECT
N.Y. LIC. NO. LA 001901-1

LANGAN

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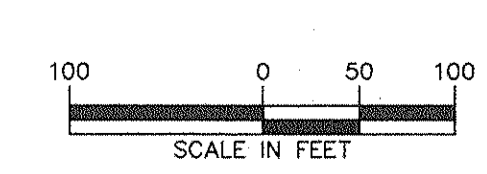
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Project: **MATRIX BUSINESS PARK AT NEWBURGH**
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ORANGE COUNTY NEW YORK
Drawing Title

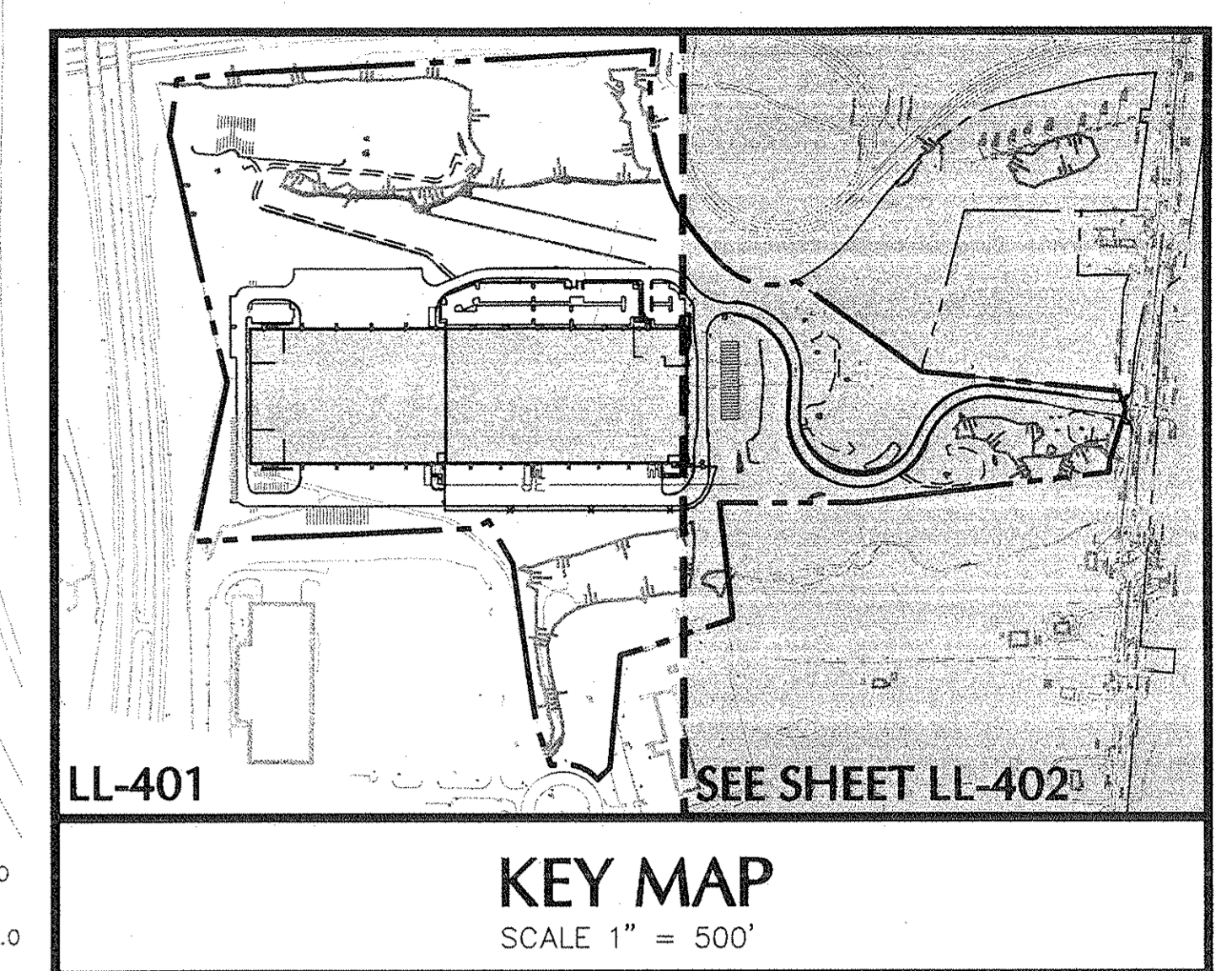
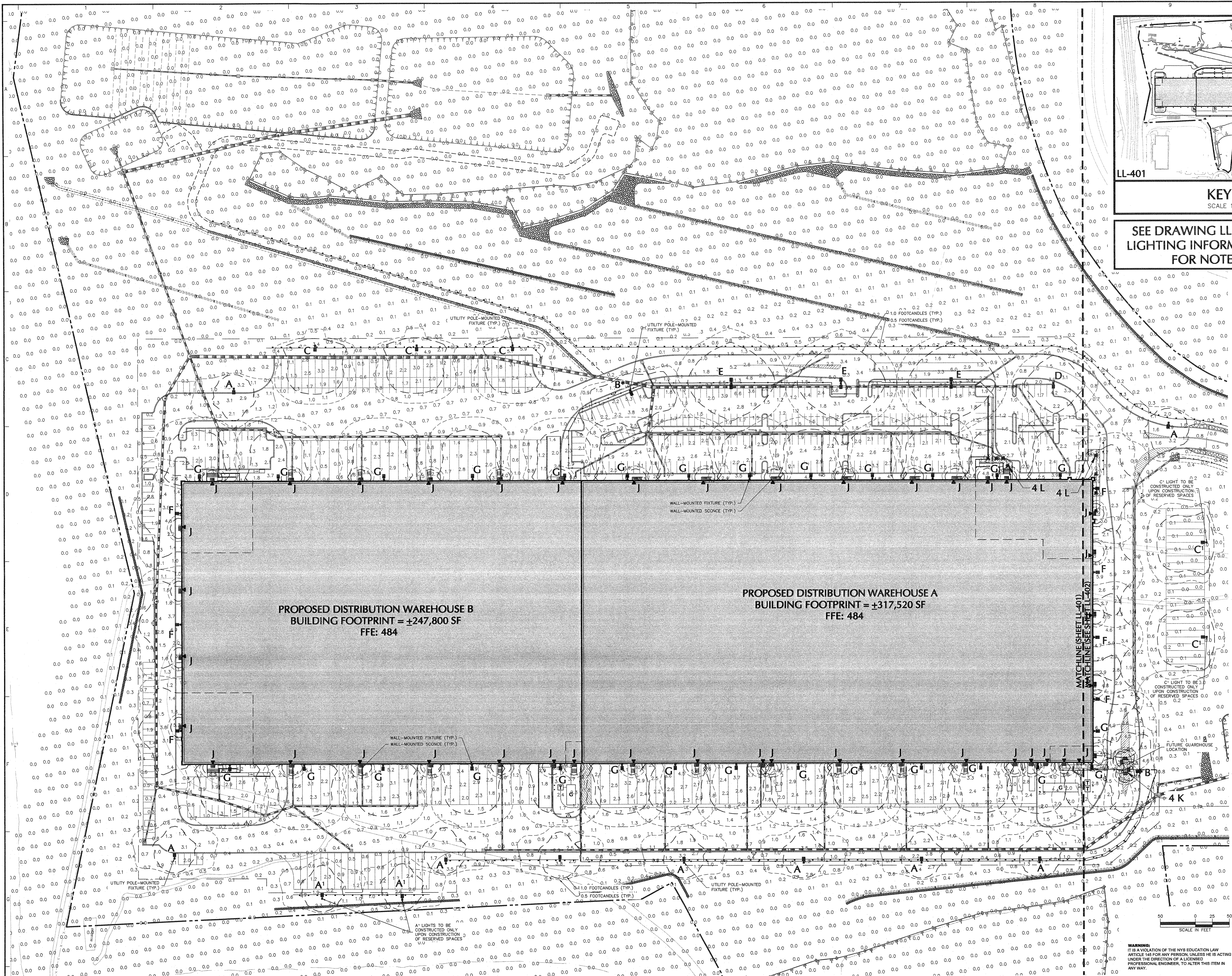
OVERALL LIGHTING PLAN

Project No. 9190601 Drawing No. LL-101
Date 9/9/2015
Scale 1" = 100'
Drawn By ALM
Submission Date 04/11/2016

SEE DRAWINGS LL401 AND LL402 FOR DETAILED LIGHTING INFORMATION




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SEE DRAWING LL-101 FOR OVERALL LIGHTING INFORMATION AND LL-501 FOR NOTES & DETAILS

Date	Description	No.
4/11/2016	REVISED ACCESS ROADS	4
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REVISIONS

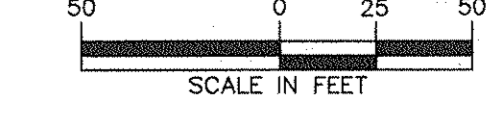

 04/11/2016 DATE SIGNED
 REGISTERED LANDSCAPE ARCHITECT
 N.Y. LIC. NO. LA 001901-1
LANGAN
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Project **MATRIX BUSINESS PARK AT NEWBURGH**
 TOWN OF NEWBURGH NEW YORK
 ORANGE COUNTY
 Drawing Title

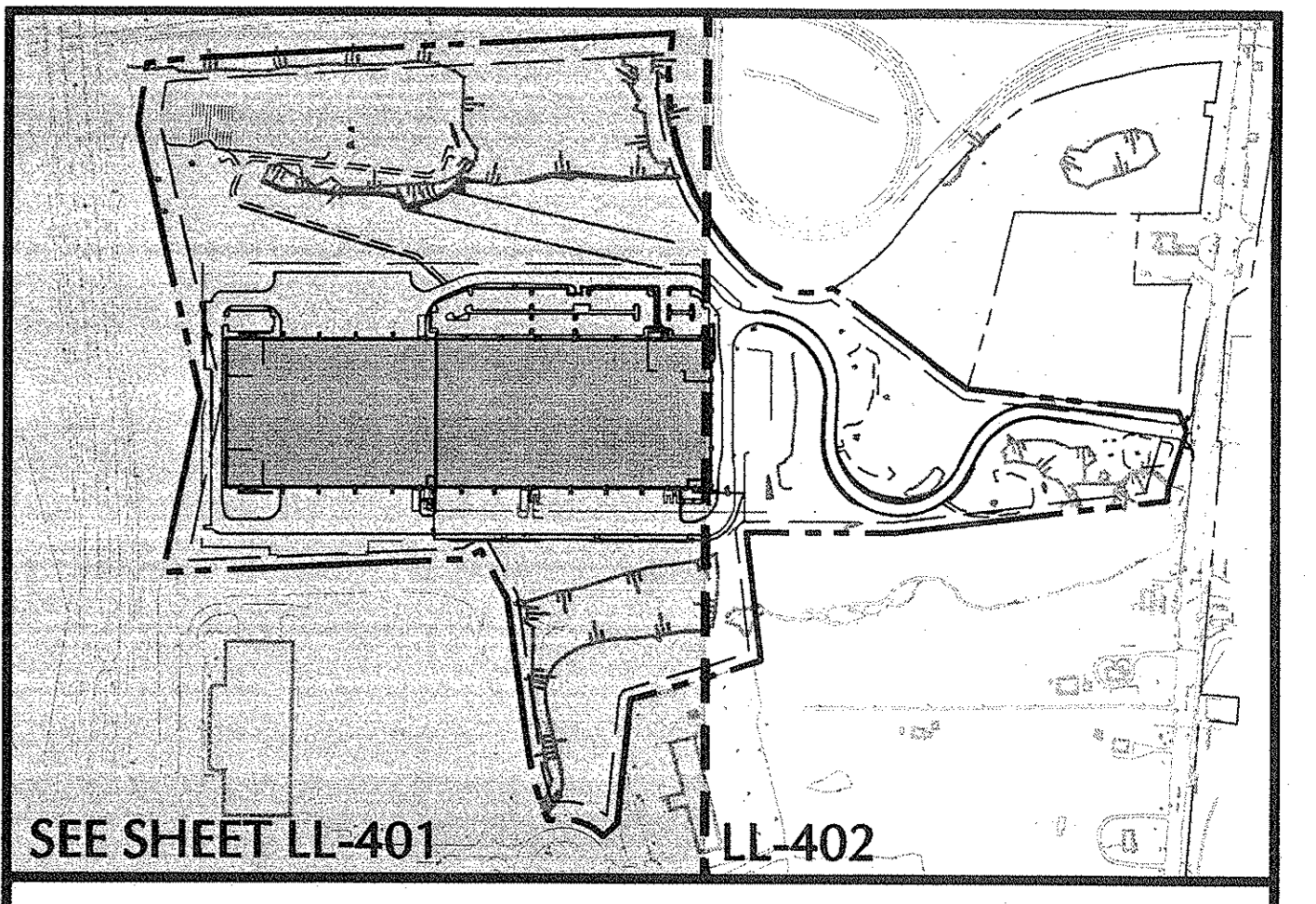
LIGHTING PLAN

Project No.	9190601	Drawing No.	LL-401
Date	9/9/2015	Scale	1" = 50'
Drawn By	ALM	Submission Date	04/11/2016

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PROJECT No. 9190601 SUBMISSION DATE: APRIL 11, 2016



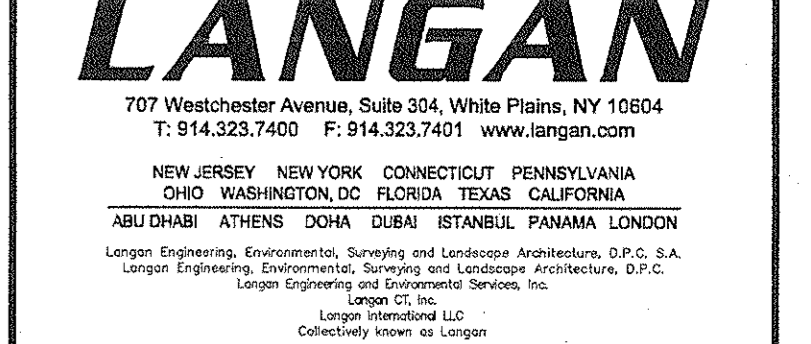
KEY MAP
SCALE 1" = 500'

SEE DRAWING LL-101 FOR OVERALL LIGHTING INFORMATION AND LL-501 FOR NOTES & DETAILS

Date	Description	No.
4/11/2016	REVISED ACCESS ROADS	3
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REVISIONS

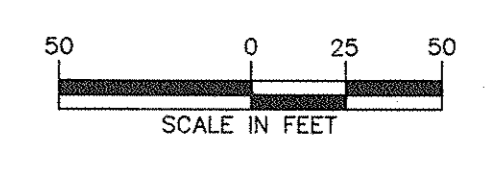
M. Szura
 SIGNATURE DATE SIGNED 04/11/2016
 REGISTERED LANDSCAPE ARCHITECT
 N.Y. LIC. NO. LA 001901-1



Project **MATRIX BUSINESS PARK AT NEWBURGH**
 TOWN OF NEWBURGH
 ORANGE COUNTY NEW YORK

LIGHTING PLAN

Project No.	9190601	Drawing No.	LL-402
Date	9/9/2015		
Scale	1" = 50'		
Drawn By	RAC		
Submission Date	04/11/2016		

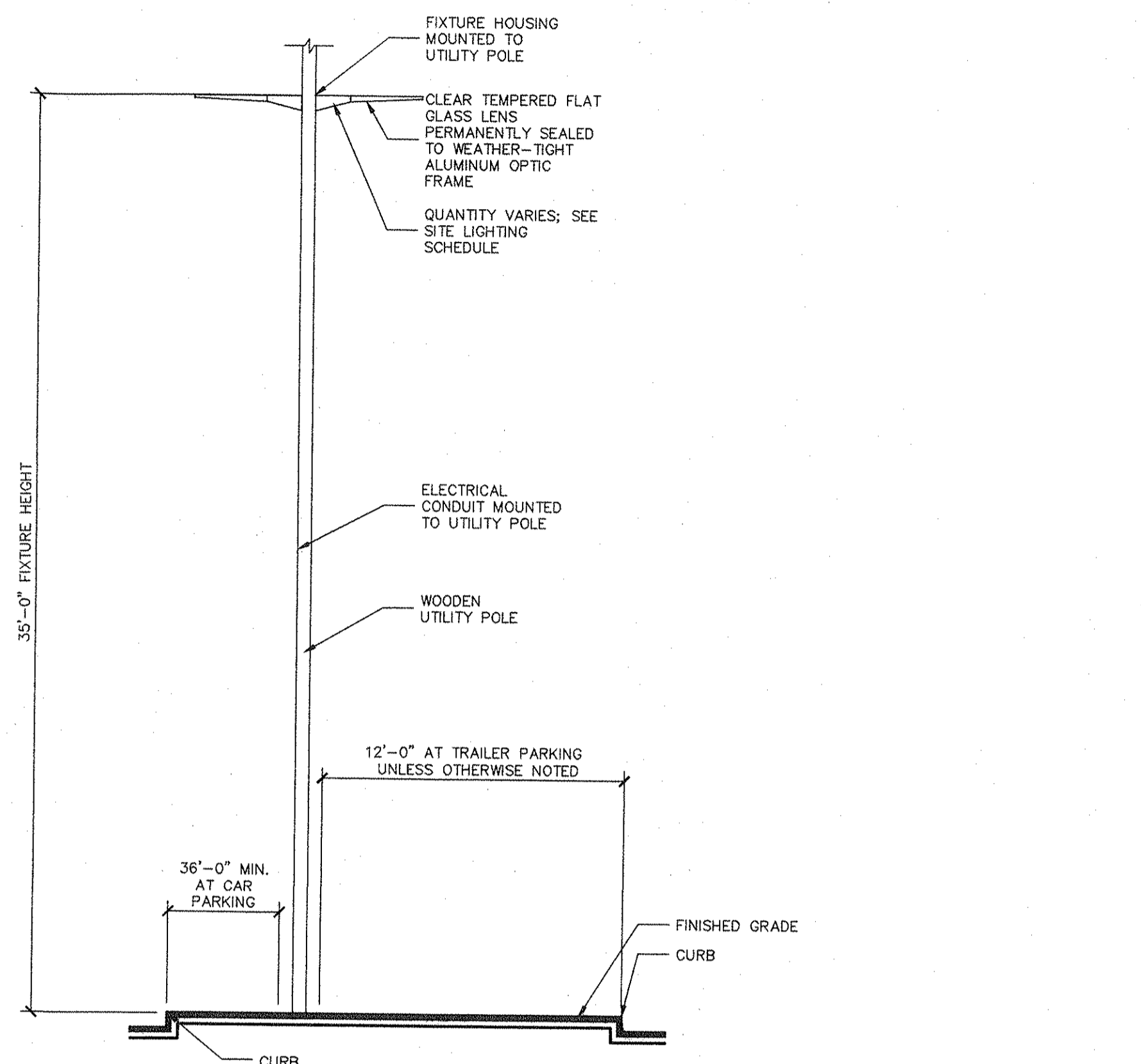


WARNING:
 IT IS A VIOLATION OF THE NYS EDUCATION LAW ARTICLE 145 FOR ANY PERSON, UNLESS HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS ITEM IN ANY WAY.

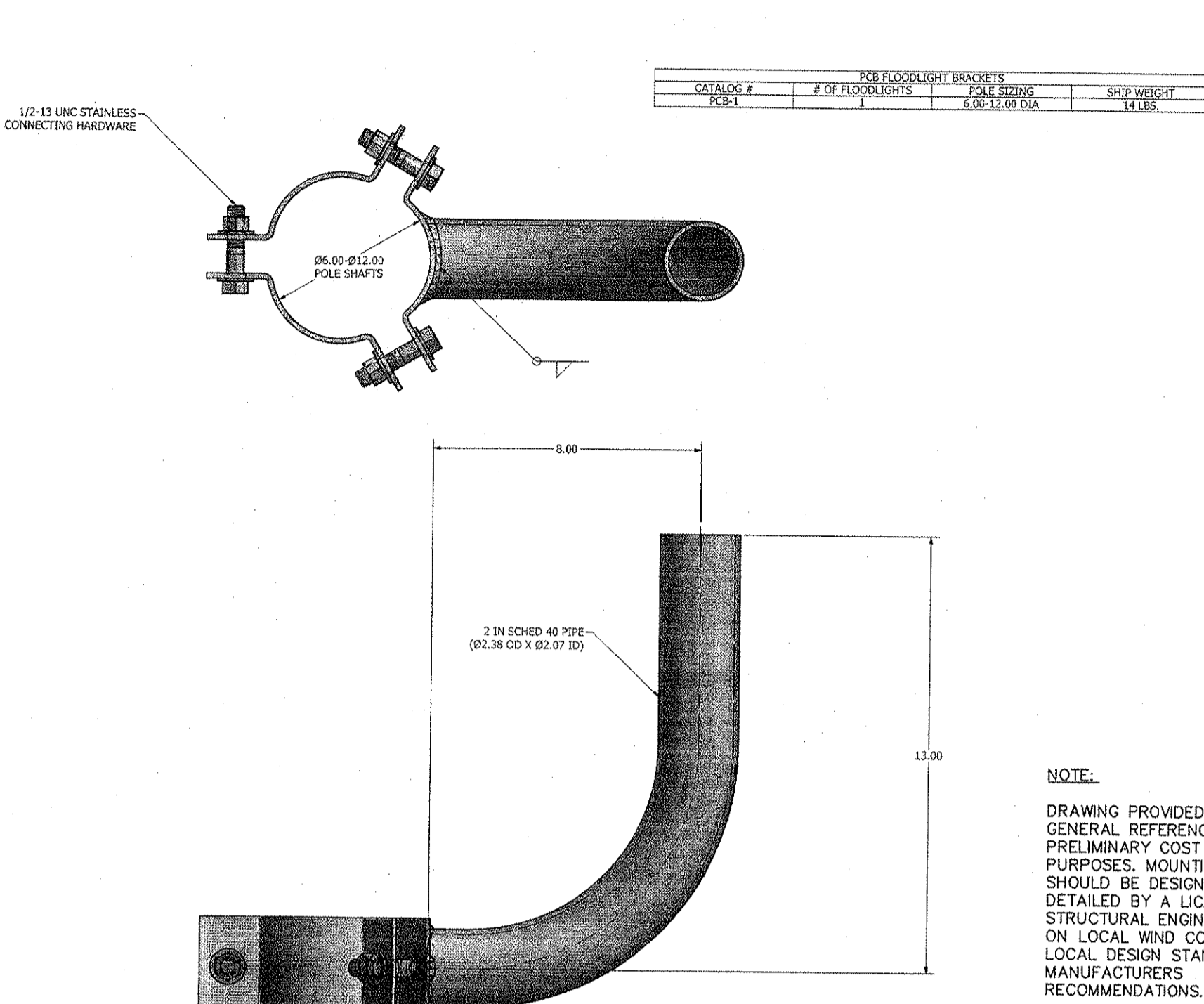
GENERAL LIGHTING NOTES:

- PROVIDE CONCRETE BASE FOR LIGHT POLES AT LOCATION INDICATED ON THE CONSTRUCTION DOCUMENTS AND IN ACCORDANCE WITH PROJECT PLANS AND SPECIFICATIONS RELATING DIRECTLY TO CAST-IN-PLACE CONCRETE.
- CONTRACTOR TO COORDINATE INSTALLATION OF UNDERGROUND FEEDER CABLE FOR EXTERIOR LIGHTING WITH EXISTING AND PROPOSED UTILITIES, SITE DRAINAGE SYSTEMS, AND PAVING. CONTRACTOR SHALL PROMPTLY NOTIFY THE OWNER'S REPRESENTATIVE SHOULD ANY UTILITIES, NOT SHOWN ON THE PLANS, BE FOUND DURING EXCAVATIONS.
- CONTRACTOR TO OPERATE EACH LUMINAIRE AFTER INSTALLATION AND CONNECTION. INSPECT FOR IMPROPER CONNECTIONS AND OPERATION.
- AIM AND ADJUST ALL LUMINAIRES TO PROVIDE ILLUMINATION LEVELS AND DISTRIBUTION AS INDICATED ON THE CONSTRUCTION DRAWINGS OR AS DIRECTED BY THE LANDSCAPE ARCHITECT AND/OR OWNER.
- CONTRACTOR TO COORDINATE ALL INSTALLATION OF WALL MOUNTED FIXTURES AND ELECTRICAL CONNECTIONS TO SITE STRUCTURE(S) WITH BUILDING MEP, ARCHITECT, AND/OR OWNER.
- INSTALLATION OF ALL LIGHTING FIXTURES, POLES, FOOTINGS, AND FEEDER CABLE TO BE COORDINATED WITH ALL SITE WORK TRACES TO AVOID CONFLICT WITH FINISHED AND PROPOSED WORK.
- POINT SPACING ON PLANE OF CALCULATION IS 20 FT. LEFT TO RIGHT AND 20 FT. TOP TO BOTTOM. POINT BY POINT CALCULATIONS ARE BASED ON A 0.75 TO 0.95 MAINTENANCE FACTOR.
- POINT-BY-POINT CALCULATIONS PROVIDED WITHIN HAVE BEEN PREPARED IN ACCORDANCE TO IESNA STANDARDS AND IN CONSIDERATION OF THE VARIABLES WITHIN THESE NOTES AND SITE LIGHTING SCHEDULE. THE VALUES SHOWN ON THE PLANS ARE NOT AN INDICATION OF THE INITIAL LIGHT INTENSITIES OF THE LAMPS. THESE VALUES ARE AN APPROXIMATION OF THE MAINTAINED INTENSITIES DELIVERED TO THE GROUND PLANE USING INDUSTRY ACCEPTABLE LIGHT LOSS FACTORS (LLF) WHICH COVER LAMP DEGRADATION AND NATURAL LIGHTING. PHYSICAL OBSTRUCTIONS, AMBIENT OR ADJACENT LIGHT SOURCES AND/OR OTHER POTENTIAL IMPACTS HAVE NOT BEEN INCLUDED IN THESE CALCULATIONS. THEREFORE, AS-BUILT LIGHT INTENSITIES MAY VARY, IN EITHER DIRECTION, FROM WHAT IS EXPLICITLY PORTRAYED WITHIN THESE DRAWINGS.
- ALL SITE LIGHTING RELATED WORK AND MATERIALS SHALL COMPLY WITH CITY, COUNTY, AND OTHER APPLICABLE GOVERNING AUTHORITY REQUIREMENTS.
- SITE ELECTRICAL CONTRACTOR TO COORDINATE LOCATION OF EASEMENTS, UNDERGROUND UTILITIES AND DRAINAGE BEFORE DRILLING POLE BASES.
- SITE ELECTRICAL CONTRACTOR TO COORDINATE POWER SOURCE WITH LIGHT FIXTURES TO INSURE ALL SITE LIGHTING IS OPERATING EFFECTIVELY, EFFICIENTLY AND SAFELY.
- SITE ELECTRICAL CONTRACTOR SHALL CONFIRM THAT LIGHT FIXTURES MATCH SPECIFICATIONS ON THIS PLAN.
- REFER TO ELECTRIFICATION PLAN FOR PROVIDING ADEQUATE POWER FOR SITE LIGHTING.
- SITE ELECTRICAL CONTRACTOR SHALL EXAMINE AND VERIFY THAT SOIL CONDITIONS ARE SUITABLE TO SUPPORT LOADS EXERTED UPON THE FOUNDATIONS DURING EXCAVATION. CONTRACTOR SHALL NOTIFY ENGINEER OF UNSATISFACTORY CONDITIONS.
- POLE FOUNDATIONS SHALL NOT BE POURED IF FREE STANDING WATER IS PRESENT IN EXCAVATED AREA.
- ELECTRIFICATION AND INSTALLATION OF WALL MOUNTED FIXTURES SHALL BE COORDINATED WITH THE ARCHITECTURAL, STRUCTURAL, AND SITE DRAWINGS FOR SAFETY AND TO PREVENT EXPOSED WIRING.
- LIGHTING SUBSTITUTION REQUIREMENTS:
 - ALL SUBSTITUTIONS MUST BE MADE WITHIN 14 DAYS PRIOR TO THE BID DATE TO PROVIDE AMPLIFIED TIME FOR REVIEW AND TO ISSUE AN ADDENDUM INCORPORATING THE SUBSTITUTION WITH THE FOLLOWING REQUIREMENTS:
 - ANY SUBSTITUTION TO LIGHTING FIXTURES, POLES, ETC. MUST BE APPROVED BY THE OWNER, ENGINEER, AND TENANTS.
 - COMPUTER PREPARED PHOTOMETRIC LAYOUT OF THE PROPOSED LIGHTED AREA WHICH INDICATES BY ISOFOOTCANDLE THE SYSTEM'S PERFORMANCE.
 - A PHOTOMETRIC REPORT FROM A NATIONAL INDEPENDENT TESTING LABORATORY WITH REPORT NUMBER, DATE, FIXTURE CATALOG NUMBER, LUMINAIRE AND LAMP SPECIFICATIONS, IES CALCULATIONS, CANDELE, TABULATIONS, ZONE LUMEN SUMMARY, ISOLUX PLOT, AND CATALOGUE CUTS. CATALOGUE CUTS MUST IDENTIFY, BUT NOT LIMITED TO, OPTICS, LAMP TYPE, DISTRIBUTION TYPE, REFLECTOR, LENS, BALLASTS, WATTAGE, VOLTAGE, FINISH, AND HOUSING DESCRIPTION.
 - POLE MANUFACTURER ASHOTO CALCULATIONS INDICATING THE POLE AND ANCHOR BOLTS BEING SUBMITTED ARE CAPABLE OF SUPPORTING THE POLE AND FIXTURE SYSTEMS BEING UTILIZED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
 - THE UNDERWRITERS LABORATORY LISTING AND FILE NUMBER FOR THE SPECIFIC FIXTURE(S) TO BE UTILIZED.
 - A COLOR PHOTOGRAPH THAT CLEARLY SHOWS THE REPLACEMENT FIXTURE POLE MOUNTED, THE FIXTURE'S COLOR, FINISH, AND PHYSICAL CHARACTERISTICS.
- EXAMPLE PHOTOMETRIC LIGHTING TEMPLATE:

NOTE: THE PHOTOMETRIC TEMPLATE REPRESENTS LIGHT THROW FOR EACH INDIVIDUAL FIXTURE. IT DOES NOT REPRESENT LIGHT COMING FROM OTHER SOURCES.
- LIGHTING LAYOUT COMPLIES WITH THE ILLUMINATION ENGINEERING SOCIETY OF NORTH AMERICA (IESNA) SAFETY STANDARDS FOR LIGHT LEVELS.

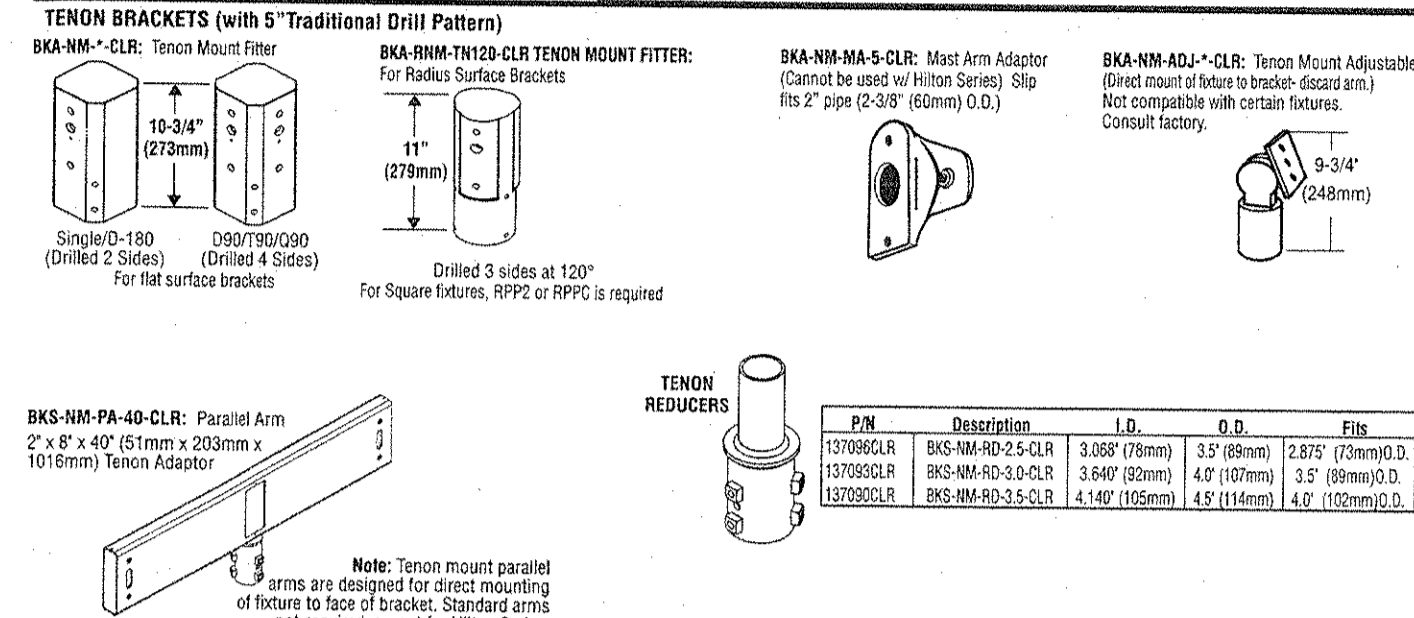


WOOD UTILITY POLE DETAIL FOR FIXTURES A, B, C, D AND E NTS



WOOD UTILITY POLE MOUNTING BRACKET FOR FIXTURES A, B, C, D AND E NTS

AREA LIGHTING BRACKETS - TENON MOUNT



BRACKET ORDERING INFORMATION

Bracket Designation	Bracket Type	Bracket Configuration	Length	Bracket Finish	Options	EPA Values *
BKS - Bracket Steel	MM - Tenon Mount	PK - Parallel Mount	27	BRZ - Bronze	BLK - Black FLP - Platinum Plus WH - White GFI - Granite SIS - Satin White Green MSV - Metallic Silver	3.0 0.1 0.1 0.5 0.5 0.5
BKA - Bracket Aluminum	MM - Tenon Mount	PK - Parallel Mount	27	BRZ - Bronze	BLK - Black FLP - Platinum Plus WH - White GFI - Granite SIS - Satin White Green MSV - Metallic Silver	3.0 0.1 0.1 0.5 0.5 0.5
BKA-AD - Bracket Aluminum	MM - Tenon Mount	PK - Parallel Mount	27	BRZ - Bronze	BLK - Black FLP - Platinum Plus WH - White GFI - Granite SIS - Satin White Green MSV - Metallic Silver	3.0 0.1 0.1 0.5 0.5 0.5

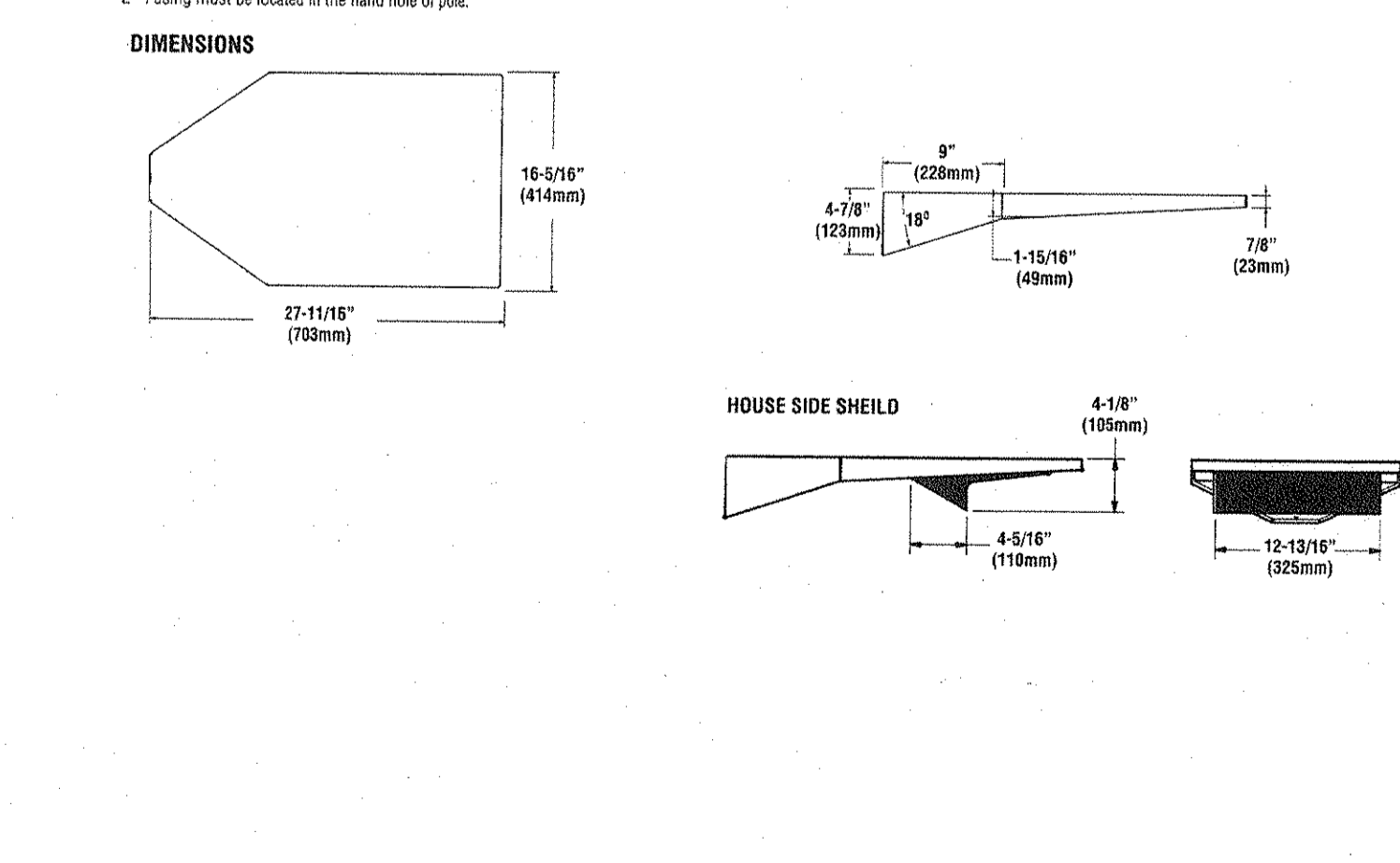
NOTE: Standard slip-fit fits 2x4x8 D.O. max (2.5 pin tenon)

LED AREA LIGHTS - LSI SLICE SMALL (XLCS)

LUMINAIRE ORDERING INFORMATION

TYPICAL ORDER EXAMPLE: **XLCS 5 LED SS CW UE BLK PCH120**

Profile	Distribution	Light Source	Drive Current	Color Temperature	Input Voltage	Finish	Options
XLCS 3 - Type III	5 - Type V	FT - Forward Throw	100	5000K	120-277V	BLK - Black WH - White	SIM - 0-10V Dimming (Dimmer not included) Available with High Output (HO) beam control only



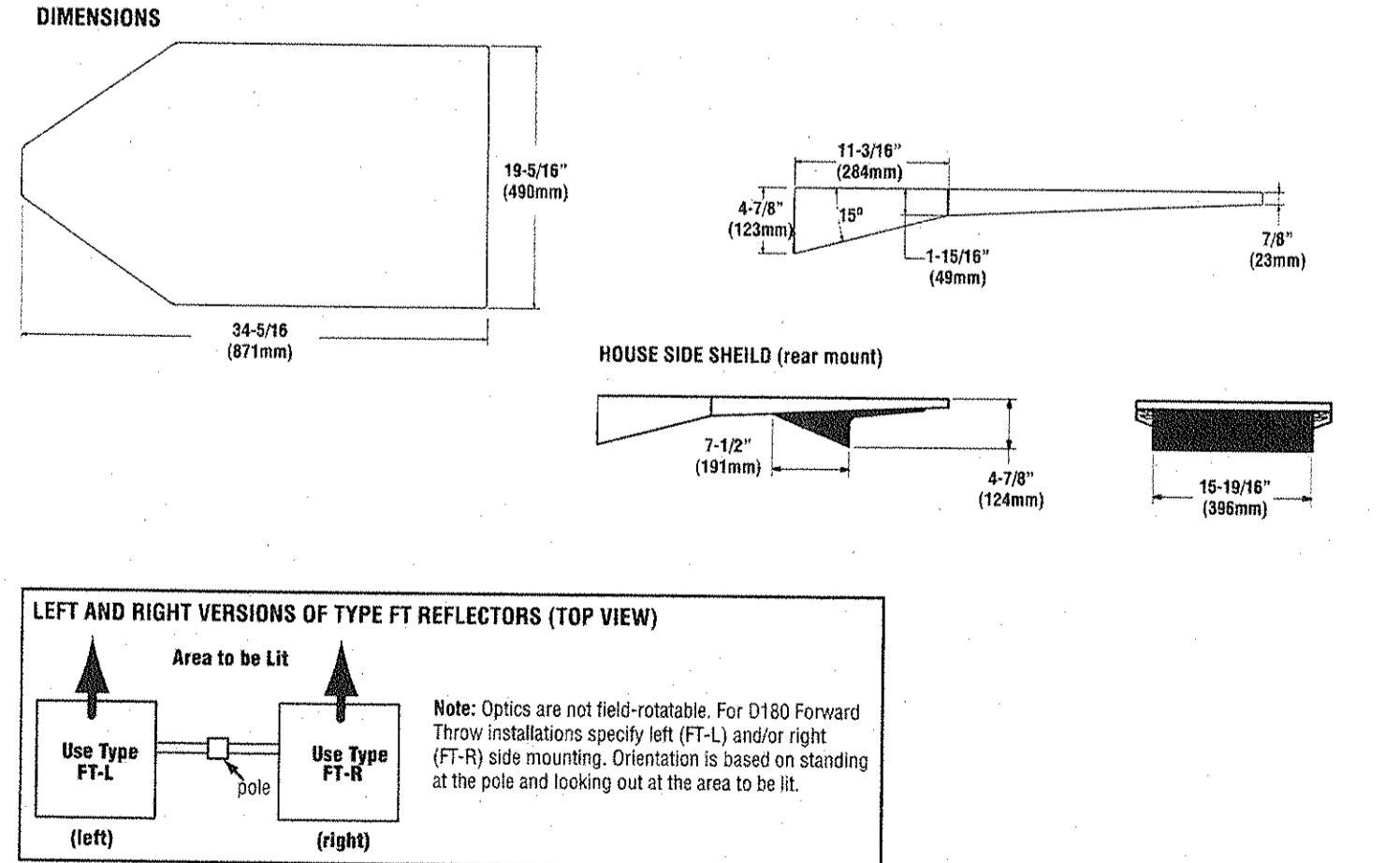
FIXTURE TYPE A CUTSHEET

LED AREA LIGHTS - LSI SLICE MEDIUM (XLCM)

LUMINAIRE ORDERING INFORMATION

TYPICAL ORDER EXAMPLE: **XLCM 5 LED SS CW UE BLK PCH120**

Profile	Distribution	Light Source	Drive Current	Color Temperature	Input Voltage	Finish	Options
XLCM 3 - Type III	5 - Type V	FT - Forward Throw	100	5000K	120-277V	BLK - Black WH - White	SIM - 0-10V Dimming (Dimmer not included) Available with High Output (HO) beam control only



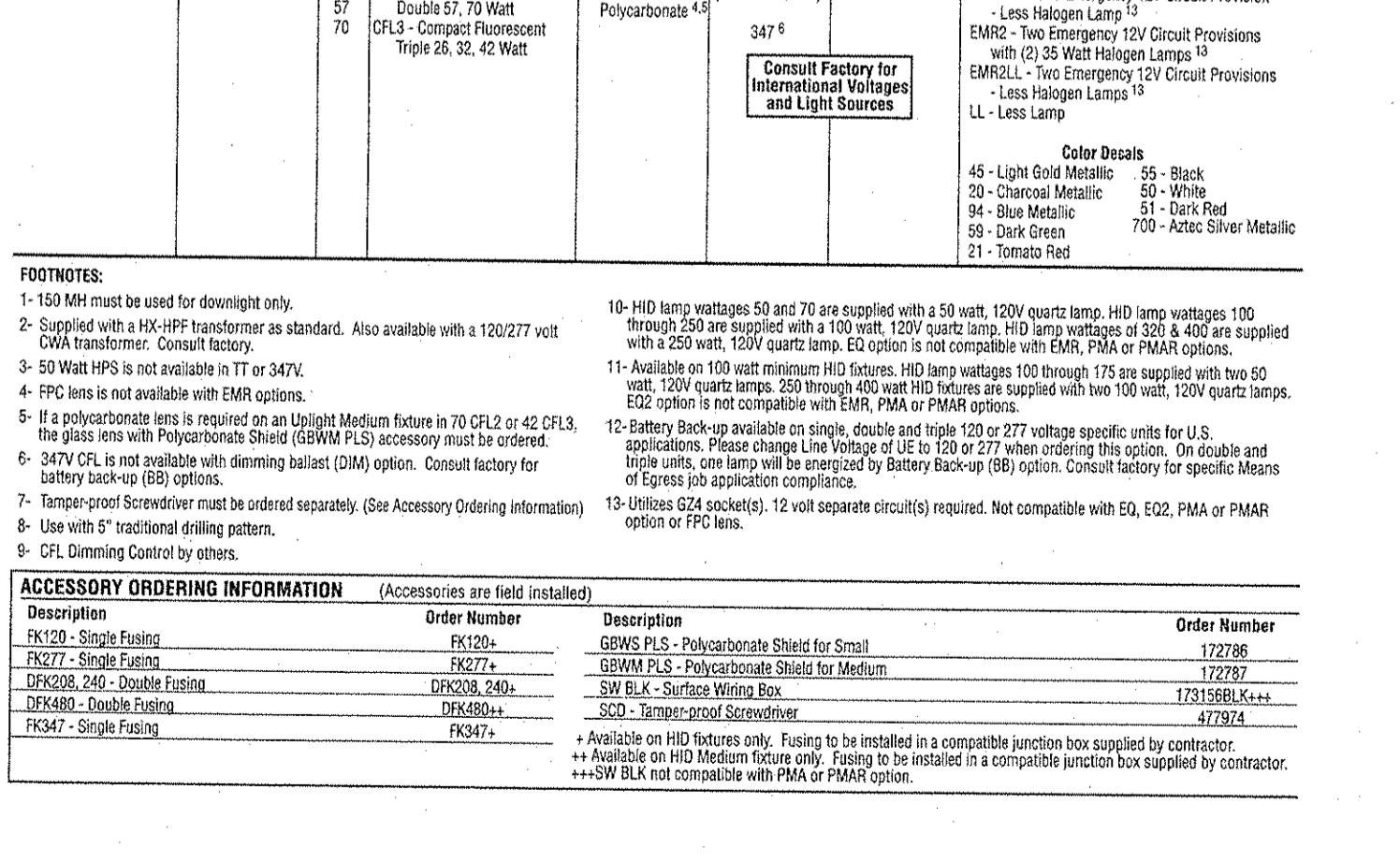
FIXTURE TYPE B, C, D, E, F, AND G CUTSHEET

GREENBRIAR® WALL SCENCE

LUMINAIRE ORDERING INFORMATION

TYPICAL ORDER EXAMPLE: **GBWM 3 400 PSMHR F 120 BRZ SQT**

Luminaire Profile	Distribution	Lamp	Light Source	Lens	Line Voltage	Luminaire Finish	Options
GBWM (Square)	3 - Type III	400	CMH - Compact Metal Halide	Tempered Glass	120	BRZ - Bronze	PC103 - Button-Type Photocell PC105 - Button-Type Photocell PC106 - Button-Type Photocell PC107 - Button-Type Photocell PC108 - Button-Type Photocell PC109 - Button-Type Photocell PC110 - Button-Type Photocell PC111 - Button-Type Photocell PC112 - Button-Type Photocell PC113 - Button-Type Photocell PC114 - Button-Type Photocell PC115 - Button-Type Photocell PC116 - Button-Type Photocell PC117 - Button-Type Photocell PC118 - Button-Type Photocell PC119 - Button-Type Photocell PC120 - Button-Type Photocell



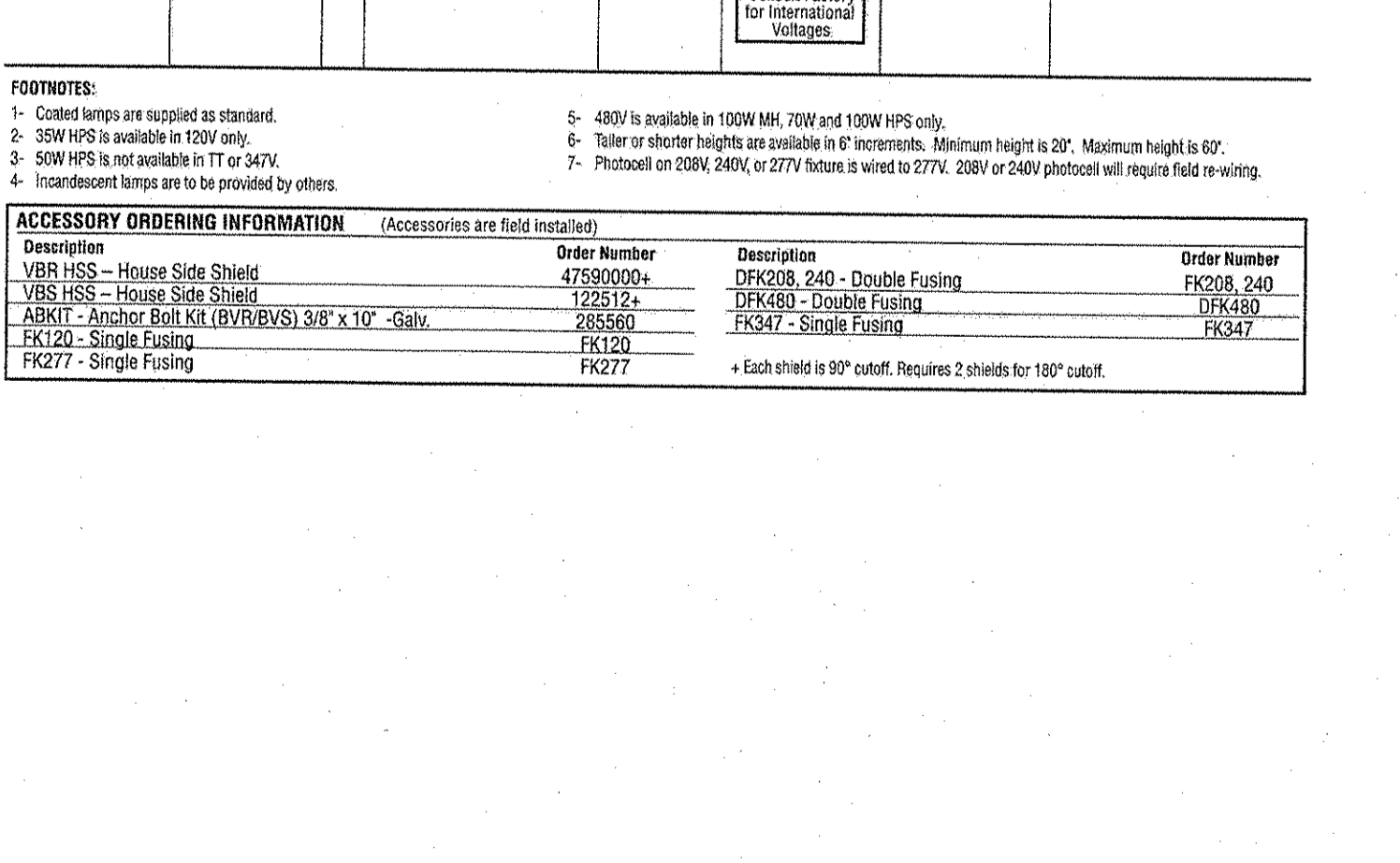
FIXTURE TYPE J AND K CUTSHEET

BOLLARD

LUMINAIRE ORDERING INFORMATION

TYPICAL ORDER EXAMPLE: **VBR ID 100 MH CA MT BRZ PC120**

Luminaire Profile	Distribution	Lamp	Light Source	Lens	Line Voltage	Luminaire Finish	Options
VBR - Square	ID - Inverted	100	CMH - Compact Metal Halide	Tempered Glass	120	BRZ - Bronze	PC103 - Button-Type Photocell PC105 - Button-Type Photocell PC106 - Button-Type Photocell PC107 - Button-Type Photocell PC108 - Button-Type Photocell PC109 - Button-Type Photocell PC110 - Button-Type Photocell PC111 - Button-Type Photocell PC112 - Button-Type Photocell PC113 - Button-Type Photocell PC114 - Button-Type Photocell PC115 - Button-Type Photocell PC116 - Button-Type Photocell PC117 - Button-Type Photocell PC118 - Button-Type Photocell PC119 - Button-Type Photocell PC120 - Button-Type Photocell



FIXTURE TYPE L CUTSHEET

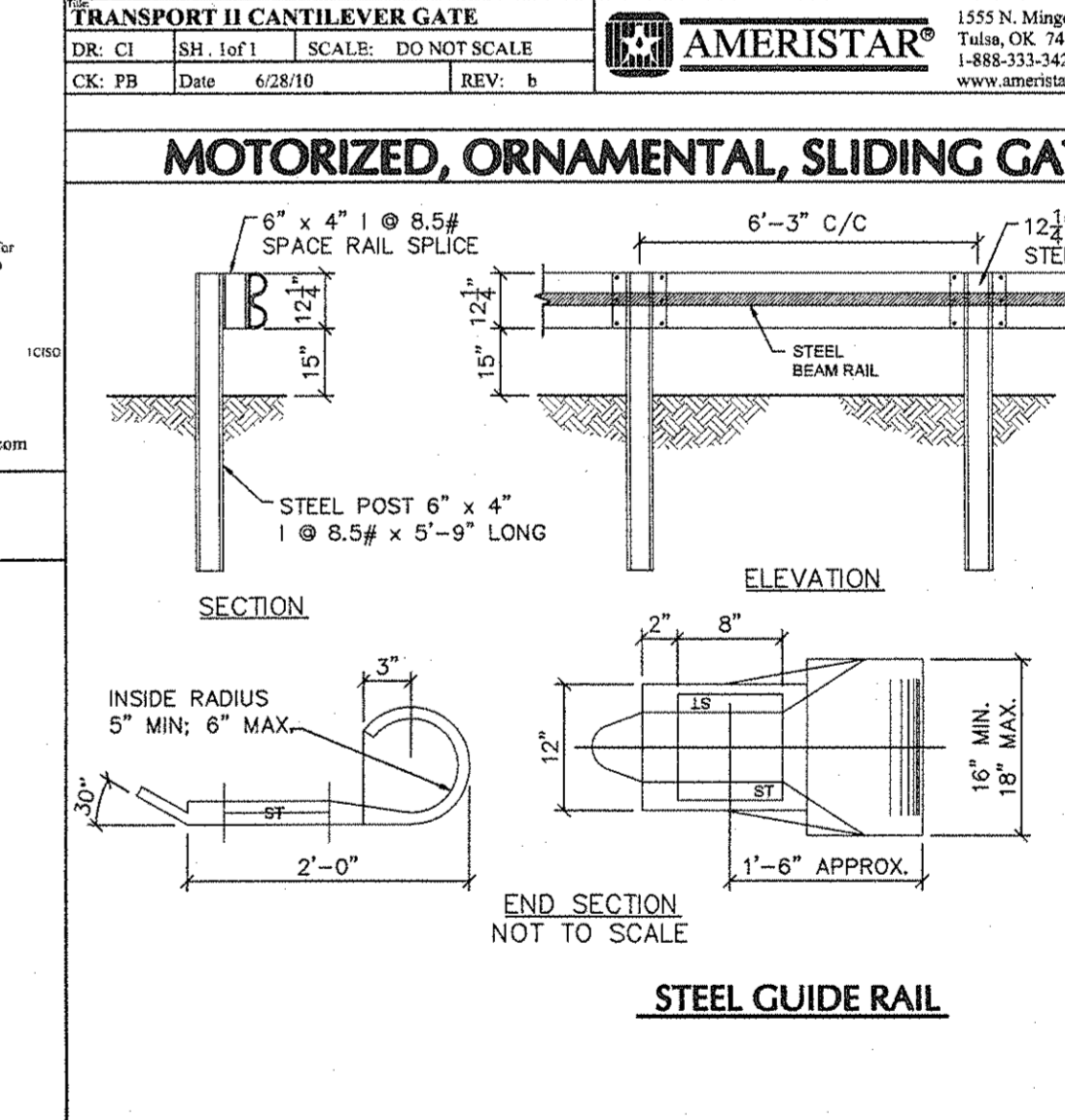
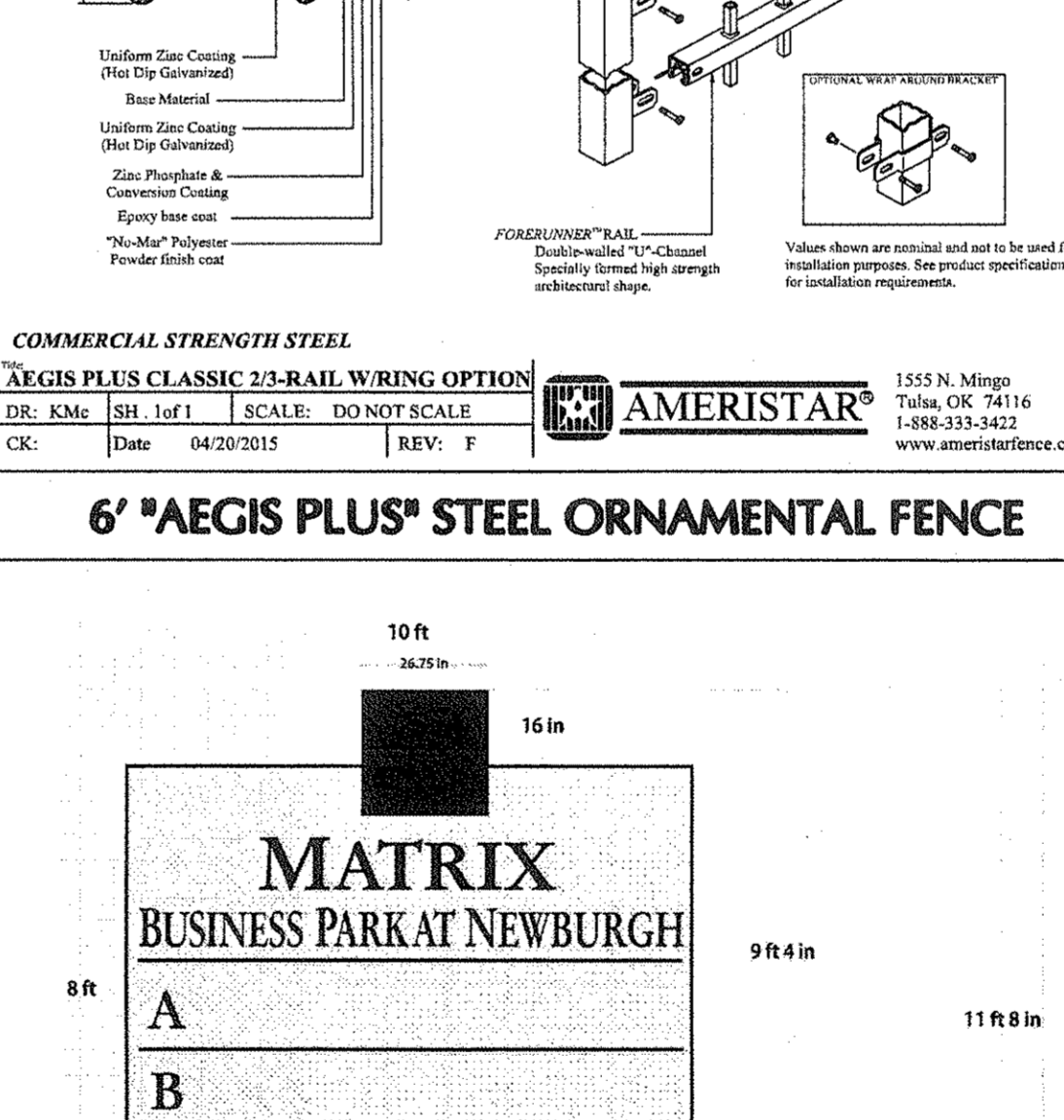
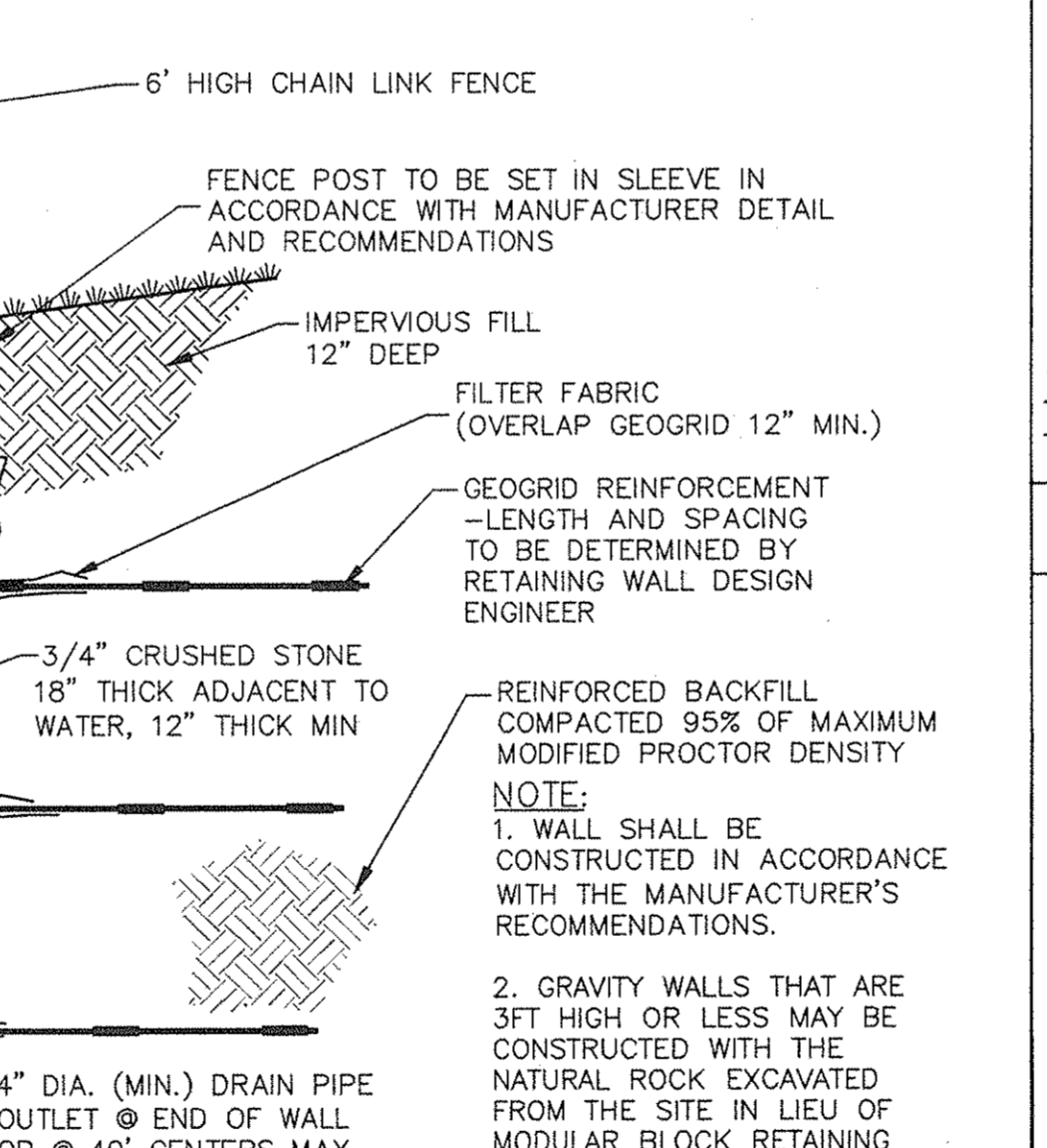
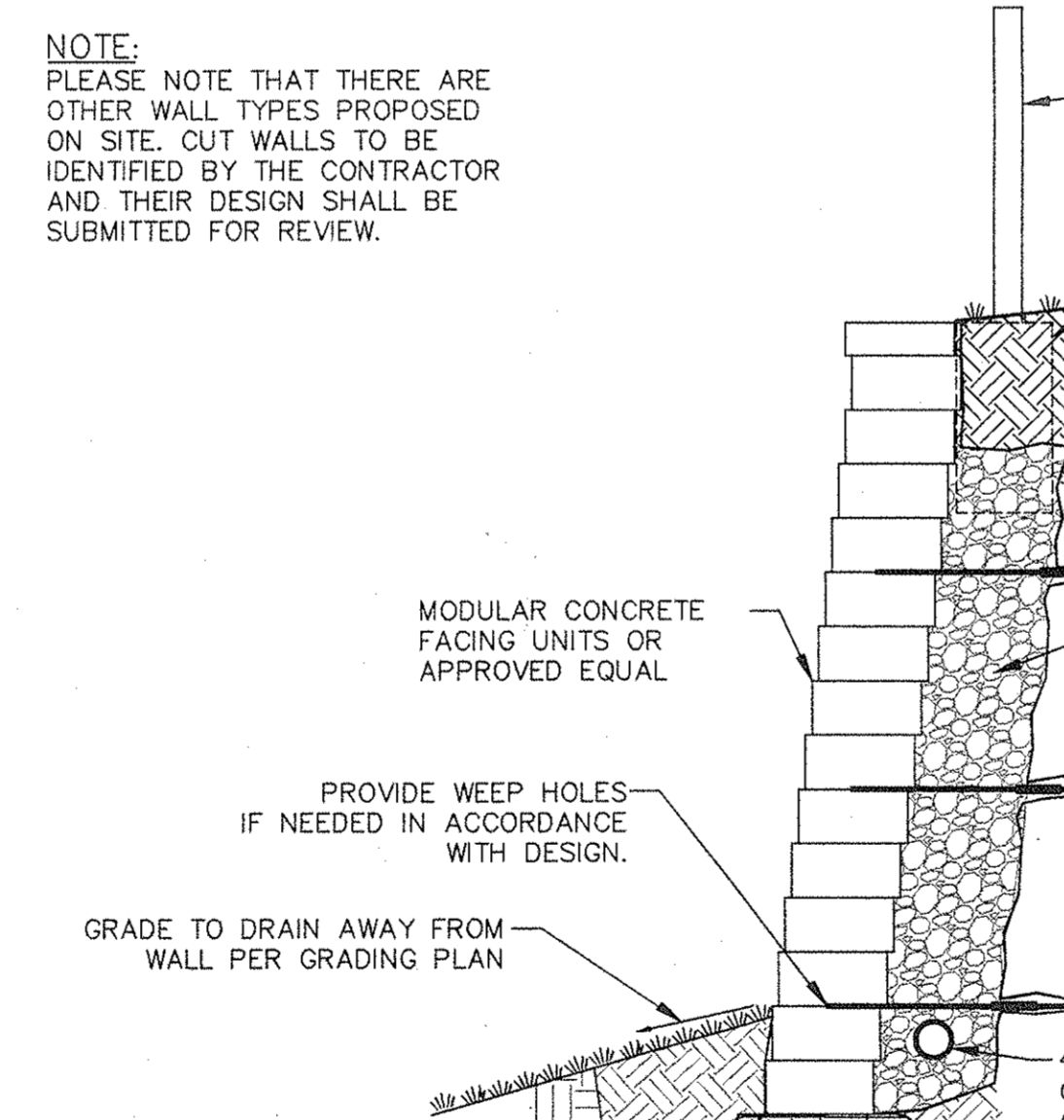
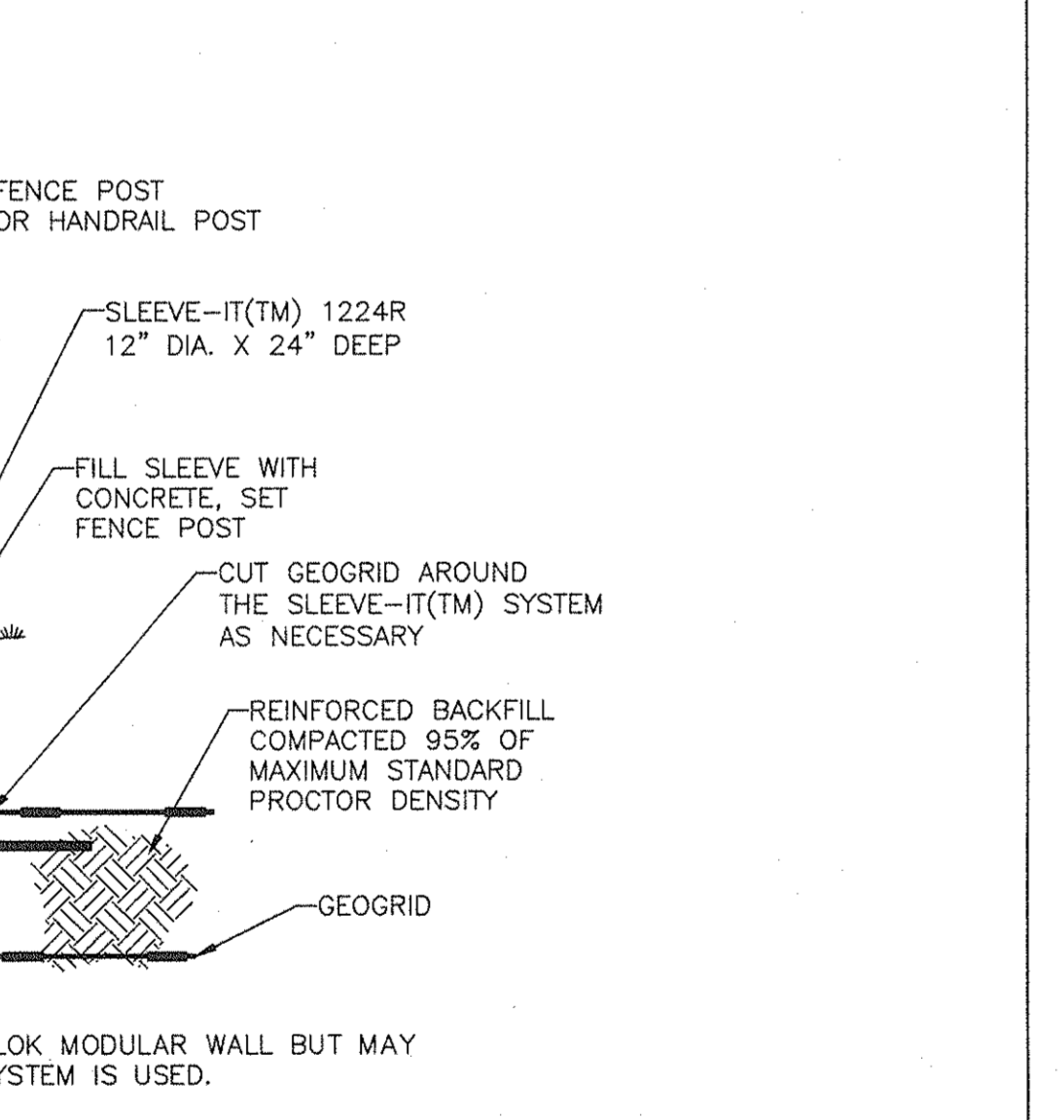
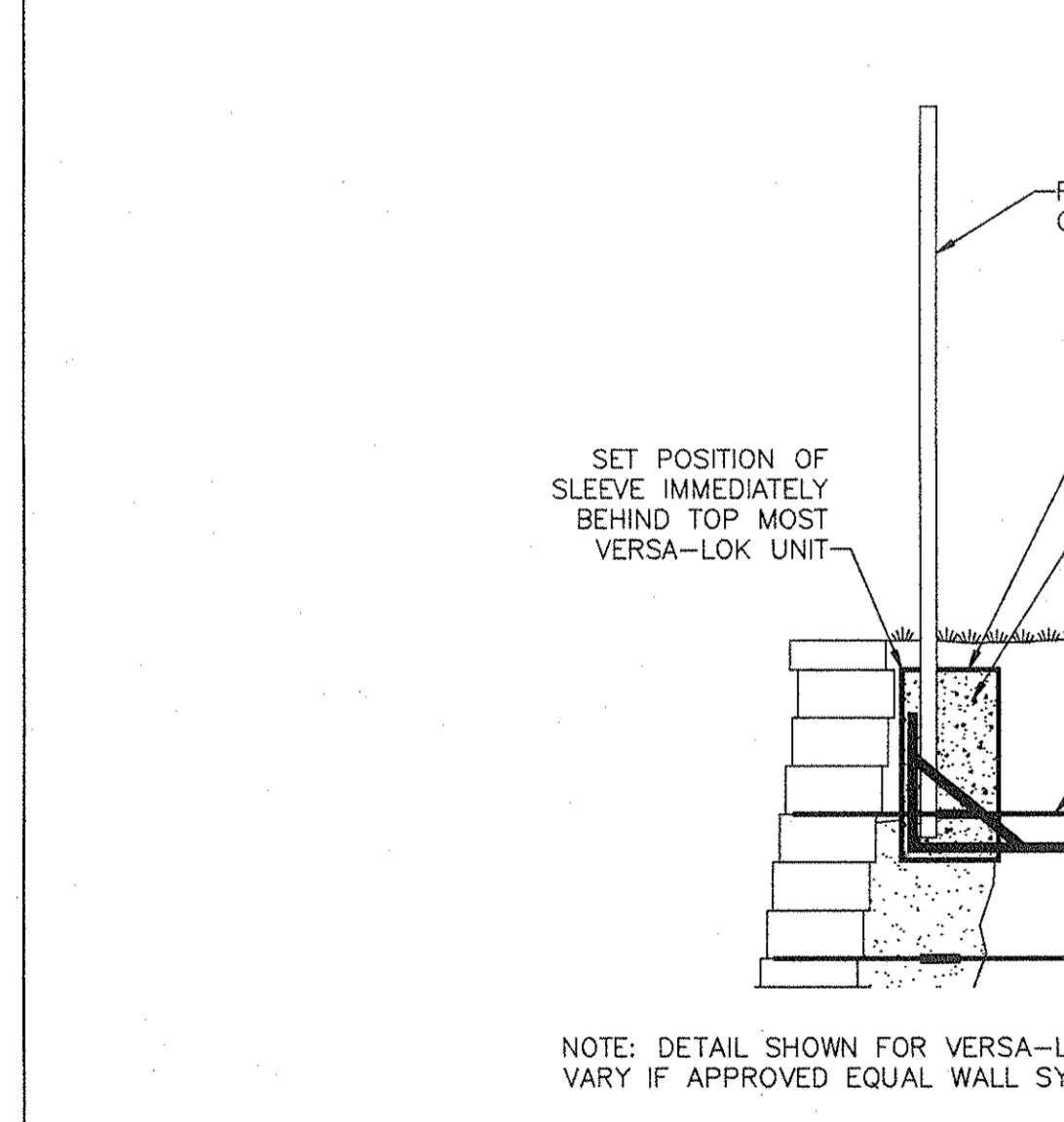
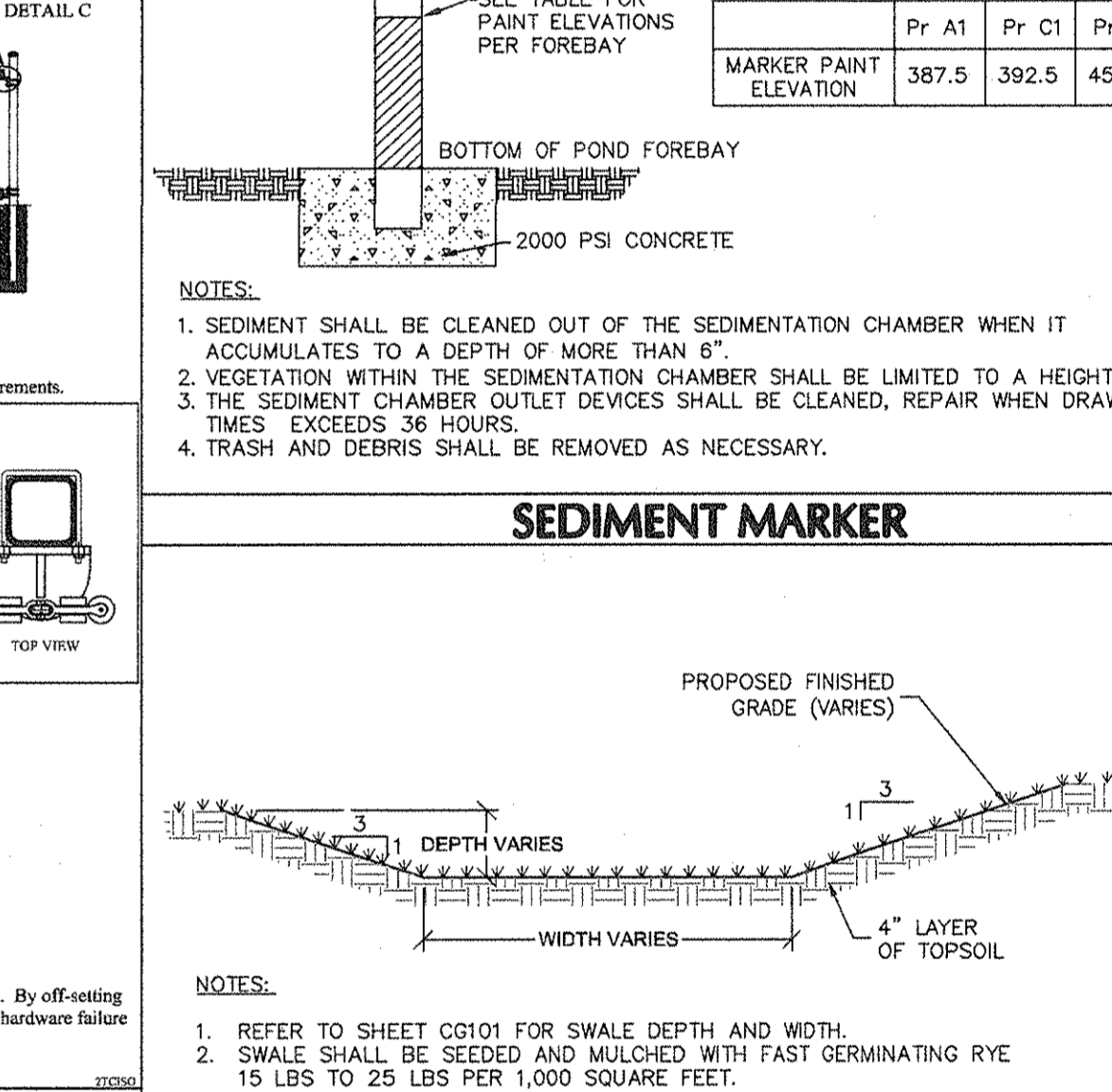
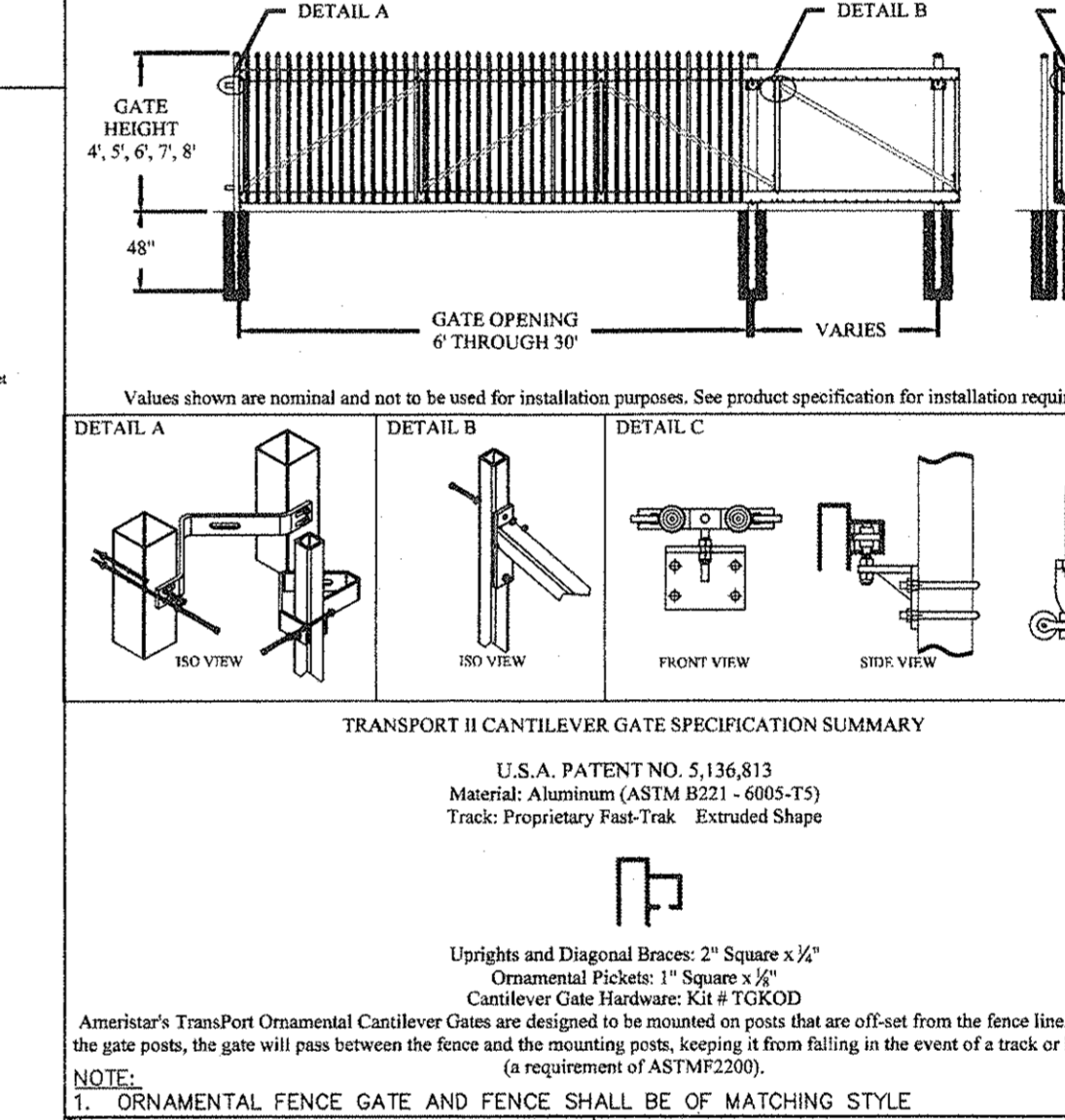
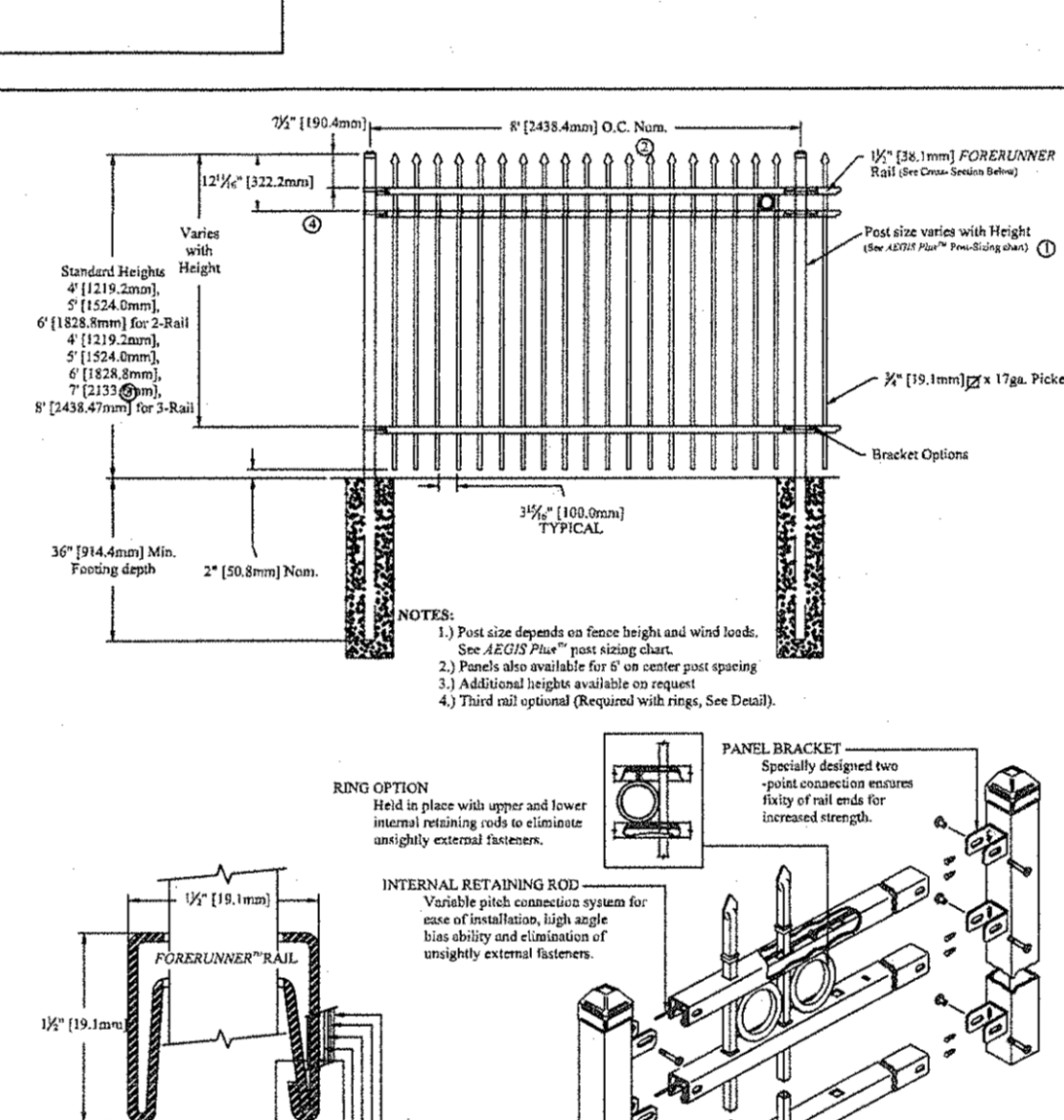
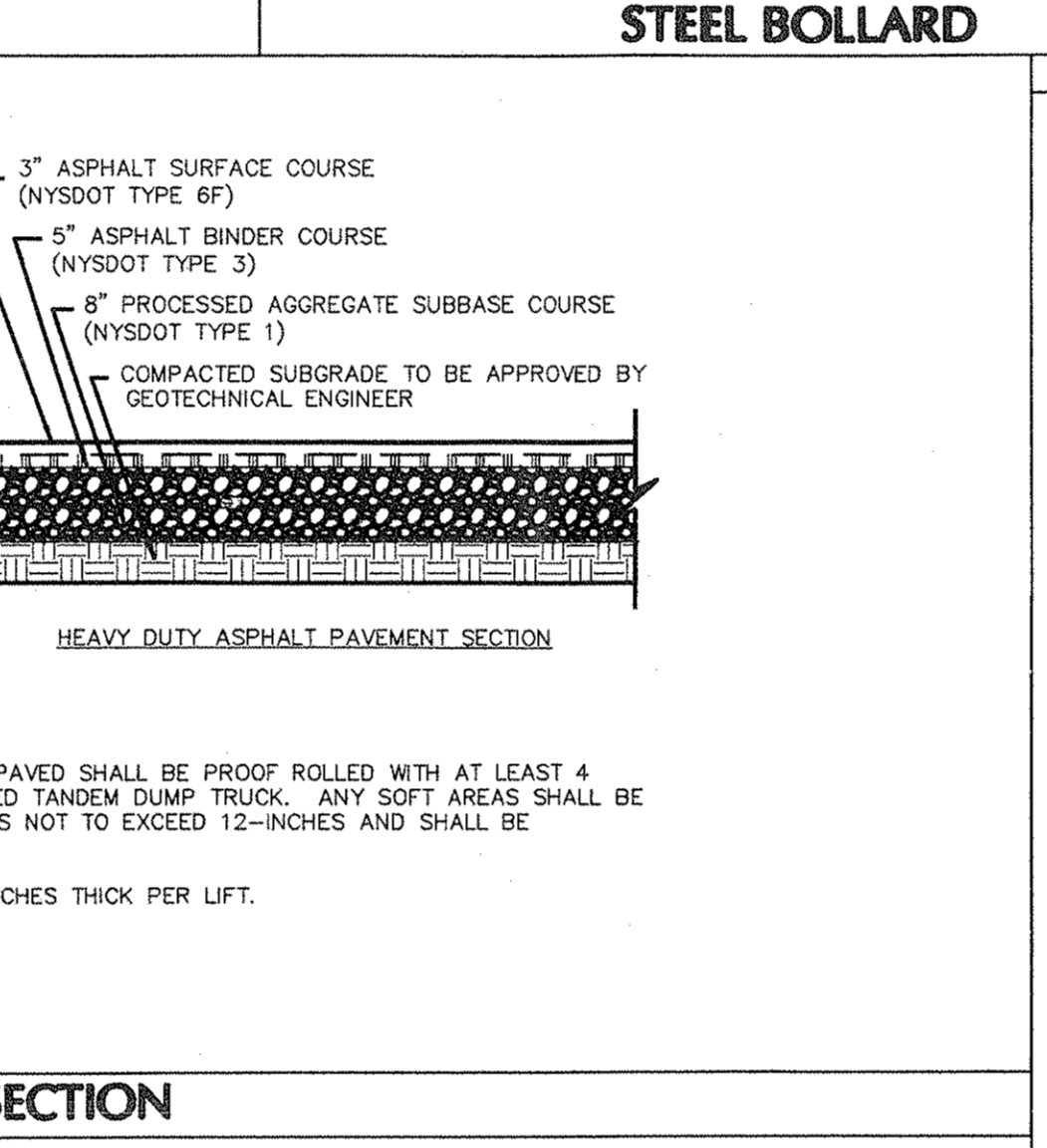
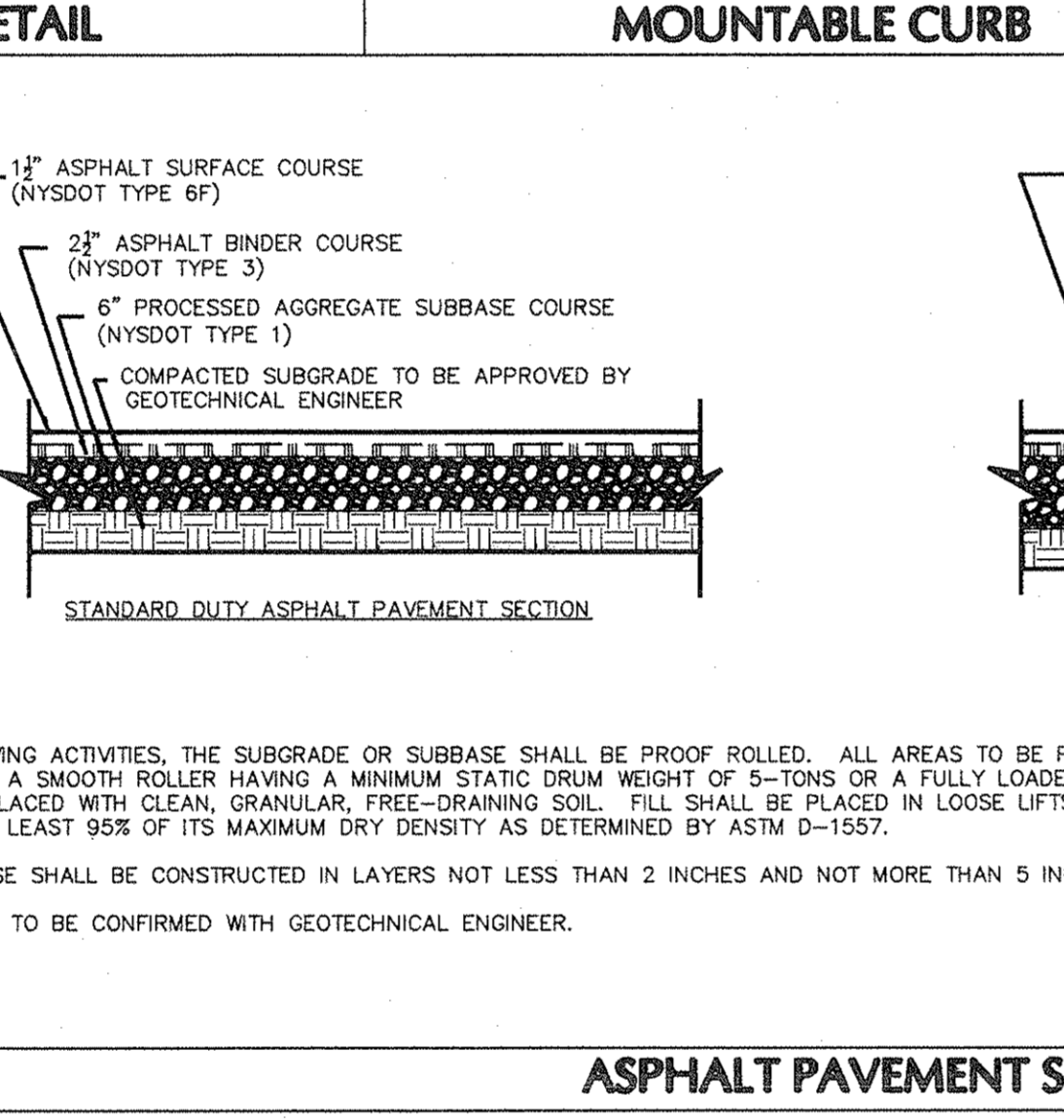
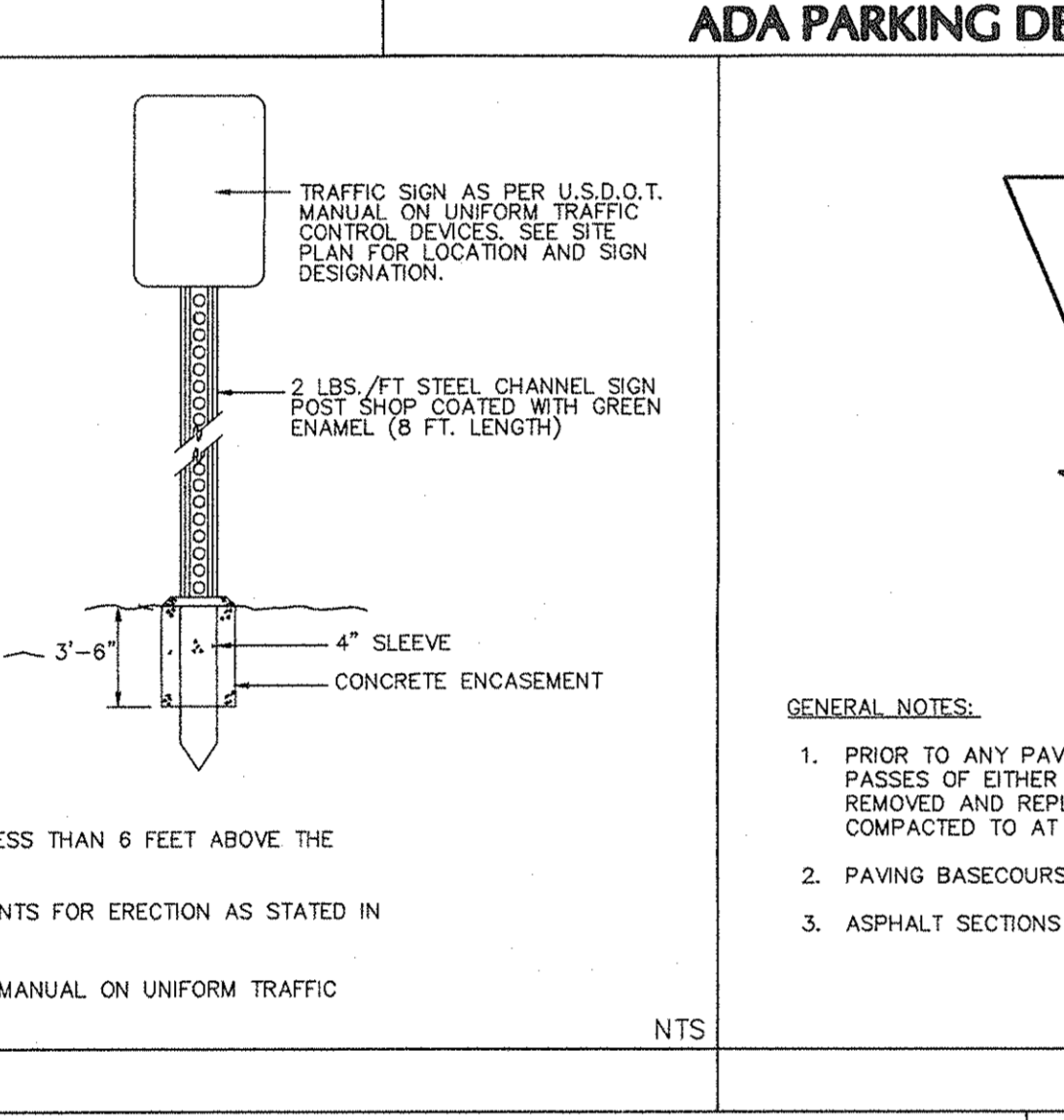
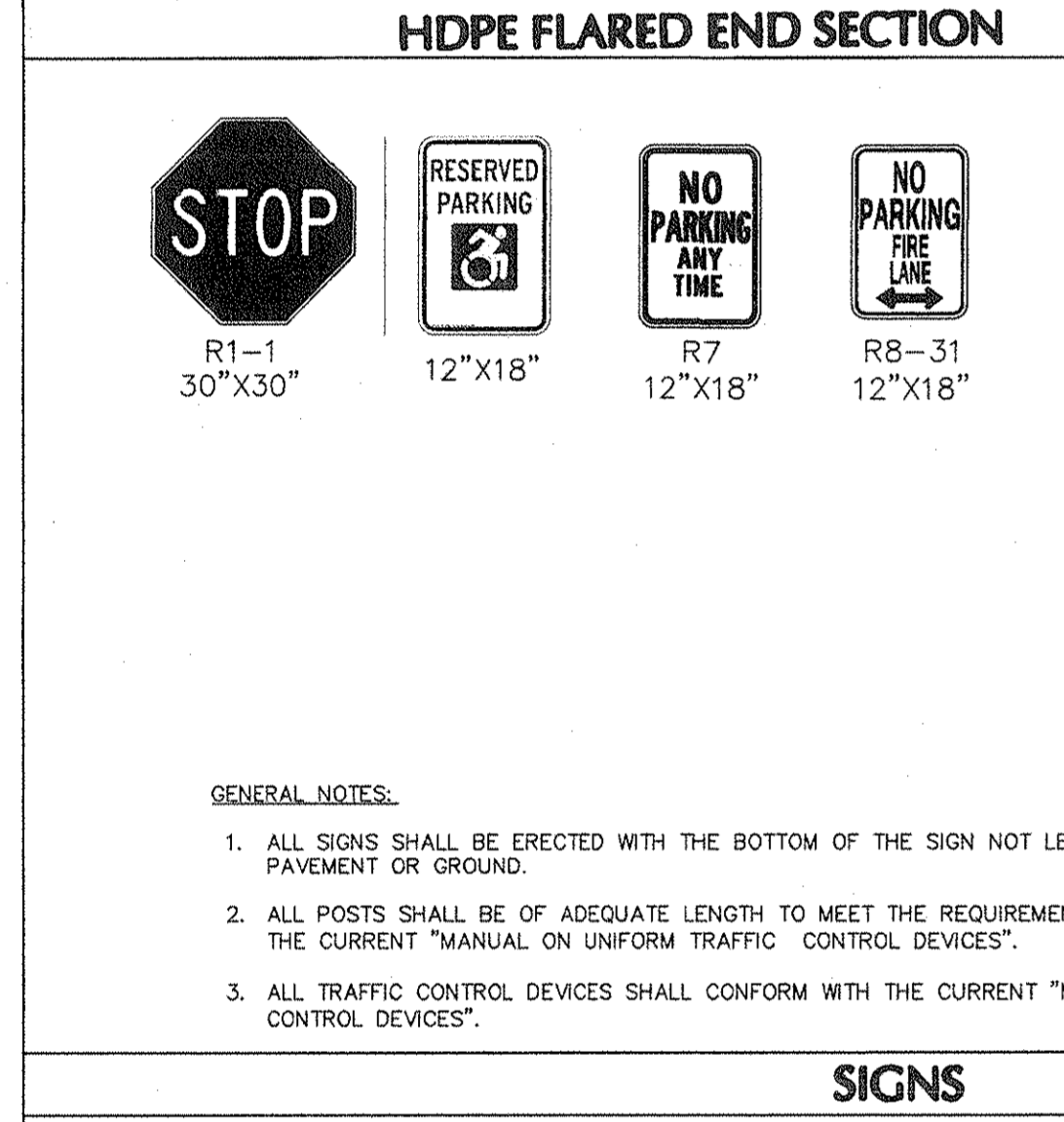
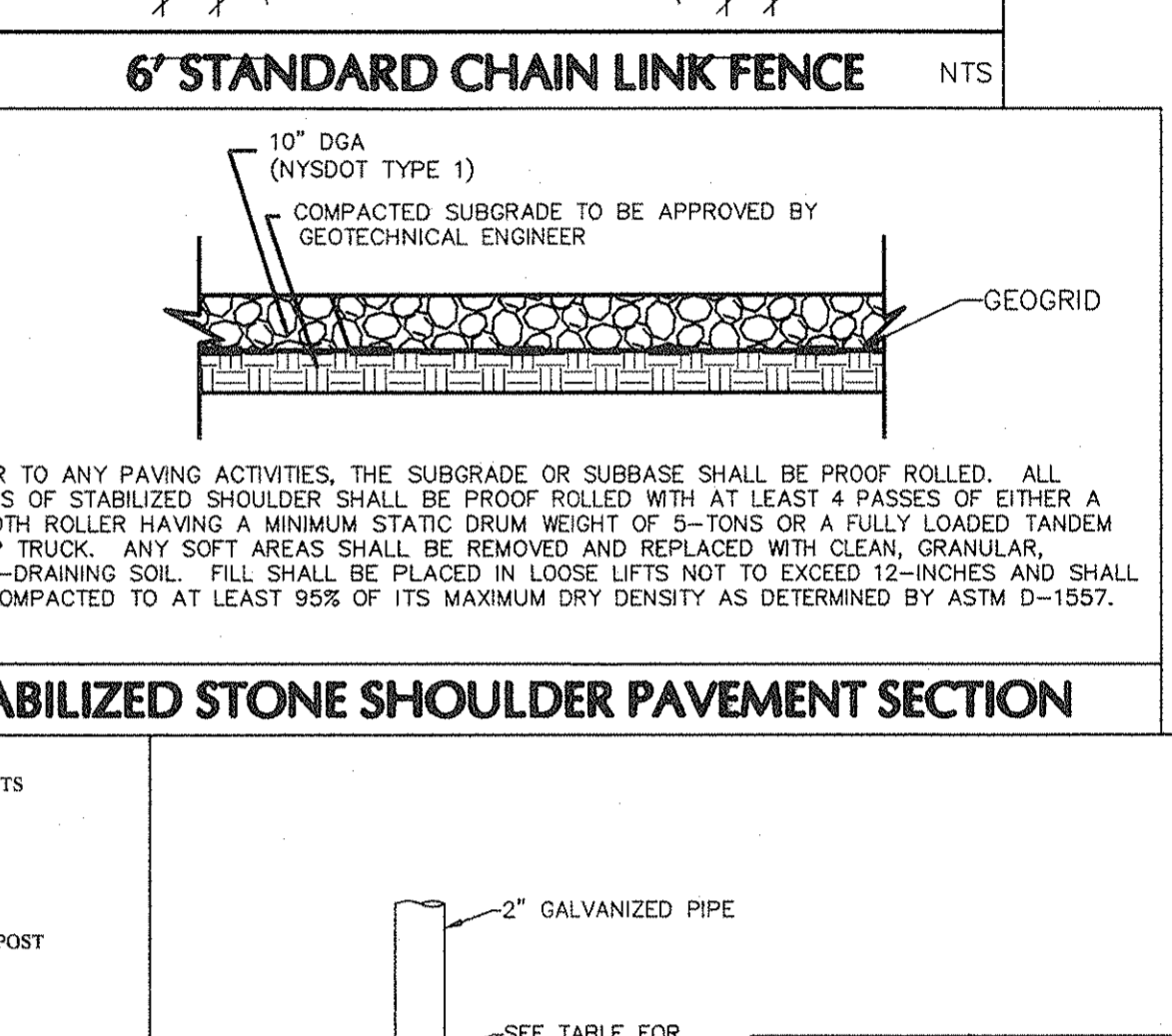
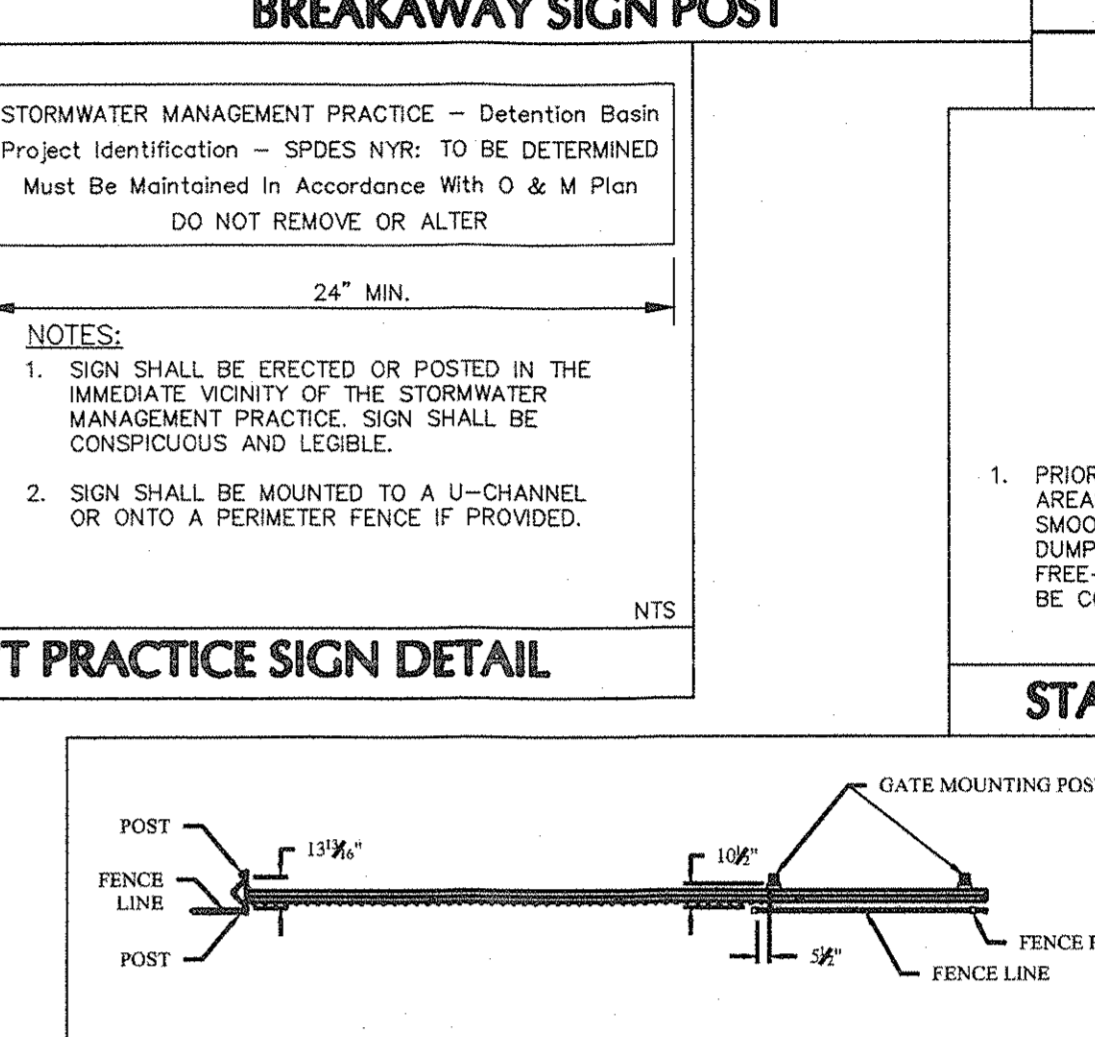
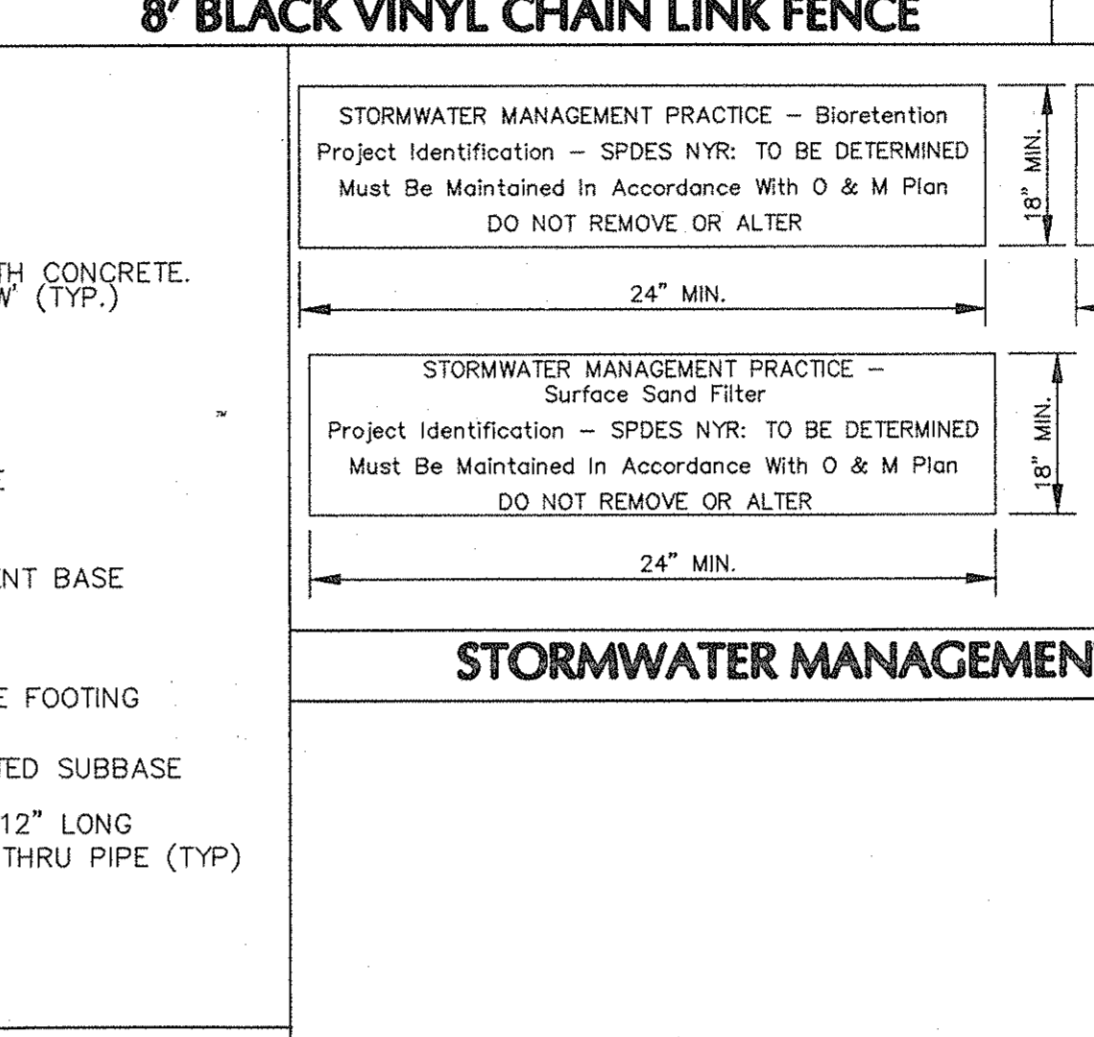
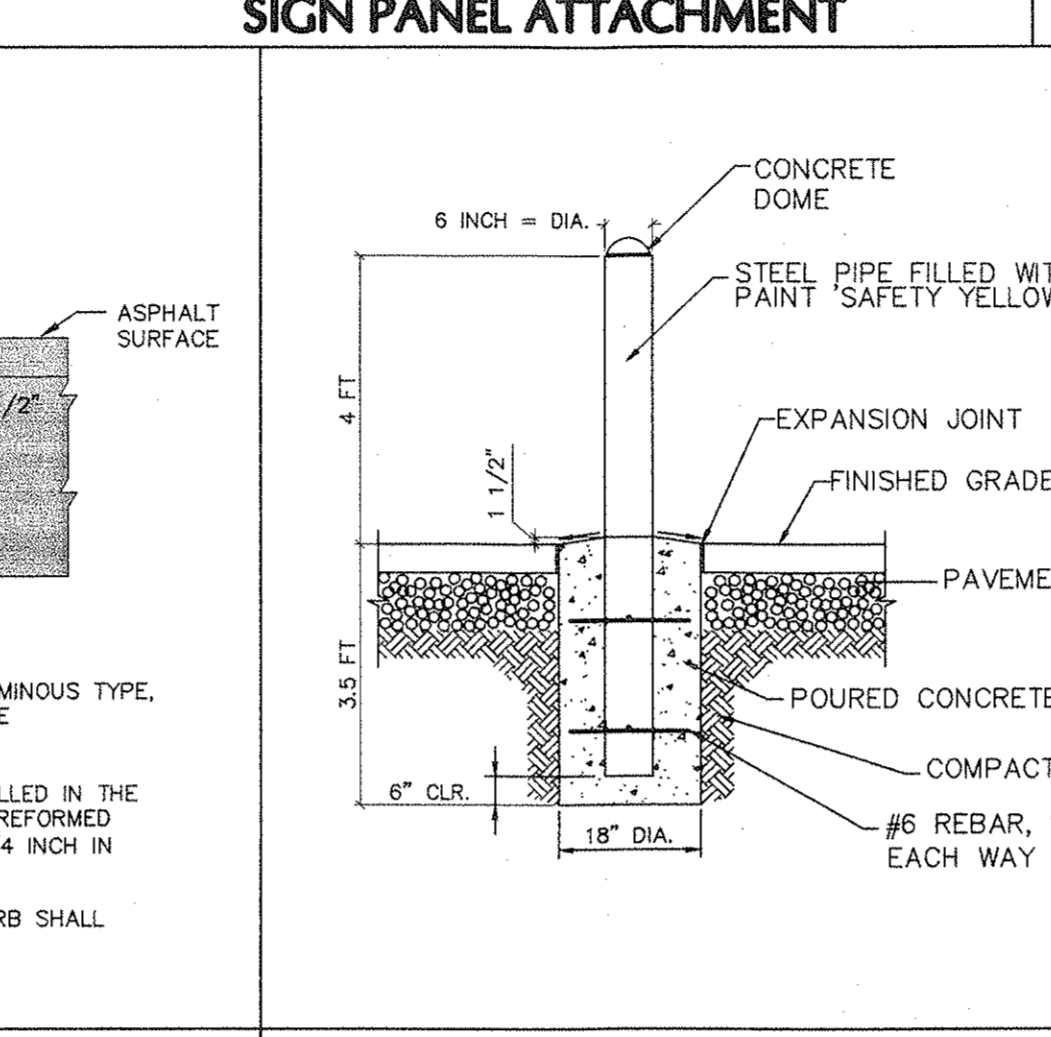
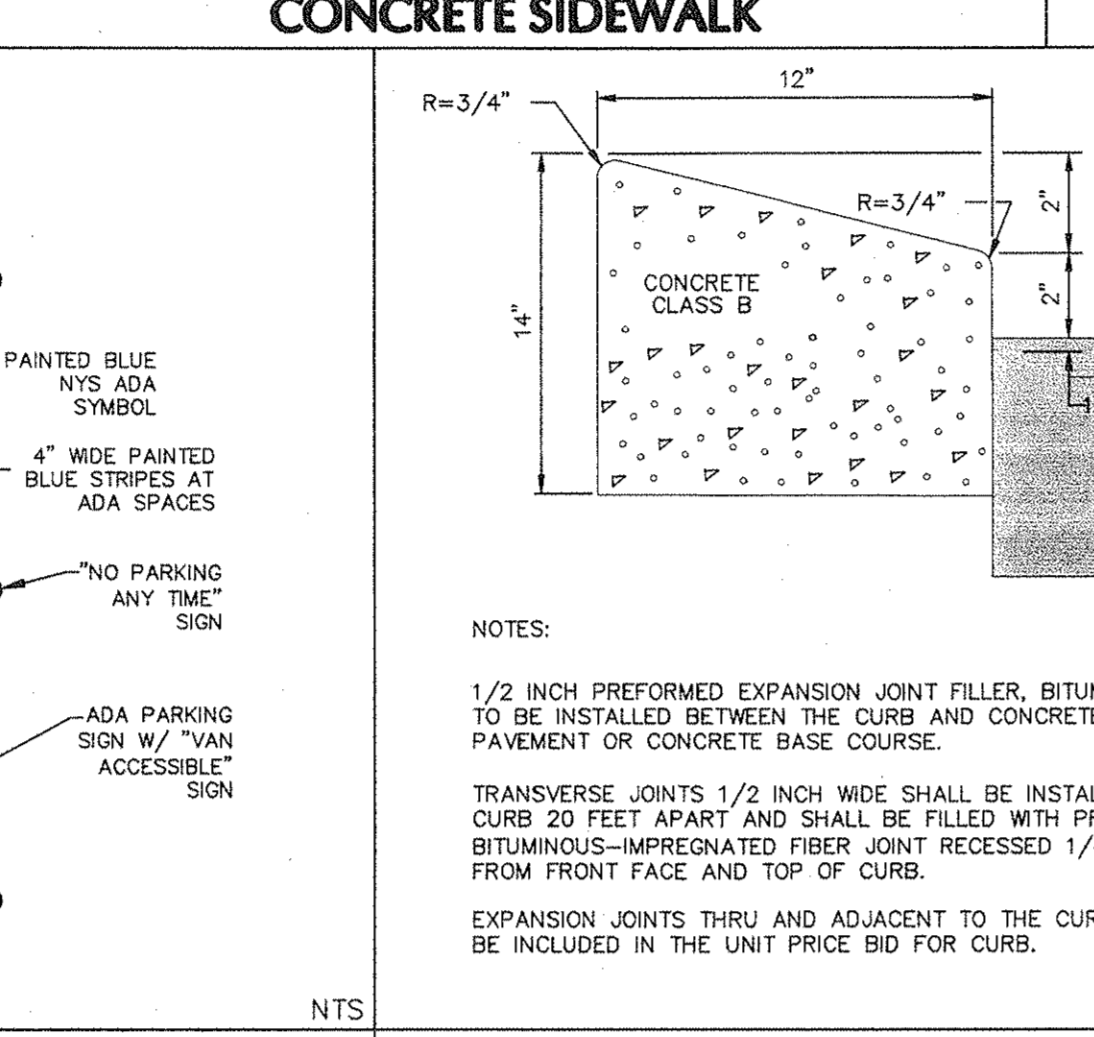
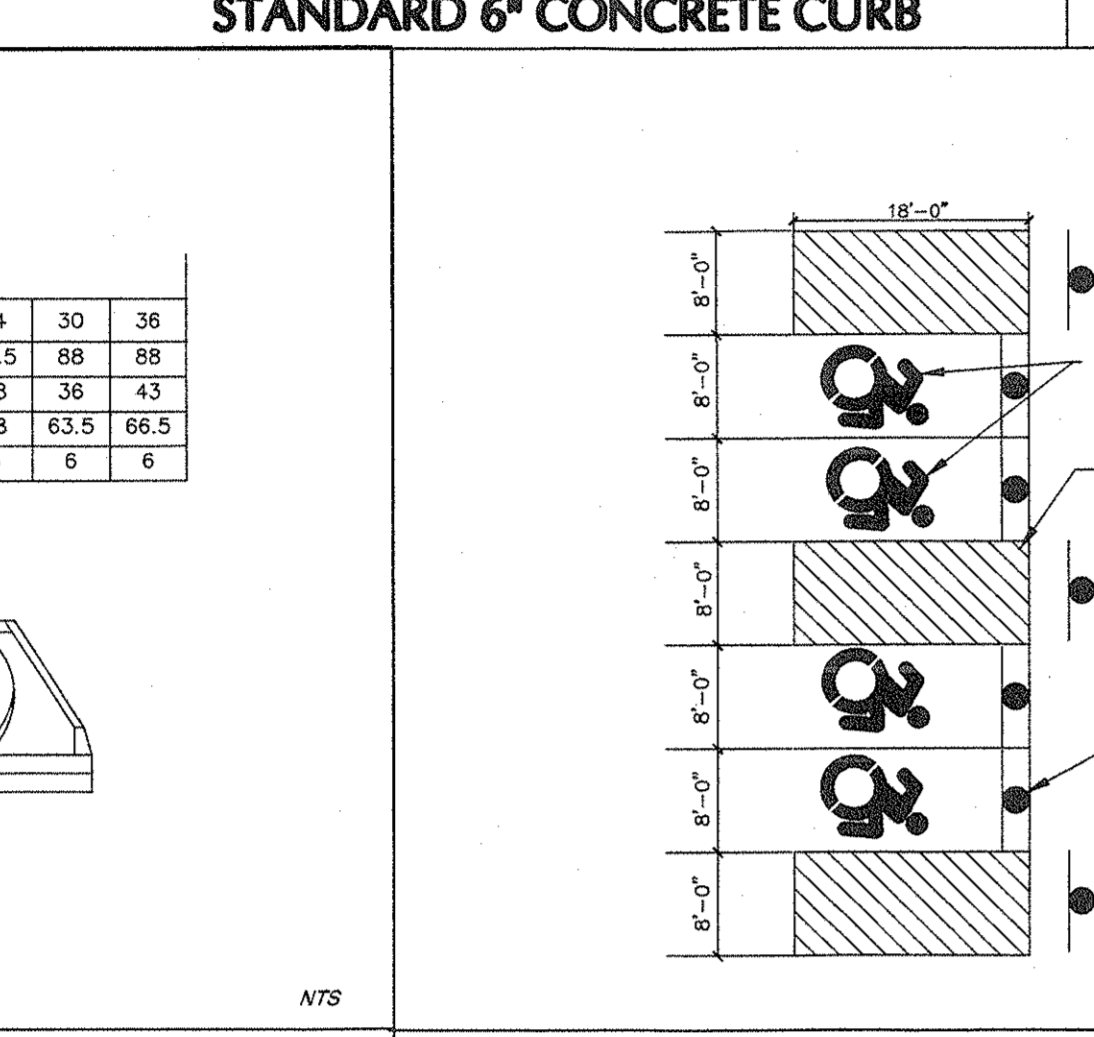
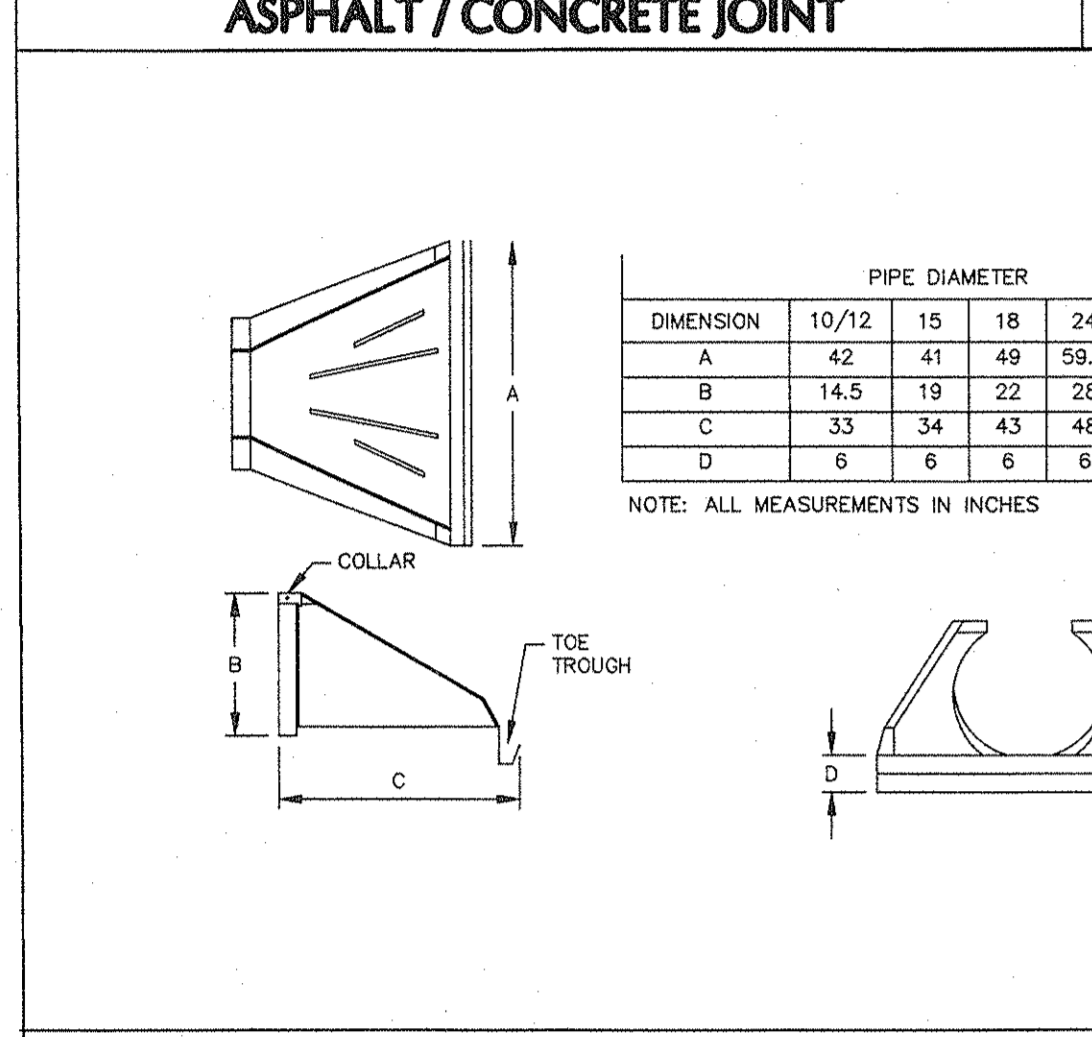
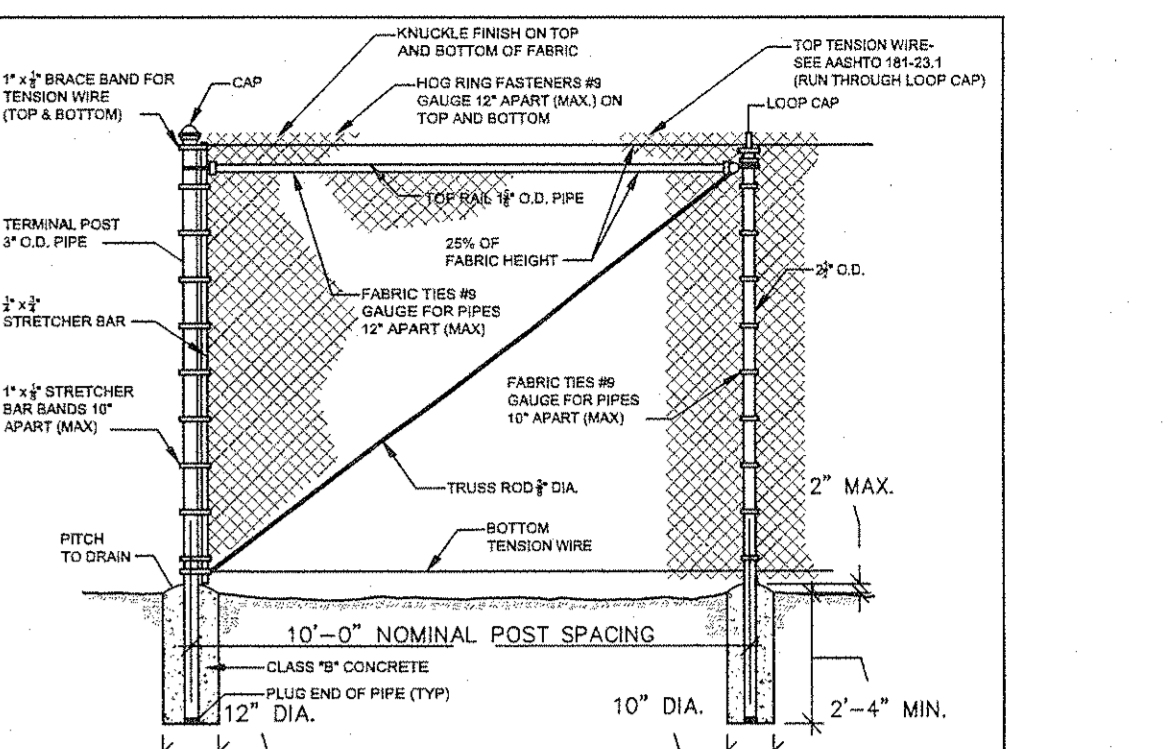
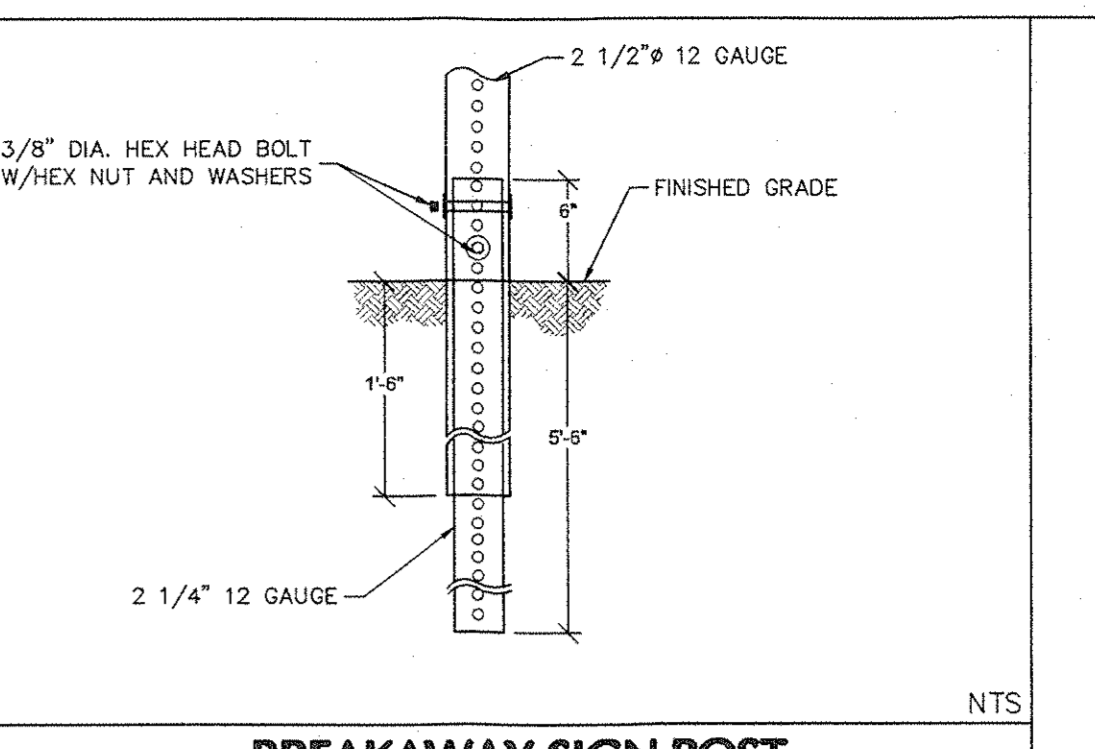
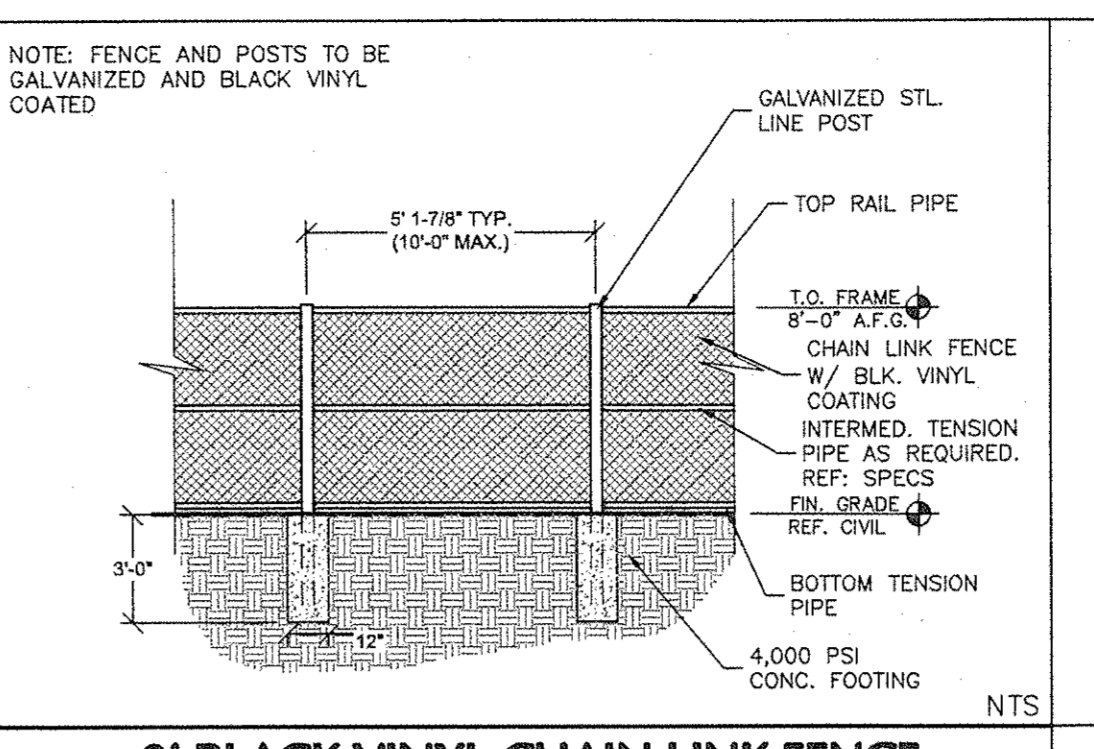
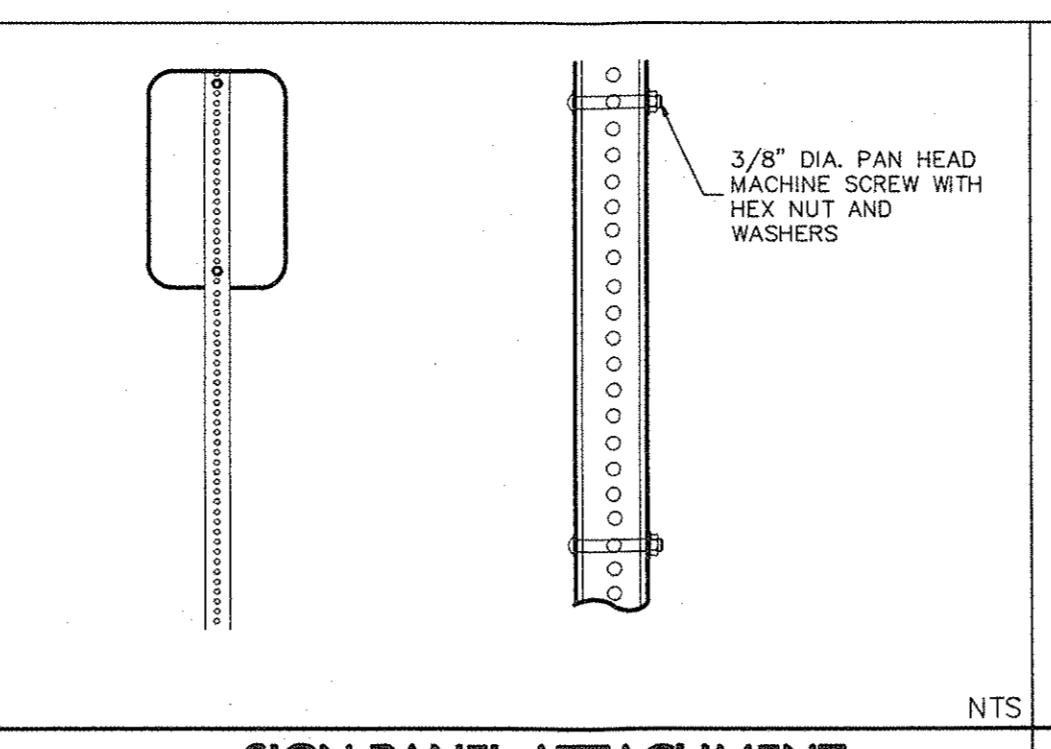
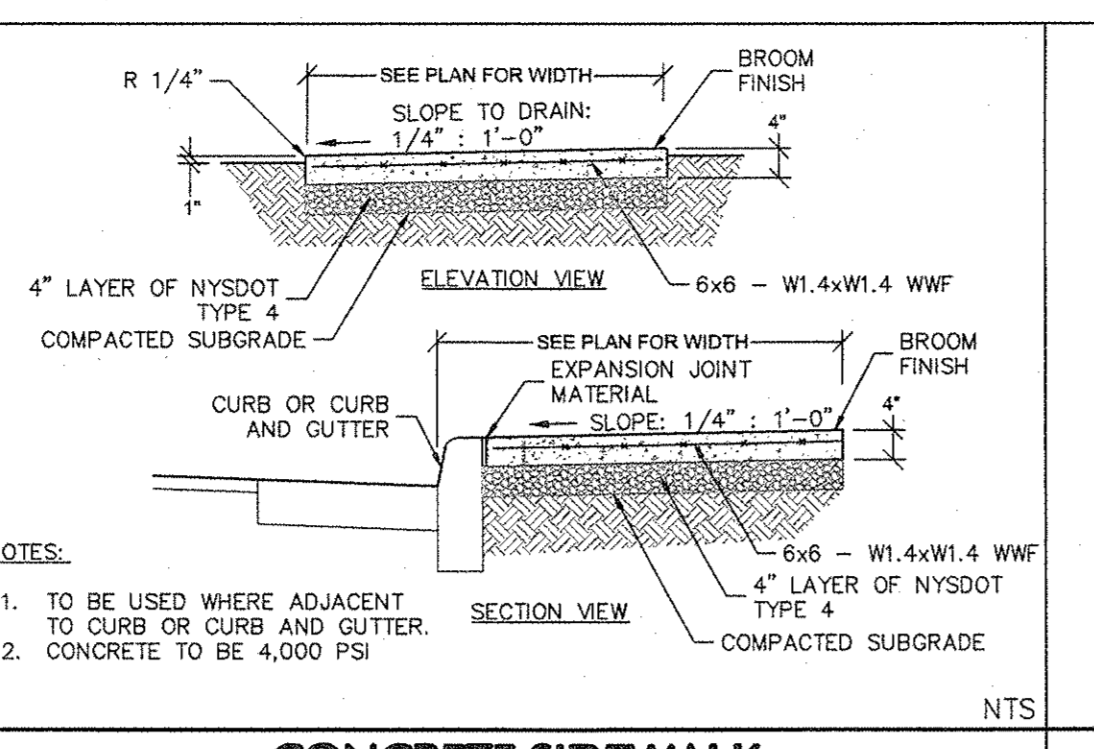
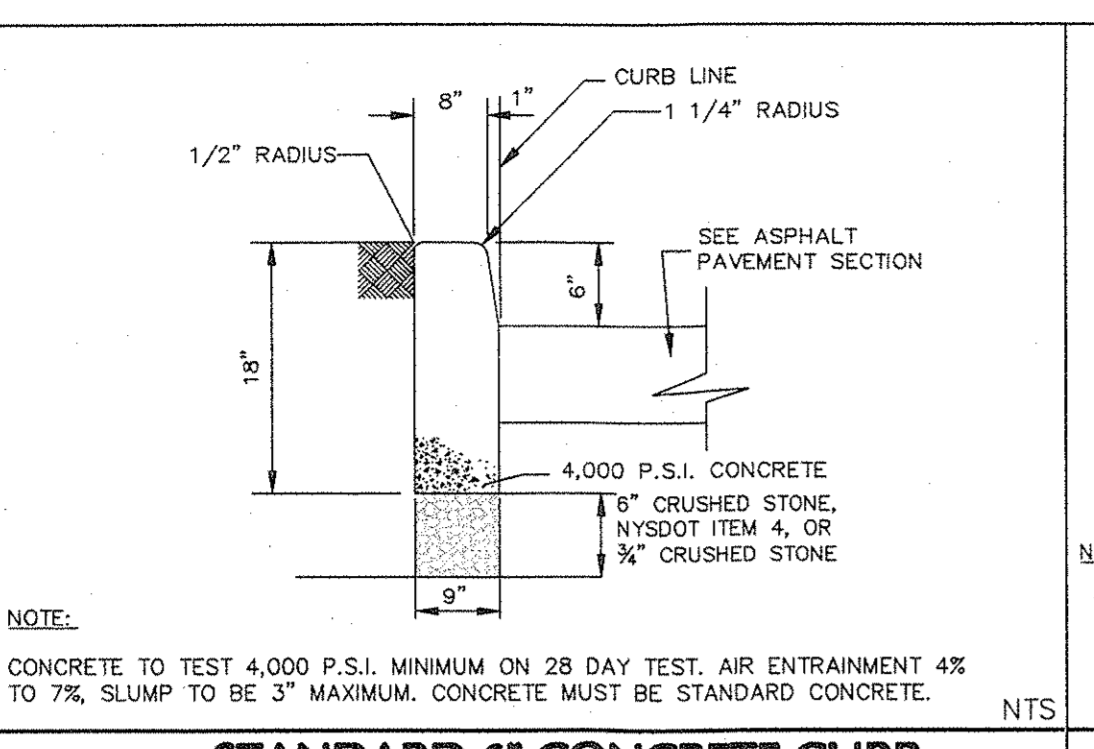
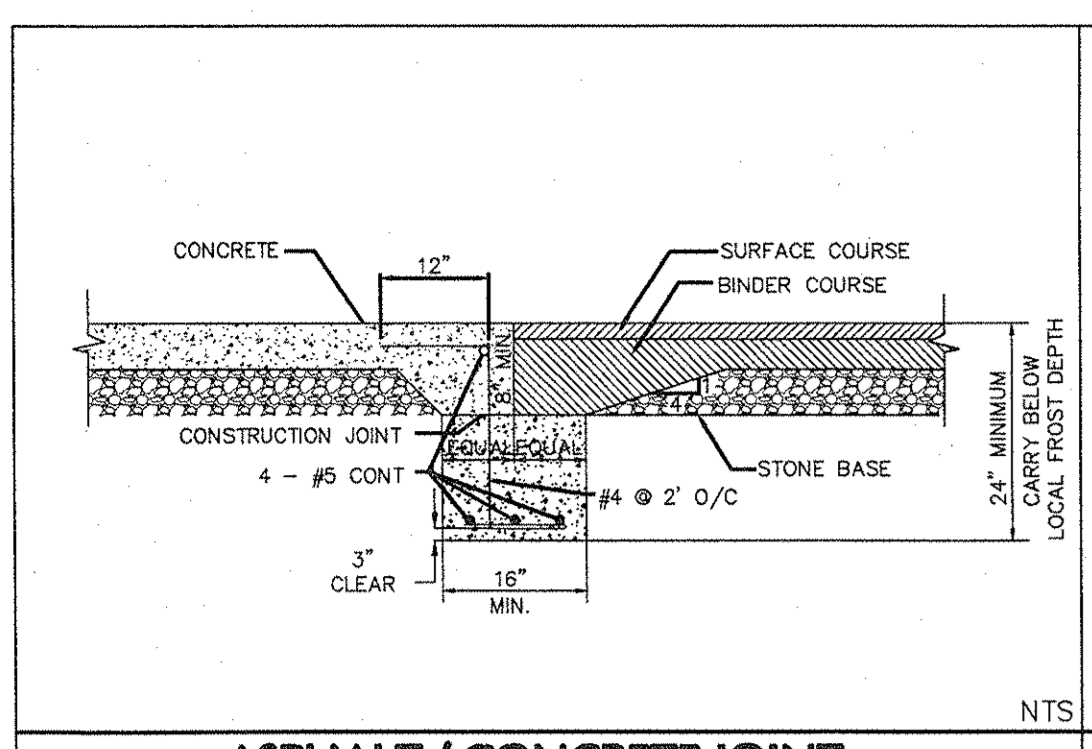
Date	REVISIONS	No.
3/18/2016	REVISED PER MEP AND ARCH. COORDINATION AND TOWN COMMENTS	2
11/9/2015	REVISED PER TOWN COMMENTS	1

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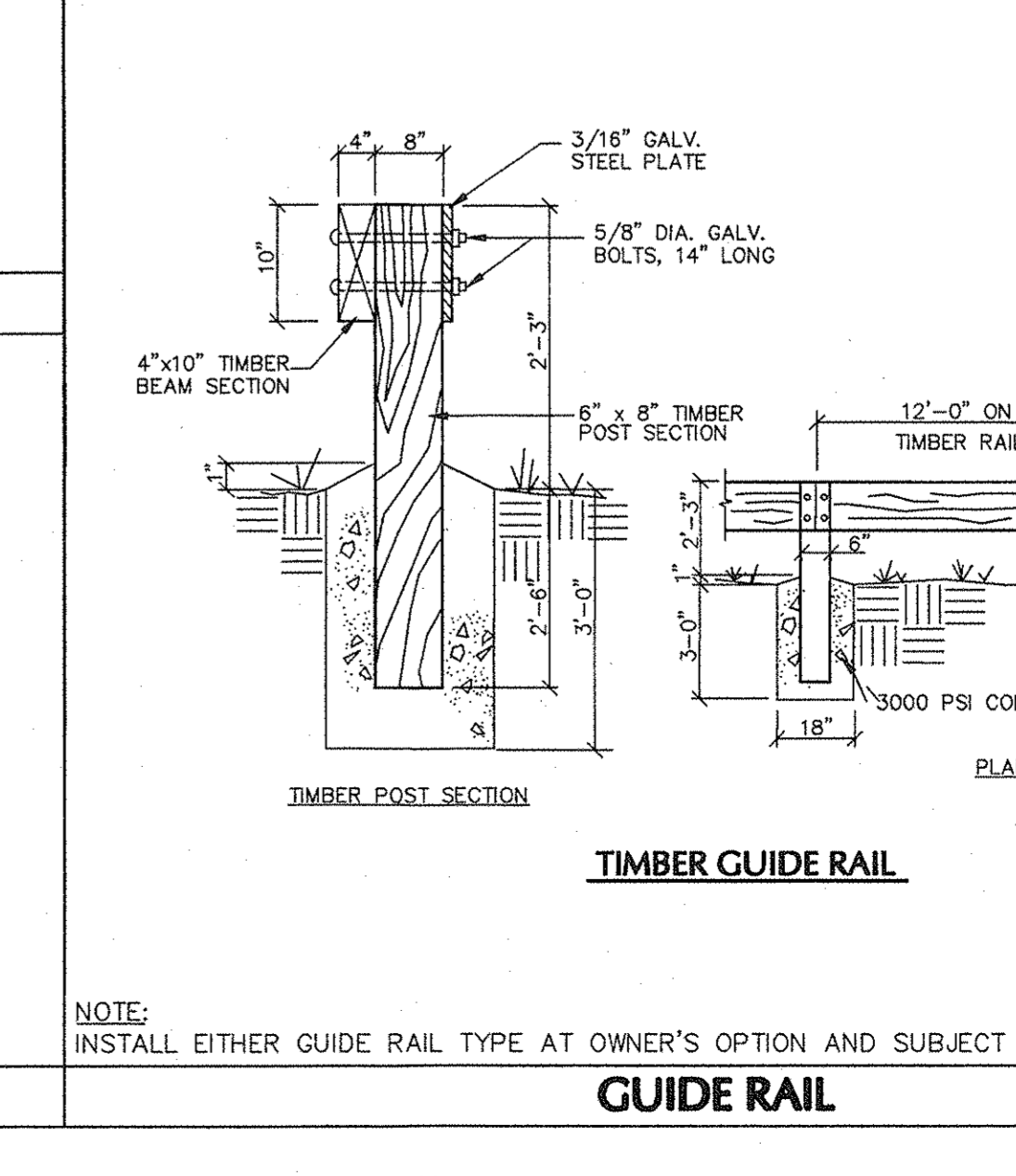
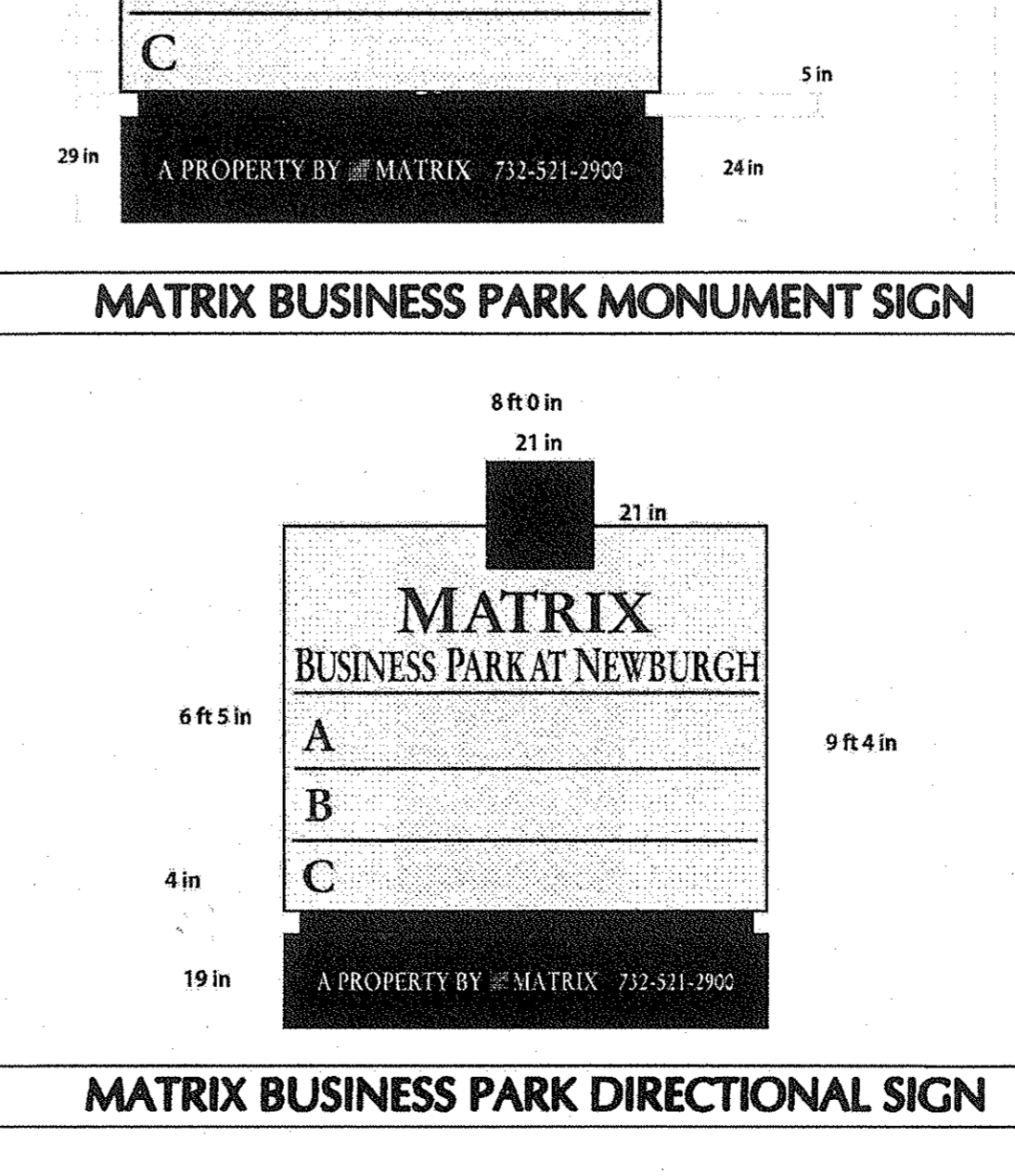
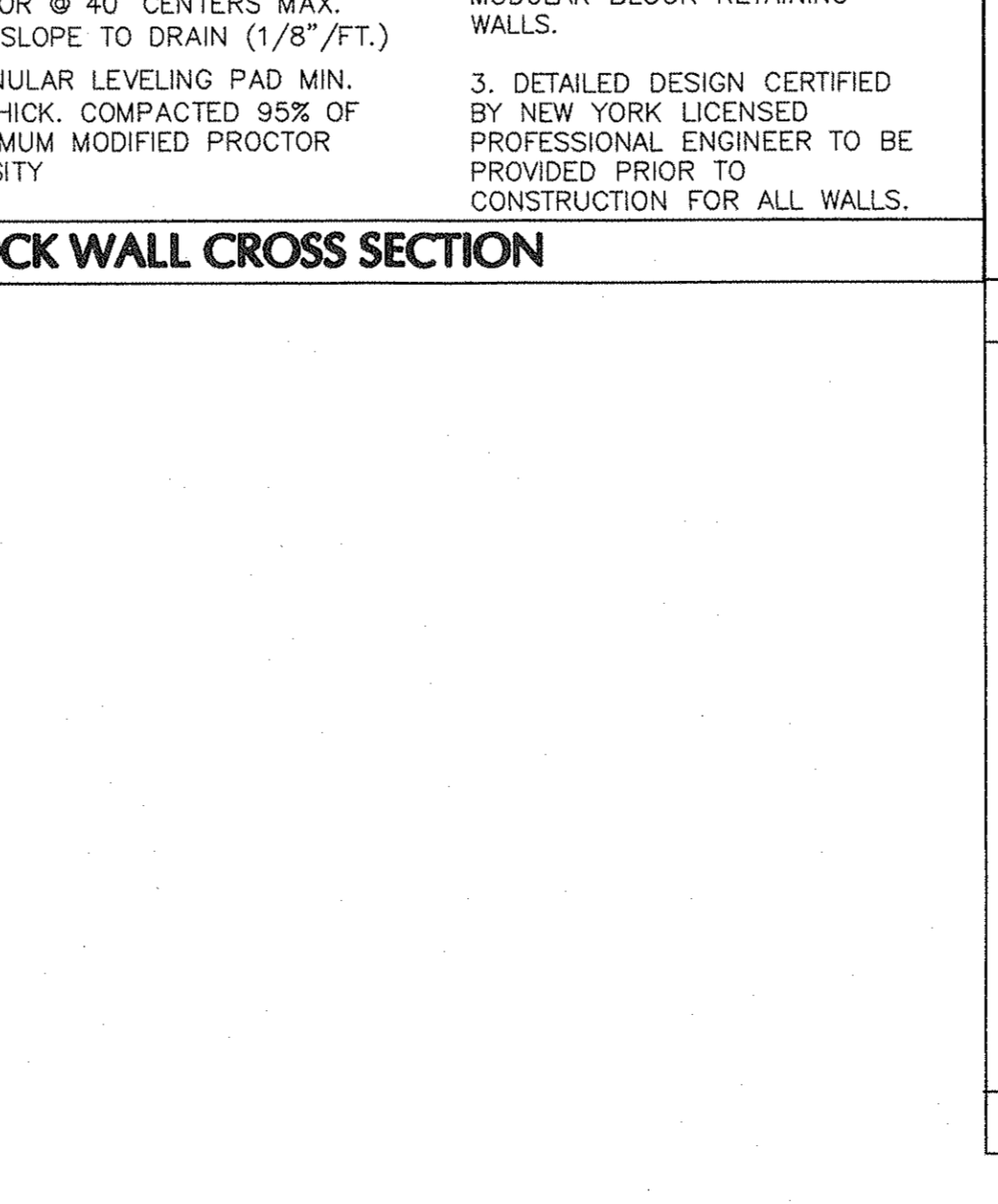
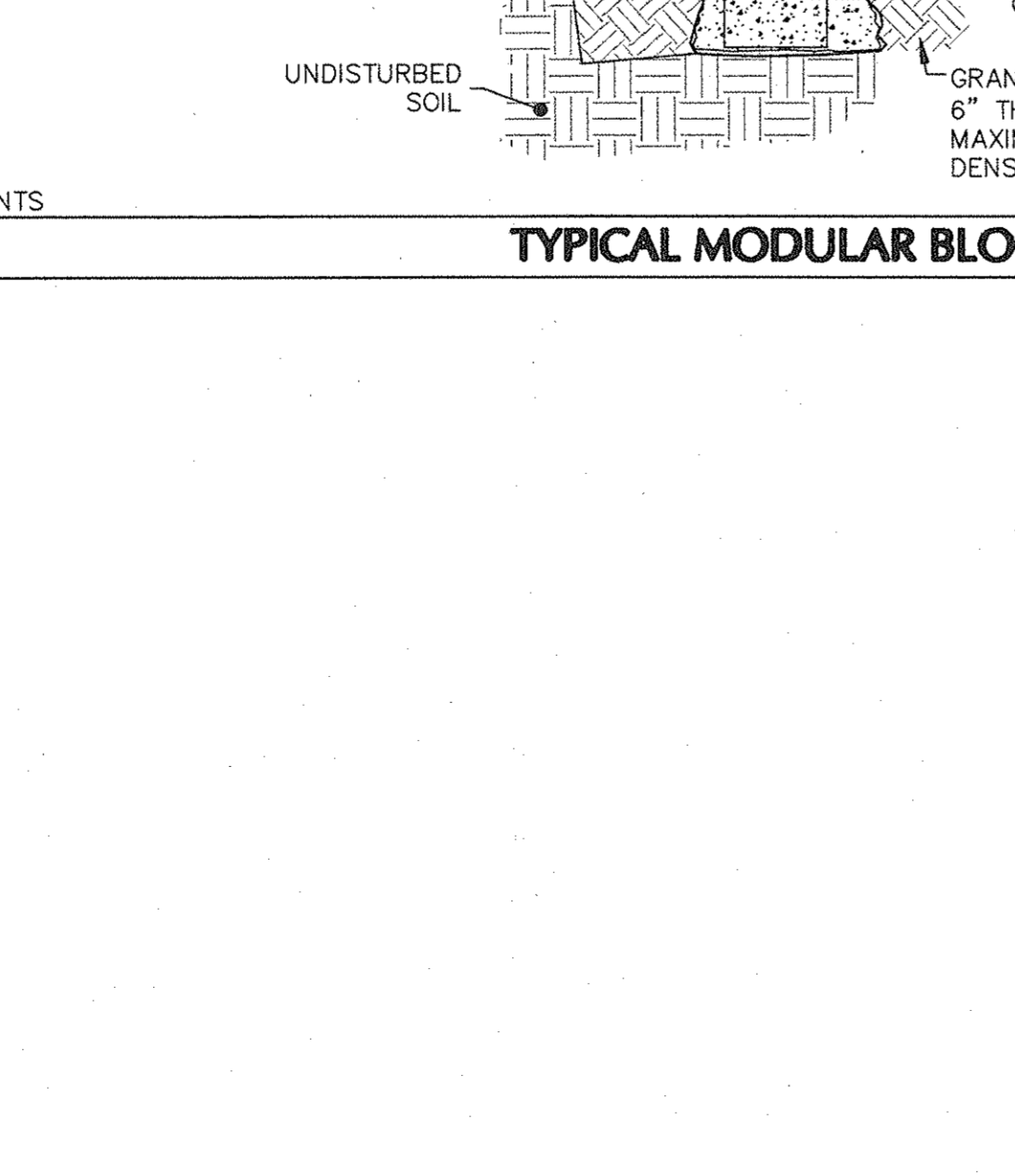
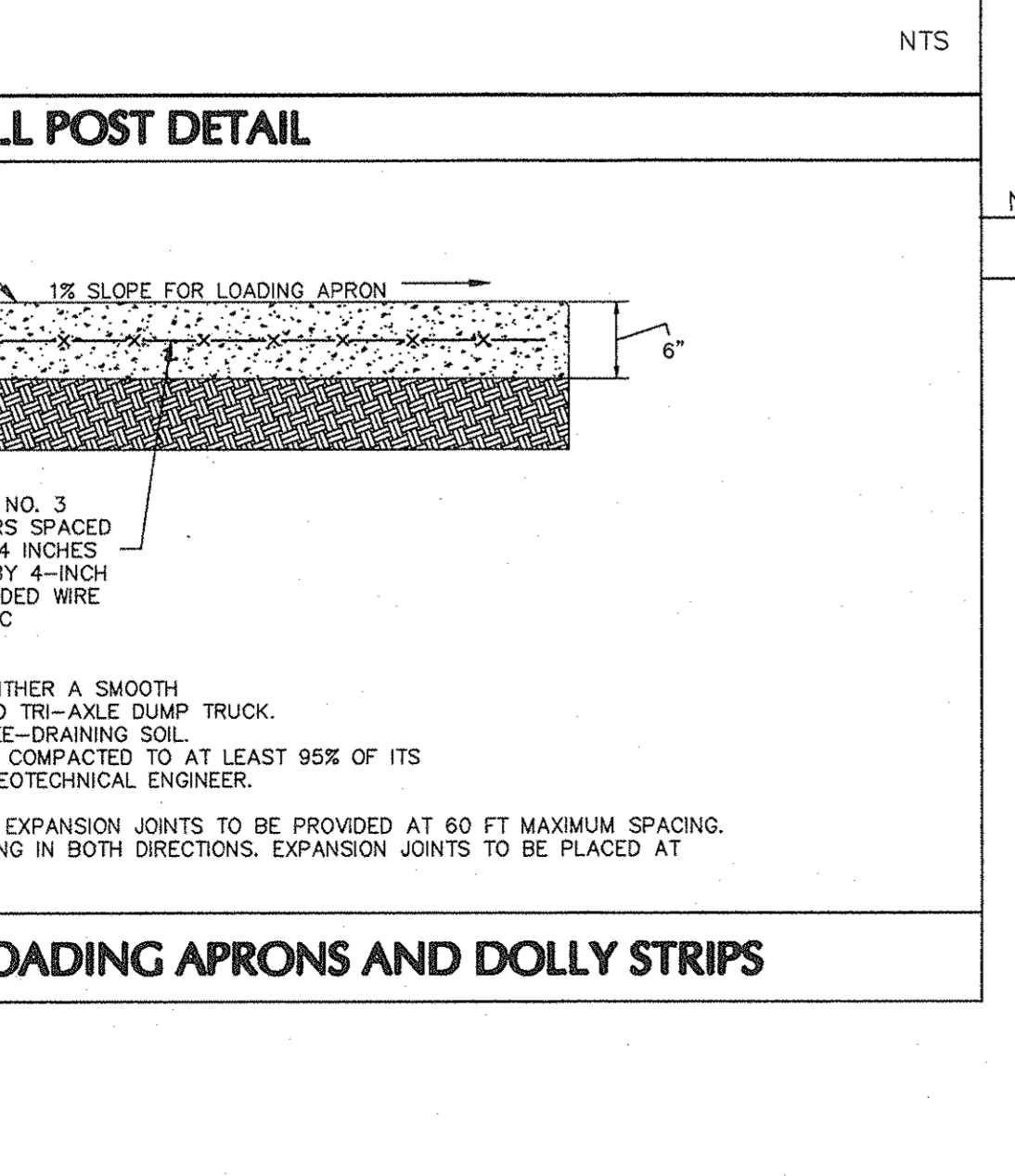
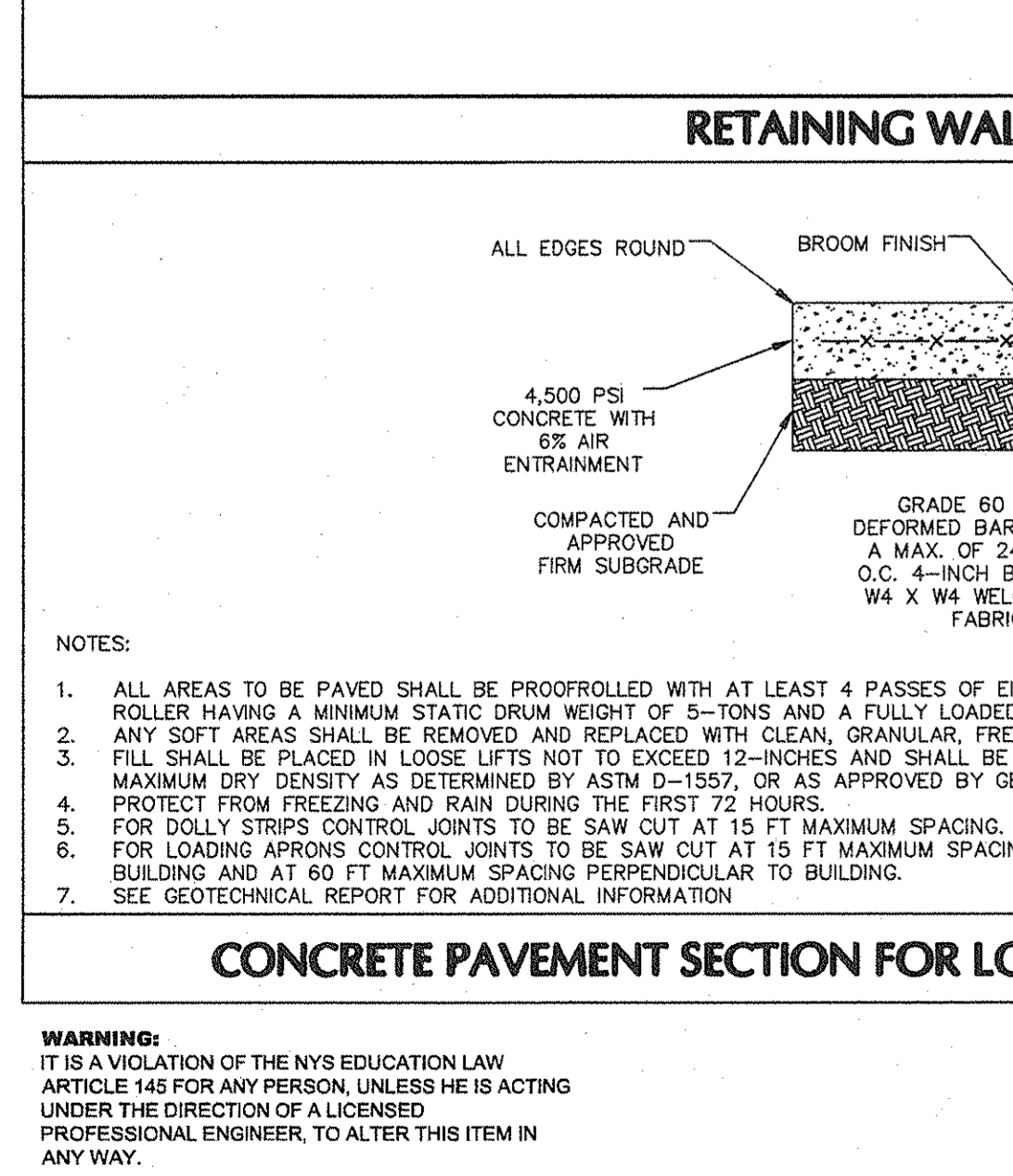
MATRIX BUSINESS PARK AT NEWBURGH
TOWN OF NEWBURGH NEW YORK

LIGHTING SCHEDULE, NOTES, AND DETAILS

Project No.	9190601	Drawing No.	LL-501
Date	9/9/2015	Scale	AS SHOWN
Drawn By	ALM	Submission Date	04/11/2016



DATE	DESCRIPTION	NO.
4/11/2016	REVISED ACCESS ROADS	4
3/18/2016	REVISED PER MEP AND ARCH. COORDINATION AND TOWN COMMENTS	3
1/25/2016	REVISED PER MEP COMMENTS, NYSDOT DESIGN, AND EMERGENCY ACCESS PATH	2
11/9/2015	REVISED PER TOWN COMMENTS	1



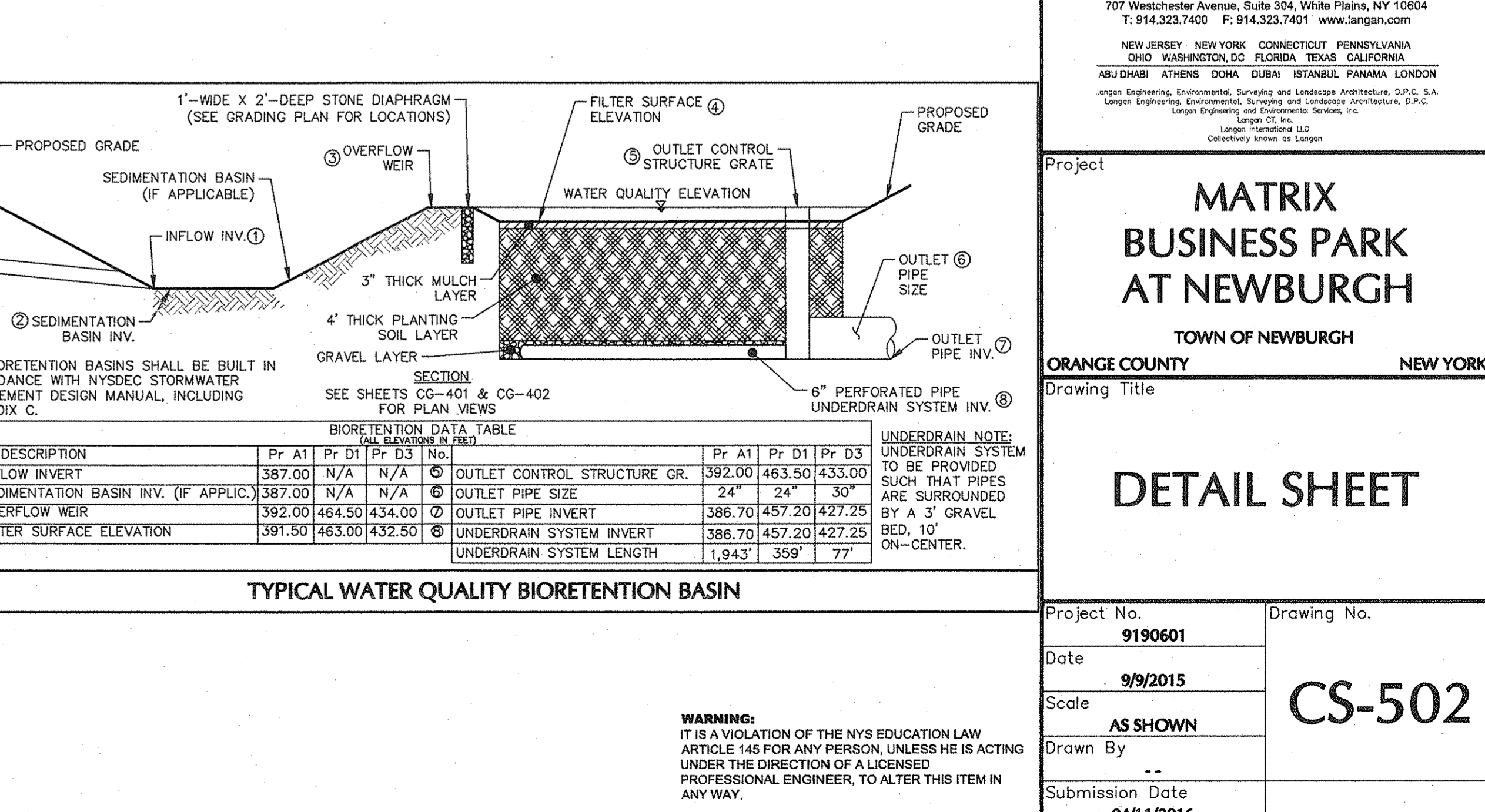
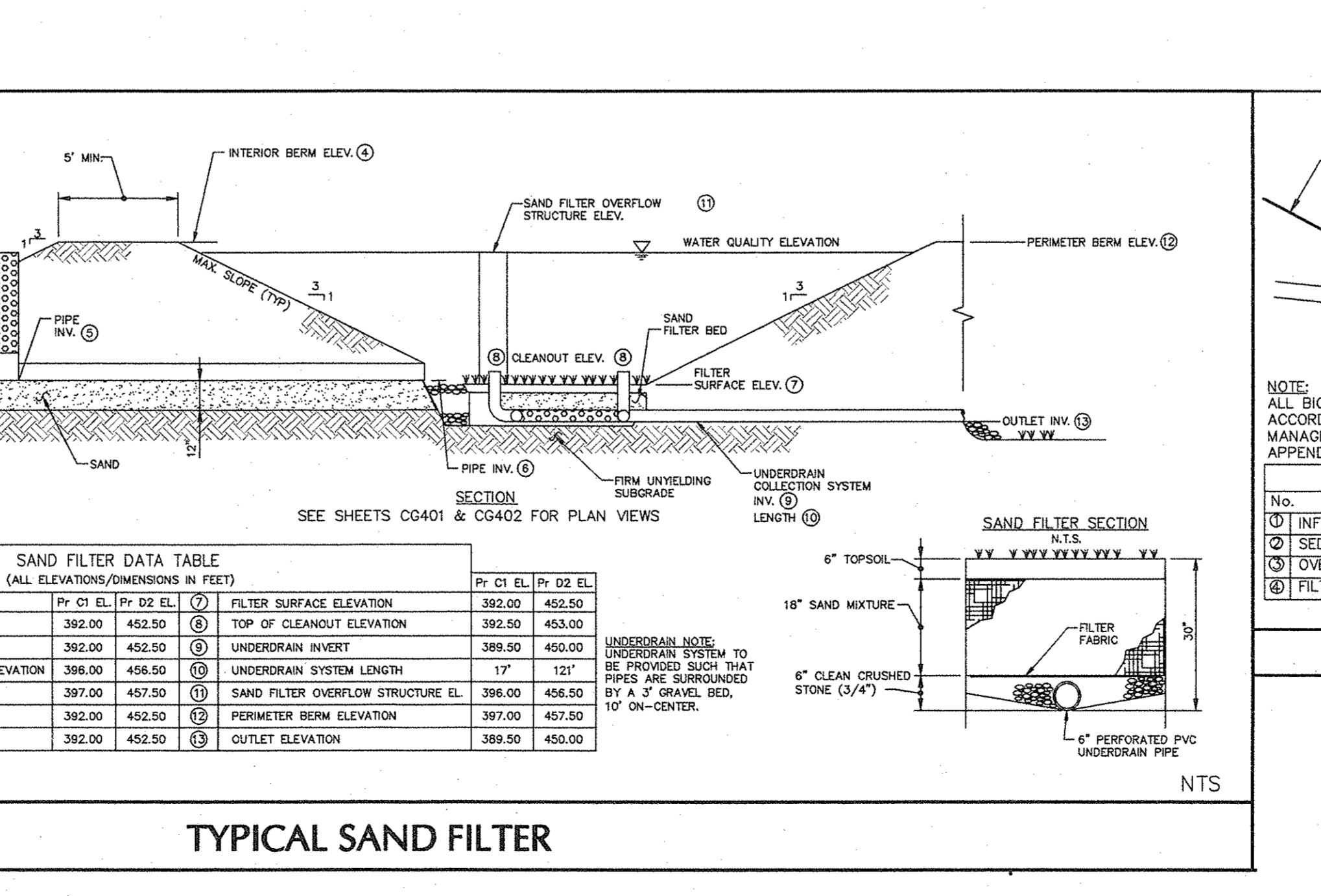
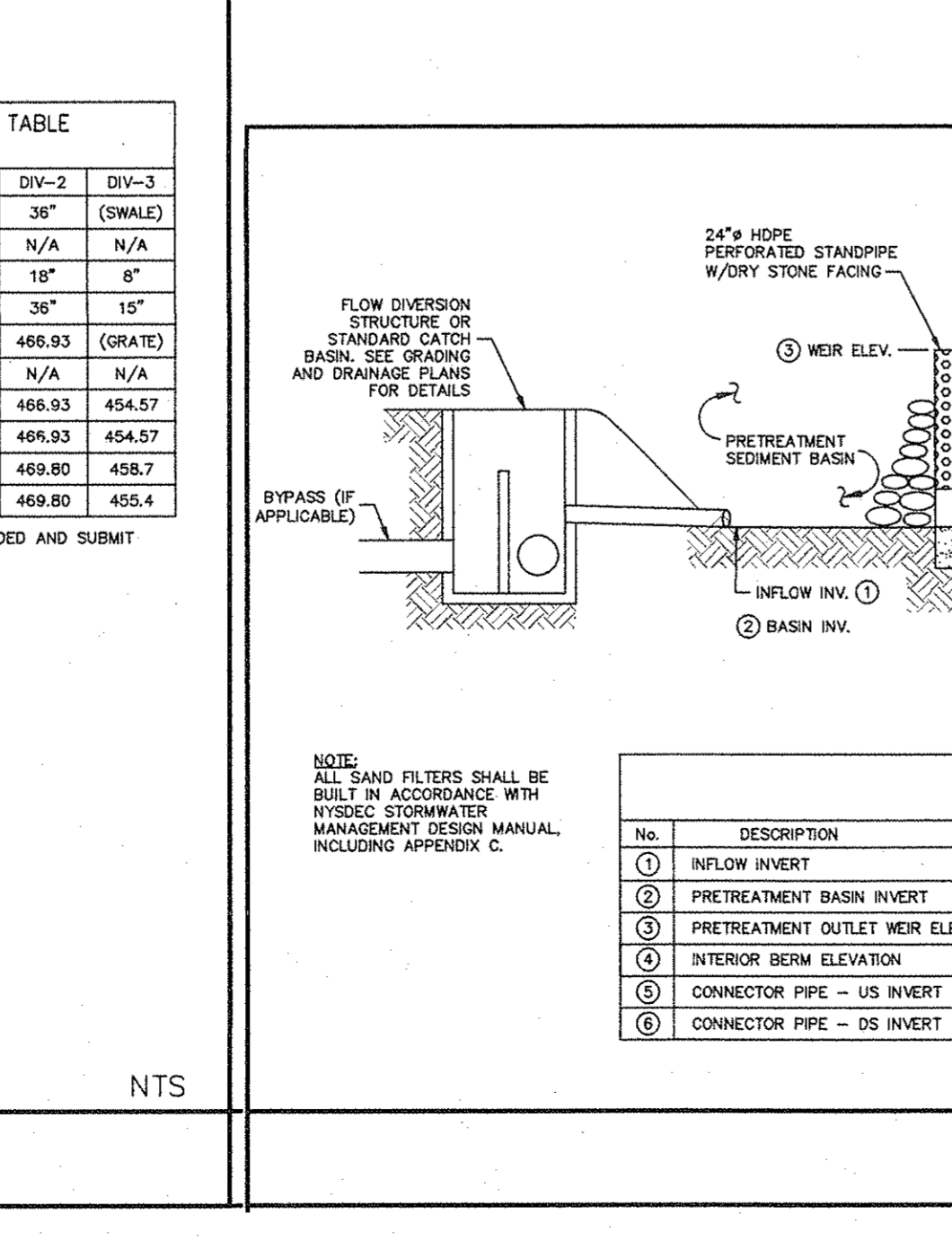
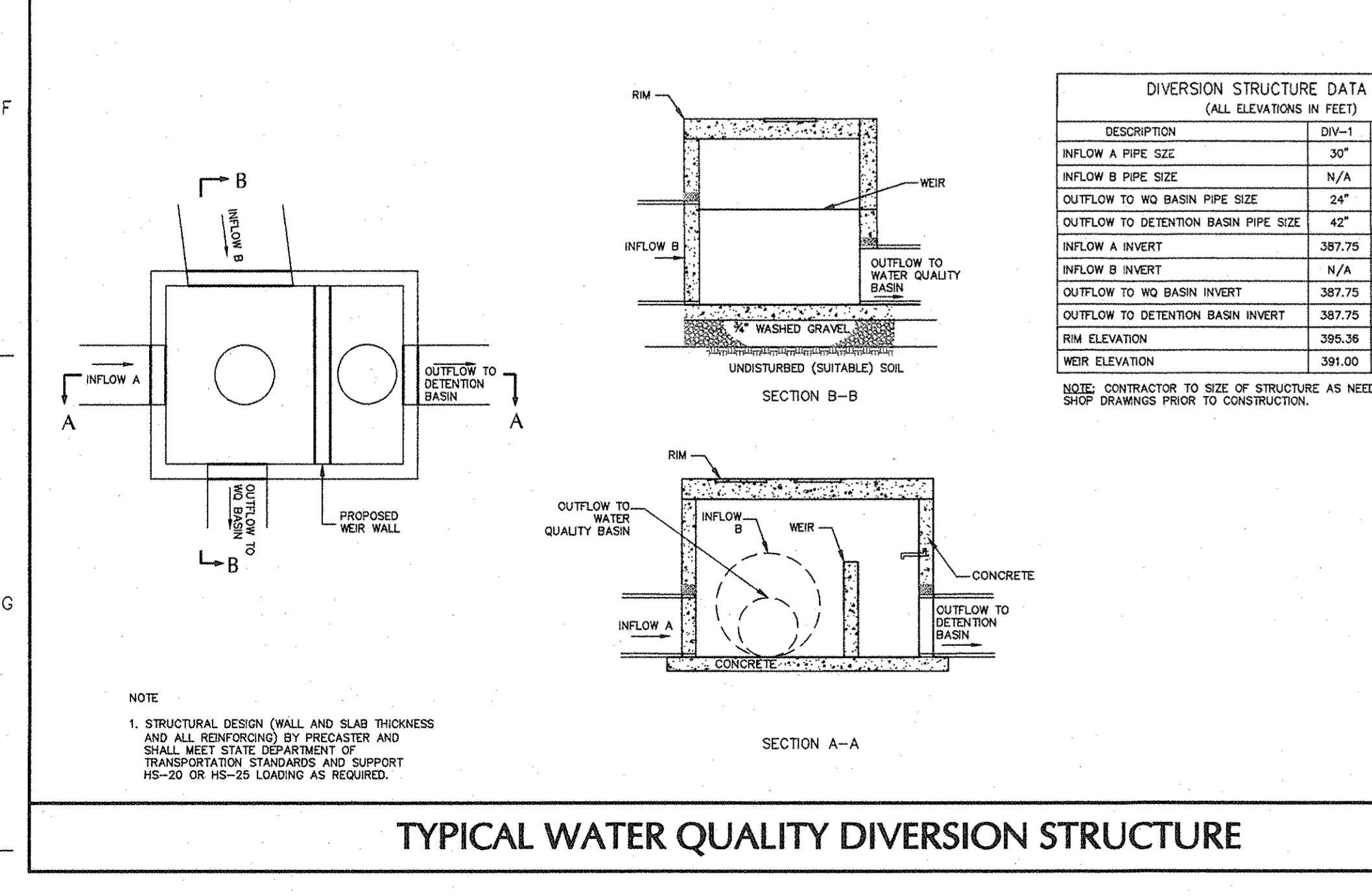
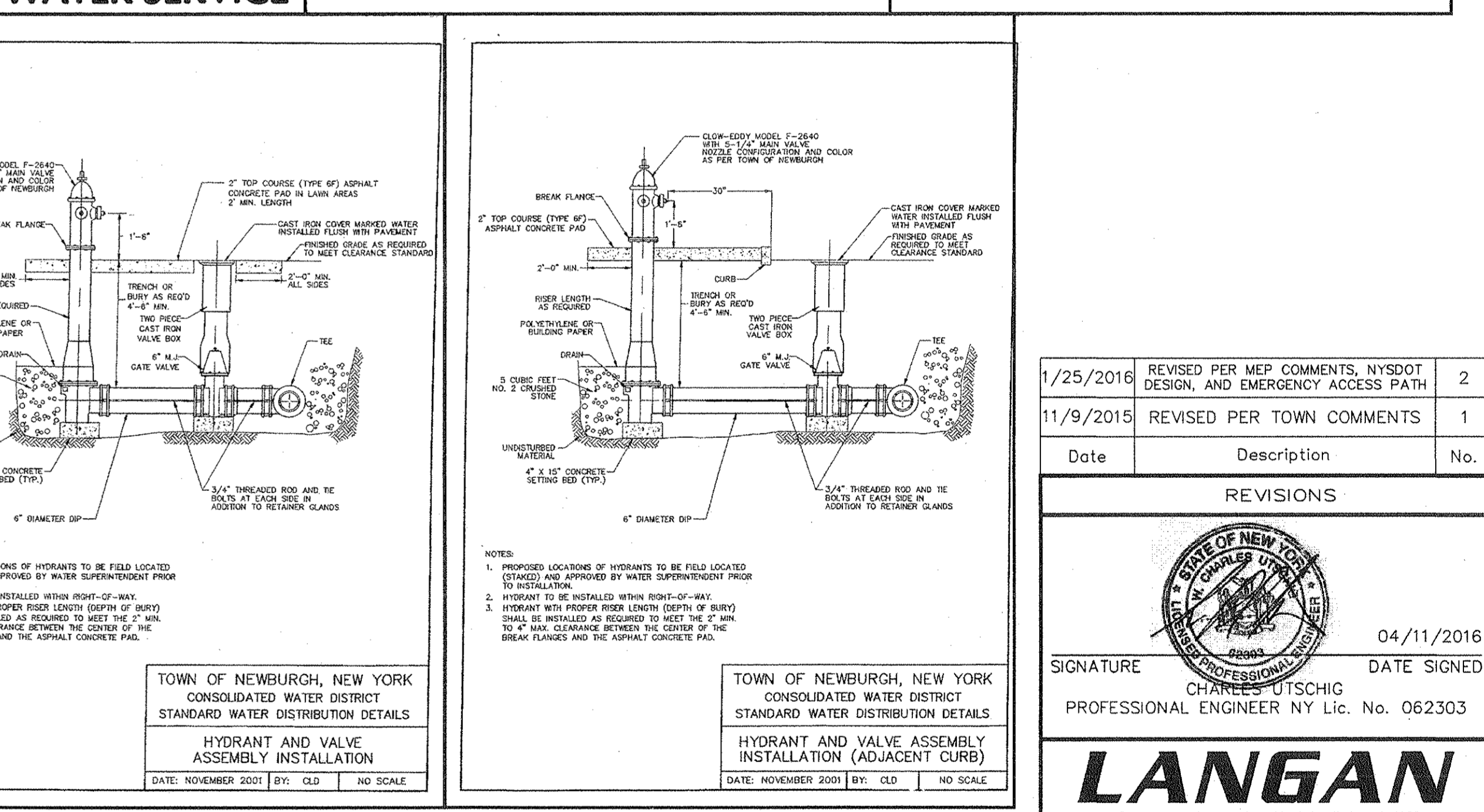
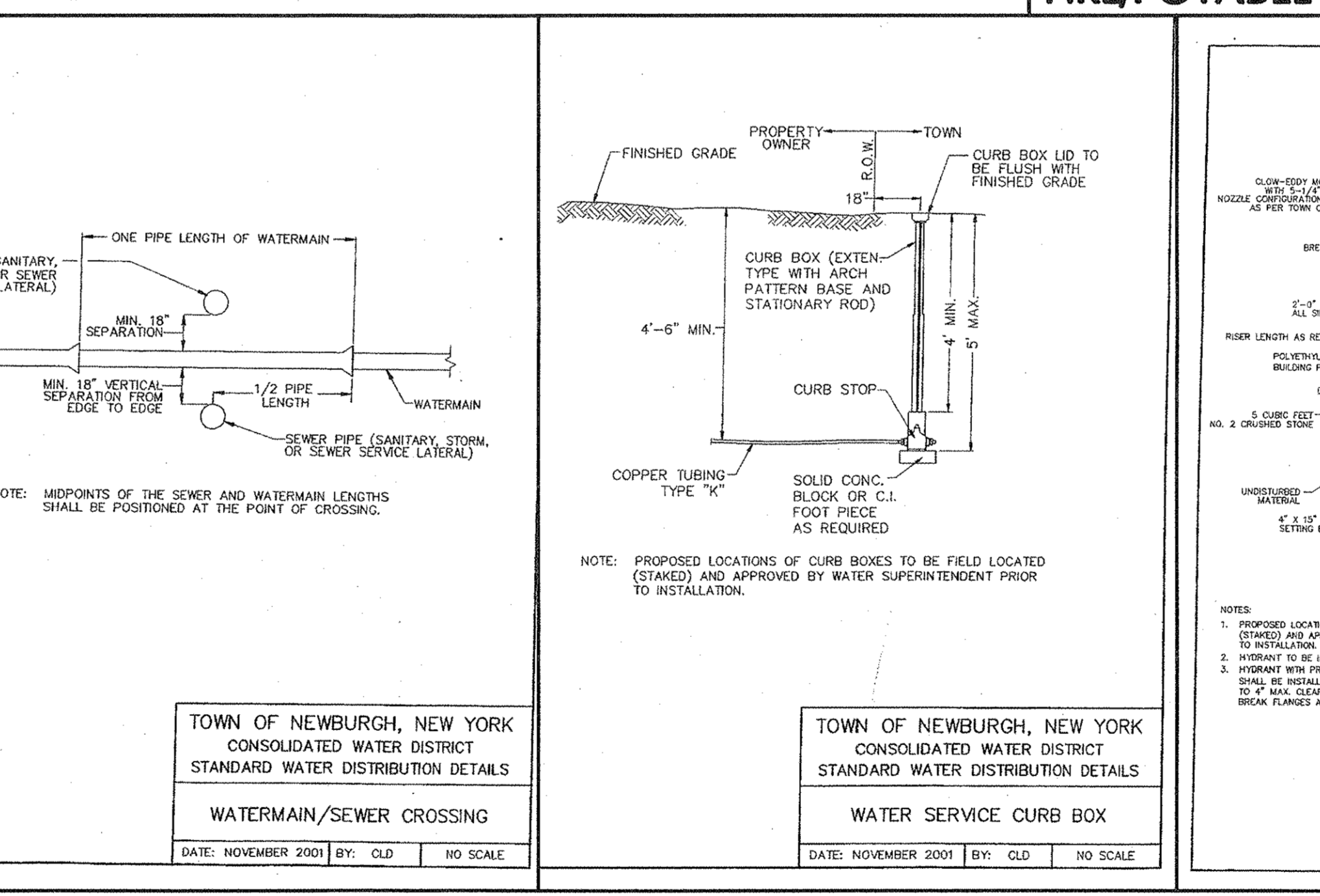
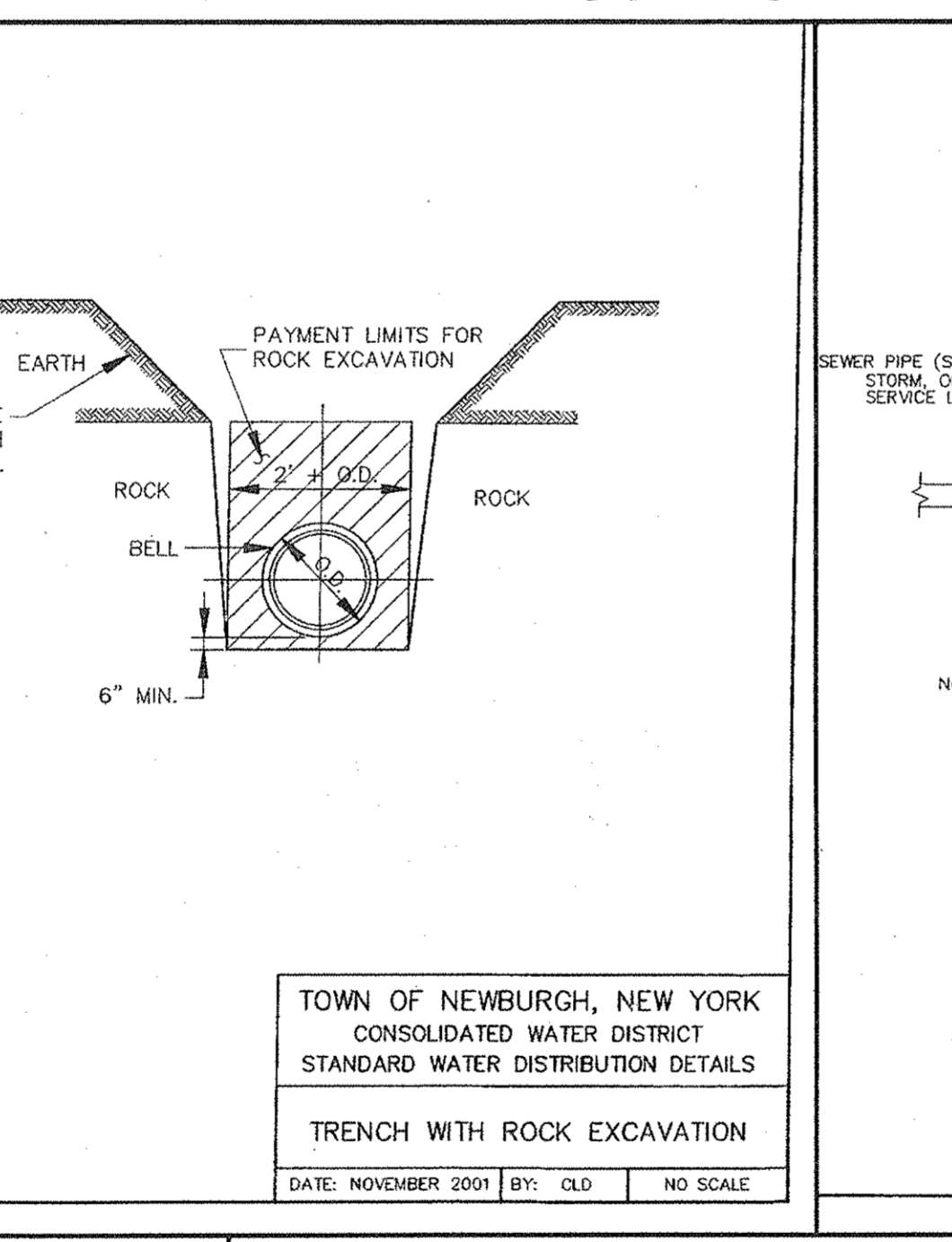
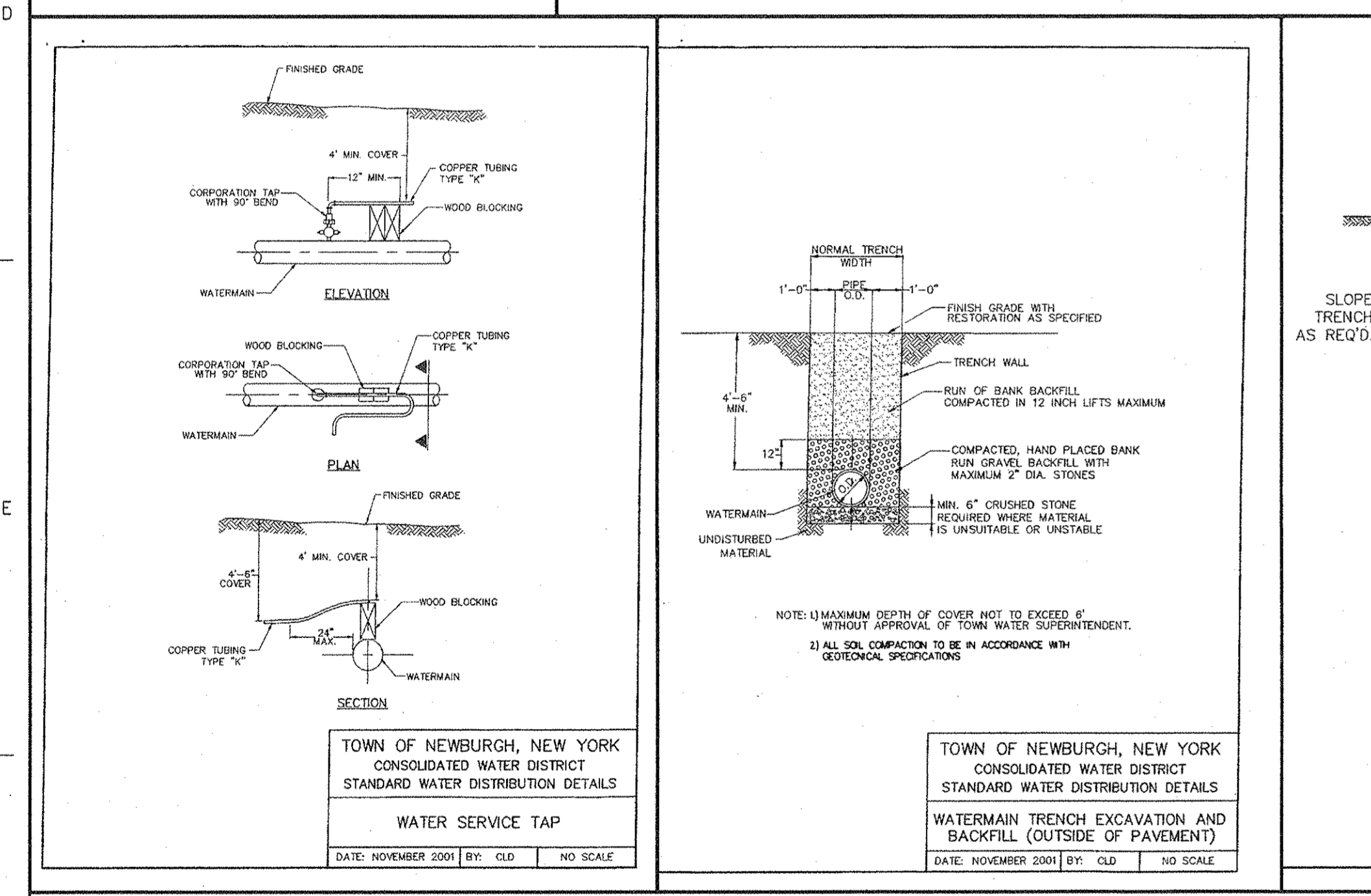
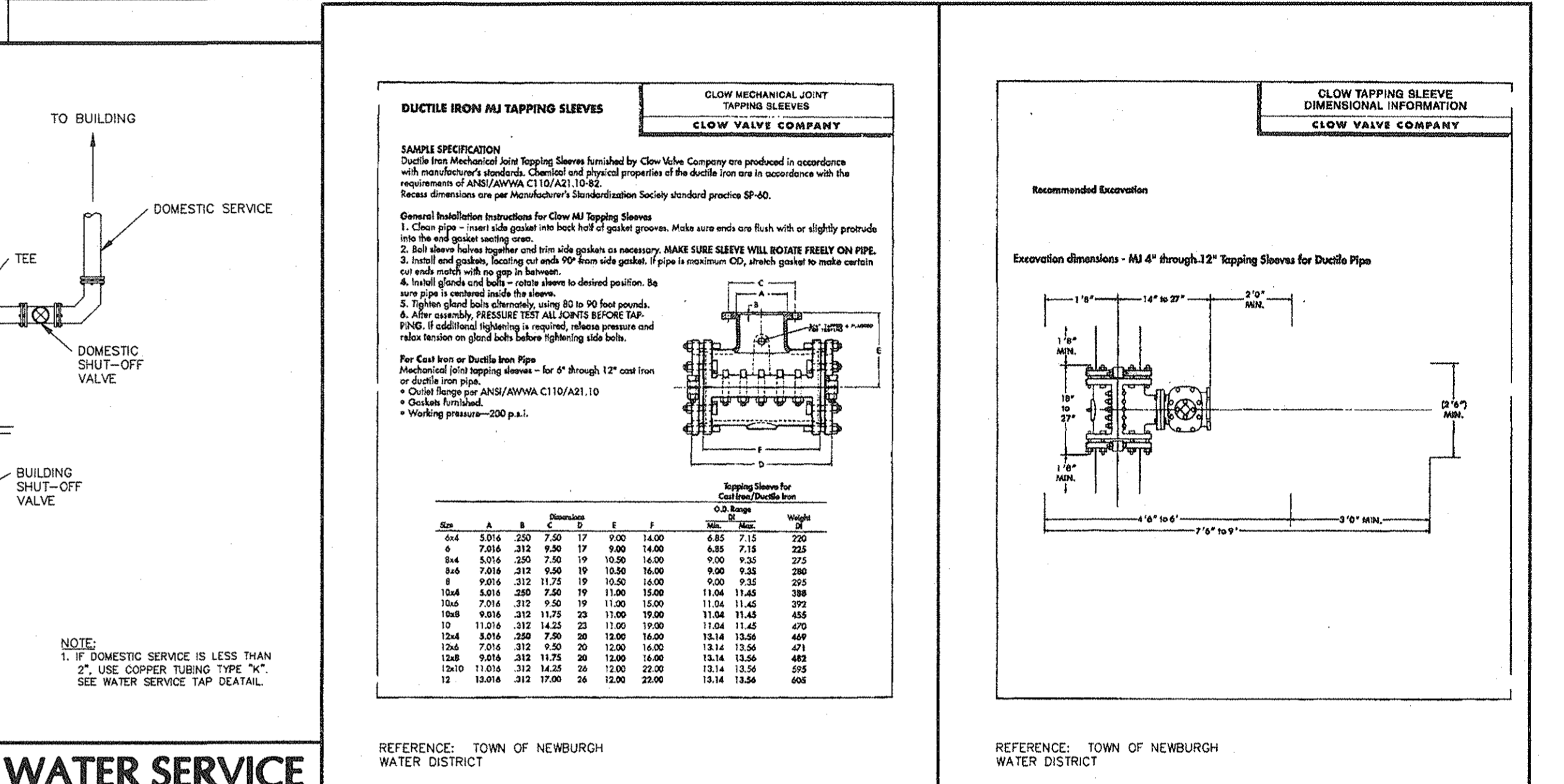
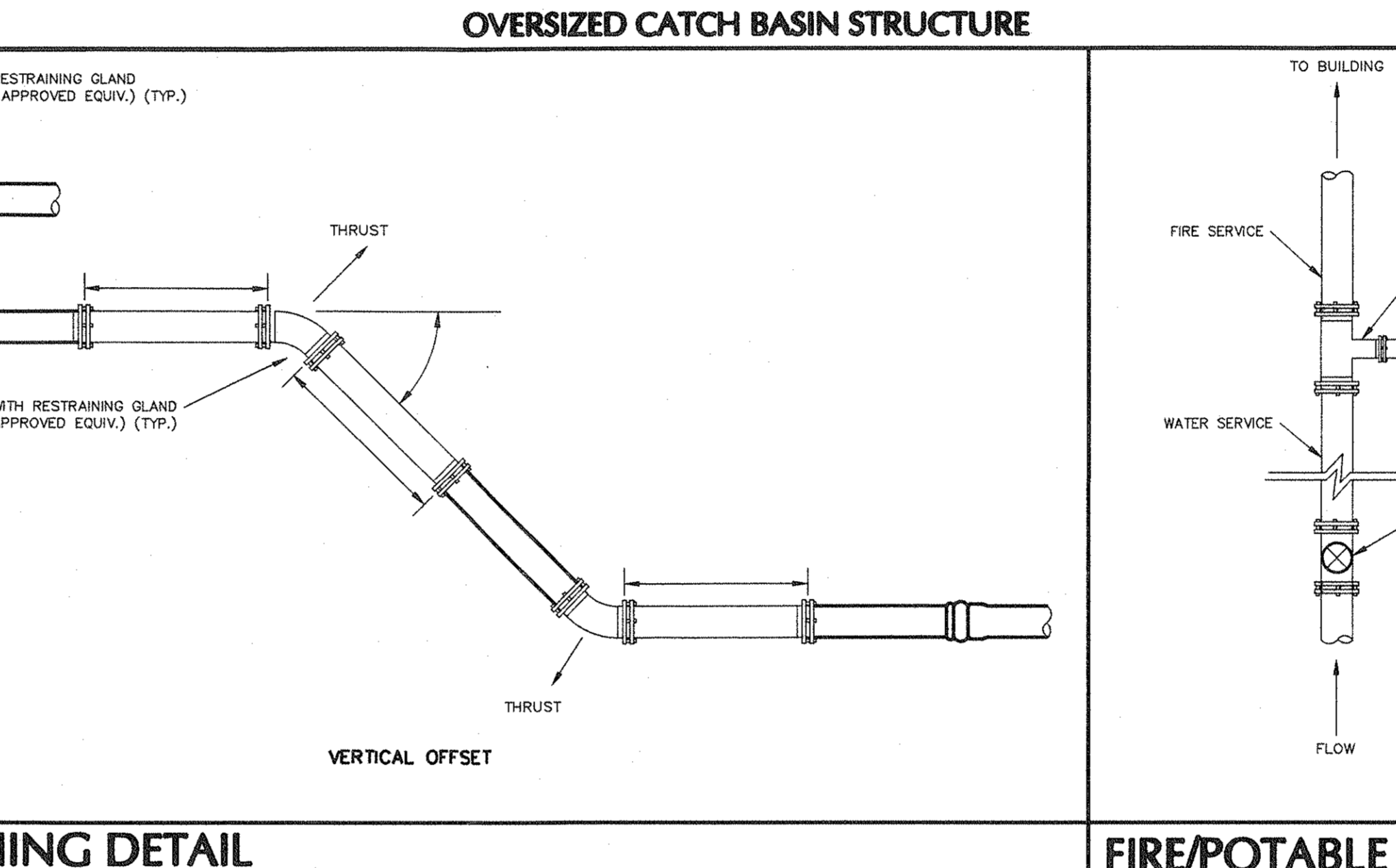
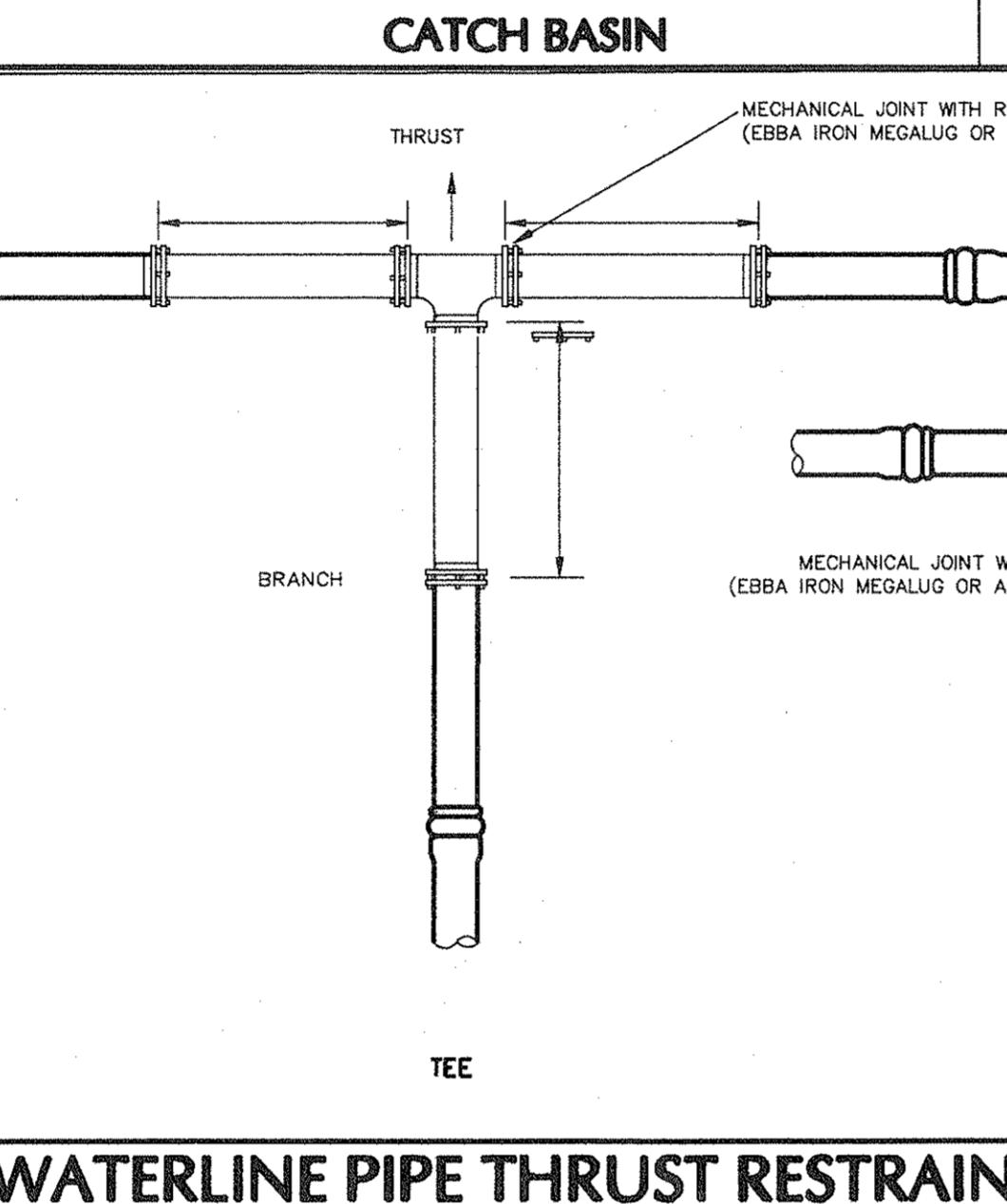
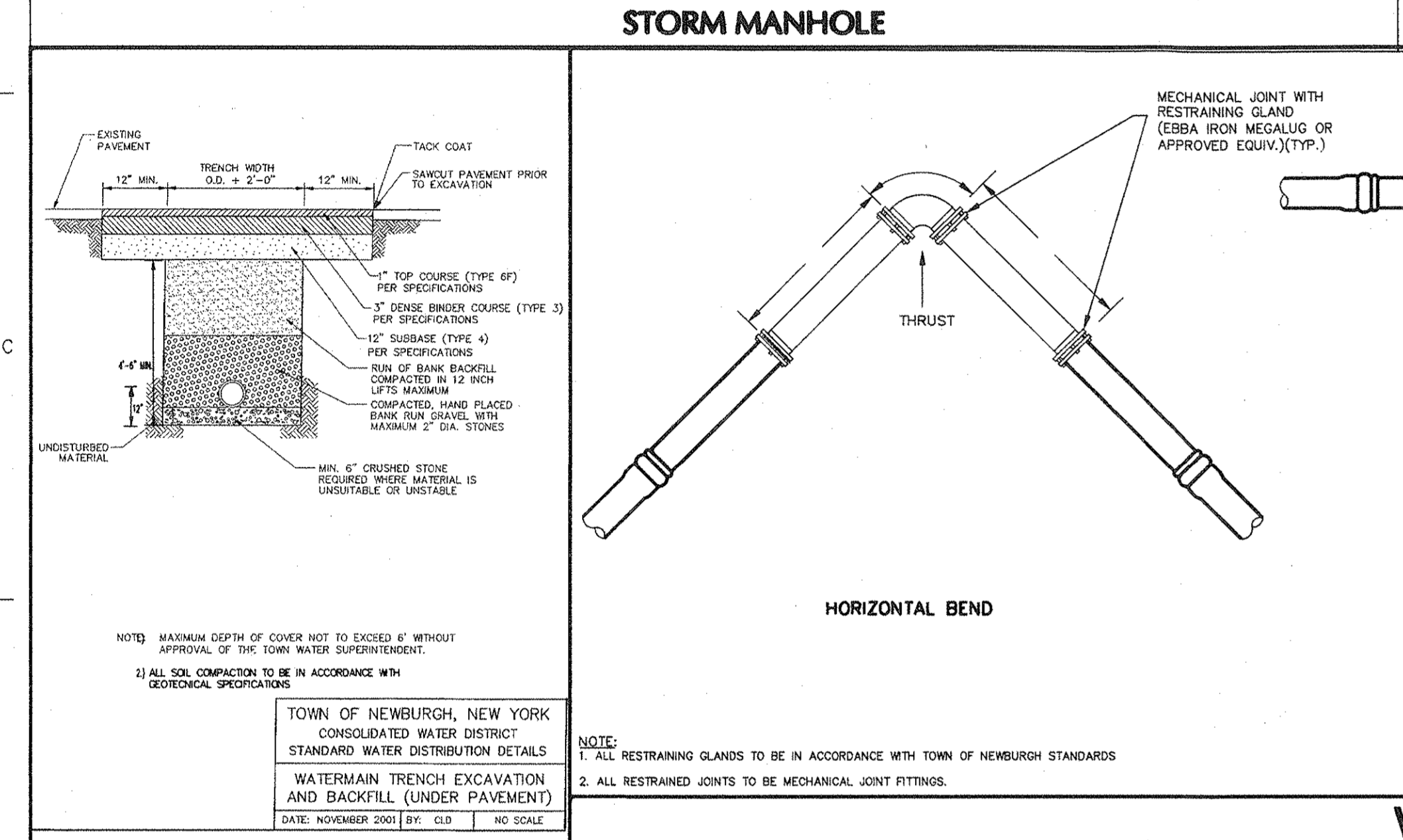
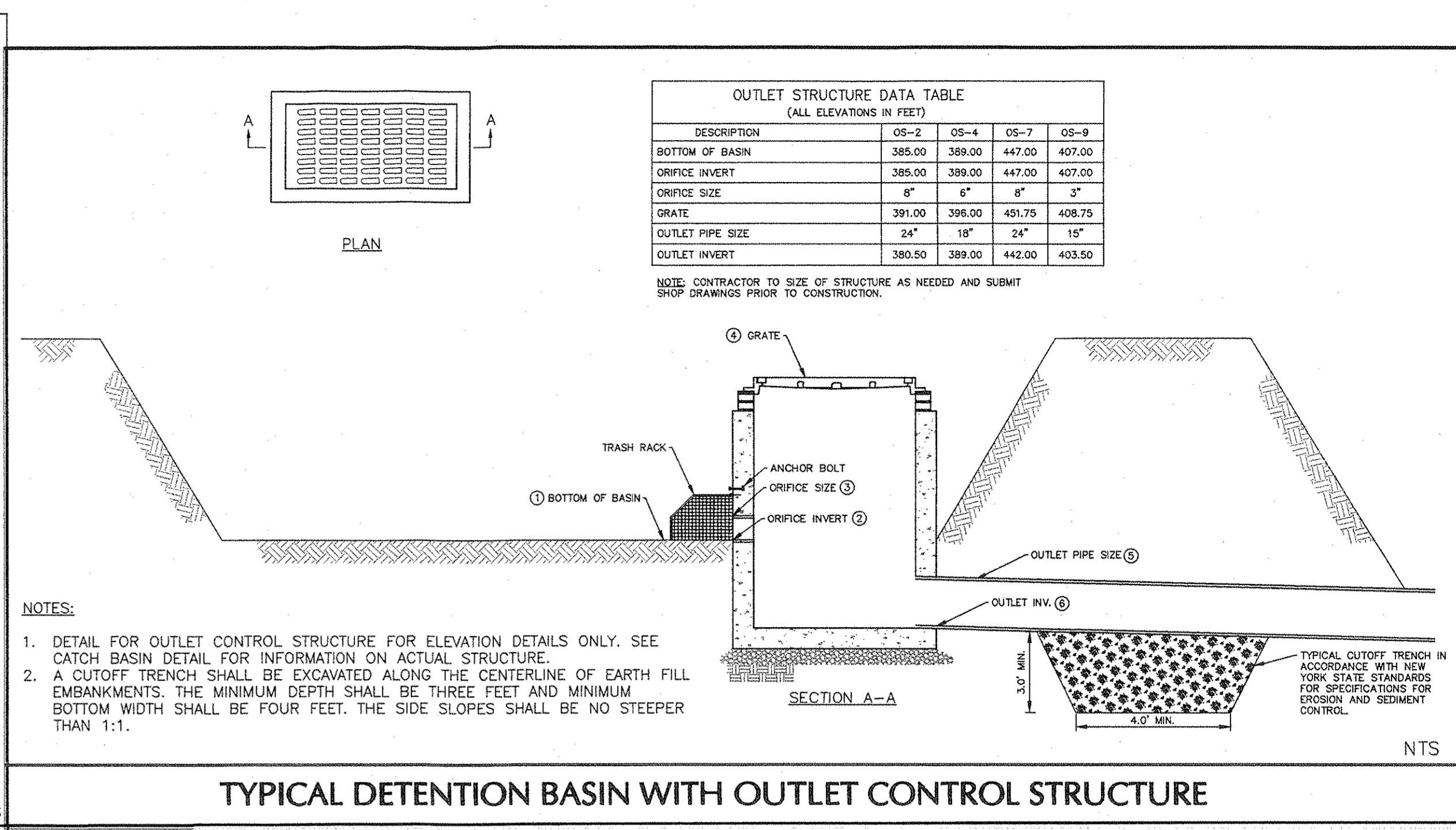
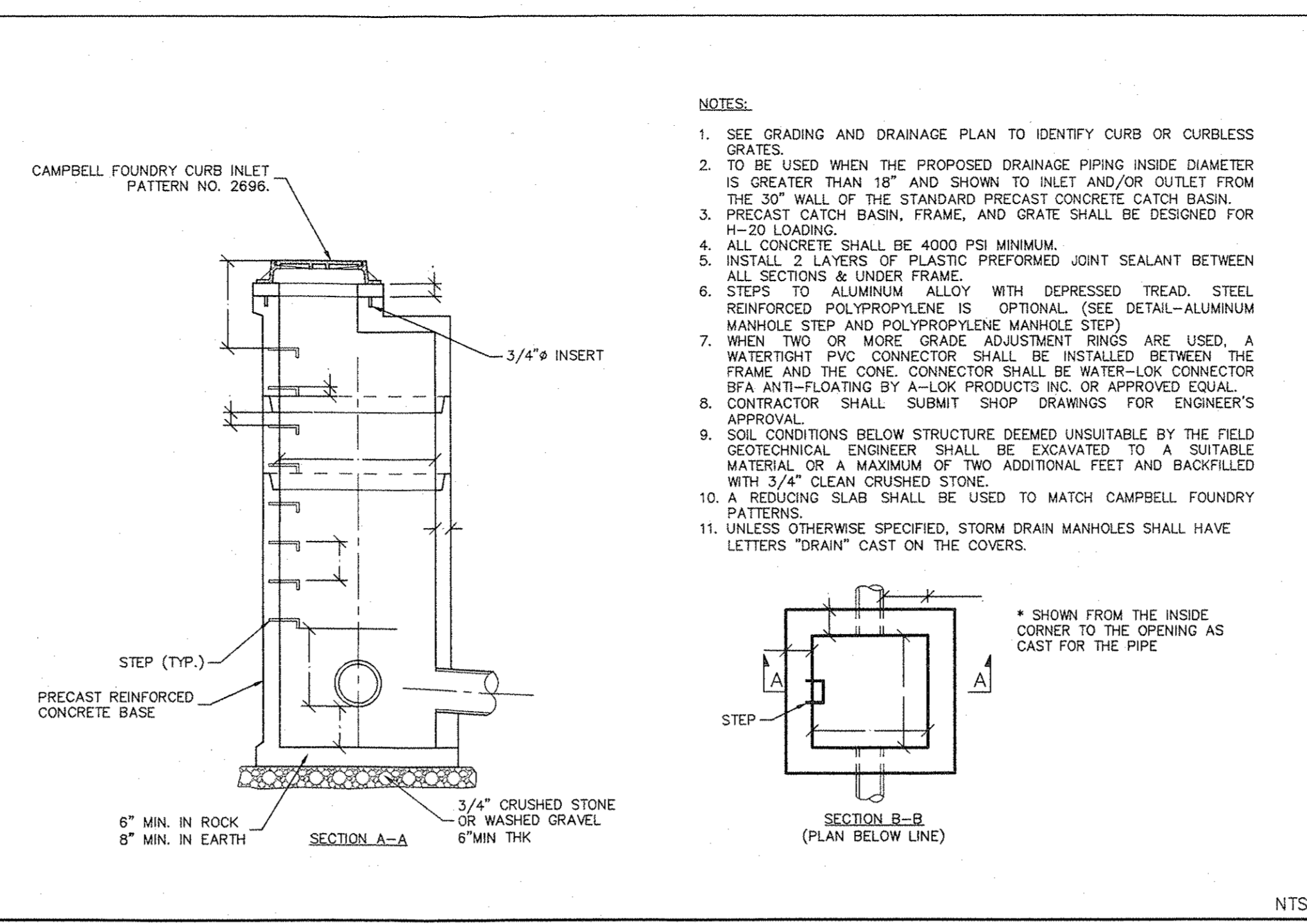
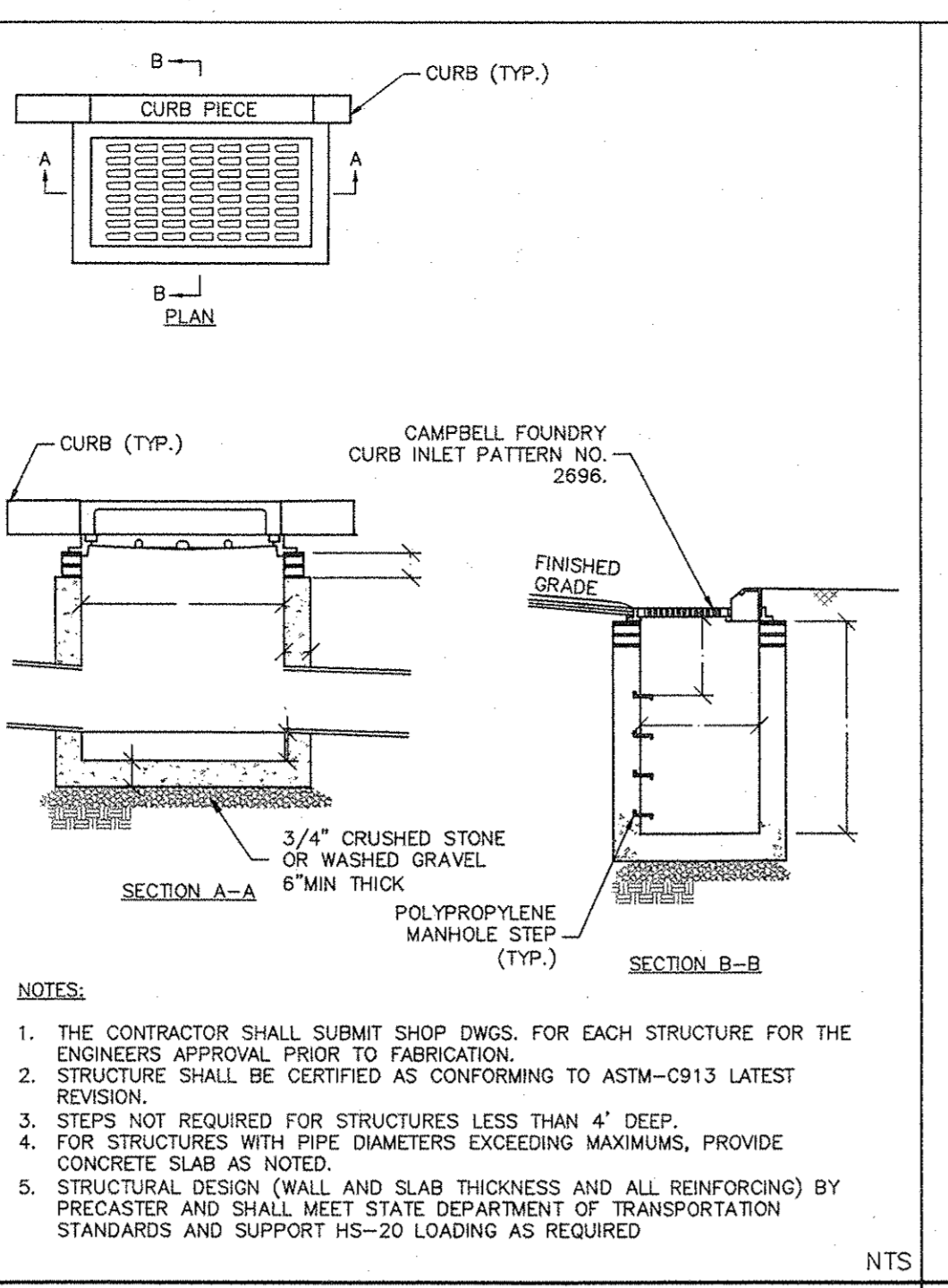
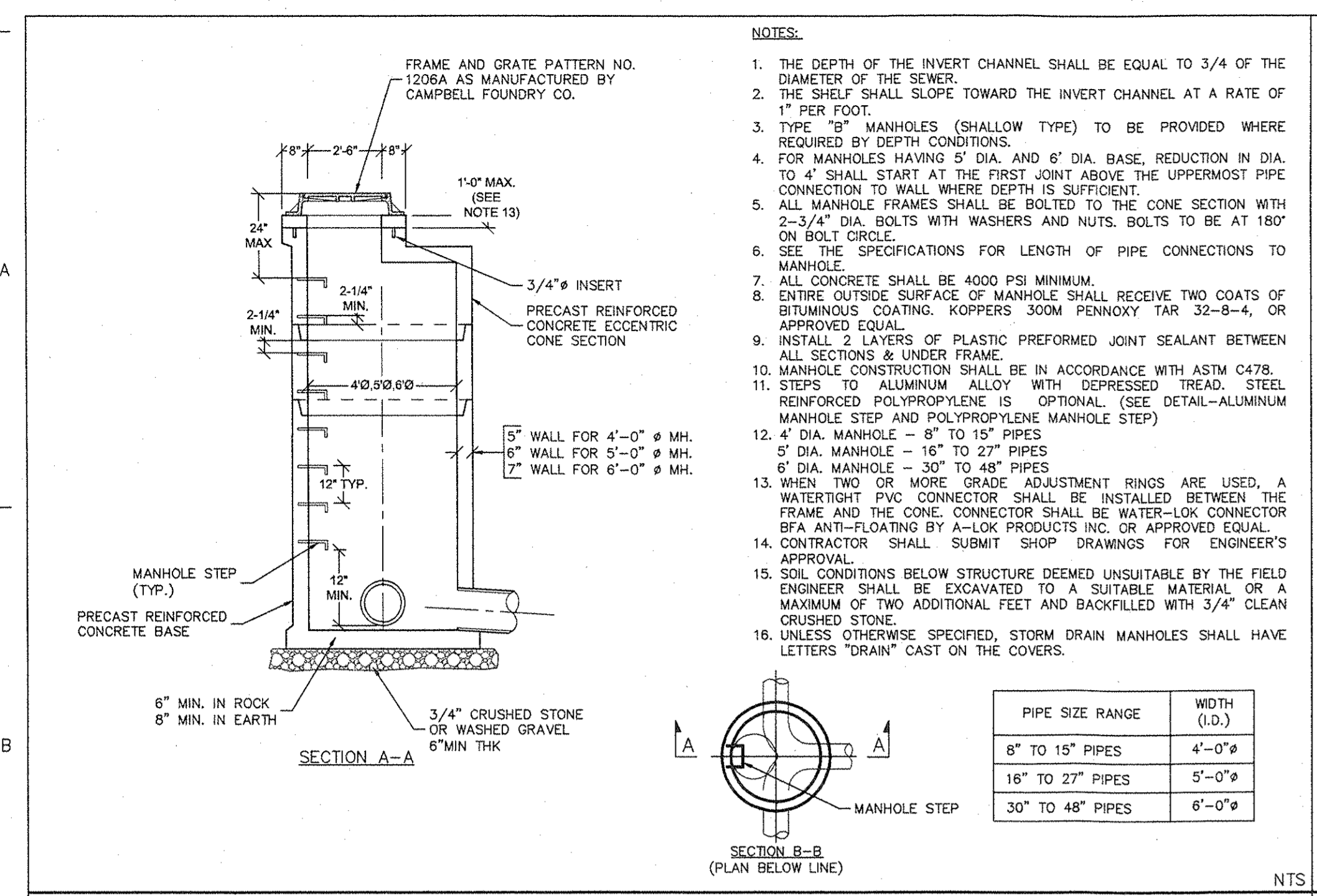
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OHIO INDIANAPOLIS ILLINOIS TEXAS CALIFORNIA
ALABAMA ARIZONA ARKANSAS COLORADO FLORIDA GEORGIA
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NEW MEXICO NORTH CAROLINA NORTH DAKOTA OREGON SOUTH CAROLINA
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Project: **MATRIX BUSINESS PARK AT NEWBURGH**
TOWN OF NEWBURGH
ORANGE COUNTY NEW YORK

Drawing Title: **DETAIL SHEET**

Project No. 9190601 Drawing No. CS-501
Date 9/9/2015
Scale AS SHOWN
Drawn By
Submission Date 04/11/2016



Date	Description	No.
1/25/2016	REVISED PER MEP COMMENTS, NYS DOT DESIGN, AND EMERGENCY ACCESS PATH	2
11/9/2015	REVISED PER TOWN COMMENTS	1

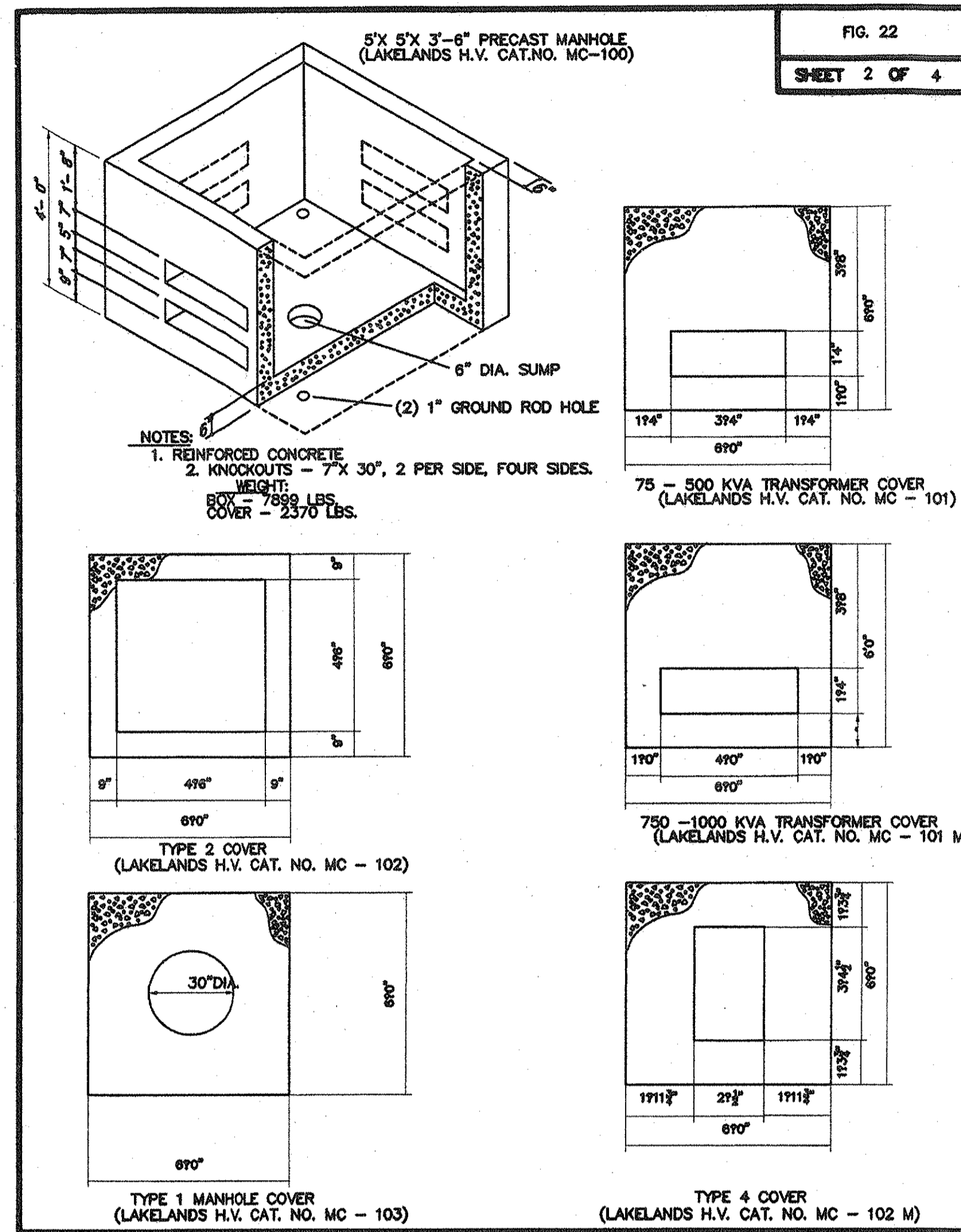
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MATRIX BUSINESS PARK AT NEWBURGH
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 Drawing Title

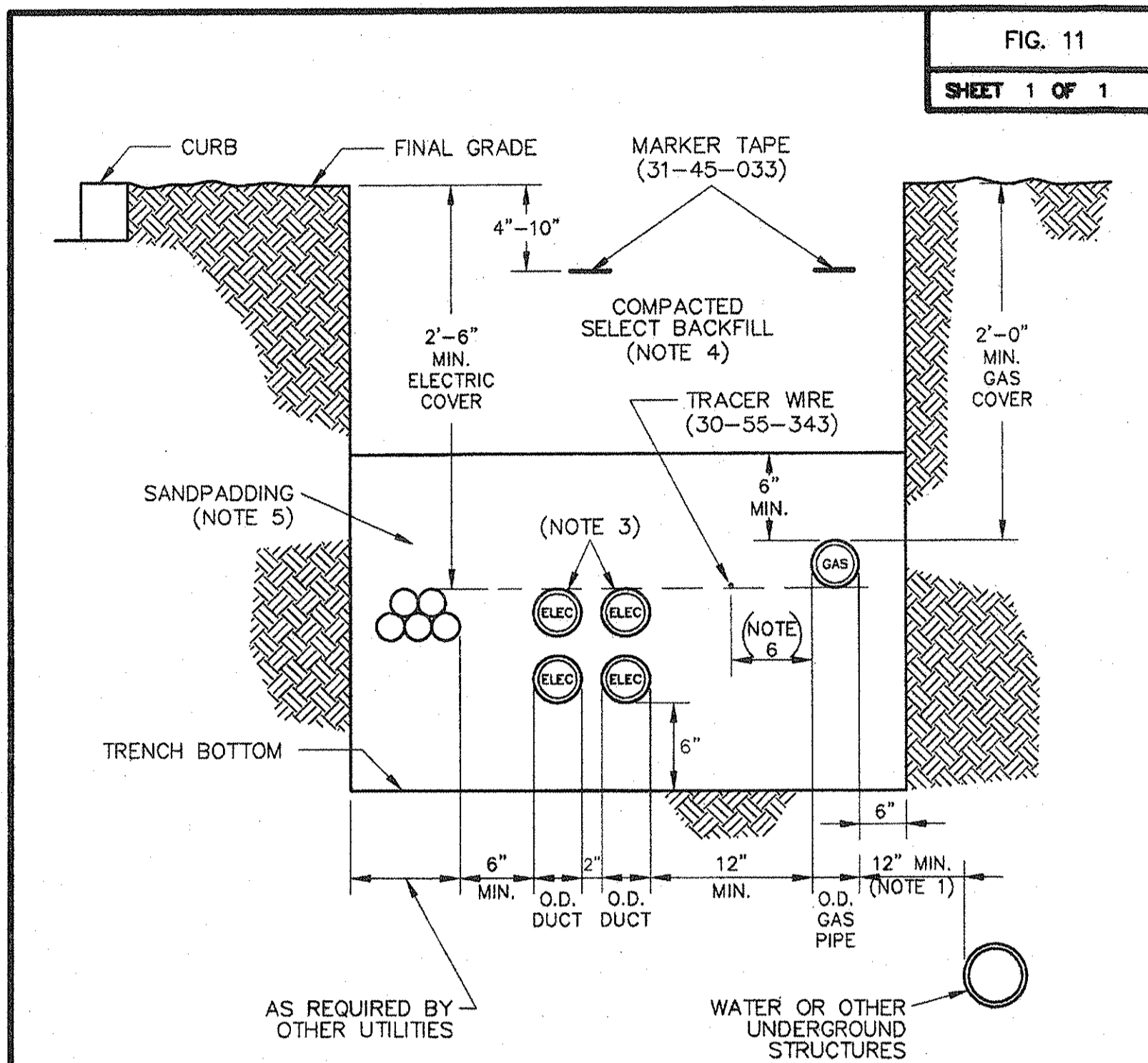
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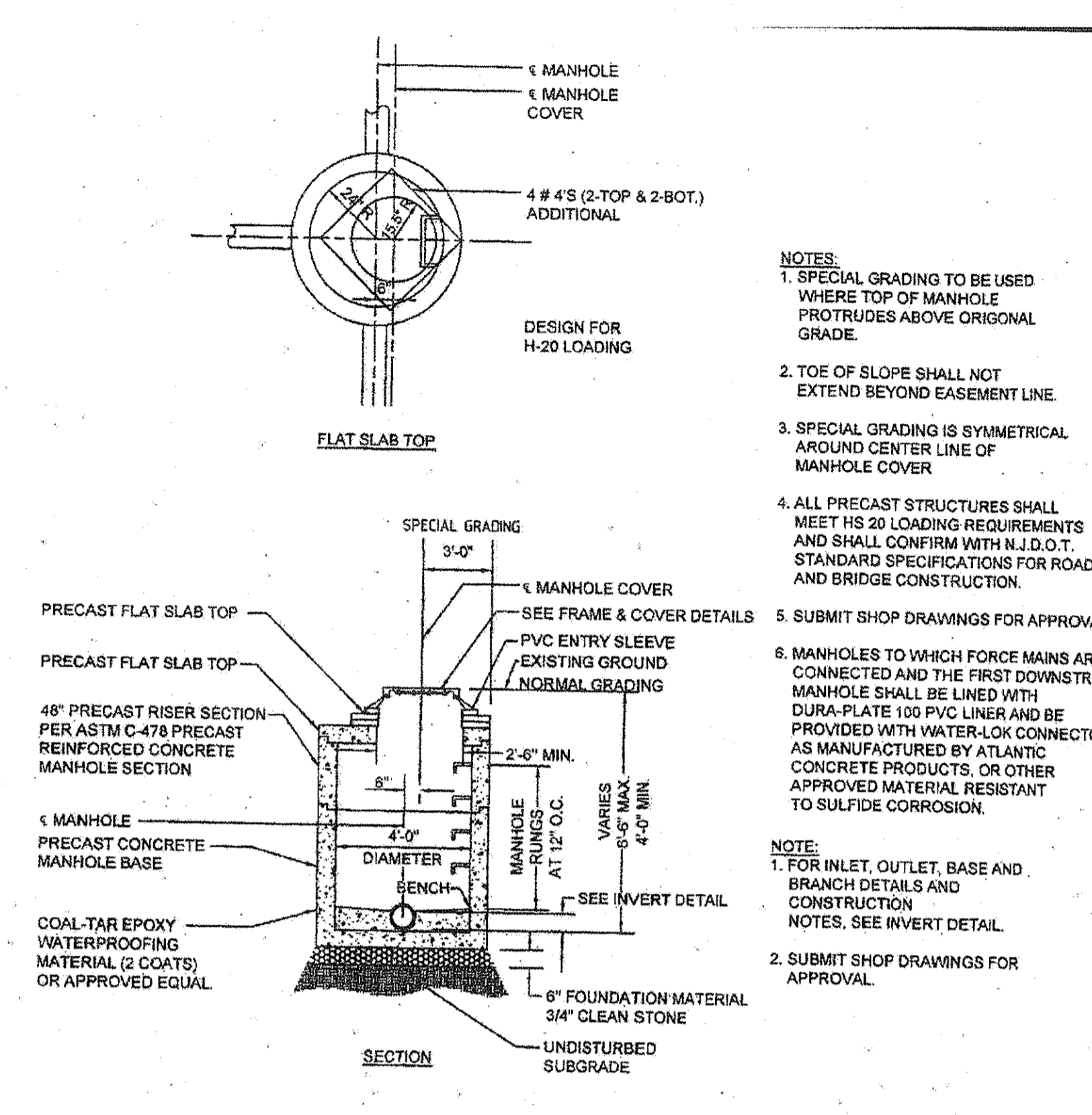
ELECTRIC STANDARDS		CENTRAL HUDSON GAS & ELECTRIC CORP.		DATE 3-2-05	
DRWN.		THREE PHASE PAD SPECIFICATIONS		ISSUE	
DSGN.		5 - 15 KV		APP.	
APPD.		75 - 1000 KVA		APP.	



NOTES:

- THE MINIMUM CLEARANCE FROM GAS TO OTHER UTILITIES SUCH AS WATER & SEWER SHALL BE 12". CONSULT WITH OTHER UTILITIES OR REVIEW LOCAL ORDINANCES FOR ADDITIONAL CLEARANCE REQUIREMENTS. IF 12" CLEARANCE IS NOT POSSIBLE, REFER TO FIGURE 19 OF THE SPECIFICATIONS AND REQUIREMENTS OF GAS INSTALLATIONS.
- GAS SHALL BE INSTALLED ON THE FIELD SIDE OF THE ELECTRIC.
- SPACING SHALL BE MAINTAINED FOR CONCRETE ENCASED DUCTS.
- COMPACTED SELECT BACKFILL MAY BE ON-SITE MATERIAL PROVIDED IT CONTAINS NO ROCKS OR STONES OVER 6" IN DIAMETER, ROOTS, STUMPS OR CONSTRUCTION DEBRIS.
- REFER TO FIGURE 20 FOR DEFINITION OF SANDPADDING.
- LOCATE TRACER WIRE A SUFFICIENT DISTANCE FROM PLASTIC PIPE TO MINIMIZE TRACER WIRE TO PIPE CONTACT.

ELECTRIC STANDARDS		CENTRAL HUDSON GAS & ELECTRIC CORP.		DATE 6/1/06	
DRWN.		TYPICAL COMMON TRENCH CONFIGURATION		ISSUE	
ENGR.		ELECTRIC DUCTS W/GAS MAIN AND OTHER UTILITIES		APP.	
APP.				APP.	

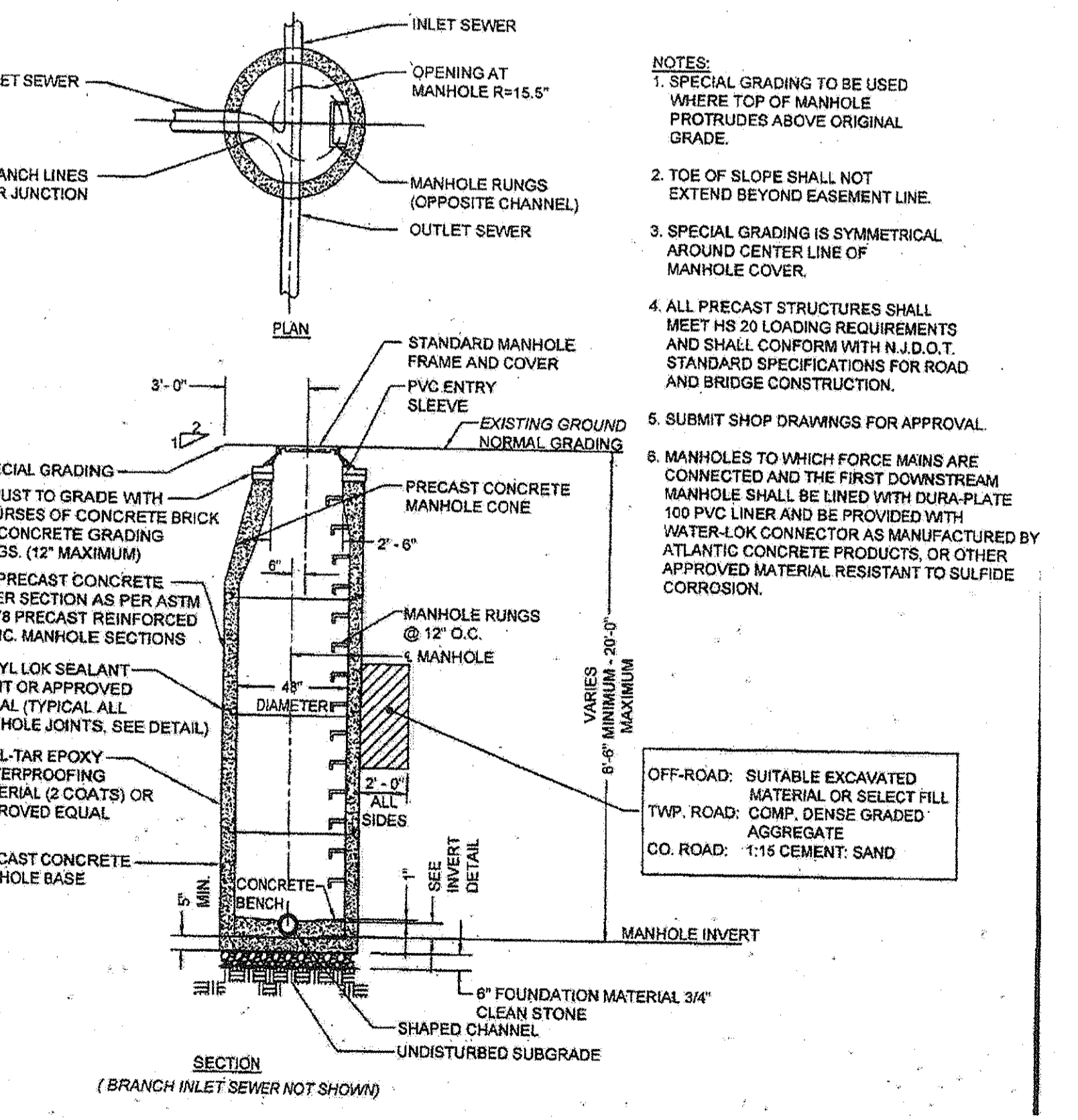
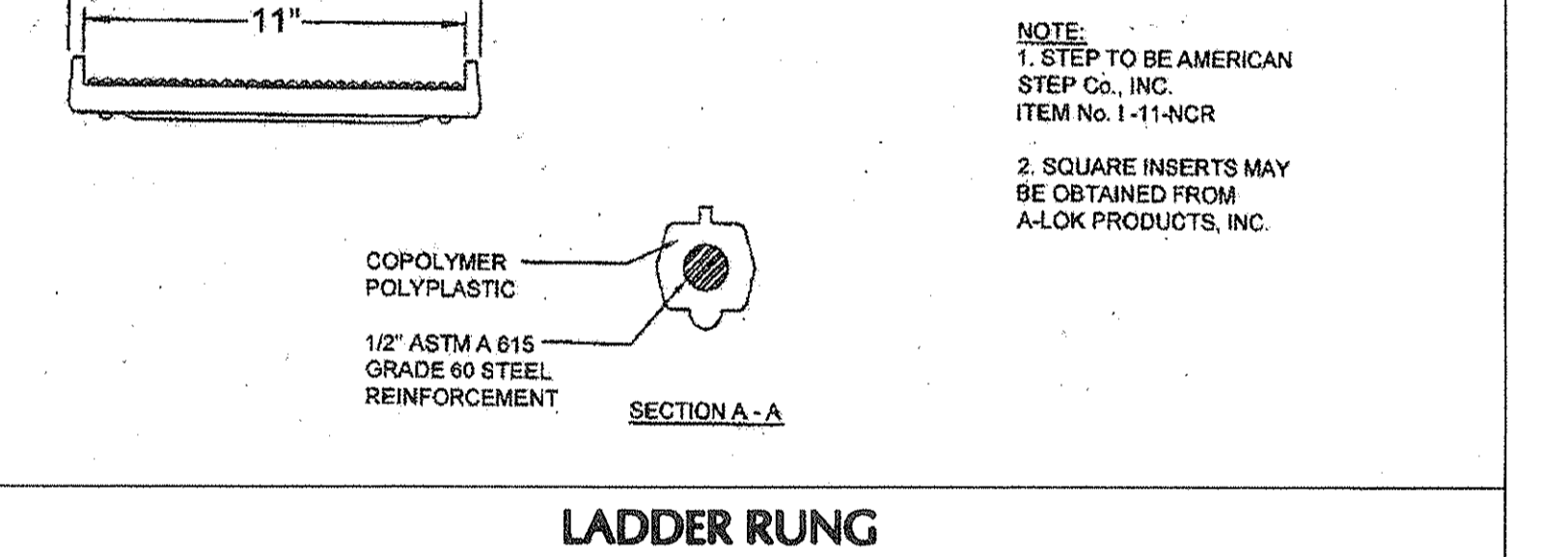
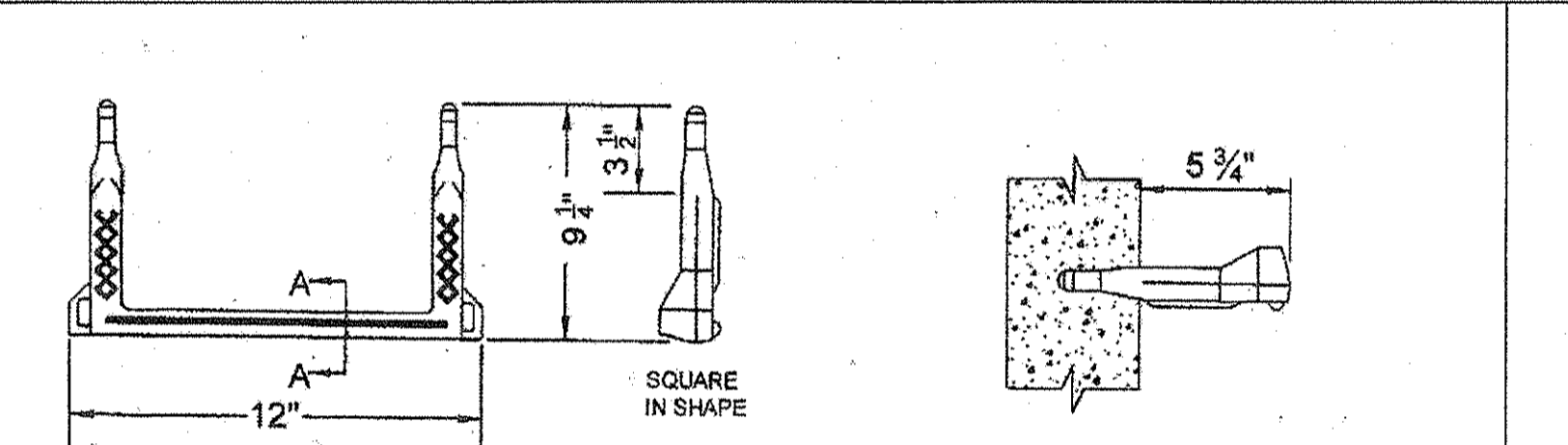


NOTES:

- SPECIAL GRADING TO BE USED WHERE TOP OF MANHOLE PROTRUDES ABOVE ORIGINAL GRADE.
- TOE OF SLOPE SHALL NOT EXTEND BEYOND EASEMENT LINE.
- SPECIAL GRADING IS SYMMETRICAL AROUND CENTER LINE OF MANHOLE COVER.
- ALL PRECAST STRUCTURES SHALL MEET HS 20 LOADING REQUIREMENTS AND SHALL CONFORM WITH N.J.D.O.T. STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
- SUBMIT SHOP DRAWINGS FOR APPROVAL.
- MANHOLES TO WHICH FORCE MAINS ARE CONNECTED AND THE FIRST DOWNSTREAM MANHOLE SHALL BE LINED WITH DURA-PLATE 100 PVC LINER AND BE PROVIDED WITH WATER-LOK CONNECTOR AS MANUFACTURED BY ATLANTIC CONCRETE PRODUCTS, OR OTHER APPROVED MATERIAL RESISTANT TO SULFIDE CORROSION.

NOTE:

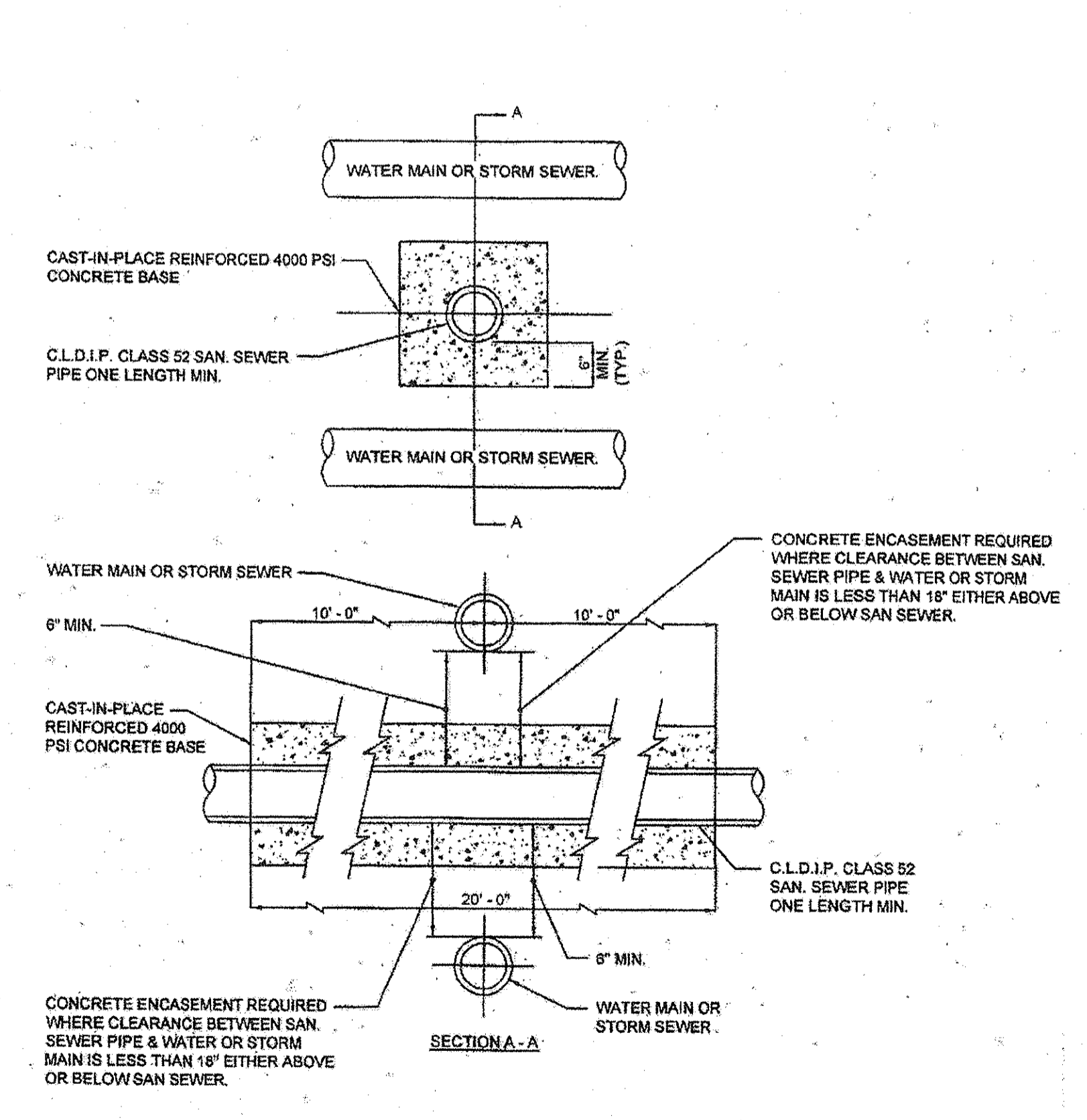
- FOR INLET, OUTLET, BASE AND BRANCH DETAILS AND CONSTRUCTION NOTES, SEE INVERT DETAIL.
- SUBMIT SHOP DRAWINGS FOR APPROVAL.



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OFF-ROAD: SUITABLE EXCAVATED MATERIAL OR SELECT FILL
TYP. ROAD: COMP. DENSE GRADED AGGREGATE
CO. ROAD: 1:1.5 CEMENT: SAND



CONCRETE ENCASEMENT REQUIRED WHERE CLEARANCE BETWEEN SAN. SEWER PIPE & WATER OR STORM MAIN IS LESS THAN 18" EITHER ABOVE OR BELOW SAN SEWER.

Date	Description	No.
REVISIONS		

04/11/2016
DATE SIGNED

LANGAN
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Project **MATRIX BUSINESS PARK AT NEWBURGH**

TOWN OF NEWBURGH
 ORANGE COUNTY NEW YORK

Drawing Title **DETAIL SHEET**

Project No.	9190601	Drawing No.	CS-503
Date	9/9/2015	Scale	AS SHOWN
Drawn By		Submission Date	4/11/2016

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