

INLAND WETLANDS
COMMISSION
Telephone (203) 563-0180
Fax (203) 563-0284



TOWN HALL
238 Danbury Road
Wilton, Connecticut 06897

APPLICATION FOR AN INTERMEDIATE REGULATED ACTIVITY

For Office Use Only:	
Filing Fee \$ _____	WET# _____
Date of Submission _____	Wilton Land Record Map# _____
Date of Acceptance _____	Volume # _____ Page # _____
	Assessor's Map # _____ Lot# _____

APPLICANT INFORMATION:

Applicant Town of Wilton
Address 238 Danbury Road
Wilton, CT 06897
Telephone 203-563-0180
Email mike.conklin@wiltonct.org

Agent (if applicable) William Kenny & Assoc.
Address 1899 Bronson Road
Fairfield, CT 06824
Telephone 203-366-0588
Email wkenny@wkassociates.net

PROJECT INFORMATION:

Property Address Map#72 Lot#14 Schencks
Acres of altered Wetlands On-Site 0
Linear Feet of Watercourse 0
Linear Feet of Open Water 0
Sq. Ft. of proposed and/or altered impervious coverage N/A

Site Acreage 2.068
Cu. Yds. of Material Excavated +75
Cu. Yds. of Material to be Deposited +75
Acres of altered upland buffer _____
Sq. Ft. of disturbed land in regulated area _____

APPLICATION REQUIREMENTS:

Is The Site Within a Public Water Supply
Watershed Boundary? NO ☒ YES* ☐

Is The Site Within 500 Feet of a Town Boundary?
NO ☒ YES* ☐

* If the answer is yes, then the applicant is responsible for notifying the appropriate water authority and/or adjoining community's Wetlands Department. Instructions for notification are available at the office of the commission.

Project Description and Purpose: Parking lot and electrical improvements at Schenck's Island

In addition, the applicant shall provide nine (9) collated copies of the following information as well as an electronic submission via email to mike.conklin@wiltonct.org & elizabeth.larkin@wiltonct.org **

- ☐ A. Written consent from the owner authorizing the agent to act on his/her behalf
- ☐ B. A Location Map at a scale of 1" = 800'
- ☐ C. *A Site Plan showing existing and proposed features at a scale not to exceed 1" = 40'*
- ☐ D. Sketch Plans depicting the alternatives considered
- ☐ E. Names and addresses of adjoining property owners
- ☐ F. A narrative describing, in detail
 - a. the proposed activity
 - b. the alternatives considered
 - c. impacts
 - d. proposed mitigation measures
- ☐ G. Soils Report prepared by a Certified Soil Scientist and Wetlands Map prepared by a Registered Land Surveyor
- ☐ H. Description of the chemical and physical characteristics of fill material to be used in the Regulated Area
- ☐ I. Description and maps detailing the watershed of the Regulated Area
- ☐ J. One original application and eight (8) copies

****Application materials shall be collated and copies of documents more than two pages in length shall be double sided.**

See Section 7 of the Wetlands and Watercourses Regulations of the Town of Wilton for a more detailed description of applications requirements.

The Applicant or his/her agent certifies that he is familiar with the information provided in this application and is aware of the penalties for obtaining a permit through deception, inaccurate or misleading information.

By signing this application, permission is hereby given to necessary and proper inspections of the subject property by the Commissioners and designated agents of the Commission or consultants to the Commission, at reasonable times, both before and after a final decision has been rendered.

Applicant's Signature:  Date: 4/12/22

Agent's Signature (if applicable): _____ Date: _____

DEPARTMENT OF
ENVIRONMENTAL AFFAIRS
Telephone (203) 563-0180
Fax (203) 563-0284



TOWN HALL
238 Danbury Road
Wilton, Connecticut 06897

April 11, 2022

Inland Wetland Commission
Town Hall Annex Building
238 Danbury Road
Wilton, CT 06897

**RE: Wetland Permit Application for Intermediate Regulated Activity
Town of Wilton - Schenck's Island Parking Lot Project –**

Dear Inland Wetland Commission,

The Town of Wilton is seeking a wetland permit for an intermediate regulated activity to re-configure the parking lot at Schenck's Island located in Wilton, Connecticut. The existing parking lot layout limits the number of vehicles that can utilize the space. The current lot is also prone to ponding water for periods of time after rain events and can ice over during the winter which creates a safety issue for park users. The re-configuration of the parking lot was developed as part of the master plan created by the Schenck's Island and Merwin Meadows Committee and adopted by the Board of Selectman.

The proposal includes removing the existing gravel and asphalt lot and constructing a larger parking lot that will accommodate 18 vehicles. The new gravel lot will have a one-way travel way to direct vehicles around the parking lot. The parking spaces will be located on the outside of the travel way. William Kenny Associates (WKA) was retained by the Town to develop the final parking lot layout and construction documents. WKA designed the parking lot to be compliant with Wilton's zoning regulations. See Site Development Plan (L-1) for more information.

During the initial site visit, Bill Kenny & Katie Hass of WKA identified several mature American elm trees that would be eliminated with the construction of the lot shown on the master plan. These landscape architects then developed the proposed plans with an eye on preserving the mature elm trees. Approximately eight (8) mature trees will need to be removed along the wooded area. Seven (7) sycamore trees and one (1) oak tree are proposed to be planted around the gravel lot to mitigate the loss of the trees. See Planting Plan (P-1) for more information.

April 11, 2022

Since a portion of the lot is located in the flood plain of the Norwalk River, care will be taken to ensure that no additional fill material will be added to the site. Stormwater will be allowed to infiltrate into the soils directly under and around the new parking lot. Electrical service will be brought into the park during this project. This project will also include new aboveground electrical equipment, such as parking lot lighting and outlets along the parking area, and electrical service along the lawn edge near the stone wall and meadow area. This service will be installed for future temporary performances so they will no longer need to use gas generators for electricity at the site.

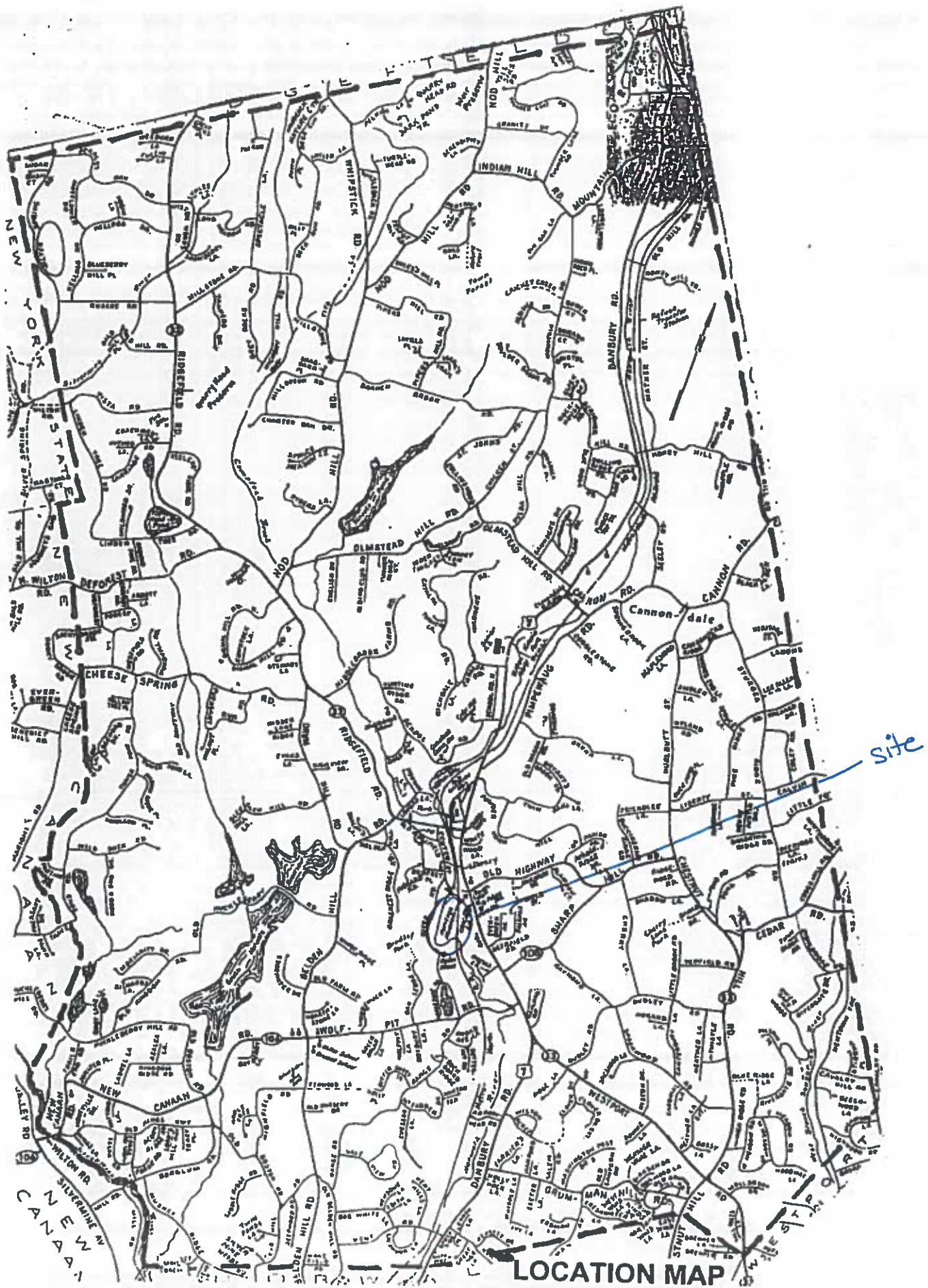
The potential for impacts to adjacent wetlands and the Norwalk River is very low. Silt fencing will be installed prior to the earth work to prevent short term impacts due to erosion. There are no long-term impacts expected from the proposed construction activities.

Thank you for your consideration of this application. I look forward to presenting the plans to you at the wetland commission meeting.

Sincerely,



Michael Conklin
Director of Environmental Affairs



LOCATION MAP

57-1

254 DANBURY ROAD EAT LLC
16 DEERFIELD ROAD
WILTON CT 06897

72-3

BHT REALTY LLC
27 CRICKET LA
WILTON CT 06897

72-7

BHT REALTY LLC
27 CRICKET LA
WILTON CT 06897

72-14

WILTON TOWN OF
238 DANBURY RD
WILTON CT 06897

73-7

263 265 DANBURY RD LLC
263-265 DANBURY RD
WILTON CT 06897

73-23-1

FAIRFIELD COUNTY BANK
150 DANBURY RD
RIDGEFIELD CT 06877

73-23-2

MCL 180 LLC
PO BOX 49
WILTON CT 06897

73-23-2

MCL 180 LLC
PO BOX 49
WILTON CT 06897

73-25-1

WILTON CAMPUS 1691 LLC
3333 NEW HYDE PARK RD STE 100
NEW HYDE PARK NY 11042

73-26

SUN PLAZA CENTER LLC
185 BROAD ST
WETHERSFIELD CT 06109

57-22

SAVOY PLAZA WILTON LLC
283 MAIN STREET
RIDGEFIELD CT 06877

72-5

OSMAN WILTON, LLC (17.5% INTEREST) &
249 DANBURY RD
WILTON CT 06897

72-8

FIRST WHITE BIRCH REALTY LLC
26 CRICKET LA
WILTON CT 06897

73-2

TBS PARTNERS LLC
2 RUBY ST
NORWALK CT 06850

73-20

WILSON PROPERTIES LLC
43 DANBURY RD
WILTON CT 06897

73-23-1

FAIRFIELD COUNTY BANK
150 DANBURY RD
RIDGEFIELD CT 06877

73-23-2

MCL 180 LLC
PO BOX 49
WILTON CT 06897

73-24

202 OLD RIDGEFIELD RD
2 RUBY ST
NORWALK CT 06850

73-25-2

WILTON TOWN OF
238 DANBURY RD
WILTON CT 06897

73-8-1

CONNECTICUT STATE OF
2800 BERLIN TPKE
NEWINGTON CT 06131

71-23

CONNECTICUT STATE OF
2800 BERLIN TPKE
NEWINGTON CT 06131

72-6

CORP OF THE PRESIDING BISHOP OF
50 E NORTH TEMPLE ST 2ND FL
SALT LAKE CITY UT 84150

72-12

WILTON TOWN OF
238 DANBURY RD
WILTON CT 06897

73-6

SADEGI SAM H
261 DANBURY RD
WILTON CT 06897

73-23-1

FAIRFIELD COUNTY BANK
150 DANBURY RD
RIDGEFIELD CT 06877

73-23-1

FAIRFIELD COUNTY BANK
150 DANBURY RD
RIDGEFIELD CT 06877

73-23-2

MCL 180 LLC
PO BOX 49
WILTON CT 06897

73-25

WILTON RIVER PARK 1688 LLC
3333 NEW HYDE PARK RD STE 100
NEW HYDE PARK NY 11042

73-25-3

AVALONBAY COMMUNITIES INC
PO BOX 4697
LOGAN UT 84323

73-23

73-25-4

WILTON CAMPUS 1691 LLC
3333 NEW HYDE PARK RD STE 100
NEW HYDE PARK NY 11042

72-5-1

CORP OF THE PRESIDING BISHOP OF
50 EAST NORTH TEMPLE ST 22FLR
SALT LAKE CITY UT 84150



May 30, 2018

Ref: 46273.00

Ms. Tracy Brown
Northeast Restoration Coordinator
Mianus Trout Unlimited
P.O. Box 475
Wilton, CT 06897

Re: Wetland Delineation Report
Schenck's Island Restoration Project – Old Ridgefield Road, Wilton, Connecticut

Dear Ms. Tracy Brown,

VHB completed an on-site investigation to determine the presence or absence of wetlands and/or watercourses on Schenck's Island located off Old Ridgefield Road in Wilton, Connecticut as requested and authorized. This investigation involved a wetland/watercourse delineation that was completed by a qualified staff soil scientist and conducted in accordance with the principles and practices noted in the United States Department of Agriculture (USDA) Soil Survey Manual (1993). The soil classification system of the National Cooperative Soil Survey was used in this investigation to identify the soil map units present on the project site.

INVESTIGATION

The project Site was investigated on May 1, 2018 with a temperature of 64° F under sunny and May 4, 2018 with a temperature of 72° F under partly cloudy conditions. Soil types are identified by observing soil morphology (soil texture, color, structure, etc.). Soil morphology is evaluated through numerous test pits and/or hand borings (generally to a depth of at least two feet). During the site investigation, if a wetland and/or watercourse was determined to be present, their boundaries would be identified with pink flagging hung from vegetation or small wire stakes if in fields or grass communities. These flags are generally spaced a maximum of approximately 50 feet apart. It is important to note that flagged wetland and watercourse boundaries are subject to change until verified by local, state, or federal regulatory agencies.

REGULATORY INFORMATION

Wetlands and watercourses are regulated by both state and federal law each with different definitions and regulatory requirements. Accordingly, the State may regulate waters that fall



outside of federal jurisdiction; however, where federal jurisdiction exists concurrent State jurisdiction is almost always present.

State Regulation

Wetland determinations are based on the presence of poorly drained, very poorly drained, alluvial, or floodplain soils and submerged land. *Watercourses* are defined as "rivers, streams, brooks, waterways, lakes, ponds, marshes, swamps, bogs and all other bodies of water, natural or artificial, vernal or intermittent, public or private, which are contained within, flow through or border upon the state or any portion thereof." *Intermittent watercourse* determinations are made based on the presence of a defined permanent channel and bank, and two of the following characteristics: (1) evidence of scour or deposits of recent alluvium or detritus, (2) the presence of standing or flowing water for a duration longer than a particular storm incident, and (3) the presence of hydrophytic vegetation. (See Inland Wetlands and Watercourses Act §22a-38 CGS.)

Federal Regulations

The U.S. Army Corps of Engineers regulates the discharge of dredged or fill material into waters of the United States under Section 404 of the Clean Water Act. Waters of the United States are navigable waters, tributaries to navigable waters, wetlands adjacent to those waters, and/or isolated wetlands that have a demonstrated interstate commerce connection. The ACOE Wetlands Delineation Manual defines wetlands as "[t]hose areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas."

WETLAND AND WATERCOURSE SITE DESCRIPTION

Wetland classifications used to identify the type of wetland(s) occurring on the project site are based on guidance from the U.S. Fish and Wildlife Service (USFWS) (Cowardin et.al. 1979). These are further qualified with the Hydrogeomorphic Method of wetland classification (Brinson, 1993).

Wetland/Watercourse Description

One (1) on-site watercourse (Norwalk River) with associated wetland/floodplain communities as well as a small pocket wetland adjacent to the eastern property boundary with Metro-North Railroad were delineated during the May 1st and May 4th visits. The Norwalk River is classified under the United States Fish & Wildlife Service (USFWS) methods as a Riverine Unknown Perennial Unconsolidated Bottom Permanently Flooded (UFWS class: R5UBH). The River was delineated using sequentially numbered flags with open ends (See Figure 1 - Wetland Sketch



Map). It was delineated using sequentially numbered flags: WF 1-100 to WF 1-150, WF 10-400 to 405, WF 10-100 to 115, WF 200 to 201, WF 10-300 to WF 10-305, and WF 9-100 to WF 9-112 with various connections on the eastern side to the wetland flag series WF 7 and WF 8 where the ordinary high water met the edge of bordering wetlands. The watercourse enters the site from the north and flows in a southerly direction until it exits the site in the southeast corner.

The inland wetlands associated with the Norwalk River were delineated using flag series WF 7-100 to WF 7-150, WF 3-100 to WF 3-105, WF 4-100 to WF 4-105, WF 5-100 to WF 5-126, and WF 2-100 to WF 2-105. The majority of these associated inland wetland areas are considered state wetlands due to the presence of floodplain and alluvial soils but do not meet the classification of federal wetlands because of the lack of hydric soils and hydrology for example.

One vernal pool was noted within the WF 5 flag series due to the observations of amphibian breeding as well as other typical features such as hydrophytic vegetation and a defined bank, see Figure 1. Although we have reviewed other drawings indicating a second vernal pool to the north of the identified pool, at the time of our investigations during amphibian breeding season, the questionable vernal pool area was completely dry at the surface with no evidence of recent pooling of water that could support amphibian breeding. However, this questionable area was still within the state inland wetland boundary. This area of the wetlands is classified as depression forested wetland under the hydrogeomorphic (HGM) approach to classification of wetlands.

Within the WF 3 series is a project to reestablish natural vegetation and appears to be part of the Trout Unlimited Norwalk River restoration project. There are recently planted saplings and appears to be frequently mowed in-between the saplings. (See photograph attachment).

The ecological community within and immediately adjacent to the River banks includes a forested and scrub-shrub habitat on either side. Along the eastern side of the bank, it transitions from bank to floodplain alternately. The forested habitat is dominated by red maple (*Acer rubrum*), American sycamore (*Platanus occidentalis*), and American elm (*Ulmus americana*). The scrub-shrub habitat along the western banks was dominated by northern spicebush (*Lindera benzoin*), smooth arrowwood (*Viburnum recognitum*), and winged euonymus (*Euonymus alatus*). The western side of the bank was dominated mainly by winged euonymus and rambler rose (*Rosa multiflora*). The herbaceous layer was dominated by skunk cabbage (*Symplocarpus foetidus*), Eurasian buttercup (*Ficaria verna*), American trout lily (*Erythronium americanum*), and sensitive fern (*Onoclea sensibilis*).



Along the easternmost side of the property contained a wetland along the train ballast. The wetland was delineated with sequentially number flags WF 6-99 to WF 6-106. The ecological community within this wetland is a hardwood forested habitat dominated by red maple.

TABLE 1: Predominate Vegetation within and adjacent to the wetlands (Common (*Scientific*) names.)

TREES & SAPLINGS				
Scientific	Common	Indicator	Upland	Wetland
<i>Acer Rubrum</i>	Red Maple	FAC	X	X
<i>Ulmus americana</i>	American Elm	FACW		X
<i>Platanus occidentalis</i>	American Sycamore	FACW		X
<i>Juniperus virginiana</i>	Eastern Red-cedar	FACU	X	
<i>Carpinus caroliniana</i>	American Hornbeam	FAC	X	
SHRUBS				
Scientific	Common	Indicator	Upland	Wetland
<i>Berberis thunbergii</i>	Japanese Barberry*	FACU	X	X
<i>Reynoutria japonica</i>	Japanese Knotweed*	FACU	X	X
<i>Rosa Multiflora</i>	Multiflora Rose*	FACU	X	X
<i>Lindera benzoin</i>	Northern Spicebush	FACW		X
<i>Viburnum recognitum</i>	Northern Arrow-wood	FAC		X
<i>Lonicera morrowii</i>	Morrow's Honeysuckle*	FACU	X	
<i>Euonymus alatus</i>	Winged Euonymus*	-	X	X
HERBS & VINES				
Scientific	Common	Indicator	Upland	Wetland
<i>Impatiens capensis</i>	Jewelweed	FACW	X	X
<i>Symplocarpus foetidus</i>	Skunk Cabbage	OBL		X
<i>Erythronium americanum</i>	American trout-lily	-	X	X
<i>Toxicodendron radicans</i>	Eastern Poison Ivy	FAC	X	X
<i>Persicaria virginiana</i>	Virginia Knotweed	FAC	X	
<i>Ficaria verna</i>	Eurasian-buttercup	FACW		X
<i>Onoclea sensibilis</i>	Sensitive fern	FACW		X
<i>Osmundastrum cinnamomeum</i>	Cinnamon fern	FACW		X
<i>Veratrum viride</i>	False Hellebore	FACW		X

*Denotes State non-native invasive species



SOIL MAP TYPES

A brief description of each soil map unit identified on the project site is presented below including information from the United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) soil descriptions. Further information on these and other soils, please refer to the internet site at <http://soils.usda.gov/technical/classification/osd/index.html>.

Upland Soils

Ninigret & Tisbury (21A)

Ninigret soils

The Ninigret series consists of very deep, moderately well drained soils formed in loamy over sandy and gravelly glacial outwash. They are nearly level to strongly sloping soils on glaciofluvial landforms, typically in slight depressions and broad drainage ways. Slope ranges from 0 to 5 percent. Diagnostic horizons in this pedon include an ochric epipedon (0 to 8 inches (Ap horizon)), a cambic horizon (8 to 26 inches (Bw horizon)) and aquic features (low chroma depletions within a 24-inch depth (Bw2 horizon)).

Tisbury soils

The Tisbury series consists of very deep, moderately well drained loamy soils formed in silty eolian deposits overlying outwash materials derived from a variety of acid rocks. They are nearly level and gently sloping soils on outwash plains and terraces, typically in slight depressions and broad drainageways. Slope ranges from 0 to 5 percent. Diagnostic horizons in this pedon include an ochric epipedon (0 to 8 inches (Ap)), and a cambic horizon (8 to 26 inches).

Haven and Enfield soils (32B) silt loam

Enfield soils

The Enfield series consists of very deep, well-drained loamy soils formed in a silty mantle overlying glacial outwash. Enfield soils are nearly level to sloping soils on terraces and outwash plains. Slopes range from 0 to 15 percent, but are generally less than 8 percent. The soils formed in a silty mantle over stratified sandy and gravelly fluvial materials derived from a variety of acidic rocks. The soils diagnostic horizons include an ochric epipedon – (0 to 7 inches (Ap horizons)) and a cambic horizon (from 7 to 25 inches (the Bw horizon)).



Haven soils

The Haven series consists of very deep, well-drained soils formed in loamy over sandy and gravelly outwash. They are nearly level to moderately sloping soils on outwash plains, valley trains, terraces, and water-sorted moraine deposits. The soils diagnostic horizons include an ochric epipedon – (0 to 6 inches (O and A horizons)) and a cambic horizon (from 6 to 22 inches (the Bw horizon)).

Ur—Urban land (306)

This unit consists of areas where urban structures cover more than 85 percent of the surface. Examples of such structures are roads, parking lots, shopping and business centers, and industrial parks. Most areas are in the towns of Bridgeport, Danbury, Fairfield, Norwalk, Shelton, Stamford, and Stratford. The areas are commonly rectangular and range from 5 to 500 acres. Slopes range from 0 to 8 percent but are dominantly less than 5 percent. Included with this unit in mapping are small areas of Udorthents and areas of excessively drained Hinckley soils; somewhat excessively drained Hollis soils; well drained Agawam, Charlton, and Paxton soils; and moderately well drained Ninigret and Sutton soils. Included areas make up about 15 percent of this map unit. This unit requires onsite investigation and evaluation for most uses.

Wetland Soils

Ridgebury, Leicester and Whitman Complex (3), extremely stony

Ridgebury Soils

The Ridgebury complex is a very deep poorly drained soil that includes poorly drained Leicester, and very poorly drained Whitman soils formed in till derived mainly from granite, gneiss and schist. Ridgebury soils on the landscape are in slightly concave areas and shallow drainageways of till uplands with slopes that range nearly level to gently sloping. Depth to the perched seasonal high-water table from November to May, or longer, is perched above the densic materials. The soils diagnostic horizons include an ochric epipedon (0 to 5 inches (A horizon)), aeric feature 100 percent of the zone from 5 to 9 inches (Bw1 horizon), and a cambic horizon (5 to 18 inches (Bw and Bg horizons)). Densic contact root limiting material begins at 18 inches (Cd). Endosaturation occurs within the zone from 9 to 18 inches and is saturated above the densic contact (Bw2 horizon).

Leicester Soils

The Leicester series consists of very deep, poorly drained loamy soils formed in friable till. They are nearly level or gently sloping soils in drainage ways and low-lying positions on hills. Slope ranges nearly level to gently sloping. Permeability is moderate or moderately rapid in



the surface layer and subsoil and moderate to rapid in the substratum. The horizons and features recognized in this pedon are an ochric epipedon in the zone from 1 to 7 inches (A horizon) and a cambic horizon in the zone from 7 to 23 inches (Bg and BC horizons). There is also an aquic moisture regime as indicated by chroma of 2 in Bg horizon but with chroma too high within 30 inches (chroma 3 in BC horizon) to qualify for Typic Endoaquepts. This series also contains an endoaquepts subgroup based on saturation to a depth of 200 cm from the mineral soil surface. There is an aeric great group based on matrix color and a chroma of 3 or more in one subhorizon between the Ap and 75 cm. (BC horizon) and the particle-size class in control section ranges from 10 to 40 inches and is considered coarse loamy type of soil.

Whitman Soils

The Whitman series consists of very deep, very poorly drained soils formed in glacial till derived mainly from granite, gneiss, and schist. They are shallow to a densic contact. These soils are nearly level or gently sloping soils in depressions and drainageways on uplands. Permeability is moderate or moderately rapid in the solum and slow or very slow in the substratum. The diagnostic horizons and features in this pedon include an umbric epipedon in the zone from the soil surface to a depth of 10 inches (Ap horizon) and a cambic horizon in the zone from 10 to 18 inches (Bg horizon). This soil also has aquic conditions as evidenced by a chroma of 1 in the Bg horizon. A densic contact is also present with the root limiting layer beginning at 18 inches. Whitman soils are considered to have a shallow depth class because the depth to the densic contact is less than 20 inches (Cd1 is at 18 inches).

Pootatuck, fine sandy loam (102)

The Pootatuck series consists of very deep, moderately well drained loamy soils formed in alluvial sediments. They are nearly level soils on floodplains subject to frequent to occasional flooding. Slope ranges from 0 to 3 percent. Saturated hydraulic conductivity is moderately high or high in the loamy upper layers and high or very high in the sandy substratum.



REFERENCES

1. Brinson, M.M. 1993. *A Hydrogeomorphic Classification for Wetlands*. Tech. Rpt.WRP-DE-4, U.S. Army Engineer Waterways Experiment Station, Vicksburg, MS.
2. Cowardin, L.M., V. Carter, F.C. Golet and E.T. LaRoe, 1979. *Classification of Wetlands and Deepwater Habitats of the United States*. U.S. Fish and Wildlife Service. Washington, D.C. FWS/OBS-79/31.
3. United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) soil descriptions. Internet site:
<http://soils.usda.gov/technical/classification/osd/index.html>.

CLOSING

Thank for the opportunity to work with you on this project. Please contact me at 860-807-4388 if you have any questions or require additional assistance.

Sincerely,
Vanasse Hangen Brustlin, Inc.

A handwritten signature in black ink, appearing to read "J. Shamas", with a stylized flourish at the end.

Jeffrey R Shamas, CSS, PWS, CE
Director of Environmental Services

jshamas@vhb.com

Appendices

1. Wetland Sketch Map
2. Site Photographs
3. NRCS Soils Survey

Appendix 1: Wetland Sketch Map



Appendix 2: Site Photographs



Photo 1: View northwest, WF6 series, pool on western side of site adjacent to railroad tracks.



Photo 2: Vernal pool located within the WF5 series.



Photo 3: View east, bank of the Norwalk river and River Road.



Photo 4: View northeast, WF3 series, view of natural vegetation reestablishment project within the wetland.



Photo 5: View northwest, view of the vegetation within WF5 series.



Photo 6: View southwest, overall view of WF4 series along the eastern bank of the Norwalk river.



Photo 7: View northeast, overall view of WF2 series.



Photo 8: View northeast, bank of Norwalk River, adjacent wetland, and the Old Ridgefield Road bridge crossing.



Photo 9: View northwest, view of River Road and the stormwater culvert leading to the Norwalk River.



Photo 10: View south, overview of the Norwalk River.



Photo 11: View north, overview of the Norwalk River.



Photo 12: View southwest, fly fishermen in the Norwalk River.

Appendix 3: NRCS Soils Survey

Soil Map—State of Connecticut
(Schenck's Island- Norwalk River, Wilton)



Map Scale: 1:3,980 if printed on A portrait (8.5" x 11") sheet.

0 50 100 200 300 Meters

0 150 300 600 900 Feet

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 18N WGS84

MAP LEGEND

Area of Interest (AOI)	Area of Interest (AOI)	Soil Map Unit Polygons	Soil Map Unit Lines	Soil Map Unit Points	Special Point Features	Water Features	Streams and Canals	Transportation	Rails	Interstate Highways	US Routes	Major Roads	Local Roads	Background	Aerial Photography
Soils	Soils	Soil Map Unit Polygons	Soil Map Unit Lines	Soil Map Unit Points	Special Point Features	Water Features	Streams and Canals	Transportation	Rails	Interstate Highways	US Routes	Major Roads	Local Roads	Background	Aerial Photography
Special Point Features	Special Point Features	Special Point Features	Special Point Features	Special Point Features	Special Point Features	Special Point Features	Special Point Features	Special Point Features	Special Point Features	Special Point Features	Special Point Features	Special Point Features	Special Point Features	Special Point Features	Special Point Features
Blowout	Blowout	Blowout	Blowout	Blowout	Blowout	Blowout	Blowout	Blowout	Blowout	Blowout	Blowout	Blowout	Blowout	Blowout	Blowout
Borrow Pit	Borrow Pit	Borrow Pit	Borrow Pit	Borrow Pit	Borrow Pit	Borrow Pit	Borrow Pit	Borrow Pit	Borrow Pit	Borrow Pit	Borrow Pit	Borrow Pit	Borrow Pit	Borrow Pit	Borrow Pit
Clay Spot	Clay Spot	Clay Spot	Clay Spot	Clay Spot	Clay Spot	Clay Spot	Clay Spot	Clay Spot	Clay Spot	Clay Spot	Clay Spot	Clay Spot	Clay Spot	Clay Spot	Clay Spot
Closed Depression	Closed Depression	Closed Depression	Closed Depression	Closed Depression	Closed Depression	Closed Depression	Closed Depression	Closed Depression	Closed Depression	Closed Depression	Closed Depression	Closed Depression	Closed Depression	Closed Depression	Closed Depression
Gravel Pit	Gravel Pit	Gravel Pit	Gravel Pit	Gravel Pit	Gravel Pit	Gravel Pit	Gravel Pit	Gravel Pit	Gravel Pit	Gravel Pit	Gravel Pit	Gravel Pit	Gravel Pit	Gravel Pit	Gravel Pit
Gravelly Spot	Gravelly Spot	Gravelly Spot	Gravelly Spot	Gravelly Spot	Gravelly Spot	Gravelly Spot	Gravelly Spot	Gravelly Spot	Gravelly Spot	Gravelly Spot	Gravelly Spot	Gravelly Spot	Gravelly Spot	Gravelly Spot	Gravelly Spot
Landfill	Landfill	Landfill	Landfill	Landfill	Landfill	Landfill	Landfill	Landfill	Landfill	Landfill	Landfill	Landfill	Landfill	Landfill	Landfill
Lava Flow	Lava Flow	Lava Flow	Lava Flow	Lava Flow	Lava Flow	Lava Flow	Lava Flow	Lava Flow	Lava Flow	Lava Flow	Lava Flow	Lava Flow	Lava Flow	Lava Flow	Lava Flow
Marsh or swamp	Marsh or swamp	Marsh or swamp	Marsh or swamp	Marsh or swamp	Marsh or swamp	Marsh or swamp	Marsh or swamp	Marsh or swamp	Marsh or swamp	Marsh or swamp	Marsh or swamp	Marsh or swamp	Marsh or swamp	Marsh or swamp	Marsh or swamp
Mine or Quarry	Mine or Quarry	Mine or Quarry	Mine or Quarry	Mine or Quarry	Mine or Quarry	Mine or Quarry	Mine or Quarry	Mine or Quarry	Mine or Quarry	Mine or Quarry	Mine or Quarry	Mine or Quarry	Mine or Quarry	Mine or Quarry	Mine or Quarry
Miscellaneous Water	Miscellaneous Water	Miscellaneous Water	Miscellaneous Water	Miscellaneous Water	Miscellaneous Water	Miscellaneous Water	Miscellaneous Water	Miscellaneous Water	Miscellaneous Water	Miscellaneous Water	Miscellaneous Water	Miscellaneous Water	Miscellaneous Water	Miscellaneous Water	Miscellaneous Water
Perennial Water	Perennial Water	Perennial Water	Perennial Water	Perennial Water	Perennial Water	Perennial Water	Perennial Water	Perennial Water	Perennial Water	Perennial Water	Perennial Water	Perennial Water	Perennial Water	Perennial Water	Perennial Water
Rock Outcrop	Rock Outcrop	Rock Outcrop	Rock Outcrop	Rock Outcrop	Rock Outcrop	Rock Outcrop	Rock Outcrop	Rock Outcrop	Rock Outcrop	Rock Outcrop	Rock Outcrop	Rock Outcrop	Rock Outcrop	Rock Outcrop	Rock Outcrop
Saline Spot	Saline Spot	Saline Spot	Saline Spot	Saline Spot	Saline Spot	Saline Spot	Saline Spot	Saline Spot	Saline Spot	Saline Spot	Saline Spot	Saline Spot	Saline Spot	Saline Spot	Saline Spot
Sandy Spot	Sandy Spot	Sandy Spot	Sandy Spot	Sandy Spot	Sandy Spot	Sandy Spot	Sandy Spot	Sandy Spot	Sandy Spot	Sandy Spot	Sandy Spot	Sandy Spot	Sandy Spot	Sandy Spot	Sandy Spot
Severely Eroded Spot	Severely Eroded Spot	Severely Eroded Spot	Severely Eroded Spot	Severely Eroded Spot	Severely Eroded Spot	Severely Eroded Spot	Severely Eroded Spot	Severely Eroded Spot	Severely Eroded Spot	Severely Eroded Spot	Severely Eroded Spot	Severely Eroded Spot	Severely Eroded Spot	Severely Eroded Spot	Severely Eroded Spot
Sinkhole	Sinkhole	Sinkhole	Sinkhole	Sinkhole	Sinkhole	Sinkhole	Sinkhole	Sinkhole	Sinkhole	Sinkhole	Sinkhole	Sinkhole	Sinkhole	Sinkhole	Sinkhole
Slide or Slip	Slide or Slip	Slide or Slip	Slide or Slip	Slide or Slip	Slide or Slip	Slide or Slip	Slide or Slip	Slide or Slip	Slide or Slip	Slide or Slip	Slide or Slip	Slide or Slip	Slide or Slip	Slide or Slip	Slide or Slip
Sodic Spot	Sodic Spot	Sodic Spot	Sodic Spot	Sodic Spot	Sodic Spot	Sodic Spot	Sodic Spot	Sodic Spot	Sodic Spot	Sodic Spot	Sodic Spot	Sodic Spot	Sodic Spot	Sodic Spot	Sodic Spot

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:12,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: State of Connecticut
Survey Area Data: Version 16, Sep 15, 2017

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Dec 31, 2009—Oct 5, 2016

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
21A	Ninigret and Tisbury soils, 0 to 5 percent slopes	2.9	8.1%
32B	Haven and Enfield soils, 3 to 8 percent slopes	9.1	25.6%
102	Pootatuck fine sandy loam	15.9	44.6%
232B	Haven-Urban land complex, 0 to 8 percent slopes	1.9	5.4%
306	Udorthents-Urban land complex	1.8	4.9%
307	Urban land	1.4	3.9%
W	Water	2.7	7.6%
Totals for Area of Interest		35.7	100.0%

WATER SHED MAP



CONSTRUCTION DOCUMENTS

FOR

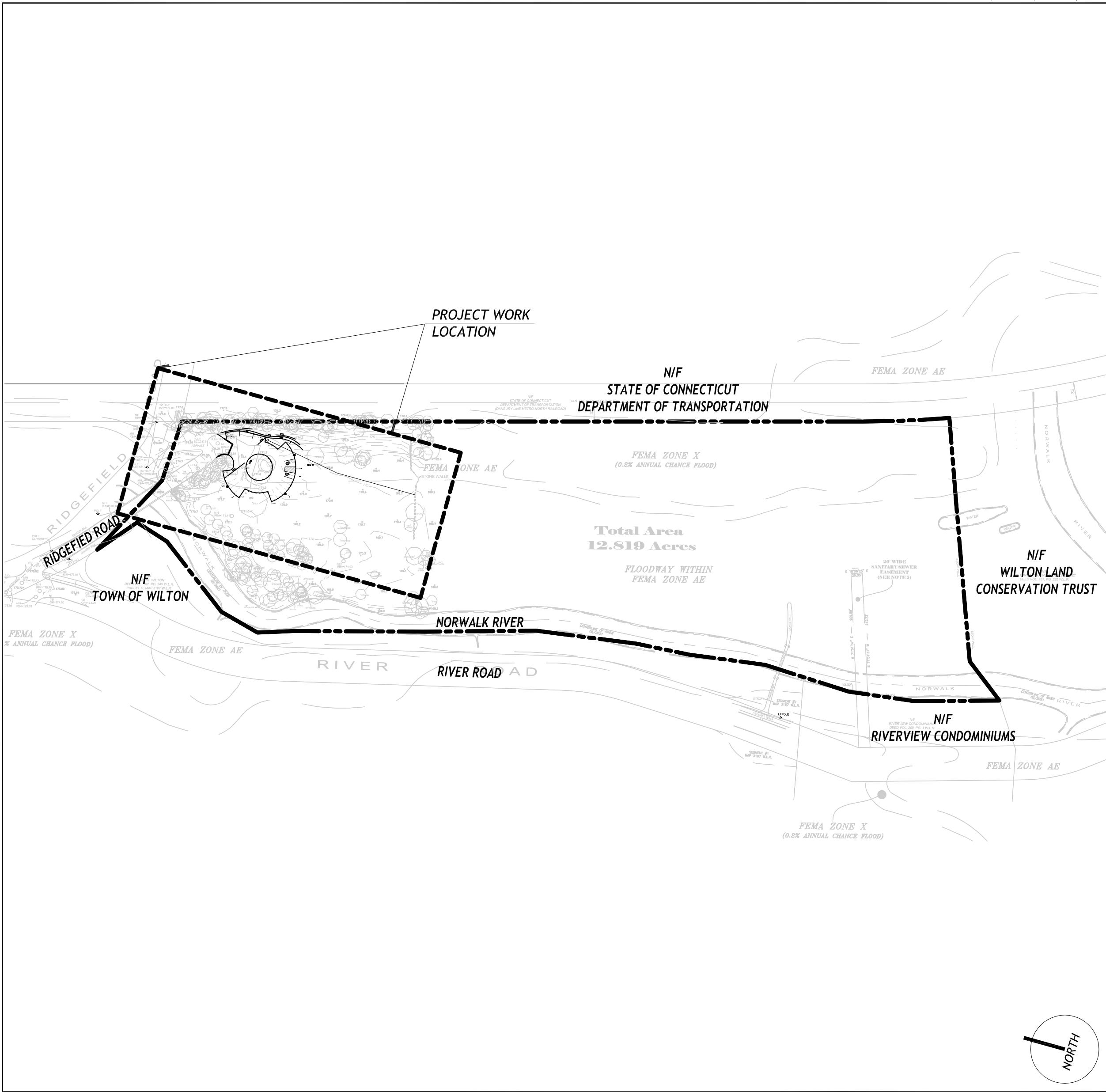
PHASE 1 IMPROVEMENTS: PARK ENTRY & PARKING

THE TOWN OF WILTON - SCHENCK'S ISLAND PRESERVE

238 DANBURY ROAD, WILTON, CT

LOCATION MAP

SCALE: 1" = 75' 150'



LIST OF DRAWINGS

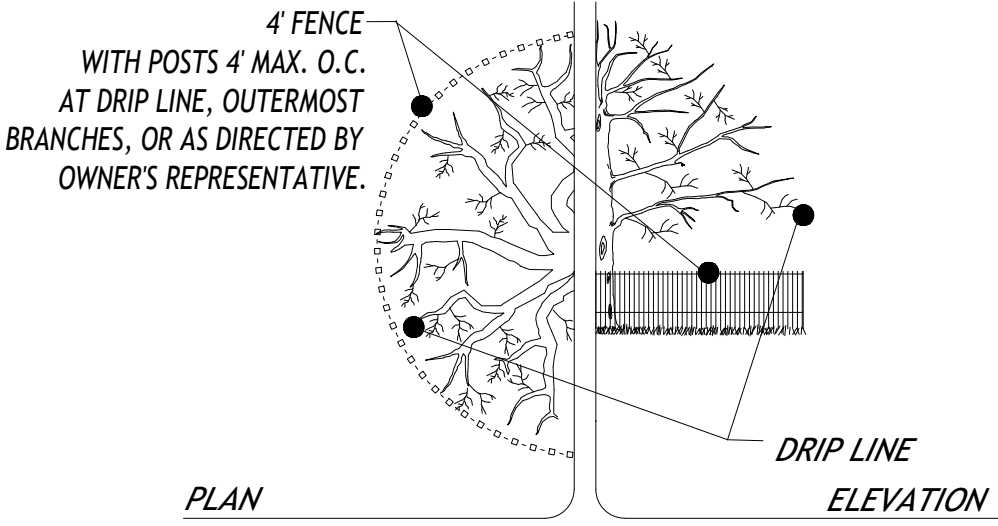
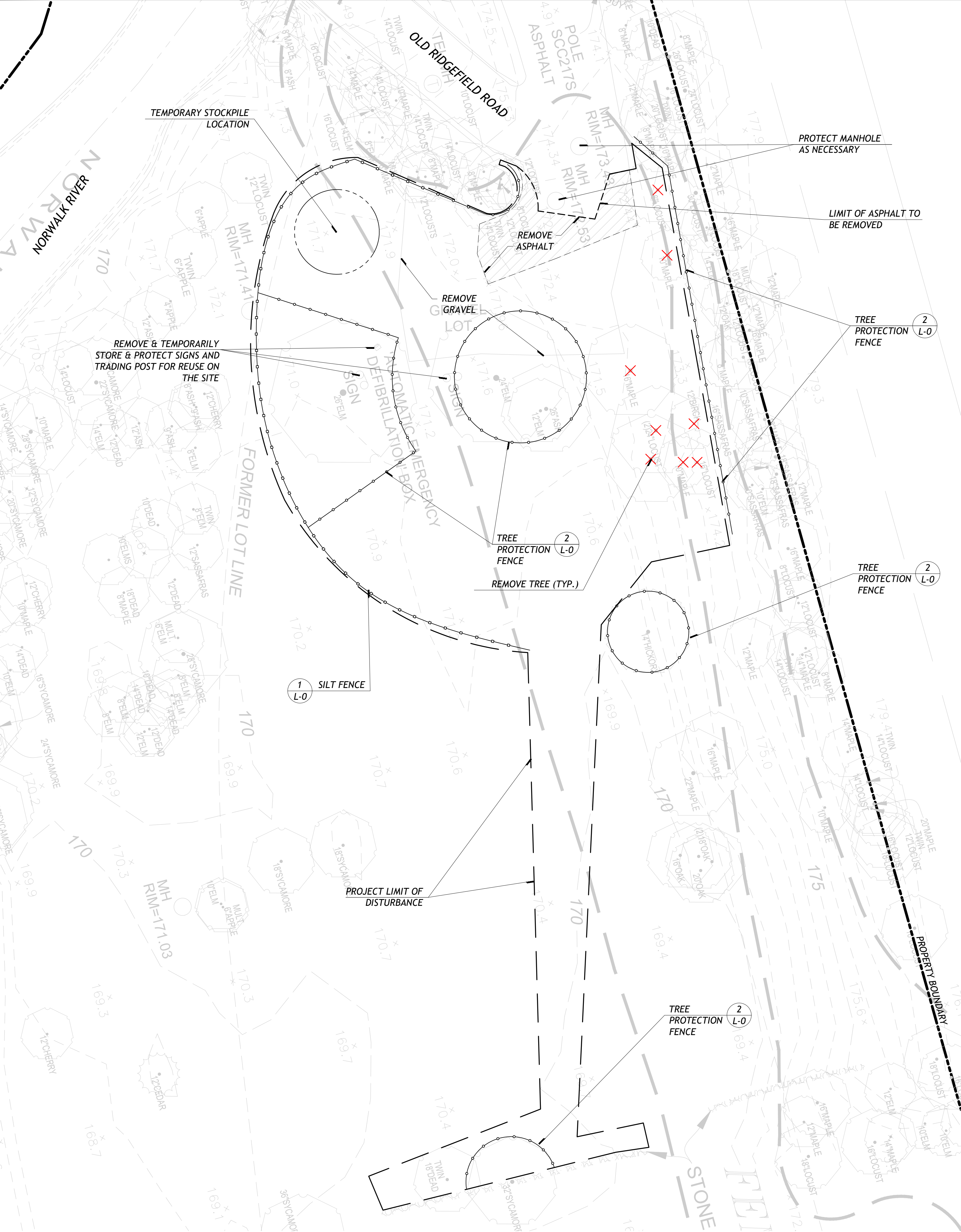
- T-1 INSTRUCTIONS AND SPECIFICATIONS
- L-0 PROTECTION, DEMOLITION & SEDIMENT AND EROSION CONTROL PLAN
- L-1 SITE DEVELOPMENT PLAN
- P-1 PLANTING PLAN
- D-1 DETAILS
- E-0 ELECTRICAL SPECIFICATIONS
- E-1 ELECTRICAL SCHEDULES, NOTES AND ABBREVIATIONS
- E-2 ELECTRICAL DETAILS
- E-3 SITE ELECTRICAL PLAN

WILLIAM KENNY ASSOCIATES

LANDSCAPE ARCHITECTURE • ECOLOGICAL SERVICES

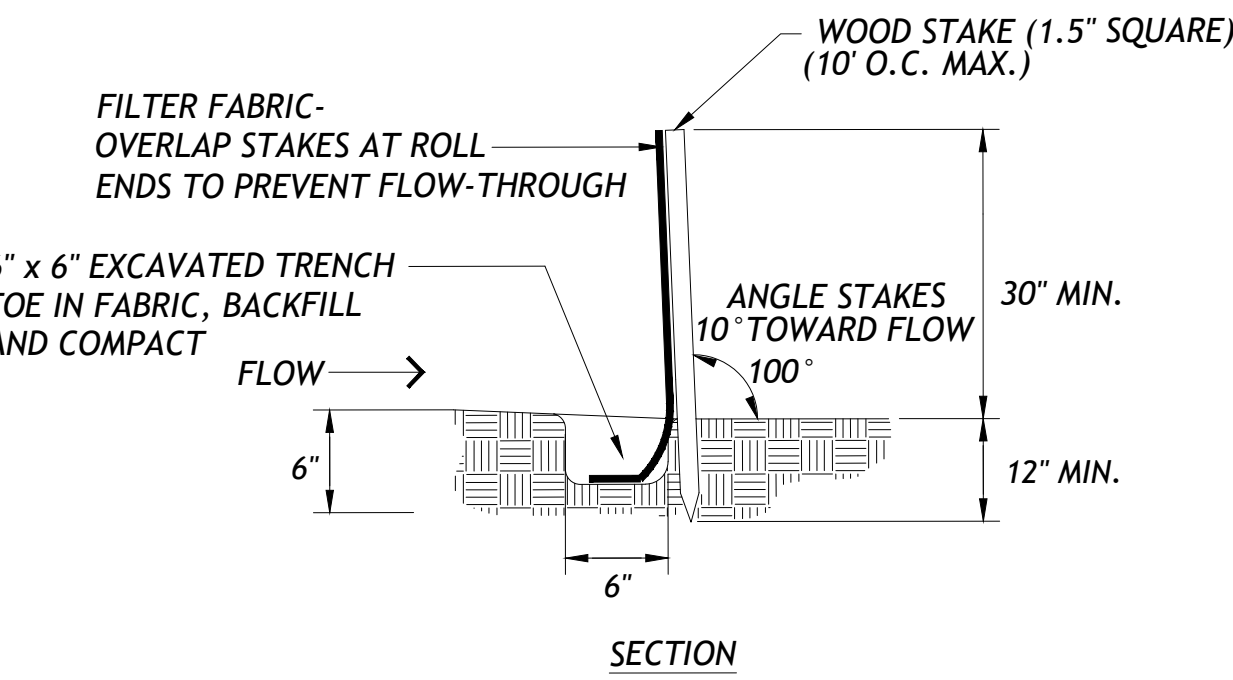
1899 Bronson Road Fairfield CT 06824
203 366 0588 www.wkassociates.net





- NOTE:
1. ACCEPTABLE FENCES: SNOW FENCE, CORD FENCE, WOOD FENCE
 2. ROOT PRUNE EXISTING TREES AS NECESSARY FOR CONSTRUCTION AS DIRECTED BY LANDSCAPE ARCHITECT.
 3. NO STOCKPILING OF MATERIALS OR SUPPLIES WITHIN THE TREE PROTECTION FENCE.

2 TREE PROTECTION DETAIL SCALE: N.T.S.



1. INSTALL SILT FENCE BEFORE COMMENCEMENT OF CONSTRUCTION AND MAINTAIN IN PLACE FOR DURATION OF THE PROJECT UNTIL THE SOIL SURFACE OF UPGRADIENT LAND IS FINALLY STABILIZED VIA ESTABLISHMENT OF PROPOSED VEGETATION.
2. JOINTS ONLY AT SUPPORT POST WITH MINIMUM 6" OVERLAP, SECURELY SEALED
3. INSPECT BARRIER AFTER EACH STORM EVENT AND DAILY DURING PROLONGED RAINFALL.
4. REMOVE SEDIMENT WHEN IT REACHES APPROXIMATELY ONE-HALF THE BARRIER HEIGHT.

1 SILT FENCE DETAIL SCALE: N.T.S.

SIGN RELOCATION NOTES

1. CAREFULLY EXCAVATE EXISTING SIGN AND TRADING POST
2. REMOVE STRUCTURAL BASE MATERIAL AND DISPOSE OF IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL LAWS.

CONSTRUCTION SEQUENCE

1. INSTALL TEMPORARY PERIMETER SILT FENCE AND TEMPORARY CONSTRUCTION ACCESS. OBTAIN L.A. AND OR TOWN APPROVAL OF INSTALLED FENCE. MAINTAIN FENCE THROUGHOUT THE CONSTRUCTION AND UNTIL THE SITE IS STABILIZED.
2. PREVENT THE TRACKING OF CONSTRUCTION SEDIMENT ONTO OLD RIDGEFIELD ROAD. IF UNAVOIDABLE, CLEAN SEDIMENT FROM ROAD SURFACE DAILY.
3. INSTALL TREE PROTECTION. OBTAIN L.A. AND OR TOWN APPROVAL OF THE PROTECTION.
4. COMPLETE DEMOLITION ACTIVITIES AS DRAWN & DETAILED.
5. CONSTRUCT PROPOSED SITE IMPROVEMENTS
6. REMOVE UNUSED SOIL AND CONSTRUCTION DEBRIS AND LEGALLY DISPOSE OFF SITE.
7. PERMANENTLY STABILIZE CONSTRUCTION DISTURBED SOIL SURFACES WITH VEGETATION OR LANDSCAPE MULCH.
8. REMOVE TREE PROTECTIONS.
9. REMOVE SILT FENCE.

PROJECT:

SCHENK'S ISLAND PRESERVE
PHASE 1 IMPROVEMENTS:
PARK ENTRY & PARKING

OWNER / CLIENT:



ENVIRONMENTAL AFFAIRS

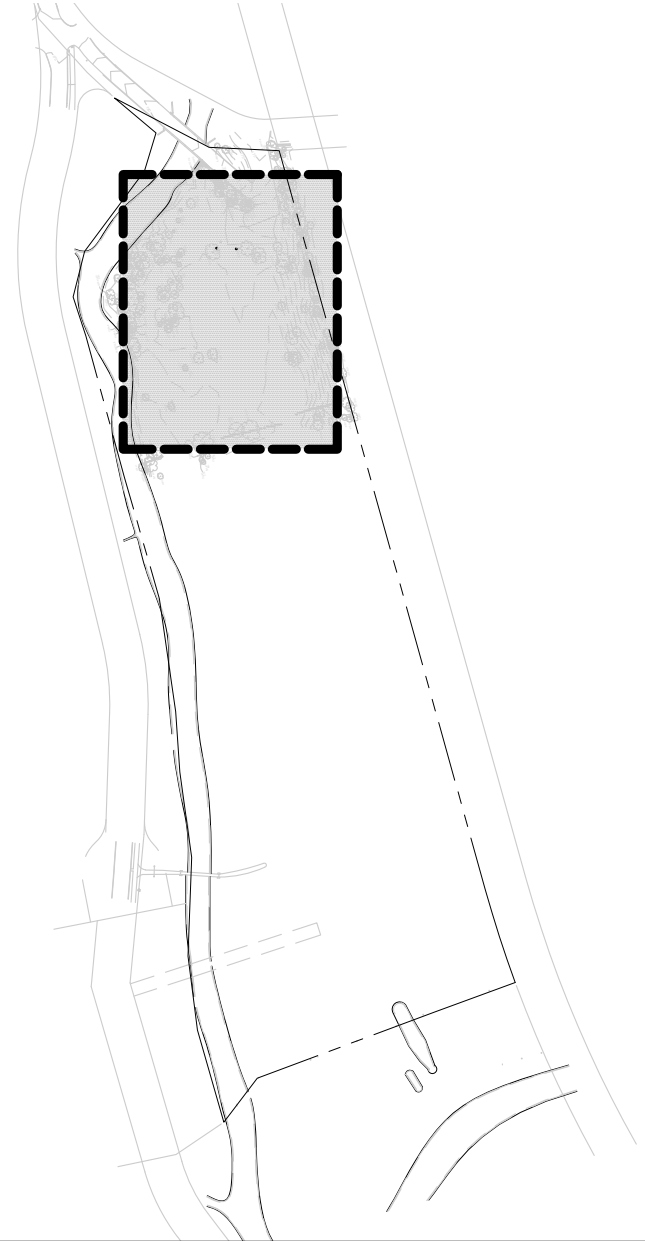
ELECTRICAL ENGINEER:



PROGRESS ISSUE:

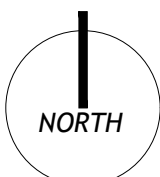
1 CONSTRUCTION DOCUMENTS 03/28/2022

KEYPLAN:



SCALE: AS NOTED

SEAL:

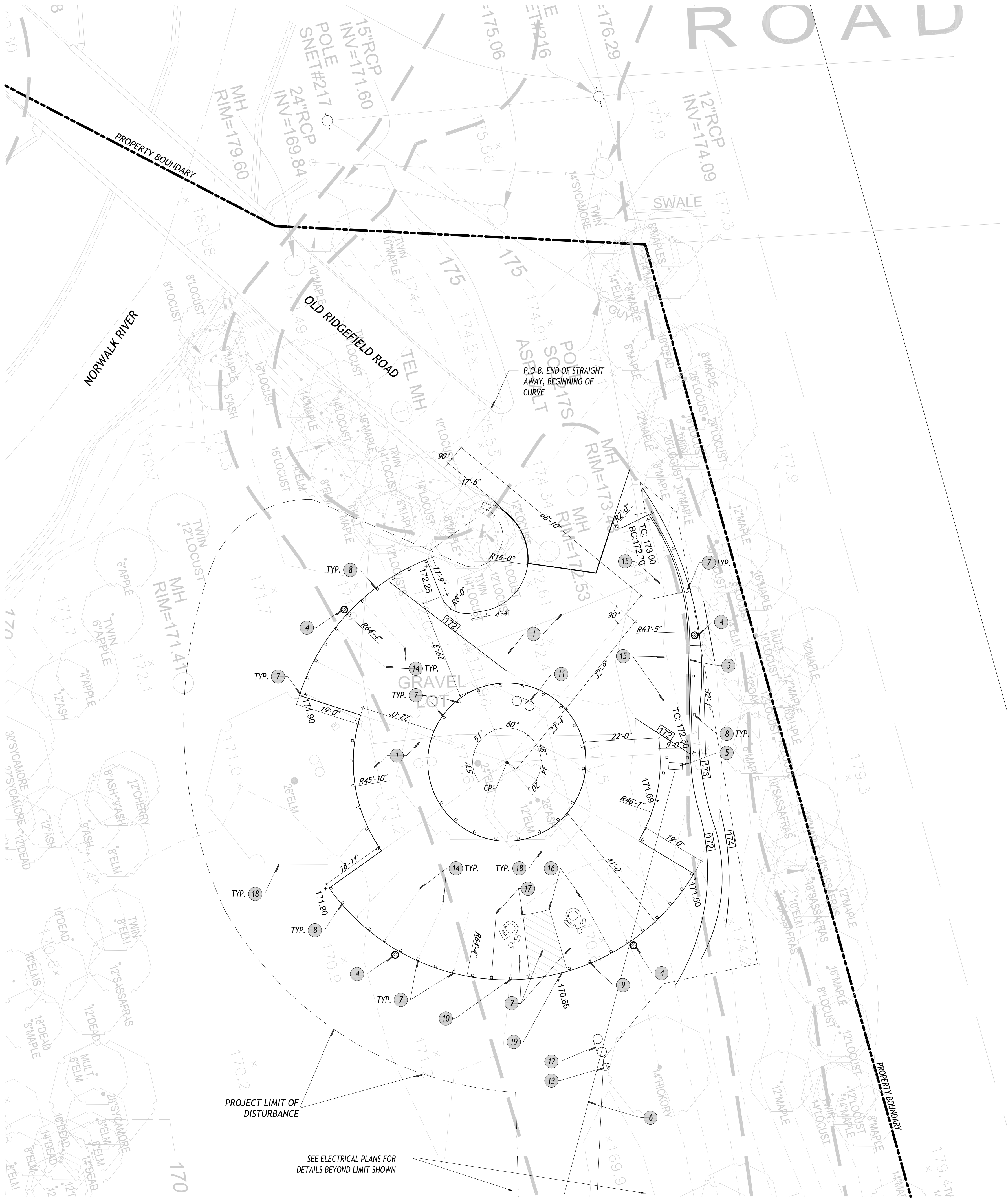


SHEET TITLE:

PROTECTION, DEMOLITION &
EROSION & SEDIMENT
CONTROL PLAN

SHEET NUMBER:

L-0



DESCRIPTION LEGEND

SYMBOL	DESCRIPTION	DETAIL	
		PAGE	NUMBER
1	GRAVEL PAVEMENT	D-1	1
2	GEO-GRID PAEMENET	D-1	2
3	GRANITE CURB	D-1	8
4	LIGHT FIXTURE & OUTLET	E-0,E-1,E-2 & E-3	
5	ELECTRICAL PANEL	E-0,E-1,E-2 & E-3	
6	ELECTRICAL CONDUIT	E-0,E-1,E-2 & E-3	
7	BOLLARD	D-1	3, 4, 5, 6 & 7
8	BOLLARD WITH PARKING SIGN	D-1	4, 7 & 11
9	BOLLARD WITH HANDICAPPED PARKING SIGN	D-1	3, 7 & 9
10	BOLLARD WITH VAN HANDICAPPED PARKING SIGN	D-1	3, 7 & 9
11	ENTRANCE SIGN	L-0	
12	INFORMATION SIGN	L-0	
13	TRADING POST	L-0	
14	STANDARD PARKING SPACE	D-1	1, 4 & 11
15	PARALLEL PARKING SPACE	D-1	1, 5 & 11
16	HANDICAPPED PARKING SPACE	D-1	2, 3, 9 & 10
17	HANDICAPPED VAN PARKING SPACE	D-1	2, 3, 9 & 10
18	EXISTING TREE	L-0	2
19	BARRIER CHAIN	D-1	6

WILLIAM KENNY ASSOCIATES

LANDSCAPE ARCHITECTURE • ECOLOGICAL SERVICES

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PROJECT:

SCHENK'S ISLAND PRESERVE
PHASE 1 IMPROVEMENTS:
PARK ENTRY & PARKING

OWNER / CLIENT:



ENVIRONMENTAL AFFAIRS

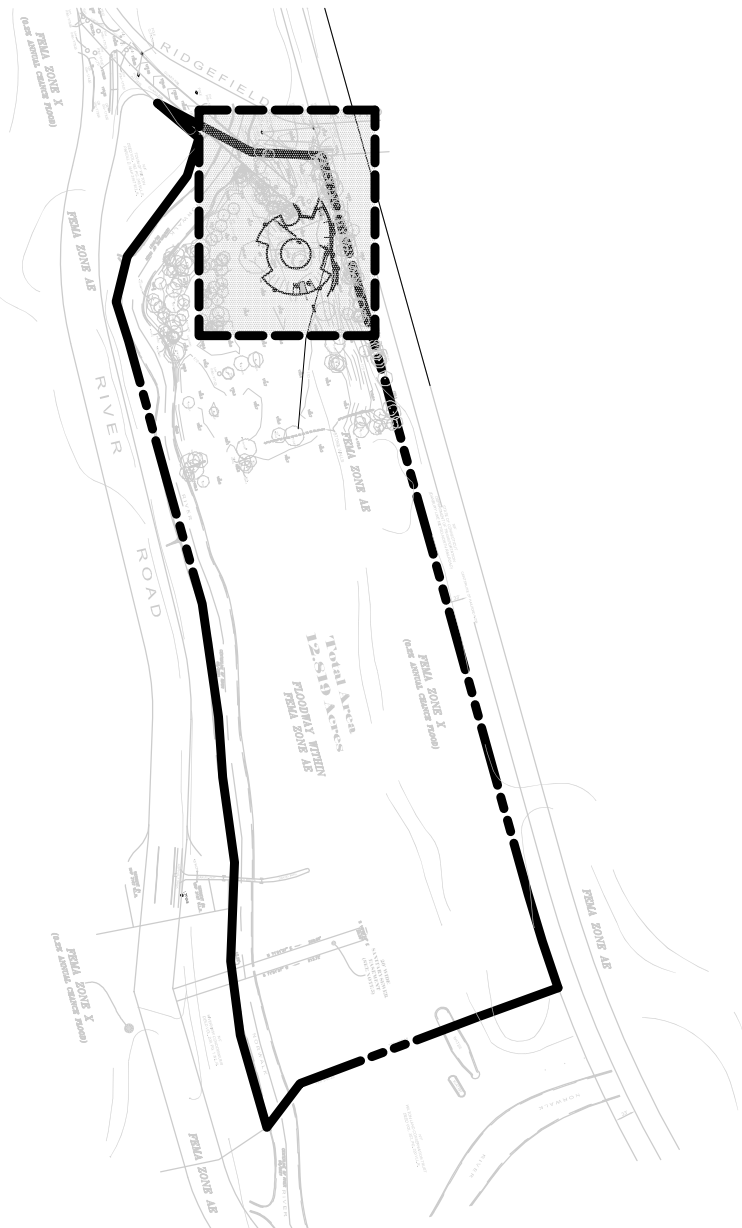
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PROGRESS ISSUE:

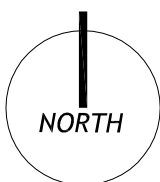
1 CONSTRUCTION DOCUMENTS 03/28/2022

KEYPLAN:



SCALE: 0' 8' 16'

SEAL:



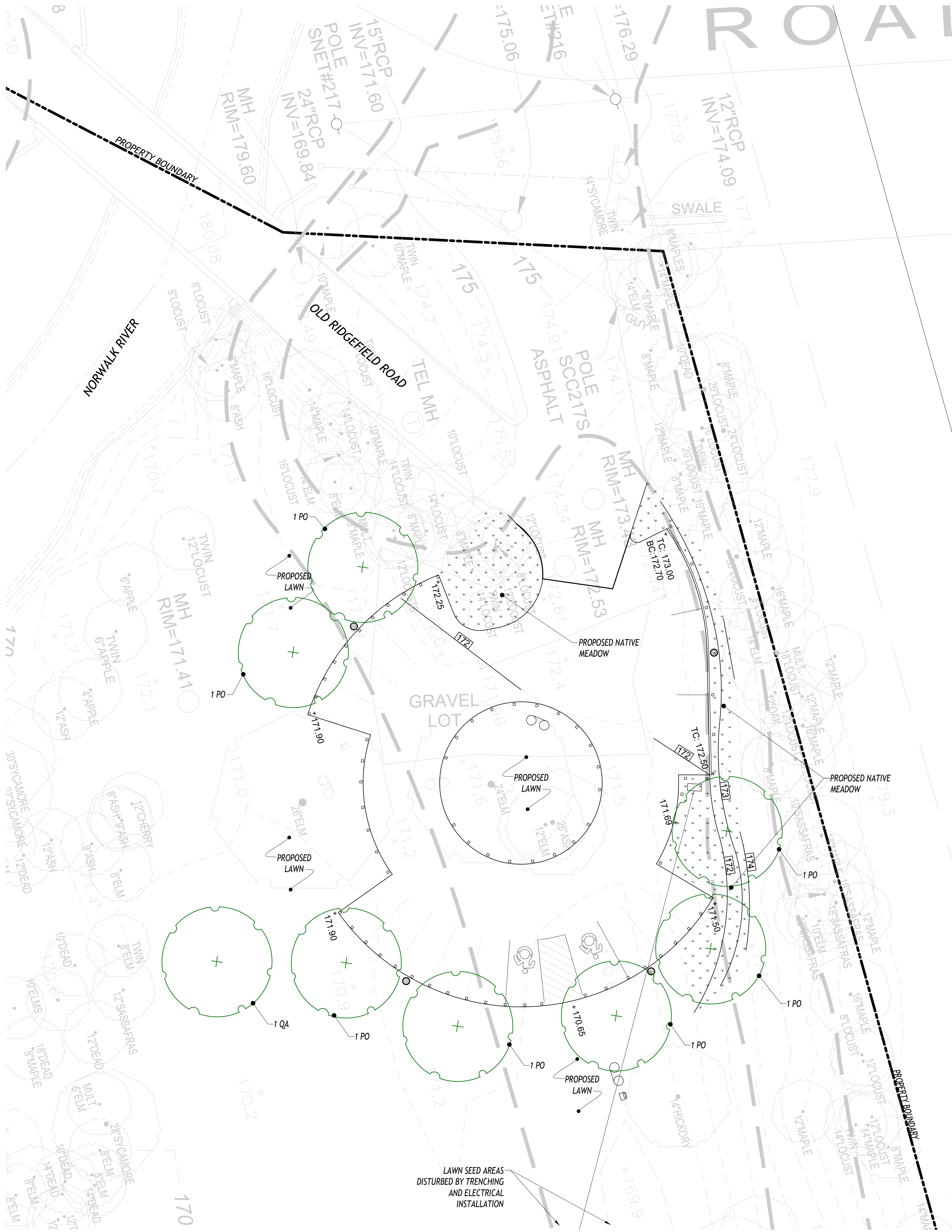
SHEET TITLE:

SITE DEVELOPMENT
PLAN

SHEET NUMBER:

L-1

REF. NO. 4783

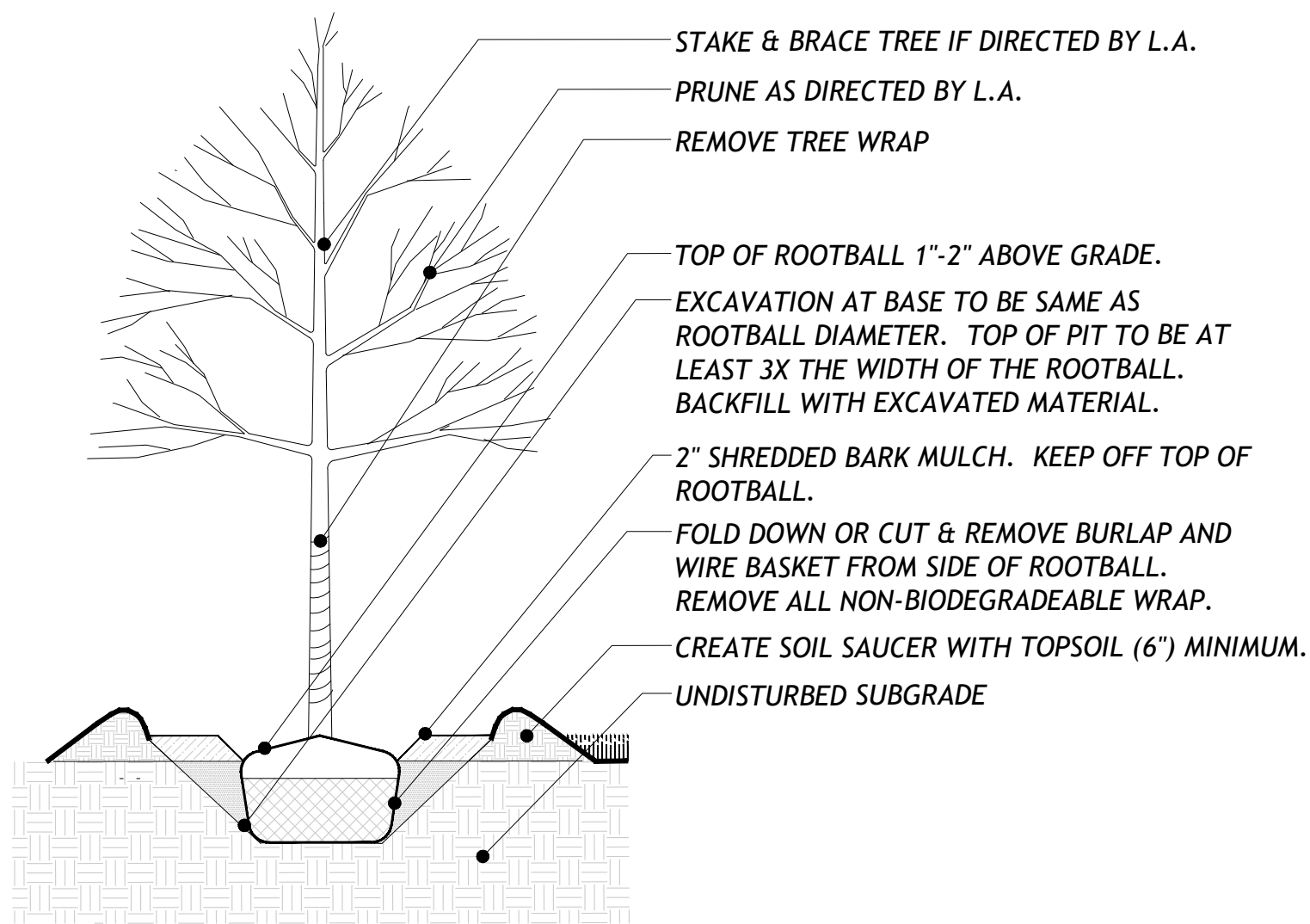


PLANT LIST

SYM.	QTY.	SCIENTIFIC NAME	COMMON NAME	SIZE	ROOT
PROPOSED NATIVE SHADE TREES					
PO	7	PLATANUS OCCIDENTALIS	AMERICAN SYCAMORE	3"-4" CAL.	B&B
QA	1	QUERCUS ALBA	WHITE OAK	3"-4" CAL.	B&B
TOTAL:		8			

PROPOSED NATIVE MEADOW
PROPOSED NATIVE UPLAND SEED SHALL BE 100% ASTER DIVARICATUS ECOTYPE AS PRODUCED BY ERNST SEED (WWW.ERNSTSEED.COM). APPLIED AT A RATE OF 0.4 LBS PER ACRE. OR APPROVED EQUAL

PROPOSED LAWN
PROPOSED LAWN SEED: 25% KENTUCKY BLUE, 25% RED FESCUE, 5% MICROCLOVER APPLIED AT A RATE OF 350 LBS PER ACRE . OR APPROVED EQUAL



1 TREE PLANTING
SCALE: N.T.S.

PROJECT:
SCHENK'S ISLAND PRESERVE
PHASE 1: IMPROVEMENTS
PARK ENTRY & PARKING

OWNER / CLIENT:

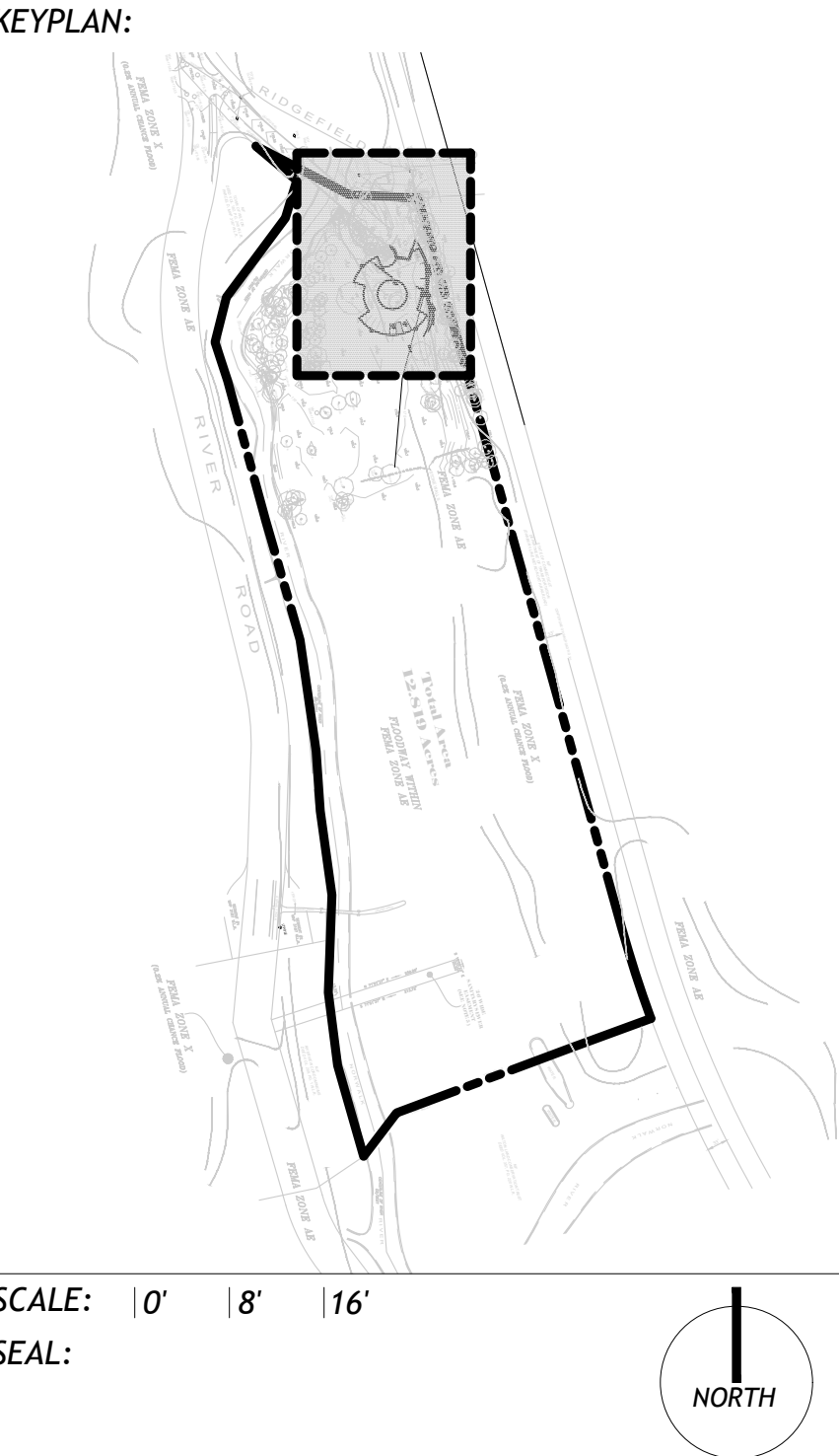


ENVIRONMENTAL AFFAIRS

ELECTRICAL ENGINEER:



PROGRESS ISSUE:
1 CONSTRUCTION DOCUMENTS 03/28/2022



SHEET TITLE:
PLANTING PLAN

SHEET NUMBER:
P-1

PROJECT:

SCHENK'S ISLAND PRESERVE
PHASE 1: IMPROVEMENTS
PARK ENTRY & PARKING

OWNER / CLIENT:



ENVIRONMENTAL AFFAIRS

ELECTRICAL ENGINEER:



PROGRESS ISSUE:

1 CONSTRUCTION DOCUMENTS

3/16/2022

KEY PLAN:

SCALE: AS NOTED

SEAL:

SHEET TITLE:

DETAILS

SHEET NUMBER:

D-1

REF. NO. 4783



NOTES:
STANDARD PARKING SIGNAGE IMAGE. SEE DETAIL 7 ON THIS SHEET

11 PARKING SIGN

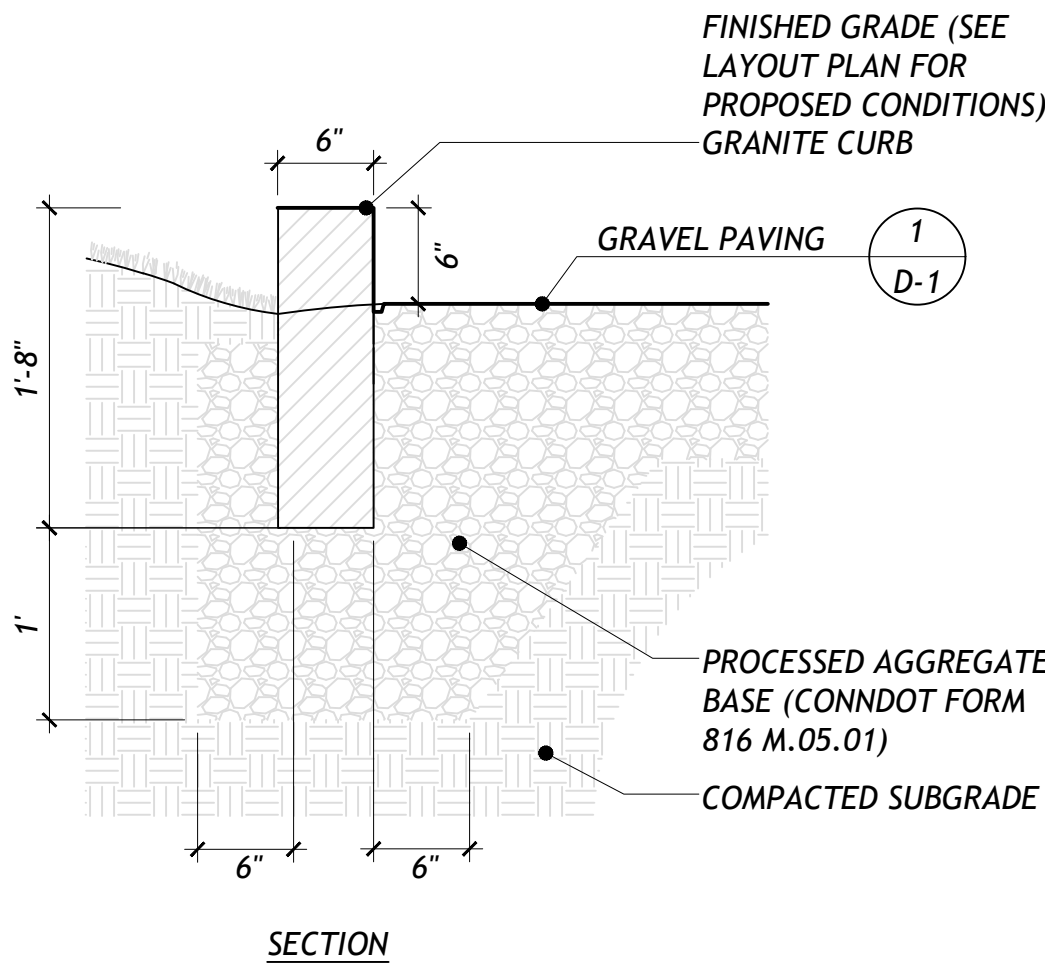
SCALE: N.T.S.



NOTES:
HANDICAPPED SIGN SHALL BE CONN D.O.T SERIES 30
#31-0629 AND CONN D.O.T SERIES 30 #31_0648.
MOUNT SIGN TO BOLLARD. SEE LAYOUT PLAN.

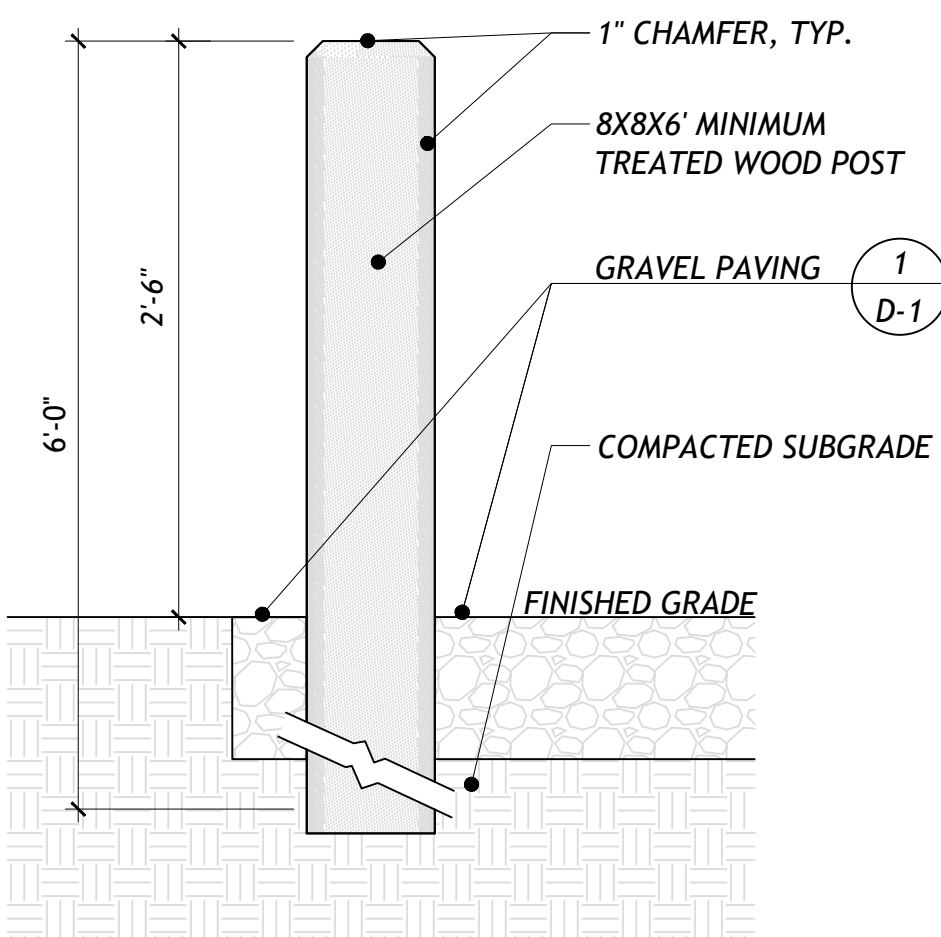
10 SNOW SPOT STRIPING IMAGE

SCALE: N.T.S.



8 GRANITE CURB

SCALE: N.T.S.

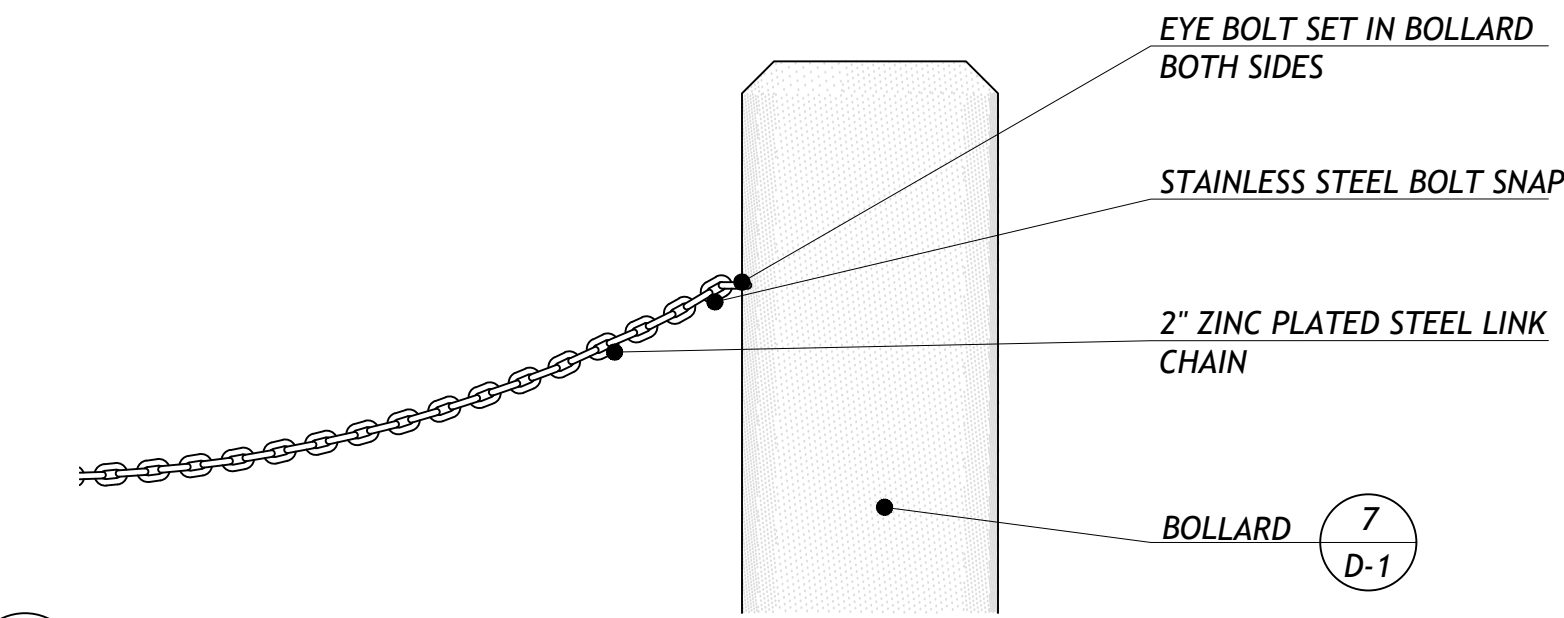
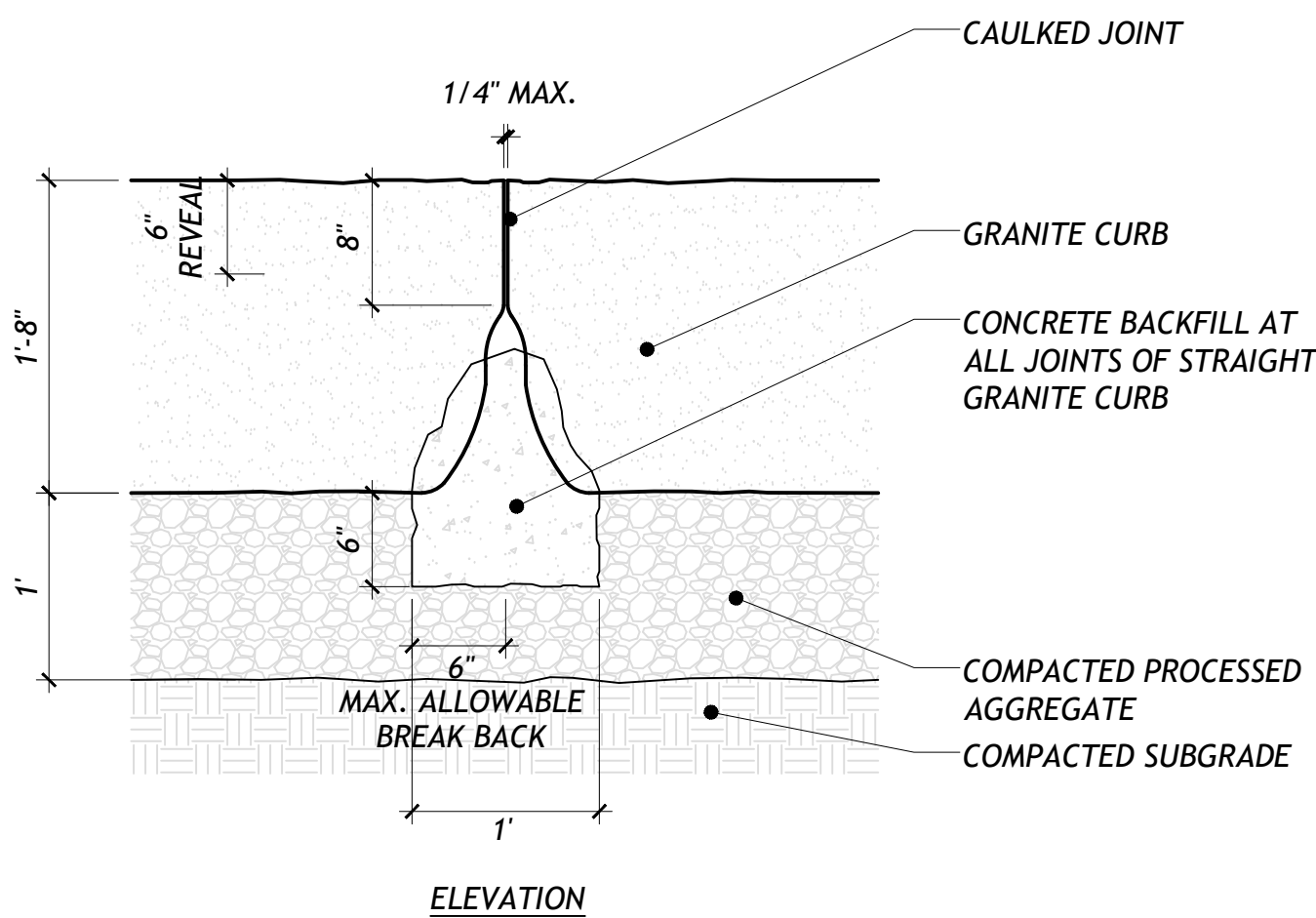


7 BOLLARD

SCALE: N.T.S.

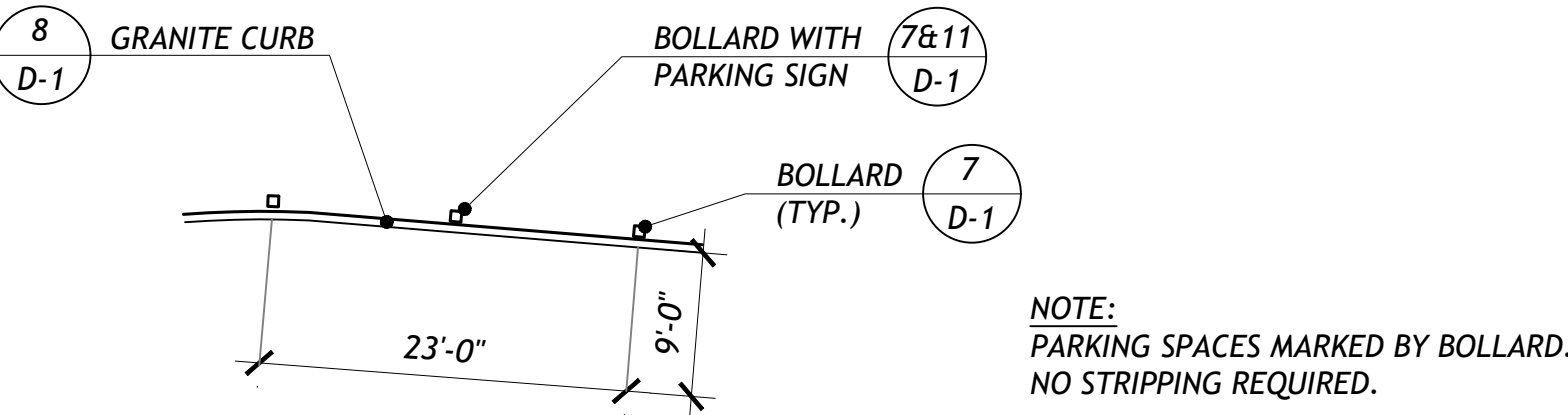
9 HANDICAPPED PARKING SIGN

SCALE: N.T.S.



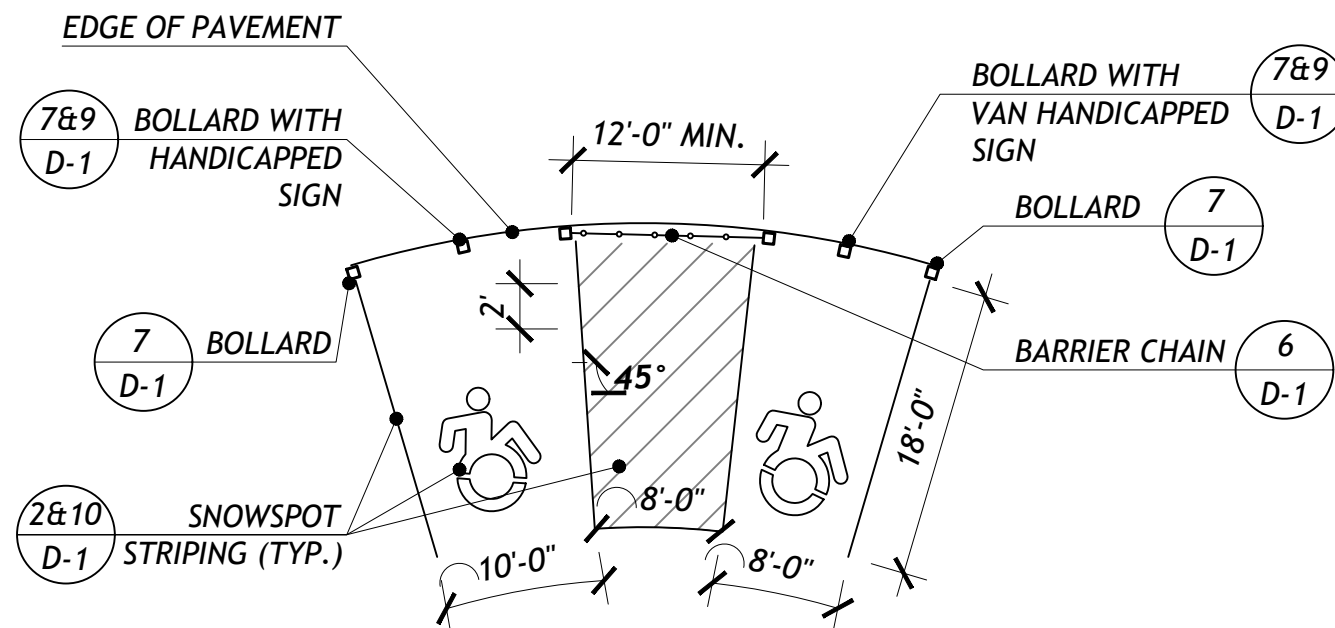
6 BARRIER CHAIN

SCALE: N.T.S.



5 PARALLEL PARKING SPACE

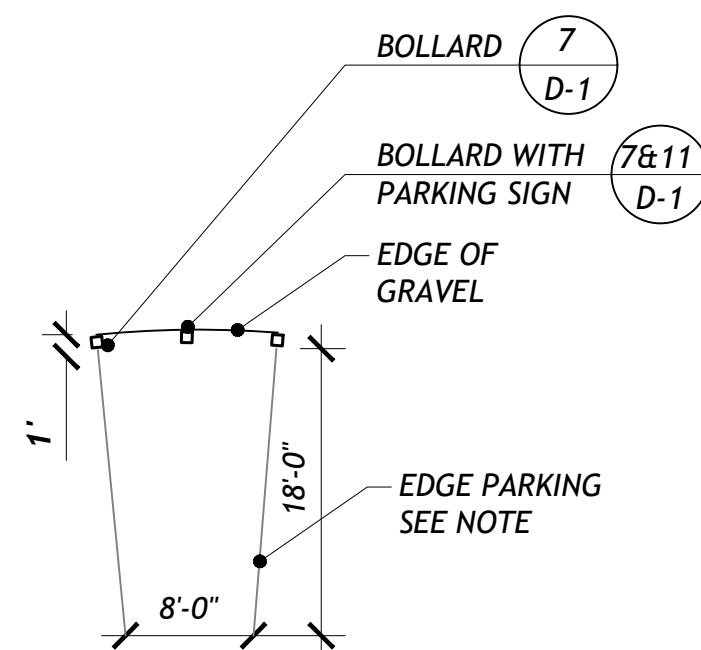
SCALE: N.T.S.



NOTES:
1) SPACES TO BE PAVED WITH GEO-GRID SURFACING. SEE DETAIL 2 & 8 ON THIS SHEET.
2) HANDICAPPED PARKING SHALL BE NO GREATER THAN 2% IN ANY DIRECTION.
3) SNOWSPOTS FOR STRIPING TO BE BLUE

3 HANDICAPPED PARKING SPACE

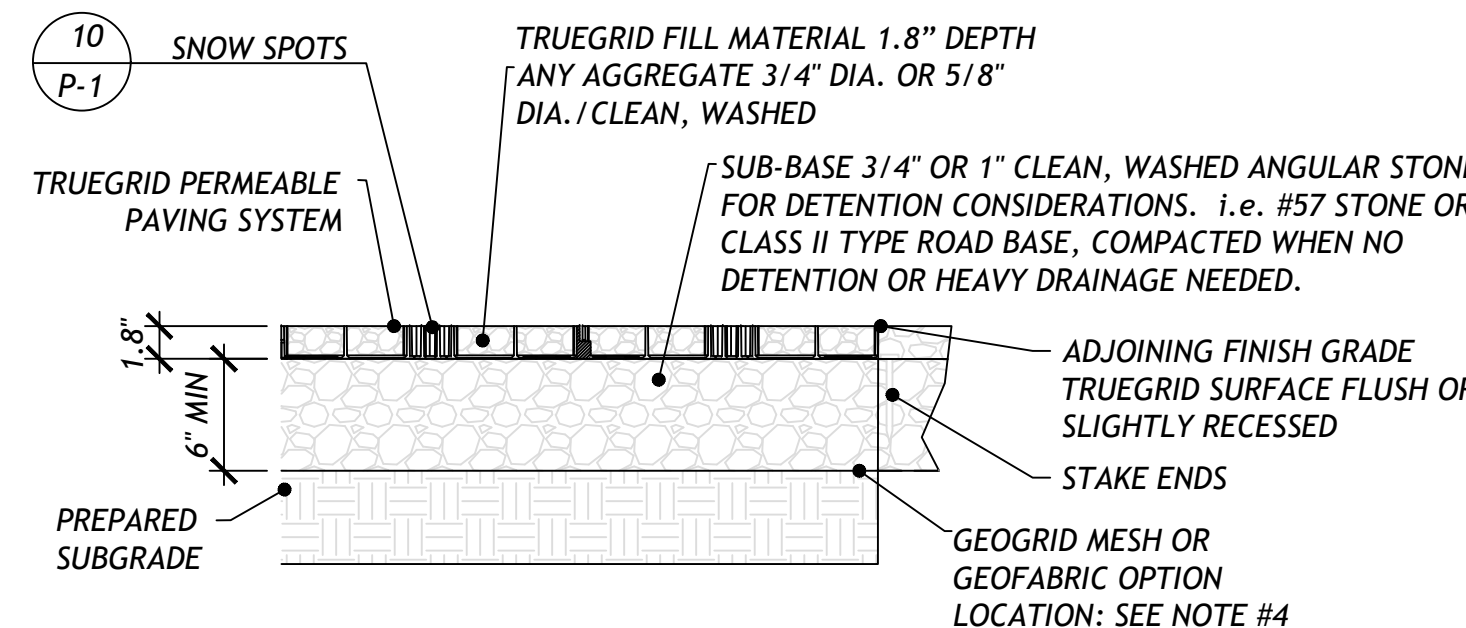
SCALE: N.T.S.



NOTE:
PARKING SPACES MARKED BY BOLLARD.
NO STRIPPING REQUIRED.

4 STANDARD PARKING SPACE

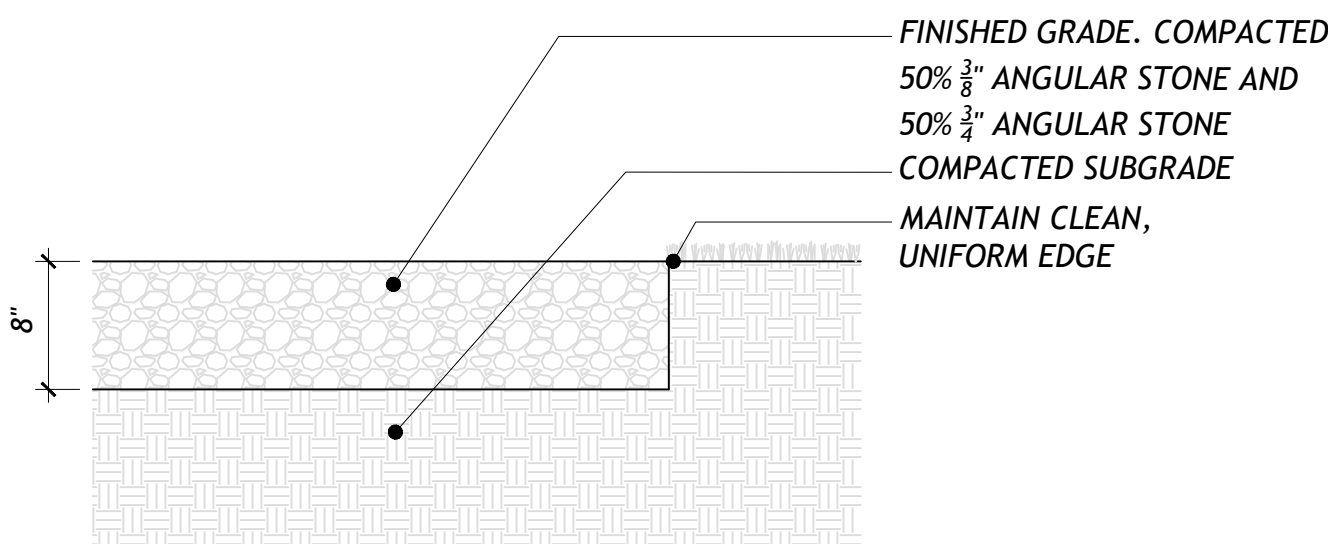
SCALE: N.T.S.



NOTES:
1. INSTALL GEO-GRID PER MANUFACTURER'S SPECIFICATIONS
2. STAKE GRID WITH NAIL

2 GEO-GRID PAVEMENT

SCALE: N.T.S.



1 GRAVEL PAVEMENT

SCALE: N.T.S.

PROJECT: SCHENK'S ISLAND PRESERVE
PHASE 1: IMPROVEMENTS
PARK ENTRY & PARKING

OWNER / CLIENT: TOWN OF WILTON
238 DANBURY
ROAD WILTON, CT

ELECTRICAL ENGINEER:



56 FOXCROFT COURT
SOUTHINGTON, CT

PROGRESS ISSUE: 1 CONSTRUCTION DOCUMENTS 03/28/2022

KEYPLAN:

SCALE: AS NOTED
SEAL:

SHEET TITLE:

ELECTRICAL
SPECIFICATIONS

SHEET NUMBER:

E-0

ELECTRICAL SPECIFICATIONS

PART 1 - GENERAL PROVISIONS FOR ELECTRICAL WORK

REFERENCES

THIS SECTION COVERS THE GENERAL REQUIREMENTS FOR ELECTRICAL WORK. EXAMINE ALL CONTRACT DRAWINGS AND ALL OTHER SECTIONS OF THE SPECIFICATIONS FOR ADDITIONAL WORK RELATED TO THE WORK OF THIS DIVISION.

DEFINITIONS

PROVIDE - TO FURNISH, INSTALL AND CONNECT UP COMPLETE AND READY FOR SAFE AND REGULAR OPERATION OF PARTICULAR WORK REFERRED TO UNLESS, SPECIFICALLY OTHERWISE NOTED.

'INSTALL' - TO ERECT, MOUNT AND CONNECT COMPLETE WITH RELATED ACCESSORIES.

WORK - LABOR, MATERIALS, EQUIPMENT, APPARATUS, CONTROLS, ACCESSORIES AND OTHER ITEMS REQUIRED FOR PROPER AND COMPLETE INSTALLATION.

'WIRING' - RACEWAY, FITTINGS, WIRE, BOXES, MOUNTING HARDWARE AND RELATED ITEMS.

'CONCEALED' - EMBEDDED IN MASONRY OR OTHER CONSTRUCTION CAVITY, INSTALLED IN FURRED SPACES, WITHIN DOUBLE PARTITIONS OR HUNG CEILINGS.

'SIMILAR' OR 'EQUAL' - EQUAL MATERIALS, WEIGHT, SIZE, DESIGN AND EFFICIENCY OF SPECIFIED PRODUCT.

'CONTRACTOR' - THE ELECTRICAL CONTRACTOR.

'NOTED' - AS INDICATED ON THE DRAWINGS AND/OR SPECIFICATIONS.

SCOPE

THIS WORK SHALL CONSIST OF THE FURNISHINGS OF ALL LABOR, MATERIALS AND SERVICES REQUIRED COMPLETE, READY FOR CORRECT OPERATION FOR ALL ELECTRICAL WORK CALL FOR BY THE ACCOMPANYING DRAWINGS AND SPECIFICATIONS. ALL ELECTRICAL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE, STATE AND LOCAL CODES.

THE DATA INDICATED IN THESE DRAWINGS AND SPECIFICATIONS ARE AS EXACT AS COULD BE SECURED. BUT THEIR ABSOLUTE ACCURACY IS NOT GUARANTEED. DO NOT SCALE DRAWINGS. EXACT LOCATIONS, DISTANCES, LEVELS AND OTHER CONDITIONS WILL BE GOVERNED BY THE DRAWINGS. USE THE DRAWINGS AND SPECIFICATIONS FOR GUIDANCE AND SECURE THE ENGINEER'S APPROVAL OF CHANGES IN LOCATIONS. CIRCUITS, WHERE SHOWN ON AN ELECTRICAL DRAWINGS, ARE SO INDICATED PRIMARILY FOR THE PURPOSE OF INDICATING THE GENERAL CIRCUIT PLAN AND DO NOT NECESSARILY INDICATE THE EXACT LOCATION OF ROUTING OF THE RACEWAYS UNLESS SPECIFICALLY INDICATED. CIRCUITS SHALL BE RUN IN SUITABLE CONDITION CONSIDERING STRUCTURAL FEATURES, OTHER TRADES, CONSTRUCTION METHODS AND GOOD INSTALLATION PRACTICE.

BEFORE SUBMITTING A BID, THE CONTRACTOR SHALL VISIT THE SITE AND BECOME THOROUGHLY FAMILIAR WITH ALL EXISTING CONDITIONS UNDER WHICH THE WORK AND WORK OF OTHER TRADES WILL BE INSTALLED. THIS CONTRACT INCLUDES ALL NECESSARY OFFSETS, TRANSITIONS, MODIFICATIONS AND RELOCATION REQUIRED TO INSTALL ALL NEW EQUIPMENT IN NEW OR EXISTING SPACES. CONTRACTOR SHALL INCLUDE ANY MODIFICATIONS REQUIRED IN EXISTING ELECTRICAL EQUIPMENT FOR INSTALLATION OF NEW ELECTRICAL EQUIPMENT AND NEW EQUIPMENT OF OTHER TRADES. (LIGHTING FIXTURES, DEVICES, CONDUIT WIRING, ETC.) ALL NEW AND EXISTING EQUIPMENT AND SYSTEMS SHALL BE FULLY OPERATIONAL UNDER THIS CONTRACT BEFORE THE PROJECT IS CONSIDERED COMPLETE. THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR ANY ASSUMPTIONS THAT ARE MADE. ANY OMISSIONS OR ERRORS MADE AS A RESULT OF FAILURE TO VISIT THE SITE AND BECOME THOROUGHLY FAMILIAR WITH THE EXISTING CONDITIONS AND THE CONTRACT DOCUMENTS OF ALL TRADES.

CODES, REGULATIONS AND STANDARDS

ALL ELECTRICAL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE FOLLOWING APPROVED CODES:

STATE DEMOLITION CODE
STATE BUILDING CODE
STATE FIRE SAFETY CODE
LOCAL BUILDING CODE
BIC - INTERNATIONAL BUILDING CODE
NFPA - NATIONAL FIRE PROTECTION CODE
ANSI - AMERICAN NATIONAL STANDARDS INSTITUTE
ASTM - AMERICAN SOCIETY FOR TESTING AND MATERIALS
OSHA - OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION
U.L. - UNDERWRITERS LABORATORIES
NFPA 70 - NATIONAL ELECTRICAL CODE
EPA - ENVIRONMENTAL PROTECTION AGENCY
IEEE - INSTITUTE OF ELECTRICAL AND ELECTRONIC ENGINEERS
NEMA - NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
IECC - INTERNATIONAL ENERGY CONSERVATION CODE
ICC/ANSI A117.1 ACCESSIBLE AND USABLE BUILDINGS AND FACILITIES

PERMITS, FEES AND INSPECTIONS

THE CONTRACTOR SHALL GIVE ALL NECESSARY NOTICES, OBTAIN ALL PERMITS, PAY FOR ALL GOVERNMENT, STATE SALES TAXES AND APPLICABLE FEES. THE CONTRACTOR SHALL FILE ALL DRAWINGS, COMPLETE ALL DOCUMENTS AND OBTAIN ALL NECESSARY APPROVALS FROM THE PROPER AUTHORITY OR AGENCY HAVING JURISDICTION. OBTAIN ALL REQUIRED CERTIFICATES OF INSPECTION COVERING WORK THE CONTRACTOR SHALL SEE THAT ALL REQUIRED INSPECTIONS AND TESTS ARE MADE AND SHALL COOPERATE TO MAKE THESE TESTS AS THOROUGH AND AS READILY MADE AS POSSIBLE. OWNER WILL PAY ANY UTILITY FEES.

MATERIALS AND WORKMANSHIP

ALL MATERIALS AND APPARATUS REQUIRED FOR THE WORK, EXCEPT AS OTHERWISE SPECIFIED, SHALL BE NEW AND OF FIRST-CLASS QUALITY. IT SHALL BE FURNISHED, DELIVERED, ERECTED, CONNECTED, FINISHED IN EVERY DETAIL AND SO SELECTED AND ARRANGED AS TO FIT PROPERLY INTO THE BUILDING SPACES. WHERE NO SPECIFIC KIND OR QUALITY MATERIAL IS GIVEN, A FIRST-CLASS STANDARD ARTICLE AS ACCEPTED BY THE ENGINEER SHALL BE FURNISHED.

ALL EQUIPMENT AND MATERIAL S SHALL BE SPECIFICATION GRADE AND BEAR THE UNDERWRITER'S LABEL. NO SUBSTITUTE OR ALTERNATE EQUIPMENT, MATERIAL, ETC. WILL BE CONSIDERED FOR THIS PROJECT.

ALL WORK SHALL BE OF A QUALITY CONSISTENT WITH GOOD TRADE PRACTICE AND SHALL BE INSTALLED IN A NEAT, WORKMANLIKE MANNER. THE ENGINEER/OWNER RESERVES THE RIGHT TO REJECT ANY WORK WHICH, IN HIS OPINION, HAS BEEN INSTALLED IN A SUBSTANDARD, DANGEROUS OR IN A UNSERVICEABLE MANNER. THE CONTRACTOR SHALL REPLACE REJECTED WORK IN A SATISFACTORY MANNER AT NO EXTRA COST TO THE OWNER.

GUARANTEES

ALL WORKMANSHIP AND MATERIALS SHALL BE FULLY GUARANTEED FOR A PERIOD OF ONE YEAR AFTER ACCEPTANCE OF THE ENTIRE INSTALLATION COVERED BY THIS CONTRACT. SHOULD ANY DEFECTS OCCUR DURING THE GUARANTEED PERIOD, THE CONTRACTOR SHALL REPAIR AND/OR REPLACE ALL DEFECTIVE EQUIPMENT, MATERIAL AND/OR WORK AT NO EXTRA CHARGE TO THE OWNER.

RECORD DRAWINGS

MAINTAIN, AT THE JOB SITE, A SET OF ELECTRICAL DRAWINGS INDICATING ALL CHANGES IN LOCATION OF THE EQUIPMENT, PANELS, DEVICES, ETC. FROM THE ORIGINAL LAYOUT. CLEARLY MARK IN RED ALL CHANGES ON THE DRAWINGS. AT THE COMPLETION OF THE PROJECT THE CONTRACTOR SHALL TURN OVER THE RECORD DRAWINGS TO THE ENGINEER/OWNER.

COORDINATION

ALL WORK SHALL BE CARRIED OUT IN CONJUNCTION WITH OTHER TRADES AND FULL COOPERATION SHALL BE GIVEN IN ORDER THAT ALL WORK MAY PROCEED WITH A MINIMUM OF DELAY AND INTERFERENCE.

SUBMITTALS

SUBMIT ELECTRONIC COPIES FOR REVIEW, DETAILED SHOP DRAWINGS OF ALL EQUIPMENT AND MATERIAL SPECIFIED. THE CONTRACTOR SHALL REVIEW ALL SHOP DRAWINGS PRIOR TO SUBMISSION TO THE ENGINEER FOR REVIEW. NO MATERIAL OR EQUIPMENT MAY BE DELIVERED TO THE JOB SITE OR INSTALLED UNTIL CONTRACTOR HAS IN THEIR POSSESSION, APPROVED SHOP DRAWINGS FOR THE PARTICULAR MATERIAL OR EQUIPMENT. SHOP DRAWINGS SHALL BE SPECIFIC WITH ITEMS SUBMITTED FOR APPROVAL CLEARLY IDENTIFIED.

THE FOLLOWING IS A LIST OF ELECTRICAL ITEMS THAT MUST BE SUBMITTED FOR REVIEW.

- PANELBOARDS
- CIRCUIT BREAKERS
- LIGHTING & LIGHTING CONTROLS
- CONDUIT, WIRE AND CABLE
- DEVICES (RECEPTACLES, SWITCHES, POWER PEDESTALS, ETC.)

OPERATING INSTRUCTIONS

THE CONTRACTOR SHALL FURNISH TO THE ENGINEER ELECTRONIC SETS OF TYPEWRITTEN OR BLUEPRINTED INSTRUCTIONS FOR OPERATING AND MAINTAINING ALL SYSTEMS AND EQUIPMENT INCLUDED IN THIS DIVISION. MANUFACTURER'S ADVERTISING LITERATURE OR CATALOGS WILL NOT BE ACCEPTABLE FOR OPERATING AND MAINTENANCE INSTRUCTIONS.

THE CONTRACTOR, IN THE ABOVE-MENTIONED INSTRUCTIONS, SHALL INCLUDE THE MAINTENANCE SCHEDULE FOR THE PRINCIPAL ITEMS OF EQUIPMENT FURNISHED UNDER THIS DIVISION.

AN AUTHORIZED MANUFACTURER'S REPRESENTATIVE SHALL ATTEST IN WRITING THAT HIS EQUIPMENT HAS BEEN PROPERLY INSTALLED PRIOR TO STARTUP. THESE LETTERS WILL BE BOUND INTO OPERATING AND MAINTENANCE BOOKS.

EQUIPMENT PROTECTION

PROPERLY AND COMPLETELY PROTECT AGAINST ALL DAMAGE. ALL APPARATUS, EQUIPMENT, ETC., INCLUDED IN THIS CONTRACT. THE CONTRACTOR WILL BE HELD RESPONSIBLE FOR ANY DAMAGE TO FURNISHED APPARATUS, EQUIPMENT, ETC., UNTIL FINAL ACCEPTANCE.

PROPERTY PROTECTION

THE CONTRACTOR SHALL TAKE WHATEVER MEANS NECESSARY AND/OR REQUIRED TO PROTECT OWNER'S PROPERTY WITHIN THE WORKING AREAS FROM DUST, DEBRIS AND OTHER MATTER GENERATED BY THE WORK. NO WORK SHALL COMMENCE IN AREAS WHERE PROTECTION IS REQUIRED UNTIL APPROVAL HAS BEEN GIVEN TO THE CONTRACTOR BY THE OWNER.

MANUFACTURER'S INSTRUCTION

INSTALL ALL EQUIPMENT IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS OR REQUIREMENTS FOR PROPER OPERATION AND MAINTENANCE.

EQUIPMENT PAINTING AND CLEANING

THOROUGHLY CLEAN ALL ELECTRICAL EQUIPMENT DEVICES AND ENCLOSURES UPON COMPLETION OF ALL WORK. REPAINT ANY EQUIPMENT WHOSE FINISH IS DAMAGED OR RUSTED. MATCH MANUFACTURER'S ORIGINAL FINISH.

PART 2 - PRODUCTS

DESCRIPTION

ALL MATERIALS AND EQUIPMENT PROVIDED UNDER THIS SECTION SHALL BE NEW, FIRST GRADE, BEST OF THEIR RESPECTIVE KINDS AND IN NO WAY SHALL THEY BE LESS THAN THE QUALITY AND INTENT SET FOURTH UNDER THIS SECTION. THEY SHALL MEET THE REQUIREMENTS OF ALL STANDARDS SET UP TO GOVERN THE MANUFACTURER OF ELECTRICAL MATERIALS AND COMPLY WITH ALL APPLICABLE CODES AND STANDARDS.

WIRE

CONDUCTORS SHALL BE U.L. LISTED, 600 VOLTS, 90 DEG. C., SINGLE CONDUCTOR TYPE THWN-2 98% CONDUCTIVITY, ANNEALED UNCOATED COPPER WITH PVC INSULATION COVERED WITH NYLON SHEATH JACKET, TESTED IN ACCORDANCE WITH THE REQUIREMENTS OF UNDERWRITERS LABORATORIES STANDARD 83. WIRE SHALL BE IDENTIFIED BY SURFACE MARKING INDICATING MANUFACTURER'S IDENTIFICATION CONDUCTOR SIZE AND METAL, VOLTAGE RATING, U.L. SYMBOL AND TYPE DESIGNATION. CONDUCTORS SHALL BE STRANDED. MINIMUM SIZE SHALL BE #12 AWG UNLESS OTHERWISE INDICATED. MANUFACTURED BY ROME CABLE, TRIANGLE WIRE & CABLE, GENERAL CABLE OR ESSEX WIRE & CABLE.

RIGID GALVANIZED STEEL CONDUIT (RGS)

RIGID STEEL CONDUIT SHALL BE FULL WEIGHT, HEAVY WALL STEEL PIPE WITH GALVANIZED PROTECTIVE COATING. MANUFACTURED BY TRIANGLE WIRE AND CABLE, ALLIED TUBE AND CONDUIT, REPUBLIC OR STEELDUCT. CONDUIT FITTINGS SHALL BE MALLEABLE IRON, CADMIUM PLATED WITH FULL THREADED HUBS.

RIGID POLYVINYL CHLORIDE CONDUIT (PVC)

RIGID POLYVINYL CHLORIDE CONDUIT SHALL BE TYPE DB, UNLIGHT RESISTANT, RATED OR USE WITH 90 DEGREES C. CONDUCTORS, U.L. RATED. ALL PVC CONDUIT AND FITTINGS SHALL BE SOLVENT WELDED. MANUFACTURED BY CARLON, ELECTRI-FLEX OR PLASTILINE. SCHEDULE 80 UNLESS SPECIFICALLY NOTED AS SCHEDULE 40 ON THE DRAWINGS.

FITTINGS

CONDUIT BODIES FOR RIGID GALVANIZED STEEL CONDUIT (RGS) SHALL BE MALLEABLE IRON-ZINC PLATED WITH TAPERED HUBS AND GASKETED ALUMINUM COVER.

INSULATION BUSHINGS SHALL BE HIGH IMPACT THERMOPLASTIC PHENOLIC WITH 150 DEG. C. UL TEMPERATURE RATING.

INSULATED GROUNDING BUSHINGS SHALL BE MALLEABLE IRON ZINC PLATED WITH MOLDED ON PHENOLIC INSULATION AND LAY-IN GROUNDING LUG.

CONDUIT LOCKNUTS SHALL BE HEAVY NUT STOCK STEEL-ZINC PLATED.

OFFSET NIPPLES SHALL BE MALLEABLE IRON ZINC PLATED WITH RIGID CONDUIT THREADING AND 3/4" OFFSET.

CONDUIT STRAPS SHALL BE SNAP-TYPE, DOUBLE RIBBED STEEL-ZINC PLATED.

CONDUIT FITTINGS SHALL BE MANUFACTURED BY OIZ GEDNEY, CROUSE-HINDS OR APPLETON.

SUPPORT FITTINGS

SUPPORT CHANNEL SHALL BE ROLL-FORMED #12 GAUGE STEEL. SOLID BASE OR BOLT HOLE BASE - HOT DIP GALVANIZED FINISH. COMPLETE WITH ANGLE FITTINGS, SPRING NUTS, CONDUIT SUPPORTS, 3/8" OR 1/2" THREADED RODS (SIZE REQUIRED FOR LOAD), ETC.

CABLE TIES

CABLE TIES SHALL BE FABRICATED OF ONE-PIECE HALLAR WITH NO METAL PARTS. MANUFACTURED BY BURNDY, T&B, PANDUIT OR BLACKBURN.

HANDHOLES

HANDHOLES SHALL BE OPEN BOTTOM, POLYMER CONCRETE, TIER 8, SIZE AS REQUIRED TO ACCOMMODATE ENTRY/EXIT LOCATIONS AND SIZES OF CONDUITS IN THE BOX. QUAZITE OR APPROVED EQUAL.

OUTLET BOXES

OUTLET BOXES SHALL BE WET LOCATION RATED, AND OF PROPER TYPE AND SIZE AS REQUIRED FOR THE PARTICULAR APPLICATION. SIZE AND TYPE DICTATED BY THE NUMBER OF DEVICES, NUMBER OF CONDUCTORS AND WIRING METHOD UTILIZED. BOXES SHALL BE ADEQUATE SIZE FOR THE INSTALLATION OF CONDUCTORS WITHOUT EXCESSIVE BENDING OR CRIMPING OF THE CONDUCTORS AND DAMAGING OF CONDUCTOR INSULATION. MANUFACTURED BY STEEL CITY OR RACO.

LIGHTING CONTROL SYSTEMS STARTUP & TRAINING

ENGAGE THE SERVICES OF THE SYSTEM MANUFACTURER TO PROVIDE ON-SITE PROGRAMMING, STARTUP, CALIBRATION & OWNER'S TRAINING FOR THE LIGHTING CONTROL SYSTEM.

PANELBOARDS

PANELBOARDS SHALL BE THE COMBINATION THERMAL/MAGNETIC CIRCUIT BREAKER TYPE, 3 PHASE, 4 WIRE WITH THE NUMBER OF BRANCH CIRCUITS AS INDICATED ON THE SCHEDULES. PROVIDE WITH FULLY RATED HARD-DRAWN COPPER, 98 PERCENT CONDUCTIVE PHASE AND GROUND BUS. LUGS SIZED TO ACCOMMODATE WIRE QUALITY AND SIZES. PANELS SHALL BE U.L. LISTED. DOOR-IN-DOOR DESIGN. BOXES SHALL BE CORROSION RESISTANT, ZINC FINISH GALVANIZED. FRONTS SHALL BE REINFORCED STEEL. POWDER FINISH PAINTED LIGHT GRAY (ANSI-61) AND SHALL BE EQUIPPED WITH CONCEALED HINGES AND CONCEALED TRIM ADJUSTING SCREWS. DIRECTORY CARD HOLDERS SHALL BE CORROSION-PROOF VALOX WITH RETRACTABLE LATCH, KEYED ALIKE. PHASE BUS SHALL BE SEQUENCED AND FULLY INSULATED RATINGS SHALL BE DISPLAYED ON THE DEAD FRONT SHIELD AND TOTALLY VISIBLE WITH THE DOOR OPEN. REFER TO SCHEDULES FOR OTHER REQUIREMENTS.

CIRCUIT BREAKERS

BRANCH CIRCUIT BREAKERS SHALL BE QUICK-MAKE, QUICK-BREAK, BOLT-IN THERMAL/MAGNETIC TYPE WITH VISIBLE CURRENT RATING AND TRIP POSITION. MANUFACTURED BY GENERAL ELECTRIC, SIEMENS, SQUARE D' OR CUTLER HAMMER. REFER TO SCHEDULES FOR AIC RATING.

ALL MULTI-POLE BREAKERS SHALL BE EQUIPPED WITH HANDLE TIES FOR MULTI-POLE USE.

WIRING DEVICES

ALL DEVICES (RECEPTACLES AND SWITCHES) SHALL BE COMMERCIAL SPECIFICATION GRADE, 20 AMP RATED, U.L. LISTED. SIDE-GROUNDING, GROUND LUG, SIDE/BACK WIRED. MANUFACTURED BY HUBBELL, LEVITON, OR PASS & SEYMOUR.

LIGHTING FIXTURES

FURNISH AND INSTALL ALL LIGHTING FIXTURES AS SPECIFIED ON THE SCHEDULES. COMPLETE WITH ALL ACCESSORIES, LOUVERS, LAMPS AND MOUNTING HARDWARE. THE FIXTURES SHOWN ARE MARKED AS TYPE A, B, C, ETC.

CLEAN AND REMOVE ALL PAINT, STICKERS, DIRT, SMUDGES AND FINGERPRINTS FROM LIGHTING FIXTURES.

IF BASIS OF DESIGN FIXTURES ARE NOT PROVIDED, THE PROPOSED ALTERNATIVES SHALL BE EQUAL IN QUALITY, FEATURES, MATERIAL, COLOR/FINISH, APPEARANCE, DIMENSIONS AND PERFORMANCE. APPROVAL OF ANY PROPOSED ALTERNATIVES WILL BE SUBJECT TO ENGINEER AND OWNER REVIEW. IN ADDITION, PHOTOMETRIC CALCULATIONS SHALL BE PROVIDED FOR ALTERNATIVE FIXTURES TO DEMONSTRATE EQUAL PERFORMANCE.

POWER PEDESTALS

POWER PEDESTALS SHALL BE WEATHERPROOF, OUTDOOR RATED, 2-GANG CAPACITY. BLACK FINISH WITH LOCKABLE HINGED COVER AND DEVICE TYPES AND QUANTITIES AS INDICATED ON PLANS. LEGRAND XPP2G30C-BK OR EQUAL.

PART 3 - EXECUTION

INSTALLATION

ALL WORK, MATERIALS AND MANNER OF INSTALLING SAME SHALL BE IN STRICT ACCORDANCE WITH THE LATEST REQUIREMENTS OF THE NATIONAL ELECTRIC CODE.

ALL CONDUIT AND WIRING SHALL BE INSTALLED CONCEALED UNLESS OTHERWISE NOTED.

WIRING IN EXPOSED AREAS SHALL BE ROUTED IN RGS CONDUIT.

RACEWAYS

RACEWAYS, ENCLOSURES AND BOXES SHALL BE MECHANICALLY JOINED TO FORM A CONTINUOUS ELECTRICAL PATH.

THE CONTRACTOR SHALL PROVIDE APPROVED TYPE PULL BOXES AS REQUIRED.

MINIMUM SIZE CONDUIT SHALL BE 3/4" UNLESS OTHERWISE NOTED.

FURNISH NYLON PULL STRINGS IN ALL EMPTY CONDUIT RUNS.

FURNISH LOCKNUTS AND BUSHINGS FOR ALL CONDUIT TERMINATIONS IN ALL OUTLET BOXES, PANELS, PULL BOXES, CONDUIT STUBS, ETC.

RIGID GALVANIZED STEEL CONDUIT (RGS) SHALL BE USED FOR WIRING IN THE FOLLOWING LOCATIONS:

- EXTERIOR EXPOSED INSTALLATIONS
- CONDUIT SWEEPS / STUB-UPS
- WITHIN STONE WALLS

RIGID POLYVINYL CHLORIDE (PVC) SHALL BE USED FOR WIRING IN THE FOLLOWING LOCATIONS:

- LIGHTING AND POWER BRANCH CIRCUIT OR FEEDER WIRING BURIED UNDER GRASS (SCHEDULE 40)
- BELOW CONCRETE SLABS (SCHEDULE 40)
- BELOW PARKING LOTS AND OTHER PAVED AREAS SUBJECT TO VEHICULAR TRAVEL (SCHEDULE 80)

ALL CONDUIT SHALL BE SUPPORTED.

WIRING

PROVIDE WIRING TO ALL OUTLETS, EQUIPMENT, APPARATUS AND OTHER SPECIALTIES UNDER THIS DIVISION THAT WHICH FURNISHED OR PROVIDED UNDER OTHER DIVISIONS OR BY THE OWNER.

THE TERM 'WIRING' SHALL BE CONSIDERED TO BE COMPRISED OF THE CONDUIT, CONDUCTORS, CONNECTIONS, ETC.

ALL WIRING ON DRAWINGS IS SIZED FOR TYPE THWN/THHN COPPER CONDUCTORS.

MINIMUM SIZE WIRE SHALL BE #12 UNLESS OTHERWISE INDICATED. ALL WIRING SHALL BE COLOR CODED.

EXERCISE CAUTION IN PULLING CONDUCTORS INTO RACEWAYS SO AS NOT TO DAMAGE THE INSULATION. CABLE PULLING LUBRICANT SHALL BE USED TO ASSIST IN PULLING.

CONDUCTORS WITHIN PANELBOARDS, JUNCTION BOXES, TROUGHS AND OTHER EQUIPMENT WHERE CONCENTRATIONS OF CONDUCTORS ARE ENCLOSED, SHALL BE NEATLY ARRANGED AND TIED WITH CABLE TIES.

CIRCUITS SHALL BE SO CONNECTED TO THE PANELBOARDS THAT THE TOTAL LOAD IS DISTRIBUTED AS NEATLY AS POSSIBLE, EQUALLY BETWEEN EACH LINE AND NEUTRAL. 10% WILL BE CONSIDERED A REASONABLE AND ALLOWABLE UNBALANCE.

COMMON NEUTRAL FOR MULTIPLE BRANCH CIRCUITS IS NOT ACCEPTABLE. PROVIDE SEPARATE NEUTRAL FOR EACH BRANCH CIRCUIT.

WIRING IN OUTLET BOXES, JUNCTION BOXES, CABINET PANELBOARDS OR EQUIPMENT SHALL HAVE A MINIMUM OF EIGHT (8") INCHES LENGTH LEADS FOR CONNECTING WIRING DEVICES TO MAKE UP CIRCUIT SPLICES.

INSTALL COPPER GREEN INSULATED GROUNDING CONDUCTOR IN ALL CONDUITS AND RACEWAYS.

SPLICING

SPLICING SHALL BE DONE WITH INSULATED OR NON-INSULATED CONNECTORS OF APPROPRIATE TYPES AND CURRENT-CARRYING CAPACITY. NON-INSULATED CONNECTORS SHALL BE WRAPPED WITH INSULATING TAPE TO THE THICKNESS OF THE INSULATION OF THE CONDUCTORS BEING SPLICED. ELECTRICAL TAPE SHALL BE 3M OR SUPER 88 SCOTCH VINYL FLAME-RETARDANT, COLD AND WEATHER RESISTANT.

SPLICES FOR CONDUCTORS, SIZES #10 AWG OR SMALLER SHALL BE MADE WITH U.L. LISTED SPRING-TYPE CONNECTORS OR APPROPRIATE CURRENT CARRYING CAPACITY.

SPLICES, TAPS AND TERMINALS FOR CONDUCTORS #8 AWG OR LARGER SHALL BE MADE WITH U.L. LISTED BOLTED PRESSURE CONNECTORS OF BRONZE OR COPPER CONSTRUCTION, OF APPROPRIATE CURRENT CARRYING CAPACITY. EQUAL TO OIZ GEDENY, BURNDY OR BLACKBURN.

CONDUCTOR IDENTIFICATION

CONDUCTORS #8 AWG AND SMALLER SHALL HAVE A COLOR-CODED INSULATION.

CONDUCTORS #6 AWG AND LARGER SHALL BE IDENTIFIED WITH TAPES APPLIED NEAR THE ENDS OF THE CONDUCTORS.

FEEDERS AND BRANCH CIRCUIT CONDUCTORS SHALL BE IDENTIFIED FOR PHASE ROTATION.

240/120V/1PH

HOT 1	BLACK
HOT 2	RED
NEUTRAL	WHITE
GROUND	GREEN

ALL FEEDERS, MAINS AND BRANCH CIRCUIT CONDUCTORS SHALL BE TAGGED AT BOTH ENDS WITH WIRE MARKERS IN ALL PANELS, MOTOR CONTROLS, JUNCTION BOXES, OUTLET BOXES AND DEVICE BOXES.

IDENTIFICATION

FURNISH AND INSTALL NAMEPLATES FOR ALL ELECTRICAL EQUIPMENT, IDENTIFYING ITEMS BY NAME, FUNCTION AND/OR CONTROL.

IDENTIFYING NAMEPLATES SHALL BE LAMINATED, PLASTIC TYPE, CONSISTING OF TWO BLACK PLASTIC SHEETS WITH ONE WHITE PLASTIC SHEET BONDED TO AND BETWEEN THE TWO OUTER BLACK SHEETS AND HAVING THE LETTERS ENGRAVED IN ONE BLACK TO THE DEPTH OF THE WHITE PLASTIC. FASTEN NAMEPLATES TO EQUIPMENT WITH SUITABLE ADHESIVES OR STAINLESS STEEL SCREWS. IN ADDITION TO THE PANELBOARD IDENTIFYING NAMEPLATE, PROVIDE ONE OF THE FOLLOWING LAMINATED PLATES ON EACH PANELBOARD (BASED ON THE PANELBOARD VOLTAGE):

VOLTAGE	HOT1	HOT2	N	G
240/120	BLACK	RED	WHITE	GREEN

ALL PANELS SHALL HAVE TYPEWRITTEN CIRCUIT DIRECTORIES IDENTIFYING ALL BRANCH CIRCUITS. PROVIDE ADDITIONAL COPY OF COMPLETE UPDATED PANEL DIRECTORY TO THE OWNER.

USE PLASTIC-COATED WIRE MARKERS OF THE SELF-ADHESIVE. WRAPAROUND TYPE WITH PERMANENT FACTORY-PRINTED NUMBER, LETTERS AND SYMBOLS.

WIRE MARKERS SHALL BE SECURELY ATTACHED AT BOTH ENDS, IDENTIFYING PANEL AND CIRCUIT BREAKER NUMBERS.

ALL CONDUCTORS SHALL BE PERMANENTLY TAGGED AT TIME OF INSTALLATION. LABELS SHALL BE EQUAL TO T&B, PANDUIT OR IDEAL.

GROUNDING

ALL ELECTRICAL WORK SHALL BE GROUNDED AND BONDED IN FULL CONFORMANCE WITH THE LATEST APPROVED EDITION OF THE NATIONAL ELECTRICAL CODE AND LOCAL REQUIREMENTS.

ALL ELECTRICAL EQUIPMENT, PANELBOARD ENCLOSURES, MOTOR FRAMES, SAFETY SWITCHES, METAL ENCLOSURES, ELECTRICAL DEVICE CLOSURES AND ALL OTHER EQUIPMENT SHALL BE MADE TO FORM A CONTINUOUS CONDUCTING, GROUND PATH OF LOW IMPEDANCE FOR GROUND FAULT CIRCUITS AND OPERATION OF THE CIRCUIT PROTECTIVE DEVICES WITHIN EACH CIRCUIT.

PROVIDE GROUNDING CONDUCTOR IN ALL RACEWAYS.

GROUND CONNECTIONS WITH THE GROUNDING CONDUCTORS SHALL BE MADE AT EACH OUTLET BOX, LIGHTING FIXTURE, MOTOR AND OTHER EQUIPMENT COMPONENTS BY MEANS OF A POSITIVELY SECURED GROUNDING CLAMP, SCREW OR CLIP.

BONDING SHALL BE PROVIDED TO ASSURE ELECTRICAL CONTINUITY AND THE CAPACITY TO SAFELY CONDUCT ANY FAULT CURRENT LIKELY TO BE IMPOSED.

ALL DEVICES (SWITCHES, RECEPTACLES, ETC.) SHALL BE GROUNDED TO CONDUIT SYSTEM WITH SIX (6") INCH SOLID COPPER #12 AWG INSULATED WIRE (GREEN) CONNECTED TO GROUND SCREW IN DEVICE AND FASTENED TO BACKBOX WITH 10-32x3/8" SLOTTED HEXAGON HEAD WASHER FACE GROUND WITH GREEN DYE FINISH.

END OF ELECTRICAL SPECIFICATIONS

PROJECT:

SCHENK'S ISLAND PRESERVE
PHASE 1: IMPROVEMENTS
PARK ENTRY & PARKING

OWNER / CLIENT:

TOWN OF WILTON
238 DANBURY
ROAD WILTON, CT

ELECTRICAL ENGINEER:



56 FOXCROFT COURT
SOUTHINGTON, CT

PROGRESS ISSUE:

1 CONSTRUCTION DOCUMENTS 03/28/2022

KEYPLAN:

SCALE: AS NOTED

SEAL:

SHEET TITLE:

ELECTRICAL
SCHEDULES, NOTES
AND ABBREVIATIONS

SHEET NUMBER:

E-1

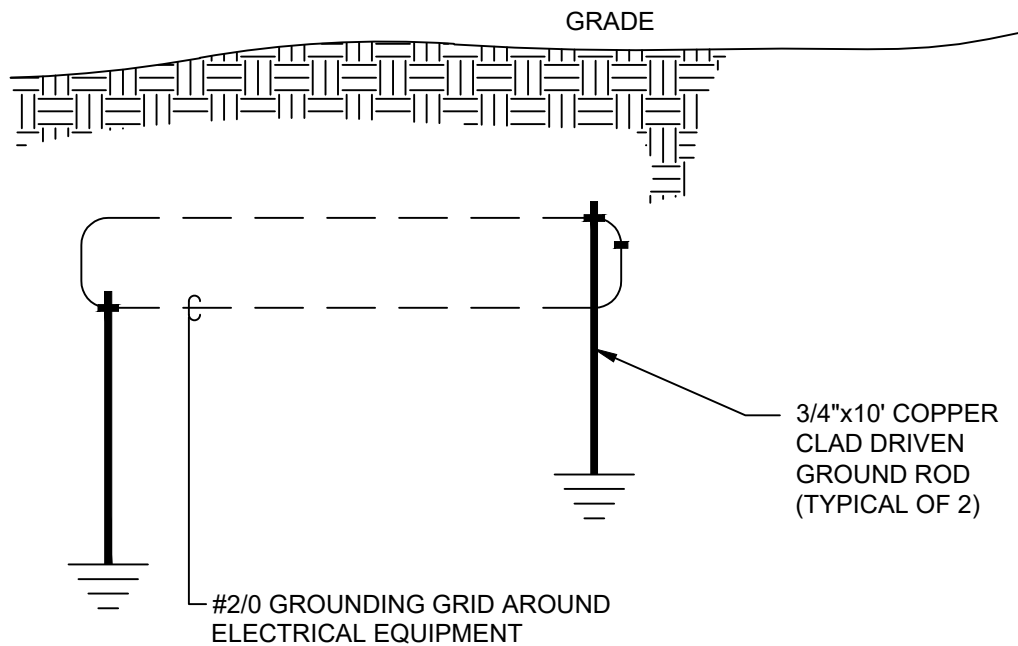
REF. NO. 4783

LIGHT FIXTURE SCHEDULE

TYPE	BASIS OF DESIGN	DESCRIPTION	VOLTAGE	LAMPING	REMARKS
SL4	STERNBERG TW1115/PV/S/A-2/BKT (POLE) STERNBERG SH-GL1960-B-BFS-12L30T4-MDL012-CA-PE- BKT (FIXTURE)	LED POLE LIGHT, 15' SMOOTH BLACK TEXTURED POLE MOUNTED TO CONCRETE BASE, 3000°K, TYPE T4 DISTRIBUTION, 4705 LUMENS, CLEAR ACRYLIC LENS, BLACK TEXTURED FINISH, INTEGRAL PHOTOCCELL	240V	39W LED	1, 2
SL4B	STERNBERG TW1115/PV/S/A-2/BKT (POLE) STERNBERG SH-GL1960-B-BFS-12L30T4-MDL012-CA- BLOC-PE-BKT (FIXTURE)	SAME AS TYPE 'SL4', BUT WITH BACK LIGHT OPTICAL CONTROL	240V	39W LED	1, 2

NOTES:

- PROVIDE ALL NECESSARY MOUNTING HARDWARE, HANGERS, BRACKETS, ETC.
- IF BASIS OF DESIGN FIXTURES ARE NOT PROVIDED, THE PROPOSED ALTERNATIVES SHALL BE EQUAL IN QUALITY, FEATURES, MATERIAL, COLOR/FINISH, DIMENSIONS, APPEARANCE AND PERFORMANCE. APPROVAL OF ANY PROPOSED ALTERNATIVES WILL BE SUBJECT TO ENGINEER AND OWNER REVIEW. IN ADDITION, PHOTOMETRIC CALCULATIONS SHALL BE PROVIDED FOR ALTERNATIVE FIXTURES TO DEMONSTRATE EQUAL PERFORMANCE.

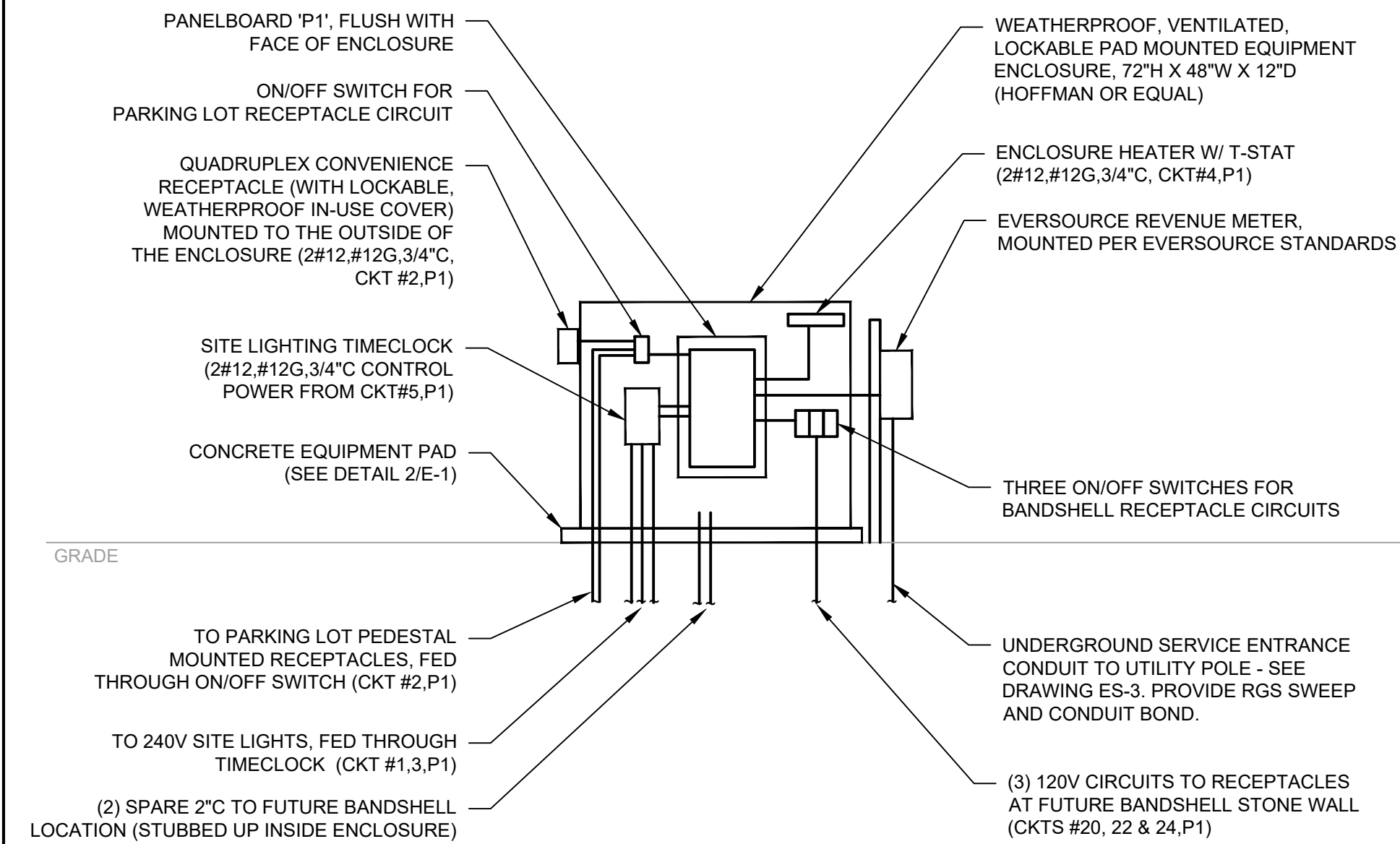


NOTES:

- ALL ASPECTS OF GROUNDING SYSTEM SHALL COMPLY FULLY WITH ARTICLE 250 OF N.E.C.
- UTILIZE GROUNDING BUSHINGS AS REQUIRED.
- PROVIDE AT PAD MOUNTED ENCLOSURE LOCATION.

GROUND RING DETAIL

E-1 NTS



DETAIL NOTES:

- SEE 6/E-2 ONE-LINE POWER DIAGRAM FOR SERVICE ENTRANCE DETAILS.
- SEE PANEL SCHEDULE ON THIS DRAWING FOR PANEL 'P1' REQUIREMENTS.
- SEE DETAIL 2 ON THIS DRAWING FOR ENCLOSURE PAD DETAIL.
- SEE E-3 FOR ENCLOSURE LOCATION. DOORS SHALL FACE SOUTH.
- PROVIDE A HEATER W/ THERMOSTAT INSIDE THE ENCLOSURE TO PREVENT AGAINST CONDENSATION.
- UTILITY REVENUE METER MAY BE MOUNTED TO SIDE OF THE ENCLOSURE IF APPROVED BY EVERSOURCE.
- SEE CONDUCTOR AND CONDUIT SIZING ON E-3 FOR SITE LIGHTING AND RECEPTACLE CIRCUITS.
- PROVIDE GROUND RING AROUND ENCLOSURE PER DETAIL 3/E-1 AND BOND TO ELECTRICAL SERVICE.

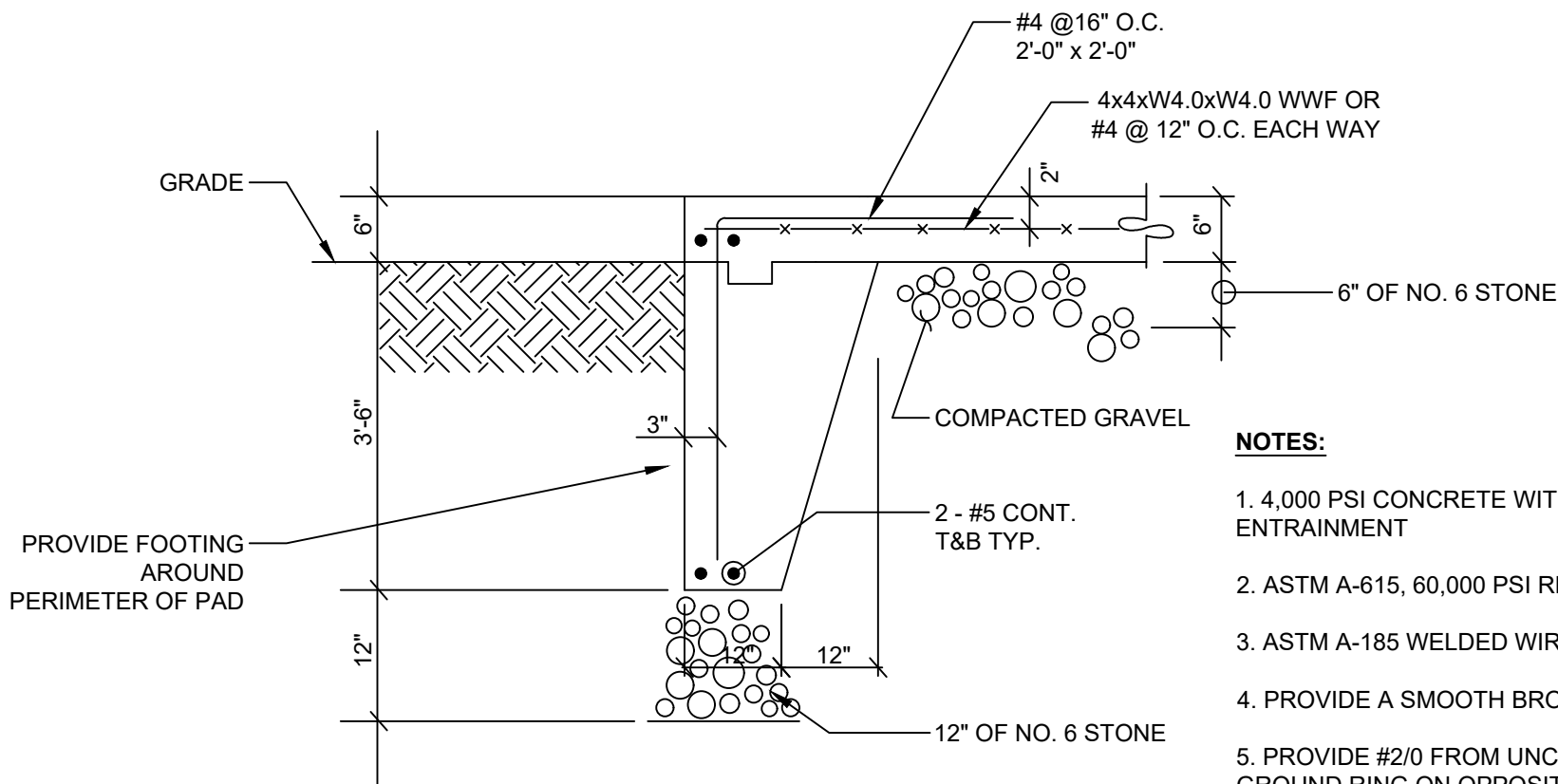
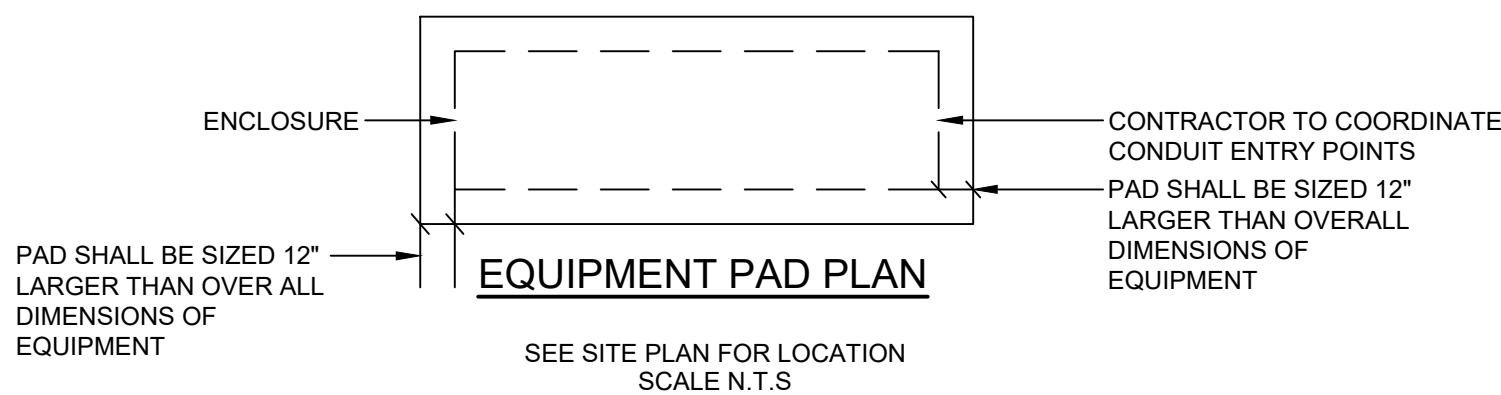
PAD MOUNTED ENCLOSURE DETAILS

E-1 NTS

ELECTRICAL GENERAL NOTES

- UNLESS OTHERWISE INDICATED, FURNISH AND INSTALL A COMPLETE AND OPERATIONAL ELECTRICAL SYSTEM INCLUDING ALL NECESSARY MATERIAL, LABOR, AND EQUIPMENT.
- ELECTRICAL PLANS AND DETAILS, AND ONE LINE DIAGRAMS SHOW THE GENERAL LOCATION AND ARRANGEMENT OF THE ELECTRICAL SYSTEM. THEY ARE DIAGRAMMATIC AND DO NOT SHOW ALL CONDUIT BODIES, CONNECTORS, BENDS, FITTINGS, HANGERS, AND ADDITIONAL PULL AND JUNCTION BOXES WHICH THE CONTRACTOR MUST PROVIDE TO COMPLETE THE ELECTRICAL SYSTEM.
- ALL EQUIPMENT AND MATERIAL SHALL BE LABELED AND LISTED, AND INSTALLED IN ACCORDANCE WITH THEIR LISTING.
- THE CONTRACTOR SHALL OBTAIN ALL REQUIRED PERMITS AND ARRANGE FOR ALL REQUIRED INSPECTIONS IN ACCORDANCE WITH STATE GOVERNING AUTHORITIES.
- ALL WORK SHALL BE DONE WITH LICENSED WORKERS IN ACCORDANCE WITH STATE GOVERNING AUTHORITY.
- THE DEFINITION OF ELECTRICAL TERMS USED SHALL BE AS DEFINED IN THE NATIONAL ELECTRICAL CODE.
- THE TERM "INDICATED" SHALL MEAN "AS SHOWN ON CONTRACT DOCUMENTS (SPECIFICATIONS, DRAWINGS, AND RELATED ATTACHMENTS)".
- THE TERM "SIZE" SHALL MEAN ONE OR MORE OF THE FOLLOWING: "LENGTH, CURRENT AND VOLTAGE RATING, NUMBER OF POLES, NEMA SIZE, AND OTHER SIMILAR ELECTRICAL CHARACTERISTICS".
- THE TERM "SPACE" ON PANELBOARD AND SWITCHBOARD SCHEDULES SHALL MEAN "PROVIDE SPACE TO INSTALL THE NUMBER OF POLES AND SIZE OF THE PROTECTIVE DEVICE INDICATED WITH ALL THE NECESSARY BUS AND FITTINGS TO INSTALL THE DEVICE AT SOME FUTURE DATE".
- COORDINATE ELECTRICAL WORK WITH OWNER.
- COORDINATE ELECTRICAL WORK WITH OTHER DIVISIONS OF THIS PROJECT.
- BEFORE SELECTING MATERIAL AND EQUIPMENT, AND PROCEEDING WITH WORK, INSPECT AREAS WHERE MATERIAL AND EQUIPMENT ARE TO BE INSTALLED TO INSURE SUITABILITY, AND CHECK NEEDED SPACE FOR REPLACEMENT, CLEARANCES AND INTERCONNECTIONS.
- ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE, 2017 EDITION.

MANUFACTURER: T.B.D. (NEW)		MLO OR MCB: MCB		PANEL: PANEL P1			
TYPE: PANEL		FEED: SEE RISER		VOLTAGE: 240V/120V, 1-PHASE			
MOUNTING: SURFACE		CU OR AL WIRE: CU		MAIN AMPS: 400A MCB			
LOCATION: SEE PLANS		AIC RATING: 42 KAIC		FEEDER: SEE RISER			
BREAKER OPTIONS:							
CKT NO.	LOAD	KVA	BRKR	BRKR	KVA	LOAD	CKT NO.
1	SITE LIGHTING	0.08	20	20	1.08	PKNGL LOT AREA RECEPTACLES	2
3	"	0.08	20	20	0.50	ENCLOSURE HEATER	4
5	TIMECLOCK	0.10	20	20		SPARE	6
7	SPARE		20	20		SPARE	8
9	EMPTY SPACE / PROVISIONS			20		SPARE	10
11	EMPTY SPACE / PROVISIONS			20		SPARE	12
13	EMPTY SPACE / PROVISIONS					EMPTY SPACE / PROVISIONS	14
15	EMPTY SPACE / PROVISIONS					EMPTY SPACE / PROVISIONS	16
17	EMPTY SPACE / PROVISIONS					EMPTY SPACE / PROVISIONS	18
19	100A-3P PROVISIONS / SPACE			20	1.92	DEDICATED QUAD RECEPT	20
21	"			20	1.92	DEDICATED QUAD RECEPT	22
23	"			20	1.92	DEDICATED QUAD RECEPT	24



NOTES:

- 4,000 PSI CONCRETE WITH 6% AIR ENTRAINMENT
- ASTM A-615, 60,000 PSI REINFORCING STEEL
- ASTM A-185 WELDED WIRE FABRIC
- PROVIDE A SMOOTH BROOM FINISH
- PROVIDE #2/0 FROM UNCOATED REBAR TO GROUND RING ON OPPOSITE CORNERS OF THE EQUIPMENT PAD - SEE GROUND RING DETAIL 3/ES-1.

ENCLOSURE PAD DETAIL

E-1 NTS

ABBREVIATIONS

ABBREVIATIONS	DESCRIPTION
A	AMPERES
AC	ALTERNATING CURRENT (60 HZ)
A/C	AIR CONDITIONING
ADA	AMERICANS WITH DISABILITIES ACT
AFCI	ARC FAULT CIRCUIT INTERRUPTER
AFV	ABOVE FINISHED FLOOR
ATS	AUTOMATIC TRANSFER SWITCH
AUX	AUXILIARY
AWG	AMERICAN WIRE GAUGE
BF	BALLAST FACTOR
BR	BRANCH
C	CONDUIT
CB	CIRCUIT BREAKER
CIR	CIRCUIT
CLG	CEILING MOUNTED
CT	CURRENT TRANSFORMER
CU	COPPER
D	DISHWASHER
DISC	DISCONNECT
DW	DISHWASHER
DWG	DRAWING
DWU	DISTILLED WATER UNIT
E	EXISTING TO REMAIN
EMT	ELECTRICAL METALLIC TUBING
EQUIP	EQUIPMENT
EX/ETR	EXISTING EQUIPMENT TO REMAIN
FDR	FEEDE
FL	FLOOR
FT	FEET
GFCI/GFI	GROUND-FAULT CIRCUIT-INTERRUPTER
GFE	GROUND-FAULT CIRCUIT EQUIPMENT BREAKER
GFP	GROUND-FAULT PROTECTION
GRD	GROUND
H	HEAT DETECTOR
HD	HAND-HOLE
HP	HORSEPOWER
IG	INSULATED GROUND
IM	ICE MAKER
IMP	IMPEDANCE
IN	INCHES
J	JUNCTION
KA	KILO AMPERE
Kcmils	THOUSAND CIRCUIT MILLS
KV	KILOVOLT
KW	KILO VOLT-AMPERE
Im	KILOWATT
LP	LIGHTING PANELBOARD
LTG	LIGHTING
M	METER
MC	MOTOR CONTROLLER
MCB	MAIN CIRCUIT BREAKER
MCC/MCB	MOLDED CASE CIRCUIT BREAKER
MCS	MOTOR-CIRCUIT SWITCH
MDP	MAIN DISTRIBUTION PANELBOARD
MH	MANHOLE
MLO	MAIN LUG ONLY
MW	MICROWAVE OVEN
N/A	NOT APPLICABLE
NEC	NATIONAL ELECTRIC CODE
NECA	NATIONAL ELECTRICAL CONTRACTORS ASSOC.
NEMA	NATIONAL ELECTRICAL MANUFACTURERS ASSOC.
NEUT	NEUTRAL
NF	NONFUSED
NIC	NOT IN CONTRACT
NL	NEW LOCATION OF RELOCATED ITEM
N.T.S.	NOT TO SCALE
OC	OVERCURRENT
P	POLE
PA	PUBLIC ADDRESS
PB	PULL BOX
PC	PHOTO CELL
PH	PHASE
PNL	PANEL BOARD
PRI	PRIMARY
PSI	POUNDS PER SQUARE INCH
PVC	POLYVINYL CHLORIDE
PWR	POWER
R	REMAIN
RE	REMOVE EXISTING ITEM
RECPT	RECEPTACLE
RGS	RIGID GALVANIZED STEEL CONDUIT
RL	RELOCATE EXISTING ITEM
RM	ROOM
RNC	RIGID NONMETALLIC CONDUIT
REF	REFRIGERATOR
RSC	RIGID STEEL CONDUIT
S	SMOKE DETECTOR
SC	SERVICE CONDUCTORS
SCHD	SCHEDULE
SCR	SHORT-CIRCUIT RATING
SD	SERVICE DROP
SE	SERVICE EQUIPMENT
SEC	SECONDARY
ST	STUNT TRIP
SURF	SURFACE
SV	SOLENOID VALVE
SW	SWITCH
SYM	SYMMETRICAL
SYMB	SYMBOL
TC	TIME CONTROLLER
TEL	TELEPHONE
TV	TELEVISION
TYP	TYPICAL
UG	UNDERGROUND
UL	UNDERWRITER'S LABORATORY
U.O.N.	UNLESS OTHERWISE NOTED
UTIL	UTILITY
UVR	UNDER VOLTAGE RELEASE
V	VOLTS
VA	VOLT-AMPERES
W	WATTS
WG	WIRE GUARD
WP	WALL PHONE OR WEATHERPROOF
WL	WEIGHT IN POUNDS
WT	WATERTIGHT
X	REMOVE
XFMR	TRANSFORMER
%	PERCENT
#	NUMBER
'	FEET
"	INCHES

PHASE 1: IMPROVEMENTS

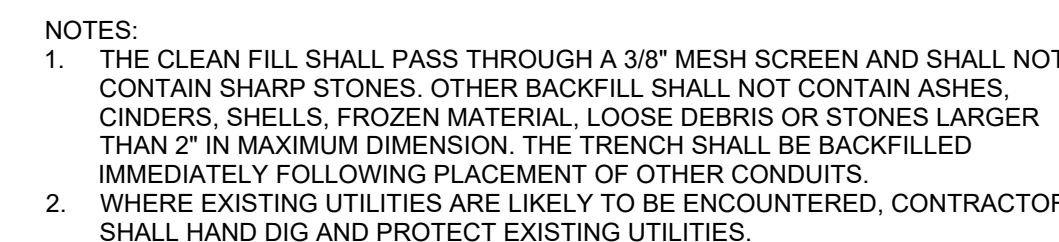
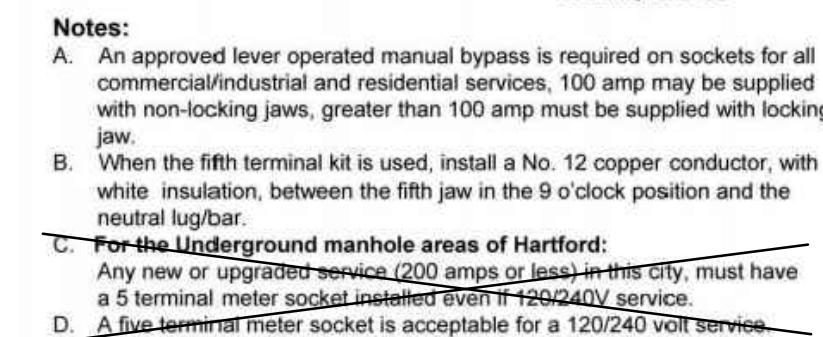
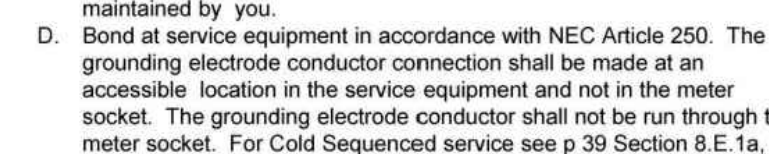
PARK ENTRY & PARKING

TOWN OF WILTON
238 DANBURY
ROAD WILTON, CT

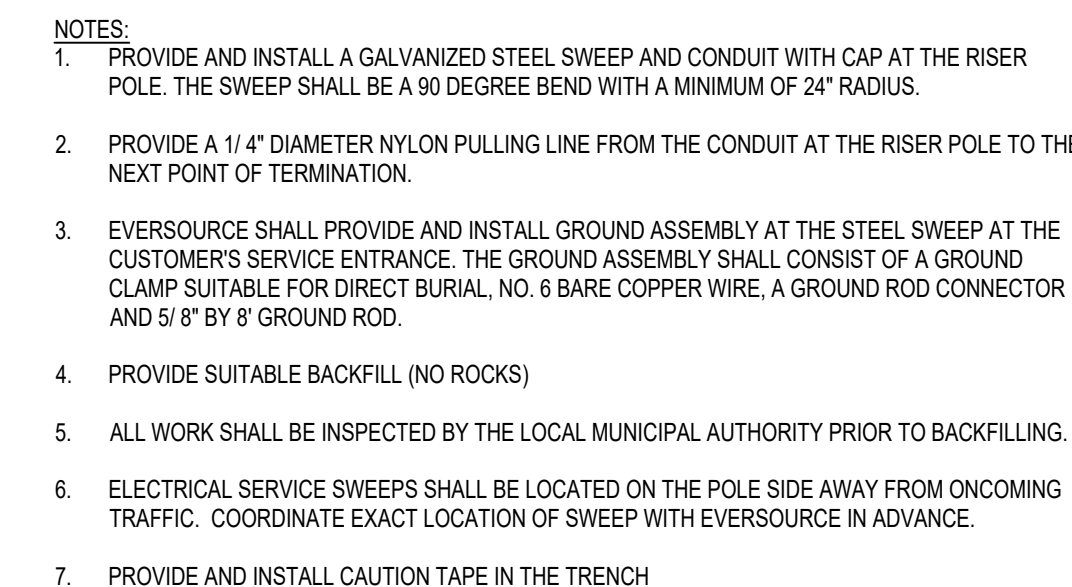
56 FOXCROFT COURT
SOUTHINGTON, CT

03/28/2022

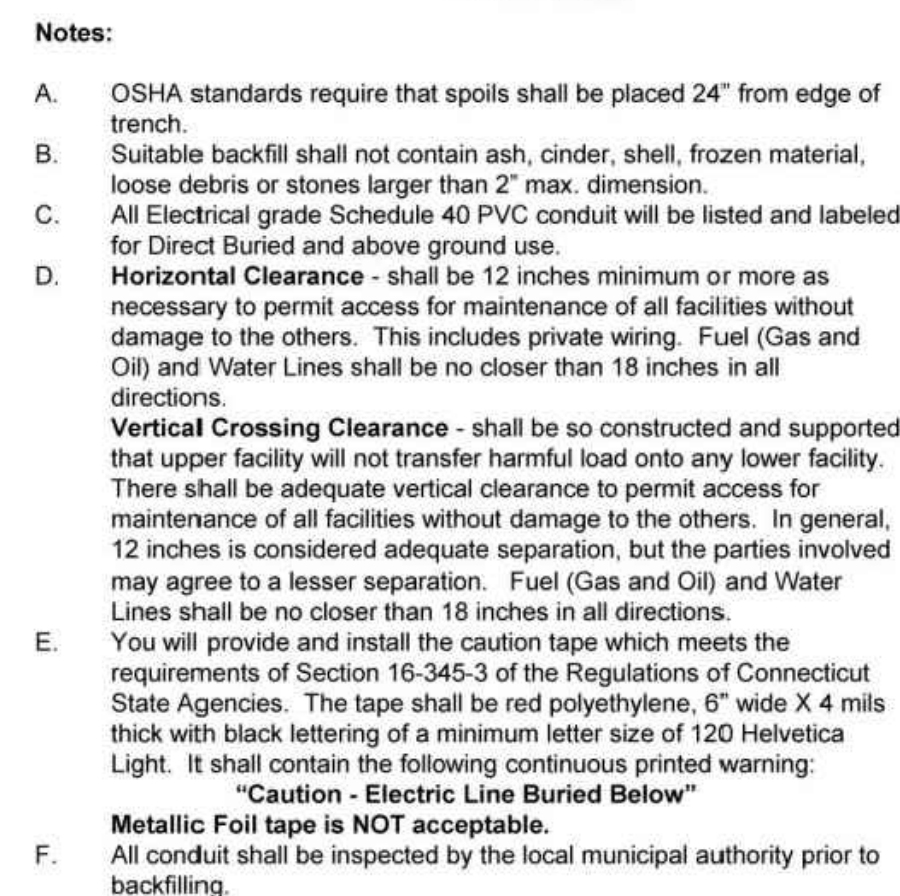
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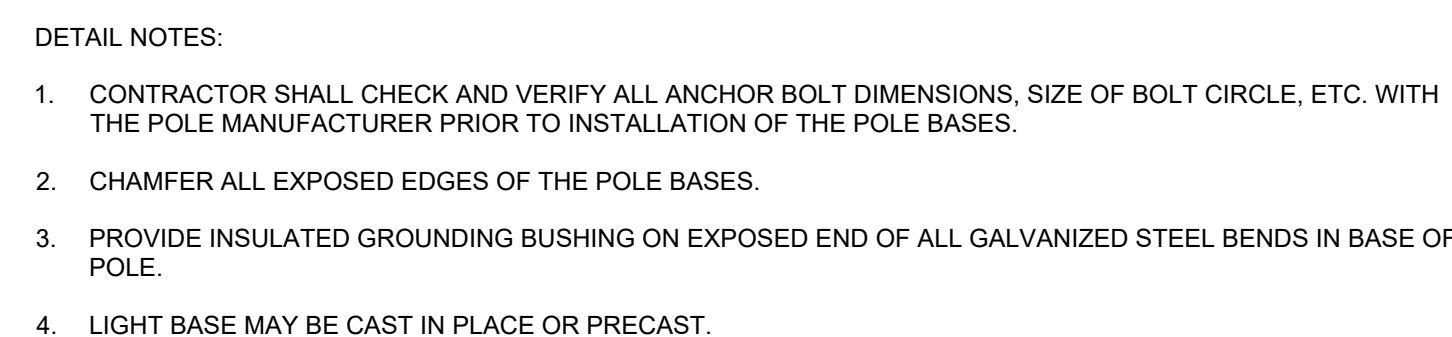
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SCALE: N.T.S.



SCALE: N.T.S



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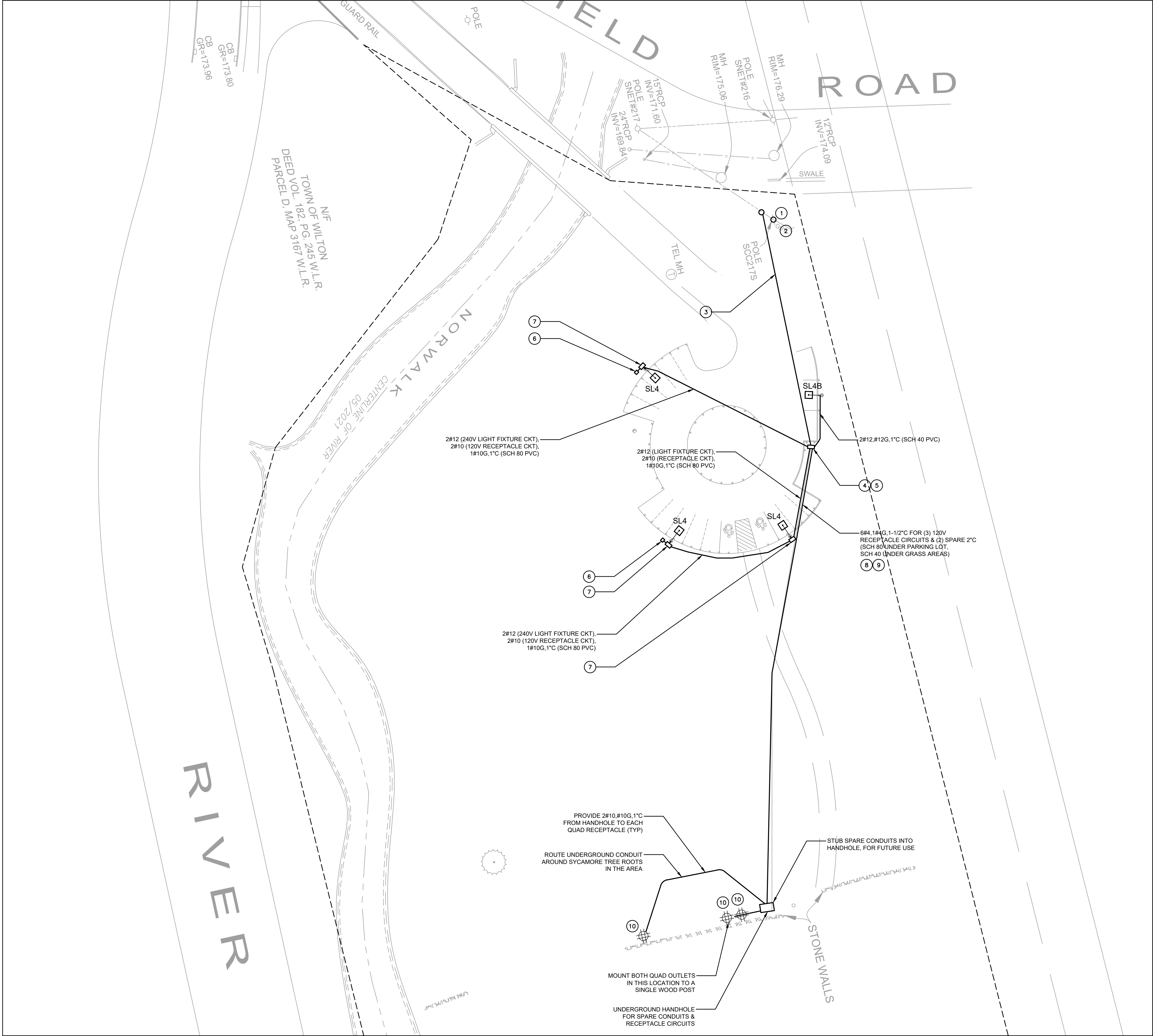


SEAL:

SHEET TITLE:

SHEET NUMBER:

REF. NO. 4783



NEW WORK KEY NOTES

- EXISTING UTILITY POLE SCC217S, TO REMAIN.
- NEW UTILITY POLE, POLE MOUNTED TRANSFORMERS GUY WIRING AND CONDUIT BOND ARE TO BE PROVIDED BY EVERSOURCE. ON A BILLABLE BASIS. TOWN OF WILTON WILL PAY ANY UTILITY FEES. SEE UTILITY COMPANY CONTACT INFO AND WORK REQUEST NUMBER REFERENCE ON THIS DRAWING. SUBMIT NEW SERVICE REQUEST TO EVERSOURCE AND COORDINATE WORK. SEE UTILITY POLE RGS CONDUIT SWEEP DETAIL 3/E-2 FOR ADDITIONAL INFORMATION AND REQUIREMENTS. EXACT LOCATION OF POLE T.B.D. BY EVERSOURCE IN THE FIELD.
- PROVIDE 4\"/>

UTILITY CONTACT INFO

JOE BELL
FIELD ENGINEERING DESIGNER
203-854-6448
joseph.is.bell@eversource.com
WORK REQUEST #7595935

PROJECT:

SCHENK'S ISLAND PRESERVE
**PHASE 1: IMPROVEMENTS
PARK ENTRY & PARKING**

OWNER / CLIENT:

TOWN OF WILTON
238 DANBURY
ROAD WILTON, CT

ELECTRICAL ENGINEER:



56 FOXCROFT COURT
SOUTHINGTON, CT

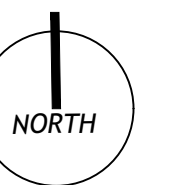
PROGRESS ISSUE:

1 CONSTRUCTION DOCUMENTS 03/28/2022

KEYPLAN:

SCALE: AS NOTED

SEAL:



SHEET TITLE:

**SITE ELECTRICAL
PLAN**

SHEET NUMBER:

E-3

REF. NO. 4783