Town of Simsbury

933 HOPMEADOW STREET P.O. BOX 495 SIMSBURY, CONNECTICUT 06070

Office of Community Planning and Development

Watch meetings LIVE and rebroadcast on Comcast Channels 96, 1090, Frontier Channel 6071 and LIVE streamed or on-demand at www.simsburytv.org

AGENDA
CONSERVATION COMMISSION/INLAND WETLANDS
AND WATERCOURSES AGENCY
REGULAR MEETING – JUNE 15, 2021 – 7:30 p.m.
The public hearing will be web-based on Zoom at:
https://zoom.us/j/2574297243
Meeting ID: 257 429 7243

I. CALL TO ORDER
II. ROLL CALL
1. **Appointment of Alternates**

III. NEW BUSINESS
NONE

IV. OLD BUSINESS
1. **CC 21-11 – 5 High Ridge Drive – Application for maintenance of a pond servicing a fire department drywell.**
2. **CC 21-13 – 32-36 Iron Horse Boulevard – Application for the development of a detention basin system associated with a residential development.**

V. GENERAL COMMISSION BUSINESS
1. **Approval of Minutes from June 1, 2021 Regular Meeting**

VI. AGENT ACTIONS
1. **CC 21-12 – 6 Old Stone Crossing – Application for the construction of a pool in the upland review.**
2. **CC 21-14 – 1 Hamilton Lane – Application for the construction of a deck in the upland review**

VII. CORRESPONDENCE
1. **DOT – Bridge reconstruction on Hopmeadow Street (632 Hopmeadow Street area)**

VIII. CONSERVATION BUSINESS
IX. ADJOURNMENT

How to Join us on Zoom for the Public Meeting:

1. Join us on the web: **https://zoom.us/j/2574297243**
2. Join us by phone: +1 646 558 8656

How to view application materials:

Visit: https://www.simsbury-ct.gov/conservation-commission-inland-wetlands-agency

Watch meetings LIVE and rebroadcast on Comcast Channels 96, 1090, Frontier Channel 6071 and LIVE streamed or on-demand at www.simsburytv.org

Town of Simsbury

Offices of Community Planning and Development – Inland Wetlands Permit Application

DATE: 5/20/21 FEE: $ Exempt CK #: X APP #: #21-11

PROPERTY ADDRESS: 5 Highridge rd

NAME OF APPLICANT: Simsbury Fire District KEVIN KOWALSKI

MAILING ADDRESS: 871 Hopmeadow st

EMAIL ADDRESS: kkowalski@simsburyfd.org TELEPHONE #: 8606581971

NAME OF OWNER: Nathen Mitchell

MAILING ADDRESS: 5 High ridge rd

EMAIL ADDRESS: Mitchellnap@gmail.com TELEPHONE #: 860-818-5259

NOTE: ATTACH A WRITTEN LETTER OF AGENCY, DULY ACKNOWLEDGED, TO ACT FOR THE OWNER, INCLUDING THE ABILITY TO CARRY OUT ACTIVITIES SET FORTH HEREIN.

DESCRIBE THE SPECIFIC ACTIVITY(ies) FOR WHICH A PERMIT IS SOUGHT AS IT RELATES TO "REGULATED ACTIVITIES" AS DEFINED IN SECTION 6 OF THE SIMSBURY INLAND WETLANDS REGULATIONS, SUCH AS: A) REMOVE MATERIAL FROM; B) DEPOSIT MATERIAL IN OR DISCHARGE TO; C) CONSTRUCT ON; D) OBSTRUCT; E) ALTER; F) POLLUTE; OR G) OTHERWISE ADVERSELY AFFECT A REGULATED AREA:

THE SIMSBURY FD HAS AN EASEMENT ON this Property to MAINTAIN a "DRY Hydrant" For Fire Protection in the AREA, The FD has had problems DRAFTING and Found that there NEED silt Removed. WE INTEND to DEWATER ON THE SAME PROPERTY

CERTIFICATIONS AND PERMISSIONS:

As owner, I hereby give permission to the Town of Simsbury's Conservation Commission Inland Wetlands Watercourses Agency, their Agents, or Town Staff to enter upon my land to make observations and tests as may be necessary to evaluate this application and ongoing work, subject to twenty-four hours notice of such entry/testing.

I hereby certify that all statements herein are true to the best of my knowledge, whether made by me or my agents. Any permit issued shall be contingent upon field conditions and activities being substantiated as indicated herein. A changed situation shall require reconsideration of the permit by the Commission upon discovery by either party.

I certify that I have the authority to sign this application.

X 5/13/21 Kevin Kowalski

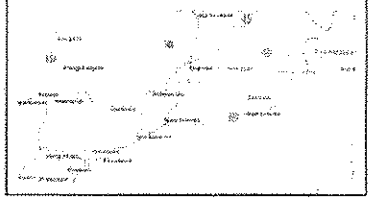
Signature of Owner *Date* *Signature and Title of Applicant* *Date*

Town of Simsbury, CT

Legend

- Parcels
- Street Labels
- Town Border
- Citations

Location



Notes

275 0 137 275

Feet

1: 1,648

N

Town of Simsbury, CT

Legend

- Parcels
- Street Labels
- Town Border
- CT_Simsbury.DBO.ACAD_Wetlands_AmmendedT
- CT_Simsbury.DBO.ACAD_Wetlands_SCStext_Arc
- CT_Simsbury.DBO.ACAD_Wetlands_RiversStrear
- CT_Simsbury.DBO.ACAD_We
- CT_Simsbury.DBO.ACAD_SOIL_Wetlands_Agenc
- CT_Simsbury.DBO.ACAD_Wetlands_Ponds_Arcs
- CT_Simsbury.DBO.ACAD_Wetlands_Ponds_Poly
- CT_Simsbury.DBO.ACAD_SOIL_Wetlands_Agenc
- CT_Simsbury.DBO.ACAD_We
- CT_Simsbury.DBO.ACAD_Wetlands_RiversStrear

Location

Notes

275 0 137 275

Feet

1: 1,648

N

SYMBOLS:
△-CONTROL MONUMENT

DASHED CONTOURS AND UNDERLINED ELEVATIONS INDICATE STANDARD VERTICAL ACCURACY REDUCED BY TREE COVER

HORIZONTAL CONTROL: CONNECTICUT STATE PLANE

TOWN OF SIMSBURY, CONNECTICUT

TOPOGRAPHIC MAP

REVISION | DATE | BY

SHEET NO.

A-5


P7
P7
P7
P7
P7
DEWATER AREA
HIGHRIDGE

5 Highridge Road

Pond Maintinance for a Drywell

5 Highridge Road – Zone R-160 – Map A05, Block 203, Lot 003. 5.10 acres. Ridgebury, Leicester and Whitman soils are the wetlands soils associated with the site. Application is to dredge the pond serving as a drywell for the Fire Department

This application is for pond dredging in order to maintain a Fire Department drywell. The proposed activity of dredging is to allow the drywell to function as intended. While the records on file don't show permits in regards to the pond, in aerials you can clearly see over time the increase in size and quality of the pond. As recent as the 2012 aerials the pond is visibly choked with vegetation and material. Due to the build up of materials the ability to properly draw water for the Fire Department is becoming impeded. The material removed from the pond will be dewatered on the property adjacent to the pond and the re-utilized on the property by the homeowner. This does not appear to be a significant activity and there is no prudent alternative that can be found. This maintenance project is proposed by the Simsbury Fire Department for the need of water in that region of town due to the lack of fire hydrants. When being considered by the commission, this application can be received and acted on at the next regularly scheduled meeting. If it is found to be a significant activity **or** there is public interest then a public hearing may be scheduled for the next meeting.

2019

2012

2009

RECEIVED
MAY 28 2021
TOWN OF SIMSBURY
PLANNING DEPARTMENT

Town of Simsbury

Office of Community Planning and Development – Inland Wetlands Permit Application

DATE: 5/28/21 **FEE: $** 215 **CK #:** 1034 **APP #:** 21-13

PROPERTY ADDRESS: 32 & 36 Iron Horse Boulevard

NAME OF APPLICANT: 32-36 Iron Horse LLC, attn. Chris Nelson

MAILING ADDRESS: 75 West Street, Simsbury, CT 06070

EMAIL ADDRESS: chris@nelsonconstructionct.com **TELEPHONE #** 860-658-7600

NAME OF OWNER: Girard Brothers Corporation

MAILING ADDRESS: 2 Farms Village Road, P.O. Box 581, Simsbury, CT 06070

EMAIL ADDRESS: mgirard@simscroft.com **TELEPHONE #** 860-651-0231

NOTE: ATTACH A WRITTEN LETTER OF AGENCY, DULY ACKNOWLEDGED, TO ACT FOR THE OWNER, INCLUDING THE ABILITY TO CARRY OUT ACTIVITIES SET FORTH HEREIN.

DESCRIBE THE SPECIFIC ACTIVITY(ies) FOR WHICH A PERMIT IS SOUGHT AS IT RELATES TO "REGULATED ACTIVITIES" AS DEFINED IN SECTION 6 OF THE SIMSBURY INLAND WETLANDS REGULATIONS, SUCH AS: A) REMOVE MATERIAL FROM; B) DEPOSIT MATERIAL IN OR DISCHARGE TO; C) CONSTRUCT ON; D) OBSTRUCT; E) ALTER; F) POLLUTE; OR G) OTHERWISE ADVERSELY AFFECT A REGULATED AREA:

The proposed redevelopment of existing contractors storage yard into a residential development, including associated storm drainage improvements. There will be approximately 116,794 square feet of disturbance within the 100-foot wetland URA, between new impervious and pervious features. No direct wetland impacts are proposed.

CERTIFICATIONS AND PERMISSIONS:

As owner, I hereby give permission to the Town of Simsbury's Conservation Commission Inland Wetlands Watercourses Agency, their Agents, or Town Staff to enter upon my land to make observations and tests as may be necessary to evaluate this application and ongoing work, subject to twenty-four hours notice of such entry/testing.

I hereby certify that all statements herein are true to the best of my knowledge, whether made by me or my agents. Any permit issued shall be contingent upon field conditions and activities being substantiated as indicated herein. A changed situation shall require reconsideration of the permit by the Commission upon discovery by either party.

I certify that I have the authority to sign this application.

Signature of Owner 5/26/2021 *Date*

Signature and Title of Applicant 5/26/2021 *Date*

Member, 32-36 Iron Horse LLC

Simsbury Inland Wetland Permit Application Supplemental Information
For
Barber Cove Development

1. In the case of a public hearing or map amendment, list on a separate sheet of paper the names and addresses of all abutting property owners and property owners within 100 feet of all property lines. Identify on one of the attached maps.

   N/A

2. Describe the site and the regulated area or wetlands/watercourses involved:

   The proposed project area is comprised of two contiguous parcels: one 6.5-acre and the other 7.2-acre, The property is accessed to the east from Iron Horse Boulevard and is bounded to the west by commercial properties along Iron Horse Boulevard, to the south by public athletic fields and the Simsbury Meadows Performing Arts Center, and to the north and east by undeveloped floodplain wetlands abutting the Farmington River. The project area consists of a developed contractors office and storage yard site. The site is mostly devoid of vegetation is currently exposed earth after demolition of the existing buildings and soil remediation. The western bank of a north-flowing oxbow (locally known as Barber Cove) off the Farmington River abuts the northeastern property boundary, with approximately 430 feet of direct waterfront existing along the property edge (Figure 2). An approximately 1,000-foot stretch of floodplain wetland (including the oxbow) extending eastward separates the site from the western bank of the mainstem Farmington River.

   a. General site conditions, including vegetation and general soil conditions.

      Topography on site has been historically modified through site development, though surrounding topography reflects the alluvial nature of the floodplain and is generally flat, sloping gradually to the north and east towards the Farmington River and associated floodplain wetlands. The majority of the site has and still remains exposed earth. See SLR soils/wetlands report for more information.

   b. Size of wetland within site or distance of the activity from the wetland.

      The wetland area within the site is approximately 1.16 acres along the eastern property boundary. There are no proposed direct wetland impacts. The closest activity is the construction of a storm water system and stone dust path approximately 5 ft from the wetland edge.

   c. Size of total contiguous wetland.

      Farmington River floodplain and watershed.

   d. Position relative to other wetlands on site.

      The site is located along the wetland edge of the Farmington River floodplain.

e. Type of wetland characterized by vegetative and soil type and/or watercourse, such as: 1) open/deep freshwater pond or lake; 2) shallow marsh; 3) seasonally flooded basins and flats; 4) meadow; 5) shrub swamp; 6) wooded swamp; 7) bog; 8) kettle; 9) stream type; 10) other.

A palustrine forested/shrub wetland just north of the northern parcel boundary, and a palustrine persistent emergent wetland on-site along the eastern property boundary. See SLR wetland report for more information.

3. Depth to water table, depth to mottled soil, and seasonal variation of water table.

See SLR wetland report for more information.

4. Describe the immediate impact on the wetlands and watercourses, including, but not limited to:

a. Quantities, by volume and area disturbed, of materials to be removed, deposited, or altered.

There are no direct impacts to the wetland areas proposed. There will be approximately 116,794 square feet of disturbance within the 100-foot wetland URA,

b. Kinds of materials by soil types and vegetative classifications, and materials classification to be removed, deposited, or altered.

There are no direct impacts proposed.

c. Percent of wetlands/watercourses disturbed or altered to total area of wetlands/watercourses on the parcel.

There are no direct impacts proposed.

5. Describe the related construction activities and their impact on:

a. Area and location of wetlands and watercourses.

This project has been designed to avoid direct and indirect impacts to wetlands and watercourses from short- and long-term perspectives. No direct wetland impacts are proposed. Work within the upland review area has been designed to avoid indirect wetland impacts.

b. Types and amounts of vegetation.

Since the project is a former industrial site, basically devoid of vegetation, the proposed landscaped design and wetland buffer planting will be an improvement. The landscaping plan is proposed adjacent to the wetlands to enhance ecological function and serve as a buffer between the site improvements and the off-site wetland resources.

c. Surface and groundwater.

As there will be no increase peak runoff rates from the proposed project the focus of the stormwater system design is focused on water quality. Roof drainage will be collected and piped to below ground retention areas that will promote infiltration and ground water recharge. The first flush from all paved surfaces will be directed to a multi-cell water quality vegetative swale located adjacent to the wetlands. The project is not expected to have any impact on ground or surface water.

d. Visual impacts.

Since the project is a former industrial site, basically devoid of vegetation, the proposed landscaped design and wetland buffer planting will be an improvement..

e. Wildlife habitats.

The proposed project area consists of a highly manipulated industrial site with no demonstrated capacity to provide habitat for species of special concern, given that all proposed work is within the prior disturbed area and is not expected to impact listed species or their habitat

6. Describe the long term or permanent impact of the activity(ies) on environmental aspects, such as the surface and groundwater quality, storm water runoff, visual impact(s), or wildlife habitats on:

a. Wetlands and/or watercourses.

No direct wetland impacts are proposed.

b. Abutting riparian properties and/or wetlands and/or watercourses.

The proposed project has been designed to avoid adverse impacts to wetland systems and their capacity to perform wetland functions. No direct wetland impacts are proposed. Potential indirect wetland impacts resulting from the redevelopment have been considered from a short- and long-term perspective. In the short term, sedimentation and erosion controls will mitigate indirect impacts, while stormwater management is proposed to minimize long-term impacts.

7. Identify sedimentation and erosion control measures to be used.

Sediment filter fence and staked hay bales will be installed around work areas adjacent to natural resources to prevent disturbed sediments from leaving the project site. Stone tracking pads have been extended to be 100 ft. Sediment traps will be strategically placed to contain construction runoff during construction. See site plans for sediment and erosion control measures.

8. Identify alternatives to the proposed activity that were considered, including alternative sites and why this one was chosen.

N/A – No direct impacts.

9. Estimate cost of work and time for completion.

Total project cost has yet to be finalized. Project is scheduled for construction in fall of 2021 and continuing for approximately 18 months.

10. Attach drainage calculations and other reports as indicated to substantiate the statements made above.

Soil/Wetlands Report and Engineering Report attached.

11. REQUIRED MAPS

    a. Attach a vicinity map on an 8 ½"x11" sheet at scale 1"=200' or 1"=800' (depending upon the size of the parcel) showing the general location of the area in which the regulated activity is proposed. The map should be in sufficient detail to allow the identification of the property on the official Inland Wetlands and Watercourses map. A guide to the kinds of information to be shown is available in the Planning Department at the Town Hall.

    See attached map.

    b. Site Plan(s) showing:
        i. The topography showing contours at intervals of not more than two (2) feet and a minimum of two (2) contour marks per ten (10) acres at a scale of 1"=100' or 1"=40' (whichever is more appropriate).
        ii. Location of existing watercourses and/or ponds.
        iii. Location of regulated activity.
        iv. Proposed grading and/or filling.
        v. Proposed drainage, site utilities, wells, etc.
        vi. Sedimentation and erosion control measures.

    See attached map.

12. The Applicant shall certify whether:

    a. Any portion of the property on which the regulated activity is proposed is located within 500 feet of the boundary of an adjoining municipality.

    Project is not located within 500 feet of adjoining municipality.

    b. Traffic attributable to the completed project on the site will use streets within the adjoining municipality to enter or exit the site.

    Project does not require the use of streets within the adjoining municipality.

    c. Sewer or water drainage from the project site will flow through and affect the sewage or drainage system within the adjoining municipality or

Project does not impact sewer or water drainage within an adjoining municipality.

d. Water runoff from the improved site will affect streets or other municipal or private property within the adjoining municipality.

Project does not impact water runoff within an adjoining municipality or private properties.

e. Documentation that notice of the pending application was provided to the adjacent municipality (certified mail, return receipt requested) on the same day of filing an inland wetland permit application with the Town of Simsbury.

Not applicable

f. The property is subject to a conservation restriction or preservation restriction, and, if so, what party or parties are holders thereof or intended to be benefitted thereby.

No.

BARBER COVE
32 & 36 IRON HORSE BOULEVARD

Wetland Impact Assessment

Prepared for:

32-36 Iron Horse, LLC

Cient Ref: 17126.00001

May 28, 2021

SLR

Wetland Impact Assessment

Prepared for:
32-36 Iron Horse, LLC
75 West Street
Simsbury, Connecticut 06070

This document has been prepared by SLR International Corporation (SLR). The material and data in this report were prepared under the supervision and direction of the undersigned.

Megan B. Raymond, MS, PWS, CFM
Principal Scientist, Wetlands & Waterways Lead

Marlee Antill, MS
Project Environmental Scientist

CONTENTS

TABLES

APPENDICES

1. INTRODUCTION

SLR International Corporation (SLR) investigated the 13.6-acre site to evaluate existing wetland conditions relative to proposed site improvements. Proposed activities on the site involve the redevelopment of a former industrial property to a residential development that will support five multifamily apartment buildings. Associated appurtenances include surface and garage parking, access ways, a club house, and recreational areas. Portions of the proposed activities, approximately 2.7 acres, will occur within 100-foot upland review area (URA) to the Farmington River wetland complex. The majority of proposed activities within the URA consist of low-impact and permeable design features such as a walking path, vegetated water quality swale, and 39,000 square foot (sf) native planting area that will serve as a vegetative buffer between proposed site infrastructure and the wetland system. Proposed activities are depicted on the site plans prepared by SLR entitled "Barber Cove," dated May 28, 2021, included under a separate cover.

The subject property is comprised of two contiguous parcels that lie west of the Farmington River. Floodplain wetlands exist north and east of the site, while the Farmington River channel is located 0.18 mile east of the site. A remnant oxbow of the river appears as an open water feature adjacent to the northeastern portion of the site. These floodplain wetlands occupy 1.2 acres of the property, or 8.8%, and are primarily palustrine persistent emergent wetlands.

The proposed project has been designed to conform within existing disturbance areas mindful of adjacent high quality wetland resources associated with the Farmington River. The project has been designed to avoid adverse impacts to wetland systems and their capacity to perform wetland functions by ensuring stormwater runoff is sufficiently renovated prior to discharge. No direct wetland impacts are proposed. Potential indirect wetland impacts resulting from the redevelopment have been considered from a short- and long-term perspective. In the short term, sedimentation and erosion controls will mitigate indirect impacts, while stormwater management and a vegetated buffer is proposed to minimize long-term and cumulative impacts.

2. GENERAL SITE DESCRIPTION

The rectangular shaped project area is comprised of two contiguous parcels: one 6.5-acre and the other 7.1-acre, located in a lightly settled commercial and Town-owned open space area in northeastern Simsbury (Appendix A, Figure 1). The property is accessed to the east from Iron Horse Boulevard, which runs parallel to the approximately 870-foot western property line. West of Iron Horse Boulevard, commercial properties exist, while open space, Town athletic fields, and the Simsbury Meadows Performing Arts Center abut the site to the north and south. The site was used as farmland until the 1980s, when industrial use began. For the past several decades the site operated as the Simscroft-Echo Farms facility that provided construction equipment storage and construction material stockpiles. Rudimentary stormwater management controls were in place and consisted of a small silt pond and a sediment sump in the eastern portion of the site (see Appendix B for site photos).

Presently, the site consists largely of open, earthen ground surface generally devoid of vegetation. Remnants of prior industrial activities, including former stockpiles, manmade berms, and two remaining single-story structures, persist. The site exists as a level plateau comprised of human transported material (HTM) or fill material. A steep but shallow earthen escarpment (fill slope) bounds the fill plateau and transitions to the abutting wetland complex to the north and a small (1.7-acre), herbaceous upland area to the east. Other than scattered annual pioneer weeds, vegetation on the plateau is confined to a row of conifer trees in the northeastern portion of the site. Site topography ranges from approximately elevation 160 feet to 148 feet at the wetland boundary.

The fill slope provides transition between the previously developed portion of the site and adjacent natural resources. To the north, vegetation on the slope consists of shagbark hickory (*Carya ovata*), red oak (*Quercus rubra*), and black oak (*Quercus velutina*), transitioning downslope to an abrupt wetland boundary comprised of a narrow, forested fringe that transitions to an emergent marsh. Some invasive species are interspersed and include multiflora rose (*Rosa multiflora*), Japanese knotweed (*Fallopia japonica*), garlic mustard (*Alliaria petiolata*), Japanese honeysuckle (*Lonicera japonica*), purple loosestrife (*Lythrum virgatum*), and winged euonymus (*Euonymus alatus*). To the east of the slope, a 1.7-acre herbaceous upland exists with assorted grasses in the genera *Poa* and *Panicum*, and scattered forbs including Queen Anne's Lace (*Daucus carota*), goldenrod (*Solidago*), and mugwort (*Artemisia vulgaris*). A stormwater feature from the previous site use is centrally located within this herbaceous upland shelf.

Watershed and Floodplain

The site is located within a 0.5-square-mile subwatershed to the Farmington River. Drainage in the ponded oxbow has a northerly gradient and meanders approximately 1,000 feet to the mainstem Farmington River approximately 1,000 feet from the site. The Farmington River in this region is a Class B waterbody, listed as suitable for activities including recreational use and fish, aquatic life, and wildlife habitat, though the oxbow at the site boundary is Class A. The Farmington River regional watershed drains 607 square miles from southwestern Massachusetts in the north, to Bristol, Connecticut in the south, and has confluence to the east with the Connecticut River near South Windsor, Connecticut.

The site is located partially within a Federal Emergency Management Agency (FEMA) designated 100-year floodplain and floodway, zone AE. The Flood Insurance Rate Map (FIRM) panel shows the base flood elevation (BFE) on site to be 155.7 feet (NAVD88). However, a Conditional Letter of Map Revision (CLOMR)

for the site was issued in 2015 and conditionally approved a 100-year BFE of 155.4. The proposed project has been designed to this revised floodplain elevation.

The parcel sits in the southern portion of an approximately 3-mile swath of alluvial wetlands associated with the Farmington River floodplain extending from the Simsbury Airport to Drake Hill Road. As estimated by aerial imagery, the wetland abutting the subject parcel has a contiguous area of approximately 750 acres. The wetland boundary was delineated by Thomas W. Pietras, a soil scientist with Pietras Environmental Group, LLC on March 31, 2014. An official map amendment based upon the delineated boundary of wetland soils was approved by the Simsbury Conservation Commission on July 15, 2014. The approved 2014 wetland boundary is presented as the regulatory boundary on the project plan set (Appendix A, Figure 2).

3. WETLAND RESOURCES

On April 9, 2021, Megan Raymond, professional wetland scientist and registered soil scientist, and Marlee Antill, environmental scientist, of SLR, visited the site and collected data to inform this report, including vegetation and soil conditions to generate a functional assessment of wetlands.

The wetland boundary associated with the Farmington River floodplain extends approximately 1,350 feet on and adjacent to the northern and eastern portions of the site. To the north, the wetland is offsite, located at the toe of the fill slope, and consists of a narrow fringe of forested wetland dominated by red maple (*Acer rubrum*) with an understory containing highbush blueberry (*Vaccinium corymbosum*), spicebush (*Lindera benzoin*), grey dogwood (*Swida racemosa*), skunk cabbage (*Symplocarpus foetidus*), and sensitive fern (*Onoclea sensibilis*) that extends to an emergent wetland and open water wetland of the Farmington River oxbow.

To the east, the wetland exists as an abrupt transition from the herbaceous upland area to an open almost still water environment of the oxbow that is punctuated by hummocks of tussock sedge (*Carex stricta*) and carries water to the north. Small patches of cattails (*Typha sp.*) and common reed (*Phragmites australis*) are also present, primarily to the north. The high quality wetland habitat is apparent, with snags within the floodplain wetland providing nesting habitat for blue herons offsite to the south, and numerous signs of beaver activity adjacent to the site. Though the primary wetland system that extends offsite to the east is an emergent vegetation and open water, small patches of microhabitats exist and include patches of pussy willow (*Salix discolor*), alder (*Alnus incana*), and pin oak (*Quercus palustris*).

Approximately 1.2 acres of wetland exist within the parcel boundary. Between this wetland and the offsite wetland to the north, approximately 3 acres of the 13.6 acre parcel (22%) consist of the 100-foot upland review area. According to Connecticut Natural Diversity Database (CT NDDB), the wetland system is part of an alluvial swamp freshwater community associated with the Farmington River.

3.1 SOIL MAPPING

According to macroscale geospatial data accessed via the United States Department of Agriculture – Natural Resources Conservation Service (USDA-NRCS) web soil survey mapping, alluvial wetland soils are mapped west of the delineated wetland boundary. However, this mapping does not reflect site-specific conditions due to the HTM that dominates the parent material of upland soils.

Per NRCS mapping, six map units were identified on the property according to the NRCS Web Soil Survey (four wetland and two upland; Appendix A, Figure 3). Each map unit represents a specific area on the landscape and consists of one or more soils for which the unit is named. Other soils (inclusions that are generally too small to be delineated separately) may account for 10 to 15 percent of each map unit. The mapped units are by name, symbol, and typical characteristics (parent material, drainage class, high water table, depth to bedrock, and slope) (Table 3-1). These characteristics are generally the primary characteristics to be considered in land use planning and management.

TABLE 3-1
Soil Unit Properties

Map Unit		Parent Material	Slope (%)	Drainage Class	High Water Table			Depth to Bedrock (in)
Sym	Name				Depth (ft)	Kind	Mos.	
Upland Soil								
306	Udorthents-Urban land complex	Human transported material (HTM)	0-25	Well drained	4.5-6	-	-	>80
702A	Tisbury silt loam	Coarse-silty eolian deposits	0-3	Moderately well drained	1.5-2.5	-	-	24-36
Wetland Soil								
18	Catden and Freetown soils	Highly decomposed organic material	0-2	Very poorly drained	0-0.5	Perched	-	>80
101	Occum fine sandy loam	Coarse-loamy alluvium	0-3	Well drained	5-6	-	-	>80
107	Limerick and Lim soils	Coarse-loamy alluvium	0-3	Poorly drained	0-1.5	-	-	>80
108	Saco silt loam	Coarse-silty alluvium	0-2	Very poorly drained	0-0.5	Perched	-	>80

3.2 WETLAND FUNCTIONAL ASSESSMENT

A functional evaluation of onsite wetlands based on SLR field observations from the April 9, 2021, site visit is summarized (Table 3-2). The first column lists the functions and values generally ascribed to wetlands while the second column summarizes the rationale used to determine whether these functions and values are being performed within the subject wetland and/or watercourse. The onsite and adjacent wetlands are a high quality system that contributes to all of the recognized wetland functions.

TABLE 3-2
Wetland Functions and Values Assessment – Farmington River Floodplain Wetland

	Functions and Values	Comments
	Groundwater Recharge/Discharge	Yes – Groundwater discharge supports the hydrology of this wetland.
	Flood Flow Alteration (Storage and Desynchronization)	Yes – The wetland is located within a mapped FEMA 100-year floodplain.
	Fish and Shellfish Habitat	Yes – The perennial hydrology of this wetland provides potential finfish and shellfish habitat.
	Sediment/Toxicant Retention	Yes – The wetland provides sediment/toxicant retention due to geomorphology.
	Nutrient Removal/Retention/ Transformation	Yes – The wetland provides nutrient removal/retention due to structural complexity and dense vegetation.
	Production Export (Nutrient)	Yes – Structural complexity and vegetative diversity allows for trophic-level interaction within the wetland corridor.
	Sediment/Shoreline/Watercourse Bank Stabilization	Yes – The wetland contributes to this function.
	Wildlife Habitat	Yes – Structural complexity and vegetative diversity provides opportunities for wildlife habitat utilization, and evidence of wildlife habitat was observed.
	Recreation (Consumptive and Non-Consumptive)	No – Presently, a lack of access minimizes contribution to this value.
	Educational Scientific Value	No – These wetlands do not presently provide educational opportunities.
	Uniqueness/Heritage	Yes – The floodplain wetland supports beaver activity and a blue heron rookery – both unique regional resources.
	Visual Quality/Aesthetics	Yes – The wetlands contain inherent visual quality or aesthetic value.
ES	Endangered Species	Yes – This area is mapped as a NDDB area as outlined by the Connecticut Department of Energy & Environmental Protection (CTDEEP, December 2020).

The principal functions of the wetlands include the following:

- Groundwater discharge
- Flood flow alteration
- Sediment/toxicant retention
- Bank stabilization
- Nutrient removal/retention
- Production export
- Visual quality/aesthetics
- Endangered species

4. PROPOSED PROJECT

The proposed project involves the construction of a new residential community consisting of five multi-family residential buildings with 35 or 39 units each for a total of 183 apartment units. The dwelling units will be surrounded by parking, lawn, and paved vehicle and pedestrian accessways. Other proposed structures include three garages (two 16-space and one 14-space), a central common area with a lawn area and club house with attached pool and play area, and a maintenance and refuse collection building. A paved pedestrian trail will surround the residential complex, while a stone dust loop trail will be created within the upland shelf in the eastern portion of the site. The project has been designed to conform to the limits of the previous site development (Appendix A, Figure 4).

Portions of these activities will take place within the URA to the Farmington River floodplain wetlands. These activities include native plantings, a water quality swale, recreational amenities, a small parking area, and portions of two buildings. These activities total 2.68-acres disturbance with 21,263 sf (18.2%) from impervious features and 95,531 sf (81.8 %) from pervious features. Pervious improvements include the stone dust walking trail, stormwater management area, and native wetland buffer planting. Collectively, proposed structures, paved accessways, and associated stormwater management will total approximately 9.0 acres of the 13.6-acre parcel.

Connecticut regulates activities in and adjacent to wetlands and watercourses as land development may result in short- and long-term direct and indirect impacts to wetlands and watercourses. The project has been designed mindful of the landscape position of the property, abutting a high quality wetland system. The project enhances existing site uses, creating a residential community to passively enjoy the wetland values. The project proposes a robust stormwater management that focuses on water quality, with an elaborate water quality swale planted with a diversity of local, native wetland plants. In addition to the swale, a native wetland buffer planting is proposed in the eastern portion of the site. These plantings will diversify the existing upland herbaceous area with native woody plants that will provide an effective interface between proposed improvements and the adjacent wetland system. Totaling 39,000 sf, the buffer enhancement will be planted and seeded and provide significant bioassimilation and screening. Further, lighting on the site is proposed to be dark sky compliant and not project artificial light to the abutting wetland.

The project has been designed to avoid direct and indirect impacts to wetlands from short- and long-term perspectives. No direct wetland impacts are proposed. Work within the upland review area has been designed to avoid indirect wetland impacts. Sedimentation and erosion control will minimize the potential for short-term impacts, while stormwater management will protect long-term water quality protection.

4.1 SEDIMENT AND EROSION CONTROL MEASURES

A Sediment and Erosion (S&E) Control Plan has been developed to minimize potential short-term impacts during construction. The S&E Control Plan includes descriptive specifications concerning land grading, topsoiling, temporary and permanent vegetative cover, and erosion checks. Details have been provided for all erosion controls with corresponding labels on the S&E Control Plan. All S&E controls provided are in accordance with the *2002 Connecticut Guidelines for Soil Erosion and Sediment Control*. The site will be accessed via two temporary construction entrances to the east from Iron Horse Boulevard, each designed

with 100-foot temporary stone tracking pads. The construction site will be bordered to the north, east, and south by sediment filter fence. Additional wetland protection will be provided by straw wattles outside of the sediment filter fencing along the northern and eastern property boundaries, upgradient of wetland areas.

Temporary soil stockpile areas will be located upgradient of secondary sediment filter fences. Erosion control blankets and strawbales will be used along slopes downgradient of the proposed development during construction. Inlet protection and sediment traps will be installed to contain construction runoff during construction.

4.2 WATER QUALITY PROTECTION AND MITIGATION

The project includes a stormwater management system that has been designed and will be installed and maintained in accordance with Town and State standards, including the *2004 Connecticut Stormwater Quality Manual.* The system design and components employ standard engineering practices that are regularly used throughout the Town and the northeast to prevent stormwater pollution. The stormwater management system includes water quantity and water quality protections. Subsurface infiltration galleries will manage stormwater quantity, while an open, vegetated water quality swale will provide water quality protection.

The stormwater management design is comprehensive. Roof drainage will be collected and piped to below ground retention areas that will promote infiltration and ground water recharge. There is no anticipated increase in peak runoff rates from the proposed project. Given the high quality wetland system, the focus of the stormwater system design is water quality. The first flush from all paved surfaces will be directed to a multi-cell water quality vegetated swale located in the herbaceous shelf in the eastern portion of the site. The bioswale will be planted and seeded with native plant material, and will contain rock filter berms. During precipitation events where storm flow exceeds the retention capacity of the system, excess flow will be routed to a 24-inch overflow riser and a riprap energy dissipator with a vegetated biofilter. The water quality swale will contain an emergency spillway at its southern terminus. The vegetated water quality swale and biofilter have been designed along with the native buffer planting to enhance the water quality of stormwater moving across the site by slowing down runoff, increasing residence time, to filter sediment and pollutants before reaching the wetland.

4.3 ALTERNATIVES ANALYSIS

The proposed project represents a studied effort to redevelop the site with a project that will provide community benefit while avoiding impacts to wetland resources. Alternatives considered for the project include the no action and the preferred project.

4.3.1 NO ACTION

An alternative to the proposed site project is to leave the site in its existing state as a denuded lot. The former industrial site adds no ecological, aesthetic, or economic value to the town and surrounding area. Leaving the site in its current state will mean the loss of potential habitat and water quality measures, local economic development, and passive enjoyment of the Farmington River by residents and visitors to

Simsbury. Abandoned sites often attract anthropogenic debris through illicit dumping as well as the settling and collection of wind-blown debris. Many invasive species thrive in disturbed, open conditions, and are often introduced to these sites along with anthropogenic debris including construction equipment and materials stockpiles.

4.3.2 PREFERRED ALTERNATIVE

The preferred alternative allows for the realization of the property as a vibrant residential community that exists in harmony with existing land uses and high quality wetland resources. The project will have no direct impact on regulated resources and indirect impacts have been managed through sedimentation and erosion controls and stormwater management. The majority of site improvements are located within previously disturbed upland area, with minimal new impervious features to be located adjacent to the wetland boundary.

Improvements within the 100-foot URA will be limited for the most part to low-impact design and pervious features including a stone dust walking trail and native vegetation planting plan. These design elements will provide opportunities for passive recreation and enjoyment of the surrounding wetland, increasing its value from its current state with no public access on site.

The establishment of a landscape with native species at the perimeter of the development is anticipated to expand the existing habitat for area wildlife and insect pollinators. A native plant buffer can help prevent the encroachment of invasive plant species from the open, disturbed project site into the undeveloped natural landscape.

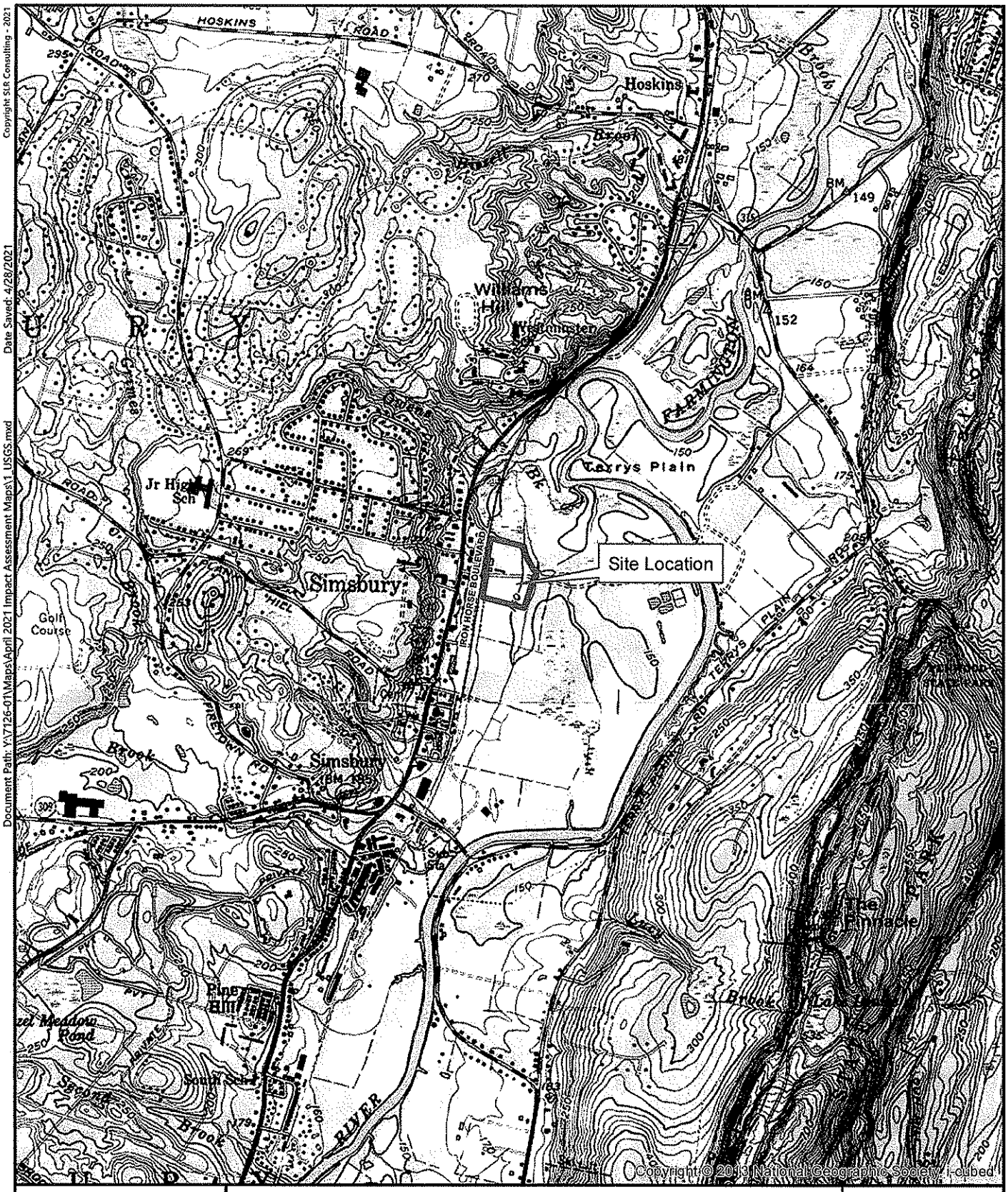
Along with the native plant restoration plan, a comprehensive stormwater management plan (described in Section 4.2) has been designed to compensate for any increases to stormwater runoff from proposed conditions.

5. CONCLUSION

The proposed project involves the redevelopment of a former industrial site located at 32 and 36 Iron Horse Boulevard to a multifamily residential community. Proposed activities include five multifamily apartment buildings, surface and garage parking, access ways, a club house, and recreation areas. Portions of the proposed activities, approximately 2.7 acres, will occur within 100-foot URA to the Farmington River wetland complex. The majority of proposed activities consist of low-impact and permeable design features such as a walking path, vegetated water quality swale, and 39,000 sf native planting area that will serve as a vegetative buffer between site infrastructure and the wetland system. The proposed project has been designed to conform within the existing disturbance areas mindful of adjacent high quality wetland resources associated with the Farmington River. The project has been designed to avoid adverse impacts to wetland systems and their capacity to perform wetland functions by ensuring stormwater runoff is sufficiently renovated prior to discharge. No direct wetland impacts are proposed. Potential indirect wetland impacts resulting from the redevelopment have been considered from a short- and long-term perspective. In the short term, sedimentation and erosion controls will be used to avoid indirect impacts, while stormwater management and a vegetated buffer is proposed to minimize long-term and cumulative impacts.

APPENDIX A

Site Maps



Date Saved: 4/28/2021

Document Path: Y:\17126-01\Maps\April 2021 Impact Assessment Maps\1_USGS.mxd

SLR
195 CHURCH STREET
7TH FLOOR
NEW HAVEN, CT 06511
203.344.7887
slrconsulting.com

SITE LOCATION

BARBER COVE IMPACT ASSESSMENT
NELSON CONSTRUCTION
32 IRON HORSE BOULEVARD
SIMSBURY, CONNECTICUT

N

0 500 1,000
Feet

SCALE 1 " = 2,000 '

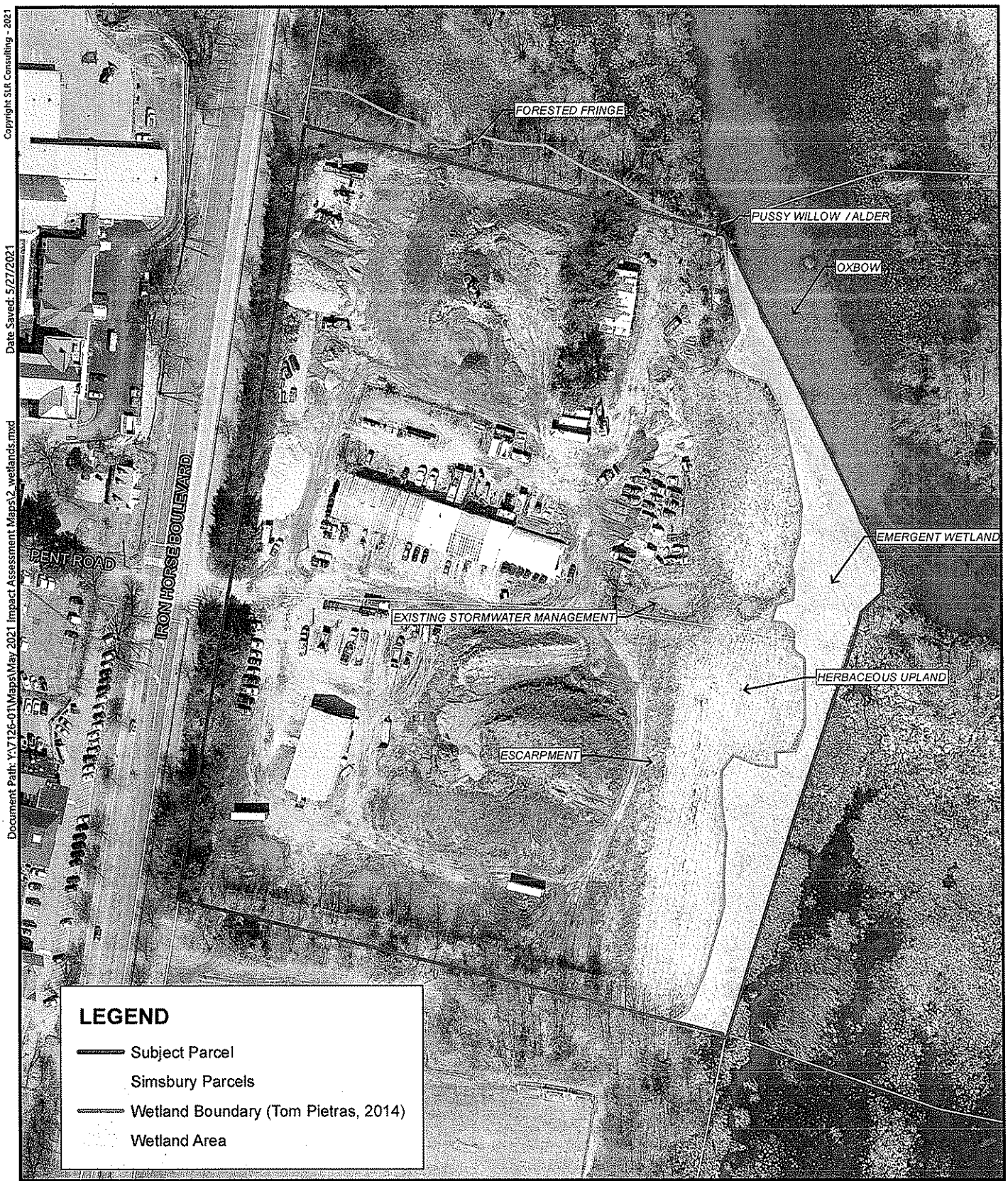
DATE 4/28/2021

PROJ. NO. 17126-00001

FIG. 1

Date Saved: 5/27/2021

Document Path: Y:\7126-01\Maps\May 2021 Impact Assessment Maps\2_wetlands.mxd



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WETLAND MAP

BARBER COVE IMPACT ASSESSMENT
NELSON CONSTRUCTION
32 & 36 IRON HORSE BOULEVARD
SIMSBURY, CONNECTICUT

N

0 150
Feet

SOURCE: 2004 AERIAL PHOTO, CTDEEP, 2019

SCALE 1 " = 150 '

DATE 5/27/2021

PROJ. NO. 17126.00001

FIG. 2

Date Saved: 5/5/2021

Document Path: Y:\17126-01\Maps\April 2021 Impact Assessment Maps\3_soils.mxd

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SOILS MAP

BARBER COVE IMPACT ASSESSMENT
NELSON CONSTRUCTION
32 & 36 IRON HORSE BOULEVARD
SIMSBURY, CONNECTICUT

N

0 150
Feet

SOURCE: 2004 AERIAL PHOTO, CTDEEP, 2019

SCALE 1" = 150'

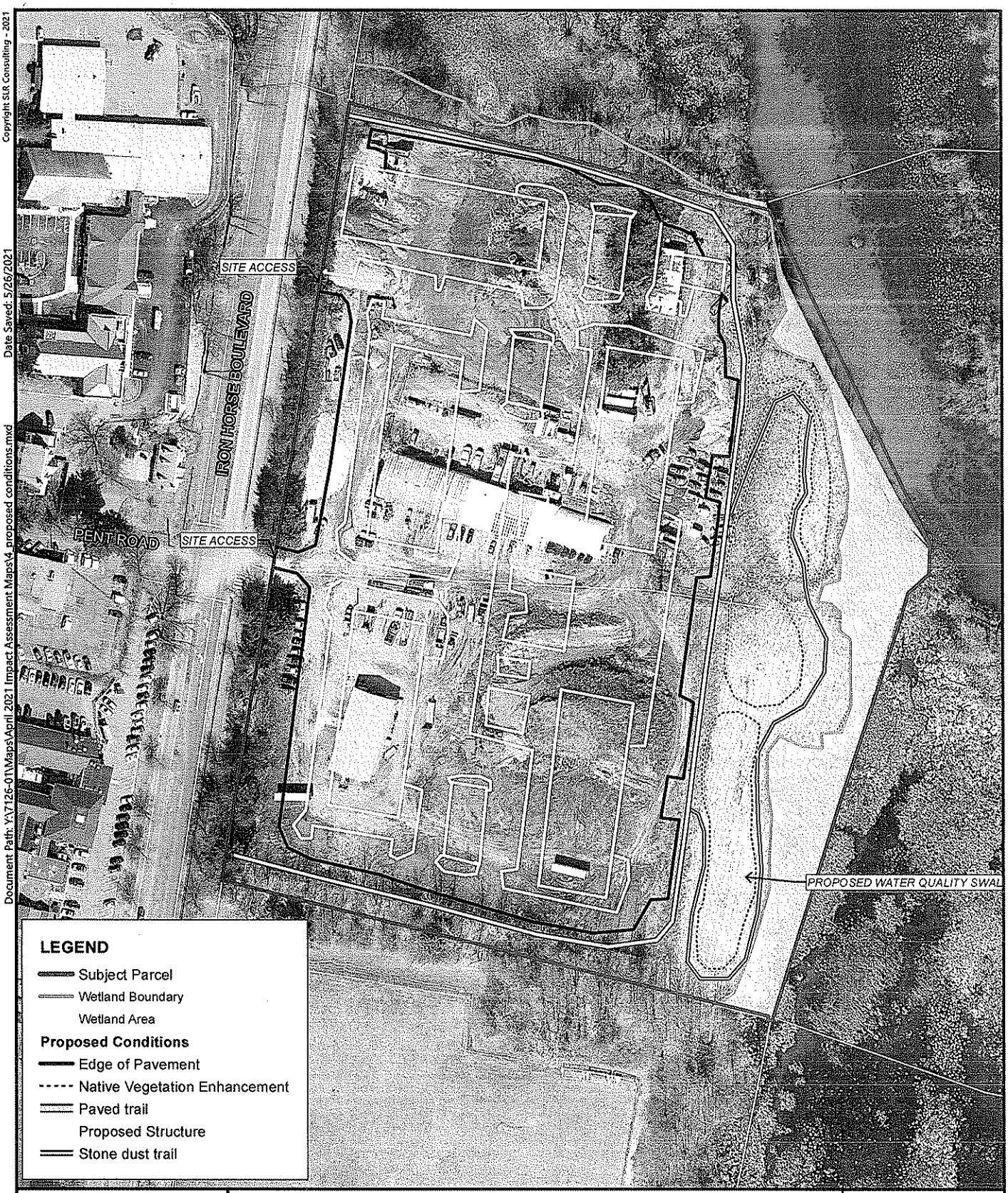
DATE 5/5/2021

PROJ. NO. 17126.00001

FIG. 3

Date Saved: 5/26/2021

Document Path: Y:\7125-01\Maps\April 2021 Impact Assessment Maps\4_proposed conditions.mxd



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slrconsulting.com

PROPOSED SITE LAYOUT

BARBER COVE IMPACT ASSESSMENT
NELSON CONSTRUCTION
32 & 36 IRON HORSE BOULEVARD
SIMSBURY, CONNECTICUT

N

0 150
Feet

SOURCE: 2004 AERIAL PHOTO, CTDEEP, 2019

SCALE 1 " = 150 '

DATE 5/26/2021

PROJ. NO. 17126.00001

FIG. 4

APPENDIX B

Site Photographs

SLR

PHOTOGRAPHIC LOG

Client Name:	**Site Location:**	**Project No.**
Nelson Construction	Barber Cove 32 Iron Horse Boulevard, Simsbury, CT	141.17126.00001

Photo No.	**Date:**
1	5/13/2020

Direction Photo Taken:
Southeast

Description:
Southeastern portion of the property.

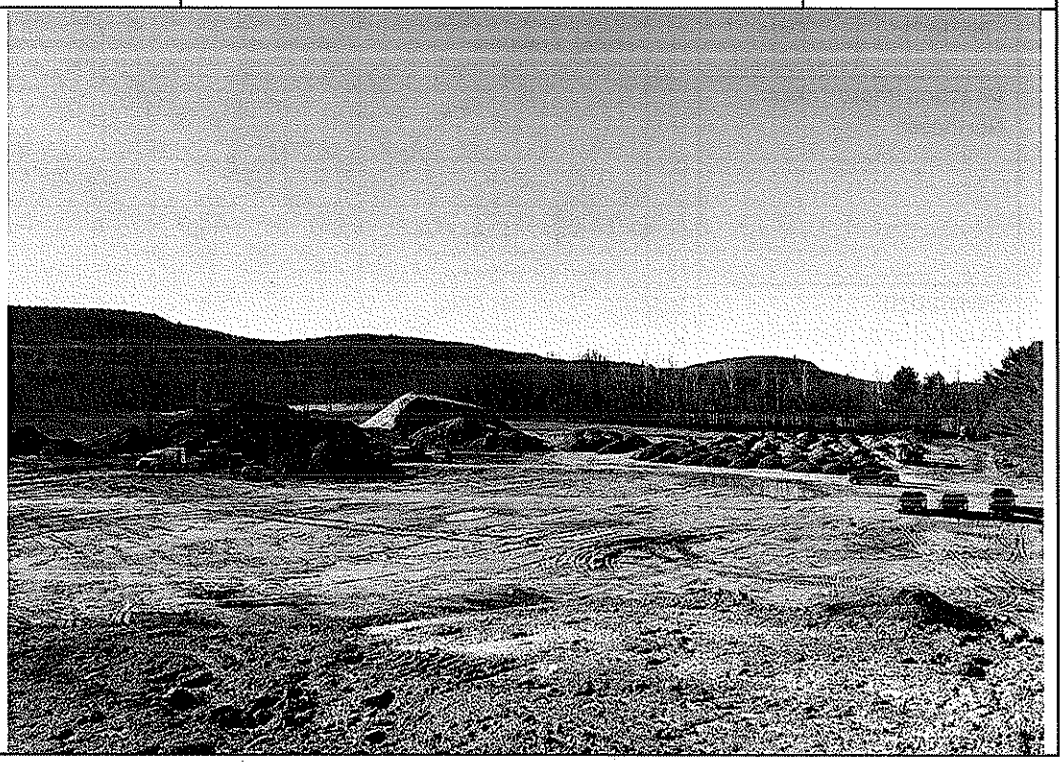
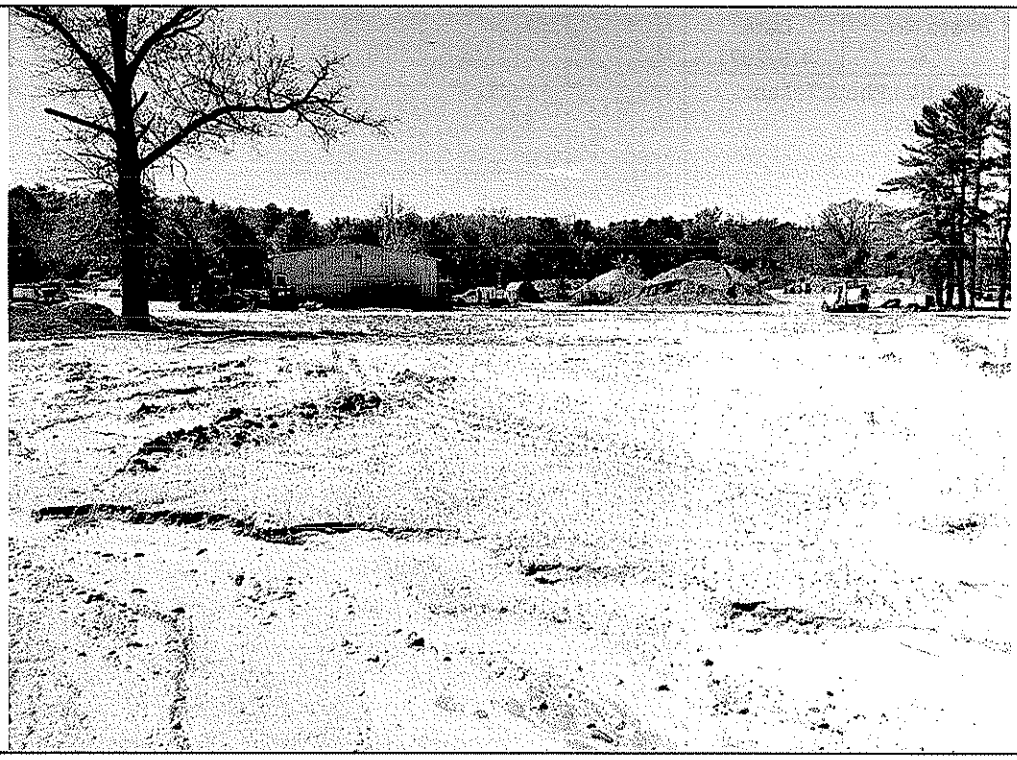


Photo No.	**Date:**
2	4/9/2021

Direction Photo Taken:
West

Description:
Existing building in the center of the site.



SLR

PHOTOGRAPHIC LOG

Client Name:	**Site Location:**	**Project No.**
Nelson Construction	Barber Cove 32 Iron Horse Boulevard, Simsbury, CT	141.17126.00001

Photo No.	**Date:**
3	4/9/2021

Direction Photo Taken:
Northeast

Description:
Seasonal apparent water table in forested fringe wetland north of property boundary with skunk cabbage and tussock sedge groundcover, spice bush and highbush blueberry shrub layer and red maple canopy.

Photo No.	**Date:**
4	4/9/2021

Direction Photo Taken:
Northeast

Description:
Palustrine emergent wetland north of site boundary downgradient of forested fringe wetland with cattails in foreground and red maple trees beyond.

SLR

PHOTOGRAPHIC LOG

Client Name:	**Site Location:**	**Project No.**
Nelson Construction	Barber Cove 32 Iron Horse Boulevard, Simsbury, CT	141.17126.00001

Photo No.	**Date:**
5	4/9/2021

Direction Photo Taken:
East

Description:
Emergent marsh area along Farmington River oxbow near the southeastern portion of the property. Tussock sedge in the foreground with cattails and giant reed beyond.

Photo No.	**Date:**
6	4/9/2021

Direction Photo Taken:
North

Description:
Herbaceous upland area on site in the foreground and the eastern project area limits to the west.

BARBER COVE

32 & 36 IRON HORSE BOULEVARD
SIMSBURY, CONNECTICUT

SLR PROJECT # 17126.00001
MAY 28, 2021

GENERAL NOTES

1. PROPERTY AND TOPOGRAPHIC INFORMATION IS COMPILED FROM A MAP TITLED "TOPOGRAPGIC AS-BUILT PLAN, PREPARED FOR GIRARD BROTHERS CORPORATION, IRON HORSE BOULEVARD, SIMSBURY, CONNECTICUT", SCALE: 1"=40', DATE: APRIL 30, 2020, PREPARED BY: BARRETT ASSOCIATES LLC.
2. NORTH ARROW, BEARINGS AND COORDINATES ARE BASED UPON THE CONNECTICUT COORDINATE SYSTEM (NAD 1983). ELEVATIONS, CONTOURS AND BENCH MARK ARE BASED UPON (NAVD 1988)
3. INFORMATION REGARDING THE LOCATION OF EXISTING UTILITIES HAS BEEN BASED UPON AVAILABLE INFORMATION AND MAY BE INCOMPLETE, AND WHERE SHOWN SHOULD BE CONSIDERED APPROXIMATE. THE LOCATION OF ALL EXISTING UTILITIES SHOULD BE CONFIRMED PRIOR TO BEGINNING CONSTRUCTION. CALL "CALL BEFORE YOU DIG", 1-800-922-4455. ALL UTILITY LOCATIONS THAT DO NOT MATCH THE VERTICAL OR HORIZONTAL CONTROL SHOWN ON THE PLANS SHALL IMMEDIATELY BE BROUGHT TO THE ATTENTION OF THE ENGINEER FOR RESOLUTION.
4. SLR INTERNATIONAL, INC. ACCEPTS NO RESPONSIBILITY FOR THE ACCURACY OF MAPS AND DATA WHICH HAVE BEEN SUPPLIED BY OTHERS.
5. ALL UTILITY SERVICES ARE TO BE UNDERGROUND. THE EXACT LOCATION, MEANS OF CONSTRUCTION, AND SIZE OF ELECTRIC, TELEPHONE, AND CABLE TELEVISION ARE TO BE DETERMINED BY THE RESPECTIVE UTILITY COMPANIES.
6. ALL DIMENSIONS AND ELEVATIONS SHALL BE VERIFIED IN THE FIELD PRIOR TO CONSTRUCTION. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER.
7. SEDIMENT AND EROSION CONTROL MEASURES AS DEPICTED ON THESE PLANS AND DESCRIBED WITHIN THE SEDIMENT AND EROSION CONTROL NARRATIVE SHALL BE IMPLEMENTED AND MAINTAINED UNTIL PERMANENT COVER AND STABILIZATION IS ESTABLISHED. ALL SEDIMENT AND EROSION CONTROL MEASURES SHALL CONFORM TO THE "GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL, CONNECTICUT - 2002". AND IN ALL CASES BEST MANAGEMENT PRACTICES SHALL PREVAIL
8. ALL DISTURBED AREAS SHALL RECEIVE A MINIMUM OF 6" TOPSOIL, AND BE SEEDED WITH GRASS, AS SHOWN ON THE PLANS.
9. ALL PROPOSED CONTOURS AND SPOT ELEVATIONS INDICATE FINISHED GRADE.
10. ALL CONSTRUCTION MATERIALS AND METHODS SHALL CONFORM TO THE TOWN OF SIMSBURY REQUIREMENTS AND TO THE APPLICABLE SECTIONS OF THE STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROADS, BRIDGES, AND INCIDENTAL CONSTRUCTION, FORM 818 AND ADDENDUMS.
11. THE PLANS REQUIRE A CONTRACTORS WORKING KNOWLEDGE OF LOCAL, MUNICIPAL, WATER AUTHORITY, AND STATE CODES FOR UTILITY SYSTEMS. ANY CONFLICTS BETWEEN MATERIALS AND LOCATIONS SHOWN, AND LOCAL REQUIREMENTS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO THE EXECUTION OF WORK. THE ENGINEER WILL NOT BE HELD LIABLE FOR COSTS INCURRED TO IMPLEMENT OR CORRECT WORK WHICH DOES NOT CONFORM TO LOCAL CODE.
12. ALL FUEL, OIL, PAINT, OR OTHER HAZARDOUS MATERIALS USED DURING CONSTRUCTION SHOULD BE STORED IN A SECONDARY CONTAINER AND REMOVED TO A LOCKED INDOOR AREA WITH AN IMPERVIOUS FLOOR DURING NON-WORK HOURS.
13. COMPLIANCE WITH THE PERMIT CONDITIONS IS THE RESPONSIBILITY OF BOTH THE CONTRACTOR AND THE PERMITTEE.

EROSION CONTROL NOTES
CONTRACTOR RESPONSIBILITIES

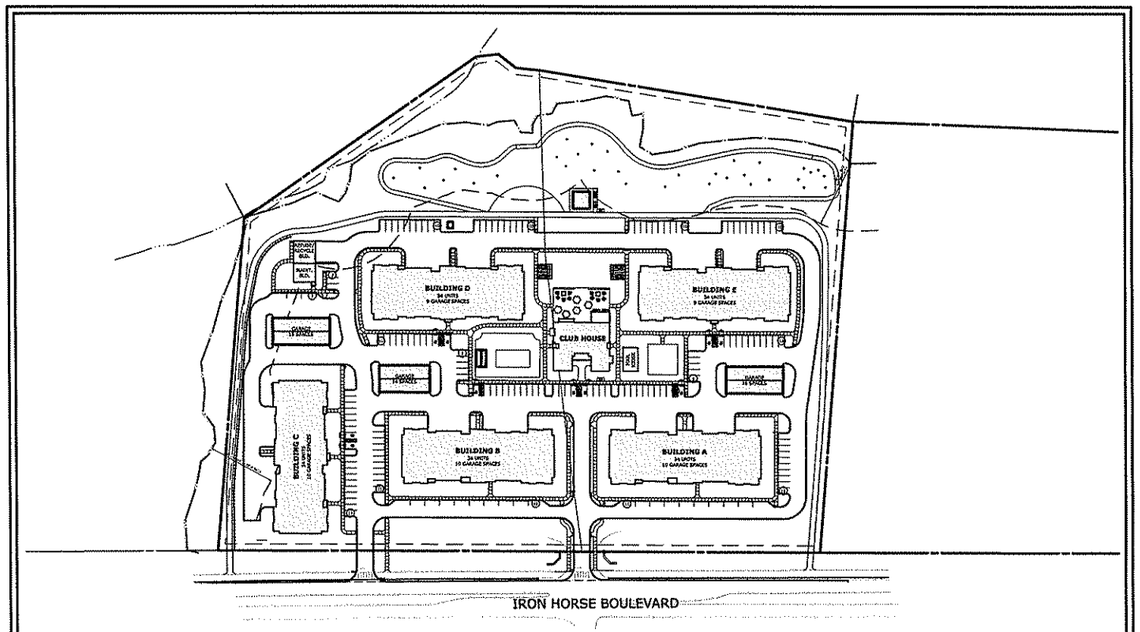
1. SEDIMENT AND EROSION CONTROLS SHALL BE INSPECTED AT LEAST ONCE A WEEK AND WITHIN 24 HOURS OF THE END OF A STORM WITH A RAINFALL AMOUNT OF 0.5 INCH OR GREATER. A LOG OF SUCH INSPECTIONS SHALL BE MAINTAINED AT THE SITE.
2. THE SEDIMENT AND EROSION CONTROL PLAN SHALL BE MODIFIED BY THE CONTRACTOR AT THE DIRECTION OF THE ENGINEER AND THE TOWN'S DESIGNATED REPRESENTATIVE AS NECESSITATED BY CHANGING SITE CONDITIONS
3. INSPECTION OF THE SITE FOR EROSION SHALL CONTINUE FOR A PERIOD OF THREE MONTHS AFTER COMPLETION WHEN RAINFALLS OF ONE INCH OR MORE OCCUR.
4. ALL DEWATERING WASTE WATERS SHALL BE DISCHARGED IN A MANNER WHICH MINIMIZES THE DISCOLORATION OF THE RECEIVING WATERS.
5. THE SITE SHOULD BE KEPT CLEAN OF LOOSE DEBRIS, LITTER, AND BUILDING MATERIALS SUCH THAT NONE OF THE ABOVE ENTER WATERS OR WETLANDS.
6. A COPY OF ALL PLANS AND REVISIONS, AND THE SEDIMENT AND EROSION CONTROL PLAN SHALL BE MAINTAINED ON-SITE AT ALL TIMES DURING CONSTRUCTION.
7. ALL CATCH BASIN SUMPS SHOULD BE INSPECTED AFTER CONSTRUCTION COMPLETION AND SEDIMENT REMOVED. THE SEDIMENT SHALL BE DISPOSED OF IN AN APPROVED LOCATION.

ZONING DATA TABLE

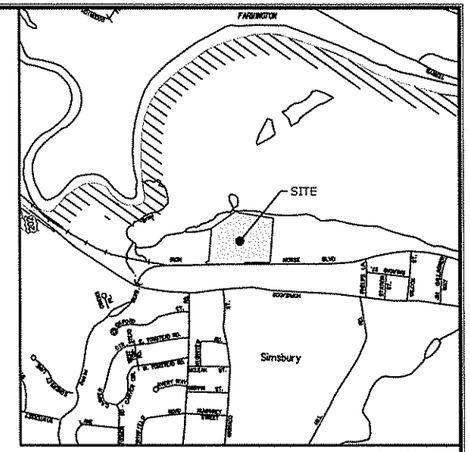
ZONE: FLOODPLAIN OVERLAY
DISTRICT: SIMSBURY CENTER CODE (SCC)

ZONE	REQUIRED	PROPOSED
LOT AREA	N/A	590,643 SQ FT (13.56 ACRES)
LOT FRONTAGE	N/A	897 FT
FRONT YARD	10 FT	25 FT
STREET SETBACK AREA	0 FT MIN/12 FT MAX	15 FT
SIDE YARD	10 FT	53 FT
REAR YARD	10 FT	69 FT
BUILDING HEIGHT	2 STORIES MIN/4 STORIES (56 FT) MAX	3 STORIES (38.5 FT)
% OPEN AREA	15%	35%
PARKING	340 SPACES (2 SPACES PER DWELLING UNIT)*	311 TOTAL SPACES (169 SURFACE SPACES (INCLUDES 10 ACCESSIBLE SPACES), 94 GARAGE SPACES, 48 TANDEM GARAGE SPACES)

*UNIT MIX IS AS FOLLOWS: 10 STUDIO, 38 ONE BEDROOM, 40 ONE BEDROOM/DEN, 62 TWO BEDROOM, 20 THREE BEDROOM (170 DWELLING UNITS TOTAL)



PROJECT SITE VICINITY MAP:



LOCATION MAP

LEGEND

EXISTING		PROPOSED
	STREET LINE	
	PROPERTY LINE	
	SETBACK LINE	
70	MAJOR CONTOUR	100
68	MINOR CONTOUR	99
+ 70.5	SPOT GRADE	+ 70.5
	TREE/ SHRUB	
	SITE LIGHT	
WV	WATER VALVE	WV
GV	GAS VALVE	GV
	CATCH BASIN	
	MANHOLE/YARD DRAIN	
	SANITARY SEWER W/MANHOLE	SMH
	STORM DRAIN	
W	WATER MAIN	W
G	GAS MAIN	G
E	ELECTRIC LINE	E
ETC	ELECTRIC, TELEPHONE, CABLE	ETC
	UTILITY POLE	
	TRAFFIC SIGN	
	IRON PIPE	
	MONUMENT	
	EDGE OF PAVEMENT W/CURB	
	GUARD RAIL	
	CHAIN LINK FENCE	
	WATERCOURSE	
	WETLAND	

PREPARED FOR:

32-36 IRON HORSE, LLC
75 WEST STREET
SIMSBURY, CONNECTICUT 06070

PREPARED BY:

SLR
99 REALTY DRIVE
CHESHIRE, CT 06410
203.271.1773
SLRCONSULTING.COM

811 Know what's below. Call before you dig. www.cbyd.com

LIST OF DRAWINGS

NO.	NAME	TITLE
01	--	TITLE SHEET
02	EX	EXISTING CONDITIONS
03	LA	SITE PLAN - LAYOUT
04	LS	SITE PLAN - LANDSCAPING
05	GR	SITE PLAN - GRADING
06	UT	SITE PLAN - UTILITIES
07	SE-1	SEDIMENT AND EROSION CONTROL PLAN
08	SE-2	SEDIMENT AND EROSION CONTROL DETAILS AND SPECIFICATIONS
09	SD-1	SITE DETAILS
10	SD-2	SITE DETAILS
11	SD-3	SITE DETAILS
12	SD-4	WET WATER QUALITY SWALE ENLARGEMENT

LEGEND

- 156 — EXISTING CONTOUR
- x 159.2 — EXISTING SPOT GRADE
- LIMIT INLAND WETLANDS
- FP — 100 YEAR FLOOD LIMIT ELEVATION 155.7
- FW — FLOODWAY LIMIT
- PROPERTY LINE
- EDGE WOODS & BRUSH
- LIMIT EXISTING STOCKPILE
- EXISTING TREE
- LIGHT POLE
- UTILITY POLE/UTILITY POLE WITH LIGHT
- CLF — CHAIN LINK FENCE
- STONE/RIP-RAP
- TRG — TIMBER GUIDE RAIL
- CATCH BASIN
- STORM MANHOLE
- SANITARY MANHOLE
- CAPPED REBAR
- DRAINAGE FLOW DIRECTION
- OVERHEAD WIRES
- EXTISTING HYDRANT
- EXISTING WATER LINE

NOTES

1. THE EXISTING CONDITIONS SHOWN ON THIS MAP REFLECT THE SITE CONDITION AS OF APRIL 30, 2020. SITE CONDITIONS MAY HAVE CHANGED SINCE THE SURVEY WAS CONDUCTED.
2. PROPERTY AND TOPOGRAPHIC INFORMATION IS COMPILED FROM A MAP TITLED "TOPOGRAPGIC AS-BUILT PLAN, PREPARED FOR GIRARD BROTHERS CORPORATION, IRON HORSE BOULEVARD, SIMSBURY, CONNECTICUT", SCALE: 1"=40', DATE: APRIL 30, 2020, PREPARED BY: BARRESI ASSOCIATES LLC.

FLOOD NOTES

1. PORTIONS OF THE PARCEL DESCRIBED HEREIN ARE WITHIN ZONE "X" (AREAS DETERMINED TO BE OUTSIDE 0.2% ANNUAL CHANCE FLOODPLAIN).

   PORTIONS OF THE PARCEL DESCRIBED HEREIN IS WITHIN SPECIAL FLOOD HAZARD AREA ZONE "AE". THE CURRENT 100-YEAR BASE FLOOD ELEVATION IS DETERMINED TO BE: 155.7 (NAVD88).

   REFERENCE: "FIRM FLOOD INSURANCE RATE MAP HARTFORD COUNTY, CONNECTICUT (ALL JURISDICTIONS) PANEL 193 OF 675 MAP NUMBER 09003C0193F, EFFECTIVE DATE: SEPTEMBER 26, 2008 FEDERAL EMERGENCY MANAGEMENT AGENCY"
2. THE 100-YEAR BASE FLOOD ELEVATION CONDITIONALLY APPROVED TO BE AMENDED TO ELEVATION: 155.4 (NAVD88).

   REFERENCE: CONDITIONAL LETTER OF MAP REVISION CASE NO.: 15-01-1643R, ISSUE DATE: NOVEMBER 24, 2015
3. LIMIT OF FLOODWAY SHOWN HEREON BASED ON CONDITIONALLY APPROVED AMENDED FLOODWAY LIMIT.

   REFERENCE: CONDITIONAL LETTER OF MAP REVISION CASE NO.: 15-01-1643R, ISSUE DATE: NOVEMBER 24, 2015

   MAP REFERENCE: "PROPOSED SITE PLAN FLOODPLAIN ASSESSMENT OF EXISTING PROPERTY, 32 IRON HORSE BOULEVARD, SIMSBURY, CONNECTICUT, SCALE SEE NOTED, DATE JUNE 9, 2015, PROJECT NO. 2501-05, SHEET NO. 1 OF 3, SHEET NAME 1, MILONE & MACBROOM, 99 REALTY DRIVE, CHESHIRE, CONNECTICUT 06410, (203)271-1773 FAX (203)272-9733 www.miloneandmacbroom.com"
4. TOTAL PARCEL AREA = 590,643 SQ. FT. = 13.559 ACRES
5. PARCEL AREA ABOVE ELEVATION 155.7 = 154,369 SQ. FT. = 10.431 ACRES
6. PARCEL AREA BELOW ELEVATION 155.7 = 136,274 SQ. FT. = 3.128 ACRES

IRON HORSE BOULEVARD

SLR
99 REALTY DRIVE
CHESHIRE, CT 06410
203.271.1773
SLRCONSULTING.COM

DESCRIPTION	DATE	BY

EXISTING CONDITIONS

BARBER COVE

32 & 35 IRON HORSE BOULEVARD
SIMSBURY, CONNECTICUT

AWG	AWG	TD
DESIGNED	DRAWN	CHECKED

1"=40'
SCALE

MAY 28, 2021
DATE

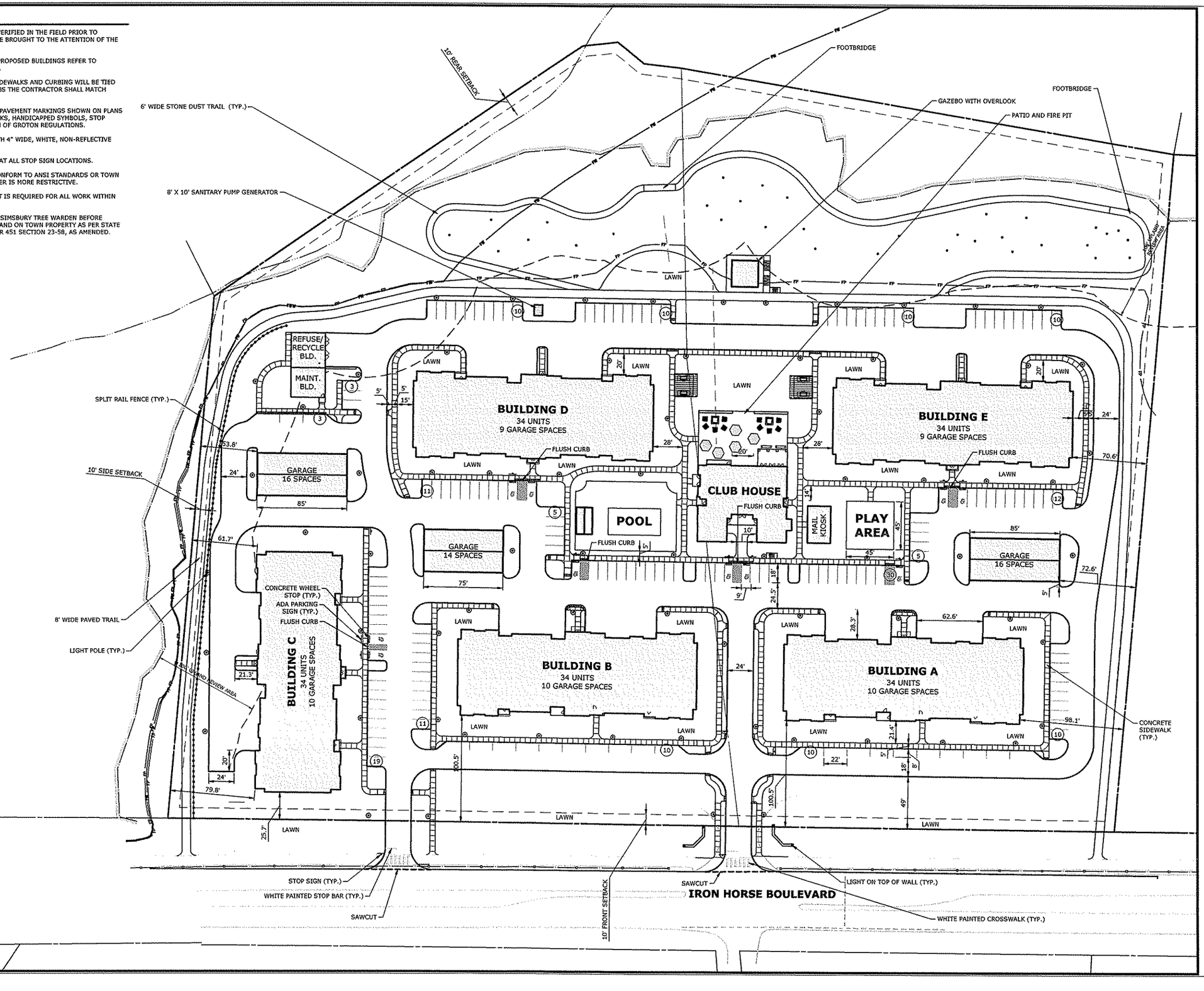
17126.00001
PROJECT NO.

02 OF 12
SHEET NO.

EX
SHEET NAME

LAYOUT NOTES

1. ALL DIMENSIONS AND ELEVATIONS SHALL BE VERIFIED IN THE FIELD PRIOR TO CONSTRUCTION. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER.
2. FOR DETAILED INFORMATION PERTAINING TO PROPOSED BUILDINGS REFER TO ARCHITECTURAL AND STRUCTURAL DRAWINGS.
3. IN ALL CASES IN WHICH PROPOSED ROADS, SIDEWALKS AND CURBING WILL BE TIED INTO EXISTING ROAD/SIDEWALK AND/OR CURBS THE CONTRACTOR SHALL MATCH EXISTING LINE AND GRADE.
4. THE CONTRACTOR IS REQUIRED TO PAINT ALL PAVEMENT MARKINGS SHOWN ON PLANS INCLUDING PARKING SPACE LINES, CROSSWALKS, HANDICAPPED SYMBOLS, STOP BARS, AND ALL MARKINGS REQUIRED BY TOWN OF GROTON REGULATIONS.
5. ALL PARKING SPACE LINES TO BE STRIPED WITH 4" WIDE, WHITE, NON-REFLECTIVE PAINT.
6. PROVIDE 12" WIDE WHITE PAINTED STOP BAR AT ALL STOP SIGN LOCATIONS.
7. ALL CURB/HANDICAP RAMP DESIGNS SHALL CONFORM TO ANSI STANDARDS OR TOWN OF GROTON SITE PLAN STANDARDS, WHICHEVER IS MORE RESTRICTIVE.
8. A CONNDOT HIGHWAY ENCROACHMENT PERMIT IS REQUIRED FOR ALL WORK WITHIN THE STATE RIGHT-OF-WAY.
9. THE CONTRACTOR WILL NOTIFY THE TOWN OF SIMSBURY TREE WARDEN BEFORE REMOVAL OR PRUNING OF ANY TREES THAT STAND ON TOWN PROPERTY AS PER STATE OF CONNECTICUT GENERAL STATUTES CHAPTER 451 SECTION 23-58, AS AMENDED.



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DESCRIPTION	DATE	BY

SITE PLAN - LAYOUT

BARBER COVE

32 & 35 IRON HORSE BOULEVARD
SIMSBURY, CONNECTICUT

AWG	AWG	TD
DESIGNED	DRAWN	CHECKED

1"=40'
SCALE

MAY 28, 2021
DATE

17126.00001
PROJECT NO.

03 OF 12
SHEET NO.

LA
SHEET NAME

PLANTING NOTES

1. THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL UNDERGROUND UTILITIES PRIOR TO EXCAVATING PLANT PITS.
2. SEED ALL DISTURBED AREAS TO LAWN UNLESS OTHERWISE NOTED. THE CONTRACTOR SHALL PROVIDE A 6" MINIMUM DEPTH OF SCREENED TOPSOIL, AS SPECIFIED, FOR ALL LAWN AREAS. AS NOTED ON THE DETAILS, SUBGRADE BENEATH PROPOSED LAWN AREAS SHALL BE LOOSENED OR SCARIFIED TO A MINIMUM DEPTH OF 12 INCHES.
3. ALL PLANTING BEDS SHALL HAVE 12" MINIMUM DEPTH OF TOPSOIL.
4. THE CONTRACTOR SHALL PROVIDE A 4" MIN. DEPTH OF SHREDDED BARK MULCH OVER ALL PLANTING BEDS AND TREE PLANTINGS. MULCHED PLANT BEDS SHALL EXTEND 12" FURTHER THAN THE ADJACENT PLANTINGS. NO DYED MULCH.
5. ALL PLANT MATERIAL IS SUBJECT TO INSPECTION AND APPROVAL BY THE LANDSCAPE ARCHITECT PRIOR TO AND AFTER PLANTING.
6. PLANT SPECIES MAY BE ADJUSTED BASED ON AVAILABILITY AT TIME OF PLANTING. ALL PLANT MATERIAL SUBSTITUTIONS ARE SUBJECT TO REVIEW AND APPROVAL BY THE LANDSCAPE ARCHITECT.
7. ALL PLANT MATERIALS SHALL CARRY A FULL GUARANTEE FOR A PERIOD OF ONE YEAR FROM THE DATE OF ACCEPTANCE, TO INCLUDE PROMPT TREATMENT OR REMOVAL AND REPLACEMENT OF ANY PLANTS FOUND TO BE IN AN UNHEALTHY CONDITION BY THE LANDSCAPE ARCHITECT. ALL REPLACEMENTS SHALL BE OF THE SAME KIND AND SIZE OF PLANTS SPECIFIED IN THE PLANT LIST.
8. MAINTENANCE SHALL BEGIN IMMEDIATELY AFTER PLANTING AND SHALL CONTINUE UNTIL ACCEPTANCE BY THE LANDSCAPE ARCHITECT AT THE END OF THE WARRANTY PERIOD. MAINTENANCE SHALL INCLUDE WATERING, MULCHING, TIGHTENING & REPLACING OF GUYS, REPLACEMENT OF SICK OR DEAD PLANTS, RESETTING PLANTS TO PROPER GRADE OR UPRIGHT (PLUMB) POSITION, RESTORATION OF SAUCERS, AND ALL OTHER CARE NEEDED FOR PROPER GROWTH OF THE PLANTS.
9. WHERE A SIZE RANGE IS SPECIFIED AT LEAST 50% OF PLANTS PROVIDED SHALL BE OF THE LARGER SIZE.

PLANT SCHEDULE

TREES	QTY	BOTANICAL NAME	COMMON NAME	SIZE
AA	49	Acer rubrum `Autumn Flame`	Autumn Flame Red Maple	2.5"-3.5" Cal.
PK	95	Prunus serrulata `Kwanzan`	Kwanzan Japanese Flowering Cherry	2"-2.5" Cal.
ZA	60	Zelkova serrata `Autumn Glow`	Autumn Glow Japanese Zelkova	3"-3.5" Cal.

SHRUBS	QTY	BOTANICAL NAME	COMMON NAME	SIZE
CR	90	Clethra alnifolia `Ruby Spice`	Ruby Spice Summersweet	---
CS	93	Clethra alnifolia `Sixteen Candles`	Sixteen Candles Summersweet	---
CA	53	Cornus amomum	Silky Dogwood	---
CR2	42	Cornus sericea	Red Twig Dogwood	---
IW	83	Ilex verticillata	Winterberry	---

GROUND COVERS	QTY	BOTANICAL NAME	COMMON NAME	CONT.
EM	67	Eutrochium fistulosum	Hollow Joe-pyeweed	plug

CONCEPT PLANT SCHEDULE

	NEW ENGLAND EROSION CONTROL/RESTORATION MIX BY NEW ENGLAND WETLAND PLANTS -	17,330 sf
	NEW ENGLAND WETMIX (WETLAND SEED MIX) BY NEW ENGLAND WETLAND PLANTS -	10,208 sf
	NEW ENGLAND SHOWY WILDFLOWER MIX BY NEW ENGLAND WETLAND PLANTS -	19,383 sf
	WETLAND BASIN PLUGS ALL PLUGS PLANTED 18" O.C. 20% Carex lanuginosa 20% Iris pseudacorus 20% Iris versicolor 20% Acorus calamus 20% Scirpus americanus -	1,653 sf

NEW ENGLAND EROSION CONTROL/RESTORATION MIX (5,723 sf)
NEW ENGLAND SHOWY WILDFLOWER MIX (8,439 sf)
NEW ENGLAND SHOWY WILDFLOWER MIX (363 sf)
NEW ENGLAND WETMIX (WETLAND SEED MIX) (462 sf)
NEW ENGLAND WETMIX (WETLAND SEED MIX) (7,220 sf)
NEW ENGLAND EROSION CONTROL/RESTORATION MIX (5,798 sf)
NEW ENGLAND SHOWY WILDFLOWER MIX (4,271 sf)
NEW ENGLAND EROSION CONTROL/RESTORATION MIX (3,354 sf)
SEED TO LAWN
NEW ENGLAND SHOWY WILDFLOWER MIX (2,049 sf)
WETLAND BASIN PLUGS (544 sf)
NEW ENGLAND SHOWY WILDFLOWER MIX (1,819 sf)
NEW ENGLAND SHOWY WILDFLOWER MIX (1,004 sf)
NEW ENGLAND WETMIX (WETLAND SEED MIX) (849 sf)
WETLAND BASIN PLUGS (592 sf)
NEW ENGLAND WETMIX (WETLAND SEED MIX) (594 sf)
NEW ENGLAND SHOWY WILDFLOWER MIX (1,438 sf)
NEW ENGLAND WETMIX (WETLAND SEED MIX) (1,083 sf)
WETLAND BASIN PLUGS (517 sf)
NEW ENGLAND EROSION CONTROL/RESTORATION MIX (2,455 sf)

REFUSE/RECYCLE BLD.
MAINT. BLD.
BUILDING D
34 UNITS
9 GARAGE SPACES
BUILDING E
34 UNITS
9 GARAGE SPACES
CLUB HOUSE
POOL
MAIL KIOSK
PLAY AREA
GARAGE 16 SPACES
GARAGE 14 SPACES
GARAGE 16 SPACES
BUILDING C
34 UNITS
10 GARAGE SPACES
BUILDING B
34 UNITS
10 GARAGE SPACES
BUILDING A
34 UNITS
10 GARAGE SPACES
30' WIDE BUFFER AREA
CONCRETE SIDEWALK (TYP.)
IRON HORSE BOULEVARD

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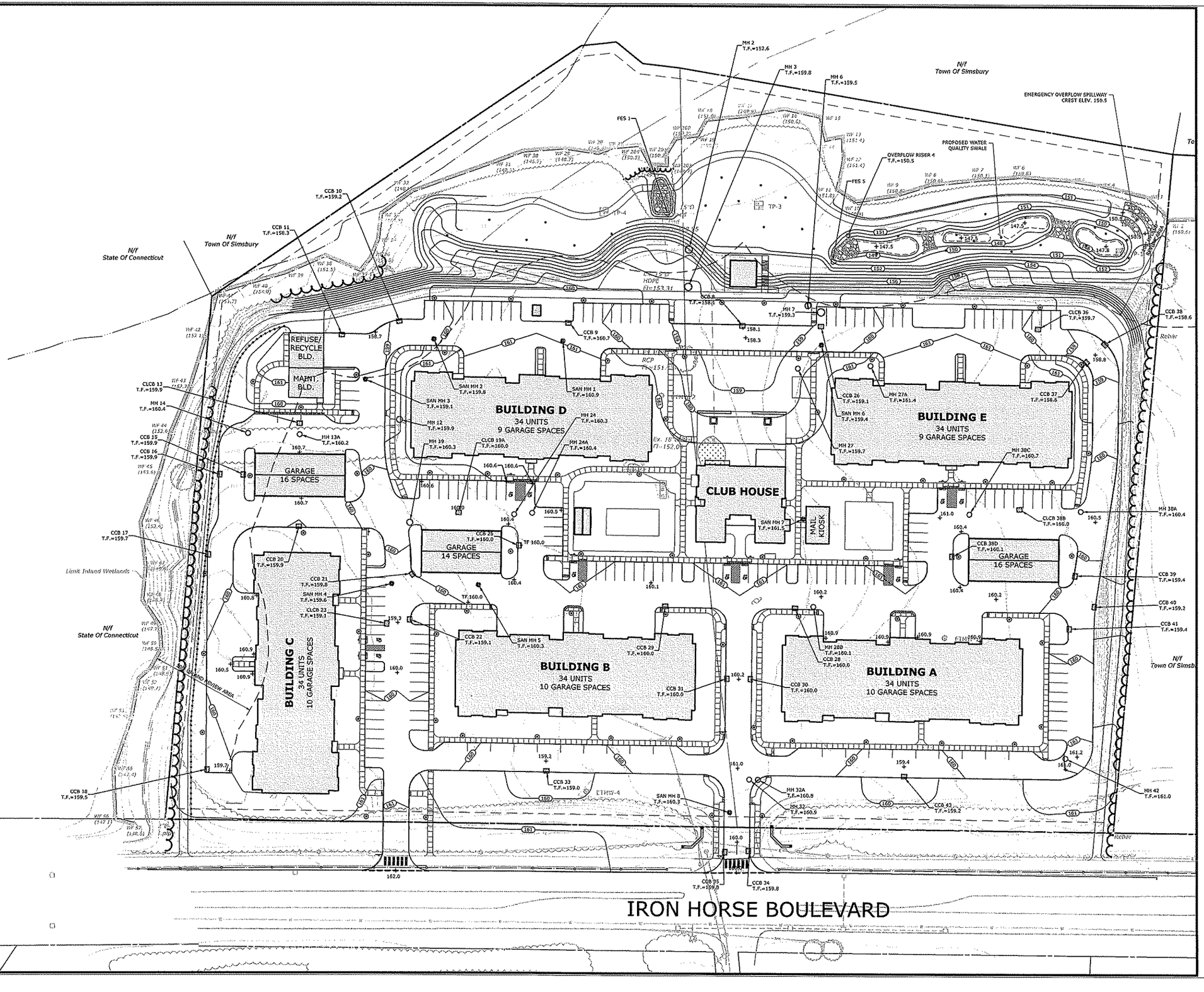
DESCRIPTION	DATE	BY

SITE PLAN - LANDSCAPING
BARBER COVE
32 & 36 IRON HORSE BOULEVARD
SIMSBURY, CONNECTICUT

AWG	AWG	TD
DESIGNED	DRAWN	CHECKED

1"=40'
SCALE
MAY 28, 2021
DATE
17128.00001
PROJECT NO.
04 OF 12
SHEET NO.
LS
SHEET NAME



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DESCRIPTION	DATE	BY

SITE PLAN - GRADING

BARBER COVE

32 & 36 IRON HORSE BOULEVARD
SIMSBURY, CONNECTICUT

AWG	AWG	TD
DESIGNED	DRAWN	CHECKED

SCALE: 1"=40'

DATE: MAY 28, 2021

PROJECT NO.: 17126.00001

SHEET NO.: 05 OF 12

SHEET NAME: GR

STORMWATER MANAGEMENT OPERATION AND MAINTENANCE PLAN

1. RECOMMENDED FREQUENCY OF SERVICE:
AS FURTHER DEFINED BELOW, ALL STORMWATER COMPONENTS SHOULD BE CHECKED ON A PERIODIC BASIS AND KEPT IN FULL WORKING ORDER. ULTIMATELY, THE REQUIRED FREQUENCY OF INSPECTION AND SERVICE WILL DEPEND ON RUNOFF QUANTITIES, POLLUTANT LOADING, AND CLOGGING DUE TO DEBRIS. AT A MINIMUM, WE RECOMMEND THAT ALL STORMWATER COMPONENTS BE INSPECTED AND SERVICED TWICE PER YEAR, ONCE BEFORE WINTER BEGINS AND ONCE DURING SPRING CLEANUP.

2. SERVICE PROCEDURES:

1. CATCH BASINS & DRAINAGE INLETS:
a. CATCH BASINS AND DRAINAGE INLETS SHALL BE COMPLETELY CLEANED OF ACCUMULATED DEBRIS AND SEDIMENTS AT THE COMPLETION OF CONSTRUCTION.
b. FOR THE FIRST YEAR, CATCH BASINS AND DRAINAGE INLETS SHALL BE INSPECTED ON A QUARTERLY BASIS.
c. ANY ACCUMULATED DEBRIS WITHIN THE CATCH BASINS/INLETS SHALL BE REMOVED AND ANY REPAIRS AS REQUIRED.
d. FROM THE SECOND YEAR ONWARD, VISUAL INSPECTIONS SHALL OCCUR TWICE PER YEAR, ONCE IN THE SPRING AND ONCE IN THE FALL, AFTER FALL CLEANUP OF LEAVES HAS OCCURRED.
e. ACCUMULATED DEBRIS WITHIN THE CATCH BASINS/INLETS SHALL BE REMOVED AND REPAIRS MADE AS REQUIRED.
f. ACCUMULATED SEDIMENTS SHALL BE REMOVED AT EACH TIME THEY ARE WITHIN 12 INCHES OF THE INVERT OF THE OUTLET PIPE.
g. ANY ADDITIONAL MAINTENANCE REQUIRED PER THE MANUFACTURER'S SPECIFICATIONS SHALL ALSO BE COMPLETED.

2. STORM DRAINAGE PIPING AND MANHOLES:
a. ALL STORM DRAINAGE PIPING SHALL BE COMPLETELY FLUSHED OF DEBRIS AND ACCUMULATED SEDIMENT AT THE COMPLETION OF CONSTRUCTION.
b. MANHOLES SHALL BE INSPECTED AND REPAIRED ON AN ANNUAL BASIS.
c. UNLESS SYSTEM PERFORMANCE INDICATES DEGRADATION OF PIPING, COMPREHENSIVE VIDEO INSPECTION OF STORM DRAINAGE PIPING SHALL OCCUR ONCE EVERY TEN YEARS.
d. ANY ADDITIONAL MAINTENANCE REQUIRED PER THE MANUFACTURER'S SPECIFICATIONS SHALL ALSO BE COMPLETED.

3. WATER QUALITY UNIT:
a. THE WATER QUALITY UNIT SHALL BE COMPLETELY CLEANED OF ACCUMULATED DEBRIS AND SEDIMENTS AT THE COMPLETION OF CONSTRUCTION.
b. FOR THE FIRST YEAR, THE HYDRODYNAMIC SEPARATOR SHALL BE INSPECTED ON A QUARTERLY BASIS.
c. ANY ACCUMULATED DEBRIS WITHIN THE HYDRODYNAMIC SEPARATOR SHALL BE REMOVED AND ANY REPAIRS MADE TO THE UNIT AS REQUIRED.
d. FROM THE SECOND YEAR ONWARD, VISUAL INSPECTION SHALL OCCUR TWICE PER YEAR, ONCE IN THE SPRING AND ONCE IN THE FALL, AFTER FALL CLEANUP OF LEAVES HAS OCCURRED.
e. ACCUMULATED DEBRIS WITHIN THE UNIT SHALL BE REMOVED AND REPAIRS MADE AS REQUIRED.
f. ACCUMULATED SEDIMENTS SHALL BE REMOVED AT WHICH TIME THEY ARE WITHIN 12 INCHES OF THE INVERT OF THE OUTLET PIPE.
g. ALL INLETS, OUTLETS AND COMPONENTS OF THE UNIT SHALL BE INSPECTED AND CLEARED OF DEBRIS. ANY REPAIRS SHALL BE PERFORMED.
h. ANY ADDITIONAL MAINTENANCE REQUIRED PER THE MANUFACTURER'S SPECIFICATIONS SHALL ALSO BE COMPLETED.

4. DRAINAGE OUTFALLS/SPLASH PADS/SCOUR HOLES:
a. ALL OUTFALLS SHALL BE COMPLETELY CLEANED OF ACCUMULATED DEBRIS AND SEDIMENTS AT THE COMPLETION OF CONSTRUCTION. ANY REPAIRS TO OUTLET PROTECTION MATERIAL (RIP RAP) SHALL BE PERFORMED.
b. FOR THE FIRST YEAR, OUTFALLS SHALL BE INSPECTED ON A QUARTERLY BASIS.
c. ANY ACCUMULATED DEBRIS SHALL BE REMOVED AND ANY REPAIRS MADE TO THE OUTFALLS AS REQUIRED.
d. FROM THE SECOND YEAR ONWARD, VISUAL INSPECTIONS SHALL OCCUR TWICE PER YEAR, ONCE IN THE SPRING AND ONCE IN THE FALL, AFTER FALL CLEANUP OF LEAVES HAS OCCURRED.
e. ACCUMULATED DEBRIS SHALL BE REMOVED AND REPAIRS MADE AS REQUIRED.
f. ANY EROSION SHALL BE PROMPTLY REPAIRED AND THE CAUSE OF THE EROSION SHALL BE IDENTIFIED AND CORRECTED.
g. ANY ADDITIONAL MAINTENANCE REQUIRED PER THE MANUFACTURER'S SPECIFICATIONS SHALL ALSO BE COMPLETED.

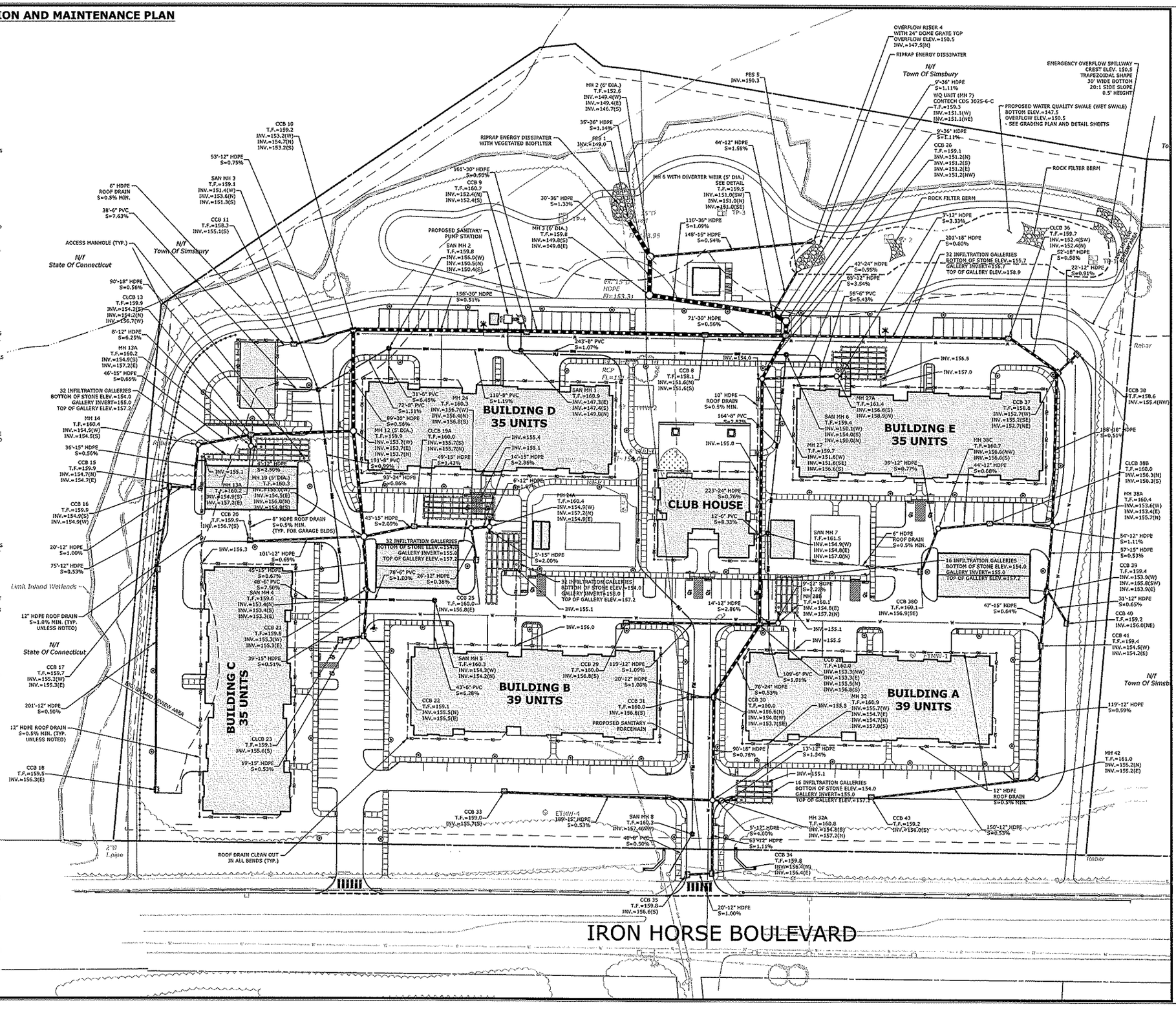
5. WATER QUALITY SWALE:
a. THE WATER QUALITY SWALE SHALL BE CLEANED OF DEBRIS AND SEDIMENTS UPON THE COMPLETION OF CONSTRUCTION.
b. THE WATER QUALITY SWALE SHALL BE VISUALLY INSPECTED ON A MONTHLY BASIS FOR THE FIRST 6 MONTHS. INSPECTIONS SHOULD FOLLOW TWICE PER YEAR (SPRING AND FALL) AND AFTER MAJOR STORM EVENTS TO ENSURE THAT THE STRUCTURE OPERATES IN THE MANNER AS ORIGINALLY INTENDED.
c. SEDIMENT BUILD UP SHOULD BE REMOVED FROM THE INITIAL SEDIMENT FOREBAY WHEN SEDIMENTS REACH 6 TO 8 INCHES IN DEPTH. SEDIMENTS SHOULD BE DISPOSED OF IN AN APPROPRIATE OFFSITE LOCATION.
d. THE WATER QUALITY SWALE SHOULD BE MOWED AT LEAST TWICE AN YEAR AND SHOULD NOT BE PERFORMED WHEN THE GROUND IS SOFT.
e. DEBRIS AND LITTER MAY ACCUMULATE NEAR THE DISCHARGE PIPE INTO THE SWALE AND FLARED END SECTION. THEY SHOULD BE REMOVED DURING THE REGULAR MOWING OPERATIONS.
f. THE VEGETATION ALONG THE SWALE BOTTOM AND SIDES SHALL BE INSPECTED FOR EROSION AND REPAIRED AS NECESSARY. A LOG OF SUCH INSPECTIONS MUST BE MAINTAINED BY THE OWNER.
g. ALL DEAD PLANTS SHALL BE REPLACED AND ANY NECESSARY PRUNING OF VEGETATION IDENTIFIED DURING INSPECTIONS SHALL BE COMPLETED.

6. UNDERGROUND DETENTION SYSTEMS:
a. UNDERGROUND DETENTION SYSTEMS SHALL BE INSPECTED QUARTERLY AND SEDIMENT SHALL BE REMOVED AS NEEDED TO ENSURE PROPER FUNCTIONING OF STRUCTURES. AREAS OF DISTURBANCE THAT MAY BE AS A RESULT OF CLEANING SHALL BE SEEDED AND PLANTED IN ACCORDANCE WITH THE ORIGINAL PLANTING PLAN. THESE STRUCTURES WILL BE MAINTAINED YEARLY, OR MORE FREQUENTLY AS REQUIRED. WASTE MATERIAL WILL BE PROPERLY DISPOSED OF OFF-SITE.
b. ANY ADDITIONAL MAINTENANCE REQUIRED PER THE MANUFACTURER'S SPECIFICATIONS SHALL ALSO BE COMPLETED.

7. TREE MAINTENANCE:
a. MAINTENANCE SHALL BEGIN IMMEDIATELY AFTER PLANTING AND SHALL CONTINUE UNTIL ACCEPTANCE BY THE LANDSCAPE ARCHITECT AT THE END OF THE WARRANTY PERIOD. MAINTENANCE SHALL INCLUDE WATERING, MULCHING, TIGHTENING & REPLACING OF GUYS, REPLACEMENT OF SICK OR DEAD PLANTS, RESETTING PLANTS TO PROPER GRADE OR UPRIGHT (PLUMB) POSITION, RESTORATION OF SAUCERS, AND ALL OTHER CARE NEEDED FOR PROPER GROWTH OF THE PLANTS.
b. TREES THAT ARE REMOVED OR DIE MUST BE REPLACED WITHIN ONE YEAR WITH SIMILAR SPECIES AT THE OWNER'S COST.
c. SEE PLANTING NOTES ON LANDSCAPING PLAN.

8. DISPOSAL OF DEBRIS AND SEDIMENT:
ALL DEBRIS AND SEDIMENT REMOVED FROM THE STORMWATER STRUCTURES AND WATER QUALITY SWALE SHALL BE DISPOSED OF LEGALLY. THERE SHALL BE NO DUMPING OF SILT OR DEBRIS INTO OR IN PROXIMITY TO ANY INLAND WETLANDS.

9. MAINTENANCE RECORDS:
THE OWNER(S) MUST MAINTAIN ALL RECORDS (LOGS, INVOICES, REPORTS, DATA, ETC.) AND HAVE ALWAYS THEM READILY AVAILABLE FOR INSPECTION.



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BY	DATE	DESCRIPTION

SITE PLAN - UTILITIES

BARBER COVE

32 & 36 IRON HORSE BOULEVARD
SIMSBURY, CONNECTICUT

AWG DESIGNED	AWG DRAWN	TD CHECKED

SCALE: 1"=40'

DATE: MAY 28, 2021

PROJECT NO.: 17126.00001

SHEET NO.: 06 OF 12

SHEET NAME: UT

SOIL EROSION AND SEDIMENT CONTROL NARRATIVE

SEDIMENT AND EROSION CONTROL MEASURES AS DEPICTED ON THESE PLANS AND DESCRIBED WITHIN THE SEDIMENT AND EROSION CONTROL NARRATIVE SHALL BE IMPLEMENTED AND MAINTAINED UNTIL PERMANENT COVER AND STABILIZATION IS ESTABLISHED. ALL SEDIMENT AND EROSION CONTROL MEASURES SHALL CONFORM TO THE "GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL, CONNECTICUT - 2002, TOWN OF SIMSBURY STANDARDS, AND IN ALL CASES BEST MANAGEMENT PRACTICES SHALL PREVAIL.

1. PURPOSE AND DESCRIPTION OF PROJECT
   A.) CONSTRUCTION OF A PROPOSED RESIDENTIAL DEVELOPMENT.
   B.) DISTURBED AREA: ± XX AC.

2. IDENTIFICATION OF EROSION AND SEDIMENT CONTROL CONCERNS
   A.) CUTS AND FILLS ASSOCIATED WITH CONSTRUCTION.
   B.) PROTECTION OF ON-SITE WETLANDS.

3. IDENTIFICATION OF OTHER POSSIBLE PERMITS
   THE PERMITS REQUIRED FOR THE PROJECT ARE LOCAL INLAND WETLANDS, PLANNING AND ZONING, AND DEPARTMENT OF ENVIRONMENT PROTECTION STORMWATER GENERAL PERMIT

4. RESPONSIBLE PARTY
   TBD

EROSION CONTROL LEGEND

	CE	CONSTRUCTION ENTRANCE
	GSF	SEDIMENT FILTER FENCE
	SW	STRAW WATTLES
	STK	TEMPORARY SOIL STOCKPILE SURROUNDED WITH SEDIMENT FILTER FENCE.
	IP	INLET PROTECTION
	DB	TEMPORARY DIVERSION BERM WITH STONE CHECK DAMS 75' O.C.
	TST	TEMPORARY SEDIMENT TRAP
	ECB	EROSION CONTROL BLANKET OR APPROVED EQUAL
	SD	SLOPE DRAIN

N/F Town Of Simsbury

N/F Town Of Simsbury

N/f State Of Connecticut

Limit Inland Wetlands

REFUSE/ RECYCLE BLD.

MAINT. BLD.

BUILDING D
34 UNITS
9 GARAGE SPACES

GARAGE
16 SPACES

GARAGE
14 SPACES

BUILDING C
34 UNITS
10 GARAGE SPACES

BUILDING B
34 UNITS
10 GARAGE SPACES

BUILDING A
34 UNITS
10 GARAGE SPACES

CLUB HOUSE

MAIL KIOSK

BUILDING E
34 UNITS
9 GARAGE SPACES

GARAGE
16 SPACES

Active Material Storage File #1
Volume On Date Of Survey = 6,798 Cy
Shape And Volume Expected To Change.

Active Material Storage File #6 On This Area
Shape And Volume Expected To Change.

Volume File #6 On Date Of Survey = 1,233 Cy

Active Material Storage Piles #2, 3, 4 & 5 This Area
Shapes And Volumes Expected To Change.

Volume File #3 On Date Of Survey = 1,118 Cy

Volume File #4 On Date Of Survey = 502 Cy

Small Active Storage Pile

Rebar

Rebar

IRON HORSE BOULEVARD

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CHESHIRE, CT 06410
203 271 1773
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DESCRIPTION	DATE	BY

SEDIMENT AND EROSION CONTROL PLAN

BARBER COVE

32 & 36 IRON HORSE BOULEVARD
SIMSBURY, CONNECTICUT

AWG	AWG	TD
DESIGNED	DRAWN	CHECKED

1"=40'
SCALE

MAY 28, 2021
DATE

17126.00001
PROJECT NO.

07 OF 12
SHEET NO.

SE-1
SHEET NAME

SEDIMENT AND EROSION CONTROL SPECIFICATIONS

GENERAL:

THESE GUIDELINES SHALL APPLY TO ALL WORK CONSISTING OF ANY AND ALL TEMPORARY AND/OR PERMANENT MEASURES TO CONTROL WATER POLLUTION AND SOIL EROSION, AS MAY BE REQUIRED, DURING THE CONSTRUCTION OF THE PROJECT. IN GENERAL, ALL CONSTRUCTION ACTIVITIES SHALL PROCEED IN SUCH A MANNER SO AS NOT TO POLLUTE ANY WETLANDS, WATERCOURSE, WATERBODY, AND CONDUIT CARRYING WATER, ETC. THE CONTRACTOR SHALL LIMIT, INSOFAR AS POSSIBLE, THE SURFACE AREA OF EARTH MATERIALS EXPOSED BY CONSTRUCTION METHODS AND IMMEDIATELY PROVIDE PERMANENT AND TEMPORARY POLLUTION CONTROL MEASURES TO PREVENT CONTAMINATION OF ADJACENT WETLANDS, WATERCOURSES, AND WATERBODIES, AND TO PREVENT, INSOFAR AS POSSIBLE, EROSION ON THE SITE.

LAND GRADING

GENERAL:

1. THE RESHAPING OF THE GROUND SURFACE BY EXCAVATION AND FILLING OR A COMBINATION OF BOTH, TO OBTAIN PLANNED GRADES, SHALL PROCEED IN ACCORDANCE WITH THE FOLLOWING CRITERIA:
   a. THE CUT FACE OF EARTH EXCAVATION SHALL NOT BE STEEPER THAN TWO HORIZONTAL TO ONE VERTICAL (2:1).
   b. THE PERMANENT EXPOSED FACES OF FILLS SHALL NOT BE STEEPER THAN TWO HORIZONTAL TO ONE VERTICAL (2:1).
   c. THE CUT FACE OF ROCK EXCAVATION SHALL NOT BE STEEPER THAN ONE HORIZONTAL TO FOUR VERTICAL (1:4).
   d. PROVISION SHOULD BE MADE TO CONDUCT SURFACE WATER SAFELY TO STORM DRAINS TO PREVENT SURFACE RUNOFF FROM DAMAGING CUT FACES AND FILL SLOPES.
   e. EXCAVATIONS SHOULD NOT BE MADE SO CLOSE TO PROPERTY LINES AS TO ENDANGER ADJOINING PROPERTY WITHOUT PROTECTING SUCH PROPERTY FROM EROSION, SLIDING, SETTLING, OR CRACKING.
   f. NO FILL SHOULD BE PLACED WHERE IT WILL SLIDE OR WASH UPON THE PREMISES OF ANOTHER OWNER OR UPON ADJACENT WETLANDS, WATERCOURSES, OR WATERBODIES.
   g. PRIOR TO ANY REGRADING, A STABILIZED CONSTRUCTION ENTRANCE SHALL BE PLACED AT THE ENTRANCE TO THE WORK AREA IN ORDER TO REDUCE MUD AND OTHER SEDIMENTS FROM LEAVING THE SITE.

TOPSOILING

GENERAL:

1. TOPSOIL SHALL BE SPREAD OVER ALL EXPOSED AREAS IN ORDER TO PROVIDE A SOIL MEDIUM HAVING FAVORABLE CHARACTERISTICS FOR THE ESTABLISHMENT, GROWTH, AND MAINTENANCE OF VEGETATION.
2. UPON ATTAINING FINAL SUBGRADES, SCARIFY SURFACE TO PROVIDE A GOOD BOND WITH TOPSOIL.
3. REMOVE ALL LARGE STONES, TREE LIMBS, ROOTS AND CONSTRUCTION DEBRIS.
4. APPLY SOIL AMENDMENTS AS FOLLOWS:
   LIME: ACCORDING TO SOIL TEST OR AT THE RATE OF 2 TONS PER ACRE.

MATERIAL:

1. TOPSOIL SHOULD HAVE PHYSICAL, CHEMICAL, AND BIOLOGICAL CHARACTERISTICS FAVORABLE TO THE GROWTH OF PLANTS.
2. TOPSOIL SHOULD HAVE A SANDY OR LOAMY TEXTURE.
3. TOPSOIL SHOULD BE RELATIVELY FREE OF SUBSOIL MATERIAL AND MUST BE FREE OF LARGE STONES , LUMPS OF SOIL, ROOTS, TREE LIMBS, TRASH, OR CONSTRUCTION DEBRIS. IT SHOULD BE FREE OF ROOTS OR RHIZOMES SUCH AS THISTLE, NUTGRASS, AND QUACKGRASS.
4. AN ORGANIC MATTER CONTENT OF SIX PERCENT (6%) IS REQUIRED. AVOID LIGHT COLORED SUBSOIL MATERIAL.
5. SOLUBLE SALT CONTENT OF LESS THAN 400 PPM IS REQUIRED.
6. THE TOPSOIL SHALL BE WARRANTED BY SELLER TO BE FREE OF DETECTABLE RESIDUES OF CHEMICAL PESTICIDES, HERBICIDES, PETROLEUM PRODUCTS, OR OTHER UNSUITABLE TOXINS.

APPLICATION:

1. AVOID SPREADING WHEN TOPSOIL IS WET OR FROZEN.
2. SPREAD TOPSOIL UNIFORMLY TO A DEPTH OF AT LEAST FOUR INCHES (4"), OR TO THE DEPTH SHOWN ON THE LANDSCAPING PLANS.

TEMPORARY VEGETATIVE COVER

TEMPORARY VEGETATIVE COVER SHALL BE ESTABLISHED ON ALL UNPROTECTED AREAS THAT PRODUCE SEDIMENT, AREAS WHERE FINAL GRADING HAS BEEN COMPLETED, AND AREAS WHERE THE ESTIMATED PERIOD OF BARE SOIL EXPOSURE IS LESS THAN 12 MONTHS. TEMPORARY VEGETATIVE COVER SHALL BE APPLIED IF AREAS WILL NOT BE PERMANENTLY SEEDED BY SEPTEMBER 1.

GENERAL:

1. INSTALL REQUIRED SURFACE WATER CONTROL MEASURES.
2. REMOVE LOOSE ROCK, STONE, AND CONSTRUCTION DEBRIS FROM AREA.
3. APPLY SOIL AMENDMENTS AS FOLLOWS:
   LIME: ACCORDING TO SOIL TEST OR AT THE RATE OF 1 TONS PER ACRE.
   ROCK DUST: ACCORDING TO SOIL TEST OR AT THE RATE OF 1 TONS PER ACRE
4. UNLESS HYDROSEEDED, WORK IN LIME TO A DEPTH OF 4 INCHES WITH A DISK OR ANY SUITABLE EQUIPMENT. DO NOT WORK FINISHED COMPOST INTO THE SOIL - APPLY IT EVENLY TO SOIL SURFACE AS A SEED BED.
5. TILLAGE SHOULD ACHIEVE A REASONABLY UNIFORM LOOSE SEEDBED. WORK ON CONTOUR IF SITE IS SLOPING.

SITE PREPARATION:

1. SELECT APPROPRIATE SPECIES FOR THE SITUATION. NOTE RATES AND SEEDING DATES (SEE VEGETATIVE COVER SELECTION & MULCHING)
2. APPLY SEED UNIFORMLY ACCORDING TO THE RATE INDICATED BY BROADCASTING, DRILLING, OR HYDRAULIC APPLICATION.
3. UNLESS HYDROSEEDED, COVER RYEGRASS SEEDS WITH NOT MORE THAN 1/4 INCH OF SOIL USING SUITABLE EQUIPMENT.
4. MULCH IMMEDIATELY AFTER SEEDING IF REQUIRED. (SEE VEGETATIVE COVER SELECTION & MULCHING SPECIFICATION BELOW.) APPLY STRAW AND ANCHOR TO SLOPES GREATER THAN 3%%% OR WHERE NEEDED.

PERMANENT VEGETATIVE COVER

GENERAL:

PERMANENT VEGETATIVE COVER SHALL BE ESTABLISHED AS VARIOUS SECTIONS OF THE PROJECT ARE COMPLETED IN ORDER TO STABILIZE THE SOIL, REDUCE DOWNSTREAM DAMAGE FROM SEDIMENT AND RUNOFF, AND TO ENHANCE THE AESTHETIC NATURE OF THE SITE. IT WILL BE APPLIED TO ALL CONSTRUCTION AREAS SUBJECT TO EROSION WHERE FINAL GRADING HAS BEEN COMPLETED AND A PERMANENT COVER IS NEEDED.

SITE PREPARATION:

1. INSTALL REQUIRED SURFACE WATER CONTROL MEASURES.
2. REMOVE LOOSE ROCK, STONE, AND CONSTRUCTION DEBRIS FROM AREA.
3. PERFORM ALL PLANTING OPERATIONS PARALLEL TO THE CONTOURS OF THE SLOPE.
4. APPLY TOPSOIL AS INDICATED ELSEWHERE HEREIN.
5. APPLY SOIL AMENDMENTS AS FOLLOWS:
   LIME: ACCORDING TO SOIL TEST OR AT THE RATE OF 1 TONS PER ACRE.
   ROCK DUST: ACCORDING TO SOIL TEST OR AT THE RATE OF 1 TONS PER ACRE
6. UNLESS HYDROSEEDED, WORK IN LIME TO A DEPTH OF 4 INCHES WITH A DISK OR ANY SUITABLE EQUIPMENT. DO NOT WORK FINISHED COMPOST

VEGETATED COVER SELECTION AND MULCHING

TEMPORARY VEGETATIVE COVER:

PERENNIAL RYEGRASS 5 LBS./1,000 SQ.FT. (LOLIUM PERENNE)
DUTCH WHITE CLOVER (TRIFOLIUM REPENS) 1/4 LBS PER 1000 SF. OR 6LBS/AC.

* PERMANENT VEGETATIVE COVER:

DUTCH WHITE CLOVER 30%
BARON KENTUCKY BLUEGRASS 30%
JAMESTOWN II CHEWINGS FESCUE 20%
PALMER PERENNIAL RYEGRASS 20%

* LOFTS - "TRIPLEX GENERAL" MIX OR APPROVED EQUAL. RECOMMENDED RATE/TIME SEEDING.
SPRING SEEDING: 4/1 to 5/31
FALL SEEDING: 8/16 to 10/15

TEMPORARY MULCHING:

STRAY 70-90 LBS./1,000 SQ.FT. (TEMPORARY VEGETATIVE AREAS) WOOD FIBER IN HYDROMULCH SLURRY 25-50 LBS./1,000 SQ. FT.

ESTABLISHMENT:
1. SMOOTH AND FIRM SEEDBED WITH CULTIPACKER OR OTHER SIMILAR EQUIPMENT PRIOR TO SEEDING (EXCEPT WHEN HYDROSEEDING).
2. SELECT ADAPTED SEED MIXTURE FOR THE SPECIFIC SITUATION. NOTE RATES AND THE SEEDING DATES (SEE VEGETATIVE COVER SELECTION & MULCHING SPEC. BELOW).
3. APPLY SEED UNIFORMLY ACCORDING TO RATE INDICATED, BY BROADCASTING, DRILLING, OR HYDRAULIC APPLICATION.
4. COVER GRASS AND LEGUME SEED WITH NOT MORE THAN 1/4 INCH OF SOIL WITH SUITABLE EQUIPMENT (EXCEPT WHEN HYDROSEEDING).
5. MULCH IMMEDIATELY AFTER SEEDING, IF REQUIRED, ACCORDING TO TEMPORARY MULCHING SPECIFICATIONS. (SEE VEGETATIVE COVER SELECTION & MULCHING SPECIFICATION BELOW).
6. USE PROPER INOCULAT ON ALL LEGUME SEEDLINGS, USE FOUR (4) TIMES NORMAL RATES WHEN HYDROSEEDING.
7. USE SOD WHERE THERE IS A HEAVY CONCENTRATION OF WATER AND IN CRITICAL AREAS WHERE IT IS IMPORTANT TO GET A QUICK VEGETATIVE COVER TO PREVENT EROSION.

MAINTENANCE:

1. TEST FOR SOIL ACIDITY EVERY THREE (3) YEARS AND LIME AS REQUIRED.

EROSION CHECKS

GENERAL:

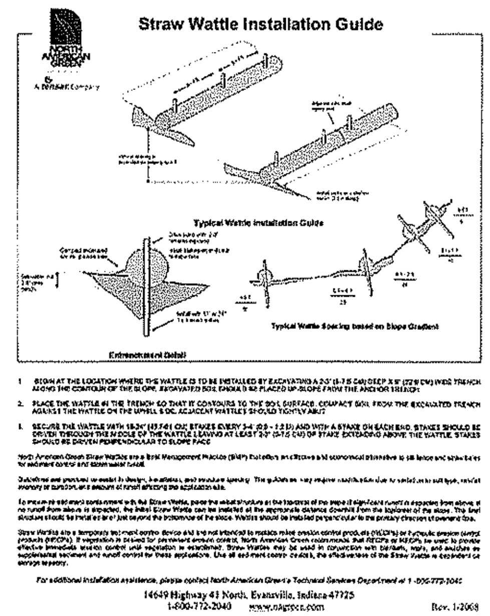
1. TEMPORARY PERVIOUS BARRIERS USING BALES OF HAY OR STRAW, HELD IN PLACE WITH STAKES DRIVEN THROUGH THE BALES AND INTO THE GROUND OR GEOTEXTILE FABRIC FASTENED TO A FENCE POST AND BURIED INTO THE GROUND, SHALL BE INSTALLED AND MAINTAINED AS REQUIRED TO CHECK EROSION AND REDUCE SEDIMENTATION.

CONSTRUCTION:

1. BALES SHOULD BE PLACED IN A ROW WITH ENDS TIGHTLY ABUTTING THE ADJACENT BALES.
2. EACH BALE SHALL BE EMBEDDED INTO THE SOIL A MINIMUM OF FOUR (4") INCHES.
3. BALES SHALL BE SECURELY ANCHORED IN PLACE BY WOOD STAKES OR REINFORCEMENT BARS DRIVEN THROUGH THE BALES AND INTO THE GROUND. THE FIRST STAKE IN EACH BALE SHALL BE ANGLED TOWARD THE PREVIOUSLY LAID BALE TO FORCE BALES TOGETHER.
4. GEOTEXTILE FABRIC SHALL BE SECURELY ANCHORED AT THE TOP OF A THREE FOOT (3') HIGH FENCE AND BURIED A MINIMUM OF FOUR INCHES (4") TO THE SOIL. SEAMS BETWEEN SECTIONS OF FILTER FABRIC SHALL OVERLAP A MINIMUM OF TWO FEET (2').

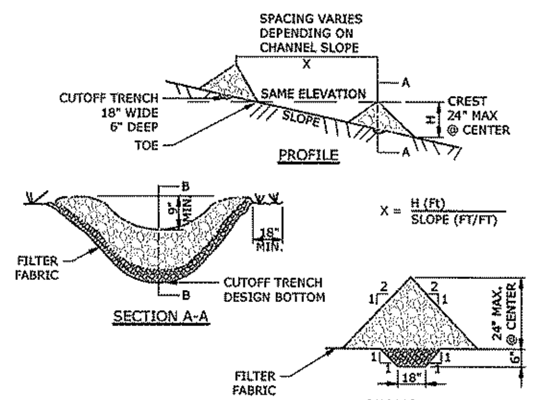
INSTALLATION AND MAINTENANCE:

1. BALED HAY EROSION BARRIERS SHALL BE INSTALLED AT ALL STORM SEWER INLETS.
2. BALED HAY EROSION BARRIERS AND GEOTEXTILE FENCE SHALL BE INSTALLED AT THE LOCATION INDICATED ON THE PLAN AND IN ADDITIONAL AREAS AS MAY BE DEEMED APPROPRIATE DURING CONSTRUCTION.
3. ALL EROSION CHECKS SHALL BE MAINTAINED UNTIL ADJACENT AREAS ARE STABILIZED.
4. INSPECTION SHALL BE FREQUENT (AT MINIMUM MONTHLY AND BEFORE AND AFTER HEAVY RAIN) AND REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED.
5. EROSION CHECKS SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFULNESS SO AS NOT TO BLOCK OR IMPEDE STORMWATER FLOW OR DRAINAGE.



STRAW WATTLE (SW)

NOT TO SCALE

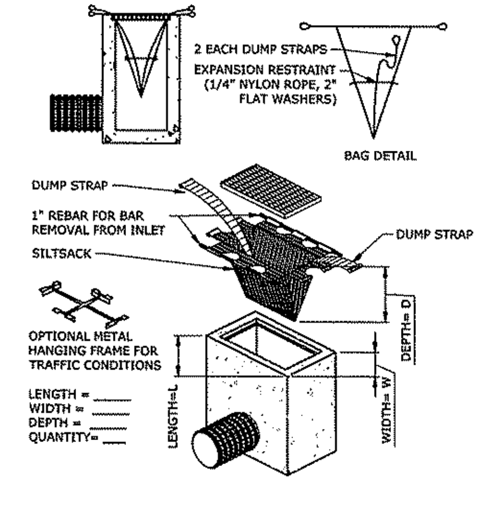


NOTES:

1. STONE WILL BE PLACED ON A FILTER FABRIC FOUNDATION TO THE LINES, GRADES AND LOCATIONS SHOWN IN THE PLAN.
2. SET SPACING OF CHECK DAMS TO ASSUME THAT THE ELEVATIONS OF THE CREST OF THE DOWNSTREAM DAM IS AT THE SAME ELEVATION OF THE TOE OF THE UPSTREAM DAM.
3. EXTEND THE STONE A MINIMUM OF 1.5 FEET BEYOND THE DITCH BANKS TO PREVENT CUTTING AROUND THE DAM.
4. PROTECT THE CHANNEL DOWNSTREAM OF THE LOWEST CHECK DAM FROM SCOUR AND EROSION WITH STONE OR LINER AS APPROPRIATE.
5. ENSURE THAT CHANNEL APPURTENANCES SUCH AS CULVERT ENTRANCES BELOW CHECK DAMS ARE NOT SUBJECT TO DAMAGE OR BLOCKAGE FROM DISPLACED STONE. MAXIMUN DRAINAGE AREA 2 ACRES.

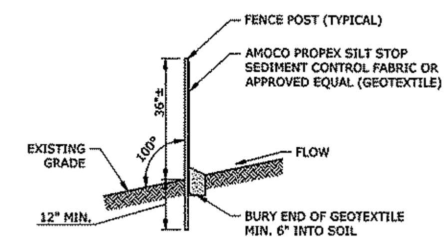
CHECK DAM

NOT TO SCALE



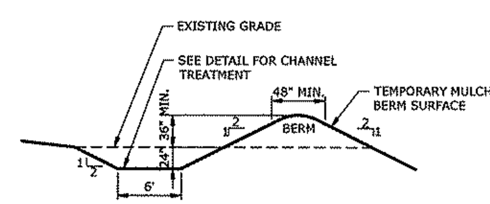
INLET SEDIMENT CONTROL DEVICE

NOT TO SCALE



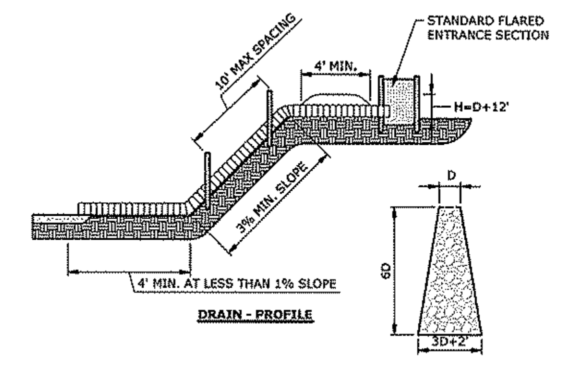
SEDIMENT FILTER FENCE

NOT TO SCALE



TEMPORARY DIVERSION BERM AND SWALE

NOT TO SCALE

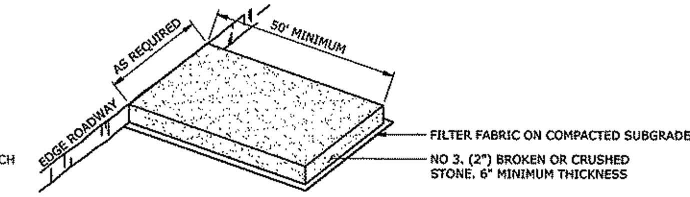


NOTES

1. THE PIPE SLOP DRAIN SHALL HAVE A SLOPE OF 3% OR STEEPER.
2. TOP OF THE EARTH DIKE OVER THE INLET PIPE AND ALL DIKES CARRYING WATER TO THE PIPE SHALL BE AT LEAST 1 FOOT HIGHER THAN THE TOP OF THE PIPE.
3. ADD 0.5 FOOT TO DIKE HEIGHT FOR SETTLEMENT.
4. SOIL AROUND AND UNDER THE SLOPE PIPE SHALL BE HAND TEMPERED IN 4-INCH LIFTS
5. THE PIPE SHALL BE PLASTIC OR CORRUGATED METAL PIPE WITH WATERTIGHT 12-INCH WIDE CONNECTING BANDS OR FLANGE CONNECTIONS
6. PIPE ANCHORS TO BE PLACED AT 10-FOOT MAXIMUM SPACING.
7. RIPRAP TO BE 6 INCHES IN A LAYER AT LEAST 12 INCHES THICKNESS AND PRESSED INTO THE SOIL.
8. PERIODIC INSPECTION AND REQUIRED MAINTENANCE MUST BE PROVIDED AFTER EACH RAIN EVENT.

TEMPORARY PIPE SLOPE DRAIN

NOT TO SCALE



NOTES:

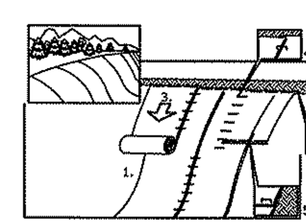
1. CONSTRUCTION ENTRANCE PAD SHALL BE INSTALLED AND MAINTAINED DURING OPERATIONS WHICH GENERATE VEHICULAR TRACKING OF MUD.

CONSTRUCTION ENTRANCE PAD

NOT TO SCALE

EROSION CONTROL MAINTENANCE INTERVALS

EROSION CONTROL MEASURE	CONTROL OBJECTIVE	INSPECTION/MAINTENANCE	FAILURE INDICATORS	REMOVAL
SILT FENCE (SF) HAYBALE (HB) STRAW WATTLE (SW) (RELATED: IP, STK)	- INTERCEPT, AND REDIRECT/DETAIN SMALL AMOUNTS OF SEDIMENT FROM SMALL DISTURBED AREAS. - DECREASE VELOCITY OF SHEET FLOW. - PROTECT SENSITIVE SLOPES OR SOILS FROM EXCESSIVE WATER FLOW.	INSPECT AT LEAST ONCE A WEEK AND WITHIN 24 HOURS OF THE END OF A STORM WITH A RAINFALL OF 0.5 INCHES OR MORE. ACCUMULATED SEDIMENT MUST BE REMOVED ONCE ITS DEPTH IS EQUAL TO ½ THE TRENCH HEIGHT. INSPECT FREQUENTLY DURING PUMPING OPERATIONS IF USED FOR DEWATERING OPERATIONS.	- PHYSICAL DAMAGE OR DECOMPOSITION - EVIDENCE OF OVERTOPPED OR UNDERCUT FENCE - EVIDENCE OF SIGNIFICANT FLOWS EVADING CAPTURE - REPETITIVE FAILURE	SILT FENCE MAY BE REMOVED AFTER UPHILL AND SENSITIVE AREAS HAVE BEEN PERMANENTLY STABILIZED.
CONSTRUCTION ENTRANCE (CE)	- REDUCE THE TRACKING OF SEDIMENT OFF-SITE ONTO PAVED SURFACES.	INSPECT AT THE END OF EACH WORK DAY AND IMMEDIATELY REPAIR DAMAGES. PERIODIC ADDITION OF STONE, OR LENGTHENING OF ENTRANCE MAY BE REQUIRED AS CONDITIONS DEMAND. ALL SEDIMENT SPILLED, DROPPED, WASHED, OR TRACKED ONTO PAVED SURFACES AS A RESULT OF INEFFICIENCY OF CONSTRUCTION ENTRANCE SHALL BE IMMEDIATELY REMOVED.	- SEDIMENT IN ROADWAY ADJACENT TO SITE	CONSTRUCTION ENTRANCE MAY BE REMOVED ONCE THE SITE HAS BEEN PERMANENTLY STABILIZED, AND ALL OTHER SECTIONS OF ROADWAY HAVE BEEN PERMANENTLY PAVED.
INLET PROTECTION (IP)	- PROHIBIT SILT IN CONSTRUCTION-RELATED RUNOFF FROM ENTERING STORM DRAINAGE SYSTEM.	INSPECT AFTER ANY RAIN EVENT. IF FILTER BAG INSIDE CATCH BASIN CONTAINS MORE THAN 6' OF SEDIMENT, REMOVE SEDIMENT FROM BAG. CHECK SURROUNDING SILT FENCE AND HAY BALES PER NOTED ABOVE.	- RIPPED BAG - FAILED HAY BALES / SILT FENCE - SIGNIFICANT SILT PRESENCE IN STORM DRAINAGE SYSTEM OUTFLOW.	INLET PROTECTION MAY BE REMOVED ONCE THE SITE HAS BEEN PERMANENTLY STABILIZED, AND ALL SECTIONS OF ROADWAY HAVE BEEN PERMANENTLY PAVED.
STOCKPILE PROTECTION (STK)	- RETAIN SOIL STOCKPILE IN LOCATIONS SPECIFIED, AND REDUCE WATER-TRANSPORT.	INSPECT SILT FENCE AT THE END OF EACH WORK DAY AND IMMEDIATELY REPAIR DAMAGES. PERIODIC REINFORCEMENT OF SILT FENCE, OR ADDITION OF HAY BALES MAY BE NECESSARY.	- EVIDENCE OF STOCK PILE DIMINISHING DUE TO RAIN EVENTS - FAILURE OF SILT FENCE	STOCKPILE PROTECTION MAY BE REMOVED ONCE THE STOCKPILE IS USED OR REMOVED.
TEMPORARY SEDIMENT TRAP (TST)	- DETAIN SEDIMENT-LADEN RUNOFF FROM SMALL DISTURBED AREAS LONG ENOUGH TO ALLOW A MAJORITY OF THE SEDIMENT TO SETTLE OUT.	INSPECT AT LEAST ONCE A WEEK AND WITHIN 24 HOURS OF THE END OF A STORM WITH A RAINFALL OF 0.5 INCHES OR MORE. STONE OUTLET SHOULD BE AT LEAST 1 FOOT BELOW CREST OF EMBANKMENT. SEDIMENT MUST BE REMOVED WHEN ACCUMULATION REACHES ½ OF THE REQUIRED WET STORAGE.	- TURBID WATER - EXCESSIVE SEDIMENT ACCUMULATION - OVERTOPPING EVIDENCE	TST MAY BE REMOVED ONCE THE CONTRIBUTING DRAINAGE AREA IS PERMANENTLY STABILIZED.
TEMPORARY DIVERSION BERM/SWALE (DB)	- MINIMIZE VELOCITY AND CONCENTRATION OF SHEET FLOW ACROSS CONSTRUCTION SITE TO A SEDIMENT TRAPPING FACILITY. - DIVERT WATER ORIGINATING FROM UNDISTURBED AREA AWAY FROM CONSTRUCTION.	WHEN LOCATED WITHIN CLOSE PROXIMITY TO ONGOING CONSTRUCTION ACTIVITIES, INSPECT AT THE END OF EACH WORK DAY AND IMMEDIATELY REPAIR DAMAGES. OTHERWISE INSPECT AT LEAST ONCE A WEEK AND WITHIN 24 HOURS OF THE END OF A STORM WITH A RAINFALL OF 0.5 INCHES OR MORE. REPAIR THE TEMPORARY MEASURE AND ANY OTHER ASSOCIATED MEASURES WITHIN 24 HOURS.	- PHYSICAL DAMAGE - EXCESSIVE SCOURING/EROSION - REPETITIVE FAILURE	TEMPORARY DIVERSIONS MAY BE REMOVED ONCE CONSTRUCTION HAS CEASED AND THE CONTRIBUTING DRAINAGE AREA HAS BEEN PERMANENTLY STABILIZED.



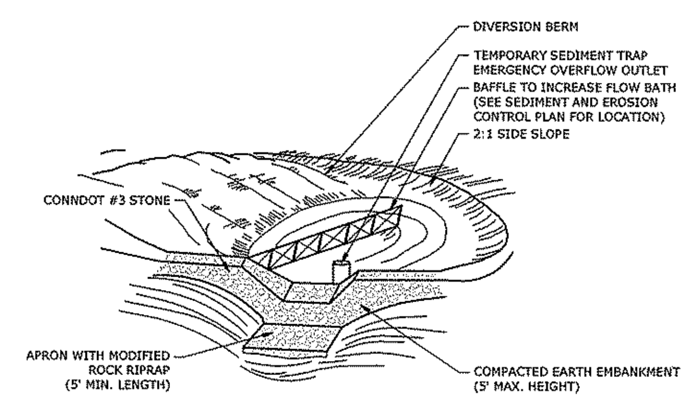
NOTES:

1. PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING APPLICATION OF LIME, FERTILIZER, AND SEED. NOTE: WHEN USING SCC225, DO NOT SEED PREPARED AREA. SCC225 MUST BE INSTALLED WITH PAPER SIDE DOWN.
2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE BLANKET IN A 6" DEEP BY 6" WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.
3. ROLL THE BLANKETS DOWN THE SLOPE IN THE DIRECTION OF THE WATER FLOW.
4. THE EDGES OF PARALLEL BLANKETS MUST BE STAPLED WITH APPROXIMATELY 2" OVERLAP.
5. WHEN BLANKETS MUST BE SPLICED DOWN THE SLOPE, PLACE BLANKETS END OVER END (SHINGLE STYLE) WITH APPROXIMATELY 6" OVERLAP. STAPLE THROUGH OVERLAP AREA, APPROXIMATELY 12" APART.

REFER TO GENERAL STAPLE PATTERN GUIDE IN NORTH AMERICAN GREEN CATALOG FOR CORRECT STAPLE PATTERN RECOMMENDATIONS FOR SLOPE INSTALLATIONS.

APPLICATION OF EROSION CONTROL BLANKET ON SLOPES

NOT TO SCALE



NOTES:

1. REFER TO SEDIMENT & EROSION CONTROL PLAN FOR APPROXIMATE DIMENSIONS AND REQUIRED VOLUME.

TEMPORARY SEDIMENT TRAP

NOT TO SCALE

SLR
99 REALTY DRIVE
CHESHIRE, CT 06410
203.271.1773
SLRCONSULTING.COM

DESCRIPTION	DATE	BY

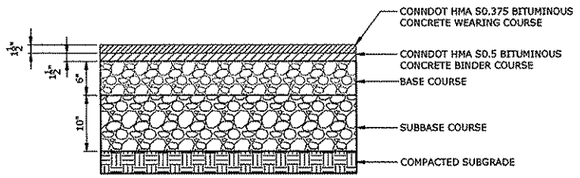
SEDIMENT AND EROSION CONTROL DETAILS AND SPECIFICATIONS

BARBER COVE

32 & 36 IRON HORSE BOULEVARD
SIMSBURY, CONNECTICUT

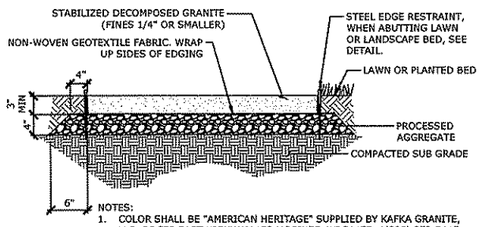
DESIGNED	DRAWN	CHECKED
AWG	AWG	TD

SCALE: AS NOTED
DATE: MAY 28, 2021
PROJECT NO.: 17126.00001
SHEET NO.: 08 OF 12
SHEET NAME: SE-2



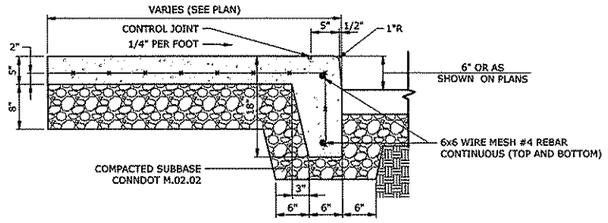
NOTE:
1. DEPTH OF BASE & SUB BASE MATERIALS AS PER GEOTECHNICAL REPORT

STANDARD DUTY BITUMINOUS CONCRETE
NOT TO SCALE



NOTES:
1. COLOR SHALL BE "AMERICAN HERITAGE" SUPPLIED BY KAFKA GRANITE, LLC. OF 550 EAST HIGHWAY 153 MOSINEE, WI 54455. 1(800) 852-7415
2. PROVIDE PRODUCT SAMPLE FOR APPROVAL BY LANDSCAPE ARCHITECT

STABILIZED DECOMPOSED GRANITE (STONE DUST TRAIL)
NOT TO SCALE

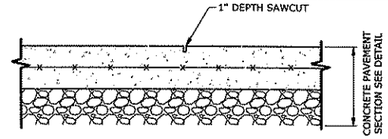


NOTES:
1. CONCRETE TO MEET CONNDOT MATERIAL M.03.02 PCC05562. 1/2" EXPANSION JOINT AT INTERVALS NOT TO EXCEED 20'. EXPANSION JOINT TO RUN TO THE FACE OF CURB.
2. TO BE USED IN ALL LOCATIONS WHERE PROPOSED CONCRETE WALKS ABUT PROPOSED CONCRETE CURB.

INTEGRAL CONCRETE SIDEWALK CURB
NOT TO SCALE

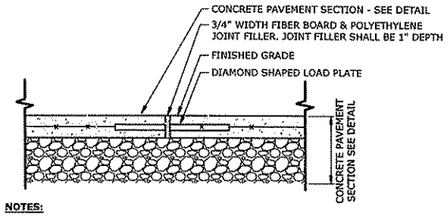
NOTES:
1. CONCRETE TO BE 4000 PSI WITH 5%-7% AIR ENTRAINMENT AT 28 DAYS. 3/4" EXPANSION JOINT AT INTERVALS NOT TO EXCEED 20'. EXPANSION JOINT TO RUN TO THE FACE OF CURB.
2. EXPANSION JOINT AT INTERVALS NOT TO EXCEED 20'. EXPANSION JOINT TO RUN TO THE FACE OF CURB.
3. TO BE USED IN ALL LOCATIONS WHERE CONCRETE SIDEWALK ABUTS ASPHALT.

FLUSH INTEGRAL CONCRETE WALK & CURB
NOT TO SCALE



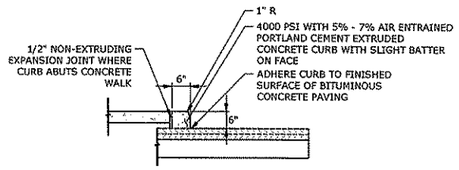
NOTES:
1. PROVIDE PREFORMED EXPANSION JOINT AT ALL EXPANSION CONTROL JOINT, SAWCUT, AND OTHER LOCATIONS WHERE CONCRETE ABUTS EXISTING CONCRETE.

SCORE JOINT - SAWCUT
NOT TO SCALE

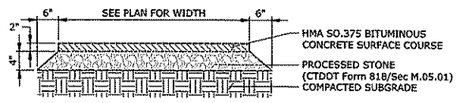


NOTES:
1. PROVIDE PREFORMED EXPANSION JOINT AT ALL CONSTRUCTION JOINT, SAWCUT, AND OTHER LOCATIONS WHERE CONCRETE ABUTTS EXISTING CONCRETE.

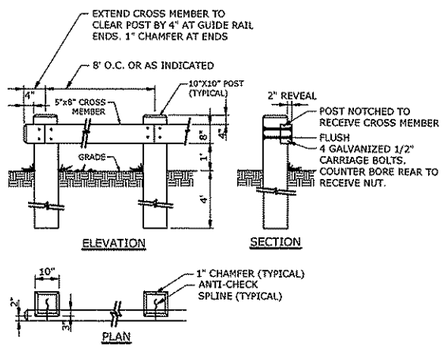
CEMENT CONCRETE EXPANSION JOINT
NOT TO SCALE



EXTRUDED CONCRETE CURB
NOT TO SCALE



BITUMINOUS CONCRETE WALKS
NOT TO SCALE



TIMBER GUIDE RAIL FACEMOUNT 10x10 POSTS
NOT TO SCALE

SOLID STATE AREA LIGHTING

COLONIAL SERIES-LED

SPECIFICATIONS

HOUSING
Durable, corrosion resistant, heavy cast low copper aluminum assembly (A356 alloy, <0.2% copper). Aluminum wall thickness is .188", traditional styling of the housing provided with cast aluminum housing top hinges for easy access. All hardware is stainless steel.

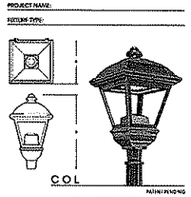
LENS/OPTICAL MODULE
Low copper A356 alloy (<.2% copper) cast aluminum housing. Integrated door, tempered 3/16" glass lens sealed with a continuous silicone gasket protects emitters (LED's) and onsite Refractor-Prism optics and seals the module from water intrusion and environmental contaminants. LED's are available in standard Neutral White (4000K), or optional Cool White (5000K) or Warm White (3000K). Each emitter is optically controlled by a Refractor-Prism injection molded from NTP acrylic (3 types per module: one from 0° - 59°; one from 60° - 65°, one from 65° - 72°). Each Refractor-Prism has indexing pins for aiming and is secured to an optical plate made of matte black anodized aluminum. The optical plate locates every Refractor-Prism over an emitter. Refractor-Prisms are secured to the optical plate with a UV curing adhesive. The Refractor-Prisms are designed to produce IES Type II, III, IV, and VS&Q distributions. The entire VLED Optical Module is field available in 90° increments. Both module and drivers are factory wired using water resistant, insulated cold. Lens, module and drivers are field replaceable.

LED EMITTERS
High Output LED's are driven at 350mA for nominal 1 Watt output each or 525mA (COL121 and COL18 only) for nominal 1.5 Watt output each. LED's are available in standard Neutral White (4000K), or optional Cool White (5000K) or Warm White (3000K). Consult Factory for other LED options.

DRIVERS
UL and CUL recognized High Power Factor, Constant Current LED drivers operate on input voltages from 120-277VAC, 50/60Hz. Consult Factory for 347-480VAC. Driver is mechanically fastened to a retaining bracket. Main power quick disconnect provided. Driver has a minimum 4KV of internal surge protection, 10KV & 20KV Surge Protector optional. Dimming and High-Low Driver options available.

FINISH
Electrostatically applied TGIC Polyester Powder Coat on substrate prepared with 20 PSI power wash at 160°F. Four step iron phosphate pretreatment for protection and paint adhesion. 400°F bake for maximum hardness and durability. Textured finish is standard.

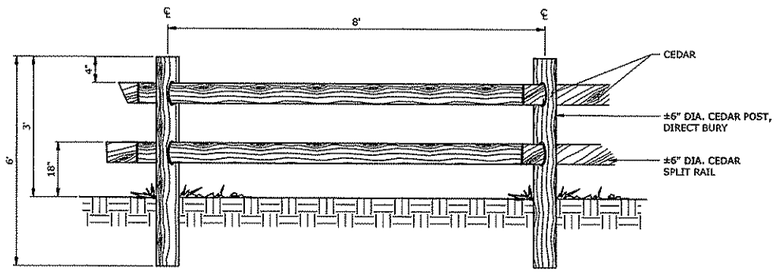
Sun Valley Lighting



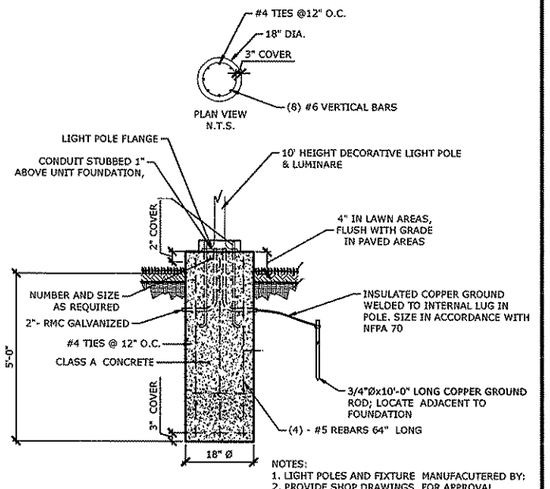
FIXTURE	A	B
COL21-LED	21"	10"
COL18-LED	18"	10"
COL12-LED	12"	10"

SUN VALLEY LIGHTING

SIGHT LIGHTING
NOT TO SCALE



SPLIT RAIL FENCE
NOT TO SCALE



NOTES:
1. LIGHT POLES AND FIXTURE MANUFACUTERED BY:
2. PROVIDE SHOP DRAWINGS FOR APPROVAL

TYP. LIGHT POLE FOUNDATION
NOT TO SCALE

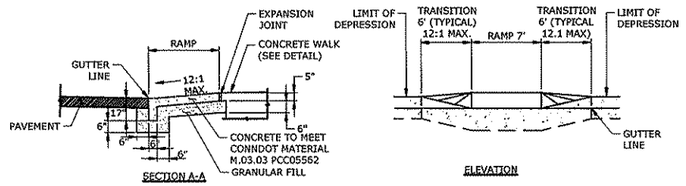
SLR
99 REALTY DRIVE
CHESHIRE, CT 06410
203.271.1773
SLRCONSULTING.COM

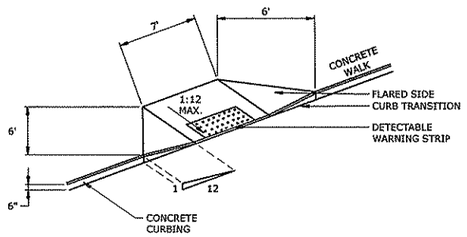
DESCRIPTION	DATE	BY

SITE DETAILS
BARBER COVE
32 & 36 IRON HORSE BOULEVARD
SIMSBURY, CONNECTICUT

AWG	AWG	TD
DESIGNED	DRAWN	CHECKED

AS NOTED
SCALE
MAY 28, 2021
DATE
17126.00001
PROJECT NO.
09 OF 12
SHEET NO.
SD-1
SHEET NAME



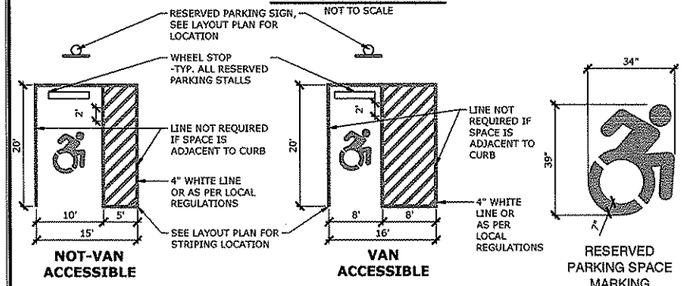


NOTES:

1. ALL INDICATED SLOPES ARE MAXIMUMS

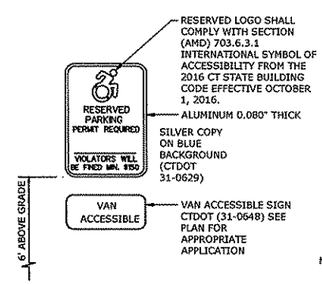
PEDESTRIAN RAMP

NOT TO SCALE



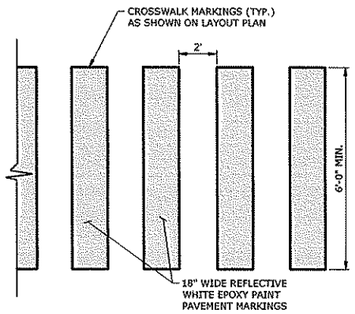
RESERVED PARKING

NOT TO SCALE



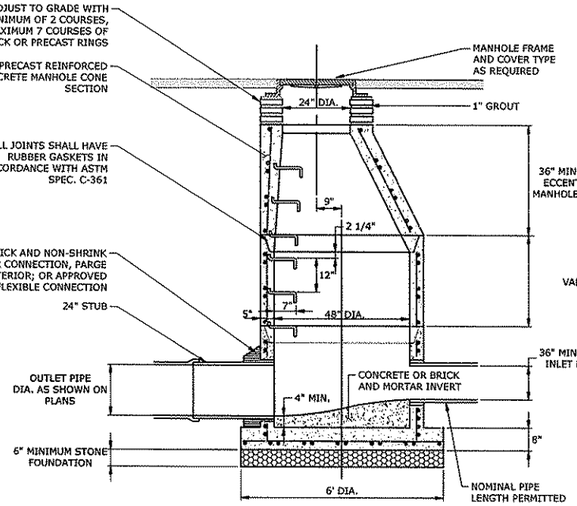
RESERVED PARKING SIGN

NOT TO SCALE



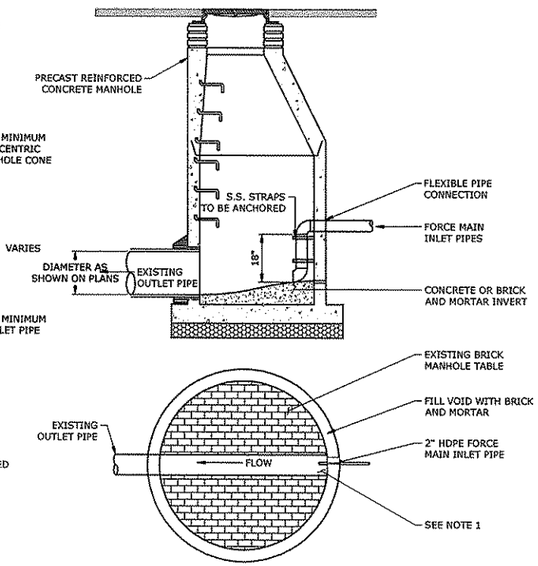
WHITE PAINTED CROSSWALK

NOT TO SCALE



PRECAST CONCRETE SANITARY MANHOLE

NOT TO SCALE

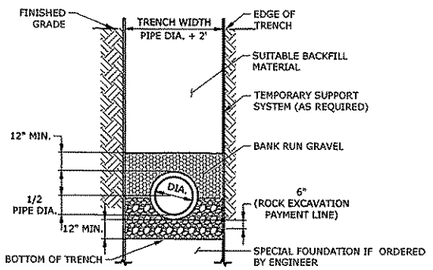


NOTES:

1. INVERT TO BE REBUILT UNDER SUPERVISION OF ENGINEER. A 24 HOUR ADVANCED NOTIFICATION IS REQUIRED FOR ALL INSPECTIONS.
2. NO OUTSIDE PIPE DROPS WILL BE ALLOWED.

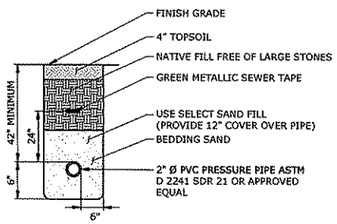
FORCE MAIN CONNECTION TO SEWER MANHOLE

NOT TO SCALE



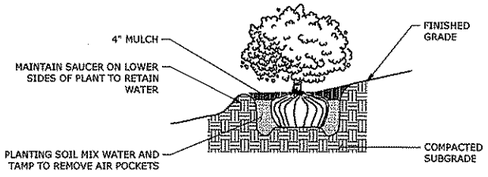
SANITARY SEWER TRENCH

NOT TO SCALE



SANITARY FORCE MAIN TRENCH

NOT TO SCALE

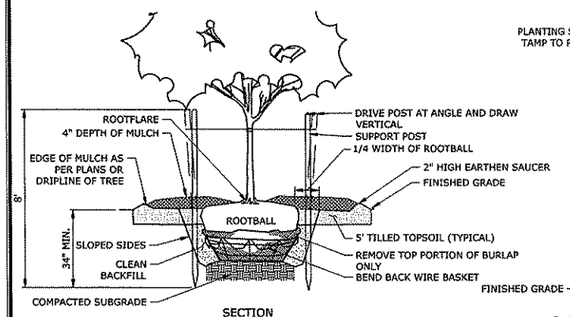


NOTES:

1. UNLESS OTHERWISE DIRECTED SHREDDED MULCH SHALL BE PLACED TO A LIMIT OF ONE FOOT BEYOND THE CENTER OF THE OUTERMOST SHRUBS IN SHRUB BED.

SHRUB PLANTING

NOT TO SCALE

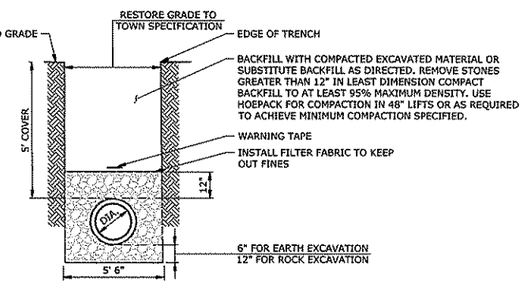


NOTE:

1. SUPPORT STAKES SHALL BE REMOVED BY THE CONTRACTOR ONE YEAR AFTER INSTALLATION.

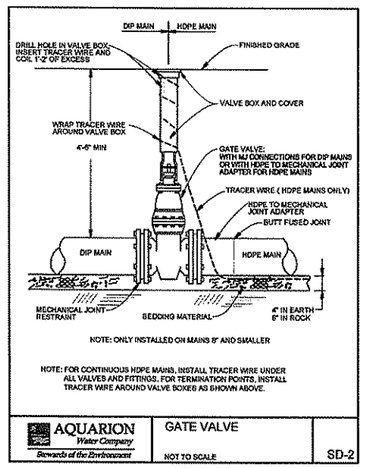
TREE PLANTING

NOT TO SCALE

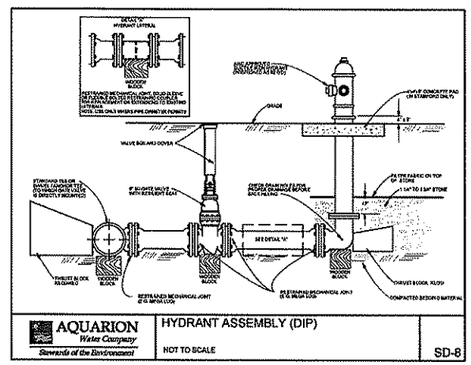


WATER MAIN TRENCH

NOT TO SCALE



AQUARION Water Company — Stewards of the Environment | GATE VALVE | NOT TO SCALE | SD-2



AQUARION Water Company — Stewards of the Environment | HYDRANT ASSEMBLY (DIP) | NOT TO SCALE | SD-8

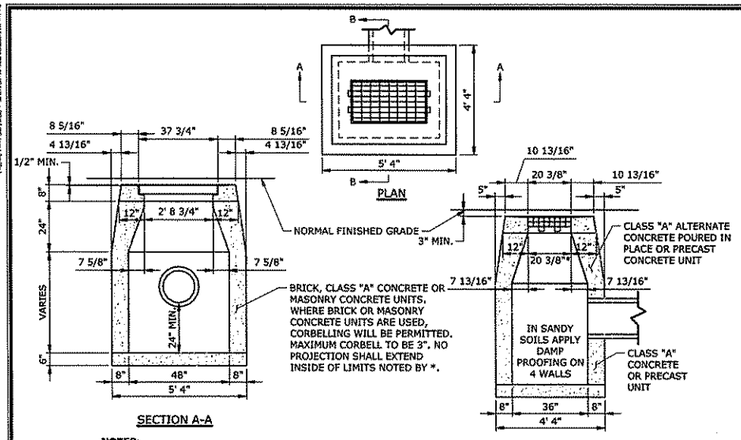
SLR
99 REALTY DRIVE
CHESHIRE, CT 06410
203.271.1773
SLRCONSULTING.COM

DESCRIPTION	DATE	BY

SITE DETAILS
BARBER COVE
32 & 36 IRON HORSE BOULEVARD
SIMSBURY, CONNECTICUT

AWG	AWG	TD
DESIGNED	DRAWN	CHECKED

AS NOTED — SCALE
MAY 28, 2021 — DATE
17126.00001 — PROJECT NO.
10 OF 12 — SHEET NO.
SD-2 — SHEET NAME

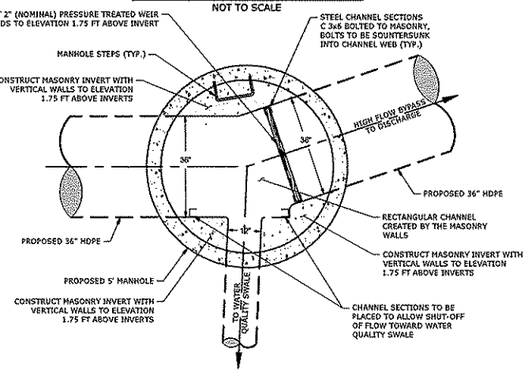


NOTES:

1. WHERE PRECAST CONCRETE UNIT IS USED FOR SUMP, THE TOP OF THE UNIT SHALL BE AT LEAST 6" BELOW THE BOTTOM OF THE PIPE OUTLETTING FROM THE CATCH BASIN.

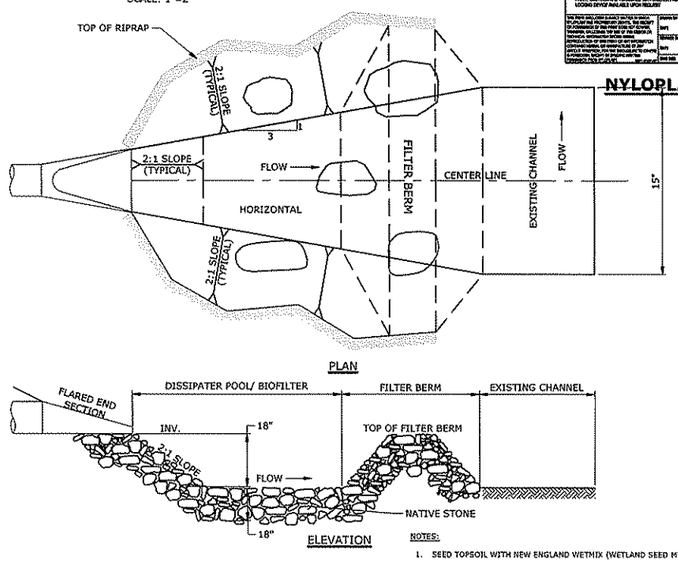
TYPE "C-L" CATCH BASIN

NOT TO SCALE



STORM MANHOLE WITH DIVERTER WEIR

SCALE: 1"=2'

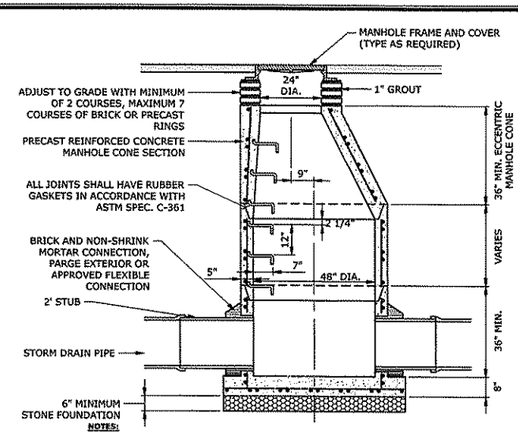


NOTES:

1. SEED TOPSOIL WITH NEW ENGLAND WETMIX (WETLAND SEED MIX)

RIPRAP ENERGY DISSIPATER WITH VEGETATED BIOFILTER

NOT TO SCALE

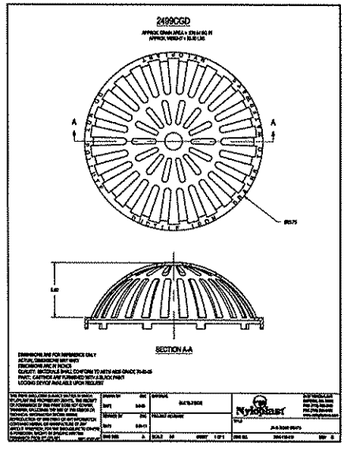


NOTES:

1. 5' OR 6' DIAMETER PRECAST BASES MAY BE REQUIRED DUE TO SIZE OR NUMBER OF PIPES AT THE MANHOLE. PRECAST REDUCERS WILL BE PLACED ABOVE THE 5' OR 6' BASES AS DIRECTED BY THE ENGINEER. WALL THICKNESS TO INCREASE BY 1" FOR EACH 1'-0" OF INSIDE DIAMETER.

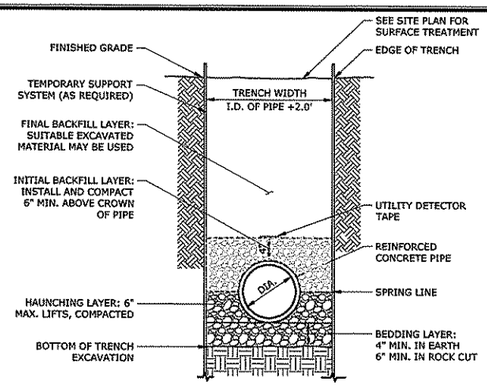
PRECAST CONCRETE STORM DRAINAGE MANHOLE

NOT TO SCALE



NYLOPLAST 24" DOME GRATE

NOT TO SCALE

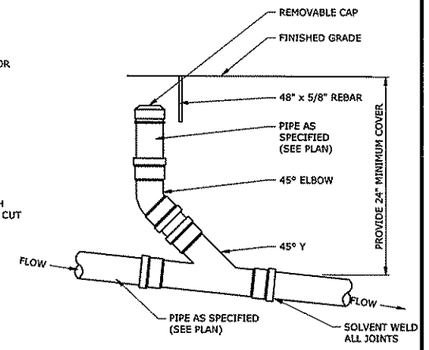


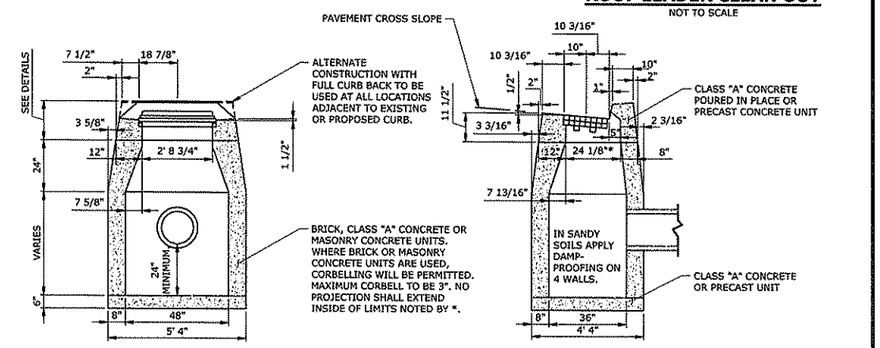
NOTES:

1. BACKFILL MATERIAL USED IN BEDDING, HAUNCHING, AND INITIAL BACKFILL LAYERS SHALL BE 3/4" CRUSHED STONE.
2. PAYMENT LIMIT FOR ROCK IN TRENCH TO BE PIPE DIAMETER + 3.0'

STORM DRAINAGE TRENCH

NOT TO SCALE





ROOF LEADER CLEAN OUT

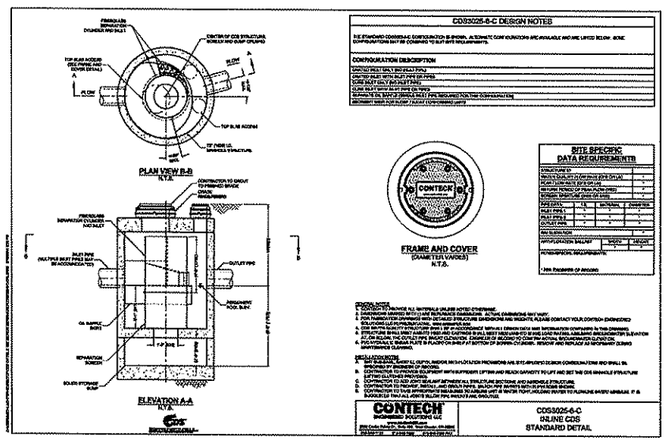
NOT TO SCALE

NOTES:

1. WHEN CATCH BASIN IS SET IN CONCRETE PAVEMENT, THE 1/2" SLOPE ON THE TOP SURFACE SHALL BE CHANGED TO MATCH ADJOINING PAVEMENT.
2. WHERE PRECAST CONCRETE UNIT IS USED FOR SUMP, THE TOP OF THE UNIT SHALL BE AT LEAST 6" BELOW THE BOTTOM OF THE PIPE OUTLET FROM THE CATCH BASIN.

TYPE "C" CATCH BASIN

NOT TO SCALE



WATER QUALITY UNIT

NOT TO SCALE

24" LOW PROFILE HS-20 LEACHING GALLEY

GALLEY DESIGN SPECIFICATIONS CONFORMS TO LATEST: ASTM DESIGNATION C913

NOTES:

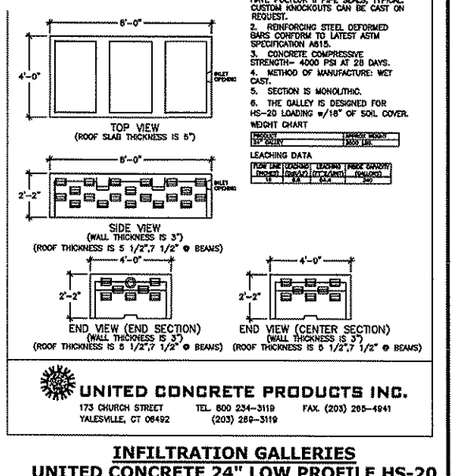
1. PIPE INLET AND OUTLET LOCATIONS HAVE POSITION II PIPE SEALS, TYPICAL. CUSTOM KNOCKOUTS CAN BE CAST ON REQUEST.
2. REINFORCING STEEL DEFORMED BARS CONFORM TO LATEST ASTM SPECIFICATION A615.
3. CONCRETE COMPRESSIVE STRENGTH– 4000 PSI AT 28 DAYS.
4. METHOD OF MANUFACTURE: WET CAST.
5. SECTION IS MONOLITHIC.
6. THE GALLEY IS DESIGNED FOR HS-20 LOADING w/18" OF SOIL COVER.

WEIGHT CHART

PRODUCT	APPROX. WEIGHT
12" GALLEY	3600 LBS.

LEACHING DATA

FLOW LINE (INCHES)	LEACHING (SQ.FT.)	LEACHING (CY/LINEAR FT.)	PERIMETER (SQ.FT.)	PERIMETER (CY/LINEAR FT.)
12	8.8	0.44	240	



UNITED CONCRETE PRODUCTS INC.
173 CHURCH STREET YALESVILLE, CT 06492
TEL. 800 234-3119 (203) 288-3119
FAX. (203) 265-4941

INFILTRATION GALLERIES UNITED CONCRETE 24" LOW PROFILE HS-20 LEACHING CHAMBER

NOT TO SCALE

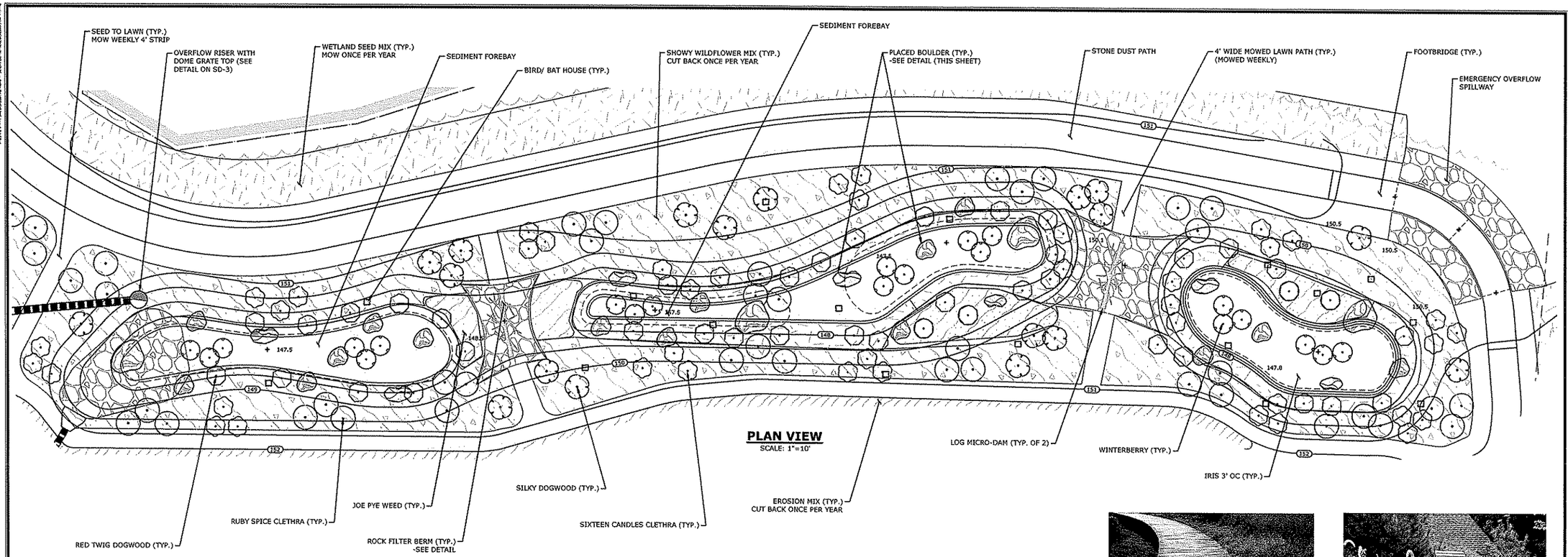
SLR
91 REALTY DRIVE
CHESHIRE, CT 06410
203.271.1773
SLRCONSULTING.COM

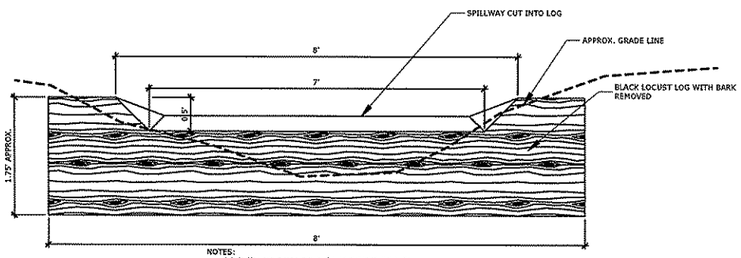
DESCRIPTION	DATE	BY

SITE DETAILS
BARBER COVE
32 & 36 IRON HORSE BOULEVARD
SIMSBURY, CONNECTICUT

AWG DESIGNED	AWG DRAWN	TD CHECKED

SCALE: AS NOTED
DATE: MAY 28, 2021
PROJECT NO.: 17126.00001
SHEET NO.: 11 OF 12
SHEET NAME: SD-3





NOTES:
1. LOG IS TO HAVE THE ENDS FULLY BURIED AND THE REMAINDER PARTIALLY BURIED TO ANCHOR IN PLACE.
2. SMOOTH ROUNDED EDGE RIVER STONE IS TO BE PLACED UNDER THE LOG MICRO-DAM AS SHOWN ON PLAN.

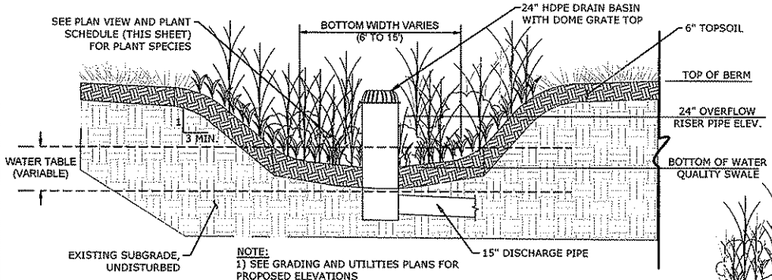
LOG MICRO-DAM
NOT TO SCALE

PLANT SCHEDULE WET WATER QUALITY SWALE

SHRUBS	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONT.
CR	90	Clethra alnifolia `Ruby Spice`	Ruby Spice Summersweet	---	#3
CS	93	Clethra alnifolia `Sixteen Candles`	Sixteen Candles Summersweet	---	#3
CA	53	Cornus amomum	Silky Dogwood	---	#3
CR2	42	Cornus sericea	Red Twig Dogwood	---	#3
IW	83	Ilex verticillata	Winterberry	---	#3
GROUND COVERS	**QTY**	**BOTANICAL NAME**	**COMMON NAME**	**CONT**	**SPACING**
EM	67	Eutrochium fistulosum	Hollow Joe-pyeweed	plug	36" o.c.

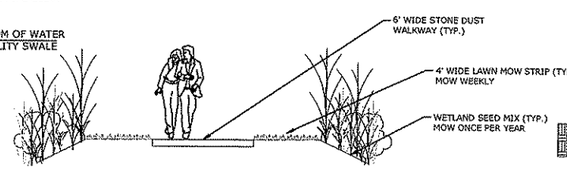
CONCEPT PLANT SCHEDULE WET WATER QUALITY SWALE

	NEW ENGLAND WETMIX (WETLAND SEED MIX) BY NEW ENGLAND WETLAND PLANTS -	10,208 sf
	NEW ENGLAND SHOWY WILDFLOWER MIX BY NEW ENGLAND WETLAND PLANTS -	19,383 sf
	WETLAND BASIN PLUGS ALL PLUGS PLANTED 18" O.C. 20% Carex lanuginosa 20% Iris pseudacorus 20% Iris versicolor 20% Acorus calamus 20% Scirpus americanus -	1,653 sf

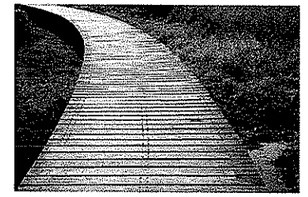


NOTE:
1) SEE GRADING AND UTILITIES PLANS FOR PROPOSED ELEVATIONS

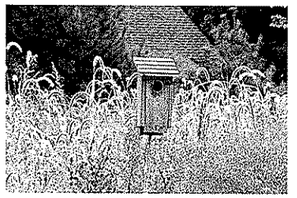
WATER QUALITY SWALE - WET SWALE TYPICAL SECTION
NOT TO SCALE



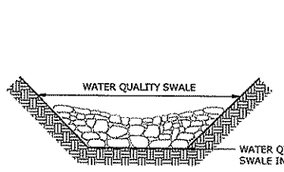
TYPICAL STONEDUST WALKWAY
NOT TO SCALE



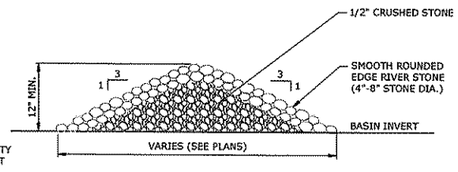
TYPICAL FOOT BRIDGE SAMPLE
NOT TO SCALE



BIRD/BAT HOUSE SAMPLE
NOT TO SCALE

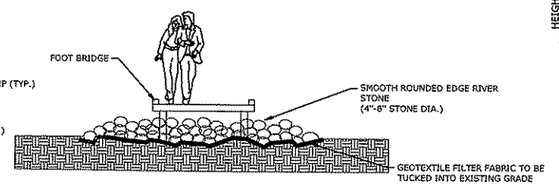


ELEVATION

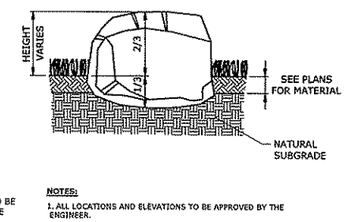


CROSS SECTION

ROCK FILTER BERM
NOT TO SCALE



EMERGENCY OVERFLOW SPILLWAY
NOT TO SCALE



NOTES:
1. ALL LOCATIONS AND ELEVATIONS TO BE APPROVED BY THE ENGINEER.

PLACED BOULDER
NOT TO SCALE

SLR
91 REALTY DRIVE
CHESHIRE, CT 06410
203.271.1773
SLRCONSULTING.COM

DESCRIPTION	DATE	BY

WET WATER QUALITY SWALE ENLARGEMENT
BARBER COVE
32 & 36 IRON HORSE BOULEVARD
SIMSBURY, CONNECTICUT

AWG	AWG	TD
DESIGNED	DRAWN	CHECKED

AS NOTED
SCALE
MAY 28, 2021
DATE
17126.00001
PROJECT NO.
12 OF 12
SHEET NO.
SD-4
SHEET NAME

32-36 Iron Horse Boulevard

Residential Development

2019

2012

2009

32-36 Iron Horse Boulevard – Zone SC – (#32) Map H09, Block 226, Lot 006. 6.06 Acres and (#36) Map H09, Block 226, Lot 008+8A. 7.10 Acres. The poorly and very poorly drained soils to the east are Catden and Freetown soils, Limerick and Lim soils, and Saco Silt Loam.

The site being developed for residential housing was previously an earth and gravel processing facility owned and operated by Girard Brothers. The heavy industrial use dates back decades. The proposal is for 5 residential buildings with a pool, club house and play area. As well as supporting infrastructure. As shown in the photos above the industrial activity over the years extended out to the edge of the wetlands but in more recent years (post 2012) the activities have been drawn back to the west. The grading is such that the proposed area of activity is elevated up from the proposed detention basins in the upland review (see picture below). The detention basins are fed from the storm water which is first put through underground infiltrators then a vortex water quality system and finally into the basins. The proposed basins have an overflow spillway for high volume storms as well as several rip rap filter berms. The proposed basins are heavily planted with native species (see planting schedule) and should be an improvement over the previous activities. Other than the detention basins a portion of the parking, a portion of a residential building and two out buildings will fall in the upland review. It is the opinion of staff that the proposal will be a water quality improvement that does not pose a significant impact and after review of the design there does not appear to be a better or more prudent alternative to the design of the basin or the layout of the project. This project will need Zoning Commission approval and will be subject to a public hearing after approval. At this meeting the application can be received but cannot be acted on until the next regularly scheduled meeting.

Looking south at the detention basin level, slope to the right rises up to the area of proposed development.

Town of Simsbury

933 HOPMEADOW STREET SIMSBURY, CONNECTICUT 06070

Office of Community Planning and Development

MINUTES
CONSERVATION COMMISSION/INLAND WETLANDS
AND WATERCOURSES AGENCY
REGULAR MEETING-TUESDAY, JUNE 1, 2021 7:30 PM

CALL TO ORDER: 7:33PM

ROLL CALL: Present – Chairman Winters, Commissioners, Levy, Campolieta and Morrison. Alternate Haldeman was invited to sit. A quorum was established. Wetlands agent Hazel was also present.

PUBLIC HEARINGS: None

NEW BUSINESS:

Application #21-11 Simsbury Fire Department Applicant, 5 Highridge Road, Assessors Map A05, Block 203 Lot 003, Zone R-160. Silt removal from a pond that provides a drywell for SFD.

The application was not represented and staff was unable to comment due to audio issues. The application was received and will be heard at the next regularly scheduled meeting.

Application #21-13 32-36 Iron Horse LLC, Chris Nelson applicant, 32-36 Iron Horse Boulevard, Assessors Map H09, Block 226, Lot 008+8A, Zone SC. Construction of a detention basin and a portion of a residential development within the upland review.

The applicant's engineer and soil scientist provided a brief overview of the project. Tom Daly of SLR spoke about the detention basin for storm water treatment and the general layout of the proposed residential housing. He also touched on the proposed planting schedule and erosion and sediment control plan. Megan Raymond spoke in detail about the type of wetlands in the area and the soils in the area. She also spoke about the effect of the proposed project on these environments and the difference in past uses versus the proposed future use.

The application was received and will be heard at the next regularly scheduled meeting

OLD BUSINESS:
None

AGENT ACTIONS:
Agent actions were not discussed due to the agent's audio issues. The listed agent action will be heard at the next regularly scheduled meeting on June 15, 2021.

GENERAL BUSINESS:

Minutes: Minutes from May 18, 2021 Motion to approve was made by Commissioner Haldeman and seconded by Commissioner Campioleta. Approved unanimously (5-0-0).

CORRESPONDANCE:
None

CONSERVATION BUSINESS:
Discussions were had on updates to the pollinator pathways and interaction with other commissions in a conservation capacity to make suggestions about sustainability and native plantings.

ADJOURNMENT:
Commissioner Haldeman made a motion to adjourn at 8:15 PM, Commissioner Campioleta Seconded. All voted in Favor. Vote: 5-0-0.

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

2800 BERLIN TURNPIKE, P.O. BOX 317546
NEWINGTON, CONNECTICUT 06131-7546
Phone: (860) 594-3448

June 1, 2021

TO: Town of Simsbury
Conservation Commission/Inland Wetlands and Watercourses Agency
c/o Margery C B Winters
993 Hopmeadow Street
Simsbury, CT
E-deliver to: mglidden@simsbury-ct.gov

FROM: Kevin F. Carifa Kevin Carifa Digitally signed by Kevin Carifa DN: C=US, E=kevin.carifa@ct.gov, O="Department of Transportation ", OU="Office of Environmental Planning ", CN=Kevin Carifa Date: 2021.06.02 19:47:22-04'00'
Transportation Assistant Planning Director
Bureau of Policy and Planning

SUBJECT: Notification of Submittal of Application to the Department of Energy and Environmental Protection (DEEP) for a General Permit for Water Resource Construction Activities

PROJECT: State Project No. 0128-0153
Rehabilitation of Bridge No. 00653, Route 10 (Hopmeadow Street) over Hop Brook
Town of Simsbury

Enclosed is a copy of our Request for Authorization under the State of Connecticut Department of Energy and Environmental Protection's General Permit for Water Resource Construction Activities.

If your agency wishes to comment on the enclosed application, comments must be submitted to the State Department of Energy and Environmental Protection.

Comments should be directed to:

Land and Water Resources Division
Department of Energy and Environmental Protection 79 Elm Street
Hartford, CT 06106-5127

If we can provide additional information, please contact Jason Coite, Transportation Supervising Engineer, at 860-594-3448 or jason.coite@ct.gov.

Enclosure

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

2800 BERLIN TURNPIKE, P.O. BOX 317546
NEWINGTON, CONNECTICUT 06131-7546
Phone: (860) 594-3448

June 1, 2021

TO: Town of Simsbury
Planning Commission
c/o William F. Rice
993 Hopmeadow Street
Simsbury, CT
E-deliver to: mglidden@simsbury-ct.gov

FROM: Kevin F. Carifa
Transportation Assistant Planning Director
Bureau of Policy and Planning

Kevin Carifa
Digitally signed by Kevin Carifa
DN: C=US, E=kevin.carifa@ct.gov, O="Department of Transportation ", OU="Office of Environmental Planning ", CN=Kevin Carifa
Date: 2021.06.02 19:47:29-04'00'

SUBJECT: Notification of Submittal of Application to the Department of Energy and Environmental Protection (DEEP) for a General Permit for Water Resource Construction Activities

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If we can provide additional information, please contact Jason Coite, Transportation Supervising Engineer, at 860-594-3448 or jason.coite@ct.gov.

Enclosure

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

2800 BERLIN TURNPIKE, P.O. BOX 317546
NEWINGTON, CONNECTICUT 06131-7546
Phone: (860) 594-3448

June 1, 2021

TO: Town of Simsbury
Zoning Commission
c/o David Rogers Ryan
993 Hopmeadow Street
Simsbury, CT
E-deliver to: mglidden@simsbury-ct.gov

FROM: Kevin F. Carifa
Transportation Assistant Planning Director
Bureau of Policy and Planning

Kevin Carifa
Digitally signed by Kevin Carifa
DN: C=US, E=kevin.carifa@ct.gov, O="Department of Transportation ", OU="Office of Environmental Planning ", CN=Kevin Carifa
Date: 2021.06.02 19:47:36-04'00'

SUBJECT: Notification of Submittal of Application to the Department of Energy and Environmental Protection (DEEP) for a General Permit for Water Resource Construction Activities

PROJECT: State Project No. 0128-0153
Rehabilitation of Bridge No. 00653, Route 10 (Hopmeadow Street) over Hop Brook
Town of Simsbury

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Department of Energy and Environmental Protection 79 Elm Street
Hartford, CT 06106-5127

If we can provide additional information, please contact Jason Coite, Transportation Supervising Engineer, at 860-594-3448 or jason.coite@ct.gov.

Enclosure

INTERDEPARTMENTAL MESSAGE **STATE OF CONNECTICUT**

To	NAME, TITLE Central Permit Processing Unit, 1st Floor	DATE June 1, 2021
	AGENCY, ADDRESS Department of Energy and Environmental Protection, 79 Elm Street, Hartford, CT 06106	
From	NAME, TITLE Kevin Carifa Digitally signed by Kevin Carifa DN: C=US, E=kevin.carifa@ct.gov, O="Department of Transportation ", OU="Office of Environmental Planning ", CN=Kevin Carifa Date: 2021.06.02 19:40:49-04'00' Kevin Carifa, Transportation Assistant Planning Director	TELEPHONE 860-594-2946
	AGENCY, ADDRESS Department of Transportation, 2800 Berlin Turnpike, Newington, CT 06131-7546	

Subject: **State Project No. 0128-0153**
Rehabilitation of Bridge No. 00653
Route 10 (Hopmeadow Street) over Hop Brook
Town of Simsbury

Attached is an original copy of the DEEP Land & Water Resources Division (LWRD) Transmittal Form associated with the above referenced project. The permits applications being submitted with this Transmittal Form include: General Permit for Water Resource Consturtcion Activities (Activities 8 & 9).

For planning purposes, please be aware the project's Final Design Plan (FDP) milestone date is June 30, 2021. In order for the project to meet its bid, advertise and contract award dates, final permits should be issued by the FDP date. Meeting this date will ensure that the project's funds are expended within Federal and State contracting timeframes and the appropriate species and wildlife time of year restrictions can be incorporated as planned in the project schedule. Please consider this project's FDP relative to other pending permits under review. The respective LWRD supervisor has access to schedule updates from the DOT.

Any questions pertaining to this application may be directed to Mr. Jason Coite, Transportation Supervising Engineer of my staff, at jason.coite@ct.gov.

Attachments

Connecticut Department of Energy & Environmental Protection
Bureau of Water Protection & Land Reuse
Land & Water Resources Division

CPPU USE ONLY
App #s: _____
_____
_____ -DIV
_____ -FM/E
Doc #: _____
Check #: _____

LWRD License Application Transmittal Form

The Land & Water Resources Division (LWRD) License Application* consists of this Transmittal Form and the program-specific form. All application forms can be found on the Department of Energy & Environmental Protection (DEEP) website at www.ct.gov/deep/lwrdpermitapps. Submit application forms per instructions provided in Part VII of this transmittal form.

Part I: License Type and Fee Information

The table below lists various License types issued by DEEP LWRD. If more than one license is necessary for a project, complete only one Transmittal Form. Complete as many Program Forms as applicable for the project. Check the boxes below that correspond with the LWRD license(s) being requested.

Type of License	Program Form	Fee	DEEP USE ONLY
Licenses for Activities in Aquifer Protection Areas			
☐ **Aquifer Protection Area Registration** Check one: ☐ New ☐ Modification[1] of # _____ (no fee) ☐ Renewal of # _____	A	$625	[#996]
☐ **Aquifer Protection Area Permit** Check one: ☐ New ☐ Modification[1] of # _____(no fee) ☐ Renewal of # _____	B	$1,250	[#995]
[1] Note that if you are seeking a *modification*, you should consult the Aquifer Protection Program at 860-424-3019 prior to application submittal to determine whether a registration form is necessary.			
Licenses for Activities in Tidal Waters			
☐ **Structures, Dredging & Fill[2]**	C	$660	[#1085]
☐ **Structures, Dredging & Fill[2] and Tidal Wetlands (TW)**	C	$660	[#438]
☐ **Structures, Dredging & Fill[2] and Section 401 Water Quality Certificate (WQC)[3]**	C	$660	[#1632]
☐ **Structures, Dredging & Fill[2]; TW; and Section 401 WQC[3]**	C	$660	[#417]
☐ **Certificate of Permission (if applicable, WQC will be included)**	D	$375	[#410]
[2] For projects larger than 825 square feet, provide Attachment A with an additional fee. Refer to the instructions (page 4) for fee calculations. [3] For activities requiring a Sec.404 Permit from United States Army Corps of Engineers (USACE).			
General Permit Registration for Coastal Maintenance			
☐ **Marina and Mooring Field Reconfiguration**	E	$700	[#992]
☐ **Remedial Activities Required by Order**	F	$700	[#427]
☐ **Residential Modification to FEMA Standards**	G	$100	[#423]
☐ **Reconstruction of Permitted Structures**	H	$300	[#1741]
General Permit Registration for Minor Coastal Structures			
☐ **4/40 Docks/Access Stairs**	I	$700	[#426]
☐ **Non-Harbor Moorings**	J	$250	[#422]
General Permit Registration for Dolphin Cove			
☐ **Structures, Fill, Obstructions, or Encroachments in Dolphin Cove Lagoon, Stamford**	K	$100	[#420]

Part I: License Type and Fee Information (continued)

Type of License	Program Form	Fee	DEEP USE ONLY
For Federal Agency Activities Only:			
☐ **Section 401 Water Quality Certificate (Tidal)**	C	None	[#1186]
Licenses for Activities in Non-Tidal Waters			
☐ **Section 401 Water Quality Certificate (Individual)**[3]	L	None	[#1195]
☐ **Pre-Construction Notification, USACE General Permits for CT**[3]	L	None	[#1188]
☐ **Inland Wetlands and Watercourses**[4]	L	None	[#365]
☐ **Inland Wetlands and Watercourses**[4] **and WQC**[3]	L	None	[#2225]
[3] For activities requiring a Sec.404 Permit from USACE.			
[4] For State Agency Activities OR Activities Conducted on State Owned/Controlled Lands.			
For State Agency Activity Conducted on State Owned/Controlled Lands Only: **General Permit Registration for Water Resources Construction Activities**			
☐ **Activities 1-4: Maintenance Plans**	M	$2,500	[#2243]
☐ **Activities 5-7: Infrastructure and Public Works Projects**	N	$2,500	[#2244]
☒ **Activity 8: Activities Authorized Under a Corps General Permit** **(Must be submitted after receiving PCN approvals and Flood Management, if applicable.)**	O	$1,250	[#2245]
☐ **Activity 9: Conservation Activities**	O	$1,250	[#2246]
Additional Licenses for Activities **These licenses may be combined with Tidal or Non-Tidal Waters licenses.**			
Water Diversion – Non-consumptive			
☐ Watershed < 0.5 sq. mi.	L	$2,050	[#457]
☐ Watershed ≥ 0.5 sq. mi and < 2.0 sq. mi.	L	$4,000	[#456]
☐ Watershed ≥ 2.0 sq. mi.	L	$6,250	[#455]
For State Agency Activity/Activities Receiving Funding Through a State Agency:			
☐ **Flood Management Certification**	P	None	[#1185]
☐ **Flood Management Certification with Exemption Request**	P	None	[#1185]
Fee from Attachment A, if applicable	None		
Total	None		

*For processing purposes, the terms Application and Applicant are synonymous with the terms Registration and Registrant.

In addition to applicable boxes above, check here if your application is:

- ☐ eligible for a municipal 50% discount;
- ☐ for work in tidal waters and being submitted pursuant to CGS section 22a-361(a)(2)(d) to address a violation; or
- ☒ receiving state funding including federal funding administered by the state (to help determine need for Flood Management Certification).

Part II: Project and Site Information

1a. Project: Provide a brief description of project/activity/work: **DOT Project No. 0128-153, Rehabilitation fo Bridge No. 00653 carying Route 10 (Hopmeadow Street) over Hop Brook.**

1b. Site Name and Location

Name of Site: DOT Project No. 0128-0153

Address of Site: Route 10 (Hopmeadow Street) City/Town: Simsbury State: CT Zip Code: 06070

Parcel Location/Tax Assessor's Reference: Map N/A Block N/A Lot N/A

GPS Coordinates/Latitude and Longitude: Provide the exact location of proposed activity, in degrees/minutes/seconds or in decimal degrees: Latitude: 41.86849911321865 Longitude: -72.80598826715341

Parcel/Easement size: If the project is located on a parcel, indicate parcel acreage: N/A acres

If the project is located on a utility/transportation right-of-way or easement, indicate dimensions or acres: See Permit Plans

Part III: Applicant Information

- *If an applicant is a corporation, limited liability company, limited partnership, limited liability partnership, or a statutory trust, they must be registered with the Secretary of State. If applicable, the applicant's name shall be stated **exactly** as it is registered with the Secretary of State. Please note, for those entities registered with the Secretary of State, the registered name will be the name used by DEEP. This information can be accessed at the Secretary of State's database (CONCORD) at portal.ct.gov/SOTS.*
- *If an applicant is an individual, provide the legal name (include suffix) in the following format: First Name; Middle Initial; Last Name; Suffix (Jr, Sr., II, III, etc.).*
- *Once an authorization has been received, if there are any changes or corrections to your company/facility or individual mailing or billing address or contact information, please complete and submit the Request to Change Company/Individual Information to the address indicated on the form.*

1. Applicant/Registrant* Information

Name: _Connecticut Department of Transportation___

Mailing Address: 2800 Berlin Turnpike

City/Town: Newington State: CT Zip Code: 06111

Business Phone: _____ Ext.: _____

Contact Person: Kevin F. Carifa Phone: 860-594-2946 Ext: _____

E-mail Address†: Kevin.Carifa@ct.gov

†Email is Required. By providing this e-mail address you are agreeing to receive official correspondence from DEEP, at this electronic address, concerning the subject application. Please remember to check your security settings to be sure you can receive e-mails from "ct.gov" addresses. Also, please notify DEEP if your e-mail address changes.

☐ **If co-applicant(s), check this box and attach co-applicant information as Attachment B following this form.**

a) Applicant Type (check one):

☐ individual ☐ federal agency ☒ state agency ☐ municipality ☐ tribal

☐ business entity (if a business entity, complete i through iii below):

i) business type: ☐ corporation ☐ limited liability company ☐ limited partnership ☐ limited liability partnership ☐ statutory trust ☐ Other: _____

ii) provide Secretary of the State business ID #:_____
This information can be accessed at database (CONCORD): portal.ct.gov/SOTS

iii) ☐ check here if your business is **NOT** registered with the Secretary of State's Office.

*For processing purposes, the terms Application and Applicant are synonymous with the terms Registration and Registrant.

Part III: Applicant Information (continued)

b) Applicant's interest in property at which the proposed activity is located:

☒ site owner ☐ option holder ☐ lessee ☐ facility owner

☐ easement holder ☐ operator ☐ other (specify): _____

2. List billing contact, if different than the applicant:

Name: _____

Mailing Address: _____

City/Town: _____ State: _____ Zip Code: _____

Business Phone: _____ Ext.: _____

Contact Person: _____ Title: _____

E-mail: _____

3. Primary contact for departmental correspondence and inquiries if different than applicant:

Name: _____

Mailing Address: _____

City/Town: _____ State: _____ Zip Code: _____

Business Phone: _____ Ext.: _____

Contact Person: _____ Title: _____

E-mail: _____

4. Site/Property Owner*, if different than applicant:

Name: _____

Mailing Address: _____

City/Town: _____ State: _____ Zip Code: _____

Business Phone: _____ Ext.: _____

Contact Person: _____ Title: _____

E-mail: _____

***If the applicant is not the owner, submit written permission from the owner as Attachment C**

5. Facility Owner, if different than applicant:

Name: _____

Mailing Address: _____

City/Town: _____ State: _____ Zip Code: _____

Business Phone: _____ Ext.: _____

Contact Person: _____ Title: _____

E-mail: _____

6. Facility Operator, if different than applicant:

Name: _____

Mailing Address: _____

City/Town: _____ State: _____ Zip Code: _____

Business Phone: _____ Ext.: _____

Contact Person: _____ Title: _____

E-mail: _____

Part III: Applicant Information (continued)

7. Attorney or other representative, if applicable.

Firm Name: _____

Mailing Address: _____

City/Town: _____ State: _____ Zip Code: _____

Business Phone: _____ Ext.: _____

Attorney: _____ Title: _____

E-mail: _____

8. Engineer(s), surveyor(s) and/or other consultant(s) employed or retained to assist in preparing the application and designing or constructing the activity.

Name: Connecticut Department of Transportation

Mailing Address: 2800 Berlin Turnpike

City/Town: Newington State: CT Zip Code: 06111

Business Phone: 860-594-3117 Ext.: _____

Contact Person: Sarwat A Basha Title: Project Engineer

E-mail: Sarwat.Basha@ct.gov

Service Provided: Project Design

Part IV: Pre-Application Coordination

If pre-application coordination occurred, provide DEEP LWRD staff contact information:

Staff Name: Interagency Cooridnation Meeting Date: 01/16/2020

Part V: Supporting Documents

As applicable, check the box by the attachments listed to indicate that they have been submitted. When submitting any supporting documents, please label the documents as indicated in this part (e.g., Attachment A, etc.) and be sure to include the applicant's name as indicated on this application form. Attach the materials below following this transmittal form.

- ☐ Attachment A Structures, Dredging and Fill fee calculation worksheet (if applicable)
- ☐ Attachment B Co-applicant information sheet (if applicable)
- ☐ Attachment C Written permission from land owner (if applicant is not the owner)
- ☐ Attachment D Additional signature sheet (if applicable)

Part VI: Applicant Certification

The applicant(s) *and* any individual(s) responsible for actually preparing the application must sign this section. An application will be considered insufficient unless *all* required signatures are provided.

"I have personally examined and am familiar with the information submitted in the LWRD application and all attachments thereto, and I certify that based on reasonable investigation, including my inquiry of the individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief.

I understand that a false statement in the submitted information may be punishable as a criminal offense, in accordance with section 22a-6 of the General Statutes, pursuant to section 53a-157b of the General Statutes, and in accordance with any other applicable statute.

I certify that the LWRD application is on complete and accurate forms as prescribed by the commissioner without alteration of the text.

I certify that I have complied with all notice requirements, if applicable, as listed in Section 22a-6g of the General Statutes."

Kimberly Lesay

Digitally signed by Kimberly Lesay
DN: cn=Kimberly Lesay, o=Connecticut Department of Transportation, ou=Bureau Chief of Policy & Planning, email=kimberly.lesay@ct.gov, c=US
Date: 2021.06.02 22:40:00 -04'00'

Signature of Applicant	Date
Kimberly C. Lesay	Bureau Chief, Policy & Planning
Name of Applicant (print or type)	Title (if applicable)

Michael J. Salter

Digitally signed by Michael J. Salter
DN: C=US, E=Michael.Salter@ct.gov, O="CTDOT, Office of Environmental Planning", OU=Environmental Permitting, CN=Michael J. Salter
Date: 2021.06.01 11:18:44-04'00'

Signature of Preparer (if different than above)	Date
Michael J. Salter	Transportation Planner
Name of Preparer (print or type)	Title (if applicable)

☐ Check here if additional signatures are required. If so, please reproduce this sheet and attach signed copies to this sheet as Attachment D. You must include signatures of any person preparing any report or parts thereof required in this application (i.e., professional engineers, surveyors, soil scientists, consultants, etc.).

Part VII: Application Submission

Instructions for submitting an application to DEEP LWRD:

1. Please submit a hardcopy of **only** this completed License Application Transmittal Form and fee, to:

   CENTRAL PERMIT PROCESSING UNIT
   DEPARTMENT OF ENERGY & ENVIRONMENTAL PROTECTION
   79 ELM STREET
   HARTFORD, CT 06106-5127

   Applications will not be processed without the fee. Fee shall be non-refundable and shall be paid by check or money order to the Connecticut Department of Energy & Environmental Protection.

2. Upon receipt of the Transmittal Form and fee, the Central Permit Processing Unit (CPPU) will e-mail a confirmation receipt letter to you containing the DEEP assigned application number.

3. Upon receipt of the email from CPPU, electronically submit the full application package with the remaining required forms:
   a. Send an empty/blank email to DEEP.LWRDRegulatorySubmittals@ct.gov
   b. An automated email response will contain instructions for uploading this Transmittal Form and applicable Program Forms, management plans, or additional supporting documents of your application to the LWRD File Transfer Protocol (FTP) website.
   c. Follow directions contained in the email for uploading the application sections.

If you are not capable of submitting the application electronically or if you have other questions or concerns regarding application submittals, please contact LWRD staff at 860-424-3019.

Connecticut Department of
Energy & Environmental Protection
Bureau of Water Protection & Land Reuse
Land & Water Resources Division

LWRD License Application Form O

General Permit Request for Authorization, Water Resources Construction Activities (Activities 8 & 9)

- **Activities Authorized Under a USACE General Permit**
- **Conservation Activities**

All sections of the LWRD License Application, when applicable, must be posted to the DEEP LWRD FTP site as instructed on Part VII of the LWRD Transmittal Form.

Application Number (as assigned in CPPU e-mail): 202107567

Applicant Name (same name used on Part III of the LWRD Transmittal Form): Connecticut Department of Transportation

Supporting Documents

Check the box by the attachments listed to indicate that they have been submitted. When submitting any supporting documents, please label the documents as indicated in this part (e.g., Attachment 31, etc.) and be sure to include the same applicant name used above. NOTE: Attachment numbering is NOT consecutive as the attachments relate to multiple LWRD program applications.

☐	Attachment 29	Attach a copy of USACE PCN authorization, if applicable. USACE PCN # _____
☒	Attachment 31	Attach a copy of either the DEEP Section 401 Pre-Construction Notification (PCN) License or the USACE Self-Verification (SV) submittal, including form and plans. DEEP PCN # N/A
☒	Attachment 32	Flood Management Certification (FMC) must be issued prior to submittal of this form, if required. Attach a copy of the FMC License. FMC # N/A Flood Management General Certification (Attached)

Attachment 31: USACE Self-Verification (SV) Package, GP 19

US Army Corps of Engineers®
New England District

Appendix E: Self-Verification Notification Form

This form is required for all **non-tidal projects in Connecticut**, but **not** required if work is done within boundaries of Mashantucket Pequot or Mohegan Tribal Lands. **Before** work commences, complete **all** fields (write "none" if applicable); attach project plans (not required for projects involving the installation of construction mats only); and any state or local approval(s); and send to:

Permits & Enforcement Branch B
U.S. Army Corps of Engineers
696 Virginia Road
Concord, MA 01742-2751
or cenae-r@usace.army.mil

and

CT DEEP
Inland Water Resources Division
79 Elm Street
Hartford, CT 06106-5127

****

State or local Permit Number: 202107567
Date of State or local Permit: 06/04/2021
State/local Project Manager: CT DEEP LWRD

Permittee: Connecticut Department of Transportation
Address, City, State & Zip: 2800 Berlin Turnpike, Newington, CT 06111
Phone(s) and Email: 860-594-2931, Kimberly.Leasy@ct.gov

Contractor: TBD
Address, City, State & Zip:
Phone(s) and Email:

Consultant/Engineer/Designer: Connecticut Department of Transportation
Address, City, State & Zip: 2800 Berlin Turnpike, Newington, CT 06111
Phone(s) and Email: Sarwat.Basha@ct.gov, 860-594-3218

Wetland/Soil Scientist Consultant: DOT Office of Environmental Planning
Address, City, State & Zip: 2800 Berlin Turnpike, Newington, CT 06111
Phone(s) and Email: 860-594-2933, Michael.Salter@ct.gov

Project Location (provide detailed description & locus map): Route 10 (Hopmeadow Street) over Hop Brook, approximately 760 ft. south of the intersection of Route 10 and Route 167 (West Street)
Address, City, State & Zip: Route 10, Simsbury, CT 06070
Latitude/Longitude Coordinates: 41.86849911321865, -72.80598826715341
Waterway Name: Hop Brook
Project Purpose (include all aspects of the project including those not within Corps jurisdiction): The purpose of the project is to rehabilitate the existing bridge which has a superstructure rated in serious condition and a scour critical rating to provide a safe and structurally adequate structure.
Work Description: Please see attached project description.

Work will be done under the following GP(s) (check all that have associated impacts):

_____**GP. 2 - Repair or maintenance of authorized or grandfathered structures/fills**
Area of total wetland impacts: temporary _____SF permanent _____SF
Area of total waterway impacts: temporary _____SF permanent_____SF

_____**GP. 5 - Boat ramps/marine railways**
Area of total wetland impacts: temporary _____SF permanent _____SF
Area of total waterway impacts: temporary _____SF permanent_____SF

_____**GP. 6 - Utility line activities (include calculations for each single & complete crossing – attach additional sheet if necessary)**
Area of total wetland impacts: temporary _____SF permanent _____SF
Area of total waterway impacts: temporary _____SF permanent_____SF

_____**GP. 9 - Shoreline and bank stabilization projects**
Area of total wetland impacts: temporary _____SF permanent _____SF
Area of total waterway impacts: temporary _____SF permanent_____SF

_____**GP. 10 - Aquatic habitat restoration, establishment and enhancement activities**
Area of total wetland impacts: temporary _____SF permanent _____SF
Area of total waterway impacts: temporary _____SF permanent_____SF

_____**GP. 11 - Fish & wildlife harvesting, enhancement and attraction devices and activities**
Area of total wetland impacts: temporary _____SF permanent _____SF
Area of total waterway impacts: temporary _____SF permanent_____SF

_____**GP. 12 - Oil Spill and Hazardous material cleanup**
Area of total wetland impacts: temporary _____SF permanent _____SF
Area of total waterway impacts: temporary _____SF permanent_____SF

_____**GP. 13 - Cleanup of hazardous and toxic waste**
Area of total wetland impacts: temporary _____SF permanent _____SF
Area of total waterway impacts: temporary _____SF permanent_____SF

_____**GP. 14 - Scientific measurements devices**
Area of total wetland impacts: temporary _____SF permanent _____SF
Area of total waterway impacts: temporary _____SF permanent_____SF

_____**GP. 15 - Survey activities**
Area of total wetland impacts: temporary _____SF permanent _____SF
Area of total waterway impacts: temporary _____SF permanent_____SF

_____**GP. 17 - New/expanded developments & recreational facilities**
Area of total wetland impacts: temporary _____SF permanent _____SF
Area of total waterway impacts: temporary _____SF permanent_____SF

_____**GP. 18 - Linear transportation projects- wetland crossings only (include calculations for each single & complete crossing - attach additional sheet if necessary)**

Area of total wetland impacts: temporary _____SF permanent _____SF
Area of total waterway impacts: temporary _____SF permanent_____SF

_____**GP. 19 - Stream, river & brook crossings – not including wetland crossings (include calculations for each single & complete crossing – attach additional sheet if necessary)**

Area of total wetland impacts: temporary 0 SF permanent 0 SF
Area of total waterway impacts: temporary 2,700 SF permanent 1,300 SF

_____**GP. 21 - Temporary fill not associated with any other GP activities**

Area of total wetland impacts: temporary _____SF permanent _____SF
Area of total waterway impacts: temporary _____SF permanent_____SF

Does your project include any secondary effects? Yes _____ No X
(Secondary effects include, but are not limited to non-tidal waters or wetlands drained, flooded, fragmented, or mechanically cleared resulting from a single and complete project. See Appendix F - Definitions.) If YES, describe here: _____
_____
_____
_____

Proposed Work Dates: Start: April 1, 2022 Finish: November 30, 2022

Your name/signature below, as permittee, confirms that your project meets the self-verification criteria and that you accept and agree to comply with the applicable terms and conditions in the Connecticut General Permits.

Kimberly Lesay
Digitally signed by Kimberly Lesay
DN: cn=Kimberly Lesay, o=Connecticut Department of Transportation, ou=Bureau Chief of Policy & Planning, email=kimberly.lesay@ct.gov, c=US
Date: 2021.06.02 22:40:11 -04'00'

_____ _____

Signature of Permittee **Date**

USACE Self-Verification From, GP 19
Applicant: State of Connecticut, Department of Transportation
Project No. 0128-0153
Rehabilitation of Bridge No. 00653, Route 10 (Hopmeadow Street) over Hop Brook
Town of Simsbury

Attachment 1: Location Map

USACE Self-Verification From, GP 19
Applicant: State of Connecticut, Department of Transportation
Project No. 0128-0153
Replacement of Bridge No. 00653, Route 10 (Hopmeadow Street) over Hop Brook
Town of Simsbury

Attachment 1: Location Map

Attachment 2: Project Description

USACE Self-Verification Form, GP 19
Applicant: State of Connecticut, Department of Transportation
Project No. 0128-0153
Rehabilitation of Bridge No. 00653, Route 10 (Hopmeadow Street) over Hop Brook
Town of Simsbury

Attachment 2: Project Description

CT DOT Project No 0128-0153 consists of rehabilitation of Bridge 00653 which carries Route 10 (Hopmeadow Street) over Hop Brook in Simsbury, Connecticut. Route 10 over Hop Brook is a two-lane road in the southbound/northbound direction. The bridge is at log mile 44.61 of Route 10, 0.15 miles south of Route 167. Bridge 00653 carries the Farmington Canal Heritage Trail (bicycle trail) which runs parallel to Route 10. The 2016 estimated Average Daily Traffic (ADT) is 13000 vehicles. The purpose of the project is to rehabilitate the existing structurally deficient and scour critical structure to maintain safe travel.

Bridge No. 00653 is a 44' long, single span structure that carries Hopmeadow Street (Route 10). The structure was originally constructed in 1957 consisting of 16 prestressed deck units. The bridge received a widened sidewalk and new parapets in 2009, as part of State Project No. 128-143. The rehabilitated bridge has an out-to-out width of 49'-3". The curb-to-curb width is 35'-2" and the sidewalk width is 10'-1 ½" which accommodates the multiuse trail. A 6" gas main is supported on the fascia of the sidewalk parapet and eight 4" telecommunication conduits are supported on the other parapet fascia. The substructure consists of reinforced concrete abutments and wingwalls with spread footings. The latest bridge inspection report states that the superstructure is in serious condition (rating 3). This bridge also has a Scour Critical rating of "3". The substructure is in fair condition (rating 5).

The project scope involves superstructure replacement, substructure rehabilitation and installation of scour countermeasures for scour mitigation near the abutments. The existing superstructure will be replaced with precast pre-stressed concrete deck units with closure pour. The widths of the existing travel lanes and sidewalk will be matched. The proposed scour countermeasures consist of installing sheet piling to an elevation of 1-foot below the streambed in front of the existing abutments. Standard riprap with a minimum 1-foot of natural streambed material will be placed between the abutments and proposed sheet piling and will match the existing streambed profile. Temporary relocation of aerial facilities will be required. The 6" gas main and 4" conduits attached to the sides of the bridge will require temporary support during construction.

The work noted above in the project description require temporary water handling cofferdams and dewatering of the site to complete work in the dry. Temporary staging and debris shield will be allowed to be constructed above the ordinary high water elevation for the removal of the superstructure and sidewalks. The "unconfined" work within the stream shall only take place from June 1 to September 30, inclusive, as required by DEEP Fisheries.

The proposed scour countermeasures will result in 1,300 square feet (0.03 acres) of permanent watercourse impact. The installation of temporary water handling cofferdams and dewatering of the proposed work area will result in 2,700 square feet (0.06 acres) of temporary watercourse impacts. There will be no permanent or temporary impacts to wetlands associated with the proposed project. The project will result in no net fill in the FEMA Floodway and 100-year Floodplain. The project is scheduled to be completed in one construction season, beginning in April 2022 and concluding in November of 2022. The project requires a Flood Management General Certification from DOT's Hydraulics and Drainage Unit, a Self-Verification form under GP 19 from the US Army Corps of Engineers and a General Permit for Water Resource Construction Activities (Activities 8 & 9) from the CT Department of Energy and Environmental Protection.

In order minimize the impact to businesses, residents, and commuters and trail users, stage construction will be used to maintain two lane of traffic during the construction duration. The Farmington Canal Heritage Trail will be maintained with a temporary pedestrian bridge downstream of the subject bridge.

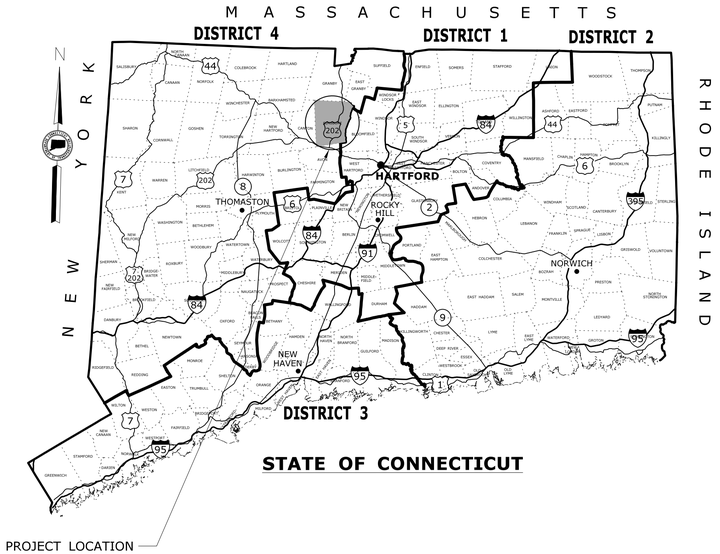
The project is scheduled to be completed in one construction season, beginning in April 2022 and concluding in November of 2022. The project requires a Flood Management General Certification from DOT's Hydraulics and Drainage Unit, a Self-Verification form under GP 19 from the US Army Corps of Engineers and a General Permit for Water Resource Construction Activities (Activities 8 & 9) from the CT Department of Energy and Environmental Protection.

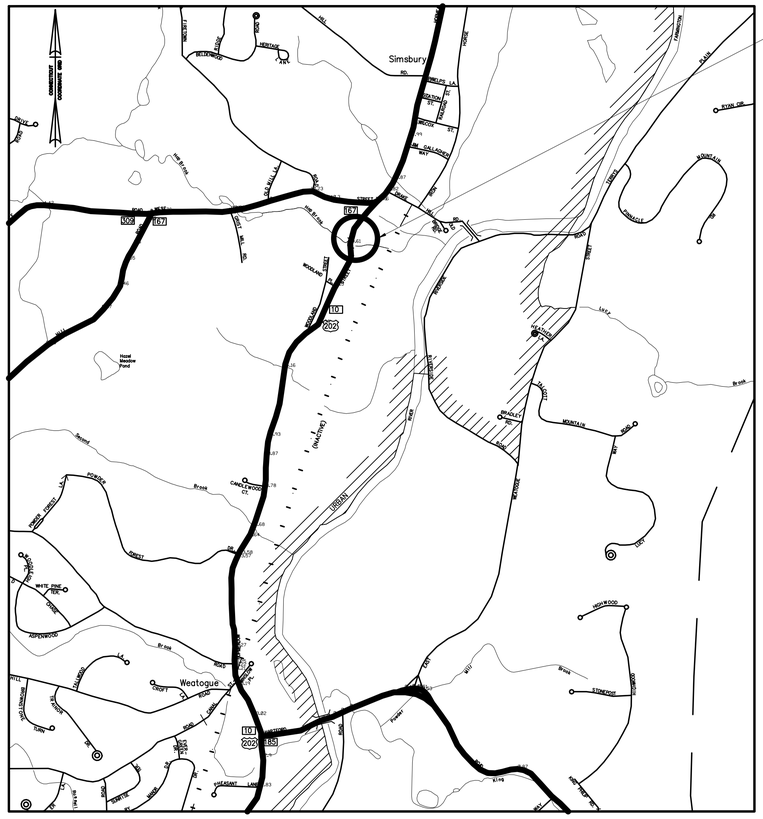
USACE Self-Verification From, GP 19

Applicant: State of Connecticut, Department of Transportation
Project No. 0128-0153
Rehabilitation of Bridge No. 00653, Route 10 (Hopmeadow Street) over Hop Brook
Town of Simsbury

Attachment 3: Project Plans

- **PMT-01 Title Sheet**
- **PMT-02 General Site Plan**
- **PMT-03 Wetland/Watercourse Impact Plan**
- **PMT-04 Floodplain Impact Plan**
- **PMT-05 Bridge Elevation**
- **PMT-06 Temporary Water-Handling Plan**
- **PMT-07 Planting Plan**





ENVIRONMENTAL PERMIT PLANS
STATE PROJECT NO. 0128-0153
REHABILITATION OF BRIDGE NO. 00653
IN THE TOWN OF SIMSBURY

STATE OF CONNECTICUT

LOCATION PLAN

SCALE: 1" = 500'

LIST OF DRAWINGS	
DRAWING NO.	DRAWING TITLE
PMT-01	TITLE SHEET
PMT-02	GENERAL SITE PLAN
PMT-03	WETLAND/WATERCOURSE IMPACT PLAN
PMT-04	FLOODPLAIN IMPACT PLAN
PMT-05	BRIDGE ELEVATION
PMT-06	TEMPORARY WATER-HANDLING PLAN
PMT-07	PLANTING PLAN

GENERAL NOTES:

1. THESE PLANS ARE NOT FOR CONSTRUCTION AND ARE INTENDED ONLY FOR ENVIRONMENTAL PERMITTING PURPOSES. THESE PLANS HOLD AUTHORITY FOR ALL ACTIVITIES CONCERNING THE REGULATED AREA. FOR DETAILED PLANIMETRIC INFORMATION AND PAYMENT REFER TO THE APPLICABLE CONTRACT DOCUMENTS.

2. THE DEPARTMENT OF TRANSPORTATION WILL ONLY SUBMIT REVISIONS TO DEEP AND USACE FOR CHANGES TO THE DESIGN THAT WILL AFFECT REGULATED AREAS.

3. FOR A DESCRIPTION OF THE WATERCOURSES, WETLANDS AND WETLAND SOILS SEE RELEVANT SECTIONS OF THE PERMIT APPLICATION.

4. 400 FOOT GRID BASED ON CONNECTICUT COORDINATE SYSTEM N.A.D. 1983 VERTICAL DATUM BASED ON NGVD OF 1988.

5. ALL CONSTRUCTION ACTIVITIES WILL BE CONDUCTED IN ACCORDANCE WITH THE DEPARTMENT'S STANDARD SPECIFICATIONS FOR ROADS, BRIDGE, AND INCIDENTAL CONSTRUCTION, FORM 818, SECTION 1.10 AND WILL ALSO FOLLOW REQUIRED BEST MANAGEMENT PRACTICES (BMPs) AND SEDIMENT AND EROSION CONTROL MEASURES IN ACCORDANCE WITH THE 2002 EROSION & SEDIMENTATION CONTROL GUIDELINES AND THE 2004 STORMWATER QUALITY MANUAL.

ENVIRONMENTAL PERMIT PLANS
PLAN DATE: 04-29-2021

REV.	DATE	REVISION DESCRIPTION	SHEET NO.

THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE THE CONDITIONS OF ACTUAL QUANTITIES OF WORK WHICH WILL BE REQUIRED.

Plotted Date: 5/5/2021

DESIGNER/DRAFTER: XHZ
CHECKED BY: SAB
SCALE AS NOTED

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

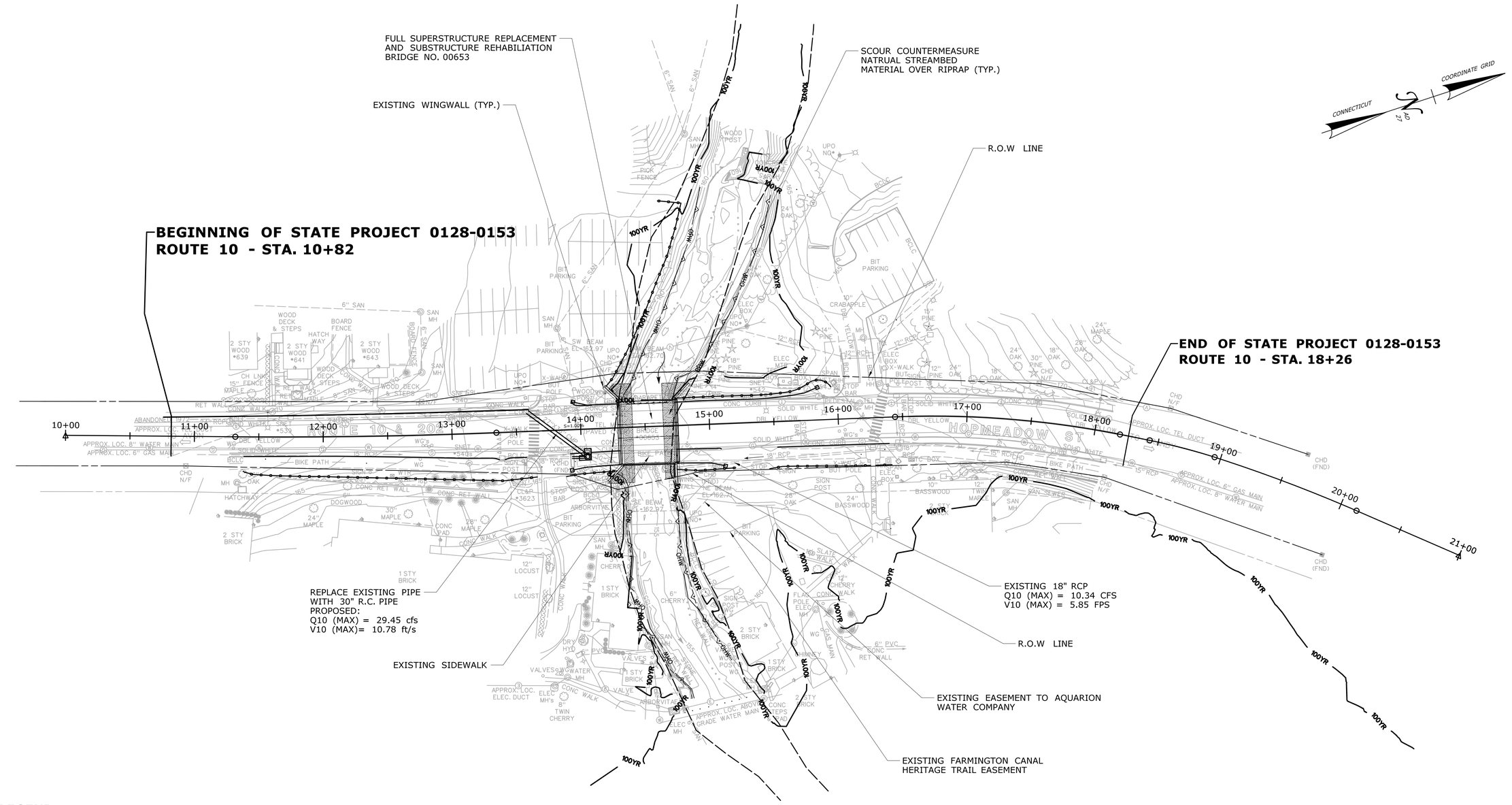
Filename: ...\PMT-01_0128-0153_Permit Title Sheet.dgn

SIGNATURE/BLOCK:
OFFICE OF ENGINEERING
APPROVED BY:

PROJECT TITLE:
REHABILITATION OF BR. NO. 00653
HOPMEADOW ST. (ROUTE 10)
OVER HOP BROOK

TOWN: **SIMSBURY**
DRAWING TITLE: **TITLE SHEET**

PROJECT NO. **0128-0153**
DRAWING NO. **PMT-01**
SHEET NO.



LEGEND

- 100YR — EXISTING 100-YEAR FLOOD (CALCULATED)
- OHW — ORDINARY HIGH WATER (OHW)
- SEDIMENTATION CONTROL SYSTEM (SCS)
- STATE / FEDERAL WETLANDS
- FEMA FLOODWAY

ENVIRONMENTAL PERMIT PLANS
PLAN DATE: 04-29-2021

REV.	DATE	REVISION DESCRIPTION	SHEET NO.

THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE THE CONDITIONS OF ACTUAL QUANTITIES OF WORK WHICH WILL BE REQUIRED.

Plotted Date: 5/5/2021

DESIGNER/DRAFTER: XHZ
CHECKED BY: SAB
SCALE IN FEET 0 40 80
SCALE 1"=40'

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: ...\PMT-02_0128-0153_Permit General Plan.dgn

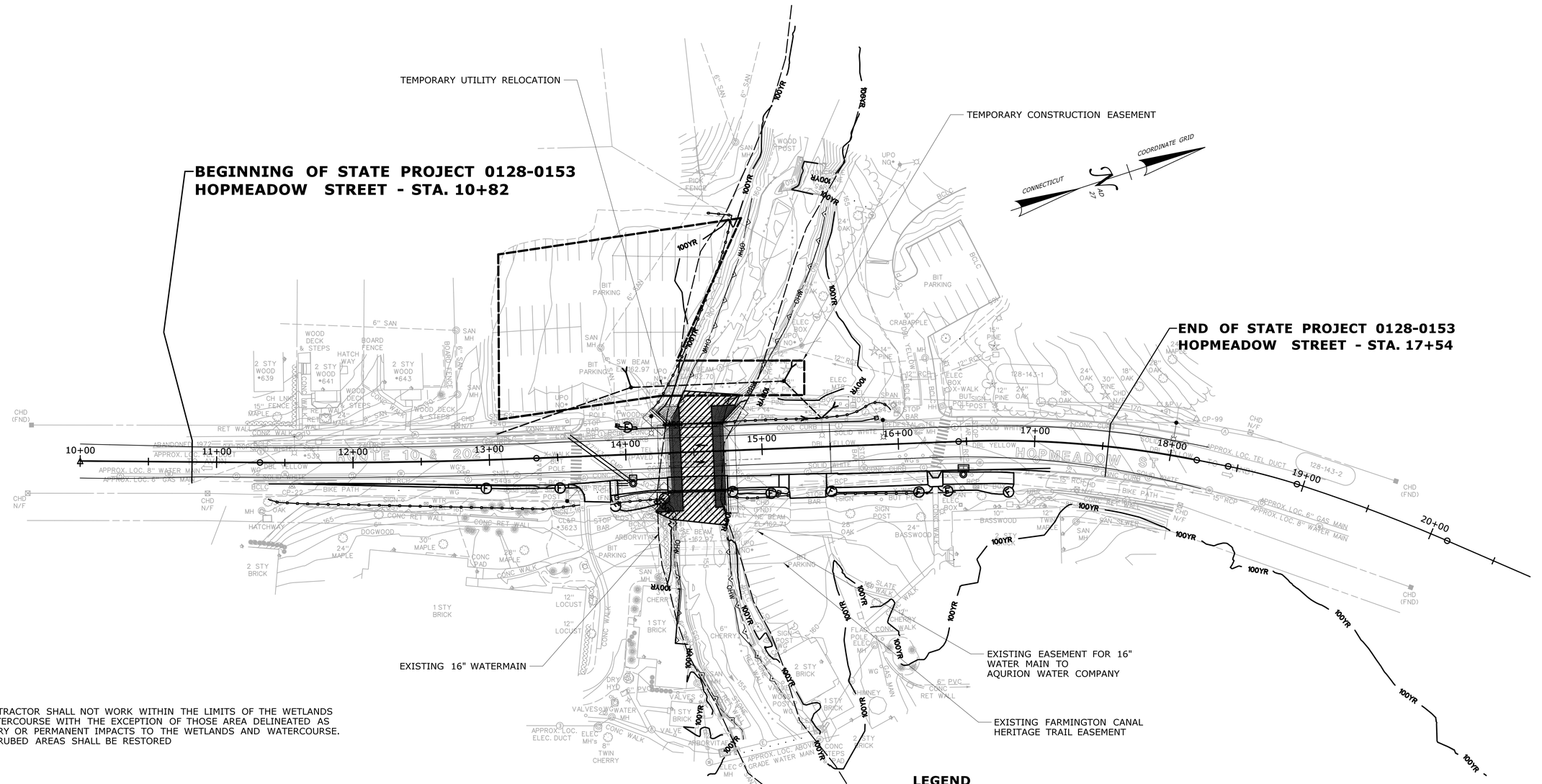
SIGNATURE/ BLOCK: OFFICE OF ENGINEERING
APPROVED BY:

PROJECT TITLE: REHABILITATION OF BR. NO. 00653 HOPMEADOW ST. (ROUTE 10) OVER HOP BROOK

TOWN: SIMSBURY

DRAWING TITLE: GENERAL SITE PLAN

PROJECT NO. 0128-0153
DRAWING NO. PMT-02
SHEET NO.



NOTE:

THE CONTRACTOR SHALL NOT WORK WITHIN THE LIMITS OF THE WETLANDS AND WATERCOURSE WITH THE EXCEPTION OF THOSE AREA DELINEATED AS TEMPORARY OR PERMANENT IMPACTS TO THE WETLANDS AND WATERCOURSE. ALL DISTRUBED AREAS SHALL BE RESTORED

WETLAND IMPACT TABLE

	WETLAND IMPACTS	WATERCOURSE IMPACTS	TOTAL
PERMANENT IMPACTS	0	1300 S.F. (0.03 A.C.)	1300 S.F. (0.03 A.C.)
TEMPORARY IMPACTS	0	2700 S.F. (0.06 A.C.)	2700 S.F. (0.06 A.C.)
TOTAL IMPACTS	0	4000 S.F. (0.09 A.C.)	4000 S.F. (0.09 A.C.)

LEGEND

THE DEPARMENT OF TRANSPORTATION WILL ONLY SUBMIT REVISIONS TO THE DEEP FOR CHANGES TO THE DESIGN THAT WILL EFFECT THE NOTED REGULATED AREAS.

- SEDIMENTATION CONCTROL SYSTEM
- STATE/FEDERAL WETLAND LIMITS
- OHW — ORDINARY HIGH WATER
- TEMPORARY IMPACT
- PERMANENT IMPACT
- 100YR — EXISTING 100-YEAR FLOOD (CALCULATED)
- FEMA FLOODWAY

ENVIRONMENTAL PERMIT PLANS
PLAN DATE: 04-29-2021

REV.	DATE	REVISION DESCRIPTION	SHEET NO.

THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE THE CONDITIONS OF ACTUAL QUANTITIES OF WORK WHICH WILL BE REQUIRED.

Plotted Date: 5/5/2021

DESIGNER/DRAFTER: XHZ
CHECKED BY: SAB
SCALE IN FEET 0 40 80
SCALE 1"=40'

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: ...\PMT-03_Wetland Watercourse Impact Plan.dgn

SIGNATURE/BLOCK: OFFICE OF ENGINEERING
APPROVED BY:

PROJECT TITLE: REHABILITATION OF BR. NO. 00653 HOPMEADOW ST. (ROUTE 10) OVER HOP BROOK

TOWN: SIMSBURY

DRAWING TITLE: WETLAND/WATERCOURSE IMPACT PLAN

PROJECT NO. 0128-0153
DRAWING NO. PMT-03
SHEET NO.

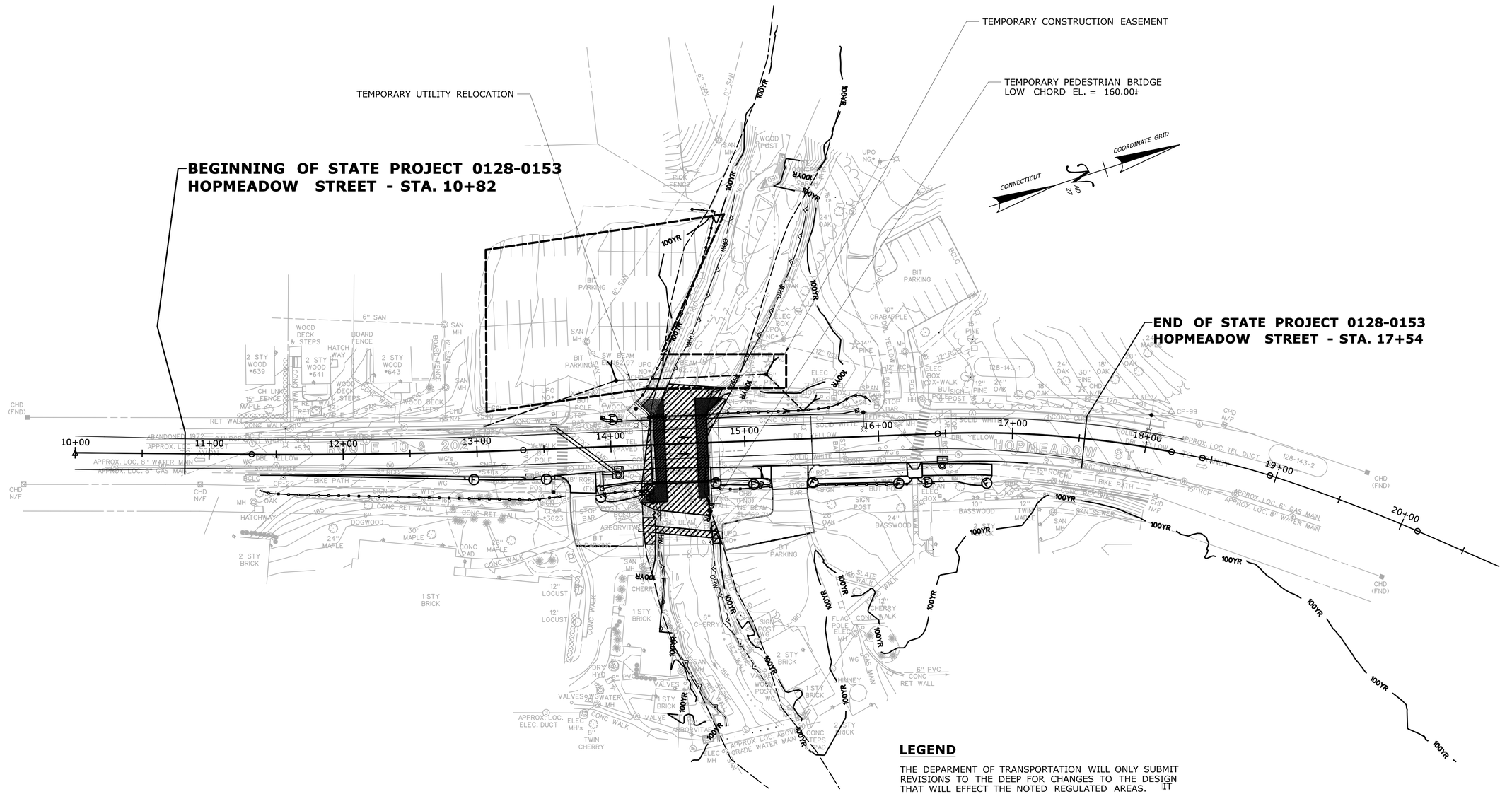
TEMPORARY CONSTRUCTION EASEMENT

TEMPORARY PEDESTRIAN BRIDGE
LOW CHORD EL. = 160.00±

TEMPORARY UTILITY RELOCATION

BEGINNING OF STATE PROJECT 0128-0153
HOPMEADOW STREET - STA. 10+82

END OF STATE PROJECT 0128-0153
HOPMEADOW STREET - STA. 17+54



LEGEND

THE DEPARMENT OF TRANSPORTATION WILL ONLY SUBMIT REVISIONS TO THE DEEP FOR CHANGES TO THE DESIGN THAT WILL EFFECT THE NOTED REGULATED AREAS. IT

- SEDIMENTATION CONCTROL SYSTEM
- STATE/FEDERAL WETLAND LIMITS
- OHW — ORDINARY HIGH WATER
- 100YR — 100-YEAR FLOODPLAIN
- FEMA FLOODWAY
- TEMPORARY IMPACT
- PERMANENT IMPACT

ENVIRONMENTAL PERMIT PLANS
PLAN DATE: 04-29-2021

FLOODPLAIN CUT & FILL INFORMATION			
VOLUME IMPACTS			
EXCAVATION IN FEMA FLOODWAY	FILL IN FEMA FLOODWAY	EXCAVATION IN FEMA 100YR FLOODPLAIN	FILL IN FEMA 100YR FLOODPLAIN
225 C.Y.	225 C.Y.	108 C.Y.	108 C.Y.

REV.	DATE	REVISION DESCRIPTION	SHEET NO.

THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE THE CONDITIONS OF ACTUAL QUANTITIES OF WORK WHICH WILL BE REQUIRED.

Plotted Date: 5/5/2021

DESIGNER/DRAFTER: XHZ
CHECKED BY: SAB
SCALE IN FEET 0 40 80
SCALE 1"=40'

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: ...\PMT-04_Flood Plain Impact Plan.dgn

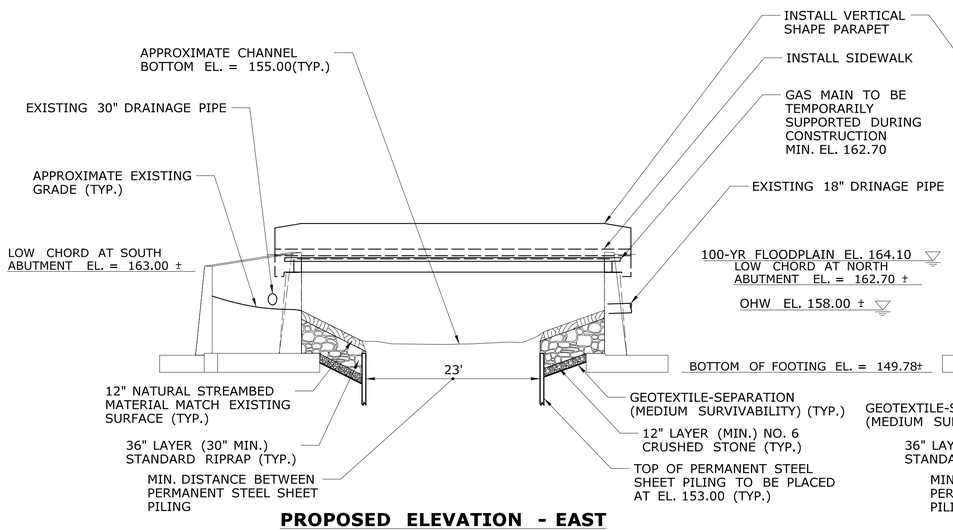
SIGNATURE/BLOCK:
OFFICE OF ENGINEERING
APPROVED BY:

PROJECT TITLE:
REHABILITATION OF BR. NO. 00653
HOPMEADOW ST. (ROUTE 10)
OVER HOP BROOK

TOWN: **SIMSBURY**

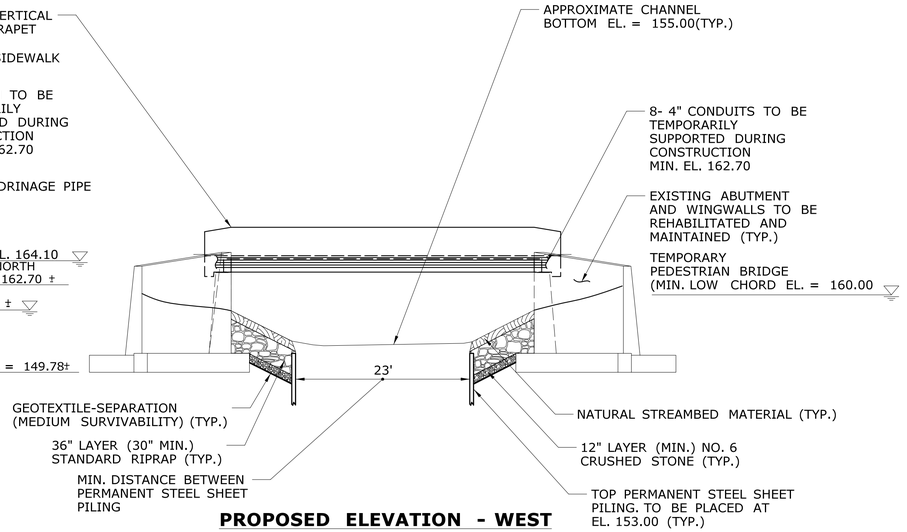
DRAWING TITLE:
FLOODPLAIN IMPACT PLAN

PROJECT NO. **0128-0153**
DRAWING NO. **PMT-04**
SHEET NO.



PROPOSED ELEVATION - EAST

SCALE: 1" = 10'



PROPOSED ELEVATION - WEST

SCALE: 1" = 10'

NATURAL STREAMBED MATERIAL NOTES:

1. THE NATURAL STREAMBED MATERIAL EXCAVATED FROM WITHIN THE EXISTING CHANNEL DURING BRIDGE REMOVAL SHALL BE STOCKPILED AND THEN REPLACED WITHIN THE STREAMBED TO THE DEPTH SHOWN ON THE PLANS, AS DIRECTED BY THE ENGINEER AND IN ACCORDANCE WITH THE PERMIT DOCUMENTS.

2. THE STOCKPILE SHALL BE LOCATED OUTSIDE THE WETLAND LIMITS AND PROTECTED WITH A SEDIMENTATION CONTROL SYSTEM.

3. THE COST OF REPLACING THE STREAMBED MATERIAL WITHIN THE STREAM SHALL BE INCLUDED IN THE COST OF THE ITEM "EXCAVATION AND REUSE OF EXISTING CHANNEL BOTTOM MATERIAL" (REFER TO SPECIAL PROVISION).

4. ADDITIONAL STREAMBED MATERIAL, IF REQUIRED, SHALL BE IN ACCORDANCE WITH SPECIAL PROVISION "SUPPLEMENTAL STREAMBED MATERIAL."

HYDRAULIC DATA TABLE (STRUCTURE NO. 00653)

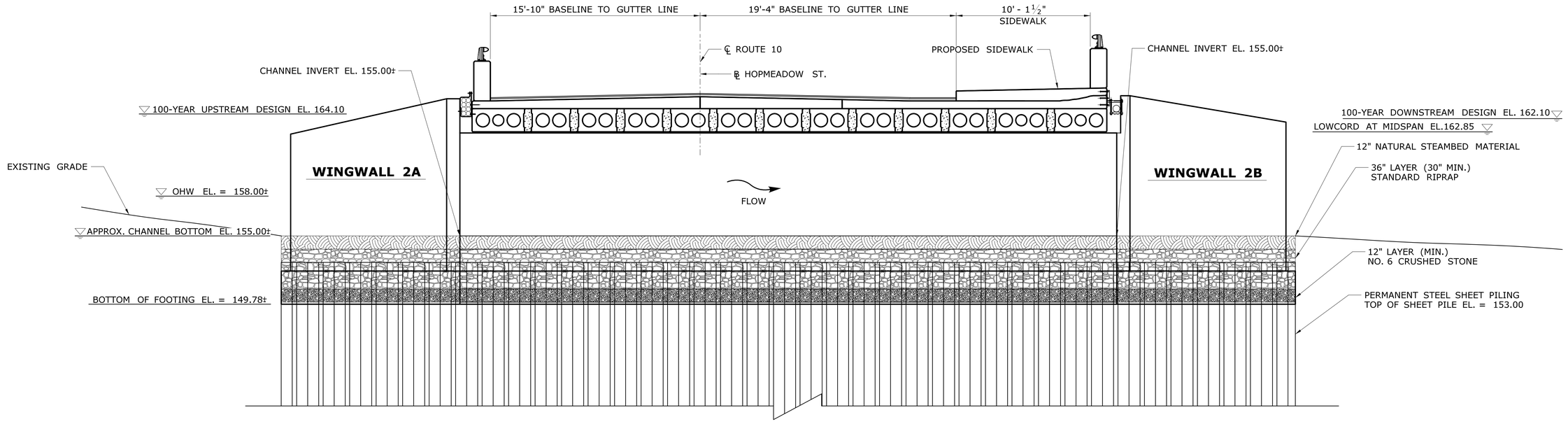
DRAINAGE AREA	13.1 SQ. MI
DESIGN FREQUENCY	100- YEAR
DESIGN DISCHARGE	2,380 CFS
AVERAGE DAILY FLOW ELEV. (COMPUTED & OBSERVED)	155.8 -UPSTREAM 155.7 -DOWNSTREAM
DESIGN WATER SURFACE ELEVATION	164.1 FT - UPSTREAM 162.1 FT - DOWNSTREAM

OPENNESS RATIO (OR):

OR = OPEN AREA / BRIDGE WIDTH
OR = 298.7 sf. / 47.92 ft = 6.23 ft
6.23 ft. > 0.82 ft (RECOMMENDED MINIMUM)

BANKFULL WIDTH (BFW):

BFW = 32 ft. EXISTING UPSTREAM (OHW)
1.2 X BFW = 38.4 ft
38.4 ft. < 40 ft.PROPOSED CLEAR SPAN



TYPICAL CROSS SECTION

SCALE: ¼" = 1'-0"

ENVIRONMENTAL PERMIT PLANS
PLAN DATE: 04-29-2021

REV.	DATE	REVISION DESCRIPTION	SHEET NO.

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Plotted Date: 5/5/2021

DESIGNER/DRAFTER: XHZ
CHECKED BY: SAB
SCALE AS NOTED

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: ...\PMT-05_Elevation and Section.dgn

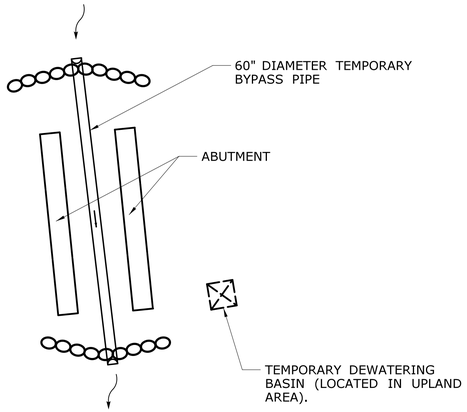
SIGNATURE/BLOCK:
OFFICE OF ENGINEERING
APPROVED BY:

PROJECT TITLE:
REHABILITATION OF BR. NO. 00653
HOPMEADOW ST. (ROUTE 10)
OVER HOP BROOK

TOWN: SIMSBURY

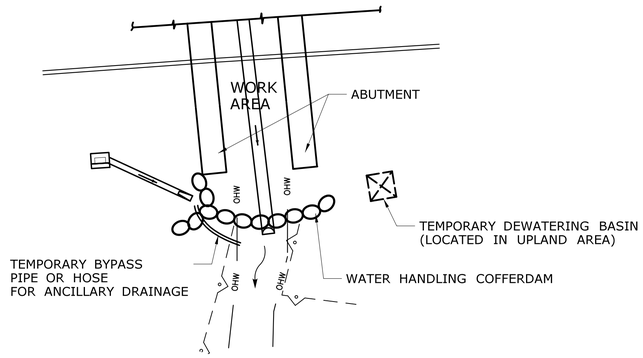
DRAWING TITLE: BRIDGE ELEVATION

PROJECT NO. 0128-0153
DRAWING NO. PMT-05
SHEET NO.



TEMPORARY PIPE/HOSE THROUGH WORK AREA

NOT TO SCALE



ANCILLARY STORM DRAINAGE NEAR WORK AREA

NOT TO SCALE

SUGGESTED SEQUENCE

1. INSTALL SEDIMENTATION CONTROL SYSTEM (SCS).
2. PERFORM CLEARING, GRUBBING AND INVASIVE SPECIES CONTROL.
3. CONSTRUCT TEMPORARY DEWATERING BASIN. BASIN TO REMAIN THROUGH ALL STAGES OF CONSTRUCTION.
4. INSTALL TEMPORARY WATER HANDLING SYSTEM.
5. CONDUCT SUPERSTRUCTURE REPLACEMENT IN 4 STAGES. REPEAT STEPS 6-8 THROUGH SUBSEQUENCE STAGES.
6. INSTALL DEBRIS SHIELD (MIN. LOW CORD ELEVATION 161.5) AND REMOVE PERTINENT PORTION OF SUPERSTRUCTURE. REMOVE DEBRIS SHIELD.
7. INSTALL NO.6 CRUSHED STONE OVER GEOTEXILE-SEPARATION (MEDIUM SURVIVABILITY), STANDARD RIPRAP AND NATURAL STREAM BED MATERIAL BETWEEN PERMANENT STEEL SHEET PILING AND THE ABUTMENT. PERMANENT STEEL SHEET PILING TO BE INSTALLED TO EL. = 153.00
8. INSTALL PERTINENT PORTION OF SUPERSTRUCTURE.
9. INSTALL PLANTINGS (REFER TO PMT-07) REMOVE PIPE AND TEMPORARY WATER-HANDLING-COFFERDAM.
10. REMOVE EROSION AND SEDIMENTATION CONTROL UPON PERMANENT STABILIZATION.

TEMPORARY CONDITION - HYDRAULIC DATA (STRUCTURE NO. 00653)	
AVERAGE DAILY FLOW (ADF)	24 CFS
AVERAGE SPRING FLOW (ASF)	45 CFS
2 - YEAR FREQUENCY DISCHARGE	500 CFS
TEMPORARY DESIGN DISCHARGE	135 CFS
TEMPORARY DESIGN FREQUENCY	3 X ASF
TEMPORARY HEADWATER ELEV.	160.3 FT - UPSTREAM 157.1 FT - DOWNSTREAM

WATER HANDLING NOTES:

1. THE CONTRACTOR SHALL MAINTAIN WATER THROUGH THE TEMPORARY WATER HANDLING SYSTEM AS REQUIRED DURING CONSTRUCTION OF THE NEW STRUCTURE.

2. A DEWATERING BASIN SHALL BE ESTABLISHED OUTSIDE OF THE WETLAND LIMITS.

3. TEMPORARY WATER-HANDLING-COFFERDAM SHALL CONSIST OF AN APPROVED SYSTEM THAT THE CONTRACTOR ELECTS TO USE WHICH WILL SAFELY CONVEY WATER FLOWS THROUGH THE CONSTRUCTION AREA, SHALL BE ABLE TO SUPPORT CONSTRUCTION ACTIVITY AND SHALL CONFORM TO PERMITS.

ANY WATER HANDLING SCHEME DEPICTED WITHIN THE DEPARTMENT'S 'HANDLING WATER TYPICAL SCHEMATICS' MAY BE UTILIZED UNLESS SPECIFICALLY PROHIBITED. A MEANS AND METHOD FOR WATER HANDLING SYSTEM SHALL BE SUBMITTED BY THE CONTRACTOR TO THE ENGINEER FOR APPROVAL.

4. WATER HANDLING MEASURES SHALL NOT EXCEED IMPACT AREAS SHOWN ON THE WETLAND AND FLOODPLAIN IMPACT SHEETS OF THE PERMIT PLANS.

5. ANY STORM DRAINAGE DISCHARGING INTO A CONFINED WORK AREA FROM EXISTING OR PROPOSED STORM DRAINAGE PIPES SHALL BE DIVERTED OR PUMPED OUTSIDE THE CONFINED AREAS. PUMPS/PIPES SHALL BE SIZED BY THE CONTRACTOR TO HANDLE THE EXPECTED FLOWS AND BE DISCHARGED TO A STABLE LOCATION. THE CONTRACTOR SHALL SUBMIT THE MEANS AND METHODS OF HANDLING STORM DRAINAGE TO THE ENGINEER FOR APPROVAL AND IS INCLUDED AS PART OF WATER HANDLING.

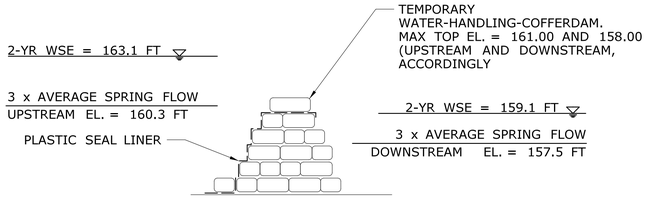
6. IF A SHORT DURATION PUMP SYSTEM IS PROPOSED DURING LOW FLOW CONDITIONS, THE PUMP SYSTEM SHALL BE DESIGNED BY THE CONTRACTOR AND HAVE A MINIMUM CAPACITY AS SHOWN IN THE TEMPORARY HYDRAULIC TABLE. PUMP SYSTEM PLAN SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW AND APPROVAL.

BASED UPON FIELD CONDITIONS, WORK DURATION, AND EXPECTED WEATHER CONDITIONS, THE ENGINEER MAY APPROVE A CONSTRUCTION WATER HANDLING PLAN WITH LOWER PUMPING FLOWS, PROVIDED THAT THIS INCLUDES A CONTINGENCY PLAN, WHICH MINIMIZES NEGATIVE IMPACTS AND SAFELY CONVEYS LARGER FLOWS THROUGH THE WORK AREA.

LEGEND

OHW — ORDINARY HIGH WATER

STATE/FEDERAL WETLANDS



WATER-HANDLING-COFFERDAM TYPICAL SECTION

NOT TO SCALE

TIME-OF-YEAR BMP NOTE:

ANY "UNCONFINED" IN-STREAM WORK WITHIN THE WATERCOURSE SHALL BE RESTRICTED TO THE PERIOD FROM JUNE 1 TO SEPTEMBER 30, INCLUSIVE.
UNLESS OTHERWISE INCLUDED AS A SPECIAL CONDITION OF THE LICENSE, THE ABOVE CONDITION SHALL APPLY TO PROJECTS IN NON-COASTAL WATER.

THE DEPARTMENT WILL REVIEW AND MAY APPROVE THE METHODS OF UNCONFINED IN-WATER WORK WITH CONSIDERATION OF THE FOLLOWING:

- PROPOSED SCHEDULE FOR WORK OPERATIONS
- ALL UNCONFINED IN-STREAM WORK SHALL BE MINOR IN NATURE;
- DISTURBANCE SHALL BE LIMITED TO AREAS THAT HAVE BEEN APPROVED FOR TEMPORARY AND PERMANENT IMPACT;
- BEST MANAGEMENT PRACTICE MEASURES SHALL BE UTILIZED WHEREVER POSSIBLE TO MINIMIZE TURBIDITY/SEDIMENT TRANSPORT DOWNSTREAM;
- DISTURBED AREAS AND DURATION OF DISTURBANCE SHALL BE MINIMIZED TO THE EXTENT POSSIBLE;
- IN-STREAM WORK SHALL BE DONE DURING PERIODS OF LOW FLOW.

THE INSTALLATION OR REMOVAL OF A WATER-HANDLING-COFFERDAM OR COFFERDAM PROHIBITED BETWEEN APRIL 1 AND SEPTEMBER 30 UNLESS CONFINED BEHIND A SILT BOOM, TURBIDITY CURTAIN OR OTHER CT DOT OEP APPROVED MEASURE.

ENVIRONMENTAL PERMIT PLANS

PLAN DATE: 04-29-2021

REV.	DATE	REVISION DESCRIPTION	SHEET NO.

THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE THE CONDITIONS OF ACTUAL QUANTITIES OF WORK WHICH WILL BE REQUIRED.

Plotted Date: 5/5/2021

DESIGNER/DRAFTER: XHZ

CHECKED BY: SAB

SCALE AS NOTED

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: ...\PMT-06_WATER-HANDLING.dgn

SIGNATURE/BLOCK:

OFFICE OF ENGINEERING

APPROVED BY:

PROJECT TITLE:

REHABILITATION OF BR. NO. 00653 HOPMEADOW ST. (ROUTE 10) OVER HOP BROOK

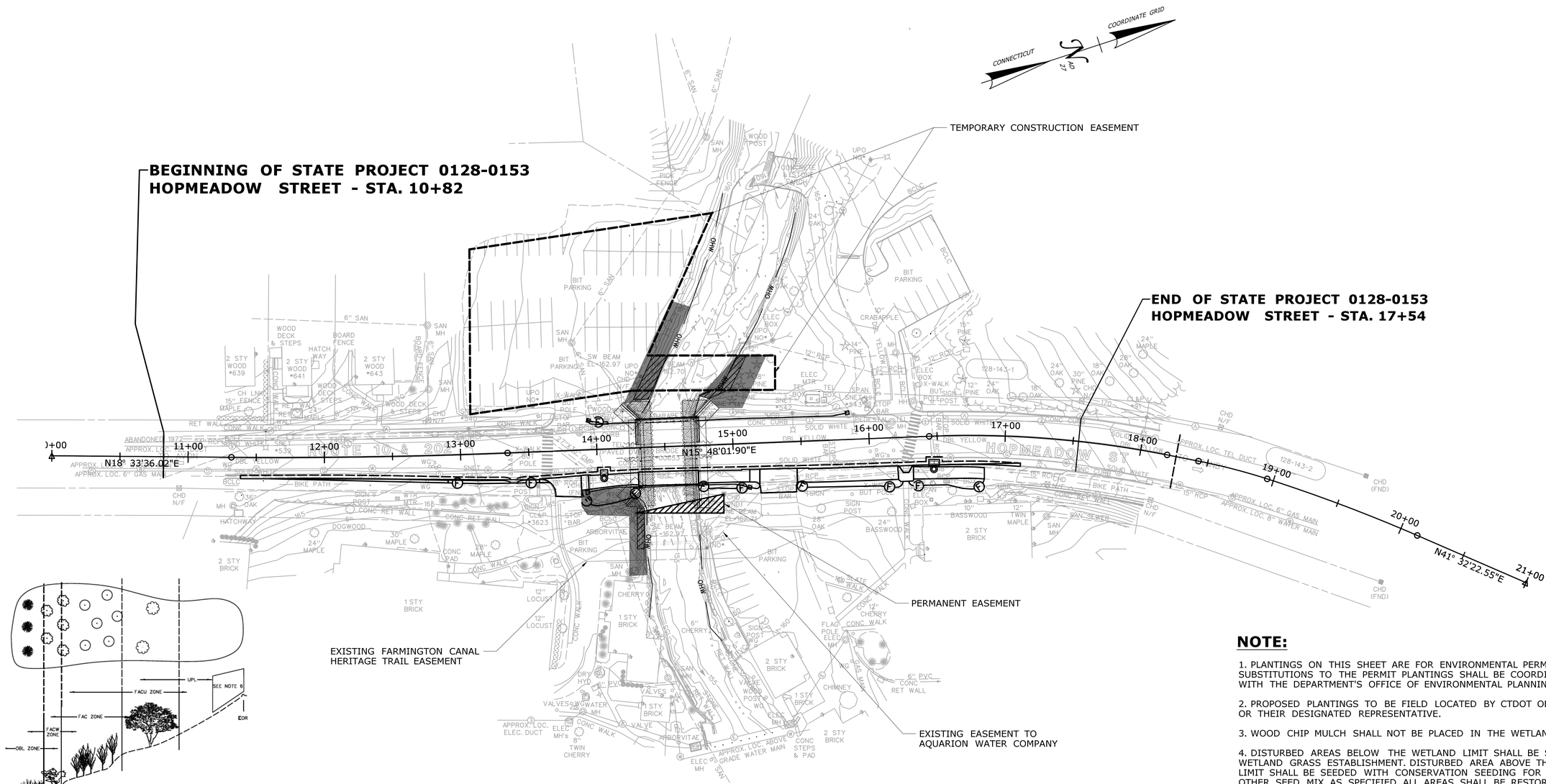
TOWN: **SIMSBURY**

DRAWING TITLE: **TEMPORARY WATER-HANDLING**

PROJECT NO. **0128-0153**

DRAWING NO. **PMT-06**

SHEET NO.



SCHEMATIC PLANTING

BOTANICAL NAME	COMMON NAME	SIZE	QTY.	SPACING	WETLAND INDICATOR
CLETHRA ALNIFOLIA	SWEET-PEPPERBUSH	18" - 24" HT. B.B.	15	3'-5' ON CENTER	FAC
ALNUS INCANA	SPECKLED ALDER	2'- 3' HT. B.B.	10	3'-5' ON CENTER	FACW
CORNUS RACEMOSA	GREY DOGWOOD	2'- 3' HT. B.B.	15	3'-5' ON CENTER	FAC
ACER RUBRUM	RED MAPLE	2" - 2½" CAL. B.B.	3	10' ON CENTER	FAC
		TOTAL	43		
CONTROL AND REMOVAL OF INVASIVE VEGETATION					
CONSERVATION SEEDING FOR SLOPES					
WETLAND GRASS ESTABLISHMENT					
WOOD CHIP MULCH					

CONTROL AND REMOVAL OF INVASIVE VEGETATION. REFER TO NOTE 7.

AREA TO BE RESTORED WITH PLANTINGS

TOTAL PLANTS = 43
TOTAL PLANTING AREA = 3600 S.F.

NOTE:

1. PLANTINGS ON THIS SHEET ARE FOR ENVIRONMENTAL PERMITTING. SUBSTITUTIONS TO THE PERMIT PLANTINGS SHALL BE COORDINATED WITH THE DEPARTMENT'S OFFICE OF ENVIRONMENTAL PLANNING (OEP)

2. PROPOSED PLANTINGS TO BE FIELD LOCATED BY CTDOT OEP OR THEIR DESIGNATED REPRESENTATIVE.

3. WOOD CHIP MULCH SHALL NOT BE PLACED IN THE WETLAND AREA.

4. DISTURBED AREAS BELOW THE WETLAND LIMIT SHALL BE SEEDED WITH WETLAND GRASS ESTABLISHMENT. DISTURBED AREA ABOVE THE WETLAND LIMIT SHALL BE SEEDED WITH CONSERVATION SEEDING FOR SLOPES, OR OTHER SEED MIX AS SPECIFIED. ALL AREAS SHALL BE RESTORED.

5. ALL PLANT MATERIAL SHALL BE STRAIGHT SPECIES. NO VARIETIES OR CULTIVARS WILL BE ACCEPTED.

6. NO PLANTING TO BE PLACED IN MOW AREA

7. AREA TO BE TREATED FOR INVASIVES AND PROPERLY REPARED FOR FINAL PLANING, AND RESTORATION.

ENVIRONMENTAL PERMIT PLANS
PLAN DATE: 04-29-2021

REV.	DATE	REVISION DESCRIPTION	SHEET NO.

THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE THE CONDITIONS OF ACTUAL QUANTITIES OF WORK WHICH WILL BE REQUIRED.

Plotted Date: 5/5/2021

DESIGNER/DRAFTER: XHZ
CHECKED BY: SAB
SCALE IN FEET
0 40 80
SCALE 1"=40'

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: ...\PMT-07_Planting Plan.dgn

SIGNATURE/BLOCK: OFFICE OF ENGINEERING
APPROVED BY:

PROJECT TITLE: REHABILITATION OF BR. NO. 00653 HOPMEADOW ST. (ROUTE 10) OVER HOP BROOK

TOWN: SIMSBURY

DRAWING TITLE: PLANTING PLAN

PROJECT NO. 0128-0153
DRAWING NO. PMT-07
SHEET NO.

Attachment 4: Interagency Coordination Meeting Notes

Interagency Meeting Notes

January 16, 2020
Room 3130

December 5, 2019 Interagency Meeting Notes

There were no comments on the December 5th Interagency Meeting Notes. The notes are considered accepted.

Project 76-223 Rehabilitation of Bridge Nos. 06884 & 06885, I-384 EB & WB over Porter Brook, Towns of Manchester and Bolton

The project involves slip-lining two existing culverts that convey Porter Brook under Interstate 384 in Manchester/Bolton.

Bridge 06884 is the downstream culvert and consists of an 84 inch diameter corrugated metal culvert, 291 feet in length (2.6% slope) under Rt. 384 westbound, which will be slip-lined with a 70" corrugated aluminum pipe. Drainage area of 0.57 sq. miles.

Bridge 06885 is the upstream culvert and consists of a 72 inch diameter asphalt-coated corrugated metal culvert, 184 feet in length (3.0 % slope) under Rt. 384 eastbound, which will be slip-lined with a 62" Ultra-flow pipe. Drainage area of 0.53 sq. miles.

Both culverts have been recently assigned a "2 – Critical" and will be on an accelerated schedule. Rehabilitation will also include constructing concrete headwalls, cutoff walls, and wingwalls at the inlets and outlets. Internal baffles within the pipes and rounded stone riprap topped with natural streambed material at the pipe outlets will be included in the proposed project. A trash rack at the inlet is not proposed. ADT of 16,250 vehicles. No NDDB. Presently, both culverts are impassable to fish. Predicted water surface elevation increases of 2 feet and 2.7 feet at the inlets of the downstream and upstream culverts, respectively, assumes the installation of v-notch baffles.

Project Impacts:

Wetland & Watercourse Impacts (coincident for both state and federal):

	Wetland (SF)	Watercourse (SF)	Total (SF)
Permanent	0	2,067	2,067
Temporary	3,444	1,320	4,764
Total	3,444	3,387	6,831

Permitting Requirements: USACE Pre-Construction Notification (PCN) GP-19, CT DEEP Programmatic Addendum GP 401 Water Quality Certification, CT DEEP General Permit Water Resource Construction Activities (IWGP), CT DPH Water Company Land Permit

Agency Comments:

CT DEEP Fisheries has identified brook trout in the area. There was a discussion regarding why the project proposed v-notch baffles instead of the sloped corner baffles that were recommended by Fisheries. The designer explained that v-notch baffles met the minimum water depth and water velocity criteria for brook trout as opposed to corner baffles where the calculations showed flow velocities that exceeded the rate understood to be suitable for fish passage.

Project 76-223 (continued)

Based upon the DOT-funded Lyman Brook study, Fisheries indicated sloped corner baffles could pass fish at substandard conditions (i.e., fish passed at water depths as low as 2.5 inches and at higher water velocities) and were preferred for better fish passage. The also designer indicated that sloped corner baffles are expected to have higher inundation increases that that caused by v-notch baffles. Since inundation increases in the median are expected to be contained in the State ROW, sloped corner baffles will be incorporated into the downstream culvert (#06884). Expected off-site inundation increases caused by sloped corner baffles in the upstream culvert (#06885) will necessitate preparation and review of hydraulic models/inundation maps, followed by further discussion with DEEP LWRD & Fisheries.

(*Note, a post-meeting project assessment indicated the accelerated schedule could not support waiting for the additional hydraulic analyses needed for either culvert. Therefore, initial permit applications will include the proposed v-notch baffles and hydraulic analyses will continue for the sloped corner baffles. If the resulting inundation and velocities are acceptable, a request for a de minimus change to the pending applications will be submitted.)*

CTDOT design staff noted that this project would be designed with the intent of construction during summer 2021 during low flow conditions, but if inspections show further deterioration of the culverts, the project may need to be expedited, requiring replacement as early as fall 2020. If it is determined that a culvert requires immediate rehabilitation, it was asked if the permits could be issued for pushing of pipe liners in the wet and without a time of year restriction with BMPs as needed; all other activities would be conducted behind cofferdams and/or during low flow. CTDEEP Fisheries stated that this area has the highest number of brook trout in the State and they spawn in the fall (Sept & Oct), therefore, Fisheries indicated if unconfined in-water work were to be proposed during the fall, CTDEEP Fisheries would request that required mitigation be included in the authorization.

Action Items: Additional hydraulic analysis of sloped corner baffles will be prepared for discussion with DEEP Fisheries and DEEP LWRD. The proposed construction schedule will be reviewed to compare durations for in-water slip-lining without a time of year restriction versus the same work done using cofferdams with a time of year restriction.

Project 73-192, Preventative Maintenance of Bridge Nos. 05181, 05182, 05183 & 06167, Litchfield

Project No. 73-192 is a bridge Preservation Project in the Town of Litchfield. The purpose of this project is to implement systematic preventative maintenance repairs to extend the service lives of the bridges. Project 73-192 is located in a FEMA Zone A.

Project 73-192 (continued)

Bridge No. 05181 is a two-span structure composed of twin 10'x8' concrete box culverts carrying East Litchfield Road No. 2 over Spruce Brook on a slight skew. ADT is 230 vehicles per day. The proposed scope of work includes excavating the roadway and embankment over the existing structure to perform concrete patching and to install a waterproof membrane. Localized drainage will be improved by installing a 4-foot wide modified riprap swale on the northeast and southeast sides of the structure. Concrete repairs will be performed on the walls and top of slab within both culvert cells. Drainage area of 2.54 sq. miles.

Bridge No. 05182 is a two-span structure composed of twin 10'x7' concrete box culverts carrying Wheeler Road over Spruce Brook. The ADT is 170 vehicles per day. The proposed scope of work includes removing the bituminous roadway over the existing structure to perform concrete patching and to install a waterproof membrane. Embankment erosion and drainage outfall will be repaired. Drainage area of 2.29 sq. miles.

Bridge No. 05183 is a two-span structure composed of twin 14'x10' concrete box culverts carrying Sawmill Road over Marshepaug River on a slight skew. The ADT is 173 vehicles per day. The roadway and embankment over the existing structure will be excavated in order to perform concrete patching on the top of the cells and install a waterproof membrane. Concrete repairs will be performed on the walls and top of slab within both culvert cells. Drainage area of 11.3 sq. miles.

Bridge No. 06167 is a single span, glue-laminated timber structure with concrete abutments and stone masonry wingwalls. It carries Duck Pond Road over Butternut Brook with a 20 degree skew. The open span of the bridge is approximately 20 feet. The ADT is 61 vehicles per day. The proposed work consists of removing the gravel-wearing surface to repair the timber deck and installing membrane water-proofing. The concrete abutments will be patched and the stone masonry walls will be repointed. Drainage area of 2.14 sq. miles.

Project Impacts: Wetland & Watercourse Impacts (coincident for both state and federal):

	Wetland (SF)	Watercourse (SF)	Total (SF)
Br. 05181			
Permanent	0	0	0
Temporary	505	1,995	2,500
Br. 05182			
Permanent	0	0	0
Temporary	325	1,180	1,505
Br. 05183			
Permanent	0	0	0
Temporary	475	3,465	3,940
Br. 06167			
Permanent	0	0	0
Temporary	115	540	655

Impacts are due to placement of temporary water handling cofferdams to shift flow allowing any needed repair work inside the culverts.

Project 73-192 (continued)

Permitting Requirements: USACE Self Verification (SV) GP-19, FM-General, Litchfield Inland Wetlands Commission

Agency Comments:

- USACE asked if these existing bridges had all been previously permitted by USACE and the consultant confirmed as such.
- USACE indicated that one SV application for all four sites would be acceptable, but the respective impacts for each bridge will need to be distinctly identified as part of the application. The application should also clearly state the types (e.g., sandbags) and amounts of temporary fills that are proposed.
- CTDOT Hydraulics asked about the type of rail proposed and the consultant confirmed it would be open rail. CTDOT Hydraulics confirmed that one FM-General application is acceptable.

Action Items: Finalize design. Prepare permit applications and submit to respective agencies. USACE staff requested a chart of all impacts, type of material (rip rap, fill,…)

Project No. 158-216, Replacement of Bridge No. 04969, Bayberry Lane over Aspetuck River, Westport

Bridge No. 04969 is a structurally deficient single span structure located on Bayberry Lane #2 over the Aspetuck River in Westport. Project is adjacent to the Newman Preserve. The existing bridge has an open span of 19.4 feet and a total width of 23.8 feet, and is oriented at a 17 degree skew to the river. Bank full width (BFW) is 37 feet. The existing structure is located in FEMA mapped flood zone and over-tops during the 5-yr storm event. The drainage area is 21.1 square miles. The scope of this project is to replace the entire bridge with a clear-span superstructure founded on new abutments. The proposed plan is to widen the span of the bridge and build new abutments behind the existing, resulting in a 45-foot clear span structure (>1.2x BFW). Existing abutments will be cut down one foot below the streambed. Gas and water utility lines will be restored on the new structure above the low chord and protected by the fascia. During construction, the utility lines will be temporarily relocated downstream of the structure. The proposed structure will pass flows up to the 10-yr storm. ADT of 636 vehicles.

The consultant designer/hydraulic engineer presentation discussed site constraints/flood flows in detail:

- The proposed crossing maintains the existing bridge crossing location at the narrowest section of the Aspetuck River within the project reach.
- The roadway will experience overtopping for the 25-year design discharge and greater events (50-year through 500-year). The proposed bridge will operate in pressure flow for the 10-year design discharge and above. A significant portion of the 50-year discharge is conveyed as weir flow over the roadway without a significant difference in the water surface elevation from the natural (no bridge) condition.

Project No. 158-216 (continued)

- The entire crossing site, including the roadway approaches, is located at an elevation close to the floodplain elevation. The existing and proposed bridge hydraulic openings are inadequate and cannot reasonably be made adequate because of the proximity of the roadway profile and surrounding area to the floodplain elevation.
- The existing and proposed roadway (and the bridges themselves) do not obstruct continuous, uninterrupted flow of the 50-year frequency storm discharge.
- Raising the bridge/roadway profile to be above the 50-year frequency flood elevation would be impractical, cause significant impacts to the adjacent developed properties and require flooding easements upstream of the crossing.

Project Impacts:

Wetland & Watercourse Impacts

	Wetland (SF)	Watercourse (SF)	Total (SF)
Permanent	446	0	446
Temporary	0	690	690
Total	446	690	1136

Floodplain Impacts:

Cut:	243 CY
Fill:	135 CY
Net Cut:	108 CY

Permitting Requirements: FM-MOU, Town of Westport Inland Wetlands, Army Corps SV or PCN (see below) GP-6 for utilities and GP-19 for all other regulated work

Agency Comments:

- USACE commented the project does not pass the 50-year storm. Passing the 50-year storm with continuous, uninterrupted flow is a condition for a GP-19 activity to typically qualify for authorization under an SV. Past precedence was discussed. USACE staff agreed to consult with the USACE Regulatory Division supervisor.
- DEEP Fisheries commented this portion of the Aspetuck is an important area for fish passage due to the fishways located downstream. OEP indicated that EFH coordination had not yet been completed, and will confirm whether NDDB has blueback herring in the project area.

Action Items:

- DOT will provide USACE with previous examples of projects determined to be SV-eligible by USACE and DEEP staff at Interagency Meetings even though the projects did not strictly meet the continuous uninterrupted flow of the 50-year frequency flow SV-condition.
  (Follow-up note: Subsequent to the meeting, DOT provided the examples. USACE responded that USACE was unaware of waivers being made for specific parts of SVs, such as allowing for continuous uninterrupted flow of the 50-year frequency storm flows, and that project 158-216 would be considered as a PCN under GP 19.)
- OEP will complete EFH coordination.

Project No. 157-86, Preservation of Bridge No. 04351, Davis Hill and Bridge No. 04960, River Road over Saugatuck River, Weston

Project 157-086 proposes preservation activities for Bridge Nos. 04351 and 04960 carrying Davis Hill Road and River Road, respectively, over the Saugatuck River in the Town of Weston. Both bridges are single-span structures consisting of a cast-in-place reinforced concrete deck with reinforced concrete abutments. Bridge No. 04351 was constructed in 1980 and has an open span of 70 feet, an out-to-out width of 35.5 feet, and a 30 degree skew. Bridge No. 04960 was constructed in 1957 and has an open span of 66 feet and an out-to-out width of 27.5 feet. Both bridges will include roadway reconstruction and structural preservation items; minor repair and crack sealing of substructure; and waterproofing and paving of bridge deck. In addition, Bridge No. 04351's preservation activities will include replacing the existing sidewalk and replacing the existing leak- offs with new deck drainage. The project is located in a FEMA Zone AE. EFH is present in this portion of Saugatuck River, therefore NOAA coordination will be required. The NDDB Review response (8/7/19) for bridge 04960 reports the presence of Lizards Tail at or near both bridges. ADT of 600 vehicles. Project duration approximately 8 months starting in April 2021.

Project Impacts: Wetland & Watercourse Impacts (coincident for both state and federal):

	Wetland (SF)	Watercourse (SF)	Total (SF)
Br. 04351			
Permanent	0	0	0
Temporary	153	2,321	2,474
Br. 04960			
Permanent	0	0	0
Temporary	11	2,428	2,439

Permitting Requirements:
Bridge 04351- USACE SV GP-19, FM-General, Weston Inland Wetlands
Bridge 04960- USACE SV GP-19 (grandfathered structure - 1957 construction), FM-General, Weston Inland Wetlands

Agency Comments:

- CTDEEP Fisheries staff mentioned that the river is stocked with "everything". They asked about the method of placing scaffolding on the channel bottom. The consultant and DOT indicated a "dead man" type anchor is typically placed on the channel bottom and the scaffolding leveled on top. Bridge 04351 requires underside bridge containment/access primarily at the ends of the bridge and scaffolding would be adjacent to the abutments. Bridge 04960 will require containment/access along the entire length of the bridge underside to paint the beams and scaffolding.
- CTDOT staff asked for clarification on the access needed for in-water work and the consultant stated that access would be by foot (e.g., no machinery) adjacent to the bridge.

Project No. 157-86 (continued)

Action Items: Provide OEP staff with plans appropriate for completing GARFO EFH coordination on both bridges and for completing DEEP NDDB coordination on Bridge 04351. Plans should show the time of year restrictions for any in-water work and state the method or show construction access for the proposed in-water work. Plans should also show how the Lizard Tail plants will be fenced for their protection.

Project 128-153 Rehabilitation of Bridge No. 00653, Rt. 10 over Hop Brook, Simsbury

Bridge No. 00653 carries a Route 10 (Hopmeadow St.) and the Farmington Canal Heritage Trail (FCHT), a bicycle trail, over Hop Brook in the Town of Simsbury. Bridge No. 00653 is single span structure originally constructed in 1957 and rehabilitated in 2009 with a widened sidewalk and new parapets. The existing open span is 40 feet long with an out-to-out width of 49'- 3". The estimated ADT is 13,000 vehicles per day. A 6-inch gas main is supported on the downstream parapet and eight 4-inch telecommunication conduits are supported on the upstream parapet fascia. The substructure consists of reinforced concrete abutments and wingwalls with spread footings. The bridge has a superstructure in serious condition (rating 3), a Scour Critical rating of "3", and a substructure is in fair condition (rating 5). The project involves superstructure replacement with precast concrete deck units, substructure rehabilitation, and installation of scour countermeasures near the abutment, consisting of cutoff sheet piling and riprap top dressed with natural streambed material. During construction, a temporary pedestrian bridge for the Farmington Canal Heritage Trail will be installed over Hop Brook. The project is >¼ miles from the mainstem of the Farmington River and coordination with National Park Service is not required. The federal ESA-listed Dwarf Wedge mussel is located in the mainstem of the Farmington River, however DEEP NDDB has confirmed a mussel survey would not be required due to an existing impassable dam downstream of the project. Therefore, with respect to ESA, a determination of No Effect has been made for the Dwarf Wedge mussel. A bald eagle nest is within 450 ft. and coordination with DEEP Wildlife has confirmed work can be completed during the time-of-year restriction, however sheet driving is limited to after May 1st. Drainage area of 13.1 sq. miles.

Project Impacts:

Bridge 00653 Wetland & Watercourse Impacts (coincident for both state and federal):

	Wetland (SF)	Watercourse (SF)	Total (SF)
Permanent	6	1194	1200
Temporary	0	2800	2800
Total	6	3994	4000

Permitting Requirements: USACE SV GP-19, FM-General, CT DEEP IWGP

Agency Comments: none

Project 128-153 (continued)

Action Items: Provide OEP with permit plan set to coordinate final DEEP Fisheries sign-off and to prepare permit applications for submittal to permitting agencies. Include the pile driving TOY restriction in the project contract.

Attachment 32: CT DOT Flood Management General Certification

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

memorandum

subject: **Flood Management General Certification**
Project No. 0128-0153]
F.A.P. No. – 0010(126)
Rehabilitation of Bridge No. 00653
Town of Simsbury

date: September 10, 2020

to: Michael E. Hogan
Transportation Principal Engineer
Bureau of Engineering and Construction

from: Andrew J. Cardinali for
Transportation Principal Engineer
Bureau of Engineering and Construction

Please review this request for Flood Management General Certification and indicate your concurrence below.

Certification (to be completed by designer)

I have read the Flood Management General Certification and the descriptions for the approved DOT minor activities. This project qualifies for the Flood Management General Certification under:

(☐) Minor Safety Improvements and Streetscape Projects
(☐) Roadway Repaving, Maintenance &Underground Utilities
(☐) Minor Stormwater Drainage Improvements
(☐) Removal of Sediment or Debris from a Floodplain
(☐) Wetland Restoration Creation or Enhancement
(☑) Scour Repairs at Structures; (*Must acquire DEEP Fisheries Concurrence to be eligible*)
(☐) Guide Rail Installation
(☑) Deck and Superstructure Replacements
(☐) Minor Bridge Repairs and Access
(☐) Fisheries Enhancements
(☐) Surveying and Testing
(☐) Bicycle / Pedestrian, Multi-Use Trails and Enhancement Projects

The following required documentation is attached in support of this certification:

- Project description
- Location Plan
- Description of Floodplain involvement and how project qualifies for general certification
- 8-1/2" by 11" copy of the FEMA Flood Insurance Rate Map (FIRM) and Floodway Boundary Map(if applicable)
- Design Plans, (dated August 12, 2020) with FEMA floodplain and floodway boundaries plotted, cross sections and profiles, as necessary, that clearly depict the floodplain involvement
- FEMA 100-year flood elevation plotted on elevation view (for structures)

Print Name: Sarwat A. Basha	Title: Project Engineer
Signature: Sarwat A. Basha Digitally signed by Sarwat A. Basha	Date: 9/10/2020

Concurrence (to be completed by Hydraulics and Drainage)

Based on the documentation submitted, I hereby concur that the project qualifies for Flood Management General Certification.

If there are any changes to the proposed activities within the floodplain or floodway, the project must be re-submitted for review and approval.

Signature: Michael E Hogan Digitally signed by Michael E. Hogan, P.E. Date: 2021.05.11 18:29:54-04'00'	Date:

cc: Bartholomew P. Sweeney – Michael E. Hogan – Won Song
Andrew J. Cardinali – Kevin V. Blasi
Kimberly C. Lesay – Jason M. Coite – Michael J. Salter
Jeff Caiola (DEEP) w/o attachment