



Connecticut Department of
 Energy & Environmental Protection
 Bureau of Materials Management & Compliance Assurance
 Water Permitting & Enforcement Division

General Permit Registration Form for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities, effective 10/1/13 (electronic form)

Prior to completing this form, you **must** read the instructions for the subject general permit at [DEEP-WPED-INST-015](#). This form must be filled out electronically before being printed. You must submit the registration fee along with this form.

The [status of your registration](#) can be checked on the DEEP's ezFile. Portal. Please note that DEEP will no longer mail certificates of registration.

CPPU USE ONLY	
App #:	_____
Doc #:	_____
Check #:	_____
Program:	<u>Stormwater</u>

Part I: Registration Type

Select the appropriate boxes identifying the registration type and registration deadline.

Registration Type		Registration Timeline	
<input type="checkbox"/>	Re-registration Existing Permit No. GSN _____	On or before February 1, 2014* *Note: Failure to renew a permit by this date will require submission of new registration. Re-registrants must only complete Parts I, II, III, IV - Question 1, VII and submit Attachment A.	
<input checked="" type="checkbox"/>	New Registration (Refer to Section 2 of the permit for definitions of Locally Exempt and Locally Approvable Projects)	<input checked="" type="checkbox"/> Locally Approvable Size of soil disturbance: _____ 5.80	New registration - Sixty (60) days prior to the initiation of the construction activity for: For sites with a total soil disturbance area of 5 or more acres
		<input type="checkbox"/> Locally Exempt Size of soil disturbance: _____	<input type="checkbox"/> New registration - Sixty (60) days prior to the initiation of the construction activity for: Sites with a total disturbance area of one (1) to twenty (20) acres except those with discharges to impaired waters or tidal wetlands
			<input type="checkbox"/> New registration - Ninety (90) days prior to the initiation of the construction activity for: (i) Sites with a total soil disturbance area greater than twenty (20) acres, or (ii) Sites discharging to a tidal wetland (that is not fresh-tidal and is located within 500 feet), or (iii) Sites discharging to the impaired water listed in the "Impaired Waters Table for Construction Stormwater Discharges"

Part II: Fee Information

1. New Registrations

a. Locally approvable projects (registration only):

\$625

b. Locally exempt projects (registration and Plan):

\$3,000 total soil disturbance area \geq one (1) and $<$ twenty (20) acres.

\$4,000 total soil disturbance \geq twenty (20) acres and $<$ fifty (50) acres.

\$5,000 total soil disturbance \geq fifty (50) acres.

2. Re-Registrations

\$625 (sites previously registered prior to September 1, 2012)

\$0 (sites previously registered between to September 1, 2012 and effective date of this permit)

Total Fee: \$625.00

The fees for municipalities shall be half of those indicated in subsections (a), (b) and (c) above pursuant to Section 22a-6(b) of the Connecticut General Statutes. State and Federal agencies shall pay the full fees specified in this subsection. The registration will not be processed without the fee. The fee shall be non-refundable and shall be paid by certified check or money order payable to the Department of Energy and Environmental Protection.

Part III: Registrant Information

- If a registrant is a corporation, limited liability company, limited partnership, limited liability partnership, or a statutory trust, it must be registered with the Secretary of the State. If applicable, the registrant's name shall be stated **exactly** as it is registered with the Secretary of the State. This information can be accessed at [CONCORD](#)
- If a registrant 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.).

1. Registrant /Client Name:	STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION		
Registrant Type:	State Agency		
Secretary of the State business ID #:			
Mailing Address:	359 S MAIN ST		
City/Town:	THOMASTON	State:	CT
		Zip Code:	06787
Business Phone:	(203) 591-3540	ext.:	
	<i>Example:(xxx) xxx-xxxx</i>		
Contact Person:	Richard N. Symonds, PE	Title :	Dist. Engr.
E-Mail:	richard.symonds@ct.gov		
2. List billing contact:			
Name:	STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION		
Mailing Address:	359 S MAIN ST		
City/Town:	THOMASTON	State:	CT
		Zip Code:	06787
Business Phone:	(203) 591-3540	ext.:	
Contact Person:	Richard N. Symonds	Title :	Dist. Engr.

3. List primary contact for departmental correspondence and inquiries:
 Name: STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION
 Mailing Address: 359 S MAIN ST
 City/Town: THOMASTON State: CT Zip Code: 06787
 Business Phone: (203) 591-3540 ext. _____
 Contact Person: Richard N. Symonds, PE Title: Dist. Engr.

4. List owner of the property on which the activity will take place:
 Name: STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION
 Mailing Address: 359 S MAIN ST
 City/Town: THOMASTON State: CT Zip Code: 06787
 Business Phone: (203) 591-3540 ext. _____
 Contact Person: Richard N. Symonds, PE

5. List preparer:
 Name: STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION
 Mailing Address: 2800 BERLIN TPKE
 City/Town: NEWINGTON State: CT Zip Code: 06111
 Business Phone: (860) 594-3303 ext. _____
 Contact Person: Michael Strong Title: Supervisor

6. List design professional:
 Name: BL COMPANIES, INC.
 Mailing Address: 100 CONSTITUTION PLZ, 10TH FL
 City/Town: HARTFORD State: CT Zip Code: 06103
 Business Phone: (860) 249-2200 ext. _____
 Contact Person: David Cicia Title: Principal Engineer

7. List Reviewing Qualified Professional (for locally approvable projects only):
 Name: BL COMPANIES, INC.
 Mailing Address: 100 CONSTITUTION PLZ, 10TH FL
 City/Town: HARTFORD State: CT Zip Code: 06103
 Business Phone: (860) 249-2200 ext. _____
 Contact Person: Michael Fisher Title: Design Professional

Part IV: Site Information

1. Site Name: Pr #143-192- Bridge and Signs & Marking Facilities
 Street Address or Description of Location: 80 Fowler Ave
 City/Town: Torrington State: CT Zip Code: 06790
 Brief Description of construction activity:
The project will entail the building of a new Bridge facility, Maintenance facility and two storage building.
 Project Start Date: 3 Jan 2022 Anticipated Completion Date: 2 Dec 2024
 Normal working hours: 9 am to 4 pm

Additional Contacts

1.	Name: <u>BL COMPANIES, INC.</u>
	Mailing Address: <u>100 CONSTITUTION PLZ, 10TH FL</u>
	City/Town: <u>HARTFORD</u> State: <u>CT</u> Zip Code: <u>06103</u>
	Business Phone: <u>(860) 249-2200</u> ext. <u></u>
	Contact Person: <u>Michael Fisher, PE</u> Title: <u>Senior Project Manager</u>
	Association (e.g. developer, general or site contractor, etc.): <u>Reviewing Qualified Professional</u>
2.	Name: <u></u>
	Mailing Address: <u></u>
	City/Town: <u></u> State: <u></u> Zip Code: <u></u>
	Business Phone: <u></u> ext. <u></u>
	Contact Person: <u></u> Title: <u></u>
	Association (e.g. developer, general or site contractor, etc.): <u></u>
3.	Name: <u></u>
	Mailing Address: <u></u>
	City/Town: <u></u> State: <u></u> Zip Code: <u></u>
	Business Phone: <u></u> ext. <u></u>
	Contact Person: <u></u> Title: <u></u>
	Association (e.g. developer, general or site contractor, etc.): <u></u>
4.	Name: <u></u>
	Mailing Address: <u></u>
	City/Town: <u></u> State: <u></u> Zip Code: <u></u>
	Business Phone: <u></u> ext. <u></u>
	Contact Person: <u></u> Title: <u></u>
	Association (e.g. developer, general or site contractor, etc.): <u></u>
5.	Name: <u></u>
	Mailing Address: <u></u>
	City/Town: <u></u> State: <u></u> Zip Code: <u></u>
	Business Phone: <u></u> ext. <u></u>
	Contact Person: <u></u> Title: <u></u>
	Association (e.g. developer, general or site contractor, etc.): <u></u>
6.	Name: <u></u>
	Mailing Address: <u></u>
	City/Town: <u></u> State: <u></u> Zip Code: <u></u>
	Business Phone: <u></u> ext. <u></u>
	Contact Person: <u></u> Title: <u></u>
	Association (e.g. developer, general or site contractor, etc.): <u></u>
7.	Name: <u></u>
	Mailing Address: <u></u>
	City/Town: <u></u> State: <u></u> Zip Code: <u></u>
	Business Phone: <u></u> ext. <u></u>
	Contact Person: <u></u> Title: <u></u>
	Association (e.g. developer, general or site contractor, etc.): <u></u>

2. **MINING** : Is the activity on the site in question part of mining operations (i.e. sand and gravel)? Yes No

If yes, mining is not authorized by this general permit. You must submit the Registration Form for the General Permit for the Discharge of Stormwater Associated with Industrial Activity.

3. **COMBINED OR SANITARY SEWER:** Does all of the stormwater from the proposed activity discharge to a combined or sanitary sewer (i.e. a sewage treatment plant)? Yes No

If yes, this activity is not regulated by this permit. Contact the Water Permitting & Enforcement Division at 860-424-3018.

4. **INDIAN LANDS:** Is or will the facility be located on federally recognized Indian lands? Yes No

5. **COASTAL BOUNDARY:** Is the activity which is the subject of this registration located within the coastal boundary as delineated on DEEP approved coastal boundary maps? Yes No

The coastal boundaries fall within the following towns: Branford, Bridgeport, Chester, Clinton, Darien, Deep River, East Haven, East Lyme, Essex, Fairfield, Greenwich, Groton (City and Town), Old Lyme, Guilford, Hamden, Ledyard, Lyme, Madison, Milford, Montville, New London, New Haven, North Haven, Norwalk, Norwich, Old Saybrook, Orange, Preston, Shelton, Stamford, Stonington (Borough and Town), Stratford, Waterford, West Haven, Westbrook and Westport.

If "yes", and this registration is for a new authorization or a modification of an existing authorization where the physical footprint of the subject activity is modified, you must provide documentation to the DEEP Office of Long Island Sound Programs or the local governing authority has issued a coastal site plan approval or determined the project is exempt from coastal site plan review. Provide this documentation with your registration as Attachment B. See guidance in Appendix D of the general permit. Information on the coastal boundary is available at the local town hall or on the [Connecticut Coastal Resources Map](#) . Additional DEEP Maps and Publications are available by contacting DEEP Staff at 860-424-3555.

6. **ENDANGERED OR THREATENED SPECIES:**

In order to be eligible to register for this General permit, each registrant must either perform a self-assessment, obtain a limited one-year determination, or obtain a safe-harbor determination regarding threatened and endangered species. This may include the need to develop and implement a mitigation plan. While each alternative has different limitations, the alternatives are not mutually exclusive; a registrant may register for this General Permit using more than one alternative. See Appendix A of the general Permit. Each registrant must complete this AND Attachment C to this Registration form and a registrant who does not or cannot do so is not eligible to register under this General Permit.

Each registration must perform a review of the Department's Natural Diversity Database maps to determine if the site of the construction activity is located within or in proximity (within ¼ mile) to a shaded area.

a. Provide the date of the NDDB maps were reviewed: 22 Jun 2021 (Print a copy of the NDDB map you viewed since it must be submitted with this registration as part of Attachment C.)

- b. For a registrant using a limited one-year determination or safe harbor determination to register for this General Permit, provide the Department's Wildlife Division NDDB identification number for any such determination:

_____ (The number is on the determination issued by the Department's Wildlife Division).

For more information on threatened and endangered species requirements, refer to Appendix A and section 3(b)(2) of this General Permit, Visit the DEEP website at [Natural Diversity Data Base](#) or call the NDDB at 860-424-3011.

- c. I verify that I have completed Attachment C to this Registration Form. Yes

7. **WILD AND SCENIC RIVERS:** Is the proposed project within the watershed of a designated Wild and Scenic River? (See Appendix H for guidance) Yes No

8. **AQUIFER PROTECTION AREAS:** Is the site located within a mapped [Aquifer Protection Area](#) , as defined in Section 22a-354h of the CT General Statutes? (For additional guidance, please refer to Appendix C of the General Permit) Yes No

9. **Connecticut Guidelines for Soil Erosion and Sediment Control Guidelines:** Is the activity in accordance with Connecticut Guidelines for Soil Erosion and Sediment Control Guidelines and local erosion & sediment control ordinances, where applicable? Yes No

10. HISTORIC AND/OR ARCHAEOLOGICAL RESOURCES:

Has the site of the proposed activity been reviewed (using the process outlined in Appendix G of this permit) for historic and/or archaeological resources? Yes No

- a. The review indicates the proposed site does not have the potential for historic/ archaeological resources, OR Yes No

- b. The review indicated historic and/ or archaeological resource potential exists and the proposed activity is being or has been reviewed by the Offices of Culture and Tourism, OR NA Yes No

- c. The proposed activity has been reviewed and authorized under an Army Corps of Engineers Section 404 wetland permit. NA Yes No

11. CONSERVATION OR PRESERVATION RESTRICTION:

Is the property subject to a conservation or preservation restriction? Yes No

If Yes, proof of written notice of this registration to the holder of such restriction or a letter from the holder of such restriction verifying this registration is in compliance with the terms of the restriction, must be submitted as Attachment D.

Part V: Stormwater Discharge Information

Table 1

Outfall #	a) Type	b) Pipe Material	c) Pipe Size	d) Note: To find lat/long, go to: CT ECO . A decimal format is required here. Directions on how to use CT ECO to find lat. /long. and conversions can be found in in Part V, section d of the DEEP-WPED-INST-015 .		e) What method was used to obtain your latitude/longitude information?
				Longitude (Format: -xx.xxxxx)	Latitude (Format: xx.xxxxx)	
EO- 2	Pipe	Concrete	36"	-73.110546	41.791550	ezFile Portal Map
EO- 1	Other(Please fill in below) Pavement sheet flow.			-73.111641	41.792252	ezFile Portal Map

Part V: Stormwater Discharge Information Continued

Table 2

2. Provide the following information about the receiving water(s)/wetland(s) that receive stormwater runoff from your site, either directly or through the storm sewer system:							
Outfall #	Dates when this outfall will be active:	a) To what system or receiving water does your stormwater runoff discharge? either "storm sewer or wetlands" or "waterbody" (If you select storm sewer or wetlands, columns c.1&2 of this table are not required to be completed)	b) What is your watershed ID (freshwater) or 305b ID (estuary)? (Section 3.b, of the DEP-GP-INST-015 explains how to find this information)	c.1) Is your receiving water identified as an impaired water in the "Impaired Waters Table for Construction Stormwater Discharges" ?	If you answered yes to question c.1, then answer the question below	For the drainage area associated with each outfall:	For the drainage area associated with each outfall:
						c.2) Has any Total Maximum Daily Load (TMDL) been approved for your receiving waterbody?	Effective Impervious Area Before Construction (sq ft)
EO- 2	Start: 3 Jan 2022 End: _____	Storm Sewer or Wetlands	_____	<input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> NA	<input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> NA	86684	193406
EO- 1	Start: 3 Jan 2022 End: _____	Storm Sewer or Wetlands	_____	<input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> NA	<input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> NA	132422	17424
_____	Start: _____ End: _____	Select One	_____	<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA	<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA	_____	_____
_____	Start: _____ End: _____	Select One	_____	<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA	<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA	_____	_____
_____	Start: _____ End: _____	Select One	_____	<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA	<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA	_____	_____
Provide the total effective impervious area for the entire site(sq ft):						219106	210830

Part V: Stormwater Discharge Information (continued)

Impaired waters: If you answered "yes" to Table 2, question 2.c.1, **verify** that the project's Pollution Control Plan (Plan) addresses the control measures below in Question 1 or 2, as appropriate.

1. If the impaired water does not have a TMDL, confirm compliance by selecting 1.a. or 2.b. below:

a. No more than 3 acres is disturbed at any time; Yes

OR

b. Stormwater runoff from a 2 yr, 24 rain event is **retained**. Yes

2. If the impaired water has a TMDL, confirm compliance by selecting 2.a. and 2.b. below and either question 2.c.1. or 2.c.2. below:

a. The Plan documents there is sufficient remaining Waste Load Allocations (WLA) in the TMDL for the proposed discharge, Yes

AND

b. Control measures shall be implemented to assure the WLA will not be exceeded, Yes

AND

c. 1. Stormwater discharges will be monitored for the indicator pollutant identified in the TMDL, Yes

OR

2. The Plan documents specific requirements for stormwater discharges specified in the TMDL. Yes

Part VI: Pollution Control Plan Availability (check one of the following four categories)

<input type="checkbox"/>	I am registering a Locally Exempt project and submitting the required electronic Plan (in Adobe™ PDF or similarly publically available format) pursuant to Section 3(c)(2)(E) of this permit. <input type="checkbox"/> Plan is attached to this registration form <input type="checkbox"/> Plan is available at the following Internet Address (URL): _____
<input type="checkbox"/>	I am registering a Locally Approvable project and have chosen not to submit the Plan with this registration pursuant to Section 3(c)(1) of this permit.
<input checked="" type="checkbox"/>	I am registering a Locally Approvable project and have chosen to make my Plan electronically available pursuant to Section 4(c)(2)(N) of this permit. <input checked="" type="checkbox"/> Plan is attached to this registration form <input type="checkbox"/> Plan is available at the following Internet Address (URL): _____
<input type="checkbox"/>	I am registering a Locally exempt project and do not have the capability to submit the Plan electronically. Therefore, I am submitting a paper copy with this registration as Attachment E.

Part VII: Registrant Certification

The registrant *and* the individual(s) responsible for actually preparing the registration must sign this part. A registration will be considered incomplete unless all required signatures are provided.

For New Registrants:

"I hereby certify that I am making this certification in connection with a registration under such general permit, submitted to the commissioner by E OF CONNECTICUT DEPARTMENT OF TRANSPORTA for an activity located at 80 Fowler Ave, Torrington, CT 06790 and that all terms and conditions of the general permit are being met for all discharges which have been initiated and such activity is eligible for authorization under such permit. I further certify that a system is in place to ensure that all terms and conditions of this general permit will continue to be met for all discharges authorized by this general permit at the site. I certify that the registration filed pursuant to this general permit is on complete and accurate forms as prescribed by the commissioner without alteration of their text. I certify that I have personally examined and am familiar with the information that provides the basis for this certification, including but not limited to all information described in Section 3(b)(8)(A) of such general permit, and I certify, based on reasonable investigation, including my inquiry of those individuals responsible for obtaining such information, that the information upon which this certification is based is true, accurate and complete to the best of my knowledge and belief. I certify that I have made an affirmative determination in accordance with Section 3(b) (8) (B) of this general permit. I understand that the registration filed in connection with such general permit is submitted in accordance with and shall comply with the requirements of Section 22a-430b of Connecticut General Statutes, as amended by Public Act 12-172. I also understand that knowingly making any false statement made in the submitted information and in this certification may be punishable as a criminal offense, including the possibility of fine and imprisonment, under Section 53a-157b of the Connecticut General Statutes and any other applicable law."

For Re-registrants:

"I hereby certify that I am making this certification in connection with a registration under the General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities, submitted to the commissioner by _____ for an activity located at _____

and that all terms and conditions of the general permit are being met for all discharges which have been initiated and such activity is eligible for authorization under such permit. I further certify that all designs and plans for such activity meet the current terms and conditions of the general permit in accordance with Section 5(b)(5)(C) of such general permit and that a system is in place to ensure that all terms and conditions of this general permit will continue to be met for all discharges authorized by this general permit at the site. I verify that the registration filed pursuant to this general permit is on complete and accurate forms as prescribed by the commissioner without alteration of their text. I certify that I have personally examined and am familiar with the information that provides the basis for this certification, including but not limited to all information described in Section 3(b)(8)(A) of such general permit, and I certify, based on reasonable investigation, including my inquiry of those individuals responsible for obtaining such information, that the information upon which this verification is based is true, accurate and complete to the best of my knowledge and belief. I also understand that knowingly making any false statement made in the submitted information and in this certification may be punishable as a criminal offense, including the possibility of fine and imprisonment, under Section 53a-157b of the Connecticut General Statutes and an other applicable law."

Signature of Registrant	
Richard N. Symonds, PE	Dist. Engr.
Name of Registrant (print or type)	Title (if applicable)

Signature of Preparer and Date (if different than above)	
Michael Strong	Supervisor
Name of Preparer (print or type)	Title (if applicable)

Part VIII: Professional Engineer (or Landscape Architect, where appropriate) Design Certification (for publicly approvable and exempt projects)

The following certification must be signed by a Professional Engineer, or Landscape Architect where appropriate.

<p>"I hereby certify that I am a _____ licensed in the State of Connecticut. I am making this certification in connection with a registration under such general permit, submitted to the commissioner by <u>STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION</u> for an activity located at <u>80 Fowler Ave, Torrington, CT 06790</u>.</p> <p>I certify that I have thoroughly and completely reviewed the Stormwater Pollution Control Plan for the project or activity covered by this certification. I further certify, based on such review and on the standard of care for such projects, that the Stormwater Pollution Control Plan has been prepared in accordance with the Connecticut Guidelines for Soil Erosion and Sediment Control, as amended, the Stormwater Quality Manual, as amended, and the conditions of the general permit, and that the controls required for such Plan are appropriate for the site. I further certify, based on reasonable investigation, including my inquiry of those individuals responsible for obtaining such information, that the information upon which this certification is based is true, accurate and complete to the best of my knowledge and belief. I also understand that knowingly making any false statement in this certification may subject me to sanction by the Department and/or be punishable as a criminal offense, including the possibility of fine and imprisonment, under Section 53a-157b of the Connecticut General Statutes and any other applicable law."</p>	
<p>_____</p>	
<p>Signature of Design Professional and Date</p>	
<p>David Cicia</p>	<p>23439</p>
<p>Name of Professional (print or type)</p>	<p>License Number</p>
<p>Affix P.E./L.A Stamp Here</p>	

Part IX: Reviewing Qualified Professional Certification (continued)

"I hereby certify that I am a qualified professional engineer or qualified soil erosion and sediment control professional, or both, as defined in the General Permit for Discharge of Stormwater and Dewatering Wastewaters from Construction Activities and as further specified in Sections 3(b)(11)(A) and (B) of such general permit. I am making this certification in connection with a registration under such general permit, submitted to the commissioner by STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION for an activity located at 80 Fowler Ave, Torrington, CT 06790.

I have personally examined and am familiar with the information that provides the basis for this certification, including but not limited to all information described in Section 3(b)(11)(C) of such general permit, and I certify, based on reasonable investigation, including my inquiry of those individuals responsible for obtaining such information, that the information upon which this certification is based is true, accurate and complete to the best of my knowledge and belief. I certify, based on my review of all information described in Section 3(b)(11)(C) of such general permit and on the standard of care for such projects, that I have made an affirmative determination in accordance with Sections 3(b)(11)(D)(i) and (ii) of this general permit. I understand that this certification is part of a registration submitted in accordance with Section 22a-430b of Connecticut General Statutes, as amended by Public Act 12-172, and is subject to the requirements and responsibilities for a qualified professional in such statute. I also understand that knowingly making any false statement in this certification may be punishable as a criminal offense, including the possibility of fine and imprisonment, under Section 53a-157b of the Connecticut General Statutes and any other applicable law."

Signature of Reviewing Qualified Professional

BL COMPANIES, INC. _____ 21170 _____

Name of Reviewing Qualified Professional License No.

Affix P.E./ L.A. Stamp Here

Note: Please submit the fee along with a completed, printed and signed Registration Form and all additional supporting documents to:

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

STORMWATER POLLUTION CONTROL PLAN

Torrington Bridge Facility and Signs & Marking Facility Torrington, CT

**State Project No.: 143-192
EzFile No. 67418**

Connecticut Department of Transportation



April 2021

This Stormwater Pollution Control Plan (SPCP) is prepared to comply with the requirements for the General Permit for Stormwater Discharges (GPSD) from Construction Activities. Also to be considered part of the SPCP are the proposed construction plans, special provisions, and the Connecticut Department of Transportation's "Standard Specifications for Roads, Bridges and Incidental Construction" (Form 818) including supplements thereto and the 2002 Connecticut Guidelines for Soil Erosion and Sediment Control

Table of Contents

1. Site Description	4
Site Description.....	4
Estimated Disturbed Area	4
Estimated Runoff Coefficient	4
Receiving Waters	5
Extent of Wetlands on Site	5
2. Construction Sequencing.....	5
3. Control Measures.....	6
Erosion and Sedimentation Controls	6
Soil Stabilization and Protection.....	7
Temporary Stabilization Practices	7
Permanent Stabilization Practices.....	8
Structural Measures	9
Maintenance.....	9
4. Dewatering Wastewaters.....	10
Dewatering Guidelines.....	10
5. Post-Construction Stormwater Management.....	10
Post-construction Guidelines	10
Post Construction Performance Standards.....	11
Redevelopment:	11
Stormwater retention and treatment, though not at standards, will be applied to the maximum extent possible. All of the control measures to be installed will be an improvement to existing conditions.....	12
Other Development:	12
Runoff Reduction and LID Practices:	12
Suspended Solids and Floatables Removal:	12
The following measures have been employed with the goal of capturing suspended solids and floatables and velocity dissipation:	12
Velocity Dissipation:	13
6. Other Controls	13
Waste Disposal	13

Washout Areas	13
Anti-tracking Pads and Dust Control (Form 818- Sections 2.11/9.39/9.42/9.43).....	14
Post-Construction.....	14
Maintaining and Storing Vehicles and Equipment	14
7. Inspections	15
Inspection Guidelines.....	15
8. Keeping Plans Current.....	16
Revisions to Stormwater Pollution Control Plans.....	17
9. Contractors.....	17
General	
Certification Statement	17
General:	19
List of applicable Figures / Plans:	20
List of Applicable Figures and Forms:	20
Appendix A – Figures.....	20
Appendix B – Drainage Calculations.....	20
Appendix C – Plan Sheets.....	20
Appendix D - MS4 Worksheet.....	20
Appendix E - CSEIR Form.....	20
Appendix F - Notice of Termination Form.....	20

1. Site Description

Site Description

The project will entail the building of a new Bridge facility and Signs & Marking facility, and two storage building (cold and warm) on 80 Fowler Ave. in Torrington, CT. The purpose of project is to replace a functionally obsolete and non-compliant facility with two new facilities that will be in compliance with the applicable portion of the “Major Capital Program Design Manual” and existing agreements between the DOT and DEEP. Work of less than 5,000 sf will occur within the delineated watercourse and the appropriate permitting will be obtained. The floodplain has been delineated within the contract plan sheets and no work will occur within the floodplain. The project site is not located within a designated APA and there are no endangered or threatened species affect by construction activities. There are no discharges to impaired waters.

Site work includes grading, utilities replacement, demolition of existing facility, demolition of two storage buildings, and corresponding site improvements.

Estimated Disturbed Area

The total construction limits area for this project site is 6.13 acres. Of this area, 5.80 acres of erodible soil will be disturbed by construction activities. 0.33 acres will be considered non- erodible disturbance.

Estimated Runoff Coefficient

The runoff coefficient assumed for the building’s roof is 1.0, for pavement is 0.9, and for gravel/ rip rap areas is 0.45. For the pervious areas (turf), a coefficient of 0.2 to 0.4 is assumed. The weighted runoff coefficient for the site has been unchanged and was maintained at 0.73.

Pre-Construction

$$\frac{(1.59 \text{ ac.} \times 0.2) + (0.15 \text{ ac.} \times .45) + (4.51 \text{ ac.} \times .9) + (.53 \text{ ac.} \times 1.0)}{6.78 \text{ ac.}} = \mathbf{0.73}$$

Post-Construction

$$\frac{(1.47 \text{ ac.} \times 0.2) + (0.48 \text{ ac.} \times .45) + (3.59 \text{ ac.} \times .9) + (1.24 \text{ ac.} \times 1.0)}{6.78 \text{ ac.}} = 0.73$$

The estimated runoff coefficients, with the corresponding contributing areas, are shown on Figures 3 and 4 of appendix A. Note- this total site area (6.78 acres) is larger than the construction limits (6.13 acres) for the project as it takes the overall site's area into account.

The overall AI (acreage multiplied by an impervious runoff coefficient) for the site was unchanged at 4.96.

Receiving Waters

A portion of the site stormwater runoff sheet flow is directed via piping to a stormwater basin/forebays for primary treatment before entering a short run of piping that outlets into the Naugatuck River. The next receiving body is the Housatonic River to Long Island Sound. Two brooks (Capel and Eckert) that flow through the site and a small portion of the site's runoff will be directed to a watercourse bypass channel. This flow will then enter the same piping that outlets to the Naugatuck River.

Extent of Wetlands on Site

Work of approximately 3,895 sf will occur within the delineated wetland/ watercourse area and the appropriate permitting will be obtained. Approximately, 2,955 sf will be classified as permanent impacts. The site has additional peripheral wetlands outside the construction limits that will not be disturbed.

2. Construction Sequencing

The Contractor will be given approximately 35 months for the construction of all phases of the project.

The suggested sequence of construction is as follows:

1. Conduct a preconstruction meeting.
2. Conduct plan implementation inspection and clearly identify Limits of Disturbance (LOD).
3. Install erosion controls at the effected inlets and at limits of disturbed slopes and construct detention basins/ forebays. Please note- Silt fencing protecting wetland delineated areas will be marked in some manner to indicate and prevent inadvertent entrance to wetland areas.
4. Perform clearing and grubbing activities.
5. **Note- the detention basins/ forebays with rip rap must be in place before any other excavation work can take place.**
6. Apply temporary stabilization measures for disturbed areas in accordance with

- pages 5-6, Temporary Stabilization Practices.
7. Install site utilities, drainage, and pavement structure.
 8. Grade grass slopes and immediately stabilize. Establish turf, per contract, on all remaining disturbed areas. Rip rap will be used before discharge points for sediment control.
 9. Remove erosion controls when it is determined that disturbed areas have been stabilized. (This determination will be made by the Qualified Inspector).
 10. All post-construction stormwater structures shall be cleaned of construction sediment and any remaining silt fence shall be removed prior to the filing of the "Notice of Termination Form".
 11. Perform project cleanup.

It is anticipated that the construction of the two facilities will take 35 months. If the construction sequencing activities create an area of disturbance with a total contributing drainage area of between two (2) acres and five (5) acres per discharge point, a temporary sediment trap must be provided and the Contractor must submit to the Engineer a revised SWPCP for review and approval. The SWPCP must include locations of the temporary sedimentation trap per discharge point with a capacity to contain 134 cubic yards per acre of material in accordance with the 2002 CT Erosion and Sedimentation Guidelines (2002 Guidelines). The Contractor shall provide an inspection and maintenance plan for the temporary sedimentation trap as part of the amended SWPCP.

If the areas of disturbance with a total contributing drainage area of more than five (5) acres per discharge point, a temporary engineered sedimentation basin must be provided and the Contractor must submit to the Engineer a revised SWPCP for review and approval. The SWPCP must include locations of the temporary engineered sedimentation basin designed and installed in accordance with the 2002 Guidelines. The Contractor shall provide an inspection and maintenance plan or the engineered sedimentation basin as part for the amended SWPCP.

3. Control Measures

Erosion and Sedimentation Controls

The Department of Transportation (Department) will have a qualified inspector assigned to the project in order to oversee the Contractor's operations to ensure compliance with the provisions of the Contract. Further Department oversight is provided by the District 4 Environmental Coordinator and the Office of Environmental Planning.

The following timelines will be followed for the proposed construction activities:

- If construction activities are completed to final grade, permanent seeding shall take place within seven (7) days.

- Areas that remain disturbed but inactive for at least 14 days shall receive temporary seeding or soil protection within seven (7) days.
- Areas that will be disturbed past the planting season will be covered with a long-term, non-vegetative stabilization method that will provide protection through the winter.
- The Contractor shall stabilize disturbed areas with temporary or permanent measures as quickly as possible after the land is disturbed. Requirements for soil stabilization are detailed in Form 818 Section 1.10, Environmental Compliance.

The following note (below) appears on the project Construction Plans, Department of Transportation projects are required to have Preconstruction Meetings with the Contractor. The Contractor is required to review and understand the Contract Plans and Specifications and to develop an E&S Plan for review and approval by the Engineer. In the review of the Contractor's E&S plan at all disturbed locations for compliance with the Stormwater Permit requirements for a double row of sediment control barriers.

Double Row of Erosion and Sediment Control Barriers

- A double row of sediment control barrier shall be utilized between any disturbed area and downgradient wetland or watercourse within 50 feet, unless there would be an adverse impact to adjacent wetlands/watercourses due to installation of a double row (i.e. would result in larger wetland/watercourse impact.)
- Additional erosion control barriers (double row of SCS) may also be required within the project area. Factors to be reviewed by the Engineer include but are not limited to: the contributing disturbed area, drainage area, slope, length of slope, and flow conditions to maintain sheet flow. If determined necessary, the Engineer will direct the Contractor to install and maintain additional rows of erosion control barrier (or equivalent).

Soil Stabilization and Protection

Temporary Stabilization Practices

- Erosion Control Matting: On turf slopes steeper than 2:1 erosion control matting shall be used to stabilize the topsoil or as necessary and directed by the Engineer.
- Temporary Rip Rap Swales: On turf slopes steeper than 2:1 where erosion control matting is proving ineffective, a temporary rip rap swale will be used to stabilize the sloped area(s). As directed by Engineer.
- Sedimentation Control System (SCS): SCS shall be placed at the toe of the slope or as directed by the Engineer

- Anti-Tracking Pads: Construction entrances (gravel anti-tracking pads) shall be constructed at truck access/exit points to off-road route. Access road(s) should grade away from the main roadway or waterbody.
- Dust Control: Routine sweeping and application of dust suppression agents, including but not limited to, water and calcium chloride, over exposed subbase shall be completed for dust control. Additional measures may be necessary to minimize dust within the project limits and within staging and stockpile areas.
- Temporary Seeding: On soils to be exposed for a period greater than 1 month but less than 1 year, temporary seeding shall be used to temporarily stabilize the soil until permanent stabilization is established.

Stabilization practices shall be implemented after completion, as final grades are reached, within seven (7) days.

Temporary seeding shall be spread over any disturbed areas which will remain inactive for at least 30 days. Areas to remain disturbed through winter shall be protected with non-vegetative stabilization measures. The Contractor must provide an Erosion and Sedimentation Control plan for each winter season during construction operations.

The Contractor may use other controls in the project as necessary if they conform to the 2002 Guidelines and are approved by the Engineer/ Qualified Inspector. The Contractor will be required to provide the necessary details for any erosion controls not specifically called for on the project plans.

During construction, all areas disturbed by the construction activity that have not been stabilized, structural control measures, and locations where vehicles enter or exit the site shall be inspected at least once a week and within 24 hours of the end of a storm that generates a discharge. For storms that end on a weekend, holiday or other time in which normal working hours will not commence within 24 hours, an inspection is required within 24 hours following any storm in which 0.5 inches or greater of rain occurs. For lesser storms, inspection shall occur immediately upon the start of subsequent normal working hours.

Permanent Stabilization Practices

During construction, the following methods of permanent stabilization shall be installed:

- Topsoiling: In conjunction with permanent seeding, once final grades have been established, topsoil shall be applied to provide a suitable growth medium for vegetation.
- Permanent Seeding: Once soils have been brought to final grade, permanent seeding shall be used to stabilize the soil with a vegetative cover. Disturbed areas below the wetland limit shall be seeded with a wetland seed mix and/or above the wetland limit

shall be seeded with a conservation seed mix.

- Landscaping: Wood chip mulch shall be placed around the plants. Plantings (trees, shrubs etc) may be planted along with the permanent seeding.
- Riprap Slopes: To stabilize slopes 2 to 1 or steeper, riprap will be placed on compacted granular fill.

All new embankments disturbed by construction and unpaved areas that are graded or disturbed by construction will receive erosion control matting, topsoil and/or turf establishment. The Contractor may use other permanent stabilization practices approved by the Engineer/ Qualified Inspector and conforming to 2002 Guidelines.

Structural Measures

The following structural measures shall be used to divert flows, limit runoff, and minimize the discharge of pollutants:

- Detention Basin: The drainage system for a portion of the site includes the basin which is conveying the treated runoff water to the outlet. The forebay of the basin and the basin are acting as pre-treatment and treatment which will encourage attenuation, infiltration and allow for a reduction in sediment leaving the site
- Minimal Curbing: Curbing shall be avoided wherever possible to maximize overland sheet flow and encourage infiltration.
- Outlet Protection: Riprap outlet protection shall be used at the proposed outlet to decrease velocity and the potential for erosion. (i.e. apron, splash pad...)
- Deep Sump Catch Basins: Deep sump catch basins (4-foot sump) shall be used, especially adjacent to outlets, to intercept pollutants and debris.

Maintenance

All construction activities and related activities shall conform to the requirements of Section 1.10 "Environmental Compliance" of the Department's Standard Specifications, Form 818. In general, all construction activities shall proceed in such a manner so as not to pollute any wetlands, watercourses, water body, and conduit carrying stormwater. The Contractor shall limit, in so far as possible, the surface area of earthen materials exposed by construction activity and immediately provide temporary and permanent pollution control to prevent soil erosion and contamination on the site. Water pollution control provisions and best management practices per Section 1.10, Environmental Compliance of the Standard Specifications shall be administered

during construction. Control measures shall be inspected and maintained in accordance with the 2002 Guidelines and as directed by the Engineer/ Qualified Inspector.

4. Dewatering Wastewaters

Dewatering Guidelines

When dewatering is necessary, pumps used shall not be allowed to discharge directly into a wetland, watercourse or stormwater drainage system. Prior to any dewatering, the Contractor must submit to the Engineer a written proposal for specific methods and devices to be used, and must obtain the Engineer's written approval of such methods and devices, including, but not limited to, the pumping of water into a temporary sedimentation basin, providing surge protection at the inlet or outlet of pumps, floating the intake of a pump, or any other method for minimizing and retaining the suspended solids. If the Engineer determines that a pumping operation is causing turbidity problems, the Contractor shall halt said operation until a means of controlling the turbidity is submitted by the Contractor in writing to the Engineer, approved in writing by the Engineer and implemented by the Contractor. No discharge of dewatering wastewater shall contain or cause a visible oil sheen, floating solids or foaming in the receiving water. If required, all activities are to be performed in compliance with the Department's Form 818.

5. Post-Construction Stormwater Management

Post-construction Guidelines

After the project is complete, the Department will perform the following maintenance and restorative measures:

- Litter/debris and sweepings will be removed from the site regularly.
- Mowing and maintenance of the turf areas and vegetated areas will occur as needed.
- Riprap outlet protection will be inspected as needed.
- The stormwater basin will be inspected and repaired annually or as needed. Sediment will be removed when it interferes with the detention capacity of the basin. Outlets will be checked for excessive scour and repaired as needed.
- Stormwater drainage system will be cleaned of sediment/debris as directed by the Engineer/ Qualified Inspector.

Post Construction Performance Standards

Redevelopment:

The project site is an existing bridge facility and signs & marking facility and currently has greater than 40% impervious area. The site is currently 74.3% impervious cover and the proposed site would be 71.2% impervious cover. The project was designed to partially retain on-site the water quality volume for the proposed site and contributing areas. The following values were calculated for the pre and post-construction site conditions:

Pre-Construction Effective Impervious Cover:

$$\begin{aligned}\text{Effective Impervious Cover} &= \frac{\text{Impervious Area of Site (acre)}}{\text{Total Area of Site (acre)}} \times 100\% \\ &= \frac{5.04 \text{ acres}}{6.78 \text{ acres}} \times 100\% \\ &= 74.3\%\end{aligned}$$

Post-Construction Effective Impervious Cover:

$$\begin{aligned}\text{Effective Impervious Cover} &= \frac{\text{Impervious Area of Site (acre)}}{\text{Total Area of Site (acre)}} \times 100\% \\ &= \frac{4.83 \text{ acres}}{6.78 \text{ acres}} \times 100\% \\ &= 71.2\%\end{aligned}$$

Water Quality Volume (storm water runoff to basin only):

Water quality requirements were satisfied by providing measures designed in accordance with the Connecticut Department of Environmental Protection's 2004 Connecticut Stormwater Quality Manual. The stormwater basin was designed to act as both a peak flow reducer and a sediment interceptor.

Basin drains a total of 3.72 acres, of which 2.72 acres is impervious. The required storage volume for the "first flush" is as follows:

$$WQV = (1") (0.05 + 0.009 I) (A) / 12$$

WQV = Water Quality Volume, acres ft
R = Volumetric Runoff Coefficient 0.05+.009(I)
I = Percent of Impervious Cover (%)
A = Site Area, acres

$$WQV = (1") [0.05 + 0.009 x ((2.72/3.72) x 100\%)] x 3.72 / 12 = 0.594 \text{ acre-ft}$$

WQV of Basin= 9,070 cf

Forebay-10% of Basin storage= 910 cf

The pond storage requirements for water quality treatment were more stringent than the requirements for peak flow reduction and therefore were used to design the stormwater pond.

The impervious area and the weighted runoff coefficient of the site will slightly decrease due to the scope of the site re-construction; consequently, the runoff totals to the adjacent water body from EO #1 and EO#2 will decrease over the current contribution. The reduction in runoff is a result of the proposed design that includes a slight reduction in impervious area and the addition of a primary treatment method (basin). The new drainage system will direct a percentage of the site's runoff to be treated by the site's detention basin. The new design incorporates a primary treatment method of the site runoff as a result the runoff directed to the Naugatuck River was decreased.

Stormwater retention and treatment will be applied to the maximum extent possible. All of the control measures to be installed will be an improvement to existing conditions.

Other Development:

Runoff Reduction and LID Practices:

The stormwater basin, stormwater re-routing, and the elimination of the use of some curbing are strategies to be employed to minimize runoff and incorporate LID methodologies. These techniques will maximize overland sheet flow thereby promoting stormwater infiltration and sediment filtration.

Suspended Solids and Floatables Removal:

The following measures have been employed with the goal of capturing suspended solids and floatables and velocity dissipation:

A goal of 50% to 80% removal of the average annual post-construction total suspended solids load was used in designing primary stormwater management measures (detention basin).

Velocity Dissipation:

To address stormwater velocity and discharge, a riprap apron will be utilized at the outlet to dissipate velocity and prevent ground erosion. Sizing calculations for the riprap apron can be found in Appendix B.

6. Other Controls

Waste Disposal

Construction site waste shall be properly managed and disposed of during the entire construction period. Additionally,

- A waste collection area will be designated. The selected area will minimize truck travel through the site and will not drain directly to the adjacent wetlands.
- Waste collection shall be scheduled regularly to prevent the containers from overflowing.
- Spills shall be cleaned up immediately.
- Defective containers that may cause leaks or spills will be identified through regular inspection. Any found to be defective will be repaired or replaced immediately.
- Any stockpiling of materials should be confined to the designated area as approved by the Engineer/ Qualified Inspector.

Washout Areas

Washout of applicators, containers, vehicles and equipment for concrete shall be conducted in a designated washout area. No surface discharge of washout wastewaters from the area will be allowed. All concrete wash water will be directed into a container or pit such that no overflows can occur. Washout shall be conducted in an entirely self-contained system and will be clearly designed and flagged or signed where necessary. The washout area shall be located outside of any buffers and at least 50 feet from any stream, wetland or other sensitive water or natural resources as determined or designated by the Department's Office of Environmental Planning or the project Engineer/ Qualified Inspector.

Washout Area(s) will be site located by the Contractor, approved by the engineer and the SWPCP revised as appropriate. The "Concrete Washout Area" detail (*See link http://www.ct.gov/dot/lib/dot/documents/dpolicy/waternoise/compliance/helpfuldesign/concrete_washout_detail.pdf*) shows the recommended method of construction for the washout area. The designated area shall be designed and maintained such that no overflows can occur during rainfall or after snowmelt.

Anti-tracking Pads and Dust Control (Form 818- Sections 2.11/9.39/9.42/9.43 and plan sheet detail.)

Off-site vehicle tracking of sediments and the generation of dust shall be minimized. Temporary anti-tracking pads from the active work site to the existing pavement will be installed and maintained at the locations shown on the plans. The Contractor shall:

- Maintain the entrance in a condition which will prevent tracking and washing of sediment onto paved surfaces.
- Provide periodic top dressing with additional stone or additional length as conditions demand.
- Repair any measures used to trap sediment as needed.
- Immediately remove all sediment spilled, dropped, washed or tracked onto paved surfaces.
- Ensure roads adjacent to a construction site are left clean at the end of each day.

If the construction entrance is being properly maintained and the action of a vehicle traveling over the stone pad is not sufficient to remove the majority of the sediment, then the contractor shall either:

- Increase the length of the construction entrance,
- Modify the construction access road surface, or
- Install washing racks and associated settling area or similar devices before the vehicle enters a paved surface.

For construction activities which cause airborne particulates, wet dust suppression shall be utilized. Construction site dust will be controlled by sprinkling the ground surface with water until it is moist on an as-needed basis. The volume of water sprayed shall be such that it suppresses dust yet also prevents the runoff of water.

Post-Construction

Upon completion of construction activities and stabilization of the site, all post-construction stormwater structures, including the catch basins shall be cleaned of construction sediment and any remaining silt fence shall be removed prior to acceptance of the project by CTDOT. Sediment shall be properly disposed of in accordance with all applicable laws, regulations and guidelines.

Maintaining and Storing Vehicles and Equipment

The Contractor shall take measures to prevent any contamination to wetlands and watercourses while maintaining and storing construction equipment on the site. All chemical and petroleum containers stored on site shall be provided with impermeable containment which will hold at least 110% of the volume of the largest container, or 10% of the total volume of all containers in the area, whichever is

larger, without overflow from the containment area. All chemicals and their containers shall be stored under a roofed area except for those stored in containers of 100 gallon capacity or more, in which case double-walled tanks will suffice.

7. Inspections

The qualified inspector conducting inspections shall submit a Construction Site Environmental Inspection Report (CSEIR), see Appendix E, for each inspection described below. The District Engineer or Qualified Inspector will be required to report this monthly to the DEEP electronically. Each report shall be retained as a part of the SWPCP. The report shall include a statement that, in the judgment of the qualified inspector(s) conducting the site inspection, the site is either in compliance or out of compliance with the terms and conditions of the Plan and permit. If the site inspection indicates that the site is out of compliance, the inspection report shall include a summary of the remedial actions required to bring the site back into compliance, see 8. Keeping Plans Current.

Inspection Guidelines

All construction activities shall be inspected initially within the first 30 days, for Plan implementation and then weekly for Routine Inspections.

The Permittee will maintain a rain gauge on-site to document rainfall amounts. During construction, all areas disturbed by the construction activity that have not been stabilized, all erosion and sedimentation control measures, all structural control measures, soil stockpile areas, washout areas and locations where vehicles enter or exit the site shall be inspected for evidence of, or the potential for, pollutants entering the drainage system and impacts to receiving waters at least once every seven calendar days or after a rain event of 0.1 inches or more. All information should be included in the CSEIR Form.

For storms that end on a weekend, holiday or other time in which working hours will not commence within 24 hours, an inspection is required within 24 hours only for storms that equal or exceed 0.5 inches. For lesser storms, inspection shall occur immediately upon the start of subsequent normal working hours.

Where sites have been temporarily or finally stabilized, such inspection shall be conducted at least weekly until final stabilization has been achieved.

Qualified inspectors provided by the Department's District 4 Office shall conduct inspections.

The following items shall be inspected as described below:

Item

Procedure

Sedimentation Control System (SCS)	The SCS shall be inspected to ensure that the fence line is intact with no breaks or tears. The fence shall be firmly anchored to the ground. Areas where the fence is excessively sagging or where support posts are broken or uprooted shall be noted. Depth of sediment behind the fence shall be noted.
Concrete Washout Area	Containers or pits shall be inspected at least once a week to ensure structural integrity, adequate holding capacity and will be repaired prior to future use if leaks are present. The contractor shall remove hardened concrete waste when it accumulates to a height of ½ of the container or pit or as necessary to avoid overflows. All concrete waste shall be disposed of in a manner consistent with all applicable laws, regulations and guidelines.
Catch Basin Protection	Protective measures shall be inspected to ensure that sediment is not entering the catch basins. Catch basin sumps shall be monitored for sediment deposition. Hay bales shall be inspected to ensure they have not clogged.
Anti-tracking Pad	Locations where vehicles enter or exit the site shall be inspected for evidence of off-site tracking.
Dust Control	Measures shall be taken for the purpose of allaying (diminishing) dust conditions. Measures may include the use of sweeping equipment and/or the application of water or calcium chloride.
General	Construction areas and the perimeter of the site shall be inspected for any evidence of debris that may blow or wash off site or that has blown or washed off site. Construction areas shall be inspected for any spills or unsafe storage of materials that could pollute off site waters.

8. Keeping Plans Current

Revisions to Stormwater Pollution Control Plans

The Department shall amend the Plan if the actions required by the Plan fail to prevent pollution or otherwise comply with provisions of the General Permit. The Plan shall also be amended whenever there is a change in contractors or sub-contractors at the site. If the results of the inspections require modifications to the Stormwater Pollution Control Plan, the plans shall be revised as soon as practicable after the inspection. Such modifications shall provide for a timely implementation of any changes to non-engineered controls on the site within 24 hours and implementation of any changes to the plan within 3 (three) calendar days following the inspection. For Engineered measures, corrective actions shall be implemented on site within 7 (seven) days and incorporated into a revised Plan within 10 (ten) days of the date of inspection

In no event shall the requirements to keep the Plan current or update a Plan, relieve the permittee and their contactor(s) of the responsibility to properly implement any actions required to protect the waters of the State and to comply with all conditions of the permit.

9. Contractors

General

This section shall identify all Contractors and Subcontractors who will perform on site actions which may reasonably be expected to cause or have the potential to cause pollution of the waters of the State.

Certification Statement

All contractors and subcontractors must sign the attached statement. All certification will be included in the Stormwater Pollution Control Plan.

State Project No. 142-193

**Torrington Bridge Facility and Signs & Marking Facility
Torrington, CT**

“I certify under penalty of law that I have read and understand the terms and conditions of the General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities. I understand that as Contractor on the project, I am covered by this General Permit, and must comply with the terms and conditions of this permit, including, but not limited to, the requirements of the Stormwater Pollution Control Plan prepared for this project.”

GENERAL CONTRACTOR

Signed: _____

Date: _____

Title: _____

Firm: _____

Telephone: _____

Address: _____

SUBCONTRACTOR

Signed: _____

Date: _____

Title: _____

Firm: _____

Telephone: _____

Address: _____

General:

This Stormwater Pollution Control Plan (SPCP) is prepared to comply with the requirements for the General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities. Also to be considered part of the SPCP are the proposed construction plans, special provisions, and the Connecticut Department of Transportation's "Standard Specifications for Roads, Bridges and Incidental Construction" (Form 818) including supplements thereto and the 2002 Connecticut Guidelines for Soil Erosion and Sediment Control and 2004 Stormwater Quality Manual.

List of applicable Figures / Plans:

List of Applicable Figures and Forms:

Appendix A – Figures

USGS Topographical Map- Site Location	Figure 1
NDDDB Determination Letter and Resource Map	Figure 1B
Soil Survey Map	Figure 1C
Aerial Photo	Figure 2
Disturbed/Erodible Areas	Figure 3

Appendix B – Drainage Calculations

Pre-Construction Drainage Areas	Figure 6
Existing Drainage Calculations	Figure 7
Post Construction Drainage Areas	Figure 8
Proposed Drainage Calculations	Figure 9
Water Quality Volume Computations and Outlet Protection Design	Figure 10
Detention Basin Areas	Figure 11
Detention Basin Routing	Figure 12
External Site Drainage Contribution	Figure 13

Appendix C – Plan Sheets

Existing Conditions	SD-002
Phasing Plans	SD-004-006
S & E Control Plan	C-002
Site Plan	C-004
Drainage Plan	C-005
Pavement Geometry and Surface Plan	C-007
Grading Plan	C-008
Miscellaneous Details (2)	C-010-011, C-016-017

Appendix D – MS4 Worksheet

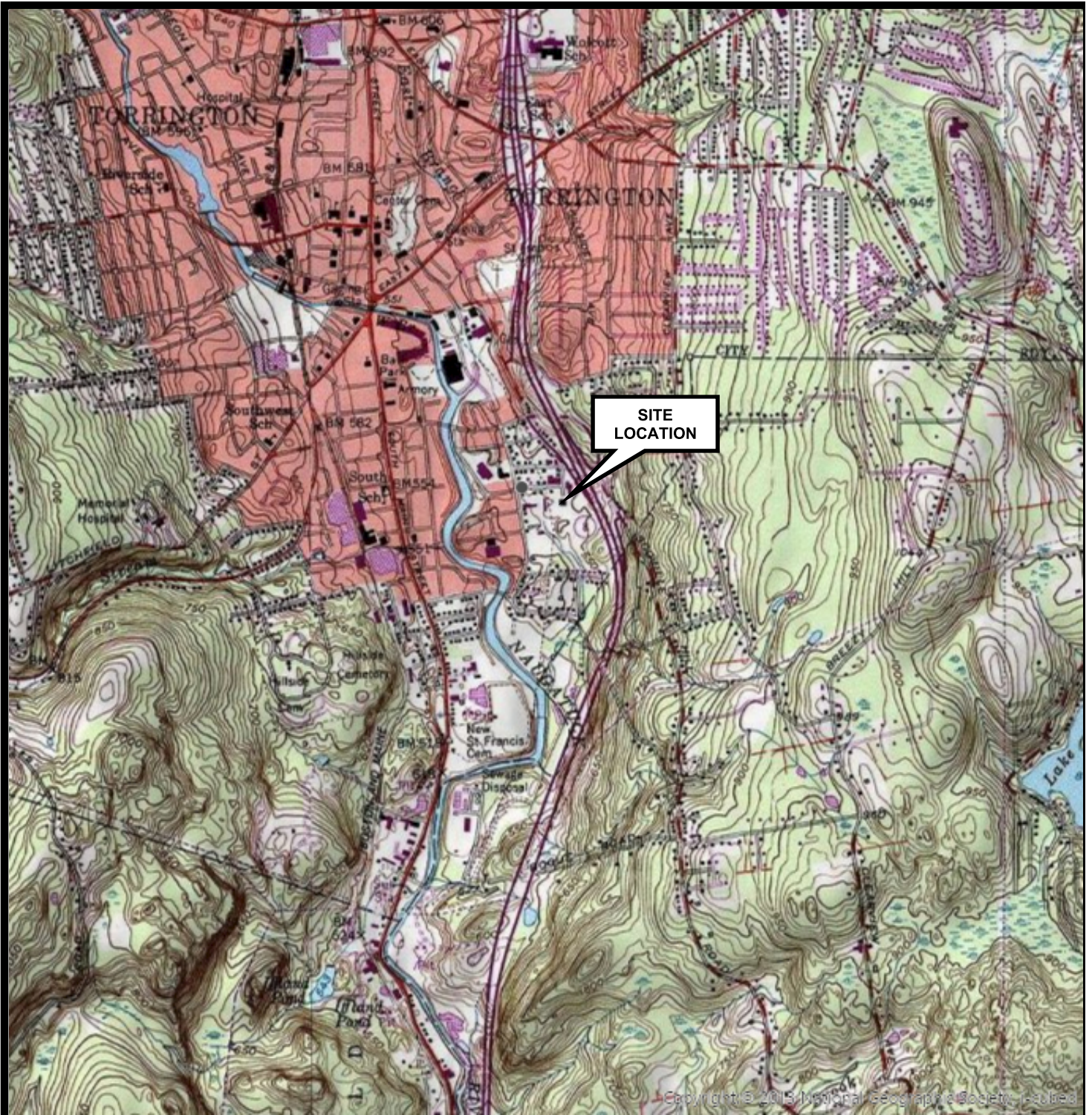
Appendix E–CSEIR Form

Appendix F – Notice of Termination Form

APPENDIX A

Figures

State Project No. 143-192



Base map is a reproduction of the U.S.G.S. 7.5 Minute Topographic Quadrangle of Torrington Connecticut, 2018



SITE LOCATION MAP

Bridge Facility and Signs & Marking Facility
Torrington, CT

FIGURE 1

NDDB Letter

Project area
is not within
a NDDB area.



United States Department of the Interior



FISH AND WILDLIFE SERVICE
New England Ecological Services Field Office
70 Commercial Street, Suite 300
Concord, NH 03301-5094
Phone: (603) 223-2541 Fax: (603) 223-0104
<http://www.fws.gov/newengland>

In Reply Refer To:

October 19, 2020

Consultation Code: 05E1NE00-2021-TA-0181

Event Code: 05E1NE00-2021-E-00529

Project Name: DOT 0143-0192

Subject: Verification letter for the 'DOT 0143-0192' project under the January 5, 2016, Programmatic Biological Opinion on Final 4(d) Rule for the Northern Long-eared Bat and Activities Excepted from Take Prohibitions.

Dear Marilyn Rose Gould:

The U.S. Fish and Wildlife Service (Service) received on October 19, 2020 your effects determination for the 'DOT 0143-0192' (the Action) using the northern long-eared bat (*Myotis septentrionalis*) key within the Information for Planning and Consultation (IPaC) system. This IPaC key assists users in determining whether a Federal action is consistent with the activities analyzed in the Service's January 5, 2016, Programmatic Biological Opinion (PBO). The PBO addresses activities excepted from "take"^[1] prohibitions applicable to the northern long-eared bat under the Endangered Species Act of 1973 (ESA) (87 Stat.884, as amended; 16 U.S.C. 1531 et seq.).

Based upon your IPaC submission, the Action is consistent with activities analyzed in the PBO. The Action may affect the northern long-eared bat; however, any take that may occur as a result of the Action is not prohibited under the ESA Section 4(d) rule adopted for this species at 50 CFR §17.40(o). Unless the Service advises you within 30 days of the date of this letter that your IPaC-assisted determination was incorrect, this letter verifies that the PBO satisfies and concludes your responsibilities for this Action under ESA Section 7(a)(2) with respect to the northern long-eared bat.

Please report to our office any changes to the information about the Action that you submitted in IPaC, the results of any bat surveys conducted in the Action area, and any dead, injured, or sick northern long-eared bats that are found during Action implementation. If the Action is not completed within one year of the date of this letter, you must update and resubmit the information required in the IPaC key.

If the Action may affect other federally listed species besides the northern long-eared bat, a proposed species, and/or designated critical habitat, additional consultation between you and this Service office is required. If the Action may disturb bald or golden eagles, additional coordination with the Service under the Bald and Golden Eagle Protection Act is recommended.

[1]Take means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct [ESA Section 3(19)].

Custom Soil Resource Report for State of Connecticut



Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (<http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/>) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (<https://offices.sc.egov.usda.gov/locator/app?agency=nrcs>) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require

alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD). To file a complaint of discrimination, write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410 or call (800) 795-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer.

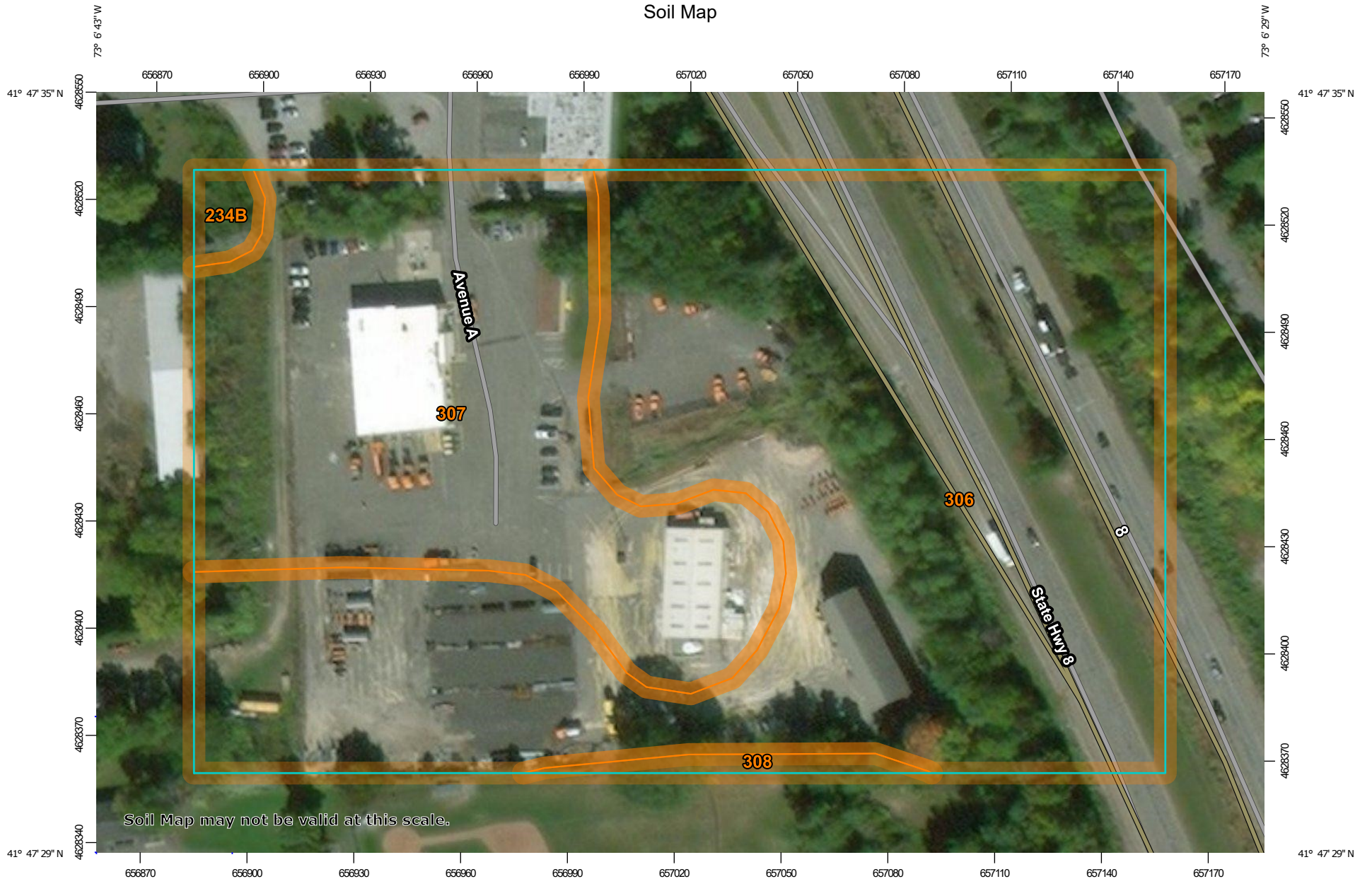
Contents

Preface	2
Soil Map	5
Soil Map.....	6
Legend.....	7
Map Unit Legend.....	8
Map Unit Descriptions.....	8
State of Connecticut.....	10
234B—Merrimac-Urban land complex, 0 to 8 percent slopes.....	10
306—Udorthents-Urban land complex.....	12
307—Urban land.....	13
308—Udorthents, smoothed.....	14
References	16

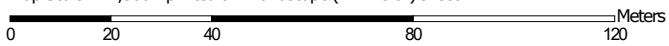
Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report
Soil Map




Map Scale: 1:1,500 if printed on A landscape (11" x 8.5") sheet.



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


MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils







 Soil Map Unit Polygons

 Soil Map Unit Lines


 Soil Map Unit Points

Special Point Features






-  Blowout
-  Borrow Pit
-  Clay Spot
-  Closed Depression
-  Gravel Pit
-  Gravelly Spot
-  Landfill
-  Lava Flow
-  Marsh or swamp
-  Mine or Quarry
-  Miscellaneous Water
-  Perennial Water
-  Rock Outcrop
-  Saline Spot
-  Sandy Spot
-  Severely Eroded Spot
-  Sinkhole
-  Slide or Slip
-  Sodic Spot

-  Spoil Area
-  Stony Spot
-  Very Stony Spot
-  Wet Spot
-  Other
-  Special Line Features


Water Features

 Streams and Canals

Transportation

-  Rails
-  Interstate Highways
-  US Routes
-  Major Roads
-  Local Roads

Background

 Aerial Photography

MAP INFORMATION

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

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

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

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

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

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

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

Soil Survey Area: State of Connecticut
 Survey Area Data: Version 20, Jun 9, 2020

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

Date(s) aerial images were photographed: Sep 29, 2013—Oct 16, 2016

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

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
234B	Merrimac-Urban land complex, 0 to 8 percent slopes	0.1	1.0%
306	Udorthents-Urban land complex	7.5	65.8%
307	Urban land	3.7	32.2%
308	Udorthents, smoothed	0.1	1.0%
Totals for Area of Interest		11.4	100.0%

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The

Custom Soil Resource Report

delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

State of Connecticut

234B—Merrimac-Urban land complex, 0 to 8 percent slopes

Map Unit Setting

National map unit symbol: 2tyr9
Elevation: 0 to 820 feet
Mean annual precipitation: 36 to 71 inches
Mean annual air temperature: 39 to 55 degrees F
Frost-free period: 140 to 250 days
Farmland classification: Not prime farmland

Map Unit Composition

Merrimac and similar soils: 45 percent
Urban land: 40 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Merrimac

Setting

Landform: Outwash plains, kames, eskers, moraines, outwash terraces
Landform position (two-dimensional): Backslope, footslope, shoulder, summit
Landform position (three-dimensional): Side slope, crest, riser, tread
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Loamy glaciofluvial deposits derived from granite, schist, and gneiss over sandy and gravelly glaciofluvial deposits derived from granite, schist, and gneiss

Typical profile

Ap - 0 to 10 inches: fine sandy loam
Bw1 - 10 to 22 inches: fine sandy loam
Bw2 - 22 to 26 inches: stratified gravel to gravelly loamy sand
2C - 26 to 65 inches: stratified gravel to very gravelly sand

Properties and qualities

Slope: 0 to 8 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat excessively drained
Runoff class: Very low
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to very high (1.42 to 99.90 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 2 percent
Maximum salinity: Nonsaline (0.0 to 1.4 mmhos/cm)
Sodium adsorption ratio, maximum: 1.0
Available water capacity: Low (about 4.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2e
Hydrologic Soil Group: A

Custom Soil Resource Report

Ecological site: F144AY022MA - Dry Outwash
Hydric soil rating: No

Description of Urban Land

Typical profile

M - 0 to 10 inches: cemented material

Properties and qualities

Slope: 0 to 8 percent

Depth to restrictive feature: 0 inches to manufactured layer

Runoff class: Very high

Capacity of the most limiting layer to transmit water (Ksat): Very low (0.00 to 0.00 in/hr)

Available water capacity: Very low (about 0.0 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 8

Hydrologic Soil Group: D

Hydric soil rating: Unranked

Minor Components

Sudbury

Percent of map unit: 5 percent

Landform: Deltas, outwash plains, terraces

Landform position (two-dimensional): Footslope

Landform position (three-dimensional): Tread, dip

Down-slope shape: Concave

Across-slope shape: Linear

Hydric soil rating: No

Hinckley

Percent of map unit: 5 percent

Landform: Kames, deltas, outwash plains, eskers

Landform position (two-dimensional): Summit, shoulder, backslope

Landform position (three-dimensional): Nose slope, head slope, side slope, crest, rise

Down-slope shape: Convex

Across-slope shape: Convex, linear

Hydric soil rating: No

Windsor

Percent of map unit: 5 percent

Landform: Deltas, outwash plains, dunes, outwash terraces

Landform position (three-dimensional): Riser, tread

Down-slope shape: Linear, convex

Across-slope shape: Linear, convex

Hydric soil rating: No

306—Udorthents-Urban land complex

Map Unit Setting

National map unit symbol: 9lmg
Elevation: 0 to 2,000 feet
Mean annual precipitation: 43 to 56 inches
Mean annual air temperature: 45 to 55 degrees F
Frost-free period: 120 to 185 days
Farmland classification: Not prime farmland

Map Unit Composition

Udorthents and similar soils: 50 percent
Urban land: 35 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Udorthents

Setting

Down-slope shape: Convex
Across-slope shape: Linear
Parent material: Drift

Typical profile

A - 0 to 5 inches: loam
C1 - 5 to 21 inches: gravelly loam
C2 - 21 to 80 inches: very gravelly sandy loam

Properties and qualities

Slope: 0 to 25 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Very low to high (0.00 to 1.98 in/hr)
Depth to water table: About 54 to 72 inches
Frequency of flooding: None
Frequency of ponding: None
Available water capacity: Moderate (about 6.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3e
Hydrologic Soil Group: B
Hydric soil rating: No

Description of Urban Land

Typical profile

H - 0 to 6 inches: material

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 8

Hydrologic Soil Group: D

Hydric soil rating: Unranked

Minor Components

Unnamed, undisturbed soils

Percent of map unit: 8 percent

Hydric soil rating: No

Udorthents, wet substratum

Percent of map unit: 5 percent

Down-slope shape: Convex

Across-slope shape: Linear

Hydric soil rating: No

Rock outcrop

Percent of map unit: 2 percent

Hydric soil rating: No

307—Urban land

Map Unit Setting

National map unit symbol: 9lmh

Elevation: 0 to 2,000 feet

Mean annual precipitation: 43 to 56 inches

Mean annual air temperature: 45 to 55 degrees F

Frost-free period: 120 to 185 days

Farmland classification: Not prime farmland

Map Unit Composition

Urban land: 80 percent

Minor components: 20 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Urban Land

Typical profile

H - 0 to 6 inches: material

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 8

Custom Soil Resource Report

Hydrologic Soil Group: D
Hydric soil rating: Unranked

Minor Components

Unnamed, undisturbed soils

Percent of map unit: 10 percent
Hydric soil rating: No

Udorthents, wet substratum

Percent of map unit: 10 percent
Down-slope shape: Convex
Across-slope shape: Linear
Hydric soil rating: No

308—Udorthents, smoothed

Map Unit Setting

National map unit symbol: 9lmj
Elevation: 0 to 2,000 feet
Mean annual precipitation: 43 to 56 inches
Mean annual air temperature: 45 to 55 degrees F
Frost-free period: 120 to 185 days
Farmland classification: Not prime farmland

Map Unit Composition

Udorthents and similar soils: 80 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Udorthents

Setting

Down-slope shape: Convex
Across-slope shape: Linear

Typical profile

A - 0 to 5 inches: loam
C1 - 5 to 21 inches: gravelly loam
C2 - 21 to 80 inches: very gravelly sandy loam

Properties and qualities

Slope: 0 to 35 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Very low to high (0.00 to 1.98 in/hr)
Depth to water table: About 24 to 54 inches
Frequency of flooding: None
Frequency of ponding: None

Custom Soil Resource Report

Available water capacity: Moderate (about 6.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 4e

Hydrologic Soil Group: C

Hydric soil rating: No

Minor Components

Unnamed, undisturbed soils

Percent of map unit: 7 percent

Hydric soil rating: No

Udorthents, wet substratum

Percent of map unit: 7 percent

Hydric soil rating: No

Urban land

Percent of map unit: 5 percent

Hydric soil rating: No

Rock outcrop

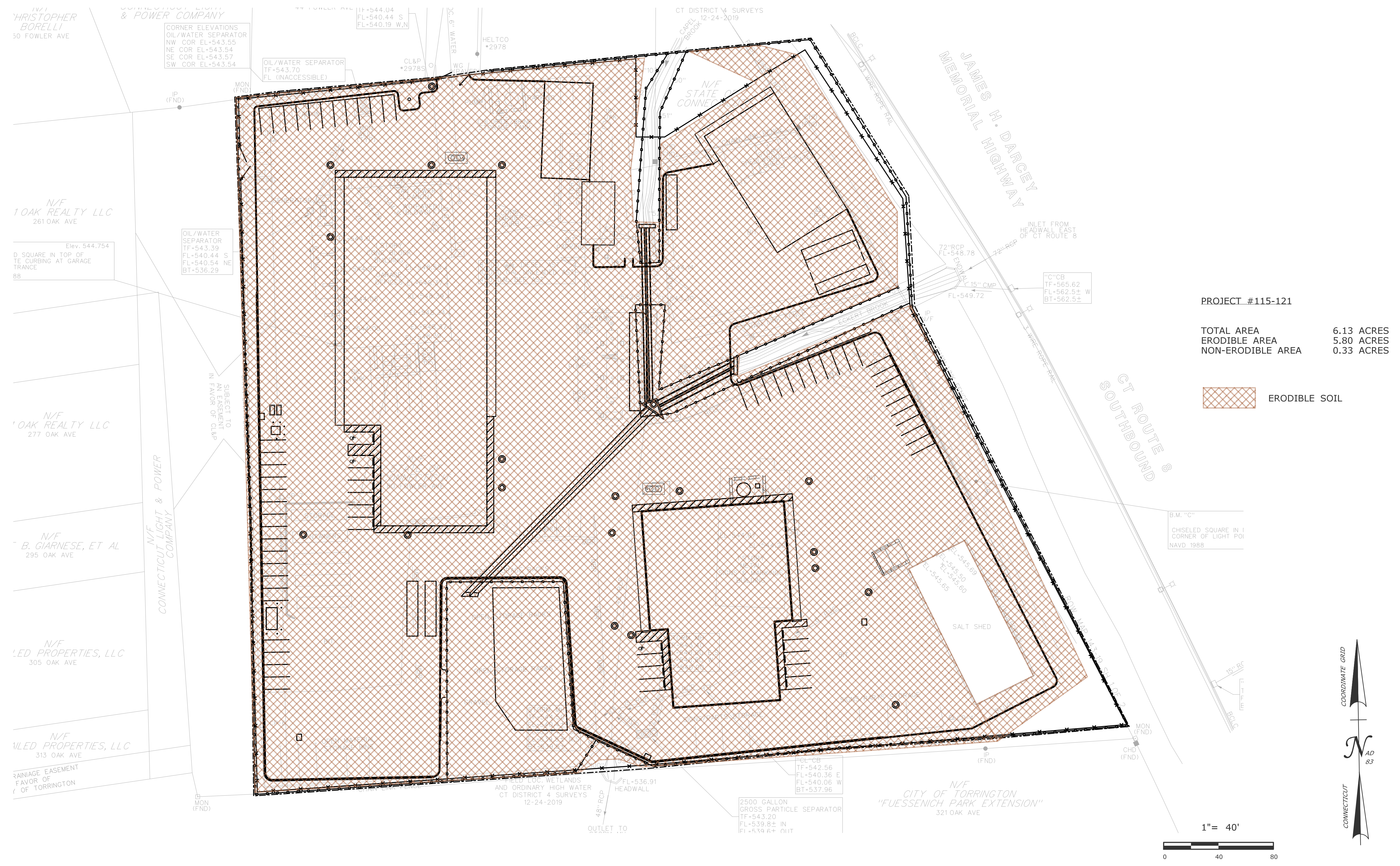
Percent of map unit: 1 percent

Hydric soil rating: No



FIGURE 2

**CONSTRUCTION OF TORRINGTON BRIDGE
AND SIGNS & MARKINGS FACILITIES
STATE PROJECT #143-192
AERIAL PHOTO
DATE: DECEMBER 2020**



PROJECT #115-121

TOTAL AREA	6.13 ACRES
ERODIBLE AREA	5.80 ACRES
NON-ERODIBLE AREA	0.33 ACRES

ERODIBLE SOIL

1" = 40'

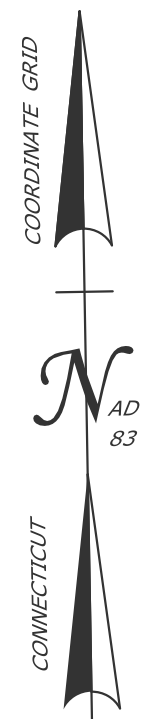


FIGURE 3

CONSTRUCTION OF TORRINGTON BRIDGE AND SIGNS & MARKINGS FACILITIES

STATE PROJECT #143-192

DISTURBED/ERODIBLE AREAS

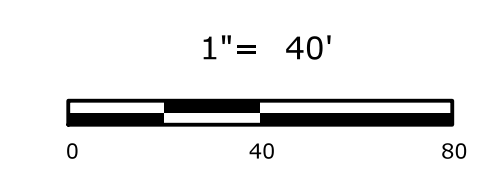
DATE: DECEMBER 2020

APPENDIX B

Drainage Calculations

State Project No. 143-192

LOCATION	AREAS (ACRES)				TOTAL
	GRASS	PAVEMENT	ROOF	STONE	
EO-1	0.23	2.76	0.28	0.00	3.27
EO-2	1.36	1.75	0.25	0.15	3.51



LEGEND

- GRASS/TURF AREA
- CONCRETE/PAVEMENT AREA
- IMPERVIOUS AREA
- STONE AREA
- DRAINAGE AREA DELINEATION

COORDINATE GRID
NAD 83
CONNECTICUT

NOTE: FLOW TO POINT AA AND POINT BB IS EXTERNAL FLOW CONTRIBUTING TO THE SITE, SEE FIGURE 6A FOR DRAINAGE AREAS AA AND BB.

FIGURE 6

CONSTRUCTION OF TORRINGTON BRIDGE AND SIGNS & MARKINGS FACILITIES
STATE PROJECT #143-192
PRE-CONSTRUCTION DRAINAGE
DATE: DECEMBER 2020

Grass & Pavement Area- Existing 10 year

Line	Time to	Time in	Accum.	Contrib.	Imperv.	AI Entering	Sum of AI	Rainfall	Q in	Pipe	Length of	Slope	"n"	Average	Maximum
Segment	Inlet	Pipe	Time	Area	Coeff.	EO-1	in System	Intensity	System	Size	channel			Velocity	Capacity
	min	min	min	acre				in/hr	cfs	in	ft	ft/ft		ft/sec	cfs
area--->EO-1	13*	n/a	0	0	0	0	2.7795	4.92	13.68	n/a	n/a	varies*	n/a	n/a	n/a
				3.27	0.85	2.7795									
				0	0	0									
							To EO-1 =		13.68						

Grass & Pavement Area- Existing 100 year

Line	Time to	Time in	Accum.	Contrib.	Imperv.	AI Entering	Sum of AI	Rainfall	Q in	Pipe	Length of	Slope	"n"	Average	Maximum
Segment	Inlet	Pipe	Time	Area	Coeff.	EO-1	in System	Intensity	System	Size	channel			Velocity	Capacity
	min	min	min	acre				in/hr	cfs	in	ft	ft/ft		ft/sec	cfs
area--->EO-1	13*	n/a	0	0	0	0	2.7795	7.10	19.73	n/a	n/a	varies*	n/a	n/a	n/a
				3.27	0.85	2.7795									
				0	0	0									
							To EO-1 =		19.73						

*- see time of concentration work sheet

Worksheet D.1 **TIME OF CONCENTRATION (T_c) OR TRAVEL TIME (T_t) for EO-1**
ENGLISH

Project: 143-192 Designed by: ME Date: 1-15-21

Location: F **Torrington** Checked by: Date:

PRESENT COUNTY: LITCHFIELD
T_c

Notes: Space for as many as two segments per flow type can be used for each worksheet.

Include a map, schematic, or description of flow segments.

Sheet flow (Applicable to T_c only) Segment ID

1. Surface description (See Table 3-1)	1.Smooth	5.Grasses	
2. Manning's roughness coeff., n	0.011	0.24	
3. Flow length, L (total L < 150ft).....ft	275	25	
4. Two-yr 24-hr rainfall, P ₂ (See Fig. 3-1).....in	3.2	3.2	
5. Land slope, sft/ft	0.0218	0.0031	
6. T _t = $\frac{.007 (nL)^{0.5}}{P_2^{0.5} s^{0.4}}$hr	0.044	0.165	= 0.209 hr.

Shallow concentrated flow

7. Surface description	Unpaved	Unpaved	
8. Flow length, L.....ft	0	0	
9. Watercourse slope, s.....ft/ft	0.000	0.000	
10. Average velocity, V (See Fig. 3-1)ft/s	0.000	0.000	
11. T _t = $\frac{L}{3600 V}$hr	0.000	0.000	= 0.000 hr.

Channel flow (NOTE- IMPORTANT -SELECT N/A AND LOOK UP MANNINGS 'n' VALUE)

12 Surface Description	1.Smooth	N/A	
13. Cross sectional flow area, Aft ²	0		
14. Wetted perimeter, P _wft	0		
15. Hydraulic radius, r = $\frac{A}{P_w}$ft	0	0	
16. Channel slope, sft/ft	0		
17. Manning's roughness coeff., n	0		
18. V = $\frac{1.49 r^{2/3} s^{1/2}}{n}$ft/s	0	0	
19. Flow length, L.....ft	0		
19. T _t = $\frac{L}{3600 V}$hr	0	0	= 0 hr.
20. Watershed or subarea T _c or T _t (add T _t in steps 6, 11, and 19)			0.209 hr.

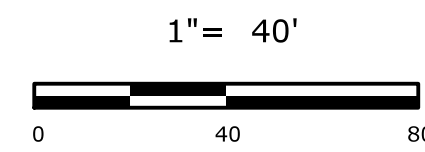
FIGURE 7

100% Existing Storm Drainage System (10 year storm)

Station / Structure		A Drainage Area (acres)		C - Runoff Coefficient	AC		T _c Flow Time (min)			I - Rainfall Intensity	Q _i In System (cfs)	Pipe			Q _f - Full Capacity (cfs)	Velocity (fps)		Invert Elevations (ft)		Headwater	"n"
From	To	Increment	Total		Increment	Total	To Inlet	In Pipe	Accumulated			Size (in.)	Length (ft.)	Slope (ft/ft)		V _f Flowing Full	V _d Design Flow	Upper End	Lower End		
A	B	0.712	0.712	0.441	0.314	0.314	10.00	0.39	10.39	5.37	1.69	24	112	0.017	31.44	9.3	4.7	543.58	541.71	1.0	0.013
B	C	0.438	1.150	0.414	0.181	0.495	10.00	1.03	11.03	5.37	2.66	42	216	0.013	123.66	12.0	3.5	541.71	538.89	1.8	0.013
E	F	2.360	2.360	0.700	1.652	1.652	10.00	0.27	10.27	5.37	8.87	12	35	0.002	1.59	1.9	2.2	540.06	540.00	0.5	0.013
F	C	0.000	2.360	#DIV/0!	#DIV/0!	1.652	10.27	0.07	10.34	5.31	8.77	15	35	0.017	9.10	6.9	8.0	540.00	539.40	0.6	0.013
C	D	0.000	3.510	#DIV/0!	#DIV/0!	2.148	11.03	0.06	11.09	5.13	11.02	42	27	0.019	148.74	14.4	8.0	539.40	538.89	1.8	0.013
								To EO2 =			11.02										

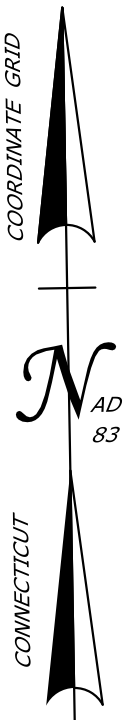
FIGURE 7

LOCATION	AREAS (ACRES)				TOTAL
	GRASS	PAVEMENT	ROOF	STONE	
EO-1	0.16	0.40	-	0.03	0.58
EO-2	1.32	3.19	1.24	0.45	6.20



LEGEND

- GRASS/TURF AREA
- CONCRETE/PAVEMENT AREA
- IMPERVIOUS AREA
- STONE AREA
- DRAINAGE AREA DELINEATION



NOTE: FLOW TO POINT AA AND POINT BB IS EXTERNAL FLOW CONTRIBUTING TO THE SITE, SEE FIGURE 6A FOR DRAINAGE AREAS AA AND BB.

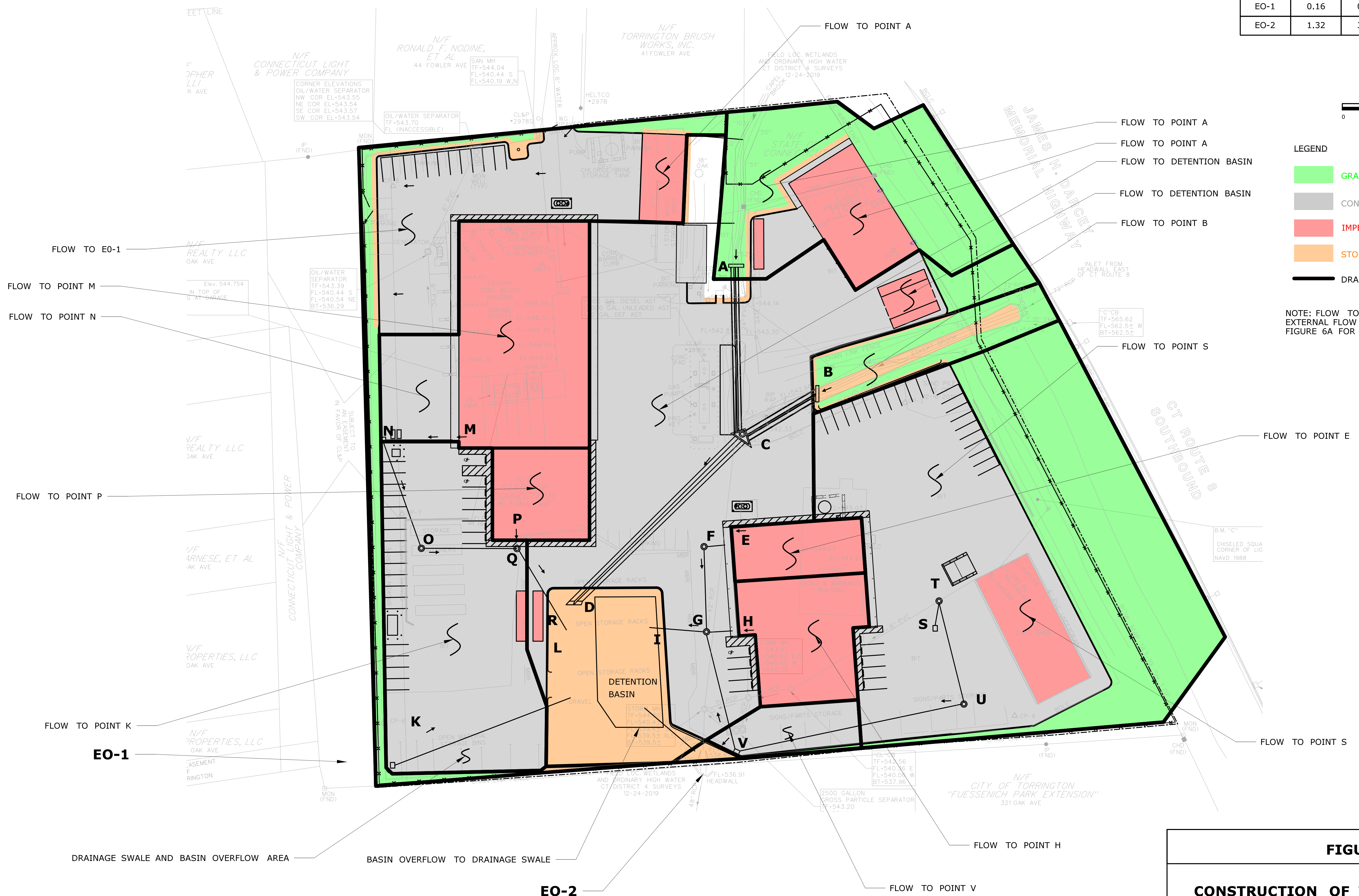


FIGURE 8
CONSTRUCTION OF TORRINGTON BRIDGE AND SIGNS & MARKINGS FACILITIES
STATE PROJECT #143-192
POST-CONSTRUCTION DRAINAGE
DATE: DECEMBER 2020

Grass & Pavement Area- Proposed 10 year

Line Segment	Time to Inlet <i>min</i>	Time in Pipe <i>min</i>	Accum. Time <i>min</i>	Contrib. Area <i>acre</i>	Imperv. Coeff.	AI Entering EO-1	Sum of AI in System	Rainfall Intensity <i>in/hr</i>	Q in System <i>cfs</i>	Pipe Size <i>in</i>	Length of channel <i>ft</i>	Slope <i>ft/ft</i>	"n"	Average Velocity <i>ft/sec</i>	Maximum Capacity <i>cfs</i>
area---->EO-1	54*	n/a	0	0	0	0	0.493	2.03	1.00	n/a	n/a	varies*	n/a	n/a	n/a
				0.58	0.85	0.493									
				0	0	0									
							To EO-1 =		1.00						

Grass & Pavement Area- Proposed 100 year

Line Segment	Time to Inlet <i>min</i>	Time in Pipe <i>min</i>	Accum. Time <i>min</i>	Contrib. Area <i>acre</i>	Imperv. Coeff.	AI Entering EO-1	Sum of AI in System	Rainfall Intensity <i>in/hr</i>	Q in System <i>cfs</i>	Pipe Size <i>in</i>	Length of channel <i>ft</i>	Slope <i>ft/ft</i>	"n"	Average Velocity <i>ft/sec</i>	Maximum Capacity <i>cfs</i>
area---->EO-1	54*	n/a	0	0	0	0	0.493	3.07	1.51	n/a	n/a	varies*	n/a	n/a	n/a
				0.58	0.85	0.493									
				0	0	0									
							To EO-1 =		1.51						

*- see time of concentration work sheet

Worksheet D.1 **TIME OF CONCENTRATION (T_c) OR TRAVEL TIME (T_t)** for EO-1
ENGLISH

Project: 143-192 Designed by: ME Date: 1-15-21

Location: F **Torrington** Checked by: Date:

PRESENT COUNTY: LITCHFIELD
T_c

Notes: Space for as many as two segments per flow type can be used for each worksheet.

Include a map, schematic, or description of flow segments.

Sheet flow (Applicable to T_c only) Segment ID

1. Surface description (See Table 3-1)	1.Smooth	5.Grasses	
2. Manning's roughness coeff., n	0.011	0.24	
3. Flow length, L (total L < 150ft).....ft	100	200	
4. Two-yr 24-hr rainfall, P ₂ (See Fig. 3-1).....in	3.2	3.2	
5. Land slope, sft/ft	0.0218	0.0031	
6. T _t = $\frac{.007 (nL)^{0.5}}{P_2^{0.5} s^{0.5}}$hr	0.020	0.873	= 0.892 hr.

Shallow concentrated flow

7. Surface description	Unpaved	Unpaved	
8. Flow length, L.....ft	0	0	
9. Watercourse slope, s.....ft/ft	0.000	0.000	
10. Average velocity, V (See Fig. 3-1)ft/s	0.000	0.000	
11. T _t = $\frac{L}{3600 V}$hr	0.000	0.000	= 0.000 hr.

Channel flow (NOTE- IMPORTANT -SELECT N/A AND LOOK UP MANNINGS 'n' VALUE)

12 Surface Description	1.Smooth	N/A	
13. Cross sectional flow area, Aft ²	0		
14. Wetted perimeter, P _wft	0		
15. Hydraulic radius, r = $\frac{A}{P_w}$ft	0	0	
16. Channel slope, sft/ft	0		
17. Manning's roughness coeff., n	0		
18. V = $\frac{1.49 r^{2/3} s^{1/2}}{n}$ft/s	0	0	
19. Flow length, L.....ft	0		
19. T _t = $\frac{L}{3600 V}$hr	0	0	= 0 hr.
20. Watershed or subarea T _c or T _t (add T _t in steps 6, 11, and 19)			0.892 hr.

FIGURE 9

100% Proposed Storm Drainage System (100 year storm)

Station / Structure		A Drainage Area (acres)		C - Runoff Coefficient	AC		T _c Flow Time (min)			I - Rainfall Intensity	D In System (cts)	Pipe			Q _F - Full Capacity (cts)	Velocity (fps)		Invert Elevations (ft)		Headwater	"n"
From	To	Increment	Total		Increment	Total	To Inlet	In Pipe	Accumulated			Size (in.)	Length (ft.)	Slope (ft/ft)		V _F Flowing Full	V _D Design Flow	Upper End	Lower End		
A	C	0.254	0.254	0.979	0.249	0.249	5.00	0.81	5.81	11.50	2.86	30	130	0.012	96.67	9.2	2.7	542.60	541.04	1.3	0.013
B	C	0.000	0.000	#DIV/0!	#DIV/0!	0.000	5.00	#DIV/0!	#DIV/0!	11.50	0.00	36	65	0.010	143.50	9.5	0.0	542.65	542.00	1.5	0.013
C	D	0.000	0.254	#DIV/0!	#DIV/0!	0.249	5.81	1.28	7.09	10.96	2.73	36	184	0.017	187.10	12.4	2.4	541.00	537.87	1.5	0.013
M	N	0.431	0.431	1.000	0.431	0.431	5.00	0.07	5.07	11.50	4.96	10	50	0.040	6.13	10.5	11.8	542.25	540.25	0.4	0.010
N	O	0.123	0.554	0.900	0.110	0.542	5.07	0.31	5.38	11.45	6.20	18	87	0.005	7.94	4.2	4.7	540.00	539.57	0.8	0.013
O	Q	0.000	0.554	#DIV/0!	#DIV/0!	0.542	5.38	0.26	5.64	11.25	6.09	18	72	0.005	7.99	4.2	4.7	539.48	539.12	0.8	0.013
P	Q	0.130	0.130	1.000	0.130	0.130	5.00	0.01	5.01	11.50	1.50	6	5	0.040	1.57	7.5	8.6	542.68	542.48	0.3	0.010
Q	R	0.000	0.684	#DIV/0!	#DIV/0!	0.672	5.64	0.19	5.83	11.07	7.44	18	74	0.010	11.30	6.0	6.4	539.48	538.74	0.8	0.013
K	L	0.662	0.662	0.901	0.596	0.596	5.00	0.52	5.52	11.50	6.86	18	150	0.005	7.99	4.2	4.8	537.92	537.17	0.8	0.013
E	F	0.105	0.105	1.000	0.105	0.105	5.00	0.03	5.03	11.50	1.21	6	14	0.040	1.57	7.5	8.3	543.91	543.35	0.3	0.010
F	G	0.000	0.105	#DIV/0!	#DIV/0!	0.105	5.03	0.19	5.22	11.48	1.21	12	45	0.010	3.83	4.6	3.9	542.70	542.25	0.5	0.013
H	G	0.205	0.205	1.000	0.205	0.205	5.00	0.03	5.03	11.50	2.36	8	18	0.040	3.38	9.0	9.8	543.70	542.98	0.3	0.010
S	T	1.005	1.005	0.911	0.916	0.916	5.00	0.04	5.04	11.50	10.54	18	18	0.011	11.91	6.3	7.2	541.90	541.70	0.8	0.013
T	U	0.000	1.005	#DIV/0!	#DIV/0!	0.916	5.06	0.25	5.31	11.46	10.50	24	80	0.005	17.21	5.1	5.4	541.04	540.64	1.0	0.013
U	V	0.000	1.005	#DIV/0!	#DIV/0!	0.916	5.31	0.56	5.87	11.29	10.35	24	180	0.005	17.21	5.1	5.4	540.64	539.74	1.0	0.013
V	G	0.089	1.094	0.900	0.080	0.996	5.87	0.29	6.16	10.92	10.88	24	93	0.005	17.21	5.1	5.4	539.74	539.28	1.0	0.013
G	I	0.000	1.404	#DIV/0!	#DIV/0!	1.307	6.16	0.08	6.24	10.72	14.01	24	36	0.010	24.34	7.2	7.5	539.28	538.92	1.0	0.013
Flow to Basin =											14.01										
Flow to Watercourse Bypass Channel =											17.02										
Flow to EO-2																					
From Watercourse Bypass Channel											17.02										
From Basin Routing (see figure 12)											9.24										
On-site Total Runoff to EO-2											26.26										

FIGURE 9

**Figure 10: Water Quality Computations and Outlet Protection Design –
Project # 143-192. Torrington Bridge Facility and Signs & Marking Facility**

Water Quality Computations:

Water quality requirements were satisfied by providing measures designed in accordance with the Connecticut Department of Environmental Protection’s 2004 Connecticut Stormwater Quality Manual. The stormwater basin was designed to act as both a peak flow reducer and a sediment interceptor.

The basin drains a total of 3.72 acres, of which 2.72 is impervious. The required storage volume for the “first flush” is as follows:

$$WQV = (1") (0.05 + 0.009 I) (A) / 12$$

WQV = Water Quality Volume, acres ft

R = Volumetric Runoff Coefficient 0.05+.009(I)

I = Percent of Impervious Cover (%)

A = Site Area, acres

$$WQV = \frac{(1") * [0.05 + 0.009 * (\frac{Impervious Area}{Total Area} * 100\%)] * Total Area}{12}$$

$$WQV = \frac{(1") * [0.05 + 0.009 * (\frac{2.72}{3.72} * 100\%)] * 3.72}{12}$$

$$WQV = 0.208 \text{ acre-ft}$$

WQV of Basin= 9.070 cf

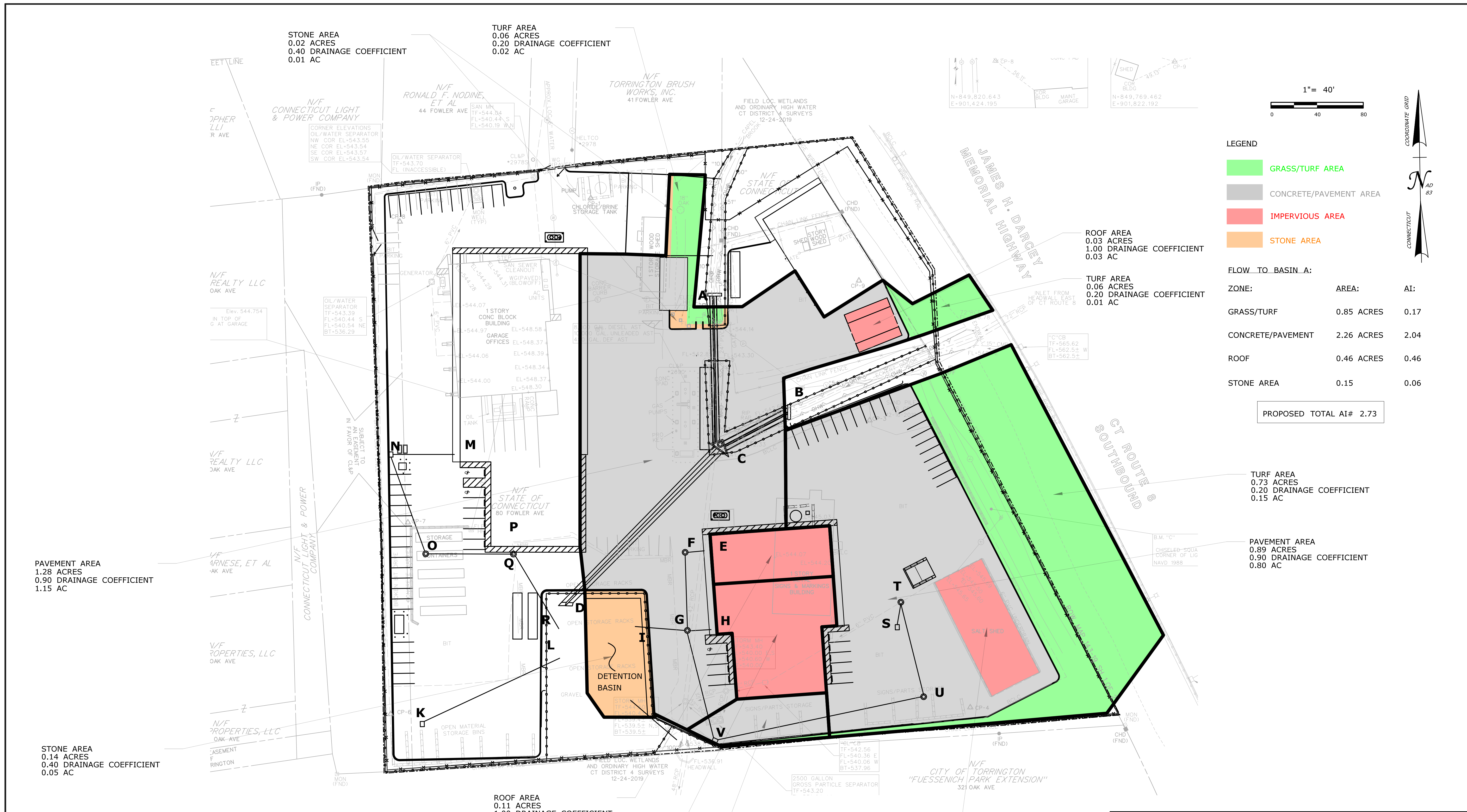
Forebay-10% of Basin storage= 910 cf

Riprap Outlet Protection Design:

Median Stone Diameter for velocity of 0 to 8 fps = Modified (5")

- Riprap outlet protection at reinforced concrete culvert end (H).

The entirety of the basin will consist of rip rap. The area of the riprap outlet protection at culvert end (H) meets the criteria in the CT DOT Drainage Manual.



STONE AREA
0.02 ACRES
0.40 DRAINAGE COEFFICIENT
0.01 AC

TURF AREA
0.06 ACRES
0.20 DRAINAGE COEFFICIENT
0.02 AC

PAVEMENT AREA
1.28 ACRES
0.90 DRAINAGE COEFFICIENT
1.15 AC

STONE AREA
0.14 ACRES
0.40 DRAINAGE COEFFICIENT
0.05 AC

ROOF AREA
0.11 ACRES
1.00 DRAINAGE COEFFICIENT
0.11 AC

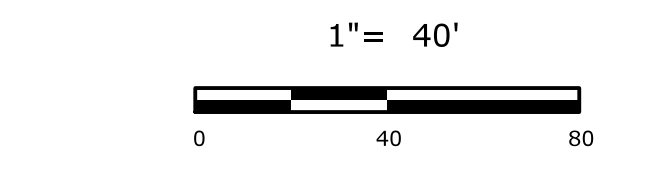
ROOF AREA
0.21 ACRES
1.00 DRAINAGE COEFFICIENT
0.21 AC

PAVEMENT AREA
0.09 ACRES
0.90 DRAINAGE COEFFICIENT
0.08 AC

ROOF AREA
0.12 ACRES
1.00 DRAINAGE COEFFICIENT
0.12 AC

ROOF AREA
0.03 ACRES
1.00 DRAINAGE COEFFICIENT
0.03 AC

TURF AREA
0.06 ACRES
0.20 DRAINAGE COEFFICIENT
0.01 AC



- LEGEND
- GRASS/TURF AREA
 - CONCRETE/PAVEMENT AREA
 - IMPERVIOUS AREA
 - STONE AREA

FLOW TO BASIN A:

ZONE:	AREA:	AI:
GRASS/TURF	0.85 ACRES	0.17
CONCRETE/PAVEMENT	2.26 ACRES	2.04
ROOF	0.46 ACRES	0.46
STONE AREA	0.15	0.06

PROPOSED TOTAL AI# 2.73

TURF AREA
0.73 ACRES
0.20 DRAINAGE COEFFICIENT
0.15 AC

PAVEMENT AREA
0.89 ACRES
0.90 DRAINAGE COEFFICIENT
0.80 AC

FIGURE 11

CONSTRUCTION OF TORRINGTON BRIDGE AND SIGNS & MARKINGS FACILITIES

STATE PROJECT #143-192

DETENTION BASIN AREAS

DATE: OCT 2020

Detention Basin

Project 143-192

* Calculations based on CT Stormwater Quality Manual 10 yr storm and NOAA Atlas 14- Rainfall Intensity Charts

		Elev.
Inlet pipe:	24" RCP	538.42
Outlet pipe:	12" RCP	537.00
Overflow:	Grass/ Riprap Swale	541.00

General Information:

Basin Depth below outlet pipe:	1.0 ft
Length of pipe	50 ft
Base Slope	0.01 ft/ft

Total AI in(pavement + grass): 2.72

** - Above elevation 538, basin encompasses forebay and lower basin complete area.

	Basin Depth	elevation	area in sf at elev.	CF per increment	Total Vol. cf
Forebay	0	536.0	290		
	1	537.0	535	413	413
	2	538.0	834	685	1097
Basin	0	536.0	684		
	1	537.0	917	801	801
	2	538.0	1156	1037	1837
	3	539.0	2677	2334	4171
	4	540.0	3299	2988	7159
	5	541.0	3927	4030	11189
	6	542.0	4537	4232	15421
Total Volume of basin and forebay					16518

T(min)= 5 R(in/hr)= 7.61 Q(cfs)= 20.70

30 sec. intervals	1	2	3	4	5	6	7	8	9	10	Final Velocity (ft/sec)
in (cf)	621	621	621	621	621	621	621	621	621	621	7.987
out (cf)					65	112	132	149	164	177	
storage in forebay (cf)	621	1097									Final Q 6.273
storage in basin (cf)	0.00	145	766	1387	1943	2451	2941	3413	3869	4313	
storage head (ft) basin	0.00	0.18	0.96	1.57	2.05	2.26	2.47	2.68	2.87	3.05	Basin Depth (ft)
storage head (ft) to pipe	0.00	0.00	0.00	0.57	1.05	1.26	1.47	1.68	1.87	2.05	
flow depth in pipe (in)	0.00	0.00	0.00	6.78	12.54	15.17	17.68	20.10	22.45	24.57	3.05
adjusted slope					0.0110	0.0152	0.0194	0.0236	0.0274	0.0310	

T(min)= 10 R(in/hr)= 5.39 Q(cfs)= 14.66

60 sec. intervals	1	2	3	4	5	6	7	8	9	10	Final Velocity (ft/sec)
in (cf)	880	880	880	880	880	880	880	880	880	880	8.935
out (cf)				184	247	293	330	362	385	403	
storage in forebay (cf)	880	1097									Final Q 7.018
storage in basin (cf)	0.00	662	1542	2238	2870	3457	4007	4525	5020	5496	
storage head (ft) basin	0.00	0.83	1.71	2.17	2.44	2.69	2.93	3.12	3.28	3.44	Basin Depth (ft)
storage head (ft) to pipe	0.00	0.00	0.71	1.17	1.44	1.69	1.93	2.12	2.28	2.44	
flow depth in pipe (in)	0.00	0.00	8.57	14.04	17.31	20.33	23.15	25.42	27.41	29.32	3.44
adjusted slope				0.0134	0.0188	0.0238	0.0286	0.0324	0.0356	0.0388	

T(min)= 15 R(in/hr)= 4.22 Q(cfs)= 11.48

90 sec. intervals	1	2	3	4	5	6	7	8	9	10	Final Velocity (ft/sec)
in (cf)	1033	1033	1033	1033	1033	1033	1033	1033	1033	1033	9.073
out (cf)			9	342	423	480	529	566	595	618	
storage in forebay (cf)	1033	1097									Final Q 7.126
storage in basin (cf)	0.00	969	1993	2684	3294	3847	4351	4818	5256	5671	
storage head (ft) basin	0.00	1.16	2.07	2.37	2.62	2.86	3.06	3.22	3.36	3.50	Basin Depth (ft)
storage head (ft) to pipe	0.00	0.16	1.07	1.37	1.62	1.86	2.06	2.22	2.36	2.50	
flow depth in pipe (in)	0.00	1.94	12.80	16.40	19.49	22.33	24.72	26.60	28.36	30.00	3.50
adjusted slope			0.0114	0.0174	0.0224	0.0272	0.0312	0.0344	0.0372	0.0400	

T(min)= 20 R(in/hr)= 3.77 Q(cfs)= 10.25

120 sec. intervals	1	2	3	4	5	6	7	8	9	10	Final Velocity (ft/sec)
in (cf)	1231	1231	1231	1231	1231	1231	1231	1231	1231	1231	9.297
out (cf)			246	513	614	687	745	784	818	849	
storage in forebay (cf)	1097										Final Q 7.302
storage in basin (cf)	134	1364	2349	3067	3683	4227	4712	5159	5572	5954	
storage head (ft) basin	0.17	1.54	2.22	2.53	2.79	3.02	3.18	3.33	3.47	3.60	Basin Depth (ft)
storage head (ft) to pipe	0.00	0.54	1.22	1.53	1.79	2.02	2.18	2.33	2.47	2.60	
flow depth in pipe (in)	0.00	6.52	14.63	18.32	21.49	24.22	26.16	27.97	29.63	31.16	3.60
adjusted slope			0.0144	0.0206	0.0258	0.0304	0.0336	0.0366	0.0394	0.0420	

Note- Critical time interval.

T(min)= 25 R(in/hr)= 3.22 Q(cfs)= 8.76

150 sec. intervals	1	2	3	4	5	6	7	8	9	10	Final Velocity
in (cf)	1314	1314	1314	1314	1314	1314	1314	1314	1314	1314	(ft/sec)
out (cf)			451	650	763	848	913	956	991	1022	8.912
storage in forebay (cf)	1097										
storage in basin (cf)	217	1531	2393	3057	3607	4073	4473	4831	5154	5445	Final Q
storage head (ft) basin	0.27	1.70	2.24	2.52	2.76	2.96	3.10	3.22	3.33	3.43	7.000
storage head (ft) to pipe	0.00	0.70	1.24	1.52	1.76	1.96	2.10	2.22	2.33	2.43	Basin Depth
flow depth in pipe (in)	0.00	8.45	14.86	18.27	21.10	23.50	25.21	26.65	27.95	29.11	(ft)
adjusted slope			0.0148	0.0204	0.0252	0.0292	0.0320	0.0344	0.0366	0.0386	3.43

T(min)= 30 R(in/hr)= 2.87 Q(cfs)= 7.81

180 sec. intervals	1	2	3	4	5	6	7	8	9	10	Final Velocity
in (cf)	1405	1405	1405	1405	1405	1405	1405	1405	1405	1405	(ft/sec)
out (cf)			676	791	916	1006	1073	1125	1158	1186	8.583
storage in forebay (cf)	1097										
storage in basin (cf)	308	1713	2443	3057	3546	3946	4278	4557	4805	5024	Final Q
storage head (ft) basin	0.38	1.88	2.26	2.52	2.73	2.90	3.04	3.13	3.21	3.29	6.741
storage head (ft) to pipe	0.00	0.88	1.26	1.52	1.73	1.90	2.04	2.13	2.21	2.29	Basin Depth
flow depth in pipe (in)	0.00	10.55	15.12	18.27	20.79	22.84	24.43	25.55	26.52	27.42	(ft)
adjusted slope			0.0152	0.0204	0.0246	0.0280	0.0308	0.0326	0.0342	0.0358	3.29

T(min)= 35 R(in/hr)= 2.7 Q(cfs)= 7.34

210 sec. intervals	1	2	3	4	5	6	7	8	9	10	Final Velocity
in (cf)	1542	1542	1542	1542	1542	1542	1542	1542	1542	1542	(ft/sec)
out (cf)			792	998	1120	1206	1270	1317	1347	1376	8.462
storage in forebay (cf)	1097										
storage in basin (cf)	445	1987	2738	3282	3704	4040	4313	4538	4733	4900	Final Q
storage head (ft) basin	0.56	2.06	2.39	2.62	2.80	2.94	3.05	3.12	3.19	3.24	6.646
storage head (ft) to pipe	0.00	1.06	1.39	1.62	1.80	1.94	2.05	2.12	2.19	2.24	Basin Depth
flow depth in pipe (in)	0.00	12.72	16.63	19.43	21.60	23.33	24.57	25.47	26.26	26.93	(ft)
adjusted slope		0.0112	0.0178	0.0224	0.0260	0.0288	0.0310	0.0324	0.0338	0.0348	3.24

--Critical Interval

FIGURE 12

Detention Basin

Project 143-192

* Calculations based on CT Stormwater Quality Manual 100 yr storm and NOAA Atlas 14- Rainfall Intensity Charts

		Elev.
Inlet pipe:	24" RCP	538.42
Outlet pipe:	12" RCP	537.00
Overflow:	Grass/ Riprap Swale	541.00

General Information:

Basin Depth below outlet pipe:	1.0 ft
Length of pipe	50 ft
Base Slope	0.01 ft/ft

Basin	elevation	area in sf at elev.	CF per increment	Total Vol. cf
Forebay	0	290		
	1	535	413	413
	2	834	685	1097
Basin	0	684		
	1	917	801	801
	2	1156	1037	1837
	3	2677	2334	4171
	4	3299	2988	7159
	5	3927	4030	11189
	6	4537	4232	15421
Total Volume of basin and forebay				16518

** - Above elevation 538, basin encompasses forebay and lower basin complete area.

Total AI in(pavement + grass): 2.73

T(min)= 5 R(in/hr)= 11.5 Q(cfs)= 31.40

30 sec. intervals	1	2	3	4	5	6	7	8	9	10	Final Velocity (ft/sec)
in (cf)	942	942	942	942	942	942	942	942	942	942	10.123
out (cf)				54	138	164	186	201	214	227	
storage in forebay (cf)	942	1097									Final Q 7.951
storage in basin (cf)	0.00	787	1729	2616	3420	4198	4954	5695	6423	7138	
storage head (ft) basin	0.00	0.98	1.51	2.33	2.68	3.01	3.26	3.51	3.75	3.99	Basin Depth (ft)
storage head (ft) to pipe	0.00	0.00	0.51	1.33	1.68	2.01	2.26	2.51	2.75	2.99	
flow depth in pipe (in)	0.00	0.00	6.06	16.00	20.14	24.11	27.14	30.12	33.05	35.91	3.99
adjusted slope				0.0166	0.0236	0.0302	0.0352	0.0402	0.0450	0.0498	

T(min)= 10 R(in/hr)= 8.15 Q(cfs)= 22.25

60 sec. intervals	1	2	3	4	5	6	7	8	9	10	Final Velocity (ft/sec)
in (cf)	1335	1335	1335	1335	1335	1335	1335	1335	1335	1335	11.112
out (cf)			193	284	349	393	429	459	486	505	
storage in forebay (cf)	1097	1097									Final Q 8.727
storage in basin (cf)	238	1573	2715	3766	4752	5694	6601	7476	8326	9156	
storage head (ft) basin	0.30	1.74	2.38	2.83	3.19	3.51	3.81	4.08	4.29	4.50	Basin Depth (ft)
storage head (ft) to pipe	0.00	0.74	1.38	1.83	2.19	2.51	2.81	3.08	3.29	3.50	
flow depth in pipe (in)	0.00	8.93	16.51	21.92	26.33	30.12	33.72	36.94	39.48	41.95	4.50
adjusted slope			0.0176	0.0266	0.0338	0.0402	0.0462	0.0516	0.0558	0.0600	

T(min)= 15 R(in/hr)= 6.4 Q(cfs)= 17.47

90 sec. intervals	1	2	3	4	5	6	7	8	9	10	Final Velocity (ft/sec)
in (cf)	1572	1572	1572	1572	1572	1572	1572	1572	1572	1572	11.350
out (cf)			348	478	568	625	676	718	749	776	
storage in forebay (cf)	1097										Final Q 8.914
storage in basin (cf)	475	2048	3272	4367	5371	6319	7215	8069	8893	9689	
storage head (ft) basin	0.59	2.09	2.61	3.07	3.40	3.72	4.01	4.23	4.43	4.63	Basin Depth (ft)
storage head (ft) to pipe	0.00	1.09	1.61	2.07	2.40	2.72	3.01	3.23	3.43	3.63	
flow depth in pipe (in)	0.00	13.08	19.38	24.79	28.81	32.63	36.17	38.71	41.16	43.54	4.63
adjusted slope		0.0118	0.0222	0.0314	0.0380	0.0444	0.0502	0.0546	0.0586	0.0626	

T(min)= 20 R(in/hr)= 5.72 Q(cfs)= 15.62

120 sec. intervals	1	2	3	4	5	6	7	8	9	10	Final Velocity (ft/sec)
in (cf)	1874	1874	1874	1874	1874	1874	1874	1874	1874	1874	11.759
out (cf)			557	718	760	895	958	1001	1040	1077	
storage in forebay (cf)	1097										Final Q 9.236
storage in basin (cf)	777	2651	3967	5123	6237	7216	8132	9005	9839	10636	
storage head (ft) basin	0.97	2.35	2.91	3.32	3.69	4.01	4.24	4.46	4.67	4.86	Basin Depth (ft)
storage head (ft) to pipe	0.00	1.35	1.91	2.32	2.69	3.01	3.24	3.46	3.67	3.86	
flow depth in pipe (in)	0.00	16.18	22.95	27.82	32.28	36.17	38.88	41.50	43.98	46.35	4.86
adjusted slope		0.0170	0.0282	0.0364	0.0438	0.0502	0.0548	0.0592	0.0634	0.0672	

Note- Critical time interval.

T(min)= 25 R(in/hr)= 5.03 Q(cfs)= 13.73

150 sec. intervals	1	2	3	4	5	6	7	8	9	10	Final Velocity (ft/sec)
in (cf)	2060	2060	2060	2060	2060	2060	2060	2060	2060	2060	11.707
out (cf)		14	756	941	1047	1136	1207	1256	1300	1341	
storage in forebay (cf)	1097										
storage in basin (cf)	963	3009	4313	5431	6444	7368	8220	9025	9784	10502	Final Q
storage head (ft) basin	1.16	2.50	3.05	3.42	3.76	4.05	4.26	4.46	4.65	4.83	9.195
storage head (ft) to pipe	0.16	1.50	2.05	2.42	2.76	3.05	3.26	3.46	3.65	3.83	Basin Depth (ft)
flow depth in pipe (in)	1.88	18.02	24.58	29.06	33.12	36.60	39.12	41.52	43.80	45.95	
adjusted slope		0.0200	0.0310	0.0384	0.0452	0.0510	0.0552	0.0592	0.0630	0.0666	4.83

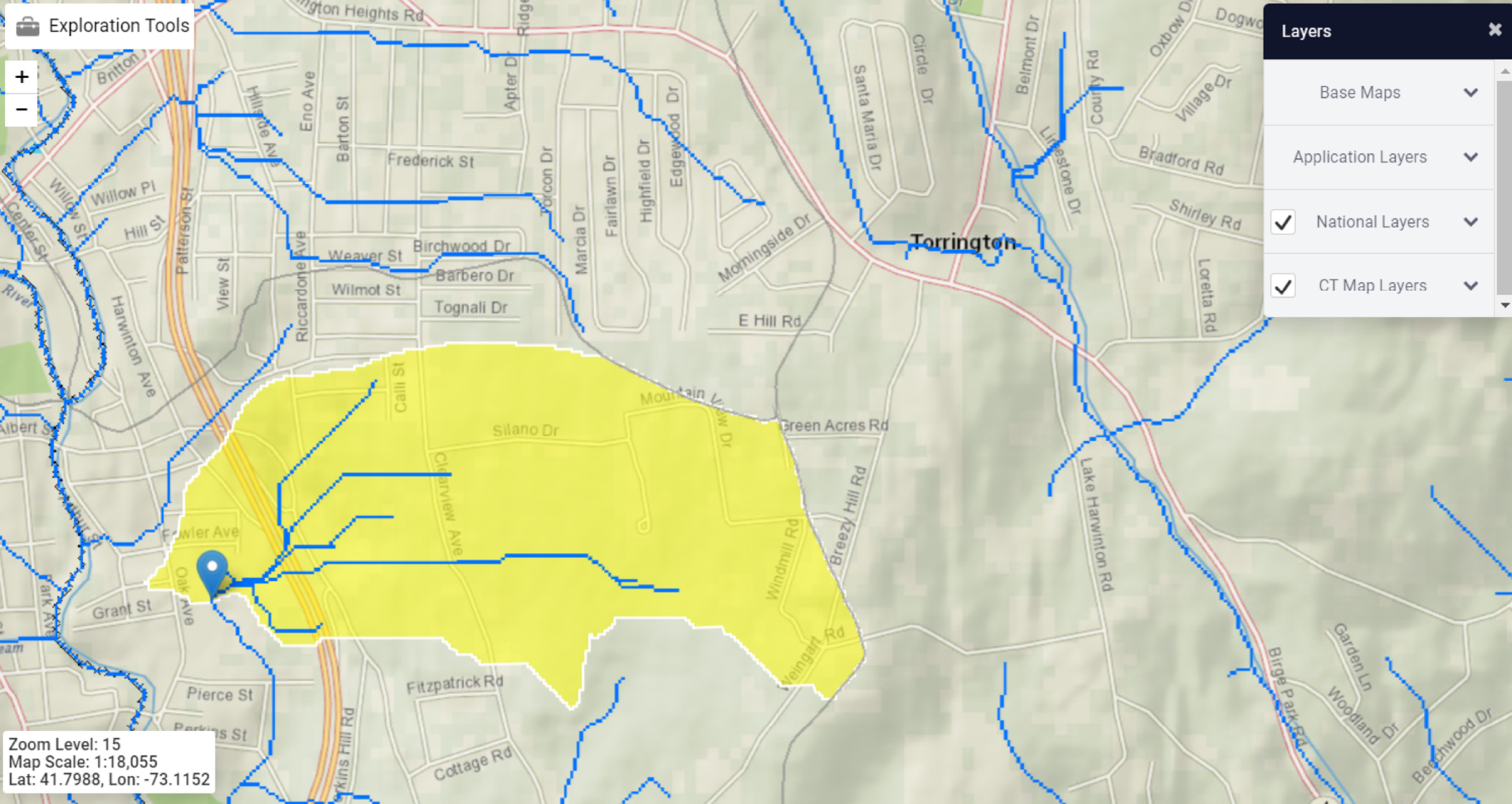
T(min)= 30 R(in/hr)= 4.35 Q(cfs)= 11.88

180 sec. intervals	1	2	3	4	5	6	7	8	9	10	Final Velocity (ft/sec)
in (cf)	2138	2138	2138	2138	2138	2138	2138	2138	2138	2138	11.314
out (cf)		45	934	1133	1247	1342	1423	1474	1520	1560	
storage in forebay (cf)	1097										
storage in basin (cf)	1041	3133	4337	5342	6233	7028	7743	8407	9025	9602	Final Q
storage head (ft) basin	1.23	2.56	3.06	3.39	3.69	3.96	4.14	4.31	4.46	4.61	8.886
storage head (ft) to pipe	0.23	1.56	2.06	2.39	2.69	2.96	3.14	3.31	3.46	3.61	Basin Depth (ft)
flow depth in pipe (in)	2.76	18.66	24.67	28.70	32.28	35.47	37.74	39.72	41.56	43.27	
adjusted slope		0.0212	0.0312	0.0378	0.0438	0.0492	0.0528	0.0562	0.0592	0.0622	4.61

T(min)= 35 R(in/hr)= 4.08 Q(cfs)= 11.14

210 sec. intervals	1	2	3	4	5	6	7	8	9	10	Final Velocity (ft/sec)
in (cf)	2339	2339	2339	2339	2339	2339	2339	2339	2339	2339	11.259
out (cf)		248	1130	1355	1478	1584	1670	1726	1774	1820	
storage in forebay (cf)	1097										
storage in basin (cf)	1242	3334	4543	5527	6388	7144	7813	8427	8992	9511	Final Q
storage head (ft) basin	1.43	2.64	3.14	3.45	3.57	3.99	4.16	4.31	4.46	4.58	8.843
storage head (ft) to pipe	0.43	1.64	2.14	2.45	2.74	2.99	3.16	3.31	3.46	3.58	Basin Depth (ft)
flow depth in pipe (in)	5.10	19.68	25.68	29.45	32.90	35.94	37.95	39.78	41.46	43.00	
adjusted slope		0.0228	0.0328	0.0390	0.0448	0.0498	0.0532	0.0562	0.0592	0.0616	4.58

--Critical Interval



USGS
StreamStats

Total Watershed Area to EO #2.

USGS StreamStats

StreamStats Output Report

State/Region ID CT
 Workspace ID CT2021011514271277000C
 Latitude 41.79178
 Longitude -73.11191
 Time 1/15/2021 9:27:28 AM

Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
DRNAREA	Area that drains to a point on a stream	0.52	square miles
I24H2Y	Maximum 24-hour precipitation that occurs on average once in 2 years - Equivalent to precipitation intensity index	3.621	inches
ELEV	Mean Basin Elevation	818	feet
I24H10Y	Maximum 24-hour precipitation that occurs on average once in 10 years	5.35	inches
I24H25Y	Maximum 24-hour precipitation that occurs on average once in 25 years	6.68	inches
I24H50Y	Maximum 24-hour precipitation that occurs on average once in 50 years	7.911	inches
I24H100Y	Maximum 24-hour precipitation that occurs on average once in 100 years	9.368	inches

Peak-Flow Statistics Parameters

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	0.52	square mil	1.69	715

Peak-Flow Statistics Parameters

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	0.52	square mil	1.69	715
I24H2Y	24 Hour 2 Year Precipitation	3.621	inches	2.95	3.82
ELEV	Mean Basin Elevation	818	feet	169	1310
I24H10Y	24 Hour 10 Year Precipitation	5.35	inches	4.15	5.53
I24H25Y	24 Hour 25 Year Precipitation	6.68	inches	4.93	7
I24H50Y	24 Hour 50 Year Precipitation	7.911	inches	5.62	8.36
I24H100Y	24 Hour 100 Year Precipitation	9.368	inches	6.41	9.99

Peak-Flow Statistics Flow Report

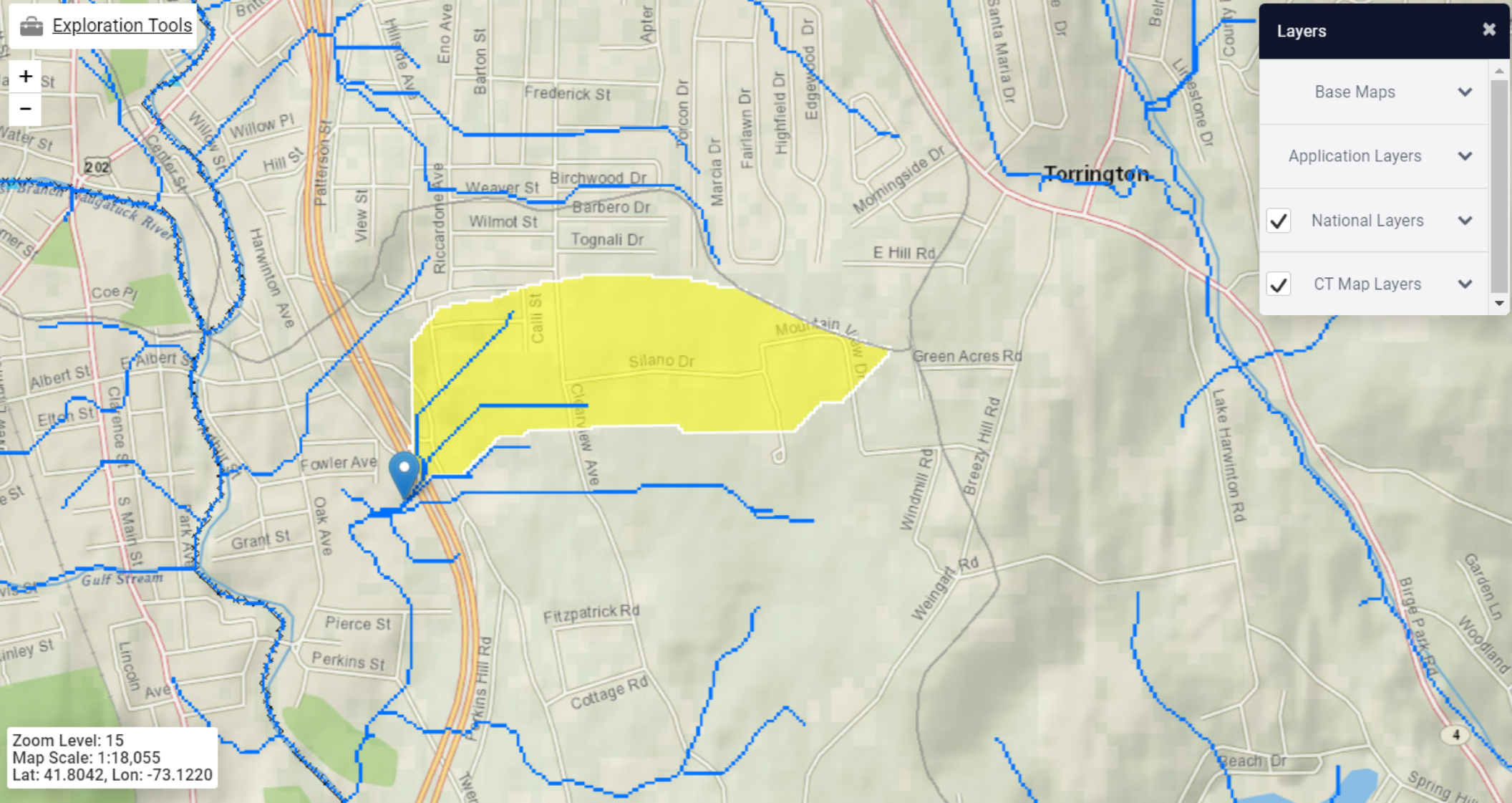
Statistic	Value	Unit
50_percent_AEP_flood	41.3	ft ³ /s
10_percent_AEP_flood	92	ft ³ /s
4_percent_AEP_flood	121	ft ³ /s
2_percent_AEP_flood	143	ft ³ /s
1_percent_AEP_flood	166	ft ³ /s

Max flow of twin 36"
 at slope .017
 = 188 cfs

Peak-Flow Statistics Flow Report

Statistic	Value	Unit
50_percent_AEP_flood	51.1	ft ³ /s
10_percent_AEP_flood	113	ft ³ /s
4_percent_AEP_flood	146	ft ³ /s
2_percent_AEP_flood	173	ft ³ /s
1_percent_AEP_flood	198	ft ³ /s

Max flow of drainage
 swale > 200 cfs



Portion of Watershed Area to North piping (twin 30" RCP).

USGS StreamStats

StreamStats Output Report

State/Region ID CT
 Workspace ID CT20210115153620611000
 Latitude 41.79253
 Longitude -73.11
 Time 1/15/2021 10:36:35 AM

Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
DRNAREA	Area that drains to a point on a stream	0.19	square miles
I24H2Y	Maximum 24-hour precipitation that occurs on average once in 2 years - Equivalent to precipitation intensity index	3.624	inches
ELEV	Mean Basin Elevation	814	feet
I24H10Y	Maximum 24-hour precipitation that occurs on average once in 10 years	5.357	inches
I24H25Y	Maximum 24-hour precipitation that occurs on average once in 25 years	6.69	inches
I24H50Y	Maximum 24-hour precipitation that occurs on average once in 50 years	7.925	inches
I24H100Y	Maximum 24-hour precipitation that occurs on average once in 100 years	9.386	inches

Peak-Flow Statistics Param 100 Percent Statewide DA only

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	0.19	square miles	1.69	715

Peak-Flow Statistics Param 100 Percent Statewide Multiparameter

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	0.19	square miles	1.69	715
I24H2Y	24 Hour 2 Year Precipitation	3.624	inches	2.95	3.82
ELEV	Mean Basin Elevation	814	feet	169	1310
I24H10Y	24 Hour 10 Year Precipitation	5.357	inches	4.15	5.53
I24H25Y	24 Hour 25 Year Precipitation	6.69	inches	4.93	7
I24H50Y	24 Hour 50 Year Precipitation	7.925	inches	5.62	8.36
I24H100Y	24 Hour 100 Year Precipitation	9.386	inches	6.41	9.99

Peak-Flow Statistics Flow f 100 Percent Statewide DA only

Statistic	Value	Unit
50_percent_AEP_flood	19.3	ft ³ /s
10_percent_AEP_flood	43	ft ³ /s
4_percent_AEP_flood	56.1	ft ³ /s
2_percent_AEP_flood	65.5	ft ³ /s
1_percent_AEP_flood	75.4	ft ³ /s

**Max flow of twin 30"
at slope .012
= 97 cfs**

Peak-Flow Statistics Flow f 100 Percent Statewide Multiparameter

Statistic	Value	Unit
50_percent_AEP_flood	23.6	ft ³ /s
10_percent_AEP_flood	52	ft ³ /s
4_percent_AEP_flood	66.4	ft ³ /s
2_percent_AEP_flood	78.1	ft ³ /s
1_percent_AEP_flood	88.9	ft ³ /s

APPENDIX C

Plan Sheets

State Project No. 143-192

GAS LINE TO BE DONE BY OTHERS, BEGIN COORDINATION WITH UTILITY COMPANY AT THE BEGINNING OF PHASE 1
 WATER MAIN EXTENTION TO BE DONE BY OTHERS. BEGIN COORDINATION WITH UTILITY COMPANY AT THE BEGIN OF PHASE 1

DEFINITIONS:
 OCCUPY: PERSONNEL AND VEHICLE USAGE BY DEPARTMENT PERSONNEL
 WINTER STORM SEASON: EACH NOVEMBER 1 TO MARCH 31 OF THE FOLLOWING YEAR

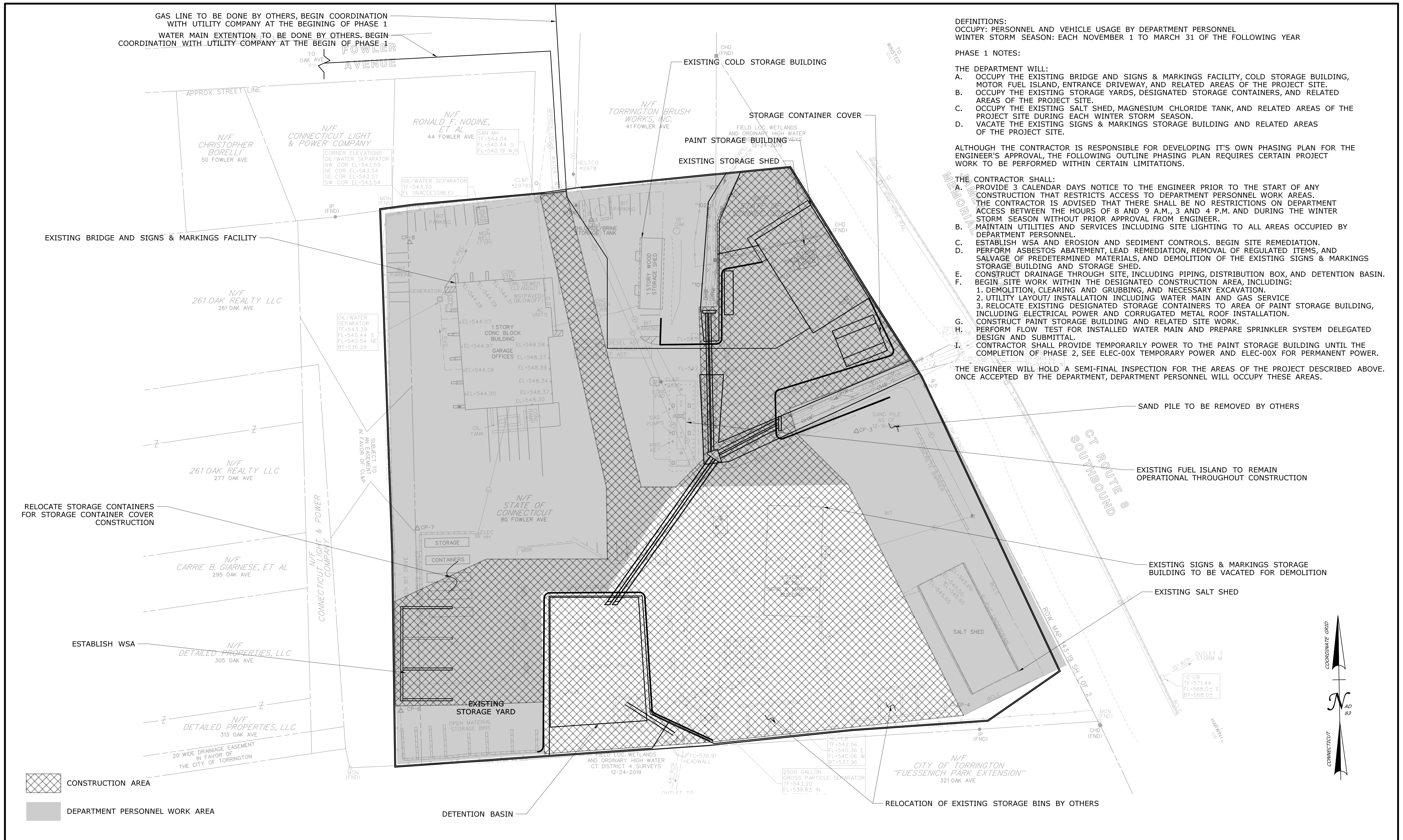
PHASE 1 NOTES:

- THE DEPARTMENT WILL:
- A. OCCUPY THE EXISTING BRIDGE AND SIGNS & MARKINGS FACILITY, COLD STORAGE BUILDING, MOTOR FUEL ISLAND, ENTRANCE DRIVEWAY, AND RELATED AREAS OF THE PROJECT SITE.
 - B. OCCUPY THE EXISTING STORAGE YARDS, DESIGNATED STORAGE CONTAINERS, AND RELATED AREAS OF THE PROJECT SITE.
 - C. OCCUPY THE EXISTING SALT SHED, MAGNESIUM CHLORIDE TANK, AND RELATED AREAS OF THE PROJECT SITE DURING EACH WINTER STORM SEASON.
 - D. VACATE THE EXISTING SIGNS & MARKINGS STORAGE BUILDING AND RELATED AREAS OF THE PROJECT SITE.

ALTHOUGH THE CONTRACTOR IS RESPONSIBLE FOR DEVELOPING IT'S OWN PHASING PLAN FOR THE ENGINEER'S APPROVAL, THE FOLLOWING OUTLINE PHASING PLAN REQUIRES CERTAIN PROJECT WORK TO BE PERFORMED WITHIN CERTAIN LIMITATIONS.

- THE CONTRACTOR SHALL:
- A. PROVIDE 3 CALENDAR DAYS NOTICE TO THE ENGINEER PRIOR TO THE START OF ANY CONSTRUCTION THAT RESTRICTS ACCESS TO DEPARTMENT PERSONNEL WORK AREAS. THE CONTRACTOR IS ADVISED THAT THERE SHALL BE NO RESTRICTIONS ON DEPARTMENT ACCESS BETWEEN THE HOURS OF 8 AND 9 A.M., 3 AND 4 P.M. AND DURING THE WINTER STORM SEASON WITHOUT PRIOR APPROVAL FROM ENGINEER.
 - B. MAINTAIN UTILITIES AND SERVICES INCLUDING SITE LIGHTING TO ALL AREAS OCCUPIED BY DEPARTMENT PERSONNEL.
 - C. ESTABLISH WSA AND EROSION AND SEDIMENT CONTROLS. BEGIN SITE REMEDIATION.
 - D. PERFORM ASBESTOS ABATEMENT, LEAD REMEDIATION, REMOVAL OF REGULATED ITEMS, AND SALVAGE OF PREDETERMINED MATERIALS, AND DEMOLITION OF THE EXISTING SIGNS & MARKINGS STORAGE BUILDING AND STORAGE SHED.
 - E. CONSTRUCT DRAINAGE THROUGH SITE, INCLUDING PIPING, DISTRIBUTION BOX, AND DETENTION BASIN.
 - F. BEGIN SITE WORK WITHIN THE DESIGNATED CONSTRUCTION AREA, INCLUDING:
 - 1. DEMOLITION, CLEARING AND GRUBBING, AND NECESSARY EXCAVATION.
 - 2. UTILITY LAYOUT/ INSTALLATION INCLUDING WATER MAIN AND GAS SERVICE
 - 3. RELOCATE EXISTING DESIGNATED STORAGE CONTAINERS TO AREA OF PAINT STORAGE BUILDING, INCLUDING ELECTRICAL POWER AND CORRUGATED METAL ROOF INSTALLATION.
 - G. CONSTRUCT PAINT STORAGE BUILDING AND RELATED SITE WORK.
 - H. PERFORM FLOW TEST FOR INSTALLED WATER MAIN AND PREPARE SPRINKLER SYSTEM DELEGATED DESIGN AND SUBMITTAL.
 - I. CONTRACTOR SHALL PROVIDE TEMPORARILY POWER TO THE PAINT STORAGE BUILDING UNTIL THE COMPLETION OF PHASE 2, SEE ELEC-00X TEMPORARY POWER AND ELEC-00X FOR PERMANENT POWER.

THE ENGINEER WILL HOLD A SEMI-FINAL INSPECTION FOR THE AREAS OF THE PROJECT DESCRIBED ABOVE. ONCE ACCEPTED BY THE DEPARTMENT, DEPARTMENT PERSONNEL WILL OCCUPY THESE AREAS.



CONSTRUCTION AREA
 DEPARTMENT PERSONNEL WORK AREA

SAND PILE TO BE REMOVED BY OTHERS

EXISTING FUEL ISLAND TO REMAIN OPERATIONAL THROUGHOUT CONSTRUCTION

EXISTING SIGNS & MARKINGS STORAGE BUILDING TO BE VACATED FOR DEMOLITION

EXISTING SALT SHED

RELOCATION OF EXISTING STORAGE BINS BY OTHERS



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.		DESIGNER/DRAFTER: KP CHECKED BY: ME SCALE IN FEET 0 40 80 SCALE 1"=40'	STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION	SIGNATURE/BLOCK: OFFICE OF ENGINEERING APPROVED BY:	PROJECT TITLE: CONSTRUCTION OF TORRINGTON BRIDGE AND SIGNS & MARKINGS FACILITIES	TOWN: TORRINGTON	PROJECT NO. 0143-0192
REV. DATE REVISION DESCRIPTION SHEET NO.	Plotted Date: 11/2/2020	Filename: ...FD_MSH_CIV_0143_0192_SD-004 (Phase 1).dgn	CONSTRUCTION OF TORRINGTON BRIDGE AND SIGNS & MARKINGS FACILITIES		DRAWING TITLE: PHASE 1	DRAWING NO. SD-004	SHEET NO.

DEFINITIONS:
 OCCUPY: PERSONNEL AND VEHICLE USAGE BY DEPARTMENT PERSONNEL
 WINTER STORM SEASON: EACH NOVEMBER 1 TO MARCH 31 OF THE FOLLOWING YEAR

PHASE 2 NOTES:

THE DEPARTMENT WILL:

- A. OCCUPY THE EXISTING BRIDGE AND SIGNS & MARKINGS FACILITY, COLD STORAGE BUILDING, MOTOR FUEL ISLAND, ENTRANCE DRIVEWAY, AND RELATED AREAS OF THE PROJECT SITE.
- B. OCCUPY THE PAINT STORAGE BUILDING, RELOCATED DESIGNATED STORAGE CONTAINERS, AND RELATED AREAS OF THE PROJECT SITE.
- C. OCCUPY THE EXISTING SALT SHED, MAGNESIUM CHLORIDE TANK, AND RELATED AREAS OF THE PROJECT SITE DURING EACH WINTER STORM SEASON.

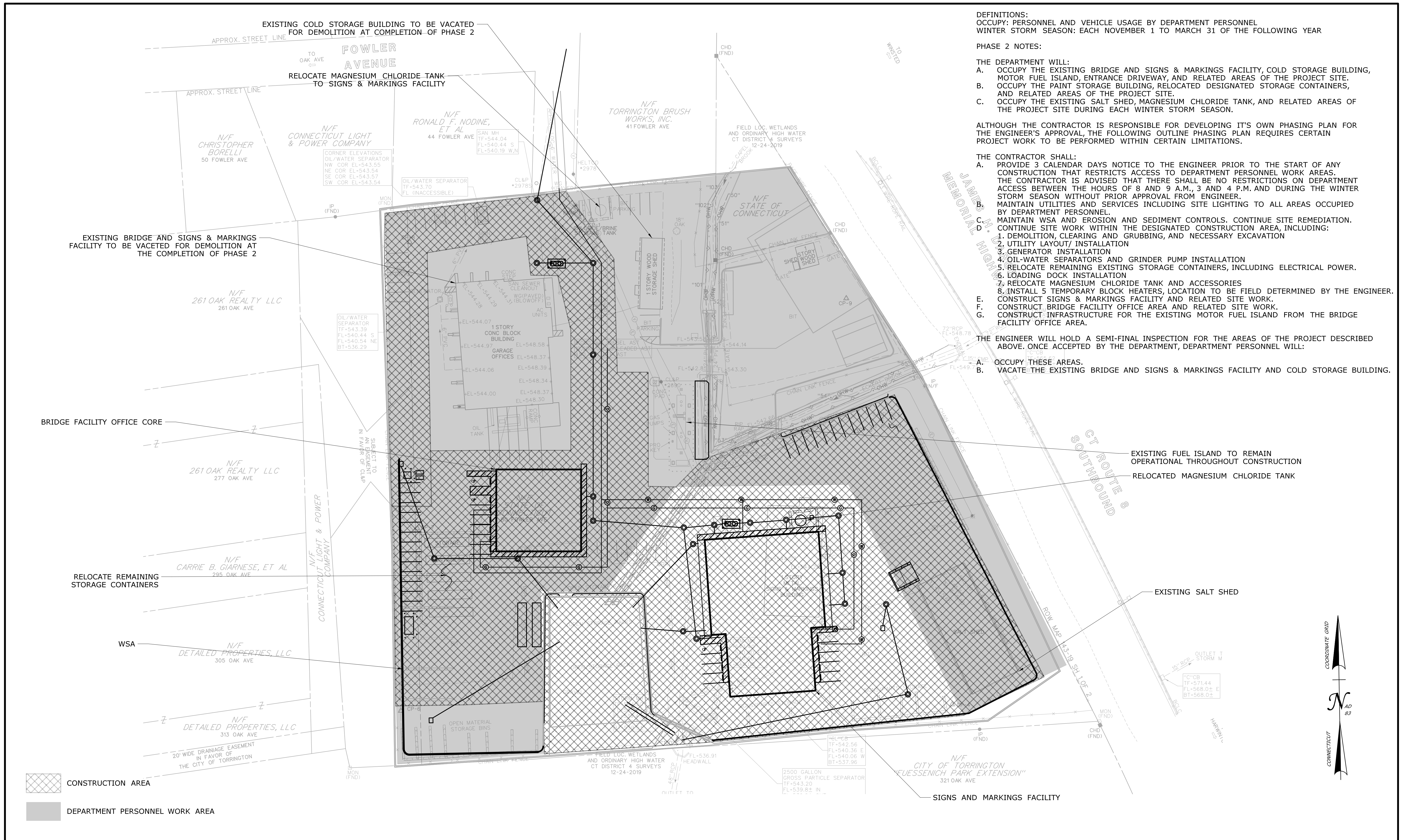
ALTHOUGH THE CONTRACTOR IS RESPONSIBLE FOR DEVELOPING IT'S OWN PHASING PLAN FOR THE ENGINEER'S APPROVAL, THE FOLLOWING OUTLINE PHASING PLAN REQUIRES CERTAIN PROJECT WORK TO BE PERFORMED WITHIN CERTAIN LIMITATIONS.

THE CONTRACTOR SHALL:

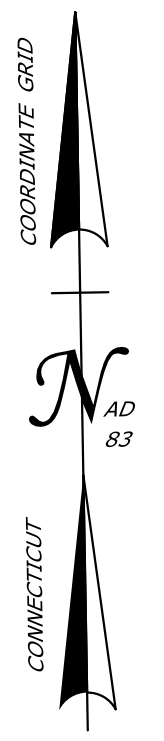
- A. PROVIDE 3 CALENDAR DAYS NOTICE TO THE ENGINEER PRIOR TO THE START OF ANY CONSTRUCTION THAT RESTRICTS ACCESS TO DEPARTMENT PERSONNEL WORK AREAS. THE CONTRACTOR IS ADVISED THAT THERE SHALL BE NO RESTRICTIONS ON DEPARTMENT ACCESS BETWEEN THE HOURS OF 8 AND 9 A.M., 3 AND 4 P.M. AND DURING THE WINTER STORM SEASON WITHOUT PRIOR APPROVAL FROM ENGINEER.
- B. MAINTAIN UTILITIES AND SERVICES INCLUDING SITE LIGHTING TO ALL AREAS OCCUPIED BY DEPARTMENT PERSONNEL.
- C. MAINTAIN WSA AND EROSION AND SEDIMENT CONTROLS. CONTINUE SITE REMEDIATION.
- D. CONTINUE SITE WORK WITHIN THE DESIGNATED CONSTRUCTION AREA, INCLUDING:
 - 1. DEMOLITION, CLEARING AND GRUBBING, AND NECESSARY EXCAVATION
 - 2. UTILITY LAYOUT/ INSTALLATION
 - 3. GENERATOR INSTALLATION
 - 4. OIL-WATER SEPARATORS AND GRINDER PUMP INSTALLATION
 - 5. RELOCATE REMAINING EXISTING STORAGE CONTAINERS, INCLUDING ELECTRICAL POWER.
 - 6. LOADING DOCK INSTALLATION
 - 7. RELOCATE MAGNESIUM CHLORIDE TANK AND ACCESSORIES
 - 8. INSTALL 5 TEMPORARY BLOCK HEATERS, LOCATION TO BE FIELD DETERMINED BY THE ENGINEER.
- E. CONSTRUCT SIGNS & MARKINGS FACILITY AND RELATED SITE WORK.
- F. CONSTRUCT BRIDGE FACILITY OFFICE AREA AND RELATED SITE WORK.
- G. CONSTRUCT INFRASTRUCTURE FOR THE EXISTING MOTOR FUEL ISLAND FROM THE BRIDGE FACILITY OFFICE AREA.

THE ENGINEER WILL HOLD A SEMI-FINAL INSPECTION FOR THE AREAS OF THE PROJECT DESCRIBED ABOVE. ONCE ACCEPTED BY THE DEPARTMENT, DEPARTMENT PERSONNEL WILL:

- A. OCCUPY THESE AREAS.
- B. VACATE THE EXISTING BRIDGE AND SIGNS & MARKINGS FACILITY AND COLD STORAGE BUILDING.



CONSTRUCTION AREA
 DEPARTMENT PERSONNEL WORK AREA



REV.	DATE	REVISION DESCRIPTION	SHEET NO.

Plotted Date: 11/2/2020
 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.

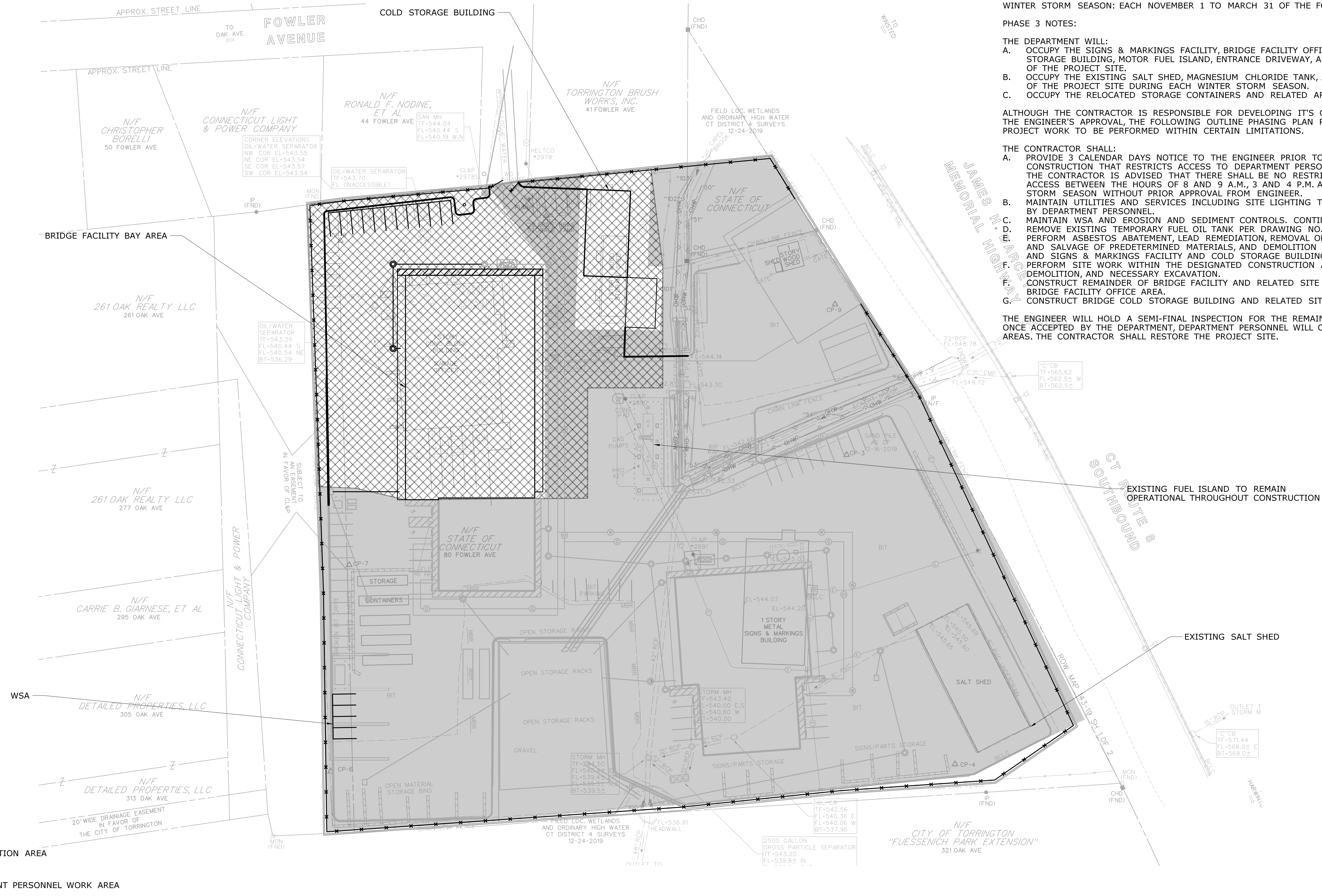
DESIGNER/DRAFTER: KP
 CHECKED BY: ME
 SCALE IN FEET
 0 40 80
 SCALE 1"=40'

STATE OF CONNECTICUT
 DEPARTMENT OF TRANSPORTATION

SIGNATURE/BLOCK:
 OFFICE OF ENGINEERING
 APPROVED BY:

PROJECT TITLE:
CONSTRUCTION OF TORRINGTON BRIDGE AND SIGNS & MARKINGS FACILITIES

TOWN: **TORRINGTON**
 PROJECT NO. 0143-0192
 DRAWING TITLE: **PHASE 2**
 DRAWING NO. **SD-005**
 SHEET NO.



DEFINITIONS:
 OCCUPY: PERSONNEL AND VEHICLE USAGE BY DEPARTMENT PERSONNEL
 WINTER STORM SEASON: EACH NOVEMBER 1 TO MARCH 31 OF THE FOLLOWING YEAR

PHASE 3 NOTES:
 THE DEPARTMENT WILL:
 A. OCCUPY THE SIGNS & MARKINGS FACILITY, BRIDGE FACILITY OFFICE AREA, PAINT STORAGE BUILDING, MOTOR FUEL ISLAND, ENTRANCE DRIVEWAY, AND RELATED AREAS OF THE PROJECT SITE.
 B. OCCUPY THE EXISTING SALT SHED, MAGNESIUM CHLORIDE TANK, AND RELATED AREAS OF THE PROJECT SITE DURING EACH WINTER STORM SEASON.
 C. OCCUPY THE RELOCATED STORAGE CONTAINERS AND RELATED AREAS OF THE PROJECT SITE.

ALTHOUGH THE CONTRACTOR IS RESPONSIBLE FOR DEVELOPING ITS OWN PHASING PLAN FOR THE ENGINEER'S APPROVAL, THE FOLLOWING OUTLINE PHASING PLAN REQUIRES CERTAIN PROJECT WORK TO BE PERFORMED WITHIN CERTAIN LIMITATIONS.

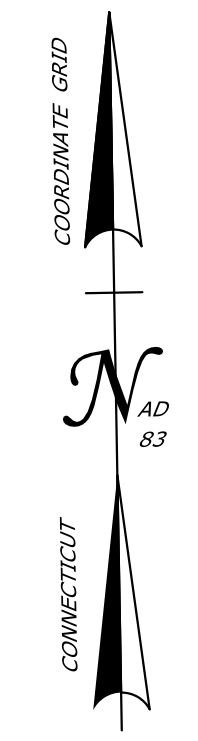
THE CONTRACTOR SHALL:
 A. PROVIDE 3 CALENDAR DAYS NOTICE TO THE ENGINEER PRIOR TO THE START OF ANY CONSTRUCTION THAT RESTRICTS ACCESS TO DEPARTMENT PERSONNEL WORK AREAS. THE CONTRACTOR IS ADVISED THAT THERE SHALL BE NO RESTRICTIONS ON DEPARTMENT ACCESS BETWEEN THE HOURS OF 8 AND 9 A.M., 3 AND 4 P.M. AND DURING THE WINTER STORM SEASON WITHOUT PRIOR APPROVAL FROM ENGINEER.
 B. MAINTAIN UTILITIES AND SERVICES INCLUDING SITE LIGHTING TO ALL AREAS OCCUPIED BY DEPARTMENT PERSONNEL.
 C. MAINTAIN WSA AND EROSION AND SEDIMENT CONTROLS. CONTINUE SITE REMEDIATION.
 D. REMOVE EXISTING TEMPORARY FUEL OIL TANK PER DRAWING NO. C-003.
 E. PERFORM ASBESTOS ABATEMENT, LEAD REMEDIATION, REMOVAL OF REGULATED ITEMS, AND SALVAGE OF PREDETERMINED MATERIALS, AND DEMOLITION OF THE EXISTING BRIDGE AND SIGNS & MARKINGS FACILITY AND COLD STORAGE BUILDING.
 F. PERFORM SITE WORK WITHIN THE DESIGNATED CONSTRUCTION AREA, INCLUDING DEMOLITION, AND NECESSARY EXCAVATION.
 G. CONSTRUCT REMAINDER OF BRIDGE FACILITY AND RELATED SITE WORK. PROTECT BRIDGE FACILITY OFFICE AREA.
 H. CONSTRUCT BRIDGE COLD STORAGE BUILDING AND RELATED SITE WORK.

THE ENGINEER WILL HOLD A SEMI-FINAL INSPECTION FOR THE REMAINDER OF THE PROJECT. ONCE ACCEPTED BY THE DEPARTMENT, DEPARTMENT PERSONNEL WILL OCCUPY THE REMAINING AREAS. THE CONTRACTOR SHALL RESTORE THE PROJECT SITE.

EXISTING FUEL ISLAND TO REMAIN OPERATIONAL THROUGHOUT CONSTRUCTION

EXISTING SALT SHED

CONSTRUCTION AREA
 DEPARTMENT PERSONNEL WORK AREA



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: 11/2/2020		DESIGNER/DRAFTER: KP CHECKED BY: ME SCALE IN FEET 0 40 80 SCALE 1"=40'	STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION Filename: ...FD.MSH.CIV.0143.0192.SD-006 (Phase 3).dgn	SIGNATURE/BLOCK: OFFICE OF ENGINEERING APPROVED BY:	PROJECT TITLE: CONSTRUCTION OF TORRINGTON BRIDGE AND SIGNS & MARKINGS FACILITIES	TOWN: TORRINGTON DRAWING TITLE: PHASE 3	PROJECT NO.: 0143-0192 DRAWING NO.: SD-006 SHEET NO.:
REV.	DATE	REVISION DESCRIPTION	SHEET NO.				

1. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL MEET OR EXCEED THE REQUIREMENTS OF THE DEEP 2002 E & S GUIDELINES AND THE 2004 STORMWATER QUALITY MANUAL.
2. INSTALL ANTI-TRACKING PAD AND CONCRETE WASHOUT AREA. SEE C-010 FOR DETAIL. LOCATIONS TO BE FIELD DETERMINED.
3. THE CONTRACTOR SHALL CONSTRUCT STONE CHECK DAMS AT ALL SITE OUTLET POINTS DURING CONSTRUCTION.
4. IT IS THE CONTRACTORS RESPONSIBILITY TO MAINTAIN/STABILIZE ALL SLOPES DURING CONSTRUCTION TO PREVENT EROSION.
5. AT THE COMPLETION OF THE PROJECT AND AS NEEDED, REMOVE ALL ACCUMULATED SEDIMENT FROM DRAINAGE STRUCTURE SUMPS, STONE CHECK DAMS, ETC.
6. ALL UNPAVED DISTURBED AREAS TO BE SEEDED WITHIN 7 DAYS OF FINAL GRADING AS DIRECTED BY SPECIAL PROVISION OR AS DIRECTED BY THE ENGINEER.
7. ALL DRAINAGE STRUCTURES TO BE PROTECTED FROM SEDIMENT AT ALL TIMES.
8. UNIMPACTED WETLAND AREAS TO BE PROTECTED AT ALL TIMES.
9. A DOUBLE ROW OF SEDIMENT CONTROL BARRIER SHALL BE UTILIZED BETWEEN ANY DISTURBED AREA AND DOWNGRADIENT WETLAND OR WATERCOURSE WITHIN 50 FEET, UNLESS THERE WOULD BE AN ADVERSE IMPACT TO ADJACENT WETLANDS/WATERCOURSES DUE TO INSTALLATION OF A DOUBLE ROW (I.E. WOULD RESULT IN LARGER WETLAND/WATERCOURSE IMPACT.)
10. ADDITIONAL EROSION CONTROL BARRIERS (DOUBLE ROW OF SCS) MAY ALSO BE REQUIRED WITHIN THE PROJECT AREA. FACTORS TO BE REVIEWED BY THE ENGINEER INCLUDE BUT ARE NOT LIMITED TO: THE CONTRIBUTING DISTURBED AREA, DRAINAGE AREA, LENGTH OF SLOPE, AND FLOW CONDITIONS TO MAINTAIN SHEET FLOW. IF DETERMINED NECESSARY, THE ENGINEER WILL DIRECT THE CONTRACTOR TO INSTALL AND MAINTAIN ADDITIONAL ROWS OF EROSION CONTROL BARRIER (OR EQUIVALENT).

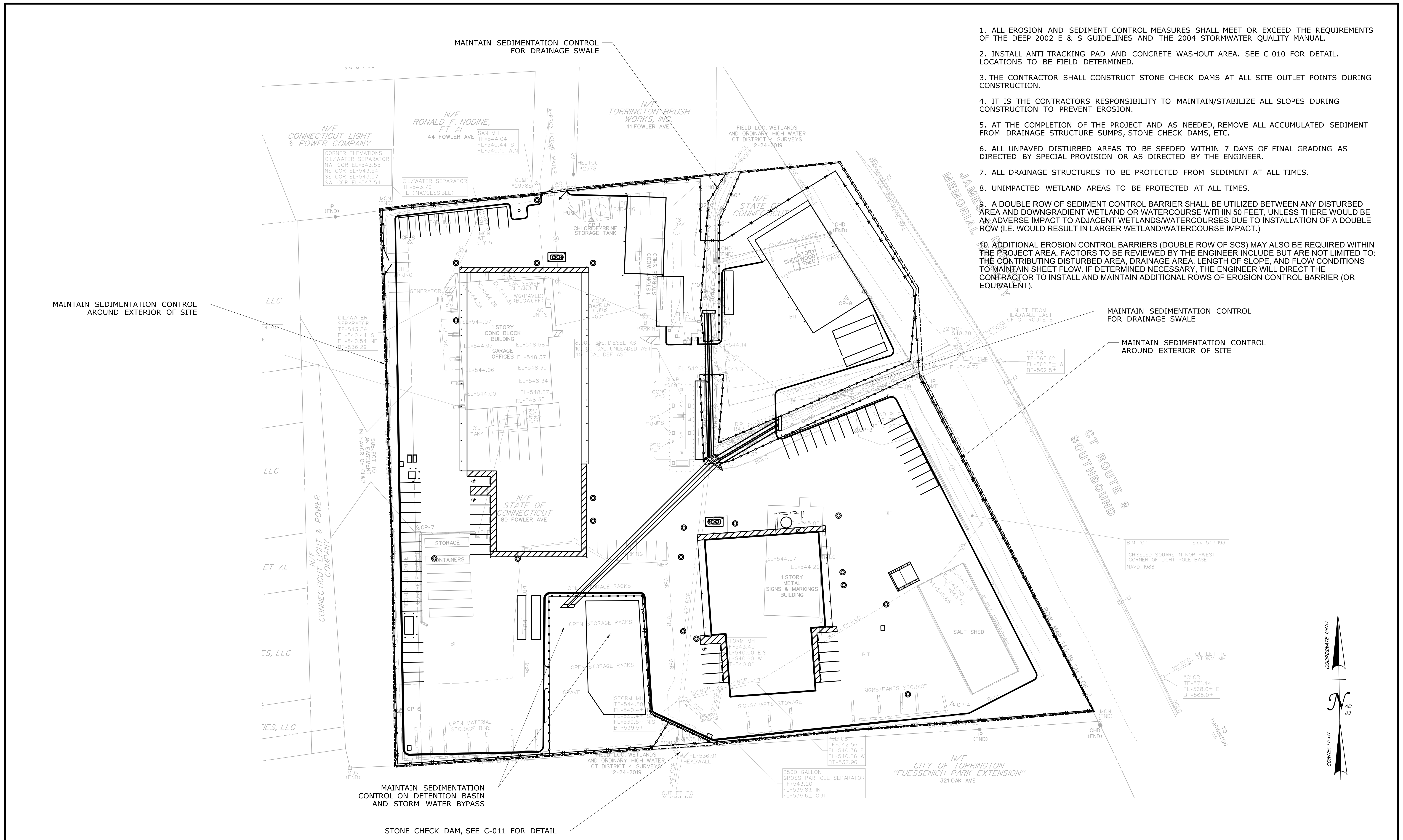
MAINTAIN SEDIMENTATION CONTROL AROUND EXTERIOR OF SITE

MAINTAIN SEDIMENTATION CONTROL FOR DRAINAGE SWALE

MAINTAIN SEDIMENTATION CONTROL AROUND EXTERIOR OF SITE

MAINTAIN SEDIMENTATION CONTROL ON DETENTION BASIN AND STORM WATER BYPASS

STONE CHECK DAM, SEE C-011 FOR DETAIL



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: 4/9/2021

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

STATE OF CONNECTICUT
 DEPARTMENT OF TRANSPORTATION

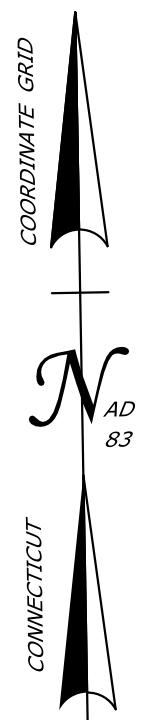
FILENAME: ...FD_MSH_CIV_0143_0192_C-002 (Sed).dgn

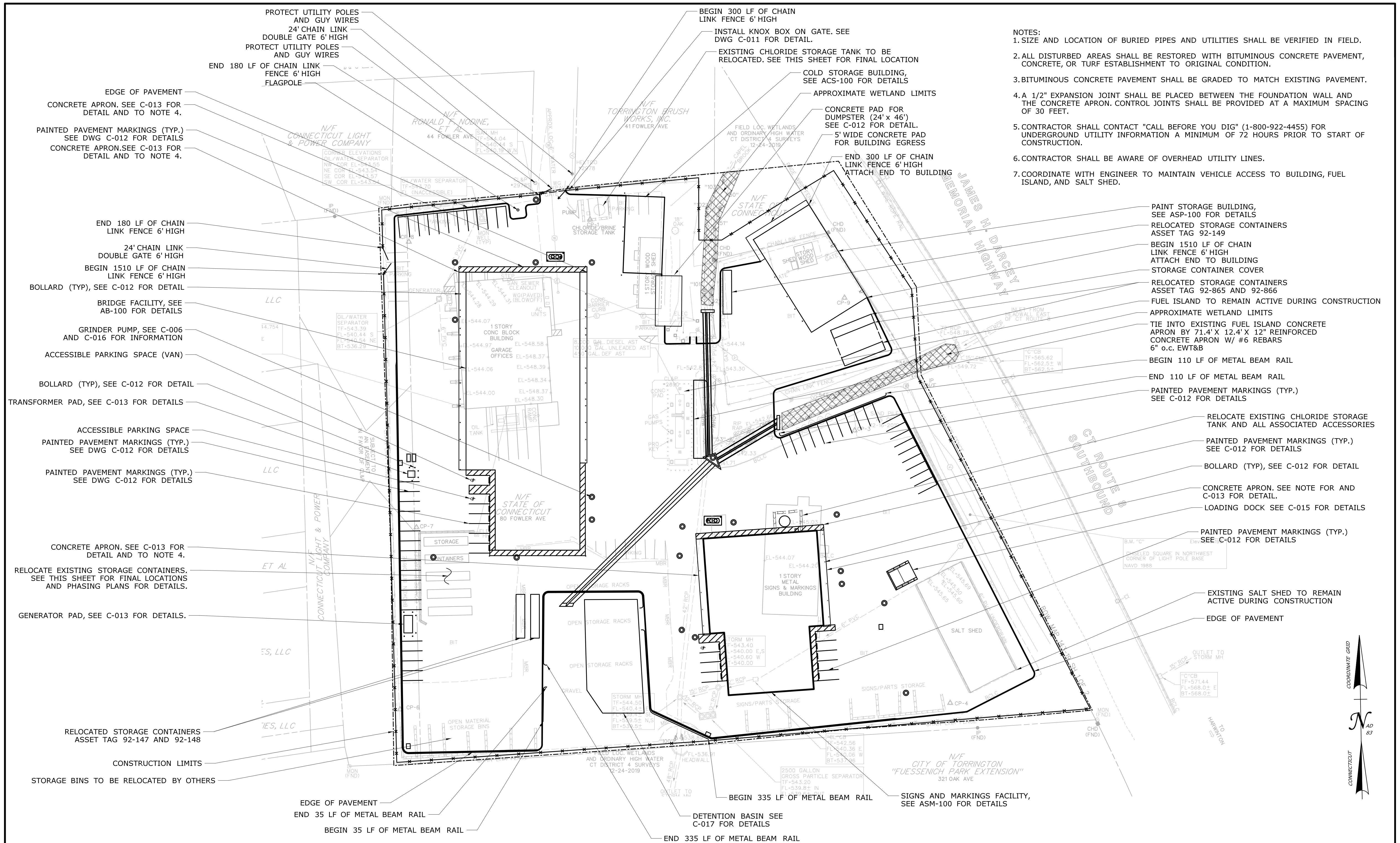
SIGNATURE/BLOCK:
 OFFICE OF ENGINEERING
 APPROVED BY:

PROJECT TITLE:
CONSTRUCTION OF TORRINGTON BRIDGE AND SIGNS & MARKINGS FACILITIES

TOWN: **TORRINGTON**
 DRAWING TITLE:
SEDIMENTATION AND EROSION CONTROL

PROJECT NO. 0143-0192
 DRAWING NO. C-002
 SHEET NO.





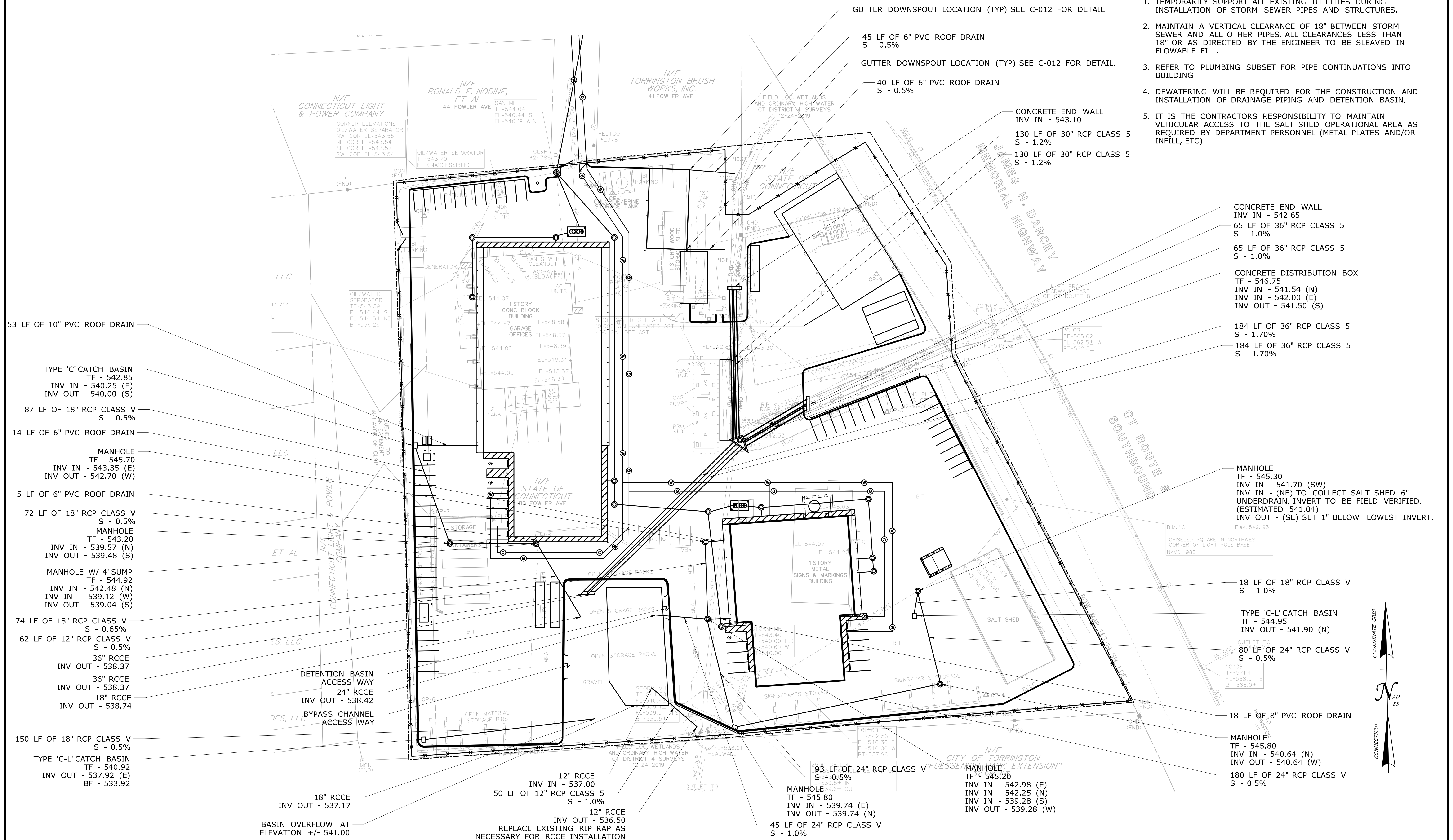
- NOTES:
1. SIZE AND LOCATION OF BURIED PIPES AND UTILITIES SHALL BE VERIFIED IN FIELD.
 2. ALL DISTURBED AREAS SHALL BE RESTORED WITH BITUMINOUS CONCRETE PAVEMENT, CONCRETE, OR TURF ESTABLISHMENT TO ORIGINAL CONDITION.
 3. BITUMINOUS CONCRETE PAVEMENT SHALL BE GRADED TO MATCH EXISTING PAVEMENT.
 4. A 1/2" EXPANSION JOINT SHALL BE PLACED BETWEEN THE FOUNDATION WALL AND THE CONCRETE APRON. CONTROL JOINTS SHALL BE PROVIDED AT A MAXIMUM SPACING OF 30 FEET.
 5. CONTRACTOR SHALL CONTACT "CALL BEFORE YOU DIG" (1-800-922-4455) FOR UNDERGROUND UTILITY INFORMATION A MINIMUM OF 72 HOURS PRIOR TO START OF CONSTRUCTION.
 6. CONTRACTOR SHALL BE AWARE OF OVERHEAD UTILITY LINES.
 7. COORDINATE WITH ENGINEER TO MAINTAIN VEHICLE ACCESS TO BUILDING, FUEL ISLAND, AND SALT SHED.

- PROTECT UTILITY POLES AND GUY WIRES
- 24' CHAIN LINK DOUBLE GATE 6' HIGH
- PROTECT UTILITY POLES AND GUY WIRES
- END 180 LF OF CHAIN LINK FENCE 6' HIGH
- FLAGPOLE
- EDGE OF PAVEMENT
- CONCRETE APRON, SEE C-013 FOR DETAIL AND TO NOTE 4.
- PAINTED PAVEMENT MARKINGS (TYP.) SEE DWG C-012 FOR DETAILS
- CONCRETE APRON, SEE C-013 FOR DETAIL AND TO NOTE 4.
- END 180 LF OF CHAIN LINK FENCE 6' HIGH
- 24' CHAIN LINK DOUBLE GATE 6' HIGH
- BEGIN 1510 LF OF CHAIN LINK FENCE 6' HIGH
- BOLLARD (TYP.), SEE C-012 FOR DETAIL
- BRIDGE FACILITY, SEE AB-100 FOR DETAILS
- GRINDER PUMP, SEE C-006 AND C-016 FOR INFORMATION
- ACCESSIBLE PARKING SPACE (VAN)
- BOLLARD (TYP.), SEE C-012 FOR DETAIL
- TRANSFORMER PAD, SEE C-013 FOR DETAILS
- ACCESSIBLE PARKING SPACE
- PAINTED PAVEMENT MARKINGS (TYP.) SEE DWG C-012 FOR DETAILS
- PAINTED PAVEMENT MARKINGS (TYP.) SEE DWG C-012 FOR DETAILS
- CONCRETE APRON, SEE C-013 FOR DETAIL AND TO NOTE 4.
- RELOCATE EXISTING STORAGE CONTAINERS. SEE THIS SHEET FOR FINAL LOCATIONS AND PHASING PLANS FOR DETAILS.
- GENERATOR PAD, SEE C-013 FOR DETAILS.
- RELOCATED STORAGE CONTAINERS ASSET TAG 92-147 AND 92-148
- CONSTRUCTION LIMITS
- STORAGE BINS TO BE RELOCATED BY OTHERS
- EDGE OF PAVEMENT
- END 35 LF OF METAL BEAM RAIL
- BEGIN 35 LF OF METAL BEAM RAIL

- PAINT STORAGE BUILDING, SEE ASP-100 FOR DETAILS
- RELOCATED STORAGE CONTAINERS ASSET TAG 92-149
- BEGIN 1510 LF OF CHAIN LINK FENCE 6' HIGH ATTACH END TO BUILDING
- STORAGE CONTAINER COVER
- RELOCATED STORAGE CONTAINERS ASSET TAG 92-865 AND 92-866
- FUEL ISLAND TO REMAIN ACTIVE DURING CONSTRUCTION
- APPROXIMATE WETLAND LIMITS
- TIE INTO EXISTING FUEL ISLAND CONCRETE APRON BY 71.4' X 12.4' X 12" REINFORCED CONCRETE APRON W/ #6 REBARS 6" o.c. EWT&B
- BEGIN 110 LF OF METAL BEAM RAIL
- END 110 LF OF METAL BEAM RAIL
- PAINTED PAVEMENT MARKINGS (TYP.) SEE C-012 FOR DETAILS
- RELOCATE EXISTING CHLORIDE STORAGE TANK AND ALL ASSOCIATED ACCESSORIES
- PAINTED PAVEMENT MARKINGS (TYP.) SEE C-012 FOR DETAILS
- BOLLARD (TYP.), SEE C-012 FOR DETAIL
- CONCRETE APRON, SEE NOTE FOR AND C-013 FOR DETAIL.
- LOADING DOCK SEE C-015 FOR DETAILS
- PAINTED PAVEMENT MARKINGS (TYP.) SEE C-012 FOR DETAILS
- EXISTING SALT SHED TO REMAIN ACTIVE DURING CONSTRUCTION
- EDGE OF PAVEMENT

DESIGNER/DRAFTER: KP CHECKED BY: ME SCALE IN FEET SCALE 1"=40' Plotted Date: 4/2/2021		STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION Filename: ...FD_MSH_CIV_0143_0192_C-004 (Site Plan).dgn		SIGNATURE/BLOCK: OFFICE OF ENGINEERING APPROVED BY:		PROJECT TITLE: CONSTRUCTION OF TORRINGTON BRIDGE AND SIGNS & MARKINGS FACILITIES		TOWN: TORRINGTON PROJECT NO.: 0143-0192 DRAWING NO.: C-004 SHEET NO.:	
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.					

- NOTES:
1. TEMPORARILY SUPPORT ALL EXISTING UTILITIES DURING INSTALLATION OF STORM SEWER PIPES AND STRUCTURES.
 2. MAINTAIN A VERTICAL CLEARANCE OF 18" BETWEEN STORM SEWER AND ALL OTHER PIPES. ALL CLEARANCES LESS THAN 18" OR AS DIRECTED BY THE ENGINEER TO BE SLEAVED IN FLOWABLE FILL.
 3. REFER TO PLUMBING SUBSET FOR PIPE CONTINUATIONS INTO BUILDING
 4. DEWATERING WILL BE REQUIRED FOR THE CONSTRUCTION AND INSTALLATION OF DRAINAGE PIPING AND DETENTION BASIN.
 5. IT IS THE CONTRACTORS RESPONSIBILITY TO MAINTAIN VEHICULAR ACCESS TO THE SALT SHED OPERATIONAL AREA AS REQUIRED BY DEPARTMENT PERSONNEL (METAL PLATES AND/OR INFILL, ETC).



- 53 LF OF 10" PVC ROOF DRAIN
- TYPE 'C' CATCH BASIN
TF - 542.85
INV IN - 540.25 (E)
INV OUT - 540.00 (S)
- 87 LF OF 18" RCP CLASS V
S - 0.5%
- 14 LF OF 6" PVC ROOF DRAIN
- MANHOLE
TF - 545.70
INV IN - 543.35 (E)
INV OUT - 542.70 (W)
- 5 LF OF 6" PVC ROOF DRAIN
- 72 LF OF 18" RCP CLASS V
S - 0.5%
- MANHOLE
TF - 543.20
INV IN - 539.57 (N)
INV OUT - 539.48 (S)
- MANHOLE W/ 4' SUMP
TF - 544.92
INV IN - 542.48 (N)
INV IN - 539.12 (W)
INV OUT - 539.04 (S)
- 74 LF OF 18" RCP CLASS V
S - 0.65%
- 62 LF OF 12" RCP CLASS V
S - 0.5%
- 36" RCCE
INV OUT - 538.37
- 36" RCCE
INV OUT - 538.37
- 18" RCCE
INV OUT - 538.74
- 150 LF OF 18" RCP CLASS V
S - 0.5%
- TYPE 'C-L' CATCH BASIN
TF - 540.92
INV OUT - 537.92 (E)
BF - 533.92

- CONCRETE END WALL
INV IN - 543.10
- 130 LF OF 30" RCP CLASS 5
S - 1.2%
- 130 LF OF 30" RCP CLASS 5
S - 1.2%
- CONCRETE END WALL
INV IN - 542.65
- 65 LF OF 36" RCP CLASS 5
S - 1.0%
- 65 LF OF 36" RCP CLASS 5
S - 1.0%
- CONCRETE DISTRIBUTION BOX
TF - 546.75
INV IN - 541.54 (N)
INV IN - 542.00 (E)
INV OUT - 541.50 (S)
- 184 LF OF 36" RCP CLASS 5
S - 1.70%
- 184 LF OF 36" RCP CLASS 5
S - 1.70%
- MANHOLE
TF - 545.30
INV IN - 541.70 (SW)
INV IN - (NE) TO COLLECT SALT SHED 6" UNDERDRAIN. INVERT TO BE FIELD VERIFIED. (ESTIMATED 541.04)
INV OUT - (SE) SET 1" BELOW LOWEST INVERT.
- 18 LF OF 18" RCP CLASS V
S - 1.0%
- TYPE 'C-L' CATCH BASIN
TF - 544.95
INV OUT - 541.90 (N)
- 80 LF OF 24" RCP CLASS V
S - 0.5%
- 18 LF OF 8" PVC ROOF DRAIN
- MANHOLE
TF - 545.80
INV IN - 540.64 (N)
INV OUT - 540.64 (W)
- 180 LF OF 24" RCP CLASS V
S - 0.5%



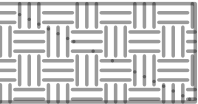


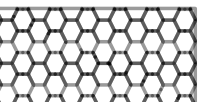
12" RCCE
INV IN - 537.00
50 LF OF 12" RCP CLASS 5
S - 1.0%

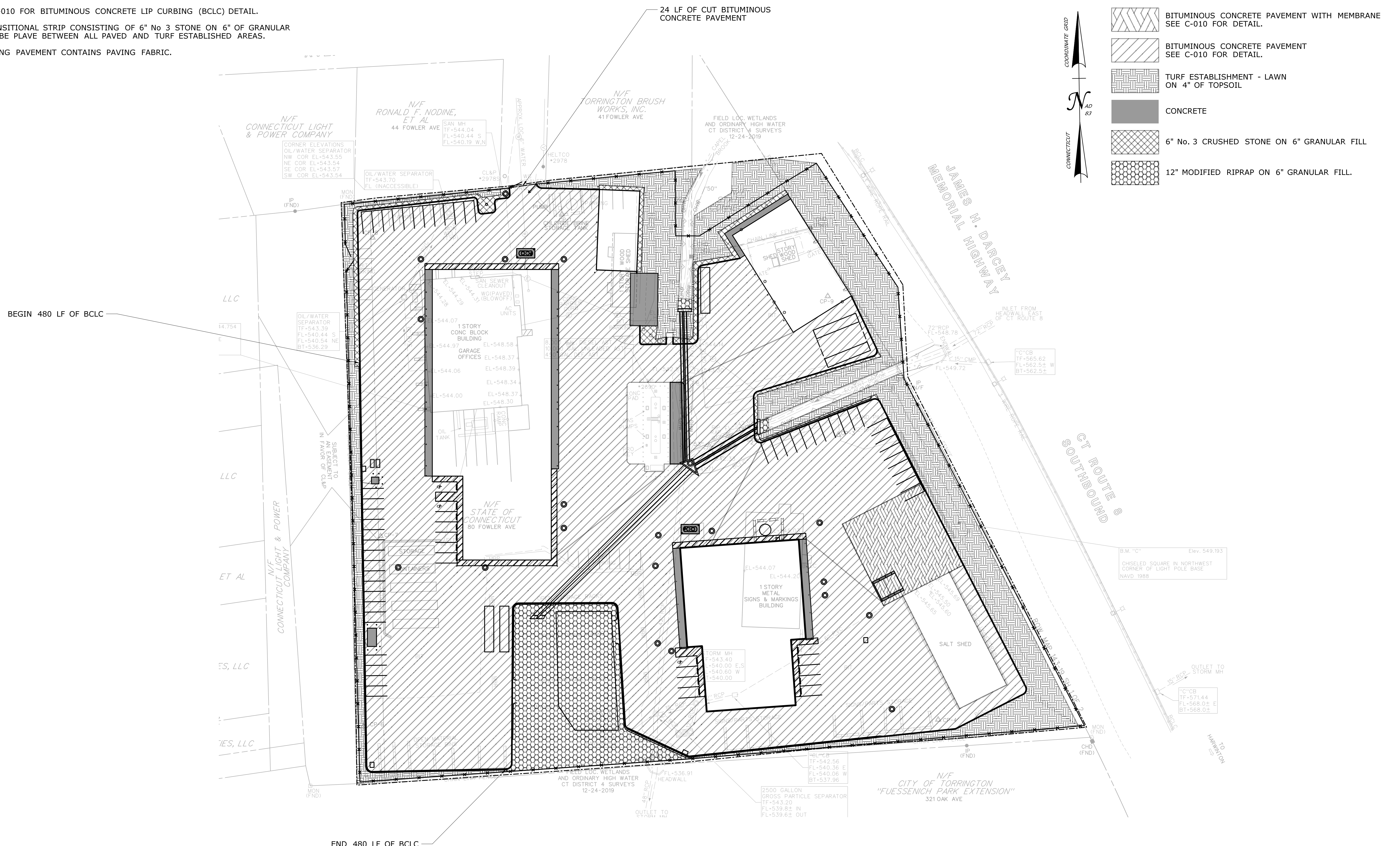
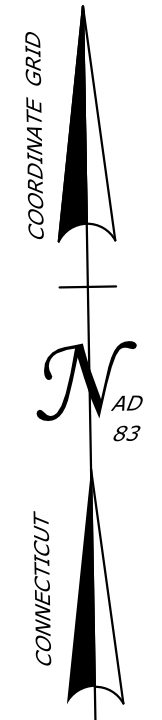
12" RCCE
INV OUT - 536.50
REPLACE EXISTING RIP RAP AS NECESSARY FOR RCCE INSTALLATION

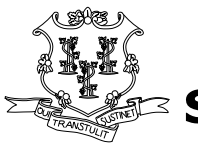
BASIN OVERFLOW AT ELEVATION +/- 541.00

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.		DESIGNER/DRAFTER: KP	STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION	SIGNATURE/ BLOCK: OFFICE OF ENGINEERING	PROJECT TITLE: CONSTRUCTION OF TORRINGTON BRIDGE AND SIGNS & MARKINGS FACILITIES	TOWN: TORRINGTON	PROJECT NO. 0143-0192
CHECKED BY: ME	SCALE IN FEET SCALE 1"=40'	APPROVED BY:		DRAWING TITLE: DRAINAGE PLAN		DRAWING NO. C-005	
REV. DATE REVISION DESCRIPTION SHEET NO.	Plotted Date: 4/2/2021	Filename: ...FD_MSH_CIV_0143_0192_C-005 (Drainage Plan).dgn	SHEET NO.				

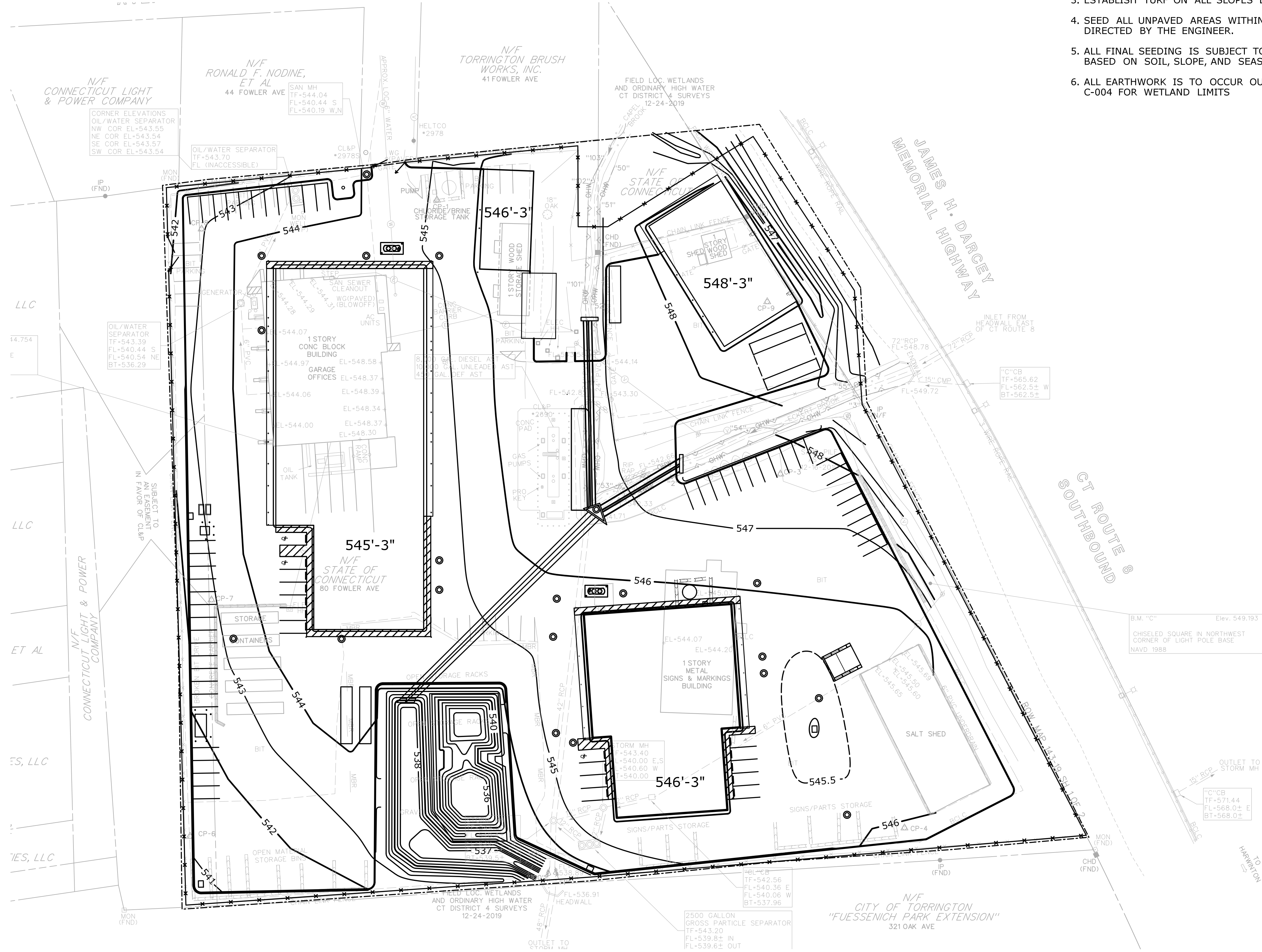
- NOTES:
 1. SEE C-010 FOR BITUMINOUS CONCRETE LIP CURBING (BCLC) DETAIL.
 2. 2" TRANSITIONAL STRIP CONSISTING OF 6" No 3 STONE ON 6" OF GRANULAR FILL TO BE PLACED BETWEEN ALL PAVED AND TURF ESTABLISHED AREAS.
 3. EXISTING PAVEMENT CONTAINS PAVING FABRIC.

-  BITUMINOUS CONCRETE PAVEMENT WITH MEMBRANE SEE C-010 FOR DETAIL.
-  BITUMINOUS CONCRETE PAVEMENT SEE C-010 FOR DETAIL.
-  TURF ESTABLISHMENT - LAWN ON 4" OF TOPSOIL
-  CONCRETE
-  6" No. 3 CRUSHED STONE ON 6" GRANULAR FILL
-  12" MODIFIED RIPRAP ON 6" GRANULAR FILL.

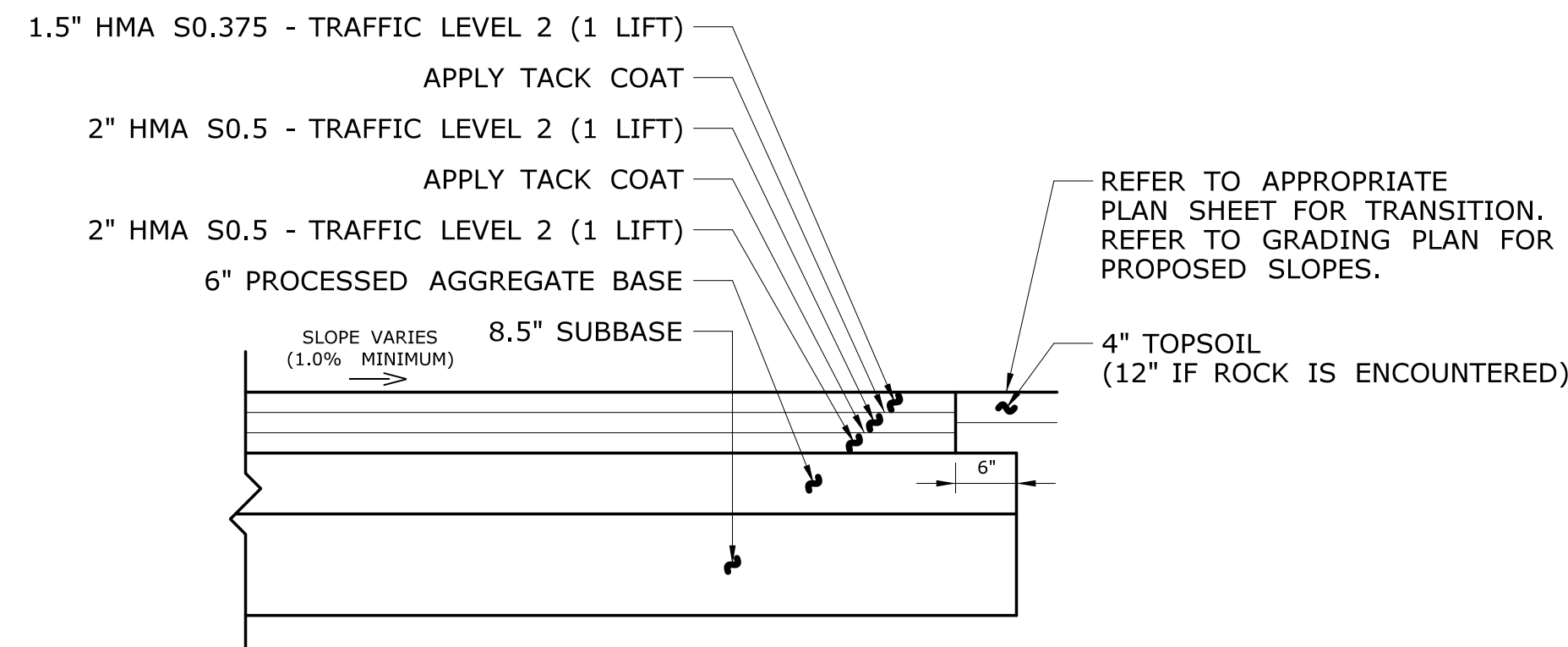


REV.	DATE	REVISION DESCRIPTION	SHEET NO.	Plotted Date: 4/2/2021	DESIGNER/DRAFTER: KP	 STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION	SIGNATURE/ BLOCK:
					CHECKED BY: ME		OFFICE OF ENGINEERING
					SCALE IN FEET 0 40 80 SCALE 1"=40'		APPROVED BY:
					CONSTRUCTION OF TORRINGTON BRIDGE AND SIGNS & MARKINGS FACILITIES		PROJECT TITLE:
					TORRINGTON		TOWN:
					PAVEMENT GEOMETRY AND SURFACE PLAN		DRAWING TITLE:
					C-007		PROJECT NO. 0143-0192
					C-007		DRAWING NO. C-007
					C-007		SHEET NO.

- NOTES:
1. SLOPES NOT TO EXCEED 3 TO 1 IN TURF AREAS.
 2. SLOPES NOT TO EXCEED 2 TO 1 IN STONE AREAS.
 3. ESTABLISH TURF ON ALL SLOPES EXCEEDING 4 TO 1 WITHIN 7 DAYS.
 4. SEED ALL UNPAVED AREAS WITHIN 7 DAYS OF FINAL GRADING OR AS DIRECTED BY THE ENGINEER.
 5. ALL FINAL SEEDING IS SUBJECT TO THE DIRECTION OF THE ENGINEER BASED ON SOIL, SLOPE, AND SEASONAL CONDITIONS.
 6. ALL EARTHWORK IS TO OCCUR OUTSIDE OF UNDISTURBED WETLANDS, SEE C-004 FOR WETLAND LIMITS

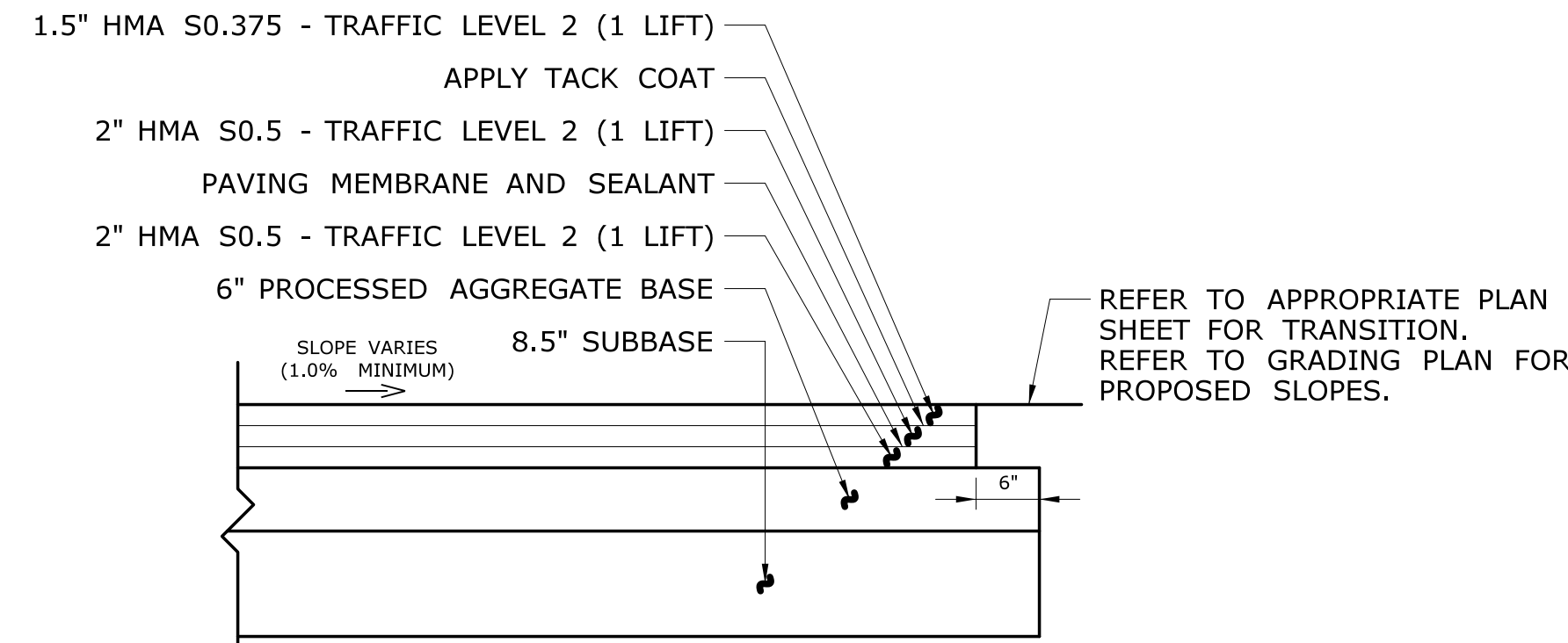


THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK SHOWN ON THESE SHEETS IS BASED ON LIMITED INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE THE CONDITIONS OF ACTUAL QUANTITIES OF WORK WHICH WILL BE REQUIRED.		DESIGNER/DRAFTER: KP	STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION	SIGNATURE/ BLOCK: OFFICE OF ENGINEERING	PROJECT TITLE: CONSTRUCTION OF TORRINGTON BRIDGE AND SIGNS & MARKINGS FACILITIES	TOWN: TORRINGTON	PROJECT NO. 0143-0192
Plotted Date: 4/2/2021		CHECKED BY: ME		APPROVED BY:		DRAWING TITLE: GRADING PLAN	DRAWING NO. C-008
REV.	DATE	REVISION DESCRIPTION	SHEET NO.	SCALE IN FEET 0 40 80 SCALE 1"=40'		FILENAME: ...FD_MSH_CIV_0143_0192_C-008 (Grading Plan).dgn	



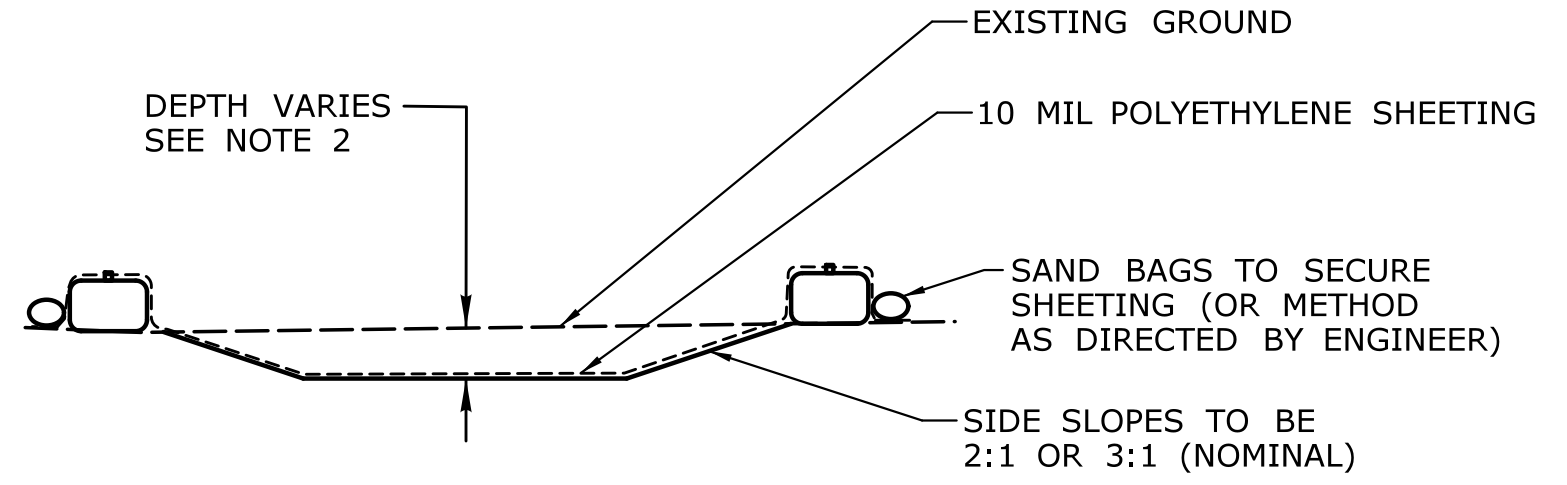
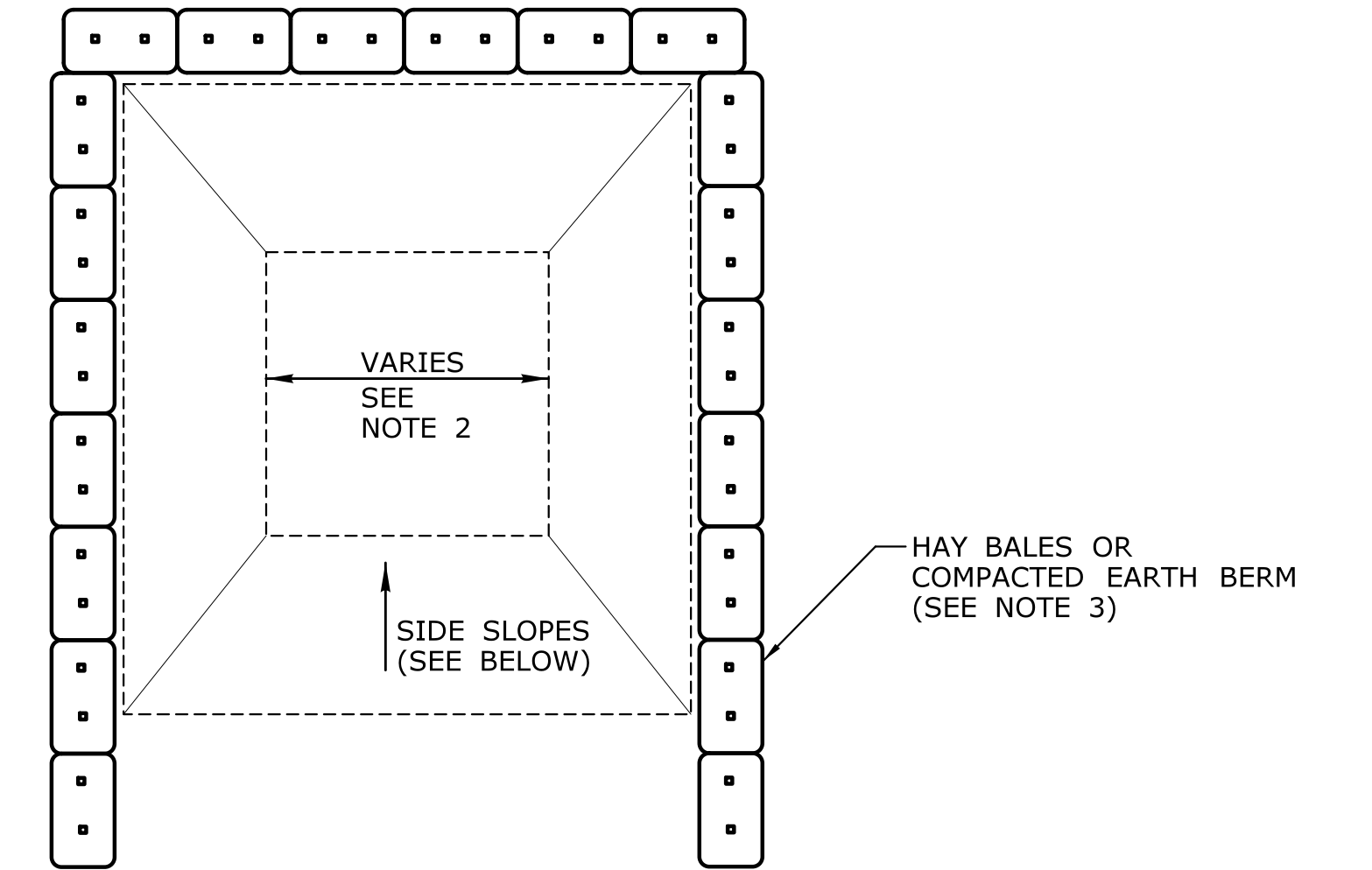
BITUMINOUS CONCRETE PAVEMENT

NOT TO SCALE



BITUMINOUS CONCRETE PAVEMENT - WITH MEMBRANE

NOT TO SCALE

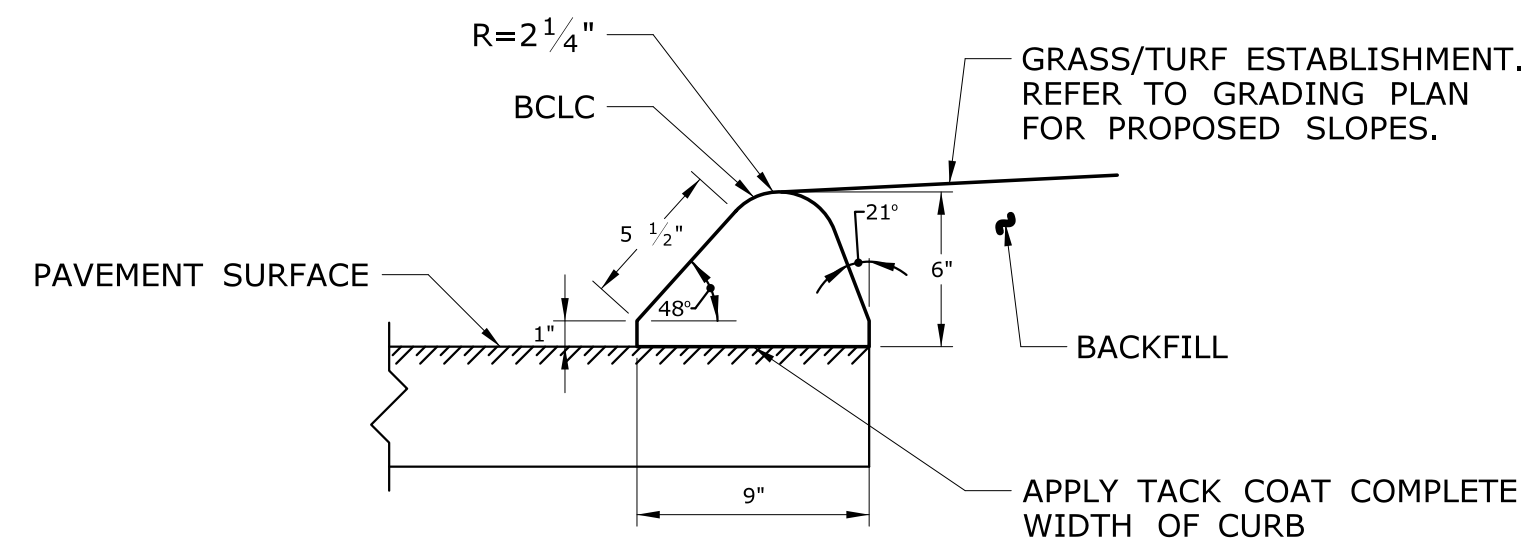


CONCRETE WASHOUT AREA

NOT TO SCALE
(SEE NOTE 2)

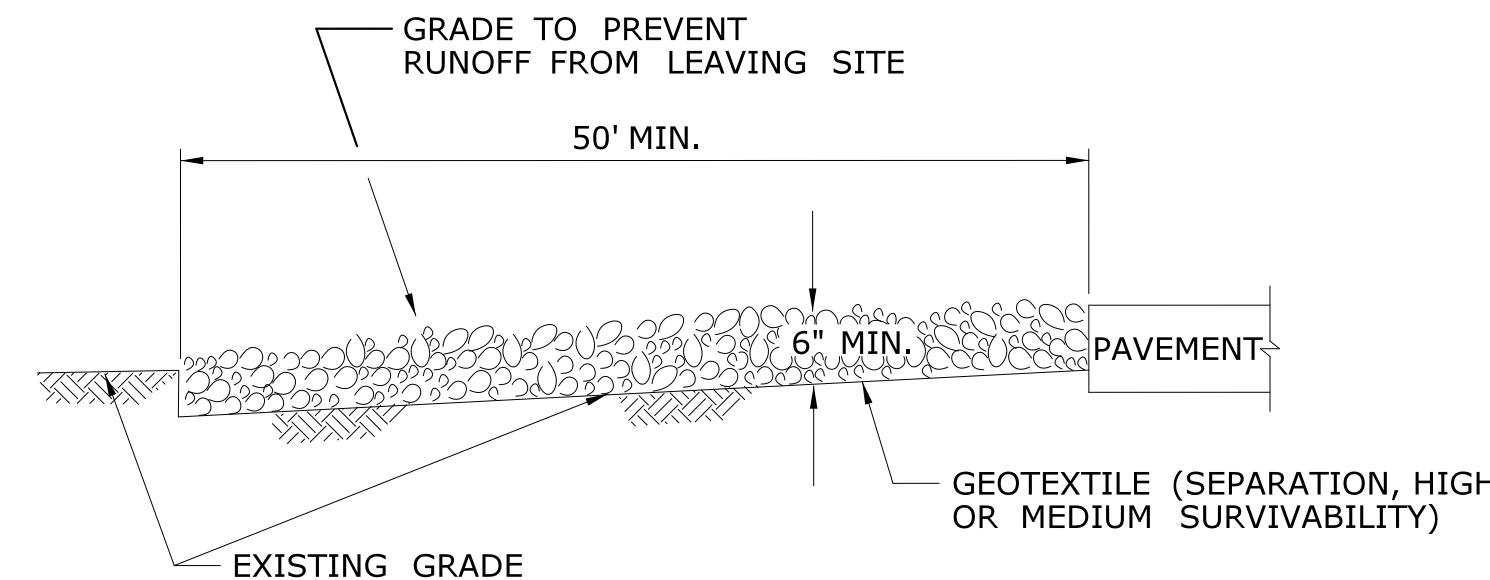
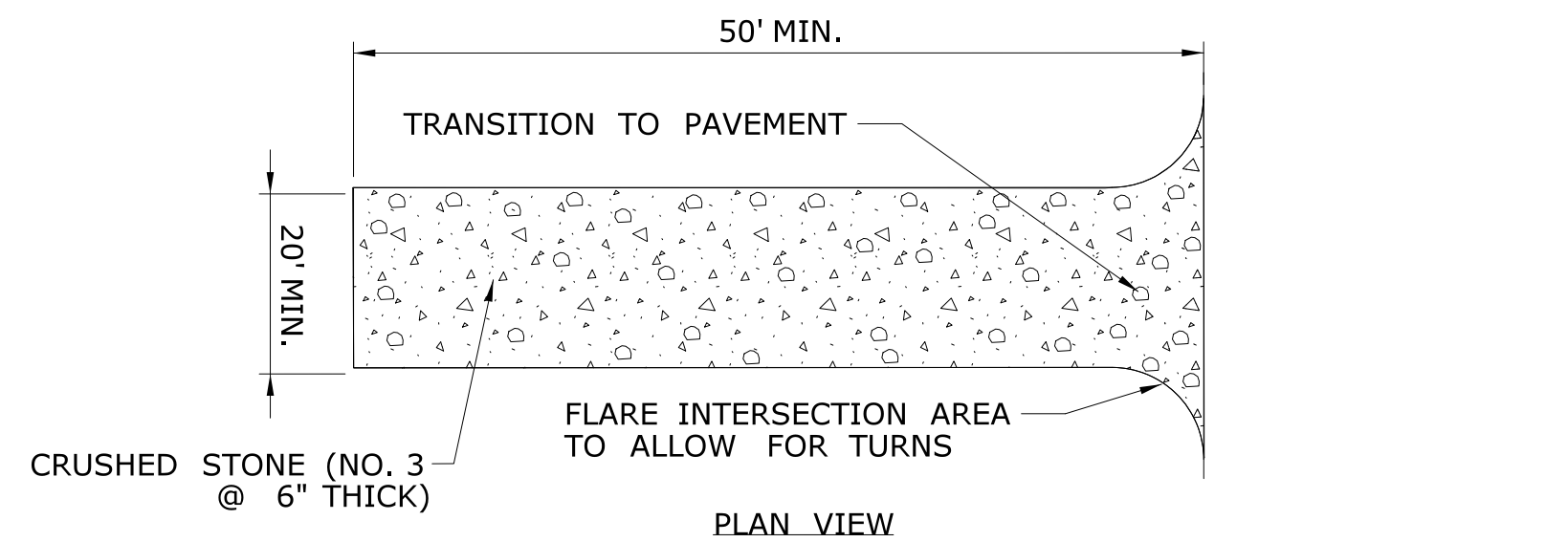
CONCRETE WASHOUT NOTES:

1. CONCRETE WASHOUT AREA(S) SHALL BE INSTALLED PRIOR TO CONCRETE PLACEMENT ON SITE. THE CONCRETE WASHOUT AREA SHALL BE ENTIRELY SELF-CONTAINED.
2. THE CONTRACTOR SHALL SUBMIT THE DESIGN, LOCATION AND SIZING OF THE CONCRETE WASHOUT AREA(S) WITH THE PROJECT'S EROSION AND SEDIMENTATION CONTROL PLAN AND SHALL BE APPROVED BY THE ENGINEER.
- LOCATION: WASHOUT AREA(S) ARE TO BE LOCATED AT LEAST 50 FEET FROM ANY STREAM, WETLAND, STORM DRAINS, OR OTHER SENSITIVE RESOURCE. THE FLOOD CONTINGENCY PLAN MUST ADDRESS THE CONCRETE WASHOUT IF THE WASHOUT IS TO BE LOCATED WITHIN THE FLOODPLAIN.
- SIZE: THE WASHOUT MUST HAVE SUFFICIENT VOLUME TO CONTAIN ALL LIQUID AND CONCRETE WASTE GENERATED BY WASHOUT OPERATIONS INCLUDING, BUT NOT LIMITED TO, OPERATIONS ASSOCIATED WITH GROUT AND MORTAR.
3. SURFACE DISCHARGE IS UNACCEPTABLE. THEREFORE, HAY BALES OR OTHER CONTROL MEASURES, AS APPROVED BY THE ENGINEER, SHOULD BE USED AROUND THE PERIMETER OF THE CONCRETE WASHOUT AREA FOR CONTAINMENT.
4. SIGNS SHOULD BE PLACED AT THE CONSTRUCTION ENTRANCE, AT THE CONCRETE AREA(S) AND ELSEWHERE AS NECESSARY TO CLEARLY INDICATE THE LOCATION OF THE CONCRETE WASHOUT TO OPERATORS OF CONCRETE TRUCKS AND PUMP RIGS. WASHOUT AREA(S) SHOULD BE FLAGGED WITH SAFETY FENCING OR OTHER APPROVED METHOD.
5. WASHOUT AREA(S) ARE TO BE INSPECTED AT LEAST ONCE A WEEK FOR STRUCTURAL INTEGRITY, ADEQUATE HOLDING CAPACITY AND CHECKED FOR LEAKS, TEARS, OR OVERFLOWS. (AS REQUIRED BY THE CONSTRUCTION SITE ENVIRONMENTAL INSPECTION REPORT) WASHOUT AREA(S) SHOULD BE CHECKED AFTER HEAVY RAINS.
6. HARDENED CONCRETE WASTE SHOULD BE REMOVED AND DISPOSED OF WHEN THE WASTE HAS ACCUMULATED TO HALF OF THE CONCRETE WASHOUT'S HEIGHT. THE WASTE CAN BE STORED AT AN UPLAND LOCATION, AS APPROVED BY THE ENGINEER. ALL CONCRETE WASTE SHALL BE DISPOSED OF IN A MANNER CONSISTENT WITH ALL APPLICABLE LAWS, REGULATIONS, AND GUIDELINES.
7. PAYMENT FOR THIS ITEM IS TO BE INCLUDED UNDER THE GENERAL COST OF THE WORK FOR THE PROJECT, INCLUDING SITE RESTORATION.



BITUMINOUS CONCRETE LIP CURBING

NOT TO SCALE

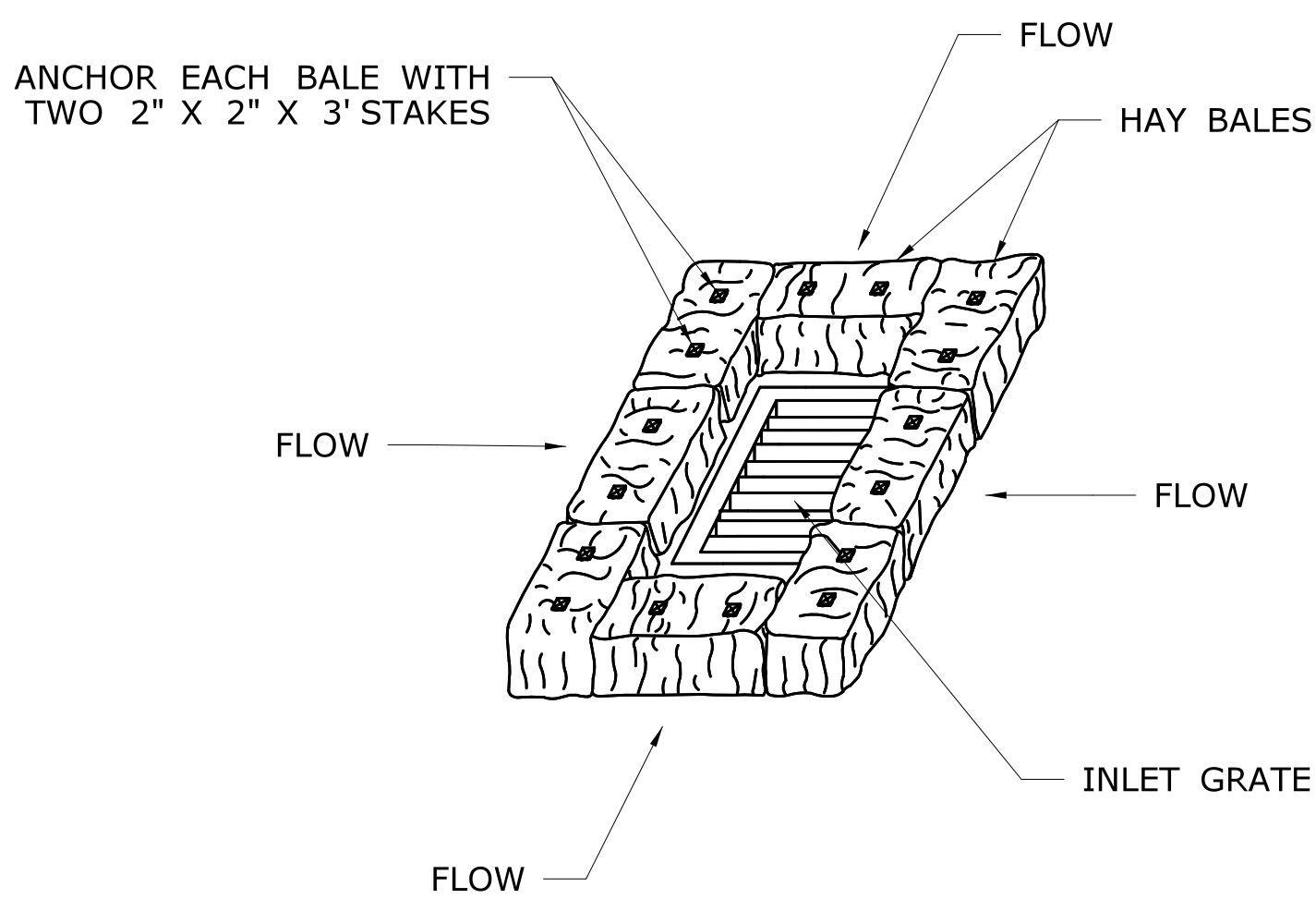


ANTI-TRACKING PAD

NOT TO SCALE

ANTI-TRACKING NOTES

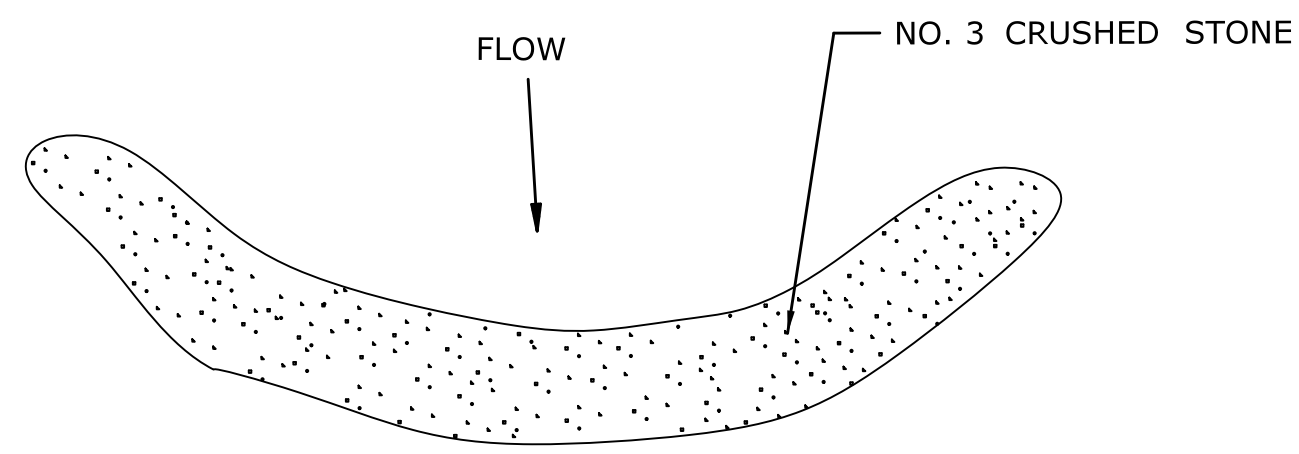
1. LOCATION TO BE APPROVED BY ENGINEER.
2. STONE SIZE NO. 3 - 2 INCH STONE.
3. WASHING - WHEN NECESSARY, WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC ROADWAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE WHICH DRAINS INTO AN APPROVED TRAP OR SEDIMENT BASIN. ALL SEDIMENT SHALL BE PREVENTED FROM ENTERING ANY STORM DRAIN, DITCH, OR WATERCOURSE USING APPROVED METHODS.
4. MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC ROADWAYS. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND, AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.
5. ALL SEDIMENT SPILLED, DROPPED, WASHED, OR TRACKED ONTO PUBLIC ROADWAY MUST BE REMOVED IMMEDIATELY.
6. DRAINAGE - ENTRANCE MUST BE PROPERLY GRADED OR INCORPORATE A DRAINAGE SWALE TO PREVENT RUNOFF FROM LEAVING THE CONSTRUCTION SITE.



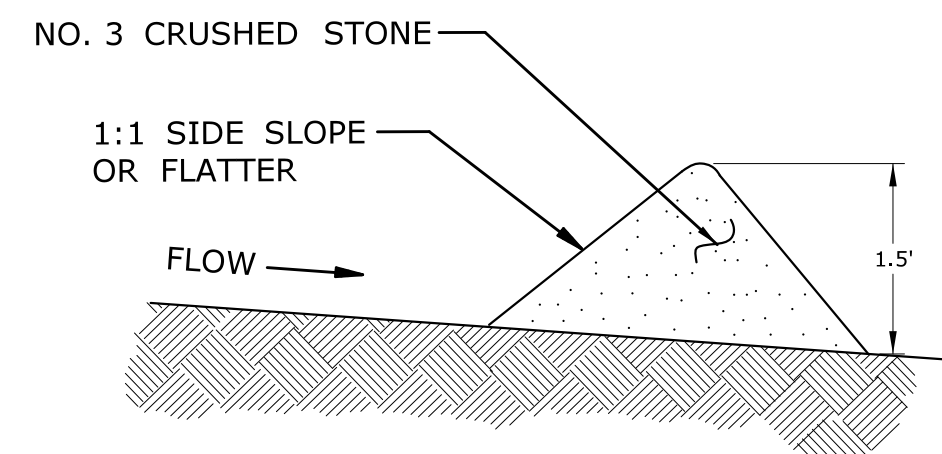
HAY BALE INSTALLATION AT CATCH BASIN

NOT TO SCALE

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.		DESIGNER/DRAFTER: KP	STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION	SIGNATURE/ BLOCK: OFFICE OF ENGINEERING	PROJECT TITLE: CONSTRUCTION OF TORRINGTON BRIDGE AND SIGNS & MARKINGS FACILITIES	TOWN: TORRINGTON	PROJECT NO. 0143-0192
		CHECKED BY: ME		APPROVED BY:		DRAWING TITLE: MISCELLANEOUS DETAILS 1	DRAWING NO. C-010
REV.	DATE	REVISION DESCRIPTION	SHEET NO.	Plotted Date: 4/2/2021	SCALE AS NOTED	Filename: ...FD_MSH_CIV_0143_0192_C-010 (MISC 1).dgn	



TOP VIEW



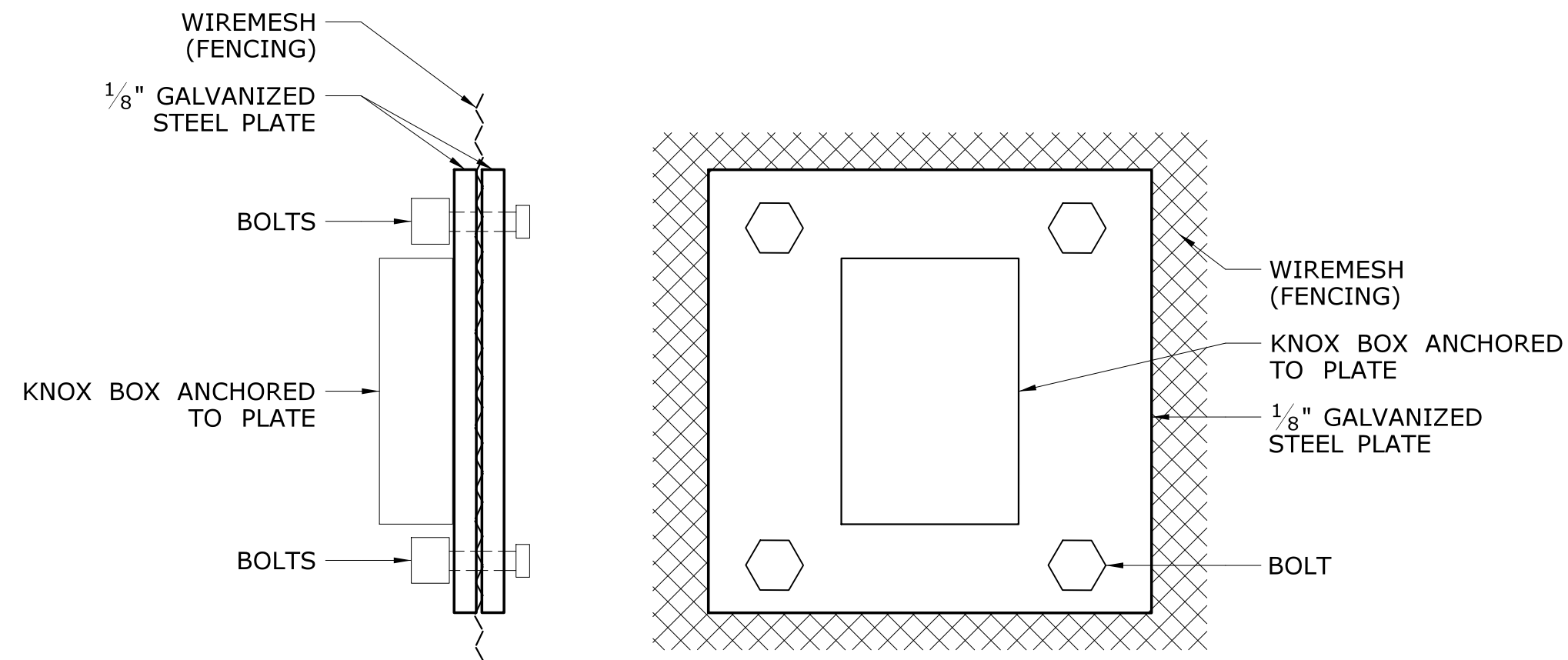
SIDE VIEW

NOTES:

1. STONE CHECK DAM SHALL EXTEND THE FULL WIDTH OF THE HEADWALL, PLUS 18 INCHES KEYED INTO THE BANKS ON EACH SIDE.
2. THE HEIGHT OF THE CENTER OF THE CHECK DAM SHALL BE 6 INCHES LOWER THAN THE HEIGHT OF THE OUTER EDGES.

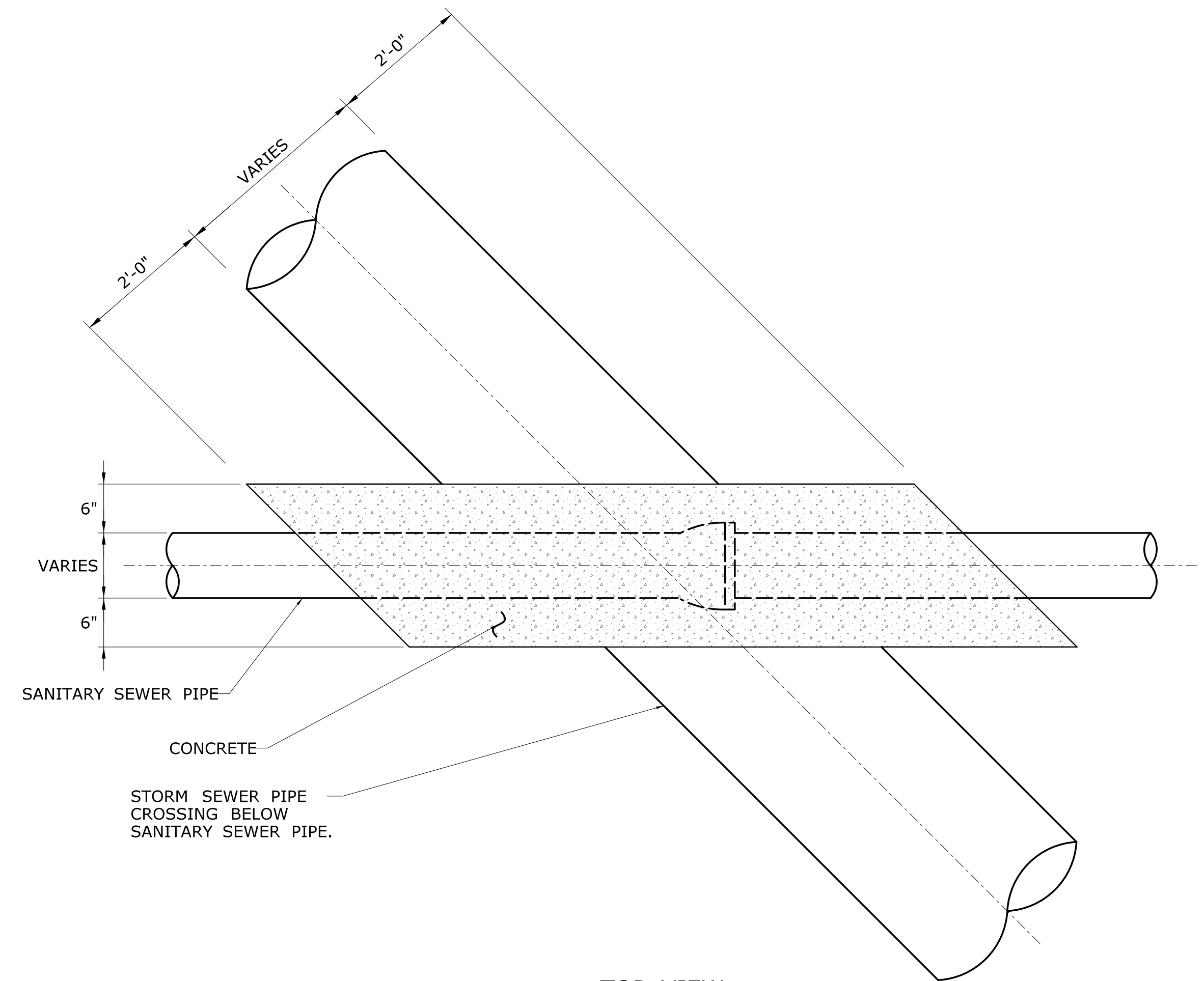
STONE CHECK DAM

NOT TO SCALE

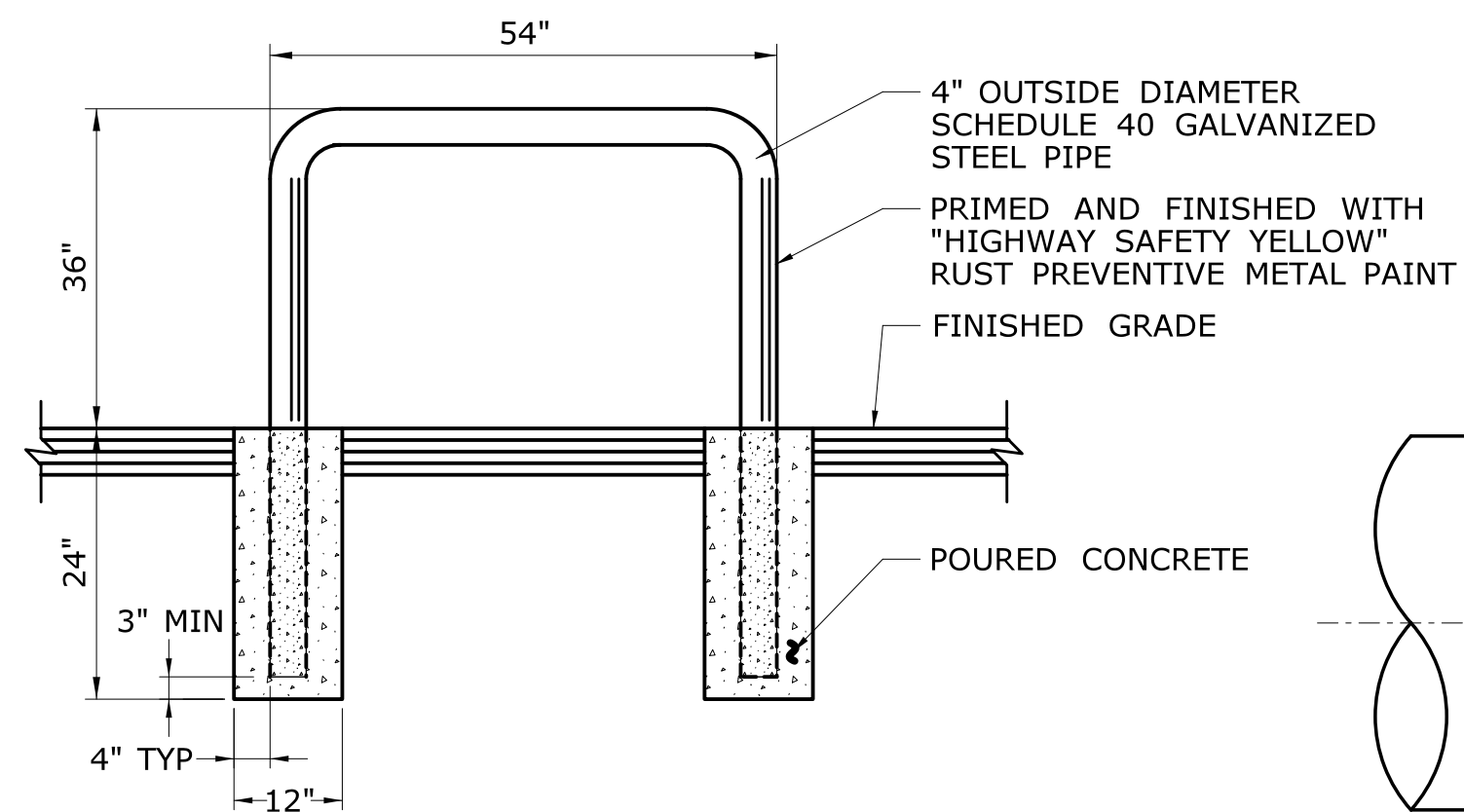


KNOX BOX INSTALLATION

NOT TO SCALE

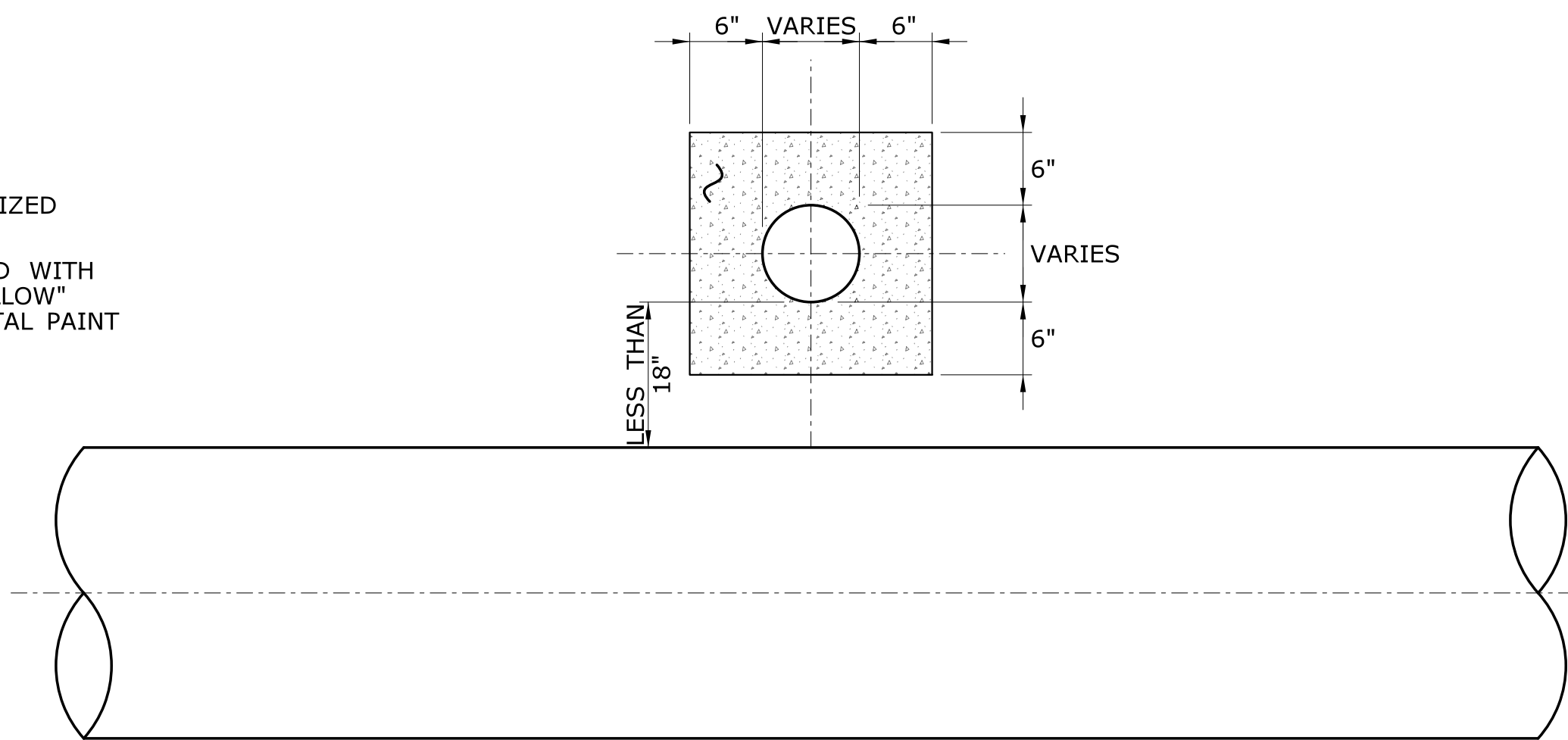


TOP VIEW

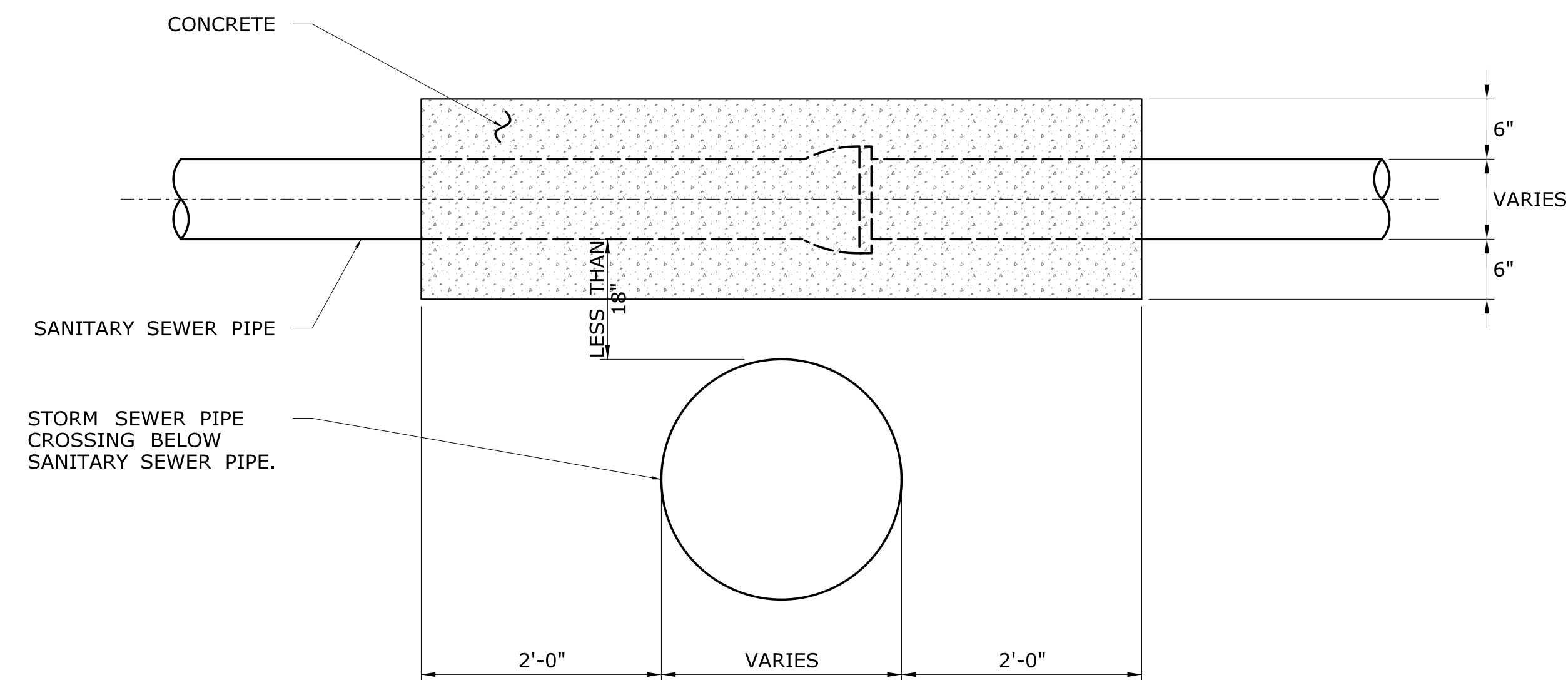


STEEL BOLLARD

NOT TO SCALE



FRONT VIEW



SIDE VIEW

CONCRETE ENCASEMENT OF SANITARY SEWER PIPE

NOT TO SCALE

REV.	DATE	REVISION DESCRIPTION	SHEET NO.	Plotted Date: 4/2/2021

DESIGNER/DRAFTER:	KP
CHECKED BY:	ME
SCALE AS NOTED	

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

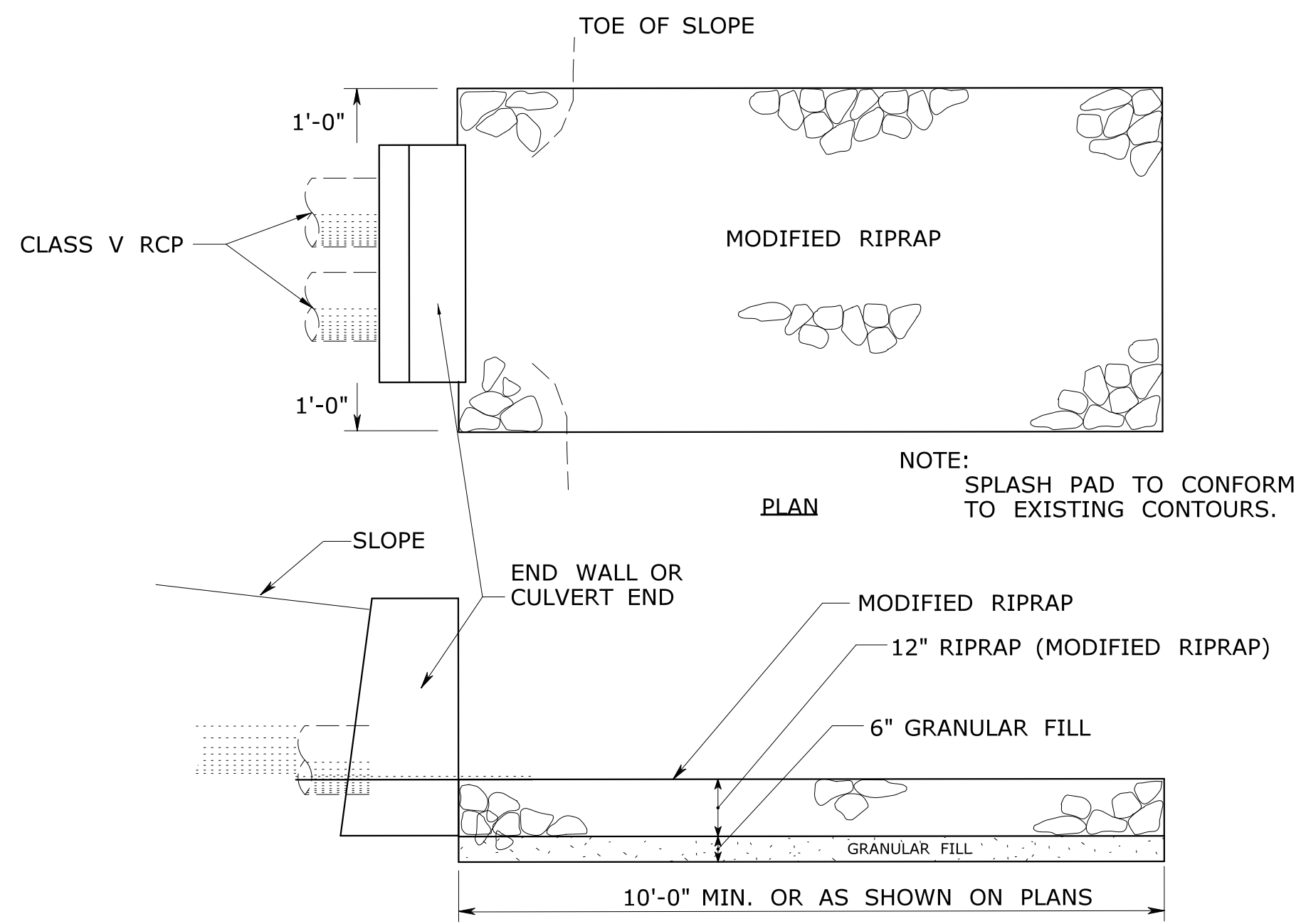
Filename: ...FD_MSH_CIV_0143_0192_C-011 (MISC 2).dgn

SIGNATURE/BLOCK:
OFFICE OF ENGINEERING
 APPROVED BY:

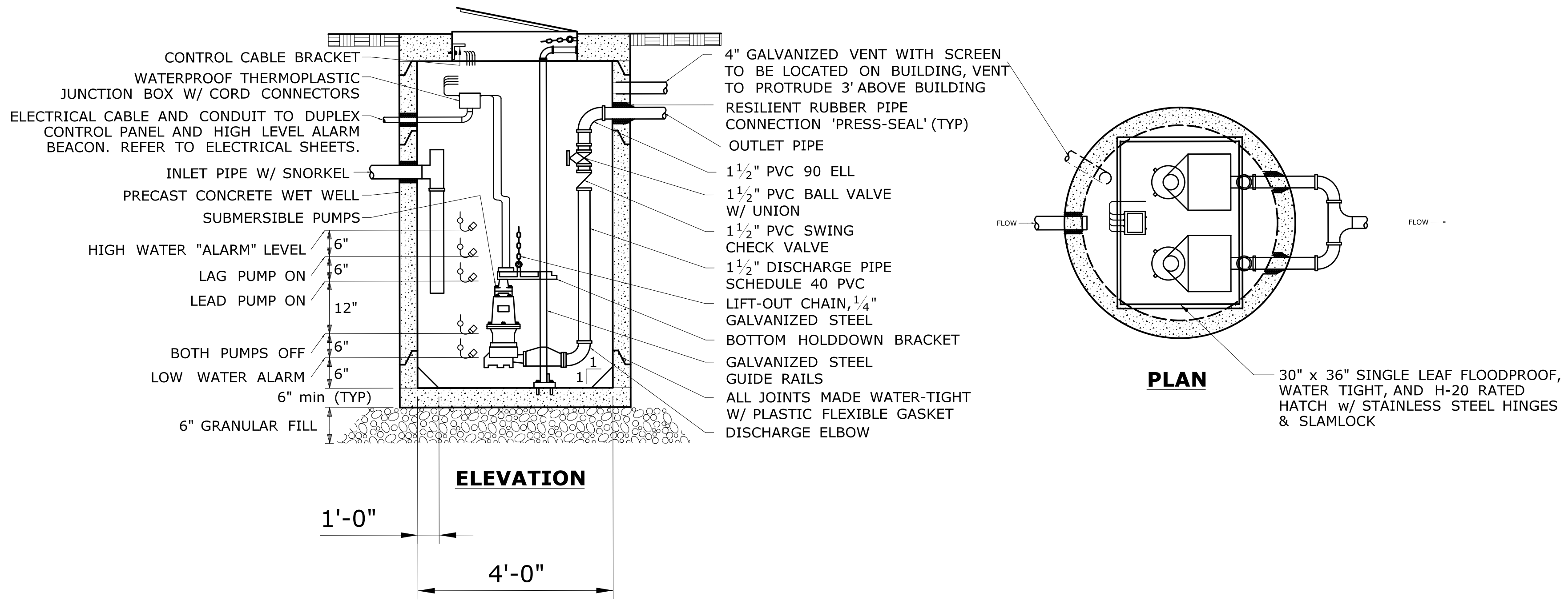
PROJECT TITLE:
CONSTRUCTION OF TORRINGTON BRIDGE AND SIGNS & MARKINGS FACILITIES

TOWN: **TORRINGTON**
 DRAWING TITLE: **MISCELLANEOUS DETAILS 2**

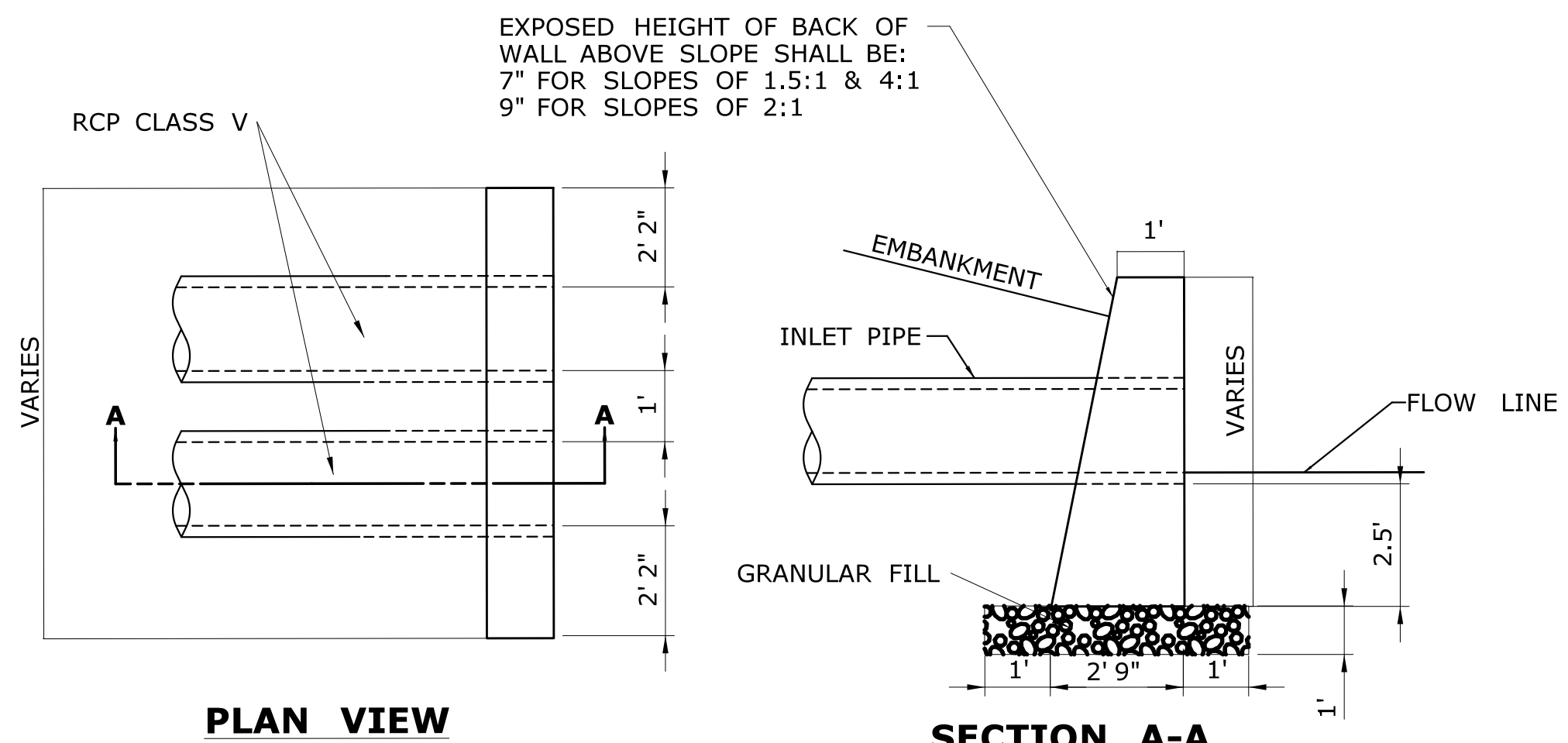
PROJECT NO. 0143-0192
 DRAWING NO. **C-011**
 SHEET NO.



SPLASH PAD DETAIL (END WALL)
NOT TO SCALE

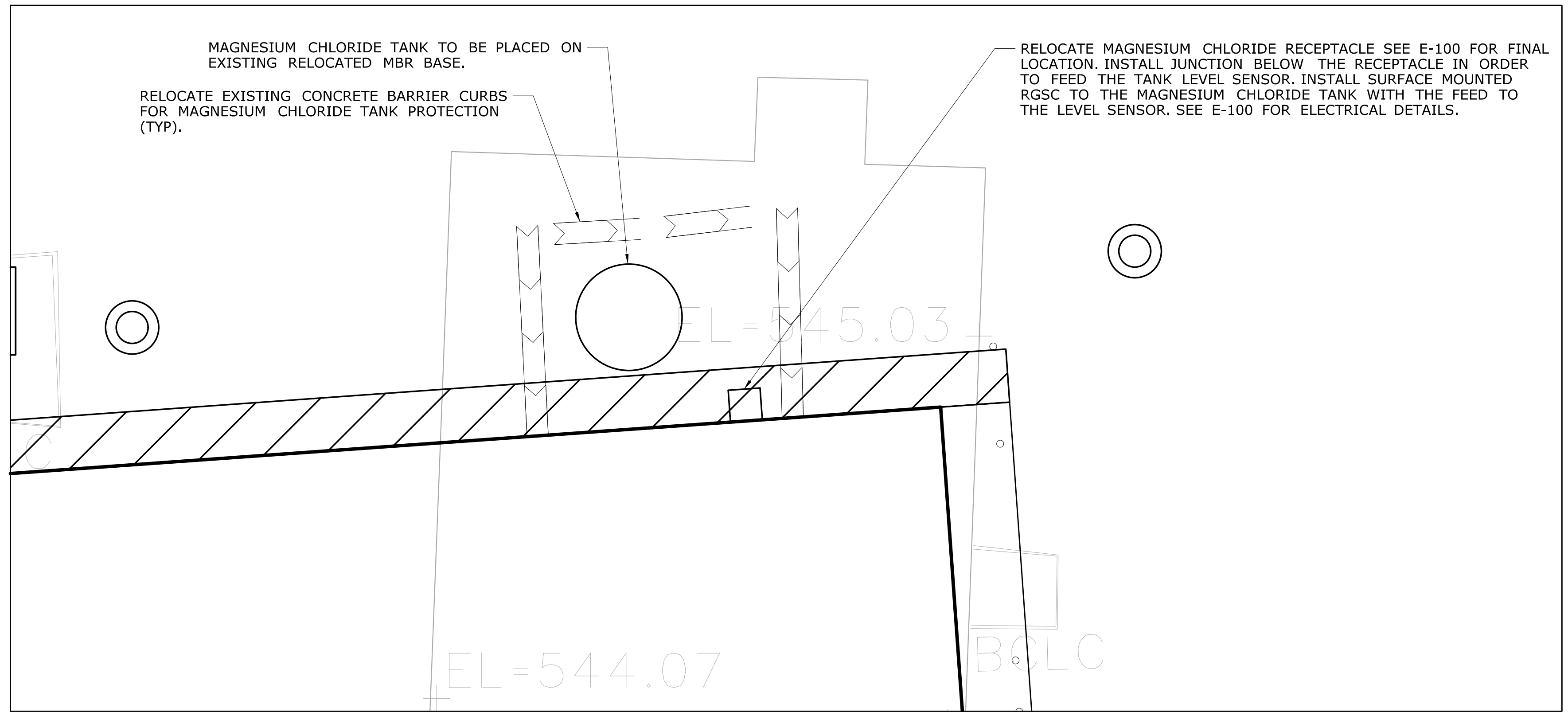


SANITARY PUMP STATION
NOT TO SCALE



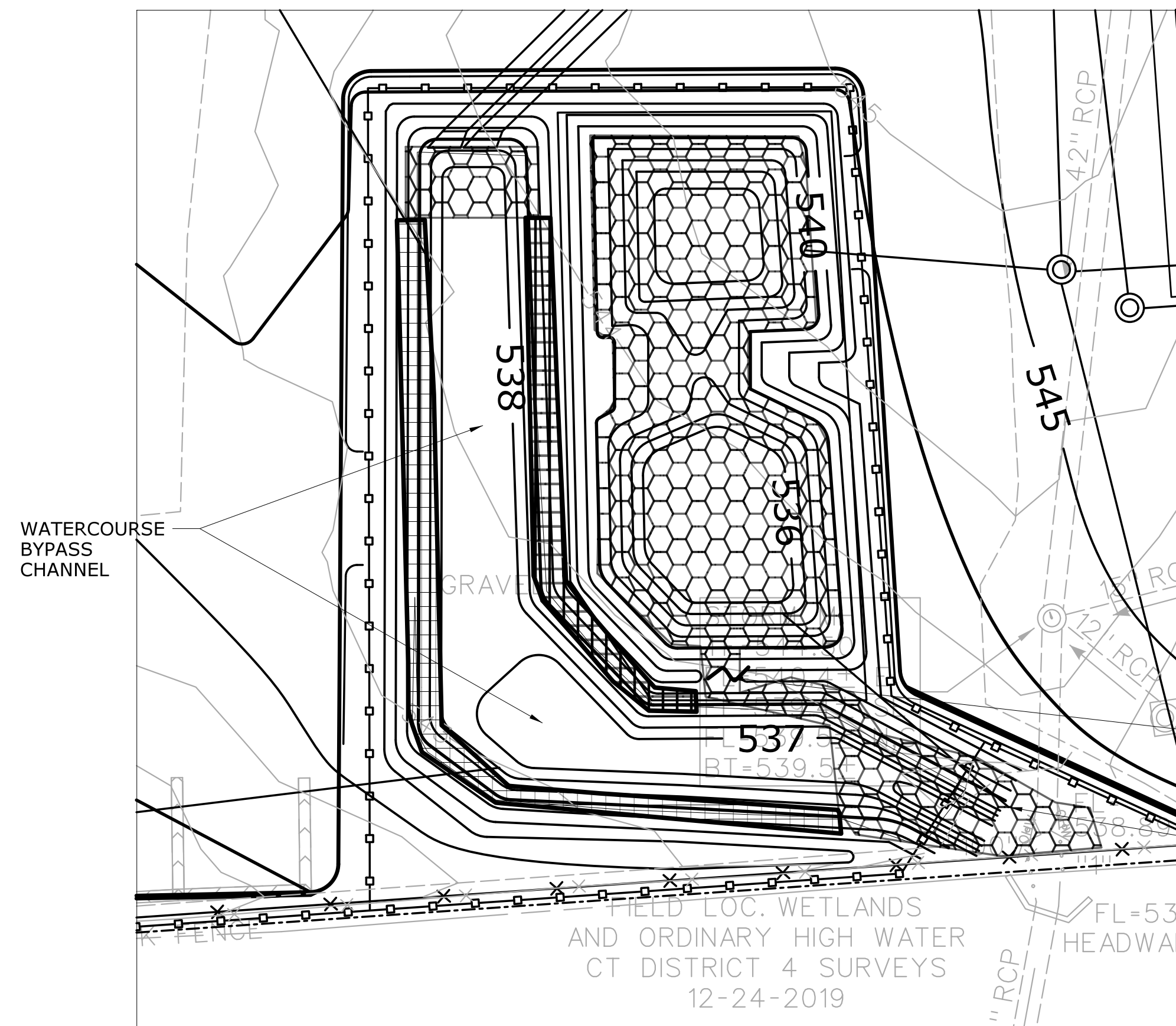
CONCRETE ENDWALL
NOT TO SCALE

NOTE: ENDWALL ON 12" OF GRANULAR FILL



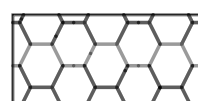
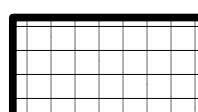
CLORIDE TANK DETAIL
NOT TO SCALE

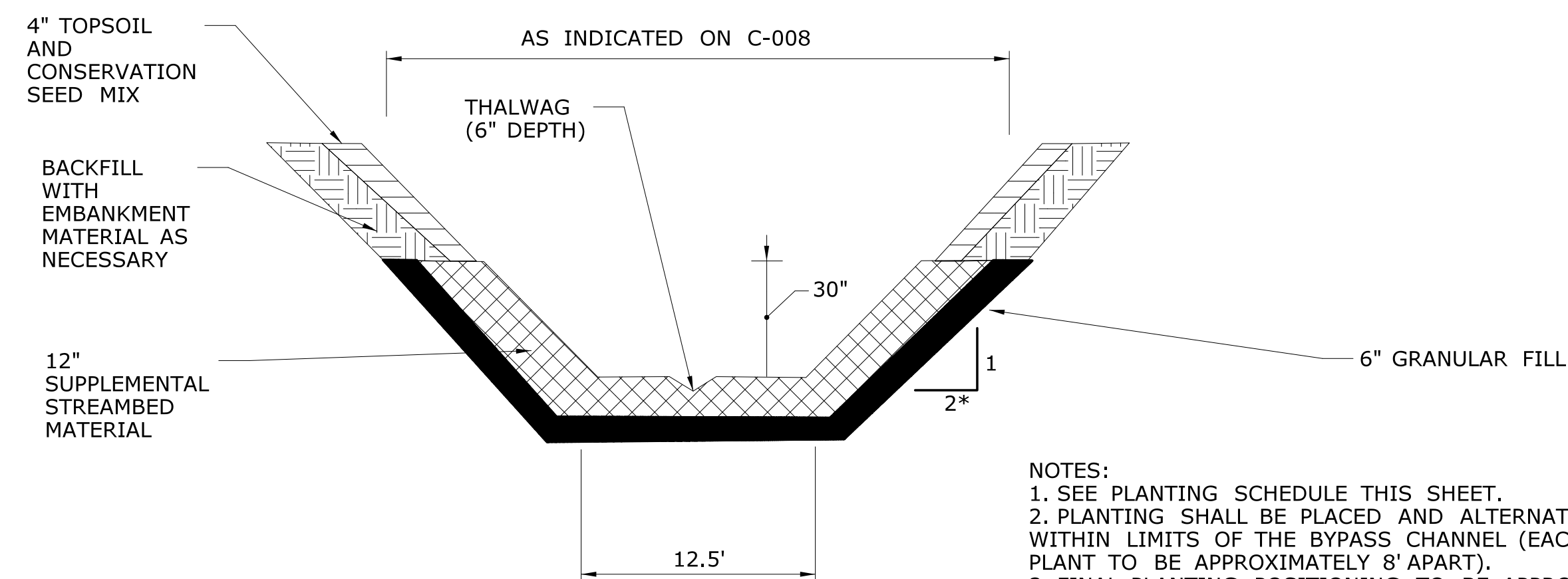
THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE THE CONDITIONS OF ACTUAL QUANTITIES OF WORK WHICH WILL BE REQUIRED.		DESIGNER/DRAFTER: KP CHECKED BY: ME SCALE AS NOTED	STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION	SIGNATURE/BLOCK: OFFICE OF ENGINEERING APPROVED BY:	PROJECT TITLE: CONSTRUCTION OF TORRINGTON BRIDGE AND SIGNS & MARKINGS FACILITIES	TOWN: TORRINGTON	PROJECT NO.: 0143-0192
REV. DATE REVISION DESCRIPTION SHEET NO.	Plotted Date: 4/2/2021	Filename: ...FD_MSH_CIV_0143_0192-C-016 (MISC 7).dgn	MISCELLANEOUS DETAILS 7		DRAWING NO.: C-016	SHEET NO.	



**WATERCOURSE BYPASS CHANNEL/
DETENTION BASIN GRADING PLAN**

SCALE 1" = 20'

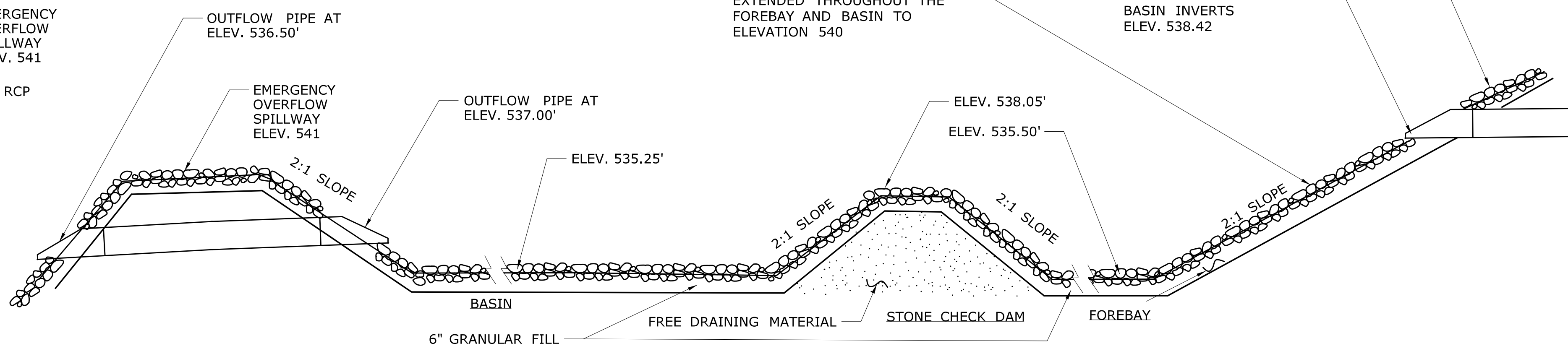
-  12" MODIFIED RIPRAP ON 6" GRANULAR FILL.
-  APPROXIMATE PLANTING LIMITS- SEE PLANTING SCHEDULE THIS SHEET.



WATERCOURSE BYPASS CHANNEL

NOT TO SCALE

- NOTES:
- SEE PLANTING SCHEDULE THIS SHEET.
 - PLANTING SHALL BE PLACED AND ALTERNATED EVERY 4' WITHIN LIMITS OF THE BYPASS CHANNEL (EACH SPECIES OF PLANT TO BE APPROXIMATELY 8' APART).
 - FINAL PLANTING POSITIONING TO BE APPROVED BY DOT'S OFFICE OF ENVIRONMENTAL PROTECTION (OEP).
 - ESTABLISH TURF ON THE REMAINDER OF THE WATERCOURSE BYPASS CHANNEL SLOPES (TURF ESTABLISHMENT TO EXTEND TO EDGE OF PAVEMENT AND FENCE LIMITS).



NOTE: ESTABLISH TURF ON THE REMAINDER OF THE STORMWATER BASIN SLOPES.

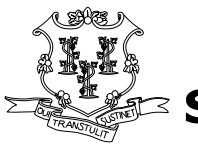

DETENTION BASIN

NOT TO SCALE

- NOTES:
- ESTABLISH TURF ON THE REMAINDER OF STORM WATER BASIN SLOPES.
 - BASIN TO BE UTILIZED DURING CONSTRUCTION.
 - RE-GRADING FINALIZED FOR POST CONSTRUCTION USE.
 - IT IS THE CONTRACTORS RESPONSIBILITY TO STAY OUT OF DELINEATED WETLANDS.

LANDSCAPING ITEMS

BOTANICAL NAME	COMMON NAME	SIZE	QUANTITY	SPACING	WETLAND INDICATOR
CORNUS RACEMOSA LAM.	GRAY DOGWOOD	2-3 FEET	25	8'- FIELD LOCATE	FAC
CORNUS SERICA L.	REDSIER DOGWOOD	2-3 FEET	25	8'- FIELD LOCATE	FACW

DESIGNER/DRAFTER: KP	CHECKED BY: ME	 STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION		SIGNATURE/ BLOCK: OFFICE OF ENGINEERING	PROJECT TITLE: CONSTRUCTION OF TORRINGTON BRIDGE AND SIGNS & MARKINGS FACILITIES	TOWN: TORRINGTON	PROJECT NO. 0143-0192
SCALE AS NOTED				APPROVED BY:	MISCELLANEOUS DETAILS 8	DRAWING NO. C-017	SHEET NO.
REV.	DATE	REVISION DESCRIPTION	SHEET NO.	Plotted Date: 4/7/2021	Filename: ...FD_MSH_CIV_0143_0192_C-017 (MISC 8) TEST.dgn		

APPENDIX D

MS4 Work Sheet

State Project No. 143-192

**CTDOT MS4 Project Design
Maximum Extent Practicable (MEP) Worksheet**

Section 1: Project Information	Project #:	
	Title:	
	Location:	

Section 2: Existing Conditions

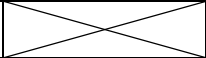

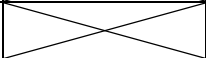
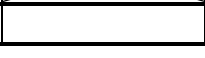
EC1	Total Project Area		acres		
EC2	Pre-construction Directly Connected Impervious Area (DCIA):		acres	%	
EC3	Soil Infiltration Potential	Data Source: <input type="checkbox"/> Existing Report / Soils Map <input type="checkbox"/> Field Verified	<input type="checkbox"/> Good/Fair	<input type="checkbox"/> Poor	<input type="checkbox"/> Mixed
EC4	Depth to Maximum Groundwater	<input type="checkbox"/> TBD	to	ft below grade	
EC5	Depth to Bedrock	<input type="checkbox"/> TBD	to	ft below grade	
EC6	Aquifer Protection Area? (from PNDP)		<input type="checkbox"/> Yes	<input type="checkbox"/> No	
EC7	MS4 Priority Area? (from PNDP)		<input type="checkbox"/> Yes (See Below)	<input type="checkbox"/> No	
<i>Check All That Apply</i> <input type="checkbox"/> Urbanized Area <input type="checkbox"/> DCIA >11% <input type="checkbox"/> Impaired Waterbody (See Below)					
<i>Select All Impairments That Apply</i>					
EC8	Contamination known or suspected to be present? (From Environmental Compliance)		<input type="checkbox"/> Yes	<input type="checkbox"/> No	
EC9	Adjoining DOT ROW beyond project limits available for stormwater quality management		acres		

Section 3: Designed Conditions

Water Quality Calculations			30% Design	60% Design	90% Design	FDP
DC1	WQV retention design goal	Full 1/2"-WQV	ac-ft <input type="checkbox"/> TBD	ac-ft	ac-ft	ac-ft
DC2	WQV goal retained (refer to page 2)		ac-ft	ac-ft	ac-ft	ac-ft
DC3	WQV goal treated (refer to page 2)		ac-ft	ac-ft	ac-ft	ac-ft
DC4	Total WQV <i>retained and treated</i>		ac-ft	ac-ft	ac-ft	ac-ft
DC5	Post-construction DCIA(acres)		ac. <input type="checkbox"/> TBD	ac.	ac.	ac.
DC6	Pre-construction DCIA (refer to EC2 above)		ac.	ac.	ac.	ac.
DC7	Change in DCIA from pre- to post-construction <i>Can be positive (DCIA gained) or negative (DCIA lost)</i>		ac. <input type="checkbox"/> TBD	ac.	ac.	ac.
Date completed						
Completed by (initials)						
Reviewed by (initials)						

Notes:

Section 4: Stormwater BMP Selection Summary

Design Phase <input type="checkbox"/> 30% <input type="checkbox"/> 60% <input type="checkbox"/> 90% <input type="checkbox"/> FDP	WQV Retained (ac-ft)	WQV Treated (ac-ft)	DCIA Captured (Acres)	DCIA Disconnection Credit (%)	DCIA Disconnection Credit (acres)	Site Constraints
Disconnection (Dispersion)						
Conveyance (Swales / Channels)						
Infiltration / Retention						
Treatment						
						
						
						
						
TOTAL						

Notes:

Worksheet users should refer to the *CT DOT MS4 Project Design MEP Worksheet Instructions*. Refer to the 2004 CT Stormwater Quality Manual for more information on BMP criteria and limitations.

APPENDIX E

CSEIR Form

State Project No. 143-192

**State of Connecticut
Department of Transportation
Construction Site Environmental Inspection Report**

This Form Must Be Completed At Least Once A Week And Within Twenty Four (24) Hours Of The End Of A Storm Event That Is 0.1 inches Or Greater

General Information			
Project Number		Date	
Permit Number(s)		Location	
		Phone No.	
Project Engineer		Chief Inspector	
Contractor			
Describe present phase of construction/activities that are occurring			
Type of Inspection: <input type="checkbox"/> Weekly <input type="checkbox"/> Pre-storm event <input type="checkbox"/> During storm event <input type="checkbox"/> Post-storm event			
Weather Information			
Has there been a storm event since the last inspection? <input type="checkbox"/> Yes <input type="checkbox"/> No If yes, provide:			
Storm Start Date & Time:	Storm Duration (hrs):	Type and Approximate Amount of Precipitation (in):	
Weather at time of this inspection? <input type="checkbox"/> Clear <input type="checkbox"/> Cloudy <input type="checkbox"/> Rain <input type="checkbox"/> Sleet <input type="checkbox"/> Fog <input type="checkbox"/> Snowing <input type="checkbox"/> High Winds Temperature:			

Site-specific BMPs

- *Number the structural and non-structural BMPs on your site map and list them below (add as many BMPs as necessary). Carry a copy of the numbered site map for reference with you during your inspections.*

BMP Maintenance							
	BMP or Observation Site and Location	BMPs Installed ?	BMP Maintenance Required?	Remedial Action Required and Date Contractor was Notified *ALL REMEDIAL ACTIONS MUST BE COMPLETED WITHIN 24 HOURS*	Date Fixed	Photo Taken ?	Repeat Failure?
1		<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No			<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
2		<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No			<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
3		<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No			<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No

Are there any sediment discharges to a regulated area occurring or have any occurred since the last inspection? Yes No

If yes, contact the District Environmental Coordinator immediately.

Describe the discharge including location, time identified, and the approximate amount of sediment. (on back)

Environmental Inspector: _____

Signature: _____ Date: _____

Reviewed by: _____

Signature: _____ Date: _____

APPENDIX F

Notice of Termination Form

State Project No. 143-192



General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities

Notice of Termination Form

Please complete and submit this form in accordance with the general permit (DEP-PED-GP-015) in order to ensure the proper handling of your termination. Print or type unless otherwise noted.

Note: Ensure that for commercial and industrial facilities, registrations under the *General Permit for the Discharge of Stormwater Associated with Industrial Activity* (DEP-PED-GP-014) or the *General Permit for the Discharge of Stormwater from Commercial Activities* (DEP-PED-GP-004) have been filed where applicable. For questions about the applicability of these general permits, please call the Department at 860-424-3018.

Part I: Registrant Information

1. Permit number: GSN
2. Fill in the name of the registrant(s) as indicated on the registration certificate: Registrant:
3. Site Address: City/Town: _____ State: _____ Zip Code: _____
4. Date all storm drainage structures were cleaned of construction sediment: Date of Completion of Construction: _____ Date of Last Inspection (must be at least three months after final stabilization pursuant to Section 6(b)(6)(D) of the general permit): _____
5. Check the post-construction activities at the site (check all that apply): <input type="checkbox"/> Industrial <input type="checkbox"/> Residential <input type="checkbox"/> Commercial <input type="checkbox"/> Capped Landfill <input type="checkbox"/> Other (describe): _____

Part II: Certification

"I have personally examined and am familiar with the information submitted in this document and all attachments thereto, and I certify that, based on reasonable investigation, including my inquiry of those 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 made in this document or its attachments may be punishable as a criminal offense, in accordance with Section 22a-6 of the Connecticut General Statutes, pursuant to Section 53a-157b of the Connecticut General Statutes, and in accordance with any other applicable statute."	
Signature of Permittee _____	Date _____
Name of Permittee (print or type) _____	Title (if applicable) _____

Note: Please submit this Notice of Termination Form to:

STORMWATER PERMIT COORDINATOR
BUREAU OF WATER MANAGEMENT
DEPARTMENT OF ENVIRONMENTAL PROTECTION
79 ELM STREET
HARTFORD, CT 06106-5127