

Energy & Environmental Property PROJECTIVE CENTRAL PERMIT PROCESSARY OF THE PROPERTY OF THE PR

Doc#: Check#:	App #:	CPPU USE ONLY
Check#:		
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Permit Application Transmitta

Please complete this transmittal form in accordance with the instructions in order to ensure the proper handling of your application(s) and the associated fee(s). Print legibly or type. Project 25-144

Part I: Applicant Information:

- *If an applicant is a corporation, limited liability company, limited partnership, limited liability partnership, or a statutory trust, it must be registered with the Secretary of State. If applicable, applicant's name shall be stated exactly as it is registered with the Secretary of State.
- If an applicant is an individual, provide the legal name (include suffix) in the following format: First Name; Middle Initial: Last Name; Suffix (Jr. Sr., II, III, etc.).

Applicant: Connecticut Department of Transportation						
Mailing Address: 1107 Cromwell Avenue						
City/Town: Rocky Hill	State: CT	Zip Code: 06067				
Business Phone:	ext.:					
Contact Person: Ravi V. Chandran	Phone: 860-25	8-4601 ext.				
E-Mail: ravi.chandran@ct.gov						
Applicant (check one): ☐ individual ☐ *business entity ☐ federal agency ☑ state agency ☐ municipality ☐ tribal *If a business entity, list type (e.g., corporation, limited partnership, etc.): ☐ Check if any co-applicants. If so, attach additional sheet(s) with the required information as supplied above.						
Please provide the following information to be used for billing purposes only, if different:						
Company/Individual Ņame:						
Mailing Address:	•					
City/Town:	State:	Zip Code:				
Contact Person:	Phone:	ext.				

Part II: Project Information

The purpose of this project is to construct a shared use path known as the Farmington Canal Heritage Trail. The trail covers approximately 84 miles (approximately 70% of which is completed) from New Haven to Northampton, Massachusetts and is part of the East Coast Greenway. Location (City/Town): Cheshire, CT								
Other Project Rela	ted Permits (not inclu	uded with this form)	•					
Permit Description	Issuing Authority	Submittal Date	lssuance Date	Denial Date	Permit#			
					·			
	·							

Part III: Individual Permit Application and Fee Information

New, Mod. or Renew	Individual Permit Applications	Initial Fees	No. of Permits Applied For	Total Initial Fees	Original + Required Copies	
	AIR EMISSIONS					
	New Source Review ☐ Revision ☐ minor mod	\$940.00			1 + 0	
	Title V Operating Permits ☐ Revision ☐ minor mod ☐ non-minor mod	none			1+0	
	Title IV	none			1+0	
	Clean Air Interstate Rule (CAIR)	none			1+0	
	WATER DISCHARGES					
	To Groundwater	\$1300.00			1+1	
	To Sanitary Sewer (POTW)	\$1300.00			1+1	
	To Surface Water (NPDES)	\$1300.00			1+1	
	INLAND WATER RESOURCES-					
	Dam Safety	none			1 + 2	
	Flood Management Certification	none			1+1	
	Inland Wetlands and Watercourses	none				
	Inland 401 Water Quality Certification	none			1 + 5	
	FERC- Hydropower Projects- 401 Water Quality Certification	none			1 +1	
	Water Diversion	*			1 + 5	
	OFFICE OF LONG ISLAND SOUND PROGRAMS					
	Certificate of Permission	\$375.00			1 + 2	
	Coastal 401 Water Quality Certification	none			1 + 2	
	Structures and Dredging/and Fill/Tidal Wetlands	\$660.00			1 + 2	
	WASTE MANAGEMENT					
	Aerial Pesticide Application	*			1 + 2	
	Aquatic Pesticide Application	\$200.00			1 + 0	
	CGS Section 22a-454 Waste Facilities	*			1 + 1	
	Disruption of a Solid Waste Disposal Area	\$0			1 + 1	
	Hazardous Waste Treatment, Storage and Disposal Facilities	*			1 + 1	
	Marine Terminal License	\$375.00			1 + 0	
	Stewardship	\$4000.00			1+1	
	Solid Waste Facilities	*			1+1	
	Waste Transportation	*			1 + 0	
		Subtotal =				
	GENERAL PERMITS and AUTHORIZATIONS Subtota	als Page 3 &4 ➡	1	\$3,000		
		otals Page 5				
		otals Page 6				
TOTAL → 1 \$3,000						
Indicate whether municipal discount or state waiver applies. Less Applicable Discount						
		AMOUNT REMI	TTED =	\$3,000		
Check	# Check or money order sho				<u> </u>	

[★] See fee schedule on individual application.

Part IV: General Permit Registrations and Requests for Other Authorizations Application and Fee Information

	Application and ree information		-	1	
✓	General Permits and Other Authorizations	Initial Fees	No. of Permits Applied For	Total Initial Fees	Original + Required Copies
	AIR EMISSIONS				
	Limit Potential to Emit from Major Stationary Sources of Air Pollution	\$2760.00			1 + 0
	Diagnostic and Therapeutic X-Ray Devices (Medical X-Ray) Registration	\$190.00/Xray device			1 + 0
	Radioactive Materials and Industrial Device Registration (Ionizing Radiation)	\$200.00			1+0
	Emergency/Temporary Authorization	**			**
	License Revocation Request	\$0			**
	Other, (please specify):				
	WATER DISCHARGES				
	Boiler Blowdown Wastewater	Expired- wa	stewater discha	arge authorized und	er MISC GP
	Categorical Industry User to a POTW Discharges > 10,000 gpd Discharges < 10,0000 gpd	\$6250.00 \$3125.00			1 + 0
	Domestic Sewage	\$625.00			1+0
	Food Preparation Establishment Wastewater	No Registration			
	Food Processing Wastewater	\$500.00			1 + 0
	Groundwater Remediation Wastewater to a Sanitary Sewer	\$500.00			1 + 0
Groundwater Remediation Wastewater to a Surface Water Registration Only Approval of Registration by DEEP		\$625.00 \$1250.00			1 + 0
	Hydrostatic Pressure Testing Wastewater Registration Only Approval of Registration by DEEP (natural gas pipelines)	\$625.00 \$1250.00			1 + 0
	Miscellaneous Discharges of Sewer Compatible Wastewater Registration Only Approval of Registration by DEEP	\$500.00 \$1000.00			1 + 0
	Nitrogen Discharges		No Re	gistration	
	Non-Contact Cooling and Heat Pump Water (Minor)	\$625.00			1 + 0
	Photographic Processing Wastewater (Minor)	Expired- wa	stewater discha	arge authorized under	er MISC GP
	Point Source Discharges from Application of Pesticides				1 + 0
Printing & Publishing Wastewater (Minor) Flow < 40 gpd		\$500.00 \$100.00			1 + 0
☐ Stormwater Associated with Commercial Activities		\$300.00			1 + 0
Stormwater Associated with Industrial Activities <50 employees–see general permit for additional requirements >50 employees–see general permit for additional requirements		\$500.00 \$1000.00			1 + 0
\square	Stormwater & Dewatering Wastewaters-Construction Activities	*	1	\$3,000	1 + 0
	Stormwater from Small Municipal Separate Storm Sewer Systems	\$250.00			1+0

[★] See fee schedule on registration/application.

Contact the specific permit program for this information. (Contact numbers are provided in the instructions)

Part IV: General Permit Registrations and Requests for Other Authorizations (continued)

WATER DISCHARGES (continued)					
☐ Subsurface Sewage Disposal Systems Serving Existing Facilities	**			1 + 0	
☐ Swimming Pool Wastewater - Public Pools and Contractors	\$500.00			1 + 0	
☐ Tumbling or Cleaning of Parts Wastewater (Minor)	Expired- was	tewater dischar	ge authorized und	der MISC GP	
Vehicle Maintenance Wastewater ☐ Registration Only ☐ Approval of Registration by DEEP	\$625.00 \$1250.00			1 + 0	
☐ Water Treatment Wastewater	\$625.00			1 + 0	
☐ Emergency/Temporary Authorization - Discharge to POTW	\$1500.00			1 + 0	
☐ Emergency/Temporary Authorization - Discharge to Surface Water	\$1500.00			1 + 0	
☐ Emergency/Temporary Authorization - Discharge to Groundwater	\$1500.00			1 + 0	
☐ Other, (please specify):					
Note: Carry subtotals over to Part III, page 2 of this form.	ubtotal =		\$3,000		

[★] See fee schedule on registration/application.

Contact the specific permit program for this information.

(Contact numbers are provided in the instructions)

Part IV: General Permit Registrations and Requests for Other Authorizations (continued)

✓	General Permits and Other Authorizations	Initial Fees	No. of Permits Applied For	Total Initial Fee	Original + Required Copies
	AQUIFER PROTECTION PROGRAM				
	Registration for Regulated Activities	\$625.00			1 + 0
	Permit Application to Add a Regulated Activity	\$1250.00			1 + 0
	Exemption Application from Registration	\$1250.00			1 + 0
	INLAND WATER RESOURCES				
	Diversion of Remediation Groundwater		No Re	gistration	
	Diversion of Water for Consumptive Use: Reauthorization Categories	\$1000.00			1 + 2
	Diversion of Water for Consumptive Use: Authorization Required	\$2500.00			1 + 4
	Diversion of Water for Consumptive Use: Filing Only	\$1500.00			1 + 4
	Programmatic General Permit	*			1+3
	Water Resource Construction Activities	*			1+0
	Emergency/Temporary Authorization	**			**
	Notice of High Hazard Dam or a Significant Hazard Dam	\$0			1+0
	Other, (please specify):				
	OFFICE OF LONG ISLAND SOUND PROGRAMS				
	4/40 Docks	\$700.00			1+1
	Beach Grading	\$100.00			1+1
	Buoys or Markers		No Re	egistration	
	Coastal Remedial Activities Required by Order	\$700.00			1+1
	Dock Reconstruction	\$300.00			1+1
	Harbor Moorings		No Re	gistration	
	Maintenance of Catch Basins and Tide Gates		No Re	gistration	
	Marina and Mooring Field Reconfiguration	\$700.00			1+1
	Minor Seawall Repair		No Re	gistration	
	Non-harbor Moorings	\$100.00			1+1
	Osprey Platforms and Perch Poles	none			1+1
	Pump-out Facilities (no fee for Clean Vessel Act grant recipients)				1 + 1
	Programmatic General Permit				1+1
	Removal of Derelict Structures	\$100.00			1 + 1
	Residential Flood Hazard Mitigation	\$100.00			1 + 1
	Swim Floats	\$100.00			1+1
	Emergency/Temporary Authorization	**			**
	Other, (please specify):				
N	ote: Carry subtotals over to Part III, page 2 of this form. Sub	ototal 🖶			

See fee schedule on registration/application.

Contact the specific permit program for this information.

(Contact numbers are provided in the instructions)

Part IV: General Permit Registrations and Requests for Other Authorizations (continued)

✓ General Permits and Other Authorizations	Initial Fees	No. of Permits Applied For	Total Initial Fee	Original + Required Copies
WASTE MANAGEMENT				
Addition of Grass Clippings at Registered Leaf Composting Facilities	\$500.00			1 + 0
☐ Beneficial Use Determination	*			
Certain Recycling Facilities:				
☐ Drop-site Recycling Facility	\$200.00			1 + 0
☐ Limited Processing Recycling Facility	\$500.00			1 + 0
☐ Recyclables Transfer Facility	\$500.00			1 + 0
Single Item Recycling Facility	\$500.00			1 + 0
\$0 ☐ Collection and Storage of Post Consumer Paint	\$0			
Contaminated Soil and/or Staging Management (Staging/Transfer) Registration Only Approval of Registration by DEEP Renewals	\$250.00 \$1500.00 \$750.00			1 + 0 1 + 0
☐ Connecticut Solid Waste Demonstration Project	\$1000.00			1 + 0
☐ Disassembling Used Electronics	\$2000.00			1 + 0
☐ Leaf Composting Facility	none			1+1
☐ Municipal Transfer Station	\$800.00			1+1
One Day Collection of Certain Wastes and Household Hazardous Waste	\$1000.00			1 + 0
☐ Sheet leaf Composting Notification	\$0			**
Special Waste Authorization Landfill or RRF Disposal Asbestos Disposal homeowner	\$660.00 \$300.00 \$0			1 + 0
☐ Storage and Processing of Asphalt Roofing Shingle Waste	\$2500.00			1 + 0
☐ Storage and Processing of Scrap Tires for Beneficial Use	\$1250.00			1 + 0
☐ Emergency/Temporary Authorization	**			**
Other, (please specify):				
REMEDIATION				
☐ In Situ Groundwater Remediation: Enhance Aerobic Biodegradation	*			1 + 2
☐ In Situ Groundwater Remediation: Chemical Oxidation	\$500.00			1 + 0
☐ Emergency/Temporary Authorization	*			**
Note: Carry subtotals over to Part III, page 2 of this form.	ototal 🖶			

[★]See fee schedule on registration/application.

(Contact numbers are provided in the instructions)

Affirmative Action, Equal Employment Opportunity and Americans with Disabilities

The Connecticut Department of Energy and Environmental Protection is an Affirmative Action/Equal Opportunity Employer that is committed to complying with the requirements of the Americans with Disabilities Act (ADA). Please contact us at (860) 418-5910 or deep.accommodations@ct.gov if you: have a disability and need a communication aid or service; have limited proficiency in English and may need information in another language; or if you wish to file an ADA or Title VI discrimination complaint.

^{★★} Contact the specific permit program for this information.



General Permit Registration Form for the Discharge of Stormwater and Dewatering

Prior to completing this form, you **must** read the instructions for the subject general permit available 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 <u>status of your registration</u> 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: Stormwater					

Part I: Registration Type

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

Registration Type			Registration Timeline			
	Re-re Existing Perm	gistration nit No. GSN	of ne Re-re	On or before February 1, 2014* e: Failure to renew a permit by this date will require submission ew registration. egistrants must only complete Parts I, II, III (except Question 8), Question 1, VII and submit Attachment A.		
	New Registration (Refer to Section 2 of the	Locally Approvable Projects Size of soil disturbance:	Ne	w registration - Sixty (60) days prior to the initiation of the construction activity for: Sites with a total soil disturbance area of 5 or more acres		
	permit for definitions of Locally Exempt and Locally Approvable Projects)	□ Locally Exempt Projects Size of soil disturbance: 2.85		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		
	disturbance:2.85			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 an 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 [#1855]
	 b. Locally exempt projects (registration and Plan): \$3,000 total soil disturbance area ≥ one (1) and < twenty (20) acres. [#1856] \$4,000 total soil disturbance ≥ twenty (20) acres and < fifty (50) acres. [#1857] \$5,000 total soil disturbance ≥ fifty (50) acres. [#1858]
2.	Re-Registrations \$625 (sites previously registered prior to September 1, 2012) [#1853] \$0 (sites previously registered between September 1, 2012 and the issuance date of this permit) [#1854]
sec in tl	e fees for municipalities shall be half of those indicated in subsections 1.a., 1.b., and 2 above pursuant to etion 22a-6(b) of the Connecticut General Statutes. State and Federal agencies shall pay the full fees specified his subsection. The registration will not be processed without the fee. The fee shall be non-refundable and shall 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.).

	militar, East Harris, Garrix (or, Gr., II, III, Gio.).						
1.	. Registrant /Client Name: Connecticut Department of Transportation						
	State Agency •						
	Secretary of the State business ID #:	I					
	Mailing Address: 1107 Cromwell Ave - Distr	rict 1					
	City/Town: Rocky Hill	State: CT	Zip Code: 06067				
	Business Phone: (860)2584601	ext.:					
	Example:(xxx) xxx-xxxx						
	Contact Person: Ravi V. Chandran	Title: District Eng					
	E-Mail: Ravi.Chandran@CT.gov						
	Additional Phone Number (if applicable):		ext.				
2.	2. List billing contact, if different than the registrant:						
	Name:						
	Mailing Address:						
	City/Town:	State:	Zip Code:				
	Business Phone:	ext.:					
	Contact Person:	Title:					

Part III: Registrant Information (continued)

3. List primary contact for departmental correspondence and inquiries, if different than the registrant:		erent than the registrant:			
	Name:				
	Mailing Address:				
	City/Town:	State:	Zip Code:		
	Business Phone:	ext.:			
	Site Phone:	Emergency Phone:			
	Contact Person:	Title:			
	Association (e.g. developer, general or site contr	actor, etc.):			
4.	List owner of the property on which the activity w	vill take place, if different f	rom registrant:		
	Name: Department of Energy and Environmental Protection				
	Mailing Address: 79 Elm Street				
	City/Town: Hartford	State: CT	Zip Code: 06106-5127		
	Business Phone: (860)4243578	ext.:	·		
	Contact Person: Laurie Giannotti				
5.	List developer if different from registrant or prim	ary contact:			
٥.	List developer, if different from registrant or primary contact: Name:				
	Mailing Address:				
	City/Town:	State:	Zip Code:		
	Business Phone:	ext.:	Zip Gode.		
	Contact Person:	Title:			
6.	List general contractor, if different from registran				
٥.	Name:	tor primary contact.			
	Mailing Address:				
	City/Town:	State:	Zip Code:		
	Business Phone:	ext.:	Zip Gode.		
	Site Phone:	Off Hours Phone:			
	Contact Person:	Title:			
	Contact i erson.	riue.			
7.	List any engineer(s) or other consultant(s) employed or retained to assist in preparing the registration and/or Stormwater Pollution Control Plan. Please select if additional sheets are necessary, and label and attach them to this sheet.				
	Name: Department of Transportation				
	Mailing Address: 2800 Berlin Turnpike				
	City/Town: Newington	State: CT	Zip Code: 06131		
	Business Phone: 860-594-2582	ext.:			
	Contact Person: Vitalij Staroverov	Title: Project Engineer			
	Service Provided:				
8.	List Reviewing Qualified Professional (for locally	approvable projects only):		
	Name:	Conta	ct Person:		
	Mailing Address:				
	City/Town:	State:	Zip Code:		
	Business Phone:	ext.:			

Part IV: Site Information

1.	Site Name: Farmington Canal Heritage Trail Extension Street Address or Description of Location: 600 ft East of the intersection of Peck Lane and Jarv ft North of I-691 at the Southington Town Line trail connector. City/Town: Cheshire State: CT Zip Code: 06410 Brief Description of construction activity: The trail will consist of a 12-foot wide paved surface version.		
	stone dust shoulder. The trail will be constructed over three existing bridges (see location plan) River, West Johnson Avenue, and Interstate 691. The bridges do not require structural modification they will require installation of a new membrane surface, paving the deck, and adding a fence to that will accommodate the trail users for safety. Fencing will also be provided along the trail as a ditches and underdrains will be provided where necessary to accommodate drainage.	ation; how the para	ever, pets
	Project Start Date: 09 / 2015 Anticipated Completion Date: 11 / 2016		
	(month/ yr) (month/ yr)		
	Normal working hours: 7 AM to 5 PM		
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, D River, East Haven, East Lyme, Essex, Fairfield, Greenwich, Groton (City and Town), Old Lyme, Hamden, Ledyard, Lyme, Madison, Milford, Montville, New London, New Haven, North Haven, Norwich, Old Saybrook, Orange, Preston, Shelton, Stamford, Stonington (Borough and Town), Waterford, West Haven, Westbrook and Westport.	Guilford, Norwalk,	ep
	If "yes", and this registration is for a new authorization or a modification of an existing authorization physical footprint of the subject activity is modified, you must provide documentation the DEEP Island Sound Programs or the local governing authority has issued a coastal site plan approval the project is exempt from coastal site plan review. Provide this documentation with your registr Attachment B. See guidance in Appendix D of the general permit. Information on the coastal bo available at the local town hall or at www.cteco.uconn.edu/map_catalog.asp . Additional DEEP Neublications are available by contacting DEEP staff at 860-424-3555.	Office of L or determ ation as undary is	ong

Part IV: Site Information (continued)

6.	EN	DANGERED OR THREATENED SPECIES:		
	In order to be eligible to register for this General Permit, each registrant must 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 section 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.			jered as Permit nis
	Each registrant 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.			if the
	a.	Provide the date the NDDB maps were reviewed: <u>December 2014</u> (Print a copy of you viewed since it must be submitted with this registration as part of Attacment C.)	the NDDE	3 map
	b.	For a registrant using a limited one-year determination or safe harbor determination to regist General Permit, provide the Department's Wildlife Divison NDDB identification number for a determination: 201303092 (The number is on the determination issued by the Wildlife Divison).	any such	
	C.	verify that I have completed Attachment C to this Registration Form.	⊠ Yes	
	3(b	more information on threatened and endangered species requirements, refer to Appendix A (2) of this General Permit, visit the DEEP website at www.ct.gov/deep/nddbrequest or call to -3011.		
7.		LD AND SCENIC RIVERS: Is the proposed project within the watershed of a designated d and Scenic River? (See Appendix H for guidance)	☐ Yes	⊠ No
8.	WW\	UIFER PROTECTION AREAS: Is the site located within a mapped aquifer protection area w.ct.gov/deep/aquiferprotection as defined in section 22a-354h of the CT General Statutes? radditional guidance, please refer to Appendix C of the General Permit)	☐ Yes	⊠ No
9.	with	GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL: Is the activity in accordance of Guidelines for Erosion and Sediment Control and local erosion & sediment trol ordinances, where applicable?	nce Yes	☐ No
10.	Ha	STORIC AND/OR ARCHAEOLOGICAL RESOURCES: as the site of the proposed activity been reviewed (using the process outlined in pendix 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	☐ Yes	⊠ No
	C.	The proposed activity has been reviewed and authorized under an Army Corps of Engineers Section 404 wetland permit.	☐ Yes	⊠ No
11.		ONSERVATION OR PRESERVATION RESTRICTION: the property subject to a conservation or preservation restriction?	☐ Yes	⊠ No
	su	Yes, proof of written notice of this registration to the holder of such restriction or a letter from ch restriction verifying that this registration is in compliance with the terms of the restriction, bmitted as Attachment D.		r of

Part V: Stormwater Discharge Information

Table 1	Table 1					
Outfall #	a) Type	b) Pipe Material	c) Pipe Size	CT ECÓ. A decimal to Directions on how to use to conversions can be found DEEP-WPE	nd lat/long, go to: format is required here. CT ECO to find lat./long. and d in Part V, Section d of the ED-INST-015.	e) What method was used to obtain your latitude/longitude information?
				Longitude	Latitude	
EO-1	pipe	concrete	<u>36"</u>	-7 <u>2.</u> 9 <u>0</u> 2_7	4_1.5_4_7_3_4	CT ECO
	Select One:	Select One:	Select One:	-1.1.1.1.1.1.1	LULLULU	Select One:
	Select One:	metal	Select One:	4000000		Select One:
	Select One:	Select One:	Select One:	400000	1111111	Select One:
	Select One:	Select One:	Select One:	-	LULULU	Select One:

Table 2	able 2					
Outfall #	a) For temporary and permanent outfalls, provide a start date. For temporary discharges, also provide a date the discharge will cease.	b) For the drainage area associated with each outfall: Effective Impervious Area Before Construction	c) For the drainage area associated with each outfall: Effective Impervious Area After Construction	d) To what system or receiving water does your stormwater runoff discharge? either "storm sewer" or "wetlands/waterbody" (If you select "storm sewer" proceed to Part VI of the form. If you select "wetlands/waterbody" proceed to next question)	e) For each outfall, does it discharge to any of the following towns: Branford, Kent, Manchester, Meriden, North Branford, Norwalk, or Wilton? (If no, proceed to Part VI of the form. If yes, proceed to next question.)	f) For each outfall, does it discharge to a "freshwater" or "salt water"? (If you select "freshwater" proceed to Table 3. If you selected "salt water", proceed to Part VI of the form.)
EO-1	09/2015- mm/dd-mm/dd	1,185 sq feet	1,185 sq feet	wetlands/waterbody	☐ Yes ⊠ No	Select one:
	- mm/dd-mm/dd	sq feet	sq feet	Select one:	☐ Yes ☐ No	Select one:
	- mm/dd-mm/dd	0 sq feet	sq feet	Select one:	☐ Yes ☐ No	Select one:
	- mm/dd-mm/dd	0 sq feet	sq feet	Select one:	☐ Yes ☐ No	Select one:
	- mm/dd-mm/dd	0 sq feet	sq feet	Select one:	☐ Yes ☐ No	Select one:
		1,185 total sq feet	1,185 total sq feet			

Part V: Stormwater Discharge Information (continued)

Table 3 Provide the following information about the receiving water(s)/wetland(s) that receive stormwater runoff from your site:				
Outfall #	a) What is your 305b ID # (water body ID #)? (Section 3.b, of the DEEP-WPED-INST-015, explains how to find this information)	b) Is your receiving water identified as a impaired water in the "Impaired Waters Table for Construction Stormwater Discharges"? If yes, proceed to next question. If no, proceed to Part VI: Pollution Control Plan.	c) Has any Total Maximum Daily Load (TMDL) been approved for the impaired water?	
		□ Y □ N	□ Y □ N	
		□ Y □ N	□ Y □ N	
		□ Y □ N	□ Y □ N	
		□ Y □ N	□ Y □ N	
		□ Y □ N	□Y□N	

Part V: Stormwater Discharge Information (continued)

	Impaired waters: If you answered "yes" to Table 3, question b., 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 1.b. below:		
	a.	No more than 3 acres is disturbed at any time;	☐ Yes
	OF	R .	
	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:		uestion
	a.	The Plan documents there is sufficient remaining Waste Load Allocations (WLA)in the TMDL for the proposed discharge,	he Yes
	A٨	ID .	
	b.	Control measures shall be implemented to assure the WLA will not be exceeded,	☐ Yes
	A٨	ID .	
	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
Pá	art '	VI: Pollution Control Plan (select one of the following four categories)	
\boxtimes		I am registering a Locally Exempt project and submitting the required electronic Plan (in Adobe TM similar publically available format) pursuant to Section $3(c)(2)(E)$ of this permit.	PDF or
		☐ Plan is available at the following Internet Address (URL):	
]	I am registering a Locally Approvable project and have chosen not to submit the Plan with this regular pursuant to Section $3(c)(1)$ of this permit.	istration
	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.		ailable
		☐ Plan is attached to this registration form☐ Plan is available at the following Internet Address (URL):	
	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 [INSERT NAME OF REGIST			
submitted to the commissioner by Ravi V. Chandran, District 1 Engi	NACT.		
[INSERT ADDRESS OF PROJEC	for CT OR ACTIVITY BELOW!		
an activity located at Jarvis Street to Southington Town Line	and that all		
terms and conditions of the general permit are being met for all discheligible for authorization under such permit. I further certify that a systhis general permit will continue to be met for all discharges authorized registration filed pursuant to this general permit is on complete and a without alteration of their text. I certify that I have personally examine basis for this certification, including but not limited to all information and I certify, based on reasonable investigation, including my inquiry information, that the information upon which this certification is based knowledge and belief. I certify that I have made an affirmative determined general permit. I understand that the registration filed in connection we and shall comply with the requirements of Section 22a-430b of Connection was a shall comply with the requirements of Section 22a-430b of Connection was a shall comply with the requirements of Section 22a-430b of Connection was a shall comply with the requirements of Section 22a-430b of Connection was an another applicable law."	harges which have been initiated and such activity is stem is in place to ensure that all terms and conditions of ed by this general permit at the site. I certify that the accurate forms as prescribed by the commissioner and am familiar with the information that provides the elescribed in Section 3(b) (8)(A) of such general permit, of those individuals responsible for obtaining such at is true, accurate and complete to the best of my hination in accordance with Section 3(b)(8)(B) of this with such general permit is submitted in accordance with ecticut General Statutes. I also understand that attention and in this certification may be punishable as a		
For Re-registrants: "I hereby certify that I am making this certification in connection with Discharge of Stormwater and Dewatering Wastewaters from Constru- [INSERT NAME OF REGISTRANT BELOW]			
by for an activity located at			
[INSERT ADDRESS OF PROJECT OR ACTIVITY BELOW]			
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 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 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."			
Law Chard	3/2/15		
Signature of Registrant	Date		
Ravi V. Chandran, P.E	District 1 Engineer		
Name of Registrant (print or type)	Title (if applicable)		
4843	2-25-2015		
Signature of Preparer (if different than above)	Date		
Vitalij V. Staroverov, E.I.T	Project Engineer		
Name of Preparer (print or type)	Title (if applicable)		

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

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

"I hereby certify that I am a professional engineer of certification in connection with a registration under su	licensed in the State of Connecticut. I am making this uch general permit, submitted to the commissioner by own	
Ravi V. Chandran, P.E	for an activity located at	
[INSERT ADDRESS OF PROJECT OR	•	
Between Jarvis Street and Southington Town Line		
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 stand care for such projects, that the Stormwater Pollution Control Plan has been prepared in accordance we the Connecticut Guidelines for Soil Erosion and Sediment Control, as amended, the Stormwater Qual Manual, as amended, and the conditions of the general permit, and that the controls required for such are appropriate for the site. I further certify, based on reasonable investigation, including my inquiry of individuals responsible for obtaining such information, that the information upon which this certification 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 set 53a-157b of the Connecticut General Statutes and any other applicable law."		
hold The	2/25/15	
Signature of Design Professional	Date	
Michael G. Fisher	Senior Project Manager	
Name of Professional (print or type)	Title	
355 Research Pkwy	Meriden.	
Mailing Address	City/Town	
CT 06450	203-630-1406	
-State Zip Code	Business Phone	
No. 21170 No. 21170 CENSER OF CONNECTION No. 21170	21170 License #	
Affix P.E/L.A Stamp Here		

Part IX: Reviewing Qualified Professional Certification

The following certification must be signed by a) a Conservation District reviewer OR, b) a qualified soil erosion and sediment control and/or professional engineer

	Review certification by Conservation District:					
	1.) District: list of districts					
	Date of Affirmative Determination:					
	"I am making this certification in connection with a registration under General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities, submitted to the commissioner					
	[INSERT NAME OF REGISTRANT BELOW]					
	by		for an activity located at			
	٠,	[INSERT ADDRESS OF PROJECT OR ACTIVITY BELO				
Sig	certifica on the s that the general to the m practica function this gen	rersonally examined and am familiar with the information that provide tion, and I affirm, based on the review described in Section 3(b)(11) tandard of care for such projects, that the Stormwater Pollution Con activity authorized under this general permit will comply with the ten permit and that all stormwater management systems: (i) have been eximum extent achievable using measures that are technologically ble and that conform to those in the Guidelines and the Stormwater properly as designed; (iii) are adequate to ensure compliance with eral permit; and (iv) will protect the waters of the state from pollution	(C) of this general permit and trol Plan is adequate to assure ms and conditions of such designed to control pollution available and economically Quality Manual; (ii) will the terms and conditions of			
Na		strict Professional and License Number (if applicable)				
_	Or					
Ш		w certification by Qualified Professional				
		npany:				
		ne:ense # :				
	LICE	::iSC # .				
Le	vel of inc	dependency of professional:				
Re	quired fo	or all projects disturbing over 1 acre:				
1.	I verify I	am not an employee of the registrant.	☐ Yes			
2.	2. I verify I have no ownership interest of any kind in the project for which the registration is being submitted. ☐ Yes					
Re	quired fo	or projects with 15 or more acres of site disturbance (in additio	n to questions 1&2):			
3.		did not engage in any activities associated with the preparation, pla erosion and sediment control plan or stormwater management syste				
			☐ Yes			
4.		am not under the same employ as any person associated with the pring of the soil erosion and sediment control plan or stormwater maint.				

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, [INSERT NAME OF REGISTRANT BELOW]				
submitted to the commissioner by [INSERT ADDRESS OF PROJECT OR ACTIVITY BELOW]				
[INSERT ADDRESS OF PROJECT OR ACTIVITY BELOW] for an activity located at 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 further certify that I have made the 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 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 Date:				
Name of Reviewing Qualified Professional License No.:				
Affix P.E./L.A. Stamp Here				

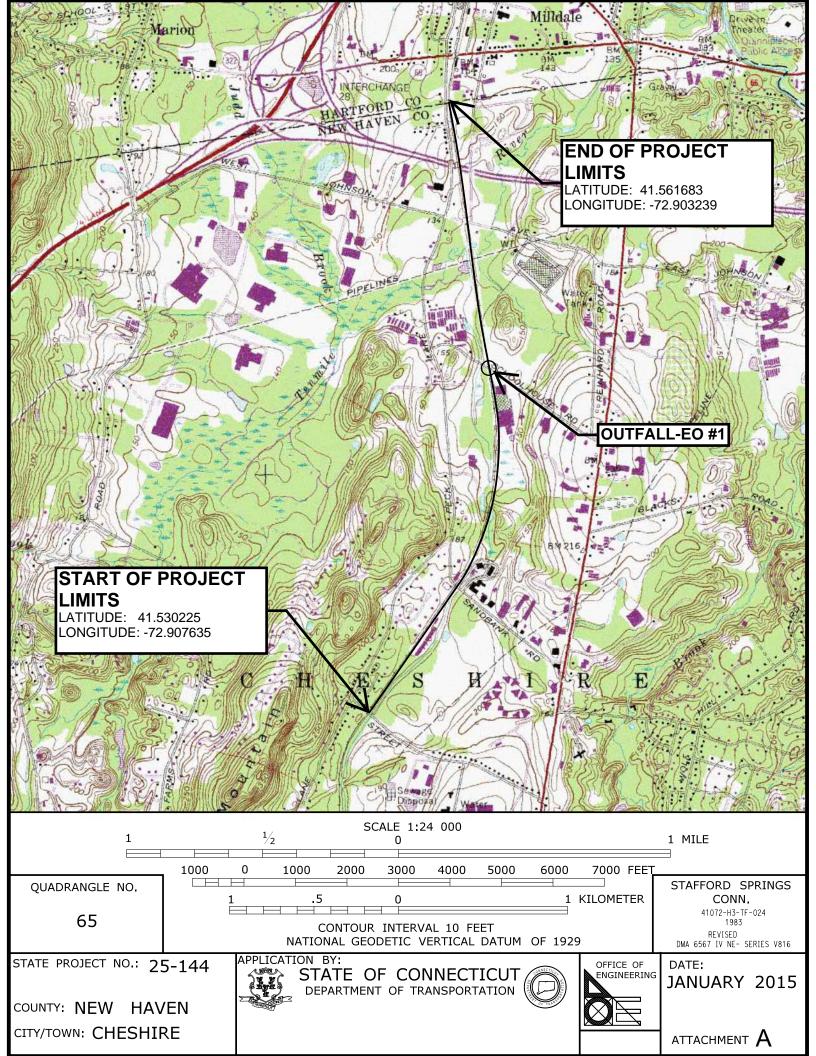
Part X: Supporting Documents

Select the applicable box below for each attachment being submitted with this registration form. When submitting any supporting documents, please label the documents as indicated below (e.g., Attachment A, etc.) and be sure to include the registrant's name as indicated on this certification form.

	Attachment A:	Select here as verification that an 8 ½" X 11" copy of the relevant portion of a USGS Quadrangle Map with a scale of 1:24,000, showing the exact location of the facility has been submitted with this registration. Indicate the quadrangle name on the map, and be sure to include the registrant's name. (To obtain a copy of the relevant USGS Quadrangle Map, call your town hall or DEEP Maps and Publications Sales at 860-424-3555)
	Attachment B:	Documentation related to Coastal Consistency Review, if applicable.
\boxtimes	Attachment C:	Threatened and Endangered Species Form and any additional information (such as a copy of a NDDB map)
	Attachment D:	Conservation or Preservation Restriction Information, if applicable.
\boxtimes	Attachment E:	Where applicable, non-electronic Pollution Control Plan.

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



ATTACHMENT C: THREATENED AND ENDANGERED SPECIES

threate of the	nec	n about compliance with the requirements of Section 3(b)(2) of this general permit, regarding I and endangered species, is in Appendix A of the general permit. Choose one or more (if applicable) wing in order to be eligible to register for this General Permit. A registrant who does not or cannot of eligible to register under this General Permit.
	Sel	f Assessment using the NDDB maps – Select this only if:
	a.	The site of the construction activity is not entirely, partially or within a ¼ mile of a shaded area depicted on the Department's Natural Diversity Database maps and this determination was made not more than six months before the date of submitting this registration;
		AND
	b.	The entity registering for this General Permit has no reasonably available verifiable scientific, or other credible information that the construction activity could reasonably be expected to have an adverse impact upon a federal or state species listed as threatened or endangered.
		ach a copy of the NDDB map used to conduct the self assessment used to register for this general mit.
	Ge	te: Both a and b as used in this section, must be true in order for a Registrant to register for this neral Permit using the self-assessment option. If neither is true, a Registrant cannot use the self-sessment option to comply with Section 3(b)(2) and Appendix A of the General Permit.
\boxtimes	Lin	nited One-Year Determination – Select this only if:
	a.	The entity registering for this General Permit has obtained a limited one-year determination from the Department's Wildlife Division regarding threatened and endangered species: i) within a year of the date of submitting this registration; or ii) more than 1 year before submitting this registration, but such determination has been extended by the Department within one year of the date of submitting this registration;
		AND
	b.	The Registrant has provided to the Department's Wildlife Division any reasonably available verifiable scientific, or other credible information that the construction activity could reasonably be expected to have an adverse impact upon a federal or state species listed as threatened or endangered.
		ovide the date the limited one-year determination was issued by the Department's Wildlife Division ril 21, 2014;
	or	
		ovide the date that the most recent extension to a limited one year determination was issued by the partment's Wildlife Division
	Ge	te: Both a and b as used in this section, must be true in order for a Registrant to register for this neral Permit using the Limited One-Year Determination option. If a Limited One-Year Determination extension to any such determination was issued by the Department's Wildlife Division more than one

year before the submission of this registration, a Registrant cannot use any such determination or

14 of 16

extension to comply with Section 3(b)(2) and Appendix A of the General Permit.

ATTACHMENT C: THREATENED AND ENDANGERED SPECIES (continued)

Ш	Select here if the Limited One-Year Determination issued by the Department includes a Mitigation Plan.
	Provide the date the Mitigation Plan was approved:
	Governmental Entity Approving the Plan:
	As of the date this Registration is submitted,
	Has the Mitigation Plan been fully implemented? ☐ Yes ☐ No
	Date commenced: Date completed:
	Is the Mitigation Plan partially implemented? ☐ Yes ☐ No
	If yes, what actions have been taken?
	And which actions are yet to be implemented and what is the timeframe for completion of such actions:
	Is the Mitigation Plan yet to be implemented? Yes No
	If yes, specify the timeframe for implementation: to
	And summarize actions to be implemented:
Safe	e Harbor Determination - Select this only if:
	The entity registering for this General Permit has obtained a Safe Harbor Determination from the Department's Wildlife Division regarding threatened and endangered species: i) within 3 years of the date of submitting this registration; or ii) more than 3 years before submitting this registration, but within one-year of a one-year extension issued by the Department's Wildlife Division to a safe harbor determination;
	AND
	The entity registering for this General Permit has provided to the Department's Wildlife Division any reasonably available verifiable scientific, or other credible information that the construction activity could reasonably be expected to have an adverse impact upon a federal or state species listed as threatened or endangered.
Pro	vide the date the Department's Wildlife Division issued a Safe Harbor Determination:
	oplicable, provide the date that any one-year extension to a Safe Harbor Determination was issued he Department's Wildlife Division:
Ger issu regi sect	e: Both a and b as used in this section, must be true in order for a Registrant to register for this neral Permit using the Safe Harbor Determination option. If a Safe Harbor Determination was led by the Department's Wildlife Division more than three years before the submission of this stration, and has not been extended, a Registrant cannot use any such safe harbor to comply with tion 3(b)(2) and Appendix A of this General Permit. If a Safe Harbor Determination was granted and ended for one-year, more than four years before the submission of this registration, a Registrant

general permit.

cannot use any such Safe Harbor Determination to comply with Section 3(b)(2) and Appendix A of the

ATTACHMENT C: THREATENED AND ENDANGERED SPECIES (continued)

Select here if the safe harbor noted above includes a Mitigation Plan.
Provide the date the Mitigation Plan was approved:
Governmental Entity Approving the Plan:
As of the date this Registration is submitted,
Has the Mitigation Plan been fully implemented? ☐ Yes ☐ No
Date commenced: Date completed:
Is the Mitigation Plan partially implemented? Yes No If yes, what actions have been taken?
And which actions are yet to be implemented and what is the timeframe for completion of such actions:
Is the Mitigation Plan yet to be implemented? ☐ Yes ☐ No
If yes, specify the timeframe for implementation: to
And summarize actions to be implemented:



ENERGY & ENVIRONMENTAL PROTECTION

April 21, 2014

Mr. Christopher Samorajczyk CT Department of Transportation 2800 Berlin Turnpike P.O. Box 317546 Newington, CT 06131 christopher.samorajczyk@ct.gov

Project: CT DOT Project #25-144, Farmington Canal Heritage Trail Extension in Cheshire, Connecticut NDDB Determination No.: 201303092

Dear Chris,

I have reviewed Natural Diversity Data Base maps and files regarding the area delineated on the map you provided for the proposed CT DOT Project # 25-144, Farmington Canal Heritage Trail Extension in Cheshire, Connecticut. According to our information we have records for State Special Concern Terrapene carolina carolina (eastern box turtle), Glyptemys insculpta (wood turtle) and Thamnophis sauritus (eastern ribbon snake) from the vicinity of this property. Thank you for including the protection strategies and protocols that will be in place to protect these species from project impacts. If these protection strategies are followed then the proposed activities will not have an adverse impact on these three reptiles. Thank you in advance for implementing the protection measures and if you have any further questions, please let me know. This determination is good for one year. Please re-submit an NDDB Request for Review if the scope of work changes or if work has not begun on this project by April 21, 2015.

Natural Diversity Data Base information includes all information regarding critical biological resources available to us at the time of the request. This information is a compilation of data collected over the years by the Department of Energy and Environmental Protection's Natural History Survey and cooperating units of DEEP, private conservation groups and the scientific community. This information is not necessarily the result of comprehensive or site-specific field investigations. Consultations with the Data Base should not be substitutes for on-site surveys required for environmental assessments. Current research projects and new contributors continue to identify additional populations of species and locations of habitats of concern, as well as, enhance existing data. Such new information is incorporated into the Data Base as it becomes available.

Please contact me if you have further questions at (860) 424-3592, or dawn.mckay@ct.gov. Thank you for consulting the Natural Diversity Data Base. Also be advised that this is a preliminary review and not a final determination. A more detailed review may be conducted as part of any subsequent environmental permit applications submitted to DEEP for the proposed site.

Sincerely,

Camin nik

Dawn M. McKay Environmental Analyst 3

NOTICE TO CONTRACTOR – ENDANGERED SPECIES

The Contractor is hereby notified that three State listed species of Special Concern, eastern box turtle (*Terrapene carolina carolina*), wood turtle (*Glyptemys insculpta*), and eastern ribbon snake (*Thamnophis sauritus*) are present within the project limits. In Connecticut, these three species inhabit a variety of habitats, including woodlands, field edges, thickets, marshes, bogs, and stream banks. They will use wetland areas at various times during the season. If work must be done during the listed species active period (April 1 to November 1) the DOT's Office of Environmental Planning (OEP) will require precautionary measures to protect the listed species and all existing habitat. All construction activities taking place within these three species active period will need to be coordinated with OEP.

The Contractor shall arrange through the Engineer at least 10 days prior to the commencement of any construction activities that a CT DOT Environmental Inspector from the OEP or their authorized delegate is available to meet and discuss proper protocol for maintaining environmental commitments made to the protection of these species and habitat. OEP will provide oversight to ensure that the following protocols are followed and maintained during the course of the project:

- Exclusionary practices will be required where wetlands are present in order to prevent any turtle access to construction areas. These measures will need to be installed at the limits of disturbance as shown on the contract plans.
- All Staging and storage areas, outside of previously paved locations, regardless of the duration of time they will be utilized, must be reviewed by and receive written approval from OEP.
- All construction personnel working within wood turtle habitat must be apprised of the species description and the possible presence of a listed species.
- The work area must be searched each morning prior to any work being done.
- In areas where silt fence is used for exclusion, it shall be removed as soon as the area is stable to allow for reptile and amphibian passage to resume.
- Any turtles encountered within the immediate work area shall be carefully
 moved to an adjacent area outside of the excluded area and OEP must be
 contacted with location.
- No heavy machinery or vehicles may be parked in any turtle habitat.

• Special precautions must be taken to avoid degradation of wetland habitats including any wet meadows and seasonal pools.

These species are protected by state laws which prohibit killing, harming, taking, or keeping them in your possession. Workers should be notified of the existence of Eastern box turtles, wood turtles, and eastern ribbon snake in this area and be apprised of the laws protecting them. Photographs of all three species (species ID sheets will be provided by OEP) shall be posted in the Contractor's and DOT field office. Any observations of this species are to be immediately reported to OEP at (860)-594-2938.

Natural Diversity Data Base Areas

CHESHIRE, CT

December 2014



State and Federal Listed Species & Significant Natural Communities



NOTE: This map shows general locations of State and Federal Listed Species and Significant Natural Communities. Information on listed species is collected and compiled by the Natural Diversity Data Base (NDDB) from a number of data sources. Exact locations of species have been buffered to produce the general locations. Exact locations of species and communities occur somewhere in the shaded areas, not necessarily in the center. A new mapping format is being employed that more accurately models important riparian and aquatic areas and eliminates the need for the upstream/downstream searches required in previous versions.

This map is intended for use as a preliminary screening tool for conducting a Natural Diversity Data Base Review Request. To use the map, locate the project boundaries and any additional affected areas. If the project is within a shaded area there may be a potential conflict with a listed species. For more information, complete a Request for Natural Diversity Data Base State Listed Species Review form (DEP-APP-007), and submit it to the NDDB along with the required maps and information. More detailed instructions are provided with the request form on our website.

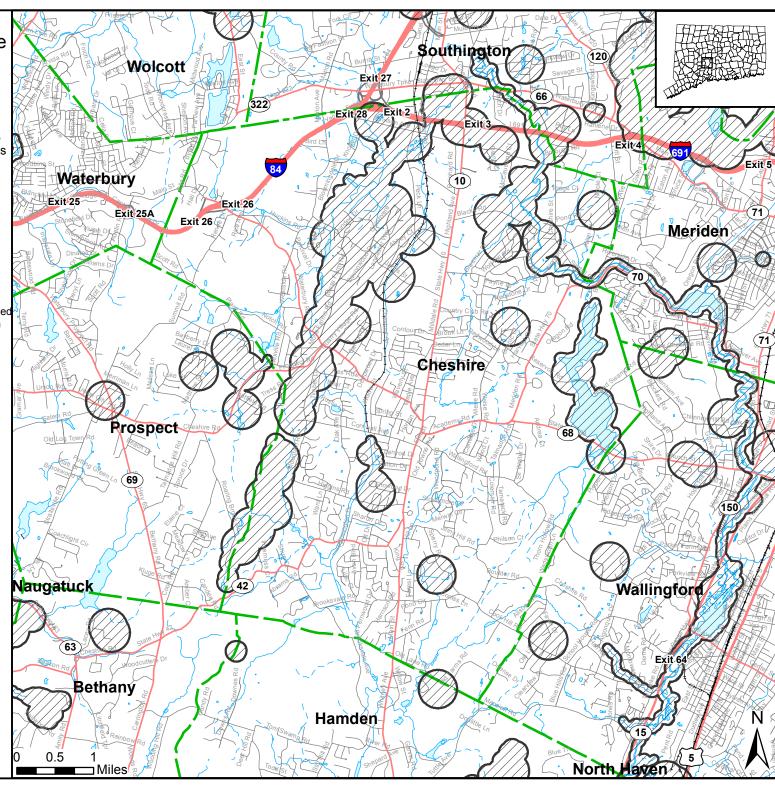
www.ct.gov/deep/nddbrequest

Use the CTECO Interactive Map Viewers at www.cteco.uconn.edu to more precisely search for and locate a site and to view aerial imagery with NDDB Areas.

QUESTIONS: Department of Energy and Environmental Protection (DEEP) 79 Elm St., Hartford CT 06106 Phone (860) 424-3011



Connecticut Department of Energy & Environmental Protection Bureau of Natural Resources Wildlife Division



STORMWATER POLLUTION CONTROL PLAN

Farmington Canal Heritage Trail Extension



Connecticut Department of Transportation-District 1 1107 Cromwell Avenue Rocky Hill, CT 06067

February 2015

Prepared by: State Highway Design 2800 Berlin Turnpike Newington, CT 06111

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 816) including supplements thereto and the 2002 Connecticut Guidelines for Soil Erosion and Sediment Control and the 2004 Stormwater Quality Manual

Stormwater Pollution Control Plan

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1. Site Description

Site Description

The purpose of this project is to extend a shared use path known as the Farmington Canal Heritage Trail in the town of Cheshire. The Farmington Canal trail covers 84 miles from New Haven, CT to Northampton, MA with gaps located in the town of Cheshire.

This project consists of constructing a 12-foot wide paved shared use path with a 2-foot stone dust shoulder from Jarvis Street to the Southington Town Line. The trail will be constructed utilizing the former railroad corridor and over three existing bridges (see location plan) which do not need any structural modifications. Stone ditches and underdrains will be provided along the trail as needed.

Site work includes temporary access roads due to the trail being built over the former rail corridor and has limited access. Crosswalks will be installed at the side roads and may require alternating one-way traffic.

At the beginning of the project at Jarvis Street, the multi-use trail will be connected to end of the town-designed trail project 25-135. The towns' project extends 1.6 miles south from Jarvis street to Route 68/70 (West Main Street). The project will be aligned on the former railroad corridor with a 12-foot wide pathway and a stone dust shoulder.

Estimated Disturbed Area

The total site area for this project is **21.96 acres**. Please see table below for area breakdowns.

Locations	Total Acres
Multi use trail Impervious Pavement Post construction	3.49
Road crossing Impervious Pavement	0.85
2' Stone dust along trail	0.58
Edge treatment	0.24
*Disturbed area	2.85
Untouched pervious soil in site post construction	13.95
	21.96

^{*}Disturbed area of 2.84 acres is computed using the areas between edge of trail and sloping limits that will be affected during construction.

At the effective outfall location, the total drainage area is 0.17 acres with 0.03 acres of impervious pavement pre and post construction. See location plan attached, Appendix A.

Estimated Runoff Coefficient

The runoff coefficient assumed for pavement is 0.9. For the pervious areas, a coefficient of 0.25 is used and for the rail-bed ballast material a coefficient of 0.70 was assumed.

The pervious area pre construction is the total site area minus the rail-bed ballast material and road crossing shown as follows.

```
21.96 \ acres - (3.49 acres + 0.85 \ acres) = 17.62 \ acres \ of pervious \ area.
```

Pre-Construction

$$\frac{(17.62 \text{ ac.} \times 0.25) + (0.85 \text{ ac.} \times 0.9) + (3.49 \text{ ac.} \times 0.70)}{17.62 \text{ ac.} + 0.85 \text{ ac.} + 3.49 \text{ ac.}} = 0.35$$

The runoff coefficient assumed for pavement is 0.9. For the pervious areas, a coefficient of 0.25 was assumed and for the stone dust and edge treatment area a coefficient of 0.25

The pervious and impervious pavement combinations used are as follows:

```
Pervious: Disturbed area + untouched pervious soil 2.85 \ acres + 13.95 \ acres = 16.80 \ acres Impervious: Multi-use paved trail + road crossings 3.49 \ acres + 0.85 \ acres = 4.34 \ acres
```

Post Construction

```
\frac{(16.80 \text{ ac.} \times 0.25) + (4.34 \text{ ac.} \times 0.90) + (0.24 \text{ ac.} \times 0.25) + (0.58 \times 0.0.25)}{16.80 \text{ ac.} + 4.34 \text{ ac.} + 0.24 \text{ ac.} + 0.58 \text{ ac.}} = \mathbf{0.37}
```

The estimated average runoff coefficient of the site after construction activities are completed is 0.37

Receiving Waters

The storm water runoff not infiltrated in the ground will sheet flow from the wetlands located alongside the proposed trail. Once the storm runoff exceeds the capacity of the wetlands, the excess water will flow into the Farmington Canal that runs alongside of the majority of the trail eventually discharging into Ten Mile River.

Extent of Wetlands on Site

Although there are no anticipated direct wetland impacts, wetlands are located adjacent to the proposed construction throughout the project. In addition a vernal pool is also located in the vicinity of sta. 286+50 =/- east of the proposed constructions. At several locations, the construction activity will be within the 100-year flood limits as depicted in the plans.

2. Construction Sequencing

The contractor will be given approximately 12 months for the construction of all phases of the project. Prior to any work commencing a preconstruction meeting is required that should include ConnDOT, the contractor, utility representatives, and other agents who have responsibility and authority for the implementation, operation, monitoring and maintenance of the erosion and sediment (E&S) controls.

The duration of all construction activities are approximate and subject to change.

Preconstruction 15 days:

- 1. Conduct a preconstruction meeting
- 2. Clearly mark clearing limits and identify trees that need to be saved

Construction:

- 1. Remove the existing rail road ties within the project limits (5 days)
 - a. **NOTE:** The rail road spur located near the Kurt'z property (driveway) must be preserved
- 2. Perform clearing and grubbing for the trail corridor (start at Jarvis Street and work up station). Clear and grub for access road off Dickerman Road *(21 days combined)*
- 3. Install Sedimentation Control System and Erosion Controls (3 days)
- 4. *Excavate ballast material from Ten Mile River Bridge and reuse to build access road. (5 days total including activity 6 & 7)
 - a. Excavate ballast material from West Johnson Ave bridge and reuse it to build access road
 - b. Excavate ballast material from I-691 bridge and reuse it to build access road
- 5. When the Ten Mile bridge ballast material is removed, repair the Bridge's membrane and place process aggregate base to the elevation shown on the plans. (37 days)
- 6. Repeat the same operation for West Johnson Ave and I-691 bridges as described in paragraph 4
- 7. Complete bridge work as indicated on the structural plans (except for paving operations)
- 8. Construct temporary turnaround areas (3 days)
- 9. Excavate to subgrade & contaminated material along the remainder of the trail. (10 days)
- 10. Prepare formation of subgrade for the trail (3 days)
- 11. Install process aggregate base material (4 days)
- 12. Excavate for edge treatments, install geotextile material, underdrains and special rip rap (16 days)
 - a. Maximum area allowed of disturbance of 5 acres at any given time.
- 13. Install pavement layers and stone dust material to a finished grade (22 days)

- 14. Installed paved areas for benches, picnic tables and trash receptacles (6 days)
- 15. Stake out fence locations. (21 days, between activity 15 & 16)
- 16. Install fencing and railing along the corridor
- 17. Remove turnaround areas (4 days)
- 18. Install signage and pavement markings as indicated on the plans (8 days)
- 19. Install landscaping (5 days)
- 20. Remove temporary access road and reestablish area to its original conditions. (3 days)
- 21. Remove temporary erosion controls (1 day)
- 22. Perform final cleanup (4 days)

Approximately 210 working days

If the construction sequencing activities create an area of disturbance between two (2) acres and five (5) acres per discharge point, 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 as per 2002 Connecticut Guidelines for Soil Erosion and Sediment Control, page 5-11-25. The Contractor shall provide an inspection and maintenance plan for the temporary sedimentation trap as part of the amended SWPCP.

*For excavating ballast material see attached special provision items #0202315A – Disposal of Controlled Materials and #101117A – Controlled Materials Handling. When handling controlled materials (item #101117A) all suitable material excavated from the AOEC's may be reused within the AOEC from which it was excavated as fill/backfill as long as it is in accordance with the following conditions: (1) such soil is deemed to be structurally suitable as fill by the engineer. (2) The soil is not placed below the water table. (3) The CT DEEP groundwater classification of the area is not to be reused as fill. (4) The soil is not to be placed in an area that is subject to erosion.

3. Control Measures

Erosion and Sedimentation Controls

The location of the project is not within any locations of an aquifer protection area. However, CT DOT will have construction inspection personnel assigned to the project in order to oversee the Contractor's operations to ensure compliance with the provisions of the Standard Specifications. Further CT DOT oversight is provided by the District 1 Environmental Coordinator and the Office of Environmental Planning.

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

- If construction activities are complete or have been temporarily halted for more than seven (7) days, stabilization activities will be implemented within three (3) days.
- Areas that remain disturbed but inactive for at least 30 days shall receive temporary seeding or soil protection within seven (7) days.
- Disturbed areas that do not establish a vegetative cover within 30 days of seeding shall have erosion control blankets installed. Prior to the erosion control blanket installation, the soil would be prepared with the application of lime, fertilizer, and seed.
- Areas and the grounds 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.
- Stabilization practices will be implemented as quickly as possible in accordance with the Guidelines.
- 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 816 Section 1.10.03, Best Management Practices.
- In the event of a flood, the contractor should make every effort to secure the site prior to a major storm event. In the event of an anticipated storm/ flood event, no materials shall be stored and no staging areas should be placed below the 100-year elevation. Any material that can be hazardous to humans, animals or plant life should not be placed within the 500-year elevation. A construction-sequencing plan and water-handling plan with a contingency plan for flooding events must be submitted by the contractor and approved by the engineer prior to construction when working near a waterway.

Temporary Stabilization Practices

- <u>Erosion Control Matting</u>: On slopes steeper than 2:1 erosion control matting shall be used to stabilize the topsoil.
- <u>Silt Fence</u>: Silt fence shall be placed at the base of embankments (fill slopes).
- <u>Anti-Tracking Pads</u>: Construction entrances (gravel anti-tracking pads) shall be constructed at truck access points to off –road route.
- <u>Dust Control</u>: Routine sweeping and application of dust suppression agents, including water and calcium chloride, over exposed subbase shall be completed for dust control.

Stabilization practices shall be implemented no more than three days after completion, as final grades are reached, or if work has been suspended for more than seven 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 that shall conform to the 2002 Connecticut Erosion and Sedimentation Guidelines and are approved by the Engineer. 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 every seven calendar days. These areas shall also be inspected within 24 hours following any storm in which 0.5 inches or greater of rain occurs.

Stockpile stabilization area shall conform to the Erosion and Sedimentation Control Manual. In addition, if the stockpile is not used within 30 days it needs to be seeded and mulched. A Polyethylene cover shall be placed over the stockpile at all times other than load-in or load-out's. The maximum slope allowed is 1:1 with sand bags placed around the perimeter is required to secure the polyethylene sheeting. Please see environmental plans (ENV-14) for detailed instructions

Permanent Stabilization Practices

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 shall use permanent stabilization practices approved by the Engineer and conforming to Connecticut's Erosion and Sedimentation Control Guidelines (2002).

Structural Measures

Because of the sheet flow on the trail no stormwater structure measures are required however, there are 5 culverts already in place along the trail that mitigate runoff water and underground flow from each side of the trail. There is no proposed construction work to be done on these structures and will stay in place post-construction.

Approximately 17 inches of the ballast material will be removed from the bridges. In case of a storm event, should the bridge decks be filled with storm water after the ballast material is removed, pumps will be available on site for emergency use to dewater the bridge decks. The ballast material removed from the bridges will be sufficient for use of the anti-tracking pads on

the access roads and had been coordinated with Environmental Compliance.

Maintenance

All construction activities and related activities shall conform to the requirements of Section 1.10 "Environmental Compliance" of ConnDOT's Standard Specifications, Form 816. 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 1.10.03 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.

Post-construction maintenance will be under the responsibility of the town of Cheshire. Including but not limited to general tree clearing of overgrown branches, landscaping, trail, pavement repairs, pavement markings, trail amenities and restroom facilities.

4 Dewatering Wastewaters

Dewatering Guidelines

If encountered, dewatering wastewaters will be infiltrated into the ground unless otherwise directed by the Engineer. When dewatering is necessary, pumps used shall not be allowed to discharge directly into a wetland or watercourse. 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 ConnDOT Form 816.

5. Post-Construction Stormwater Management

Post-construction Guidelines

After the project is complete, the Town of Cheshire will perform the following maintenance and restorative measures:

- Litter/debris will be removed from the site.
- Mowing and maintenance of the turf areas and vegetated areas will occur as needed.
- Riprap outlet protection will be inspected and repaired annually or as needed.
- Maintenance of stone dust shoulder.

Post Construction Performance Standards

The existing site is mostly pervious, with the exception of the road crossings classifying the project as "Other Development". The following values were calculated for post-construction.

Effective Impervious Cover:

Effective Impervious Cover
$$= \frac{\text{Proposed impervious Area (acre)} + \text{Road Crossings (acre)}}{\text{Total Area of Site (acre)}} \times 100\%$$

$$= \underbrace{[12\text{ft (Paved surface)} \times (2.4\text{mile x 5280ft})] + 0.85 \text{ acres}}_{21.96 \text{ acres}}$$

$$= \frac{4.34 \text{ acres}}{21.96 \text{ acres}} \times 100\%$$

$$= 19.76\%$$

With the site being classified as "other development", the site must be designed to retain the full water quality volume. All of the stormwater on the 4.34 acres of impervious pavement will be treated as sheet flow prior to it reaching its discharge point at Ten Mile River.

Velocity Dissipation:

Splash pad computations are in the attached appendix B.

6. Other Controls

Waste Disposal

Construction site waste shall be properly managed and disposed of during the entire construction period. The contractor will be responsible for removing all waste disposal.

• A waste collection area will be designated. Construction traffic will be minimized through the area.

- Waste collection shall be scheduled regularly to prevent the containers from overfilling.
- 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 defined by the engineer.

Locations of waste disposal areas are located on environmental plans attached. Environmental plan sheet No. 14.

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 washwater 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 CTDOT Office of Environmental Planning. Approximate washout area located on plan sheet 10 adjacent to temporary access road, see plans for details.

The designated area shall be designed and maintained such that no overflows can occur during rainfall or after snowmelt. 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.

Anti-tracking Pads and Dust Control

Off—site vehicle tracking of sediment 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 existing 5 culverts, 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

Inspection Guidelines

All construction activities shall be inspected initially for plan implementation and then weekly for routine inspections.

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 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 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 once every month for three months.

Qualified personnel provided by the DOT District 1 Office shall conduct Inspections.

Items to be inspected: the following items shall be inspected as described below:

<u>Item</u>	Procedure
Silt Fence	Silt fence 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.
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.
Vehicle Entrances / Exits	Locations where vehicles enter or exit the site shall be inspected for evidence of off-site tracking.
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:

CTDOT 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. Monitoring Requirements

A written report summarizing the scope of the inspection, the name(s) and qualifications of inspection personnel, the date and time of the inspection, major observations relative to the implementation of the Pollution Control Plan, and actions taken shall be completed within 24 hours of the inspection. This report shall be retained as part of the Stormwater Pollution Control Plan for at least five years after the date of the inspection.

Turbidity monitoring shall be conducted at the three existing culvert locations depicted on the Plan utilizing a procedure consistent with 40 CFR Part 136 (http://www.epa.gov/region9/qa/pdfs/40cfr136_03.pdf) and may be taken manually or by an in-situ turbidity probe or other automatic sampling device equipped to take individual turbidity readings. The first sample shall be taken within the first hour of stormwater discharge from the site and at least three grab samples shall be taken during a storm event and shall be representative of the flow and characteristics of the discharge. Sampling shall be conducted at least monthly when there is a discharge of stormwater from the site while construction activity is ongoing, until final stabilization of the drainage area associated with each outfall is achieved.

Samples shall be taken during normal working hours, which for this project shall be defined as Monday through Friday, 8 am to 6 pm. If a storm continues past working hours, sampling shall

resume the following morning or the morning of the next working day following a weekend or Holiday, as long as the discharge continues. Sampling may be temporarily suspended when conditions exist that may reasonably pose a threat to the safety of the person taking the sample.

Within 30 days following the end of each month, the stormwater sampling results shall be submitted on the Stormwater Monitoring Report (SMR) and submit in accordance with Net DMR. If there is no stormwater discharge during a month, sampling is not required, however, SMR's indicating "no discharge" shall still be submitted as required.

10. 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. 25-144

Farmington Canal Heritage Trail Extension Cheshire, 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 associated with construction activity. 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 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 816) including supplements thereto and the 2002 Connecticut Guidelines for Soil Erosion and Sediment Control and 2004 Stormwater Quality Manual.

List of applicable Figures / Plans:

Appendix A - Figures

Location Map	Figure 1
Outlet Location Plans	Figure 2

Appendix B – Drainage Calculations

Drainage Areas Associated with Each Outfall	Figure 3
Splash Pad Rip Rap Computations	_

Appendix C – Plan Sheets

Highway Plan set of drawings

Appendix D – Stormwater Monitoring Report Form

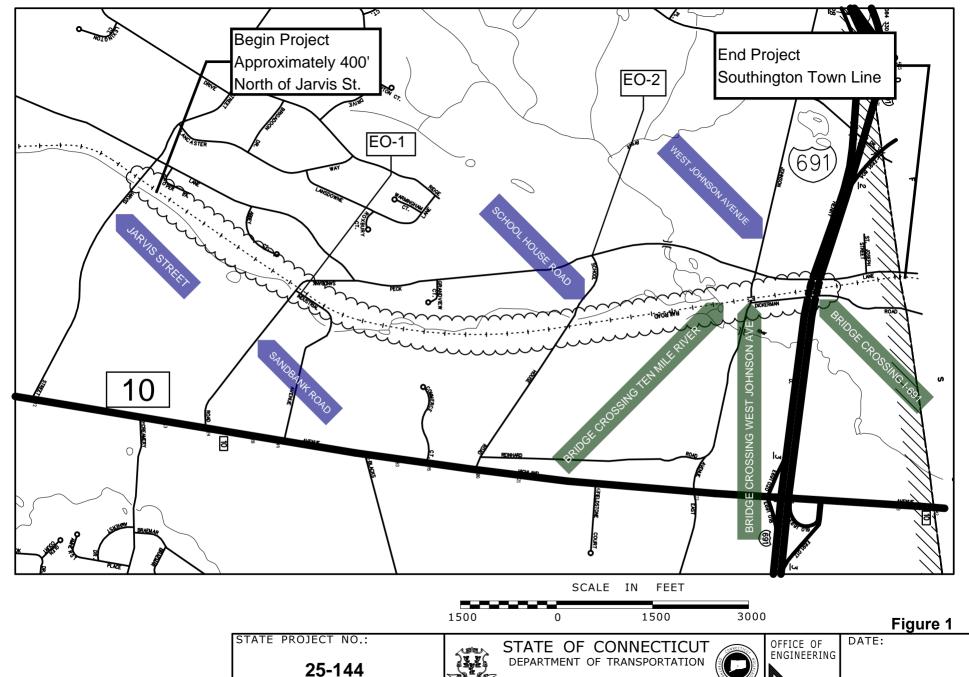
Appendix E – Notice of Termination Form

Appendix F – Flood Management General Certification

Appendix G – Specifications for Controlled Materials Handling & Disposal of Controlled Materials

APPENDIX A

Location Map



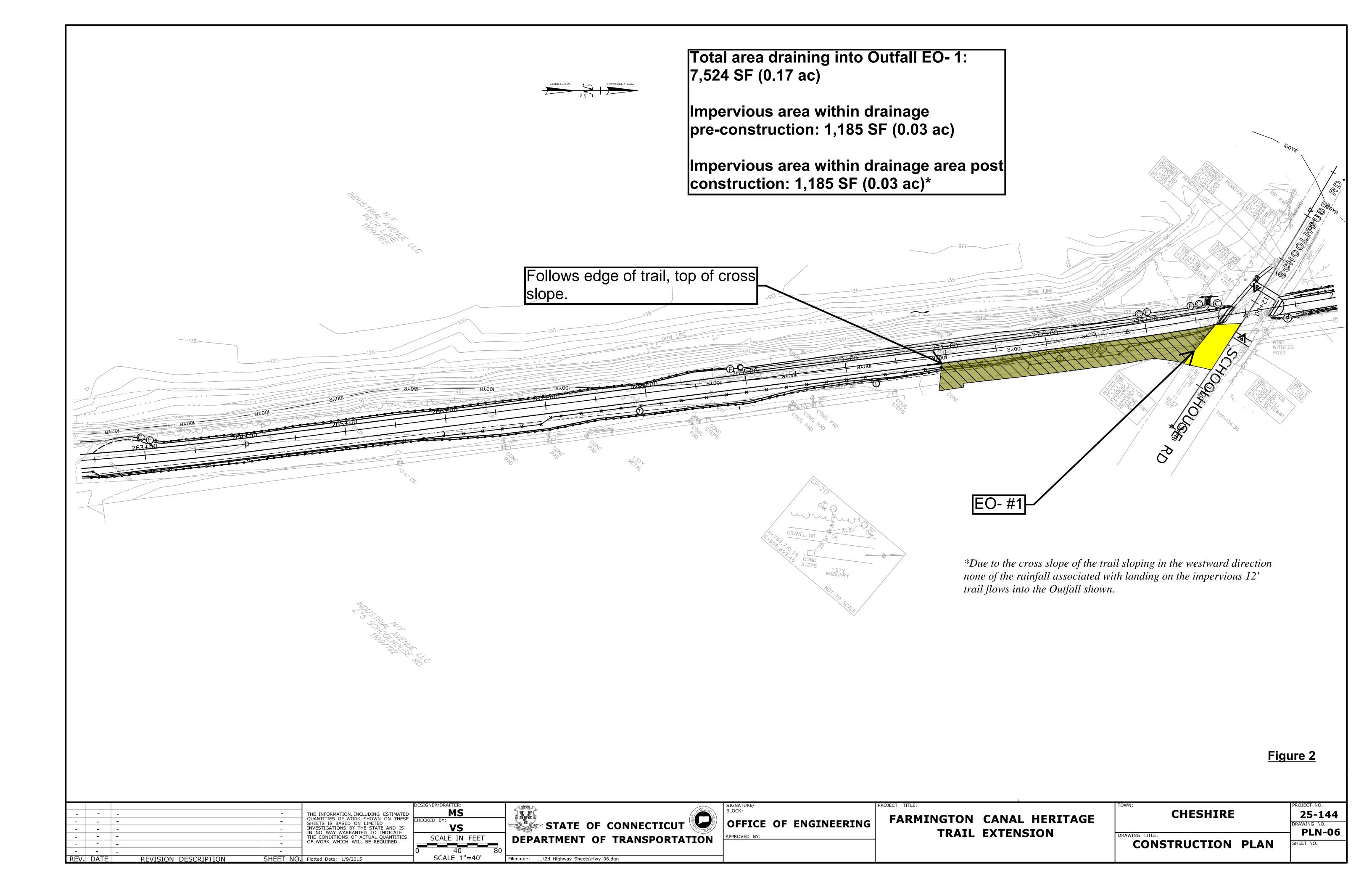
CITY/TOWN:

Town of Cheshire

DEPARTMENT OF TRANSPORTATION

Farmington Canal Heritage Trail Extension





APPENDIX B

Drainage Calculations

Comp By:JBH Check By: VS

Outfall Computations

Date: 2/11/15

For the Drainage area associated with each outfall: Effective Impervious Area After Construction

Outfall #	Size	Width of Paved Trail (Ft)	Outfall Station	Collecting Start Station	Total legnth (Ft)	Total Effective Impervious Area (SF)	Total Drainage Area (SF)
EO-1*	36"	12	273+75	271+25	250	0	7,524

Existing drai	inage	imperivous area associated	Total	0	
EO-1	36"	Existing area of drainage picked up from road intersection at Schoolhouse Road	\rightarrow	1,185	
		Total SF _{after co}	onstruction	1,185	7,524
			Acres	0.03	0.17

* EO - 1: All flow on the proposed impervious 12 foot wide trail sheet flows in a westward direction **away** from the outfall location. Therfore is not incorporated into the total effective impervious area which consists of the existing roadway area on Schoolhouse Drive depicted on the plans.

Note: Total effective Impervious Area associated with each outfall is shown on attached plans in Appendix A .

EST. BY:	MS	DATE:	1/14/2015	DEPARTME NT OF	PROJ. NO.:		25-144
CHECKED BY:	vs	DATE:	1/14/2015	OFFICE OF ENGINEERI		1 of 1	
Farmington Canal Heritage Trail Extens	sion			T			
Rational Method (Station 269+00 to 27	/3+60 Left)						
Area to Outlet =	20,072 sq. ft. (0.46 ac.)						
Cross Sectional Area of Grass Ditch	1 sq. ft						
Elevation Difference	133.13-130.76=2.37						
Slope of Channel	2.37/475'=.005						
Flow Length	475 ft						
Time of Concentration	26 min						
Rainfall Intensity 10 yr Storm	3.1 in/hr						
Ref: Drainage Manual (Table B-2.1)							
Weighted Runoff Coefficient	C=0.9 pavement C=0.25 Turf Area						
	C-0.25 Tull Alea						
	Cw= 5520 sq. ft. x (0.9) + 14552	sq. ft x (0.25)	=	0.43		
	20,072 sq. ft						
Rational Flow	Q=(0.43)x(3.1 in/hr)x(0.46 ac.)			=	0.61	cfs	
Material Flow	ξ (0.15/λ(3.2 πηπη/λ(0.40 dc.)		Round to	<u> </u>	1	cfs	
Velocity in Channel		V=Q	/A=1cfs/1	sq. ft	1	ft/s	
Use Modified Riprap			·				
As assumed by Table 11.11				1			
Width of Splash Pad	W-25n						
Assume Sp=2'	W=3Sp W=3x2'		W=6'				
Assume Sp-2	W-3/2		11-0				
Length of Splash Pad							_
at Outlet (Assume Eq. 11.31)							
Use Type A riprap	La=1.80(Q-5)/Sp^1.5+10						
for a Min. Tailwater condition	La=1.80(1-5)/2^1.5+10	=	7.5 ft				
Riprap Splash Pad	6' x 7.5'						
Final Dimensions							
Rounded Dimensions	6' x 8'						

				DEPARTMENT OF			
EST. BY:	MS	DATE:	1/14/2015	TRANSPORTATION	PROJ. NO.:		25-144
CHECKED BY:	vs	DATE:	1/14/2015	OFFICE OF ENGINEERING		1 of 1	
Farmington Canal Heritage Trail Extensio	n						
Riprap Splash Pad Computation (Sta. 212	2+50 Rt)						
Elevation Difference	165.39-163.55=1.84						
Length of Underdrain	L=361 ft						
Slope of Underdrain	1.84/361'=0.005				l		
Cross Sectional Area of 6" Underdrain	0.2 sq. ft						
Wetted Perimeter	1.57						
Hydraulic Radius R=A/Pw	0.13						
Mannings Coefficient							
Chapter 8 (Appendix A)	0.015						
(Plastic Pipe)							
, , . , . , . , . , . , . , . ,							
Assume Full Flow for 6" Underdrain							
	Q=A x 1.49 (R) ^2/3 (S) ^1/	/2	•				
	n						
	Q=(0.2)x 1.49 x (0.13)	^2/3 x (0.005) ^1/2		=	0.35		cfs
	0.015	, , , , , , , , , , , , , , , , , , , ,					
			Round to		0.5		cfs
Velocity at Outlet of drain		V=Q/	A=.5cfs/0.2	sq. ft	2.5	ft/s	
Use Modified Riprap							
See Table 11.11				·			
Length of Apron	L=5 x D +3 ft	L= 5 x (0.5 ft) + 3 ft	L=5.5 ft				
Width (at end of apron)	W=3 x D + (2/3) x L	W=3x0.5'+(2/3)x(5.5')	W=5.2 ft	Use 5 ft			
Width at outlet of U drain	W=3 x D	W=3 x 0.5 ft	W=1.5 ft				
Depth of Riprap	D=2.4 x D 50	D=2.4 x 10"	Depth=24"				
Refer to next Sheet for typical layout.							
"Hydraulic Design of Engery Dissipators							
for Culverts and Channels"							
					l	l	

HYDRAULIC DESIGN OF ENERGY DISSIPATORS FOR CULVERTS AND CHANNELS

10.2 RIPRAP APRON

The most commonly used device for outlet protection, primarily for culverts 1500 mm (60 in) or smaller, is a riprap apron. An example schematic of an apron taken from the Federal Lands Division of the Federal Highway Administration is shown in Figure 10.4.

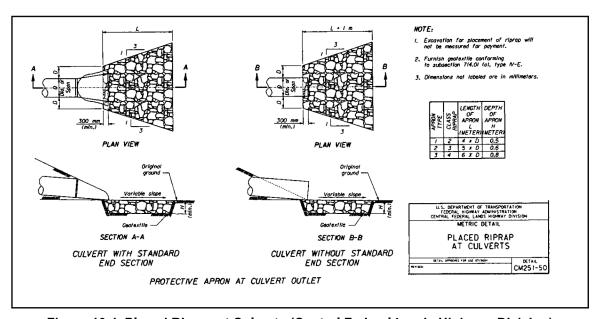
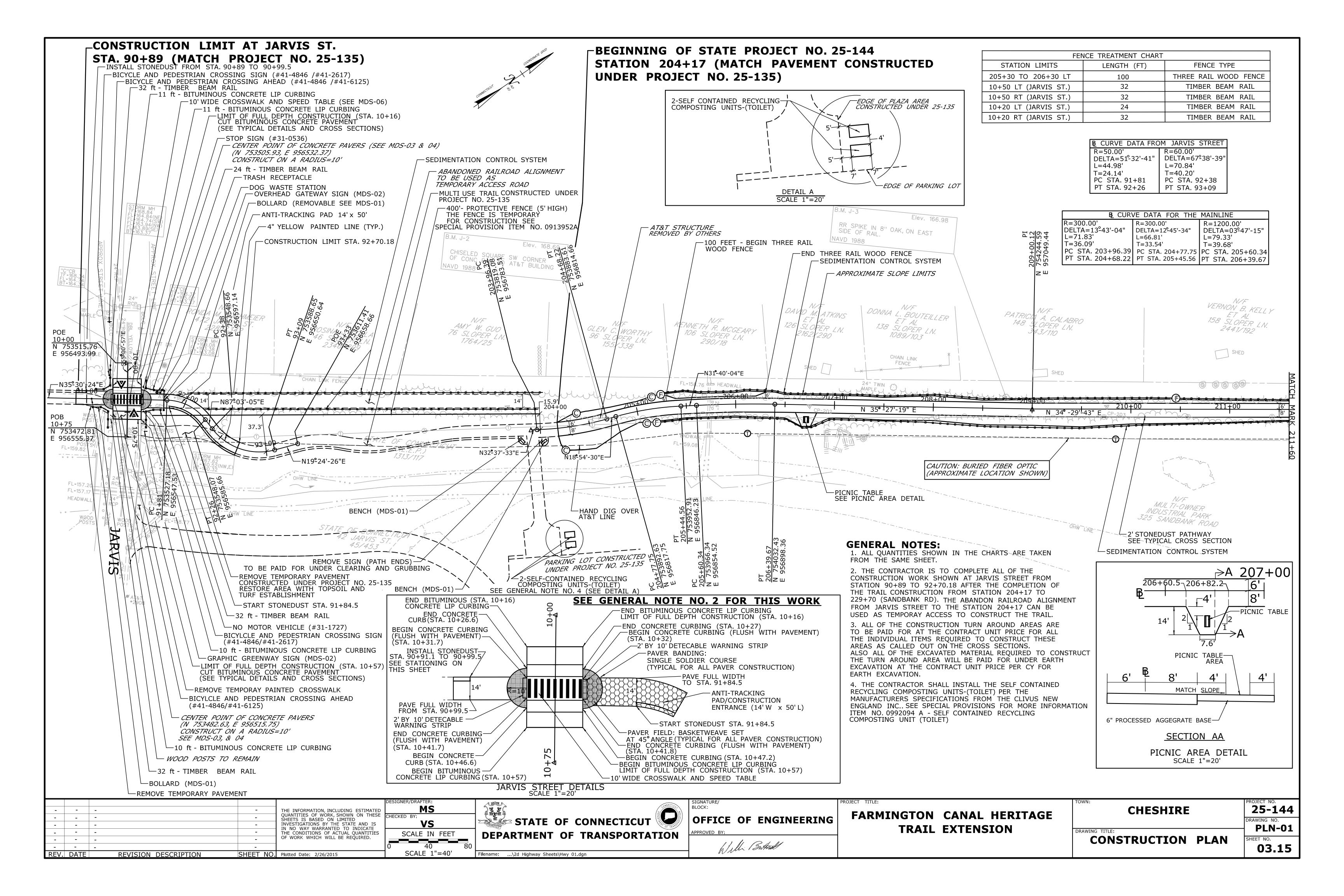


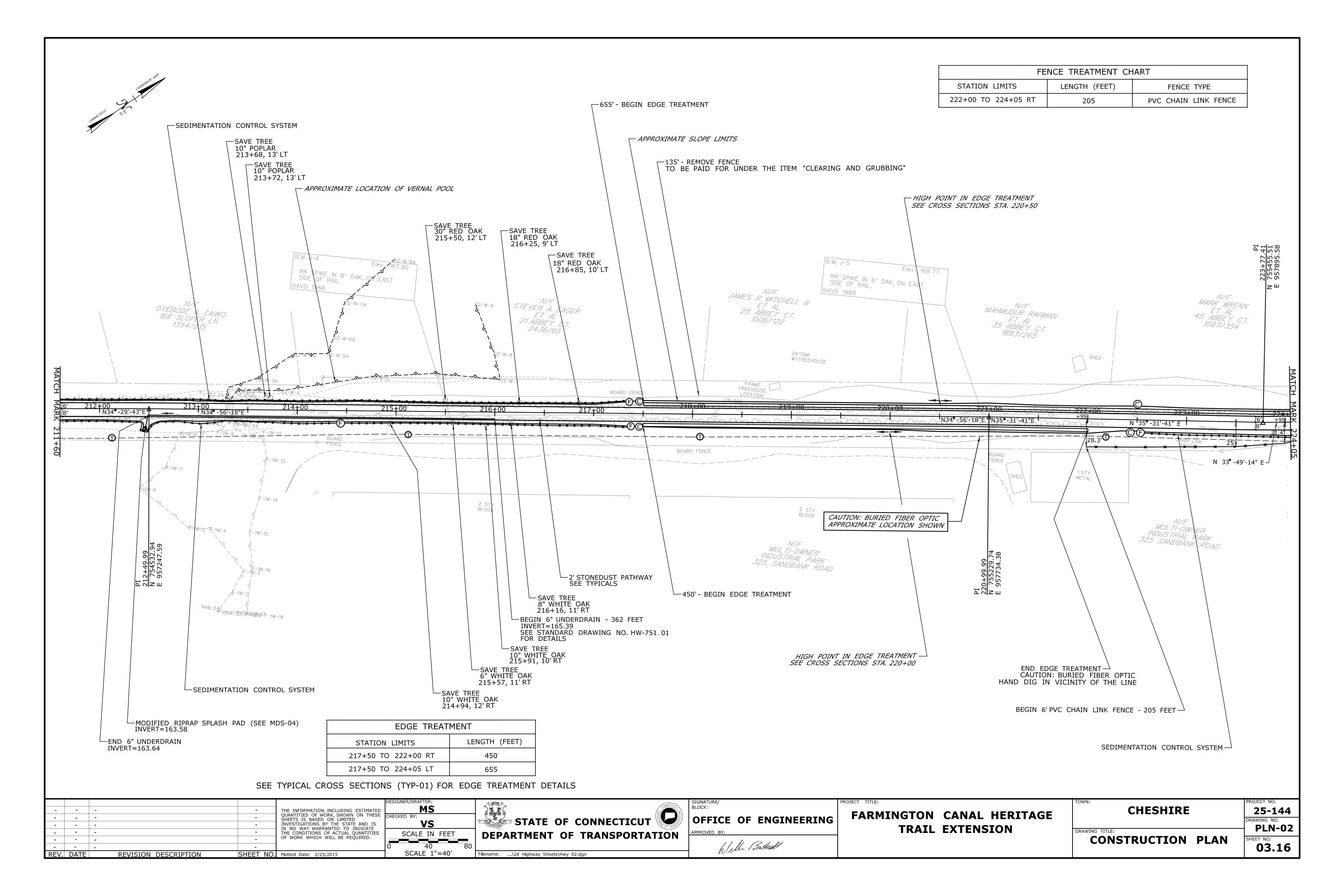
Figure 10.4. Placed Riprap at Culverts (Central Federal Lands Highway Division)

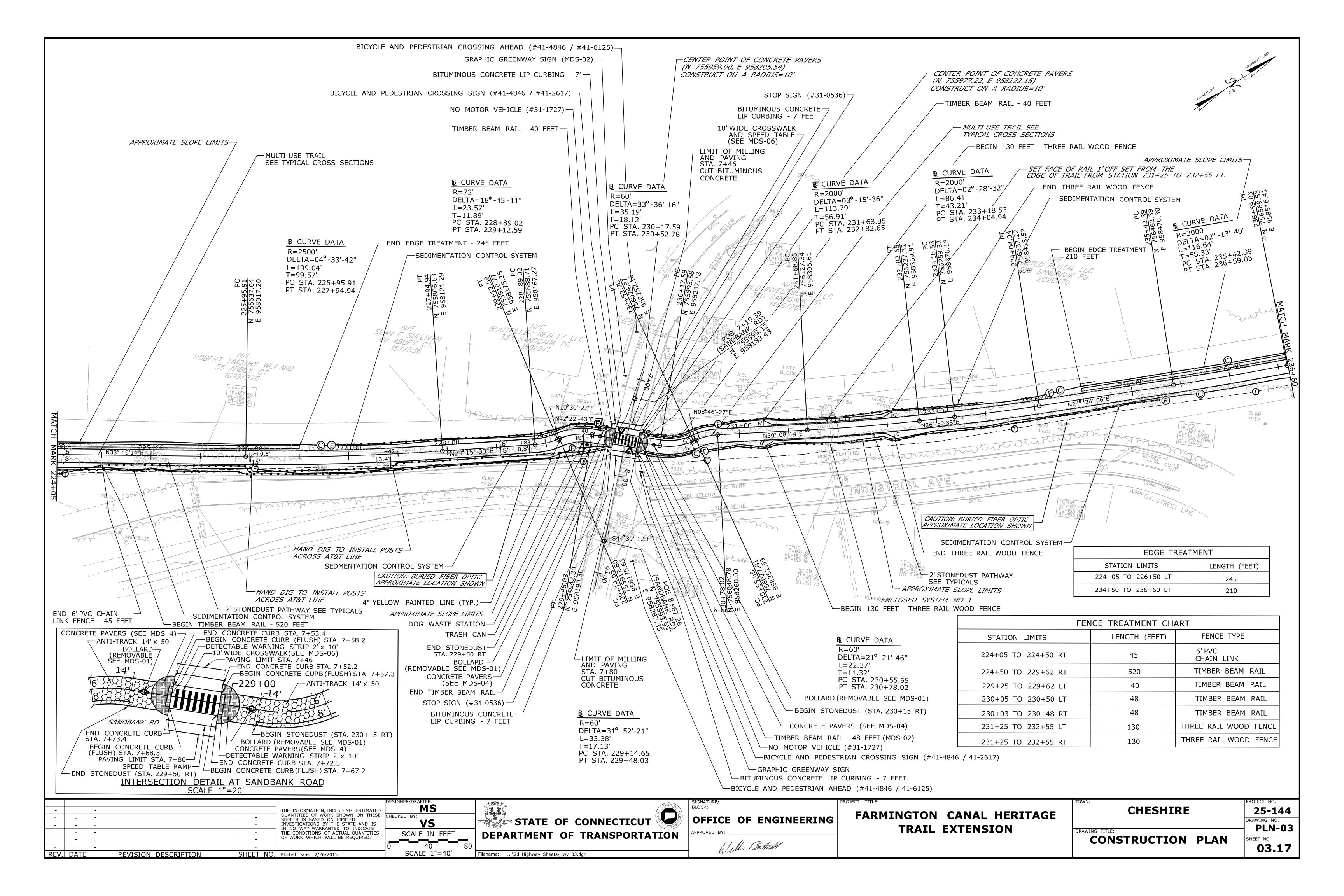
They are constructed of riprap or grouted riprap at a zero grade for a distance that is often related to the outlet pipe diameter. These aprons do not dissipate significant energy except

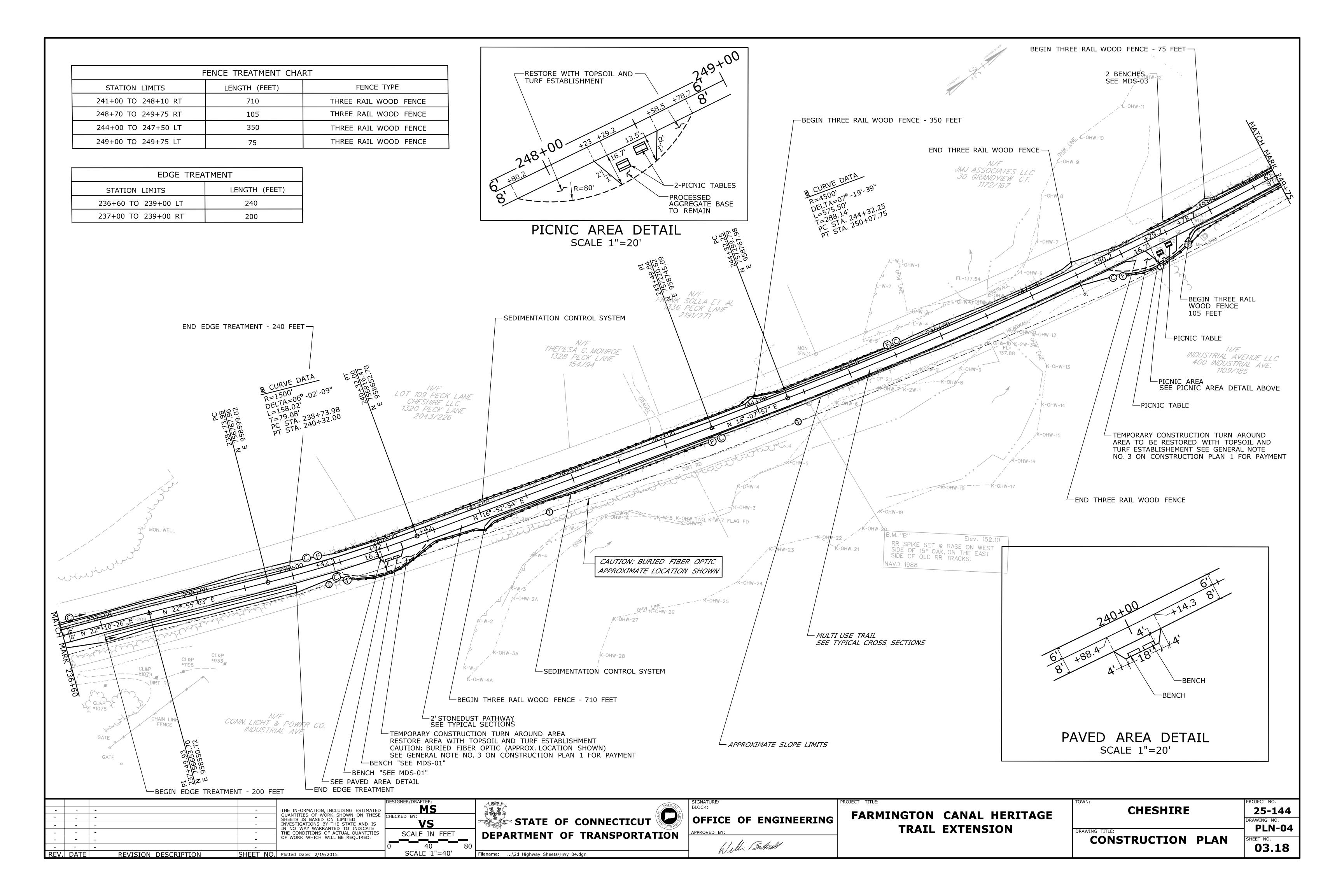
APPENDIX C

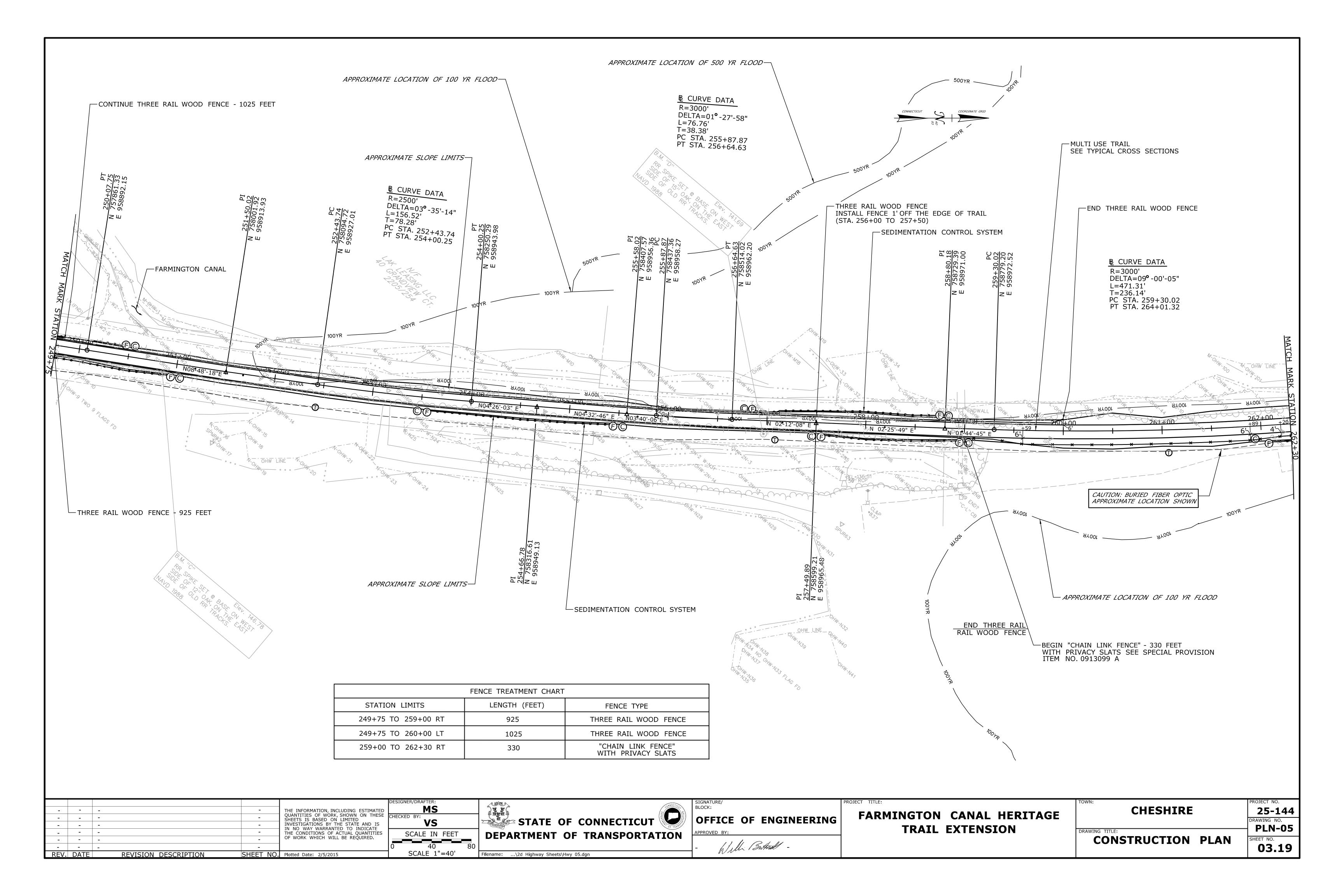
Plan Sheets

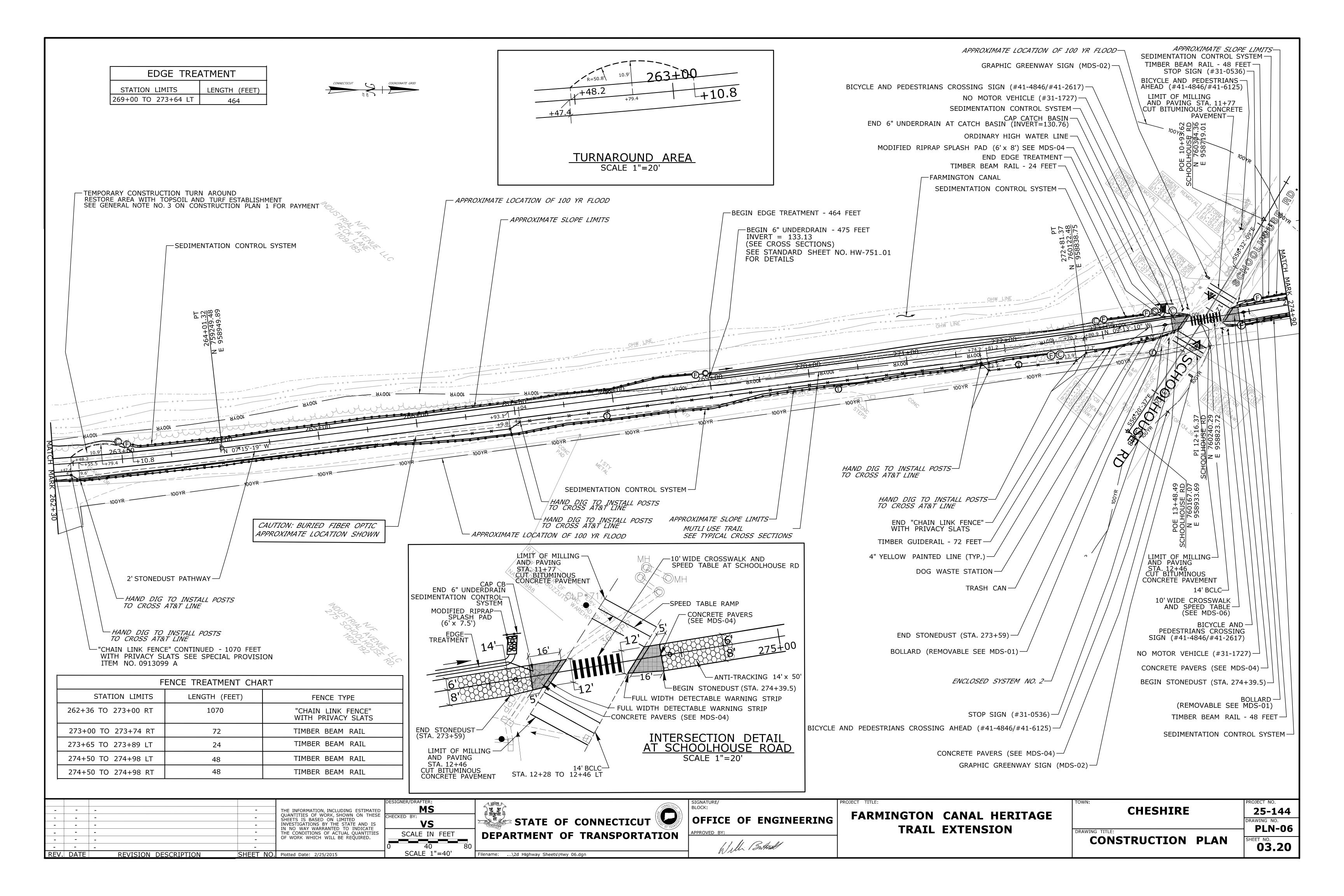


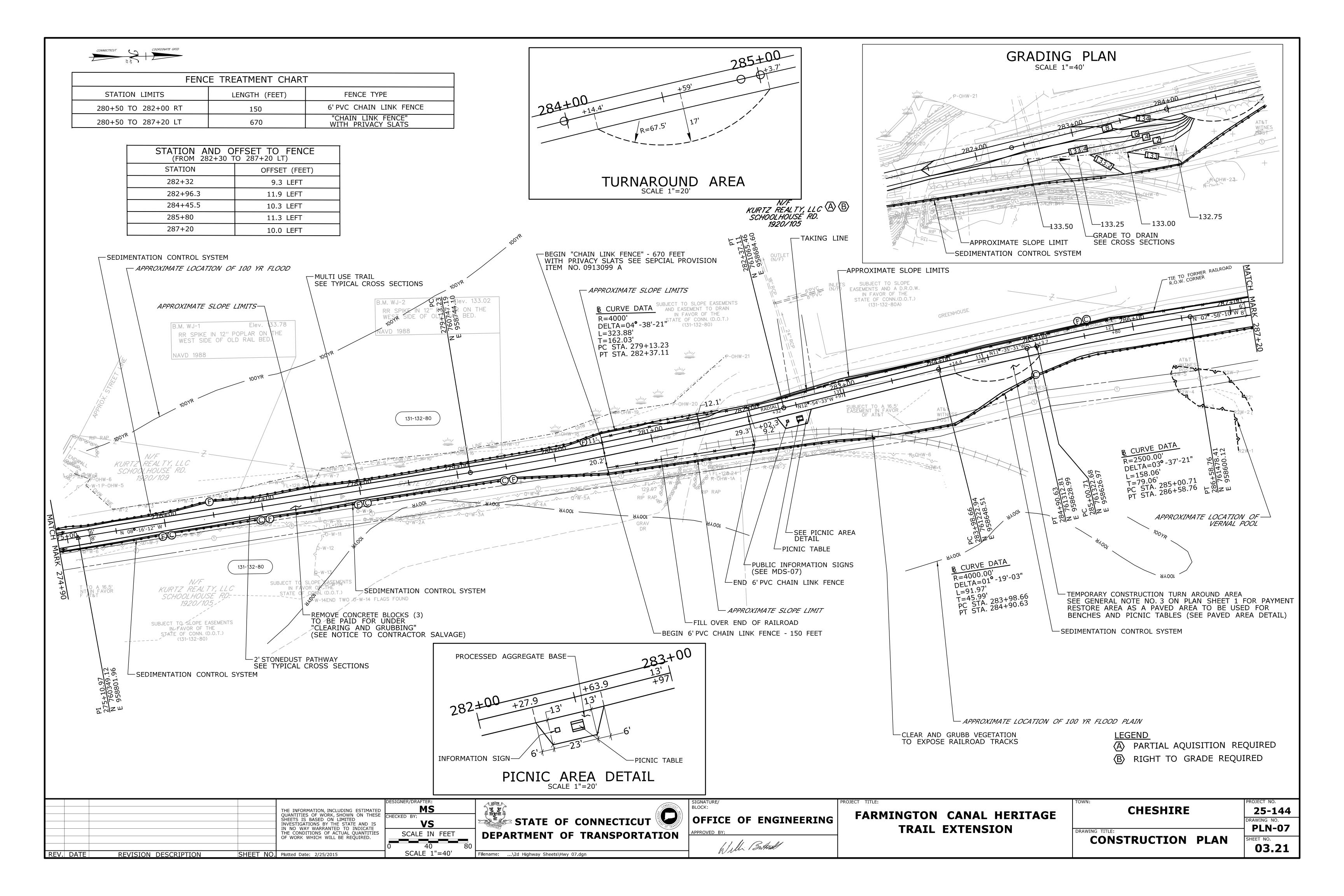


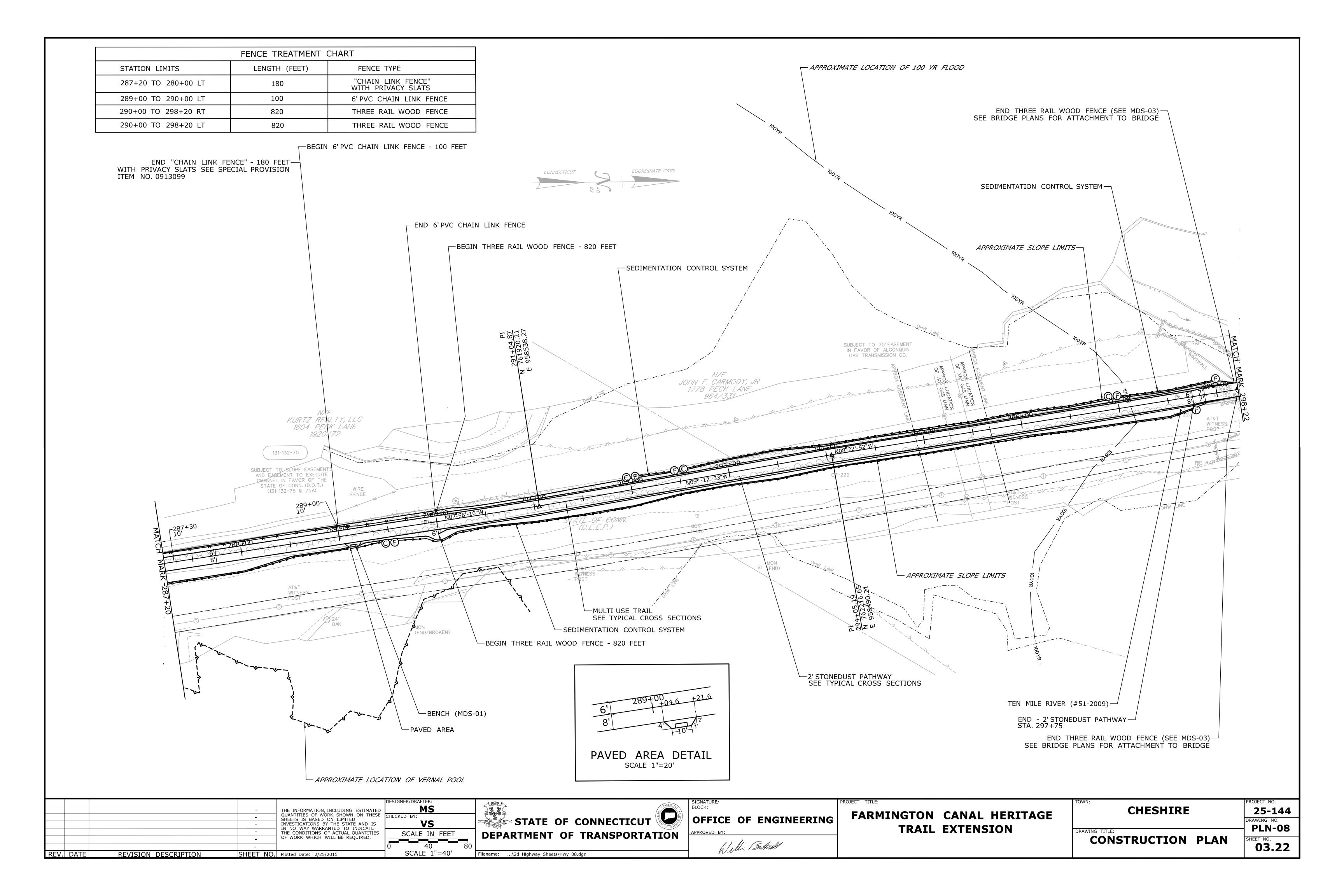


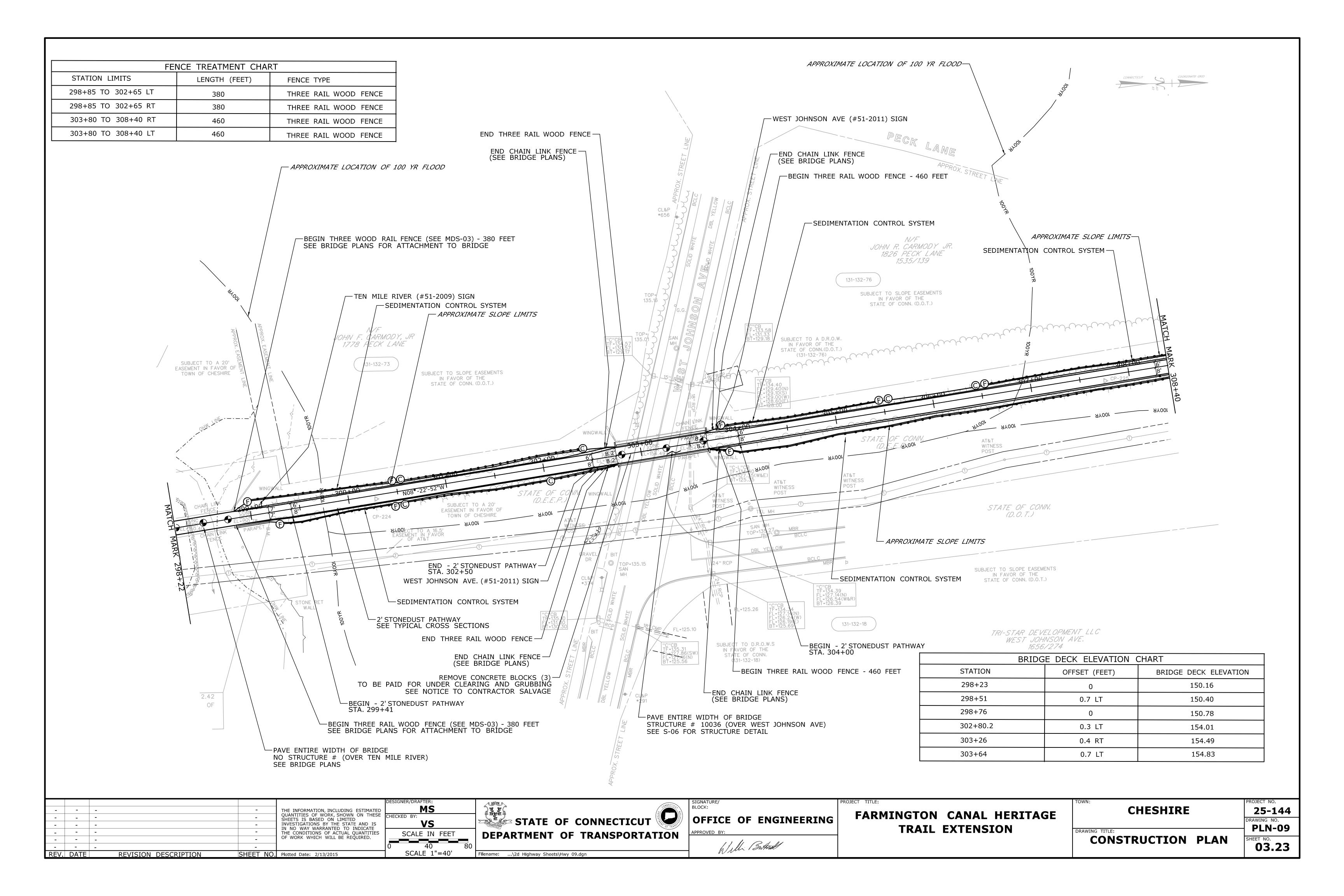


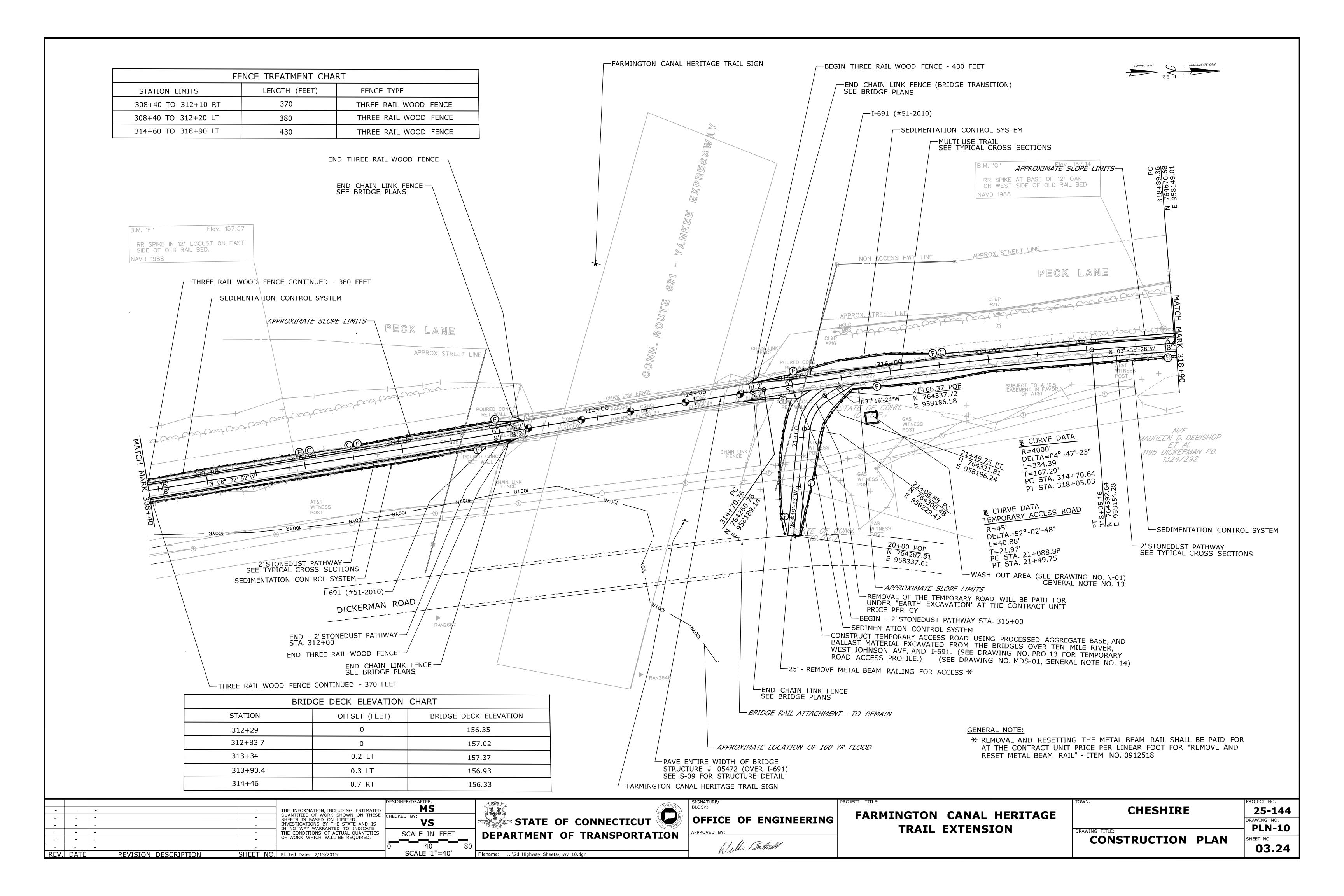




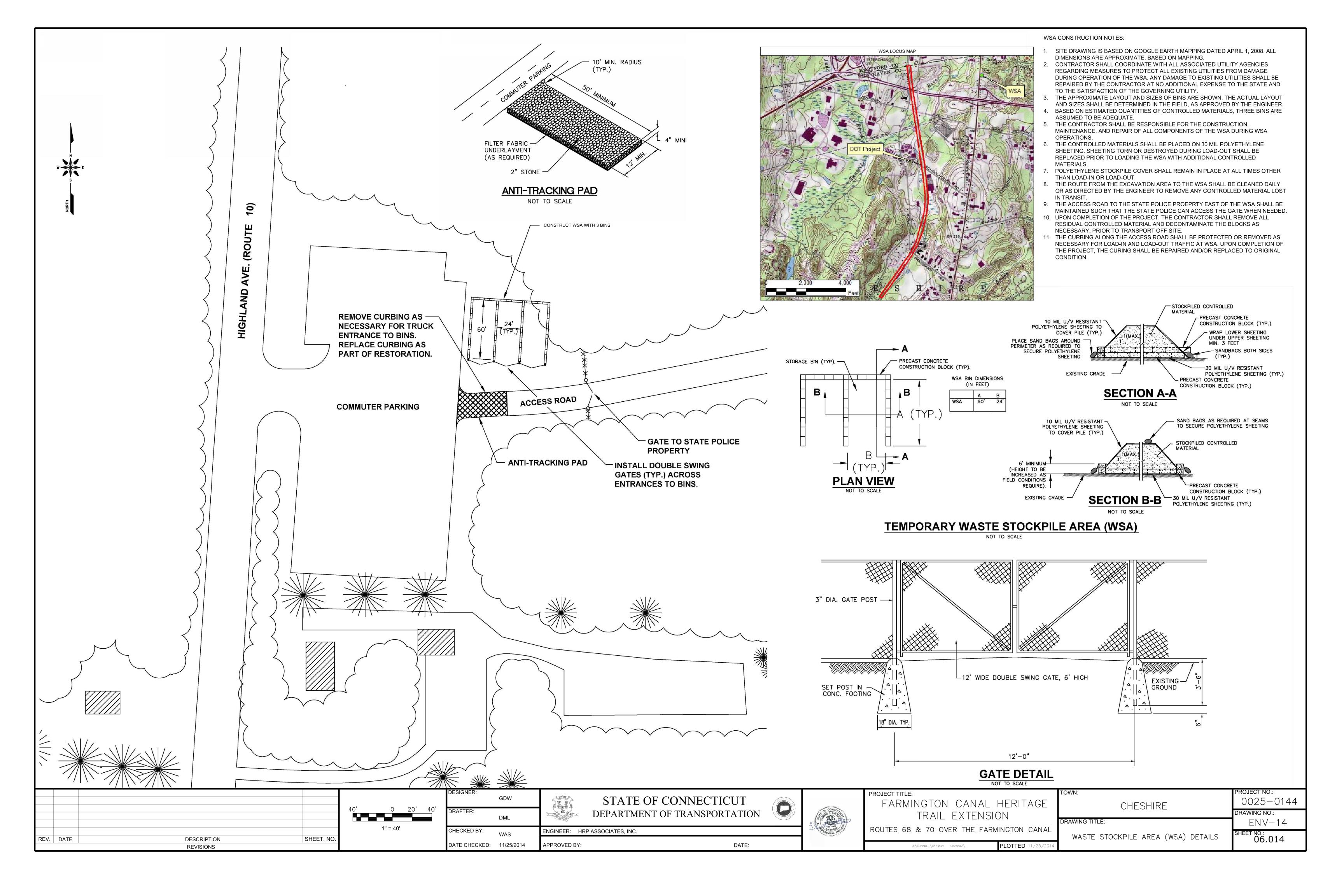








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STATION LIMITS	LENGTH (FEET)	FENCE TYPE			TEST PIT NO.	STATION	OFFSET	ELEVATION INFORMATION
318+90 TO 319+10 LT	20	THREE RAIL WOOD FENCE			1	323+56	0	TBD - GAS MAIN
	ZO —END THREE RAIL W —BEGIN EDGE	FENCE TYPE	323+25.4 3765110.4	THIS FENCE IS CONSTRUCTION PROVISION ITE 2 - REMOVE ME TO BE PAID PER O "EARTH EXCAVATION" AT THE O UNIT PRICE PER CY FOR EARTH EXC MULTI USE TRAIL SEE TYPICAL CROSS SECTIONS	TEMPORARY FOR SEE SPECIAL M NO. 0913952A TAL POST Y UNDER ONTRACT AVATION.		OFFSET 0 395.76+725 327+00 327+00 RIT RATH NO2*52'-39"W	ELEVATION INFORMATION TBD - GAS MAIN COMMICTICAT COMMI
MARK STA. 318+90		SIGN POST O SUBJECT IN STATE	TO SLOPE EASEMENT FAVOR OF THE FOR CONN. (D.O.T.) Elev. 16005	77.64 5161.78 5164.96	•	SOUTHINGTON	B.M. "I" EIGO CHISELED SQUARE NE CO 5'X5' CONC PAD BETWEEN AND PARKING LOT. NAVD 1988 2 - PICNIC TABLES	ev. 166.02
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APPENDIX D

Stormwater Monitoring Report Form



Connecticut Department of Energy & Environmental Protection

Bureau of Materials Management & Compliance Assurance Water Permitting & Enforcement Division

General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities, issued 8/21/13, effective 10/1/13 **Stormwater Monitoring Report**

SITE INFORMATION

Permittee:				
Mailing Address:				
			:Fax: _	
Contact Person:		Tit	le:	_
Site Name:				_
Receiving Water (nam	ne, basin):			
Stormwater Permit No	o. GSN			
SAMPLING INFORM	ATION (<mark>Submit a separa</mark>	ate form for each outf	all)	
Outfall Designation: _		Date/Time C	collected:	
Outfall Location(s) (lat	t/lon or map link):			
Person Collecting Sar	mple:			_
Storm Magnitude (incl	hes):	Storr	m Duration (hours):	
Size of Disturbed Area	a at any time:			
MONITORING RESU				
Sample #	Parameter	Method	Results (units)	Laboratory (if applicable)
1	Turbidity			
2	Turbidity			
3 4	Turbidity			
<u> </u>	Turbidity t if more than 4 samples wer	a taken for this outfall)	1 A	
STATEMENT OF AC certify that the data report the Discharge of Store	KNOWLEDGMENT ported on this document were	e prepared under my dire	Avg = ction or supervision in accordation Activities. The information	
Authorized Official:				
Signature:		Date:		

HARTFORD, CT 06106-5127 ATTN: NEAL WILLIAMS

APPENDIX E

Notice of Termination Form



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):
	☐ Industrial ☐ Residential ☐ Commercial ☐ Capped Landfill
	☐ Other (describe):
art	II: Certification
ther for c know puni	eve personally examined and am familiar with the information submitted in this document and all attachments eto, and I certify that, based on reasonable investigation, including my inquiry of those individuals responsible obtaining the information, the submitted information is true, accurate and complete to the best of my wledge and belief. I understand that a false statement made in this document or its attachments may be shable as a criminal offense, in accordance with Section 22a-6 of the Connecticut General Statutes, pursuant ection 53a-157b of the Connecticut General Statutes, and in accordance with any other applicable statute."
Sig	nature of Permittee Date
Nai	me 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

APPENDIX F

Flood Management General Certification

STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION

memorandum

FLOOD MANAGEMENT GENERAL CERTIFICATION Project No.: 25-144

Farmington Canal Heritage Trail Extension

Town of Cheshire

Date: June 2, 2014

to: Michael E. Masayda

Transportation Principal Engineer

Hydraulics and Drainage

Bureau of Engineering and Highway Operations

from: William W. Britnell

Transportation Principal Engineer

Bureau of Engineering and Highway Operations

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

Certification (to be completed by designer)
I have read the Flood Management General Certification and the descriptions for the approved DOT mino activities. This project qualifies for the Flood Management General Certification under:
 () Minor Safety Improvements and Streetscape Projects () Roadway Repaving, Maintenance & Underground Utilities () Minor Stormwater Drainage Improvements () Removal of Sediment or Debris from a Floodplain () Wetland Restoration Creation or Enhancement () Scour Repairs at Structures; (Must acquire DEEP Fisheries Concurrence to be eligible) () Guide Rail Installation () Deck and Superstructure Replacements () Minor Bridge Repairs and Access () Fisheries Enhancements () Surveying and Testing () Bicycle / Pedestrian, Multi Use Trails and Enhancement Projects
The following required documentation is attached in support of this certification:
 Project description Location plan Description of Floodplain involvement and how project qualifies for general certification 8-1/2" by 11" excerpt copy of the FEMA Flood Insurance Rate Map (FIRM) and Floodway Boundary Map (if applicable) Design plans, (6-2-14) with FEMA floodplain and floodway boundaries plotted, cross sections and profiles, as necessary, that clearly depict the floodplain involvement FEMA 100-year flood elevation plotted on elevation view (for structures)
Print Name VITALIN STAROVEROV Title Proj. EngineER
lignature Date 62 2014

Concurrence (to be completed by Hydraulics and Drainage)

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

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

Signature Michael Mascydo

Date 6-17-14

ce: James Fallon

Rev 02/12

Project No. 25-144

Farmington Canal Heritage Trail Extension Town of Cheshire

Floodplain Involvement

Project 25-144 begins at Jarvis Street in the Town of Cheshire and extends to the Southington Town Line (see attached location plan) for a length of approximately 2.4 miles.

The trail will consist of a 12-foot wide paved surface with a 2-foot stone dust shoulder. The trail will be constructed over three existing bridges (see location plan) over ten Mile River, West Johnson Avenue, and Interstate 691. The bridges do not require structural modification; however, they will require installation of a new membrane surface, paving the deck, and adding a fence to the parapets that will accommodate the trail users for safety. Fencing will also be provided along the trail as needed. Stone ditches and underdrains will be provided where necessary to accommodate drainage.

The Farmington Canal runs parallel with the trail from station 250+00 to 272+50 for 2,250 feet as shown on the enclosed plans. The construction of this project will have no direct impact to the Farmington Canal. The 100 and 500 year FEMA Flood limits from the Flood Insurance Rate Maps for the New Haven County are also plotted on the plans. It appears that several areas are within the 100 year flood limits as shown on the enclosed plans:

- Sta. 251+85 to Sta. 252+50
- Sta. 256+00 to Sta. 259+00
- Sta. 267+50 to Sta. 297+00
- Sta. 299+00 to Sta. 307+00

On March 21, 2011, the letter between the Inland Resources Division of the Department of Energy and Environmental Protection and the Bureau of Policy and Planning was prepared identifying that there are twelve (12) categories of minor activities that are subject to occur on as needed basis throughout the state. As long as those activities are designed in compliance with the requirements outlined in the letter the project would qualify for a Flood Management General Certification.

Activity No. 12 allows for the construction of Bicycle/Pedestrian, Multi-Use Trails and Enhancement Projects. The design of the trail complies with all of the requirements under the Activity No. 12. There will be no adverse effect to the flood flow conveyance through the floodway as a result of this project. All proper erosion and sedimentation controls will be utilized in accordance with the 2002 Connecticut Guidelines for Soil Erosion and Sediment Control and in conjunction with the Best Management Practices as outlined in Section 1.10 of Form 816.

NOTICE TO CONTRACTOR - FLOODPLAIN INVOLVEMENT

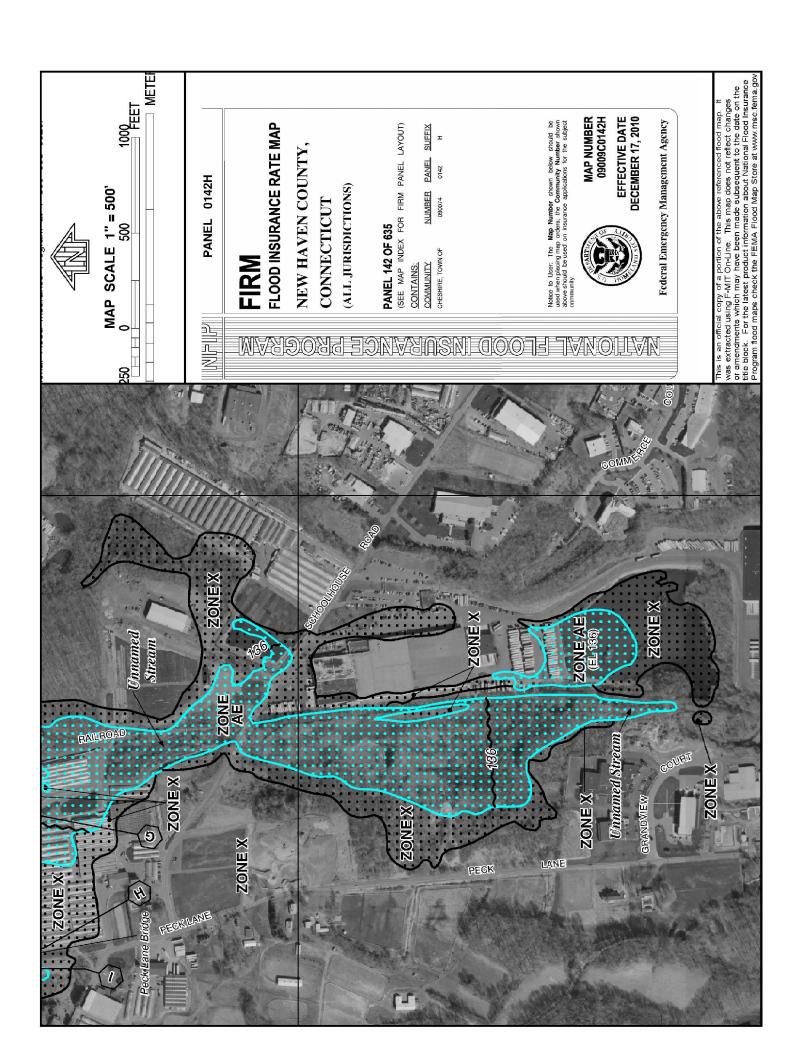
The Contractor is hereby notified that this project encroaches within the 100-year flood zone. According to FIRM Flood Insurance Rate Map of December 17, 2010, the following locations are within the 100-year flood zone:

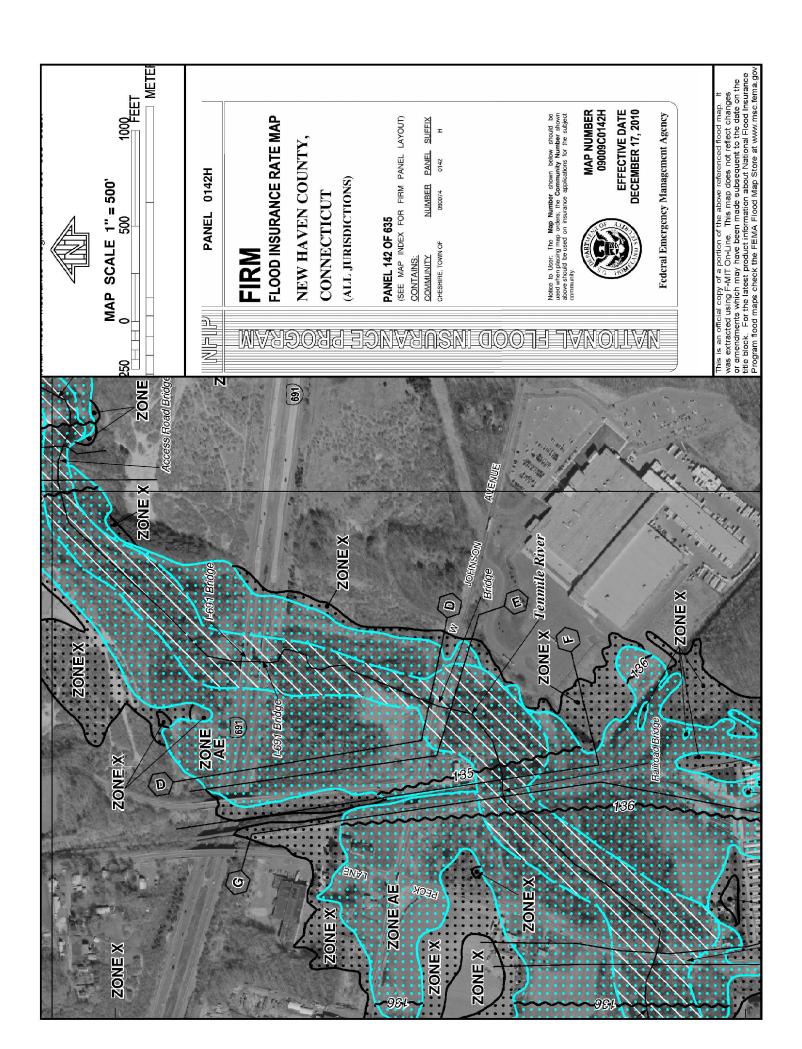
- Sta. 251+85 to Sta. 252+50
- Sta. 256+00 to Sta. 259+00
- Sta. 267+50 to Sta. 297+00
- Sta. 299+00 to Sta. 307+00

Construction activity in these areas is regulated. All contract work, including grading has been authorized under the Flood Management General Certification. Requested field changes in these locations must be reviewed with the designer.

- The existing flood storage capacity must be maintained to ensure the compliance with the certification.
- Any proposed additional grading by the Contractor shall not result in a net increase of fill material within the floodplain.
- Any temporary facilities or equipment requiring work or placement in a floodplain must be able to be removed in a timely manner from the site in case of a flood warning.

Contact Vitalij Staroverov, CTDOT Project Engineer, at 860-594-2582 for review and approval of any planned revisions within the regulated flood zone.





APPENDIX G

Specifications for Controlled Materials Handling and Disposal of Controlled Materials

ITEM NO. 0202315A - DISPOSAL OF CONTROLLED MATERIALS

Description:

Work under this Item shall consist of the transportation and final off-site disposal/recycling/ treatment of Controlled Materials (excluding dewatering fluids) that have been generated from various excavations within the Areas of Environmental Concern (AOECs) and Low-Level Areas of Environmental Concern (LLAOEC) that have been determined to be contaminated with regulated substances at non-hazardous levels. This contamination is documented in the report listed in the "Notice to Contractor – Environmental Investigations". The Controlled Materials will be properly characterized by the Engineer and shall be excavated, loaded, transported directly to, and treated/ recycled/disposed of at, a Department-approved permitted treatment/recycle/disposal facility (TDRF) listed herein.

Contractor Take Note: No delay claim will be considered based upon the Contractor's failure to select facility(s) with enough capacity to handle the anticipated volume of Controlled Materials being generated by its activities.

Controlled Materials include:

- (1) Soil materials (excluding pavement, concrete, sub-base, structures, utilities, and ledge/boulders) that contain regulated substances at concentrations exceeding numeric criteria in the Connecticut Department of Energy and Environmental Protection (CTDEEP) Remediation Standard Regulations (RSRs); and
- (2) Soil materials that contain detectable concentrations of regulated substances that are below numeric criteria in the CTDEEP RSRs, but above typical background concentrations, and which cannot be reused within the Project Limits.

The Contractor must use the following Department-approved Transportation, Disposal, Recycle Facility (TDRFs) for the disposal of non-hazardous materials:

Clean Earth of Carteret	Clean Earth of Philadelphia, Inc.
24 Middlesex Avenue	3201 S. 61 Street
Carteret, NJ 07008	Philadelphia, PA 19153
(732) 541-8909; Cheryl Coffee	(215) 724-5520; Mike Kelly
Clean Earth of Southeast Pennsylvania, Inc.	Cranston Sanitary Landfill
7 Steel Road	1690 Pontiac Avenue
M::11- DA 10067	G . DI 00000
Morrisville, PA 19067	Cranston, RI 02920

ESMI of New Hampshire, LLC
67 International Drive
Louden, NH 03307
(518) 747-5500; Peter Hansen
Northampton Landfill (Solid Waste
Solutions, LLC)
170 Glendale Road
Florence, MA 01062
Upton Landfill (former) / Upton Site
Remediation, LLC
Maple Avenue
Upton, MA
(413) 522-3688 ; Paul Mahoney
Waste Management (Chicopee Sanitary
Landfill)
161 New Lombard Road
Chicopee, MA 01020
(413) 534-8741; Tom Heaton
Waste Management Granby Sanitary
Landfill
11 New Ludlow Road
Granby, MA 01033
(413) 534-8741; Tom Heaton

The above list contains TDRFs which can accept the waste stream generated by this Project in quantities limited by their permits and their operational needs. In addition, some of these TDRFs may become unavailable during the duration of the Project. It is the responsibility of the Contractor to verify that a TDRF will be available and capable of handling the volume as well as the chemical and physical characteristics of soil generated by this Project. As such, the Contractor must factor in such possibilities.

Construction Methods:

A. Submittals

The apparent low bidder shall submit in writing, within 14 days after bid opening the following:

- 1. A copy of the attached "Disposal Facility Material Acceptance Certification" form from each facility from the list above, which shall be signed by an authorized representative of each TDRF; and
- 2. A copy of the facility acceptance criteria and facility sampling frequency requirements from the TDRF.

Failure to comply with all of the above requirements may result in the rejection of the bid. If the material cannot be accepted by any of the TDRFs listed above, the Department will supply the Contractor with the name(s) of other acceptable facilities.

Disposal Facility Materials Acceptance Certification

Project Number: 0025-03	.44		
Project Location <u>Farming</u>	gton Canal Heritage Trail I	Extension, Town of Cheshire, Cheshire, C	T
Facility Name:		Telephone:	
Facility Address:		Fax:	
investigation performed be accept the following Co Controlled Materials. This intent to accept the materials.	y the Designer. I have positive to a racterization determination	ontained in the report concerning the spersonally reviewed this data and intend cribed in Item 0202315A - Disposal and dependent upon the facility's subsequent documentation to be provided to	of
Authorized Facility		,	
RepresentativePri	nted/Typed Name	Title	
Sig	nature	Date	

Note: The facility shall attach the acceptance criteria and facility sampling frequency requirements to this document.

DO NOT ALTER FORM IN ANY WAY. FORM MUST BE COMPLETED IN ENTIERETY.

B. General

When Controlled Materials are encountered during the course of the work, health and safety provisions shall conform to the appropriate sections of the Contract. Provisions may include

implementation of engineering controls, air and personal monitoring, the use of chemical protective clothing (CPC), personal protective equipment (PPE), implementation of engineering controls, and decontamination procedures.

Controlled Materials requiring disposal off-site shall be loaded directly into vehicles for immediate transport to the Contractor selected treatment/recycling/disposal facility(s). Controlled Materials awaiting disposal shall not be stockpiled within the Project limits, unless otherwise directed by the Engineer.

C. Material Disposal

The Engineer shall sample the in-place Controlled Materials prior to the start of any work for waste characterization purposes. The Engineer will provide the Contractor with the waste characterization sampling results.

The Contractor shall obtain and complete all paperwork necessary to arrange for material disposal (such as disposal facility waste profile sheets). It is solely the Contractor's responsibility to coordinate the disposal of Controlled Materials with the selected TDRF(s). Upon receipt of the final approval from the facility, the Contractor shall arrange for the excavation, loading, transport, and treatment/recycling/disposal of the materials in accordance with all Federal and State regulations.

The Contractor shall not begin excavation within the Project AOECs until the selected disposal facility has indicated final approval of the Controlled Material for disposal. No claim will be considered based on the failure of the Contractor's selected TDRF(s) to meet the Contractor's production rate or for the Contractor's failure to select sufficient TDRF(s) to meet its production rate.

Any material processing (removal of woody debris, scrap metal, treated and untreated wood timber, large stone, concrete, polyethylene sheeting or similar material) required by the Contractor's selected facility, will be completed by the Contractor prior to the material leaving the site. It is solely the Contractor's responsibility to meet any such requirements of its facility. Any materials removed shall be disposed of or recycled in a manner acceptable to the Engineer at no additional cost. If creosote treated railroad ties or timbers are removed, they will be disposed of under the Item No. 0101133A – Disposal of Contaminated Railroad Ties, or in accordance with Article 1.04.05 in the absence of such item.

All manifests or bills of lading utilized to accompany the transportation of the material shall be prepared by the Contractor a minimum of 24 hours in advance and signed by an authorized Department representative, as Generator, for each truckload of material that leaves the site. The Contractor shall forward the appropriate <u>original copies</u> of all manifests or bills of lading to the Engineer the same day the material leaves the Project.

A load-specific certificate of treatment/recycling/disposal, signed by the authorized agent representing the TDRF, shall be obtained by the Contractor and promptly delivered to the Engineer for each load.

D. Dust Control

The Contractor shall implement a fugitive dust suppression program in accordance with the Contract to prevent the off-site migration of particulate matter and/or dust resulting from excavation, loading, and operations associated with Controlled Materials. It shall be the Contractor's responsibility to supervise fugitive dust control measures and to monitor airborne particulate matter. The Contractor shall:

- 1. Employ reasonable fugitive dust suppression techniques.
- 2. Visually observe the amounts of particulate and/or fugitive dust generated during the handling of Controlled Materials. If the apparent amount of fugitive dust and/or particulate matter is not acceptable to the Engineer, the Engineer may direct the Contractor to implement corrective measures at his discretion, including, but not limited to, the following:
 - (a) apply water to pavement surfaces
 - (b) apply water to equipment and excavation faces; and
 - (c) apply water during excavation, loading, and dumping.

E. Material Transportation

In addition to all pertinent Federal, State, and local laws or regulatory agency polices, the Contractor shall adhere to the following precautions during the transport of Controlled Materials off-site:

- 1. Transported Controlled Materials are to be covered sufficiently to preclude the loss of material during transport prior to leaving the site and are to remain covered until the arrival at the selected TDRF;
- 2. Discharge openings on trucks used for the transportation of Controlled Materials must be securely closed during transportation and load tarpaulins must be deployed. Trucks deemed unacceptable for use by the Engineer shall not be used for the transportation of Controlled Materials;
- 3. All vehicles departing the Project are to be properly logged to show the vehicle identification, driver's name, time of departure, destination, approximate volume, and contents of materials carried:
- 4. No materials shall leave the site unless a TDRF willing to accept all of the material being transported has agreed to accept the type and quantity of waste; and

5. Documentation must be maintained indicating that all applicable laws have been satisfied and that materials have been successfully transported to and received at the TDRF.

F. Dewatering

Dewatering activities shall conform to items in pertinent articles of the Contract.

G. Equipment Decontamination

All equipment shall be provided to the work site free of gross contamination. The Engineer may prohibit from the site any equipment that in his opinion has not been thoroughly decontaminated prior to arrival. Any decontamination of the Contractor's equipment prior to arrival at the site shall be at the expense of the Contractor. The Contractor is prohibited from decontaminating equipment on the Project that has not been thoroughly decontaminated prior to arrival.

The Contractor shall furnish labor, materials, tools, and equipment for decontamination of all equipment and supplies that are used to handle Controlled Materials. Decontamination shall be conducted at an area acceptable to the Engineer and shall be required prior to equipment and supplies leaving the Project and between stages of the work.

The Contractor shall use dry decontamination procedures. Residuals from dry decontamination activities shall be collected and managed as Controlled Materials. If the results from dry methods are unsatisfactory to the Engineer, the Contractor shall modify decontamination procedures as required.

The Contractor shall be responsible for the collection and treatment/recycling/disposal of any liquid and solid wastes that may be generated by its decontamination activities in accordance with applicable regulations.

Method of Measurement:

The work of "DISPOSAL OF CONTROLLED MATERIALS" will be measured for payment as the actual net weight in tons of material delivered to the TDRF. Such determinations shall be made by measuring each hauling vehicle on the certified permanent scales at the TDRF before and after unloading and subtracting the weight of the empty vehicle from the weight of the loaded vehicle. Total weight will be the summation of weight bills issued by the facility specific to this Project.

Excess excavations made by the Contractor beyond the payment limits specified in Specification Sections 2.02, 2.03, 2.05, 2.06, or the Contract Special Provisions (as appropriate) will not be

measured for payment and the Contractor assumes responsibility for all costs associated with the appropriate handling, management, and disposal of this material.

The disposal of excavated materials, originally anticipated to be Controlled Materials, but determined by characterization sampling <u>not</u> to contain concentrations of regulated chemicals (non-polluted or "clean" materials) will <u>not</u> be measured for payment under this Item but will be considered as surplus excavated materials and shall be handled in accordance with Article 1.04.05.

Any Controlled Materials which are reused within the Project limits will not be measured for payment under this Item.

Equipment decontamination, the collection of residuals, and the collection and disposal of liquids generated during equipment decontamination activities will not be measured separately for payment.

Any material processing required by the Contractor-selected disposal facility, including the proper disposal of all removed materials other than creosote treated wood, will not be measured for payment.

Basis of payment:

This work shall be paid for at the Contract unit price, which shall include transportation of Controlled Materials from the Project WSA to the TDRF(s); the preparation of manifests, bills of lading, and fees paid; and all equipment, materials, tools, and labor incidental to this work. This unit price will be applicable to all of the listed TDRFs and will not change for the duration of the Project.

This price shall also include equipment decontamination, the collection and handling of residuals generated during decontamination, and the collection and disposal of solids and liquids generated during equipment decontamination activities.

Payment for dust control activities shall be made under the appropriate Contract items.

Pay Item Pay Unit

Disposal of Controlled Materials ton

ITEM NO. 101117A - CONTROLLED MATERIALS HANDLING

Description:

Work under this Item is intended to provide specific procedural requirements to be followed by the Contractor during the excavation of controlled materials from within any AOEC and LLAOEC, as shown on the Project Plans. This supplements Specifications Section 2.02, 2.03, 2.05, and 2.06 and Contract Special Provisions for excavation wherever contaminated materials are encountered. Work under this item shall include transporting and stockpiling materials at the WSA; and covering, securing, and maintaining the stockpiled materials throughout the duration of the Project. All materials, excluding the existing pavement structure (asphalt and subbase), rock, ledge, and concrete excavated within AOECs are to be considered controlled materials. All surplus excavated material within LLAOECs that cannot be reused within the project limits shall also be considered controlled materials. If the vertical limits of the existing subbase cannot be determined visually, subbase will be presumed to exist 12" below the bottom of existing pavement. Bridge ballast materials characterized as AOEC/LLAOEC represent settled finegrained materials along with blended settled fines/stone. The settled fines should be handled as referenced above. The overlying crushed rock component of bridge ballast is considered clean surplus material.

Controlled materials consisting of non-hazardous levels of regulated substances have been documented to exist within the Project limits. Such contamination is documented in the reports listed in the "Notice to Contractor – Environmental Investigations". Where contaminated soils are excavated, such soil will require special handling, disposal and documentation procedures.

Materials:

The required materials are detailed on the Project Plans. All materials shall conform to the requirements of the Contract.

Plastic Sheet: Polyethylene plastic sheeting for underlayment shall be at least 30 mil thick. Polyethylene plastic sheeting for covering excavated material shall be a thickness of 10 mil. Both shall be at least 10 feet wide.

Covers for roll-off/storage containers shall be made of polyethylene plastic, or similar watertight material, that is of sufficient size to completely cover top opening and can be securely fastened to the container.

Sand Bags: Sandbags used to secure polyethylene covers shall be at least 30 pounds.

Sorbent Boom: Shall be 8 inches in diameter and 10 feet long and possess petrophilic and hydrophilic properties. Sorbent booms shall also have devices (i.e. clips, clasps, etc.) for connection to additional lengths of boom.

Construction Methods:

A. General

When controlled materials are encountered during the course of the work, health and safety provisions shall conform to the appropriate sections of the Contract. Provisions may include implementation of engineering controls, air and personal monitoring, the use of chemical protective clothing (CPC), personal protective equipment (PPE), implementation of engineering controls, air and personal monitoring, and decontamination procedures.

All suitable material excavated from the AOECs may be reused within the AOEC from which it was excavated as fill/backfill, in accordance with the following conditions: (1) such soil is deemed to be structurally suitable as fill by the Engineer; (2) such soil is not placed below the water table; (3) the CT DEEP groundwater classification of the area where the soil is to be reused as fill does not preclude said use; and (4) such soil is not placed in an area subject to erosion. Soils within the LLAOECs are to be reused on site prior to the use of other soils and/or fill such that no excess soils requiring off-site disposal are generated from the LLAOECs. Materials removed from any excavation within an AOEC which cannot be immediately reused within the same AOEC shall be transported directly from their point of origin on the Project to the WSA. The stockpiles of excavated controlled materials shall be maintained as shown on the Project Plans. The Contractor shall plan excavation activities within AOECs/LLAOECs in consideration of the capacity of WSA, and the material testing and disposal requirements of the applicable Contract item. No claims for delay shall be considered based on the Contractor's failure to coordinate excavation activities as specified herein.

The Engineer will sample the stockpiled controlled materials at a frequency and for the constituents to meet the acceptance criteria of the treatment/recycling/disposal facilities submitted by the Contractor. The Contractor is hereby notified that laboratory turnaround time is expected to be fifteen (15) working days. Turnaround time is the period of time beginning when the Contractor notifies the Engineer which facility it intends to use and that the stockpile is ready for sampling and ending with the Contractor's receipt of the laboratory analytical results. Any change of intended treatment/recycling/disposal facility may prompt the need to resample and will therefore restart the time required for laboratory turnaround. The laboratory will furnish such results to the Engineer. Upon receipt, the Engineer will make available to the Contractor the results of the final waste characterization determinations. No delay claim will be considered based upon the Contractor's failure to accommodate the laboratory turnaround time as identified above.

B. Transportation and Stockpiling

In addition to following all pertinent Federal, State and local laws or regulatory agency policies, the Contractor shall adhere to the following precautions during transport of non-hazardous materials:

• Transported controlled materials are to be covered prior to leaving the point of generation

and are to remain covered until the arrival at the WSA;

- All vehicles departing the site are properly logged to show the vehicle identification, driver's name, time of departure, destination, and approximate volume and content of materials carried;
- All vehicles shall have secure, watertight containers free of defects for material transportation;
- No material shall leave the site until there is adequate lay down area prepared in the WSA;
 and,
- Documentation must be maintained indicating that all applicable laws have been satisfied and that the materials have been successfully transported and received at the WSA.

Construction of the WSA shall be completed prior to the initiation of construction activities generating Controlled Materials. Plastic polyethylene sheeting shall underlay all excavated controlled materials. Measures shall be implemented to divert rainfall away from the WSA.

No controlled materials shall be excavated or transported to the WSA until registration under the General Permit for Contaminated Soil and/or Sediment Management (Staging and Transfer) has been obtained by ConnDOT.

Placement of sorbent boom along the perimeter of the WSA shall be conducted when soil is saturated with petroleum product.

Excavated materials shall be staged as shown on the Project Plans or as directed by the Engineer.

C. WSA Maintenance

The Contractor shall provide all necessary materials, equipment, tools and labor for anticipated activities within the WSA. Such activities include, but are not limited to, handling and management of stockpiles and drummed CPC/PPE; uncovering and recovering stockpiles; maintenance of WSA; replacement of damaged components (i.e. sand bags, plastic polyethylene sheeting, etc.); and waste inventory record management. The Contractor shall manage all materials in the WSA in such a way as to minimize tracking of potential contaminated materials across the site and off-site, and minimize dust generation.

Each stockpile shall be securely covered when not in active use with a cover of sufficient size to prevent generation of dust and infiltration of precipitation. The cover shall be to prevent wind erosion.

The staged stockpiles shall be inspected at least daily by the Contractor to ensure that the cover and containment have not been damaged and that there is no apparent leakage from the pile. If

the cover has been damaged, or there is evidence of leakage from the piles, the Contractor shall immediately replace the cover or containment as needed to prevent the release of materials to the environment from the piles.

An inventory of stockpiled materials and drummed CPC/PPE shall be conducted on a daily basis. Inventory records shall indicate the approximate volume of material/drums stockpiled per day; the approximate volume of material/drums stockpiled to date; material/drums loaded and transported off-site for disposal; any materials loaded and transported for on-site reuse; and identification of stockpiles relative to their points of generation.

Following the removal of all stockpiled controlled materials, residuals shall be removed from surfaces of the WSA as directed by the Engineer. This operation shall be accomplished using dry methods such as shovels, brooms, mechanical sweepers or a combination thereof. Residuals shall be disposed of as Controlled Materials.

D. Dewatering

Dewatering activities shall conform to Items in pertinent articles of the Contract.

E. Decontamination

All equipment shall be provided to the work site free of contamination. The Engineer may prohibit from the site any equipment that in his opinion has not been thoroughly decontaminated prior to arrival. Any decontamination of the Contractor's equipment prior to arrival at the site shall be at the expense of the Contractor. The Contractor is prohibited from decontaminating equipment on the Project that has not been thoroughly decontaminated prior to arrival.

The Contractor shall furnish labor, materials, tools and equipment for decontamination of all equipment and supplies that are used to handle Controlled Materials. Decontamination shall be conducted at an area designated by the Engineer and may be required prior to equipment and supplies leaving the Project, between stages of the work, or between work in different AOEC's.

Dry decontamination procedures are recommended. Residuals from dry decontamination activities shall be collected and managed as Controlled Materials. If dry methods are unsatisfactory as determined by the Engineer, the Contractor shall modify decontamination procedures as required subject to the Engineer's approval.

F. Dust Control

The Contractor shall implement a fugitive dust suppression program in accordance with the Contract to prevent the off-site migration of particulate matter and/or dust resulting from excavation, loading and operations associated with Controlled Materials. It shall be the Contractor's responsibility to supervise fugitive dust control measures and to monitor airborne particulate matter. The Contractor shall:

- 1. Employ reasonable fugitive dust suppression techniques.
- 2. Visually observe the amounts of particulate and/or fugitive dust generated during the handling of controlled materials. If the apparent amount of fugitive dust and/or particulate matter is not acceptable to the Engineer, the Engineer may direct the Contractor to implement corrective measures at his discretion, including, but not limited to, the following:
 - (a) apply water to pavement surfaces
 - (b) apply water to equipment and excavation faces; and
 - (c) apply water during excavation, loading and dumping.

G. Permit Compliance

The Contractor shall comply with the terms and conditions of the DEEP "General Permit for Contaminated Soil and/or Sediment Management (Staging and Transfer)", including the General Operating Conditions and the Specific Operating Conditions, except that the Engineer will conduct all soil/sediment characterization and perform all record keeping. In particular, the Contractor shall:

- 1. Operate, maintain and repair the WSA in conformance with the requirements of the General Permit.
- 2. Maintain a communications system capable of summoning fire, police, and/or other emergency service personnel.
- 3. Prevent unauthorized entry onto the stockpiles by the use of fences, gates, or other natural or artificial barriers.
- 4. Separate incidental excavation waste to the satisfaction of the receiving facility or to an extent that renders the contaminated soil and/or sediment suitable for its intended reuse.
- 5. Isolate and temporarily store incidental waste in a safe manner prior to off-site transport to a facility lawfully authorized to accept such waste.
- 6. Not store more that 100 cubic yards of incidental waste at any one time.
- 7. Sort, separate and isolate all hazardous waste from contaminated soil and/or sediment.
- 8. Prevent or minimize the transfer or infiltration of contaminants from the stockpiles to the ground as detailed in "B. Transportation and Stockpiling" above.
- 9. Securely cover each stockpile of soil as detailed in "C. WSA Maintenance" above.
- 10. Minimize wind erosion and dust transport as detailed in "F. Dust Control" above.
- 11. Use anti-tracking measures at the WSA to ensure the vehicles do not track soil from the WSA onto a public roadway at any time.
- 12. Instruct the transporters of contaminated soil and/or sediment of best management practices for the transportation of such soil (properly covered loads, removing loose material from dump body, etc.).
- 13. Control all traffic related to the operation of the facility in such a way as to mitigate the queuing of vehicles off-site and excessive or unsafe traffic impact in the area where the facility is located.

14. Ensure that except as allowed in section 22a-174-18(b)(3)(C) of the Regulations of Connecticut State Agencies, trucks are not left idling for more than three (3) consecutive minutes.

Method of Measurement:

The work of Controlled Material Handling will be measured for payment by the number of cubic yards of controlled material excavated within the AOEC(s) and taken to the WSA and stockpiled within the storage bins for sampling by the Engineer or temporarily stockpiled for later reuse. Material kept in proximity to the site of the excavation and reused as it is generated will not be measured for payment under this item. This measurement shall be in accordance with and in addition to the quantity measured for payment of the applicable excavation item in Specification Sections 2.02, 2.03, 2.05, 2.06, or the Contract Special Provisions, as applicable. Excess excavations made by the Contractor beyond the payment limits specified in the Contract will not be measured for payment and the Contractor assumes all costs associated with the appropriate handling, management and disposal of this material.

Equipment decontamination, the collection of residuals, and the collection and disposal of liquids generated during equipment decontamination activities will not be measured separately for payment.

Basis of Payment:

This work shall be paid for at the Contract unit price, which shall include all transportation from the excavation site to the final WSA, including any intermediate handling steps; stockpiling controlled materials at the WSA; covering, securing, and maintaining the individual stockpiles within the WSA throughout the duration of the Project; and all tools, equipment, material and labor incidental to this work.

This price shall also include equipment decontamination; the collection of residuals generated during decontamination and placement of such material in the WSA; and the collection and disposal of liquids generated during equipment decontamination activities.

All materials, labor and equipment associated with compliance with the General Permit for Contaminated Soil and/or Sediment Management (Staging and Transfer) will not be measured separately, but will be considered incidental to the item "Controlled Materials Handling".

Securing and construction of the WSA shall be paid for under Item 101128A. Payment for dust control activities shall be made under the appropriate Contract items.

Pay Item Pay Unit

Controlled Materials Handling C.Y.