

ATTACHMENT A – EXECUTIVE SUMMARY

Attachment A – Executive Summary

As part of an on-call contract with the Connecticut Department of Public Works, DTC has been tasked to solve a bank stabilization problem on the Padanaram Brook in Danbury, CT adjacent to the Henry Abbott Technical High School. After construction was complete on an addition to the high school, erosion to the bank of the brook became an issue. If allowed to continue, the bank erosion has the potential to undermine an existing driveway used to access the school.

Options for this problem included re-grading of the bank with a grouted Rip Rap, a Gabion Block Retaining wall, a cast in place retaining wall and a segmental block retaining wall. After consulting with DEP Fisheries, it was decided to go with the segmental block retaining wall. To implement this solution it will be necessary to disturb 465 square feet of wetlands temporarily along the edge of Padanaram Brook.

The wetland and watercourse disturbance will be due to construction of the wall. These activities include the installation of sheet piling at the toe of the bank, excavation, and dewatering. The sheet piles shall be set at 1 foot higher than the 2-year storm as per CT DOT standards for temporary facilities. Once, construction is complete the sheet piles shall be cut down to the mud line of the brook channel. The bank will be back filled with the top three feet consisting of 2 feet of riprap and the top one-foot being natural existing soil. The intent is to restore the bank to its original state after construction to the extent possible.

Dewatering basins will be constructed in close proximity to each of the proposed work areas and will be designed in accordance with the Connecticut Water Quality and Sediment and Erosion Control Manuals. Standard erosion control measures such as silt fence, and stone check dams are proposed.

A review of the State and Federal Listed Species and Natural Communities Map revealed the project is outside an area of special concern for threatened or endangered species.

With this determination, an environmental report and mitigation plan was not performed at this stage of the project pending input from the Department of Environmental Protection.

ATTACHMENT B – USGS MAP



NOTES:

LOCATION PLAN PADANARAM BROOK

Figure 2

DRAWN BY: FJC
 CHECKED BY: JAB
 SCALE: 1" = 2000'
 DATE: OCTOBER 14, 2009
 DTC NUMBER 07-134-606



DIVERSIFIED TECHNOLOGY CONSULTANTS
 2321 WHITNEY AVENUE HAUGEN CT 05115
 203 239 4200 203 234 1315 FAX

DANBURY, CT

Attachment C: Documentation Form for the Following Permits:

- Inland Wetlands and Watercourses Permit (CGS Section 22a-39)
- Stream Channel Encroachment Line Permit (CGS Section 22a-342 through 22a-349)
- 401 Water Quality Certification Inland Waters (33 U.S.C. 1341)

All applicants should review the application instructions (DEP-IWRD-INST-100). Applicants for an Inland Wetlands and Watercourses Permit should review CGS Sections 22a-36 through 22a-45 and RCSA Sections 22a-39-1 through 22a-39-15. Applicants for a Stream Channel Encroachment Line Permit should review CGS Section 22a-342. Applicants for 401 Water Quality Certification should review Section 401 of the Federal Water Pollution Control Act (33 U.S.C. 1341) and Connecticut's Water Quality Standards.

If more space is needed for your response, duplicate the form and attach additional pages to the form. If additional pages are attached, they should be numbered and titled to correspond to the specific number and title of the request for information on the application form.

1. Applicant Name: **CT Dept of Education**
(as indicated on the *Permit Application Transmittal Form*)
2. Check the permit(s) being requested in this application (check all that apply):
 - Inland Wetlands & Watercourses
 - Stream Channel Encroachment Lines
 - Water Quality Certification
3. If applying for a SCEL permit, indicate the SCEL Map number(s) wherein the proposed activity will take place, the property identifier and the date of the map referenced:
SCEL Map number(s)
Property Identifier:
Date of the map referenced:
4. Name of wetland(s) and watercourse(s) involved:
Padanaram Brook and associated wetlands

Attachment C: Documentation Form (continued)

5. Describe the purpose and need for the proposed project.

After construction was complete on an addition to Henry Abbott Technical High School, erosion to the bank of Padanaram brook adjacent to the school became an issue after the significant flood event in the fall of 2007. If allowed to continue, storm events will continue to erode the streambank and undermine the structural integrity of the driveway and guardrail, leaving an unsafe condition. After studying a grouted rip-rap bank and various wall systems, DTC consulted with DEP Fisheries and jointly concluded that a wall was preferred.

Check here if additional sheets are necessary, and label and attach them to this sheet.

Attachment C: Documentation Form (continued)

6. *Description of the Regulated Activity:*

6a. Indicate the area, in acres and volume in cubic yards, of any fill, excavation, or other alterations of wetlands, watercourses and floodplains.

.02 acres

100 cubic yards

6b. Describe all proposed regulated activities in and affecting wetlands, watercourses and floodplains. Include all discharges of dredged or fill material and storm waters incidental to the construction and/or operation of the proposed project.

It is proposed to build a retaining wall along Padanaram Brook to stop bank erosion. There is no proposed discharge of dredged or fill material into the brook. The stormwater into the brook is limited to the existing outfalls.

Check here if additional sheets are necessary, and label and attach them to this sheet.

Attachment C: Documentation Form (continued)

7. *Description of Site* - Describe all natural and man-made features at the property at which the regulated activity is proposed to be conducted.

At the proposed wall site, Padanaram Brook is a natural sand & gravel channel with some cobbles both upstream and down stream of the site. The banks are vegetated with underbrush and trees ranging in size from 2" to 18" in diameter.

Check here if additional sheets are necessary, and label and attach them to this sheet.

8. *Disposal of Excess Material* - State the type and quantity of excess material anticipated from the project and where such material will be disposed.

Any material removed in conjunction with construction of the wall will be reused if suitable or removed from the site.

Check here if a disposal plan is included as Attachment C8.

Attachment C: Documentation Form (continued)

9. Inland Wetlands and Watercourses Applications Only:

- a. Is the project located in a public water supply watershed? Yes No

If Yes, the applicant must give written notice to the water company of the filing of this application in accordance with CGS Section 22a-42f.

If Yes, include a copy of that notice as Attachment C9a.

- b. Is any portion of an inland wetland or watercourse in which the regulated activity is proposed located within 500 feet of an another municipality? Yes No

If Yes, the applicant must give written notice to the inland wetlands agency of such municipality of the filing of this application in accordance with CGS Section 22a-42c.

If Yes, include a copy of that notice as Attachment C9b.

- c. Is the owner of the subject property different than the applicant? Yes No

If Yes, the owner must give written consent to the proposed activity in accordance with RCSA Section 22a-39-5.2.

If Yes, include a copy of that consent as Attachment C9c.

10. Inland Wetlands and Watercourses Applications Only:

List the names and addresses of the current owners of record of land abutting the site of the proposed regulated activity.

Name: **Danpar Associates Limited**

Address: **1 Padanaram Rd**

City/Town: **Danbury**

State: **CT** Zip Code:

Mailing address, if different than above:

Mailing Address: **99 Park ave suite 1820**

City/Town: **New York**

State: **NY** Zip Code: **10016**

Name: **Joseph & Denise Martin**

Address: **8 Oak Lane**

City/Town: **Danbury**

State: **CT** Zip Code:

Mailing address, if different than above:

Mailing Address: **31 Maple Ave**

City/Town: **Bethel**

State: **CT** Zip Code: **06801**

Name: **John & Victoria Walling**

Address: **8A Oak Lane**

City/Town: **Danbury**

State: **CT** Zip Code: **06811**

Mailing address, if different than above:

Mailing Address:

City/Town:

State: Zip Code:

Check here if additional sheets are necessary, and label and attach them to this sheet.

Additional Abutters

Property Address:
6A Oak Lane

Owner of Record:
Daniel Breton
6A Oak Lane
Danbury, CT 06811

Property Address:
6 Oak Lane

Owner of Record:
Romilton M Desousa, Jose Primo, Nancy Zeno
6 Oak Lane
Danbury, CT 06811

Property Address:
31 Hayestown Avenue

Owner of Record:
City of Danbury
155 Deer Hill Ave
Danbury, CT 06810-7769

Attachment C: Documentation Form (continued)

11. *Section 401 Water Quality Certification Applications Only:*

In order to obtain a Section 401 Water Quality Certification from the DEP, you must have applied for a federal license or permit for an activity which may result in a discharge into the waters of the United States, including wetlands.

- a. Has an application for a federal license or permit been submitted to the Army Corps of Engineers or other federal agency? Yes No

If Yes, include a complete copy of the application form and plans as Attachment C11a.

- b. If the Section 401 Water Quality Certification application is for an activity authorized by an individual or programmatic general permit issued by the Army Corps of Engineers under section 404 of the federal Clean Water Act, identify such permit by name and application or file number.

Permit Name: **Pending**

Application or File Number: **Pending**

12. Summary of Documents submitted with Attachment C: Check each document being submitted under Attachment C as verification that all applicable documents have been submitted.

Attachment C8: Disposal Plan

Attachment C9a: If the project is located in a public water supply watershed, provide a copy of the written notice sent to the water company of the filing of this application in accordance with CGS Section 22a-42f.

Attachment C9b: If any portion of an inland wetland or watercourse in which the regulated activity is proposed to be located is within 500 feet of an another municipality, provide a copy of the written notice sent to the inland wetlands agency of such municipality of the filing of this application in accordance with CGS Section 22a-42c.

Attachment C9c: If the owner of the subject property is different than the applicant, provide a copy of the owner's written consent to the proposed activity in accordance with RCSA Section 22a-39-5.2.

Attachment C11a: *Section 401 Water Quality Certification Applications Only:* a complete copy of the application form and plans submitted to a federal agency for a federal license or permit.

Other, please specify:

ATTACHMENT C11a – Army Corps Permit

18. Nature of Activity (Description of project, include all features)

See Attached

19. Project Purpose (Describe the reason or purpose of the project, see instructions)

See Attached

USE BLOCKS 20-23 IF DREDGED AND/OR FILL MATERIAL IS TO BE DISCHARGED

20. Reason(s) for Discharge

See Attached

21. Type(s) of Material Being Discharged and the Amount of Each Type in Cubic Yards:

Type Amount in Cubic Yards	Type Amount in Cubic Yards	Type Amount in Cubic Yards
See Attached		

22. Surface Area in Acres of Wetlands or Other Waters Filled (see instructions)

Acres See Attached
Or
Liner Feet

23. Description of Avoidance, Minimization, and Compensation (see instructions)

See Attached

24. Is Any Portion of the Work Already Complete? Yes No IF YES, DESCRIBE THE COMPLETED WORK

25. Addresses of Adjoining Property Owners, Lessees, Etc., Whose Property Adjoins the Waterbody (if more than can be entered here, please attach a supplemental list).

Address - See Attached

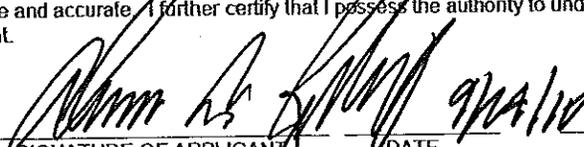
City - State - Zip -

26. List of Other Certifications or Approvals/Denials Received from other Federal, State, or Local Agencies for Work Described in This Application.

AGENCY	TYPE APPROVAL*	IDENTIFICATION NUMBER	DATE APPLIED	DATE APPROVED	DATE DENIED
CT DEP	401 Water Quality Cert	Pending	September 2010	Pending	
CT DEP	Inland Wetlands	Pending	September 2010	Pending	
CT DEP	Flood Manage. Cert.	Pending	September 2010	Pending	
CT DEP	Water Diversion	Pending	September 2010	Pending	

* Would include but is not restricted to zoning, building, and flood plain permits

27. Application is hereby made for a permit or permits to authorize the work described in this application. I certify that the information in this application is complete and accurate. I further certify that I possess the authority to undertake the work described herein or am acting as the duly authorized agent of the applicant.




SIGNATURE OF APPLICANT DATE SIGNATURE OF AGENT DATE

The application must be signed by the person who desires to undertake the proposed activity (applicant) or it may be signed by a duly authorized agent if the statement in block 11 has been filled out and signed.

18 U.S.C. Section 1001 provides that: Whoever, in any manner within the jurisdiction of any department or agency of the United States knowingly and willfully falsifies, conceals, or covers up any trick, scheme, or disguises a material fact or makes any false, fictitious or fraudulent statements or representations or makes or uses any false writing or document knowing same to contain any false, fictitious or fraudulent statements or entry, shall be fined not more than \$10,000 or imprisoned not more than five years or both.

**Padanaram Brook Bank Stabilization
Danbury, CT**

**U.S. Army Corps of Engineers Permit Application
Supplemental Information**

Block 18

The proposed improvements include the following:

The Construction of approximately 135 lf of modular block retaining wall along the banks of Padanaram Brook is proposed. The exposed face of the wall will vary in height with a maximum exposure of 6 feet. To implement this solution it will be necessary to temporarily disturb wetlands and watercourses within the Padanaram Brook. The wetland impacts are primarily due to the installation of a sheet pile cofferdam at the toe of the bank, excavation, and dewatering. The sheet piles shall be set at 1 foot higher than the 2-year storm as per CT DOT standards for temporary facilities. Once, construction is complete the sheet piles shall be cut down to the mud line of the brook channel. The bank will be back filled with 2 feet of riprap topped with one-foot of natural channel soil. The intent is to restore the bank to its original state after construction.

Block 19

The purpose of this project is to stabilize the bank of the Padanaram Brook along an access drive for The Henry Abbott Technical High School. After construction was complete on an addition to the high school, erosion to the bank of the brook became an issue. If allowed to continue, the bank erosion has the potential to undermine an existing driveway used to access the school.

Block 20

Dredge material will be generated from excavation behind the cofferdam. The cofferdam is necessary for the construction of the retaining wall. No dredged material will be disposed of within wetland areas. After dewatering, all suitable dredged material will be reused to backfill the proposed wall. Dredged material deemed unsuitable for fill will be disposed of at an approved offsite upland disposal area.

Block 21

Approximately 42 CY of material within the wetland limits are to be excavated behind the cofferdam. Dredged material will be dewatered and filtered adjacent to the construction site, prior to release to the Brook. Final design of the dewatering system will be performed by the selected contractor and is subject to review and acceptance by the Engineer prior to construction. After dewatering, suitable channel sediments will be utilized as embankment fill. Dredged sediments deemed unsuitable for embankment fill will be disposed of at an approved offsite disposal site.

Block 22

450 SF of wetlands and watercourse will be disturbed during the course of construction for the retaining wall. After completion of the wall, it is the intent to back fill the wall with suitable 2 feet of riprap topped with of natural channel soil. The riprap will serve as scour protection of the wall and the soil on top of the riprap will promote the return of native vegetation.

Block 23

This proposed project will be designed with a view toward utilizing the least damaging alternative for fulfilling the project objectives. The following alternatives were considered in the development of the design:

1. No Action: This alternative was rejected because it will not address the problems of the bank erosion and the impending access drive destabilization.
2. Postponing Action Pending Further Study: Detailed study has already been performed on the proposed project areas from a hydrologic and hydraulic standpoint. No further study is warranted.
3. Taking Action of a Different Nature: Alternative options for addressing the flooding

4. concerns have been considered:

1. Re-grade slope stabilize with grouted rip rap
2. Gabion Block Retaining Wall
3. Cast-in-place Retaining Wall
The preferred option has the least potential for impacts and was preferred by the state fisheries staff

5. Conducting the Proposed Activity in a Different Location: Due to the nature of the proposed improvements, no alternative locations exist.

Block 25

Abutters

Property Address:
1 Padanaram Road

Owner of Record:
Danpar Associates Limited
99 Park Avenue suite 1820
New York, New York 10016

Property Address:
8 Oak Lane

Owner of Record:
Joseph & Denise Martin
8 Oak Lane
Danbury, CT 06811

Property Address:
8A Oak Lane

Owner of Record:
John & Victoria Walling
8A Oak Lane
Danbury, CT 06811

Property Address:
6A Oak Lane

Owner of Record:
Daniel Breton
6A Oak Lane
Danbury, CT 06811

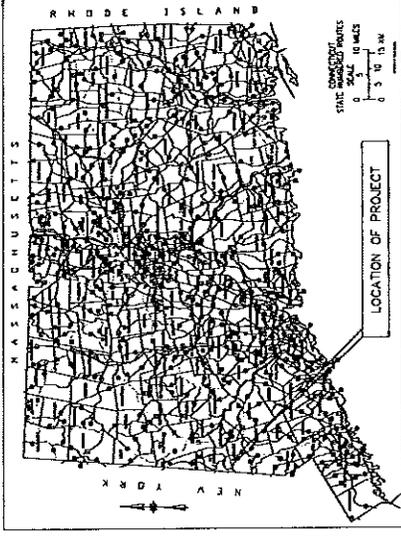
Property Address:
6 Oak Lane

Owner of Record:
Romilton M Desousa, Jose Primo, Nancy Zeno
6 Oak Lane
Danbury, CT 06811

Property Address:
31 Hayestown Avenue

Owner of Record:
City of Danbury
155 Deer Hill Ave
Danbury, CT 06810-7769

ATTACHMENT – PERMIT PLATES

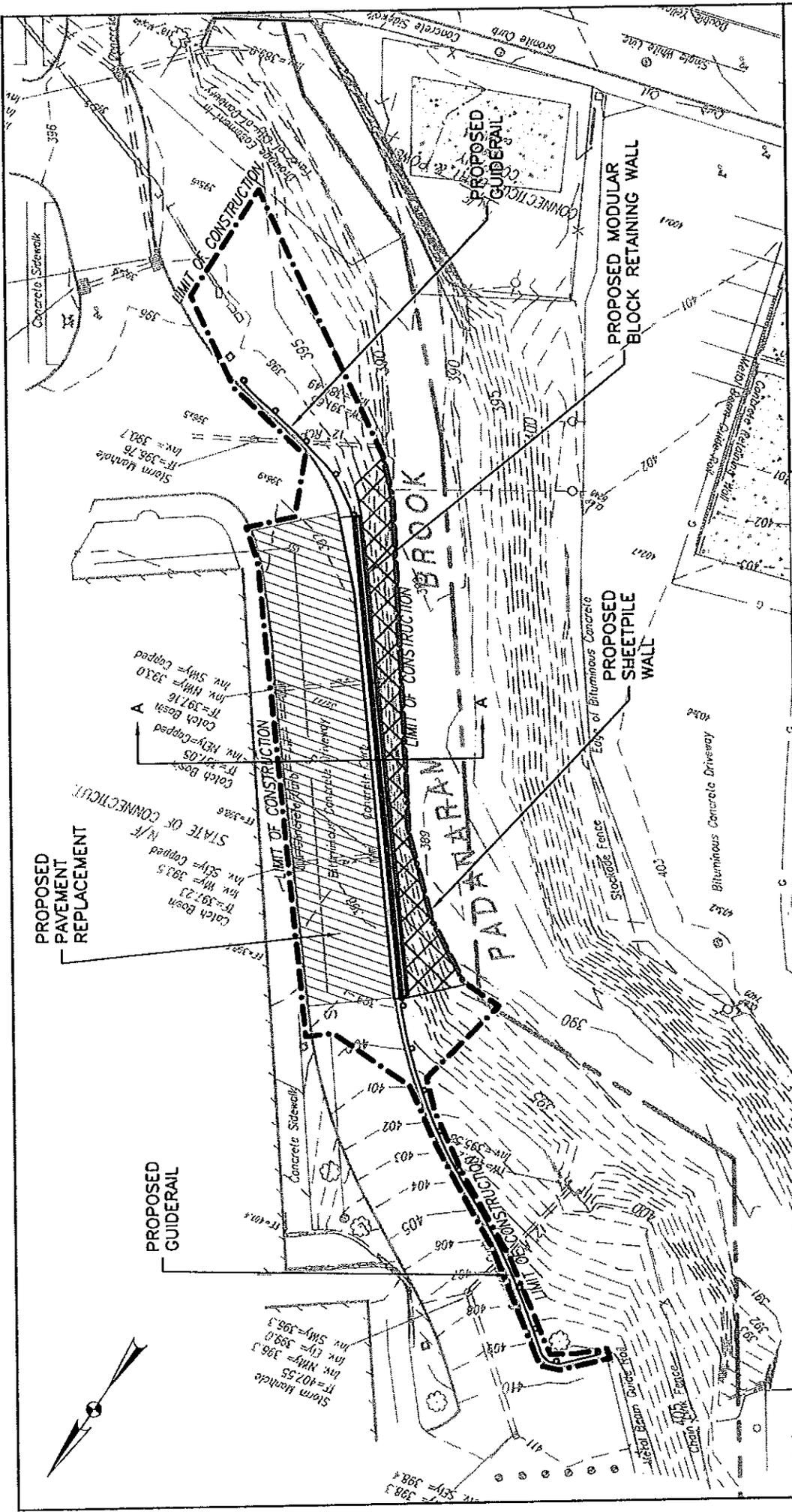


PROJECT LOCATION
SCALE: N.T.S.

LOCATION AND VICINITY	
PADANARAM BROOK BANK STABILIZATION HENRY ABBOTT TECHNICAL SCHOOL Danbury, Connecticut	
Henry Abbott Technical School 21 Hayestown Ave Danbury, CT 06811	
DATE: 5/3/10	SHEET 1

PROJECT VICINITY
SCALE 1"=2,000'





Overview of Construction Limits

PADANARAM BROOK BANK STABILIZATION
HENRY ABBOTT TECHNICAL SCHOOL
 Danbury, Connecticut

Henry Abbott Technical School
 21 Hayestown Ave
 Danbury, CT 06811

DATE: 5/3/10

SHEET 2

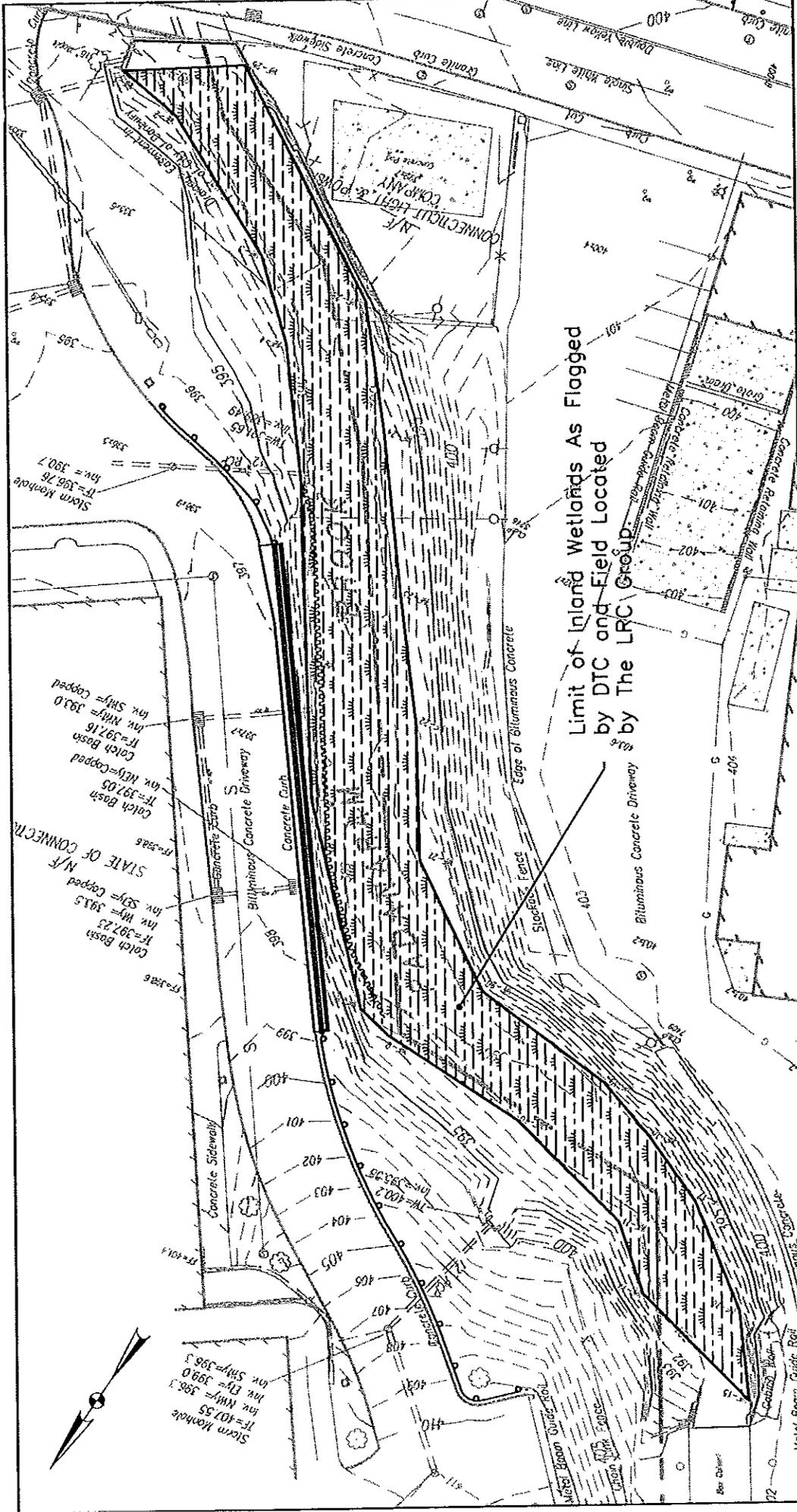
Overview of Construction Limits

SCALE 1"=40'

0 10' 20' 40'

Pavement Replacement

Limits of Rip Rap Overlay by Native Soil



Wetlands Limits

PADANARAM BROOK BANK STABILIZATION
HENRY ABBOTT TECHNICAL SCHOOL
 Danbury, Connecticut

Henry Abbott Technical School
 21 Hayestown Ave
 Danbury, CT 06811

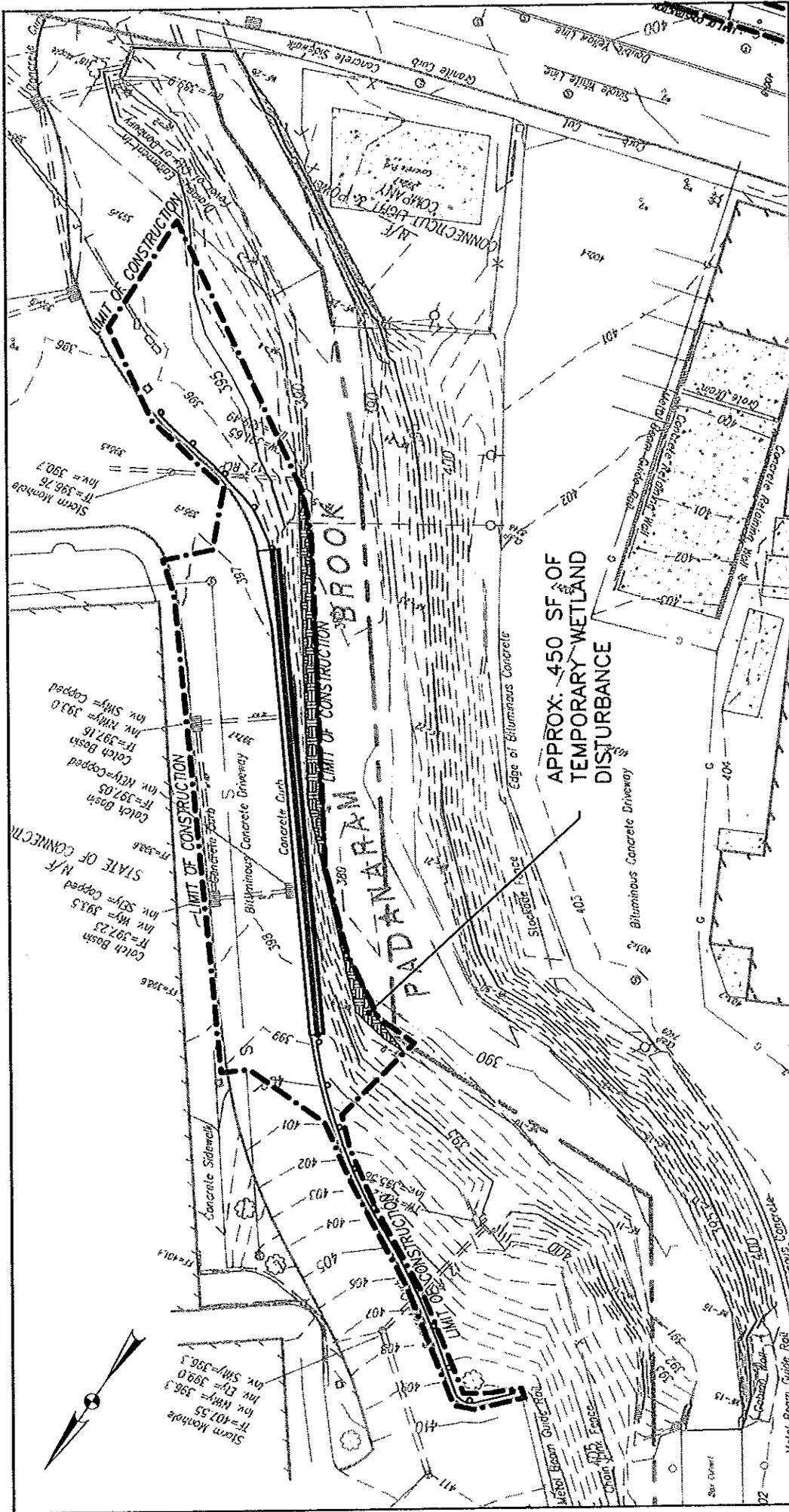
DATE: 5/3/10

SHEET 3

Wetland Limits
 SCALE 1"=40'

Inland Wetlands





Temporary Wetlands Disturbance

SCALE 1"=40'



Temporary Wetland Disturbance

Area of Temporary Wetlands Disturbance

PADANARAM BROOK BANK STABILIZATION

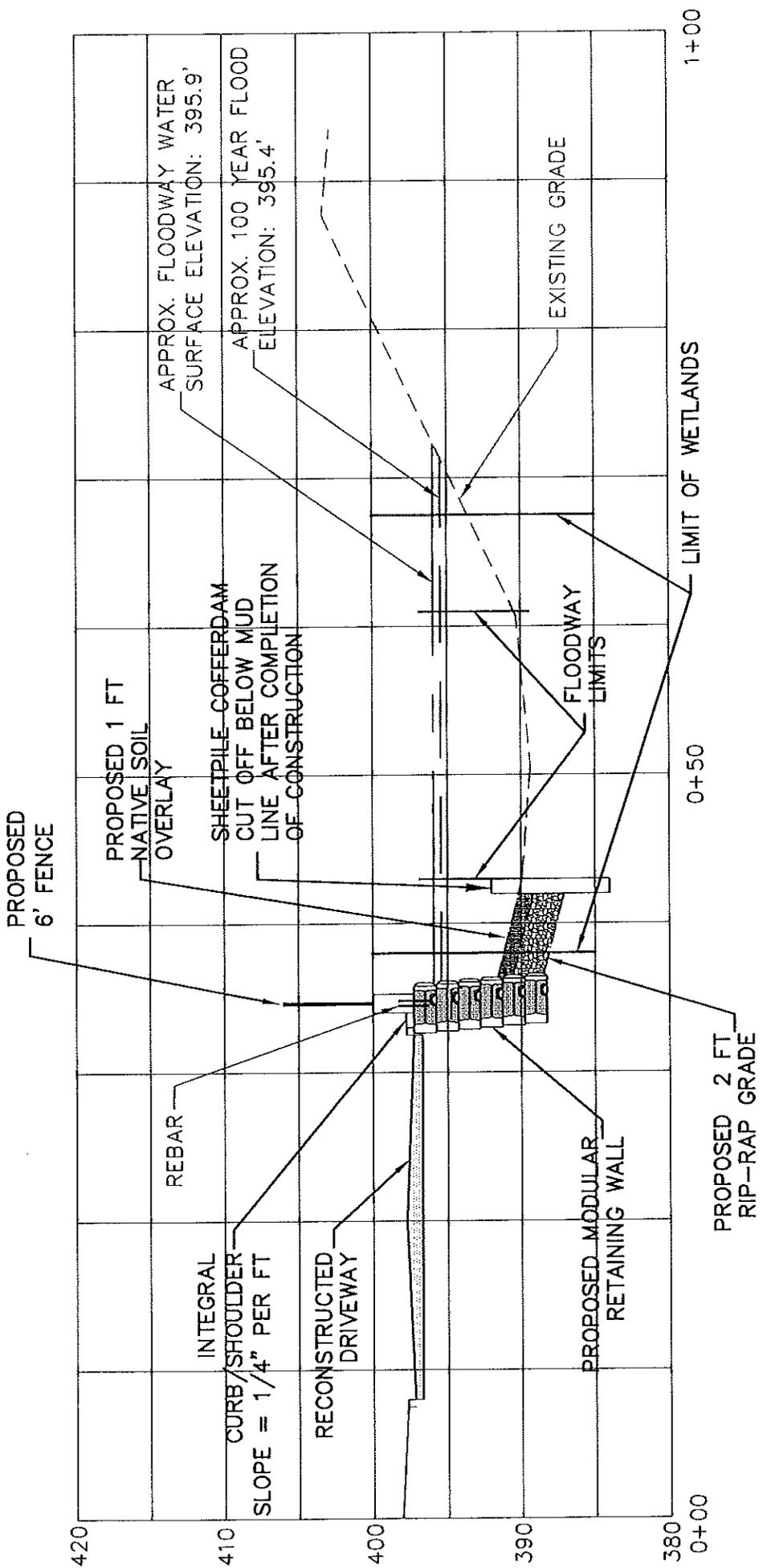
HENRY ABBOTT TECHNICAL SCHOOL

Danbury, Connecticut

Henry Abbott Technical School
 21 Hayestown Ave
 Danbury, CT 06811

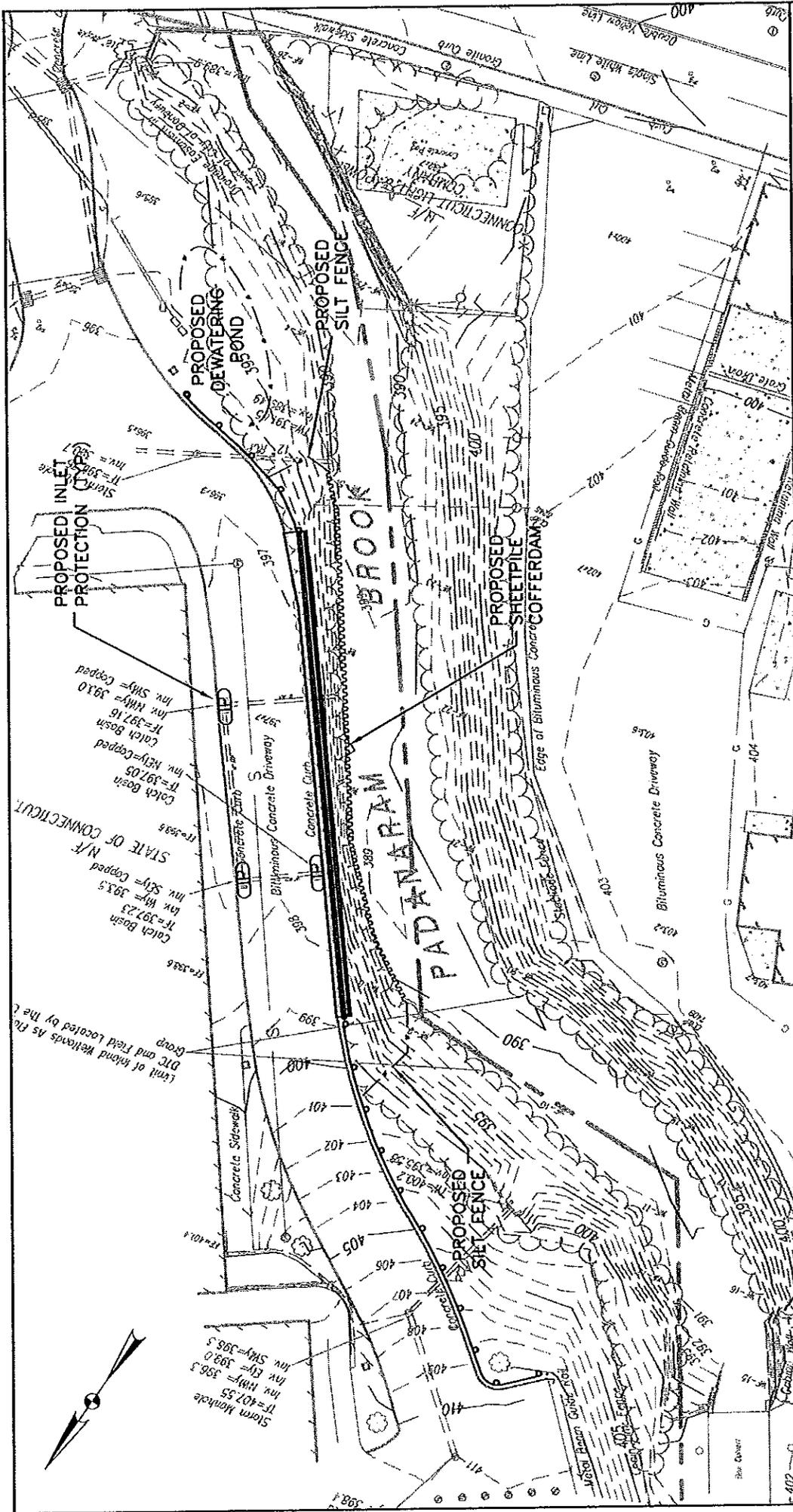
DATE: 5/3/10

SHEET 4



Cross Section A-A
SCALE NTS

Modular Retaining Wall Detail
PADANARAM BROOK BANK STABILIZATION HENRY ABBOTT TECHNICAL SCHOOL Danbury, Connecticut
Henry Abbott Technical School 21 Hayestown Ave Danbury, CT 06811
DATE: 5/3/10
SHEET 7



Sedimentation Erosion Provisions

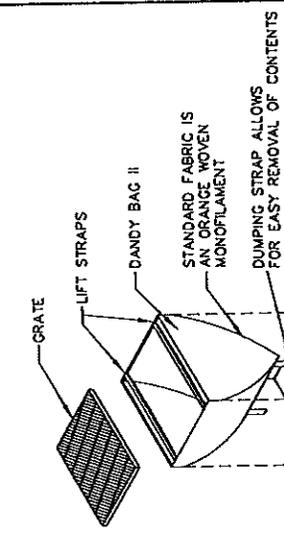
PADANARAM BROOK BANK STABILIZATION
HENRY ABBOTT TECHNICAL SCHOOL
 Danbury, Connecticut

Sedimentation Erosion Plan
 SCALE 1"=40'

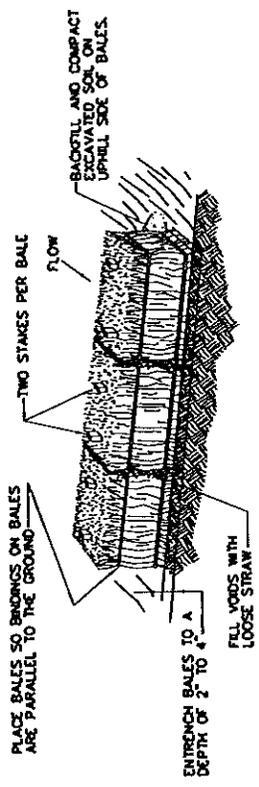
Henry Abbott Technical School
 21 Hayestown Ave
 Danbury, CT 06811

DATE: 5/3/10

SHEET 8

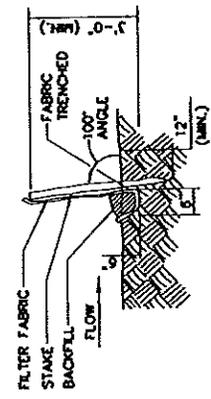


**SILT SACK INSTALLATION
AT CATCH BASIN**
INLET PROTECTION IN IMPERVIOUS AREA



HAYBALE INSTALLATION

- A) IDEALLY, BALES SHOULD BE ENTRENCHED 2 TO 4 INCHES AND TIGHTLY BUTTED TOGETHER. BALES CAN BE SUCCESSFULLY PLACED WITHOUT A TRENCH ON LOOSE SOILS. COMPACTS SHOULD BE REMOVED HEAVY BRUSH AND FILL IN ALL VOIDS WITH LOOSE STRAW.
- B) BALES SHALL BE ONLY USED AS A TEMPORARY BARRIER AND FOR NO LONGER THAN 60 DAYS. THEY SHALL NOT BE USED ON A JOB ADJACENT TO A RESIDENTIAL NEIGHBORHOOD, RESOURCES OR ADJACENT TO OR IN A WATERCOURSE.
- C) WHEN SEDIMENTATION DEPOSITS REACH WITHIN 3" OF THE TOP OF THE BALES, REMOVE SEDIMENTATION OR ADD ADDITIONAL BALES ON SEDIMENTATION DIRECTLY BEHIND THE FIRST ROW OF BALES AS DIRECTED BY THE ENGINEER.
- D) UPON ESTABLISHMENT OF GROUND COVER ON DISTURBED AREAS AND UPON REMOVAL OF THE SILT FENCE, THE SACKS MAY BE REMOVED AND USED AS MULCH. ANY SEDIMENTATION WILL BE THORLY SPREAD UPON ESTABLISHED GROUND COVER.



SILT FENCE INSTALLATION

- A) MINIMUM LENGTH OF SILT FENCE IS 15 L.F.
 - B) MAXIMUM POST SPACING IS 10 L.F.
 - C) JOINTS ONLY AT SUPPORT POST WITH MINIMUM 6" OVERLAP. SECURELY SEALED.
 - D) SEDIMENTATION DEPOSITS SHALL BE REMOVED WHEN THEY REACH 1/2 THE HEIGHT OF THE SILT FENCE.
 - E) SILT FENCE SHALL NOT BE USED IN A WATER COURSE.
- UPON ESTABLISHMENT OF GROUND COVER ON DISTURBED AREAS, AND WHEN DIRECTED BY THE ENGINEER, FENCE WILL BE REMOVED AND MULCH SPREAD UPON EXISTING GROUND COVER.

Sedimentation Erosion Control Details
NTS

Sedimentation Erosion Control Details	
PADANARAM BROOK BANK STABILIZATION HENRY ABBOTT TECHNICAL SCHOOL Danbury, Connecticut	
Henry Abbott Technical School 21 Hayestown Ave Danbury, CT 06811	
DATE: 5/3/10	SHEET 9

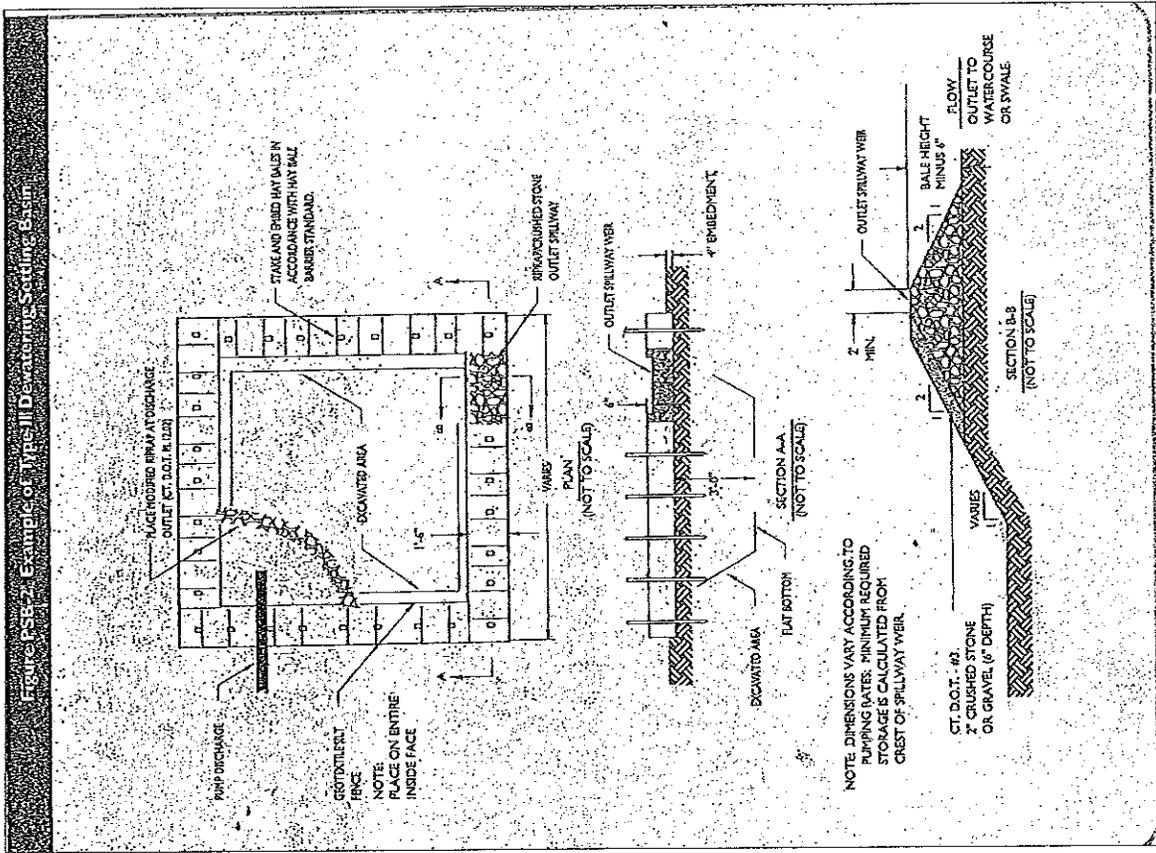


FIGURE 1-35-1 Example of Type II Dewatering Settling Basin

Dewatering Pond Detail

NTS

Dewatering Pond Detail	
PADANARAM BROOK BANK STABILIZATION HENRY ABBOTT TECHNICAL SCHOOL Danbury, Connecticut	
Henry Abbott Technical School 21 Hayestown Ave Danbury, CT 06811	
DATE: 5/3/10	SHEET 10

ATTACHMENT – SOIL SCIENTIST REPORT

ENGINEERED
SOLUTIONS



LAND
STRUCTURES
WATER

09.01.09
DTC
RECOMM
COPY

September 1, 2009

J. Andrew Bevilacqua, P.E.
Associate & Manager of Civil Engineering
Diversified Technology Consultants, Inc.
2321 Whitney Avenue
Suite 301
Hamden, CT 06518

Re: Wetland and Watercourse Delineation
Portion of Henry Abbott Technical School
Hayestown Avenue
Danbury, Connecticut

Dear Mr. Bevilacqua:

Diversified Technology Consultants, Inc. (DTC) conducted a site inspection of the referenced property to determine the presence or absence of wetlands and/or watercourses, to demarcate (flag) the boundaries of wetlands and watercourses identified, and to identify onsite soil types.

The limit of investigation on the project site consisted of approximately 1.65 acres west and southwest of the Henry Abbott Technical School. The investigation consisted of an area immediately surrounding the Padanaram Brook. The weather on the day of the investigation was sunny with temperatures in the 70s.

During the September 1, 2009 investigation an inland wetland and watercourse system was identified and delineated. The system is a watercourse, Padanaram Brook, with a narrow wetland buffer along portions of the brook. The vegetative cover is primarily broadleaved deciduous woodland. Wetland soils are primarily poorly drained fine sandy loams that formed from glacial till. The boundaries of the wetland and watercourse system were marked onsite with flags numbered 1 to 13, 15 to 26, 30 to 32 and 35 to 37.

Five soil map units were identified on the property (two wetland and three upland). Each map unit represents a specific area on the landscape and consists of one or more soils for which the unit is named. Other soils (inclusions that are generally too small to be delineated separately) may account for 10 to 15 percent per map unit. A complete description of each soil map can be found in the Soil Survey, State of Connecticut (Natural Resources Conservation Service, USDA).

2321 WHITNEY AVENUE HAMDEN CENTER II HAMDEN CT 06518

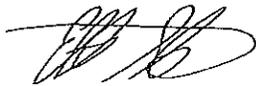
203 239 4200 PH 203 234 7376 FAX

<i>Symbol</i>	<i>Name</i>	<i>Parent Material</i>	<i>Drainage Class</i>
<u><i>Upland Soil</i></u>			
273E	<i>Urban land-Charlton-Chatfield complex, rocky, 15 to 45 percent slopes</i>	<i>Glacial Till</i>	<i>Moderately Well Drained</i>
306	<i>Udorthents-Urban land complex</i>	<i>Excavated or Filled Soil (>2 feet)</i>	<i>Well Drained to Moderately Well Drained</i>
308	<i>Urban Land</i>	<i>Buildings, Paved Roads, Parking lots</i>	<i>Not Applicable</i>
<u><i>Wetland Soil</i></u>			
84D	<i>Paxton and Montauk fine sandy loams</i>	<i>Glacial Till</i>	<i>Very Poorly Drained</i>
308	<i>Udorthents, smoothed</i>	<i>Excavated or Filled Soil (>2 feet)</i>	<i>Poorly Drained</i>

On September 1, 2009, DTC completed a limited investigation at a portion of Henry Abbott Technical School property in Danbury, Connecticut and identified and delineated a wetland and watercourse system along the western property boundary. The wetland and watercourse boundaries are subject to change until adopted by local, state, or federal regulatory agencies. If you should have any questions or comments, please do not hesitate to contact DTC.

Sincerely,

DIVERSIFIED TECHNOLOGY CONSULTANTS, INC.



Ethan Stewart
Soil Scientist

ATTACHMENT – SOIL BORING REPORT

CLARENCE WELTI ASSOC., INC. P.O. BOX 397 GLASTONBURY, CONN 06033				CLIENT TAI SOO KIM ARCHITECTS		PROJECT NAME HENRY ABBOTT TECHNICAL SCHOOL	
						LOCATION DANBURY, CT	
	AUGER	CASING	SAMPLER	CORE BAR.	OFFSET	SURFACE ELEV. 399.5	HOLE NO. SB-45
TYPE	HSA		SS		LINE & STA.	GROUND WATER OBSERVATIONS	
SIZE I.D.	3.75"		1.5"		N. COORDINATE	AT 7.5 FT. AFTER 0 HOURS	START DATE 7/30/02
HAMMER WT.			140lbs.		E. COORDINATE	AT FT. AFTER HOURS	FINISH DATE 7/30/02
HAMMER FALL			30"				

DEPTH	SAMPLE			A	STRATUM DESCRIPTION + REMARKS	ELEV.
	NO.	BLOWS/6"	DEPTH			
0	1	7-13-9-8	0.00'-2.00'		ASPHALT	.15
					BR. FINE-MED. SAND, LITTLE FINE GRAVEL, TRACE SILT	1.0
	2	11-8-9-13	2.00'-4.00'		DARK BR. FINE-MED. SAND, LITTLE SILT-FILL	
5	3	6-9-11-14	4.00'-6.00'			395
					7.0	
					BR. FINE-CRS. SAND, LITTLE GRAVEL, TRACE SILT	390
10	4	6-15-13	10.00'-11.50'			
					BOTTOM OF BORING @ 11.5'	11.5
15						385
20						380
25						375
30						370
35						365

LEGEND: COL. A: SAMPLE TYPE: D=DRY A=AUGER C=CORE U=UNDISTURBED PISTON S=SPLIT SPOON PROPORTIONS USED: TRACE=0-10% LITTLE=10-20% SOME=20-35% AND=35-50%		DRILLER: BROMLEY INSPECTOR:
		SHEET 1 OF ?? HOLE NO. SB-45

CLARENCE WELTI ASSOC., INC. P.O. BOX 397 GLASTONBURY, CONN 06033				CLIENT TAI SOO KIM ARCHITECTS			PROJECT NAME HENRY ABBOTT TECHNICAL SCHOOL		
							LOCATION DANBURY, CT		
	AUGER	CASING	SAMPLER	CORE BAR.	OFFSET	SURFACE ELEV. 405.5		HOLE NO. SB-44	
TYPE	HSA		SS		LINE & STA.	GROUND WATER OBSERVATIONS		START DATE 7/30/02	
SIZE I.D.	3.75"		1.5"		N. COORDINATE	AT NONE FT. AFTER 0 HOURS		FINISH DATE 7/30/02	
HAMMER WT.			140lbs.		E. COORDINATE	AT FT. AFTER HOURS			
HAMMER FALL			30"						
DEPTH	SAMPLE			A	STRATUM DESCRIPTION + REMARKS	ELEV.			
	NO.	BLOWS/6"	DEPTH						
0	1	11-22-16-8	0.00'-2.00'		BR. TOPSOIL	405			
					BR. FINE-MED. SAND, TRACE GRAVEL & SILT-FILL				
	2	5-3-3-4	2.00'-4.00'						
5	3	4-4-4-3	4.00'-6.00'			400			
					DARK BR. FINE-MED. SAND, LITTLE FINE-CRS. GRAVEL & COBBLES, LITTLE SILT	7.0			
10	4	12-60	10.00'-10.75'			395			
					AUGER REFUSAL @ 10.9'	10.9			
15						390			
20						385			
25						380			
30						375			
35									
LEGEND: COL. A: SAMPLE TYPE: D=DRY A=AUGER C=CORE U=UNDISTURBED PISTON S=SPLIT SPOON PROPORTIONS USED: TRACE=0-10% LITTLE=10-20% SOME=20-35% AND=35-50%						DRILLER: BROMLEY INSPECTOR:			
						SHEET 1 OF ?? HOLE NO. SB-44			

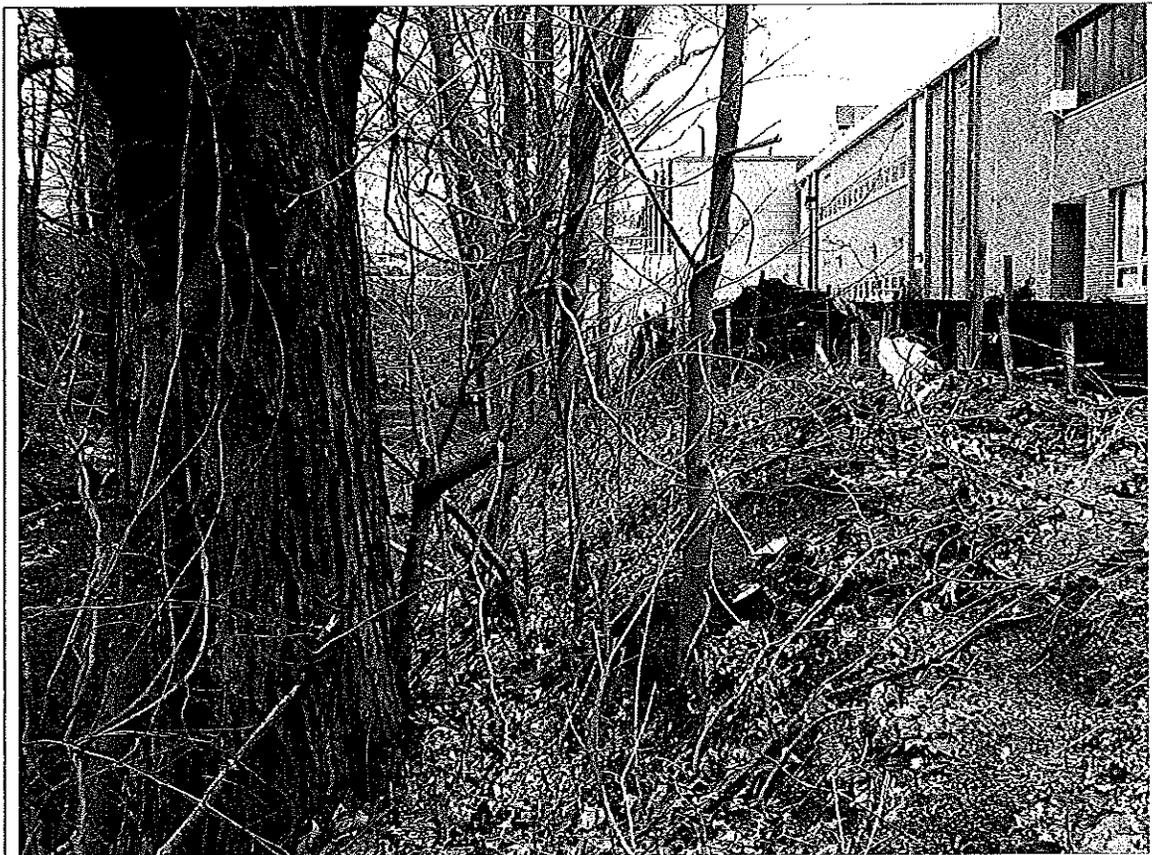
ATTACHMENT – SITE PICTURES



Padanaram Brook-looking downstream at location of Proposed wall



Padanaram Brook-looking upstream at location of Proposed wall



Padanaram Brook-Looking upstream at location of proposed wall



Padanaram Brook- looking downstream Vicinity of proposed wall

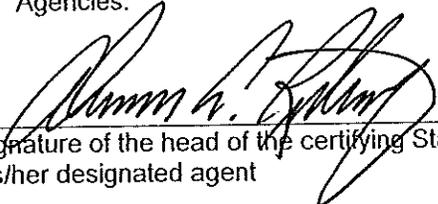
Attachment F: Documentation Form for Flood Management Certification

1. Applicant Name: CT Dept. of Education
(as indicated on the *Permit Application Transmittal Form*)

2. Name of Subject Facility or Project/Project Number:
Henry Abbott Technical High School/ Project Number BI-RT-829A

3. Name of floodplain and watercourse:
Pandanaram Brook

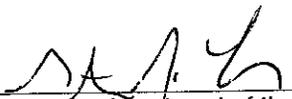
4. This Certification is submitted for the Commissioner's approval pursuant to Section 25-68d of the General Statutes. I hereby certify that based on my reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, the proposed activity described in this application is consistent with all applicable standards and criteria established in Sections 25-68d(b) of the General Statutes and Sections 25-68h-1 through 25-68h-3, inclusive, of the Regulations of Connecticut State Agencies.


Signature of the head of the certifying State agency or his/her designated agent

9/21/10
Date

Al Richmond
Name of the head of the certifying State agency or his/her designated agent (print or type)

Building & Facilities Planning
Title (if applicable)


Signature of the head of the certifying State agency or his/her designated agent

9/28/10
Date

Steven J. Longo
Name of the head of the certifying State agency or his/her designated agent (print or type)

Asst. Project Manager
Title (if applicable)