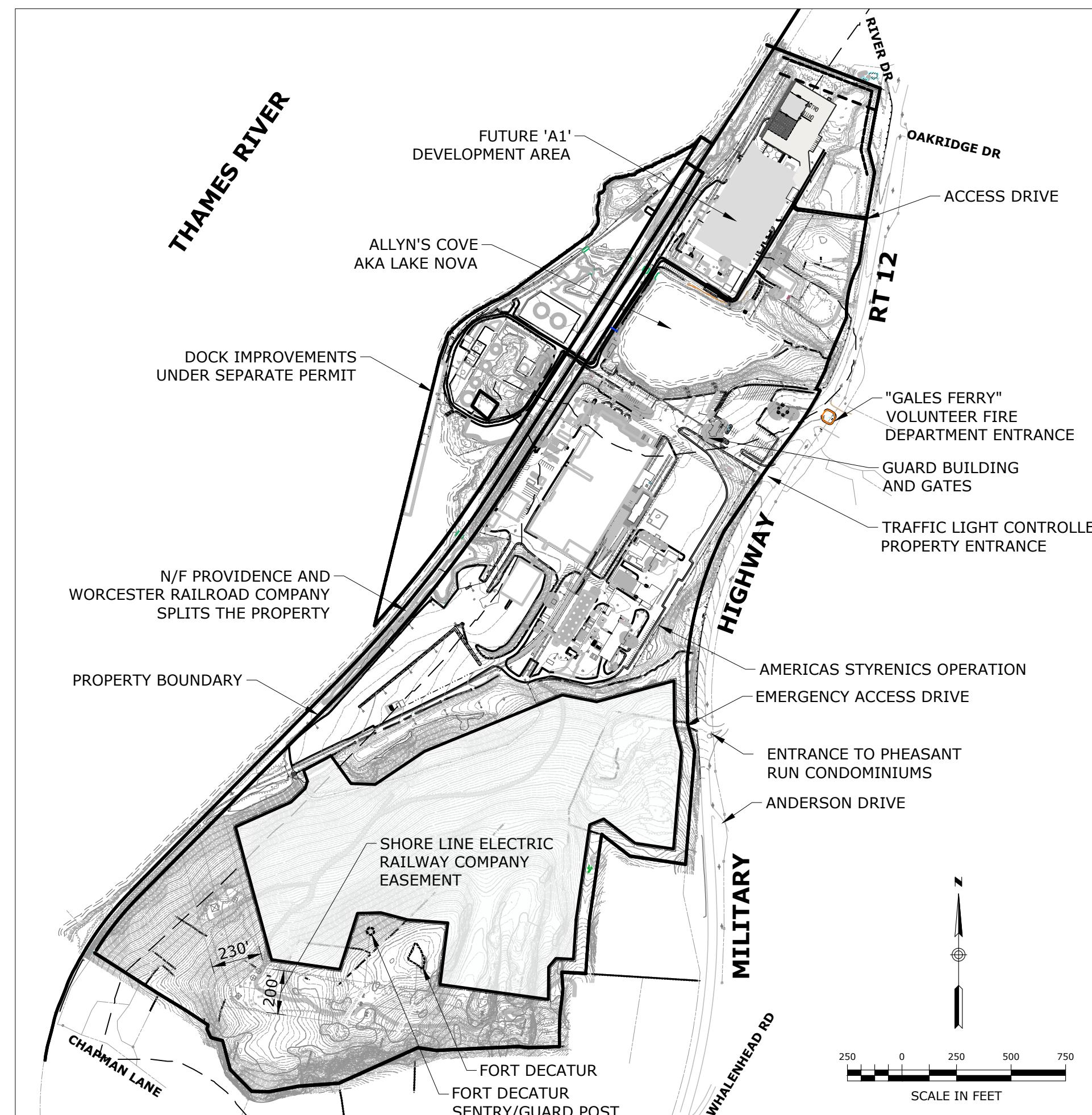


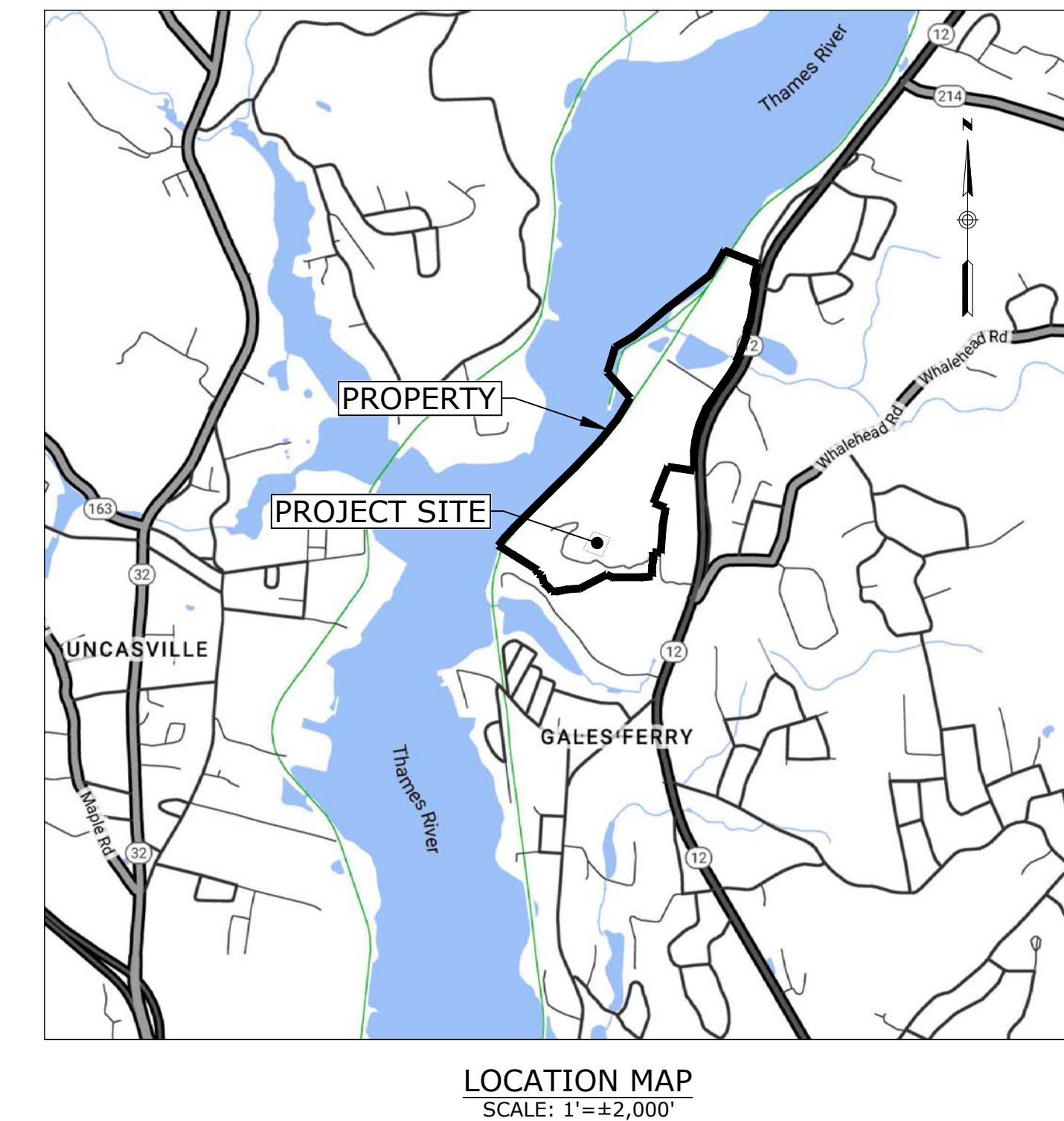
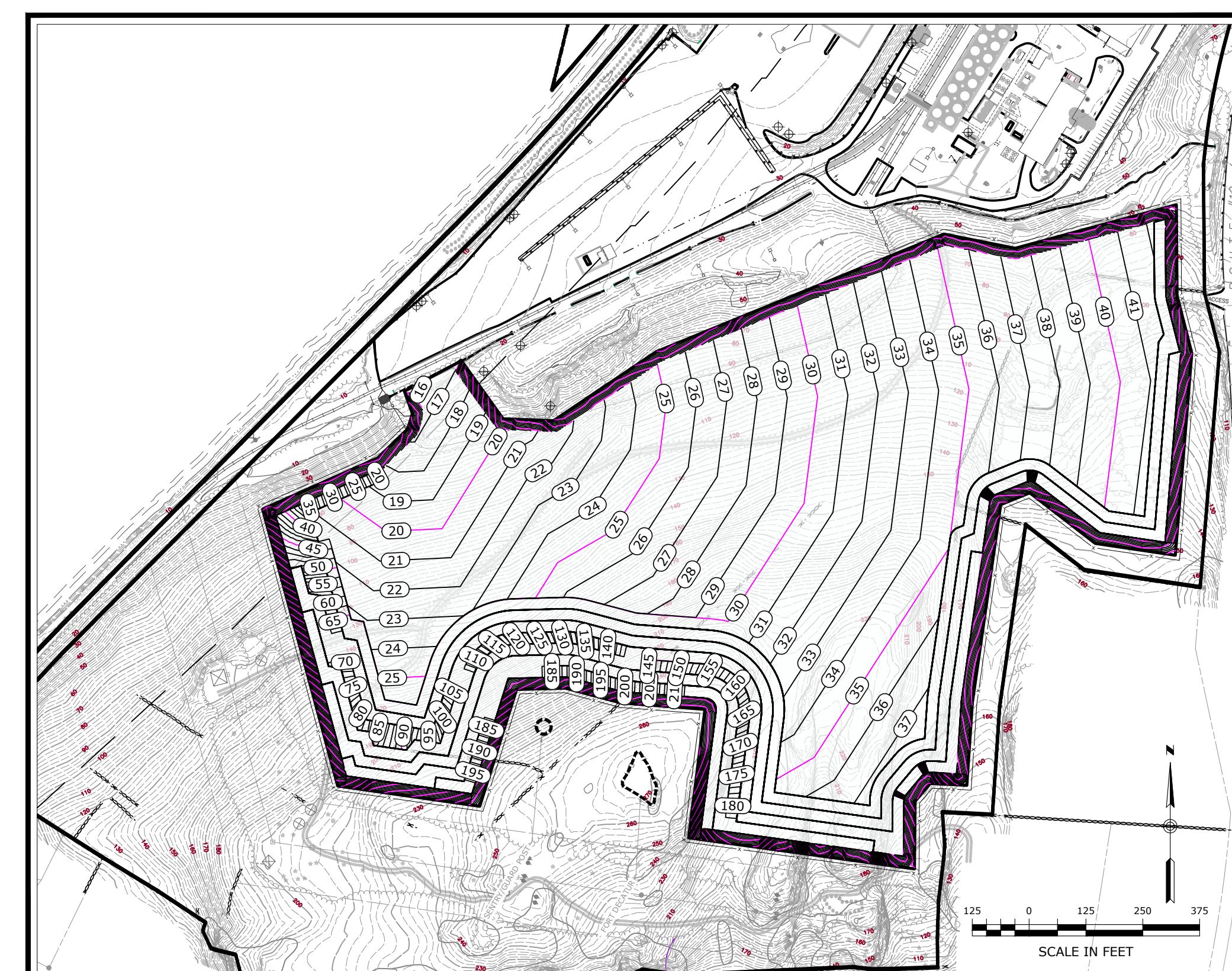
# GALES FERRY INTERMODAL INDUSTRIAL SITE PREPARATION PLANS

1737 & 1761 ROUTE 12  
GALES FERRY, CT 06335

APRIL 3, 2023  
REVISED: JUNE 6, 2023



PROPERTY MAP AND ADJACENT FEATURES



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Property Owner / Applicant:

GALES FERRY INTERMODAL LLC  
549 SOUTH STREET  
QUINCY, MA 02169



Prepared By:

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PZC CHAIRMAN OR SECRETARY	DATE	
IWWC PERMIT #	DATE OF APPROVAL	
IWWC CHAIRMAN	DATE	

## SURVEY NOTES

1. THIS PLAN IS BASED ON MAP REFERENCE A AND B.
2. REFERENCE IS MADE TO THE TOWN OF LEDYARD, CT LAND EVIDENCE RECORDS VOLUME 621 AT PAGE 981 FOR THE SUBJECT PROPERTY.
3. THE SUBJECT PROPERTY IS LOCATED ENTIRELY WITHIN THE "I" INDUSTRIAL ZONE DISTRICT.
4. "NATIONAL FLOOD INSURANCE PROGRAM FLOOD INSURANCE RATE MAP NEW LONDON COUNTY, CONNECTICUT ALL JURISDICTIONS PANEL 354, TOWN OF LEDYARD, MAP NUMBER 09011C03546 EFFECTIVE DATE JULY 18, 2011 FEDERAL EMERGENCY MANAGEMENT AGENCY" INDICATES THE SUBJECT PROPERTY IS LOCATED IN ZONE AE (EL 12) AND ZONE X.
5. THE SUBJECT PROPERTIES ARE SHOWN ON THE TOWN OF LEDYARD, CT TAX ASSESSOR MAP 61 BLOCK 2120 AS LOT 1761 WHICH HAS ASSIGNED STREET ADDRESS OF 1761 ROUTE 12, GALES FERRY, LEDYARD, CT, PREPARED FOR: CMA, INC. MAP 76 BLOCK 2120 AS LOT 1737 WHICH HAS ASSIGNED STREET ADDRESS OF 1737 ROUTE 12, GALES FERRY, CONNECTICUT 06335.
6. UNDERGROUND UTILITIES MUST BE FIELD VERIFIED PRIOR TO ANY EXCAVATION.
7. A PORTION OF INLAND WETLANDS WERE DELINEATED IN THE FIELD BY JMM WETLAND CONSULTING SERVICES, LLC AND LOCATED BY LOUREIRO ENGINEERING ASSOCIATES, INC., GROTON, CONNECTICUT. THE REMAINING WETLANDS WERE FROM ELECTRONIC DATA FROM CMA AS RECEIVED FROM GALES FERRY INTERMODAL LLC.

## MAP REFERENCES

- A. PROPERTY SURVEY, PROPERTY OF TRINSEO LLC, #1737 & #1761 MILITARY HIGHWAY (ROUTE 12), LEDYARD, GALES FERRY, CT, PREPARED FOR: JAY CASHMAN, INC., 549 SOUTH STREET, QUINCY, MA, SCALE: 1"=100', DATE: 5/10/2022, BY CHA.
- B. PROPERTY AND TOPOGRAPHIC SURVEY, #1737 & #1761 MILITARY HIGHWAY (ROUTE 12), LEDYARD, GALES FERRY, CT, PREPARED FOR: STYRON LLC "ALLYN'S POINT PLANT", BY CME.

## SITE NOTES:

1. THE APPLICANT/OWNER IS GALES FERRY INTERMODAL LLC OF 549 SOUTH STREET, QUINCY, MA.
2. THE APPLICANT IS PROPOSING A REGRADING OPERATION TO CREATE ADDITIONAL BUILDING PADS FOR FUTURE INDUSTRIAL DEVELOPMENT. THE PROPOSED SITE REGRADING AND PREPARATION APPLICATION WILL BE CONDUCTED IN FOUR PHASES WITH EACH PHASE BEING 10 ACRES ON THE DOWNSLOPES. NO DREDGING, DREDGE TEST BORINGS CONDUCTED ON SITE, THE SITE PREPARATION, OR REQUIRE THE REMOVAL OF SOIL AND BEDROCK WITH FINAL GRADING BEING SUITABLE FOR FUTURE INDUSTRIAL BUILDINGS.
3. OTHER USES ON THE SITE CURRENTLY INCLUDE MANUFACTURING OF STYROFOAM PRODUCTS BY AMERICAS STYRENECS, A TENANT OF THE PROPERTY.
4. THE PURPOSE OF THESE PLANS IS FOR REVIEW BY THE TOWN OF LEDYARD INLAND WETLAND WATERCOURSE COMMISSION AND PLANNING AND ZONING COMMISSION. THESE PLANS ARE FOR PERMIT PURPOSES ONLY AND ARE NOT TO BE USED FOR CONTRACT DOCUMENTS.
5. NO CONSTRUCTION OF BUILDINGS IS ASSOCIATED WITH THIS APPLICATION.
6. THE SUBJECT PROPERTY IS LOCATED WITHIN THE "I" INDUSTRIAL ZONE. THE PARCEL DOES LIE WITHIN THE COASTAL AREA MANAGEMENT ZONE. A PORTION OF THE SITE IS WITHIN THE FEMA AE (EL 12) AND ZONE X.
7. THE SUBJECT PROPERTY IS LOCATED WITHIN THE "I" INDUSTRIAL ZONE. THE PARCEL DOES LIE WITHIN THE COASTAL AREA MANAGEMENT ZONE. A PORTION OF THE SITE IS WITHIN THE FEMA AE (EL 12) AND ZONE X.
8. ALL EXISTING CURBING, PAVEMENT, ETC. DISTURBED AS A RESULT OF CONSTRUCTION ACTIVITIES SHALL BE REPLACED/RESTORED TO ORIGINAL CONDITION BY THE CONTRACTOR.

## EROSION AND SEDIMENTATION (E&amp;S) CONTROL PLAN:

## NARRATIVE

1. THIS EROSION AND SEDIMENTATION CONTROL (ESC) PLAN IS FOR THE REGRADING OPERATION FOR BUILDING PADS FOR FUTURE INDUSTRIAL SITE.
2. THE TOPOGRAPHY VARIES ACROSS THE SITE AND GENERALLY SLOPES FROM THE SOUTH ALONG THE COASTAL PORTION OF THE PROPERTY NORTHERNLY TOWARD THE EXISTING RAILROAD AND IMPROVED POSITION OF THE TENANT AMERICAS STYRENECS. THE UNDERLYING SOIL ON THE HIGHER PORTION OF THE PROJECT AREA IS HOLLIS CHATFIELD ROCK, HYDROLOGIC GROUP D, AND THE LOWER PORTION OF THE PROJECT AREA IS HINCKLEY LOAMY SAND, HYDROLOGIC GROUP A.
3. A LARGE PORTION OF THE UPLAND SOILS WILL BE DISTURBED BY EARTHWORK ACTIVITIES AND THE INTENT OF THIS EROSION AND SEDIMENT CONTROL PLAN IS TO ESTABLISH STORMWATER CONSTRUCTION SEQUENCING OUTLINED HEREIN TO PREVENT THE DISCHARGE OF SEDIMENT LADEN RUNOFF FROM ENTERING THE EXISTING INLAND WETLANDS.
4. EROSION CONTROL MEASURES INTENDED TO MINIMIZE SOIL EROSION AND TO CONTROL SEDIMENTATION DURING CONSTRUCTION INCLUDE:
  - A. THE INSTALLATION OF MULCH SOCKS ALONG THE DOWN-GRADIENT LIMIT OF DISTURBANCE; INSTALL MULCH SOCKS AND/OR HAYBALES AS SHOWN ON PLANS.
  - B. TEMPORARY SEDIMENT BASINS DURING CONSTRUCTION.
  - C. THE IMMEDIATE STABILIZATION OF FINAL GRADED AREAS THROUGH THE PLACEMENT OF CRUSHED STONE, TOPSOIL, SEED, MULCH AND EROSION CONTROL NETTING.
  - D. SWEEP THE PAVED AREA IN THE CONSTRUCTION AREA WEEKLY.
  - E. DEVELOPMENT OF A CONSTRUCTION OPERATIONS PLAN IN CONSIDERATION OF BASIC CONSTRUCTION SEQUENCING OUTLINED HEREIN.
5. THE CONSTRUCTION OF THIS PROJECT IS IN 4 PHASES. IT IS ANTICIPATED THAT SITE WORK CONSTRUCTION WILL BEGIN IN THE FALL OF 2023 AND WILL CONTINUE OFF AND ON FOR 5-10 YEARS.
6. A STATE OF CONNECTICUT GENERAL PERMIT FOR THE DISCHARGE OF STORMWATER AND DEWATERING WASTEWATERS FROM CONSTRUCTION ACTIVITIES MUST BE FILED AT LEAST 60 DAYS PRIOR TO CONSTRUCTION.

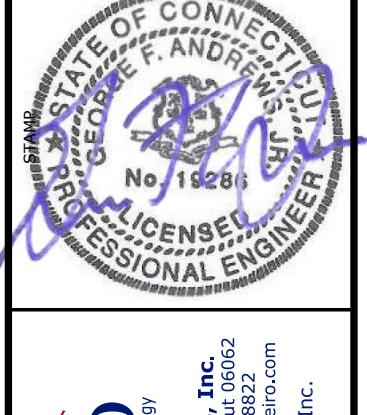
## CONSTRUCTION SEQUENCE

1. CONTACT "CALL BEFORE YOU DIG" TO MARK OUT ALL UTILITY LOCATIONS PRIOR TO ANY CONSTRUCTION ACTIVITIES.
2. ENSURE ALL LAND USE PERMITS HAVE BEEN SECURED. OBTAIN ALL NECESSARY LOCAL, STATE AND FEDERAL PERMITS, AS REQUIRED. FILE ALL STATE GENERAL PERMITS FOR CONSTRUCTION ACTIVITY THAT APPLY AS REQUIRED.
3. PRIOR TO THE START OF WORK, THE CONTRACTOR SHALL MEET WITH THE TOWN REPRESENTATIVE FOR A PRE-CONSTRUCTION MEETING TO DISCUSS ESC REQUIREMENTS AND WATER QUALITY MANAGEMENT PROCEDURES.
4. THE LIMITS OF PHASE 1 EXCAVATION AND WORK AREA SHALL BE DELINEATED IN THE FIELD PRIOR TO ANY WORK.
5. INSTALL TEMPORARY CONSTRUCTION ENTRANCE, MULCH SOCKS, TEMPORARY SEDIMENT BASIN AND/OR HAY BAILE BARRIERS AS SHOWN ON THE EROSION & SEDIMENT CONTROL PLAN FOR EACH PHASE. INSTALL A DOUBLE ROW OF MULCH SOCKS WHERE WETLANDS ARE DOWNGRADED IN ANY WORK.
6. INSTALL NEW CULVERT ACROSS EXISTING STREAM AND ANY WORK NEEDED TO CROSS THE EXISTING STREAM.
7. REMOVE ALL TREES, BRUSH, STUMPS, TOPSOIL AND SUBSOIL WITHIN PHASE 1, AS NECESSARY. PROTECT WETLANDS AT ALL TIMES. ALL TOPSOIL AND SUBSOIL SHALL BE RETAINED ON SITE FOR USE IN THE FINAL STABILIZATION AND RECLAMATION OF THE SITE. THE TOPSOIL AND SUBSOIL SHALL BE STOCKPILED IN AREA DELINEATED ON THE PLAN. THE SURFACE OF THE SOIL STOCKPILE SHALL BE STABILIZED, SEEDED AND REVEGETATED WITH RYEGRASS MIX AND MULCH. DUST CONTROL MEASURES SHALL BE APPLIED AT A RATE OF 40 POUNDS PER ACRE. MULCH SHALL BE APPLIED AT A RATE OF 80 POUNDS PER 1,000 SQUARE FEET.
8. PRIOR TO ANY BLASTING ACTIVITIES, THE APPLICANT'S BLASTING CONTRACTOR SHALL CONDUCT A PRE-BLAST SURVEY. THE APPLICANT'S GEOTECHNICAL/BLASTING CONSULTANT WILL DETERMINE A SAFE PRE-BLASTING PROCEDURE.
9. SURFICIAL MATERIAL (OTHER THAN TOPSOIL AND SUBSOIL) SHALL BE EXCAVATED FROM THE PHASE 1 AREA AND REMOVED BY TRUCK TO THE PROCESSING AREA SHOWN ON THE PLAN.
10. PHASE 1 EXCAVATION AREA SHALL BE OVER-EXCAVATED TO A DEPTH OF 6 FEET AND THEREAFTER BACKFILLED WITH STONE DUST OR EQUALLY SUITABLE MATERIAL IN ORDER TO ACCOMMODATE THE INSTALLATION OF FUTURE UNDERGROUND UTILITIES NECESSARY TO SERVE THE FUTURE INDUSTRIAL DEVELOPMENT ON THE PROPERTY.
11. UPON THE COMPLETION OF THE EXTRACTION OF STONE IN EACH PHASE OF THE PROJECT, BACKFILL THE FUTURE CONCRETE PAD WITH MINIMUM OF 6 FEET OF COMPACTED STONE DUST OR EQUALLY SUITABLE MATERIAL AND PLACE SUFFICIENT STABILIZER MATERIAL. THEREAFTER THE AREA WITH NO LESS THAN 4 INCHES OF TOPSOIL FROM THE TOPSOIL THAT WAS PREVIOUSLY STRIPPED AND STOCKPILED ON SITE. THEN SEED AREA WITH FUTURA 2000 BY THE CHAS C. ART CO CONTAINING VARIETIES OF PERENNIAL RYEGRASSES. APPLY AT A RATE OF 90 POUNDS PER 1,000 SQUARE FEET.
12. ESC MEASURES SHALL BE INSTALLED AND MAINTAINED THROUGHOUT THE WORK IN EACH PHASE.
13. THE CONSTRUCTION MANAGER SHALL BE RESPONSIBLE FOR IMPLEMENTING AND INSPECTING ESC MEASURES FOR THIS PLAN AND SHALL INFORM ALL CONTRACTORS OF THE OBJECTIVES AND REQUIREMENTS OF THE PLAN. THE OWNER SHALL NOTIFY THE TOWN TOWNSHIP AGENCY OF ANY TRANSFER OF THIS RESPONSIBILITY AND SHALL ADVISE THE TOWNSHIP REGARDING THE NEED FOR IMPLEMENTING ADDITIONAL CONTROL MEASURES OR MAINTAINING EXISTING MEASURES AS DEEMED NECESSARY DURING CONSTRUCTION. WEEKLY INSPECTIONS SHALL BE CONDUCTED AND DUST CONTROL MEASURES SHALL BE MAINTAINED AS DIRECTED BY THE CONSTRUCTION MANAGER. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REPAIRED AND MAINTAINED AS NECESSARY. MONTHLY WRITTEN REPORTS SHALL BE PREPARED INFORMING THE TOWN OF LEDYARD OBSERVATIONS, MAINTENANCE, AND CORRECTIVE ACTIONS.
14. THE CONTRACTOR IS RESPONSIBLE FOR DUST CONTROL DURING THE CONSTRUCTION PROCESS. THE CONSTRUCTION MANAGER SHALL INSPECT THE SITE TO ASSURE DUST IS ADVERTISED AND CONTROLLED. IF THE CONSTRUCTION MANAGER DETERMINES DUST CONTROL MEASURES ARE NOT ADEQUATE, THE CONTRACTOR SHALL BE REQUIRED TO INCREASE THESE MEASURES AS DIRECTED BY THE CONSTRUCTION MANAGER.
15. WHEN ALL GRADED AREAS ARE PERMANENTLY STABILIZED, REMOVE ALL EROSION AND SEDIMENT CONTROLS AS INDICATED ON PLAN.
16. THE SEQUENCE ABOVE APPLIES TO PHASES 2, 3 AND 4.
17. CONSTRUCT WETLAND MITIGATION AS SHOWN ON PLANS.
18. WETLAND AREAS ON SITE DOWNSTREAM OF THE EXCAVATION AREA SHALL BE MONITORED FOR 5 YEARS BY A WETLAND SCIENTIST. IF THESE WETLANDS ARE DETERMINED TO BE IMPACTED THEN FUTURE MITIGATION WILL BE DESIGNED AND IMPLEMENTED.

## MAINTENANCE OF EROSION CONTROL DEVICES:

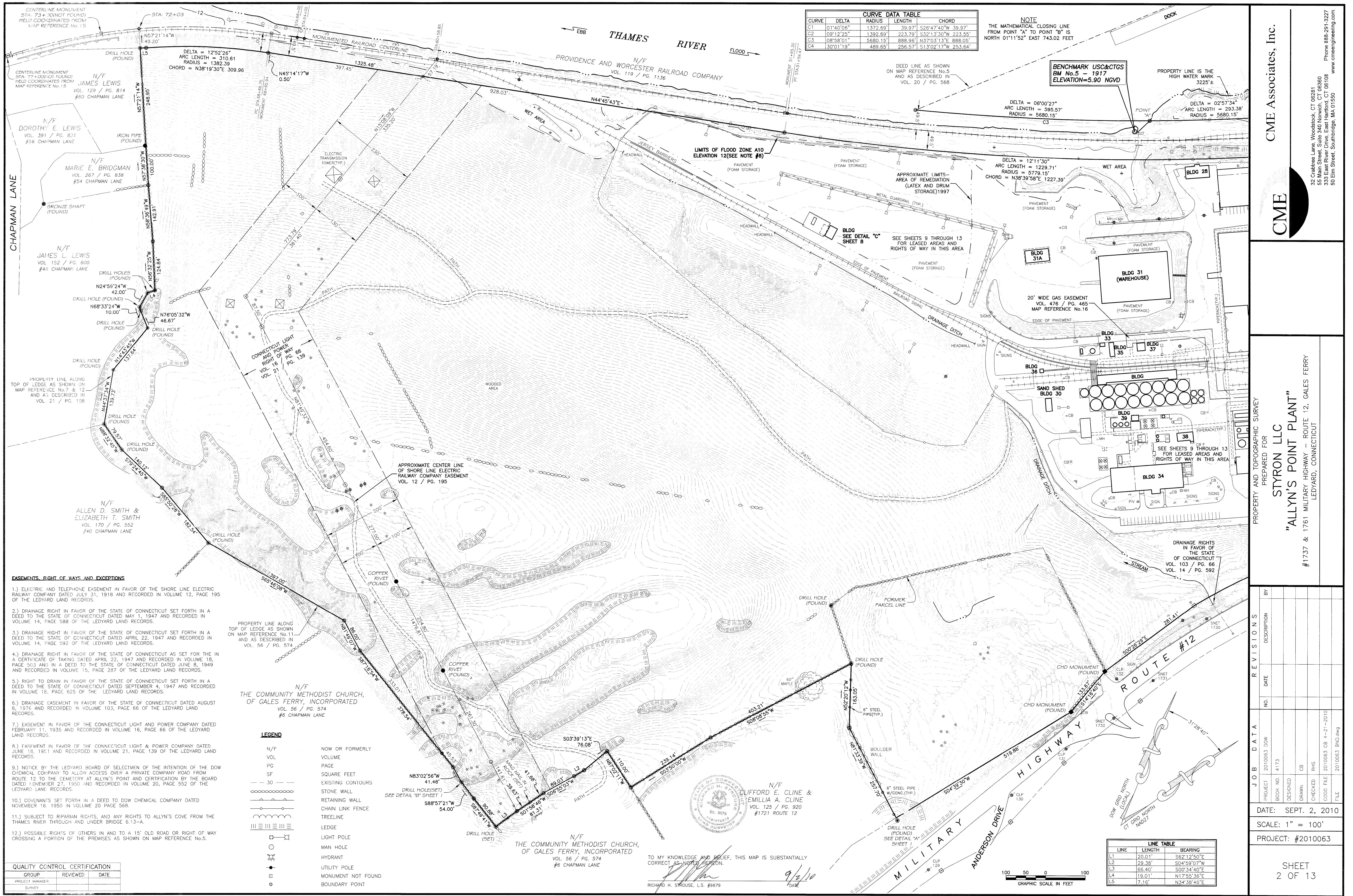
1. HAYBALE BARRIERS/MULCH SOCK/SILT FENCE:
  - A. INSPECT HAY BAILE BARRIERS/MULCH SOCK/SILT FENCE AT LEAST ONCE A WEEK AND WITHIN 24 HOURS AFTER THE END OF A STORM RESULTING IN A DISCHARGE TO DETERMINE MAINTENANCE NEEDS.
  - B. IF A MULCH SOCK IS OVERTURNED DURING A STORM EVENT, CONTRACTOR SHALL INSTALL AN ADDITIONAL MULCH SOCK ON TOP OF THE EXISTING MULCH SOCK OR PLACE ANOTHER MULCH SOCK UPSTREAM OF THE MULCH SOCK THAT OVERTURNED.
  - C. INSTALL A SECONDARY BARRIER/FENCE WHEN SEDIMENT DEPOSITS REACH APPROXIMATELY ONE HALF HEIGHT OF THE BARRIER/FENCE.
  - D. REMOVE SEDIMENT THAT BUILDS UP AGAINST THE MULCH SOCK/BARRIER/SILT FENCE.
  - E. REPAIR OR REPLACE SPLIT, TORN OR UNRAVELING SOCKS. REPLACE BROKEN OR SPLIT STAKES, SAGGING OR SLUMPING MULCH SOCKS MUST BE REPAIRED WITH ADDITIONAL STAKES OR REPLACED.
  - F. REPLACE OR REPAIR THE BARRIER/SOCK/FENCE WITHIN 24 HOURS OF OBSERVED FAILURE. IF REPETITIVE FAILURE OCCURS, CONSULT 2002 GUIDELINES FOR TROUBLESHOOTING FAILURES.
  - G. MAINTAIN THE HAY BAILE BARRIER/MULCH SOCK/FENCE UNTIL THE CONTRIBUTING AREA IS STABILIZED.
2. CONSTRUCTION ENTRANCES AND ROADWAYS:
  - A. MAINTAIN THE ENTRANCE IN A CONDITION WHICH WILL PREVENT TRACKING AND WASHING OF SEDIMENTS ONTO PAVED SURFACES.
  - B. PROVIDE PERIODIC TOP DRESSING AND ADDITIONAL STONE OR LENGTH AS NECESSARY.
  - C. IMMEDIATELY REMOVE ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PAVED SURFACES. ROADS ADJACENT TO THE CONSTRUCTION SITE SHALL BE LEFT CLEAN EVERY DAY.
3. TEMPORARY SEDIMENT TRAP:
  - A. INSPECTIONS SHALL BE AT SAME INTERVALS AS ABOVE.
  - B. OUTLET SHALL BE CHECKED FOR INTEGRITY; HEIGHT OF THE STONE OUTLET SHALL BE MAINTAINED AT ONE FOOT BELOW CREST OF EMBANKMENT. SEDIMENT ACCUMULATION AND FILTRATION PERIODICALLY.
  - C. WHEN SEDIMENTS HAVE ACCUMULATED TO ONE HALF OF THE MINIMUM REQUIRED STORAGE CAPACITY OF THE BASIN, REMOVE SEDIMENTS, RESTORE TRAP TO ORIGINAL DIMENSIONS AND DISPOSE OF SEDIMENT AT A LOCATION AND MANNER THAT WILL NOT RESULT IN EROSION OR SEDIMENTATION.
  - D. AFTER CONTRIBUTING AREA IS STABILIZED, REMOVE BASIN AND RE-GRADE/STABILIZE AREA. PHASE 1 AND PHASE 2 TEMPORARY SEDIMENT BASINS WILL BE CLEANED AND CONVERTED TO PERMANENT WATER QUALITY BASINS.
4. TEMPORARY DIVERSION DITCHES/SWALES:
  - A. WHEN THE TEMPORARY DIVERSION IS LOCATED IN CLOSE PROXIMITY TO ONGOING CONSTRUCTION ACTIVITIES, INSPECT AT THE END OF EACH DAY AND IMMEDIATELY REPAIR DAMAGES. OTHERWISE, INSPECT ON SAME INTERVAL AS ABOVE.
  - B. REPAIR THE DIVERSION WITHIN 24 HOURS OF ANY OBSERVED FAILURE. FAILURE HAS OCCURRED WHEN THE DIVERSION HAS BEEN DAMAGED SUCH THAT IT NO LONGER MEETS THE SPECIFICATIONS IN THE 2002 GUIDELINES.
  - C. IF REPETITIVE FAILURES OCCUR, REVIEW CONDITIONS AND DETERMINE IF ADDITIONAL MEASURES OR AN ALTERNATIVE MEASURES IS NECESSARY.

ZONING DATA TABLE		
'I' INDUSTRIAL ZONE		
ITEM	REQUIRED	PROVIDED
LOT AREA	200,000 SQ. FT. (4.59 AC.)	7,220,941 SQ. FT. (165.7 AC.)
FRONTAGE	200 FT.	3700 ± FT.
LOT WIDTH	200 FT	> 200 FT.
FRONT SETBACK	35 FT.	> 35 FT EXISTING BUILDINGS
SIDE SETBACK	25 FT	> 25 FT EXISTING BUILDINGS
REAR SETBACK	25 FT.	> 25 FT EXISTING BUILDINGS
LOT COVERAGE (%) (SEE SITE NOTE 5)	70% (4,817,736 SQ. FT.)	30.0% (2,165,706 SQ. FT.)
BUILDING HEIGHT	N/A	N/A
PARKING (# OF SPACES)	N/A	N/A
WATER SUPPLY	MUNICIPAL	MUNICIPAL
SANITARY DISPOSAL	ONSITE SSDS	ONSITE SSDS

1		RESPONSE TO INLAND WETLAND COMMISSION COMMENTS																																													
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 <p>Loureiro Engineering Associates, Inc. Engineering • Geotechnical • Civil • Facility Services • Laboratory 100 Main Street • P.O. Box 200 • Groton, CT 06368-2000 Phone: 860-427-5181 • Fax: 860-427-5822 ©Loureiro Engineering Associates, Inc. All Rights Reserved 2023</p>																																															
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PZC PERMIT #	DATE OF APPROVAL	EXPIRATION DATE
PZC CHAIRMAN OR SECRETARY		
IWWC PERMIT #	DATE OF APPROVAL	
IWWC CHAIRMAN		







# INDUSTRIAL SITE PREPARATION PLAN: EXISTING CONDITIONS PLAN

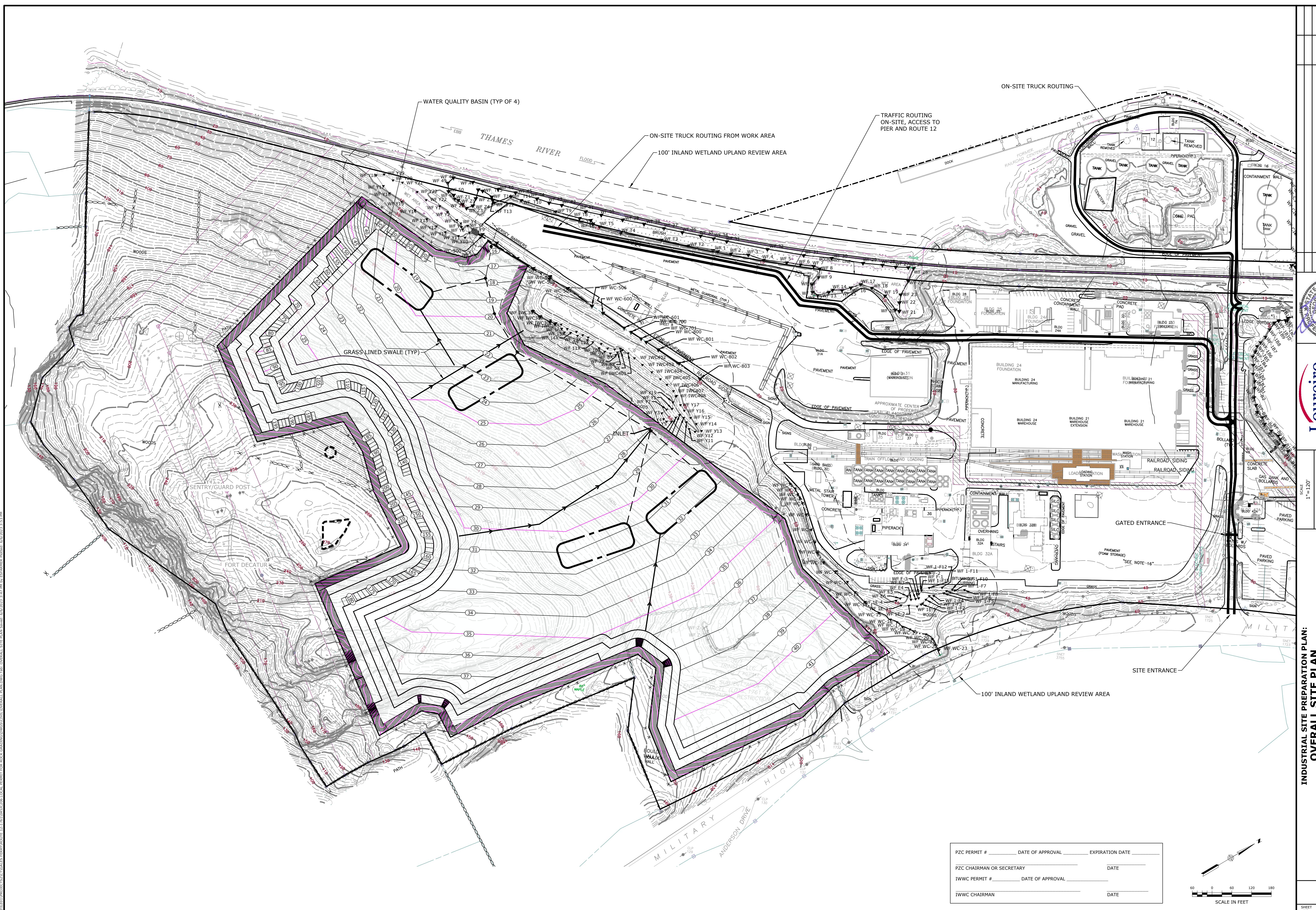
**GALES FERRY INTERMODAL**  
1737 & 1761 ROUTE 12, GALES FERRY, CT 06335  
PREPARED FOR:

**GALES FERRY INTERMODAL**  
737 & 1761 ROUTE 12, GALES FERRY, CT 06335  
PREPARED FOR:

WC PERMIT #	DATE OF APPROVAL	EXPIRATION DATE
WC CHAIRMAN OR SECRETARY		DATE
WC PERMIT #	DATE OF APPROVAL	
WC CHAIRMAN		DATE

DRAWING  
**C-2**

3 NO. OF SHEETS



# DUSTRIAL SITE PREPARATION PLAN: OVERALL SITE PLAN

**GALES FERRY INTERMODAL**  
1137 & 1761 ROUTE 12, GALES FERRY, CT 06335  
PREPARED FOR:

**GALES FERRY INTERMODAL**  
1137 & 1761 ROUTE 12, GALES FERRY, CT 06335  
PREPARED FOR:

Ionireiro

**Louireiro Engineering Associates, Inc.**  
Engineering • Construction • EH&S • Energy  
Waste • Facility Services • Laboratory  
Northwest Drive • Plainville, Connecticut 06062  
Phone: 860-747-6181 • Fax: 860-747-8822  
Employee Owned Company • [www.louireiro.com](http://www.louireiro.com)

A circular blue ink stamp. The outer ring contains the text "STATE OF GEORGIA" at the top and "OFFICE OF THE SECRETARY OF STATE" at the bottom. The center of the stamp contains the date "JULY 1, 1981" and the word "FEE" below it.





# GRADING AND DRAINAGE PLAN

## GALES FERRY INTERMODAL

1737 & 1761 ROUTE 12, GALES FERRY, CT 06335

PREPARED FOR:

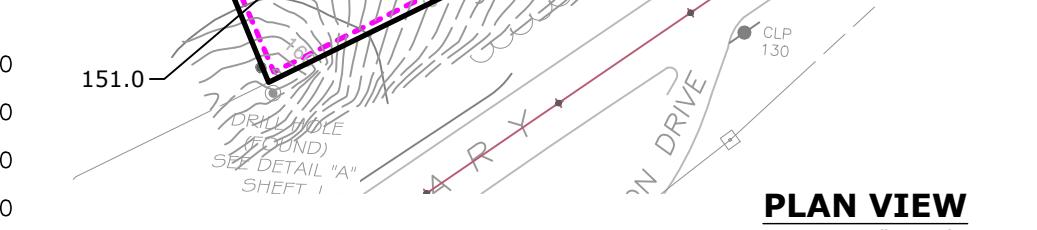
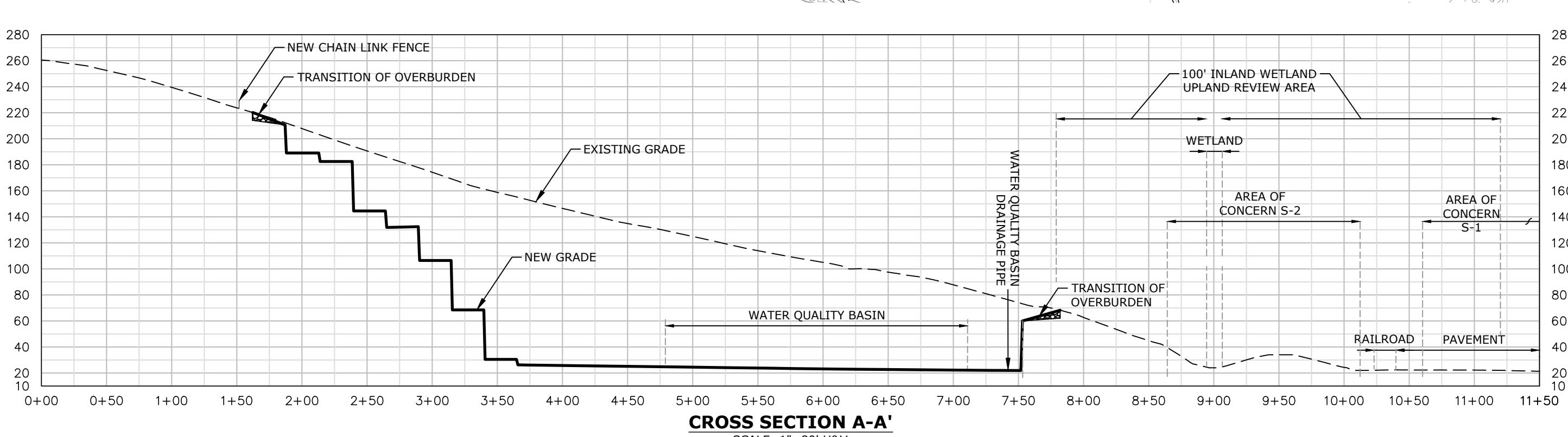
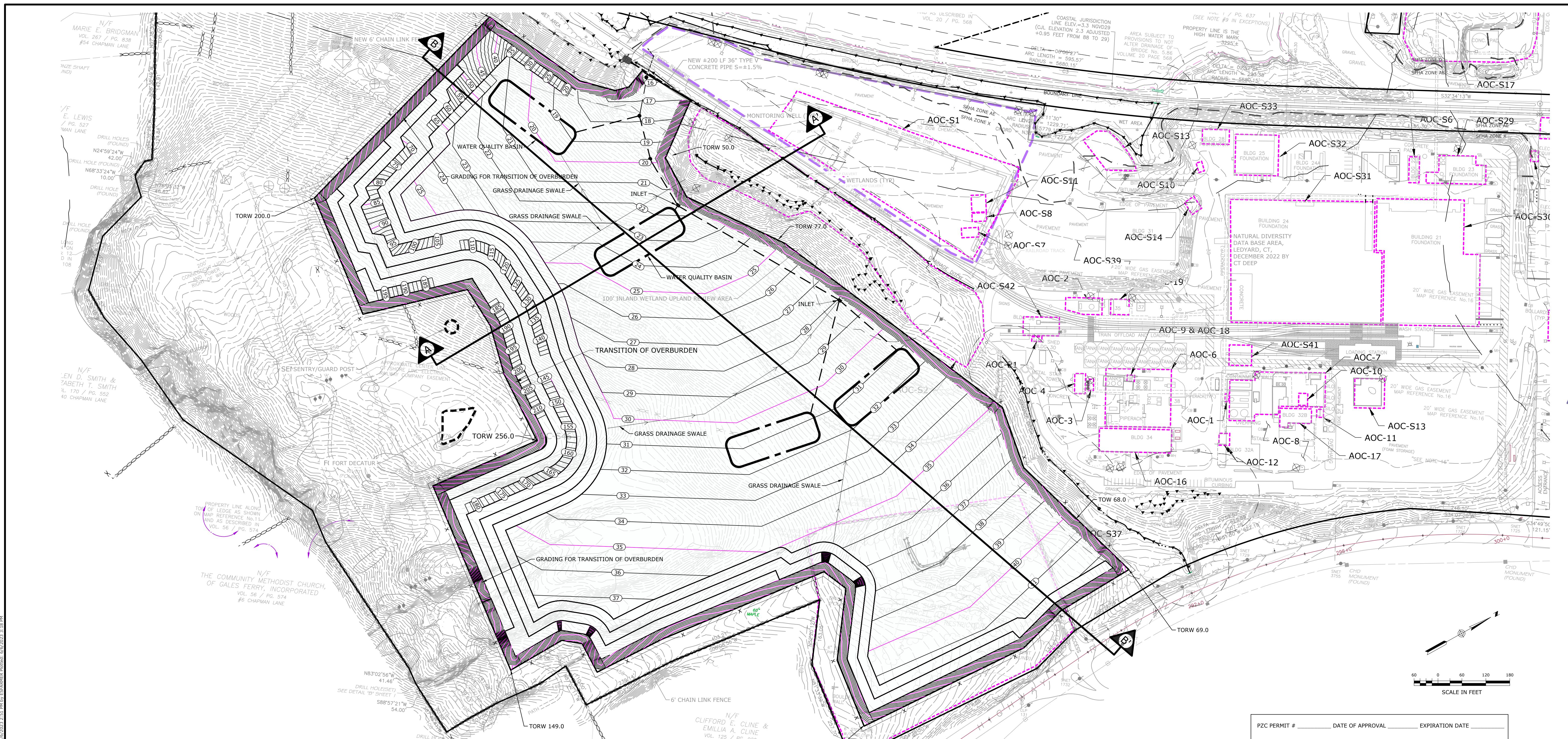
**Loureiro Engineering Associates**  
Engineering • Construction • Environmental Services • Laboratory  
Waste • Facility Services • Laboratory  
100 Northwest Drive • Plainville, Connecticut  
Phone: 860-747-6181 • Fax: 860-747-4444  
Employee Owned Company • [www.loureiro.com](http://www.loureiro.com)

A circular stamp with a decorative border. The outer ring contains the text "STATE OF CONNECTICUT" at the top and "GAMES AND FISHES" at the bottom. The center of the stamp features a detailed illustration of a fish, possibly a trout, with a small boat and a fisherman nearby. Below the illustration, the number "No 15286" is stamped. A large, dark blue ink signature is written across the center of the stamp, appearing to read "GEORGE F. ANDREWS" and "JAN 22".

COMMISSION COMMENTS	06/06/2023	SRM	APPR.
DESCRIPTION OF REVISION	DATE		

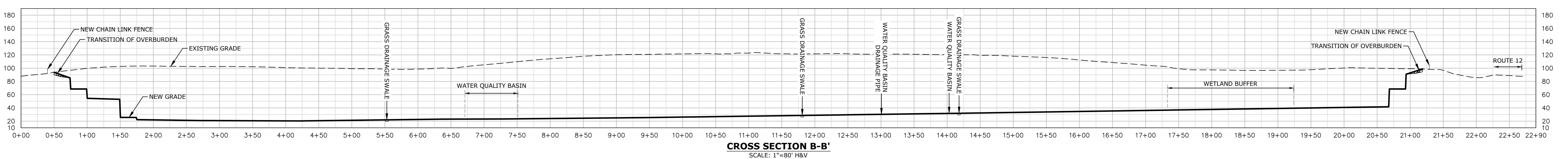
COMM. NO. 045JC2.06		DATE 04/03/2023
DRAWN BY ESF	APPROVED BY SRM	DATE 04/03/2023

**DRAWING**  
**C-4**



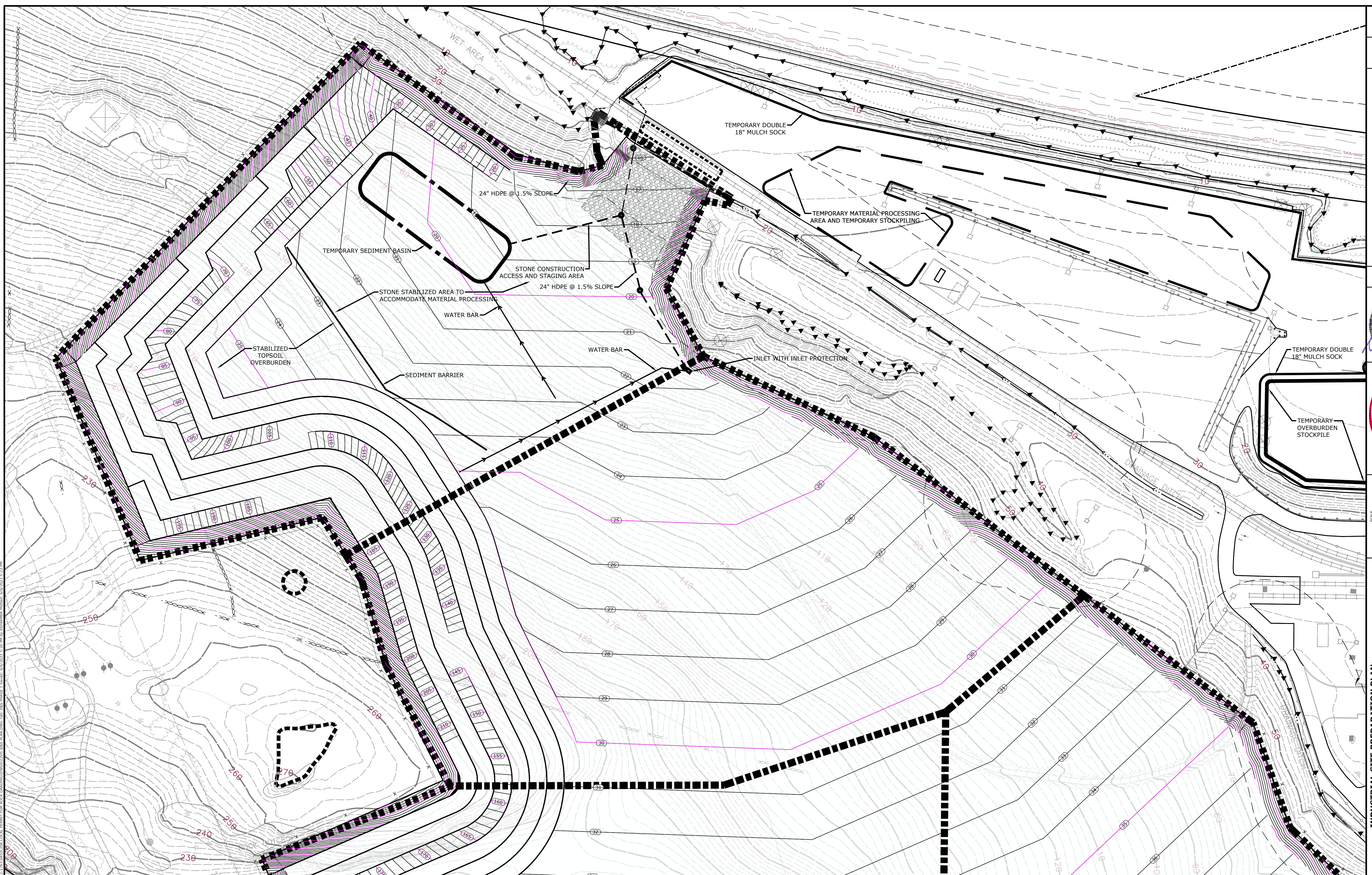
## **INDUSTRIAL SITE PREPARATIONS PLAN: CROSS SECTIONS**

**GALES FERRY INTERMODAL LLC**  
1737 & 1761 ROUTE 12, GALES FERRY, CT 06335  
549 SOUTH STREET, QUINCY, MA 02169  
PREPARED FOR:



DRAWING  
**KS-1**





# SOIL EROSION & SEDIMENT CONTROL - PHASE 1

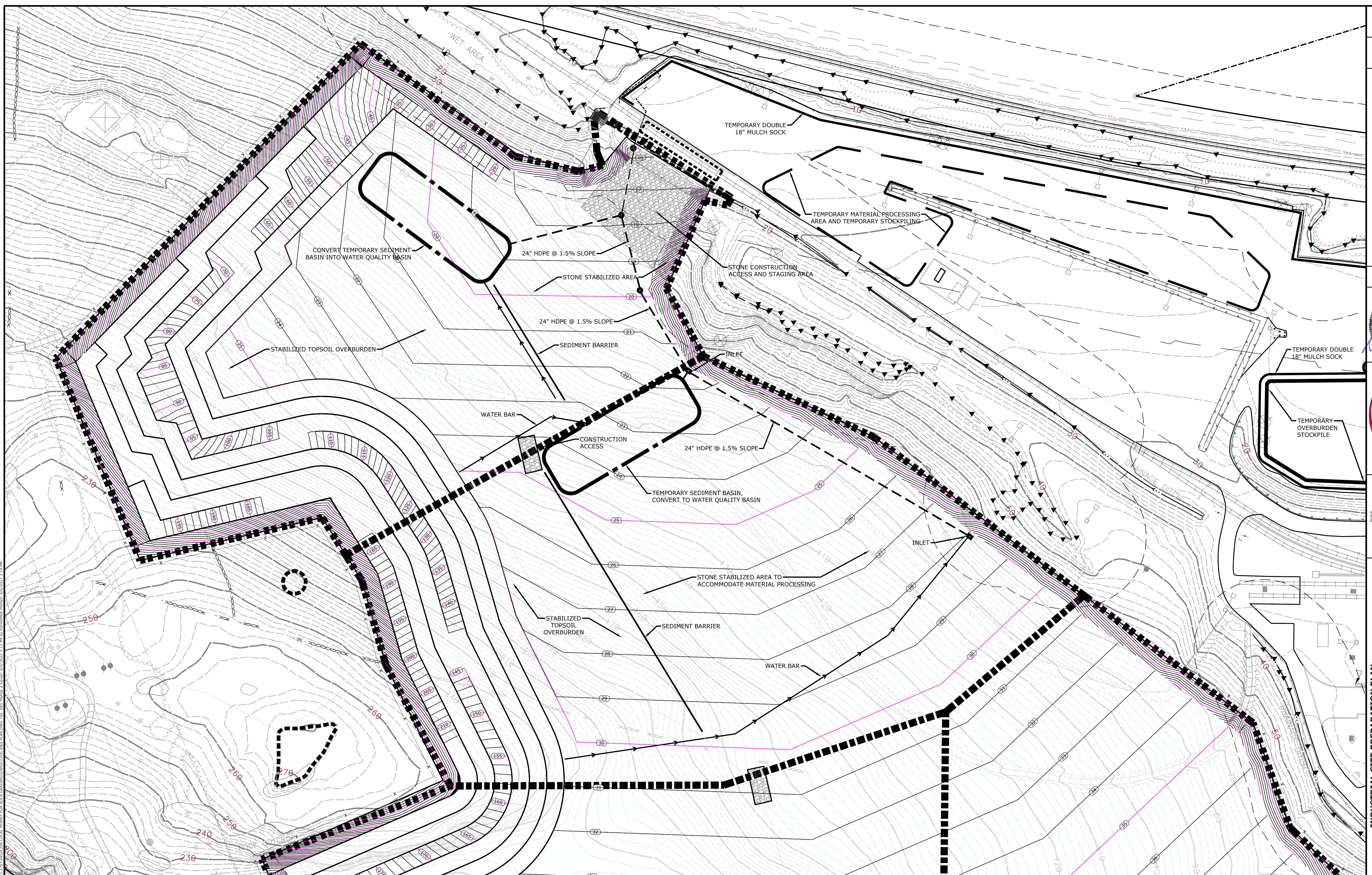
## INDUSTRIAL SITE PREPARATION PLAN:

# INDUSTRIAL SITE PREPARATION PLAN: SECTION & SEDIMENT CONTROL - P

A vertical grid of 12 empty lines for signatures, with a circular state seal at the bottom.

PZC PERMIT #	DATE OF APPROVAL	EXPIRATION DATE
PZC CHAIRMAN OR SECRETARY		DATE
IWWC PERMIT #	DATE OF APPROVAL	
IWWC CHAIRMAN		DATE

A horizontal scale bar with three tick marks. The first tick mark is labeled '30' to its left. The second tick mark is labeled '0' to its left. The third tick mark is labeled '30' to its right. Below the scale bar, the text 'SCALE IN FEET' is written in capital letters.



### INDUSTRIAL SITE PREPARATION PLAN: SOIL EROSION & SEDIMENT CONTROL - PHASE 2

**GALES FERRY INTERMODAL**  
1737 & 1761 ROUTE 2, GALES FERRY, CT 06335  
PREPARED FOR:  
**GALES FERRY INTERMODAL LLC**  
549 SOUTH STREET, QUINCY, MA 02169

**Loureiro**  
Engineering • Construction • E&I • Energy  
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STATE OF CONNECTICUT	REGISTRATION NO. 10281
PROFESSIONAL ENGINEER	REV.
LICENSURE AND REGISTRATION	
RESPONSE TO INLAND WETLAND COMMISSION COMMENTS	
1	DESCRIPTION OF REVISION
06/06/2023	
SR4	
APPR. DATE	

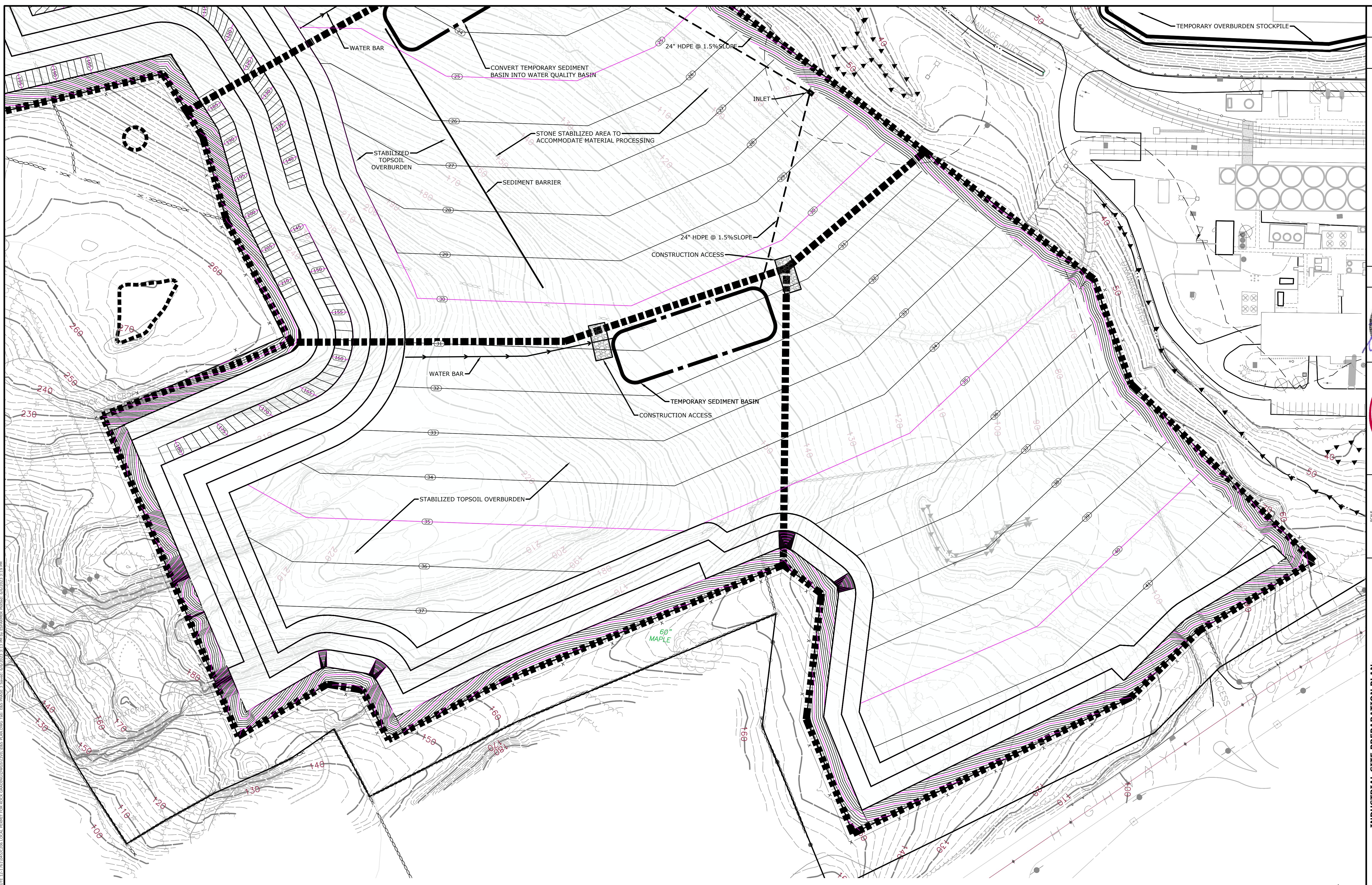
PZC PERMIT #	DATE OF APPROVAL	EXPIRATION DATE
PZC CHAIRMAN OR SECRETARY	DATE	
IWWC PERMIT #	DATE OF APPROVAL	
IWWC CHAIRMAN	DATE	

**DRAWING**

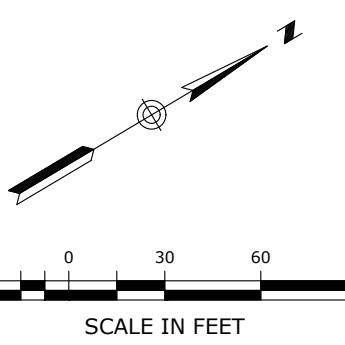
**C-7**

**NO. OF SHEETS**

**15**



PZC PERMIT #	DATE OF APPROVAL	EXPIRATION DATE
PZC CHAIRMAN OR SECRETARY		DATE
IWWC PERMIT #	DATE OF APPROVAL	
IWWC CHAIRMAN		DATE



# INDUSTRIAL SITE PREPARATION PLAN: SOIL EROSION & SEDIMENT CONTROL - PHASE 3

# INDUSTRIAL SITE PREPARATION PLAN: Sediment & Sediment Control -

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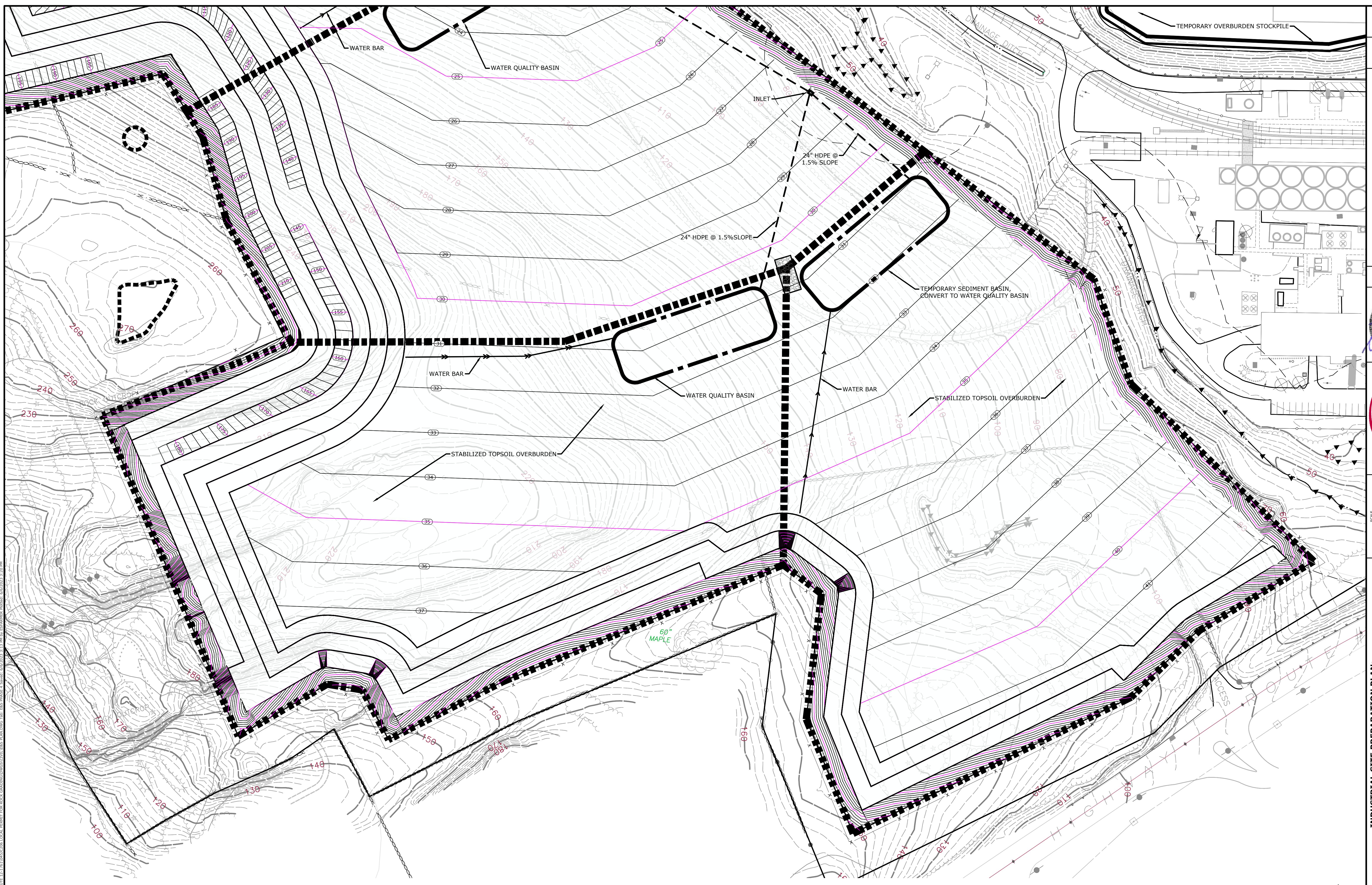
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1	RESPONSE TO INLAND WETLAND COMMISSION COMMENTS	06/06/2023	SRM
REV.	DESCRIPTION OF REVISION	DATE	APPR.

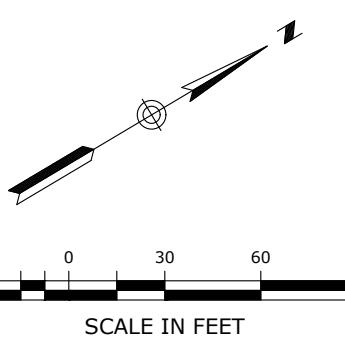
*GEORGE F. ANDREW*

STATE OF CONNECTICUT  
No. 19286  
LICENSED PROFESSIONAL ENGINEER

SCALE 1"=60'	COMM. NO. 045JC2.06	DRAWN BY ESF	DATE 04/03/2023
		APPROVED BY SRM	DATE 04/03/2023
<p style="text-align: right;">Lo 100 F An E</p>			



PZC PERMIT #	DATE OF APPROVAL	EXPIRATION DATE
PZC CHAIRMAN OR SECRETARY		DATE
IWWC PERMIT #	DATE OF APPROVAL	
IWWC CHAIRMAN		DATE



# INDUSTRIAL SITE PREPARATION PLAN: **SOIL EROSION & SEDIMENT CONTROL - PHASE 4**

**INDUSTRIAL SITE PREPARATION PLAN:  
Sediment & Sediment Control -**

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Waste • Facility Services • Laboratory

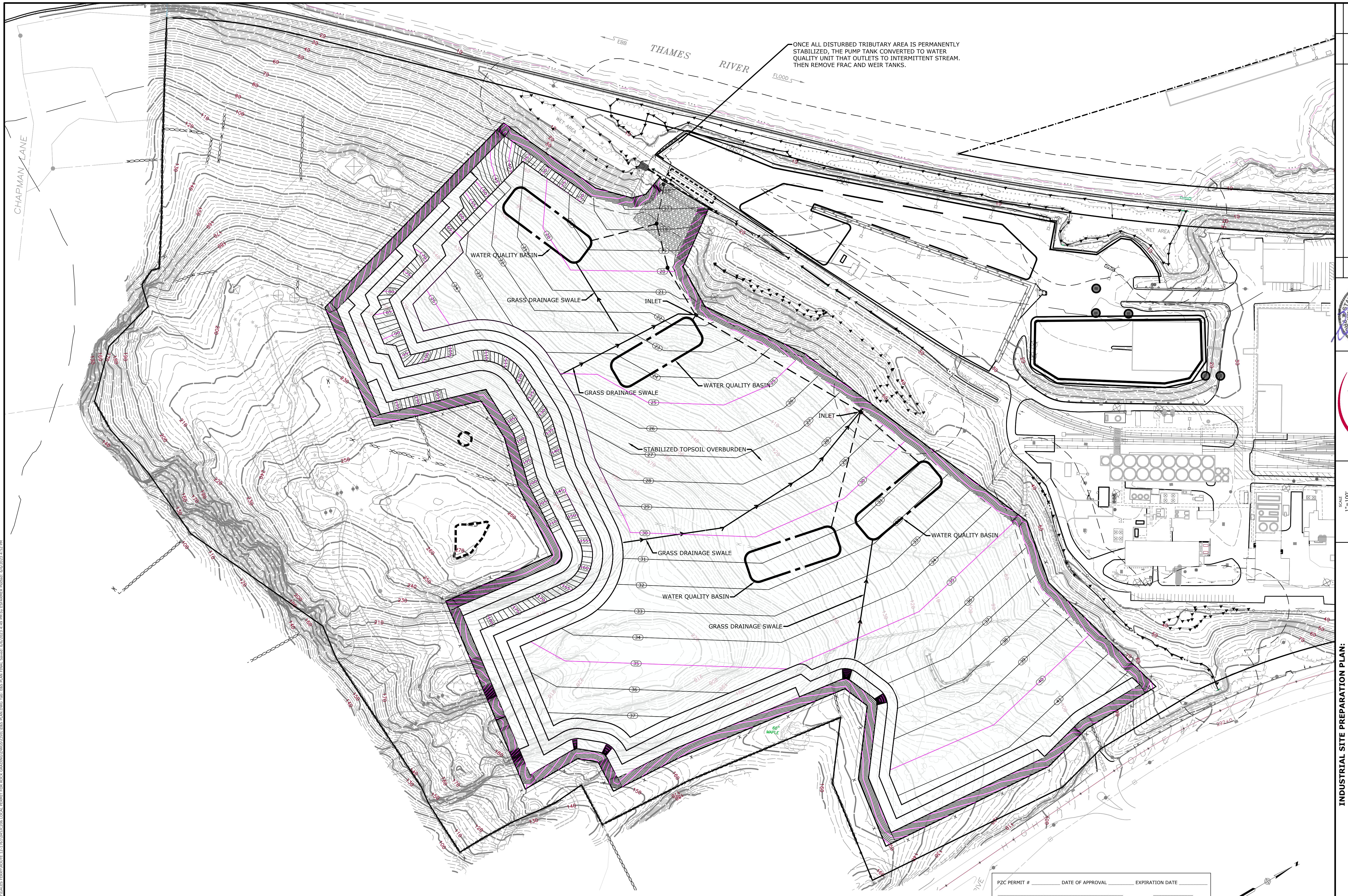
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DESCRIPTION OF REVISION	DATE	APPR.

	06/06/2023	SRM	APPR.
	DATE		

1



# SOIL EROSION & SEDIMENT CONTROL - FINAL

**SION & SEDIMENT CONTROL -  
GALES FERRY INTERMODAL  
1737 & 1761 ROUTE 12, GALES FERRY, CT 06335  
PREPARED FOR:**

A circular state seal for Connecticut. The outer ring contains the text "STATE OF CONNECTICUT" at the top and "PROFESSIONAL ENGINEER" at the bottom. The center features a shield with a plow, a sheaf of wheat, and a compass rose, with the word "CONSTITUTION" above the shield. Below the shield is the date "1784". The center of the seal contains the name "GEORGE F. ANDREW" and the number "No. 18286". A large blue signature "1972" is written across the center of the seal.


111

1

111

A circular library stamp with a decorative border. The text "STATE OF CONNECTICUT LIBRARY" is at the top, and "GEORGE F. ANDREW" is at the bottom. In the center is a circular seal with a crest and the word "CONSTITUTION".

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PROFESSIONAL ENGINEER  
H&S • Energy  
Laboratory  
**associates, Inc.**  
Connecticut 06062  
860-747-8822  
[www.Loureiro.com](http://www.Loureiro.com)

COMM. NO.	045JC2.06
DATE	04/03/2023

DRAWN BY  
ESF

OL - FINAL

ENT CONTROL  
**INTERMODA**  
SALES FERRY, CT 06335  
FOR:

# ON & SEDIMENTATION & FERRY

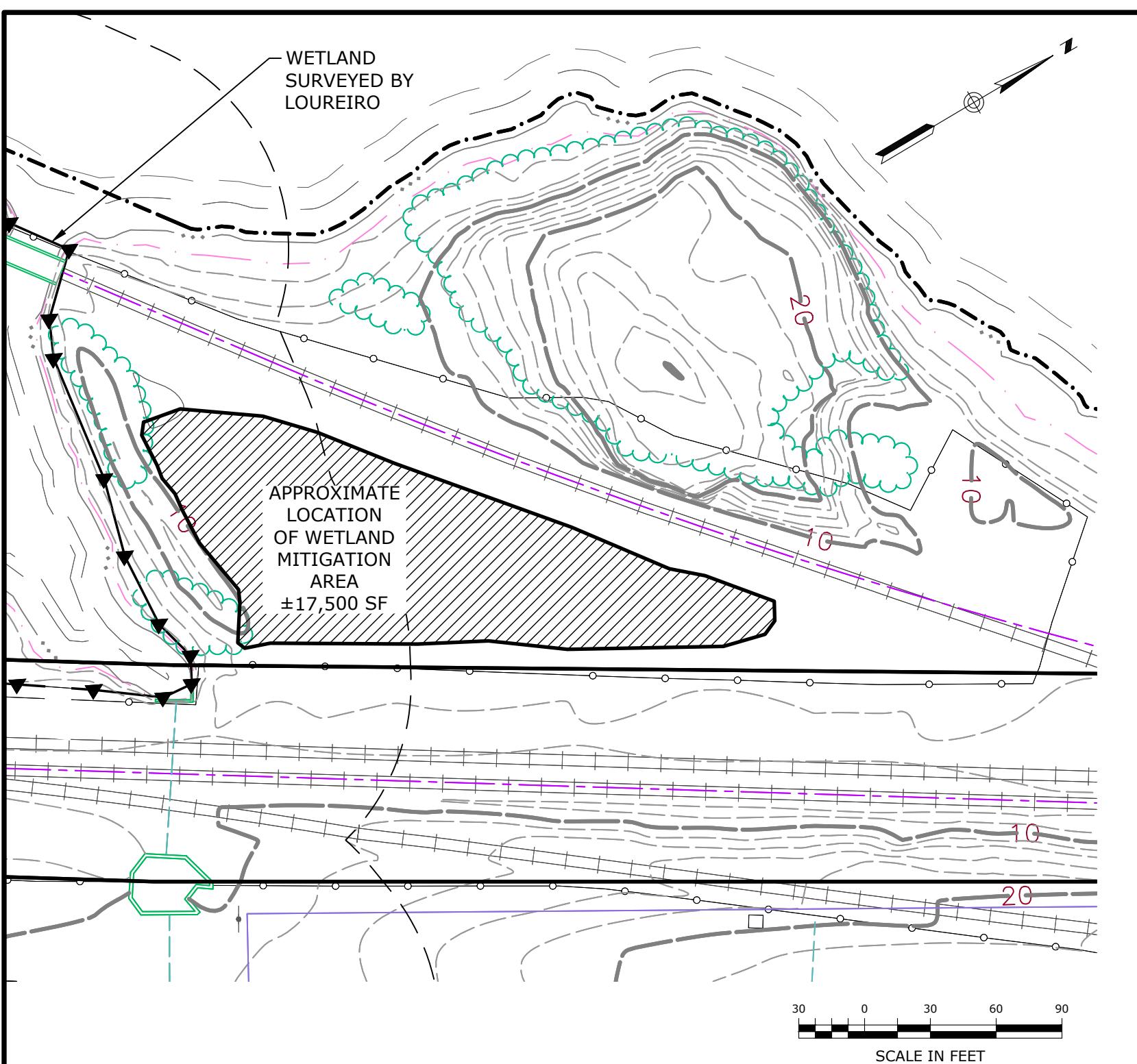
1737 & 1761 ROUTE 12, GLENWOOD SPRINGS, COLORADO  
PREPARED FOR THE COLORADO DIVISION OF HIGHWAYS

SOIL EROSION  
GA 17

A vertical line drawing consisting of a single, straight vertical line segment. The line is solid and black, extending from the bottom of the frame to the top. The word "DRAWING" is printed in capital letters at the bottom of the line, and the identifier "C-10" is printed in large, bold, capital letters at the bottom of the page.

ET 12 NO. OF SHEETS





### New England Conservation/Wildlife Mix

Botanical Name	Common Name	Indicator
<i>Elymus virginicus</i>	Virginia Wild Rye	FACW-
<i>Schizachyrium scoparium</i>	Little Bluestem	FACU
<i>Andropogon gerardii</i>	Big Bluestem	FAC
<i>Festuca rubra</i>	Red Fescue	FACU
<i>Sorghastrum nutans</i>	Indian Grass	UPL
<i>Panicum virgatum</i>	Switch Grass	FAC
<i>Chamáceras fasciculata</i>	Partridge Pea	FACU
<i>Desmodium canadense</i>	Showy Tick Trefoil	FAC
<i>Asclepias tuberosa</i>	Butterfly Milkweed	NI
<i>Bidens frondosa</i>	Beggar Ticks	FACW
<i>Eupatorium purpureum (Eutrochium maculatum)</i>	Purple Joe Pye Weed	FAC
<i>Rudbeckia hirta</i>	Black Eyed Susan	FACU-
<i>Aster pilosus (Symphytum pilosum)</i>	Heath (or Hairy) Aster	UPL
<i>Solidago juncea</i>	Early Goldenrod	

PRICE PER LB. \$39.50 MIN. QUANTITY 2 LBS. TOTAL: \$79.00 APPLY: 25 LBS/ACRE:1750 sq ft/lb

The New England Conservation/Wildlife Mix provides a permanent cover of grasses, wildflowers, and legumes. For both good erosion control and wildlife habitat value. The mix is designed to be a no maintenance seeding, and is appropriate for cut and fill slopes, detention basin side slopes, and disturbed areas adjacent to commercial and residential projects.

New England Wetland Plants, Inc. may modify seed mixes at any time depending upon seed availability. The design criteria and ecological function of the mix will remain unchanged. Price is \$/bulk pound, FOB warehouse, Plus SH and applicable taxes.

**Table 3. Herbs**

Hydrologic Zones: Zone A: Saturated/Shallow inundation; Zone B: seasonally saturated, moist  
Zone C: moderately well drained, usually moist; Zone D: well-drained

Scientific Name	Zone	Common Name	Form	NWI*	Spacing	Wetland Creation Area	Total
<i>Asclepias incarnata</i>	A,B	Swamp milkweed	2" plug	OBL	2'OC	100	100
<i>Carex lupulina</i>	B	Hop sedge	2" plug	FACW	2'OC	100	100
<i>Eutrochium purpureum</i>	B	Purple Joe Pye weed	2" plug	FAC	3'OC	100	100
<i>Juncus canadensis</i>	A,B	Canada rush	2" plug	OBL	2'OC	50	50
<i>Mimulus ringens</i>	B	Monkey-flower	2" plug	OBL	2'OC	50	50
<i>Monarda fistulosa</i>	C	Wild bergamot	2" plug	UPL	3'OC	100	100
<i>Panicum virgatum</i>	C	Switchgrass	2" plug	FAC	3'OC	150	150
<i>Onoclea sensibilis</i>	B	Sensitive fern	6" pot	FAC	2'OC	50	50
<i>Veronica hastata</i>	B	Blue vervain	2" plug	FACW	3'OC	100	100
<i>Veronica novae-angliae</i>	B	New York Ironweed	2" plug	FACW	3'OC	100	100
<i>Zizia aurea</i>	B	Golden alexander	2" plug	FAC	3'OC	100	100
<b>Total:</b>						1000	1000

\* NWI Status (National Wetland Inventory; National Wetland Plant List: Northcentral & Northeast)

**NOTES:**

1. Plant between May 15 and June 30 for herbaceous species. July planting will need watering through end of August.
2. Purchased woody material may be installed either in the spring (April 15 to June 15), or in the fall (August 15 to October 15)
3. Plant in same species groupings of three to six shrubs, ten to twenty for herbs.
4. Use seed mixes from New England Wetland Plants, Inc., South Hadley, MA (see Table 4), at specified seeding rate.
5. No seeding or plants in 3' diameter circle around each shrub and tree, 1' around plugs; mulch with shredded bark
6. Water and weed as needed during first growing season.

**Table 1. Trees**

Hydrologic Zones: Zone A: Saturated/Shallow inundation; Zone B: seasonally saturated, moist  
Zone C: moderately well drained, usually moist; Zone D: well-drained

Scientific Name	Zone	Common Name	Size	Shade	NWI*	Form	tolerant?	Wetland Creation Area	Total
<b>FULL SIZE TREES</b>									
<i>Nyssa sylvatica</i>	B,C	Black gum	4'-6'	Y	FAC	nursery pot	4	4	
<i>Quercus palustris</i>	B,C	Pin Oak	4'-6'	Y	FACW	nursery pot	4	4	
<i>Acer rubrum</i>	D	Red maple	4'-6'	Y	FACU-	nursery pot	7	7	
<b>Total:</b>							15	15	
<b>SMALL TREES/LARGE SHRUBS</b>									
<i>Amelanchier canadensis</i>	C,D	Shadblow	3'-4'	Y/N	FAC	nursery pot	4	4	
<i>Salix discolor</i>	B,C	Pussy willow	3'-4'	N	FACW	nursery pot	8	8	
<i>Juniperus virginiana</i>	C,D	Red cedar	3'-4'	Y	UPL	nursery pot	16	16	
<b>Total:</b>							28	28	

**Table 2. Shrubs**

Hydrologic Zones: Zone A: Saturated/Shallow inundation; Zone B: seasonally saturated, moist  
Zone C: moderately well drained, usually moist; Zone D: well-drained

Scientific Name	Zone	Common Name	Size	Shade	NWI*	Form	tolerant?	Wetland Creation Area	Total
<b>MEDIUM TO LOW SHRUBS</b>									
<i>Aronia arbutifolia</i>	B,C	Chokeberry	3'-4'	N	FACW	pot	12	12	
<i>Clethra alnifolia</i>	B,C	Sweet pepperbush	3'-4'	Y	FAC+	pot	16	16	
<i>Corylus americana</i>	C,D	American hazelnut	3'-4'	Y	FACU-	pot	12	12	
<i>Ilex verticillata</i>	B,C	Winterberry	3'-4'	Y	FACW+	pot	15	15	
<i>Lyonia ligustrina</i>	B,C	Maleberry	3'-4'	Y/N	FACW	pot	15	15	
<i>Morella pensylvanica</i>	C,D	Bayberry	3'-4'	N	FAC	pot	20	20	
<i>Vaccinium corymbosum</i>	B	Highbush blueberry	3'-4'	Y	FACW	pot	20	20	
<i>Viburnum lentago</i>	B,C	Nannyberry	3'-4'	Y	FAC	pot	25	25	
<i>Spiraea latifolia</i>	B,C	Meadowweet	3'-4'	N	FAC+	pot	50	50	
<i>Swida racemosa</i>	B,C	Gray dogwood	3'-4'	Y	FAC	pot	30	30	
<i>Rosa palustris</i>	A	Swamp rose	3'-4'	Y	OBL	pot	15	15	
<b>Total:</b>							230	230	

PZC PERMIT # \_\_\_\_\_ DATE OF APPROVAL \_\_\_\_\_ EXPIRATION DATE \_\_\_\_\_

PZC CHAIRMAN OR SECRETARY \_\_\_\_\_ DATE \_\_\_\_\_

IWWC PERMIT # \_\_\_\_\_ DATE OF APPROVAL \_\_\_\_\_

IWWC CHAIRMAN \_\_\_\_\_ DATE \_\_\_\_\_

### Mitigation Plan for Creation of Wetland Habitats

#### IMPLEMENTATION NOTES

1.0 **INTRODUCTION**  
EMERGENT AND SCRUB-SHRUB WETLAND (I.E., WET MEADOW/MARSH AND SHRUB SWAMP) CREATION BY EXCAVATION, AND HERBACEOUS AND WOODY PLANTINGS, WILL TAKE PLACE AT AN ADDITIONAL LOCATION ON THE SUBJECT SITE, AT THE WESTERN PORTION OF THE OVERALL PROPERTY, A PIE-SHAPED AREA, BETWEEN TWO RAILROAD TRACKS, AND EASTERLY OF A PROMINENT BEDROCK KNOB.

SOILS RANGE FROM WELL DRAINED, TO MODERATELY WELL DRAINED FINE SANDY LOAMS TO LOAMY SAND. BASED ON PRELIMINARY SOIL EXPLORATION ON THE SITE AND REMOTE SENSING, THIS AREA APPEARS TO HAVE NOT BEEN FILLED OR MANIPULATED TO A GREAT DEGREE, IN THE SUBSOILS.

THOUGH SOME BETTER-QUALITY NATIVE VEGETATION OF RUDERAL WOODS EXISTS WITHIN THIS AREA, FOR THE MOST PART IT IS REPLETE WITH INVASIVE PLANTS (E.G., MULTIFLORA ROSE, MUGWORT, ASIATIC BITTERSWEET, TREE OF HEAVEN, AUTUMN OLIVE, ETC.).

IN-KIND MITIGATION (I.E., CREATION) IS PROPOSED TO OFF-SET LOSSES & VALUES FROM THE CURRENTLY PROPOSED PERMANENT WETLAND IMPACT (I.E., +/- 1,700 SQUARE FEET) (I.E., "WETLAND Z") AND THE POTENTIAL HYDROLOGIC IMPACTS TO WETLANDS "Y" AND "X". THE GOAL IS TO CREATE ECOLOGICAL COMMUNITIES WITH AT LEAST COMPARABLE, AND PREFERABLY HIGHER, FUNCTIONS AND COMPLEMENTARY WETLAND COVER TYPES TO THE WETLAND THAT WOULD BE IMPACTED. THE INITIAL TARGET COVER TYPE RATIO FOR THE WETLAND REPLICATION SHALL BE 1/2 EMERGENT (I.E., WET MEADOW, MARSH) AND 1/2 SCRUB-SHRUB HABITATS. APPROXIMATELY 17,500 SQUARE FEET OF PRODUCTIVE WETLAND CAN BE CREATED AT THIS LOCATION.

THE WETLAND CREATION GOAL IS 100% COVER, AND 95% COVER BY NATIVE SPECIES. BY THE END OF THE FIVE-YEAR (5) MONITORING PERIOD, PLANT SPECIES WERE SELECTED TO ENCOMPASS THE FOLLOWING CRITERIA: FOOD PLANTS FOR CATERPILLARS, BEETLES, AND OTHER INSECTS; FRUIT, SEED, AND NUT PRODUCTION IN DIFFERENT SEASONS, INCLUDING PERSISTENT WINTER FRUIT AND SPRING SEEDS; FORAGE FOR VERTEBRATE HERBIVORES; SUITABLE MICRO-HABITATS FOR OVERWINTERING INSECTS; AND NECTAR AND POLLEN THROUGHOUT THE GROWING SEASON (SEE TABLE 3). SPECIES ALREADY PRESENT IN NEARBY WETLAND HABITATS, ESPECIALLY WOODY SPECIES, WERE SELECTED FIRST, AS THEY ARE ALREADY USED BY THE LOCAL FAUNAL ASSEMBLAGE.

NOTE: ALL WETLAND REPLICATION WORK SHALL BE SUPERVISED BY AN ECOLOGIST (OR WETLAND SCIENTIST), INCLUDING INITIAL GRADING, PLANTING, MARKING INVASIVES IN ADJACENT UPLAND BUFFER AREAS, AND MARKING ANY NATIVE MATERIALS FOR SALVAGE. A PRE-IMPLEMENTATION MEETING SHALL TAKE PLACE AT LEAST ONE MONTH PRIOR TO PLAN IMPLEMENTATION, BETWEEN THE WETLAND SCIENTIST, THE SITE CONTRACTOR, AND THE LANDSCAPER, AND THE TOWN'S WETLAND AGENT, AT THE TOWN'S DISCRETION.

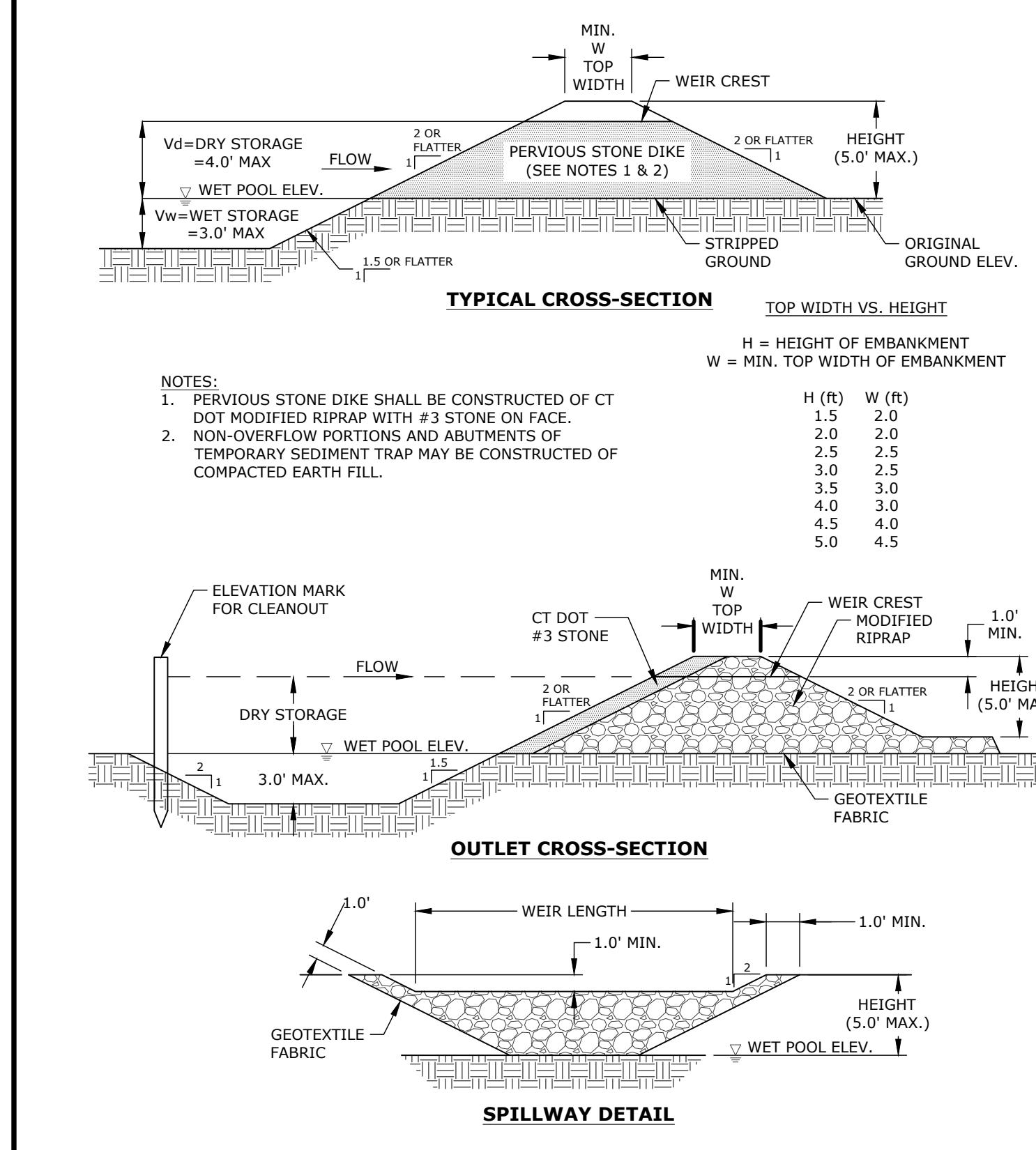
#### 2.0 WETLAND CREATION

##### PREPARATION

1. ORDER THE TRAYS OF HERBACEOUS PLUGS AND THE SEED MIX. FOR DELIVERY RIGHT AFTER COMPLETION OF GRADING, STORE IN SHADE WHEN THEY ARRIVE.
2. EARTHWORK FOR THE WETLAND CREATION AREA WILL TAKE PLACE IN APRIL / MAY, OR IN AUGUST, SO THAT PLANTINGS CAN BE INSTALLED IMMEDIATELY AFTERWARDS, EITHER IN LATE SPRING OR VERY EARLY FALL SEASONS.
3. A MINIMUM OF 10 INCHES OF TOPSOIL (AFTER COMPACTION) SHALL BE USED. SOIL TEXTURE SHALL BE LOAM OR FINER. ORGANIC MATTER CONTENT SHALL BE A MINIMUM OF 10 PERCENT BY WEIGHT (I.E., LOSS AT IGNITION), AS TESTED AT A QUALIFIED LABORATORY (E.G., UNIVERSITY OF CONNECTICUT SOILS LAB).
4. IF NECESSARY, WELL-ROTTED LEAF COMPOST (I.E., TWO YEAR MINIMUM) WILL BE ADDED TO BRING THE PERCENT ORGANIC MATTER TO THE DESIRED SPECIFICATION.
5. A TWO INCH THICK "TOP-DRESSING" SHALL BE APPLIED TO THE FINAL GRADE AT THE CREATION AREA, EXCEPT IN AREAS WITH PROPOSED INUNDATION, CONSISTING OF LEAF COMPOST (2-YEAR OLD, MINIMUM).
6. ADD ORGANIC, SLOW-RELEASE FERTILIZER OR OTHER AMENDMENT ONLY AS INDICATED BY THE SOIL TEST RESULTS. NOTE THAT NUTRIENT LEVELS SHOULD BE LOWER FOR NATURAL HABITATS THAN FOR AGRICULTURAL OR HORTICULTURAL SITES, TO PREVENT EXCESSIVE COMPETITION BY RANK WEEDS.
7. INSTALL PERIMETER EROSION CONTROLS AROUND THE MITIGATION AREAS AS SHOWN ON PLAN: CORRECTLY TRENCHED AND STAKED SILT FENCE PER THE 2002 CONNECTICUT EROSION & SEDIMENTATION CONTROL GUIDELINES (2002 GUIDELINES).

##### EARTHWORK

8. CLEAR AND GRUB THE WETLAND MITIGATION AREA.
- a. REMOVE THE EXISTING TOPSOIL FROM THESE LOCATIONS & PLACE IN A DESIGNATED SOIL STOCKPILE AREA, AT LEAST FIFTY FEET AWAY. (IMPORTANT NOTE: THE TOPSOIL FROM THE MITIGATION AREA SHALL NOT BE USED, BECAUSE IT IS HEAVILY INFESTED WITH INVASIVE PLANT SPECIES).
9. SUBSOIL FROM CERTAIN PORTIONS OF THE WETLAND REPLICATION AREA, WITH HIGHER POTENTIAL FOR INVASIVE SPECIES, WILL BE TRUCKED TO OTHER UPLAND PARTS OF THE SITE, AND COULD BE STOCKPILED FOR USE IN AREAS OF MAINTAINED LAWN.
10. EXCAVATION, GRADING, AND TRANSPLANTING WILL TAKE PLACE UNDER THE DIRECTION OF THE WETLAND SCIENTIST. GRADING WILL BE BASED ON CONDITIONS OBSERVED AT THE FIELD BY THE WETLAND SCIENTIST WHO MAY MAKE SMALL IN-FIELD ADJUSTMENTS TO ACHIEVE THE DESIRED WETLAND HYDROLOGY.
11. GRADING FOR THE WETLAND REPLICATION AREA WILL ENTAIL THE REMOVAL OF FILL OVER PRE-EXISTING WETLANDS. THE DEPTH OF MATERIALS TO BE REMOVED, BEFORE TOPSOIL IS PLACED, WILL RANGE FROM APPROXIMATELY ONE FOOT TO OVER FIVE FEET.
12. NO MACHINERY WILL BE ALLOWED WITHIN THE WETLAND CREATION AREAS WHERE TOPSOIL HAS BEEN PLACED.
13. THE CREATED WETLANDS HABITAT WILL ONLY HAVE A SUBSURFACE HYDROLOGIC CONNECTION TO THE TIDAL WETLANDS TO THE



**TEMPORARY SEDIMENT TRAP DETAIL**  
SCALE: NONE

TEMPORARY SEDIMENT TRAP SHALL BE SIZED BASED ON A MINIMUM OF 134 CUBIC YARDS OF WATER STORAGE PER ACRE DRAINED. A MINIMUM WET STORAGE VOLUME EQUAL TO HALF OF THE TOTAL STORAGE VOLUME AND A MINIMUM DRY STORAGE VOLUME EQUAL TO HALF OF THE TOTAL STORAGE VOLUME.

NOTES:  
1. PERVERSUS STONE DIKE SHALL BE CONSTRUCTED OF CT DOT MODIFIED RIPRAP WITH #3 STONE ON FACE.  
2. NON-OVERFLOW PORTIONS AND ABUTMENTS OF TEMPORARY SEDIMENT TRAP MAY BE CONSTRUCTED OF COMPACTED EARTH FILL.

H = HEIGHT OF EMBANKMENT  
W = MIN. TOP WIDTH OF EMBANKMENT

1.5 2.0  
2.0 2.0  
2.5 2.5  
3.0 2.5  
3.5 3.0  
4.0 3.0  
4.5 4.0  
5.0 4.5

Vd=DRY STORAGE =4.0' MAX FLOW  
Vw=WET STORAGE =3.0' MAX

1.5 OR FLATTER  
1.5 OR FLATTER

</