

C:\USERS\ZACH\CITY OF NEW HAVEN, CT\ENGINEERING DEPARTMENT - DOCUMENTS\PROJECTS\22-099-09 EDGWOOD PARK PEDESTRIAN BRIDGE\DESIGN\CONSTRUCTION PLANS.DWG



CITY OF NEW HAVEN

DEPARTMENT OF ENGINEERING

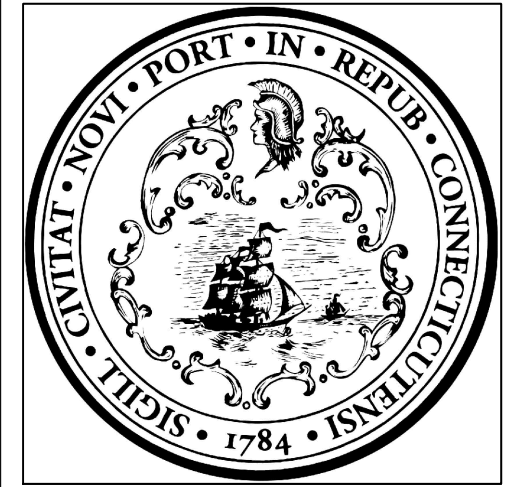
EDGEWOOD PARK MID-BRIDGE

PROJECT NUMBER 22-099-09

Sheet List Table	
Sheet Number	Sheet Title
1	COVER SHEET
N	NOTES
S-1	EXISTING CONDITIONS
SP	SITE PLAN
S&E	SEDIMENT AND EROSION
ENVT	ENVIRONMENTAL
C&G	CLEARING AND GRUBBING
D1	DEMOLITION PLAN
D2	DEMOLITION ELEVATION
CS	CONSTRUCTION SEQUENCE
S	STRUCTURAL
PLNT	LANDSCAPING
DRG	DRAINAGE
DT	TYPICAL DETAILS

HONORABLE JUSTIN ELICKER, MAYOR
GIOVANNI ZINN, P.E.
CITY ENGINEER

CITY OF NEW HAVEN CONNECTICUT	
APPROVED:	
GIOVANNI ZINN, P.E.	DATE



No.	Revision/Issue	Date

CITY OF NEW HAVEN
DEPARTMENT OF ENGINEERING

THE HONORABLE JUSTIN ELICKER, MAYOR
GIOVANNI ZINN, P.E., CITY ENGINEER

Project Name and Address

EDGEWOOD PARK
MID BRIDGE

Drawn By	ZSHAPIRO
Designed By	ZSHAPIRO
Date	9/12/2024
Project Number	22-099-09

Professional Seal

Sheet Title	COVER SHEET
Sheet Number	1

C:\USERS\ZACH\CITY OF NEW HAVEN, CT\ENGINEERING DEPARTMENT - DOCUMENTS\PROJECTS\22-099-09 EDGEWOOD PARK PEDESTRIAN BRIDGE\DESIGN\CONSTRUCTION PLANS.DWG

PROJECT DESCRIPTION:

This project is to replace an existing pedestrian bridge over the West River on new abutments, strengthen the existing abutments and wingwalls, demolish the existing center pier and remove various debris materials accumulated on it. Contractor is responsible for visiting site prior to bid and for confirming dimensions/geometry, existing conditions, calculating quantities, and understanding intended scope of work.

DESIGN BASIS:

AASHTO LRFD Bridge Design Specifications, 7th Edition
AASHTO LRFD Pedestrian Bridge Design Specifications
Presumptive soil bearing pressure of 1,500 psf per IBC 1806.2.5
See Structure sheet S notes for design load requirements for pedestrian bridge.

PERMITS & CONDITIONS:

Inland wetlands and watercourses permit, and coastal site plan review issued by the City of New Haven have been obtained for this project. The permit documents are included in the bid documents and the Contractor is subject to all permit requirements.

Contractor is required to submit for approval a disposal facility for all spoils, organic matter, and a decontamination plan for all equipment leaving the site to control the spread of invasive species.

FLOOD PLAIN:

Contractor work will take place within the flood plain. Contractor is responsible for monitoring weather systems and taking precautions prior to any significant precipitation events to move all debris, materials, and equipment upland.

ACCESS:

Edgewood Park Mid-Bridge may be accessed by vehicle off Whalley Ave. at Fitch St. and taking the carriage road approximately 1/4 mile South. Work on the site is permitted between 7am and 7pm on weekdays, excluding holidays. The existing bridge superstructure has been checked for a track mounted CAT 304 mini excavator weighing 9,867lb and carrying a single 2'x2'x3' concrete block. Contractor must submit actual equipment and plan to engineer prior to putting construction loads on bridge. Contractor should verify decking is adequate prior to loading existing bridge, and reinforce with lagging if necessary.

Contractor is responsible for placing signs and barricades redirecting pedestrians on the walking path approaches from the East and West to the bridge.

Contractor is responsible for documenting condition of carriage road prior to mobilization and performing any/all restoration work to road necessary to repair construction related damages.

SUBMITTALS:

Contractor must provide submittals for all materials permanently incorporated into the project, or specified by pay item. The following list is not intended to be all inclusive. Stamped shop drawings and calculations for bridge superstructure Concrete mix design/bag mix components for stem wall

Reinforcement material certification and bar schedule
Cofferdam materials, layout, and dimensions
Turbidity curtain material
Demolition plan
Crane size, location, swing chart
Planting and seed material and source

PLANTINGS:

Wetland seed mix shall be spread over disturbed areas at conclusion of construction. Contractor must submit mix prior to purchase. Mix design provided by New England Wetland Plants, Inc. Contractor shall supply seed mix as specified or approved equal. Trees are to be planted at 8' on center in 3 gallon containers in locations determined by the engineer. Trees may be chosen based on availability from the following list:
Amelanchier canadensis
Betula populifolia
Pinus rigida
Prunus maritima
Quercus alba
Quercus stellata

BID ITEMS & SPECIFICATIONS:

CLEARING AND GRUBBING- Contractor may not remove any trees unless noted on plans or given written permission from City tree warden. Minor branch trimming for crane swing may be performed with express permission from Engineering and Park's Dept. representatives. Contractor is responsible for removal of any vegetation that would otherwise inhibit work, and restoration of the site at the conclusion of work. Contractor should include in this price the removal and disposal of any debris within the waterway adjacent to the bridge. Wetland seeding and landscape plantings will be paid for elsewhere.
COFFERDAM - Contractor is to provide plan and details for cofferdam within river banks for work zone. At a minimum cofferdam must extend to limits shown on sheet S&E and be sized to overtop normal water height by one foot (elevation 4). Cofferdam and S&E controls must be checked and reestablished/maintained within 24 hours of any perception event. Contractor must include in this price all work associated with designing, procuring, installing and maintaining cofferdam, as well as turbidity curtain, pipe extension, and any dewatering necessary.

DEMOLISH PIER TO 2' BELOW MUDLINE- Contractor must submit demolition plan with staging and access. All debris materials shall be the responsibility of the contractor to remove and dispose. No heavy equipment may enter the waterway, contractor is to use jackhammer, demo saw, or other means to breakdown pier for removal. All rubble must be continuously removed, contractor must ensure no debris enter waterway.

DEMOLISH EXISTING BRIDGE SUPERSTRUCTURE- Remove bridge superstructure, decking, baseplates, and cut anchor bolts flush with abutment concrete and coat exposed anchor bolt end with zinc spray.

REBUILD MASONRY PIPE OUTFALL- Contractor may reuse existing stones or furnish new similar stones for work. Existing wall and penetration may be rebuilt in-kind or a new concrete pipe extension placed with interlocking rock placed over and around it.

REPOINT WINGWALLS- Engineer will mark out areas for repointing.

Joints must be cleaned and raked to a minimum depth of 3 inches, or until all loose materials have been removed. Contractor must collect and remove mortar debris from waterway. Mortar must type S and be used within 1 hour of mix.




ABUTMENTS- Price for abutments must include all excavation, backfill, furnishing and installation of materials and details shown on sheet S, layout for elevation and geometry of bridge, granite backwall, and asphalt path tie-in. Contractor must submit material certifications and cut sheets for all materials used.

PRE-FABRICATED BRIDGE- See notes on sheet S for design requirements for the pedestrian bridge. Contractor must submit stamped and sealed calculations and shop drawings for pedestrian bridge. Price for pre-fabricated bridge must include material and equipment to deliver, lift, and set bridge on abutments with anchor bolts, and staining of the wood deck after pressure treatment has dried.

LANDSCAPING TREES- Contractor must provide source of trees and provide Chief Landscape Architect an opportunity to see and approve of the species prior to bringing them onsite. Include in this item all excavation, furnishing, planting, and provide a one-year warranty on the trees.

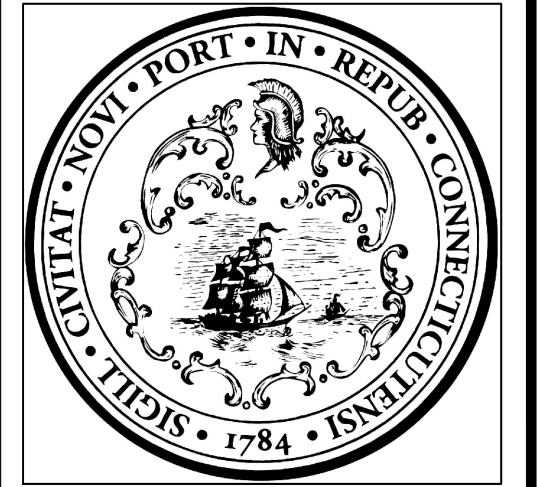
WETLAND SEEDING- Seed mix is provided on landscaping sheet PLNT. Chief Landscape Architect will delineate areas for wetland seeding, contractor must provide seed mix, and source prior to furnishing. Area must be prepared by scarification and/or roto-tilled to six inch depth and seed spread per nursery's recommendations.

LEGEND


-  NON-WETLANDS AREA
-  DEMOLITION LIMITS
-  PERMITTED DISTURBANCE AREA


TIDAL ELEVATIONS NAVD88:

CJL	4.6'
MHW	2.8'
MLW	-3.4'
HTL	4.4'



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CITY OF NEW HAVEN
DEPARTMENT OF ENGINEERING


THE HONORABLE JUSTIN ELICKER, MAYOR
GIOVANNI ZINN, P.E., CITY ENGINEER

Project Name and Address
EDGEWOOD PARK MID BRIDGE

Drawn By	ZSHAPIRO
Designed By	ZSHAPIRO
Date	9/12/2024
Project Number	22-099-09

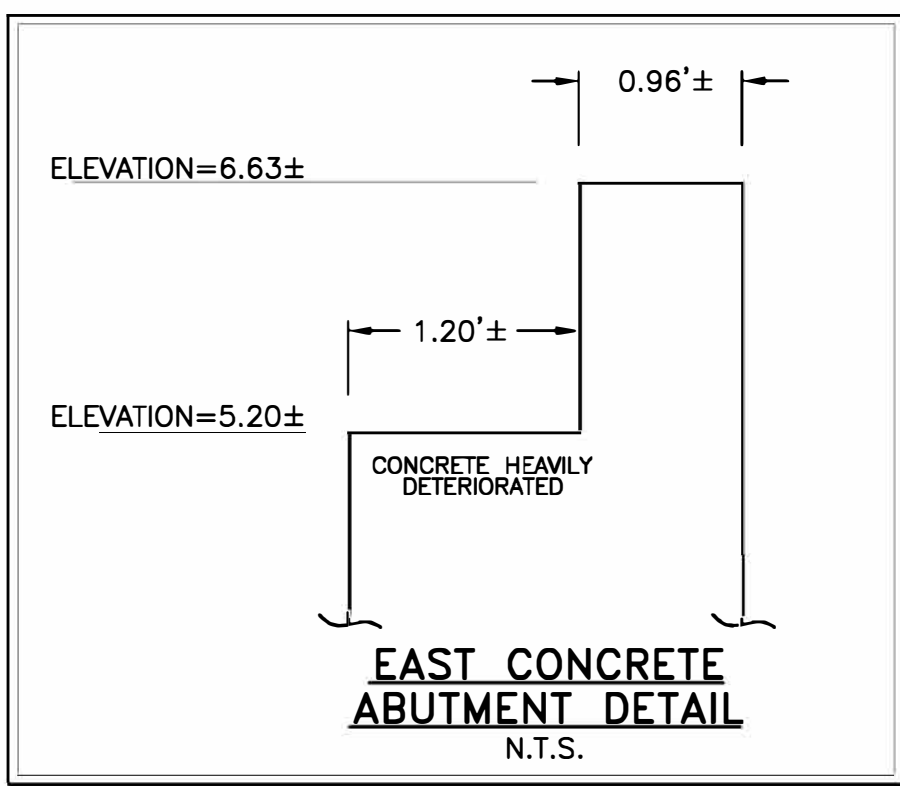
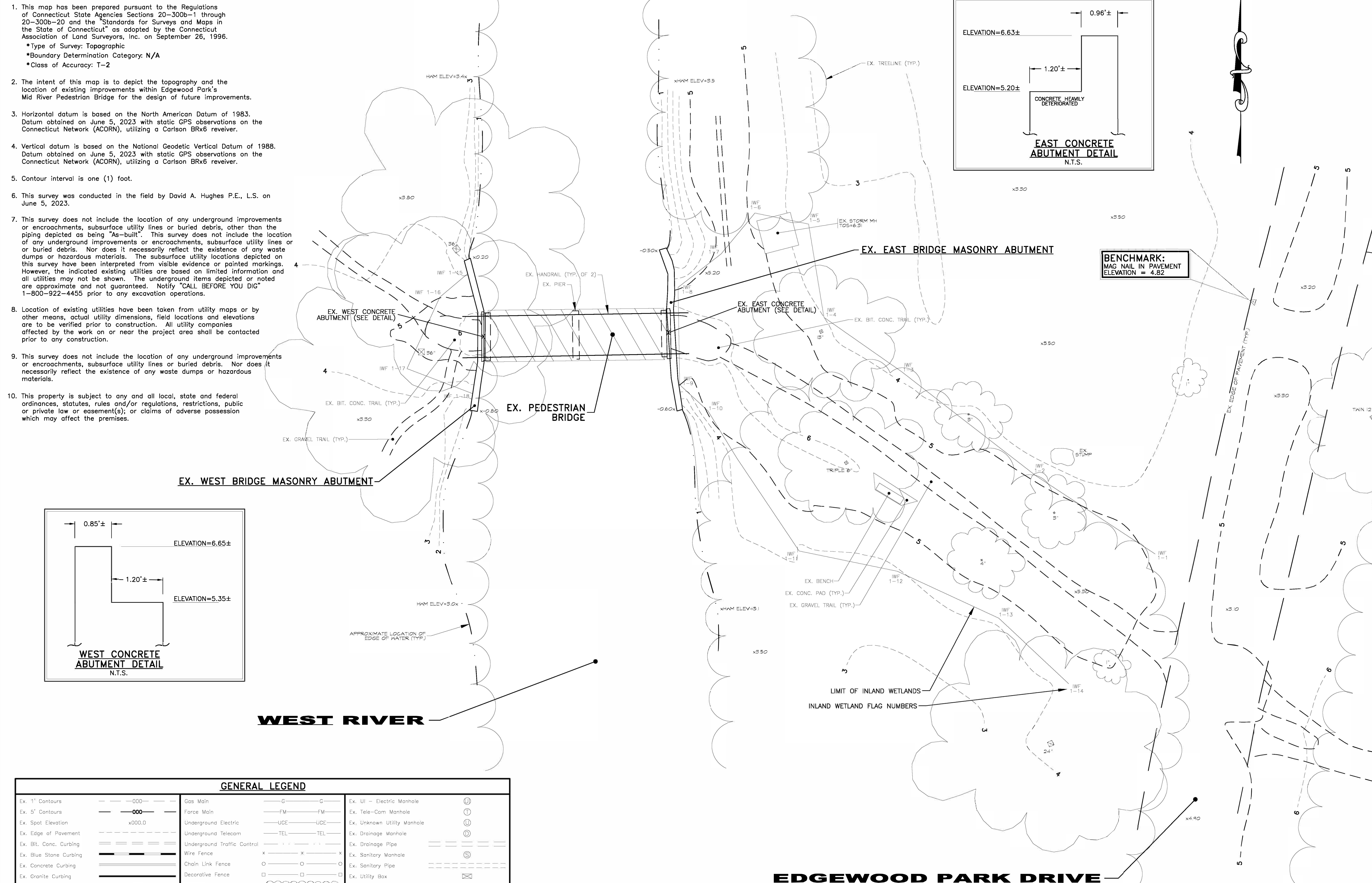
Professional Seal

Sheet Title
NOTES

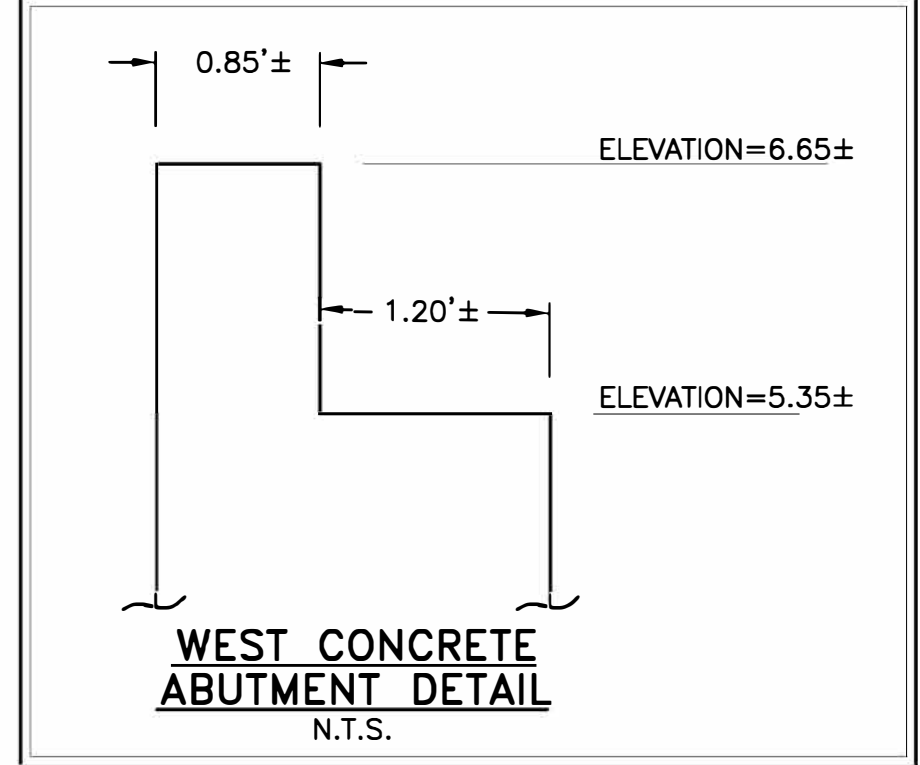
Sheet Number
N

NOTES:

- This map has been prepared pursuant to the Regulations of Connecticut State Agencies Sections 20-300b-1 through 20-300b-20 and the "Standards for Surveys and Maps in the State of Connecticut" as adopted by the Connecticut Association of Land Surveyors, Inc. on September 26, 1996.
 - Type of Survey: Topographic
 - Boundary Determination Category: N/A
 - Class of Accuracy: T-2
- The intent of this map is to depict the topography and the location of existing improvements within Edgewood Park's Mid River Pedestrian Bridge for the design of future improvements.
- Horizontal datum is based on the North American Datum of 1983. Datum obtained on June 5, 2023 with static GPS observations on the Connecticut Network (ACORN), utilizing a Carlson BRx6 receiver.
- Vertical datum is based on the National Geodetic Vertical Datum of 1988. Datum obtained on June 5, 2023 with static GPS observations on the Connecticut Network (ACORN), utilizing a Carlson BRx6 receiver.
- Contour interval is one (1) foot.
- This survey was conducted in the field by David A. Hughes P.E., L.S. on June 5, 2023.
- This survey does not include the location of any underground improvements or encroachments, subsurface utility lines or buried debris, other than the piping depicted as being "As-built". This survey does not include the location of any underground improvements or encroachments, subsurface utility lines or buried debris. Nor does it necessarily reflect the existence of any waste dumps or hazardous materials. The subsurface utility locations depicted on this survey have been interpreted from visible evidence or painted markings. However, the indicated existing utilities are based on limited information and all utilities may not be shown. The underground items depicted or noted are approximate and not guaranteed. Notify "CALL BEFORE YOU DIG" 1-800-922-4455 prior to any excavation operations.
- Location of existing utilities have been taken from utility maps or by other means, actual utility dimensions, field locations and elevations are to be verified prior to construction. All utility companies affected by the work on or near the project area shall be contacted prior to any construction.
- This survey does not include the location of any underground improvements or encroachments, subsurface utility lines or buried debris. Nor does it necessarily reflect the existence of any waste dumps or hazardous materials.
- This property is subject to any and all local, state and federal ordinances, statutes, rules and/or regulations, restrictions, public or private law or easement(s); or claims of adverse possession which may affect the premises.



BENCHMARK:
MAG NAIL IN PAVEMENT
ELEVATION = 4.82



EX. WEST BRIDGE MASONRY ABUTMENT

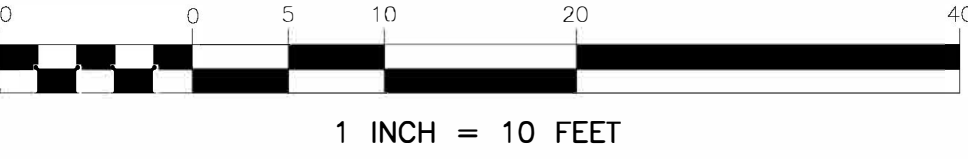
EX. EAST BRIDGE MASONRY ABUTMENT

EX. PEDESTRIAN BRIDGE

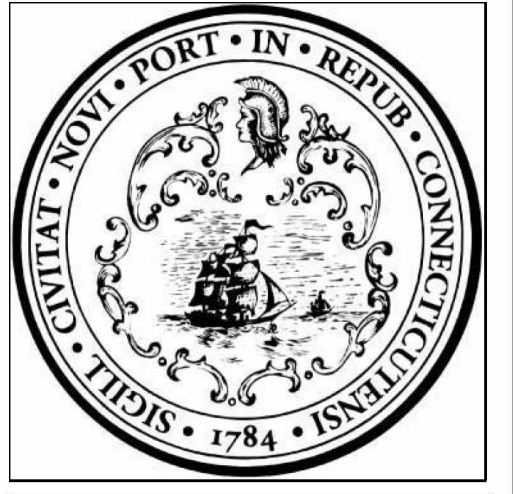
WEST RIVER

EDGEWOOD PARK DRIVE

GENERAL LEGEND					
Ex. 1" Contours	---000---	Gas Main	—G—G—	Ex. UI - Electric Manhole	⊙
Ex. 5" Contours	---000---	Force Main	—FM—FM—	Ex. Tele-Cam Manhole	⊕
Ex. Spot Elevation	x000.0	Underground Electric	—UGE—UGE—	Ex. Unknown Utility Manhole	⊙
Ex. Edge of Pavement	----	Underground Telecom	—TEL—TEL—	Ex. Drainage Manhole	⊙
Ex. Bit. Conc. Curbing	====	Underground Traffic Control	----	Ex. Drainage Pipe	—
Ex. Blue Stone Curbing	=====	Wire Fence	x x x x	Ex. Sanitary Manhole	⊙
Ex. Concrete Curbing	=====	Chain Link Fence	o o o o	Ex. Sanitary Pipe	—
Ex. Granite Curbing	=====	Decorative Fence	o o o o	Ex. Utility Box	⊙
Ex. Well	⊙	Treeline	~~~~~	Ex. Utility Pole	⊙
Ex. Water Valve	⊙	Deciduous Tree	⊙	Ex. Utility Pole w/Street Light	⊙
Ex. Fire Hydrant	⊙	Coniferous Tree	⊙	Ex. Soil Boring	⊙
Ex. Gas Valve	⊙	Ex. "C" Catch Basin	⊙	Overhead Electric	—OHE—OHE—
Ex. Traffic Sign	⊙	Ex. "C-L" Catch Basin	⊙	Water Main	—W—W—
Stonewall	⊙	Ex. Sanitary/Drainage Combo Manhole	⊙		



DAVID A. HUGHES
PROFESSIONAL ENGINEER & LAND SURVEYOR
57 NORWAY STREET
DAKVILLE, CT 06779
(860) 681-7483



No.	Revision/Issue	Date



CITY OF NEW HAVEN
DEPARTMENT OF ENGINEERING

THE HONORABLE JUSTIN ELICKER, MAYOR
GIOVANNI ZINN, P.E., CITY ENGINEER



Project Name and Address
TOPOGRAPHIC SURVEY
EDGEWOOD PARK
MID BRIDGE
NEW HAVEN, CT

Drawn By: **D.A.H.**
Designed By: **---**
Date: **06/05/23**
Project Number: **0368**

Professional Seal
To the best of my knowledge and belief, this map is substantially correct as noted hereon.

DAVID A. HUGHES, L.S. REG. NO. 72011
NOT VALID UNLESS EMBOSSED SEAL IS AFFIXED HERETO

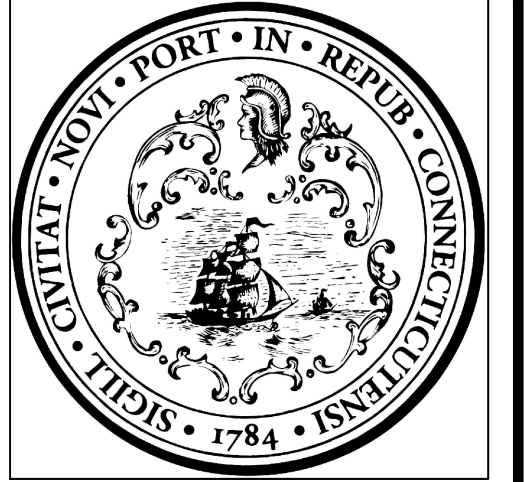
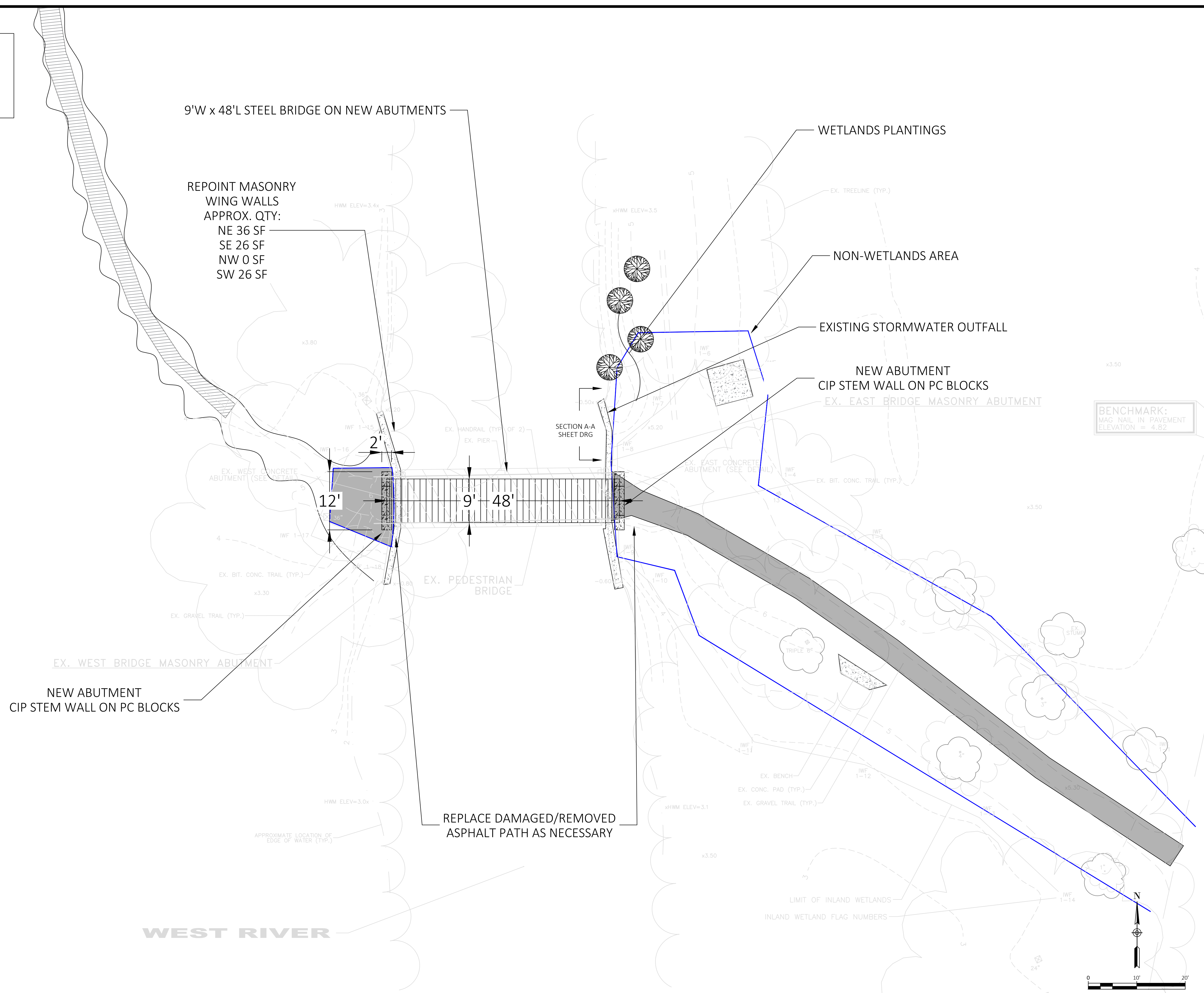
Sheet Title
EXISTING CONDITIONS PLAN

Sheet Number

S-1

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TIDAL ELEVATIONS NAVD88:	
CJL	4.6'
MHW	2.8'
MLW	-3.4'
HTL	4.4'



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CITY OF NEW HAVEN
DEPARTMENT OF ENGINEERING

THE HONORABLE JUSTIN ELICKER, MAYOR
GIOVANNI ZINN, P.E., CITY ENGINEER



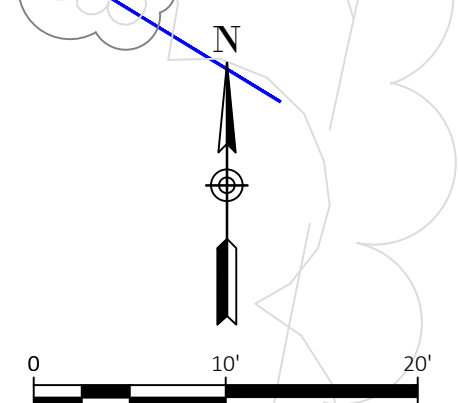
Project Name and Address
**EDGEWOOD PARK
MID BRIDGE**

Drawn By	ZSHAPIRO
Designed By	ZSHAPIRO
Date	9/30/2024
Project Number	22-099-09

Professional Seal

Sheet Title
SITE PLAN

Sheet Number
SP



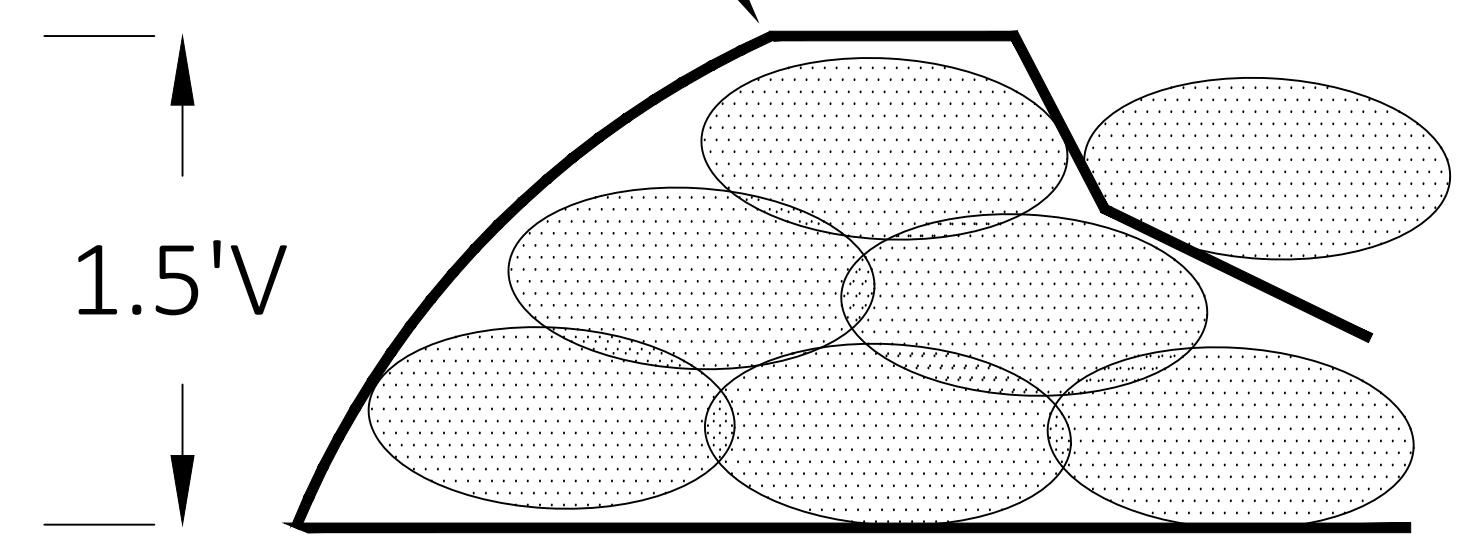
NOTE:
 SUPERSTRUCTURE NOT SHOWN FOR CLARITY
 SUGGESTED COFFERDAM SECTION AND LIMITS SHOWN.
 ALTERNATE MEANS METHODS FOR PERFORMING WORK MUST
 BE SUBMITTED AND APPROVED BY ENGINEER. NO HEAVY
 EQUIPMENT MAY ENTER STREAM.
 ALL SEDIMENT AND EROSION CONTROL DEVICES MUST BE
 INSTALLED BEFORE BEGINNING DEMOLITION ACTIVITIES, ALL
 DEVICES MUST BE CHECKED, MAINTAINED, AND REPAIRED
 WITHIN 24 HOURS OF ANY STORM EVENT AND AS NEEDED
 DURING CONSTRUCTION.

TIDAL ELEVATIONS NAVD88:	
CJL	4.6'
MHW	2.8'
MLW	-3.4'
HTL	4.4'

PERMITTED EXCAVATION LIMITS
 14'L x 4'W x 5'D AT ABUTMENTS
 11'L x 2'W x 1'D AT WINGWALL

PROTECT EXISTING 36" DIA TREE. HAND
 DIG AROUND ROOTS, IF CUTTING ROOTS
 ARE NECESSARY CITY TREE WARDEN
 MUST BE ONSITE TO ADVISE/DIRECT

10 MILL POLY SECURED
 UNDER LAYER OF BAGS
 WITHIN COFFERDAM



SAND BAG COFFER DAM TYPICAL DETAIL
 MUD LINE APPROX. ELEVATION 1
 MIN. TOP OF COFFERDAM ELEVATION 5

NON-WETLANDS AREA WITHIN BLUE
 LINE LIMITS, ALL OTHER AREAS ARE
 ALLUVIAL SOIL WITHIN FLOOD PLAIN

SANDBAG
 COFFERDAM

STREAM/SUBSTRUCTURE ACCESS. RESTORE TO
 ORIGINAL CONDITIONS. SEED WITH NEW
 ENGLAND WETLAND PLANT MIX. PLANT TREES
 IN 3 GAL. CONTAINERS AT 8' O-C AS DIRECTED
 BY ENGINEER

REBUILD WINGWALL AND EXISTING OUTFALL -
 SEE SHEET DRG SECTION A-A

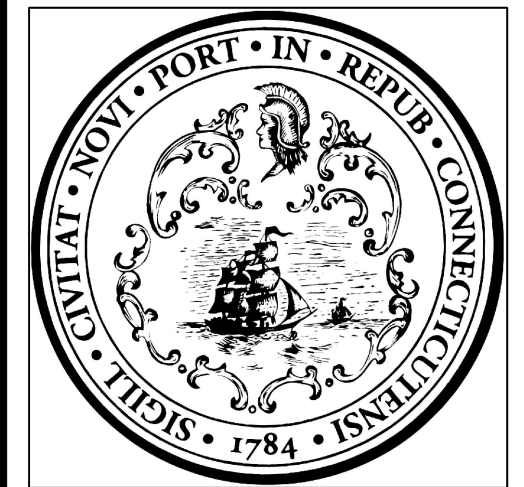
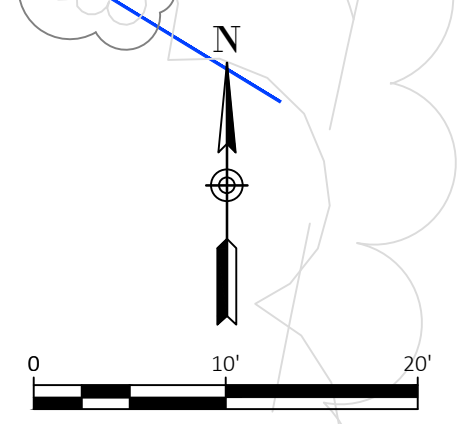
EXTEND TEMPORARY DRAINAGE PIPE MIN. DIA
 18" FROM OUTFALL TO BEYOND WORK ZONE
 SECURE WITH STAKES

BENCHMARK:
 MAG NAIL IN PAVEMENT
 ELEVATION = 4.82

APPROXIMATE LOCATION OF
 TURBIDITY CURTAIN ENCLOSING
 WORKSITE AT ALL TIMES

TEMPORARY DEWATERING
 DISCHARGE SYSTEM PROPOSED
 LOCATION. SEE DETAILS SHEET

WEST RIVER



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CITY OF NEW HAVEN
 DEPARTMENT OF ENGINEERING

THE HONORABLE JUSTIN ELICKER, MAYOR
 GIOVANNI ZINN, P.E., CITY ENGINEER

MADE
 NEW
 HAVEN

Project Name and Address
 EDGEWOOD PARK
 MID BRIDGE

Drawn By	ZSHAPIRO
Designed By	ZSHAPIRO
Date	9/30/2024
Project Number	22-099-09

Professional Seal

Sheet Title
 SEDIMENTATION & EROSION

Sheet Number

S&E

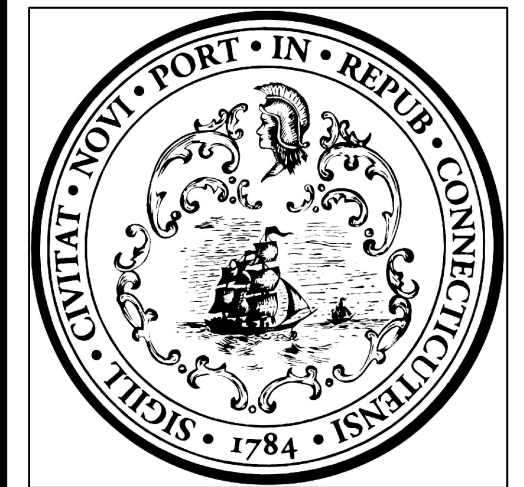
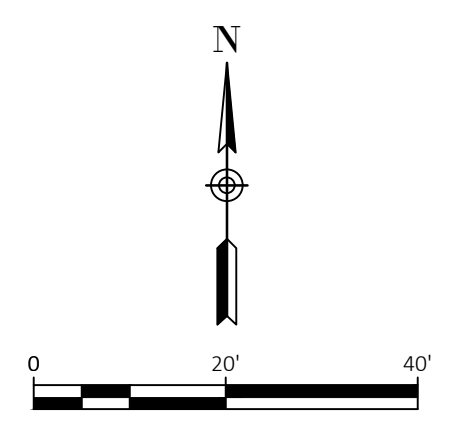
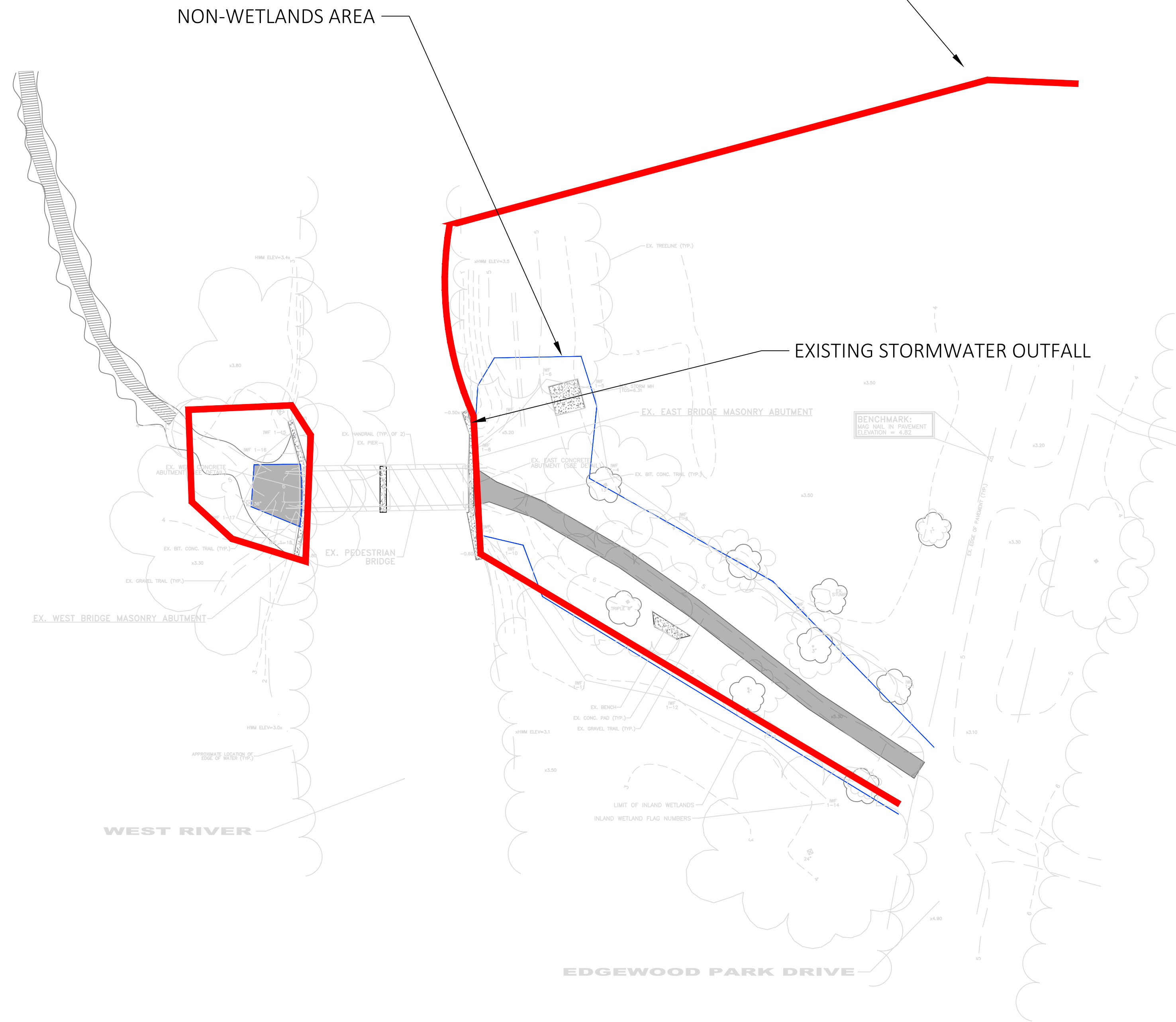
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TIDAL ELEVATIONS NAVD88:

CJL	4.6'
MHW	2.8'
MLW	-3.4'
HTL	4.4'

PERMITTED DISTURBANCE AREA WITHIN RED LINE LIMITS. NO HEAVY EQUIPMENT MAY ENTER WATERWAY. CONTRACTOR IS RESPONSIBLE FOR RESTORATION OF ALL AREAS IMPACTED BY CONSTRUCTION



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THE HONORABLE JUSTIN ELICKER, MAYOR
GIOVANNI ZINN, P.E., CITY ENGINEER



Project Name and Address
**EDGEWOOD PARK
MID BRIDGE**

Drawn By	ZSHAPIRO
Designed By	ZSHAPIRO
Date	9/30/2024
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Professional Seal

Sheet Title ENVIRONMENTAL RESTRICTIONS
Sheet Number

ENVT

C:\USERS\ZSHAPIRO\CITY OF NEW HAVEN, CT\ENGINEERING DEPARTMENT - DOCUMENTS\PROJECTS\22-099-09 EDGEWOOD PARK PEDESTRIAN BRIDGE\DESIGN\CONSTRUCTION PLANS.DWG

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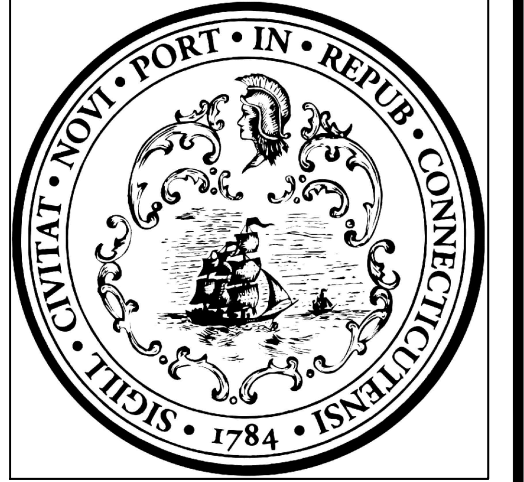
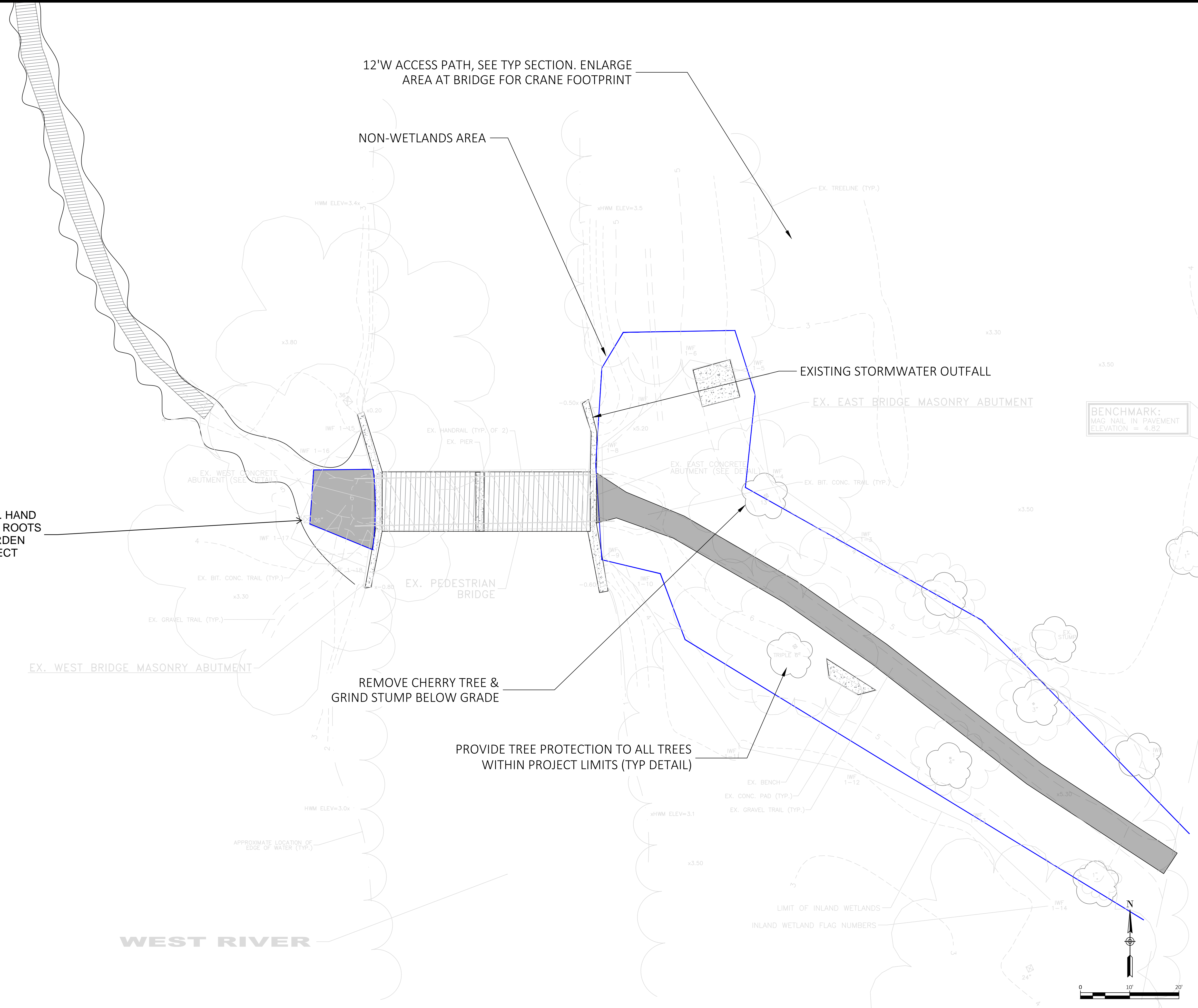
12'W ACCESS PATH, SEE TYP SECTION. ENLARGE AREA AT BRIDGE FOR CRANE FOOTPRINT

NON-WETLANDS AREA

PROTECT EXISTING 36" DIA TREE. HAND DIG AROUND ROOTS, IF CUTTING ROOTS ARE NECESSARY CITY TREE WARDEN MUST BE ONSITE TO ADVISE/DIRECT

REMOVE CHERRY TREE & GRIND STUMP BELOW GRADE

PROVIDE TREE PROTECTION TO ALL TREES WITHIN PROJECT LIMITS (TYP DETAIL)



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EDGEWOOD PARK
MID BRIDGE

Drawn By ZSHAPIRO

Designed By ZSHAPIRO

Date 9/30/2024

Project Number 22-099-09

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Sheet Title
CLEARING AND GRUBBING

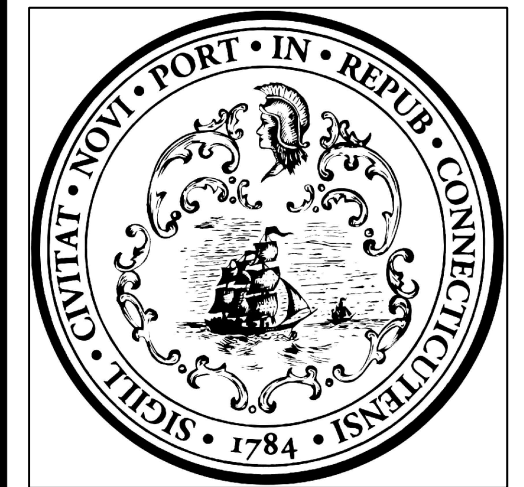
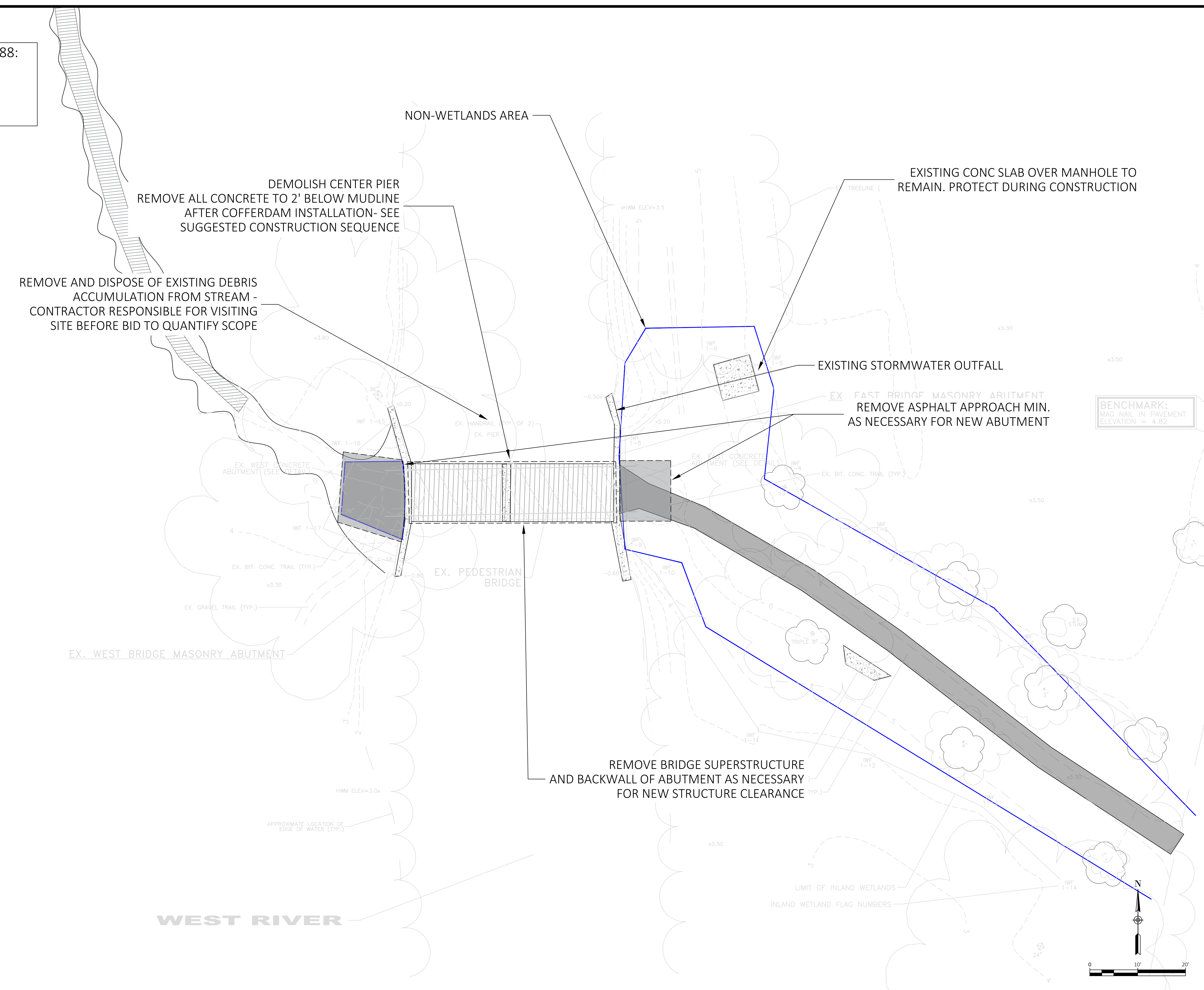
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C&G

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GIOVANNI ZINN, P.E., CITY ENGINEER



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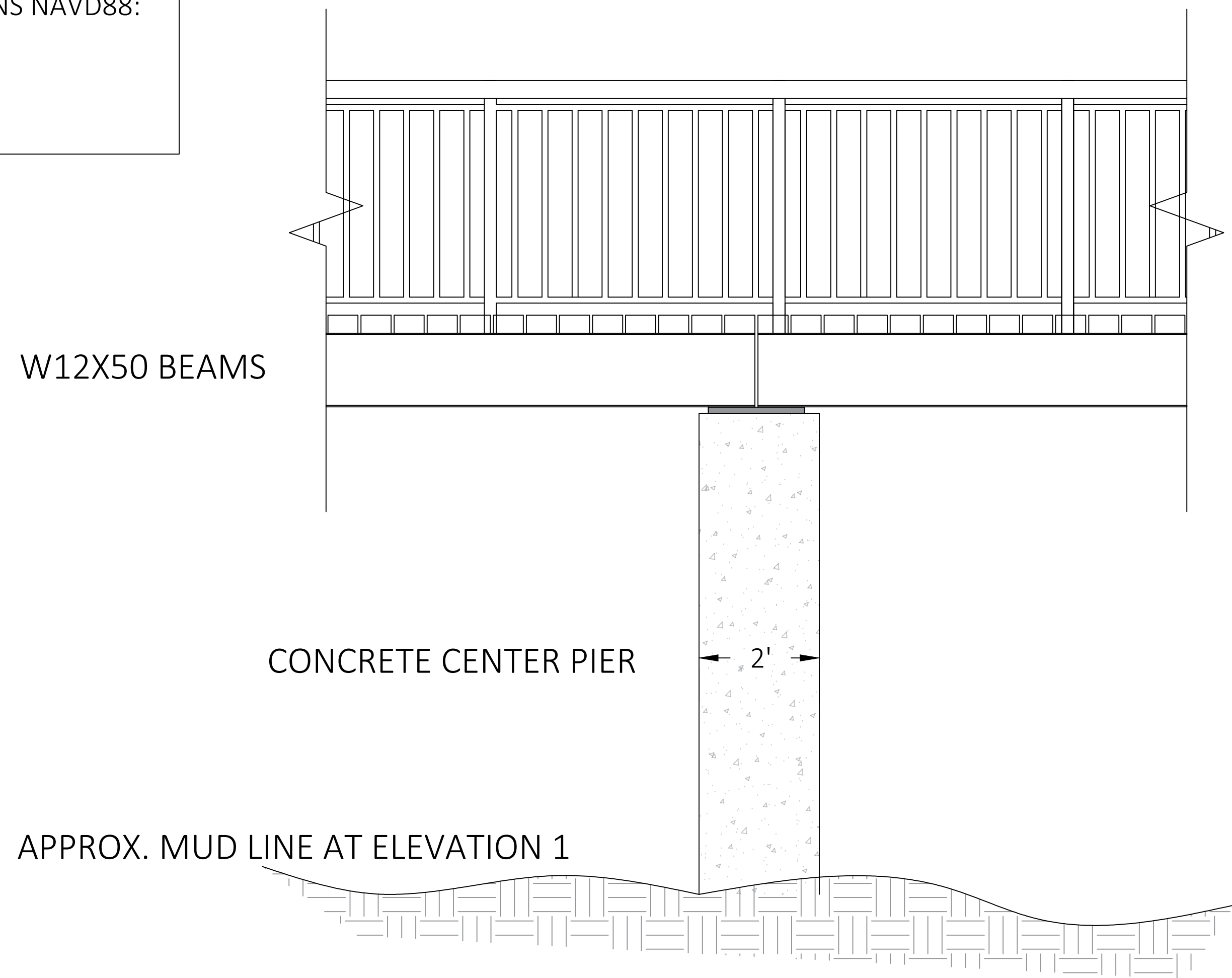
Sheet Title
DEMOLITION PLAN

Sheet Number
D1

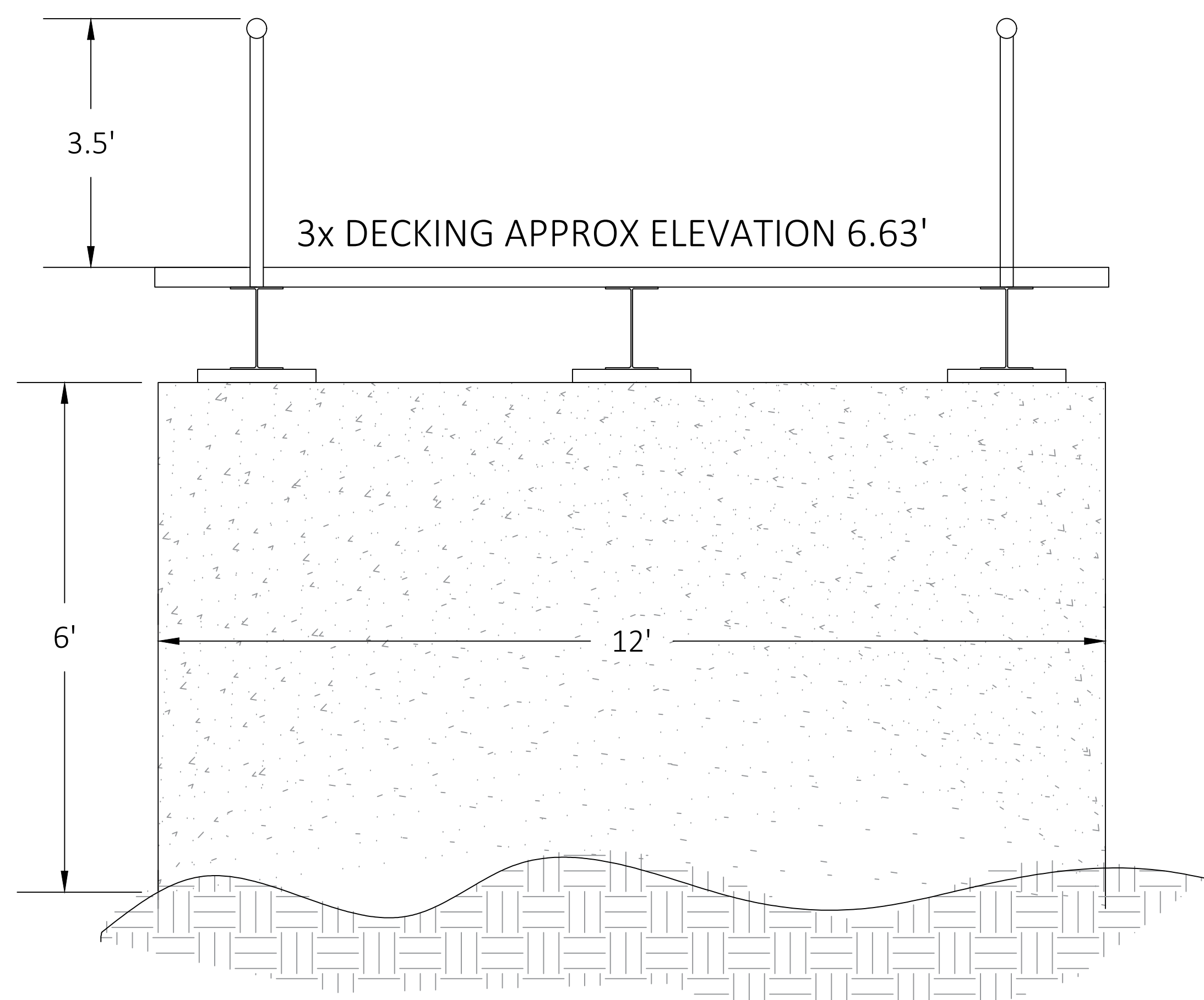
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CJL	4.6'
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MLW	-3.4'
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CENTER PIER SECTION



CENTER PIER ELEVATION

NOTES:

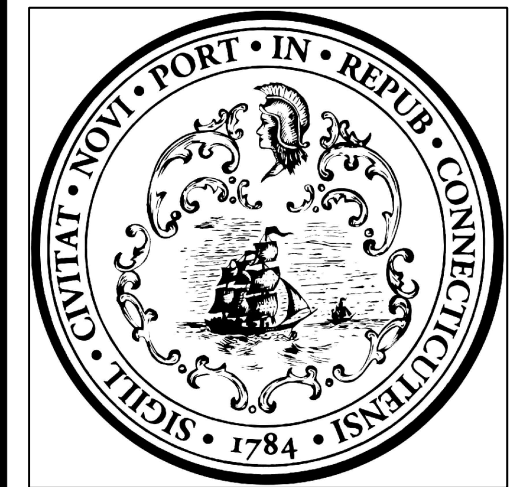
1. CONTRACTOR IS RESPONSIBLE FOR INSPECTING, QUANTIFYING AND CONFIRMING EXISTING CONDITIONS PRIOR TO BID.
5. CUT EXISTING ANCHOR BOLTS FLUSH IN ALL LOCATIONS BEFORE BEGINNING SUPERSTRUCTURE DEMOLITION
6. REMOVE BASE PLATE AND ZINC SPRAY EXPOSED TOP OF ANCHOR BOLTS
7. EXISTING SUPERSTRUCTURE APPROXIMATE WEIGHT OF 12,000 LBS
8. PIER IS TO BE DEMOLISHED TO 2' BELOW EXISTING MUD LINE
9. HEAVY EQUIPMENT IS NOT PERMITTED WITHIN STREAM
10. SUBMIT NARRATIVE OF DEMOLITION, AND CRANE PICK PLAN IF APPLICABLE, FOR APPROVAL

SUGGESTED SUPERSTRUCTURE DEMOLITION SEQUENCE ALTERNATES:

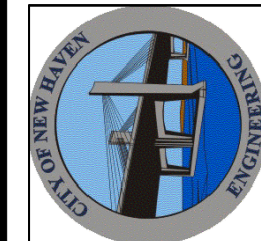
- A. SUPERSTRUCTURE DEMOLITION ONSITE
 1. UNBOLT AND REMOVE HANDRAIL IN 8' SECTIONS BY HAND OR WITH SMALL MACHINE
 2. REMOVE NAILER, THROUGH BOLTS, AND DECKING FROM WESTERN ABUTMENT TO CENTER PIER
 3. CUT ANCHOR BOLTS FROM BELOW SUPERSTRUCTURE
 4. USE CHAIN FALL AND WINCH FROM LULL OR LARGE MACHINE EAST OF EXISTING ABUTMENT TO LIFT INDIVIDUAL BEAMS OFF WESTERN SPAN AND ONTO TRUCK OR LAYDOWN AREA.
 5. REPEAT STEPS 1-4 FOR EASTERN SPAN.
- B. SUPERSTRUCTURE DEMOLITION OFFSITE
 1. UNBOLT AND REMOVE HANDRAIL IN 8' SECTIONS BY HAND OR WITH SMALL MACHINE
 2. CUT ANCHOR BOLTS FROM BELOW SUPERSTRUCTURE
 3. MOBILIZE CRANE TO A MAXIMUM OF 60' RADIUS OF CENTER OF EXISTING BRIDGE
 4. LAY SPREADER BEAM ON EXISTING BRIDGE DECK OVER CENTER PIER
 5. ATTACH RIGGING AT 4 LOCATIONS, 2 PER SPAN, PASSING UNDER THREE GIRDER SECTION
 6. LIFT BRIDGE BY CRANE AND DIRECTLY LOAD ONTO HAULING TRUCK FOR DISPOSAL OFFSITE

SUGGESTED SUBSTRUCTURE DEMOLITION SEQUENCE:

- A. SUBSTRUCTURE DEMOLITION WITHIN RIVER
 1. WET PIER DOWN ON ALL EXPOSED SIDES
 2. PLACE TEMPORARY WORK PLATFORM AS NECESSARY ADJACENT TO PIER, WITHIN COFFERDAM, TO FACILITATE REMOVAL WORK ON PIER AT COMFORTABLE WORKING HEIGHT.
 3. USING DEMO SAW PLUNGE CUT PERIMETER OF PIER EVERY TWO VERTICAL FEET
 4. USING JACKHAMMER AND/OR HAND TOOLS CHIP SECTIONS OF PIER TO SECTIONS NO SMALLER THAN 1' DIAMETER
 5. THROUGHOUT DEMOLITION CONTINUALLY HAUL DEBRIS FROM RIVER TO LAY DOWN AREA BY WINCH AND BUCKET OR WHEELBARROW
- B. SUBSTRUCTURE DEMOLITION OFFSITE
 1. WET PIER DOWN ON ALL EXPOSED SIDES
 2. PLACE TEMPORARY WORK PLATFORM AS NECESSARY FOR ACCESS
 3. USING DEMO SAW PLUNGE CUT PERIMETER OF PIER EVERY TWO VERTICAL FEET
 4. DRILL AND EPOXY LIFTING HOOKS INTO PIER SEGMENTS
 5. USE RIGGING AT MINIMUM OF 2 POINTS PER SEGMENT TO LIFT PIER BY CRANE FROM RIVER DIRECTLY ONTO HAULING TRUCK FOR DISPOSAL OFFSITE.



No.	Revision/Issue	Date



CITY OF NEW HAVEN
DEPARTMENT OF ENGINEERING

THE HONORABLE JUSTIN ELICKER, MAYOR
GIOVANNI ZINN, P.E., CITY ENGINEER



Project Name and Address
EDGEWOOD PARK
MID BRIDGE

Drawn By	ZSHAPIO
Designed By	ZSHAPIO
Date	9/12/2024
Project Number	22-099-09

Professional Seal

Sheet Title
DEMOLITION ELEVATION

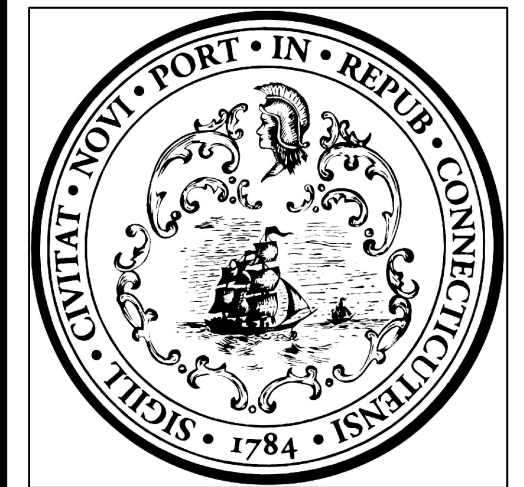
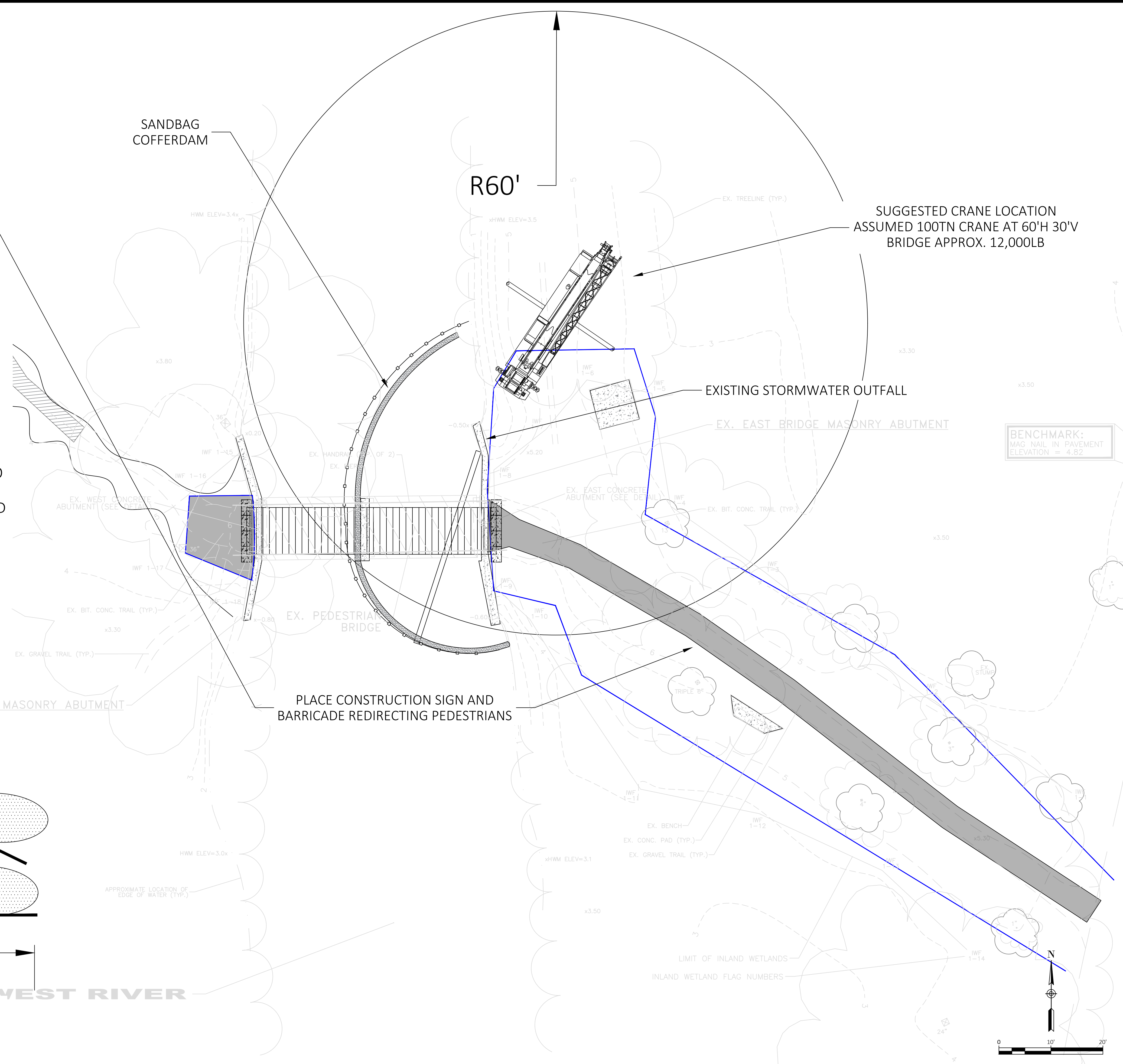
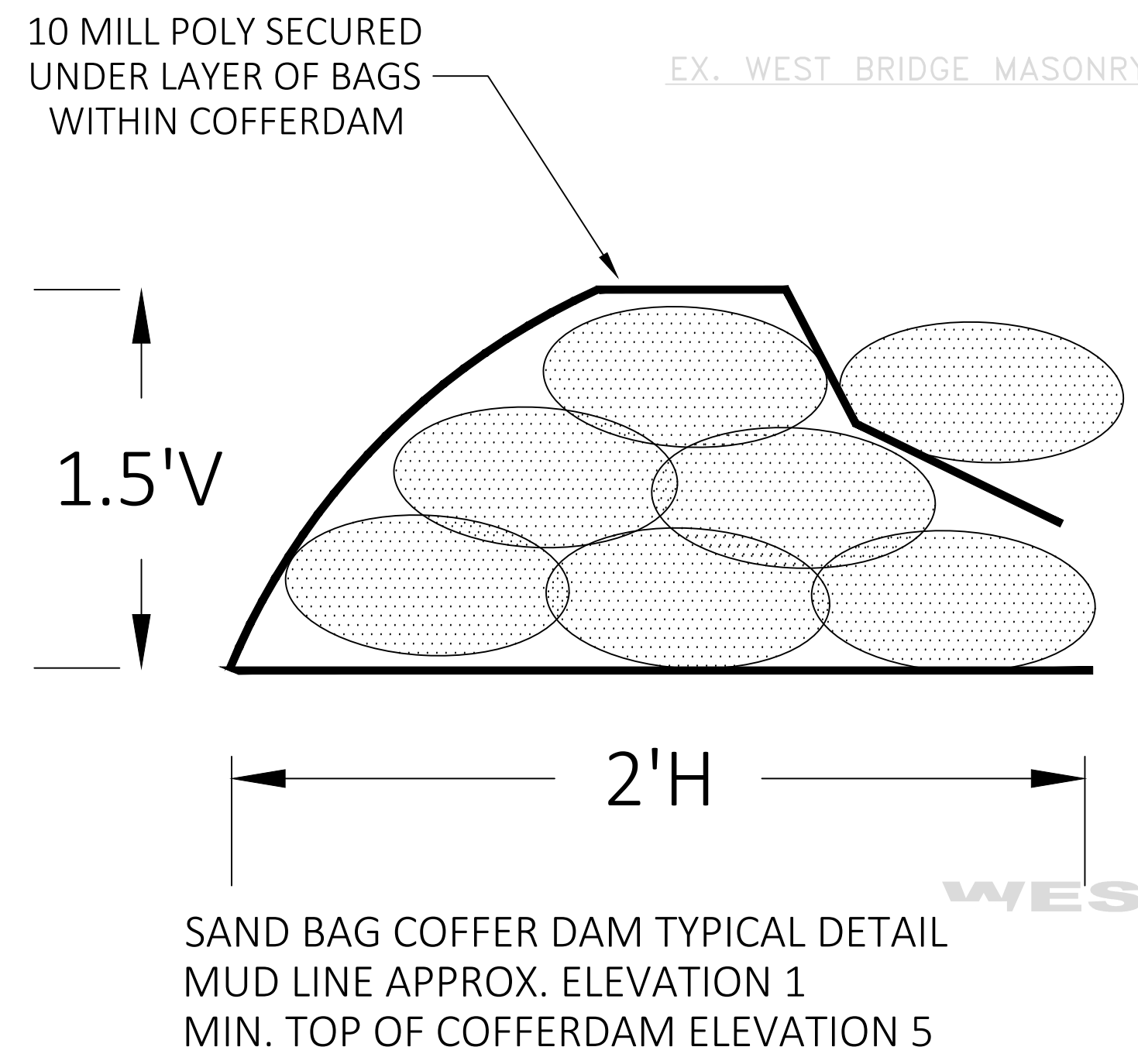
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C:\USERS\ZSHAPIRO\CITY OF NEW HAVEN, CT\ENGINEERING DEPARTMENT - DOCUMENTS\PROJECTS\22-099-09 EDGEWOOD PARK PEDESTRIAN BRIDGE\DESIGN\CONSTRUCTION PLANS.DWG

TIDAL ELEVATIONS NAVD88:

CJL	4.6'
MHW	2.8'
MLW	-3.4'
HTL	4.4'

- SUGGESTED SEQUENCE OF CONSTRUCTION:
1. ESTABLISH SANDBAG COFFERDAM
 2. RESET STONES AS NECESSARY AND REPOINT WINGWALLS
 3. CONSTRUCT WESTERN ABUTMENT.
 4. REMOVE SUPERSTRUCTURE USING WINCH AND BACKHOE FROM BEHIND EASTERN ABUTMENT
 5. CONSTRUCT EASTERN ABUTMENT.
 6. CUT CENTER PIER WITH DEMO SAW AS CLOSE TO MUDLINE AS POSSIBLE, CHIP REMAINING EXPOSED PIER TO 2' BELOW MUDLINE. DRILL AND EPOXY LIFTING HOOKS INTO PIER.
 7. MOBILIZE CRANE TO SITE. REMOVE CENTER PIER AND PLACE NEW BRIDGE SUPERSTRUCTURE.
 8. RESTORE SITE TO ORIGINAL CONDITIONS AND PLANTINGS/SEEDINGS AS CALLED FOR.



No.	Revision/Issue	Date



CITY OF NEW HAVEN
DEPARTMENT OF ENGINEERING

THE HONORABLE JUSTIN ELICKER, MAYOR
GIOVANNI ZINN, P.E., CITY ENGINEER



Project Name and Address
EDGEWOOD PARK MID BRIDGE

Drawn By	ZSHAPIRO
Designed By	ZSHAPIRO
Date	9/30/2024
Project Number	22-099-09

Professional Seal

Sheet Title
CONSTRUCTION SEQUENCE

Sheet Number
CS

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TIDAL ELEVATIONS NAVD88:

CJL 4.6'
 MHW 2.8'
 MLW -3.4'
 HTL 4.4'

DRILL AND EPOXY 3/8"Ø F36 ANCHOR BOLTS
 9" EMBEDMENT 4" MIN EXPOSED SET IN
 HILTI HIT-HY 200. 4 PER ABUTMENT

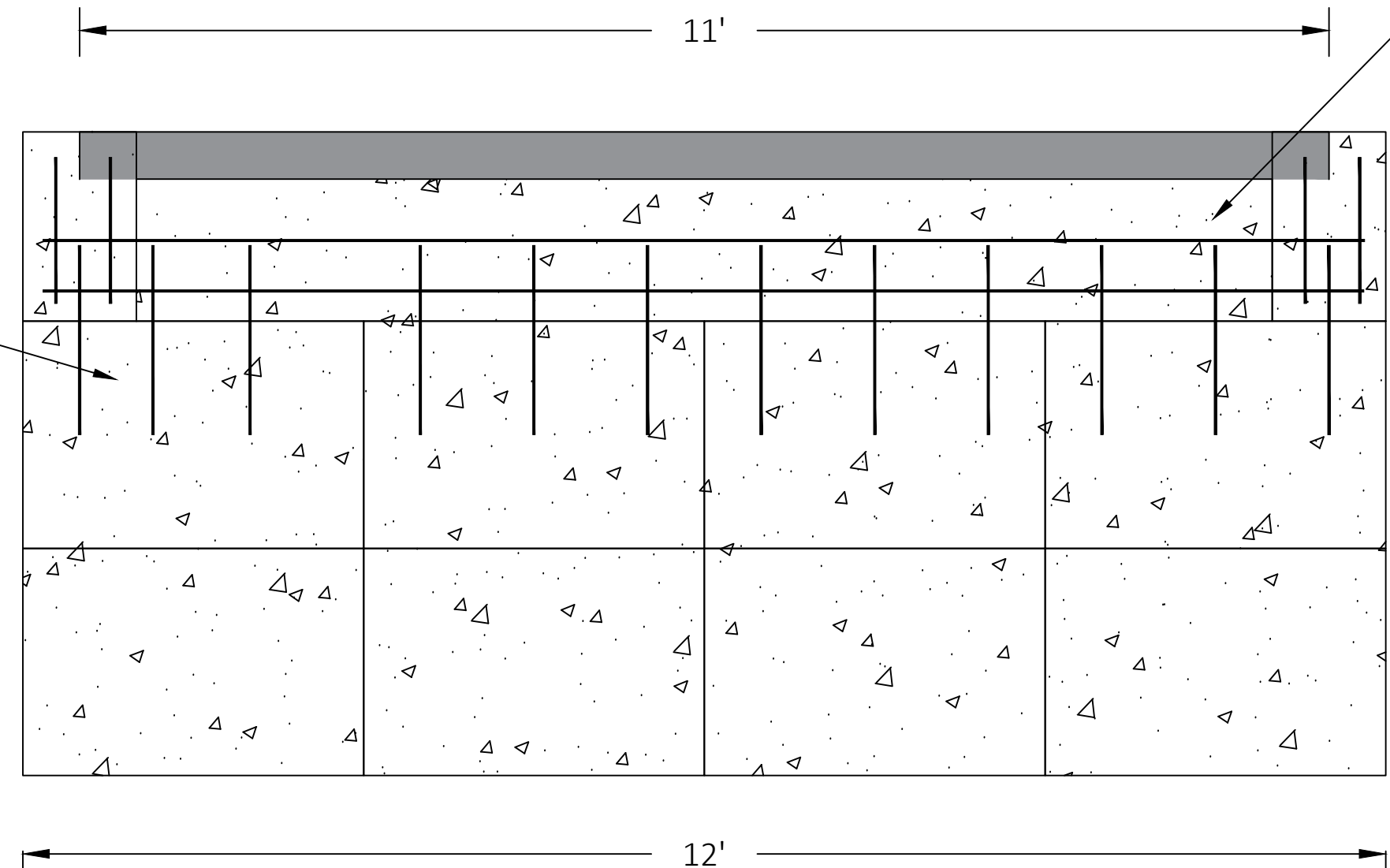
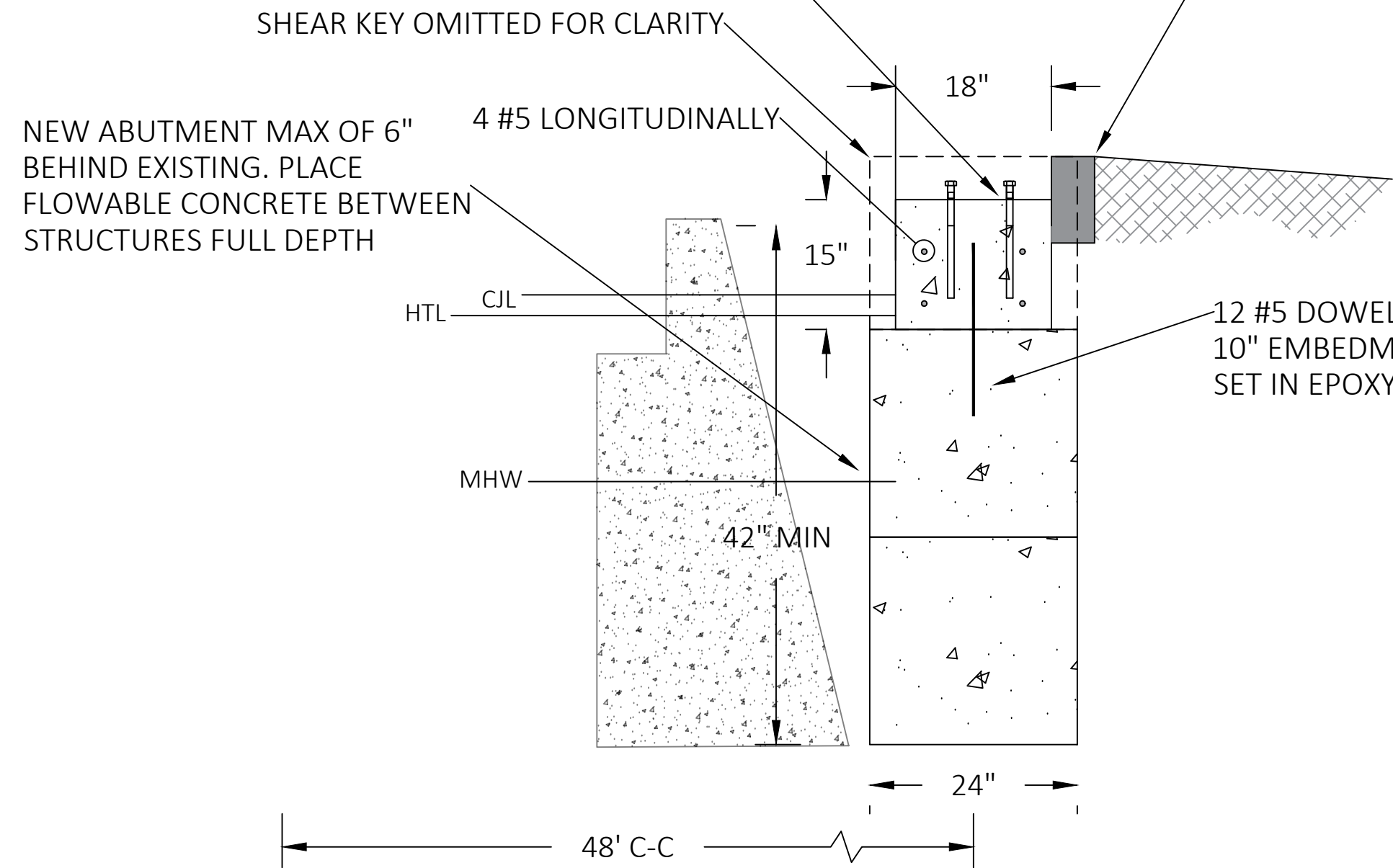
5"W x 10"T x 11'L GRANITE BACK WALL
 MUST USE SINGLE CONTINUOUS GRANITE BLOCK
 SET ON 10" OF PROCESS
 PLACE ASPHALT RAMP FROM CURB TO EXISTING PATH

18"W x 15"H x 10'L
 CIP STEMWALL
 2 #5 T&B HORIZONTAL
 12 #5 DRILL AND EPOXY 10" INTO PC
 BLOCKS W/ HILTI HIT-HY 200 A/R V3

24"W x 20"H x 12"L
 SHEAR KEY EACH SIDE OF STEMWALL
 2 - #5 BENT SQUARE

1/4" TYPE M MORTAR
 BETWEEN BLOCKS

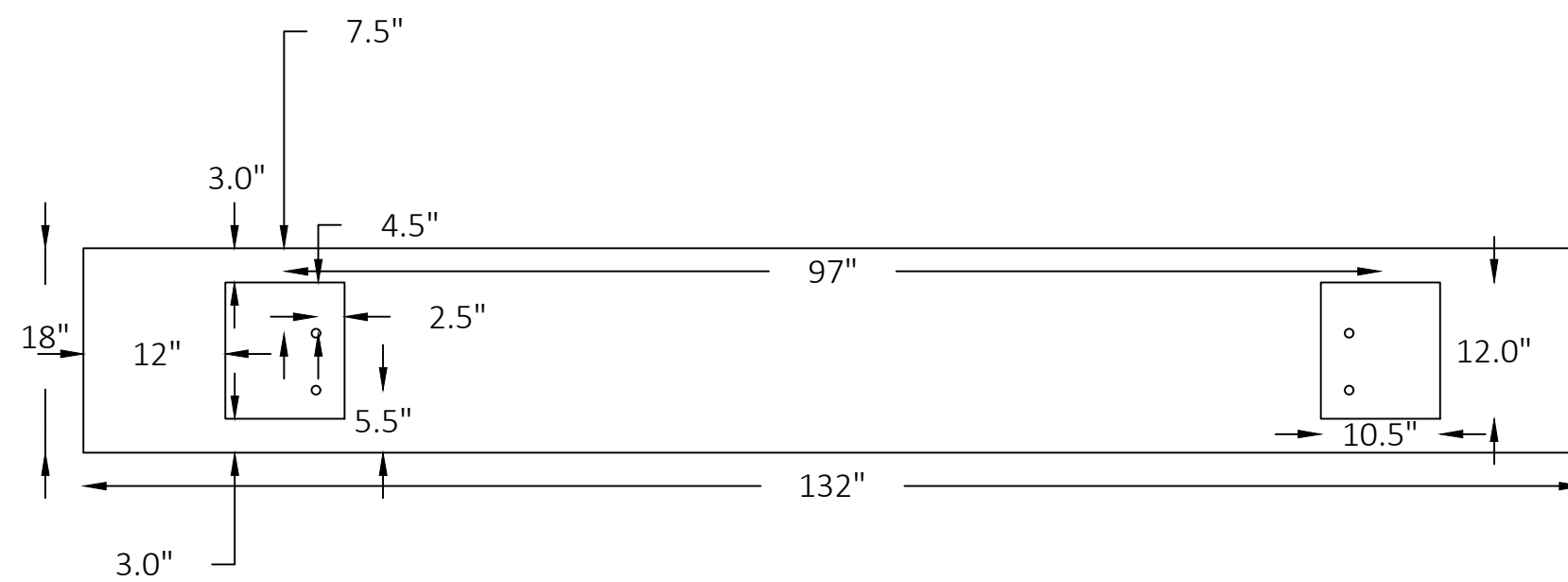
MIN. 2' X 3' PC CONCRETE BLOCKS
 SET ON 12" COMPACT PROCESS OR
 CLEAN STONE



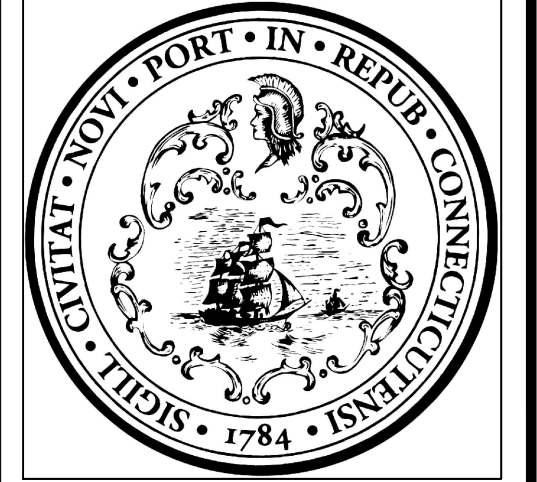
NOTES:

- 3" CLEAR COVER ON ALL REINFORCEMENT UNLESS OTHERWISE NOTED
- PC CONCRETE BLOCKS TO BE MIN. 1,800LB EACH
- CIP STEM WALL & SHEAR KEYS:
 EXPOSURE CLASS F2
 MAX W/C OF 0.45
 F'C MIN = 4,500 PSI
 AIR ENTRAINMENT 5% +/-1
 BEVEL ALL EXPOSED EDGES 1:1
- DEFORMED REINFORCEMENT SHALL BE GRADE 60 UNCOATED FY = 60,000 PSI
- ANCHOR BOLTS SHALL BE GRADE 36 STEEL WITH F1554 HARDWARE (DOUBLE NUT AND DOUBLE WASHER FOR EACH BOLT) ALL HARDWARE HOT DIP GALVANIZED
- BACK OF EXISTING ABUTMENT AND ADJACENT WINGWALL SHALL BE EXPOSED AND INSPECTED BY ENGINEER PRIOR TO PLACING PRE-CAST BLOCKS. BLOCKS SHOULD BE MIN. 6" OFF BACK FACE OF EXISTING WALL TO ALLOW CONCRETE SLURRY PLACEMENT.
- ABUTMENTS TO BE 48' C-C. SUBMIT BRIDGE SHOP DRAWINGS FOR APPROVAL PRIOR TO FABRICATION.
- BRIDGE BASIS OF DESIGN:
 48'-6" LONG OUT-OUT
 9' WIDE OUT-OUT
 8' MIN INT. CLEARANCE
 BRIDGE RAIL MUST MEET IBC REQUIREMENTS FOR HANDRAIL
 BRIDGE TYPE TO BE TRUSS WITH BOW/ARCH TYPE SUPERSTRUCTURE AND UNPAINTED WEATHERING STEEL FINISH
 PEDESTRIAN 90 PSF
 H5 MOVING VEHICLE LOAD
 GROUND SNOW OF 30 PSF
 LOAD CASES MUST INCLUDE COMBINED SNOW AND VEHICLE
 BRIDGE DECKING TO BE PRESSURE TREATED TIMBER
 CONTRACTOR MUST STAIN DECK LUMBER ONCE DRY
- EXISTING BRIDGE BOTTOM CHORD ELEVATION 5.35', PROPOSED BRIDGE SEAT ELEVATION AT NEW ABUTMENTS TO BE E 5.52', MIN. 2" ABOVE EXISTING ABUTMENT SEAT

- CONTRACTOR MUST ALERT ENGINEER FOR INSPECTION OF SOIL CONDITIONS PRIOR TO PLACING PC BLOCKS OR BACKFILL. CONTRACTOR MAY REUSE SPOILS AS BACKFILL IF FREE OF DEBRIS AND ORGANICS. ALL BASE MATERIAL TO BE CTDOT CLASSIFICATION TYPE B COMPACTED BY MECHANICAL MEANS IN LIFTS OF 4" OR LESS.
- DESIGN RELIES ON EXISTING ABUTMENT FOR SLIDING RESISTANCE. EXISTING ABUTMENT MUST BE PROTECTED DURING ALL WORK. CONTRACTOR MUST BE CAREFUL NOT TO UNDERMINE EXISTING ABUTMENT FOUNDATION DURING EXCAVATION FOR NEW WORK. ALERT ENGINEER FOR INSPECTION DURING EXCAVATION PRIOR TO THE START OF WORK.



ASSUMED BASE PLATE LAYOUT, SUBMIT BRIDGE PLANS TO ENGINEER FOR APPROVAL



No.	Revision/Issue	Date

CITY OF NEW HAVEN
 DEPARTMENT OF ENGINEERING

THE HONORABLE JUSTIN ELICKER, MAYOR
 GIOVANNI ZINN, P.E., CITY ENGINEER

MADE IN NEW HAVEN

Project Name and Address
 EDGEWOOD PARK
 MID BRIDGE

Drawn By ZSHAPIRO
 Designed By ZSHAPIRO
 Date 10/28/2024
 Project Number 22-099-09

Professional Seal

Sheet Title
 STRUCTURAL

Sheet Number
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SCALE AS NOTED

TIDAL ELEVATIONS NAVD88:

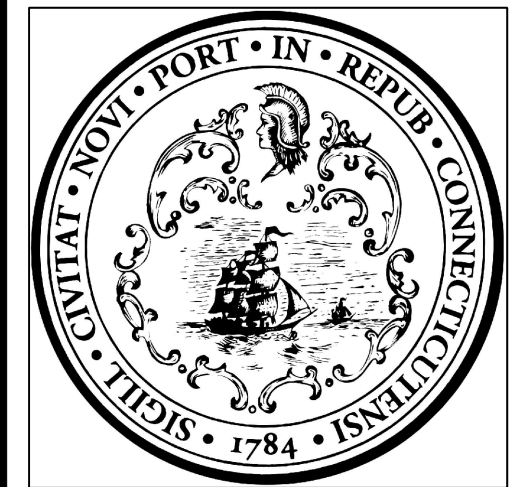
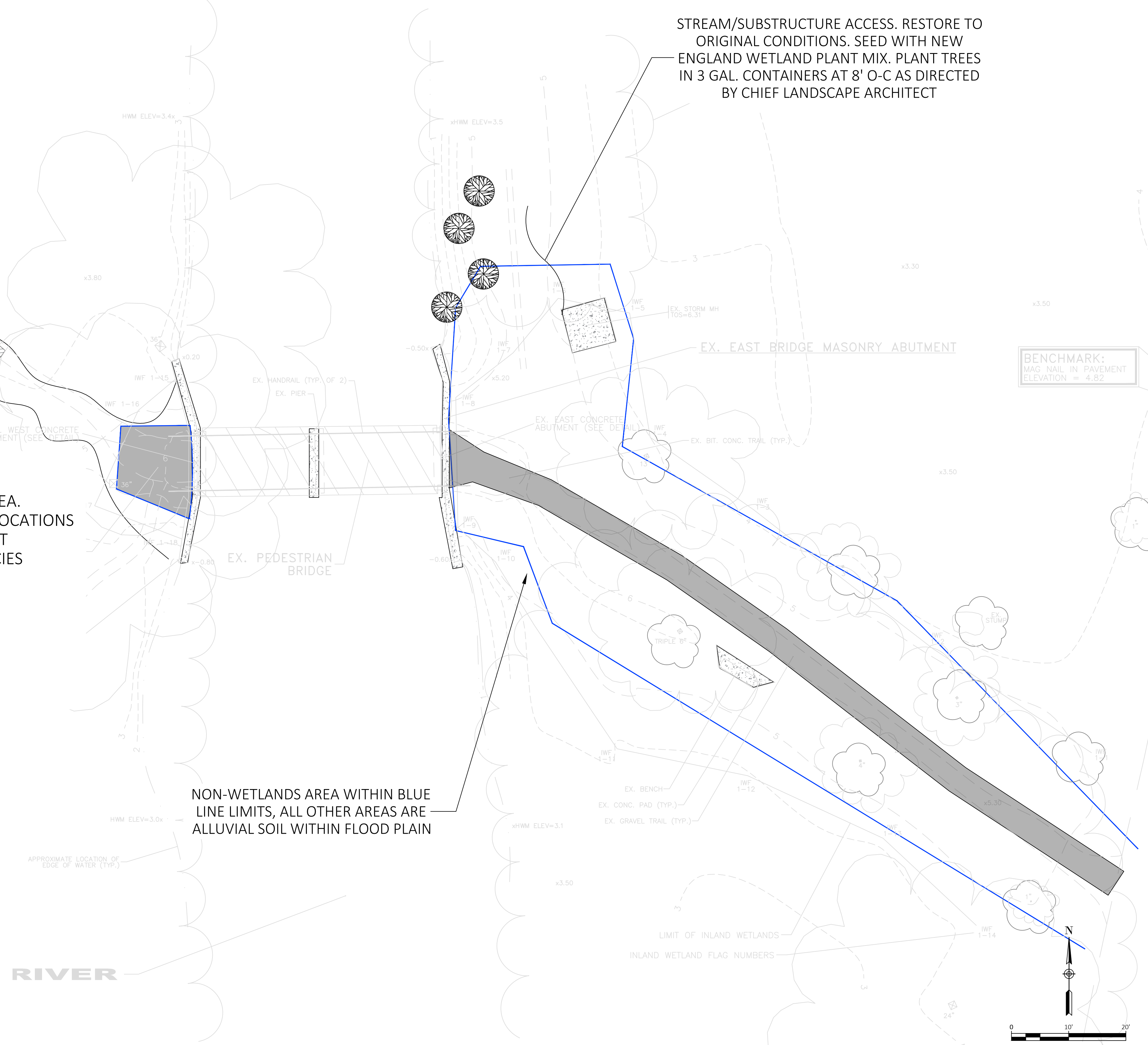
CJL	4.6'
MHW	2.8'
MLW	-3.4'
HTL	4.4'

NOTES:
 SEE NOTES SHEET FOR ADDITIONAL INFORMATION
 WETLAND SEED MIX SHALL BE SPREAD OVER DISTURBED AREA.
 TREES TO BE PLANTED AT 8' O-C IN 3 GAL. CONTAINERS IN LOCATIONS
 AS DETERMINED BY THE CITY'S CHIEF LANDSCAPE ARCHITECT
 TREES MAY BE CHOSEN BASED ON AVAILABILITY FROM SPECIES
 BELOW:
 Amelanchier canadensis
 Betula populifolia
 Pinus rigida
 Prunus maritima
 Quercus alba
 Quercus stellata

NEW ENGLAND WETLAND PLANTS, INC
 820 WEST STREET, AMHERST, MA 01002
 PHONE: 413-548-8000 FAX 413-549-4000
 EMAIL: INFO@NEWP.COM WEB ADDRESS: WWW.NEWP.COM
New England Coastal Salt Tolerant Grass Mix

Botanical Name	Common Name	Indicator
<i>Elymus canadensis</i>	Canada Wild Rye	FACU+
<i>Festuca rubra</i>	Red Fescue	FACU
<i>Panicum amarum</i>	Atlantic Coastal Panic Grass	FACU-
<i>Andropogon gerardii</i>	Big Bluestem	FAC
<i>Sorghastrum nutans</i>	Indian Grass	UPL
<i>Panicum virgatum</i>	Switch Grass	FAC
<i>Juncus tenuis</i>	Path Rush	FAC

PRICE PER LB. \$26.00 MIN. QUANTITY 4 LBS. TOTAL: \$104.00 APPLY: 35 LBS/ACRE :1250 sq ft/lb
 The New England Coastal Salt Tolerant Seed Mix contains a selection of native grasses that tolerate salty conditions. This mix is appropriate for drier coastal areas that receive salt spray or mist. Always apply on clean bare soil. The mix may be applied by hydro-seeding, by mechanical spreader, or on small sites it can be spread by hand. Lightly rake, or roll to ensure proper seed to soil contact. Best results are obtained with a Spring seeding. Late Spring and early Summer seeding will benefit with a light mulching of weed-free straw to conserve moisture. If conditions are drier than usual, watering may be required. Late Fall and Winter dormant seeding require an increase in the seeding rate. Fertilization is not required unless the soils are particularly infertile. Preparation of a clean weed free soil surface is necessary for optimal results.
 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.



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 GIOVANNI ZINN, P.E., CITY ENGINEER

Project Name and Address
 EDGEWOOD PARK
 MID BRIDGE

Drawn By ZSHAPIRO
 Designed By ZSHAPIRO
 Date 9/12/2024
 Project Number 22-099-09

Professional Seal

Sheet Title LANDSCAPING
 Sheet Number
PLNT

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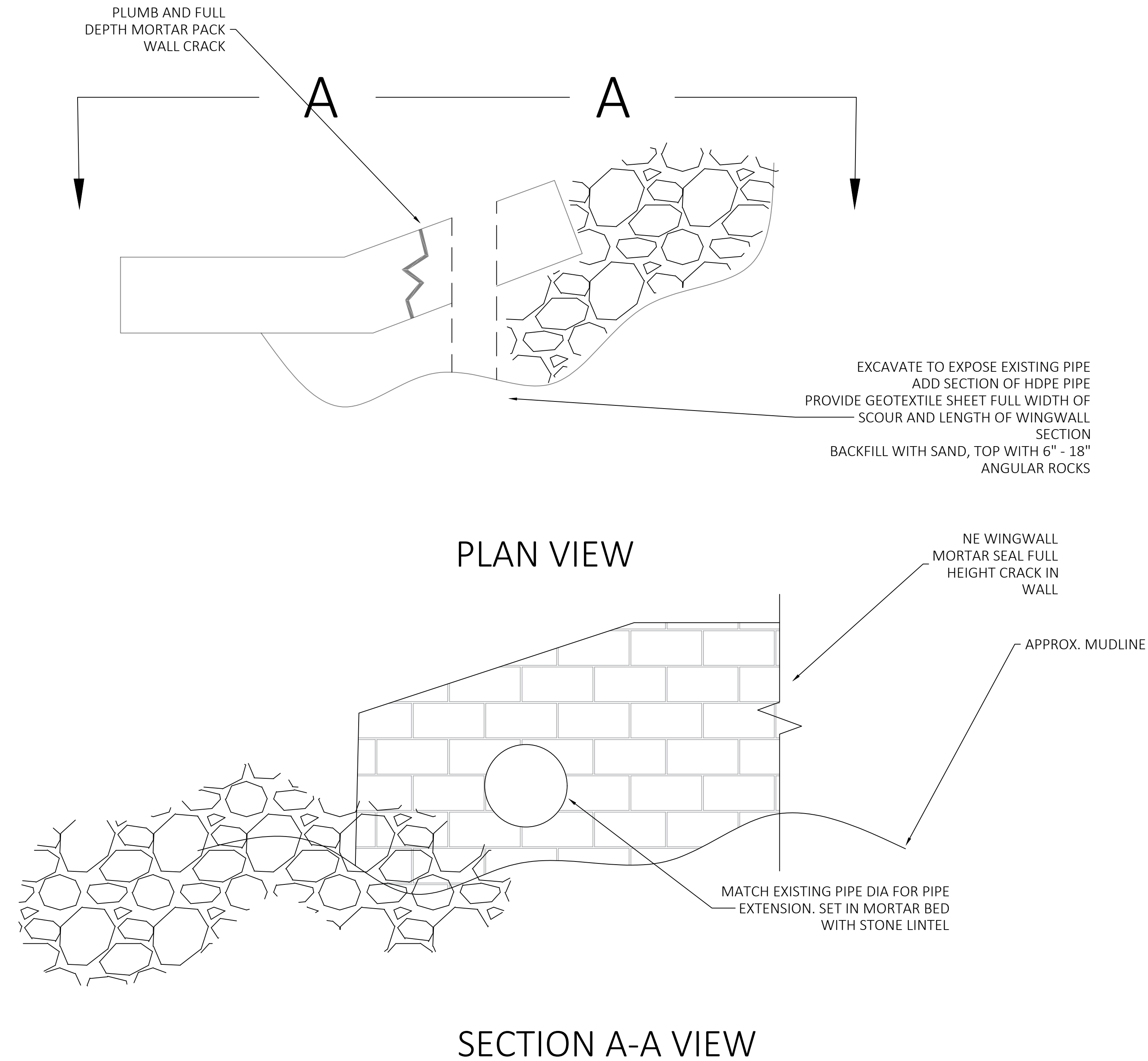
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REBUILD MASONRY PIPE OUTFALL

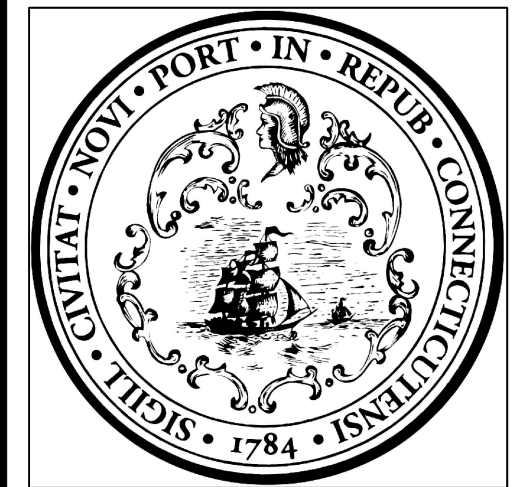
SOW & NOTES:

1. CONTRACTOR IS RESPONSIBLE FOR VISITING THE SITE PRIOR TO BID TO FAMILIARIZE THEMSELVES WITH SCOPE OF WORK, EXISTING CONDITIONS, AND QUANTITIES.
2. NORTHEASTERN WINGWALL HAS FULL HEIGHT VERTICAL SHEAR CRACK AND SEPARATION, LOSS OF BACKFILL MATERIAL, LOOSE AND MISSING MASONRY STONES, AND NON-CONTINUOUS FLOW OF AN EMBED DRAINAGE PIPE.
3. CONTRACTOR IS TO PLUMB, AS NEAR AS IS PRACTICAL, THE BROKEN SECTION OF MASONRY WALL. REPOINT THE CRACKED JOINT. REPLACE AND EXTEND THE DRAINAGE PIPE. REPLACE BACKFILL BEHIND THE WALL.





TIDAL ELEVATIONS NAVD88:	
CJL	4.6'
MHW	2.8'
MLW	-3.4'
HTL	4.4'

NTS



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THE HONORABLE JUSTIN ELICKER, MAYOR
 GIOVANNI ZINN, P.E., CITY ENGINEER

Project Name and Address
EDGEWOOD PARK MID BRIDGE

Drawn By	ZSHAPIRO
Designed By	ZSHAPIRO
Date	10/30/2024
Project Number	22-099-09

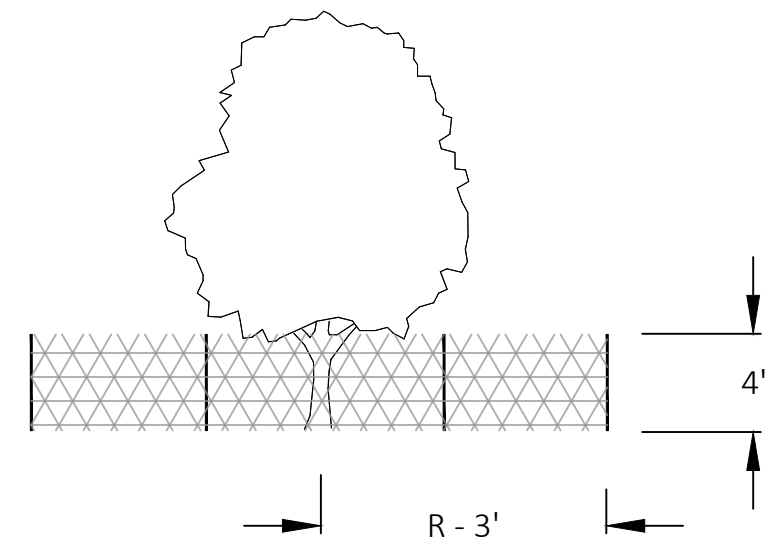
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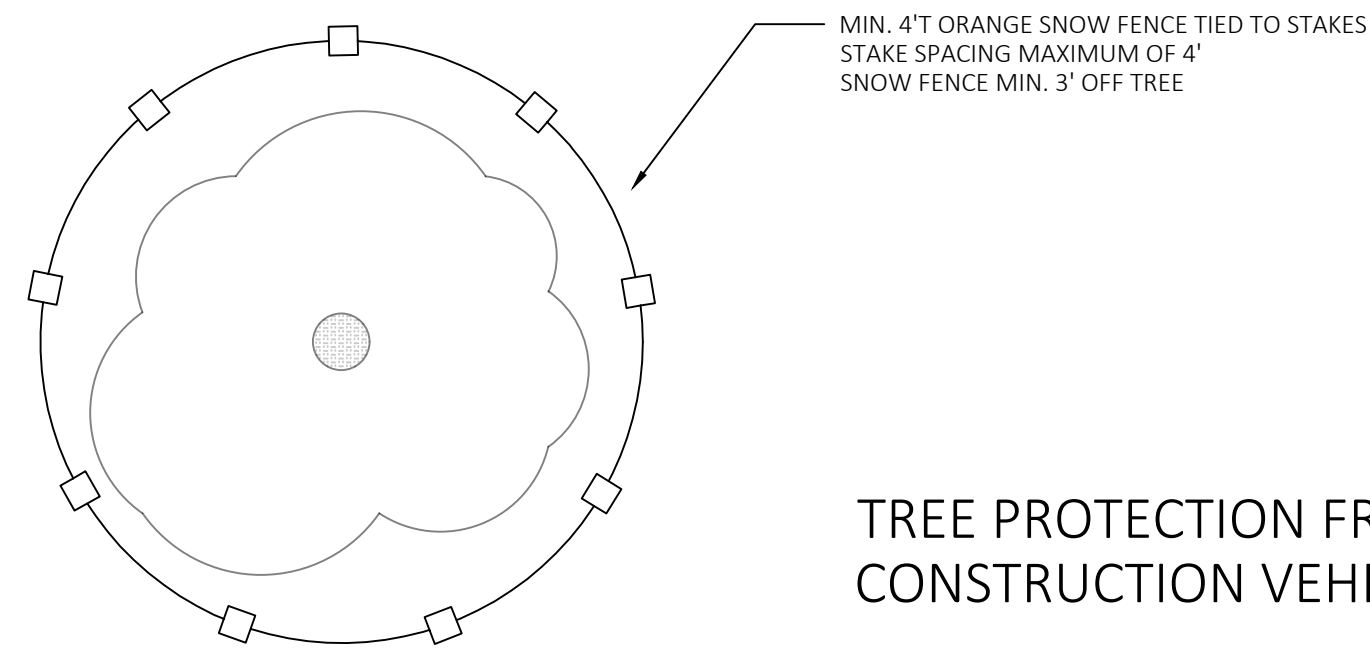
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ELEVATION



PLAN



TREE PROTECTION FROM CONSTRUCTION VEHICLES

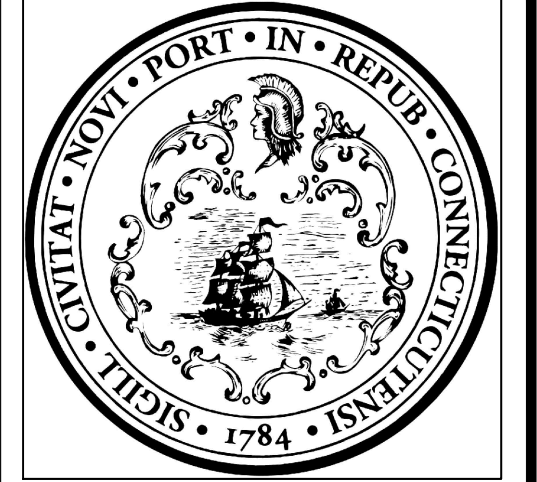
TREE PROTECTION NOTES:

BEFORE BEGINNING ANY SITE REMOVALS OR CONSTRUCTION, TREE PROTECTION FENCING SHALL BE INSTALLED AS SHOWN AND DETAILED ON THE DRAWINGS AND/OR AS DIRECTED IN THE FIELD BY THE ENGINEER. FOLLOWING THE INSTALLATION OF TREE PROTECTION FENCING AND FOR THE ENTIRE CONSTRUCTION PERIOD THE FOLLOWING SHALL APPLY:

- NO MATERIALS, VEHICLES OR EQUIPMENT MAY BE STORED OR STOCKPILED WITHIN THE AREAS ENCLOSED BY TREE PROTECTION FENCING.
- NO VEHICLES OR EQUIPMENT MAY BE DRIVEN, OPERATED OR PARKED WITHIN AREAS ENCLOSED BY TREE PROTECTION.
- AREAS ENCLOSED BY TREE PROTECTION CAN NOT BE USED AS ROUTES FOR SITE TRAFFIC
- FENCING SHALL BE RESECURED AS NECESSARY AND MAINTAINED TAUT. FENCING SHALL BE REPAIRED OR REPLACED WHEN DAMAGED AT NO ADDITIONAL COST.
- NO EXCAVATION MAY OCCUR WITHIN THE FOOTPRINT OF THE TREE CANOPY WITHOUT EXPRESS WRITTEN PERMISSION FROM THE ENGINEER AND/OR THE TREE WARDEN

TIDAL ELEVATIONS NAVD88:

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MHW	2.8'
MLW	-3.4'
HTL	4.4'

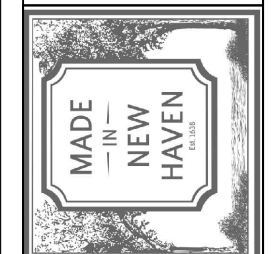


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CITY OF NEW HAVEN
DEPARTMENT OF ENGINEERING

THE HONORABLE JUSTIN ELICKER, MAYOR
GIOVANNI ZINN, P.E., CITY ENGINEER



Project Name and Address

EDGEWOOD PARK
MID BRIDGE

Drawn By
ZSHAPIRO

Designed By
ZSHAPIRO

Date
9/12/2024

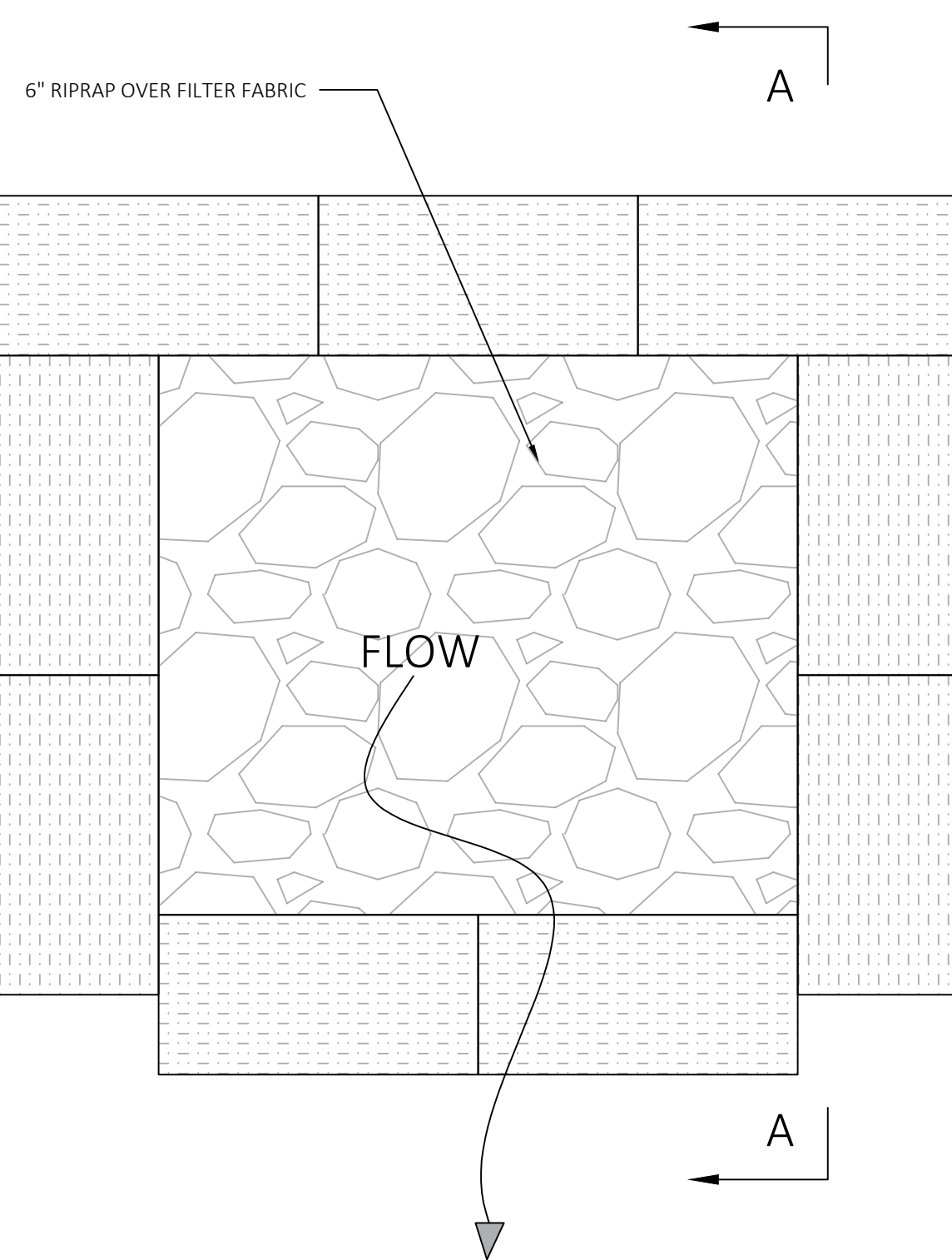
Project Number
22-099-09

Professional Seal

Sheet Title
TYPICAL DETAILS

Sheet Number

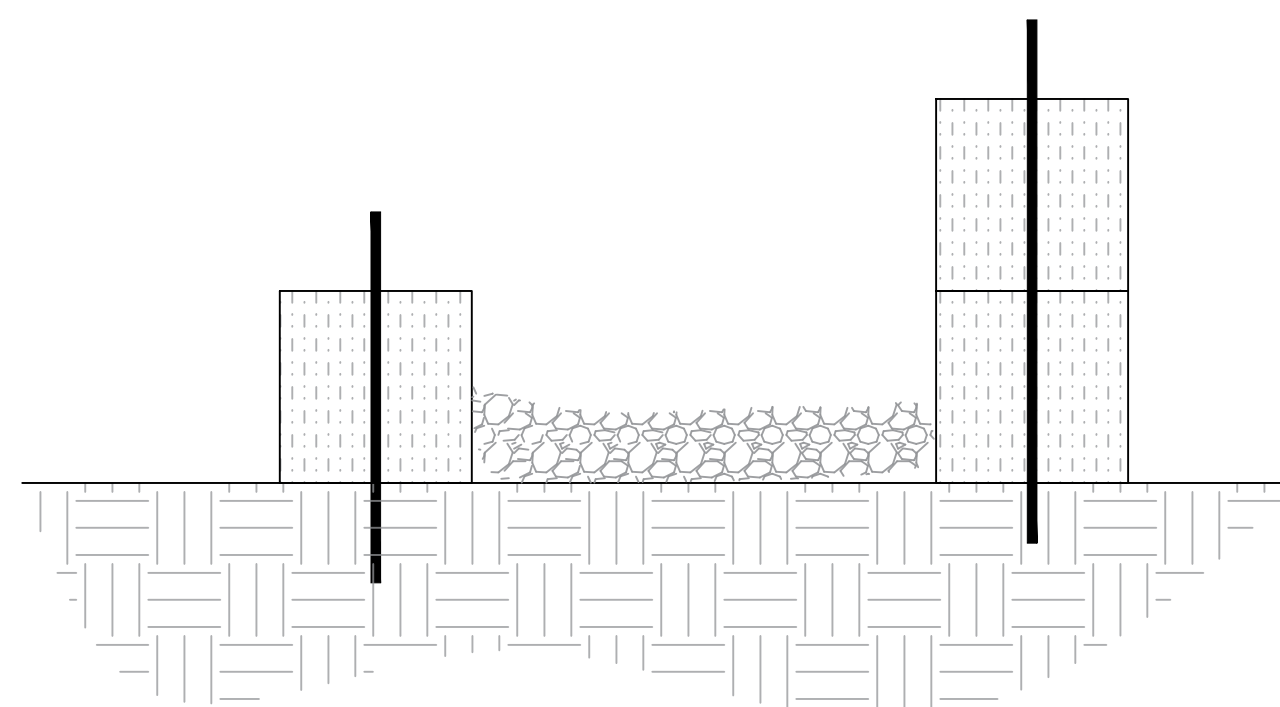
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PLAN VIEW DEWATERING RECEPTACLE

NOTES:

1. FINAL DESIGN AND LOCATION OF DEWATERING RECEPTACLE TO BE DETERMINED AND SUBMIT FOR APPROVAL BY CONTRACTOR.
2. HAYBALES PERIMETER WALL TO BE MIN. 3'TALL, SPILL WALL TO BE MIN. 2'TALL.
3. CONTRACTOR RESPONSIBLE FOR CHECKING/MAINTAINING RECEPTACLE AFTER ANY STORM EVENT AND REGRADING OR REPLACING STONE AS NEEDED TO REMOVE SEDIMENT.



SECTION A-A