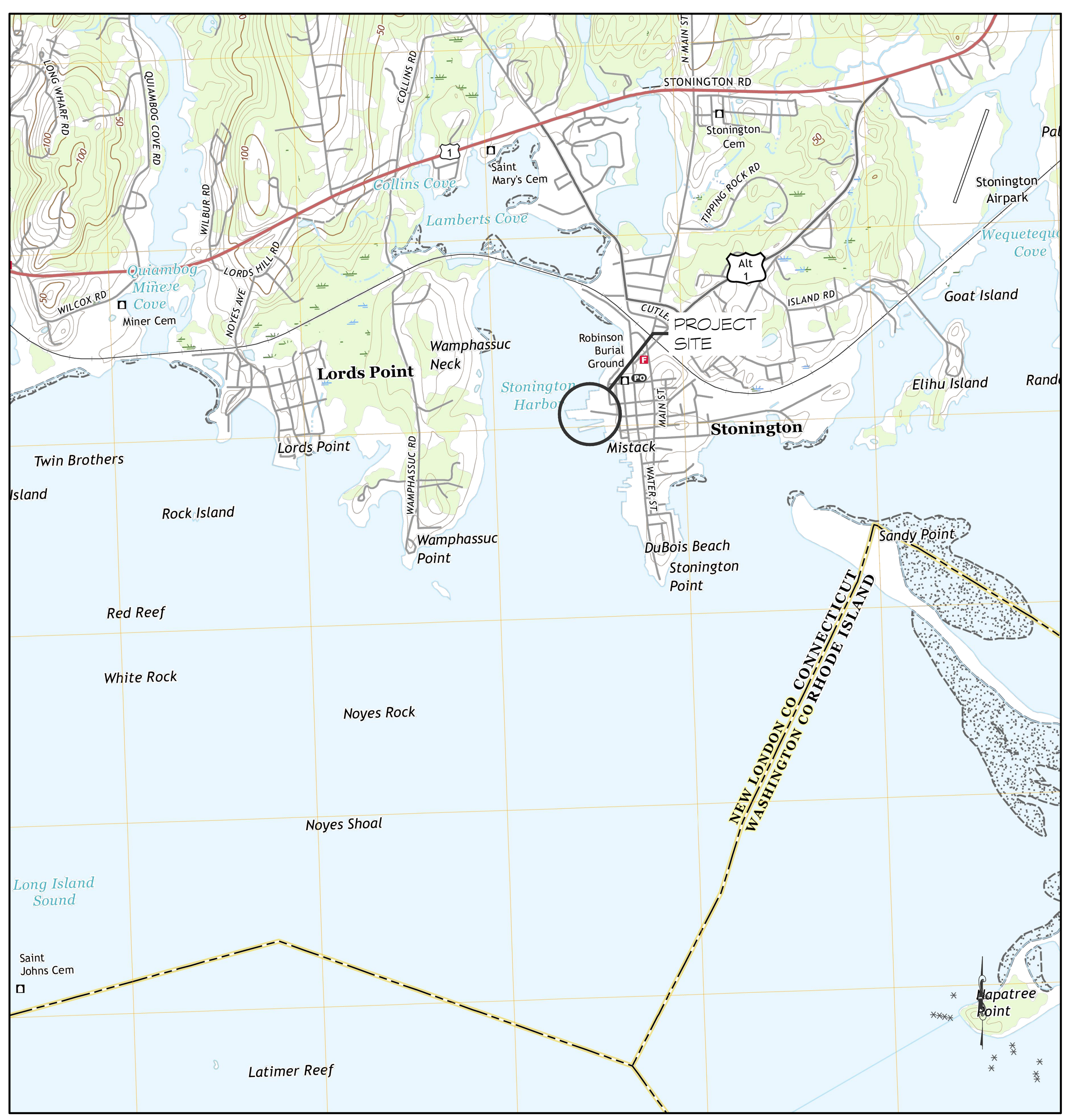
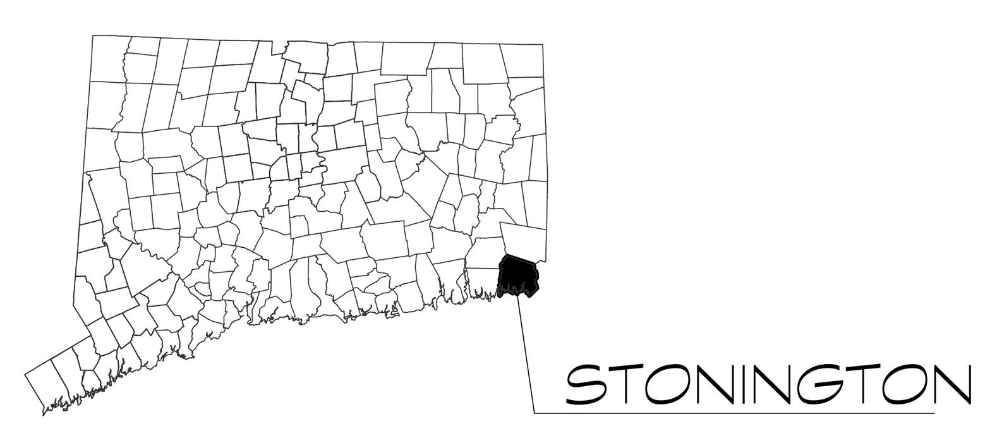
PIER REHABILITATION
STONINGTON TOWN DOCK
STONINGTON HARBOR
MAY 7, 2025

LIST OF DRAWINGS

TIDAL ELEVATIONS		
	MLLW	NAVD88
HTL	4.39	2.6
CJL	3.79	2.0
MHHW	2.97	1.18
MHW	2.75	0.96
NAVD88	1.79	0.0
MLW	0.11	-1.68
MLLW	0.0	-1.79



VICINITY MAP



AERIAL PHOTO

0	3/31/25	ISSUE FOR BID

TITLE SHEET
PIER REHABILITATION
STONINGTON TOWN DOCK
STONINGTON HARBOR
MAY 7, 2025

PROPERTY OF
TOWN OF STONINGTON
CONNECTICUT

APPROVED

DATE

SHEET 1

PREPARED BY:
DOCKO
SOUND ENGINEERING ASSOCIATES
MYSTIC,CT 06355
860 572-8939
EMAIL: office@docko.com

DWG 24-02-3325

PROJECT NOTES

DESCRIPTION OF THE WORK:

1. THE WORK COVERED UNDER THESE CONTRACT DOCUMENTS, INCLUDING THE DRAWINGS, GENERAL NOTES, AND SPECIFICATIONS AND ALL AMENDMENTS, CONSISTS OF PROVIDING ALL PLANT, LABOR, SUPERVISION, EQUIPMENT, APPLIANCES AND MATERIALS AND IN PERFORMING ALL OPERATIONS IN CONNECTION WITH AT LEAST, BUT NOT NECESSARILY LIMITED TO, THE FOLLOWING ITEMS:
   - STONE SEAWALL REPAIR
   - EXCAVATING AND BACKFILLING
   - TIMBER AND STEEL PILES
   - STEEL FRAMING TIMBER STRINGERS, AND DECKING
   - FENDER SYSTEM
   - MOORING SYSTEM
   - ANCHOR SYSTEM
   - CONCRETE WORK
2. THE CONTRACTOR SHALL PROVIDE ALL ITEMS AND ACCESSORIES REQUIRED TO COMPLETE ALL ASPECTS OF THE WORK NEEDED FOR A COMPLETE AND PROPER INSTALLATION, ALL IN STRICT ACCORDANCE WITH THE CONTRACT DOCUMENTS.

GENERAL NOTES

1. ALL BATHYMETRY IS IN MEAN LOWER LOW WATER DATUM (MLLW). ALL LAND CONTOURS, SPOT AND OTHER SPECIFIED ELEVATIONS ARE IN NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD-88).
2. EXISTING CONDITIONS TAKEN FROM A DRAWING TITLED 'TOPOGRAPHIC SURVEY PREPARED FOR THE TOWN OF STONINGTON BY RESOURCE MANAGEMENT AND MAPPING, DATED MARCH 25, 2009 AND SUPPLEMENTED BY MEASUREMENTS TAKEN BY DOCKO.
3. HYDROGRAPHIC INFORMATION TAKEN FROM A DRAWING TITLED 'HYDROGRAPHIC SURVEY, STONINGTON FISHING DOCKS' BY VESPOS HYDROGRAPHIC SURVEYS & SOFTWARE DATED APRIL 29, 2024 AND REPRESENT THE CONDITIONS AT THE TIME OF THE SURVEY.
4. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO LAYOUT THE STRUCTURES IN ACCORDANCE WITH THE PROJECT DRAWINGS.
5. ALL WORK SHALL COMPLY WITH FEDERAL, STATE, AND LOCAL LAWS AND STATUTES AND THE RETIREMENTS AND CONDITIONS OF ALL REGULATORY PERMITS ISSUED FOR THEE WORK.
6. THESE DRAWINGS SHALL BE USED IN CONJUNCTION WITH THE PROJECT REGULATORY APPROVALS AND ALL CONDITIONS OF THOSE APPROVALS. THE CONTRACTOR IS ADVISED THAT THE REGULATORY APPROVALS FOR THIS PROJECT MAY CONTAIN ADDITIONAL RETIREMENTS THAT, AFTER ANY ADDENDUM, SUPERSEDE THE DRAWING NOTES. THE CONTRACTOR IS FURTHER ADVISED THAT IN THE CASE OF ANY DISCREPANCIES WITHIN THE CONTRACT DOCUMENTS FOUND BEFORE CONSTRUCTION, THE FINAL DECISION AS TO WHAT INFORMATION TAKES PRECEDENCE SHALL BE MADE BY THE ENGINEER OF RECORD ON THE BASIS OF THAT INTENT.
7. EXISTING CONDITIONS AND DIMENSIONS SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION AND FABRICATION OR ORDERING OF ANY CONSTRUCTION MATERIALS.
8. SECTIONS AND DETAILS APPLY TO SAME AND SIMILAR CONDITIONS UNLESS SPECIFICALLY Y NOTED OTHERWISE HEREIN.
9. DAMAGE TO ANY PROPERTY, PRIVATE OR OF PUBLIC TRUST, OCCURRING DURING THE CONSTRUCTION BY THE CONTRACTOR, SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE REPAIRED TO THE SATISFACTION OF THE OWNER AT THE EXPENSE OF THE CONTRACTOR.

STEEL FASTENERS

1. BOLTS: ASTM A307 WITH HEXAGONAL HEADS UNLESS OTHERWISE NOTED.
2. NUTS: ASTM A563 WITH HEXAGONAL HEADS
3. WASHERS: ASTM F436 OR OGEE TYPE WASHERS AS NOTED
4. ALL BOLTS, NUS, AND WASHERS SHALL BE HOT DIPPED GALVANIZED IN ACCORDANCE WITH ASTM A153 AND MEET MINIMUM TESTS OF ASTM A239, UNLESS OTHERWISE NOTED.

STEEL PILES:

1. HP-PILES SHALL BE ASTM ASTM A572. PIPE PILES SHALL BE ASTM A252 SPIRAL WELDED PIPE.
2. THE TOP 30 FEET OF PILES SHALL BE SHOP COATED, ON OUTER SURFACES ONLY, UNLESS NOTED OTHERWISE.
3. PIPE PILES SHALL BE FILLED WITH CONCRETE UNLESS NOTED OTHERWISE. CONCRETE FILL FOR PIPES SHALL BE NORMAL WEIGHT WITH A MINIMUM 28-DAY STRENGTH OF 3,000 PSI.

TIMBER PILES

1. TIMBER PILES SHALL BE SOUTHERN PINE AND SHALL CONFORM TO ASTM D25 AND BE UNUSED, CLEAN PEELED, STRAIGHT, AND UNIFORMLY TAPERED. ANY PILES NOT CONFORMING TO THESE SPECIFICATIONS SHALL BE REMOVED FROM THE SITE.
2. THE MINIMUM BUTT DIAMETER SHALL BE 12" DIAMETER.
3. ALL PILES SHALL BE HANDLED CAREFULLY, WITHOUT SUDDEN DROPPING, BREAKING OF OUTER FIBERS, BRUISING OR PENETRATING THE SURFACE WITH TOOLS.
4. TO PREVENT SPLITTING OR BROOMING, THE BUTT ENDS OF THE PILES SHALL BE CUT SQUARE WITH THE AXIS, EDGES CHAMFERED, AND, IF NECESSARY, STEEL BANDS OR CAPS SHALL BE USED WHILE DRIVING.
5. ALL PILES SHALL BE PRESSURE TREATED IN ACCORDANCE WITH THE AMERICAN WOOD PRESERVER'S ASSOCIATION (AWPA) CATEGORY C3 WITH A CCA PRESERVATIVE TO A RETENTION OF 1.5 POUNDS PER CUBIC FOOT.
6. DATA ON TIMBER PILE TREATMENT, INCLUDING CERTIFICATION BY TREATING PLANT STATING TYPE OF PRESERVATIVE SOLUTION AND PRESSURE PROCESS USED, NET AMOUNT OF PRESERVATIVE RETAINED, AND COMPLIANCE WITH APPLICABLE STANDARDS, SHALL BE FURNISHED TO THE ENGINEER PRIOR TO PILE INSTALLATION.
7. HANDLING, STORAGE, AND FIELD FABRICATION, INCLUDING TREATMENT OF CUT ENDS, SHALL BE IN ACCORDANCE WITH AWPA M4.
8. ALL CUT ENDS SHALL BE COATED WITH A COPPER NAPTHANATE SOLUTION, WITH NO LESS THAN 2% COPPER METAL CONTENT, TO BE APPROVED BY THE ENGINEER PRIOR TO USE.

PILE INSTALLATION

4. EQUIPMENT AND METHODS FOR INSTALLING PILES SHALL BE SUCH THAT PILES ARE INSTALLED IN THER PROPER POSITION AND ALIGNMENT.
5. PILES SHALL BE CONTINUOUSLY DRIVEN TO A DEPTH OR CAPACITY AS FOLLOWS:
   A. TIMBER FENDER PILES SHALL BE NO LESS THAT 40 FEET LONG AND DRIVEN TO THER FULL DEPTH
   B. STEEL PIPE PILES FOR DOCK SHALL BE NO LESS THAN 40 FEET LONG AND DRIVEN TO THER FULL DEPTH
   C. HP PILES FOR DOCK FOUNDATION SHALL BE DRIVEN TO A "SAFE LOAD" CAPACITY OF NO LESS THAN 20 TONS AS DETERMINED BY THE ENGINEERING NEWS FORMULA OR A MINIMUM EMBEDMENT OF 20 FEET, WHICHEVER IS DEEPER.
   D. HP PILES FOR DEAD MAN ANCHOR SHALL BE UNCOATED, 30 FEET LONG, AND DRIVEN TO THER FULL DEPTH
   E. STEEL PIPE PILES FOR STORM BOLLARDS SHALL BE 35 FEET LONG AND DRIVE TO THER FULL DEPTH. THE TOP 6 FEET OF THE PILES SHALL BE COATED.
6. THE PILE DRIVING HAMMER SHALL BE OF SUITABLE SIZE FOR TLE PROPER INSTALLATION OF THE PILE AND SHALL BE CAPABLE IN ANY CASE OF DELIVERING AN ENERGY PER BLOW AS REQUIRED BY APPROPRIATE DRIVING RESISTANCE REQUIREMENTS.
7. SUITABLE ANVILS OR CUSHIONS, DEPENDING ON THE TYPE OF PILE SHALL BE USED TO PREVENT DAMAGE TO THE PILE BUTTS. THE CUSHION USED SHOULD PROVIDE ENOUGH PROTECTION TO PREVENT DAMAGE TO THE PILE BUT SHOULD NOT ABSORB TOO MUCH OF THE ENERGY OF THE BLOW.
8. PILES SHALL BE INSTALLED WITH DUE CONSIDERATION FOR THE SAFETY OF ADJACENT STRUCTURES AND SUB-SURFACE CONSTRUCTION AND, BY A METHOD WHICH LEAVES THE PILE STRENGTH UNIMPAIRED, AND WHICH DEVELOPS AND RETAINS THE THE REQUIRED LOAD BEARING RESISTANCE FOR THE PILE. IF CONDITIONS AT THE SITE ARE SUCH THAT THE TIP, THE BODY, OR THE BUTT OF THE PILE IS LIKELY TO SUFFER DAMAGE DURING DRIVING SPECIAL PRECAUTIONS SUCH AS PRE-DRILLING OR SPUDDING MUST BE TAKEN BY THE CONTRACTOR TO AVOID SUCH DAMAGE. IT IS THE CONTRACTORS RESPONSIBILITY TO ENSURE PLACEMENT OF UNDAMAGED PILES TO THE LOADING CAPACITY, REQUIRED TIP ELEVATION AND/OR EMBEDMENT INTO SOUND MATERIAL AS SPECIFIED HEREIN.
9. ALL PILES SHOWING SIGNS OF HEAVING AND LIFTING CAUSED DUE TO INSTALLATION OF ADJACENT PILES, OR ANY OTHER CAUSE, OR WHICH HAVE BEEN INSTALLED IN THE WRONG LOCATIONS, SHALL BE REMOVED AND REINSTALLED TO FIRM BEARING AS SPECIFIED HEREIN.
10. PILES WHICH ARE DAMAGED SHALL BE REMOVED AND DISPOSED OFF-SITE AND REPLACED WITH NEW PILES.
11. THE CONTRACTOR SHALL KEEP AN ACCURATE RECORD OF EACH PILE DRIVEN. THE RECORDS SHALL GIVE THE BUTT AND TIP DIAMETERS, LENGTH, DESIGN CAPACITY, PENETRATION UNDER THE LAST BLOWS OF THE HAMMER, BEHAVIOR DURING DRIVING, CUT-OFF LENGTHS, RESULTS OF ANY TESTS, DRILLING OR PROBING INFORMATION IF ANY, AND ALL OTHER INFORMATION REGARDING EACH PILE DRIVEN. THESE RECORDS SHALL BE SUBMITTED TO THE ENGINEER ON A DAILY BASIS.

HEAVY TIMBER CONSTRUCTION

1. THE WORK COVERED UNDER THIS SECTION INCLUDES, BUT IS NOT NECESSARILY LIMITED TO, STRINGERS, CHOCKS, AND BLOCKING.
2. ALL VISUALLY GRADED STRUCTURAL LUMBER AND WOOD CONSTRUCTION SHALL CONFORM TO THE 'NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION' (ANSI/NFPA NDS - LATEST EDITION, ITS SUPPLEMENT, AND COMMENTARY BY THE AMERICAN WOOD COUNCIL).
3. TIMBER SHALL MEET THE REQUIREMENTS OF THE SOUTHERN PINE INSPECTION BUREAU INSPECTION RULES, LATEST EDITION FOR SOUTHERN YELLOW PINE NO. 2 GRADE MINIMUM.
4. TIMBER SHALL BE HANDLED CAREFULLY, WITHOUT SUDDEN DROPPING, BREAKING OF OUTER FIBERS, BRUISING OR
5. PENETRATING THE SURFACE WITH TOOLS.
6. ALL TIMBER SHALL BE CUT AND FRAMED TO A CLOSE FIT IN SUCH A MANNER THAT THE JOINTS SHALL HAVE AN EVEN BEARING OVER THE ENTIRE CONTACT SURFACE. NO SHIMMING WILL BE PERMITTED IN MAKING JOINTS NOR WILL OPEN JOINTS BE ACCEPTED.
7. ALL TIMBER SHALL BE PRESSURE TREATED IN ACCORDANCE WITH TLE AMERICAN WOOD PRESERVERS ASSOCIATION (AWPA) CATEGORY C3 WITH A CCA PRESSERVATIVE TO A RETENTION OF 0.6 PCF UNLESS NOTED OTHERWISE.
8. TIMBERS THAT ARE INSTALLED BELOW THE MEAN HIGH WATER LINE SHALL BE CCA PRESSURE TREATED TO A RETENTION OF 2.5 PCF.
9. ALL CUT ENDS SHALL BE COATED WITH A COPPER NAPTHANATE SOLUTION, WITH NO LESS THAN 2% COPPER METAL CONTENT, TO BE APPROVED BY THE ENGINEER PRIOR TO USE.
10. ALL MATERIAL SHALL BE SOUND, WELL-SEASONED, AND STRAIGHT GRAINED, FREE FROM SHAKES AND LARGE OR LOOSE KNOTS AND SHALL HAVE NO DECAYED WOOD, WORM HOLES, OR ANY OTHER DEFECTS WHICH THE ENGINEER DETERMINES WILL IMPAIR ITS STRENGTH OR DURABILITY.
11. PECES OF EXCEPTIONALLY LIGHT WEIGHT WILL NOT BE ACCEPTED.
12. ALL MATERIAL SHALL BE STORED OFF OF THE GROUND IN A MANNER TO PREVENT DAMAGE AND TO PERMIT EASY INSPECTION.
13. TIMBER SHALL BE SURFACED FOUR SIDES (S4S) UNLESS OTHERWISE NOTED.

DECKING

1. BASE BID DECKING SHALL BE SOUTHERN YELLOW PINE AND SHALL MEET SPECIFICATIONS SET FOURTH IN THESE DRAWINGS UNDER TIMBER CONSTRUCTION.
2. DECKING SHALL BE FASTENED TO EACH STRINGER 2" FROM EACH EDGE USING 8.5" LONG BY 0.285" DIAMETER DECK SPIKES.
3. DECKING SHALL BE STORED IN A CLEAN, DRY, WEATHER PROTECTED LOCATION PRIOR TO INSTALLATION. NO DENTED, STAINED, TWISTED, OR DAMAGED MATERIAL SHALL BE INCORPORATED INTO THE WORK.
4. DECKING TO HAVE 1/8-INCH GAP BETWEEN ADJACENT BOARDS.

STONE REPAIR WORK

1. STONE SHALL CONSIST OF ROUGHLY SQUARED AND DRESSED. STONE SHALL BE OF APPROVED QUALITY, SOUND AND DURABLE, AND FREE FROM SEGREGATIONS, SEAMS, CRACKS, AND OTHER STRUCTURAL DEFECTS OR IMPERFECTIONS TENDING TO DESTROY ITS RESISTANCE TO WEATHER. IT SHALL BE FREE FROM ROUNDED, WORN, OR WEATHERED SURFACES.
2. STONES SHALL HAVE A THICKNESS OF NOT LESS THAN 8 INCHES AND A WIDTH OF NOT LESS THAN 1½ TIMES THE THICKNESS.
3. CARE SHALL BE TAKEN THAT EACH STONE TAKES A FIRM BEARING AT NOT LESS THAN THREE SEPARATE POINTS ON THE UNDERLYING STONE.

MARINE FENDERS

1. TIRE FENDERS SHOULD BE NO LESS THAN 48" IN DIAMETER AND IN GOOD CONDITION.
2. DO FENDERS SHALL BE TRC-D0350 FROM THE RUBBER COMPANY OR EQUIVALENT AND APPROVED BY THE ENGINEER.

DESIGN CRITERIA		
Standard Reference	1. Unified Facilities Criteria, by the Department of Defense __UFC 4-159-03, Change 1, 9/1/2012, Design: Moorings __UFC 4-152-01, Change 1, 9/1/2012, Design: Piers & Wharves 3. 2022 Connecticut State Building Code 4. 2022 International Building Code 5. ASCE / SEI 7-16 Minimum Design Loads and __Associated Criteria for Buildings and Other Structures	
Municipality	Stonington, CT	
Structure Description	Commercial Fishing Vessel Docking Facility	
Structure Risk Category	I	
Exposure	D	
Live Loads	Deck Live Load (Heavy Storage)	250 psf

CONTRACTOR MEANS & METHODS AND SEQUENCE NOTES

1. CONTRACTOR IS RESPONSIBLE FOR MEANS & METHODS OF CONSTRUCTION, PROVIDED THAT SUCH MEANS AND METHODS ARE REVIEWED AND ACCEPTABLE BY THE TOWN. THE CONTRACTOR SHALL SUBMIT A DETAILED "METHODOLOGY" TO THE TOWN WITHIN 15 DAYS FOLLOWING THE AWARD OF CONTRACT.
2. THE DOCK IS OPERATED BY THE SOUTHERN NEW ENGLAND LOBSTERMAN & FISHERMAN ASSOCIATION ("SNEFLA"). PORTION OF THE SOUTH DOCK WILL REMAIN IN OPERATION. THE CONTRACTOR WILL WORK IN HARMONY WITH SNEFLA AND NOT INTERRUPT OPERATIONS.
3. THE CONTRACTOR SHALL PREPARE AND MAINTAIN A PROJECT SCHEDULE FOR THE DURATION OF THE PROJECT. THE SCHEDULE SHALL BE UPDATED NO LESS THAN EVERY TWO WEEKS.
4. THE CONTRACTOR SHALL ATEND PROJECT MEETINGS AT A SCHEDULE DETERMINES BY THE TOWN AND REPORT TO THE TOWN PROJECT PROGRESS. AT EACH PROJECT MEETING, THE CONTRACTOR SHALL PROVIDE A TWO-WEEK LOOK AHEAD OF WORK TO BE PERFORMED FOR THE PURPOSE OF IDENTIFYING ANY POTENTIAL CONFLICTS WITH SITE OPERATIONS OR OTHER ACTIVITIES.
5. SUGGESTED CONSTRUCTION METHODOLOGY:
   A. SITE PREPERATION - INSTALL FENCES, TRAILER AND SETUP BASELINE.
   B. MOBILIZATION OF CONSTRUCTION EQUIPMENT AND MATERIALS.
   C. DEMOLISH AND REMOVED 244'-0" OF EXISTING PIER AND PILES.
   D. REPAIR DAMAGED LOCATIONS ON EXISTING SEAWALL (MARKED ON PLANS).
   E. INSTALL ALL STEEL AND TIMBER PILES. INSTALL LANDWARD TIE-RODS.
   F. COMPLETE ALL NECESSARY CONCRETE WORK FOR BOTH LAND AND PILES.
   G. INSTALL STEEL AND TIMBER FRAMING MEMBERS FOR PIER.
   H. INSTALL CATWALK, TIRE FENDERS AND STORM BOLLARDS.
   I. RE-PAVE ASPHALT TO RETURN SITE BACK TO ORIGINAL CONDITION.
   J. CLEAN-UP AND REMOVE EQUIPMENT AND EXTRA MATERIALS FROM SITE.

0	3/31/25	ISSUE FOR BID	

PROJECT NOTES
PIER REHABILITATION
STONINGTON TOWN DOCK
STONINGTON HARBOR
MAY 7, 2025

PROPERTY OF
TOWN OF STONINGTON
CONNECTICUT

APPROVED

DATE

SHEET 2

PREPARED BY:
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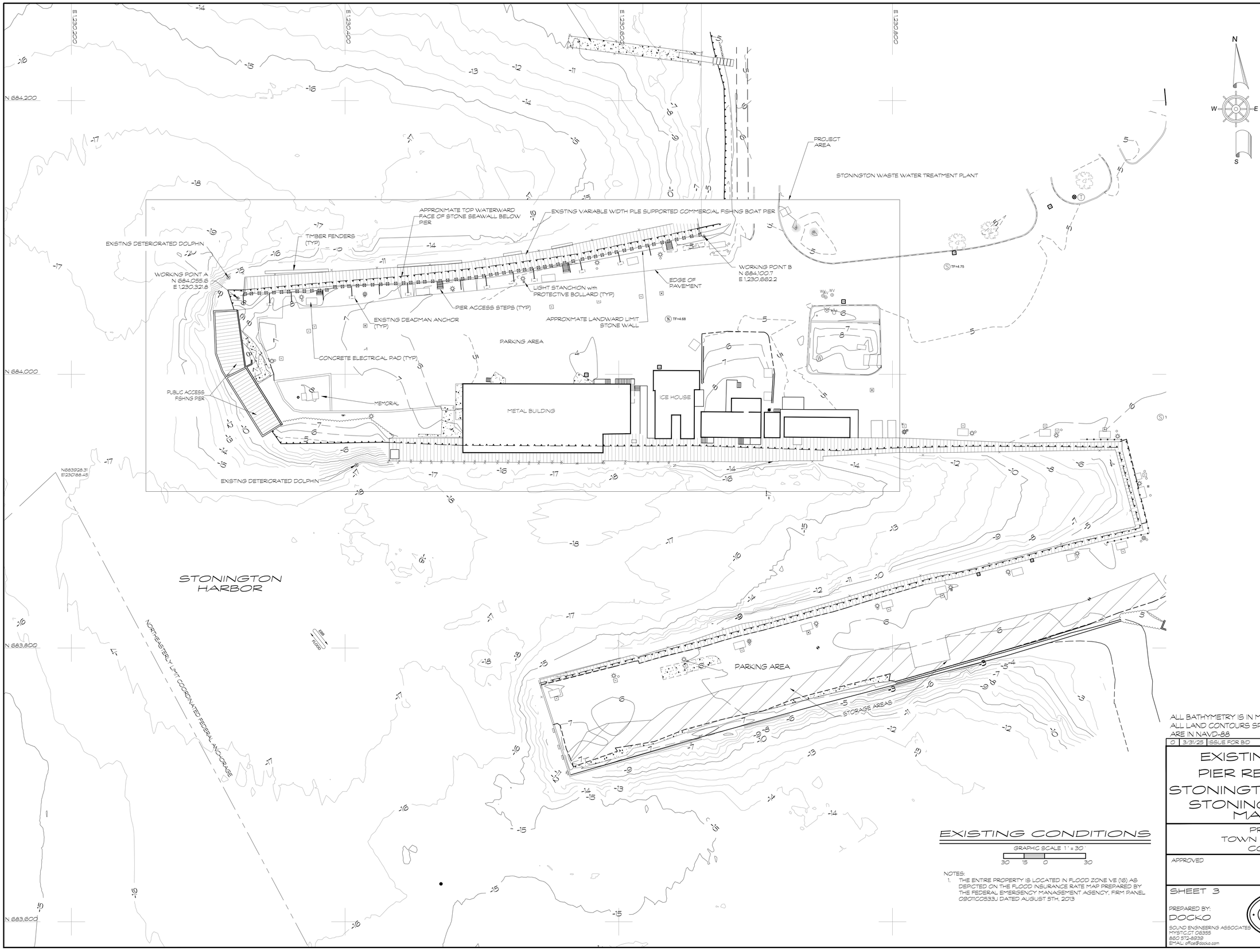
860 572-9330
EMAIL: office@docko.com

DWG 24-02-3325

STATE OF CONNECTICUT
LICENSED
PROFESSIONAL ENGINEER



EXISTING CONDITIONS

GRAPHIC SCALE 1" = 30'

30 15 0 30

NOTES:

1. THE ENTIRE PROPERTY IS LOCATED IN FLOOD ZONE VE (16) AS DEPICTED ON THE FLOOD INSURANCE RATE MAP PREPARED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY, FIRM PANEL 09011C0533J DATED AUGUST 5TH, 2013

ALL BATHYMETRY IS IN MLLWD
ALL LAND CONTOURS SPOT AND OTHER SPECIFIED ELEVATIONS ARE IN NAVD-88

0	3/31/25	ISSUE FOR BID

EXISTING SITE PLAN
PIER REHABILITATION
STONINGTON TOWN DOCK
STONINGTON HARBOR
MAY 7, 2025

PROPERTY OF
TOWN OF STONINGTON
CONNECTICUT

APPROVED

DATE

SHEET 3

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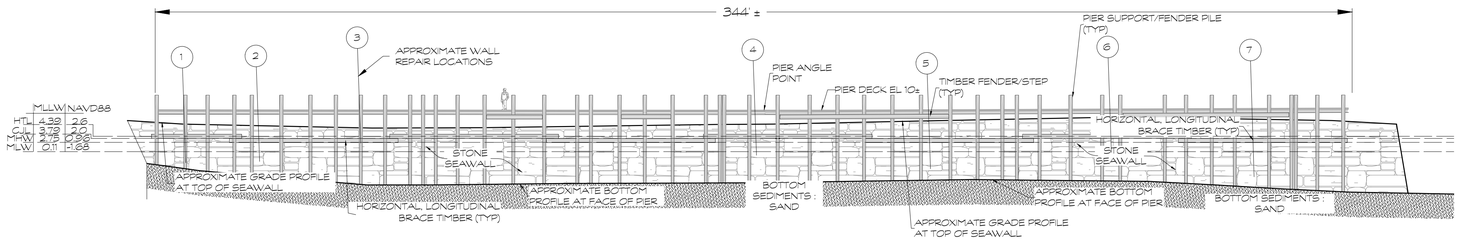
DWG 24-02-3325

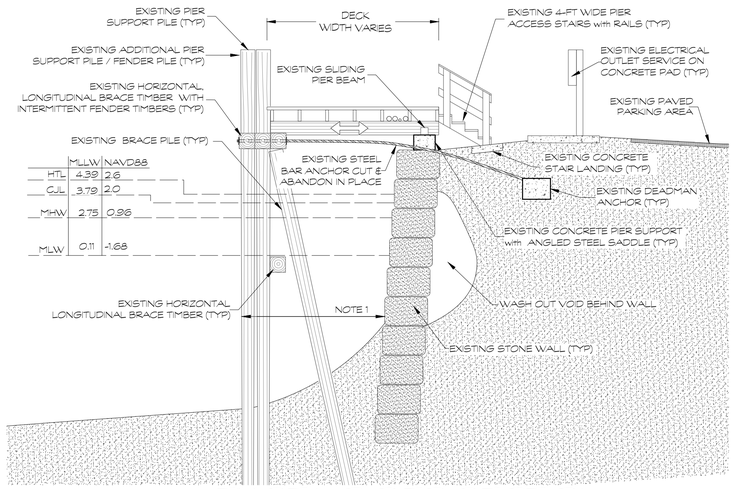
STATE OF CONNECTICUT
LICENSED
PROFESSIONAL ENGINEER



DEVELOPED ELEVATION

GRAPHIC SCALE 1" = 20'

20 10 0 20

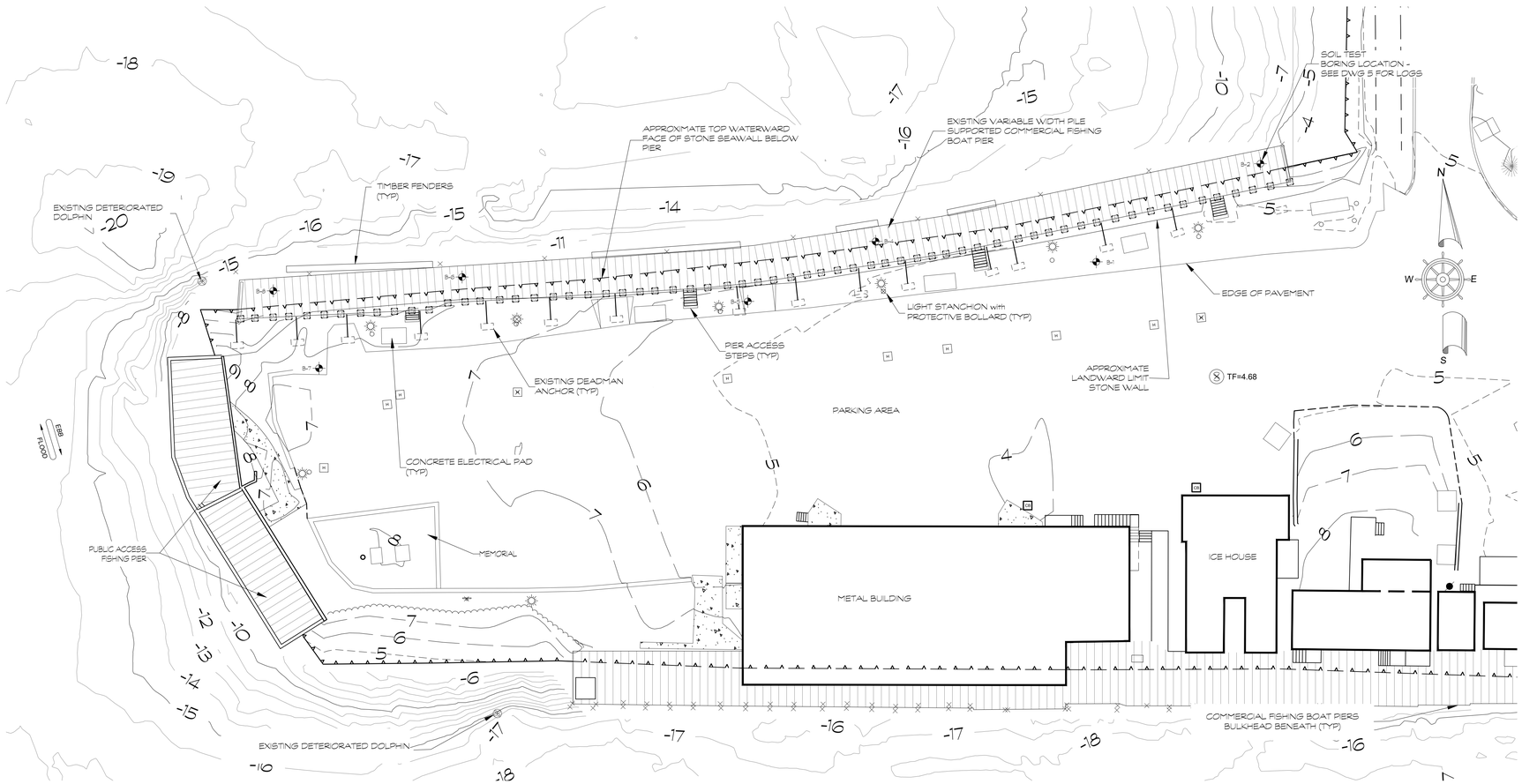


EXISTING PIER SECTION

GRAPHIC SCALE 1" = 5'

5 4 3 2 1 0 5

1. A DEBRIS FIELD EXISTS AT THE MUDLINE UNDER EXISTING DOCK. CONTRACTOR SHALL REMOVE AND DISPOSE OF DEBRIS AS REQUIRED FOR NEW WORK.



EXISTING CONDITIONS

GRAPHIC SCALE 1" = 20'

20 10 0 20

ALL BATHYMETRY IS IN MLLWD
ALL LAND CONTOURS SPOT AND OTHER SPECIFIED ELEVATIONS ARE IN NAVD-88

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EXISTING DOCK PLAN
PIER REHABILITATION
STONINGTON TOWN DOCK
STONINGTON HARBOR
MAY 7, 2025

PROPERTY OF
TOWN OF STONINGTON
CONNECTICUT

APPROVED

DATE

SHEET 4

PREPARED BY:
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DWG 24-03-3325

STATE OF CONNECTICUT · DEPARTMENT OF · LICENSED · PROFESSIONAL ENGINEER

HARDIMAN CO. & ASSOC., INC.
10 Fox Hunt Road
Shelton, CT 06484

CLIENT: SOUND ENGINEERING ASSOCIATES, LLC

SHEET 1 OF 2
HOLE NO. **B - 1**

CONTRACTOR
PROJECT NO. S - 377
LINE
FOREMAN—DRILLER TJH,III
PROJECT NAME STONINGTON PIER
STATION
INSPECTOR D.D.
LOCATION HIGH STREET, STONINGTON, CT
OFFSET

GROUND WATER OBSERVATIONS
AT ____ FT. AFTER ____ HOURS
AT ____ FT. AFTER ____ HOURS

Type	Casing FJ	Sampler SS	Core Bar "NQ"
Size I.D.	4"	1 3/8"	2"
Hammer Wt.	Spin	140	SIT
Hammer Fall		30	Dia.

Date Start 8/13/24 Date Fin. 8/16/24
Surface Elev. _Existing ground
Ground Water Elev. Tidal

Depth Casin	Blows per Foot	No.	Type	Pen.	Rec.	Depth of Bor.	Sample: Blows Per 6" on Sampler (Force on Table) 0-6	6-12	12-18	18 - 24	Strata Change Depth	Field Identification of Soil: Remarks Incl. Color, Loss of Wash Water, Seams in Rock, Etc.
											0.3	Wood deck
												Air & water
5												
10		1	ss	2.0	1.0	7.0	4	4	2	3		
15		2	ss	2.0	1.5	12.0	2	1	2	6	11.5	Gray & brown organic silt, some fine sand.
20		3	ss	2.0	1.5	17.0	1	1	4	2	16.5	Organic silt.
25		4	ss	2.0	1.5	22.0	8	10	13	14		Gray-brown f/m sand, trace gravel.
30		5	ss	2.0	1.5	27.0	9	9	11	15		Brown f/m sand.
35		6	ss	1.5	1.3	31.5	10	11	15			
40		7	ss	0.5	0.4	33.5	50				36.0	E.O.B. Refusal

Note: B - 3, Eliminated

Ground Surface To ____ Ft. Used ____ " Casing Then ____ " Casing To _____ Ft. **HOLE NO. B - 1**
D = Dry W = Washed C = CoreD" = Dry A = Auger UP = Undisturbed Piston
UB = Undisturbed Ball Check T = Thin wall V = Vane Test
Proportions Used: Trace = 0-10%, little = 10-20%, Some = 20-35%, and = 35-5-%

HARDIMAN CO. & ASSOC., INC.
10 Fox Hunt Road
Shelton, CT 06484

CLIENT: SOUND ENGINEERING ASSOCIATES, LLC

SHEET 1 OF 2
HOLE NO. **B - 2**

CONTRACTOR
PROJECT NO. S - 377
LINE
FOREMAN—DRILLER A.S.
PROJECT NAME STONINGTON PIER
STATION
INSPECTOR Ben
LOCATION HIGH STREET, STONINGTON, CT
OFFSET

GROUND WATER OBSERVATIONS
AT ____ FT. AFTER ____ HOURS
AT ____ FT. AFTER ____ HOURS

Type	Casing FJ	Sampler SS	Core Bar "NQ"
Size I.D.	4"	1 3/8"	2"
Hammer Wt.	Spin	140	SIT
Hammer Fall		30	Dia.

Date Start 8/14/24 Date Fin. 8/16/24
Surface Elev. _Existing ground
Ground Water Elev. Tidal

Depth Casin	Blows per Foot	No.	Type	Pen.	Rec.	Depth of Bor.	Sample: Blows Per 6" on Sampler (Force on Table) 0-6	6-12	12-18	18 - 24	Strata Change Depth	Field Identification of Soil: Remarks Incl. Color, Loss of Wash Water, Seams in Rock, Etc.
											0.3	Wood deck
												Air & water
5												
10		1	ss	2.0	0.5	22.0	5	7	5	5	22.5	Boulder
15		2	ss	2.0		27.0	8	10	11	10	24.5	Gray-brown f/m sand, some silt, trace gravel
20		3	ss	2.0	1.0	32.0	4	5	7	11		Boulder
25		4	ss	2.0	1.5	37.0	13	15	15	18	Core Stop 29.0	Brown f/m sand, some silt, trace gravel
30		5	C	5.0	2.0	34.0					8 5 2 8	Rock cored
35		6	C	5.0	2.0	34.0					8	E.O.B.
40												

Ground Surface To ____ Ft. Used ____ " Casing Then ____ " Casing To _____ Ft. **HOLE NO. B - 2**
D = Dry W = Washed C = CoreD" = Pit A = Auger UP = Undisturbed Piston
UB = Undisturbed Ball Check T = Thin wall V = Vane Test
Proportions Used: Trace = 0-10%, little = 10-20%, Some = 20-35%, and = 35-5-%

HARDIMAN CO. & ASSOC., INC.
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Shelton, CT 06484

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SHEET 1 OF 2
HOLE NO. **B - 4**

CONTRACTOR
PROJECT NO. S - 377
LINE
FOREMAN—DRILLER A.S.
PROJECT NAME STONINGTON PIER
STATION
INSPECTOR Ben
LOCATION HIGH STREET, STONINGTON, CT
OFFSET

GROUND WATER OBSERVATIONS
AT ____ FT. AFTER ____ HOURS
AT ____ FT. AFTER ____ HOURS

Type	Casing FJ	Sampler SS	Core Bar "NQ"
Size I.D.	4"	1 3/8"	2"
Hammer Wt.	Spin	140	SIT
Hammer Fall		30	Dia.

Date Start 8/14/24 Date Fin. 8/16/24
Surface Elev. _Existing ground
Ground Water Elev. Tidal

Depth Casin	Blows per Foot	No.	Type	Pen.	Rec.	Depth of Bor.	Sample: Blows Per 6" on Sampler (Force on Table) 0-6	6-12	12-18	18 - 24	Strata Change Depth	Field Identification of Soil: Remarks Incl. Color, Loss of Wash Water, Seams in Rock, Etc.
											0.3	Wood deck
												Air & water
5												
10		1	ss	2.0	1.0	22.0	1	1	1	1	18.0	Black organic silt.
15		2	ss	2.0	0.5	27.0	1	1	2	3	21.0	Gray organic silt.
20		3	ss	2.0	1.0	32.0	4	5	7	11		Gray f/m sand, some silt.
25		4	ss	2.0	1.5	37.0	13	15	15	18		
30												
35												
40												

Ground Surface To ____ Ft. Used ____ " Casing Then ____ " Casing To _____ Ft. **HOLE NO. B - 4**
D = Dry W = Washed C = CoreD" = Pit A = Auger UP = Undisturbed Piston
UB = Undisturbed Ball Check T = Thin wall V = Vane Test
Proportions Used: Trace = 0-10%, little = 10-20%, Some = 20-35%, and = 35-5-%

HARDIMAN CO. & ASSOC., INC.
10 Fox Hunt Road
Shelton, CT 06484

CLIENT: SOUND ENGINEERING ASSOCIATES, LLC

SHEET 2 OF 2
HOLE NO. **B - 4**

CONTRACTOR
PROJECT NO. S - 377
LINE
FOREMAN—DRILLER A.S.
PROJECT NAME STONINGTON PIER
STATION
INSPECTOR Ben
LOCATION HIGH STREET, STONINGTON, CT
OFFSET

GROUND WATER OBSERVATIONS
AT ____ FT. AFTER ____ HOURS
AT ____ FT. AFTER ____ HOURS

Type	Casing FJ	Sampler SS	Core Bar "NQ"
Size I.D.	4"	1 3/8"	2"
Hammer Wt.	Spin	140	SIT
Hammer Fall		30	Dia.

Date Start 8/14/24 Date Fin. 8/14/24
Surface Elev. _Existing ground
Ground Water Elev. Tidal

Depth Casin	Blows per Foot	No.	Type	Pen.	Rec.	Depth of Bor.	Sample: Blows Per 6" on Sampler (Force on Table) 0-6	6-12	12-18	18 - 24	Strata Change Depth	Field Identification of Soil: Remarks Incl. Color, Loss of Wash Water, Seams in Rock, Etc.
											0.3	Wood deck
												Air & water
5												
10		1	ss	2.0	1.0	22.0	1	1	1	1	18.0	Black organic silt.
15		2	ss	2.0	0.5	27.0	1	1	2	3	21.0	Gray organic silt.
20		3	ss	2.0	1.0	32.0	4	5	7	11		Gray f/m sand, some silt.
25		4	ss	2.0	1.5	37.0	13	15	15	18		
30											41.5	Gray f/c sand some gravel, little silt, trace broken rock.
35												E.O.B. Refusal.
40												

Ground Surface To ____ Ft. Used ____ " Casing Then ____ " Casing To _____ Ft. **HOLE NO. B - 4**
D = Dry W = Washed C = CoreD" = Pit A = Auger UP = Undisturbed Piston
UB = Undisturbed Ball Check T = Thin wall V = Vane Test
Proportions Used: Trace = 0-10%, little = 10-20%, Some = 20-35%, and = 35-5-%

HARDIMAN CO. & ASSOC., INC.
10 Fox Hunt Road
Shelton, CT 06484

CLIENT: SOUND ENGINEERING ASSOCIATES, LLC

SHEET 1 OF 2
HOLE NO. **B - 5**

CONTRACTOR
PROJECT NO. S - 377
LINE
FOREMAN—DRILLER A.S.
PROJECT NAME STONINGTON PIER
STATION
INSPECTOR
LOCATION HIGH STREET, STONINGTON, CT
OFFSET

GROUND WATER OBSERVATIONS
AT ____ FT. AFTER ____ HOURS
AT ____ FT. AFTER ____ HOURS

Type	Casing FJ	Sampler SS	Core Bar "NQ"
Size I.D.	4"	1 3/8"	2"
Hammer Wt.	Spin	140	SIT
Hammer Fall		30	Dia.

Date Start 8/6/24 Date Fin. 8/6/24
Surface Elev. _Existing ground
Ground Water Elev. Tidal

Depth Casin	Blows per Foot	No.	Type	Pen.	Rec.	Depth of Bor.	Sample: Blows Per 6" on Sampler (Force on Table) 0-6	6-12	12-18	18 - 24	Strata Change Depth	Field Identification of Soil: Remarks Incl. Color, Loss of Wash Water, Seams in Rock, Etc.
												Brown f/c sand, some silt, some gravel. (Fill)
5												
10		1	ss	2.0	1.5	7.0	2	1	1	4		
15		2	ss	2.0	1.0	11.1	21	21	50		11.0	Boulders
20		3	ss	2.0	0.5	17.0	8	5	4	4	13.0	Brown f/c sand, some silt, some gravel.
25		4	ss	2.0	0.2	22.0	wor	wor	8	8		
30		5	ss	2.0	1.5	27.0	10	16	21	30.0	26.0	Gray-brown f/c sand & silt, trace gravel. Brown clayey silt.
35		6	ss	2.0	1.5	32.0	4	5	13	13	31.0	Brown f/c sand, some gravel
40		7	ss	2.0	ss	37.0	12	14	13	11		Brown f/c sand, some gravel, trace silt

Ground Surface To ____ Ft. Used ____ " Casing Then ____ " Casing To _____ Ft. **HOLE NO. B - 5**
D = Dry W = Washed C = CoreD" = Pit A = Auger UP = Undisturbed Piston
UB = Undisturbed Ball Check T = Thin wall V = Vane Test
Proportions Used: Trace = 0-10%, little = 10-20%, Some = 20-35%, and = 35-5-%

HARDIMAN CO. & ASSOC., INC.
10 Fox Hunt Road
Shelton, CT 06484

CLIENT: SOUND ENGINEERING ASSOCIATES, LLC

SHEET 2 OF 2
HOLE NO. **B - 5**

CONTRACTOR
PROJECT NO. S - 377
LINE
FOREMAN—DRILLER A.S.
PROJECT NAME STONINGTON PIER
STATION
INSPECTOR
LOCATION HIGH STREET, STONINGTON, CT
OFFSET

GROUND WATER OBSERVATIONS
AT ____ FT. AFTER ____ HOURS
AT ____ FT. AFTER ____ HOURS

Type	Casing FJ	Sampler SS	Core Bar "NQ"
Size I.D.	4"	1 3/8"	2"
Hammer Wt.	Spin	140	SIT
Hammer Fall		30	Dia.

Date Start 8/6/24 Date Fin. 8/6/24
Surface Elev. _Existing ground
Ground Water Elev. Tidal

Depth Casin	Blows per Foot	No.	Type	Pen.	Rec.	Depth of Bor.	Sample: Blows Per 6" on Sampler (Force on Table) 0-6	6-12	12-18	18 - 24	Strata Change Depth	Field Identification of Soil: Remarks Incl. Color, Loss of Wash Water, Seams in Rock, Etc.
												Brown f/c sand, some silt, some gravel. (Fill)
5												
10		1	ss	2.0	1.5	7.0	2	1	1	4		
15		2	ss	2.0	1.0	11.1	21	23	50		11.0	Boulders
20		3	ss	2.0	0.5	17.0	8	5	4	4	13.0	Brown f/c sand, some silt, some gravel.
25		4	ss	2.0	0.2	22.0	wor	wor	8	8		
30		5	ss	2.0	1.5	27.0	10	16	21	30.0	26.0	Gray-brown f/c sand & silt, trace gravel. Brown clayey silt.
35		6	ss	2.0	1.5	32.0	4	5	13	13	31.0	Brown f/c sand, some gravel
40		7	ss	2.0	ss	37.0	12	14	13	11		Brown f/c sand, some gravel, trace silt

Ground Surface To ____ Ft. Used ____ " Casing Then ____ " Casing To _____ Ft. **HOLE NO. B - 5**
D = Dry W = Washed C = CoreD" = Pit A = Auger UP = Undisturbed Piston
UB = Undisturbed Ball Check T = Thin wall V = Vane Test
Proportions Used: Trace = 0-10%, little = 10-20%, Some = 20-35%, and = 35-5-%

HARDIMAN CO. & ASSOC., INC.
10 Fox Hunt Road
Shelton, CT 06484

CLIENT: SOUND ENGINEERING ASSOCIATES, LLC

SHEET 1 OF 2
HOLE NO. **B - 6**

CONTRACTOR
PROJECT NO. S - 377
LINE
FOREMAN—DRILLER A.S.
PROJECT NAME STONINGTON PIER
STATION
INSPECTOR Ben
LOCATION HIGH STREET, STONINGTON, CT
OFFSET

GROUND WATER OBSERVATIONS
AT ____ FT. AFTER ____ HOURS
AT ____ FT. AFTER ____ HOURS

Type	Casing FJ	Sampler SS	Core Bar "NQ"
Size I.D.	4"	1 3/8"	2"
Hammer Wt.	Spin	140	SIT
Hammer Fall		30	Dia.

Date Start 8/12/24 Date Fin. 8/12/24
Surface Elev. _Existing ground
Ground Water Elev. Tidal

Depth Casin	Blows per Foot	No.	Type	Pen.	Rec.	Depth of Bor.	Sample: Blows Per 6" on Sampler (Force on Table) 0-6	6-12	12-18	18 - 24	Strata Change Depth	Field Identification of Soil: Remarks Incl. Color, Loss of Wash Water, Seams in Rock, Etc.
											0.3	Wood deck
												Air & water
5												
10		1	ss	2.0	0.0	20.0	50					
15		2	ss	0.0	0.0	19.0	50					
20											16.0	Boulders, sand & gravel.
25												
30											28.0	Gray brown f/c sand
35		3	ss	2.0	1.0	32.0	4	6	6	8		
40		4	ss	2.0	0.3	37.0	13	20	30	25		Brown silt

Ground Surface To ____ Ft. Used ____ " Casing Then ____ " Casing To _____ Ft. **HOLE NO. B - 6**
D = Dry W = Washed C = CoreD" = Pit A = Auger UP = Undisturbed Piston
UB = Undisturbed Ball Check T = Thin wall V = Vane Test
Proportions Used: Trace = 0-10%, little = 10-20%, Some = 20-35%, and = 35-5-%

HARDIMAN CO. & ASSOC., INC.
10 Fox Hunt Road
Shelton, CT 06484

CLIENT: SOUND ENGINEERING ASSOCIATES, LLC

SHEET 2 OF 2
HOLE NO. **B - 6**

CONTRACTOR
PROJECT NO. S - 377
LINE
FOREMAN—DRILLER A.S.
PROJECT NAME STONINGTON PIER
STATION
INSPECTOR Ben
LOCATION HIGH STREET, STONINGTON, CT
OFFSET

GROUND WATER OBSERVATIONS
AT ____ FT. AFTER ____ HOURS
AT ____ FT. AFTER ____ HOURS

Type	Casing FJ	Sampler SS	Core Bar "NQ"
Size I.D.	4"	1 3/8"	2"
Hammer Wt.	Spin	140	SIT
Hammer Fall		30	Dia.

Date Start 8/12/24 Date Fin. 8/12/24
Surface Elev. _Existing ground
Ground Water Elev. Tidal

Depth Casin	Blows per Foot	No.	Type	Pen.	Rec.	Depth of Bor.	Sample: Blows Per 6" on Sampler (Force on Table) 0-6	6-12	12-18	18 - 24	Strata Change Depth	Field Identification of Soil: Remarks Incl. Color, Loss of Wash Water, Seams in Rock, Etc.
												Brown silt, some fine sand, trace clay.
5												
10		5	ss	2.0	1.3	42.0	7	13	14	12		
15		6	ss	2.0	1.3	47.0	7	17	13	11	46.0	Brown f/c sand.
20		7	x	2.0	1.0	52.0	5	7	6	5		
25											53.5	E.O.B. Refusal
30												
35												
40												

Ground Surface To ____ Ft. Used ____ " Casing Then ____ " Casing To _____ Ft. **HOLE NO. B - 6**
D = Dry W = Washed C = CoreD" = Pit A = Auger UP = Undisturbed Piston
UB = Undisturbed Ball Check T = Thin wall V = Vane Test
Proportions Used: Trace = 0-10%, little = 10-20%, Some = 20-35%, and = 35-5-%

HARDIMAN CO. & ASSOC., INC.
10 Fox Hunt Road
Shelton, CT 06484

CLIENT: SOUND ENGINEERING ASSOCIATES, LLC

SHEET 1 OF 2
HOLE NO. **B - 7**

CONTRACTOR
PROJECT NO. S - 377
LINE
FOREMAN—DRILLER TJH, III
PROJECT NAME STONINGTON PIER
STATION
INSPECTOR D.D.
LOCATION HIGH STREET, STONINGTON, CT
OFFSET

GROUND WATER OBSERVATIONS
AT ____ FT. AFTER ____ HOURS
AT ____ FT. AFTER ____ HOURS

Type	Casing	Sampler SS	Core Bar "NQ"
Size I.D.		1 3/8"	2"
Hammer Wt.		300	SIT
Hammer Fall		30	Dia.

Date Start 8/13/24 Date Fin. 8/14/24
Surface Elev. _Existing ground
Ground Water Elev. Tidal

Depth Casin	Blows per Foot	No.	Type	Pen.	Rec.	Depth of Bor.	Sample: Blows Per 6" on Sampler (Force on Table) 0-6	6-12	12-18	18 - 24	Strata Change Depth	Field Identification of Soil: Remarks Incl. Color, Loss of Wash Water, Seams in Rock, Etc.
												Misc. sand, gravel & boulder. (Fill)
5		1	ss	0.0	0.0	5.0	50				9.0	
10		2	ss	2.0	0.5	12.0	1	0	1	0		Brown f/c sand, some silt (Possible fill)
15		3	ss	0.0	0.0	15.0	50					Boulders
20		4	ss	0.0	0.0	20.0	50				23.0	
25		5	ss	2.0	0.2	27.0	6	5	4	4		Gray organic silt, some fine sand.
30		6	ss	2.0	1.0	32.0	3	3	7	10		Gray fine sand. (Organic odor)
35		7	ss	2.0	1.5	37.0	1	2	4	8		Brown clayey silt.
40												

Ground Surface To ____ Ft. Used ____ " Casing Then ____ " Casing To _____ Ft. **HOLE NO. B - 7**
D = Dry W = Washed C = CoreD" = Pit A = Auger UP = Undisturbed Piston
UB = Undisturbed Ball Check T = Thin wall V = Vane Test
Proportions Used: Trace = 0-10%, little = 10-20%, Some = 20-35%, and = 35-5-%

HARDIMAN CO. & ASSOC., INC.
10 Fox Hunt Road
Shelton, CT 06484

CLIENT: SOUND ENGINEERING ASSOCIATES, LLC

SHEET 2 OF 2
HOLE NO. **B - 7**

CONTRACTOR
PROJECT NO. S - 377
LINE
FOREMAN—DRILLER A.S.
PROJECT NAME STONINGTON PIER
STATION
INSPECTOR Ben
LOCATION HIGH STREET, STONINGTON, CT
OFFSET

GROUND WATER OBSERVATIONS
AT ____ FT. AFTER ____ HOURS
AT ____ FT. AFTER ____ HOURS

Type	Casing FJ	Sampler SS	Core Bar "NQ"
Size I.D.		1 3/8"	2"
Hammer Wt.		300	SIT
Hammer Fall		30	Dia.

Date Start 8/13/24 Date Fin. 8/14/24
Surface Elev. _Existing ground
Ground Water Elev. Tidal

Depth Casin	Blows per Foot	No.	Type	Pen.	Rec.	Depth of Bor.	Sample: Blows Per 6" on Sampler (Force on Table) 0-6	6-12	12-18	18 - 24	Strata Change Depth	Field Identification of Soil: Remarks Incl. Color, Loss of Wash Water, Seams in Rock, Etc.
												Brown clayey silt.
5		5	ss	2.0	1.5	42.0	3	5	7	9		
10		6	ss	2.0	1.5	47.0	3	5	8	10		Brown m/f sand, trace gravel
15		7	x	2.0	0.0	52.0	7	12	14	12		
20		8	ss	2.0	0.5	37.0	6	7	8	9		
25		9	ss	2.0	1.5	62.0	3	3	3	5	62.0	E.O.B.
30												
35												
40												

Ground Surface To ____ Ft. Used ____ " Casing Then ____ " Casing To _____ Ft. **HOLE NO. B**
D = Dry W = Washed C = CoreD" = Pit A = Auger UP = Undisturbed Piston
UB = Undisturbed Ball Check T = Thin wall V = Vane Test
Proportions Used: Trace = 0-10%, little = 10-20%, Some = 20-35%, and = 35-5-%

HARDIMAN CO. & ASSOC., INC.
10 Fox Hunt Road
Shelton, CT 06484

CLIENT: SOUND ENGINEERING ASSOCIATES, LLC

SHEET 1 OF 2
HOLE NO. **B - 8**

CONTRACTOR
PROJECT NO. S - 377
LINE
FOREMAN—DRILLER TJH,III
PROJECT NAME STONINGTON PIER
STATION
INSPECTOR Ben
LOCATION HIGH STREET, STONINGTON, CT
OFFSET

GROUND WATER OBSERVATIONS
AT ____ FT. AFTER ____ HOURS
AT ____ FT. AFTER ____ HOURS

Type	Casing FJ	Sampler SS	Core Bar "NQ"
Size I.D.	4"	1 3/8"	2"
Hammer Wt.	Spin	140	SIT
Hammer Fall		30	Dia.

Date Start 8/8/24 Date Fin. 8/12/24
Surface Elev. _Existing ground
Ground Water Elev. Tidal

Depth Casin	Blows per Foot	No.	Type	Pen.	Rec.	Depth of Bor.	Sample: Blows Per 6" on Sampler (Force on Table) 0-6	6-12	12-18	18 - 24	Strata Change Depth	Field Identification of Soil: Remarks Incl. Color, Loss of Wash Water, Seams in Rock, Etc.
											0.5	Wood deck
												Air & water
5												
10		1	ss	2.0	0.4	22.0	4	13	7	2	12.0	Black sand, gravel, silt. (Fill)
15		2	ss	0.0	0.0	19.0	50					Boulders & cobbles
20		3	ss	2.0	1.0	32.0	12	12	11	11	29.0	Gray f/c sand & gravel, trace silt.
25		4	ss	2.0	1.0	37.0	6	10	13	11		Gray-brown clayey silt, little fine sand.
30												
35												
40												

Ground Surface To ____ Ft. Used ____ " Casing Then ____ " Casing To _____ Ft. **HOLE NO. B - 8**
D = Dry W = Washed C = CoreD" = Pit A = Auger UP = Undisturbed Piston
UB = Undisturbed Ball Check T = Thin wall V = Vane Test
Proportions Used: Trace = 0-10%, little = 10-20%, Some = 20-35%, and = 35-5-%

HARDIMAN CO. & ASSOC., INC.
10 Fox Hunt Road
Shelton, CT 06484

CLIENT: SOUND ENGINEERING ASSOCIATES, LLC

SHEET 2 OF 2
HOLE NO. **B - 8**

CONTRACTOR
PROJECT NO. S - 377
LINE
FOREMAN—DRILLER A.S.
PROJECT NAME STONINGTON PIER
STATION
INSPECTOR Ben
LOCATION HIGH STREET, STONINGTON, CT
OFFSET

GROUND WATER OBSERVATIONS
AT ____ FT. AFTER ____ HOURS
AT ____ FT. AFTER ____ HOURS

Type	Casing FJ	Sampler SS	Core Bar "NQ"
Size I.D.	4"	1 3/8"	2"
Hammer Wt.	Spin	140	SIT
Hammer Fall		30	Dia.

Date Start 8/8/24 Date Fin. 8/12/24
Surface Elev. _Existing ground
Ground Water Elev. Tidal

Depth Casin	Blows per Foot	No.	Type	Pen.	Rec.	Depth of Bor.	Sample: Blows Per 6" on Sampler (Force on Table) 0-6	6-12	12-18	18 - 24	Strata Change Depth	Field Identification of Soil: Remarks Incl. Color, Loss of Wash Water, Seams in Rock, Etc.
												Brown silt, little fine sand.
5		5	ss	2.0	1.0	42.0	6	10	9	8		
10		6	ss	2.0	1.0	47.0	4	4	4	4		
15		7	x	2.0	1.0	52.0	3	5	7	9	51.0	Brown f/c sand, some gravel.
20		8	ss	2.0	1.0	37.0	14	13	20	14		
25		9	ss	2.0	0.1	62.0	8	8	8	8	62.0	E.O.B.
30												
35												
40												

Ground Surface To ____ Ft. Used ____ " Casing Then ____ " Casing To _____ Ft. **HOLE NO. B - 8**
D = Dry W = Washed C = CoreD" = Pit A = Auger UP = Undisturbed Piston
UB = Undisturbed Ball Check T = Thin wall V = Vane Test
Proportions Used: Trace = 0-10%, little = 10-20%, Some = 20-35%, and = 35-5-%

0	3/31/25	ISSUE FOR BID

SOIL TEST BORING LOGS
PIER REHABILITATION
STONINGTON TOWN DOCK
STONINGTON HARBOR
MAY 7, 2025

PROPERTY OF
TOWN OF STONINGTON
CONNECTICUT

APPROVED

DATE

SHEET 5

PREPARED BY:
DOCKO
SOUND ENGINEERING ASSOCIATES
MYSTIC,CT 06355
860 572-8939
EMAIL office@docko.com

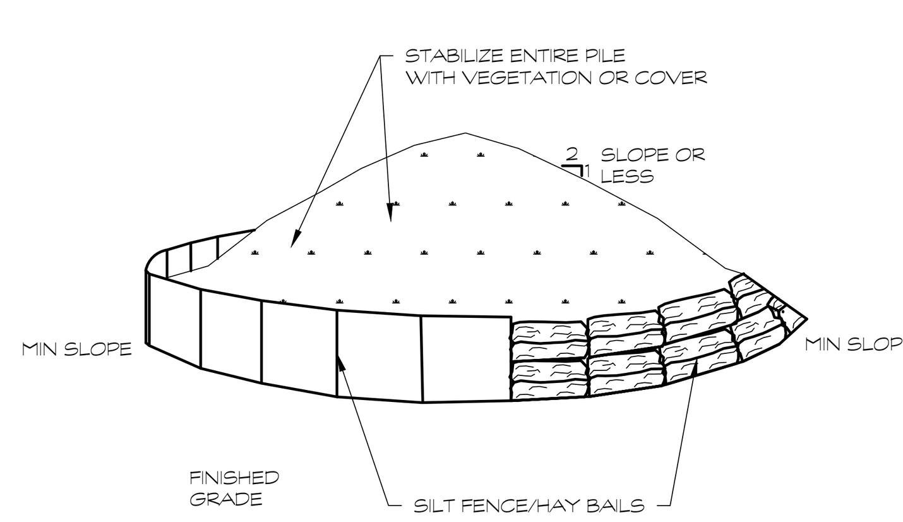
DWG# 24-02-3325

STATE OF CONNECTICUT — TIMOTHY J. HARDIMAN — LICENSED — 17011 — PROFESSIONAL ENGINEER

SITE UTILIZATION PLAN

GRAPHIC SCALE 1" = 20'

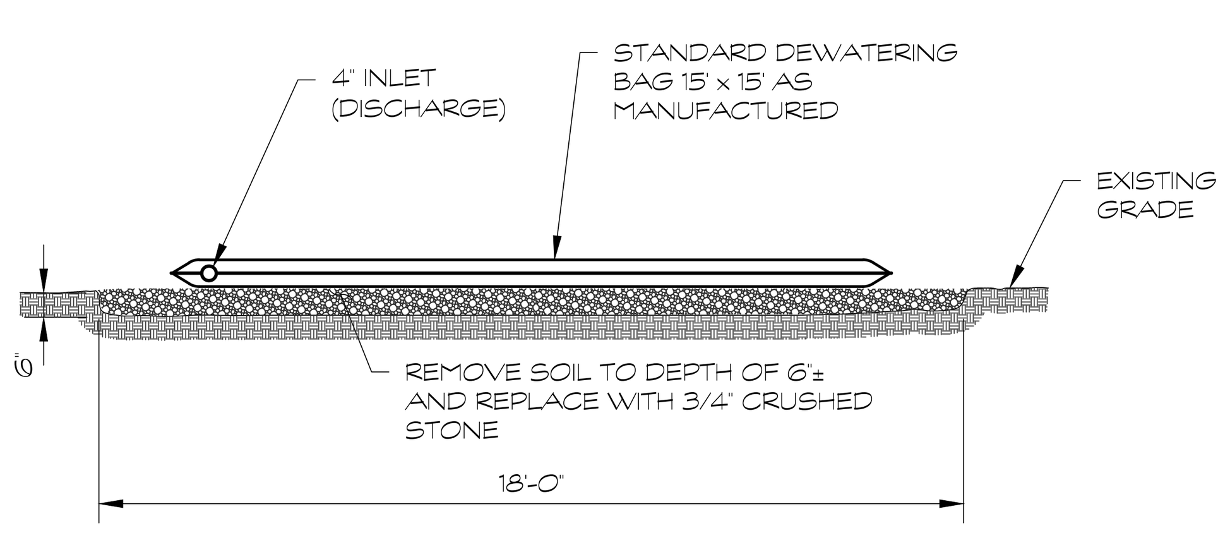
20 10 0 20



NOTES:
1. AREA CHOSEN FOR STOCKPLING OPERATION SHALL BE DRY AND STABLE.
2. MAXIMUM SLOPE OF STOCKPILE SHALL BE 2:1.
3. UPON COMPLETION OF SOIL STOCKPILING, EACH PILE SHALL BE SURROUNDED WITH REINFORCED SILT FENCING, THEN STABLIZED WITH VEGETATION OR COVERED.

SOIL STOCKPILE

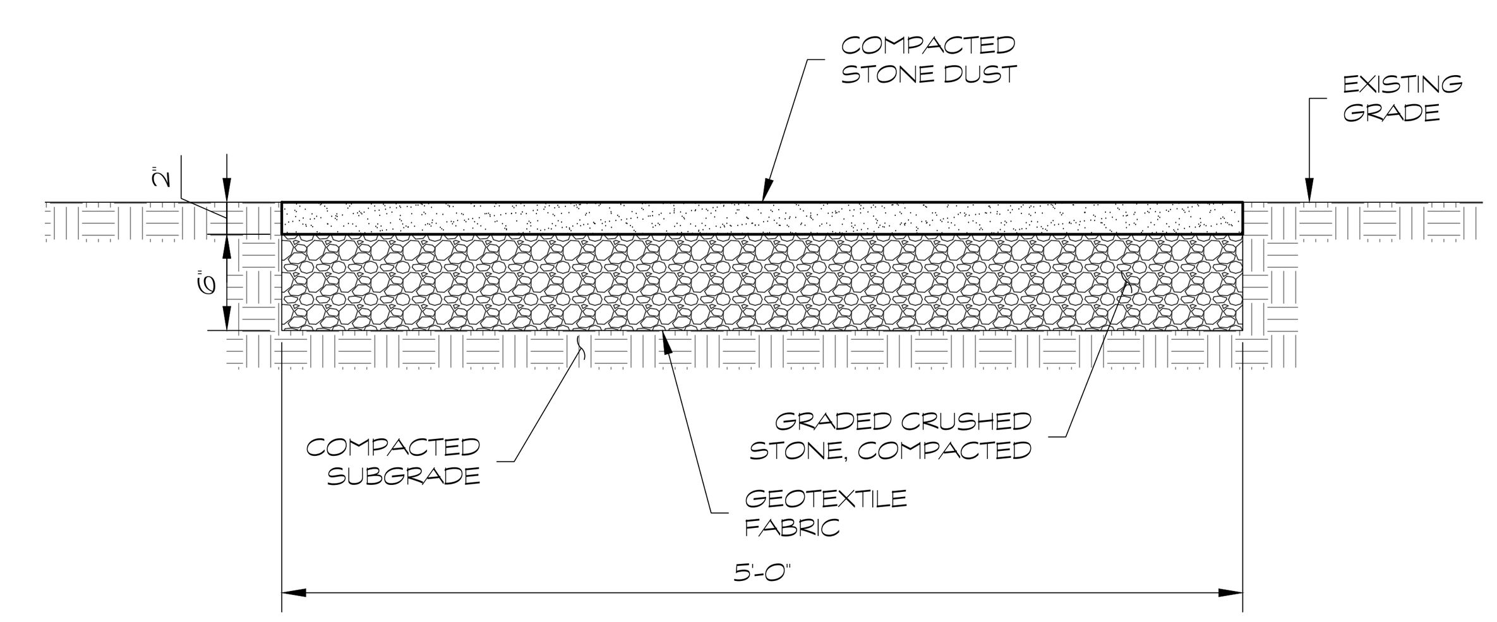
N.T.S.



DEWATERING BAG DETAIL

GRAPHIC SCALE 1/4" = 1'

1/4 1/8 0 1/4



STONEDUST WALKWAY DETAIL

GRAPHIC SCALE 1" = 1'

1 1/2 0 1

ALL BATHYMETRY IS IN MLLWD
ALL LAND CONTOURS SPOT AND OTHER SPECIFIED ELEVATIONS ARE IN NAVD-88

0	3/31/25	ISSUE FOR BID

SITE UTILIZATION PLAN
PIER REHABILITATION
STONINGTON TOWN DOCK
STONINGTON HARBOR
MAY 7, 2025

PROPERTY OF
TOWN OF STONINGTON
CONNECTICUT

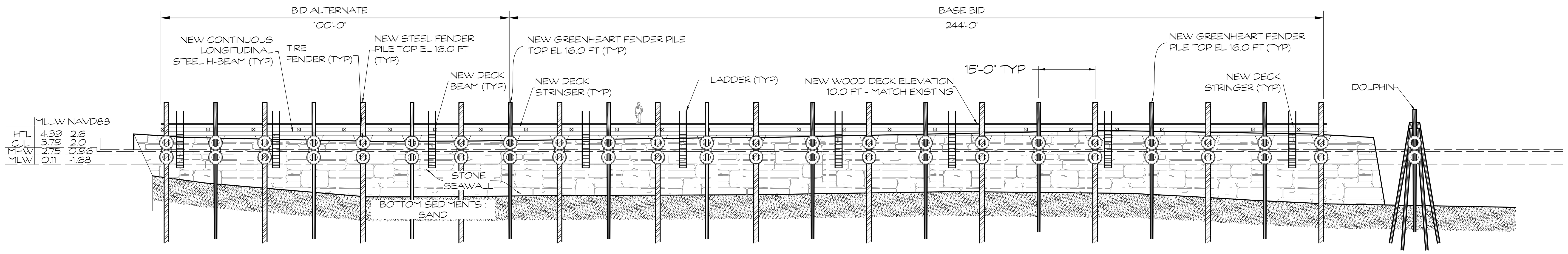
APPROVED

DATE

SHEET 6

PREPARED BY:
DOCKO
SOUND ENGINEERING ASSOCIATES
MYSTIC CT 06355
860 572-8939
EMAIL: office@docko.com

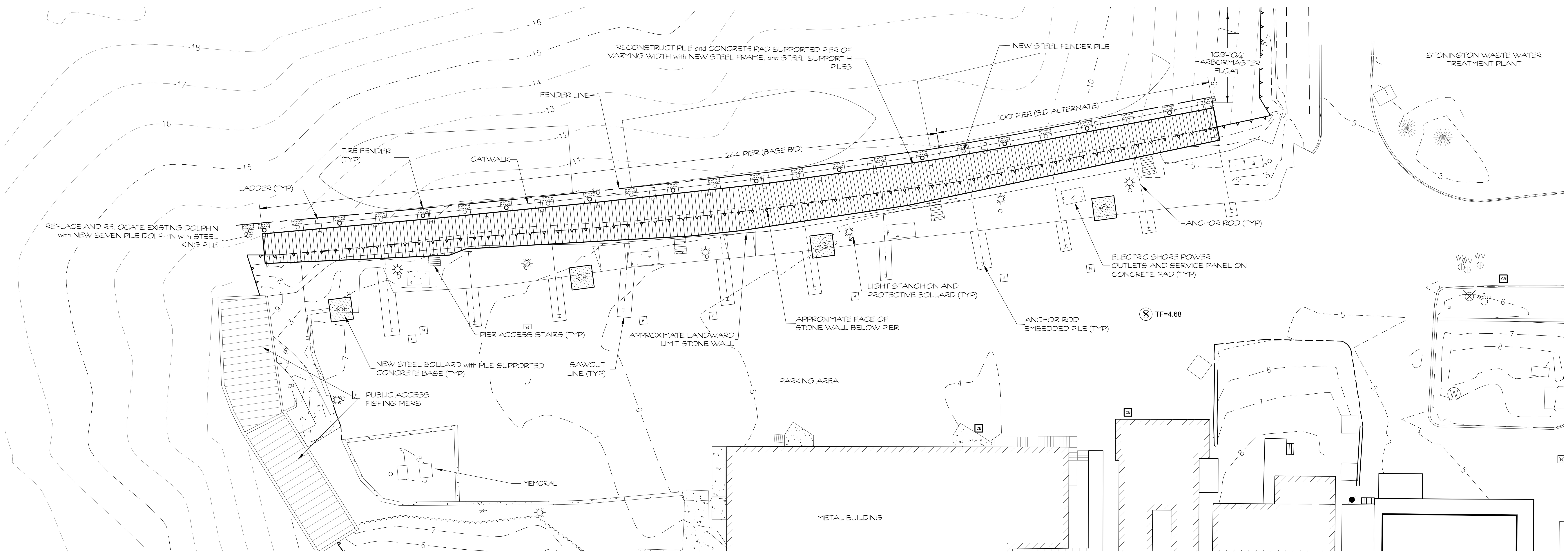
DWG 24-02-3325



DEVELOPED ELVATION

GRAPHIC SCALE 1" = 20'

20 10 0 20



NOTE:
CONTRACTOR SHALL TEMPORARILY REMOVE FIRE EXSTINGUISHER(S), UTILITIES, SIGNS AND OTHER INCIDENTAL FIXED EQUIPMENT AND REINSTALL ON NEW DOCK.

PLAN VIEW

GRAPHIC SCALE 1" = 20'

20 10 0 20

ALL BATHYMETRY IS IN MLLWD
ALL LAND CONTOURS SPOT AND OTHER SPECIFIED ELEVATIONS ARE IN NAVD-88

0	3/31/25	ISSUE FOR BID

DOCK PLAN & ELEVATION
PIER REHABILITATION
STONINGTON TOWN DOCK
STONINGTON HARBOR
MAY 7, 2025

PROPERTY OF
TOWN OF STONINGTON
CONNECTICUT

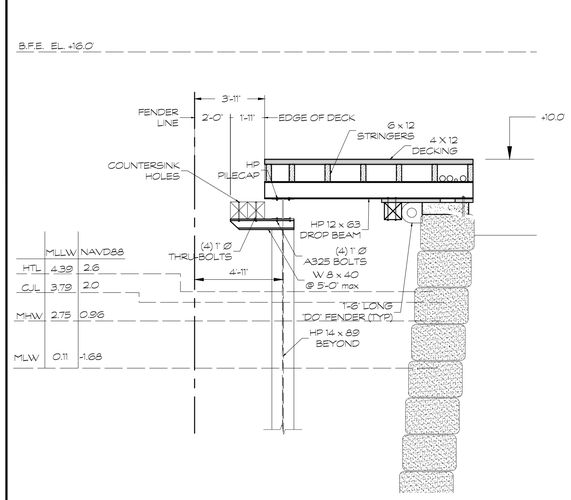
APPROVED

DATE

SHEET 7

PREPARED BY:
DOCKO
SOUND ENGINEERING ASSOCIATES
MYSTIC CT 06355
860 572-8939
EMAIL office@docko.com

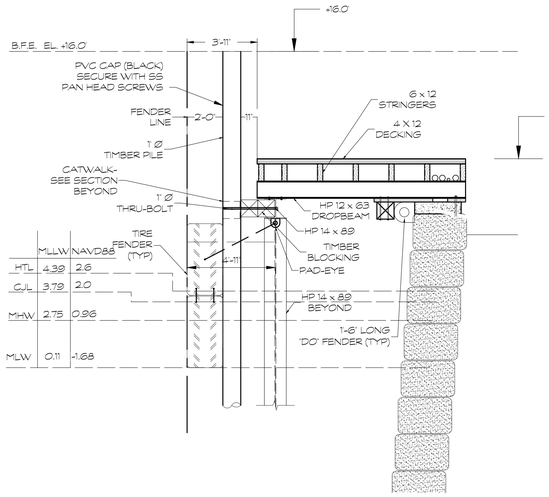
DWG 24-02-3325



SECTION AT CATWALK

GRAPHIC SCALE 1" = 4'

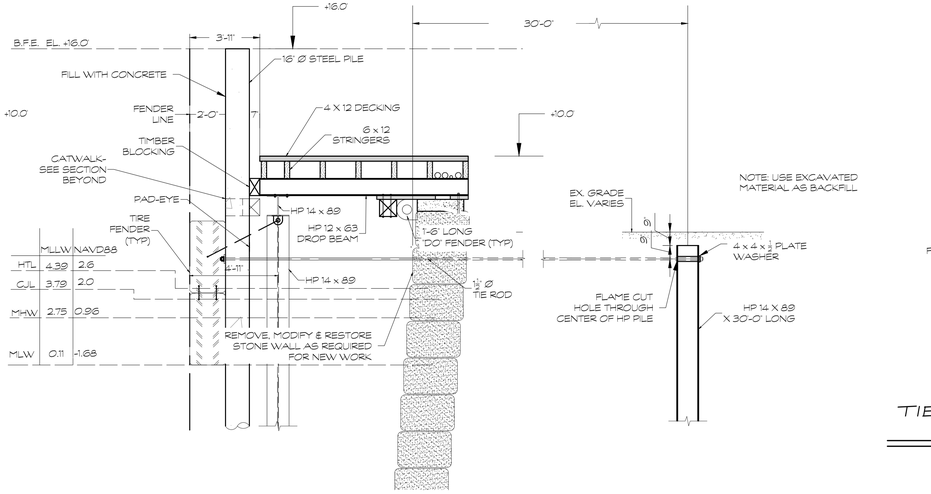
4 2 0 4



SECTION AT TIMBER PILE

GRAPHIC SCALE 1" = 4'

4 2 0 4



SECTION AT STEEL PILE

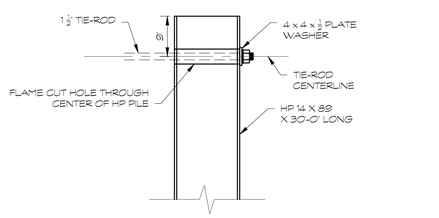
GRAPHIC SCALE 1" = 4'

4 2 0 4

TIE-BACK CONNECTION DETAIL

GRAPHIC SCALE 1" = 4'

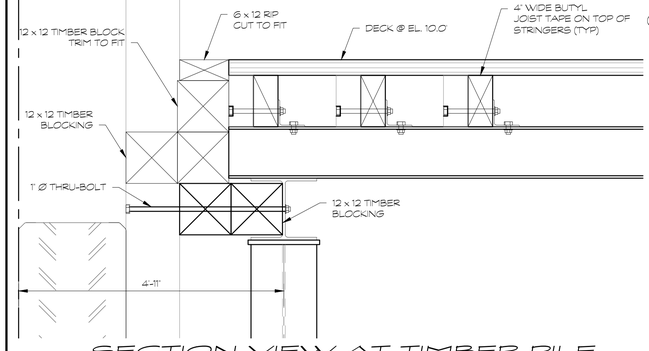
4 2 0 4



TIE-BACK TO ANCHOR PILE CONNECTION DETAIL

GRAPHIC SCALE 3/4" = 1'

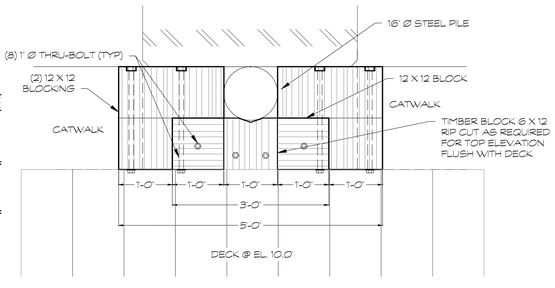
3/4 3/8 0 3/4



SECTION VIEW AT TIMBER PILE

GRAPHIC SCALE 3/4" = 1'

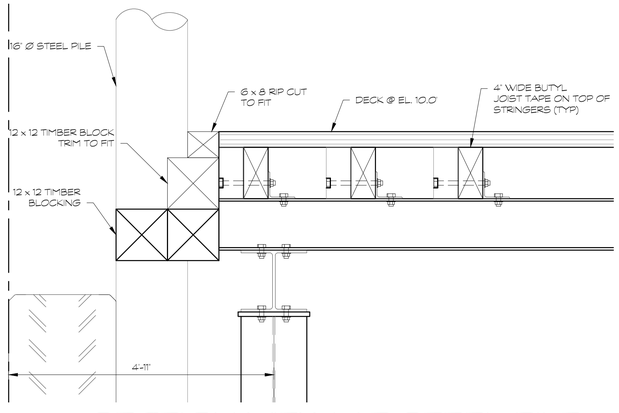
3/4 3/8 0 3/4



PLAN DETAIL AT TIMBER PILE

GRAPHIC SCALE 3/4" = 1'

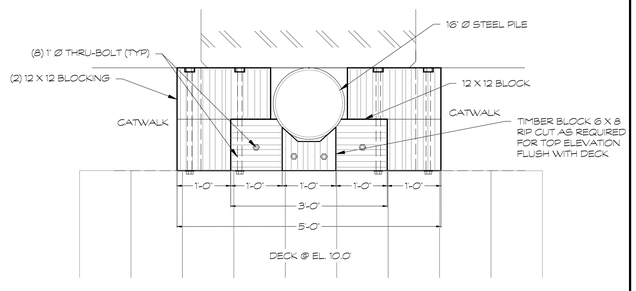
3/4 3/8 0 3/4



SECTION VIEW AT STEEL PILE

GRAPHIC SCALE 3/4" = 1'

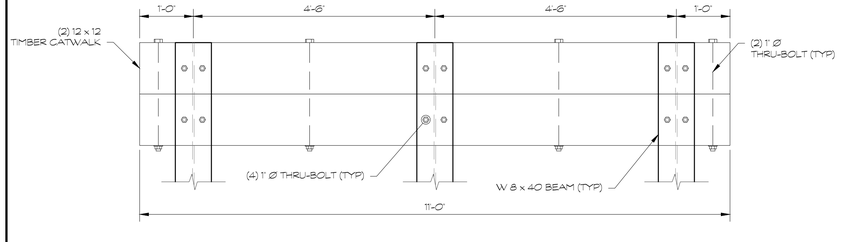
3/4 3/8 0 3/4



PLAN DETAIL AT STEEL PILE

GRAPHIC SCALE 3/4" = 1'

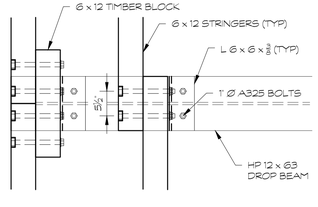
3/4 3/8 0 3/4



TYPICAL CATWALK PLAN

GRAPHIC SCALE 3/4" = 1'

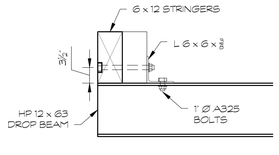
3/4 3/8 0 3/4



PLAN VIEW AT STRINGERS

GRAPHIC SCALE 3/4" = 1'

3/4 3/8 0 3/4



SECTION VIEW AT STRINGERS

GRAPHIC SCALE 3/4" = 1'

3/4 3/8 0 3/4

ALL BATHYMETRY IS IN MLLWD
ALL LAND CONTOURS SPOT AND OTHER SPECIFIED ELEVATIONS ARE IN NAVD-88

0	3/31/25	ISSUE FOR BID

TYPICAL DETAILS
PIER REHABILITATION
STONINGTON TOWN DOCK
STONINGTON HARBOR
MAY 7, 2025

PROPERTY OF
TOWN OF STONINGTON
CONNECTICUT

APPROVED

DATE

SHEET 8

PREPARED BY:
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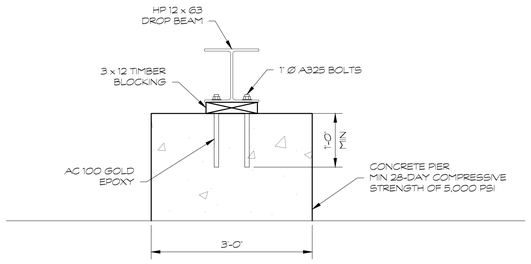
860 572-8939
EMAIL: office@docko.com

DWG 24-02-3325

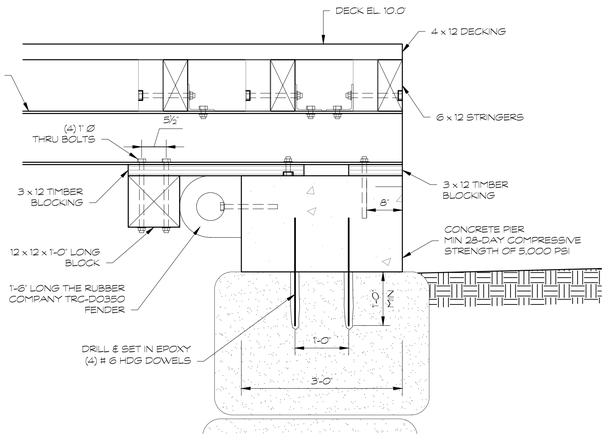
STATE OF CONNECTICUT — 12011 — LICENSED PROFESSIONAL ENGINEER



PROFILE VIEW AT CONCRETE PIER

GRAPHIC SCALE 3/4 " = 1'

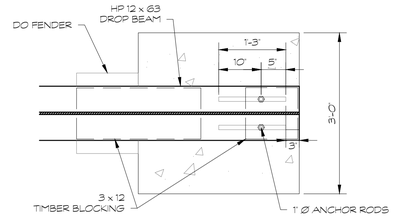
3/4 3/8 0 3/4



PROFILE VIEW AT CONCRETE PIER

GRAPHIC SCALE 3/4 " = 1'

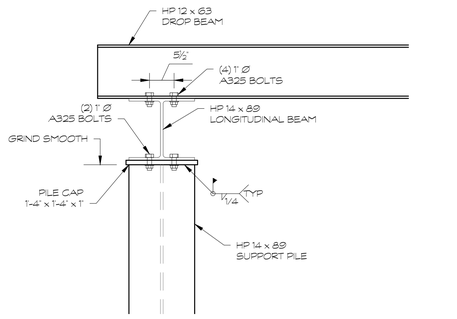
3/4 3/8 0 3/4



PLAN VIEW AT CONCRETE PIER

GRAPHIC SCALE 3/4 " = 1'

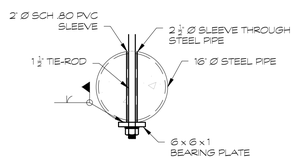
3/4 3/8 0 3/4



TYPICAL BEAM CONNECTIONS

GRAPHIC SCALE 3/4 " = 1'

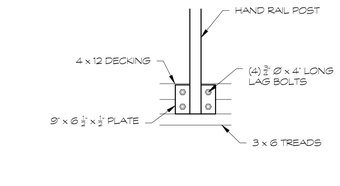
3/4 3/8 0 3/4



TYPICAL TIE-ROD CONNECTION DETAIL

GRAPHIC SCALE 3/4 " = 1'

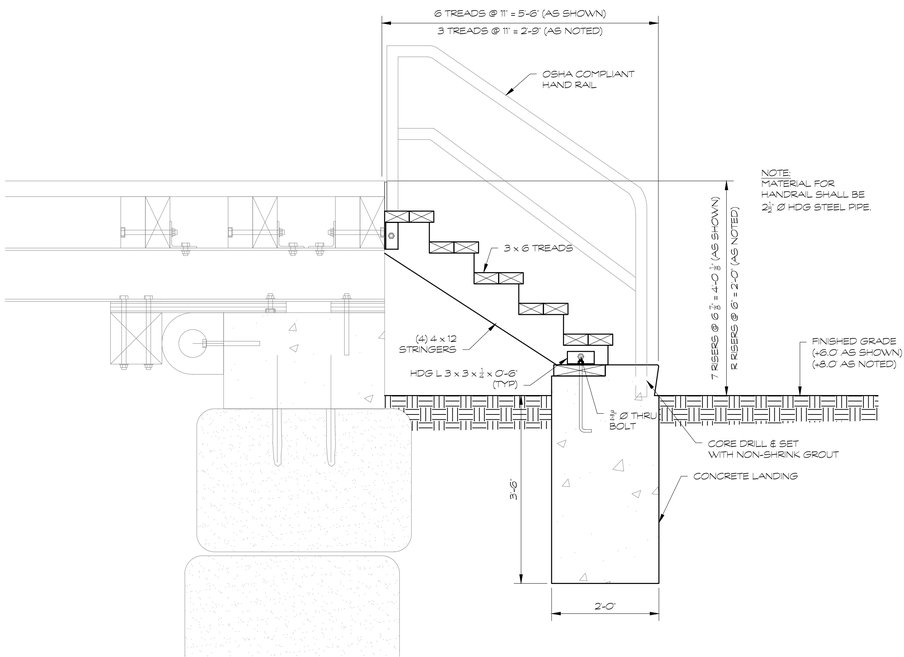
3/4 3/8 0 3/4



TYPICAL HAND RAIL POST CONNECTION

GRAPHIC SCALE 3/4 " = 1'

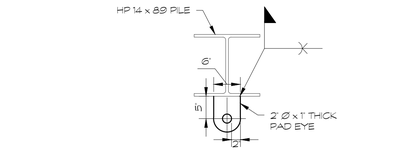
3/4 3/8 0 3/4



TYPICAL STAIR DETAIL

GRAPHIC SCALE 3/4 " = 1'

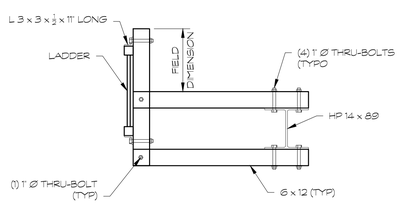
3/4 3/8 0 3/4



TIRE FENDER PAD EYE CONNECTION DETAIL

GRAPHIC SCALE 3/4 " = 1'

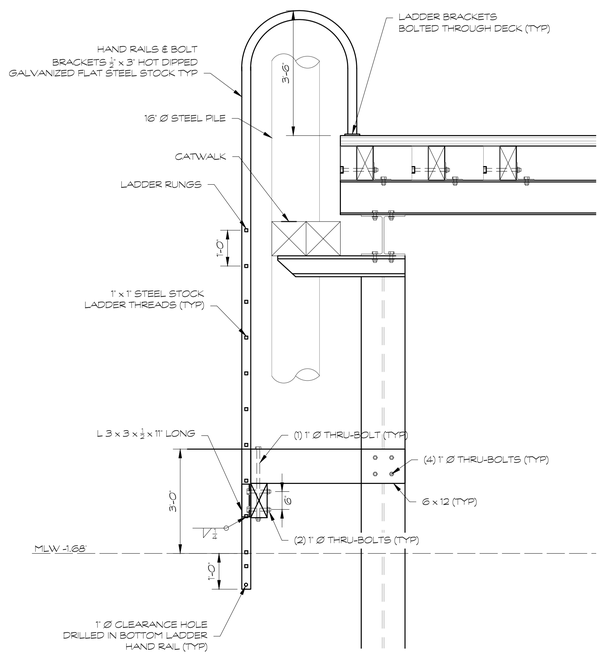
3/4 3/8 0 3/4



PLAN VIEW AT LADDER

GRAPHIC SCALE 1/2 " = 1'

1/2 1/4 0 1/2



TYPICAL LADDER DETAIL

GRAPHIC SCALE 1/2 " = 1'

1/2 1/4 0 1/2

ALL BATHYMETRY IS IN MLLWD
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0	3/31/25	ISSUE FOR BID

TYPICAL DETAILS
PIER REHABILITATION
STONINGTON TOWN DOCK
STONINGTON HARBOR
MAY 7, 2025

PROPERTY OF
TOWN OF STONINGTON
CONNECTICUT

APPROVED

DATE

SHEET 9

PREPARED BY:
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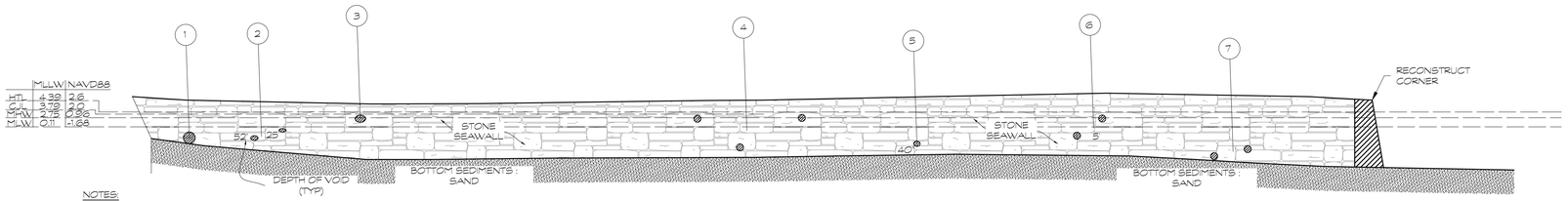
DWG 24-02-3325

STATE OF CONNECTICUT
CHRISTOPHER M. DOCKO
12011
LICENSED
PROFESSIONAL ENGINEER



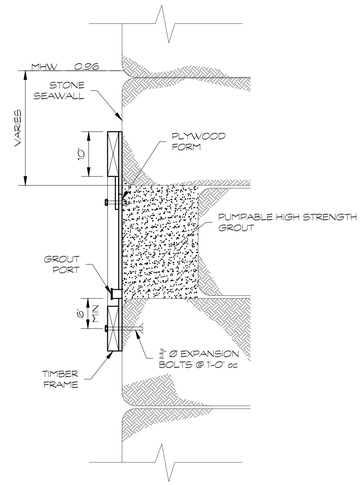
NOTES:

1. VOID SIZES ARE APPROXIMATES & IRREGULAR IN SHAPE
2. OPENINGS LESS THAN 6" ARE NOT SHOWN

SEAWALL ELEVATION LOOKING SOUTH

GRAPHIC SCALE 1" = 20'

20 10 0 20



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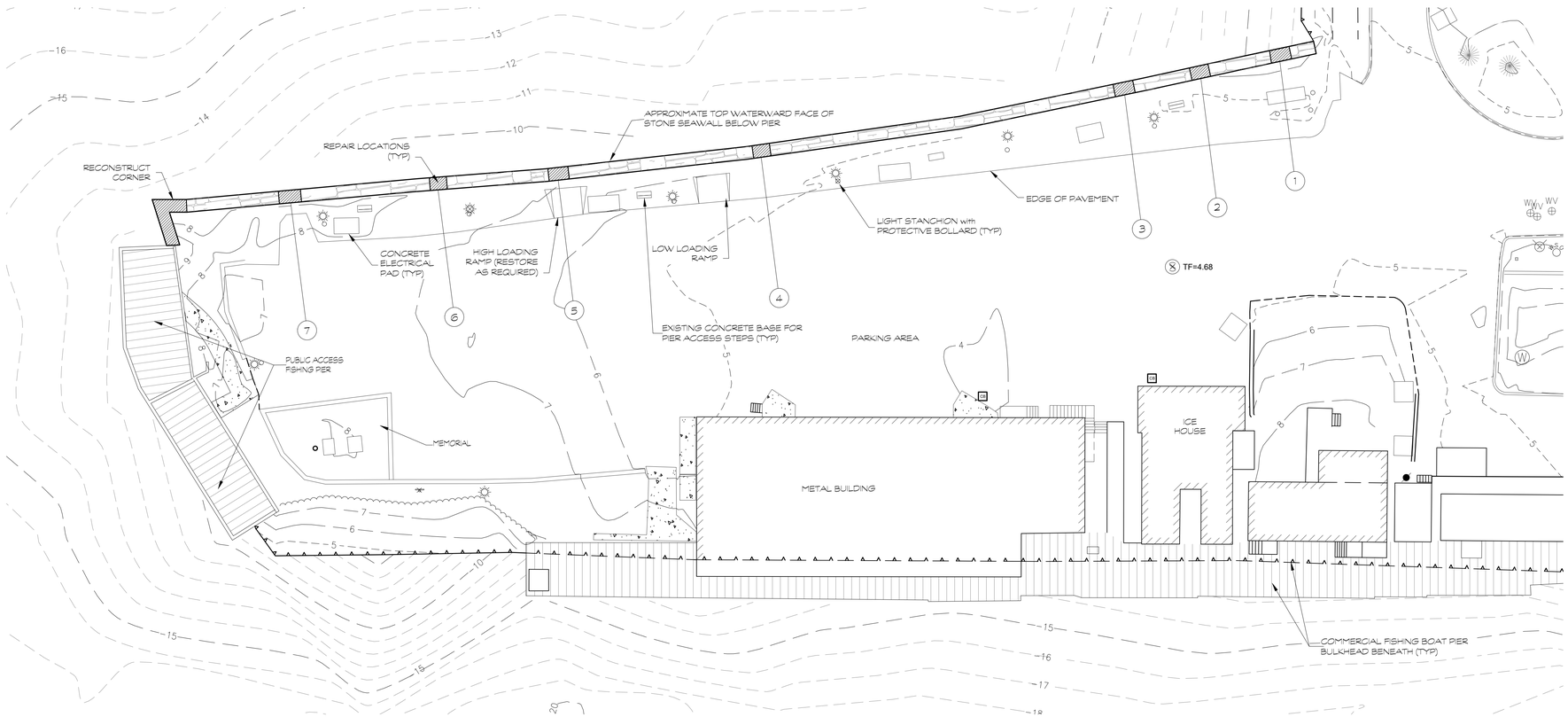
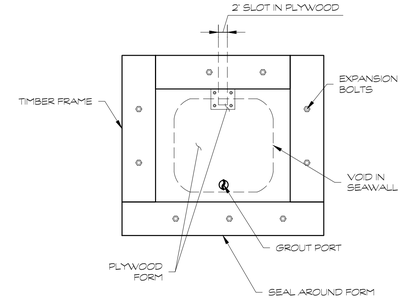


EXCAVATION PLAN

GRAPHIC SCALE 1" = 20'

20 10 0 20



FRONT VIEW

SEAWALL REPAIR DETAIL

GRAPHIC SCALE 3/4" = 1

3/4 3/8 0 3/4

NOTES:

1. DETAIL IS CONCEPT ONLY. VOIDS VARY IN SIZE. CONTRACTOR IS RESPONSIBLE FOR THE DESIGN OF FORMWORK.
2. UPON COMPLETION OF REPAIR, ALL FORMWORK AND HARDWARE SHALL BE REMOVED.
3. CONTRACTOR SHALL INCLUDE IN HIS SCOPE AN UNDERWATER INSPECTION WITH THE ENGINEER TO REVIEW THE AS-BUILT CONDITION OF THE REPAIR WORK.

ALL BATHYMETRY IS IN MLLWD
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0	3/31/25	ISSUE FOR BID

SEAWALL REPAIR PLAN
PIER REHABILITATION
STONINGTON TOWN DOCK
STONINGTON HARBOR
MAY 7, 2025

PROPERTY OF
TOWN OF STONINGTON
CONNECTICUT

APPROVED

DATE

SHEET 10

PREPARED BY:
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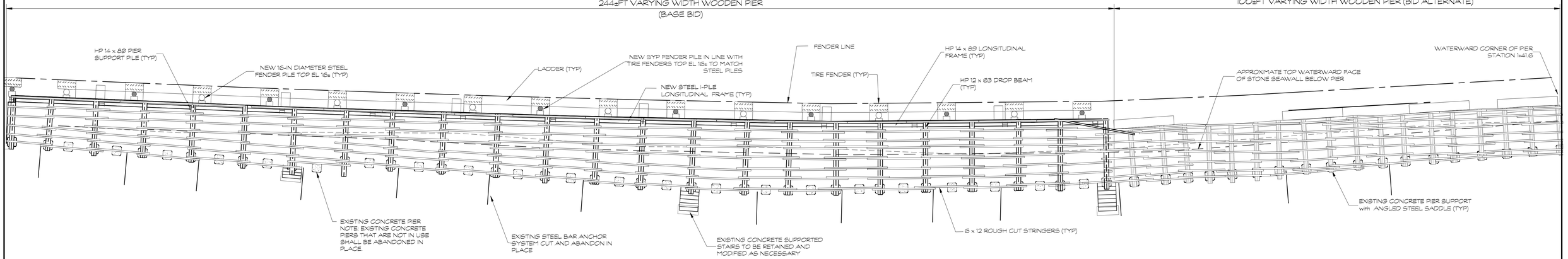
DWG 24-03-3325

STATE OF CONNECTICUT · 12017 · LICENSED PROFESSIONAL ENGINEER

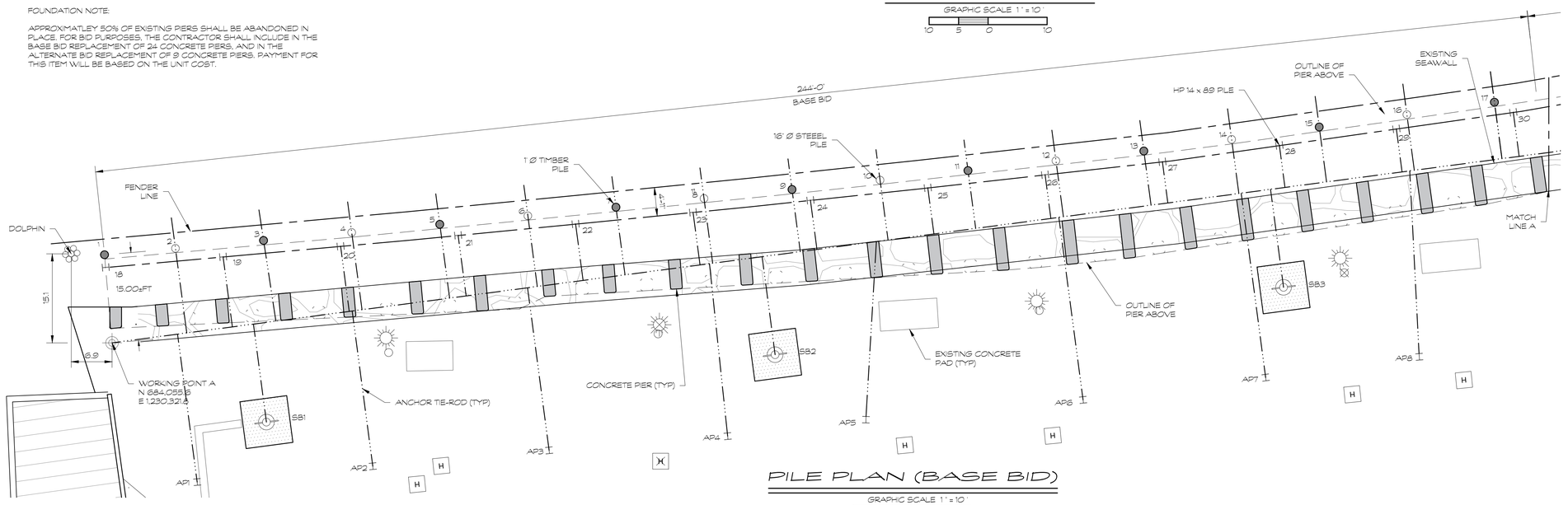


FRAMING PLAN

GRAPHIC SCALE 1" = 10'
10 5 0 10

FOUNDATION NOTE:

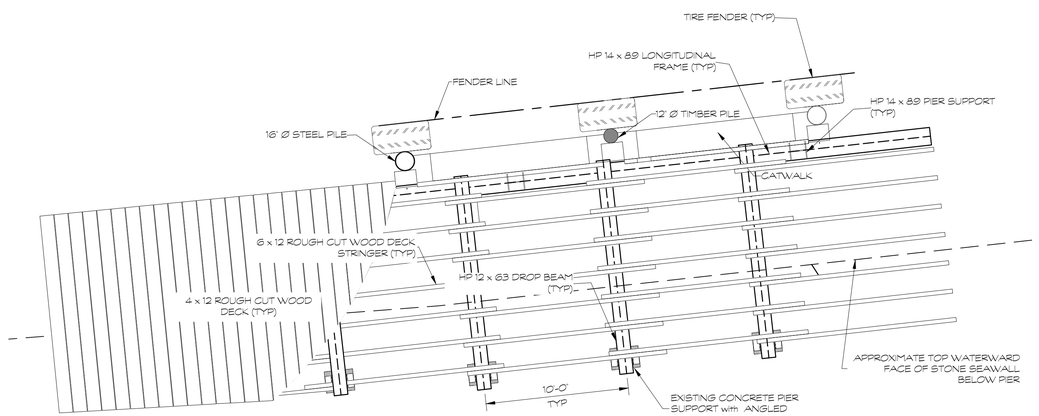
APPROXIMATLEY 50% OF EXISTING PIERS SHALL BE ABANDONED IN PLACE. FOR BID PURPOSES, THE CONTRACTOR SHALL INCLUDE IN THE BASE BID REPLACEMENT OF 24 CONCRETE PIERS, AND IN THE ALTERNATE BID REPLACEMENT OF 9 CONCRETE PIERS. PAYMENT FOR THIS ITEM WILL BE BASED ON THE UNIT COST.



PILE PLAN (BASE BID)

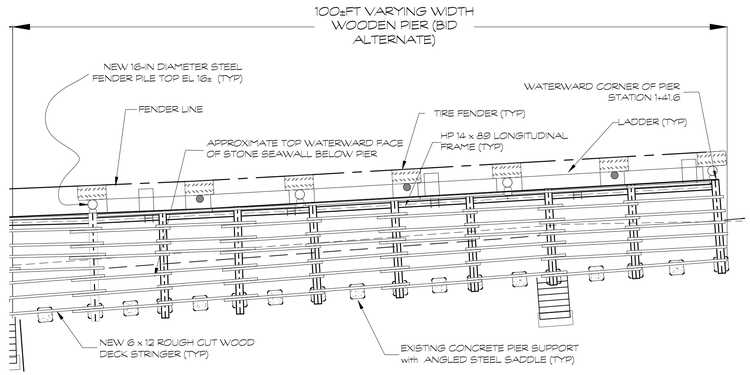
GRAPHIC SCALE 1" = 10'
10 5 0 10

PILE SCHEDULE (BASE BID)			
PILE NUMBER	PILE TYPE	DISTANCE FROM MARKER LINE N SOUTH TO NORTH (FT)	DISTANCE FROM MARKER LINE N WEST TO EAST (FT)
1	12 N Ø TIMBER PILE	15.0	0
2	16 N Ø STEEL PILE	14.9	12.8
3	12 N Ø TIMBER PILE	13.8	28.0
4	16 N Ø STEEL PILE	13.2	42.7
5	12 N Ø TIMBER PILE	12.8	57.7
6	16 N Ø STEEL PILE	12.1	72.7
7	12 N Ø TIMBER PILE	11.8	87.7
8	16 N Ø STEEL PILE	11.1	102.7
9	12 N Ø TIMBER PILE	10.8	117.7
10	16 N Ø STEEL PILE	10.2	132.7
11	12 N Ø TIMBER PILE	9.8	147.7
12	16 N Ø STEEL PILE	9.8	162.7
13	12 N Ø TIMBER PILE	9.3	177.7
14	16 N Ø STEEL PILE	8.9	192.7
15	12 N Ø TIMBER PILE	8.4	207.7
16	16 Ø STEEL PILE	8.5	222.7
17	12 N Ø TIMBER PILE	8.7	237.7
18	HP 14 x 89	12.8	0
19	HP 14 x 89	12.0	20.8
20	HP 14 x 89	11.2	40.8
21	HP 14 x 89	10.4	60.8
22	HP 14 x 89	9.7	80.8
23	HP 14 x 89	9.0	100.8
24	HP 14 x 89	8.4	120.8
25	HP 14 x 89	7.9	140.8
26	HP 14 x 89	7.5	160.8
27	HP 14 x 89	7.1	180.8
28	HP 14 x 89	7.2	200.8
29	HP 14 x 89	7.4	220.8
30	HP 14 x 89	7.8	240.8
SB1	BOLLARD PILE	18.8	34.2
SB2	BOLLARD PILE	18.8	111.2
SB3	BOLLARD PILE	18.8	1288.1
AP1	HP 14 x 89	25.3	11.2
AP2	HP 14 x 89	26.8	47.1
AP3	HP 14 x 89	27.8	71.1
AP4	HP 14 x 89	29.4	107.4
AP5	HP 14 x 89	29.7	127.8
AP6	HP 14 x 89	31.2	161.9
AP7	HP 14 x 89	31.8	1283.1
AP8	HP 14 x 89	31.0	22.6



PLAN VIEW DETAIL

GRAPHIC SCALE 1" = 5
5 4 3 2 1 0 5



ALTERNATE BID FRAMING PLAN

GRAPHIC SCALE 1" = 10'
10 5 0 10

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0	3/31/25	ISSUE FOR BID

PILE AND FRAMING PLANS PIER REHABILITATION

STONINGTON TOWN DOCK STONINGTON HARBOR MAY 7, 2025

PROPERTY OF
TOWN OF STONINGTON
CONNECTICUT

APPROVED

DATE

SHEET 11

PREPARED BY:
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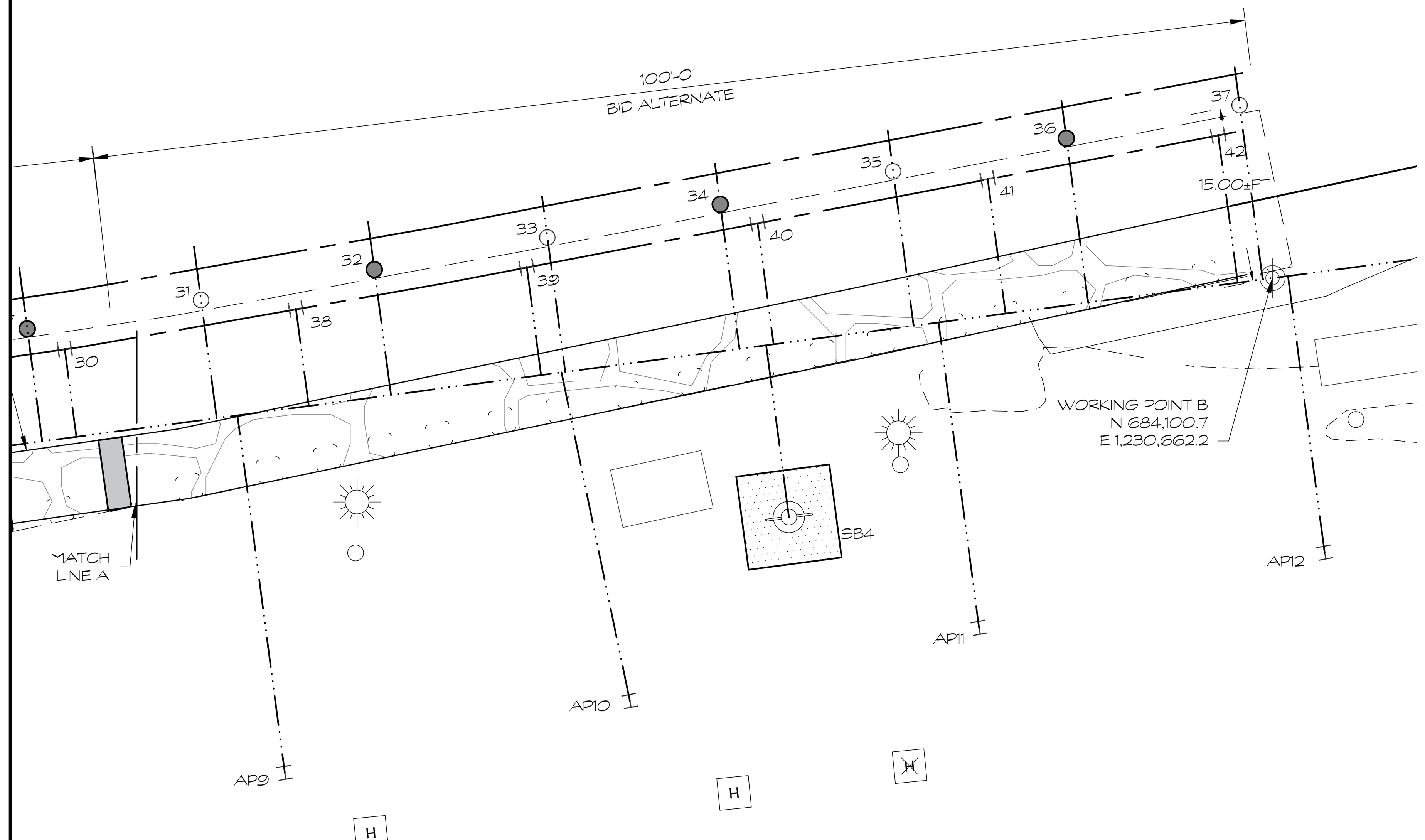
DWG 24-02-3925

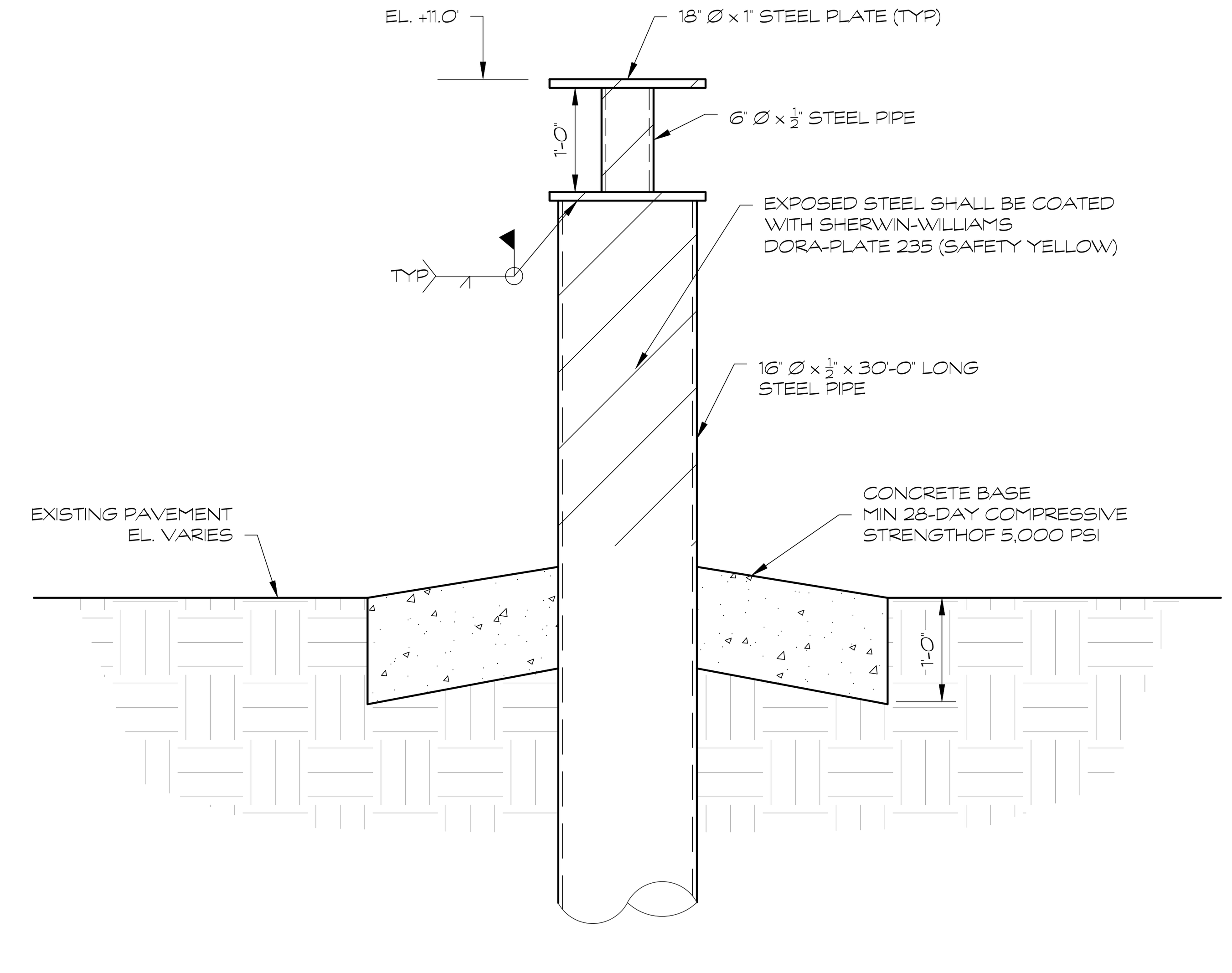
STATE OF CONNECTICUT
LICENSED PROFESSIONAL ENGINEER

PILE SCHEDULE (BID ALTERNATE)			
PILE NUMBER	PILE TYPE	DISTANCE FROM MARKER LINE IN SOUTH TO NORTH (FT)	DISTANCE FROM MARKER LINE IN WEST TO EAST (FT)
31	16 IN Ø STEEL PILE	10.2	252.7
32	12 IN Ø TIMBER PILE	10.8	267.2
33	16 IN Ø STEEL PILE	11.6	282.7
34	12 IN Ø TIMBER PILE	12.4	297.6
35	16 IN Ø STEEL PILE	13.3	312.6
36	12 IN Ø TIMBER PILE	14.1	327.6
37	16 IN Ø STEEL PILE	15.0	342.6
38	HP 14 x 84	8.41	280.6
39	HP 14 x 84	9.3	280.6
40	HP 14 x 84	10.4	300.6
41	HP 14 x 84	11.6	320.5
42	HP 14 x 84	12.7	340.5
SB4	BOLLARD PILE	14.8	300
AP9	HP 14 x 89	30.7	254.5
AP10	HP 14 x 89	28.6	282.3
AP11	HP 14 x 89	26.3	314.8
AP12	HP 14 x 89	23.8	344.8



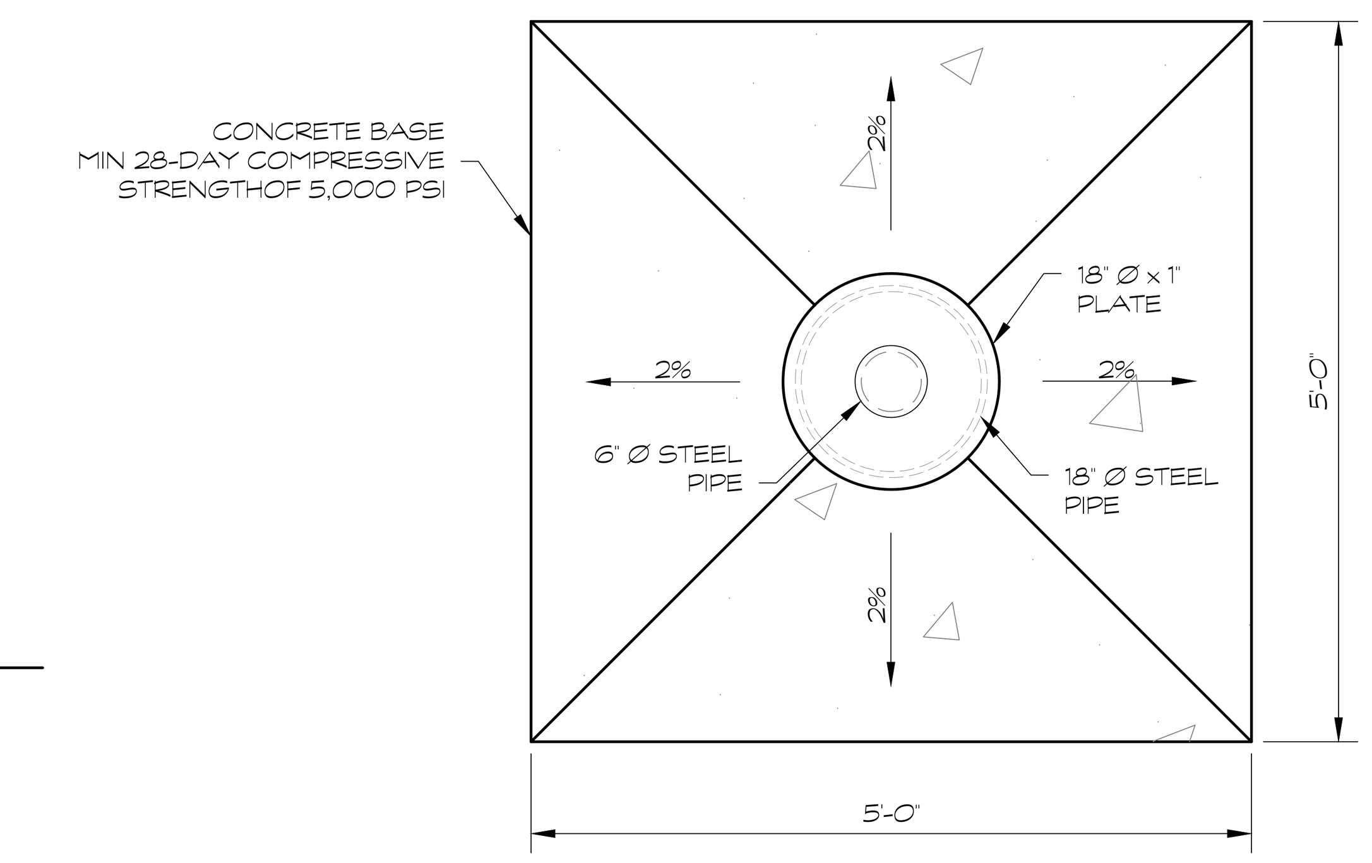
PILE PLAN (BID ALTERNATE)

GRAPHIC SCALE 1" = 10'



TYPICAL PROPOSED SECTION

GRAPHIC SCALE 3/4" = 1'



REMOTE BOLLARD DETAIL

GRAPHIC SCALE 3/4" = 1'

STORM BOLLARD MOORING PLAN

GRAPHIC SCALE 1" = 10'

ALL BATHYMETRY IS IN MLLWD
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0	3/31/25	ISSUE FOR BID

STORM BOLLARD PLAN
PIER REHABILITATION
STONINGTON TOWN DOCK
STONINGTON HARBOR
MAY 7, 2025

PROPERTY OF
TOWN OF STONINGTON
CONNECTICUT

APPROVED

DATE

SHEET 12

PREPARED BY:
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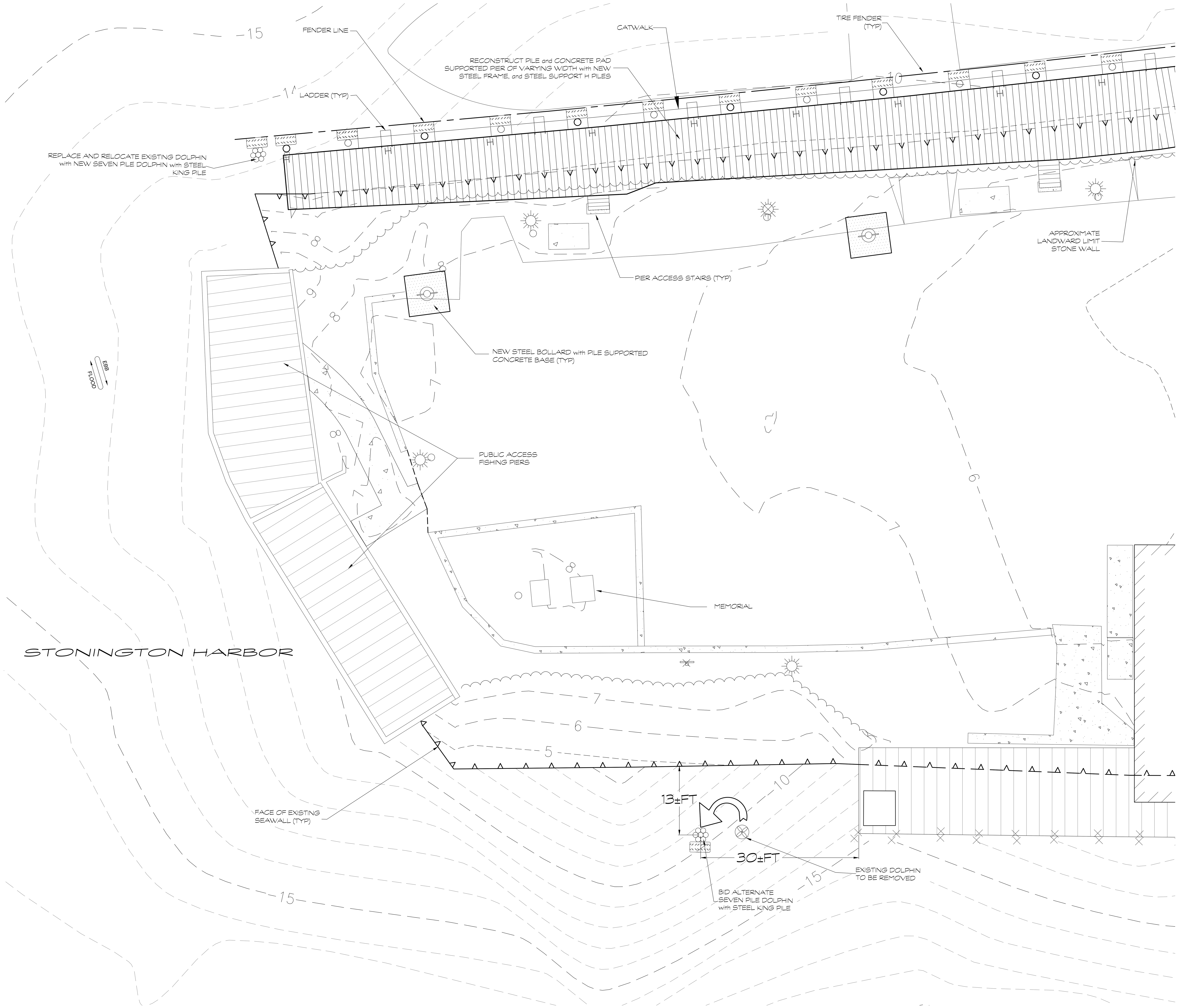
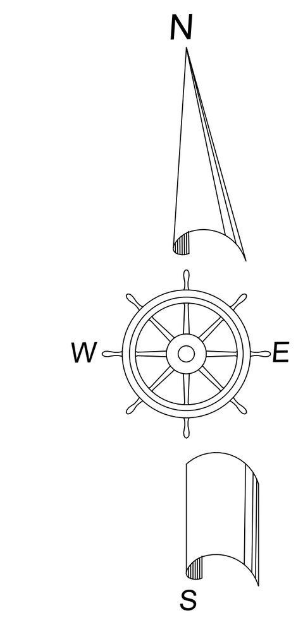
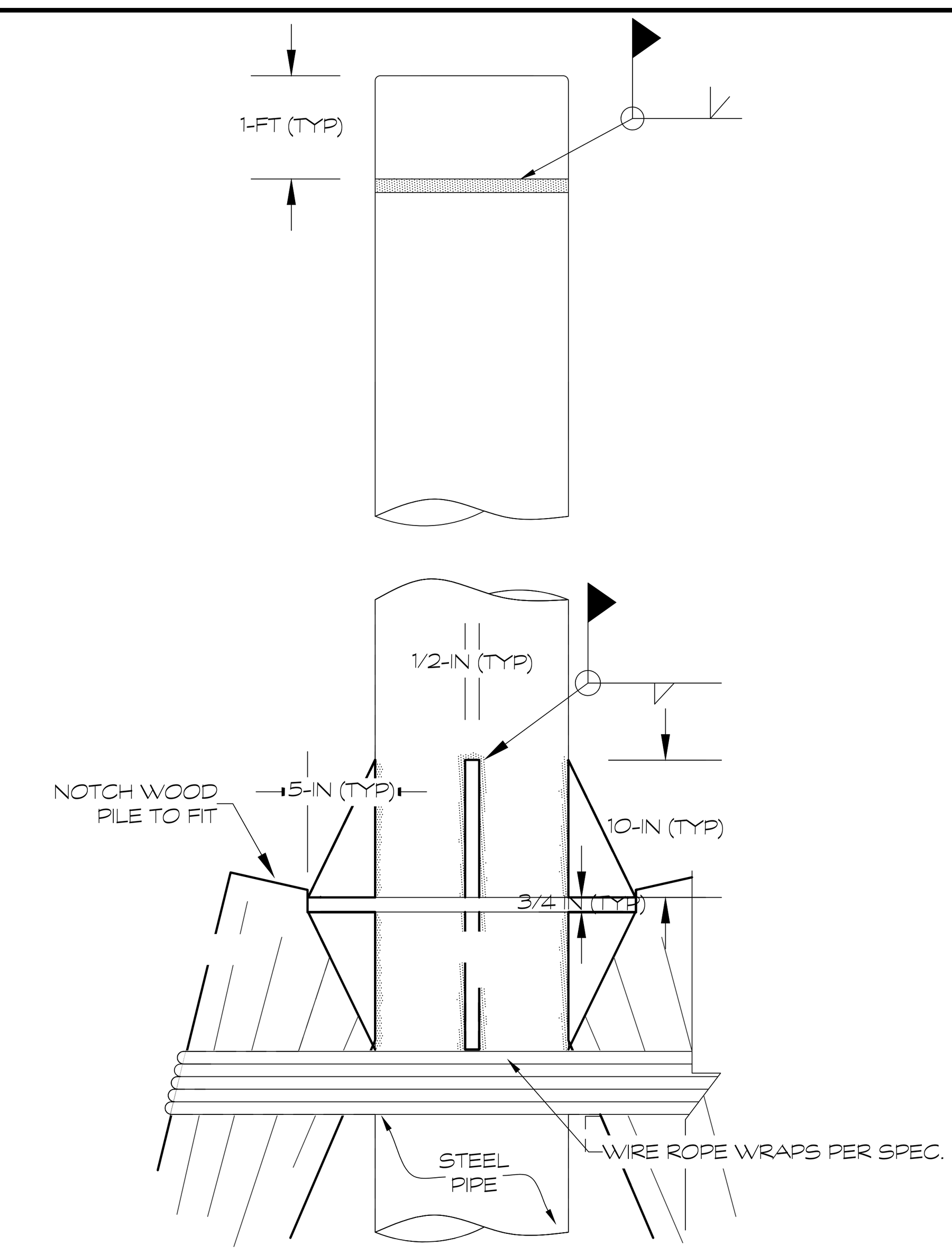
DWG 24-02-3325



DOLPHIN RECONSTRUCTION PLAN VIEW

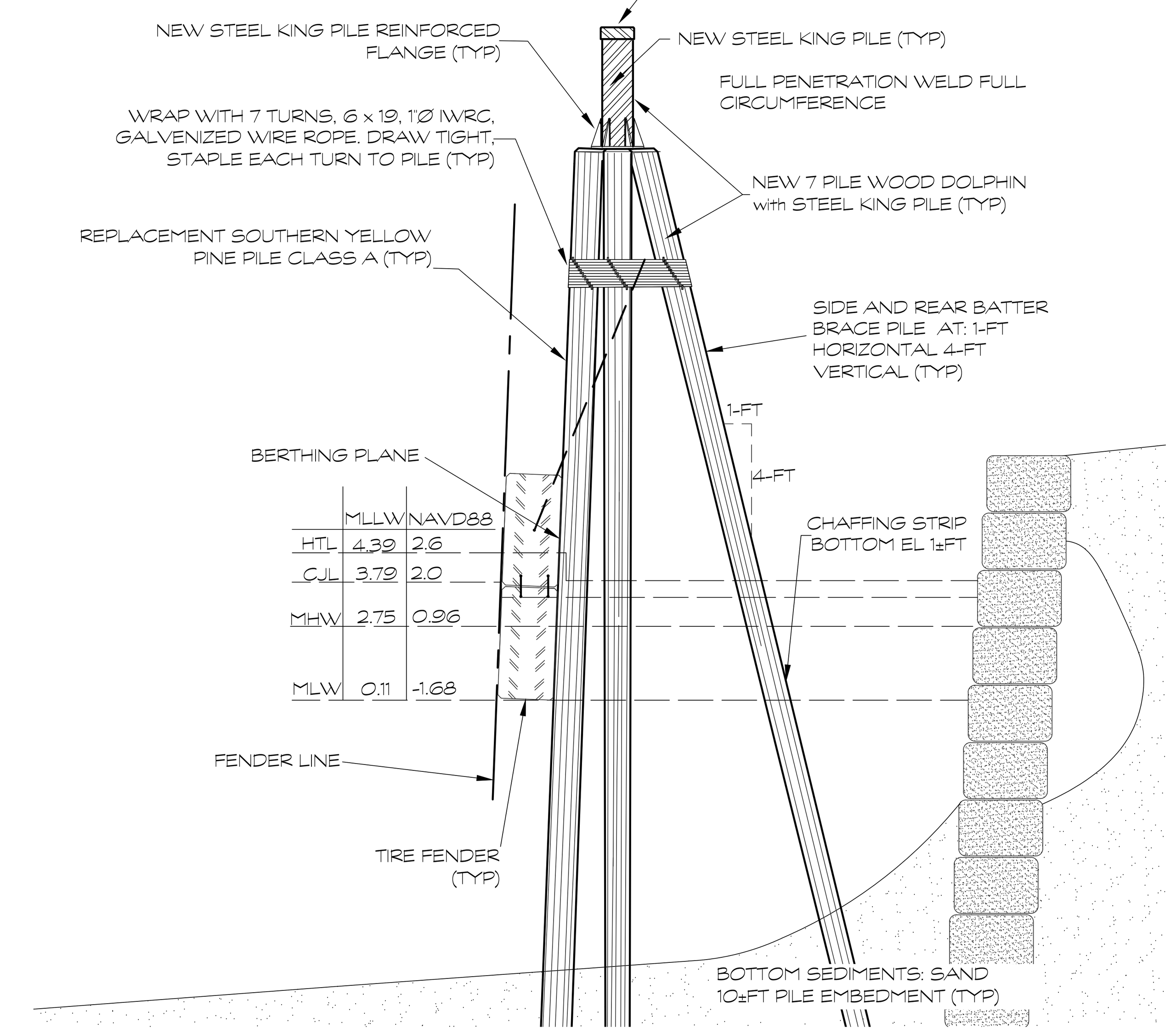
GRAPHIC SCALE 1" = 10'





STEEL KING PILE DETAIL

NOT TO SCALE



TYPICAL 7-PILE DOLPHIN with STEEL KING PILE

GRAPHIC SCALE 1" = 5'

ALL BATHYMETRY IS IN MLLWD
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BID ALTERNATE PLAN
PIER REHABILITATION
STONINGTON TOWN DOCK
STONINGTON HARBOR
MAY 7, 2025

PROPERTY OF
TOWN OF STONINGTON
CONNECTICUT

APPROVED

DATE

SHEET 13

PREPARED BY:
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