

GENERAL NOTES

100. DESIGN CRITERIA

100.1 PER THE BEACH AND DUNE WALKOVER GUIDELINES PUBLISHED BY THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION, THE DUNE WALKOVERS HAVE BEEN DESIGNED AS MINOR EXPENDABLE STRUCTURES THAT GENERATE A MINIMAL AMOUNT OF DEBRIS. THEREFORE, THE DUNE WALKOVERS HAVE NOT BEEN DESIGNED FOR WAVE ACTION, FLOODING, OR SCOUR.

100.2 DESIGN BUILDING CODE:

A. FLORIDA BUILDING CODE, 7<sup>TH</sup> EDITION 2020

100.3 LIVE LOADS:

A. ELEVATED PEDESTRIAN WALKWAY:.....60 PSF

100.4 LATERAL LOADS:

A. WIND LOADS (IN ACCORDANCE WITH DESIGN BUILDING CODE PER GENERAL NOTE 100.2):

1. ULTIMATE DESIGN WIND SPEED (3 SECOND GUST), VULT = 129 MPH
2. NOMINAL DESIGN WIND SPEED (3 SECOND GUST), VASD = 100 MPH
3. RISK CATEGORY = II
4. EXPOSURE CATEGORY = D
5. ENCLOSURE CLASSIFICATION = OTHER STRUCTURES

110. GENERAL

110.1 THESE DRAWINGS HAVE BEEN PRODUCED ENTIRELY ON ATLANTIC ENGINEERING SERVICES CADD SYSTEM. ANY OTHER LETTERING, LINES OR SYMBOLS, OTHER THAN PROFESSIONAL STAMPS AND SIGNATURES, HAVE BEEN MADE WITHOUT THE AUTHORIZATION OF ATLANTIC ENGINEERING SERVICES AND ARE INVALID.

110.2 THE STRUCTURAL DRAWINGS SHALL GOVERN THE WORK FOR ALL STRUCTURAL FEATURES, UNLESS NOTED OTHERWISE. THE ARCHITECTURAL AND CIVIL DRAWINGS SHALL GOVERN THE WORK FOR ALL DIMENSIONS.

110.3 DO NOT SCALE DRAWINGS TO OBTAIN DIMENSIONS. ONLY DIMENSIONS INDICATED ON DRAWINGS MAY BE USED TO ESTABLISH THE LOCATION AND EXTENT OF STRUCTURAL WORK. IF A REQUIRED DIMENSION IS NOT FURNISHED ON DRAWINGS, THE CONTRACTOR SHALL SUBMIT A REQUEST FOR INFORMATION TO OBTAIN THE DIMENSION.

110.4 UNLESS OTHERWISE INDICATED, PROVIDE EQUAL SPACING OF STRUCTURAL COMPONENTS BETWEEN OVERALL DIMENSIONS INDICATED ON DRAWINGS.

110.5 THE CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS, DIMENSIONS, ETC., AND SHALL NOTIFY THE ENGINEER OF ANY AND ALL DISCREPANCIES, ADDITIONAL INFORMATION, ETC., BEFORE BEGINNING THE WORK.

110.6 THE CONTRACTOR SHALL REMOVE ANY EXISTING PILES, DEBRIS, OR OBSTRUCTIONS THAT INTERFERE WITH THE INSTALLATION OF THE DUNE WALKOVERS.

110.7 EMBEDMENT DEPTH OF WOOD PILES SHALL BE BASED ON POST PROJECT BEACH PROFILE.

110.8 THE CONTRACTOR IS RESPONSIBLE FOR ALL CONSTRUCTION SEQUENCING AND ALL TEMPORARY SHORING AND STABILIZATION THAT IS REQUIRED TO PERFORM THEIR WORK. THE CONTRACTOR IS RESPONSIBLE FOR PERFORMING THEIR WORK IN A SAFE AND SATISFACTORY MANNER.

110.9 ALL STRUCTURAL WORK SHALL BE INSPECTED IN ACCORDANCE WITH THE BUILDING CODE INDICATED IN NOTE 100.2, AND ALL LOCAL ORDINANCES.

110.10 CONSTRUCTION SHALL BE PERFORMED IN A MANNER THAT MINIMIZES DISTURBANCE OF THE DUNE SYSTEM AND EXISTING VEGETATION. REPLACE DAMAGED VEGETATION WITH NATIVE PLANTS SUITABLE FOR BEACH AND DUNES STABILIZATION AS RECOMMENDED BY THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION AND THE CITY OF JACKSONVILLE BEACH.

110.11 THE CONTRACTOR SHALL COORDINATE ALLOWABLE VEHICLES, EQUIPMENT, METHODS, AND WORK HOURS WITH THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION AND THE CITY OF JACKSONVILLE BEACH, INCLUDING SPECIAL REQUIREMENTS FOR WORK OCCURRING DURING THE MARINE TURTLE NESTING SEASON.

120. SHOP DRAWINGS

120.1 THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR REVIEW BY ATLANTIC ENGINEERING SERVICES AND THE CIVIL ENGINEER. SHOP DRAWINGS SHALL BE SUBMITTED FOR ALL STRUCTURAL COMPONENTS INCLUDING, BUT NOT LIMITED TO, THE FOLLOWING:

- A. WOOD MATERIAL CERTIFICATIONS INCLUDING PRESERVATIVE TREATMENT
- B. MATERIAL CERTIFICATIONS AND PRODUCT DATA FOR METAL FASTENERS, BOLTS, CONNECTORS, AND COMPONENTS
- C. FABRICATED HANDRAILS (FOR REVIEW BY ARCHITECT)

120.2 SHOP DRAWINGS TO BE SUBMITTED SHALL PROVIDE COMPLETE INFORMATION FOR THE PRODUCTS OR COMPONENTS TO BE SUPPLIED. SUBMITTAL INFORMATION SHALL INCLUDE, BUT NOT BE LIMITED TO: MEMBER SIZES AND DIMENSIONS; GRADES OF MATERIAL FURNISHED; MATERIAL PREPARATION REQUIRED; MATERIAL FINISH AND MATERIAL COATINGS TO BE FURNISHED; INFORMATION REGARDING CUTS, COPES, AND HOLES REQUIRED FOR OTHER TRADES; END CONNECTIONS; CAMBER AND OTHER DEVIATION FROM LINE; SPECIAL ERECTION AND/OR INSTALLATION PROCEDURES, INCLUDING REQUIREMENTS FOR TEMPORARY STABILIZATION.

120.3 ALL SHOP DRAWING RESUBMITTALS AND RECORD COPY SUBMITTALS SHALL HAVE ALL REVISIONS SUBSEQUENT TO THE PREVIOUS SUBMISSION CLOUDED OR OTHERWISE IDENTIFIED ON THE RESUBMITTED SHEETS. RESUBMITTALS AND RECORD COPY SUBMITTALS WITHOUT IDENTIFICATION OF REVISIONS WILL BE REJECTED WITHOUT REVIEW.

120.4 THE CONTRACTOR SHALL SUBMIT ELECTRONIC OR PRINTED COPIES OF SHOP DRAWINGS (ELECTRONIC COPIES ARE PREFERRED). COPIES SHALL BE SUBMITTED TO ATLANTIC ENGINEERING SERVICES IN PDF FILE FORMAT (ISO 32000-1), WITH ONE (1) ELECTRONIC FILE PER SUBMISSION. ATLANTIC ENGINEERING SERVICES WILL REVIEW, ANNOTATE, AND RETURN ONE (1) FILE TO THE ARCHITECT FOR THEIR REVIEW AND DISTRIBUTION TO THE CONTRACTOR.

120.5 THE REVIEW OF SHOP DRAWINGS AND OTHER SUBMITTALS FOR THIS PROJECT IS FOR CONFORMANCE WITH THE DESIGN CONCEPT AND FOR GENERAL COMPLIANCE WITH THE INFORMATION CONTAINED IN THE CONTRACT DOCUMENTS. COMMENTS REGARDING THESE SUBMITTALS DO NOT RELIEVE THE CONTRACTOR FROM COMPLIANCE WITH THE CONTRACT DOCUMENTS. THE CONTRACTOR IS RESPONSIBLE FOR PERFORMING HIS WORK IN A SAFE AND SATISFACTORY MANNER.

610. STRUCTURAL LUMBER

610.1 ALL STRUCTURAL LUMBER WORK SHALL BE IN ACCORDANCE WITH THE "NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION" (NDS - LATEST EDITION) PUBLISHED BY THE AMERICAN WOOD COUNCIL.

610.2 ALL LUMBER SHALL COMPLY WITH PS 20 "AMERICAN SOFTWOOD LUMBER STANDARD" AND WITH THE APPLICABLE RULE OF INSPECTION AGENCIES CERTIFIED BY AMERICAN LUMBER STANDARD. FACTORY-MARK EACH PIECE OF LUMBER WITH GRADE STAMP OF INSPECTION AGENCY EVIDENCING COMPLIANCE WITH GRADING RULE REQUIREMENTS.

610.3 TRIM, CHAMFER, COPE OR PROVIDE WOOD SHIMS AND BLOCKING AS REQUIRED TO FACILITATE MEMBER CONNECTIONS AND TRANSITIONS. MAINTAIN ALIGNMENT AND AESTHETIC APPEARANCE OF DUNE WALKOVER RAILINGS AND DECKING AT CHANGES IN GEOMETRY, DIRECTION, AND ELEVATION.

610.4 CUTS, HOLES, OR COPES REQUIRED FOR OTHER TRADES IN STRUCTURAL WOOD FRAMING SHALL NOT BE PERMITTED WITHOUT PRIOR REVIEW AND APPROVAL OF ENGINEER.

610.5 ALTERNATE CONNECTION DETAILS MAY BE USED IF SUCH DETAILS ARE SUBMITTED TO THE ENGINEER FOR REVIEW AND APPROVAL. HOWEVER, THE ENGINEER SHALL BE THE SOLE JUDGE OF ACCEPTANCE AND THE CONTRACTOR'S BID SHALL ANTICIPATE THE USE OF THOSE SPECIFIED DETAILS SHOWN ON THE DRAWINGS THE CONTRACTOR IS RESPONSIBLE FOR THE DESIGN OF SUCH ALTERNATE DETAILS WHICH HE PROPOSES.

STRUCTURAL COMPONENT NOTES

ROUND WOOD PILE

1. SOUTHERN YELLOW PINE, ASTM D25.
2. AWPA USE CATEGORY: UC5C (MARINE USE, SOUTHERN WATERS)
3. 2.5 CCA PRESERVATIVE TREATED
4. PILES SHALL HAVE A MINIMUM TIP DIAMETER OF 6 INCHES. PILE DIAMETER INDICATED ON STRUCTURAL DRAWINGS REFERS TO THE MINIMUM TIP DIAMETER. THE PILE DIAMETER AT THE BUTT END BELOW THE GUARDRAIL CAP RAIL SHALL BE AS CLOSE TO 6 INCHES AS POSSIBLE. PILES WITH A TAPER SHALL HAVE A CONSISTENT TAPER NOT EXCEEDING 0.1 INCH PER FOOT. PILES SHALL ALSO BE VISUALLY STRAIGHT WITHOUT SPLITS OR VOIDS.
5. PILE SPLICES SHALL NOT BE PERMITTED.

BEAMS, JOISTS, X-BRACING, AND STAIR STRINGERS

1. SOUTHERN YELLOW PINE, NO. 1
2. AWPA USE CATEGORY: UC4C (GROUND CONTACT, EXTREME DUTY)
3. 0.8 CCA (CHROMATED COPPER ARSENATE) PRESERVATIVE TREATED. PROPOSED ALTERNATE PRESERVATIVE TREATMENT SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW PRIOR TO BIDDING.
4. S4S - SURFACED FOUR SIDES

RAILINGS, GUARDRAIL CAP, AND BENCH FRAMING

1. SOUTHERN YELLOW PINE, NO. 1
2. AWPA USE CATEGORY: UC4B (GROUND CONTACT, HEAVY DUTY)
3. 0.31 CA (COPPER AZOLE) PRESERVATIVE TREATED
4. MICRONIZED COPPER AZOLE (MCA) AND CHROMATED COPPER ARSENATE (CCA) ARE NOT PERMITTED. PROPOSED ALTERNATE PRESERVATIVE TREATMENT SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW PRIOR TO BIDDING.
5. S4S - SURFACED FOUR SIDES
6. ROUT ALL EDGES AND ENDS OF MEMBERS THAT ARE EXPOSED TO CONTACT, INCLUDING BENCH SEATING. REMOVE ALL BURRS, SPLINTERS, AND SHARP EDGES.

WOOD DECKING

1. SOUTHERN YELLOW PINE, NO. 1, DENSE
2. AWPA USE CATEGORY: UC4B (GROUND CONTACT, HEAVY DUTY)
3. 0.31 CA (COPPER AZOLE) PRESERVATIVE TREATED
4. MICRONIZED COPPER AZOLE (MCA) AND CHROMATED COPPER ARSENATE (CCA) ARE NOT PERMITTED. PROPOSED ALTERNATE PRESERVATIVE TREATMENT SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW PRIOR TO BIDDING.
5. S4S - SURFACED FOUR SIDES
6. ROUT ALL EDGES AND ENDS OF MEMBERS THAT ARE EXPOSED TO CONTACT, INCLUDING BENCH SEATING. REMOVE ALL BURRS, SPLINTERS, AND SHARP EDGES.
7. GAP WIDTH AND LEVELNESS BETWEEN DECK BOARDS SHALL COMPLY WITH ALL ADA, FLORIDA ACCESSIBILITY CODE, AND FLORIDA BUILDING CODE REQUIREMENTS.
8. DECKING OVERHANG SHALL BE UNIFORM AND NOT EXCEED 2 INCHES. NOTCH AND TRIM DECKING AS REQUIRED AT PILES AND OTHER CONFLICTS.
9. DECKING SPLICES SHALL NOT BE PERMITTED.
10. ATTACH EACH 2X6 DECK BOARD TO EACH JOIST WITH (2) #10 X 3 1/2" BUGLEHEAD TYPE 316 STAINLESS STEEL DECK SCREWS.

REINFORCED PLASTIC DECKING (BID ALTERNATE)

1. CONTRACTOR BID SHALL INCLUDE OWNER OPTION FOR 2X6 ADVANTAGE REINFORCED PLASTIC DECKING (OR APPROVED EQUIVALENT) IN LIEU OF WOOD DECKING.
2. PROPOSED ALTERNATE COMPOSITE OR PLASTIC DECKING SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW PRIOR TO BIDDING.
3. INSTALL ADVANTAGE DECKING IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS AND RECOMMENDATIONS WITH (2) #10 X 3 1/2" BUGLEHEAD TYPE 316 STAINLESS STEEL DECK SCREWS OR EQUAL AT EACH 2X6 DECK BOARD TO EACH JOIST.
4. DECKING COLOR TO BE SELECTED BY THE CITY OF JACKSONVILLE BEACH.
5. GAP WIDTH AND LEVELNESS BETWEEN DECK BOARDS SHALL COMPLY WITH ALL ADA, FLORIDA ACCESSIBILITY CODE, AND FLORIDA BUILDING CODE REQUIREMENTS.
6. DECKING OVERHANG SHALL BE UNIFORM AND NOT EXCEED 2 INCHES. NOTCH AND TRIM DECKING AS REQUIRED AT PILES AND OTHER CONFLICTS.
7. DECKING SPLICES SHALL NOT BE PERMITTED.

FASTENERS AND CONNECTORS

1. ALL BOLTS, SCREWS, THREADED RODS, NAILS, WASHERS, HEX NUTS, CONNECTORS, AND ALL OTHER HARDWARE AND FASTENERS SHALL BE TYPE 316 STAINLESS STEEL.
2. BOLTED CONNECTIONS SHALL CONSIST OF A HEX HEAD BOLT WITH ROUND WASHER AT EACH END. BOLT END OPPOSITE OF THE HEX HEAD SHALL BE SECURED WITH A ROUND WASHER AND HEX NUT. THREADED RODS WITH HEX NUTS AT EACH END SHALL NOT BE PERMITTED IN LIEU OF HEX HEAD BOLTS. AFTER INSTALLATION, BOLTED CONNECTIONS SHALL BE CHECKED FOR TIGHTNESS AND PROTRUDING BOLT ENDS SHALL BE CUT OFF 3/4" BEYOND THE NUT.
3. PROTRUDING BOLT ENDS WITH HEX NUT SHALL BE LOCATED AT FACE OF MEMBER THAT IS LESS ACCESSIBLE OR LESS EXPOSED TO VIEW FROM THE PUBLIC. RECESS BOLT ENDS FLUSH WITH PILE AT ALL CONNECTIONS EXPOSED TO WALKWAY, RAMPS, AND STAIRS.
4. SCREW FASTENERS SHALL BE ALIGNED, UNIFORMLY SPACED, AND SET FLUSH (OR SLIGHTLY COUNTERSUNK) AS REQUIRED FOR A SMOOTH SURFACE. PRE-DRILL HOLES AS REQUIRED TO PREVENT SPLITTING AND CRACKS IN THE WOOD MEMBERS AND DAMAGE OF THE FASTENERS.

16TH STREET DUNE CROSSOVER AND  
RETAINING WALLS  
ATLANTIC BEACH, FLORIDA

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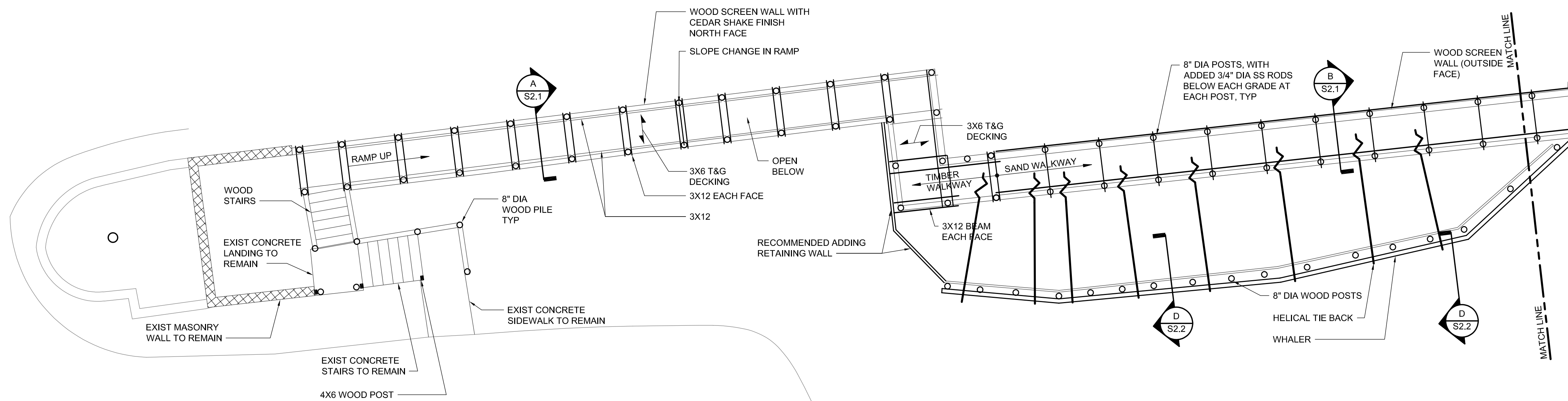
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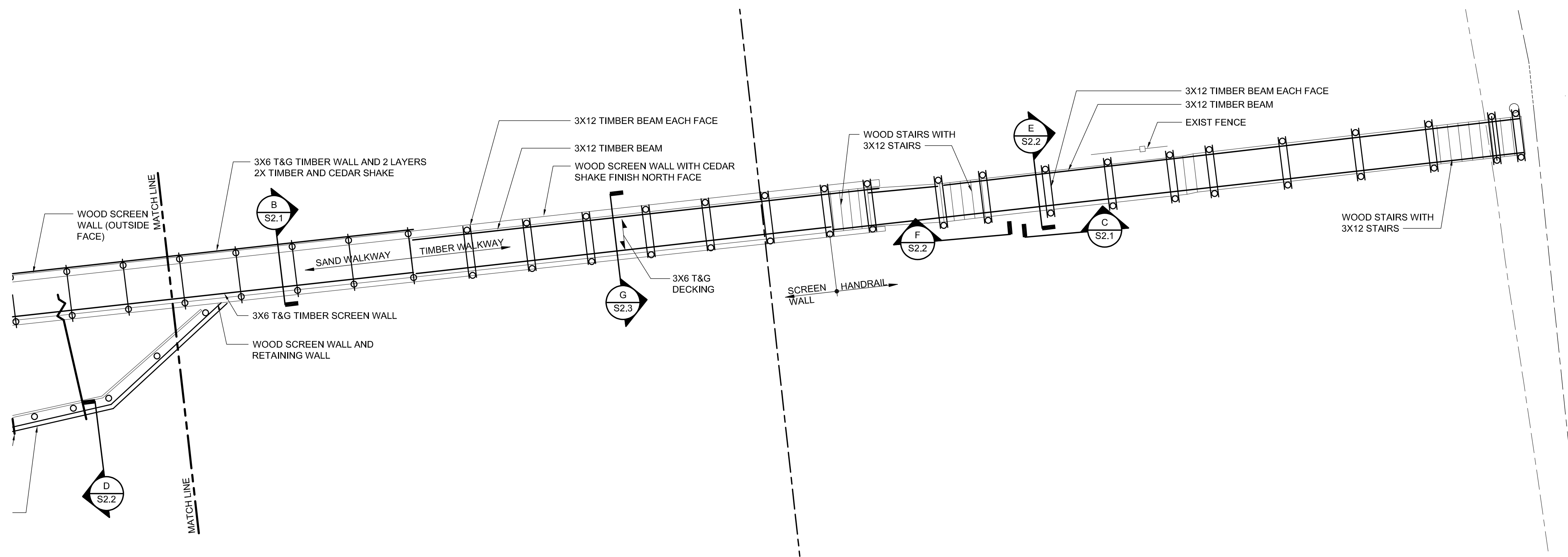


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 **PARTIAL PLAN**

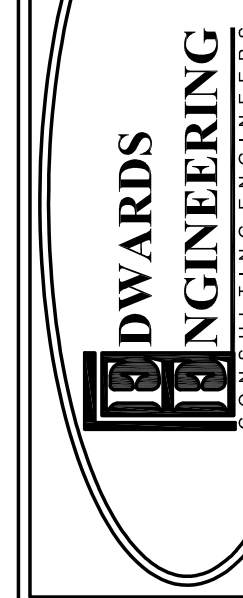


 **PARTIAL PLAN**

# 16TH STREET DUNE CROSSOVER AND RETAINING WALLS ATLANTIC BEACH, FLORIDA

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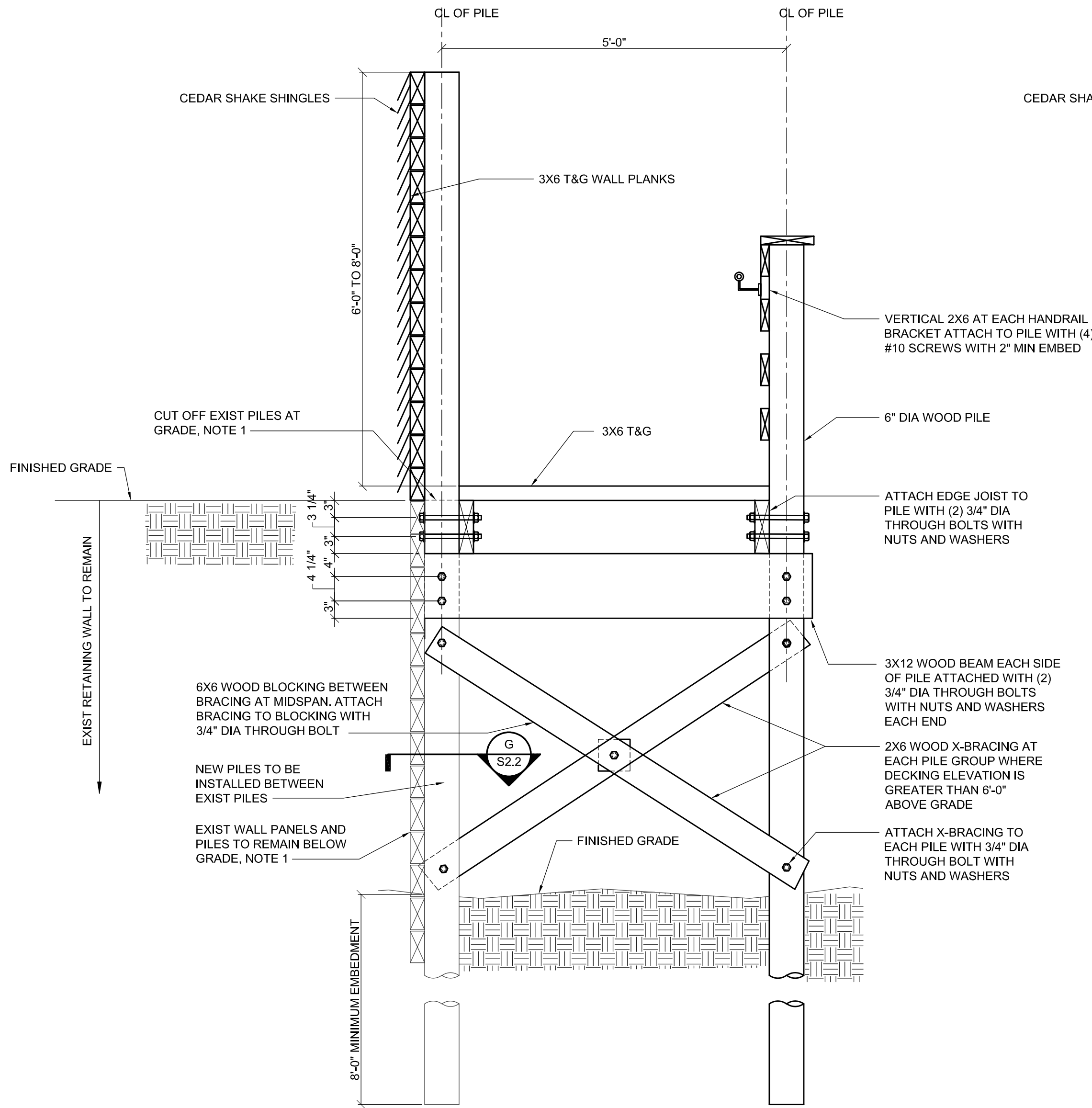
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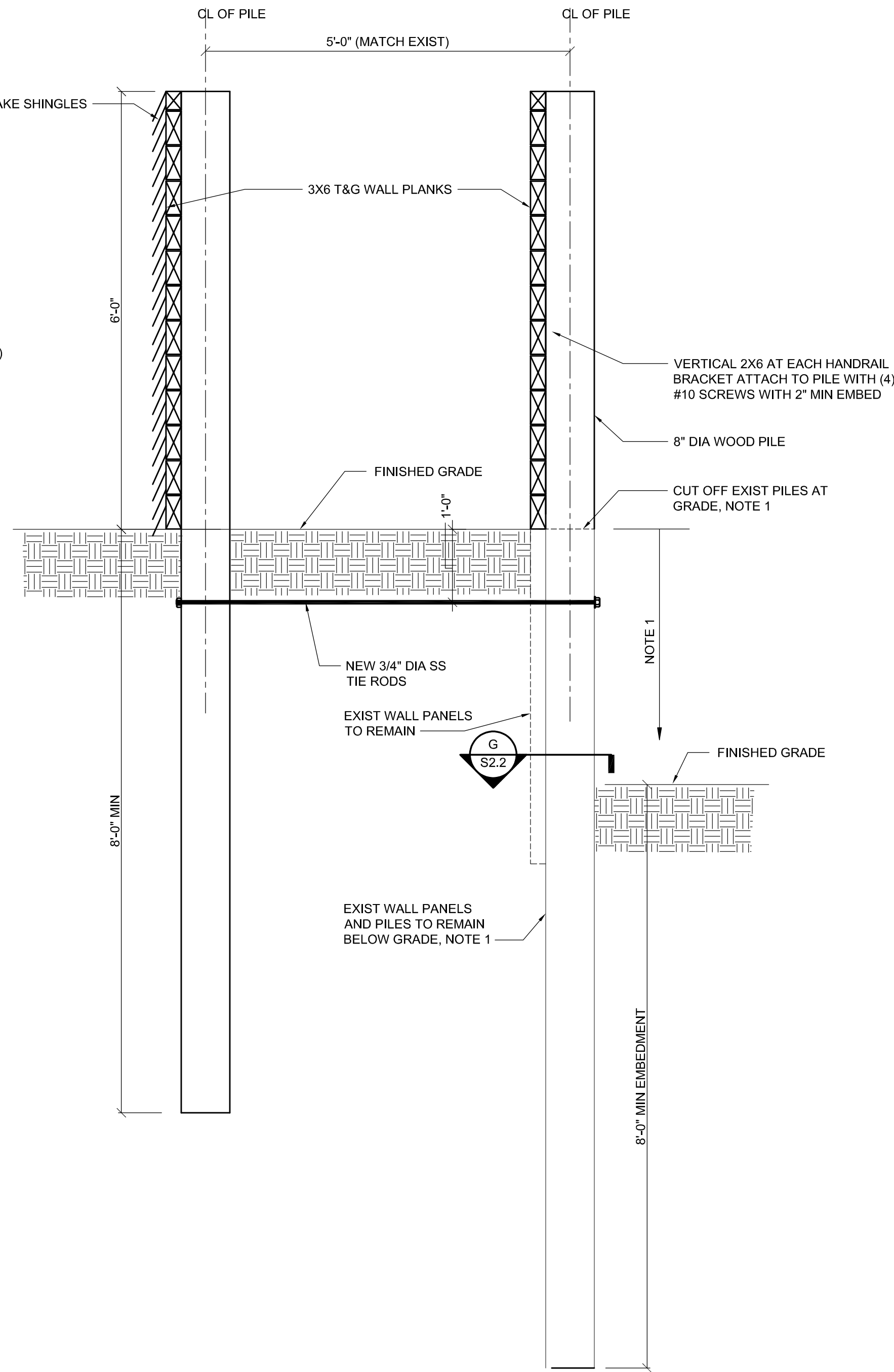
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**ELEVATION A**  
SCALE: 3/4" = 1'-0"

NOTES:

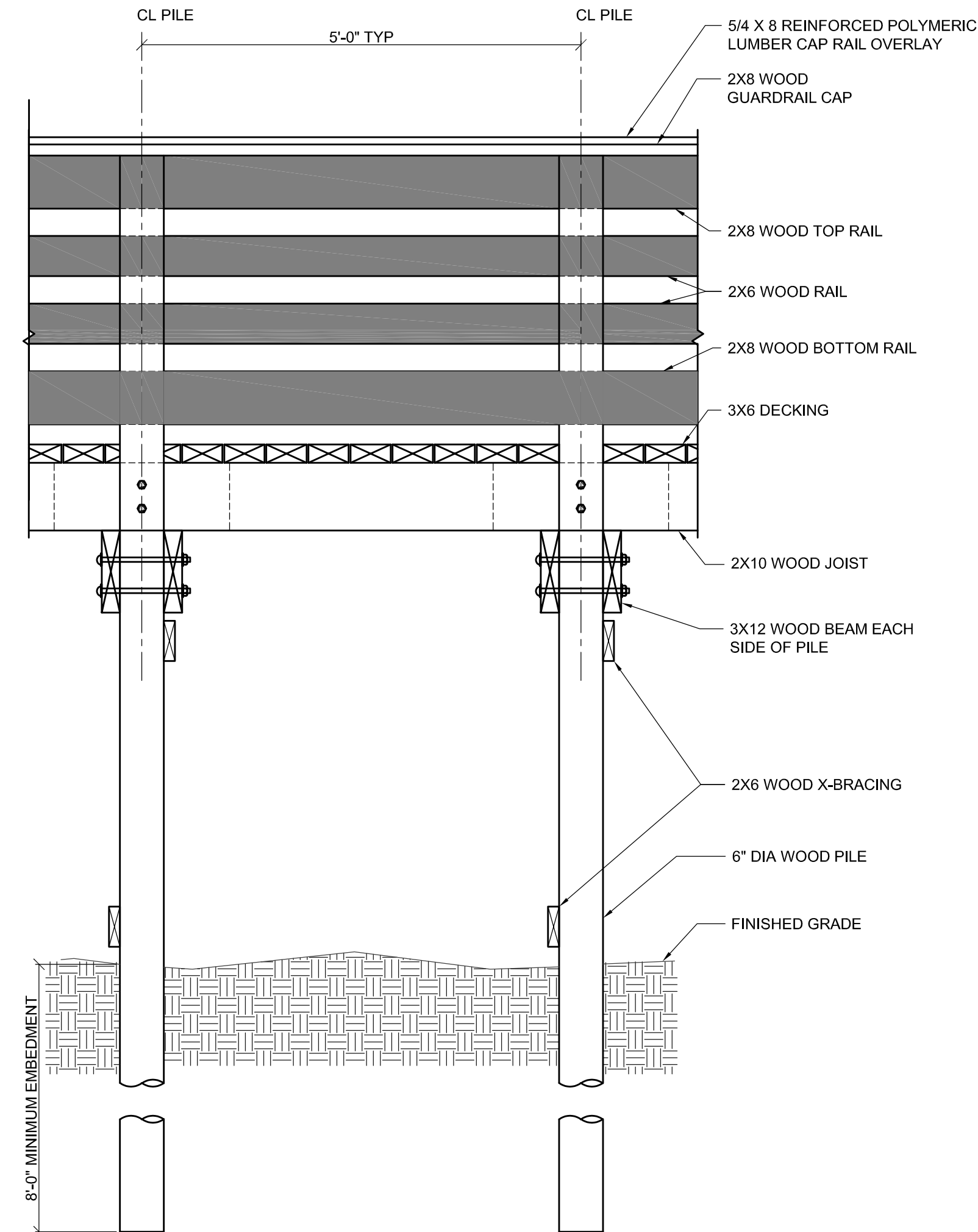
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**ELEVATION B**  
SCALE: 3/4" = 1'-0"

NOTES:

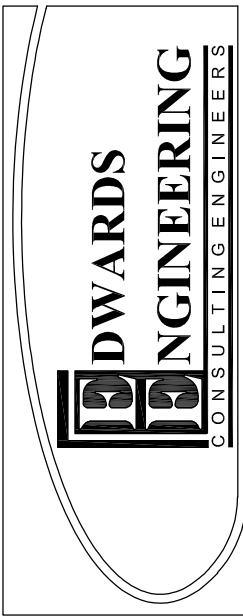
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**ELEVATION C**  
SCALE: 3/4" = 1'-0"



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**S2.1**

SEAL

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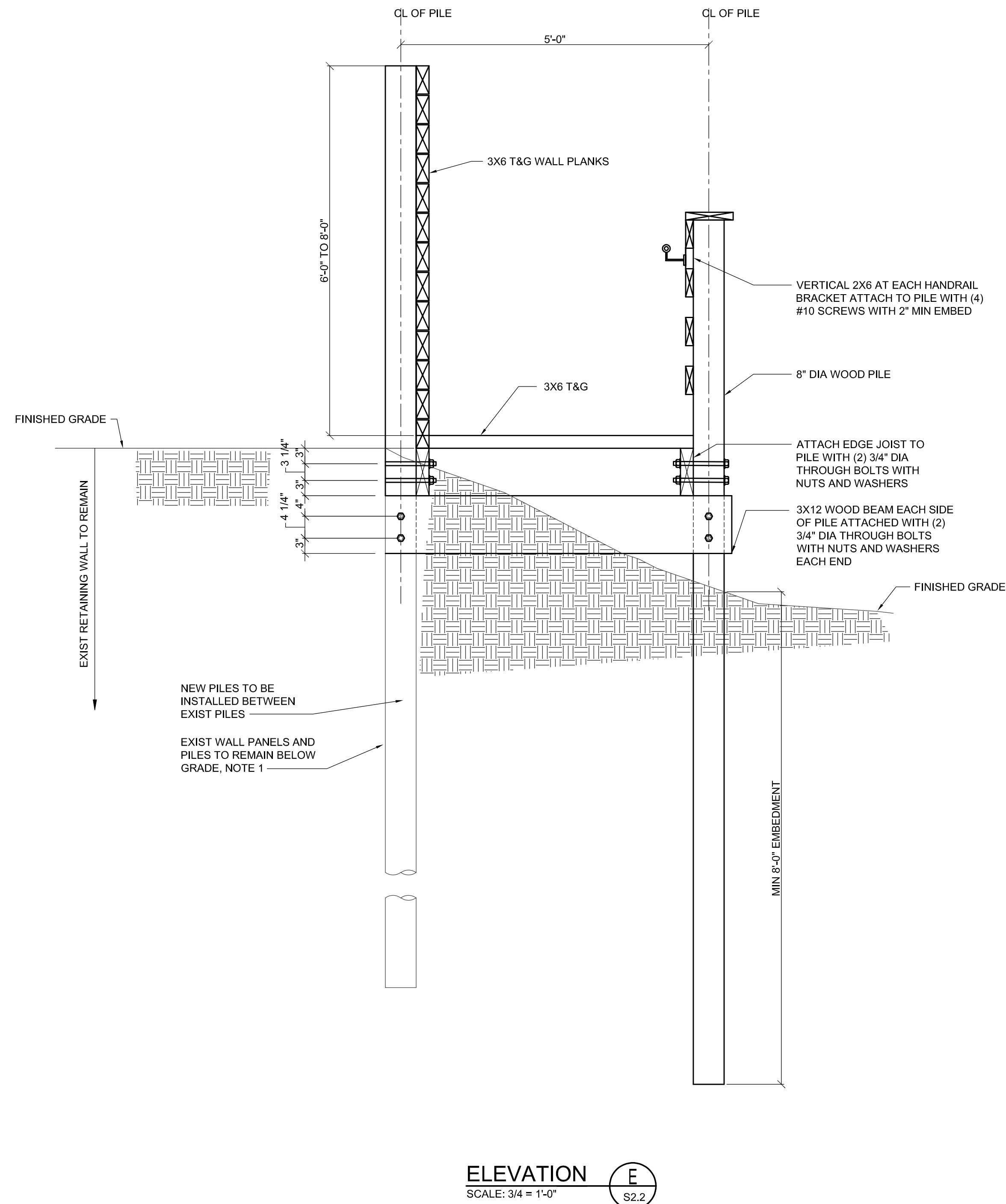
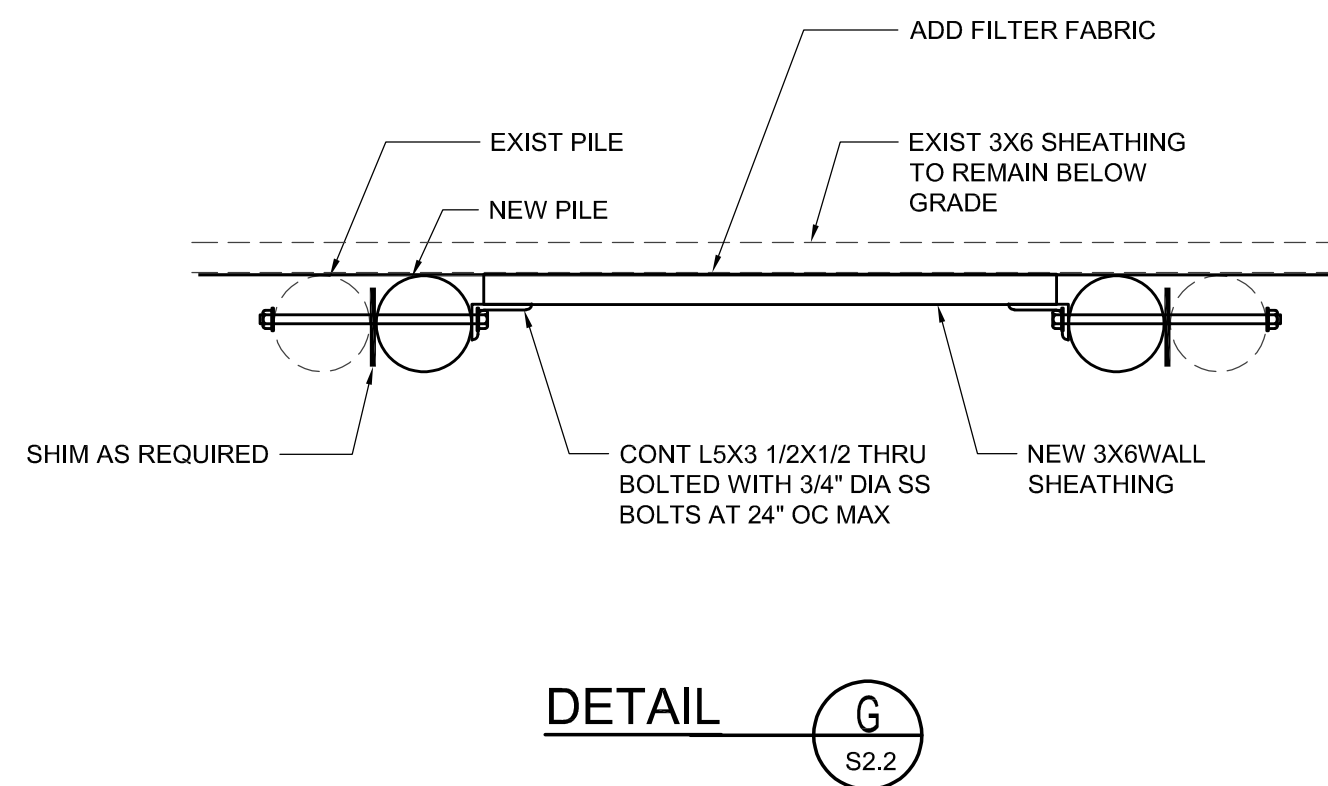
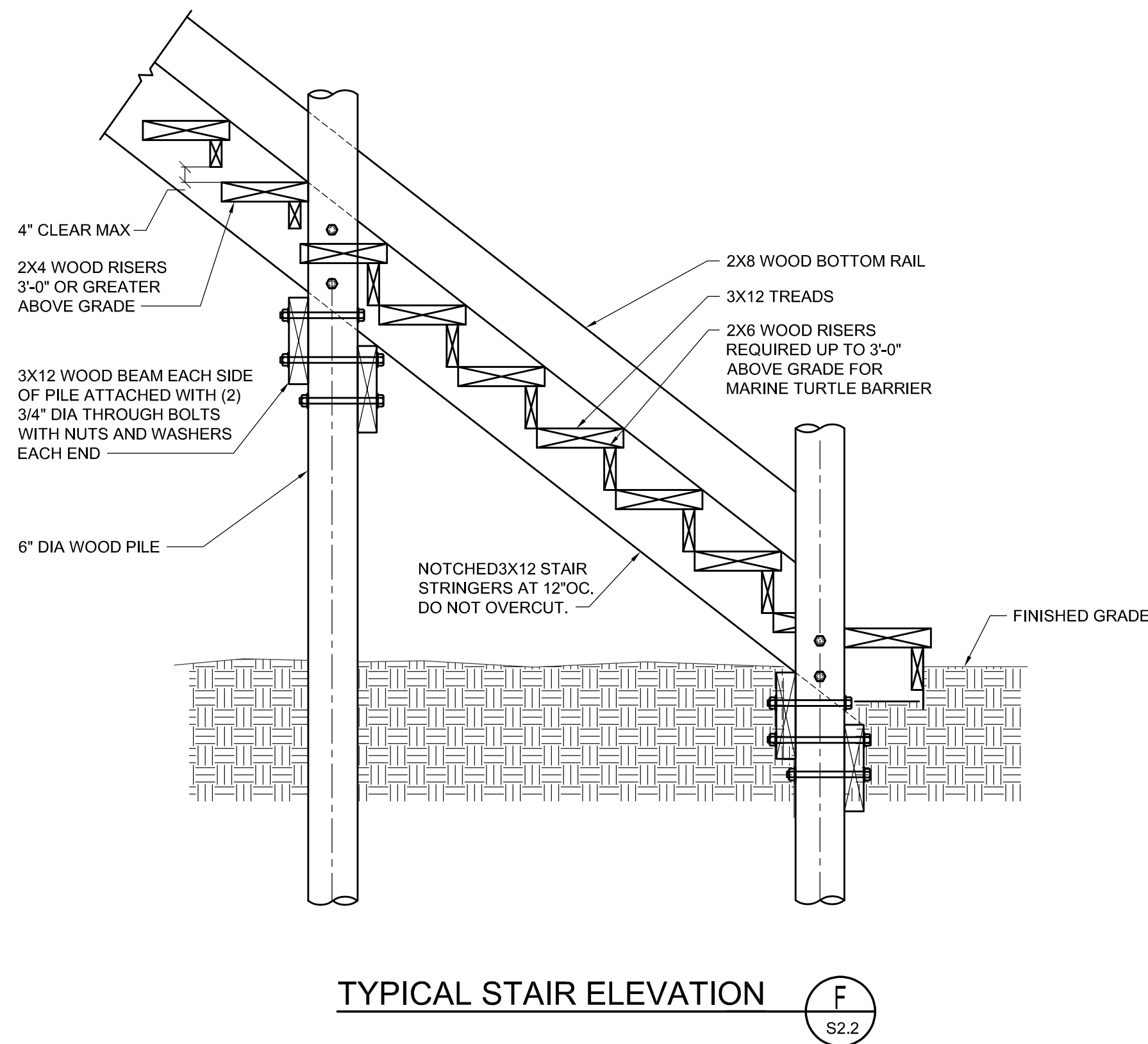
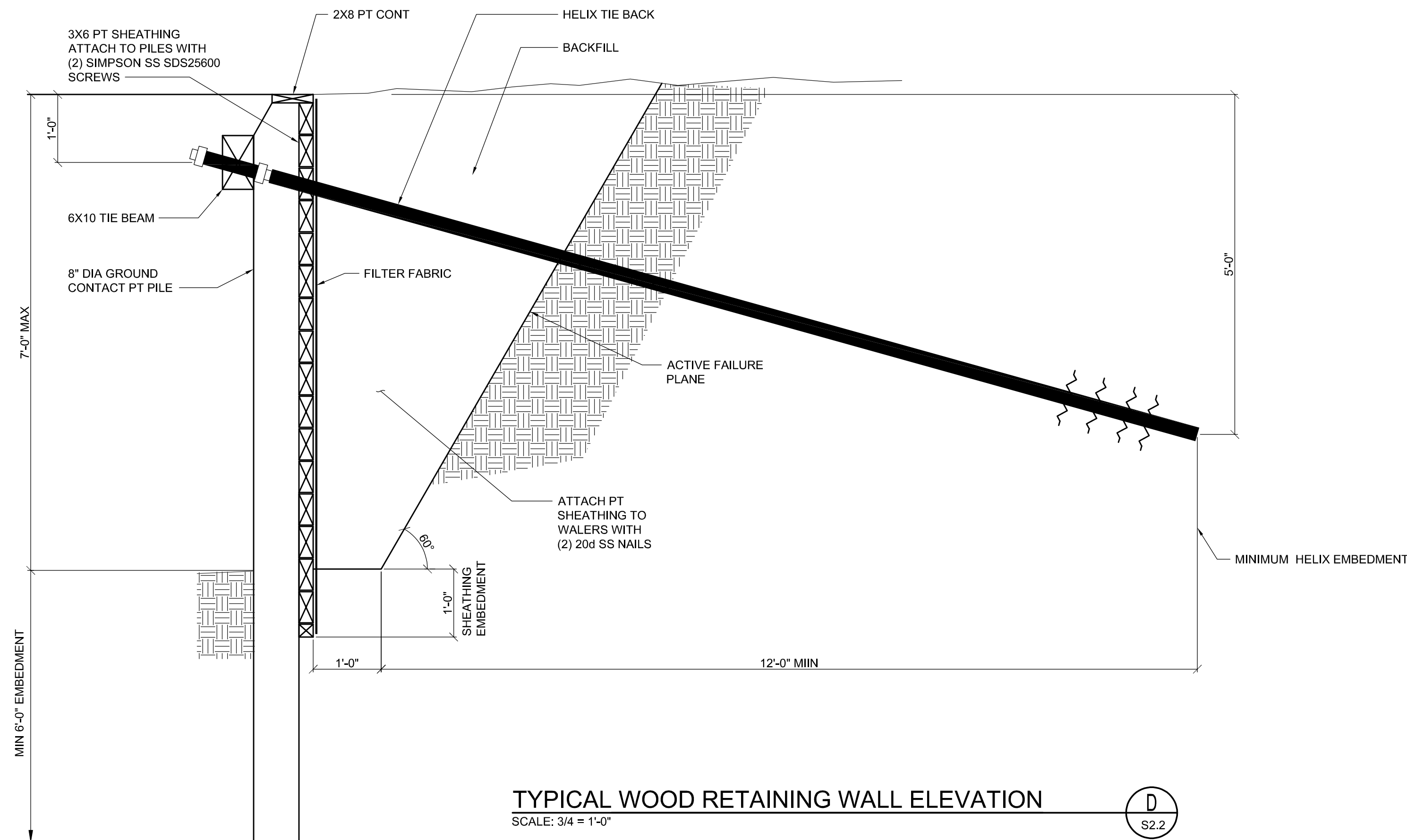
# 16TH STREET DUNE CROSSOVER AND RETAINING WALLS ATLANTIC BEACH, FLORIDA

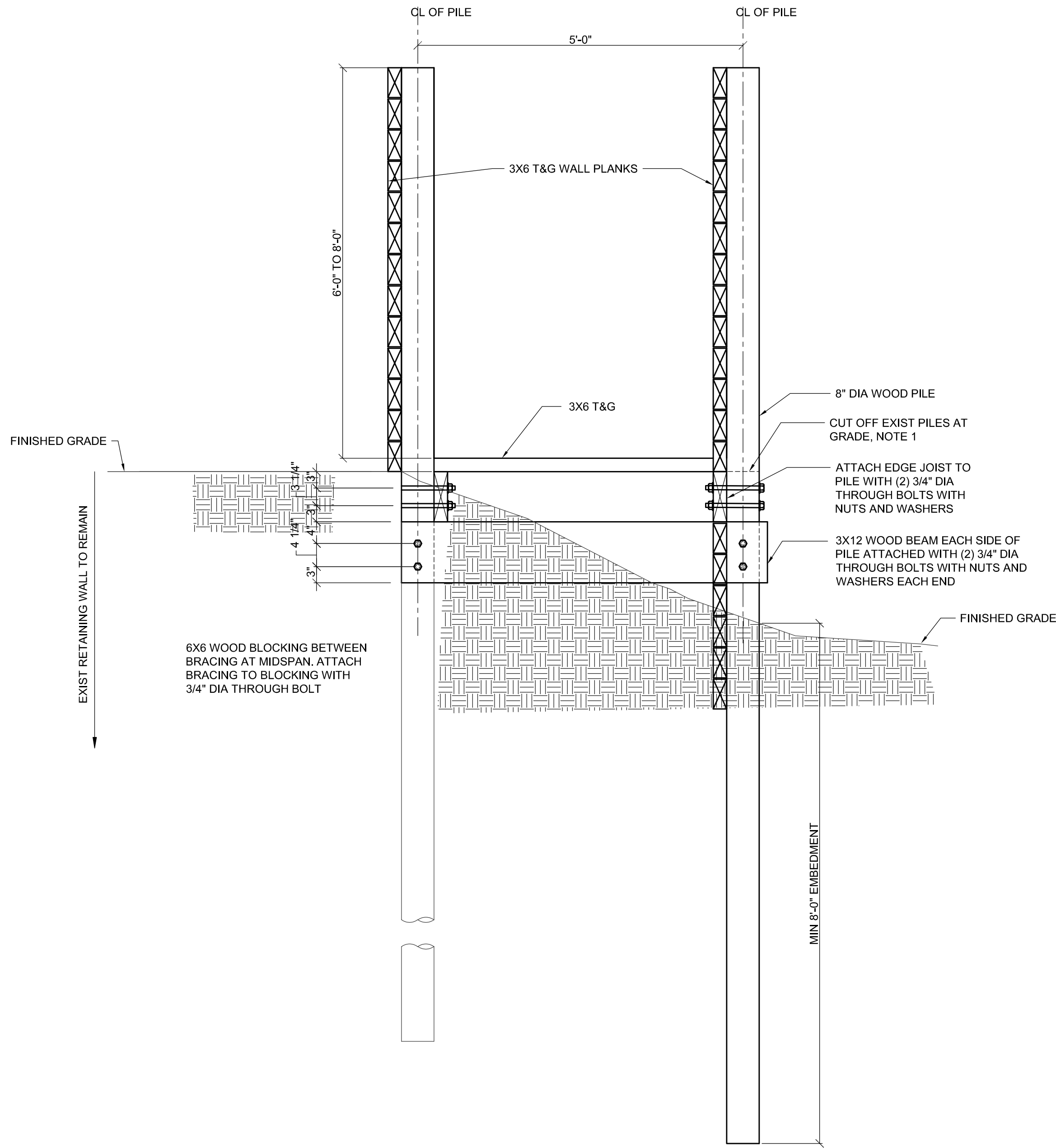
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### SUBMITTAL - March 2022

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ELEVATION G  
SCALE: 3/4" = 1'-0"

- NOTES:
1. CUT EXIST PILES OFF AT GRADE AND INSTALL NEW PILES ADJACENT TO EXISTING.