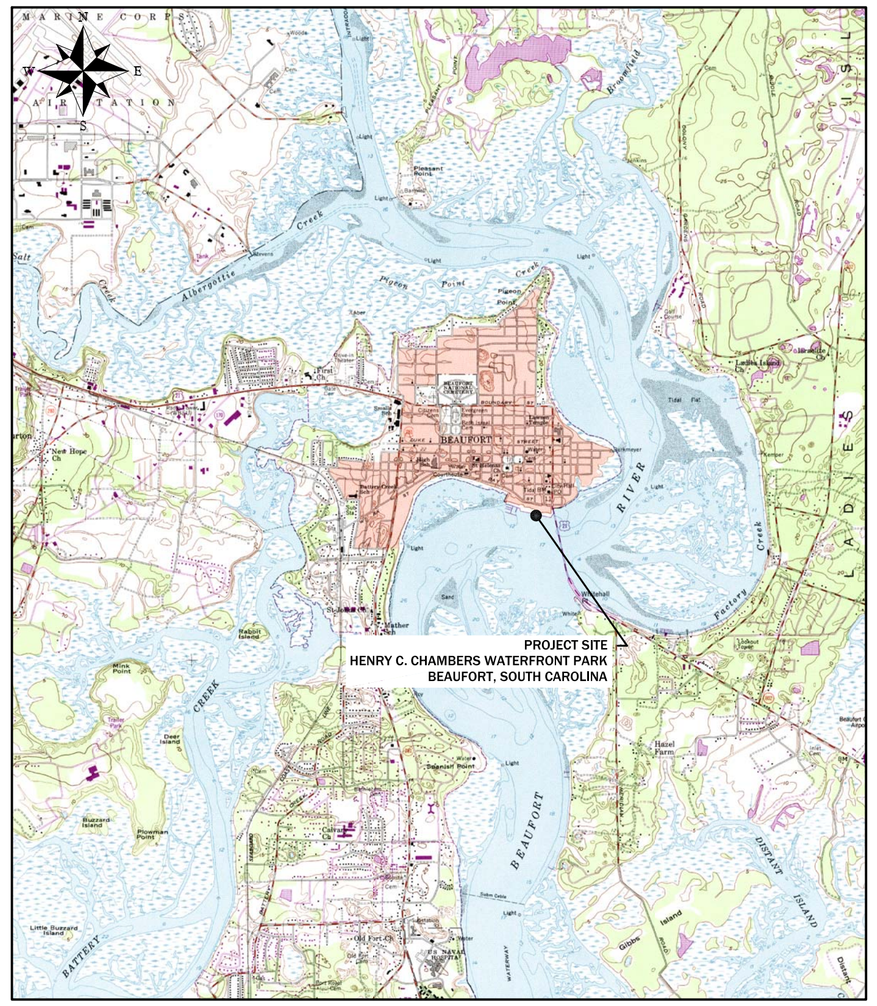
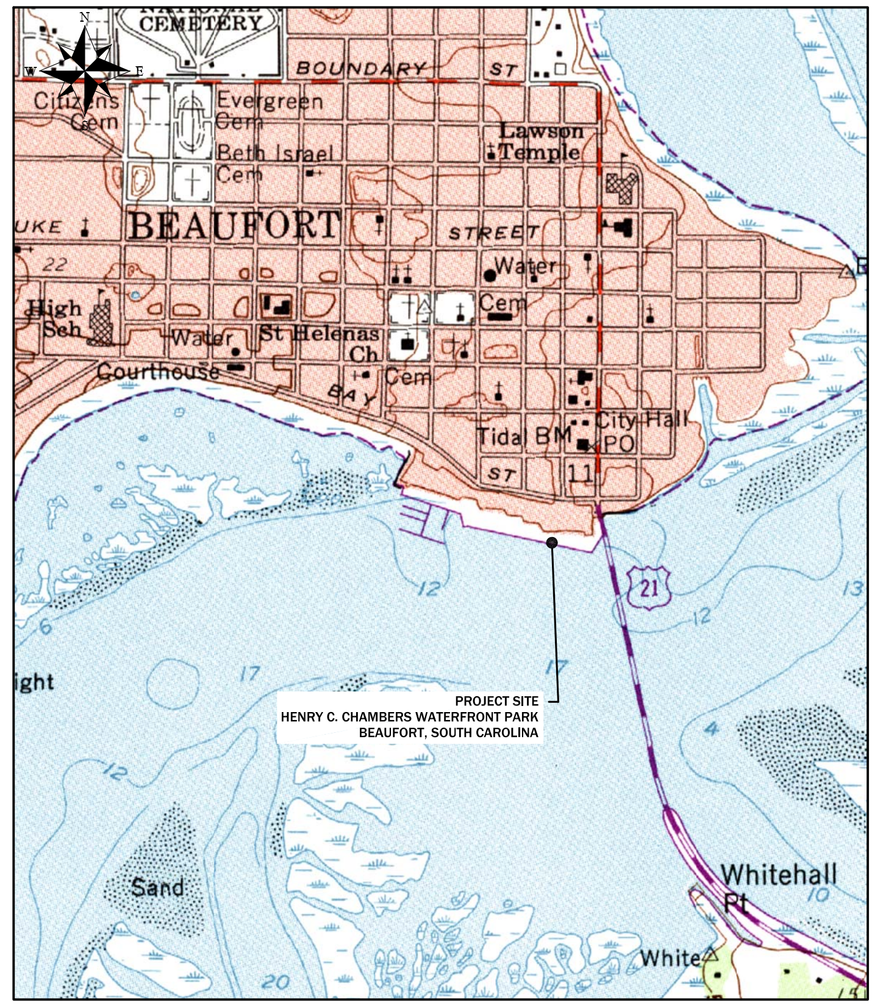
CITY OF BEAUFORT
HENRY C. CHAMBERS WATERFRONT PARK
DAY DOCK PROJECT



PROJECT VICINITY
SCALE: N.T.S.

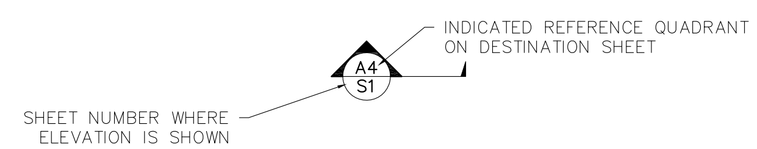


PROJECT LOCATION
SCALE: N.T.S.

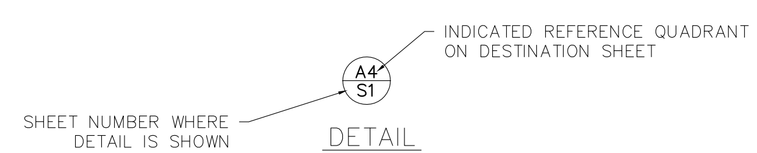
TABLE OF CONTENTS

811 Know what's below. Call before you dig.

ELEVATION, SECTION OR DETAIL SYMBOLS



ELEVATION OR SECTION



DETAIL

McSweeney Engineers
123 Cannon Street
Charleston, SC 29403
(843) 974-5621
www.mcsweeneyengineers.com

CITY OF BEAUFORT DAY DOCK
HENRY C. CHAMBERS WATERFRONT PARK
BEAUFORT, SOUTH CAROLINA

SOUTH CAROLINA PROFESSIONAL ENGINEER No. 25057 9/29/17 WILLIAM D. SARRIS

DESIGNED BY:	WDB
DRAWN BY:	WDB
CHECKED BY:	DBM
DATE:	9/29/17
REV. __ DATE:	_____

T1
TITLE AND LOCATION

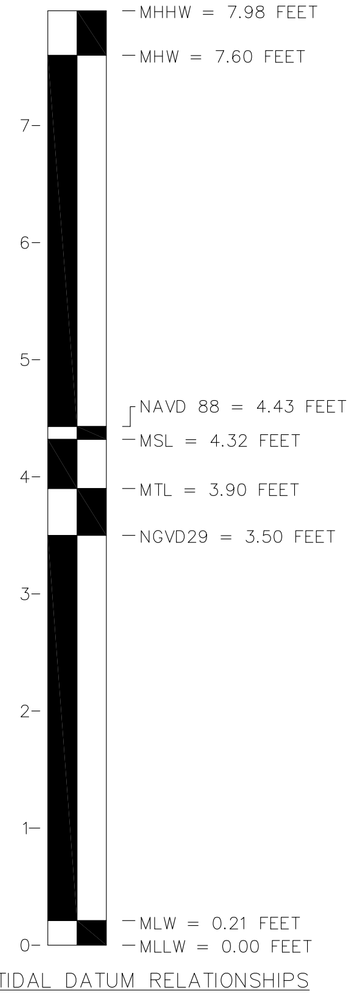
Boring Location Plan

Henry C. Chambers Waterfront Park
Beaufort, Beaufort County, South Carolina

N

ALL BORING LOCATIONS ARE APPROXIMATE, & ARE BASED ONLY ON FIELD ESTIMATES.

WHITTAKER LABORATORY, INC.



TIDAL DATUM RELATIONSHIPS
NOAA STATION ID: 8667999
PID: CK2243
VM: 4433

Client: McSweeney Engineers, LLC
Project: Waterfront Park Floating Dock
Location: Beaufort, SC

Boring No. B-1

Date: 9/21/15
Engineer: Follo

SUBSURFACE PROFILE Depth	Description	Sample Depth	Number	Blows/ft	Standard Penetration Test blows/ft. 10 20 30 40 50 60 70 80 90	Water Table	Remarks
0	Ground Surface	0	1				
	26' of Water		2				
	SC Very soft to firm, gray fine sand clay	5	3	2			
			4				
10		10	5	5			
15		15	6	6			
	Refusal at 18' in limestone						
20	End of Borehole	20	7				

Drilled By: Wilkerson
Drill Method: H. S. Auger
Drill Date: 9/21/15

WHITAKER LABORATORY, INC.
2500 Tremont Road
Savannah, GA 31405

Hole Size: 6.5"
Datum:
Sheet: 1 of 1

Client: McSweeney Engineers, LLC
Project: Waterfront Park Floating Dock
Location: Beaufort, SC

Boring No. B-2

Date: 9/21/15
Engineer: Follo

SUBSURFACE PROFILE Depth	Description	Sample Depth	Number	Blows/ft	Standard Penetration Test blows/ft. 10 20 30 40 50 60 70 80 90	Water Table	Remarks
0	Ground Surface	0	1				
	23' of water		2				
	SC Soft gray fine sand clay	5	3	4			
			4				
10	Gray, semi-consolidated limestone	10	5	9			
15		15	6	19			
20		20	7	75			
	Refusal at 23' in limestone						
25	End of Borehole	25	8				
30		30	9				

Drilled By: Wilkerson
Drill Method: H. S. Auger
Drill Date: 9/21/15

WHITAKER LABORATORY, INC.
2500 Tremont Road
Savannah, GA 31405

Hole Size: 6.5"
Datum:
Sheet: 1 of 1

Client: McSweeney Engineers, LLC
Project: Waterfront Park Floating Dock
Location: Beaufort, SC

Boring No. B-3

Date: 9/21/15
Engineer: Follo

SUBSURFACE PROFILE Depth	Description	Sample Depth	Number	Blows/ft	Standard Penetration Test blows/ft. 10 20 30 40 50 60 70 80 90	Water Table	Remarks
0	Ground Surface	0	1				
	23' of water		2				
	SC Soft, gray fine sand clay	5	3	4			
			4				
10	Gray, semi-consolidated limestone	10	5	6			
15		15	6	18			
20		20	7	100			
	Refusal at 23' in limestone						
25	End of Borehole	25	8				
30		30	9				

Drilled By: Wilkerson
Drill Method: H. S. Auger
Drill Date: 9/21/15

WHITAKER LABORATORY, INC.
2500 Tremont Road
Savannah, GA 31405

Hole Size: 6.5"
Datum:
Sheet: 1 of 1

Client: McSweeney Engineers, LLC
Project: Waterfront Park Floating Dock
Location: Beaufort, SC

Boring No. B-4

Date: 9/21/15
Engineer: Follo

SUBSURFACE PROFILE Depth	Description	Sample Depth	Number	Blows/ft	Standard Penetration Test blows/ft. 10 20 30 40 50 60 70 80 90	Water Table	Remarks
0	Ground Surface	0	1				
	24' of water		2				
	SM Loose to firm, gray fine silty sand	5	3	11			
			4				
10	Gray, semi-consolidated limestone	10	5	2			
15		15	6	16			
20		20	7	19			
	Refusal at 23' in limestone						
25	End of Borehole	25	8				
30		30	9				

Drilled By: Wilkerson
Drill Method: H. S. Auger
Drill Date: 9/21/15

WHITAKER LABORATORY, INC.
2500 Tremont Road
Savannah, GA 31405

Hole Size: 6.5"
Datum:
Sheet: 1 of 1

SOIL BORING LOGS

SCALE: NTS

GENERAL NOTES:

1. THE CONTRACTOR IS ADVISED THAT THE DRAWINGS FORM A PART OF THE CONTRACT DOCUMENTS AND ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE SPECIFICATIONS AND THE DRAWINGS. THE CONTRACTOR SHALL KEEP A COPY OF THE CONTRACT DOCUMENTS ON SITE AT ALL TIMES DURING THE WORK.
2. ELEVATIONS ARE BASED ON MEAN LOW WATER.
3. ALL EXISTING DIMENSIONS, ELEVATIONS AND CONDITIONS RELATING TO THE WORK SHALL BE FIELD VERIFIED BY THE CONTRACTOR. ALL DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER BEFORE ORDERING MATERIALS AND STARTING THE WORK.
4. CONTRACTOR SHALL MAINTAIN ADEQUATE SURVEY CONTROL AT ALL TIMES TO ESTABLISH AND MAINTAIN ALL LINES AND ELEVATIONS.
5. THE SIZE AND LOCATION OF ALL EXISTING UTILITIES IMPACTED BY THE WORK SHALL BE FIELD VERIFIED AND PROTECTED BY THE CONTRACTOR. THE CONTRACTOR MAY RELOCATE UTILITIES TO ACCOMMODATE CONSTRUCTION AS APPROVED BY THE OWNER, AT NO ADDITIONAL COST TO THE OWNER.
6. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE ERECTION PROCEDURES AND SEQUENCE TO ENSURE THE SAFETY OF THE FACILITY. THE CONTRACTOR IS RESPONSIBLE TO ERECT, MAINTAIN AND REMOVE TEMPORARY SHORING TO COMPLETE THE WORK. ALL PROPOSED STAGING AREAS SHALL BE COORDINATED WITH THE ENGINEER AND OWNER BEFORE STARTING THE WORK.
7. THE CONTRACTOR IS RESPONSIBLE FOR ALL DAMAGE DONE TO STRUCTURES, UTILITIES, AND VESSELS OR INJURIES TO THE PUBLIC DURING THE PERFORMANCE OF THE WORK. ANY DAMAGE CAUSED DURING CONSTRUCTION OPERATIONS SHALL BE REPAIRED AT NO ADDITIONAL COST TO THE OWNER.
8. THE CONTRACTOR SHALL PROVIDE AND MAINTAIN ENVIRONMENTAL CONTROLS AS REQUIRED BY FEDERAL, STATE, AND MUNICIPAL REGULATIONS AND PERMITS. ENVIRONMENTAL CONTROLS SHALL INCLUDE BUT NOT LIMITED TO TURBIDITY, DUST, AND DEBRIS.
9. THE CONTRACTOR SHALL FOLLOW ALL APPLICABLE FEDERAL, STATE, AND MUNICIPAL REGULATIONS, INCLUDING THE FEDERAL DEPARTMENT OF LABOR, SAFETY, HEALTH ACT, U.S. ARMY CORPS OF ENGINEERS, OFFICE OF COASTAL RESOURCE MANAGEMENT, AND PERMITS.
10. STORAGE, FUELING, AND LUBRICATION OF EQUIPMENT AND MOTORIZED VEHICLES SHALL BE CONDUCTED IN A MANNER THAT AFFORDS THE MAXIMUM PROTECTION AGAINST SPILL AND EVAPORATION. FUEL, LUBRICANTS AND OIL SHALL BE MANAGED AND STORED IN ACCORDANCE WITH ALL FEDERAL, STATE, AND LOCAL LAWS AND REGULATIONS. THERE SHALL BE NO STORAGE OF FUEL ON THE PROJECT SITE. FUEL MUST BE BROUGHT TO THE SITE AS NEEDED.
11. STANDARD CONSTRUCTION WORK HOURS SHALL BE BETWEEN 7:00 AM AND 5:00 PM TO MINIMIZE NOISE AND LIGHT DISTURBANCE TO NEARBY RESIDENTIAL PROPERTIES. SPECIAL WORK OUTSIDE OF THESE HOURS SHALL BE SCHEDULED WITH THE OWNER.
12. INSPECTION OF COMPLETED WORK WILL BE PERFORMED FOLLOWING NOTIFICATION FROM THE CONTRACTOR THAT A SPECIFIED PORTION OF THE WORK HAS BEEN COMPLETED.
13. USACE AND SCDHEC–OCRM PERMITS HAVE BEEN OBTAINED BY FOR THE PROJECT AND ARE INCLUDED IN THE PROJECT SPECIFICATIONS FOR REFERENCE. THE CONTRACTOR IS REQUIRED TO OBTAIN ALL OTHER PERMITS AS REQUIRED TO COMPLETE THE WORK. CONTRACTOR SHALL OBTAIN THESE PERMITS PRIOR TO THE COMMENCEMENT OF ANY WORK.
14. CONTRACTOR MUST DISPLAY ON SITE THE APPROPRIATE CONSTRUCTION PLACARDS AS REQUIRED BY THE PERMITTING AGENCIES THROUGHOUT THE PROJECT.
15. CONTRACTOR SHALL PROVIDE CONTROL MEASURES AS NECESSARY FOR PREVENTING DEBRIS FROM ENTERING THE WATER.

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CITY OF BEAUFORT DAY DOCK

HENRY C. CHAMBERS WATERFRONT PARK

BEAUFORT, SOUTH CAROLINA

SOUTH CAROLINA PROFESSIONAL ENGINEER No. 25057 9/29/17 WILLIAM D. BARNA

DESIGNED BY:	WDB
DRAWN BY:	WDB
CHECKED BY:	DBM
DATE:	9/29/17
REV. __ DATE:	_____

G1
GENERAL NOTES
SOIL BORING LOGS

SITE PLAN
SCALE: 1 : 50

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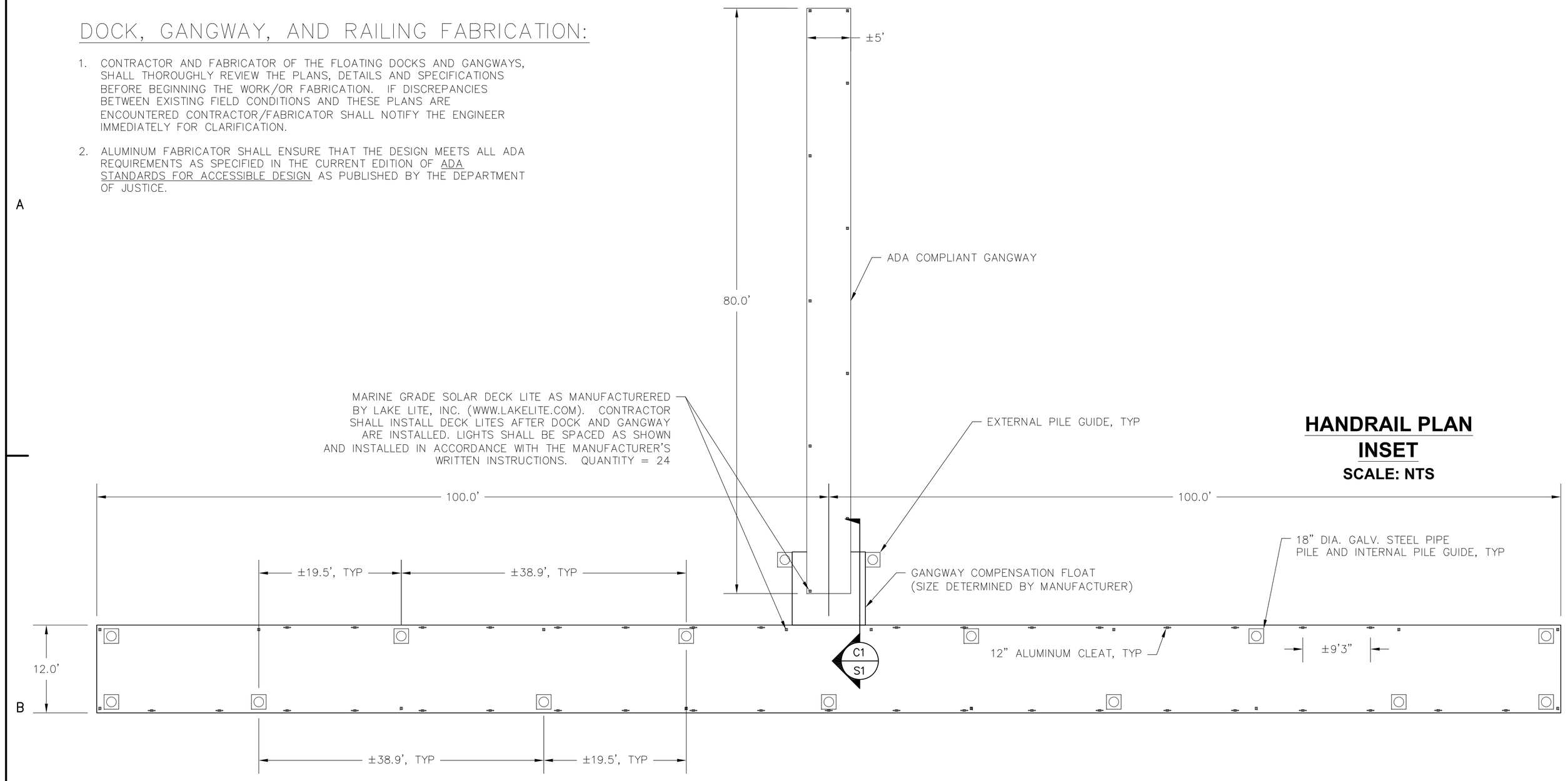
C1
SITE PLAN

DOCK, GANGWAY, AND RAILING FABRICATION:

1. CONTRACTOR AND FABRICATOR OF THE FLOATING DOCKS AND GANGWAYS, SHALL THOROUGHLY REVIEW THE PLANS, DETAILS AND SPECIFICATIONS BEFORE BEGINNING THE WORK/OR FABRICATION. IF DISCREPANCIES BETWEEN EXISTING FIELD CONDITIONS AND THESE PLANS ARE ENCOUNTERED CONTRACTOR/FABRICATOR SHALL NOTIFY THE ENGINEER IMMEDIATELY FOR CLARIFICATION.
2. ALUMINUM FABRICATOR SHALL ENSURE THAT THE DESIGN MEETS ALL ADA REQUIREMENTS AS SPECIFIED IN THE CURRENT EDITION OF ADA STANDARDS FOR ACCESSIBLE DESIGN AS PUBLISHED BY THE DEPARTMENT OF JUSTICE.

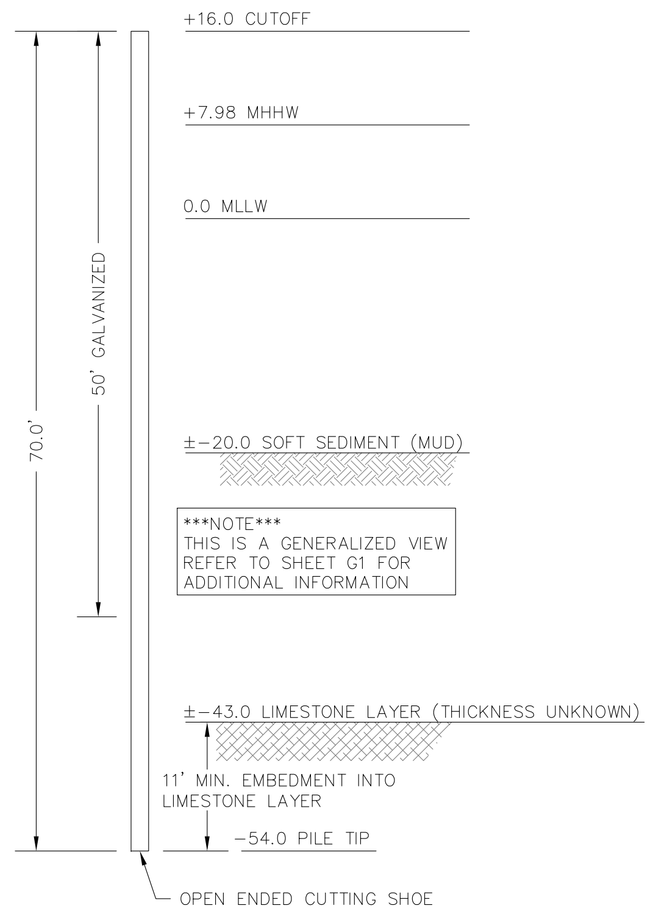


HANDRAIL PLAN INSET
SCALE: NTS

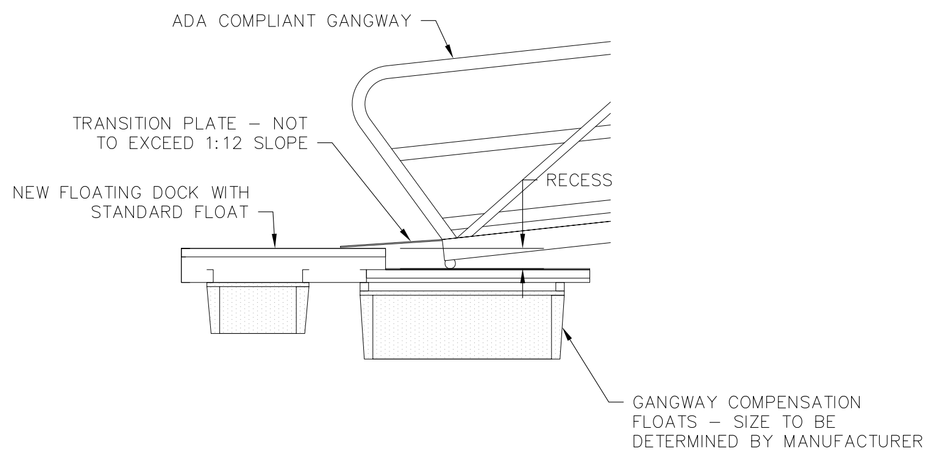
PROPOSED DOCK AND GANGWAY LAYOUT
SCALE: 1 : 10

PIPE PILE NOTES:

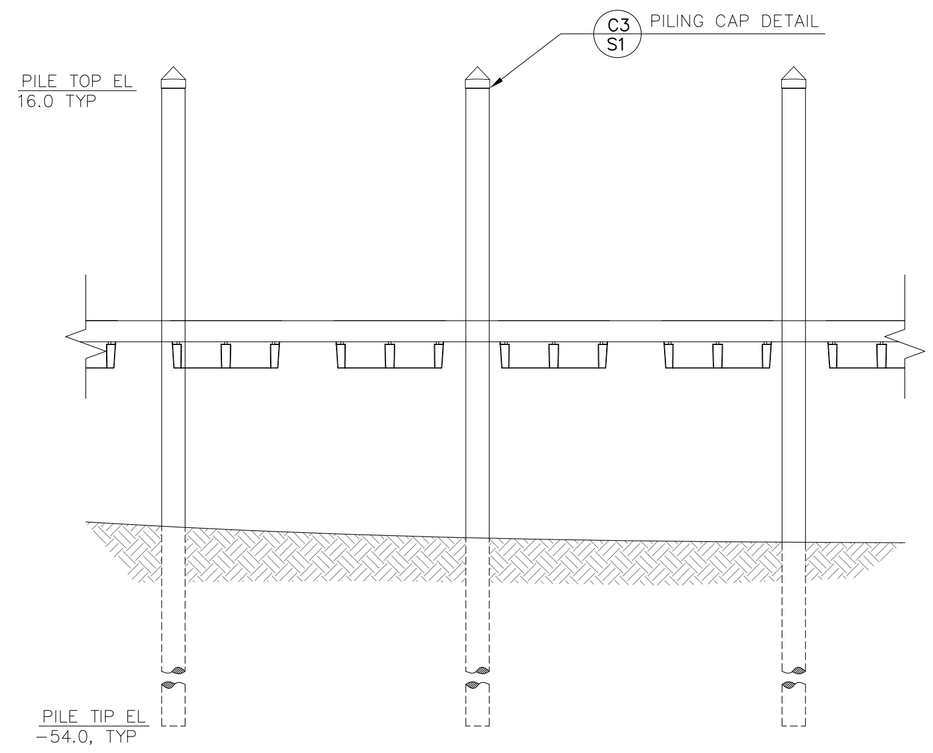
1. STEEL PIPE PILES SHALL BE IN ACCORDANCE WITH ASTM A252 GRADE 3 SEAMLESS, STRAIGHT SEAM, OR SPIRAL WELDED, WITH MINIMUM YIELD STRENGTH OF 45 KSI.
2. PILES SHALL BE HOT-DIPPED GALVANIZED FOR THE TOP 50 FEET. THE GALVANIZING SHALL BE IN ACCORDANCE WITH ASTM A 123. MINIMUM COATING THICKNESS SHALL BE 8 MILS.
3. PILES SHALL BE SET TO THE CUT-OFF ELEVATIONS AS INDICATED ON THE DRAWINGS.
4. IF REQUIRED, FIELD SPLICING OF PILES IS ONLY PERMITTED AFTER ENGINEER APPROVAL.
5. CONTRACTOR SHALL PROVIDE MEANS TO BUST, BREAK, AUGER, OR CORE THROUGH LIMESTONE LAYER AND DRIVE PILES TO SPECIFIED DEPTH WITHOUT CAUSING DAMAGE OR DISTORTION TO NEW PIPE PILES.
6. PILES SHALL BE DRIVEN TO THE ELEVATIONS AS INDICATED ON THE PLANS AND PROJECT SPECIFICATIONS.



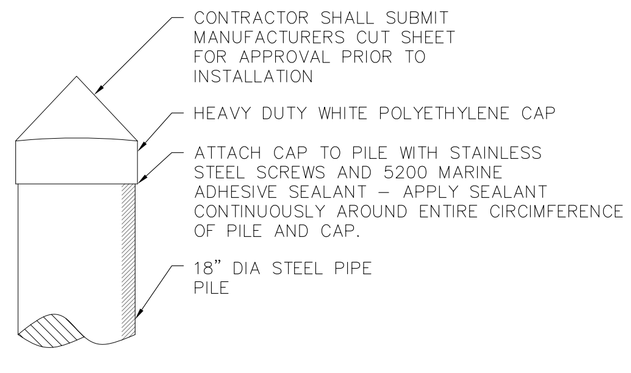
PIPE PILE DETAIL
SCALE: 1:10



C1 GANGWAY COMPENSATION FLOAT
SCALE: NTS



PARTIAL DOCK ELEVATION
SCALE: NTS



C3 PILING CAP DETAIL
SCALE: NTS

STEEL PIPE PILE SCHEDULE				
PILE SIZE	NO. OF PILES	PILE CUT OFF EL	EST. PILE TIP EL	EST. PILE LENGTH
PP 18x0.500	15	+16.0	-54.0	70'

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BEAUFORT, SOUTH CAROLINA

SOUTH CAROLINA PROFESSIONAL ENGINEER
No. 25057
9/29/17
WILLIAM D. BARRIE

DESIGNED BY:	WDB
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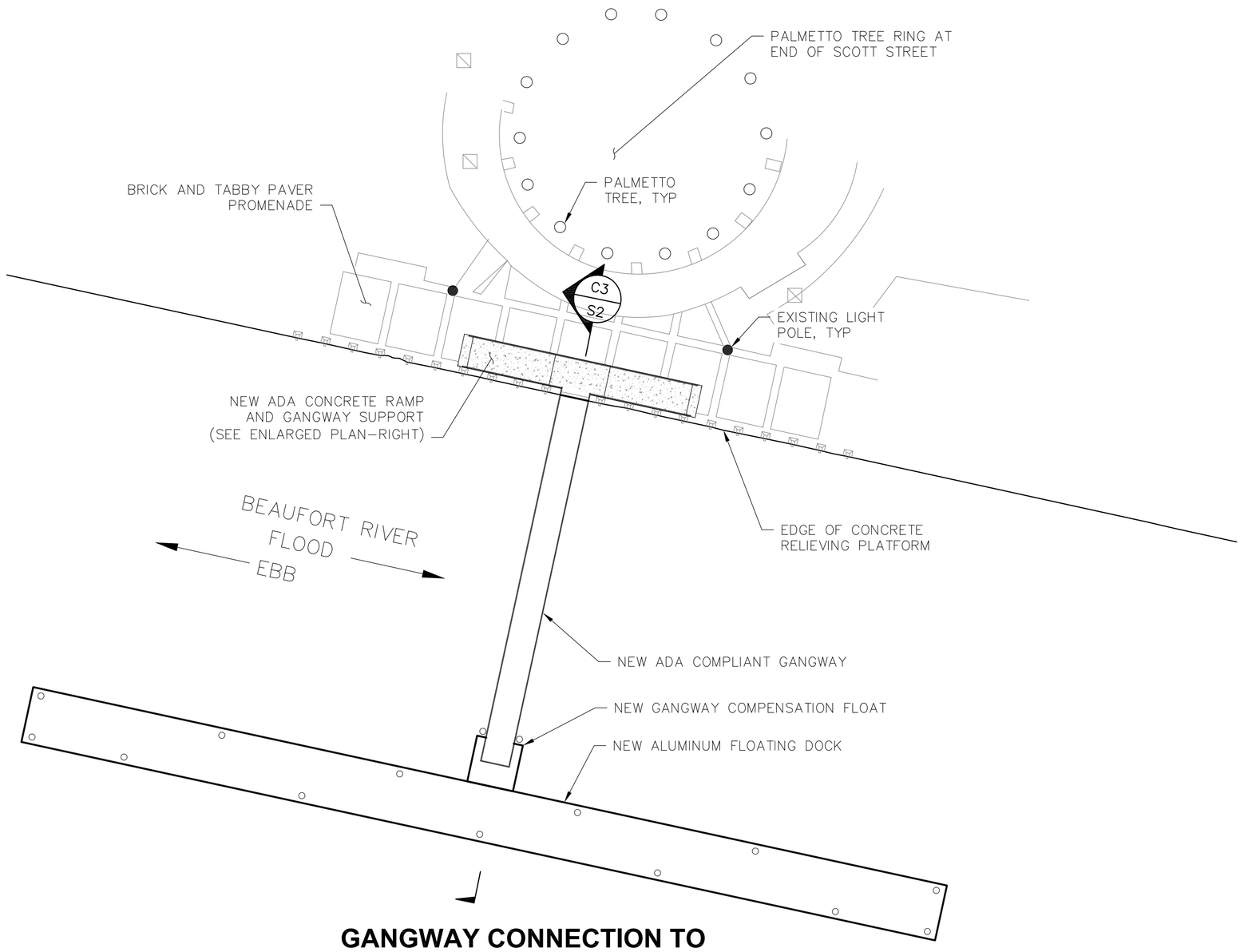
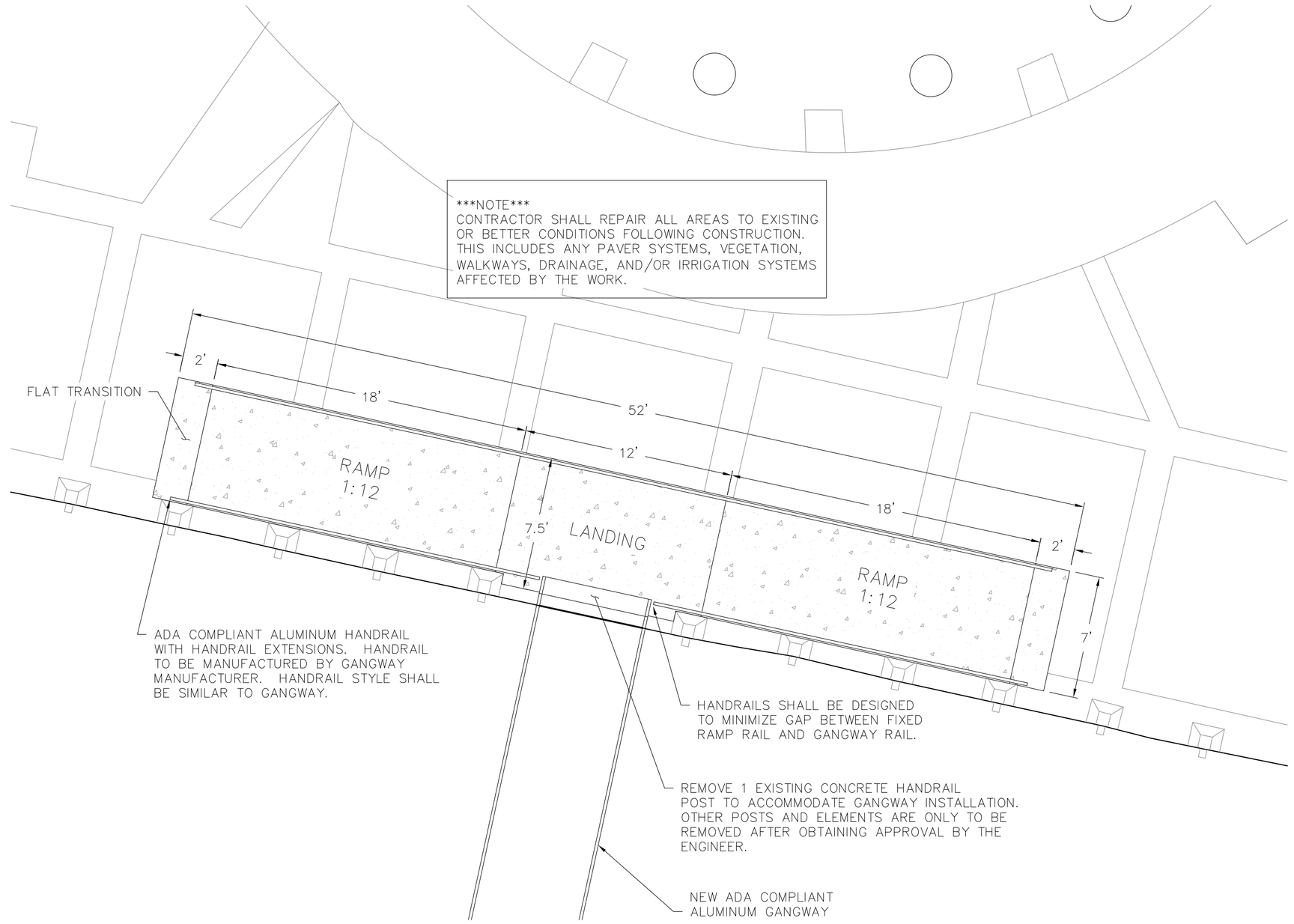
DATE:	9/29/17
REV. __ DATE:	_____

S1
DOCK AND PILE LAYOUT



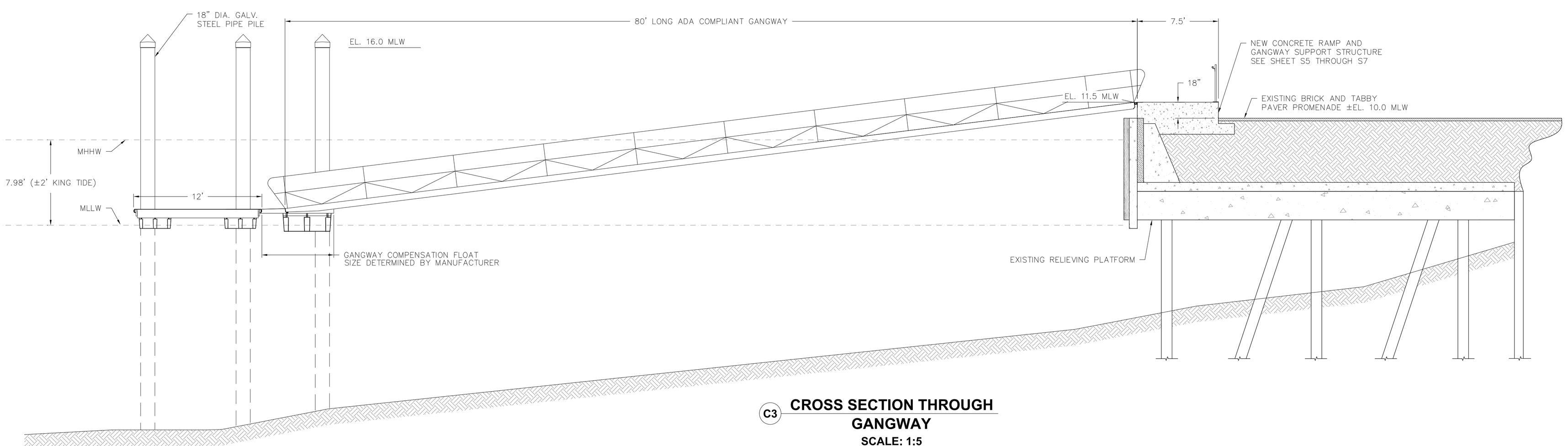
GANGWAY CONNECTION TO RELIEVING PLATFORM

SCALE: 1:20



ENLARGED PLAN

SCALE: 1:5



C3 CROSS SECTION THROUGH GANGWAY

SCALE: 1:5

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No. 25057
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DESIGNED BY:	WDB
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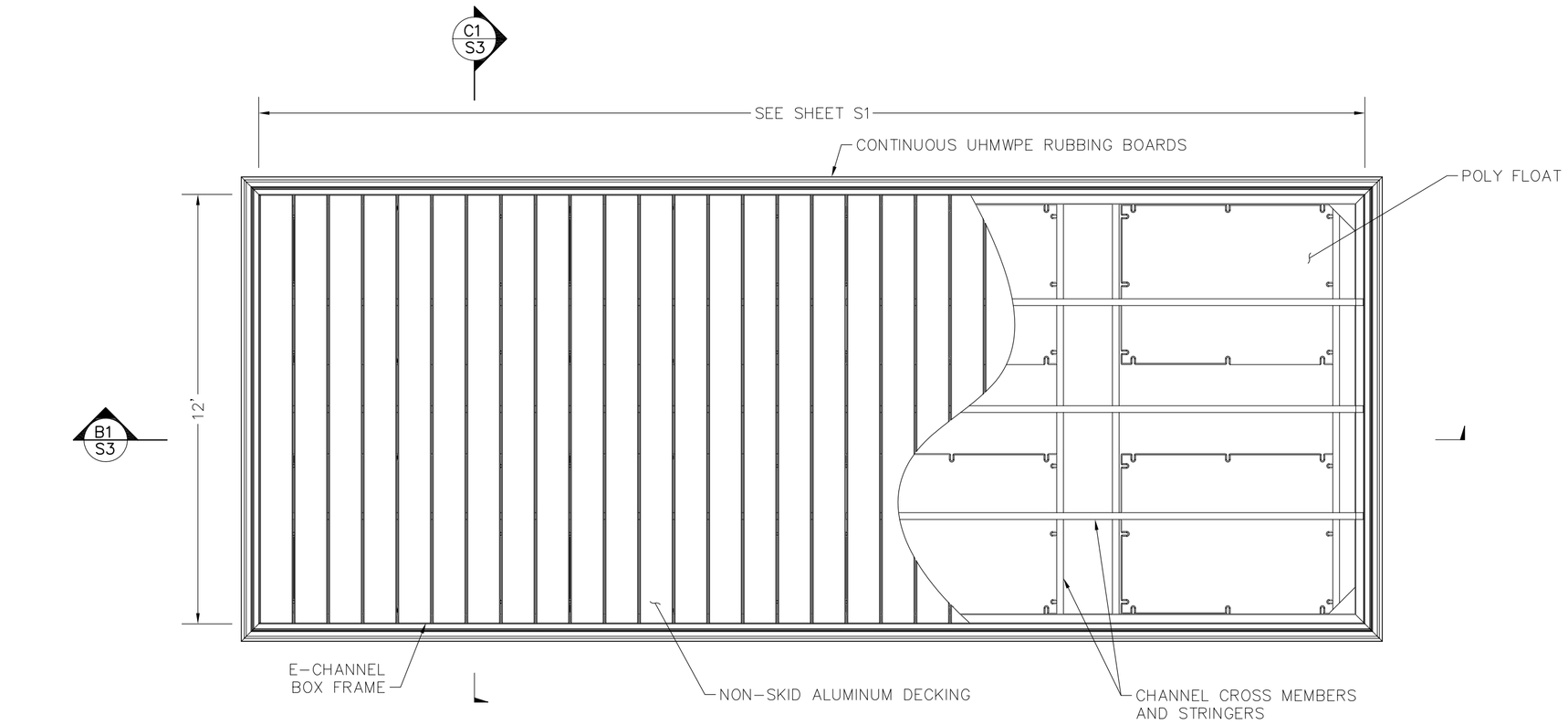
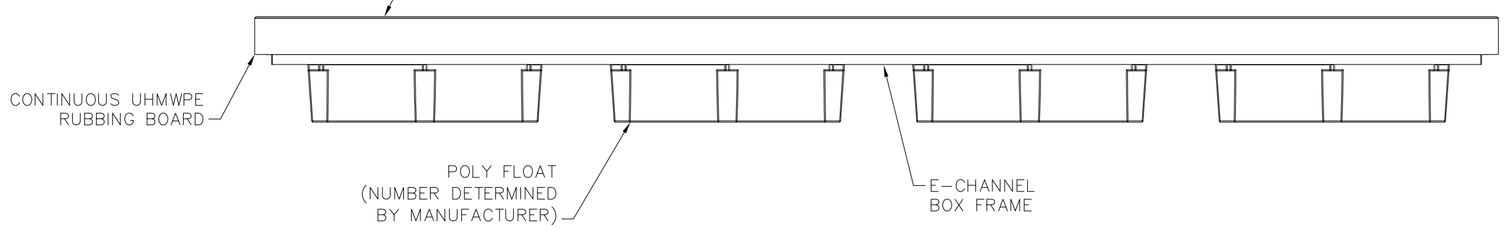
S2

GANGWAY CONNECTION

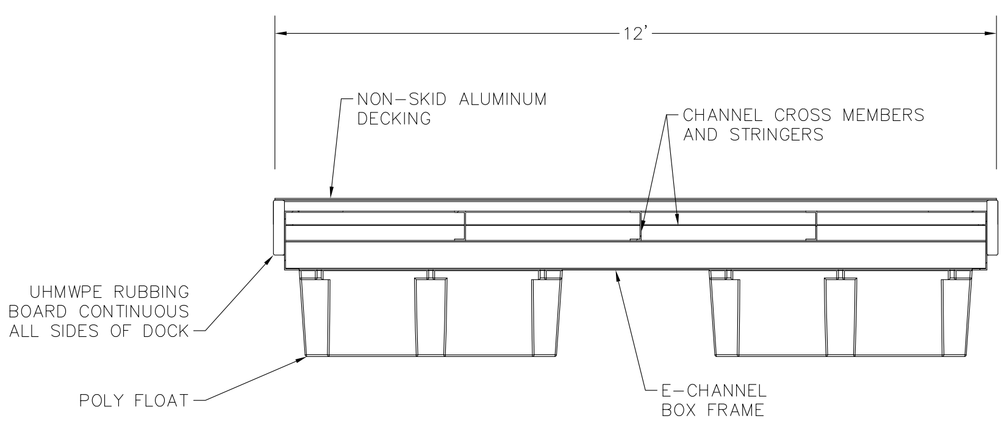


NOTE: SIZE AND LOCATION OF ALL ALUMINUM STRUCTURAL MEMBERS AND FLOTATION UNITS TO RESIST SPECIFIED LOADING SHALL BE DETERMINED BY MANUFACTURER.

A1 ALUMINUM FLOATING DOCK PLAN
SCALE: NTS



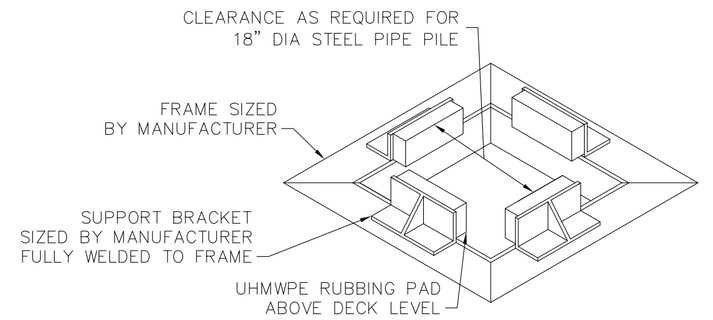
B1 ALUMINUM FLOATING DOCK ELEVATION
SCALE: NTS



C1 ALUMINUM FLOATING DOCK SECTION
SCALE: NTS

DOCK ARRANGEMENT NOTES:

1. CONTRACTOR SHALL POSITION THE FLOATING DOCKS AND GANGWAYS IN RELATION TO EACH OTHER AS SHOWN ON THESE PLANS.
2. GANGWAY SHALL NOT BE ALLOWED TO HAVE INTERFERENCE WITH THE STEEL PIPE PILES DURING ANY STAGE OF THE TIDE.
3. STEEL PIPE PILES SHALL BE PLACED IN THE CENTER OF THE PILE GUIDES.
4. FLOATING DOCKS SHALL BE POSITIONED SO THAT A MINIMUM OF 3 FT OF CLEARANCE IS MAINTAINED BETWEEN THE EDGE OF THE DOCK AND THE END OF THE GANGWAY AT ALL TIDES.
5. FLOATING DOCKS SHALL BE POSITIONED SO THAT A MINIMUM OF 6 IN. OF CLEAR SPACE IS PRESENT BETWEEN THE STEEL PIPE PILES AND GANGWAY HANDRAIL AT ALL TIDES.
6. CONTRACTOR SHALL SLIGHTLY FIELD-ADJUST THE LOCATION OF THE FLOATING DOCK TO ENSURE THAT THE REQUIRED CLEARANCES ARE MAINTAINED.
7. PRIOR TO PERFORMING ANY FIELD ADJUSTMENTS, CONTRACTOR SHALL NOTIFY THE ENGINEER.
8. LAND SIDE GANGWAY ATTACHMENT IS A FIXED LOCATION AND ANY FIELD ADJUSTMENTS SHALL BE MADE TO FLOATING DOCK.



A3 PILE GUIDE DETAIL
SCALE: NTS

PILE GUIDE ASSEMBLY NOTES:

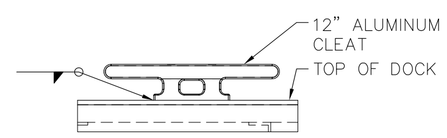
1. PILE GUIDE ASSEMBLIES SHALL BE SIZED FOR HEAVY DUTY SERVICE IN THE MARINE ENVIRONMENT.
2. PILE GUIDE FRAME AND SUPPORT BRACKETS SHALL BE ALUMINUM OR STAINLESS STEEL AS DETERMINED BY THE MANUFACTURER IN ORDER TO RESIST THE FORCES GENERATED BY THE FLOATING DOCK.
3. RUBBING PADS SHALL BE UHMWPE AND SHALL BE BOLTED TO THE SUPPORT BRACKET USING STAINLESS HARDWARE. ALL HARDWARE SHALL BE RECESSED OR COUNTERSUNK WITHIN THE RUBBING PAD.
4. SUPPORT BRACKETS SHALL BE WELDED TO THE PILE GUIDE FRAME MEMBERS.
5. STIFFENERS FOR THE ANGLE SUPPORT BRACKETS SHALL BE PROVIDED WHERE DEEMED NECESSARY BY THE MANUFACTURER.
6. ALL HARDWARE SHALL BE STAINLESS STEEL WITH NYLON LOCK NUTS WHERE APPLICABLE.
7. ANCHORING DEVICES FOR THE FLOATING DOCKS SHALL ALLOW FREE MOVEMENT OF THE DOCK WHILE MINIMIZING DAMAGE DUE TO NORMAL DOCK MOVEMENT CAUSED BY TIDES, BOAT WAKES, WATER FLUCTUATION AND SEASONAL WINDS. GUIDES SHALL BE OF SUFFICIENT NUMBER TO RESTRAIN A UNIFORM LATERAL FORCE OF 150 POUNDS PER LINEAR FOOT APPLIED ALONG THE ENTIRE LENGTH OF THE DOCK.

FLOATING DOCK NOTES:

1. ALL MATERIALS SHALL BE AS MANUFACTURED BY GATOR DOCK & MARINE, LLC, SANFORD, FLORIDA, (407) 323-0190 OR ENGINEER APPROVED EQUAL.
2. THE DECK AND FRAME STRUCTURAL COMPONENTS OF THE FLOATING DOCKS SHALL BE DESIGNED WITH MINIMUM SAFETY FACTORS ON WORKING STRESS WHICH CONFORM TO THOSE SET FORTH IN THE LATEST ISSUE OF THE ALUMINUM ASSOCIATION "SPECIFICATIONS FOR ALUMINUM STRUCTURES" FOR BUILDINGS AND SIMILAR TYPE STRUCTURES.
3. THE MANUFACTURER/SUPPLIER SHALL HAVE A MINIMUM OF 5 YEARS CONTINUOUS EXPERIENCE IN COMMERCIAL DOCK FABRICATION.
4. ALUMINUM EXTRUSIONS FOR DOCK STRUCTURES SHALL BE ALUMINUM ALLOY 6061-T6 "E" CHANNELS EXTRUDED IN ACCORDANCE WITH THE REQUIREMENTS OF APPLICABLE SECTIONS OF FEDERAL SPECIFICATIONS QQ-A-200. MISCELLANEOUS ALUMINUM MAY BE 6063-T5 OR 5052-H32.
5. ALUMINUM DECKING SHALL BE SYMMETRICALLY EXTRUDED SLATS WITH INTEGRATED RIBS AND MECHANICAL KNURLING TO PROVIDE A NON SKID SURFACE. DECKING TO BE ALUMINUM ALLOY 6061-T6.
6. ALL FLOATING DOCKS SHALL BE DESIGNED FOR A MINIMUM FREEBOARD OF 8 INCHES UNDER FULL DEAD PLUS LIVE LOAD, AND 10 INCHES UNDER A DEADLOAD PLUS CONCENTRATED LOAD OF 400 POUNDS APPLIED AT ANY LOCATION ON THE DOCK WALKING SURFACE. ADDITIONAL FLOTATION SHALL BE ADDED TO SUPPORT THE GANGWAY DEAD LOADS WITHOUT CREATING UNDUE DISTORTION IN THE DOCK. POLY FLOATS SHALL BE DESIGNED FOR A MINIMUM OF 20 PSF LIVE LOAD PROVIDING A MINIMUM OF 16 INCHES UNLOADED FREEBOARD.
7. ALL FLOATING DOCKS AND PILE GUIDES SHALL BE DESIGNED TO MEET THE FOLLOWING WAVE CONDITIONS

   WAVE HEIGHT = 0.92 FT
   WAVE PERIOD = 1.78 SEC
   WAVE LENGTH = 16.17 FT
   MAXIMUM DEFLECTION AT TOP OF PILE (EL 16.0 MLW) = 4.5 IN.

8. HINGED OR BOLTED FLOATING DOCK MODULE CONNECTORS SHALL BE ABLE TO WITHSTAND A LOAD OF 3000 POUNDS APPLIED TO THE FULL CONNECTOR.
9. ALL WELDS SHALL BE MADE IN A CLEAN AND NEAT MANNER TO RESULT IN A HIGH QUALITY WELD. FABRICATOR IS RESPONSIBLE FOR REMOVING ALL BURS AND SHARP EDGES FROM ALUMINUM MEMBERS OR WELDS THAT MAY POSE A HAZARD TO USERS.
10. CONTRACTOR IS REQUIRED TO SUBMIT SHOP DRAWINGS AND ENGINEERING CALCULATIONS FOR ALL GANGWAY, FIXED PIERS, AND FLOATING DOCKS FROM THE MANUFACTURER APPROVED BY THE ENGINEER. THE MANUFACTURERS SHOP DRAWINGS AND CALCULATIONS SHALL BE SIGNED AND STAMPED BY A SOUTH CAROLINA REGISTERED PROFESSIONAL ENGINEER.
11. CONTRACTOR SHALL PROPERLY INSULATE ANY POTENTIALLY CORROSIVE OR DISSIMILAR METALS BY USE OF NEOPRENE, NYLON, OR A OTHER MATERIAL AS APPROVED BY THE ENGINEER.
12. ALL HARDWARE FOR CONNECTING THE UHMWPE RUBBING BOARDS SHALL BE COUNTERSUNK.



C4 TYPICAL CLEAT DETAIL
SCALE: NTS

CLEAT NOTES:

1. CLEATS SHALL BE CAST ALUMINUM ALLOY MEETING THE REQUIREMENTS OF THE FEDERAL SPECIFICATIONS QQ-A-571F AND QQ-A-601E.
2. CLEATS SHALL BE DESIGNED TO WITHSTAND A MOORING LINE LOAD OF 1500 POUNDS IN ANY DIRECTION.
3. CLEATS ON ALUMINUM DECKED DOCKS SHALL BE WELDED WITH A CONTINUOUS FILLET WELD. ALL CLEATS SHALL BE INSTALLED IN LOCATIONS SHOWN ON SHEET S1.

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CITY OF BEAUFORT DAY DOCK

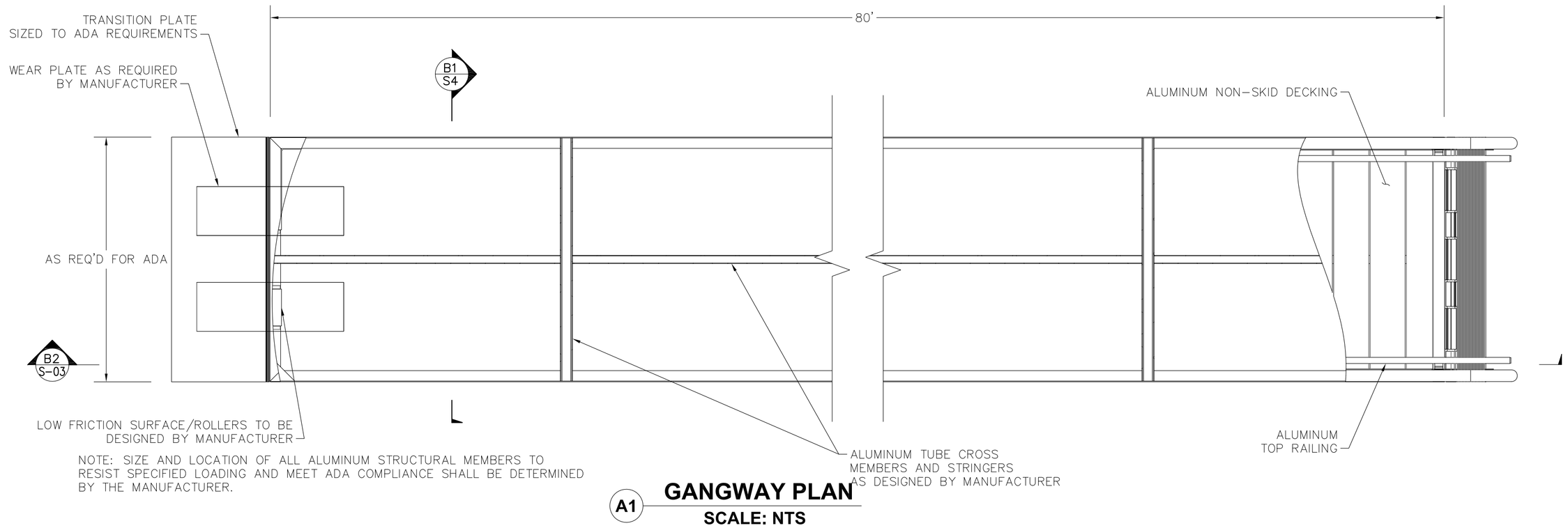
HENRY C. CHAMBERS WATERFRONT PARK

BEAUFORT, SOUTH CAROLINA

SOUTH CAROLINA LICENSED PROFESSIONAL ENGINEER
No. 25057
9/29/17
WILLIAM D. BARNY

DESIGNED BY:	WDB
DRAWN BY:	WDB
CHECKED BY:	DBM
DATE:	9/29/17
REV. __ DATE:	_____

S3
FLOATING DOCK DETAILS

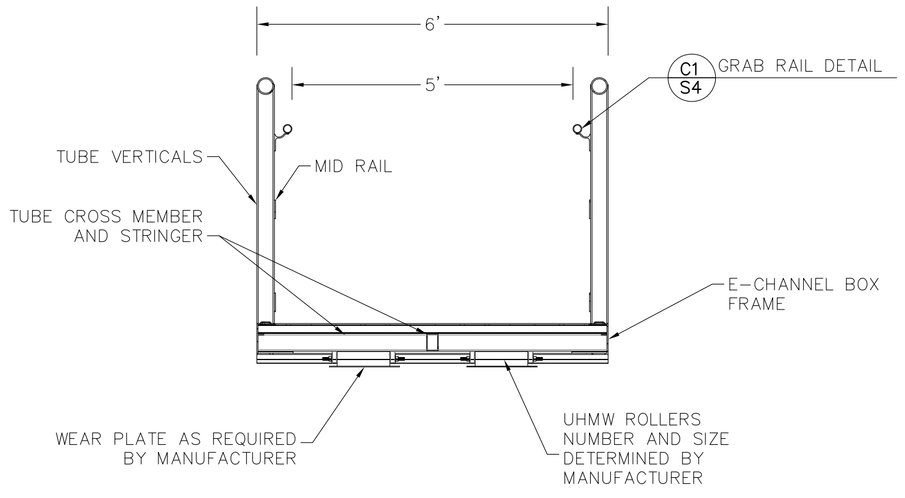


NOTE: SIZE AND LOCATION OF ALL ALUMINUM STRUCTURAL MEMBERS TO RESIST SPECIFIED LOADING AND MEET ADA COMPLIANCE SHALL BE DETERMINED BY THE MANUFACTURER.

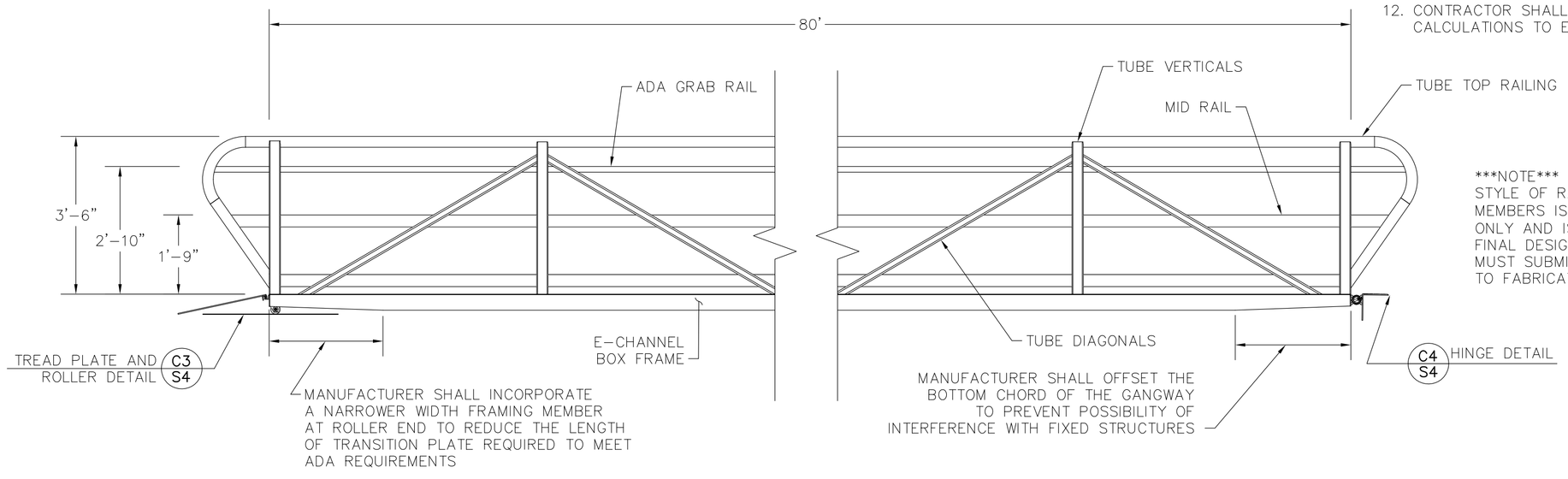
A1 GANGWAY PLAN
SCALE: NTS

GANGWAY NOTES:

1. ALL MATERIALS SHALL BE AS MANUFACTURED BY GATOR DOCK & MARINE, LLC, SANFORD, FLORIDA, (407) 323-0190 OR ENGINEER APPROVED EQUAL.
2. THE DECK AND FRAME STRUCTURAL COMPONENTS OF THE GANGWAYS SHALL BE DESIGNED WITH MINIMUM SAFETY FACTORS ON WORKING STRESS WHICH CONFORM TO THOSE SET FORTH IN THE LATEST ISSUE OF THE ALUMINUM ASSOCIATION "SPECIFICATIONS FOR ALUMINUM STRUCTURES" FOR BUILDINGS AND SIMILAR TYPE STRUCTURES.
3. THE MANUFACTURER/SUPPLIER SHALL HAVE A MINIMUM OF 5 YEARS CONTINUOUS EXPERIENCE IN COMMERCIAL GANGWAY FABRICATION.
4. ALUMINUM EXTRUSIONS FOR GANGWAY STRUCTURES SHALL BE ALUMINUM ALLOY 6061-T6 "E" CHANNELS EXTRUDED IN ACCORDANCE WITH THE REQUIREMENTS OF APPLICABLE SECTIONS OF FEDERAL SPECIFICATIONS QQ-A-200. MISCELLANEOUS ALUMINUM MAY BE 6063-T5 OR 5052-H32.
5. ALUMINUM DECKING SHALL BE SYMMETRICALLY EXTRUDED SLATS WITH INTEGRATED RIBS AND MECHANICAL KNURLING TO PROVIDE A NON SKID SURFACE. DECKING TO BE ALUMINUM ALLOY 6061-T6.
6. GANGWAYS SHALL BE STRUCTURALLY DESIGNED FOR DEAD LOAD PLUS LIVE LOAD. DEAD LOAD SHALL BE DETERMINED BY MANUFACTURER AND LIVE LOAD SHALL BE 100 PSF.
7. THE MAXIMUM ALLOWABLE DEFLECTION DUE TO THE DEAD LOAD AND LIVE LOAD COMBINATION SHALL BE L/180 WHERE L IS THE DISTANCE BETWEEN THE HINGE CONNECTION AND THE ROLLERS.
8. ALL HANDRAIL COMPONENTS SHALL BE FULLY WELDED.
9. ALL OTHER CONNECTION HARDWARE (NUTS, WASHERS, BOLTS) SHALL BE A316 SS.
10. ALL GANGWAYS SHALL BE DESIGNED FOR ADA COMPLIANCE REQUIREMENTS.
11. ALL GANGWAY COMPONENTS SHALL BE SIZED BY THE MANUFACTURER TO MEET THE SPECIFIED LOADING WHILE MAINTAINING 5 FT OF CLEAR SPACING BETWEEN GRAB RAILS.
12. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS AND ENGINEERING CALCULATIONS TO ENGINEER FOR APPROVAL PRIOR TO INSTALLATION.

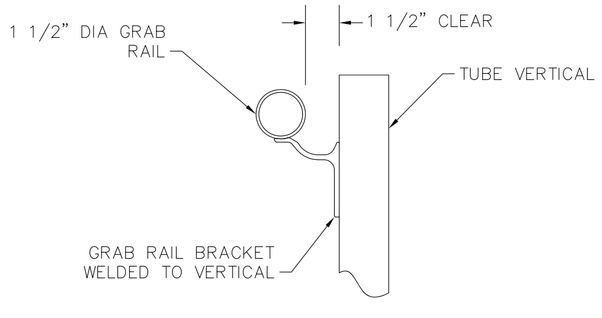


B1 GANGWAY SECTION
SCALE: NTS

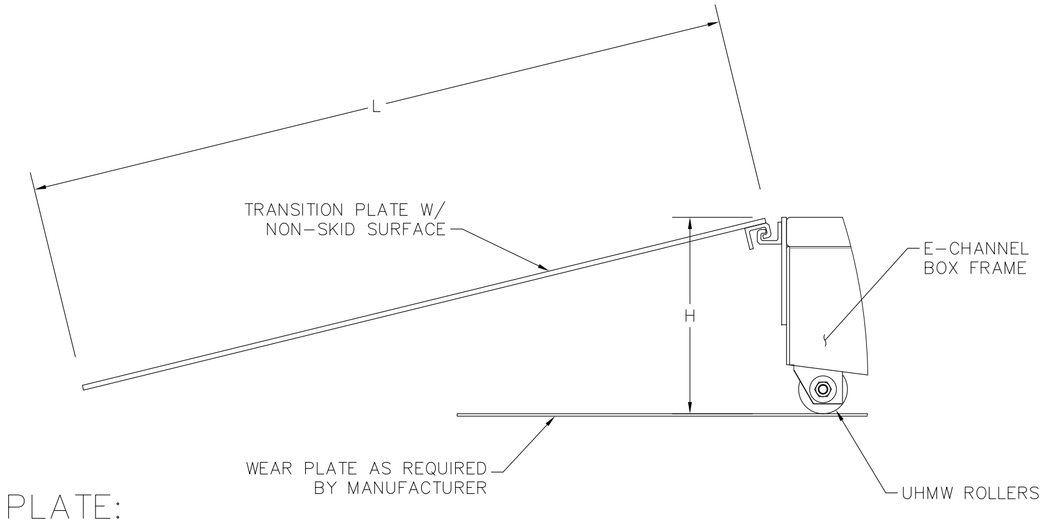


NOTE
STYLE OF RAIL AND LAYOUT OF STRUCTURAL MEMBERS IS FOR REFERENCE/REPRESENTATION ONLY AND IS NOT TO BE CONSTRUED AS THE FINAL DESIGN OF THE GANGWAY. MANUFACTURER MUST SUBMIT SHOP DRAWINGS FOR REVIEW PRIOR TO FABRICATION.

B2 GANGWAY ELEVATION
SCALE: NTS



C1 GRAB BAR DETAIL
SCALE: NTS



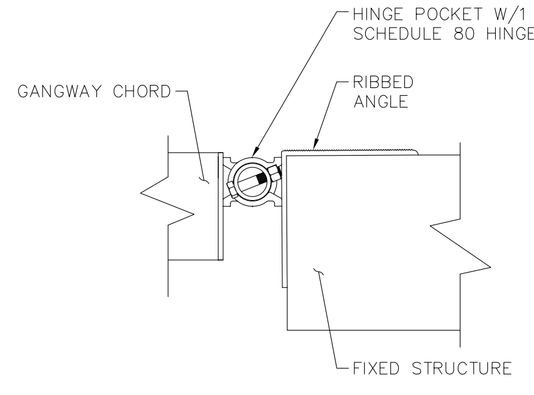
TRANSITION PLATE:

1. MANUFACTURER SHALL INCORPORATE A NARROW DEPTH FRAMING MEMBER AT THE ROLLER END OF THE GANGWAY TO REDUCE THE REQUIRED LENGTH OF THE TRANSITION PLATE.
2. LENGTH OF TRANSITION PLATE (L) SHALL BE CALCULATED AS L = 12 x H, WHERE L AND H ARE IN INCHES.

C3 TREAD PLATE & ROLLER DETAIL
SCALE: NTS

HINGE NOTES:

1. THE DETAIL SHOWN IS FOR REFERENCE ONLY.
2. FOR GANGWAY AND HINGE CONNECTION TO EXISTING STRUCTURES SEE SHEET S7.
3. THE MANUFACTURER SHALL PROVIDE A STAINLESS STEEL SAFETY CHAINS OR WIRE ROPE BOLTED TO EACH SIDE OF THE GANGWAY AND FASTENED TO THE NEW CONCRETE GANGWAY SUPPORT BY THE CONTRACTOR DURING CONSTRUCTION.
4. SAFETY CHAIN(S) SHALL BE SIZED TO SUPPORT THE FULL WEIGHT OF THE GANGWAY PLUS LIVE LOAD.
5. HARDWARE TO ATTACH SAFETY CHAIN TO THE NEW CONCRETE GANGWAY SUPPORT SHALL BE DETERMINED BY THE MANUFACTURER.



C4 HINGE DETAIL
SCALE: NTS

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CITY OF BEAUFORT DAY DOCK

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SOUTH CAROLINA PROFESSIONAL ENGINEER No. 25057 9/29/17 WILLIAM D. BARNA

DESIGNED BY:	WDB
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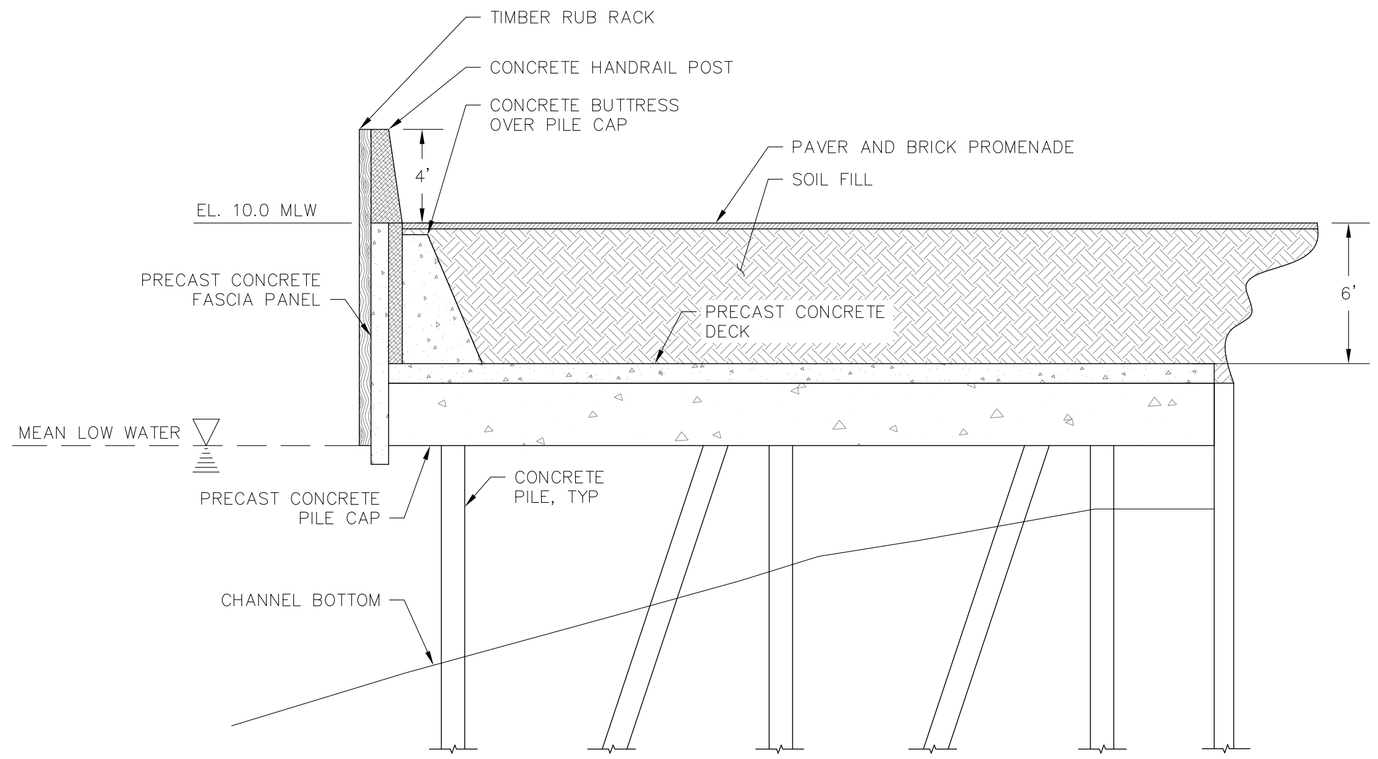
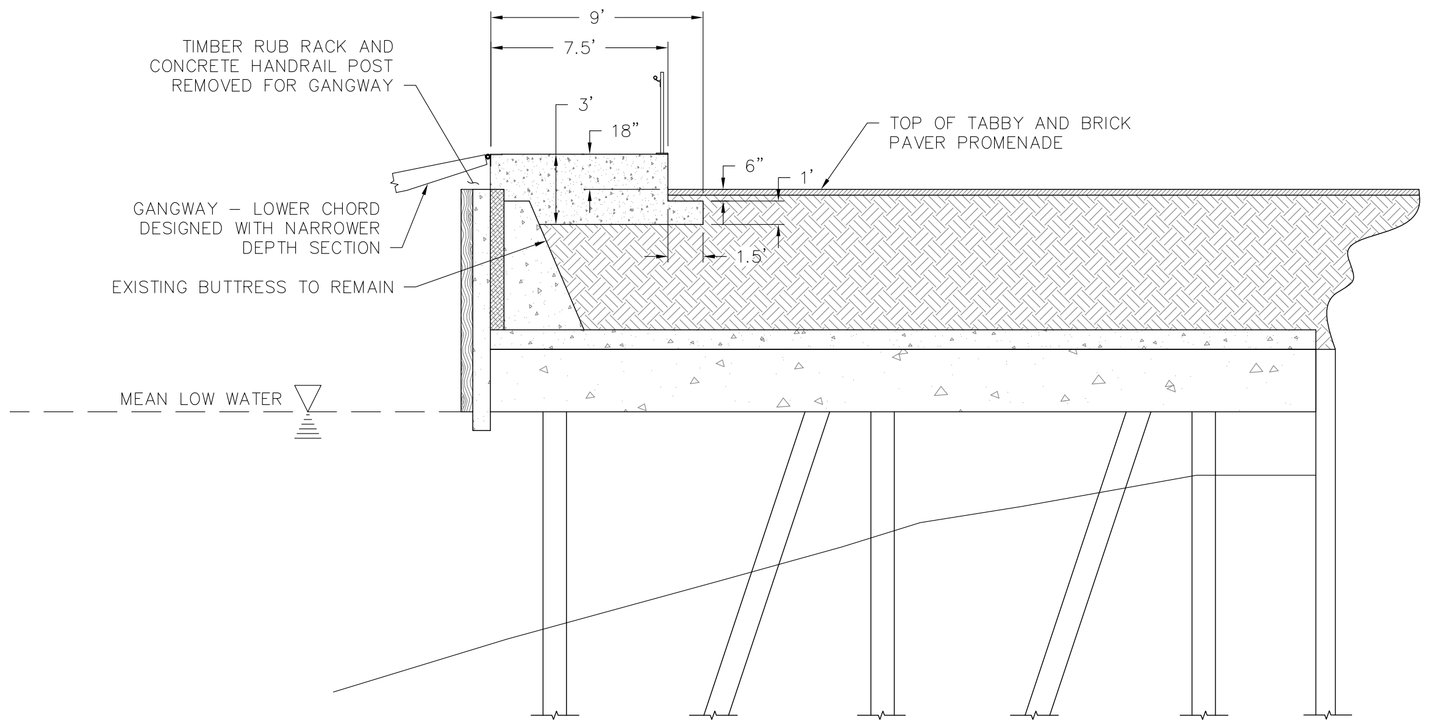
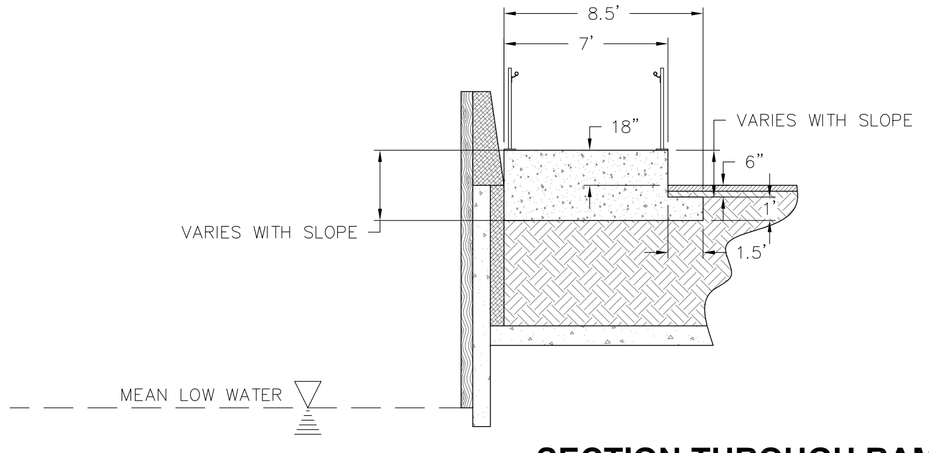
S4
GANGWAY DETAILS



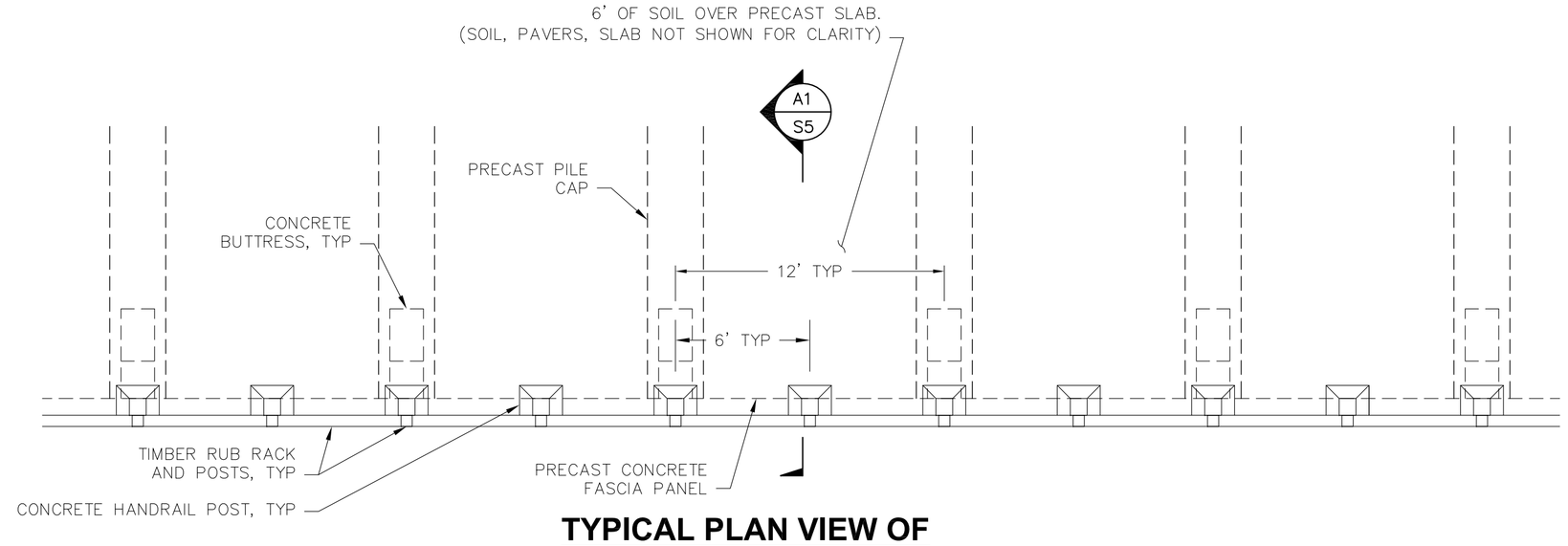
A1 EXISTING SECTION THROUGH RELIEVING PLATFORM
SCALE: 1:5



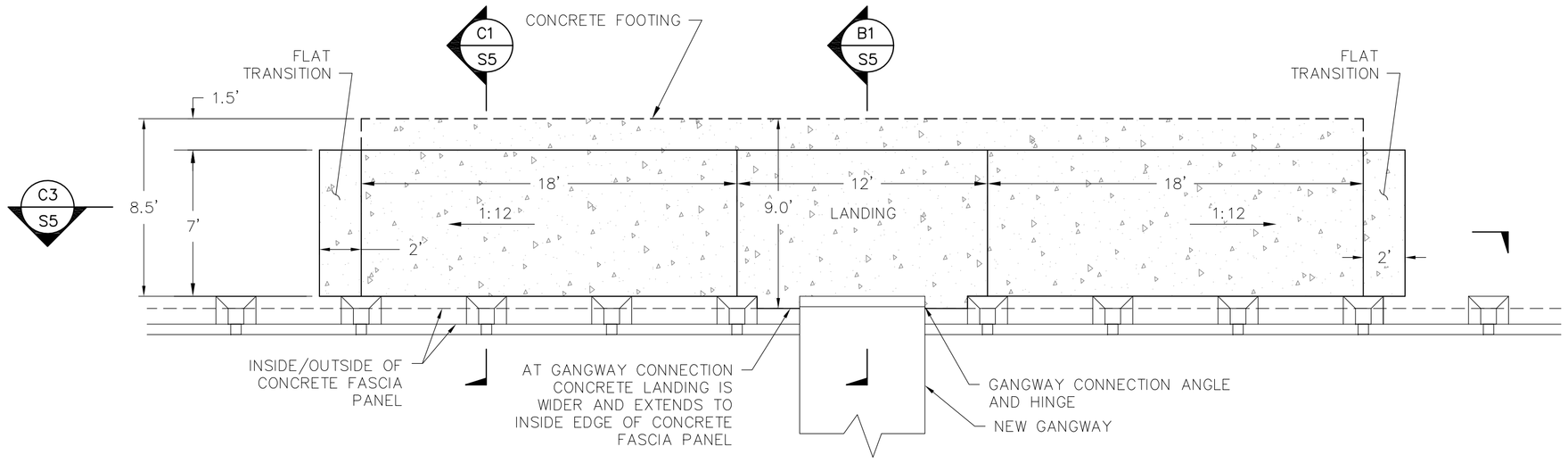
B1 SECTION THROUGH LANDING AND GANGWAY
SCALE: 1:5



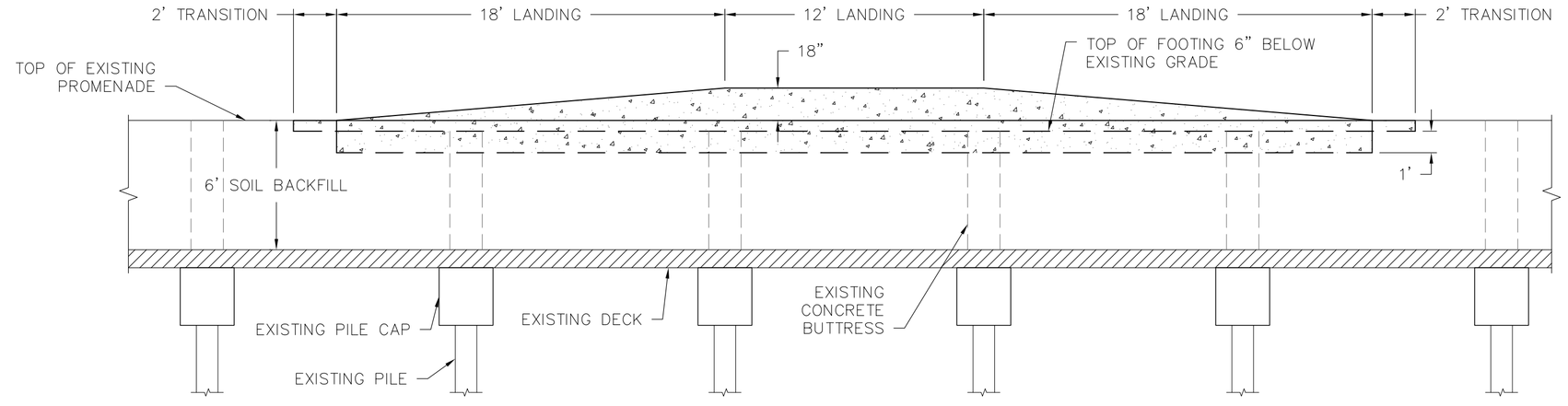
C1 SECTION THROUGH RAMP
SCALE: 1:5



TYPICAL PLAN VIEW OF EXISTING RELIEVING PLATFORM
SCALE: 1:5



NEW CONCRETE RAMP PLAN
SCALE: 1:5



C3 SECTION THROUGH RAMP
SCALE: 1:5

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SOUTH CAROLINA PROFESSIONAL ENGINEER No. 25057 9/29/17 WILLIAM D. SARRIA

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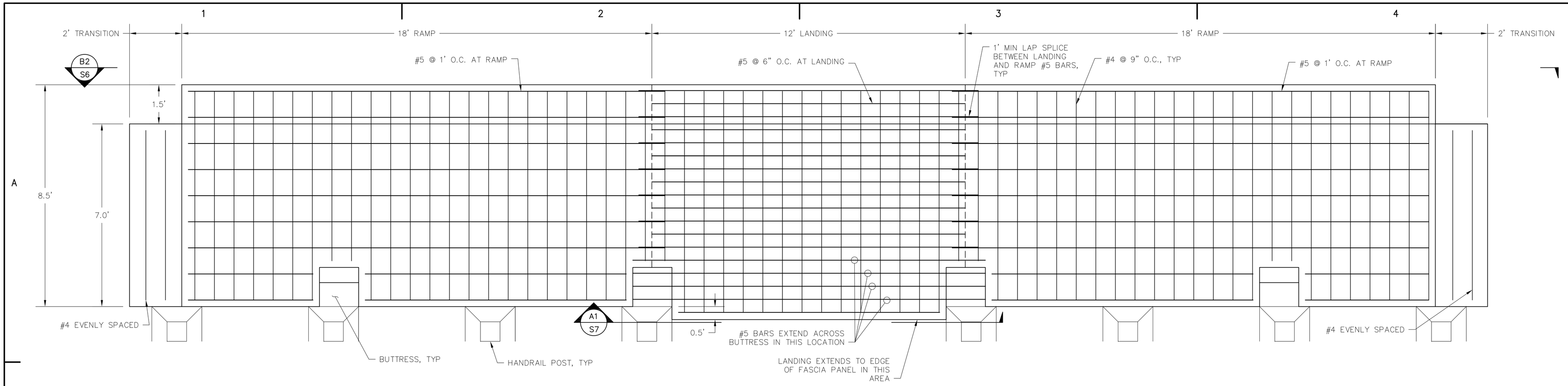
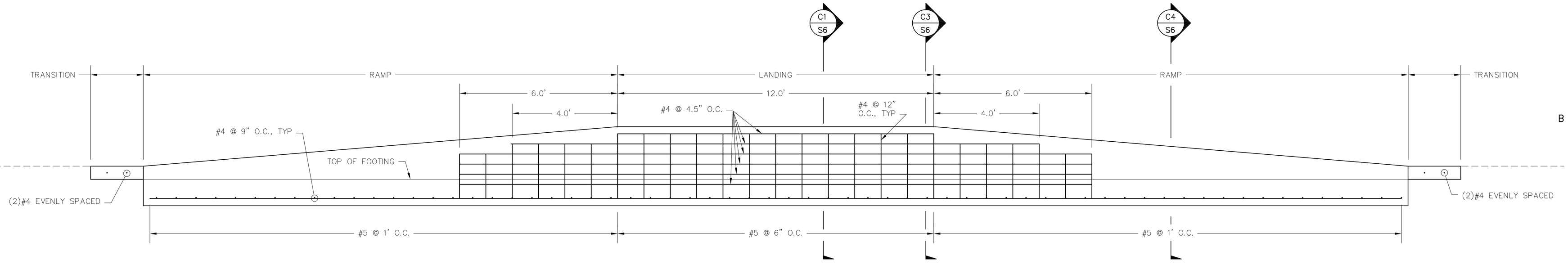
S5
CONCRETE RAMP LAYOUT



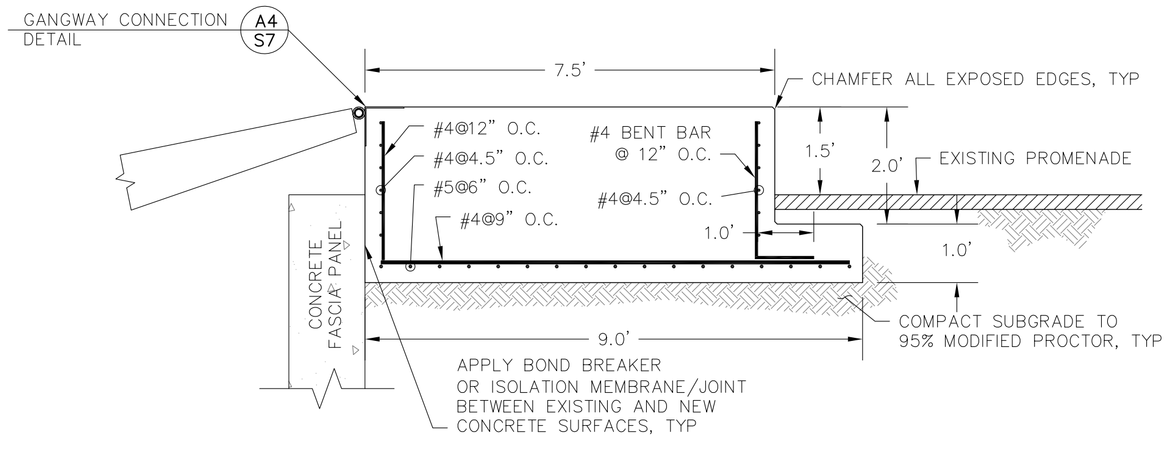
RAMP REINFORCEMENT PLAN

SCALE: 1:2



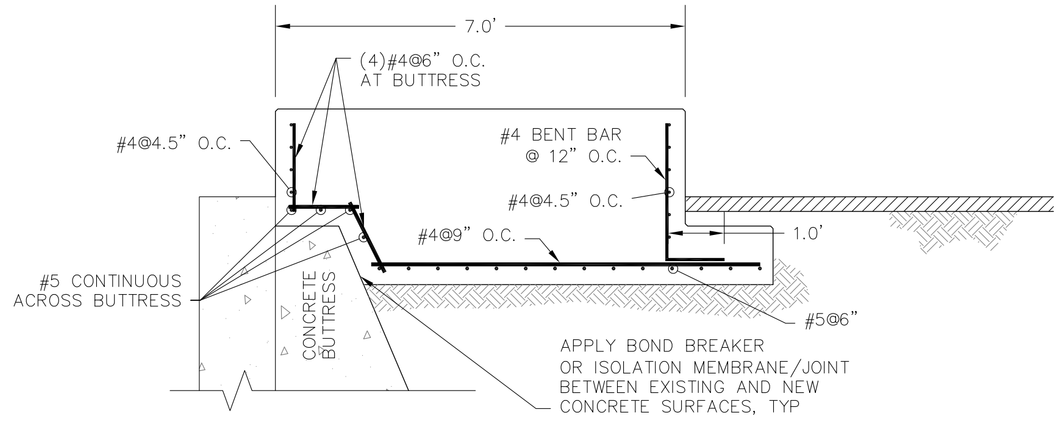
B2 SECTION THROUGH RAMP

SCALE: 1:2



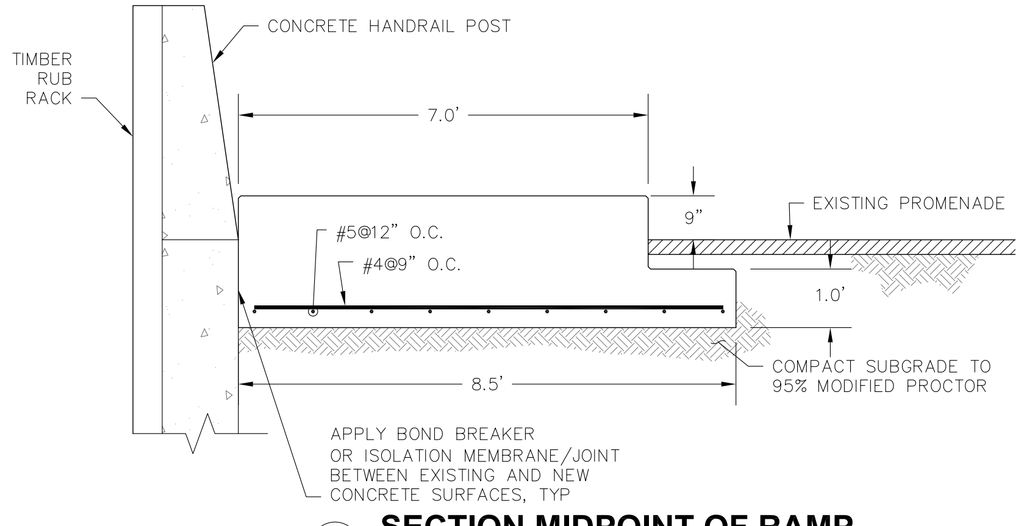
C1 SECTION THROUGH LANDING

SCALE: 1:2



C3 SECTION THROUGH BUTTRESS

SCALE: 1:2



C4 SECTION MIDPOINT OF RAMP

SCALE: 1:2

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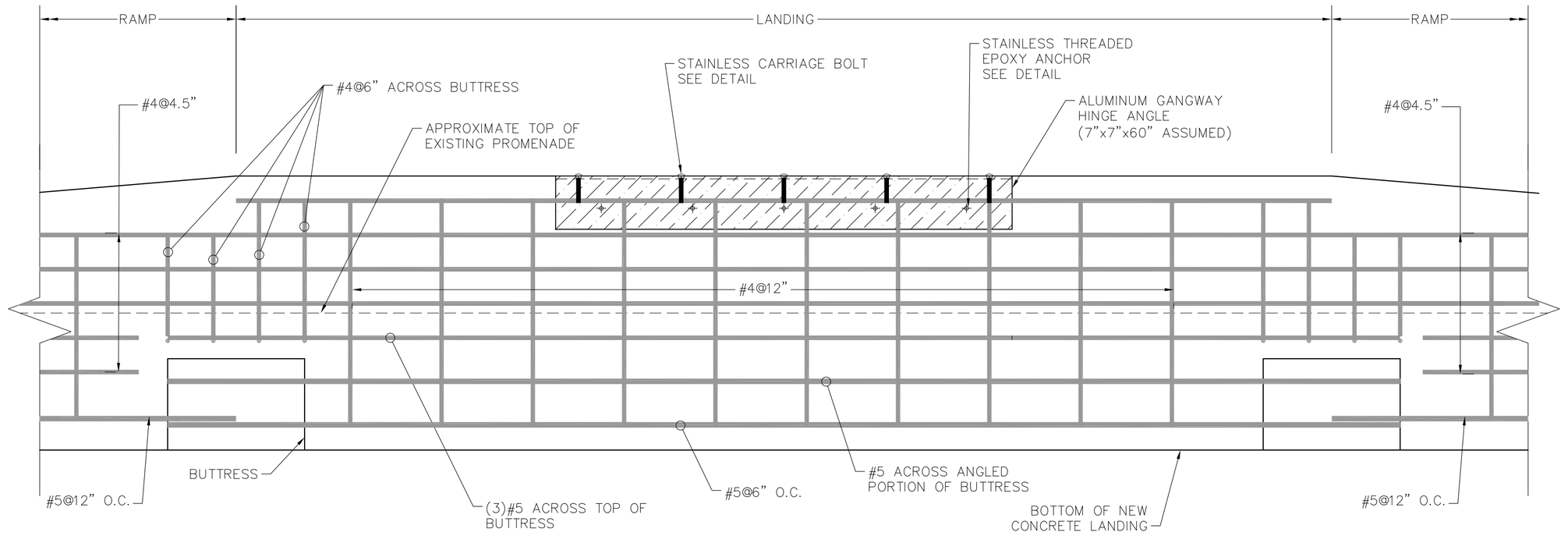
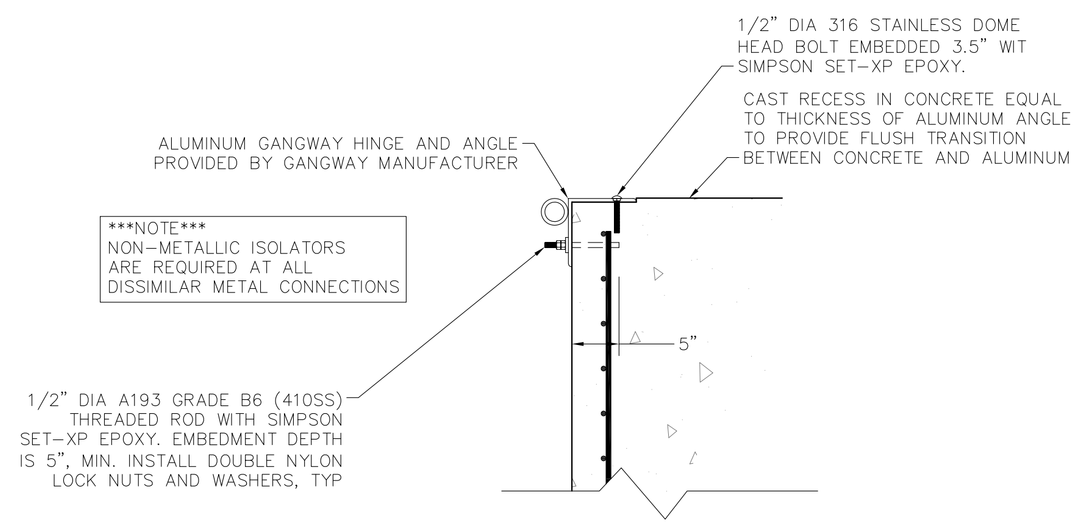
S6

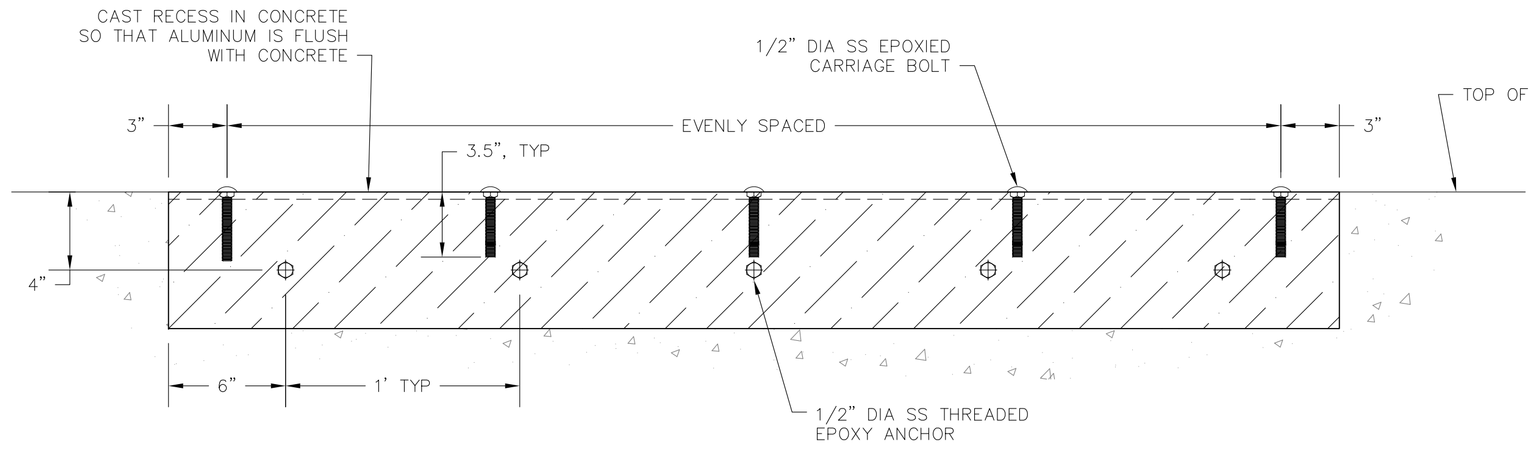
CONCRETE RAMP DETAILS



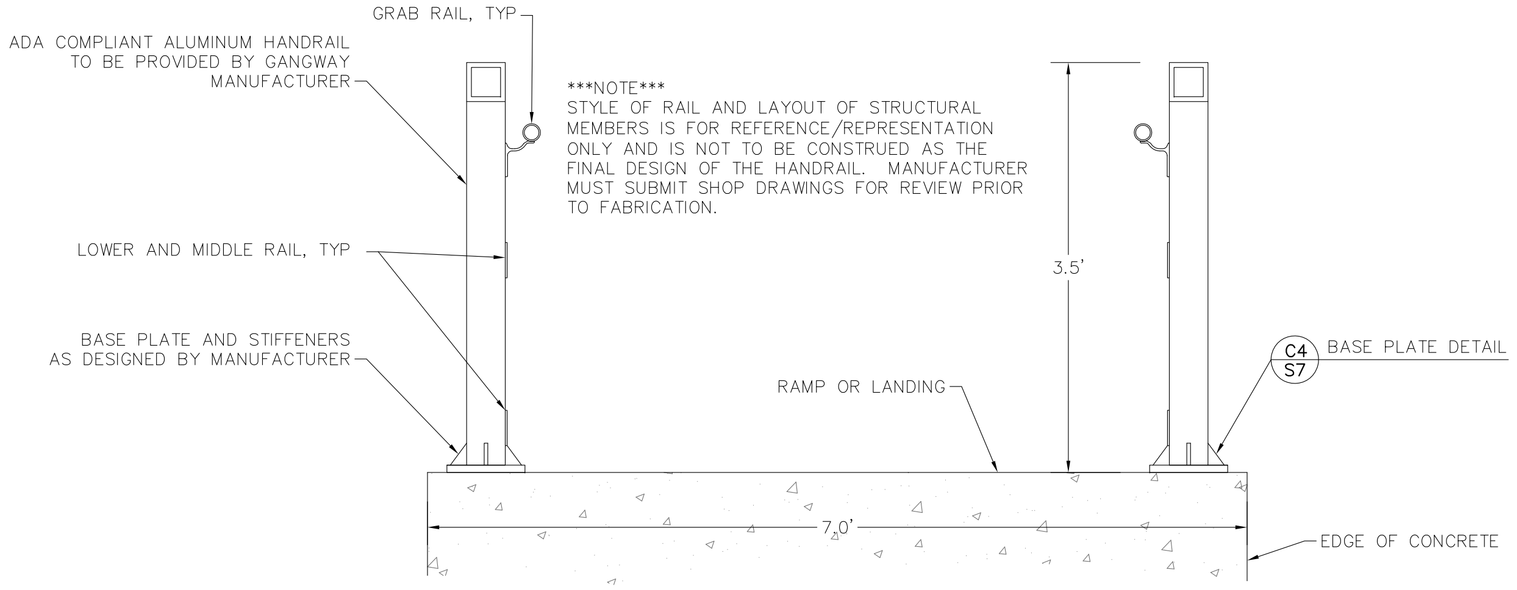
A1 REINFORCING AND GANGWAY DETAIL
SCALE: 2:1



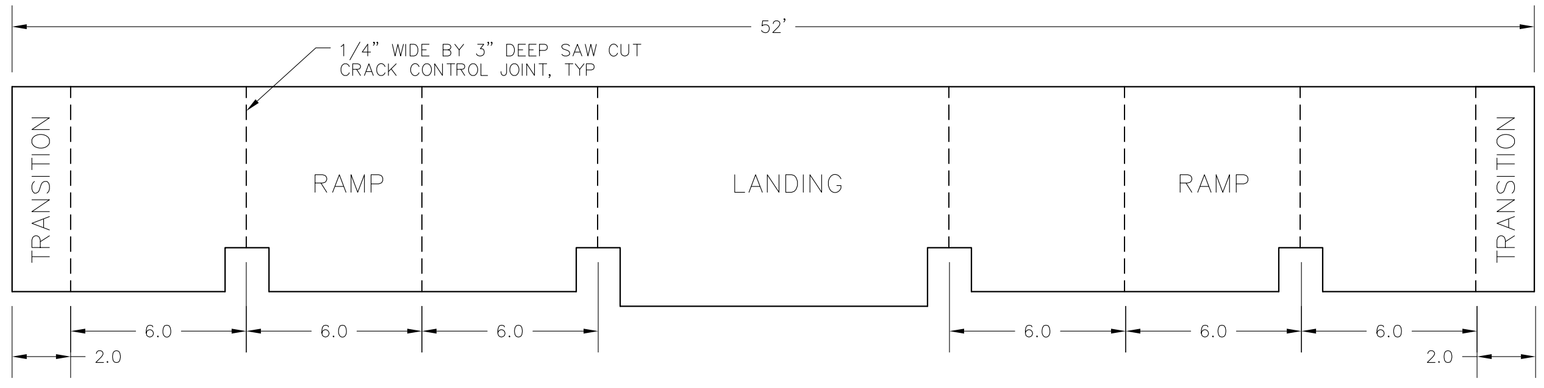
A4 GANGWAY CONNECTION DETAIL
SCALE: 2:1



GANGWAY HINGE PLATE BOLT LAYOUT
SCALE: 2:1



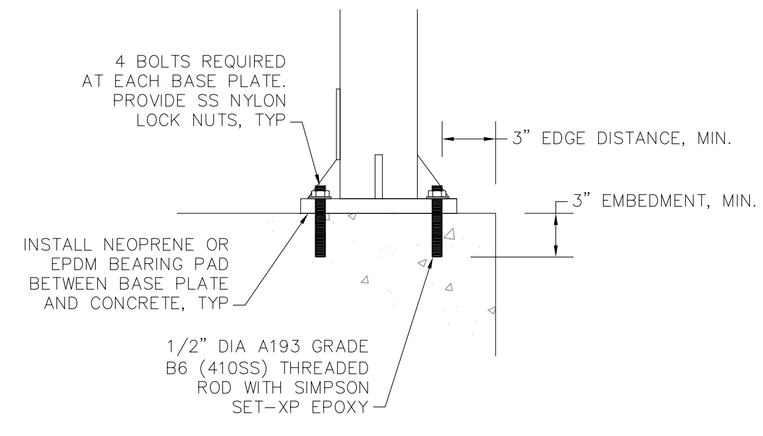
CONCRETE RAMP HANDRAIL SECTION
SCALE: 1:1



CONTROL JOINT LOCATION PLAN
SCALE: 1:4

CONCRETE NOTES:

1. ALL CONCRETE CONSTRUCTION SHALL CONFORM TO ACI 318 BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE.
2. ALL CONCRETE SHALL HAVE A 28 DAY COMPRESSIVE STRENGTH OF 5,000 PSI AND A MAXIMUM W/C RATIO OF 0.40.
3. ALL REINFORCING STEEL SHALL BE EPOXY COATED AND CONFORM TO ASTM A934 GRADE 60.
4. REINFORCING STEEL CLEAR COVER SHALL BE A MINIMUM OF 3 IN.



C4 BASE PLATE DETAIL
SCALE: 2:1

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S7
GANGWAY CONNECTION DETAILS