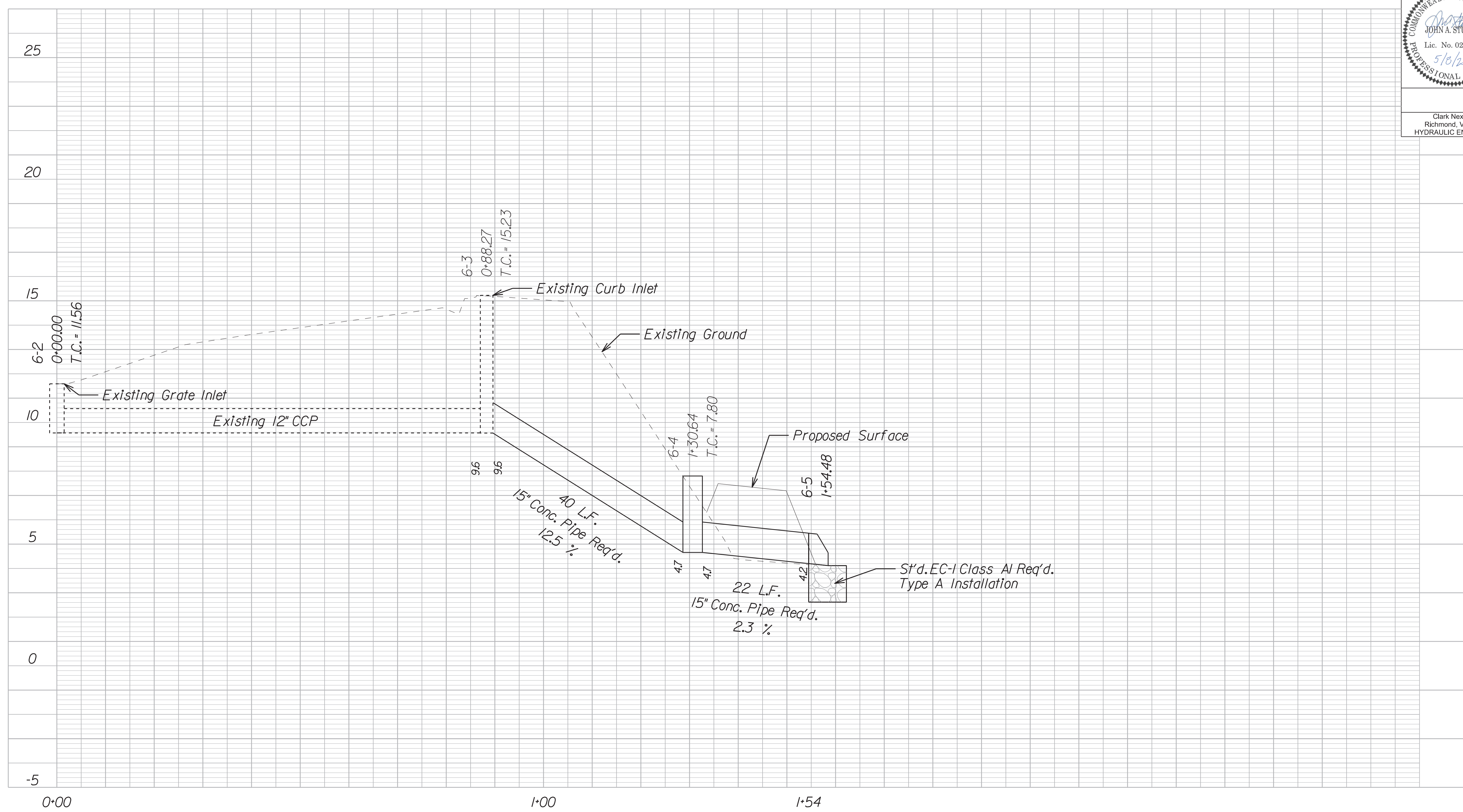



Clark Nexsen
Richmond, Virginia
HYDRAULIC ENGINEER

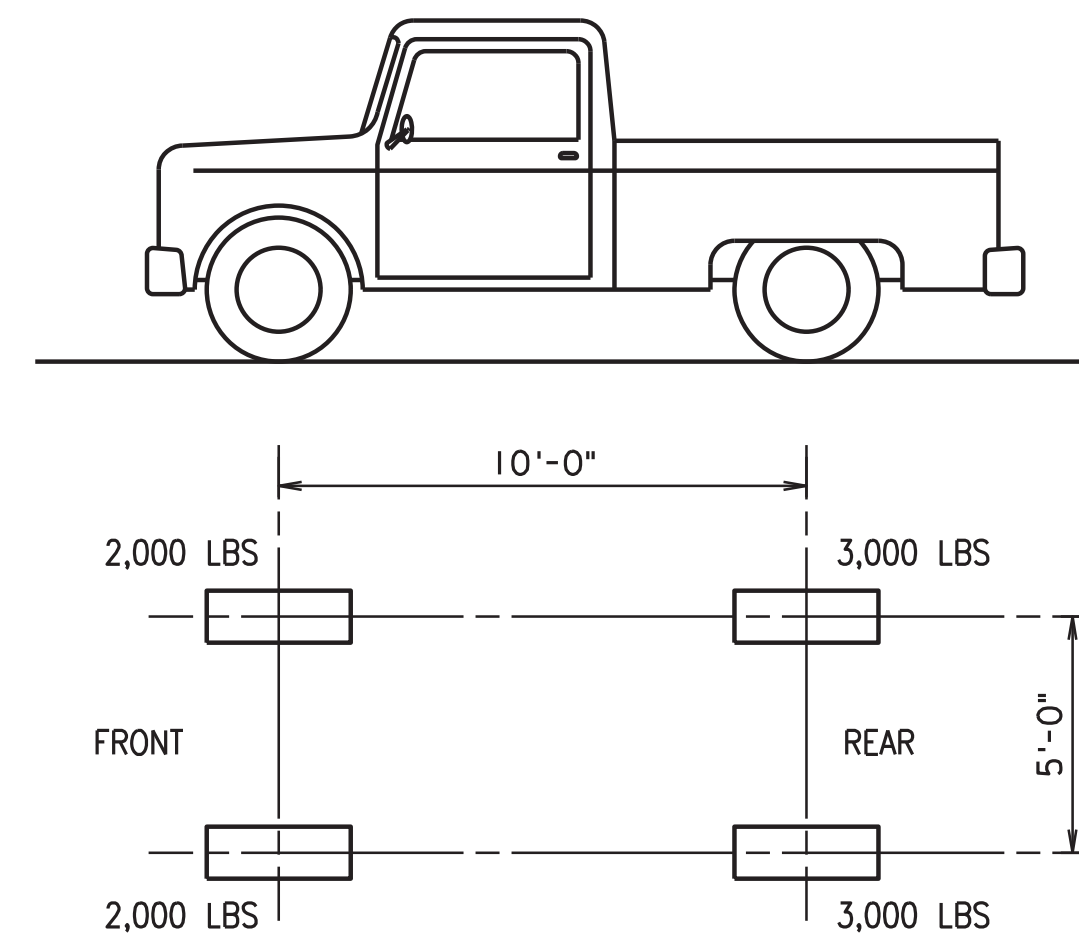


5/18/2023 I:\Projects\1500761\200-Appomattox Trail Phase 5\CAD\075335\Sheets\0753307.dgn

	CITY OF COLONIAL HEIGHTS DEPARTMENT OF PUBLIC WORKS ENGINEERING DIVISION		APPOMATTOX RIVER GREENWAY TRAIL PHASE 5 STORM SEWER PROFILE
	CLARK NEXSEN	CITY PROJECT MANAGER T. FLIPPEN	
		DRAWN BY BK	SHEET NO. 7
		DESIGNED BY BK	
		APPROVED BY JAS	

GENERAL NOTES:

1. THESE DRAWINGS ARE INCOMPLETE UNLESS ACCOMPANIED BY THE CONTRACT SPECIFICATIONS.
2. THE STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH OTHER DISCIPLINE DRAWINGS. THE CONTRACTOR SHALL COORDINATE THE REQUIREMENTS OF THE WORK OF OTHER TRADES TO BE PROVIDED IN THE STRUCTURAL WORK. THE CONTRACTOR SHALL VERIFY THIS DATA FROM APPROVED SHOP DRAWINGS.
3. DETAILS ENTITLED OR NOTED AS "TYPICAL" SHALL APPLY NOT ONLY WHERE SPECIFICALLY INDICATED OR REFERENCED, BUT ALSO IN ALL OTHER CASES WHERE THE NATURE OF THE CONSTRUCTION REQUIRES THEIR USE. APPLICATION OF TYPICAL DETAILS SHALL BE DETERMINED FROM DESCRIPTIVE TITLES OR FROM THE SIMILARITY OF A CONSTRUCTION CONDITION TO ANOTHER CONDITION WHERE THE DETAIL IS SPECIFICALLY INDICATED OR REFERENCED.
4. DISCREPANCIES BETWEEN DIFFERENT DRAWINGS SHALL BE REPORTED TO THE OWNER'S REPRESENTATIVE FOR CLARIFICATION PRIOR TO BEGINNING CONSTRUCTION IN THE AREAS AFFECTED BY SUCH DISCREPANCIES.
5. THE CONTRACTOR SHALL COORDINATE WITH THE OWNER'S REPRESENTATIVE REGARDING ALL DEMOLITION AND WORK TO BE ACCOMPLISHED WITHIN THE LIMITS OF CONSTRUCTION.
6. THE CONTRACTOR SHALL COORDINATE WITH THE OWNER'S REPRESENTATIVE THE LOCATION AND LIMITS OF THE CONTRACTOR'S LAYDOWN AREA.
7. ALL ELEVATIONS ON THE STRUCTURAL DRAWINGS ARE REFERENCED TO 0.00' = NORTH AMERICAN VERTICAL DATUM-1988 (NAVD 88).
8. CONTRACTOR SHALL PERFORM A PRECONSTRUCTION SURVEY OF THE PROJECT SITE AND ADJACENT PROPERTIES AND STRUCTURES WITH THE OWNER'S REPRESENTATIVE. THE CONTRACTOR SHALL TAKE PHOTOGRAPHS SHOWING EXISTING CONDITIONS IN AND ADJACENT TO THE SITE, AS NECESSARY.
9. DAMAGE TO PROPERTY AND/OR FACILITIES RESULTING FROM CONTRACTOR'S OPERATIONS DURING CONSTRUCTION BEYOND THE LIMITS SHOWN ON THESE PLANS OR AS DIRECTED BY THE OWNER'S REPRESENTATIVE SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR. THE COST OF SUCH REPAIRS OR REPLACEMENT IS THE RESPONSIBILITY OF THE CONTRACTOR.
10. THE FOUNDATIONS HAVE BEEN DESIGNED IN ACCORDANCE WITH THE RECOMMENDATIONS IN THE GEOTECHNICAL ENGINEERING REPORT - REVISION NO. 1 PREPARED BY SCHNABEL ENGINEERING AND DATED OCTOBER 8, 2019 (SCHNABEL REFERENCE 19C13049).

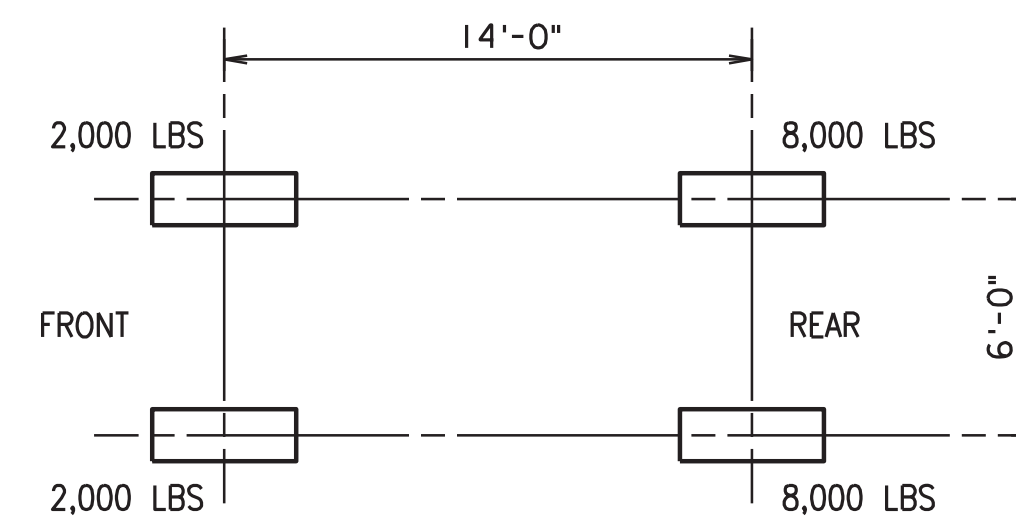


WHEEL LOAD DIAGRAM FOR 10,000-LB TRUCK

NOT TO SCALE

STRUCTURAL DESIGN CRITERIA:

1. STRUCTURAL DESIGN IS IN ACCORDANCE WITH THE FOLLOWING CODES AND SPECIFICATIONS:
 - A. 2018 VIRGINIA CONSTRUCTION CODE (PART I OF THE VIRGINIA UNIFORM STATEWIDE BUILDING CODE) EFFECTIVE JULY 1, 2021.
 - B. ASCE 7-16, MINIMUM DESIGN LOADS AND ASSOCIATED CRITERIA FOR BUILDINGS AND OTHER STRUCTURES.
 - C. SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS, AISC 360-16, DATED JULY 7, 2016.
 - D. CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES, AISC 303-16, DATED JUNE 15, 2016.
 - E. SPECIFICATION FOR STRUCTURAL JOINTS USING HIGH-STRENGTH BOLTS, DATED AUGUST 1, 2014.
 - F. ANS/AWC NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION WITH COMMENTARY INCLUDING SUPPLEMENT, 2018 EDITION.
 - G. STRUCTURAL WELDING CODE-STEEL, AWS D1.1-15.
2. DESIGN VERTICAL LIVE LOADS:
 - A. UNIFORM LOAD 100 PSF
 - B. TRUCK LOAD 10,000-LB VEHICLE WEIGHT (SEE WHEEL LOAD DIAGRAM)
 AASHTO H10 TRUCK - OVERLOAD VEHICLE WITH 33% INCREASE IN ALLOWABLE STRESSES (SEE WHEEL LOAD DIAGRAM)




WHEEL LOAD DIAGRAM FOR AASHTO H10 TRUCK OVERLOAD VEHICLE

NOT TO SCALE



Clark Nexsen
Virginia Beach, Virginia
STRUCTURAL ENGINEER

	CITY OF COLONIAL HEIGHTS DEPARTMENT OF PUBLIC WORKS ENGINEERING DIVISION		APPOMATTOX RIVER GREENWAY TRAIL PHASE 5 GENERAL NOTES
	CITY PROJECT MANAGER T. FLIPPEN	DRAWN BY WBB	
CLARK NEXSEN	DATE 05/08/23	APPROVED BY ECW	SHEET NO. B1

TIMBER CONSTRUCTION NOTES:

- TIMBER PILES SHALL BE SOUTHERN YELLOW PINE OR DOUGLAS FIR CLEAN-PEELED PILES CONFORMING TO ASTM D25. MINIMUM PILE BUTT CIRCUMFERENCE MEASURED AT 3 FEET FROM THE BUTT END SHALL BE 38 INCHES WITH A CORRESPONDING MINIMUM TIP CIRCUMFERENCE OF 25 INCHES. SEE TIMBER PILE SCHEDULE. TREAT PILES IN ACCORDANCE WITH AWPA U1 WITH WATER-BORNE PRESERVATIVE FOR MARINE PILES (USE CATEGORY 5B; CCA - 2.5 PCF RETENTION). DESIGN COMPRESSIVE LOAD CAPACITY (SERVICE LOAD) OF TIMBER PILES IS 8 TONS PER PILE.
- ALL LUMBER AND TIMBER SHALL BE SOUTHERN PINE, NO. 1 GRADE. MINIMUM DESIGN VALUES SHALL BE AS INDICATED IN "DESIGN VALUES FOR WOOD CONSTRUCTION", A SUPPLEMENT TO THE "NATIONAL DESIGN SPECIFICATION (NDS) FOR WOOD CONSTRUCTION", 2018 EDITION, BY THE AMERICAN WOOD COUNCIL. UNLESS OTHERWISE INDICATED, TREAT WOOD IN ACCORDANCE WITH AWPA U1 WITH WATER-BORNE PRESERVATIVE FOR MATERIAL SUBJECT TO MARINE BORER EXPOSURE (USE CATEGORY 5B; CCA - 2.5 PCF RETENTION).
- ALL BOLTS AND NUTS SHALL CONFORM TO ASTM A307 AND SHALL BE OF THE SIZES INDICATED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE LENGTHS OF ALL BOLTS.
- UNLESS OTHERWISE INDICATED, ALL HARDWARE; SUCH AS BOLTS, NUTS, WASHERS, SPIKES, AND NAILS; SHALL BE HOT-DIP GALVANIZED IN ACCORDANCE WITH ASTM A123 OR ASTM A153 AS APPLICABLE.
- PROVIDE PROTECTIVE EQUIPMENT FOR PERSONNEL FABRICATING, FIELD TREATING, OR HANDLING MATERIALS TREATED WITH WATER-BORNE SALTS.
- USE ONLY FULL-LENGTH TIMBERS AND TIGHTLY FIT AGAINST PILES AND ADJACENT TIMBERS. OPEN JOINTS ARE UNACCEPTABLE. SPLICE TIMBERS IN LOCATION IN A MANNER AS INDICATED. ADDITIONAL SPLICING OF TIMBERS WILL NOT BE PERMITTED. SECURE TIMBERS AND PILES IN ALIGNMENT. BORE HOLES FOR BOLTS WITH A BIT 1/16 INCH LARGER IN DIAMETER THAN BOLT. BORE HOLES FOR LAG BOLTS IN TWO PARTS; MAKE LEAD HOLE FOR SHANK THE SAME DIAMETER AS SHANK, AND MAKE LEAD HOLE FOR THE THREADED PORTION APPROXIMATELY TWO-THIRDS OF THE SHANK DIAMETER.
- USE WASHERS OF THE SIZE AND TYPE INDICATED UNDER BOLT HEADS AND NUTS IN CONTACT WITH WOOD. BURR THREADS OF ALL BOLTS AFTER NUTS HAVE BEEN FINALLY TIGHTENED. HORIZONTAL BOLTS EXPOSED AT FACE OF TIMBER STRUCTURE SHALL HAVE NUTS ON INBOARD (CONCEALED) ENDS. WHERE BOLTS ARE USED TO FASTEN TIMBER TO TIMBER OR TO STEEL, BOLT MEMBERS TOGETHER WHEN THEY ARE INSTALLED AND RETIGHTEN IMMEDIATELY PRIOR TO FINAL ACCEPTANCE OF CONTRACT. PROVIDE BOLTS HAVING SUFFICIENT ADDITIONAL THREADING TO PROVIDE AT LEAST 3/8 INCH PER FOOT THICKNESS OF TIMBER FOR FUTURE RETIGHTENING.
- FIELD TREAT CUTS, BEVELS, NOTCHES, REFACING AND ABRASIONS MADE IN THE FIELD IN TREATED PILES OR TIMBERS IN ACCORDANCE WITH AWPA M4. WOOD PRESERVATIVES ARE RESTRICTED USE PESTICIDES AND SHALL BE APPLIED ACCORDING TO APPLICABLE STANDARDS. TRIM CUTS AND ABRASIONS BEFORE FIELD TREATMENT. PAINT DEPRESSIONS OR OPENINGS AROUND BOLT HOLES, JOINTS, OR GAPS INCLUDING RECESSES FORMED BY COUNTERBORING, WITH PRESERVATIVE TREATMENT USED FOR PILES OR TIMBER.
- IN ACCORDANCE WITH AWPA M4, IMMEDIATELY AFTER PILE TOPS ARE CUT OFF, PROTECT PILE TOP WITH AT LEAST THREE (3) HEAVY APPLICATIONS OF THE SAME PRESERVATIVE USED TO TREAT THE PILE, OR ELSE COPPER NAPHTHENATE SOLUTIONS CONTAINING A MINIMUM OF 2 PERCENT COPPER METAL MAY BE USED WITH TREATED PRODUCTS. SEAL ENDS WITH A HEAVY APPLICATION OF AN APPROVED SEALER.
- REPAIR AND RECOAT ZINC COATING WHICH HAS BEEN FIELD OR SHOP CUT, BURNED BY WELDING, ABRADED, OR OTHERWISE DAMAGED TO SUCH AN EXTENT AS TO EXPOSE THE BASE METAL. THOROUGHLY CLEAN THE DAMAGED AREA BY WIRE BRUSHING AND REMOVE TRACES OF WELDING FLUX AND LOOSE OR CRACKED ZINC COATING PRIOR TO PAINTING. PAINT CLEANED AREA WITH TWO COATS OF ZINC OXIDE-ZINC DUST PAINT CONFORMING TO ASTM A780. COMPOUND PAINT WITH A SUITABLE VEHICLE IN A RATIO OF ONE PART ZINC OXIDE TO FOUR PARTS ZINC DUST BY WEIGHT.
- TIMBER DECK PLANKS AND CURBS SHALL BE SURFACED ON FOUR SIDES (S4S).
- INSTALL SPIKE GRIDS PER MANUFACTURER'S INSTRUCTIONS USING MANUFACTURER'S RECOMMENDED INSTALLATION TOOLS. FULLY ENGAGE SPIKES OF GRIDS SO TIMBER MEMBERS ARE FLUSH WITH GRID.

STEEL CONSTRUCTION NOTES:

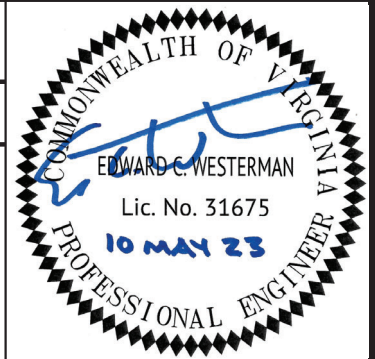
- WIDE-FLANGE SHAPES, ANGLES, DIAPHRAGMS AND ASSOCIATED CONNECTIONS SHALL CONFORM TO ASTM A588, GRADE 50. STEEL PLATES SHALL CONFORM TO ASTM A36 AND BE HOT-DIP GALVANIZED IN ACCORDANCE WITH ASTM A123. FABRICATION AND ERECTION OF STRUCTURAL STEEL SHALL BE IN ACCORDANCE WITH THE AISC "SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS" DATED JULY 7, 2016 AND THE AISC "CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES" DATED JUNE 15, 2016.
- STEEL PLATES, ANGLES, AND FASTENERS FABRICATED FROM MATERIAL OTHER THAN ASTM A588 SHALL BE HOT-DIP GALVANIZED IN ACCORDANCE WITH ASTM A123, UNLESS OTHERWISE NOTED.
- WELDING SHALL BE IN ACCORDANCE WITH THE AMERICAN WELDING SOCIETY (AWS), STRUCTURAL WELDING CODE-STEEL, D1.1-15. WELDS SHALL BE MADE USING LOW HYDROGEN E70XX ELECTRODES. ALL SHOP CONNECTIONS SHALL BE WELDED.
- BOLTS INDICATED THUS: HS, SHALL BE HIGH-STRENGTH BOLTS CONFORMING TO ASTM F3125, GRADE A325. NUTS AND WASHERS SHALL BE FURNISHED IN ACCORDANCE WITH THE REQUIREMENTS OF ASTM A563 AND ASTM F436, RESPECTIVELY.
- HOLES TO BE MADE IN STEEL SHALL BE DRILLED OR PUNCHED. FLAME CUTTING OR ENLARGEMENT OF HOLES SHALL NOT BE PERMITTED.
- PRIOR TO WELDING, CERTIFICATION FOR EACH WELDER SHALL BE SUBMITTED STATING THE TYPE OF WELDING AND POSITIONS QUALIFIED FOR, THE CODE AND PROCEDURE QUALIFIED UNDER, DATE QUALIFIED, AND THE FIRM AND INDIVIDUAL CERTIFYING THE QUALIFICATION TESTS. IF THE QUALIFICATION DATE OF THE WELDING OPERATOR IS MORE THAN ONE-YEAR OLD, THE WELDING OPERATOR'S QUALIFICATION CERTIFICATE SHALL BE ACCOMPANIED BY A CURRENT CERTIFICATE BY THE WELDER ATTESTING TO THE FACT THAT HE HAS BEEN ENGAGED IN WELDING SINCE THE DATE OF CERTIFICATION, WITH NO BREAK IN WELDING SERVICE GREATER THAN 6 MONTHS.
- FIELD CONNECTIONS SHALL BE MADE WITH HIGH-STRENGTH BOLTS UNLESS OTHERWISE NOTED. FIELD WELDING WILL BE PERMITTED ONLY WHEN SPECIFICALLY SHOWN ON THE DRAWINGS.
- UNLESS OTHERWISE INDICATED, ALL HARDWARE; SUCH AS BOLTS, NUTS, AND WASHERS; SHALL BE HOT-DIP GALVANIZED IN ACCORDANCE WITH ASTM A153 OR ASTM F2329, AS APPLICABLE.
- REPAIR DAMAGED AND UNCOATED AREAS OF HOT-DIP GALVANIZED COATINGS IN ACCORDANCE WITH ASTM A780.
- ROUND HSS TUBING SHALL CONFORM TO ASTM A500, GRADE C, FY = 46 KSI. STEEL PIPE SHALL CONFORM TO ASTM A53, GRADE B, FY = 35 KSI.
- FIELD-CUTTING OF STRUCTURAL STEEL MEMBERS BY ANY TRADE SHALL NOT BE PERMITTED.
- BOLTS IN BEARING-TYPE CONNECTIONS SHALL BE INSTALLED TO THE SNUG-TIGHT CONDITION UNLESS OTHERWISE NOTED IN THE CONTRACT DOCUMENTS OR REQUIRED IN THE AISC SPECIFICATION TO BE PRE-TENSIONED OR SLIP-CRITICAL.
- THE CONTRACTOR SHALL SUBMIT FOR APPROVAL DRAWINGS AND DESIGN CALCULATIONS FOR ANY ALTERNATE DETAILS AND MEMBER SPLICES.
- SHOP OR FIELD SPLICES OF STRUCTURAL STEEL MEMBERS ARE PROHIBITED EXCEPT AS DETAILED ON THE DRAWINGS AND AS SPECIFICALLY APPROVED ON SHOP DRAWINGS PRIOR TO FABRICATION.

TIMBER RAILING NOTES:

- ALL LUMBER AND TIMBER FOR RAILING SHALL BE SOUTHERN PINE, NO. 1 GRADE. MINIMUM DESIGN VALUES SHALL BE AS INDICATED IN "DESIGN VALUES FOR WOOD CONSTRUCTION", A SUPPLEMENT TO THE "NATIONAL DESIGN SPECIFICATION (NDS) FOR WOOD CONSTRUCTION", 2018 EDITION, BY THE AMERICAN WOOD COUNCIL. TREAT LUMBER AND TIMBER FOR RAILING WITH WATER-BORNE PRESERVATIVES (ACQ OR CA-B) TO PROVIDE A MINIMUM RETENTION OF 0.60 PCF (ACQ) OR 0.31 PCF (CA-B).
- RAILING LUMBER AND TIMBER SHALL BE SURFACED ON FOUR SIDES (S4S) AND SHALL HAVE ALL EDGES EASED.
- ALL RAIL POSTS SHALL BE TRULY VERTICAL.
- SPLICES IN RAILS SHALL BE STAGGERED AT EACH POST SO THAT NO MORE THAN THREE (3) RAILS ARE SPLICED AT ANY ONE POST. SPLICES IN CAP RAIL SHALL BE STAGGERED FROM SPLICES IN TOP RAIL.

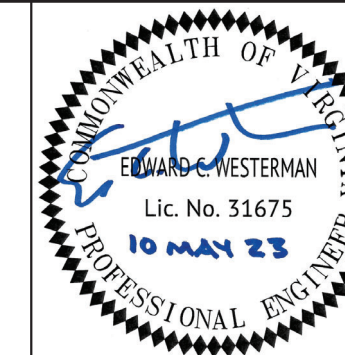
STRUCTURAL LEGEND

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
AB	ANCHOR BOLT	LLV	LONG LEG VERTICAL
AHR	ANCHOR	LSH	LONG SIDE HORIZONTAL
APPROX	APPROXIMATELY	LSV	LONG SIDE VERTICAL
BD	BAR DIAMETER	MAX	MAXIMUM
BOC	BOTTOM OF CONCRETE	MFR	MANUFACTURER
BOS	BOTTOM OF STEEL	MHHW	MEAN HIGHER HIGH WATER
BRG	BEARING	MIN	MINIMUM
CJ	SLAB CONSTRUCTION JOINT	NIC	NOT IN CONTRACT
CL	CENTER LINE	NO	NUMBER
CLR	CLEAR	NTS	NOT TO SCALE
CONN	CONNECTION	OC	ON CENTER
CONC	CONCRETE	OPP	OPPOSITE
CONT	CONTINUOUS	OD	OUTSIDE DIAMETER
DIA, Ø	DIAMETER	PL	PLATE
DWG(S)	DRAWING(S)	PLF	POUNDS PER LINEAR FOOT
DN	DOWN	PSF	POUNDS PER SQUARE FOOT
EA	EACH	REINF	REINFORCEMENT
EF	EACH FACE	SCHED	SCHEDULE
EJ	EXPANSION JOINT	SIM	SIMILAR
ELEV	ELEVATION	SJ	SLAB SAWED (CONTRACTION) JOINT
EOS	EDGE OF SLAB	SL	SLOPE(D)
EQ	EQUAL	SS	STAINLESS STEEL
EW	EACH WAY	STD	STANDARD
FT	FOOT	T&B	TOP AND BOTTOM
FTG	FOOTING	TOC	TOP OF CONCRETE
GA	GAGE	TOF	TOP OF FOOTING
GALV	GALVANIZED	TOS	TOP OF STEEL
HORIZ	HORIZONTAL	TYP	TYPICAL
HS	HIGH STRENGTH	UHMW	ULTRA HIGH MOLECULAR WEIGHT
ID	INSIDE DIAMETER	UNON	UNLESS OTHERWISE NOTED
KIPS (k)	1000 POUNDS	UV	ULTRA-VIOLENT
LB	POUNDS	VERT	VERTICAL
LG	LONG	WP	WORKING POINT
LLH	LONG LEG HORIZONTAL	WWF	WELDED WIRE FABRIC
	SPOT ELEVATION		RIPRAP, ARMOR STONE OR BEDDING STONE
	INDICATES ELEVATION		STEEL
	SLOPE DIRECTION		CONCRETE
	PILE REFERENCE GRID LINE (CENTER LINE OF PILE)		TIMBER
	TEST PILE		EARTH FILL
	RAILING		

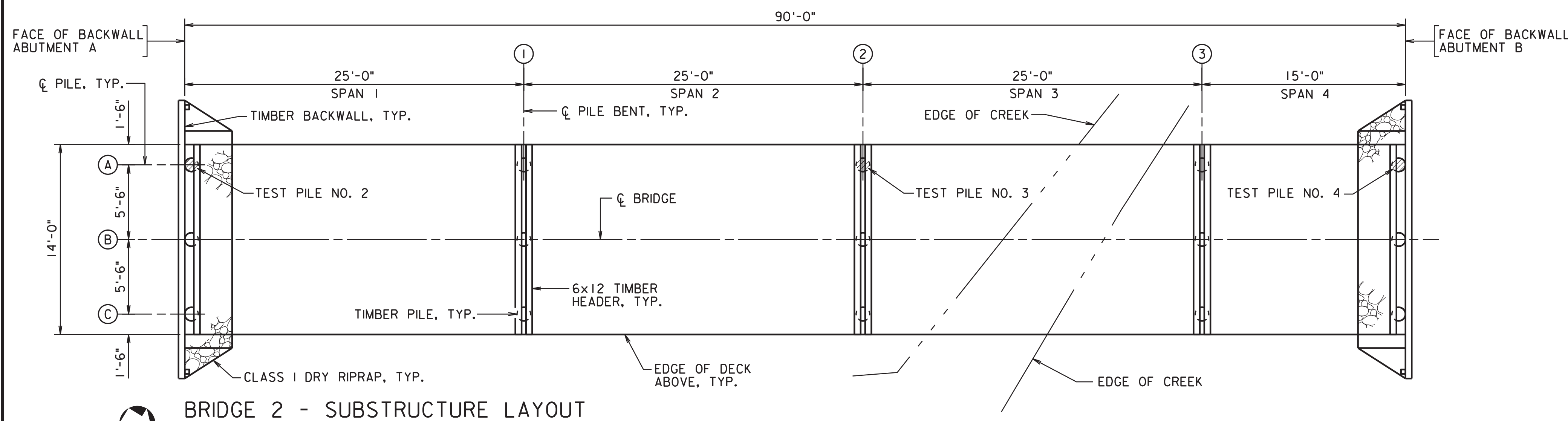


Clark Nexsen
Virginia Beach, Virginia
STRUCTURAL ENGINEER

	CITY OF COLONIAL HEIGHTS DEPARTMENT OF PUBLIC WORKS ENGINEERING DIVISION		APPOMATTOX RIVER GREENWAY TRAIL PHASE 5 GENERAL NOTES
	CITY PROJECT MANAGER T. FLIPPEN	DRAWN BY WBB	
CLARK NEXSEN		DATE 05/08/23	APPROVED BY ECW
			SHEET NO. B2

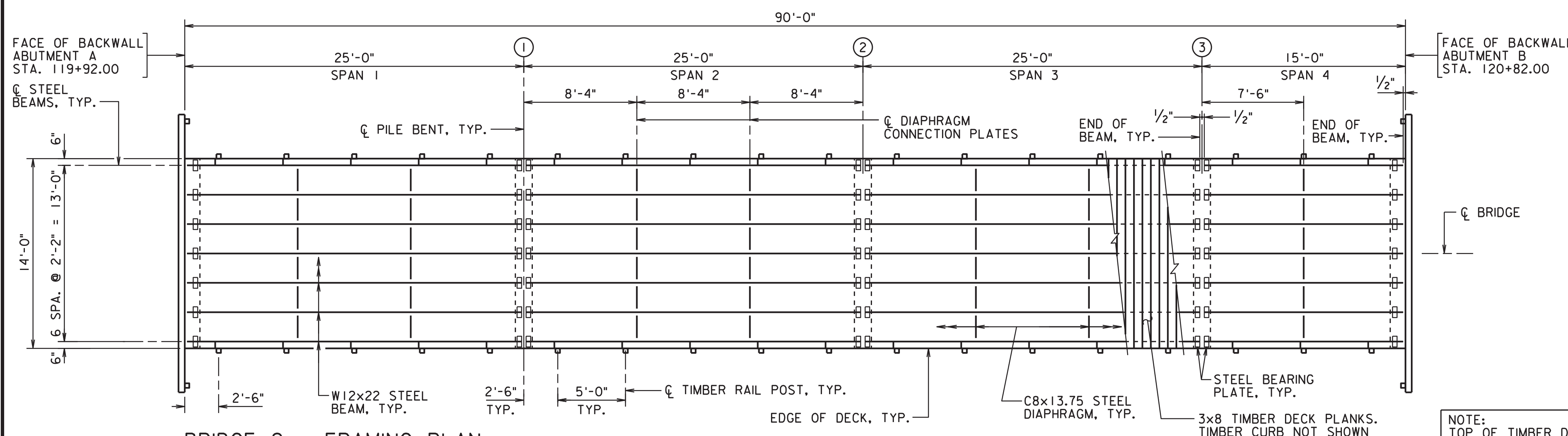


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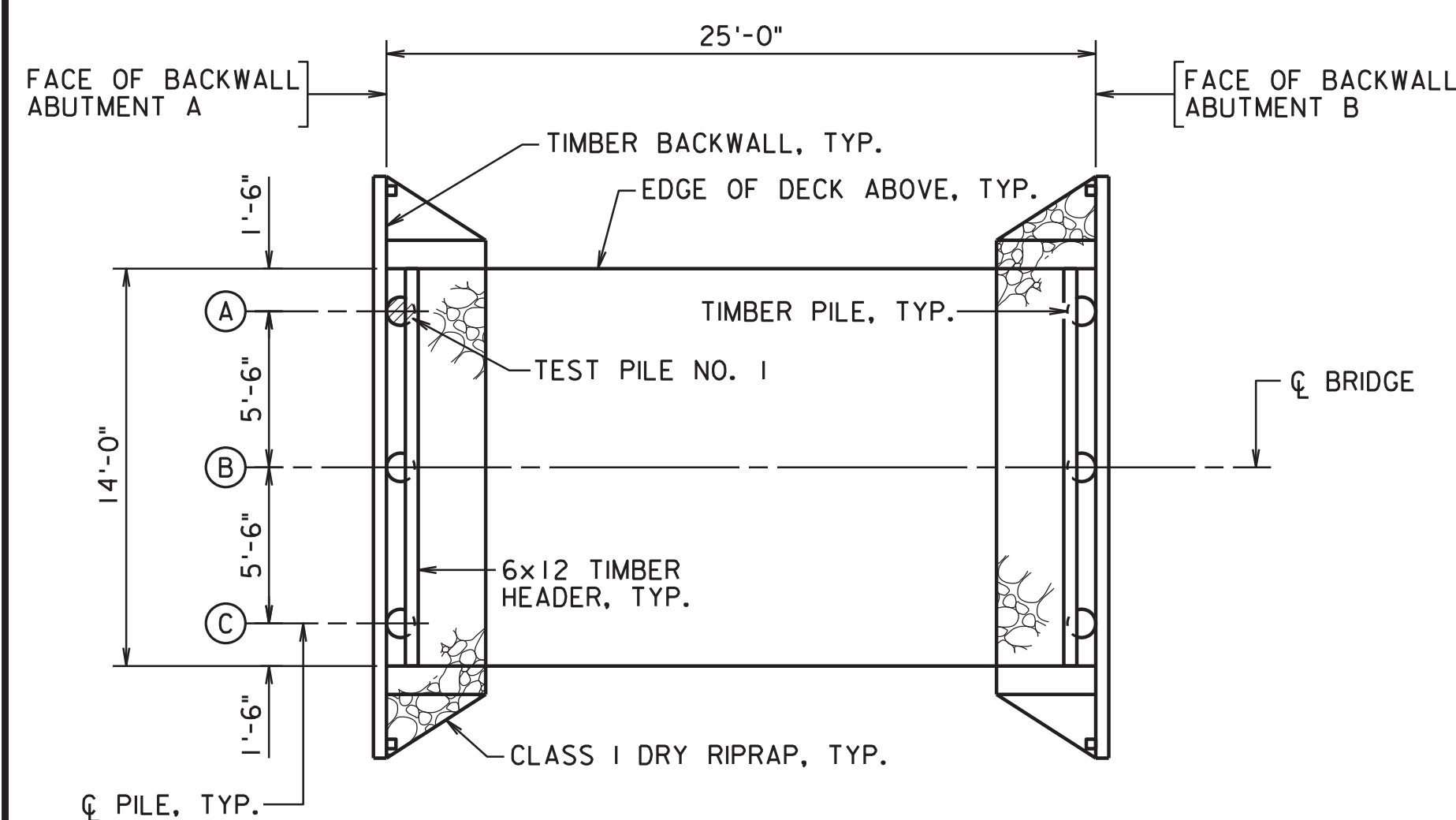
BRIDGE 2 - SUBSTRUCTURE LAYOUT

SCALE: 3/16" = 1'-0"



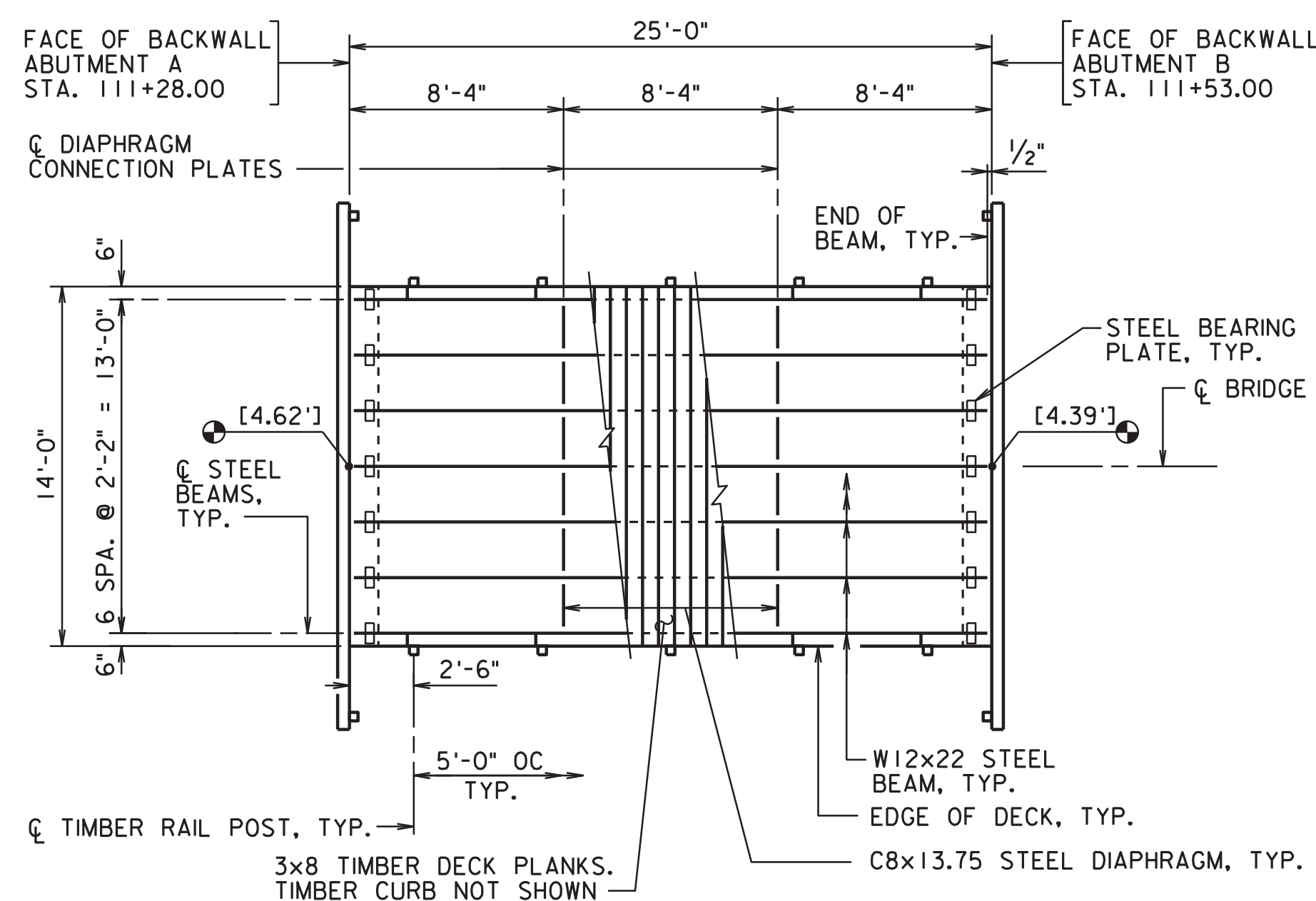
BRIDGE 2 - FRAMING PLAN

SCALE: 3/16" = 1'-0"



BRIDGE 1 - SUBSTRUCTURE LAYOUT

SCALE: 3/16" = 1'-0"



BRIDGE 1 - FRAMING PLAN

SCALE: 3/16" = 1'-0"

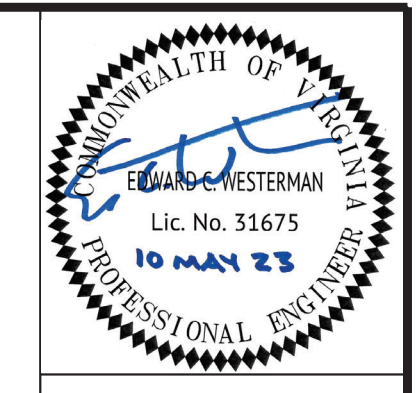
TIMBER PILE SCHEDULE				
	LOCATION	PILE SIZE	BID LENGTH PER PILE	REFERENCE SHEET NUMBER
BRIDGE NO. 1	ABUT. A	12" Ø	24'	B3
	ABUT. B	12" Ø	24'	B3
BRIDGE NO. 2	ABUT. A	12" Ø	24'	B3
	BENT 1-3	12" Ø	24'	B3
	ABUT. B	12" Ø	24'	B3

NOTES:

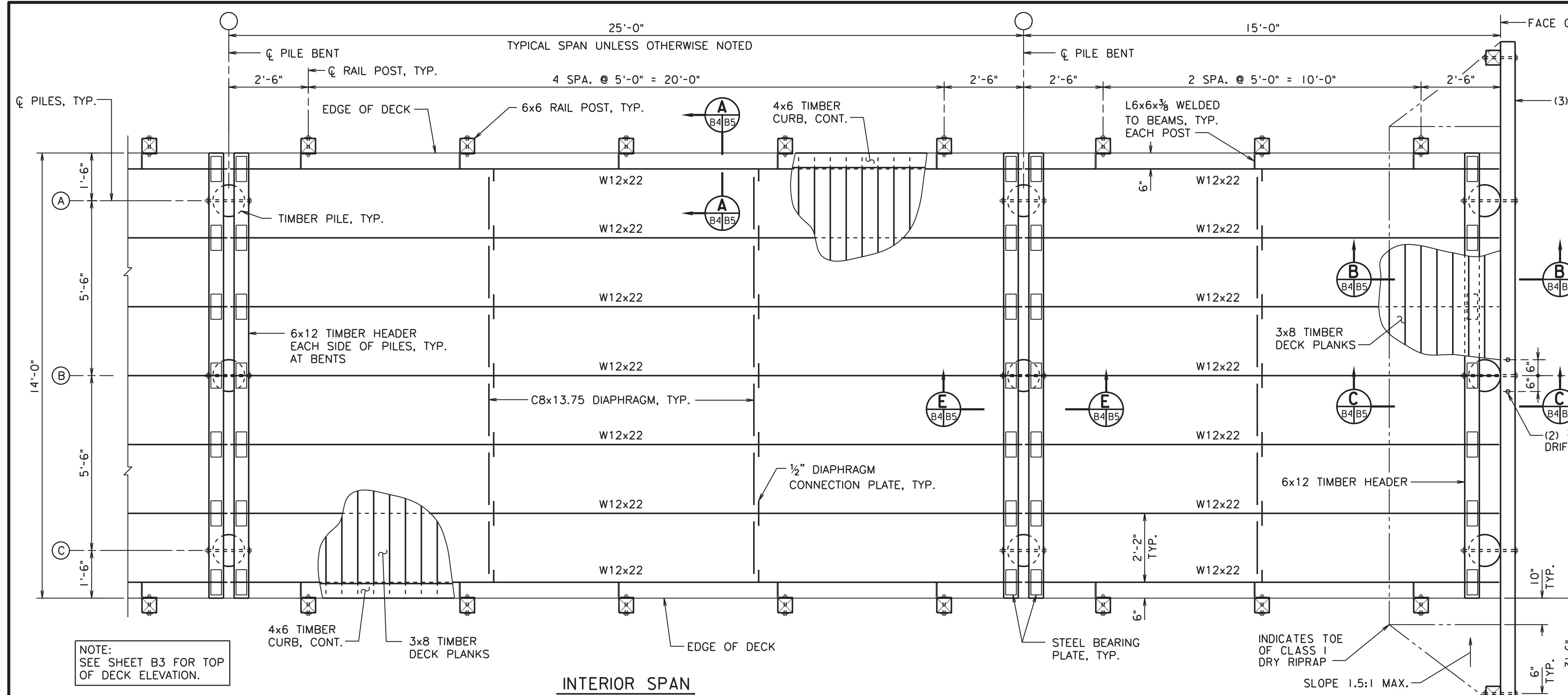
- BID LENGTHS GIVEN ARE PROVIDED FOR BIDDING PURPOSES ONLY. SEE SPECIFICATIONS.
- BID LENGTHS DO NOT INCLUDE THE ADDITIONAL LENGTH REQUIRED FOR TEST PILES. SEE SPECIFICATIONS.
- BID LENGTH IS BASED ON THE LENGTH FROM THE PILE CUT-OFF ELEVATION TO THE ESTIMATED PILE TIP ELEVATION.
- PROVIDE TEST PILES FIVE (5) FEET LONGER IN LENGTH THAN PRODUCTION PILES. THE ADDITIONAL TEST PILE LENGTH SHALL BE DRIVEN ONLY AT THE DIRECTION OF THE OWNER'S REPRESENTATIVE.

NOTE: TOP OF TIMBER DECK PLANK ELEVATION VARIES.

	CITY OF COLONIAL HEIGHTS DEPARTMENT OF PUBLIC WORKS ENGINEERING DIVISION		APPOMATTOX RIVER GREENWAY TRAIL PHASE 5 FRAMING PLAN AND SUBSTRUCTURE LAYOUT
	CITY PROJECT MANAGER T. FLIPPEN	DRAWN BY WBB	
CLARK NEXSEN		DATE 05/08/23	APPROVED BY ECW
			SHEET NO. B3

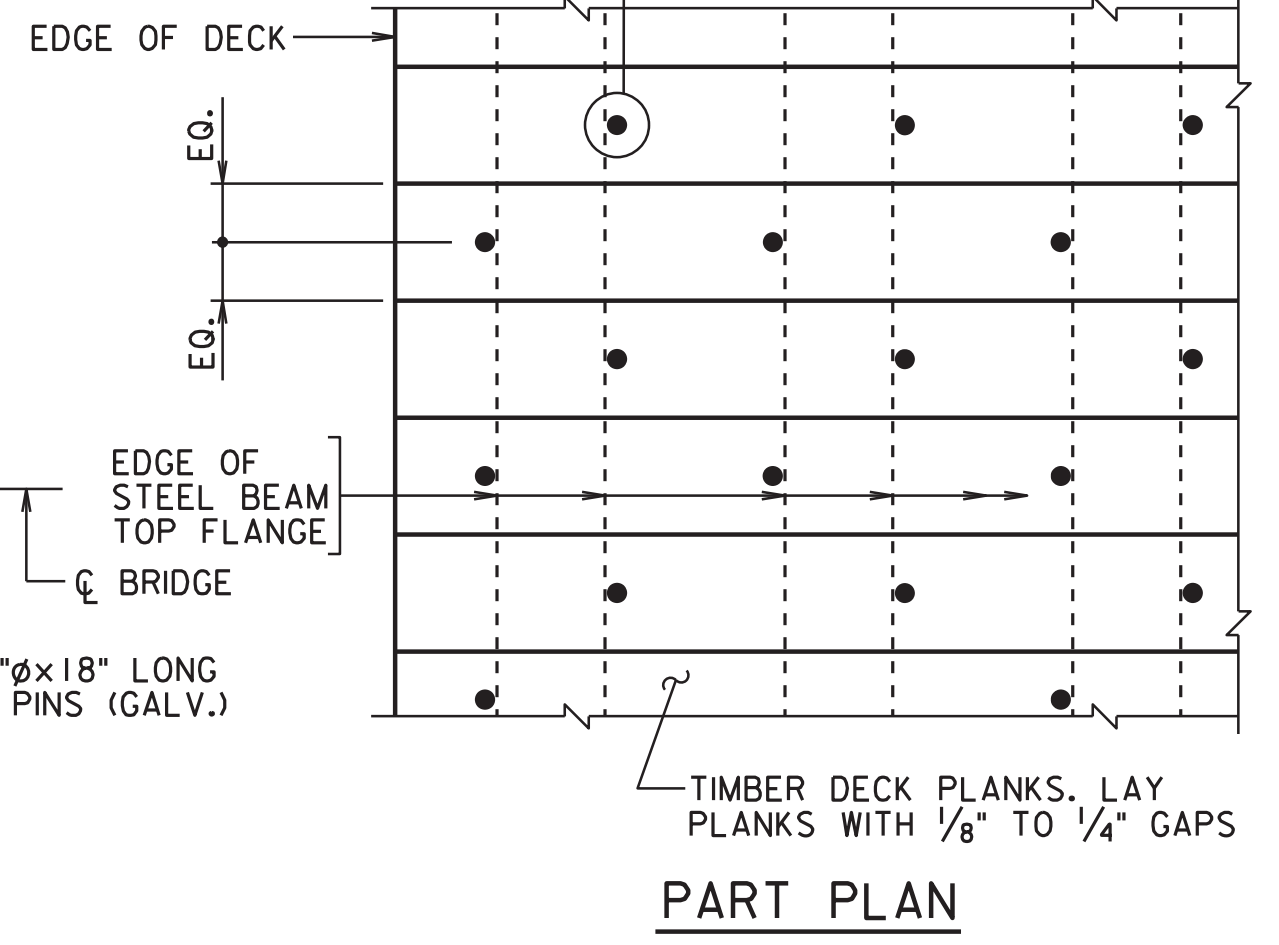


Clark Nexsen
Virginia Beach, Virginia
STRUCTURAL ENGINEER



NOTES:
FOR GENERAL NOTES, SEE SHEETS B1 AND B2

5/8" BRIDGE BOLT AND LUG, TYP. SEE TIMBER DECK ATTACHMENT DETAIL THIS SHEET

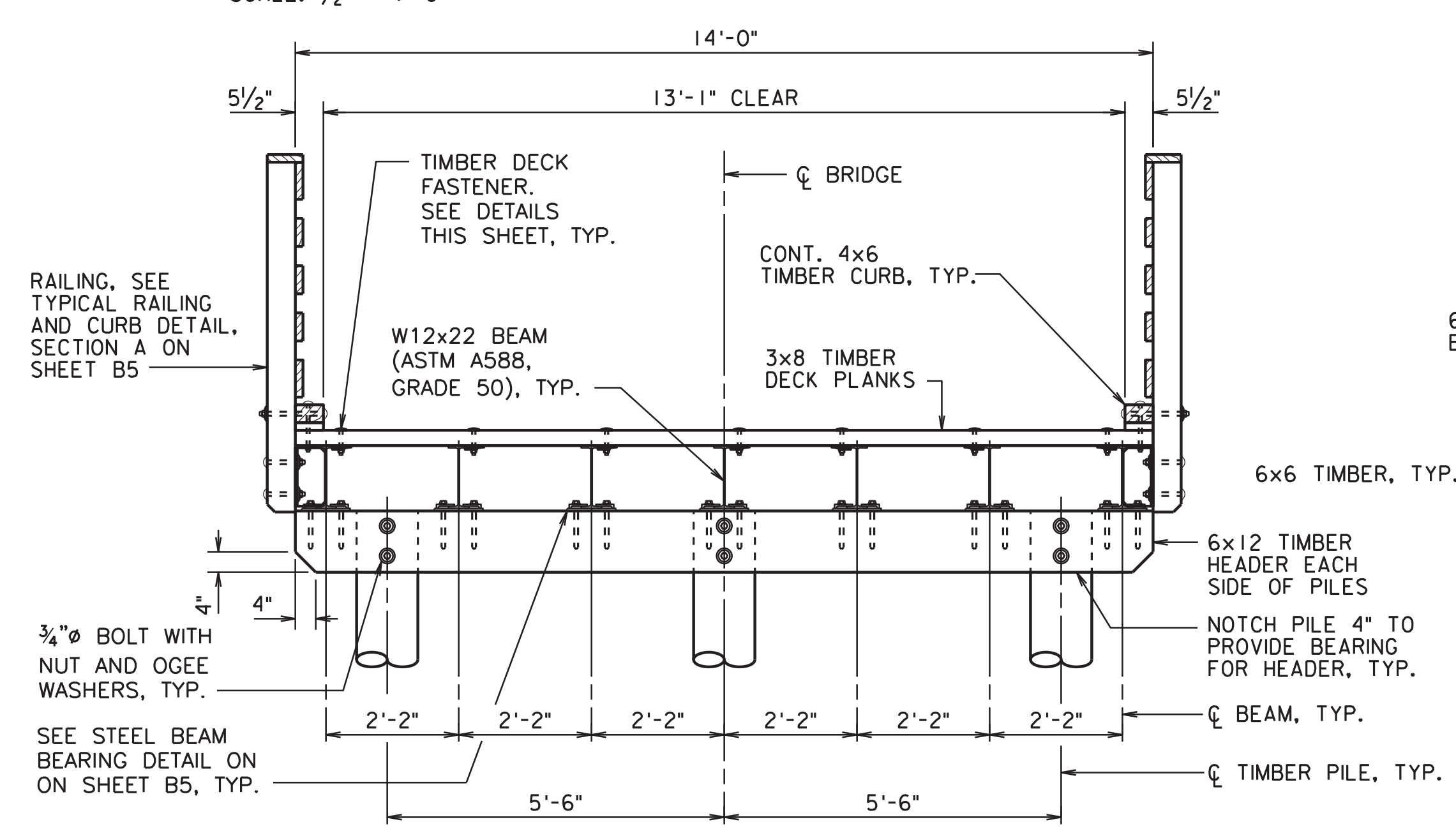


FASTENING NOTES:
1. IN ORDER TO OBTAIN THE NECESSARY BRACING OF THE BEAMS, ALTERNATE THE DECK FASTENERS FROM THE INSIDE EDGE TO THE OUTSIDE EDGE OF THE BEAM FLANGE ON ADJACENT PLANKS.
2. ONE SQUARE NUT WITH BRIDGE LOCK NUT MAY BE USED IN LIEU OF EACH SELF-LOCKING NUT.

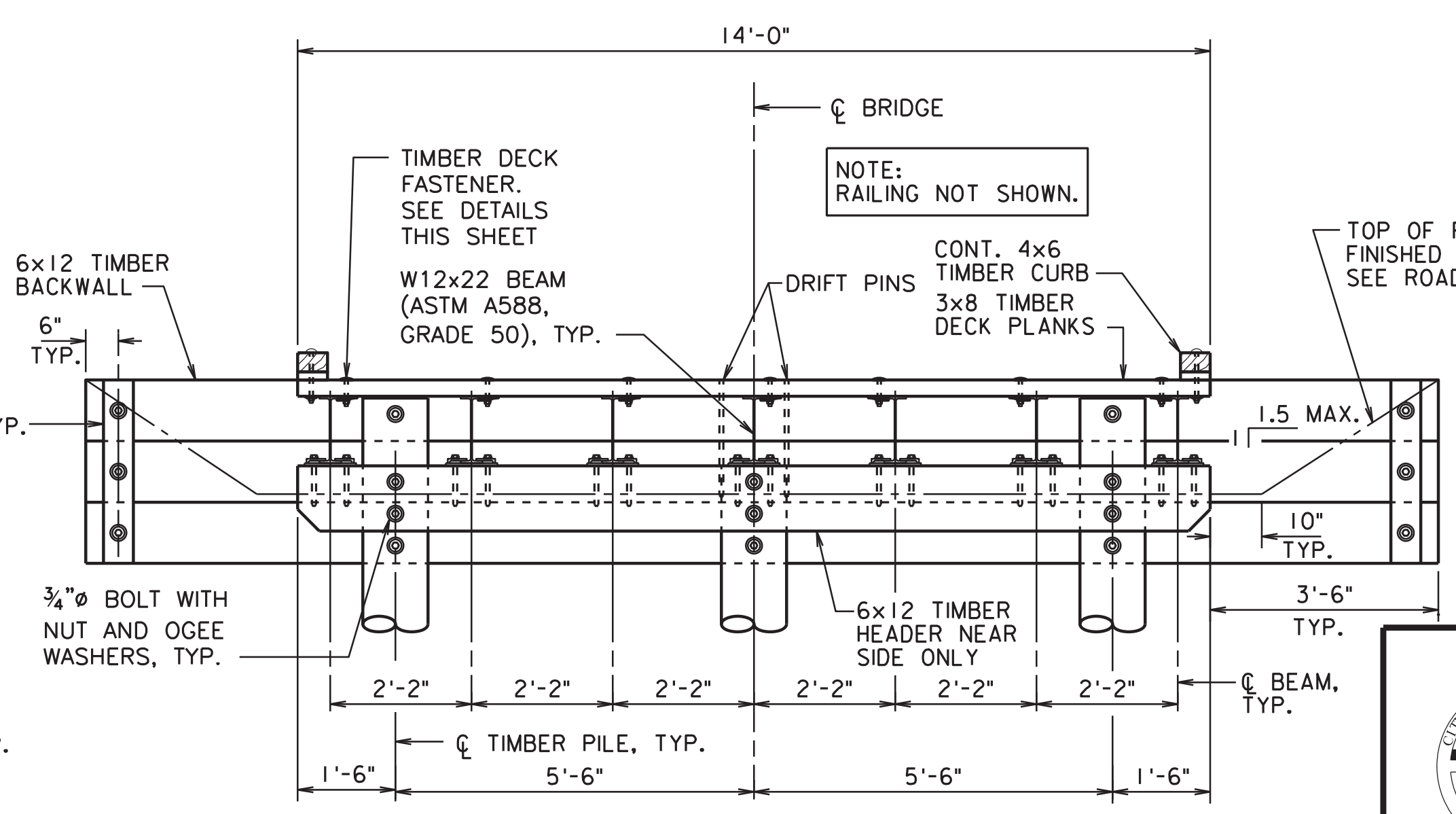
TIMBER DECK FASTENING DETAIL
NOT TO SCALE

NOTE:
SEE SHEET B3 FOR TOP OF DECK ELEVATION.

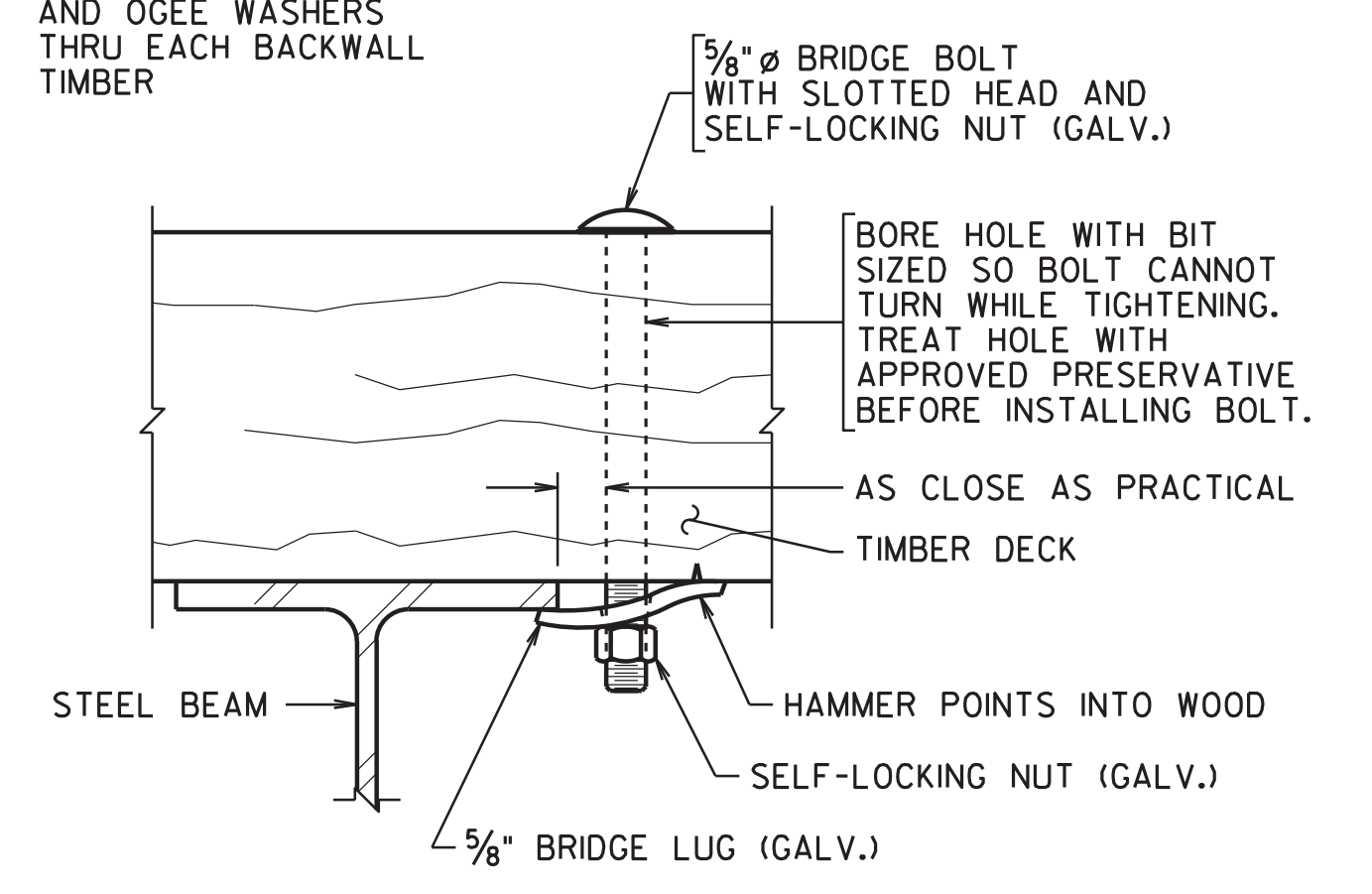
TYPICAL PARTIAL FRAMING PLAN
SCALE: 1/2" = 1'-0"



TYPICAL TRANSVERSE SECTION AT PILE BENT
SCALE: 1/2" = 1'-0"

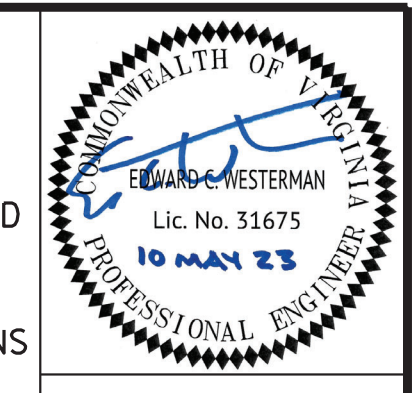


TYPICAL TRANSVERSE SECTION AT ABUTMENT
SCALE: 1/2" = 1'-0"

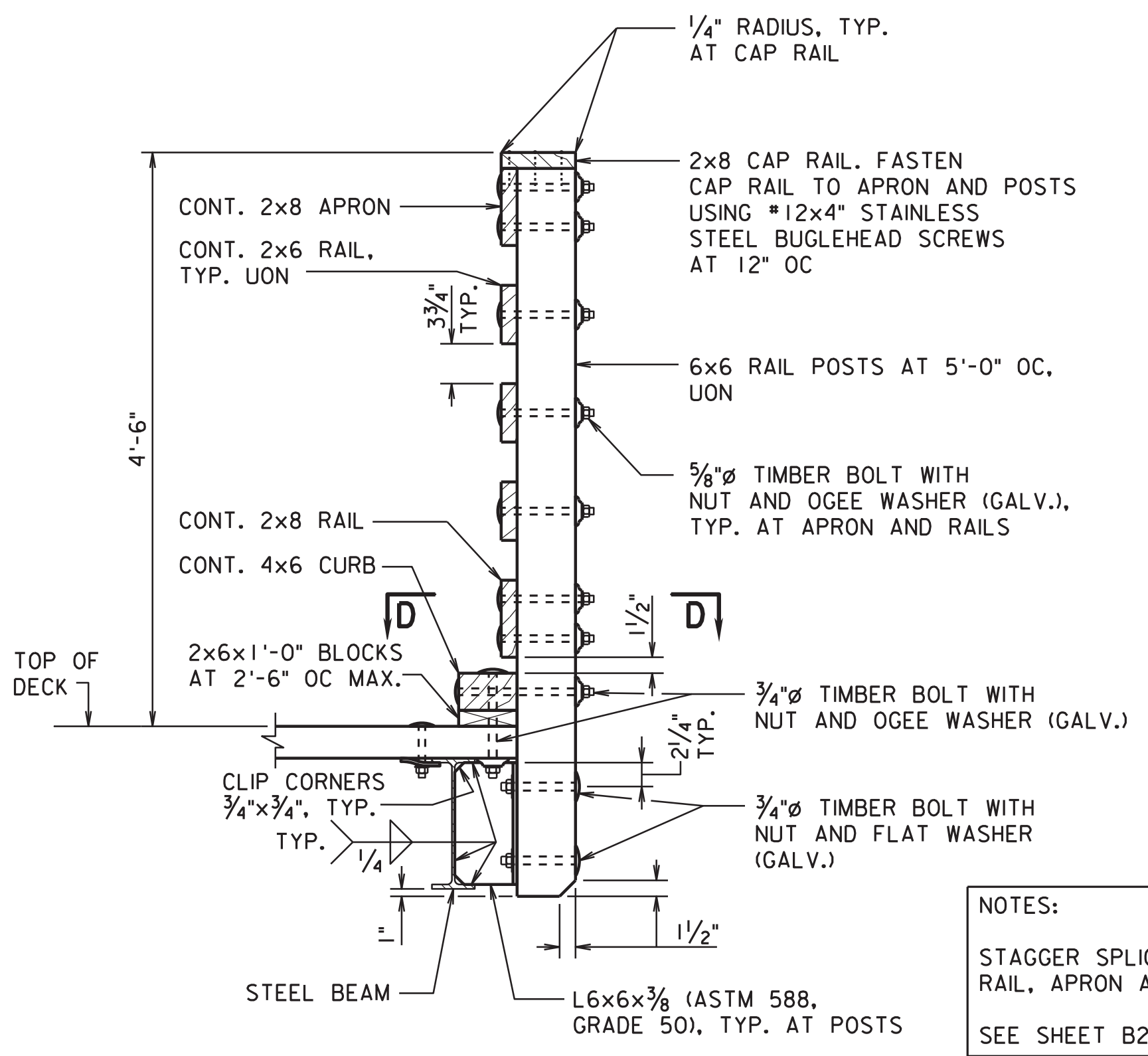


TIMBER DECK ATTACHMENT DETAIL
NOT TO SCALE

	CITY OF COLONIAL HEIGHTS DEPARTMENT OF PUBLIC WORKS ENGINEERING DIVISION		APPOMATTOX RIVER GREENWAY TRAIL PHASE 5 TYPICAL PARTIAL PLAN, SECTIONS AND DETAILS
	CITY PROJECT MANAGER T. FLIPPEN	DRAWN BY WBB DESIGNED BY STW	
CLARK NEXSEN		DATE 05/08/23 APPROVED BY ECW	



Clark Nexsen
Virginia Beach, Virginia
STRUCTURAL ENGINEER

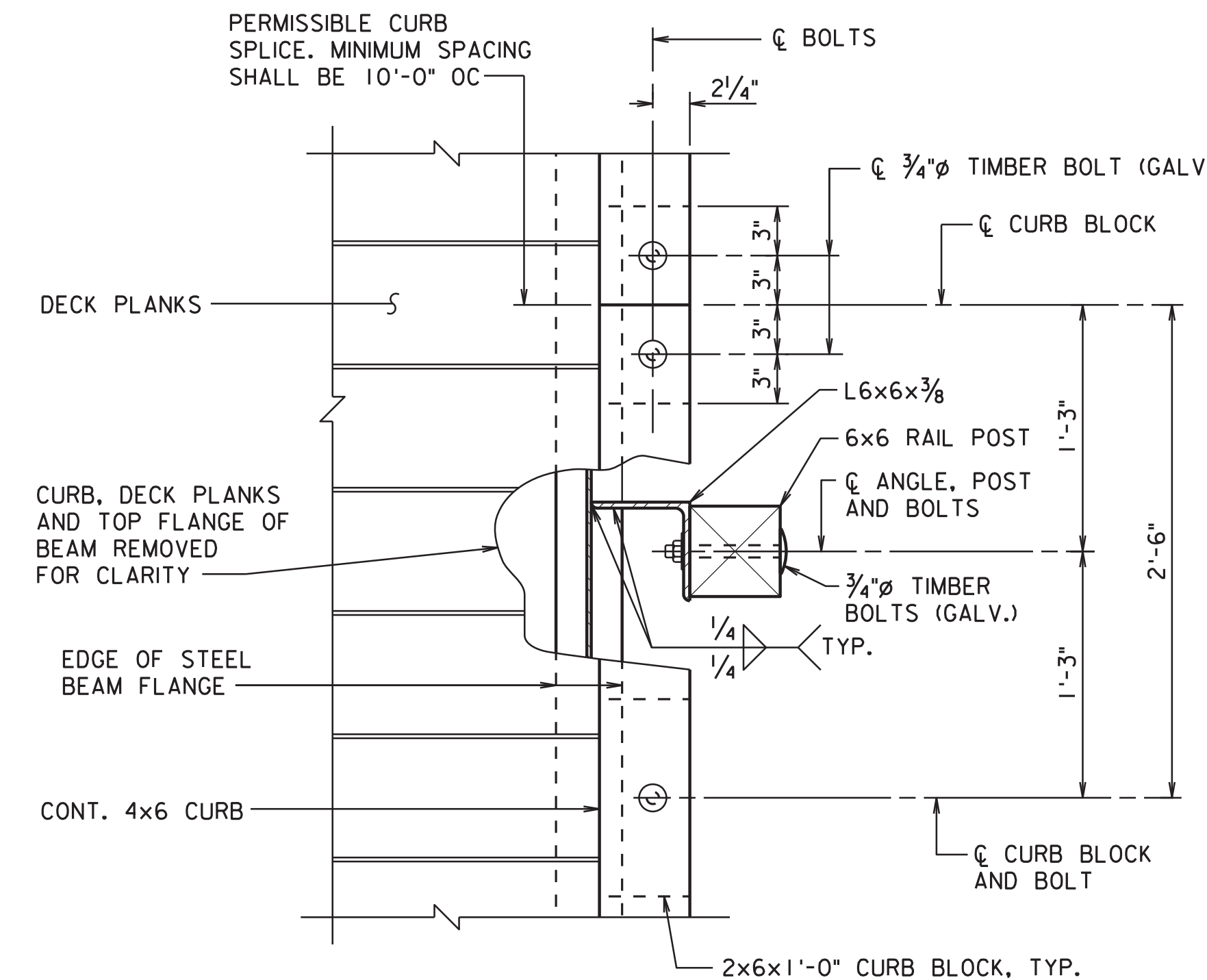


TYPICAL RAILING AND CURB DETAIL

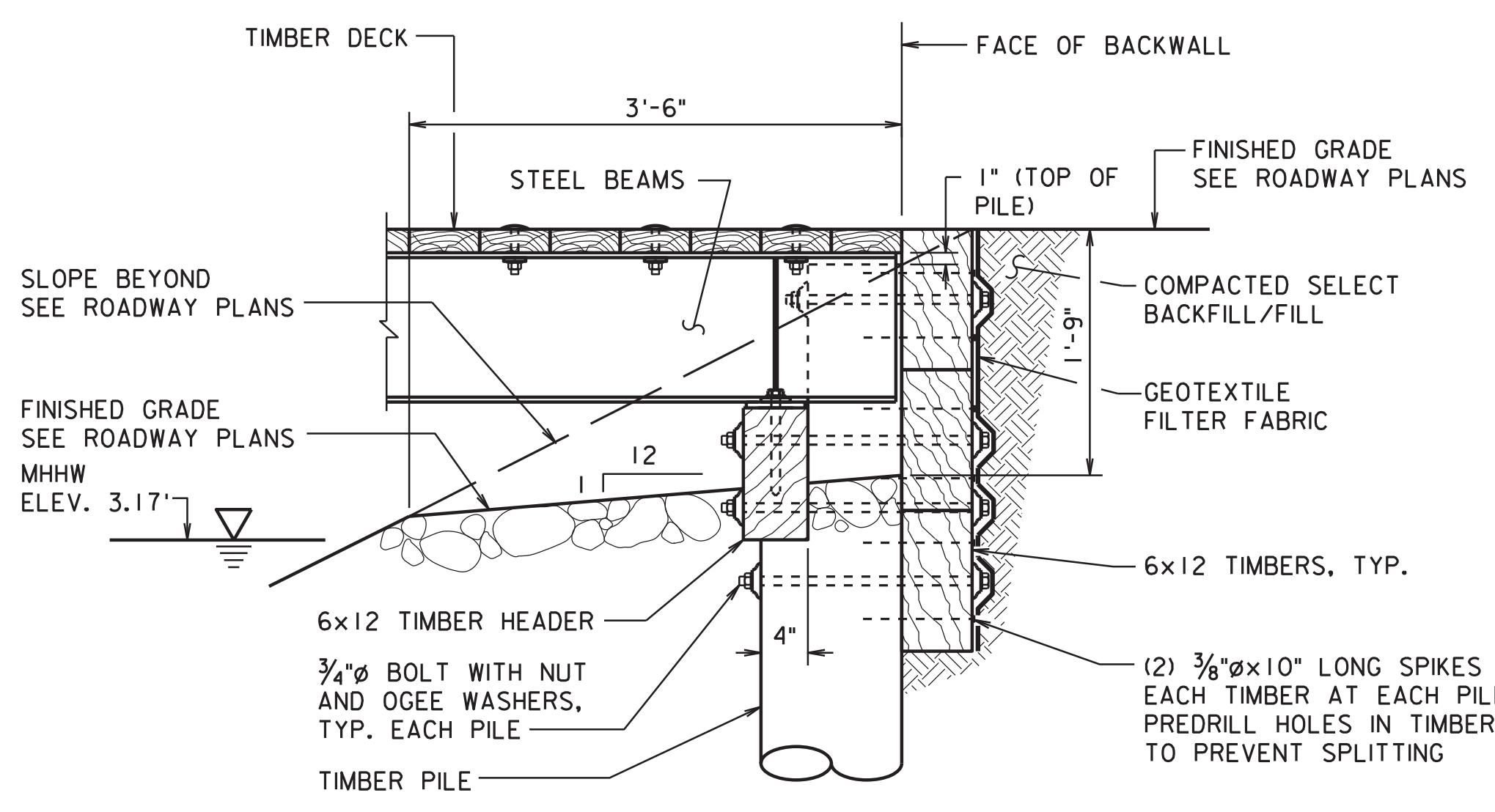
A SECTION
SCALE: 1" = 1'-0"

NOTES:
STAGGER SPLICES IN CAP RAIL, APRON AND RAILS.
SEE SHEET B2 FOR RAILING NOTES.

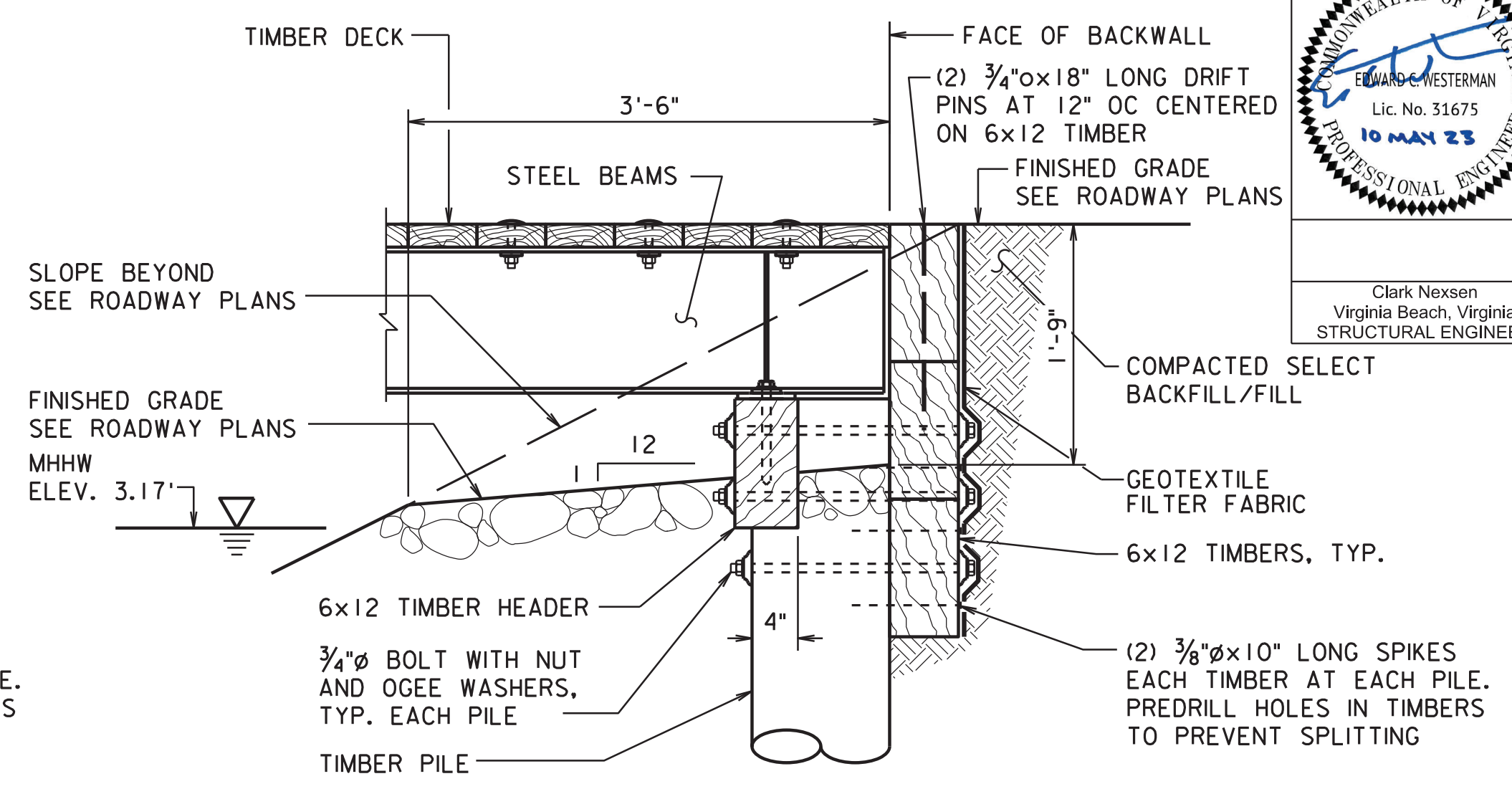
PERMISSIBLE CURB SPLICE. MINIMUM SPACING SHALL BE 10'-0" OC



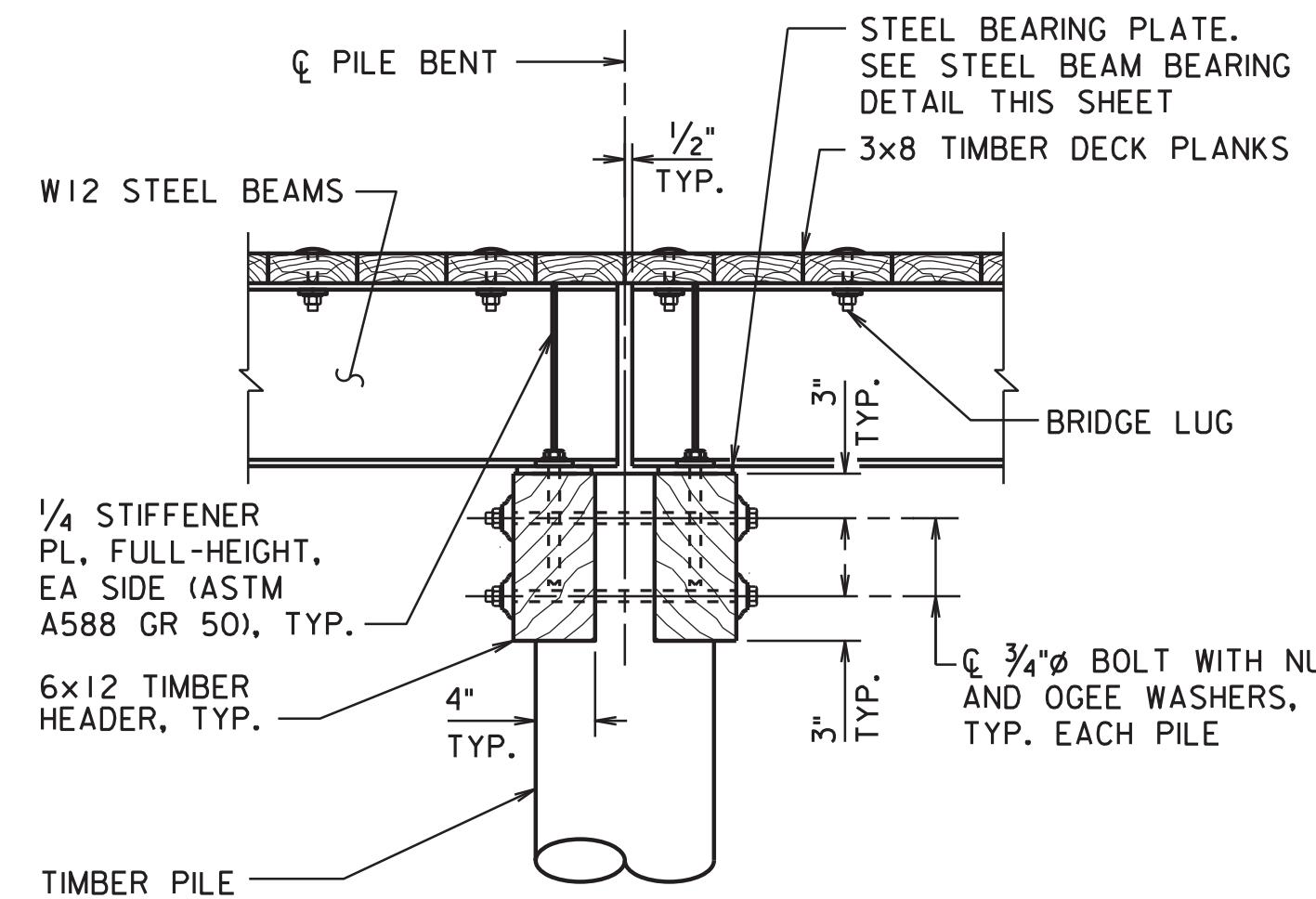
SECTION D-D
SCALE: 1/2" = 1'-0"



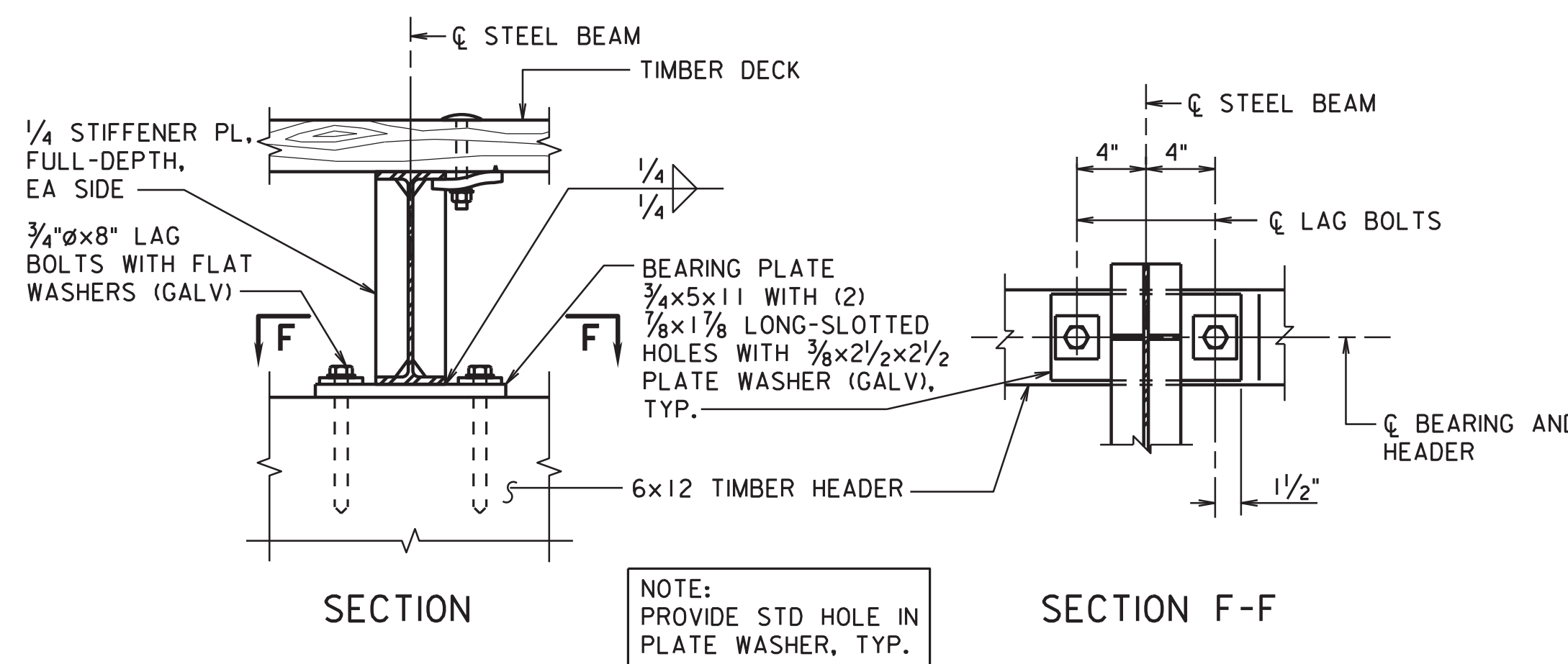
B SECTION
SCALE: 1" = 1'-0"



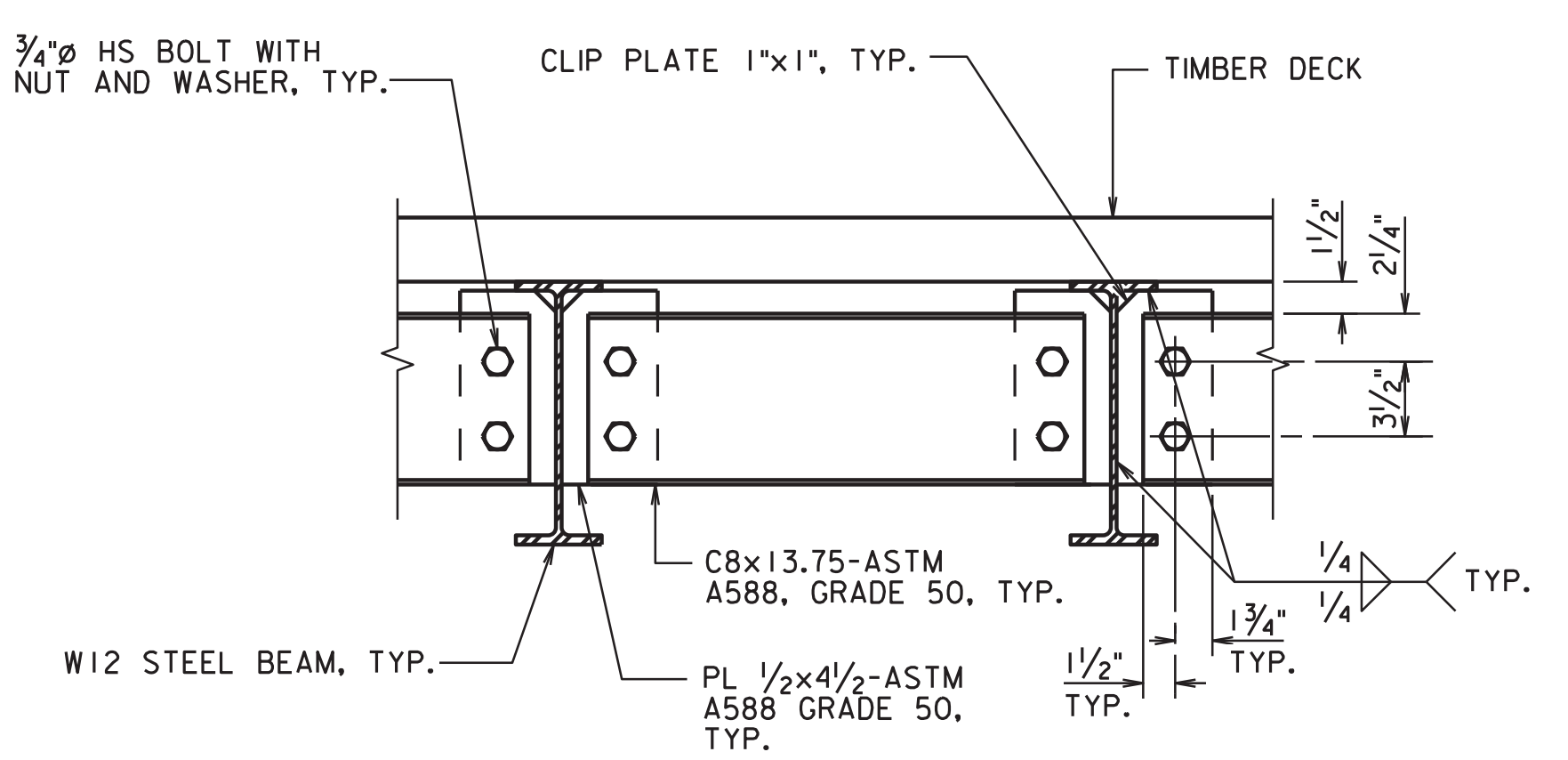
C SECTION
SCALE: 1" = 1'-0"



E SECTION
SCALE: 1" = 1'-0"

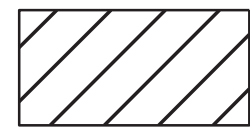


STEEL BEAM BEARING DETAIL
SCALE: 1/2" = 1'-0"



TYPICAL DIAPHRAGM CONNECTION DETAIL
SCALE: 1/2" = 1'-0"

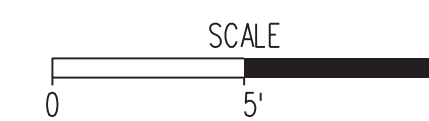
	CITY OF COLONIAL HEIGHTS DEPARTMENT OF PUBLIC WORKS ENGINEERING DIVISION		APPOMATTOX RIVER GREENWAY TRAIL PHASE 5 SECTION AND DETAILS
	CITY PROJECT MANAGER T. FLIPPEN	DRAWN BY WBB DESIGNED BY STW	
CLARK NEXSEN		DATE 05/08/23 APPROVED BY ECW	



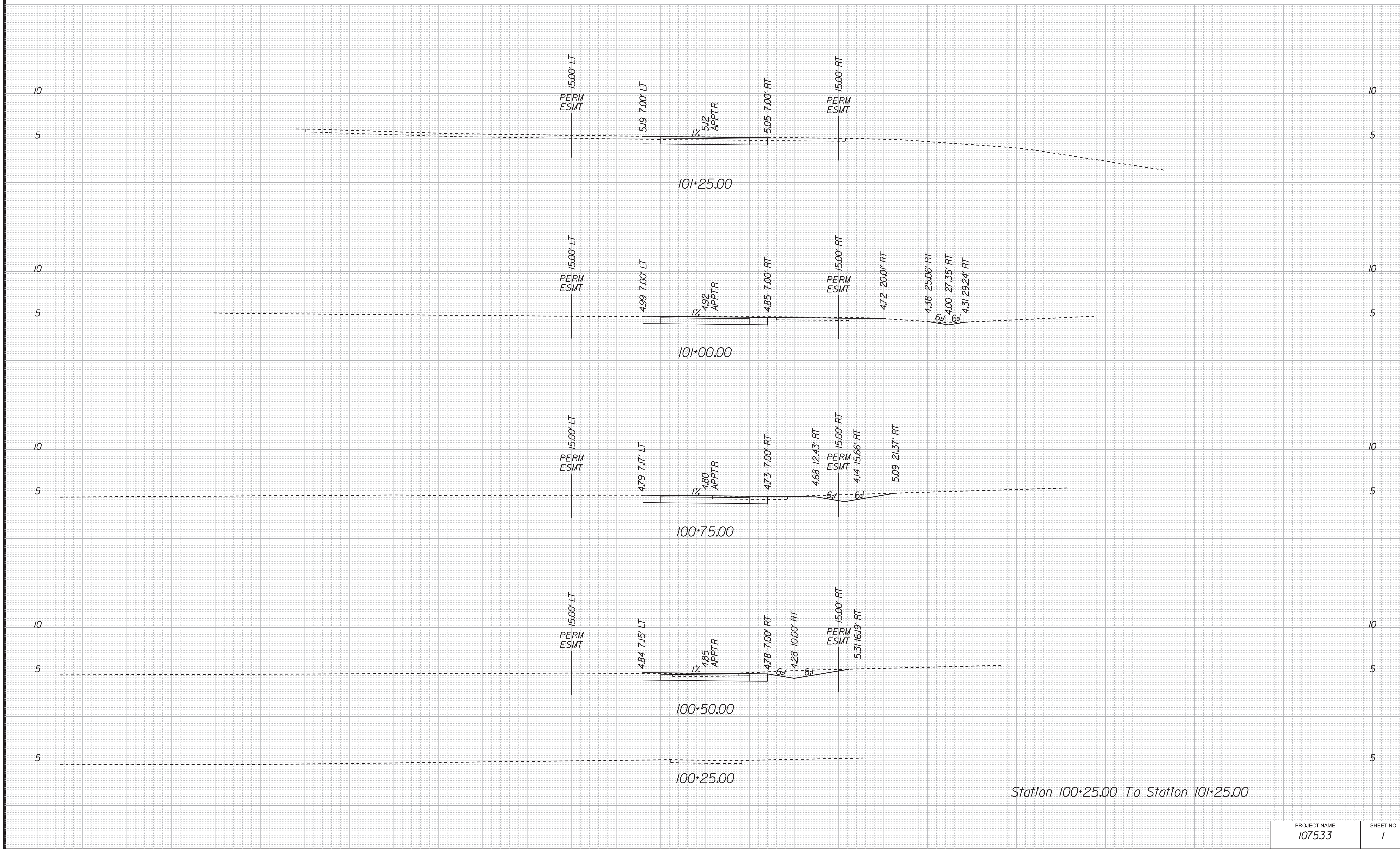
UNSUITABLE SOIL UNDERCUT

CROSS SECTIONS

SCALE 1 IN. = 5 FT

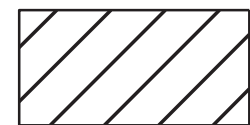


APPOMATTOX TRAIL



5/18/2023 I:\Projects\500761-200-Appomattox Trail Phase 5\CADD\107533\Sheets\10753301_A.dgn

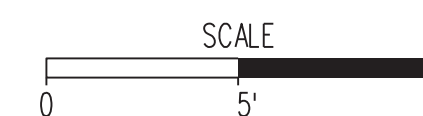
PROJECT NAME 107533	SHEET NO. 1
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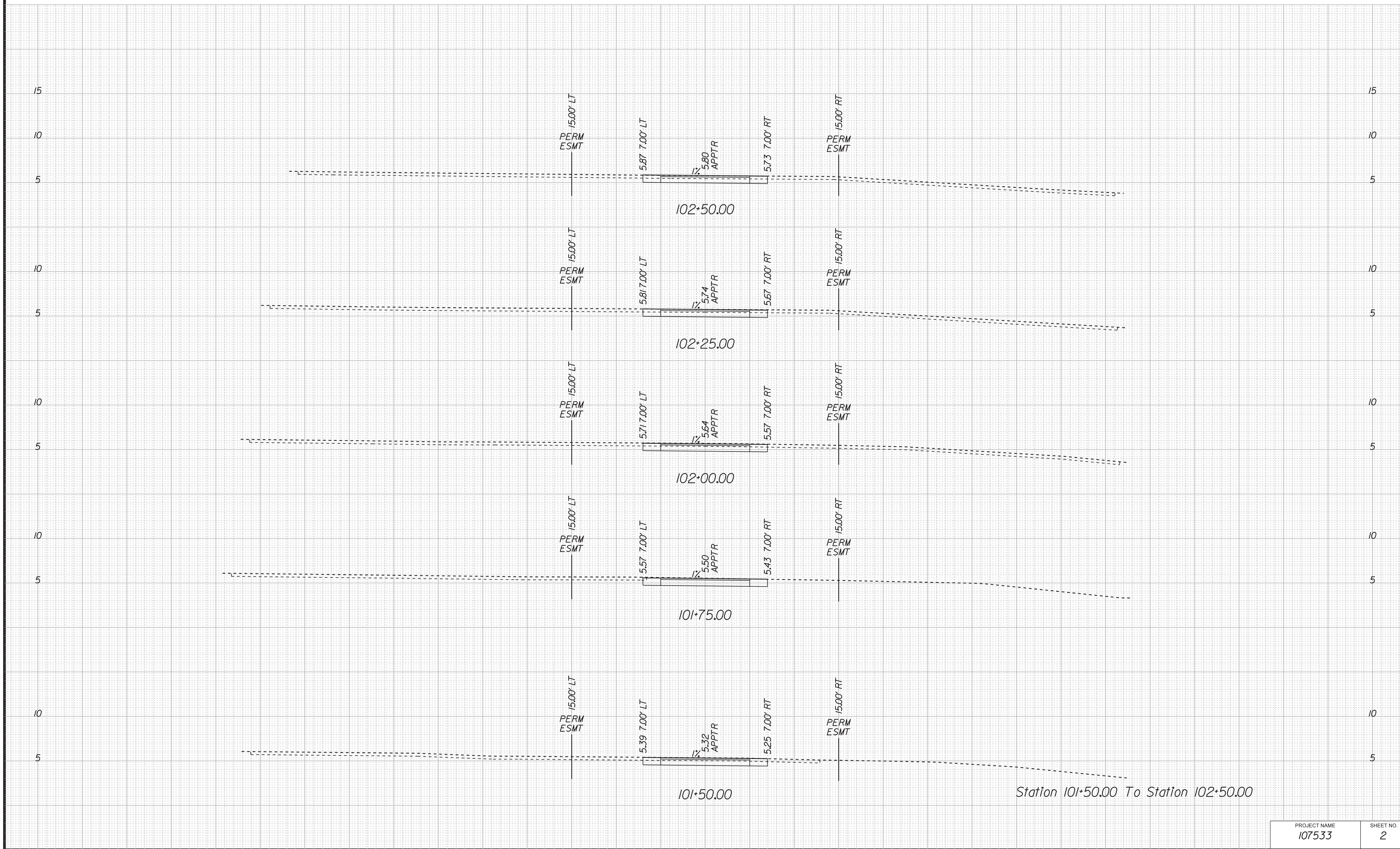
UNSUITABLE SOIL UNDERCUT

CROSS SECTIONS

SCALE 1 IN. = 5 FT

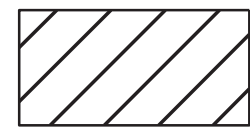


APPOMATTOX TRAIL



5/18/2023
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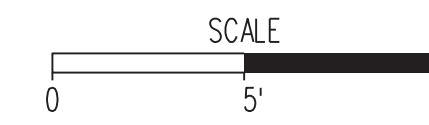
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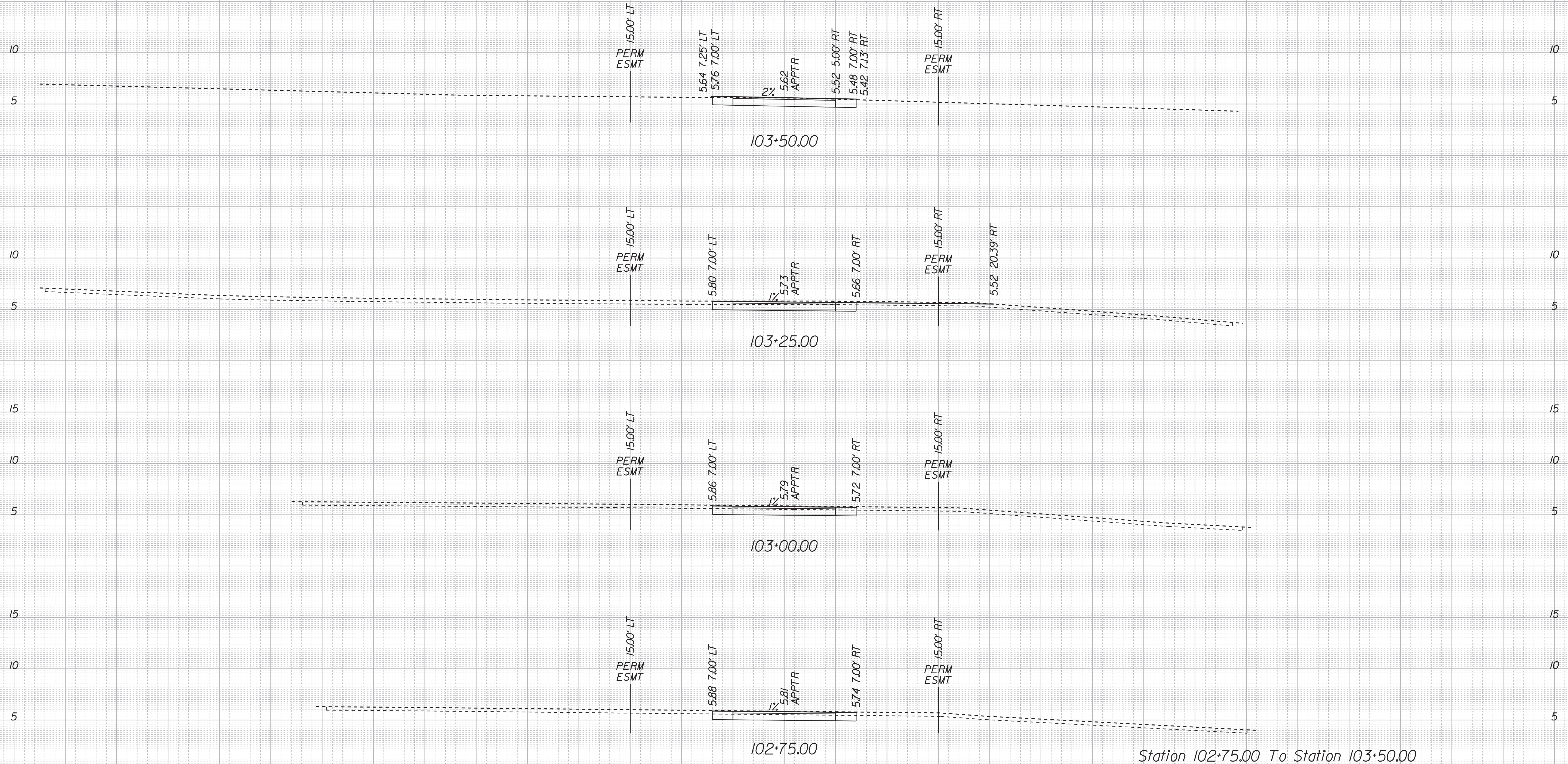
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CROSS SECTIONS

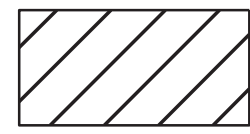
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APPOMATTOX TRAIL



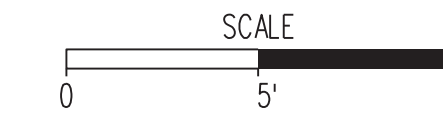
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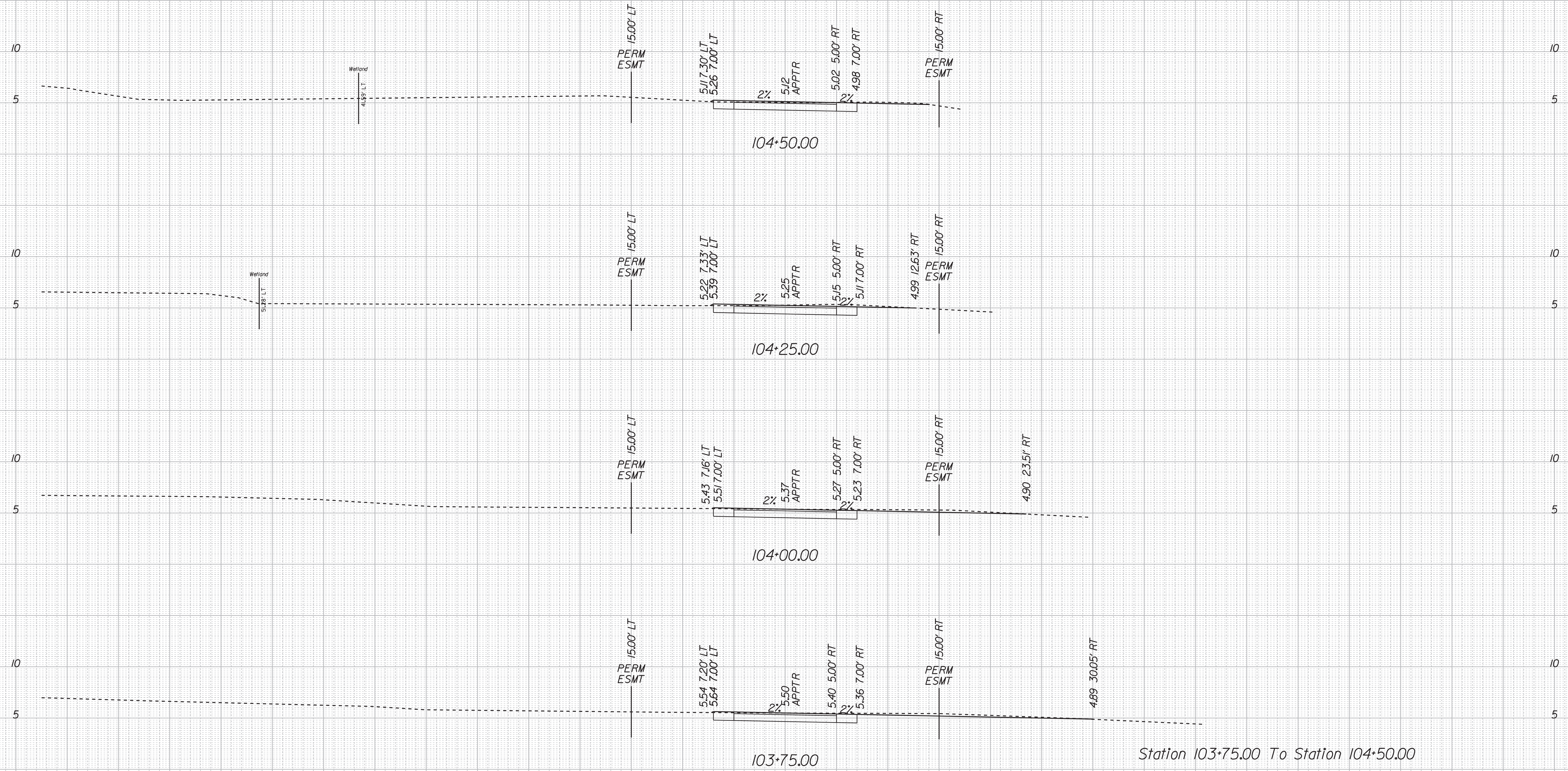
UNSUITABLE SOIL UNDERCUT

CROSS SECTIONS

SCALE 1 IN. = 5 FT



APPOMATTOX TRAIL



5/18/2023
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