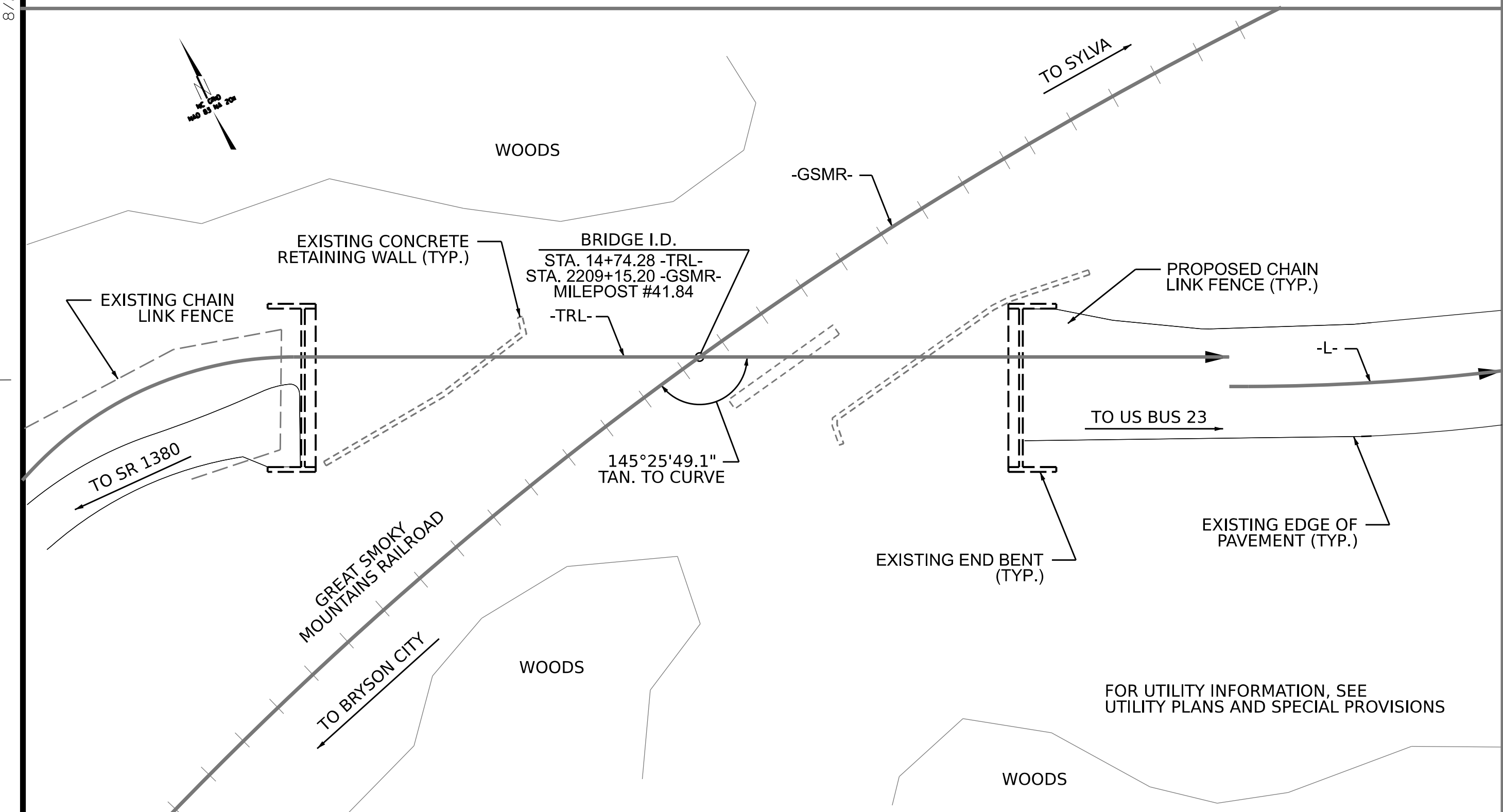
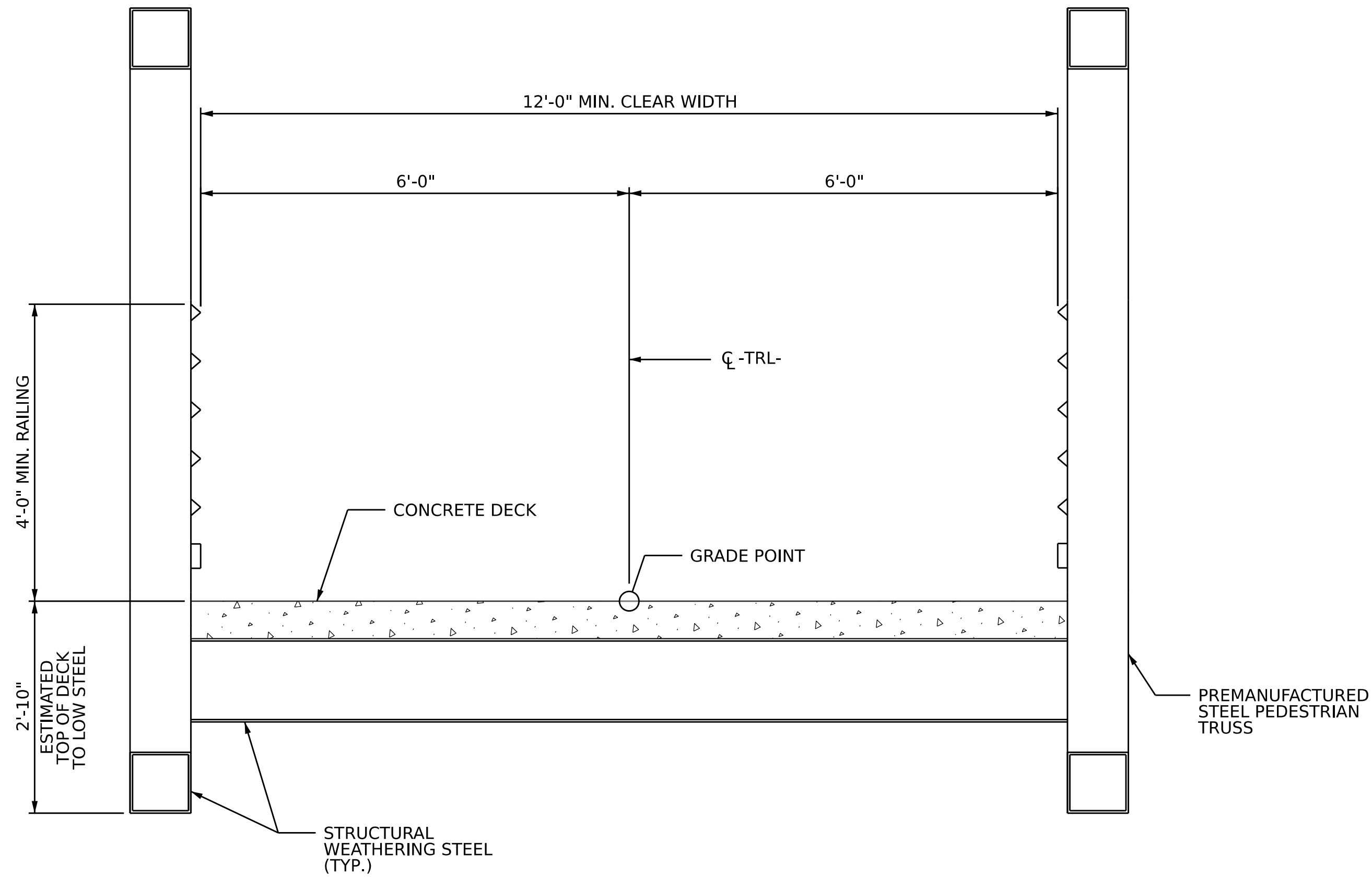


8/26/21

B.M. #2, 18.10' RT. OF STA. 15+40.81 -TRL-, ELEV. 2030.66'



LOCATION SKETCH



TYPICAL SECTION

SINGLE SPAN PREMANUFACTURED STEEL PEDESTRIAN TRUSS

DRAWN BY : J. WEIGER DATE : 7/2025
CHECKED BY : J. LOFTUS DATE : 8/2025
DESIGN ENGINEER OF RECORD: J. LOFTUS DATE : 2/2026

6/8/2026
X:\Projects\TPD\TPDNCC0005 - 2021 Western Divisions PDSC and GESC LSC\WO 02 Hometown Place\CADD (NCDOT)2023\NC ORD\Structures\BN-0003\03 - CADD\02 - FinalDrawings\401.003.BN0003.SMU.GD02.002.49XXXX.dgn
loftus

NOTES

1. ASSUMED PEDESTRIAN LIVE LOAD = 90 PSF.
2. ASSUMED DESIGN VEHICLE LIVE LOAD = H10.
3. THIS BRIDGE HAS BEEN DESIGNED IN ACCORDANCE WITH THE LRFD DESIGN SPECIFICATIONS FOR THE DESIGN OF PEDESTRIAN BRIDGES AND REQUIREMENTS OF THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS.
4. THIS BRIDGE IS LOCATED IN SEISMIC ZONE 1.
5. TOTAL BRIDGE LENGTH SHOWN ON PLANS IS APPROXIMATED. CONTRACTOR AND/OR TRUSS MANUFACTURER SHALL FIELD VERIFY DISTANCES BETWEEN EXISTING END BENT BACKWALLS TO SIZE PREMANUFACTURED STEEL PEDESTRIAN TRUSS AND ITS ANTICIPATED EXPANSION.
6. ALL WORK AND MATERIALS SHALL BE IN ACCORDANCE WITH 2024 NCDOT STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES UNLESS OTHERWISE SPECIFIED IN THE PLANS.
7. THE SUPERSTRUCTURE OF THE BRIDGE SHALL BE A PREMANUFACTURED PEDESTRIAN BRIDGE.
8. FABRICATOR OF PREMANUFACTURED PEDESTRIAN BRIDGE SUPERSTRUCTURE SHALL INDICATE THE LOCATION OF DRAINAGE HOLES FOR THE BRIDGE TUBULAR MEMBERS IN THE SHOP DRAWINGS.
9. ALL STRUCTURAL STEEL SHALL BE AASHTO M270 GRADE HPS 50W.
10. ANCHOR BOLTS FOR PREMANUFACTURED PEDESTRIAN BRIDGE SHALL BE ASTM F1554 GRADE 105.
11. CONCRETE DECK SHALL BE CLASS AA CONCRETE AND ADHERE TO NCDOT SPECIFICATIONS.
12. REINFORCED CONCRETE PEDESTALS SHALL BE CLASS AA CONCRETE AND ADHERE TO NCDOT SPECIFICATIONS.
13. AT THE CONTRACTOR'S DISCRETION AND AT NO ADDITIONAL COST TO THE OWNER, THE CONCRETE PEDESTALS OR BEARING LEG EXTENSIONS MAY BE SUBSTITUTED FOR STEEL PEDESTALS DESIGNED BY THE STEEL TRUSS MANUFACTURER.
14. ALL REINFORCING STEEL SHALL BE ASTM A615, GRADE 60 AND ADHERE TO NCDOT SPECIFICATIONS.
15. ALL BOLTS, NUTS, WASHERS, ETC. SHALL BE HOT DIPPED GALVANIZED AFTER FABRICATION IN ACCORDANCE WITH ASTM A153 UNLESS OTHERWISE NOTED.
16. ALL WORK SHALL BE ACCOMPLISHED AS DIRECTED BY THE ENGINEER. ANY DISCREPANCIES FOUND ON THIS DRAWING SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER BEFORE PROCEEDING.
17. FOR FALSEWORK AND FORMWORK, SEE SPECIAL PROVISIONS.
18. FOR CRANE SAFETY, SEE SPECIAL PROVISIONS.
19. FOR CRANE SAFETY, SEE SPECIAL PROVISIONS.
20. FOR SUBMITTAL OF WORKING DRAWINGS, SEE SPECIAL PROVISIONS.
21. FOR CONCRETE APPROACH SLAB, SEE SPECIAL PROVISIONS.
22. FOR GROUT FOR STRUCTURES, SEE SPECIAL PROVISIONS.
23. FOR REINFORCED CONCRETE PEDESTALS, SEE SPECIAL PROVISIONS.
24. FOR MAINTENANCE AND PROTECTION OF TRAFFIC BENEATH PROPOSED STRUCTURE, SEE SPECIAL PROVISIONS.
25. FOR OTHER DESIGN DATA AND GENERAL NOTES, SEE SHEET SN.
26. FOR PREMANUFACTURED PEDESTRIAN BRIDGE SUPERSTRUCTURE, SEE SPECIAL PROVISIONS.
27. BRIDGE LOADINGS ARE ESTIMATED. AFTER SHOP DRAWINGS FOR THE PREMANUFACTURED PEDESTRIAN BRIDGE ARE SUBMITTED, IT IS THE RESPONSIBILITY OF THE ENGINEER OF RECORD TO CHECK THE END BENTS AND PEDESTALS FOR ACTUAL BRIDGE LOADINGS. SHOP DRAWINGS SHALL BE FORWARDED TO ENGINEER OF RECORD UPON RECEIPT. A FINAL SET OF BRIDGE REACTIONS SHALL BE PROVIDED TO THE ENGINEER AT THE TIME OF SHOP DRAWING SUBMITTAL. BRIDGE REACTIONS SHOULD BE SUPPLIED FOR THE FOLLOWING LOAD CASES: DEAD (DC), DEAD (DW), LIVE (PEDESTRIAN), LIVE (H10 TRUCK), WIND (WS), WIND (OVERTURNING), THERMAL (TU), AND SEISMIC (EQ). THE ORIENTATION AND APPLICATION OF THE LOADINGS SHALL BE CLEARLY MARKED. THE PEDESTALS/SUBSTRUCTURE HAVE BEEN DESIGNED FOR THE FOLLOWING ESTIMATED LOADS. ALL LOADS ARE PER BEARING. NEGATIVE SIGN INDICATES UPLIFT IN THE VERTICAL DIRECTION:

VERTICAL DEAD LOAD DC: 47,800 LB
VERTICAL DEAD LOAD DW: 0 LB
VERTICAL LIVE LOAD PEDESTRIAN: 40,500 LB
VERTICAL LIVE LOAD VEHICLE: 11,500 LB
TRANSVERSE WIND LOAD: 23,200 LB
VERTICAL WIND LOAD: +/- 19,500 LB
OVERTURNING WIND LOAD: -13,300 LB (WINDWARD LEG)
OVERTURNING WIND LOAD: -4,800 LB (LEEWARD LEG)
LONGITUDINAL FORCE DUE TO THERMAL AFFECTS: 6,700 LB

TOTAL BILL OF MATERIAL

	REINFORCED CONCRETE APPROACH SLABS	APPROACH RAIL	REINFORCED CONCRETE PEDESTALS	PREMANUFACTURED PEDESTRIAN BRIDGE SUPERSTRUCTURE @ STA. 14+74.28 -TRL-	BRIDGE ERECTION @ STA. 14+74.28 -TRL-	REINFORCED CONCRETE DECK @ STA. 14+74.28 -TRL-
	EACH	EACH	LUMP SUM	LUMP SUM	LUMP SUM	SF
SUPERSTRUCTURE	2	2		LUMP SUM	LUMP SUM	1,875
END BENT NO. 1			LUMP SUM			
END BENT NO. 2			LUMP SUM			
TOTAL	2	2	LUMP SUM	LUMP SUM	LUMP SUM	1,875



McADAMS

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Signed by: *Jeff Loftus* 6/8/2026
7C22480A37E0480...

DOCUMENT NOT CONSIDERED
FINAL UNLESS ALL
SIGNATURES COMPLETED

PROJECT NO. BN-0003

JACKSON COUNTY

STATION: 14+74.28 -TRL-

SHEET 2 OF 2

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

GENERAL DRAWING
BRIDGE ON SR 1381 OVER
GREAT SMOKY MOUNTAINS RAILROAD
BETWEEN SR 1380 AND US 23 BUS

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-2
1			3			TOTAL SHEETS
2			4			8