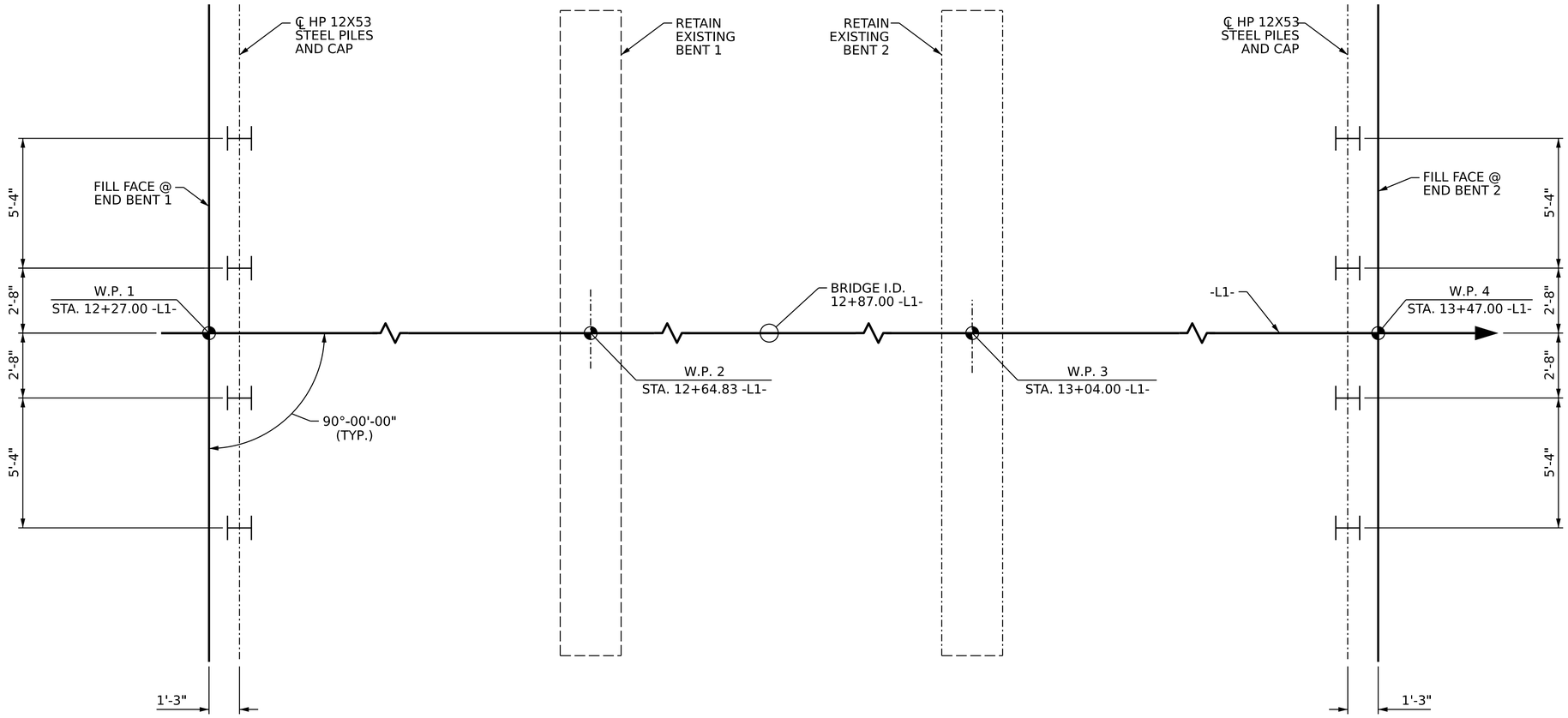
8/26/21



END BENT 1

END BENT 2

FOUNDATION LAYOUT PLAN

NOTES

ALL PILES IN ABUTMENTS ARE HP 12 X 53 STEEL PILES.

DIMENSIONS LOCATING THE PILES ARE SHOWN TO THE PILE CENTERLINES.

FOR PILES, SEE SECTION 450 OF THE STANDARD SPECIFICATIONS.

PILE DRIVING LEADS ARE NOT REQUIRED TO INSTALL PILES AT THE END BENTS.

PILES SHALL BE INSTALLED USING A VIBRATORY HAMMER AND A DROP HAMMER WITH A MINIMUM RAM WEIGHT OF 1,000 POUNDS. A DROP HEIGHT OF AT LEAST THREE FEET SHALL BE ATTAINABLE WITH THE DROP HAMMER. THE CONTRACTOR SHALL SUBMIT A HAMMER DRIVING SYSTEM FOR APPROVAL BY THE ENGINEER PROVIDING DETAILED DRAWINGS AND/OR SPECIFICATION SHEETS FOR THE VIBRATORY AND DROP HAMMER.

USE OF CONSTRUCTION EQUIPMENT SUCH AS AN OFF-ROAD CRANE OR EXCAVATOR TO DRIVE PILES USING VIBRATORY AND DROP HAMMER METHODS IS ACCEPTABLE. THE CONTRACTOR SHALL PROVIDE DETAILS OF MEANS AND METHODS TO DRIVE THE PILES WITHIN THE HAMMER DRIVING SYSTEM SUBMITTAL.

ACCEPTABLE PENETRATION AND PILE BEARING WILL BE DETERMINED BY USING DYNAMIC PILE TEST EQUIPMENT AND A PROVIDED DRIVE CRITERIA AND/OR MINIMUM PILE TIP ELEVATION REQUIREMENT FOR THE REMAINING (NON-TESTED) PRODUCTION PILES.

THE FIRST PRODUCTION PILE SHALL BE TESTED USING DYNAMIC PILE TESTING EQUIPMENT. THE PILE SHALL BE INSTALLED IN SEGMENT LENGTHS OF 10 FEET. A VIBRATORY HAMMER SHALL BE USED TO INSTALL THE PILE TO REFUSAL. THE DROP HAMMER SHALL THEN BE PLACED ON THE PILE TO COMPLETE PILE INSTALLATION AND CONFIRM ACCEPTABLE PENETRATION AND BEARING IS ACHIEVED. DYNAMIC PILE TESTING SHALL BE PERFORMED ONLY WHEN USING THE DROP HAMMER TO INSTALL THE PILES.

PRODUCTION PILES SHALL BE INSTALLED IN ACCORDANCE TO THE RECOMMENDATIONS OUTLINED IN THE DRIVE CRITERIA PROVIDED IN THE DYNAMIC PILE TESTING REPORT.

AT LEAST ONE SPLICE PER PILE SHALL BE ANTICIPATED FOR THE PILES AT END BENT NO. 2. IF THE CONTRACTOR ELECTS TO USE SEGMENT LENGTHS LESS THAN 10 FEET, ADDITIONAL SPLICES MAY BE REQUIRED.

PROJECT NO. 30001.WIUM.002

WAKE COUNTY

STATION: 12+87.00 -L1-

SHEET 2 OF 4

DocuSigned by: Timothy Shackelford
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NORTH CAROLINA PROFESSIONAL SEAL 45689 ENGINEER T. R. SHACKELFORD

03/05/2026

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

GENERAL DRAWING

BRIDGE ON SOUTH TURKEY CREEK TRAIL OVER CRABTREE CREEK BETWEEN CRABTREE CREEK TRAIL AND CEDAR RIDGE TRAIL

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-2
1			3			TOTAL SHEETS
2			4			17

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

ASSEMBLED BY:	P.D. BRYANT	DATE :	04/2025
CHECKED BY :	D. SHACKELFORD	DATE :	04/2025
DRAWN BY :			
CHECKED BY :			

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