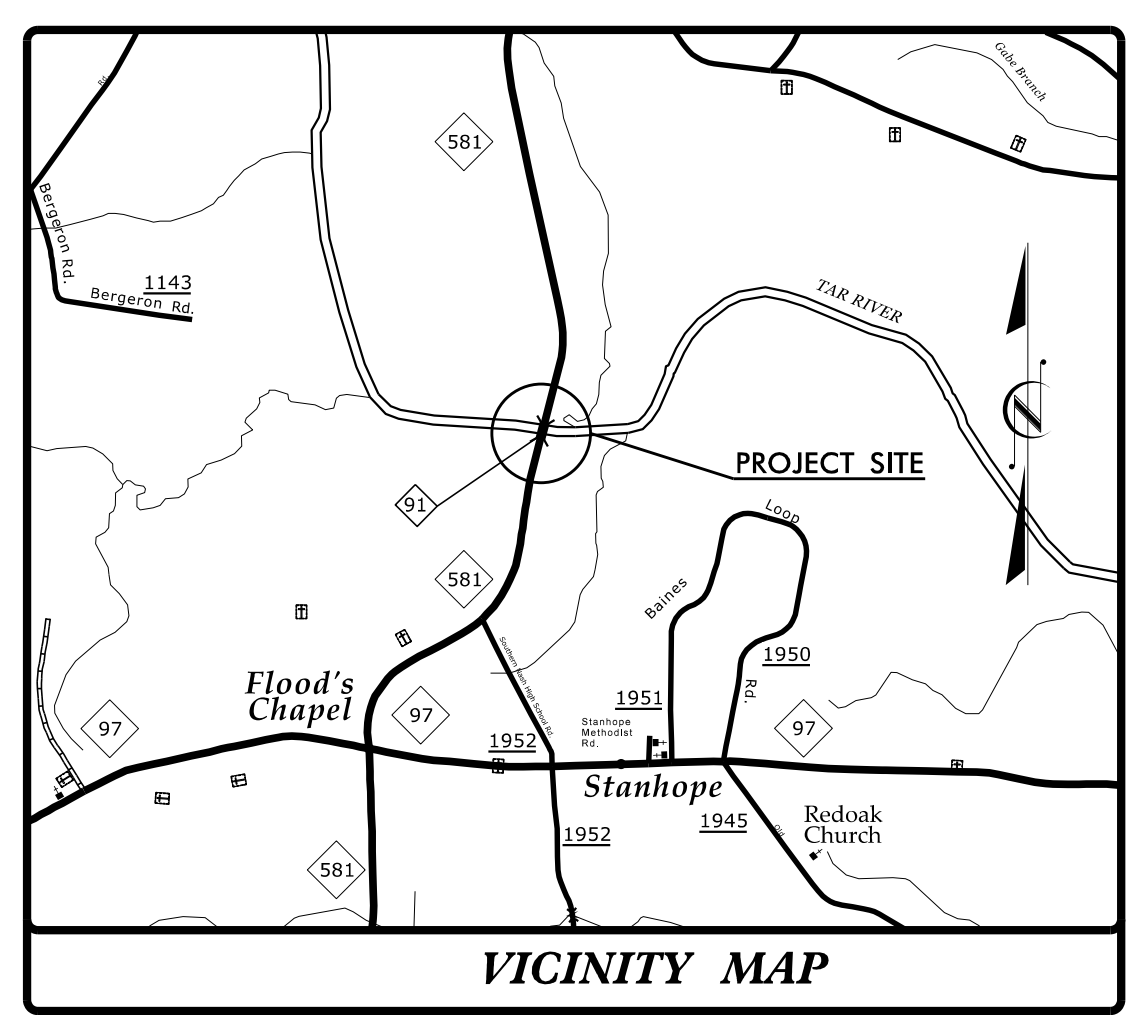
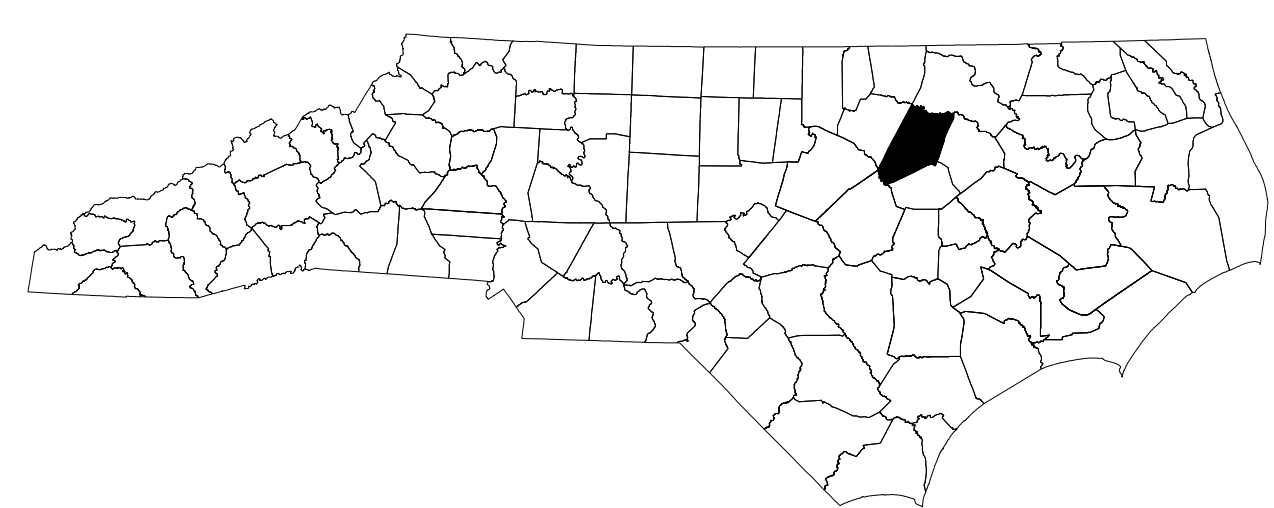


STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

TRANSPORTATION MANAGEMENT PLAN

NASH COUNTY



**LOCATION: BRIDGE NO. 630091 OVER TAR RIVER
ON NC 581**

TYPE OF WORK: GRADING, DRAINAGE, PAVING & STRUCTURE

INDEX OF SHEETS

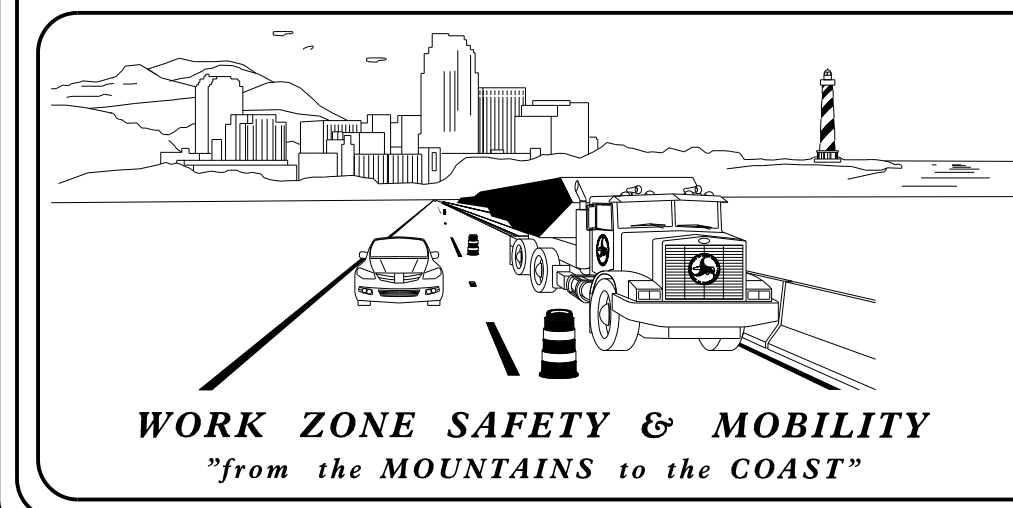
SHEET NO.	TITLE
TMP-01	TITLE SHEET, VICINITY MAP, AND INDEX OF SHEETS
TMP-01A	ROADWAY STANDARD DRAWINGS AND LEGEND
TMP-01B THRU 01C	TRANSPORTATION OPERATIONS PLAN: (MANAGEMENT STRATEGIES AND GENERAL NOTES)
TMP-02	PORTABLE CONCRETE BARRIER AT TEMPORARY SHORING LOCATIONS
TMP-02A THRU 02B	TEMPORARY SHORING DATA
TMP-03	TEMPORARY TRAFFIC CONTROL PHASING
TMP-04 THRU 06	TEMPORARY TRAFFIC CONTROL PHASE I DETAIL
TMP-07 THRU 08	TEMPORARY TRAFFIC CONTROL PHASE II DETAIL
TMP-09 THRU 13	TEMPORARY TRAFFIC CONTROL PHASE III DETAIL

SHEET NO.
TMP-01

B-5947

TIP PROJECT:

3/24/2022
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User:AHayes



PLANS PREPARED BY:

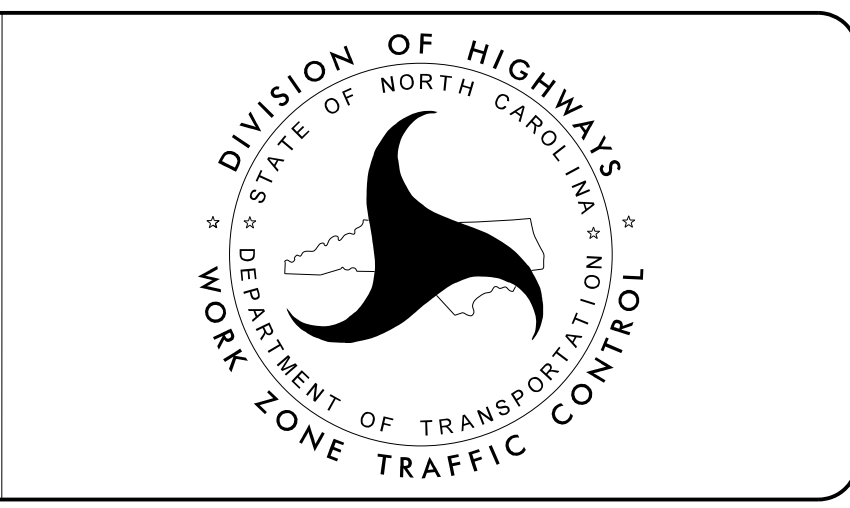
GREG PURVIS, P.E.

D. ALLEN HAYES, E.I.

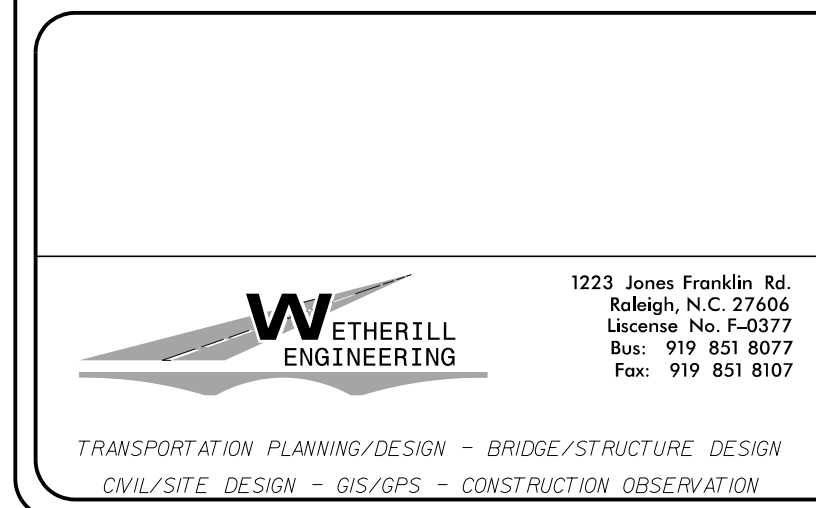
NCDOT CONTACTS:

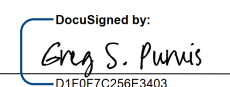
KEN THORNEWELL, P.E.
PROJECT ENGINEER

SPENCER JENNINGS
PROJECT DESIGN ENGINEER




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APPROVED: 
DocuSigned by:
Greg S. Purvis
010F1C38E3463

DATE: 3/24/2022

SEAL



TRANSPORTATION PLANNING/DESIGN - BRIDGE/STRUCTURE DESIGN
CIVIL/SITE DESIGN - GIS/GPS - CONSTRUCTION OBSERVATION

ROADWAY STANDARD DRAWINGS

THE FOLLOWING ROADWAY STANDARDS AS SHOWN IN "ROADWAY STANDARD DRAWINGS" - N.C. DEPARTMENT OF TRANSPORTATION - RALEIGH, N.C., DATED JANUARY 2018 ARE APPLICABLE TO THIS PROJECT AND BY REFERENCE HEREBY ARE CONSIDERED A PART OF THESE PLANS:

STD. NO.	TITLE
1101.01	WORK ZONE WARNING SIGNS
1101.02	TEMPORARY LANE CLOSURES
1101.04	TEMPORARY SHOULDER CLOSURES
1101.05	WORK ZONE VEHICLE ACCESSES
1101.06	WARNING SIGNS FOR BLASTING ZONES
1101.11	TRAFFIC CONTROL DESIGN TABLES
1110.01	STATIONARY WORK ZONE SIGNS
1110.02	PORTABLE WORK ZONE SIGNS
1130.01	DRUMS
1135.01	CONES
1145.01	BARRICADES
1150.01	FLAGGING DEVICES
1160.01	TEMPORARY CRASH CUSHION
1165.01	TRUCK MOUNTED ATTENUATOR
1170.01	PORTABLE CONCRETE BARRIER
1180.01	SKINNY - DRUMS
1205.01	PAVEMENT MARKINGS - LINE TYPES AND OFFSETS
1205.02	PAVEMENT MARKINGS - TWO LANE AND MULTILANE ROADWAYS
1205.12	PAVEMENT MARKINGS - BRIDGES
1250.01	RAISED PAVEMENT MARKERS - INSTALLATION SPACING
1251.01	RAISED PAVEMENT MARKERS - (PERMANENT AND TEMPORARY)
1261.01	GUARDRAIL AND BARRIER DELINEATORS - INSTALLATION SPACING
1261.02	GUARDRAIL AND BARRIER DELINEATORS - TYPES AND MOUNTING
1262.01	GUARDRAIL END DELINEATION

LEGEND

GENERAL

- DIRECTION OF TRAFFIC FLOW
- EXIST. PVMT.
- NORTH ARROW
- PROPOSED PVMT.
- TEMP. SHORING (EXCAVATION) (LOCATION PURPOSES ONLY)
- TEMP. SHORING (FILL) (LOCATION PURPOSES ONLY)
- WORK AREA
- REMOVAL
- WEDGING
- TEMPORARY PAVEMENT

PAVEMENT MARKINGS

- EXISTING LINES
- TEMPORARY LINES

TRAFFIC CONTROL DEVICES

- BARRICADE (TYPE III)
- DRUM
- TEMPORARY CRASH CUSHION

TEMPORARY SIGNING

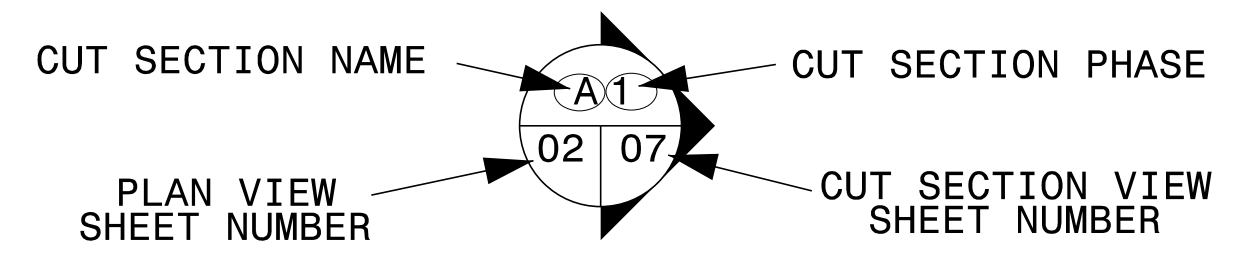
- PORTABLE SIGN
- STATIONARY SIGN
- STATIONARY OR PORTABLE SIGN

PAVEMENT MARKERS

- CRYSTAL/CRYSTAL
- CRYSTAL/RED
- YELLOW/YELLOW

PAVEMENT MARKING SYMBOLS AND CHARACTERS

- EXISTING PAVEMENT MARKING



TEMPORARY PAVEMENT MARKING

SYMBOL	DESCRIPTION	PAY ITEM
P1	WHITE SOLID EDGE LINE	PAINT (4")
P4	3 FT. - 9 FT./SP WHITE MINISKIP	PAINT (4")
P13	YELLOW DOUBLE CENTER	PAINT (4")
P61	WHITE STOPBAR	PAINT (24")
P100	ALPHANUMERIC CHARACTERS	PAINT PAVEMENT MARKING
MH	YELLOW/YELLOW TEMPORARY RAISED PAVEMENT MARKERS	

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<p>1223 Jones Franklin Rd. Raleigh, N.C. 27606 License No. F-0377 Bus: 919 851 8077 Fax: 919 851 8107</p> <p>TRANSPORTATION PLANNING/DESIGN - BRIDGE/STRUCTURE DESIGN CIVIL/SITE DESIGN - GIS/GPS - CONSTRUCTION OBSERVATION</p>	APPROVED: DATE: 3/24/2022			ROADWAY STANDARD DRAWINGS & LEGEND
	DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED			

GENERAL NOTES

CHANGES MAY BE REQUIRED WHEN PHYSICAL DIMENSIONS IN THE DETAIL DRAWINGS, STANDARD DETAILS, AND ROADWAY DETAILS ARE NOT ATTAINABLE TO MEET FIELD CONDITIONS OR RESULT IN DUPLICATE OR UNDESIRABLE OVERLAPPING OF DEVICES. MODIFICATION MAY INCLUDE: MOVING, SUPPLEMENTING, COVERING, OR REMOVAL OF DEVICES AS DIRECTED BY THE ENGINEER.

THE FOLLOWING GENERAL NOTES APPLY AT ALL TIMES FOR THE DURATION OF THE CONSTRUCTION PROJECT EXCEPT WHEN OTHERWISE NOTED IN THE PLAN OR DIRECTED BY THE ENGINEER.

TIME RESTRICTIONS

A) DO NOT CLOSE OR NARROW TRAVEL LANES AS FOLLOWS:

ROAD NAME	DAY AND TIME RESTRICTIONS
1. NC 581	6:30 A.M. - 8:30 A.M. 1:30 P.M. - 3:30 P.M. MONDAY THRU FRIDAY

B) DO NOT CLOSE OR NARROW TRAVEL LANES DURING HOLIDAYS AND SPECIAL EVENTS AS FOLLOWS:

- ROAD NAME
1. NC 581
- HOLIDAY
- FOR ANY UNEXPECTED OCCURRENCE THAT CREATES UNUSUALLY HIGH TRAFFIC VOLUMES, AS DIRECTED BY THE ENGINEER.
 - FOR NEW YEAR'S, BETWEEN THE HOURS OF 6:30 A.M. DECEMBER 31st TO 3:30 P.M. JANUARY 2ND. IF NEW YEAR'S DAY IS ON A FRIDAY, SATURDAY, SUNDAY, OR MONDAY THEN UNTIL 3:30 P.M. THE FOLLOWING TUESDAY.
 - FOR EASTER, BETWEEN THE HOURS OF 6:30 A.M. THURSDAY AND 3:30 P.M. MONDAY.
 - FOR MEMORIAL DAY, BETWEEN THE HOURS OF 6:30 A.M. FRIDAY TO 3:30 P.M. TUESDAY.
 - FOR INDEPENDENCE DAY, BETWEEN THE HOURS OF 6:30 A.M. THE DAY BEFORE INDEPENDENCE DAY AND 3:30 P.M. THE DAY AFTER INDEPENDENCE DAY.

IF INDEPENDENCE DAY IS ON A FRIDAY, SATURDAY, SUNDAY OR MONDAY THEN BETWEEN THE HOURS OF 6:30 A.M. THE THURSDAY BEFORE INDEPENDENCE DAY AND 3:30 P.M. THE TUESDAY AFTER INDEPENDENCE DAY.
 - FOR LABOR DAY, BETWEEN THE HOURS OF 6:30 A.M. FRIDAY AND 3:30 P.M. TUESDAY.
 - FOR THANKSGIVING DAY, BETWEEN THE HOURS OF 6:30 A.M. TUESDAY TO 3:30 P.M. MONDAY.
 - FOR CHRISTMAS, BETWEEN THE HOURS OF 6:30 A.M. THE FRIDAY BEFORE THE WEEK OF CHRISTMAS DAY AND 3:30 P.M. THE FOLLOWING TUESDAY AFTER THE WEEK OF CHRISTMAS.

C) DO NOT STOP TRAFFIC AS FOLLOWS:

ROAD NAME	DAY AND TIME RESTRICTIONS	DURATION AND OPERATION
1. NC 581	6:30 A.M. - 8:30 A.M. 1:30 P.M. - 3:30 P.M. MONDAY THRU FRIDAY	15 MINUTES TRAFFIC OPERATIONS

D) DO NOT CONDUCT ANY HAULING OPERATIONS AGAINST THE FLOW OF TRAFFIC OF AN OPEN TRAVELWAY UNLESS THE HAULING OPERATION IS PROTECTED BY BARRIER OR GUARDRAIL OR AS DIRECTED BY THE ENGINEER.

LANE AND SHOULDER CLOSURE REQUIREMENTS

- E) REMOVE LANE CLOSURE DEVICES FROM THE LANE WHEN WORK IS NOT BEING PERFORMED BEHIND THE LANE CLOSURE OR WHEN A LANE CLOSURE IS NO LONGER NEEDED OR AS DIRECTED BY THE ENGINEER.
- F) WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING WITHIN 15 FT OF AN OPEN TRAVEL LANE, CLOSE THE NEAREST OPEN SHOULDER USING ROADWAY STANDARD DRAWING NO. 1101.04 UNLESS THE WORK AREA IS PROTECTED BY BARRIER OR GUARDRAIL OR A LANE CLOSURE IS INSTALLED.

- G) WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING ON THE SHOULDER ADJACENT TO AN UNDIVIDED FACILITY AND WITHIN 5 FT OF AN OPEN TRAVEL LANE, CLOSE THE NEAREST OPEN TRAVEL LANE USING ROADWAY STANDARD DRAWING NO. 1101.02 UNLESS THE WORK AREA IS PROTECTED BY BARRIER OR GUARDRAIL.
- H) WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING WITHIN A LANE OF TRAVEL OF AN UNDIVIDED OR DIVIDED FACILITY, CLOSE THE LANE ACCORDING TO THE TRAFFIC CONTROL PLANS, ROADWAY STANDARD DRAWINGS, OR AS DIRECTED BY THE ENGINEER. CONDUCT THE WORK SO THAT ALL PERSONNEL AND/OR EQUIPMENT REMAIN WITHIN THE CLOSED TRAVEL LANE.
- I) DO NOT WORK SIMULTANEOUSLY WITHIN 15 FT ON BOTH SIDES OF AN OPEN TRAVELWAY, RAMP, OR LOOP WITHIN THE SAME LOCATION UNLESS PROTECTED WITH GUARDRAIL OR BARRIER.
- J) DO NOT INSTALL MORE THAN ONE LANE CLOSURE IN ANY ONE DIRECTION ON NC 581.

PAVEMENT EDGE DROP OFF REQUIREMENTS

- K) BACKFILL AT A 6:1 SLOPE UP TO THE EDGE AND ELEVATION OF EXISTING PAVEMENT IN AREAS ADJACENT TO AN OPENED TRAVEL LANE THAT HAS AN EDGE OF PAVEMENT DROP-OFF AS FOLLOWS:
- BACKFILL DROP-OFFS THAT EXCEED 2 INCHES ON ROADWAYS WITH POSTED SPEED LIMITS OF 45 MPH OR GREATER.
- BACKFILL DROP-OFFS THAT EXCEED 3 INCHES ON ROADWAYS WITH POSTED SPEED LIMITS LESS THAN 45 MPH.
- BACKFILL WITH SUITABLE COMPACTED MATERIAL, AS APPROVED BY THE ENGINEER, AT NO EXPENSE TO THE DEPARTMENT.
- L) DO NOT EXCEED A DIFFERENCE OF 2 INCHES IN ELEVATION BETWEEN OPEN LANES OF TRAFFIC FOR NOMINAL LIFTS OF 1.5 INCHES. INSTALL ADVANCE WARNING "UNEVEN LANES" SIGNS (W8-11) 500 FT/MI IN ADVANCE AND A MINIMUM OF EVERY HALF MILE THROUGHOUT THE UNEVEN AREA.

TRAFFIC PATTERN ALTERATIONS

M) NOTIFY THE ENGINEER THIRTY (30) CALENDAR DAYS PRIOR TO ANY TRAFFIC PATTERN ALTERATION.

SIGNING

- N) INSTALL ADVANCE WORK ZONE WARNING SIGNS WHEN WORK IS WITHIN 40 FT FROM THE EDGE OF TRAVEL LANE AND NO MORE THAN THREE (3) DAYS PRIOR TO THE BEGINNING OF CONSTRUCTION.
- O) ENSURE ALL NECESSARY SIGNING IS IN PLACE PRIOR TO ALTERING ANY TRAFFIC PATTERN.
- P) INSTALL BLACK ON ORANGE "DIP" SIGNS (W8-2) AND/OR "BUMP" SIGNS (W8-1) 500 FT/MI IN ADVANCE OF THE UNEVEN AREA, OR AS DIRECTED BY THE ENGINEER.

TRAFFIC BARRIER

- Q) INSTALL TEMPORARY BARRIER ACCORDING TO THE TRANSPORTATION MANAGEMENT PLANS A MAXIMUM OF TWO (2) WEEKS PRIOR TO BEGINNING WORK IN ANY LOCATION. ONCE TEMPORARY BARRIER IS INSTALLED AT ANY LOCATION PROCEED IN A CONTINUOUS MANNER TO COMPLETE THE PROPOSED WORK IN THAT LOCATION UNLESS OTHERWISE STATED IN THE TRANSPORTATION MANAGEMENT PLANS OR AS DIRECTED BY THE ENGINEER.
- DO NOT PLACE BARRIER DIRECTLY ON ANY SURFACE OTHER THAN ASPHALT OR CONCRETE.
- ONCE TEMPORARY BARRIER IS INSTALLED AT ANY LOCATION AND NO WORK IS PERFORMED BEHIND THE TEMPORARY BARRIER FOR A PERIOD LONGER THAN TWO (2) MONTHS, REMOVE / RESET TEMPORARY BARRIER AT NO COST TO THE DEPARTMENT UNLESS OTHERWISE STATED IN THE TRANSPORTATION MANAGEMENT PLANS, TEMPORARY BARRIER IS PROTECTING A HAZARD, OR AS DIRECTED BY THE ENGINEER.

INSTALL TEMPORARY BARRIER WITH THE TRAFFIC FLOW BEGINNING WITH THE UPSTREAM SIDE OF TRAFFIC. REMOVE TEMPORARY BARRIER AGAINST THE TRAFFIC FLOW BEGINNING WITH THE DOWNSTREAM SIDE OF TRAFFIC.

INSTALL AND SPACE DRUMS NO GREATER THAN TWICE THE POSTED SPEED LIMIT (MPH) TO CLOSE OR KEEP THE SECTION OF THE ROADWAY CLOSED UNTIL THE TEMPORARY BARRIER CAN BE PLACED OR AFTER THE TEMPORARY BARRIER IS REMOVED.

R) PROTECT THE APPROACH END OF MOVABLE/PORTABLE CONCRETE BARRIER AT ALL TIMES DURING THE INSTALLATION AND REMOVAL OF THE BARRIER BY EITHER A TRUCK MOUNTED ATTENUATOR (MAXIMUM 72 HOURS) OR A TEMPORARY CRASH CUSHION.

PROTECT THE APPROACH END OF MOVABLE/PORTABLE CONCRETE BARRIER FROM ONCOMING TRAFFIC AT ALL TIMES BY A TEMPORARY CRASH CUSHION UNLESS THE APPROACH END OF MOVABLE/PORTABLE CONCRETE BARRIER IS OFFSET FROM ONCOMING TRAFFIC AS FOLLOWS OR AS SHOWN IN THE PLANS: (SEE ALSO 1101.05)

POSTED SPEED LIMIT	MINIMUM OFFSET
40 OR LESS	15 FT
45 - 50	20 FT
55	25 FT
60 MPH or HIGHER	30 FT

TRAFFIC CONTROL DEVICES

- S) WHEN LANE CLOSURES ARE NOT IN EFFECT SPACE CHANNELIZING DEVICES IN WORK AREAS NO GREATER IN FEET THAN TWICE THE POSTED SPEED LIMIT (MPH) EXCEPT 10 FT ON-CENTER IN RADIUS AND 3 FT OFF THE EDGE OF AN OPEN TRAVELWAY. REFER TO STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES SECTIONS 1130 (DRUMS), 1135 (CONES) AND 1180 (SKINNY DRUMS) FOR ADDITIONAL REQUIREMENTS.
- T) PLACE TYPE III BARRICADES, WITH "ROAD CLOSED" SIGN R11-2 ATTACHED, OF SUFFICIENT LENGTH TO CLOSE ENTIRE ROADWAY.
- U) PLACE ADDITIONAL SETS OF THREE CHANNELIZING DEVICES PERPENDICULAR TO THE EDGE OF TRAVELWAY ON 500 FT CENTERS WHEN UNOPENED LANES ARE CLOSED TO TRAFFIC.

PAVEMENT MARKINGS AND MARKERS

- V) INSTALL TEMPORARY PAVEMENT MARKINGS AND TEMPORARY PAVEMENT MARKERS ON INTERIM LAYERS OF PAVEMENT AS FOLLOWS:
- | ROAD NAME | MARKING | MARKER |
|-----------|---------|------------------|
| 1. NC 581 | PAINT | TEMPORARY RAISED |
- W) PLACE ONE APPLICATION OF PAINT FOR TEMPORARY TRAFFIC PATTERNS. PLACE A SECOND APPLICATION OF PAINT SIX (6) MONTHS AFTER THE INITIAL APPLICATION AND EVERY SIX MONTHS AS DIRECTED BY THE ENGINEER.

- X) TIE PROPOSED PAVEMENT MARKING LINES TO EXISTING PAVEMENT MARKING LINES.
- Y) REMOVE/REPLACE ANY CONFLICTING/DAMAGED PAVEMENT MARKINGS AND MARKERS BY THE END OF EACH DAY'S OPERATION.

MISCELLANEOUS

- Z) IN THE EVENT A TIE-IN CANNOT BE MADE IN ONE DAY'S TIME, BRING THE TIE-IN AREA TO AN APPROPRIATE ROADWAY ELEVATION AS DETERMINED BY THE ENGINEER. PLACE BLACK ON ORANGE "LOOSE GRAVEL" SIGNS (W8-7) AND BLACK ON ORANGE "PAVEMENT ENDS" SIGNS (W8-3) 500 FT/MI AND 500 FT/MI RESPECTIVELY IN ADVANCE OF THE UNEVEN AREAS. USE DRUMS TO DELINEATE THE EDGE OF ROADWAY ALONG UNPAVED AREAS.
- AA) ALL STATIONS ARE CONSIDERED +/- UNLESS OTHERWISE NOTED ON THE PLANS.
- BB) MAINTAIN ACCESS TO ALL ROADS AND DRIVEWAYS PER THE DISCRETION OF THE ENGINEER. USE COMPACTED ABC OR OTHER SUITABLE MATERIAL AS APPROVED BY THE ENGINEER.
- CC) ALL LANE WIDTHS ARE CONSIDERED +/- UNLESS OTHERWISE SHOWN ON THE PLANS.

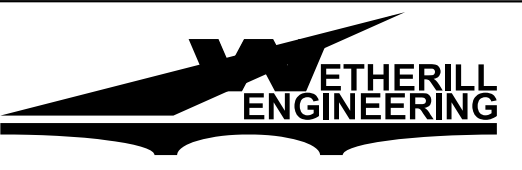
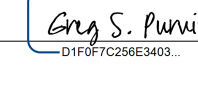

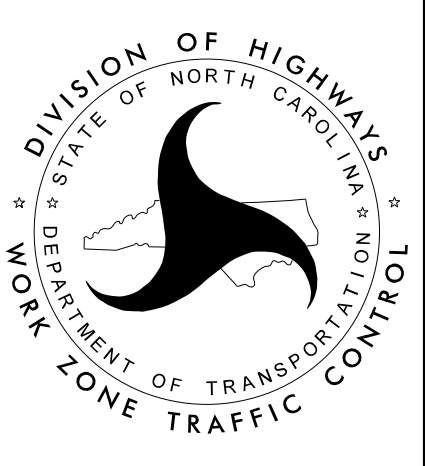
MANAGEMENT STRATEGIES

THE FOLLOWING LISTED WORK ZONE STRATEGIES ARE RECOMMENDED FOR INCLUSION WITHIN THIS TRANSPORTATION MANAGEMENT PLAN (TMP).

RECOMMENDED STRATEGIES:

- TRAFFIC MANAGEMENT STRATEGIES:
 FULL ROADWAY CLOSURES
 LANE SHIFTS OR CLOSURES
 SHOULDER CLOSURES
 ONE-LANE, TWO WAY OPERATION (FLAGGING)
 WORK HOUR RESTRICTIONS FOR PEAK TRAVEL
 ON-SITE DETOURS

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 <p>1223 Jones Franklin Rd. Raleigh, N.C. 27606 License No. F-0377 Bus: 919 851 8077 Fax: 919 851 8107</p> <p>TRANSPORTATION PLANNING/DESIGN - BRIDGE/STRUCTURE DESIGN CIVIL/SITE DESIGN - GIS/GPS - CONSTRUCTION OBSERVATION</p>	<p>APPROVED:  DATE: 3/24/2022</p> 		<p>TRANSPORTATION OPERATIONS PLAN: (MANAGEMENT STRATEGIES AND GENERAL NOTES)</p>
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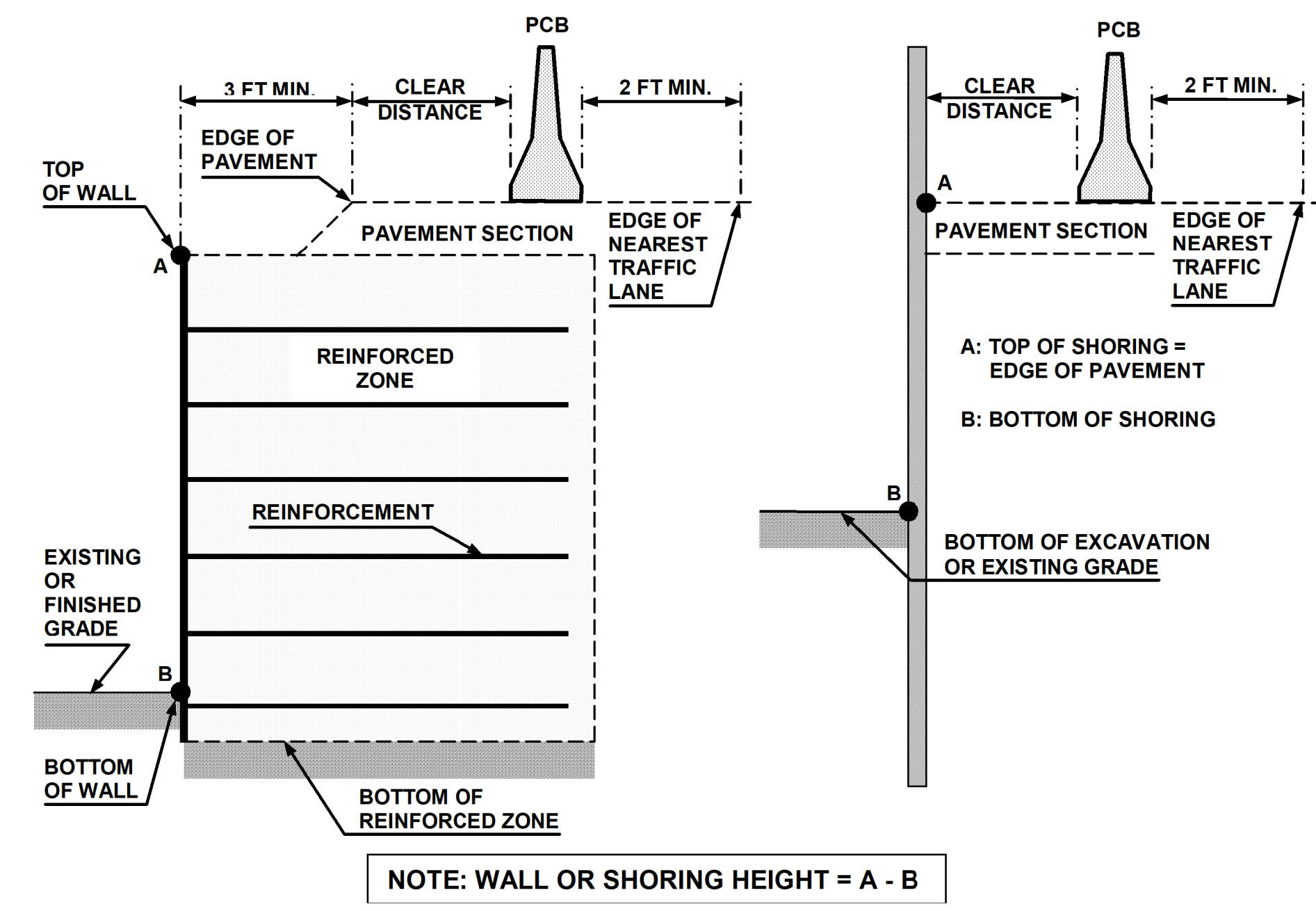


FIGURE A

NOTES

- 1- REFER TO THE TRAFFIC CONTROL PLANS FOR TEMPORARY SHORING LOCATIONS AND NOTES.
- 2- REFER TO THE "TEMPORARY SHORING" PROJECT SPECIAL PROVISION FOR INFORMATION ABOUT TEMPORARY SHORING AND PORTABLE CONCRETE BARRIER (PCB).
- 3- PCB IS REQUIRED IF TEMPORARY SHORING IS LOCATED WITHIN THE CLEAR ZONE IN ACCORDANCE WITH THE AASHTO ROADSIDE DESIGN GUIDE. DO NOT PLACE BARRIER DIRECTLY ON ANY SURFACE OTHER THAN ASPHALT OR CONCRETE. (CONTACT NCDOT PAVEMENT MANAGEMENT UNIT FOR APPLICABLE PAVEMENT DESIGN).
- 4- BASED ON THE CLEAR DISTANCE, OFFSET, DESIGN SPEED AND PAVEMENT TYPE, CHOOSE AN UNANCHORED OR ANCHORED PCB FROM THE TABLE SHOWN IN FIGURE B. CLEAR DISTANCE IS DEFINED AS SHOWN IN FIGURE A AND OFFSET IS DEFINED AS SHOWN IN FIGURE B.
- 5- AT THE CONTRACTOR'S OPTION OR IF THE MINIMUM REQUIRED CLEAR DISTANCE IS NOT AVAILABLE, SET PCB NEXT TO AND UP AGAINST THE TRAFFIC SIDE OF THE TEMPORARY SHORING EXCEPT FOR BARRIER ABOVE TEMPORARY WALLS. PCB WITH THE MINIMUM REQUIRED CLEAR DISTANCE IS REQUIRED ABOVE TEMPORARY WALLS.
- 6- USE NCDOT PORTABLE CONCRETE BARRIER (PCB) IN ACCORDANCE WITH ROADWAY STANDARD DRAWING NO. 1170.01 AND SECTION 1170 OF THE STANDARD SPECIFICATIONS.
- 7- PCB REQUIREMENTS FOR TEMPORARY WALLS APPLY TO TEMPORARY MECHANICALLY STABILIZED EARTH (MSE) WALLS AND TEMPORARY SOIL NAIL WALLS.
- 8- SET PCB WITH A MINIMUM HORIZONTAL DISTANCE OF 2 FT BETWEEN THE FRONT FACE OF THE BARRIER AND THE EDGE OF THE NEAREST TRAFFIC LANE AS SHOWN IN FIGURE A UNLESS OTHERWISE SHOWN IN THE PLANS AND OR AS APPROVED BY THE ENGINEER.
- 9- FOR PCB ABOVE AND BEHIND TEMPORARY WALLS, PROVIDE A MINIMUM DISTANCE OF 3 FT BETWEEN THE EDGE OF PAVEMENT AND THE WALL FACE AS SHOWN IN FIGURE A. IF THESE MINIMUM REQUIRED DISTANCES ARE NOT AVAILABLE, CONTACT THE ENGINEER.
- 10- TABLE SHOWN IN FIGURE B IS BASED ON NCDOT RESEARCH PROJECT NO. 2005-010 WITH VEHICLE TYPE USED FOR NCHRP 350 CRASH TESTS. BARRIER DEFLECTIONS AND RESULTING MINIMUM REQUIRED CLEAR DISTANCES MIGHT VARY SIGNIFICANTLY FOR LARGER HEAVIER VEHICLES, RUNS OF BARRIER LESS THAN 200 FT IN LENGTH AND WET OR DRY PAVEMENT.

MINIMUM REQUIRED CLEAR DISTANCE, inches

Barrier Type	Pavement Type	Offset * ft	Design Speed, mph					
			<30	31-40	41-50	51-60	61-70	71-80
Unanchored PCB	Asphalt	<8	24	26	29	32	36	40
		8-14	26	28	31	35	38	42
		14-20	27	29	34	36	39	43
		20-26	28	31	35	38	40	44
		26-32	29	32	36	39	42	45
		32-38	30	34	38	41	43	46
		38-44	31	34	41	43	45	48
		44-50	31	35	41	43	46	49
		50-56	32	36	42	44	47	50
	>56	32	36	42	45	47	51	
	Concrete	<8	17	18	21	22	25	26
		8-14	19	20	23	25	26	29
		14-20	22	22	24	26	28	31
		20-26	23	24	26	27	30	34
		26-32	24	25	27	28	32	35
		32-38	24	26	27	30	33	36
		38-44	25	26	28	30	34	37
		44-50	26	26	28	32	35	37
50-56		26	26	28	32	35	38	
>56	26	27	29	32	36	38		
Anchored PCB	Asphalt	All Offsets	24 for All Design Speeds					
Anchored PCB	Concrete (including bridge approach slabs)	All Offsets	12 for All Design Speeds					

* See Figure Below

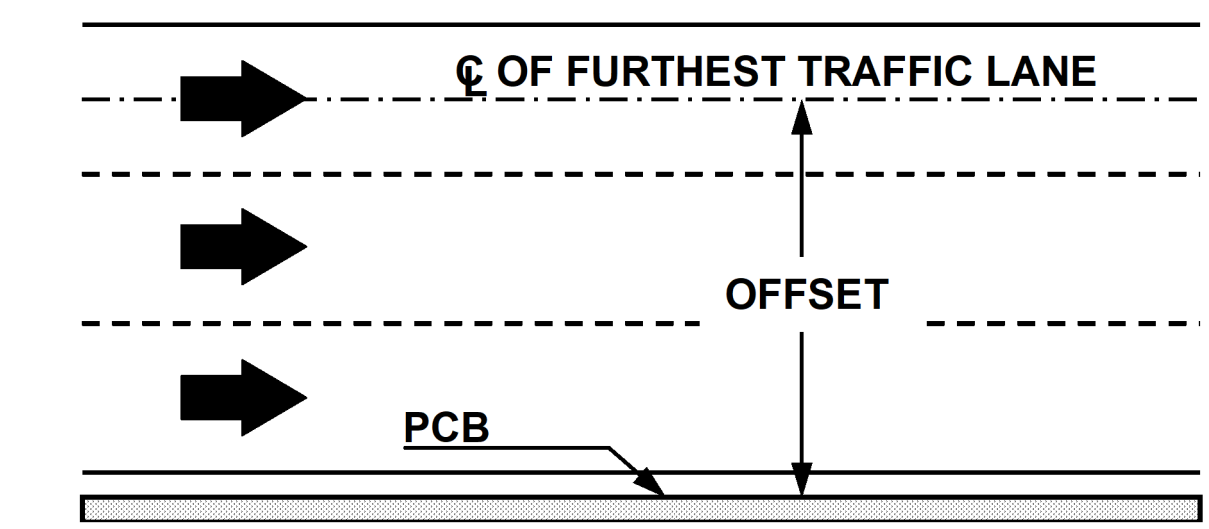
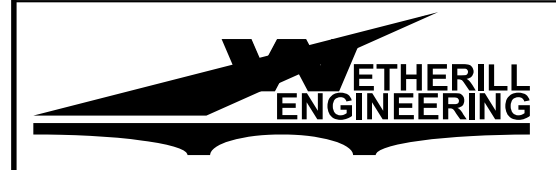
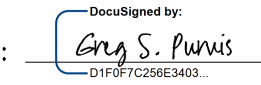




FIGURE B

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	<p>DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED</p>			

Shoring Location No. ①

FOR TEMPORARY SHORING AND POSITIVE PROTECTION FOR TEMPORARY SHORING, SEE PLANS AND TEMPORARY SHORING PROVISION.

BEFORE BEGINNING TEMPORARY SHORING DESIGN OR CONSTRUCTION, SURVEY EXISTING GROUND ELEVATIONS IN THE VICINITY OF SHORING LOCATIONS TO DETERMINE ACTUAL SHORING HEIGHTS.

DESIGN TEMPORARY SHORING FROM STATION 21+97±-LREV-, 28.9 FT RIGHT, TO STATION 22+49±-LREV-, 28.9 FT RIGHT, FOR THE FOLLOWING ASSUMED SOIL PARAMETERS AND GROUNDWATER ELEVATION:

UNIT WEIGHT (γ) = 120 PCF
 FRICTION ANGLE (ϕ) = 30 DEGREES
 COHESION (c) = 0 PSF
 GROUNDWATER ELEVATION = 140 FT

LIMITED SUBSURFACE INFORMATION IS AVAILABLE IN THE VICINITY OF TEMPORARY SHORING FROM STATION 21+97±-LREV-, 28.9 FT RIGHT, TO STATION 22+49±-LREV-, 28.9 FT RIGHT. THE INFORMATION PROVIDED FOR TEMPORARY SHORING DESIGN WAS ASSUMED AND MAY NOT BE APPLICABLE TO THE ACTUAL SITE CONDITIONS ENCOUNTERED DURING CONSTRUCTION.

DRIVEN PILING FOR TEMPORARY SHORING FROM STATION 21+97±-LREV-, 28.9 FT RIGHT, TO STATION 22+49±-LREV-, 28.9 FT RIGHT MAY NOT PENETRATE BELOW ELEVATION 130 FT DUE TO OBSTRUCTIONS, VERY DENSE OR HARD SOIL, BOULDERS OR WEATHERED OR HARD ROCK.

DO NOT USE A TEMPORARY WALL FOR TEMPORARY SHORING FROM STATION 21+97±-LREV-, 28.9 FT RIGHT, TO STATION 22+49±-LREV-, 28.9 FT RIGHT.

AT THE CONTRACTOR'S OPTION, USE STANDARD TEMPORARY SHORING FOR TEMPORARY SHORING FROM STATION 21+97±-LREV-, 28.9 FT RIGHT, TO STATION 22+49±-LREV-, 28.9 FT RIGHT. SEE GEOTECHNICAL STANDARD DETAIL NO. 1801.01 FOR STANDARD TEMPORARY SHORING.

Shoring Location No. ②

FOR TEMPORARY SHORING AND POSITIVE PROTECTION FOR TEMPORARY SHORING, SEE PLANS AND TEMPORARY SHORING PROVISION.

BEFORE BEGINNING TEMPORARY SHORING DESIGN OR CONSTRUCTION, SURVEY EXISTING GROUND ELEVATIONS IN THE VICINITY OF SHORING LOCATIONS TO DETERMINE ACTUAL SHORING HEIGHTS.

DESIGN TEMPORARY SHORING FROM STATION 25+12±-LREV-, 28.8 FT RIGHT, TO STATION 25+85±-LREV-, 28.8±FT RIGHT, FOR THE FOLLOWING ASSUMED SOIL PARAMETERS AND GROUNDWATER ELEVATION:

UNIT WEIGHT (γ) = 120 PCF
 FRICTION ANGLE (ϕ) = 30 DEGREES
 COHESION (c) = 0 PSF
 GROUNDWATER ELEVATION = 140 FT

LIMITED SUBSURFACE INFORMATION IS AVAILABLE IN THE VICINITY OF TEMPORARY SHORING FROM STATION 25+12±-LREV-, 28.8 FT RIGHT, TO STATION 25+85±-LREV-, 28.8±FT RIGHT. THE INFORMATION PROVIDED FOR TEMPORARY SHORING DESIGN WAS ASSUMED AND MAY NOT BE APPLICABLE TO THE ACTUAL SITE CONDITIONS ENCOUNTERED DURING CONSTRUCTION.

DRIVEN PILING FOR TEMPORARY SHORING FROM STATION 25+12±-LREV-, 28.8 FT RIGHT, TO STATION 25+85±-LREV-, 28.8±FT RIGHT MAY NOT PENETRATE BELOW ELEVATION 120 FT DUE TO OBSTRUCTIONS, VERY DENSE OR HARD SOIL, BOULDERS OR WEATHERED OR HARD ROCK.

DO NOT USE A TEMPORARY WALL FOR TEMPORARY SHORING FROM STATION 25+12±-LREV-, 28.8 FT RIGHT, TO STATION 25+85 -LREV-, 28.8±FT RIGHT.

AT THE CONTRACTOR'S OPTION, USE STANDARD TEMPORARY SHORING FOR TEMPORARY SHORING FROM STATION 25+12±-LREV-, 28.8 FT RIGHT, TO STATION 25+85±-LREV-, 28.8 FT RIGHT. SEE GEOTECHNICAL STANDARD DETAIL NO. 1801.01 FOR STANDARD TEMPORARY SHORING.

Shoring Location No. ③a

FOR TEMPORARY SHORING AND POSITIVE PROTECTION FOR TEMPORARY SHORING, SEE PLANS AND TEMPORARY SHORING PROVISION.

BEFORE BEGINNING TEMPORARY SHORING DESIGN OR CONSTRUCTION, SURVEY EXISTING GROUND ELEVATIONS IN THE VICINITY OF SHORING LOCATIONS TO DETERMINE ACTUAL SHORING HEIGHTS.

DESIGN TEMPORARY SHORING FROM STATION 18+50±-LREV-, 21.1 FT RIGHT, TO STATION 19+75±-LREV-, 27.5 FT RIGHT, FOR THE FOLLOWING ASSUMED SOIL PARAMETERS AND GROUNDWATER ELEVATION:

UNIT WEIGHT (γ) = 120 PCF
 FRICTION ANGLE (ϕ) = 30 DEGREES
 COHESION (c) = 0 PSF
 GROUNDWATER ELEVATION = 140 FT

LIMITED SUBSURFACE INFORMATION IS AVAILABLE IN THE VICINITY OF TEMPORARY SHORING FROM STATION 18+50±-LREV-, 21.1 FT RIGHT, TO STATION 19+75±-LREV-, 27.5 FT RIGHT. THE INFORMATION PROVIDED FOR TEMPORARY SHORING DESIGN WAS ASSUMED AND MAY NOT BE APPLICABLE TO THE ACTUAL SITE CONDITIONS ENCOUNTERED DURING CONSTRUCTION.

DO NOT USE CANTILEVER, BRACED AND/OR ANCHORED SHORING FOR TEMPORARY SHORING FROM STATION 18+50±-LREV-, 21.1 FT RIGHT, TO STATION 19+75±-LREV-, 27.5 FT RIGHT.

AT THE CONTRACTOR'S OPTION, USE A STANDARD TEMPORARY WALL FOR TEMPORARY SHORING FROM STATION 18+50±-LREV-, 21.1 FT RIGHT, TO STATION 19+75±-LREV-, 27.5 FT RIGHT. SEE GEOTECHNICAL STANDARD DETAIL NO. 1801.02 FOR STANDARD TEMPORARY WALLS.

Shoring Location No. ③b

FOR TEMPORARY SHORING AND POSITIVE PROTECTION FOR TEMPORARY SHORING, SEE PLANS AND TEMPORARY SHORING PROVISION.

BEFORE BEGINNING TEMPORARY SHORING DESIGN OR CONSTRUCTION, SURVEY EXISTING GROUND ELEVATIONS IN THE VICINITY OF SHORING LOCATIONS TO DETERMINE ACTUAL SHORING HEIGHTS.

DESIGN TEMPORARY SHORING FROM STATION 19+75±-LREV-, 27.5 FT RIGHT, TO STATION 20+15±-LREV-, 19.4 FT RIGHT, FOR THE FOLLOWING ASSUMED SOIL PARAMETERS AND GROUNDWATER ELEVATION:

UNIT WEIGHT (γ) = 120 PCF
 FRICTION ANGLE (ϕ) = 30 DEGREES
 COHESION (c) = 0 PSF
 GROUNDWATER ELEVATION = 140 FT

LIMITED SUBSURFACE INFORMATION IS AVAILABLE IN THE VICINITY OF TEMPORARY SHORING FROM STATION 19+75±-LREV-, 27.5 FT RIGHT, TO STATION 20+15±-LREV-, 19.4 FT RIGHT. THE INFORMATION PROVIDED FOR TEMPORARY SHORING DESIGN WAS ASSUMED AND MAY NOT BE APPLICABLE TO THE ACTUAL SITE CONDITIONS ENCOUNTERED DURING CONSTRUCTION.

DO NOT USE CANTILEVER, BRACED AND/OR ANCHORED SHORING FOR TEMPORARY SHORING FROM STATION 19+75±-LREV-, 27.5 FT RIGHT, TO STATION 20+15±-LREV-, 19.4 FT RIGHT.

AT THE CONTRACTOR'S OPTION, USE A STANDARD TEMPORARY WALL FOR TEMPORARY SHORING FROM STATION 19+75±-LREV-, 27.5 FT RIGHT, TO STATION 20+15±-LREV-, 19.4 FT RIGHT. SEE GEOTECHNICAL STANDARD DETAIL NO. 1801.02 FOR STANDARD TEMPORARY WALLS.

Shoring Location No. ③c

FOR TEMPORARY SHORING AND POSITIVE PROTECTION FOR TEMPORARY SHORING, SEE PLANS AND TEMPORARY SHORING PROVISION.

BEFORE BEGINNING TEMPORARY SHORING DESIGN OR CONSTRUCTION, SURVEY EXISTING GROUND ELEVATIONS IN THE VICINITY OF SHORING LOCATIONS TO DETERMINE ACTUAL SHORING HEIGHTS.

DESIGN TEMPORARY SHORING FROM STATION 20+60±-LREV-, 18.8 FT RIGHT, TO STATION 21+00±-LREV-, 25.9 FT RIGHT, FOR THE FOLLOWING ASSUMED SOIL PARAMETERS AND GROUNDWATER ELEVATION:

UNIT WEIGHT (γ) = 120 PCF
 FRICTION ANGLE (ϕ) = 30 DEGREES
 COHESION (c) = 0 PSF
 GROUNDWATER ELEVATION = 140 FT

LIMITED SUBSURFACE INFORMATION IS AVAILABLE IN THE VICINITY OF TEMPORARY SHORING FROM STATION 20+60±-LREV-, 18.8 FT RIGHT, TO STATION 21+00±-LREV-, 25.9 FT RIGHT. THE INFORMATION PROVIDED FOR TEMPORARY SHORING DESIGN WAS ASSUMED AND MAY NOT BE APPLICABLE TO THE ACTUAL SITE CONDITIONS ENCOUNTERED DURING CONSTRUCTION.

DO NOT USE CANTILEVER, BRACED AND/OR ANCHORED SHORING FOR TEMPORARY SHORING FROM STATION 20+60±-LREV-, 18.8 FT RIGHT, TO STATION 21+00±-LREV-, 25.9 FT RIGHT.

AT THE CONTRACTOR'S OPTION, USE A STANDARD TEMPORARY WALL FOR TEMPORARY SHORING FROM STATION 20+60±-LREV-, 18.8 FT RIGHT, TO STATION 21+00±-LREV-, 25.9 FT RIGHT. SEE GEOTECHNICAL STANDARD DETAIL NO. 1801.02 FOR STANDARD TEMPORARY WALLS.

Shoring Location No. ③d

FOR TEMPORARY SHORING AND POSITIVE PROTECTION FOR TEMPORARY SHORING, SEE PLANS AND TEMPORARY SHORING PROVISION.

BEFORE BEGINNING TEMPORARY SHORING DESIGN OR CONSTRUCTION, SURVEY EXISTING GROUND ELEVATIONS IN THE VICINITY OF SHORING LOCATIONS TO DETERMINE ACTUAL SHORING HEIGHTS.

DESIGN TEMPORARY SHORING FROM STATION 21+00±-LREV-, 25.9 FT RIGHT, TO STATION 21+97±-LREV-, 25.0 FT RIGHT, FOR THE FOLLOWING ASSUMED SOIL PARAMETERS AND GROUNDWATER ELEVATION:

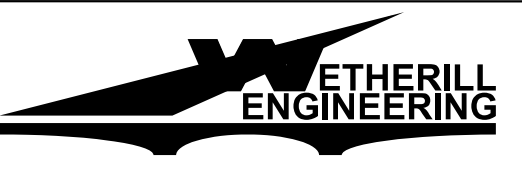
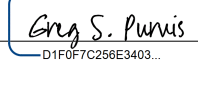
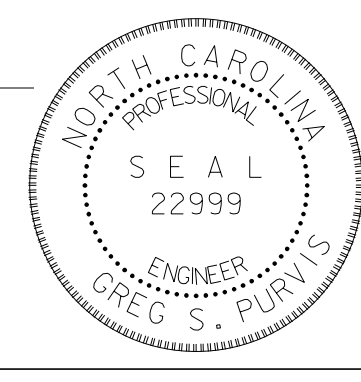
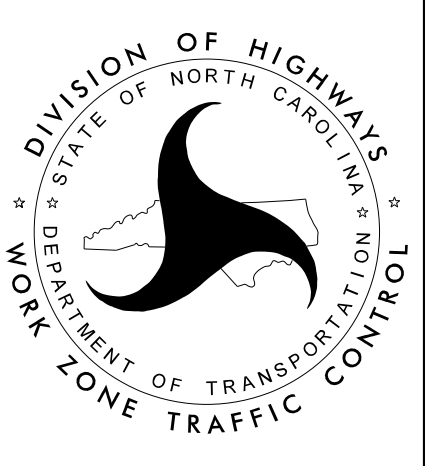
UNIT WEIGHT (γ) = 120 PCF
 FRICTION ANGLE (ϕ) = 30 DEGREES
 COHESION (c) = 0 PSF
 GROUNDWATER ELEVATION = 140 FT

LIMITED SUBSURFACE INFORMATION IS AVAILABLE IN THE VICINITY OF TEMPORARY SHORING FROM STATION 21+00±-LREV-, 25.9 FT RIGHT, TO STATION 21+97±-LREV-, 25.0 FT RIGHT. THE INFORMATION PROVIDED FOR TEMPORARY SHORING DESIGN WAS ASSUMED AND MAY NOT BE APPLICABLE TO THE ACTUAL SITE CONDITIONS ENCOUNTERED DURING CONSTRUCTION.

DO NOT USE CANTILEVER, BRACED AND/OR ANCHORED SHORING FOR TEMPORARY SHORING FROM STATION 21+00±-LREV-, 25.9 FT RIGHT, TO STATION 21+97±-LREV-, 25.0 FT RIGHT.

AT THE CONTRACTOR'S OPTION, USE A STANDARD TEMPORARY WALL FOR TEMPORARY SHORING FROM STATION 21+00±-LREV-, 25.9 FT RIGHT, TO STATION 21+97±-LREV-, 25.0 FT RIGHT. SEE GEOTECHNICAL STANDARD DETAIL NO. 1801.02 FOR STANDARD TEMPORARY WALLS.

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User:AHayes

 <p>1223 Jones Franklin Rd. Raleigh, N.C. 27606 License No. F-0377 Bus: 919 851 8077 Fax: 919 851 8107</p> <p>TRANSPORTATION PLANNING/DESIGN - BRIDGE/STRUCTURE DESIGN CIVIL/SITE DESIGN - GIS/GPS - CONSTRUCTION OBSERVATION</p>	<p>APPROVED: </p> <p>DATE: 3/24/2022</p>  <p>DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED</p>		<p style="text-align: center; font-size: 24pt;">SHORING DATA</p>
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PROJ. REFERENCE NO.	SHEET NO.
B-5947	TMP-02B

Shoring Location No. 3e

FOR TEMPORARY SHORING AND POSITIVE PROTECTION FOR TEMPORARY SHORING, SEE PLANS AND TEMPORARY SHORING PROVISION.

BEFORE BEGINNING TEMPORARY SHORING DESIGN OR CONSTRUCTION, SURVEY EXISTING GROUND ELEVATIONS IN THE VICINITY OF SHORING LOCATIONS TO DETERMINE ACTUAL SHORING HEIGHTS.

DESIGN TEMPORARY SHORING FROM STATION 21+97±-LREV-, 25.0 FT RIGHT, TO STATION 22+41±-LREV-, 25.0 FT RIGHT, FOR THE FOLLOWING ASSUMED SOIL PARAMETERS AND GROUNDWATER ELEVATION:

- UNIT WEIGHT (γ) = 120 PCF
- FRICTION ANGLE (ϕ) = 30 DEGREES
- COHESION (c) = 0 PSF
- GROUNDWATER ELEVATION = 140 FT

LIMITED SUBSURFACE INFORMATION IS AVAILABLE IN THE VICINITY OF TEMPORARY SHORING FROM STATION 21+97±-LREV-, 25.0 FT RIGHT, TO STATION 22+41±-LREV-, 25.0 FT RIGHT. THE INFORMATION PROVIDED FOR TEMPORARY SHORING DESIGN WAS ASSUMED AND MAY NOT BE APPLICABLE TO THE ACTUAL SITE CONDITIONS ENCOUNTERED DURING CONSTRUCTION.

DO NOT USE CANTILEVER, BRACED AND/OR ANCHORED SHORING FOR TEMPORARY SHORING FROM STATION 21+97±-LREV-, 25.0 FT RIGHT, TO STATION 22+41±-LREV-, 25.0 FT RIGHT.

AT THE CONTRACTOR'S OPTION, USE A STANDARD TEMPORARY WALL FOR TEMPORARY SHORING FROM STATION 21+97±-LREV-, 25.0 FT RIGHT, TO STATION 22+41±-LREV-, 25.0 FT RIGHT. SEE GEOTECHNICAL STANDARD DETAIL NO. 1801.02 FOR STANDARD TEMPORARY WALLS.

WHEN BACKFILL FOR BRIDGE APPROACH FILLS OVERLAPS WITH THE REINFORCED ZONE OF TEMPORARY WALLS, USE SHORING BACKFILL OR BACKFILL MATERIAL REQUIRED FOR BRIDGE APPROACH FILLS, WHICHEVER IS BETTER, IN THE REINFORCED ZONE OF TEMPORARY WALLS.

Shoring Location No. 3f

FOR TEMPORARY SHORING AND POSITIVE PROTECTION FOR TEMPORARY SHORING, SEE PLANS AND TEMPORARY SHORING PROVISION.

BEFORE BEGINNING TEMPORARY SHORING DESIGN OR CONSTRUCTION, SURVEY EXISTING GROUND ELEVATIONS IN THE VICINITY OF SHORING LOCATIONS TO DETERMINE ACTUAL SHORING HEIGHTS.

DESIGN TEMPORARY SHORING FROM STATION 19+75±-LREV-, 27.5 FT RIGHT, TO STATION 21+00±-LREV-, 25.9 FT RIGHT, FOR THE FOLLOWING ASSUMED SOIL PARAMETERS AND GROUNDWATER ELEVATION:

- UNIT WEIGHT (γ) = 120 PCF
- FRICTION ANGLE (ϕ) = 30 DEGREES
- COHESION (c) = 0 PSF
- GROUNDWATER ELEVATION = 140 FT

LIMITED SUBSURFACE INFORMATION IS AVAILABLE IN THE VICINITY OF TEMPORARY SHORING FROM STATION 19+75±-LREV-, 27.5 FT RIGHT, TO STATION 21+00±-LREV-, 25.9 FT RIGHT. THE INFORMATION PROVIDED FOR TEMPORARY SHORING DESIGN WAS ASSUMED AND MAY NOT BE APPLICABLE TO THE ACTUAL SITE CONDITIONS ENCOUNTERED DURING CONSTRUCTION.

DO NOT USE CANTILEVER, BRACED AND/OR ANCHORED SHORING FOR TEMPORARY SHORING FROM STATION 19+75±-LREV-, 27.5 FT RIGHT, TO STATION 21+00±-LREV-, 25.9 FT RIGHT.

AT THE CONTRACTOR'S OPTION, USE A STANDARD TEMPORARY WALL FOR TEMPORARY SHORING FROM STATION 19+75±-LREV-, 27.5 FT RIGHT, TO STATION 21+00±-LREV-, 25.9 FT RIGHT. SEE GEOTECHNICAL STANDARD DETAIL NO. 1801.02 FOR STANDARD TEMPORARY WALLS.

Shoring Location No. 4

FOR TEMPORARY SHORING AND POSITIVE PROTECTION FOR TEMPORARY SHORING, SEE PLANS AND TEMPORARY SHORING PROVISION.

BEFORE BEGINNING TEMPORARY SHORING DESIGN OR CONSTRUCTION, SURVEY EXISTING GROUND ELEVATIONS IN THE VICINITY OF SHORING LOCATIONS TO DETERMINE ACTUAL SHORING HEIGHTS.

DESIGN TEMPORARY SHORING FROM STATION 25+44±-LREV-, 24.6 FT RIGHT, TO STATION 25+85±-LREV-, 24.6 FT RIGHT, FOR THE FOLLOWING ASSUMED SOIL PARAMETERS AND GROUNDWATER ELEVATION:

- UNIT WEIGHT (γ) = 120 PCF
- FRICTION ANGLE (ϕ) = 30 DEGREES
- COHESION (c) = 0 PSF
- GROUNDWATER ELEVATION = 140 FT

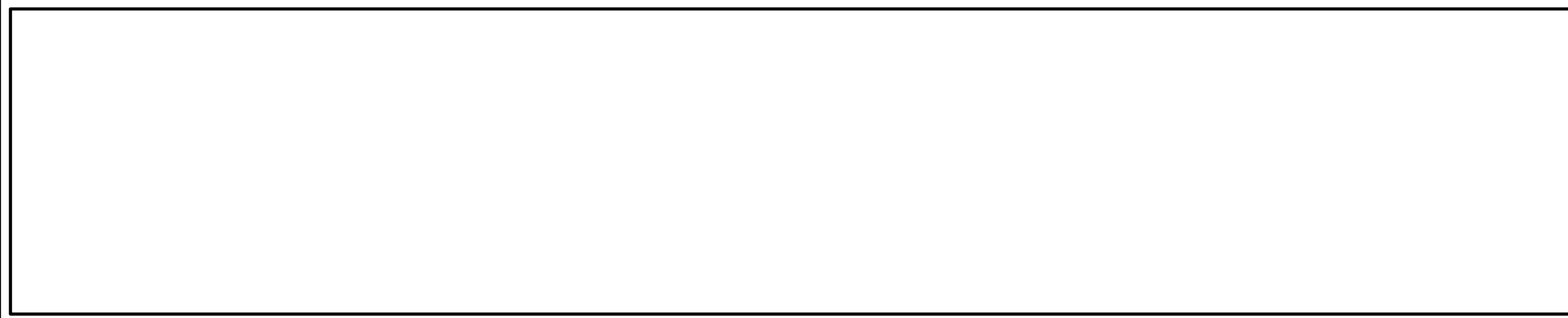
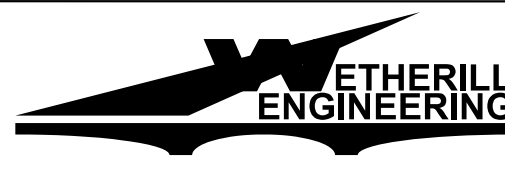
LIMITED SUBSURFACE INFORMATION IS AVAILABLE IN THE VICINITY OF TEMPORARY SHORING FROM STATION 25+44±-LREV-, 24.6 FT RIGHT, TO STATION 25+85±-LREV-, 24.6 FT RIGHT. THE INFORMATION PROVIDED FOR TEMPORARY SHORING DESIGN WAS ASSUMED AND MAY NOT BE APPLICABLE TO THE ACTUAL SITE CONDITIONS ENCOUNTERED DURING CONSTRUCTION.

DO NOT USE CANTILEVER, BRACED AND/OR ANCHORED SHORING FOR TEMPORARY SHORING FROM STATION 25+44±-LREV-, 24.6 FT RIGHT, TO STATION 25+85±-LREV-, 24.6 FT RIGHT.

AT THE CONTRACTOR'S OPTION, USE A STANDARD TEMPORARY WALL FOR TEMPORARY SHORING FROM STATION 25+44±-LREV-, 24.6 FT RIGHT, TO STATION 25+85±-LREV-, 24.6 FT RIGHT. SEE GEOTECHNICAL STANDARD DETAIL NO. 1801.02 FOR STANDARD TEMPORARY WALLS.

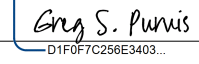
WHEN BACKFILL FOR BRIDGE APPROACH FILLS OVERLAPS WITH THE REINFORCED ZONE OF TEMPORARY WALLS, USE SHORING BACKFILL OR BACKFILL MATERIAL REQUIRED FOR BRIDGE APPROACH FILLS, WHICHEVER IS BETTER, IN THE REINFORCED ZONE OF TEMPORARY WALLS.


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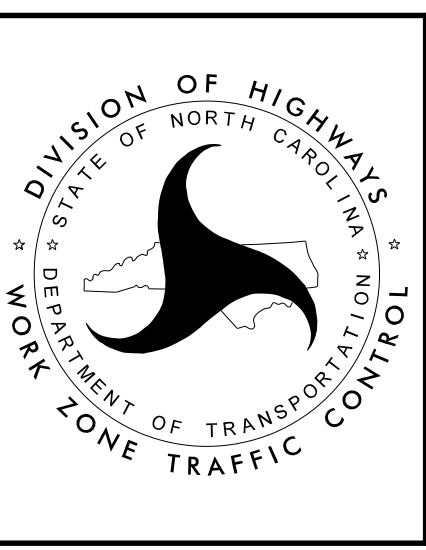
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TRANSPORTATION PLANNING/DESIGN - BRIDGE/STRUCTURE DESIGN
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APPROVED: 
DATE: 3/24/2022



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PROJ. REFERENCE NO.	SHEET NO.
B-5947	TMP-03

PHASE I

- STEP 1) USING ROADWAY STANDARD DRAWING (RSD 1101.02) INSTALL ALL ADVANCE WARNING SIGNING AND COVER IF CONSTRUCTION HAS NOT BEGUN WITHIN THREE DAYS OF SIGN INSTALLATION. IF SIGNS HAVE BEEN COVERED, UNCOVER SIGNING THE DAY CONSTRUCTION BEGINS.
- STEP 2) USING RSD 1101.02 COMPLETE THE FOLLOWING [REFER TO SHEETS TMP-04, 05, 09-13, & ROADWAY PLANS]:
- CONSTRUCT -LREV- UP TO THE EXISTING EDGE AND ELEVATION FROM BEGIN CONSTRUCTION LIMITS TO STA. 15+00 -LREV- AND FROM STA. 36+00 -LREV- TO END CONSTRUCTION LIMITS
 - CONSTRUCT -LREV- UP TO THE BASE COURSE AND WEDGE EXISTING -LREV- UP TO THE ELEVATION OF THE BASE COURSE FROM STA. 15+00 -LREV- TO STA. 17+50 -LREV-, AND FROM STA. 32+00 -LREV- TO STA. 36+00 -LREV-
 - INSTALL TEMPORARY PAVEMENT MARKINGS FROM STA. 15+00 -LREV- TO STA. 36+00 -LREV-
 - INSTALL TEMPORARY GUARDRAIL FROM STA. 18+00 -LREV- TO EXISTING -DR1-, FROM -DR1- TO STA. 22+13 -LREV-, AND FROM STA. 25+37 -LREV- TO STA. 28+29 -LREV-

USING RSD 1101.02 AS NEEDED AND AWAY FROM TRAFFIC, BEGIN CONSTRUCTION OF -LREV- FROM STA. 17+50 -LREV- TO STA. 19+75 -LREV- AND FROM STA. 21+00 -LREV- TO STA. 32+00 -LREV- UP TO BUT NOT INCLUDING THE FINAL LIFT OF SURFACE COURSE, INCLUDING THE BRIDGE, TEMPORARY SHORING, AND TEMPORARY SLOPES.
[REFER TO SHEETS TMP-04, 05, 09-12, & STRUCTURE PLANS]

AWAY FROM TRAFFIC CONSTRUCT -DR1- FROM -LREV- TO STA. 15+00 -DR1- UP TO THE FINAL SURFACE ELEVATION. CONSTRUCT -DR1- FROM STA. 15+00 -DR1- TO EXISTING -DR1- UP TO THE EXISTING EDGE AND ELEVATION. [REFER TO SHEET TMP-04]

- STEP 3) USING FLAGGERS AS NEEDED ON -DR1-, CONSTRUCT -DR1- TIE IN AND SHIFT TRAFFIC ONTO -DR1-. [REFER TO SHEET TMP-06]

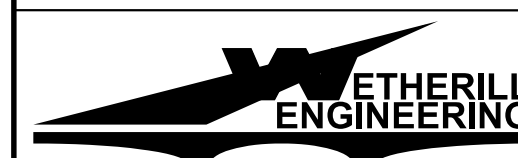
- STEP 4) USING RSD 1101.02 AS NEEDED, INSTALL TEMPORARY GUARDRAIL FROM STA. 20+09 -LREV- TO STA. 20+70 -LREV- AND CONSTRUCT -LREV- FROM 19+75 TO 21+00 INCLUDING TEMPORARY SHORING.
[REFER TO SHEET TMP-06]

USING RSD 1101.02 AS NEEDED AND AWAY FROM TRAFFIC, COMPLETE CONSTRUCTION OF -LREV- FROM STA. 17+50 -LREV- TO STA. 19+75 -LREV-, AND FROM STA. 21+00 -LREV- TO STA. 32+00 -LREV- UP TO BUT NOT INCLUDING THE FINAL LIFT OF SURFACE COURSE, INCLUDING TEMPORARY PAVEMENT MARKINGS, AND MARKERS.
[REFER TO SHEETS TMP-05, 06, 09-13, AND STRUCTURE PLANS]

PHASE II

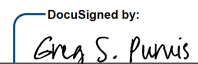
- STEP 1) USING RSD 1101.02, WEDGE -LREV- FROM BEGIN CONSTRUCTION LIMITS TO STA. 17+50 -LREV- AND FROM STA. 32+00 -LREV- TO END CONSTRUCTION LIMITS UP TO BUT NOT INCLUDING THE FINAL LIFT OF SURFACE COURSE. INSTALL TEMPORARY PAVEMENT MARKINGS AND MARKERS, SHIFT TRAFFIC ONTO -LREV-, AND INSTALL TEMPORARY BARRIER AS SHOWN.
[REFER TO SHEETS TMP-07 THRU 10, & 13]
- STEP 2) USING RSD 1101.02 AS NEEDED AND AWAY FROM TRAFFIC COMPLETE SHOULDER CONSTRUCTION ON -LREV-, CONSTRUCT -DR2-, AND REMOVE EXISTING -LREV-. MAINTAIN ACCESS TO ALL D/W'S. UPON COMPLETION, REMOVE THE TYPE III BARRICADES.
[REFER TO SHEETS TMP-07 THRU 10, & 13]
- STEP 3) USING RSD 1101.02, REMOVE TEMPORARY BARRIER AND INSTALL REMAINING PERMANENT GUARDRAIL.
[REFER TO SHEETS TMP-09 & 10]
- STEP 4) USING RSD 1101.02, INSTALL THE FINAL LIFT OF SURFACE COURSE, FINAL PAVEMENT MARKINGS, AND MARKERS. REMOVE ALL TRANSPORTATION MANAGEMENT DEVICES AND SIGNING, AND PLACE TRAFFIC ON THE FINAL TRAFFIC PATTERN.
[REFER TO THE FINAL PAVEMENT MARKING PLAN]

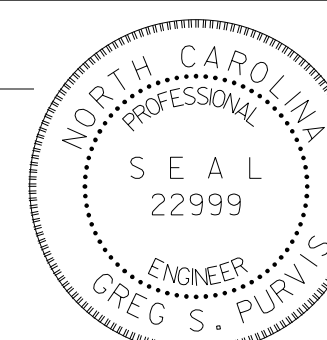
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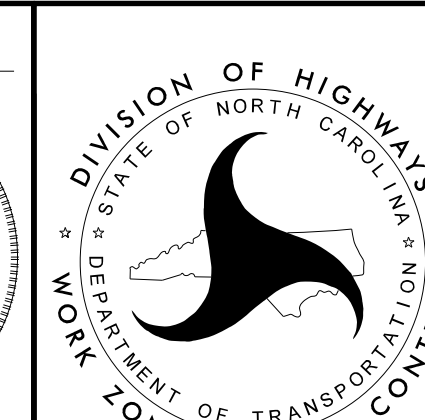
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TRANSPORTATION PLANNING/DESIGN - BRIDGE/STRUCTURE DESIGN
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APPROVED: 
DATE: 3/24/2022

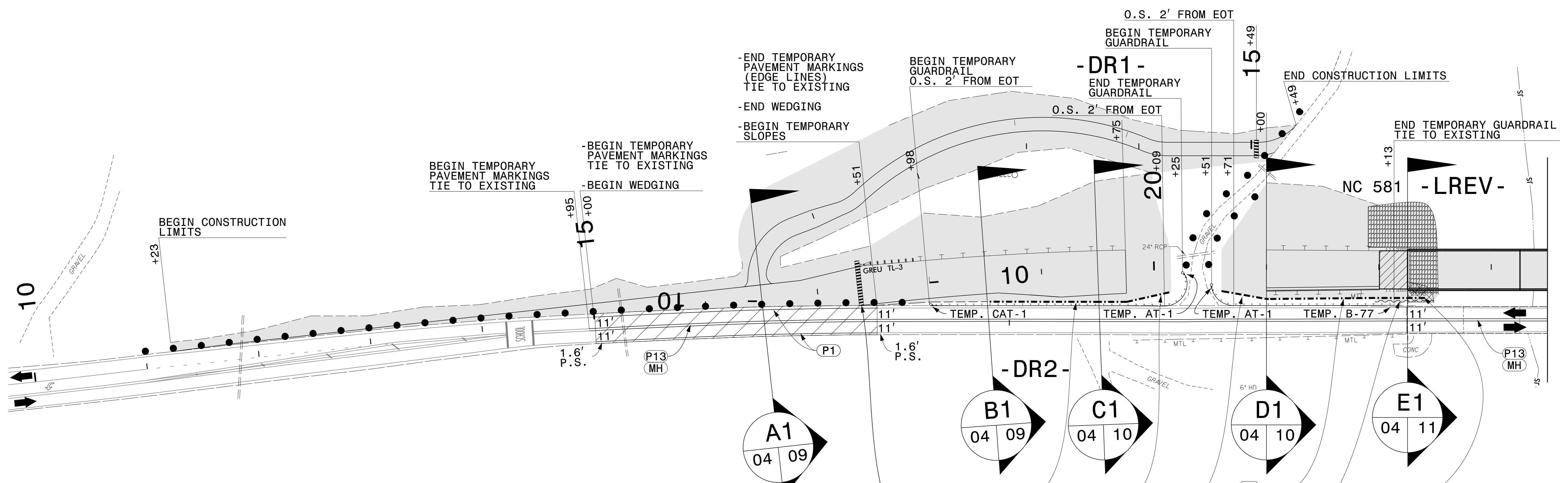
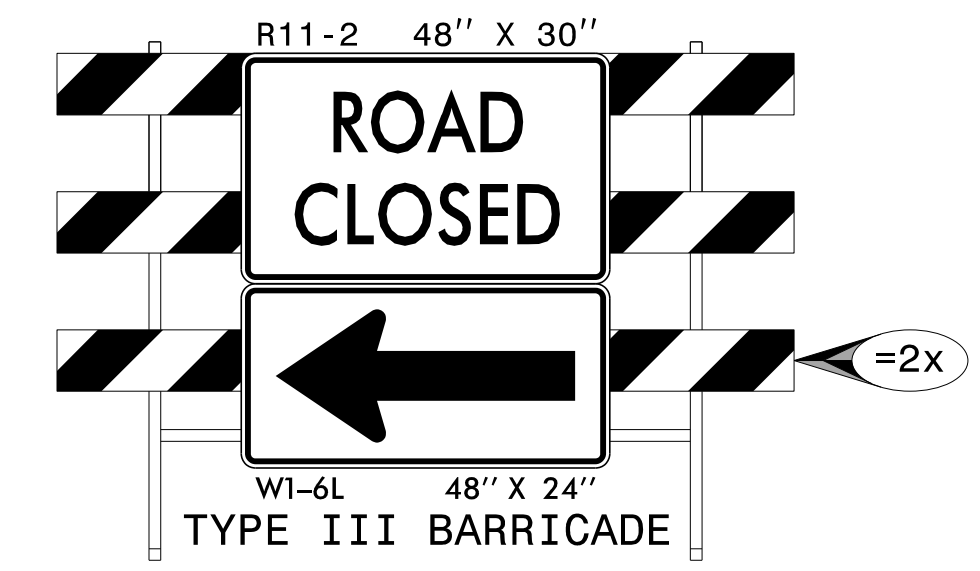


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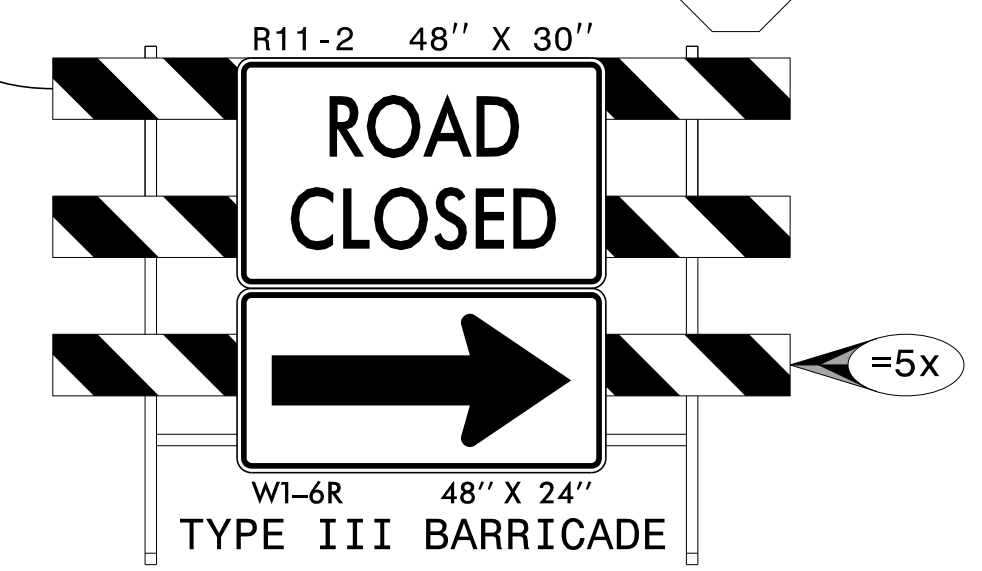


PHASING

- | | | | |
|--|---|--|--|
| <p>1 QUANTITY = 192.4 SF</p> <p>TEMPORARY SHORING
FROM STA. 21+97 +/- -LREV-,
SHORING BACK FACE 28.9' RIGHT
OF C.L.= 3.3' LEFT OF EOP</p> <p>TO STA. 22+49 +/- -LREV-,
SHORING BACK FACE 28.9' RIGHT
OF C.L.</p> <p>(SEE SHEET TMP-02A FOR
TEMPORARY SHORING NOTES)</p> | <p>3a QUANTITY = 550 SF</p> <p>TEMPORARY SHORING
FROM STA. 18+50 +/- -LREV-,
21.1' RIGHT OF C.L.=
3.5' LEFT OF EOP</p> <p>TO STA. 19+75 +/- -LREV-,
27.5' RIGHT OF C.L.=
3.3' LEFT OF EOP</p> <p>(SEE SHEET TMP-02A FOR
TEMPORARY SHORING NOTES)</p> | <p>3b QUANTITY = 132 SF</p> <p>TEMPORARY SHORING
FROM STA. 19+75 +/- -LREV-,
27.5' RIGHT OF C.L.=
3.3' LEFT OF EOP</p> <p>TO STA. 20+15 +/- -LREV-,
19.4' RIGHT OF C.L.=
12.1' LEFT OF EOP</p> <p>(SEE SHEET TMP-02A FOR
TEMPORARY SHORING NOTES)</p> | <p>3c QUANTITY = 148 SF</p> <p>TEMPORARY SHORING
FROM STA. 20+60 +/- -LREV-,
18.8' RIGHT OF C.L.=
13.0' LEFT OF EOP</p> <p>TO STA. 21+00 +/- -LREV-,
25.9' RIGHT OF C.L.=
5.9' LEFT OF EOP</p> <p>(SEE SHEET TMP-02A FOR
TEMPORARY SHORING NOTES)</p> |
|--|---|--|--|



- | | |
|---|---|
| <p>3d QUANTITY = 426.8 SF</p> <p>TEMPORARY SHORING
FROM STA. 21+00 +/- -LREV-,
25.9' RIGHT OF C.L.=
5.9' LEFT OF EOP</p> <p>TO STA. 21+97 +/- -LREV-,
25.0' RIGHT OF C.L.=
7.2' LEFT OF EOP</p> <p>(SEE SHEET TMP-02A FOR
TEMPORARY SHORING NOTES)</p> | <p>3e QUANTITY = 176 SF</p> <p>TEMPORARY SHORING
FROM STA. 21+97 +/- -LREV-,
25.0' RIGHT OF C.L.=
7.2' LEFT OF EOP</p> <p>TO STA. 22+41 +/- -LREV-,
25.0' RIGHT OF C.L.</p> <p>(SEE SHEET TMP-02B FOR
TEMPORARY SHORING NOTES)</p> |
|---|---|



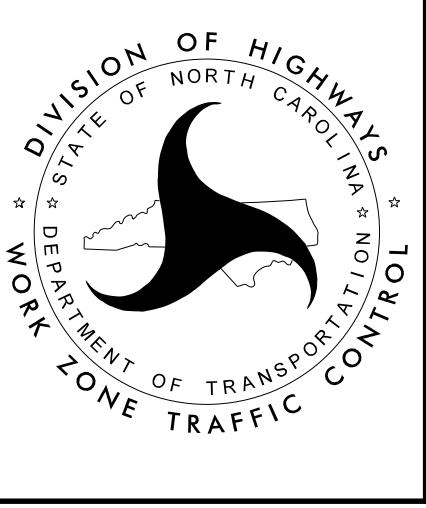
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 User:AHayes

NOTES:
- SEE ROADWAY PLANS FOR CONSTRUCTION LIMITS.

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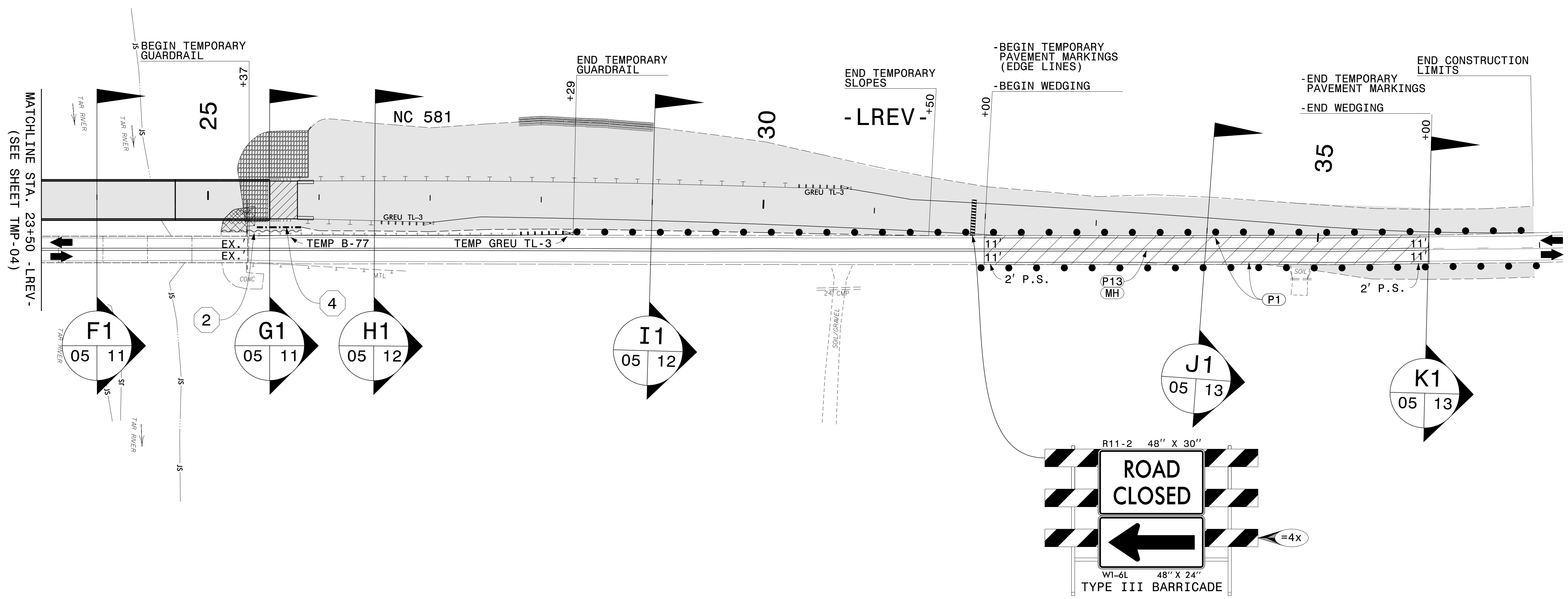
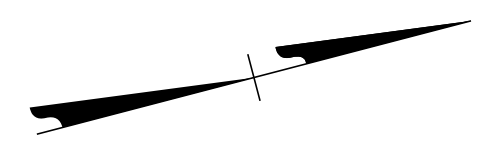


PHASE I DETAIL

DEPARTMENT OF TRANSPORTATION
 NORTH CAROLINA
 DIVISION OF HIGHWAYS
 WORK ZONE TRAFFIC CONTROL

2 QUANTITY = 248.2 SF
 TEMPORARY SHORING
 FROM STA. 25+12 +/- -LREV-,
 SHORING BACK FACE 28.8' RIGHT
 OF C.L.
 TO STA. 25+85 +/- -LREV-,
 SHORING BACK FACE 28.8' RIGHT
 OF C.L.= 2.6' LEFT OF EOP
 (SEE SHEET TMP-02A FOR
 TEMPORARY SHORING NOTES)

4 QUANTITY = 205 SF
 TEMPORARY SHORING
 FROM STA. 25+44 +/- -LREV-,
 24.6' RIGHT OF C.L.=
 7.8' LEFT OF EOP
 TO STA. 25+85 +/- -LREV-,
 24.6' RIGHT OF C.L.=
 7.2' LEFT OF EOP
 (SEE SHEET TMP-02B FOR
 TEMPORARY SHORING NOTES)

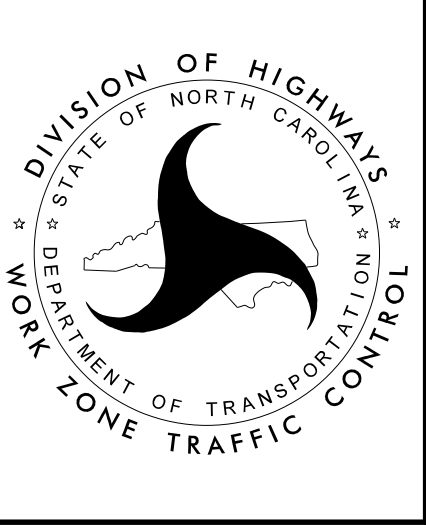


NOTES:
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 CIVIL/SITE DESIGN - GIS/GPS - CONSTRUCTION OBSERVATION

APPROVED: *Greg S. Purvis*
DocuSigned by:
Greg S. Purvis
D78F7C5E8403
 DATE: 5/5/2022

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PHASE I DETAIL

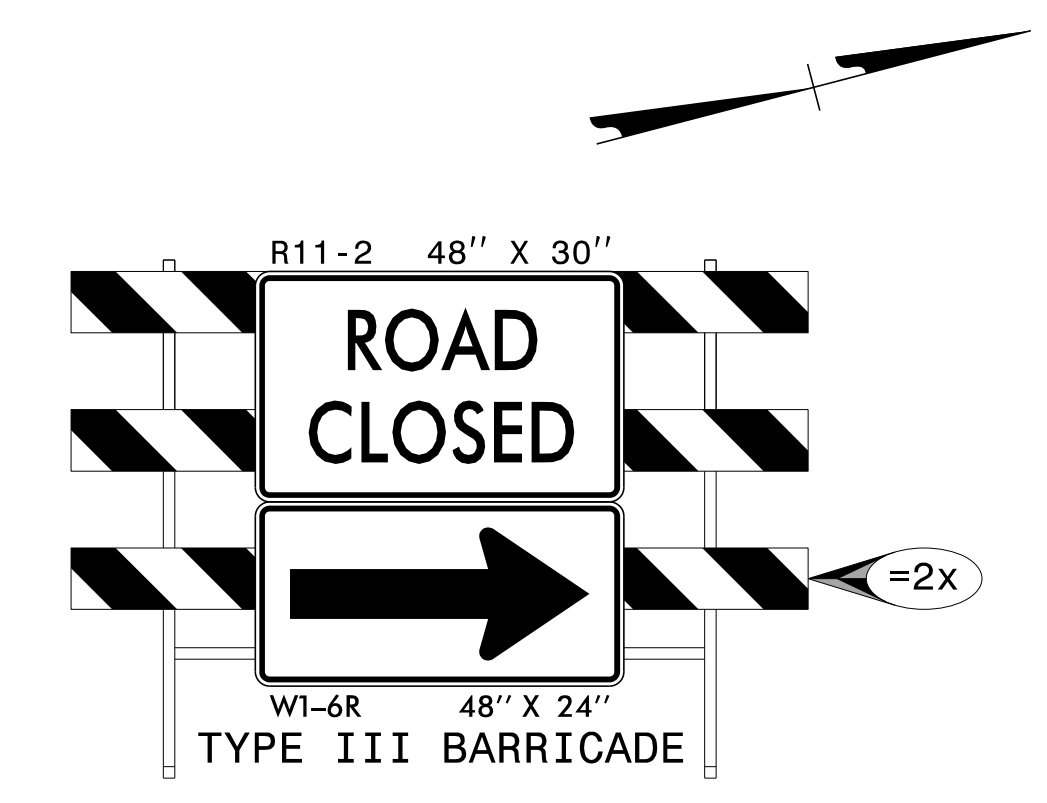
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 User: AHayes

3f QUANTITY = 737.5 SF

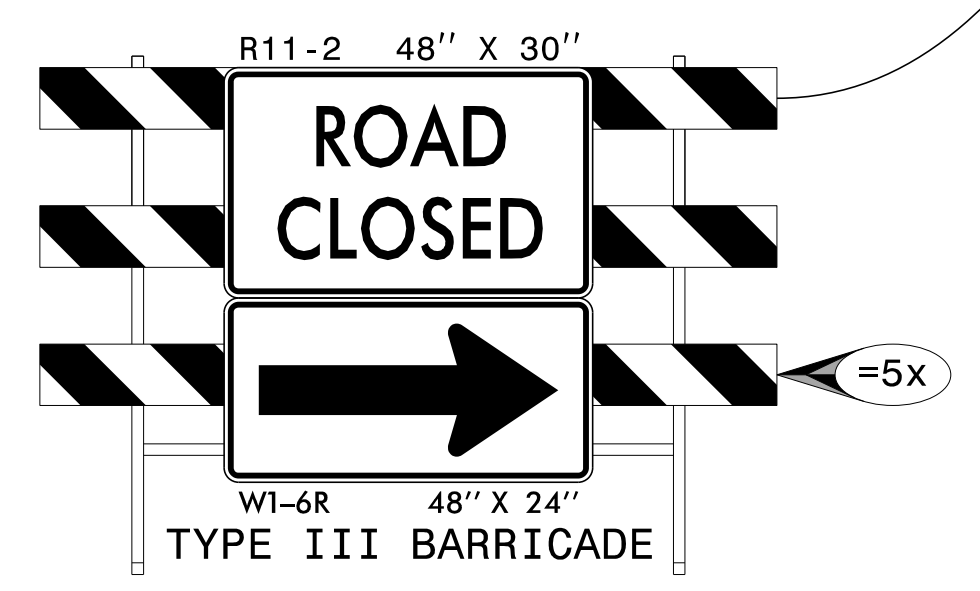
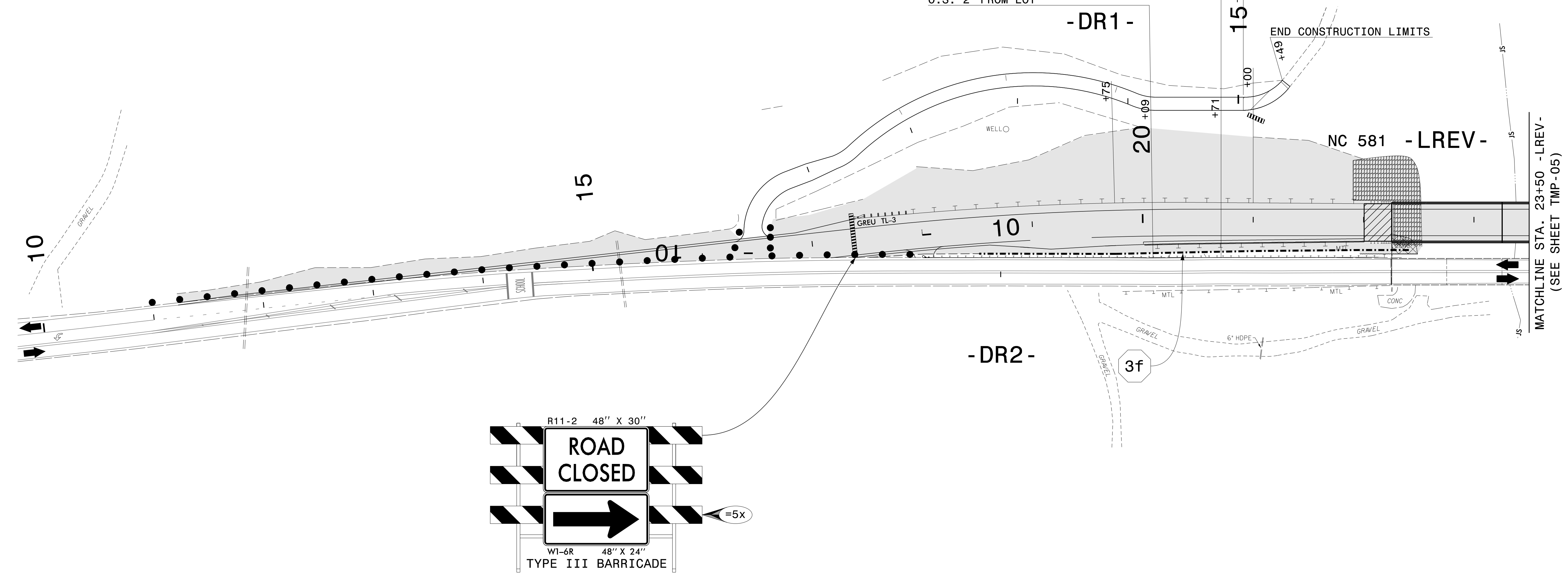
TEMPORARY SHORING
FROM STA. 19+75 +/- -LREV-,
27.5' RIGHT OF C.L.=
3.3' LEFT OF EOP

TO STA. 21+00 +/- -LREV-,
25.9' RIGHT OF C.L.=
5.9' LEFT OF EOP

(SEE SHEET TMP-02B FOR
TEMPORARY SHORING NOTES)



TIE PHASE II TEMPORARY GUARDRAIL
TO PHASE I TEMPORARY GUARDRAIL
O.S. 2' FROM EOT



MATCHLINE STA. 23+50 -LREV-
(SEE SHEET TMP-05)

9/26/2022
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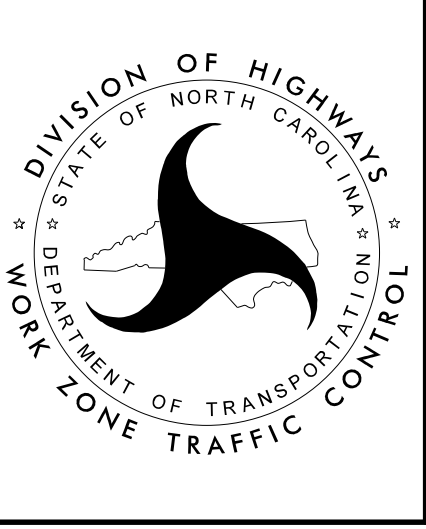
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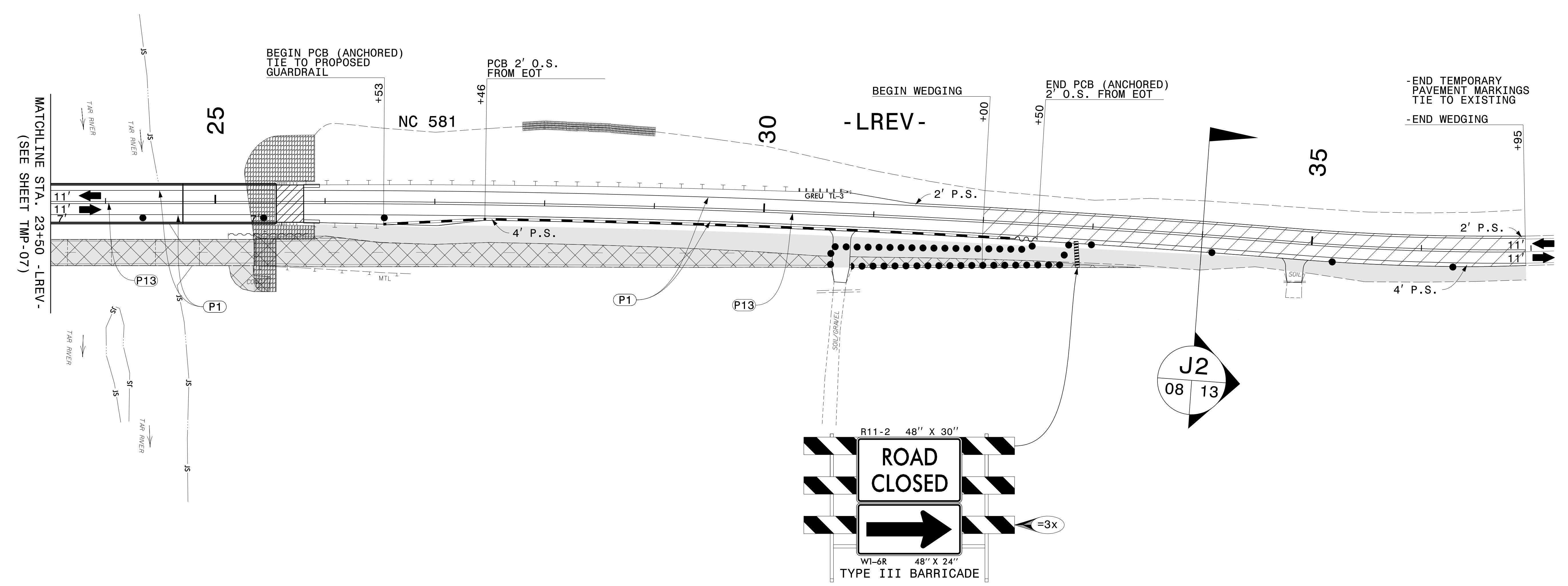
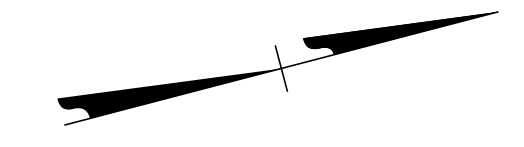
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DATE: 9/26/2022

PROFESSIONAL SEAL
NORTH CAROLINA
DESIGNED BY
Greg S. Purvis
GREG S. PURVIS

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PHASE I DETAIL



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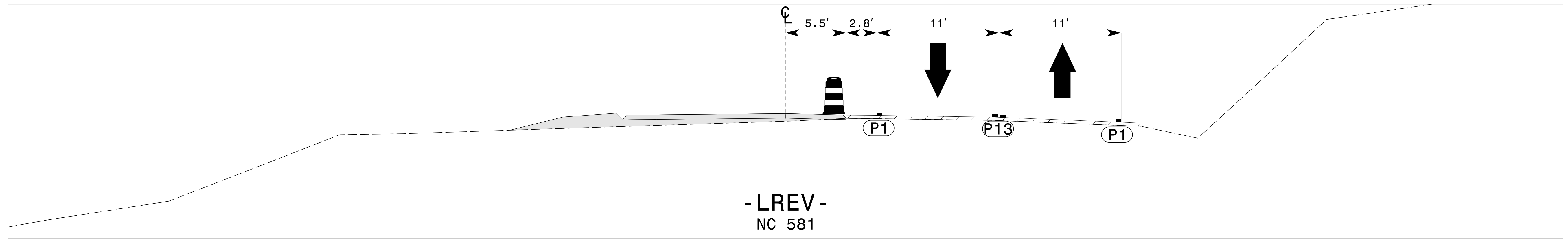
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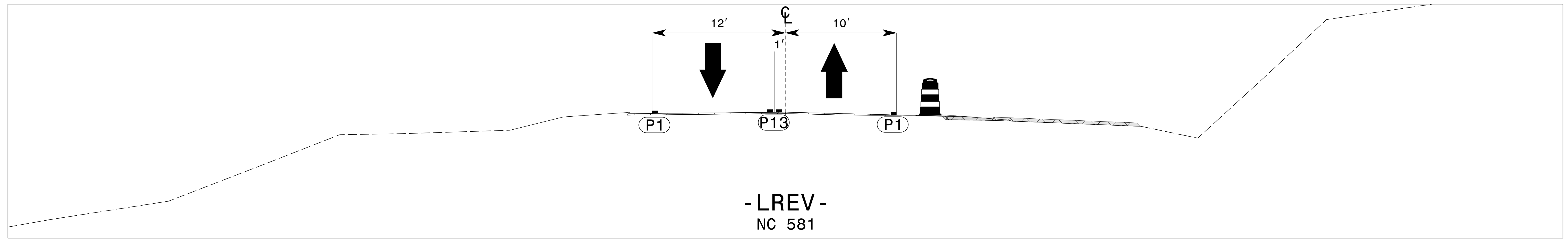


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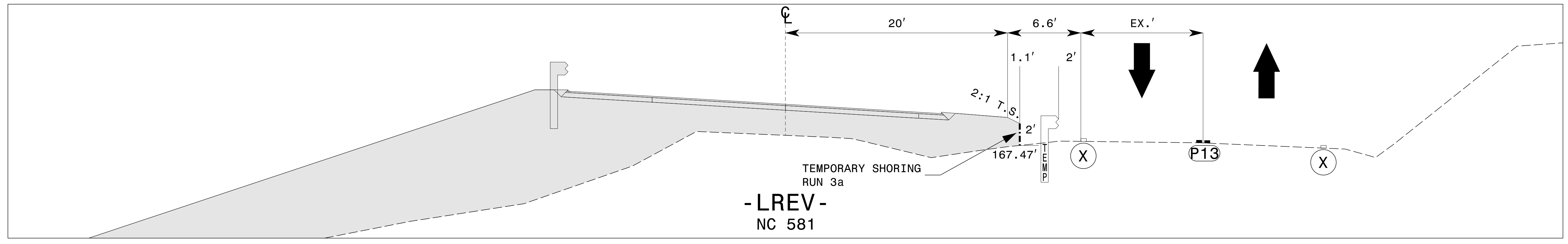
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 User: AHayes



A1
04 | 09
STA. 16+50 -LREV-
CUT SECTION

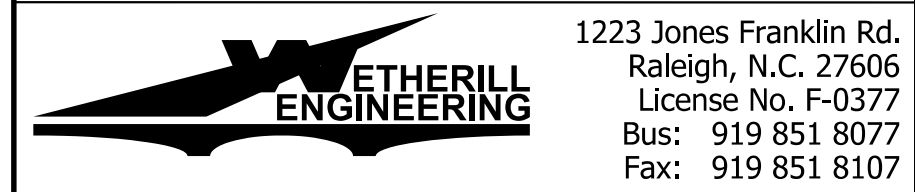


A2
07 | 09
STA. 16+50 -LREV-
CUT SECTION



B1
04 | 09
STA. 18+50 -LREV-
CUT SECTION

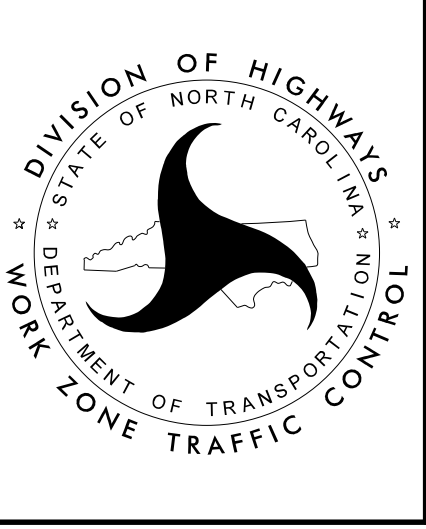
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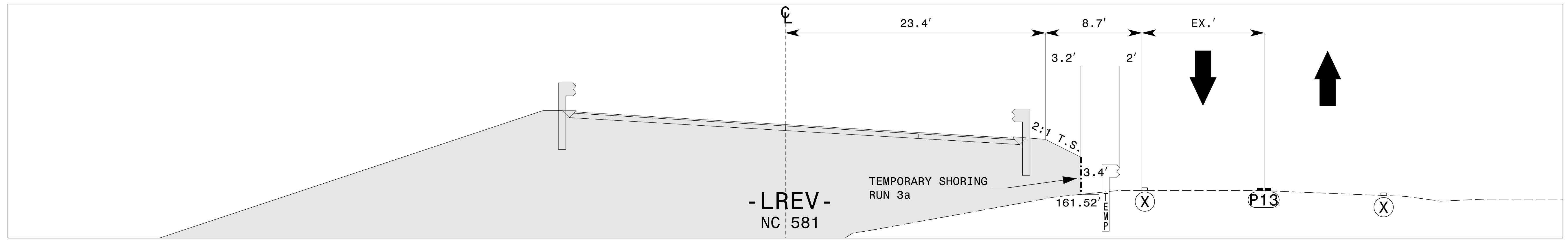
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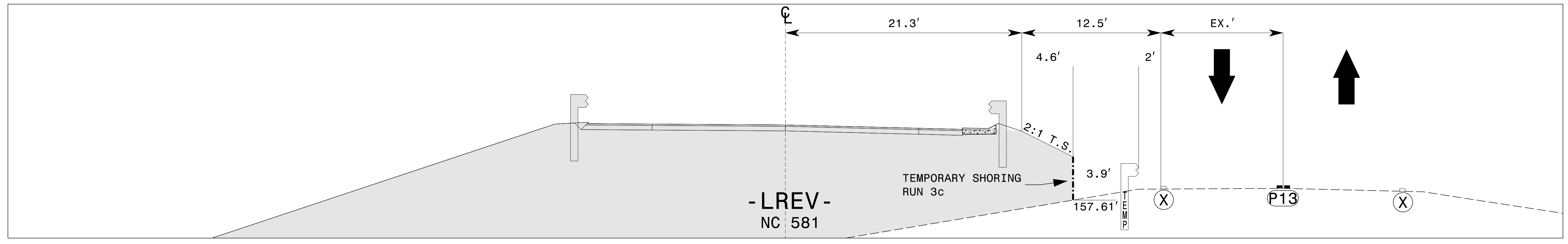
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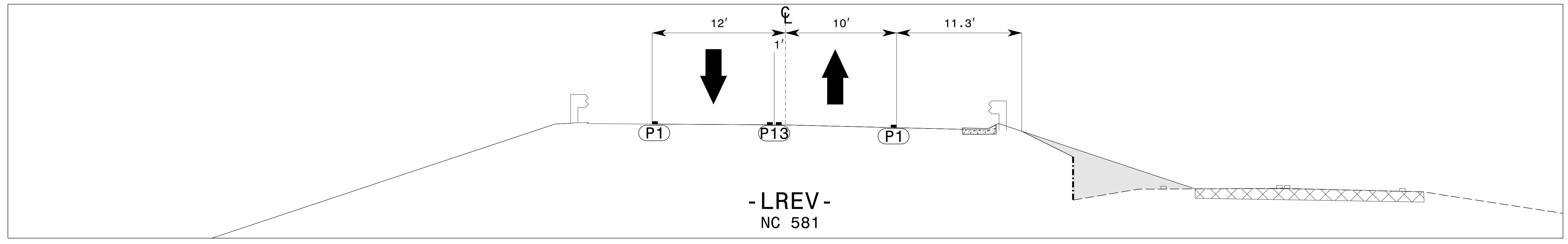
TEMPORARY CUT SECTIONS
A & B



C1
04 | 10
STA. 19+50 -LREV-
CUT SECTION

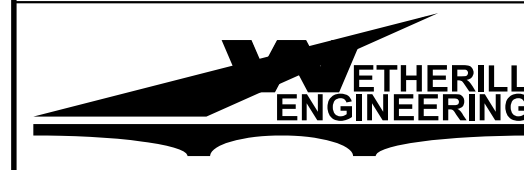


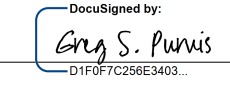

D1
04 | 10
STA. 21+00 -LREV-
CUT SECTION

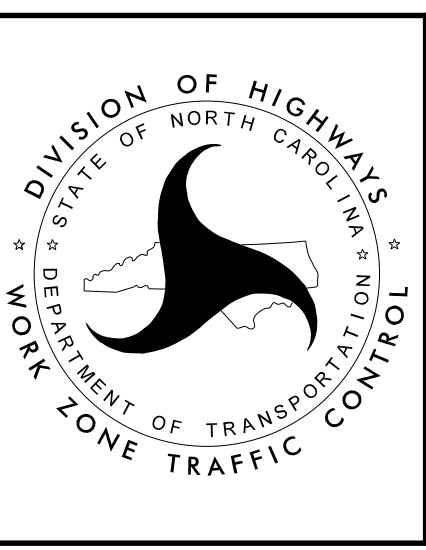


D2
07 | 10
STA. 21+00 -LREV-
CUT SECTION

5/5/2022
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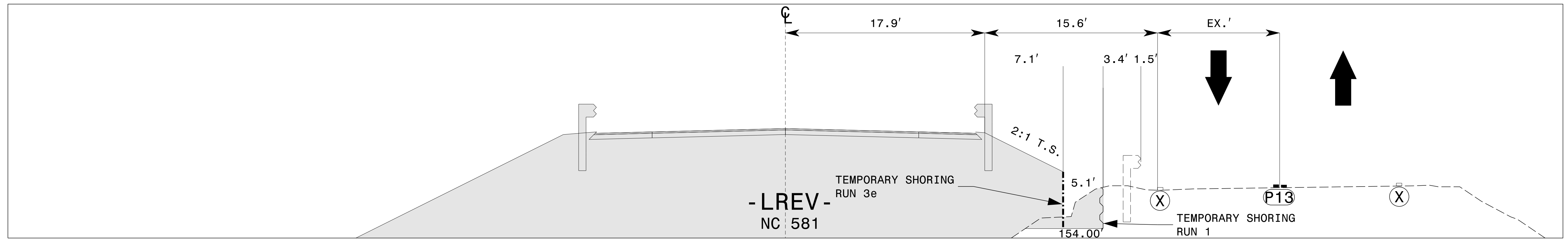

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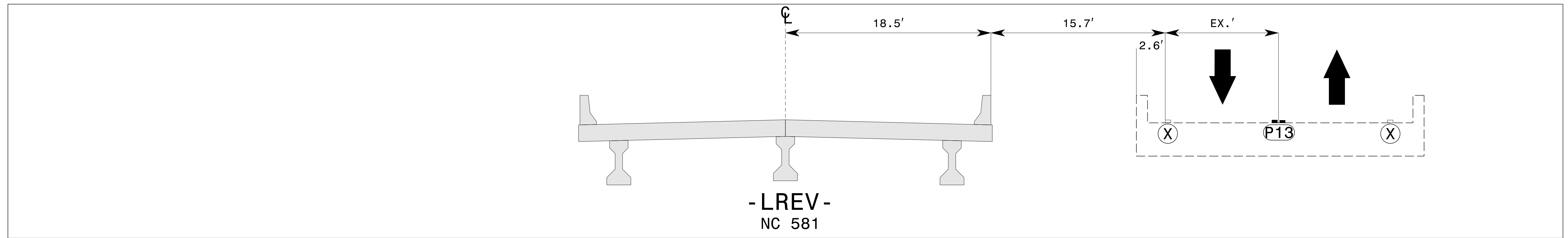


TEMPORARY CUT SECTIONS
 C & D

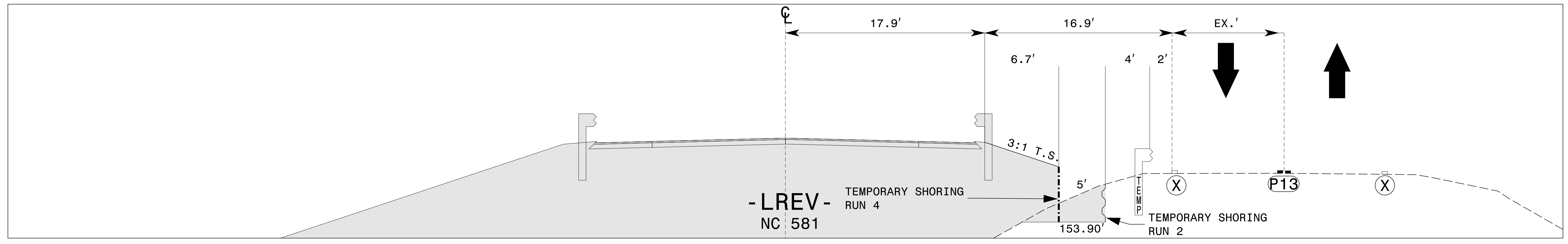
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E1
04 | 11
STA. 22+25 -LREV-
CUT SECTION

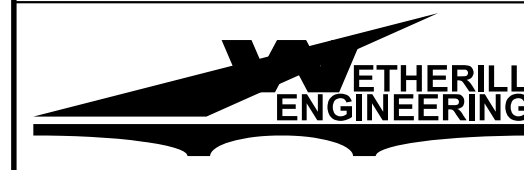


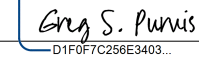
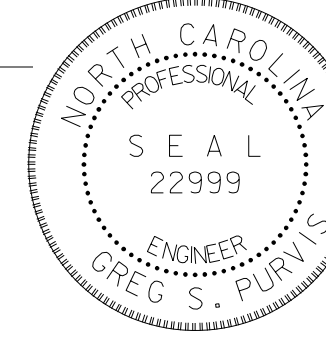
F1
05 | 11
STA. 24+00 -LREV-
CUT SECTION

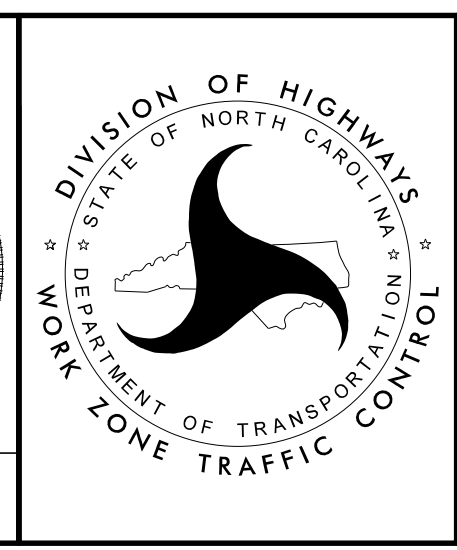


G1
05 | 11
STA. 25+55 -LREV-
CUT SECTION

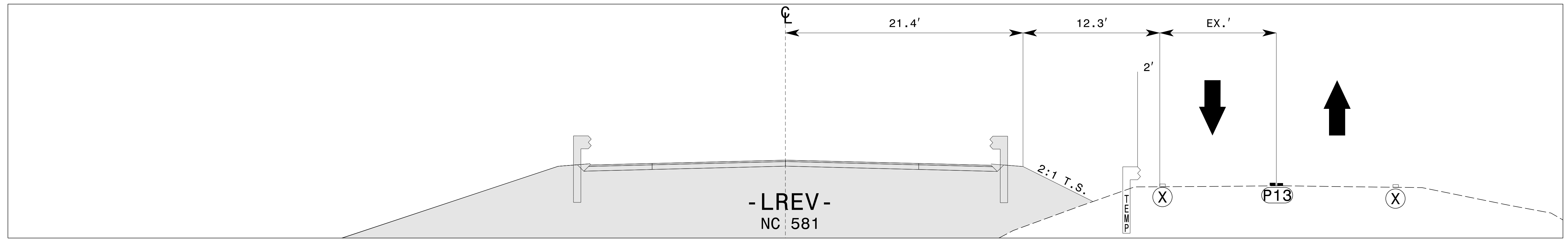
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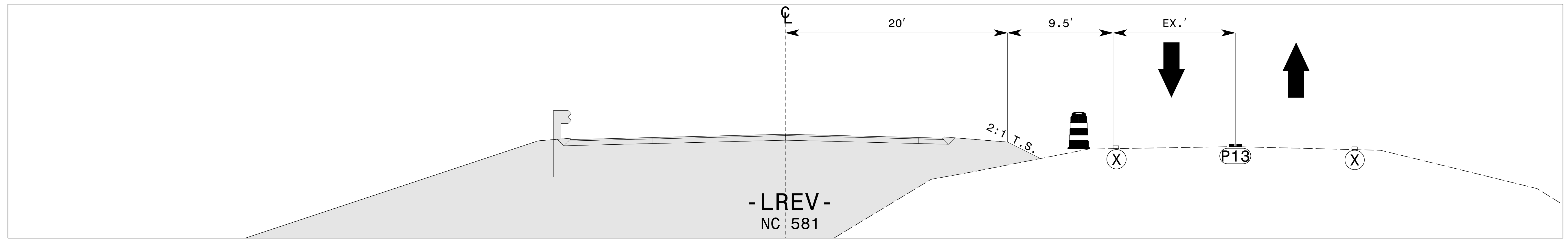
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**TEMPORARY CUT SECTIONS
 E, F, & G**

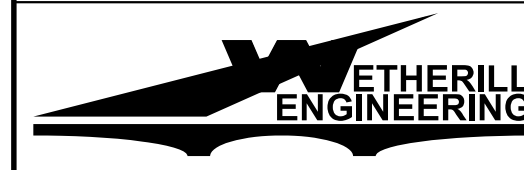


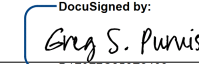

H1
05 | 12
STA. 26+50 -LREV-
CUT SECTION



I1
05 | 12
STA. 29+00 -LREV-
CUT SECTION

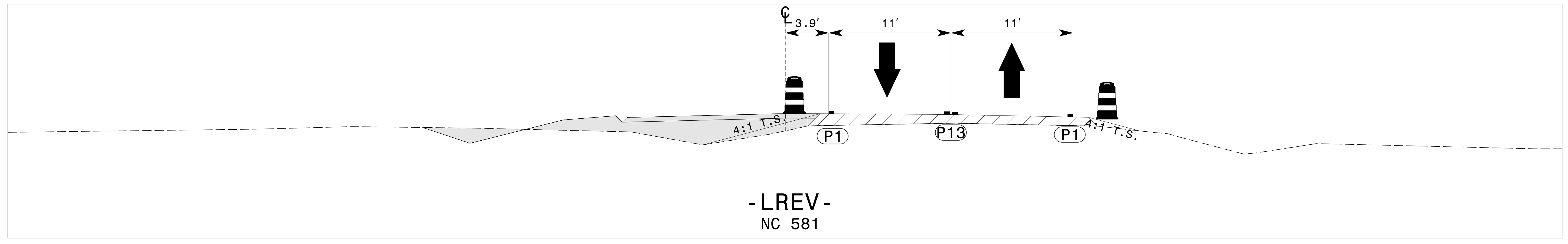
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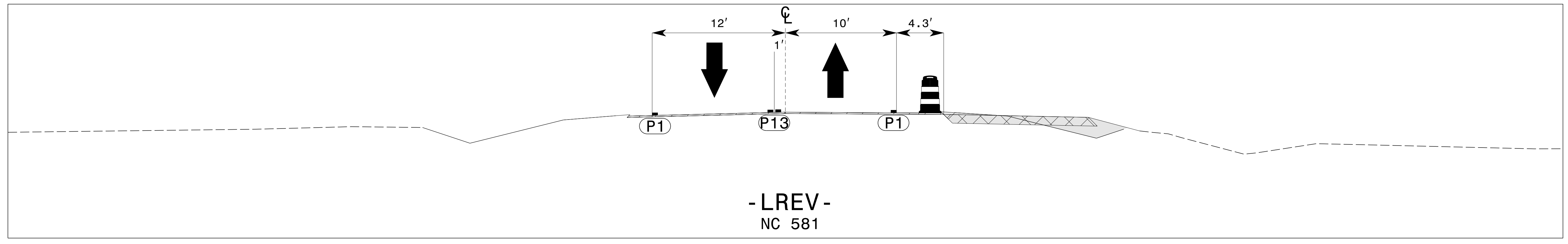
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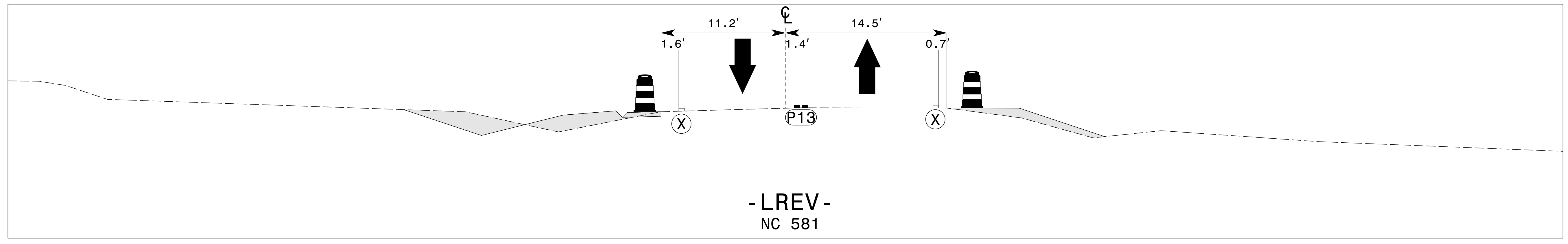
**TEMPORARY CUT SECTIONS
H & I**



J1
05 | 13
STA. 34+00 -LREV-
CUT SECTION



J2
08 | 13
STA. 34+00 -LREV-
CUT SECTION

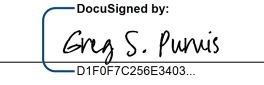



K1
05 | 13
STA. 36+00 -LREV-
CUT SECTION

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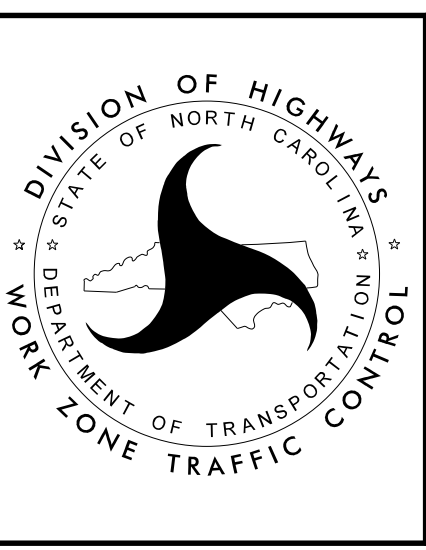
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**TEMPORARY CUT SECTIONS
J & K**