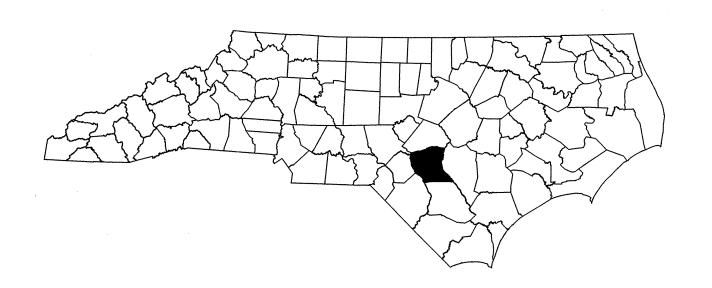
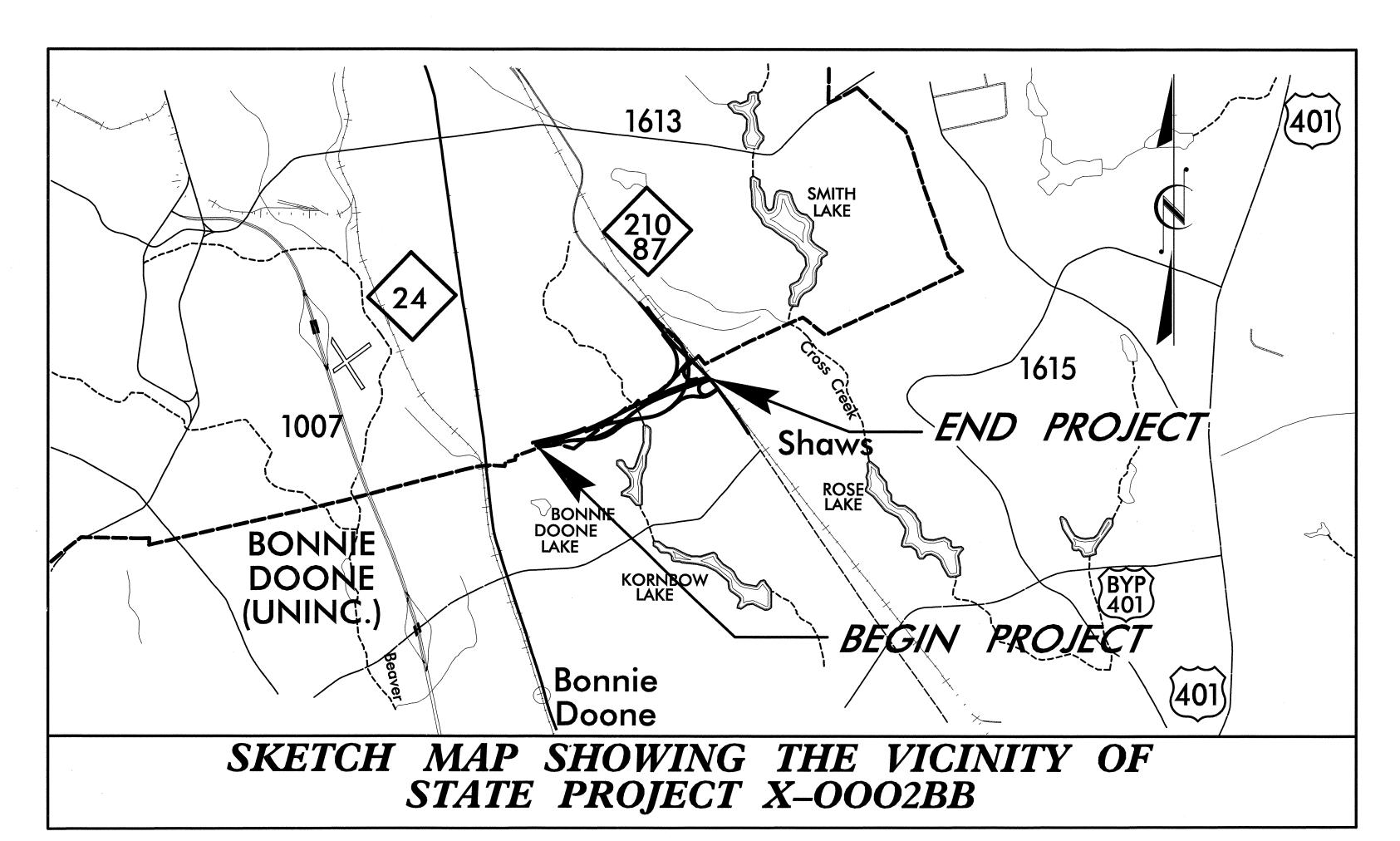
TRANSPORTATION MANAGEMENT PLAN

CUMBERLAND COUNTY





INDEX OF SHEETS

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TMP-1A

TITLE

I NO.

TITLE SHEET, AND INDEX OF SHEETS

LIST OF APPLICABLE ROADWAY STANDARD DRAWINGS,

AND LEGEND

TMP-1B

TRANSPORTATION OPERATIONS PLAN: (MANAGEMENT STRATEGIES, GENERAL NOTES AND LOCAL NOTES)

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TMP-2B

DETAIL DRAWING FOR ADVANCE WORK ZONE

WARRING SIGN DESIGNS

TMP-3 PHASING

TMP-4 THRU 10 PHASE I DETAILS

PROJECT:

TMP-1

WORK ZONE SAFETY & MOBILITY
"from the MOUNTAINS to the COAST"

N.C.D.O.T. WORK ZONE TRAFFIC CONTROL

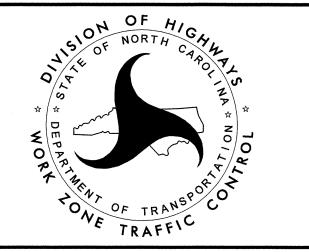
1580 MAIL SERVICE CENTER (MSC) RALEIGH, NC 27699-1580
750 N. GREENFIELD PARKWAY, GARNER, NC 27529 (DELIVERY)
PHONE: (919) 773-2800 FAX: (919) 771-2745

J. S. BOURNE, P.E. STATE TRAFFIC MANAGEMENT ENGINEER

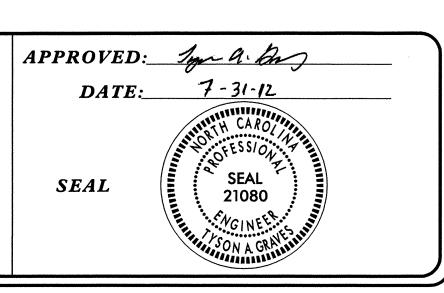
J. S. KITE, P.E. TRAFFIC CONTROL PROJECT ENGINEER

D. A. PARKER TRAFFIC CONTROL PROJECT DESIGN ENGINEER

TRAFFIC CONTROL DESIGN ENGINEER







ROADWAY STANDARD DRAWINGS

THE FOLLOWING ROADWAY STANDARDS AS SHOWN IN "ROADWAY STANDARD DRAWINGS" -PROJECT SERVICES UNIT - N.C. DEPARTMENT OF TRANSPORTATION - RALEIGH, N.C., DATED JULY 2006 ARE APPLICABLE TO THIS PROJECT AND BY REFERENCE HEREBY ARE CONSIDERED A PART OF THESE PLANS:

STD. NO.	<u>TITLE</u>
1101.02	TEMPORARY LANE CLOSURES
1101.03	TEMPORARY ROAD CLOSURES
1101.04	TEMPORARY SHOULDER CLOSURES
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	FLAGGERS DEVICES
1180.01	SKINNY - DRUM

Florence & Hutcheson An ICA Company An ICA Company 5121 Kingdom Way, Raleigh, NC 27607

PROJ. REFERENCE NO. X-0002BB TMP-1A

LEGEND

GENERAL

DIRECTION OF TRAFFIC FLOW DIRECTION OF PEDESTRIAN TRAFFIC FLOW ----- EXIST. PVMT. NORTH ARROW

PROPOSED PVMT. **WORK AREA**

CONTINUING CONSTRUCTION

REMOVAL

TRAFFIC CONTROL DEVICES

BARRICADE (TYPE III)

DRUM

SKINNY DRUM

TUBULAR MARKER

TEMPORARY CRASH CUSHION FLASHING ARROW PANEL (TYPE C)

FLAGGER LAW ENFORCEMENT

TRUCK MOUNTED IMPACT ATTENUATOR (TMIA)

CHANGEABLE MESSAGE SIGN

TEMPORARY SIGNING

PORTABLE SIGN — STATIONARY SIGN

STATIONARY OR PORTABLE SIGN

SIGNALS

■ EXISTING PROPOSED



PAVEMENT MARKINGS

----EXISTING LINES

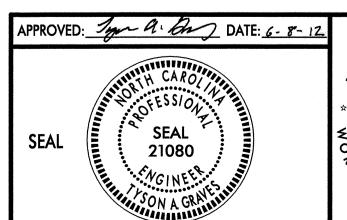
----TEMPORARY LINES

PAVEMENT MARKERS

CRYSTAL/CRYSTAL CRYSTAL/RED YELLOW/YELLOW

PAVEMENT MARKING SYMBOLS

PAVEMENT MARKING SYMBOLS





ROADWAY STANDARD DRAWINGS

GENERAL NOTES

PROJECT NOTES



Florence & Hutcheson An ICA Company
5121 Kingdom Way, Raleigh, NC 27607

PROJ. REFERENCE NO. X-0002BB TMP-1B

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 UNDESIRED 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

-Y1- MURCHISON RD (NORTHBOUND) -Y1- MURCHISON RD (SOUTHBOUND) 7:00AM TO 9:00AM MONDAY-FRIDAY 3:00PM TO 6:00PM MONDAY-FRIDAY

-Y2- BRAGG BLVD

6:00AM TO 8:00PM MONDAY-SUNDAY

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

ROAD NAME

-Y1- MURCHISON ROAD AND -Y2- BRAGG BLVD

HOLIDAY

- 1. FOR ANY UNEXPECTED OCCURRENCE THAT CREATES UNUSUALLY HIGH TRAFFIC VOLUMES, AS DIRECTED BY THE ENGINEER.
- 2. FOR NEW YEAR'S, BETWEEN THE HOURS OF 6:00 A.M. DECEMBER 31ST TO 8:00 P.M. JANUARY 2ND. IF NEW YEAR'S DAY IS ON A FRIDAY, SATURDAY, SUNDAY, OR MONDAY THEN UNTIL 8:00 P.M. THE FOLLOWING TUESDAY.
- 3. FOR EASTER, BETWEEN THE HOURS OF 6:00 A.M. THURSDAY AND 8:00 P.M. MONDAY.
- 4. FOR MEMORIAL DAY, BETWEEN THE HOURS OF 6:00 A.M. FRIDAY TO 8:00 P.M. TUESDAY.
- 5. FOR INDEPENDENCE DAY, BETWEEN THE HOURS OF 6:00 A.M. THE DAY BEFORE INDEPENDENCE DAY AND 8:00 P.M. THE DAY AFTER INDEPENDENCE DAY.

IF INDEPENDENCE DAY IS ON A FRIDAY, SATURDAY, SUNDAY OR MONDAY THEN BETWEEN THE HOURS OF 6:00 A.M. THE THURSDAY BEFORE INDEPENDENCE DAY AND 8:00 P.M. THE TUESDAY AFTER INDEPENDENCE DAY.

- 6. FOR LABOR DAY, BETWEEN THE HOURS OF 6:00 A.M. FRIDAY AND 8:00 P.M. TUESDAY.
- 7. FOR THANKSGIVING DAY, BETWEEN THE HOURS OF 6:00 A.M. TUESDAY TO 8:00 P.M. MONDAY.
- 8. FOR CHRISTMAS, BETWEEN THE HOURS OF 6:00 A.M. THE FRIDAY BEFORE THE WEÉK OF CHRISTMAS DAY AND 8:00 P.M. THE FOLLOWING TUESDAY AFTER THE WEEK OF CHRISTMAS.
- 9. FOR SPRING FEST AND OCTOBER FEST ON FORT BRAGG, BETWEEN THE HOURS OF 6:00 A.M. TWO DAYS PRIOR TO THE BEGINNING OF THE EVENT AND 8:00 P.M. THE FOLLOWING DAY AFTER THE END OF THE EVENT.

LANE AND SHOULDER CLOSURE REQUIREMENTS

- 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.
- WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING ON THE SHOULDER ADJACENT TO AN UNDIVIDED FACILITY AND WITHIN 1.5 M 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.

WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING ON THE SHOULDER ADJACENT TO A DIVIDED FACILITY AND WITHIN 3 M OF AN OPEN TRAVEL LANE, CLOSE THE NEAREST OPEN TRAVEL LANE USING ROADWAY STANDARD DRÁWING NO. 1101.02 UNLESS THE WORK AREA IS PROTECTED BY BARRIER OR GUARDRAIL.

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.

TRAFFIC PATTERN ALTERATIONS

NOTIFY THE ENGINEER TWENTY ONE (21) CALENDAR DAYS PRIOR TO ANY TRAFFIC PATTERN ALTERATION.

SIGNING

INSTALL ADVANCE WORK ZONE WARNING SIGNS WHEN WORK IS WITHIN 12 M FROM THE EDGE OF TRAVEL LANE AND NO MORE THAN THREE (3) DAYS PRIOR TO THE BEGINNING OF CONSTRUCTION.

TRAFFIC CONTROL DEVICES

H) PLACE TYPE III BARRICADES, WITH "ROAD CLOSED" SIGN R11-2 ATTACHED, OF SUFFICIENT LÉNGTH TO CLOSE ENTIRE ROADWAY.

PPROVED: Jan a Con DATE: 7-31-12

PROJECT NOTES

JUNE, '12 DWG. BY: GEP DESIGN BY: GEP REVIEWED BY: TAG

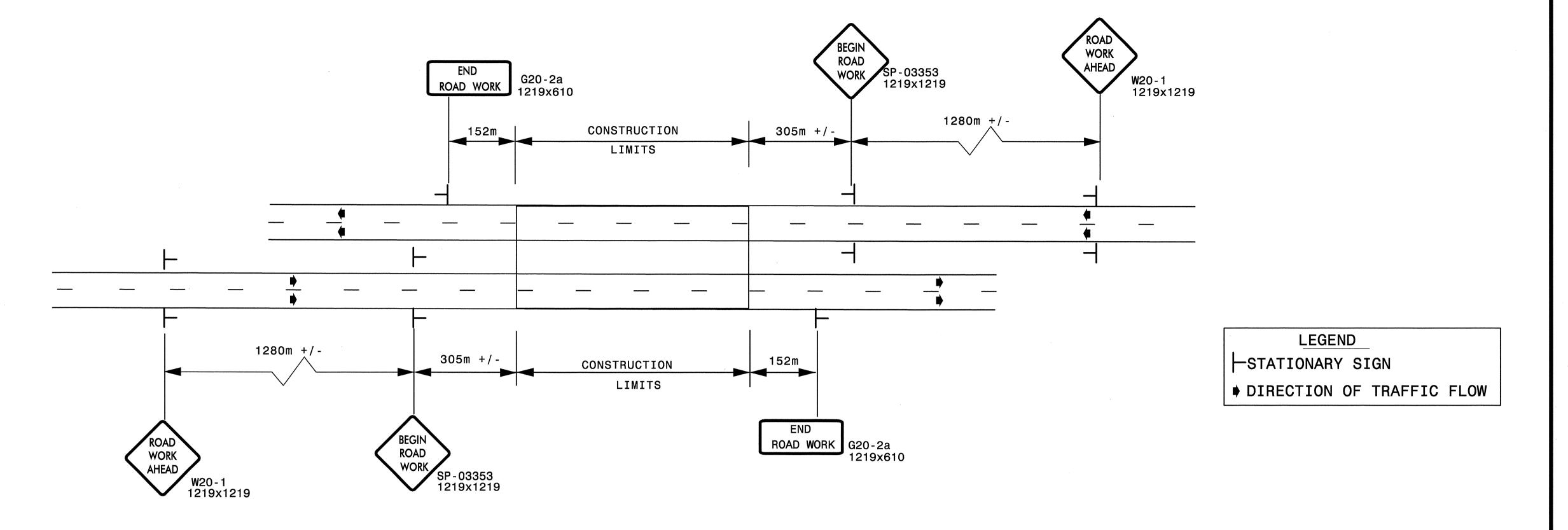
REVISIONS

ADVANCED WORK ZONE WARNING SIGNING FOR FREEWAYS (4 LANES OR GREATER)

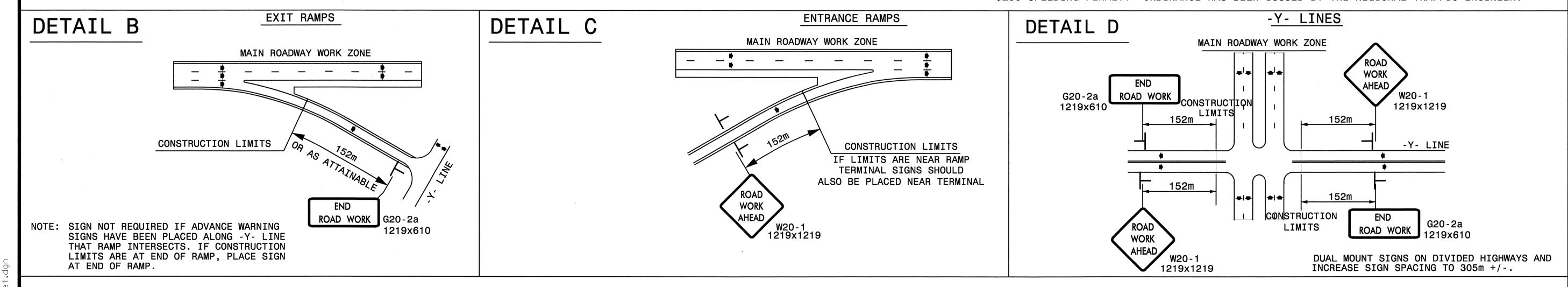
PROJ. REFERENCE NO. SHEET NO.

TMP - 2A

DETAIL A

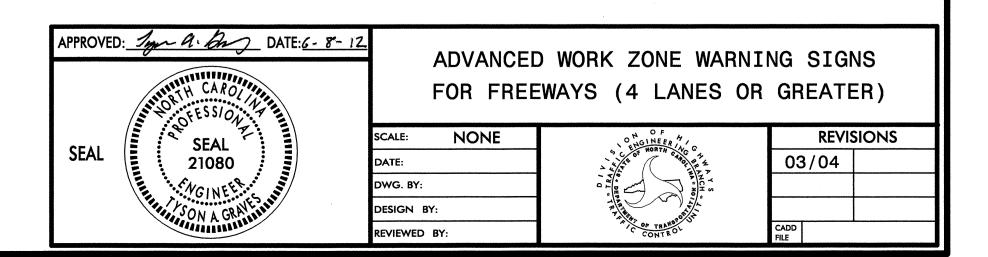


USE THE "\$250 SPEEDING PENALTY" SIGN, SPEED LIMIT SIGN, AND ORANGE PANEL; ONLY WHEN A "\$250 SPEEDING PENALTY" ORDINANCE HAS BEEN ISSUED BY THE REGIONAL TRAFFIC ENGINEER.



GENERAL NOTES

- USE FLUORESCENT ORANGE SHEETING (TYPE VII OR HIGHER) ON ALL ADVANCED WORK ZONE SIGNS.
- DO NOT INSTALL ADVANCE WARNING SIGNS MORE THAN 3 DAYS PRIOR TO BEGINNING OF WORK.
- SIGNS SHOWN ARE REQUIRED FOR WORK ZONES THAT WILL REMAIN IN EFFECT OVERNIGHT. FOR SHORT-TERM DAILY MAINTENANCE TYPE OPERATIONS, THIS SIGNING APPLICATION IS OPTIONAL; MAY USE ONLY APPLICABLE ROADWAY STANDARD DRAWINGS INSTEAD. HOWEVER, IF THIS SIGNING APPLICATION IS USED, SIGNS MAY BE PORTABLE MOUNTED.
- ALL SIGN SPACING DIMENSIONS ARE APPROXIMATE, FIELD ADJUST AS NECESSARY OR AS DIRECTED.
- USE 1.4Kg STEEL U-CHANNEL POST OR 90mm X 90mm WOOD POST FOR ALL WORK ZONE SIGNS. 1.4Kg STEEL U-CHANNEL POSTS MUST MEET THE REQUIREMENTS OF STANDARD SPECIFICATION SECTION 1094-1(B), MAY BE GALVANIZED STEEL, OR MAY BE PAINTED GREEN BY THE POST MANUFACTURER. SQUARE STEEL TUBING POSTS HAVING EQUIVALENT STRENGTH OF THE 1.4Kg STEEL U-CHANNEL POST ARE ALSO ACCEPTABLE FOR USE. ERECT SIGNS PER ROADWAY STANDARD DRAWING 1110.01. PAYMENT FOR WOOD POSTS, 1.4Kg STEEL U-CHANNEL AND SQUARE STEEL TUBING POSTS WITH SIGNS WILL BE MADE ACCORDING TO STANDARD SPECIFICATION "WORK ZONE SIGNS" SECTION 1110.
- WHEN NECESSARY, USE SPLICING IN ACCORDANCE WITH ROADWAY STANDARD DRAWING NO. 1110.01. REMOVE ENTIRE POST WHEN REMOVING SIGNS WITH SPLICED POSTS.
- DO NOT BACK BRACE SIGN SUPPORTS.



SHEET 1 OF 1 DETAIL DRAWING FOR

	ADVAN	ICED WORK ZONE WARNING SIGN DESIGNS	
SCALE:	NONE	ONGINEER "	SI
DATE:	08/03	04/04	
DWG. BY:		0 + 0 × × × × × × × × × × × × × × × × ×	

SP 03353 SIGN NUMBER: SP-03353 BACKG COLOR: Fluorescent Orange | DESIGN BY: CLD STD #: W20-1 CHECKED BY: CHECKED TYPE: A COPY COLOR: Black DATE: Sep 19,2003 PROJECT ID: ALL PROJECTS DIV: DIV QUANTITY: 1 X Y WID HT SIGN WIDTH: 1219mm HEIGHT: 1219mm TOTAL AREA: 1.5 Sq.m BORDER TYPE: FLUSH RECESS: 13mm WIDTH: 19mm BEGIN RADII: 35mm 180C 135 NO. Z BARS: N/A ROAD LENGTH: N/A 180C USE NOTES: 2, 4 Legend and border shall be direct applied Type VII reflective sheeting. 180C 2.Legend and border shall be direct applied non-reflective sheeting. **BORDER** 3. Shields shall be Type VII reflective sheeting on 0.032" (0.8mm) aluminum and demountable. R = 35 mm- Background shall be Type VII reflective sheeting. 5. Background shall be Type I reflective sheeting. TH = 19mm6.Center arrow(s) vertically on sign. 7. Bottom panel shall be yellow Type III sheeting. IN = 13 mmLegend shall be direct applied black non-reflective sheeting. Yellow panel is: LETTER POSITIONS Series/Size Letter spacings are to start of next letter Text Length B E G I N 563 561 139 122 139 64 100 561 C180 511 C180 550

GENERAL NOTES FOR THE "BEGIN ROAD WORK" SIGN

-SIGN SP-03353 "BEGIN ROAD WORK" ONLY APPLIES TO FULL CONTROL AND PARTIAL CONTROL OF ACCESS ROADWAYS -WHEN USED, INSTALL SIGN SP-03353 "BEGIN ROAD WORK" ACCORDING TO DETAIL A ON SHEET TMP-2A.

NORTH CAROLINA D.O.T. SIGN DETAIL

PPROVED: Jan a: On DATE: 6-8-12

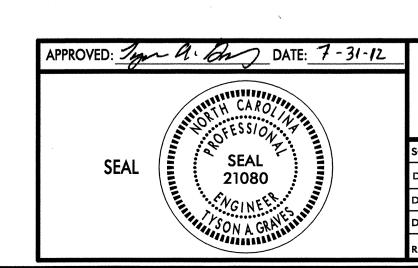
NC License No: F-0258

PHASING

- USING ROADWAY STANDARD DRAWING NUMBER 1101.02 OR 1101.04, INSTALL ADVANCE WARNING SIGNS ON -Y1-, MURCHISON ROAD AND -Y2-, BRAGG BLVD. (SEE SHEETS 2A AND 2B)
- AWAY FROM TRAFFIC, COMPLETE CONSTRUCTION UP TO AND STEP 2. INCLUDING FINAL FINAL LAYER OF SURFACE COURSE IN THE FOLLOWING AREAS:

```
FROM STA. 48+50± TO STA. 57+12±
- L -
- L -
          FROM STA. 59+08± TO STA. 60+79±
-COL2-
          FROM STA. 39+40± TO STA. 47+87±
- LP2B -
          FROM STA. 10+00± TO STA. 12+33±
-SPUR2B-
          FROM STA. 10+00± TO STA. 10+54±
          FROM STA. 12+04± TO STA. 12+47±
-LP2D-
-SPUR2D-
         FROM STA. 10+00± TO STA. 10+41±
-RP2D-
          FROM STA. 10+88± TO STA. 14+07±
- CDR -
          FROM STA. 45+04± TO STA. 52+71±
-RPCDR-
          FROM STA. 11+65± TO STA. 16+25±
         FROM STA. 14+79± TO STA. 15+89±
-FLYOVER-
-FLYOVER- FROM STA. 17+54± TO STA. 21+37±
-FLYOVER- FROM STA. 26+27± TO STA. 30+00±
-RPB-
          FROM STA. 11+19± TO STA. 15+21±
-RPC-
          FROM STA. 11+23± TO STA. 15+33±
-SPURB-
          FROM STA. 13+27± TO STA. 16+79±
```

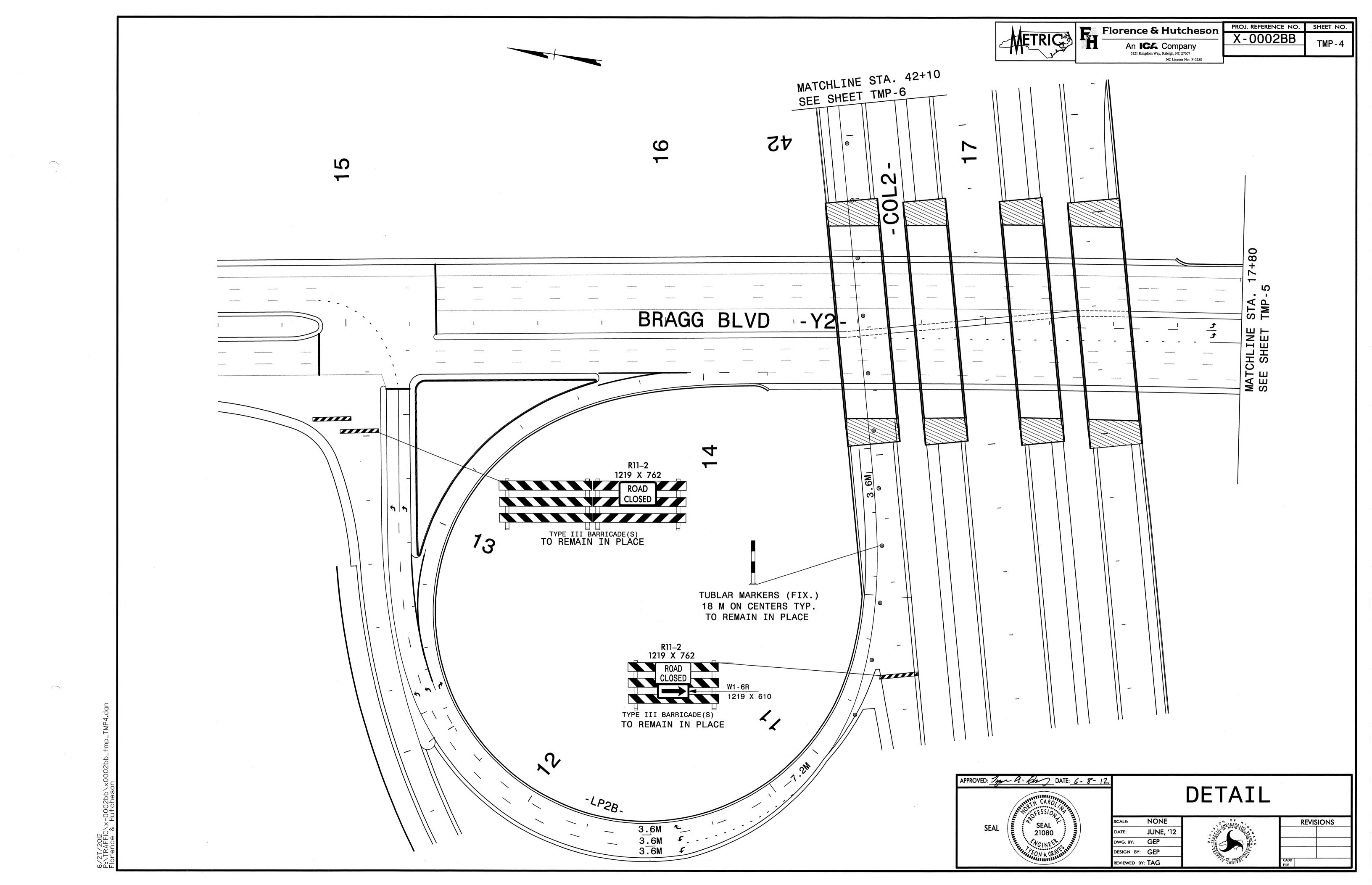
- AWAY FROM TRAFFIC, PLACE FINAL PAVEMENT MARKING LINES AND SYMBOLS AS SHÓWN IN PAVEMENT MARKING PLANS. PLACE TYPE III BARRICADES AND TUBULAR MARKERS (FIX.) AS SHOWN ON SHEETS TMP-4 THRU TMP-10 (WHICH ARE TO REMAIN IN PLACE UPON COMPLETION OF THIS PROJECT). USING ROADWAY STANDARD DRAWING 1101.02 SHEET 3 OF 9 AND 1101.03 SHEET 9 OF 9 AS NECESSARY, INSTALL OVERHEAD SIGN ASSEMBLIES ON -Y1-, MURCHISON ROÁD AND -Y2-, BRAGG BLVD.
- USING ROADWAY STANDARD DRAWING 1101.02, SHEET 3 OF 9, PLACE FINAL PAVEMENT MARKING LINES AND SYMBOLS ON -Y1-, MURCHISON ROAD AND -Y2-, BRAGG BLVD. (SEE PAVEMENT MARKING PLANS) REMOVE CONFICTING EXISTING MARKINGS. OPEN PROJECT UP TO TRAFFIC.
- REMOVE ALL TRAFFIC CONTROL DEVICES EXCEPT FOR THE TYPE III BARRICADES AND TUBULAR MARKERS WHICH ARE TO REMAIN ON THE PROJECT.

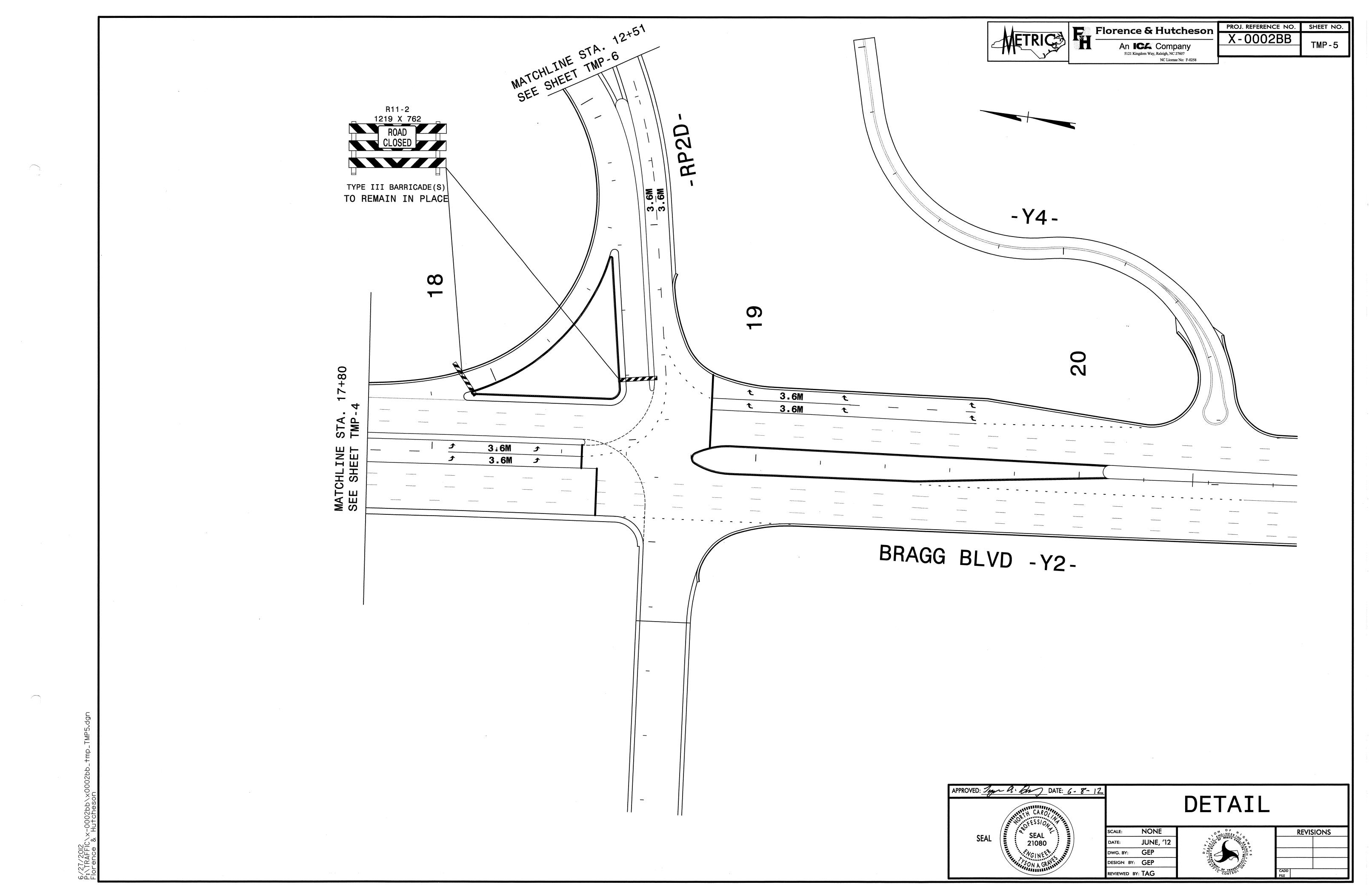


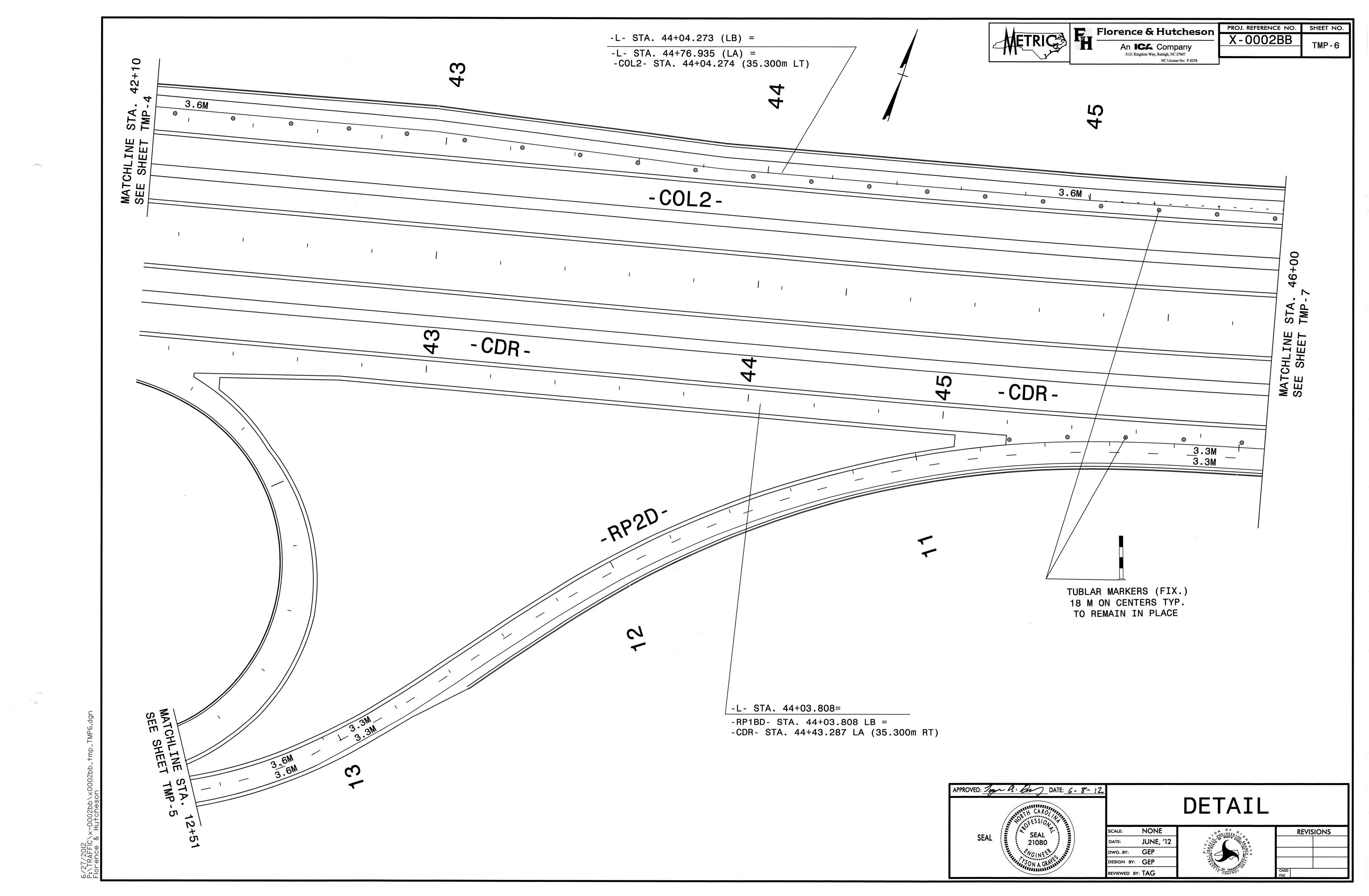
PHASING

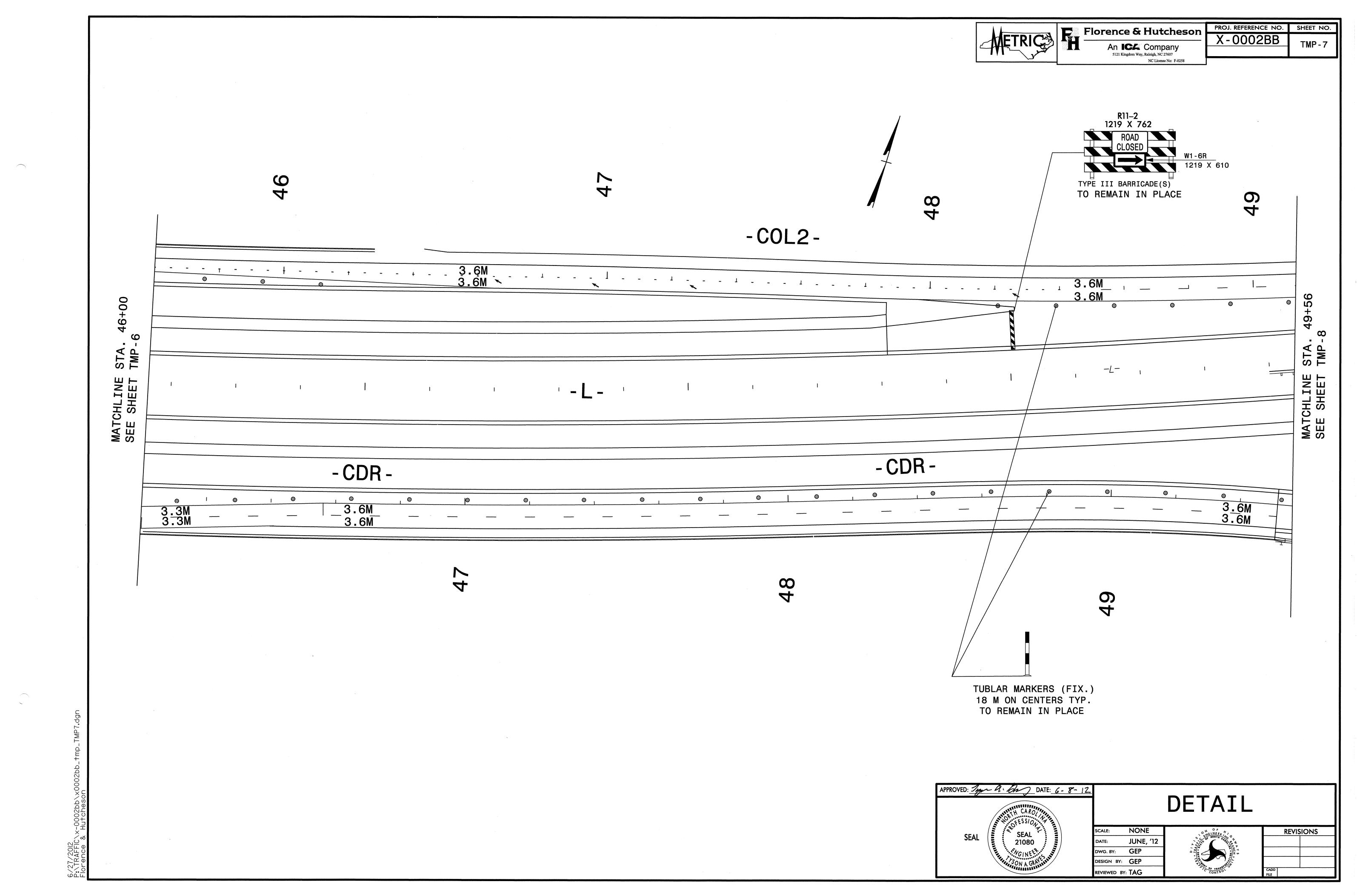
NONE JUNE, '12 DWG. BY: GEP DESIGN BY: GEP REVIEWED BY: TAG

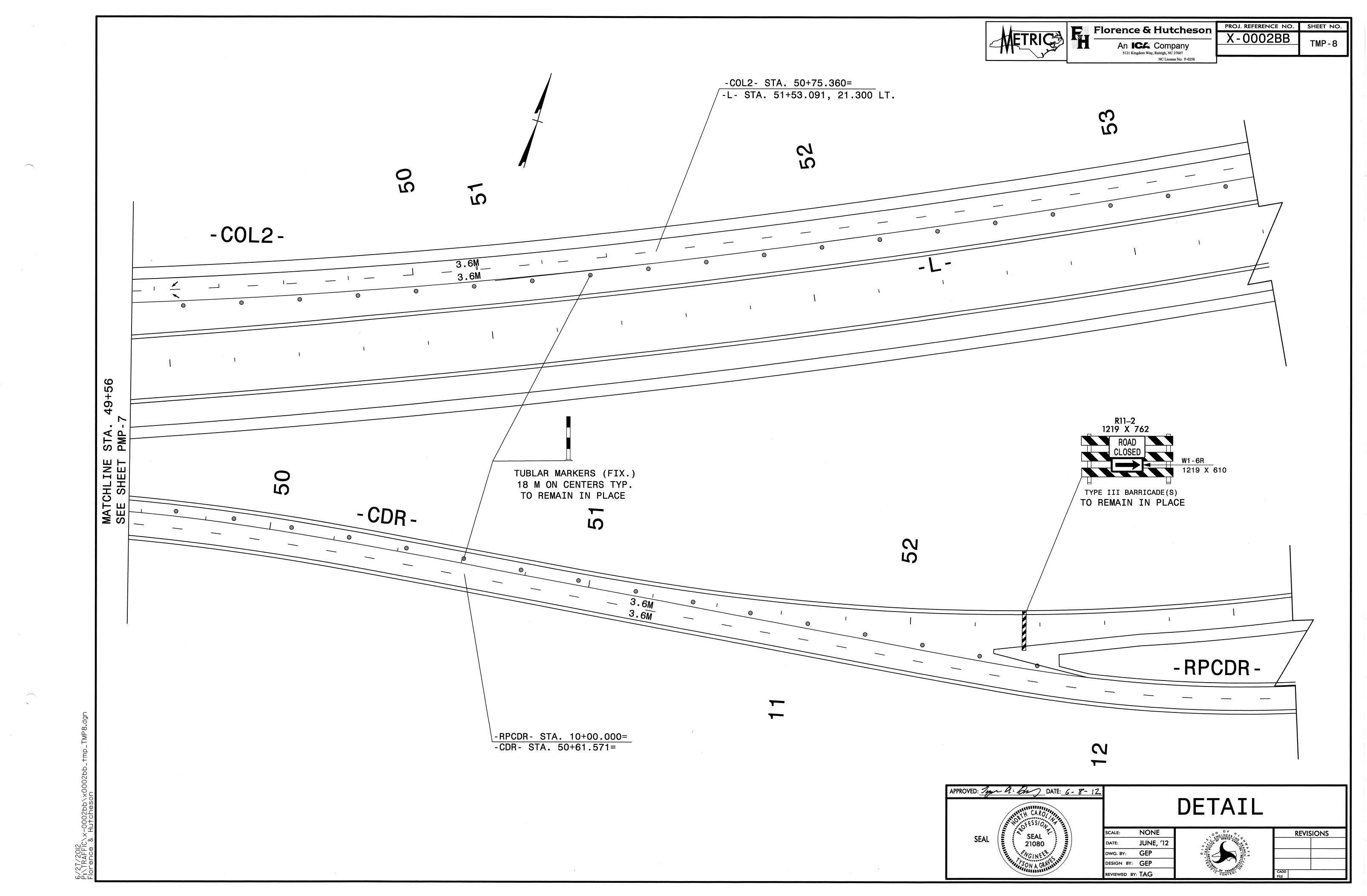
REVISIONS

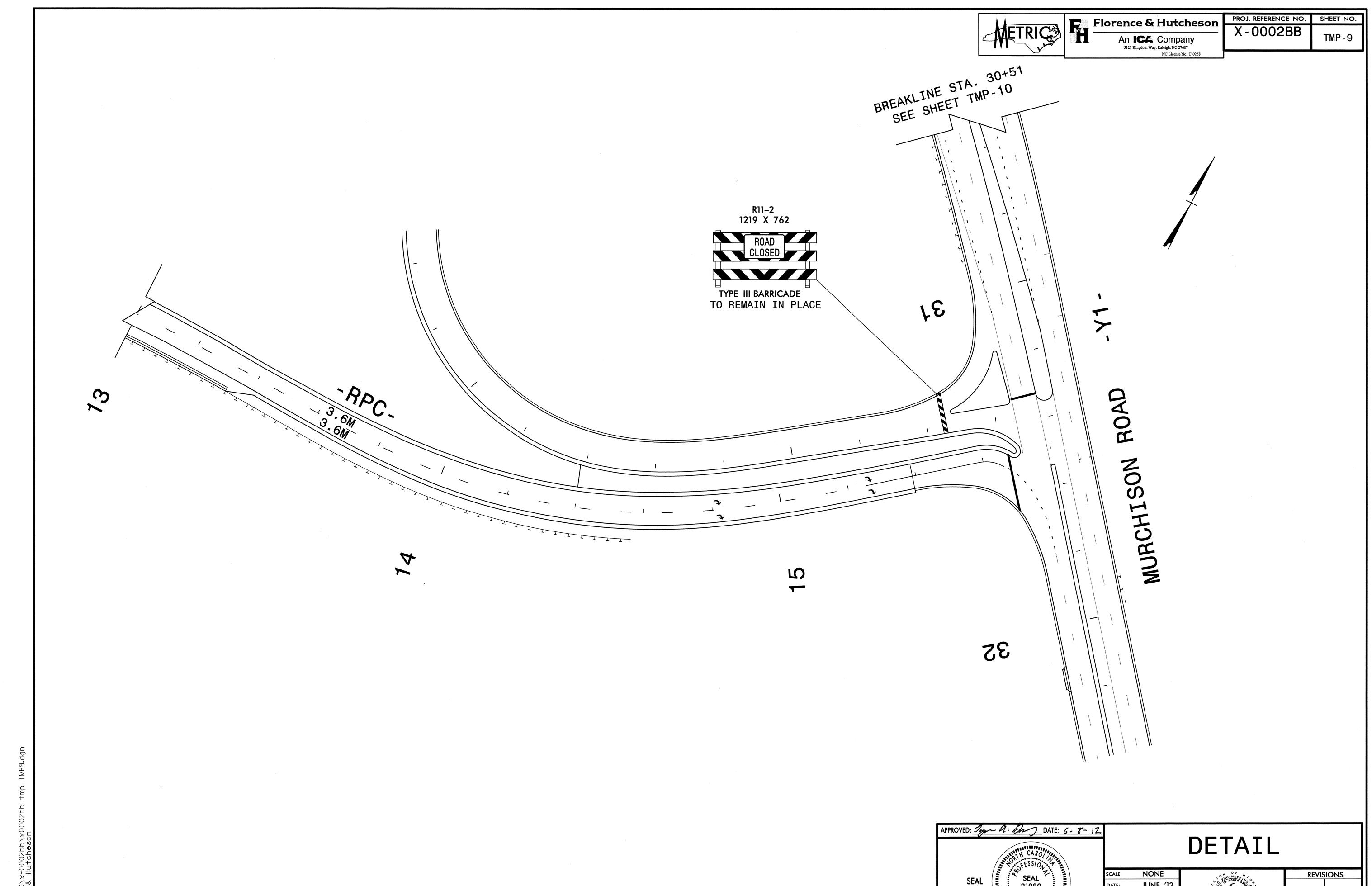












JUNE, '12

