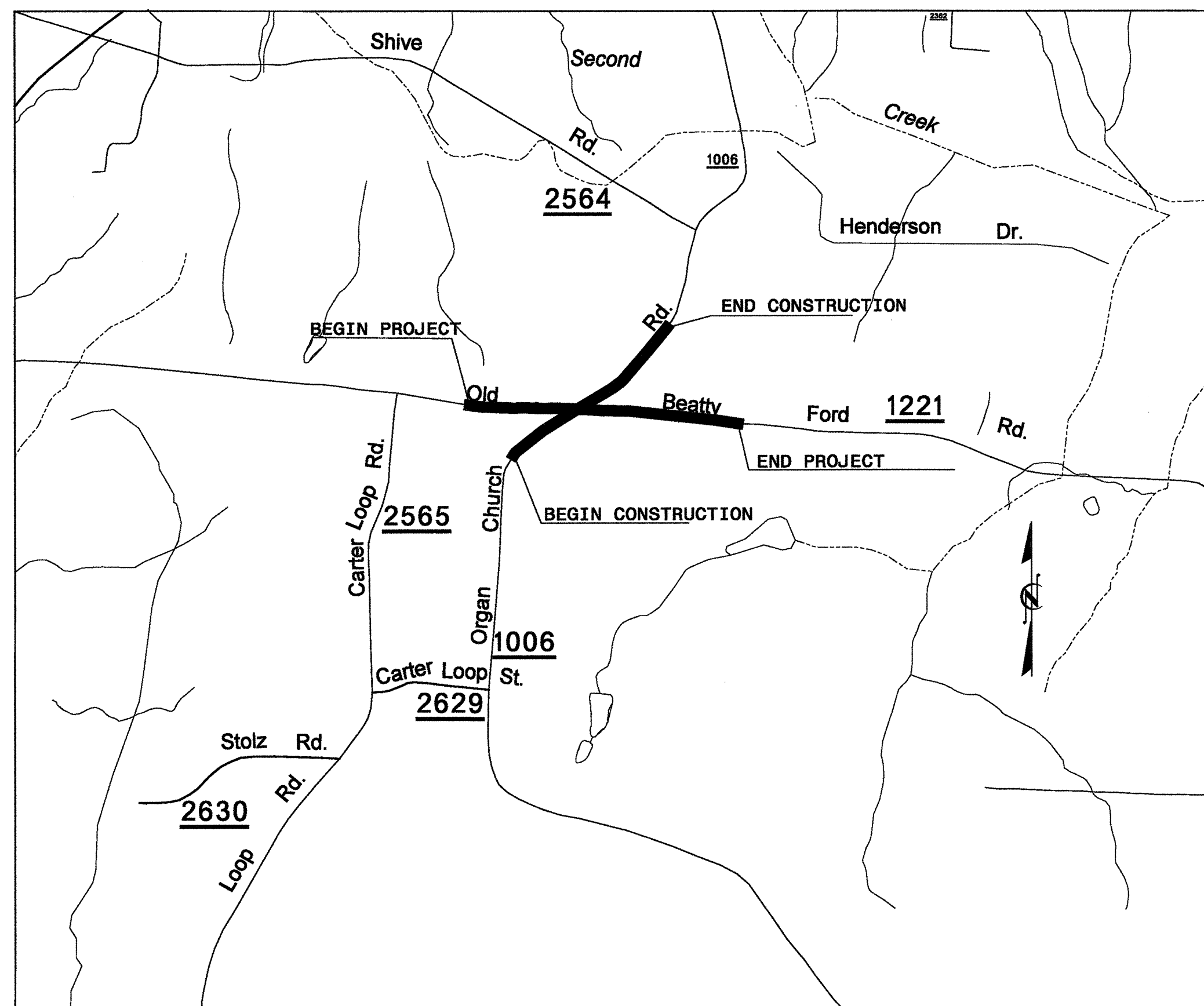
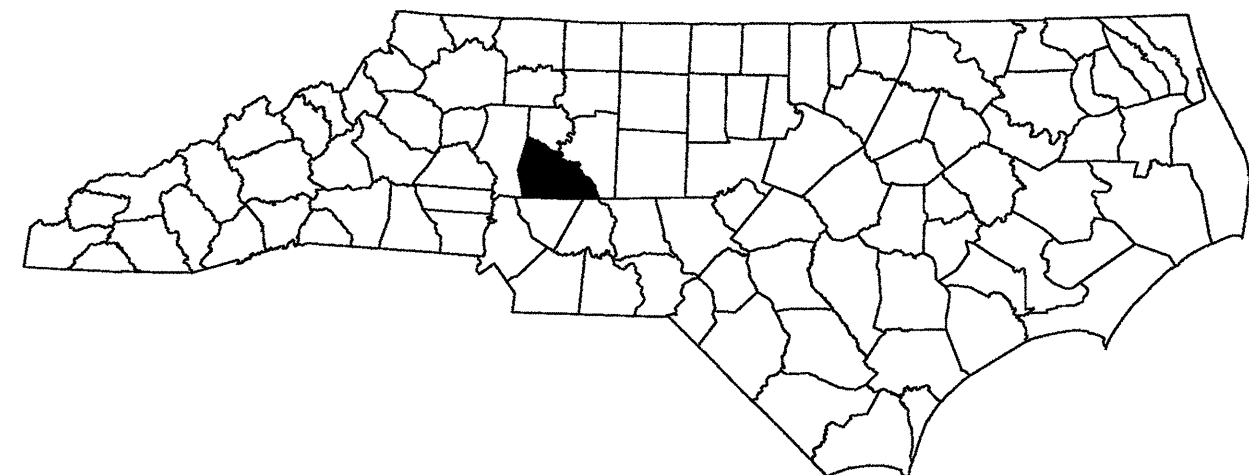


STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

TRANSPORTATION MANAGEMENT PLAN

ROWAN COUNTY



**SKETCH MAP SHOWING THE VICINITY OF
STATE PROJECT W-5146**

INDEX OF SHEETS	
SHEET NO.	TITLE
TMP-1	TITLE SHEET, AND INDEX OF SHEETS
TMP-1A	LIST OF APPLICABLE ROADWAY STANDARD DRAWINGS, LEGEND, AND TEMPORARY PAVEMENT MARKING SCHEDULE
TMP-2A	TRANSPORTATION OPERATION PLAN: (GENERAL NOTES AND LOCAL NOTES) AND PHASING
TMP-3	NOT USED
TMP-4 AND 5	PHASE I
TMP-6 AND 7	PHASE II

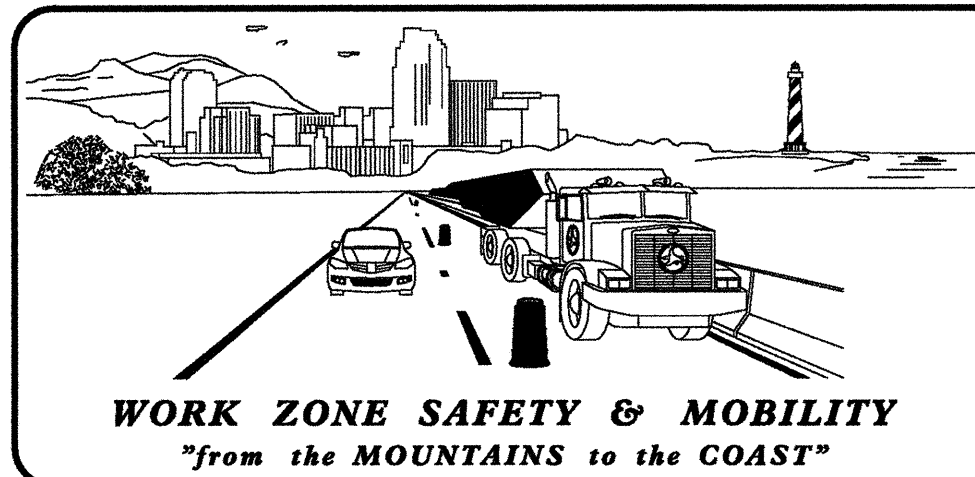
SHEET NO.

TMP-1

W-5146

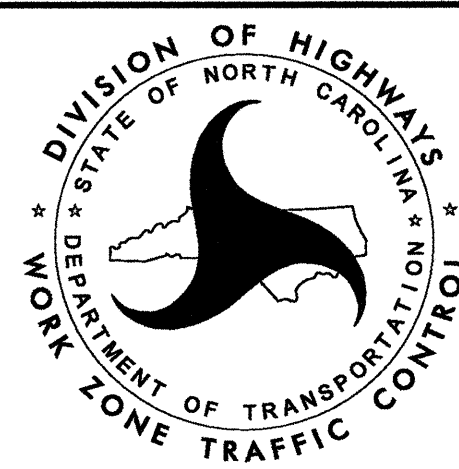
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5/16/2012
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Florence & Hutcheson



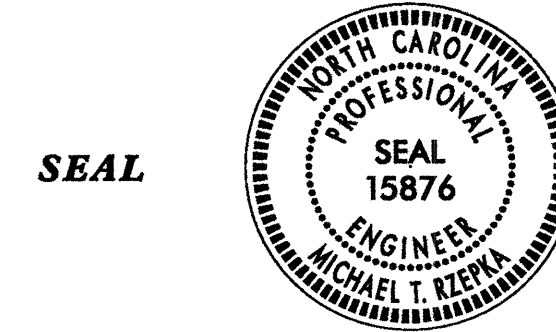
N.C.D.O.T. WORK ZONE TRAFFIC CONTROL
1561 MAIL SERVICE CENTER (MSC) RALEIGH, NC 27699-1561
750 N. GREENFIELD PARKWAY, GARNER, NC 27529 (DELIVERY)
PHONE: (919) 773-2800 FAX: (919) 771-2745

J. S. BOURNE, P.E. STATE TRAFFIC MANAGEMENT ENGINEER
JOSEPH ISHAK, P.E. TRAFFIC CONTROL PROJECT ENGINEER
BEN SCHOENBAUER, P.E. TRAFFIC CONTROL PROJECT DESIGN ENGINEER
TRAFFIC CONTROL DESIGN ENGINEER



FH Florence & Hutcheson
An ICA Company
5121 Kingdom Way, Raleigh, NC 27607
NC License No: P-0258

APPROVED: *Michael T. Rzepka*
DATE: 5-16-12



SEAL

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 JANUARY 2012 ARE APPLICABLE TO THIS PROJECT AND BY REFERENCE HEREBY ARE CONSIDERED A PART OF THESE PLANS:

<u>STD. NO.</u>	<u>TITLE</u>
1101.01	TWO-WAY UNDIVIDED WORK ZONE WARNING SIGNS
1101.02	TEMPORARY LANE CLOSURES
1101.04	TEMPORARY SHOULDER CLOSURES
1101.05	WORK ZONE VEHICLE ACCESSES
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
1205.01	PAVEMENT MARKINGS - LINE TYPES AND OFFSETS
1205.02	PAVEMENT MARKINGS - 2 LANE AND MULTILANE ROADWAYS
1205.04	PAVEMENT MARKINGS - INTERSECTIONS
1205.05	PAVEMENT MARKINGS - TURN LANES
1205.08	PAVEMENT MARKINGS - SYMBOLS AND WORD MESSAGES
1205.09	PAVEMENT MARKINGS - PAINTED ISLANDS
1250.01	PAVEMENT MARKER SPACING
1251.01	RAISED PAVEMENT MARKERS - TEMPORARY AND PERMANENT

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)
- CONE
- 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
- TEMPORARY

PAVEMENT MARKINGS

- EXISTING LINES
- TEMPORARY LINES

PAVEMENT MARKERS

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

PAVEMENT MARKING SYMBOLS

- PAVEMENT MARKING SYMBOLS

TEMPORARY PAVEMENT MARKING

<u>SYMBOL</u>	<u>DESCRIPTION</u>
<u>PAINT (4")</u>	
PA	WHITE EDGELINE
PD	2 FT. WHITE MINISKIP
PE	WHITE SOLID LANE LINE
PI	DOUBLE YELLOW CENTERLINE
<u>PAINT (8")</u>	
PV	YELLOW DIAGONAL
<u>PAINT (24")</u>	
P2	WHITE STOP BAR
<u>PAINT SYMBOL</u>	
QA	LEFT ARROW
<u>TEMPORARY RAISED MARKERS</u>	
MH	YELLOW & YELLOW
MI	CRYSTAL & RED

APPROVED: <i>Michael T. Rzepka</i> DATE: 5-16-12 		ROADWAY STANDARD DRAWINGS, LEGEND & TEMPORARY PAVEMENT MARKING SCHEDULE
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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
OLD BEATTY FORD ROAD	6:00 AM TO 8:15 AM, MONDAY THRU FRIDAY (WHEN SCHOOL IS IN SESSION)
ORGAN CHURCH ROAD	6:00 AM TO 8:15 AM, MONDAY THRU FRIDAY (WHEN SCHOOL IS IN SESSION)

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

ROAD NAME	HOLIDAY
OLD BEATTY FORD ROAD ORGAN CHURCH ROAD	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 6:00 A.M. JANUARY 2ND. IF NEW YEAR'S DAY IS ON A FRIDAY, SATURDAY, SUNDAY, OR MONDAY THEN UNTIL 6:00 A.M. THE FOLLOWING TUESDAY.
3.	FOR EASTER, BETWEEN THE HOURS OF 6:00 A.M. THURSDAY AND 6:00 A.M. MONDAY.
4.	FOR MEMORIAL DAY, BETWEEN THE HOURS OF 6:00 A.M. FRIDAY TO 6:00 A.M. TUESDAY.
5.	FOR INDEPENDENCE DAY, BETWEEN THE HOURS OF 6:00 A.M. THE DAY BEFORE INDEPENDENCE DAY AND 6:00 A.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 6:00 A.M. THE TUESDAY AFTER INDEPENDENCE DAY.
6.	FOR LABOR DAY, BETWEEN THE HOURS OF 6:00 A.M. FRIDAY AND 6:00 A.M. TUESDAY.
7.	FOR THANKSGIVING DAY, BETWEEN THE HOURS OF 6:00 A.M. TUESDAY TO 6:00 A.M. MONDAY.
8.	FOR CHRISTMAS, BETWEEN THE HOURS OF 6:00 A.M. THE FRIDAY BEFORE THE WEEK OF CHRISTMAS DAY AND 6:00 A.M. THE FOLLOWING TUESDAY AFTER THE WEEK OF CHRISTMAS.

LANE AND SHOULDER CLOSURE REQUIREMENTS

- C) 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.
- D) 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.

- E) 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.
- F) 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.
- G) DO NOT WORK SIMULTANEOUSLY WITHIN 15 FT ON BOTH SIDES OF AN OPEN TRAVELWAY WITHIN THE SAME LOCATION UNLESS PROTECTED WITH GUARDRAIL OR BARRIER.

PAVEMENT EDGE DROP OFF REQUIREMENTS

- H) 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.
- I) 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) 100 FT IN ADVANCE AND A MINIMUM OF EVERY HALF MILE THROUGHOUT THE UNEVEN AREA.

TRAFFIC PATTERN ALTERATIONS

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

SIGNING

- K) 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.

TRAFFIC CONTROL DEVICES

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

PAVEMENT MARKINGS AND MARKERS

- N) INSTALL TEMPORARY PAVEMENT MARKINGS AND TEMPORARY PAVEMENT MARKERS ON INTERIM LAYERS OF PAVEMENT AS FOLLOWS:
- | ROAD NAME | MARKING | MARKER |
|-----------|---------|------------------|
| ALL | PAINT | TEMPORARY RAISED |
- O) 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.
- P) TIE PROPOSED PAVEMENT MARKING LINES TO EXISTING PAVEMENT MARKING LINES.
- Q) REMOVE/REPLACE ANY CONFLICTING/DAMAGED PAVEMENT MARKINGS AND MARKERS BY THE END OF EACH DAY'S OPERATION.

LOCAL NOTES

PHASING

PHASE I (SEE LOCAL NOTE 1)

- STEP 1. USING ROADWAY STANDARD DRAWING NUMBER 1101.02, SHEET 1 OF 15 OR ROADWAY STANDARD DRAWING NUMBER 1101.04, INSTALL ADVANCE WARNING SIGNS ON -LREV- (OLD BEATTY FORD RD., SR 1221 AND ALL -Y- LINES. (SEE ROADWAY STANDARD DRAWING NUMBER 1101.01)
- STEP 2. USING ROADWAY STANDARD DRAWING NUMBER 1101.02, SHEET 1 OF 15, INSTALL DRAINAGE AND WIDEN -LREV- (OLD BEATTY FORD RD., SR 1221), FROM STA. 12+00± TO STA. 35+50±, UP TO EXISTING EDGE OF PAVEMENT ELEVATION. (SEE SHEETS TMP-4 AND TMP-5)
- USING ROADWAY STANDARD DRAWING NUMBER 1101.02, SHEET 1 OF 15, CONSTRUCT UP TO EXISTING EDGE OF PAVEMENT ELEVATION, -Y2REV- (ORGAN CHURCH RD., SR 1006), INCLUDING DRAINAGE, FROM STA. 10+00± TO STA. 15+00±. (SEE SHEET TMP-4)
- USING ROADWAY STANDARD DRAWING NUMBER 1101.02, SHEET 1 OF 15, CONSTRUCT UP TO EXISTING EDGE OF PAVEMENT ELEVATION, -Y3REV-, INCLUDING DRAINAGE, FROM STA. 10+00± TO 24+12±. (SEE SHEET TMP-5)

PHASE II (SEE LOCAL NOTE 1)

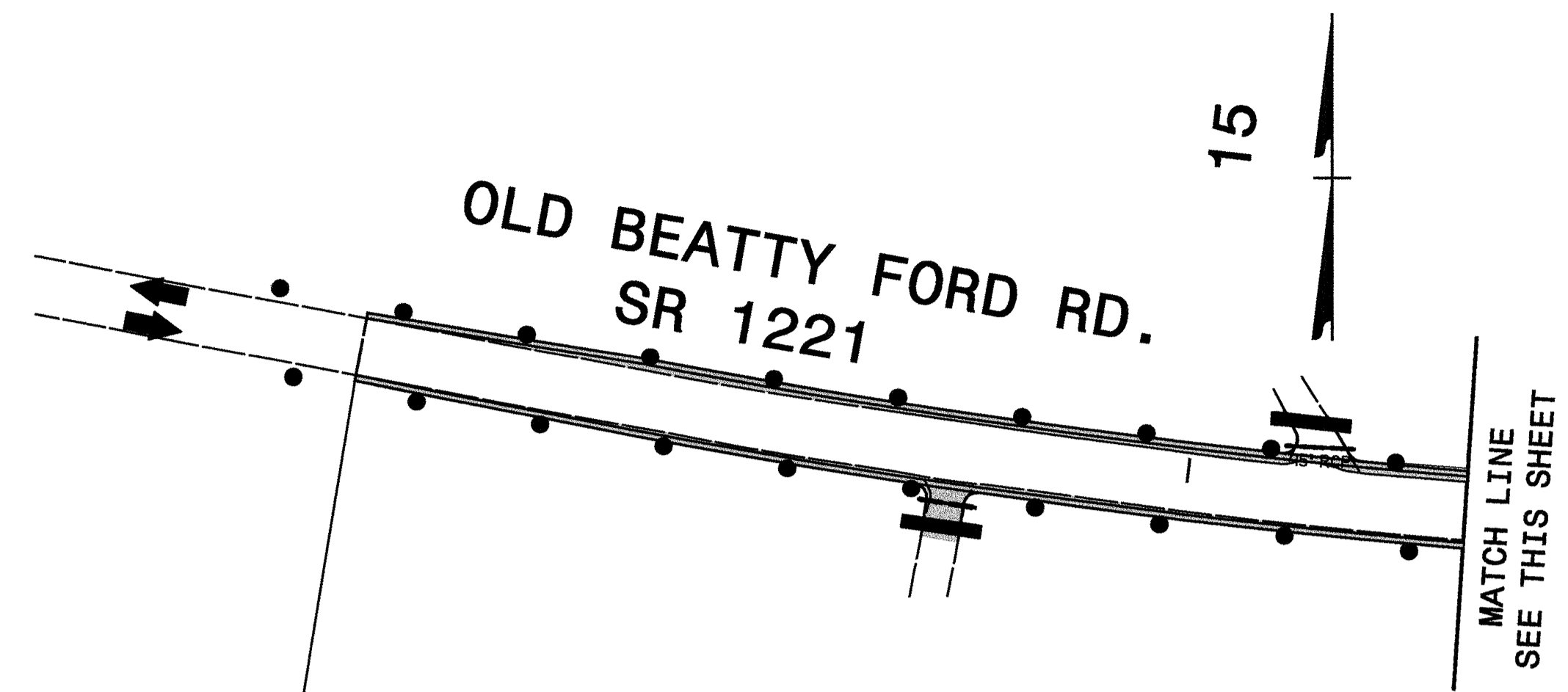
- STEP 1. USING ROADWAY STANDARD DRAWING NUMBER 1101.02, SHEET 1 OF 15, PLACE TEMPORARY PAVEMENT MARKING ALONG -LREV-, -Y2REV-, AND -Y3REV-. SIMULTANEOUSLY, PLACE ORGAN CHURCH ROAD TRAFFIC INTO NEW ALIGNMENT. (SEE SHEETS TMP-6 AND TMP-7)
- STEP 2. USING ROADWAY STANDARD DRAWING NUMBER 1101.02, SHEET 1 OF 15, PAVE/WEDGE -LREV-, -Y2REV-, AND -Y3REV- UP TO BUT NOT INCLUDING FINAL LAYER OF SURFACE COURSE. REPLACE TEMPORARY PAVEMENT MARKINGS AND SAFE UP SHOULDERS AT END OF EACH DAY'S PAVING.
- STEP 3. USING ROADWAY STANDARD DRAWING NUMBER 1101.02, SHEET 1 OF 15, REMOVE EXISTING PAVEMENT AS NECESSARY AND COMPLETE CONSTRUCTING OF SHOULDERS.
- STEP 4. USING ROADWAY STANDARD DRAWING NUMBER 1101.02, SHEET 1 OF 15, PLACE FINAL LAYER OF SURFACE ON -LREV- AND ALL -Y- LINES INCLUDING PAVEMENT MARKING LINES, SYMBOLS, AND MARKERS (SEE PAVEMENT MARKING PLANS)
- REMOVE ALL TRAFFIC CONTROL DEVICES.

APPROVED: *Michael T. Rippe* DATE: 7-26-12

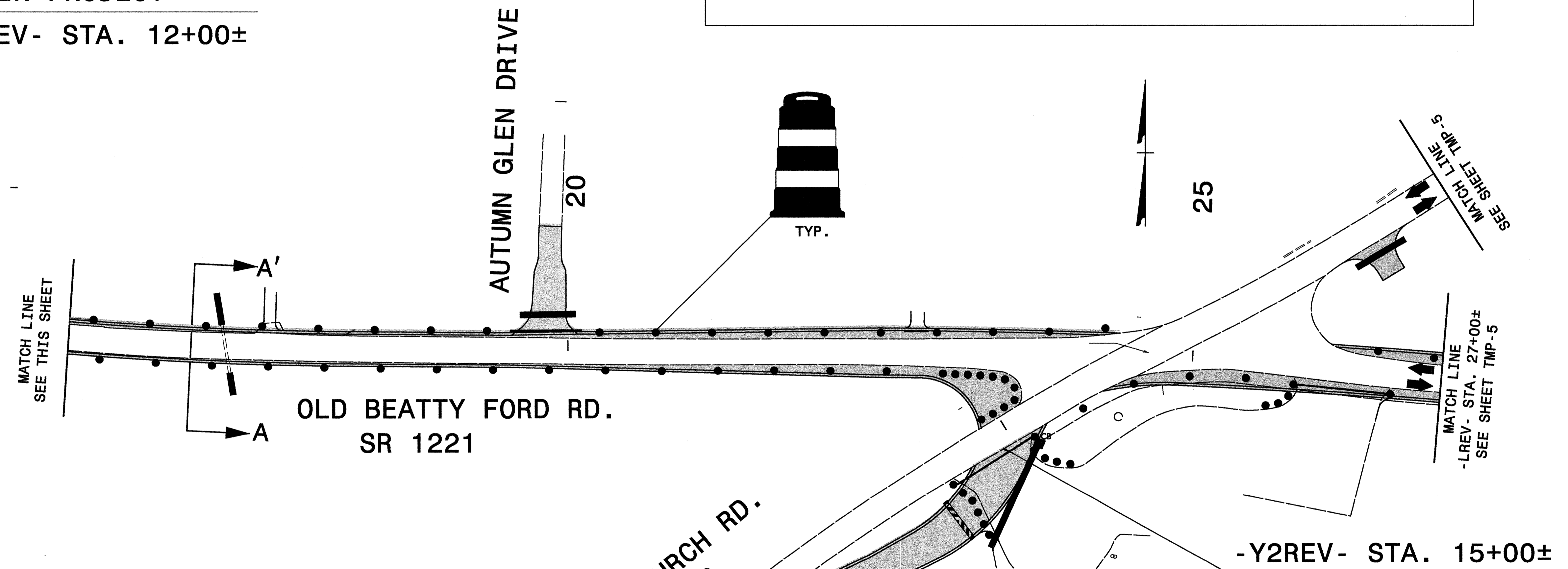
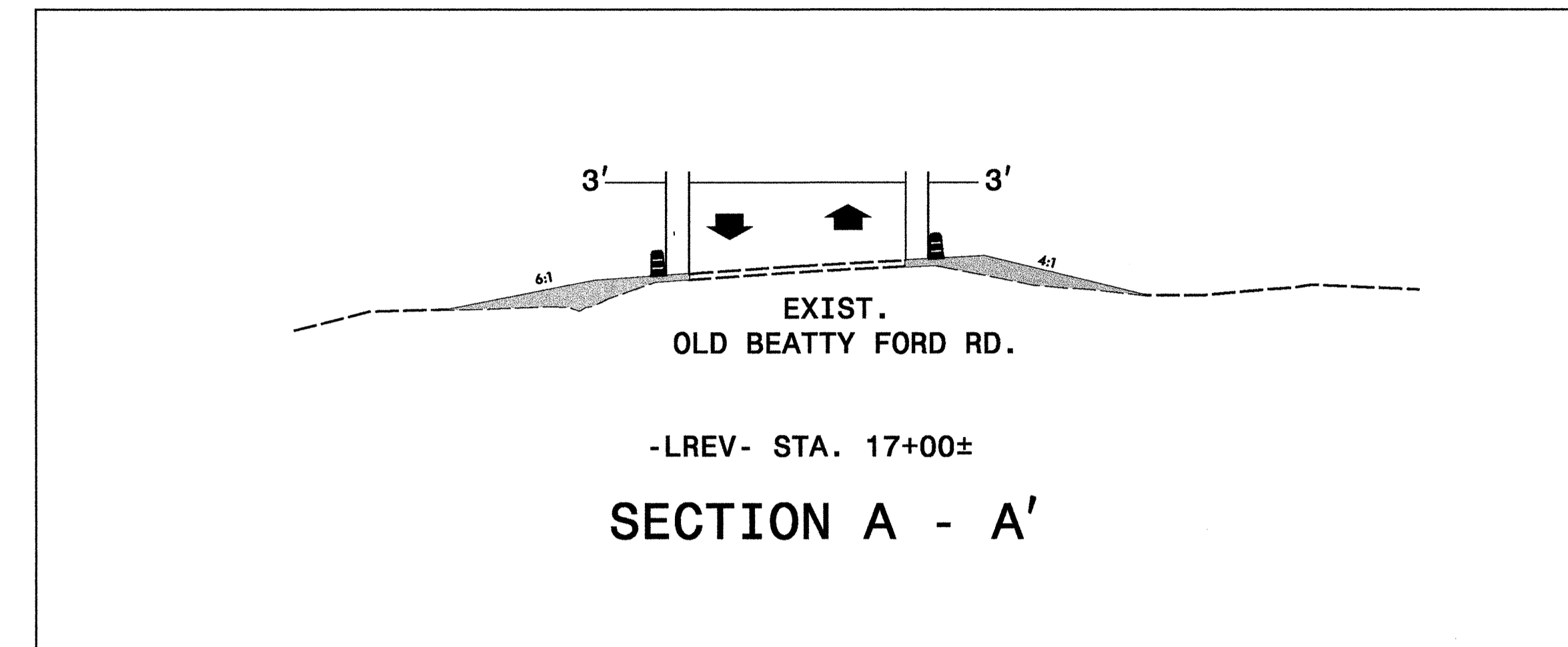
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GENERAL NOTES AND PHASING,

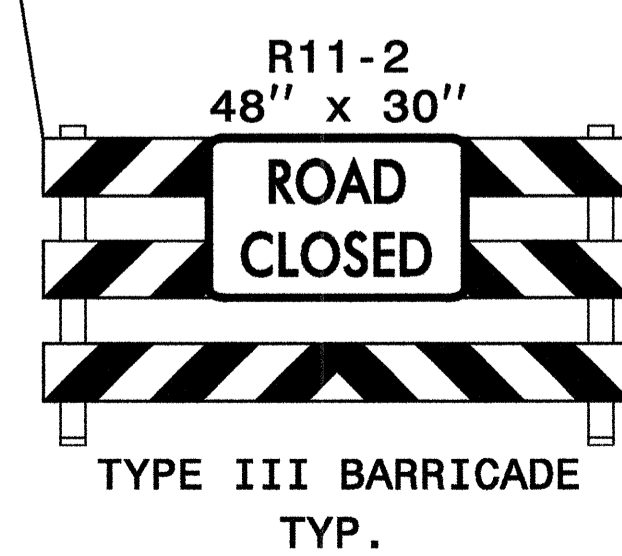
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DATE: JULY '12		
DWG. BY: GEP		
DESIGN BY: GEP		
REVIEWED BY: MTR		



BEGIN PROJECT
 -LREV- STA. 12+00±



BEGIN CONSTRUCTION
 -Y2REV- STA. 10+00±

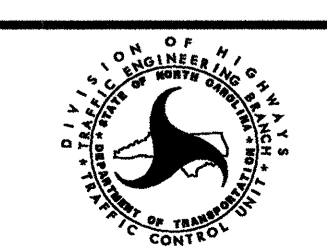


APPROVED: *Michael T. Rzepka* DATE: 5-16-12

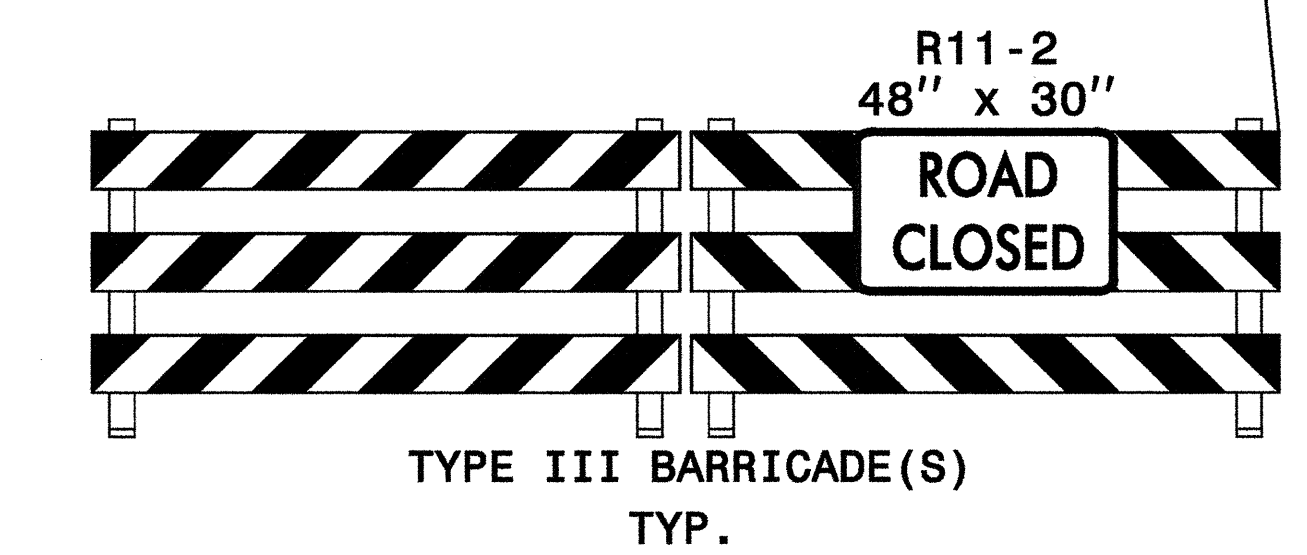
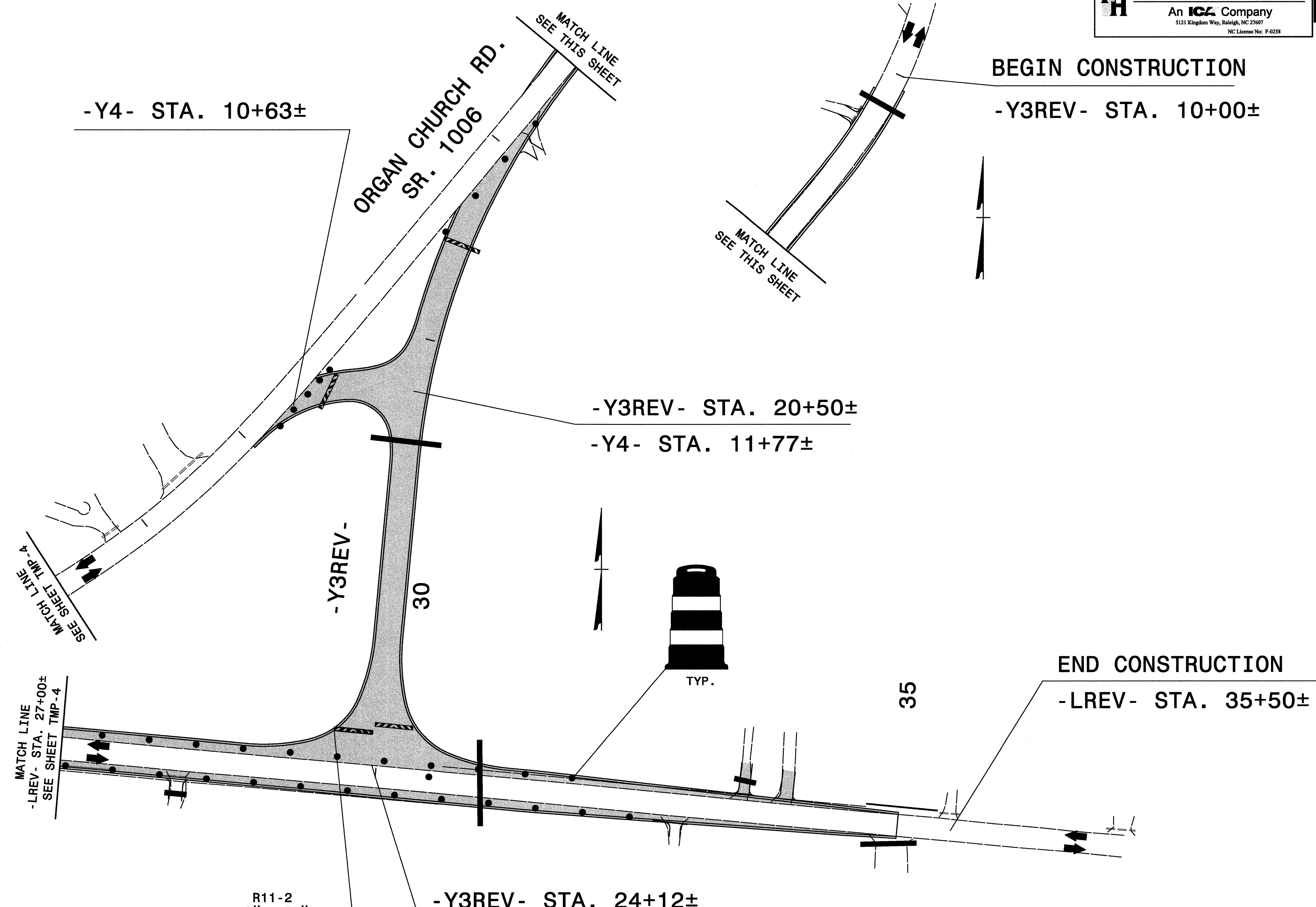


PHASE I

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 DESIGN BY: GEP
 REVIEWED BY: MTR



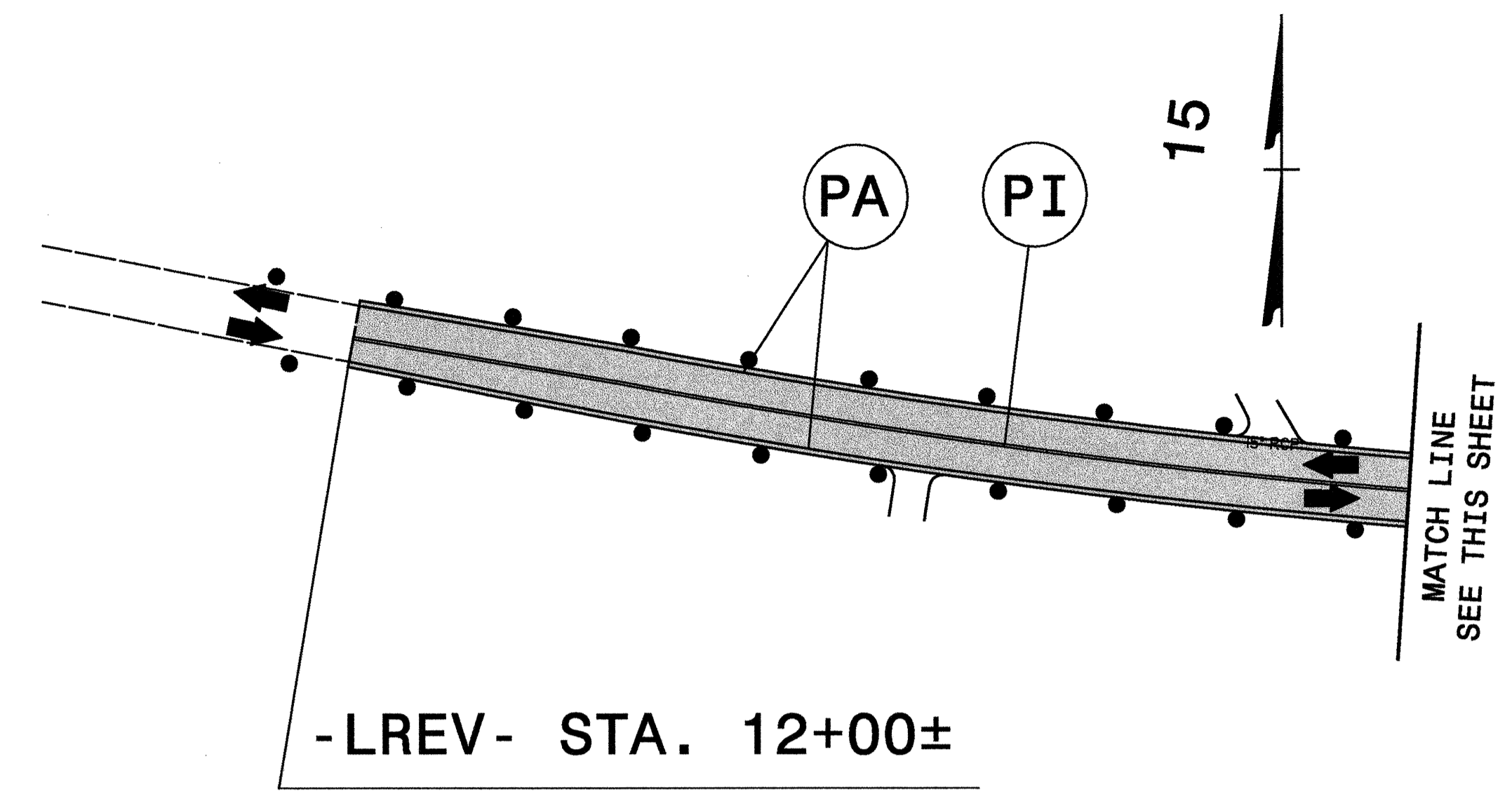
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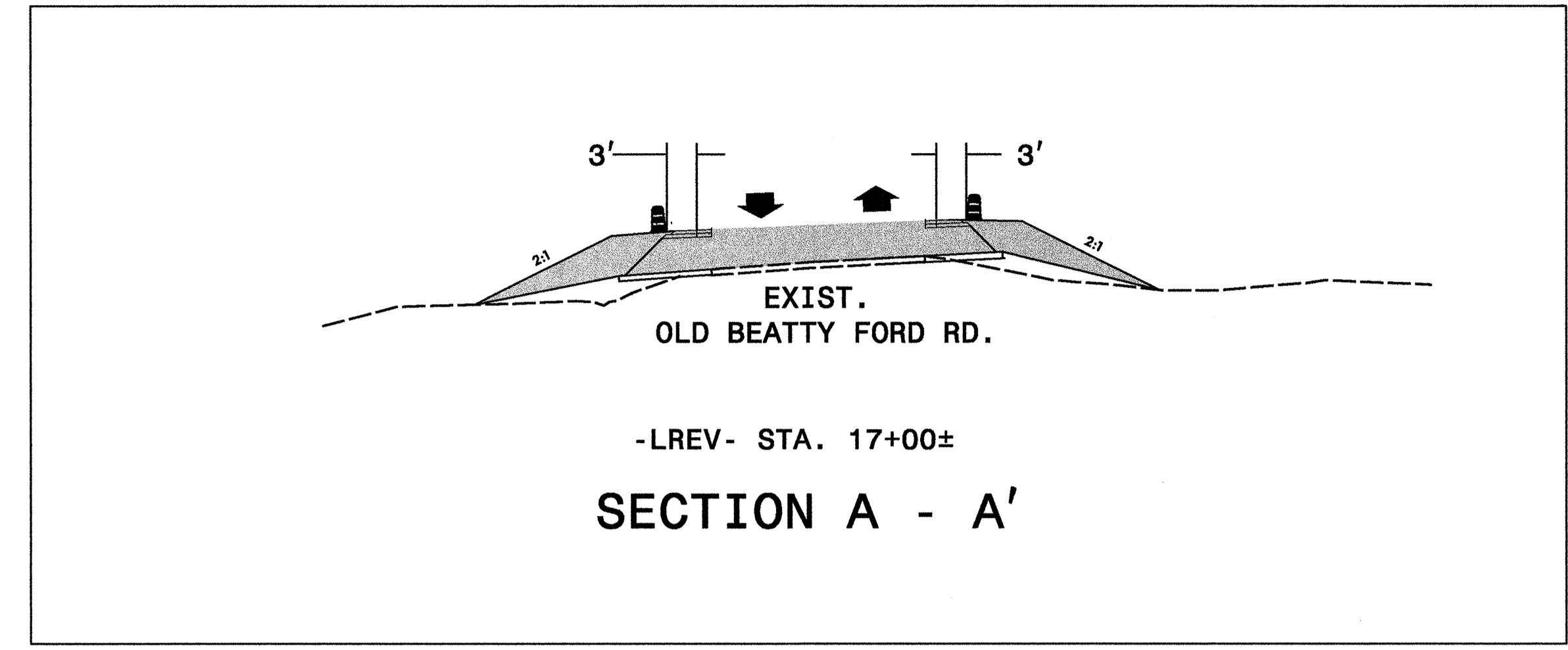
APPROVED: *Michael J. Roggen* DATE: 5-16-12

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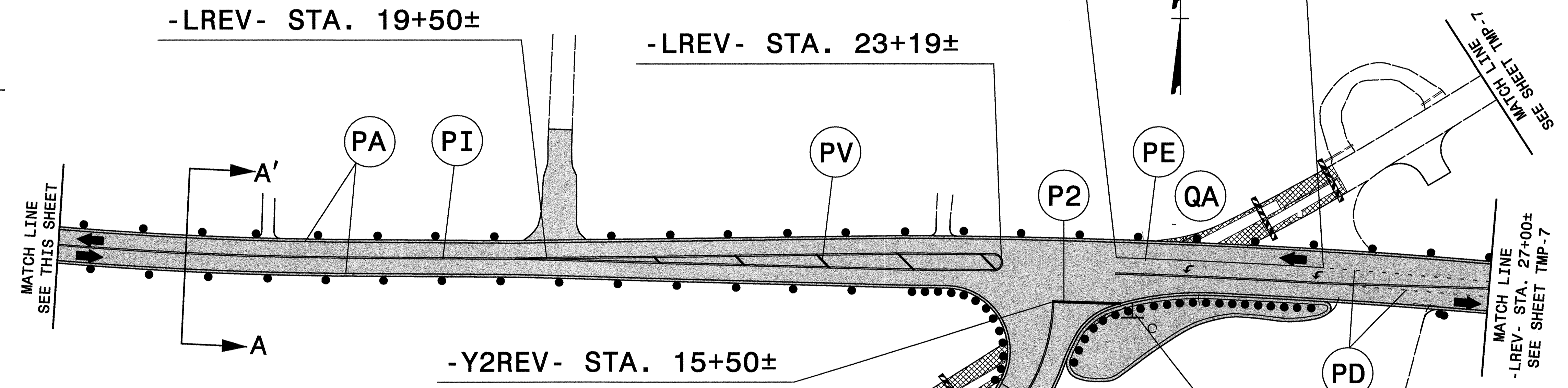


-LREV- STA. 12+00±
 TIE TO EXISTING



-LREV- STA. 24+13±

-LREV- STA. 25+72±



-LREV- STA. 19+50±

-LREV- STA. 23+19±

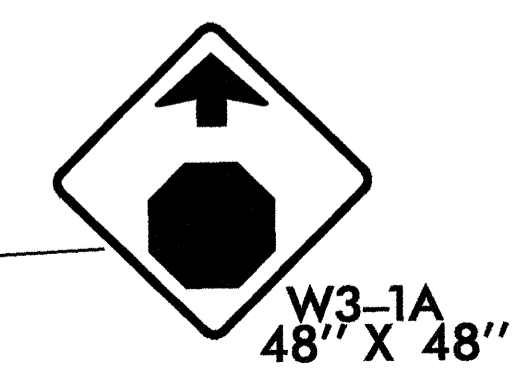
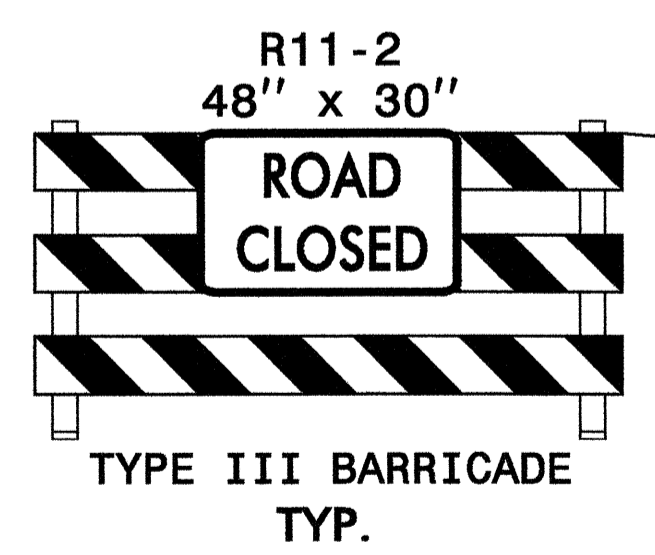
MATCH LINE
SEE THIS SHEET

MATCH LINE
-LREV- STA. 27+00±
SEE SHEET TMP-7

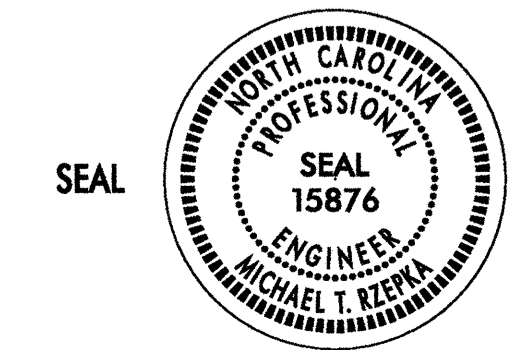
-Y2REV- STA. 15+50±

-Y2REV- STA. 10+00±

TIE TO EXISTING



APPROVED: *Michael T. Rieber* DATE: 5-16-12



PHASE II

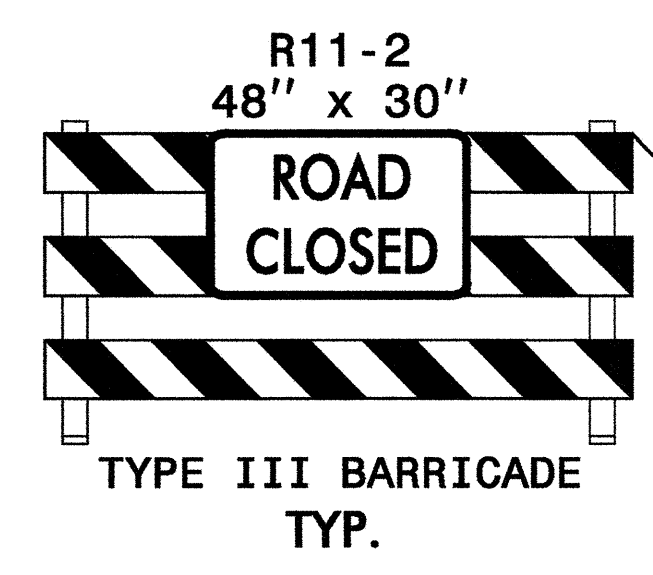
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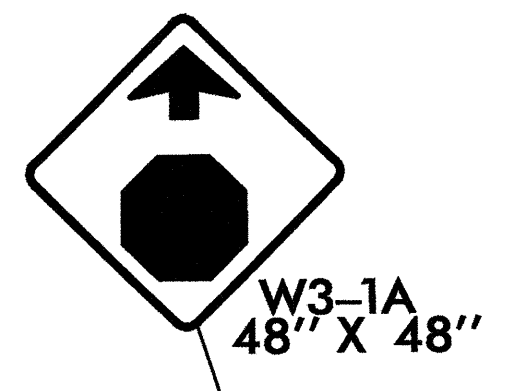
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-Y4- STA. 11+54±

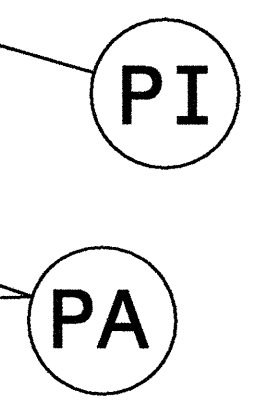


-Y4- STA. 10+00±
TIE TO EXISTING

ORGAN CHURCH RD.
SR. 1006



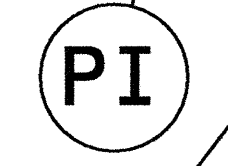
-Y3REV- STA. 10+00±
TIE TO EXISTING



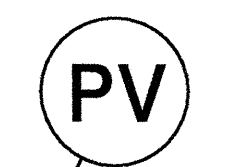
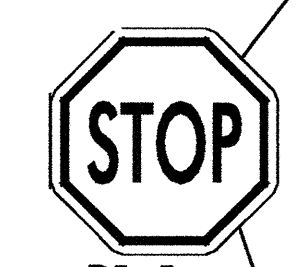
-Y3REV- STA. 20+17±



-Y3REV- STA. 20+30±

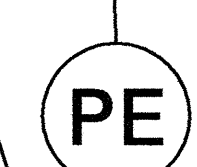


-Y3REV- STA. 23+96±



-LREV- STA. 35+50±
TIE TO EXISTING

MATCH LINE
-LREV- STA. 27+00±
SEE SHEET TMP-6

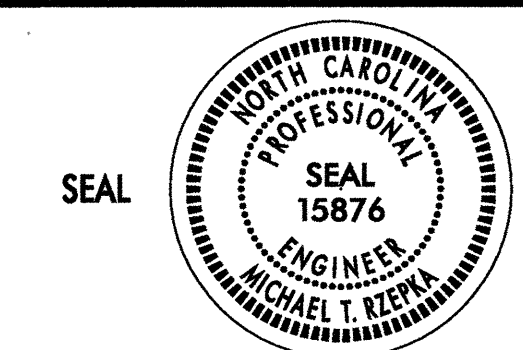


-LREV- STA. 27+15±

-LREV- STA. 30+29±

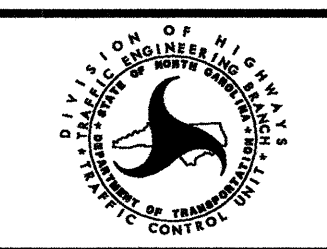
-LREV- STA. 29+75±

APPROVED: *Michael T. Rzepa* DATE: 5-16-12



PHASE II

SCALE: NONE
DATE: MAY '12
DWG. BY: GEP
DESIGN BY: GEP
REVIEWED BY: MTR



REVISIONS	