STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

STATE PROJECT REFERENCE NO.	SHEET NO.
R-2408B	TCP-1

PLAN FOR PROPOSED TRAFFIC CONTROL, MARKING & DELINEATION

MACON COUNTY

R-2408B

TIP PROJECT:

ROADWAY STANDARD DRAWINGS

THE FOLLOWING ROADWAY STANDARDS AS APPEAR 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.	TITLE
1101.02	TEMPORARY LANE CLOSURES
1101.03	TEMPORARY ROAD 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 IMPACT ATTENUATOR
1170.01	PORTABLE CONCRETE BARRIER
1180.01	SKINNY-DRUM
1205.01	PAVEMENT MARKINGS - LINE TYPES & OFFSETS
1205.02	PAVEMENT MARKINGS - 2 LANE & MULTILANE ROADWAYS
1205.04	PAVEMENT MARKINGS - INTERSECTIONS
1205.05	PAVEMENT MARKINGS - TURN LANES
1205.08	PAVEMENT MARKINGS - SYMBOLS & WORD MESSAGES
1205.09	PAVEMENT MARKINGS - PAINTED ISLANDS
1261.01	GUARDRAIL & BARRIER DELINEATOR SPACING
1261.02	GUARDRAIL & BARRIER DELINEATOR TYPES
1262.01	GUARDRAIL END DELINEATION

INDEX OF SHEETS

LEGEND

GENERAL

- DIRECTION OF TRAFFIC FLOW
- NORTH ARROW
- PROPOSED PVMT. -------- EXIST. PVMT.
- WORK AREA
- REMOVAL OF EXISTING PAVEMENT

TRAFFIC CONTROL DEVICES

- TYPE I BARRICADE
- TYPE II BARRICADE
- TYPE III BARRICADE
- CONE
- DRUM / SKINNY DRUM
- FLASHING ARROW PANEL (TYPE C)
- STATIONARY SIGN
- PORTABLE SIGN
- STATIONARY OR PORTABLE SIGN
- CRASH CUSHION
- CHANGEABLE MESSAGE SIGN
- TRUCK MOUNTED IMPACT ATTENUATOR (TMIA)
- POLICE
- FLAGGER

PAVEMENT MARKINGS

- CRYSTAL/CRYSTAL PAVEMENT MARKER
- YELLOW/YELLOW PAVEMENT MARKER
- CRYSTAL/RED PAVEMENT MARKER
- PAVEMENT MARKING SYMBOLS

APPROVED: _____

DATE: _____

NORTH CAROLINA PROFESSIONAL SEAL 027856 ENGINEER JENNIFER L. PORTANOVA

2/3/10

PLAN PREPARED BY: N.C.D.O.T. WORK ZONE TRAFFIC CONTROL UNIT

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PROJ. REFERENCE NO.	SHEET NO.
R-2408B	TCP-2

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 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
NC 28 [FROM BEGINNING OF PROJECT TO -L- STA. 114+00]	MONDAY THRU FRIDAY FROM 6:00 A.M. TO 9:00 A.M.

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

ROAD NAME

NC 28
SR 1434 (AIRPORT RD.)

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 9:00 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 9:00 A.M. THURSDAY AND 6:00 A.M. MONDAY.
4. FOR MEMORIAL DAY, BETWEEN THE HOURS OF 9:00 A.M. FRIDAY TO 6:00 A.M. TUESDAY.
5. FOR INDEPENDENCE DAY, BETWEEN THE HOURS OF 9:00 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 9:00 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 9:00 A.M. FRIDAY AND 6:00 A.M. TUESDAY.
7. FOR THANKSGIVING DAY, BETWEEN THE HOURS OF 9:00 A.M. TUESDAY TO 6:00 A.M. MONDAY.
8. FOR CHRISTMAS, BETWEEN THE HOURS OF 9:00 A.M. THE FRIDAY BEFORE THE WEEK OF CHRISTMAS DAY AND 6:00 A.M. THE FOLLOWING TUESDAY AFTER THE WEEK OF CHRISTMAS.
9. FOR LEAF SEASON, FROM 9:00 A.M. ON OCTOBER 1 TO 6:00 AM ON OCTOBER 31.

C) DO NOT CLOSE ROADS AS FOLLOWS:

ROAD NAME	DAY AND TIME RESTRICTIONS
NC 28 SR 1434 (AIRPORT RD.)	FOR LEAF SEASON FROM 6:00 A.M. ON OCTOBER 1 TO 9:00 A.M. ON OCTOBER 31

D) DO NOT STOP TRAFFIC AS FOLLOWS:

ROAD NAME	DAY AND TIME RESTRICTIONS	DURATION AND OPERATION
NC 28	MONDAY THRU FRIDAY FROM 6:00 A.M TO 9:00 A.M	FOR MORE THAN 15 MINUTES FOR TRAFFIC SHIFTS

E) 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

F) 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.

G) WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING WITHIN 15 FT OF AN 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.

H) 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.

WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING ON THE SHOULDER ADJACENT TO A DIVIDED FACILITY AND WITHIN 10 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.

I) 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.

J) 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.

K) DO NOT INSTALL MORE THAN 1000 FT OF LANE CLOSURE ON NC 28 MEASURED FROM THE BEGINNING OF THE MERGE TAPER TO THE END OF THE LANE CLOSURE.

L) DO NOT INSTALL MORE THAN 2 SIMULTANEOUS LANE CLOSURES, IN ANY ONE DIRECTION, ON NC 28.

M) PROVIDE A MINIMUM OF 1/2 MILE BETWEEN LANE CLOSURES, MEASURED FROM THE END OF ONE CLOSURE TO THE FIRST SIGN OF THE NEXT LANE CLOSURE.

N) PROVIDE TRAFFIC CONTROL FOR APPROPRIATE LANE CLOSURES FOR SURVEYING DONE BY THE DEPARTMENT.

APPROVED:_____ DATE:_____

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 027856 JENNIFER L. PORTANOVA 3/15/10

GENERAL NOTES

SCALE:	NONE
DATE:	NOV. 08
DWG. BY:	MHS
DESIGN BY:	MHS
REVIEWED BY:	JLP

REVISIONS

CADD FILE

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GENERAL NOTES CONTINUED

PAVEMENT EDGE DROP OFF REQUIREMENTS

O) 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.

P) 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) 350 FT. IN ADVANCE AND A MINIMUM OF EVERY HALF MILE THROUGHOUT THE UNEVEN AREA.

TRAFFIC PATTERN ALTERATIONS

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

SIGNING

R) 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.

S) PROVIDE PERMANENT SIGNING.

T) PROVIDE DETOUR SIGNING WITHIN AND OFF THE PROJECT LIMITS.

U) COVER OR REMOVE ALL DETOUR SIGNS WITHIN AND OFF THE PROJECT LIMITS WHEN A DETOUR IS NOT IN OPERATION.

V) ENSURE ALL NECESSARY SIGNING IS IN PLACE PRIOR TO ALTERING ANY TRAFFIC PATTERN.

W) INSTALL BLACK ON ORANGE "DIP" SIGNS (W8-2) AND/OR "BUMP" SIGNS (W8-1) 350 FT. IN ADVANCE OF THE UNEVEN AREA, OR AS DIRECTED BY THE ENGINEER.

TRAFFIC BARRIER

X) INSTALL TEMPORARY BARRIER ACCORDING TO THE TRAFFIC CONTROL 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 TRAFFIC CONTROL 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 TRAFFIC CONTROL 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.

Y) 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 IMPACT 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:

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

Z) SPACE CHANNELIZING DEVICES IN WORK AREAS NO GREATER THAN TWICE THE POSTED SPEED LIMIT (MPH), EXCEPT 10 FT ON-CENTER IN RADII, AND 3 FT OFF THE EDGE OF AN OPEN TRAVELWAY, WHEN LANE CLOSURES ARE NOT IN EFFECT. WHEN SKINNY DRUMS ARE ALLOWED, REFER TO SECTION 1180 OF STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES OR AS SHOWN IN THE PLANS.

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

BB) PLACE ADDITIONAL SETS OF THREE CHANNELIZING DEVICES DRUMS PERPENDICULAR TO THE EDGE OF TRAVELWAY ON 500 FT CENTERS WHEN UNOPENED LANES ARE CLOSED TO TRAFFIC.

PAVEMENT MARKINGS AND MARKERS

CC) INSTALL TEMPORARY PAVEMENT MARKINGS AND TEMPORARY PAVEMENT MARKERS ON INTERIM LAYERS OF PAVEMENT AS FOLLOWS:

ROAD NAME	MARKING	MARKER
ALL ROADS	PAINT	NONE

DD) 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.

EE) TIE PROPOSED PAVEMENT MARKING LINES TO EXISTING PAVEMENT MARKING LINES.

FF) REMOVE/REPLACE ANY CONFLICTING/DAMAGED PAVEMENT MARKINGS AND MARKERS BY THE END OF EACH DAY'S OPERATION.

APPROVED:________________ DATE:________

NORTH CAROLINA PROFESSIONAL SEAL 027856 ENGINEER JENNIFER L. PORTANOVA 2/2/10

GENERAL NOTES CONTINUED

SCALE:	NONE
DATE:	NOV. 08
DWG. BY:	MHS
DESIGN BY:	MHS
REVIEWED BY:	JLP

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

REVISIONS

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PROJ. REFERENCE NO.	SHEET NO.
R-2408B	TCP-3

PHASING

NOTES:
1. USE ROADWAY STANDARD 1101.02 SHEET 1 OF 9 FOR FLAGGING OPERATIONS.
2. MAINTAIN ACCESS TO DRIVEWAYS AT ALL TIMES UNLESS OTHERWISE NOTED IN PHASING.
3. MAINTAIN POSITIVE DRAINAGE DURING CONSTRUCTION.
4. RETURN TRAFFIC TO EXISTING TRAFFIC PATTERN BY END OF EACH WORK DAY UNLESS OTHERWISE NOTED IN PHASING.
5. REPLACE EXISTING PAVEMENT MARKINGS COVERED OR DAMAGED BY CONSTRUCTION ACTIVITY WITH TEMPORARY PAVEMENT MARKING AT END OF EACH WORK DAY.
6. CONSTRUCT ANY PROPOSED OR TEMPORARY WIDENING IN SUCH A MANNER THAT PONDING WILL NOT OCCUR IN TRAVEL LANE.
7. CONSTRUCT ALL ROADS UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE UNLESS OTHERWISE STATED IN PHASING.
8. WHEN NECESSARY, RELOCATE ANY WORK ZONE SIGNING DURING TRAFFIC SHIFTS AS DIRECTED BY THE ENGINEER.
9. MINIMUM ALLOWABLE SLOPE BETWEEN TRAFFIC AND CONSTRUCTION IS 1:1. HOWEVER, CONTRACTOR IS ENCOURAGED TO USE FLATTER SLOPES WHERE IT IS ATTAINABLE. 1:1 SLOPES SHOULD BE USED AS A LAST OPTION.
10. DURING TRAFFIC PHASING, SUPPLEMENTAL DRAINAGE PIPE, DRAINAGE STRUCTURES, GRADING, AND PAVING MAY BE REQUIRED TO MAINTAIN EXISTING DRAINAGE PATTERNS, DRIVEWAY CONNECTIONS, ECT., AND TO PROTECT THE TRAVELLING PUBLIC. SUCH ITEMS WILL BE INSTALLED AS DIRECTED BY THE ENGINEER, AND WILL BE COMPENSATED AT THE EXISTING CONTRACT LINE ITEM PRICES.

PHASE 1

STEP 1:
INSTALL ADVANCE WARNING AND WORK ZONE SPEED REDUCTION SIGNS ACCORDING TO TCP-54.

INSTALL AND COVER DETOUR SIGNS AND ROAD CLOSURE SIGNS FOR -Y6- (LEE TALENT ROAD) CLOSURE (SEE TCP-19).

STEP 2:
USING FLAGGERS, COMPLETE THE MAINTENANCE REPAIR OF EXISTING NC 28 THOUGHOUT PROJECT AS DIRECTED BY THE ENGINEER (SEE ROADWAY PLAN SHEET 2).

STEP 3:
-AWAY FROM TRAFFIC AND USING FLAGGERS, BEGIN THE FOLLOWING CONSTRUCTION (SEE TCP-4 TO TCP-18):
* PROPOSED DRAINAGE WORK, INCLUDING STAGE I CONSPAN AND TRENCHLESS INSTALLATION OF 36" PIPE -L- STA. 91+05+/-, 48" PIPE -L- STA. 109+65+/-, 36" PIPE -L- STA. 124+08+/-, AND 36" PIPE -L- STA 132+90+/-, 36" PIPES -L- STA. 151+15+/- (SEE ROADWAY PLANS FOR PIPE LOCATIONS AND EROSION CONTROL PLANS FOR HYDRAULIC SEQUENCING OF CONSPAN).
* SR 1468 (HUGHES LANE)
* TEMPORARY PAVEMENT -L- STA. 59+50+/- TO STA. 67+57+/-
* -Y3- (TEMPORARY TIE TO EXISTING NC 28)
* -L- STA. 68+05+/- TO STA. 70+85+/- (RIGHT SIDE UP TO EDGE AND ELEVATION OF EXISTING NC 28).
* -DET1REV-
* -LTEMP-
* -DET2REV- (INCLUDING PAVED PAD FOR PORTABLE CONCRETE BARRIER [PCB])
* -Y7TIE-
* -L- STA. 111+38+/- TO STA. 113+61+/- (PAVEMENT CONSTRUCTED TO EDGE AND ELEVATION OF -DET2REV- FOR PHASE 3 TRAFFIC).
* -DET3 REV-
* -Y8-
* -DET6-

-USING FLAGGERS, COMPLETE THE FOLLOWING CONSTRUCTION (SEE TCP 10 AND 10A):
* TEMPORARY PAVEMENT -L- STA. 75+32+/- TO 78+18+/ (LEFT SIDE)
* -Y4DET- (UP THROUGH FINAL LAYER OF SURFACE COURSE)
* -DET1REV- STA. 17+47+/- TO STA. 20+00+/-
* TEMPORARY -Y4- ACCESS -L- STA. 80+50+/- (TO BE USED FOR PINE RIDGE RD. TRAFFIC ACCESS TO NC 28)

-UNCOVER DETOUR SIGNS, INSTALL BARRICADES, AND CLOSE -Y6- (LEE TALLENT RD.) TO TRAFFIC AND BEGIN -Y6- CONSTRUCTION, INCLUDING PROPOSED DRAINAGE. (SEE TCP-11 AND TCP-19)

-USING FLAGGERS, MAY BEGIN WIDENING, MILLING, AND/OR WEDGING UNDER TRAFFIC IN THE FOLLOWING LOCATIONS (SEE TCP-4 TO TCP-18 AND ROADWAY PLANS):
* -L- STA. 56+50+/- TO STA. 59+29+/-
* -L- STA. 59+29+/- TO STA. 73+50+/- (LEFT SIDE WIDENING UP TO EXISTING EDGE AND ELEVATION OF NC 28).
* -Y4- (PINE RIDGE RD.)
* -Y5- (WINDY GAP RD.)
* -Y7- (AIRPORT RD.)
* -Y9- (RIVERBEND RD.)
* -L- STA. 162+19+/- TO STA. 165+27+/- (PAVEMENT CONSTRUCTED UP TO EDGE AND ELEVATION OF EXISTING NC 28).
* -L- STA. 162+19+/- TO STA. 165+27+/- (RIGHT SIDE WIDENING).
* -L- STA. 181+00+/- TO END OF PROJECT

ICT

WORK IN A CONTINUOUS MANNER TO COMPLETE PHASE 1, STEP 4 WITHIN SIXTEEN (16) CONSECUTIVE HOURS BETWEEN SUNDAY AT MIDNIGHT AND THURSDAY . SEE CONTRACT TIME AND LIQUIDATED DAMAGES.

STEP 4:
USING FLAGGERS, COMPLETE UNDERCUT EXCAVATION AT -L- STA. 83+00+/- TO STA. 83+95+/- AND PLACE BACK SATISFACTORY FILL MATERIAL TO SAFE UP SHOULDER AS DIRECTED BY THE ENGINEER (SEE ROADWAY PLANS AND TCP-4 AND TCP-11).

STEP 5:
-USING FLAGGERS, TIE-IN -Y4DET- TO PINE RIDGE ROAD, INSTALL TEMPORARY MARKINGS, AND SHIFT TRAFFIC ON -Y4DET-. INSTALL DIRECTIONAL SIGNS ON NC 28 FOR PINE RIDGE RD. TRAFFIC AND OPEN TEMPORARY ACCESS FOR PINE RIDGE RD. TO ACCESS NC 28 AT -L- STA. 80+50+/- AS SHOWN ON TCP-10A.

-USING FLAGGERS, INSTALL TEMPORARY PAVEMENT MARKINGS AND SHIFT NC 28 TRAFFIC ONTO TEMPORARY PAVEMENT FROM -L- STA. 75+32+/- TO STA. 78+18+/- (SEE TCP-10A) AND CONSTRUCT -DET1REV FROM STA. 15+19+/- TO STA. 16+70+/- AND FROM -DET1REV- STA. 17+10+/- TO STA. 17+47+/-.

STEP 6:
AWAY FROM TRAFFIC AND USING FLAGGERS, COMPLETE THE FOLLOWING CONSTRUCTION IN PREPARATION FOR PHASE II TRAFFIC PATTERN AS SHOWN ON SHEETS TCP-4 TO TCP-18:
* TEMPORARY PAVEMENT -L- STA. 59+50+/- TO STA. 67+57+/-
* -Y3-, WITH TEMPORARY TIE TO EXISTING NC 28
* -L- STA. 68+05+/- TO STA. 70+85+/- UP TO EXISTING EDGE AND ELEVATION OF NC 28
* -DET1REV-, INCLUDING TEMPORARY GUARDRAIL (SEE ROADWAY PLANS)
* -DET3REV-, INCLUDING AS MUCH OF TEMPORARY PAVEMENT MARKING AS POSSIBLE
* -DET6-

PHASE 2

STEP 1:
-PERFORM THE WORK FOR (A) AND (B) SIMULTANEOUSLY IN A CONTINUOUS MANNER:

A) USING FLAGGERS, REMOVE EXISTING CONFLICTING PAVEMENT MARKING, INSTALL TEMPORARY PAVEMENT MARKING, AND SHIFT TRAFFIC TO TEMPORARY PAVEMENT -L- STA. 59+50+/- TO STA. 68+28+/- AS SHOWN ON TCP-20 AND TCP-25.

B) USING FLAGGERS, TIE-IN -Y3- TO EXISTING RIVERBEND RD. AND TEMPORARY TIE TO NC 28, INSTALL TEMPORARY PAVEMENT MARKING, AND SHIFT TRAFFIC TO -Y3- IN A TEMPORARY TRAFFIC PATTERN (SEE TCP-20 AND TCP-25).

-USING FLAGGERS, WORK CONTINUOUSLY TO SHIFT TRAFFIC TO -DET1REV- AND PLACE TEMPORARY PAVEMENT MARKINGS AS FOLLOWS (SEE TCP-20, TCP-21, TCP-26, AND TCP-27):
1. PLACE NC 28 TRAFFIC IN SOUTHBOUND LANE OF EXISTING NC 28 IN A 1-LANE, 2-WAY PATTERN.
2. TIE-IN NORTHBOUND LANE OF -DET1REV- TO EXISTING NC 28.
3. SHIFT NC 28 TRAFFIC TO THE NORTHBOUND LANE OF -DET1REV- IN A 1-LANE, 2-WAY TRAFFIC PATTERN.
4. REMOVE DIRECTIONAL SIGNS INSTALLED ON NC 28 FOR PINE RIDGE RD. TRAFFIC IN PHASE I.
5. TIE-IN SOUTHBOUND LANE OF -DET1REV- TO EXISTING NC 28.
6. OPEN -DET1REV- TO TEMPORARY 2-LANE, 2-WAY TRAFFIC PATTERN.

-USING FLAGGERS, WORK CONTINUOUSLY TO SHIFT TRAFFIC TO -DET3REV- AND PLACE TEMPORARY PAVEMENT MARKINGS AS FOLLOWS (SEE TCP-21 TO TCP-23, AND TCP-28 TO TCP-31):
1. PLACE NC 28 TRAFFIC IN SOUTHBOUND LANE OF EXISTING NC 28 IN A 1-LANE, 2-WAY TRAFFIC PATTERN AND TIE-IN NORTHBOUND LANE OF -DET3REV- TO EXISTING NC 28.
2. TIE-IN -Y9- TEMPORARILY TO -DET3REV-, RELOCATE STOP SIGN FOR -Y9- (RIVERBEND RD.), AND INSTALL ADVANCE WARNING SIGN ON RIVERBEND RD. TO INFORM MOTORIST OF CHANGE IN STOP LOCATION.
3. SHIFT NC 28 TRAFFIC TO THE NORTHBOUND LANE OF -DET3REV- IN A 1-LANE, 2-WAY PATTERN AND TIE-IN SOUTHBOUND LANE OF -DET3REV-.
4. TIE-IN IOTLA CHURCH RD. TO -DET3REV-, RELOCATE STOP SIGN, AND PLACE IOTLA CHURCH RD. TRAFFIC INTO A TEMPORARY 2-LANE, 2-WAY TRAFFIC PATTERN.
5. OPEN *DET3REV- TO A TEMPORARY 2-LANE, 2-WAY TRAFFIC PATTERN.

-USING FLAGGERS, TIE-IN -DET6- TO EXISTING NC 28, INSTALL TEMPORARY PAVEMENT MARKINGS, AND SHIFT TRAFFIC TO -DET6- IN A TEMPORARY 2-LANE, 2-WAY TRAFFIC PATTERN AS SHOWN ON SHEETS TCP-23 AND TCP-24, AND TCP-32 AND TCP-33.

STEP 2:
-USING FLAGGERS, INSTALL TEMPORARY GUARDRAIL ON -DET3REV- AS SHOWN ON SHEET TCP-21, TCP-22, TCP-28, AND ROADWAY PLANS.

-AWAY FROM TRAFFIC AND USING FLAGGERS, BEGIN INSTALLATION OF PROPOSED SIGNAL AT -Y3- (RIVERBEND RD.) AND NC 28.

APPROVED:_____ DATE:_____

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 027856 JENNIFER L. PORTANOVA 3/15/10

PHASING

SCALE:	NONE
DATE:	JAN 2010
DWG. BY:	MHS
DESIGN BY:	MHS
REVIEWED BY:	JLP

REVISIONS

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15-MAR-2010 13:54
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msteelman AT WZTC237453

PROJ. REFERENCE NO.	SHEET NO.
R-2408B	TCP-3A

STEP 3:
AWAY FROM TRAFFIC AND USING FLAGGERS, CONSTRUCT AND COMPLETE THE FOLLOWING IN PREPARATION FOR PHASE 3 TRAFFIC PATTERN AS SHOWN ON SHEETS TCP-20 TO TCP-33:
* -L- STA. 61+05+/- TO STA. 67+00+/- (LEFT)
* -L- STA. 70+85+/- TO STA. 85+67+/- (LEFT), INCLUDING AS MUCH OF RIGHT SIDE TEMPORARY SLOPES WITHOUT INTERFERING WITH EXISTING TRAFFIC.
  NOTE: THE ACCESS POINT FOR PINE RIDGE RD. IN PHASE 1 WILL BE USED FOR ACCESS TO PROPERTY ON LEFT SIDE DURING PHASE 2. DURING THIS STEP, THE ACCESS POINT MAY BE RELOCATED TO MATCH PROPOSED GRADES. (SEE SHEETS TCP-20 AND TCP-26).
* -Y5- (WINDY GAP RD.) STA. 11+00+/- TO STA. 14+00+/-, INCLUDING PROPOSED GUARDRAIL WITH TEMPORARY ANCHOR UNIT AS SHOWN ON TCP-27.
* -Y6- (LEE TALENT ROAD) STA. 10+44+/- TO STA. 14+50+/-, INCLUDING PROPOSED GUARDRAIL WITH TEMPORARY ANCHOR UNITS AS SHOWN ON TCP-27.
* -LTEMP-, EXCLUDING AREAS THAT INTERFER WITH EXISTING TRAFFIC PATTERN.
* STAGE I OF CONSPAN AND -DET2REV- USING TEMPORARY SHORING, INCLUDING PAVED PAD FOR PCB (SEE TCP-28, TCP-28A, AND TCP-28B).
* -Y7TIE-
* -L- STA. 111+39+/- TO -L- STA. 113+61+/- (CONSTRUCT PAVEMENT TO -DET2REV- GRADE).
* -L- STA. 113+61+/- TO STA. 152+56+/- (LEFT)
* -Y8- (IOTLA CHURCH RD.)
* -L- STA. 152+87+/- TO STA. 159+00+/- (LEFT)
* TEMPORARY TIE-IN -L- STA. 159+00+/- TO STA. 162+19+/- (AS MUCH AS POSSIBLE)
* -L- STA. 162+19+/- TO STA 165+27+/- (LEFT) [-L- PAVEMENT CONSTRUCTED TO PROPOSED EDGE OF PAVEMENT AT EXISTING ELEVATION AND SLOPE OF NC 28 TO BE UTILIZED BY PHASE 3 TRAFFIC].
* TEMPORARY TIE-IN -L- STA 165+27* TO STA 168+50* (AS MUCH AS POSSIBLE)
* -L- STA. 168+50+/- TO STA. 174+50+/- (LEFT)
* TEMPORARY TIE-IN -L- STA. 174+50+/- TO STA. 179+80+/- (AS MUCH AS POSSIBLE)

STEP 4:
-AWAY FROM TRAFFC, INSTALL PORTABLE CONCRETE BARRIER (PCB) AS MUCH AS POSSIBLE ON -DET2REV- TO NOT INTERFERE WITH -Y7- (AIRPORT RD.) TRAFFIC (SEE TCP-42 AND TCP-43 FOR UPCOMING PHASE 3 TRAFFIC PATTERN).

-AWAY FROM TRAFFIC, INSTALL TEMPORARY PAVEMENT MARKINGS AS MUCH AS POSSIBLE NEEDED FOR PHASE III TRAFFIC PATTERN (SEE TCP-34 TO TCP-50).

-INSTALL AND COVER ROAD CLOSURE SIGNS AND DETOUR SIGNS FOR PHASE III, STEP 1 ROAD CLOSURE AS SHOWN ON TCP-51 AND TCP-52.

-INSTALL AND ACTIVATE CHANGEABLE MESSAGE SIGNS (CMS) USED TO NOTIFY PUBLIC FIVE (5) DAYS IN ADVANCE OF NC 28 ROAD CLOSURE (SEE TCP-51 FOR MESSAGES AND PLACEMENT).

PHASE 3

WORK IN A CONTINUOUS MANNER TO COMPLETE PHASE 3, STEP 1 AND 2 WITHIN FIFTY-FOUR (54) CONSECUTIVE HOURS STARTING FRIDAY 12:00 A.M. (MIDNIGHT) TO THE FOLLOWING MONDAY AT 6:00 AM AND OPEN ALL ROADS TO PHASE 3 TEMPORARY TRAFFIC PATTERN. SEE CONTRACT TIME AND LIQUIDATED DAMAGES.

ICT

STEP 1:
A)
UNCOVER ROAD CLOSURE SIGNS AND DETOUR SIGNS, INSTALL BARRICADES, MODIFY MESSAGES ON CMSs, AND USING LAW ENFORCEMENT, CLOSE NC 28 AND INTERSECTING -Y- LINES TO TRAFFIC BETWEEN -L- STA. 82+75+/- AND STA. 159+00+/-.

B)
* USING FLAGGERS, CONSTRUCT TEMPORARY TIE-IN FROM -L- STA. 61+05+/- TO STA. 62+50+/- (SEE TCP-34 AND TCP-39).
* USING FLAGGERS, CONSTRUCT TEMPORARY TIE-IN FROM -L- STA. 65+00+/- TO STA. 67+00+/- (SEE TCP-34 AND TCP-39).
* USING FLAGGERS, CONSTRUCT TEMPORARY TIE-IN FROM -L- STA. 70+85+/- TO STA. 73+50+/- (SEE TCP-34 AND TCP-40).
* USING FLAGGERS, CONSTRUCT RIGHT SIDE TEMPORARY SLOPES FROM -L- STA. 71+00+/- TO STA. 85+00+/- (2:1 MAX. SLOPES) (SEE TCP-34, TCP-40, AND TCP-41).
* INSTALL DIRECTIONAL SIGNS ON NC 28 TO INFORM TRAFFIC OF ACCESS POINT FOR PINE RIDGE RD. (SEE TCP-40).
* USING FLAGGERS, CONSTRUCT TEMPORARY TIE-IN FORM -L- STA. 83+50+/- TO -LTEMP- (ACROSS EXISTING NC 28 PAVEMENT) (SEE TCP-34, TCP-35, AND TCP-41).
* AWAY FROM TRAFFIC, CONSTRUCT TEMPORARY TIE-IN FOR -Y5- (WINDY GAP RD.) TO -LTEMP- AND INSTALL 36* PIPE ON -Y5- (WINDY GAP RD.) (SEE TCP-35 AND TCP-41).
* AWAY FROM TRAFFIC, CONSTRUCT TEMPORARY TIE-IN FOR -Y6- (LEE TALENT RD.) TO -LTEMP- (SEE TCP-35 AND TCP-41).
* AWAY FROM TRAFFIC, CONSTRUCT TIE-IN OF -LTEMP- ACROSS EXISTING NC 28 AT STA. 95+00+/- (SEE TCP-35 AND TCP-41).
* INSTALL REMAINING PCB AND TEMPORARY CRASH CUSHIONS ON -DET2REV- (SEE TCP-35, TCP-42, AND TCP-43).
  NOTE: LOCAL NC 28 TRAFFIC MAY NEED TO USE (-Y7-) AIRPORT RD. TO GET AROUND NC 28 CLOSURE.
* USING FLAGGERS, ADJUST PAVEMENT MARKINGS AT INTERSECTION OF -Y7- (AIRPORT RD.) AND -DET2REV-, RELOCATE STOP SIGN FOR -Y7- (AIRPORT RD.), AND INSTALL ADVANCE WARNING SIGN ON AIRPORT RD. TO INFORM MOTORIST OF CHANGE IN STOP LOCATION. (SEE TCP-35 AND TCP-43).
* AWAY FROM TRAFFIC, CONSTRUCT -L- FROM STA. 152+57+/- TO STA. 152+87+/- (SEE TCP-37 AND TCP-46).
* AWAY FROM TRAFFIC, CONSTRUCT TIE-IN OF -Y8- TO IOTLA CHURCH ROAD. (SEE TCP-37 AND TCP-46).
* AWAY FROM TRAFFIC, CONSTRUCT TEMPORARY TIE-IN FOR Y9- (RIVERBEND RD.) TO LEFT SIDE OF PROPOSED -L- AND REMOVE ADVANCE WARNING SIGNS INSTALLED IN PHASE II ON RIVERBEND RD. TO INFORM MOTORIST OF STOP LOCATION (SEE TCP-37 AND TCP-46).
* USING FLAGGERS, CONSTRUCT TEMPORARY TIE-IN FOR -L- STA. 159+00+/- TO STA. 162+19+/- (SEE TCP-37, TCP-46, AND TCP-47).
* USING FLAGGERS, CONSTRUCT TEMPORARY TIE-IN FOR -L- STA. 165+27+/- TO STA. 168+50+/- (SEE TCP-37 AND TCP-47).
* PLACE TEMPORARY PAVEMENT MARKING FOR PHASE III TEMPORARY TRAFFIC PATTERN.
  NOTE: UTILIZE PROPOSED SHOULDER FOR TRAFFIC IN AREAS WHERE TRAFFIC IS SHIFTED TO PROPOSED LEFT SIDE.

ICT

STEP 2:
REMOVE BARRICADES, DEACTIVATE CMSs, COVER ROAD CLOSURE AND DETOUR SIGNING, AND OPEN ALL ROADS TO TRAFFIC IN PHASE 3 TEMPORARY TRAFFIC PATTERN SHOWN ON TCP-34 TO TCP-50.

STEP 3:
-REMOVE CMSs, ROAD CLOSURE SIGNS, AND DETOUR SIGNS NO LONGER NEEDED.

-AWAY FROM TRAFFIC AND USING FLAGGERS, BEGIN CONSTRUCTION OF FOLLOWING: (SEE TCP-34 TO TCP-50).
* REMOVE EXISTING PAVEMENT NO LONGER NEEDED FOR TRAFFIC.
* RIGHT SIDE OF PROPOSED -L-.
* -Y4- (PINE RIDGE RD.).
* WEDGING ON -LTEMP- FROM STA. 85+00+/- TO STA. 97+25+/-.
NOTE: INSTALL AS MUCH OF PROPOSED GUARDRAIL ALONG -LTEMP- WITHOUT INTERFERRING WITH TRAFFIC ON -DET2REV-

-AWAY FROM TRAFFIC, COMPLETE CONSPAN STAGE II AND RIGHT SIDE -L- STA. 100+00+/- TO STA 116+61+/- (SEE TCP-35 AND TCP-43).

-INSTALL AND COVER DETOUR AND ROAD CLOSURE SIGNS TO BE USED IN STEP 4.

WORK IN A CONTINUOUS MANNER TO COMPLETE PHASE 3, STEP 4 THRU 7 WITHIN TWENTY-FOUR (24) CONSECUTIVE HOURS BETWEEN FRIDAY 12:00 A.M. (MIDNIGHT) TO THE FOLLOWING MONDAY AT 6:00 AM AND OPEN AIRPORT RD TO TEMPORARY TRAFFIC PATTERN ON TCP-49 AND TCP-50. SEE CONTRACT TIME AND LIQUIDATED DAMAGES.

ICT

STEP 4:
INSTALL BARRICADES, UNCOVER DETOUR AND ROAD CLOSURE SIGNS, AND CLOSE AIRPORT RD. TO TRAFFIC (SEE TCP-53).

STEP 5:
USING FLAGGERS, TIE-IN RIGHT SIDE -L- AT STA. 100+00+/- AND -L- STA. 116+61+/-, INSTALL TEMPORARY PAVEMENT MARKINGS, AND SHIFT NC 28 TRAFFIC TO RIGHT SIDE BETWEEN -L- STA. 100+00+/- TO -L- STA. 116+61+/- IN A TEMPORARY 2-LANE, 2-WAY TRAFFIC PATTERN USING PROPOSED SHOULDERS (SEE TCP-49 AND TCP-50).

STEP 6:
AWAY FROM TRAFFIC, REMOVE ENOUGH PCB AND TEMPORARY CRASH CUSHION TO CONSTRUCT -Y7- TIE-IN.

REMOVE ADVANCE WARNING SIGNS INSTALLED ON AIRPORT ROAD IN PHASE III, STEP 1 FOR STOP LOCATION.

STEP 7:
REMOVE BARRICADES, COVER DETOUR SIGNS, AND OPEN AIRPORT RD. TO TRAFFIC (SEE TCP-50).

STEP 8:
-AWAY FROM TRAFFIC AND USING FLAGGERS, BEGIN LEFT SIDE -L- STA. 100+00+/- AND STA. 113+61+/-, INCLUDING PROPOSED GUARDRAIL (SEET TCP-49 AND TCP-50).

-USING FLAGGERS, COMPLETE LEFT SIDE -Y4- (PINE RIDGE RD.), INSTALL TEMPORARY PAVEMENT MARKING, AND SHIFT TRAFFIC IN TEMPORARY TRAFFIC PATTERN TO COMPLETE -Y4- (PINE RIDGE RD. (SEE TCP-40A).

STEP 9:
AWAY FROM TRAFFIC AND USING FLAGGERS, COMPLETE CONSTRUCTION OF THE FOLLOWING:
* PCB AND TEMPORARY CRASH CUSHION REMOVAL ON -DET2REV-
* PAVEMENT REMOVAL
* PROPOSED SIGNAL AT -Y7- (AIRPORT RD.) AND NC 28
* PROPOSED DRAINAGE
* PROPOSED GUARDRAIL IN ALL AREAS
* SR 1468 (HUGHES LANE)
* -Y3-
* -Y4- (PINE RIDGE RD.)
* -Y5- (WINDY GAP RD.)
* -Y6- (LEE TALENT) TIE-IN
* -Y9- (RIVERBEND RD.)
* -L-
NOTE: COMPLETE FINAL PAVEMENT STRUCTURE USING MILLING AND/OR WEDGING AS DIRECTED BY THE ENGINEER (SEE ROADWAY PLANS)

PHASE 4

STEP 1:
USING FLAGGERS, PLACE THE FINAL SURFACE AND FINAL PAVEMENT MARKING, SHIFT TRAFFIC TO FINAL TRAFFIC PATTERN, AND ACTIVATE PROPOSED SIGNALS.

STEP 2:
REMOVE ALL WORK ZONE TRAFFIC CONTROL DEVICES.

APPROVED:_____ DATE:_____

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 027856 JENNIFER L PORTANOVA 2/4/10

PHASING

SCALE:	NONE
DATE:	JAN 2010
DWG. BY:	MHS
DESIGN BY:	MHS
REVIEWED BY:	JLP

REVISIONS

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mstegeman AT WZ10237453

PROJ. REFERENCE NO.	SHEET NO.
R-2408B	TCP-3B

TEMPORARY PAVEMENT MARKING SCHEDULE

SYMBOL	DESCRIPTION	PAY ITEM QUANTITY		TOTAL	
	TEMPORARY				
	PAVEMENT MARKINGS				
	PAINT(24")				
P4	WHITE STOPBAR (2X)	480	LF		
			TOTAL	480	LF
	PAINT(4")				
PA	WHITE EDGELINE (2X)	140000	LF		
PD	2 FT. WHITE MINISKIP (2X)	254	LF		
PE	WHITE SOLID LANE LINE (2X)	560	LF		
PI	YELLOW DOUBLE CENTER (2X)	140000	LF		
			TOTAL	280814	LF
	PAINTMARKING SYMBOLS				
QA	LEFT TURN ARROW (2X)	8	EA		
QB	RIGHT TURN ARROW (2X)	8	EA		
			TOTAL	16	EA

NOTE: FOR EACH PAINT PAVEMENT MARKING ITEM, 1X IMPLIES A SINGLE APPLICATION, 2X IMPLIES TWO APPLICATIONS, AND 3X IMPLIES THREE APPLICATIONS.

APPROVED:_____ DATE:_____

NORTH CAROLINA PROFESSIONAL SEAL 027856 ENGINEER JENNIFER L. PORTANOVA
2/2/10

TEMPORARY PAVEMENT MARKING SCHEDULE

SCALE:	NONE
DATE:	JAN 2010
DWG. BY:	MHS
DESIGN BY:	MHS
REVIEWED BY:	JLP

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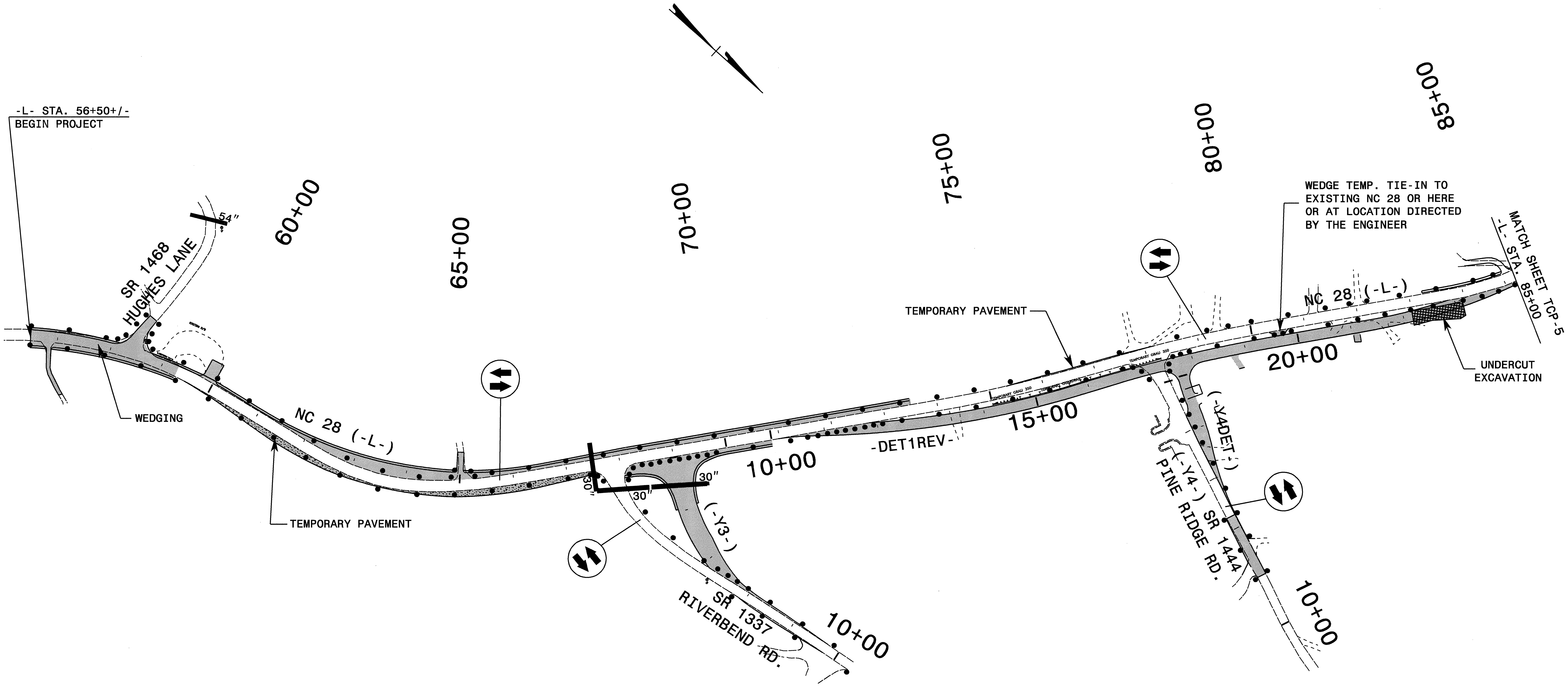
msteelman AT WZTC237453

PROJ. REFERENCE NO.	SHEET NO.
R-2408B	TCP-4



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msteelman AT WZTC237453

APPROVED:______ DATE:______

NORTH CAROLINA PROFESSIONAL SEAL 027856 ENGINEER JENNIFER L. PORTANOVA 2/2/10

PHASE 1 OVERVIEW

SCALE:	NONE
DATE:	4/2009
DWG. BY:	MHS
DESIGN BY:	MHS
REVIEWED BY:	JLP

DIVISION OF HIGHWAYS · STATE OF NORTH CAROLINA · DEPARTMENT OF TRANSPORTATION · WORK ZONE TRAFFIC CONTROL UNIT

REVISIONS

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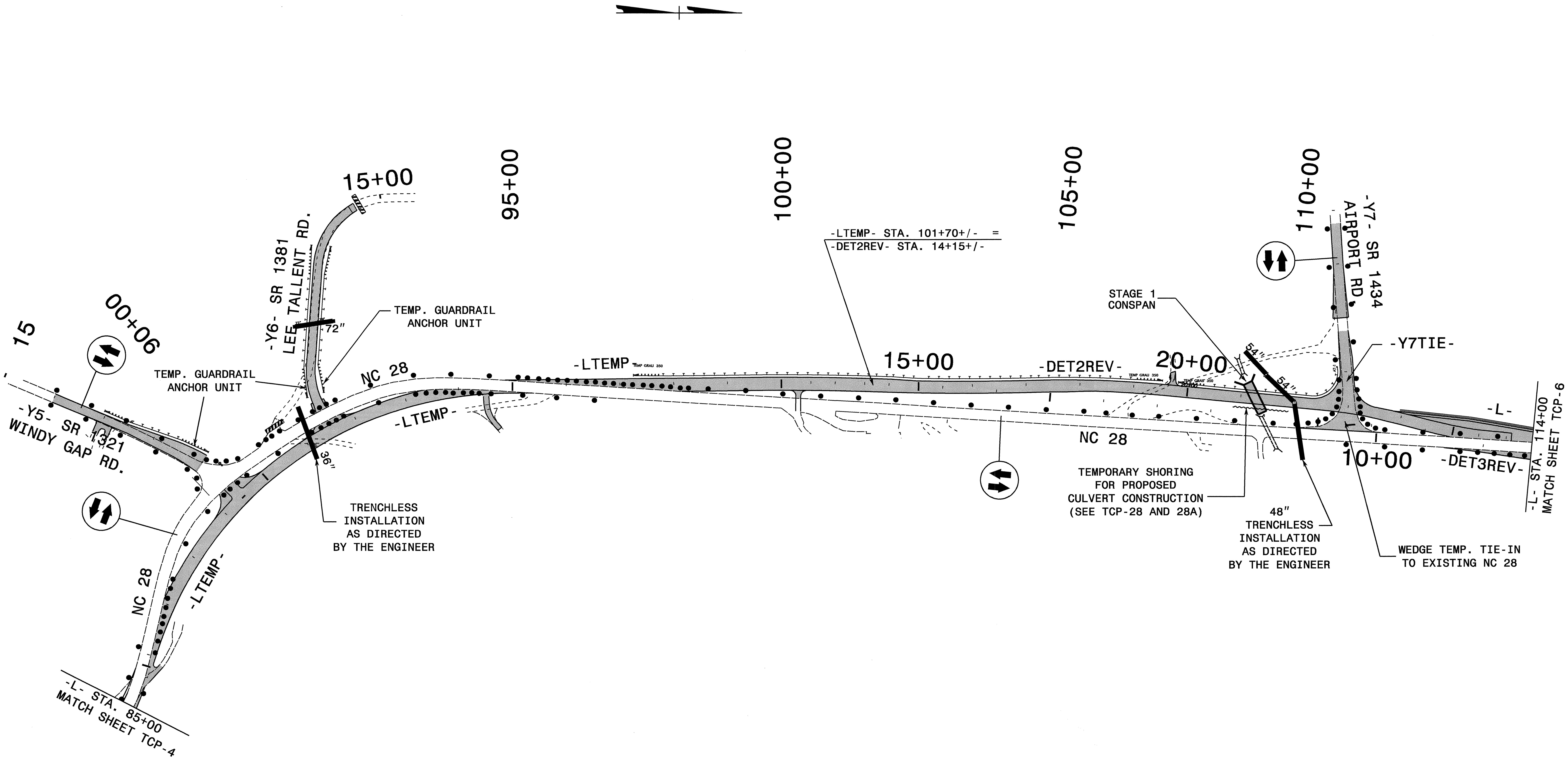
PROJ. REFERENCE NO.	SHEET NO.
R-2408B	TCP-5



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msteelman AT WZTC237453

APPROVED:__________ DATE:______

NORTH CAROLINA PROFESSIONAL SEAL 027856 ENGINEER JENNIFER L. PORTANOVA
2/2/10

PHASE 1 OVERVIEW

SCALE:	NONE
DATE:	4/2009
DWG. BY:	MHS
DESIGN BY:	MHS
REVIEWED BY:	JLP

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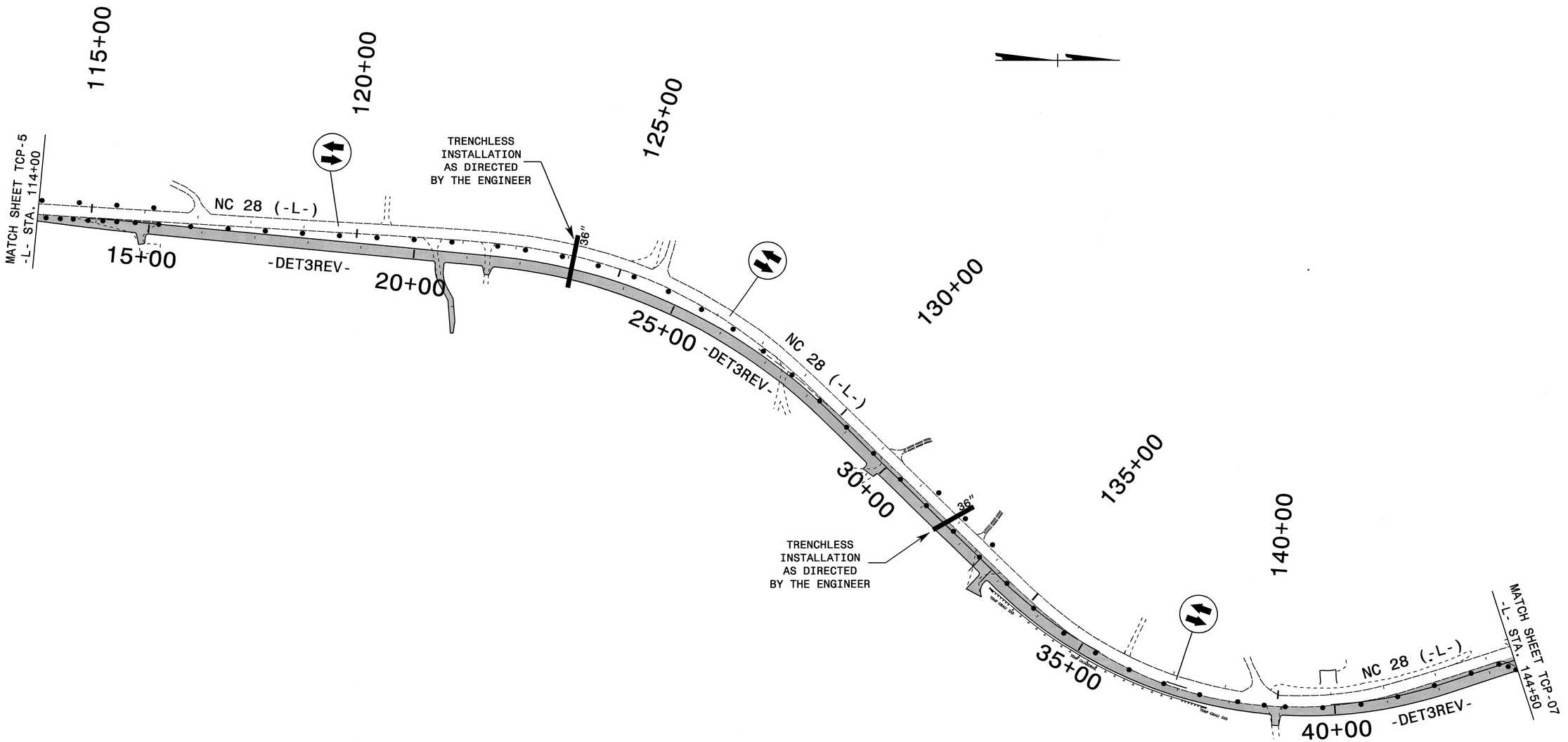
PROJ. REFERENCE NO.	SHEET NO.
R-2408B	TCP-6



APPROVED:_____ DATE:_____

NORTH CAROLINA PROFESSIONAL SEAL 027858 ENGINEER JENNIFER L. PORTANOVA 2/2/10

PHASE 1 OVERIVEW

SCALE:	NONE
DATE:	4/2009
DWG. BY:	MHS
DESIGN BY:	MHS
REVIEWED BY:	JLP

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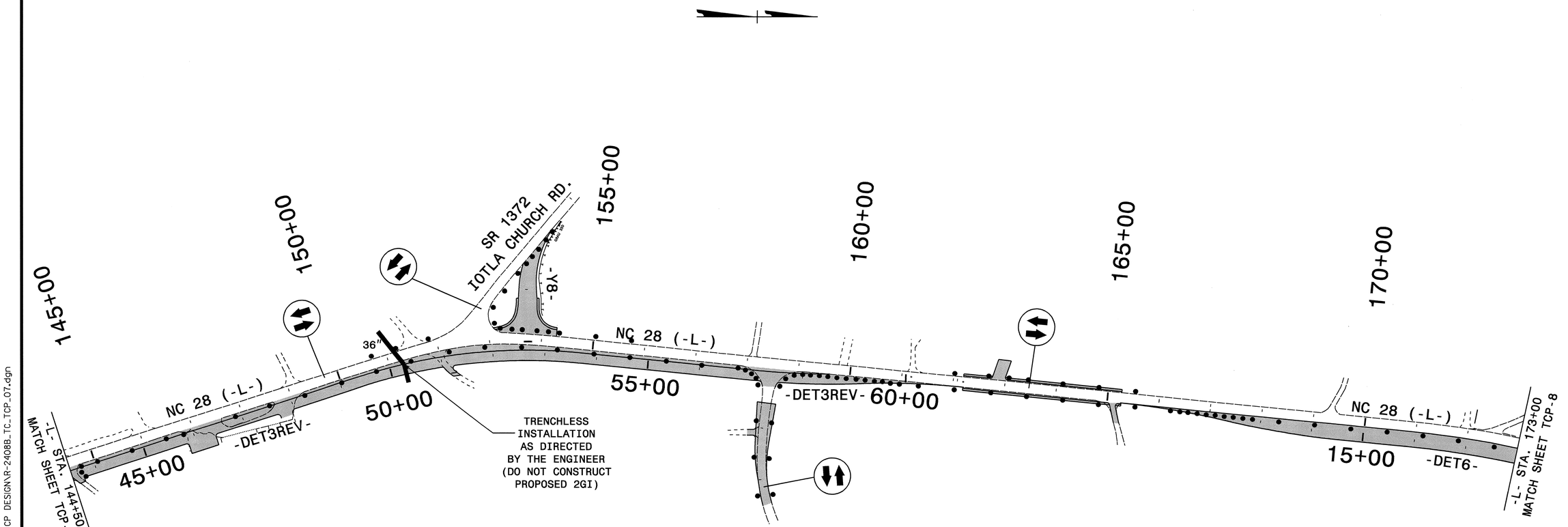
msfeelman AT WZTC237453

PROJ. REFERENCE NO.	SHEET NO.
R-2408B	TCP-7



APPROVED: _____ DATE: _____

NORTH CAROLINA PROFESSIONAL SEAL 027856 ENGINEER JENNIFER L. PORTANOVA

2/2/10

PHASE 1 OVERVIEW

SCALE:	NONE
DATE:	4/2009
DWG. BY:	MHS
DESIGN BY:	MHS
REVIEWED BY:	JLP

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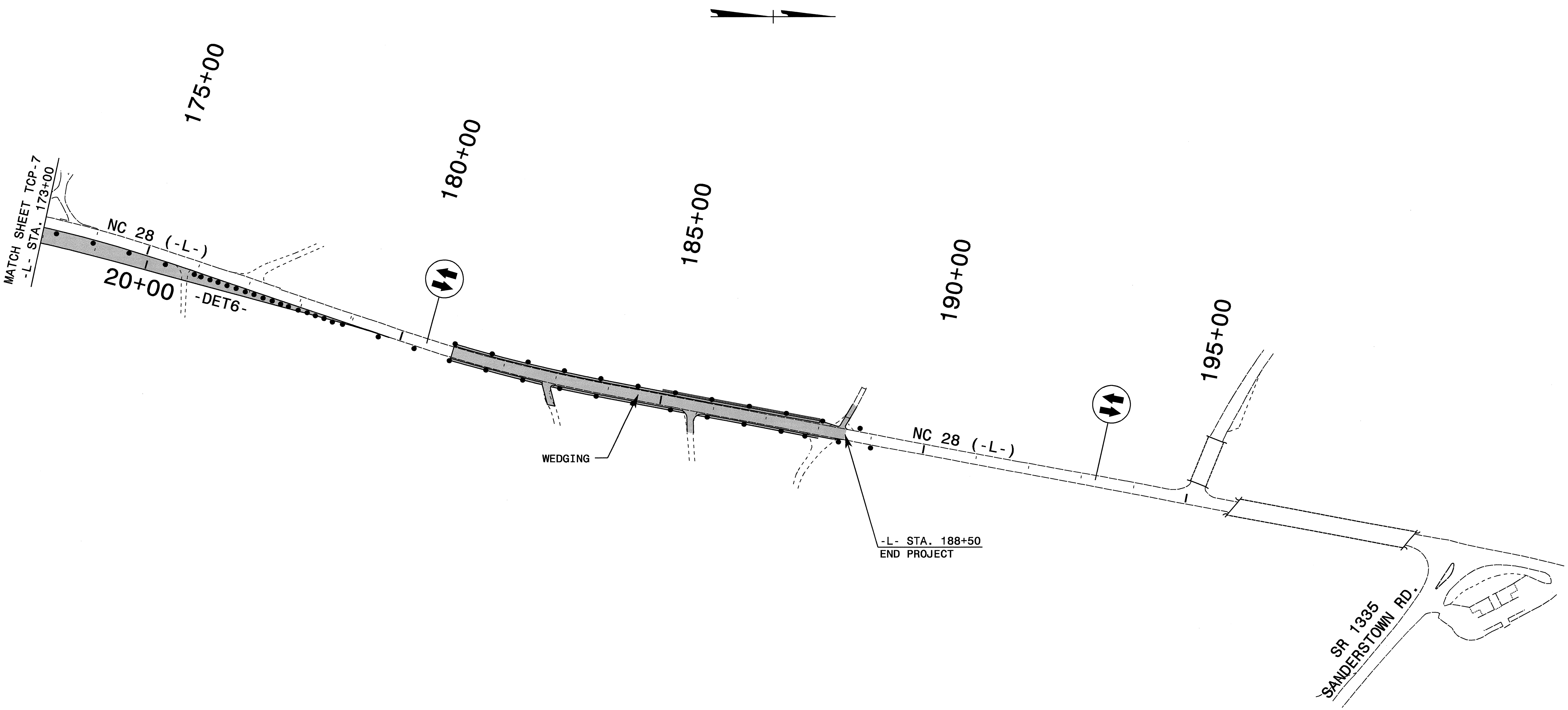
mstaelman AT WZTC237453

PROJ. REFERENCE NO.	SHEET NO.
R-2408B	TCP-8



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msteelman AT WZTC237453

APPROVED:__________ DATE:________

NORTH CAROLINA PROFESSIONAL SEAL 027856 ENGINEER JENNIFER L. PORTANOVA

2/2/10

PHASE 1 OVERVIEW

SCALE:	NONE
DATE:	4/2009
DWG. BY:	MHS
DESIGN BY:	MHS
REVIEWED BY:	JLP

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REVISIONS

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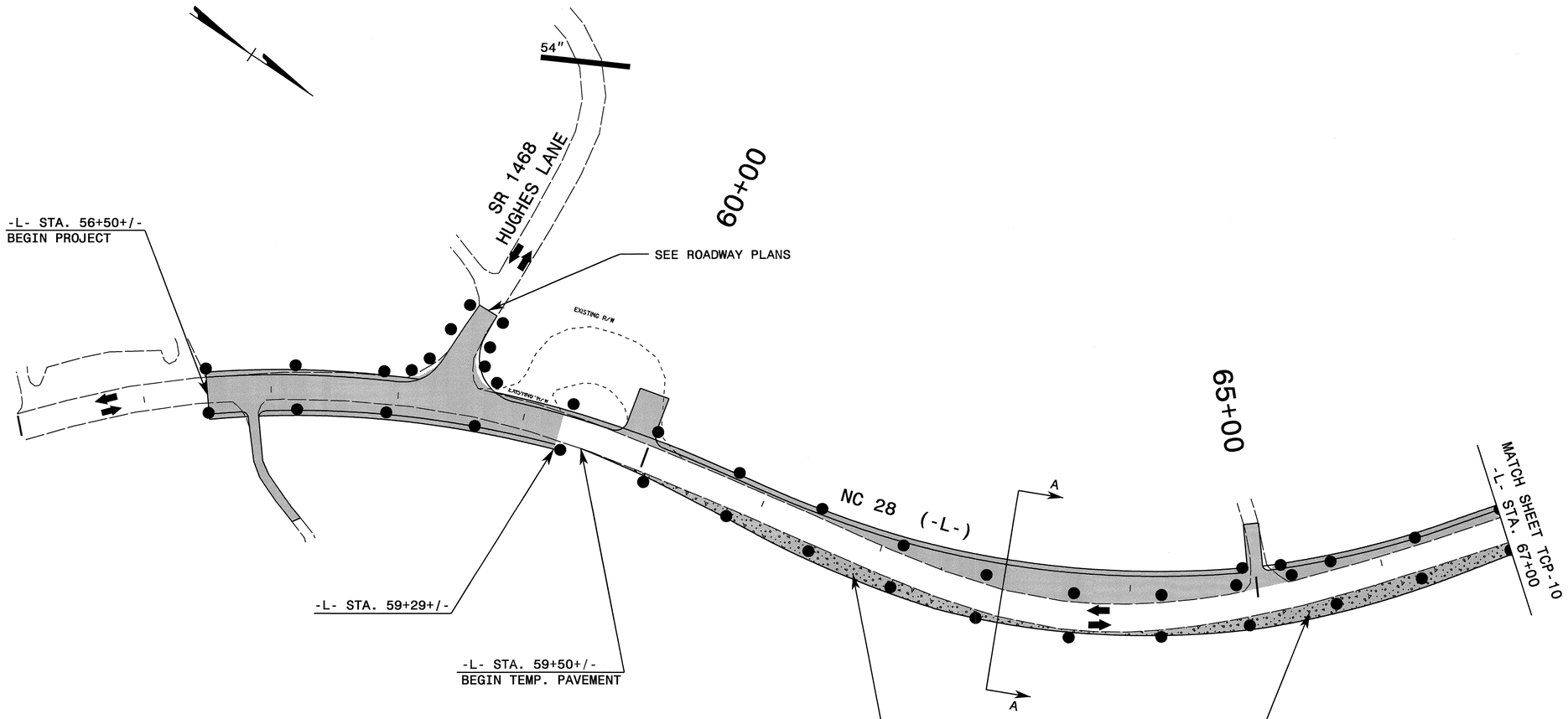
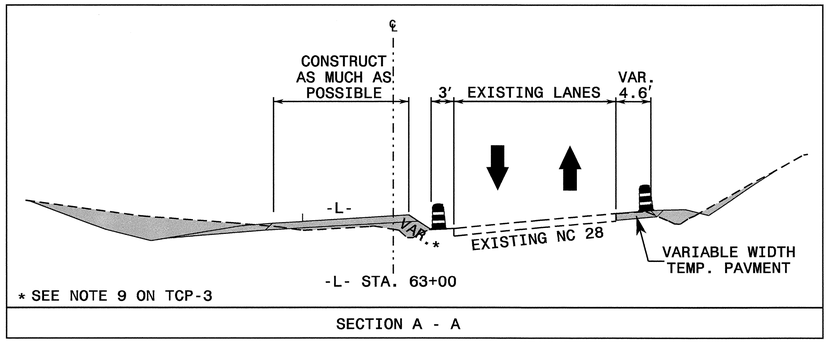
PROJ. REFERENCE NO.	SHEET NO.
R-2408B	TCP-9





SECTION A - A

APPROVED: _____ DATE: _____

NORTH CAROLINA PROFESSIONAL SEAL 027856 ENGINEER JENNIFER L PORTANOVA

2/2/10

PHASE 1 DETAIL

SCALE:	NONE
DATE:	5/2009
DWG. BY:	MHS
DESIGN BY:	MHS
REVIEWED BY:	JLP

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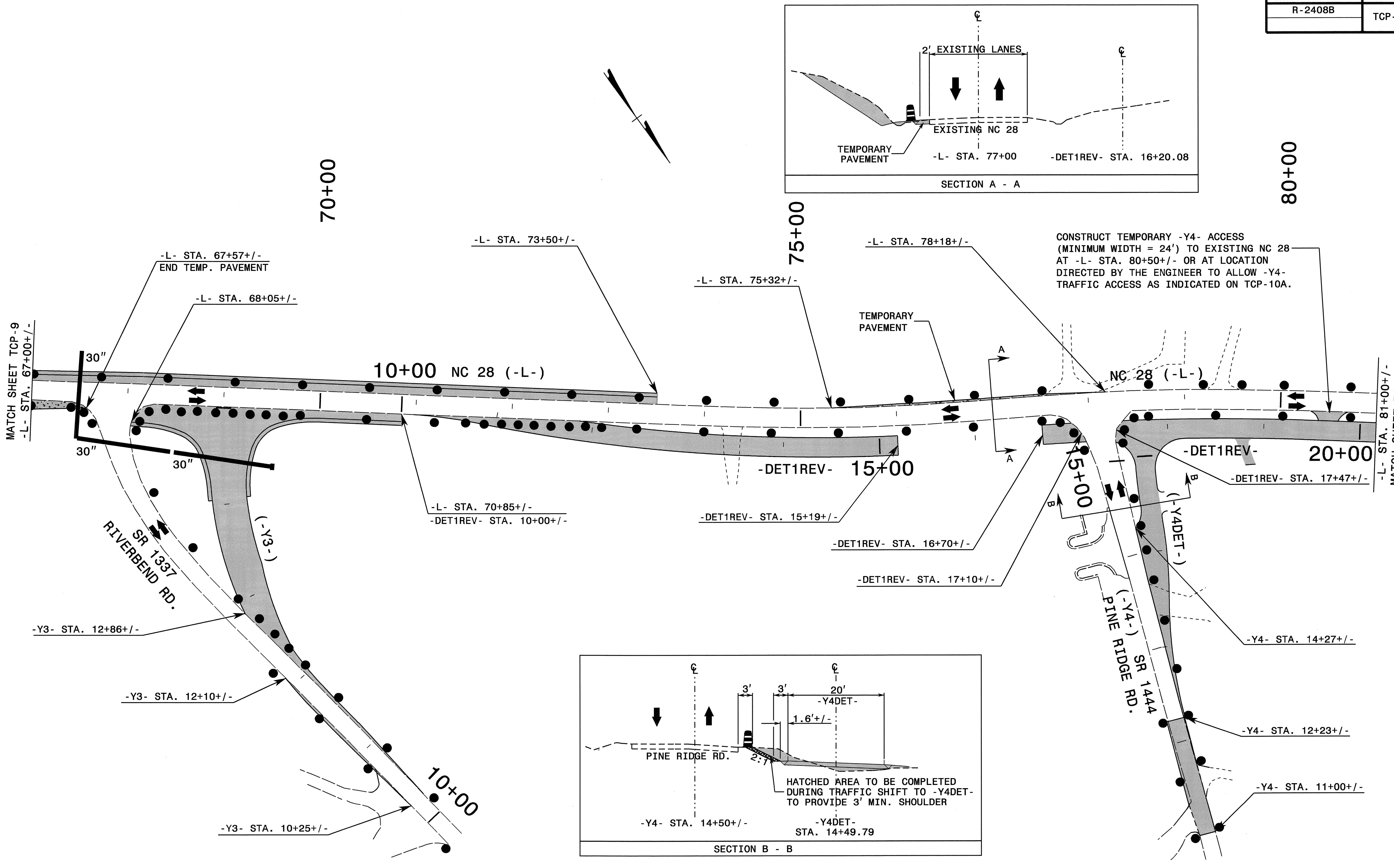
mstreelman
AT WZTC237453

PROJ. REFERENCE NO.	SHEET NO.
R-2408B	TCP-10



APPROVED:________________ DATE:________

NORTH CAROLINA PROFESSIONAL SEAL 027856 ENGINEER JENNIFER L. PORTANOVA

Jennifer L. Portanova 2/2/10

PHASE 1 DETAIL

SCALE:	NONE
DATE:	5/2009
DWG. BY:	MHS
DESIGN BY:	MHS
REVIEWED BY:	JLP

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msteelman AT WZTC237453

PROJ. REFERENCE NO.	SHEET NO.
R-2408B	TCP-10A

PLACE TRAFFIC CONTROL DEVICES AS DIRECTED BY THE ENGINEER

1 = STOP (R1-1) TEMPORARY STOP SIGN

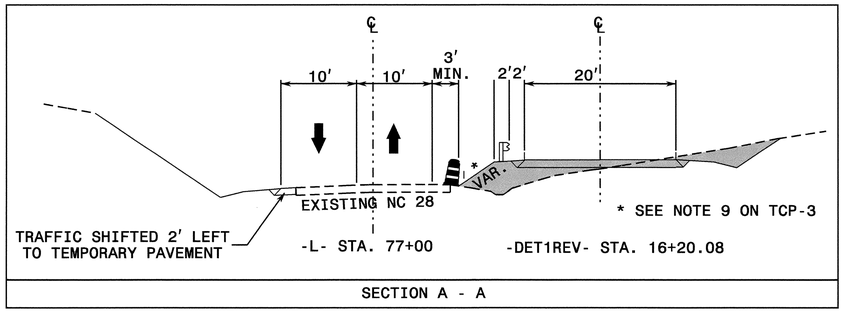
2 = R11-2 48"X30" ROAD CLOSED DETOUR M4-10L 48"X18" TYPE III BARRICADE

3 = R11-2 48"X30" ROAD CLOSED W1-6R 48"x24" TYPE III BARRICADE

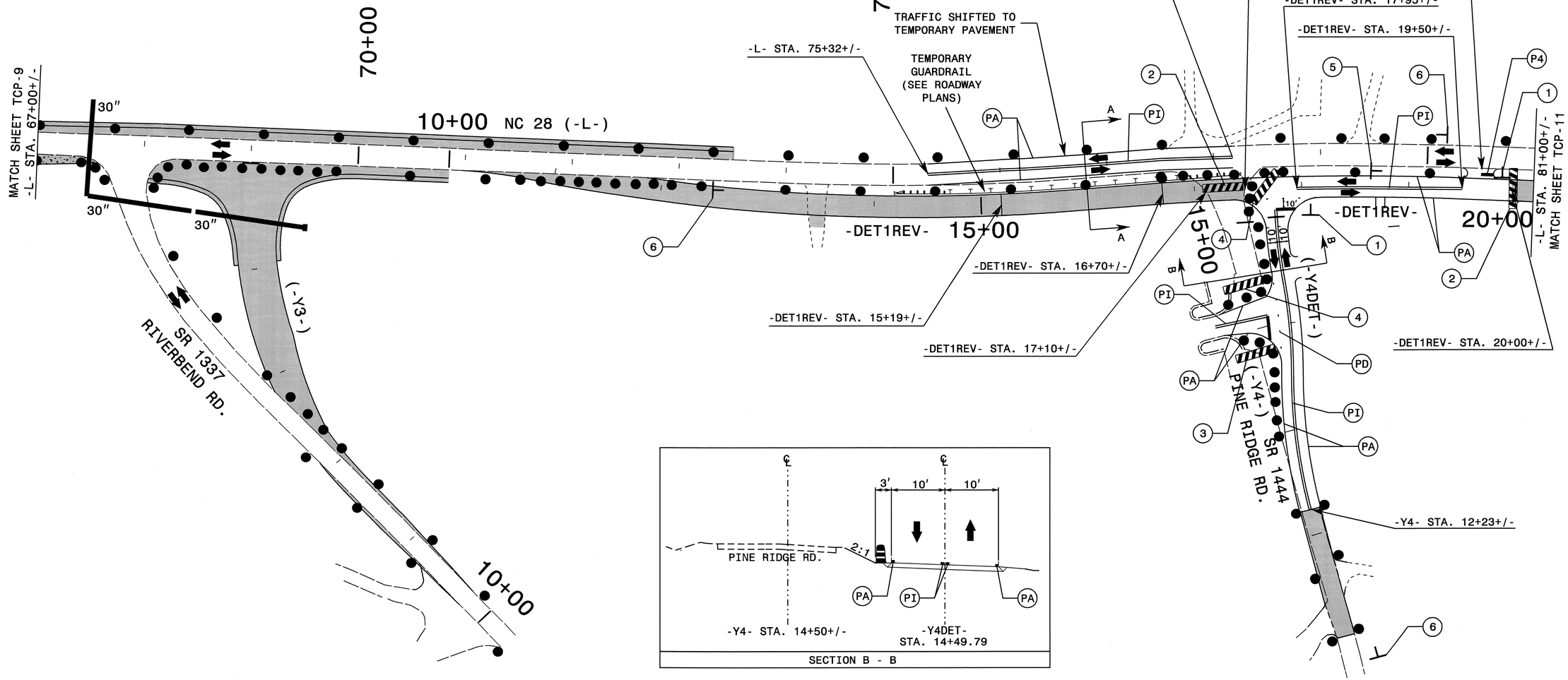
4 = R11-2 48"X30" ROAD CLOSED TYPE III BARRICADE

5 = PINE RIDGE RD. DETOUR M4-8 24" X 12" M6-1 21" X 15"

6 = TRAFFIC SHIFT AHEAD W31-1 48" X 48"



SECTION A - A



SECTION B - B

APPROVED: _____ DATE: _____

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 027856 JENNIFER L. PORTANOVA

2/2/10

PHASE 1 DETAIL

SCALE:	NONE
DATE:	5/2009
DWG. BY:	MHS
DESIGN BY:	MHS
REVIEWED BY:	JLP

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msteelman AT WZTC237453

PROJ. REFERENCE NO.	SHEET NO.
R-2408B	TCP-11

INSTALL SIGN AS
DIRECTED BY THE ENGINEER

PINE RIDGE RD.

① = DETOUR M4-8 24" X 12"

M6-1 L 21" X 15"

-Y5- STA. 14+00+/-

85+00

90+00

-Y6- STA. 14+50

-Y6- STA. 10+44

(-Y5-) SR 1321 WINDY GAP RD.

(-Y6) SR 1381 LEE TALLENT RD.

TEMP. GUARDRAIL ANCHOR UNIT

-Y5- STA. 11+00+/-

72"

15+00

-LTEMP- STA. 87+04+/-

NC 28

B

SEE TCP-19 FOR ROAD CLOSURE AND DETOUR SIGNING FOR (-Y6-)

36"

TEMP. GUARDRAIL ANCHOR UNIT

-LTEMP-

-LTEMP- STA. 93+34+/-

-LTEMP- STA. 94+88+/-

NC 28 (-L-)

A

25+00

-Y5- STA. 10+34+/-

TRENCHLESS INSTALLATION AS DIRECTED BY THE ENGINEER

-Y6- STA. 10+20+/-

95+00

-L- STA. 81+00 MATCH SHEET TCP-10

-DET1REV-

-L- STA. 83+95+/-

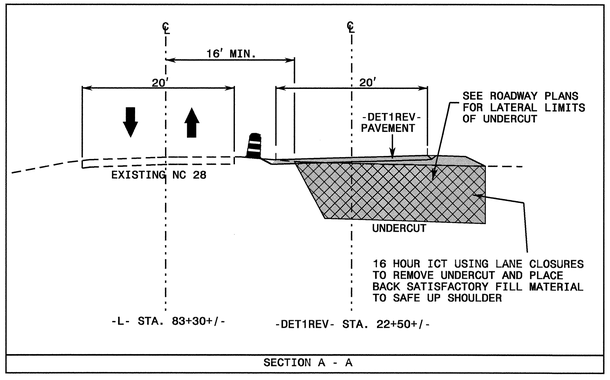
-L- STA. 83+00+/-

UNDERCUT AREA
(SEE ROADWAY CROSS SECTIONS)

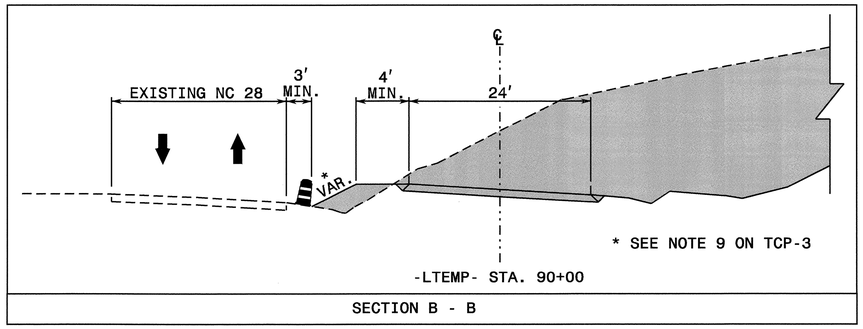
-LTEMP-

-LTEMP- STA. 95+36+/-

-L- STA. 96+50 MATCH SHEET TCP-12



SECTION A - A



SECTION B - B

APPROVED: _____ DATE: _____

NORTH CAROLINA PROFESSIONAL ENGINEER 027856 JENNIFER L. PORTANOVA 2/2/10

PHASE 1 DETAIL

SCALE:	NONE
DATE:	5/2009
DWG. BY:	MHS
DESIGN BY:	MHS
REVIEWED BY:	JLP

REVISIONS

CADD FILE

02-FEB-2010 13:45
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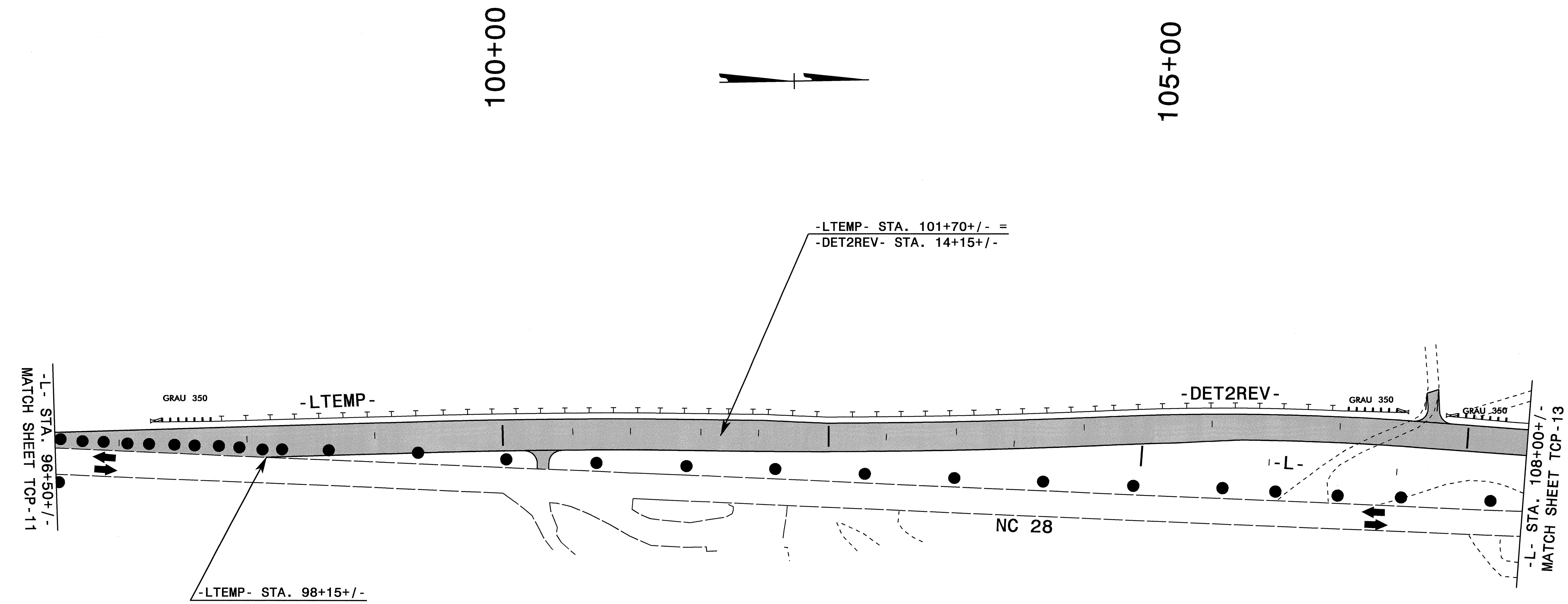
msteelman
AT WZTC237453

PROJ. REFERENCE NO.	SHEET NO.
R-2408B	TCP-12



PHASE 1 DETAIL

APPROVED:__________ DATE:______

NORTH CAROLINA PROFESSIONAL SEAL 027856 ENGINEER JENNIFER L. PORTANOVA 2/2/10

SCALE:	NONE
DATE:	5/2009
DWG. BY:	MHS
DESIGN BY:	MHS
REVIEWED BY:	JLP

DIVISION OF HIGHWAYS · STATE OF NORTH CAROLINA · DEPARTMENT OF TRANSPORTATION · WORK ZONE TRAFFIC CONTROL UNIT

REVISIONS

CADD FILE

02-FEB-2010 13:46
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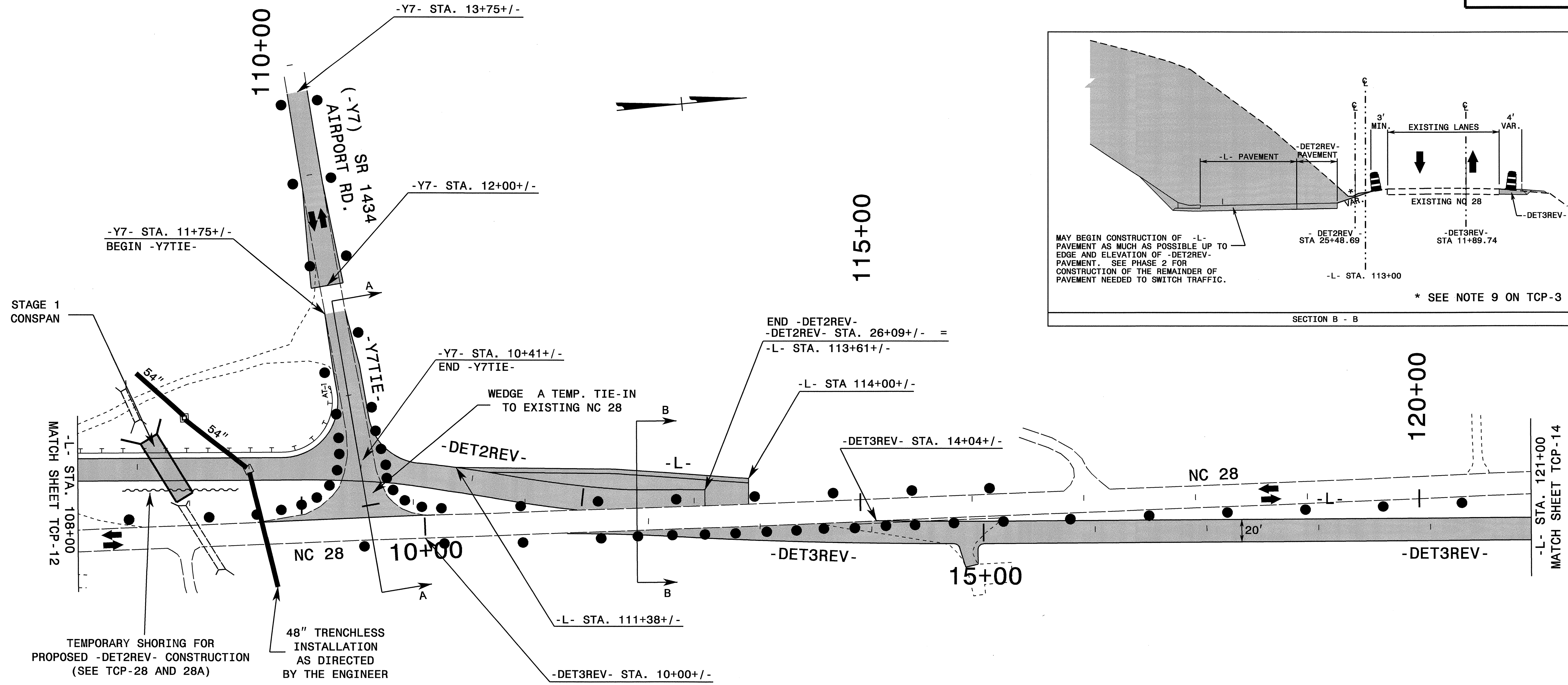
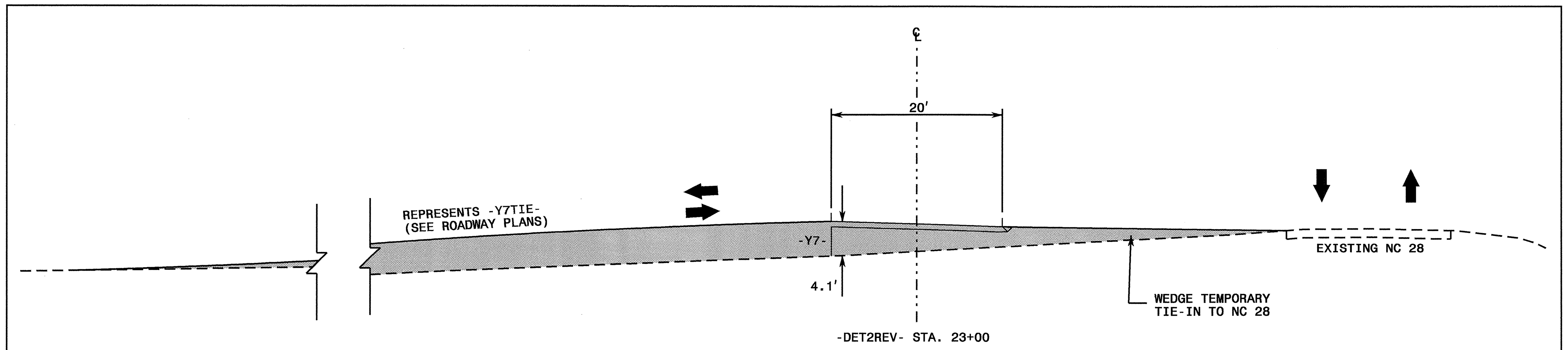
msteelman AT WZTC237453

PROJ. REFERENCE NO.	SHEET NO.
R-2408B	TCP-13



SECTION B - B



SECTION A - A

APPROVED:__________ DATE:______

NORTH CAROLINA PROFESSIONAL SEAL 027856 ENGINEER JENNIFER L. PORTANOVA 2/2/10

PHASE 1 DETAIL

SCALE:	NONE
DATE:	5/2009
DWG. BY:	MHS
DESIGN BY:	MHS
REVIEWED BY:	JLP

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

REVISIONS

CADD FILE

02-FEB-2010 16:02
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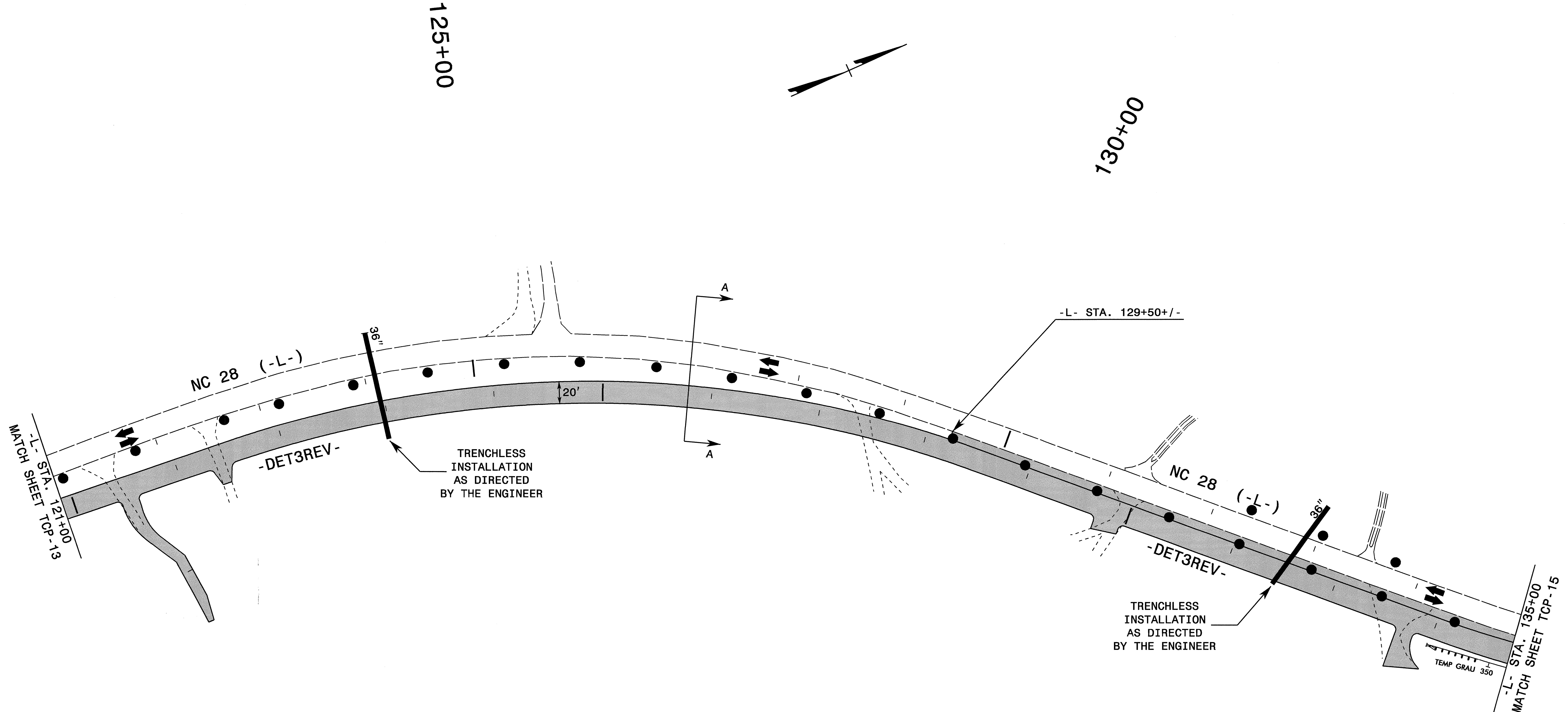
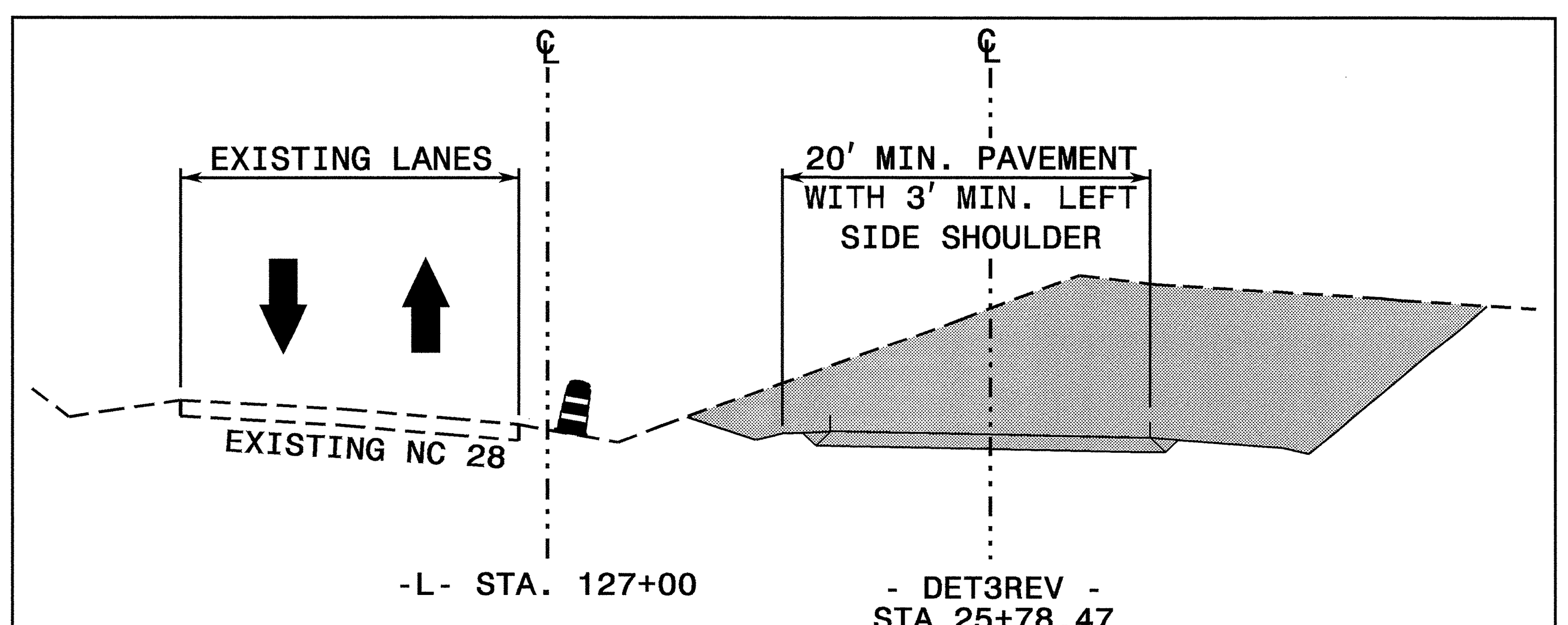
msteelman AT WZTC237453

PROJ. REFERENCE NO.	SHEET NO.
R-2408B	TCP-14





SECTION A - A

APPROVED:________ DATE:________

NORTH CAROLINA PROFESSIONAL SEAL 027856 ENGINEER JENNIFER L. PORTANOVA 2/2/10

PHASE 1 DETAIL

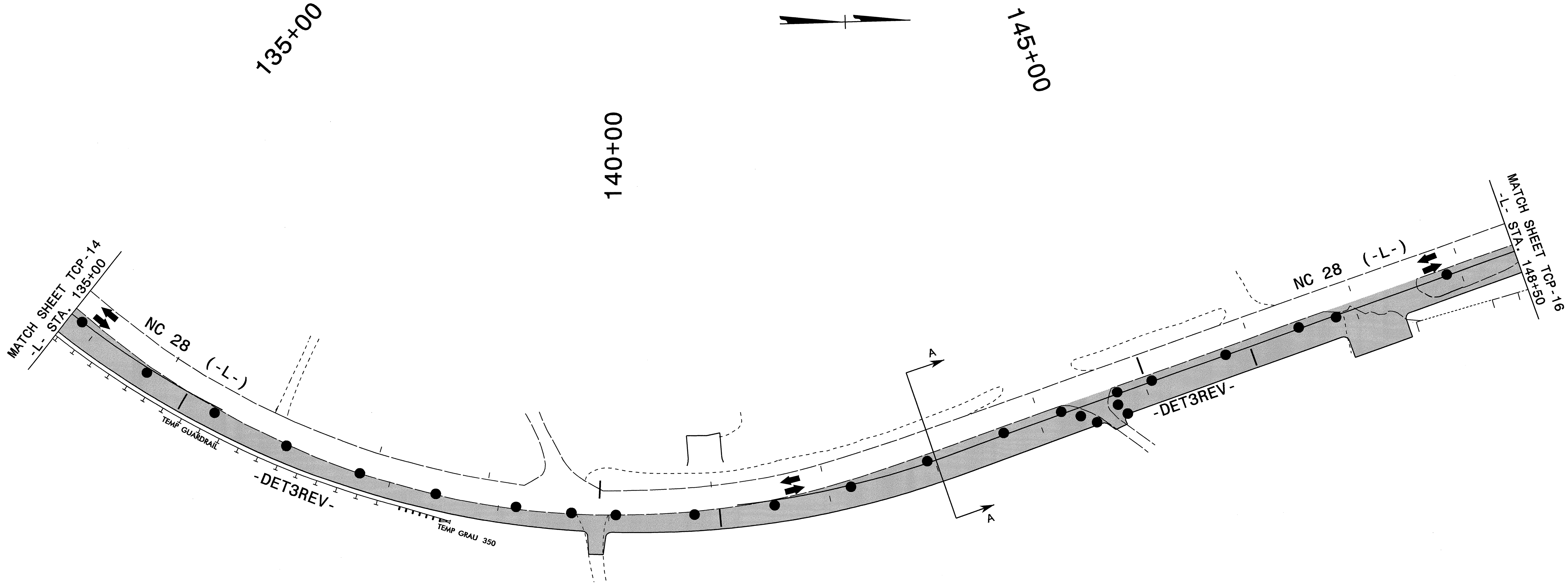
SCALE:	NONE
DATE:	5/2009
DWG. BY:	MHS
DESIGN BY:	MHS
REVIEWED BY:	JLP

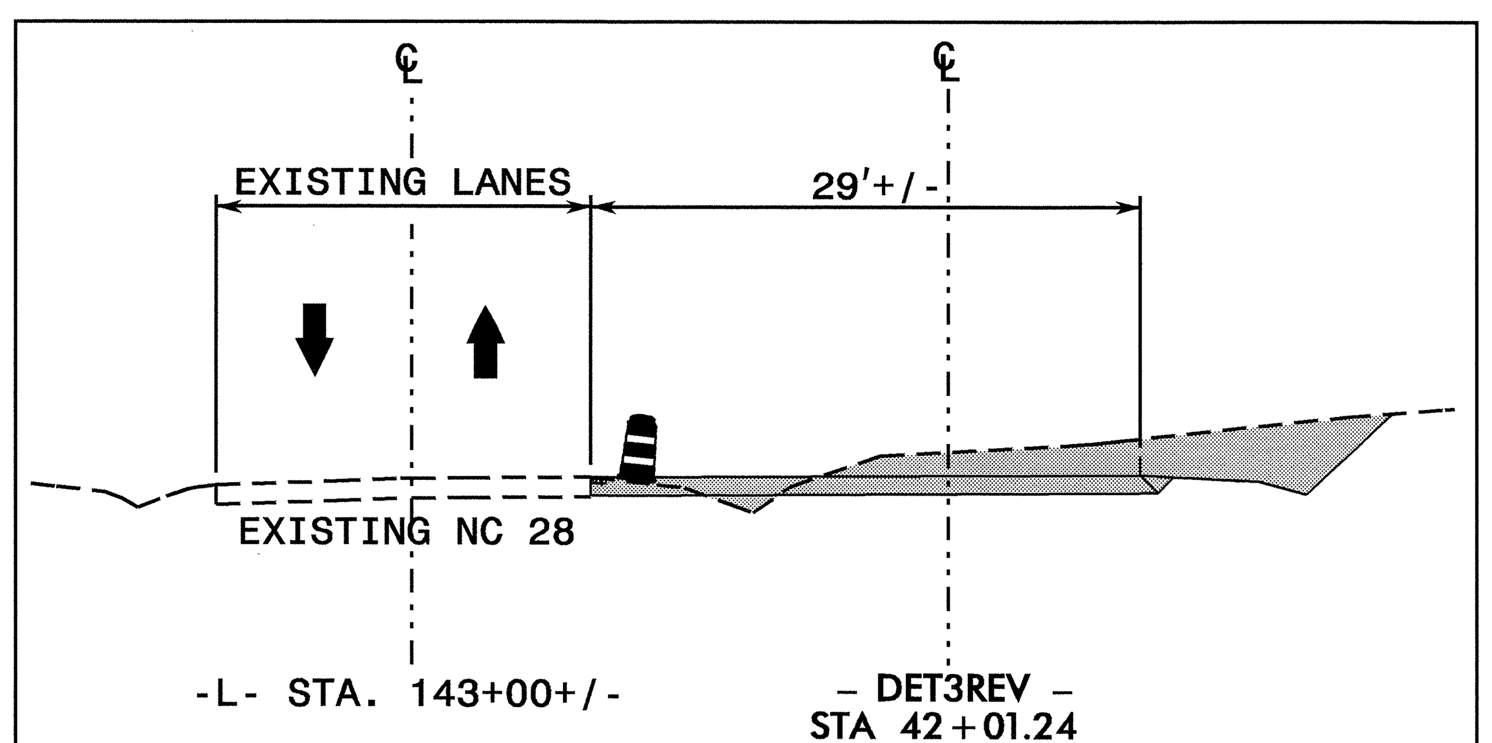
DIVISION OF HIGHWAYS · STATE OF NORTH CAROLINA · DEPARTMENT OF TRANSPORTATION · WORK ZONE TRAFFIC CONTROL UNIT

REVISIONS

CADD FILE

PROJ. REFERENCE NO.	SHEET NO.
R-2408B	TCP-15





SECTION A - A

APPROVED:______________ DATE:________

NORTH CAROLINA PROFESSIONAL SEAL 027856 ENGINEER JENNIFER L. PORTANOVA 2/2/10

PHASE 1 DETAIL

SCALE:	NONE
DATE:	5/2009
DWG. BY:	MHS
DESIGN BY:	MHS
REVIEWED BY:	JLP

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

REVISIONS

CADD FILE

02-FEB-2010 09:52
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msteelman AT WZTC237453

PROJ. REFERENCE NO.	SHEET NO.
R-2408B	TCP-16

150+00

155+00

160+00

-Y8- STA. 12+50+/-

-Y8- STA. 11+50+/-

SR 1372
IOTLA CHURCH RD.

GRAU 350

(-Y8-)

-L- STA. 148+09+/-

-L- STA. 149+29+/-

END -DET3REV-
-L- STA. 162+19+/- =
-DET3REV- STA. 61+11+/-

A

NC 28 (-L-)

36"

NC 28 (-L-)

-DET3REV-

-L- STA. 148+50
MATCH SHEET TCP-15

TRENCHLESS
INSTALLATION
AS DIRECTED
BY THE ENGINEER.
(DO NOT CONSTRUCT
PROPOSED 2GI).

-DET3REV-

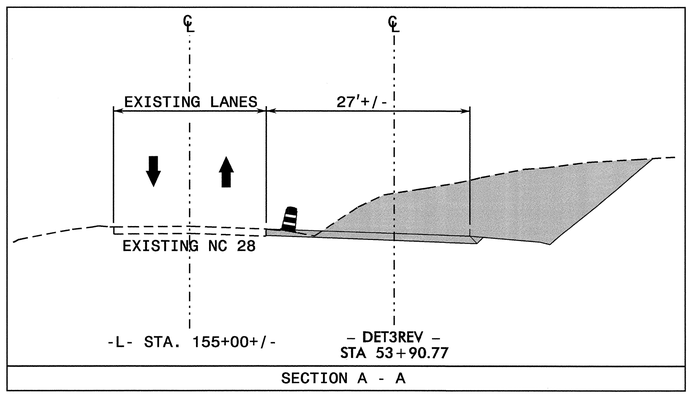
WEDGE A TEMPORARY TIE-IN

-L- STA. 162+50
MATCH SHEET TCP-17

-Y9- STA. 14+50+/-

(-Y9-) SR 1337
RIVERBEND RD.

-Y9- STA. 12+50+/-



SECTION A - A

APPROVED: _____ DATE: _____

NORTH CAROLINA
PROFESSIONAL
027856
ENGINEER
JENNIFER L PORTANOVA
2/2/10

PHASE 1 DETAIL

SCALE:	NONE
DATE:	5/2009
DWG. BY:	MHS
DESIGN BY:	MHS
REVIEWED BY:	JLP

DIVISION OF HIGHWAYS
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
"MOVING NORTH CAROLINA FORWARD"

REVISIONS	
CADD FILE	

02-FEB-2010 09:53
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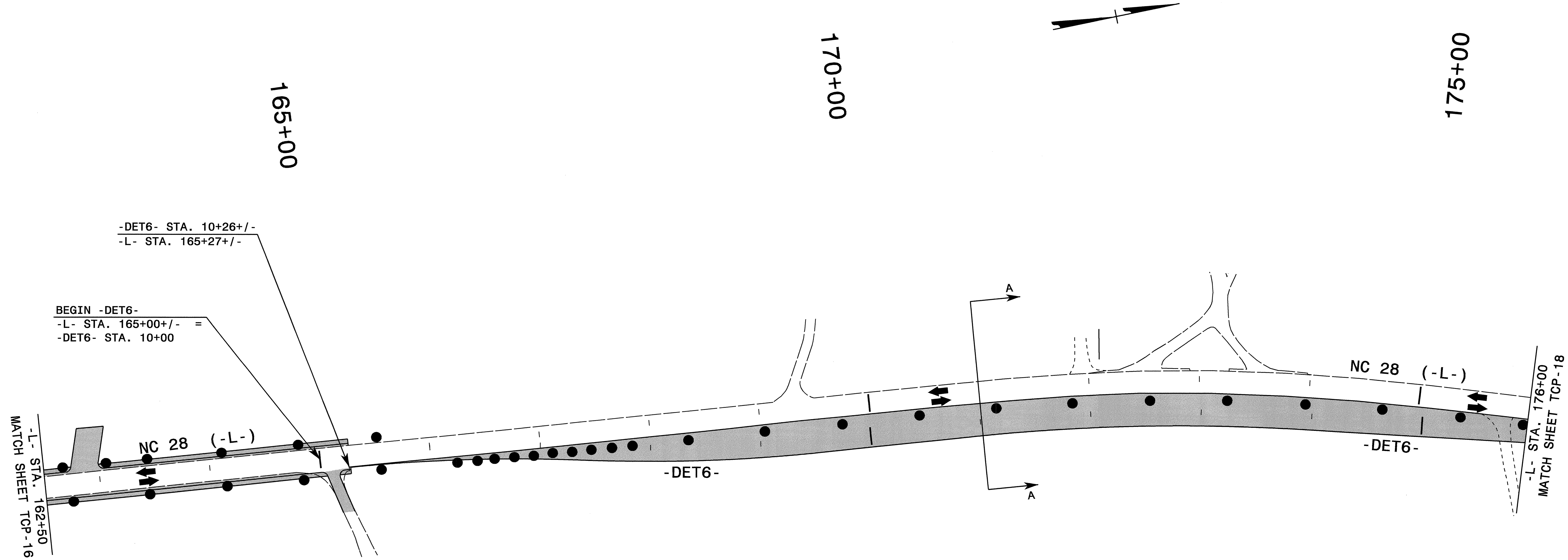
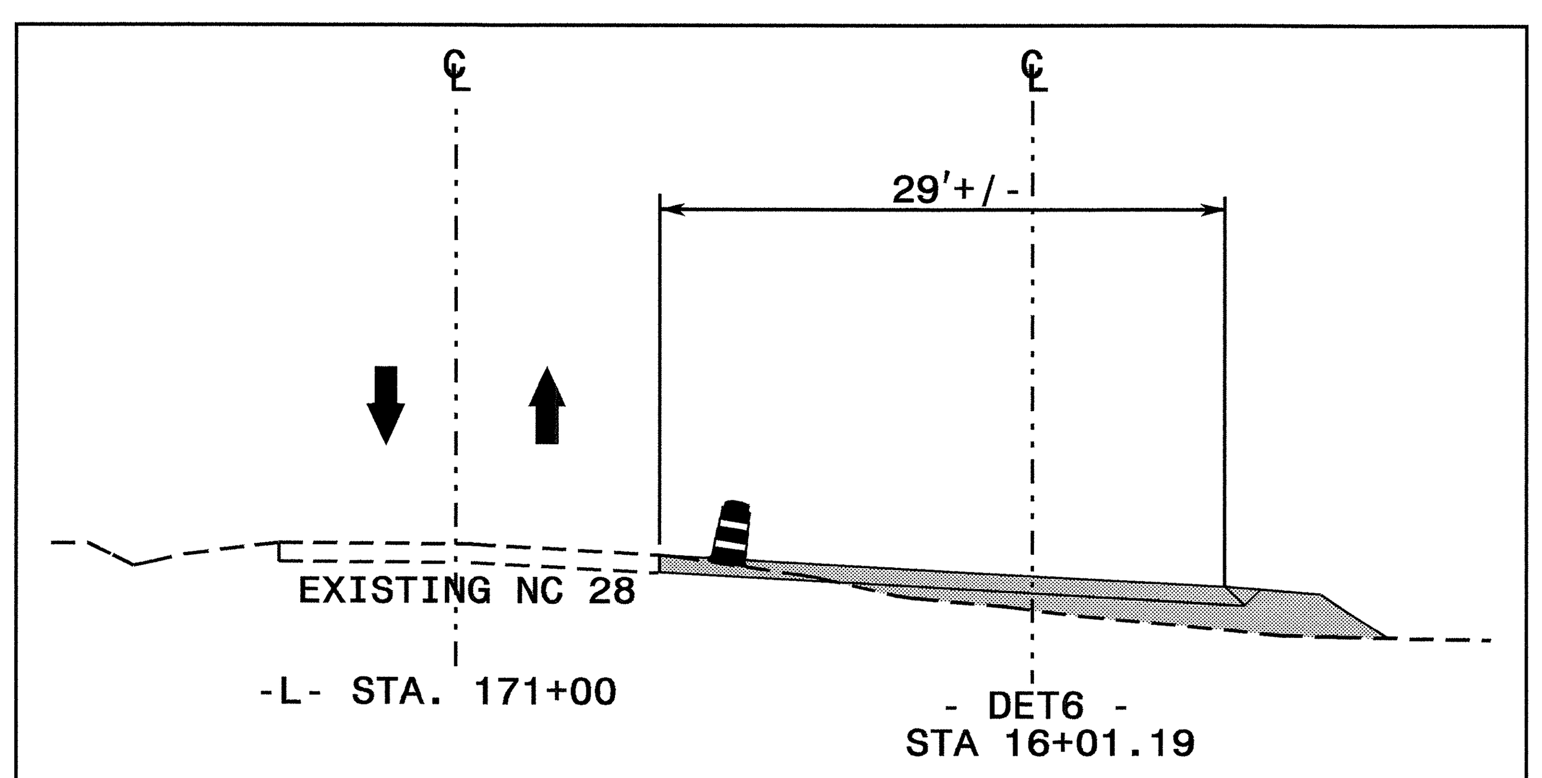
msteelman AT WZTC237453

PROJ. REFERENCE NO.	SHEET NO.
R-2408B	TCP-17





SECTION A - A

APPROVED:__________ DATE:______

NORTH CAROLINA PROFESSIONAL SEAL 027856 ENGINEER JENNIFER L. PORTANOVA

2/2/10

PHASE 1 DETAIL

SCALE:	NONE
DATE:	5/2009
DWG. BY:	MHS
DESIGN BY:	MHS
REVIEWED BY:	JLP

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

REVISIONS

CADD FILE

02-FEB-2010 09:54
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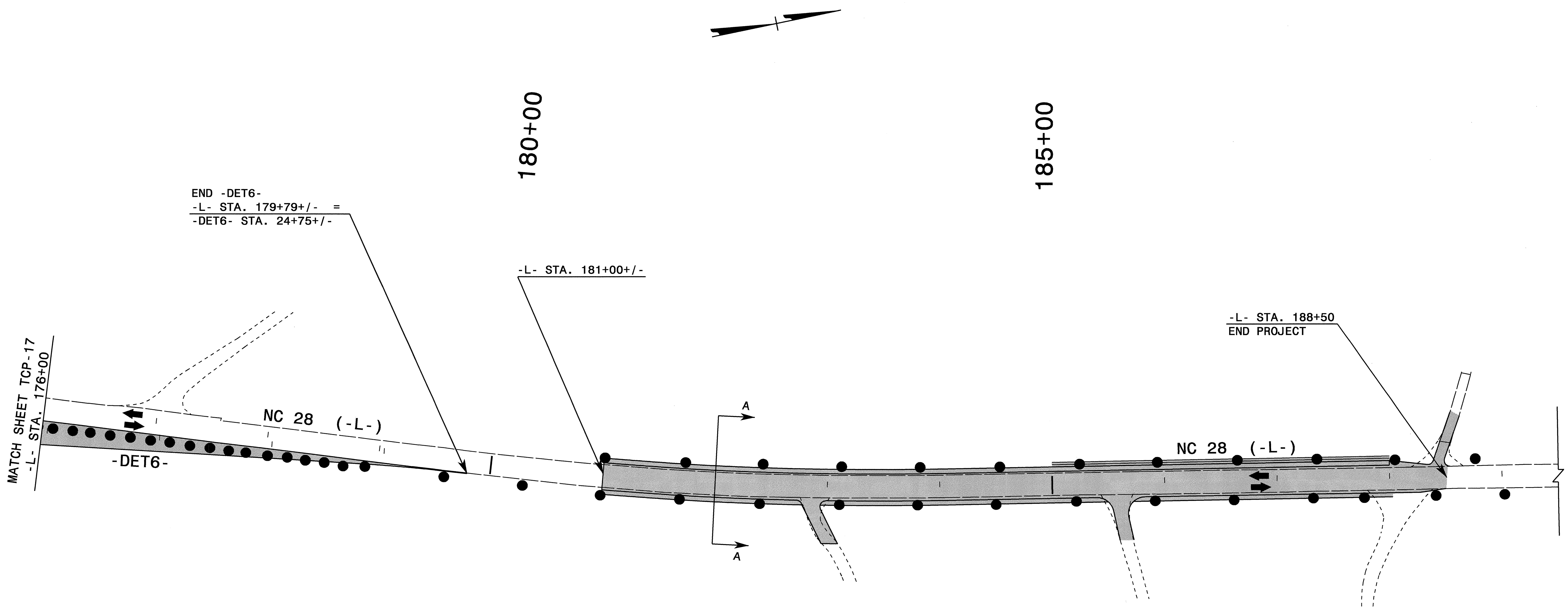
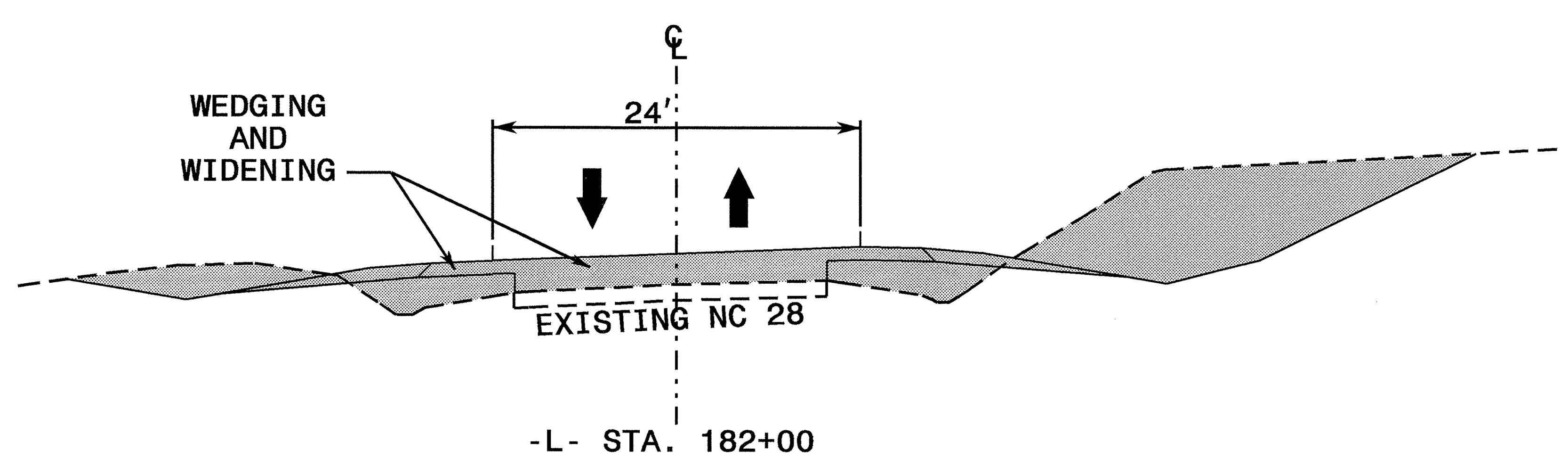
msteelman AT WZTC237453

PROJ. REFERENCE NO.	SHEET NO.
R-2408B	TCP-18





SECTION A - A

APPROVED:	DATE:

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 027856 JENNIFER L. PORTANOVA 2/2/10

PHASE 1 DETAIL

SCALE:	NONE
DATE:	5/2009
DWG. BY:	MHS
DESIGN BY:	MHS
REVIEWED BY:	JLP

DIVISION OF HIGHWAYS · STATE OF NORTH CAROLINA · DEPARTMENT OF TRANSPORTATION · WORK ZONE TRAFFIC CONTROL UNIT

REVISIONS

CADD FILE

02-FEB-2010 09:55
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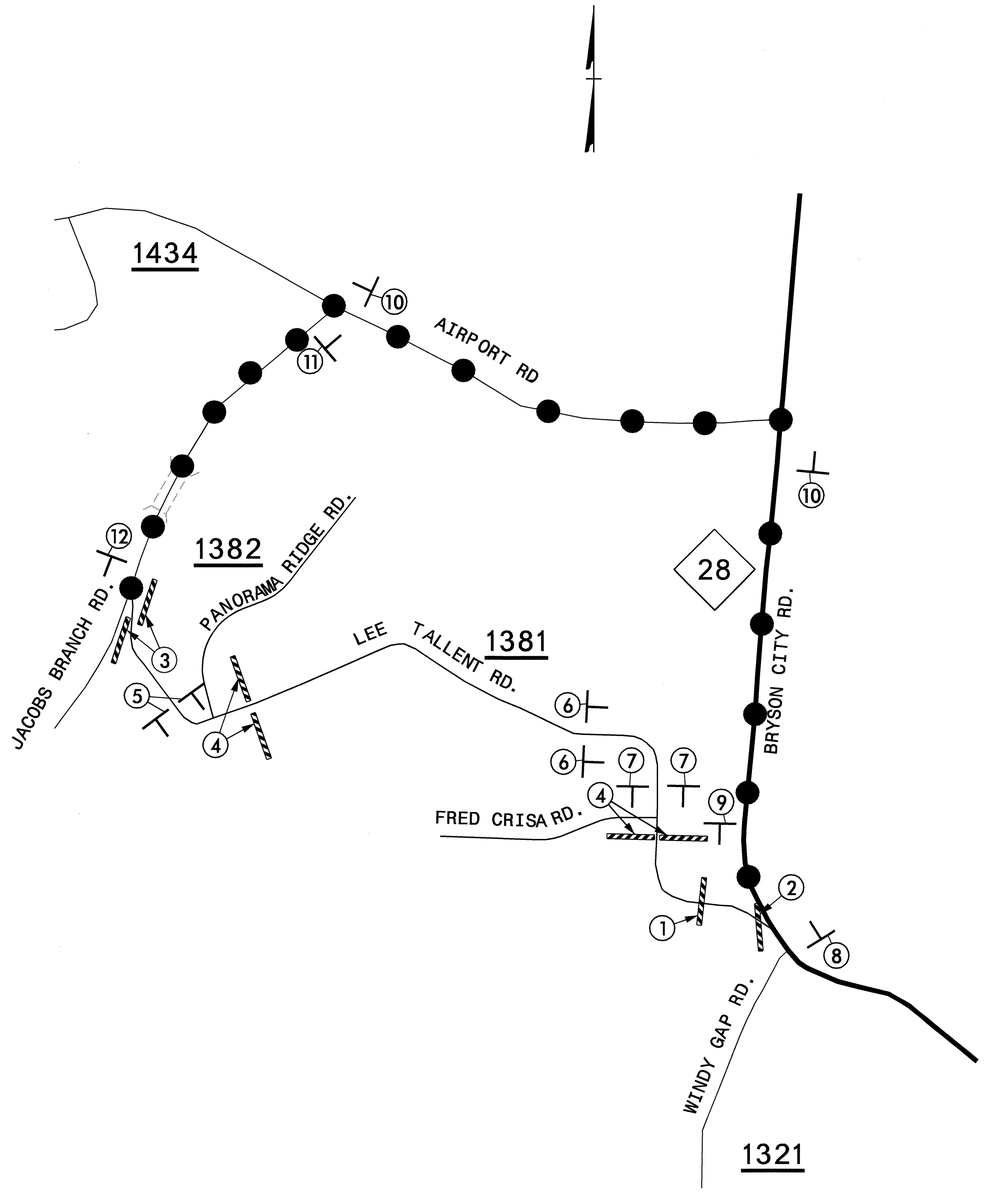
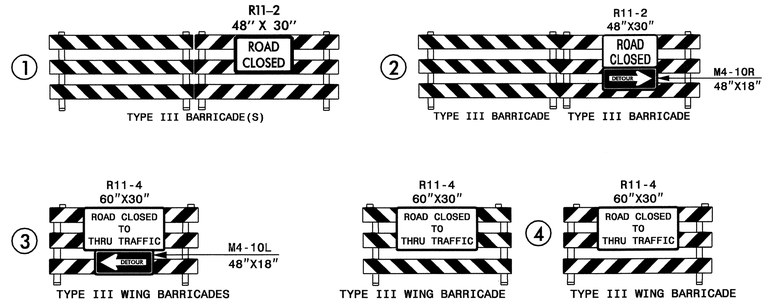
msteelman AT WZTC237453

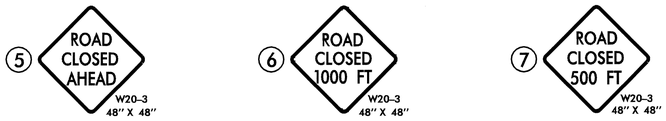
PROJ. REFERENCE NO.	SHEET NO.
R-2408B	TCP-19

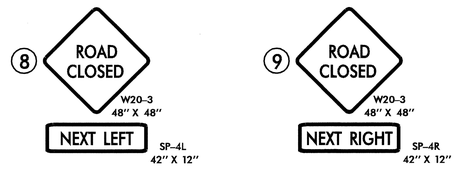
*REFER TO GENERAL NOTES AND ROAD CLOSURE SIGN SPACINGS AS SHOWN IN ROADWAY STANDARD DRAWINGS 1101.03, SHEET 1 AND 2 OF 9.

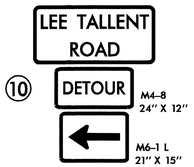
*DETOUR SIGNING TO BE PLACED AS DIRECTED BY THE ENGINEER.

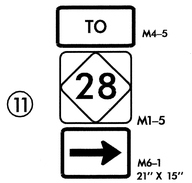


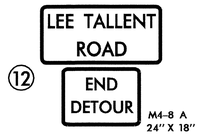












APPROVED:_____ DATE:_____

NORTH CAROLINA PROFESSIONAL SEAL 027856 ENGINEER JENNIFER L PORTANOVA 2/24/10

LEE TALLENT RD.
ROAD CLOSURE AND DETOUR SIGNING

SCALE:	NONE
DATE:	12/23/09
DWG. BY:	SH
DESIGN BY:	SH
REVIEWED BY:	MHS

REVISIONS

CADD FILE

02-FEB-2010 09:57
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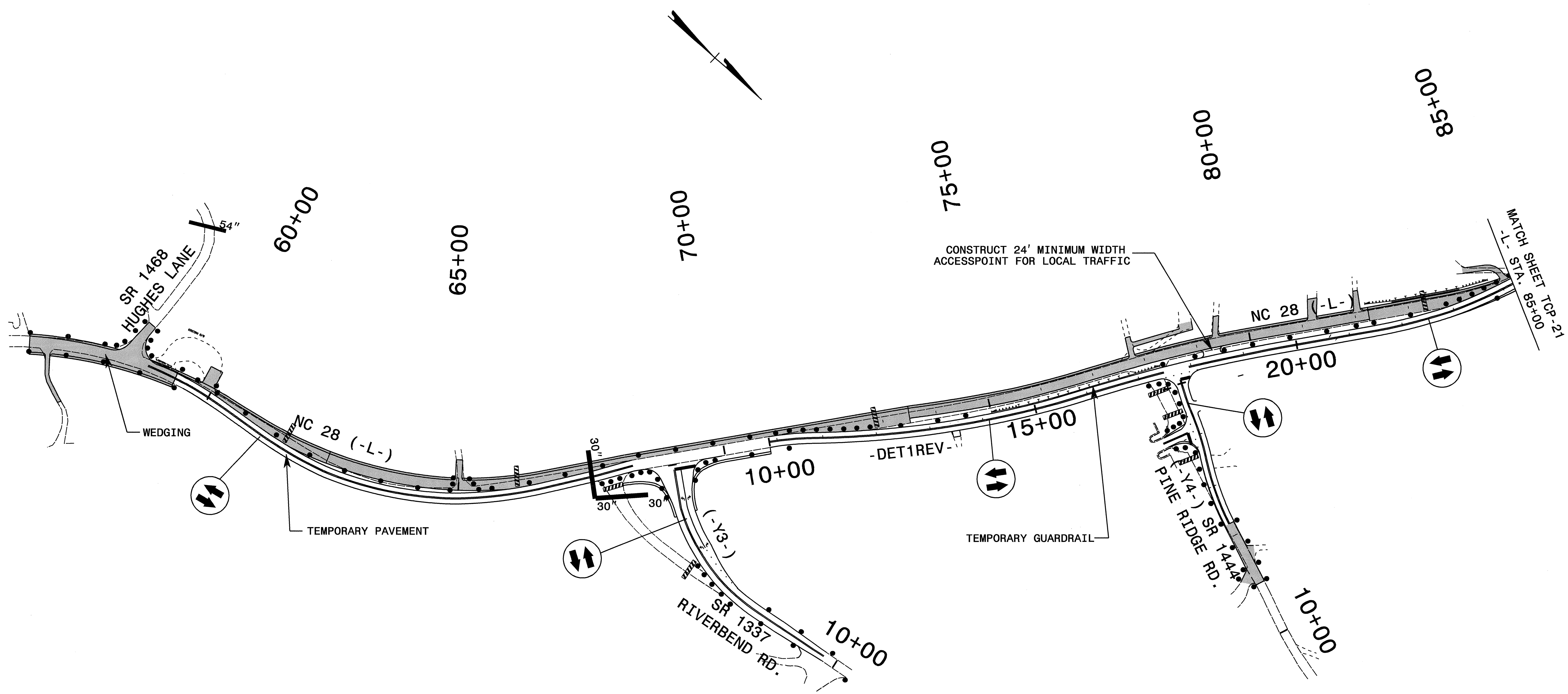
msteelman AT WZTC237453

PROJ. REFERENCE NO.	SHEET NO.
R-2408B	TCP-20



02-FEB-2010 09:57
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msteelman AT WZTC237453

APPROVED:______________ DATE:________

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 027856 JENNIFER L. PORTANOVA

2/2/10

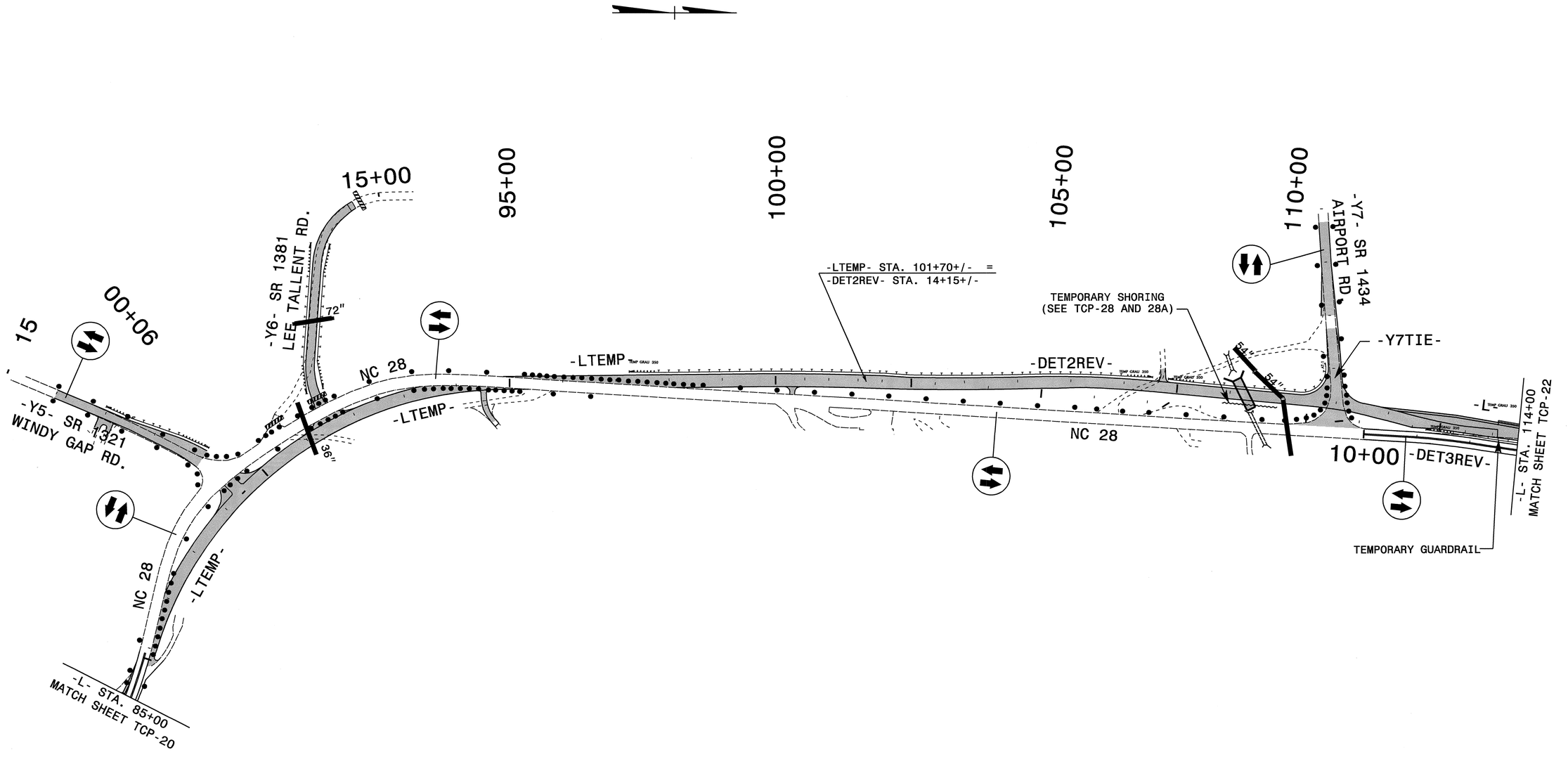
PHASE 2 OVERVIEW

SCALE:	NONE
DATE:	4/2009
DWG. BY:	MHS
DESIGN BY:	MHS
REVIEWED BY:	JLP

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

REVISIONS	
CADD FILE	

PROJ. REFERENCE NO.	SHEET NO.
R-2408B	TCP-21



APPROVED: _____ DATE: _____

NORTH CAROLINA PROFESSIONAL ENGINEER 027856 JENNIFER L. PORTANOVA

2/4/10

PHASE 2 OVERVIEW

SCALE:	NONE
DATE:	4/2009
DWG. BY:	MHS
DESIGN BY:	MHS
REVIEWED BY:	JLP

REVISIONS

CADD FILE	

02-FEB-2010 16:03
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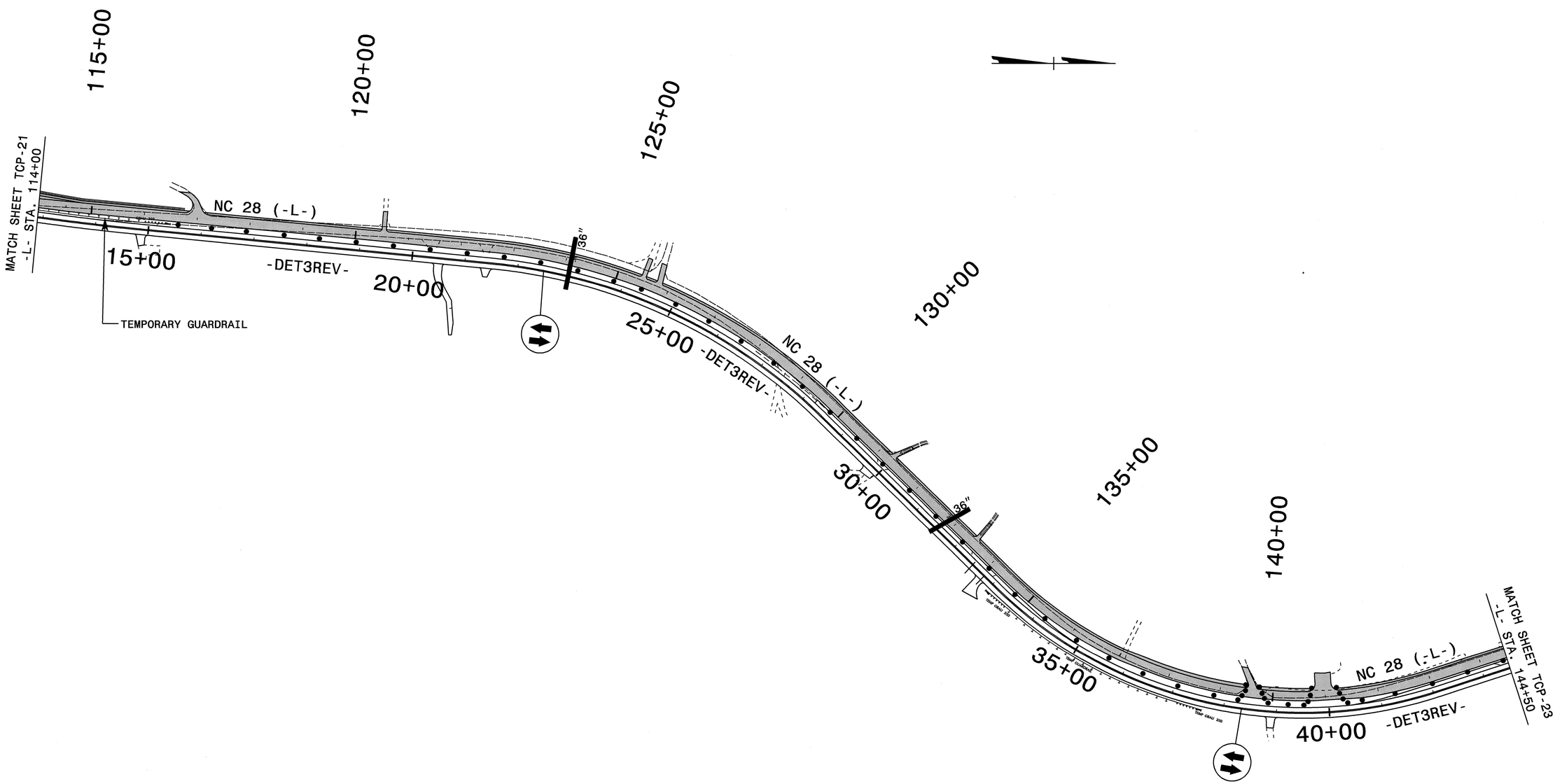
msteelman AT WZTC237453

PROJ. REFERENCE NO.	SHEET NO.
R-2408B	TCP-22



APPROVED:_____ DATE:_____

NORTH CAROLINA PROFESSIONAL SEAL 027856 ENGINEER JENNIFER L. PORTANOVA 2/2/10

PHASE 2 OVERIVEW

SCALE:	NONE
DATE:	4/2009
DWG. BY:	MHS
DESIGN BY:	MHS
REVIEWED BY:	JLP

REVISIONS	
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02-FEB-2010 09:59
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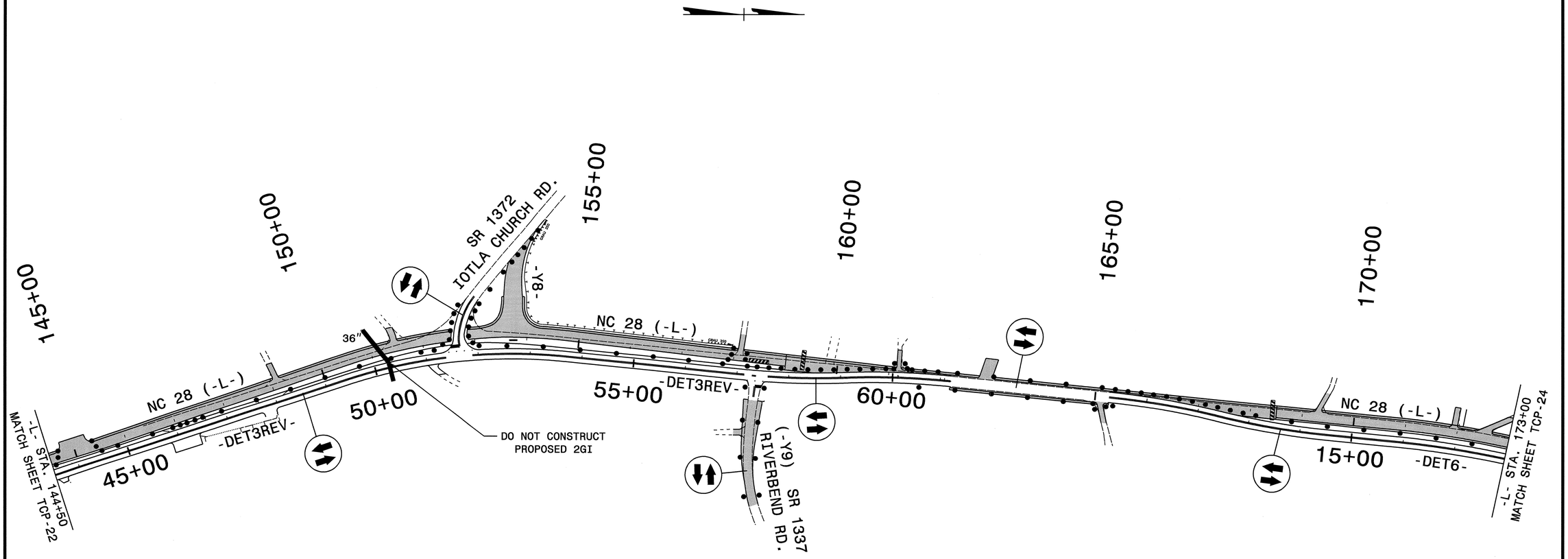
msteelman AT WZTC237453

PROJ. REFERENCE NO.	SHEET NO.
R-2408B	TCP-23



02-FEB-2010 10:00
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msteelman AT WZTC237453

APPROVED: _____ DATE: _____

NORTH CAROLINA PROFESSIONAL SEAL 027856 ENGINEER JENNIFER L PORTANOVA 2/2/10

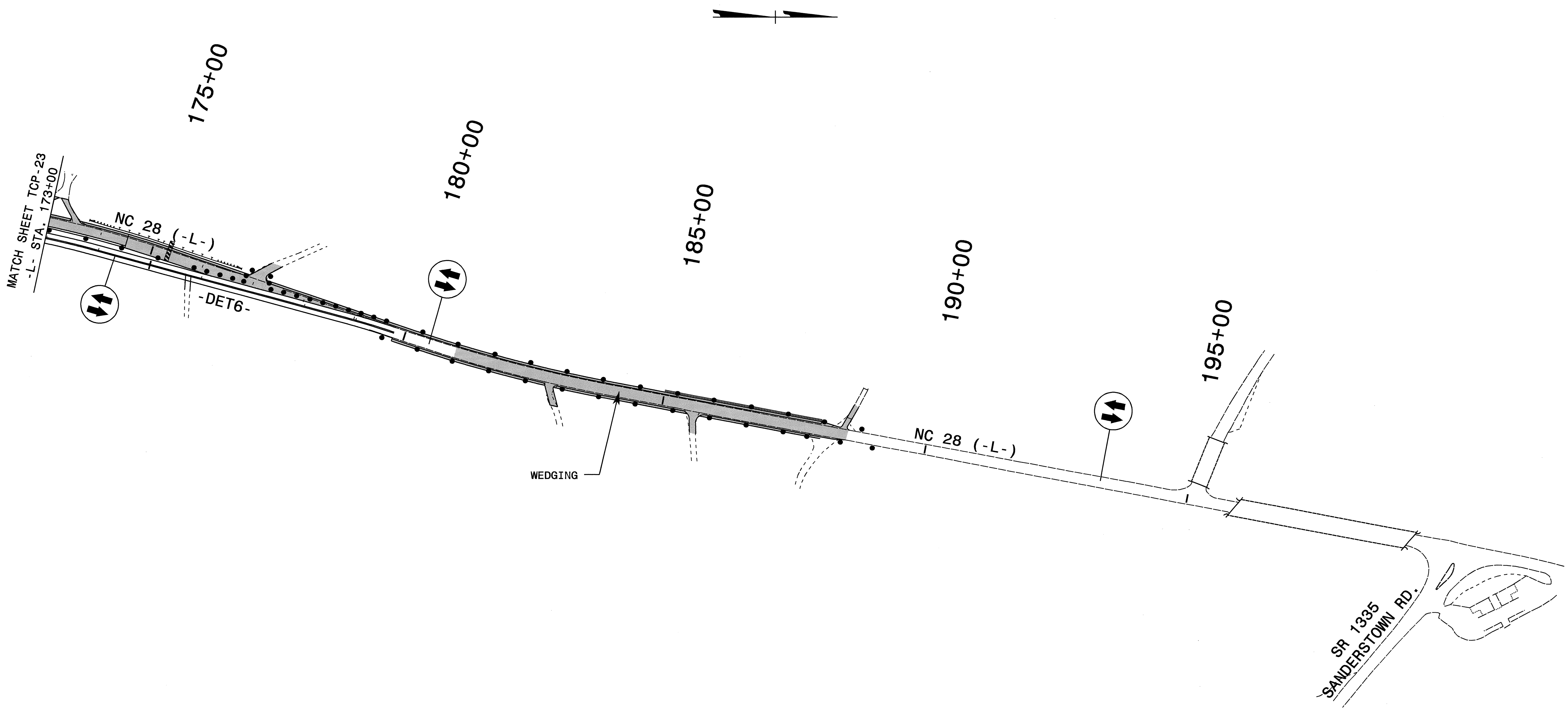
PHASE 2 OVERVIEW

SCALE:	NONE
DATE:	4/2009
DWG. BY:	MHS
DESIGN BY:	MHS
REVIEWED BY:	JLP

REVISIONS

CADD FILE

PROJ. REFERENCE NO.	SHEET NO.
R-2408B	TCP-24



PHASE 2 OVERVIEW

APPROVED:______________ DATE:________

NORTH CAROLINA PROFESSIONAL SEAL 027856 ENGINEER JENNIFER L. PORTANOVA

Jennifer L. Portanova 2/2/10

SCALE:	NONE
DATE:	4/2009
DWG. BY:	MHS
DESIGN BY:	MHS
REVIEWED BY:	JLP

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

REVISIONS	
CADD FILE	

02-FEB-2010 10:01
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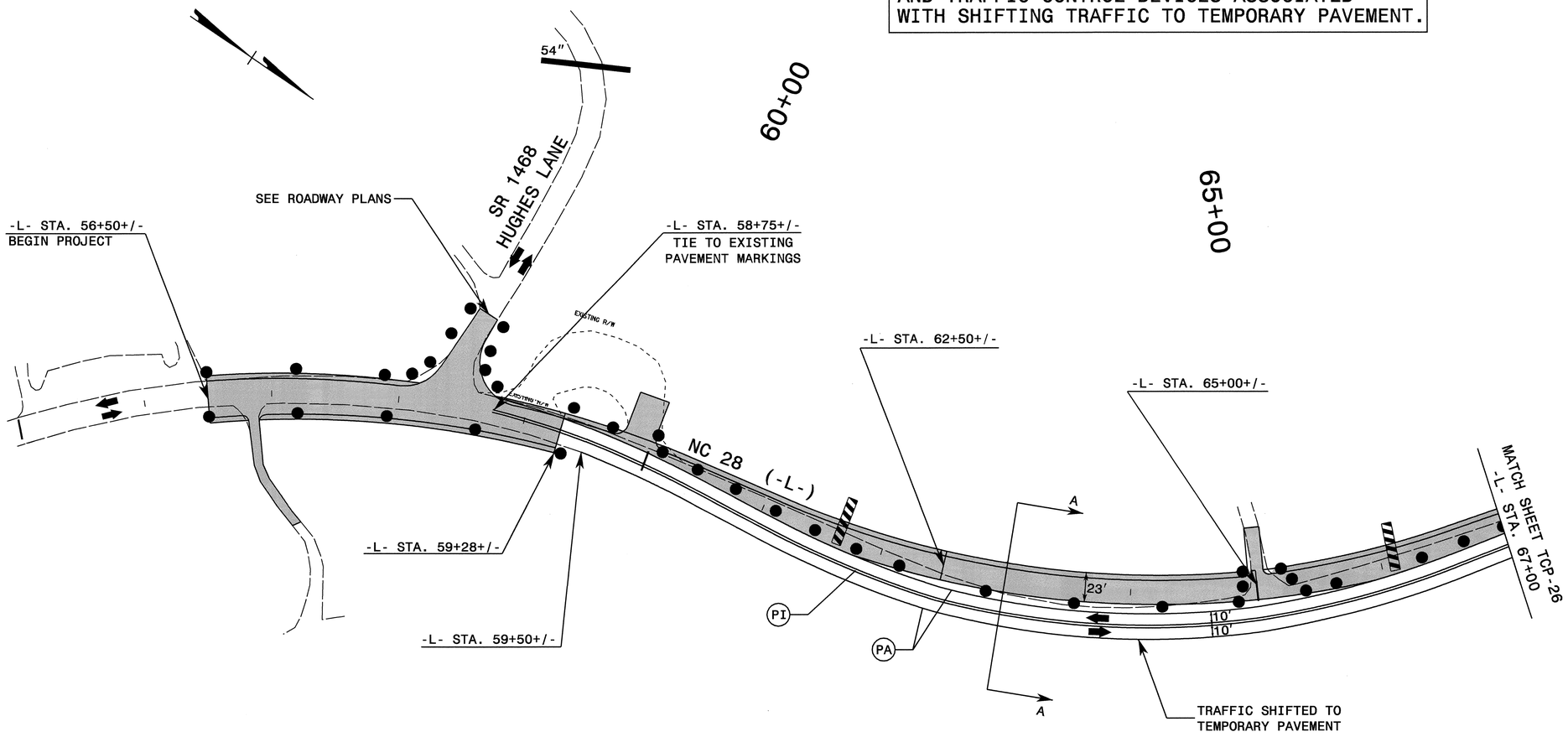
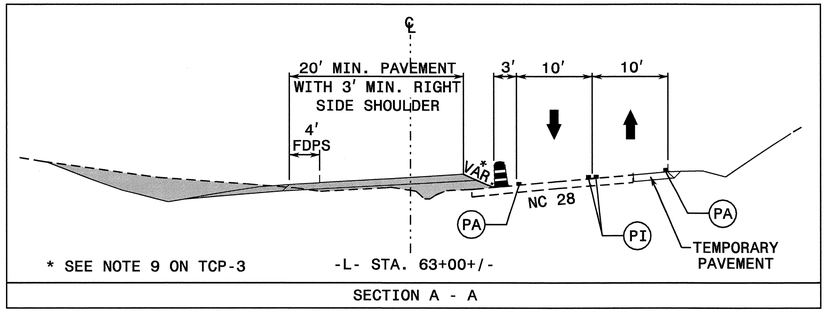
msteelman AT WZTC237453

PROJ. REFERENCE NO.	SHEET NO.
R-2408B	TCP-25

REFER TO ROADWAY STANDARD DRAWING 1101.03, SH. 3 OF 9, FOR GENERAL NOTES AND TRAFFIC CONTROL DEVICES ASSOCIATED WITH SHIFTING TRAFFIC TO TEMPORARY PAVEMENT.





SECTION A - A

APPROVED: _____ DATE: _____

PROFESSIONAL ENGINEER SEAL 027856 JENNIFER L. PORTANOVA

PHASE 2 DETAIL

SCALE:	NONE
DATE:	5/2009
DWG. BY:	MHS
DESIGN BY:	MHS
REVIEWED BY:	JLP

REVISIONS	
CADD FILE	

02-FEB-2010 13:48
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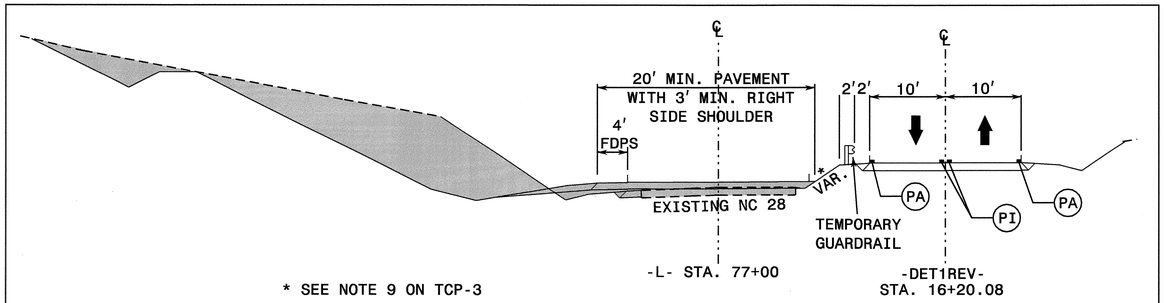
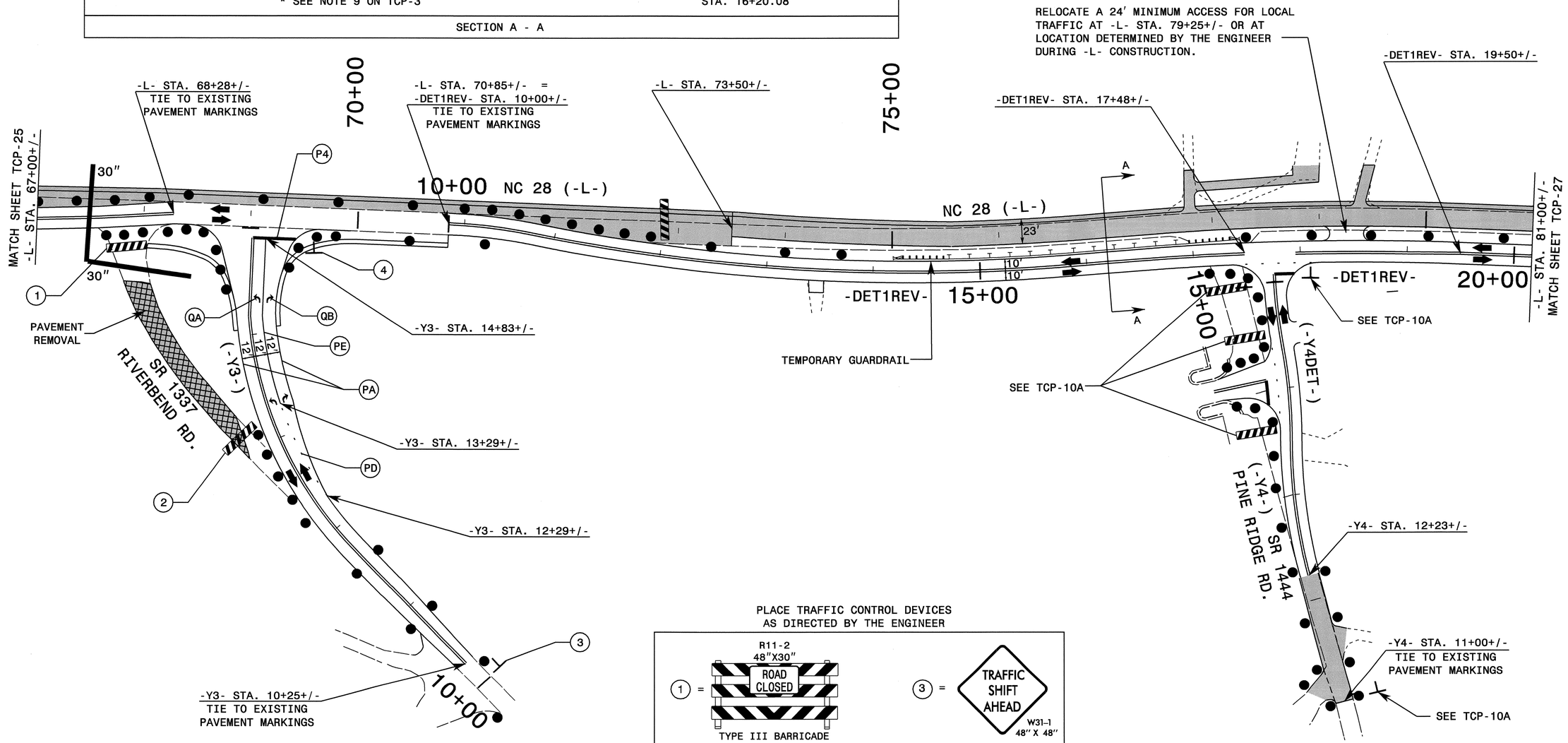
mstreelman AT WZTC237453

PROJ. REFERENCE NO.	SHEET NO.
R-2408B	TCP-26



SECTION A - A

REFER TO ROADWAY STANDARD DRAWING 1101.03, SH. 3 OF 9, FOR GENERAL NOTES AND TRAFFIC CONTROL DEVICES ASSOCIATED WITH SHIFTING TRAFFIC TO -DET1REV-.



PLACE TRAFFIC CONTROL DEVICES AS DIRECTED BY THE ENGINEER

1 = R11-2 48"X30" ROAD CLOSED — TYPE III BARRICADE

2 = R11-2 48"X30" ROAD CLOSED W1-6R 48"x24" — TYPE III BARRICADE

3 = TRAFFIC SHIFT AHEAD W31-1 48" X 48"

4 = STOP R1-1

APPROVED: _____ DATE: _____

PHASE 2 DETAIL

SCALE:	NONE
DATE:	5/2009
DWG. BY:	MHS
DESIGN BY:	MHS
REVIEWED BY:	JLP

REVISIONS	
CADD FILE	

02-FEB-2010 13:49
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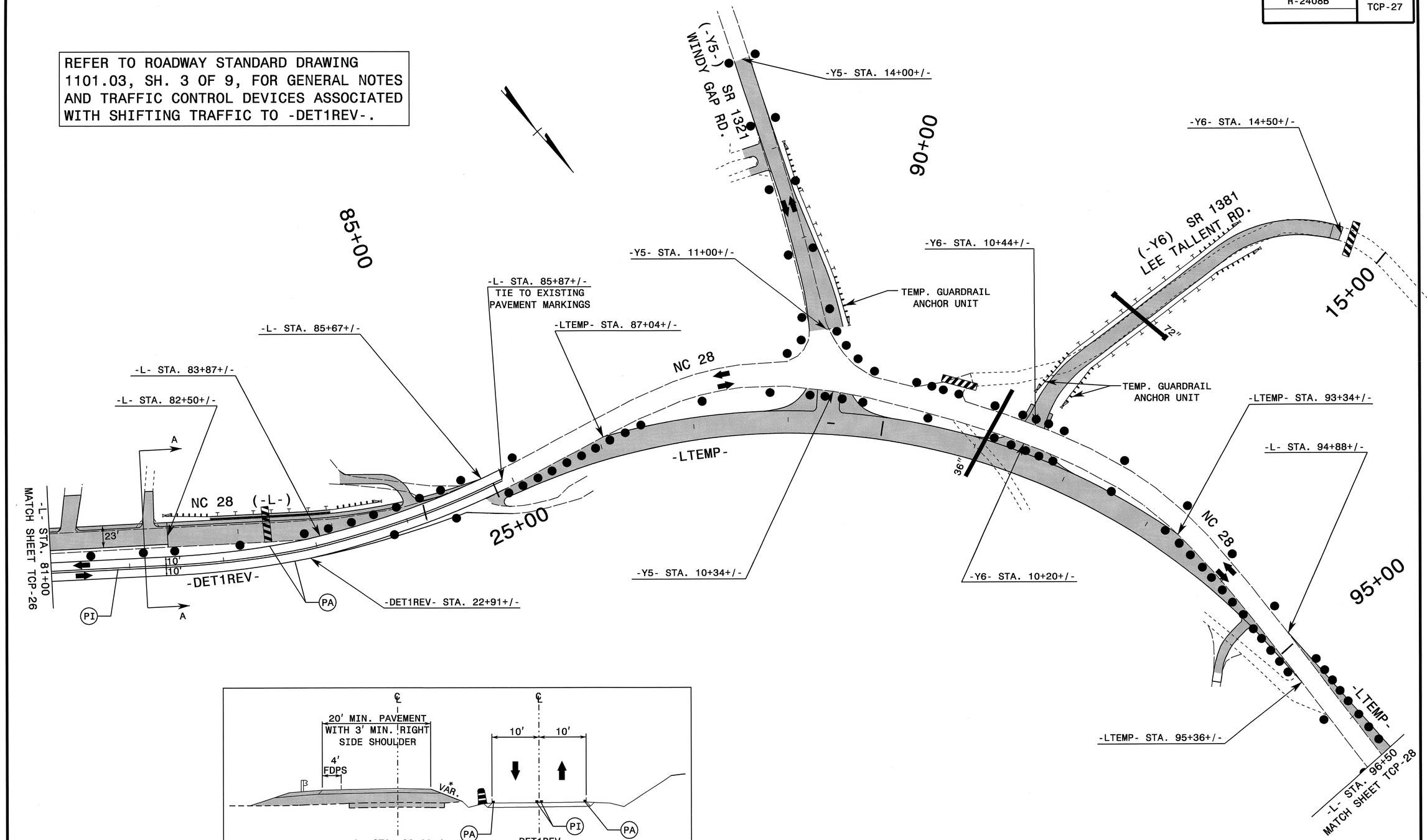
msteelman AT WZTC237453

PROJ. REFERENCE NO.	SHEET NO.
R-2408B	TCP-27

REFER TO ROADWAY STANDARD DRAWING 1101.03, SH. 3 OF 9, FOR GENERAL NOTES AND TRAFFIC CONTROL DEVICES ASSOCIATED WITH SHIFTING TRAFFIC TO -DET1REV-.



SECTION A - A

APPROVED: _____ DATE: _____

NORTH CAROLINA PROFESSIONAL 027856 ENGINEER JENNIFER L. PORTANOVA 2/2/10

PHASE 2 DETAIL

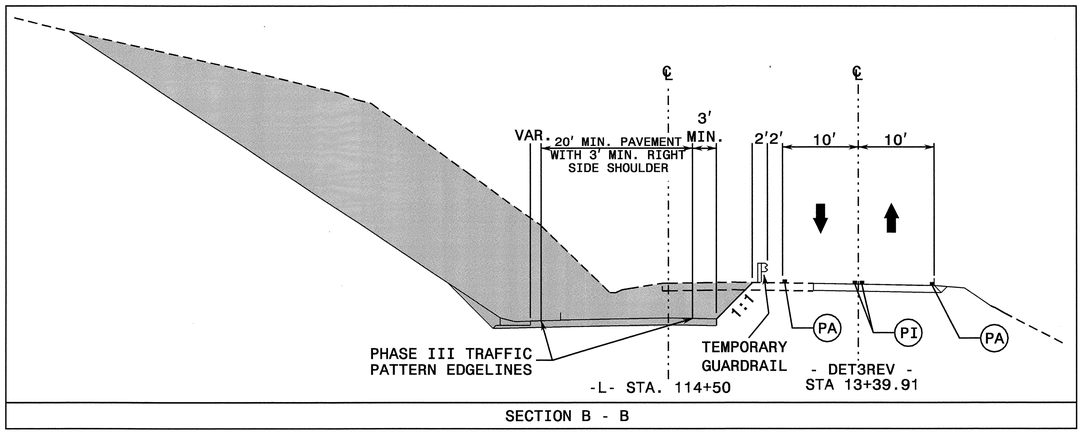
SCALE:	NONE
DATE:	5/2009
DWG. BY:	MHS
DESIGN BY:	MHS
REVIEWED BY:	JLP

DIVISION OF HIGHWAYS STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION HIGHWAY TRAFFIC CONTROL UNIT

REVISIONS	
CADD FILE	

02-FEB-2010 13:50
\\Dot\dfsroot01\Proj\TIPProjects-R\R2408B\Traffic\TrafficControl\TCP\R-2408B_TCP DESIGN\R-2408B_Tc_TCP_27.dgn
msteelman AT WZTC237453

PROJ. REFERENCE NO.	SHEET NO.
R-2408B	TCP-28

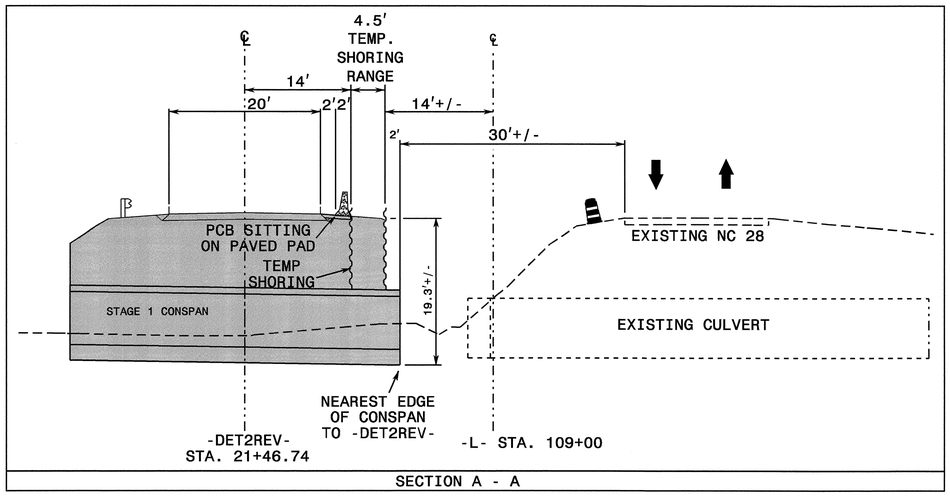


SECTION B - B

SEE TCP-28A FOR STANDARD DETAIL FOR PORTABLE CONCRETE BARRIER AT TEMPORARY SHORING LOCATIONS.

(1) QUANTITY = 1,058 SQ. FT.
TEMPORARY SHORING
FROM -DET2REV- STA. 20+86+/-
TO -DET2REV- STA. 21+90+/-

REFER TO ROADWAY STANDARD DRAWING 1101.03, SH. 3 OF 9, FOR GENERAL NOTES AND TRAFFIC CONTROL DEVICES ASSOCIATED WITH SHIFTING TRAFFIC TO -DET3REV-.



SECTION A - A

TEMPORARY SHORING NOTES

Temporary Shoring No. 1

FOR TEMPORARY SHORING, SEE TEMPORARY SHORING SPECIAL PROVISION.

FOR CONTRACTOR DESIGNED SHORING, SURVEY THE SHORING LOCATION TO DETERMINE EXISTING ELEVATIONS AND ACTUAL DESIGN HEIGHTS BEFORE BEGINNING DESIGN.

WHEN USING CONTRACTOR DESIGNED SHORING FROM STATION 20+86.00+/- -DET2REV-, OFFSET 14' TO 18.5', TO STATION 21+90.00+/- -DET2REV-, OFFSET 14' TO 18.5'.

USE THE FOLLOWING SOIL PARAMETERS:
UNIT WEIGHT OF SOIL ABOVE WATER TABLE, y = 120 PCF
UNIT WEIGHT OF SOIL BELOW WATER TABLE, y = 60 PCF
FRICTION ANGLE, ϕ = 30 DEGREES
COHESION, c = 0 PSF

IT MAY BE PREFERRED OR NECESSARY TO ANCHOR TEMPORARY SHORING FROM STATION 20+86.00+/- -DET2REV-, OFFSET 14' TO 18.5', TO STATION 21+90.00+/- -DET2REV-, OFFSET 14' TO 18.5'. THE TEMPORARY SHORING PROVISION DOES NOT APPLY TO ANCHORED TEMPORARY SHORING. IF ANCHORED SHORING IS PROPOSED, SUBMIT WORKING DRAWINGS, DESIGN CALCULATIONS AND AN ANCHORED TEMPORARY SHROING PROVISION FOR REVIEW AND ACCEPTANCE IN ACCORDANCE WITH ARTICLE 105-2 OF THE STANDARD SPECIFICATIONS.

NO SUBSURFACE INFORMATION IS AVAILABLE IN THE VICINITY OF THE TEMPORARY SHORING FROM STATION 20+86.00+/- -DET2REV-, OFFSET 14' TO 18.5', TO STATION 21+90.00+/- -DET2REV-, OFFSET 14' TO 18.5'. THE INFORMATION PROVIDED FOR DESIGN WAS ASSUMED AND MAY NOT BE APPLICABLE TO THE ACTUAL SITE CONDITIONS ENCOUNTERED DURING CONSTRUCTION.

FOR PORTABLE CONCRETE BARRIERS ABOVE AND BEHIND TEMPORARY SHORING, USE AN NCDOT PORTABLE CONCRETE BARRIER (UNANCHORED OR ANCHORED) OR AN OREGON TALL F-SHAPE CONCRETE BARRIER IN ACCORDANCE WITH THE TRAFFIC CONTROL PLANS.

THE TEMPORARY SHORING NOTES SHOWN ON THIS SHEET WERE PROVIDED THROUGH A SEALED DOCUMENT FROM THE GEOTECHNICAL ENGINEERING UNIT. THE DOCUMENT WAS SUBMITTED TO THE WZTC ON JANUARY 15, 2010 AND SEALED BY A PROFESSIONAL ENGINEER, JOHN FARGHER, PE, LICENSE #023480

APPROVED:_____ DATE:_____

NORTH CAROLINA PROFESSIONAL SEAL 027856 ENGINEER JENNIFER L. PORTANOVA 2/2/10

PHASE 2 DETAIL

SCALE:	NONE
DATE:	5/2009
DWG. BY:	MHS
DESIGN BY:	MHS
REVIEWED BY:	JLP
CADD FILE	

REVISIONS

02-FEB-2010 16:07
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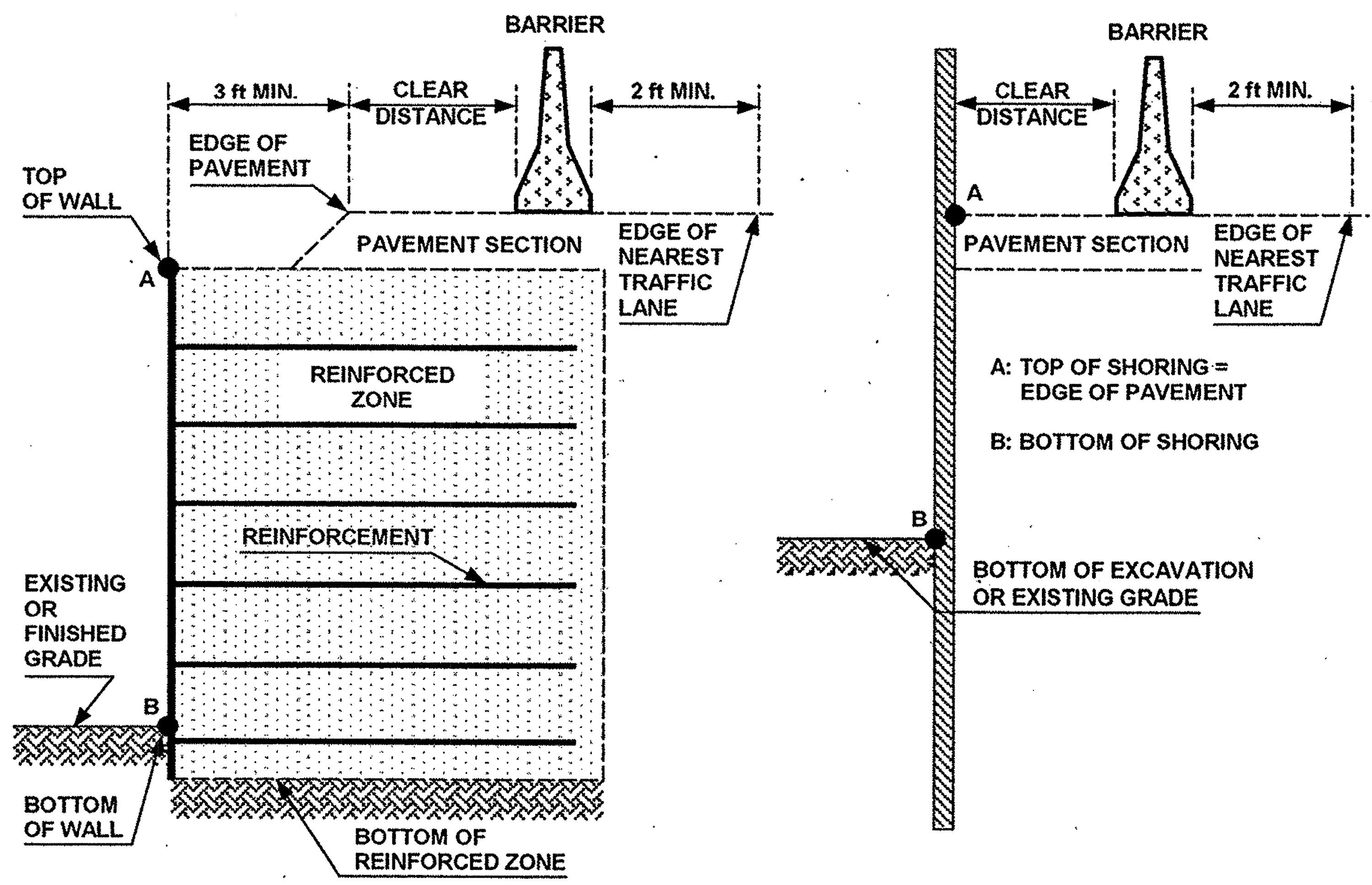
msteelman AT WZTC237453

PROJ. REFERENCE NO.	SHEET NO.
R-2408B	TCP- 28A



NOTE: WALL OR SHORING HEIGHT = A - B

FIGURE A

NOTES

1- REFER TO THE TRAFFIC CONTROL PLANS FOR SHORING LOCATIONS AND SOIL PARAMETERS.

2- REFER TO THE "TEMPORARY SHORING" PROJECT SPECIAL PROVISION FOR MORE INFORMATION ABOUT TEMPORARY SHORING, MEASUREMENT AND PAYMENT.

3- PROVIDE PORTABLE CONCRETE BARRIER TO PROTECT TEMPORARY SHORING IF SHORING IS LOCATED WITHIN THE CLEAR ZONE AS DEFINED IN 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 PCB, ANCHORED PCB OR AN OREGON BARRIER FROM THE TABLE SHOWN IN FIGURE B. FOR TRAFFIC LANES AND PORTABLE CONCRETE BARRIER LOCATED ABOVE AND BEHIND TEMPORARY SHORING, THE FOLLOWING ARE DEFINED AS:

CLEAR DISTANCE - HORIZONTAL DISTANCE FROM THE BACK FACE OF THE BARRIER TO THE EDGE OF PAVEMENT FOR TEMPORARY MSE WALL OR TO THE FACE OF NON-ANCHORED TEMPORARY SHORING AS SHOWN IN FIGURE A.

OFFSET - HORIZONTAL DISTANCE FROM THE FRONT FACE OF THE BARRIER TO CENTERLINE OF THE FURTHEST TRAFFIC LANE AS SHOWN IN FIGURE B FOR 3 TRAFFIC LANES.

5- AT THE CONTRACTOR'S OPTION OR IF THE MINIMUM REQUIRED CLEAR DISTANCE IS NOT AVAILABLE, SET AN UNANCHORED PCB AGAINST THE TRAFFIC SIDE OF THE SHORING AND DESIGN SHORING FOR TRAFFIC IMPACT OR USE THE "SURCHARGE CASE WITH TRAFFIC IMPACT" FOR THE STANDARD TEMPORARY SHORING. DO NOT PLACE BARRIER DIRECTLY ON ANY SURFACE OTHER THAN ASPHALT OR CONCRETE. (CONTACT NCDOT PAVEMENT MANAGEMENT UNIT FOR APPLICABLE PAVEMENT DESIGN).

6- USE NCDOT PORTABLE CONCRETE BARRIER (PCB) IN ACCORDANCE WITH ROADWAY STANDARD DRAWING NO. 1170.01 AND SECTION 1170 OF THE STANDARD SPECIFICATIONS.

7- USE OREGON TALL F-SHAPE CONCRETE BARRIER IN ACCORDANCE WITH DETAIL DRAWING AND SPECIAL PROVISION OBTAINED FROM: WORK ZONE TRAFFIC CONTROL UNIT WEB PAGE.

8- UNLESS NOTED OTHERWISE ON THE PLANS, SET PORTABLE CONCRETE BARRIER WITH A MINIMUM DISTANCE OF 2 FT BETWEEN THE FRONT FACE OF THE BARRIER AND THE EDGE OF THE NEAREST TRAFFIC LANE AS SHOWN IN FIGURE A.

9- FOR PORTABLE CONCRETE BARRIER ABOVE AND BEHIND TEMPORARY MSE 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' 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 or Oregon Barrier	Asphalt	All Offsets	24 for All Design Speeds					
Anchored PCB or Oregon Barrier	Concrete (including bridge approach slabs)	All Offsets	12 for All Design Speeds					

*** See Figure Below**

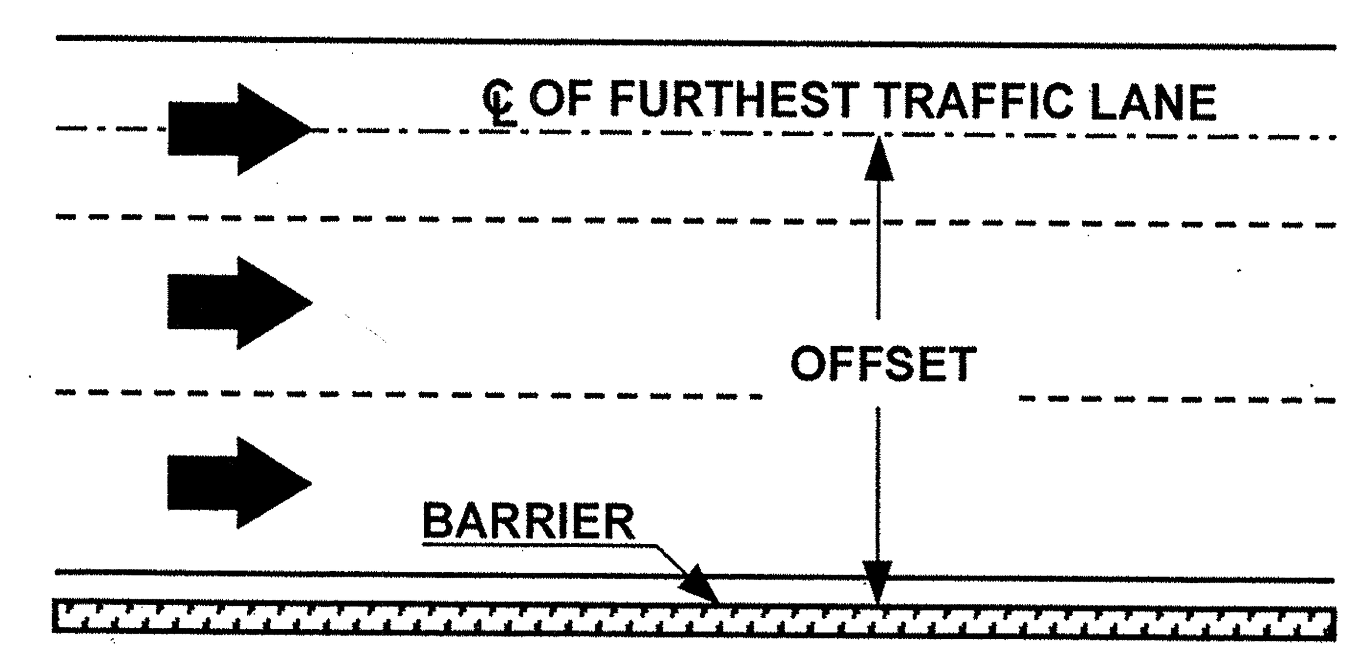


FIGURE B

APPROVED:	DATE:
SEAL	SEAL 028380 NORTH CAROLINA PROFESSIONAL ENGINEER JOSEPH ISHAK

Dec 12 2008

PORTABLE CONCRETE BARRIER AT TEMPORARY SHORING LOCATIONS

		REVISIONS
SCALE:	NONE	12/08
DATE:	3/07	
DWG. BY:	JI	
DESIGN BY:	JI	
REVIEWED BY:	JI	CADD FILE

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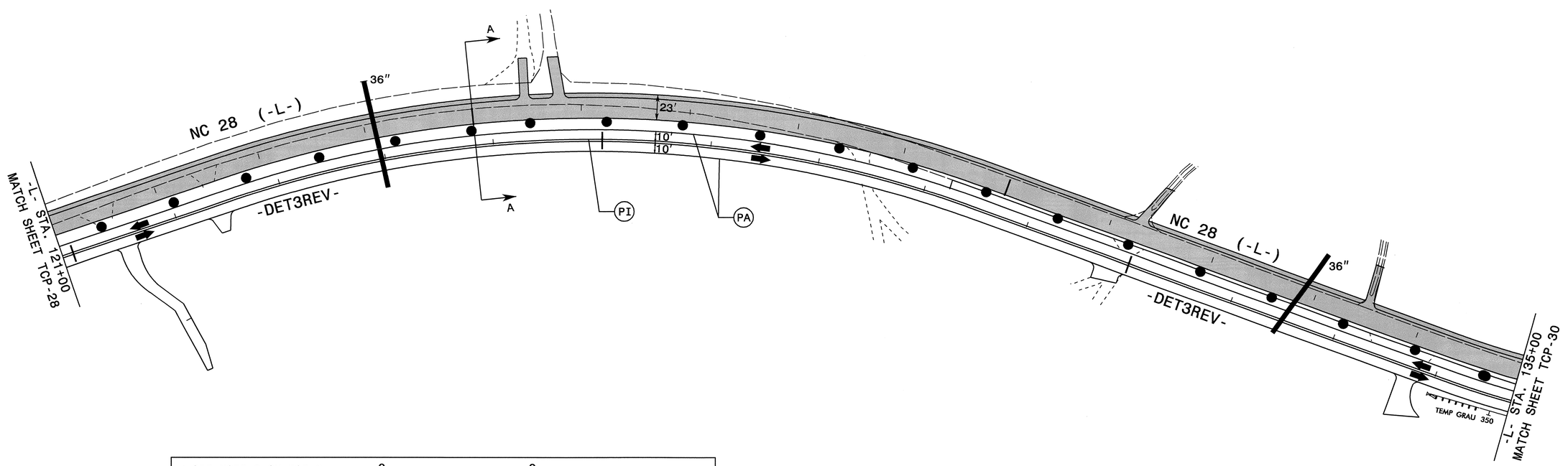
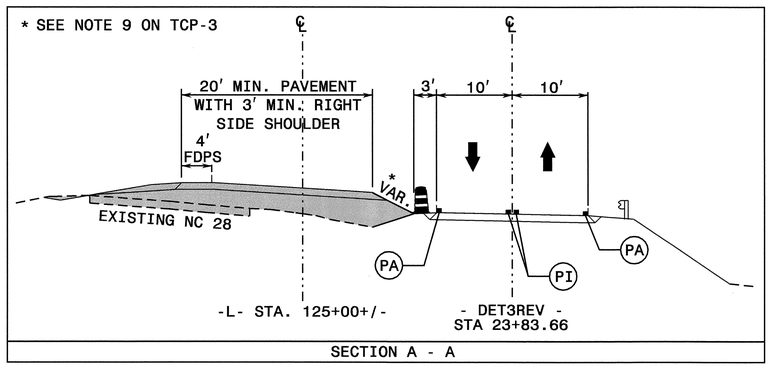
PROJ. REFERENCE NO.	SHEET NO.
R-2408B	TCP-29

125+00

130+00





SECTION A - A

APPROVED: _____ DATE: _____

NORTH CAROLINA PROFESSIONAL 027856 ENGINEER JENNIFER L. PORTANOVA 2/4/10

PHASE 2 DETAIL

SCALE:	NONE
DATE:	5/2009
DWG. BY:	MHS
DESIGN BY:	MHS
REVIEWED BY:	JLP

REVISIONS	
CADD FILE	

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msteelman AT WZTC237453

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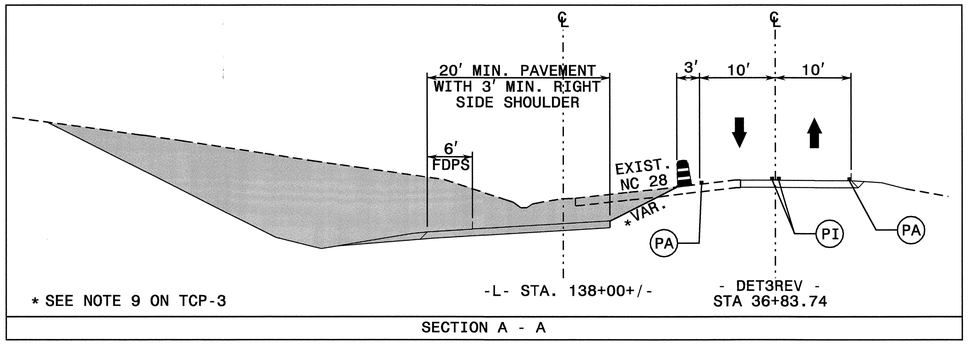
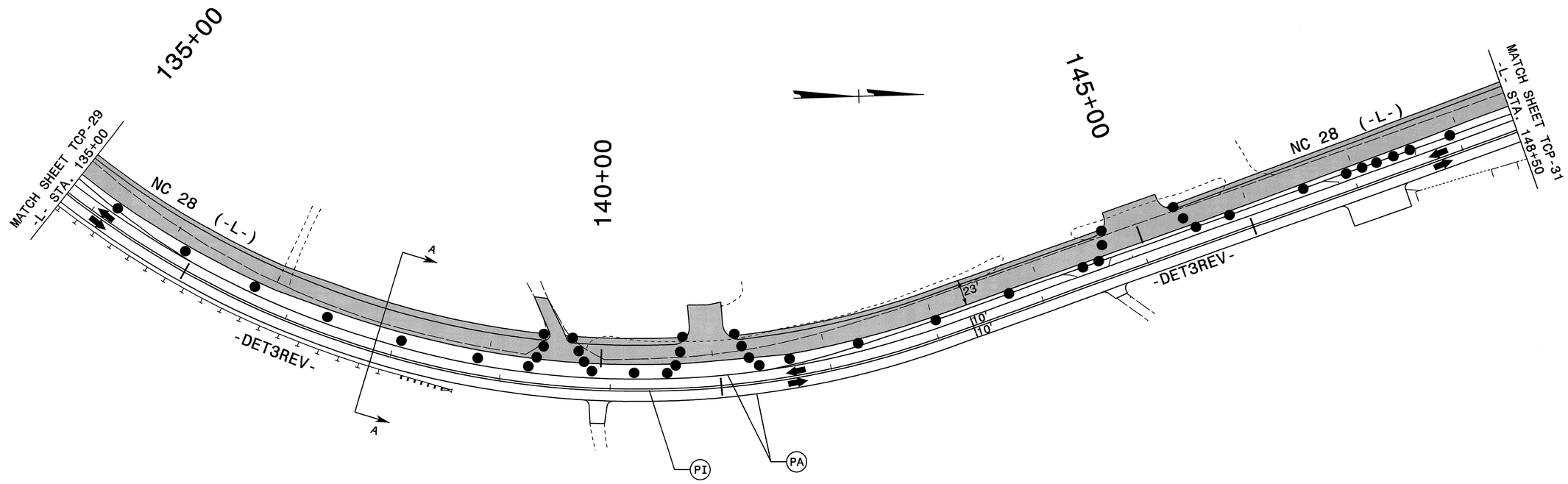


SECTION A - A



APPROVED: _____ DATE: _____

PHASE 2 DETAIL

SCALE:	NONE
DATE:	5/2009
DWG. BY:	MHS
DESIGN BY:	MHS
REVIEWED BY:	JLP

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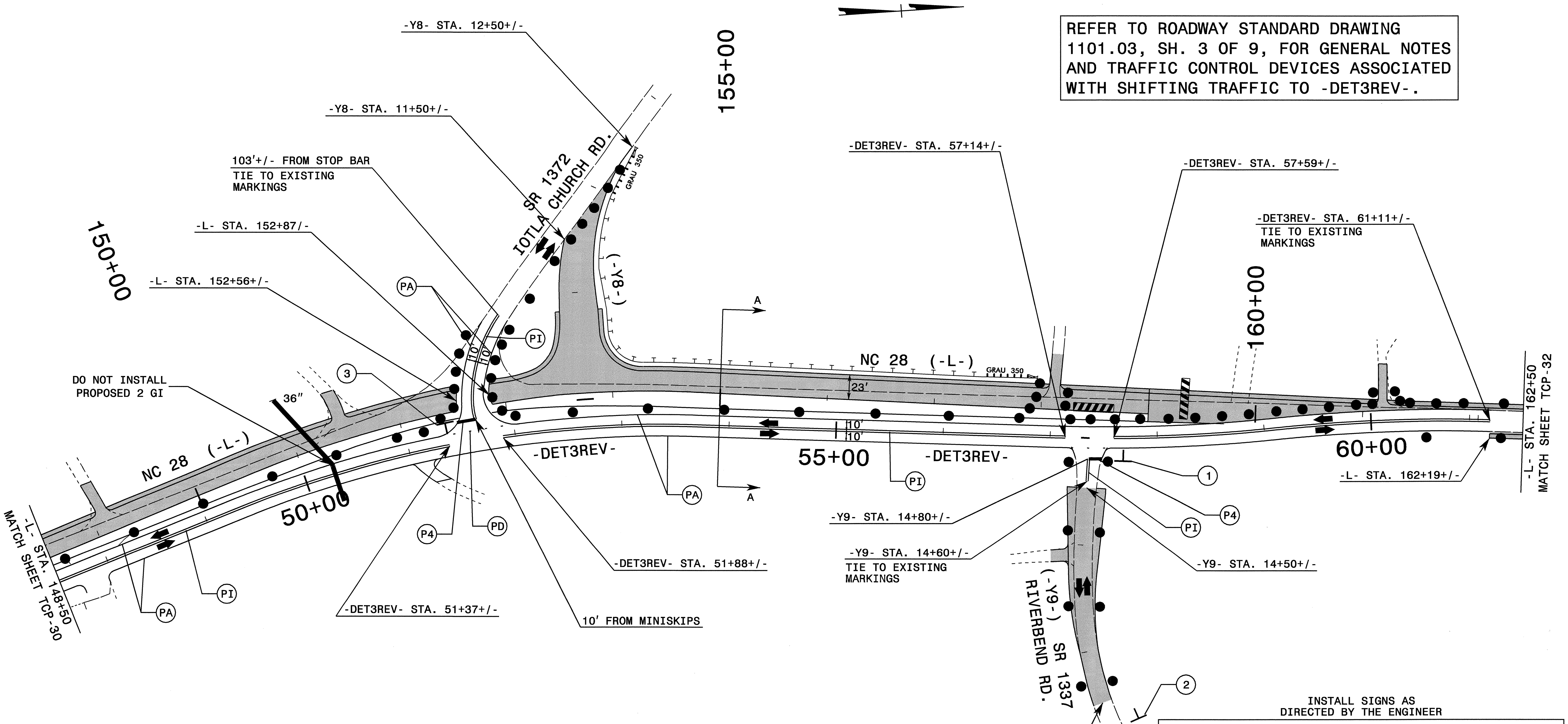
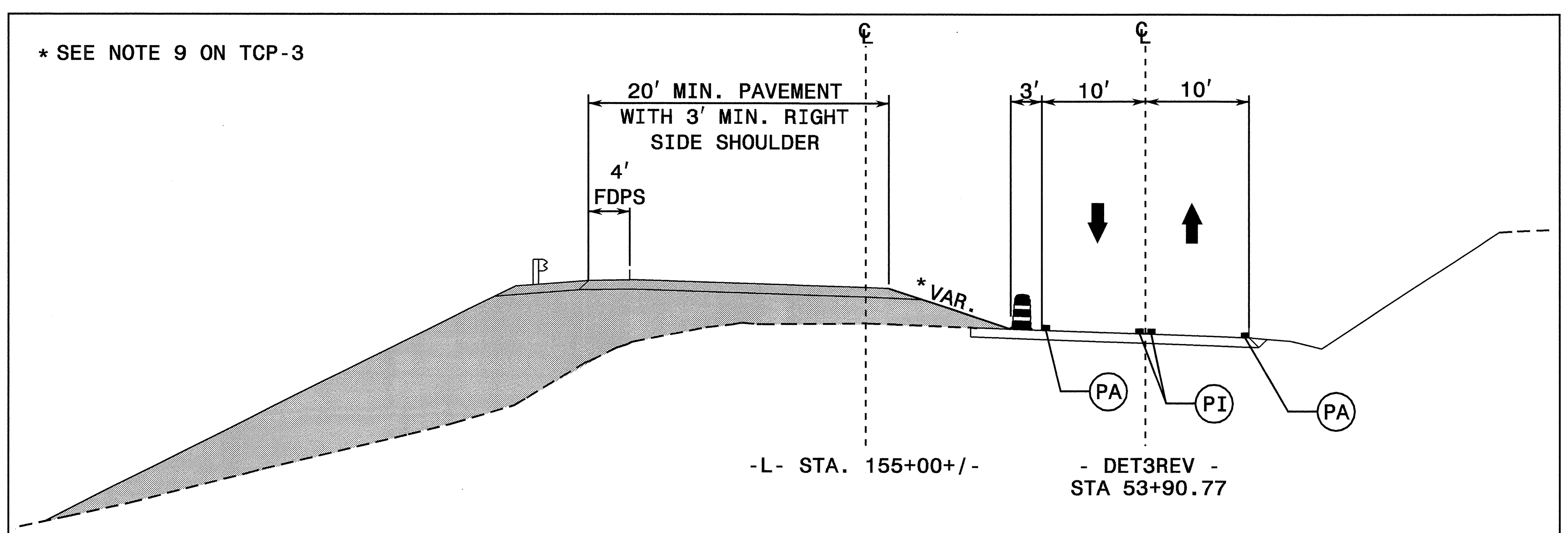
PROJ. REFERENCE NO.	SHEET NO.
R-2408B	TCP-31

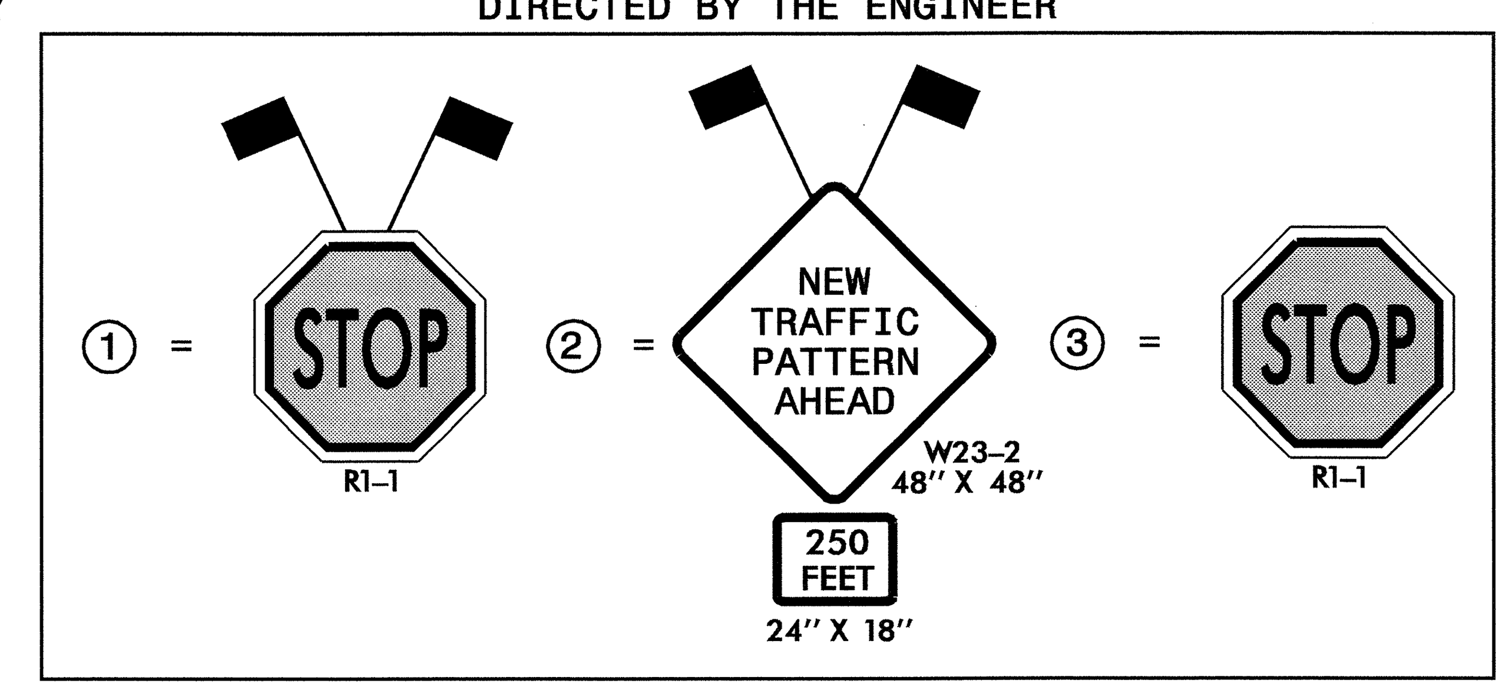
REFER TO ROADWAY STANDARD DRAWING 1101.03, SH. 3 OF 9, FOR GENERAL NOTES AND TRAFFIC CONTROL DEVICES ASSOCIATED WITH SHIFTING TRAFFIC TO -DET3REV-.





SECTION A - A

INSTALL SIGNS AS DIRECTED BY THE ENGINEER



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NORTH CAROLINA PROFESSIONAL SEAL 027856 ENGINEER JENNIFER L. PORTANOVA 2/2/10

PHASE 2 DETAIL

SCALE:	NONE
DATE:	5/2009
DWG. BY:	MHS
DESIGN BY:	MHS
REVIEWED BY:	JLP

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

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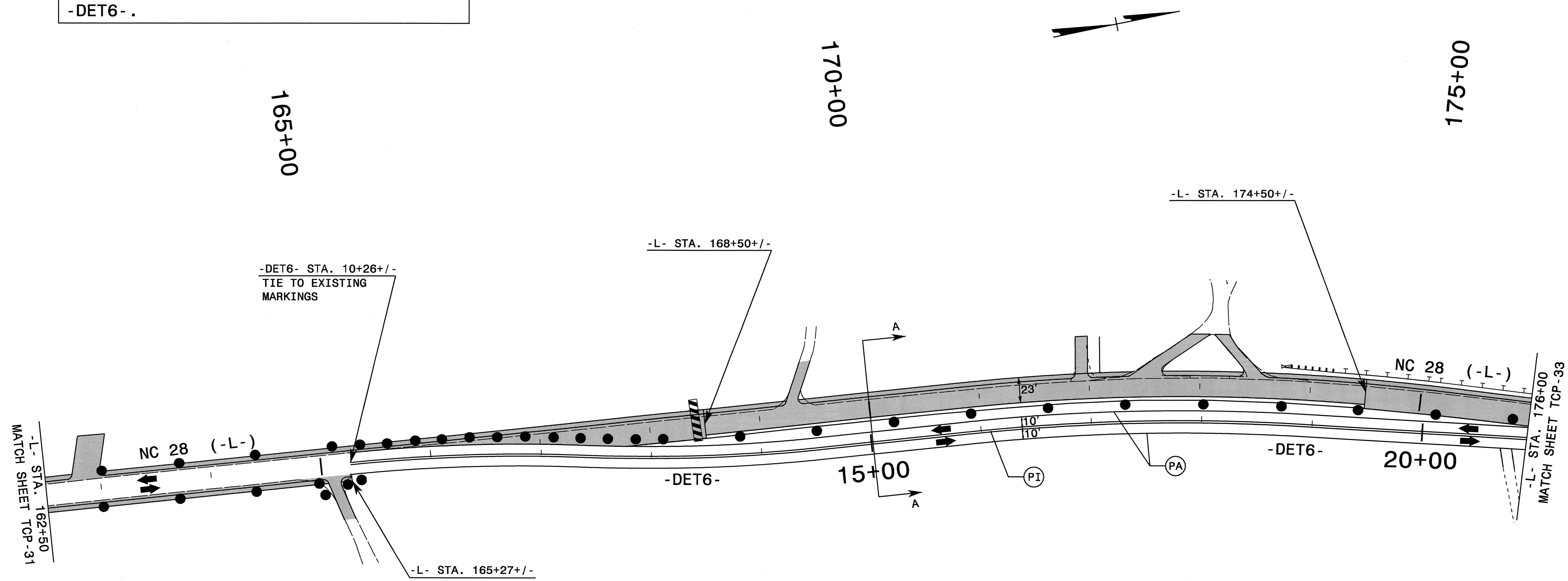
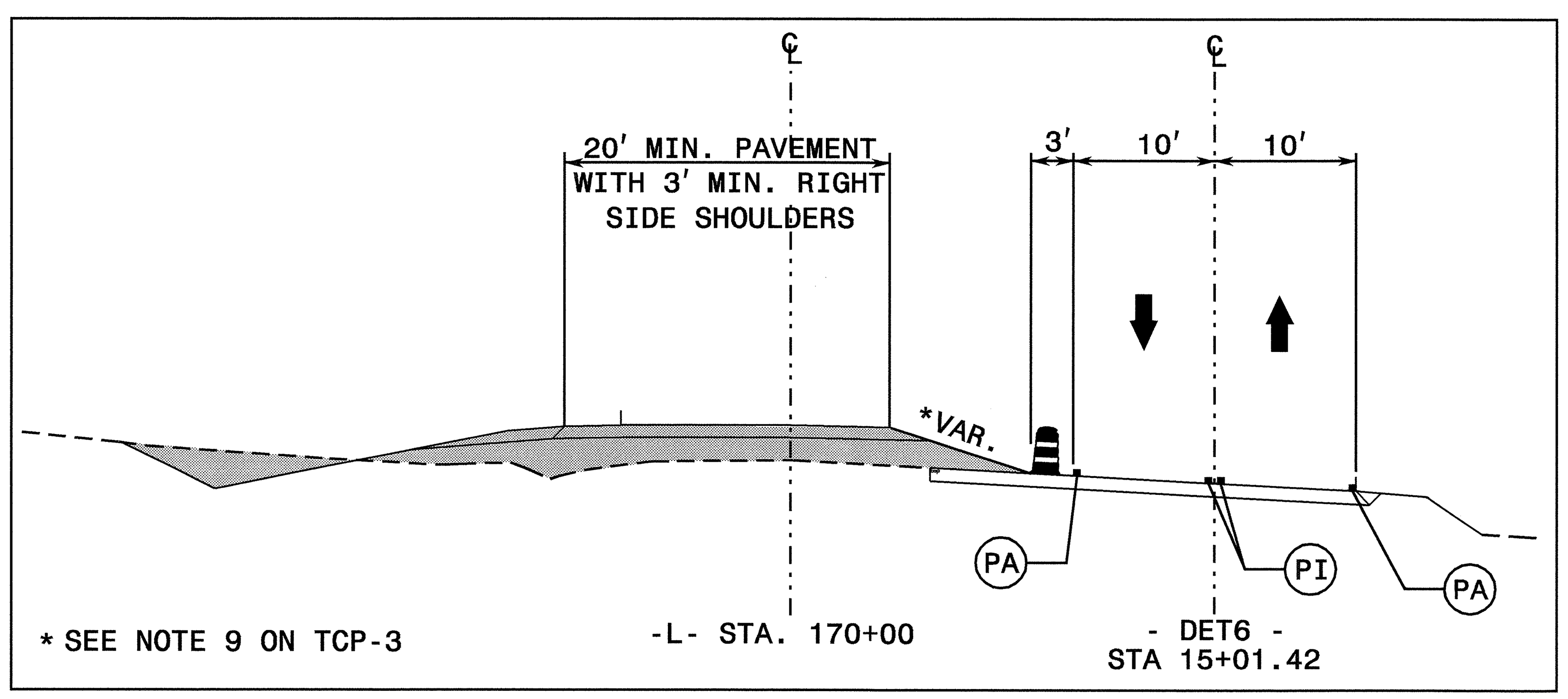
msteelman AT WZTC237453

REFER TO ROADWAY STANDARD DRAWING 1101.03, SH. 3 OF 9, FOR GENERAL NOTES AND TRAFFIC CONTROL DEVICES ASSOCIATED WITH SHIFTING TRAFFIC TO -DET3REV- AND -DET6-.





PROJ. REFERENCE NO.	SHEET NO.
R-2408B	TCP-32

PHASE 2 DETAIL

APPROVED:_______________ DATE:________

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 027856 JENNIFER L. PORTANOVA
2/2/10

SCALE:	NONE
DATE:	5/2009
DWG. BY:	MHS
DESIGN BY:	MHS
REVIEWED BY:	JLP

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msteelman AT WZTC237453

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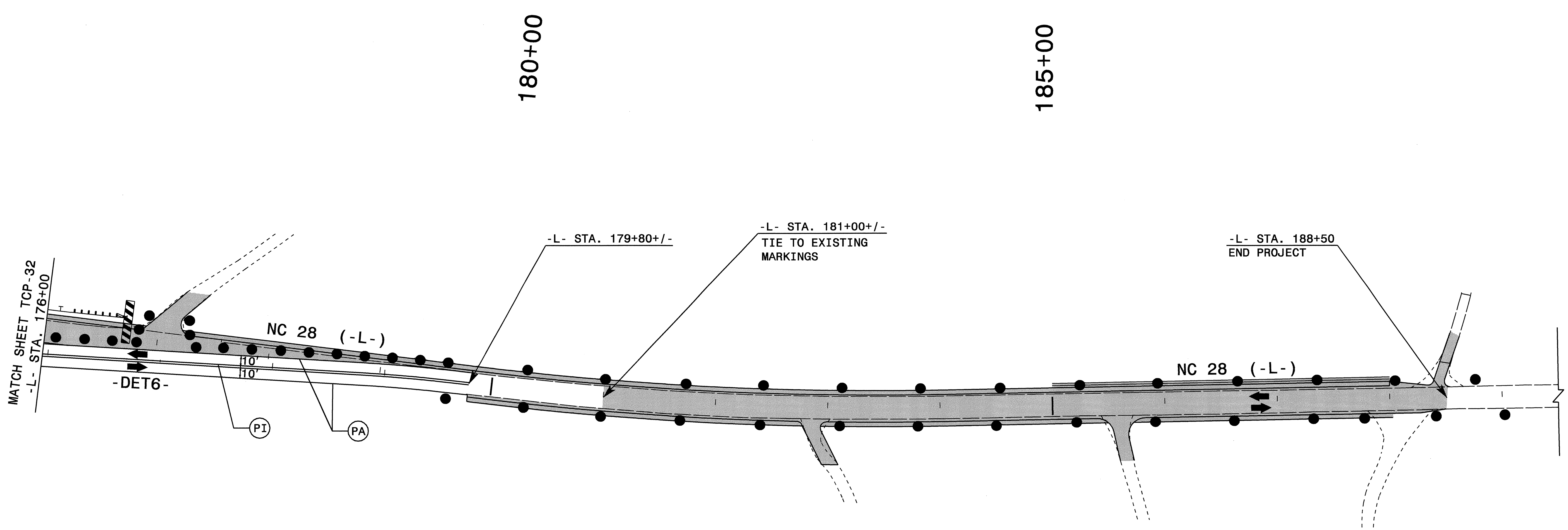

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NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 027856 JENNIFER L. PORTANOVA 2/2/10

PHASE 2 DETAIL

SCALE:	NONE
DATE:	5/2009
DWG. BY:	MHS
DESIGN BY:	MHS
REVIEWED BY:	JLP

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

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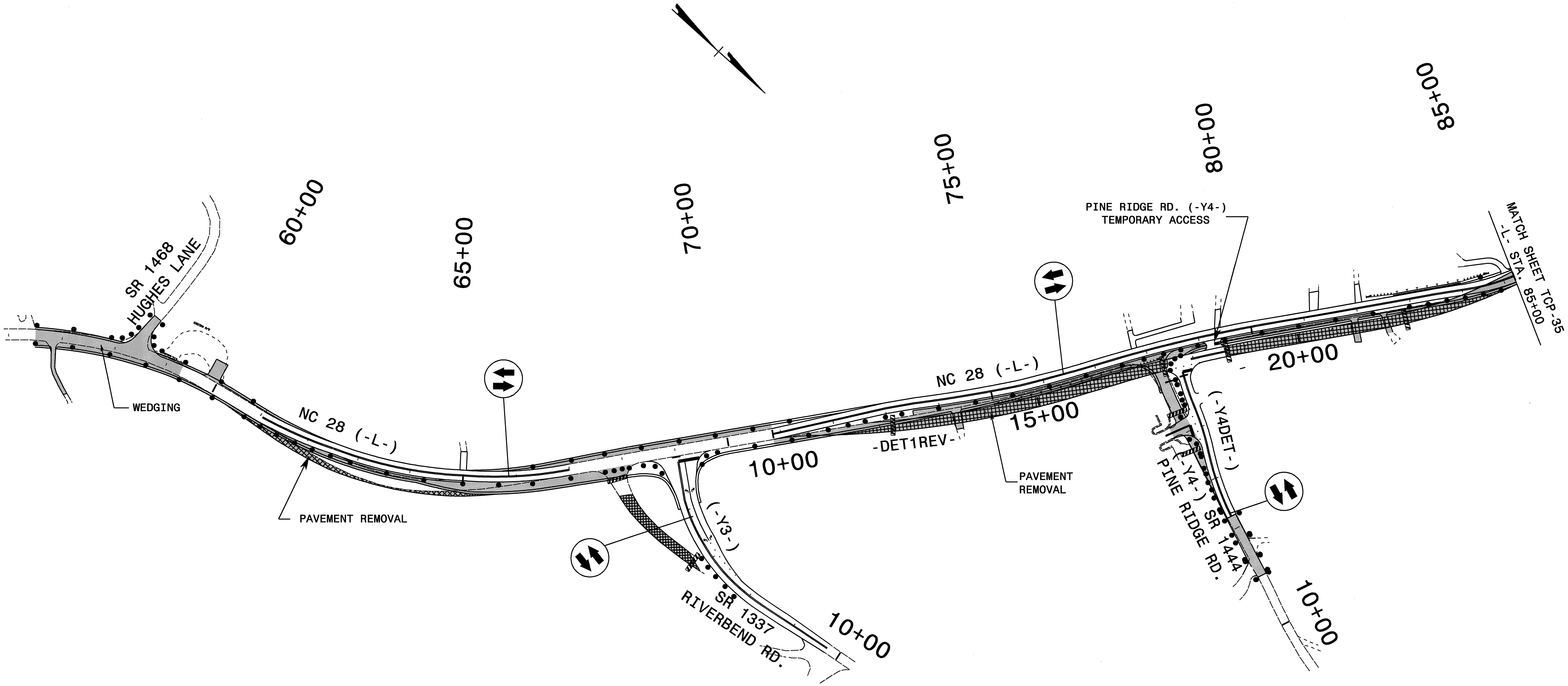

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APPROVED:____________ DATE:________

NORTH CAROLINA PROFESSIONAL SEAL 027856 ENGINEER JENNIFER L. PORTANOVA
2/2/10

PHASE 3 OVERVIEW

SCALE:	NONE
DATE:	4/2009
DWG. BY:	MHS
DESIGN BY:	MHS
REVIEWED BY:	JLP

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

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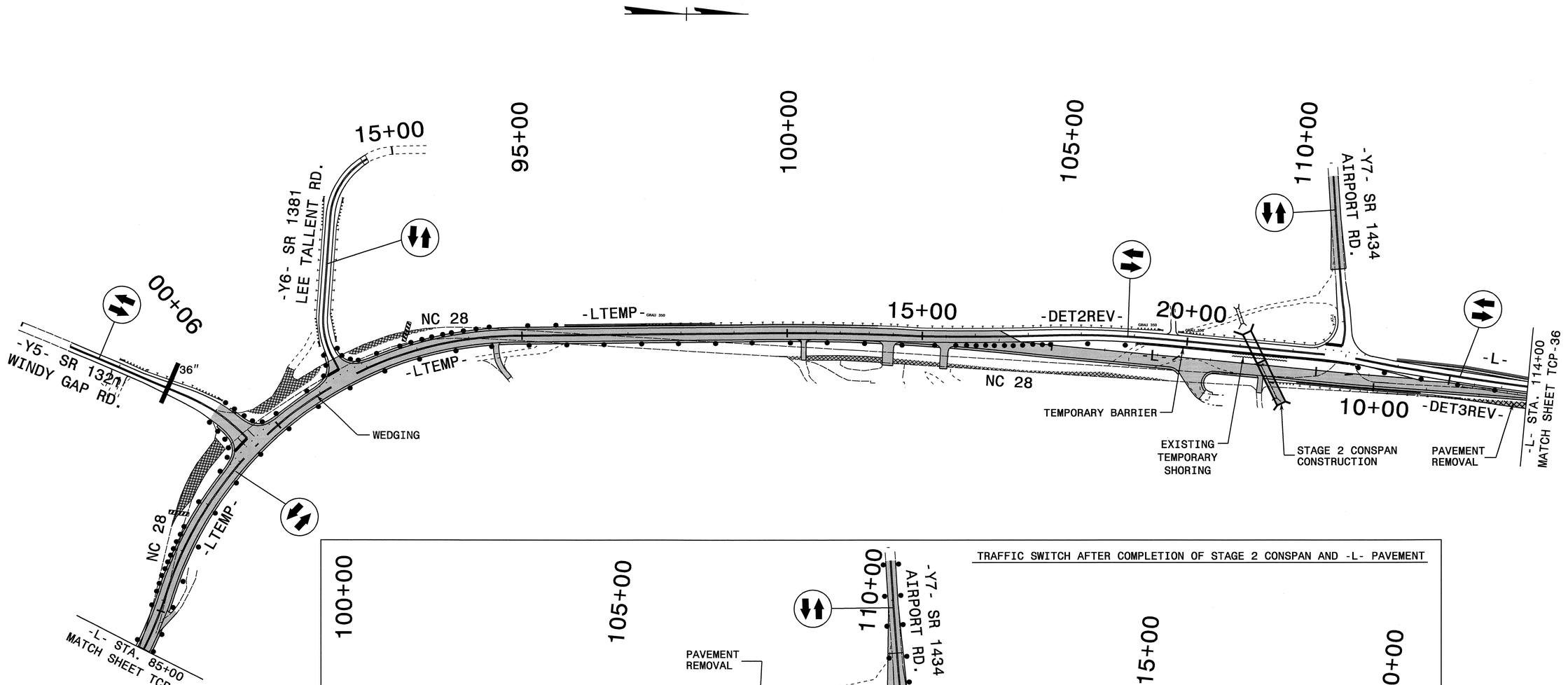

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NORTH CAROLINA PROFESSIONAL ENGINEER 027856 JENNIFER L. PORTANOVA 2/2/10

PHASE 3 OVERVIEW

SCALE:	NONE
DATE:	4/2009
DWG. BY:	MHS
DESIGN BY:	MHS
REVIEWED BY:	JLP

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AT WZTC237453

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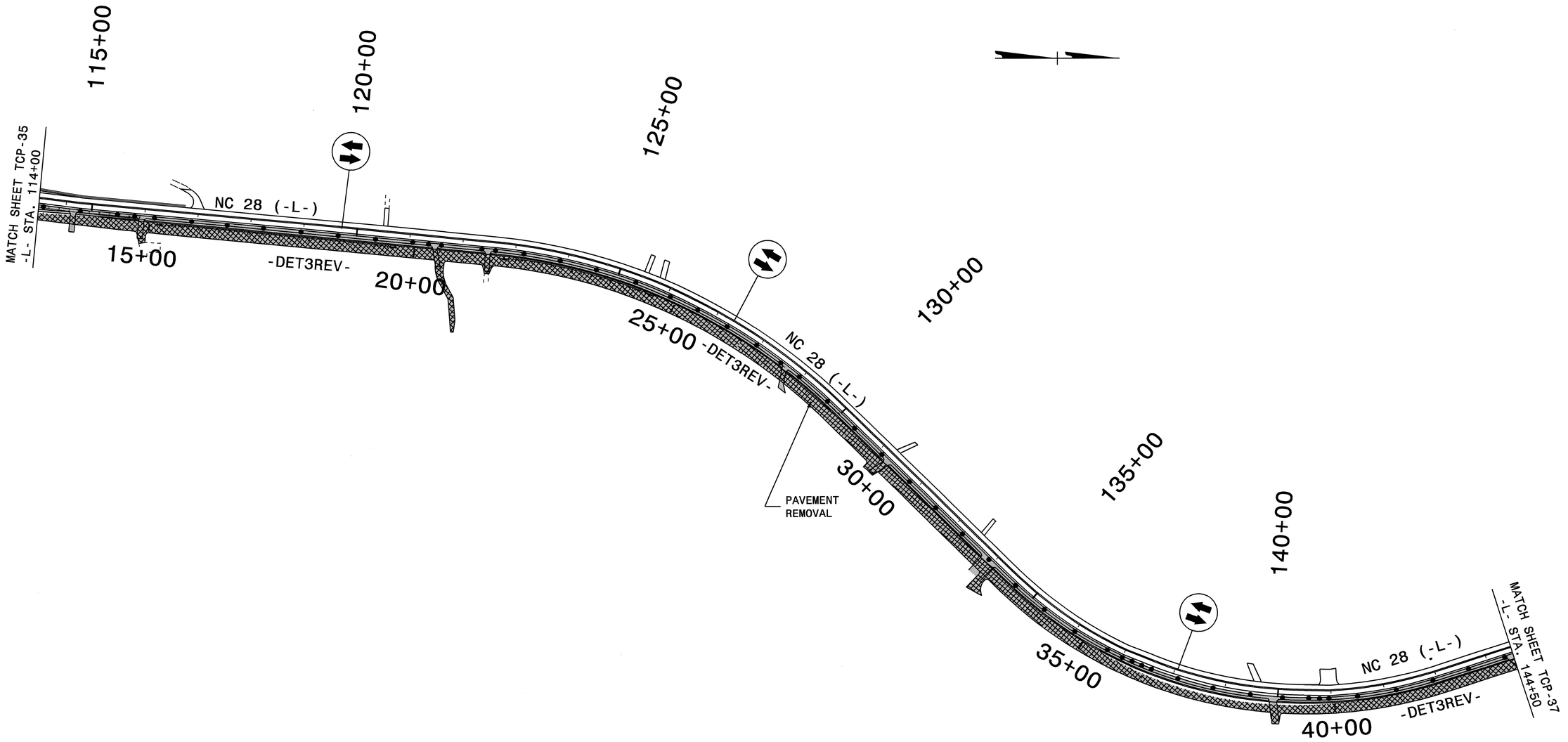

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NORTH CAROLINA PROFESSIONAL SEAL 027856 ENGINEER JENNIFER L. PORTANOVA 2/2/10

PHASE 3 OVERIVEW

SCALE:	NONE
DATE:	4/2009
DWG. BY:	MHS
DESIGN BY:	MHS
REVIEWED BY:	JLP

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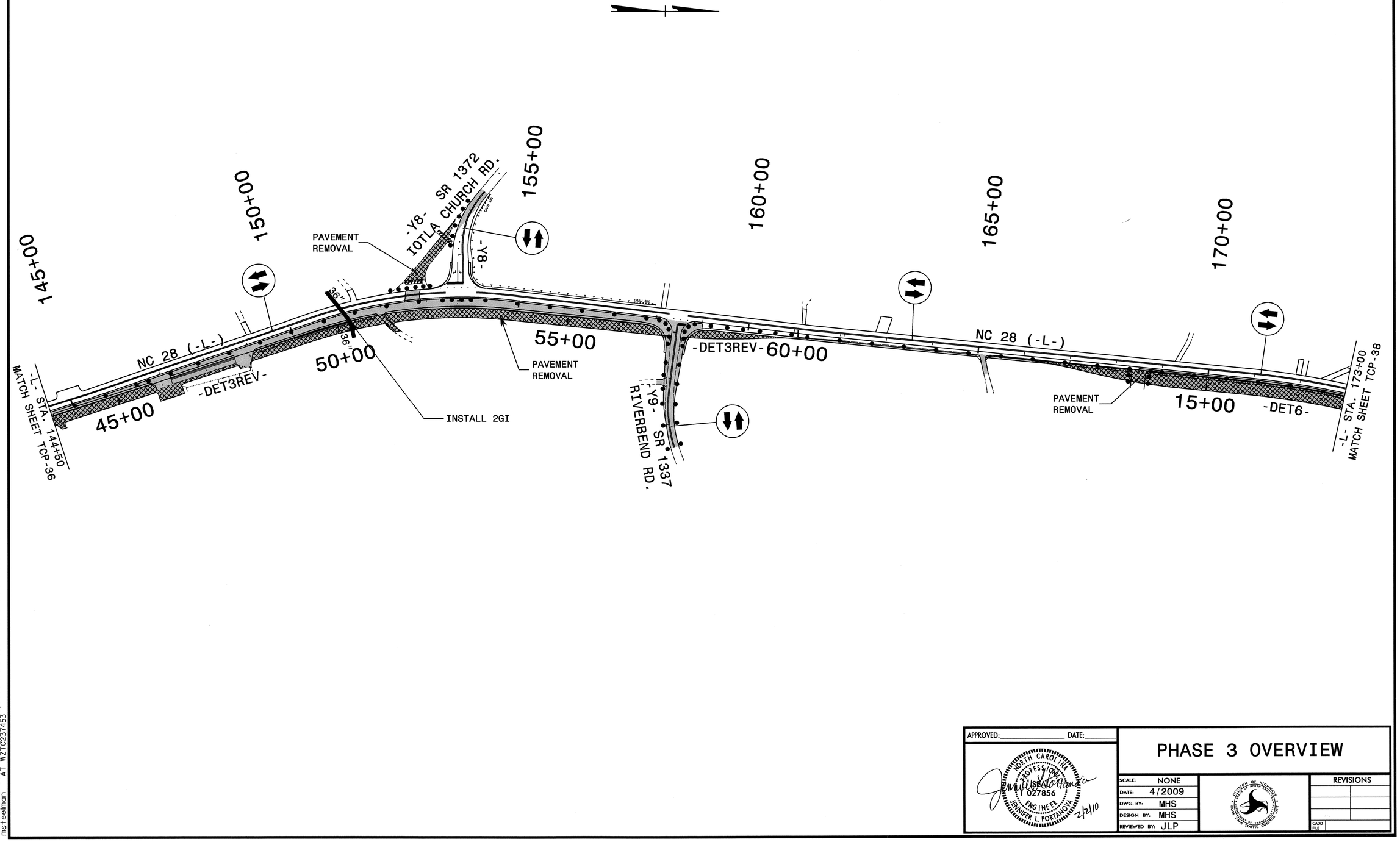

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NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 027856 JENNIFER L. PORTANOVA 2/2/10

PHASE 3 OVERVIEW

SCALE:	NONE
DATE:	4/2009
DWG. BY:	MHS
DESIGN BY:	MHS
REVIEWED BY:	JLP

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mstealman AT WZTC237453

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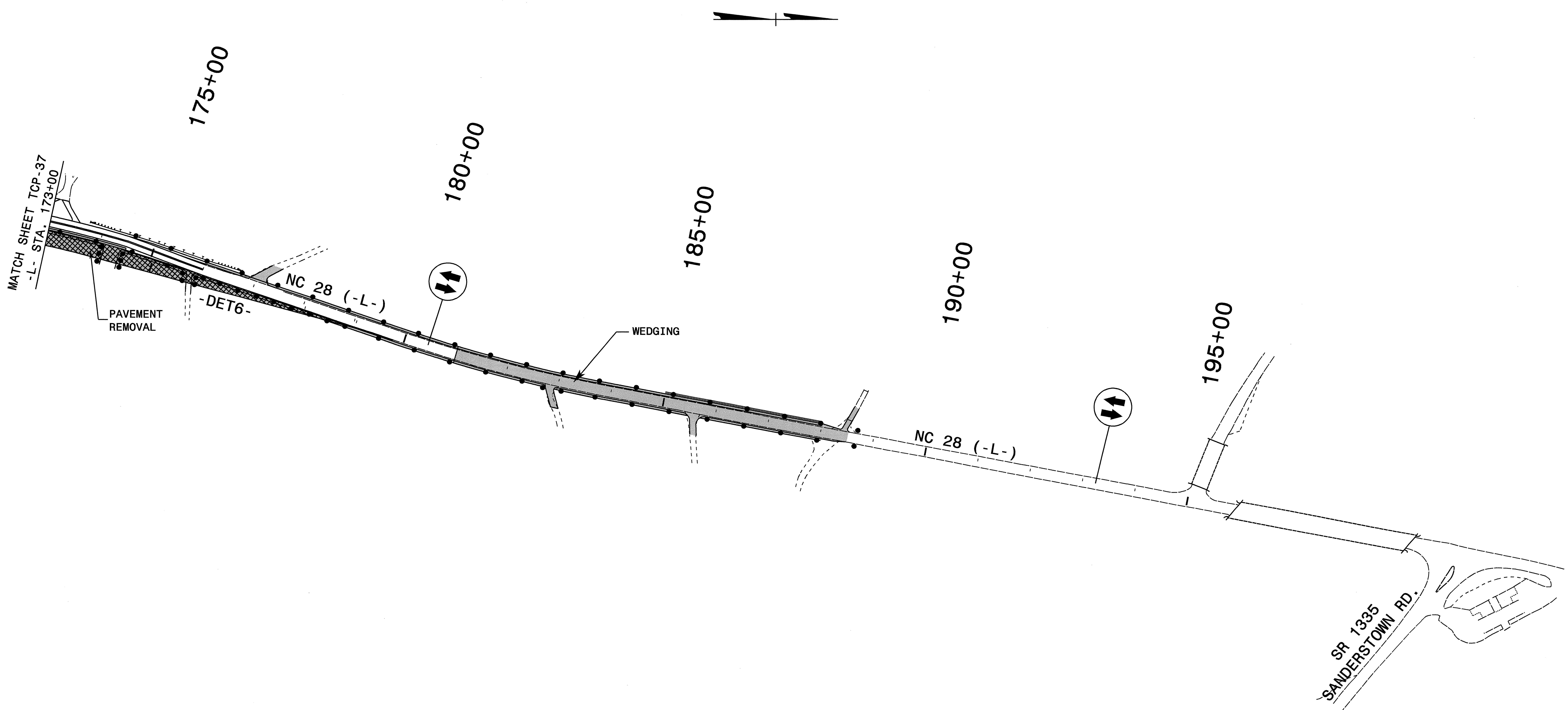
R-2408B	TCP-38



APPROVED:__________ DATE:______

NORTH CAROLINA PROFESSIONAL SEAL 027856 ENGINEER JENNIFER L. PORTANOVA

2/2/10

PHASE 3 OVERVIEW

SCALE:	NONE
DATE:	4/2009
DWG. BY:	MHS
DESIGN BY:	MHS
REVIEWED BY:	JLP

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

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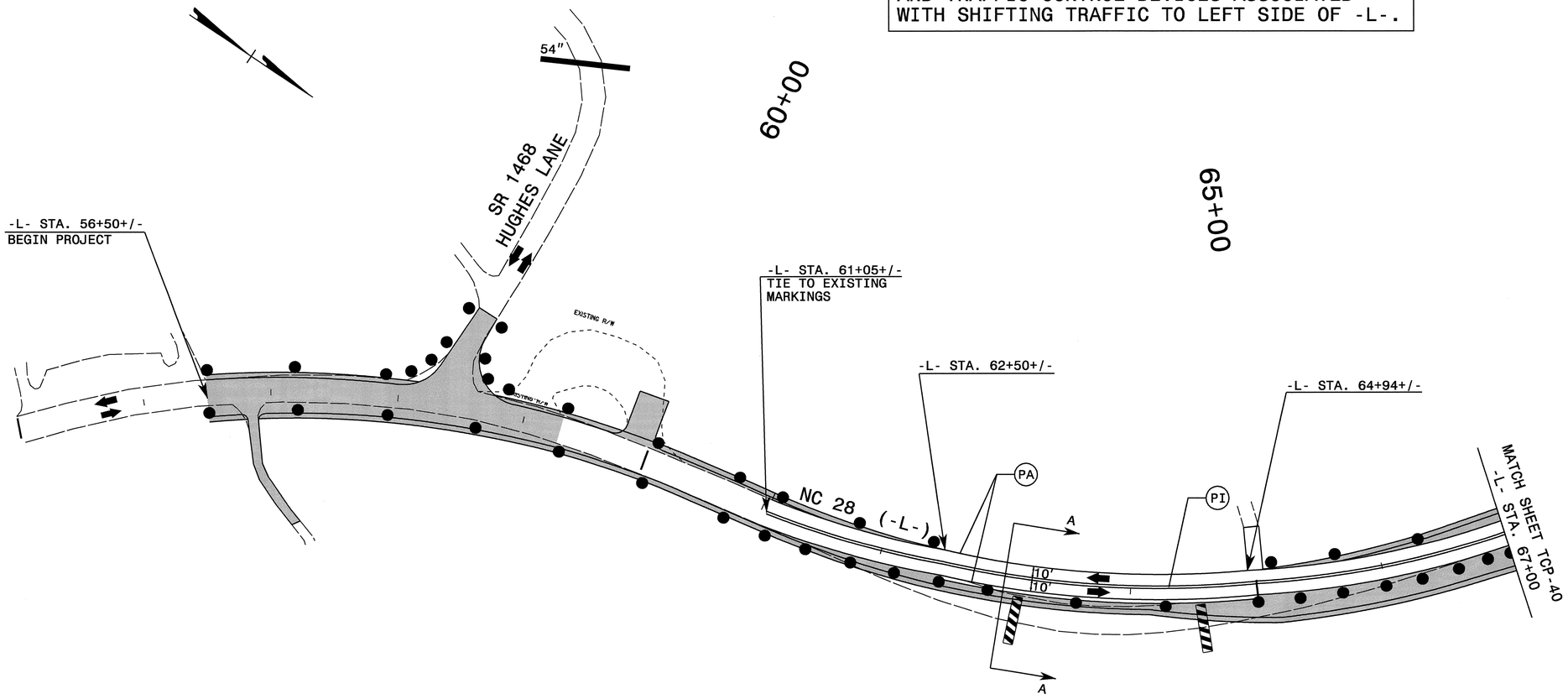
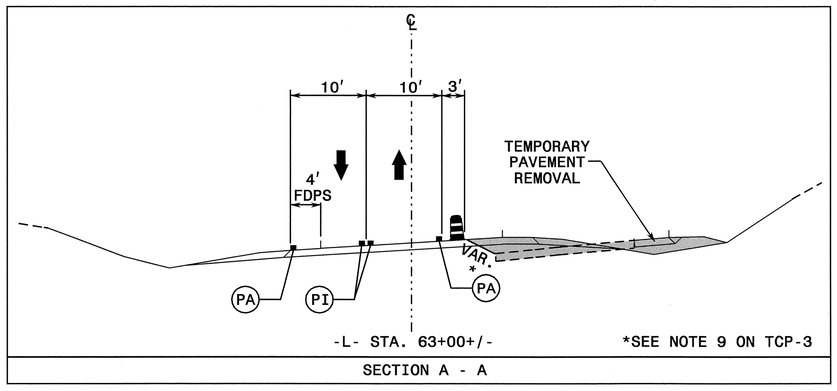
msteelman AT WZTC237453

PROJ. REFERENCE NO.	SHEET NO.
R-2408B	TCP-39

REFER TO ROADWAY STANDARD DRAWING 1101.03, SH. 3 OF 9, FOR GENERAL NOTES AND TRAFFIC CONTROL DEVICES ASSOCIATED WITH SHIFTING TRAFFIC TO LEFT SIDE OF -L-.





SECTION A - A

APPROVED: _____ DATE: _____

NORTH CAROLINA PROFESSIONAL ENGINEER 027856 JENNIFER L. PORTANOVA 2/2/10

PHASE 3 DETAIL

SCALE:	NONE
DATE:	5/2009
DWG. BY:	MHS
DESIGN BY:	MHS
REVIEWED BY:	JLP

REVISIONS	
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msteelman AT WIC237453

PROJ. REFERENCE NO.	SHEET NO.
R-2408B	TCP-40

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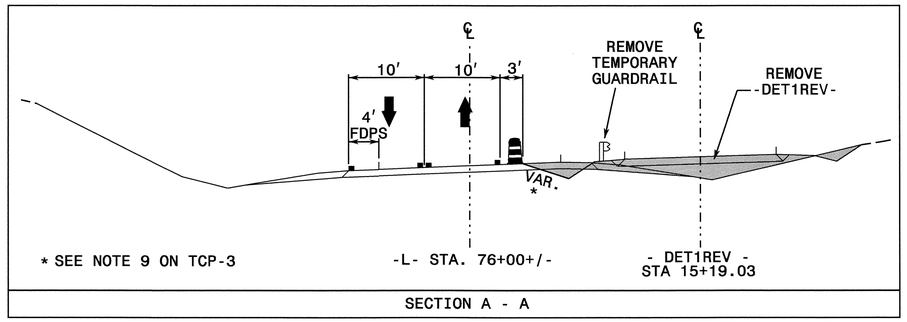
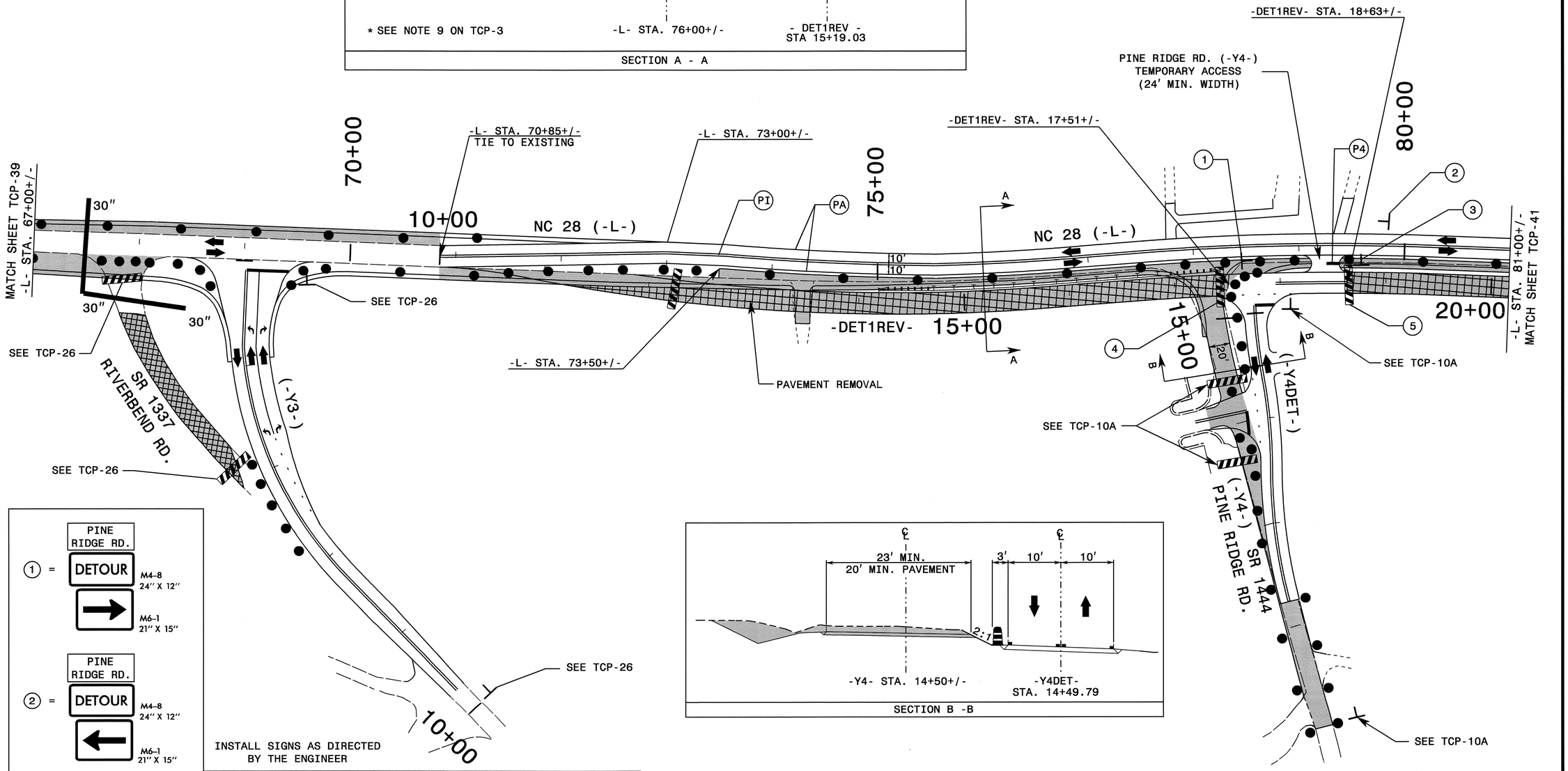


SECTION A - A



SECTION B -B

APPROVED: _____ DATE: _____

NORTH CAROLINA PROFESSIONAL ENGINEER 027856 JENNIFER L. PORTANOVA 2/2/10

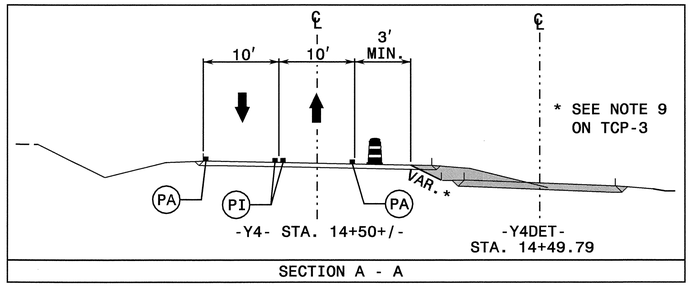
PHASE 3 DETAIL

SCALE:	NONE
DATE:	5/2009
DWG. BY:	MHS
DESIGN BY:	MHS
REVIEWED BY:	JLP

REVISIONS	
CADD FILE	

02-FEB-2010 13:06
\\Dot\dfsroot01\Proj\TIPProjects-R\R2408B\Traffic\TrafficControl\TCP\R-2408B_TCP DESIGN\R-2408B_TC_TCP_40.dgn
mstreelman AT WZTC237453

PROJ. REFERENCE NO.	SHEET NO.
R-2408B	TCP-40A



SECTION A - A

PINE RIDGE RD. (-Y4-) TEMPORARY PATTERN
AFTER COMPLETION OF RIGHT SIDE -Y4- WIDENING

APPROVED: _____ DATE: _____

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 027856 JENNIFER L. PORTANOVA 2/4/10

PHASE 3 DETAIL

SCALE:	NONE
DATE:	5/2009
DWG. BY:	MHS
DESIGN BY:	MHS
REVIEWED BY:	JLP

REVISIONS	
CADD FILE	

02-FEB-2010 13:43
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msteelman AT WZTC237453

PROJ. REFERENCE NO.	SHEET NO.
R-2408B	TCP-41

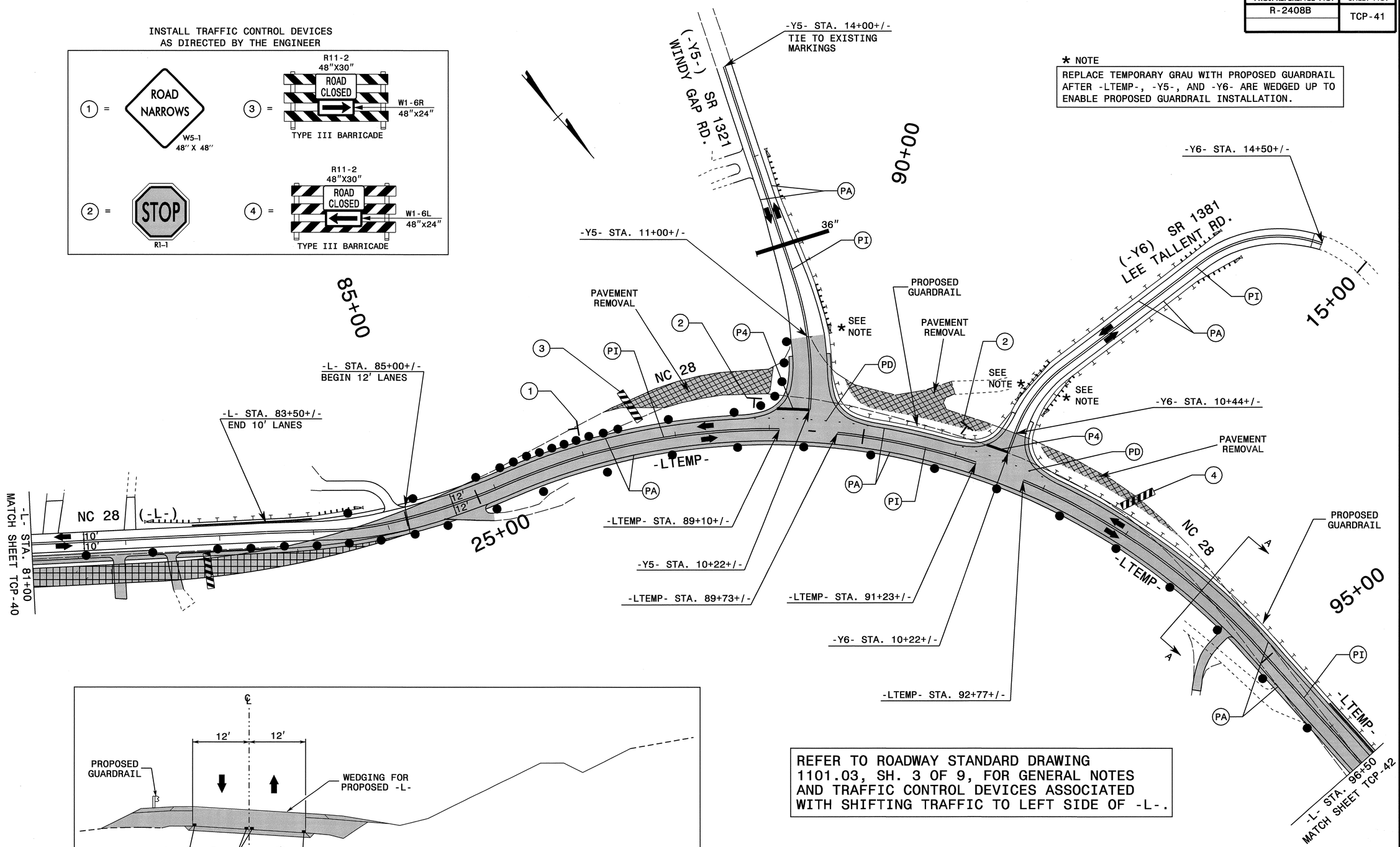
INSTALL TRAFFIC CONTROL DEVICES
AS DIRECTED BY THE ENGINEER

1 = ROAD NARROWS (W5-1 48" X 48")

2 = STOP (R1-1)

3 = R11-2 48"X30" ROAD CLOSED W1-6R 48"x24" TYPE III BARRICADE

4 = R11-2 48"X30" ROAD CLOSED W1-6L 48"x24" TYPE III BARRICADE



* NOTE
REPLACE TEMPORARY GRAU WITH PROPOSED GUARDRAIL AFTER -LTEMP-, -Y5-, AND -Y6- ARE WEDGED UP TO ENABLE PROPOSED GUARDRAIL INSTALLATION.

SECTION A - A

REFER TO ROADWAY STANDARD DRAWING 1101.03, SH. 3 OF 9, FOR GENERAL NOTES AND TRAFFIC CONTROL DEVICES ASSOCIATED WITH SHIFTING TRAFFIC TO LEFT SIDE OF -L-.

APPROVED: _____ DATE: _____

NORTH CAROLINA PROFESSIONAL SEAL 027856 ENGINEER JENNIFER L. PORTANOVA 2/2/10

PHASE 3 DETAIL

SCALE:	NONE
DATE:	5/2009
DWG. BY:	MHS
DESIGN BY:	MHS
REVIEWED BY:	JLP

REVISIONS	
CADD FILE	

02-FEB-2010 13:25
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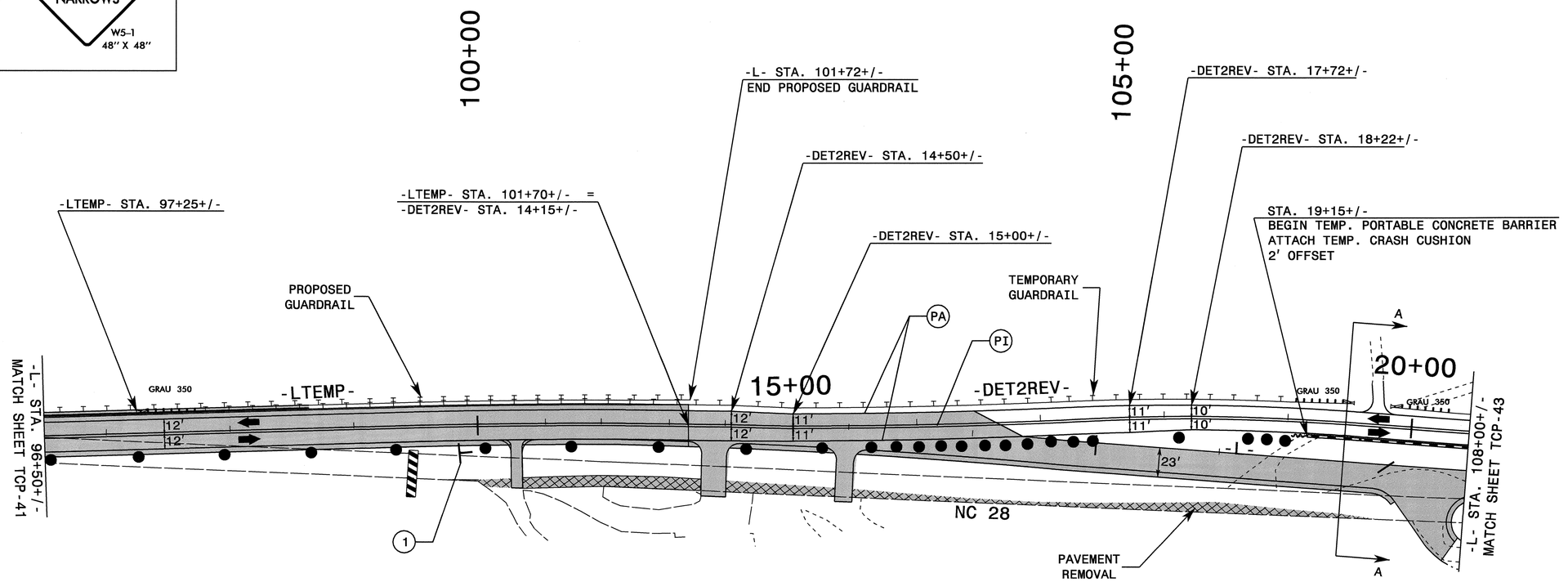
msteelman AT WZTC237453

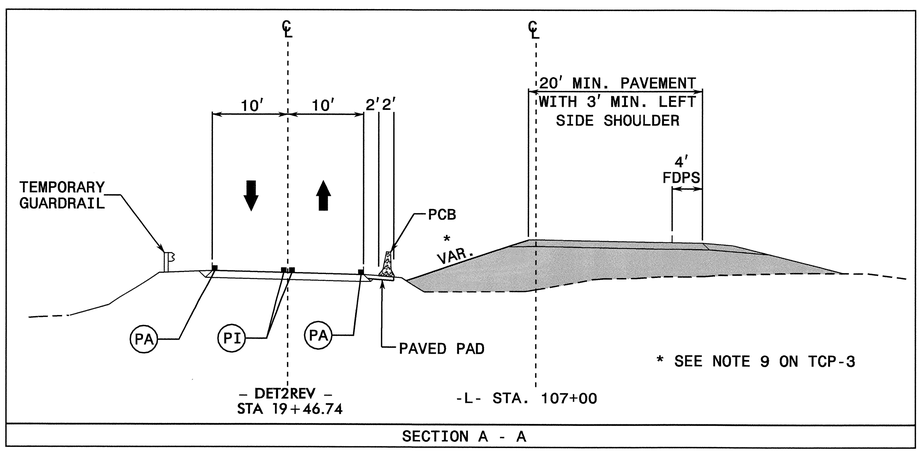
PROJ. REFERENCE NO.	SHEET NO.
R-2408B	TCP-42

INSTALL TRAFFIC CONTROL DEVICES
AS DIRECTED BY THEN ENGINEER

(1) = ROAD NARROWS
W5-1
48" X 48"

REFER TO ROADWAY STANDARD DRAWING 1101.03, SH. 3 OF 9, FOR GENERAL NOTES AND TRAFFIC CONTROL DEVICES ASSOCIATED WITH SHIFTING TRAFFIC TO -DET2REV-.





SECTION A - A

APPROVED: _____ DATE: _____

NORTH CAROLINA PROFESSIONAL SEAL 027856 ENGINEER JENNIFER L PORTANOVA
12/10

PHASE 3 DETAIL

SCALE:	NONE
DATE:	5/2009
DWG. BY:	MHS
DESIGN BY:	MHS
REVIEWED BY:	JLP

REVISIONS

CADD FILE

02-FEB-2010 14:04
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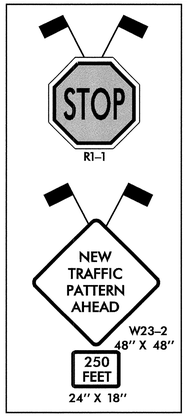
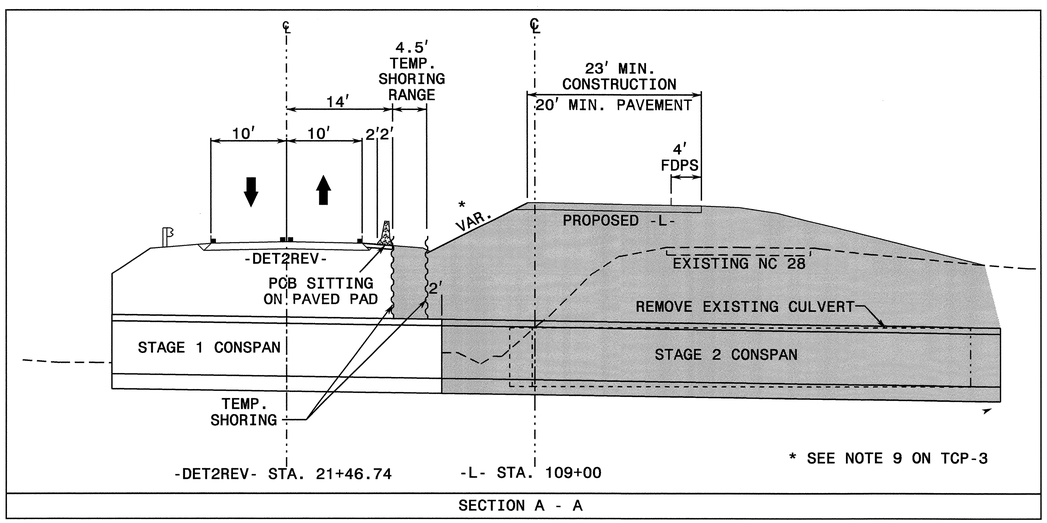
msteelman AT WZTC237453

PROJ. REFERENCE NO.	SHEET NO.
R-2408B	TCP-43

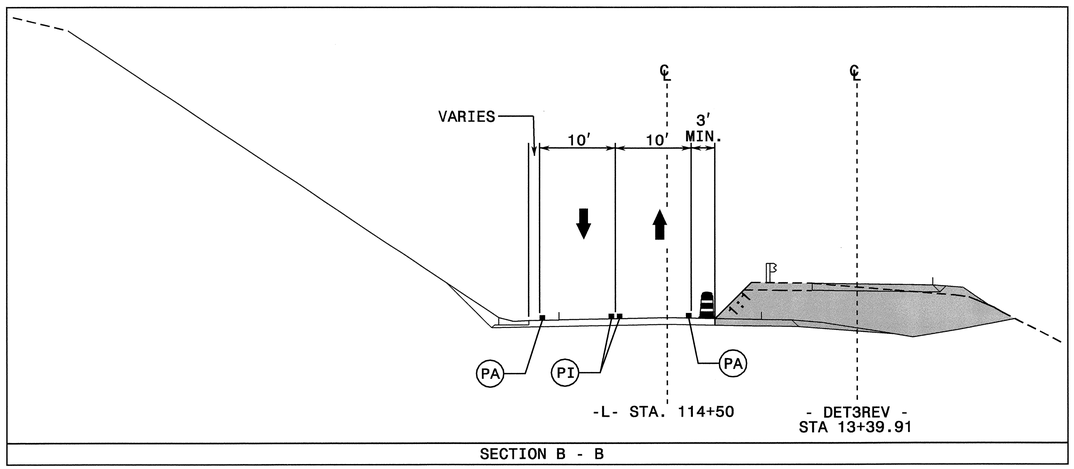
INSTALL SIGNS AS DIRECTED BY THE ENGINEER



SECTION C - C

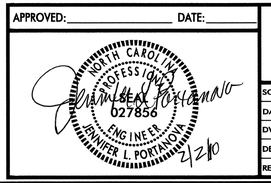


SECTION A - A



SECTION B - B

APPROVED: _____ DATE: _____



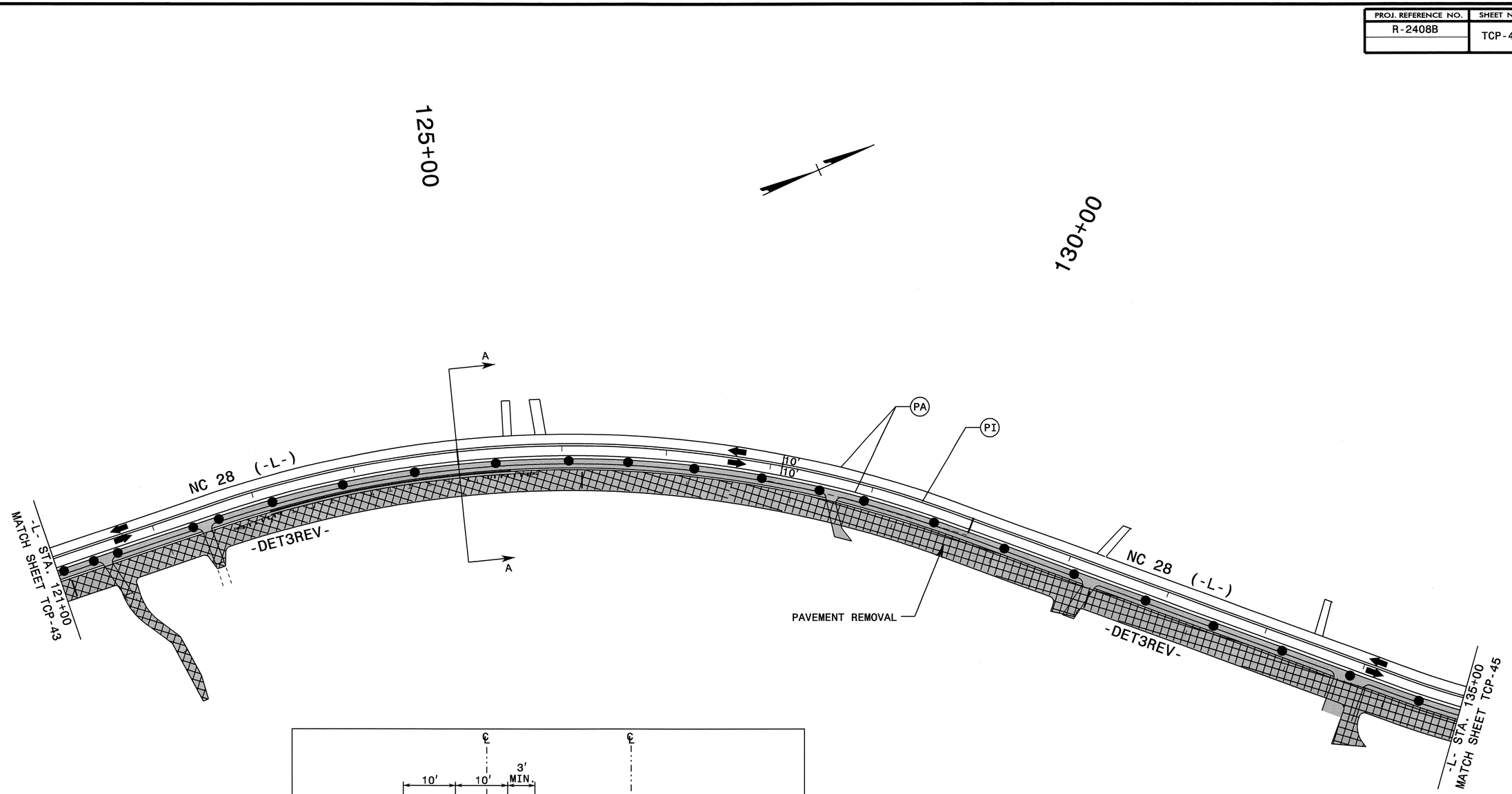
PHASE 3 DETAIL

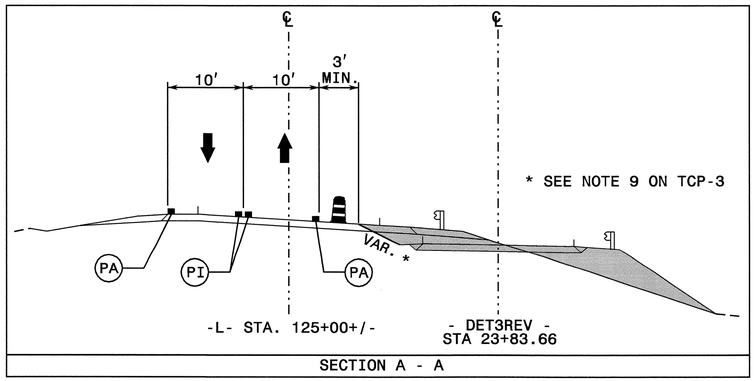
SCALE:	NONE
DATE:	5/2009
DWG. BY:	MHS
DESIGN BY:	MHS
REVIEWED BY:	JLP

REVISIONS
CADD FILE

02-FEB-2010 14:03
\\Dot\dfs\co\ON\Proj\TIPProjects-RVR2408B\Traffic\TrafficControl\TCPVR-2408B_TCP DESIGN\R-2408B_TC_TCP_43.dgn
msteelman
AT WZTC237453

PROJ. REFERENCE NO.	SHEET NO.
R-2408B	TCP-44





SECTION A - A

APPROVED: _____ DATE: _____

NORTH CAROLINA PROFESSIONAL ENGINEER 027856 JENNIFER L. PORTANOVA

2/2/10

PHASE 3 DETAIL

SCALE:	NONE
DATE:	5/2009
DWG. BY:	MHS
DESIGN BY:	MHS
REVIEWED BY:	JLP

REVISIONS	
CADD FILE	

02-FEB-2010 14:01
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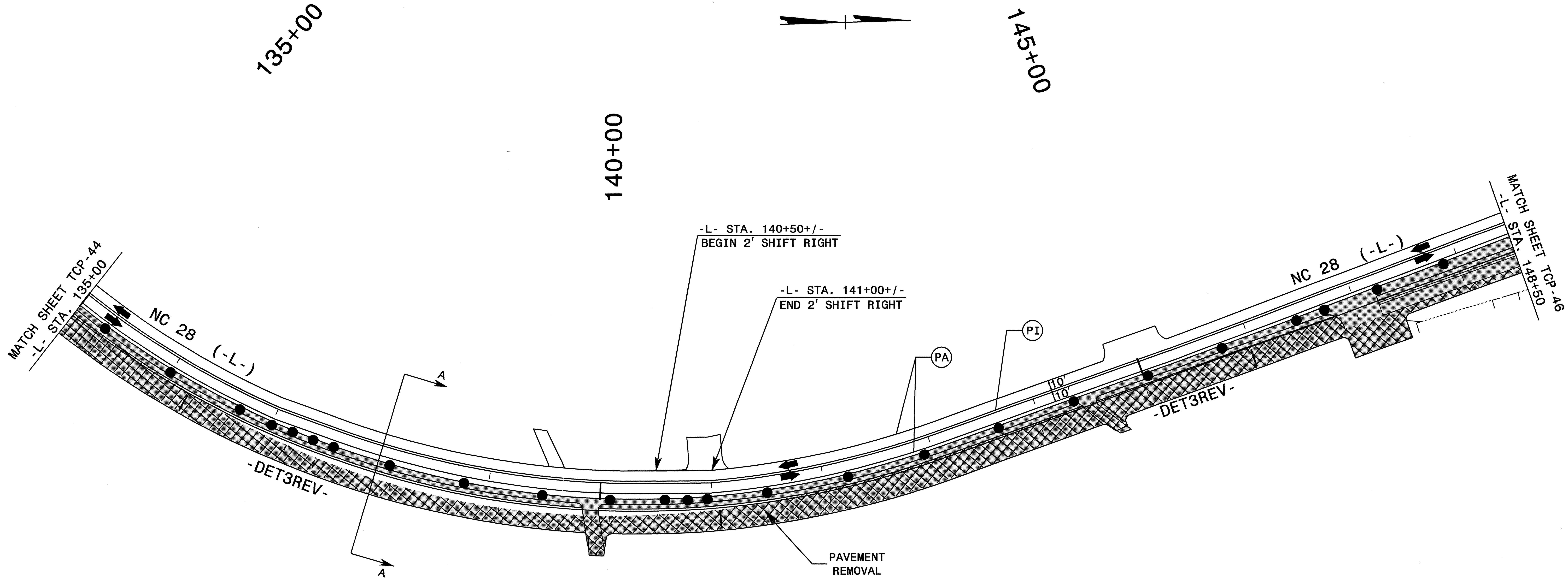
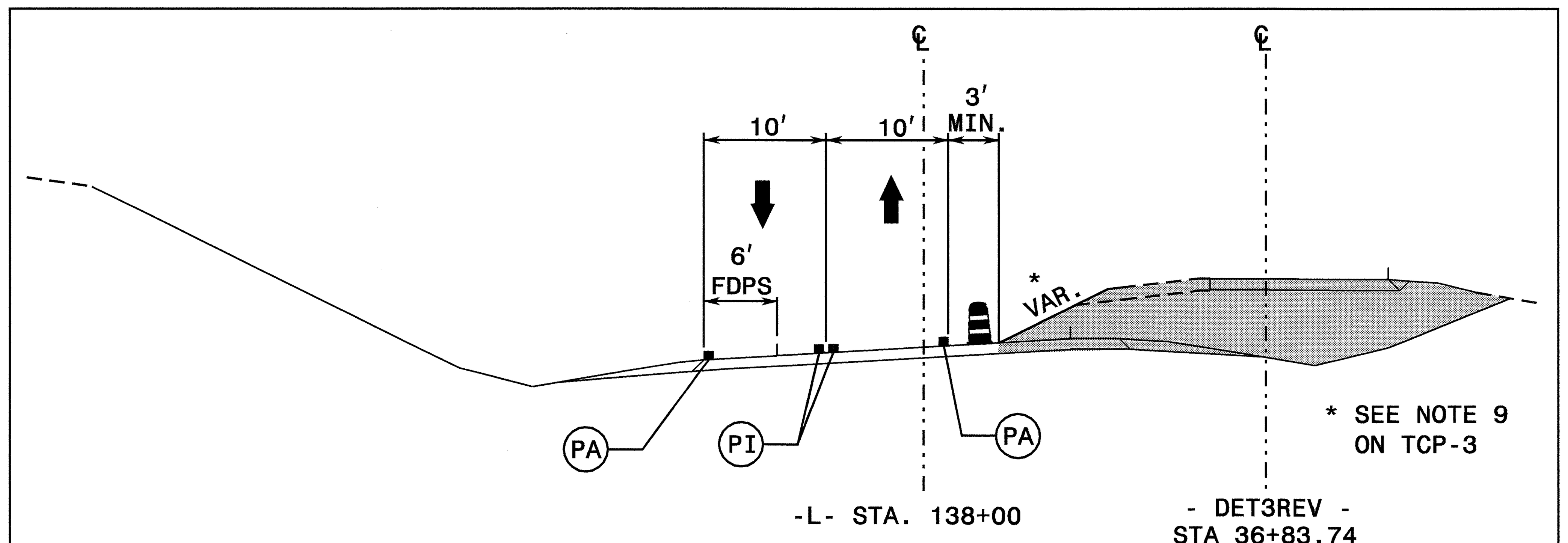
msteelman AT WZTC237453

PROJ. REFERENCE NO.	SHEET NO.
R-2408B	TCP-45





SECTION A - A

02-FEB-2010 14:01
\\Dot\dfsroot01\Proj\TIPProjects-R\R2408B\Traffic\TrafficControl\TCP\R-2408B_TCP DESIGN\R-2408B_TC_TCP_45.dgn
msteelman AT WZTC237453

APPROVED: ______ DATE: ______

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 027856 JENNIFER L. PORTANOVA 2/2/10

PHASE 3 DETAIL

SCALE:	NONE
DATE:	5/2009
DWG. BY:	MHS
DESIGN BY:	MHS
REVIEWED BY:	JLP

REVISIONS

CADD FILE

PROJ. REFERENCE NO.	SHEET NO.
R-2408B	TCP-46

INSTALL TRAFFIC CONTROL DEVICES AS DIRECTED BY THE ENGINEER

1 = STOP R1-1

2 = R11-2 48"X30" ROAD CLOSED W1-6L 48"x24" TYPE III BARRICADE

3 = TRAFFIC SHIFT AHEAD W31-1 48" X 48"

4 = R11-2 48"X30" ROAD CLOSED TYPE III BARRICADE

-Y8- STA. 12+50+/-
TIE TO EXISTING MARKINGS

-Y8- STA. 11+73+/-

-Y8- STA. 10+82+/-

-Y8- STA. 10+38+/-

-L- STA. 152+87+/-

-L- STA. 152+57+/-

150+00

155+00

160+00

SR 1372 CHURCH RD.

(-Y8-)

GRAU 350

PAVEMENT REMOVAL

-L- STA. 158+27+/-

-Y9- STA. 15+18+/-

-L- STA. 158+67+/-

NC 28 (-L-)

GRAU 350

-DET3REV-

PAVEMENT REMOVAL

-L- STA. 162+50
MATCH SHEET TCP-47

36"

110'

INSTALL 2G1

-L- STA. 148+50
MATCH SHEET TCP-45

-L- STA. 153+43+/-

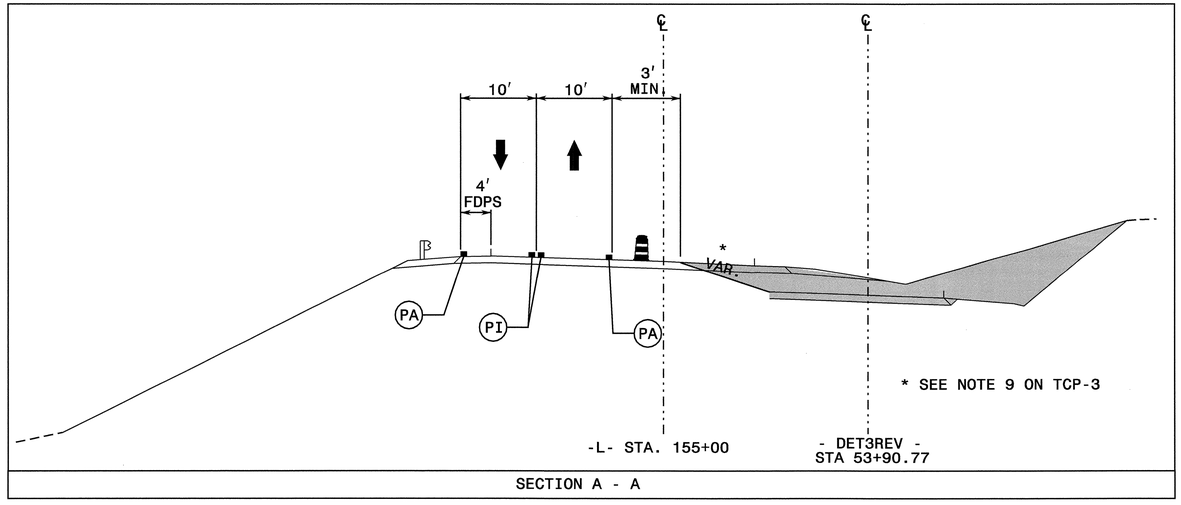
-L- STA. 154+08+/-

-Y9- STA. 14+70+/-

(-Y9-) SR 1337 RIVERBEND RD.

-Y9- STA. 14+70+/-

-Y9- STA. 12+50+/-
TIE TO EXISTING MARKINGS



SECTION A - A

* SEE NOTE 9 ON TCP-3

APPROVED: _____ DATE: _____

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 027856 JENNIFER L. PORTANOVA 2/2/10

PHASE 3 DETAIL

SCALE:	NONE
DATE:	5/2009
DWG. BY:	MHS
DESIGN BY:	MHS
REVIEWED BY:	JLP

REVISIONS

CADD FILE

02-FEB-2010 13:54
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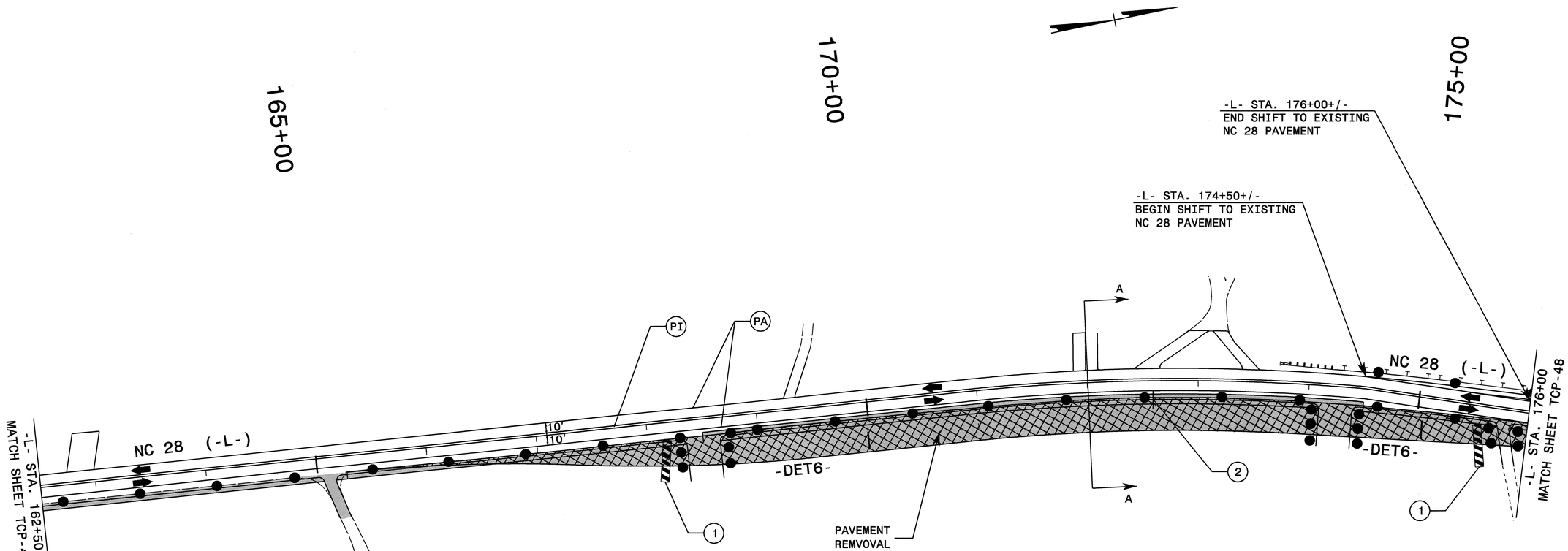
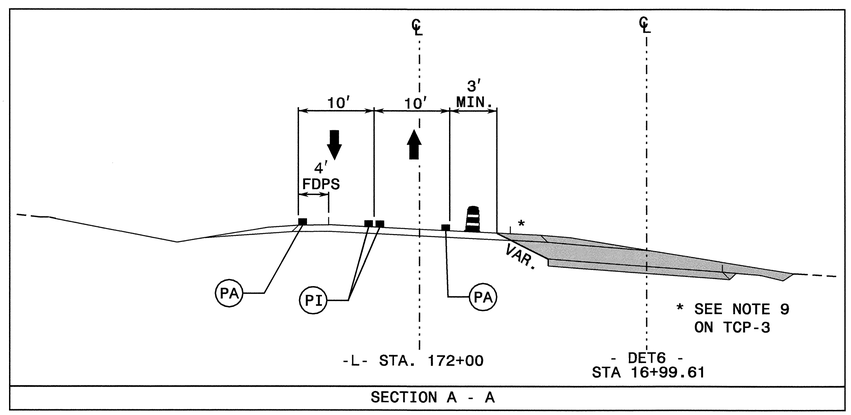
msteelman AT WZTC237453

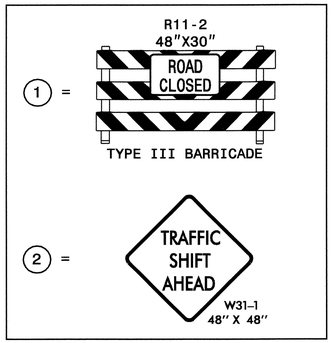
PROJ. REFERENCE NO.	SHEET NO.
R-2408B	TCP-47





SECTION A - A

INSTALL TRAFFIC CONTROL DEVICES
AS DIRECTED BY THE ENGINEER



APPROVED: _____ DATE: _____

NORTH CAROLINA PROFESSIONAL SEAL 027856 ENGINEER JENNIFER L. PORTANOVA 2/2/10

PHASE 3 DETAIL

SCALE:	NONE
DATE:	5/2009
DWG. BY:	MHS
DESIGN BY:	MHS
REVIEWED BY:	JLP

REVISIONS

CADD FILE

02-FEB-2010 13:53
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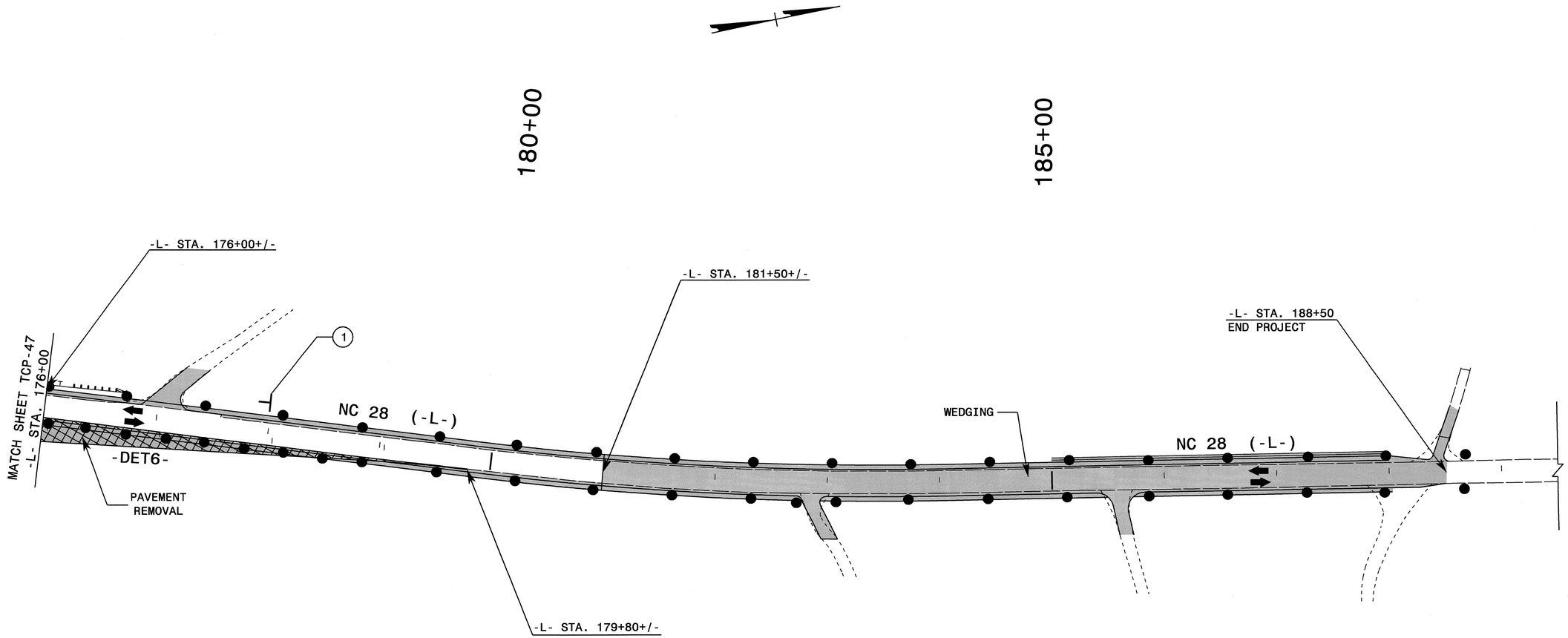
msteelman AT WZTC237453

PROJ. REFERENCE NO.	SHEET NO.
R-2408B	TCP-48



INSTALL SIGN AS
DIRECTED BY THE ENGINEER

(1) = TRAFFIC SHIFT AHEAD
W31-1
48" X 48"

APPROVED:_____ DATE:_____

NORTH CAROLINA PROFESSIONAL 027856 ENGINEER JENNIFER L. PORTANOVA 2/2/10

PHASE 3 DETAIL

SCALE:	NONE
DATE:	5/2009
DWG. BY:	MHS
DESIGN BY:	MHS
REVIEWED BY:	JLP

REVISIONS

CADD FILE

02-FEB-2010 10:30
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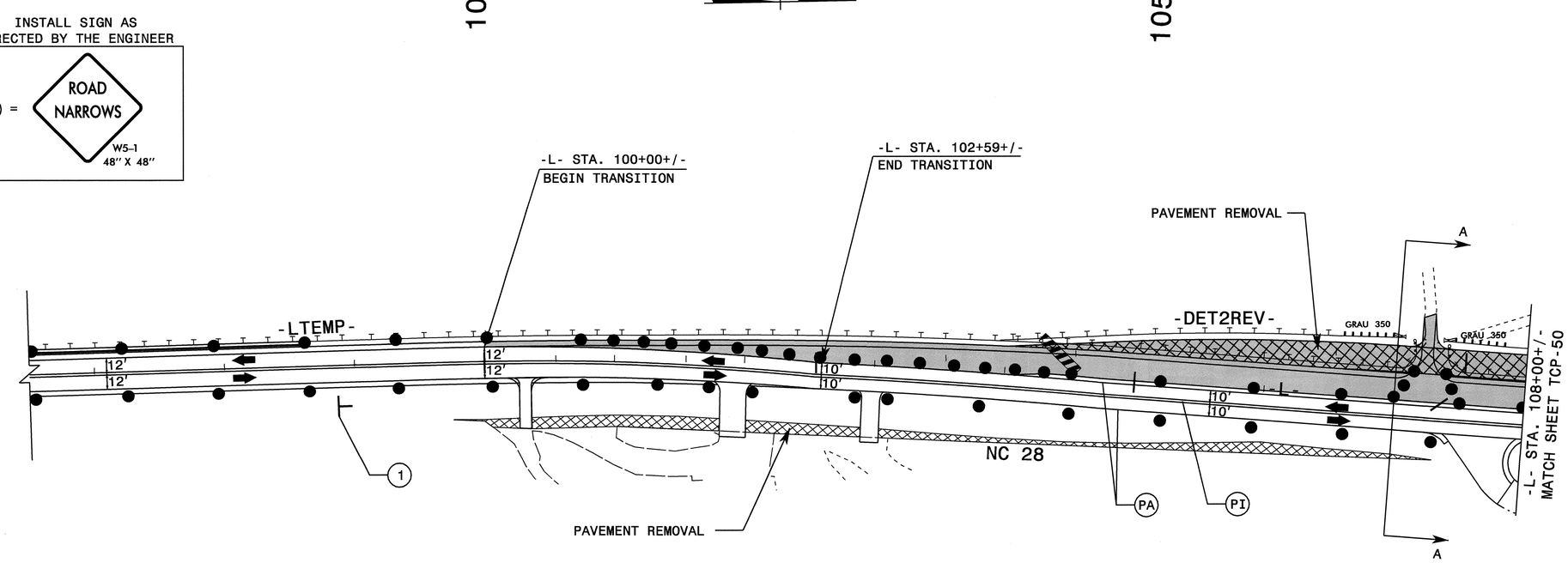
mstreeiman AT WZ10237453

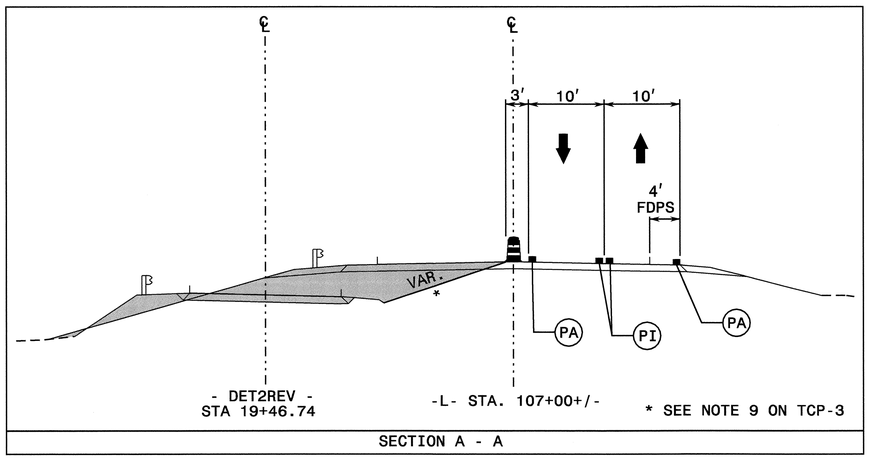
PROJ. REFERENCE NO.	SHEET NO.
R-2408B	TCP-49

REFER TO ROADWAY STANDARD DRAWING 1101.03, SH. 3 OF 9, FOR GENERAL NOTES AND TRAFFIC CONTROL DEVICES ASSOCIATED WITH SHIFTING TRAFFIC TO RIGHT SIDE OF -L-.

INSTALL SIGN AS DIRECTED BY THE ENGINEER

(1) = ROAD NARROWS W5-1 48" X 48"





SECTION A - A

APPROVED: _____ DATE: _____

NORTH CAROLINA PROFESSIONAL SEAL D27856 ENGINEER JENNIFER L PORTANOVA 2/2/10

PHASE 3 DETAIL

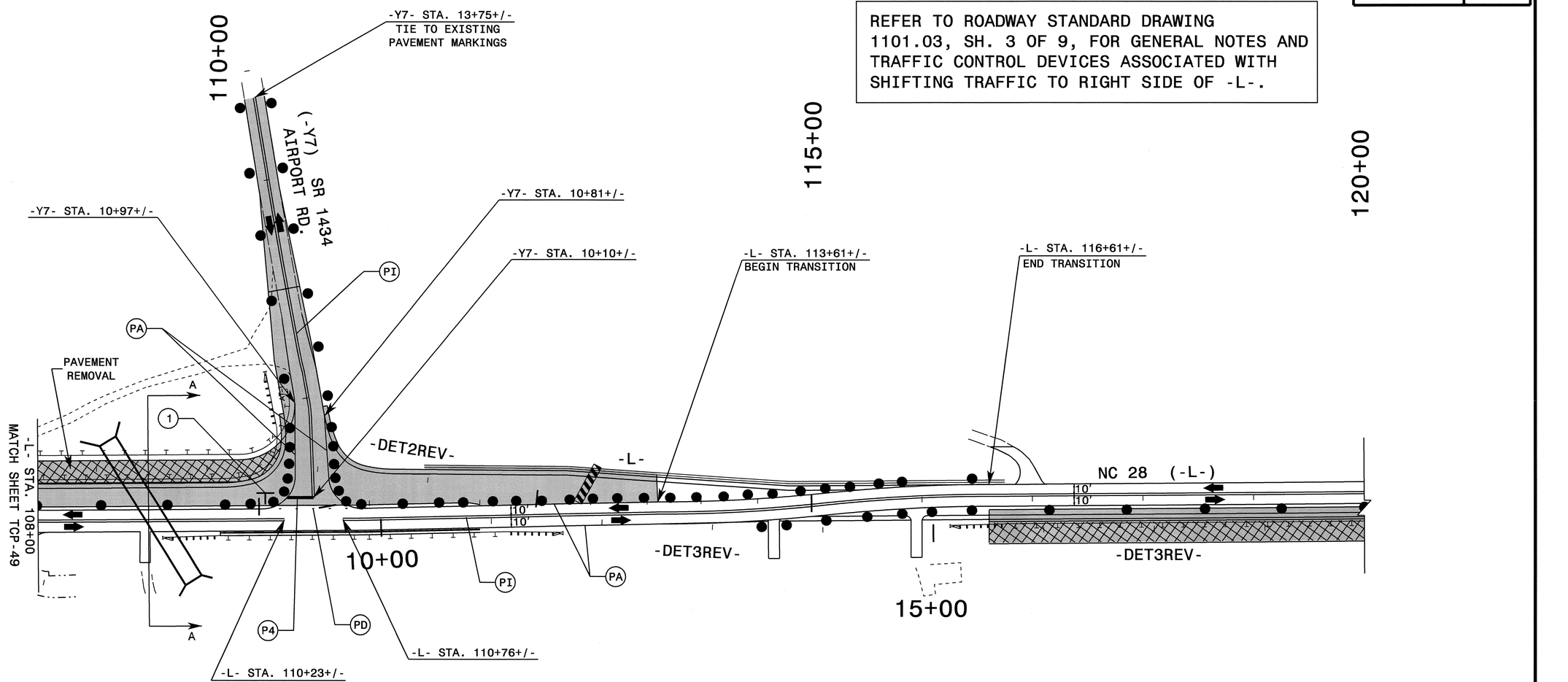
SCALE:	NONE
DATE:	5/2009
DWG. BY:	MHS
DESIGN BY:	MHS
REVIEWED BY:	JLP

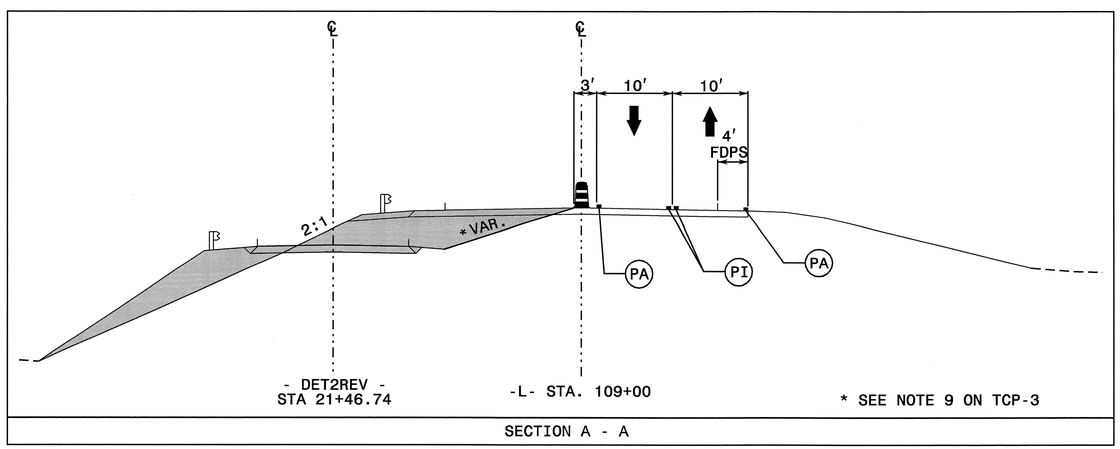
REVISIONS	
CADD FILE	

02-FEB-2010 13:52
\\Dot\dfsroot01\Proj\TIPProjects-R\R2408B\Traffic\TrafficControl\TCP\R-2408B_TCP DESIGN\R-2408B_TC_TCP_49.dgn
msteelman AT WIC237453

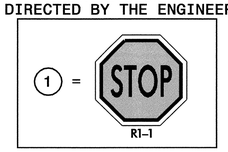
PROJ. REFERENCE NO.	SHEET NO.
R-2408B	TCP-50

REFER TO ROADWAY STANDARD DRAWING 1101.03, SH. 3 OF 9, FOR GENERAL NOTES AND TRAFFIC CONTROL DEVICES ASSOCIATED WITH SHIFTING TRAFFIC TO RIGHT SIDE OF -L-.





INSTALL SIGN AS DIRECTED BY THE ENGINEER



APPROVED: _____ DATE: _____

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 027856 JENNIFER L. PORTANOVA 2/2/10

PHASE 3 DETAIL

SCALE:	NONE
DATE:	5/2009
DWG. BY:	MHS
DESIGN BY:	MHS
REVIEWED BY:	JLP

REVISIONS

CADD FILE

02-FEB-2010 13:51
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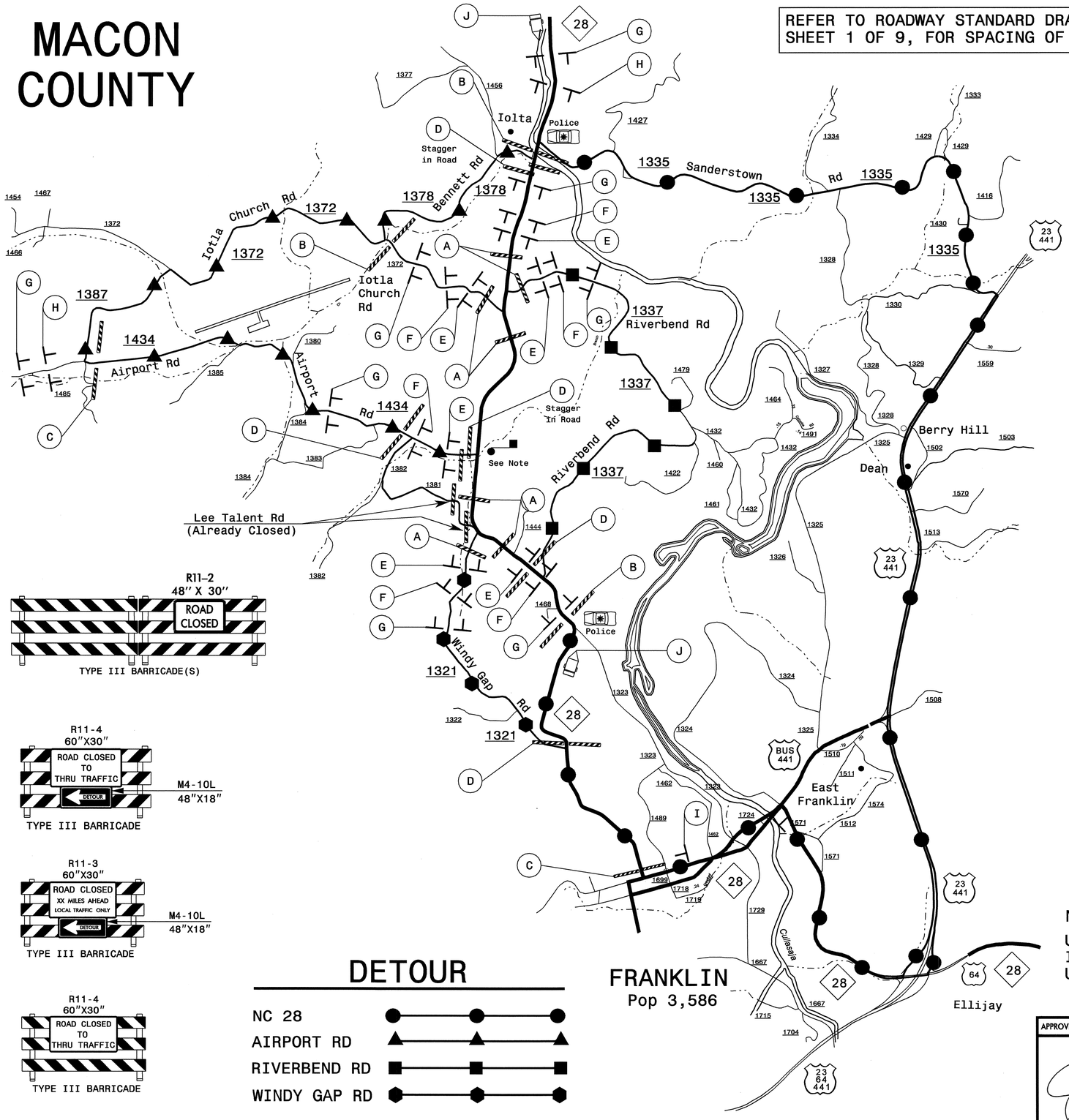
msfeelman
AT WZTC237453

PROJ. REFERENCE NO.	SHEET NO.
R-2408B	TCP-51

MACON COUNTY

REFER TO ROADWAY STANDARD DRAWING NO. 1101.03, SHEET 1 OF 9, FOR SPACING OF ROAD CLOSURE SIGNING



DETOUR

- NC 28
- AIRPORT RD
- RIVERBEND RD
- WINDY GAP RD

A

R11-2
48" X 30"
ROAD CLOSED
TYPE III BARRICADE(S)

B

R11-4
60"X30"
ROAD CLOSED TO THRU TRAFFIC
DETOUR
M4-10L
48"X18"
TYPE III BARRICADE

C

R11-3
60"X30"
ROAD CLOSED
XX MILES AHEAD
LOCAL TRAFFIC ONLY
DETOUR
M4-10L
48"X18"
TYPE III BARRICADE

D

R11-4
60"X30"
ROAD CLOSED TO THRU TRAFFIC
TYPE III BARRICADE

E

ROAD CLOSED 500 FT
W20-3
48" X 48"

F

ROAD CLOSED 1000 FT
W20-3
48" X 48"

G

ROAD CLOSED AHEAD
W20-3
48" X 48"

H

DETOUR AHEAD
W20-2
48" X 48"

I

ROAD CLOSED AHEAD
W20-3
48" X 48"
NEXT RIGHT
SP-4R
42" X 12"

J

INSTALL 5 DAYS IN ADVANCE OF ROAD CLOSURE

MESSAGE NO. 1	MESSAGE NO. 2
NC 28 WILL BE CLOSED	FRI 12AM TO MON 6AM

CHANGEABLE MESSAGE SIGN
SUGGESTED MESSAGES

SWITCH TO NEW MESSAGE DURING ROAD CLOSURE

MESSAGE NO. 1	MESSAGE NO. 2
NC 28 CLOSED AHEAD	FOLLOW DETOUR SIGNS

CHANGEABLE MESSAGE SIGN
SUGGESTED MESSAGES

NOTE:

USE FLAGGER FOR NC 28 LOCAL TRAFFIC INGRESS AND EGRESS USING AIRPORT ROAD UNLESS OTHERWISE DIRECTED BY THE ENGINEER

APPROVED:_____ DATE:_____

NORTH CAROLINA PROFESSIONAL SEAL 027856 ENGINEER JENNIFER L. PORTANOVA 2/2/10

PHASE 3
ROAD CLOSURE SETUP

SCALE:	NONE
DATE:	
DWG. BY:	
DESIGN BY:	
REVIEWED BY:	

REVISIONS

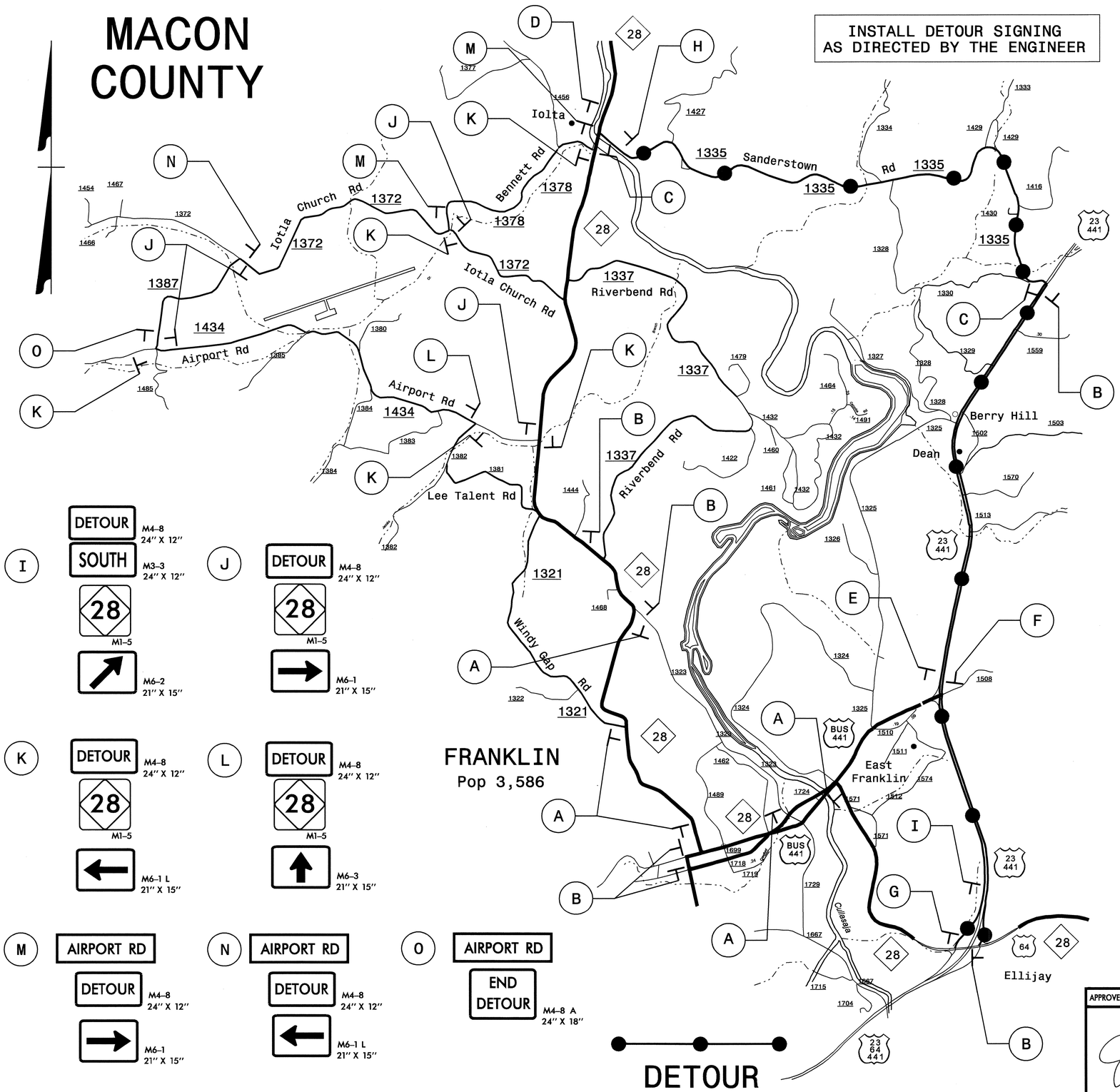
CADD FILE

02-FEB-2010 10:33
\\Dot\dfsroot\Proj\TIPProjects-RVR2408B\Traffic\TrafficControl\TCP\R-2408B_TCP DESIGN\R-2408B_TC_TCP_5i.dgn
mstreeman AT WZTC231453

PROJ. REFERENCE NO.	SHEET NO.
R-2408B	TCP-52

MACON COUNTY

INSTALL DETOUR SIGNING AS DIRECTED BY THE ENGINEER



A
DETOUR M4-8 24" X 12"
NORTH M3-1 24" X 12"
28 M1-5
M6-1 21" X 15"

B
DETOUR M4-8 24" X 12"
NORTH M3-1 24" X 12"
28 M1-5
M6-1 L 21" X 15"

C
DETOUR M4-8 24" X 12"
SOUTH M3-3 24" X 12"
28 M1-5
M6-1 21" X 15"

D
DETOUR M4-8 24" X 12"
SOUTH M3-3 24" X 12"
28 M1-5
M6-1 L 21" X 15"

E
DETOUR M4-8 24" X 12"
SOUTH M3-3 24" X 12"
28 M1-5
M6-3 21" X 15"

F
DETOUR M4-8 24" X 12"
NORTH M3-1 24" X 12"
28 M1-5
M6-3 21" X 15"

G
END DETOUR M4-8 A 24" X 18"
SOUTH M3-3 24" X 12"
28 M1-5

H
END DETOUR M4-8 A 24" X 18"
NORTH M3-1 24" X 12"
28 M1-5

I
DETOUR M4-8 24" X 12"
SOUTH M3-3 24" X 12"
28 M1-5
M6-2 21" X 15"

J
DETOUR M4-8 24" X 12"
28 M1-5
M6-1 21" X 15"

K
DETOUR M4-8 24" X 12"
28 M1-5
M6-1 L 21" X 15"

L
DETOUR M4-8 24" X 12"
28 M1-5
M6-3 21" X 15"

M
AIRPORT RD
DETOUR M4-8 24" X 12"
M6-1 21" X 15"

N
AIRPORT RD
DETOUR M4-8 24" X 12"
M6-1 L 21" X 15"

O
AIRPORT RD
END DETOUR M4-8 A 24" X 18"

APPROVED: _____ DATE: _____

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 027856 JENNIFER L. PONTANOVA

PHASE 3
DETOUR SIGNING SETUP

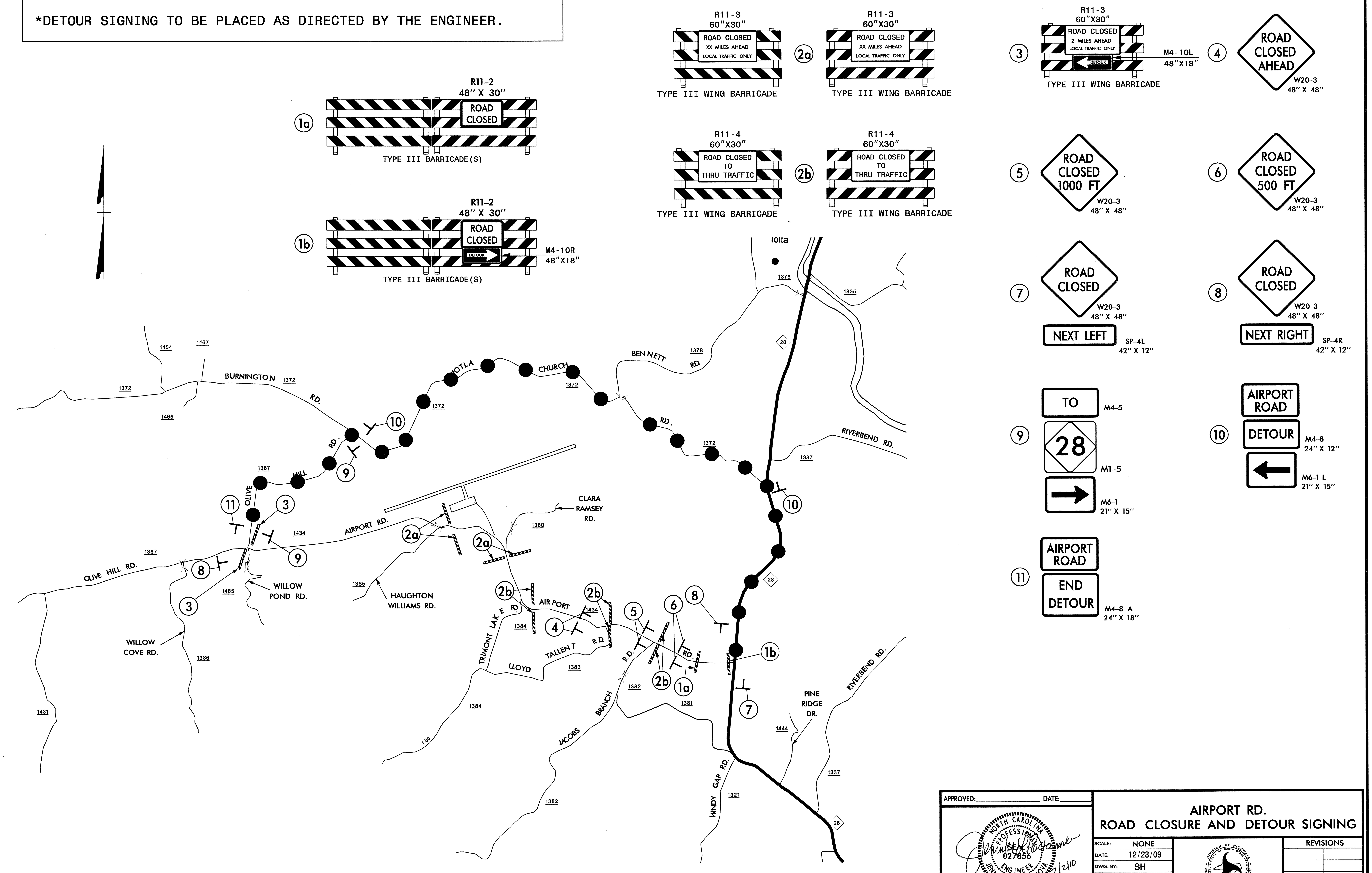
SCALE: NONE	REVISIONS
DATE:	
DWG. BY:	
DESIGN BY:	
REVIEWED BY:	CADD FILE

02-FEB-2010 10:34
\\Dot\dfsroot01\Proj\TIP\Projects-R\R2408B\Traffic\TrafficControl\TCP\R-2408B_TCP DESIGN\R-2408B_TC_TCP_52.dgn
mstelman AT WZ10231453

PROJ. REFERENCE NO.	SHEET NO.
R-2408B	TCP-53

*REFER TO GENERAL NOTES AND ROAD CLOSURE SIGN SPACINGS AS SHOWN ON ROADWAY STANDARD DRAWING 1101.03, SHEETS 1 AND 2 OF .

*DETOUR SIGNING TO BE PLACED AS DIRECTED BY THE ENGINEER.



APPROVED:	DATE:

SEAL 027856 — NORTH CAROLINA PROFESSIONAL ENGINEER — JENNIFER L. PORTANOVA
2/2/10

AIRPORT RD.
ROAD CLOSURE AND DETOUR SIGNING

SCALE:	NONE
DATE:	12/23/09
DWG. BY:	SH
DESIGN BY:	SH
REVIEWED BY:	MHS

DIVISION OF HIGHWAYS · STATE OF NORTH CAROLINA · DEPARTMENT OF TRANSPORTATION · WORK ZONE TRAFFIC CONTROL UNIT

REVISIONS	
CADD FILE	

02-FEB-2010 10:35
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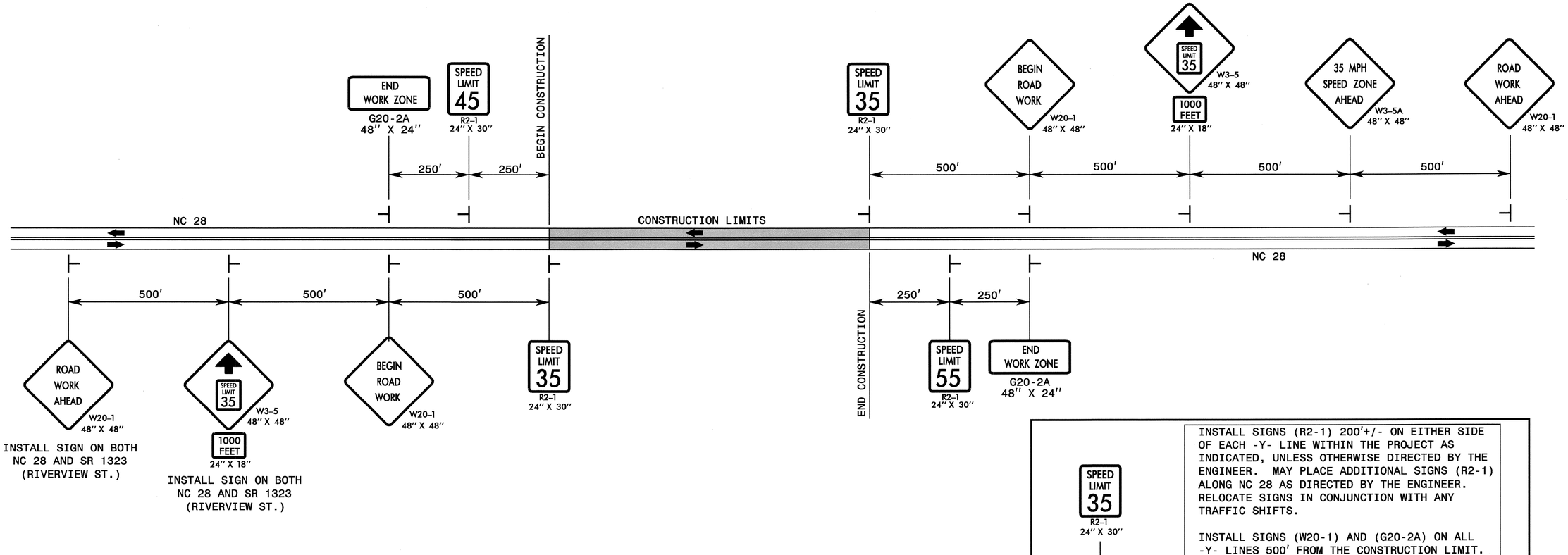
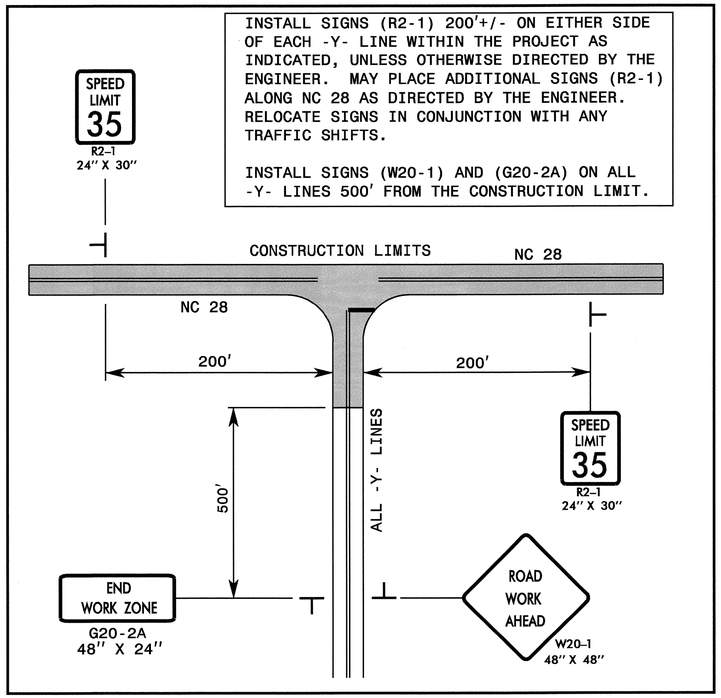
msteelman AT WZTC237453

PROJ. REFERENCE NO.	SHEET NO.
R-2408B	TCP-54



INSTALL SIGN ON BOTH NC 28 AND SR 1323 (RIVERVIEW ST.)

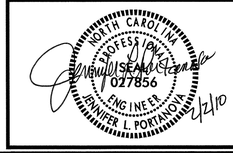
INSTALL SIGN ON BOTH NC 28 AND SR 1323 (RIVERVIEW ST.)



GENERAL NOTES

- COVER/REMOVE ALL EXISTING SPEED LIMIT SIGNS ON NC 28.
- USE FLUORESCENT ORANGE SHEETING (TYPE VII OR HIGHER) ON ALL ADVANCED WARNING 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 3LB STEEL U-CHANNEL POST OR 4" X 4" WOOD POST FOR ALL WORK ZONE SIGNS. 3LB 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 3 LB STEEL U-CHANNEL POST ARE ALSO ACCEPTABLE FOR USE. ERECT SIGNS PER ROADWAY STANDARD DRAWING 1110.01. PAYMENT FOR WOOD POSTS, 3LB 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.

APPROVED:_____ DATE:_____



WORK ZONE ADVANCE WARNING AND SPEED LIMIT REDUCTION SIGNING

SCALE:	NONE
DATE:	JAN. 2010
DWG. BY:	MHS
DESIGN BY:	MHS
REVIEWED BY:	JLP

REVISIONS

CADD FILE

02-FEB-2010 10:35
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mstreeman AT WZTC23453