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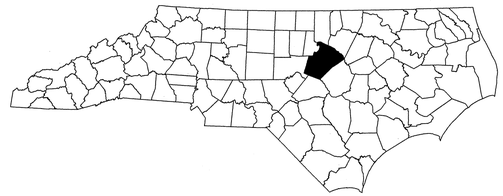
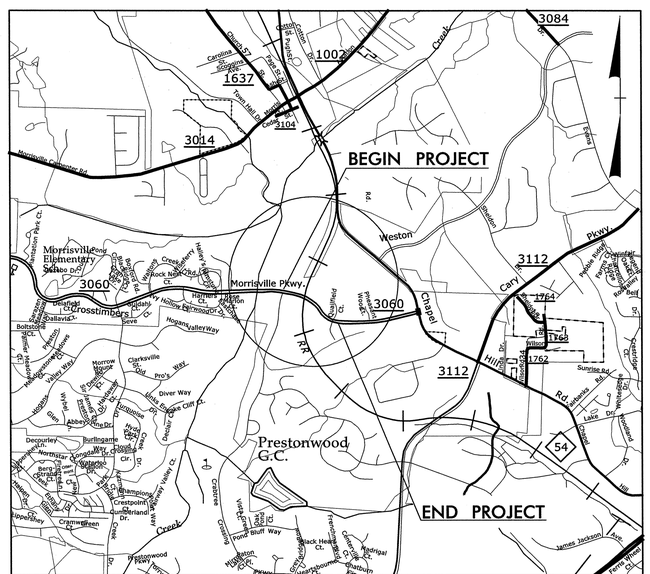
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

TRANSPORTATION MANAGEMENT PLAN

WAKE COUNTY





SKETCH MAP SHOWING THE VICINITY OF STATE PROJECT P-5201

INDEX OF SHEETS

SHEET NO.	TITLE
TMP-1	INDEX OF SHEETS
TMP-1A	LIST OF APPLICABLE ROADWAY STANDARD DRAWINGS, LEGEND & TEMPORARY PAVEMENT MARKING SCHEDULE
TMP-2	PROJECT NOTES
TMP-2A	CHAPEL HILL RD./WESTON PKWY. DETAIL
TMP-2B	MORRISVILLE PKWY./DAVIS DR. DETAIL
TMP-3 & 3A	PHASING
TMP-4 & 5	PHASE I DETAILS
TMP-6 & 7	PHASE II DETAILS
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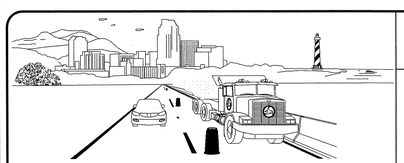
TMP-14	PHASE IV DETAIL
TMP-15	DETOUR FOR MORRISVILLE PARKWAY CLOSURE
TMP-16	TYPE III BARRICADES AND DETOUR SIGNS

SHEET NO.
TMP-1

P-5201

TIP PROJECT:



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

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
J. ISHAK, P.E. — TRAFFIC CONTROL PROJECT ENGINEER
_____ — TRAFFIC CONTROL PROJECT DESIGN ENGINEER
_____ — TRAFFIC CONTROL DESIGN ENGINEER

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

ICA Engineering
f/k/a Florence & Hutcheson, Inc.
5121 Kingdom Way, Suite 100
Raleigh, NC 27607
NC License No: P-0258

APPROVED: Michael T. Rzepka
DATE: 9-16-13

SEAL
NORTH CAROLINA PROFESSIONAL SEAL 15876 ENGINEER MICHAEL T. RZEPKA

9/13/2013
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Florence & Hutcheson

0422DEL_P19

PROJ. REFERENCE NO.	SHEET NO.
P-5201	TMP-1A

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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:

STD. NO.	TITLE
1101.01	WORK ZONE WARNING SIGNS
1101.02	TEMPORARY LANE CLOSURES
1101.03	TEMPORARY ROAD 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
1115.01	FLASHING ARROW BOARDS
1130.01	DRUMS
1135.01	CONES
1145.01	BARRICADES
1150.01	FLAGGING DEVICES
1160.01	TEMPORARY CRASH CUSHION
1165.01	WORK VEHICLE LIGHTING SYSTEMS AND TMA DELINEATION
1170.01	PORTABLE CONCRETE BARRIER
1180.01	SKINNY - DRUM
1205.01	PAVEMENT MARKINGS - LINE TYPES AND OFFSETS
1205.02	PAVEMENT MARKINGS - TWO LANE AND MULTILANE ROADWAYS
1205.04	PAVEMENT MARKINGS - INTERSECTIONS
1205.05	PAVEMENT MARKINGS - TURN LANES
1205.09	PAVEMENT MARKINGS - PAINTED ISLANDS
1205.11	PAVEMENT MARKINGS - RAILROAD CROSSINGS
1250.01	RAISED PAVEMENT MARKERS - INSTALLATION SPACING
1251.01	RAISED PAVEMENT MARKERS - (PERMANENT AND TEMPORARY)
1261.01	GUARDRAIL AND BARRIER DELINEATORS - INSTALLATION SPACING
1261.02	GUARDRAIL AND BARRIER DELINEATORS - TYPES AND MOUNTING
1262.01	GUARDRAIL END DELINEATION

LEGEND

GENERAL

- DIRECTION OF TRAFFIC FLOW
- 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 (T E M P)

PAVEMENT MARKINGS

- EXISTING LINES
- TEMPORARY LINES

PAVEMENT MARKERS

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

PAVEMENT MARKING SYMBOLS

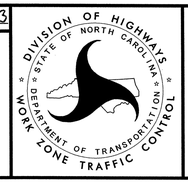
- PAVEMENT MARKING SYMBOLS

TEMPORARY PAVEMENT MARKING

SYMBOL	DESCRIPTION
	PAINT (4")
P8	2 FT.-6 FT./SP WHITE MINISKIP
P9	2 FT.-6 FT./SP YELLOW MINISKIP
PA	WHITE EDGELINE
PC	10 FT. WHITE SKIP
PD	3 FT.-9 FT./SP WHITE MINISKIP
PE	WHITE SOLID LANE LINE
PI	DOUBLE YELLOW CENTERLINE
	PAINT (8")
P13	3 FT.-9 FT./SP WHITE MINISKIP
PR	WHITE SOLID LANE LINE
PP	YELLOW DIAGONAL
	PAINT (24")
P2	WHITE STOP BAR
	PAINT SYMBOL
QA	LEFT ARROW
QB	RIGHT ARROW
QE	COMBO RIGHT/STRAIGHT ARROW
QI	ALPHANUMERIC CHARACTER
QP	MERGE ARROW
	TEMPORARY RAISED MARKERS
MH	YELLOW & YELLOW
MI	CRYSTAL & RED

APPROVED: Michael T. Rzepka DATE: 9-16-13

SEAL



ROADWAY STANDARD DRAWINGS, LEGEND & TEMPORARY PAVEMENT MARKING SCHEDULE

9/13/2013
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Florence & Hutcheson

0422DEL_P19

GENERAL NOTES

ICA Engineering
5121 Kingdom Way, Suite 100
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NC License No: P-0268
f/k/a Florence & Hutcheson, Inc.

PROJ. REFERENCE NO.	SHEET NO.
P-5201	TMP-2

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
MORRISVILLE PARKWAY	MONDAY-FRIDAY, 6:00AM TO 9:00AM
DAVIS DRIVE	3:00PM TO 7:00PM
CHAPEL HILL ROAD	
WESTON PARKWAY	
TOWN HALL DRIVE	
MORRISVILLE CARPENTER ROAD	

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

ROAD NAME

MORRISVILLE PARKWAY
DAVIS DRIVE
CHAPEL HILL ROAD
WESTON PARKWAY
TOWN HALL DRIVE
MORRISVILLE CARPENTER 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 6:00AM DECEMBER 31st TO 7:00PM JANUARY 2ND. IF NEW YEAR'S DAY IS ON A FRIDAY, SATURDAY, SUNDAY, OR MONDAY THEN UNTIL 7:00PM THE FOLLOWING TUESDAY.

3. FOR EASTER, BETWEEN THE HOURS OF 6:00AM THURSDAY AND 7:00PM MONDAY.

4. FOR MEMORIAL DAY, BETWEEN THE HOURS OF 6:00AM FRIDAY TO 7:00PM TUESDAY.

5. FOR INDEPENDENCE DAY, BETWEEN THE HOURS OF 6:00AM THE DAY BEFORE INDEPENDENCE DAY AND 7:00PM THE DAY AFTER INDEPENDENCE DAY.

   IF INDEPENDENCE DAY IS ON A FRIDAY, SATURDAY, SUNDAY OR MONDAY THEN BETWEEN THE HOURS OF 6:00AM THE THURSDAY BEFORE INDEPENDENCE DAY AND 7:00PM THE TUESDAY AFTER INDEPENDENCE DAY.

6. FOR LABOR DAY, BETWEEN THE HOURS OF 6:00AM FRIDAY AND TUESDAY.

7. FOR THANKSGIVING DAY, BETWEEN THE HOURS OF 6:00AM TUESDAY TO 7:00PM MONDAY.

8. FOR CHRISTMAS, BETWEEN THE HOURS OF 6:00AM THE FRIDAY BEFORE THE WEEK OF CHRISTMAS DAY AND 7:00PM THE FOLLOWING TUESDAY AFTER THE WEEK OF CHRISTMAS.

C) DO NOT STOP TRAFFIC AS FOLLOWS:

ROAD NAME	DAY AND TIME RESTRICTIONS	DURATION AND OPERATION
MORRISVILLE PARKWAY	MONDAY-FRIDAY, 6:00AM TO 9:00AM 3:00PM TO 7:00PM	15 MINUTES TRAFFIC SHIFTS

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

LANE AND SHOULDER CLOSURE REQUIREMENTS

E) REMOVE LANE CLOSURE DEVICES FROM THE LANE WHEN WORK IS NOT BEING PERFORMED BEHIND THE LANE CLOSURE OR WHEN A LANE CLOSURE IS NO LONGER NEEDED OR AS DIRECTED BY THE ENGINEER.

F) WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING WITHIN 15 FT OF AN OPEN TRAVEL LANE, CLOSE THE NEAREST OPEN SHOULDER USING ROADWAY STANDARD DRAWING NO. 1101.04 UNLESS THE WORK AREA IS PROTECTED BY BARRIER OR GUARDRAIL OR A LANE CLOSURE IS INSTALLED.

G) WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING ON THE SHOULDER ADJACENT TO AN UNDIVIDED FACILITY AND WITHIN 5 FT OF AN OPEN TRAVEL LANE, CLOSE THE NEAREST OPEN TRAVEL LANE USING ROADWAY STANDARD DRAWING NO. 1101.02 UNLESS THE WORK AREA IS PROTECTED BY BARRIER OR GUARDRAIL.

   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.

H) WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING WITHIN A LANE OF TRAVEL OF AN UNDIVIDED OR DIVIDED FACILITY, CLOSE THE LANE ACCORDING TO THE TRAFFIC CONTROL PLANS, ROADWAY STANDARD DRAWINGS, OR AS DIRECTED BY THE ENGINEER. CONDUCT THE WORK SO THAT ALL PERSONNEL AND/OR EQUIPMENT REMAIN WITHIN THE CLOSED TRAVEL LANE.

I) DO NOT WORK SIMULTANEOUSLY WITHIN 15 FT ON BOTH SIDES OF AN OPEN TRAVELWAY, RAMP, OR LOOP WITHIN THE SAME LOCATION UNLESS PROTECTED WITH GUARDRAIL OR BARRIER.

J) DO NOT INSTALL MORE THAN ONE LANE CLOSURE IN ANY ONE DIRECTION ON MORRISVILLE PARKWAY.

PAVEMENT EDGE DROP OFF REQUIREMENTS

K) BACKFILL AT A 6:1 SLOPE UP TO THE EDGE AND ELEVATION OF EXISTING PAVEMENT IN AREAS ADJACENT TO AN OPENED TRAVEL LANE THAT HAS AN EDGE OF PAVEMENT DROP-OFF AS FOLLOWS:

   BACKFILL DROP-OFFS THAT EXCEED 2 INCHES ON ROADWAYS WITH POSTED SPEED LIMITS OF 45 MPH OR GREATER.

   BACKFILL DROP-OFFS THAT EXCEED 3 INCHES ON ROADWAYS WITH POSTED SPEED LIMITS LESS THAN 45 MPH.

   BACKFILL WITH SUITABLE COMPACTED MATERIAL, AS APPROVED BY THE ENGINEER, AT NO EXPENSE TO THE DEPARTMENT.

L) DO NOT EXCEED A DIFFERENCE OF 2 INCHES IN ELEVATION BETWEEN OPEN LANES OF TRAFFIC FOR NOMINAL LIFTS OF 1.5 INCHES. INSTALL ADVANCE WARNING "UNEVEN LANES" SIGNS (W8-11) 200 FEET IN ADVANCE AND A MINIMUM OF EVERY HALF MILE THROUGHOUT THE UNEVEN AREA.

TRAFFIC PATTERN ALTERATIONS

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

SIGNING

N) INSTALL ADVANCE WORK ZONE WARNING SIGNS WHEN WORK IS WITHIN 40 FT FROM THE EDGE OF TRAVEL LANE AND NO MORE THAN THREE (3) DAYS PRIOR TO THE BEGINNING OF CONSTRUCTION.

O) PROVIDE SIGNING AND DEVICES REQUIRED TO CLOSE THE ROAD ACCORDING TO THE ROADWAY STANDARD DRAWINGS AND TRAFFIC CONTROL PLANS.

   PROVIDE SIGNING REQUIRED FOR THE OFF-SITE DETOUR ROUTE AS SHOWN IN THE TRAFFIC CONTROL PLANS.

P) COVER OR REMOVE ALL SIGNS AND DEVICES REQUIRED TO CLOSE THE ROAD WHEN ROAD CLOSURE IS NOT IN OPERATION.

   COVER OR REMOVE ALL SIGNS REQUIRED FOR THE OFF-SITE DETOUR WHEN THE DETOUR IS NOT IN OPERATION.

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

TRAFFIC BARRIER

R) INSTALL TEMPORARY BARRIER ACCORDING TO THE TRANSPORTATION MANAGEMENT PLANS A MAXIMUM OF TWO (2) WEEKS PRIOR TO BEGINNING WORK IN ANY LOCATION. ONCE TEMPORARY BARRIER IS INSTALLED AT ANY LOCATION PROCEED IN A CONTINUOUS MANNER TO COMPLETE THE PROPOSED WORK IN THAT LOCATION UNLESS OTHERWISE STATED IN THE TRANSPORTATION MANAGEMENT PLANS OR AS DIRECTED BY THE ENGINEER.

   DO NOT PLACE BARRIER DIRECTLY ON ANY SURFACE OTHER THAN ASPHALT OR CONCRETE.

   ONCE TEMPORARY BARRIER IS INSTALLED AT ANY LOCATION AND NO WORK IS PERFORMED BEHIND THE TEMPORARY BARRIER FOR A PERIOD LONGER THAN TWO (2) MONTHS, REMOVE / RESET TEMPORARY BARRIER AT NO COST TO THE DEPARTMENT UNLESS OTHERWISE STATED IN THE TRANSPORTATION MANAGEMENT PLANS, TEMPORARY BARRIER IS PROTECTING A HAZARD, OR AS DIRECTED BY THE ENGINEER.

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

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

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

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

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

TRAFFIC CONTROL DEVICES

T) 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 RADII, 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.

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

PAVEMENT MARKINGS AND MARKERS

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

ROAD NAME	MARKING	MARKER
MORRISVILLE PARKWAY	PAINT	TEMPORARY RAISED
DAVIS DRIVE	PAINT	TEMPORARY RAISED
CHAPEL HILL ROAD	PAINT	TEMPORARY RAISED

W) PLACE ONE APPLICATION OF PAINT FOR TEMPORARY TRAFFIC PATTERNS. PLACE ANOTHER APPLICATION OF PAINT SIX (6) MONTHS AFTER THE INITIAL APPLICATION AND EVERY SIX MONTHS AS DIRECTED BY THE ENGINEER.

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

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

Z) TRACE THE PROPOSED MONOLITHIC ISLAND LOCATIONS WITH PROPER COLOR PAVEMENT MARKINGS PRIOR TO INSTALLATION. PLACE CONES TO DELINEATE ANY PROPOSED MONOLITHIC ISLANDS BEFORE INSTALLATION

MISCELLANEOUS

AA) LAW ENFORCEMENT SHALL BE USED TO MAINTAIN TRAFFIC THROUGH THE WORK AREA AND/OR INTERSECTIONS AS DIRECTED BY THE ENGINEER.

BB) ALL CURB RAMP LOCATIONS SHALL BE DERIVED FROM STATIONING SHOWN ON PAVEMENT MARKING PLANS OR AS DIRECTED BY THE ENGINEER IN COORDINATION WITH THE SIGNING AND DELINEATION UNIT.

APPROVED: Michael T. Rzepka DATE: 9-20-13

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 15876 ENGINEER MICHAEL T. RZEPKA

TRANSPORTATION OPERATIONS PLAN

SCALE:	NONE
DATE:	SEPT '13
DWG. BY:	YTM
DESIGN BY:	TAG
REVIEWED BY:	MTR

DIVISION OF HIGHWAYS
UNIFORM STANDARDS FOR WORK ZONE TRAFFIC CONTROL

REVISIONS

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PROJ. REFERENCE NO.	SHEET NO.
P-5201	TMP-2A

NOTES:
1. IMPROVEMENTS SHOWN ON THIS SHEET ARE TEMPORARY AND SHALL BE REMOVED AT THE END OF THE PROJECT. USE THERMOPLASTIC MATERIAL TO RESTORE THE ORIGINAL MARKINGS.
2. RECORD LOCATIONS OF EXISTING MARKINGS.
3. ALL DIMENSIONS ARE APPROXIMATE. ADJUST THE PAVEMENT MARKINGS FOR FIELD CONDITIONS.
4. RESTRIPE EXISTING CHAPEL HILL ROAD TO PROVIDE ADDITIONAL STORAGE.
5. REMOVE CONFLICTING MARKINGS USING NON-DESTRUCTIVE TECHNIQUES.

APPROVED: DATE: 9/16/13

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 026453 ENGINEER NEIL J. DEAN

Prepared in the Office of: AECOM

NC FIRM LICENSE No: F-0342
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Raleigh, NC 27610
(919) 854-6200 - (919) 854-6259 (FAX)

DETOUR MITIGATION SITE
NC 54 (CHAPEL HILL RD. AT WESTON PKWY)

SCALE:	
DATE:	6/13
DWG. BY:	NJD
DESIGN BY:	NJD
REVIEWED BY:	TH

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

REVISIONS

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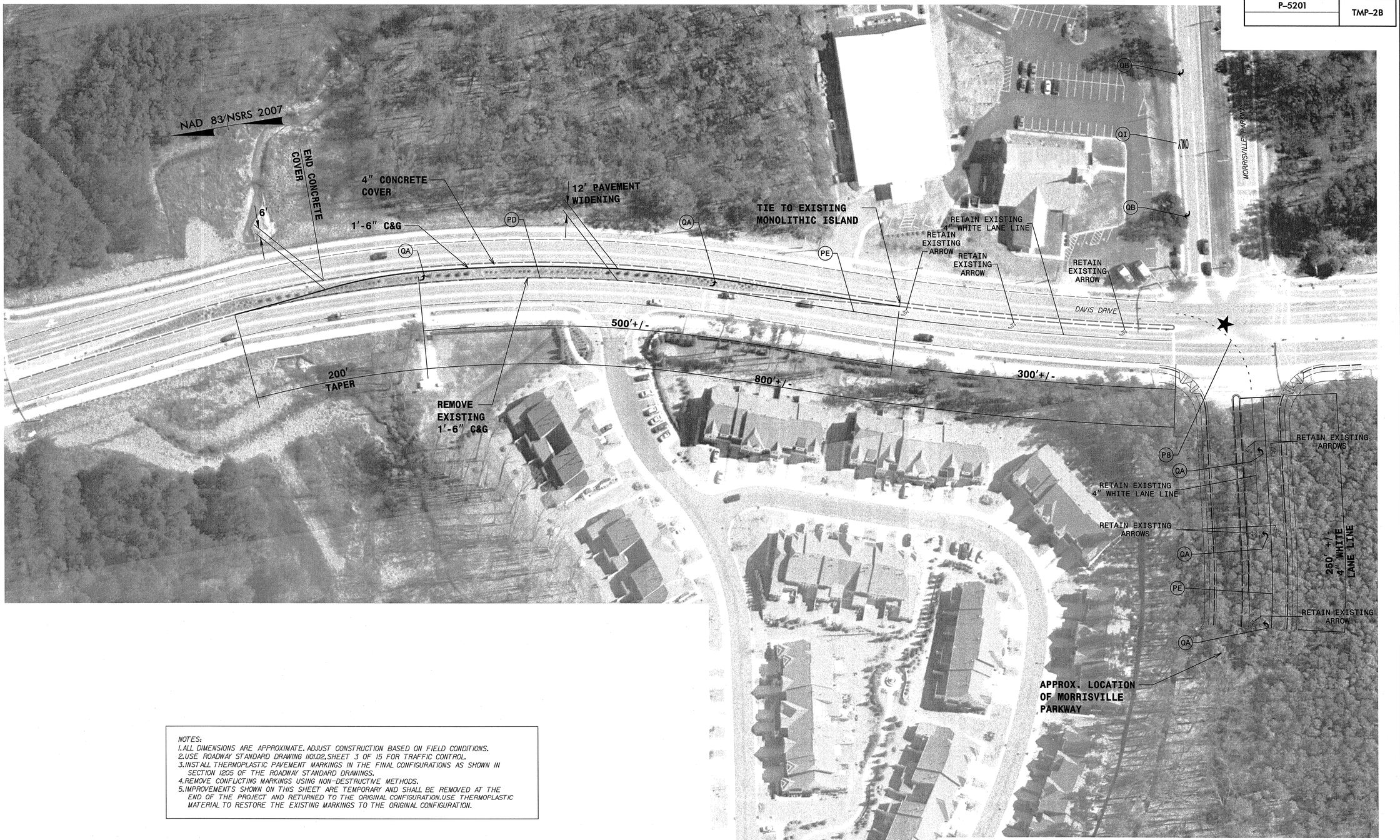
PROJ. REFERENCE NO.	SHEET NO.
P-5201	TMP-2B



NOTES:
1. ALL DIMENSIONS ARE APPROXIMATE. ADJUST CONSTRUCTION BASED ON FIELD CONDITIONS.
2. USE ROADWAY STANDARD DRAWING 1101.02, SHEET 3 OF 15 FOR TRAFFIC CONTROL.
3. INSTALL THERMOPLASTIC PAVEMENT MARKINGS IN THE FINAL CONFIGURATIONS AS SHOWN IN SECTION 1205 OF THE ROADWAY STANDARD DRAWINGS.
4. REMOVE CONFLICTING MARKINGS USING NON-DESTRUCTIVE METHODS.
5. IMPROVEMENTS SHOWN ON THIS SHEET ARE TEMPORARY AND SHALL BE REMOVED AT THE END OF THE PROJECT AND RETURNED TO THE ORIGINAL CONFIGURATION. USE THERMOPLASTIC MATERIAL TO RESTORE THE EXISTING MARKINGS TO THE ORIGINAL CONFIGURATION.

APPROVED: [signature] DATE: 9/16/13

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 026453 ENGINEER NEIL J. DEAN

Prepared in the Office of: AECOM NC FIRM LICENSE No: F-0342 701 Corporate Center Drive, Suite 475 Raleigh, NC 27607 (919) 854-6200 - (919) 854-6259 (FAX)

DETOUR MITIGATION SITE
DAVIS DR. AT MORRISVILLE PKWY

SCALE:	
DATE:	6/13
DWG. BY:	NJD
DESIGN BY:	NJD
REVIEWED BY:	TH

REVISIONS

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$$$$USERNAME$$$$

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PHASING

ICA Engineering (f/k/a Florence & Hutcheson, Inc.) 5121 Kingdom Way, Suite 100 Raleigh, NC 27607 NC License No: P0258	PROJ. REFERENCE NO.	SHEET NO.
	P-5201	TMP-3

PHASE I

NOTE: "RSD" REFERS TO NCDOT ROADWAY STANDARD DRAWINGS.

STEP 1

USING RSD 1101.01 (SHEET 3 OF 3), INSTALL ADVANCE WARNING SIGNS ON MORRISVILLE PARKWAY, CRABTREE CROSSING PARKWAY, QUAIL FIELDS COURT AND BRISTOL CREEK DRIVE.

STEP 2

AWAY FROM TRAFFIC, BEGIN UTILITY RELOCATION.

USING RSD 1101.02 (SHEETS 1 & 3 OF 15), PERFORM THE FOLLOWING (SEE SHEET TMP-4):

- CONSTRUCT PROPOSED WIDENING OF TOWN HALL DRIVE/MORRISVILLE CARPENTER ROAD INTERSECTION
- PLACE FINAL LAYER OF SURFACE COURSE AND FINAL PAVEMENT MARKINGS AND MARKERS
- SHIFT TRAFFIC TO PROPOSED PATTERN

USING RSD 1101.02 (SHEET 3 OF 15), PERFORM THE FOLLOWING AT THE CHAPEL HILL ROAD/ WESTON PARKWAY INTERSECTION (SEE SHEET TMP-2A):

- REMOVE CONFLICTING MARKINGS AND PLACE TEMPORARY PAVEMENT MARKINGS AND MARKERS AND TIE TO EXISTING
- OPEN INTERSECTION TO TEMPORARY REVISED PATTERN

USING RSD 1101.02 (SHEET 3 OF 15), PERFORM THE FOLLOWING AT THE MORRISVILLE PARKWAY/ DAVIS DRIVE INTERSECTION (SEE SHEET TMP-2B):

- CONSTRUCT MEDIAN TURN-LANE TO DAVIS DRIVE
- REVISE EXISTING SIGNALS
- REMOVE CONFLICTING MARKINGS AND PLACE TEMPORARY PAVEMENT MARKINGS AND MARKERS AND TIE TO EXISTING
- OPEN INTERSECTION TO TEMPORARY REVISED PATTERN

USING RSD 1101.02 (SHEET 3 OF 15), CONSTRUCT THE FOLLOWING TEMPORARY (SEE SHEETS TMP-4 & 5):

- CURB AND TEMPORARY ASPHALT FOR MEDIAN CROSSOVERS FOR EASTBOUND TRAFFIC
- TEMPORARY DRIVEWAY TIE (-L- STA 27+55± RT)(24' MINIMUM OPENING)

USING RSD 1101.02 (SHEET 3 OF 15), BEGIN CONSTRUCTION OF TEMPORARY WIDENING OF EXISTING WESTBOUND LANES FROM -L- STA 19+52± TO STA 23+03± (SEE SHEET TMP-4).

USING RSD 1101.02 (SHEET 3 OF 15), INSTALL PROPOSED SIGNAL AT MORRISVILLE PARKWAY/ CRABTREE CROSSING PARKWAY INTERSECTION (KEEP DEACTIVATED).

INSTALL DETOUR SIGNING FOR PHASE I, STEP 3 AND KEEP COVERED (SEE SHEETS TMP-15 & 16).

INSTALL AND ACTIVATE CMS BOARDS 14 DAYS BEFORE BEFORE CLOSING MORRISVILLE PARKWAY.

NOTE: COORDINATE WITH NORFOLK SOUTHERN RAILROAD ON AVAILABILITY TO PERFORM THE WORK IN PHASE I, STEP 3 BEFORE CLOSING MORRISVILLE PARKWAY IN PHASE I, STEP 3.

COMPLETE THE WORK REQUIRED OF PHASE I, STEP 3 IN 7 CONSECUTIVE DAYS.

STEP 3

SHIFT TRAFFIC TO OFFSITE DETOUR AND CLOSE MORRISVILLE PARKWAY TO TRAFFIC FROM CRABTREE CROSSING PARKWAY TO BRISTOL CREEK DRIVE (MAINTAIN ACCESS TO BUSINESSES).

COMPLETE CONSTRUCTION OF TEMPORARY WIDENING OF EXISTING WESTBOUND LANES AND INSTALL TEMPORARY RAIL CROSSING GATES (BY OTHERS).

USING RSD 1101.02 (SHEET 1 & 3 OF 15), PLACE TEMPORARY PAVEMENT MARKINGS AND MARKERS AND OPEN MORRISVILLE PARKWAY IN A 2-LANE/2-WAY PATTERN IN THE EXISTING WESTBOUND LANES AND WIDENING UTILIZING THE MEDIAN CROSSOVERS FOR EASTBOUND TRAFFIC. REMOVE CONFLICTING MARKINGS AND PLACE TEMPORARY PAVEMENT MARKINGS AND MARKERS ON MORRISVILLE PARKWAY WESTBOUND APPROACH AND BRISTOL CREEK DRIVE. ADJUST EXISTING SIGNAL AT MORRISVILLE PARKWAY/ BRISTOL CREEK DRIVE/QUAIL FIELDS COURT INTERSECTION. ACTIVATE SIGNAL FOR TEMPORARY PATTERN AT MORRISVILLE PARKWAY/CRABTREE CROSSING PARKWAY INTERSECTION. COVER/REMOVE DETOUR SIGNING. (SEE SHEETS TMP-6 & 7 FOR TEMPORARY PATTERN)

PHASE II

OPEN TEMPORARY DRIVEWAY TIE AT -L- STA 27+55± RT AND CLOSE EXISTING XPEDX DRIVEWAY.

USING RSD 1101.02 (SHEET 1 OF 15), INSTALL PORTABLE CONCRETE BARRIER AND BEHIND BARRIER, INSTALL TEMPORARY SHORING AND CONSTRUCT PROPOSED RAILWAY STRUCTURE (SEE SHEET TMP-6).

AWAY FROM TRAFFIC, BEGIN CONSTRUCTION OF THE FOLLOWING PROPOSED UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE (SEE SHEETS TMP-6 & 7):

- RAILWAY
- EB & WB -L- STA 22+15± TO STA 25+00±
- EB -L- STA 25+00± TO STA 26+00±
- -Y1-
- RETAINING WALL (-W1-)

USING RSD 1101.02 (SHEET 1 OF 15), CONSTRUCT PROPOSED ACCESS MODIFICATIONS TO THE BUSINESSES ON NORTH SIDE OF MORRISVILLE PARKWAY. CONSTRUCT TEMPORARY WIDENING OF EXISTING DRIVE ENTRANCE AT -L- STA 27+00± LEFT (22' MINIMUM OPENING)(SEE SHEET TMP-7).

ACTIVATE CMS BOARDS 14 DAYS BEFORE BEFORE CLOSING MORRISVILLE PARKWAY IN PHASE III.

PHASE III

COMPLETE THE WORK REQUIRED OF PHASE III, STEP 1 THROUGH STEP 4 IN 180 CONSECUTIVE DAYS.

STEP 1

INSTALL/UNCOVER DETOUR SIGNING AND USING RSD 1101.03 (SHEET 1 OF 9), CLOSE MORRISVILLE PARKWAY TO TRAFFIC FROM CRABTREE CROSSING PARKWAY TO BRISTOL CREEK DRIVE (MAINTAIN ACCESS TO BUSINESSES). ADJUST SIGNALS AT BOTH INTERSECTIONS FOR TEMPORARY PATTERN. (SEE SHEETS TMP-8 & 9)(SEE SHEETS TMP-15 & 16 FOR DETOUR DETAILS).

AWAY FROM TRAFFIC CONSTRUCT REMAINING PROPOSED RAILWAY SECTION ACROSS EXISTING MORRISVILLE PARKWAY AND COMPLETE PROPOSED RAILWAY CONSTRUCTION, INCLUDING STURCTURE BEGUN IN PHASE II (SEE SHEET TMP-8).

SWITCH RAIL TRAFFIC TO NEW ALIGNMENT AND STRUCTURE (BY OTHERS).

STEP 2

OPEN TEMPORARY DRIVEWAY TIE AT -L- STA 27+00± LEFT (TWO-WAY) AND CLOSE EXISTING DRIVEWAY ENTRANCE AT PROPOSED -Y2- (SEE SHEET TMP-11).

AWAY FROM TRAFFIC, CONSTRUCT THE FOLLOWING PROPOSED UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE (SEE SHEETS TMP-10 & 11):

-L- FROM CRABTREE CROSSING TO -L- STA 22+15±
WB -L- STA 25+00± TO STA 26+00± (PROVIDE TEMP. MEDIAN CROSSING)
-Y2-

COMPLETE CONSTRUCTION OF PROPOSED BEGUN EARLIER:

- EB & WB -L- STA 22+15± TO STA 25+00±
- EB -L- STA 25+00± TO STA 26+00±
- -Y1-
- RETAINING WALL (-W1-)

STEP 3

COMPLETE THE FOLLOWING (SEE SHEETS TMP-12 & 13):

- OPEN PROPOSED -L- FROM CRABTREE CROSSING PARKWAY TO -L- STA 26+00± TO LOCAL TRAFFIC ONLY
- OPEN -Y1- & -Y2- AND CLOSE TEMPORARY DRIVEWAY TIES AT -L- STA 27+00± LT AND -L- STA 27+55± RT
- CLOSE ACCESS TO MORRISVILLE PARKWAY FROM -L- STA 26+00 TO END PROJECT LIMIT
- ADJUST SIGNALS AT BOTH INTERSECTIONS

AWAY FROM TRAFFIC, CONSTRUCT THE FOLLOWING UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE (SEE SHEET TMP-13):

-L- STA 26+00± TO BRISTOL CREEK DRIVE
-DR1-

COMPLETE UTILITY RELOCATION.

STEP 4

AWAY FROM TRAFFIC, PLACE TEMPORARY PAVEMENT MARKINGS AND MARKERS IN THE FINAL PATTTERN ON -L- (SEE FINAL PAVEMENT MARKING PLANS).

USING RSD 1101.02 (SHEET 1 & 3 OF 15), TIE TEMPORARY PAVEMENT MARKINGS AND MARKERS TO EXISITNG AND OPEN -L- AND -DR1- TO FINAL TRAFFIC PATTERN. ADJUST SIGNALS AT BOTH INTERSECTIONS FOR FINAL PATTERN (SEE FINAL PAVEMENT MARKING PLANS). REMOVE OFFSITE DETOUR SIGNING.

APPROVED: Michael T. Rzepka DATE: 10-8-13

SEAL — NORTH CAROLINA PROFESSIONAL SEAL 15876 ENGINEER MICHAEL T. RZEPKA

PHASING

SCALE:	NONE
DATE:	OCT '13
DWG. BY:	YTM
DESIGN BY:	TAG
REVIEWED BY:	MTR

DIVISION OF HIGHWAYS — STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION — TRAFFIC ENGINEERING — TRAFFIC CONTROL

REVISIONS

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PROJ. REFERENCE NO.	SHEET NO.
P-5201	TMP-3A

PHASE IV

USING RSD 1101.02 (SHEET 3 OF 15), COMPLETE THE FOLLOWING:

- CONSTRUCT REMAINING MEDIAN ISLAND SECTION FROM -L- STA 24+00± TO STA 26+00± (SEE SHEET TMP-14).
- PLACE FINAL ASPHALT LAYER -L-, -Y1-, -Y2- AND DR1. PLACE FINAL MARKINGS AND MARKERS ON -L-.
- REMOVE CONFLICTING MARKINGS AND PLACE FINAL MARKINGS AND MARKERS ON BRISTOL CREEK DRIVE AND THE CHAPEL HILL ROAD/WESTON PARKWAY INTERSECTION IN ITS ORIGINAL LOCATIONS AND TIE TO EXISTING MARKINGS.
- REMOVE THE IMPROVEMENTS TO DAVIS DRIVE/MORRISVILLE PARKWAY INTERSECTION AND RETURN TO ITS ORIGINAL CONFIGURATION.
- REMOVE REMAINING TRAFFIC CONTROL DEVICES.

APPROVED: Michael T. Rzepka DATE: 9-16-13

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 15876 ENGINEER MICHAEL T. RZEPKA

PHASING

SCALE:	NONE
DATE:	SEPT '13
DWG. BY:	YTM
DESIGN BY:	TAG
REVIEWED BY:	MTR

DIVISION OF HIGHWAYS
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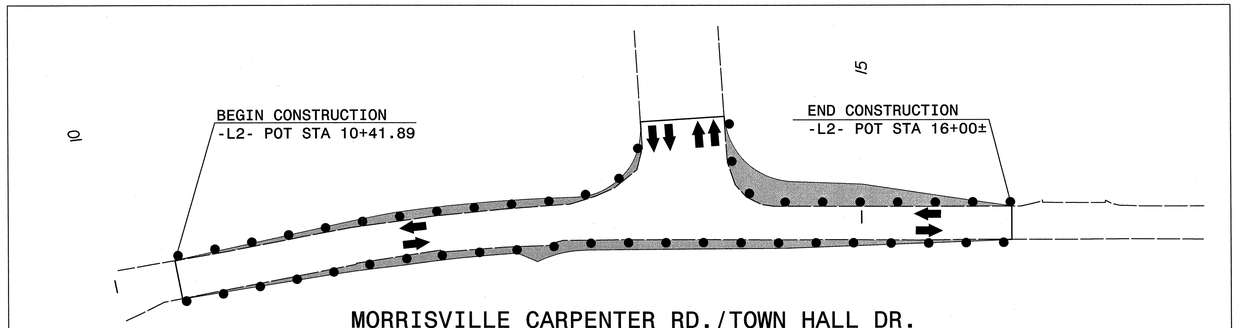
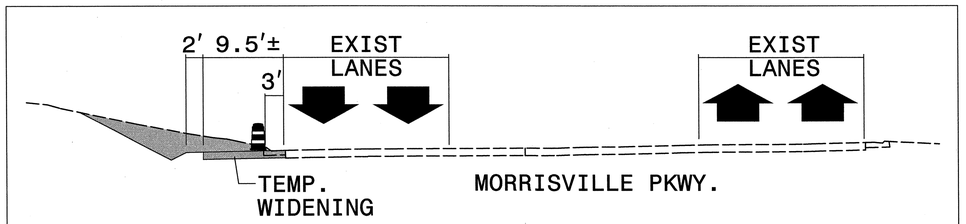
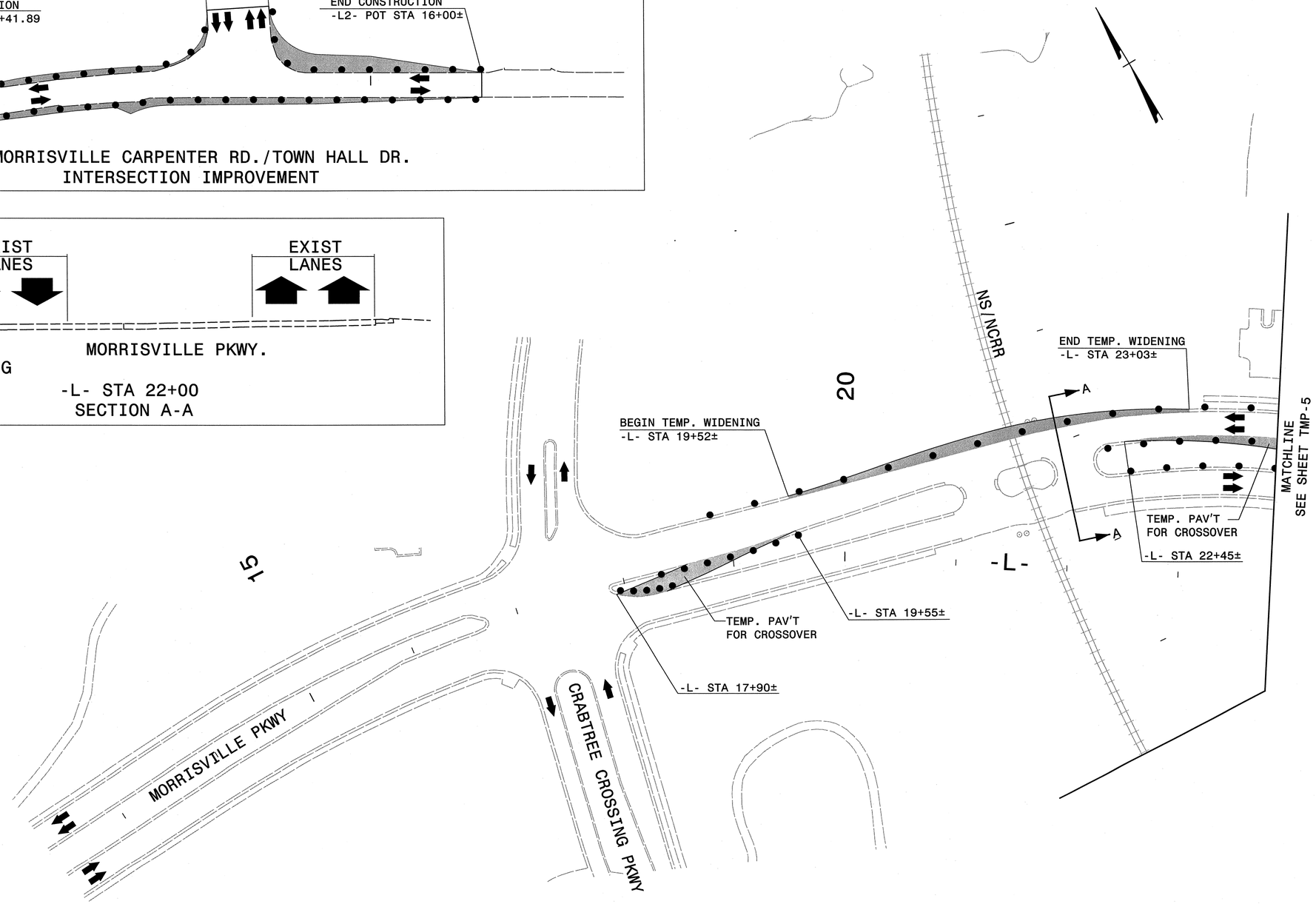
PROJ. REFERENCE NO.	SHEET NO.
P-5201	TMP-4



MORRISVILLE CARPENTER RD./TOWN HALL DR.
INTERSECTION IMPROVEMENT



-L- STA 22+00
SECTION A-A



APPROVED: Michael T. Rzepka DATE: 9-16-13

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 15876 ENGINEER MICHAEL T. RZEPKA

PHASE I DETAIL

SCALE:	NONE
DATE:	SEPT '13
DWG. BY:	YTM
DESIGN BY:	TAG
REVIEWED BY:	MTR

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STATE OF NORTH CAROLINA
STATE ENGINEER
DEPARTMENT OF TRANSPORTATION
STRATEGIC CONTROL

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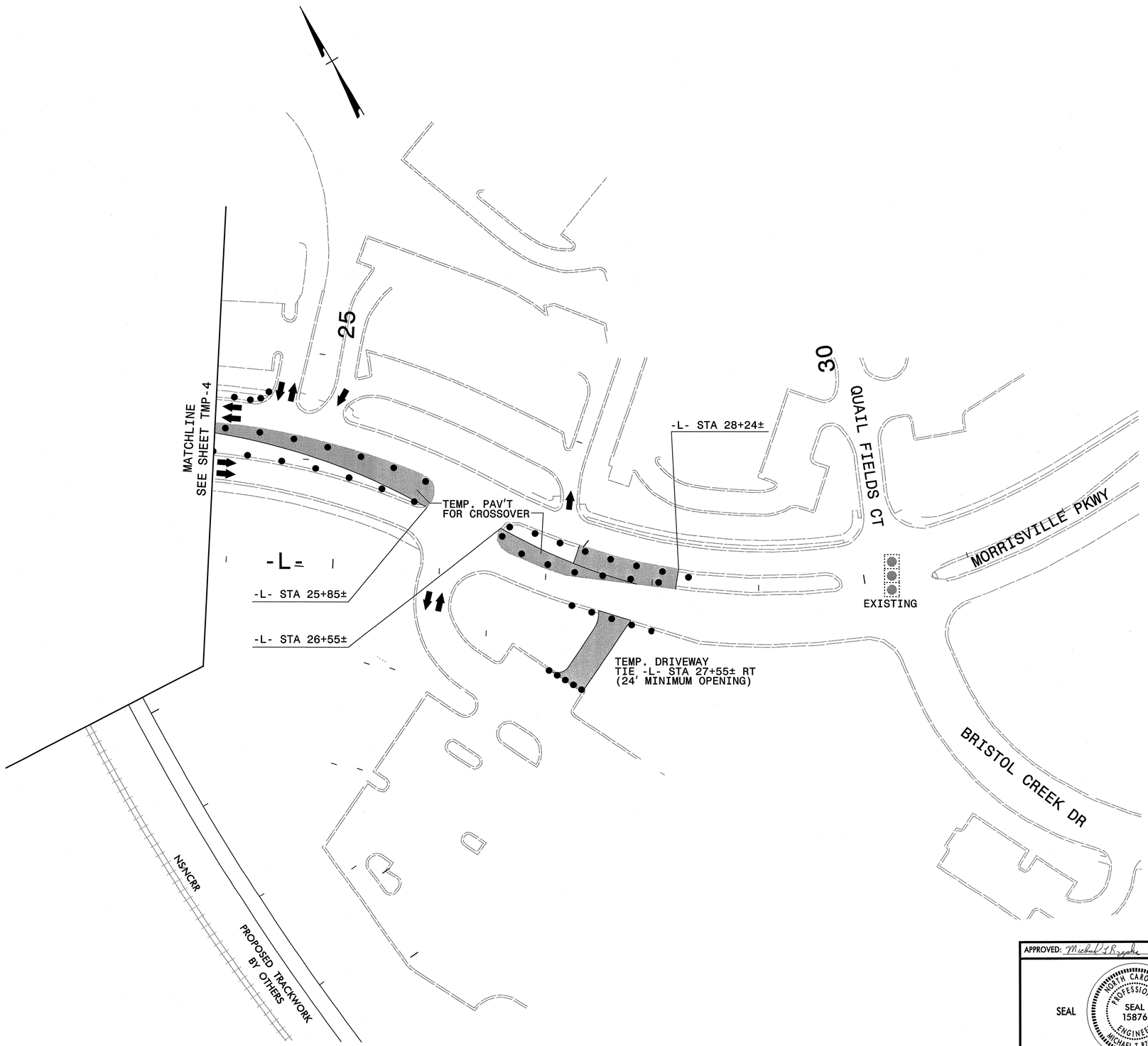
PROJ. REFERENCE NO.	SHEET NO.
P-5201	TMP-5



APPROVED: Michael T. Rzepka DATE: 9-16-13

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 15876 ENGINEER MICHAEL T. RZEPKA

PHASE I DETAIL

SCALE:	NONE
DATE:	SEPT '13
DWG. BY:	YTM
DESIGN BY:	TAG
REVIEWED BY:	MTR

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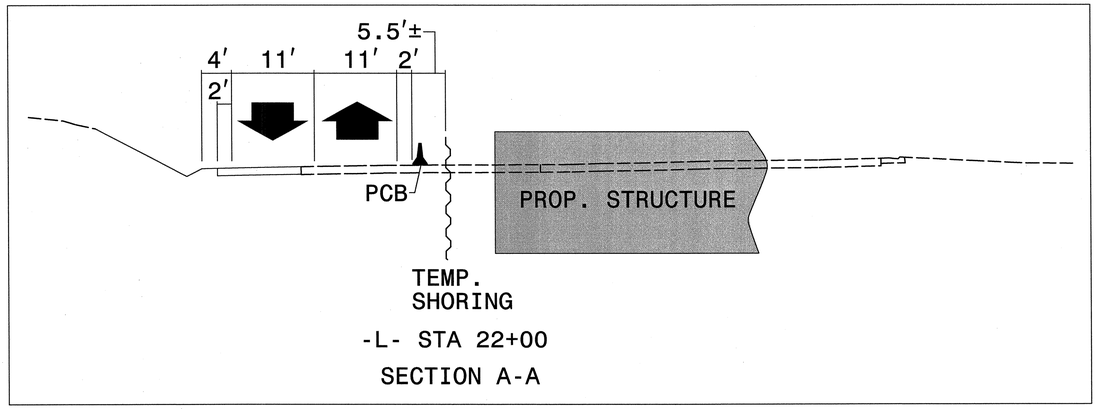
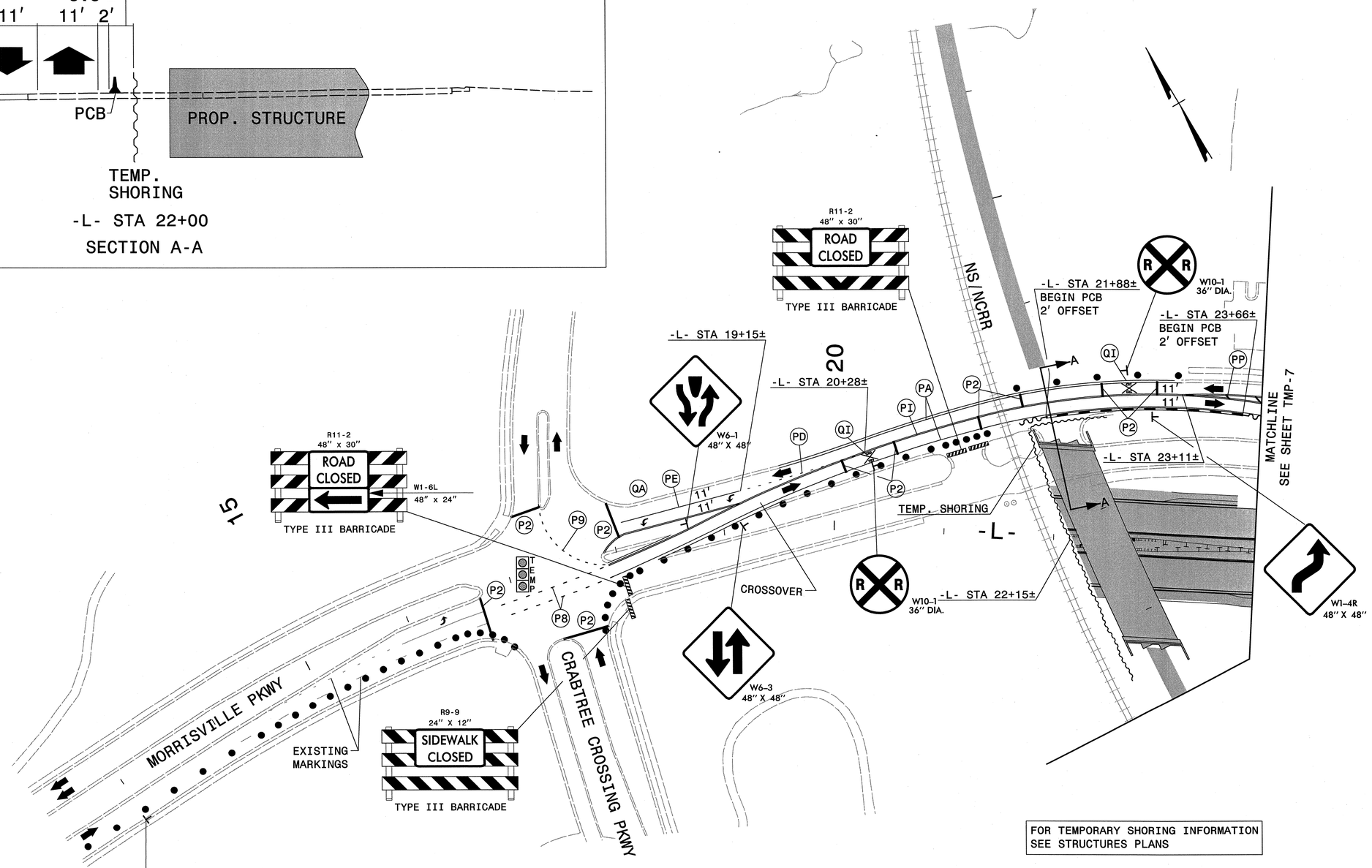
PROJ. REFERENCE NO.	SHEET NO.
P-5201	TMP-6





FOR TEMPORARY SHORING INFORMATION
SEE STRUCTURES PLANS

USE RSD 1101.02, SHEET 3 OF 15
TO CLOSE RIGHT LANE

APPROVED: Michael T. Rzepka DATE: 9-16-13

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 15876 ENGINEER MICHAEL T. RZEPKA

PHASE II DETAIL

SCALE:	NONE
DATE:	SEPT '13
DWG. BY:	YTM
DESIGN BY:	TAG
REVIEWED BY:	MTR

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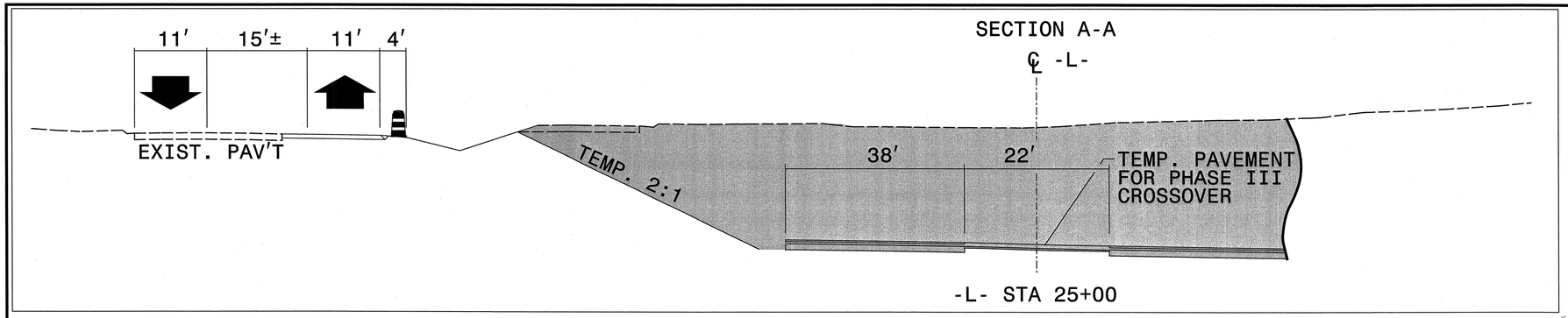
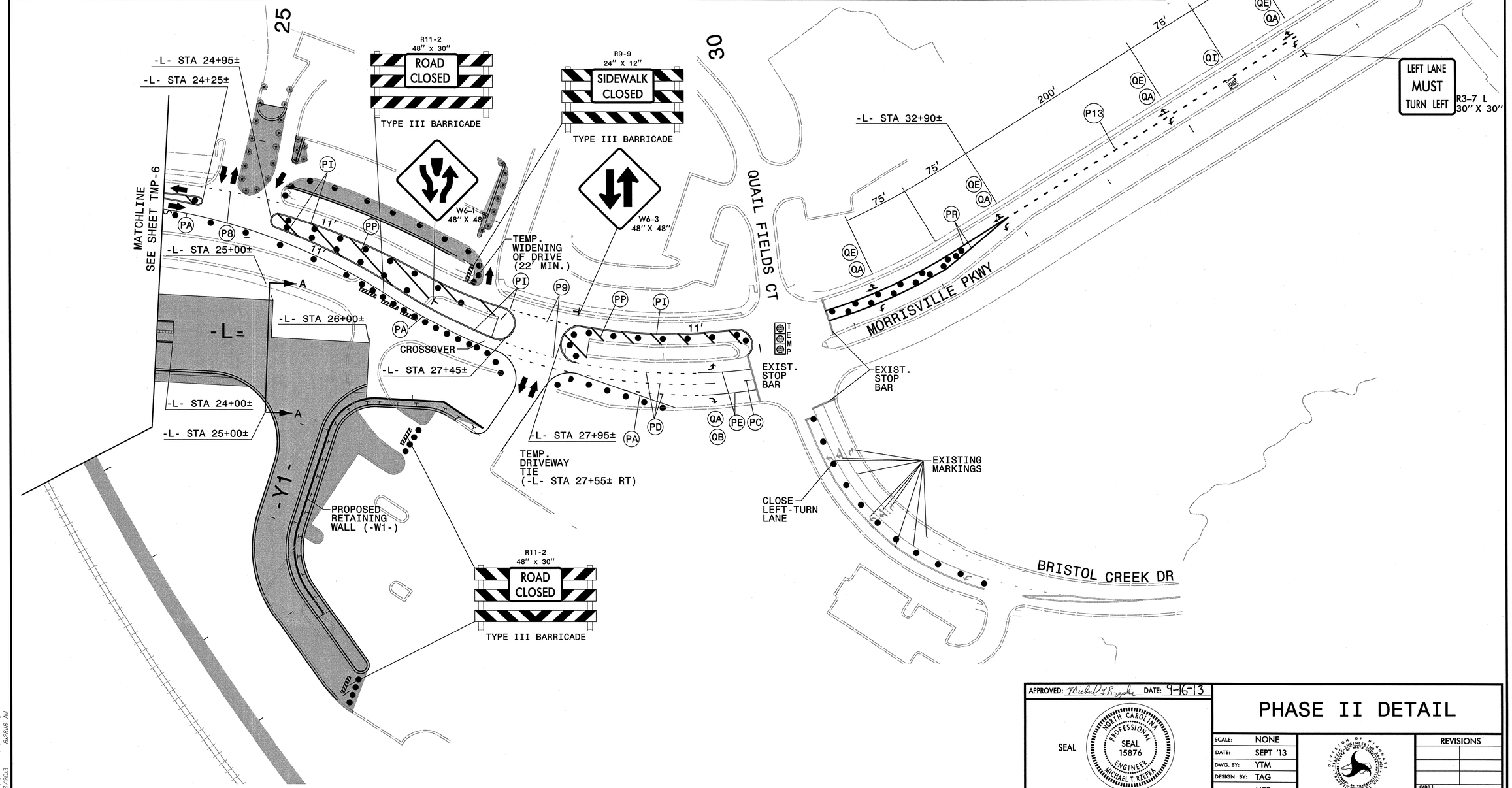
PROJ. REFERENCE NO.	SHEET NO.
P-5201	TMP-7





APPROVED: Michael T. Rzepka DATE: 9-16-13

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 15876 ENGINEER MICHAEL T. RZEPKA

PHASE II DETAIL

SCALE:	NONE
DATE:	SEPT '13
DWG. BY:	YTM
DESIGN BY:	TAG
REVIEWED BY:	MTR

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TRANSPORTATION MOBILITY AND SAFETY DIVISION
TRAFFIC ENGINEERING BRANCH
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PROJ. REFERENCE NO.	SHEET NO.
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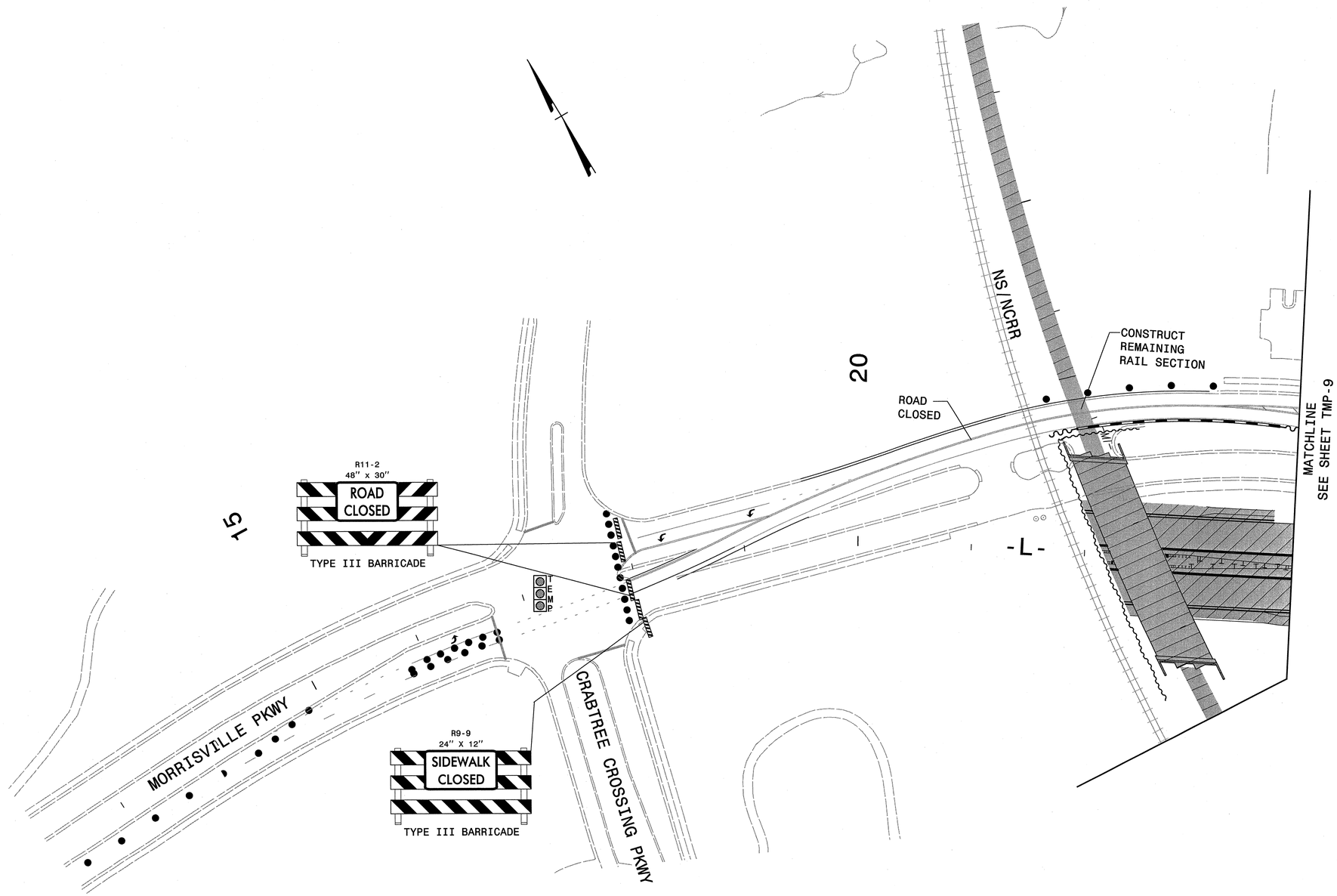

USE RSD 1101.02, SHEET 3 OF 15 TO CLOSE LEFT LANE

APPROVED: Michael T. Rzepka DATE: 9-16-13

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 15876 ENGINEER MICHAEL T. RZEPKA

PHASE III, STEP 1 DETAIL

SCALE:	NONE
DATE:	SEPT '13
DWG. BY:	YTM
DESIGN BY:	TAG
REVIEWED BY:	MTR

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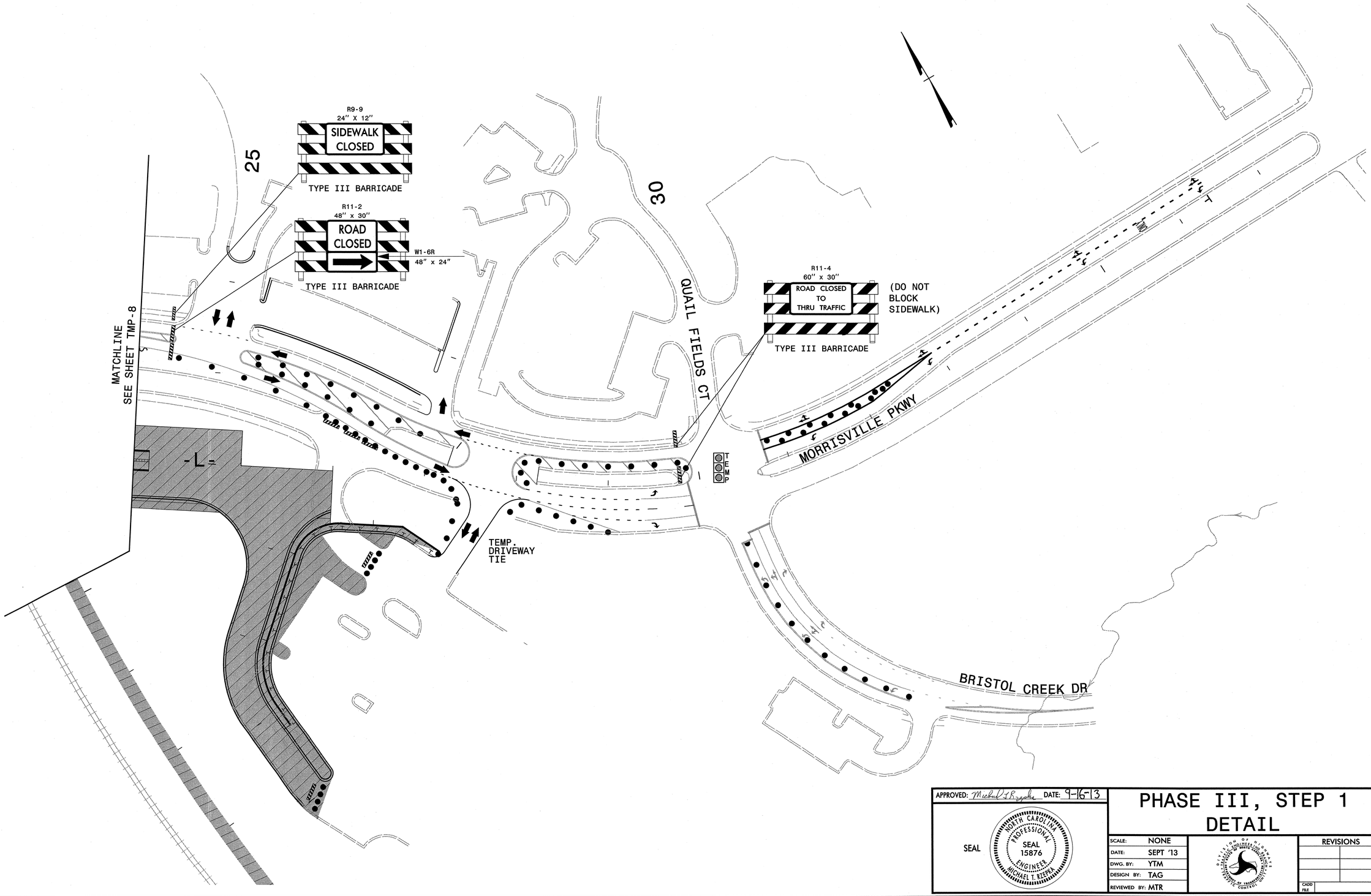
PROJ. REFERENCE NO.	SHEET NO.
P-5201	TMP-9



APPROVED: Michael T. Rzepka DATE: 9-16-13

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 15876 ENGINEER MICHAEL T. RZEPKA

PHASE III, STEP 1 DETAIL

SCALE:	NONE
DATE:	SEPT '13
DWG. BY:	YTM
DESIGN BY:	TAG
REVIEWED BY:	MTR

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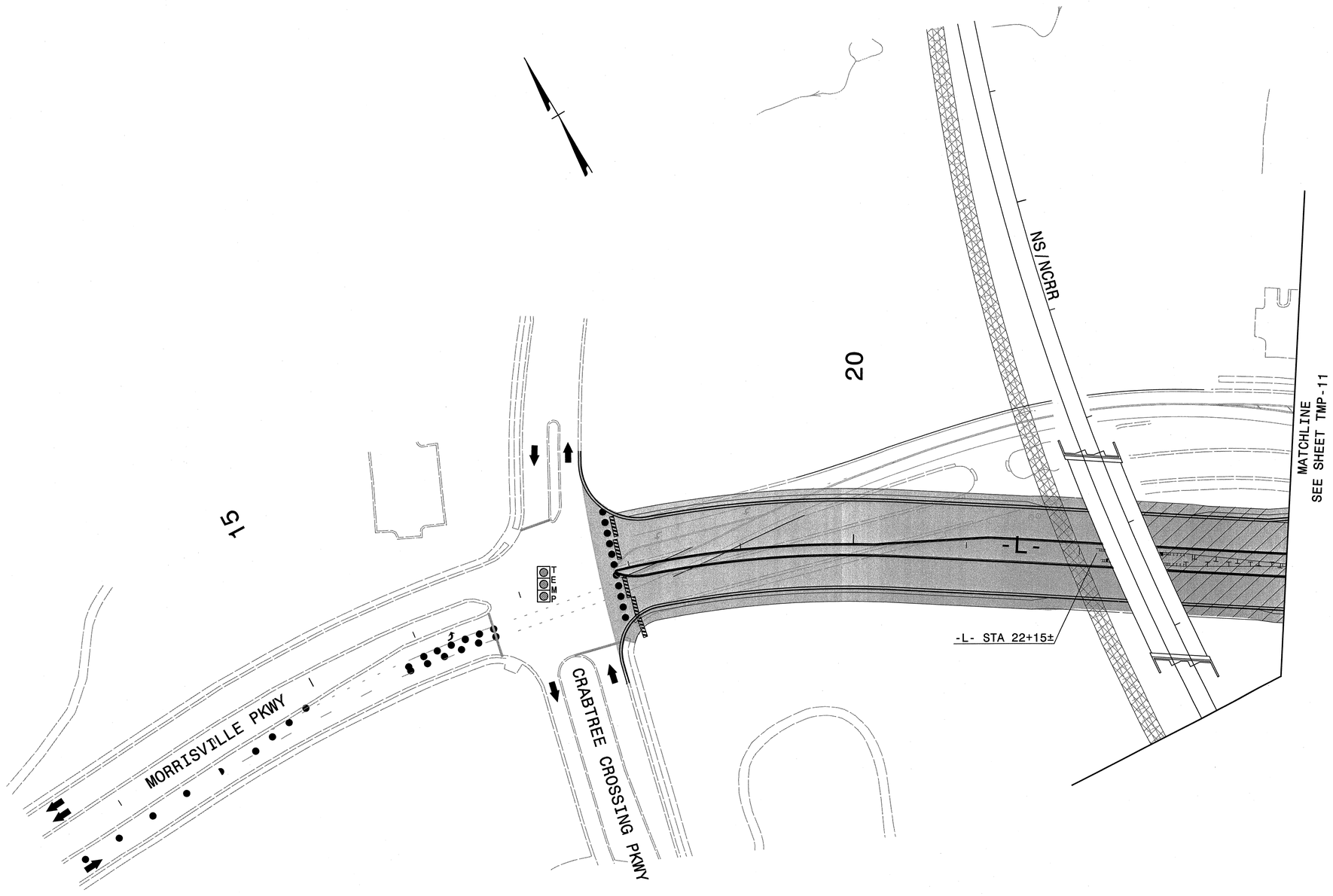
PROJ. REFERENCE NO.	SHEET NO.
P-5201	TMP-10



APPROVED: Michael T. Rzepka DATE: 9-16-13

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 15876 ENGINEER MICHAEL T. RZEPKA

PHASE III, STEP 2 DETAIL

SCALE:	NONE
DATE:	SEPT '13
DWG. BY:	YTM
DESIGN BY:	TAG
REVIEWED BY:	MTR

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TRAFFIC ENGINEERING BRANCH
TRAFFIC CONTROL UNIT
STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

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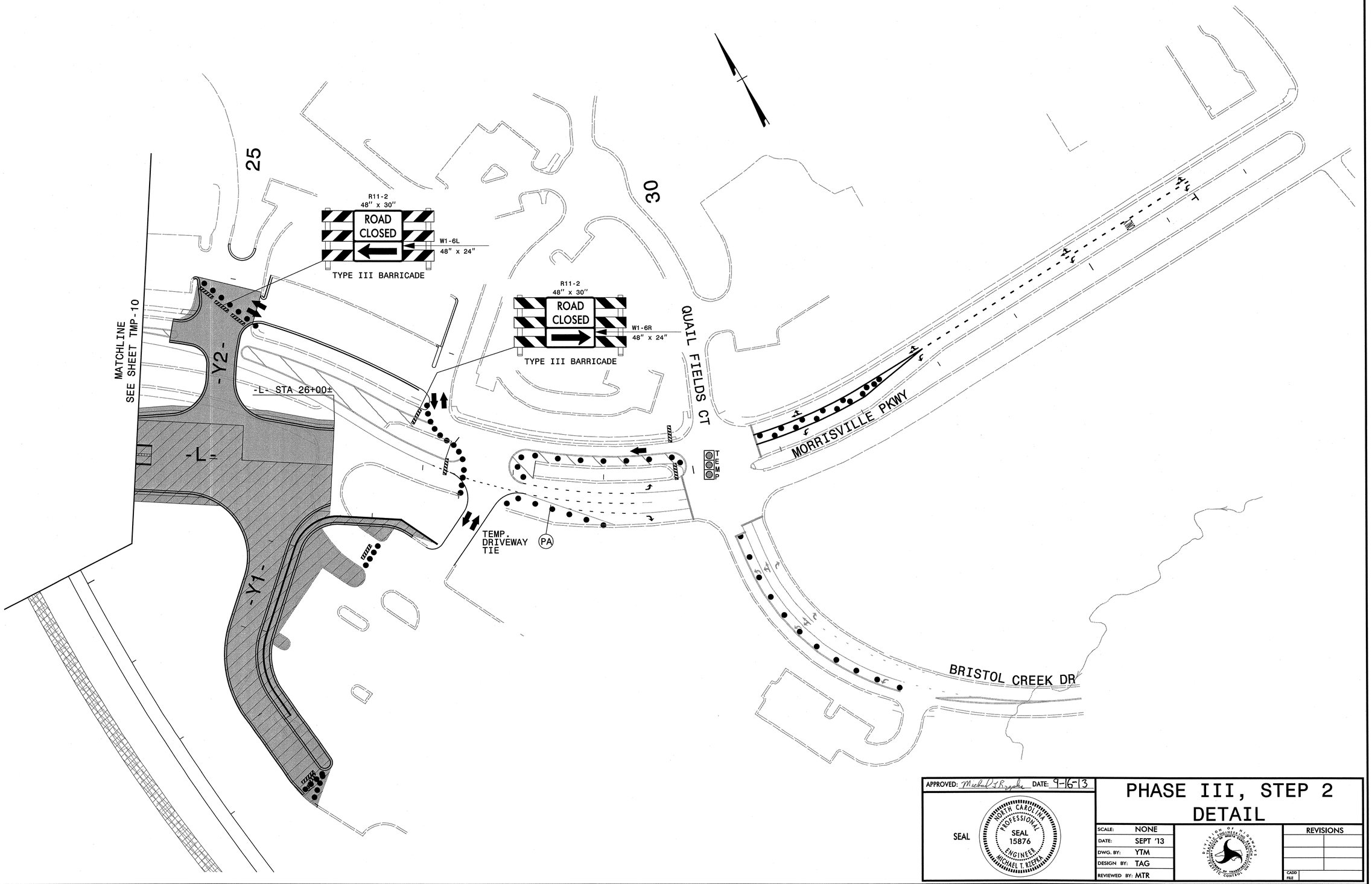
PROJ. REFERENCE NO.	SHEET NO.
P-5201	TMP-11



APPROVED: Michael T. Rzepka DATE: 9-16-13

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 15876 ENGINEER MICHAEL T. RZEPKA

PHASE III, STEP 2 DETAIL

SCALE:	NONE
DATE:	SEPT '13
DWG. BY:	YTM
DESIGN BY:	TAG
REVIEWED BY:	MTR

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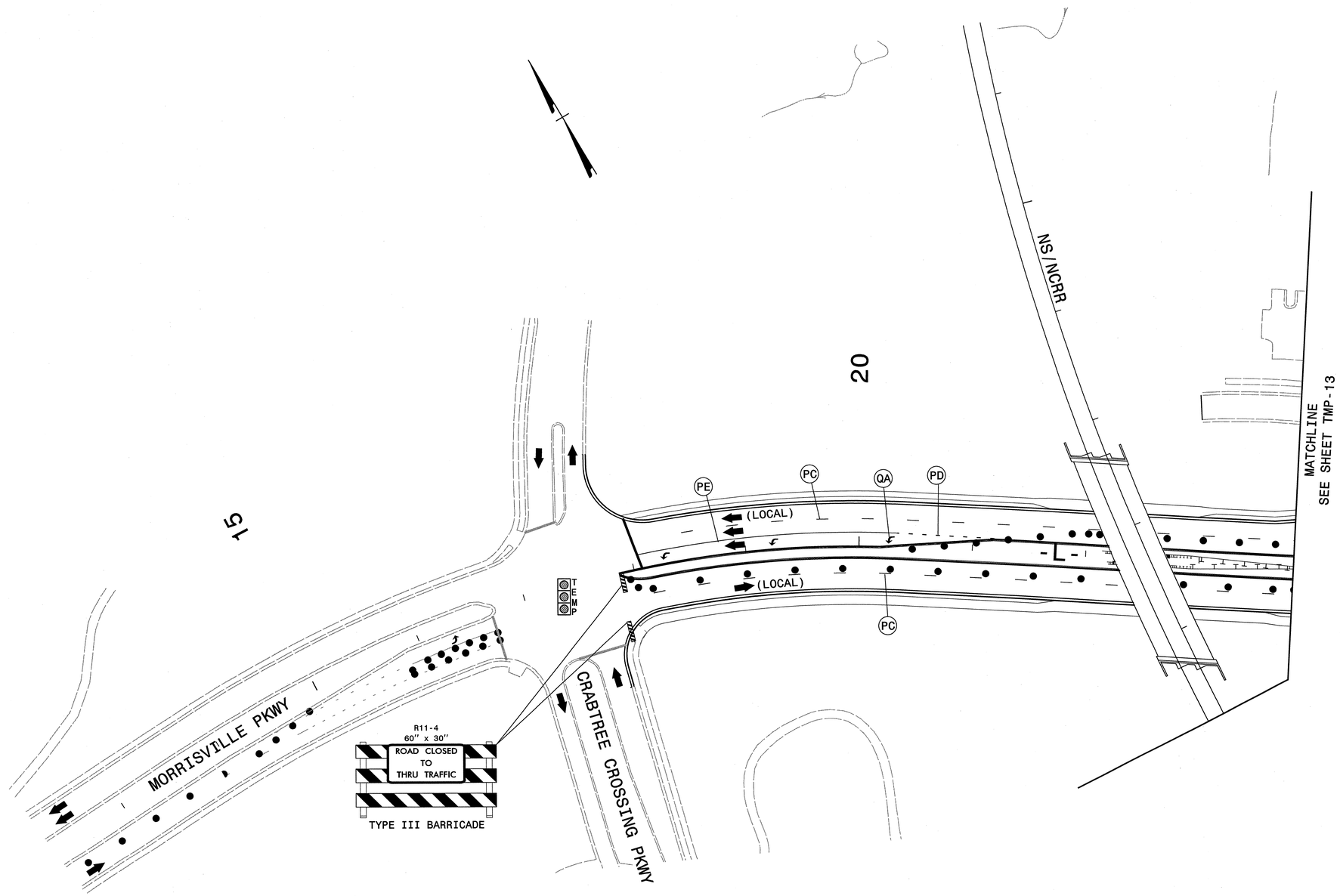
PROJ. REFERENCE NO.	SHEET NO.
P-5201	TMP-12



APPROVED: Michael T. Rzepka DATE: 9-16-13

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 15876 ENGINEER MICHAEL T. RZEPKA

PHASE III, STEP 3 DETAIL

SCALE:	NONE
DATE:	SEPT '13
DWG. BY:	YTM
DESIGN BY:	TAG
REVIEWED BY:	MTR

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STATE OF NORTH CAROLINA
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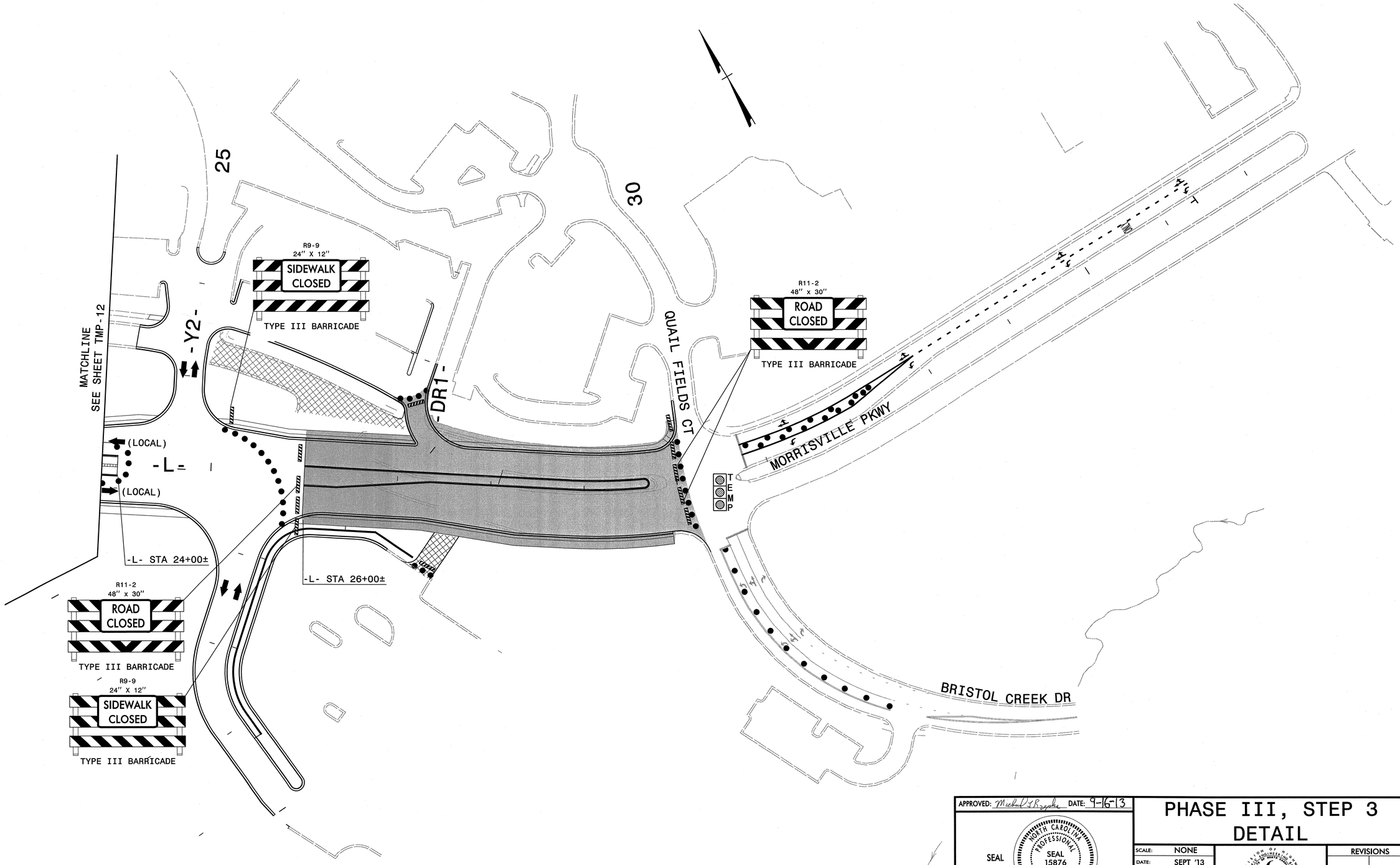

APPROVED: Michael T. Rzepka DATE: 9-16-13

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 15876 ENGINEER MICHAEL T. RZEPKA

PHASE III, STEP 3 DETAIL

SCALE:	NONE
DATE:	SEPT '13
DWG. BY:	YTM
DESIGN BY:	TAG
REVIEWED BY:	MTR

REVISIONS

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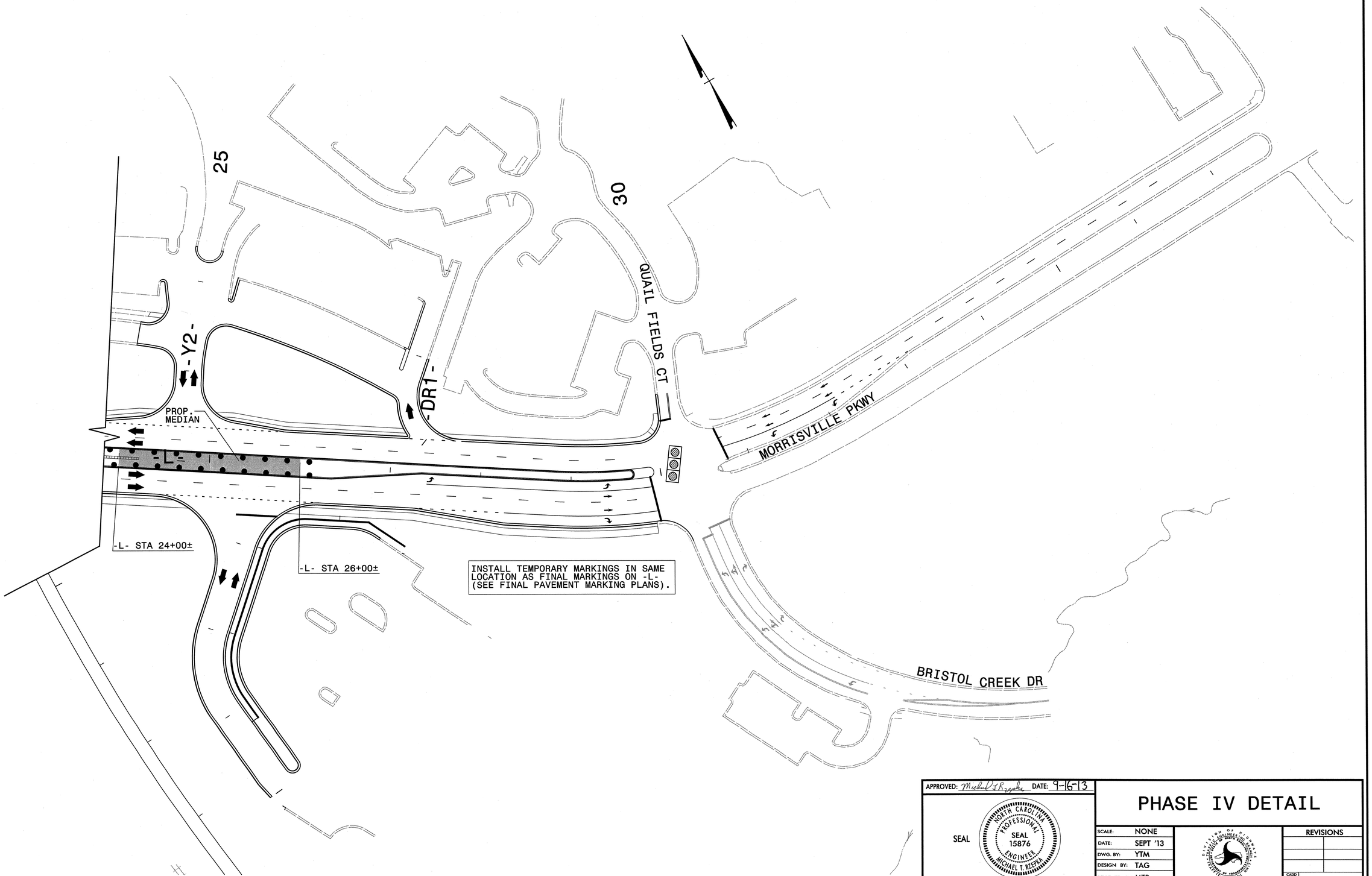
PROJ. REFERENCE NO.	SHEET NO.
P-5201	TMP-14



APPROVED: Michael T. Rzepka DATE: 9-16-13

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 15876 ENGINEER MICHAEL T. RZEPKA

PHASE IV DETAIL

SCALE:	NONE
DATE:	SEPT '13
DWG. BY:	YTM
DESIGN BY:	TAG
REVIEWED BY:	MTR

DIVISION OF HIGHWAYS TRAFFIC ENGINEERING BRANCH TRAFFIC CONTROL UNIT

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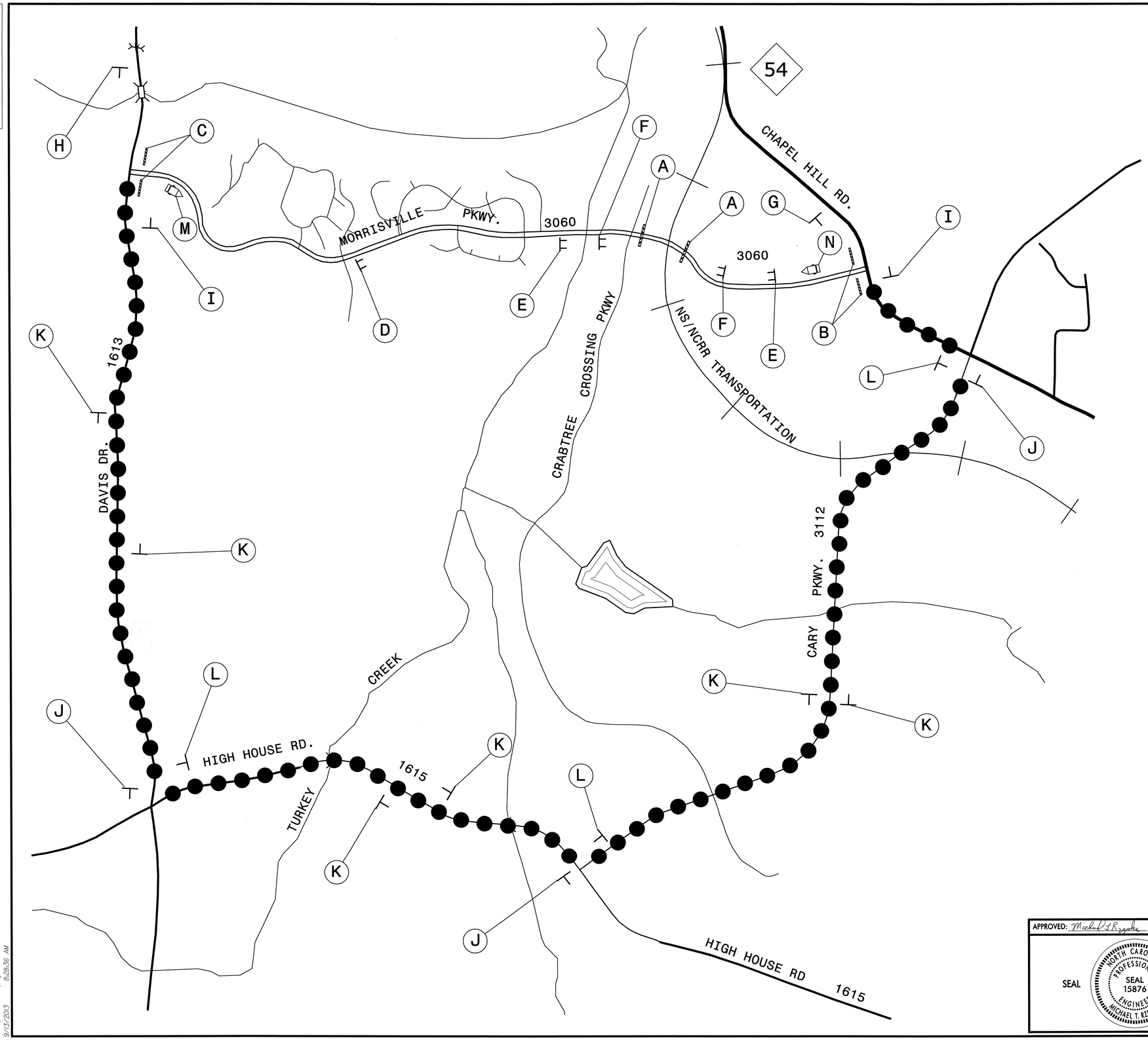
PROJ. REFERENCE NO.	SHEET NO.
P-5201	TMP-15



APPROVED: Michael T. Rzepka DATE: 9-16-13

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 15876 ENGINEER MICHAEL T. RZEPKA

DETOUR FOR MORRISVILLE PKWY CLOSURE

SCALE:	NONE
DATE:	SEPT '13
DWG. BY:	YTM
DESIGN BY:	TAG
REVIEWED BY:	MTR

REVISIONS

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9/13/2013 8:28:36 AM

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PROJ. REFERENCE NO.	SHEET NO.
P-5201	TMP-16

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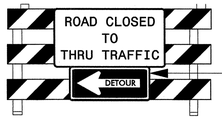
R11-2
48"X30"

TYPE III BARRICADE

(A)

R11-4
60"X30"



M4-10L
48"X18"

TYPE III BARRICADE

(B)

R11-4
60" x 30"

M4-10R
48" x 18"

TYPE III BARRICADE

(C)

W20-3
48" X 48"

(D)

W20-3
48" X 48"

(E)

W20-3
48" X 48"

(F)

W20-3
48" X 48"

NEXT RIGHT

SP-4R
42" X 12"

(G)

W20-3
48" X 48"

NEXT LEFT

SP-4L
42" X 12"

(H)

END DETOUR

M4-8 A
24" x 18"

(I)

36" x 24"

DETOUR

M4-8
24" x 12"

M6-1L
21" x 15"

(J)

36" x 24"

DETOUR

M4-8
24" x 12"

M6-3
21" x 15"

(K)

36" x 24"

DETOUR

M4-8
24" x 12"

M6-1
21" x 15"

(L)

MESSAGE NO. 1	MESSAGE NO. 2
MORRISVL PKWY TO CLOSE AT	CRABTREE CROSSING *(DATE)*

CHANGEABLE MESSAGE SIGN

(M)

MESSAGES AND LOCATIONS AS SHOWN OR AS DIRECTED BY THE ENGINEER

ACTIVATE CMS 14 DAYS PRIOR TO ROAD CLOSURE

MESSAGE NO. 1	MESSAGE NO. 2
MORRISVL PKWY TO CLOSE AT	BRISTOL CREEK *(DATE)*

CHANGEABLE MESSAGE SIGN

(N)

SIGN NUMBER: name
TYPE: STATIONARY
QUANTITY: SEE PLANS

SIGN WIDTH: 3'-0"
HEIGHT: 2'-0"
TOTAL AREA: 6.0 Sq.Ft.

BORDER TYPE: INSET
RECESS: 0.375"
WIDTH: 0.625"
RADII: 1.5"

NO. Z BARS:
LENGTH:

BACKG COLOR: Fluorescent Orange
COPY COLOR: Black

SYMBOL	X	Y	WID	HT

MAT'L: 0.080" (2.0 mm) ALUMINUM

DESIGN BY: TAG
PROJECT ID: P-5201
CHECKED BY:F&H
DIV: DIV 5
DATE: Jun 17, 2013

USE NOTES: 1,2

1. Legend and border shall be direct applied black non-reflective sheeting.
2. Background shall be NC GRADE B fluoresent orange retroreflective sheeting.

BORDER
R=1.5"
TH=0.625"
IN=0.375"

Spacing Factor is 1 unless specified otherwise

LETTER POSITIONS

Letter spacings are to start of next letter

																												Series/Size Text Length
	M	o	r	r	i	s	v	i	l	l	e																	C 2000
4.9	4.1	3.3	2.2	2.2	1.3	2.4	3.5	1.6	1.6	1.4	2.6	4.9																26.3
	P	a	r	k	w	a	y																					C 2000
6.6	3.5	3.3	2.2	2.8	5	2.9	3.1	6.6																				22.8

FILENAME: p5201_tmp_detoursigns

NORTH CAROLINA D.O.T. SIGN DETAIL

APPROVED: Michael T. Rzepka DATE: 9-16-13

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 15876 ENGINEER MICHAEL T. RZEPKA

TYPE III BARRICADES AND DETOUR SIGNS

SCALE:	NONE
DATE:	SEPT '13
DWG. BY:	YTM
DESIGN BY:	TAG
REVIEWED BY:	MTR

DIVISION OF HIGHWAYS ENGINEERING BRANCH NORTH CAROLINA DEPARTMENT OF TRANSPORTATION TRAFFIC CONTROL

REVISIONS

CADD FILE

R:\tmp\p5201_tmp_detoursigns.dgn
9/13/2013 8:28:37 AM