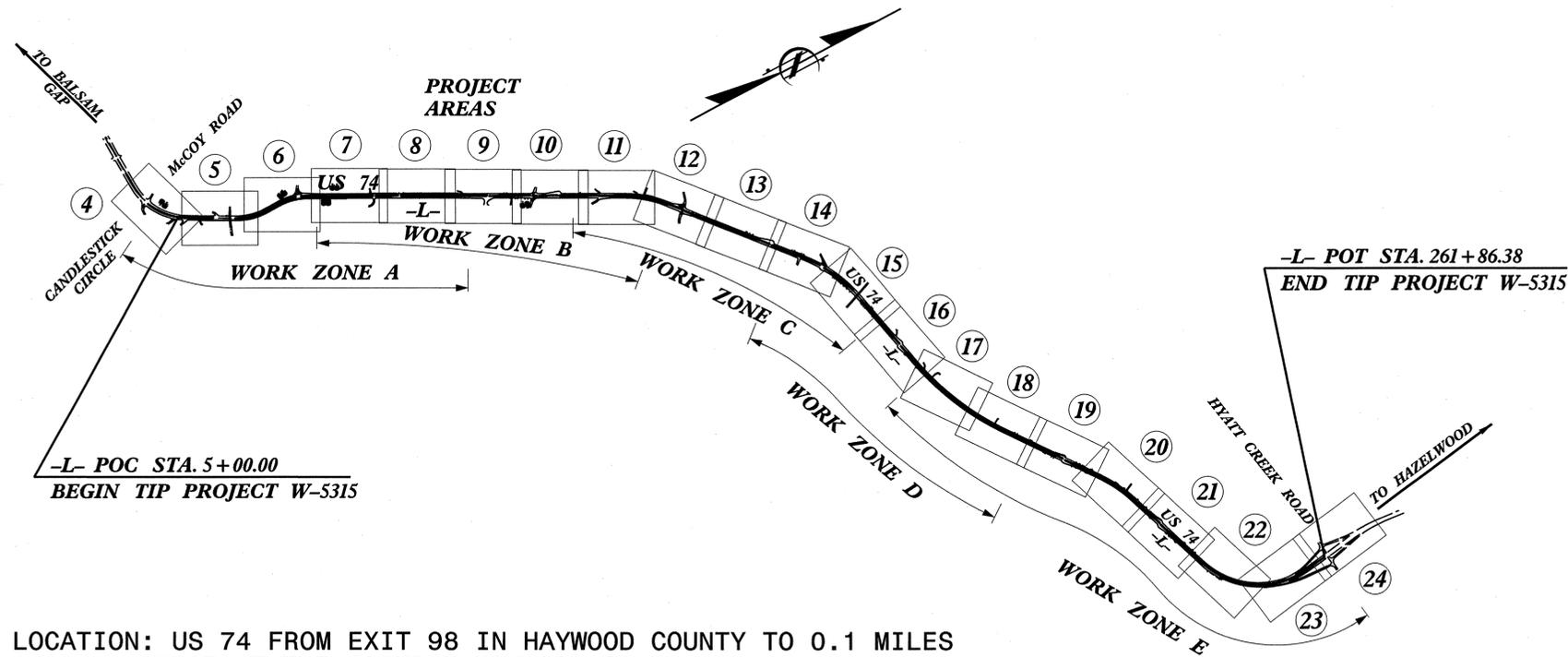


STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

TRANSPORTATION MANAGEMENT PLAN

HAYWOOD COUNTY

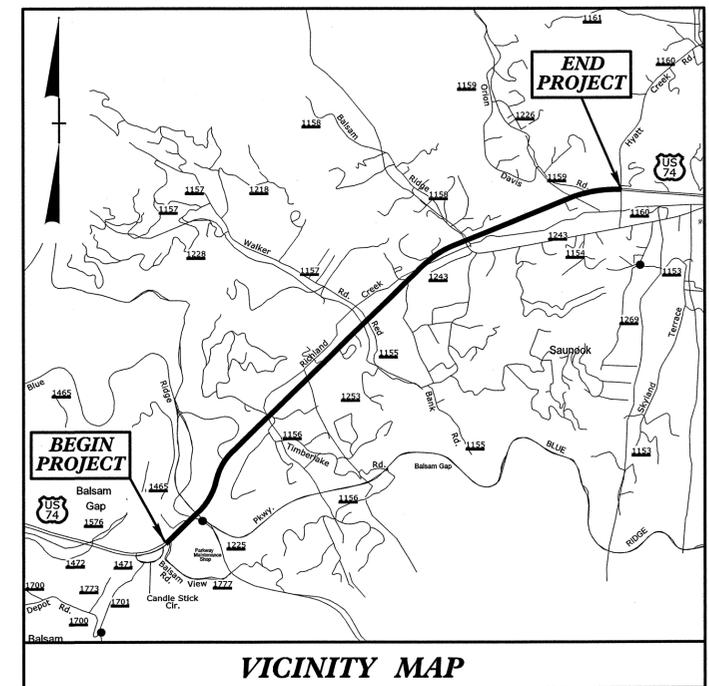


LOCATION: US 74 FROM EXIT 98 IN HAYWOOD COUNTY TO 0.1 MILES WEST OF THE JACKSON-HAYWOOD COUNTY LINE

TYPE OF WORK: MEDIAN GUARDRAIL AND DRAINAGE

INDEX OF SHEETS

SHEET NO.	TITLE
TMP-01	TITLE SHEET, AND INDEX OF SHEETS
TMP-1A	LIST OF APPLICABLE ROADWAY STANDARD DRAWINGS, LEGEND, AND TEMPORARY PAVEMENT MARKING
TMP-1B	TRANSPORTATION OPERATIONS PLAN: (MANAGEMENT STRATEGIES, GENERAL NOTES AND LOCAL NOTES)
TMP-03	TEMPORARY TRAFFIC CONTROL PHASING
TMP-04	TEMPORARY TRAFFIC CONTROL SECTION VIEWS
TMP-05 - TMP-08	TEMPORARY TRAFFIC CONTROL WORK ZONE A DETAIL
TMP-09 - TMP-14	TEMPORARY TRAFFIC CONTROL WORK ZONE B DETAIL
TMP-15 - TMP-18	TEMPORARY TRAFFIC CONTROL WORK ZONE C DETAIL
TMP-19 - TMP-23	TEMPORARY TRAFFIC CONTROL WORK ZONE D DETAIL
TMP-24 - TMP-28	TEMPORARY TRAFFIC CONTROL WORK ZONE E DETAIL
TMP-29	TEMPORARY TRAFFIC CONTROL ALL WORK ZONES DETAIL



STEVE SMALLWOOD, P.E. PROJECT ENGINEER
JUSTIN BEARD, P.E. TRAFFIC CONTROL DESIGN ENGINEER

6/28/13 DATE SUBMITTED

SUBMITTAL:

- STAGING CONCEPT
- MIDPOINT
- PRE-FINAL
- FINAL

APPROVED: _____
DATE: _____

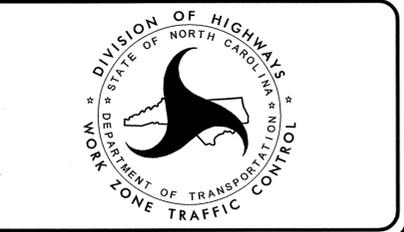
SEAL

SEAL NOT VALID UNLESS SIGNED AND DATED



PREPARED FOR: 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
G.L. GETTIER, P.E. TRAFFIC CONTROL PROJECT ENGINEER
J.W. WOOLARD JR., P.E. TRAFFIC CONTROL PROJECT DESIGN ENGINEER



\$\$\$\$\$SYTIME\$\$\$\$\$
\$\$\$\$\$SDON\$\$\$\$\$
\$\$\$\$\$USERNAME\$\$\$\$\$

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
1101.04	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
1205.03	PAVEMENT MARKINGS - EXITS AND ENTRANCE RAMPS
1205.04	PAVEMENT MARKINGS - INTERSECTIONS
1205.05	PAVEMENT MARKINGS - TURN LANES
1205.06	PAVEMENT MARKINGS - LANE DROPS
1205.09	PAVEMENT MARKINGS - PAINTED ISLANDS
1205.13	PAVEMENT MARKINGS - LANE REDUCTIONS
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
1264.01	OBJECT MARKERS - TYPES
1264.02	OBJECT MARKERS - INSTALLATION

LEGEND

GENERAL

- DIRECTION OF TRAFFIC FLOW
- DIRECTION OF PEDESTRIAN TRAFFIC FLOW
- EXIST. PVMT.
- NORTH ARROW
- PROPOSED PVMT.
- TEMP. SHORING (LOCATION PURPOSES ONLY)

WORK AREA

REMOVAL

USER DEFINED (IF NEEDED)

USER DEFINED (IF NEEDED)

TRAFFIC CONTROL DEVICES

- BARRICADE (TYPE III)
- CONE
- DRUM SKINNY DRUM TUBULAR MARKER
- TEMPORARY CRASH CUSHION
- FLASHING ARROW BOARD
- FLAGGER
- LAW ENFORCEMENT
- TRUCK MOUNTED ATTENUATOR (TMA)
- CHANGEABLE MESSAGE SIGN

TEMPORARY SIGNING

- PORTABLE SIGN
- STATIONARY SIGN
- STATIONARY OR PORTABLE SIGN

SIGNALS

- EXISTING
- PROPOSED
- TEMPORARY

PAVEMENT MARKINGS

- EXISTING LINES
- TEMPORARY LINES

PAVEMENT MARKERS

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

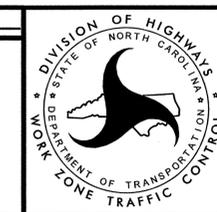
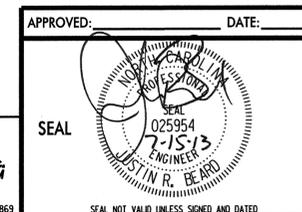
PAVEMENT MARKING SYMBOLS

- PAVEMENT MARKING SYMBOLS

TEMPORARY PAVEMENT MARKINGS

SYMBOL	DESCRIPTION	PAY ITEM
CA	WHITE EDGELINE	TAPE (4")
CE	WHITE SOLID LANE LINE	TAPE (4")
DA	LEFT TURN ARROW	TAPE (4")

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ROADWAY STANDARD
DRAWINGS & LEGEND

GENERAL NOTES / LOCAL 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 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

- B) 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.
- C) 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.
- D) 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.

- E) 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.
- F) 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.
- G) DO NOT INSTALL MORE THAN ONE LANE CLOSURE IN ANY ONE DIRECTION ON US 74.

PAVEMENT EDGE DROP OFF REQUIREMENTS

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

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

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

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

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

TRAFFIC PATTERN ALTERATIONS

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

SIGNING

- K) INSTALL ADVANCE WORK ZONE WARNING SIGNS WHEN WORK IS WITHIN 40 FT FROM THE EDGE OF TRAVEL LANE AND NO MORE THAN THREE (3) DAYS PRIOR TO THE BEGINNING OF CONSTRUCTION.
- L) PROVIDE SIGNING AND DEVICES REQUIRED TO CLOSE THE ROAD ACCORDING TO THE ROADWAY STANDARD DRAWINGS AND TRAFFIC CONTROL PLANS.
- M) ENSURE ALL NECESSARY SIGNING IS IN PLACE PRIOR TO ALTERING ANY TRAFFIC PATTERN.

TRAFFIC BARRIER

- N) 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.

- O) 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

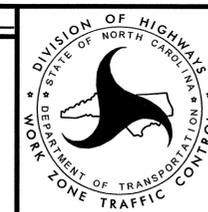
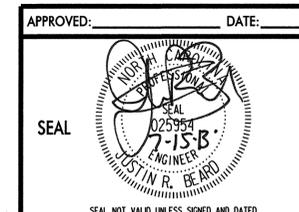
- P) WHEN LANE CLOSURES ARE NOT IN EFFECT SPACE CHANNELIZING DEVICES IN WORK AREAS NO GREATER IN FEET THAN TWICE THE POSTED SPEED LIMIT (MPH) EXCEPT, 10 FT ON-CENTER IN RADII, AND 3 FT OFF THE EDGE OF AN OPEN TRAVELWAY. REFER TO STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES SECTIONS 1130 (DRUMS), 1135 (CONES) AND 1180 (SKINNY DRUMS) FOR ADDITIONAL REQUIREMENTS.
- Q) 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.
- R) TIE PROPOSED PAVEMENT MARKING LINES TO EXISTING PAVEMENT MARKING LINES.
- S) REMOVE/REPLACE ANY CONFLICTING/DAMAGED PAVEMENT MARKINGS AND MARKERS BY THE END OF EACH DAY'S OPERATION.
- T) TRACE THE PROPOSED MONOLITHIC ISLAND LOCATIONS WITH PROPER COLOR PAVEMENT MARKINGS PRIOR TO INSTALLATION. PLACE CONES TO DELINEATE ANY EXISTING AND PROPOSED MONOLITHIC ISLANDS AFTER REMOVAL AND BEFORE INSTALLATION.

MISCELLANEOUS

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

PROJ. REFERENCE NO. W-5315	SHEET NO. TMP-1B
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TRANSPORTATION OPERATIONS PLAN

MANAGEMENT STRATEGIES

- A) DISSEMINATE TRAFFIC MANAGEMENT PLAN, CONSTRUCTION SCHEDULE, AND WORK ZONE SAFETY INFORMATION TO LOCAL ROAD USERS TO PROMOTE AWARENESS AND POTENTIALLY REDUCE TRAFFIC VOLUMES.
- B) PROVIDE WORK ZONE SAFETY TRAINING AND TRAFFIC MANAGEMENT STRATEGIES TO FIELD STAFF, AND INVOLVE LOCAL LAW ENFORCEMENT AS NEEDED.
- C) COORDINATE, PLAN, AND SCHEDULE WORK ACTIVITIES IN COOPERATION WITH NCDOT STAFF AND LOCAL LAW ENFORCEMENT.
- D) ENHANCE ENFORCEMENT OF TRAFFIC LAWS IN WORK ZONES.
- E) UTILIZE CHANGEABLE MESSAGE SIGN AND FLASHING ARROWS TO INFORM DRIVERS OF LANE CLOSURES / SHIFTS.
- F) UTILIZE FULL-TIME MEDIAN LANE CLOSURE THROUGHOUT PROJECT LIMITS TO REDUCE DRIVER CONFUSION AND LIMIT VEHICLE MERGE LOCATIONS.
- G) UTILIZE PORTABLE CONCRETE BARRIER FOR MEDIAN CONSTRUCTION OPERATIONS TO PROMOTE WORKER SAFETY, REDUCE FLAGGER EXPOSURE TO TRAFFIC, AND ACCELERATE CONSTRUCTION SCHEDULE.
- H) LIMIT LENGTH OF WORK ZONE TO A MAXIMUM OF 2 MILES BETWEEN MEDIAN BREAKS TO ALLOW TRAFFIC ACCESS TO LOCAL BUSINESSES AND REDUCE OVERALL TRAFFIC VOLUMES.
- I) ALLOW LIMITS OF WORK ZONE TO BE FLEXIBLE IN ORDER TO ACCELERATE CONSTRUCTION SCHEDULE.
- J) USE NIGHTTIME ROAD WORK TO ACCELERATE CONSTRUCTION SCHEDULE AND REDUCE DRIVER IMPACTS.

PHASING

PROJ. REFERENCE NO.	SHEET NO.
W-5315	TMP-03

STEP 1:
INSTALL WORK ZONE ADVANCE WARNING SIGNS IN ACCORDANCE WITH NCDOT ROADWAY STANDARD DRAWING # 1101.01. WHEN NO WORK IS BEING CONDUCTED FOR A PERIOD LONGER THAN ONE WEEK, REMOVE OR COVER ALL ADVANCE WORK ZONE SIGNS, AS DIRECTED BY THE ENGINEER, AT NO COST TO THE DEPARTMENT.

STEP 2:
USING NCDOT ROADWAY STANDARD DRAWING # 1101.02 (SHEET 3 OF 15), CLOSE US 74 EASTBOUND AND WESTBOUND MEDIAN LANES USING DRUMS FROM STA 0+00 +/- TO 266+00 +/-, WHILE KEEPING EXISTING MEDIAN CROSSINGS OPEN.

STEP 3:
USING NCDOT ROADWAY STANDARD DRAWING # 1101.02 (SHEET 3 OF 15), CLOSE US 74 EASTBOUND AND WESTBOUND MEDIAN LANES AND MEDIAN CROSSINGS USING PORTABLE CONCRETE BARRIER (PCB) WITHIN A SINGLE WORK ZONE AS LISTED BELOW. INITIAL WORK ZONE MAY BEGIN AT EITHER END OF THE PROJECT LIMITS, BUT WORK ZONE MUST THEN CONTINUOUSLY PROGRESS TOWARDS THE OPPOSITE END. MAXIMUM DISTANCE BETWEEN MEDIAN ACCESS POINTS IS SET AT 2 MILES; LENGTH OF CURRENT WORK ZONE IS RESTRICTED BY THIS DISTANCE.

WORK ZONE SUGGESTIONS:
 FROM STA. 5+10+/- TO STA. 67+60+/- (WORK ZONE A; AREAS 4-9, SEE SHEETS TMP-05 THRU TMP-08)
 FROM STA. 39+10+/- TO STA. 106+90+/- (WORK ZONE B; AREAS 7-12, SEE SHEETS TMP-19 THRU TMP-14)
 FROM STA. 88+35+/- TO STA. 154+30+/- (WORK ZONE C; AREAS 10-15, SEE SHEETS TMP-15 THRU TMP-18)
 FROM STA. 131+65+/- TO STA. 193+80+/- (WORK ZONE D; AREAS 14-18, SEE SHEETS TMP-19 THRU TMP-23)
 FROM STA. 168+60+/- TO STA. 262+00+/- (WORK ZONE E; AREAS 17-24, SEE SHEETS TMP-24 THRU TMP-28)

NOTE: WORK ZONES LISTED ARE SUGGESTED BASED ON THE MAXIMUM 2 MILE MEDIAN OPENING CRITERIA, HOWEVER THESE LIMITS MAY BE FIELD ADJUSTED AS NEEDED PROVIDED THE CRITERIA IS STILL MET

NOTE: AT THE END OF EACH WORK DAY, TRAFFIC TO REMAIN IN TWO-WAY, TWO-LANE TRAFFIC PATTERN (ONE EACH DIRECTION) THROUGHOUT PROJECT AREA.

STEP 4:
AWAY FROM TRAFFIC, REMOVE EXISTING MONOLITHIC CONCRETE ISLANDS, INSTALL DRAINAGE IMPROVEMENTS, INSTALL SHOULDER BERM GUTTER, INSTALL CONCRETE ISLANDS, INSTALL GUARDRAIL, AND INSTALL PAVEMENT INCLUDING FINAL LIFT AS SHOWN WITHIN THE CURRENT WORK ZONE. APPLY FINAL PAVEMENT MARKINGS (POLYUREA) AS SHOWN ON PAVEMENT MARKING PLANS (SEE TMP-04).

STEP 5:
COORDINATE INSTALLATION OF ANY PERMANENT MEDIAN SIGNING WITHIN THE CURRENT WORK ZONE WITH NCDOT DIVISION ENGINEER.

STEP 6:
ONCE A SECTION OF MEDIAN IMPROVEMENTS ARE COMPLETE, REMOVE TEMPORARY CONCRETE BARRIER FROM COMPLETED SECTION AND REPLACE WITH DRUMS. OPEN COMPLETED MEDIAN CROSSING(S) TO TRAFFIC AND RELOCATE PORTABLE AND CHANGEABLE MESSAGE SIGNS. ONCE OPEN, CLOSE NEXT WORK ZONE MEDIAN CROSSING(S) TO TRAFFIC BY RELOCATE PORTABLE CONCRETE BARRIERS TO SUBSEQUENT WORK ZONE, CONTINUING TO KEEP BOTH MEDIAN LANES CLOSED WHILE MAINTAINING THE MAXIMUM MEDIAN OPENING SPACING CRITERIA. REMOVE TEMPORARY TRAFFIC CONTROL DEVICES FROM COMPLETED DOWNSTREAM ZONES AND OPEN TO FINAL TRAFFIC PATTERN, KEEPING UPSTREAM TRAFFIC CONTROLS IN PLACE.

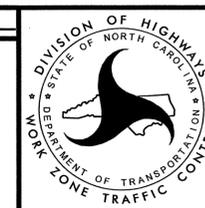
STEP 7:
AWAY FROM TRAFFIC, CONTINUE TO REMOVE EXISTING MONOLITHIC CONCRETE ISLANDS, INSTALL DRAINAGE IMPROVEMENTS AND SHOULDER BERM GUTTER, INSTALL PAVEMENT INCLUDING FINAL LIFT, INSTALL CONCRETE ISLANDS, INSTALL GUARDRAIL, APPLY FINAL PAVEMENT MARKINGS (POLYUREA), AND COORDINATE INSTALLATION OF ANY PERMANENT MEDIAN SIGNING WITH NCDOT DIVISION ENGINEER. CONTINUE TO WORK DOWNSTREAM UNTIL ALL WORK ZONES ARE COMPLETE.

STEP 8:
REMOVE TEMPORARY TRAFFIC CONTROL DEVICES, AND OPEN US 74 TO FINAL TRAFFIC PATTERN.

APPROVED: _____ DATE: _____

SEAL

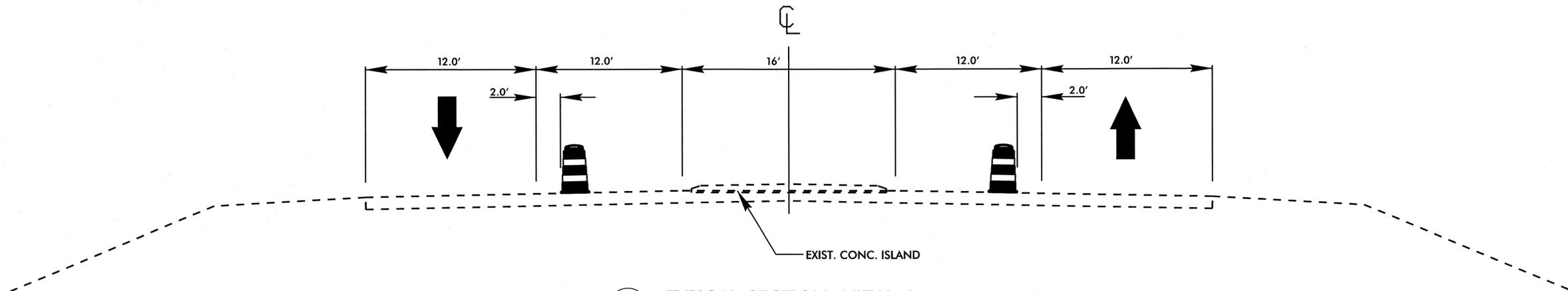
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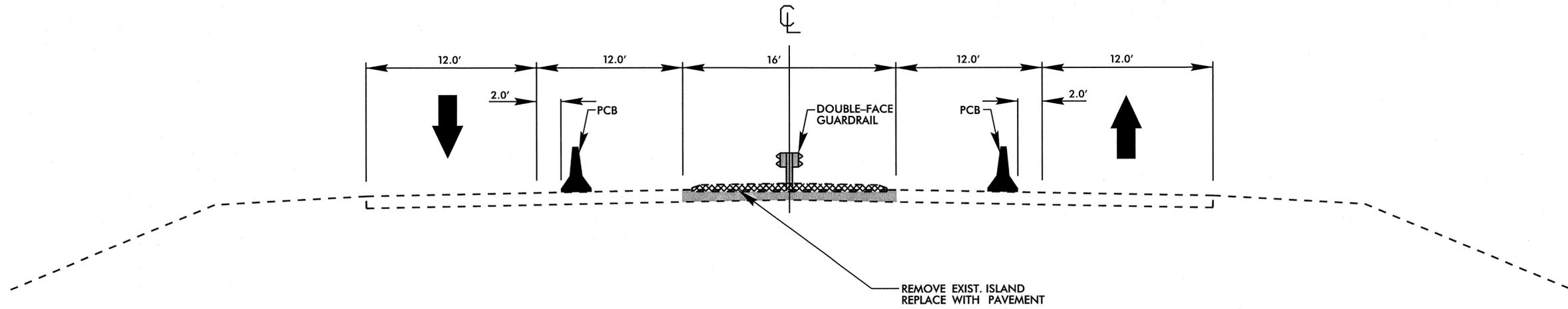
TEMPORARY TRAFFIC CONTROL PHASING



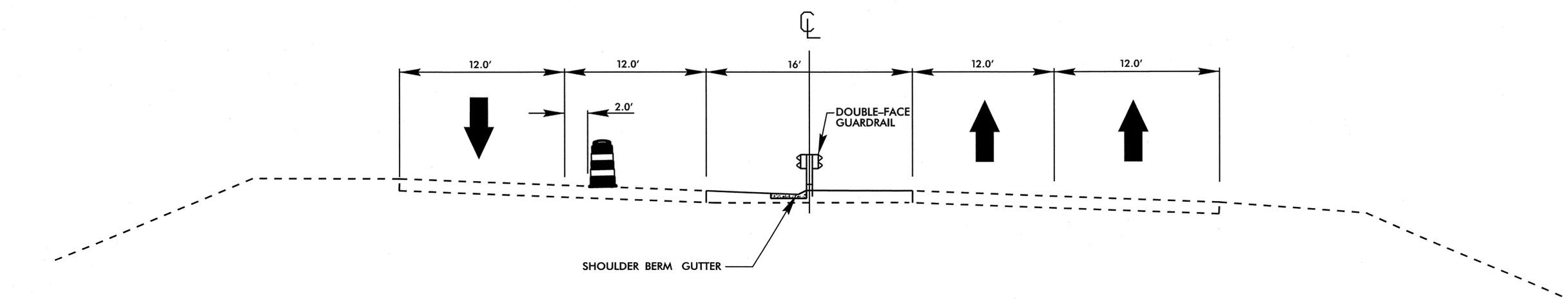
TYPICAL CROSS-SECTION VIEWS



A TYPICAL SECTION VIEW 1
PRE-CONSTRUCTION (AWAY FROM WORK ZONE)

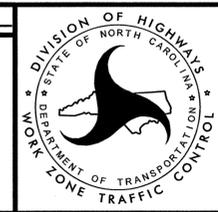
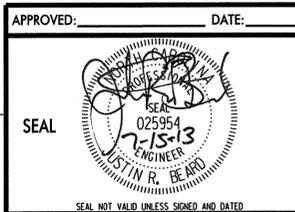


B TYPICAL SECTION VIEW 2
CONSTRUCTION PHASE (WITHIN WORK ZONE)

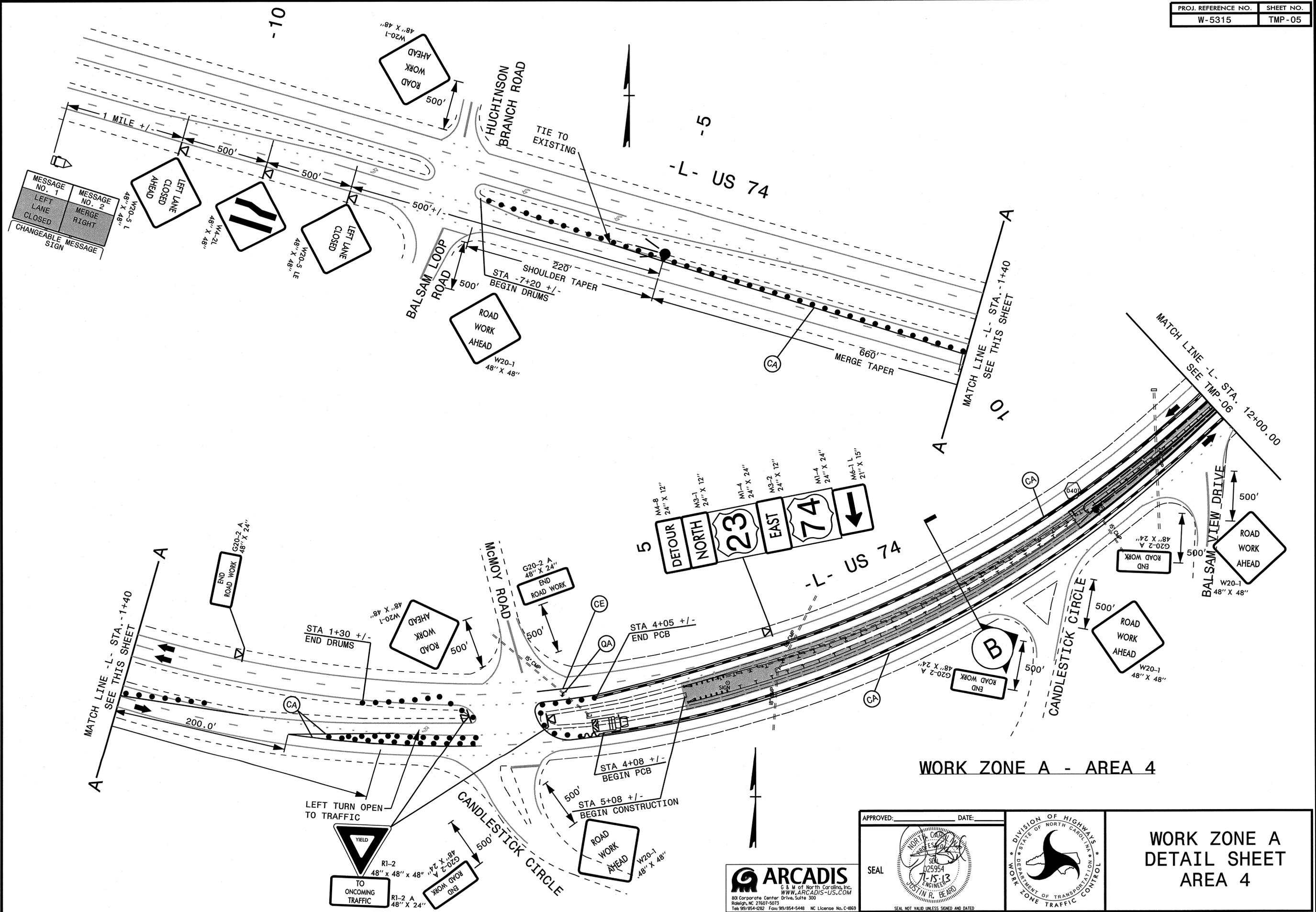


C TYPICAL SECTION VIEW 3
POST-CONSTRUCTION (DOWNSTREAM FROM WORK ZONE)

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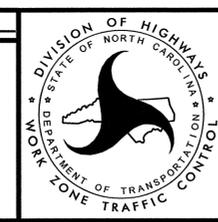


**PHASE I
TYPICAL CROSS
SECTION VIEWS**



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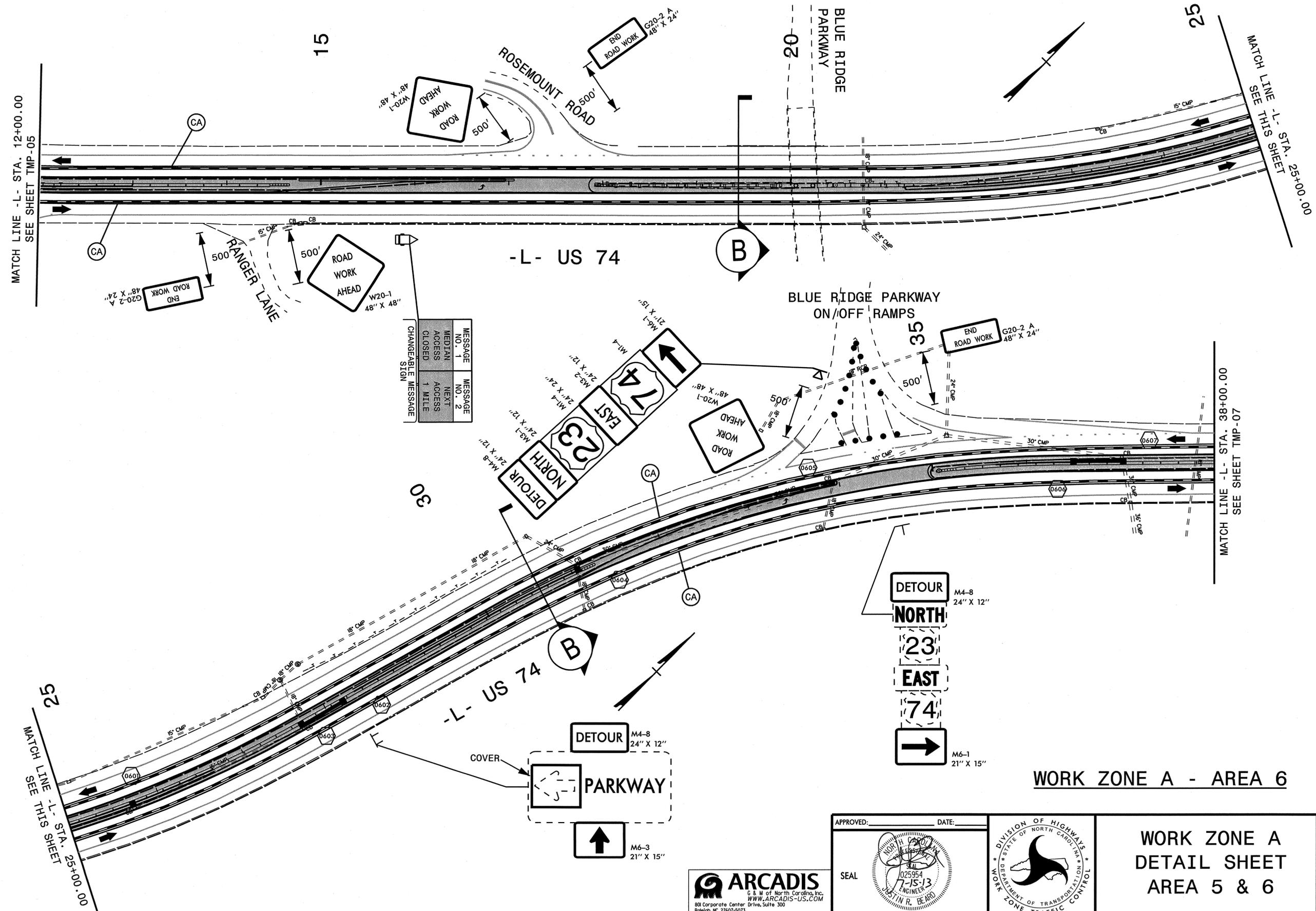
APPROVED:	DATE:



WORK ZONE A
 DETAIL SHEET
 AREA 4

ARCADIS
G & M of North Carolina, Inc.
 WWW.ARCADIS-US.COM
 801 Corporate Center Drive, Suite 300
 Raleigh, NC 27607-5073
 Tel: 919/854-2282 Fax: 919/854-5448 NC License No. C-9863

WORK ZONE A - AREA 5



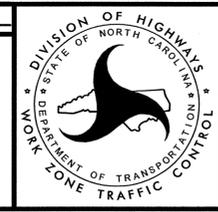
CHANGEABLE MESSAGE SIGN

MESSAGE NO. 1	MESSAGE NO. 2
MEDIAN ACCESS CLOSED	NEXT ACCESS 1 MILE

APPROVED: _____ DATE: _____

SEAL

SEAL NOT VALID UNLESS SIGNED AND DATED

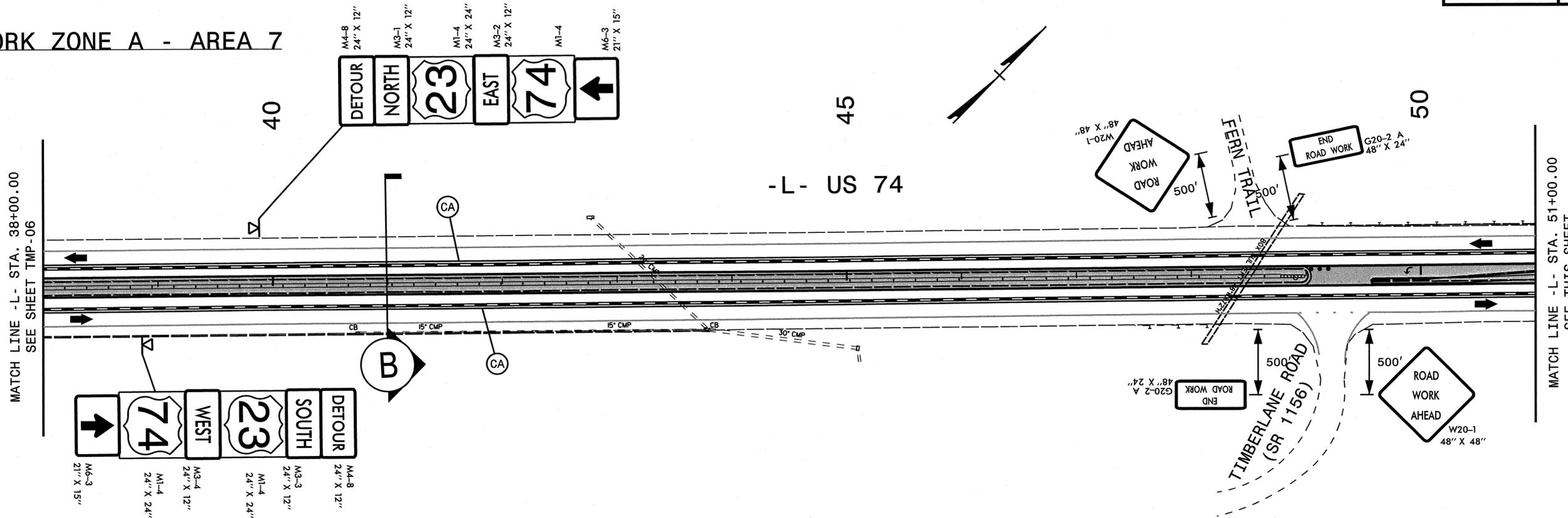


WORK ZONE A
DETAIL SHEET
AREA 5 & 6

ARCADIS
 a U.S. firm of North Carolina, Inc.
 WWW.ARCADIS-US.COM
 801 Corporate Center Drive, Suite 300
 Raleigh, NC 27607-5073
 Tel: 919/254-1282 Fax: 919/254-5448 NC License No. C-1869

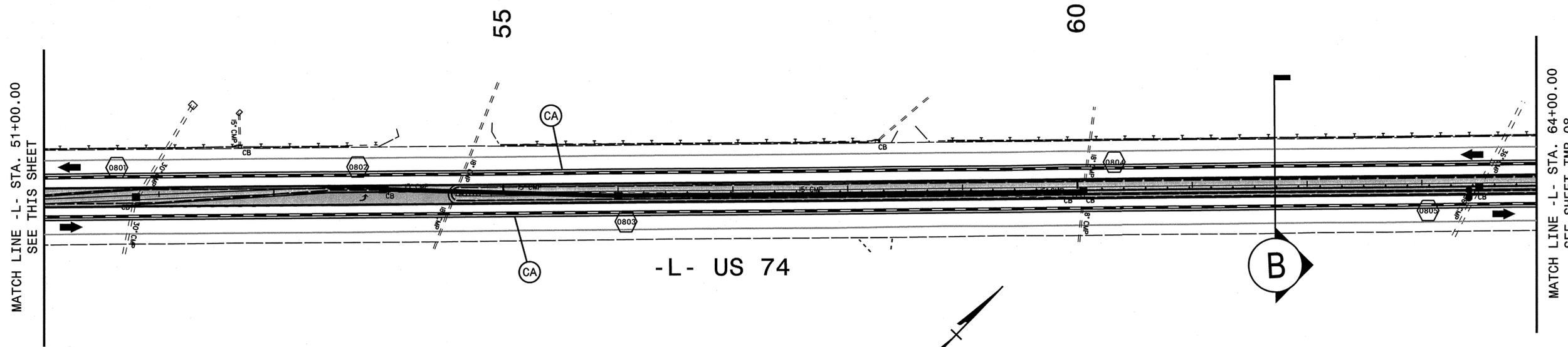
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WORK ZONE A - AREA 7



MATCH LINE - L - STA. 51+00.00
SEE THIS SHEET

MATCH LINE - L - STA. 64+00.00
SEE THIS SHEET



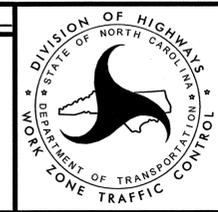
WORK ZONE A - AREA 8

WORK ZONE A
DETAIL SHEET
AREA 7 & 8

APPROVED: _____ DATE: _____

SEAL

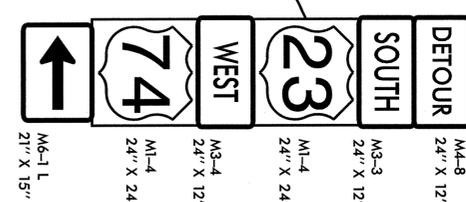
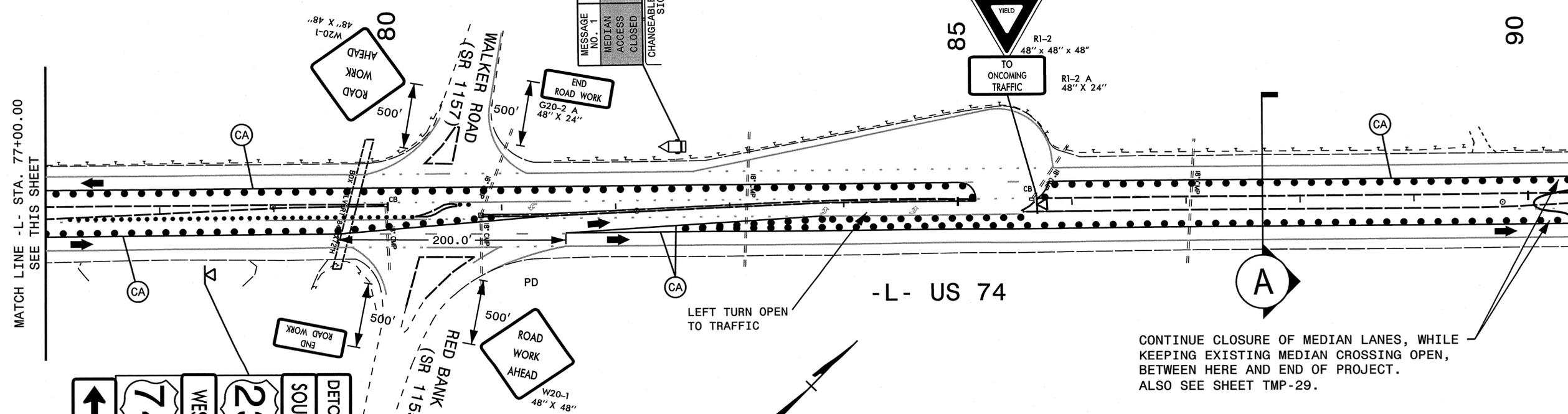
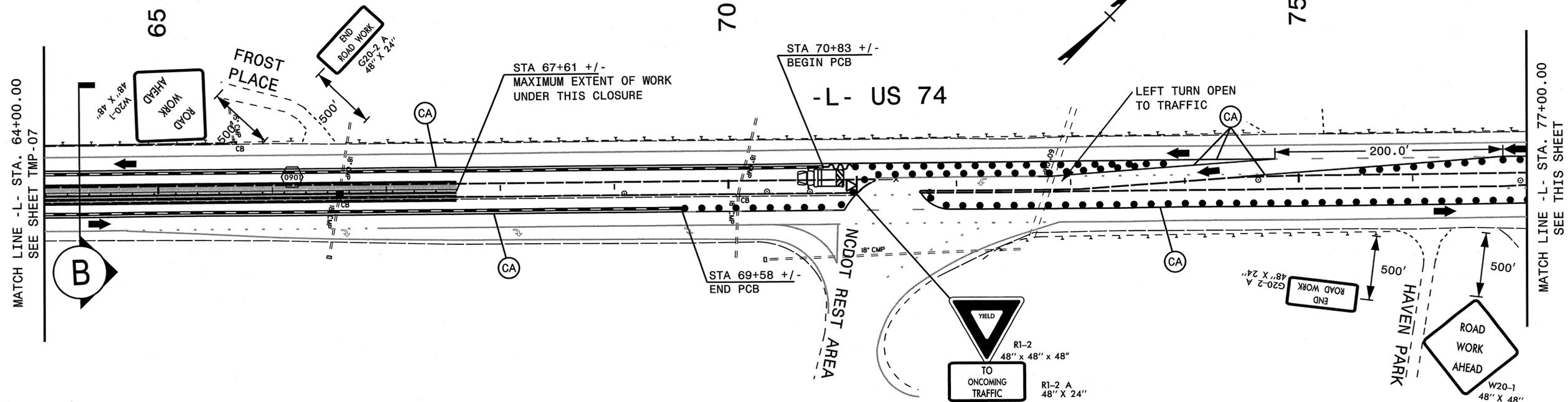
SEAL NOT VALID UNLESS SIGNED AND DATED



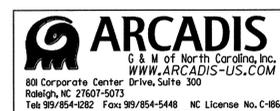
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6/27/2013
R:\TrafficControl\TCP\W5315_TC_TMP_A07_detail.dgn
User: jbeard

WORK ZONE A - AREA 9



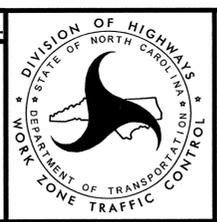
WORK ZONE A - AREA 10



APPROVED: _____ DATE: _____

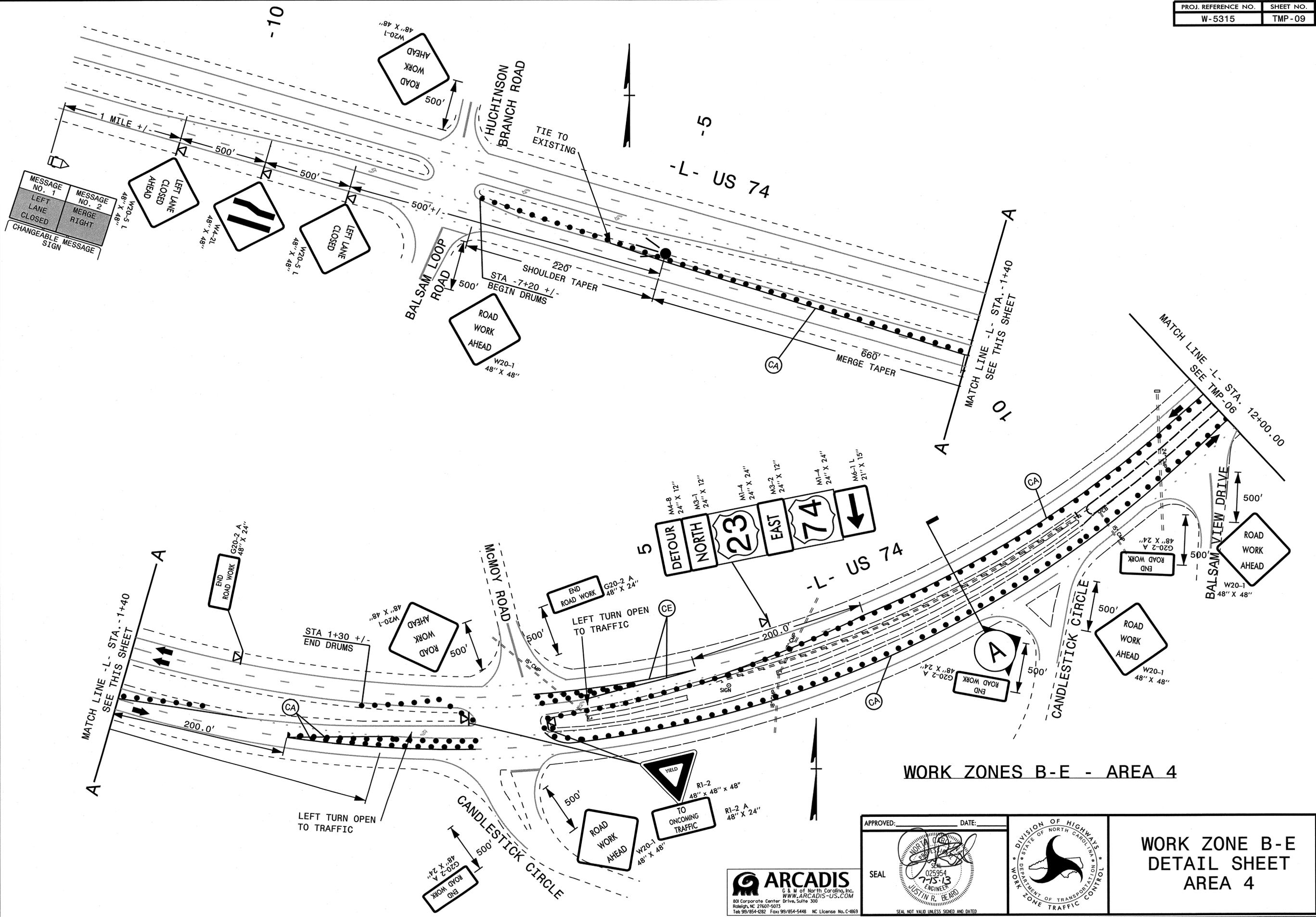
SEAL:

SEAL NOT VALID UNLESS SIGNED AND DATED



**WORK ZONE A
DETAIL SHEET
AREA 9 & 10**

6/27/2013 R:\TrafficControl\TrafficControl\TCP\W5315.TC_TMP_A08_detail.dgn User: jbeard



WORK ZONES B-E - AREA 4

**WORK ZONE B-E
DETAIL SHEET
AREA 4**

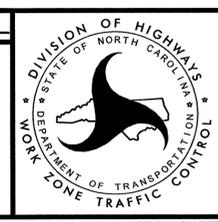


APPROVED: _____ DATE: _____

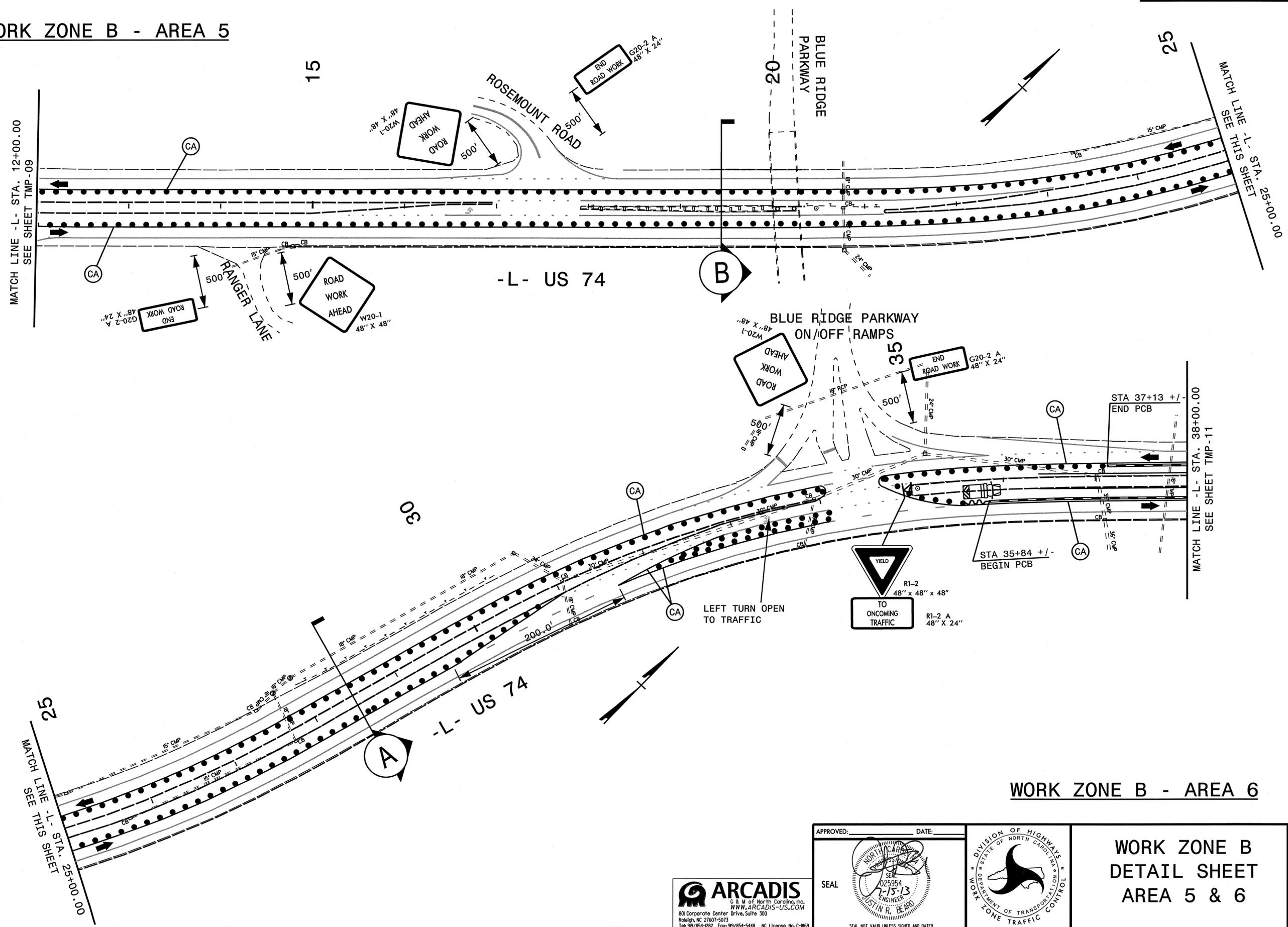
SEAL

025954
7-5-13
ENGINEER
JUSTIN R. BEARD

SEAL NOT VALID UNLESS SIGNED AND DATED



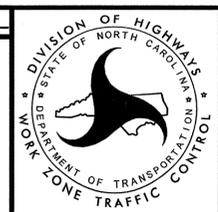
WORK ZONE B - AREA 5



WORK ZONE B - AREA 6

APPROVED: _____ DATE: _____

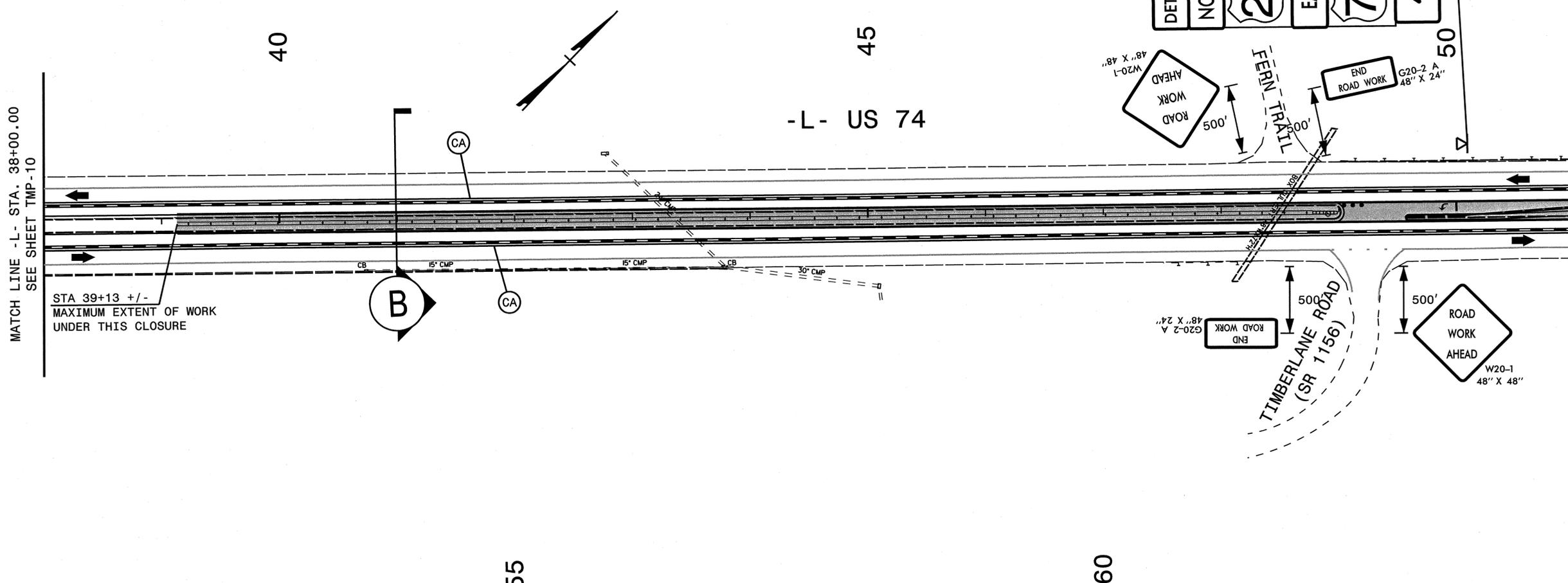
SEAL



**WORK ZONE B
DETAIL SHEET
AREA 5 & 6**

6/27/2013
 R:\TrafficControl\TCP\W5315_TC_TMP_BIO_detail.dgn
 User: jbeard

WORK ZONE B - AREA 7



MATCH LINE - L- STA. 38+00.00
SEE SHEET TMP-10

STA 39+13 +/-
MAXIMUM EXTENT OF WORK
UNDER THIS CLOSURE

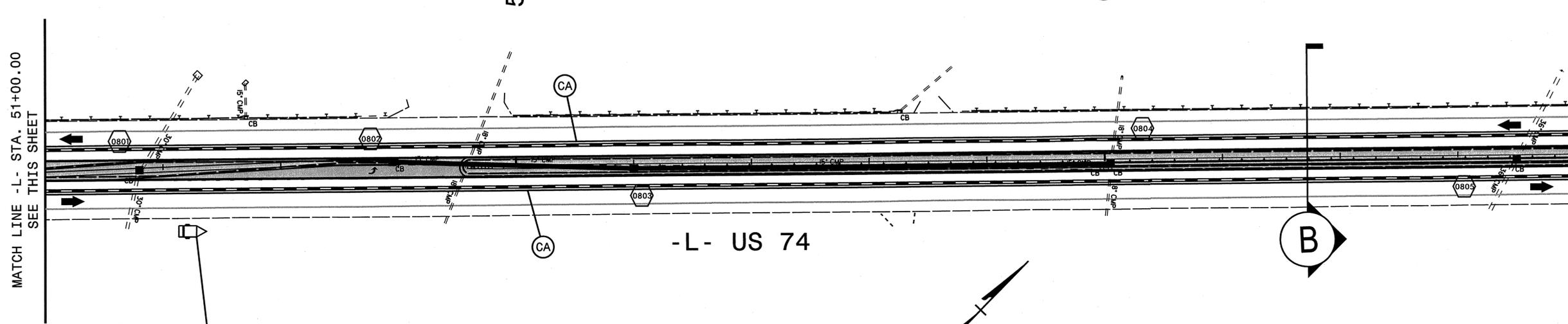
MATCH LINE - L- STA. 51+00.00
SEE THIS SHEET

MATCH LINE - L- STA. 51+00.00
SEE THIS SHEET

MATCH LINE - L- STA. 64+00.00
SEE SHEET TMP-12

CHANGABLE MESSAGE SIGN	MESSAGE NO. 1	MESSAGE NO. 2
	MEDIAN ACCESS CLOSED	NEXT ACCESS 2 MILES

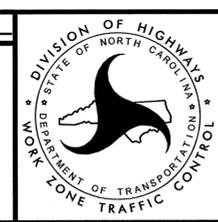
WORK ZONE B - AREA 8



APPROVED: _____ DATE: _____

SEAL

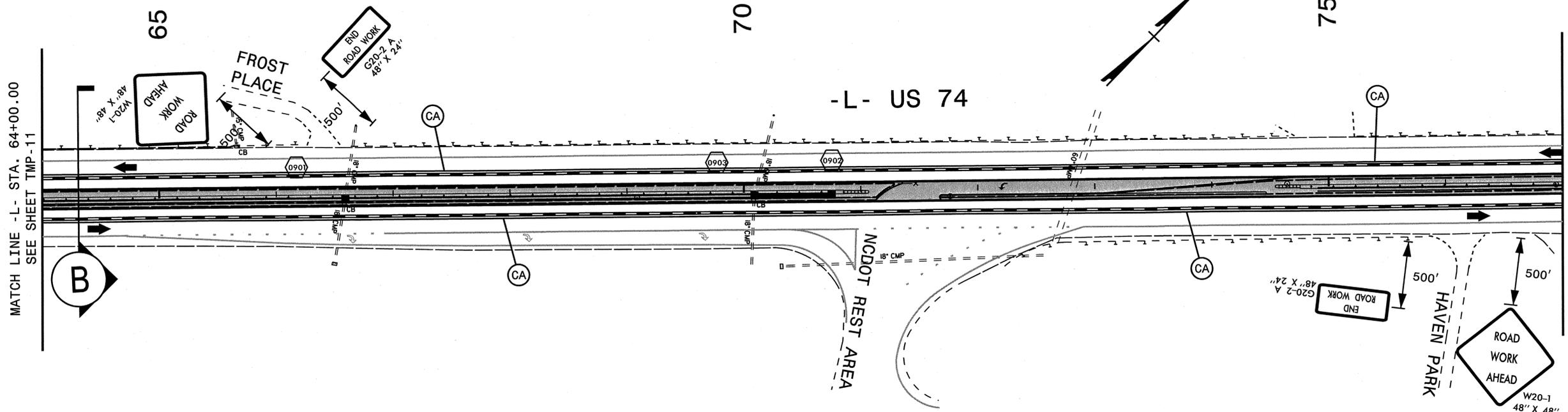
SEAL NOT VALID UNLESS SIGNED AND DATED



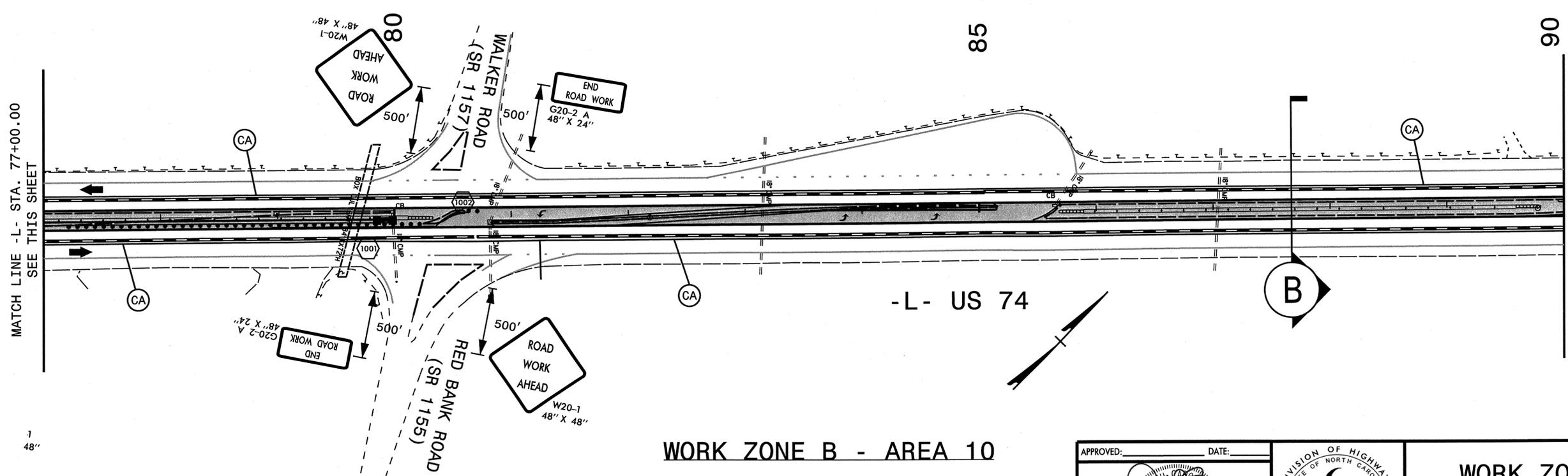
WORK ZONE B
DETAIL SHEET
AREA 7 & 8

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WORK ZONE B - AREA 9



WORK ZONE B - AREA 10



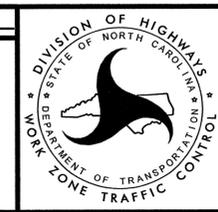
6/27/2013 9:05:10 AM TrafficControl\TCP\W5315_TC_TMP_B12_detail.dgn User: jdsar



APPROVED: _____ DATE: _____

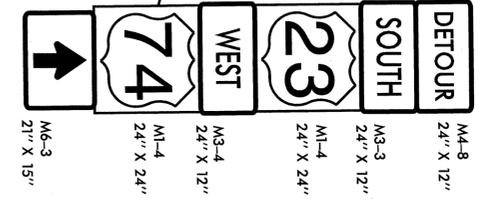
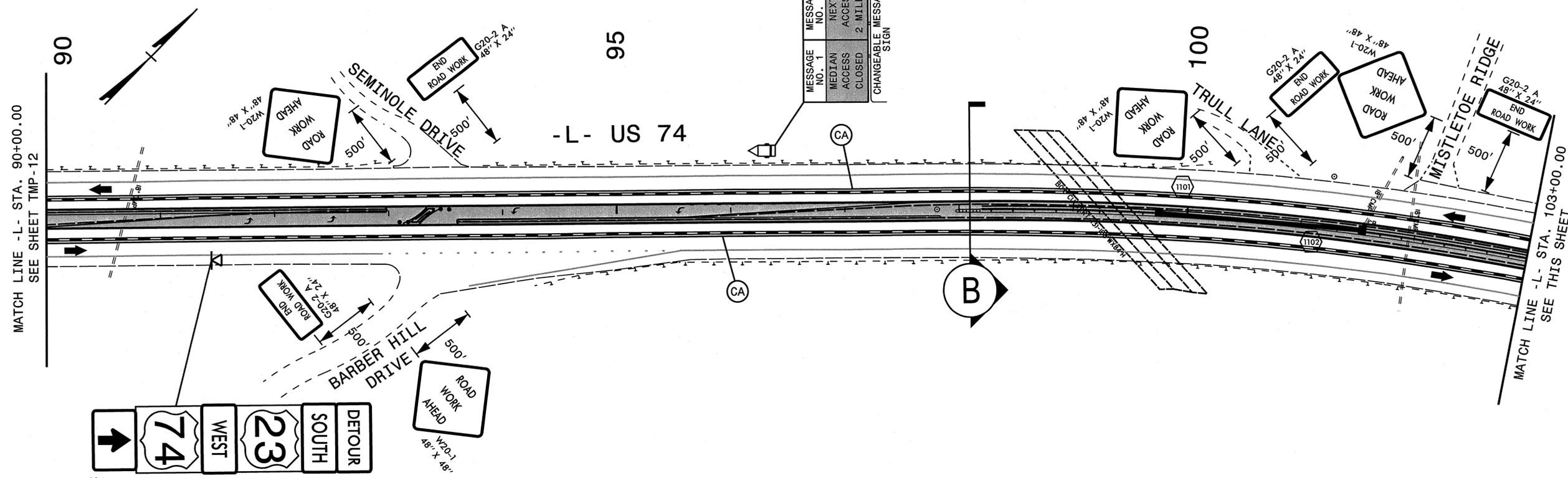
SEAL

SEAL NOT VALID UNLESS SIGNED AND DATED

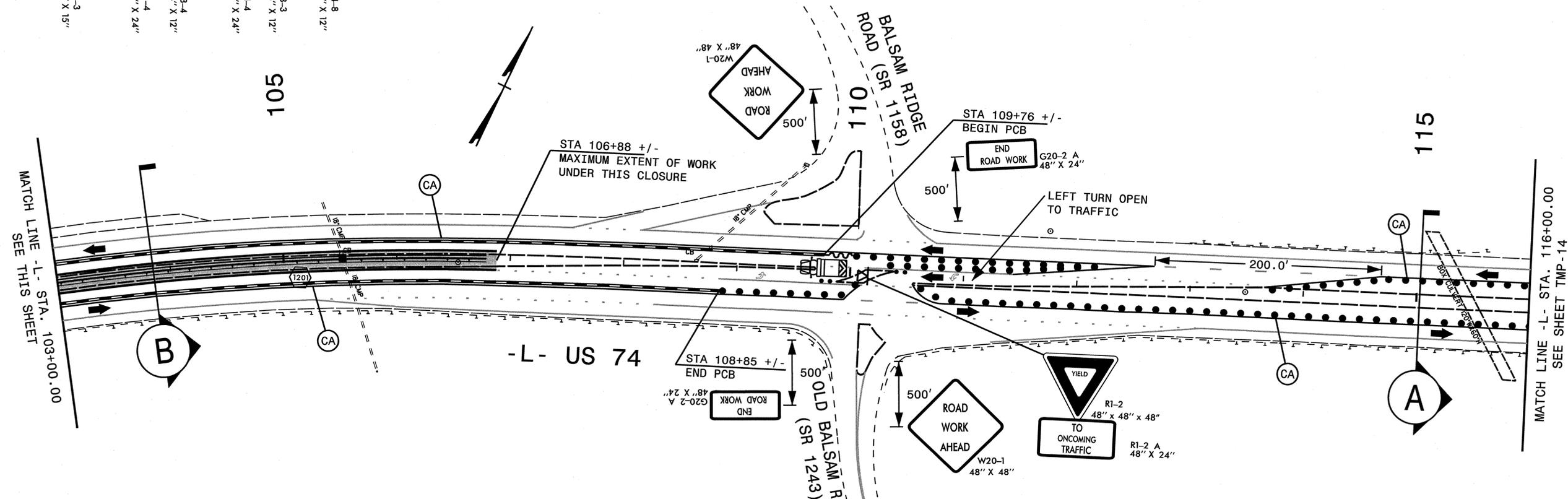


WORK ZONE B
DETAIL SHEET
AREA 9 & 10

WORK ZONE B - AREA 11



MESSAGE NO. 1	NEXT MESSAGE NO. 2
MEDIAN ACCESS CLOSED	ACCESS CLOSED 2 MILES
CHANGEABLE MESSAGE SIGN	



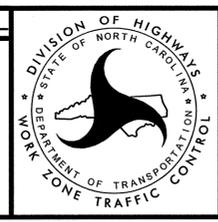
WORK ZONE B - AREA 12

APPROVED: _____ DATE: _____

SEAL

025954
7-15-13
JUSTIN R. BEARD
ENGINEER

SEAL NOT VALID UNLESS SIGNED AND DATED

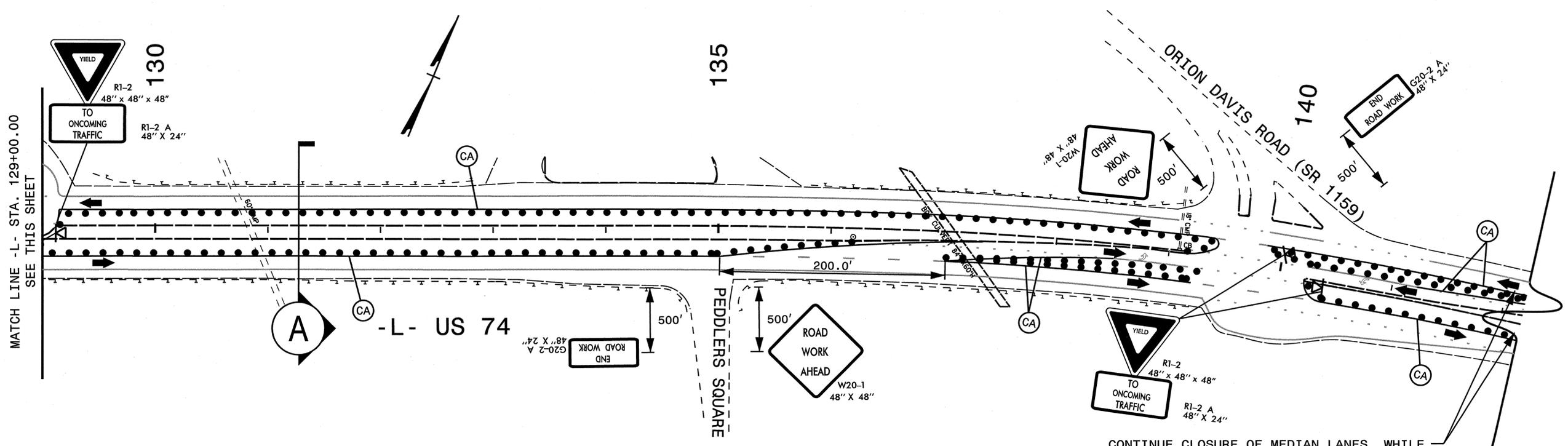
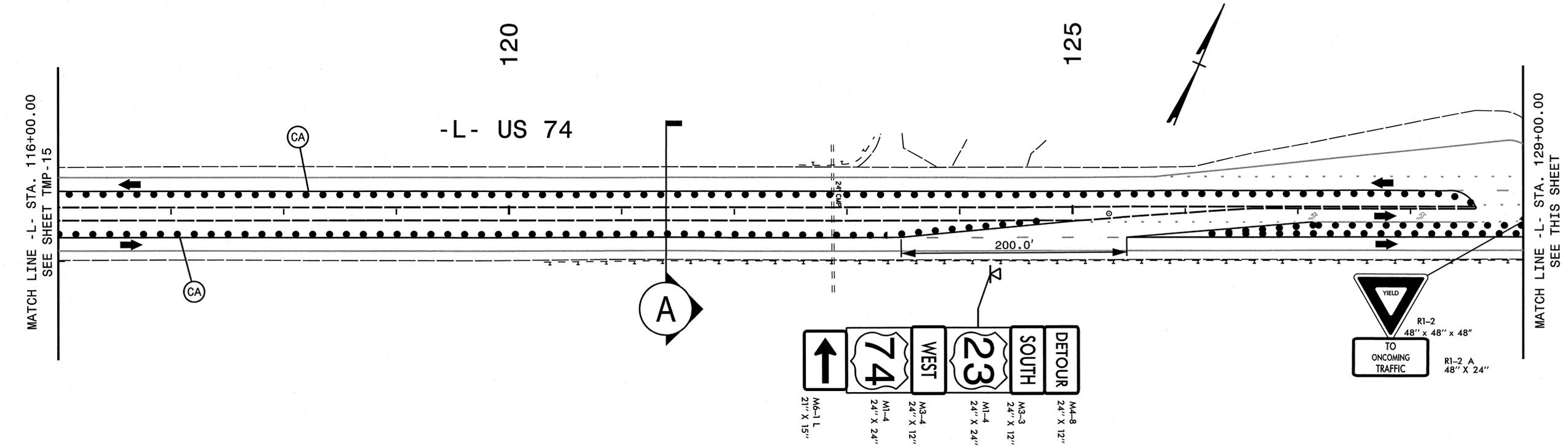


WORK ZONE B
DETAIL SHEET
AREA 11 & 12

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6/27/2013 R:\Tr\offic\Tr\offic\Control\TCP\W5315_TC_TMP_B13.detaill.dgn User:jbear

WORK ZONE B - AREA 13



CONTINUE CLOSURE OF MEDIAN LANES, WHILE KEEPING EXISTING MEDIAN CROSSING OPEN, BETWEEN HERE AND END OF PROJECT. ALSO SEE SHEET TMP-29.

WORK ZONE B - AREA 14

WORK ZONE B
DETAIL SHEET
AREA 13 & 14

APPROVED: _____ DATE: _____

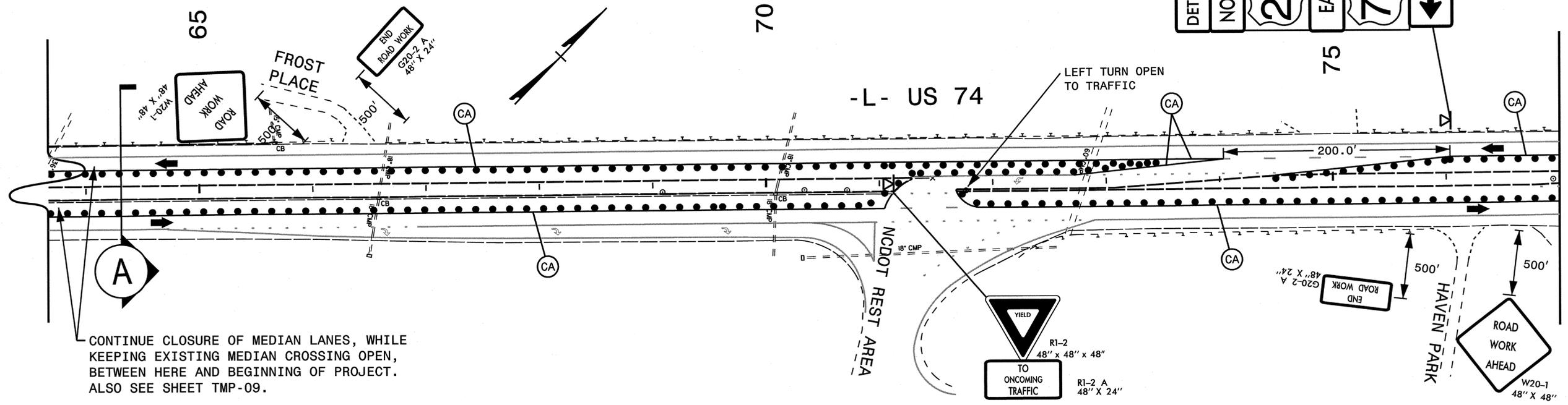
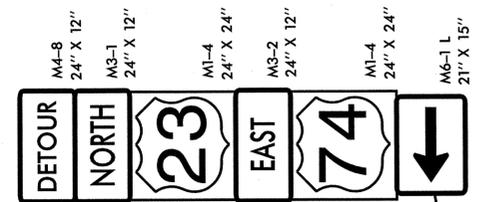
SEAL

SEAL NOT VALID UNLESS SIGNED AND DATED

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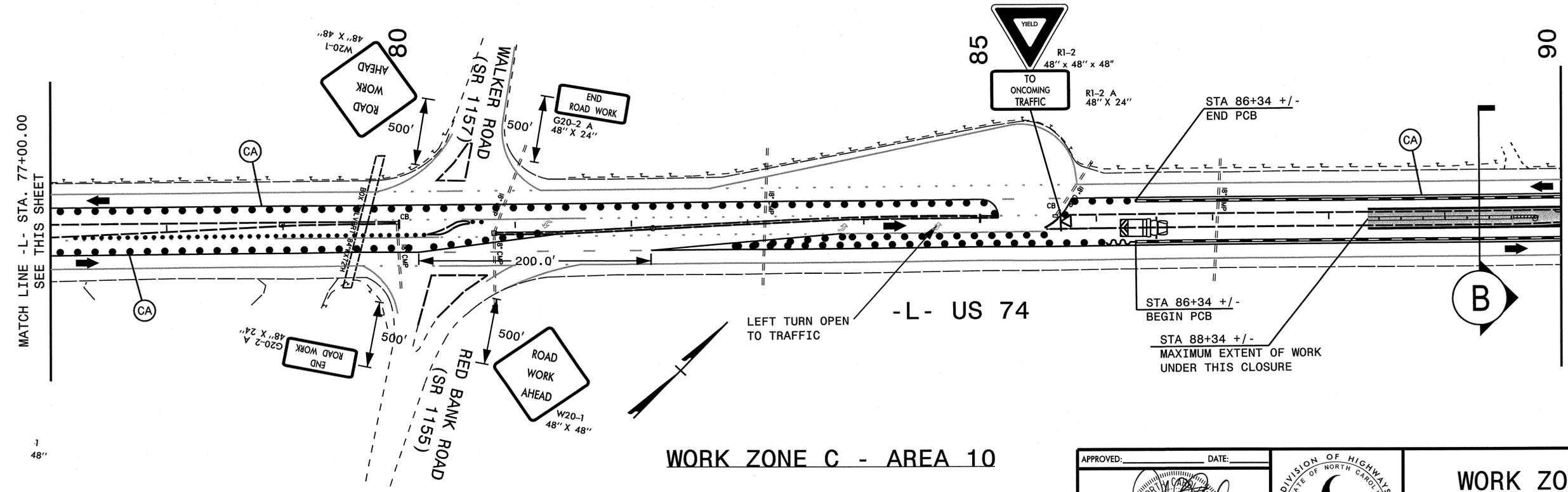
6/27/2013 R:\TrafficControl\TCP\W5315_TC_TMP_B14_detail.dgn Users\jbeard

WORK ZONE C - AREA 9



MATCH LINE -L- STA. 77+00.00
SEE THIS SHEET

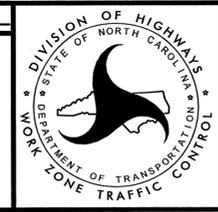
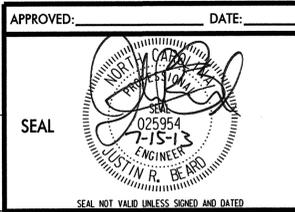
WORK ZONE C - AREA 10



MATCH LINE -L- STA. 77+00.00
SEE THIS SHEET

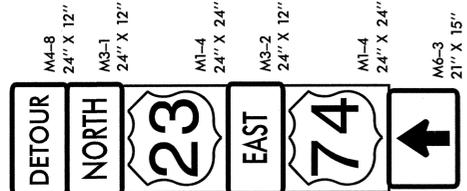
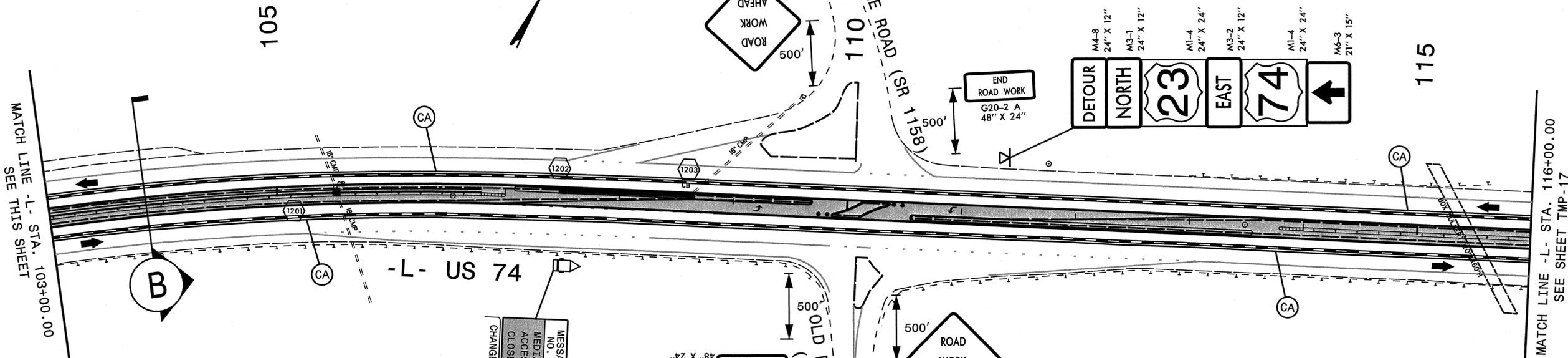
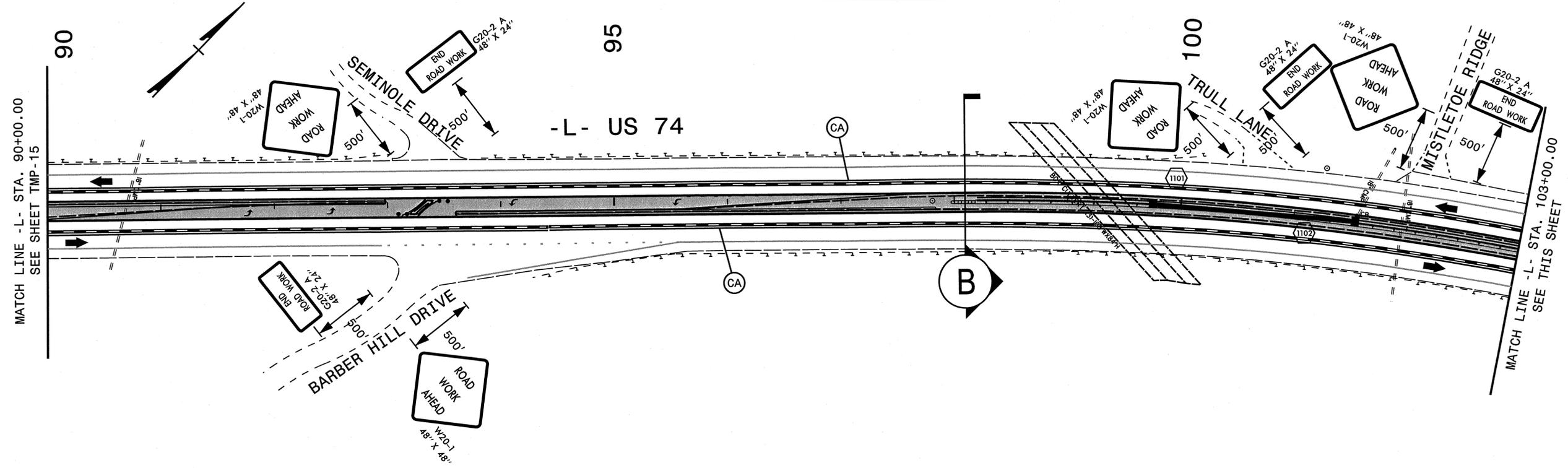
MATCH LINE -L- STA. 90+00.00
SEE SHEET TMP-16

6/27/2013
R:\TrafficControl\TCP\W5315_TC_TMP_C15_detail.dgn
User: jbeard



WORK ZONE C
 DETAIL SHEET
 AREA 9 & 10

WORK ZONE C - AREA 11



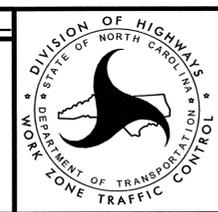
MESSAGE NO. 1	MESSAGE NO. 2
MEDIAN ACCESS CLOSED	NEXT ACCESS 1 MILE
CHANGEABLE MESSAGE SIGN	

WORK ZONE C - AREA 12

APPROVED: _____ DATE: _____

SEAL

SEAL NOT VALID UNLESS SIGNED AND DATED

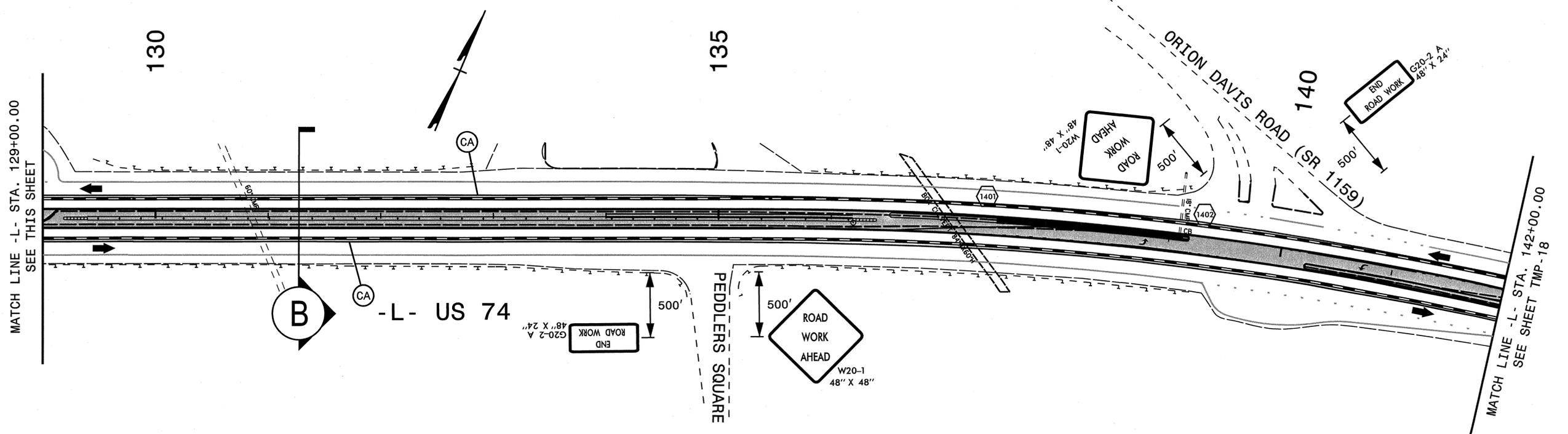
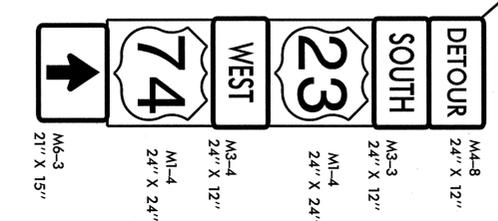
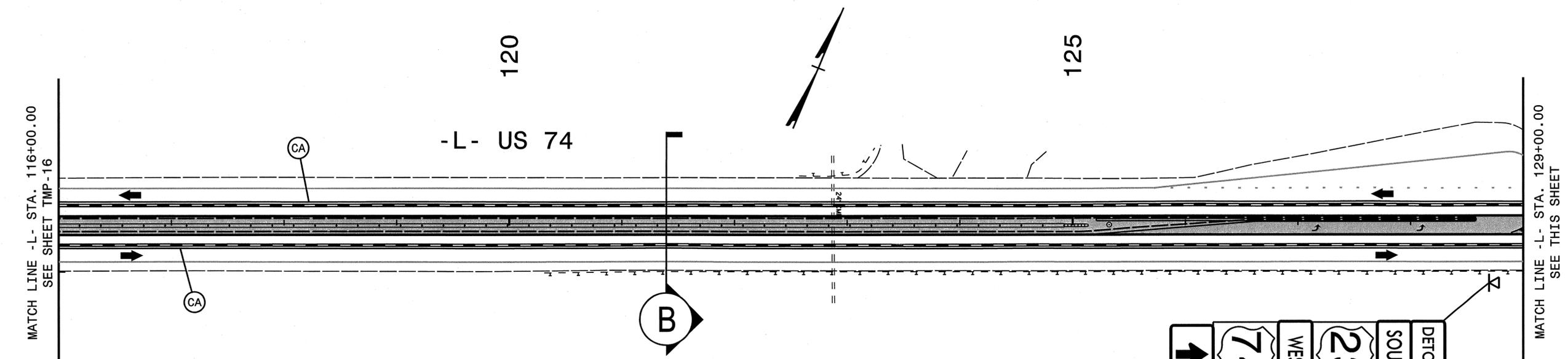


WORK ZONE C
DETAIL SHEET
AREA 11 & 12

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 R:\Vr\office\TrafficControl\TCP\W5315_TC_TMP_C6.detaill.dgn
 User: jbeard

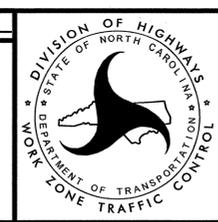
WORK ZONE C - AREA 13



WORK ZONE C - AREA 14

APPROVED: _____ DATE: _____

 SEAL
 JUSTIN R. BEARD
 ENGINEER
 025954
 7-15-13
 SEAL NOT VALID UNLESS SIGNED AND DATED

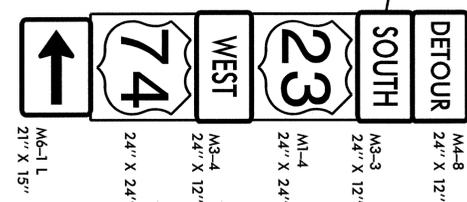
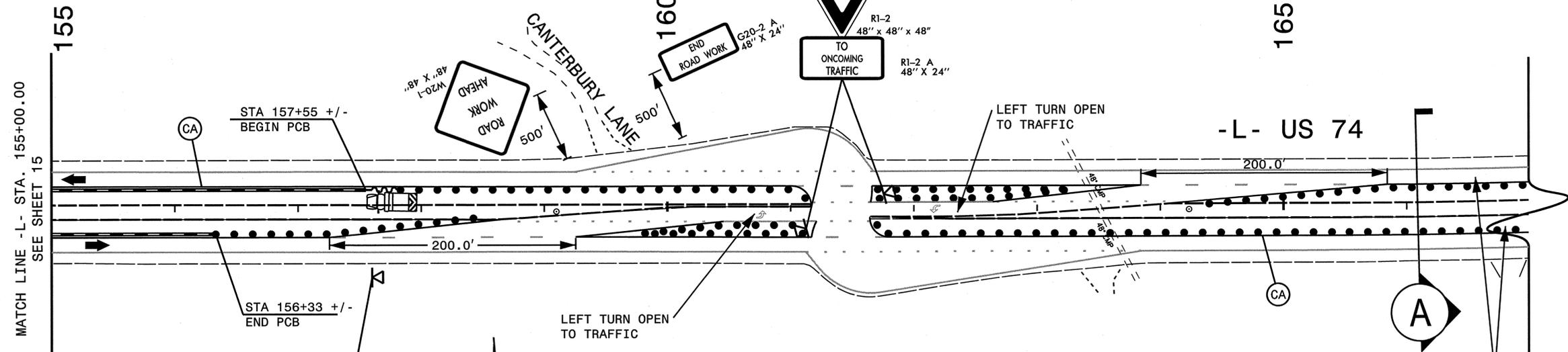
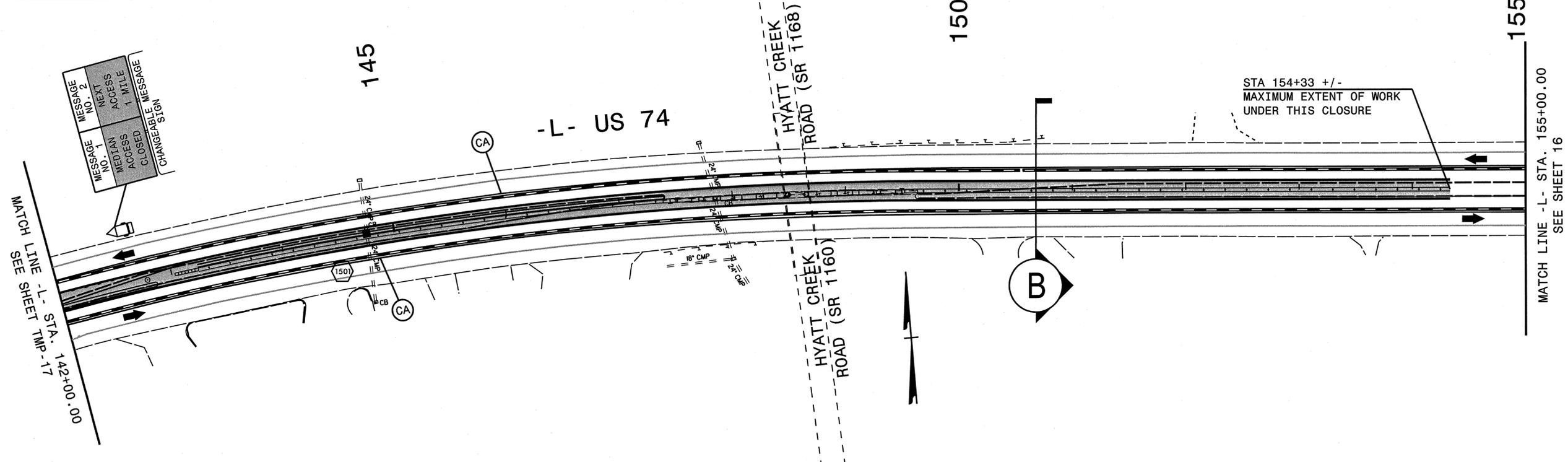


WORK ZONE C
 DETAIL SHEET
 AREA 13 & 14

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 R:\TrafficControl\W5315.TC_TMP_CIT_detail.dgn
 User: jbeard

WORK ZONE C - AREA 15



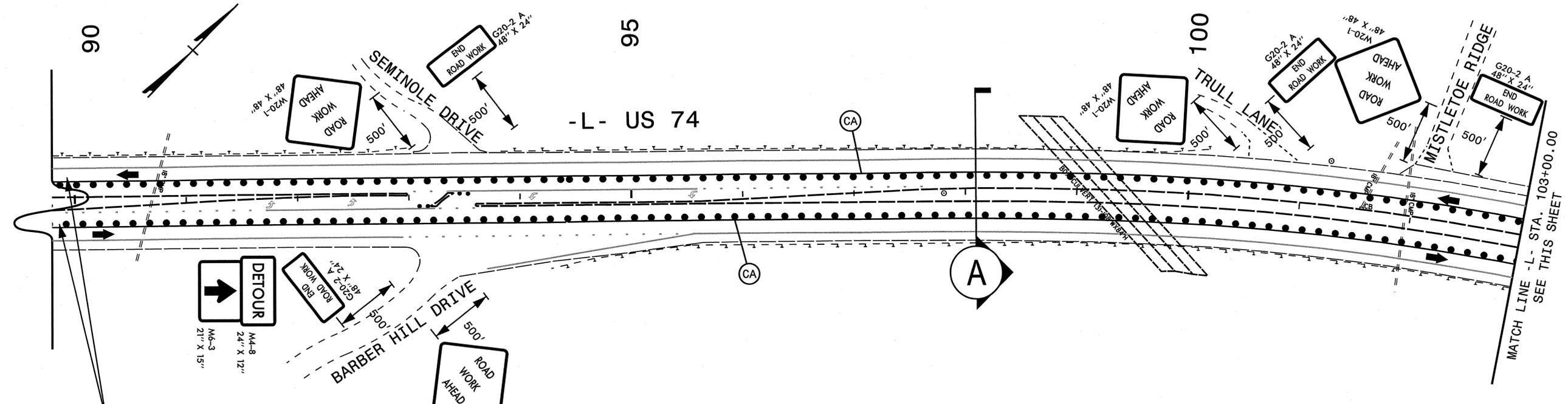
CONTINUE CLOSURE OF MEDIAN LANES, WHILE KEEPING EXISTING MEDIAN CROSSING OPEN, BETWEEN HERE AND END OF PROJECT. ALSO SEE SHEET TMP-29.

WORK ZONE C - AREA 16

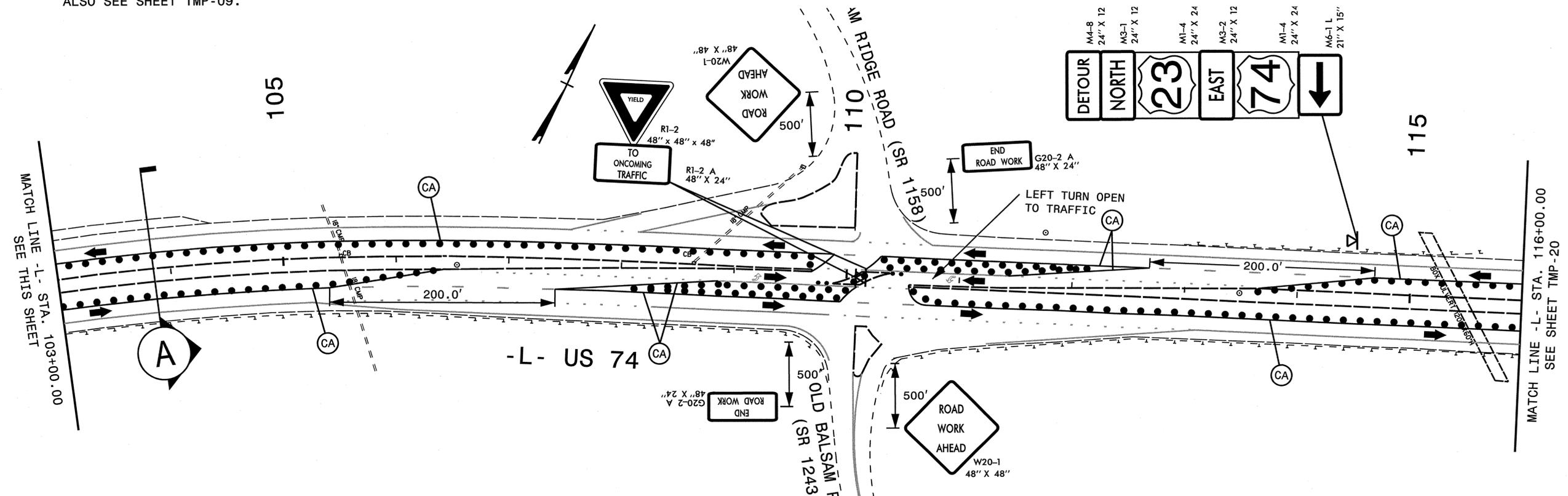
APPROVED: _____ DATE: _____		<p>WORK ZONE C DETAIL SHEET AREA 15 & 16</p>
<p>ARCADIS G. S. M. of North Carolina, Inc. WWW.ARCADIS-US.COM 801 Corporate Center Drive, Suite 300 Raleigh, NC 27601-5073 Tel: 919/854-4322 Fax: 919/854-5448 NC License No. C-869</p>		

6/27/2013 8:17:24 PM C:\TrafficControl\TCP\W5315_TC_TMP_C18_detail.dgn User: jbeard

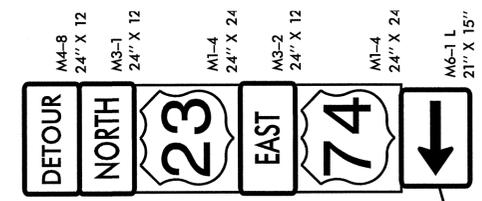
WORK ZONE D - AREA 11



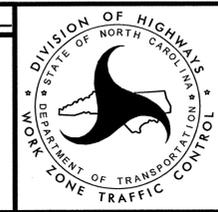
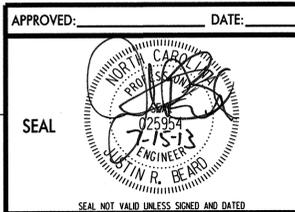
CONTINUE CLOSURE OF MEDIAN LANES, WHILE KEEPING EXISTING MEDIAN CROSSING OPEN, BETWEEN HERE AND BEGINNING OF PROJECT. ALSO SEE SHEET TMP-09.



WORK ZONE D - AREA 12



6/27/2013 8:41:00 AM C:\projects\TrafficControl\TCP\W5315_1C_TMP_D19_detail.dgn User: jbeard

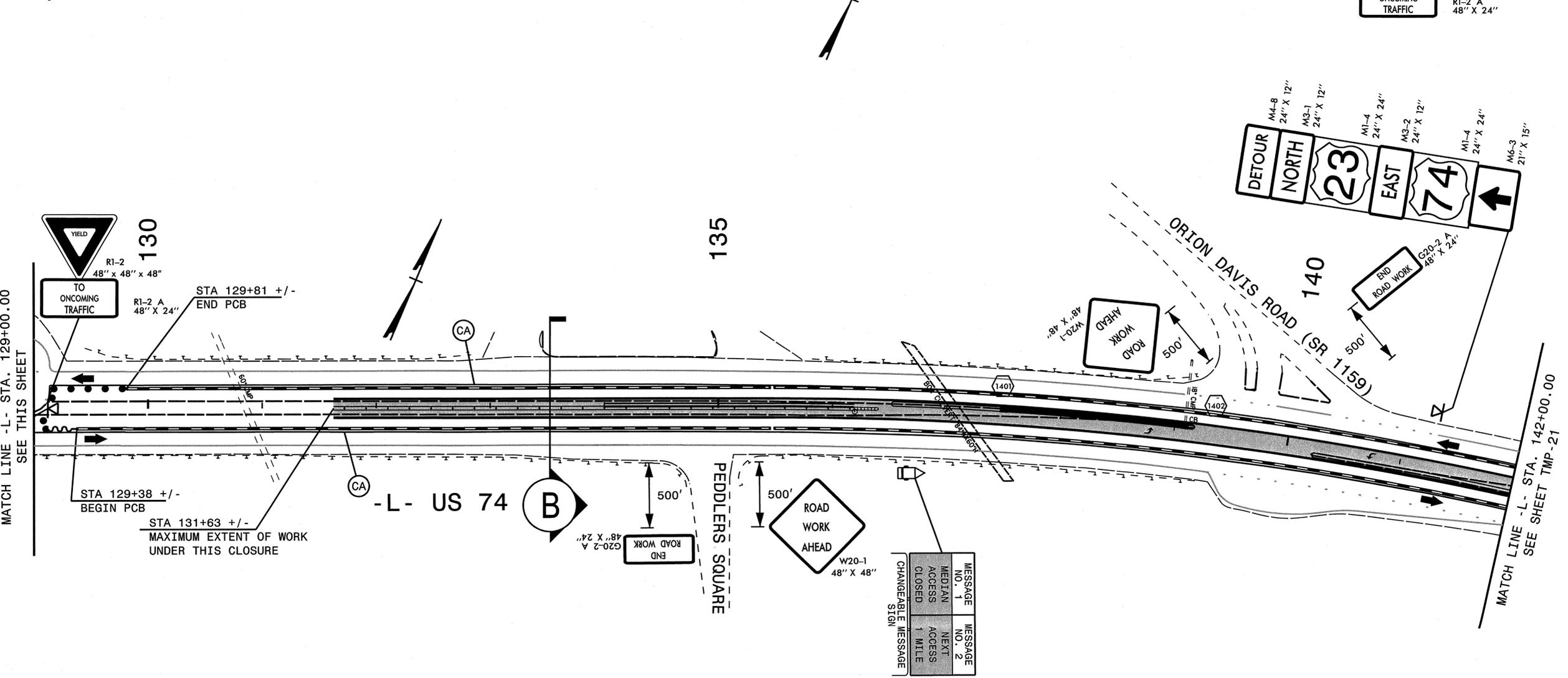
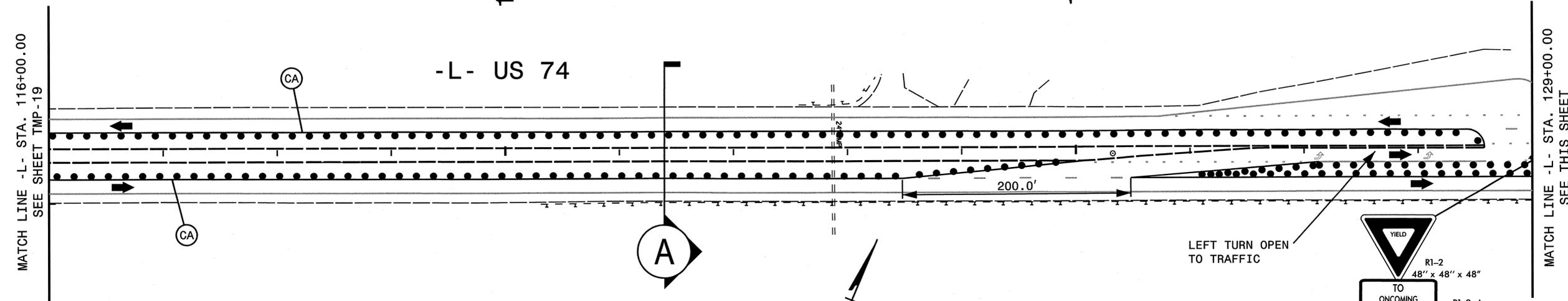


WORK ZONE D
DETAIL SHEET
AREA 11 & 12

WORK ZONE D - AREA 13

120

125

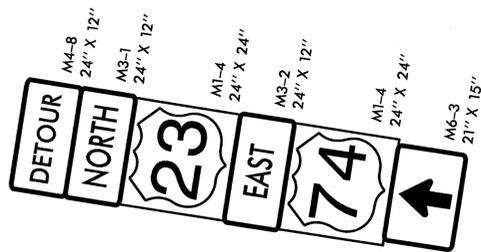


MATCH LINE -L- STA. 116+00.00
SEE SHEET TMP-19

MATCH LINE -L- STA. 129+00.00
SEE THIS SHEET

MATCH LINE -L- STA. 129+00.00
SEE THIS SHEET

MATCH LINE -L- STA. 142+00.00
SEE SHEET TMP-21



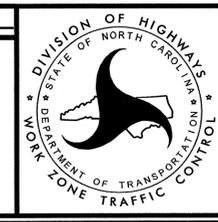
MESSAGE NO. 1	MESSAGE NO. 2
MEDIAN ACCESS CLOSED	NEXT ACCESS 1 MILE
CHANGEABLE MESSAGE SIGN	

WORK ZONE D - AREA 14

APPROVED: _____ DATE: _____

SEAL

SEAL NOT VALID UNLESS SIGNED AND DATED



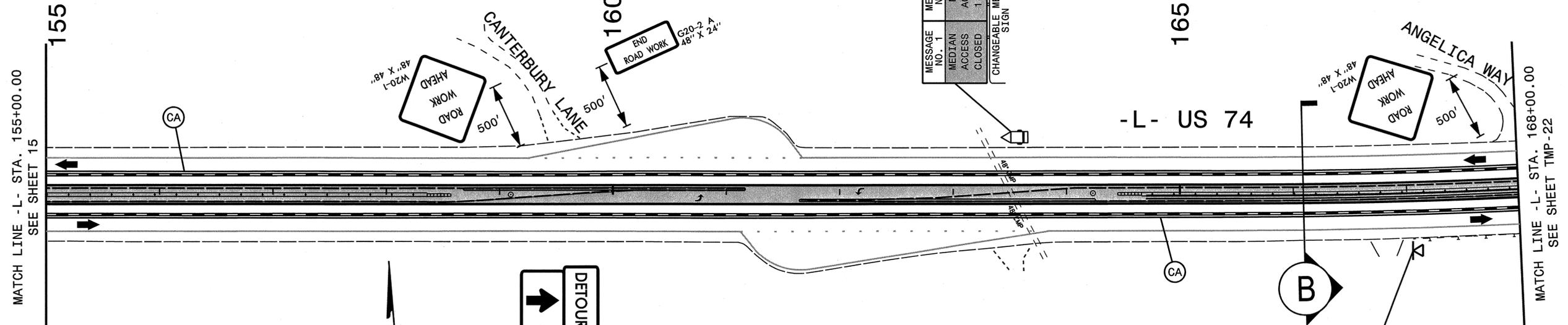
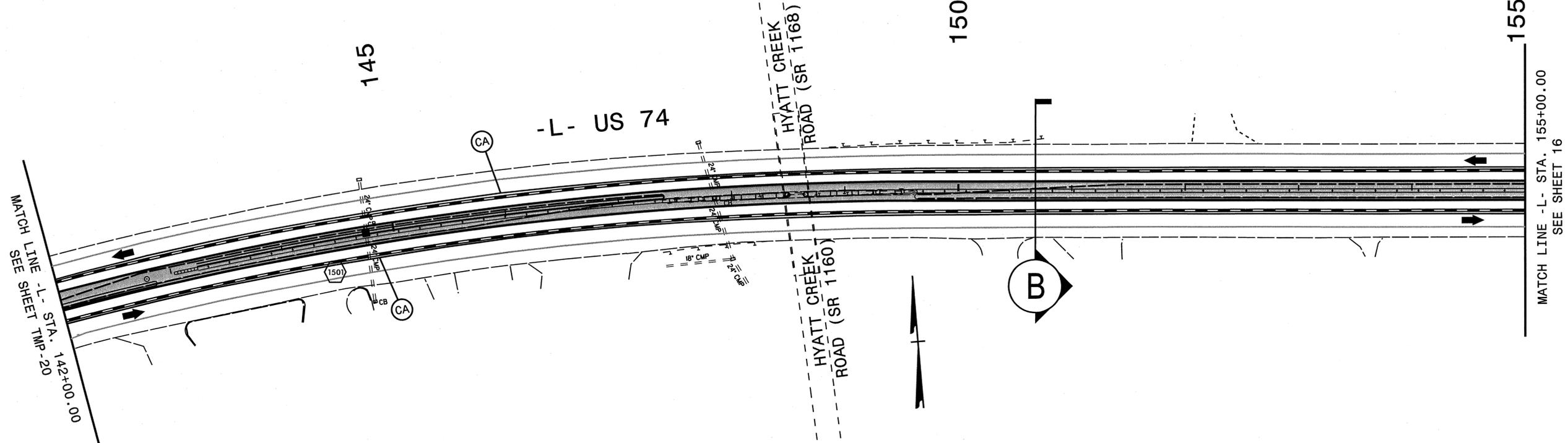
WORK ZONE D
DETAIL SHEET
AREA 13 & 14

ARCADIS

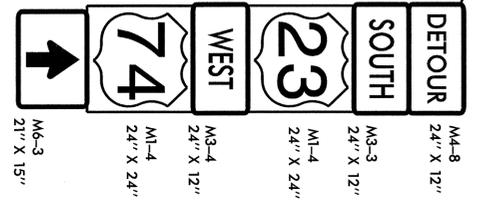
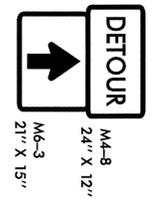
 a U.S. M. of North Carolina, Inc.
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 Raleigh, NC 27607-5075
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6/27/2013 8:47:44 AM C:\TrafficControl\TCP\W5315.TC_TMP_D20_detail.dgn User: jbeard

WORK ZONE D - AREA 15



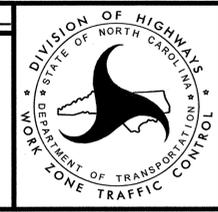
MESSAGE NO. 1	MESSAGE NO. 2
MEDIAN ACCESS CLOSED	NEXT ACCESS 1 MILE
CHANGEABLE MESSAGE SIGN	



WORK ZONE D - AREA 16

APPROVED: _____ DATE: _____

SEAL

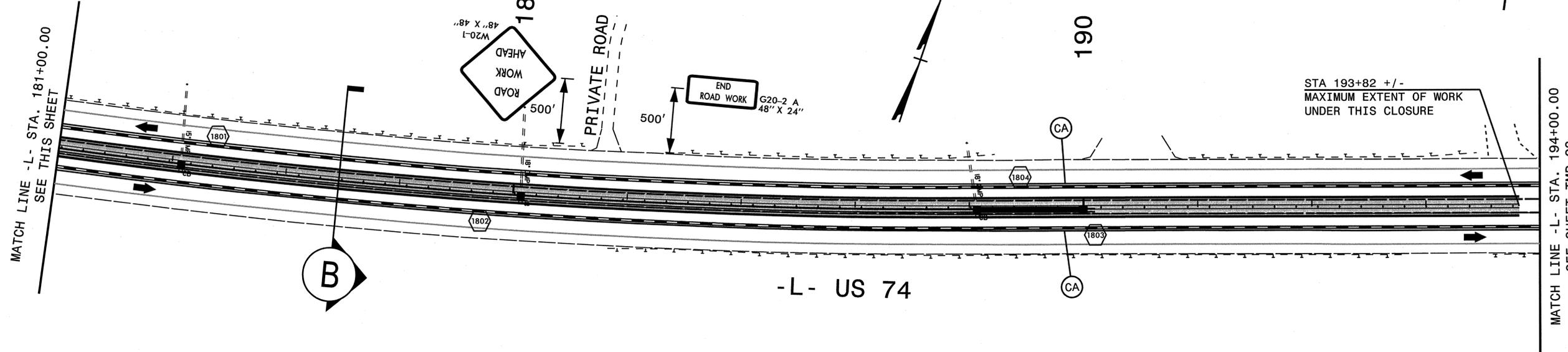
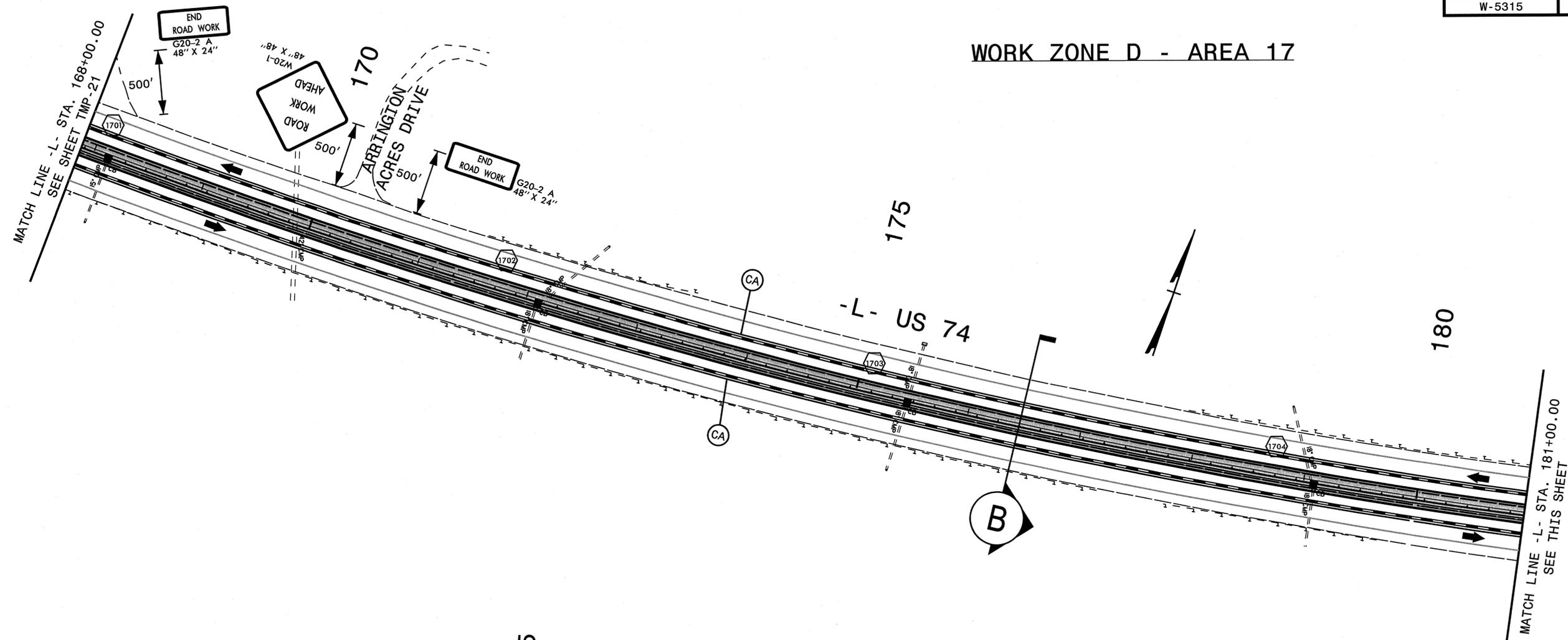


WORK ZONE D
DETAIL SHEET
AREA & 16

6/27/2013
R:\TrafficControl\W5315_TC_TMP_D21_detail.dgn
User: jbeard

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Raleigh, NC 27607-5073
Tel: 919/554-1282 Fax: 919/554-5448 NC License No. C-1869

WORK ZONE D - AREA 17

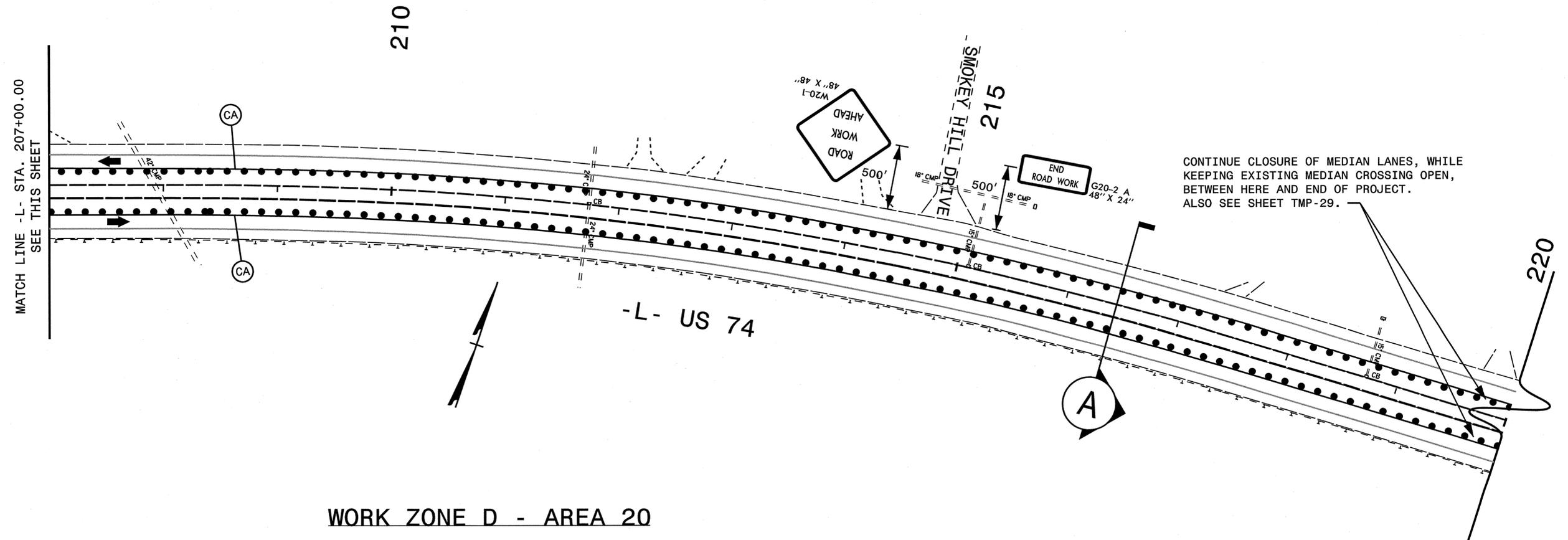
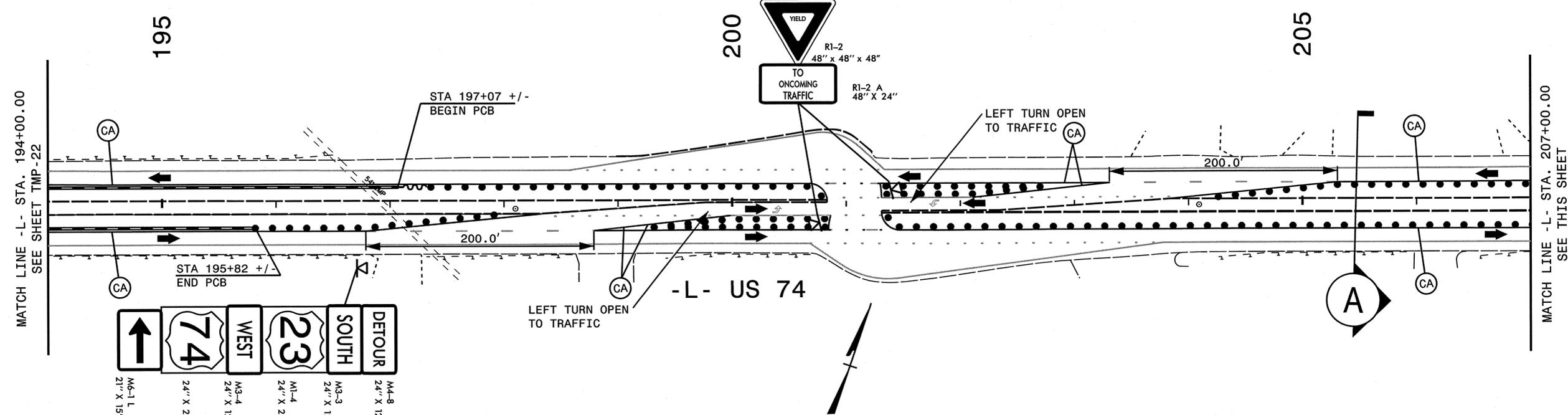


WORK ZONE D - AREA 18

APPROVED: _____ DATE: _____		<p>WORK ZONE D DETAIL SHEET AREA 17 & 18</p>
 <small>G. S. M. of North Carolina, Inc. WWW.ARCADIS-US.COM 801 Corporate Center Drive, Suite 300 Raleigh, NC 27601-5073 Tel: 919/854-4282 Fax: 919/854-5448 NC License No. C-4869</small>		

6/27/2013
 R:\TrafficControl\TCP\W5315_TC_TMP_D22.detaill.dgn
 User: jbeard

WORK ZONE D - AREA 19



WORK ZONE D - AREA 20

6/27/2013 R:\TrafficControl\TCP\W5315.TC_TMP_D23_detail.dgn User:ibeard

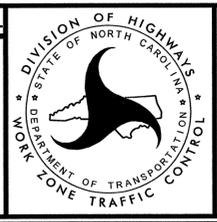
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 80 Corporate Center Drive, Suite 300
 Raleigh, NC 27601-5013
 Tel: 919/854-1292 Fax: 919/854-5448 NC License No. C-869

APPROVED: _____ DATE: _____

SEAL

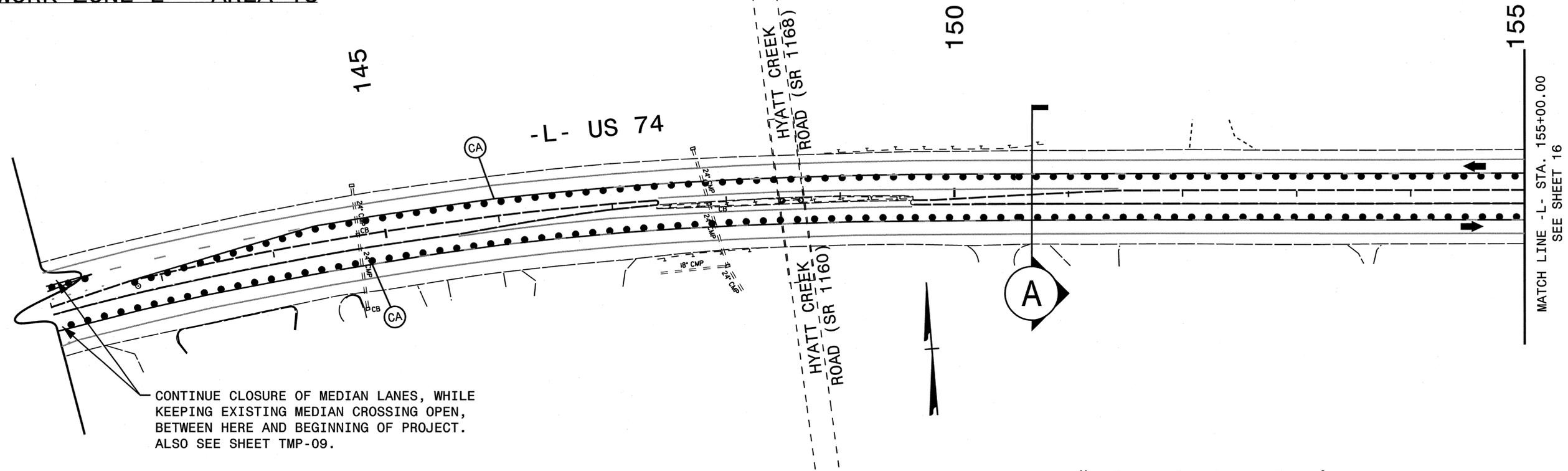
025954
7-15-13
ENGINEER
JUSTIN R. BEARD

SEAL NOT VALID UNLESS SIGNED AND DATED



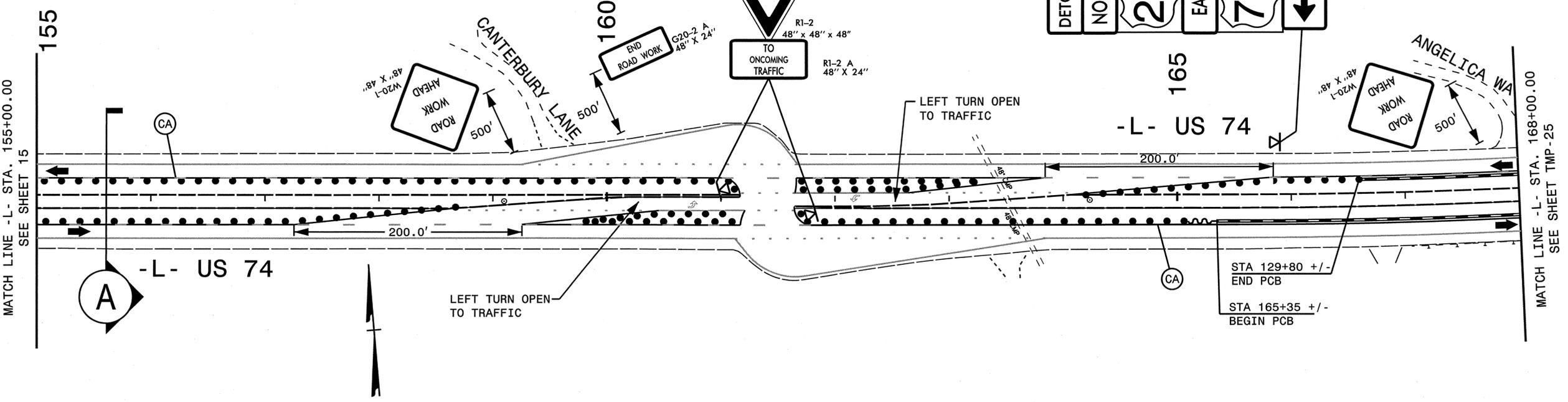
**WORK ZONE D
 DETAIL SHEET
 AREA 19 & 20**

WORK ZONE E - AREA 15



CONTINUE CLOSURE OF MEDIAN LANES, WHILE KEEPING EXISTING MEDIAN CROSSING OPEN, BETWEEN HERE AND BEGINNING OF PROJECT. ALSO SEE SHEET TMP-09.

MATCH LINE -L- STA. 155+00.00 SEE SHEET 16



MATCH LINE -L- STA. 155+00.00 SEE SHEET 15

MATCH LINE -L- STA. 168+00.00 SEE SHEET TMP-25

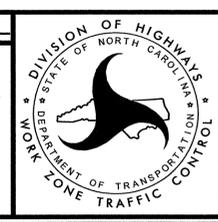
STA 129+80 +/- END PCB
STA 165+35 +/- BEGIN PCB

WORK ZONE E - AREA 16

APPROVED: _____ DATE: _____

SEAL

SEAL NOT VALID UNLESS SIGNED AND DATED

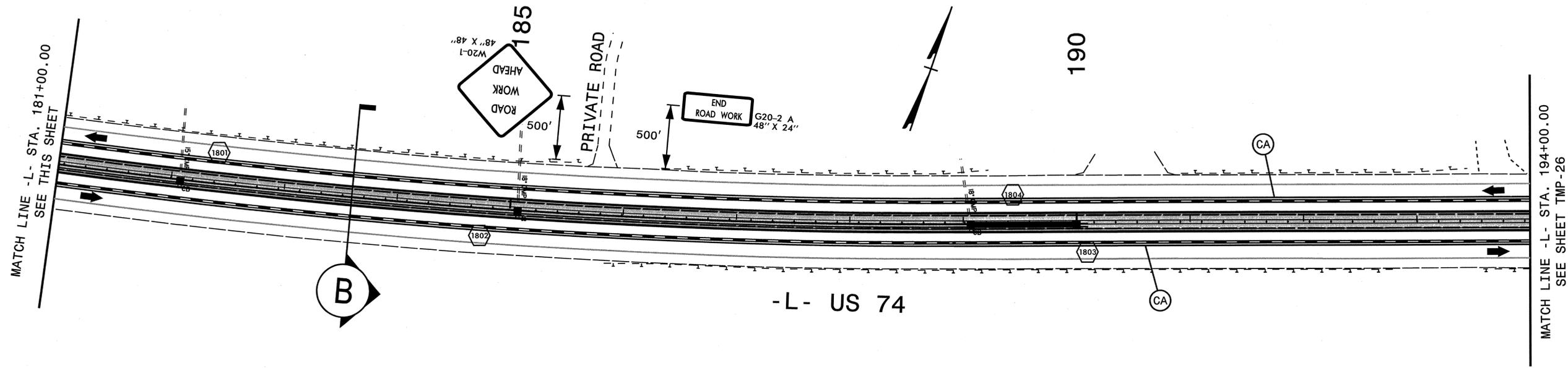
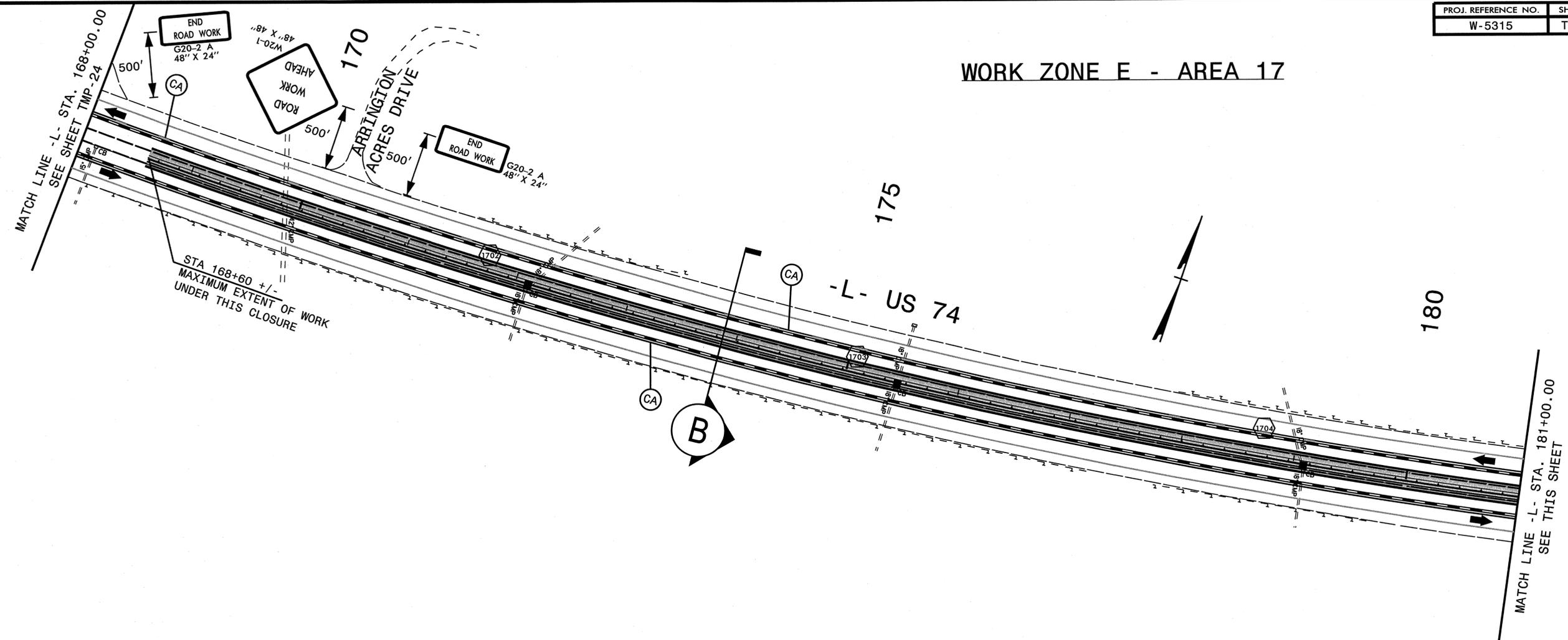


WORK ZONE E
DETAIL SHEET
AREA 15 & 16

ARCADIS
C & M of North Carolina, Inc.
WWW.ARCADIS-US.COM
801 Corporate Center Drive, Suite 300
Raleigh, NC 27607-5073
Tel: 919/854-1282 Fax: 919/854-5448 NC License No. C-1869

6/27/2013
R:\TrafficControl\TCP\W5315_TC_TMP_E24_detail.dgn
User: jbeard

WORK ZONE E - AREA 17



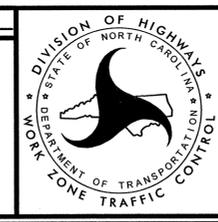
WORK ZONE E - AREA 18

APPROVED: _____ DATE: _____

SEAL

JUSTIN R. BEARD
ENGINEER
2253954
STATE OF NORTH CAROLINA

SEAL NOT VALID UNLESS SIGNED AND DATED



WORK ZONE E
DETAIL SHEET
AREA 17 & 18

ARCADIS
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801 Corporate Center Drive, Suite 300
Raleigh, NC 27607-5073
Tel: 919/854-4200 Fax: 919/854-5448 NC License No. C-1869

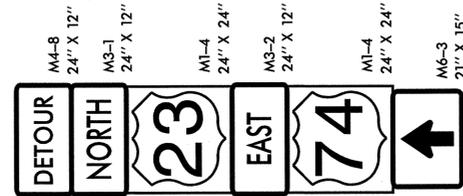
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WORK ZONE E - AREA 19

195

200

205



MATCH LINE -L- STA. 194+00.00
SEE SHEET TMP-25

MATCH LINE -L- STA. 207+00.00
SEE THIS SHEET

MESSAGE NO. 1	MESSAGE NO. 2
MEDIAN ACCESS CLOSED	NEXT ACCESS 1 MILE
CHANGEBLANK MESSAGE SIGN	

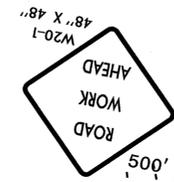
-L- US 74

210

MATCH LINE -L- STA. 207+00.00
SEE THIS SHEET

MATCH LINE -L- STA. 220+00.00
SEE SHEET TMP-27

-L- US 74



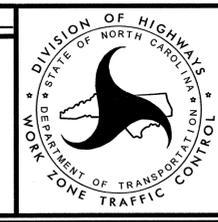
SMOKEY HILL DRIVE

215

WORK ZONE E - AREA 20

APPROVED: _____ DATE: _____

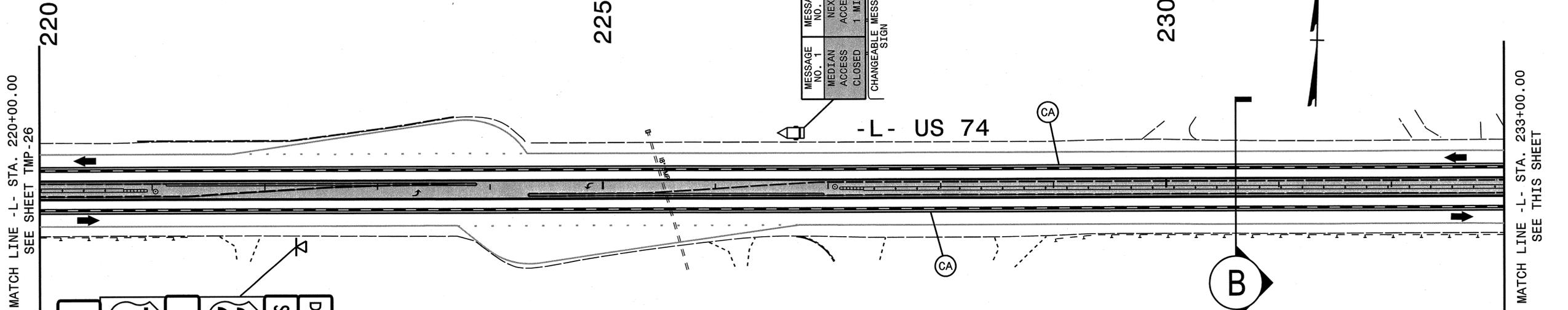
SEAL



WORK ZONE E
DETAIL SHEET
AREA 19 & 20

ARCADIS
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800 Corporate Center Drive, Suite 300
Raleigh, NC 27601-5013
Tel: 919/854-1322 Fax: 919/854-5448 NC License No. C-869

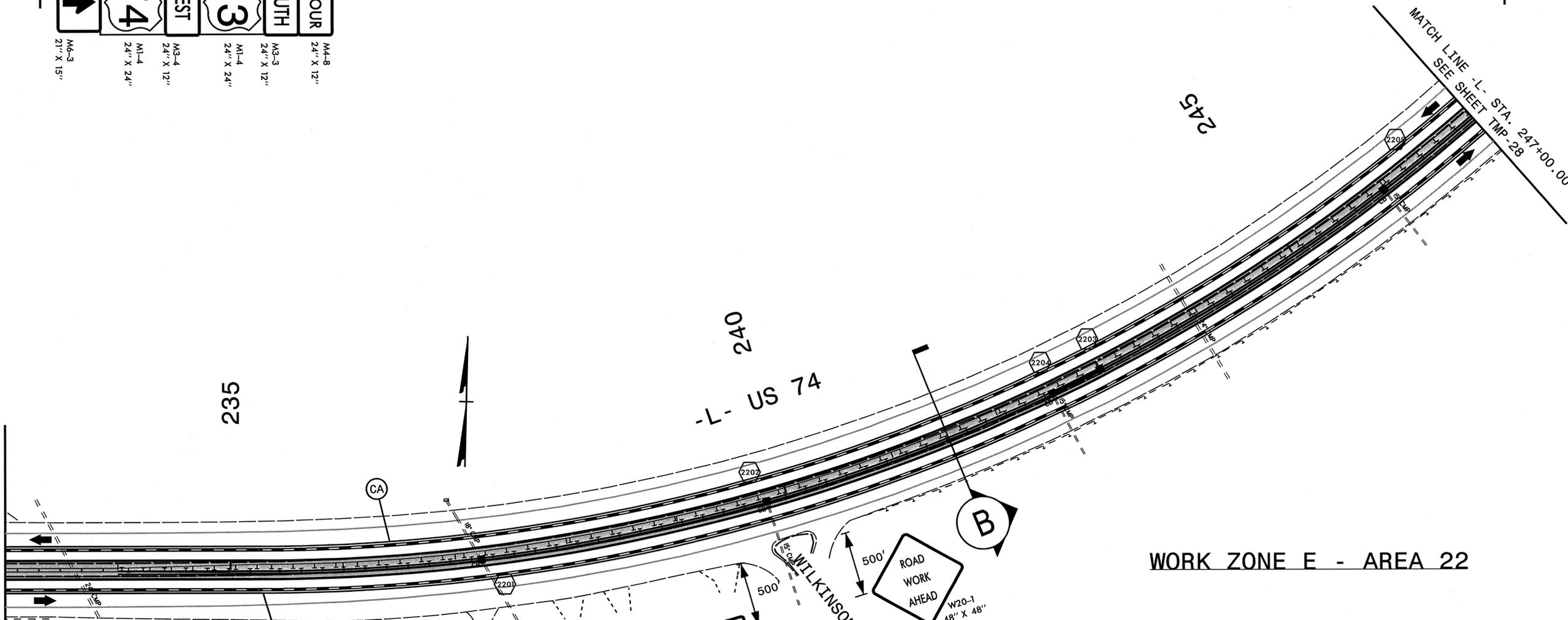
WORK ZONE E - AREA 21



		WEST		SOUTH	DETOUR
M6-3 21" X 15"	M1-4 24" X 24"	M3-4 24" X 12"	M1-4 24" X 24"	M3-3 24" X 12"	M4-8 24" X 12"

MESSAGE NO. 1	MESSAGE NO. 2
MEDIAN ACCESS CLOSED	NEXT ACCESS 1 MILE
CHANGEABLE MESSAGE SIGN	

MATCH LINE -L- STA. 233+00.00
SEE THIS SHEET



WORK ZONE E - AREA 22

6/27/2013
C:\TrafficControl\TCP\W5315_TC_TMP_E27_detail.dgn
User: jbeard

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 Raleigh, NC 27607-5073
 Tel: 919/854-4202 Fax: 919/854-5448 NC License No. C-869

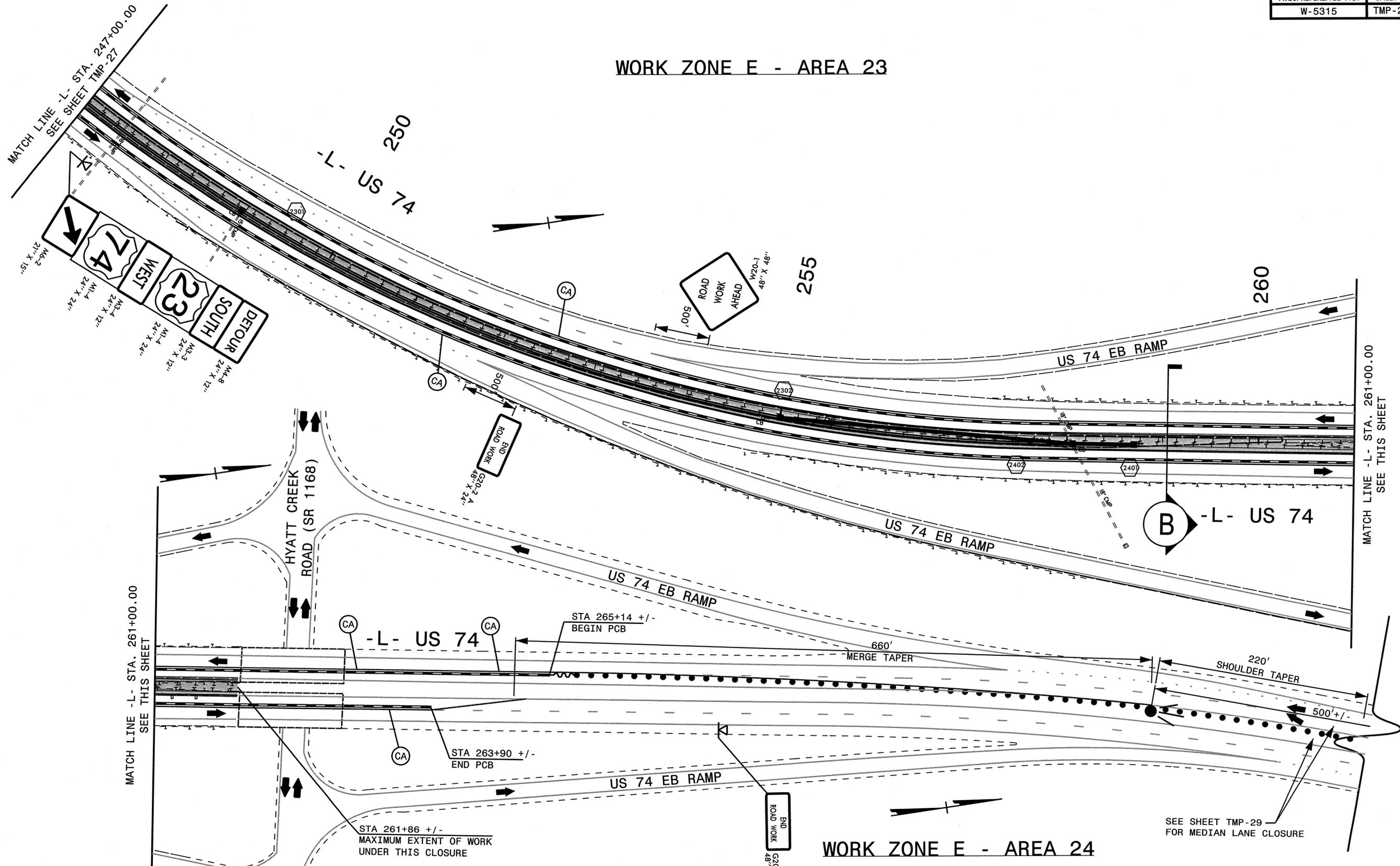
APPROVED: _____ DATE: _____

DIVISION OF HIGHWAYS
 STATE OF NORTH CAROLINA

 DEPARTMENT OF TRANSPORTATION
 WORK ZONE TRAFFIC CONTROL

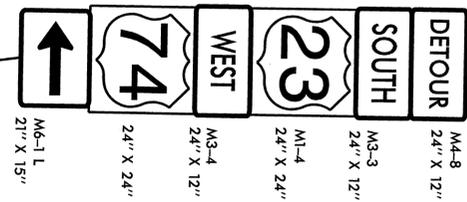
**WORK ZONE E
 DETAIL SHEET
 AREA 21 & 22**

WORK ZONE E - AREA 23



MATCH LINE - L - STA. 261+00.00
SEE THIS SHEET

MATCH LINE - L - STA. 261+00.00
SEE THIS SHEET

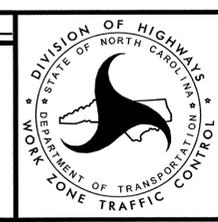


WORK ZONE E - AREA 24

SEE SHEET TMP-29
FOR MEDIAN LANE CLOSURE

APPROVED: _____ DATE: _____

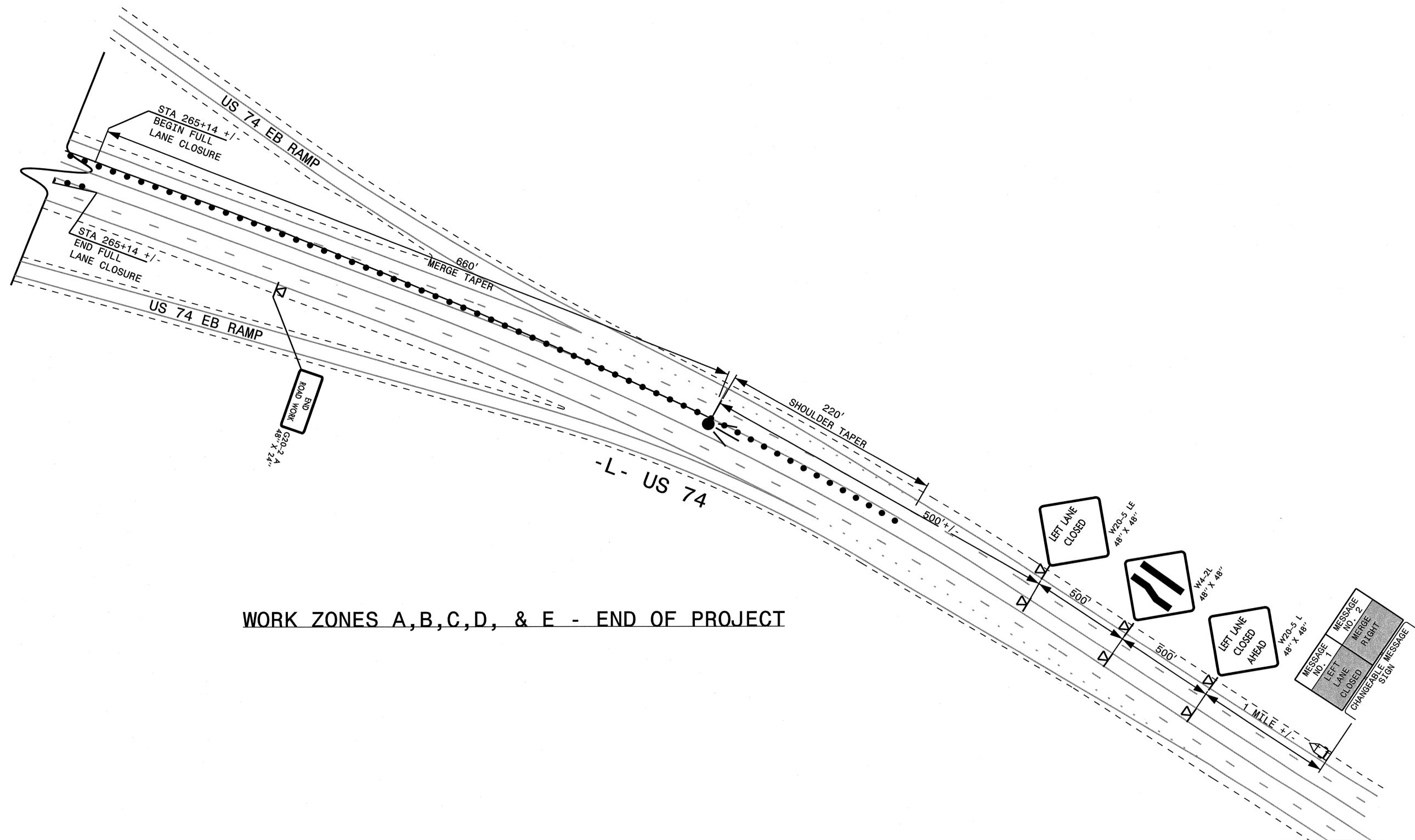
SEAL



WORK ZONE E
DETAIL SHEET
AREA 23 & 24

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Raleigh, NC 27601-5013
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6/27/2013
 R:\TrafficControl\TCP\W5315_TC_TMP_E28_detall.dgn
 User: jbeard



WORK ZONES A, B, C, D, & E - END OF PROJECT

6/27/2013
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 User: jbeard

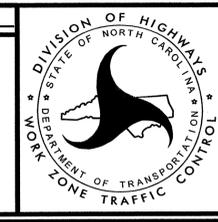
ARCADIS
 G & M of North Carolina, Inc.
 WWW.ARCADIS-US.COM
 80 Corporate Center Drive, Suite 300
 Raleigh, NC 27607-5073
 Tel: 919/854-4282 Fax: 919/854-5448 NC License No. C-869

APPROVED: _____ DATE: _____

SEAL

025954
 7-15-13
 JUSTIN R. BEARD
 ENGINEER

SEAL NOT VALID UNLESS SIGNED AND DATED



**WORK ZONES A-E
 DETAIL SHEET
 END OF PROJECT**