STATE OF NORTH CAROLINA DIVISION OF HIGHWAYS

STATE PROJECT REFERENCE NO. SHEET NO. U-3344 A TCP-1

PLAN FOR PROPOSED TRAFFIC CONTROL, MARKING & DELINEATION

WAKE COUNTY

ROADWAY STANDARD DRAWINGS

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

STD. NO.	<u>TITLE</u>
1101.02	TEMPORARY LANE CLOSURES
1101.03	TEMPORARY ROAD CLOSURES
1101.05	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 PANELS
1130.01	DRUMS
1135.01	CONES
1145.01	BARRICADES
1150.01	FLAGGERS
1160.01	TEMPORARY CRASH CUSHION
1165.01	TRUCK MOUNTED IMPACT ATTENUATOR
1170.01 1205.01	PORTABLE CONCRETE BARRIER PAVEMENT MARKINGS - LINE TYPES & OFFSETS
1205.01	PAVEMENT MARKINGS - LINE TIPES & OFFSETS PAVEMENT MARKINGS - 2 LANE & MULTILANE ROADWAYS
1205.04	PAVEMENT MARKINGS - INTERSECTIONS
1205.05	PAVEMENT MARKINGS - TURN LANES
1205.06	PAVEMENT MARKINGS - THRU LANE DROPS
1205.08	PAVEMENT MARKINGS - SYMBOLS & WORD MESSAGES
1205.09	PAVEMENT MARKINGS - PAINTED ISLANDS
1250.01	PAVEMENT MARKER SPACING
1251.01	RAISED PAVEMENT MARKERS (TEMPORARY & PERMANENT)
1261.01	GUARDRAIL & BARRIER DELINEATOR SPACING
1261.02	GUARDRAIL & BARRIER DELINEATOR TYPES
1262.01	GUARDRAIL END DELINEATION

INDEX OF SHEETS

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TCP-1	LIST OF APPLICABLE ROADWAY STANDARD DRAWINGS, LEGEND AND INDEX OF SHEETS
TCP-2	PROJECT NOTES
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TCP-14	DETOUR ROUTE FOR WEEKEND CLOSURE OF AIRPORT BLVD.
TCP-15	BARRICADE LOCATIONS FOR WEEKEND CLOSURE OF AIRPORT BLVD.
TCP-16	WORK ZONE ADVANCED WARNING SIGNING
PMP - 1	FINAL PAVEMENT MARKING SCHEDULE
PMP-2 TO 5	FINAL PAVEMENT MARKING PLANS

[LEGEND]

GENERAL

DIRECTION OF TRAFFIC FLOW

→ NORTH ARROW

PROPOSED PVMT. ----- EXIST. PVMT.

WORK AREA

REMOVAL OF EXISTING PAVEMENT

TRAFFIC CONTROL DEVICES

T TYPE I BARRICADE

TYPE III BARRICADE

CONE

■ FLASHING ARROW PANEL (TYPE C)

TYPE 'B' WARNING LIGHT

STATIONARY SIGN

PORTABLE SIGN

STATIONARY OR PORTABLE SIGN

WARNING FLAGS

CRASH CUSHION

CHANGEABLE MESSAGE SIGN

TRUCK MOUNTED IMPACT ATTENUATOR (TMIA)

POLICE

■ FLAGGER

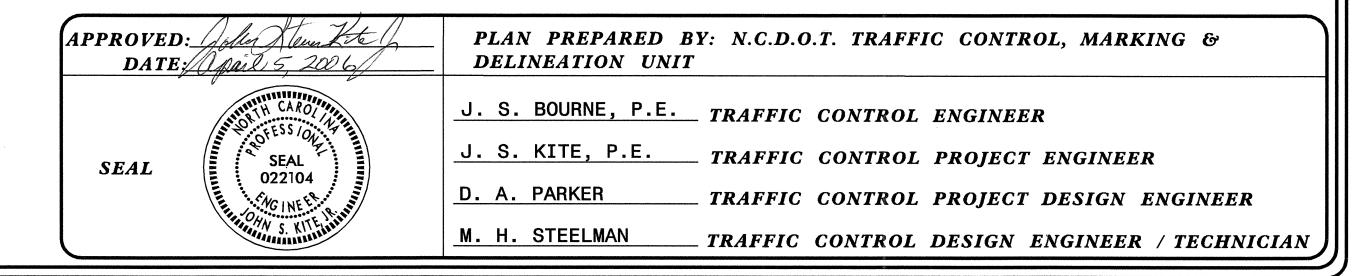
PAVEMENT MARKINGS

CRYSTAL/CRYSTAL PAVEMENT MARKER

YELLOW/YELLOW PAVEMENT MARKER

CRYSTAL/RED PAVEMENT MARKER

PAVEMENT MARKING SYMBOLS



U-3344A TCP-2

REVISIONS

CADD U3344A TC TCP2.DGN

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.

ADAPT THE TRAFFIC CONTROL PLANS, WHEN DIRECTED BY THE ENGINEER, TO MEET FIELD CONDITIONS TO PROVIDE SAFE AND EFFICIENT TRAFFIC MOVEMENT. CHANGES MAY BE REQUIRED WHEN PHYSICAL DIMENSIONS IN THE DETAIL DRAWINGS, STANDARD DETAILS AND ROADWAY DETAILS ARE NOT ATTAINABLE, OR RESULT IN DUPLICATE, OR UNDESIRED OVERLAPPING OF DEVICES. MODIFICATION MAY INCLUDE: MOVING, SUPPLEMENTING, COVERING OR REMOVAL OF DEVICES.

TIME RESTRICTIONS

A) DO NOT CLOSE OR NARROW TRAVEL LANES AS FOLLOWS:

ROAD NAME

DAY AND TIME RESTRICTIONS

1. SR 3015 (AIRPORT BLVD.)

MONDAY THROUGH FRIDAY 6:00 A.M. TO 9:00 A.M. 3:00 P.M. TO 6:00 P.M.

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

ROAD NAME

1. SR 3015 (AIRPORT BLVD.)

HOLIDAY

- 1. FOR NEW YEAR'S, BETWEEN THE HOURS OF 6:00 A.M. DECEMBER 31ST TO 6:00 P.M. JANUARY 2ND. IF NEW YEAR'S DAY IS ON A SATURDAY OR A SUNDAY, THEN UNTIL 6:00 P.M. THE FOLLOWING TUESDAY.
- 2. FOR EASTER, BETWEEN THE HOURS OF 6:00 A.M. THURSDAY AND 6:00 P.M. MONDAY.
- 3. FOR MEMORIAL DAY, BETWEEN THE HOURS OF 6:00 A.M. FRIDAY TO 6:00 P.M. TUESDAY.
- 4. FOR INDEPENDENCE DAY, BETWEEN THE HOURS OF 6:00 A.M. THE DAY BEFORE INDEPENDENCE DAY AND 6:00 P.M. THE DAY AFTER INDEPENDENCE DAY.

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

- 5. FOR LABOR DAY, BETWEEN THE HOURS OF 6:00 A.M. FRIDAY TO 6:00 P.M. TUESDAY.
- 6. FOR THANKSGIVING, BETWEEN THE HOURS OF 6:00 A.M. TUESDAY TO 6:00 P.M. MONDAY.
- 7. FOR CHRISTMAS, BETWEEN THE HOURS OF 6:00 A.M. THE FRIDAY BEFORE THE WEEK OF CHRISTMAS DAY AND 6:00 P.M. THE FOLLOWING MONDAY AFTER THE WEEK OF CHRISTMAS.
- 8. FOR ANY EVENT THAT CREATES UNUSUALLY HIGH TRAFFIC VOLUMES, AS DIRECTED BY THE ENGINEER.
- C) DO NOT STOP TRAFFIC FOR MORE THAN 15 MINUTES AS FOLLOWS:

ROAD NAME

OPERATION

1. SR 3015 (AIRPORT BLVD.)

TRAFFIC SHIFTS

D) DO NOT CONDUCT MULTI-VEHICLE HAULING AS FOLLOWS:

ROAD NAME

DAY AND TIME RESTRICTIONS

1. SR 3015 (AIRPORT BLVD.)

MONDAY THROUGH FRIDAY 6:00 A.M. TO 9:00 A.M. 3:00 P.M. TO 6:00 P.M.

E) DO NOT CONDUCT ANY HAULING OPERATIONS AGAINST THE FLOW OF TRAFFIC OF AN OPEN TRAVELWAY UNLESS THE WORK AREA IS PROTECTED BY BARRIER OR GUARDRAIL OR OTHERWISE 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 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.

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, ON BOTH SIDES OF AN OPEN TRAVELWAY, WITHIN THE SAME LOCATION, ON A TWO-LANE, TWO-WAY ROAD.

PAVEMENT EDGE DROP OFF REQUIREMENTS

J) 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 A 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.

K) DO NOT EXCEED A DIFFERENCE OF 1.5 inches IN ELEVATION BETWEEN OPEN LANES OF TRAFFIC. INSTALL ADVANCE WARNING "UNEVEN LANES" SIGNS (W8-11) 500 FT IN ADVANCE OF THE UNEVEN AREA.

TRAFFIC PATTERN ALTERATIONS

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

SIGNING

M) INSTALL ADVANCE WORK ZONE WARNING SIGNS WHEN WORK IS WITHIN 100 FT FROM THE EDGE OF TRAVEL LANE AND NO MORE THAN THREE (3) DAYS PRIOR TO THE BEGINNING OF CONSTRUCTION.

WHEN NO WORK IS BEING CONDUCTED FOR A PERIOD LONGER THAN ONE WEEK, REMOVE OR COVER ALL ADVANCE WORK ZONE WARNING SIGNS, AS DIRECTED BY THE ENGINEER, AT NO COST TO THE DEPARTMENT.

- N) PROVIDE PERMANENT SIGNING.
- O) PROVIDE DETOUR SIGNING.
- P) COVER OR REMOVE ALL DETOUR SIGNS WHEN A DETOUR IS NOT IN OPERATION.
- Q) ENSURE ALL NECESSARY SIGNING IS IN PLACE PRIOR TO ALTERING ANY TRAFFIC PATTERN.

TRAFFIC BARRIER

R) INSTALL PORTABLE CONCRETE BARRIER/WATER-FILLED BARRIER ACCORDING TO THE TRAFFIC CONTROL PLANS A MAXIMUM OF TWO (2) WEEKS PRIOR TO BEGINNING WORK IN ANY LOCATION. ONCE PORTABLE CONCRETE BARRIER/WATER-FILLED 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.

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

S) PROTECT THE APPROACH END OF 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.

OFFSET THE APPROACH END OF MOVABLE/PORTABLE CONCRETE BARRIER A MINIMUM OF 40 FT FROM ONCOMING TRAFFIC OR PROTECT AT ALL TIMES BY A TEMPORARY CRASH CUSHION.

INSTALL PORTABLE CONCRETE BARRIER/WATER-FILLED BARRIER WITH THE TRAFFIC FLOW, BEGINNING WITH THE UPSTREAM SIDE OF TRAFFIC. REMOVE PORTABLE CONCRETE BARRIER/WATER-FILLED 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 CLOSED THE SECTION OF THE ROADWAY UNTIL THE BARRIER CAN BE PLACED OR AFTER BARRIER IS REMOVED.

TRAFFIC CONTROL DEVICES

- T) WHEN USING ROADWAY STANDARD NO. 1101.02, DRUMS MAY BE USED IN LIEU OF CONES ON ALL ROADS.
- U) 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.
- V) PLACE TYPE III BARRICADES, WITH "ROAD CLOSED" SIGN R11-2 ATTACHED, OF SUFFICIENT LENGTH TO CLOSE ENTIRE ROADWAY. STAGGER OR OVERLAP BARRICADES TO ALLOW FOR INGRESS OR EGRESS.
- W) PLACE SETS OF THREE DRUMS PERPENDICULAR TO THE EDGE OF THE TRAVELWAY ON 500 FT CENTERS WHEN UNOPENED LANES ARE CLOSED TO TRAFFIC. THESE DRUMS SHALL BE IN ADDITION TO CHANNELIZING DEVICES.

PAVEMENT MARKINGS AND MARKERS

X) INSTALL PAVEMENT MARKINGS AND PAVEMENT MARKERS ON THE FINAL SURFACE AS FOLLOWS:

ROAD NAME MARKING MARKER

1. ALL ROADS THERMOPLASTIC RAISED

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

ROAD NAME MARKING MARKER

1. ALL ROADS PAINT RAISED

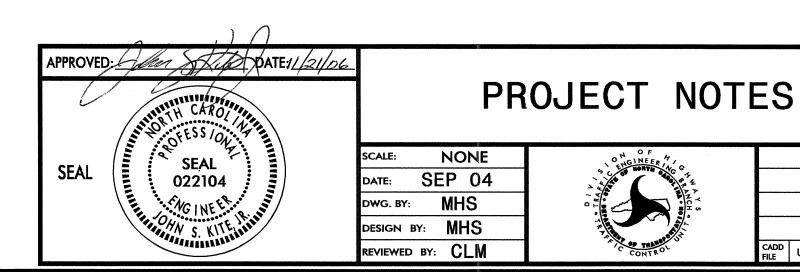
- Z) TIE PROPOSED PAVEMENT MARKING LINES TO EXISTING PAVEMENT MARKING LINES.
- AA) REPLACE ANY PAVEMENT MARKINGS THAT HAVE BEEN DAMAGED BY THE END OF EACH DAY'S OPERATION.
- BB) PLACE AT LEAST TWO APPLICATIONS OF PAINT ON NEW ASPHALT WITH TEMPORARY TRAFFIC PATTERNS WHICH WILL REMAIN IN PLACE OVER THREE (3) MONTHS. PLACE ADDITIONAL APPLICATIONS OF PAINT UPON SUFFICIENT DRYING TIME, AS DETERMINED BY THE ENGINEER.

TEMPORARY/FINAL SIGNALS

- CC) NOTIFY THE ENGINEER TWO (2) MONTHS BEFORE A TRAFFIC SIGNAL INSTALLATION BY OTHERS IS REQUIRED.
- DD) SHIFT AND REVISE ALL SIGNAL HEADS AS SHOWN ON THE SIGNAL PLANS.

MISCELLANEOUS

- EE) USING INCIDENTAL STONE OR ASPHALT AS NECESSARY, MAINTAIN VEHICULAR ACCESS TO ALL RESIDENCES AND BUSINESSES DURING THE LIFE OF THE CONTRACT UNLESS OTHERWISE NOTED IN THE PHASING OR DIRECTED BY THE ENGINEER.
- FF) RELOCATE EXISTING STOP SIGNS DURING CONSTRUCTION AS SHOWN IN THE PLANS OR AS DIRECTED BY THE ENGINEER.



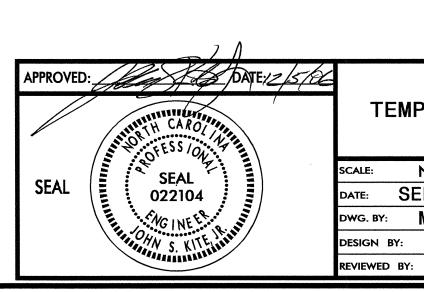
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TCP-3

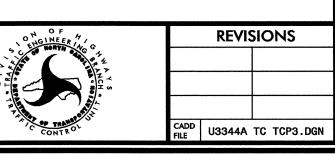
TEMPORARY PAVEMENT MARKING SCHEDULE

SYMBOL	DESCRIPTION		PAY ITEM QUA BREAKDOW		Υ	TOTAL QUA	NTITY
		TEMPORARY					
		PAVEMENT MARKINGS					
PA	WHITE EDGELINE (2X)	PAINT (4")	20004	LF			
РВ	YELLOW EDGELINE (2X)		140	LF			
PC	10 FT. WHITE SKIP (1X)		1713	LF			
PD	2 FT. WHITE MINISKIP (2X)		516	LF			
PE	WHITE SOLID LANE LINE (2X)		1232	LF			
PF	10 FT. YELLOW SKIP (2X)		2150	LF			
PH	YELLOW SINGLE CENTER (1X)		8596	LF			
PI	YELLOW DOUBLE CENTER (2X)		31900	LF			
					TOTAL	66251	LF
		PAINT (8")					
PR	WHITE GORELINE (2X)		2378	LF			
PS	WHITE DIAGONAL (1X)		643	LF			
PV	YELLOW DIAGONAL (2X)		338	LF			
					TOTAL	3359	LF
		PAINT (24")					
P4	WHITE STOPBAR (2X)		405	LF			
					TOTAL	405	LF
QI	ALPHANUMERIC CHAR. (1X)	PAINT MARKING CHARACTERS	32	EA			
4.	ALITATIONE ITES OF ALIT		02		TOTAL	32	EA
		PAINT MARKING SYMBOLS				<u> </u>	
QA	LEFT TURN ARROW (2X)		38	EA			
QB	RIGHT TURN ARROW (2X)		23	EA			
	` ,				TOTAL	61	EA
		MARKERS					
		TEMPORARY RAISED PAVEMENT MARKE	RS				
мн	YELLOW & YELLOW		388	EA			
MI	CRYSTAL & RED		259	EA			
					TOTAL	647	EA



TEMPORARY PAVEMENT MARKING SCHEDULE

SCALE:	NONE	
DATE: SE	EP 04	
DWG. BY:	MHS	
DESIGN BY:	MHS	
REVIEWED BY:	CLM	



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U-3344A TCP-4

PHASE I

- STEP 1) INSTALL WORK ZONE ADVANCE WARNING SIGNS AS SHOWN ON SHEET TCP-16.
- STEP 2) USING ROADWAY STANDARD DRAWING 1101.02, SHEET 1 OF 7, BEGIN WIDENING FROM -L- STA. 22+00 +/- TO STA. 33+50 +/- UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE. (SEE TCP-5 THROUGH TCP-7).
 - -USING ROADWAY STANDARD DRAWING 1101.02, SHEET 1 OF 7, BEGIN PROPOSED DRAINAGE INSTALLATION. BEGIN INSTALLATION OF PROPOSED 42" PIPE ADJACENT TO EXISTING AIRPORT BLVD. AS SHOWN IN (SECTION B B) ON SHEET TCP-5. BACKFILL EXCAVATED AREA WITHIN 10' TO TRAFFIC BEFORE RETURNING TRAFFIC TO THE EXISTING 2-LANE, 2-WAY PATTERN.
 - -USING ROADWAY STANDARD DRAWING 1101.02, SHEET 1 OF 7, BEGIN THE UNDERCUT EXCAVATION AND BACKFILL IN A CONTINUOUS MANNER FROM STA. 27+25 +/- -L- (RIGHT) TO STA. 29+25 +/- -L- (RIGHT). AT THE END OF THE DAY, THE AREAS THAT WERE EXCAVATED SHALL BE BACKFILLED PRIOR TO RETURNING TRAFFIC TO THE EXISTING 2-LANE, 2-WAY PATTERN.
 - -USING ROADWAY STANDARD DRAWING 1101.02, SHEET 1 OF 7, CONSTRUCT THE FOLLOWING IN CONJUNCTION WITH EACH OTHER UP TO THE EDGE AND ELEVATION OF EXISTING PAVEMENT.
 - A) PROPOSED FILL FROM STA. 33+94 +/- -L- TO STA. 37+47 +/- -L- AND FROM STA. 37+61 +/- -L- TO STA. 40+84 +/- -L-. (SEE TCP-7).
 - B) VARIABLE WIDTH TEMPORARY PAVEMENT FROM STA. 33+94 +/- -L- TO STA. 40+84 +/- -L-. (SEE TCP-7).
 - -MAY BEGIN INSTALLATION OF FINAL SIGNAL AT INTERSECTION OF AIRPORT BLVD. AND NC 54. COVER PROPOSED SIGNAL HEADS. DO NOT INSTALL PROPOSED LOOPS ON AIRPORT BLVD. DUE TO PHASE III, STEP 8, MILLING OPERATION (SEE SIGNAL PLANS).

WORK IN A CONTINUOUS MANNER TO COMPLETE THE FOLLOWING WORK OF PHASE I, STEP 3 AND STEP 4.

- STEP 3) USING ROADWAY STANDARD DRAWING 1101.02, SHEET 1 OF 7 AND 4 OF 7, INSTALL TEMPORARY PAVEMENT MARKINGS AND MARKERS, TEMPORARY SIGNING, AND CHANGEABLE MESSAGE SIGNS FOR THE TEMPORARY TRAFFIC PATTERN ON -L- SHOWN ON TCP-8 AND TCP-8A. INSTALL THE WATER-FILLED BARRIER SHOWN ON TCP-8. REMOVE CONFLICTING PAVEMENT MARKINGS.
- STEP 4) USING FLAGGERS/POLICE, SWITCH EXISTING SR 3015 (AIRPORT BLVD.) TRAFFIC TO THE TEMPORARY PAVEMENT IN A 2-LANE, 2-WAY TRAFFIC PATTERN. (SEE TCP-8 AND TCP-8A).
- STEP 5) USING ROADWAY STANDARD DRAWING 1101.02, SHEET 1 OF 7, INSTALL THE PORTABLE CONCRETE BARRIER AND TEMPORARY CRASH CUSHIONS AS SHOWN ON TCP-8.
- STEP 6) INSTALL TEMPORARY SHORING NO. 1 FROM STA. 37+00 +/- -L- TO STA. 37+96 +/- -L-. (REFER TO ROADWAY STANDARD DRAWING 1101.02, SHEET 1 OF 7). (SEE TCP-8).
- STEP 7) USING ROADWAY STANDARD DRAWING 1101.02, SHEET 1 OF 7, CONSTRUCT 27' OF RIGHT SIDE WIDENING FROM STA. 33+50 +/- -L- TO STA 42+00 +/- -L- AND STAGE I OF THE PROPOSED CULVERT AT STA. 37+50 +/- -L-. (SEE TCP-8 AND STRUCTURE PLANS).
 - -CONSTRUCT TEMP. SHORING NO. 2 IN CONJUNCTION WITH THE STAGE I CULVERT CONSTRUCTION FROM STA. 36+92 +/- -L- TO STA. 37+88 +/- -L-. (SEE TCP-8).
 - -USING ROADWAY STANDARD DRAWING 1101.02, SHEET 1 OF 7, COMPLETE THE PROPOSED WIDENING FROM -L- STA. 22+00 +/- TO STA. 33+50 +/- BEGUN IN PHASE I UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE: (SEE TCP-5 THROUGH TCP-7).
 - -USING ROADWAY STANDARD DRAWING 1101.02, SHEET 1 OF 7, CONSTRUCT TEMPORARY PAVEMENT UP TO THE EDGE AND ELEVATION OF EXISTING PAVEMENT FROM STA. 10+86 +/- -Y3- TYING INTO THE EDGE AND ELEVATION OF PROPOSED PAVEMENT AT STA. 22+00 +/- -L-. (SEE TCP-5).
 - -WEDGE A TEMPORARY TIE-IN CONNECTING TO THE TEMPORARY PAVEMENT AND PROPOSED PAVEMENT AT STA. 22+00 +/- -L- SUFFICIENT TO SWITCH TRAFFIC TO THE TEMPORARY PAVEMENT IN A 2-LANE, 2-WAY PATTERN IN PHASE II. (SEE TCP-5).

PHASE II

STEP 1) INSTALL AS MUCH TEMPORARY PAVEMENT MARKINGS AND MARKERS AS POSSIBLE FOR THE TEMPORARY PATTERN SHOWN ON SHEET TCP-9 THROUGH TCP-11 WITHOUT INTERFERING WITH TRAFFIC.

-USING ROADWAY STANDARD DRAWING 1101.02, SHEET 1 OF 7, INSTALL PORTABLE CONCRETE BARRIER AND TEMPORARY CRASH CUSHIONS AS SHOWN ON TCP-10 AND TCP-11.

WORK IN A CONTINUOUS MANNER TO COMPLETE THE FOLLOWING WORK OF PHASE II, STEP 2 AND STEP 3

- STEP 2) USING ROADWAY STANDARD DRAWING 1101.02, SHEET 1 OF 7, COMPLETE INSTALLATION OF THE TEMPORARY PAVEMENT MARKINGS AND MARKERS FOR THE TEMPORARY TRAFFIC PATTERN SHOWN ON TCP-9 THROUGH TCP-11. MAY USE POLICE TO DIRECT TRAFFIC AT INTERSECTION OF AIRPORT BLVD. AND NC 54.
- STEP 3) USING FLAGGERS/POLICE, SWITCH -L- TRAFFIC TO THE RIGHT SIDE WIDENING IN THE TEMPORARY 2-WAY PATTERN AS SHOWN ON TCP-9 THROUGH TCP-11.
- STEP 4) USING ROADWAY STANDARD DRAWING 1101.02, SHEET 1 OF 7, INSTALL WATER-FILLED BARRIER FROM STA. 14+02 +/- -L- TO STA. 22+00 +/- -L-. (SEE SHEET TCP-9).
- STEP 5) USING FLAGGERS AS NECESSARY, CONSTRUCT LEFT SIDE CONSTRUCTION AS MUCH AS POSSIBLE FROM STA. 13+92 +/- -L- TO STA. 27+50 +/- -L- INCLUDING CURB AND GUTTER UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE. (SEE TCP-9 AND TCP-10).

-BEGIN LEFT SIDE CONSTRUCTION FROM STA. 27+50 +/- -L- TO STA. 42+00 +/- -L- INCLUDING CURB AND GUTTER AND STAGE II OF THE PROPOSED CULVERT AT STA. 37+50 +/- -L- UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE. (SEE TCP-10 AND TCP-11).

PHASE III

WORK IN A CONTINUOUS MANNER TO COMPLETE THE FOLLOWING WORK OF PHASE III, STEP 1 THROUGH STEP 3, FROM FRIDAY AT 9:00 P.M. TO THE FOLLOWING MONDAY AT 6:00 A.M. (SEE INTERMEDIATE CONTRACT TIME AND LIQUIDATED DAMAGES)

STEP 1) USING ROADWAY STANDARD DRAWING 1101.03, SHEET 1 OF 9 AND 2 OF 9, CLOSE AIRPORT BLVD. (SR 3015) AND PLACE TRAFFIC ON THE OFFSITE DETOUR. (SEE SHEET TCP-14 AND TCP-15). USE FLAGGERS OR POLICE TO MAINTAIN LOCAL TRAFFIC. PERFORM THE FOLLOWING:

CONSTRUCT VARIABLE WIDTH PROPOSED PAVEMENT FROM -L- STA. 13+50 +/- TO STA. 21+00 +/- UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE CONNECTING TO THE LEFT SIDE PROPOSED PAVEMENT CONSTRUCTED IN PHASE II, STEP 5. 36.5' OF PAVEMENT IS NEEDED TO SWITCH TRAFFIC PRIOR TO REOPENING AIRPORT BLVD. (SEE TCP-12).

STEP 2) CONSTRUCT THE FOLLOWING:

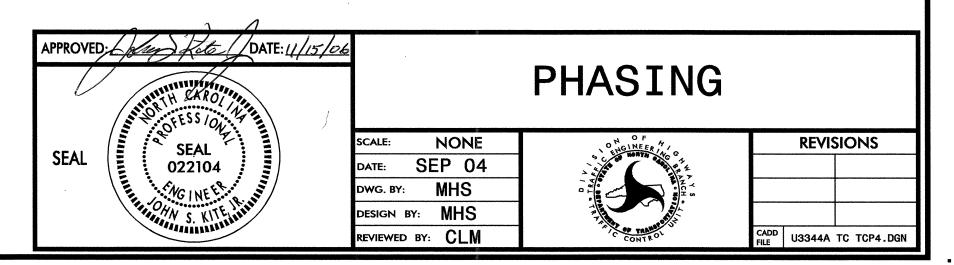
PAVEMENT UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE FROM -L- STA. 13+50 +/- TO STA. 14+24 +/-. (SEE TCP-12A).

-TEMPORARY TIE-INS FOR -Y2- AND -Y3- AS DIRECTED BY THE ENGINEER. (SEE TCP-12A).

-INSTALL TEMPORARY PAVEMENT MARKINGS AND MARKERS, TEMPORARY SIGNING, AND WATER-FILLED BARRIER. (SEE SHEET TCP-12A AND TCP-12B).

STEP 3) OPEN AIRPORT BLVD. (SR 3015) TO THE TEMPORARY TRAFFIC PATTERN (SEE TCP-13).

-RELOCATE CHANGEABLE MESSAGE SIGNS THAT WERE MOVED DUE TO AIRPORT BLVD. CLOSURE TO THEIR ORIGINAL LOCATION AND DISPLAY THE ORIGINAL MESSAGE. (SEE TCP-8A AND TCP-9).



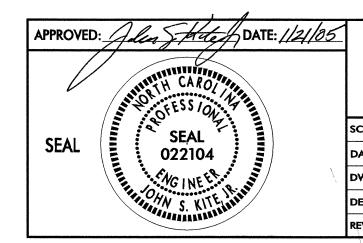
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U-3344A	TCP-4A	
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PHASING

PHASE III CONTINUED

- STEP 4) USING ROADWAY STANDARD DRAWING 1101.02, SHEET 1 OF 7, AS NECESSARY, COMPLETE PROPOSED CULVERT AND CONSTRUCT PROPOSED PAVEMENT UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE AS SHOWN ON SHEET TCP-12B AND TCP-13.
- STEP 5) COMPLETE ALL WORK PREVIOUSLY BEGUN.
- STEP 6) INSTALL AS MUCH TEMPORARY (PAINT) PAVEMENT MARKINGS AND MARKERS IN THE FINAL 5-LANE, 2-WAY PATTERN AS POSSIBLE WITHOUT INTERFERING WITH EXISTING TRAFFIC. (SEE TCP-3 AND PM-2 THROUGH PM-4 FOR LAYOUT OF PAVEMENT MARKINGS).
 - -INSTALL AND COVER PERMANENT SIGNING. (SEE SIGNING PLANS)
- WORK IN A CONTINUOUS MANNER TO COMPLETE THE FOLLOWING WORK OF PHASE III, STEP 7.
- STEP 7) USING ROADWAY STANDARD DRAWING 1101.02, SHEET 1 OF 7 AND 4 OF 7, INSTALL THE REMAINING TEMPORARY PAVEMENT MARKINGS AND MARKERS IN THE FINAL PATTERN AND PLACE -L-, -Y2-, AND -Y3- TRAFFIC IN THE FINAL TRAFFIC PATTERN.

 (SEE TCP-3, AND PM-2 THROUGH PM-4).
 - -UNCOVER PERMANENT SIGNING.
- STEP 8) PERFORM MILLING AND PAVING BACK UP TO THE EXISTING PAVEMENT ELEVATION FROM -L- STA. 10+36 +/- TO STA. 13+50 +/- AND FROM -L- STA. 42+00 +/- TO STA. 46+33 +/- -L-. REPLACE TEMPORARY (PAINT) PAVEMENT MARKINGS AND MARKERS IN THE FINAL PATTERN.
 - -INSTALL PROPOSED LOOPS AND ACTIVATE FINAL SIGNAL (SEE SIGNAL PLANS).
- STEP 9) REMOVE THE TRAFFIC CONTROL DEVICES AND TEMPORARY PAVEMENT MARKINGS PREVIOUSLY INSTALLED PER SHEET TCP-8A AND INSTALL FINAL PAVEMENT MARKINGS AND MARKERS ON THIS SECTION OF AIRPORT BLVD. TO RETURN IT TO THE EXISTING 5-LANE, 2-WAY TRAFFIC PATTERN (SEE PM-5).
- STEP 10) USING ROADWAY STANDARD DRAWING 1101.02, SHEET 4 OF 7, PLACE THE FINAL LAYER OF SURFACE COURSE AND INSTALL THE FINAL PAVEMENT MARKINGS AND MARKERS ON ALL ROADS. (SEE PM-1 THROUGH PM-4).
- STEP 11) REMOVE ALL WORK ZONE TRAFFIC CONTROL DEVICES.



PHASING

DATE: SEP 04

DWG. BY: MHS

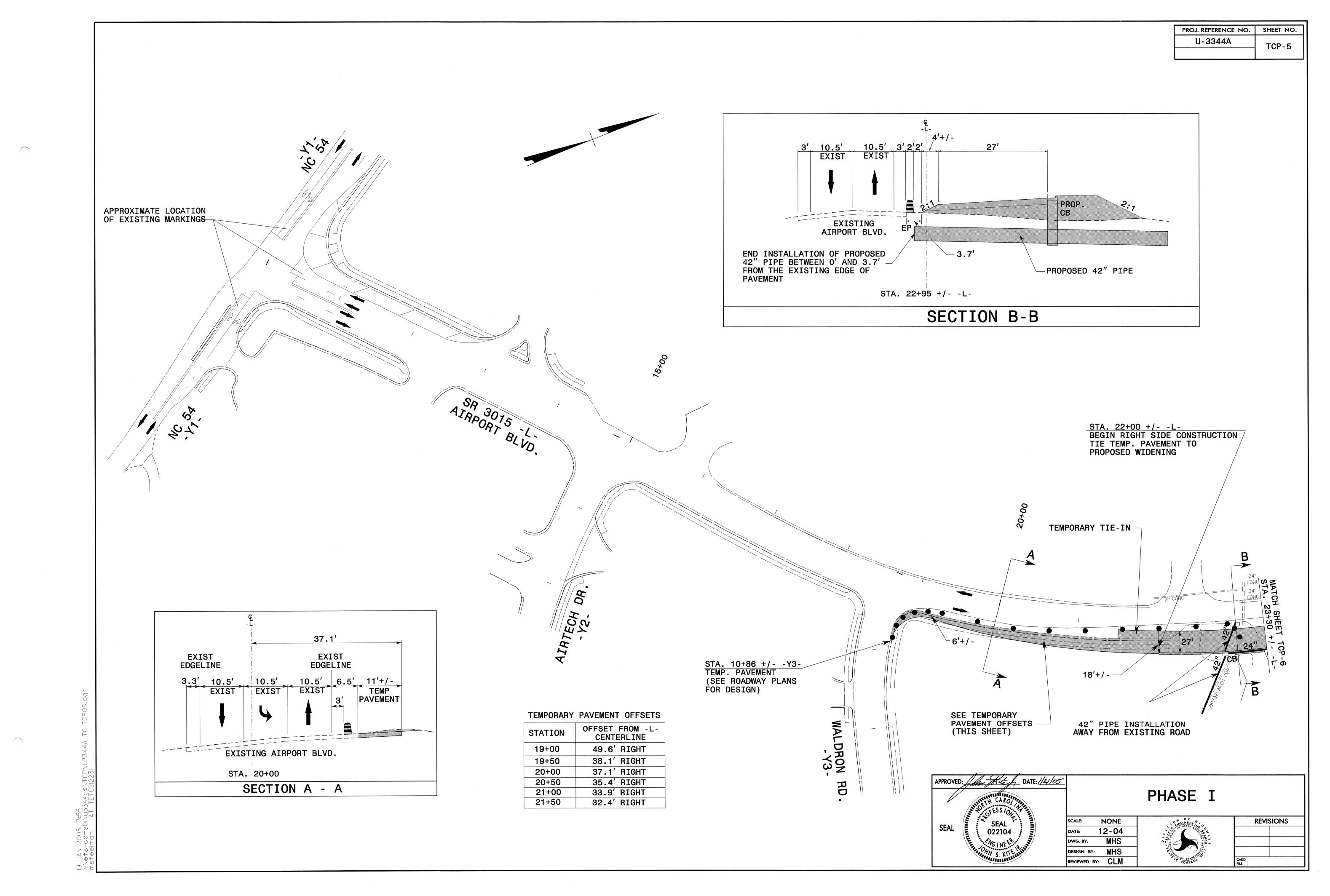
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REVIEWED BY: CLM

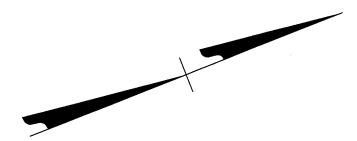


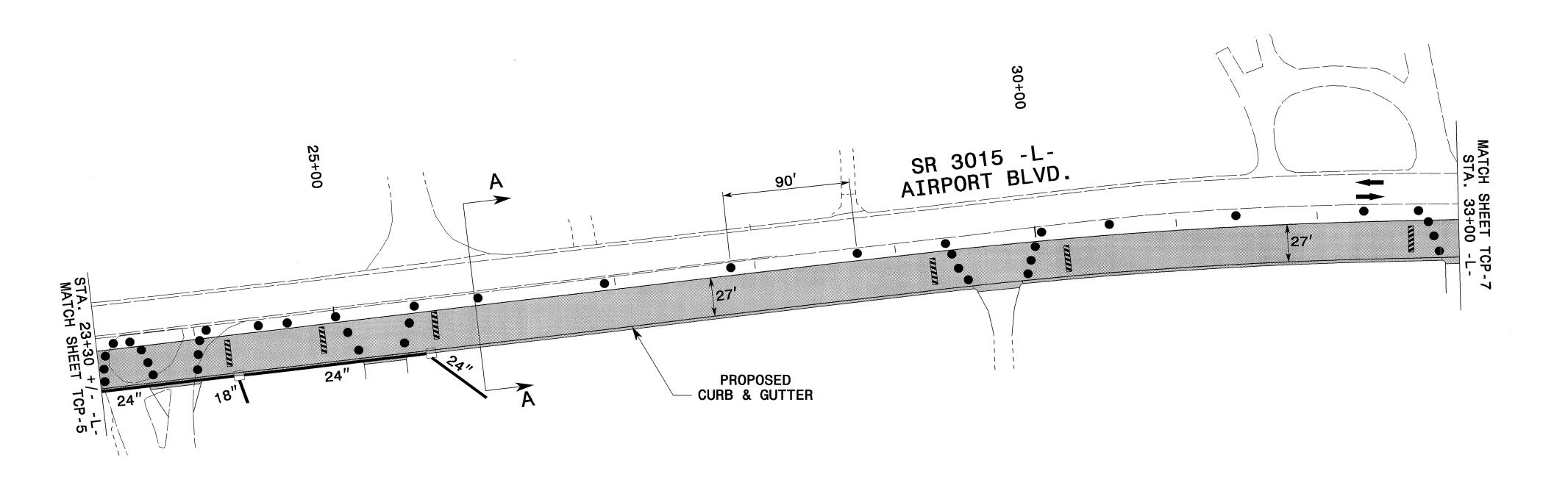
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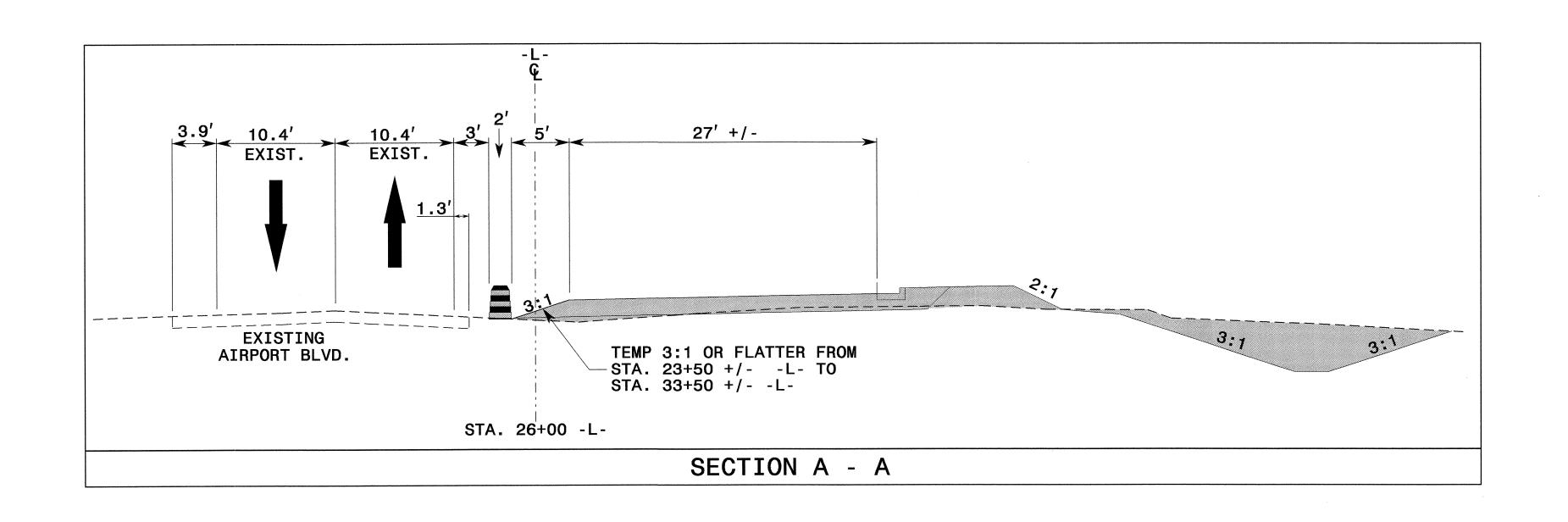
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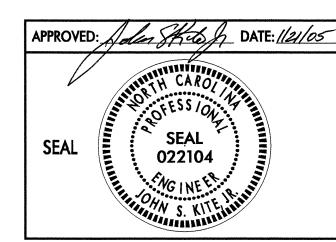


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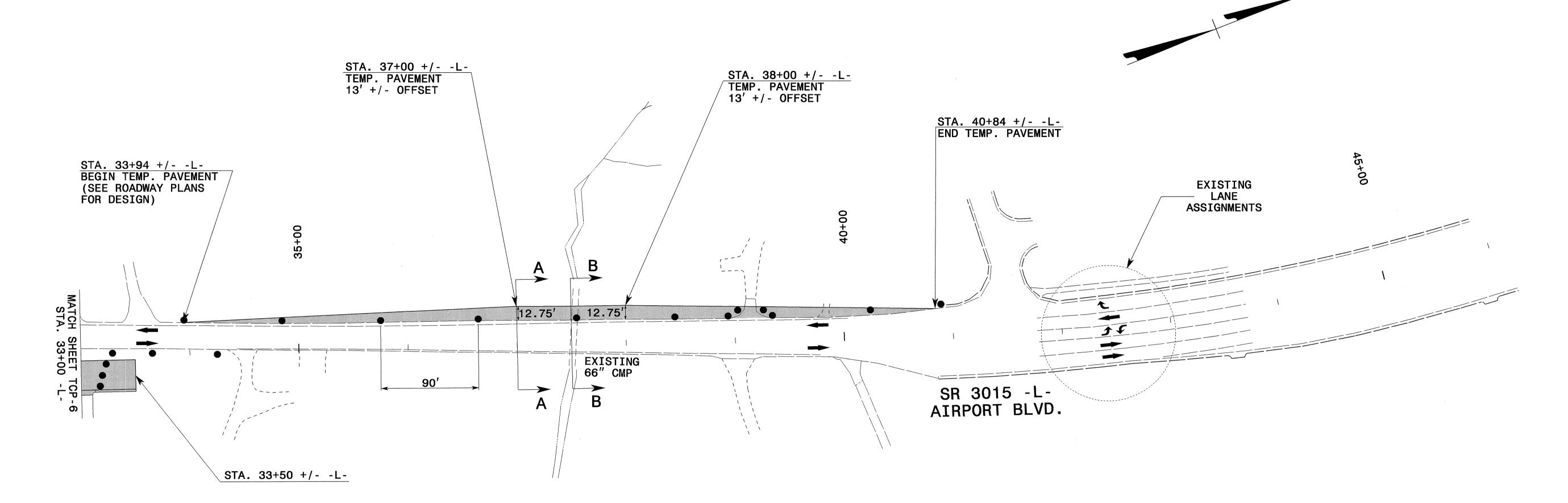
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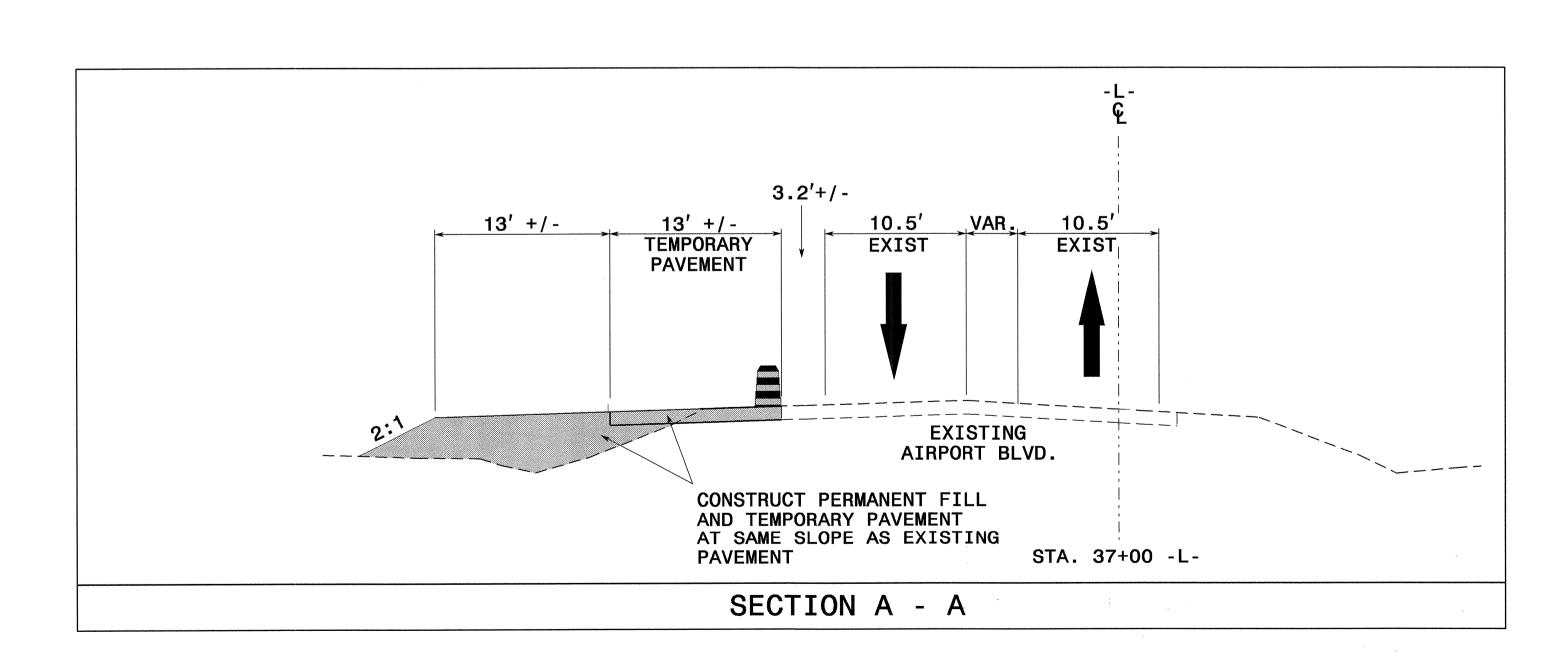
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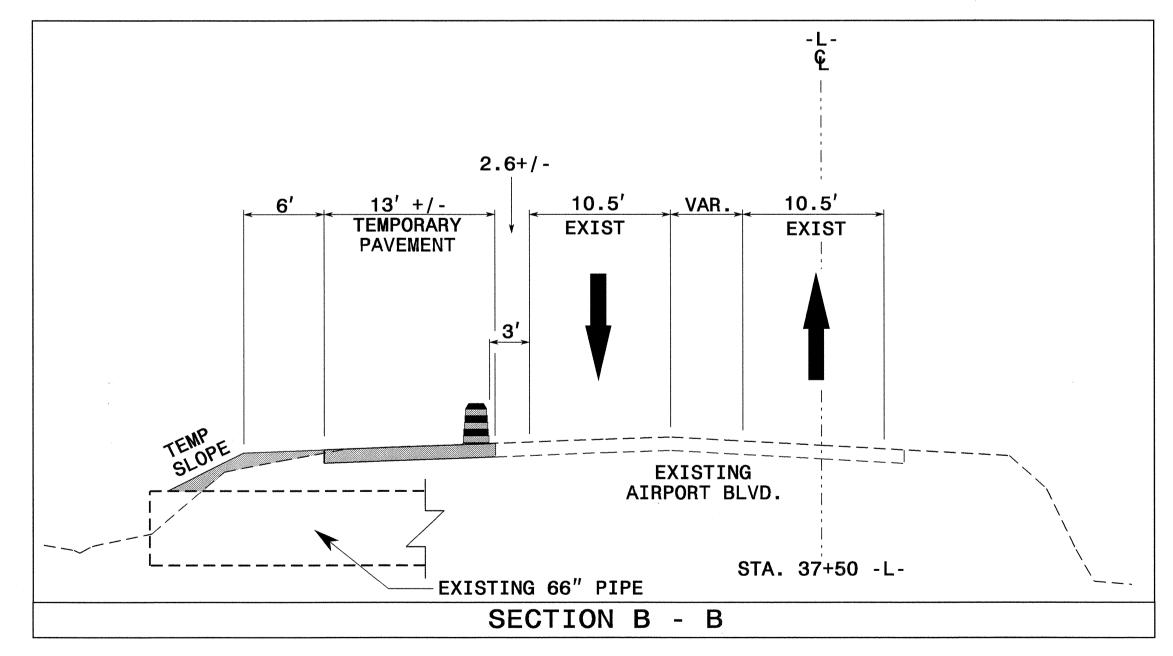
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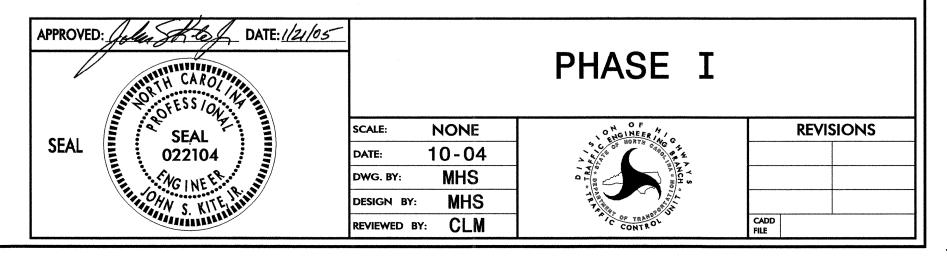
U-3344A

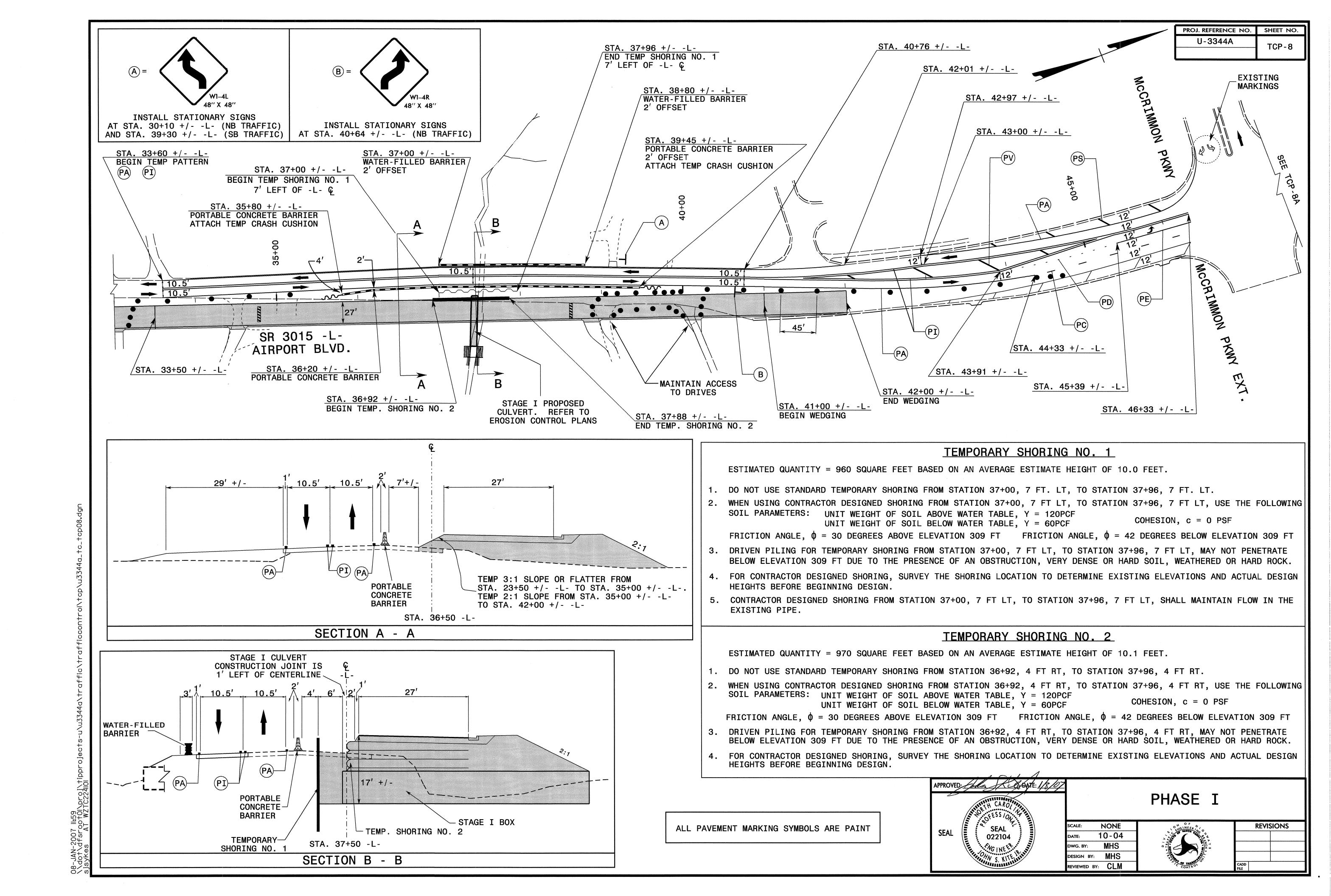
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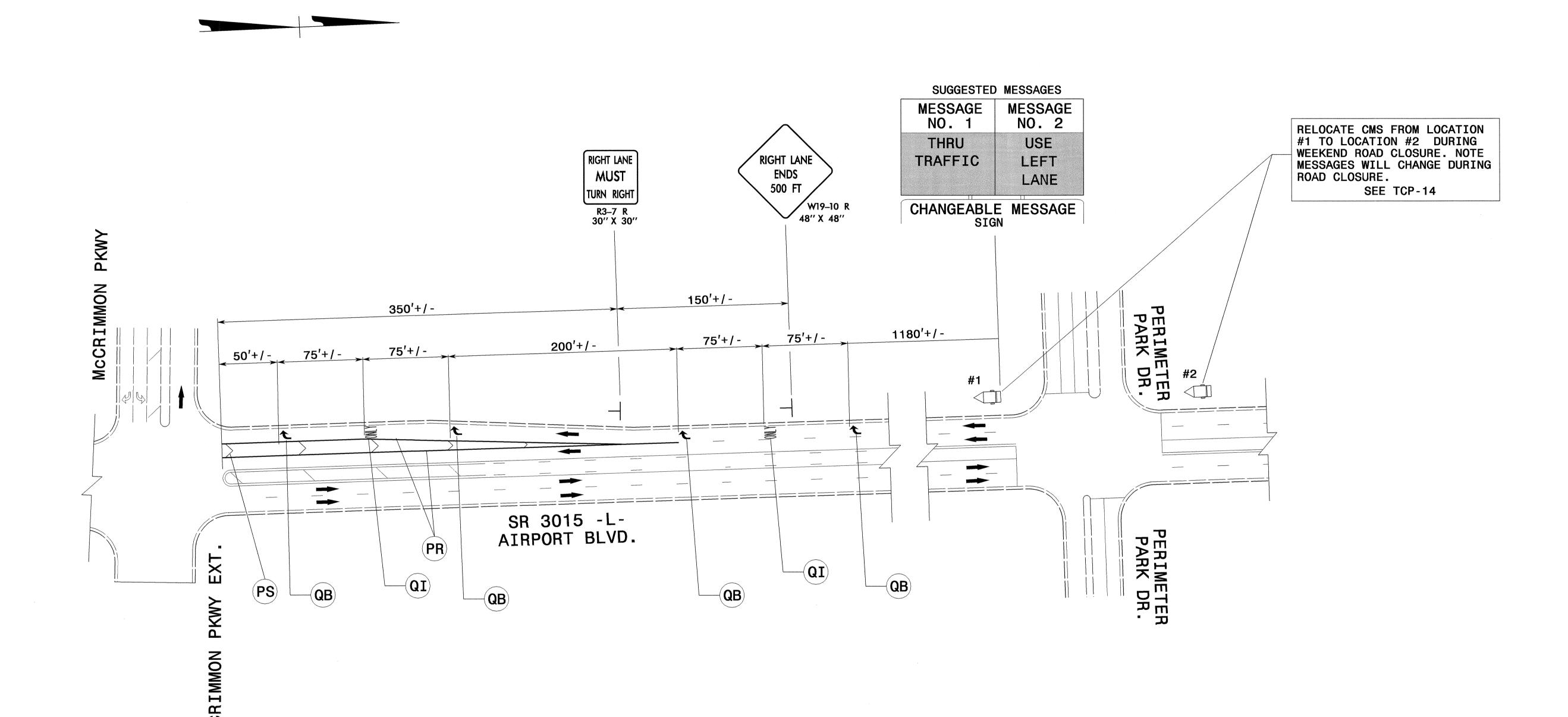


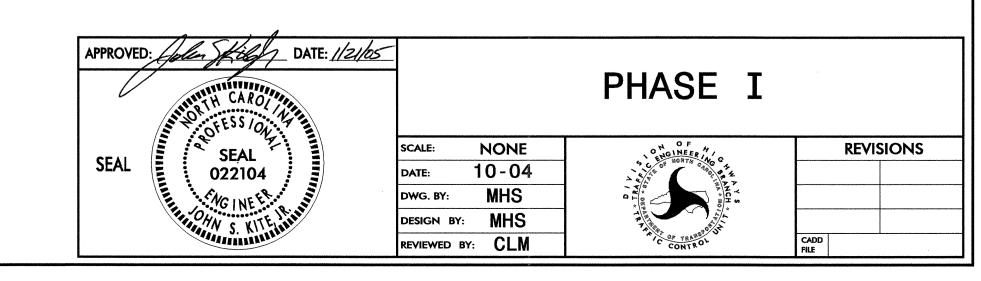


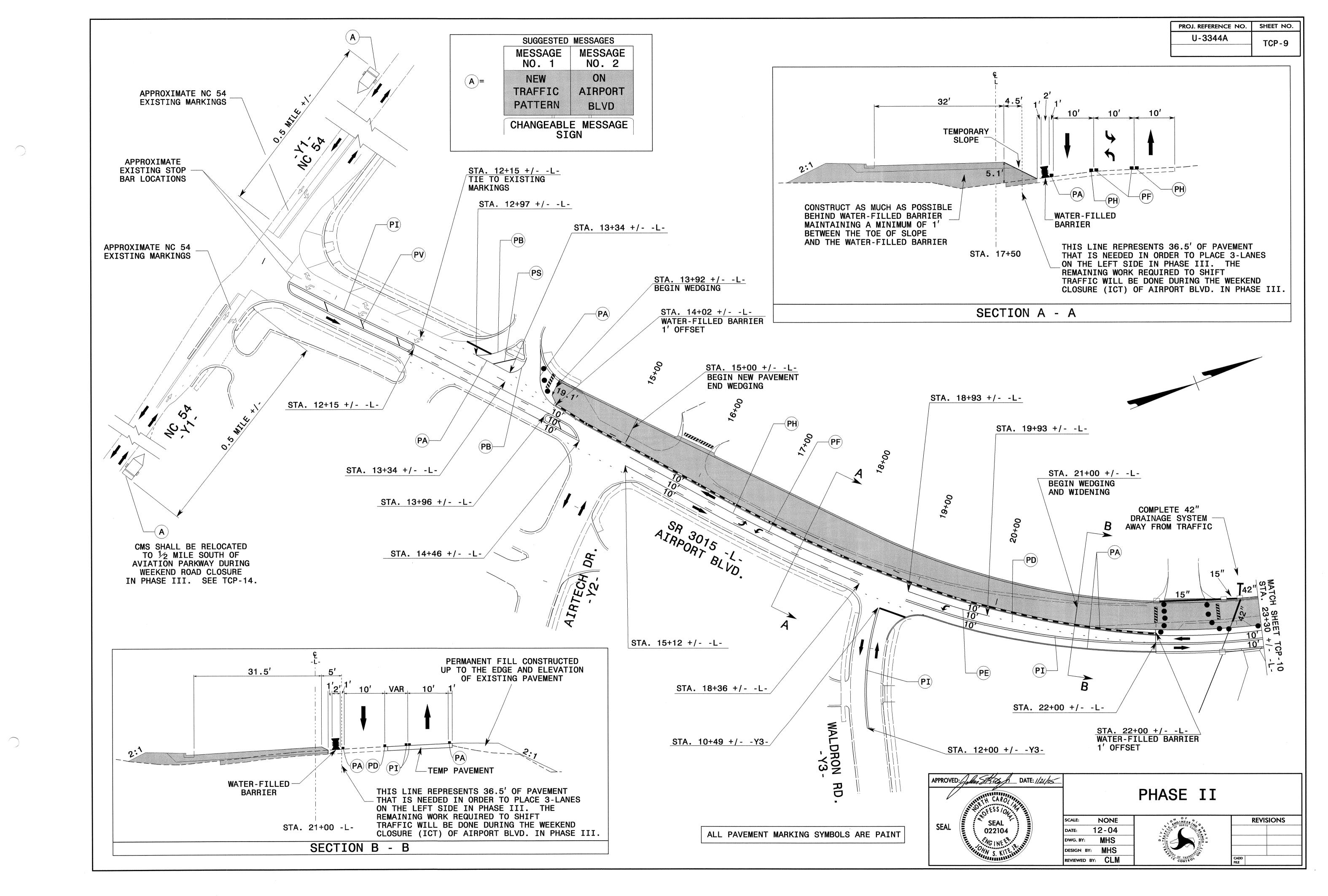




PROJ. REFERENCE NO.	SHEET NO.
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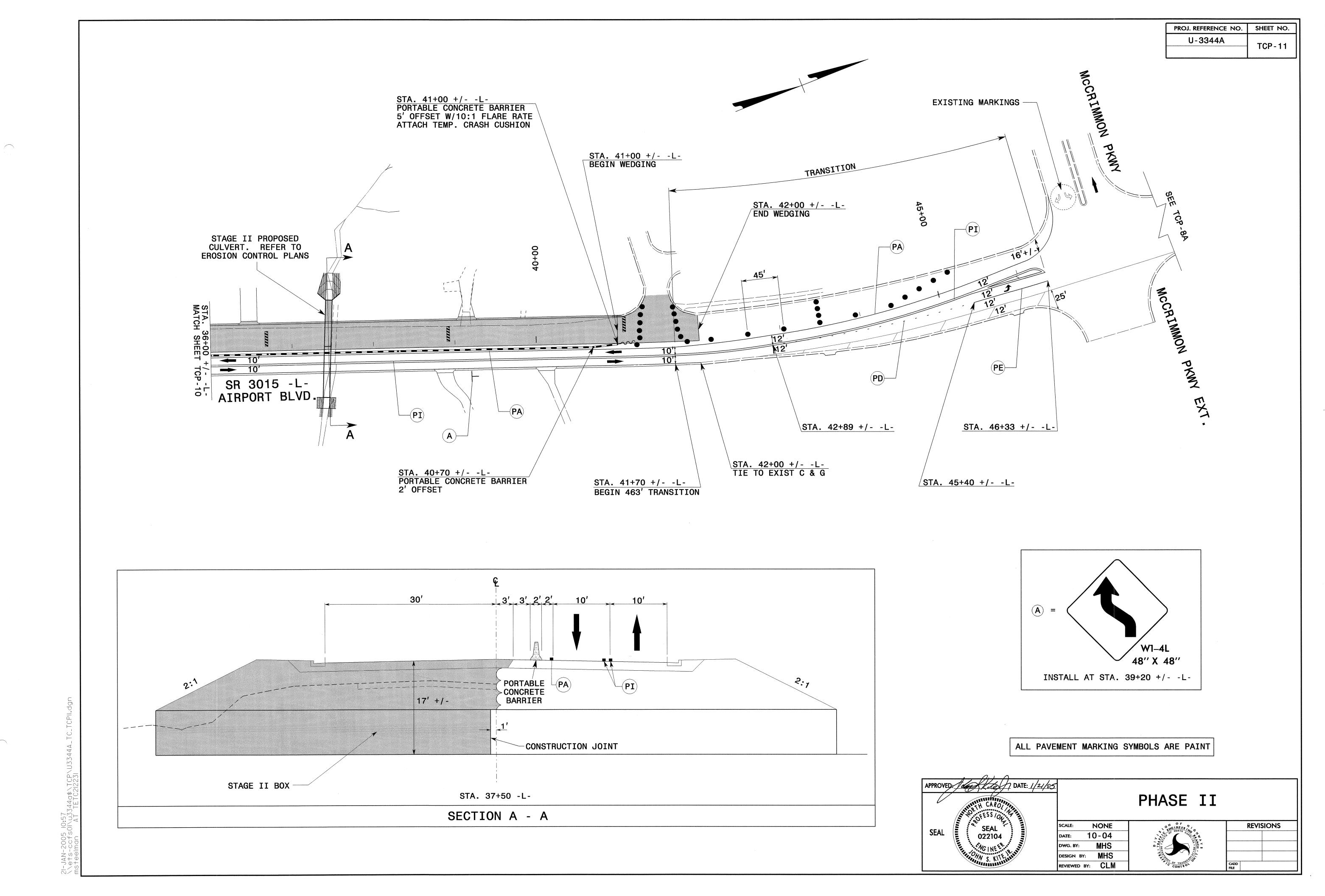


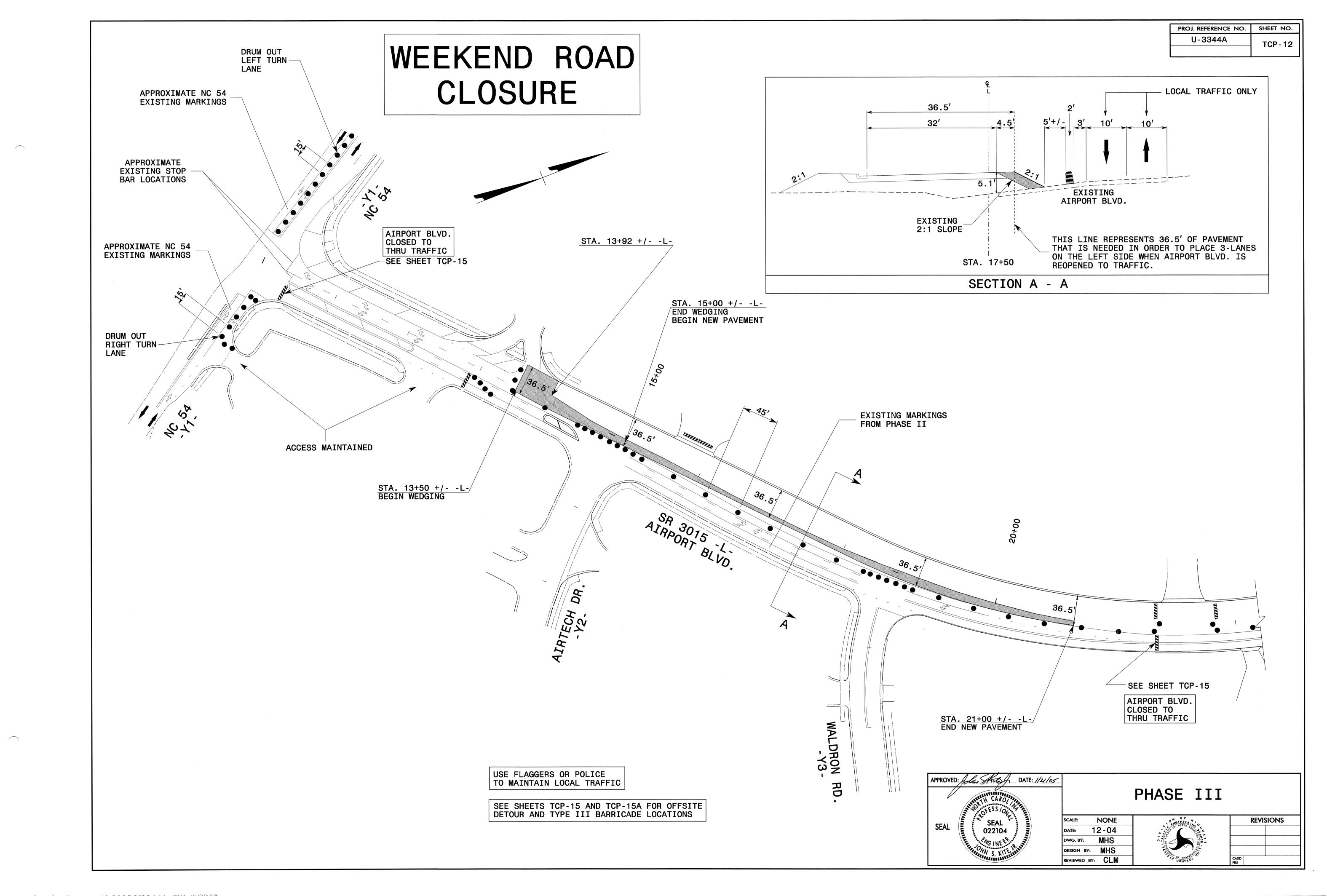


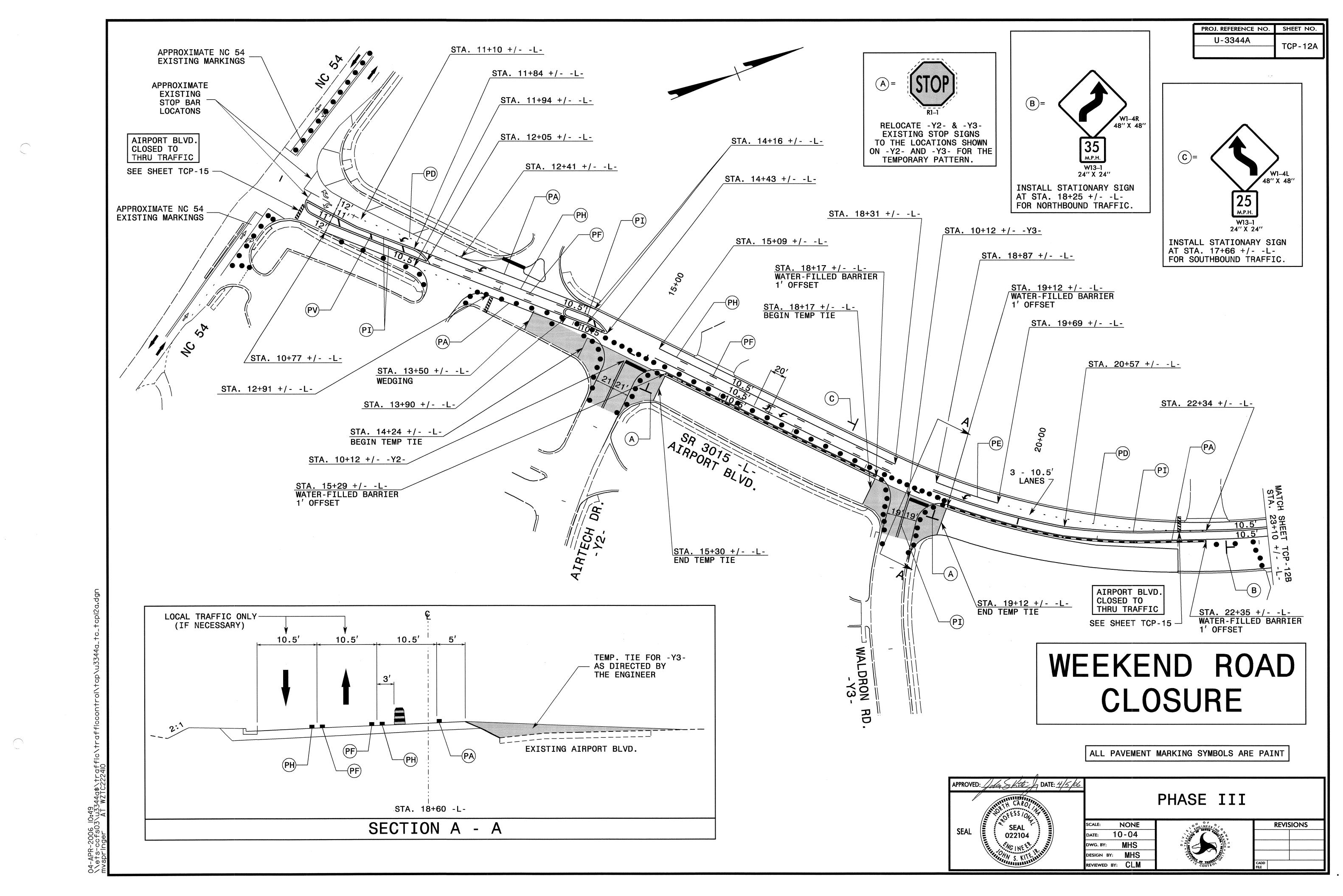


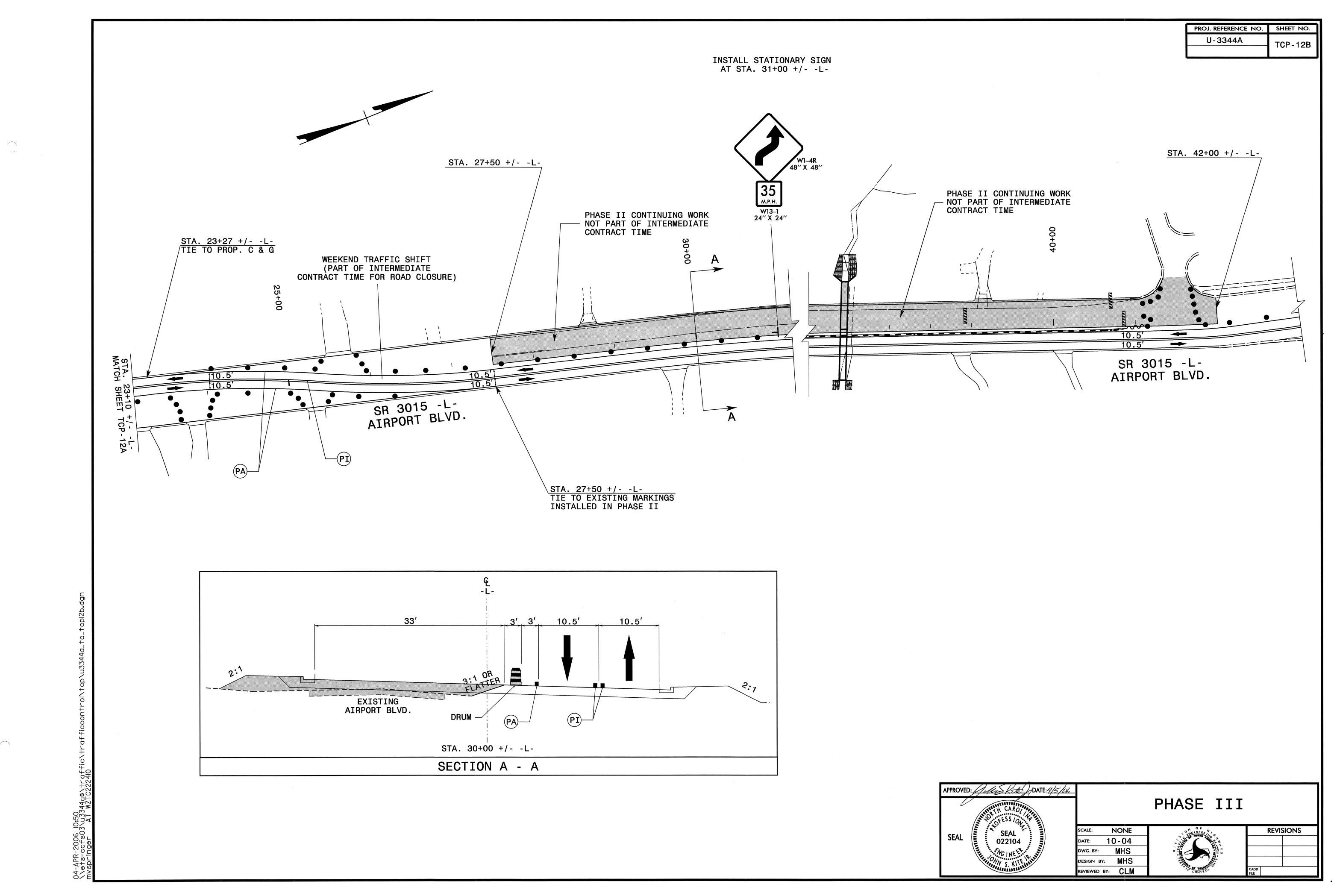
PROJ. REFERENCE NO. SHEET NO. U-3344A TCP-10 STA. 35+00 +/- -LPORTABLE CONCRETE BARRIER
2' OFFSET
ATTACH TEMP. CRASH CUSHION STA. 27+50 +/- -L-SR 3015 -L-AIRPORT BLVD. 33' EXISTING AIRPORT BLVD. STA. 30+00 +/- -L-SECTION A - A APPROVED: fales States DATE: 1/21/05 PHASE II REVISIONS 10-04

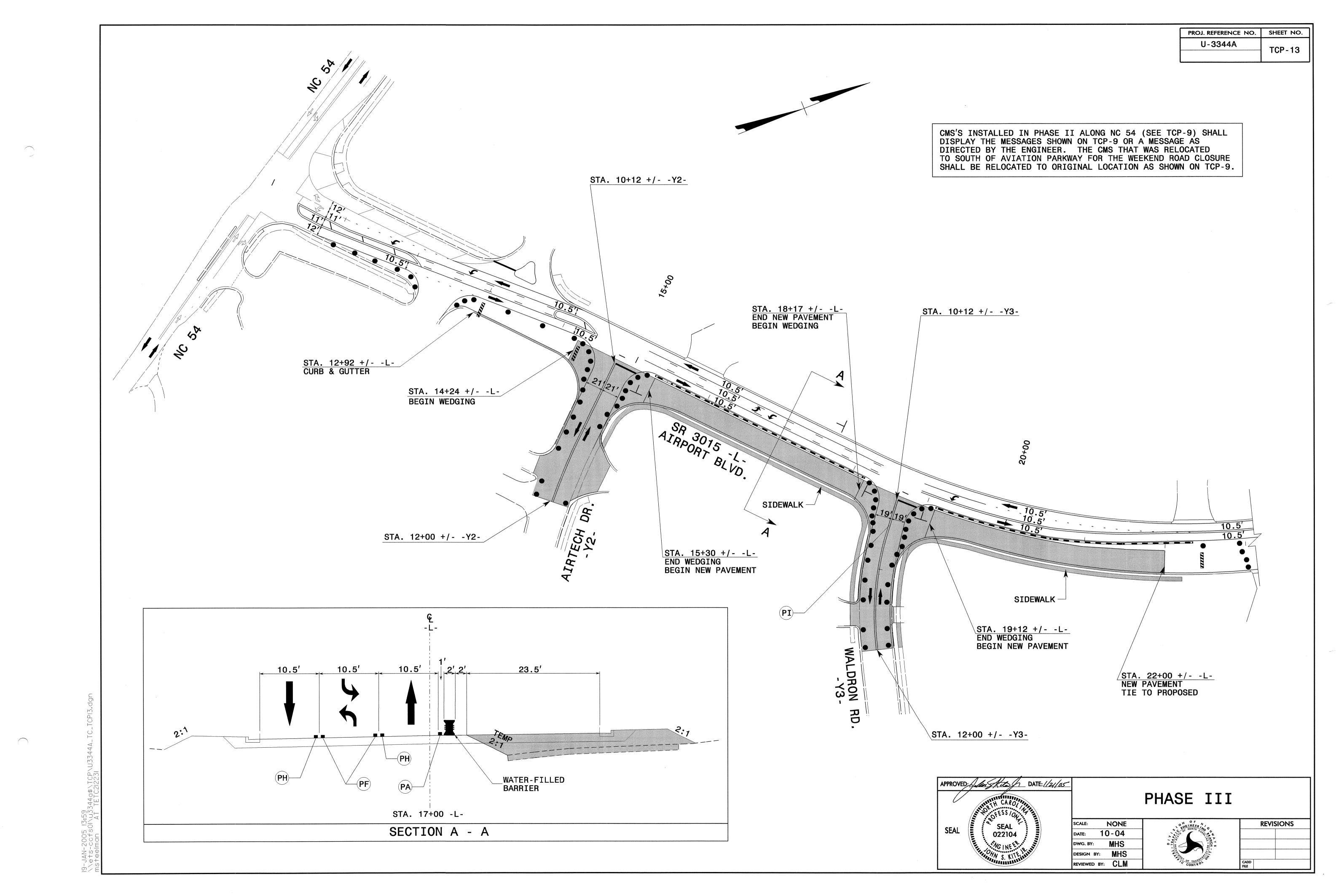
DESIGN BY: MHS
REVIEWED BY: CLM

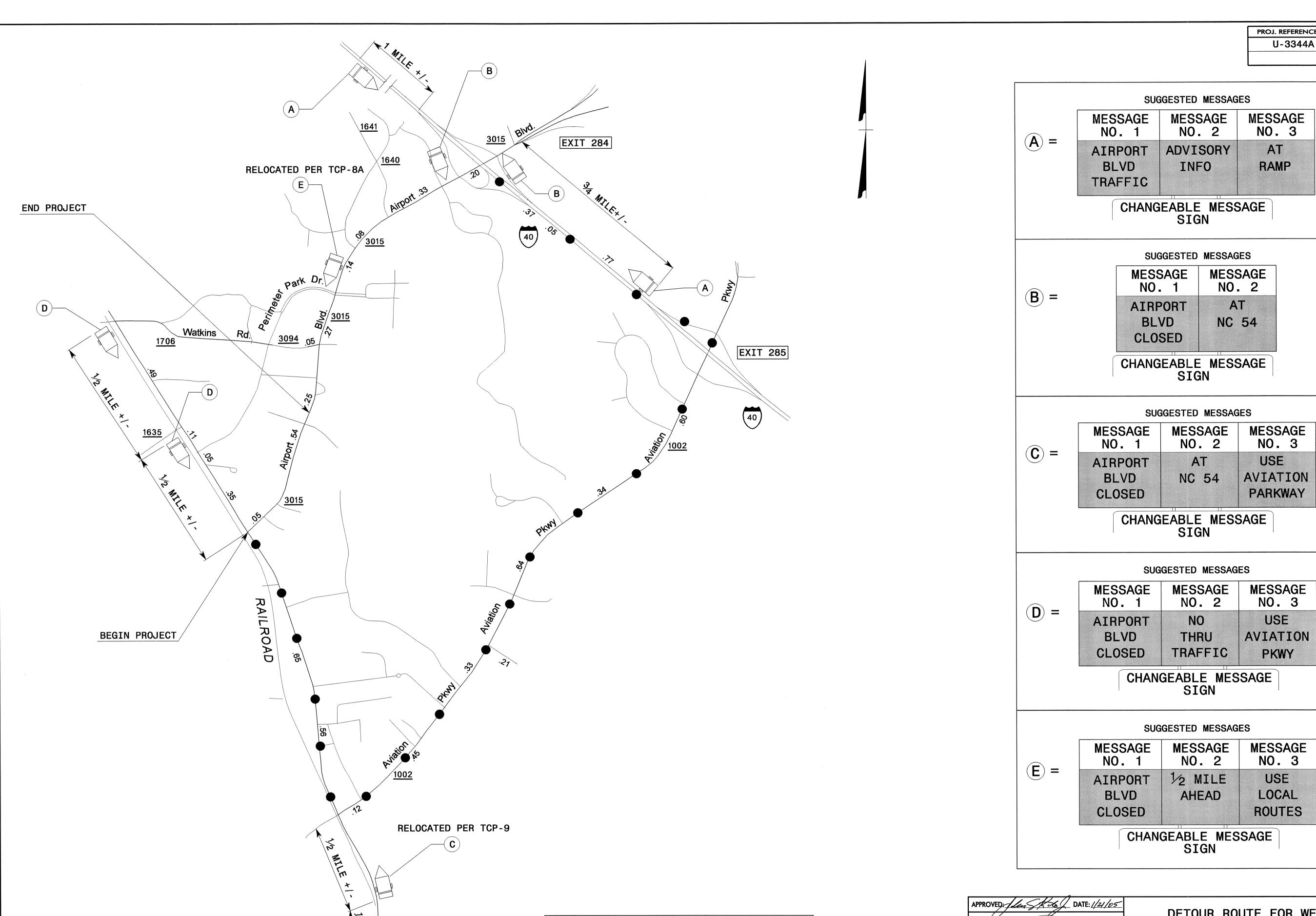












SEE TCP-15 FOR TYPE III BARRICADE LOCATIONS.

DETOUR ROUTE FOR WEEKEND CLOSURE OF AIRPORT BLVD.

PROJ. REFERENCE NO.

U-3344A

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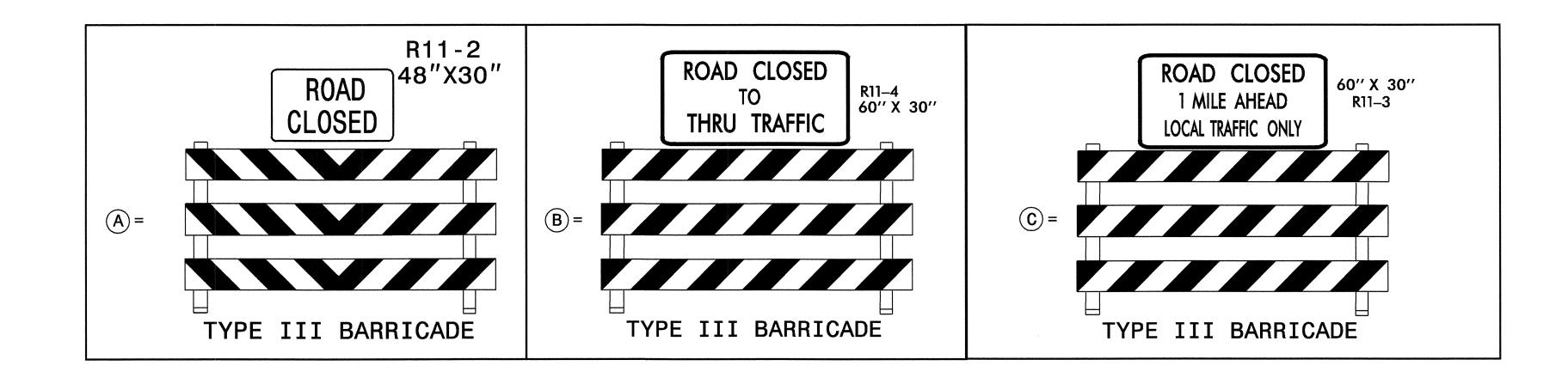
TCP-14

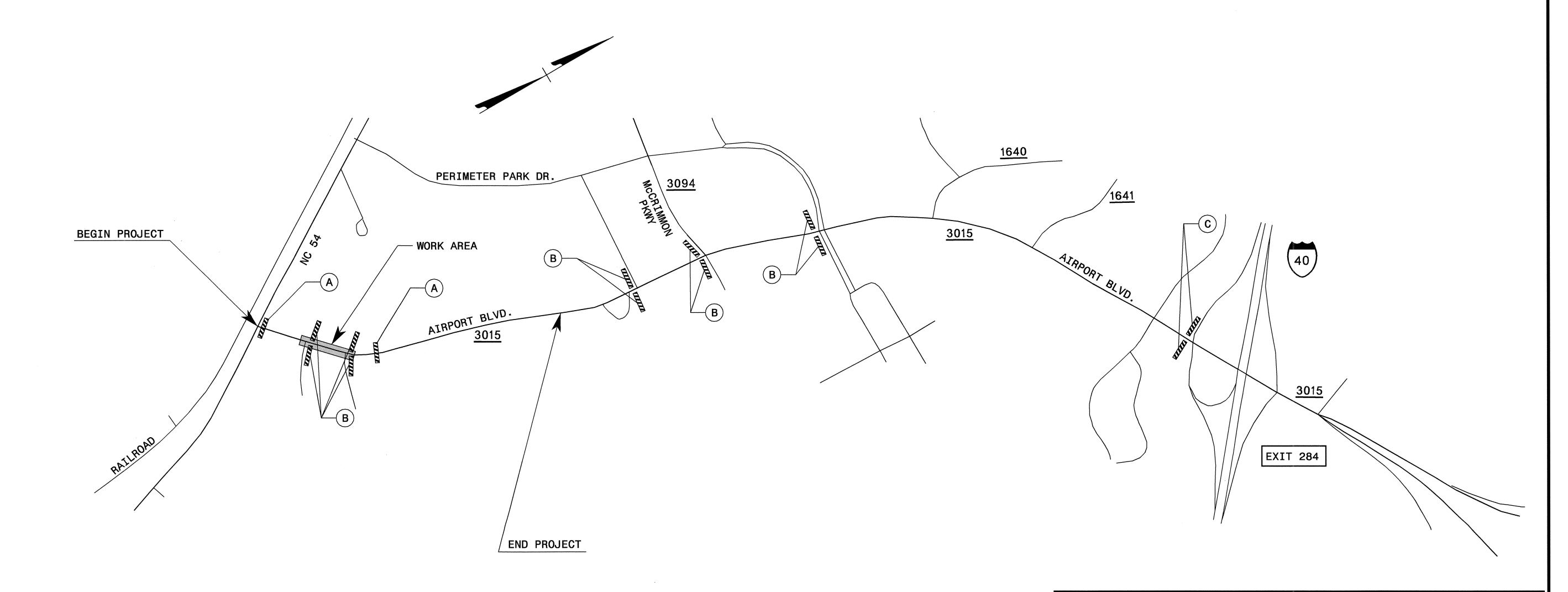
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TCP-15





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BARRICADE LOCATIONS FOR WEEKEND CLOSURE OF AIRPORT BLVD.

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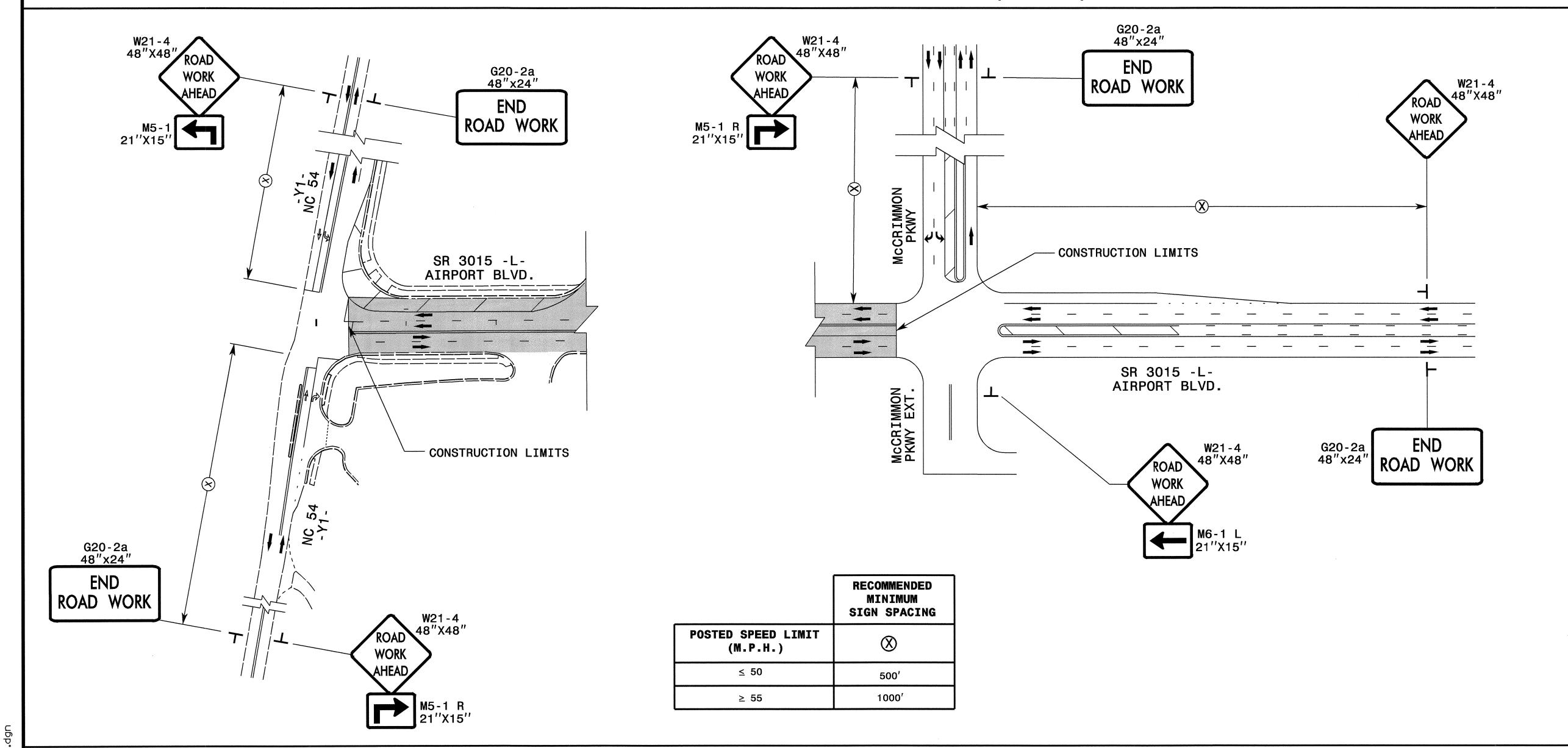
DEPT

CAROLINA

NORTH

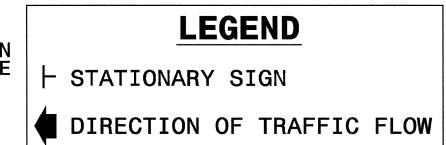
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TWO-WAY UNDIVIDED & URBAN FREEWAYS (L-LINES)

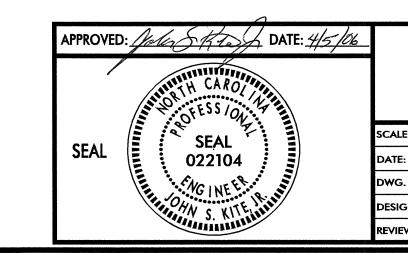


GENERAL NOTES

- USE FLUORESCENT ORANGE SHEETING (TYPE VII OR HIGHER) ON ALL ADVANCED WORK ZONE SIGNS.
- DO NOT INSTALL ADVANCE WARNING SIGNS MORE THAN 3 DAYS PRIOR TO BEGINNING OF WORK.
- SIGNS SHOWN ARE REQUIRED FOR WORK ZONES THAT WILL REMAIN IN EFFECT OVERNIGHT. FOR SHORT-TERM DAILY MAINTENANCE TYPE OPERATIONS, THIS SIGNING APPLICATION IS 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.



SHEET 1 OF 1



DETAIL DRAWING FOR TWO-WAY UNDIVIDED AND URBAN FREEWAYS ADVANCED WORK ZONE WARNING SIGNS

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