

GENERAL NOTES

CHANGES MAY BE REQUIRED WHEN PHYSICAL DIMENSIONS IN THE DETAIL DRAWINGS, STANDARD DETAILS, AND ROADWAY DETAILS ARE NOT ATTAINABLE TO MEET FIELD CONDITIONS OR RESULT IN DUPLICATE OR UNDESIRE 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
I-77 AND I-77 RAMPS	5 AM to 11 PM (EXCEPT SUNSET RD. RAMPS)

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

ROAD NAME
I-77 AND I-77 RAMPS

HOLIDAY

- FOR ANY UNEXPECTED OCCURRENCE THAT CREATES UNUSUALLY HIGH TRAFFIC VOLUMES, AS DIRECTED BY THE ENGINEER.
- FOR NEW YEAR'S, BETWEEN THE HOURS OF 5:00 A.M. DECEMBER 31st TO 11:00 P.M. JANUARY 2ND. IF NEW YEAR'S DAY IS ON A FRIDAY, SATURDAY, SUNDAY, OR MONDAY THEN UNTIL 11:00 P.M. THE FOLLOWING TUESDAY.
- FOR EASTER, BETWEEN THE HOURS OF 5:00 A.M. THURSDAY AND 11:00 P.M. MONDAY.
- FOR MEMORIAL DAY, BETWEEN THE HOURS OF 5:00 A.M. FRIDAY TO 11:00 P.M. TUESDAY.
- FOR INDEPENDENCE DAY, BETWEEN THE HOURS OF 5:00 A.M. THE DAY BEFORE INDEPENDENCE DAY AND 11:00 P.M. THE DAY AFTER INDEPENDENCE DAY.

IF INDEPENDENCE DAY IS ON A FRIDAY, SATURDAY, SUNDAY OR MONDAY THEN BETWEEN THE HOURS OF 5:00 A.M. THE THURSDAY BEFORE INDEPENDENCE DAY AND 11:00 P.M. THE TUESDAY AFTER INDEPENDENCE DAY.
- FOR LABOR DAY, BETWEEN THE HOURS OF 5:00 A.M. FRIDAY AND 11:00 P.M. TUESDAY.
- FOR THANKSGIVING DAY, BETWEEN THE HOURS OF 5:00 A.M. TUESDAY TO 11:00 P.M. MONDAY.
- FOR CHRISTMAS, BETWEEN THE HOURS OF 5:00 A.M. THE FRIDAY BEFORE THE WEEK OF CHRISTMAS DAY AND 11:00 P.M. THE FOLLOWING TUESDAY AFTER THE WEEK OF CHRISTMAS.
- FOR ANY NASCAR EVENT AT THE LOWES MOTOR SPEEDWAY, BETWEEN THE HOURS OF 5:00 A.M. THE (DAY) OF THE WEEK OF THE ANY NASCAR EVENT AT THE LOWES MOTOR SPEEDWAY AND 11:00 P.M. THE FOLLOWING (DAY) AFTER THE WEEK OF THE ANY NASCAR EVENT AT THE LOWES MOTOR SPEEDWAY.

C) DO NOT CLOSE ROADS AS FOLLOWS:

ROAD NAME	DAY AND TIME RESTRICTIONS
I-77 I-77 RAMPS (EXCEPT SUNSET RD. RAMPS)	ANYTIME 5a-11p

D) DO NOT STOP TRAFFIC AS FOLLOWS:

ROAD NAME	DAY AND TIME RESTRICTIONS	DURATION AND OPERATION
I-77 AND I-77 RAMPS	ANYTIME	ANYTIME

E) DO NOT USE MEDIAN CROSSOVERS AS FOLLOWS:

ROAD NAME	DAY AND TIME RESTRICTIONS
I-77 AND I-77 RAMPS	ANYTIME

F) 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

G) 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.

H) 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.

I) WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING WITHIN 5 FT OF AN OPEN TRAVEL LANE ON AN UNDIVIDED FACILITY, 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 WITHIN 10 FT OF AN OPEN TRAVEL LANE ON A DIVIDED FACILITY, CLOSE THE NEAREST OPEN TRAVEL LANE USING ROADWAY STANDARD DRAWING NO. 1101.02 UNLESS THE WORK AREA IS PROTECTED BY BARRIER OR GUARDRAIL.

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

K) USE SEQUENTIAL FLASHING WARNING LIGHTS ON DRUMS USED FOR THE MERGING TAPERS OF NIGHTTIME LANE CLOSURES IN ACCORDANCE WITH SECTION 1140 IN THE STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES.

L) NOTIFY THE NCDOT STATEWIDE TRANSPORTATION OPERATIONS CENTER (STOC) AT 877-627-7862 APPROXIMATELY 30 MINUTES PRIOR TO INSTALLING AND WITHIN 15 MINUTES AFTER REMOVING LANE CLOSURES ON INTERSTATES, FREEWAYS, CONTROLLED ACCESS FACILITIES, AND US ROUTES.

PAVEMENT EDGE DROP OFF REQUIREMENTS

M) INSTALL CONNECTED LANE CLOSURE SYSTEMS (CLCS) FOR ALL LANE CLOSURES ON I-77

N) 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.

TRAFFIC PATTERN ALTERATIONS

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

SIGNING

P) 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.

Q) 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.

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

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

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

TRAFFIC BARRIER

T) 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.

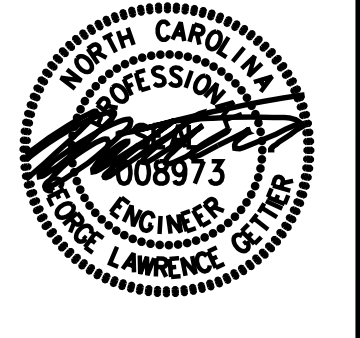
INSTALL TEMPORARY BARRIER WITH THE TRAFFIC FLOW BEGINNING WITH THE UPSTREAM SIDE OF TRAFFIC. REMOVE TEMPORARY BARRIER AGAINST THE TRAFFIC FLOW BEGINNING WITH THE DOWNSTREAM SIDE OF TRAFFIC.

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.

U) 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



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**GENERAL NOTES,
MANAGEMENT STRATEGIES,
OVERALL PHASING**

REVISIONS

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GENERAL NOTES

TRAFFIC CONTROL DEVICES

V) 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.

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

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

PAVEMENT MARKINGS AND MARKERS

Y) EXCEPT FOR SUNSET RD. RAMPS TO I-77, INSTALL TEMPORARY PAVEMENT MARKINGS, AT THE END OF THE ALLOWED WORK PERIOD, IF THE WORK HAS NOT BEEN COMPLETED, AND REOPEN THE RAMPS TO TRAFFIC.

ROAD NAME	MARKING	MARKER
I-77 RAMPS	PAINT	NONE

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

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

MISCELLANEOUS

BB) USE LAW ENFORCEMENT TO MAINTAIN TRAFFIC THROUGH THE WORK AREA AND OR INTERSECTIONS AS SHOWN IN PLANS OR AS DIRECTED BY THE ENGINEER.

CC) ALL DIMENSIONS AND STATIONS IN THE TRANSPORTATION MANAGEMENT PLAN ARE APPROXIMATE (+/-); FIELD ADJUST AS NECESSARY OR AS DIRECTED BY THE ENGINEER.

DD) CHANGEABLE MESSAGE SIGN MESSAGES SHOWN ARE EXAMPLES. OTHER MESSAGES MAY BE USED AS CONDITIONS WARRANT. ALL MESSAGES AND LOCATIONS MUST BE APPROVED BY THE ENGINEER PRIOR TO INCORPORATING

MANAGEMENT STRATEGIES

THIS PROJECT CONSISTS OF REHABILITATION AND RECONSTRUCTION OF 16 EXISTING RAMPS AND LOOPS ON I-77. WORK WILL TAKE PLACE AT NIGHT, WITH TRAFFIC DETOURED OFF-SITE. WHERE POSSIBLE, THE DETOURS WILL BE ROUTED TO THE NEAREST INTERCHANGE ON I-77. NO MORE THAN ONE RAMP/LOOP WILL BE CLOSED SIMULTANEOUSLY AT ANY GIVEN INTERCHANGE. LANE CLOSURES MAY BE IMPLEMENTED, IF WORK IS CLOSE TO TRAFFIC.

THE FOLLOWING LISTED WORK ZONE STRATEGIES ARE RECOMMENDED FOR INCLUSION WITHIN THIS TRANSPORTATION MANAGEMENT PLAN (TMP).

RECOMMENDED STRATEGIES:

TRAFFIC MANAGEMENT STRATEGIES:

- FULL ROADWAY CLOSURES
- LANE SHIFTS OR CLOSURES
- SHOULDER CLOSURES
- RAMP CLOSURES / RELOCATION
- NIGHT WORK
- WEEKEND WORK
- WORK HOUR RESTRICTIONS FOR PEAK TRAVEL
- OFF-SITE DETOURS / USE OF ALTERNATIVE ROUTES
- COORDINATION WITH ADJACENT CONSTRUCTION SITE(S)

TRAFFIC / INCIDENT MANAGEMENT & SPEED ENFORCEMENT STRATEGIES:

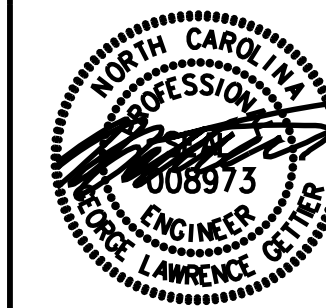
- COORDINATION WITH STATE TRAFFIC OPERATIONS CENTER (STOC)
- COORDINATION WITH MEDIA
- LOCAL DETOUR ROUTES

CONTRACTING & INNOVATIVE CONSTRUCTION STRATEGIES:

- INTERMEDIATE CONTRACT TIMES / LIQUIDATED DAMAGES

OVERALL PHASING

ALL WORK WILL TAKE PLACE AT NIGHT. NO MORE THAN ONE RAMP OR LOOP MAY BE CLOSED SIMULTANEOUSLY AT A SINGLE INTERCHANGE. EACH AREA (INTERCHANGE RAMP OR LOOP) HAS ITS OWN PHASING AND DETOUR MAP ON THE SHEETS WHICH FOLLOW. MULTIPLE RAMP CLOSURES ARE ALLOWED DURING EACH NIGHT OPERATIONS AS APPROVED BY THE I-77 MOBILITY PARTNERS AND NCDOT. THE CONTRACTOR MAY WORK AT MORE THAN ONE OF THE INTERCHANGES AT A TIME, IN ANY SEQUENCE, UNLESS THERE IS A CONFLICT WITH DETOUR ROUTING, AS IS SPECIFIED IN THE INDIVIDUAL RAMP/LOOP PHASING. SEE (SHEETS TMP-4 THRU TMP-19 FOR SPECIFIC PHASING OF EACH AREA (INTERCHANGE RAMP OR LOOP).



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UNLESS ALL SIGNATURES COMPLETED**

**GENERAL NOTES,
MANAGEMENT STRATEGIES,
OVERALL PHASING**

REVISIONS
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**SUNSET RD (US21) RAMP TO I-77 S RAMP
TRAFFIC CONTROL PHASING**

NOTE: I-77 N EXIT 18 TO W.T. HARRIS BLVD AND W.T. HARRIS BLVD EXIT TO I-77 S ON-RAMP SHALL NOT BE CLOSED DURING THIS CONSTRUCTION.

NOTE: THE CONTRACTOR SHALL NOTIFY THE ENGINEER ONE WEEK IN ADVANCE OF THE CLOSURE OR RE-OPENING EITHER OF THE SUNSET RD TO I-77 ON-RAMPS, TO ALERT THE CITY OF CHARLOTTE REGARDING NEED TO PULL THE DETECTOR CARDS OR BAG SIGNAL HEADS FOR LEFT TURN LANES ON SUNSET. THE CONTRACTOR SHALL INSTALL DRUMS AND SIGNING TO COMPLETELY CLOSE THE LEFT TURN LANE.

STEP 1: INSTALL ADVANCED WORK ZONE WARNING SIGNS ON SUNSET RD. AND I-77, ACCORDING TO R.S.D. 1101.01, SHEETS 1 AND 3 OF 3.

STEP 2: PLACE CHANGEABLE MESSAGE SIGNS (CMS) ON SUNSET RD, AS SHOWN ON THIS SHEET, AND AS DIRECTED BY THE ENGINEER. (THE SAME CMS SIGNS MAY ALSO BE USED SEVERAL DAYS IN ADVANCE, TO DISPLAY DATE AND TIME DURATION OF RAMP CLOSURE(S).) PLACE STATIONARY SIGNING AS SHOWN ON THIS SHEET, LOCATED AS DIRECTED BY THE ENGINEER. (KEEP SIGNS COVERED UNTIL NEEDED FOR RAMP CLOSURE).

ICT

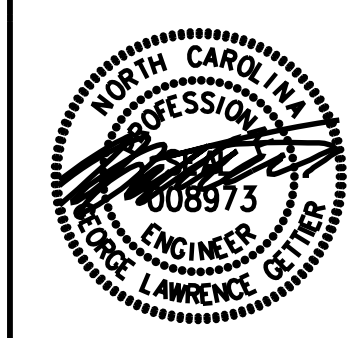
THE NB & SB SUNSET RAMPS TO I-77 SHOWN ON TMP-4 AND TMP-5 MAY BE CONSTRUCTED CONSECUTIVELY, IN EITHER SEQUENCE, BUT SHALL NOT BE CLOSED CONCURRENTLY. COMPLETE ALL WORK OF BOTH NB & SB SUNSET ROAD RAMPS TO I-77, STEPS 3 THROUGH 5, SHOWN ON SHEETS TMP-4 AND TMP-5, IN 60 CONSECUTIVE CALENDAR DAYS. THIS TIME SHALL BEGIN WHEN THE FIRST RAMP IS CLOSED AND NOT END UNTIL ALL THE WORK ON TMP-4 AND TMP-5 IS COMPLETE.

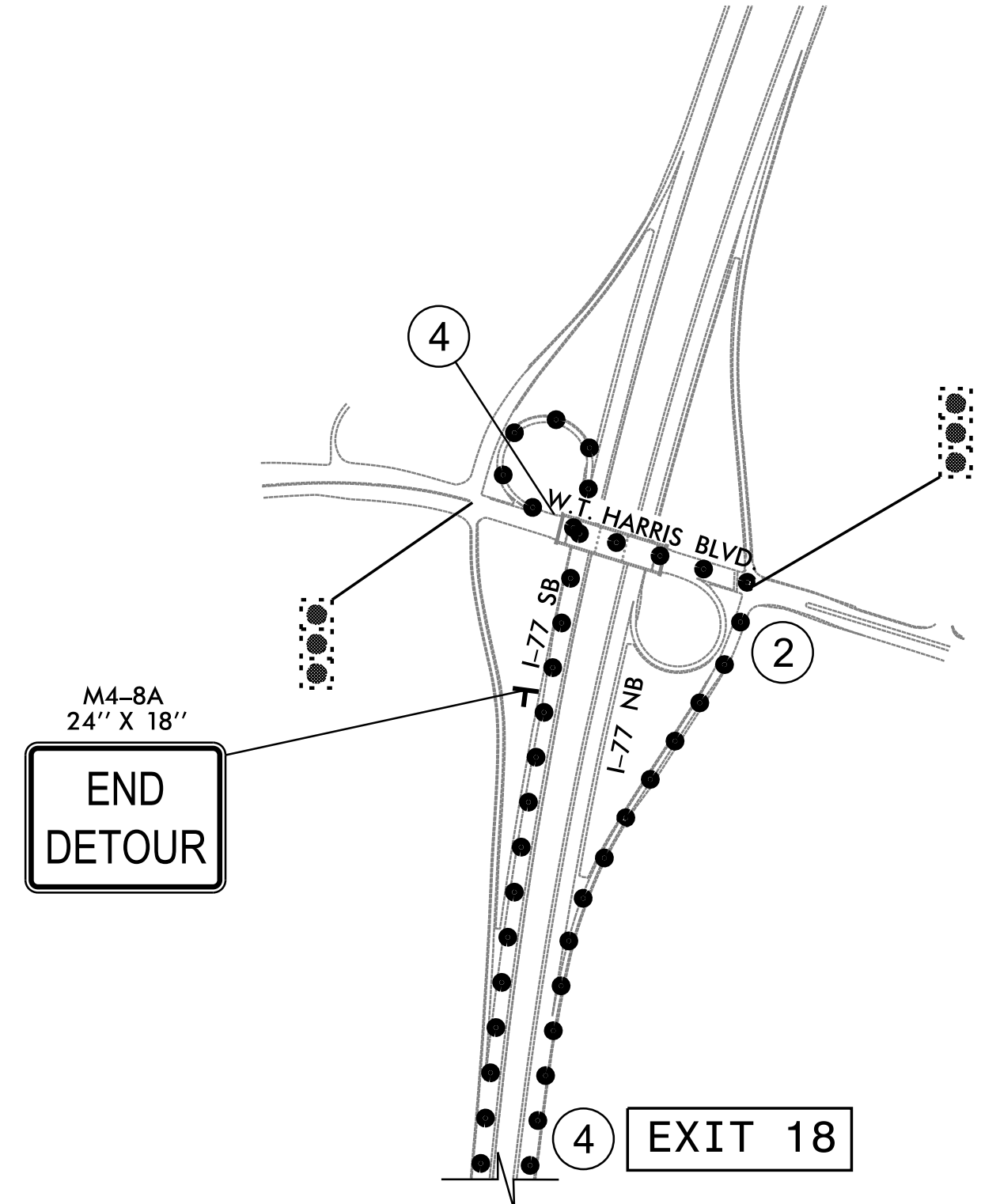
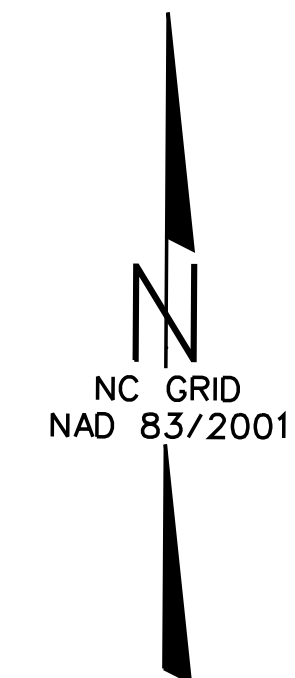
SEE PROJECT PROPOSAL FOR ICT AND LIQUIDATED DAMAGES

STEP 3: INSTALL PORTABLE CONCRETE BARRIER ALONG I-77 S AS SHOWN ON SHEET TMP-20. (SEE R.S.D. 1101.02 SHEET 4 OF 19, 1101.11 SHEET 3 OF 4 AND 1101.04 SHEET 1 OF 2). INSTALL DRUMS & TYPE III BARRICADES, WITH R11-2 AND M4-10L SIGNS ATTACHED, TO CLOSE THE SUNSET RD. RAMP TO I-77 S RAMP TO TRAFFIC. THE WB SUNSET RD. LEFT-TURN LANE SHALL BE ENTIRELY CLOSED (SEE FOR RAMPS AND TURN LANES CLOSURES, R.S.D. 1101.02 SHEETS 3,7 & 12)

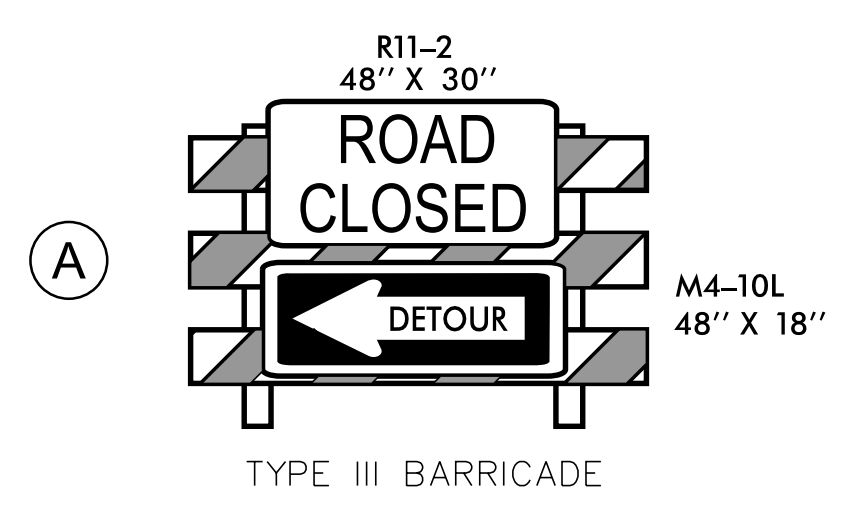
STEP 4: AWAY FROM TRAFFIC, CONSTRUCT SUNSET RD.RAMP TO I-77 S, AS SHOWN IN ROADWAY PLANS. USE LANE OR SHOULDER CLOSURES ON SUNSET ROAD AND/OR I-77, IF REQUIRED, AS OUTLINED IN THE GENERAL NOTES.

STEP 5: WHEN CONSTRUCTION IS COMPLETE, INSTALL TEMPORARY PAVEMENT MARKING PAINT, (LOCATED AS SHOWN IN THE PAVEMENT MARKING PLANS FOR PERMANENT MARKINGS). REMOVE ALL TRAFFIC CONTROL DEVICES AND OPEN THE SUNSET RD. RAMP TO I-77 S FOR TRAFFIC.

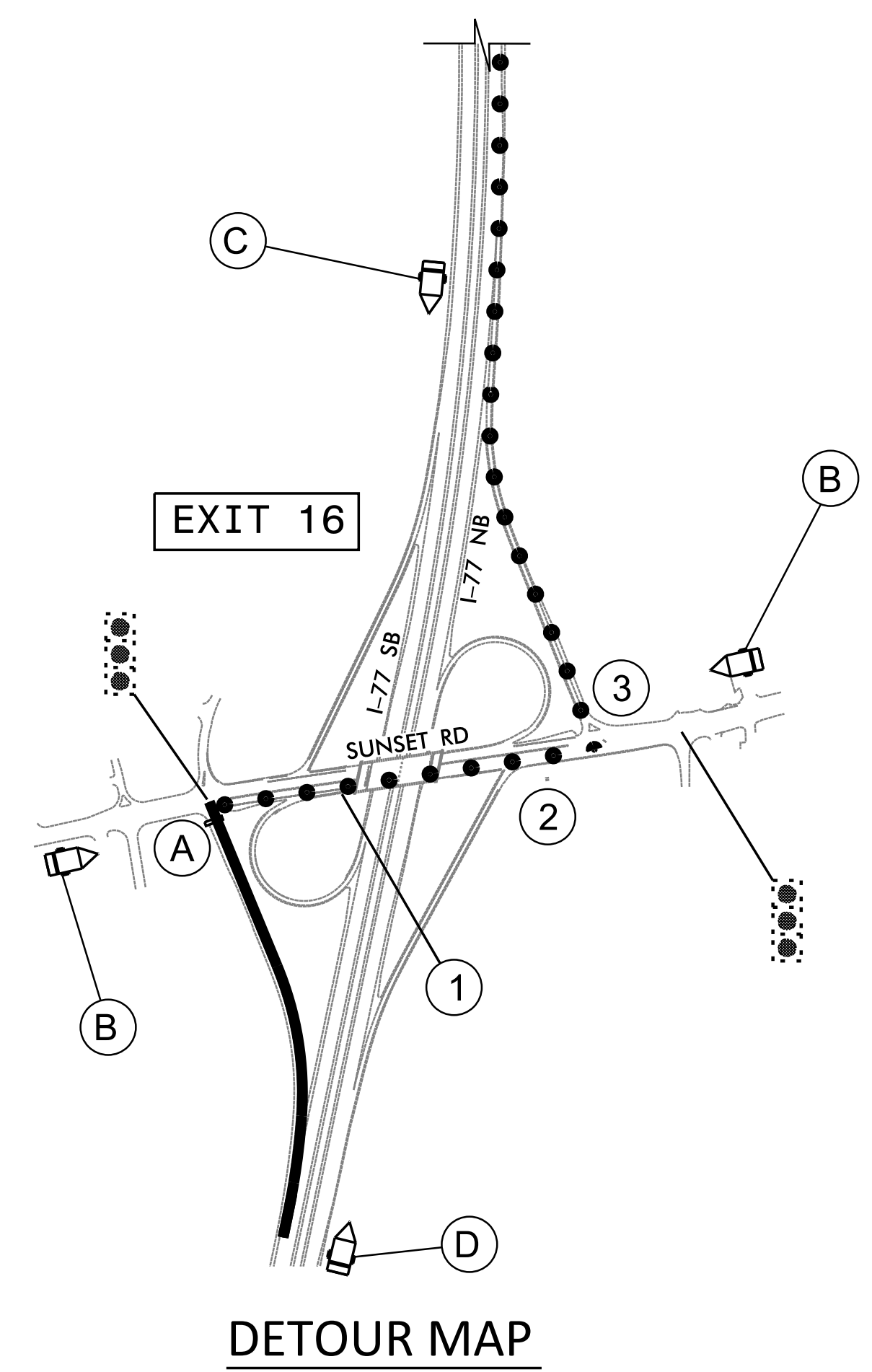
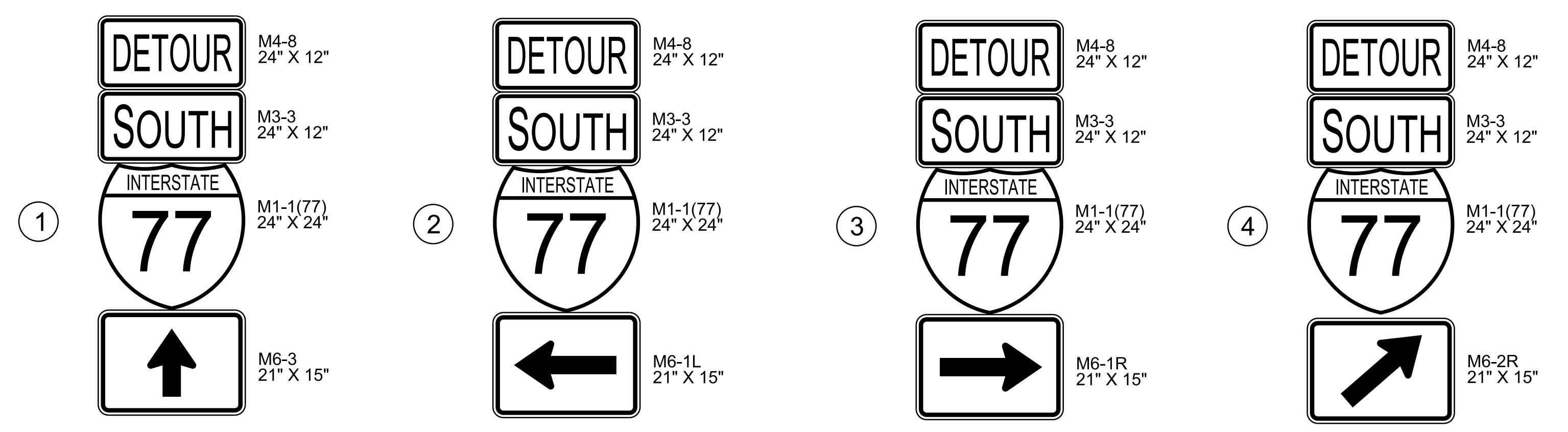
PROJECT REFERENCE NO. I-5405D	SHEET NO. TMP-4
	
<p>DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED</p>	



REVISIONS



PORTABLE CMS		FOR ADVANCE NOTICE OF RAMP CLOSURE	
<p>(A) CMS MESSAGE 1: I-77 S RAMP CLOSED</p> <p>(B) CMS MESSAGE 2: FOLLOW DETOUR AHEAD</p>	<p>(C) CMS MESSAGE 1: EXITS 16 NO RETURN</p> <p>(D) CMS MESSAGE 2: I-77 S RAMP CLOSED</p>	<p>(B) CMS MESSAGE 1: RAMP FROM US 21</p> <p>(C) CMS MESSAGE 2: TO I-77 S CLOSED</p>	<p>(B) CMS MESSAGE 1: I-77 S RAMP CLOSED</p> <p>(C) CMS MESSAGE 2: BEGINNING (DAY OF WEEK) - / - / -</p>



**SUNSET RD. (US21)
RAMP TO SB I-77
PHASING & DETOUR PLAN**

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**SUNSET RD (US21) TO I-77 N RAMP
TRAFFIC CONTROL PHASING**

NOTE: I-77 S EXIT 12 TO LASALLE ST. AND LASALLE ST EXIT TO I-77 N ON-RAMP SHALL NOT BE CLOSED DURING THIS CONSTRUCTION.

NOTE: THE CONTRACTOR SHALL NOTIFY THE ENGINEER ONE WEEK IN ADVANCE OF THE CLOSURE OR RE-OPENING EITHER OF THE SUNSET RD TO I-77 ON-RAMPS, TO ALERT THE CITY OF CHARLOTTE REGARDING NEED TO PULL THE DETECTOR CARDS OR BAG SIGNAL HEADS FOR LEFT TURN LANES ON SUNSET. THE CONTRACTOR SHALL INSTALL DRUMS AND SIGNING TO COMPLETELY CLOSE THE LEFT TURN LANE.

STEP 1: INSTALL ADVANCED WORK ZONE WARNING SIGNS ON SUNSET AVE. AND I-77 ACCORDING TO R.S.D. 1101.01, SHEETS 1 AND 3 OF 3.

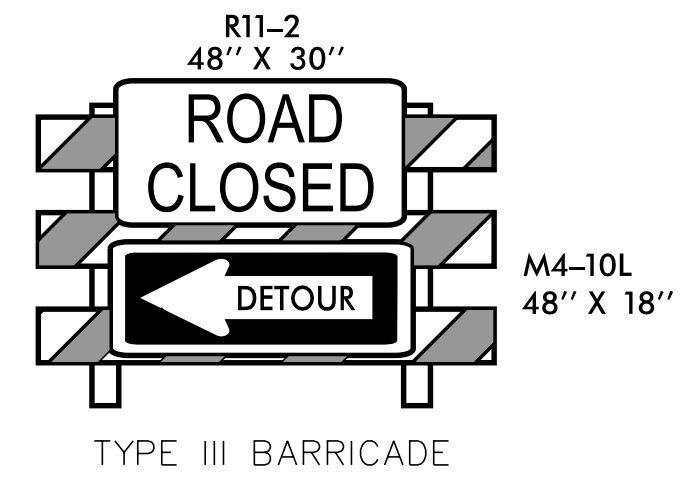
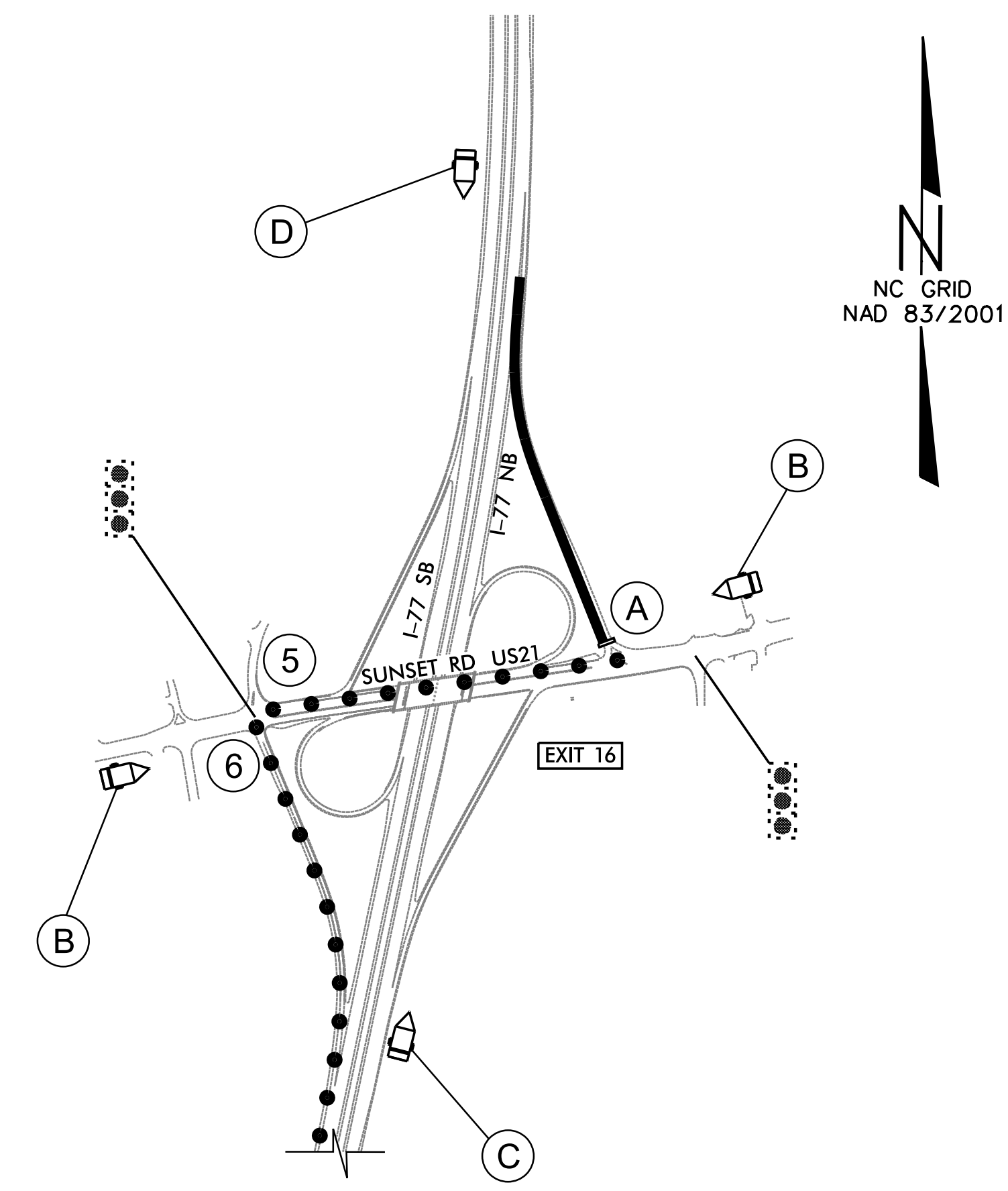
STEP 2: PLACE CHANGEABLE MESSAGE SIGNS (CMS) ON SUNSET RD., AS SHOWN ON THIS SHEET, AND AS DIRECTED BY THE ENGINEER. (THE SAME CMS SIGNS MAY ALSO BE USED SEVERAL DAYS IN ADVANCE, TO DISPLAY DATE AND TIME DURATION OF RAMP CLOSURE(S).) PLACE STATIONARY SIGNING AS SHOWN ON THIS SHEET, LOCATED AS DIRECTED BY THE ENGINEER. (KEEP SIGNS COVERED UNTIL NEEDED FOR RAMP CLOSURE).

ICT
THE NB & SB SUNSET RAMPS TO I-77 SHOWN ON TMP-4 AND TMP-5 MAY BE CONSTRUCTED CONSECUTIVELY, IN EITHER SEQUENCE, BUT SHALL NOT BE CLOSED CONCURRENTLY.
COMPLETE ALL WORK OF BOTH NB & SB SUNSET ROAD RAMPS TO I-77, STEPS 3 THROUGH 5, SHOWN ON SHEETS TMP-4 AND TMP-5, IN 60 CONSECUTIVE CALENDAR DAYS. THIS TIME SHALL BEGIN WHEN THE FIRST RAMP IS CLOSED AND NOT END UNTIL ALL THE WORK ON TMP-4 AND TMP-5 IS COMPLETE.
SEE PROJECT PROPOSAL FOR ICT AND LIQUIDATED DAMAGES

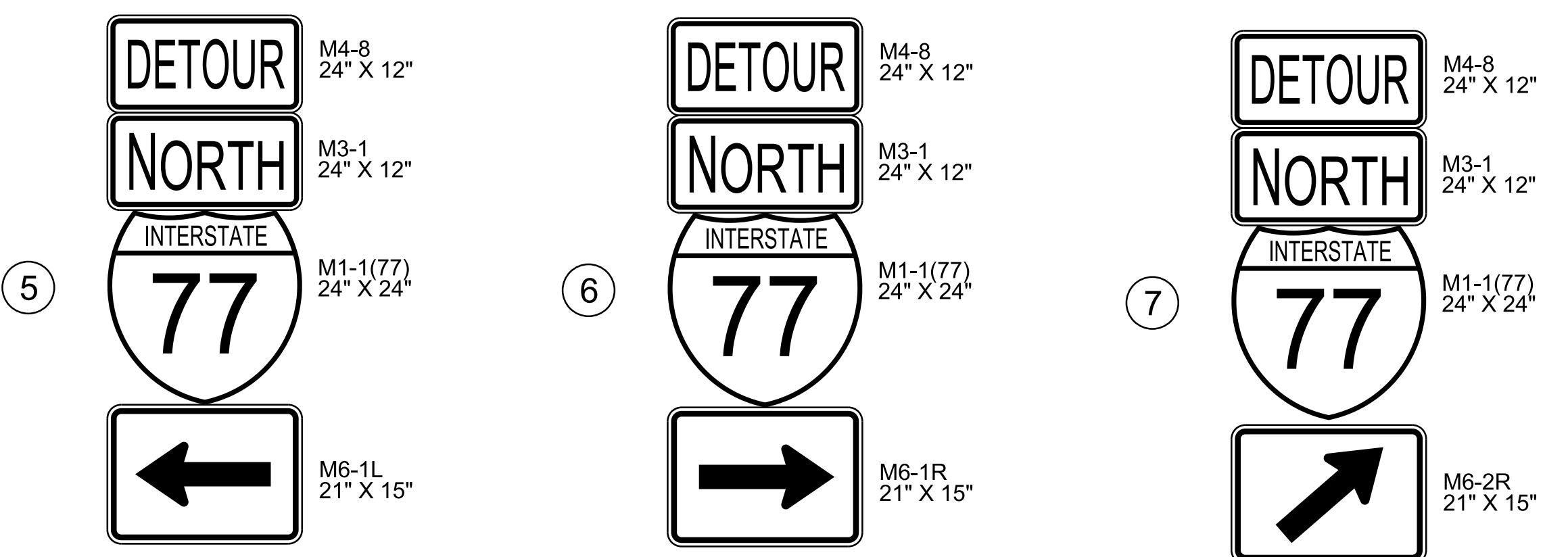
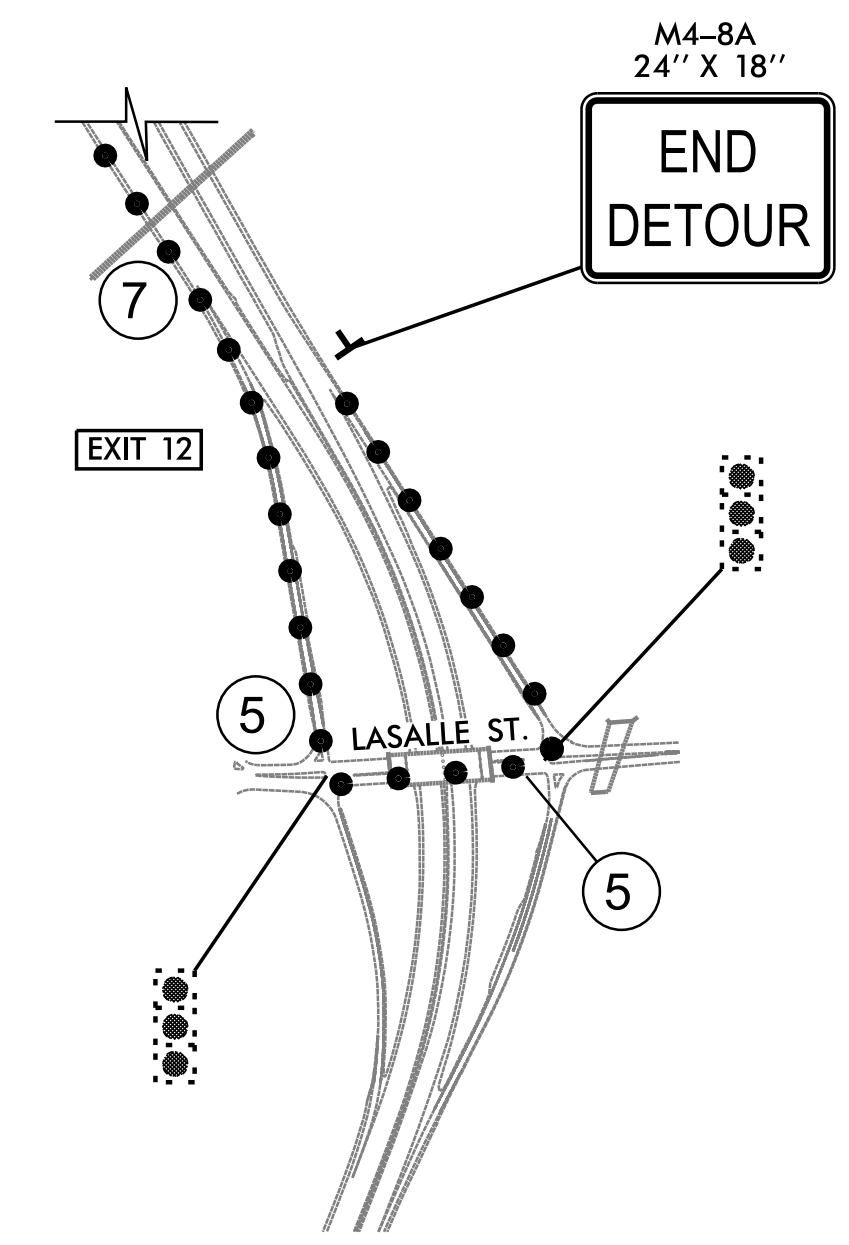
STEP 3: INSTALL PORTABLE CONCRETE BARRIER ALONG I-77 AS SHOWN ON SHEET TMP-21. (SEE R.S.D. 1101.02 SHEET 4 OF 19, 1101.11 SHEET 3 OF 4 AND 1101.04 SHEET 1 OF 2). INSTALL DRUMS AND TYPE III BARRICADES, WITH R11-2 AND M4-10L SIGNS ATTACHED, TO CLOSE THE SUNSET RD. RAMP TO I-77 N RAMP TO TRAFFIC. THE EB SUNSET RD. LEFT-TURN LANE AND WB RIGHT-TURN LANE SHALL BE ENTIRELY CLOSED. (SEE FOR RAMPS AND TURN LANES CLOSURES, R.S.D. 1101.02 SHEETS 3,7 & 12)

STEP 4: AWAY FROM TRAFFIC, CONSTRUCT SUNSET RD. RAMP AS SHOWN IN ROADWAY PLANS. USE LANE OR SHOULDER CLOSURES ON SUNSET RD. AND/OR I-77, IF REQUIRED, AS OUTLINED IN THE GENERAL NOTES.

STEP 5: WHEN CONSTRUCTION IS COMPLETE, INSTALL TEMPORARY PAVEMENT MARKING PAINT, (LOCATED AS SHOWN IN THE PAVEMENT MARKING PLANS FOR PERMANENT MARKINGS). REMOVE ALL TRAFFIC CONTROL DEVICES AND OPEN THE SUNSET RD. RAMP TO I-77 N FOR TRAFFIC.



PORTABLE CMS		FOR ADVANCE NOTICE OF RAMP CLOSURE	
(A) CMS MESSAGE 1: I-77 N RAMP CLOSED	(C) CMS MESSAGE 1: EXITS 16 NO RETURN	(B) CMS MESSAGE 1: RAMP FROM US 21	(B)(C) CMS MESSAGE 1: I-77 N RAMP CLOSED
(B) CMS MESSAGE 2: FOLLOW DETOUR AHEAD	(D) CMS MESSAGE 2: I-77 N RAMP CLOSED	(D) CMS MESSAGE 2: TO I-77 N CLOSED	(B)(C) CMS MESSAGE 2: BEGINNING (DAY OF WEEK) - / - / -



DETOUR MAP

**SUNSET RD. (US21)
RAMP TO NB I-77
PHASING & DETOUR PLAN**

REVISIONS

2/14/2026 1:54:00 PM I-77 Mobility Partners\80-Drawings\83-Design\83b-Sheets\TCP\1721004_TMP_PHL_05.dgn

**I-77 S EXIT 18: RAMP TO HARRIS BLVD (NC24)
TRAFFIC CONTROL PHASING**

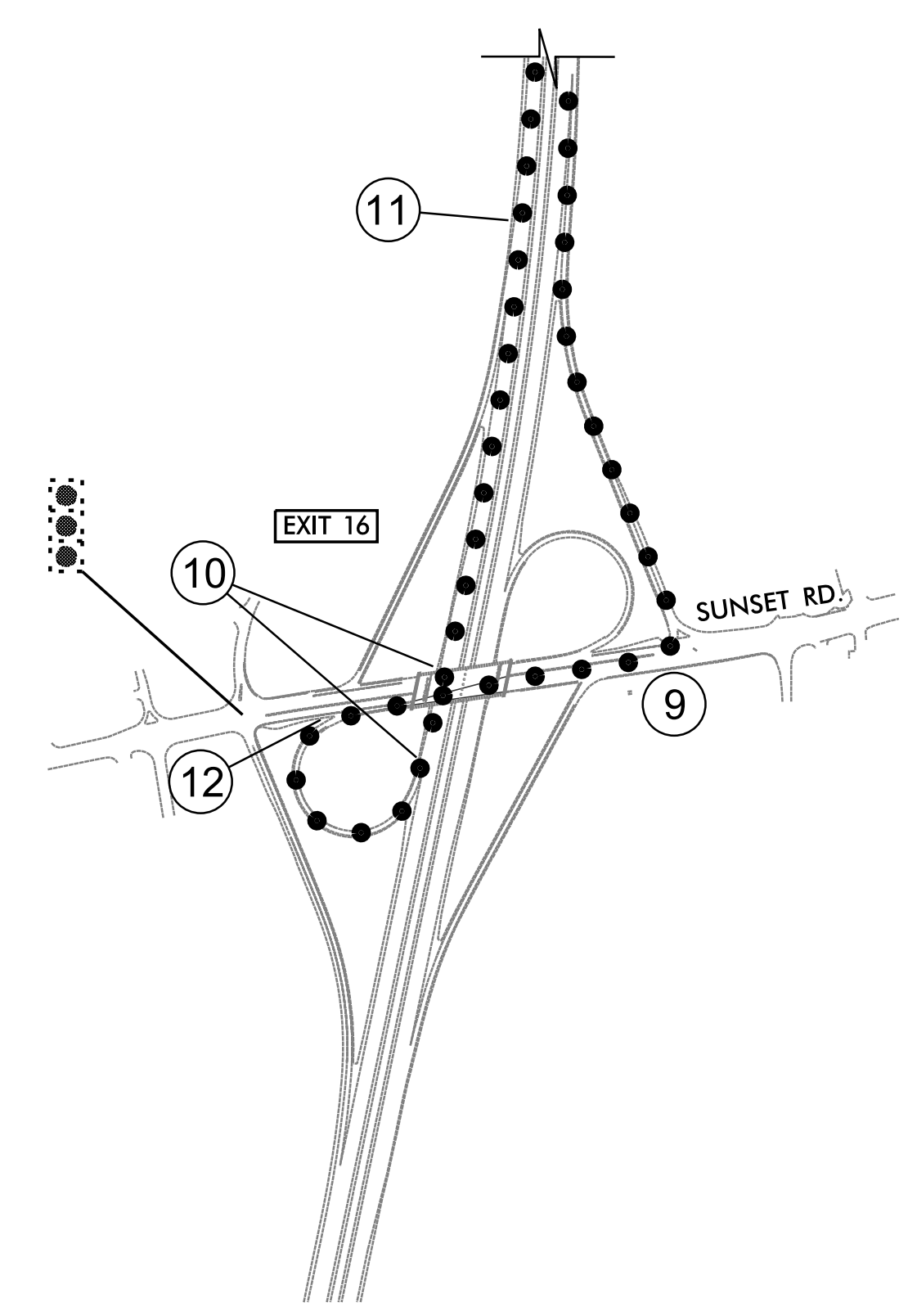
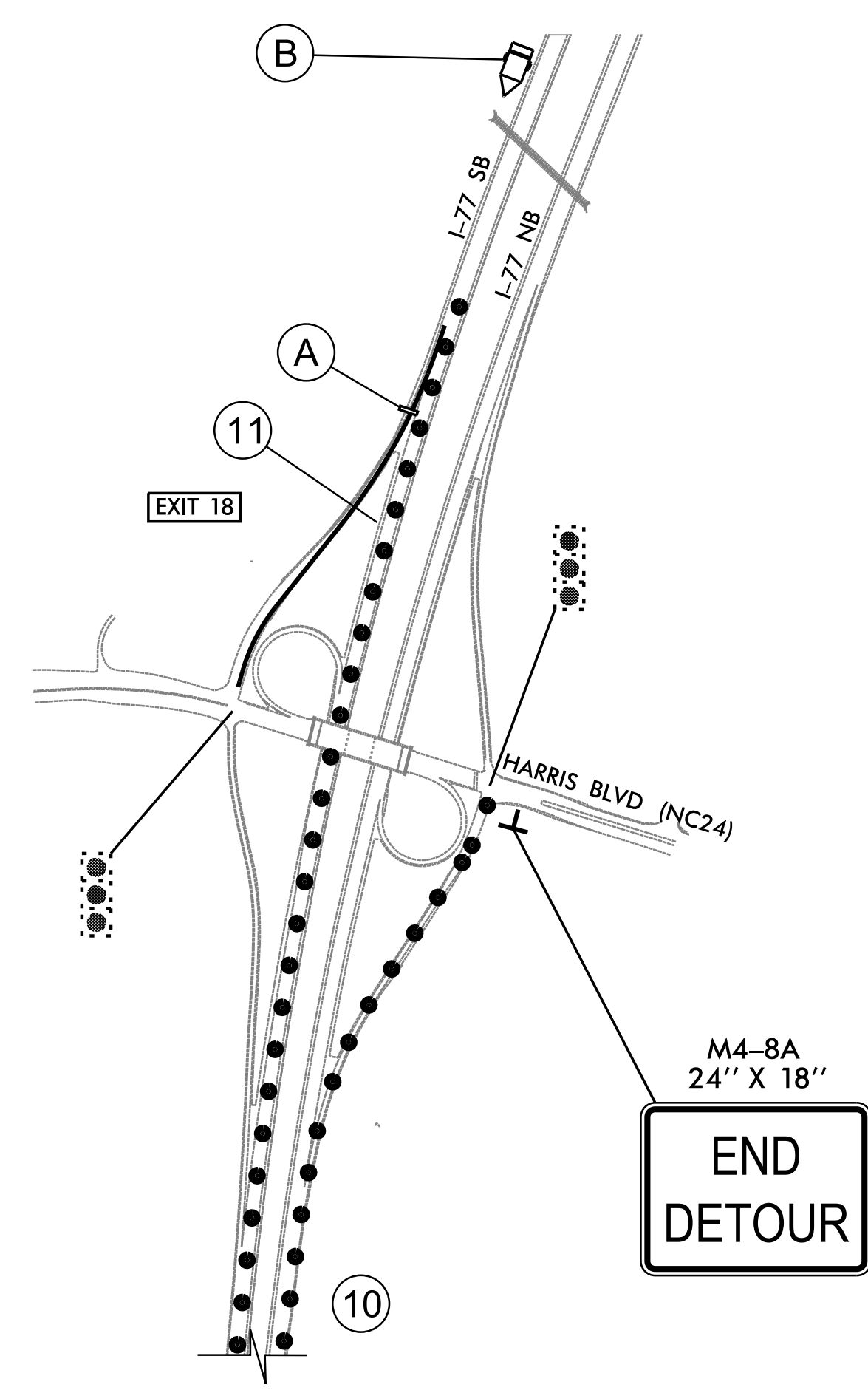
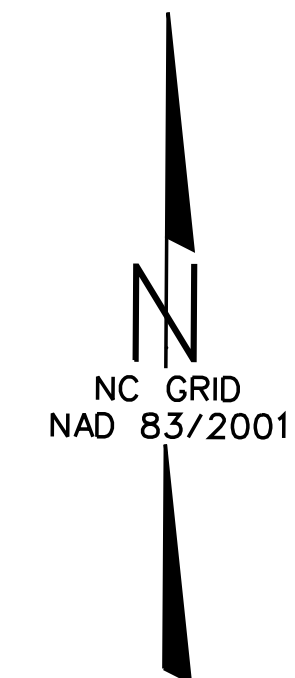
NOTE: I-77 S EXIT 16, LOOP TO SUNSET RD; AND SUNSET RD RAMP TO I-77 N, SHALL NOT BE CLOSED DURING THIS CONSTRUCTION.

- STEP 1: INSTALL ADVANCED WORK ZONE WARNING SIGNS ON HARRIS BLVD AND I-77, ACCORDING TO R.S.D. 1101.01, SHEETS 1 AND 3 OF 3.
- STEP 2: PLACE CHANGEABLE MESSAGE SIGNS (CMS) ON I-77, AS SHOWN ON THIS SHEET, AND AS DIRECTED BY THE ENGINEER. (THE SAME CMS SIGNS MAY ALSO BE USED SEVERAL DAYS IN ADVANCE, TO DISPLAY DATE AND TIME DURATION OF RAMP CLOSURE(S).) PLACE STATIONARY SIGNING AS SHOWN ON THIS SHEET, LOCATED AS DIRECTED BY THE ENGINEER. (KEEP SIGNS COVERED UNTIL NEEDED FOR DETOUR).
- STEP 3: INSTALL DRUMS AND TYPE III BARRICADES, WITH R11-2 AND M4-10L SIGNS ATTACHED, TO CLOSE THE I-77 S EXIT 18, RAMP TO HARRIS BLVD, TO TRAFFIC. (SEE R.S.D. 1101.02 SHEET 12)
- STEP 4: AWAY FROM TRAFFIC, CONSTRUCT I-77 S EXIT 18, RAMP TO HARRIS BLVD, AS SHOWN IN ROADWAY PLANS. USE LANE OR SHOULDER CLOSURES ON HARRIS BLVD AND/OR I-77, IF REQUIRED, AS OUTLINED IN THE GENERAL NOTES. IF ALL RESURFACING WORK ON THIS SHEET IS NOT ABLE TO BE COMPLETED WITHIN ONE OPERATION, THE CONTRACTOR SHALL PLACE TEMPORARY PAVEMENT MARKINGS ON THE PORTION OF COMPLETED PAVEMENT AND REOPEN THE RAMP TO TRAFFIC. REPEAT AS NECESSARY, UNTIL ALL RAMP RESURFACING IS COMPLETE. TRAFFIC WILL BE ON EXISTING ALIGNMENT (-Y14RCP-) AT THE END OF THE WORK DAY.
- STEP 5: WHEN CONSTRUCTION IS COMPLETE, INSTALL TEMPORARY PAVEMENT MARKING PAINT, (LOCATED AS SHOWN IN THE PAVEMENT MARKING PLANS FOR PERMANENT MARKINGS). REMOVE ALL TRAFFIC CONTROL DEVICES AND OPEN THE I-77 S EXIT 18, RAMP TO HARRIS BLVD, FOR TRAFFIC.

ICT

THE CONTRACTOR MUST REPLACE INDUCTIVE SIGNAL LOOPS THAT WERE REMOVED DURING RESURFACING OPERATIONS WITHIN 7 DAYS. (SEE PROJECT PROPOSAL FOR INTERMEDIATE COMPLETION TIME AND LIQUIDATED DAMAGES).

PROJECT REFERENCE NO. I-5405D	SHEET NO. TMP-6
<p>DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED</p>	



DETOUR MAP

**SB I-77 EXIT TO
HARRIS BLVD.
PHASING & DETOUR PLAN**

<p>A</p> <p>TYPE III BARRICADE</p>	<p>B</p> <table border="1"> <tr> <th colspan="2">PORTABLE CMS</th> <th colspan="2">FOR ADVANCE NOTICE OF RAMP CLOSURE</th> </tr> <tr> <td>CMS MESSAGE 1:</td> <td>EXIT 18 CLOSED</td> <td>CMS MESSAGE 1:</td> <td>EXIT 18 CLOSED</td> </tr> <tr> <td>CMS MESSAGE 2:</td> <td>FOLLOW DETOUR AHEAD</td> <td>CMS MESSAGE 2:</td> <td>(DAY OF WEEK) -/-/- 11p - 5a</td> </tr> </table>	PORTABLE CMS		FOR ADVANCE NOTICE OF RAMP CLOSURE		CMS MESSAGE 1:	EXIT 18 CLOSED	CMS MESSAGE 1:	EXIT 18 CLOSED	CMS MESSAGE 2:	FOLLOW DETOUR AHEAD	CMS MESSAGE 2:	(DAY OF WEEK) -/-/- 11p - 5a
PORTABLE CMS		FOR ADVANCE NOTICE OF RAMP CLOSURE											
CMS MESSAGE 1:	EXIT 18 CLOSED	CMS MESSAGE 1:	EXIT 18 CLOSED										
CMS MESSAGE 2:	FOLLOW DETOUR AHEAD	CMS MESSAGE 2:	(DAY OF WEEK) -/-/- 11p - 5a										
<p>9</p>	<p>10</p>	<p>11</p>	<p>12</p>										

REVISIONS

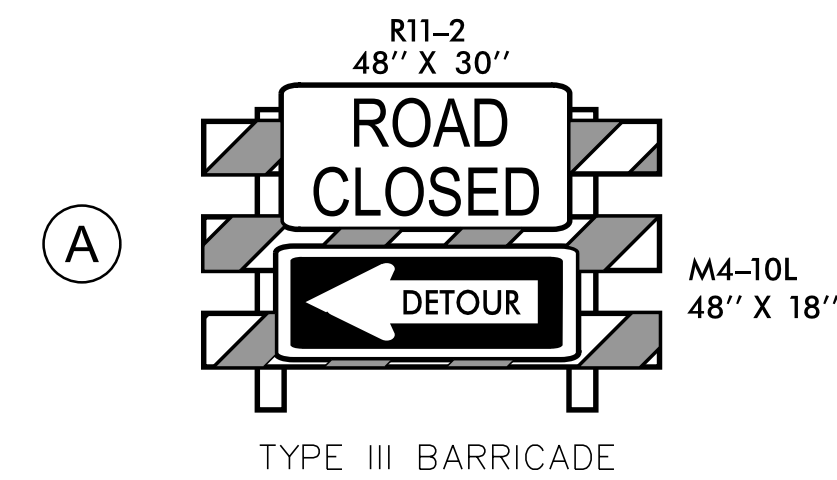
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**I-77 N EXIT 18: RAMP TO HARRIS BLVD. (NC24)
TRAFFIC CONTROL PHASING**

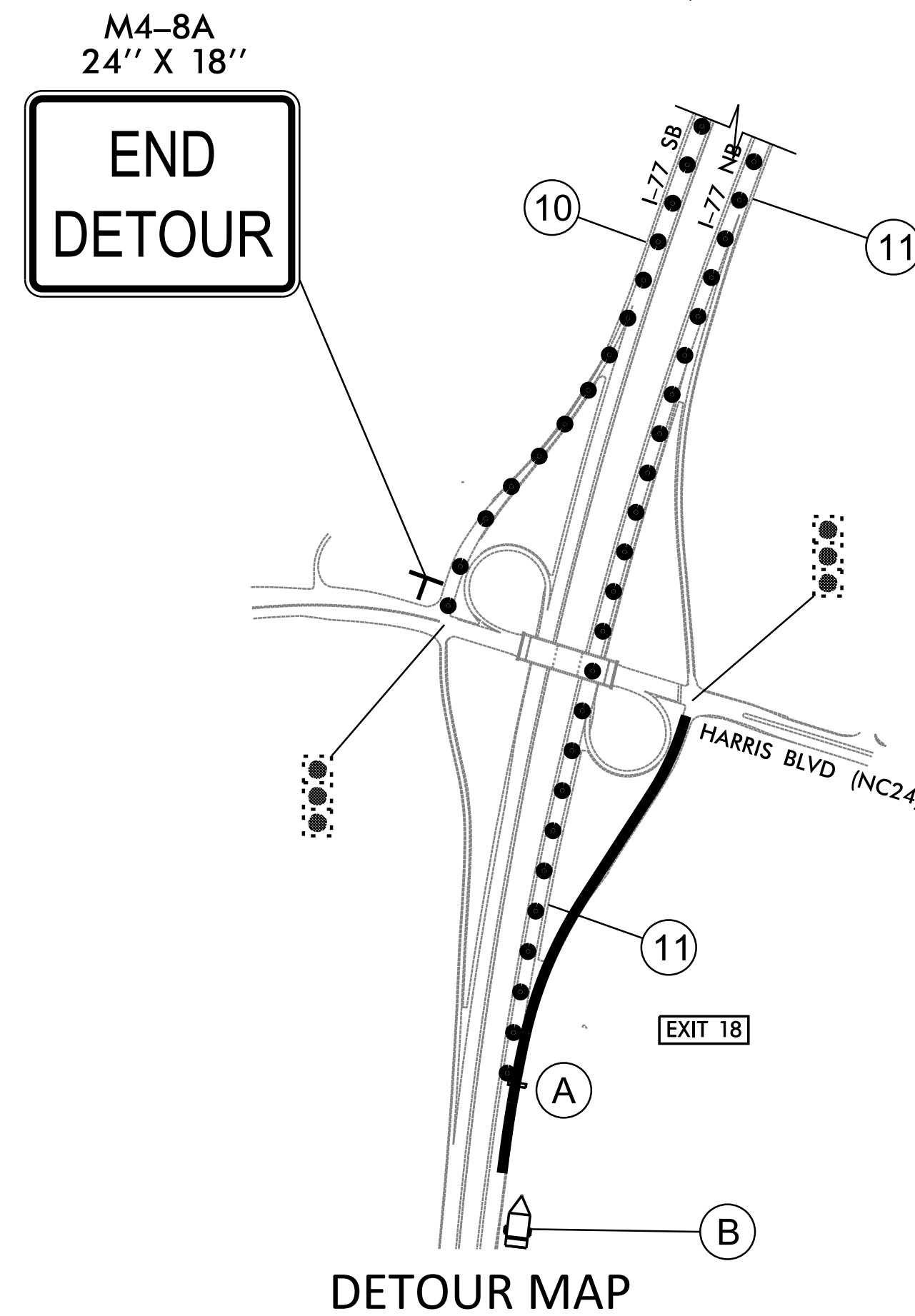
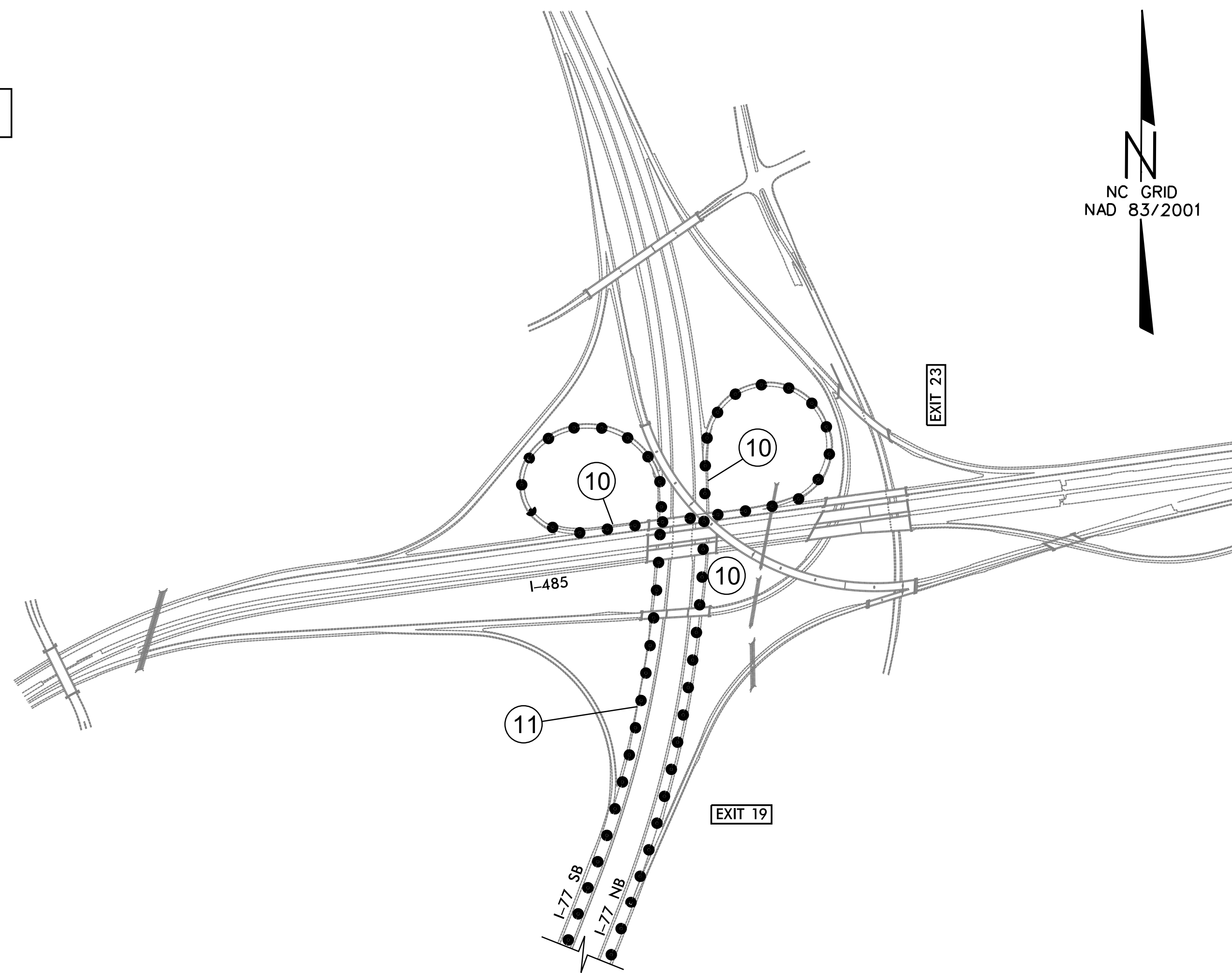
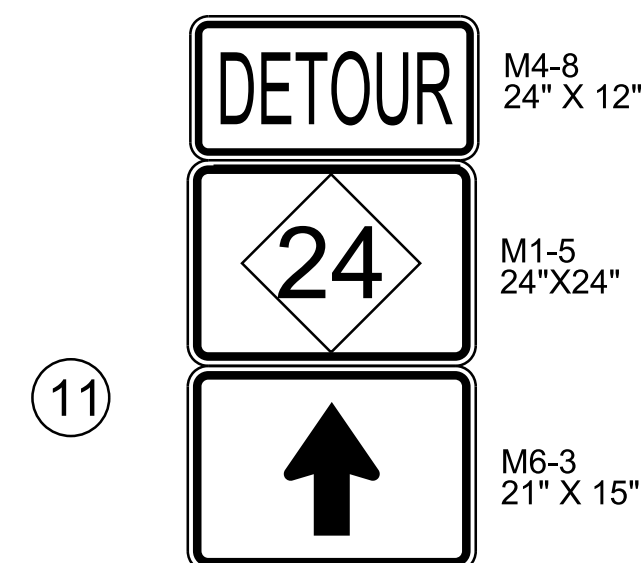
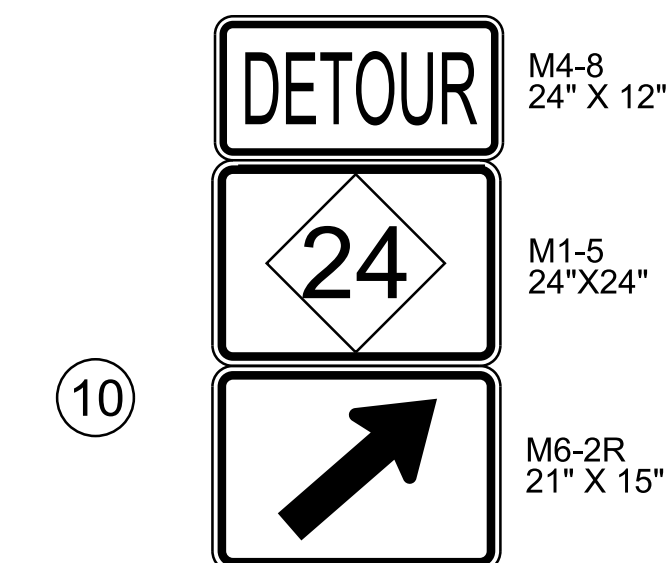
NOTE: I-77 N EXIT 19B, LOOP TO I-485 S; AND I-485 S EXIT 23A, LOOP TO I-77 S, SHALL NOT BE CLOSED DURING THIS CONSTRUCTION.

- STEP 1:** INSTALL ADVANCED WORK ZONE WARNING SIGNS ON HARRIS BLVD AND I-77, ACCORDING TO R.S.D. 1101.01, SHEETS 1 AND 3 OF 3.
- STEP 2:** PLACE CHANGEABLE MESSAGE SIGNS (CMS) ON I-77, AS SHOWN ON THIS SHEET, AND AS DIRECTED BY THE ENGINEER. (THE SAME CMS SIGNS MAY ALSO BE USED SEVERAL DAYS IN ADVANCE, TO DISPLAY DATE AND TIME DURATION OF RAMP CLOSURE(S).) PLACE STATIONARY SIGNING AS SHOWN ON THIS SHEET, LOCATED AS DIRECTED BY THE ENGINEER. (KEEP SIGNS COVERED UNTIL NEEDED FOR DETOUR).
- STEP 3:** INSTALL DRUMS AND TYPE III BARRICADES, WITH R11-2 AND M4-10L SIGNS ATTACHED, TO CLOSE THE I-77 N RAMP TO HARRIS BLVD TO TRAFFIC. (SEE R.S.D. 1101.02 SHEET 12)
- STEP 4:** AWAY FROM TRAFFIC, CONSTRUCT I-77 N RAMP TO HARRIS BLVD, AS SHOWN IN ROADWAY PLANS. USE LANE OR SHOULDER CLOSURES ON HARRIS BLVD AND/OR I-77, IF REQUIRED, AS OUTLINED IN THE GENERAL NOTES. IF ALL RESURFACING WORK ON THIS SHEET IS NOT ABLE TO BE COMPLETED WITHIN ONE OPERATION, THE CONTRACTOR SHALL PLACE TEMPORARY PAVEMENT MARKINGS ON THE PORTION OF COMPLETED PAVEMENT AND REOPEN THE RAMP TO TRAFFIC. REPEAT AS NECESSARY, UNTIL ALL RAMP RESURFACING IS COMPLETE. TRAFFIC WILL BE ON EXISTING ALIGNMENT (-Y14RPB-) AT THE END OF THE WORK DAY.
- STEP 5:** WHEN CONSTRUCTION IS COMPLETE, INSTALL TEMPORARY PAVEMENT MARKING PAINT, (LOCATED AS SHOWN IN THE PAVEMENT MARKING PLANS FOR PERMANENT MARKINGS). REMOVE ALL TRAFFIC CONTROL DEVICES AND OPEN THE I-77 N RAMP TO HARRIS BLVD FOR TRAFFIC.

ICT
THE CONTRACTOR MUST REPLACE INDUCTIVE SIGNAL LOOPS THAT WERE REMOVED DURING RESURFACING OPERATIONS WITHIN 7 DAYS. (SEE PROJECT PROPOSAL FOR INTERMEDIATE COMPLETION TIME AND LIQUIDATED DAMAGES).



PORTABLE CMS		FOR ADVANCE NOTICE OF RAMP CLOSURE	
(A)	CMS MESSAGE 1: EXIT 18 CLOSED	(A)	CMS MESSAGE 1: EXIT 18 CLOSED
(B)	CMS MESSAGE 2: FOLLOW DETOUR AHEAD	(B)	CMS MESSAGE 2: DAY OF WEEK - / - / - 11p - 5a

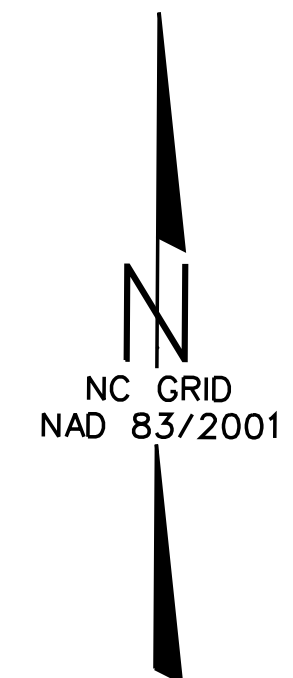


PROJECT REFERENCE NO. I-5405D	SHEET NO. TMP-8
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

**NB I-77 EXIT 18:
RAMP TO HARRIS BLVD (NC24)
PHASING & DETOUR PLAN**

REVISIONS

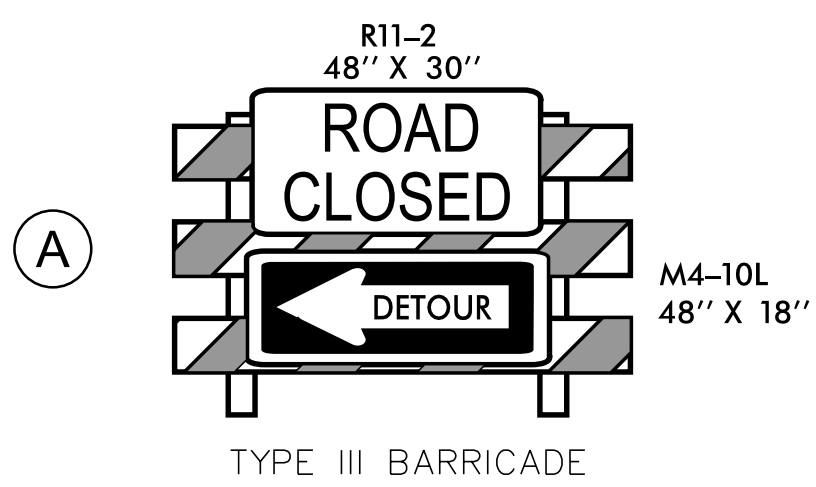
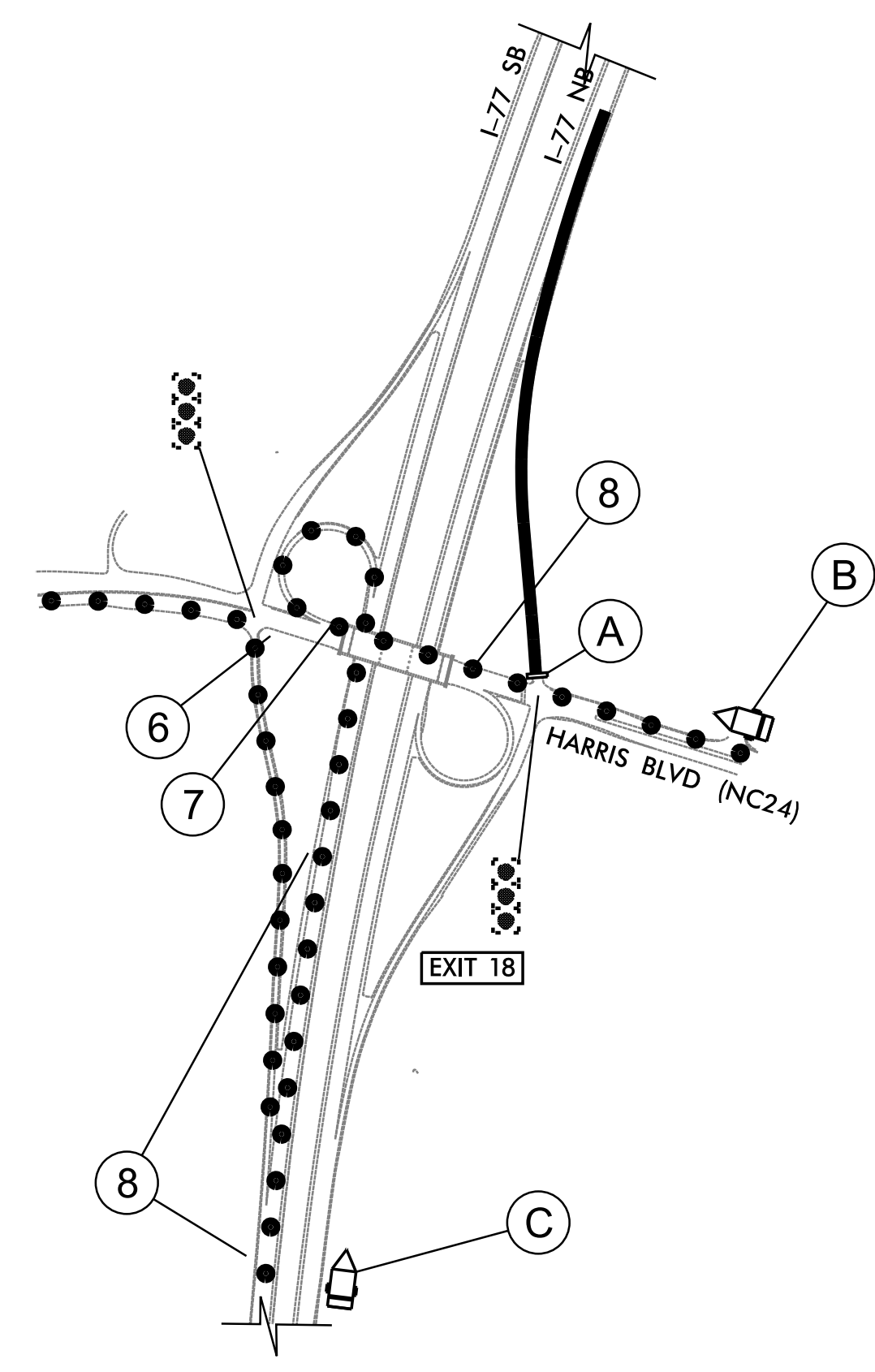
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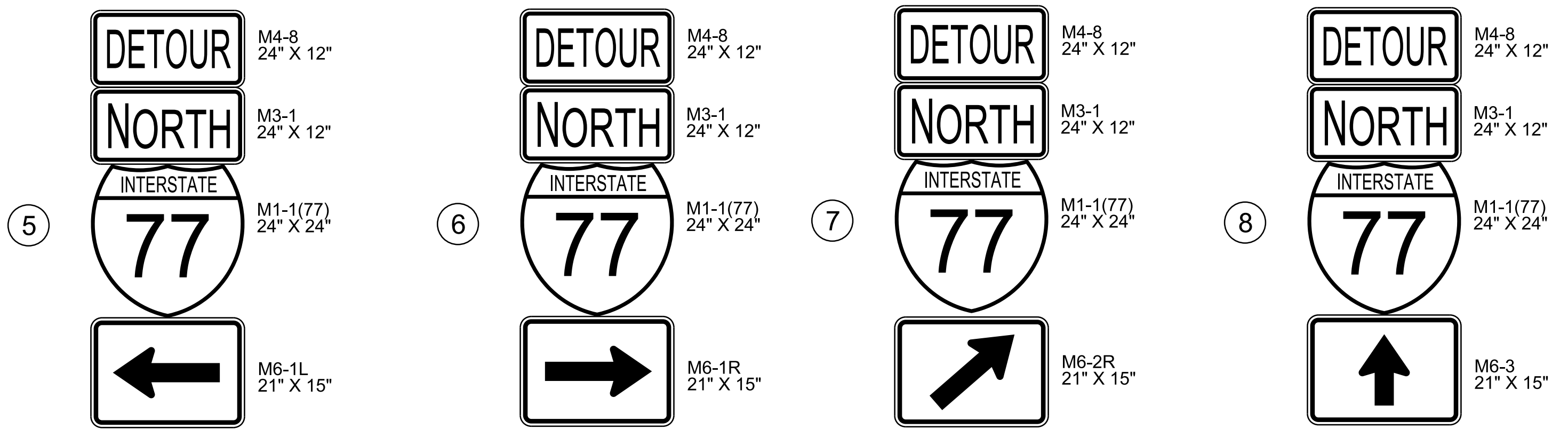
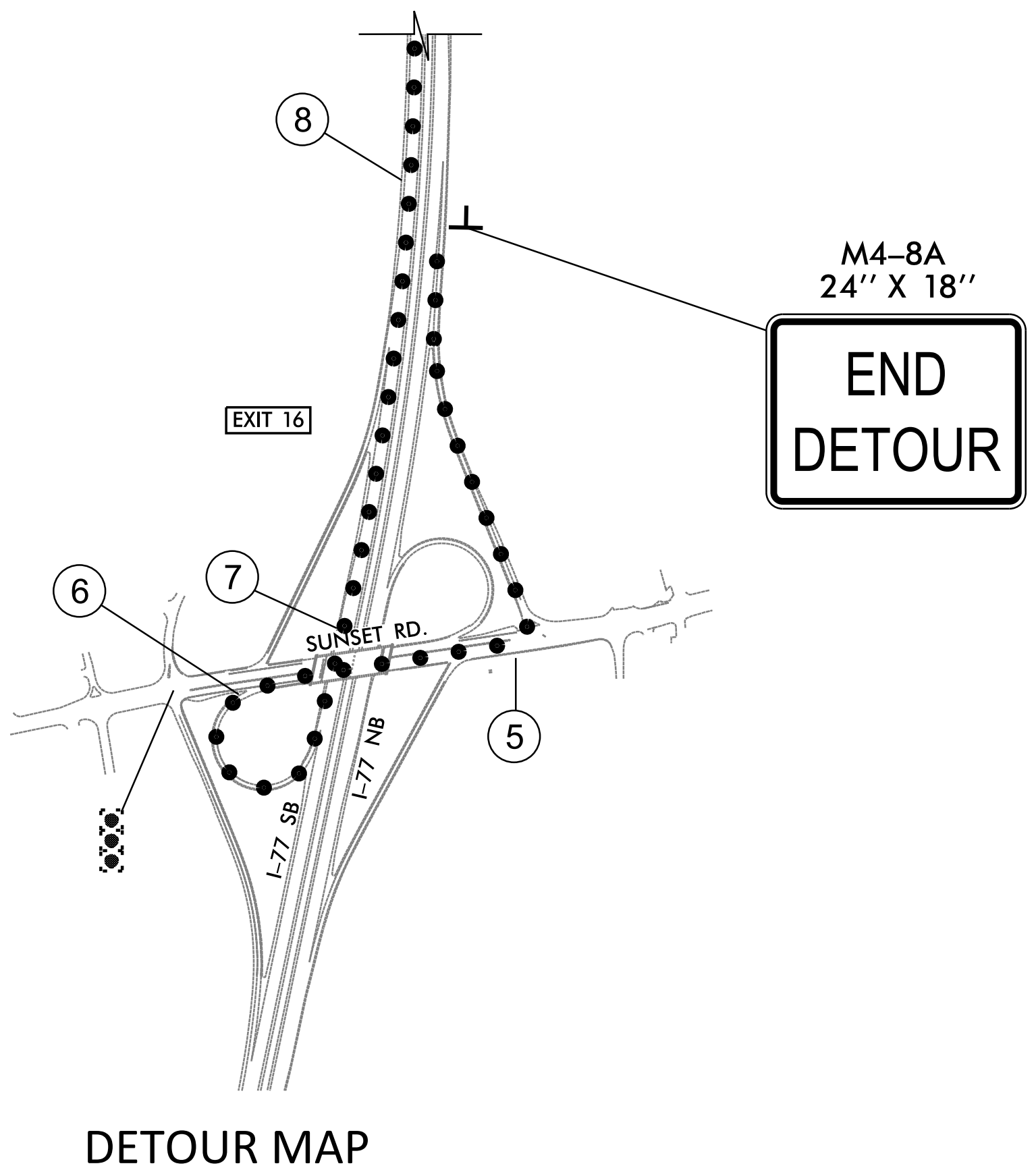
**HARRIS BLVD. (NC24): RAMP TO I-77 N
TRAFFIC CONTROL PHASING**

NOTE: I-77 S LOOP TO SUNSET RD, AND SUNSET RD RAMP TO I-77 N, SHALL NOT BE CLOSED DURING THIS CONSTRUCTION.

- STEP 1: INSTALL ADVANCED WORK ZONE WARNING SIGNS ON HARRIS BLVD AND I-77, ACCORDING TO R.S.D. 1101.01, SHEETS 1 AND 3 OF 3.
- STEP 2: PLACE CHANGEABLE MESSAGE SIGNS (CMS) ON HARRIS BLVD, AS SHOWN ON THIS SHEET, AND AS DIRECTED BY THE ENGINEER. (THE SAME CMS SIGNS MAY ALSO BE USED SEVERAL DAYS IN ADVANCE, TO DISPLAY DATE AND TIME DURATION OF RAMP CLOSURE(S).) PLACE STATIONARY SIGNING AS SHOWN ON THIS SHEET, LOCATED AS DIRECTED BY THE ENGINEER. (KEEP SIGNS COVERED UNTIL NEEDED FOR DETOUR).
- STEP 3: INSTALL DRUMS AND TYPE III BARRICADES, WITH R11-2 AND M4-10L SIGNS ATTACHED, TO CLOSE THE HARRIS BLVD RAMP TO I-77 N TO TRAFFIC. (SEE R.S.D. 1101.03 SHEET 2 FOR RAMP CLOSURE). PLACE DRUMS ALONG WESTBOUND HARRIS BLVD TO CLOSE RIGHT-TURN LANE TO RAMP. (SEE R.S.D. 1101.02 SHEET 12)
- STEP 4: AWAY FROM TRAFFIC, CONSTRUCT HARRIS BLVD RAMP TO I-77 N, AS SHOWN IN ROADWAY PLANS. USE LANE OR SHOULDER CLOSURES ON HARRIS BLVD AND/OR I-77, IF REQUIRED, AS OUTLINED IN THE GENERAL NOTES. IF ALL RESURFACING WORK ON THIS SHEET IS NOT ABLE TO BE COMPLETED WITHIN ONE OPERATION, THE CONTRACTOR SHALL PLACE TEMPORARY PAVEMENT MARKINGS ON THE PORTION OF COMPLETED PAVEMENT AND REOPEN THE RAMP TO TRAFFIC. REPEAT AS NECESSARY, UNTIL ALL RAMP RESURFACING IS COMPLETE. TRAFFIC WILL BE ON EXISTING ALIGNMENT (-Y14RPD-) AT THE END OF THE WORK DAY.
- STEP 5: WHEN CONSTRUCTION IS COMPLETE, INSTALL TEMPORARY PAVEMENT MARKING PAINT, (LOCATED AS SHOWN IN THE PAVEMENT MARKING PLANS FOR PERMANENT MARKINGS). REMOVE ALL TRAFFIC CONTROL DEVICES AND OPEN THE HARRIS BLVD RAMP TO I-77 N FOR TRAFFIC.



PORTABLE CMS		FOR ADVANCE NOTICE OF RAMP CLOSURE	
(A)	<p>CMS MESSAGE 1: I-77 N RAMP CLOSED</p> <p>CMS MESSAGE 2: FOLLOW DETOUR AHEAD</p>	(C)	<p>CMS MESSAGE 1: EXIT 18 NO RETURN</p> <p>CMS MESSAGE 2: I-77 N RAMP CLOSED</p>
(B)		(B)	<p>CMS MESSAGE 1: I-77 N RAMP CLOSED</p> <p>CMS MESSAGE 2: (DAY OF WEEK) - / - / - 11p - 5a</p>



**HARRIS BLVD (NC24):
RAMP TO NB I-77
PHASING & DETOUR PLAN**

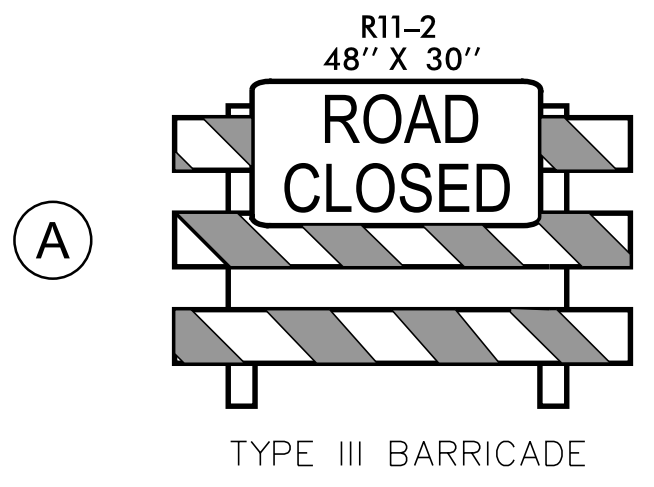
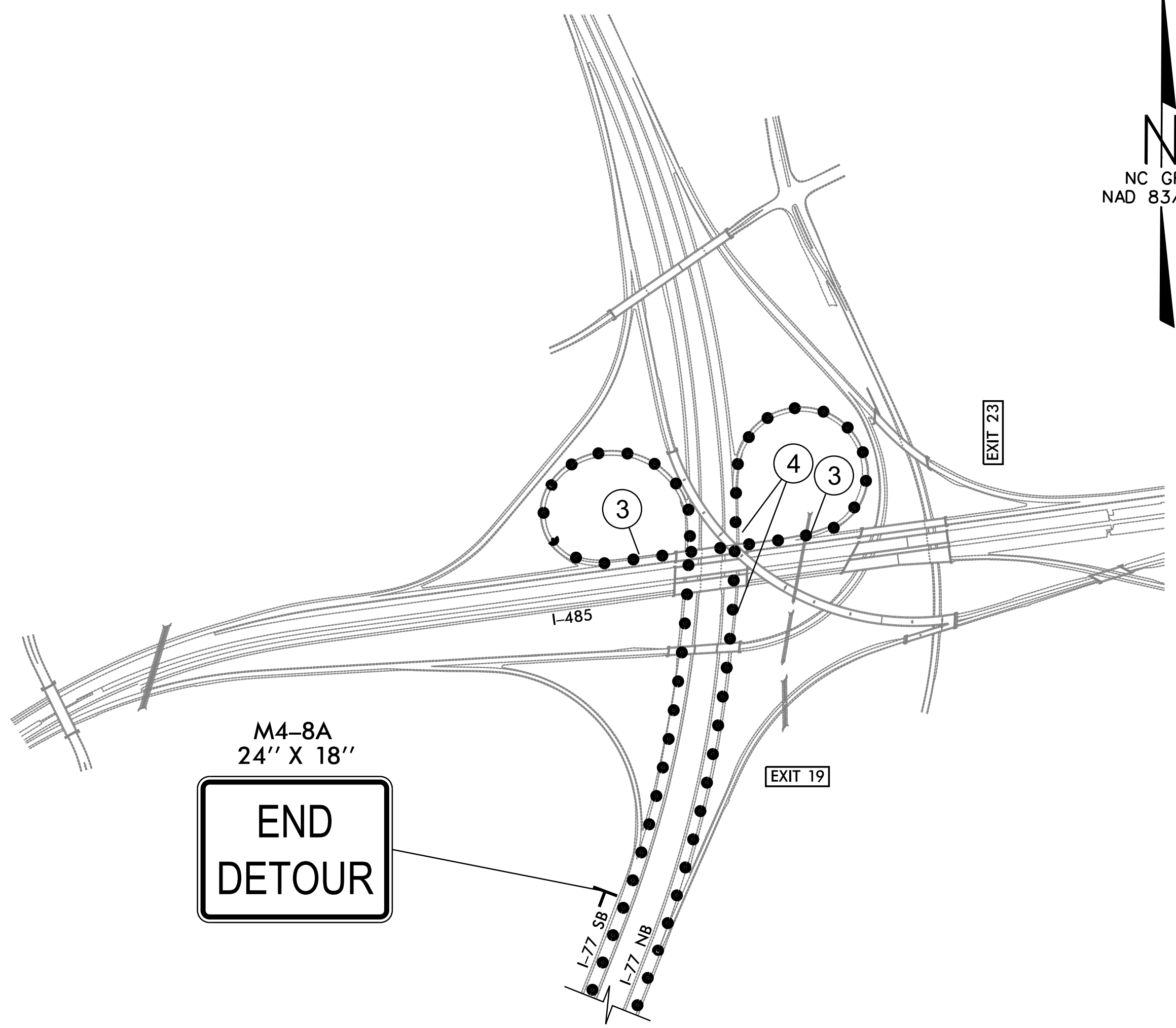
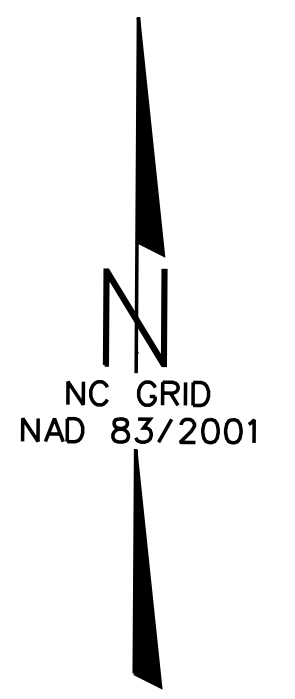
REVISIONS

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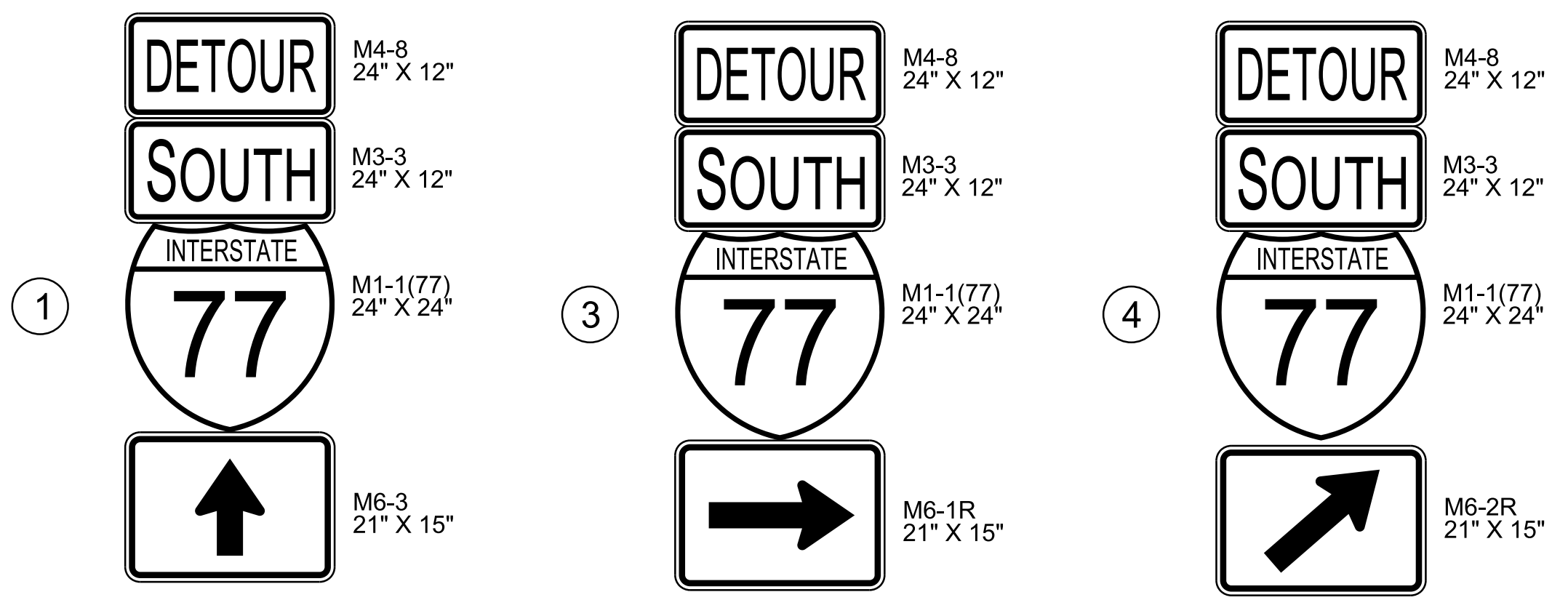
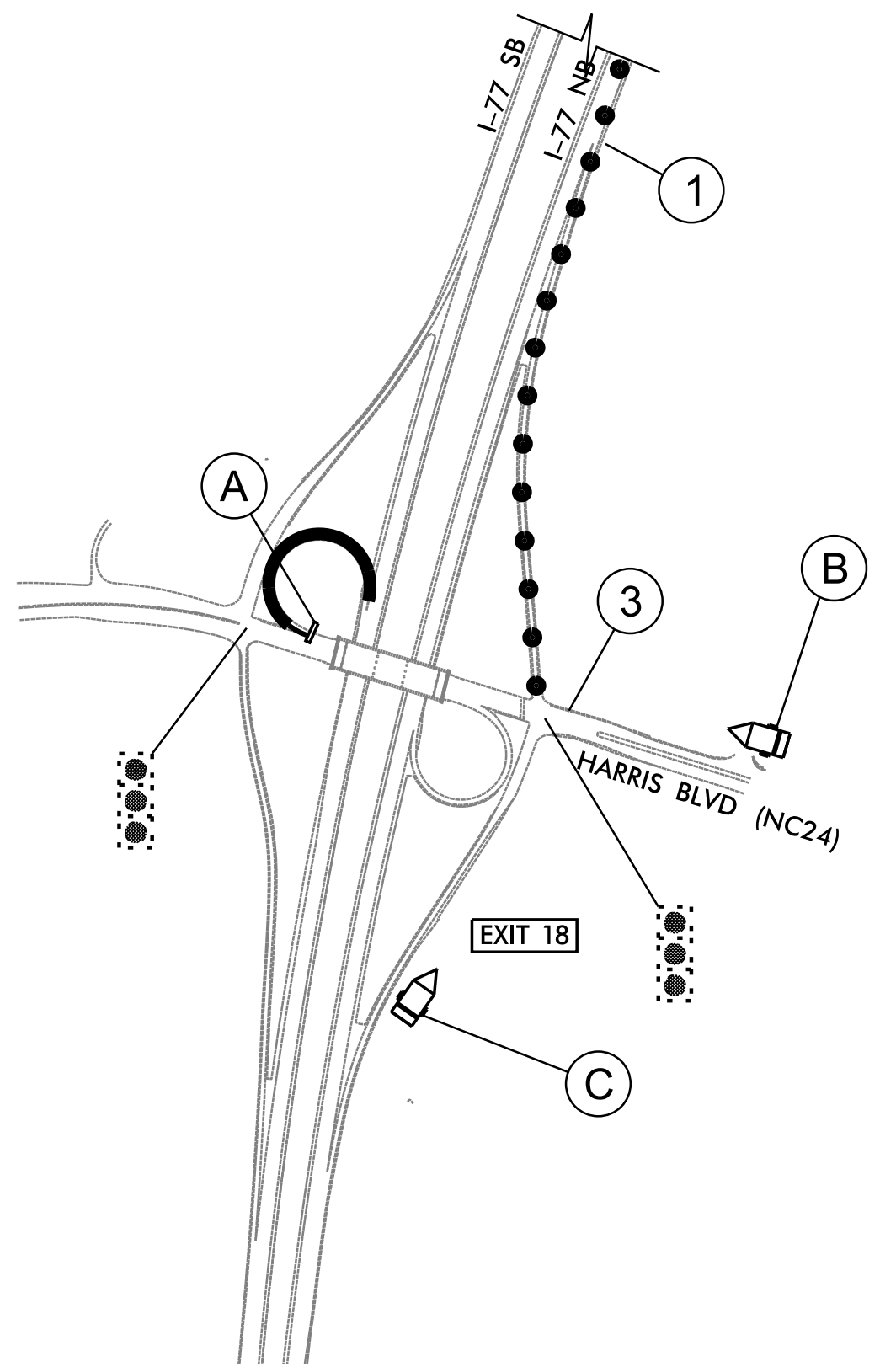
HARRIS BLVD. (NC24): LOOP TO I-77 S TRAFFIC CONTROL PHASING

NOTE: I-77 N EXIT 19B LOOP TO I-485 S, AND I-485 S EXIT 23A LOOP TO I-77 S, SHALL NOT BE CLOSED DURING THIS CONSTRUCTION.

- STEP 1:** INSTALL ADVANCED WORK ZONE WARNING SIGNS ON HARRIS BLVD AND I-77, ACCORDING TO R.S.D. 1101.01, SHEETS 1 AND 3 OF 3.
- STEP 2:** PLACE CHANGEABLE MESSAGE SIGNS (CMS) ON HARRIS BLVD, AS SHOWN ON THIS SHEET, AND AS DIRECTED BY THE ENGINEER. (THE SAME CMS SIGNS MAY ALSO BE USED SEVERAL DAYS IN ADVANCE, TO DISPLAY DATE AND TIME DURATION OF RAMP CLOSURE(S).) PLACE STATIONARY SIGNING AS SHOWN ON THIS SHEET, LOCATED AS DIRECTED BY THE ENGINEER. (KEEP SIGNS COVERED UNTIL NEEDED FOR DETOUR).
- STEP 3:** INSTALL DRUMS AND TYPE III BARRICADES, WITH R11-2 AND M4-10L SIGNS ATTACHED, TO CLOSE THE HARRIS BLVD LOOP TO I-77 S TO TRAFFIC. (SEE R.S.D. 1101.03 SHEET 2 AND 12 FOR LOOP CLOSURE). PLACE DRUMS ALONG HARRIS BLVD WESTBOUND TO CLOSE THE RIGHT-TURN LANE TO THE LOOP.
- STEP 4:** AWAY FROM TRAFFIC, CONSTRUCT HARRIS BLVD LOOP TO I-77 S AS SHOWN IN ROADWAY PLANS. USE LANE OR SHOULDER CLOSURES ON HARRIS BLVD AND/OR I-77. IF REQUIRED, AS OUTLINED IN THE GENERAL NOTES. IF ALL RESURFACING WORK ON THIS SHEET IS NOT ABLE TO BE COMPLETED WITHIN ONE OPERATION, THE CONTRACTOR SHALL PLACE TEMPORARY PAVEMENT MARKINGS ON THE PORTION OF COMPLETED PAVEMENT AND REOPEN THE RAMP TO TRAFFIC. REPEAT AS NECESSARY, UNTIL ALL RAMP RESURFACING IS COMPLETE. TRAFFIC WILL BE ON EXISTING ALIGNMENT (-Y14LPA-) AT THE END OF THE WORK DAY.
- STEP 5:** WHEN CONSTRUCTION IS COMPLETE, INSTALL TEMPORARY PAVEMENT MARKING PAINT. (LOCATED AS SHOWN IN THE PAVEMENT MARKING PLANS FOR PERMANENT MARKINGS). REMOVE ALL TRAFFIC CONTROL DEVICES AND OPEN THE HARRIS BLVD LOOP TO I-77 S FOR TRAFFIC.



PORTABLE CMS		FOR ADVANCE NOTICE OF RAMP CLOSURE	
(A)	CMS MESSAGE 1: I-77 S LOOP CLOSED	(B)	CMS MESSAGE 1: I-77 S LOOP CLOSED
(B)	CMS MESSAGE 2: FOLLOW DETOUR AHEAD	(C)	CMS MESSAGE 2: I-77 S RAMP OPEN
		(B)	CMS MESSAGE 2: (DAY OF WEEK) -/-/- 11p - 5a



**HARRIS BLVD (NC24):
LOOP TO SB I-77
PHASING & DETOUR PLAN**

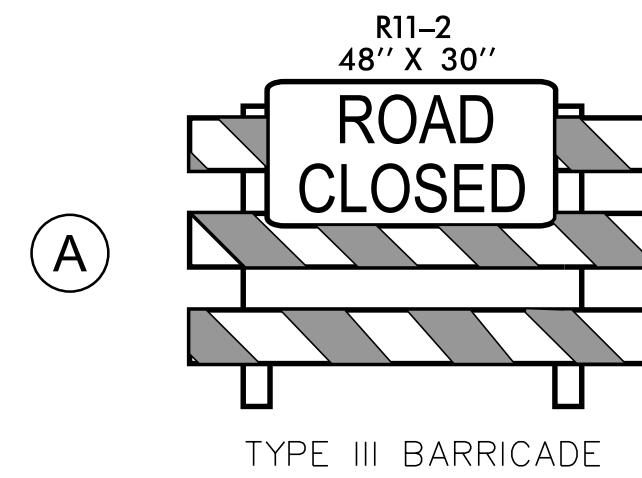
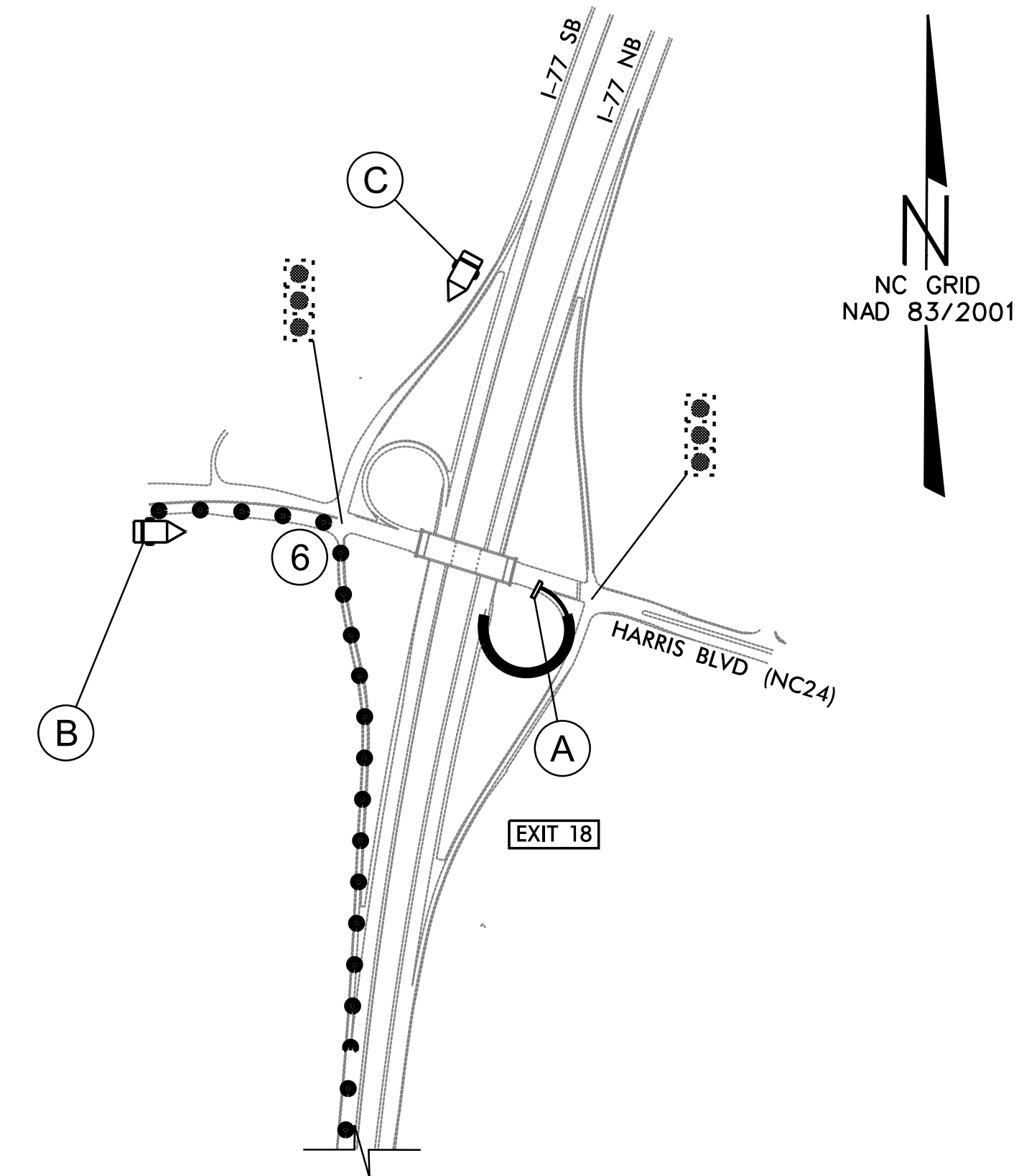
REVISIONS

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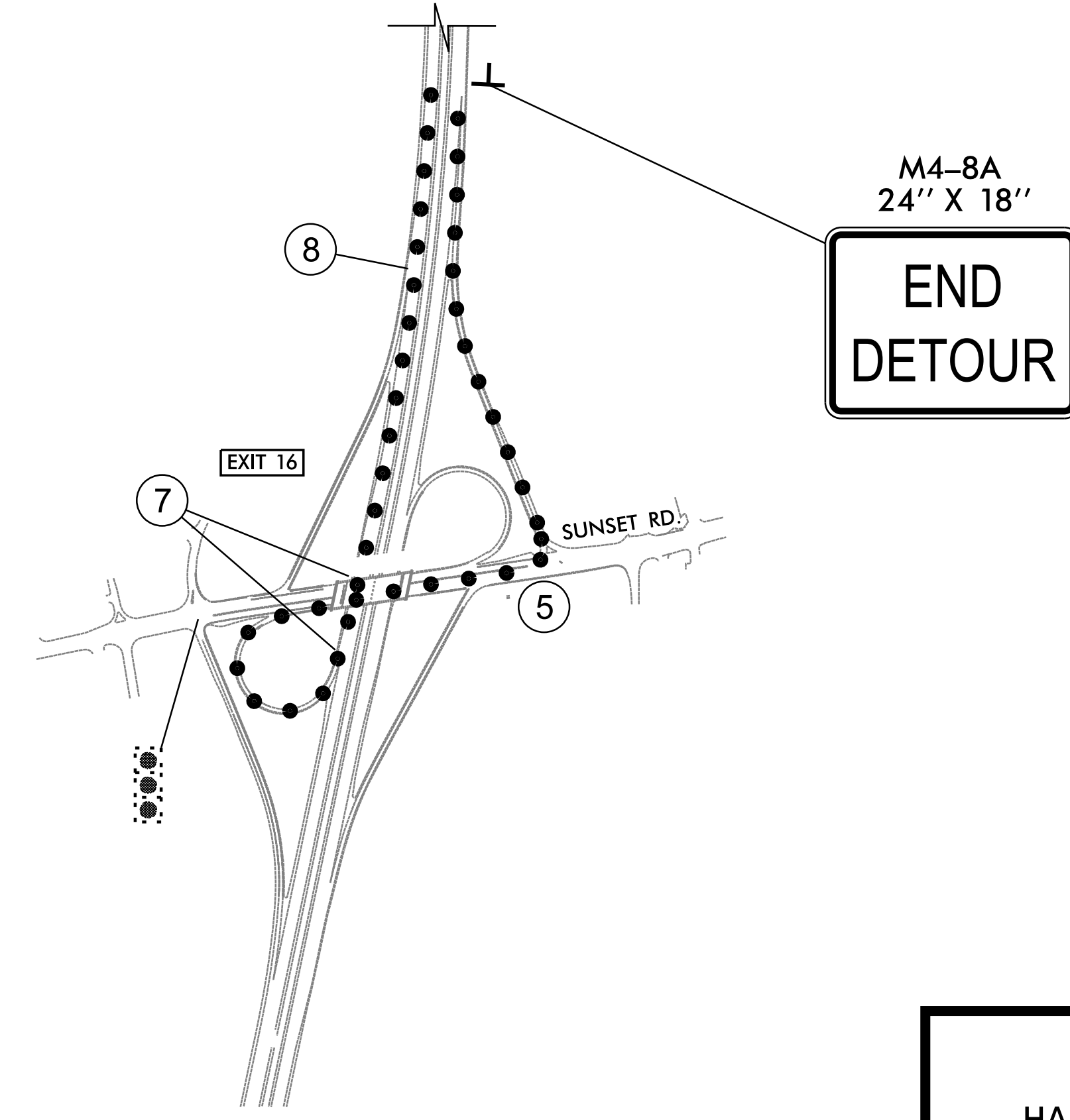
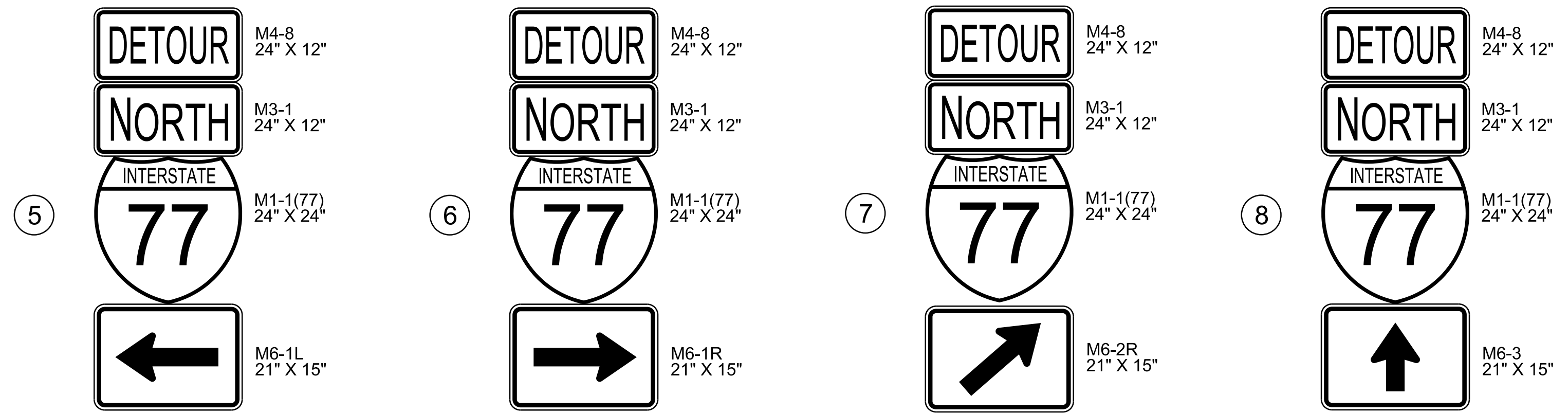
**HARRIS BLVD. (NC24): LOOP TO I-77 N
TRAFFIC CONTROL PHASING**

NOTE: I-77 S EXIT 16, LOOP TO SUNSET RD, AND SUNSET RD RAMP TO I-77 N, SHALL NOT BE CLOSED DURING THIS CONSTRUCTION.

- STEP 1: INSTALL ADVANCED WORK ZONE WARNING SIGNS ON HARRIS BLVD AND I-77, ACCORDING TO R.S.D. 1101.01, SHEETS 1 AND 3 OF 3.
- STEP 2: PLACE CHANGEABLE MESSAGE SIGNS (CMS) ON HARRIS BLVD, AS SHOWN ON THIS SHEET, AND AS DIRECTED BY THE ENGINEER. (THE SAME CMS SIGNS MAY ALSO BE USED SEVERAL DAYS IN ADVANCE, TO DISPLAY DATE AND TIME DURATION OF RAMP CLOSURE(S).) PLACE STATIONARY SIGNING AS SHOWN ON THIS SHEET, LOCATED AS DIRECTED BY THE ENGINEER. (KEEP SIGNS COVERED UNTIL NEEDED FOR DETOUR).
- STEP 3: INSTALL DRUMS TO CLOSE RT TURN LANE AND TYPE III BARRICADES, WITH R11-2 AND M4-10L SIGNS ATTACHED, TO CLOSE THE HARRIS BLVD LOOP I-77 N TO TRAFFIC. (SEE R.S.D. 1101.03 SHEET 2 AND R.S.D. 1101.02 SHEET 12 TO CLOSE THE LOOP, SEE 1101.02 SHEET 3 FOR RIGHT-TURN LANE CLOSURE)
- STEP 4: AWAY FROM TRAFFIC, CONSTRUCT HARRIS BLVD LOOP TO I-77 N AS SHOWN IN ROADWAY PLANS. USE LANE OR SHOULDER CLOSURES ON HARRIS BLVD AND/OR I-77, IF REQUIRED, AS OUTLINED IN THE GENERAL NOTES. IF ALL RESURFACING WORK ON THIS SHEET IS NOT ABLE TO BE COMPLETED WITHIN ONE OPERATION, THE CONTRACTOR SHALL PLACE TEMPORARY PAVEMENT MARKINGS ON THE PORTION OF COMPLETED PAVEMENT AND REOPEN THE RAMP TO TRAFFIC. REPEAT AS NECESSARY, UNTIL ALL RAMP RESURFACING IS COMPLETE. TRAFFIC WILL BE ON EXISTING ALIGNMENT (-Y14LPB-) AT THE END OF THE WORK DAY.
- STEP 5: WHEN CONSTRUCTION IS COMPLETE, INSTALL TEMPORARY PAVEMENT MARKING PAINT, (LOCATED AS SHOWN IN THE PAVEMENT MARKING PLANS FOR PERMANENT MARKINGS). REMOVE ALL TRAFFIC CONTROL DEVICES AND OPEN THE HARRIS BLVD LOOP TO I-77 N FOR TRAFFIC.



PORTABLE CMS		FOR ADVANCE NOTICE OF RAMP CLOSURE	
(B)	CMS MESSAGE 1: I-77 N LOOP CLOSED CMS MESSAGE 2: FOLLOW DETOUR AHEAD	(C)	CMS MESSAGE 1: I-77 N LOOP CLOSED CMS MESSAGE 2: I-77 N RAMP OPEN
		(B)	CMS MESSAGE 1: I-77 N LOOP CLOSED CMS MESSAGE 2: (DAY OF WEEK) - / - / - 11p - 5a



DETOUR MAP

**HARRIS BLVD (NC24)
LOOP TO NB I-77
PHASING & DETOUR PLAN**

REVISIONS

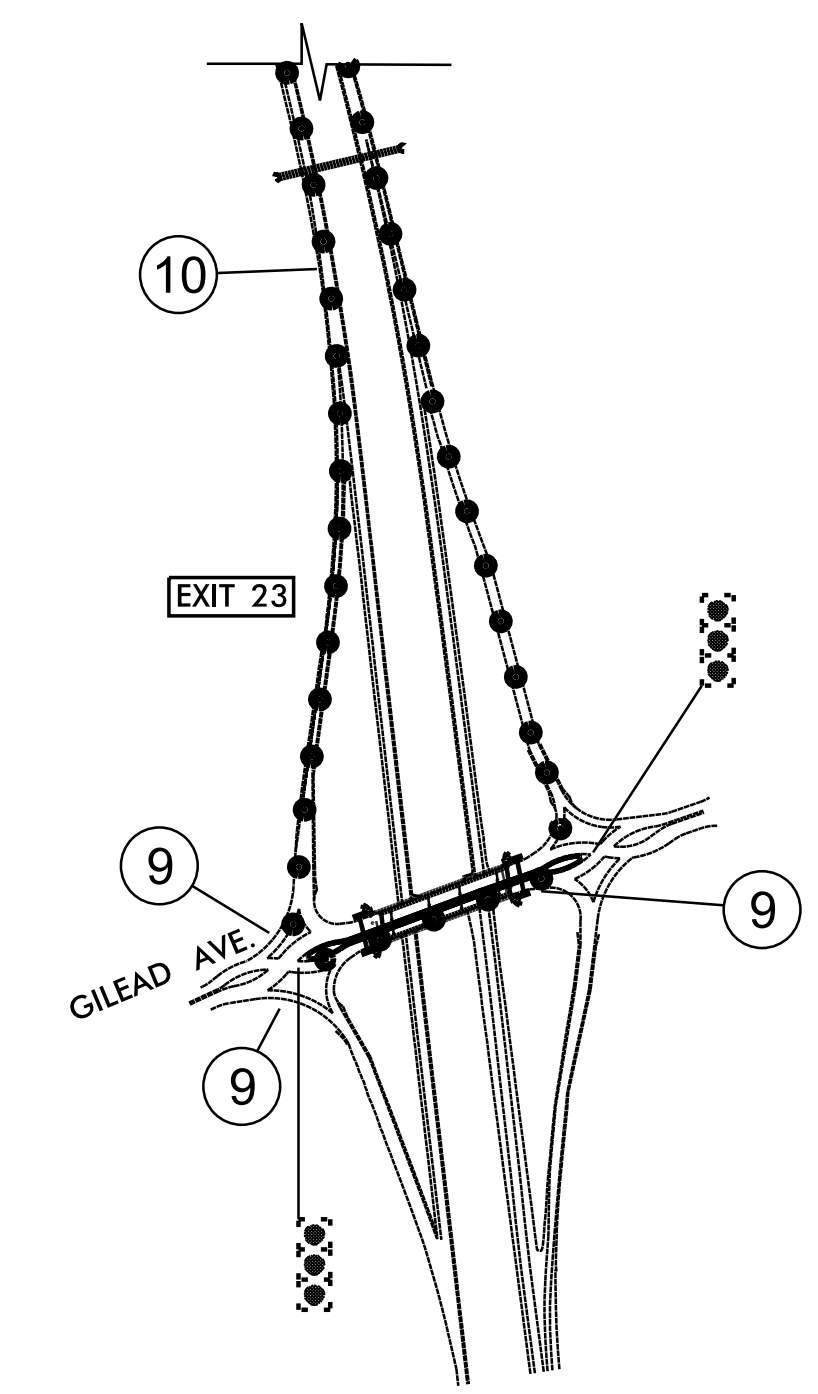
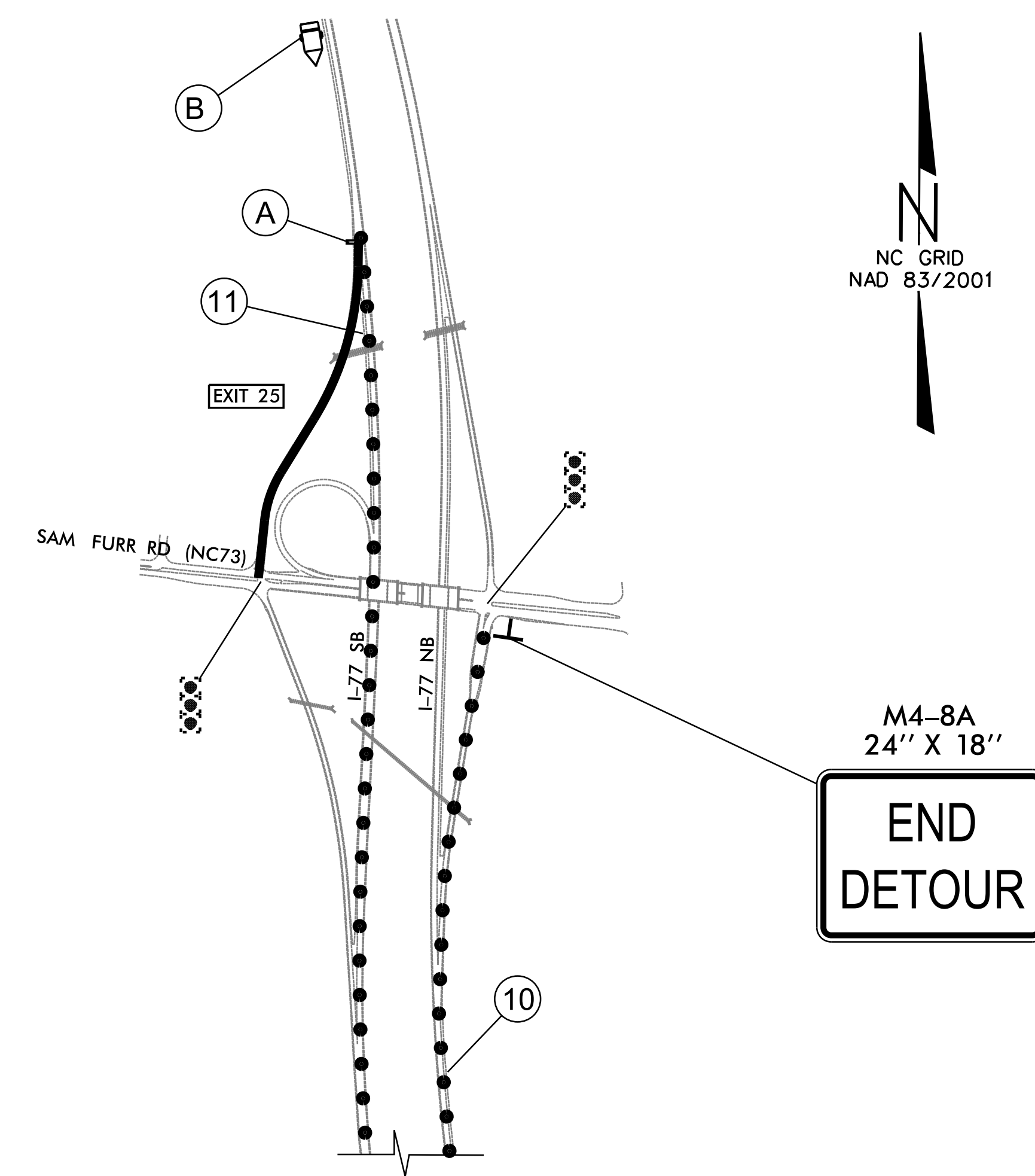
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**I-77 S EXIT 25: RAMP TO SAM FURR RD. (NC73)
TRAFFIC CONTROL PHASING**

NOTE: I-77 S EXIT 23, RAMP TO GILEAD RD; AND GILEAD RD RAMP TO I-77 N, SHALL NOT BE CLOSED DURING THIS CONSTRUCTION.

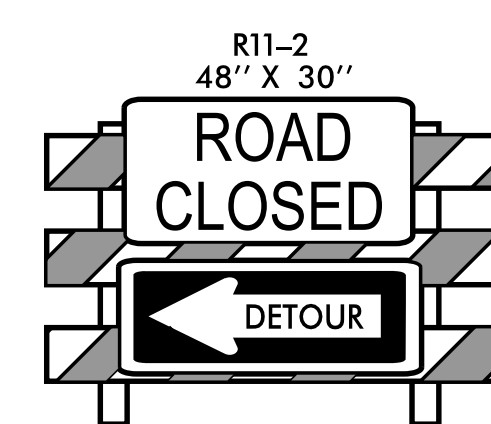
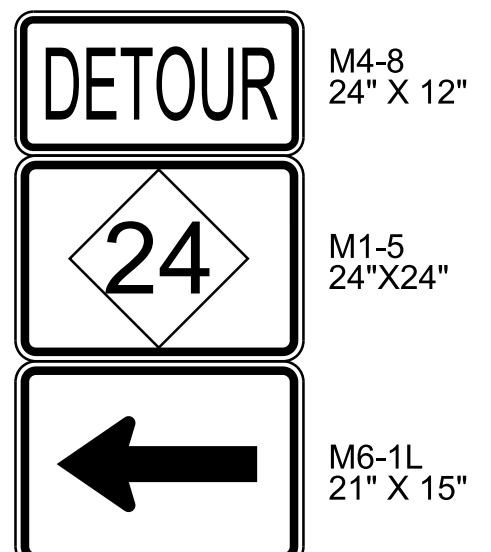
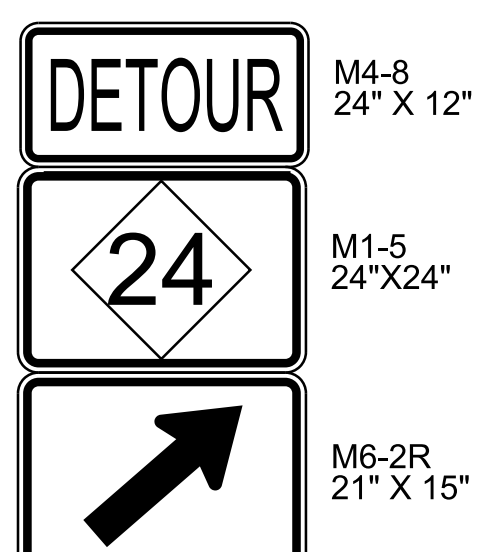
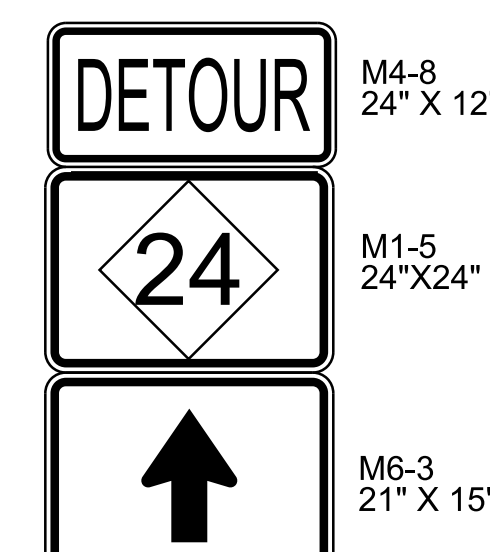
- STEP 1:** INSTALL ADVANCED WORK ZONE WARNING SIGNS ON I-77 AND SAM FURR RD, ACCORDING TO R.S.D. 1101.01, SHEETS 1 AND 3 OF 3.
- STEP 2:** PLACE CHANGEABLE MESSAGE SIGNS (CMS) ON I-77, AS SHOWN ON THIS SHEET, AND AS DIRECTED BY THE ENGINEER. (THE SAME CMS SIGNS MAY ALSO BE USED SEVERAL DAYS IN ADVANCE, TO DISPLAY DATE AND TIME DURATION OF RAMP CLOSURE(S).) PLACE STATIONARY SIGNING AS SHOWN ON THIS SHEET, LOCATED AS DIRECTED BY THE ENGINEER. (KEEP SIGNS COVERED UNTIL NEEDED FOR DETOUR).
- STEP 3:** INSTALL DRUMS AND TYPE III BARRICADES, WITH R11-2 AND M4-10L SIGNS ATTACHED, TO CLOSE THE SB I-77 EXIT 25, RAMP TO SAM FURR RD, TO TRAFFIC. (SEE R.S.D. 1101.02 SHEET 12 FOR RAMP CLOSURE AT I-77)
- STEP 4:** AWAY FROM TRAFFIC, CONSTRUCT I-77 S EXIT 25, RAMP TO SAM FURR RD, AS SHOWN IN ROADWAY PLANS. USE LANE OR SHOULDER CLOSURES ON SAM FURR RD AND/OR I-77, IF REQUIRED, AS OUTLINED IN THE GENERAL NOTES. IF ALL RESURFACING WORK ON THIS SHEET IS NOT ABLE TO BE COMPLETED WITHIN ONE OPERATION, THE CONTRACTOR SHALL PLACE TEMPORARY PAVEMENT MARKINGS ON THE PORTION OF COMPLETED PAVEMENT AND REOPEN THE RAMP TO TRAFFIC. REPEAT AS NECESSARY, UNTIL ALL RAMP RESURFACING IS COMPLETE.
TRAFFIC WILL BE ON EXISTING ALIGNMENT (-Y20RCP-) AT THE END OF THE WORK DAY.
- STEP 5:** WHEN CONSTRUCTION IS COMPLETE, INSTALL TEMPORARY PAVEMENT MARKING PAINT, (LOCATED AS SHOWN IN THE PAVEMENT MARKING PLANS FOR PERMANENT MARKINGS). REMOVE ALL TRAFFIC CONTROL DEVICES AND OPEN THE I-77 S EXIT 25, RAMP TO SAM FURR RD, FOR TRAFFIC.

ICT
THE CONTRACTOR MUST REPLACE INDUCTIVE SIGNAL LOOPS THAT WERE REMOVED DURING RESURFACING OPERATIONS WITHIN 7 DAYS. (SEE PROJECT PROPOSAL FOR INTERMEDIATE COMPLETION TIME AND LIQUIDATED DAMAGES).



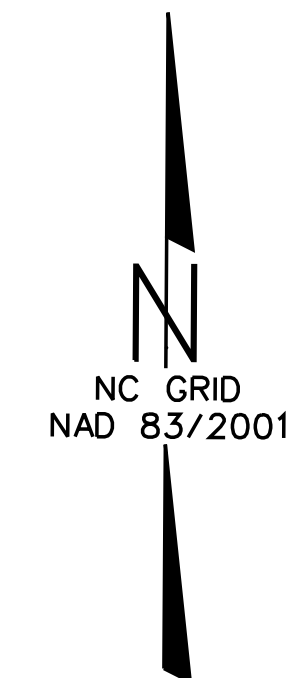
DETOUR MAP

**SB I-77 EXIT 25:
RAMP TO SAM FURR RD (NC73)
PHASING & DETOUR PLAN**

 R11-2 48" X 30" ROAD CLOSED ← DETOUR M4-10L 48" X 18" TYPE III BARRICADE	PORTABLE CMS	FOR ADVANCE NOTICE OF RAMP CLOSURE	
(A)	(B)	(B)	
	CMS MESSAGE 1: EXIT 25 CLOSED CMS MESSAGE 2: FOLLOW DETOUR AHEAD	CMS MESSAGE 1: I-77 N LOOP CLOSED CMS MESSAGE 2: (DAY OF WEEK) -/-/ - 11p - 5a	
(9)	(10)	(11)	
			

REVISIONS

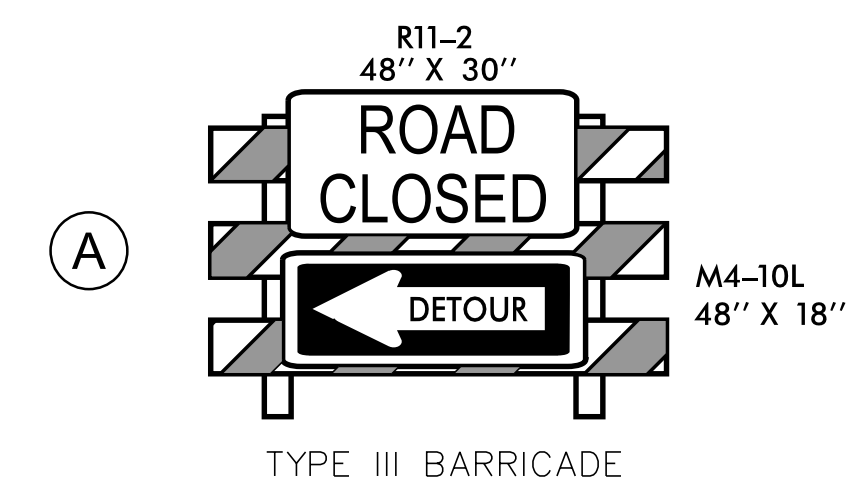
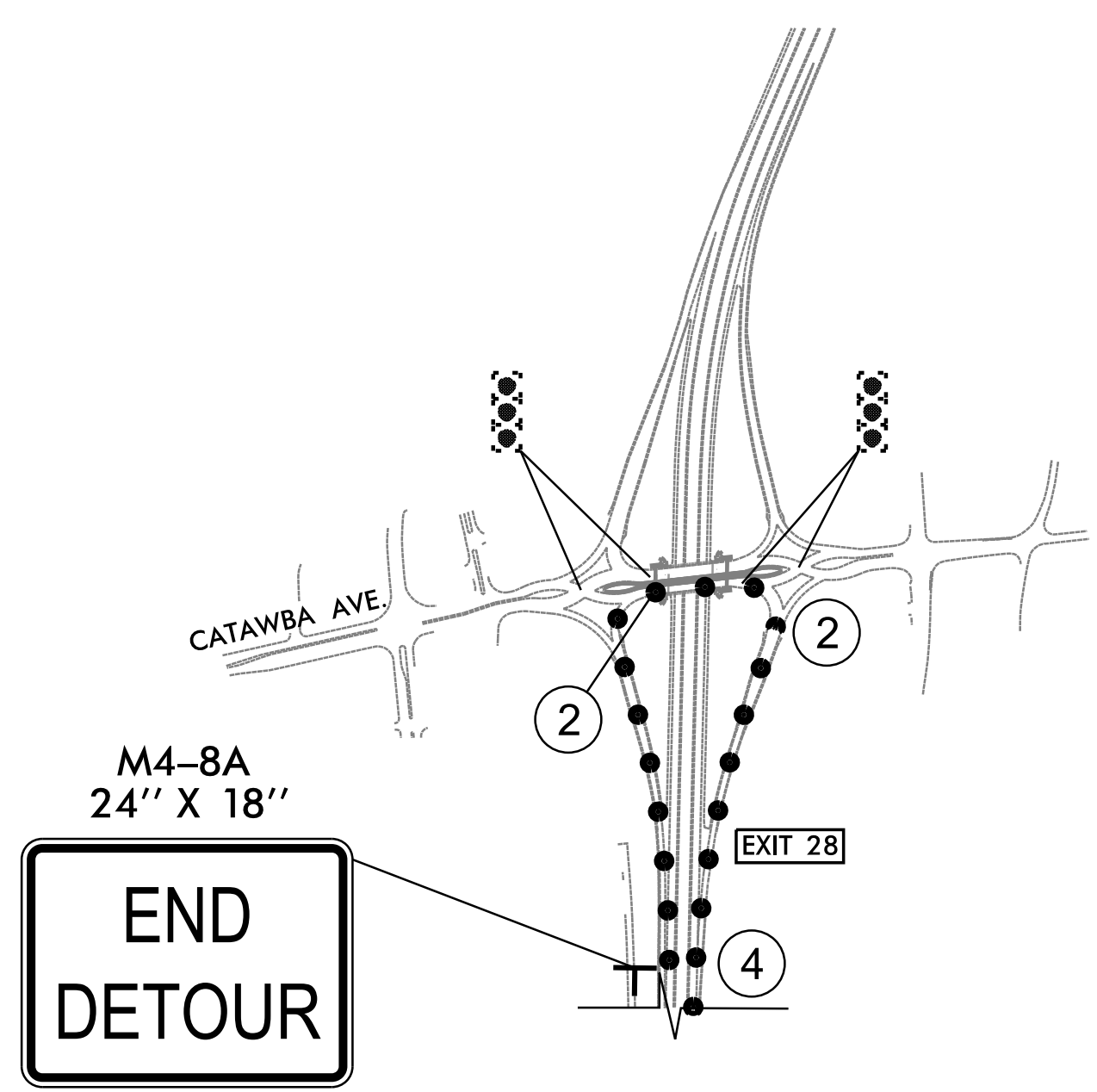
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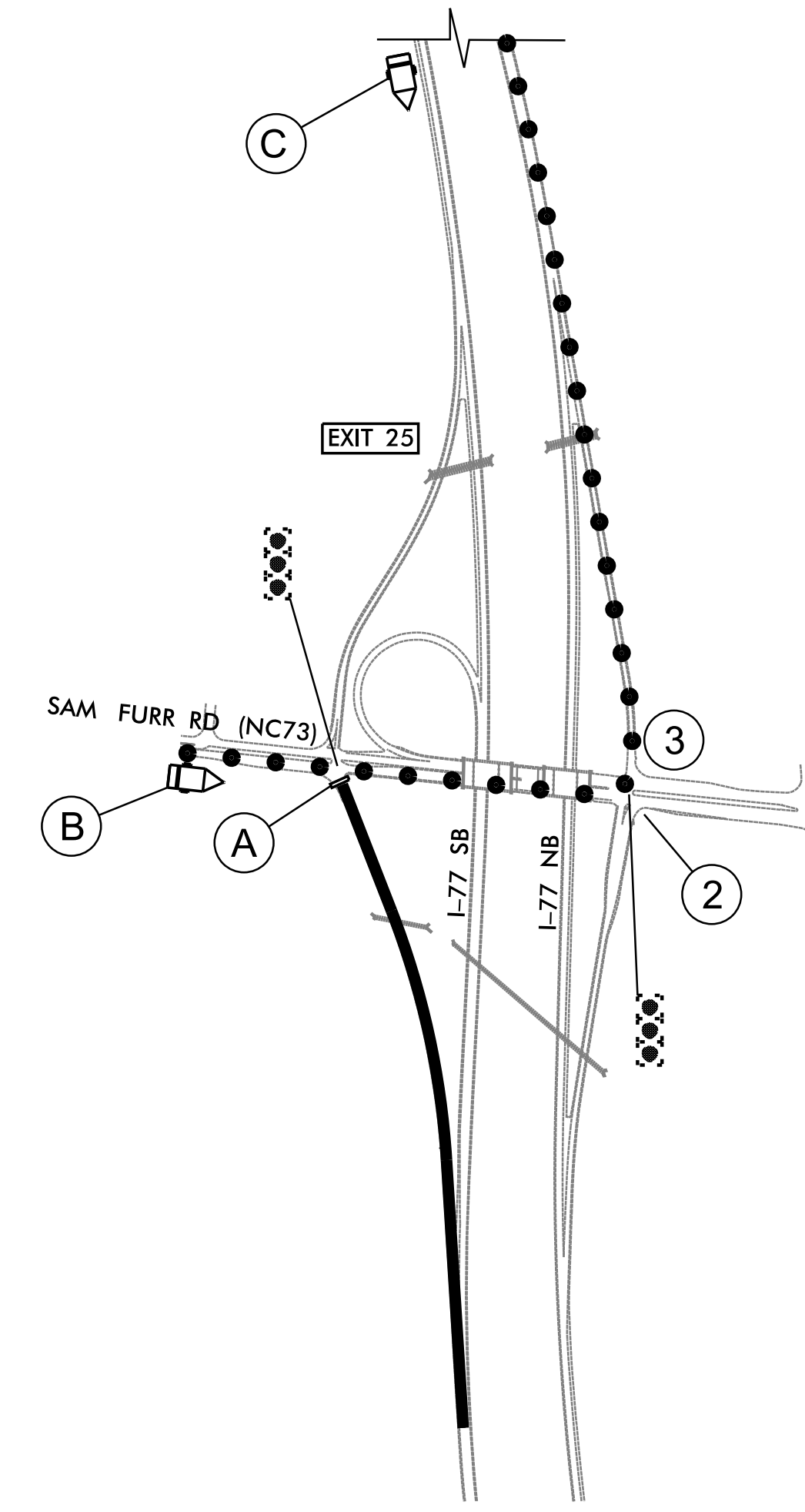
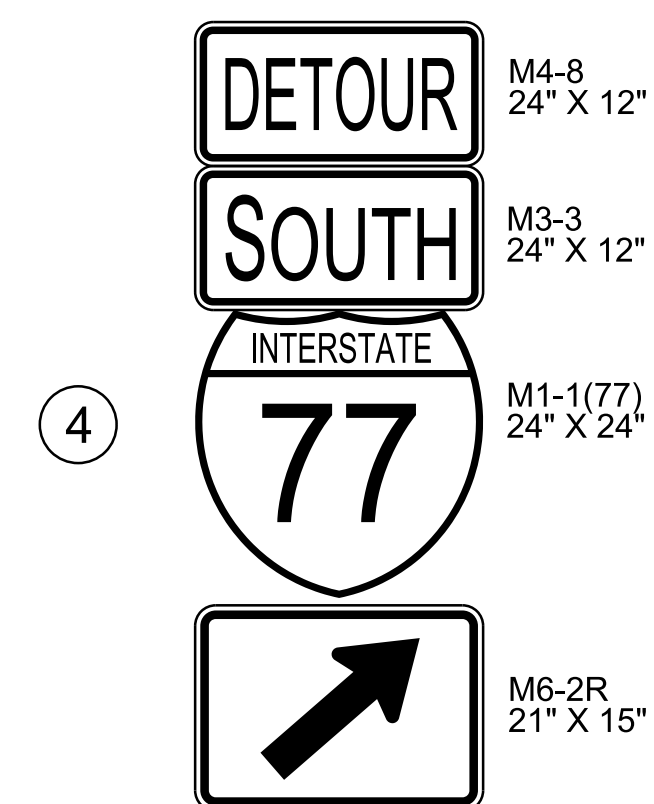
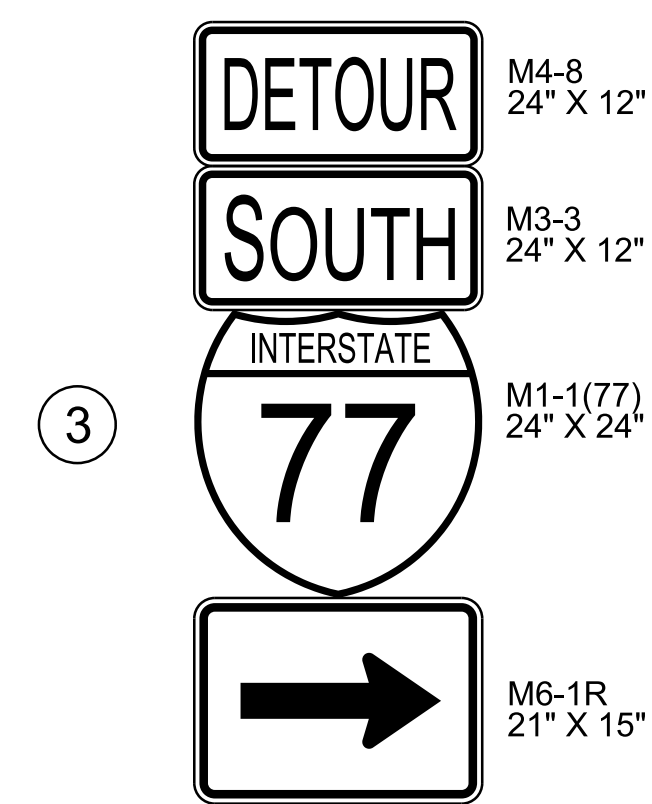
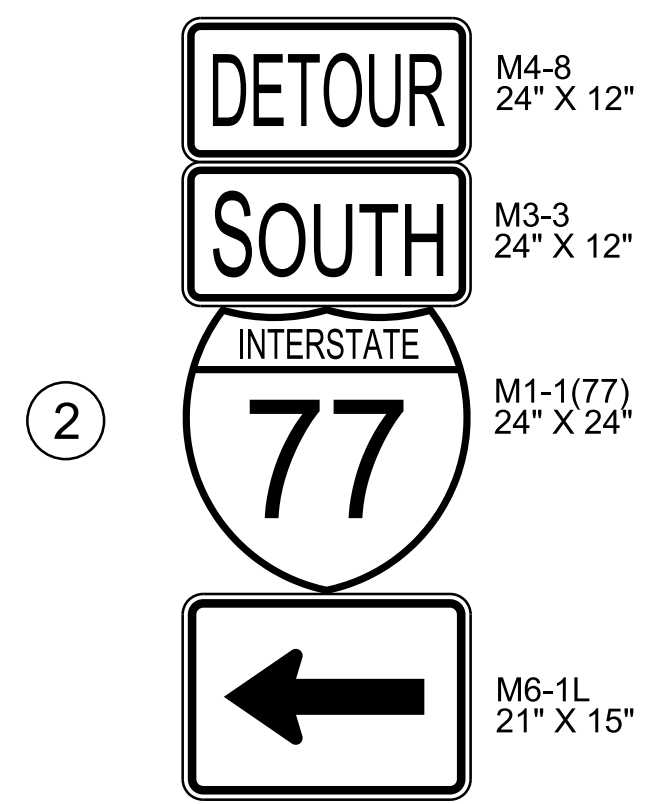
**SAM FURR RD. (NC73): RAMP TO I-77 S
TRAFFIC CONTROL PHASING**

NOTE: I-77 N EXIT 28, RAMP TO CATAWBA AVE, AND CATAWBA AVE RAMP TO I-77 S, SHALL NOT BE CLOSED DURING THIS CONSTRUCTION.

- STEP 1: INSTALL ADVANCED WORK ZONE WARNING SIGNS ON SAM FURR RD AND I-77, ACCORDING TO R.S.D. 1101.01, SHEETS 1 AND 3 OF 3.
- STEP 2: PLACE CHANGEABLE MESSAGE SIGNS (CMS) ON SAM FURR RD, AS SHOWN ON THIS SHEET, AND AS DIRECTED BY THE ENGINEER. (THE SAME CMS SIGNS MAY ALSO BE USED SEVERAL DAYS IN ADVANCE, TO DISPLAY DATE AND TIME DURATION OF RAMP CLOSURE(S).) PLACE STATIONARY SIGNING AS SHOWN ON THIS SHEET, LOCATED AS DIRECTED BY THE ENGINEER. (KEEP SIGNS COVERED UNTIL NEEDED FOR DETOUR).
- STEP 3: INSTALL DRUMS TO CLOSE RT TURN LANE AND TYPE III BARRICADES, WITH R11-2 AND M4-10L SIGNS ATTACHED, TO CLOSE THE SAM FURR RD TO I-77 S RAMP TO TRAFFIC. (SEE R.S.D. 1101.02 SHEETS 3 AND 12, SEE R.S.D. 1101.03 SHEET 2 FOR ADDITIONAL REQUIRED SIGNS)
- STEP 4: AWAY FROM TRAFFIC, CONSTRUCT SAM FURR RD RAMP TO I-77 S, AS SHOWN IN ROADWAY PLANS. USE LANE OR SHOULDER CLOSURES ON HARRIS BLVD AND/OR I-77, IF REQUIRED, AS OUTLINED IN THE GENERAL NOTES. IF ALL RESURFACING WORK ON THIS SHEET IS NOT ABLE TO BE COMPLETED WITHIN ONE OPERATION, THE CONTRACTOR SHALL PLACE TEMPORARY PAVEMENT MARKINGS ON THE PORTION OF COMPLETED PAVEMENT AND REOPEN THE RAMP TO TRAFFIC. REPEAT AS NECESSARY, UNTIL ALL RAMP RESURFACING IS COMPLETE. TRAFFIC WILL BE ON EXISTING ALIGNMENT (-Y20RPA-) AT THE END OF THE WORK DAY.
- STEP 5: WHEN CONSTRUCTION IS COMPLETE, INSTALL TEMPORARY PAVEMENT MARKING PAINT, (LOCATED AS SHOWN IN THE PAVEMENT MARKING PLANS FOR PERMANENT MARKINGS). REMOVE ALL TRAFFIC CONTROL DEVICES AND OPEN THE SAM FURR RD TO I-77 S FOR TRAFFIC.



PORTABLE CMS		FOR ADVANCE NOTICE OF RAMP CLOSURE	
(A) CMS MESSAGE 1: I-77 S RAMP CLOSED	(C) CMS MESSAGE 1: RAMP FROM NC73	(B) CMS MESSAGE 1: I-77 S RAMP CLOSED	
(B) CMS MESSAGE 2: FOLLOW DETOUR AHEAD	(C) CMS MESSAGE 2: TO I-77 S CLOSED	(B) CMS MESSAGE 2: (DAY OF WEEK) - / - / - 11p - 5a	

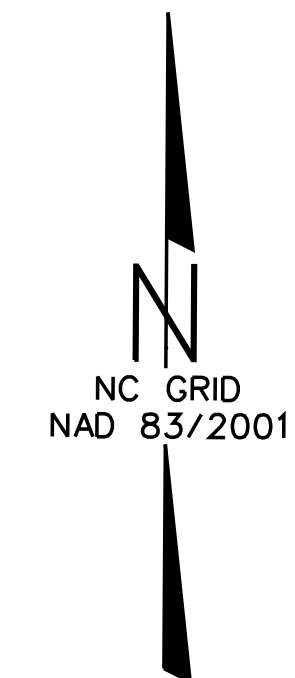


DETOUR MAP

**SAM FURR RD. (NC73):
RAMP TO SB I-77
PHASING & DETOUR PLAN**

REVISIONS

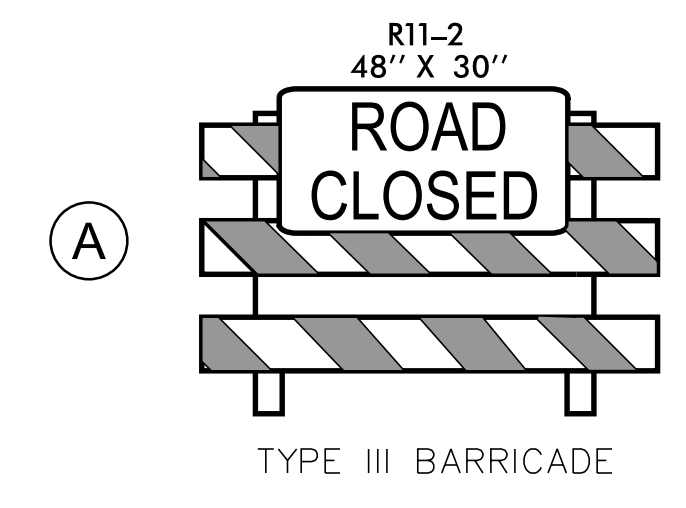
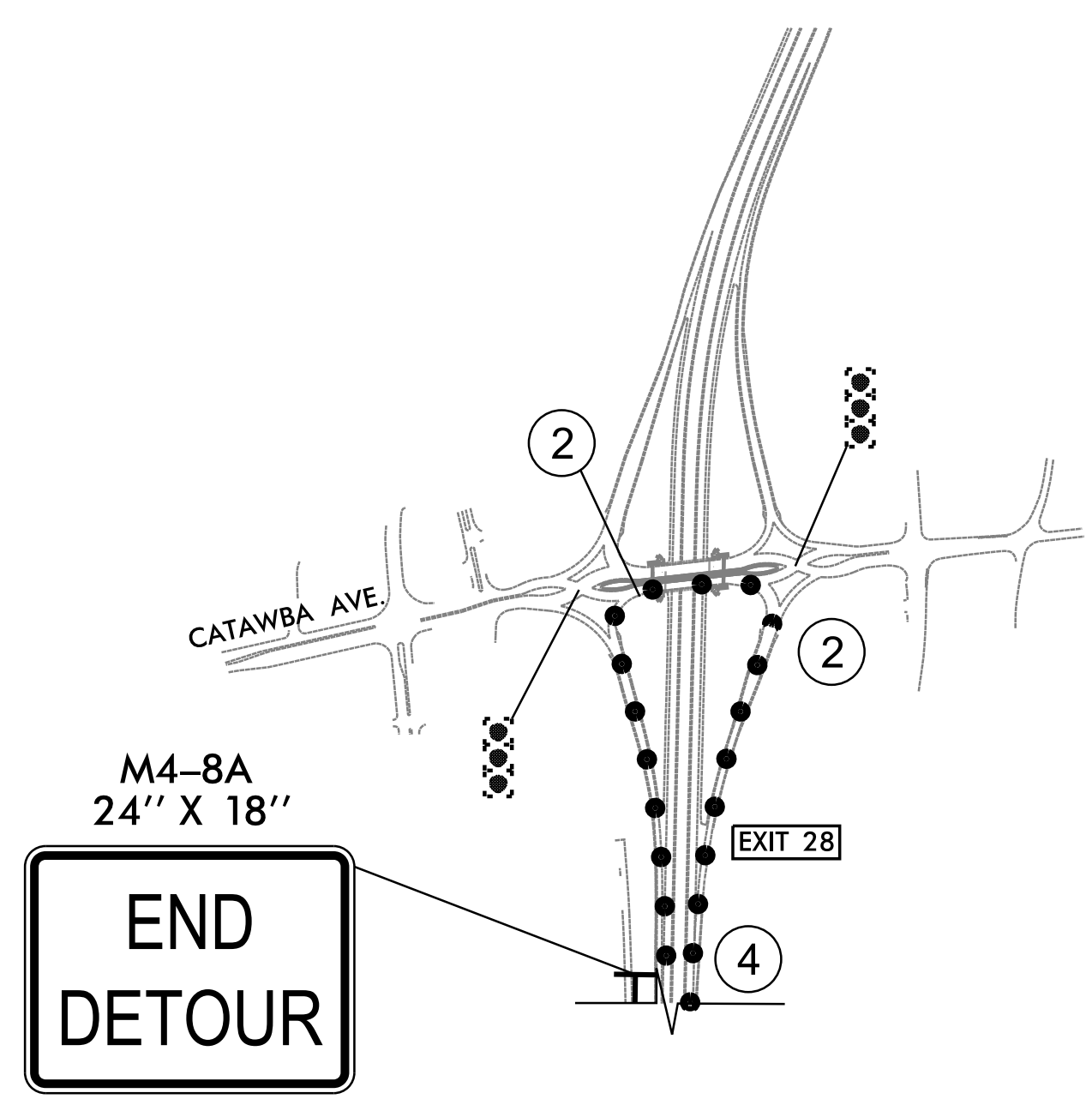
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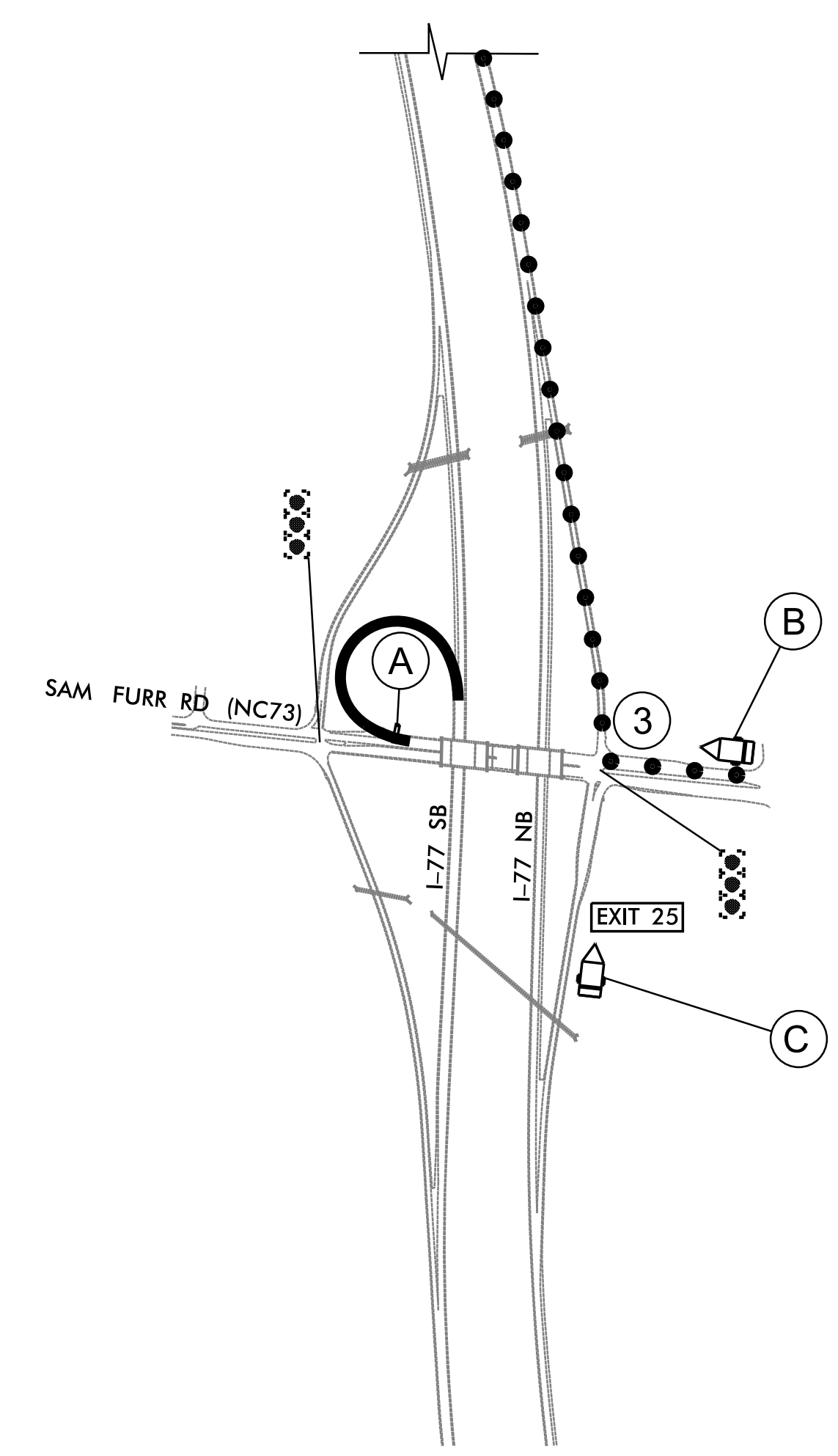
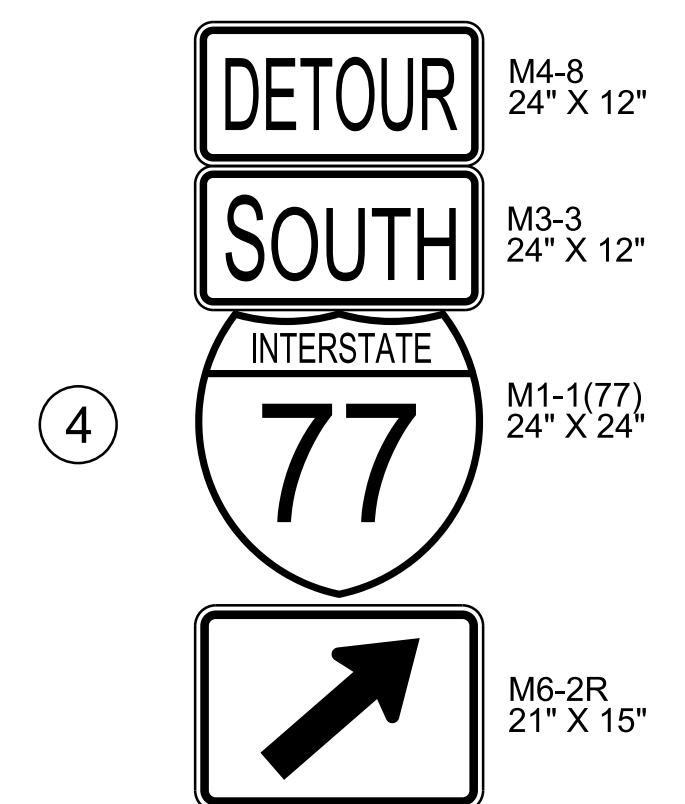
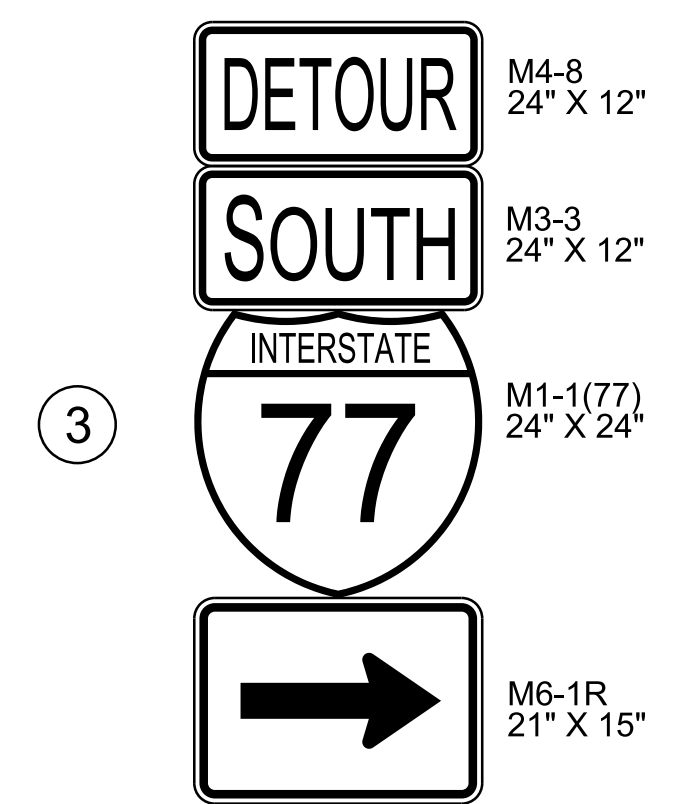
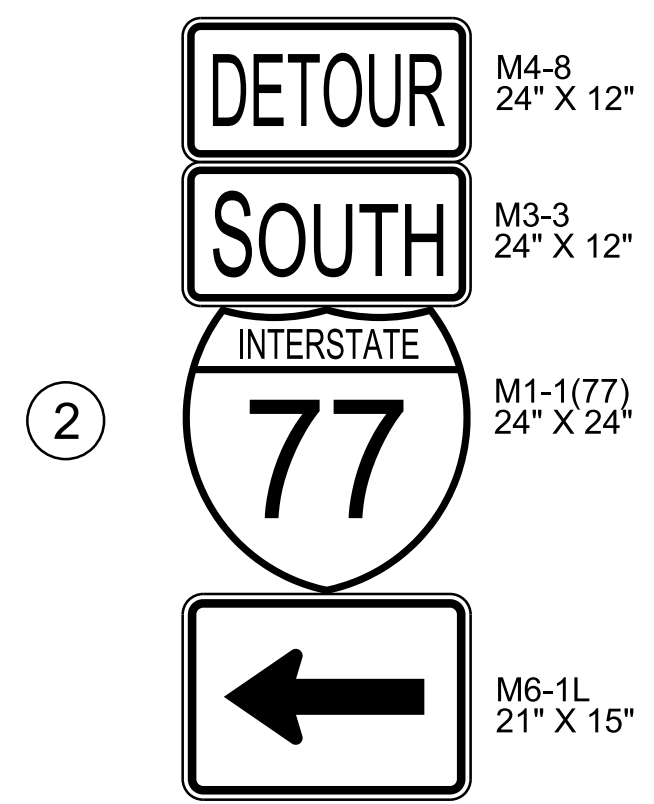
**SAM FURR RD. (NC73): LOOP TO I-77 S
TRAFFIC CONTROL PHASING**

NOTE: I-77 N RAMP TO CATAWBA AVE, AND CATAWBA AVE RAMP TO I-77 S SHALL NOT BE CLOSED DURING THIS CONSTRUCTION.

- STEP 1: INSTALL ADVANCED WORK ZONE WARNING SIGNS ON SAM FURR RD AND I-77, ACCORDING TO R.S.D. 1101.01, SHEETS 1 AND 3 OF 3.
- STEP 2: PLACE CHANGEABLE MESSAGE SIGNS (CMS) ON SAM FURR RD, AS SHOWN ON THIS SHEET, AND AS DIRECTED BY THE ENGINEER. (THE SAME CMS SIGNS MAY ALSO BE USED SEVERAL DAYS IN ADVANCE, TO DISPLAY DATE AND TIME DURATION OF RAMP CLOSURE(S).) PLACE STATIONARY SIGNING AS SHOWN ON THIS SHEET, LOCATED AS DIRECTED BY THE ENGINEER. (KEEP SIGNS COVERED UNTIL NEEDED FOR DETOUR).
- STEP 3: INSTALL DRUMS AND TYPE III BARRICADES, WITH R11-2 AND M4-10L SIGNS ATTACHED, TO CLOSE THE SAM FURR RD LOOP TO I-77 S TO TRAFFIC. (SEE R.S.D. 1101.02 SHEETS 3 AND 12 FOR LOOP CLOSURE, AND R.S.D. 1101.03 FOR ADDITIONAL SIGNS.)
- STEP 4: AWAY FROM TRAFFIC, CONSTRUCT SAM FURR RD LOOP TO I-77 S AS SHOWN IN ROADWAY PLANS. USE LANE OR SHOULDER CLOSURES ON SAM FURR RD AND/OR I-77, IF REQUIRED, AS OUTLINED IN THE GENERAL NOTES. IF ALL RESURFACING WORK ON THIS SHEET IS NOT ABLE TO BE COMPLETED WITHIN ONE OPERATION, THE CONTRACTOR SHALL PLACE TEMPORARY PAVEMENT MARKINGS ON THE PORTION OF COMPLETED PAVEMENT AND REOPEN THE RAMP TO TRAFFIC. REPEAT AS NECESSARY, UNTIL ALL RAMP RESURFACING IS COMPLETE. TRAFFIC WILL BE ON EXISTING ALIGNMENT (-Y20LPA-) AT THE END OF THE WORK DAY.
- STEP 5: WHEN CONSTRUCTION IS COMPLETE, INSTALL TEMPORARY PAVEMENT MARKING PAINT, (LOCATED AS SHOWN IN THE PAVEMENT MARKING PLANS FOR PERMANENT MARKINGS). REMOVE ALL TRAFFIC CONTROL DEVICES AND OPEN THE SAM FURR RD LOOP TO I-77 S FOR TRAFFIC.



PORTABLE CMS		FOR ADVANCE NOTICE OF RAMP CLOSURE	
(B) CMS MESSAGE 1: I-77 S LOOP CLOSED	(C) CMS MESSAGE 1: I-77 S LOOP CLOSED	(B) (C) CMS MESSAGE 1: I-77 S LOOP CLOSED	
(B) CMS MESSAGE 2: FOLLOW DETOUR AHEAD	(C) CMS MESSAGE 2: I-77 S RAMP OPEN	(B) (C) CMS MESSAGE 2: (DAY OF WEEK) -/-/- 11p - 5a	



DETOUR MAP

**SAM FURR RD. (NC73):
LOOP TO SB I-77
PHASING & DETOUR PLAN**

REVISIONS

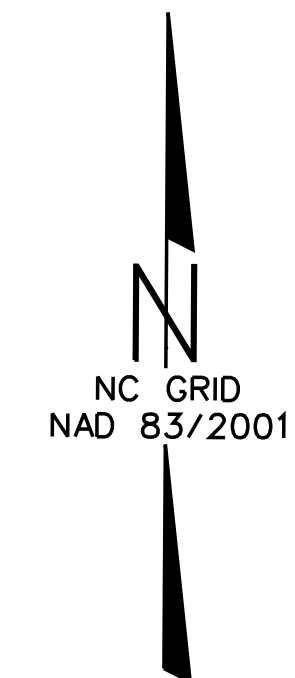
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**I-77 N EXIT 25 RAMP TO SAM FURR RD. (NC73)
TRAFFIC CONTROL PHASING**

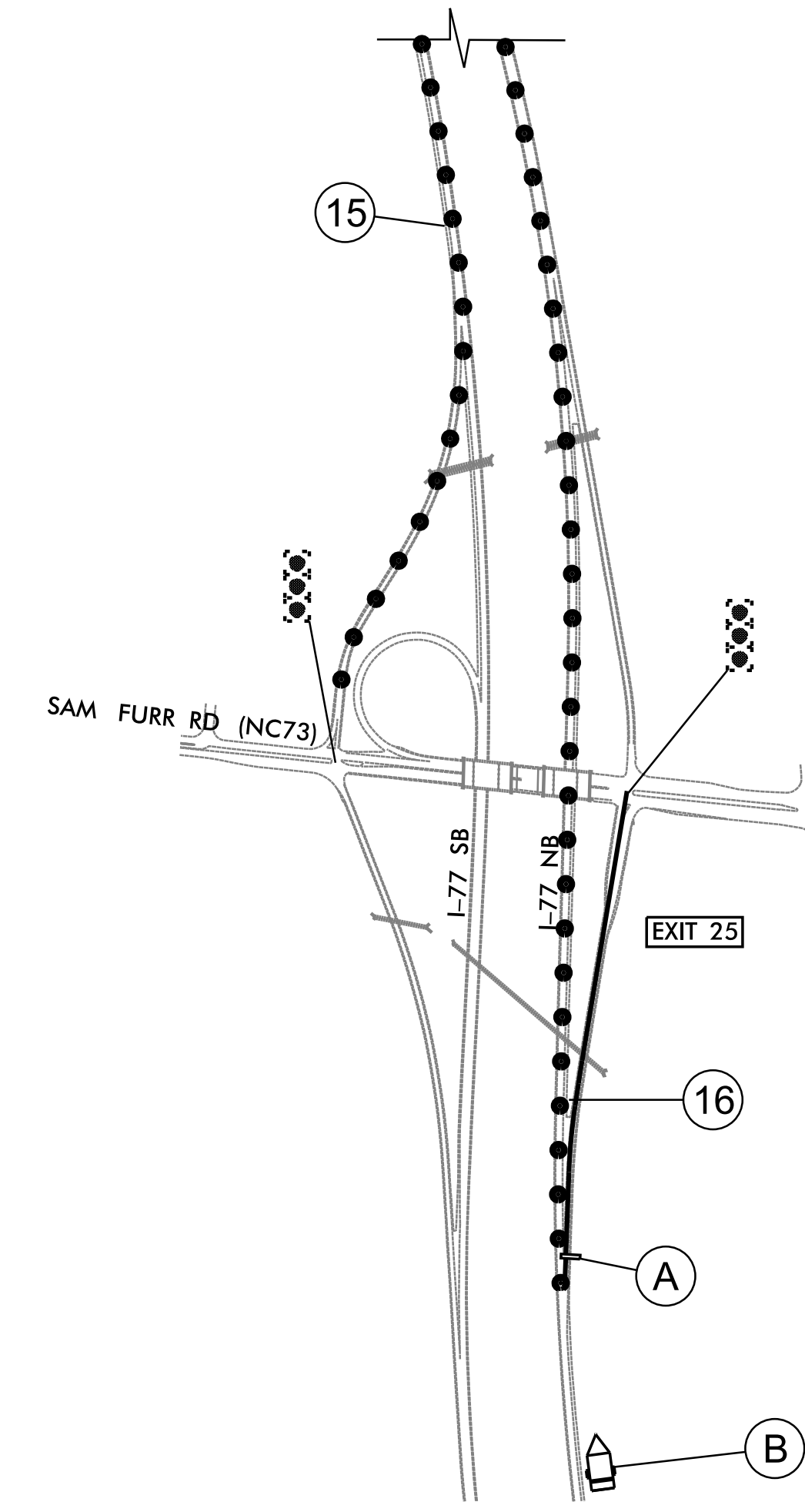
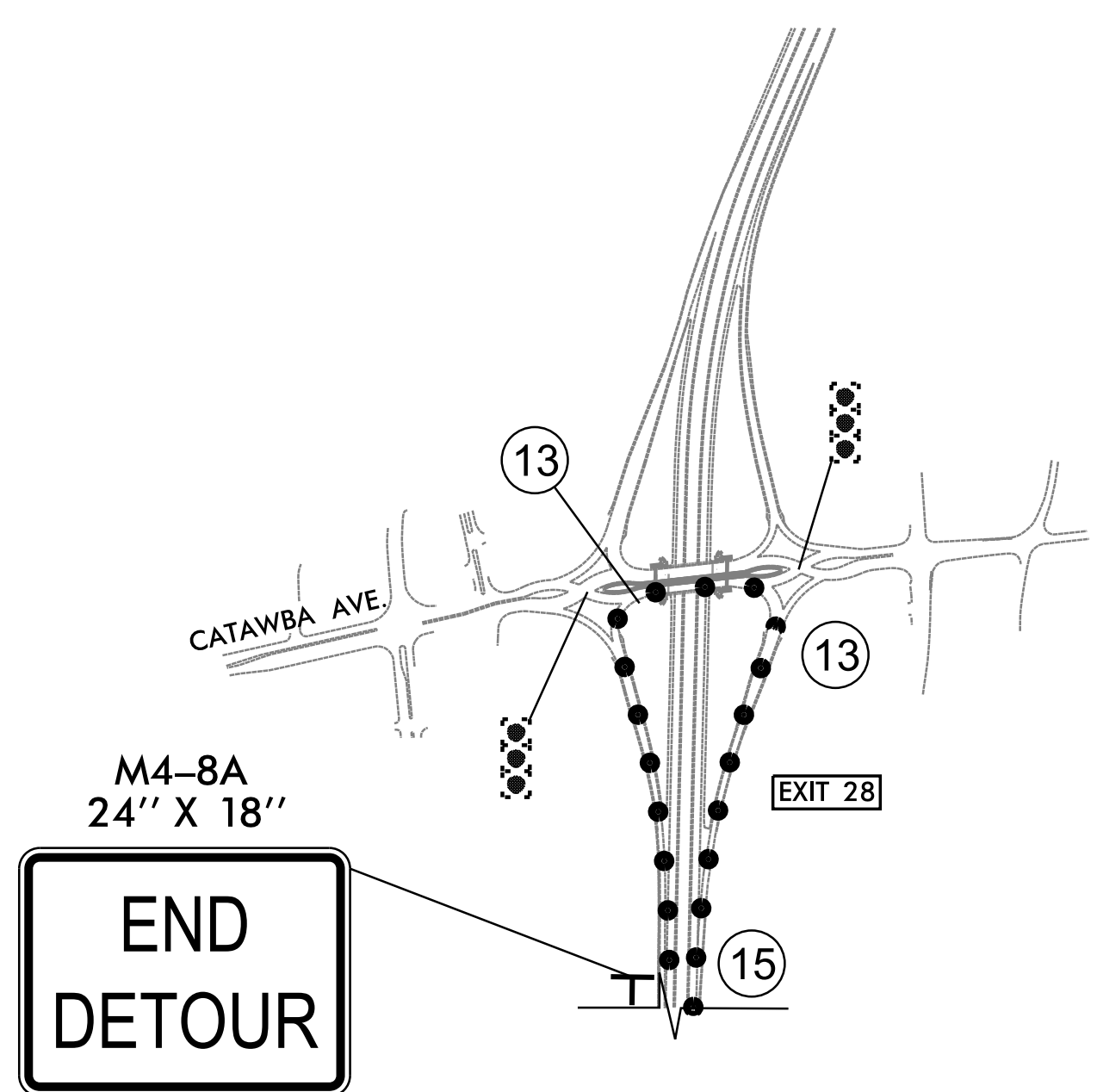
NOTE: I-77 N EXIT 28, RAMP TO CATAWBA AVE; AND CATAWBA AVE RAMP TO I-77 S, SHALL NOT BE CLOSED DURING THIS CONSTRUCTION.

- STEP 1: INSTALL ADVANCED WORK ZONE WARNING SIGNS ON I-77 AND SAM FURR RD, ACCORDING TO R.S.D. 1101.01, SHEETS 1 AND 3 OF 3.
- STEP 2: PLACE CHANGEABLE MESSAGE SIGNS (CMS) ON I-77, AS SHOWN ON THIS SHEET, AND AS DIRECTED BY THE ENGINEER. (THE SAME CMS SIGNS MAY ALSO BE USED SEVERAL DAYS IN ADVANCE, TO DISPLAY DATE AND TIME DURATION OF RAMP CLOSURE(S).) PLACE STATIONARY SIGNING AS SHOWN ON THIS SHEET, LOCATED AS DIRECTED BY THE ENGINEER. (KEEP SIGNS COVERED UNTIL NEEDED FOR DETOUR).
- STEP 3: INSTALL DRUMS AND TYPE III BARRICADES, WITH R11-2 AND M4-10L SIGNS ATTACHED, TO CLOSE THE I-77 N RAMP TO SAM FURR RD TO TRAFFIC. (SEE R.S.D. 1101.02 SHEET 12)
- STEP 4: AWAY FROM TRAFFIC, CONSTRUCT I-77 N RAMP TO SAM FURR RD, AS SHOWN IN ROADWAY PLANS. USE LANE OR SHOULDER CLOSURES ON SAM FURR RD AND/OR I-77, IF REQUIRED, AS OUTLINED IN THE GENERAL NOTES. IF ALL RESURFACING WORK ON THIS SHEET IS NOT ABLE TO BE COMPLETED WITHIN ONE OPERATION, THE CONTRACTOR SHALL PLACE TEMPORARY PAVEMENT MARKINGS ON THE PORTION OF COMPLETED PAVEMENT AND REOPEN THE RAMP TO TRAFFIC. REPEAT AS NECESSARY, UNTIL ALL RAMP RESURFACING IS COMPLETE. TRAFFIC WILL BE ON EXISTING ALIGNMENT (-Y20RPB-) AT THE END OF THE WORK DAY.
- STEP 5: WHEN CONSTRUCTION IS COMPLETE, INSTALL TEMPORARY PAVEMENT MARKING PAINT, (LOCATED AS SHOWN IN THE PAVEMENT MARKING PLANS FOR PERMANENT MARKINGS). REMOVE ALL TRAFFIC CONTROL DEVICES AND OPEN THE I-77 N RAMP TO SAM FURR RD FOR TRAFFIC.

ICT
THE CONTRACTOR MUST REPLACE INDUCTIVE SIGNAL LOOPS THAT WERE REMOVED DURING RESURFACING OPERATIONS WITHIN 7 DAYS. (SEE PROJECT PROPOSAL FOR INTERMEDIATE COMPLETION TIME AND LIQUIDATED DAMAGES).



PROJECT REFERENCE NO. I-5405D	SHEET NO. TMP-15
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	



DETOUR MAP

<p>TYPE III BARRICADE</p>	<p>PORTABLE CMS</p> <table border="1"> <tr> <td>CMS MESSAGE 1:</td> <td>EXIT 25 CLOSED</td> </tr> <tr> <td>CMS MESSAGE 2:</td> <td>FOLLOW DETOUR AHEAD</td> </tr> </table>	CMS MESSAGE 1:	EXIT 25 CLOSED	CMS MESSAGE 2:	FOLLOW DETOUR AHEAD	<p>FOR ADVANCE NOTICE OF RAMP CLOSURE</p> <table border="1"> <tr> <td>CMS MESSAGE 1:</td> <td>EXIT 25 CLOSED</td> </tr> <tr> <td>CMS MESSAGE 2:</td> <td>(DAY OF WEEK) -/-/- 11p - 5a</td> </tr> </table>	CMS MESSAGE 1:	EXIT 25 CLOSED	CMS MESSAGE 2:	(DAY OF WEEK) -/-/- 11p - 5a										
CMS MESSAGE 1:	EXIT 25 CLOSED																			
CMS MESSAGE 2:	FOLLOW DETOUR AHEAD																			
CMS MESSAGE 1:	EXIT 25 CLOSED																			
CMS MESSAGE 2:	(DAY OF WEEK) -/-/- 11p - 5a																			
<p>13</p> <table border="1"> <tr><td>DETOUR</td><td>M4-8 24" X 12"</td></tr> <tr><td>73</td><td>M1-5 24" X 24"</td></tr> <tr><td>←</td><td>M6-1L 21" X 15"</td></tr> </table>	DETOUR	M4-8 24" X 12"	73	M1-5 24" X 24"	←	M6-1L 21" X 15"	<p>15</p> <table border="1"> <tr><td>DETOUR</td><td>M4-8 24" X 12"</td></tr> <tr><td>73</td><td>M1-5 24" X 24"</td></tr> <tr><td>↗</td><td>M6-2R 21" X 15"</td></tr> </table>	DETOUR	M4-8 24" X 12"	73	M1-5 24" X 24"	↗	M6-2R 21" X 15"	<p>16</p> <table border="1"> <tr><td>DETOUR</td><td>M4-8 24" X 12"</td></tr> <tr><td>73</td><td>M1-5 24" X 24"</td></tr> <tr><td>↑</td><td>M6-3 21" X 15"</td></tr> </table>	DETOUR	M4-8 24" X 12"	73	M1-5 24" X 24"	↑	M6-3 21" X 15"
DETOUR	M4-8 24" X 12"																			
73	M1-5 24" X 24"																			
←	M6-1L 21" X 15"																			
DETOUR	M4-8 24" X 12"																			
73	M1-5 24" X 24"																			
↗	M6-2R 21" X 15"																			
DETOUR	M4-8 24" X 12"																			
73	M1-5 24" X 24"																			
↑	M6-3 21" X 15"																			

**NB I-77 EXIT 25 RAMP TO SAM FURR RD. (NC73)
PHASING & DETOUR PLAN**

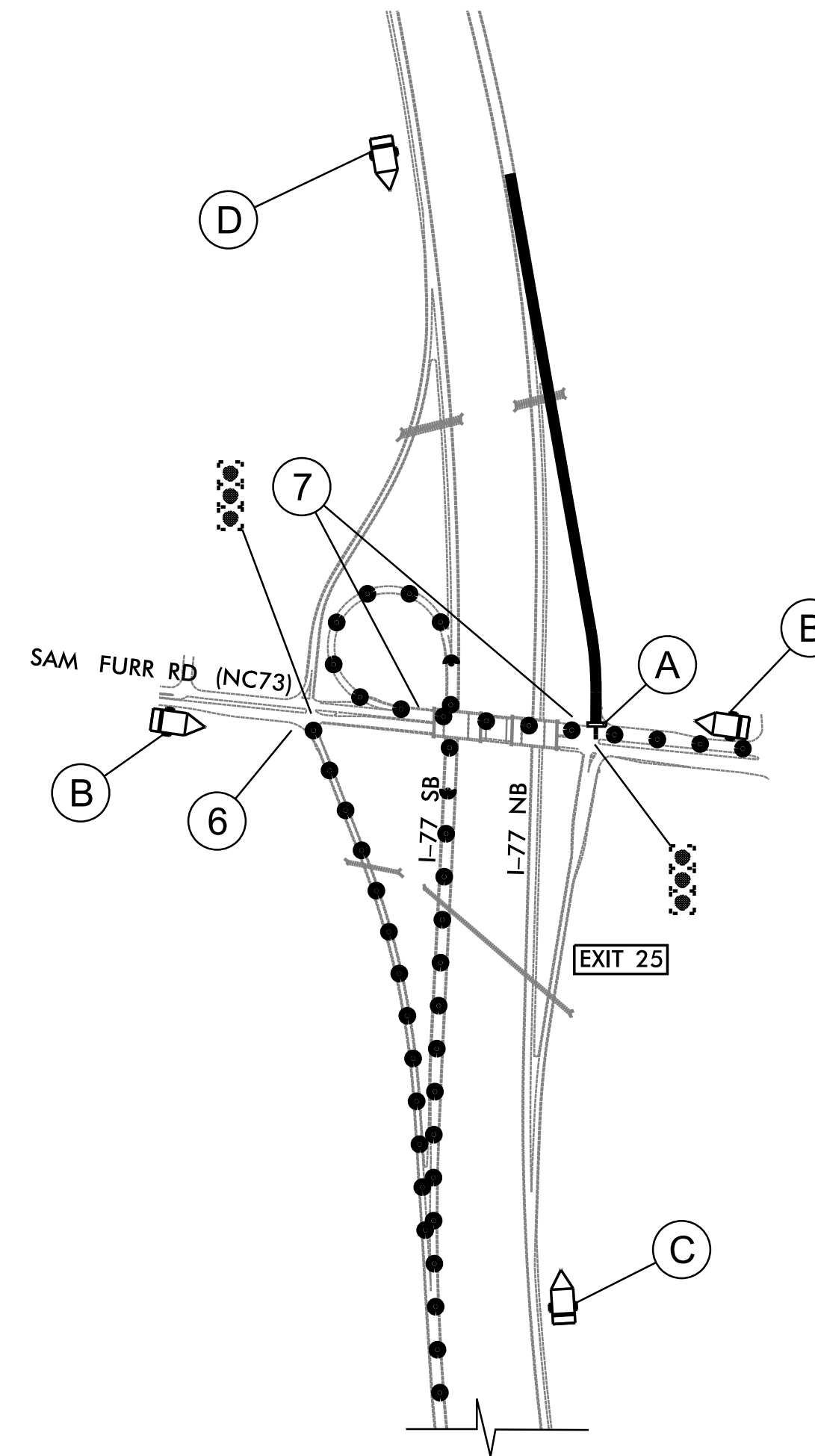
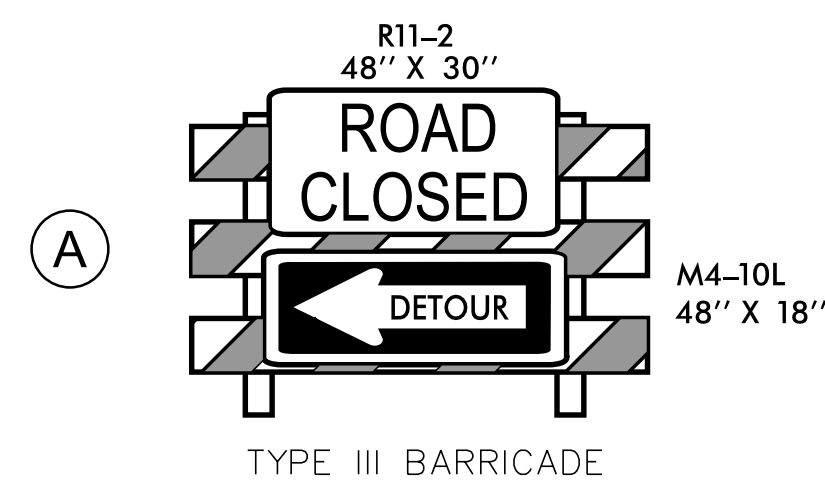
REVISIONS

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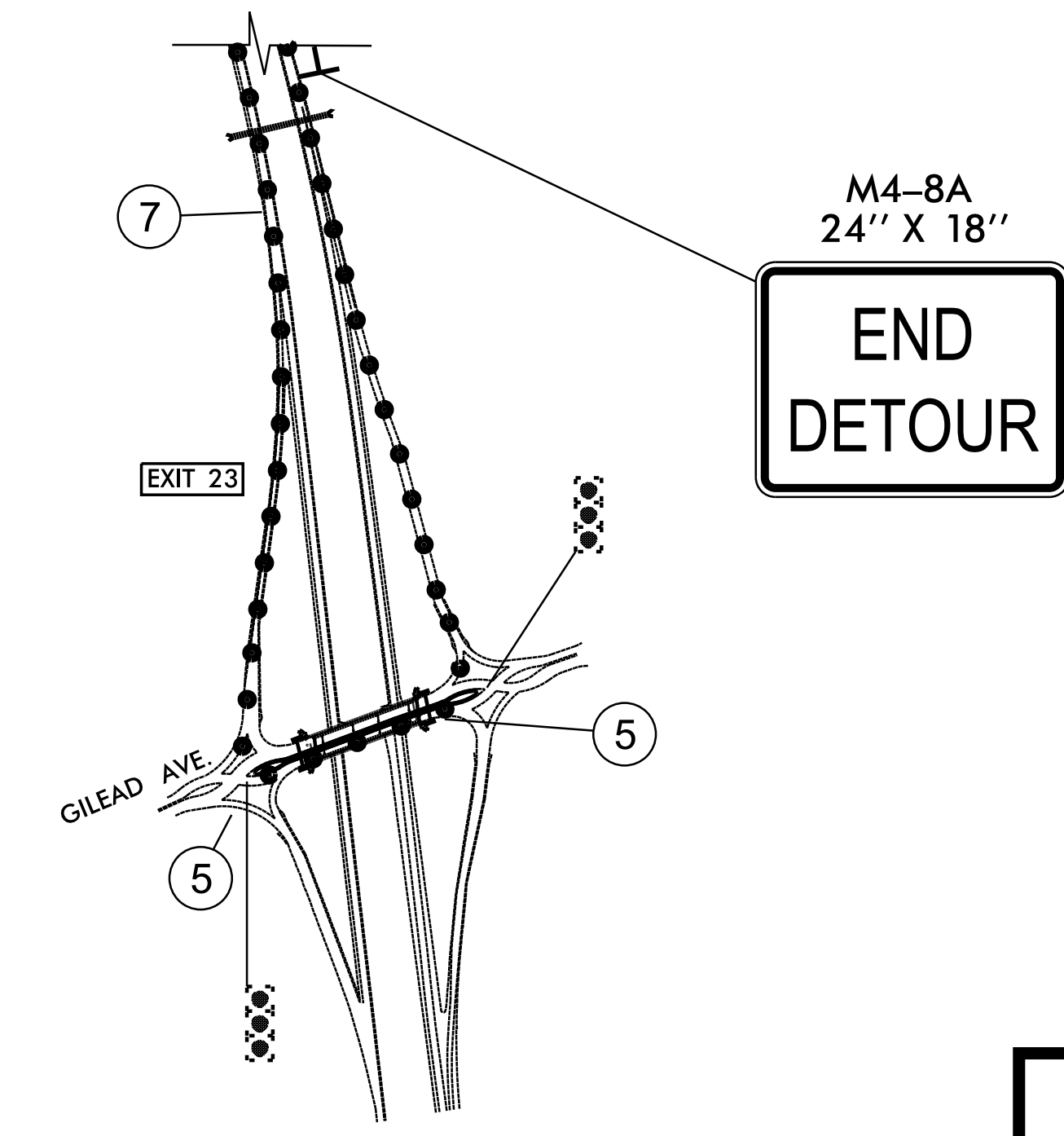
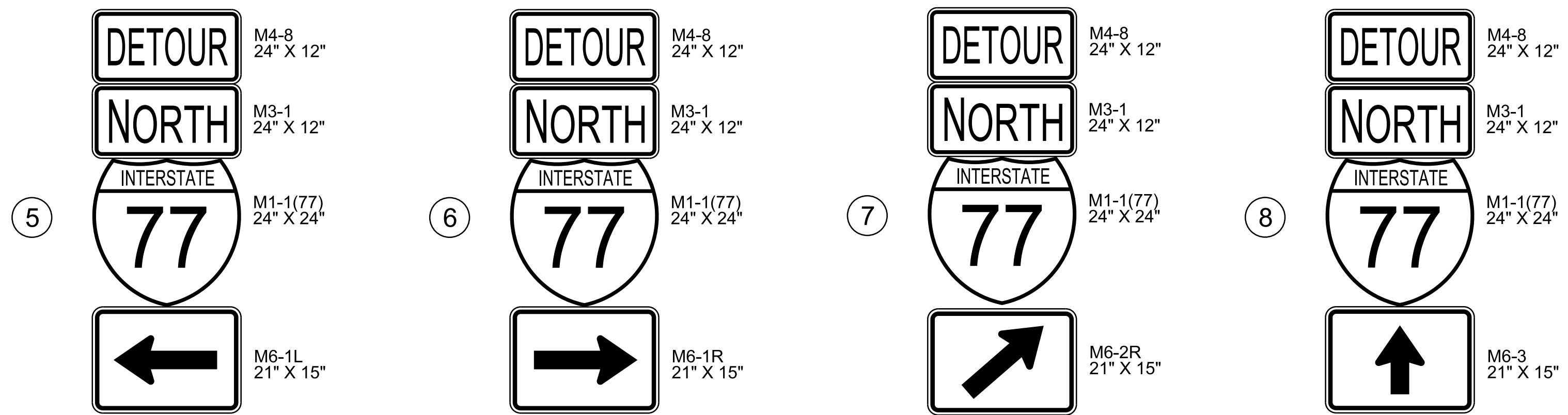
**SAM FURR RD. (NC73): RAMP TO I-77 N
TRAFFIC CONTROL PHASING**

NOTE: I-77 S EXIT 23 TO GILEAD RD, AND GILEAD RD RAMP TO I-77 N, SHALL NOT BE CLOSED DURING THIS CONSTRUCTION.

- STEP 1: INSTALL ADVANCED WORK ZONE WARNING SIGNS ON SAM FURR RD AND I-77, ACCORDING TO R.S.D. 1101.01, SHEETS 1 AND 3 OF 3.
- STEP 2: PLACE CHANGEABLE MESSAGE SIGNS (CMS) ON SAM FURR RD, AS SHOWN ON THIS SHEET, AND AS DIRECTED BY THE ENGINEER. (THE SAME CMS SIGNS MAY ALSO BE USED SEVERAL DAYS IN ADVANCE, TO DISPLAY DATE AND TIME DURATION OF RAMP CLOSURE(S).) PLACE STATIONARY SIGNING AS SHOWN ON THIS SHEET, LOCATED AS DIRECTED BY THE ENGINEER. (KEEP SIGNS COVERED UNTIL NEEDED FOR DETOUR).
- STEP 3: INSTALL DRUMS AND TYPE III BARRICADES, WITH R11-2 AND M4-10L SIGNS ATTACHED, TO CLOSE THE SAM FURR RD RAMP TO I-77 N TO TRAFFIC. (SEE R.S.D. 1101.03 SHEET 2 FOR ADDITIONAL SIGNS; SEE 1101.02 SHEET 12 FOR RT TURN LANE CLOSURE, AND COMPLETELY CLOSE THE EASTBOUND LEFT RUN LANE ON SAM FURR RD)
- STEP 4: AWAY FROM TRAFFIC, CONSTRUCT SAM FURR RD RAMP TO I-77 N, AS SHOWN IN ROADWAY PLANS. USE LANE OR SHOULDER CLOSURES ON SAM FURR RD AND/OR I-77, IF REQUIRED, AS OUTLINED IN THE GENERAL NOTES. IF ALL RESURFACING WORK ON THIS SHEET IS NOT ABLE TO BE COMPLETED WITHIN ONE OPERATION, THE CONTRACTOR SHALL PLACE TEMPORARY PAVEMENT MARKINGS ON THE PORTION OF COMPLETED PAVEMENT AND REOPEN THE RAMP TO TRAFFIC. REPEAT AS NECESSARY, UNTIL ALL RAMP RESURFACING IS COMPLETE. TRAFFIC WILL BE ON EXISTING ALIGNMENT (-Y20RPD-) AT THE END OF THE WORK DAY.
- STEP 5: WHEN CONSTRUCTION IS COMPLETE, INSTALL TEMPORARY PAVEMENT MARKING PAINT, (LOCATED AS SHOWN IN THE PAVEMENT MARKING PLANS FOR PERMANENT MARKINGS). REMOVE ALL TRAFFIC CONTROL DEVICES AND OPEN THE SAM FURR RAMP TO I-77 N FOR TRAFFIC.



PORTABLE CMS				FOR ADVANCE NOTICE OF RAMP CLOSURE	
(A)	CMS MESSAGE 1: I-77 N RAMP CLOSED	(C)	CMS MESSAGE 1: EXIT 25 NO RETURN	(D)	CMS MESSAGE 1: EXIT 25 NC 73
(B)	CMS MESSAGE 2: FOLLOW DETOUR AHEAD	(C)	CMS MESSAGE 2: I-77 N RAMP CLOSED	(D)	CMS MESSAGE 2: I-77 N RAMP CLOSED
				(B)	CMS (DAY OF WEEK) MESSAGE 2: - / - / - 11p - 5a



DETOUR MAP

**SAM FURR RD. (NC73):
RAMP TO NB I-77
PHASING & DETOUR PLAN**

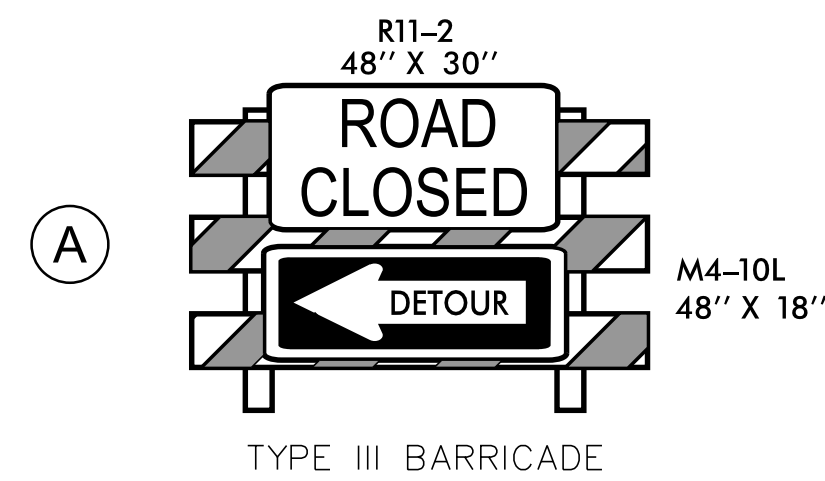
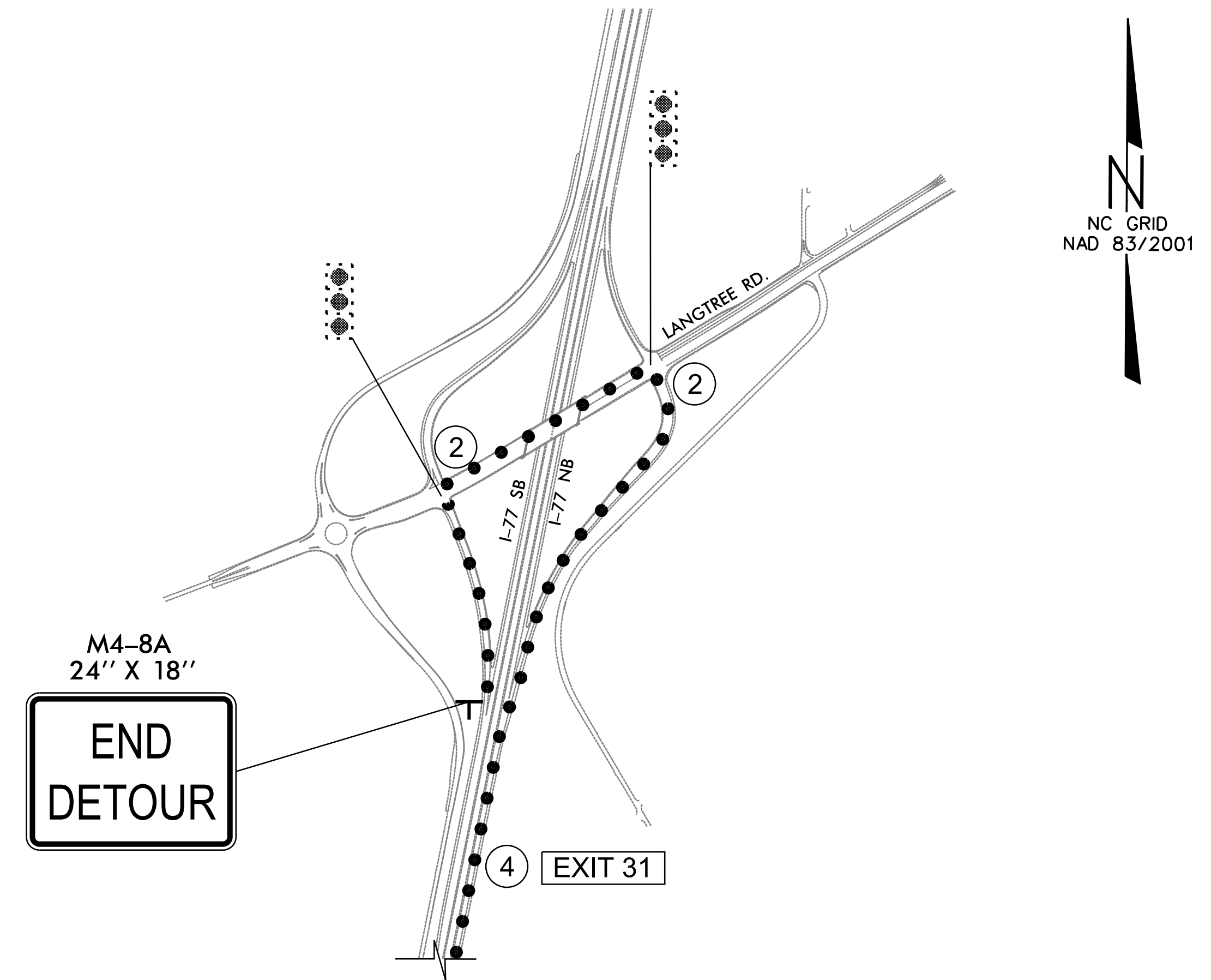
REVISIONS

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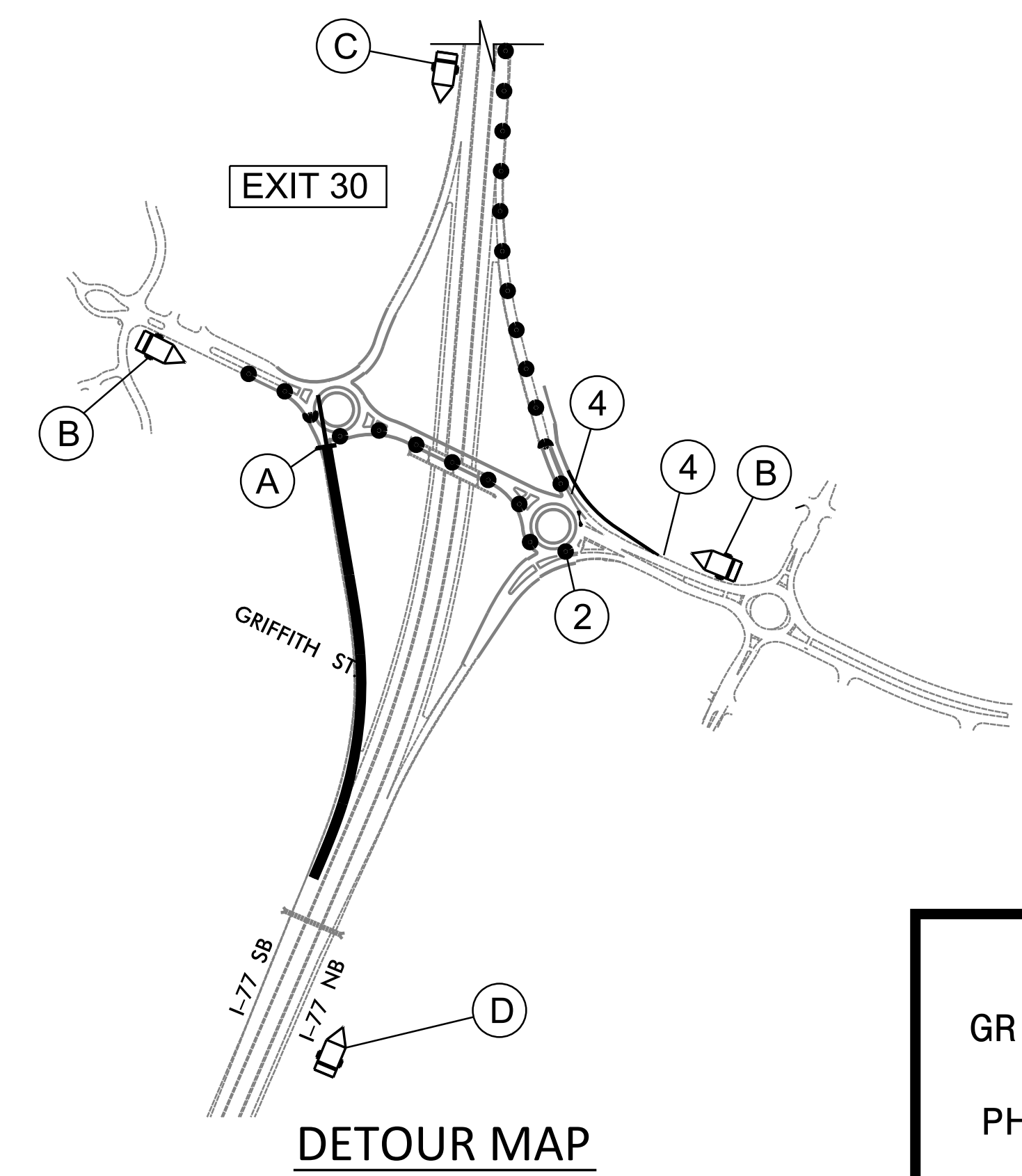
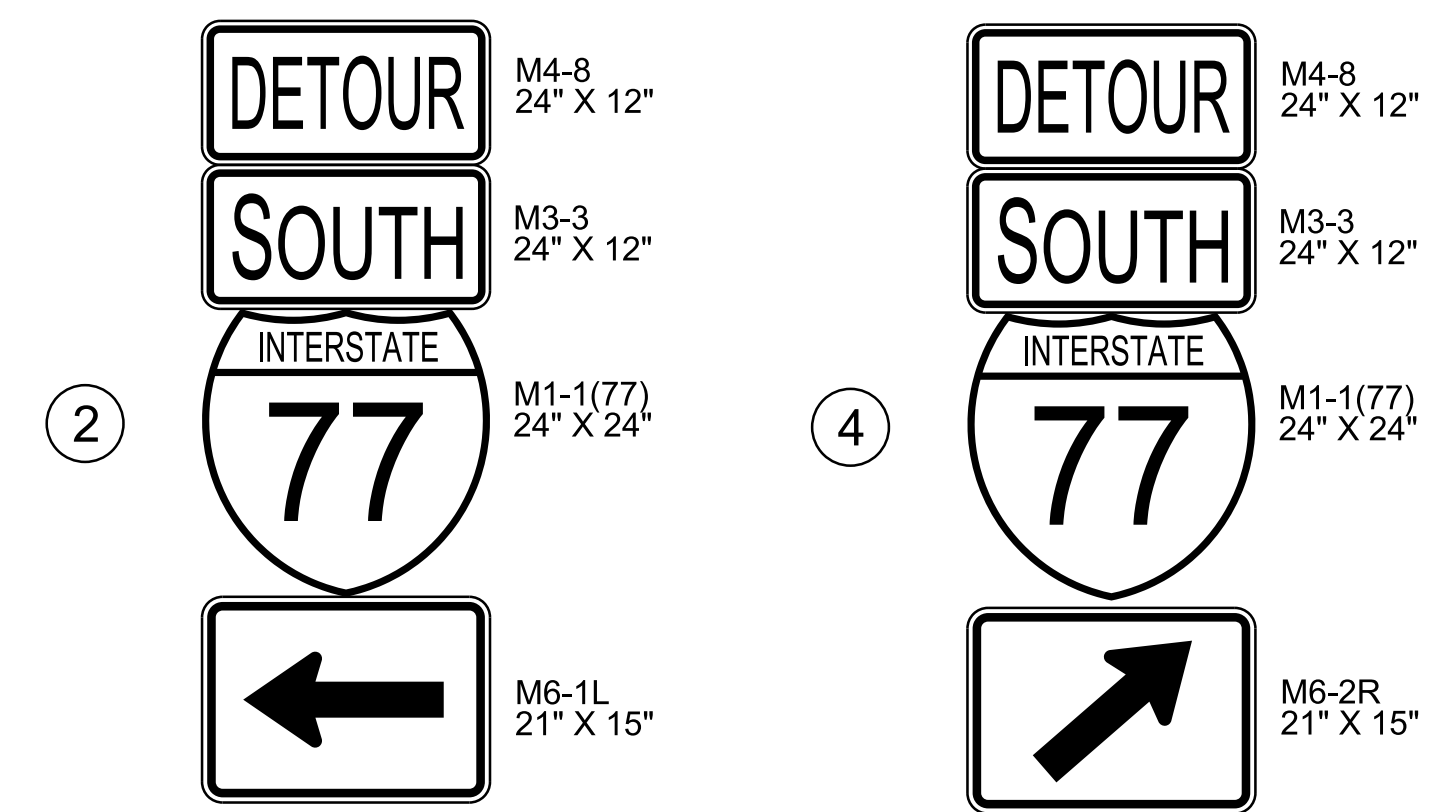
GRIFFITH ST. RAMP TO I-77 S TRAFFIC CONTROL PHASING

NOTE: I-77 N EXIT 31 TO LANGTREE RD AND LANGTREE RD EXIT TO I-77 S RAMP SHALL NOT BE CLOSED DURING THIS CONSTRUCTION.

- STEP 1:** INSTALL ADVANCED WORK ZONE WARNING SIGNS ON GRIFFITH ST AND I-77, ACCORDING TO R.S.D. 1101.01, SHEETS 1 AND 3 OF 3.
- STEP 2:** PLACE CHANGEABLE MESSAGE SIGNS (CMS) ON GRIFFITH ST, AS SHOWN ON THIS SHEET, AND AS DIRECTED BY THE ENGINEER. (THE SAME CMS SIGNS MAY ALSO BE USED SEVERAL DAYS IN ADVANCE, TO DISPLAY DATE AND TIME DURATION OF RAMP CLOSURE(S).) PLACE STATIONARY SIGNING AS SHOWN ON THIS SHEET, LOCATED AS DIRECTED BY THE ENGINEER. (KEEP SIGNS COVERED UNTIL NEEDED FOR DETOUR).
- STEP 3:** INSTALL DRUMS AND TYPE III BARRICADES, WITH R11-2 AND M4-10L SIGNS ATTACHED, TO CLOSE THE I-77 S RAMP TO TRAFFIC. (SEE R.S.D. 1101.02 SHEET 12 FOR CLOSURE, AND SEE R.S.D. 1101.03 SHEET 2 FOR ADDITIONAL REQUIRED SIGNS)
- STEP 4:** AWAY FROM TRAFFIC, CONSTRUCT RAMP AS SHOWN IN ROADWAY PLANS. USE LANE OR SHOULDER CLOSURES ON SUNSET ROAD AND/OR I-77, IF REQUIRED, AS OUTLINED IN THE GENERAL NOTES. IF ALL RESURFACING WORK ON THIS SHEET IS NOT ABLE TO BE COMPLETED WITHIN ONE OPERATION, THE CONTRACTOR SHALL PLACE TEMPORARY PAVEMENT MARKINGS ON THE PORTION OF COMPLETED PAVEMENT AND REOPEN THE RAMP TO TRAFFIC. REPEAT AS NECESSARY, UNTIL ALL RAMP RESURFACING IS COMPLETE. TRAFFIC WILL BE ON EXISTING ALIGNMENT (-Y23RPB-) AT THE END OF THE WORK DAY
- STEP 5:** WHEN CONSTRUCTION IS COMPLETE, INSTALL TEMPORARY PAVEMENT MARKING PAINT, (LOCATED AS SHOWN IN THE PAVEMENT MARKING PLANS PERMANENT MARKINGS). REMOVE ALL TRAFFIC CONTROL DEVICES AND OPEN THE RAMP TO I-77 S FOR TRAFFIC.



PORTABLE CMS				FOR ADVANCE NOTICE OF RAMP CLOSURE	
(A)	CMS MESSAGE 1: I-77 S RAMP CLOSED	(C)	CMS MESSAGE 1: EXIT 30 NO RETURN	(B)	CMS MESSAGE 1: I-77 S RAMP CLOSED
(B)	CMS MESSAGE 2: FOLLOW DETOUR AHEAD	(D)	CMS MESSAGE 2: I-77 S RAMP CLOSED	(B)	CMS MESSAGE 2: (DAY OF WEEK) - / - / - 11p - 5a



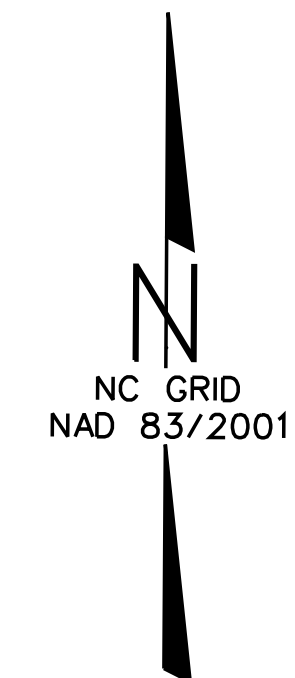
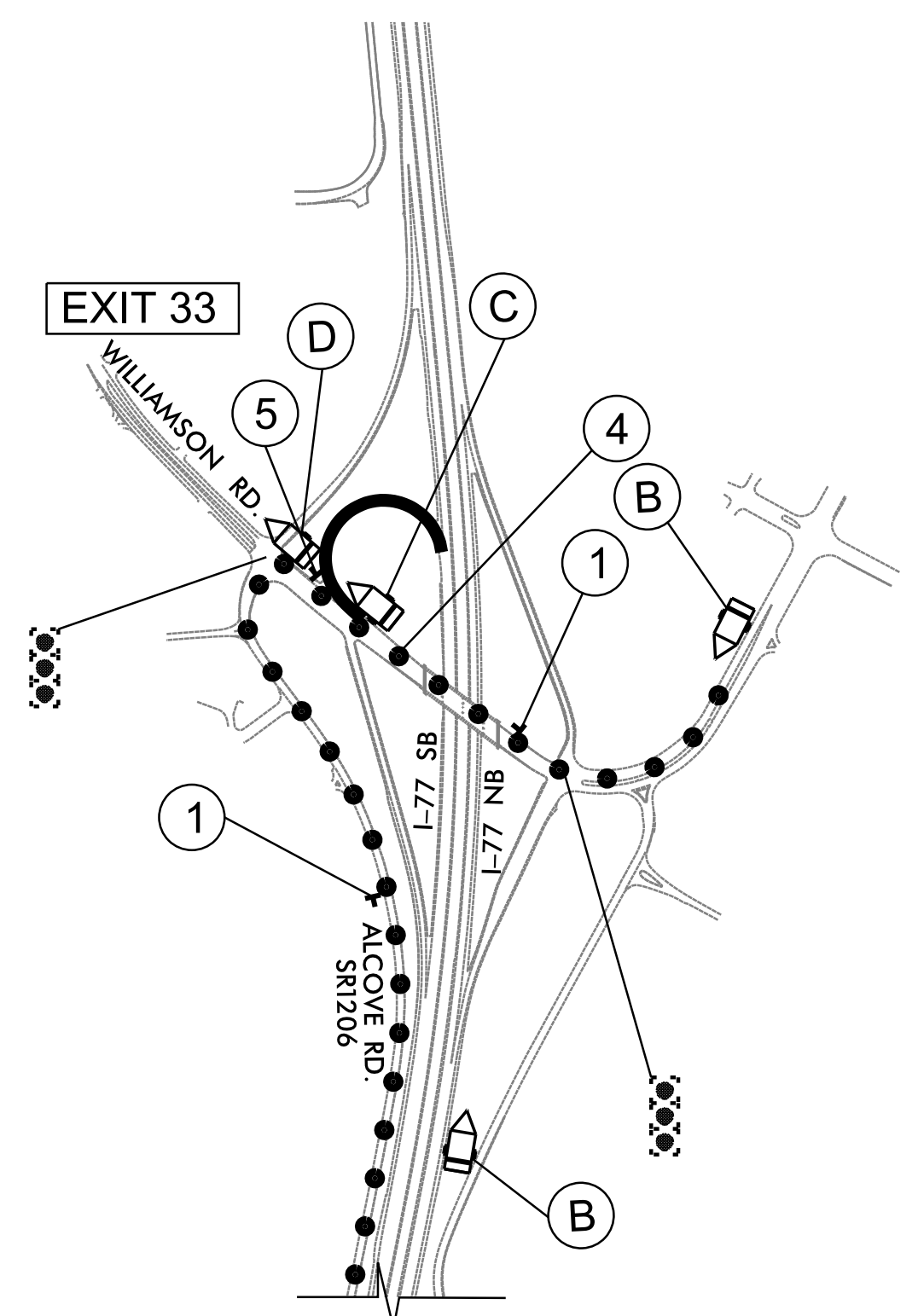
**GRIFFITH ST. (SR 2158)
RAMP TO SB I-77
PHASING & DETOUR PLAN**


REVISIONS

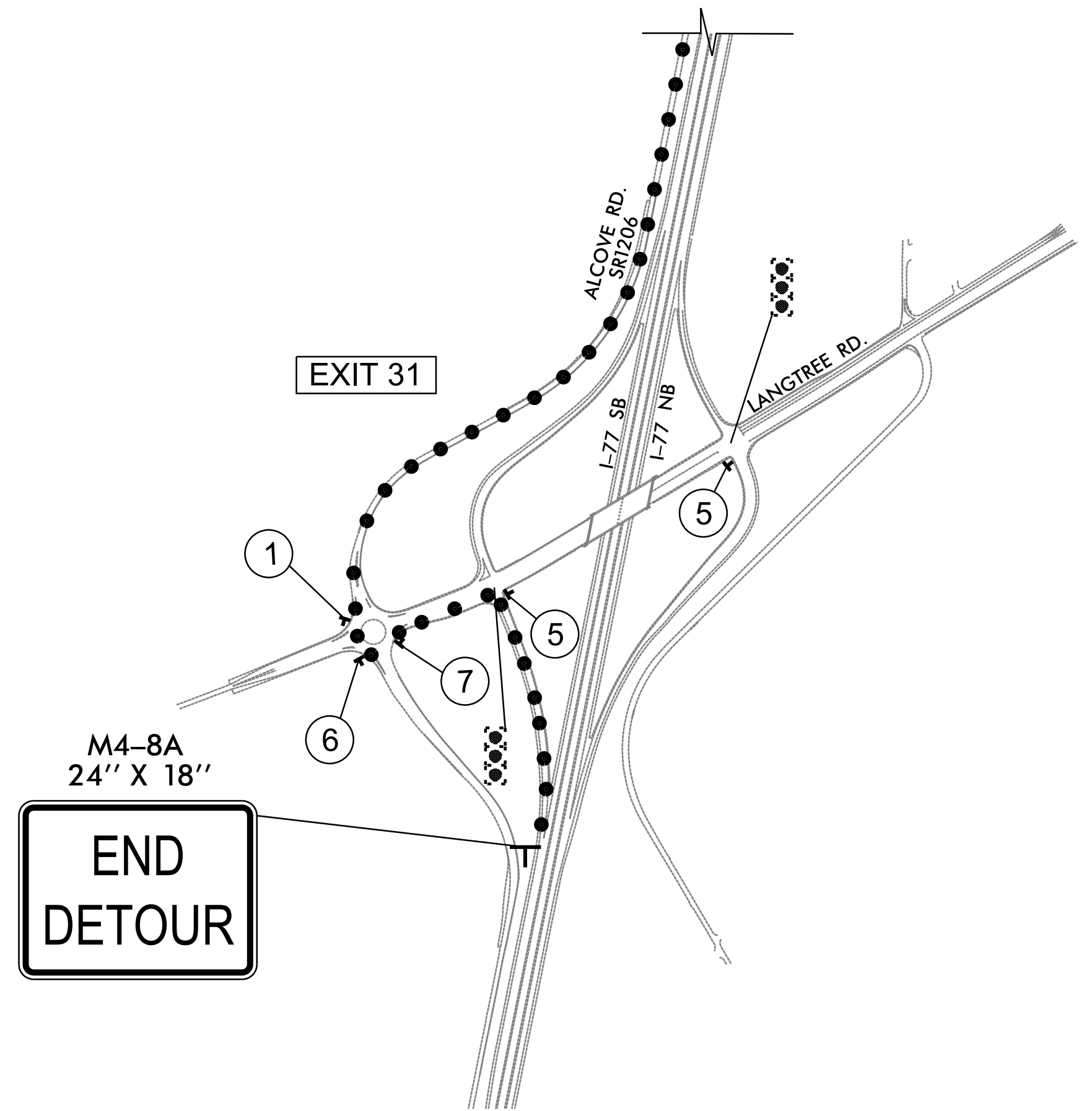
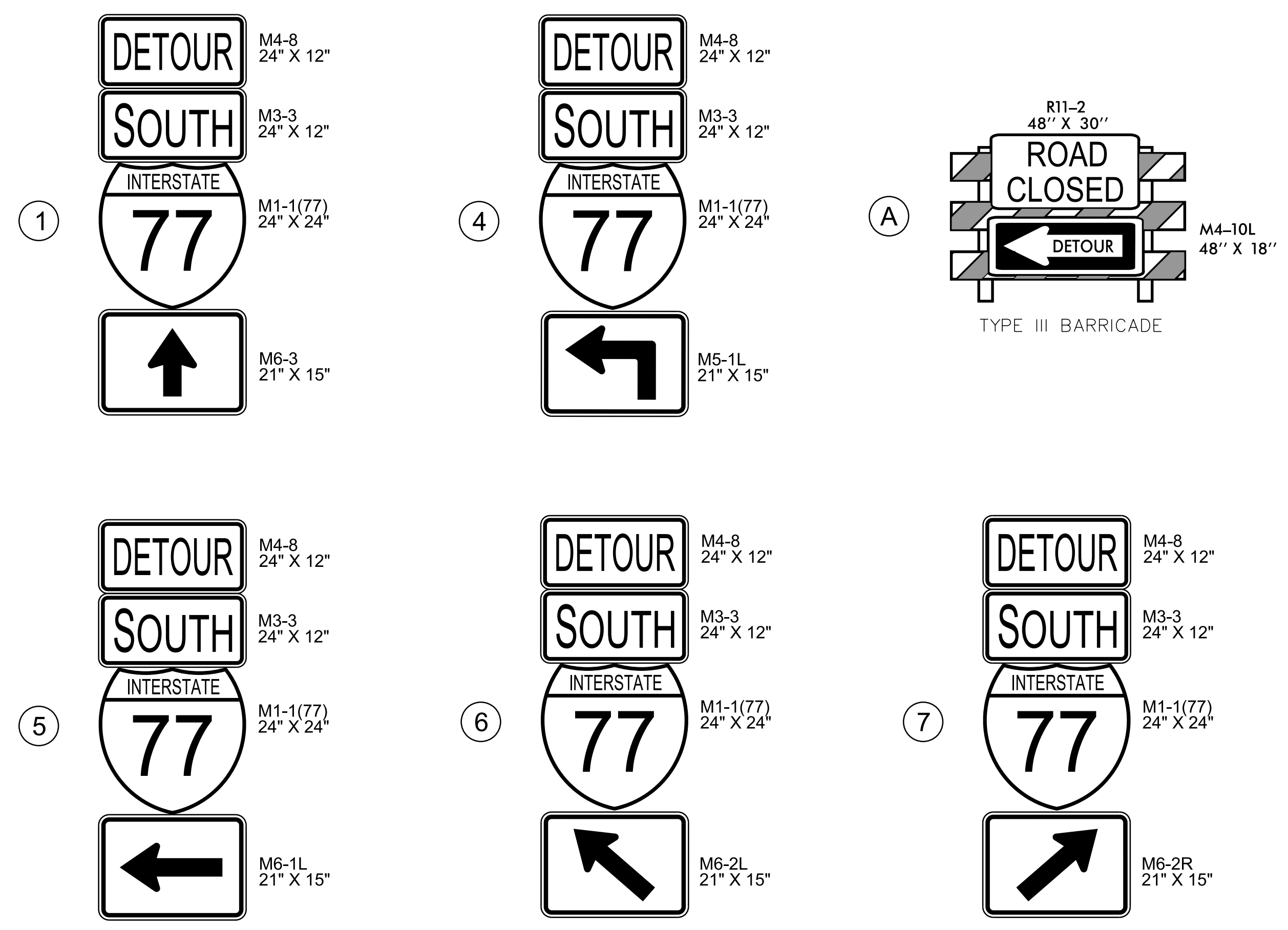
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**WILLIAMSON RD. (US21 & SR 1109): LOOP TO I-77 S
TRAFFIC CONTROL PHASING**

- STEP 1: INSTALL ADVANCED WORK ZONE WARNING SIGNS ON WILLIAMSON RD AND I-77, ACCORDING TO R.S.D. 1101.01, SHEETS 1 AND 3 OF 3.
- STEP 2: PLACE CHANGEABLE MESSAGE SIGNS (CMS) ON WILLIAMSON RD, AS SHOWN ON THIS SHEET, AND AS DIRECTED BY THE ENGINEER. (THE SAME CMS SIGNS MAY ALSO BE USED SEVERAL DAYS IN ADVANCE, TO DISPLAY DATE AND TIME DURATION OF RAMP CLOSURE(S).) PLACE STATIONARY SIGNING AS SHOWN ON THIS SHEET, LOCATED AS DIRECTED BY THE ENGINEER. (KEEP SIGNS COVERED UNTIL NEEDED FOR DETOUR).
- STEP 3: INSTALL DRUMS AND TYPE III BARRICADES, WITH R11-2 AND M4-10L SIGNS ATTACHED, TO CLOSE THE WILLIAMSON RD LOOP TO I-77 S TO TRAFFIC. (SEE R.S.D. 1101.02 SHEET 12 AND R.S.D. 1101.03 FOR ADDITIONAL SIGNS)
- STEP 4: AWAY FROM TRAFFIC, CONSTRUCT WILLIAMSON RD LOOP TO I-77 S, AS SHOWN IN ROADWAY PLANS. USE LANE OR SHOULDER CLOSURES ON WILLIAMSON RD AND/OR I-77, IF REQUIRED, AS OUTLINED IN THE GENERAL NOTES. IF ALL RESURFACING WORK ON THIS SHEET IS NOT ABLE TO BE COMPLETED WITHIN ONE OPERATION, THE CONTRACTOR SHALL PLACE TEMPORARY PAVEMENT MARKINGS ON THE PORTION OF COMPLETED PAVEMENT AND REOPEN THE RAMP TO TRAFFIC. REPEAT AS NECESSARY, UNTIL ALL RAMP RESURFACING IS COMPLETE. TRAFFIC WILL BE ON EXISTING ALIGNMENT (-Y25LPA-) AT THE END OF THE WORK DAY.
- STEP 5: WHEN CONSTRUCTION IS COMPLETE, INSTALL TEMPORARY PAVEMENT MARKING PAINT, (LOCATED AS SHOWN IN THE PAVEMENT MARKING PLANS FOR PERMANENT MARKINGS). REMOVE ALL TRAFFIC CONTROL DEVICES AND OPEN THE WILLIAMSON RD LOOP TO I-77 S FOR TRAFFIC.



PORTABLE CMS 			FOR ADVANCE NOTICE OF LOOP CLOSURE	
(B)	CMS MESSAGE 1: I-77 S LOOP CLOSED CMS MESSAGE 2: FOLLOW DETOUR AHEAD	(C)	CMS MESSAGE 1: I-77 S DETOUR CMS MESSAGE 2: LT-TURN ALCOVE ROAD	(B) (C) CMS (DAY OF WEEK) MESSAGE 2: - / - / - 11p - 5a
(D)	CMS MESSAGE 1: I-77 S DETOUR CMS MESSAGE 2: LEFT TURN HERE			

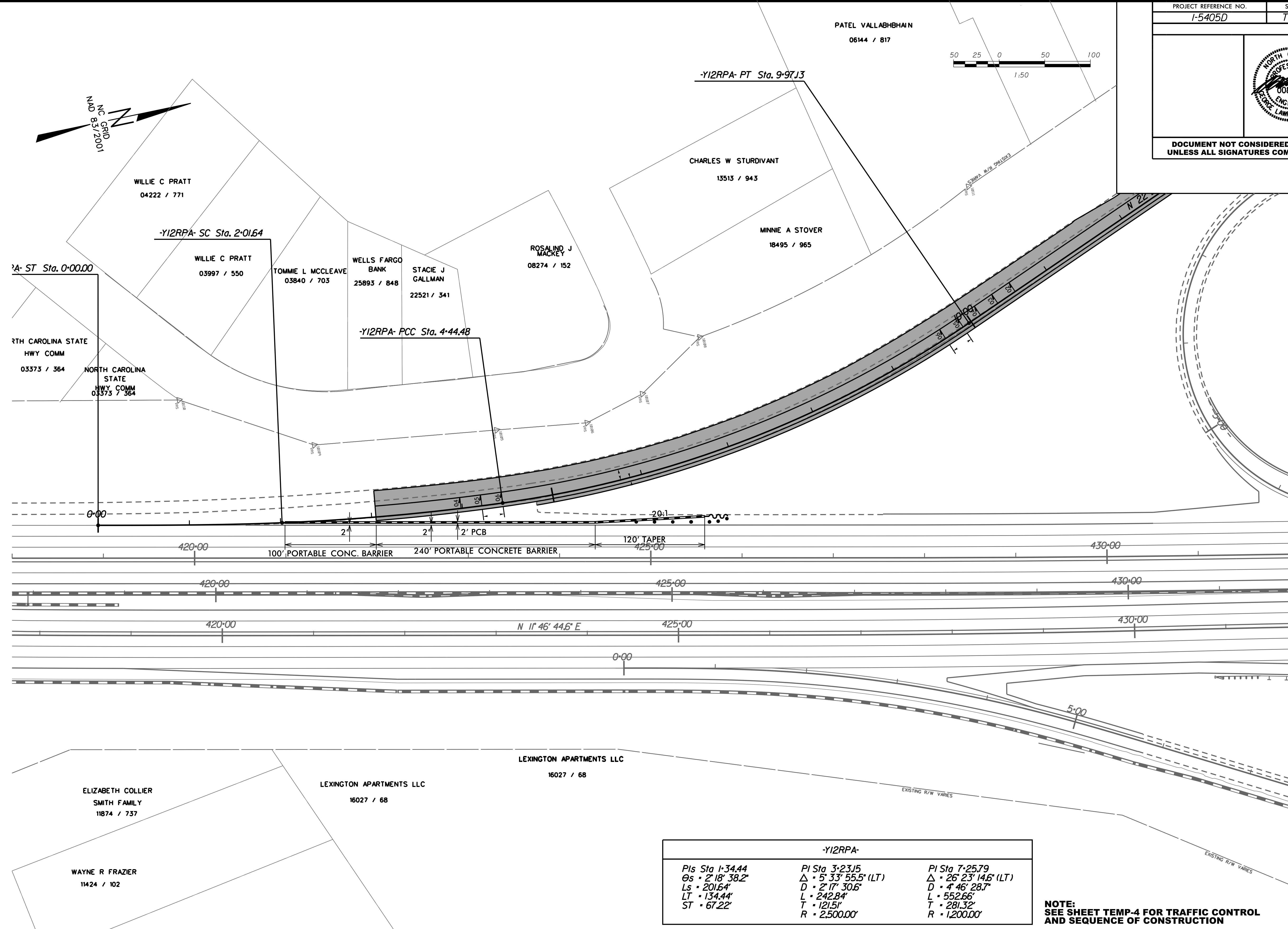


DETOUR MAP

**WILLIAMSON RD.
(US21 & SR 1109):
LOOP TO SB I-77
PHASING & DETOUR PLAN**

REVISIONS

2/9/2026 15:00:15 C:\Users\luciano\Documents\Projects\83-Design\83b-Sheets\TCP\1721004_TMP_PHL_18.dgn

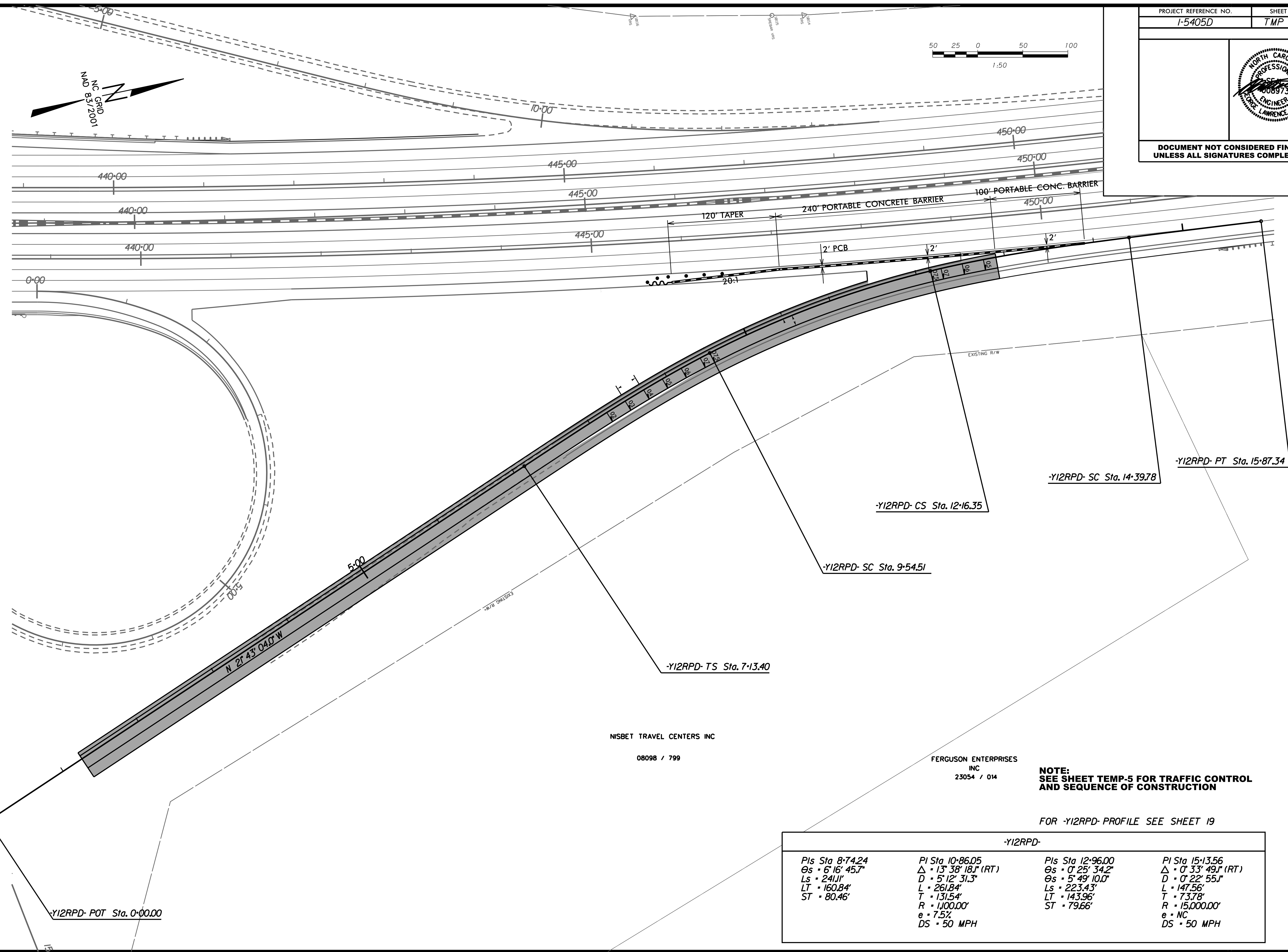
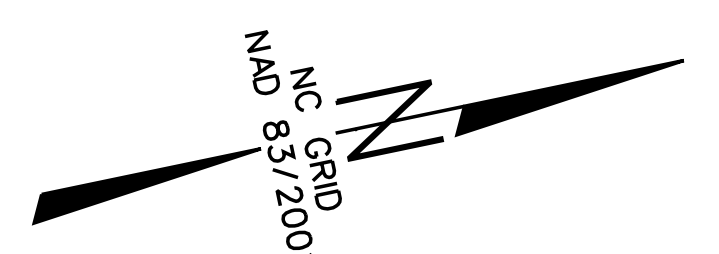
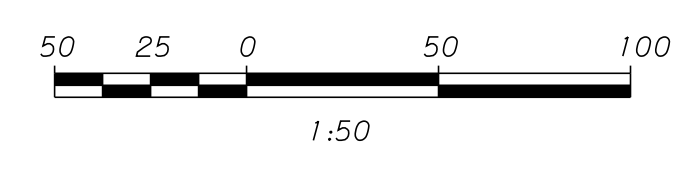


REVISIONS

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-Y12RPA-		
PI Sta 1+34.44	PI Sta 3+23.15	PI Sta 7+25.79
Os = 2' 18" 38.2"	Δ = 5' 33" 55.5" (LT)	Δ = 26' 23" 14.6" (LT)
Ls = 201.64'	D = 2' 17" 30.6"	D = 4' 46" 28.7"
LT = 134.44'	L = 242.84'	L = 552.66'
ST = 67.22'	T = 121.51'	T = 281.32'
	R = 2,500.00'	R = 1,200.00'

NOTE:
SEE SHEET TEMP-4 FOR TRAFFIC CONTROL
AND SEQUENCE OF CONSTRUCTION



REVISIONS

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NISBET TRAVEL CENTERS INC
08098 / 799

FERGUSON ENTERPRISES
INC
23054 / 014

**NOTE:
SEE SHEET TEMP-5 FOR TRAFFIC CONTROL
AND SEQUENCE OF CONSTRUCTION**

FOR -Y12RPD- PROFILE SEE SHEET 19

-Y12RPD-			
<i>PIs Sta 8+74.24</i> <i>Os • 6' 16' 45.7"</i> <i>Ls • 241.11'</i> <i>LT • 160.84'</i> <i>ST • 80.46'</i>	<i>PI Sta 10+86.05</i> <i>Δ • 13° 38' 18.1" (RT)</i> <i>D • 5' 12' 31.3"</i> <i>L • 261.84'</i> <i>T • 131.54'</i> <i>R • 1,000.00'</i> <i>e • 7.5%</i> <i>DS • 50 MPH</i>	<i>PIs Sta 12+96.00</i> <i>Os • 0' 25' 34.2"</i> <i>Os • 5' 49' 10.0"</i> <i>Ls • 223.43'</i> <i>LT • 143.96'</i> <i>ST • 79.66'</i>	<i>PI Sta 15+13.56</i> <i>Δ • 0' 33' 49.1" (RT)</i> <i>D • 0' 22' 55.1"</i> <i>L • 147.56'</i> <i>T • 73.78'</i> <i>R • 15,000.00'</i> <i>e • NC</i> <i>DS • 50 MPH</i>