

STATE OF OHIO
DEPARTMENT OF TRANSPORTATION

MAH-76 / 80-6.95 / 0.00

**JACKSON TOWNSHIP
MAHONING COUNTY**

PROJECT DESCRIPTION

MINOR REHABILITATION - FULL DEPTH CONCRETE REPAIRS,
WITH DRAINAGE IMPROVEMENTS.

PROJECT EDA: N/A (MAINTENANCE PROJECT)
ESTIMATED CONTRACTOR EDA: N/A (MAINTENANCE PROJECT)
NOTICE OF INTENT EDA: N/A (MAINTENANCE PROJECT)

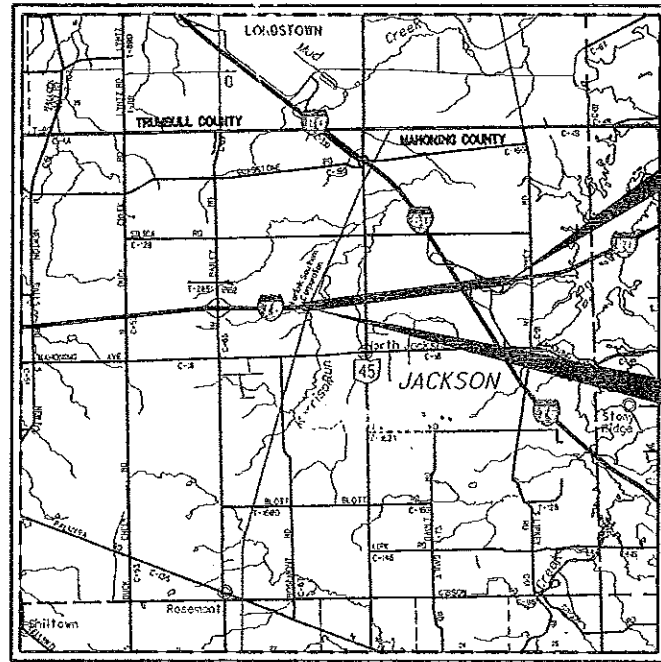
LIMITED ACCESS

THIS IMPROVEMENT IS ESPECIALLY DESIGNED FOR
THROUGH TRAFFIC AND HAS BEEN DECLARED A LIMITED
ACCESS HIGHWAY OR FREEWAY BY ACTION OF THE
DIRECTOR IN ACCORDANCE WITH THE PROVISIONS OF
SECTION 5511.02 OF THE OHIO REVISED CODE.

2010 SPECIFICATIONS

THE STANDARD SPECIFICATIONS OF THE STATE OF
OHIO, DEPARTMENT OF TRANSPORTATION, INCLUDING
CHANGES AND SUPPLEMENTAL SPECIFICATIONS LISTED
IN THE PROPOSAL SHALL GOVERN THIS IMPROVEMENT.

I HEREBY APPROVE THESE PLANS AND DECLARE THAT
THE MAKING OF THIS IMPROVEMENT WILL NOT REQUIRE
THE CLOSING TO TRAFFIC OF THE HIGHWAY EXCEPT
FOR THE RAMPS AS DESCRIBED ON SHEETS 14
AND THAT PROVISIONS FOR THE MAINTENANCE AND
SAFETY OF TRAFFIC WILL BE AS SET FORTH ON THE
PLANS AND ESTIMATES.



LOCATION MAP

LATITUDE: N41°06'32" LONGITUDE: W80°50'55"



PORTION TO BE IMPROVED	
INTERSTATE HIGHWAY	
FEDERAL ROUTES	
STATE ROUTES	
COUNTY & TOWNSHIP ROADS	
OTHER ROADS	

DESIGN DESIGNATION

DESIGN SPEED ----- 70 MPH
LEGAL SPEED ----- 65 MPH
DESIGN FUNCTIONAL CLASSIFICATION:
RURAL INTERSTATE, FREEWAYS AND EXPRESSWAYS
NHS PROJECT ----- NHS

DESIGN EXCEPTIONS

NONE

INDEX OF SHEETS:

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UNDERGROUND UTILITIES
CONTACT BOTH SERVICES
CALL TWO WORKING DAYS
BEFORE YOU DIG

CALL
1-800-362-2764
(TOLL FREE)

OHIO UTILITIES PROTECTION SERVICE
NON-MEMBERS
MUST BE CALLED DIRECTLY

OIL & GAS PRODUCERS UNDERGROUND
PROTECTION SERVICE CALL: **1-800-925-0988**

PLAN PREPARED BY:
ODOT - DISTRICT 4 PLANNING & ENGINEERING
2088 SOUTH ARLINGTON RD.
AKRON, OHIO 44306

ENGINEERS SEAL:
MOT SHEETS 8-24

SIGNED: *Mary Joy Hursh*
DATE: 8-1-2012

ENGINEERS SEAL:
ROADWAY SHEETS 1-7 & 25-39

SIGNED: *Lauren M. Phillis*
DATE: 8-1-12

STANDARD CONSTRUCTION DRAWINGS								SUPPLEMENTAL SPECIFICATIONS		SPECIAL PROVISIONS	
BP-2.1	7/18/08	DM-4.2	7/20/12	MT-95.30	7/20/12	TC-73.10	4/20/12	800-2010	7/20/12		
BP-2.2	7/18/08	DM-4.3	7/20/12	MT-95.40	7/20/12			821	4/20/12		
BP-2.5	7/18/08			MT-98.20	7/20/12			832	5/5/09		
BP-4.1	7/16/04	GR-1.1	7/20/12	MT-98.29	7/20/12						
BP-6.1	1/15/11	GR-2.1	7/20/12	MT-101.70	4/15/11						
BP-9.1	4/15/05	GR-3.1	7/20/12	MT-101.90	10/21/11						
		GR-3.2	7/20/12	MT-102.10	7/20/12						
CB-3.2	7/20/12	GR-4.2	7/20/12	MT-105.10	7/20/12						
CB-4.1	7/20/12										
						TC-41.20	1/19/01				
HW-2.1	7/20/12					TC-42.20	1/21/11				
HW-2.2	7/20/12					TC-52.10	1/19/07				
						TC-52.20	1/19/07				
DM-1.1	7/20/12					TC-65.10	4/20/12				
DM-1.2	7/20/12					TC-65.11	4/20/12				
DM-1.4	7/15/11					TC-72.20	7/20/12				

APPROVED *Anthony V. ...*
DATE 8/2/12 DISTRICT DEPUTY DIRECTOR

APPROVED *Tommy ...*
DATE 8-6-12 DIRECTOR, DEPARTMENT OF TRANSPORTATION

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126007
Dist 4

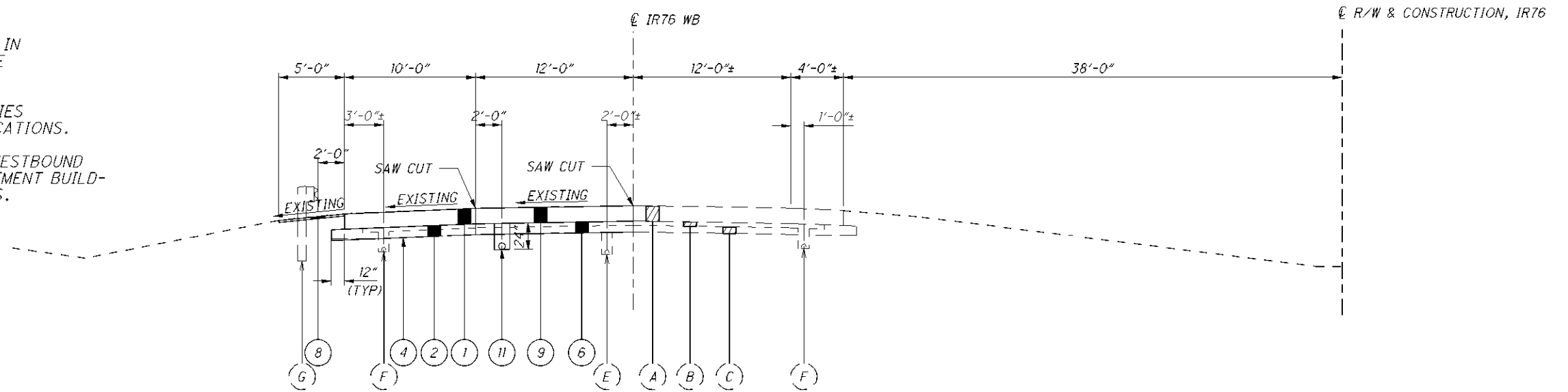
PID 93408
09/06/2012

Contract Proposal available
@www.contracts.dot.state.oh.us/home

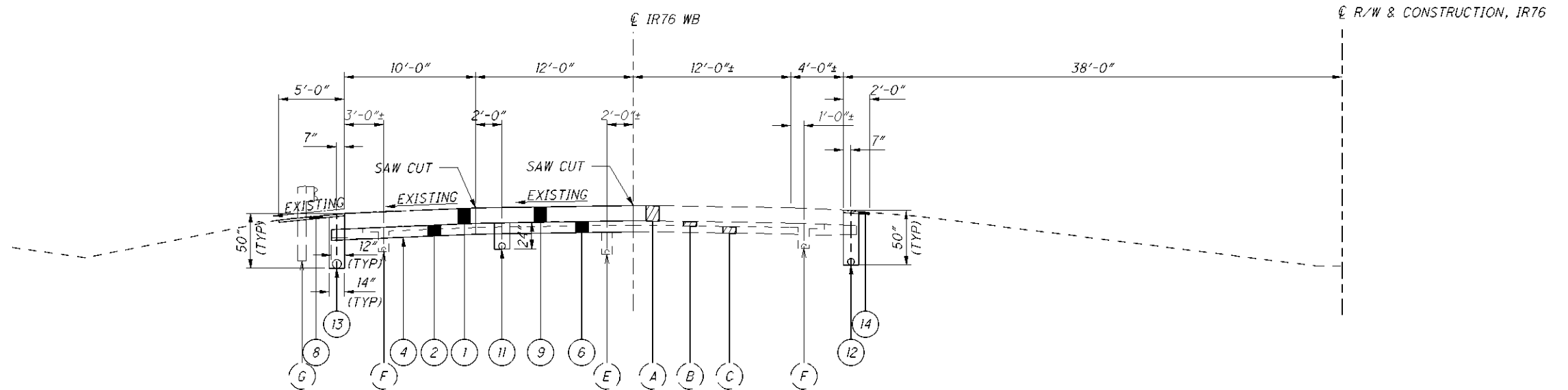
FEDERAL PROJECT NO. E120(884)
PID NO. 93408
CONSTRUCTION PROJECT NO.
RAILROAD INVOLVEMENT NONE
MAH-76 / 80-6.95 / 0.00

NOTES:

1. FULL-DEPTH PAVEMENT (DRIVING LANE) REPLACEMENT LOCATIONS ARE SHOWN IN THE PLAN VIEW SHEETS.
2. SHOULDER REPLACEMENT LIMITS ARE 8'-0" IN LENGTH AND LOCATIONS ARE SHOWN IN THE PLAN VIEW SHEETS.
3. SKIM COAT OF ASPHALT CONCRETE IN VARIES LOCATIONS OF FULL-DEPTH PAVEMENT LOCATIONS.
4. # STATIONS ARE GIVEN FOR THE ENTIRE WESTBOUND PROJECT LIMITS TO SHOWN EXISTING PAVEMENT BUILD-UP AND PROPOSED SHOULDER UNDERDRAINS.



(1) IR76 WESTBOUND
 STA 367+00 TO 370+00
 (IR76 SLM: 6.98 TO 7.04)

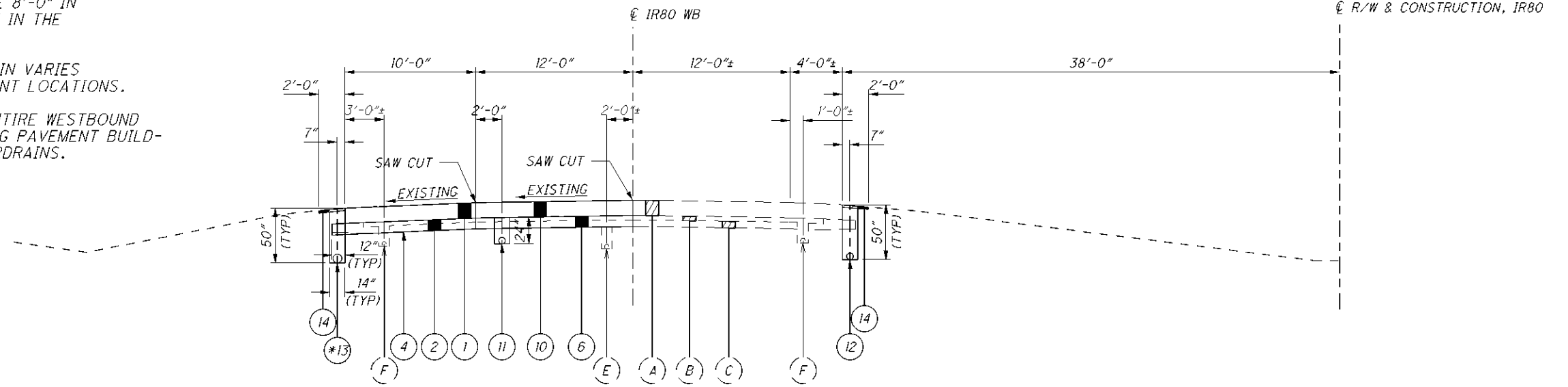


(2) IR76 WESTBOUND
 *STA 406+50 TO 408+50
 (IR76 SLM: 7.73 TO 7.77)

LEGEND

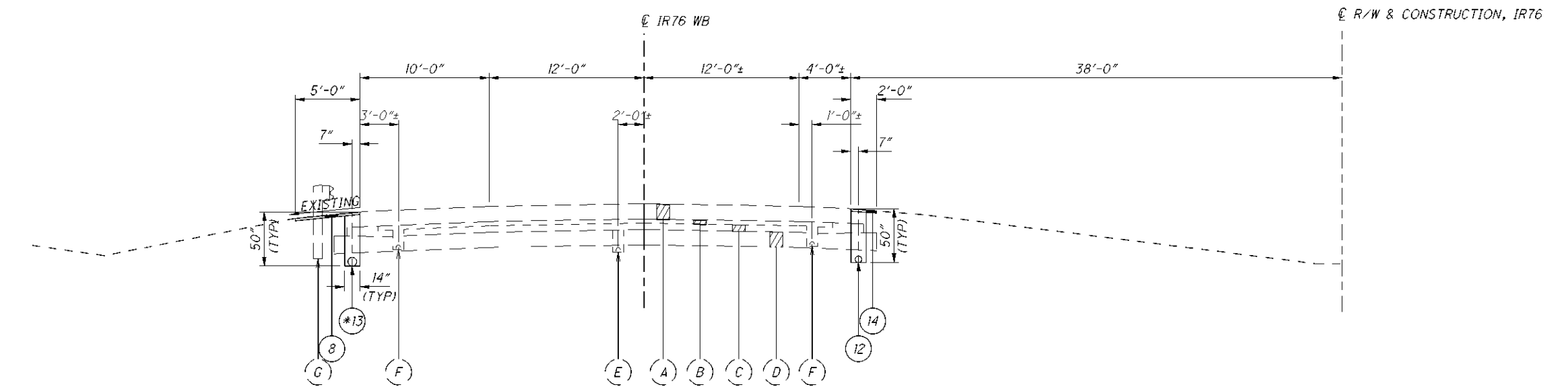
- | | | |
|---|---|---|
| <ul style="list-style-type: none"> (1) ITEM 202, PAVEMENT REMOVED (T = 14"±) (2) ITEM 203, EXCAVATION (T = 10"±) (3) ITEM 203, EXCAVATION (T = 24"±) (4) ITEM 204, SUBGRADE COMPACTION (5) ITEM 255, FULL DEPTH PAVEMENT REMOVAL AND RIGID REPLACEMENT, CLASS RRCM (6) ITEM 304, AGGREGATE BASE, AS PER PLAN (T = 10") (7) ITEM 304, AGGREGATE BASE, AS PER PLAN (T = 24") (8) ITEM 448, ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, PG64-22, UNDER GUARDRAIL, AS PER PLAN (T = 2") | <ul style="list-style-type: none"> (9) ITEM 452, 14" NON-REINFORCED CONCRETE PAVEMENT (10) ITEM 452, 14" NON-REINFORCED CONCRETE PAVEMENT, AS PER PLAN (11) ITEM 605, 6" SHALLOW PIPE UNDERDRAINS WITH FABRIC WRAP, AS PER PLAN (24" DEPTH) (12) ITEM 605, 6" DEEP PIPE UNDERDRAINS WITH FABRIC WRAP, AS PER PLAN (50" DEPTH) (13) ITEM 605, UNDERDRAINS, MISC.: 8" UNDERDRAINS WITH FABRIC WRAP (50" DEPTH) (14) ITEM 617, COMPACTED AGGREGATE, AS PER PLAN (T = 2") | <ul style="list-style-type: none"> (A) EXISTING PLAIN CONCRETE PAVEMENT (T = 14"±) (B) EXISTING NON-STABILIZED FREE DRAINAGE BASE (T = 4"±) (C) EXISTING AGGREGATE BASE (T = 6"±) (D) EXISTING CRUSHED SHALE/ROCK (T = 14"±) (E) EXISTING 6" ROCK UNDERDRAIN (20"± BELOW SUBGRADE) (F) EXISTING 4" SHALLOW PIPE UNDERDRAIN (18"± BELOW DRAINAGE BASE) (G) EXISTING GUARDRAIL |
|---|---|---|

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4. # STATIONS ARE GIVEN FOR THE ENTIRE WESTBOUND PROJECT LIMITS TO SHOWN EXISTING PAVEMENT BUILD-UP AND PROPOSED SHOULDER UNDERDRAINS.



* WB OUTSIDE UNDERDRAIN (U62) SHALL BE AT A DEPTH OF 43" (STA 456+39.33 TO 462+80.00)

(5) IR80 WESTBOUND
 #STA 457+00 TO 467+25
 (IR80 SLM: 0.03 TO 0.23)



* WB OUTSIDE UNDERDRAIN (U68) SHALL VARY IN DEPTH FROM 50" TO 24" (STA 473+00.00 TO 475+20.00)

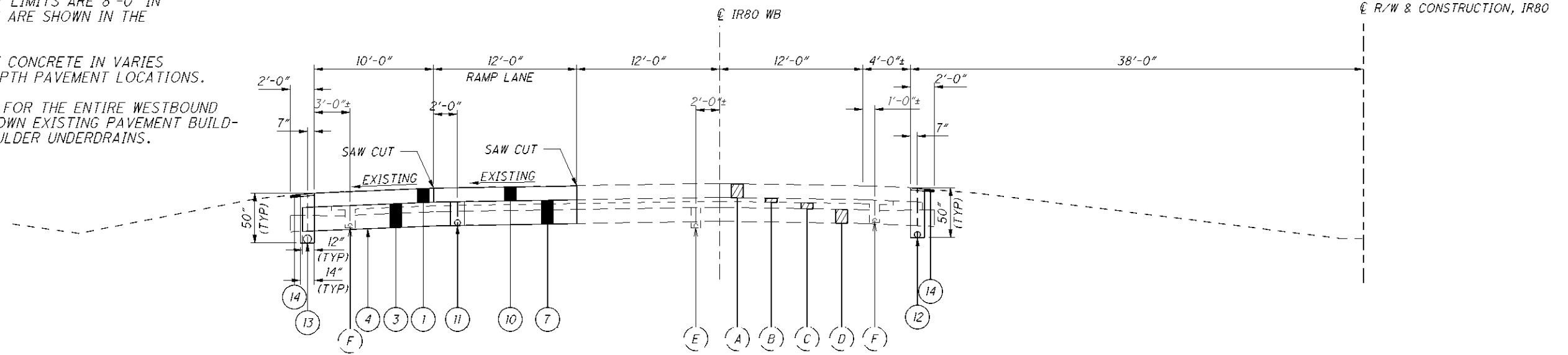
(6) IR80 WESTBOUND
 #STA 467+25 TO 475+50
 (IR80 SLM: 0.23 TO 0.38)

TYPICAL SECTIONS

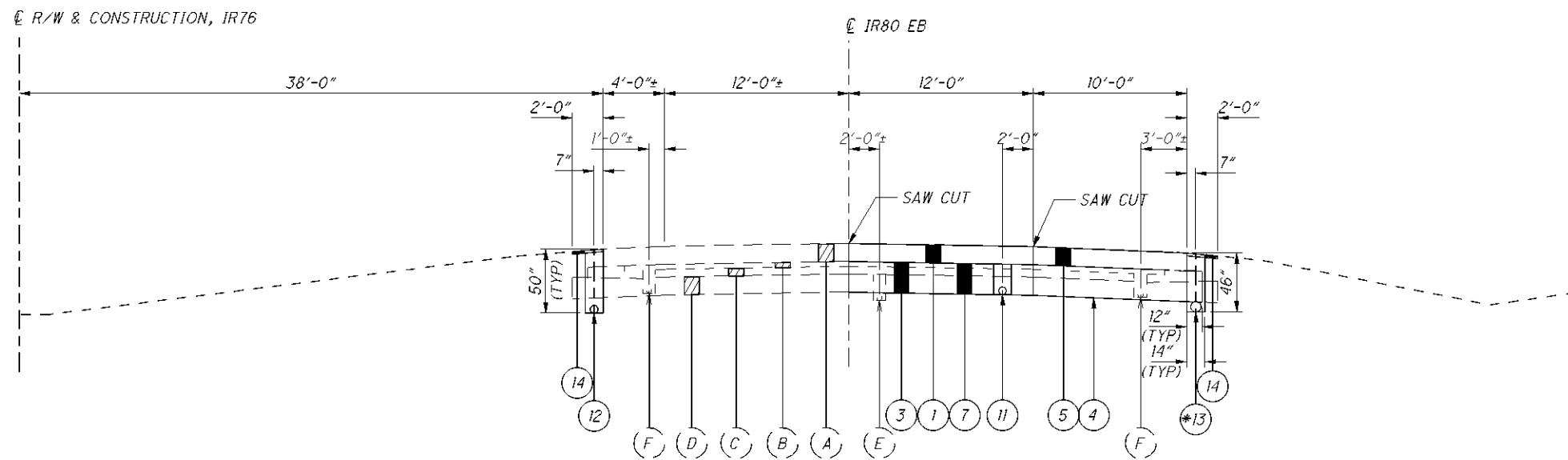
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FOR LEGEND SEE SHEET 2

1. FULL-DEPTH PAVEMENT (DRIVING LANE) REPLACEMENT LOCATIONS ARE SHOWN IN THE PLAN VIEW SHEETS.
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(7) IR80 WESTBOUND
 #STA 479+00 TO 483+00
 (IR80 SLM: 0.45 TO 0.53)



(8) IR80 EASTBOUND
 STA 476+55 TO 477+00
 (IR80 SLM: 0.40 TO 0.41)

* EB OUTSIDE UNDERDRAIN (U85 & U86) SHALL BE AT A DEPTH OF 46" (STA 476+12.00 TO 486+00.00)

TYPICAL SECTIONS

MAH-76/80-
6.95/0.00

UTILITIES

THE CONTRACTOR SHALL USE THE FOLLOWING PROCEDURE AT EACH LOCATION WHERE WORK IS PERFORMED, IN ACCORDANCE WITH SECTIONS 105.07 AND 107.16 IN THE CONSTRUCTION AND MATERIALS SPECIFICATIONS:

THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER, THE OHIO UTILITIES PROTECTION SERVICE (OUPS), THE OHIO & GAS PROCEDURES UNDERGROUND PROTECTION SERVICE (OGPUPS), THE OHIO DEPARTMENT OF TRANSPORTATION DISTRICT 4 HEAD-QUARTERS AND ALL NON REGISTERED UTILITY OWNERS AT LEAST TWO (2) WORKING DAYS PRIOR TO COMMENCING CONSTRUCTION OPERATIONS IN ALL AREAS.

OUPS 1-800-362-2764 (CONTACT LIMITED BASIS PARTICIPANTS DIRECTLY)
OGPUPS 1-800-925-0988
ODOT 330-786-3145 KEN GREENE

THE LOCATION OF THE UNDERGROUND UTILITIES SHOWN ON THE PLANS ARE AS OBTAINED FROM THE OWNERS AS REQUIRED BY SECTION 153.64 O.R.C.

LISTED BELOW ARE ALL UTILITIES LOCATED WITHIN THE PROJECT CONSTRUCTION LIMITS TOGETHER WITH THEIR RESPECTIVE OWNERS:

AT&T BUCKEYE PARTNERS, L.P.
THE OHIO BELL TELEPHONE CO. ATTN: MICHAEL MILLER
ATTN: JERRY SMITH P.O. BOX 542
50 W. BOWERY ST. MANTUA, OH 44255
4TH FLOOR 330-274-2470
AKRON, OH 44308 330-274-2978 FAX
330-384-8557
330-384-8879 FAX

ELANTIC TELECOM
RODGER MADDERN
1111 SUPERIOR AVE., EAST
SUITE 500
CLEVELAND, OHIO 44114
440-274-0209
DOMINION EAST OHIO GAS
ATTN: MARY LONG
320 SPRINGSIDE DRIVE
SUITE 320
AKRON, OH 44333
330-664-2409
888-504-0126 FAX

QWEST COMMUNICATIONS
ATTN: CHRIS STRAYER
4650 LAKEHURST COURT
DUBLIN, OH 43016
614-215-5606
614-659-2288 FAX
OHIO EDISON
ATTN: BILL SPEECE
730 SOUTH AVENUE
YOUNGSTOWN, OH 44502
330-740-7635
330-740-7655 FAX

EXISTING PLANS

EXISTING PLANS ENTITLED MAH-80S-7.01 (1968), MAH-76-0.00 (1973), AND MAH-76/80-6.95/0.00 (1999) MAY BE INSPECTED IN THE ODOT DISTRICT 4 OFFICE IN AKRON.

WORK LIMITS

THE WORK LIMITS SHOWN ON THESE PLANS ARE FOR PHYSICAL CONSTRUCTION ONLY. PROVIDE THE INSTALLATION AND OPERATION OF ALL WORK ZONE TRAFFIC CONTROL AND WORK ZONE TRAFFIC CONTROL DEVICES REQUIRED BY THESE PLANS WHETHER INSIDE OR OUTSIDE THESE WORK LIMITS.

ITEM 204 - PROOF ROLLING

THE FOLLOWING QUANTITY IS PROVIDED IN THE GENERAL SUMMARY TO ADDRESS LOCATIONS REQUIRING PROOF ROLLING.
ITEM 204, PROOF ROLLING, 3 HOUR

UNSUITABLE SOILS

THE FOLLOWING ITEMS AND QUANTITIES ARE TO BE USED AS DIRECTED BY THE ENGINEER TO ADDRESS UNSUITABLE SOILS ENCOUNTERED IN THE AREA UNDER THE PROPOSED FULL-DEPTH PAVEMENT REPLACEMENT LOCATIONS.
ITEM 203, EXCAVATION, 800 CU YD
ITEM 203, GRANULAR MATERIAL, TYPE C (703.16), 800 CU YD
ITEM 204, GEOTEXTILE FABRIC, TYPE D, 1700 SY YD

ITEM 304 - AGGREGATE BASE, AS PER PLAN

ONLY CRUSHED GRAVEL WILL BE PERMITTED FOR THIS ITEM. ALL OTHER REQUIREMENTS OF SECTIONS 304 AND 703.17 OF THE CONSTRUCTION AND MATERIAL SPECIFICATIONS SHALL STILL BE APPLICABLE.

EXISTING UNDERDRAINS

PROVIDE NEW UNOBSTRUCTED OUTLETS FOR ALL EXISTING UNDERDRAINS ENCOUNTERED DURING CONSTRUCTION.

PROVIDE AN OUTLET TO THE PROPOSED 6" OR 8" UNDERDRAIN ALONG THE OUTSIDE EDGES OF IR76.

UNDERDRAINS THAT CAN BE CONNECTED TO THE NEW OR EXISTING UNDERDRAINS AT THE END OF THE PROJECT LIMITS AS WELL AS ALL NECESSARY BENDS OR BRANCHES REQUIRED FOR CONNECTION ARE INCLUDED IN THE BASIS OF PAYMENT FOR UNCLASSIFIED PIPE UNDERDRAINS.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR THE WORK NOTED ABOVE:
ITEM 601, TIED CONCRETE BLOCK MAT, TYPE 1, 10 SQ YD
ITEM 603, 6" CONDUIT, TYPE F FOR UNDERDRAIN OUTLET, 100 FT
ITEM 604, PRECAST REINFORCED CONCRETE OUTLET, 5 EACH
ITEM 605, 6" UNCLASSIFIED PIPE UNDERDRAINS, 100 FT

UNDERDRAIN FLUSHING AND RECONDITIONING

ALL EXISTING UNDERDRAINS EXPOSED DURING SLAB REPLACEMENTS WILL BE FLUSHED. THE OBSTRUCTIONS ARE TO BE LOCATED AND REPAIRED. THE FOLLOWING PROCEDURES AND METHODS OF PAYMENT ARE PROVIDED. A COPY OF THE ORIGINAL CONSTRUCTION PLANS SHOWING THE LOCATION OF THE UNDERDRAINS AND OUTLETS IS AVAILABLE ON FILE AT THE DISTRICT OFFICE.

1. ITEM 605, UNDERDRAIN MISC.: UNDERDRAIN CLEANOUT

THIS ITEM WILL CONSIST OF EXPOSING THE UPPER END OF AN UNDERDRAIN RUN OR A SUBSEQUENT INTERMEDIATE UNDERDRAIN OPENING. EACH OPENING WILL INCLUDE REPLACING THE EXISTING 4" OR 6" UNDERDRAIN PIPE BROKEN IN MAKING THE OPENING AND THE BACKFILL WITH NO.8 AGGREGATE, ALL IN ACCORDANCE WITH SECTION 605 OF CMS. PAYMENT FOR THE OPERATIONS DESCRIBED ABOVE WILL INCLUDE ALL LABOR, TOOLS, EQUIPMENT, AND MATERIALS INCIDENTAL TO COMPLETING THIS ITEM INCLUDING A MAXIMUM OF 6 FEET OF UNDERDRAIN PIPE, PAYMENT WILL BE MAKE UNDER ITEM 605, UNDERDRAIN MISC.: UNDERDRAIN CLEANOUT.

2. ITEM 616, WATER, AS PER PLAN

AFTER EXPOSED UNDERDRAIN PIPE HAS BEEN REMOVED THE LINE WILL BE FLUSHED WITH WATER USING A MINIMUM SIZE HOSE OF 2" AND A MAXIMUM VOLUME OF WATER CALCULATED AT 1 1/2 GALLONS PER FOOT (1.5 GAL/FT) OF UNDERDRAIN PIPE. THE FLUSHING OPERATION MAY BE STOPPED AT ANY TIME BY THE ENGINEER IF FIELD OPERATIONS SHOW THE LINE TO BE PLUGGED OR OPERATING EFFICIENTLY. IN THE EVENT THE LINE IS SHOWN TO BE PLUGGED OR FLOW RESTRICTED, IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE THE RESTRICTION BY RODDING OR SIMILAR METHOS APPROVED BY THE ENGINEER. THE COST OF RODDING THE LINE WILL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 616, WATER, AS PER PLAN. THE METHOD OF MEASUREMENT AND PAYMENT WILL BE ACCORDING TO CMS 616.

3. ITEM 605, 6" UNCLASSIFIED PIPE UNDERDRAINS, AS PER PLAN
ITEM 605, 4" UNCLASSIFIED PIPE UNDERDRAINS, AS PER PLAN

WHERE A SECTION OF UNDERDRAIN PIPE IS FOUND TO BE BROKEN OR PLUGGED, THE SECTION WILL BE ISOLATED BY RODDING. THE SECTION WILL BE REPLACED AT APPROXIMATELY THE LINE GRADE IN ITS ENTIRETY WITH 4" OR 6" UNCLASSIFIED PIPE UNDERDRAINS ACCORDING TO CMS 605. THE COST OF REMOVAL OF THE EXISTING BROKEN OR PLUGGED UNDERDRAIN SHALL BE CONSIDERED INCIDENTAL TO THIS WORK. THE CONTRACTOR WILL EXERCISE CARE NOT TO DAMAGE OR REMOVE MORE EXISTING UNDERDRAIN THAN IS NECESSARY TO REMOVE THE BROKEN OR PLUGGED SECTION. THE METHOD OF MEASUREMENT AND PAYMENT WILL BE ACCORDING TO CMS 605.

4. ITEM 605, 6" CONDUIT, TYPE F FOR UNDERDRAIN OUTLET

EXISTING UNDERDRAIN OUTLETS WHICH ARE BROKEN, PLUGGED, OR FLOW RESTRICTED WILL BE REPLACED AS DIRECTED BY THE ENGINEER. NEW UNDERDRAIN OUTLETS WILL BE TIED INTO THE PROPOSED UNDERDRAINS ALONG THE EDGE OF SHOULDERS. ALL NECESSARY BENDS, TEES, OR BRANCHES REQUIRED FOR CONNECTIONS ARE INCLUDED IN THE BASIS OF PAYMENT FOR ITEM 605, 6" CONDUIT, TYPE F FOR UNDERDRAIN OUTLET. THE METHOD OF MEASUREMENT AND PAYMENT WILL BE ACCORDING TO CMS 605.

AFTER ALL REPAIRS ARE MAKE TO A RUN OF UNDERDRAIN, A FINAL FLUSHING WILL BE PERFORMED TO DETERMINE WETHER THE RUN IS FUNCTIONING PROPERLY, AFTER WHICH THE CLOSING OF THE INITIAL OPENING WILL BE PERMITTED. PAYMENT FOR THIS OPERATION WILL BE INCLUDED IN THE CONTRACT PRICE FOR THE PERTINENT 605 UNDERDRAIN ITEMS.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR THE ABOVE LISTED WORK:

ITEM 603, 6" CONDUIT, TYPE F FOR UNDERDRAIN OUTLET, 100 FT
ITEM 605, 6" UNCLASSIFIED PIPE UNDERDRAINS, AS PER PLAN, 300 FT
ITEM 605, 4" UNCLASSIFIED PIPE UNDERDRAINS, AS PER PLAN, 300 FEET
ITEM 605, UNDERDRAIN MISC.: UNDERDRAIN CLEANOUT, 48 EA
ITEM 616, WATER, AS PER PLAN, 100 M GAL

ITEM 605, 6" SHALLOW PIPE UNDERDRAINS WITH FABRIC WRAP, AS PER PLAN

INSTALL NEW 6" SHALLOW PIPE UNDERDRAIN AT 2' IN FROM THE OUTSIDE EDGE LINE, AS DETAILED IN THE TYPICAL SECTIONS AND STANDARD CONSTRUCTION DRAWING DM-1.2. THE NEW UNDERDRAIN WILL BE AT A DEPTH OF 24" AND FOLLOW THE PROFILE OF THE EXISTING PAVEMENT. THE UNDERDRAIN WILL BE PLACED TO CREATE POSITIVE FLOW DETAILED IN THE PLAN VIEW.

ITEM 605, 6" DEEP PIPE UNDERDRAINS WITH FABRIC WRAP, AS PER PLAN

INSTALL NEW 6" DEEP PIPE UNDERDRAIN AT 7" OUT FROM THE EDGE OF THE INSIDE SHOULDERS AS DETAILED IN THE TYPICAL SECTIONS AND STANDARD CONSTRUCTION DRAWING DM-1.2. THE NEW UNDERDRAIN WILL BE AT A TYPICAL DEPTH OF 50". MATERIAL FOR THE UNDERDRAIN WILL BE 6" CONDUIT, TYPE F, 707.42 (PERFORATED) AND WILL BE FABRIC WRAPED AS DETAILED IN CMS. THE UNDERDRAIN WILL FOLLOW THE PROFILE OF THE EXISTING PAVEMENT AND BE PLACED TO CREATE POSITIVE FLOW AS DETAILED IN THE PLAN VIEW.

ITEM 605, UNDERDRAIN MISC.: 8" UNDERDRAIN WITH FABRIC WRAP

ALL REQUIREMENTS OF CMS 605 WILL BE MET WITH THE FOLLOWING MODIFICATIONS. INSTALL NEW 8" UNDERDRAIN PIPE AT 7" OUT FROM THE EDGE OF THE OUTSIDE SHOULDERS AND A TRENCH WIDTH OF 14", AS DETAILED IN THE TYPICAL SECTIONS AND STANDARD CONSTRUCTION DRAWING DM-1.2. THE NEW UNDERDRAIN WILL BE AT A TYPICAL DEPTH OF 50" EXCEPT WHERE NOTED IN THE TYPICAL SECTIONS. MATERIAL FOR THE UNDERDRAIN WILL BE 8" CONDUIT, TYPE F, 707.42 (PERFORATED) AND WILL BE FABRIC WRAPED AS DETAILED IN CMS. THE UNDERDRAIN WILL FOLLOW THE PROFILE OF THE EXISTING PAVEMENT AND BE PLACED TO CREATE POSITIVE FLOW AS DETAILED IN THE PLAN VIEW.

CALCULATED
LMP
CHECKED
TJP

GENERAL NOTES

MAH-76/80-6.95/0.00

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REVIEW OF DRAINAGE FACILITIES

BEFORE ANY WORK IS STARTED ON THE PROJECT AND AGAIN BEFORE FINAL ACCEPTANCE BY THE STATE, REPRESENTATIVES OF THE STATE AND THE CONTRACTOR, ALONG WITH LOCAL REPRESENTATIVES, SHALL MAKE AN INSPECTION OF ALL EXISTING SEWERS WHICH ARE TO REMAIN IN SERVICE AND WHICH MAY BE AFFECTED BY THE WORK. THE CONDITION OF THE EXISTING CONDUITS AND THEIR APPURTENANCE SHALL BE DETERMINED FROM FIELD OBSERVATIONS. RECORDS OF THE INSPECTION SHALL BE KEPT IN WRITING BY THE STATE.

ALL NEW CONDUITS, INLETS, CATCH BASINS, AND MANHOLES CONSTRUCTED AS A PART OF THE PROJECT SHALL BE FREE OF ALL FOREIGN MATTER AND IN A CLEAN CONDITION BEFORE THE PROJECT WILL BE ACCEPTED BY THE STATE.

ALL EXISTING SEWERS INSPECTED INITIALLY BY THE ABOVE MENTIONED PARTIES SHALL BE MAINTAINED AND LEFT IN A CONDITION REASONABLY COMPARABLE TO THAT DETERMINED BY THE ORIGINAL INSPECTION. ANY CHANGE IN THE CONDITION RESULTING FROM THE CONTRACTOR'S OPERATIONS SHALL BE CORRECTED BY THE CONTRACTOR TO THE SATISFACTION OF THE ENGINEER.

PAYMENT FOR ALL OPERATIONS DESCRIBED ABOVE SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE PERTINENT 603 CONDUIT ITEMS.

CONTRACTION JOINTS IN CONCRETE PAVEMENT

WHERE NEW CONCRETE IS PLACED ADJACENT TO AND TIED TO EXISTING CONCRETE, THE CONTRACTION JOINT SPACING REQUIRED IN STANDARD CONSTRUCTION DRAWING BP-2.2 WILL BE WAIVED. CONSTRUCT CONTRACTION JOINTS IN THE NEW CONCRETE PAVEMENT TO FORM A CONTINUOUS LINE WITH ALL CONTRACTION JOINTS IN THE EXISTING CONCRETE PAVEMENT. INSTALL EXPANSION JOINTS IN THE NEW CONCRETE PAVEMENT TO FORM A CONTINUOUS LINE WITH ALL EXPANSION JOINTS IN THE EXISTING CONCRETE PAVEMENT.

ITEM 452, 14" NON-REINFORCED CONCRETE PAVEMENT, AS PER PLAN

THE REQUIREMENTS OF ITEM 452 APPLY, EXCEPT CLASS MS CONCRETE WILL BE USED.

ITEM 255 - PAVEMENT REPAIR

A QUANTITY OF THIS ITEM SHALL BE PROVIDED FOR USE AS DIRECTED BY THE ENGINEER FOR AREAS ON THE OHIO TURNPIKE OFF RAMP TO I76 WESTBOUND. THIS ITEM SHALL CONSIST OF CUTTING AND REMOVING DETERIORATED PAVEMENT FULL DEPTH AND PLACING 14" CLASS RRCM CONCRETE. PAYMENT SHALL BE BASED ON THE ACTUAL NUMBER OF SQUARE YARDS OF PAVEMENT REMOVED AND REPLACED TO THE LIMITS DESIGNATED BY THE ENGINEER. THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY:

- 255, FULL DEPTH PAVEMENT REMOVAL AND RIGID REPLACEMENT, CLASS RRCM, 20 SQ YD
- 255, FULL DEPTH PAVEMENT SAWING, 75 FT

PAVING UNDER GUARDRAIL

THIS OPERATION SHALL INCLUDE PREPARATION OF THE GRADED SHOULDER USING 209, LINEAR GRADING AS PER PLAN, AND PAVING UNDER THE GUARDRAIL USING 448 ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I, PG 64-22, UNDER GUARDRAIL, AS PER PLAN.

ITEM 209, LINEAR GRADING AS PER PLAN, SHALL CONSIST OF EXCAVATING TOPSOIL, AND PLACING GRANULAR MATERIAL.

ALL COLLECTED DEBRIS AND TOPSOIL, INCLUDING RHIZOMES, ROOTS AND OTHER VEGETATIVE PLANT MATERIAL SHALL BE REMOVED AND DISPOSED OF AS SPECIFIED IN 105.17.

THE REMOVED MATERIAL SHALL BE REPLACED WITH COMPACTABLE GRANULAR MATERIAL CONFORMING TO 703.16 PLACED TO GRADE AS DETAILED ON THE TYPICAL SECTION OR AS APPROVED BY THE ENGINEER.

ALL EQUIPMENT, MATERIALS AND LABOR REQUIRED TO PERFORM THE WORK OUTLINED ABOVE SHALL BE INCLUDED FOR PAYMENT UNDER ITEM 209, LINEAR GRADING, AS PER PLAN.

PAVING UNDER GUARDRAIL SHALL CONSIST OF PLACING ITEM 448 TO THE DEPTH SPECIFIED USING ONE OF THE FOLLOWING METHODS:

METHOD A:

1. SET GUARDRAIL POSTS
2. PLACE ITEM 448

METHOD B:

1. PLACE ITEM 448
2. BORE ASPHALT AT POST LOCATIONS (MAY BE OMITTED IF STEEL POSTS ARE USED)
3. SET GUARDRAIL POSTS
4. PATCH AROUND POSTS. THE MATERIALS USED FOR PATCHING SHALL BE AN ASPHALT CONCRETE APPROVED BY THE ENGINEER. PATCHED AREAS SHALL BE COMPACTED USING EITHER HAND OR MECHANICAL METHODS. FINISHED SURFACES SHALL BE SMOOTH AND SLOPED TO DRAIN AWAY FROM THE POSTS.

ALL EQUIPMENT, MATERIALS AND LABOR REQUIRED TO PERFORM THE WORK OUTLINED ABOVE, WITH THE EXCEPTION OF SETTING GUARDRAIL POSTS, SHALL BE INCLUDED FOR PAYMENT UNDER ITEM 448, ASPHALT CONCRETE, INTERMEDIATE COURSE, TYPE I, PG 64-22, UNDER GUARDRAIL, AS PER PLAN.

CROSSINGS PROPOSED UNDER DRAIN PIPES AND LIGHTING CONDUIT

WHERE PLANS SHOW A PROPOSED UNDERDRAIN TO CROSS OVER OR UNDER AN EXISTING UNDERGROUND LIGHTING CONDUIT, THE CONTRACTOR WILL DE-ENERGIZE THE LIGHTING CIRCUIT AND LOCATE THE LIGHTING CONDUIT BOTH AS TO LINE AND GRADE BEFORE STARTING TO LAY THE PROPOSED UNDERDRAINS.

CARE WILL BE TAKEN AT THE POSSIBLE CROSSING LOCATIONS SHOWN ON THE PLAN TO NOT DAMAGE THE EXISTING LIGHTING CONDUIT. IF DAMAGE OCCURS, THE ENTIRE CIRCUIT BETWEEN TOWERS AND/OR PULLBOXES WILL BE REPLACED AT THE CONTRACTORS EXPENSE. SPLICES WILL NOT BE ALLOWED WITHOUT A NEW/EXISTING PULLBOX.

THE ORIGINAL LIGHTING PLANS WILL BE SUPPLIED AT THE PRE-CONSTRUCTION MEETING.

ITEM 606 - ANCHOR ASSEMBLY, TYPE E

THIS ITEM SHALL CONSIST OF FURNISHING AND INSTALLING ANY OF THE GUARDRAIL END TERMINALS AS LISTED ON ROADWAY ENGINEERING'S WEB PAGE UNDER ROADSIDE SAFETY DEVICES FOR APPROVED GUARDRAIL END TREATMENTS. INSTALLATION SHALL BE AT THE LOCATIONS SPECIFIED IN THE PLANS, IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.

THE FACE OF THE TYPE E IMPACT HEAD SHALL BE COVERED WITH A SHEET OF TYPE G REFLECTIVE SHEETING, PER CMS 730.19.

REFER TO THE MANUFACTURER'S INSTRUCTIONS REGARDING THE INSTALLATION OF, AND THE GRADING AROUND THE FOUNDATION TUBES AND GROUND STRUT. THE TOP OF ANY FOUNDATION TUBE SHOULD BE LESS THAN 4 INCHES ABOVE THE GROUND. THE PLACEMENT OF THE FOUNDATION TUBES SHOULD BE AN APPROPRIATE DEPTH BELOW THE LEVEL LINE IN ORDER TO MAINTAIN THE FINISHED GUARDRAIL HEIGHT OF 27.75 INCHES FROM THE EDGE OF THE SHOULDER.

ON-SITE GRADING IS REQUIRED IF THE TOP OF THE FOUNDATION TUBES OR TOP OF THE GROUND STRUT DOES PROJECT MORE THAN 4 INCHES ABOVE THE GROUND LINE.

PAYMENT FOR THE ABOVE WORK SHALL BE MADE AT THE UNIT PRICE BID FOR ITEM 606, ANCHOR ASSEMBLY, TYPE E, EACH, AND SHALL INCLUDE ALL LABOR, TOOLS, EQUIPMENT AND MATERIALS NECESSARY TO CONSTRUCT A COMPLETE AND FUNCTIONAL ANCHOR ASSEMBLY SYSTEM, INCLUDING ALL RELATED TRANSITIONS, REFLECTIVE SHEETING, HARDWARE, GRADING, EMBANKMENT AND EXCAVATION NOT SEPARATELY SPECIFIED, AS REQUIRED BY THE MANUFACTURER.

ITEM 617 - COMPACTED AGGREGATE, AS PER PLAN

IN LOW SHOULDER AREAS EXCEEDING 1", AND ADJACENT TO THE SAFETY EDGE, OR AS DIRECTED BY THE ENGINEER, RECYCLED ASPHALT PAVEMENT (RAP) SHALL BE USED IN AREAS ADJACENT TO THE PAVED BERM. THE RAP SHALL HAVE A MINIMUM PG CONTENT OF 4.5% AND MEET THE FOLLOWING GRADATION. ONCE THE STOCKPILE MEETS THE GRADATION, THE PG CONTENT OF THE RAP SHALL BE DETERMINED PER 441.03. THE RAP ANALYSIS MUST BE SUBMITTED TO THE ENGINEER FOR APPROVAL 2 WEEKS PRIOR TO USE. METHOD OF MEASUREMENT SHALL BE AS PER 617.06. PLACEMENT AND COMPACTION SHALL MEET THE REQUIREMENTS OF ITEM 617. ALL MATERIALS, LABOR, EQUIPMENT, TOOLS AND INCIDENTALS NECESSARY TO COMPLETE THE WORK SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 617 COMPACTED AGGREGATE, AS PER PLAN.

MODIFIED GRADATION SHALL APPLY:

SIEVE	TOTAL PERCENT PASSING
1-1/2"	100
3/4"	50-100
NO. 4	35-70
NO. 30	9-33
NO. 200	0-13

RUMBLE STRIPS

THE FOLLOWING ITEM AND QUANTITY IS TO BE USED TO REPLACE RUMBLE STRIPS AT LOCATIONS OF RIGID REPLACEMENT OF THE OUTSIDE SHOULDER.

- ITEM 618, RUMBLE STRIPS, (CONCRETE), 200 FT

PERMANENT PAVEMENT MARKING

THE FOLLOWING ITEMS AND QUANTITIES ARE TO BE USED TO REPLACE THE EDGE LINE AND LANE LINE PAVEMENT MARKINGS OF I76 WESTBOUND. ALL PERMANENT PAVEMENT MARKINGS SHALL BE PLACED TO MATCH EXISTING ADJACENT PAVEMENT MARKINGS.

- ITEM 646, EDGE LINE, 6", 0.71 MI
- ITEM 646, LANE LINE, 6", 0.71 MI
- ITEM 646, CHANNELIZING, 12", 400 FT

SEEDING AND MULCHING

THE FOLLOWING QUANTITIES ARE PROVIDED TO PROMOTE GROWTH AND CARE OF PERMANENT SEEDED AREAS:

- ITEM 659, TOPSOIL, 805 CU YD
- ITEM 659, SEEDING AND MULCHING, 7260 SQ YD
- ITEM 659, REPAIR SEEDING AND MULCHING, 365 SQ YD
- ITEM 659, COMMERCIAL FERTILIZER, 0.98 TON
- ITEM 659, LIME, 1.5 ACRES
- ITEM 659, WATER, 40 M GAL

SEEDING AND MULCHING SHALL BE APPLIED TO ALL AREAS OF EXPOSED SOIL BETWEEN THE RIGHT-OF-WAY LINES, AND WITHIN THE CONSTRUCTION LIMITS FOR AREAS OUTSIDE THE RIGHT-OF-WAY LINES COVERED BY WORK AGREEMENT OR SLOPE EASEMENT. QUANTITY CALCULATIONS FOR SEEDING AND MULCHING ARE BASED ON THESE LIMITS.

RAISED PAVEMENT MARKINGS

THE FOLLOWING ITEMS AND QUANTITIES ARE TO BE USED TO REPLACE THE RAISED PAVEMENT MARKINGS AT LOCATIONS OF FULL-DEPTH PAVEMENT REPLACEMENT AREAS.

- ITEM 621, RPM, LOW PROFILE, WHITE, 45 EA
- ITEM 621, RPM, LOW PROFILE, WHITE/RED, 10 EA

STREAM AVOIDANCE

NO EXCAVATION, GRADING OR FILLING OPERATIONS SHALL BE PERFORMED IN ANY STREAMS. UNDER NO CIRCUMSTANCES SHALL THE CONTRACTOR STORE CONSTRUCTION EQUIPMENT AND/OR MATERIALS IN ANY STREAMS.

CALCULATED
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GENERAL NOTES

MAH-76/80-
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MAINTENANCE OF TRAFFIC

THIS ITEM SHALL CONSIST OF MAINTENANCE OF TRAFFIC ON EXISTING ROADWAYS AND RAMPS IN ACCORDANCE WITH THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS, CURRENT EDITION, LATEST REVISION, THE SPECIFICATIONS AND THE FOLLOWING:

1. A MINIMUM OF ONE ELEVEN FOOT LANE IN EACH DIRECTION SHALL BE MAINTAINED ON THE EXISTING PAVEMENT OR COMPLETED PAVEMENT DURING CONSTRUCTION OF THE WORK.
2. THE CONTRACTOR SHALL INFORM THE DISTRICT OFFICE (330) 786-2208, EIGHTEEN (18) DAYS PRIOR TO THE BEGINNING OF WORK.
3. CONES SHALL NOT BE ACCEPTABLE TRAFFIC CONTROL DEVICES FOR LANE RESTRICTIONS OR LANE REDUCTIONS THAT ARE IN OPERATION ONE-HALF HOUR AFTER SUNSET OR ONE HALF-HOUR BEFORE SUNRISE. ALL NIGHTTIME LANE RESTRICTIONS SHALL REQUIRE DRUMS OR BARRICADES AT A MAXIMUM SPACING OF FIFTY (50) FEET. WEIGHTED CHANNELIZERS MAY BE USED IN ACCORDANCE WITH THE STANDARD CONSTRUCTION DRAWINGS.
4. THE CONTRACTOR SHALL FURNISH, ERECT, MAINTAIN AND SUBSEQUENTLY REMOVE ALL FLAGS, BARRICADES, SIGNS, SIGN SUPPORTS AND FURNISH AND MAINTAIN ALL FLAGGERS, WATCHERS AND INCIDENTALS RELATED THERETO.
5. TRUCK MOUNTED ATTENUATORS (TMA'S) SHALL BE USED AS SHOWN IN THE STANDARD CONSTRUCTION DRAWINGS.
6. UNDER NO CIRCUMSTANCES SHALL THE CONTRACTOR BE PERMITTED TO HAVE SUCCESSIVE WORK ZONES UNLESS THE DISTANCE BETWEEN THE DRUMS, BARRICADES OR CONES EXCEEDS TWO (2) MILES.

OVERLAYING OF SIGNS

WHERE THE PLANS CALL FOR A PERMANENT SIGN TO BE OVERLAYED, THE CONTRACTOR SHALL DO SO IN SUCH A MANNER AS TO AVOID DAMAGING THE PERMANENT SIGN WHEN THE OVERLAY IS REMOVED. THE OVERLAY SHALL BE TOTALLY OPAQUE. THE USE OF ADHESIVE TAPE APPLIED DIRECTLY TO A SIGN FACE IS STRICTLY PROHIBITED. THE OVERLAYS MAY BE RIVETED TO THE PERMANENT SIGN. THE CONTRACTOR SHALL PROVIDE ALL OF THE PLAQUES, SIGNS AND SIGN PANELS NECESSARY.

614 WORK ZONE PAVEMENT MARKINGS, AS PER PLAN

IN ADDITION TO THE REQUIREMENTS OF 614.11, ALL CLASS 1 EDGE LINES, LANE LINES, CENTER LINES AND DOTTED LINES SHALL BE 6 INCHES WIDE AND CHANNELIZING MARKINGS SHALL BE 8 INCHES WIDE. THE APPLICATION RATES FOR THE 6 OR 8 INCH LINES SHALL BE 1.5 TIMES THE RATES SPECIFIED FOR 4 INCH LINES IN TABLE 614.11-1.

LANE CLOSURES

DURATION OF LANE CLOSURES AND RESTRICTIONS SHALL BE AS PER THE PERMITTED LANE CLOSURE CHART. THE PERMITTED LANE CLOSURE CHART USED FOR THIS PROJECT SHALL BE THE MOST CURRENT CHART AVAILABLE ON THE DATE THIS PROJECT SELLS.

THE CHART CAN BE FOUND AT:
<http://plcm.dot.state.oh.us>

SHOULD THE CONTRACTOR FAIL TO MEET ANY OF THE REQUIREMENTS IN THE CHART, THE CONTRACTOR SHALL BE ASSESSED DISINCENTIVES IN THE AMOUNT OF \$2500.00 PER HOUR OR PORTION THEREOF THAT THE LANE REDUCTION REMAINS BEYOND THE SPECIFIED LIMIT.

EXCEPTIONS TO THE PERMITTED LANE CLOSURE CHART

I-76 / I-80 WESTBOUND MAY BE REDUCED TO ONE LANE FOR THE CONSTRUCTION OF PHASES 2, 3, AND 4. THE MAXIMUM DURATION FOR PHASE 2 CONSTRUCTION SHALL BE 21 CONSECUTIVE CALENDAR DAYS.

I-76 EASTBOUND MAY BE REDUCED TO ONE LANE FOR THE CONSTRUCTION OF STA. 476+55 TO STA. 477+00 FOR ONE WEEKEND (7:00PM FRIDAY TO 6:00AM MONDAY).

SHOULD THE CONTRACTOR FAIL TO MEET ANY OF THE REQUIREMENTS OF THE ABOVE, THE CONTRACTOR SHALL BE ASSESSED DISINCENTIVES IN THE AMOUNT OF \$2500.00 PER HOUR OR PORTION THEREOF THAT THE LANE REDUCTION REMAINS BEYOND THE SPECIFIED LIMIT.

OTHER RESTRICTIONS

ALL WORK REQUIRED TO CONSTRUCT PHASE 1 (I-80 WESTBOUND FROM STA. 479+15 TO STA. 482+60) SHALL BE COMPLETED IN A MAXIMUM OF 7 CONSECUTIVE CALENDAR DAYS.

SHOULD THE CONTRACTOR FAIL TO MEET ANY OF THE REQUIREMENTS OF THE ABOVE, THE CONTRACTOR SHALL BE ASSESSED DISINCENTIVES IN THE AMOUNT OF \$2500.00 PER HOUR OR PORTION THEREOF THAT THE LANE REDUCTION REMAINS BEYOND THE SPECIFIED LIMIT.

CONSTRUCTION OF I-76 EAST, STA. 476+55 TO STA. 477+00

THE CONTRACTOR SHALL MAINTAIN ACCESS TO THE RAMP USING SCD MT-98.20. THE CONTRACTOR SHALL MAINTAIN A MINIMUM BUFFER AREA OF 600' BETWEEN THE END OF THE MERGE TAPER AND THE BEGINNING OF THE RAMP EXIT. A TRUCK-MOUNTED ATTENUATOR SHALL BE PROVIDED ON THE SHADOW VEHICLE.

DETOUR NOTIFICATION - OHIO TURNPIKE RAMP TO I-76 WEST

THE CONTRACTOR SHALL ADVISE THE ODOT DISTRICT OFFICE (330-786-3148) AND THE OHIO TURNPIKE (440-234-2081, EXT. 1201) EIGHTEEN (18) DAYS IN ADVANCE OF WHEN THE DETOUR ROUTE SHOULD BE IN EFFECT. ALL WORK ZONE DEVICES REQUIRED SHALL BE FURNISHED, ERECTED, MAINTAINED, AND SUBSEQUENTLY REMOVED BY THE CONTRACTOR. PAYMENT FOR ALL WORK ASSOCIATED WITH THE DETOUR SHALL BE INCLUDED UNDER THE LUMP SUM BID FOR ITEM 614, DETOUR SIGNING.

ITEM 614, MAINTAINING TRAFFIC (TIME LIMITATION ON A DETOUR) FOR RAMP FROM THE OHIO TURNPIKE TO I-76 WEST

A MINIMUM OF ONE LANE OF TRAFFIC IN EACH DIRECTION SHALL BE MAINTAINED AT ALL TIMES, EXCEPT FOR A PERIOD NOT TO EXCEED 21 CONSECUTIVE CALENDAR DAYS, WHEN THROUGH TRAFFIC MAY BE DETOURED AS SHOWN ON SHEETS 14-15. A DISINCENTIVE SHALL BE ASSESSED IN THE AMOUNT OF \$1000.00 FOR EACH CALENDAR DAY THE ROADWAY REMAINS CLOSED TO TRAFFIC BEYOND THE SPECIFIED LIMIT.

ITEM 614, MAINTAINING TRAFFIC (NOTICE OF CLOSURE SIGN)

NOTICE OF CLOSURE SIGNS, AS DETAILED IN THESE PLANS, SHALL BE ERECTED BY THE CONTRACTOR AT LEAST ONE WEEK IN ADVANCE OF THE SCHEDULED ROAD OR RAMP CLOSURE. THE SIGNS SHALL BE ERECTED ON THE RIGHT-HAND SIDE OF THE ROAD/RAMP FACING TRAFFIC. THEY SHALL BE PLACED SO AS NOT TO INTERFERE WITH THE VISIBILITY OF ANY OTHER TRAFFIC CONTROL SIGNS. ON ROADWAYS, THEY SHOULD BE ERECTED AT THE POINT OF CLOSURE. THE SIGNS MAY BE ERECTED ANYWHERE ON RAMPS AS LONG AS THEY ARE VISIBLE TO THE MOTORISTS USING THE RAMP. ON ENTRANCE RAMPS, THE SIGN SHALL BE ERECTED WELL IN ADVANCE OF THE MERGE AREA TO AVOID DISTRACTING MOTORISTS.

RAMP WILL BE
CLOSED
FOR 21 DAYS
INFO: 330-786-2208

W20-H13-60

ITEM 614, WORK ZONE IMPACT ATTENUATOR FOR 24" WIDE HAZARDS (UNIDIRECTIONAL OR BIDIRECTIONAL)

THIS ITEM SHALL CONSIST OF FURNISHING AND INSTALLING A NON-GATING IMPACT ATTENUATOR. FURNISH AN IMPACT ATTENUATOR FROM THE OFFICE OF ROADWAY ENGINEERING APPROVED LIST FOR WORK ZONE IMPACT ATTENUATORS. THE APPROVED LIST IS AVAILABLE AT THE "ROADWAY STANDARDS: PROPRIETARY ROADSIDE SAFETY DEVICES" WEB PAGE ON THE OFFICE OF ROADWAY ENGINEERING WEBSITE.

INSTALLATION SHALL BE AT THE LOCATIONS SPECIFIED IN THE PLANS IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.

THE CONTRACTOR SHALL REPAIR OR REPLACE A DAMAGED UNIT WITHIN 24 HOURS OF A DAMAGING IMPACT.

WHEN BIDIRECTIONAL DESIGNS ARE SPECIFIED, THE CONTRACTOR SHALL SUPPLY APPROPRIATE TRANSITIONS.

WHEN GATING IMPACT ATTENUATORS ARE DESIRED, THE CONTRACTOR SHALL SUBMIT DOCUMENTATION TO THE ENGINEER FOR ACCEPTANCE.

THE COST FOR THE ADDITIONAL BARRIER REQUIRED FOR A GATING IMPACT ATTENUATOR SHALL BE INCLUDED IN THE COST OF THE GATING IMPACT ATTENUATOR.

PAYMENT FOR THE ABOVE WORK SHALL BE MADE AT THE UNIT PRICE BID AND SHALL INCLUDE ALL LABOR, TOOLS, EQUIPMENT AND MATERIALS NECESSARY TO CONSTRUCT AND MAINTAIN A COMPLETE AND FUNCTIONAL IMPACT ATTENUATOR SYSTEM, INCLUDING ALL RELATED BACKUPS, TRANSITIONS, LEVELING PADS, HARDWARE AND GRADING, NOT SEPARATELY SPECIFIED, AS REQUIRED BY THE MANUFACTURER.

CALCULATED
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MAINTENANCE OF TRAFFIC GENERAL NOTES

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CONTRACTOR'S EQUIPMENT - OPERATION AND STORAGE

A QUALIFIED FLAGGER SHALL BE EMPLOYED WHERE THE CONTRACTOR'S EQUIPMENT MUST MERGE WITH THE TRAFFIC STREAM. THE CONTRACTOR'S EQUIPMENT SHALL BE EQUIPPED WITH AT LEAST ONE AMBER FLASHING LIGHT. PAVERS, ROLLERS AND OTHER EQUIPMENT MAY BE PARKED IN AREAS ALONG THE HIGHWAY WHEN PAVING OPERATIONS ARE SCHEDULED TO CONTINUE WITHIN THE NEXT WORKDAY. OTHERWISE THE EQUIPMENT SHALL BE STORED AT A STORAGE AREA OUTSIDE THE R/W, THE LOCATION OF WHICH SHALL HAVE PRIOR APPROVAL OF THE ENGINEER. WHEN PARKING ALONG THE HIGHWAY THE EQUIPMENT SHALL BE PLACED AND DELINEATED AS PER 614.03. NO EQUIPMENT SHALL BE PARKED IN THE MEDIAN OF THE HIGHWAY. ADEQUATE BARRICADES AND LIGHTS SHALL BE PLACED ON THE PAVEMENT SIDE OF THE EQUIPMENT TO IDENTIFY THE LIMITS OF THE EQUIPMENT. ALL OTHER EQUIPMENT, INCLUDING PRIVATE VEHICLES, SHALL BE STORED AT THE APPROVED CONTRACTOR'S STORAGE AREA. NO EQUIPMENT SHALL BE PARKED ON PRIVATE PROPERTY UNLESS PRIOR APPROVAL OF THE OWNER AND THE PROJECT ENGINEER/SUPERVISOR HAS BEEN GRANTED.

TRAFFIC CONTROL INSPECTOR

THE CONTRACTOR SHALL DESIGNATE AN INDIVIDUAL OTHER THAN THE SUPERINTENDENT AND SUBJECT TO THE APPROVAL OF THE ENGINEER, TO CONTINUOUSLY INSPECT ALL TRAFFIC CONTROL DEVICES WHENEVER CONSTRUCTION WORK IS BEING PERFORMED WITHIN THE WORK LIMITS OF THE PROJECT. THE DESIGNATED INDIVIDUAL SHALL ALSO INSPECT ALL TRAFFIC DEVICES AT THE BEGINNING AND AT THE END OF EACH WORK DAY. THE DESIGNATED INDIVIDUAL OR A QUALIFIED REPRESENTATIVE SHALL ALSO BE AVAILABLE ON AN AROUND THE CLOCK BASIS TO REPAIR AND/OR REPLACE DAMAGED OR MISSING TRAFFIC CONTROL DEVICES. THESE INDIVIDUALS SHALL BE EQUIPPED WITH CELLULAR PHONES AND THEIR NAMES AND PHONE NUMBERS SHALL BE GIVEN TO THE PROJECT ENGINEER AT THE PRE-CONSTRUCTION MEETING. THE DESIGNATED INDIVIDUAL MAY HAVE OTHER CONSTRUCTION RELATED DUTIES AS LONG AS IMMEDIATE ATTENTION IS GIVEN TO TRAFFIC CONTROL. PAYMENT FOR THE SERVICES OF THE TRAFFIC CONTROL INSPECTOR SHALL BE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 614 MAINTAINING TRAFFIC.

ITEM 614 - PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN

THE CONTRACTOR SHALL FURNISH, INSTALL, MAINTAIN AND REMOVE, WHEN NO LONGER NEEDED, 4 PORTABLE CHANGEABLE MESSAGE SIGNS (PCMS), ON SITE, FOR THE DURATION OF TIME SPECIFIED IN THIS NOTE, EACH SIGN SHALL BE OF A TYPE SHOWN ON A LIST OF APPROVED PCMS UNITS MAINTAINED BY THE DIRECTOR. THIS LIST IS AVAILABLE ON THE ODOT WEBSITE AT <http://www.dot.state.oh.us/divisions/constructionmgt/materials/pages/portable-changeable.aspx> THE CLASS A UNITS SHALL HAVE A MINIMUM LEGIBILITY DISTANCE OF 650 FEET.

EACH SIGN SHALL BE TRAILER MOUNTED AND EQUIPPED WITH A FUNCTIONAL DIMMING MECHANISM TO DIM THE SIGN DURING DARKNESS AND A TAMPER AND VANDAL PROOF ENCLOSURE. EACH SIGN SHALL BE PROVIDED WITH APPROPRIATE TRAINING AND OPERATION INSTRUCTIONS TO ENABLE ON-SITE PERSONNEL TO OPERATE AND TROUBLESHOOT THE UNIT. THE SIGN SHALL ALSO BE CAPABLE OF BEING POWERED BY AN ELECTRICAL SERVICE DROP FROM A LOCAL UTILITY COMPANY. PCMS TRAILERS SHOULD BE DELINEATED ON A PERMANENT BASIS BY AFFIXING RETRO-REFLECTIVE MATERIAL, IN A CONTINUOUS LINE ON THE FACE OF THE TRAILER AS SEEN BY ONCOMING ROAD USERS.

PLACEMENT, OPERATION, MAINTENANCE AND ALL ACTIVATION OF THE SIGNS BY THE CONTRACTOR SHALL BE AS DIRECTED BY THE ENGINEER. THE PCMS SHALL BE LOCATED IN A HIGHLY VISIBLE POSITION YET PROTECTED FROM TRAFFIC. THE PCMS SHOULD NOT BE LOCATED IN THE MEDIAN OF THE HIGHWAY UNLESS IT IS PROTECTED FROM BOTH DIRECTIONS OF TRAFFIC. THE PCMS SHOULD BE LOCATED BEHIND GUARDRAIL WHEREVER POSSIBLE. THE CONTRACTOR SHALL, AT THE DIRECTION OF THE ENGINEER, RELOCATE THE PCMS TO IMPROVE THE VISIBILITY OR ACCOMMODATE CHANGED CONDITIONS. WHEN NOT IN USE, THE PCMS WILL BE OFF, FACING AWAY FROM ALL TRAFFIC AND SHALL DISPLAY ONE OR MORE HIGH INTENSITY YELLOW REFLECTIVE SHEETING SURFACES OF 9-INCH BY 15-INCH MINIMUM SIZE FACING TRAFFIC.

THE ENGINEER SHALL BE PROVIDED ACCESS TO EACH SIGN UNIT AND SHALL BE PROVIDED WITH APPROPRIATE TRAINING AND OPERATION INSTRUCTIONS TO ENABLE PERSONNEL TO OPERATE AND TROUBLESHOOT THE UNIT AND TO REVISE SIGN MESSAGES, IF NECESSARY.

ALL MESSAGES TO BE DISPLAYED ON THE SIGN WILL BE PROVIDED BY THE CONTRACTOR. A LIST OF ALL PROPOSED PRE-PROGRAMMED MESSAGES WILL BE GIVEN TO THE ENGINEER PRIOR TO CONSTRUCTION. THE SIGN SHALL HAVE TWO DIFFERENT MEMORIES (PROM AND RAM) AND CAPABILITY TO STORE UP TO 99 MESSAGES IN EACH MEMORY. MESSAGE MEMORY OR PRE-PROGRAMMED DISPLAYS SHALL NOT BE LOST AS A RESULT OF POWER FAILURES TO THE ON-BOARD COMPUTER. THE SIGN LEGEND SHALL BE CAPABLE OF BEING CHANGED IN THE FIELD. IN ORDER TO CONVEY A MAXIMUM OF INFORMATION AT A SINGLE GLANCE, ONLY THREE LINE PRESENTATION FORMATS WITH A MAXIMUM OF SIX MESSAGE PHASES WILL BE PERMITTED. NORMALLY, ONLY A MAXIMUM OF THREE MESSAGE PHASES SHOULD BE EMPLOYED. PCMS FORMAT SHALL PERMIT THE COMPLETE MESSAGE FOR EACH PHASE TO BE READ AT LEAST TWICE.

THE PCMS SHALL CONTAIN AN ACCURATE CLOCK AND PROGRAMMING LOGIC WHICH WILL ALLOW THE SIGN TO BE ACTIVATED, DE-ACTIVATED OR MESSAGES CHANGED AUTOMATICALLY AT DIFFERENT TIMES OF THE DAY FOR DIFFERENT DAYS OF THE WEEK.

THE PCMS SHALL CONTAIN A CELLULAR TELEPHONE DATA LINK WHICH WILL [IN ACTIVE CELLULAR AREAS] ALLOW REMOTE SIGN ACTIVATION, DEACTIVATION, MESSAGE CHANGES, MESSAGE ADDITIONS AND REVISIONS TO TIME OF DAY PROGRAMS. THE SYSTEM SHALL ALSO PERMIT VERIFICATION OF CURRENT AND PROGRAMMED MESSAGES.

THE PCMS UNIT SHALL BE MAINTAINED IN GOOD WORKING ORDER BY THE CONTRACTOR IN ACCORDANCE WITH THE PROVISIONS OF 614. THE CONTRACTOR SHALL PRIOR TO ACTIVATING THE UNIT, MAKE ARRANGEMENTS WITH AN AUTHORIZED SERVICE AGENT FOR THE PCMS TO ASSURE PROMPT SERVICE IN THE EVENT OF FAILURE. ANY FAILURE SHALL NOT RESULT IN THE SIGN BEING OUT OF SERVICE FOR MORE THAN 12 HOURS INCLUDING WEEKENDS. FAILURE TO COMPLY MAY RESULT IN AN ORDER TO STOP WORK AND OPEN ALL TRAFFIC LANES AND/OR IN THE DEPARTMENT TAKING APPROPRIATE ACTION TO SAFELY CONTROL TRAFFIC AND THE ENTIRE COST TO CONTROL TRAFFIC ACCRUED BY THE DEPARTMENT WILL BE DEDUCTED FROM MONEYS DUE, OR TO BECOME DUE THE CONTRACTOR ON HIS CONTRACT.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR 24 HOURS PER DAY OPERATION AND MAINTENANCE OF THESE SIGNS ON THE PROJECT FOR THE DURATION OF THE PHASES. THE REQUIREMENT TO FURNISH, INSTALL, MAINTAIN AND REMOVE A PCMS UNIT ON THIS PROJECT SHALL NOT IN ANY WAY RELIEVE THE CONTRACTOR OF HIS RESPONSIBILITIES AS OUTLINED IN 614.02.

PAYMENT FOR THE ABOVE DESCRIBED ITEM SHALL BE AT THE CONTRACT UNIT PRICE BID FOR EACH DAY OF ITEM 614 PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN AND SHALL INCLUDE ALL LABOR, MATERIALS, EQUIPMENT, FUELS, LUBRICATING OILS, SOFTWARE, HARDWARE AND INCIDENTALS TO PERFORM THE ABOVE DESCRIBED WORK.

614 PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN, 21 DAY

(FOR PHASE 2 CONSTRUCTION, SEE SHEET 18)

ADDITIONAL PORTABLE CHANGEABLE MESSAGE SIGNS

IN ORDER TO KEEP TRAFFIC INFORMED OF CONSTRUCTION IN THE WORK ZONE THROUGHOUT THE PROJECT, TWO PORTABLE CHANGEABLE MESSAGE SIGNS SHALL BE PLACED ON I-80 WESTBOUND BETWEEN THE SR-11 AND SR-46 INTERCHANGES, APPROXIMATELY SLM 4.46. THE SIGNS SHALL BE PLACED ON BOTH THE MEDIAN AND OUTSIDE SHOULDER SIDES. THE SIGNS SHALL BE KEPT UP TO DATE WITH CURRENT TRAFFIC INFORMATION TO ALLOW TRAFFIC TO DIVERT TO THE CR-18 ALTERNATE ROUTE. AN ADDITIONAL QUANTITY OF 180 DAYS OF ITEM 614, PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN HAS BEEN CARRIED TO THE GENERAL SUMMARY. ALL REQUIREMENTS OF THE PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN NOTE INCLUDED IN THE ABOVE NOTE SHALL APPLY TO THIS NOTE AS WELL.

ITEM 614, MAINTAINING TRAFFIC (LANES OPEN DURING HOLIDAYS OR SPECIAL EVENTS)

NO WORK SHALL BE PERFORMED AND ALL EXISTING LANES SHALL BE OPEN TO TRAFFIC DURING THE FOLLOWING DESIGNATED HOLIDAYS OR EVENTS:

CHRISTMAS	FOURTH OF JULY
NEW YEARS	LABOR DAY
MEMORIAL DAY	THANKSGIVING

THE PERIOD OF TIME THAT THE LANES ARE TO BE OPEN DEPENDS ON THE DAY OF THE WEEK ON WHICH THE HOLIDAY OR EVENT FALLS. THE FOLLOWING SCHEDULE SHALL BE USED TO DETERMINE THIS PERIOD:

DAY OF HOLIDAY OR EVENT	TIME ALL LANES MUST BE OPEN TO TRAFFIC
SUNDAY	12:00N FRIDAY THROUGH 12:00N MONDAY
MONDAY	12:00N FRIDAY THROUGH 12:00N TUESDAY
TUESDAY	12:00N MONDAY THROUGH 12:00N WEDNESDAY
WEDNESDAY	12:00N TUESDAY THROUGH 12:00N THURSDAY
THURSDAY	12:00N WEDNESDAY THROUGH 12:00N FRIDAY
THURSDAY (THANKSGIVING ONLY)	12:00N WEDNESDAY THROUGH 12:00N MONDAY
FRIDAY	12:00N THURSDAY THROUGH 12:00N MONDAY
SATURDAY	12:00N FRIDAY THROUGH 12:00N MONDAY

NO EXTENSIONS OF TIME SHALL BE GRANTED FOR DELAYS IN MATERIAL DELIVERIES, UNLESS SUCH DELAYS ARE INDUSTRY-WIDE, OR FOR LABOR STRIKES, UNLESS SUCH STRIKES ARE AREA-WIDE.

SHOULD THE CONTRACTOR FAIL TO MEET ANY OF THESE REQUIREMENTS, THE CONTRACTOR SHALL BE ASSESSED A DISINCENTIVE IN THE AMOUNT OF \$3000.00 FOR EACH HOUR THE ABOVE DESCRIBED LANE CLOSURE RESTRICTIONS ARE VIOLATED.

ITEM 614, BARRIER REFLECTORS AND/OR OBJECT MARKERS

BARRIER REFLECTORS AND/OR OBJECT MARKERS SHALL BE INSTALLED ON ALL PORTABLE CONCRETE BARRIER USED FOR TRAFFIC CONTROL. BARRIER REFLECTORS, OBJECT MARKERS AND THEIR INSTALLATION SHALL CONFORM TO CMS 626, EXCEPT THAT THE SPACING SHALL BE 50 FEET. ESTIMATED QUANTITIES OF ITEM 614 BARRIER REFLECTOR, TYPE B AND ITEM 614 OBJECT MARKER, 1-WAY ARE PROVIDED ON THE SUBSUMMARY, SHEET 10.

REMOVAL AND REPLACEMENT OF EXISTING RUMBLE STRIPS

WHERE TRAFFIC WILL BE SHIFTED ONTO THE INSIDE SHOULDER, ALL EXISTING RUMBLE STRIPS WILL BE REMOVED PRIOR TO CONSTRUCTION. WHEN CONSTRUCTION IS COMPLETE, THE RUMBLE STRIPS WILL BE RESTORED TO THEIR ORIGINAL CONDITION. PAYMENT FOR ALL WORK AND MATERIALS ASSOCIATED WITH THE REMOVAL AND REPLACEMENT OF THE RUMBLE STRIPS WILL BE PAID FOR UNDER ITEM 614, MAINTAINING TRAFFIC, MISC.: SHOULDER RUMBLE STRIPS. ALL REQUIREMENTS OF CMS ITEM 618 AND STANDARD CONSTRUCTION DRAWING BP-9.1 WILL APPLY.

THE FOLLOWING QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY:

10,560 FT. - ITEM 614, MAINTAINING TRAFFIC, MISC.: SHOULDER RUMBLE STRIPS

CALCULATED
MUJH
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MAINTENANCE OF TRAFFIC GENERAL NOTES

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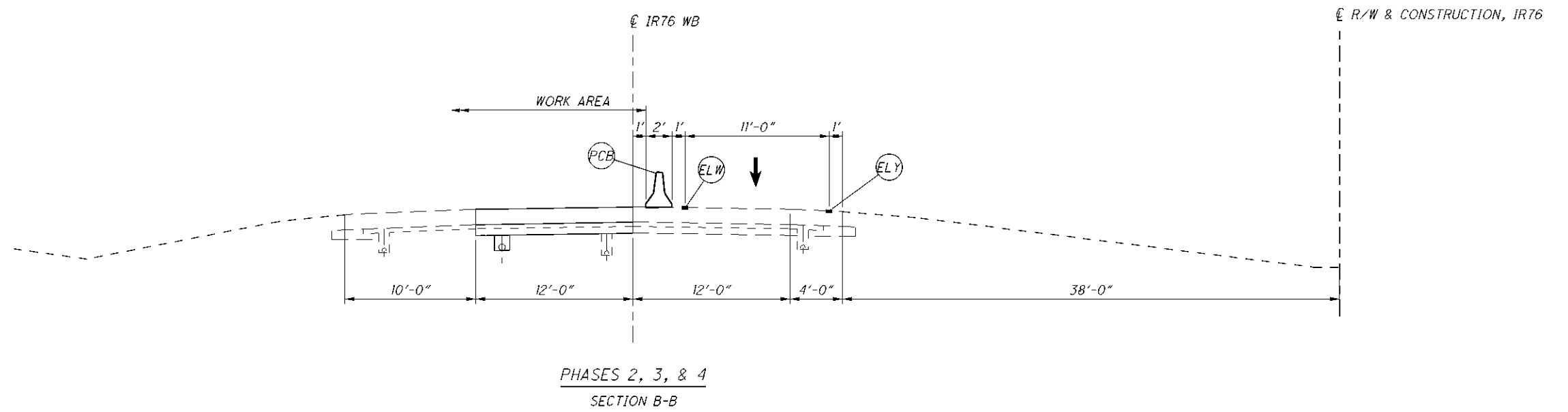
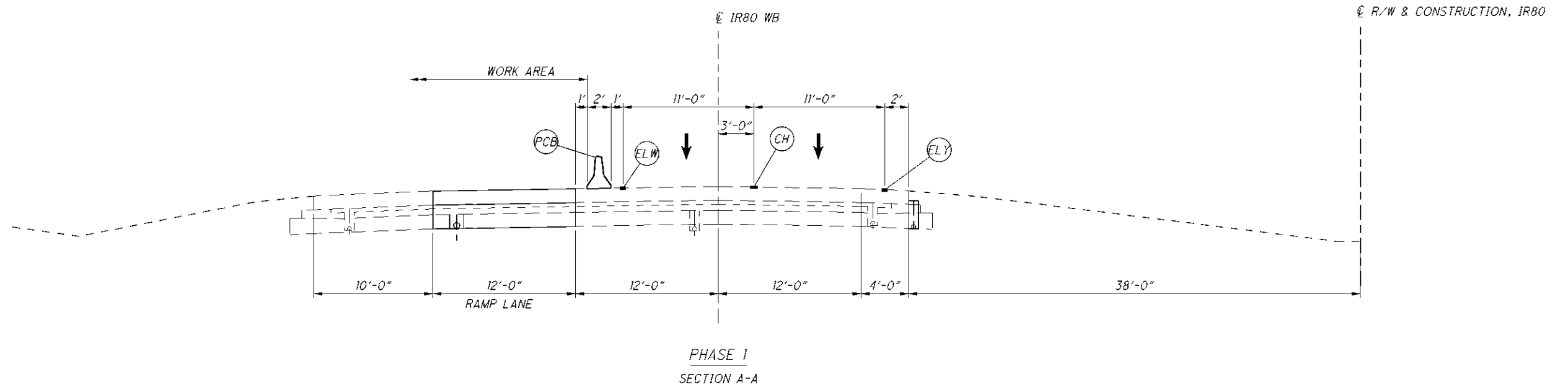
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REF NO.	SHEET NO.	STATION TO STATION					614	614	614	614	622	614	614	614	614	614	614	614	614	614						
							WORK ZONE EDGE LINE, CLASS I, 740.06, TYPE I, AS PER PLAN (WHITE)	WORK ZONE EDGE LINE, CLASS I, 740.06, TYPE I, AS PER PLAN (YELLOW)	WORK ZONE CHANNELIZING LINE, CLASS I, 740.06, TYPE I, AS PER PLAN	WORK ZONE DOTTED LINE, CLASS I, 740.06, TYPE I	PORTABLE CONCRETE BARRIER, 32"	WORK ZONE IMPACT ATTENUATOR (UNIDIRECTIONAL)	BARRIER REFLECTOR, TYPE B	OBJECT MARKER, ONE WAY												
PHASE 1						614	614	614	614	622	614	614	614	614	614	614	614	614	614							
						MILE	MILE	FT	FT	FT	FT	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH							
ELW1	12	471+40.00	WB	TO	476+25.00	WB	0.09																			
ELW2	12	475+28.00	WB	TO	476+25.00	WB	0.01																			
ELW3	12	475+56.00	WB	TO	499+20.00	WB	0.45																			
ELY1	12	471+40.00	WB	TO	491+40.00	WB		0.38																		
CH1	12	471+40.00	WB	TO	491+40.00	WB			2000																	
DL1	12	476+25.00	WB	TO	479+10.00	WB				285																
PCB1	12	479+10.00	WB	TO	485+80.00	WB					670	1	14	14												
PHASE 2																										
ELW4	16	443+40.00	WB	TO	483+70.00	WB	0.76																			
ELY2	16	443+40.00	WB	TO	507+10.00	WB		1.21																		
CH2	17	475+90.00	WB	TO	499+30.00	WB			2340																	
PCB2	16	447+00.00	WB	TO	470+30.00	WB				2330	1	47	47													
PHASE 3																										
ELW5	19	402+85.00	WB	TO	446+65.00	WB	0.83																			
ELW6	21	457+40.00	WB	TO	471+80.00	WB	0.27																			
ELY3	19	402+85.00	WB	TO	464+00.00	WB		1.16																		
CH3	21	457+40.00	WB	TO	458+40.00	WB			100																	
DL2	21	443+45.00	WB	TO	457+40.00	WB				1395																
PCB3	19	405+95.00	WB	TO	446+65.00	WB					4070	1	82	82												
PHASE 4																										
ELW7	23	363+40.00	WB	TO	387+40.00	WB	0.45																			
ELY4	23	363+40.00	WB	TO	379+60.00	WB		0.31																		
PCB4	23	366+50.00	WB	TO	374+00.00	WB					750	1	15	15												
TOTALS CARRIED TO GENERAL SUMMARY							5.92	0	4440	0	1680	0	7820	0	4	0	158	0	158	0	0	0	0	0	0	0

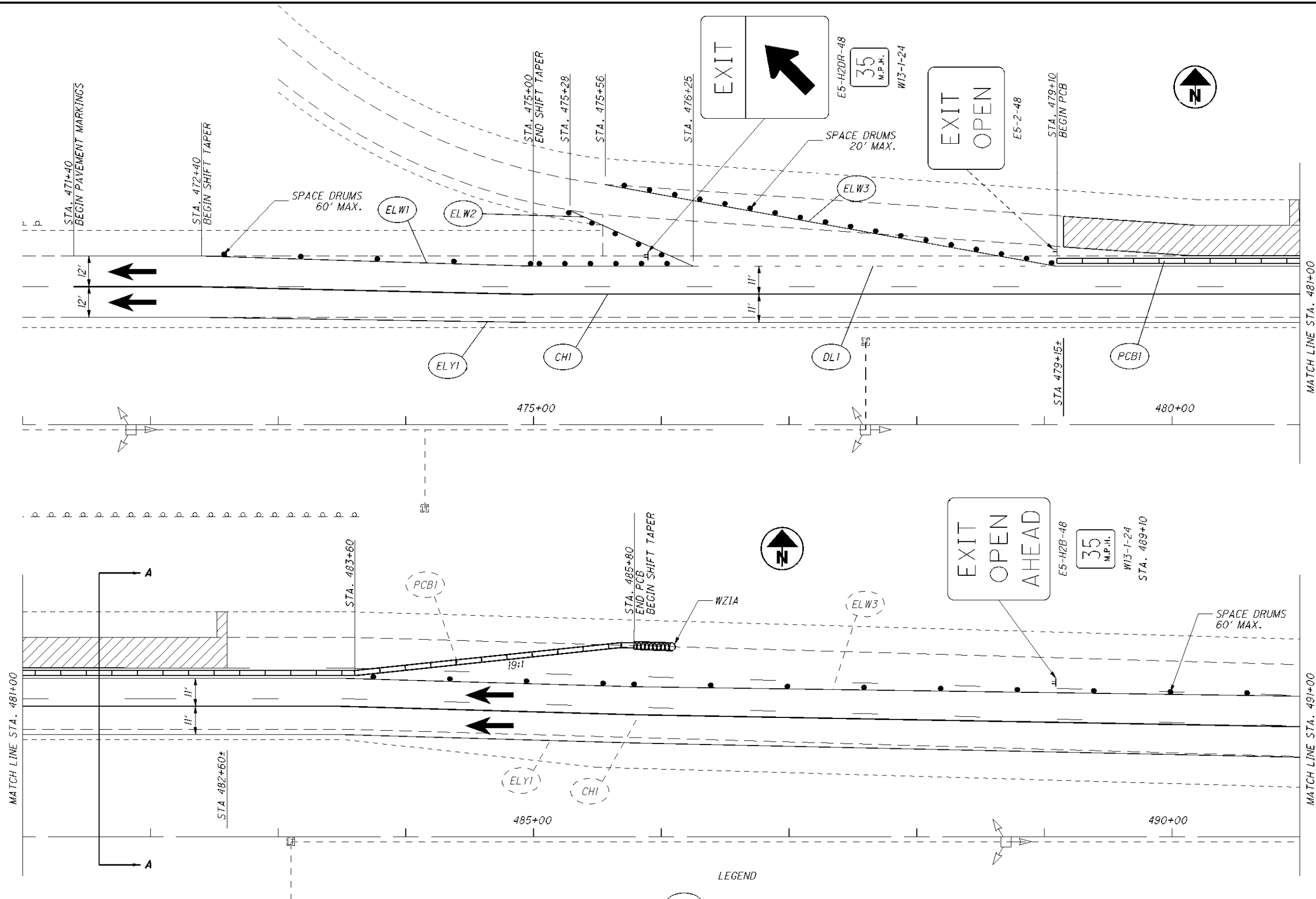
CALCULATED	MAC		
	CHECKED		
MAINTENANCE OF TRAFFIC SUBSUMMARY			
MAH-76/80-6.95/0.00			
<table border="1"> <tr> <td>10</td> </tr> <tr> <td>40</td> </tr> </table>		10	40
10			
40			

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LEGEND

- ⊙ ELW 614, WORK ZONE EDGE LINE, CLASS 1, 740.06, TYPE 1, AS PER PLAN (WHITE)
- ⊙ ELY 614, WORK ZONE EDGE LINE, CLASS 1, 740.06, TYPE 1, AS PER PLAN (YELLOW)
- ⊙ CH 614, WORK ZONE CHANNELIZING LINE, CLASS 1, 740.06, TYPE 1, AS PER PLAN
- ⊙ PCB 622, PORTABLE CONCRETE BARRIER, 32"

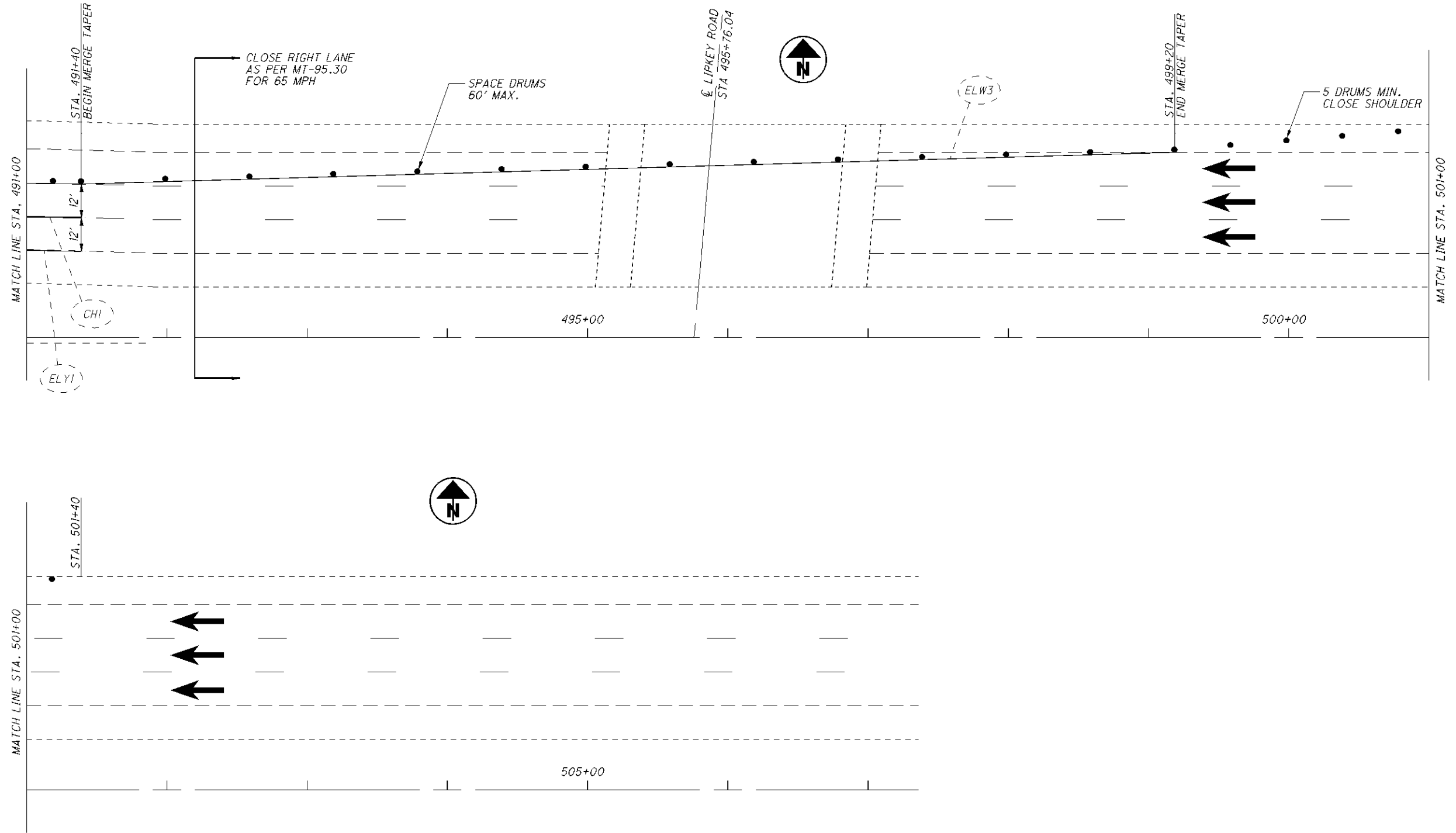


- LEGEND
- (ELW) ITEM 614, WORK ZONE EDGE LINE, CLASS 1, 740.06, TYPE 1, AS PER PLAN (WHITE)
 - (ELY) ITEM 614, WORK ZONE EDGE LINE, CLASS 1, 740.06, TYPE 1, AS PER PLAN (YELLOW)
 - (CH) ITEM 614, WORK ZONE CHANNELIZING LINE, CLASS 1, 740.06, TYPE 1, AS PER PLAN
 - (DL) ITEM 614, WORK ZONE DOTTED LINE, CLASS 1, 740.06, TYPE 1
 - (PCB) ITEM 622, PORTABLE CONCRETE BARRIER, 32"
 - WZ1A ITEM 614, WORK ZONE IMPACT ATTENUATOR (UNIDIRECTIONAL)

CALCULATED
RCB
CHECKED
MUJH

**MAINTENANCE OF TRAFFIC PHASE 1
PLAN SHEET STA. 471+00 TO STA. 491+00**

**MAH-76/80-
6.95/0.00**



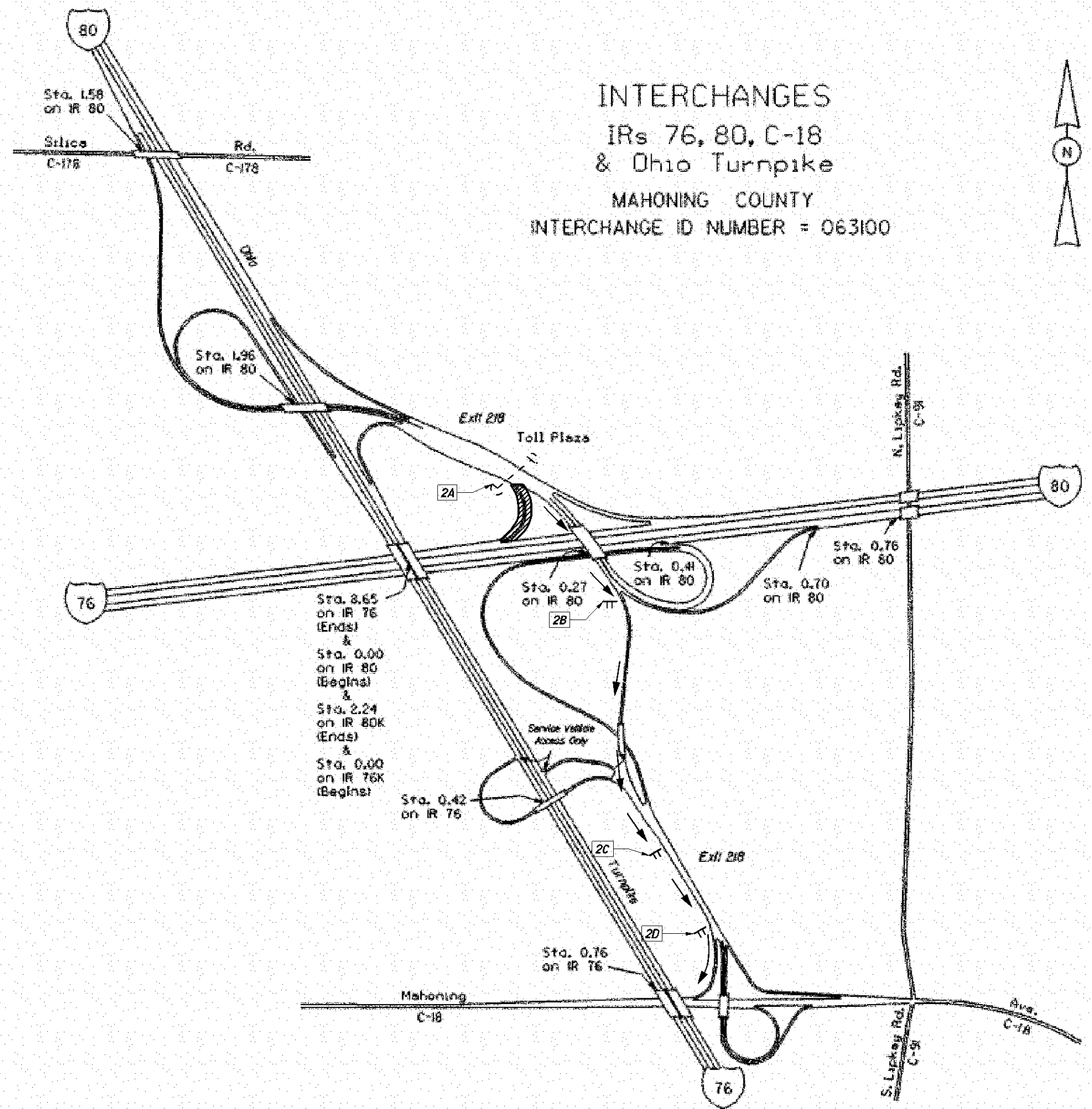
SEE SHEET 12 FOR LEGEND.

CALCULATED
R/CB
CHECKED
MJH

**MAINTENANCE OF TRAFFIC PHASE 1
PLAN SHEET STA. 491+00 TO STA. 507+00**

**MAH-76/80-
6.95/0.00**

INTERCHANGES
IRs 76, 80, C-18
& Ohio Turnpike
MAHONING COUNTY
INTERCHANGE ID NUMBER = 063100



DETOUR PLAN FOR MAH-76/80-6.95/0.00 FOR RAMP FROM OHIO TURNPIKE TO IR-76 WEST

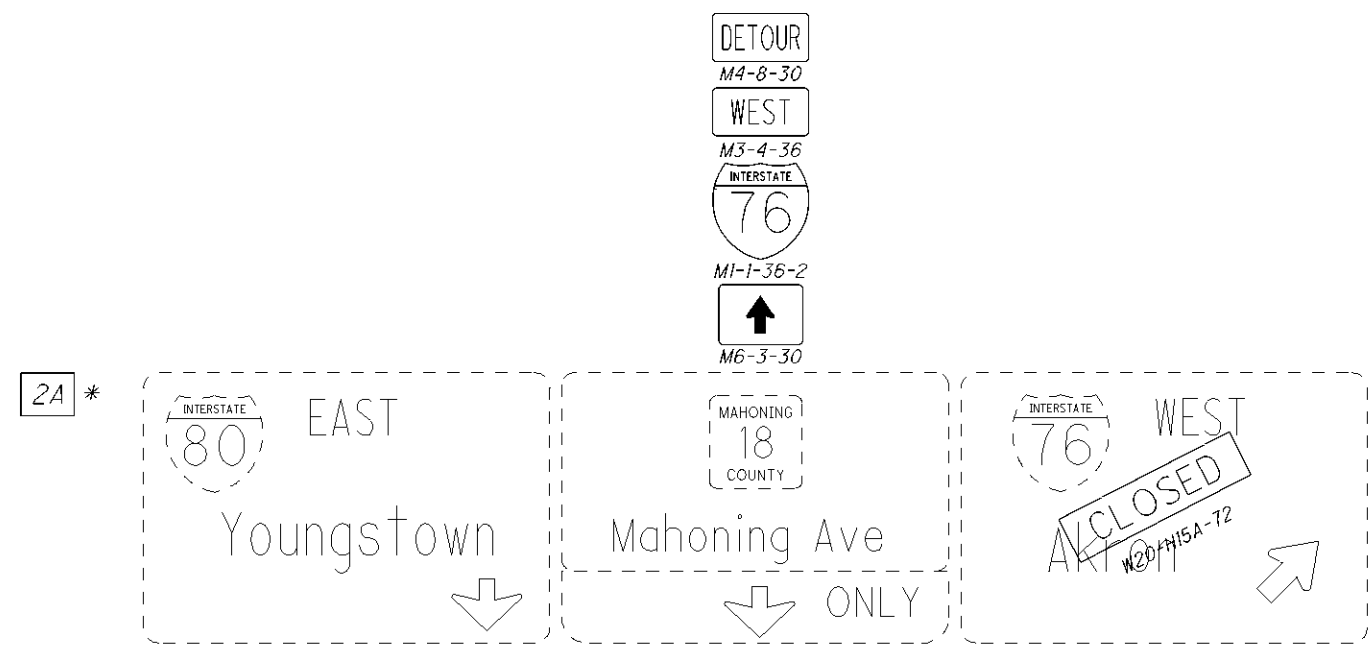
→ OFFICIAL DETOUR ROUTE: MAHONING AVE WEST

CLOSE RAMP AS PER MT-98.29

MAXIMUM DETOUR DURATION IS 21 CONSECUTIVE CALENDAR DAYS.

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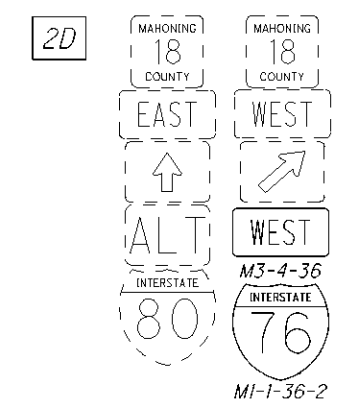
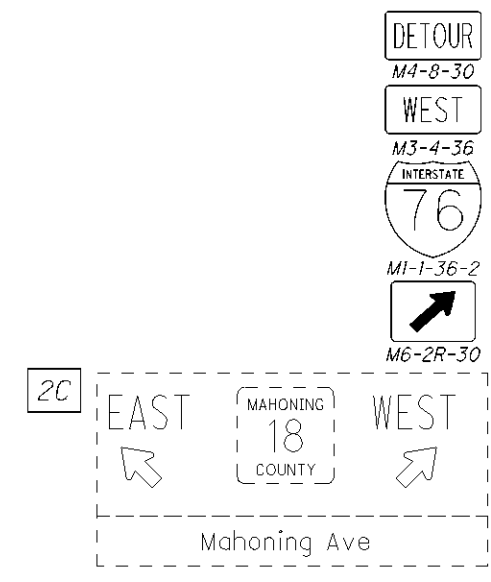
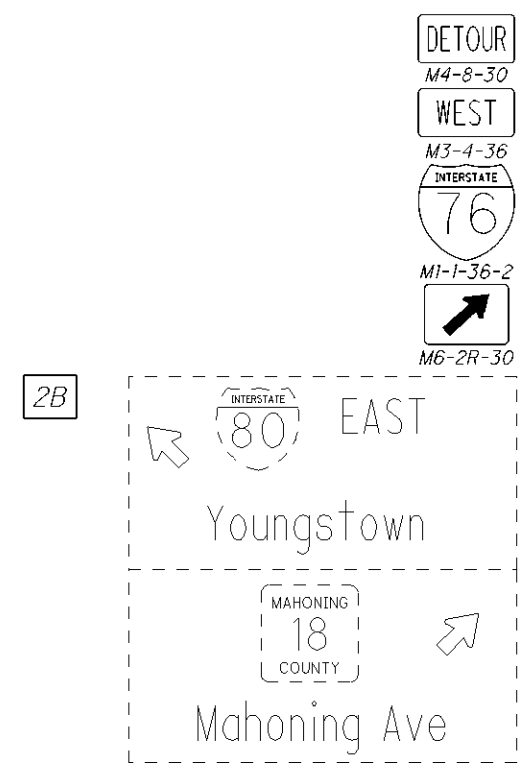
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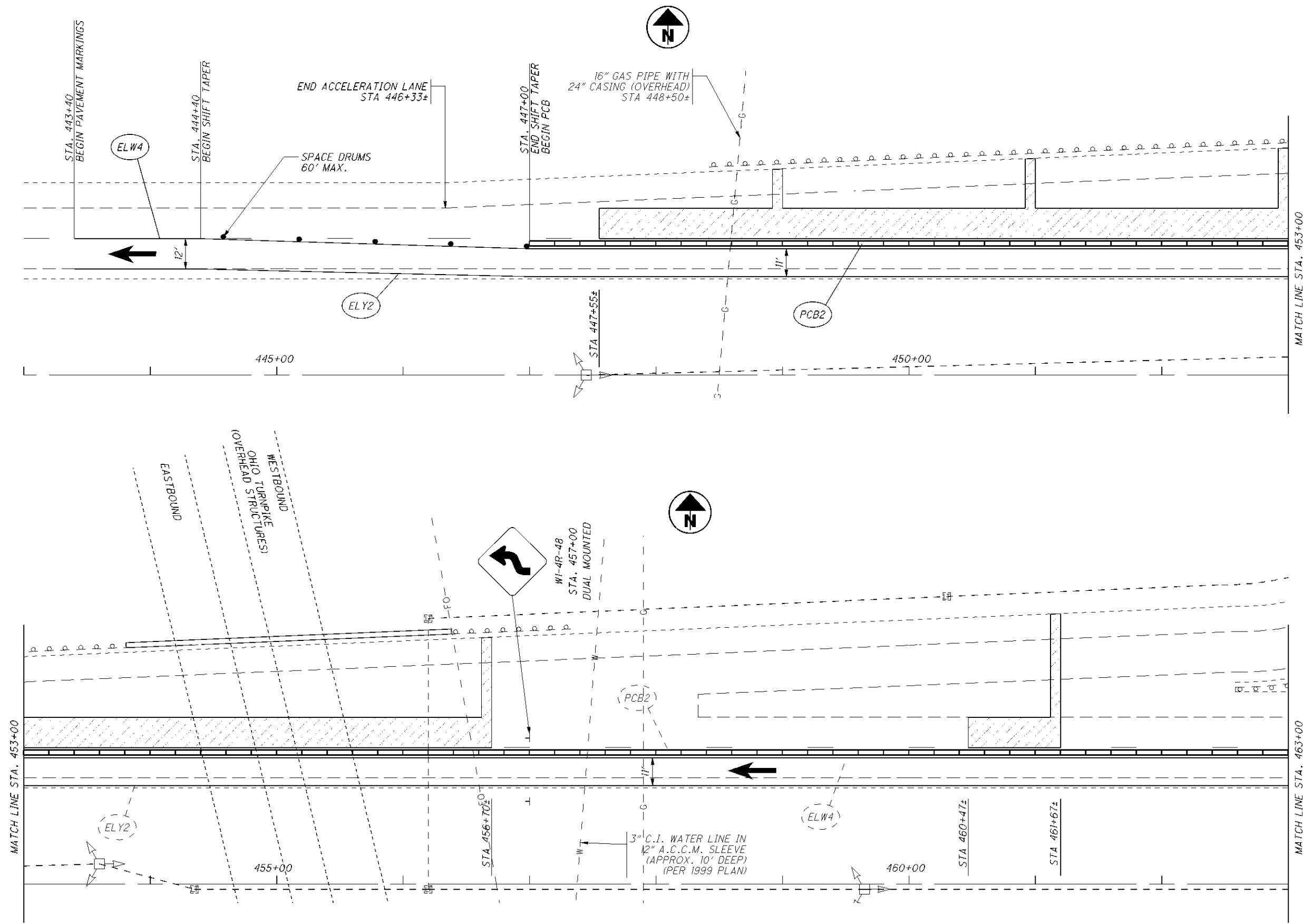


***NOTE:**
THE CONTRACTOR SHALL SUBMIT FOR APPROVAL TO THE PROJECT ENGINEER AND THE OHIO TURNPIKE A MAINTENANCE OF TRAFFIC PLAN AND SCHEDULE FOR THE PLACEMENT AND REMOVAL OF THESE SIGNS. THIS WORK WILL NOT BE PERMITTED ON A THURSDAY OR FRIDAY. THE PLAN SHALL BE SUBMITTED 10 DAYS PRIOR TO THE PLACEMENT OF THE SIGNS.

CONTACT INFORMATION FOR THE OHIO TURNPIKE:

DOUG HEDRICK
CHIEF ENGINEER
OHIO TURNPIKE COMMISSION
682 PROSPECT ST
BEREA, OH 44017
(440)-234-2081 EXT. 1201
DOUG.HEDRICK@OHIOTURNPIKE.ORG



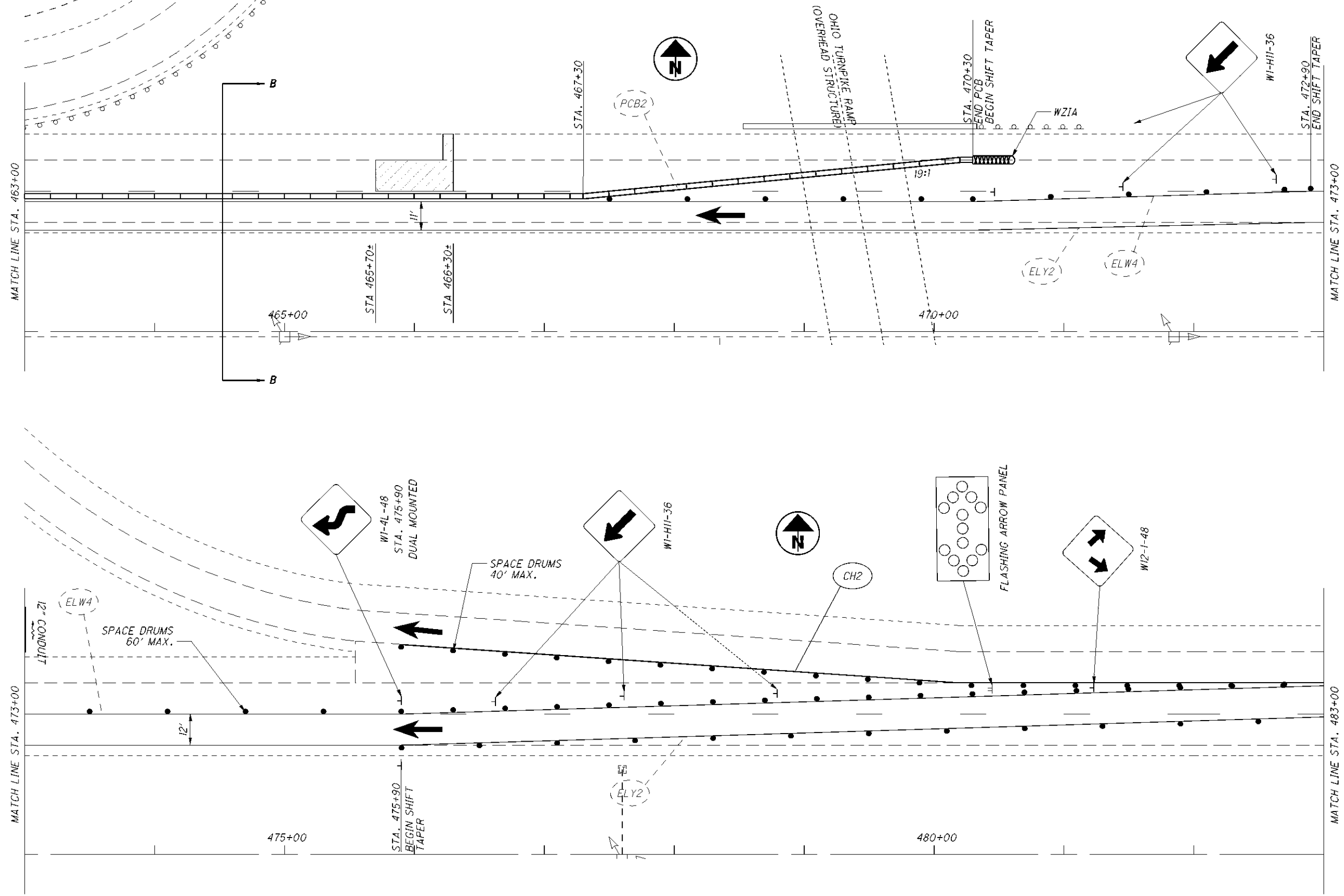


SEE SHEET 12 FOR LEGEND.

CALCULATED	LAB
MJH	CHECKED

**MAINTENANCE OF TRAFFIC PHASE 2
PLAN SHEET STA. 443+00 TO STA. 463+00**

**MAH-76/80-
6.95/0.00**

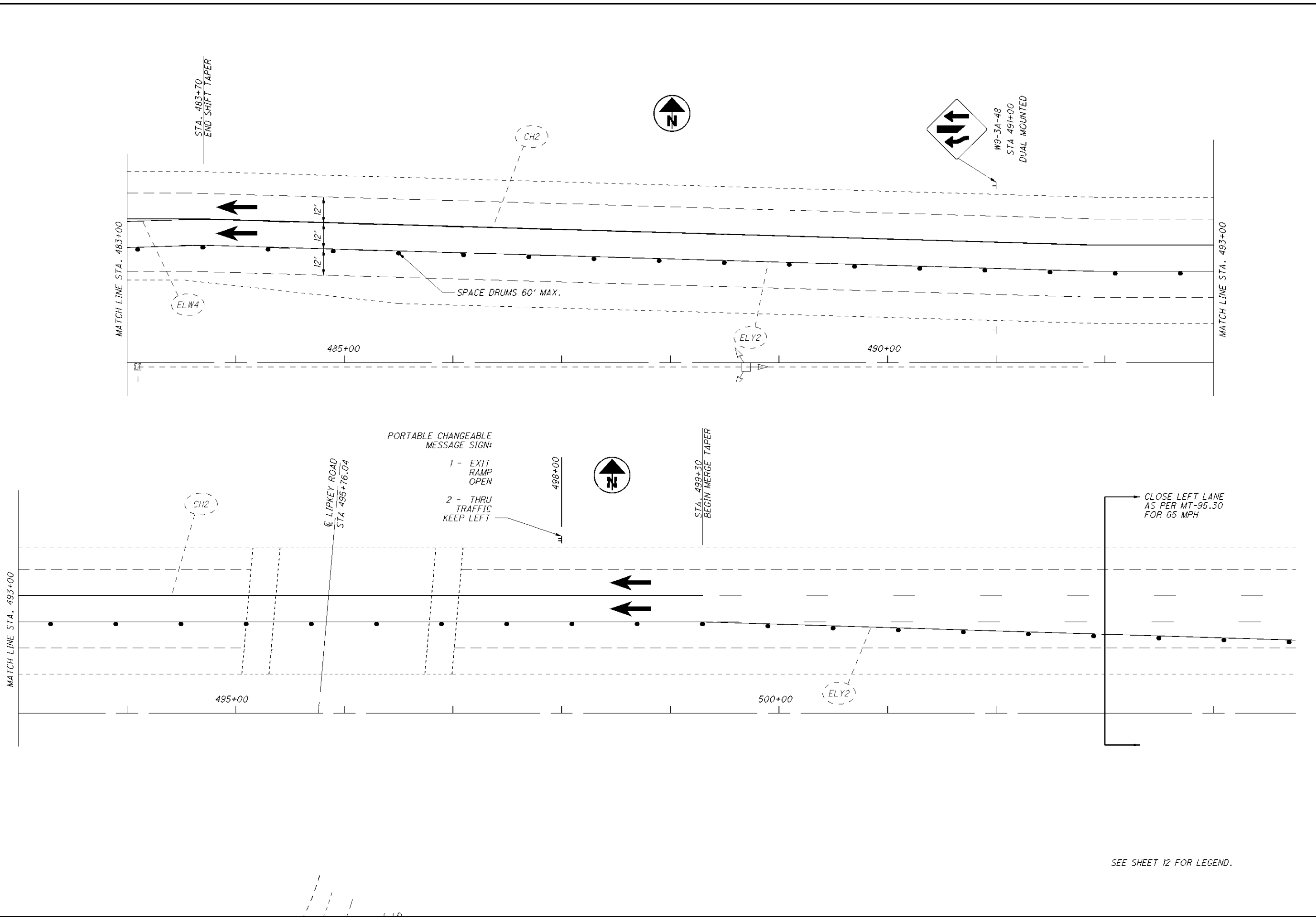


SEE SHEET 12 FOR LEGEND.

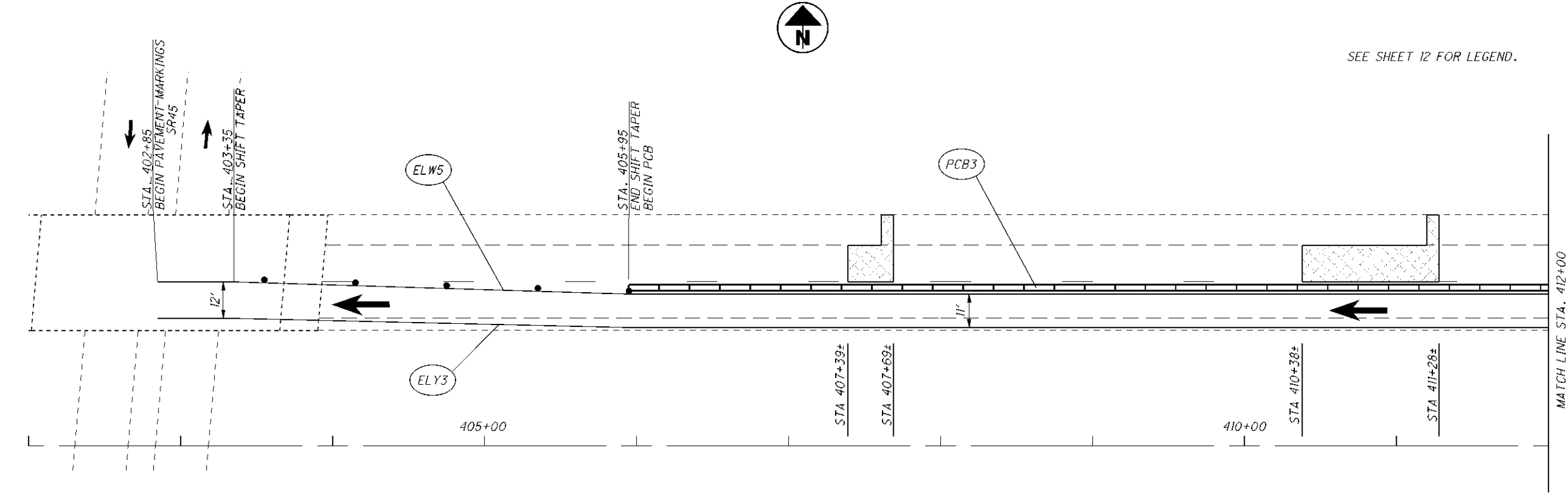
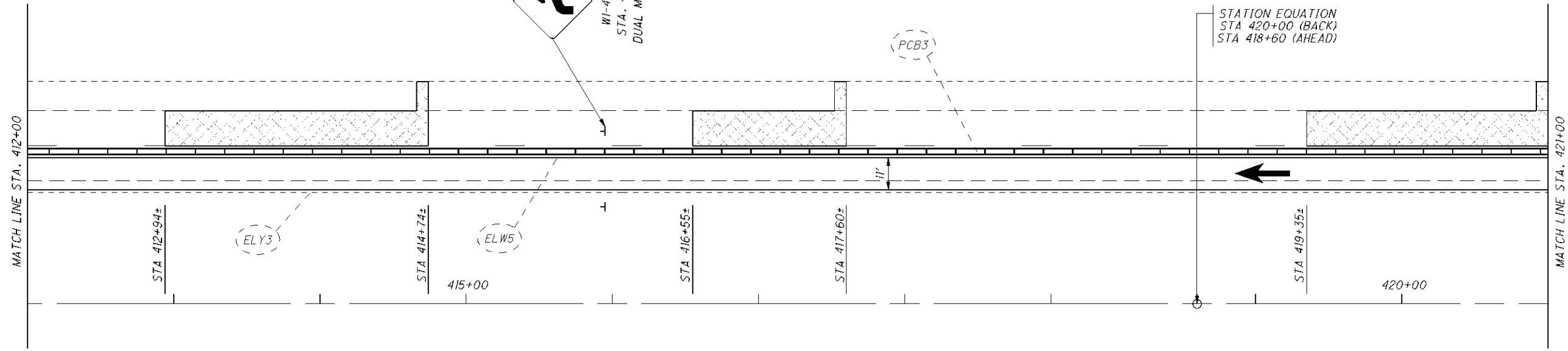
CALCULATED	
MJH	
CHECKED	
LAB	

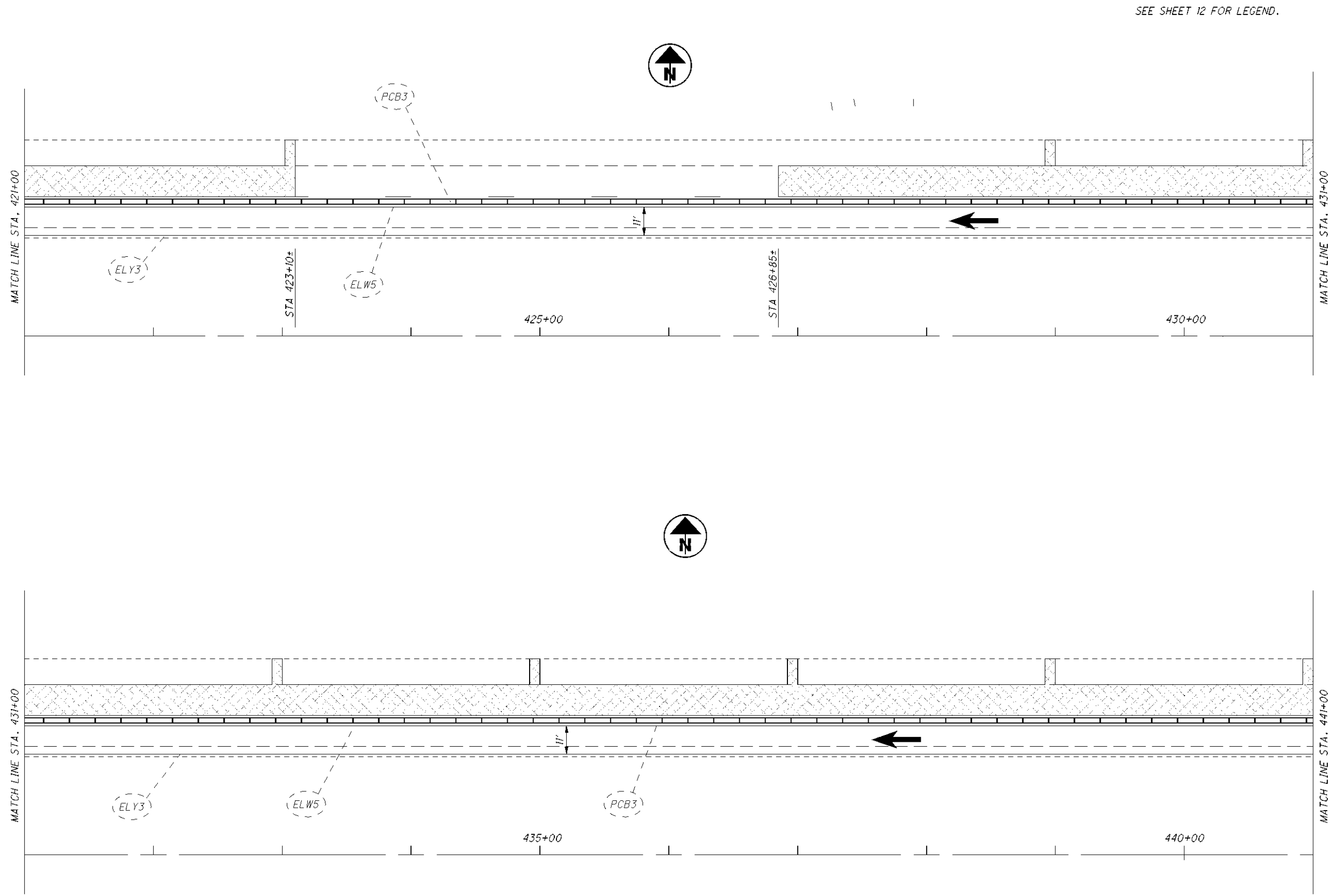
**MAINTENANCE OF TRAFFIC PHASE 2
PLAN SHEET STA. 463+00 TO STA. 483+00**

**MAH-76/80-
6.95/0.00**



SEE SHEET 12 FOR LEGEND.



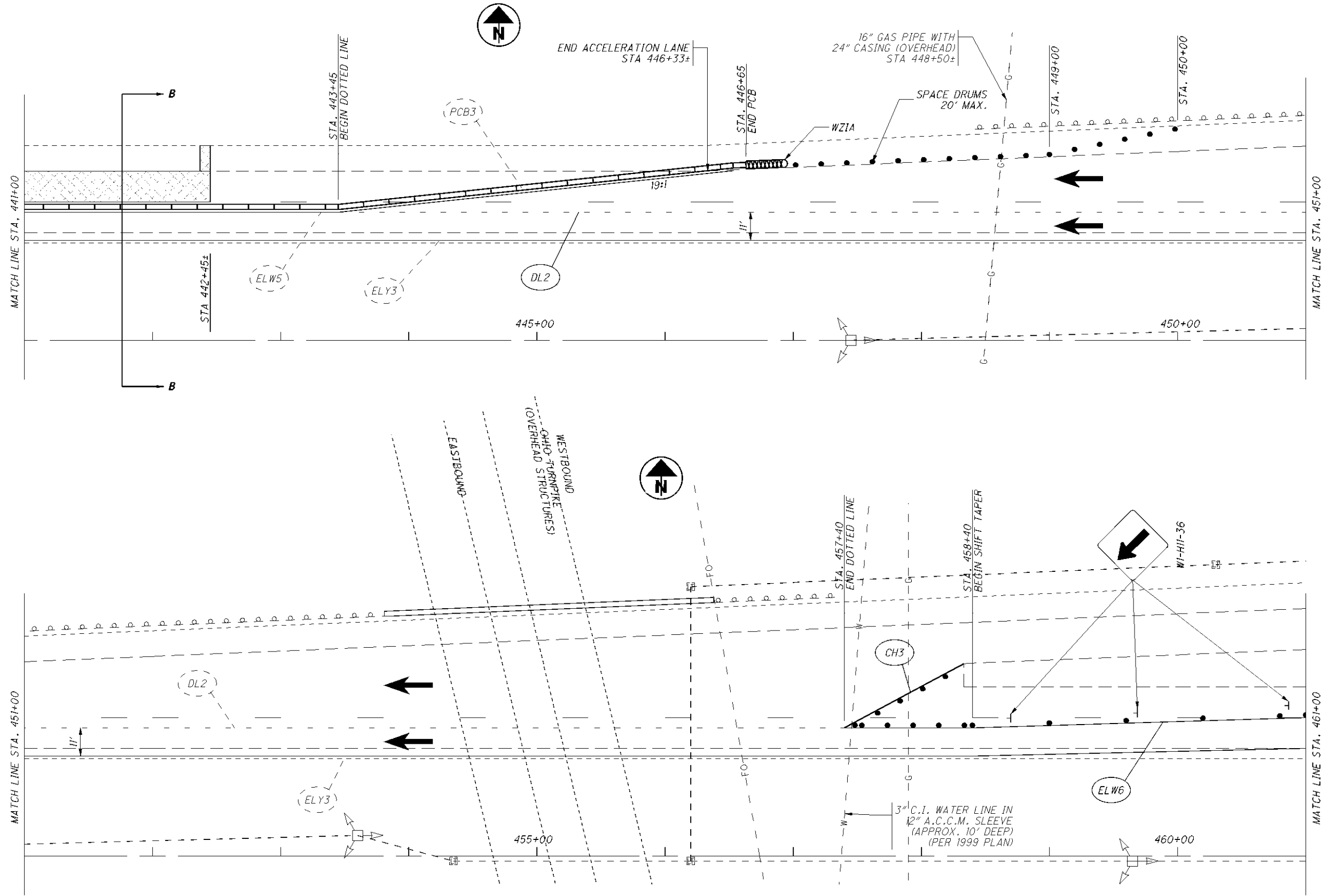


CALCULATED
MJH
CHECKED
LAB

**MAINTENANCE OF TRAFFIC PHASE 3
PLAN SHEET STA. 421+00 TO STA. 441+00**

**MAH-76/80-
6.95/0.00**

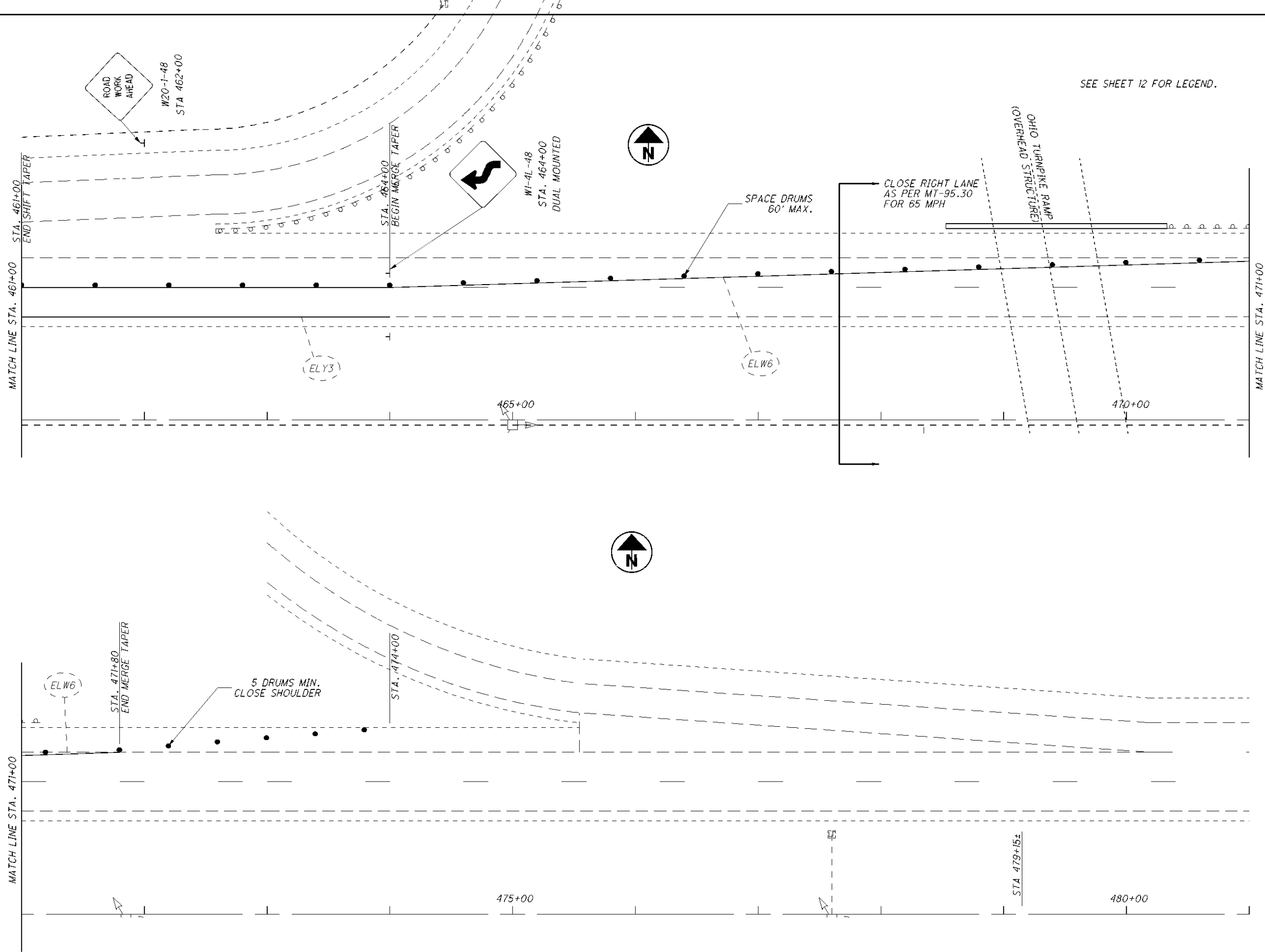
SEE SHEET 12 FOR LEGEND.



CALCULATED
MUJ
CHECKED
LAB

**MAINTENANCE OF TRAFFIC PHASE 3
PLAN SHEET STA. 441+00 TO STA. 461+00**

**MAH-76/80-
6.95/0.00**

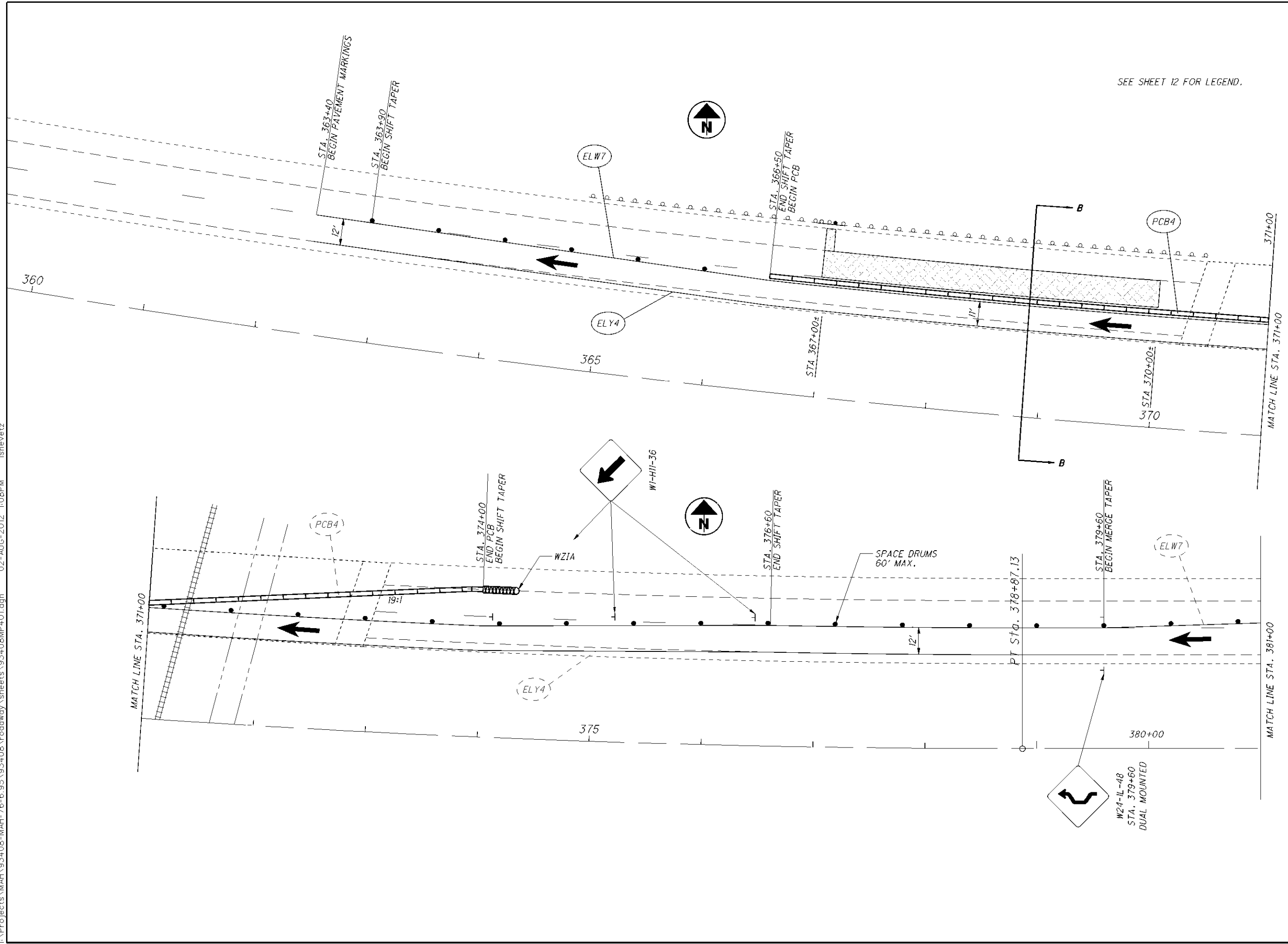


SEE SHEET 12 FOR LEGEND.

CALCULATED
MJH
CHECKED
LAB

**MAINTENANCE OF TRAFFIC PHASE 3
PLAN SHEET STA. 461+00 TO STA. 481+00**

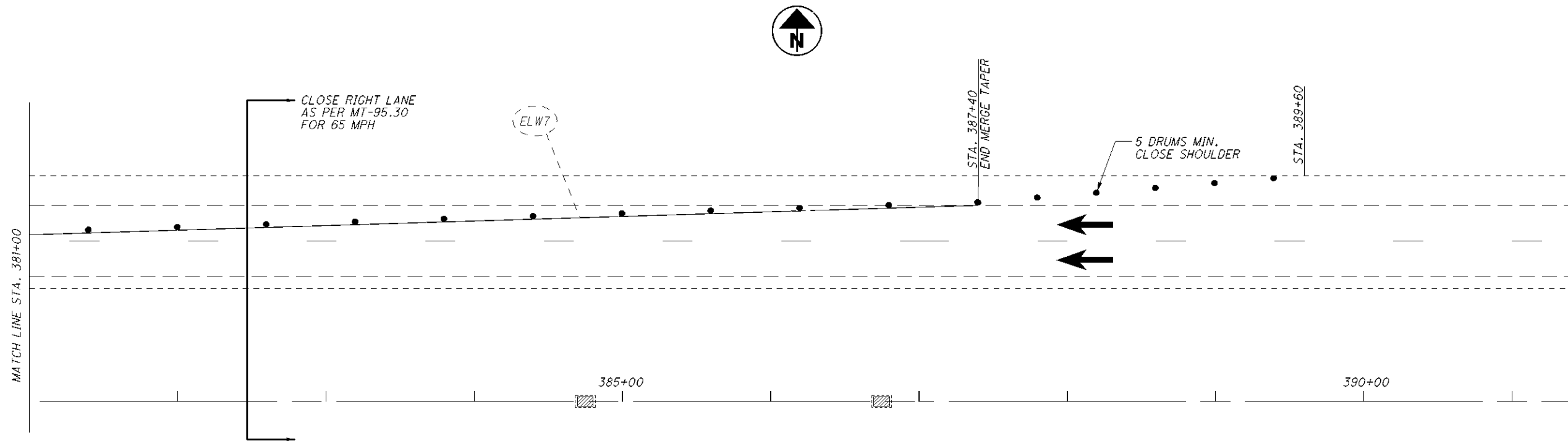
**MAH-76/80-
6.95/0.00**



CALCULATED
RCB
CHECKED
MJH

**MAINTENANCE OF TRAFFIC PHASE 4
PLAN SHEET STA. 360+00 TO STA. 381+00**

**MAH-76/80-
6.95/0.00**



SEE SHEET 12 FOR LEGEND.

CALCULATED
RFB
CHECKED
MJH

**MAINTENANCE OF TRAFFIC PHASE 4
PLAN SHEET STA. 381+00 TO STA. 391+00**

**MAH-76/80-
6.95/0.00**

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STATION RANGE			TYPICAL SECTION	SIDE	DISTANCE (D)	AVERAGE WIDTH (W)	SURFACE AREA (A) A=DxW/9	CADD GENERATED AREA	202	203	203	204	255	255	304	304	452	452	617												
									PAVEMENT REMOVED (T = 14"±)	EXCAVATION (T = 10"±)	EXCAVATION (T = 24"±)	SUBGRADE COMPACTION	FULL DEPTH PAVEMENT REMOVAL AND RIGID REPLACEMENT, CLASS RRCCM	FULL DEPTH PAVEMENT SAWING	AGGREGATE BASE, AS PER PLAN (T = 10")	AGGREGATE BASE, AS PER PLAN (T = 24")	14" NON-REINFORCED CONCRETE PAVEMENT	14" NON-REINFORCED CONCRETE PAVEMENT, AS PER PLAN	COMPACTED AGGREGATE, AS PER PLAN												
FT	FT	SQ YD	SQ YD	SQ YD	CU YD	CU YD	SQ YD	SQ YD	FT	CU YD	CU YD	SQ YD	SQ YD	CU YD	CU YD	SQ YD	SQ YD	CU YD													
367+00.00	TO	370+00.00	1	WB	300.00	12.00	400.00		400.00	111.11		400.00		624.00	111.11		400.00														
367+00.00	TO	367+08.00	1	WB	8.00	10.00	8.89		8.89	2.72		9.78		20.00	2.71		8.89														
407+39.00	TO	407+69.00	2	WB	30.00	12.00	40.00		40.00	11.11		40.00		84.00	11.11		40.00														
407+61.00	TO	407+69.00	2	WB	8.00	10.00	8.89		8.89	2.72		9.78		20.00	2.72		8.89														
410+38.00	TO	411+28.00	3	WB	90.00	12.00	120.00		120.00		80.00	120.00		204.00		80.00	120.00														
411+20.00	TO	411+28.00	3	WB	8.00	10.00	8.89		8.89		6.52	9.78		20.00		6.52	8.89														
412+94.00	TO	414+74.00	3	WB	180.00	12.00	240.00		240.00		160.00	240.00		384.00		160.00	240.00														
414+66.00	TO	414+74.00	3	WB	8.00	10.00	8.89		8.89		6.52	9.78		20.00		6.52	8.89														
416+55.00	TO	417+60.00	3	WB	105.00	12.00	140.00		140.00		93.33	140.00		234.00		93.33	140.00														
417+52.00	TO	417+60.00	3	WB	8.00	10.00	8.89		8.89		6.52	9.78		20.00		6.52	8.89														
419+35.00	TO	423+10.00	3	WB	375.00	12.00	500.00		500.00		333.33	500.00		774.00		333.33	500.00														
420+92.00	TO	421+00.00	3	WB	8.00	10.00	8.89		8.89		6.52	9.78		20.00		6.52	8.89														
423+02.00	TO	423+10.00	3	WB	8.00	10.00	8.89		8.89		6.52	9.78		20.00		6.52	8.89														
426+85.00	TO	442+45.00	3	WB	1560.00	12.00	2080.00		2080.00		1386.67	2080.00		3144.00		1386.67	2080.00														
428+92.00	TO	429+00.00	3	WB	8.00	10.00	8.89		8.89		6.52	9.78		20.00		6.52	8.89														
430+92.00	TO	431+00.00	3	WB	8.00	10.00	8.89		8.89		6.52	9.78		20.00		6.52	8.89														
432+92.00	TO	433+00.00	3	WB	8.00	10.00	8.89		8.89		6.52	9.78		20.00		6.52	8.89														
434+92.00	TO	435+00.00	3	WB	8.00	10.00	8.89		8.89		6.52	9.78		20.00		6.52	8.89														
436+92.00	TO	437+00.00	3	WB	8.00	10.00	8.89		8.89		6.52	9.78		20.00		6.52	8.89														
438+92.00	TO	439+00.00	3	WB	8.00	10.00	8.89		8.89		6.52	9.78		20.00		6.52	8.89														
440+92.00	TO	441+00.00	3	WB	8.00	10.00	8.89		8.89		6.52	9.78		20.00		6.52	8.89														
442+37.00	TO	442+45.00	3	WB	8.00	10.00	8.89		8.89		6.52	9.78		20.00		6.52	8.89														
447+55.00	TO	456+70.00	4	WB	915.00	12.00	1220.00		1220.00		813.33	1220.00		1854.00		813.33	1220.00														
448+92.00	TO	449+00.00	4	WB	8.00	15.50	13.78		13.78		9.78	14.67		31.00		9.78	13.78														
450+92.00	TO	451+00.00	4	WB	8.00	19.50	17.33		17.33		12.15	18.22		39.00		12.15	17.33														
452+92.00	TO	453+00.00	4	WB	8.00	24.00	21.33		21.33		14.81	22.22		48.00		14.81	21.33														
456+62.00	TO	456+70.00	4	WB	8.00	31.50	28.00		28.00		19.26	28.89		63.00		19.26	28.00														
460+47.00	TO	461+67.00	5	WB	120.00	12.00	160.00		160.00		44.44	160.00		264.00		44.44	160.00														
461+59.00	TO	461+67.00	5	WB	8.00	43.00	38.22		38.22		10.86	39.11		20.00		10.86	38.22														
465+70.00	TO	466+30.00	5	WB	60.00	12.00	80.00		80.00		22.22	80.00		144.00		22.22	80.00														
466+22.00	TO	466+30.00	5	WB	8.00	10.00	8.89		8.89		2.72	9.78		20.00		2.72	8.89														
479+15.00	TO	482+60.00	7	WB	345.00	12.00	460.00		460.00		306.67	460.00		714.00		306.67	460.00														
480+92.00	TO	481+00.00	7	WB	8.00	10.00	8.89		8.89		6.52	9.78		20.00		6.52	8.89														
482+52.00	TO	482+60.00	7	WB	8.00	10.00	8.89		8.89		6.52	9.78		20.00		6.52	8.89														
476+55.00	TO	477+00.00	8	EB	45.00	12.00	60.00		60.00		40.00	60.00	60.00	114.00		40.00															
476+92.00	TO	477+00.00	8	EB	8.00	10.00	8.89		8.89		5.93	8.89	8.89	20.00		5.93															
406+50.00	TO	486+00.00	WB	OUTSIDE	7950.00	2.00	1766.67											98.15													
406+50.00	TO	488+00.00	WB	MEDIAN	8150.00	2.00	1811.11											100.62													
406+50.00	TO	486+00.00	EB	OUTSIDE	7950.00	2.00	1766.67											98.15													
406+50.00	TO	488+00.00	EB	MEDIAN	8150.00	2.00	1811.11											100.62													
SUBTOTALS									5787.56	207.90	3373.06	5808.04	68.89	9119.00	207.90	3373.06	3653.33	2065.33	0.00	397.53	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
TOTALS CARRIED TO GENERAL SUMMARY									5788	208	3374	5809	69	9119	208	3374	3654	2066	0	398	0	0	0	0	0	0	0	0	0	0	0

PAVEMENT SUBSUMMARY	MAH-76/80-6.95/0.00
CALCULATED LMP CHECKED TJP	27 40

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REF NO.	SHEET NO.	STATION TO STATION					202	202	202	209	448	601	602	603	603	604	604		606	606	606	606	606		626		
							HEADWALL REMOVED	PIPE REMOVED, 24" AND UNDER	GUARDRAIL REMOVED	LINEAR GRADING, AS PER PLAN	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, UNDER GUARDRAIL, PG64-22, AS PER PLAN	TIED CONCRETE BLOCK MAT, TYPE 1	CONCRETE MASONRY	12" CONDUIT, TYPE C	15" CONDUIT, TYPE C	CATCH BASIN, NO. 5	CATCH BASIN, NO. 7		GUARDRAIL, TYPE 5	ANCHOR ASSEMBLY, TYPE E	ANCHOR ASSEMBLY, TYPE T	BRIDGE TERMINAL ASSEMBLY, TYPE 1	BRIDGE TERMINAL ASSEMBLY, TYPE 2		BARRIER REFLECTOR		
						EACH	FT	FT	STATION	CU YD	SQ YD	CU YD	FT	FT	EACH	EACH		FT	EACH	EACH	EACH	EACH		EACH			
GR1	31	367+00.00	WB					25	0.25	0.77								25								1	
GR2	36	445+21.00	EB	TO	448+58.50	EB		337.5	3.38	10.42								275	1	1						5	
GR3	36/37	448+56.00	WB	TO	453+81.00	WB		525	5.25	16.20								512.5		1		1				7	
GR4	37	452+22.50	EB	TO	453+35.00	EB		112.5	1.13	3.47								62.5	1			1		1		3	
GR5	37	456+38.00	WB	TO	457+13.00	WB		75	0.75	2.31								25	1			1				2	
GR6	37/38	462+32.50	EB	TO	467+95.00	EB		562.5	5.63	17.36								512.5	1			1				7	
GR7	38	470+33.00	WB	TO	471+01.75	WB		68.75	0.75	2.31								25	1			1				2	
GR8	38	470+31.25	EB	TO	473+68.75	EB		337.5	3.38	10.42								275	1	1						5	
D1	37	451+97.00	WB	TO	453+75.00	WB							77														
D2	37	453+75.00	WB	TO	454+72.00	WB	1	5					97	1													
D3	37/38	462+80.00	WB	TO	463+22.50	WB					2	0.21	62														
D4	38	468+46.50	WB	TO	470+40.00	WB							218			2											
D5	38	473+00.00	WB										20														
D6	40	486+00.00	WB								2	0.21	44														
D7	37	453+00.00	EB	TO	454+50.00	EB							154														
D8	37	454+50.00	EB	TO	455+70.50	EB	1	5						126	1												
D9	38	467+70.00	EB	TO	468+20.00	EB							51														
D10	40	486+00.00	EB								2	0.21	26														
TOTALS CARRIED TO GENERAL SUMMARY							2	10	2043.8	21	64	6	0.63	652	223	2	2	0	1712.5	6	3	4	1	0	32	0	0

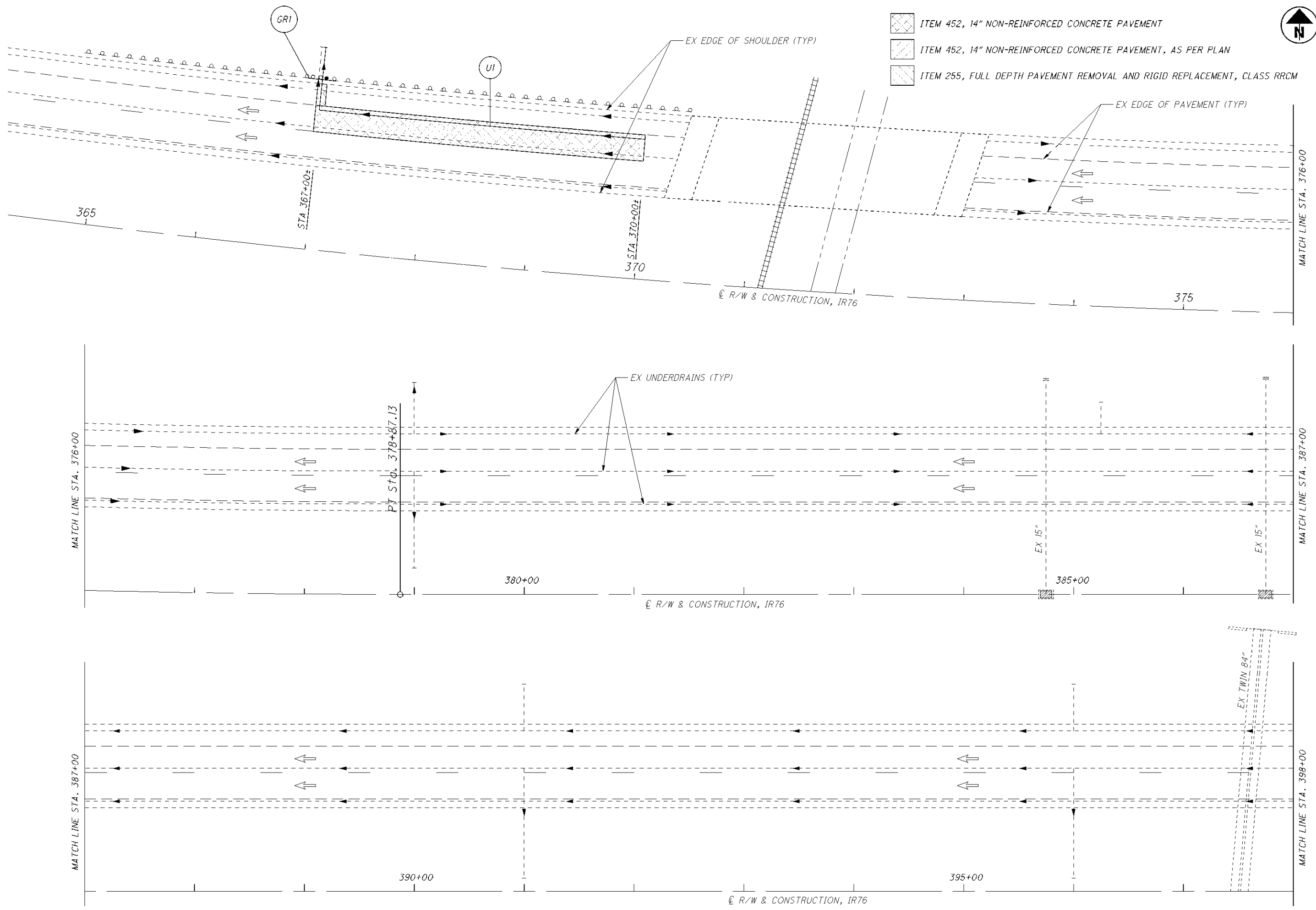
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ROADWAY AND DRAINAGE SUBSUMMARY

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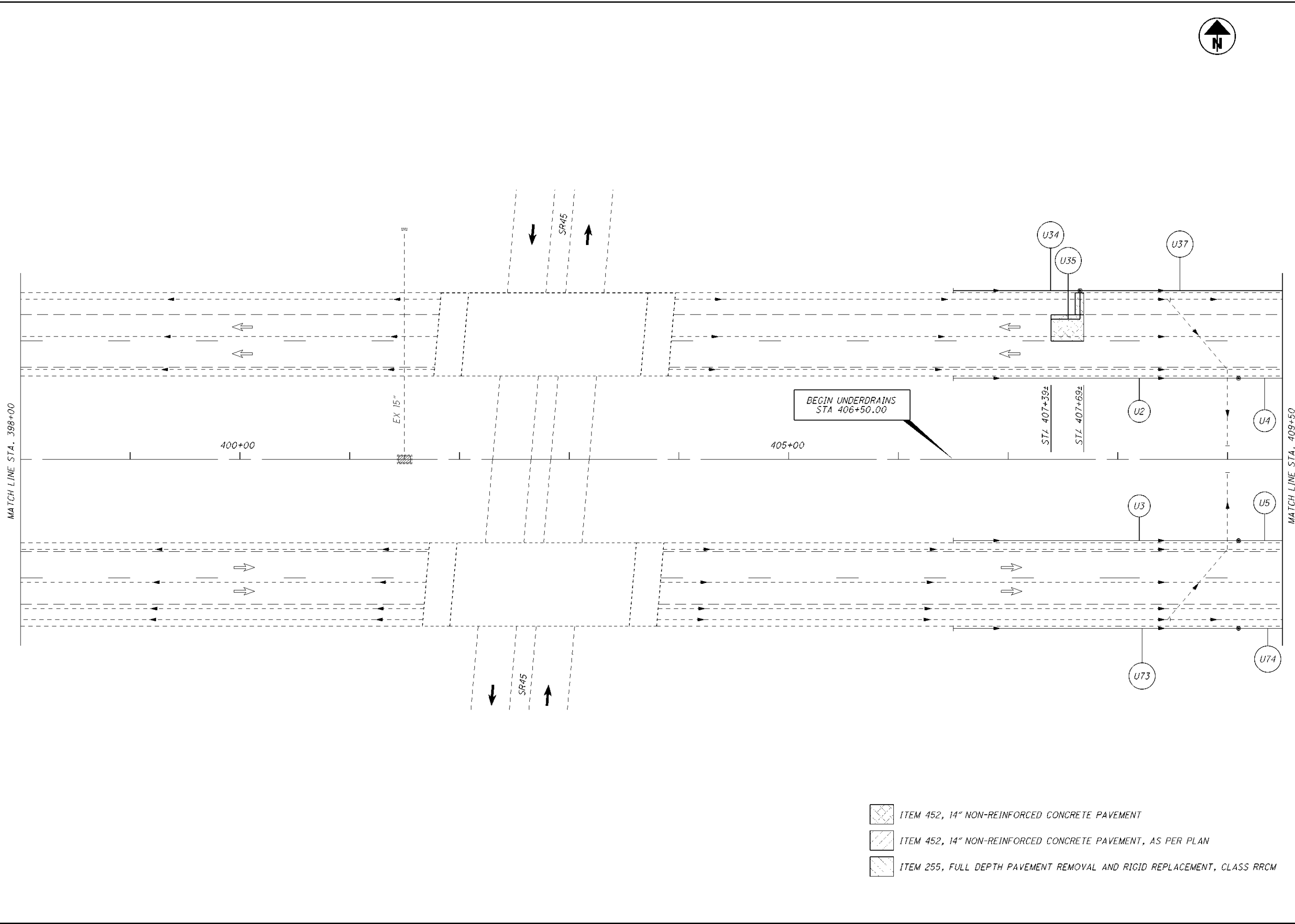





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PLAN VIEW (IR76/IR80)

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-  ITEM 452, 14" NON-REINFORCED CONCRETE PAVEMENT
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-  ITEM 255, FULL DEPTH PAVEMENT REMOVAL AND RIGID REPLACEMENT, CLASS RRCM

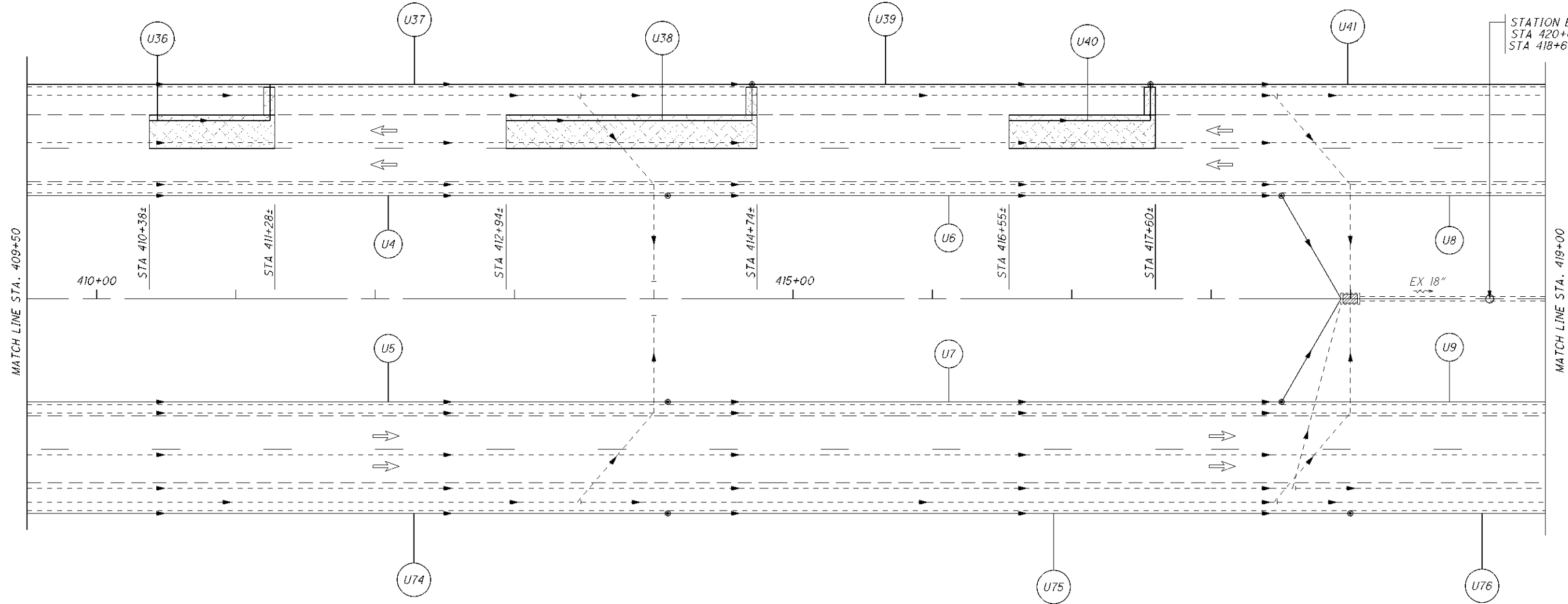





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PLAN VIEW (IR76 / IR80)

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6.95 / 0.00**

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STATION EQUATION
 STA 420+00 (BACK)
 STA 418+60 (AHEAD)

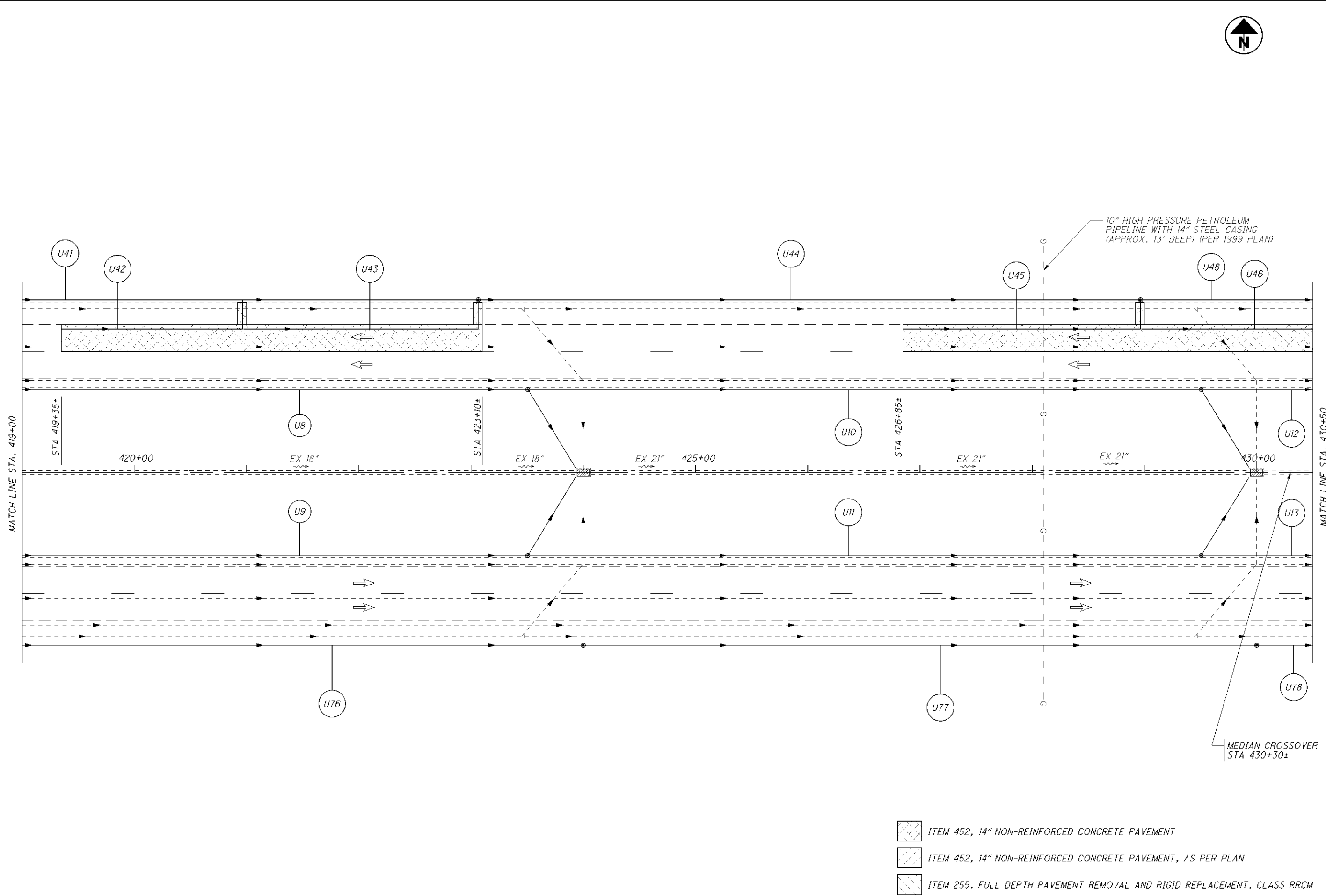





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PLAN VIEW (IR76 / IR80)

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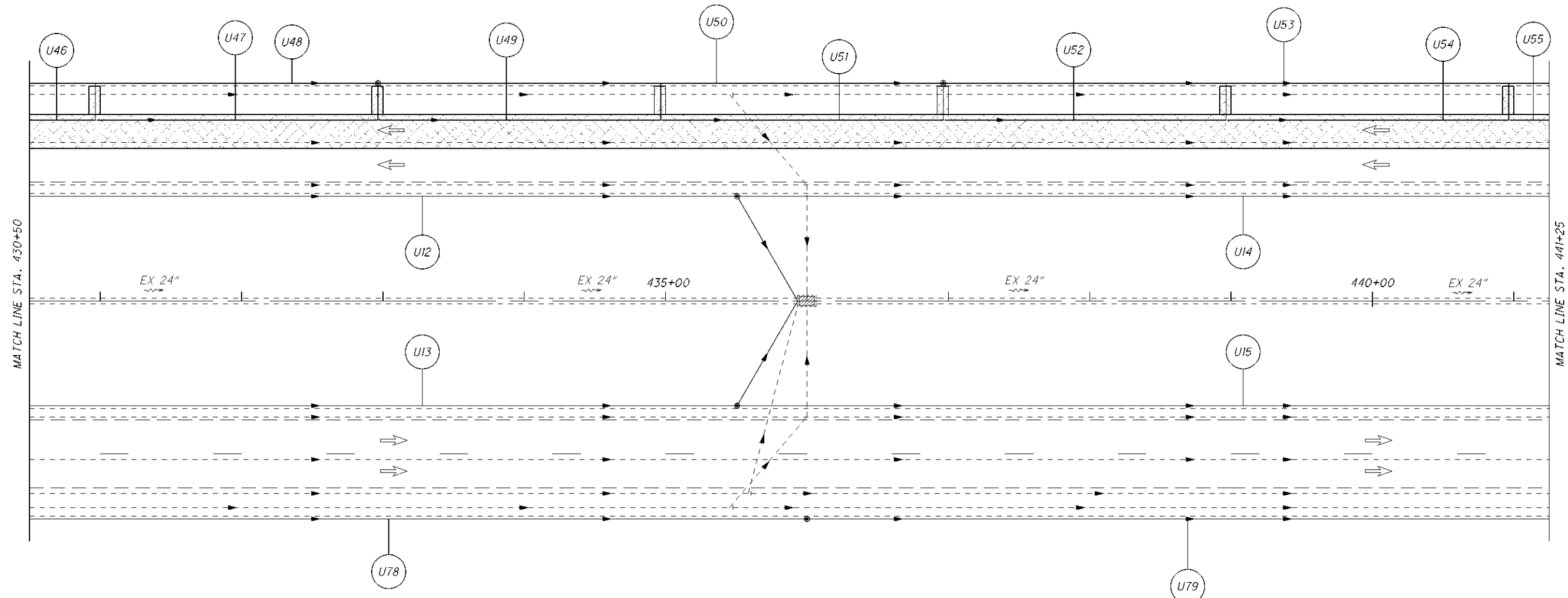
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PLAN VIEW (IR76/IR80)

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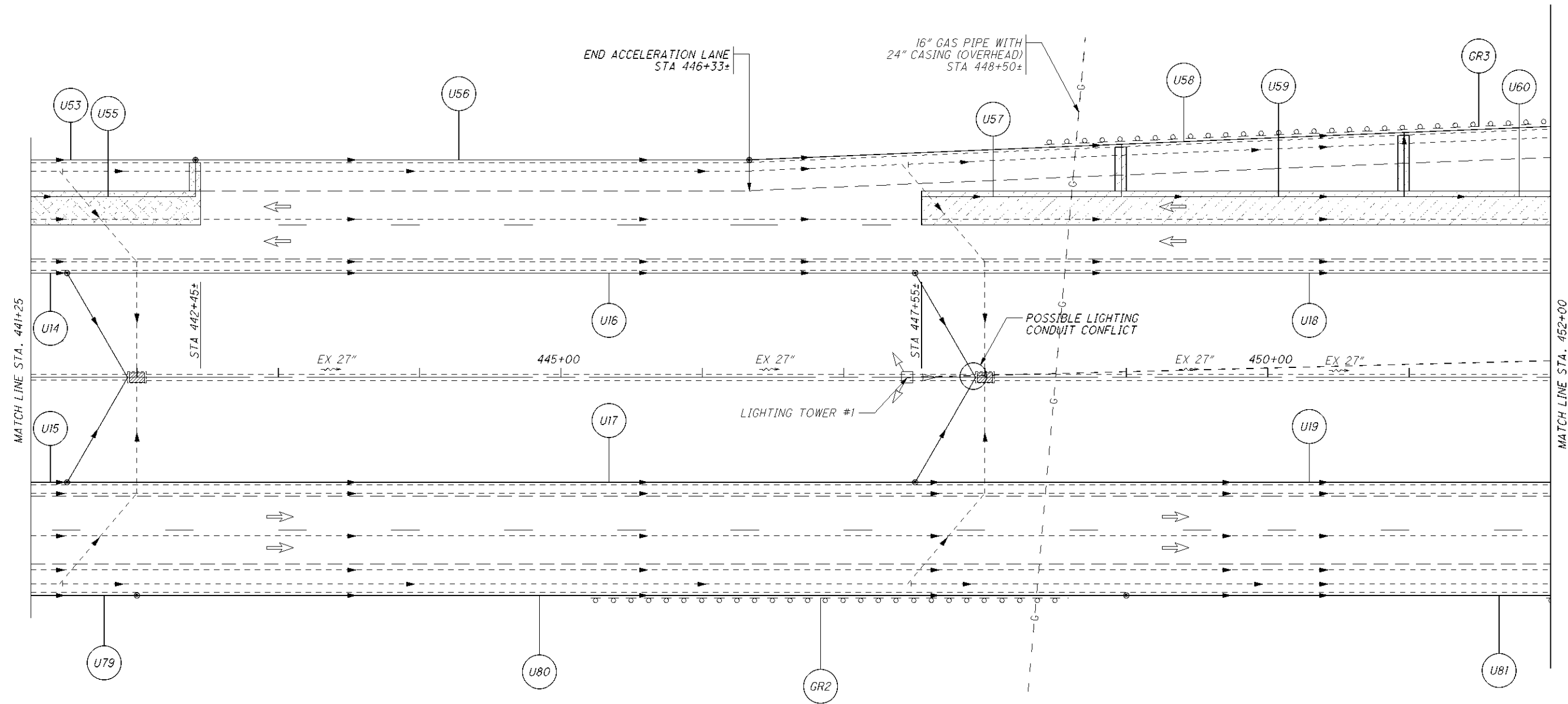


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PLAN VIEW (IR76/IR80)

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


END ACCELERATION LANE
STA 446+33±

16" GAS PIPE WITH
24" CASING (OVERHEAD)
STA 448+50±

POSSIBLE LIGHTING
CONDUIT CONFLICT

LIGHTING TOWER #1

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PLAN VIEW (IR76/IR80)

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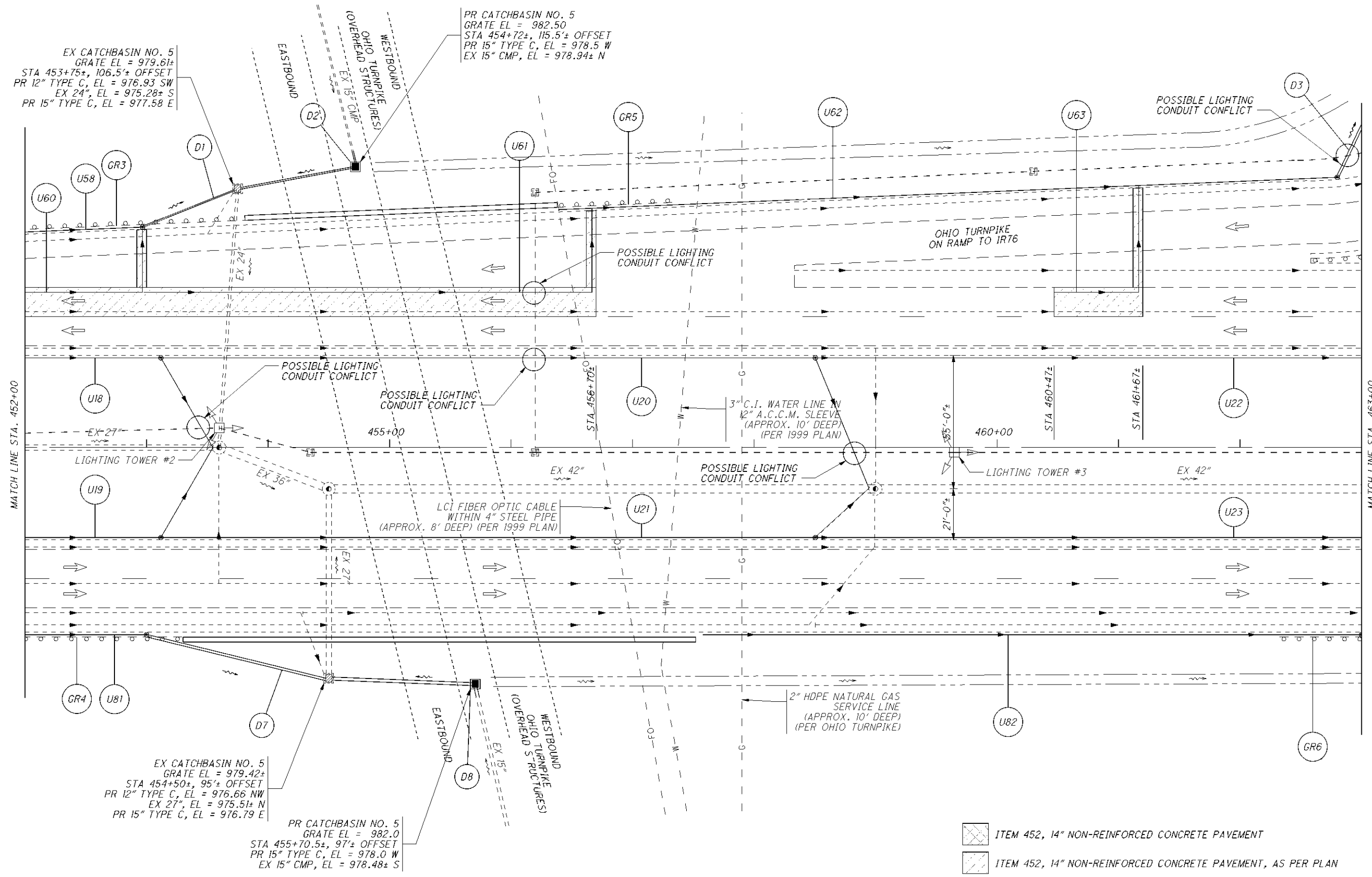
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PLAN VIEW (IR76/IR80)

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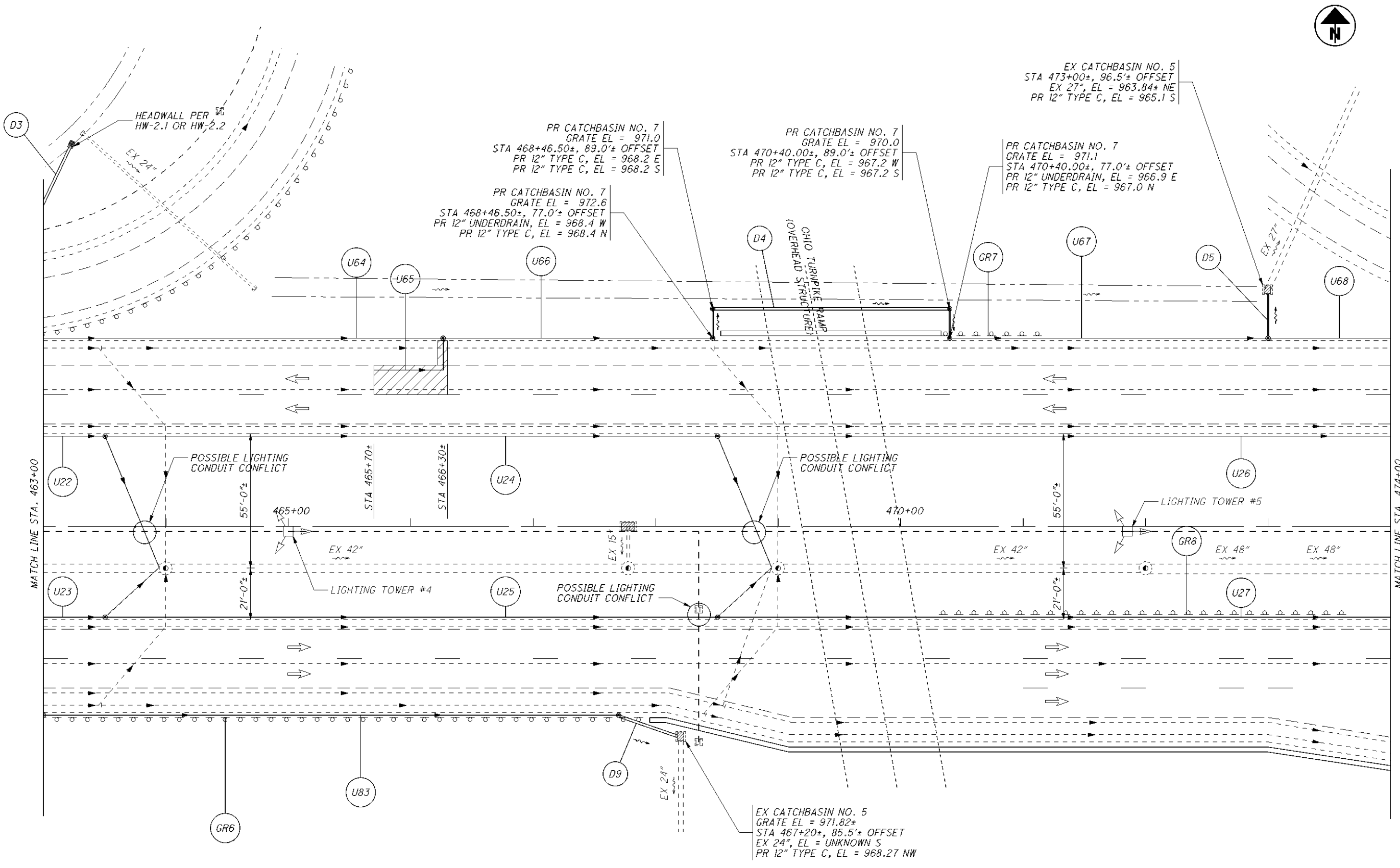
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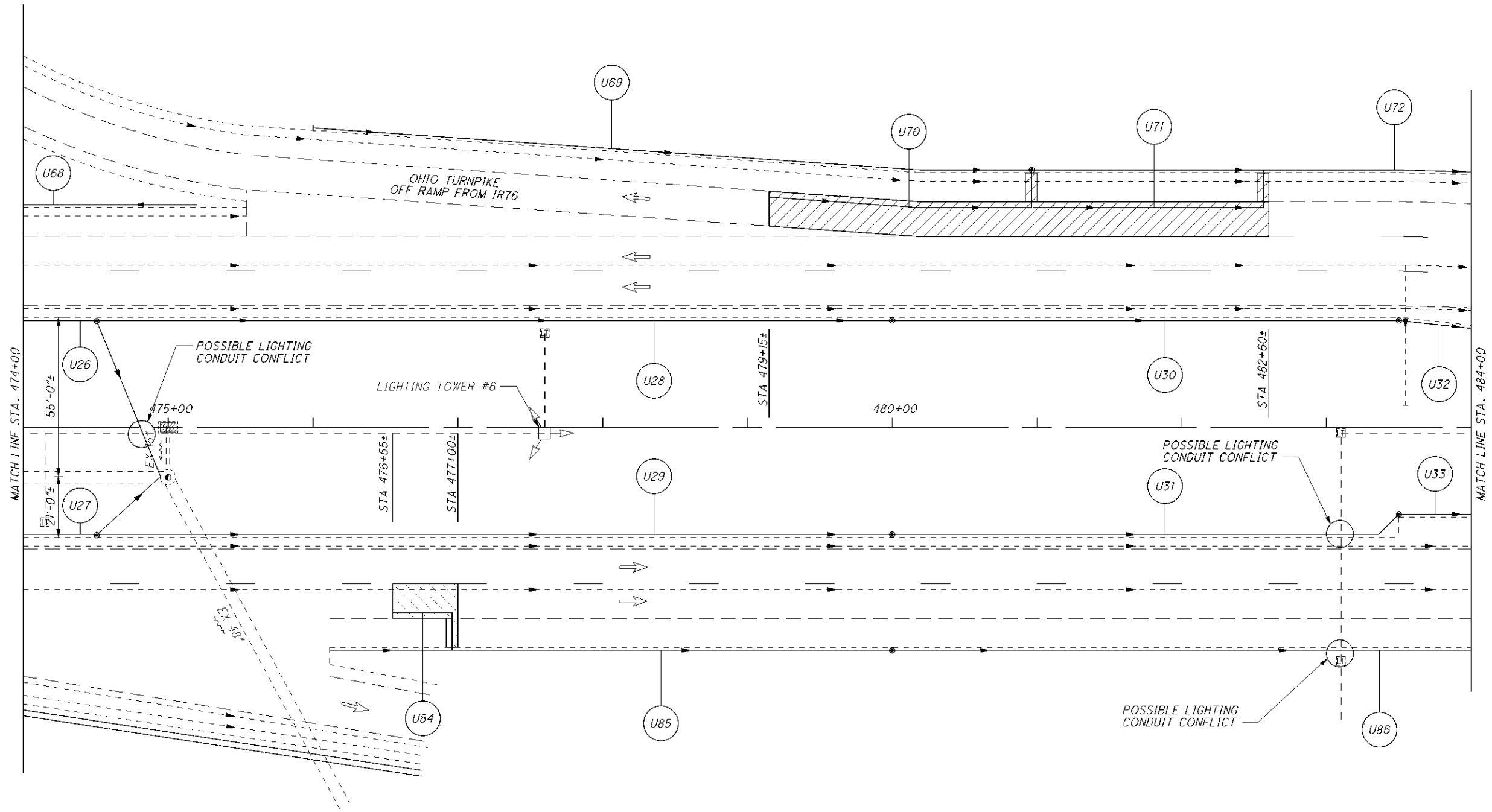
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

PLAN VIEW (IR76/IR80)

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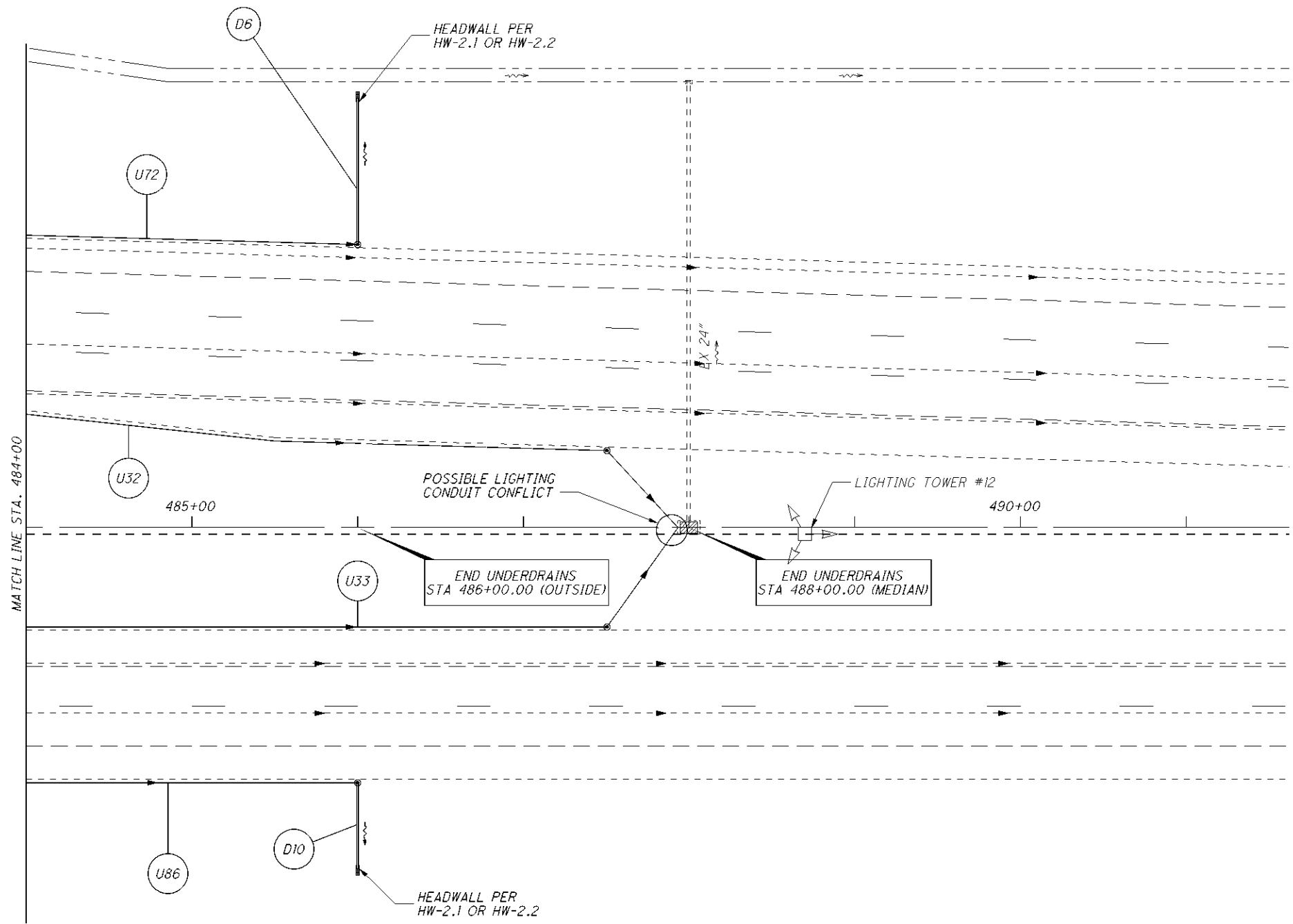
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PLAN VIEW (IR76 / IR80)

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PLAN VIEW (IR76 / IR80)

**MAH-76 / 80-
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