

# STATE OF OHIO DEPARTMENT OF TRANSPORTATION

## WAR/MOT-75-11.56/0.00

CITY OF MIAMISBURG  
CITY OF SPRINGBORO  
CLEARCREEK AND MIAMI TOWNSHIPS  
WARREN AND MONTGOMERY COUNTIES



LOCATION MAP

LATITUDE: 39°36'10" LONGITUDE: 84°14'10"



END PROJECT  
STA. 149+15.00

BEGIN PROJECT  
STA. 186+00.00

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

### DESIGN DESIGNATION

CURRENT ADT (2028)	147,900
DESIGN YEAR ADT (2048)	170,400
DESIGN HOURLY VOLUME (2048)	15,340
DIRECTIONAL DISTRIBUTION	0.51
TRUCKS (24 HOUR B&C)	17%
Td	11%
DESIGN SPEED	70 MPH
LEGAL SPEED	65 MPH
DESIGN FUNCTIONAL CLASSIFICATION:	
01 INTERSTATE (URBAN)	
NHS PROJECT	YES

### DESIGN EXCEPTIONS

NONE REQUIRED

### ADA DESIGN WAIVERS

NONE REQUIRED

**UNDERGROUND UTILITIES**  
Contact Two Working Days  
Before You Dig

**OHIO811.org**  
Before You Dig

OHIO811, 8-1-1, or 1-800-362-2764  
(Non members must be called directly)

PLAN PREPARED BY:  
**CARPENTER MARTY** transportation  
6612 SINGLETREE DRIVE COLUMBUS, OH 43229  
614.656.2424 • WWW.CMTTRAN.COM

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STANDARD CONSTRUCTION DRAWINGS										SUPPLEMENTAL SPECIFICATIONS				SPECIAL PROVISIONS					
BP-3.1	1/19/24	MGS-5.2	7/15/16	HL-30.11	1/16/26	MT-95.30	7/18/25	MT-99.30	1/17/20	TC-15.116	1/16/26	TC-61.30	7/19/24	800-2023	1/16/26	902	1/16/26	WPC	12/18/2025
BP-5.1	1/16/26	MGS-5.3	7/15/16	HL-30.21	4/17/20	MT-95.31	7/18/25	MT-99.50	7/18/25	TC-16.22	1/16/26	TC-65.10	1/17/14	804	1/16/26	904	7/15/22		
BP-9.1	1/18/19	MGS-6.2	7/18/25	HL-30.22	1/17/25	MT-95.32	7/18/25	MT-99.60	7/19/24	TC-21.11	1/16/26	TC-65.11	1/17/25	807	1/17/25	905	1/17/25		
CB-4	7/19/24	RM-4.1	1/17/20	HL-40.20	7/18/25	MT-95.45	7/21/23	MT-100.00	1/19/24	TC-21.21	7/18/25	TC-71.10	1/16/26	808	7/19/24	908	1/17/25		
DM-1.1	1/17/25	RM-4.2	1/16/26	HL-60.11	7/21/17	MT-95.50	7/21/17	MT-101.60	1/17/25	TC-22.20	7/18/25	TC-72.20	1/16/26	809	1/16/26	909	1/16/26		
DM-1.2	1/17/25	RM-4.5	1/16/26	HL-60.31	1/16/26	MT-95.70	7/21/23	MT-101.70	7/19/24	TC-41.10	1/16/26	TC-75.10	1/16/26	813	7/21/23	913	4/16/21		
DM-4.2	7/20/12	RM-4.6	7/18/25	ITS-10.10	1/17/25	MT-95.71	7/21/23	MT-101.75	7/21/23	TC-41.20	10/18/13	TC-81.22	1/16/26	814	7/15/16	914	7/15/16		
DM-4.3	1/15/16	HW-2.1	7/15/22	ITS-14.10	1/17/25	MT-98.10	1/17/20	MT-101.90	7/17/20	TC-41.30	4/21/23	TC-83.20	1/16/26	821	4/20/12	921	7/19/24		
DM-4.4	1/15/16	HW-2.2	7/20/18	ITS-14.11	1/16/26	MT-98.20	4/19/19	MT-102.20	4/19/19	TC-42.10	10/18/13	TC-85.10	1/16/26	832	7/18/25	992	4/18/14		
MGS-2.1	1/16/26	HL-10.11	1/16/26	ITS-14.11	1/16/26	MT-98.21	7/21/23	MT-102.30	10/16/15	TC-42.20	10/18/13	TC-85.20	4/21/23	833	1/16/26	996	7/21/23		
MGS-3.1	1/16/26	HL-10.12	1/16/26	ITS-14.60	1/16/26	MT-98.22	1/17/20	MT-103.10	7/18/25	TC-51.11	7/18/25			836	1/19/24				
MGS-4.2	7/18/25	HL-10.13	1/20/23	ITS-15.10	1/16/26	MT-98.28	1/17/20	MT-104.10	1/19/24	TC-51.12	7/18/25			850	7/21/23				
MGS-4.3	7/18/25	HL-20.11	1/16/26	ITS-18.00	7/16/21	MT-98.29	1/17/20	MT-105.10	1/17/20	TC-52.10	10/18/13			896	7/21/17				
				ITS-50.10	1/16/26	MT-98.30	7/18/25			TC-52.20	1/15/21								
				ITS-50.11	7/18/25	MT-99.20	4/19/19	TC-12.31	1/16/26	TC-61.10	4/21/23								

### FEDERAL PROJECT NUMBER

E201 (055)

### RAILROAD INVOLVEMENT

NONE

### PROJECT DESCRIPTION

THIS PROJECT INCLUDES 3.25 MILES OF WORK ALONG I.R. 75. THE EXISTING PAVEMENT WILL BE RUBBLIZED OR REPLACED FULL DEPTH. ONE LANE IN EACH DIRECTION WILL BE ADDED FROM THE SOUTHERN LIMITS TO THE I.R. 675 INTERCHANGE. PROJECT ALSO INCLUDES DRAINAGE IMPROVEMENTS, GUARDRAIL REPLACEMENT AND PROTECTION FOR NONREDUNDANT PIERS.

### EARTH DISTURBED AREAS

PROJECT EARTH DISTURBED AREA:	120 ACRES
ESTIMATED CONTRACTOR EARTH DISTURBED AREA:	2 ACRES
NOTICE OF INTENT EARTH DISTURBED AREA:	122 ACRES

### 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.

### 2023 SPECIFICATIONS

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

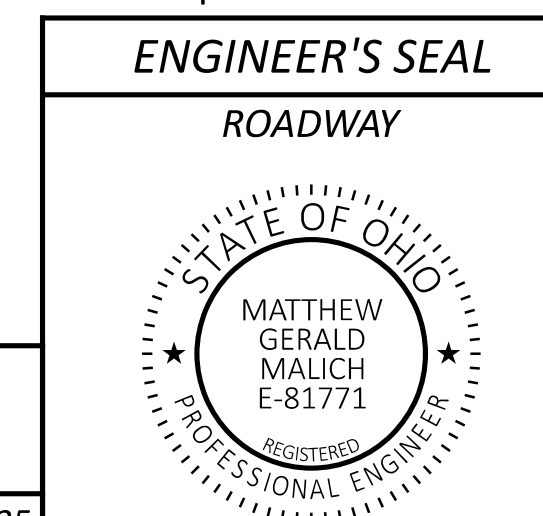
I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE MAKING OF THIS IMPROVEMENT WILL NOT REQUIRE THE CLOSING TO TRAFFIC OF THE HIGHWAY EXCEPT FOR THE RAMPS AS DESCRIBED ON SHEET P.17 AND THAT PROVISIONS FOR THE MAINTENANCE AND SAFETY OF TRAFFIC WILL BE AS SET FORTH ON THE PLANS AND ESTIMATES.

*John W. O'Brien*

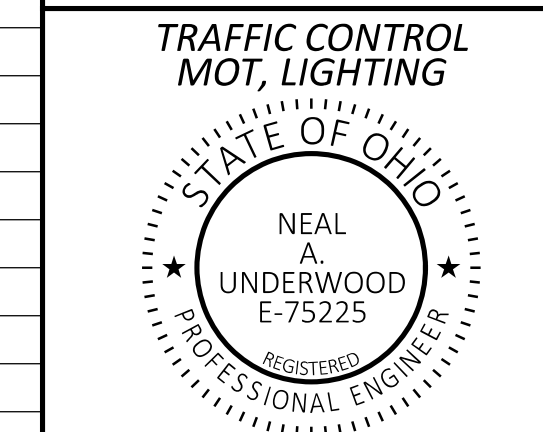
John W. O'Brien  
District 07 Deputy Director

*Pamela Boratyn*

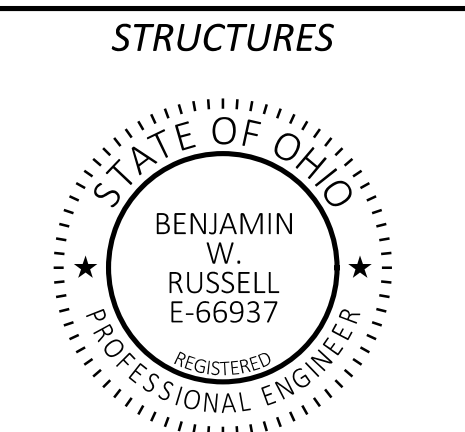
Pamela Boratyn  
Director, Department of Transportation



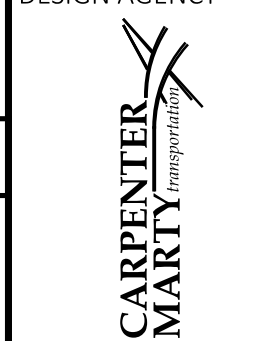
ENGINEER'S SEAL



ENGINEER'S SEAL



DESIGN AGENCY



DESIGNER

BAC

REVIEWER

TWG 12/02/25

PROJECT ID

113579

SHEET

P.1

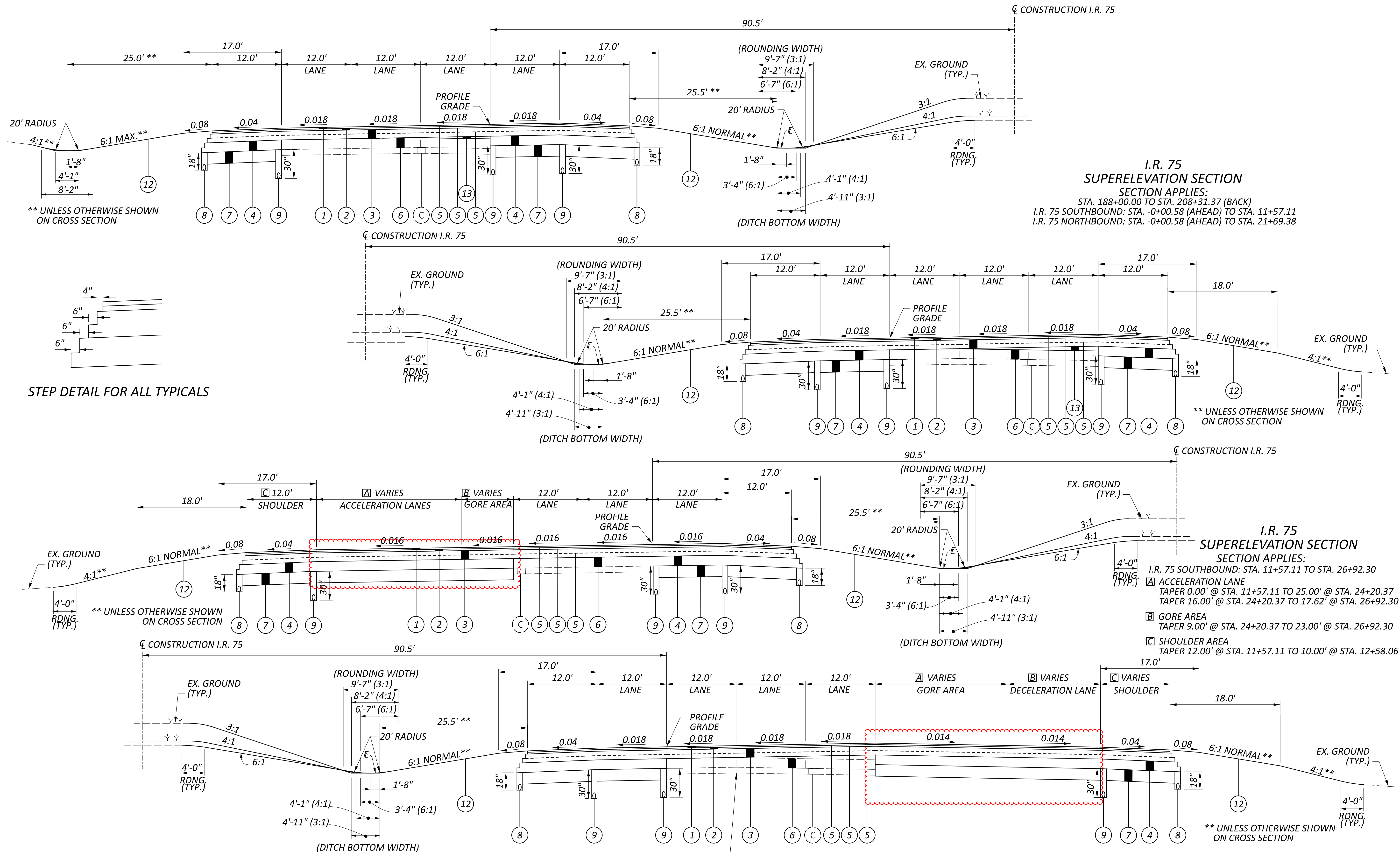
TOTAL

722

TITLE SHEET

WAR/MOT-75-11.56/0.00

MODEL: Sheet\_SurvFI PAPER SIZE: 34x42 (in.) DATE: 4/28/2026 TIME: 6:37:16 AM USER: cmt008  
P:\ODT\070697\_WAR-75-11.56\_MOT-75-0.00\113579\400-Engineering\Roadway\Sheets\113579\_GTO01.dgn



**I.R. 75  
 SUPERELEVATION SECTION**  
 SECTION APPLIES:  
 STA. 188+00.00 TO STA. 208+31.37 (BACK)  
 I.R. 75 SOUTHBOUND: STA. -0+00.58 (AHEAD) TO STA. 11+57.11  
 I.R. 75 NORTHBOUND: STA. -0+00.58 (AHEAD) TO STA. 21+69.38

**I.R. 75  
 SUPERELEVATION SECTION**  
 SECTION APPLIES:  
 I.R. 75 SOUTHBOUND: STA. 11+57.11 TO STA. 26+92.30  
 [A] ACCELERATION LANE  
 TAPER 0.00' @ STA. 11+57.11 TO 25.00' @ STA. 24+20.37  
 TAPER 16.00' @ STA. 24+20.37 TO 17.62' @ STA. 26+92.30  
 [B] GORE AREA  
 TAPER 9.00' @ STA. 24+20.37 TO 23.00' @ STA. 26+92.30  
 [C] SHOULDER AREA  
 TAPER 12.00' @ STA. 11+57.11 TO 10.00' @ STA. 12+58.06

[D] DECELERATION LANE  
 TAPER 0.00' @ STA. 21+69.38 TO 12.00' @ STA. 22+69.38  
 12.00' FROM STA. 22+69.38 TO STA. 26+86.21  
 TAPER 12.00' @ STA. 26+86.21 TO 16.00' @ STA. 27+93.14  
 16.00' FROM STA. 27+93.14 TO STA. 29+62.70  
 [E] SHOULDER  
 TAPER 12.00' @ STA. 21+69.38 TO 8.00' @ STA. 22+69.38  
 8.00' FROM STA. 22+69.38 TO STA. 29+62.70

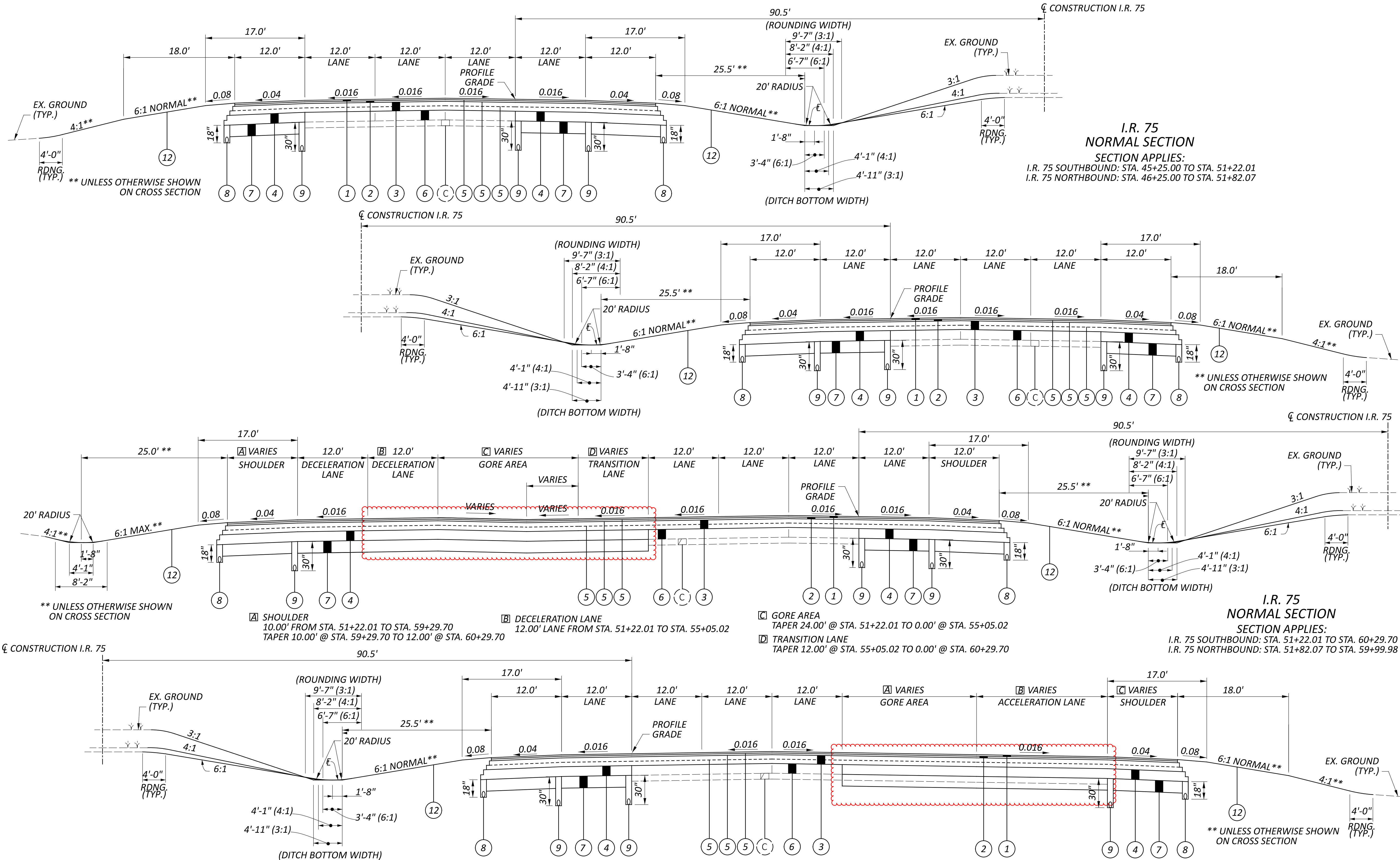
I.R. 75 NORTHBOUND: 21+69.38 TO STA. 29+62.70  
 [A] GORE AREA  
 0.00' FROM STA. 21+69.38 TO STA. 27+93.14  
 TAPER 0.00' @ STA. 27+93.14 TO 22.90' @ STA. 29+62.70

PAVEMENT BUILD UP NOTE: NORTHBOUND FULL DEPTH, FULL WIDTH  
 PAVEMENT REPLACEMENT BEGINNING AT STA. 29+00.00

NOTE  
 FOR LEGEND, SEE SHEET P.4

TYPICAL SECTIONS

DESIGN AGENCY	CARPENTER MARTY
DESIGNER	BAC
REVIEWER	TWG
PROJECT ID	113579
SHEET	P.5
TOTAL	722



**I.R. 75  
NORMAL SECTION**  
 SECTION APPLIES:  
 I.R. 75 SOUTHBOUND: STA. 45+25.00 TO STA. 51+22.01  
 I.R. 75 NORTHBOUND: STA. 46+25.00 TO STA. 51+82.07

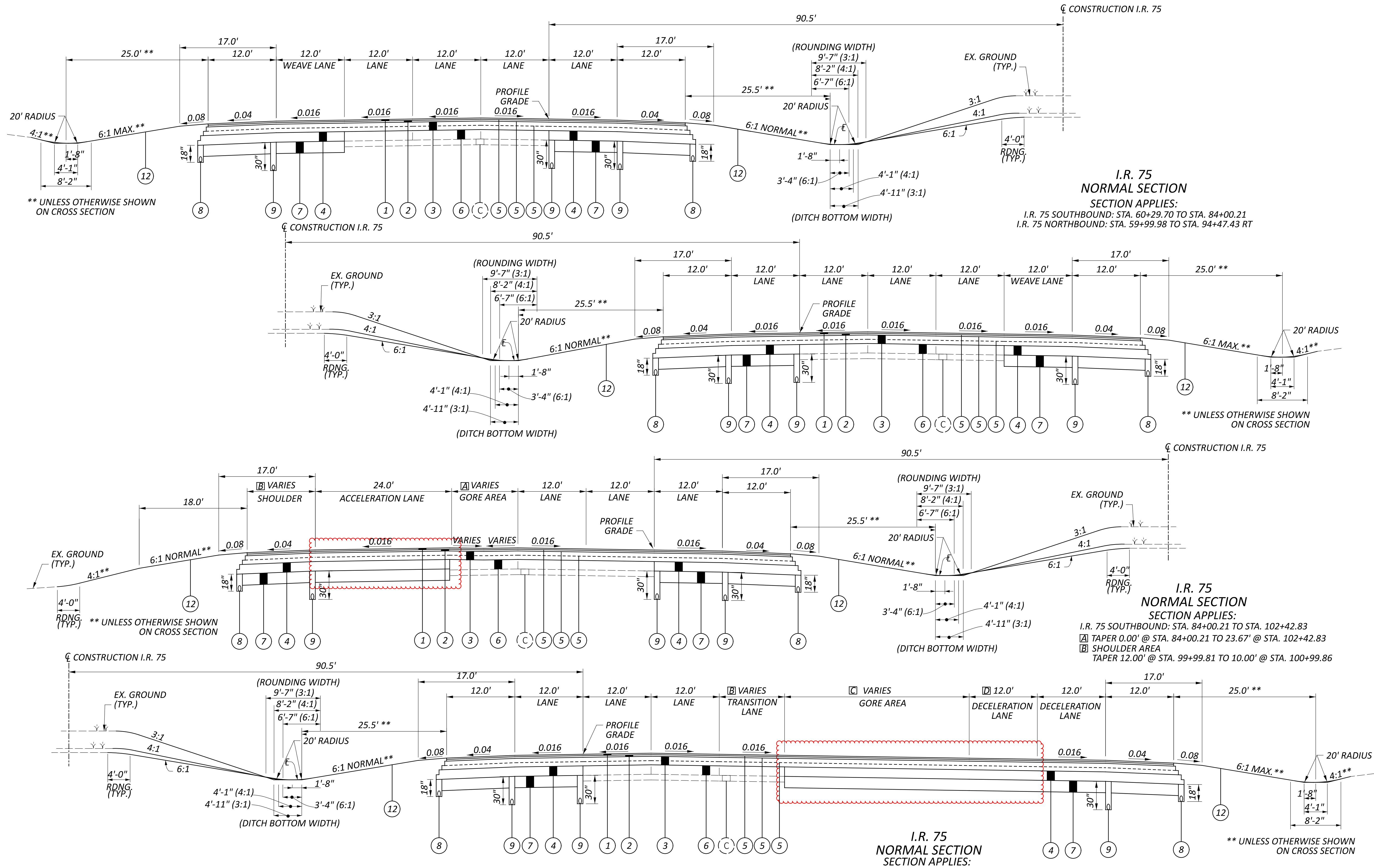
**I.R. 75  
NORMAL SECTION**  
 SECTION APPLIES:  
 I.R. 75 SOUTHBOUND: STA. 51+22.01 TO STA. 60+29.70  
 I.R. 75 NORTHBOUND: STA. 51+82.07 TO STA. 59+99.98

- ☐ SHOULDER  
10.00' FROM STA. 51+22.01 TO STA. 59+29.70  
TAPER 10.00' @ STA. 59+29.70 TO 12.00' @ STA. 60+29.70
- ☐ DECELERATION LANE  
12.00' LANE FROM STA. 51+22.01 TO STA. 55+05.02
- ☐ GORE AREA  
TAPER 24.00' @ STA. 51+22.01 TO 0.00' @ STA. 55+05.02
- ☐ TRANSITION LANE  
TAPER 12.00' @ STA. 55+05.02 TO 0.00' @ STA. 60+29.70
- ☐ GORE AREA  
TAPER 23.00' @ STA. 51+82.07 TO 9.00' @ STA. 54+26.46
- ☐ SHOULDER  
10.00' FROM STA. 51+82.07 TO STA. 54+26.46  
TAPER 10.00' @ STA. 54+26.46 TO 12.00' @ STA. 59+99.98
- ☐ ACCELERATION LANE  
TAPER 22.40' @ STA. 51+82.07 TO 16.00' @ STA. 54+26.46  
TAPER 25.00' @ STA. 54+26.46 TO 12.00' @ STA. 59+99.98

**NOTE**  
 FOR LEGEND, SEE SHEET P.4

TYPICAL SECTIONS

DESIGN AGENCY	CARPENTER MARKY
DESIGNER	BAC
REVIEWER	TWG 12/02/25
PROJECT ID	113579
SHEET	P.7
TOTAL	722



**NOTE**  
 FOR LEGEND, SEE SHEET P.4

TYPICAL SECTIONS

DESIGN AGENCY	CARPENTER MARTY
DESIGNER	BAC
REVIEWER	TWG
PROJECT ID	12/02/25
SHEET	113579
TOTAL	113579
P.8	722

**ITEM 442, ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (447), AS PER PLAN, PG76-22M**

**ITEM 442, ASPHALT CONCRETE INTERMEDIATE COURSE, 12.5 MM, TYPE A (446), AS PER PLAN**

FOLLOW 403, EXCEPT AS FOLLOWS:

- OFFSET THE AC GAUGE FOR EACH JMF FOR THE PROJECT PRIOR TO THE PROJECT'S START USING 403.06.A. AND THE MODIFIED SUPPLEMENT 1043 PROCEDURE BELOW.
- DURING S-1043.07 PROCESS, A RAP SAMPLE OBTAINED FROM THE JMF-DESIGNATED RAP PILE WILL BE EXTRACTED IN THE ASPHALT LEVEL 3 LAB TO VERIFY THE RAP AC PERCENT. THE RAP AC PERCENT WILL BE WITHIN 0.5 PERCENT OF THE AVERAGE RAP AC PERCENT FROM THE JMF. IF RAP AC PERCENT IS OUTSIDE OF THE 0.5 PERCENT, THE VERIFICATION PAN PROCESS WILL STOP, AND DISTRICT TESTING WILL ALLOW ONE OPPORTUNITY TO REWORK THE RAP PILE AT THE MIX PLANT AND RESAMPLE. RESAMPLING REQUIRES DISTRICT TESTING TO BE PRESENT. IF THE RESAMPLE IS STILL OUTSIDE OF THE 0.5 PERCENT, THE JMF AND ALL JMF'S USING THIS PILE WILL BE RESCINDED AND NEED TO BE REDESIGNED.

FOLLOW 403.06 EXCEPT AS FOLLOWS:

- ENSURE ASPHALT BINDER CONTENT DOES NOT EXCEED TABLE 403.06.G-1. TOTAL AC PERCENT ADJUSTMENTS TO THE MIX PLANT CONTROL SETTINGS MUST BE SUBMITTED TO AND APPROVED BY DISTRICT TESTING PRIOR TO MAKING THE ADJUSTMENT. THE ADJUSTMENT CANNOT EXCEED +/- 0.2 PERCENT FROM THE JMF DESIGN AC PERCENT. DO NOT LOWER VIRGIN BINDER CONTENT OR INCREASE RAP PERCENT. ENSURE PLANT TICKET SHOWS THE ADJUSTMENT AND IS SET TO THE ADJUSTED TOTAL AC PERCENT AT ALL TIMES AFTERWARDS.
- RECORD THE DAILY VERIFICATION PAN RESULTS IN A SEPARATE WORKSHEET AND MAKE SURE IT'S POSTED IN THE PLANT FACILITY AND AVAILABLE TO THE MONITORS. INCLUDE THE DATE RAN, VERIFICATION PAN RESULT, AND INITIALS OF WHO RAN IT. ENSURE A PRINTOUT OF THE DAILY VERIFICATION PAN IS ALSO INCLUDED WITH THE TE-199.

FOLLOW SUPPLEMENT 1043 FOR AC GAUGE OFFSET, EXCEPT AS MODIFIED BELOW:

- FOLLOW 1043.07 EXCEPT AS FOLLOVED:
  - NOTIFY DISTRICT TESTING A MINIMUM OF ONE WEEK PRIOR TO MAKING CALIBRATION AND VERIFICATION PANS.
  - DISTRICT TESTING WILL WITNESS A SOLVENT EXTRACTION FROM A SAMPLE FROM THE RAP PILE THAT IS TO BE USED IN THE JMF TO VERIFY THE RAP AC PERCENT AND GRADATION. RAP AC PERCENT WILL BE WITHIN 0.5 PERCENT OF RAP AC PERCENT AND THE PASSING THE NO. 4 SIEVE WITH BE WITHIN 5 PERCENT OF THE NO. 4 SIEVE BASED ON THE ESTABLISHED RAP PILE USED IN THE JMF. IF OUTSIDE OF 0.5 PERCENT, DO NOT PROCEED AND THE JMF WILL NEED TO BE REDESIGNED.
  - DISTRICT TESTING WILL WITNESS THE VERIFICATION PANS BEING BLENDED, MIXED, AND COMPACTED.
  - MAKE A MINIMUM OF THREE VERIFICATION PANS FOR THE JMF THAT ARE AT THE JMF ASPHALT BINDER CONTENT. MAKE ONE ADDITIONAL VERIFICATION PAN FOR EACH ADDITIONAL DISTRICT THE JMF WILL BE USED IN.
  - IN ADDITION, TURN POSSESSION OVER OF THE CALIBRATION AC GAUGE PANS USED TO DETERMINE THE FIT COEFFICIENT TO DISTRICT TESTING.
- FOR AC CONTENT PAY ACCEPTANCE, REPLACE 1043.08 WITH THE FOLLOWING:

CALCULATE AN AC GAUGE OFFSET AMOUNT FOR EACH JMF AND MIX PLANT IN ACCORDANCE WITH THE FOLLOWING PROCEDURE PRIOR TO START OF ANY PRODUCTION FOR THE JMF. NOTIFY DISTRICT TESTING 24 HOURS PRIOR TO OFFSETTING GAUGE.

1. ENSURE PRINTER IS ON AND PLACE THE FIRST VERIFICATION PAN IN THE AC GAUGE AND RUN.
2. AFTER THE 16-MINUTE TEST, TAKE THE VERIFICATION PAN OUT AND TURN 180 DEGREES AND PLACE BACK IN AC GAUGE AND RUN.
3. REPEAT STEPS 1 AND 2 WITH SECOND AND THIRD VERIFICATION PANS.
4. FOR EACH RUN, TAKE THE JMF ASPHALT BINDER CONTENT MINUS THE AC GAUGE AC PERCENT TO OBTAIN THE OFFSET FOR THAT RUN.
5. AVERAGE ALL OFFSETS FOR A FINAL OFFSET.
6. RETAIN ALL OF THE VERIFICATION PANS. AFTER THE FINAL OFFSET IS DETERMINED, DISTRICT TESTING WILL CHOOSE TWO OF THE VERIFICATION PANS AND SEND ONE OF THESE TWO TO OMM TO EXTRACT AND REFLUX.
7. DISTRICT TESTING WILL USE THE TWO VERIFICATION PANS TO OFFSET THEIR AC GAUGE. DISTRICT TESTING MAY OPT TO TAKE ALL THREE PANS AND OFFSET THEIR AC GAUGE.
8. STORE THE VERIFICATION PAN IN THE PLANT LAB AND IN A MANNER IN WHICH TO AVOID HUMIDITY, MOISTURE, AND ALL OTHER SOURCES WHICH MAY POTENTIALLY CONTAMINATE THE SAMPLE IN THE PAN.

BEFORE THE BEGINNING OF A PRODUCTION DAY, RUN THE VERIFICATION PAN IN THE AC GAUGE AND ENSURE THE OFFSET AC GAUGE AMOUNT IS WITHIN 0.14 PERCENT OF THE JMF ASPHALT BINDER CONTENT. NOTIFY THE DEPARTMENT IF THE AC GAUGE EXCEEDS 0.14 PERCENT OF THE JMF. IF THE VERIFICATION PAN EXCEEDS ON THE HIGH SIDE AND IT'S BELIEVED TO BE DUE TO EXCESS MOISTURE FROM HUMIDITY, THE DEPARTMENT MAY ALLOW THE VERIFICATION PAN TO BE PLACED IN AN OVEN AT 230 DEG F (110 DEG C) FOR ONE HOUR AND RERAN.

DURING THE START OF PRODUCTION FOR THE JMF, SOLVENT EXTRACT THE FIRST TWO QA SAMPLES (QC, VA, AND SUBLOT) AND COMPARE TO THE OFFSET AC GAUGE. ENSURE SOLVENT EXTRACTION IS WITHIN 0.3 PERCENT OF OFFSET AC GAUGE. IF MORE THAN 0.3 PERCENT OFF, IMMEDIATELY RESAMPLE AND RUN AC GAUGE AND SOLVENT EXTRACT IMMEDIATELY. IF TWO CONSECUTIVE SAMPLES ARE MORE THAN 0.3 PERCENT OFF, IMMEDIATELY STOP PRODUCTION, CONTACT MONITORING TEAM, AND INVESTIGATE THE REASON FOR THE PROBLEM. ONCE TWO CONSECUTIVE QA SAMPLES ARE WITHIN 0.3 PERCENT OF OFFSET AC GAUGE, THE FINAL OFFSET GAUGE IS CONFIRMED.

AFTER CONFIRMING THE AC GAUGE OFFSET AMOUNT PROCEED WITH DETERMINING AC CONTENTS OF PRODUCTION SAMPLES BY THE AC GAUGE ACCORDING TO 1043.09.

ONLY DETERMINE ONE AC GAUGE OFFSET AMOUNT PER JMF. IF MORE THAN 30 DAYS HAS LAPSED SINCE THE JMF WAS LAST TESTED, RE-DO THE OFFSET PROCEDURE ABOVE WITH TWO VERIFICATION PANS (ONE FROM THE CONTRACTOR AND ONE FROM THE DISTRICT). IF THE THIRD PAN IS STILL AVAILABLE, USE ALL THREE PANS. IF AN AC GAUGE OFFSET AMOUNT IS LATER DETERMINED, BY AN INVESTIGATION OF BOTH THE CONTRACTOR AND THE DISTRICT, TO BE INCORRECT RE-DO THE OFFSET PROCEDURE.

DESIGN AGENCY



DESIGNER

AA

REVIEWER

TWG 12/02/25

PROJECT ID

113579

SHEET TOTAL

P.15A | 722

**WORK ZONE SPEED ZONES (WZSZ)**

THE FOLLOWING WORK ZONE SPEED ZONE (WZSZ) SPEED LIMIT REVISION(S) HAVE BEEN APPROVED FOR USE ON THIS PROJECT WHEN WORK ZONE CONDITIONS AND FACTORS ARE MET AS DESCRIBED BELOW:

WZSZ REVISION NUMBER(S)	COUNTY-ROUTE-SECTIONS(S)	DIRECTION(S)
40499	WARREN & MONTGOMERY - IR-75 - SLM WAR-75-11.60 TO SLM MOT-75-2.93	NB, SB

POTENTIAL WZSZ LOCATIONS SHALL HAVE AN ORIGINAL (PRE-CONSTRUCTION) POSTED SPEED LIMIT OF 55 MPH OR GREATER, A QUALIFYING WORK ZONE CONDITION OF AT LEAST 0.5 MILE IN LENGTH, AN EXPECTED WORK DURATION OF AT LEAST THREE HOURS, AND A WORK ZONE CONDITION IN PLACE THAT REDUCES THE EXISTING FUNCTIONALITY OF THE TRAVEL LANES OR SHOULDERS (I.E., LANE CLOSURE, LANE SHIFT, CROSSOVER, CONTRAFLOW AND/OR SHOULDER CLOSURE). THE LENGTH OF THE WORK ZONE CONDITION IS MEASURED FROM THE BEGINNING OF THE TAPER FOR THE SUBJECT WORK ZONE CONDITION IMPACTING THE TRAVEL LANES AND/OR SHOULDER TO THE END OF THE DOWNSTREAM TAPER, WHERE DRIVERS ARE RETURNED TO TYPICAL ALIGNMENT. AN EXPECTED WORK DURATION OF AT LEAST THREE HOURS IS REQUIRED TO BALANCE THE ADDITIONAL EXPOSURE CREATED BY INSTALLING AND REMOVING WZSZ SIGNING WITH THE TIME NEEDED TO COMPLETE THE WORK.

IF THE WORK ZONE MEETS THESE MINIMUM CRITERIA, IT SHALL BE ANALYZED FURTHER USING TABLE 1 BELOW TO DETERMINE IF AND WHEN IT QUALIFIES FOR A SPEED LIMIT REDUCTION. DEPENDING ON THE ORIGINAL POSTED SPEED LIMIT, THE TYPE OF TEMPORARY TRAFFIC CONTROL USED, AND WHETHER OR NOT WORKERS ARE PRESENT, A WARRANTED WZSZ WILL VARY IN THE APPROVED SPEED LIMIT TO BE POSTED OVER TIME.

C&MS ITEM 614, PARAGRAPH 614.02(B), INDICATES THAT TWO DIRECTIONS OF A DIVIDED HIGHWAY ARE CONSIDERED SEPARATE HIGHWAY SECTIONS. THEREFORE, IF THE WORK ON A MULTI-LANE DIVIDED HIGHWAY IS LIMITED TO ONLY ONE DIRECTION, A SPEED LIMIT REDUCTION IN THE DIRECTION OF THE WORK DOES NOT AUTOMATICALLY CONSTITUTE A SPEED LIMIT REDUCTION IN THE OPPOSITE DIRECTION. EACH DIRECTION SHALL BE ANALYZED INDEPENDENTLY FROM EACH OTHER.

ALL WZSZS FLUCTUATE BETWEEN TWO APPROVED REDUCED SPEED LIMITS OR BETWEEN AN APPROVED REDUCED SPEED LIMIT AND THE ORIGINAL POSTED SPEED LIMIT. ONLY ONE OF TWO SIGNING STRATEGIES SHALL BE USED TO IMPLEMENT A WZSZ.

WZSZS USING DSL SIGN ASSEMBLIES SHALL BE IN ACCORDANCE WITH THIS NOTE, APPROVED LIST, SUPPLEMENTAL SPECIFICATIONS (SS) 808 AND 908, AND TRAFFIC SCD MT-104.10.

ONLY ONE WARRANTED SPEED LIMIT APPLIES AT ANY ONE TIME; SPEED LIMIT REDUCTIONS ARE NOT CUMULATIVE. WZSZS SHALL NOT BE USED FOR MOVING/MOBILE ACTIVITIES, AS DEFINED IN OMUTCD PART 6.

WHEN LOOKING UP THE WARRANTED WORK ZONE SPEED LIMITS, ALWAYS USE THE ORIGINAL, PRE-CONSTRUCTION, POSTED SPEED LIMIT. DO NOT USE A PRIOR OR CURRENT WORK ZONE SPEED LIMIT AS A LOOK UP VALUE IN THE TABLE. POSITIVE PROTECTION IS GENERALLY REGARDED AS PORTABLE BARRIER OR OTHER RIGID BARRIER IN USE ALONG THE WORK AREA WITHIN THE SUBJECT WARRANTED WORK ZONE CONDITION. WITHOUT POSITIVE PROTECTION IS GENERALLY REGARDED AS USING DRUMS, CONES, SHADOW VEHICLE, ETC., ALONG THE WORK AREA WITHIN THE SUBJECT WARRANTED WORK ZONE CONDITION. WORKERS ARE CONSIDERED AS BEING PRESENT WHEN ON-SITE, WORKING WITHIN THE SUBJECT WARRANTED WORK ZONE CONDITION. WHEN THE WORK ZONE CONDITION REDUCING THE EXISTING FUNCTIONALITY OF THE TRAVEL LANES OR SHOULDERS IS REMOVED, THE SPEED LIMIT DISPLAYED SHALL RETURN TO THE ORIGINAL POSTED SPEED LIMIT.

TABLE 1: WARRANTED WORK ZONE SPEED LIMITS (MPH) FOR WORK ZONES ON HIGH-SPEED (55 MPH OR GREATER) MULTI-LANE HIGHWAYS

ORIGINAL POSTED SPEED LIMIT	WITH POSITIVE PROTECTION		WITHOUT POSITIVE PROTECTION	
	WORKERS PRESENT	WORKERS NOT PRESENT	WORKERS PRESENT	WORKERS NOT PRESENT
70	60	65	55	65
65	55	60	50	60
60	55	60	50	60
55	50	55	45	55

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY.

ITEM 808, DIGITAL SPEED LIMIT (DLS) SIGN ASSEMBLY 461 SIGN MONTH

- PHASE 1 - ASSUMING 15 DSL SIGN ASSEMBLIES FOR 8 MONTHS
- PHASE 2 - ASSUMING 12 DSL SIGN ASSEMBLIES FOR 4 MONTHS
- PHASE 3 - ASSUMING 12 DSL SIGN ASSEMBLIES FOR 1 MONTHS
- PHASE 4 - ASSUMING 14 DSL SIGN ASSEMBLIES FOR 3 MONTHS
- OVER-WINTER - ASSUMING 9 DSL SIGN ASSEMBLIES FOR 5 MONTHS
- PHASE 5 - ASSUMING 13 DSL SIGN ASSEMBLIES FOR 4 MONTHS
- PHASE 6 - ASSUMING 13 DSL SIGN ASSEMBLIES FOR 1 MONTHS
- PHASE 7 - ASSUMING 13 DSL SIGN ASSEMBLIES FOR 3 MONTHS
- OVER-WINTER - ASSUMING 9 DSL SIGN ASSEMBLIES FOR 5 MONTHS
- PHASE 8 - ASSUMING 9 DSL SIGN ASSEMBLIES FOR 5 MONTHS

**ESTIMATED QUANTITIES**

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR USE AS DETERMINED BY THE ENGINEER TO FILL POT HOLES AND MAINTAIN A SAFE RIDING SURFACE.

ITEM 410, TRAFFIC COMPACTED SURFACE, TYPE A OR B 100 CU. YD

ITEM 410, TRAFFIC COMPACTED SURFACE, TYPE C 100 CU. YD.

ITEM 614, ASPHALT CONCRETE FOR MAINTAINING TRAFFIC 50 CU. YD

**NORTHBOUND INSIDE SHOULDER RESURFACING**

THE EXISTING INSIDE NORTHBOUND IR-75 ASPHALT SHOULDER, INCLUDING THE EXISTING YELLOW EDGE LINE, FROM STA. 173+50 TO STA. 177+15 AND STA. 181+38 TO STA. 132+50 SHALL BE PLANED 2", TACK COAT APPLIED AND 2" ASPHALT SURFACE COURSE CONSTRUCTED PRIOR TO SHIFTING TRAFFIC ONTO PORTIONS OF THE SHOULDERS.

THE FOLLOWING QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY TO BE USED AS DIRECTED BY THE ENGINEER.

ITEM 254, PAVEMENT PLANING, ASPHALT CONCRETE (T=2") 9,030 SQ YD  
 ITEM 407, NON-TRACKING TACK COAT 768 GAL  
 ITEM 441, ASPHALT CONCRETE SURFACE COURSE, TYPE 1 (449), PG64-22 502 CU YD

**WORK ZONE INCREASED PENALTIES SIGN (R11-H5A)**

R11-H5A-48 SIGNS SHALL BE FURNISHED, ERECTED, AND MAINTAINED IN GOOD CONDITION AND/OR REPLACED AS NECESSARY AND SUBSEQUENTLY REMOVED BY THE CONTRACTOR. SIGNS SHALL BE MOUNTED AT THE APPROPRIATE OFFSETS AND ELEVATIONS AS PRESCRIBED BY THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. THEY SHALL BE MAINTAINED ON SUPPORTS MEETING CURRENT SAFETY CRITERIA.

THE SIGNS MAY BE ERECTED OR UNCOVERED NO MORE THAN FOUR HOURS BEFORE THE ACTUAL START OF WORK. THE SIGNS SHALL BE REMOVED OR COVERED NO LATER THAN FOUR HOURS FOLLOWING RESTORATION OF ALL LANES TO TRAFFIC WITH NO RESTRICTIONS, OR SOONER AS DIRECTED BY THE ENGINEER. TEMPORARY SIGN COVERING AND UNCOVERING DUE TO TEMPORARY LANE RESTORATIONS SHALL BE GUIDED BY THE FOUR-HOUR LIMITATIONS STATED ABOVE. SUCH LANE RESTORATIONS SHOULD BE EXPECTED TO REMAIN IN EFFECT FOR 30 OR MORE CONSECUTIVE CALENDAR DAYS, SUCH AS DURING WINTER SHUT-DOWNS.

THE R11-H5A-48 SIGNS SHALL BE MOUNTED ON 2 NO. 3 POSTS WHEN LOCATED WITHIN CLEAR ZONES.

THE CONTRACTOR MAY USE SIGNS AND SUPPORTS IN USED, BUT GOOD, CONDITION PROVIDED THE SIGNS MEET CURRENT ODOT SPECIFICATIONS.

WORK ZONE INCREASED PENALTIES SIGNS AND SUPPORTS WILL BE MEASURED AS THE NUMBER OF SIGN INSTALLATIONS, INCLUDING THE SIGN AND NECESSARY SUPPORTS. IF A SIGN AND SUPPORT COMBINATION IS REMOVED AND REERECTED AT ANOTHER LOCATION AS DIRECTED BY THE ENGINEER, IT SHALL BE CONSIDERED ANOTHER UNIT.

PAYMENT FOR ACCEPTED QUANTITIES, COMPLETE, IN PLACE WILL BE MADE AT THE CONTRACT UNIT PRICE. PAYMENT SHALL BE FULL COMPENSATION FOR ALL MATERIALS, LABOR, INCIDENTALS AND EQUIPMENT FOR FURNISHING, ERECTING, MAINTAINING, COVERING DURING SUSPENSION OF WORK, AND REMOVAL OF THE SIGN AND SUPPORT.

ITEM 614, WORK ZONE INCREASED PENALTIES SIGN 28 EACH

WORK ZONE INCREASED PENALTIES SIGNS WILL BE PLACED AT THE LOCATIONS SHOWN IN THE PLANS.

**ITEM 202 - REMOVAL MISC.: RUMBLE STRIPS (B)**

THE CONTRACTOR SHALL MILL 1.5 INCHES DEEP BY 2 FEET WIDE OF THE EXISTING ASPHALT SHOULDER IN ORDER TO REMOVE THE EXISTING RUMBLE STRIPS ALONG IR-75 IN THE AREA WHERE TRAFFIC IS SHIFTED AS SHOWN IN THE PLANS. THE CONTRACTOR SHALL THEN COAT ALL MILLED SURFACES, HORIZONTAL AND VERTICAL, WITH APPROVED AC LIQUID. NEXT THE CONTRACTOR SHALL PLACE 1.5 INCHES OF ITEM 441 ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (449), PG 64-22. ALL COSTS ASSOCIATED WITH THE REMOVAL OF THE EXISTING PAVEMENT, AND PLACEMENT OF THE SURFACE COURSE SHALL BE INCLUDED ON THE UNIT PRICE BID PER FOOT COST OF ITEM 202 - REMOVAL MISC.: RUMBLE STRIPS (B).

THE FOLLOWING QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY TO BE USED AS DIRECTED BY THE ENGINEER.

NORTHBOUND INSIDE SHOULDER STA. 150+00 TO STA. 155+75 = 575 FT  
 SOUTHBOUND OUTSIDE SHOULDER STA. 54+00 TO STA. 87+50 = 3,350 FT  
 SOUTHBOUND INSIDE SHOULDER STA. 171+40 TO STA. 177+10 = 570 FT  
 SOUTHBOUND INSIDE SHOULDER STA. 182+00 TO STA. 186+00 = 400 FT  
 SOUTHBOUND INSIDE SHOULDER STA. 73+00 TO STA. 75+00 = 200 FT  
 SOUTHBOUND INSIDE SHOULDER STA. 149+15 TO STA. 159+00 = 985 FT

ITEM 202, REMOVAL MISC.: RUMBLE STRIPS (B) 6,080 FT

**ITEM 614 - WORK ZONE SPEED MEASUREMENT MARKING, CLASS I, 642 PAINT**

SPEED MEASUREMENT MARKINGS SHALL BE PLACED BETWEEN MILE MARKER 41.0 AND MILE MARKER 43.0 TO ASSIST IN THE ENFORCEMENT OF SPEED REGULATIONS. SPEED MEASUREMENT MARKINGS SHOULD AVOID BEING LOCATED IN THE VICINITY OF A TAPER, ENTRANCE RAMP OR EXIT RAMP.

THE MARKINGS SHALL BE LAID OUT BY A REGISTERED SURVEYOR. ON SECTIONS WITH CURVES, THE MARKINGS ON THE INSIDE OF THE CURVE SHALL MEET THE REQUIRED ONE-QUARTER MILE INTERVALS. MARKINGS ON THE OUTSIDE OF THE CURVE SHALL BE DIRECTLY ACROSS FROM THE MARKINGS ON THE INSIDE OF THE CURVE, NOT STAGGERED. A RECORD IS TO BE KEPT AND ONE ORIGINAL SIGNED AND SEALED DOCUMENT IS TO BE SENT TO THE DISTRICT TRAFFIC ENGINEER AND ONE COPY IS TO BE SENT TO THE DISTRICT CONSTRUCTION ENGINEER.

SPEED MEASUREMENT MARKINGS SHALL BE PLACED FOR THE I.R. 75 MAINLINE LANES IN PHASE 1, PHASE 2, PHASE 5, AND EACH OVER-WINTER PHASE (3 TOTAL). DURING PHASES 3, 4, 6, AND 7, THESE MARKINGS SHALL REMAIN FROM PREVIOUS PHASES.

TO ASSURE VISIBILITY OF THE MARKINGS AND REDUCE PARALLAX ERRORS, FOR EACH DIRECTION UTILIZING AIR SPEED CHECK ZONE, A SET OF TWO MARKINGS (LEFT AND RIGHT SIDE) SHALL BE USED AT EACH ONE-QUARTER MILE INTERVAL.

PAYMENT WILL BE FOR EACH 24-INCH-WIDE BY 4 FEET LONG MARKING AND SHALL INCLUDE THE PAVEMENT MARKING MATERIAL USED AND THE SURVEYING WORK. THE FOLLOWING QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY TO BE USED AS DIRECTED BY THE ENGINEER.

ITEM 614, WORK ZONE SPEED MEASUREMENT MARKING, CLASS I, 642 PAINT 108 EA

**NORTHBOUND OUTSIDE SHOULDER RESURFACING**

THE EXISTING OUTSIDE NORTHBOUND IR-75 ASPHALT SHOULDER, INCLUDING THE EXISTING WHITE EDGE LINE, FROM STA. 173+05 TO STA. 208+31 SHALL BE PLANED 2", TACK COAT APPLIED AND 2" ASPHALT SURFACE COURSE CONSTRUCTED PRIOR TO SHIFTING TRAFFIC ONTO PORTIONS OF THE SHOULDERS.

THE FOLLOWING QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY TO BE USED AS DIRECTED BY THE ENGINEER.

ITEM 254, PAVEMENT PLANING, ASPHALT CONCRETE (T=2") 4,310 SQ YD  
 ITEM 407, NON-TRACKING TACK COAT 366 GAL  
 ITEM 442, ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (448) 240 CU YD

**ITEM 202 - REMOVAL MISC.: RUMBLE STRIPS (A)**

THE CONTRACTOR SHALL MILL 2 INCHES DEEP BY 5 FEET WIDE OF THE EXISTING ASPHALT SHOULDER IN ORDER TO REMOVE THE EXISTING RUMBLE STRIPS AND EXISTING WHITE EDGE LINE ALONG IR-75 IN THE AREA WHERE TRAFFIC IS SHIFTED AS SHOWN IN THE PLANS. THE CONTRACTOR SHALL THEN COAT ALL MILLED SURFACES, HORIZONTAL AND VERTICAL, WITH APPROVED AC LIQUID. NEXT THE CONTRACTOR SHALL PLACE 2 INCHES OF ITEM 441 ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (449), PG 64-22. ALL COSTS ASSOCIATED WITH THE REMOVAL OF THE EXISTING PAVEMENT, AND PLACEMENT OF THE SURFACE COURSE SHALL BE INCLUDED ON THE UNIT PRICE BID PER FOOT COST OF ITEM 202 - REMOVAL MISC.: RUMBLE STRIPS (A).

THE FOLLOWING QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY TO BE USED AS DIRECTED BY THE ENGINEER.

NORTHBOUND OUTSIDE SHOULDER STA. 0+00 TO STA. 154+00.

ITEM 202, REMOVAL MISC.: RUMBLE STRIPS (A) 15,400 FT



**ITEM 614, PORTABLE CHANGEABLE MESSAGE SIGNS, AS PER PLAN**

THE CONTRACTOR SHALL FURNISH, INSTALL, MAINTAIN AND REMOVE, WHEN NO LONGER NEEDED, A CHANGEABLE MESSAGE SIGN. THE SIGN SHALL BE OF A TYPE SHOWN ON A LIST OF APPROVED PCMS UNITS AVAILABLE ON THE OFFICE OF MATERIALS MANAGEMENT WEB PAGE. THE LIST CONTAINS CLASS A AND B UNITS WITH MINIMUM LEGIBILITY DISTANCES OF 800 FEET AND 650 FEET, RESPECTIVELY.

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. THE PCMS SHALL BE DELINEATED IN ACCORDANCE WITH C&MS 614.03.

THE PROBABLE PCMS LOCATIONS AND WORK LIMITS FOR THOSE LOCATIONS SHALL BE DETERMINED BY THE ENGINEER. 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 CONTRACTOR SHALL, AT THE DIRECTION OF THE ENGINEER, RELOCATE THE PCMS TO IMPROVE VISIBILITY OR ACCOMMODATE CHANGED CONDITIONS. WHEN NOT IN USE, THE PCMS SHALL BE TURNED OFF. ADDITIONALLY, WHEN NOT IN USE FOR EXTENDED PERIODS OF TIME, THE PCMS SHALL BE TURNED AWAY FROM ALL TRAFFIC.

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

THE CONTRACTOR SHALL IMPLEMENT A SYSTEM WHEREBY CHANGEABLE MESSAGES WILL BE IMPLEMENTED WITHIN 4 HOURS FOLLOWING TELEPHONE NOTIFICATION FROM THE PROJECT ENGINEER TO A DESIGNATED PHONE.

ALL MESSAGES TO BE DISPLAYED ON THE SIGN WILL BE PROVIDED BY THE ENGINEER. A LIST OF ALL REQUIRED PRE-PROGRAMMED MESSAGES WILL BE GIVEN TO THE CONTRACTOR AT THE PROJECT PRECONSTRUCTION CONFERENCE. THE SIGN SHALL HAVE THE CAPABILITY TO STORE UP TO 99 MESSAGES. 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. THREE-LINE PRESENTATION FORMATS WITH UP TO SIX MESSAGE PHASES SHALL BE SUPPORTED. 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, DEACTIVATED 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 PHONE AREAS) ALLOW REMOTE SIGN ACTIVATION, MESSAGE CHANGES, MESSAGE ADDITIONS AND REVISIONS TO TIME OF DAY PROGRAMS. THE SYSTEM SHALL ALSO PERMIT VERIFICATION OF CURRENT AND PROGRAMMED MESSAGES. ONE REMOTE DATA INPUT DEVICE (LAPTOP COMPUTER PLUS MODEM OR EQUIVALENT) SHALL BE FURNISHED FOR USE BY THE DISTRICT TRAFFIC ENGINEER, OR EQUIVALENT, AND SHALL BE INSURED AGAINST THEFT.) THE PCMS UNIT SHALL BE MAINTAINED IN GOOD WORKING ORDER BY THE CONTRACTOR IN ACCORDANCE WITH THE PROVISIONS OF C&MS 614.07. 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. THE ENTIRE COST TO CONTROL TRAFFIC, ACCRUED BY THE DEPARTMENT DUE TO THE CONTRACTOR'S NONCOMPLIANCE, WILL BE DEDUCTED FROM MONEYS DUE, OR TO BECOME DUE THE CONTRACTOR ON HIS CONTRACT.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR 24-HOUR-PER-DAY OPERATION AND MAINTENANCE OF THESE SIGNS ON THE PROJECT FOR THE DURATION OF THE PHASES WHEN THE PLAN REQUIRES THEIR USE.

PAYMENT FOR THE ABOVE DESCRIBED ITEM SHALL BE AT THE CONTRACT UNIT PRICE. PAYMENT SHALL INCLUDE ALL LABOR, MATERIALS, EQUIPMENT, FUELS, LUBRICATING OILS, SOFTWARE, HARDWARE AND INCIDENTALS TO PERFORM THE ABOVE DESCRIBED WORK.

ITEM 614 - PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN 200 SIGN MONTH

ASSUMING 2 PCMS SIGNS ON IR-75 FOR 40 MONTHS  
 ASSUMING 1 PCMS SIGN ON IR-675 SB FOR 40 MONTHS  
 ASSUMING 2 PCMS SIGNS ON SIDE ROADS FOR 40 MONTHS

**ITEM 253 - PAVEMENT REPAIR, AS PER PLAN (A)**  
**ITEM 253 - PAVEMENT REPAIR, AS PER PLAN (B)**

PAVEMENT REPAIR SHALL BE IN ACCORDANCE WITH ITEM 253 - PAVEMENT REPAIR, WITH THE FOLLOWING ADDITIONS:

THE ENGINEER SHALL DESIGNATE THE LOCATIONS AND LIMITS OF THE AREAS TO BE REPAIRED. THE AREAS SHALL BE ROUGHLY RECTANGULAR IN SHAPE AND SAWED OR MILLED TO A NEAT LINE. THE DEPTH OF REMOVAL, AS DIRECTED BY THE ENGINEER, SHALL BE SUFFICIENT TO REMOVE ALL DETERIORATED PAVEMENT. THE REPLACEMENT MATERIAL SHALL BE ITEM 442, ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A, (449), PG70-22M AND FINISHED TO MATCH THE EXISTING PAVEMENT SURFACE.

PAVEMENT REPAIR (A) AREAS SHALL BE MINIMUM OF 12.5 FEET IN WIDTH, 4 FEET IN LENGTH AND 2 INCHES IN DEPTH MEASURED FROM THE MILLED SURFACE OR AS DIRECTED BY THE ENGINEER.

PAVEMENT REPAIR (B) AREAS SHALL BE A MINIMUM OF 4 FEET IN WIDTH, TBA IN LENGTH AND 2 INCHES IN DEPTH MEASURED FROM THE MILLED SURFACE OR AS DIRECTED BY THE ENGINEER.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY TO BE USED AS DIRECTED BY THE ENGINEER.

ITEM 253 - PAVEMENT REPAIR, AS PER PLAN (A) = 1000 SY  
 ITEM 253 - PAVEMENT REPAIR, AS PER PLAN (B) = 1000 SY

**ITEM 614, LAW ENFORCEMENT OFFICER (WITH PATROL CAR) FOR ASSISTANCE DURING CONSTRUCTION OPERATIONS**

USE OF LAW ENFORCEMENT OFFICERS (LEOS) BY CONTRACTORS OTHER THAN THE USES SPECIFIED BELOW SHALL NOT BE PERMITTED AT PROJECT COST NOR TIME COMPENSATION. LEOS SHOULD NOT BE USED WHERE THE OMUTCD INTENDS THAT FLAGGERS BE USED.

IN ADDITION TO THE REQUIREMENTS OF C&MS 614 AND THE OMUTCD, A UNIFORMED LEO WITH AN OFFICIAL PATROL CAR (CAR WITH TOP-MOUNTED EMERGENCY FLASHING LIGHTS AND COMPLETE MARKINGS OF THE APPROPRIATE LAW ENFORCEMENT AGENCY) SHALL BE PROVIDED FOR THE FOLLOWING TRAFFIC CONTROL TASKS:

- DURING THE ENTIRE ADVANCE PREPARATION AND CLOSURE SEQUENCE WHERE COMPLETE BLOCKAGE OF TRAFFIC IS REQUIRED.
- DURING A TRAFFIC SIGNAL INSTALLATION WHEN IMPACTING THE NORMAL FUNCTION OF THE SIGNAL OR THE FLOW OF TRAFFIC, OR WHEN TRAFFIC NEEDS TO BE DIRECTED THROUGH AN ENERGIZED TRAFFIC SIGNAL CONTRARY TO THE SIGNAL DISPLAY (E.G., DIRECTING MOTORISTS THROUGH A RED LIGHT).
- DURING PERIODS WHERE TRAFFIC NEEDS TO BE DIRECTED CONTRARY TO A TRAFFIC CONTROL DEVICE (FLAGGER, SIGN [E.G. STOP SIGN, STREET OR HIGHWAY SIGNS, ETC], SIGNAL OR OTHER DEVICE USED TO REGULATE, WARN OR GUIDE TRAFFIC). TRAFFIC IN THIS INSTANCE INCLUDES VEHICULAR, PEDESTRIAN AND/OR SHARED USE PATH USERS.

IN ADDITION TO THE REQUIREMENT OF C&MS 614 AND THE OMUTCD, A UNIFORMED LEO WITH AN OFFICIAL PATROL CAR (CAR WITH TOP-MOUNTED EMERGENCY FLASHING LIGHTS AND COMPLETE MARKINGS OF THE APPROPRIATE LAW ENFORCEMENT AGENCY) SHOULD BE PROVIDED FOR THE FOLLOWING TRAFFIC CONTROL TASKS AS APPROVED BY THE ENGINEER:

- FOR LANE CLOSURES THAT MEET ALL OF THE CRITERIA LISTED BELOW: DURING INITIAL SET-UP PERIODS, TEAR DOWN PERIODS, SUBSTANTIAL SHIFTS OF A CLOSURE POINT OR WHEN NEW LANE CLOSURE ARRANGEMENTS ARE INITIATED FOR LONG-TERM LANE CLOSURES/SHIFTS (FOR THE FIRST AND LAST DAY OF MAJOR CHANGES IN TRAFFIC CONTROL SETUP).
- CRITERIA
- ON A MULTI-LANE DIVIDED INTERSTATE, OTHER FREEWAY OR EXPRESSWAY; AND,
  - AN AUTHORIZED SPEED LIMIT OF 45 MPH OR GREATER THAT IS IN EFFECT AT THE TIME OF THE OPERATION; AND,
  - AADT OF 50,000 (OR AADT OF 30,000 WITH 25% OR HIGHER PERCENT TRUCKS)

IN GENERAL, LEOS SHOULD BE POSITIONED IN ADVANCE OF AND ON THE SAME SIDE AS THE LANE RESTRICTION (OR AT THE POINT OF ROAD CLOSURE), AND TO MANUALLY CONTROL TRAFFIC MOVEMENTS THROUGH SIGNALIZED INTERSECTIONS AND/OR IN CONTRARY TO OTHER TRAFFIC CONTROL DEVICES IN WORK ZONES.

LEOS SHOULD NOT FORGO THEIR TRAFFIC CONTROL RESPONSIBILITIES TO APPREHEND MOTORISTS FOR ROUTINE TRAFFIC VIOLATIONS. HOWEVER, IF A MOTORIST'S ACTIONS ARE CONSIDERED TO BE RECKLESS, THEN PURSUIT OF THE MOTORIST IS APPROPRIATE.

THE LEOS WORK AT THE DIRECTION OF THE CONTRACTOR. THE CONTRACTOR IS RESPONSIBLE FOR SECURING THE SERVICES OF THE LEOS WITH THE APPROPRIATE AGENCIES AND COMMUNICATING THE INTENTIONS OF THE PLANS WITH RESPECT TO DUTIES OF THE LEOS. THE ENGINEER SHALL HAVE FINAL CONTROL OVER THE LEOS' DUTIES AND PLACEMENT, AND WILL RESOLVE ANY ISSUES THAT MAY ARISE BETWEEN THE TWO PARTIES.

ENSURE PROVIDED LEOS HAVE BEEN TRAINED APPROPRIATE TO THE JOB DECISIONS THEY ARE REQUIRED TO MAKE WHILE ON THE PROJECT, IN ACCORDANCE WITH C&MS 614.03.

THE LEO SHALL REPORT IN TO THE CONTRACTOR PRIOR TO THE START OF THE SHIFT, IN ORDER TO RECEIVE INSTRUCTIONS REGARDING SPECIFIC WORK ASSIGNMENTS DURING HIS/HER SHIFT. THE LEO IS EXPECTED TO STAY AT THE PROJECT SITE FOR THE ENTIRE DURATION OF HIS/HER SHIFT. THE LEO SHALL REPORT TO THE CONTRACTOR AT THE END OF HIS/HER SHIFT. SHOULD IT BE NECESSARY TO LEAVE THE PROJECT SITE, THE LEO SHALL NOTIFY THE ENGINEER. THE CONTRACTOR SHALL PROVIDE THE LEO WITH A TWO-WAY COMMUNICATION DEVICE THAT SHALL BE RETURNED TO THE CONTRACTOR AT THE END OF HIS/HER SHIFT.

LEOS (WITH PATROL CAR) REQUIRED BY THE TRAFFIC MAINTENANCE TASKS ABOVE SHALL BE PAID FOR ON A UNIT PRICE (HOURLY) BASIS UNDER ITEM 614, LAW ENFORCEMENT OFFICER (WITH PATROL CAR) FOR ASSISTANCE. THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY.

ITEM 614 - LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE 3000 HOURS

THE HOURS PAID SHALL INCLUDE ANY MINIMUM SHOW-UP TIME REQUIRED BY THE LAW ENFORCEMENT AGENCY INVOLVED. ANY ADDITIONAL COSTS

ANY ADDITIONAL COSTS (ADMINISTRATIVE OR OTHERWISE) INCURRED BY THE CONTRACTOR TO OBTAIN THE SERVICES OF AN LEO ARE INCLUDED WITH THE BID UNIT PRICE FOR ITEM 614, LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE.



