

STATE OF OHIO
DEPARTMENT OF TRANSPORTATION

LUC-75 / 475-8.42 / 14.50

LUCAS COUNTY
CITY OF TOLEDO
WASHINGTON TOWNSHIP

PROJECT DESCRIPTION

A DISTRICT FUNDED PROJECT TO RESURFACE A SECTION OF I-75 FROM -280 TO MICHIGAN STATE LINE AND I-475 FROM DOUGLAS RD TO I-75 IN LUCAS COUNTY.

EARTH DISTURBED AREAS

PROJECT EARTH DISTURBED AREA: N/A ACRES
ESTIMATED CONTRACTOR EARTH DISTURBED AREA: N/A ACRES
NOTICE OF INTENT EARTH DISTURBED AREA: ACRES

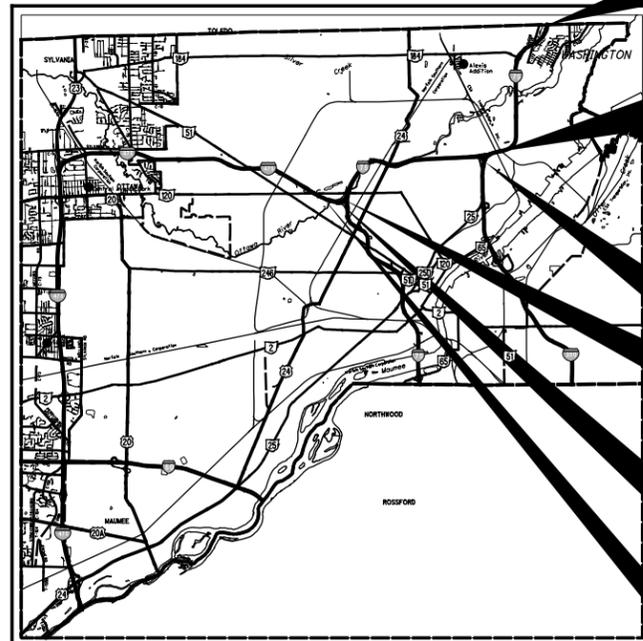
LIMITED ACCESS

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.

2019 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 AS NOTED ON SHEETS 20-23, AND THAT PROVISIONS FOR THE MAINTENANCE AND SAFETY OF TRAFFIC WILL BE AS SET FORTH ON THE PLANS AND ESTIMATES.



LOCATION MAP

LATITUDE: N41°41'19" LONGITUDE: W83°32'40"



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

DESIGN DESIGNATION

CURRENT ADT (2021)	85000
DESIGN YEAR ADT (2031)	91000
DESIGN HOURLY VOLUME (2031)	8200
DIRECTIONAL DISTRIBUTION	52%
TRUCKS (24 HOUR B&C)	25%
DESIGN SPEED	65MPH/70MPH
LEGAL SPEED	60MPH/65MPH
DESIGN FUNCTIONAL CLASSIFICATION:	URBAN INTERSTATE

LUC-75: 8.42-11.86	LUC-475: 14.50-16.42
85000	92000
91000	100000
8200	10000
52%	50%
25%	11%
65MPH/70MPH	60MPH
60MPH/65MPH	65MPH
URBAN INTERSTATE	URBAN INTERSTATE

NHS PROJECT ----- N/A

DESIGN EXCEPTIONS

NONE

UNDERGROUND UTILITIES
Contact Two Working Days Before You Dig

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

PLAN PREPARED BY:

ODOT-DISTRICT 2
PRODUCTION

ENGINEERS SEAL: 	ENGINEERS SEAL:
SIGNED: Julie M. Fahy DATE: 12-10-20	SIGNED: David J. Geckle DATE: 12-11-2020

INDEX OF SHEETS:

TITLE SHEET	1
TYPICAL SECTIONS	2-14
GENERAL NOTES	15-19, 19A
MAINTENANCE OF TRAFFIC	20-46, 23A, 26A
REPAIR LOCATIONS I-475	47-56
GENERAL SUMMARY	57, 57A
PAVEMENT CALCULATIONS	58, 58A
GUARDRAIL SUBSUMMARY	59
PLAN SHEETS I-75	60-71
PLAN SHEETS I-475	72-81
TRAFFIC CONTROL SUBSUMMARIES	82, 82A-C
TRAFFIC CONTROL I-75	83-94
TRAFFIC CONTROL I-475	95-104
STRUCTURES OVER 20 FOOT SPAN	
LUC-75-0849	105-108
LUC-75-0861	109-110
LUC-75-0891	111-112
LUC-75-1013	113-115

ADDED SHEET NO.

STANDARD CONSTRUCTION DRAWINGS						SUPPLEMENTAL SPECIFICATIONS	SPECIAL PROVISIONS
BP-2.5	7/19/13	RM-1.1	7/18/14	TC-65.10	1/17/14	800-2019	01/15/21
BP-3.1	01/17/20			TC-65.11	7/21/17	832	10/19/18
BP-3.2	1/18/19	MT-95.30	7/19/19	TC-71.10	1/19/18	848	1/20/17
BP-6.1	7/19/13	MT-95.45	1/17/20	TC-72.20	7/20/18	875	1/18/19
		MT-95.50	7/21/17			807	7/17/20
DM-4.3	1/15/16	MT-98.10	1/17/20				
DM-4.4	1/15/16	MT-98.11	1/17/20				
		MT-98.20	4/19/19				
MGS-1.1	1/19/18	MT-98.22	1/17/20				
MGS-2.1	1/19/18	MT-99.60	7/15/16				
MGS-3.1	1/19/18	MT-101.90	7/17/20				
MGS-3.2	1/18/13	MT-102.20	4/19/19				
MGS-4.2	7/19/13	MT-104.10	10/16/15				
MGS-4.3	1/18/13						
MGS-6.1	1/19/18	TC-61.30	7/19/19				

APPROVED:
DATE: 12/9/20 DISTRICT DEPUTY DIRECTOR

APPROVED: _____
DATE: _____ DIRECTOR, DEPARTMENT OF TRANSPORTATION

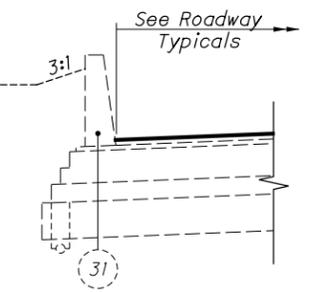
FEDERAL PROJECT NO.
E101084

PID NO.
88563

CONSTRUCTION PROJECT NO.

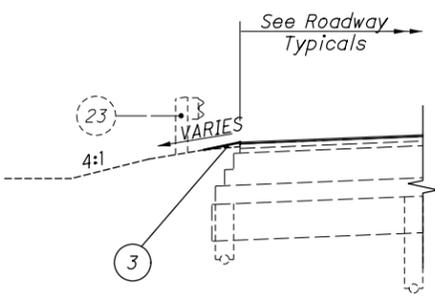
RAILROAD INVOLVEMENT
ANN ARBOR RR / CSX RR
CANADIAN NATIONAL RR

LUC-75 / 475-8.42 / 14.50



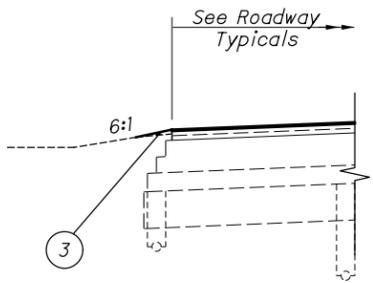
DETAIL A

Applies From Sta. 272+19.38 to Sta. 272+50.00



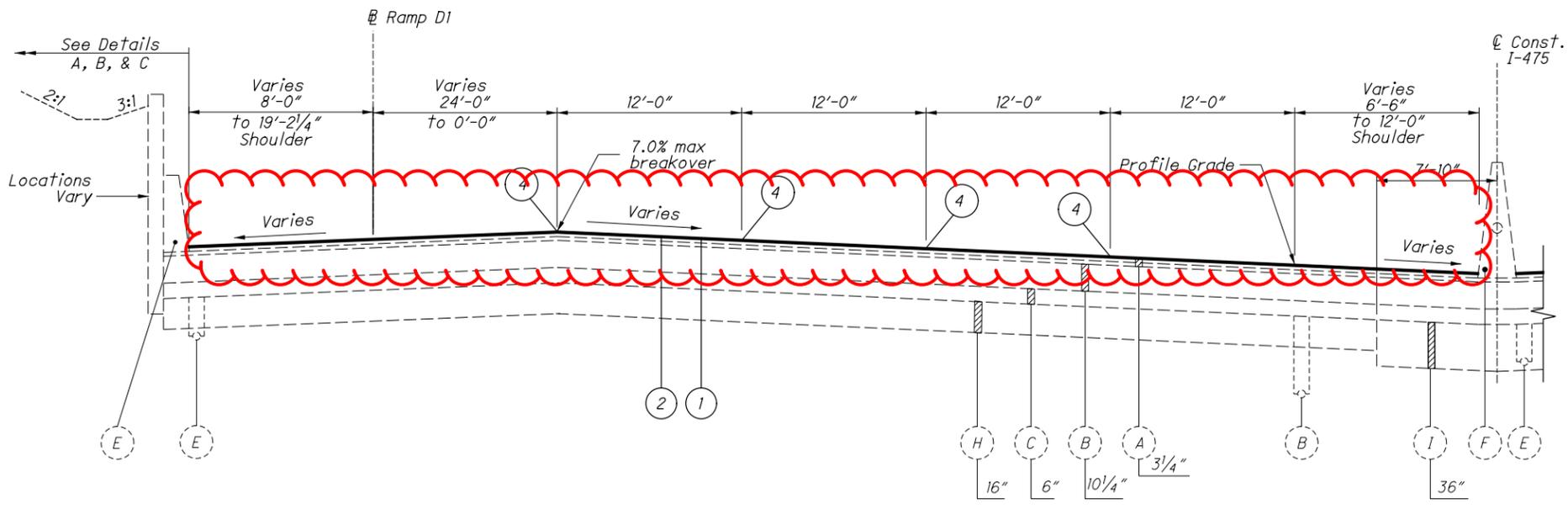
DETAIL B

Applies From Sta. 272+50.00 to Sta. 274+24.69



DETAIL C

Applies From Sta. 274+24.69 to Sta. 277+69.88



TYPICAL SECTION - A
SUPERELEVATED SECTION - WESTBOUND I-475
I-475 Sta. 267+00.00 to Sta. 277+70.36 = 1070.36 FT.

PAVEMENT GRADE HAS BEEN MODIFIED

PROPOSED LEGEND

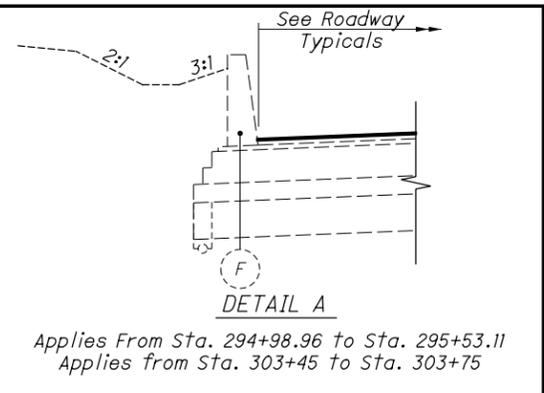
- ① ITEM 407 - NON-TRACKING TACK COAT
- ② ITEM 424 - 1" FINE GRADED POLYMER ASPHALT CONCRETE, TYPE B, AS PER PLAN
- ③ ITEM 617 - COMPACTED AGGREGATE & ITEM 209 - LINEAR GRADING
- ④ ITEM 875 - LONGITUDINAL JOINT SEALER

EXISTING LEGEND

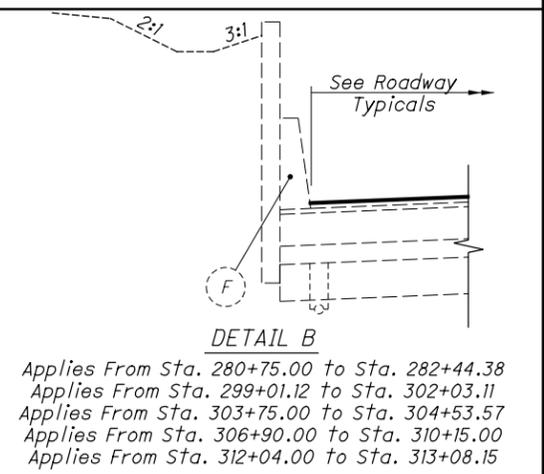
- Ⓐ ASPHALT CONCRETE (THICKNESS AS SHOWN)
- Ⓑ ASPHALT CONCRETE BASE (THICKNESS AS SHOWN)
- Ⓒ 6" AGGREGATE BASE
- Ⓓ 6" DEEP PIPE UNDERDRAINS
- Ⓔ 6" SHALLOW PIPE UNDERDRAINS
- Ⓕ CONCRETE BARRIER
- Ⓖ 6" CONCRETE CURB
- Ⓗ 16" CEMENT STABILIZED SUBGRADE
- Ⓘ GRANULAR MATERIAL TYPE C

I:\ProjectData\LUC\88563\LUC-75-8.42\Design\Roadway\Sheets\88563_GY010.dgn Sheet 2/5/2021 9:46:44 AM afintel

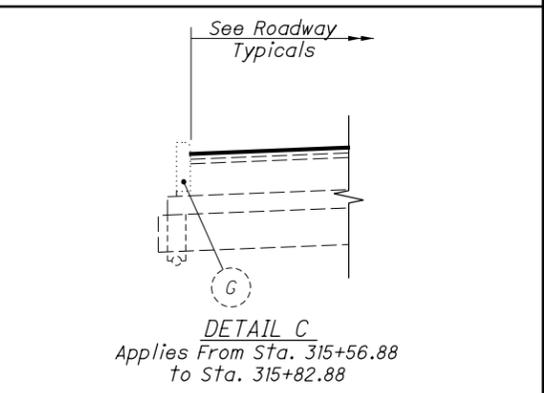
I:\ProjectData\LUC\88563\LUC-75-8.42\Design\Roadway\Sheets\88563.GY01.dgn Sheet 2/5/2021 9:47:43 AM afintel



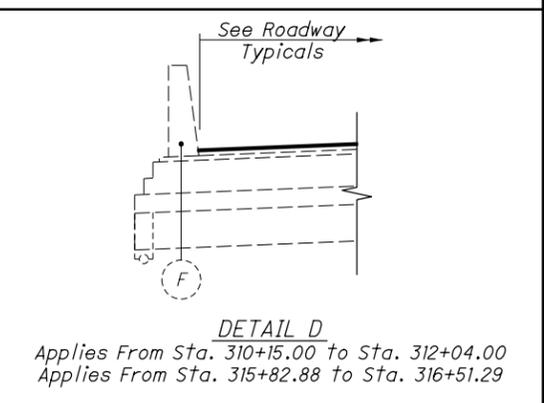
DETAIL A
 Applies From Sta. 294+98.96 to Sta. 295+53.11
 Applies from Sta. 303+45 to Sta. 303+75



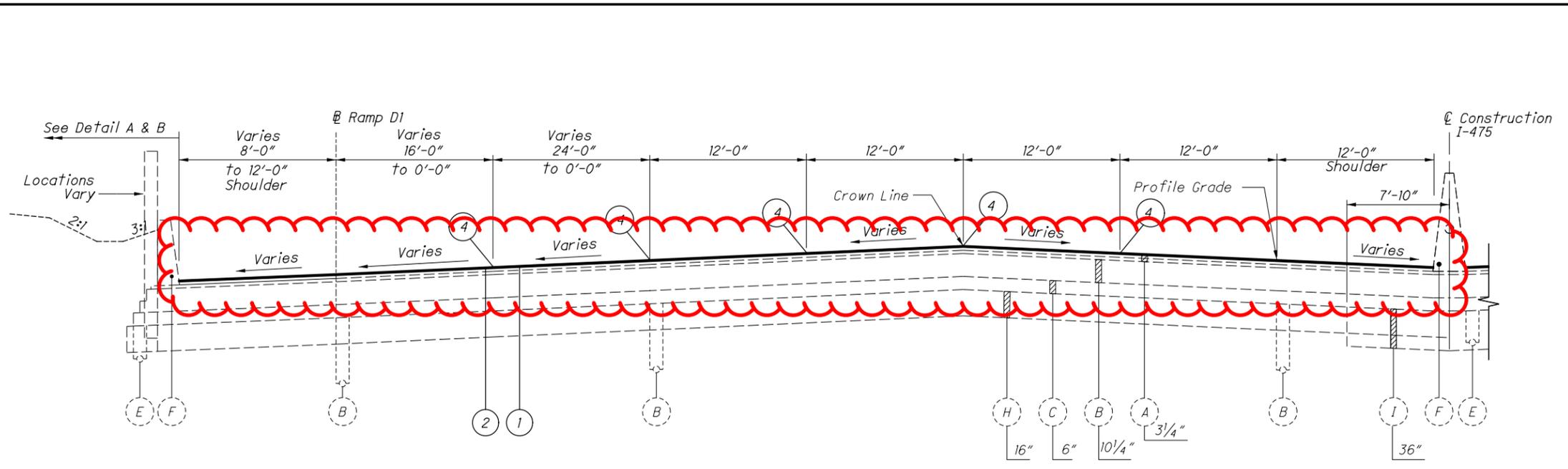
DETAIL B
 Applies From Sta. 280+75.00 to Sta. 282+44.38
 Applies From Sta. 299+01.12 to Sta. 302+03.11
 Applies From Sta. 303+75.00 to Sta. 304+53.57
 Applies From Sta. 306+90.00 to Sta. 310+15.00
 Applies From Sta. 312+04.00 to Sta. 313+08.15



DETAIL C
 Applies From Sta. 315+56.88 to Sta. 315+82.88

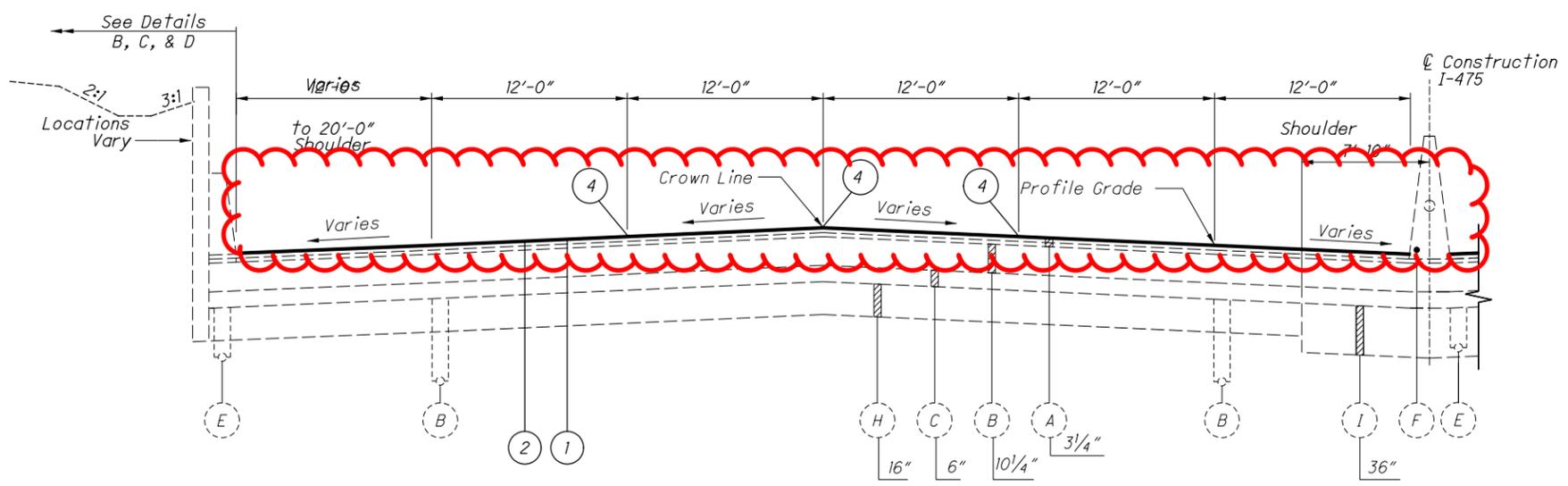


DETAIL D
 Applies From Sta. 310+15.00 to Sta. 312+04.00
 Applies From Sta. 315+82.88 to Sta. 316+51.29



TYPICAL SECTION - B
 NORMAL SECTION - WESTBOUND I-475
 I-475 Sta. 277+70.36 to Sta. 304+53.57 = 2683.21 FT.

PAVEMENT GRADE HAS BEEN MODIFIED



TYPICAL SECTION - C
 NORMAL SECTION - WESTBOUND I-475
 I-475 Sta. 304+53.57 to Sta. 330+24.00 = 2570.43 FT.

DEDUCT FOR BRIDGE NO. LUC-475-1538C
 STA. 316+51.29 TO STA. 318+25.00 = (-) 173.71 FT

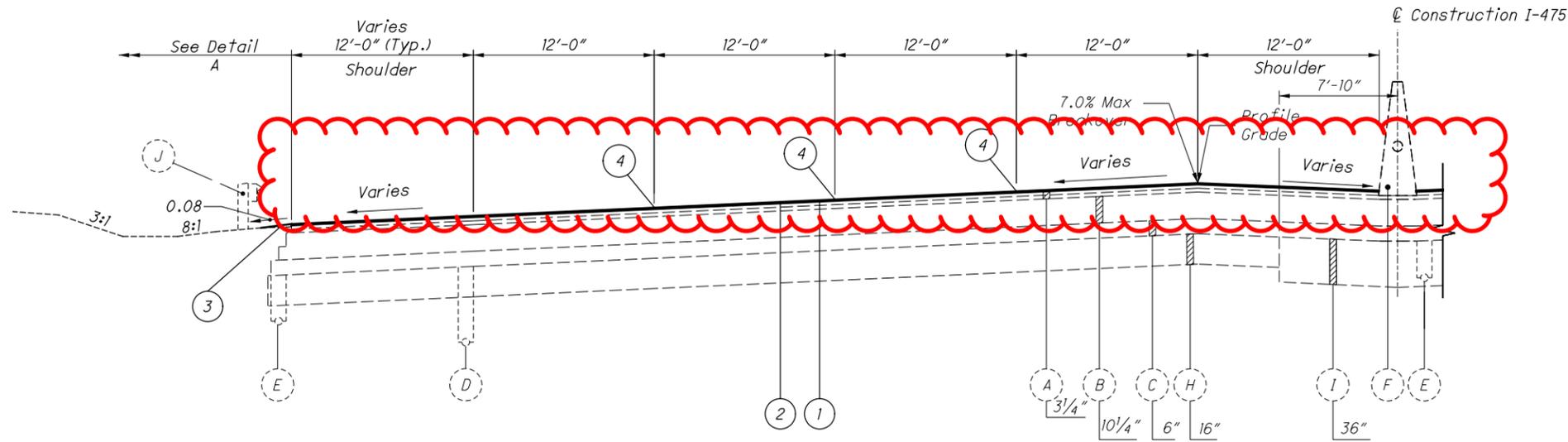
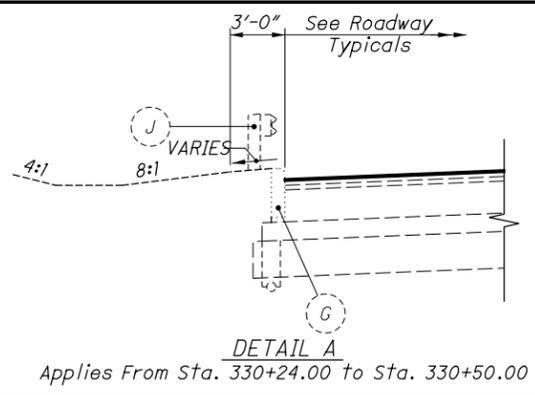
CALCULATED
 ALF
 CHECKED
 JMF

TYPICAL SECTIONS I-475

LUC-75 / 475-7.82 / 14.50

NOTE: SEE SHEET NO. 7 FOR PAVEMENT LEGEND.

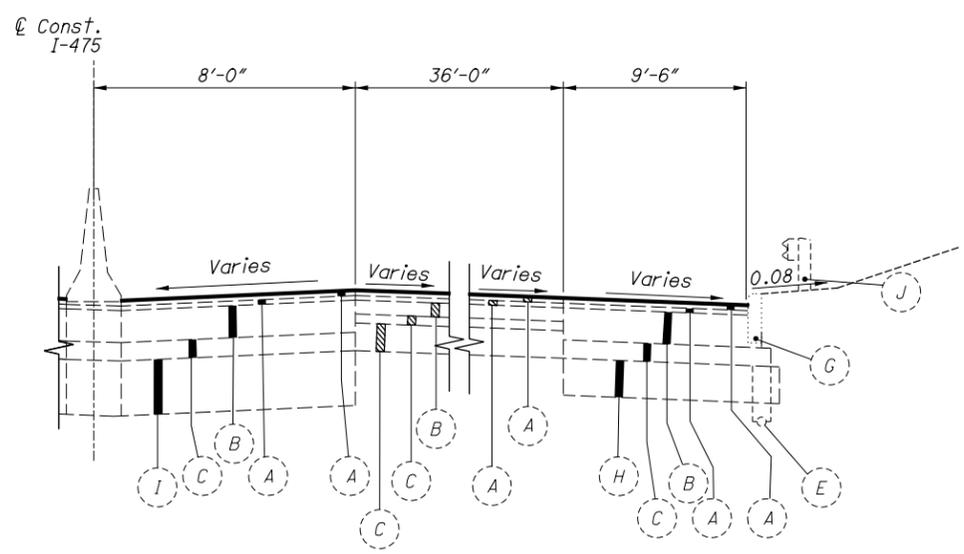
I:\ProjectData\LUC\88563\LUC-75-8.42\Design\Roadway\Sheets\88563_GY02.dgn_Sheet 2/5/2021 9:48:52 AM afintel



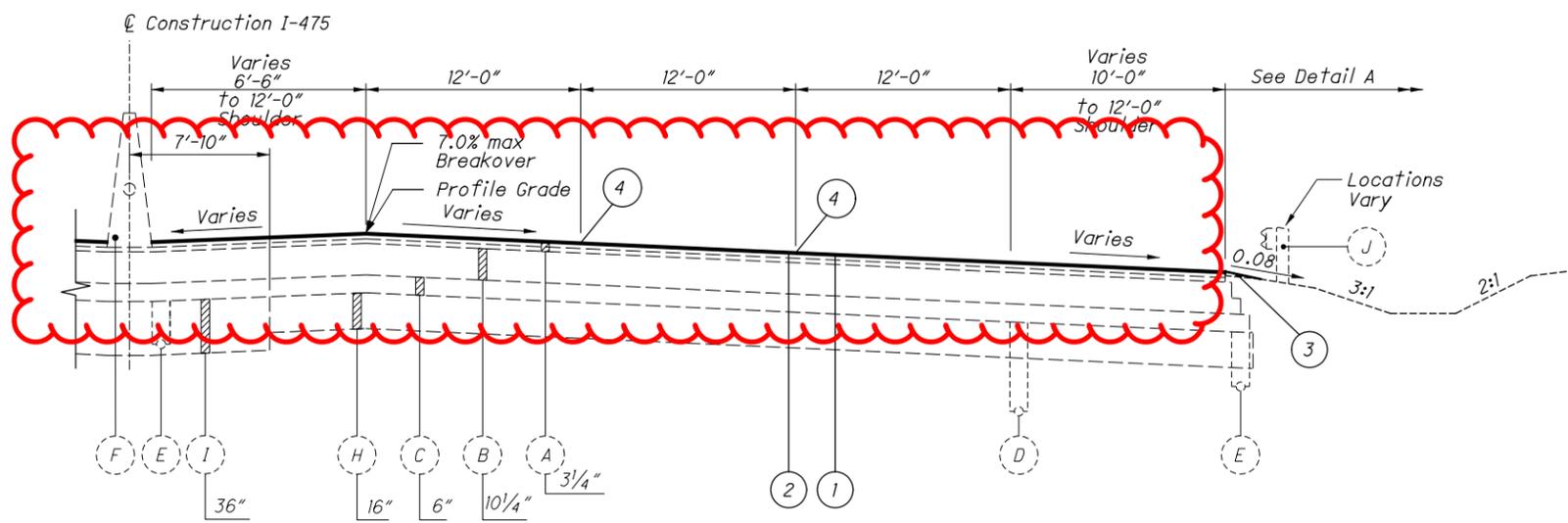
TYPICAL SECTION - D
 SUPERELEVATED SECTION - WESTBOUND I-475
 I-475 Sta. 330+24.00 to Sta. 345+41.69 = 1517.69 FT.

PAVEMENT GRADE HAS BEEN MODIFIED

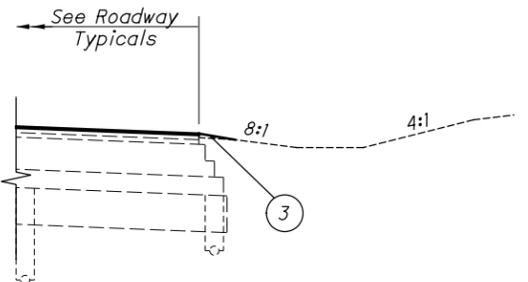
NOTE: SEE SHEET NO. 7 FOR PAVEMENT LEGEND.



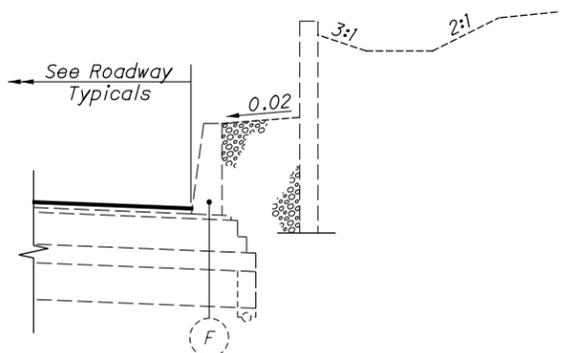
SHOULDER SECTION - EASTBOUND I.R. 475
 I-475 Sta. 258+30.00 to Sta. 267+00.00 (Median Shoulder) = 870.00 FT.
 I-475 Sta. 262+50.00 to Sta. 267+00.00 (Outside Shoulder) = 450.00 FT.



TYPICAL SECTION - E
SUPERELEVATED SECTION - EASTBOUND I-475
 I-475 Sta. 267+00.00 to Sta. 279+20.64 = 1220.64 FT.

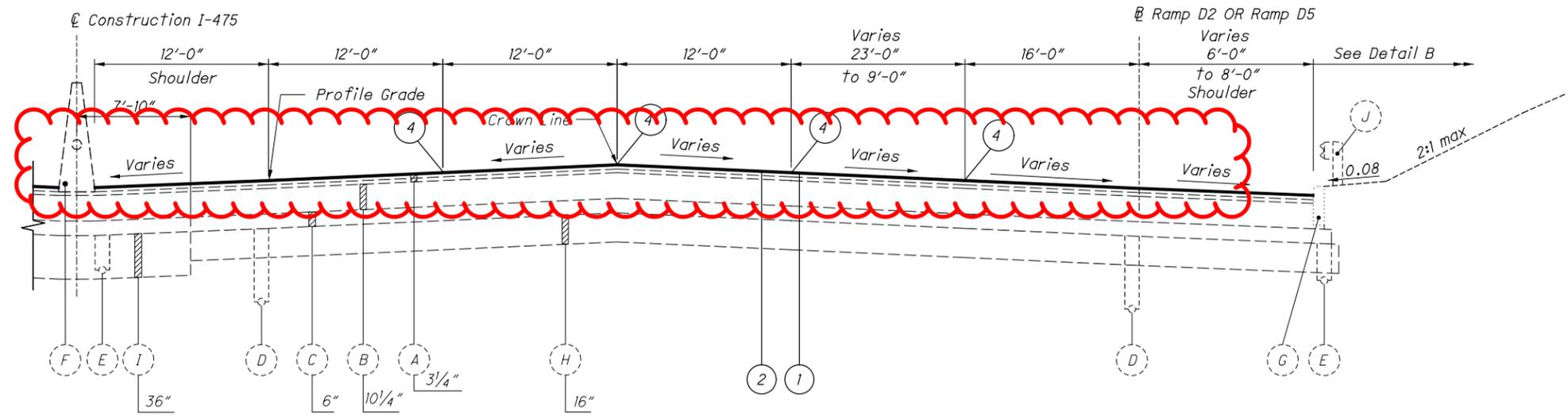


DETAIL A
 Applies From Sta. 273+63.14 to Sta. 277+70.36



DETAIL B
 Applies From Sta. 281+59.57 to Sta. 282+68.55

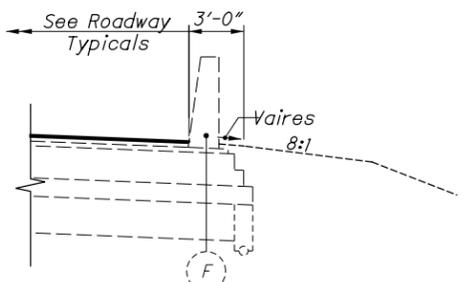
PAVEMENT GRADE HAS BEEN MODIFIED



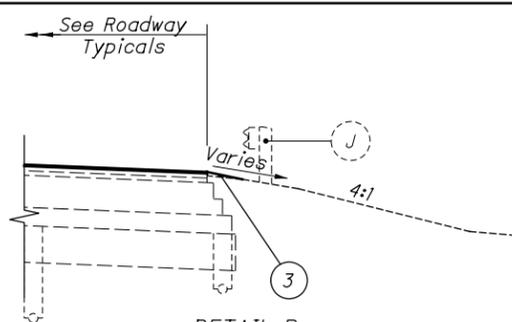
TYPICAL SECTION - F
NORMAL SECTION - EASTBOUND I-475
 I-475 Sta. 279+20.64 to Sta. 286+96.00 = 775.36 FT.
 I-475 Sta. 295+55 to Sta. 300+50.18 = 495.18 FT.

NOTE: SEE SHEET NO. 7 FOR PAVEMENT LEGEND.

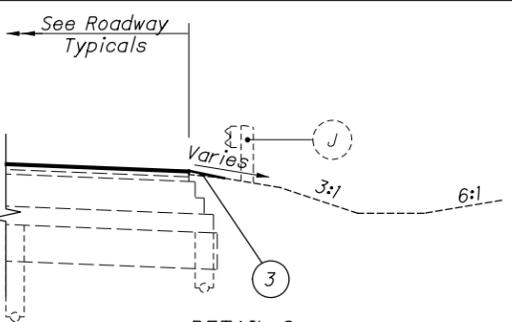
I:\ProjectData\LUC\88563\LUC-75-8.42\Design\Roadway\Sheets\88563.GY013.dgn Sheet 2/5/2021 9:49:54 AM cfintel



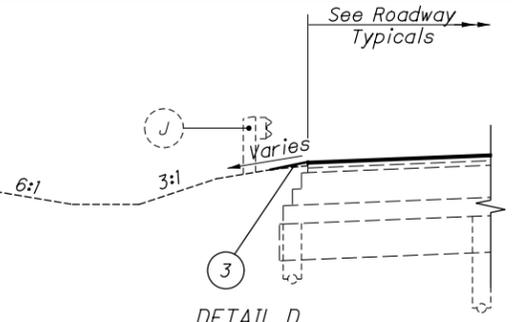
DETAIL A
Applies From Sta. 342+74.56 to Sta. 344+35.00



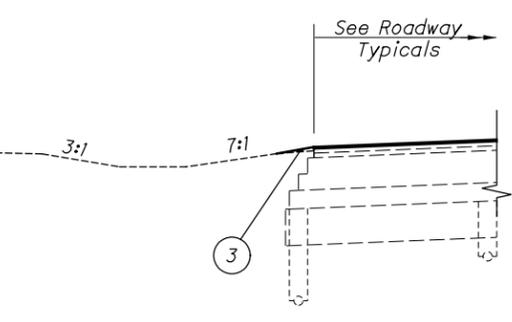
DETAIL B
Applies From Sta. 345+41.69 to Sta. 345+64.12



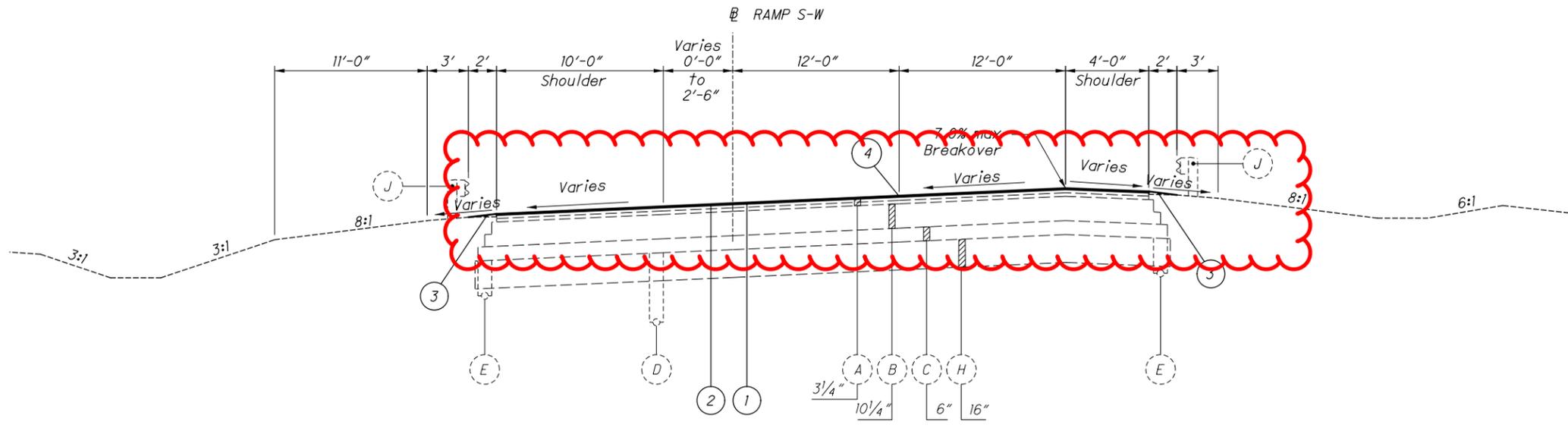
DETAIL C
Applies From Sta. 344+35.00 to Sta. 345+41.69



DETAIL D
Applies From Sta. 347+59.09 to Sta. 348+89.65

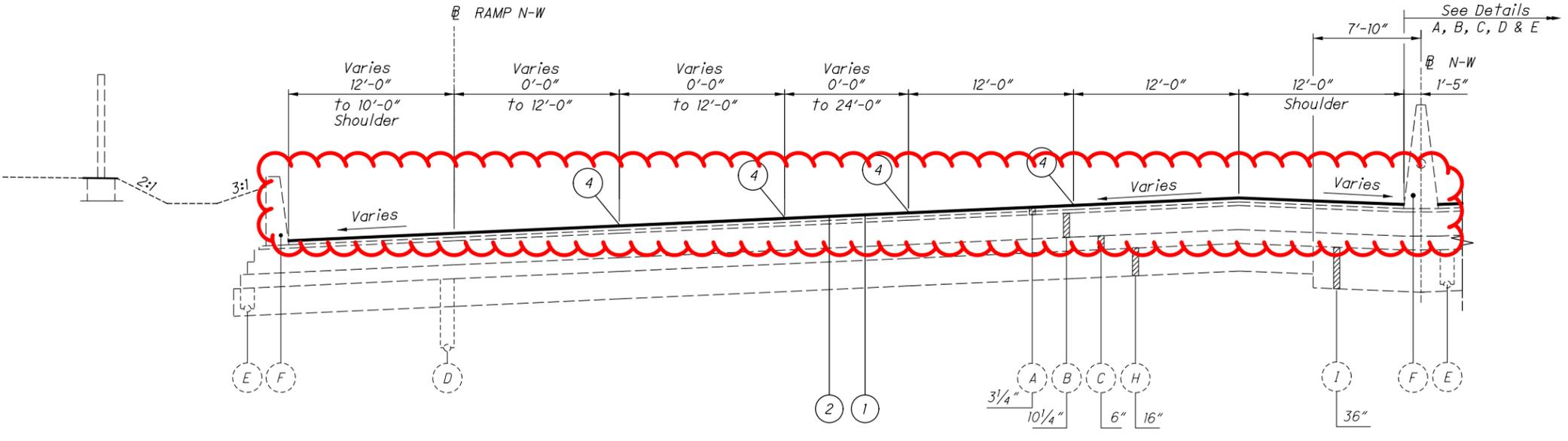


DETAIL E
Applies From Sta. 339+48.81 to Sta. 341+36.98



TYPICAL SECTION - G
SUPERELEVATED SECTION - RAMP S-W
Sta. 345+41.69 to Sta. 354+40.80 = 899.11 FT.

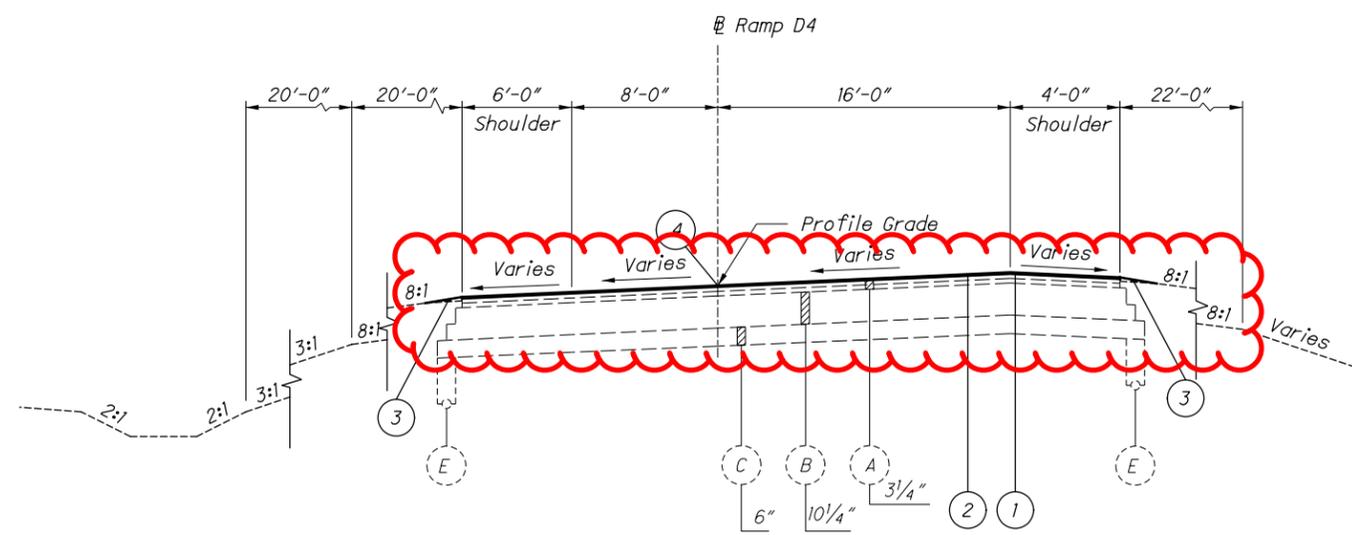
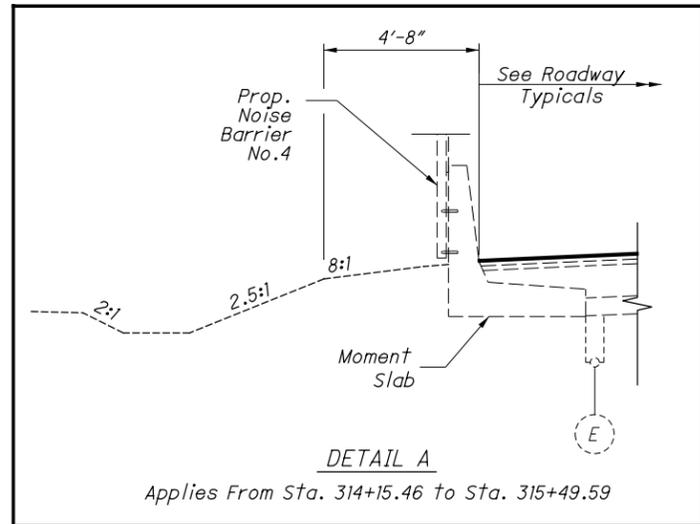
PAVEMENT GRADE HAS BEEN MODIFIED



TYPICAL SECTION - H
SUPERELEVATED SECTION - Ramp N-W
Sta. 345+41.69 to Sta. 353+16.50 = 774.81 FT.

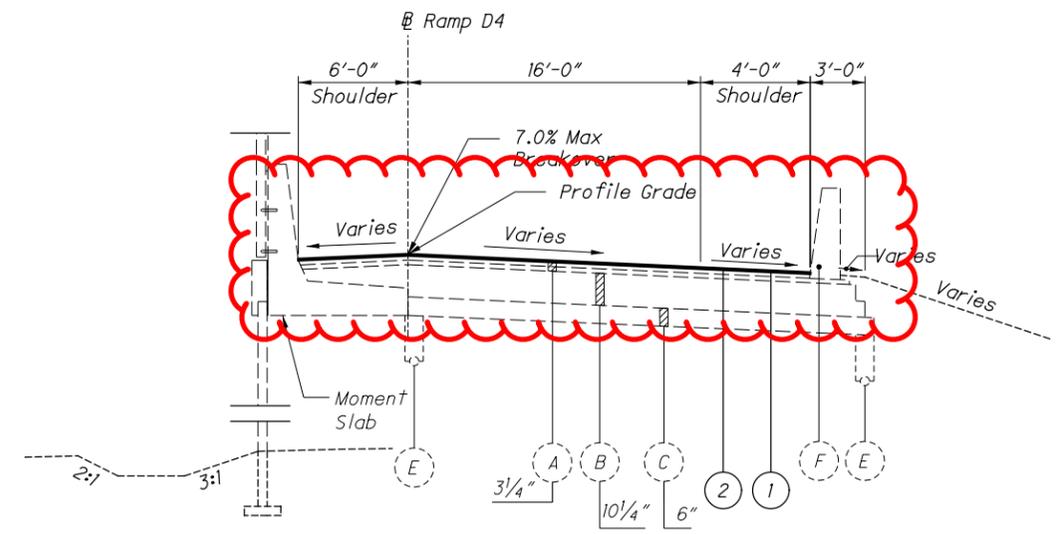
NOTE: SEE SHEET NO. 7 FOR PAVEMENT LEGEND.

I:\ProjectData\LUC\88563\LUC-75-8.42\Design\Roadway\Sheets\88563.GY04.dgn Sheet 2/5/2021 9:53:06 AM afintel

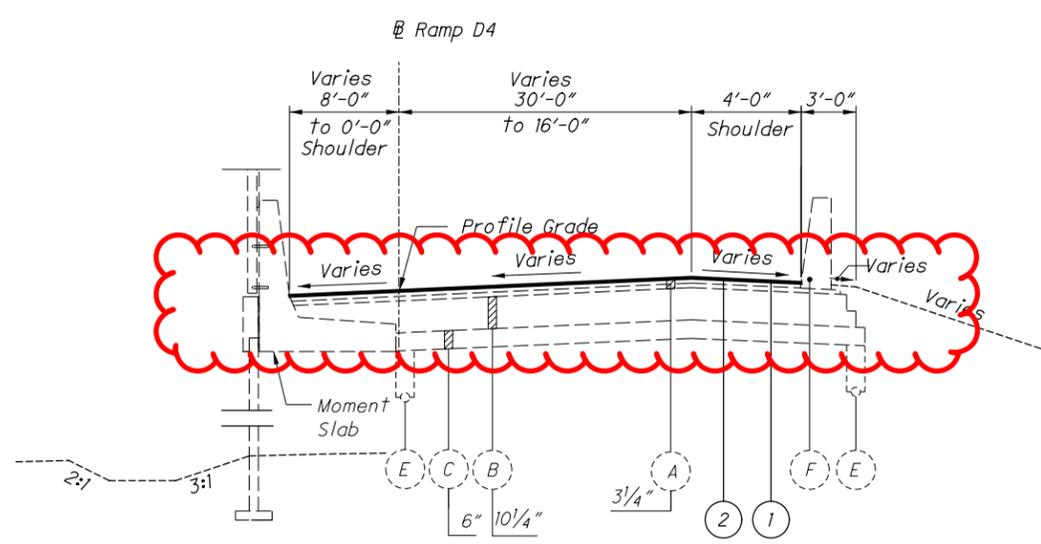


TYPICAL SECTION - L
NORMAL SECTION - Ramp D4
Ramp D4 Sta. 311+20.00 to Sta. 315+49.59 = 429.59 FT.

PAVEMENT GRADE HAS BEEN MODIFIED



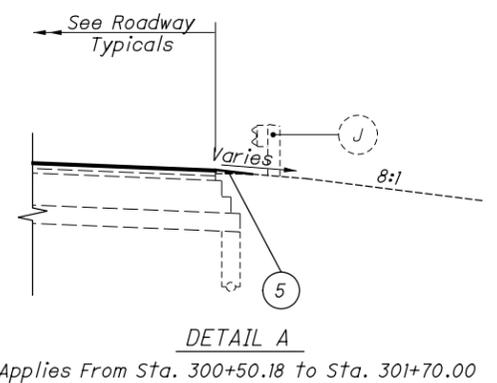
TYPICAL SECTION - M
SUPERELEVATED SECTION - Ramp D4
Ramp D4 Sta. 317+35.95 to Sta. 317+45.58 = 9.63 FT.



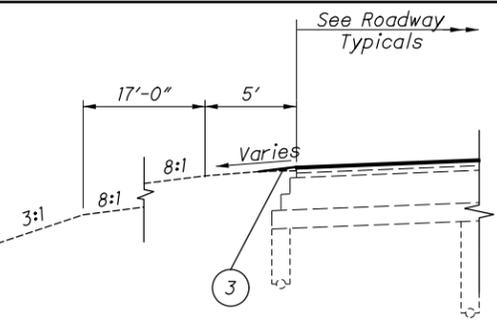
TYPICAL SECTION - N
NORMAL SECTION - Ramp D4
Ramp D4 Sta. 317+45.58 to Sta. 322+56.44 = 510.86 FT.

NOTE: SEE SHEET NO. 7 FOR PAVEMENT LEGEND.

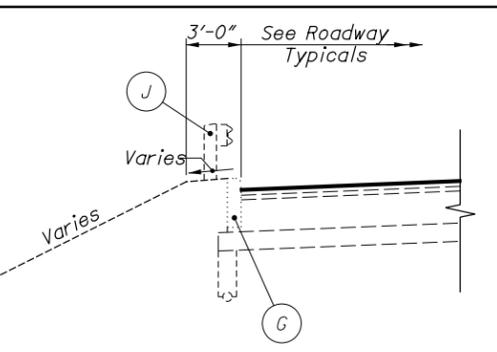
I:\ProjectData\LUC-75-8-42\Design\Roadway\Sheets\88563.GY016.dgn_Sheet 2/5/2021 9:56:34 AM afintel



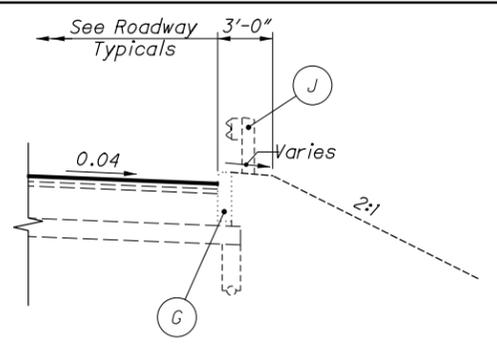
DETAIL A
Applies From Sta. 300+50.18 to Sta. 301+70.00



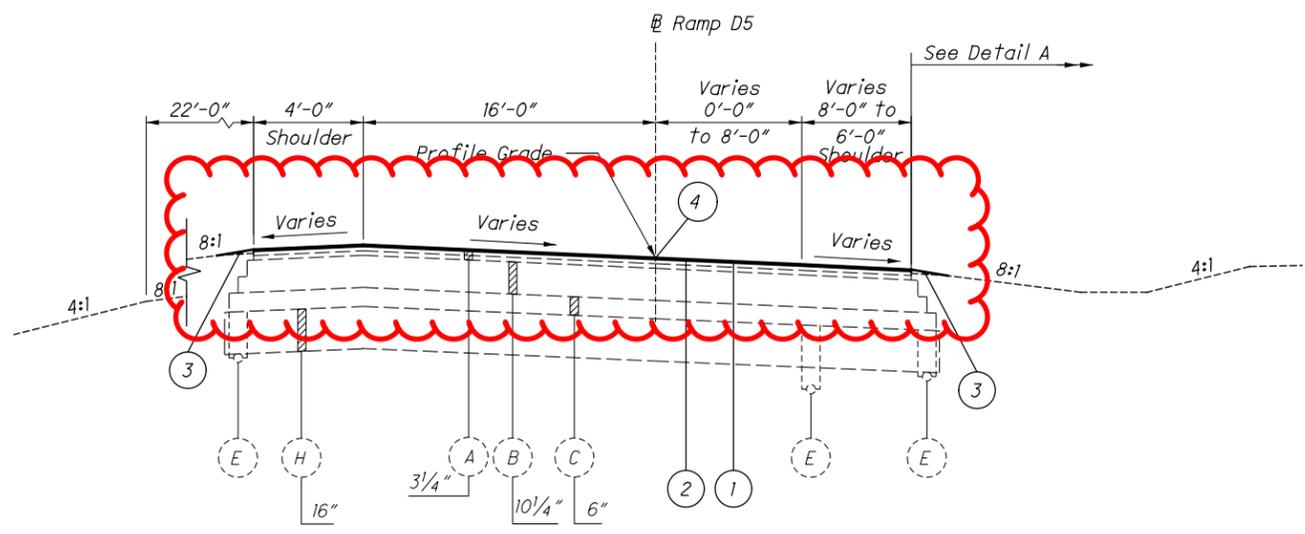
DETAIL B
Applies From Sta. 313+04.25 to Sta. 315+63.37



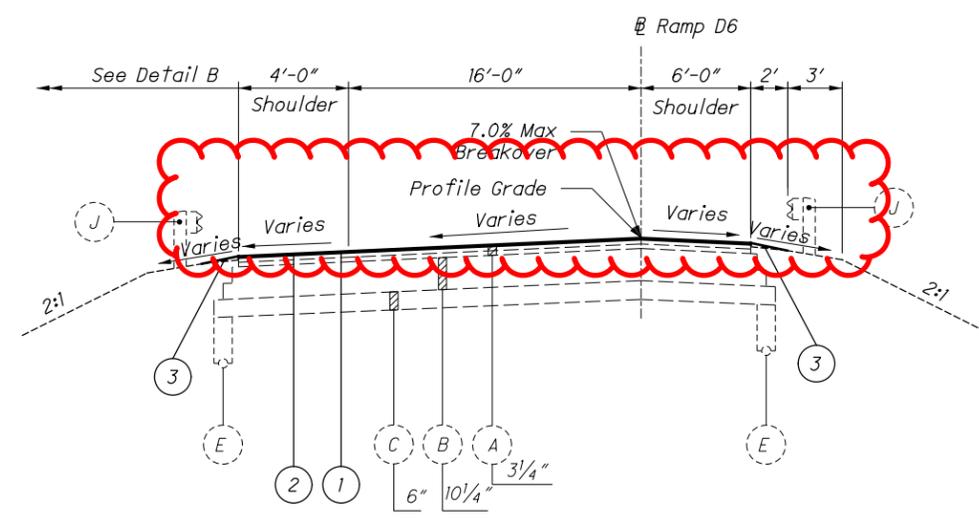
DETAIL C
Applies From Sta. 317+02.14 to Sta. 317+30.29



DETAIL D
Applies From Sta. 317+05.11 to Sta. 317+30.29

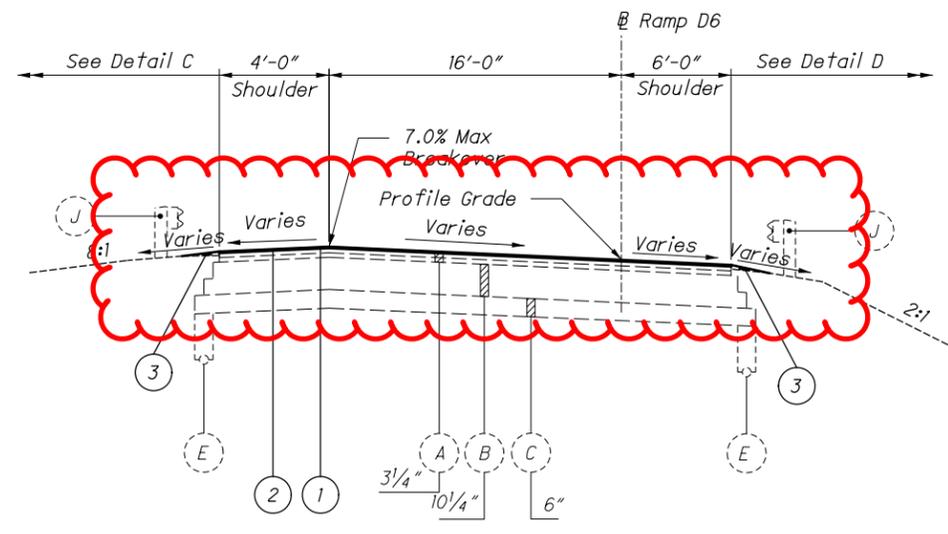


TYPICAL SECTION - O
NORMAL SECTION - Ramp D5
Ramp D5 Sta. 300+50.18 to Sta. 310+54.00 = 1003.82 FT.



TYPICAL SECTION - P
SUPERELEVATED SECTION - Ramp D6
Ramp D6 Sta. 311+19.00 to Sta. 315+63.37 = 444.37 FT.

PAVEMENT GRADE HAS BEEN MODIFIED



TYPICAL SECTION - Q
SUPERELEVATED SECTION - Ramp D6
Ramp D6 Sta. 315+63.37 to Sta. 317+30.29 = 166.92 FT.
Sta. 318+90.43 to Sta. 321+31.65 = 241.22 FT.

NOTE: SEE SHEET NO. 7 FOR PAVEMENT LEGEND.

I:\Project+Data\LUC\88563\LUC-75-8.42\Design\Roadway\Sheets\88563_GY01.dgn Sheet 2/5/2021 9:58:39 AM ofintel

MEDIAN BARRIER REPLACEMENT

THIS ITEM WILL INCLUDE THE REMOVAL AND REPLACEMENT OF VARIOUS LOCATIONS OF MEDIAN BARRIER INCLUDED IN THIS PLAN. THE FOLLOWING QUANTITIES WILL BE INCLUDED FOR MEDIAN BARRIER REMOVAL AND REPLACEMENT:

ITEM 622 - CONCRETE BARRIER, TYPE D, AS PER PLAN 93 FT.

IT IS THE INTENT TO FOLLOW THE PLAN INSERT SHEET INCLUDED IN THIS PLAN FOR CONCRETE BARRIER WALL INSTALLATION. PLACEMENT OF MEDIAN BARRIER WALL SHALL IMMEDIATELY FOLLOW THE REMOVAL.

AIRWAY/HIGHWAY CLEARANCE FOR AIRPORTS AND HELIPORTS

THIS PROJECT HAS BEEN IDENTIFIED AS BEING WITHIN THE INFLUENCE AREA OF A PUBLIC USE AIRPORT OR HELIPORT. NO TEMPORARY STRUCTURES OR CONSTRUCTION EQUIPMENT AT MAXIMUM OPERATING HEIGHT SHALL EXCEED A HEIGHT OF 145 FT. IF ANY TEMPORARY STRUCTURES OR CONSTRUCTION EQUIPMENT WILL EXCEED THIS HEIGHT, FURTHER COORDINATION WITH THE FEDERAL AVIATION ADMINISTRATION (FAA), AND THE ODOT OFFICE OF AVIATION, WILL BE NECESSARY PRIOR TO ERECTING SUCH TEMPORARY STRUCTURES OR OPERATING SUCH EQUIPMENT ON THE PROJECT. NO TEMPORARY STRUCTURES OR CONSTRUCTION EQUIPMENT SHALL EXCEED THE PERMISSIBLE HEIGHT, UNTIL COORDINATION IS MET AND DOCUMENTATION HAS BEEN FURNISHED TO THE PROJECT ENGINEER. IF COORDINATION IS NOT OBTAINED, THEN THE PROJECT ENGINEER WILL HAVE THE AUTHORITY TO PROVIDE RESTRICTIONS AS REQUIRED.

THE TOLEDO HOSPITAL
PROMEDICA HEALTH SYSTEM
2142 N. COVE BLVD.
TOLEDO, OHIO 43606
419.291.4000

ITEM 442 ASPHALT CONCRETE SURFACE COURSE, 12.5MM, TYPE A (447), AS PER PLAN

ITEM 442 ASPHALT CONCRETE SURFACE COURSE, 12.5MM TYPE A (447), AS PER PLAN SHALL FOLLOW THE SPECIFICATIONS FOR THE 442 ITEM EXCEPT FOR SECTION 442.04 ASPHALT BINDER, THE BINDER SHALL BE PG76-22M FOR THE SURFACE COURSE AND A MAXIMUM OF 10% OF RAP BY DRY WEIGHT OF MIX CAN BE USED. ADDITIONALLY, THE COARSE AGGREGATE FOR THIS ITEM SHALL CONTAIN A MINIMUM OF 50% AIR COOLED BLAST FURNACE SLAG, STEEL SLAG, OR CRUSHED IGNEOUS ROCK.

ITEM 442, ASPHALT CONCRETE INTERMEDIATE COURSE, AS PER PLAN

ITEM 442, ASPHALT CONCRETE INTERMEDIATE COURSE, 19MM, TYPE A (446), AS PER PLAN SHALL FOLLOW THE SPECIFICATIONS FOR THE 442 ITEM EXCEPT FOR SECTION 442.04 ASPHALT BINDER. THE BINDER SHALL BE PG76-22M FOR THE INTERMEDIATE COURSE AND A MAXIMUM OF 20% OF RAP BY DRY WEIGHT OF MIX CAN BE USED.

ITEM 424 - FINE GRADED POLYMER ASPHALT CONCRETE, TYPE B, AS PER PLAN

PER CMS 424.08, 448 DENSITY APPLIES TO THIS PROJECT. DENSITY WILL BE TESTED ACCORDING TO SUPPLEMENT 1055 PER CMS 448.02. THE DISINCENTIVE PORTION OF S-1055 (TABLE 1055.01-1 AND TABLE 1055.04) WILL BE WAIVED PROVIDING THAT THE CONTRACTOR MAKES EVERY EFFORT TO OBTAIN DENSITY AND DOES NOT USE VIBRATORY ROLLERS.

AN ESTIMATED QUANTITY OF 100 CY HAS BEEN CARRIED TO THE GENERAL SUMMARY TO ACCOUNT FOR SURFACE IRREGULARITIES.

PLANED SURFACES

NO PLANED SURFACES SHALL BE OPEN TO THE PUBLIC FOR MORE THAN 5 DAYS. IF THE PLANED SURFACE IS OPEN FOR MORE THAN 5 DAYS, THEN IT IS THE CONTRACTOR'S RESPONSIBILITY TO REPAIR THE PAVEMENT FAILURES THAT OCCURRED AFTER THE 5 DAYS.

RUMBLE STRIPE REMOVAL BEFORE PAVING

RUMBLE STRIPS WILL BE PLANED WITH ITEM 441, FOR THE I-475 LOCATION. THE QUANTITIES FOR PLANING AND PAVING THE RUMBLE STRIPS ARE PROVIDED BELOW. QUANTITIES ARE BASED ON 2' WIDE MILL. QUANTITIES TO BE CARRIED TO THE GENERAL SUMMARY.

I 475 EB EXISTING LENGTH OF RUMBLE STRIP:
LENGTH = 1996 FT (x2) = 2992 FT

I 475 WB EXISTING LENGTH OF RUMBLE STRIP:
LENGTH = 7842 FT (x2) = 15684 FT

RAMP S-W TO I 475 WB EXISTING LENGTH OF RUMBLE STRIP:
LENGTH = 900 FT (x2) = 1800 FT

RAMP N-W TO I 475 WB EXISTING LENGTH OF RUMBLE STRIP:
LENGTH = 775 FT (x2) = 1550 FT

TOTAL 22026 FT

ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE, 1 1/2 "

I 475 EB 444 SY
I 475 WB 3486 SY
RAMP S-W TO I 475 WB 400 SY
RAMP N-W TO I 475 WB 345 SY
ITEM 254 TOTAL = 4675 SY

ITEM 407 - NON TRACKING TACK COAT

I 475 EB 25 GAL
I 475 WB 192 GAL
RAMP S-W TO I 475 WB 22 GAL
RAMP N-W TO I 475 WB 19 GAL
ITEM 407 TOTAL = 258 GAL

ITEM 441 - ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG64-22, 1 1/2"

I 475 EB 19 CY
I 475 WB 146 CY
RAMP S-W TO I 475 WB 17 CY
RAMP N-W TO I 475 WB 15 CY
ITEM 441 TOTAL = 197 CY

ITEM 255, FULL DEPTH PAVEMENT REMOVAL AND RIGID REPLACEMENT, MISC.: CLASS QC 3

MATERIALS: PROVIDE MATERIALS CONFORMING TO THE FOLLOWING REQUIREMENTS:

PORTLAND CEMENT CONCRETE
499.03, CLASS QC 3, W/MACRO-FIBERS*

QC3: FLEXURAL STRENGTH: 300 PSI IN 12 HOURS

PERMEABILITY: 2000 COULOMBS

MACROFIBERS: MINIMUM 4.0 LB/CY

COARSE AGGREGATE (NO. 57 & NO.8) 703.02 & 703.13
FINE AGGREGATE (NATURAL SAND) 703.02
PORTLAND CEMENT, TYPE I 701.04
FLY ASH OR NATURAL POZZOLAN 701.13
SLAG CEMENT 701.09
WATER 499.02
CHEMICAL ADMIXTURE 705.12
AIR-ENTRAINING ADMIXTURE 705.10
MACRO-FIBERS FOR CONCRETE 705.29
LIQUID MEMBRANE-FORMING COMPOUNDS FOR CONCRETE CURING 705.07

*USE A MINIMUM DOSAGE RATE OF FIBERS OF 4.0 LB/YD³ OF CONCRETE. ENSURE THE FINAL PROPOSED MIX IS WORKABLE AND ABLE TO BE PRODUCED SUCH THAT BALLING OR CLUMPING OF THE FIBERS IS NOT A PROBLEM AS DETERMINED BY THE ENGINEER. A DEMONSTRATION OF THE MIX PRODUCTION, OR TRIAL MIX, MAY BE REQUIRED BY THE ENGINEER PRIOR TO PLACING ANY OF THE MIX ON THE PROJECT.

PAVEMENT SHALL BE PLANED BEFORE PAVEMENT IS REMOVED. THE FOLLOWING ESTIMATED QUANTITY IS TO BE USED FOR PAVEMENT REMOVAL AND RIGID REPLACEMENT AS DIRECTED BY THE ENGINEER. THE CONTRACTOR MAY BRING THE CONCRETE TO THE MILLED SURFACE.

ITEM 255 - FULL DEPTH PAVEMENT REPAIR AND RIGID REPLACEMENT, MISC.: CLASS QC 3
60-6x12 JOINTS NB = 480 SQ. YD.
75-6x12 JOINTS SB = 600 SQ. YD.
TOTAL = 1080 SQ. YD.

ITEM 255 - FULL DEPTH PAVEMENT SAWING
2160 LF (NB)
2700 FL (SB)
TOTAL = 4860 LF

QUANTIES CARRIED TO THE GENERAL SUMMARY.

LONGITUDINAL JOINTS (FLEXIBLE PAVEMENT)

LOCATE LONGITUDINAL JOINTS IN THE SURFACE COURSE SUBJECT TO THE FOLLOWING REQUIREMENTS:

- PLACE THE MAINLINE PAVEMENT SURFACE COURSE WITH A SINGLE COLD LONGITUDINAL JOINT LOCATED AT THE LANE LINES. NO OTHER COLD JOINTS ARE PERMITTED IN THE SURFACE COURSE OF THE MAINLINE PAVEMENT.

CHANGED ITEM

CHANGED ITEM

CALCULATED
ALF
CHECKED
JMF

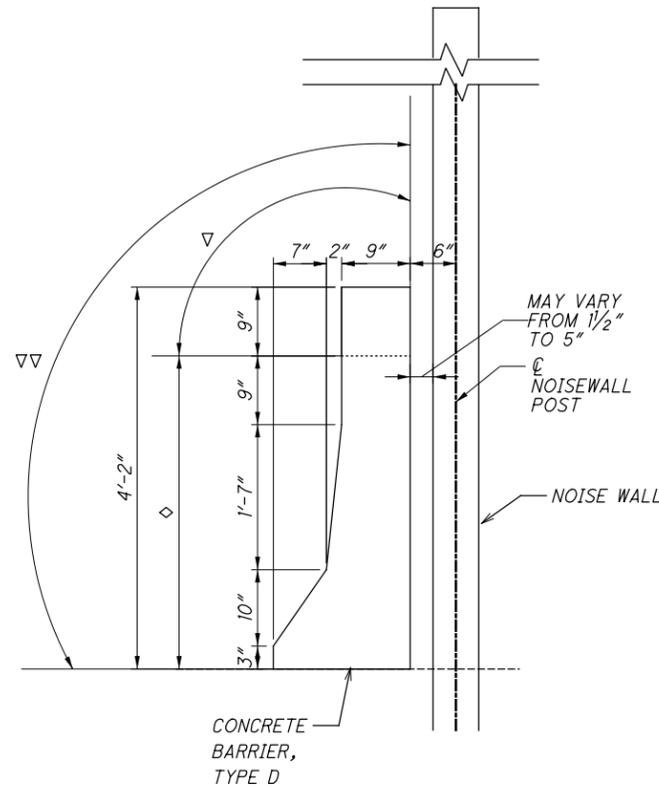
GENERAL NOTES

LUC-75 / 475-7.82 / 14.50

ITEM 512 - SEALING OF CONCRETE SURFACES

THIS ITEM CONSISTS OF SEALING THE EXISTING TYPE D BARRIER WALL LOCATED ALONG OUTSIDE SHOULDER OF I-75 SOUTHBOUND FROM APPROXIMATELY STA. 515+50 TO STA. 539+50. THE COLOR OF URETHANE FINISH COAT SHALL BE FEDERAL COLOR NO. 17778-LIGHT NEUTRAL.

THE DETAIL BELOW SHOW THE LIMITS OF THE PROPOSED WORK OF THE TYPE D BARRIER WALL SEALING:



- ▽ LIMITS OF SURFACE PREPARATION (INCIDENTAL TO SEALING OF CONCRETE SURFACES)
- ◇ LIMITS OF REMOVAL OF EXISTING COATINGS FROM CONCRETE SURFACE
- ▽▽ LIMITS OF SEALING CONCRETE SURFACES (EPOXY-URETHANE)

THE FOLLOWING ITEMS HAVE BEEN CARRIED TO THE GENERAL SUMMARY:

- ITEM 512 - SEALING OF CONCRETE SURFACES (EPOXY-URETHANE) 1365 SY
- ITEM 512 - REMOVAL OF EXISTING COATINGS FROM CONCRETE SURFACES 965 SY

625, POWER SERVICE, AS PER PLAN

IN ADDITION TO THE REQUIREMENTS OF THE SPECIFICATIONS, THE FOLLOWING IS ADDED.

THE POWER SUPPLYING AGENCY FOR THIS PROJECT IS:

TOLEDO EDISON
6099 ANGOLA RD
HOLLAND, OH 43528
419-249-5274
JULIAN ORTIZ

THE ENGINEER SHALL ENSURE THAT EACH POWER SERVICE ELECTRICAL ENERGY ACCOUNT IS IN THE NAME OF AND THAT THE BILLING ADDRESS IS TO THE MAINTAINING AGENCY NOTED IN THE PLANS. THIS SHALL BE DONE NOT ONLY FOR EACH NEW POWER SERVICE ESTABLISHED BY THIS PROJECT BUT ALSO FOR EACH EXISTING POWER SERVICE, SINCE THERE MAY BE A REASSIGNMENT OF THE RESPONSIBILITY FOR AN EXISTING SERVICE AS A RESULT OF THE WORK PERFORMED BY THIS PROJECT.

PAYMENT WILL BE MADE AT THE UNIT BID PRICE FOR EACH C&MS ITEM 625, "POWER SERVICE, AS PER PLAN" WHICH SHALL BE FULL COMPENSATION FOR ALL LABOR, MATERIALS AND INCIDENTALS REQUIRED TO COMPLETE THIS ITEM IN A SATISFACTORY AND WORKMANLIKE MANNER.

625, LUMINAIRE, CONVENTIONAL, SOLID-STATE (LED), AS PER PLAN, IES-DISTRIBUTION, LUMENS

IN ADDITION TO THE REQUIREMENTS OF ODOT'S CONSTRUCTION AND MATERIAL SPECIFICATIONS AND SUPPLEMENTAL SPECIFICATIONS 813, 913, AND 114, THE FOR CONVENTIONAL LIGHTING UNITS SHALL BE LED INSTEAD OF HIGHWAY PRESSURE SODIUM. THE CONTRACTOR SHALL CHOOSE ONE OF THE FOLLOWING LUMINAIRES LISTED BELOW, OR AN APPROVED EQUAL:

IES TYPE III DISTRIBUTION, 17,200-19,100 LUMENS (ODOT I-475)

BRAND CATALOG NO.

PAYMENT WILL BE MADE AT THE UNIT BID PRICE FOR EACH LUMINAIRE:

ITEM 625 LUMINAIRE, CONVENTIONAL, SOLID-STATE (LED), AS PER PLAN, IES-DISTRIBUTION, LUMENS 102 EACH

WHICH SHALL BE FULL COMPENSATION FOR ALL LABOR, MATERIALS AND INCIDENTALS REQUIRED TO COMPLETE THIS ITEM IN A SATISFACTORY AND WORKMANLINE MANNER.

THE CONTRACTOR SHALL MATCH THE ADJACENT LUMINAIRES ALREADY IN THE FIELD. BOTH OF THE FOLLOWING TYPES OF LUMINAIRES ARE SPECIFIED TO BE USED WHEN REPLACING LUMINAIRES WITH THIS PROJECT:

COOPER GALLEON

HOLPHANE MONGOOSE

SPECIAL, MAINTAIN EXISTING LIGHTING

EXISTING ROADWAYS WHICH ARE TO REMAIN OPEN TO TRAFFIC DURING CONSTRUCTION OF THIS PROJECT AND WHICH ARE LIGHTED SHALL HAVE THE LIGHTING MAINTAINED AS DESCRIBED HEREIN.

BEFORE ANY WORK IS STARTED IN THE IMMEDIATE VICINITY OF THE EXISTING LIGHTING CIRCUITS, REPRESENTATIVES OF ODOT, THE MAINTAINING AGENCY AND THE CONTRACTOR SHALL MAKE A VISUAL INSPECTION OF THE EXISTING ROADWAY LIGHTING CIRCUITS TO BE MAINTAINED. DURING THIS INSPECTION, A WRITTEN RECORD OF THE CONDITION OF EXISTING LIGHTING SHALL BE MADE BY ODOT'S REPRESENTATIVE. THIS WRITTEN REPORT SHALL NOTE INDIVIDUAL LUMINAIRES WHICH ARE NOT IN WORKING ORDER, INDIVIDUAL POLES WHICH ARE NOT STANDING, AND INDIVIDUAL CIRCUITS WHICH ARE NOT IN WORKING ORDER. THE COMPLETED REPORT SHALL BE SIGNED BY THE REPRESENTATIVES OF ODOT, THE MAINTAINING AGENCY AND THE CONTRACTOR.

IF, AS A RESULT OF THIS INSPECTION, IT IS DETERMINED THAT THE CONDITION OF THE EXISTING SYSTEM IS BELOW THAT REQUIRED FOR THE SAFETY OF THE TRAVELING PUBLIC, THEN THE MAINTAINING AGENCY SHALL MAKE THE REPAIRS NECESSARY TO RETURN THE SYSTEM TO AN ACCEPTABLE CONDITION. FOLLOWING THESE REPAIRS, THE SYSTEM SHALL AGAIN BE INSPECTED AND A REPORT SHALL BE MADE AND SIGNED AS OUTLINED HEREIN.

WHEN THE EXISTING SYSTEM IS IN AN ACCEPTABLE CONDITION, IT SHALL BE TURNED OVER TO THE CONTRACTOR WHO SHALL THEN BE REQUIRED TO MAINTAIN THE EXISTING LIGHTING TO THE CONDITION OUTLINED IN THIS REPORT WITH THE EXCEPTION OF KNOCKDOWNS DUE TO TRAFFIC ACCIDENTS.

REPLACEMENT OF KNOCKED DOWN UNITS SHALL BE DONE ONLY WHEN THE ENGINEER HAS DETERMINED THAT THE REPLACEMENT OF THE KNOCKED DOWN UNIT IS NECESSARY AND SHALL BE PAID SEPARATELY ON A UNIT BASIS.

BETTERMENTS SHALL BE COVERED IN ITEMS OF WORK PERTAINING TO THE CONSTRUCTION OF PERMANENT IMPROVEMENT.

WHEN THE SEQUENCE OF CONSTRUCTION ACTIVITIES REQUIRES, OR SHOULD THE CONTRACTOR DESIRE, THE REMOVAL OF THE EXISTING LIGHTING BEFORE THE NEW LIGHTING IS OPERATIONAL, THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING TEMPORARY LIGHTING OF THIS PORTION OF THE ROADWAY.

PRIOR TO INSTALLING SUCH LIGHTING, THE CONTRACTOR SHALL PREPARE AND SUBMIT FOUR SETS OF THE TEMPORARY LIGHTING PLAN TO THE ENGINEER FOR REVIEW AND APPROVAL.

THIS PLAN SHALL SHOW LOCATIONS OF POLES, LENGTHS OF BRACKET ARMS, STYLES OF LUMINAIRES, MOUNTING HEIGHTS, WIRING METHODS AND OTHER PERTINENT INFORMATION. THE TEMPORARY LIGHTING SHALL PROVIDE AN AVERAGE INITIAL INTENSITY OF 1.2 FOOTCANDLES WITH AN AVERAGE TO MINIMUM UNIFORMITY NOT TO EXCEED 3:1. MOUNTING HEIGHT OF TEMPORARY LUMINAIRES SHALL NOT BE LESS THAN 30 FEET, AND THE MINIMUM OVERHEAD CONDUCTOR CLEARANCE SHALL BE 20 FEET. TEMPORARY OVERHEAD CONSTRUCTION SHALL NOT BE LESS THAN GRADE "A" FOR STRENGTH REQUIREMENTS AS DEFINED BY THE NATIONAL ELECTRIC SAFETY CODE. WOOD POLES WITH OVERHEAD WIRING MAY BE USED. HOWEVER, TEMPORARY LIGHTING SHALL MEET FEDERAL AND STATE SAFETY CRITERIA. IF BREAKAWAY POLES ARE USED TO MEET THESE CRITERIA, THEN UNDERGROUND WIRING SHALL BE USED. RECONDITIONED OR USED MATERIALS MAY BE FURNISHED FOR TEMPORARY LIGHTING.

ALL MATERIALS NECESSARY TO COMPLETE THE TEMPORARY LIGHTING SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR. WHEN NO LONGER NEEDED, THE TEMPORARY LIGHTING INSTALLATION SHALL BE REMOVED AND PROPERLY DISPOSED OF BY THE CONTRACTOR.

THE MAINTAINING AGENCY WILL PAY FOR ELECTRICAL ENERGY CONSUMED BY EXISTING POWER SERVICES AND BY PROPOSED PERMANENT POWER SERVICES AFTER ACCEPTANCE OF THE LIGHTING WORK. THE CONTRACTOR WILL PAY FOR ELECTRICAL ENERGY, INSTALLATION, REMOVAL AND MAINTENANCE OF ANY TEMPORARY POWER SERVICES.

THE LUMP SUM PRICE BID FOR ITEM SPECIAL "MAINTAIN EXISTING LIGHTING" SHALL INCLUDE PAYMENT FOR ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS NECESSARY TO MAINTAIN THE EXISTING LIGHTING AS SPECIFIED HEREIN.

THE UNIT PRICE BID FOR ITEM SPECIAL "REPLACEMENT OF EXISTING LIGHTING UNIT" SHALL BE FULL PAYMENT FOR THE REPLACEMENT OF AN EXISTING LIGHTING UNIT WHICH HAS BEEN KNOCKED DOWN AFTER THE AFOREMENTIONED INSPECTION AND SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS NECESSARY TO PROVIDE A REPLACEMENT FOR SUCH UNIT.

ITEMS IN THIS NOTE WERE CARRIED TO GENERAL SUMMARY

CALCULATED
ALF
CHECKED
JMF

GENERAL NOTES

LUC-75 / 475-7.82 / 14.50

18
115

I:\Project+Data\LUC\88563\LUC-75-8.42\Design\Roadway\Sheets\88563.GN004.dgn Sheet 2/3/2021 11:57:45 AM afintel

ITEM SPECIAL - PAVEMENT OVERLAY FABRIC COMPOSITE

DESCRIPTION. THIS WORK SHALL CONSIST OF FURNISHING AND INSTALLING PAVEMENT OVERLAY FABRIC COMPOSITE AS SHOWN ON THE PLANS AND AT LOCATIONS DESIGNATED BY THE ENGINEER. THIS FABRIC COMPOSITE WILL BE PLACED ON A SS 897 MILLED SURFACE.

MATERIALS. PAVEMENT OVERLAY FABRIC COMPOSITE SHALL BE CONSTRUCTED OF LONG CHAIN SYNTHETIC POLYMERS COMPOSED OF AT LEAST 85 PERCENT OF POLYOLEPHINES, POLYESTERS, AND POLYAMIDES BY WEIGHT, SHALL BE RESISTANT TO CHEMICAL ATTACK, MILDEW, ROT, AND ATTACHED TO A FIBERGLASS GRID. COMPOSITE SHALL MEET THE FOLLOWING PHYSICAL REQUIREMENTS:

PROPERTY	SPECIFICATION	TEST METHOD
PAVING FABRIC:		
GRAB TENSILE STRENGTH, LBS.	90 MIN.	ASTM D 1682
GRAB ELONGATION, PERCENT	50 MIN.	ASTM D 1682
ASPHALT RETENTION GAL./SY.	0.20 MIN.	AASHTO M-288

COMPOSITE		
ULTIMATE TENSILE STRENGTH (LBS/FT)	MD 6720 MIN XD 13440 MIN	ASTM D 6637

MAXIMUM ELONGATION	LESS THAN 3%	ASTM D 6637
--------------------	--------------	-------------

PERCENT OPEN AREA	>50	TEX-621-J "TESTING GEOGRIDS"
-------------------	-----	---------------------------------

MELTING POINT MINIMUM (DEGREES F) 1000		ASTM C 338
--	--	------------

LOSS ON IGNITION %	>15	TEX-621-J "TESTING GEOGRIDS"
--------------------	-----	---------------------------------

MASS/UNIT AREA	16.0 OZ. /SY MIN	ASTM D 5261-92
----------------	------------------	----------------

THE COMPOSITE FABRIC SHALL NOT BE EXPOSED TO ULTRAVIOLET RADIATION FOR MORE THAN 7 DAYS. THE FABRIC SHALL BE AT LEAST 60 INCHES BUT NO MORE THAN 150 INCHES IN WIDTH AND FURNISHED IN ROLLS OF APPROXIMATELY 104 YARDS IN LENGTH.

THE ASPHALT SEALANT SHALL BE PG64-22 MEETING THE REQUIREMENTS OF 702.01.

CERTIFICATION SHALL BE FURNISHED IN ACCORDANCE WITH 101.061 BEFORE THE FABRIC IS PLACED. THE ENGINEER MAY REQUIRE SAMPLING FOR TESTING PURPOSES AS DIRECTED BY THE LABORATORY.

EQUIPMENT. THE CONTRACTOR SHALL PROVIDE EQUIPMENT FOR HEATING AND APPLYING BITUMINOUS MATERIAL. HEATING EQUIPMENT AND DISTRIBUTORS SHALL MEET THE REQUIREMENTS OF 407.

THE MECHANICAL LAYDOWN EQUIPMENT SHALL BE MOUNTED ON A FOUR-WHEELED VEHICLE THAT IS CAPABLE OF DRIVING OVER THE FABRIC WHILE IT IS BEING INSTALLED TO CONTROL THE TENSION ON THE MATERIAL. THE LAYDOWN MACHINE SHALL BE EQUIPPED WITH CLUTCHES TO ADJUST THE ROLL TENSION AND BROOMS TO SMOOTH OUT WRINKLES DURING INSTALLATION. MANUAL LAYDOWN MAY ONLY BE USED IN AREAS INACCESSIBLE TO THE LAYDOWN MACHINE.

CONSTRUCTION DETAILS

1. SURFACE PREPARATION. THE CRACKS AND ENTIRE ROAD SURFACE TO BE TREATED, AND AT LEAST ONE ADDITION FOOT ON EACH SIDE, SHALL BE CLEANED BY SWEEPING, BLOWING, OR OTHER METHODS UNTIL ALL DUST, MUD, CLAY LUMPS, VEGETATION, AND FOREIGN MATERIAL ARE REMOVED ENTIRELY FROM THE PAVEMENT BEFORE THE BITUMINOUS MATERIAL IS APPLIED. CARE SHALL BE EXERCISED TO PREVENT MATERIAL SO REMOVED FROM BECOMING MIXED WITH THE NEW SURFACE. LARGE CRACKS AND POTHOLES SHOULD BE FILLED.

2. APPLICATION OF ASPHALT SEALANT. THE APPLICATION OF THE ASPHALT SEALANT SHALL CONFORM TO THE APPLICABLE PORTIONS OF 407. THE ASPHALT SEALANT SHALL BE UNIFORMLY SPRAYED OVER THE AREA TO BE COVERED BY FABRIC AT A RATE OF 0.25 TO 0.30 GALLON PER SQUARE YARD.

THE QUANTITY APPLIED WILL VARY WITH THE SURFACE CONDITION OF THE EXISTING PAVEMENT (DEGREE OF POROSITY, FOR EXAMPLE). THE FABRIC ALONE, UNDER HEAT OF THE OVERLAY, WILL ABSORB AT LEAST 0.20 GALLON PER SQUARE YARD. WITHIN INTERSECTIONS OR OTHER ZONES WHERE VEHICLE BRAKING IS COMMON PLACE, THE APPLICATION SHALL BE REDUCED 20 PERCENT. THE SEALANT SHALL BE APPLIED TO AN AREA TWO TO SIX INCHES WIDER THAN THE WIDTHS OF THE FABRIC BEING PLACED, BUT RESTRICTED TO THE AREA OF IMMEDIATE FABRIC LAYDOWN. APPLICATION SHALL BE BY DISTRIBUTOR WITH HAND SPRAYING ALLOWED ONLY WHERE THE DISTRIBUTOR CANNOT BE USED. ASPHALT SPILLS SHALL BE CLEANED FROM THE ROAD SURFACE TO AVOID FLUSHING AND POSSIBLE MOVEMENT AT THESE ASPHALT RICH AREAS.

THE ASPHALT CEMENT USED AS A SEALANT SHALL HAVE DISTRIBUTOR TANK TEMPERATURE BETWEEN 300 DEGREES AND 350 DEGREES F. APPLICATION TEMPERATURE IS NOT CRITICAL AFTER THE ASPHALT IS SPRAYED ON THE PAVEMENT. IF THE FABRIC IS TO BE OVER-SPRAYED, DISTRIBUTOR TANK TEMPERATURES SHOULD NOT EXCEED 350 DEGREES F TO AVOID DAMAGE TO THE FABRIC.

3. COMPOSITE FABRIC PLACEMENT. THE COMPOSITE FABRIC SHALL BE PLACED ON THE ASPHALT SEALANT AS SOON AS PRACTICAL AND BEFORE THE TACKINESS OF THE SEALANT IS LOST. THE COMPOSITE SHALL BE PLACED AS SMOOTHLY AS POSSIBLE TO AVOID WRINKLES. IT SHALL BE UNROLLED SO THAT THE SOFT SIDE IS UNWOUND INTO THE SEALANT AND THE GRID SIDE UP, THUS PROVIDING OPTIMUM BOND BETWEEN FABRIC AND PAVEMENT DURING THE CONSTRUCTION PROCESS. WRINKLES SEVERE ENOUGH TO CAUSE "FOLDS" SHALL BE SLIT AND LAID FLAT. SMALL WRINKLES, WHICH FLATTEN UNDER COMPACTION ARE NOT DETRIMENTAL TO PERFORMANCE. THE COMPOSITE SHALL BE BROOMED OR SQUEEGEED TO REMOVE AIR BUBBLES AND MAKE COMPLETE CONTACT WITH THE ROAD SURFACE AS RECOMMENDED BY THE FABRIC MANUFACTURER. THE FABRIC SHALL BE LAID STRAIGHT, WITHIN THE SEALANT AREA. MODERATE CURVES CAN BE NEGOTIATED BY STRETCHING THE FABRIC ON THE OUTSIDE OF THE CURVE BY ADJUSTING THE DRAG ON THE BRAKES OF THE LAYDOWN EQUIPMENT. TRANSVERSE JOINTS SHALL BE "SHINGLED" IN THE DIRECTION OF PAVING.

LONGITUDINAL JOINTS SHALL BE MADE BY OVERLAPPING THE FABRIC ONE TO TWO INCHES. TRANSVERSE JOINTS SHALL BE MADE BY OVERLAPPING THE FABRIC MINIMUM OF FOUR INCHES. ADDITIONAL SEALANT (ABOUT 0.20 GAL. PER SQ. YD.) SHALL BE ADDED TO THE JOINTS AS REQUIRED. THE ADDITIONAL SEALANT FOR TRANSVERSE JOINTS MAY BE APPLIED BY HAND SPRAYING OR WITH MOP AND BUCKET IF EXTREME CARE IS TAKEN TO NOT EXCEED THE SPECIFIED RATE.

TO ENHANCE THE BOND OF THE FABRIC WITH THE EXISTING PAVEMENT AND TO SMOOTH OUT ANY WRINKLES FOR FOLDS IN THE FABRIC, THE CONTRACTOR MAY BE REQUIRED TO PNEUMATICALLY ROLL THE FABRIC AFTER IT IS PLACED.

4. TREATMENT OF THE APPLIED COMPOSITE PRIOR TO THE ASPHALT CONCRETE. IT IS UNNECESSARY TO TACK COAT THE FABRIC PRIOR TO PLACEMENT OF THE OVERLAY UNLESS THERE ARE CIRCUMSTANCES SUCH AS DELAY OF OVERLAY, DUST ACCUMULATION OR UNDER APPLICATION OF SEALANT WHICH WOULD MAKE TACK COATING DESIRABLE. IF A TACK COAT IS REQUIRED, EMULSIFIED ASPHALT SHALL BE APPLIED AT A RATE OF 0.02 TO 0.05 GALLON PER SQUARE YARD RESIDUAL ASPHALT. FLOW OF THE ASPHALT CONCRETE OVERLAY SHALL CLOSELY FOLLOW FABRIC LAYDOWN. IN THE EVENT THAT THE SEALANT BLEEDS THROUGH THE FABRIC BEFORE THE ASPHALT CONCRETE IS PLACED, IT MAY BE NECESSARY TO BLOT THE SEALANT BY SPREADING SAND OR ASPHALT CONCRETE OVER THE AFFECTED AREAS. THIS WILL PREVENT ANY TENDENCY FOR CONSTRUCTION EQUIPMENT TO PICK UP THE FABRIC WHEN DRIVING OVER IT.

TURNING OF THE PAVER AND OTHER VEHICLES SHALL BE GRADUAL TO AVOID MOVEMENT OR DAMAGE TO THE COMPOSITE. UNESSENTIAL TRAFFIC ON COMPOSITE SHOULD BE ELIMINATED. IF IT IS NECESSARY TO OPEN THE ROAD TO TRAFFIC AFTER FABRIC PLACEMENT, BUT PRIOR TO PAVING, IT IS ADVISABLE TO SPREAD A SMALL AMOUNT OF SAND OVER THE MEMBRANE TO PREVENT TIRES FROM STICKING TO THE SEALANT OR PULLING UP THE COMPOSITE. THIS PRACTICE IS TO BE AVOIDED IF POSSIBLE TO PREVENT DAMAGE TO THE MEMBRANE. QUICK STOPS AND SHARP TURNS MAY DAMAGE THE MATERIAL. IF RAIN PRIOR TO THE OVERLAY SHOULD CAUSE A BLISTERED APPEARANCE AND SOME BOND LOSS THROUGHOUT THE MEMBRANE, IT SHOULD BE CORRECTED BY PNEUMATIC ROLLING UNTIL ADHESION IS RESTORED.

5. ASPHALT CONCRETE. THE ASPHALT CONCRETE OVERLAY SHALL CONFORM TO 401 SPECIFICATION WITH A MINIMUM THICKNESS OF 1.5"

METHOD OF MEASUREMENT. THE ACCEPTED FABRIC COMPOSITE PLACED IN ACCORDANCE WITH THESE SPECIFICATIONS AND AS DIRECTED WILL BE MEASURED BY THE SQUARE YARD OF ROADWAY, RAMPS, AND TURNOUTS COVERED BY THE COMPOSITE FABRIC. LAPS IN COMPOSITE FABRIC WILL NOT BE MEASURED.

BLOTTING THE SEALANT, SPREADING SAND OR ASPHALT CONCRETE OVER THE MEMBRANE TO PREVENT TIRES FROM STICKING TO THE SEALANT OR PULLING UP THE FABRIC, ROLLING TO RESTORE BOND, OR APPLICATION OF A TACK COAT WILL NOT BE MEASURED FOR DIRECT PAYMENT BUT SHALL BE CONSIDERED A NECESSARY PART OF THE CONSTRUCTION INVOLVED AND THE COST THEREFORE SHALL BE INCLUDED IN OTHER APPROPRIATE CONTRACT UNIT PRICES.

BASIS OF PAYMENT. THE ACCEPTED QUANTITIES OF PAVEMENT OVERLAY FABRIC COMPOSITE WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE YARD, WHICH PRICE AND PAYMENT SHALL BE FULL COMPENSATION FOR FURNISHING ALL LABOR, MATERIALS (INCLUDING ASPHALT SEALANT AND OVERLAP), TOOLS, EQUIPMENT AND INCIDENTALS FOR DOING ALL THE WORK INVOLVED IN FURNISHING AND PLACING THE COMPOSITE COMPLETE IN PLACE AS SHOWN ON THE PLANS OR AS DIRECTED.

ITEM	UNIT	DESCRIPTION
SPECIAL	SQUARE YARD	PAVEMENT OVERLAY FABRIC COMPOSITE

I-475 LONGITUNINAL JOINT PAVEMENT REPAIR

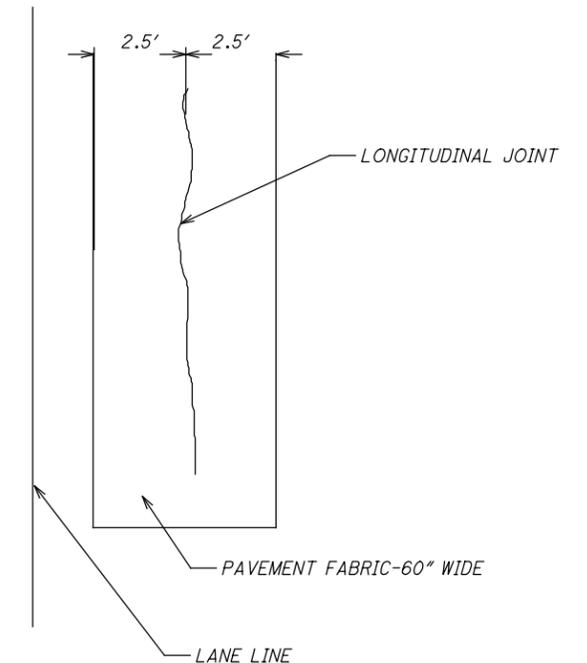
AS NOTED ON SHEETS 47-56 THESE AREAS SHALL BE REPAIRED BY THE FOLLOWING METHOD:

MILL 3" OF THE AREA PER ITEM 897 PAVEMENT PLANING, ASPHALT CONCRETE, CLASS A. PLACE THE PAVEMENT OVERLAY FABRIC COMPOSITE PER THE MANUFACTURER'S SPECIFICATION. PLACE 3" OF ITEM 442 ASPHALT CONCRETE INTERMEDIATE COURSE, 19MM TYPE A, AS PER PLAN ON TOP OF THE FABRIC OVERLAY THE ENTIRE PAVEMENT WITH ITEM 424 FINE GRADED POLYMER ASPHALT CONCRETE, TYPE B, AS PER PLAN.

THE FOLLOWING QUANTITIES ARE CARRIED TO GENERAL SUMMARY:

ITEM 897-PAVEMENT PLANING, ASPHALT CONCRETE, CLASS A	3330 SY
ITEM 442-ASPHALT CONCRETE INTERMEDIATE COURSE, 19MM TYPE A, AS PER PLAN	277 CY
ITEM SPECIAL-PAVEMENT OVERLAY FABRIC COMPOSITE	2774 SY

PLACE THE FABRIC AS SHOWN BELOW:



ITEMS IN THIS NOTE WERE CARRIED TO GENERAL SUMMARY

I:\ProjectData\LUC\88563\LUC-75-8-42\Design\Roadway\Sheets\88563_GNADD.dgn Sheet 2/3/2021 12:44:46 PM afintel

CALCULATED
ALF
CHECKED
JMF

GENERAL NOTES

LUC-75 / 475-7.82 / 14.50

19
115

PROTECTION OF TRAFFIC MONITORING EQUIPMENT

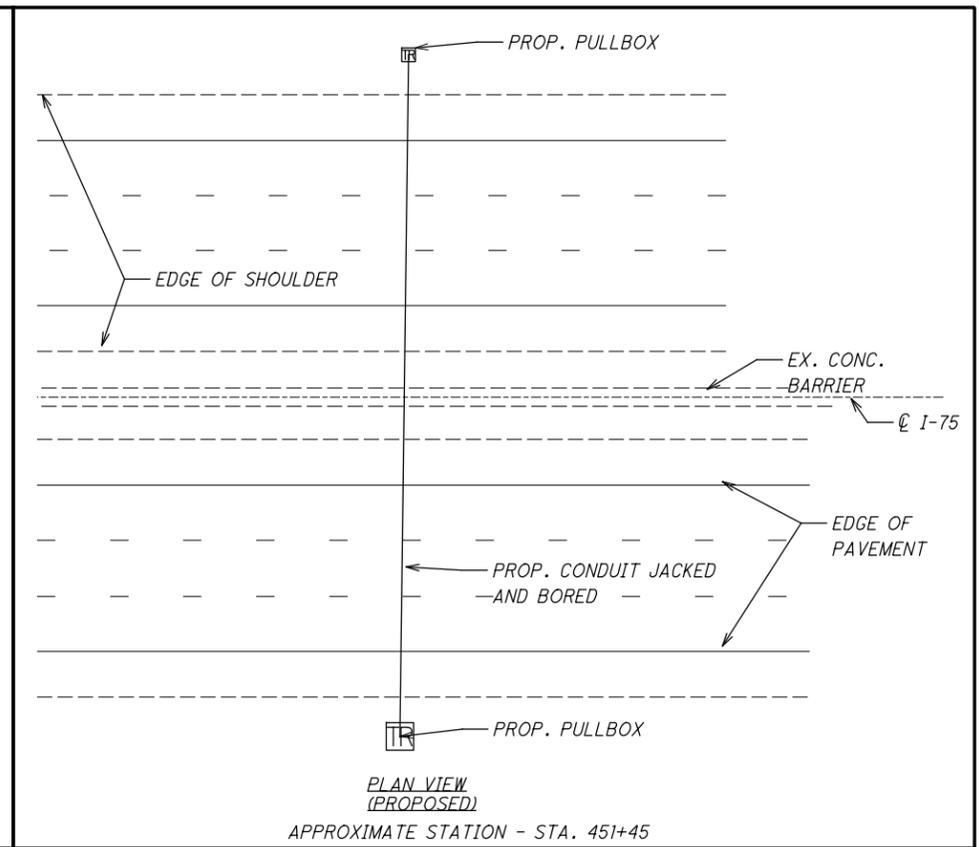
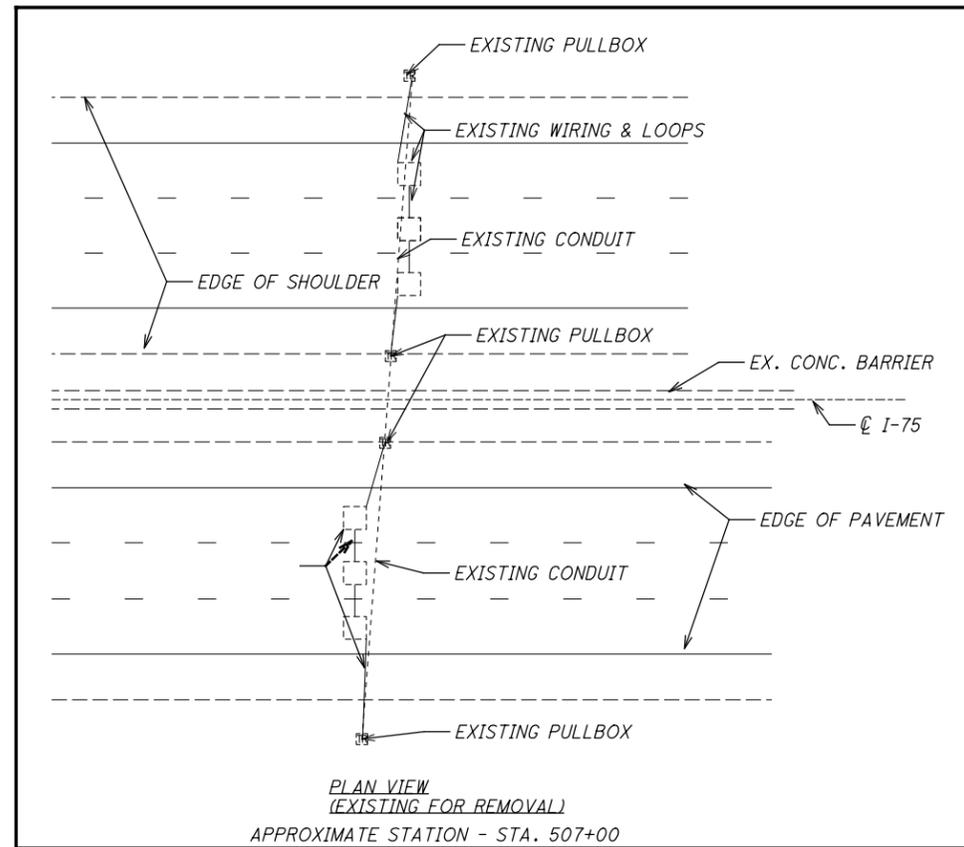
PRIOR TO BEGINNING ANY PAVEMENT/MEDIAN ACTIVITIES BETWEEN STA. 451+35 AND STA. 451+55 THE CONTRACTOR, THE PROJECT ENGINEER AND A REPRESENTATIVE FROM THE OWNER WILL COORDINATE A TIME FOR THE OWNER/ MAINTAINING AGENCY TO DISCONNECT THE EQUIPMENT. FOLLOWING THE DISCONNECTION BY THE OWNER, THE CONTRACTOR WILL BE ALLOWED TO REMOVE THE EXISTING MEDIAN PULL BOXES, WIRING, CONDUIT AND LOOPS. THE EXISTING PULL BOXES ALONG THE OUTSIDE SHALL NOT BE DISTURBED. ALL ITEMS REMOVED SHALL BECOME THE PROPERTY OF THE CONTRACTOR.

DURING THE MEETING, THE OWNER/MAINTAINING AGENCY WILL IDENTIFY EQUIPMENT LOCATIONS. DO NOT DISTURB PULL BOXES, CONTROLLERS, CABINETS, POLES AND CONDUITS. ANY DAMAGE WILL BE THE RESPONSIBLY OF THE CONTRACTOR AND REPAIRS MUST BE ACCEPTED BY THE OWNER.

PAYMENT FOR ALL LABOR, EQUIPMENT AND MATERIALS SHALL BE INCLUDED IN THE ITEM 202 - REMOVAL MISC. : TRAFFIC MONITORING EQUIPMENT.

THE FOLLOWING ITEMS HAVE BEEN CARRIED TO THE GENERAL SUMMARY FOR INSTALLATION OF TRAFFIC MONITORING EQUIPMENT:

ITEM 625 - 3" CONDUIT JACK OR DRILLED	225 FT.
ITEM 625 - PULL BOX, 725.08, 18"	2 EACH



THIS SHEET WAS ADDED TO THE PLAN

I:\ProjectData\LUC\88563\LUC-75-8-42\Design\Roadway\Sheets\88563.GN005.dgn Sheet 2/3/2021 10:52:52 PM afintel

CALCULATED
ALF
CHECKED
JMF

GENERAL NOTES

LUC-75 / 475-7.82 / 14.50

ITEM 614, WORK ZONE SPEED ZONES (WZSZS)

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	COUNTY & ROUTE	DIRECTION
WZ-15216	LUC-75	NB/SB
WZ-15217	LUC-475	EB/WB

POTENTIAL WZSZ LOCATIONS SHALL HAVE AN ORIGINAL (PRE-CONSTRUCTION) POSTED SPEED LIMIT OF =55 MPH, 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. THE PRIMARY SIGNING STRATEGY USES DIGITAL SPEED LIMIT (DSL) SIGN ASSEMBLIES. THE SECONDARY STRATEGY USES TEMPORARY FLATSHEET SPEED LIMIT SIGNS (R2-1) FOR WHEN THERE ARE NO DSL SIGN ASSEMBLIES ON THE APPROVED LIST, OR DSL SIGN ASSEMBLIES ARE NOT AVAILABLE.

WZSZS USING DSL SIGN ASSEMBLIES SHALL BE IN ACCORDANCE WITH THIS NOTE, SUPPLEMENTAL SPECIFICATION (SS) 808, 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 OMTCD 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) MULTI-LANE HIGHWAYS

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

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

ITEM 808, DIGITAL SPEED LIMIT (DSL) SIGN ASSEMBLY 30 SIGN MONTH

I-75: ASSUMING 9 DSL SIGN ASSEMBLIES FOR 3 MONTH

I-475: ASSUMING 3 DSL SIGN ASSEMBLIES FOR 1 MONTH

ITEMS IN THIS NOTE WERE CARRIED TO GENERAL SUMMARY

FLOODLIGHTING

FLOODLIGHTING OF THE WORK SITE FOR OPERATIONS CONDUCTED DURING NIGHTTIME PERIODS SHALL BE ACCOMPLISHED SO THAT THE LIGHTS DO NOT CAUSE GLARE TO THE DRIVERS ON THE ROADWAY. TO ENSURE THE ADEQUACY OF THE FLOODLIGHT PLACEMENT, THE CONTRACTOR AND THE ENGINEER SHALL DRIVE THROUGH THE WORK SITE EACH NIGHT WHEN THE LIGHTING IS IN PLACE AND OPERATIVE PRIOR TO COMMENCING ANY WORK. IF GLARE IS DETECTED, THE LIGHT PLACEMENT AND SHIELDING SHALL BE ADJUSTED TO THE SATISFACTION OF THE ENGINEER BEFORE WORK PROCEEDS.

PAYMENT FOR ALL LABOR, EQUIPMENT AND MATERIALS SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614, MAINTAINING TRAFFIC.

EXTRA ADVANCE WARNING SIGNS (NOTE A)

AN EXTRA ADVANCE WARNING SIGN GROUP CONSISTS OF TWO W20-1 (ROAD WORK AHEAD) SIGNS, TWO W20-5 (RIGHT/LEFT LANE CLOSED AHEAD) SIGNS WITH W16-3A DISTANCE PLATES, AND TWO W3-H7 (WATCH FOR STOPPED TRAFFIC) SIGNS AND REQUIRED WARNING LIGHTS.

THE CONTRACTOR SHALL PROVIDE, ERECT, MAINTAIN AND REMOVE EXTRA ADVANCE WARNING SIGN GROUPS AS SHOWN ON TRAFFIC SCD MT-95.50 AT THE FOLLOWING DISTANCES IN ADVANCE OF THE LANE TAPERS WITH THE APPROPRIATE W16-3A DISTANCE PLATES:

I-75: STAGE 2 NB/SB & STAGE 3 NB/SB AT 2 MILES.

I-475: EB WEEKEND WORK AT 2 MILES.

THE CONTRACTOR SHALL HAVE AN ADDITIONAL EXTRA ADVANCE WARNING SIGN GROUP (6 SIGNS AND 2 DISTANCE PLATES) AVAILABLE FOR USE WHEN DIRECTED BY THE ENGINEER. THE DISTANCE PLATES FOR THIS GROUP SHALL BE ABLE TO BE MODIFIED IN THE FIELD TO SHOW APPROPRIATE WHOLE MILES TO THE LANE TAPER.

PAYMENT FOR PROVIDING, ERECTING, MAINTAINING AND REMOVING EXTRA ADVANCE WARNING SIGN GROUPS SHALL BE INCLUDED IN THE LUMP SUM BID FOR ITEM 614, MAINTAINING TRAFFIC.

APPROVED MAINTENANCE OF TRAFFIC (MOT) POLICY EXCEPTION(S)

PORTIONS OF THE MOT PLANS AS DESCRIBED BELOW HAVE APPROVED MOT EXCEPTION(S) PER TRAFFIC MANAGEMENT IN WORK ZONES POLICY (21-008(P)) AND STANDARD PROCEDURE (123-001(SP)).

APPROVED MOT EXCEPTION(S) INCLUDE:

I-75:
 - I-75 : MAINTAIN MINIMUM LANES OPEN ON I-75 PER DETAILS ON SHEET NO 23.
 - THE SYSTEM RAMP FROM I-280 NB TO I-75 NB MAY BE CLOSED UP TO 4 WEEKEND FROM 9:00PM FRIDAY TO 6:00AM MONDAY.

I-475:
 - THE SYSTEM RAMP FROM I-75 NB TO I-475 WB MAY BE CLOSED FOR ONE WEEKEND FROM 7:00PM TO 6:00AM MONDAY, AND HALF OF AN ADDITIONAL WEEKEND. (29 HRS.)
 - THE SYSTEM RAMP FROM I-75 SB TO I-475 WB MAY BE CLOSED FOR HALF OF ONE WEEKEND. (29 HRS.)
 - I-475 WB MAY BE REDUCED TO TWO LANES FOR ONE WEEKEND.
 - I-475 EB MAY BE REDUCED TO ONE LANE FOR ONE WEEKEND.

A MAINTENANCE OF TRAFFIC MEETING SHALL BE HELD A MINIMUM OF 30 CALENDAR DAYS PRIOR TO IMPLEMENTATION OF EACH APPROVED MOT EXCEPTION. THIS MEETING SHALL INCLUDE THE DISTRICT WORK ZONE TRAFFIC MANAGER AND THE CITY OF TOLEDO AS WELL AS THE CONTRACTOR, WORKSITE TRAFFIC SUPERVISOR (WTS) AND ANY SUBCONTRACTORS INVOLVED WITH TEMPORARY TRAFFIC CONTROL.

IN ADDITION TO ANY NOTIFICATIONS REQUIRED IN OTHER NOTES, THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER AT LEAST 3 BUSINESS DAYS IN ADVANCE OF IMPLEMENTATION OF THE APPROVED MOT EXCEPTION(S) REFERENCED ABOVE SO THAT THE PROJECT ENGINEER CAN SEND EMAIL NOTIFICATION TO THE OFFICE OF ROADWAY ENGINEERING, STATEWIDE TMC, DWZTM AND SPECIAL HAULING PERMITS AT LEAST 2 BUSINESS DAYS IN ADVANCE OF THE IMPLEMENTATION OF THE APPROVED MOT EXCEPTION(S) REFERENCED ABOVE. REFERENCE "EXCEPTION REQUEST APPROVAL DATED 06/30/20 FOR PID 88563 IN THE NOTIFICATION AND OTHER CORRESPONDENCE.

ANY CHANGES TO THE MOT THAT IMPACT THE PREVIOUSLY APPROVED MOT EXCEPTION(S) LISTED ABOVE SHALL BE APPROVED IN WRITING BY THE MOT EXCEPTION COMMITTEE (MOTEC). IN THE EVENT THAT SUCH CHANGES ARE PROPOSED,

THE REQUEST SHALL BE COORDINATED THROUGH THE DISTRICT WORK ZONE TRAFFIC MANAGER (DWZTM) A MINIMUM OF 30 CALENDAR DAYS PRIOR TO THE DESIRED IMPLEMENTATION DATE. IF THE DISTRICT AGREES WITH THE PROPOSED CHANGES THE DWZTM SHALL SEEK APPROVAL FROM THE MOTEC. IN THE EVENT THE PROPOSED CHANGES ARE APPROVED IN WRITING, THE CLOSURES ARE STILL SUBJECT TO NOTIFICATION REQUIREMENTS WITHIN THIS NOTE PRIOR TO IMPLEMENTATION.

I:\ProjectData\LUC\88563\LUC-75-8.42\Design\Roadway\Sheets\88563_MN003.dgn Sheet 2/3/2021 12:49:41 PM afintel

SEQUENCE OF OPERATIONS

CONSTRUCTION SEQUENCING FOR LUC-75.

MILL AND FILL RUMBLE STRIPS AS NECESSARY PRIOR TO THE START OF EACH STAGE.

THE INTENT IS THAT LONGITUDINAL JOINTS SHALL BE PLACED ON THE LANE LINE, EDGE LINE, OR CENTER OF A TRAVELED LANE.

WEDGING AT TRANSVERSE AND LONGITUDINAL JOINTS SHALL BE INSTALLED PER SCD MT-101.90.

STAGE 1: LIMITED TO FOUR WEEKENDS FROM FRIDAY 9PM TO MONDAY 6AM. THE RAMP FROM I-280 NB TO I-75 NB MAY BE CLOSED. A MINIMUM OF TWO LANES ON I-75 NB MUST BE MAINTAINED AT ALL TIMES EXCEPT WHEN ADDITIONAL LANE CLOSURES ARE ALLOWED PER THE PERMITTED LANE CLOSURE SCHEDULE. ALL LANE SHIFTS AND LANE CLOSURES SHALL BE COMPLETED PER SCD MT-95.30 AND SCD MT-102.20.

COMPLETE OVERLAY OF FORWARD AND REAR APPROACH SLABS FOR STRUCTURE LUC-75-0849.

COMPLETE OVERLAY OF FORWARD AND REAR APPROACH SLABS FOR STRUCTURE LUC-75-0861.

COMPLETE DECK SEALING OF STRUCTURE LUC-75-0891.

COMPLETE PAVEMENT REPAIRS AND RESURFACING UP TO THE INTERMEDIATE COURSE FOR THE FOLLOWING LOCATIONS:

RAMP LL STA 19+54/RAMP A STA 351+32- RAMP LL STA 30+03/RAMP A 362+15.
LUC-75 NB FROM STA 363+89 - STA 386+15

STAGE 2: THIS WORK SHALL BE LIMITED TO 10 DAYS. I-75 NB SHALL REMAIN THREE LANES FROM THE I-280 INTERCHANGE UNTIL THE LANE REDUCTION AT STA 407+16, WHERE I-75 NB CAN BE REDUCED TO TWO LANE. ADDITIONAL CLOSURES PERMITTED BY THE PLCS ARE ACCEPTABLE. I-75 SB SHALL REMAIN A MINIMUM OF TWO LANES EXCEPT WHEN ADDITIONAL LANE CLOSURES ARE ALLOWED PER THE PERMITTED LANE CLOSURE SCHEDULE. ALL LANE SHIFTS AND LANE CLOSURES SHALL BE COMPLETED PER SCD MT-95.30 AND SCD MT-102.20.

COMPLETE MEDIAN WALL REPAIR, PAVEMENT REPAIRS AND RESURFACING UP TO THE INTERMEDIATE COURSE FOR THE FOLLOWING LOCATIONS:

THE INSIDE PORTION AND LEFT LANE OF LUC-75 NB FROM STA 389+88.52 TO STA 448+50.

THE INSIDE PORTION AND LEFT LANE OF LUC-75 SB FROM STA 366+88.33 TO STA 448+50.

STAGE 3: THIS WORK SHALL BE LIMITED TO 10 DAYS. I-75 NB & I-75 SB SHALL REMAIN A MINIMUM OF TWO LANES IN EACH DIRECTION EXCEPT WHEN ADDITIONAL LANE CLOSURES ARE ALLOWED PER THE PERMITTED LANE CLOSURE SCHEDULE. ALL LANE SHIFTS AND LANE CLOSURES SHALL BE COMPLETED PER SCD MT-95.30 AND SCD MT-102.20.

COMPLETE PAVEMENT REPAIRS AND RESURFACING UP TO THE INTERMEDIATE COURSE FOR THE FOLLOWING LOCATIONS:

THE CENTER LANE, RIGHT LANE, AND OUTSIDE PORTION OF LUC-75 NB FROM STA 389+88.52 TO STA 448+50.

THE CENTER LANE, RIGHT LANE, AND OUTSIDE PORTION OF LUC-75 SB FROM 366+88.33 TO STA 448+50.

STAGE 4: THIS WORK SHALL BE LIMITED TO 21 DAYS. A MINIMUM OF TWO LANES IN EACH DIRECTION MUST BE MAINTAINED AT ALL TIMES EXCEPT WHEN ADDITIONAL LANE CLOSURES ARE ALLOWED PER THE PERMITTED LANE CLOSURE SCHEDULE. LANE SHIFTS AND LANE CLOSURES SHALL BE COMPLETED PER SCD MT-95.30 AND SCD MT-102.20.

COMPLETED THE PAVEMENT REPAIRS AND RESURFACING UP TO THE INTERMEDIATE COURSE FOR THE INSIDE PORTION FOR I-75 NB & SB FROM STA 450+64.22 TO STA 539+50.

STAGE 5: THIS WORK SHALL BE LIMITED TO 21 DAYS. A MINIMUM OF TWO LANES IN EACH DIRECTION MUST BE MAINTAINED AT ALL TIMES EXCEPT WHEN ADDITIONAL LANE CLOSURES ARE ALLOWED PER THE PERMITTED LANE CLOSURE SCHEDULE. LANE SHIFTS AND THE LANE CLOSURES SHALL BE COMPLETED PER SCD MT-95.30 AND SCD MT-102.20.

COMPLETE THE PAVEMENT REPAIRS AND RESURFACING UP TO THE INTERMEDIATE COURSE FOR THE OUTSIDE PORTION OF LUC-75 NB AND SB FROM STA. 450+64.22 TO STA. 593.50.

STAGE 6: PLACE THE FINAL SURFACE COURSE. A MINIMUM OF 3 LANE MUST BE MAINTAINED AT ALL TIMES FROM 7AM TO 7PM. THE PERMITTED LANE CLOSURE SCHEDULE SHALL BE FOLLOWED ALL OTHER TIMES.

INSTALL PERMANENT PAVEMENT MARKINGS AND ALL OTHER SAFTEY ITEMS.

CONSTRUCTION SEQUENCING FOR LUC-475.

STAGE 1: JOINT REPAIRS

FOR THREE (3) WEEKENDS, CONTRACTOR WILL BE ALLOWED MOT LANE REDUCTION AND CLOSURE PERIODS AS DETAILED BELOW TO PERFORM JOINT REPAIR WORK IN LIEU OF ODOT PERMITTED LANE CLOSURE TABLE TIMEFRAMES ALL WORK NOT COMPLETED DURING THESE 3 WEEKENDS WILL BE SUBJECT TO ODOT'S PERMITTED LANE CLOSURE TABLE. I 475 EXIT RAMPS TO PROMEDICA PARKWAY SHALL REMAIN OPEN AT ALL TIMES.

MILL AND FILL RUMBLE STRIPS PRIOR TO PERFORMING JOINT REPAIR WORK. (TO BE PREFORMED PRIOR TO THE START OF THESE 3 WEEKENDS)

WEEKEND 1: WB REPAIRS ON I-75/I-475 WB SYSTEM RAMPS, UP TO STATION 344+00 +/-.

-CLOSE THE SYSTEM RAMP FROM I-75 NB TO I-475 WB FOR HALF OF THE WEEKEND TO COMPLETE REPAIRS ALONG THE RAMP. REOPEN I75 NB TO I-475 WB SYSTEM RAMP TO WB 475, PRIOR TO PERFORMING 2ND HALF OF WEEKEND WORK.
-CLOSE THE SYSTEM RAMP FROM I-75 SB TO I-475 WB FOR WTHE REMAINING HALF OF THE WEEKEND TO COMPLETE REPAIRS ALONG THE RAMP. (THIS RAMP CLOSURE MUST START BETWEEN THE HOURS OF 9PM AND 6AM.)

WEEKEND 2: REPAIRS ON WB I-475 MAINLINE

-CLOSE THE SYSTEM RAMP FROM I-75 NB TO I-475 WB.
-PERFORM THE PAVEMENT REPAIRS (STATION 344+00+/- TO WEST END OF PROJECT). MAINTAIN MINIMUM TWO OPEN LANES OF TRAFFIC BY USE OF RIGHT SHOULDER AND RIGHT LANE ON I-475 WB. CONTRACTOR MAY REMOVE RIGHT LANE EDGE LINE UP TO 48 HOURS PRIOR TO THE START OF WEEKEND WORK. INSTALL NO EDGE LINE SIGNS. PLACE DRUMS IN CLOSED SHOULDER AREA. PLACE TEMP LANE LINE BETWEEN SHOULDER AND RIGHT LANE, PRIOR TO SHIFTING TRAFFIC TO SHOULDER FOR WEEKEND WORK. AT CONCLUSION OF WEEKEND WORK, RE-CLOSE SHOULDER WITH DRUMS. PLACE TEMPORARY EDGE LINE WITHIN

48 HOURS OF COMPLETING WEEKEND WORK.

-THE RAMP FROM PROMEDICA TO I-475 WB WILL NEED TO BE CLOSED TO REDUCE CONGESTION

WEEKEND 3: REPAIRS NEAR DOUGLAS RD OFF RAMP AND PROMEDICA ON RAMP
-CLOSE THE RIGHT LANE OF I-475 AFTER THE PROMEDICA EXIST RAMP TO MAKE REPAIRS ON THE PROMEDICA ENTRANCE RAMP, DOUGLAS EXIST RAMP, AND RIGHT LANE OF I-475 WB.
-I-475 EB: REDUCE TO ONE LANE (FROM WEST END OF PROJECT UP TO STATION 287+00) FOR 24 HOURS DURING ONE OF THE THREE ALLOTTED WEEKENDS TO COMPLETE THE PAVEMENT REPAIRS. ALL LANES OF EB 475 SHALL REOPEN AS SOON AS JOINT REPAIR WORK IS COMPLETED.

STAGE 2: RESURFACING

RESURFACE I-475 AND COMPLETE ALL SAFETY ITEMS.

A MINIMUM OF 3 LANES MUST BE MAINTAINED AT ALL TIMES FROM 7AM TO 7PM. A MINIMUM OF 2 LANES MUST BE MAINTAINED ON ALL SYSTEM RAMPS AND MUST BE MAINTAINED FROM 7AM TO 7PM. THE PERMITTED LANE CLOSURE SCHEDULE SHALL BE FOLLOWED ALL OTHER TIMES.

DESCRIPTION OF CRITICAL LANE/RAMP TO BE MAINTAINED	TIME UNIT	DISINCENTIVE, MONEY TIME UNIT
MAINTAIN A MINIMUM 2 LANES OF I-75	/MIN	\$100
MAINTAIN A MINIMUM OF 3 LANES OF I-75 NB DURING STAGE 2	/MIN	\$100
ALL STAGE COMPLETED WITHIN TIMEFRAME DESCRIBED IN THE CONSTRUCTION SEQUENCING	/HR	\$1000
SYSTEM RAMP CLOSURES	/15 MIN	\$1000

Ramp Closure	Maintenance of Traffic Operation	Detour
Related to I-75 Work		
I-280 NB to I-75 NB	May be closed up to 4 weekends according to the construction sequencing.	I-75 SB to Expressway Dr to I-75 NB
Ramp LL (Manhattan to I-75 NB)	May be closed up to 4 weekends according to the construction sequencing.	Manhattan Blvd to Phillips Ave to I-75 NB
I-75 NB to Ottawa River Rd	This ramp may be closed up to 5 nights from 9PM to 6AM.	I-75 NB to Alexis Rd to Suder Ave
Ottawa River Rd to I-75 SB	This ramp may be closed up to 5 nights from 9PM to 6AM.	Suder Ave to Alexis Rd to I-75 SB
I-75 NB to Alexis Rd	This ramp may be closed up to 5 nights from 9PM to 6AM.	I-75 NB to Erie Rd to I-75 SB
Alexis Rd to I-75 NB	This ramp may be closed up to 5 nights from 9PM to 6AM.	I-75 SB to Expressway Dr to I-75 NB
I-75 SB to Alexis Rd	This ramp may be closed up to 5 nights from 9PM to 6AM.	I-75 SB to Expressway Dr to I-75
Alexis Rd to I-75 SB	This ramp may be closed up to 5 nights from 9PM to 6AM.	I-75 NB to Erie Rd to I-75 SB
Related to I-475 Work		
I-75 NB to I-475 WB	May be closed up to one full weekend and up to 29 hours of an additional weekend according to the construction sequencing.	I-75 NB to Phillips Ave to I-75 SB
I-75 SB to I-475 WB	May be closed up to 29 hours of one weekend according to the construction sequencing.	I-75 SB to Detroit Ave to I-75 NB
Promedica Pkwy to I-475 WB	May be closed for two weekends according to the construction sequencing.	Promedica Pkwy to Central Ave to Monroe St to Douglas Rd to I-475 WB
I-475 WB to Douglas Rd	May be closed for one weekend according to the construction sequencing.	I-475 WB to Secor Rd to I-475 EB

THE SEQUENCE OF CONSTRUCTION WAS MODIFIED IN THIS NOTE

I:\ProjectData\LUC\88563\LUC-75-8-42\Design\Roadway\Sheets\88563_MN005.dgn Sheet 2/3/2021 10:02:58 PM afintel

DELINEATION OF PORTABLE AND PERMANENT BARRIER

BARRIER REFLECTORS AND OBJECT MARKERS SHALL BE INSTALLED ON ALL PORTABLE BARRIER (PB) USED FOR TRAFFIC CONTROL; AND, ON PERMANENT CONCRETE BARRIER (INCLUDING BRIDGE PARAPETS) LOCATED WITHIN 5 FEET OF THE EDGE OF THE ADJACENT TRAVEL LANE.

BARRIER REFLECTORS SHALL CONFORM TO C&MS 626, EXCEPT THAT THE SPACING SHALL BE AS PER TRAFFIC SCD MT-101.70. OBJECT MARKERS AND THEIR INSTALLATION SHALL CONFORM TO C&MS 614.03 AND SCD MT-101.70. WHEN THE PB CONTAINS GLARE SCREEN, ONE SET OF THREE VERTICAL STRIPES OF SHEETING SHALL BE CONSIDERED EQUIVALENT TO AN OBJECT MARKER, ONE-WAY.

[INCREASED BARRIER DELINEATION, AS SPECIFIED HEREIN, SHALL BE INSTALLED ON ALL PB AND PERMANENT CONCRETE BARRIER LOCATED WITHIN 5 FEET OF THE EDGE OF THE TRAVELED LANE UNDER EITHER OF THE FOLLOWING CONDITIONS: ALONG TAPERS AND TRANSITION AREAS; OR ALONG CURVES (OUTSIDE ONLY) WITH DEGREE OF CURVATURE GREATER THAN OR EQUAL TO 3 DEGREES.]

[THE INCREASED BARRIER DELINEATION SHALL CONSIST OF EITHER DELINEATION PANELS OR THE TRIPLE STACKING OF WORK ZONE BARRIER REFLECTORS.]

[DELINEATION PANELS SHALL CONSIST OF PANELS OF DELINEATION, APPROXIMATELY 34 INCHES LONG AND 6 INCHES WIDE AND SHALL BE "CRIMPED." PANELS SHALL BE INSTALLED AND SPACED PER TRAFFIC SCD MT-101.70.]

[TRIPLE-STACKED BARRIER REFLECTORS SHALL CONSIST OF ALIGNING THREE BARRIER REFLECTORS VERTICALLY, AT LOCATIONS WHERE A SINGLE BARRIER REFLECTOR WOULD BE OTHERWISE ATTACHED. THERE SHALL BE NO OPEN SPACE BETWEEN THE ADJACENT BARRIER REFLECTORS. THE TRIPLE-STACKED BARRIER REFLECTORS SHALL CONFORM TO C&MS 626, EXCEPT THAT THEY SHALL BE SPACED AND ALIGNED PER TRAFFIC SCD MT-101.70.]

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE PLANS AND CARRIED TO THE GENERAL SUMMARY:

ITEM 614, BARRIER REFLECTOR, TYPE 1, ONE-WAY	942 EACH
ITEM 614, OBJECT MARKER, ONE-WAY	236 EACH
ITEM 614, OBJECT MARKER, TWO-WAY	353 EACH
ITEM 614, INCREASED BARRIER DELINEATION	2301 FT

PAYMENT SHALL BE FULL COMPENSATION FOR ALL MATERIAL, LABOR, INCIDENTALS AND EQUIPMENT NECESSARY FOR FURNISHING, INSTALLING, MAINTAINING AND REMOVING EACH OF THE ABOVE ITEMS.

DELINEATION OF TEMPORARY AND PERMANENT GUARDRAIL

BARRIER REFLECTORS SHALL BE INSTALLED ON ALL TEMPORARY GUARDRAIL USED FOR TRAFFIC CONTROL; AND, ON ALL PERMANENT GUARDRAIL LOCATED WITHIN 5 FEET OF THE EDGE OF THE ADJACENT TRAVEL LANE. BARRIER REFLECTORS SHALL CONFORM TO C&MS 626 AND THE SPACING SHALL BE APPROXIMATELY 50 FEET.

[OBJECT MARKERS SHALL BE INSTALLED ON ALL TEMPORARY AND PERMANENT GUARDRAIL LOCATED WITHIN 5 FEET OF THE EDGE OF THE ADJACENT TRAVEL LANE. GUARDRAIL-MOUNTING OF OBJECT MARKERS SHALL BE MADE BY INSTALLING THE OBJECT MARKERS ON THE EXTENSION BLOCKS RATHER THAN DIRECTLY ONTO THE GUARDRAIL ITSELF. OBJECT MARKERS SHALL CONFORM TO C&MS 614.03 AND THE SPACING SHALL BE APPROXIMATELY 50 FEET WITH A 25 FOOT OFFSET FROM THE BARRIER REFLECTORS.]

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE PLANS AND CARRIED TO THE GENERAL SUMMARY:

ITEM 614, BARRIER REFLECTOR, TYPE 5, ONE WAY	210 EACH
ITEM 614, OBJECT MARKER, ONE-WAY	201 EACH

PAYMENT SHALL BE FULL COMPENSATION FOR ALL MATERIAL, LABOR, INCIDENTALS AND EQUIPMENT NECESSARY FOR FURNISHING, INSTALLING, MAINTAINING AND REMOVING THE ABOVE ITEM(S).

WORKSITE TRAFFIC SUPERVISOR

SUBJECT TO APPROVAL OF THE ENGINEER, THE CONTRACTOR SHALL EMPLOY AND IDENTIFY (SOMEONE OTHER THAN THE SUPERINTENDENT) A PREQUALIFIED WORKSITE TRAFFIC SUPERVISOR (WTS) BEFORE STARTING WORK IN THE FIELD. THE WTS SHALL BE TRAINED IN ACCORDANCE WITH CMS 614.03, SHALL HAVE SUCCESSFULLY COMPLETED ODOT ADMINISTERED WTS TESTING (AND RE-TESTING WHEN APPLICABLE) AND BE LISTED ON THE ODOT PREQUALIFIED WTS ROSTER. PREQUALIFICATION EXPIRES EVERY 5 YEARS. RE-TESTING SHALL BE SUCCESSFULLY REPEATED EVERY 5 YEARS TO REMAIN PREQUALIFIED.

THE NAME OF THE PREQUALIFIED WTS AND RELATED 24-HOUR CONTACT INFORMATION SHALL BE PROVIDED TO THE ENGINEER AT THE PRECONSTRUCTION CONFERENCE. IF THE DESIGNATED WTS WILL NOT BE AVAILABLE FULL TIME (24/7), THE CONTRACTOR MAY DESIGNATE AN ALTERNATE (SECONDARY) WTS TO BE AVAILABLE WHEN THE PRIMARY IS OFF DUTY; HOWEVER THE PRIMARY WTS SHALL REMAIN THE POINT OF CONTACT AT ALL TIMES. ANY ALTERNATE (SECONDARY) WTS IS SUBJECT TO THE SAME TRAINING, PREQUALIFICATION AND OTHER REQUIREMENTS OUTLINED WITHIN THIS PLAN NOTE. AT ALL TIMES THE ENGINEER, OR ENGINEER'S REPRESENTATIVES, MUST BE INFORMED OF WHO THE PRIMARY WTS (AND SECONDARY WTS, IF APPLICABLE) IS AT THE CURRENT TIME.

THE WTS POSITION HAS THE PRIMARY RESPONSIBILITY OF IMPLEMENTING THE TRAFFIC MANAGEMENT PLAN (TMP), MONITORING THE SAFETY AND MOBILITY OF THE ENTIRE WORK ZONE, AND CORRECTING TEMPORARY TRAFFIC CONTROL (TTC) DEFICIENCIES FOR THE ENTIRE WORK ZONE. THE WTS, AND ALTERNATE WTS WHEN ON DUTY, SHALL HAVE SUFFICIENT AUTHORITY TO EFFECTIVELY CARRY OUT THE IDENTIFIED WTS RESPONSIBILITIES AND DUTIES. THE DUTIES OF THE WTS ARE AS FOLLOWS:

1. BE AVAILABLE ON A 24-HOUR PER DAY BASIS.
2. BE ON SITE FOR ALL EMERGENCY TTC NEEDS WITHIN ONE HOUR OF NOTIFICATION BY POLICE OR PROJECT STAFF, AND EFFECT CORRECTIVE MEASURES IMMEDIATELY ON EXISTING WORK ZONE TTC DEVICES.
3. ATTEND PRECONSTRUCTION MEETING AND ALL PROJECT MEETINGS WHERE TTC MANAGEMENT IS DISCUSSED.

4. BE AVAILABLE ON SITE FOR OTHER MEETINGS OR DISCUSSIONS WITH THE ENGINEER UPON REQUEST.
5. BE AWARE OF ALL EXISTING AND PROPOSED TTC OPERATIONS OF THE CONTRACTOR, SUBCONTRACTORS AND SUPPLIERS, AND ENSURE COORDINATION OCCURS BETWEEN THEM TO ELIMINATE CONFLICTING TEMPORARY AND/OR PERMANENT TRAFFIC CONTROL.
6. COORDINATE PROJECT ACTIVITIES WITH ALL LAW ENFORCEMENT OFFICERS (LEOS). THE WTS SHALL ALSO BE THE MAIN CONTACT PERSON WITH THE LEOS WHILE LEOS ARE ON THE PROJECT.
7. COORDINATE AND FACILITATE MEETINGS WITH ODOT PERSONNEL, LEOS AND OTHER APPLICABLE ENTITIES BEFORE EACH PLAN PHASE SWITCH TO DISCUSS THE WORK ZONE TTC FOR IMPLEMENTING THE PHASE SWITCH. SUBMIT A WRITTEN DETAIL OF MOT OPERATIONS AND SCHEDULE OF EVENTS TO IMPLEMENT THE SWITCH BETWEEN PHASE PLANS TO THE ENGINEER 5 CALENDAR DAYS PRIOR TO THIS MEETING.
8. BE PRESENT, ON SITE FOR, AND INVOLVED WITH, EACH TTC SET UP/TAKE DOWN AND EACH PHASE CHANGE IN ACCORDANCE WITH CMS 614.03.
9. ON A CONTINUAL BASIS ENSURE THAT THE TTC ZONE AND ALL RELATED DEVICES ARE INSTALLED, MAINTAINED AND REMOVED IN COMPLIANCE WITH THE CONTRACT DOCUMENTS.
10. ON A CONTINUAL BASIS FACILITATE CORRECTIVE ACTION(S) NECESSARY TO BRING DEFICIENT TTC ZONES AND ALL RELATED DEVICES INTO COMPLIANCE WITH CONTRACT DOCUMENTS IN THE TIMEFRAME DETERMINED BY THE ENGINEER.
11. INSPECT, EVALUATE, PROPOSE NECESSARY MODIFICATIONS TO, AND DOCUMENT THE EFFECTIVENESS OF, THE TTC DEVICES AND TRAFFIC OPERATIONS ON A DAILY BASIS (7 DAYS A WEEK). IN ADDITION, PERFORM ONE WEEKLY NIGHT INSPECTION OF THE WORK ZONE SETUP FOR DAYTIME WORK OPERATIONS; AND ONE DAYTIME INSPECTION PER WEEK FOR NIGHTTIME PROJECTS. THIS SHALL INCLUDE (BUT NOT BE LIMITED TO) DOCUMENTATION ON THE FOLLOWING PROJECT EVENTS:
 - A. INITIAL TTC SETUP (DAY AND NIGHT REVIEW).
 - B. DAILY TTC SETUP AND REMOVAL.
 - C. WHEN CONSTRUCTION STAGING CAUSES A CHANGE IN THE TTC SETUP.
 - D. CRASH OCCURRENCES WITHIN THE CONSTRUCTION AREA AND WITHIN THE INFLUENCE AREA(S) APPROACHING THE WORK ZONE.
 - E. REMOVAL OF TTC DEVICES AT THE END OF A PHASE OR PROJECT.
 - F. ALL OTHER EMERGENCY TTC NEEDS.

12. COMPLETE THE DEPARTMENT APPROVED LONG TERM INSPECTION FORM (CA-D-8) AFTER EACH INSPECTION AS REQUIRED IN # 11 AND SUBMIT IT TO THE ENGINEER THE FOLLOWING WORKDAY. THESE REPORTS SHALL INCLUDE A CHECKLIST OF ALL TTC MAINTENANCE ITEMS TO BE REVIEWED. A COPY OF THE FORM WILL BE PROVIDED AT THE PRE-CONSTRUCTION MEETING. ANY DEFICIENCIES OBSERVED SHALL BE NOTED, ALONG WITH RECOMMENDED OR COMPLETED CORRECTIVE ACTIONS AND THE DATES BY WHICH SUCH CORRECTIONS WERE, OR WILL BE, COMPLETED. A COPY OF THE CURRENT CA-D-8 DOCUMENT CAN BE FOUND ON THE OFFICE OF CONSTRUCTION ADMINISTRATION'S INSPECTION FORMS WEBSITE.

13. HAVE COPIES OF THE ODOT TEMPORARY TRAFFIC CONTROL MANUAL AND CONTRACT DOCUMENTS AVAILABLE AT ALL TIMES ON THE PROJECT.

THE DEPARTMENT WILL DEDUCT:

- A. THE PRORATED DAILY AMOUNT OF ITEM 614 MAINTAINING TRAFFIC FOR ANY DAY IN WHICH THE WTS FAILS TO PERFORM THE DUTIES SET FORTH ABOVE. THE PRORATED DAILY AMOUNT WILL BE EQUAL TO THE ORIGINAL BID AMOUNT FOR ITEM 614 MAINTAINING TRAFFIC DIVIDED BY THE DIFFERENCE BETWEEN THE ORIGINAL COMPLETION DATE AND THE FIRST DAY OF WORK, IN CALENDAR DAYS.
- B. 1% OF THE ORIGINAL BID AMOUNT FOR ITEM 614 MAINTAINING TRAFFIC FOR ANY DAY THAT A TTC ISSUE IS IDENTIFIED IN THE FIELD AND IS NOT CORRECTED IN THE GIVEN TIMEFRAME PER THE ENGINEER. DEDUCTION B SHALL NOT APPLY TO SITUATIONS COVERED BY DEDUCTION C.
- C. 1% OF THE ORIGINAL BID AMOUNT FOR ITEM 614 MAINTAINING TRAFFIC FOR ANY DAY THAT A LANE OR RAMP IS BLOCKED (FULLY OR PARTIALLY) WITHOUT TTC, AS DETERMINED BY THE ENGINEER. THIS DEDUCTION SHALL BE IN ADDITION TO ANY OTHER DISINCENTIVES ESTABLISHED FOR UNAUTHORIZED LANE USE.

FOR DAYS IN WHICH MORE THAN ONE DEDUCTION LISTED ABOVE OCCUR, THE HIGHEST DEDUCTION AMOUNT WILL APPLY.

IF THREE OR MORE TOTAL DAYS RESULT IN TTC ISSUES DESCRIBED IN DEDUCTION B OR C ABOVE, THE PRIMARY WTS SHALL BE IMMEDIATELY REMOVED FROM THE WORK IN ACCORDANCE WITH C&MS 108.05. UPON REMOVAL THE ENGINEER SHALL NOTIFY ODOT CENTRAL OFFICE (WTSPREQUALIFICATION@DOT.OHIO.GOV) TO REGISTER A REMOVAL AGAINST THE STATEWIDE PREQUALIFICATION FOR THE PRIMARY WTS. THREE REMOVALS SHALL CAUSE STATEWIDE DISQUALIFICATION FOR ANY PREVIOUSLY PREQUALIFIED WTS.

PAYMENT FOR THE ABOVE REQUIREMENTS, RESPONSIBILITIES AND DUTIES SHALL BE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 614, MAINTAINING TRAFFIC.

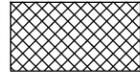
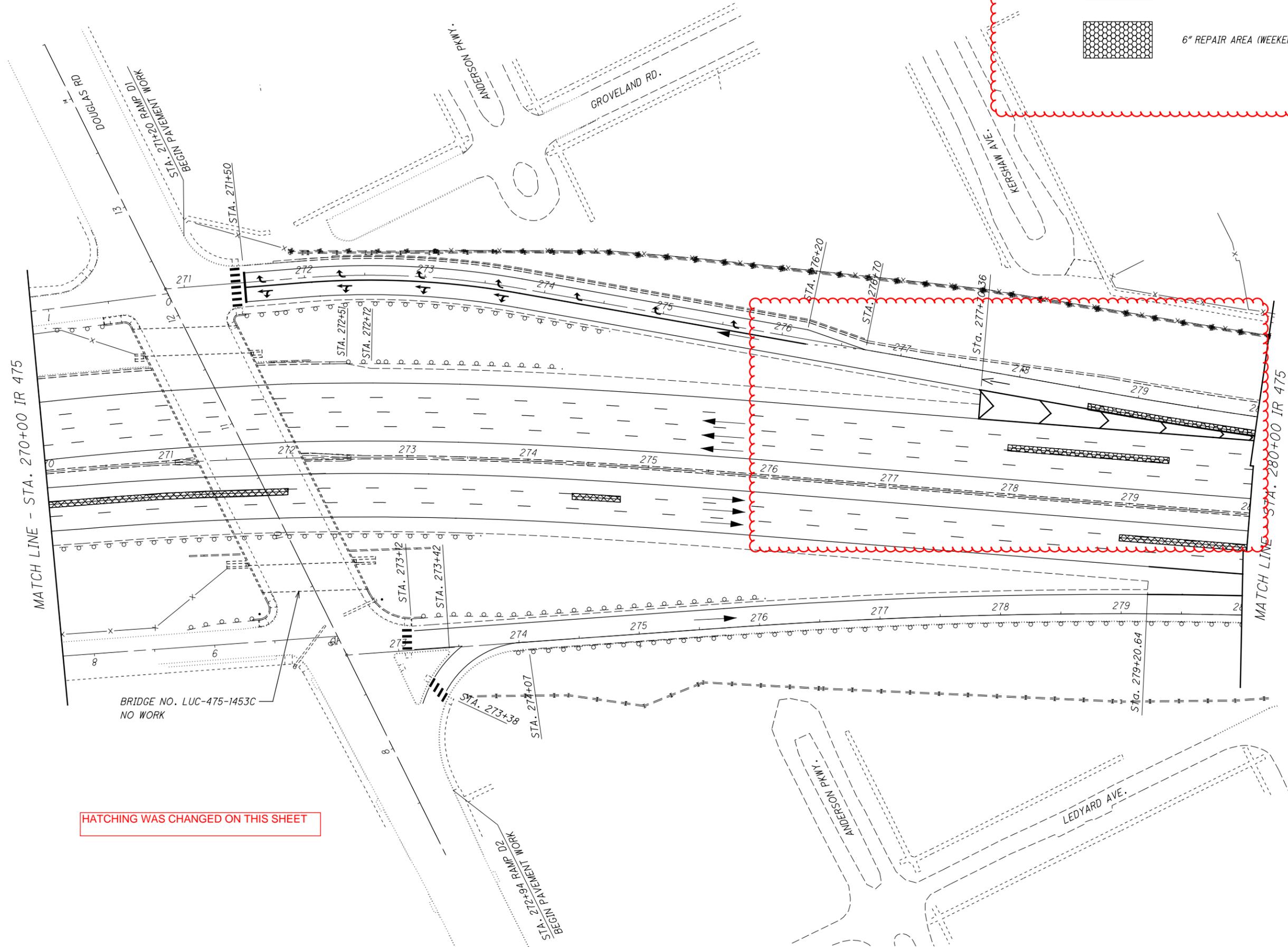
THIS SHEET WAS ADDED AND QUANTITIES CARRIED TO THE GEN SUM

MATCH LINE - STA. 270+00 IR 475

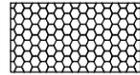
MATCH LINE STA. 280+00 IR 475

BRIDGE NO. LUC-475-1453C
NO WORK

HATCHING WAS CHANGED ON THIS SHEET



6" REPAIR AREA (WEEKEND 1 AND 3)



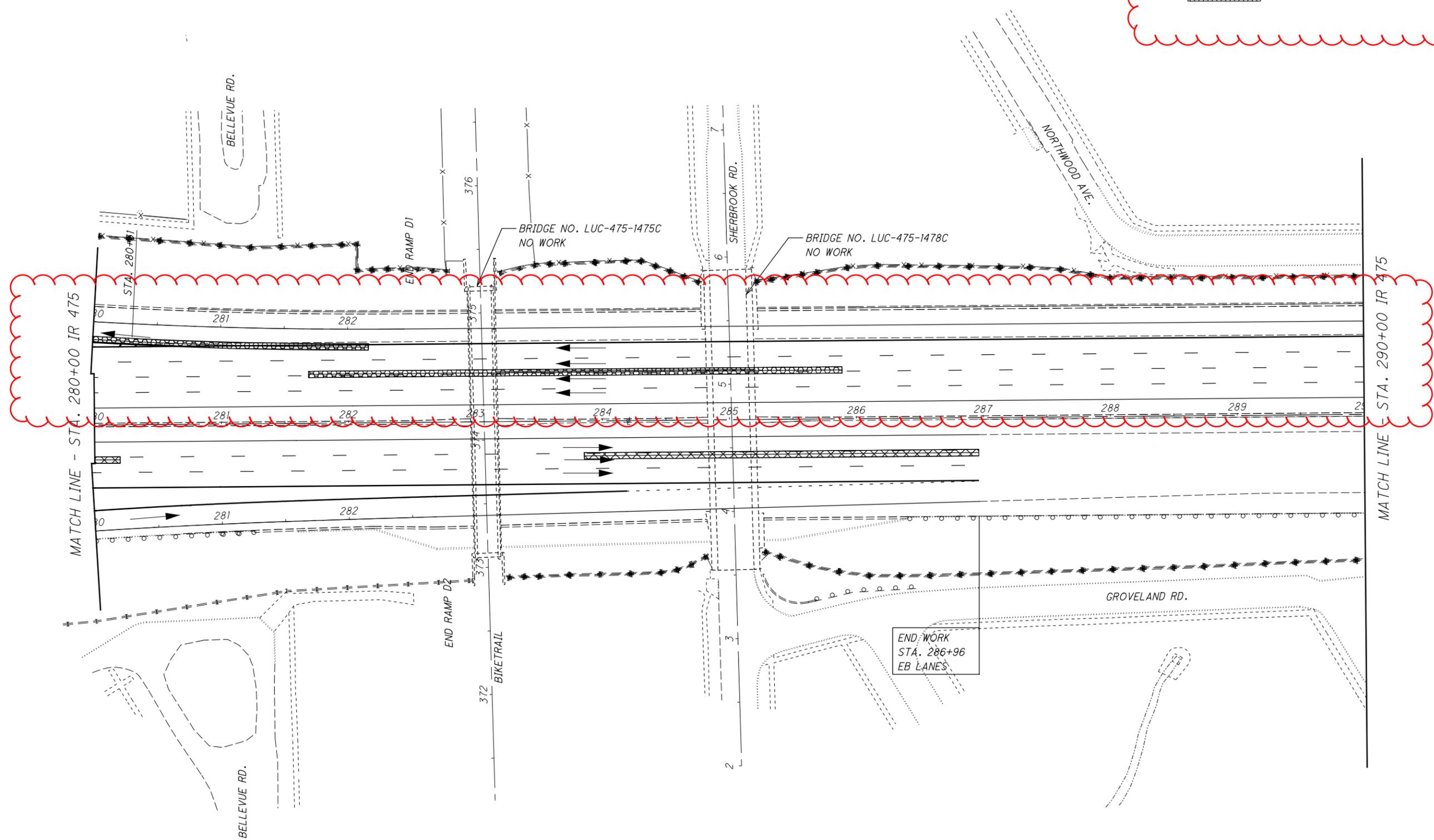
6" REPAIR AREA (WEEKEND 2)

CALCULATED ALF
CHECKED JMF

0 20 40 80
HORIZONTAL SCALE IN FEET

REPAIR LOCATIONS DETAIL SHEET I-475
STA. 270+00 TO STA. 280+00

LUC-75 / 475-7.82 / 14.50



6" REPAIR AREA (WEEKEND 1 AND 3)

6" REPAIR AREA (WEEKEND 2)

CALCULATED ALF
CHECKED JMF

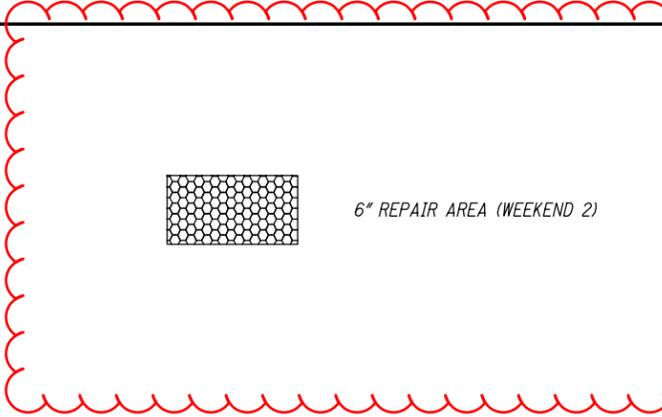
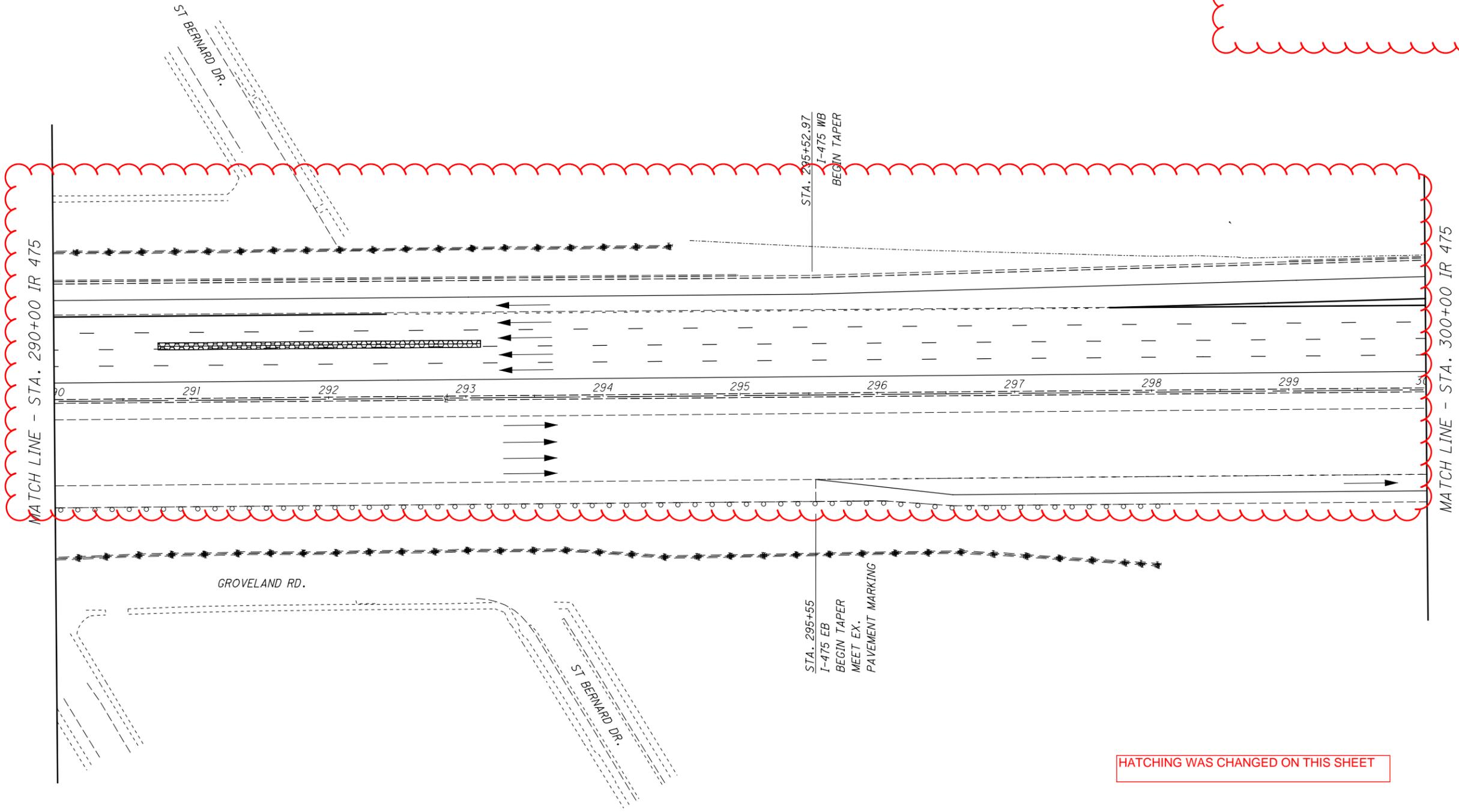
0 20 40 80
HORIZONTAL SCALE IN FEET

REPAIR LOCATIONS DETAIL SHEET I-475
STA. 280+00 TO STA. 290+00

LUC-75 / 475-7.82 / 14.50

HATCHING WAS CHANGED ON THIS SHEET

END WORK
STA. 286+96
EB LANES



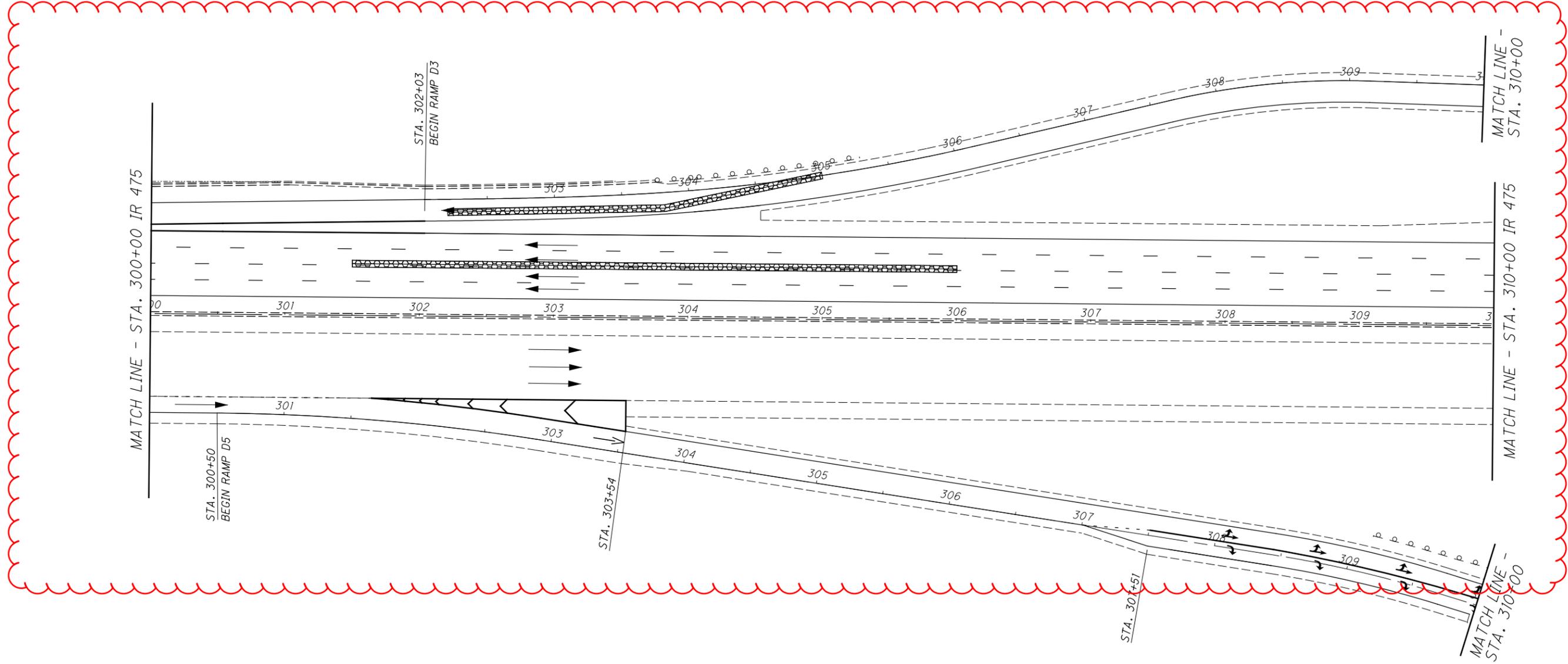
CALCULATED BY ALF
 CHECKED BY JMF

20
40
80
HORIZONTAL SCALE IN FEET

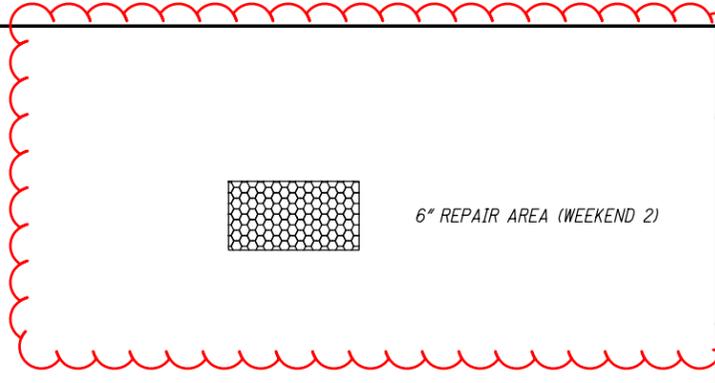
REPAIR LOCATIONS DETAIL SHEET I-475
STA. 290+00 TO STA. 300+00

LUC-75 / 475-7.82 / 14.50

HATCHING WAS CHANGED ON THIS SHEET



HATCHING WAS CHANGED ON THIS SHEET

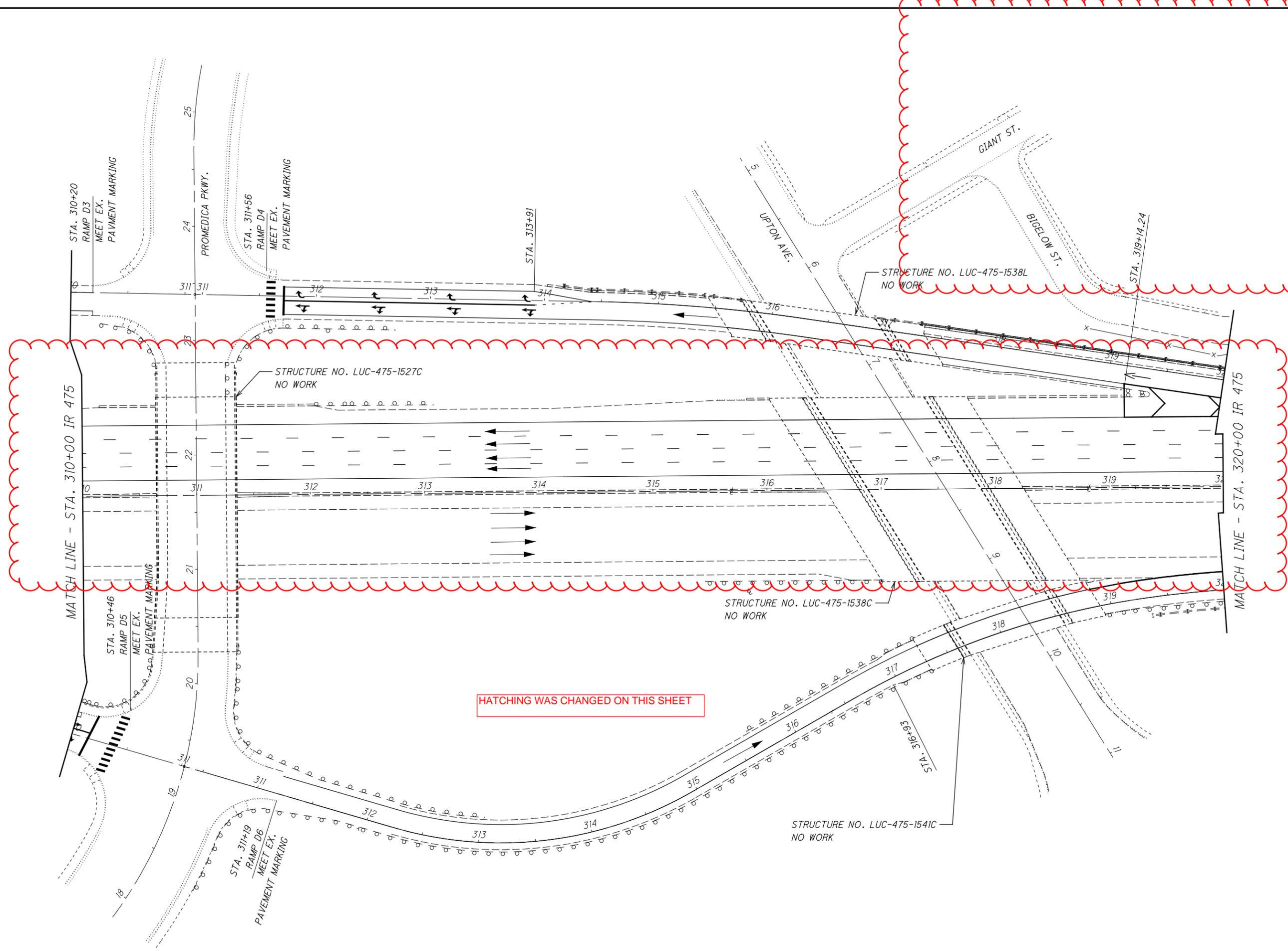


CALCULATED BY ALF
 CHECKED BY JMF

0 0 0
 HORIZONTAL SCALE IN FEET

REPAIR LOCATIONS DETAIL SHEET I-475
STA. 300+00 TO STA. 310+00

LUC-75 / 475-7.82 / 14.50



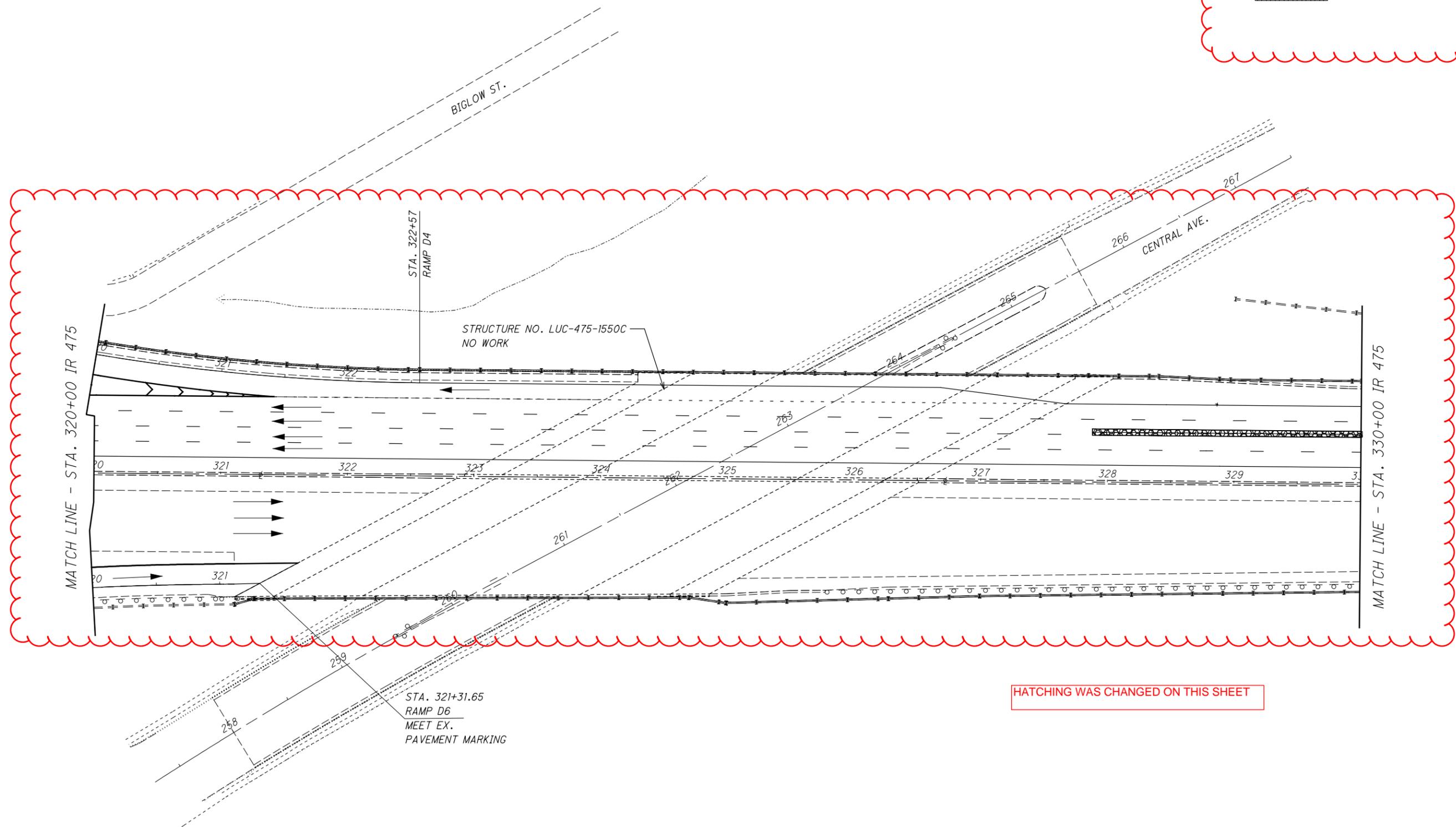
HATCHING WAS CHANGED ON THIS SHEET

CALCULATED ALF
 CHECKED JMF
 HORIZONTAL SCALE IN FEET
 0 20 40 80

REPAIR LOCATIONS DETAIL SHEET
L-475
STA. 310+00 TO STA. 320+00

LUC-75 / 475-7.82 / 14.50

I:\ProjectData\LUC\88563\LUC-75-8.42\Design\Roadway\Sheets\88563_MD_GPI7.dgn Sheet 2/3/2021 11:32 AM afintel



6" REPAIR AREA (WEEKEND 2)

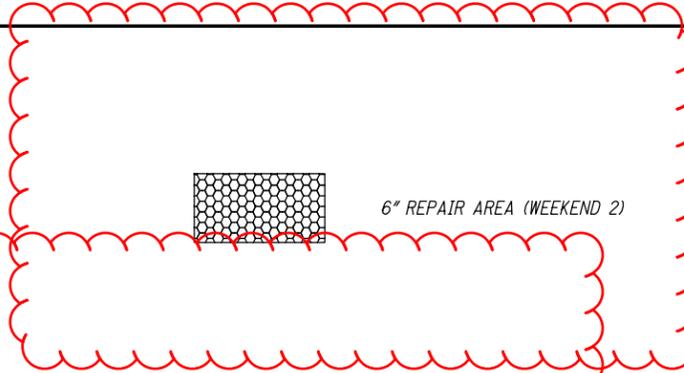
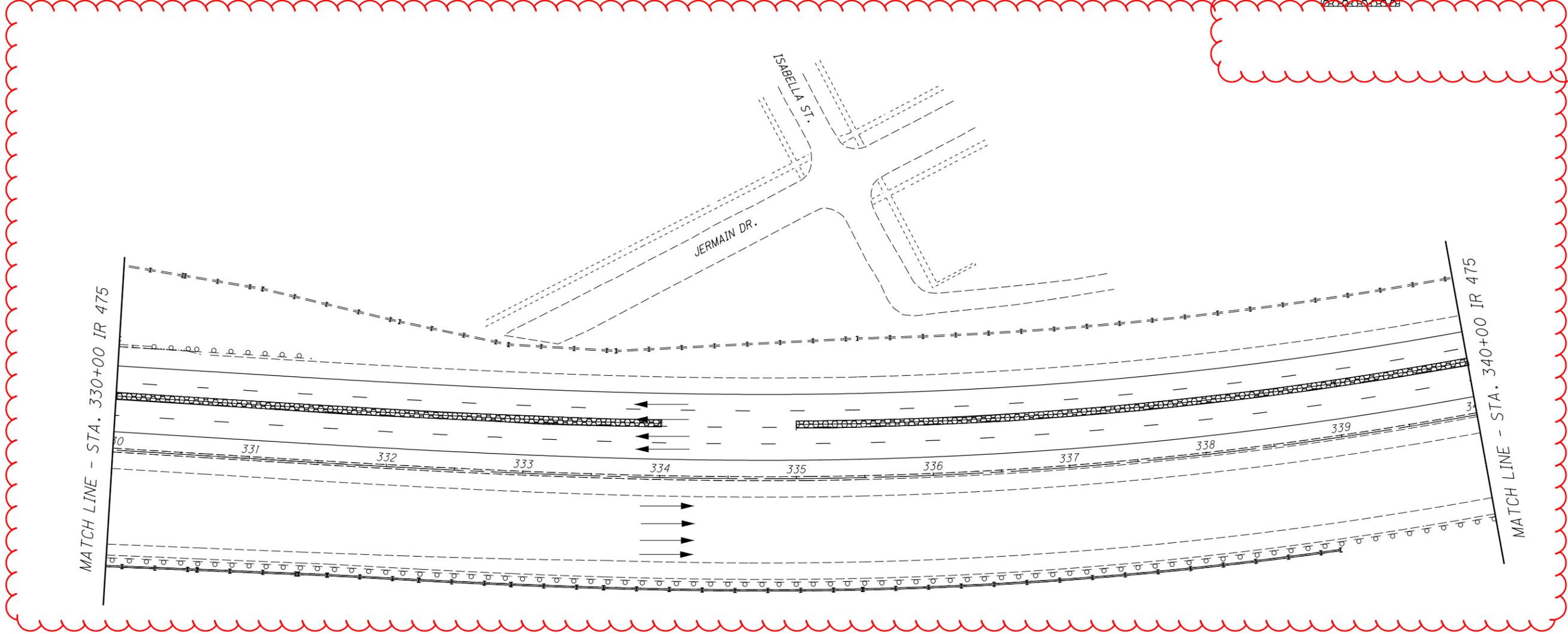
CALCULATED ALF
CHECKED JMF

HATCHING WAS CHANGED ON THIS SHEET

CALCULATED ALF
CHECKED JMF

REPAIR LOCATIONS DETAIL SHEET I-475
STA. 320+00 TO STA. 330+00

LUC-75 / 475-7.82 / 14.50



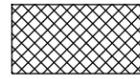
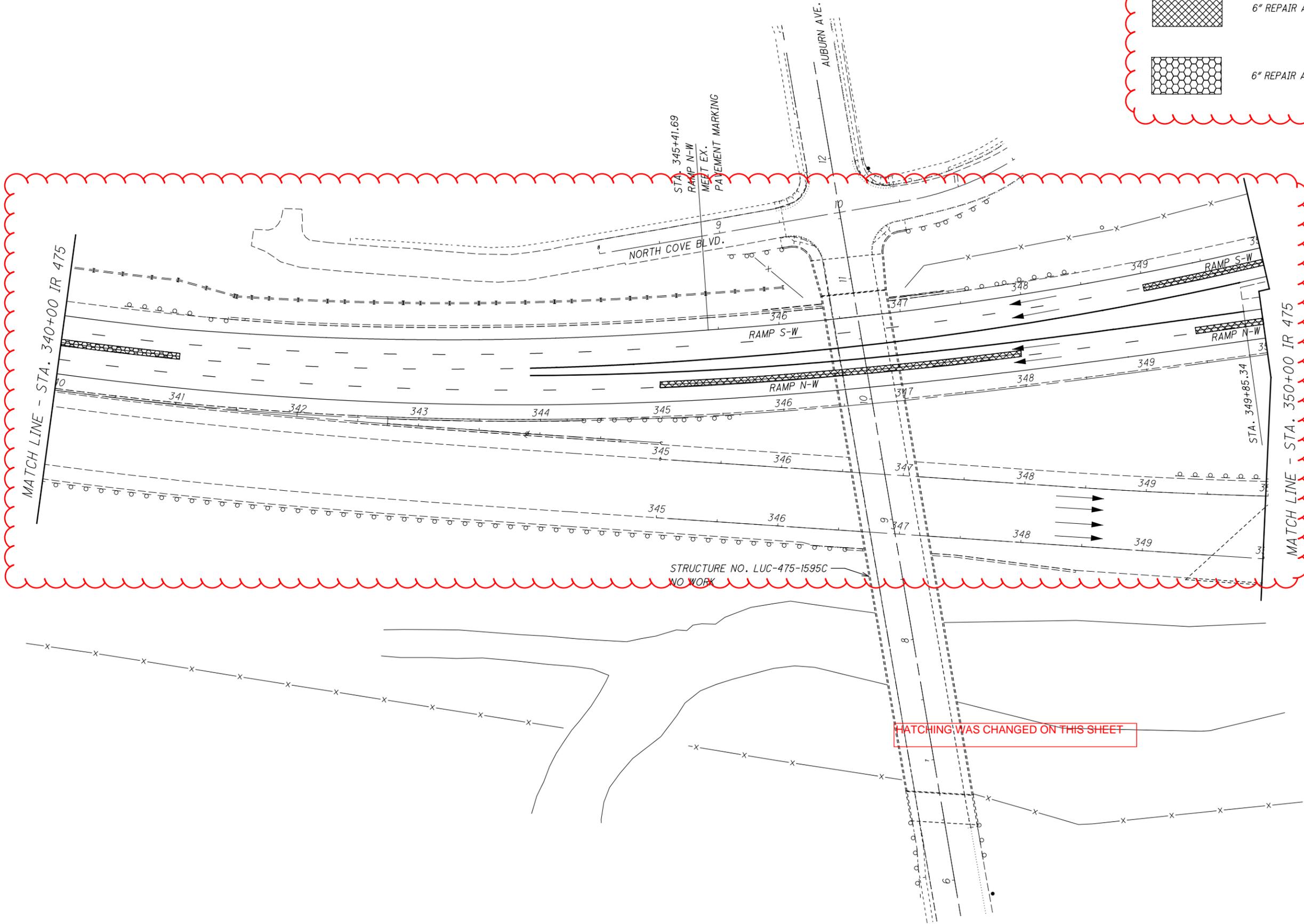
CALCULATED
ALF
CHECKED
JMF

0 20 40 80
HORIZONTAL
SCALE IN FEET

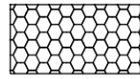
**REPAIR LOCATIONS DETAIL SHEET I-475
STA. 330+00 TO STA. 340+00**

LUC-75/475-7.82/14.50

HATCHING WAS CHANGED ON THIS SHEET



6" REPAIR AREA (WEEKEND 1)



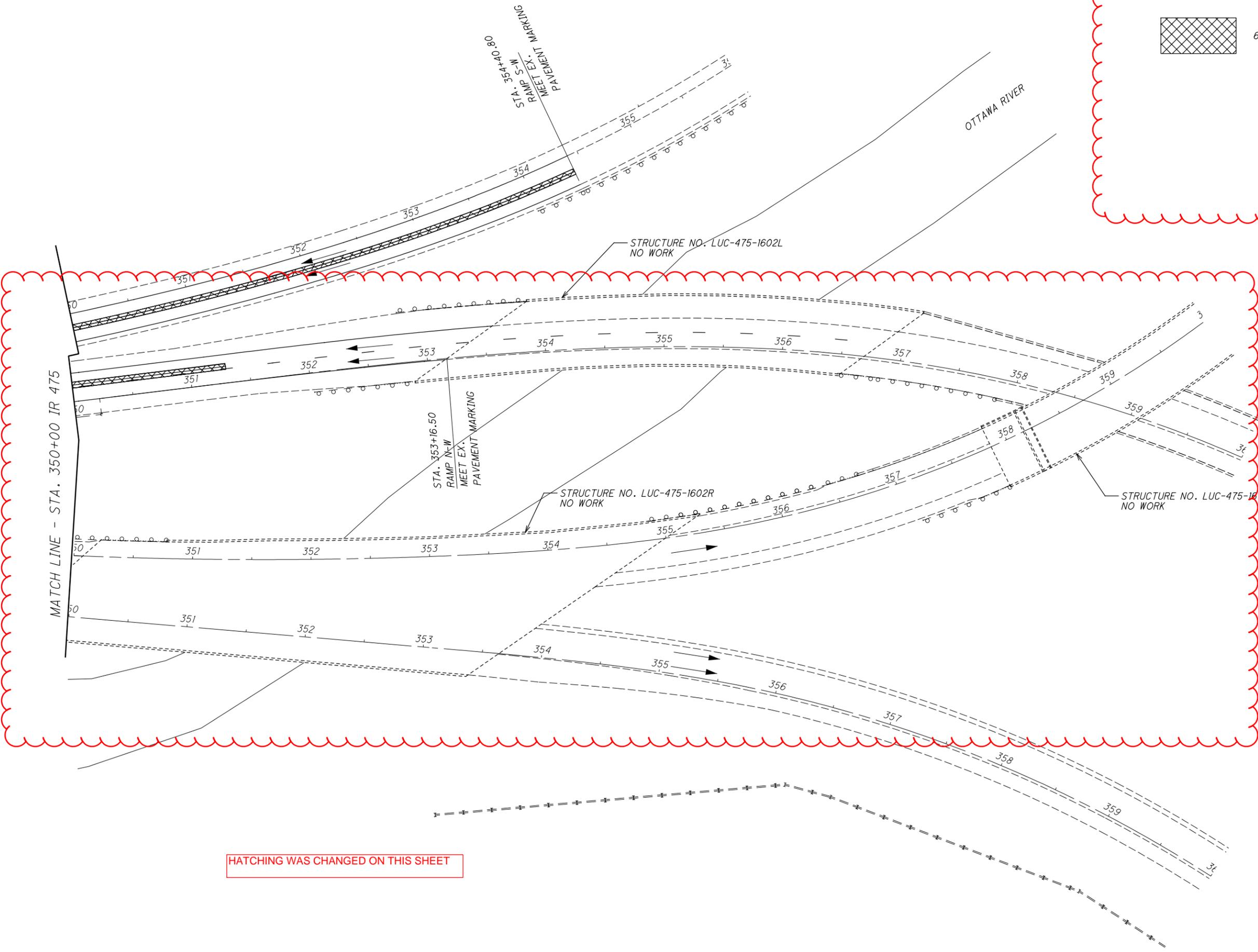
6" REPAIR AREA (WEEKEND 2)



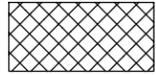
CALCULATED	ALF
CHECKED	JMF

REPAIR LOCATIONS DETAIL SHEET I-475
LUC-75 / 475-7.82 / 14.50

LUC-75 / 475-7.82 / 14.50



HATCHING WAS CHANGED ON THIS SHEET



6" REPAIR AREA





 HORIZONTAL SCALE IN FEET

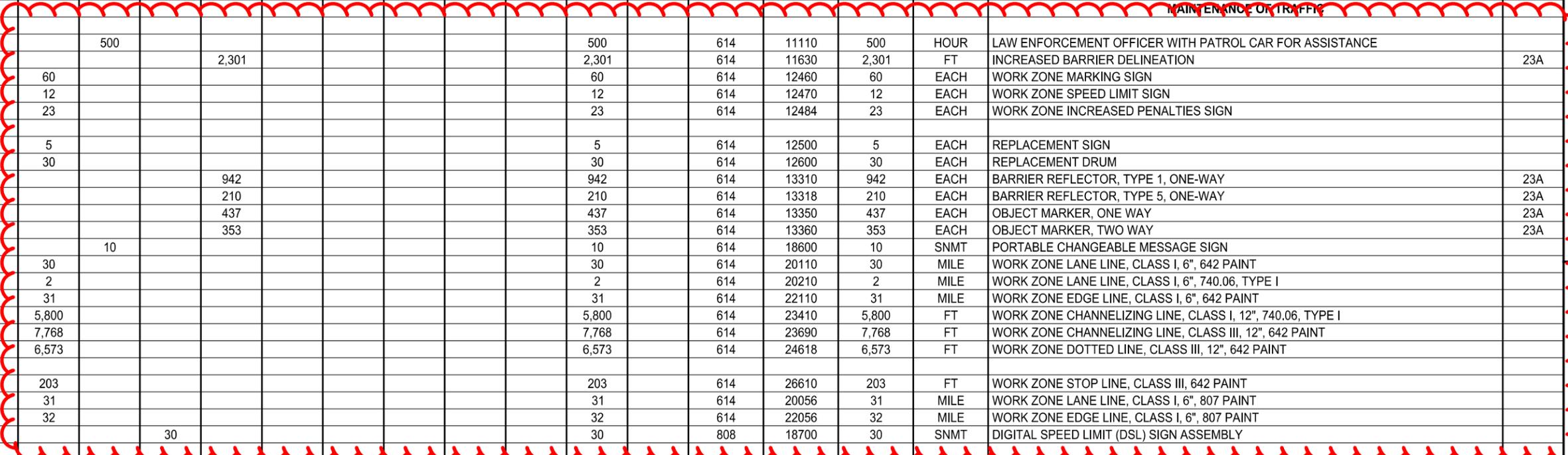
REPAIR LOCATIONS DETAIL SHEET I-475
STA. 350+00 TO STA. 360+00

LUC-75 / 475-7.82 / 14.50

I:\ProjectData\LUC\88563\LUC-75-8-42\Design\Roadway\Sheets\88563_G002.dgn Sheet 2/5/2021 10:26:01 AM cfintel

SHEET NUM.														PART.		ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.	CALCULATED ALF	CHECKED JMF
15	16	18	19	19A	20	21	22	23A	58	58A	59	82A	82C	01/IMS/PV	02/IMS/BR								
										TRAFFIC CONTROL													
												867	413	1,280		621	00100	1,280	EACH	RPM			
												867	413	1,280		621	54000	1,280	EACH	RAISED PAVEMENT MARKER REMOVED			
				225										225		625	25900	225	FT	CONDUIT, JACKED OR DRILLED, 3"			
				2										2		625	30700	2	EACH	PULL BOX, 725.08, 18"			
728														728		626	00102	728	EACH	BARRIER REFLECTOR, TYPE 1, ONE WAY			
											204			204		626	00116	204	EACH	BARRIER REFLECTOR, TYPE 5, UNIDIRECTIONAL			
											89			89		626	00116	89	EACH	BARRIER REFLECTOR, TYPE 5, BIDIRECTIONAL			
												14.78	6	20.78		642	00104	20.78	MILE	EDGE LINE, 6", TYPE 1			
												14.48	5.5	19.98		642	00204	19.98	MILE	LANE LINE, 6", TYPE 1			
1														1		642	40000	1	EACH	SPEED MEASUREMENT MARKING	15		
												530	956	1,486		644	00400	1,486	FT	CHANNELIZING LINE, 8"			
												5,482	6,178	11,660		644	00404	11,660	FT	CHANNELIZING LINE, 12"			
												39	86	125		644	00500	125	FT	STOP LINE			
												48	264	312		644	00601	312	FT	CROSSWALK LINE, AS PER PLAN	15		
												366	301	667		644	00720	667	FT	CHEVRON MARKING			
												9	27	36		644	01300	36	EACH	LANE ARROW			
												2	3	5		644	01360	5	EACH	WRONG WAY ARROW			
												4,611	2,191	6,802		644	01510	6,802	FT	DOTTED LINE, 6"			
										RETAINING WALLS													
														1,365		512	10100	1,365	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)			
														965		512	74000	965	SY	REMOVAL OF EXISTING COATINGS FROM CONCRETE SURFACES			
										STRUCTURE OVER 20 FOOT SPAN (LUC-75-0849)													
										SEE SHEETS 105-108 FOR QUANTITIES.													
										STRUCTURE OVER 20 FOOT SPAN (LUC-75-0861)													
										SEE SHEETS 109-110 FOR QUANTITIES.													
										STRUCTURE OVER 20 FOOT SPAN (LUC-75-0891)													
										SEE SHEETS 111-112 FOR QUANTITIES.													
										STRUCTURE OVER 20 FOOT SPAN (LUC-75-1013)													
										SEE SHEETS 113-115 FOR QUANTITIES.													
										MAINTENANCE OF TRAFFIC													
												500		500		614	11110	500	HOURLY	LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE			
													2,301	2,301		614	11630	2,301	FT	INCREASED BARRIER DELINEATION	23A		
												60		60		614	12460	60	EACH	WORK ZONE MARKING SIGN			
												12		12		614	12470	12	EACH	WORK ZONE SPEED LIMIT SIGN			
												23		23		614	12484	23	EACH	WORK ZONE INCREASED PENALTIES SIGN			
												5		5		614	12500	5	EACH	REPLACEMENT SIGN			
												30		30		614	12600	30	EACH	REPLACEMENT DRUM			
													942	942		614	13310	942	EACH	BARRIER REFLECTOR, TYPE 1, ONE-WAY	23A		
													210	210		614	13318	210	EACH	BARRIER REFLECTOR, TYPE 5, ONE-WAY	23A		
													437	437		614	13350	437	EACH	OBJECT MARKER, ONE WAY	23A		
													353	353		614	13360	353	EACH	OBJECT MARKER, TWO WAY	23A		
												10		10		614	18600	10	SNMT	PORTABLE CHANGEABLE MESSAGE SIGN			
												30		30		614	20110	30	MILE	WORK ZONE LANE LINE, CLASS I, 6", 642 PAINT			
												2		2		614	20210	2	MILE	WORK ZONE LANE LINE, CLASS I, 6", 740.06, TYPE I			
												31		31		614	22110	31	MILE	WORK ZONE EDGE LINE, CLASS I, 6", 642 PAINT			
												5,800		5,800		614	23410	5,800	FT	WORK ZONE CHANNELIZING LINE, CLASS I, 12", 740.06, TYPE I			
												7,768		7,768		614	23690	7,768	FT	WORK ZONE CHANNELIZING LINE, CLASS III, 12", 642 PAINT			
												6,573		6,573		614	24618	6,573	FT	WORK ZONE DOTTED LINE, CLASS III, 12", 642 PAINT			
												203		203		614	26610	203	FT	WORK ZONE STOP LINE, CLASS III, 642 PAINT			
												31		31		614	20056	31	MILE	WORK ZONE LANE LINE, CLASS I, 6", 807 PAINT			
												32		32		614	22056	32	MILE	WORK ZONE EDGE LINE, CLASS I, 6", 807 PAINT			
							30					30		30		808	18700	30	SNMT	DIGITAL SPEED LIMIT (DSL) SIGN ASSEMBLY			
										INCIDENTALS													
																LUMP	108	30000	LS	CPM PROGRESS SCHEDULE SHORT DURATION PROJECTS			
																LUMP	614	11000	LS	MAINTAINING TRAFFIC			
																LUMP	623	10001	LS	CONSTRUCTION LAYOUT STAKES AND SURVEYING, AS PER PLAN	15		
																LUMP	624	10000	LS	MOBILIZATION			

THESE ITEMS HAVE BEEN MODIFIED OR ADDED



GENERAL SUMMARY

LUC-75 / 475-7.82 / 14.50