

STATE OF OHIO  
DEPARTMENT OF TRANSPORTATION

# DEL-257-1.53

## LIBERTY TOWNSHIP CONCORD TOWNSHIP DELAWARE COUNTY

**PROJECT DESCRIPTION**

RESURFACING PROJECT TO INCLUDE:  
PLANING AND ASPHALT OVERLAY OF 5.8 MILES OF  
SR 257 FROM 0.5 MILES NORTH OF SR 750 (SLM 1.53)  
TO 250' SOUTH OF US 42 (SLM 7.77) IN DELAWARE COUNTY.

SUSPEND PAVING AT SLM 4.12 AND RESUME AT SLM 4.56,  
SKIPPING THE ROUNDABOUT AT HOME ROAD.

PAVEMENT REPAIRS IN VARIOUS LOCATIONS FROM  
0.3 MILES NORTH OF SR 750 (SLM 1.35) TO US 42 (7.77).

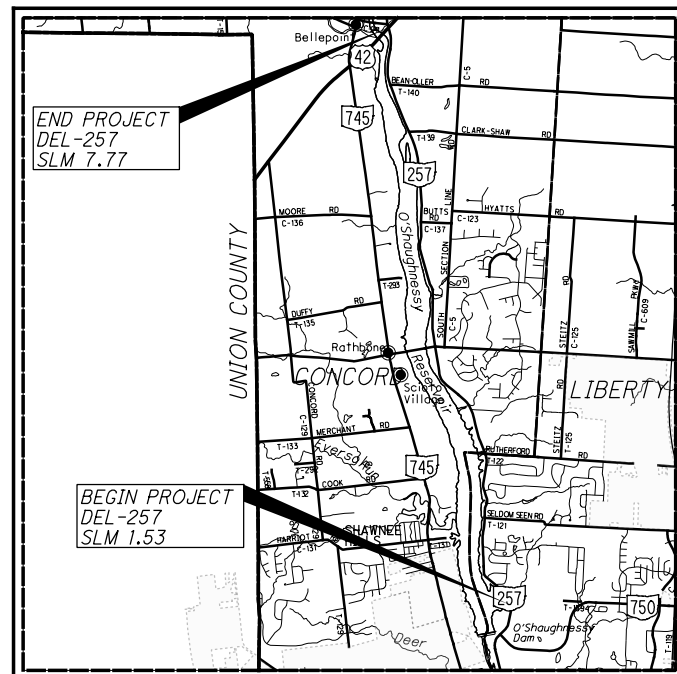
PAVEMENT MARKING/LANE USE CHANGES FROM 0.14 MILES  
NORTH OF SR 750 (SLM 1.19) TO BEGIN PROJECT (SLM 1.53).

VARIOUS GUARDRAIL UPGRADES IN VARIOUS LOCATIONS.

SEALING OF STRUCTURE DEL-257-3.08 WITH  
GRAVITY FED RESIN.

**EARTH DISTURBED AREAS**

PROJECT EARTH DISTURBED AREA: N/A\*  
ESTIMATED CONTRACTOR EARTH DISTURBED AREA: N/A\*  
NOTICE OF INTENT EARTH DISTURBED AREA: N/A\*  
\*MAINTENANCE PROJECT



LOCATION MAP

LATITUDE: 40°12'05" LONGITUDE: 83°08'10"



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

**DESIGN DESIGNATION**

CURRENT ADT (2020)	9,200	
DESIGN YEAR ADT (2032)	11,000	
DESIGN HOURLY VOLUME (2032)	990	
DIRECTIONAL DISTRIBUTION	56%	
TRUCKS (24 HOUR B&C)	7%	
DESIGN SPEED	55 MPH	
LEGAL SPEED	55 MPH	
DESIGN FUNCTIONAL CLASSIFICATION:	SLM 1.05-4.35	04 MINOR ARTERIAL (URBAN)
	SLM 4.35-5.69	05 MAJOR COLLECTOR (URBAN)
	SLM 5.69-7.80	05 MAJOR COLLECTOR (RURAL)
NHS PROJECT	NO	

**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:

ENGINEERS SEAL:

SIGNED: *Katherine Montoya*  
DATE: 10/24/19

**INDEX OF SHEETS:**

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STANDARD CONSTRUCTION DRAWINGS								SUPPLEMENTAL SPECIFICATIONS	
BP-3.1	10/18/19	MGS-1.1	01/19/18	MT-97.10	04/19/19	TC-41.20	10/18/13	800	10/18/19
BP-3.2	01/18/19	MGS-2.1	01/19/18	MT-97.12	01/20/17	TC-42.20	10/18/13	821	04/20/12
BP-4.1	07/19/13	MGS-4.1	01/20/17	MT-101.90	07/21/17	TC-52.10	10/18/13	832	10/19/18
		MGS-4.2	07/19/13	MT-105.10	07/19/13	TC-52.20	07/20/18		
		MGS-4.3	01/18/13			TC-61.30	01/20/17		
DBR-2-73	07/19/02	MGS-5.2	07/15/16			TC-65.10	01/17/14		
DBR-3-11	07/15/11	MGS-5.3	07/15/16			TC-65.11	07/21/17		
		RM-1.1	07/18/14						
									SPECIAL PROVISIONS

**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 AND THAT PROVISIONS FOR THE MAINTENANCE AND SAFETY OF TRAFFIC WILL BE AS SET FORTH ON THE PLANS AND ESTIMATES.

APPROVED: *[Signature]*  
DISTRICT DEPUTY DIRECTOR

DATE: 10/24/19

APPROVED: *[Signature]*  
DIRECTOR, DEPARTMENT OF TRANSPORTATION

DATE: 11/6/19

FEDERAL PROJECT NO. E190(141)  
PID NO. 107793  
CONSTRUCTION PROJECT NO. -  
RAILROAD INVOLVEMENT NONE  
DEL-257-1.53  
1/54

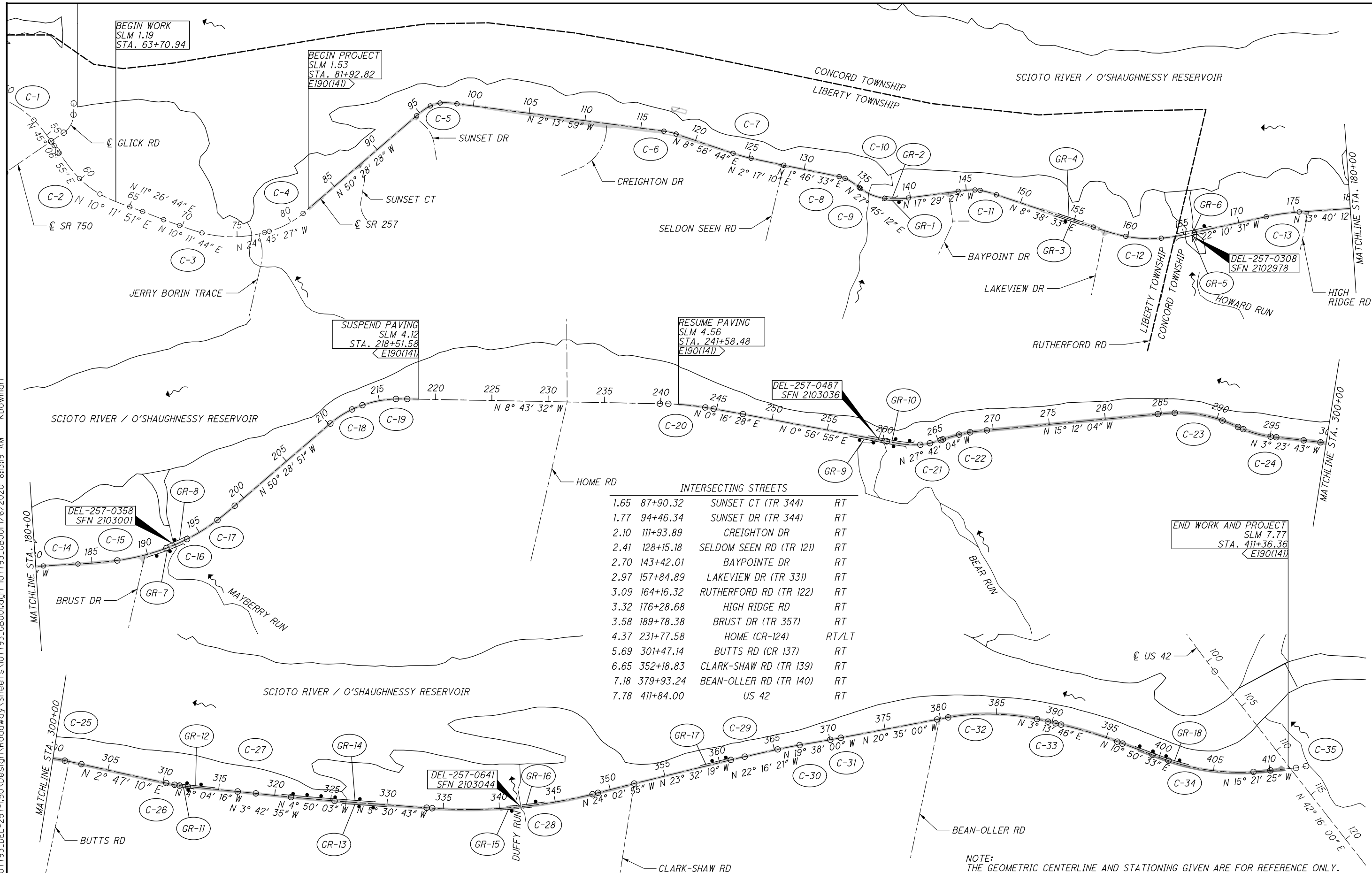
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CALCULATED  
KLM  
CHECKED  
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SCHEMATIC PLAN

DEL-257-1.53



INTERSECTING STREETS

1.65	87+90.32	SUNSET CT (TR 344)	RT
1.77	94+46.34	SUNSET DR (TR 344)	RT
2.10	111+93.89	CREIGHTON DR	RT
2.41	128+15.18	SELDON SEEN RD (TR 121)	RT
2.70	143+42.01	BAYPOINTE DR	RT
2.97	157+84.89	LAKEVIEW DR (TR 331)	RT
3.09	164+16.32	RUTHERFORD RD (TR 122)	RT
3.32	176+28.68	HIGH RIDGE RD	RT
3.58	189+78.38	BRUST DR (TR 357)	RT
4.37	231+77.58	HOME (CR-124)	RT/LT
5.69	301+47.14	BUTTS RD (CR 137)	RT
6.65	352+18.83	CLARK-SHAW RD (TR 139)	RT
7.18	379+93.24	BEAN-OLLER RD (TR 140)	RT
7.78	411+84.00	US 42	RT

CATEGORY	GROUP	RESPONSIBLE ENTITY	PLAN SPLIT CODE	DESCRIPTION
STP > 200000	PAVEMENT	STATE	01/S>2/PV	DEL-257 1.53 TO 5.69
STP > 200000	BRIDGE	STATE	02/S>2/BR	Minor work on 2102978, DEL-257-3.08
STP RURAL	PAVEMENT	STATE	03/STR/PV	DEL-257 5.69 TO 7.77

NOTE:  
THE GEOMETRIC CENTERLINE AND STATIONING GIVEN ARE FOR REFERENCE ONLY. THIS CENTERLINE SHOULD NOT BE USED TO TIE DOWN RIGHT-OF-WAY, CENTERLINE MONUMENTS, OR EXISTING PAVEMENT GEOMETRY. THIS CENTERLINE CAN BE USED FOR THE PURPOSE OF CONSTRUCTION LAYOUT STAKES AND SURVEYING.

THERE ARE NO EXISTING LANDSCAPED AREAS WITHIN THE WORK LIMITS.  
FOR CURVE DATA, SEE SHEET 3.

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C-1

P.I. Sta. 50+85.82  
 $\Delta = 57^\circ 53' 22''$  (RT)  
Dc = 6° 45' 00"  
R = 848.83'  
Ls = 290.00'  
 $\theta_s = 9^\circ 47' 15''$   
LT = 193.63'  
ST = 96.94'  
x = 289.15'  
y = 16.48'  
k = 144.86'  
p = 4.12'  
 $\Delta c = 38^\circ 18' 52''$  (RT)  
Lc = 567.62'  
Ts = 616.58'  
Es = 125.88'  
C = 557.11'  
TS Sta. 44+69.24  
SC Sta. 47+59.24  
CS Sta. 53+26.86  
ST Sta. 56+16.86

C-2

P.I. Sta. 61+09.14  
 $\Delta = 34^\circ 55' 10''$  (LT)  
Dc = 6° 45' 00"  
R = 848.83'  
Ls = 290.00'  
 $\theta_s = 9^\circ 47' 15''$   
LT = 193.63'  
ST = 96.94'  
x = 289.15'  
y = 16.48'  
k = 144.86'  
p = 4.12'  
 $\Delta c = 15^\circ 20' 41''$  (LT)  
Lc = 227.33'  
Ts = 413.14'  
Es = 45.32'  
C = 226.65'  
TS Sta. 56+96.00  
SC Sta. 59+86.00  
CS Sta. 62+13.33  
ST Sta. 65+03.33

C-3

P.I. Sta. 74+20.86  
 $\Delta = 34^\circ 57' 11''$  (LT)  
Dc = 5° 15' 00"  
R = 1,091.35'  
 $\theta =$   
 $\Delta c = 29^\circ 26' 26''$  (LT)  
Lc = 560.78'  
Es = 53.70'  
C = 554.63'  
TS Sta. 69+74.69  
SC Sta. 71+84.69  
PT Sta. 77+45.47

C-4

P.I. Sta. 79+63.67  
 $\Delta = 25^\circ 43' 01''$  (LT)  
Dc = 7° 30' 00"  
R = 763.94'  
T = 174.38'  
L = 342.89'  
E = 19.65'  
C = 340.02'  
PC Sta. 77+89.29  
PT Sta. 81+32.17

C-5

P.I. Sta. 96+66.97  
 $\Delta = 48^\circ 14' 29''$  (RT)  
Dc = 20° 00' 00"  
R = 286.48'  
Ls = 150.00'  
 $\theta_s = 15^\circ 00' 00''$   
LT = 100.36'  
ST = 50.33'  
x = 148.98'  
y = 13.03'  
k = 74.83'  
p = 3.26'  
 $\Delta c = 18^\circ 14' 29''$  (RT)  
Lc = 91.21'  
Ts = 204.56'  
Es = 30.98'  
C = 90.82'  
TS Sta. 94+62.41  
SC Sta. 96+12.41  
CS Sta. 97+03.62  
ST Sta. 98+53.62

C-6

P.I. Sta. 117+63.01  
 $\Delta = 11^\circ 10' 43''$  (RT)  
Dc = 10° 00' 00"  
R = 572.96'  
T = 56.07'  
L = 111.79'  
E = 2.74'  
C = 111.61'  
PC Sta. 117+06.94  
PT Sta. 118+18.72

C-7

P.I. Sta. 124+35.90  
 $\Delta = 6^\circ 39' 34''$  (LT)  
Dc = 4° 00' 00"  
R = 1,432.39'  
T = 83.34'  
L = 166.49'  
E = 2.42'  
C = 166.39'  
PC Sta. 123+52.57  
PT Sta. 125+19.05

C-8

P.I. Sta. 133+45.44  
 $\Delta = 10^\circ 58' 40''$  (RT)  
Dc = 20° 00' 00"  
R = 286.48'  
T = 27.53'  
L = 54.89'  
E = 1.32'  
C = 54.80'  
PC Sta. 133+17.91  
CS Sta. 133+72.80  
ST Sta. 135+22.80

C-9

P.I. Sta. 136+57.50  
 $\Delta = 31^\circ 07' 48''$  (LT)  
Dc = 13° 20' 00"  
R = 429.72'  
T = 119.70'  
L = 233.48'  
E = 16.36'  
C = 230.61'  
PC Sta. 135+37.81  
PCC Sta. 137+71.28  
P.I. Sta. 138+77.68  
 $\Delta = 14^\circ 06' 51''$  (LT)  
Dc = 6° 40' 00"  
R = 859.44'  
T = 106.39'  
L = 211.71'  
E = 6.56'  
C = 211.18'  
PCC Sta. 137+71.28  
PT Sta. 139+82.99

C-11

P.I. Sta. 146+03.29  
 $\Delta = 26^\circ 08' 00''$  (RT)  
Dc = 13° 20' 00"  
R = 429.72'  
Ls = 150.00'  
 $\theta_s = 10^\circ 00' 00''$   
LT = 100.16'  
ST = 50.15'  
x = 149.54'  
y = 8.71'  
k = 74.92'  
p = 2.18'  
 $\Delta c = 6^\circ 08' 00''$  (RT)  
Lc = 46.00'  
Ts = 175.16'  
Es = 13.66'  
C = 45.98'  
TS Sta. 144+28.12  
SC Sta. 145+78.12  
CS Sta. 146+24.12  
ST Sta. 147+74.12

C-12

P.I. Sta. 161+47.77  
 $\Delta = 30^\circ 49' 04''$  (LT)  
Dc = 5° 00' 00"  
R = 1,145.92'  
Ls = 300.00'  
 $\theta_s = 7^\circ 30' 00''$   
LT = 200.18'  
ST = 100.16'  
x = 299.49'  
y = 13.07'  
k = 149.91'  
p = 3.27'  
 $\Delta c = 15^\circ 49' 04''$  (LT)  
Lc = 316.36'  
Ts = 466.65'  
Es = 46.12'  
C = 315.35'  
TS Sta. 156+81.12  
SC Sta. 159+81.12  
CS Sta. 162+97.48  
ST Sta. 165+97.48

C-13

P.I. Sta. 173+98.08  
 $\Delta = 8^\circ 30' 19''$  (RT)  
Dc = 2° 51' 26"  
R = 2,005.35'  
T = 149.11'  
L = 297.68'  
E = 5.54'  
C = 297.41'  
PC Sta. 172+48.96  
PT Sta. 175+46.65

C-14

P.I. Sta. 182+21.63  
 $\Delta = 1^\circ 13' 41''$  (RT)  
Dc = 0° 24' 00"  
R = 14,323.95'  
T = 153.50'  
L = 306.99'  
E = 0.82'  
C = 306.98'  
PC Sta. 180+68.13  
PRC Sta. 183+75.12

C-15

P.I. Sta. 185+50.64  
 $\Delta = 5^\circ 00' 42''$  (LT)  
Dc = 1° 25' 43"  
R = 4,010.70'  
T = 175.52'  
L = 350.81'  
E = 3.84'  
C = 350.70'  
PRC Sta. 183+75.12  
PCC Sta. 187+25.93

C-16

P.I. Sta. 189+52.55  
 $\Delta = 12^\circ 53' 43''$  (LT)  
Dc = 2° 51' 26"  
R = 2,005.35'  
T = 226.62'  
L = 451.33'  
E = 12.76'  
C = 450.38'  
PCC Sta. 187+25.93  
CS Sta. 191+77.26

C-17

P.I. Sta. 195+36.84  
 $\Delta = 10^\circ 36' 30''$  (LT)  
Dc = 3° 20' 00"  
R = 1,718.87'  
T = 159.58'  
L = 318.25'  
E = 7.39'  
C = 317.79'  
CS Sta. 191+77.26  
SC Sta. 193+77.26  
CS Sta. 196+95.50  
ST Sta. 198+95.50

C-18

P.I. Sta. 211+30.53  
 $\Delta = 15^\circ 20' 11''$  (RT)  
Dc = 6° 40' 00"  
R = 859.44'  
T = 115.71'  
L = 230.05'  
E = 7.75'  
C = 229.36'  
PC Sta. 210+14.82  
CS Sta. 212+44.86

C-19

P.I. Sta. 214+98.04  
 $\Delta = 17^\circ 22' 17''$  (RT)  
Dc = 5° 42' 51"  
R = 1,002.68'  
T = 153.18'  
L = 304.00'  
E = 11.63'  
C = 302.84'  
CS Sta. 212+44.86  
SC Sta. 213+44.86  
CS Sta. 216+48.86  
ST Sta. 217+48.86

C-20

P.I. Sta. 242+33.20  
 $\Delta = 9^\circ 00' 00''$  (RT)  
Dc = 2° 13' 20"  
R = 2,578.31'  
Ls = 75.00'  
 $\theta_s = 0^\circ 50' 00''$   
LT = 50.00'  
ST = 25.00'  
x = 75.00'  
y = 0.36'  
k = 37.50'  
p = 0.09'  
 $\Delta c = 7^\circ 20' 00''$  (RT)  
Lc = 330.00'  
Ts = 240.42'  
Es = 8.06'  
C = 329.77'  
TS Sta. 239+92.77  
SC Sta. 240+67.77  
CS Sta. 243+97.77  
ST Sta. 244+72.77

C-21

P.I. Sta. 263+23.08  
 $\Delta = 28^\circ 38' 59''$  (LT)  
Dc = 10° 00' 00"  
R = 572.96'  
 $\theta =$   
 $\Delta c = 8^\circ 38' 59''$  (LT)  
Lc = 86.50'  
Es = 22.25'  
C = 86.42'  
TS Sta. 260+37.54  
SC Sta. 263+37.54  
CS Sta. 264+24.04  
ST Sta. 265+24.04

C-22

P.I. Sta. 267+44.62  
 $\Delta = 12^\circ 30' 00''$  (RT)  
Dc = 5° 00' 00"  
R = 1,145.92'  
Ls = 150.00'  
 $\theta_s = 3^\circ 45' 00''$   
LT = 100.02'  
ST = 50.02'  
x = 149.94'  
y = 3.27'  
k = 74.99'  
p = 0.82'  
 $\Delta c = 5^\circ 00' 00''$  (RT)  
Lc = 100.00'  
Ts = 200.58'  
Es = 7.67'  
C = 99.97'  
TS Sta. 265+44.04  
SC Sta. 266+94.04  
CS Sta. 267+94.04  
ST Sta. 269+44.04

C-23

P.I. Sta. 288+38.10  
 $\Delta = 21^\circ 36' 19''$  (RT)  
Dc = 5° 00' 00"  
R = 1,145.92'  
T = 218.65'  
L = 432.11'  
E = 20.67'  
C = 429.55'  
TS Sta. 284+69.45  
SC Sta. 286+19.45  
CS Sta. 290+51.56

C-24

P.I. Sta. 293+78.60  
 $\Delta = 14^\circ 26' 32''$  (LT)  
Dc = 5° 42' 51"  
R = 1,002.68'  
T = 127.04'  
L = 252.74'  
E = 8.02'  
C = 252.07'  
SRS Sta. 292+01.56  
SC Sta. 292+51.56  
CS Sta. 295+04.30  
ST Sta. 295+54.30

C-25

P.I. Sta. 300+28.75  
 $\Delta = 6^\circ 10' 53''$  (RT)  
Dc = 2° 00' 00"  
R = 2,864.79'  
Ls = 150.00'  
 $\theta_s = 1^\circ 30' 00''$   
LT = 100.00'  
ST = 50.00'  
x = 149.99'  
y = 1.31'  
k = 75.00'  
p = 0.33'  
 $\Delta c = 3^\circ 10' 53''$  (RT)  
Lc = 159.07'  
Ts = 229.70'  
Es = 4.50'  
C = 159.05'  
TS Sta. 297+99.05  
SC Sta. 299+49.05  
CS Sta. 301+08.11  
ST Sta. 302+58.11

C-26

P.I. Sta. 311+27.66  
 $\Delta = 6^\circ 51' 26''$  (LT)  
Dc = 5° 42' 51"  
R = 1,002.68'  
Ls = 75.00'  
 $\theta_s = 2^\circ 08' 34''$   
LT = 50.00'  
ST = 25.00'  
x = 74.99'  
y = 0.93'  
k = 37.50'  
p = 0.23'  
 $\Delta c = 2^\circ 34' 17''$  (LT)  
Lc = 45.00'  
Ts = 97.58'  
Es = 2.03'  
C = 45.00'  
TS Sta. 310+30.07  
SC Sta. 311+05.07  
CS Sta. 311+50.07  
ST Sta. 312+25.07

C-27

P.I. Sta. 317+50.59  
 $\Delta = 0^\circ 21' 41''$  (RT)  
Dc = 0° 13' 20"  
R = 25,783.10'  
T = 81.31'  
L = 162.61'  
E = 0.13'  
C = 162.61'  
PC Sta. 316+69.28  
PT Sta. 318+31.89

C-28

P.I. Sta. 341+27.08  
 $\Delta = 18^\circ 32' 13''$  (LT)  
Dc = 1° 14' 56"  
R = 4,587.76'  
Ls = 50.00'  
 $\theta_s = 0^\circ 18' 44''$   
LT = 33.33'  
ST = 16.67'  
x = 50.00'  
y = 0.09'  
k = 25.00'  
p = 0.02'  
 $\Delta c = 17^\circ 54' 45''$  (LT)  
Lc = 1,434.27'  
Ts = 773.68'  
Es = 60.71'  
C = 1,428.44'  
TS Sta. 333+53.40  
SC Sta. 334+03.40  
CS Sta. 348+37.67  
ST Sta. 348+87.67

C-29

P.I. Sta. 361+66.07  
 $\Delta = 1^\circ 15' 58''$  (RT)  
Dc = 1° 00' 00"  
R = 5,729.58'  
T = 63.31'  
L = 126.61'  
E = 0.35'  
C = 126.61'  
PC Sta. 361+02.77  
PT Sta. 362+29.38

C-31

P.I. Sta. 370+51.93  
 $\Delta = 0^\circ 57' 00''$  (LT)  
Dc = 1° 00' 00"  
R = 5,729.58'  
T = 47.50'  
L = 95.00'  
E = 0.20'  
C = 95.00'  
PC Sta. 370+04.42  
PT Sta. 370+99.42

P.I. Sta. 366+29.02  
 $\Delta = 2^\circ 38' 21''$  (RT)  
Dc = 1° 20' 00"  
R = 4,297.18'  
T = 98.99'  
L = 197.94'  
E = 1.14'  
C = 197.92'  
PC Sta. 365+30.03  
PT Sta. 367+27.97

C-30

C-32

P.I. Sta. 384+72.57  
 $\Delta = 23^\circ 48' 46''$  (RT)  
Dc = 2° 40' 00"  
R = 2,148.59'  
Ls = 100.00'  
 $\theta_s = 1^\circ 20' 00''$   
LT = 66.67'  
ST = 33.34'  
x = 99.99'  
y = 0.78'  
k = 50.00'  
p = 0.19'  
 $c = 21^\circ 08' 46''$  (RT)  
Lc = 792.98'  
Ts = 503.07'  
Es = 47.44'  
C = 788.49'  
TS Sta. 379+69.50  
SC Sta. 380+69.50  
CS Sta. 388+62.48  
ST Sta. 389+62.48

C-33

P.I. Sta. 393+43.39  
 $\Delta = 7^\circ 36' 47''$  (RT)  
Dc = 1° 20' 00"  
R = 4,297.18'  
Ls = 50.00'  
 $\theta_s = 0^\circ 20' 00''$   
LT = 33.33'  
ST = 16.67'  
x = 50.00'  
y = 0.10'  
k = 25.00'  
p = 0.02'  
 $\Delta c = 6^\circ 56' 47''$  (RT)  
Lc = 520.98'  
Ts = 310.91'  
Es = 9.53'  
C = 520.66'  
TS Sta. 390+32.48  
SC Sta. 390+82.48  
CS Sta. 396+03.46  
ST Sta. 396+53.46

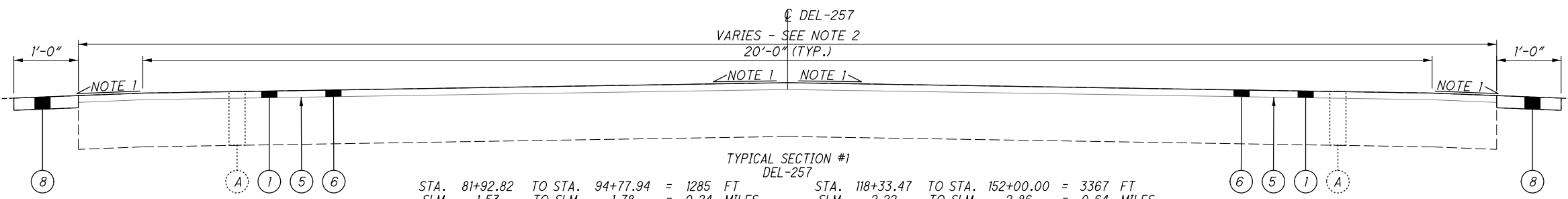
C-34

P.I. Sta. 404+80.44  
 $\Delta = 26^\circ 11' 58''$  (LT)  
Dc = 2° 51' 26"  
R = 2,005.35'  
Ls = 150.00'  
 $\theta_s = 2^\circ 08' 34''$   
LT = 100.01'  
ST = 50.01'  
x = 149.98'  
y = 1.87'  
k = 75.00'  
p = 0.47'  
 $\Delta c = 21^\circ 54' 49''$  (LT)  
Lc = 766.98'  
Ts = 541.75'  
Es = 54.06'  
C = 762.31'  
TS Sta. 399+38.69  
SC Sta. 400+88.69  
CS Sta. 408+55.67  
ST Sta. 410+05.67

C-35

P.I. Sta. 412+79.87  
 $\Delta = 9^\circ 00' 00''$  (LT)  
Dc = 10° 00' 00"  
R = 572.96'  
T = 45.09'  
L = 90.00'  
E = 1.77'  
C = 89.91'  
PC Sta. 412+34.78  
PT Sta. 413+24.78

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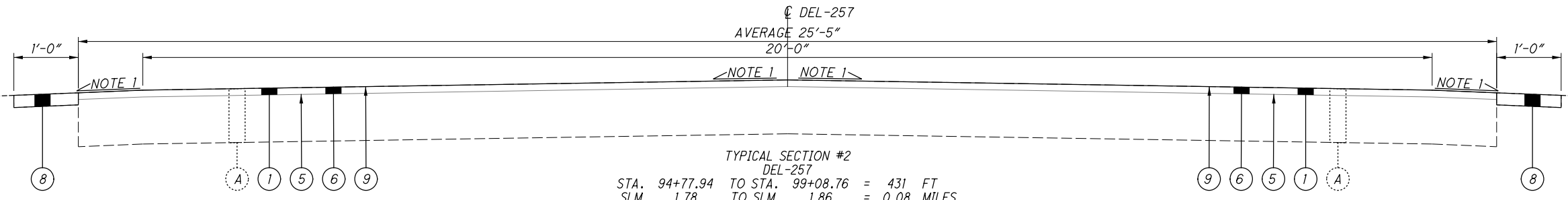
TYPICAL SECTION #1  
DEL-257

STA. 81+92.82 TO STA. 94+77.94 = 1285 FT	STA. 118+33.47 TO STA. 152+00.00 = 3367 FT
SLM 1.53 TO SLM 1.78 = 0.24 MILES	SLM 2.22 TO SLM 2.86 = 0.64 MILES
STA. 99+08.76 TO STA. 117+00.00 = 1791 FT	STA. 157+31.13 TO STA. 218+51.58 = 6120 FT
SLM 1.86 TO SLM 2.20 = 0.34 MILES	SLM 2.96 TO SLM 4.12 = 1.16 MILES

SEE SHEET 5 FOR STA. 117+00.00 TO 118+33.47

SUSPEND STA. 218+51.58 / RESUME STA. 241+58.48

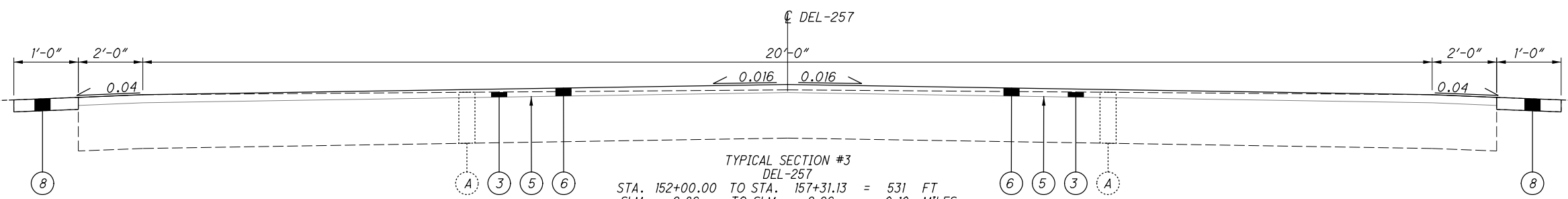
STA. 241+58.48 TO STA. 408+86.36 = 16728 FT
SLM 4.56 TO SLM 7.73 = 3.17 MILES



TYPICAL SECTION #2  
DEL-257

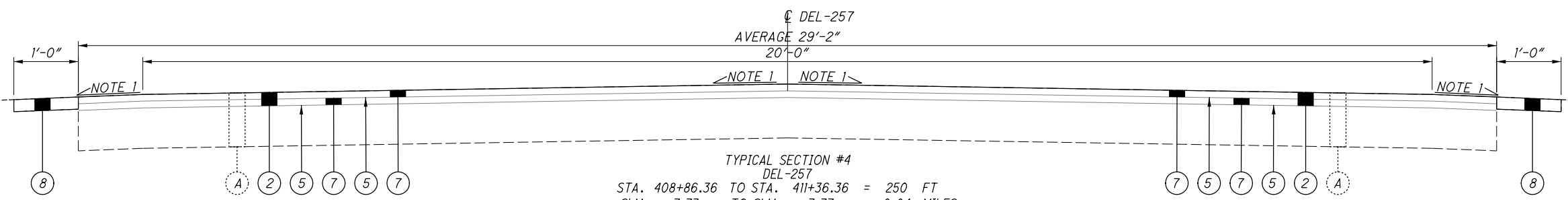
AVERAGE 25'-5"

STA. 94+77.94 TO STA. 99+08.76 = 431 FT
SLM 1.78 TO SLM 1.86 = 0.08 MILES



TYPICAL SECTION #3  
DEL-257

STA. 152+00.00 TO STA. 157+31.13 = 531 FT
SLM 2.86 TO SLM 2.96 = 0.10 MILES



TYPICAL SECTION #4  
DEL-257

AVERAGE 29'-2"

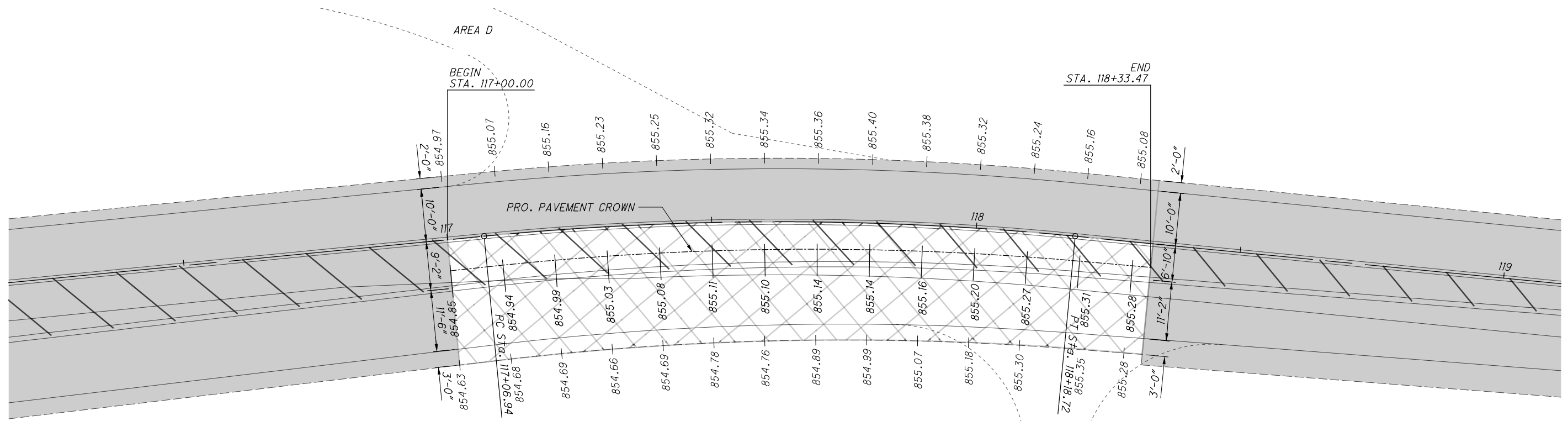
STA. 408+86.36 TO STA. 411+36.36 = 250 FT
SLM 7.73 TO SLM 7.77 = 0.04 MILES

**LEGEND**

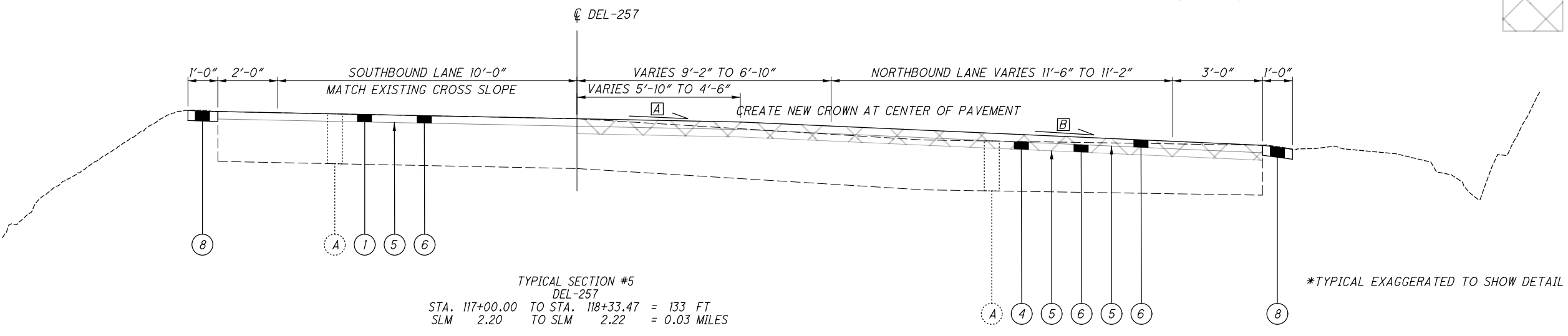
- (A) EXISTING PAVEMENT
- (1) ITEM 254 - 1.50" PAVEMENT PLANING, ASPHALT CONCRETE
- (2) ITEM 254 - 3.00" PAVEMENT PLANING, ASPHALT CONCRETE
- (3) ITEM 254 - VARIABLE DEPTH (AVG. 1.0") PAVEMENT PLANING, ASPHALT CONCRETE (MIN. 0.5")
- (4) ITEM 254 - VARIABLE DEPTH (AVG. 2.0") PAVEMENT PLANING, ASPHALT CONCRETE (MIN 0.5")
- (5) ITEM 407 - NON-TRACKING TACK COAT (PER CMS TABLE 407.06-1)
- (6) ITEM 441 - 1.50" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (446), PG64-22
- (7) ITEM 442 - 1.50" ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (446)
- (8) ITEM 617 - 2.00" COMPACTED AGGREGATE
- (9) ITEM 888 - HIGH FRICTION SURFACE COURSE, SINGLE LIFT

NOTES:  
1. MAINTAIN EXISTING CROSS SLOPES  
2. SEE PAVEMENT SUBSUMMARY FOR DETAILED WIDTHS

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THE INTENT OF THIS WORK IS TO CREATE POSITIVE DRAINAGE OFF OF THE ROADWAY SURFACE.



TYPICAL SECTION #5  
 DEL-257  
 STA. 117+00.00 TO STA. 118+33.47 = 133 FT  
 SLM 2.20 TO SLM 2.22 = 0.03 MILES

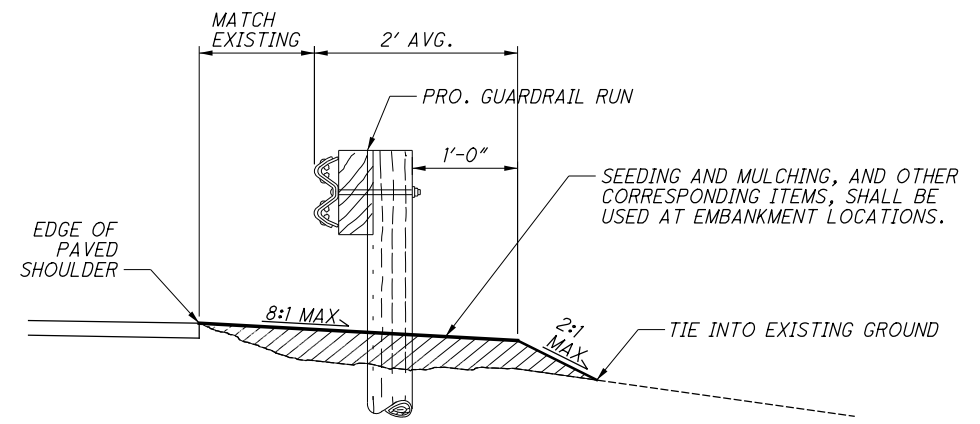
\*TYPICAL EXAGGERATED TO SHOW DETAIL

**LEGEND**

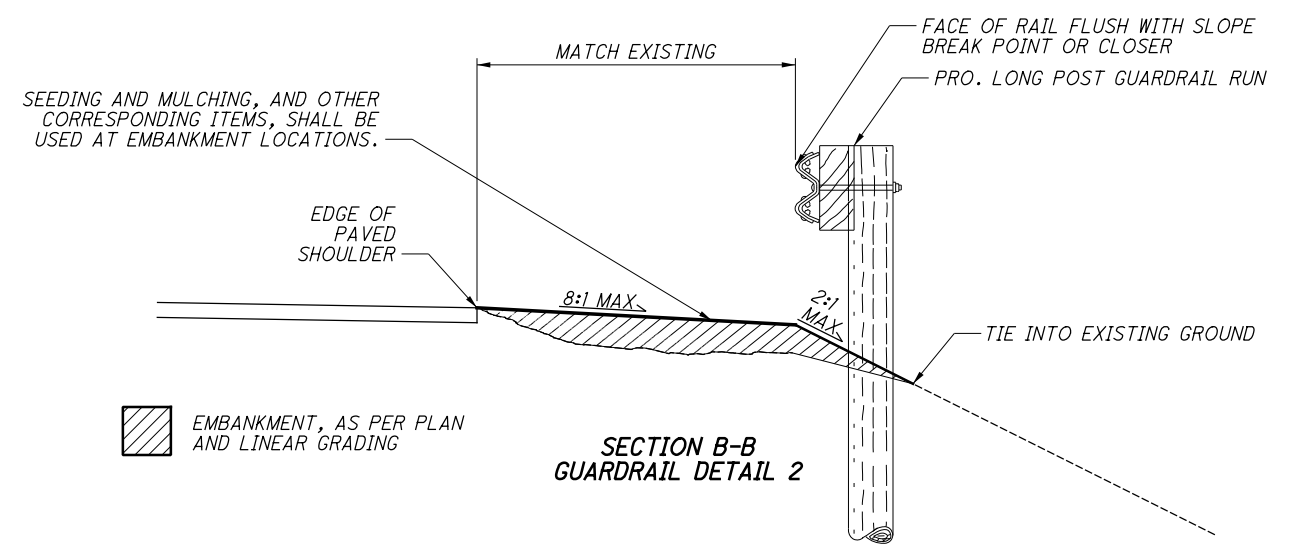
- Ⓐ EXISTING PAVEMENT
- ① ITEM 254 - 1.50" PAVEMENT PLANING, ASPHALT CONCRETE
- ② ITEM 254 - 3.00" PAVEMENT PLANING, ASPHALT CONCRETE
- ③ ITEM 254 - VARIABLE DEPTH (AVG. 1.0") PAVEMENT PLANING, ASPHALT CONCRETE (MIN. 0.5")
- ④ ITEM 254 - VARIABLE DEPTH (AVG. 2.0") PAVEMENT PLANING, ASPHALT CONCRETE (MIN 0.5")
- ⑤ ITEM 407 - NON-TRACKING TACK COAT (PER CMS TABLE 407.06-1)
- ⑥ ITEM 441 - 1.50" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (446), PG64-22
- ⑦ ITEM 442 - 1.50" ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (446)
- ⑧ ITEM 617 - 2.00" COMPACTED AGGREGATE
- ⑨ ITEM 888 - HIGH FRICTION SURFACE COURSE, SINGLE LIFT

STATION	Ⓐ	Ⓑ	COMMENTS
117+00.00	-0.004	-0.013	MATCH EXISTING
117+10.00	-0.007	-0.014	CROSS SLOPE Ⓐ TO MATCH EXISTING SOUTHBOUND CROSS SLOPE
117+20.00	-0.010	-0.017	CROSS SLOPE Ⓐ TO MATCH EXISTING SOUTHBOUND CROSS SLOPE
117+30.00	-0.011	-0.021	CROSS SLOPE Ⓐ TO MATCH EXISTING SOUTHBOUND CROSS SLOPE
117+40.00	-0.010	-0.022	CROSS SLOPE Ⓐ TO MATCH EXISTING SOUTHBOUND CROSS SLOPE
117+50.00	-0.012	-0.019	CROSS SLOPE Ⓐ TO MATCH EXISTING SOUTHBOUND CROSS SLOPE
117+60.00	-0.014	-0.020	CROSS SLOPE Ⓐ TO MATCH EXISTING SOUTHBOUND CROSS SLOPE
117+70.00	-0.013	-0.015	CROSS SLOPE Ⓐ TO MATCH EXISTING SOUTHBOUND CROSS SLOPE
117+80.00	-0.015	-0.009	CROSS SLOPE Ⓐ TO MATCH EXISTING SOUTHBOUND CROSS SLOPE
117+90.00	-0.013	-0.005	CROSS SLOPE Ⓐ TO MATCH EXISTING SOUTHBOUND CROSS SLOPE
118+00.00	-0.007	-0.001	CROSS SLOPE Ⓐ TO MATCH EXISTING SOUTHBOUND CROSS SLOPE
118+10.00	0.002	0.002	CROSS SLOPE Ⓐ TO MATCH EXISTING SOUTHBOUND CROSS SLOPE
118+20.00	0.009	0.002	CROSS SLOPE Ⓐ TO MATCH EXISTING SOUTHBOUND CROSS SLOPE
118+30.00	0.016	0.000	MATCH EXISTING

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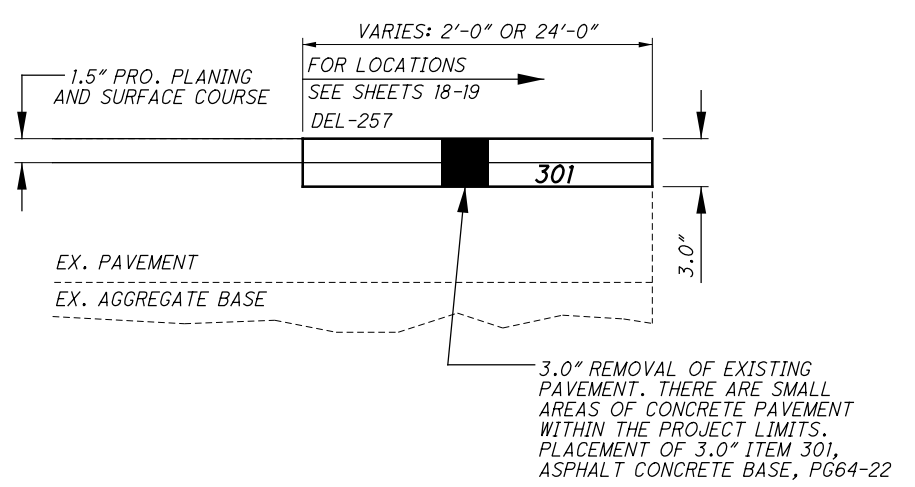


SECTION A-A  
GUARDRAIL DETAIL



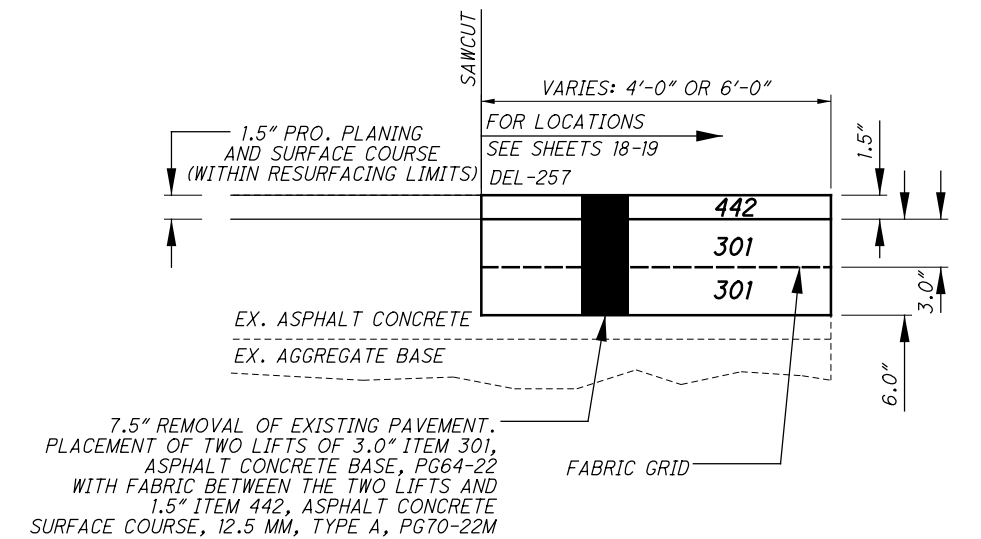
SECTION B-B  
GUARDRAIL DETAIL 2

- NOTES:  
1. FOR MORE INFORMATION REGARDING EMBANKMENT, AS PER PLAN, SEE GENERAL NOTES.  
2. SEE STANDARD DRAWING MGS-1.1 FOR MORE DETAILS AND DIMENSIONS.



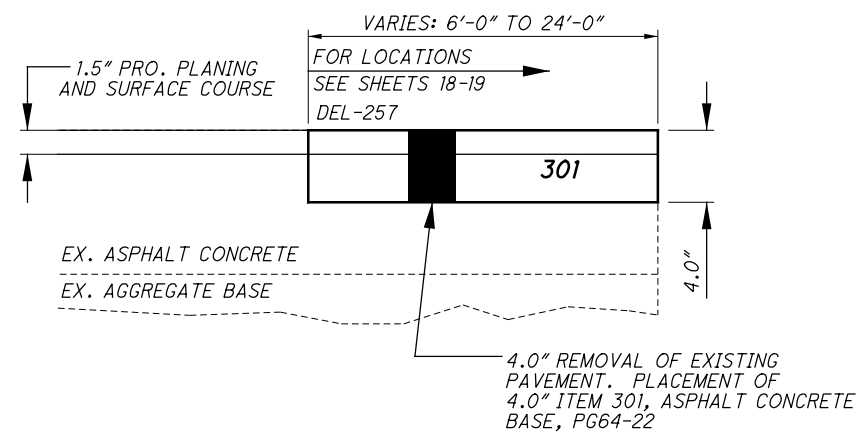
ITEM 251 - PARTIAL DEPTH PAVEMENT REPAIR  
(ASPHALT CONCRETE BASE), AS PER PLAN, 3.0"

SEE GENERAL NOTES FOR MORE INFORMATION REGARDING  
ITEM 251 - PARTIAL DEPTH PAVEMENT REPAIR  
(ASPHALT CONCRETE BASE), AS PER PLAN, 3.0"



ITEM 253 - PAVEMENT REPAIR,  
AS PER PLAN, 7.5"

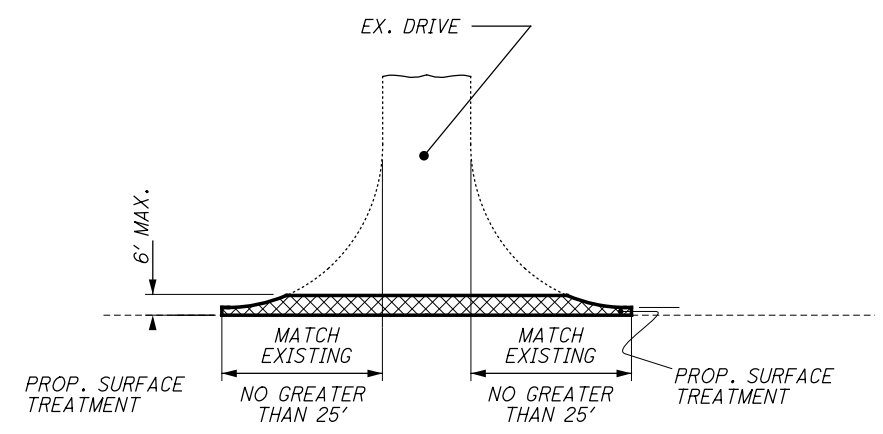
SEE GENERAL NOTES FOR MORE INFORMATION REGARDING  
ITEM 253 - PAVEMENT REPAIR, AS PER PLAN, 7.5"



ITEM 251 - PARTIAL DEPTH PAVEMENT REPAIR  
(ASPHALT CONCRETE BASE), AS PER PLAN, 4.0"

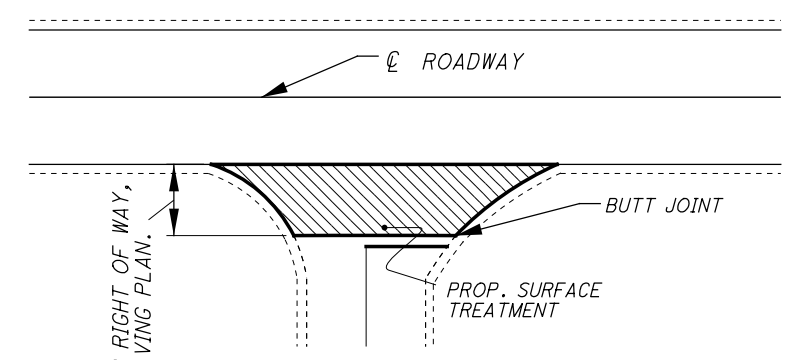
SEE GENERAL NOTES FOR MORE INFORMATION REGARDING  
ITEM 251 - PARTIAL DEPTH PAVEMENT REPAIR  
(ASPHALT CONCRETE BASE), AS PER PLAN, 4.0"

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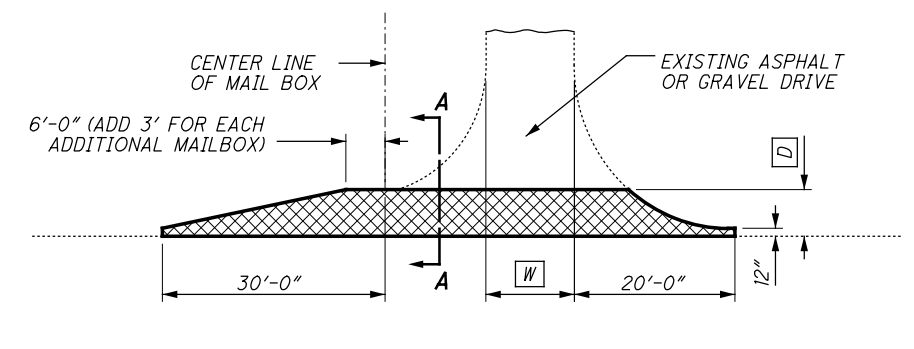
**TYPICAL DRIVEWAY APPROACH DETAIL**

PAVEMENT PLANING/BUTT JOINT AND MATCH PROPOSED SURFACE TREATMENT DEPTH.



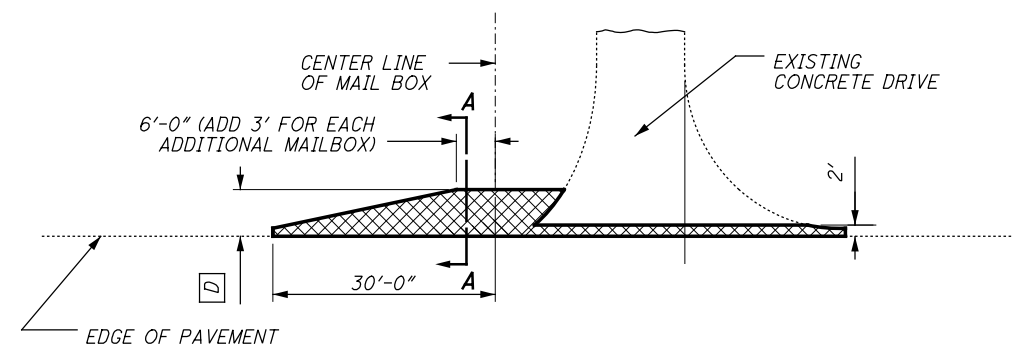
**TYPICAL INTERSECTION DETAIL DEL-257**

PAVEMENT PLANING AND RESURFACING



**TYPICAL APPROACH #1 COMBINED DRIVEWAY & MAIL BOX APPROACH**

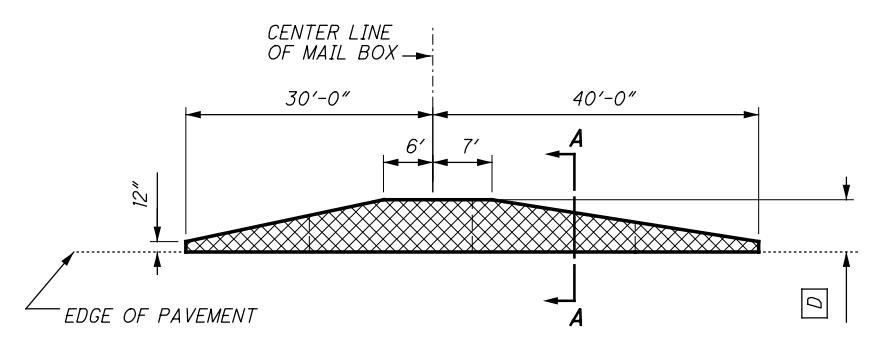
MAIL BOX POSITIONED PAST DRIVE SHOWN. MIRROR FOR MAILBOX PRECEDING DRIVE. THE EXISTING MAIL BOX POSITION SHALL REMAIN. DIMENSION **D** SHALL NOT EXCEED 6' AND SHALL MATCH EXISTING. **W** = WIDTH OF EXISTING DRIVEWAY.



**TYPICAL APPROACH #2 COMBINED DRIVEWAY & MAIL BOX APPROACH**

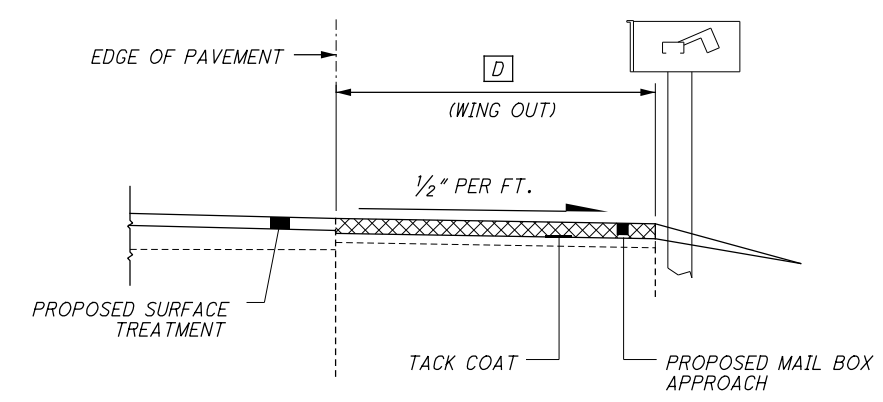
MAIL BOX POSITIONED PAST DRIVE SHOWN. MIRROR FOR MAILBOX PRECEDING DRIVE. THE EXISTING MAIL BOX POSITION SHALL REMAIN. DIMENSION **D** SHALL NOT EXCEED 6'. AND SHALL MATCH EXISTING. **W** = WIDTH OF EXISTING DRIVEWAY.

ASPHALT OR ITEM 617 - PROPOSED TO MATCH EXISTING

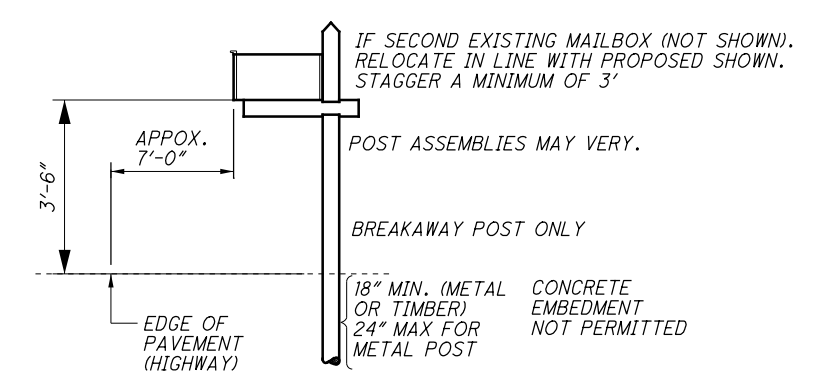


**TYPICAL APPROACH #3 TYPICAL MAIL BOX APPROACH**

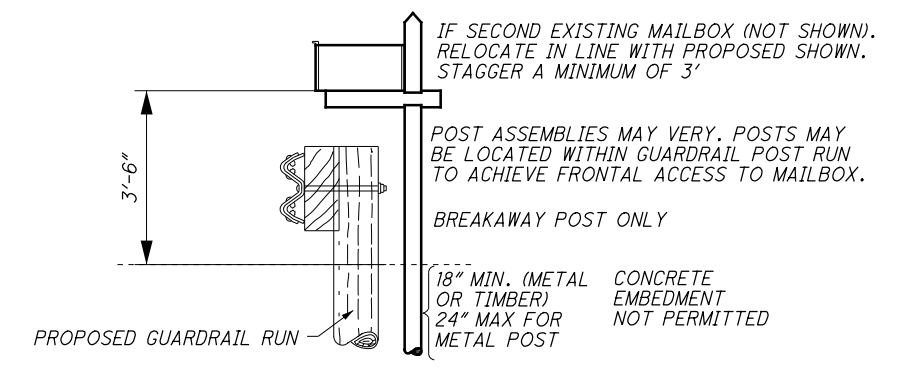
THE EXISTING MAIL BOX POSITION SHALL REMAIN. DIMENSION **D** SHALL NOT EXCEED 6' AND SHALL MATCH EXISTING. \*FOR TYPICAL MAIL BOX APPROACH AND OTHER ADDITIONAL INFORMATION SEE STA. DWG. BP 4.1 (07/19/13). **W** = WIDTH OF EXISTING DRIVEWAY.



**SECTION A-A MAILBOX APPROACH DETAIL**  
FOR EXISTING ASPHALT MAILBOX APPROACHES ONLY  
FOR GRAVEL MAILBOX APPROACHES, USE ITEM 617



**MAILBOX DETAIL**  
ADDRESS 6157 RIVERSIDE DR

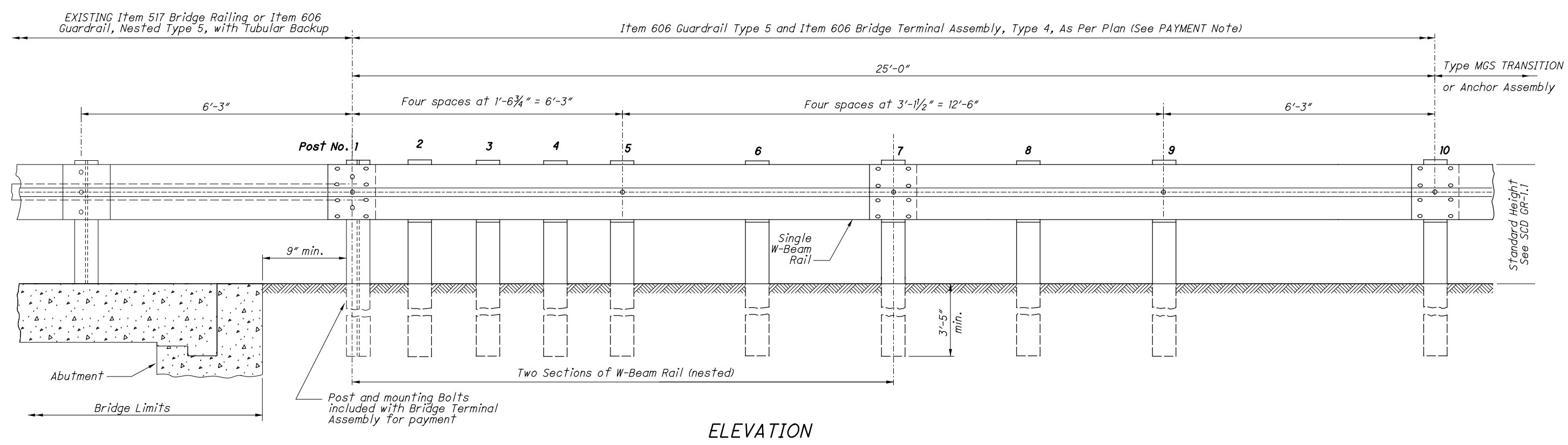
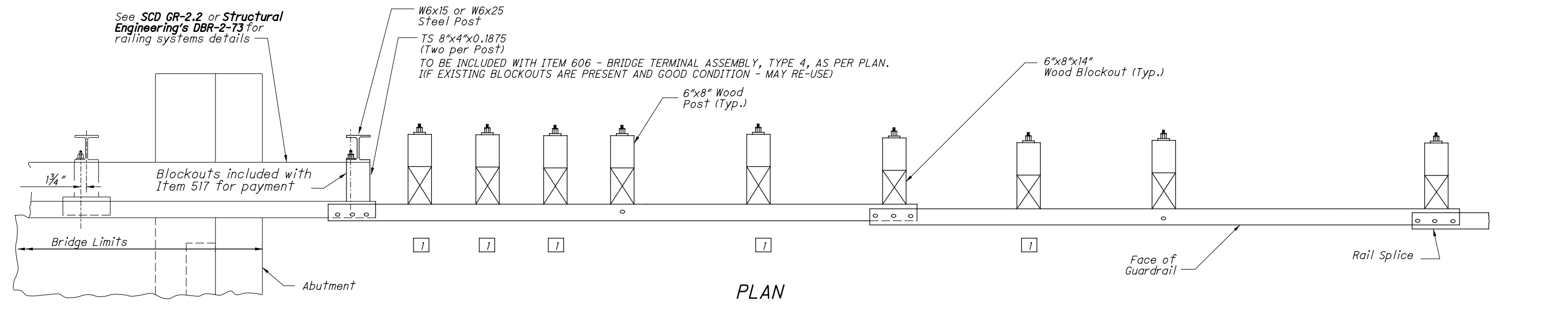


**MAILBOX REMOVED AND RESET DETAIL**

EXISTING MAILBOX ASSEMBLY RELOCATED TO ALIGN WITH PROPOSED GUARDRAIL RUN. DAMAGE RESULTING IN THE REMOVAL SHALL BE REPLACED AT THE EXPENSE OF THE CONTRACTOR. HOLES LEFT AT THE REMOVAL LOCATION SHALL BE FILLED WITH MATERIAL REMOVED FROM THE PROPOSED LOCATION.

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NOTES

**GENERAL:** For additional details, see PIS GR-1.1.

**APPLICATION:** The Type 4 Bridge Terminal Assembly shall connect Type 5/MGS Guardrail runs to Type 5 Guardrail with Tubular Backup or to Deep Beam Guardrail (as shown on Structural Engineering SCD DBR-2-73).

**DETAIL INFORMATION:** The first post off the bridge shall be steel (W6x15 or W6x25). All holes in the off-structure end of the approach panel rail section spanning the abutment are slotted 3/4"x2 1/2". Tighten the bolts as specified for expansion joints in Item 606.05.

**POSTS:** Posts may be set in drilled holes or driven to grade. See PIS GR-1.1 for additional Post embedment details. Guardrail is not attached to certain posts (see LEGEND).

**WOOD POSTS -** Use square sawed pressure treated wood as specified in CMS 710.14 and fabricated with square ends. Bore bolt holes and trim the tops of posts, if required after the posts are set.

**STEEL POSTS -** are allowed as an alternate. Use W6x9 or W6x8.5 in lieu of the 6"x8" wood post. Use same post material through-out assembly.

**BLOCKOUTS:** Use wood blockouts only. Steel or plastic blockouts are not permitted. Notched wood blockouts are used with steel posts.

**FLARED GUARDRAIL:** Start Standard Guardrail Flares as shown on PIS GR-5.1 at or beyond Post No. 10; however, the flare may begin at Post No. 7.

**PAYMENT: Item 606 - Bridge Terminal Assembly, Type 4, AS PER PLAN, Each,** includes the cost of ALL components INCLUDING TYPE 5 guardrail, posts and other hardware.

LEGEND

- 1 Guardrail is not attached to posts at Posts 2, 3, 4, 6, and 8. Blockout is fastened to post with standard Post Bolt.
- 2 FOR PIS GR-1.1 AND PIS GR-2.1, SEE <http://www.dot.state.oh.us/Divisions/Engineering/Roadway/DesignStandards/roadway/Pages/RoadwayStandardsRoadwayPlanInserts.aspx>

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**GENERAL:**

THE CONTRACTOR SHALL SUBMIT IN WRITING A SCHEDULE OF OPERATIONS TO THE ENGINEER (SEE 108.02) AND RECEIVE APPROVAL IN WRITING BEFORE WORK IS STARTED ON THIS PROJECT. ALL TRAFFIC CONTROL DEVICES SHALL BE FURNISHED, ERECTED, MAINTAINED, AND REMOVED BY THE CONTRACTOR IN ACCORDANCE WITH THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.

**CONTRACTORS EQUIPMENT - OPERATION AND STORAGE:**

THE CONTRACTORS EQUIPMENT SHALL BE OPERATED IN THE DIRECTION OF TRAFFIC WHERE PRACTICAL. EQUIPMENT SHALL HAVE AT LEAST ONE AMBER FLASHING LIGHT. WHEN PARKED ALONG THE HIGHWAY, THE EQUIPMENT SHALL BE LOCATED EITHER A MINIMUM OF THIRTY FEET FROM THE EDGE OF PAVEMENT OR SIX FEET BEHIND GUARDRAIL WITH A MINIMUM OF 125 FEET OF GUARDRAIL PRECEDING THE EQUIPMENT. ALL OTHER EQUIPMENT, INCLUDING PRIVATE VEHICLES, SHALL BE STORED AT AN APPROVED CONTRACTORS STORAGE AREA.

**CONTINGENCY QUANTITIES:**

THE CONTRACTOR SHALL NOT ORDER MATERIALS OR PERFORM WORK FOR ITEMS DESIGNATED BY PLAN NOTE TO BE USED "AS DIRECTED BY THE ENGINEER" UNLESS AUTHORIZED BY THE ENGINEER. THE ACTUAL WORK LOCATIONS AND QUANTITIES USED FOR SUCH ITEMS SHALL BE INCORPORATED INTO THE FINAL CHANGE ORDER GOVERNING COMPLETION OF THIS PROJECT,

**REMOVAL ITEMS:**

UNLESS OTHERWISE INSTRUCTED, ASPHALT AND ANY OTHER MISCELLANEOUS ITEMS (SUCH AS GUARDRAIL) DESIGNATED FOR REMOVAL BECOME PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF. PAYMENT FOR THE ABOVE SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE REMOVED ITEM.

**ALIGNMENT AND PROFILE:**

THE WORK PROPOSED BY THIS PROJECT IS FOR THE REPAIR, PLANING AND RESURFACING OF THE EXISTING PAVEMENT. THE ALIGNMENT OF THE EXISTING PAVEMENT WILL NOT BE CHANGED, AND THE PROFILE OF THE PROPOSED SURFACE WILL BE THE SAME AS THE EXISTING PAVEMENT, EXCEPT AS DETAILED ON SHEET 5/54.

**DRIVEWAYS, SIDE ROADS, AND MAILBOX APPROACHES:**

QUANTITIES AND DETAILS HAVE BEEN PROVIDED FOR THE TREATMENT OF DRIVEWAYS, INTERSECTIONS, AND MAILBOX APPROACHES. THE CONTRACTOR SHALL EXPECT TO "PAVE BACK" ON ALL EXISTING SIDE ROADS AS LISTED AND DETAILED IN THE TYPICAL DETAIL SECTION OF THIS PLAN. ONLY EXISTING ASPHALT MAILBOXES SHALL RECEIVE PROPOSED ASPHALT TREATMENTS. QUANTITIES OF ITEM 617 COMPACTED AGGREGATE HAVE BEEN PROVIDED IN THE PLANS TO ACCOMMODATE FOR NON-ASPHALT APPROACHES.

**WORK LIMITS:**

THE WORK LIMITS SHOWN ON THESE PLANS ARE FOR PHYSICAL CONSTRUCTION ONLY. THE INSTALLATION AND OPERATION OF ALL TEMPORARY TRAFFIC CONTROL AND TEMPORARY TRAFFIC CONTROL DEVICES REQUIRED BY THESE PLANS SHALL BE PROVIDED BY THE CONTRACTOR WHETHER INSIDE OR OUTSIDE THESE WORK LIMITS.

**PART-WIDTH CONSTRUCTION:**

BECAUSE OF THE NECESSITY TO BUILD THIS PROJECT UNDER TRAFFIC AND TO CONSTRUCT THE FULL PAVEMENT WIDTH IN STAGES, EXERCISE CARE TO PREVENT THE CONSTRUCTION OF A BUTT JOINT IN THE BASE COURSES. LAP LONGITUDINAL JOINTS AS SHOWN ON STANDARD CONSTRUCTION DRAWING BP-3.1.

**UTILITIES:**

NO UTILITY IMPACT IS ANTICIPATED DUE TO THE SCOPE OF WORK. THE ODOT CONTRACTOR IS REQUIRED TO CONTACT OHIO811 A MINIMUM OF 48 HOURS EXCLUDING WEEKENDS AND HOLIDAYS TO PERMIT ALL UNDERGROUND UTILITIES AN OPPORTUNITY TO MARK THEIR LINES. IT IS ALSO THE ODOT CONTRACTOR'S RESPONSIBILITY TO CONTACT ALL NON-MEMBERS OF OHIO811 DIRECTLY A MINIMUM OF 48 HOURS NOTICE EXCLUDING WEEKENDS AND HOLIDAYS TO PROVIDE THEM WITH THE SAME OPPORTUNITY.

IT IS ODOT'S EXPECTATION THAT ALL GUARDRAIL POSTS WILL BE INSTALLED IN THE SAME LOCATIONS AND THERE WILL BE NO DISRUPTION TO UNDERGROUND UTILITIES. IF THERE IS A UTILITY MARKING WITHIN THE TOLERANCE ZONE OF A UTILITY LOCATE FROM THE PROPOSED GUARDRAIL PLACEMENT IT IS THE ODOT CONTRACTORS RESPONSIBILITY TO DIRECTLY CONTACT THE IMPACTED UTILITY AND WORK WITH THEM TO FIND A SOLUTION THAT DOES NOT CHANGE THE GUARDRAIL PLACEMENT OR DAMAGE THE EXISTING UTILITY. NO UTILITY RELOCATION WILL BE REIMBURSED NOR WILL DELAY CLAIMS BE PERMISSIBLE BASED ON LACK OF COORDINATION BETWEEN THE ODOT CONTRACTOR AND THE IMPACTED UTILITY.

BELOW IS A LIST OF UTILITIES LOCATED WITHIN THE PROJECT AREA TOGETHER WITH THEIR RESPECTIVE OWNERS.

AEP  
700 MORRISON RD  
GAHANNA, OH 43230  
PAUL PAXTON  
614.883.6831  
ppaxton@aep.com

DELAWARE COUNTY REGIONAL  
SEWER DISTRICT  
50 CHANNING ST  
DELAWARE, OH 43015  
KELLY THIEL  
740.833.2240  
kthiel@co.delaware.oh.us

AT&T  
111 NORTH 4TH ST  
ROOM 802  
COLUMBUS, OH 43215  
GARY VAN ALMSICK  
614.223.7276  
gv2758@att.com

FRONTIER COMMUNICATIONS  
1300 COLUMBUS-SANDUSKY RD  
MARION, OH 43302  
BRIAN SPIRES  
740.383.0551  
brian.spires@ftr.com

COLUMBIA GAS OF OHIO  
3550 JOHNNY APPLESEED COURT  
COLUMBUS, OH 43231  
ROB CALDWELL  
614.818.2107  
rcaldwell@nisource.com

ODOT TRAFFIC (DIST 6)  
400 EAST WILLIAM ST  
DELAWARE, OH 43015  
DAVE CARLIN  
740.833.8267  
david.carlin@dot.ohio.gov

COLUMBUS DEPT OF UTILITIES  
109 NORTH FRONT ST  
COLUMBUS, OH 43215

OHIO EDISON  
420 SOUTH YORK ST  
SPRINGFIELD, OH 45505  
CHRIS HARPER  
937.327.1283  
harperc@firstenergycorp.com

COLUMBUS ZOO  
9900 RIVERSIDE DR  
POWELL, OH 43065  
614.645.3582

SPECTRUM  
3760 INTERCHANGE DR  
COLUMBUS, OH 43204  
SAM LUTZ  
614.255.6349  
samuel.lutz@charter.com  
DAVE HOLSTEIN  
david.holstein@charter.com

DELAWARE COUNTY ENGINEERS  
50 CHANNING ST  
DELAWARE, OH 43015  
740.833.2400  
delcoeng@co.delaware.oh.us

**ITEM 202 - GUARDRAIL REMOVED, AS PER PLAN:**

**ITEM 202 - ANCHOR ASSEMBLY REMOVED, TYPE A, AS PER PLAN:**

**ITEM 202 - ANCHOR ASSEMBLY REMOVED, TYPE E, AS PER PLAN:**

**ITEM 202 - BRIDGE TERMINAL ASSEMBLY REMOVED, AS PER PLAN:**

IN ADDITION TO THE REQUIREMENTS OF ITEM 202, REMOVAL OF SPECIFIED GUARDRAIL ITEMS SHALL INCLUDE BUT NOT BE LIMITED TO ANY ATTACHED POSTS, SIGNS AND DELINEATORS (NOT OTHERWISE SPECIFIED). THIS REMOVAL WILL INCLUDE ALL POSTS, ANCHORS AND HARDWARE UNDER GROUND.

THE CONTRACTOR SHALL EXPECT TO REMOVE ALL CONCRETE FOUNDATIONS COMPLETELY AT ALL LOCATIONS UNLESS OTHERWISE INSTRUCTED OR APPROVED BY THE ENGINEER. REMOVING EXISTING CONCRETE FOUNDATION TO A MINIMUM OF 1 FOOT BELOW THE GRADE OF THE SURROUNDING AREA MAY ONLY BE PERMITTED IF THE EXISTING CONCRETE DOES NOT FALL WITHIN 6 FEET OF THE PROPOSED AS TO NOT COMPROMISE THE PERFORMANCE OF THE PROPOSED GUARDRAIL SYSTEM(S).

ALL HOLES AND VOIDS REMAINING AFTER REMOVAL OF GUARDRAIL POSTS AND FOUNDATIONS SHALL BE FILLED WITH GRANULAR MATERIAL CONFORMING TO CMS 203.02R. FILL MATERIAL CONTAINING SOD SHALL NOT BE USED. ALL FILL MATERIAL SHALL BE APPROVED BY THE ENGINEER. MATERIAL PLACED IN HOLES SHALL BE THOROUGHLY COMPACTED AND LEVELED OFF AS DIRECTED BY THE ENGINEER. PAYMENT FOR THE ABOVE SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE APPLICABLE GUARDRAIL REMOVAL ITEM.

NO HAZARD SHALL BE LEFT UNPROTECTED EXCEPT FOR THE ACTUAL TIME NECESSARY TO REMOVE THE EXISTING GUARDRAIL, PREPARE THE SITE, AND INSTALL NEW GUARDRAIL IN A CONTINUOUS OPERATION.

**ITEM 202 - MAILBOX REMOVED, AS PER PLAN:**

THIS ITEM INCLUDES THE REMOVAL OF A STONE MAILBOX SUPPORT AT ADDRESS 6157 RIVERSIDE DR, APPROXIMATELY STA. 321+98.09, AS SHOWN ON SHEET 35/54.

CARE SHALL BE TAKEN TO NOT DAMAGE THE EXISTING MAILBOX, AS IT SHALL BE REUSED. ALL HOLES AND VOIDS REMAINING AFTER REMOVAL SHALL BE FILLED WITH GRANULAR MATERIAL CONFORMING TO CMS 203.02R. FILL MATERIAL CONTAINING SOD SHALL NOT BE USED. ALL FILL MATERIAL SHALL BE APPROVED BY THE ENGINEER. MATERIAL PLACED IN HOLES SHALL BE THOROUGHLY COMPACTED AND LEVELED OFF AS DIRECTED BY THE ENGINEER.

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN PROVIDED AND HAS BEEN CARRIED TO THE GENERAL SUMMARY:

ITEM 202 - MAILBOX REMOVED, AS PER PLAN = 1 EACH

**ITEM 202 - REMOVAL MISC.: ANCHOR ASSEMBLY FOUNDATION:**

THIS ITEM INCLUDES THE COMPLETE REMOVAL OF A CONCRETE FOUNDATION AT APPROXIMATELY STA. 342+42.39, AS SHOWN ON SHEET 37/54.

ALL HOLES AND VOIDS REMAINING AFTER REMOVAL SHALL BE FILLED WITH GRANULAR MATERIAL CONFORMING TO CMS 203.02R. FILL MATERIAL CONTAINING SOD SHALL NOT BE USED. ALL FILL MATERIAL SHALL BE APPROVED BY THE ENGINEER. MATERIAL PLACED IN HOLES SHALL BE THOROUGHLY COMPACTED AND LEVELED OFF AS DIRECTED BY THE ENGINEER.

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**ITEM 202 - REMOVAL MISC.: BUSH:**

THIS ITEM INCLUDES THE REMOVAL OF A LANDSCAPING BUSH FOUNDATION AT ADDRESS 6809 RIVERSIDE DR WITHIN THE RIGHT-OF-WAY LIMITS.

ALL HOLES AND VOIDS REMAINING AFTER REMOVAL SHALL BE FILLED WITH GRANULAR MATERIAL CONFORMING TO CMS 203.02R. FILL MATERIAL CONTAINING SOD SHALL NOT BE USED. ALL FILL MATERIAL SHALL BE APPROVED BY THE ENGINEER. MATERIAL PLACED IN HOLES SHALL BE THOROUGHLY COMPACTED AND LEVELED OFF AS DIRECTED BY THE ENGINEER.

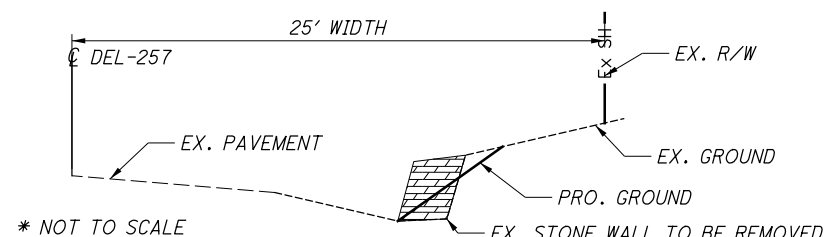
THE FOLLOWING ESTIMATED QUANTITY HAS BEEN PROVIDED AND HAS BEEN CARRIED TO THE GENERAL SUMMARY:

ITEM 202 - REMOVAL MISC.: BUSH = 1 EACH

**ITEM 202 - REMOVAL, MISC.: STONE WALL:**

THIS ITEM INCLUDES THE COMPLETE REMOVAL OF A STONE WALL AT ADDRESS 9093 RIVERSIDE DR, FROM APPROXIMATELY STA. 128+83.86 TO STA. 129+32.84, WITHIN THE RIGHT-OF-WAY LIMITS.

THIS ITEM ALSO INCLUDES GRADING THE EXPOSED GROUND AFTER REMOVAL OF THE STONES TO PREVENT EROSION OR COLLAPSE OF THE EXPOSED SLOPE. EXPOSED GROUND SHALL BE SEEDED AND MULCHED. PAYMENT FOR EROSION CONTROL ITEMS (I.E. SEEDING AND MULCHING) SHALL BE MADE UNDER THE RESPECTIVE ITEMS AS DETAILED IN THE GRADING AND EROSION CONTROL NOTE ON SHEET 11/54.



THE FOLLOWING ESTIMATED QUANTITY HAS BEEN PROVIDED AND HAS BEEN CARRIED TO THE GENERAL SUMMARY:

ITEM 202 - REMOVAL MISC.: STONE WALL = 52 FT

**ITEM 202 - REMOVAL, MISC.: WOOD FENCE:**

THIS ITEM INCLUDES THE COMPLETE REMOVAL OF A SECTION OF A WOODEN LANDSCAPING FENCE AT ADDRESS 6809 RIVERSIDE DR WITHIN THE RIGHT-OF-WAY LIMITS.

ALL HOLES AND VOIDS REMAINING AFTER REMOVAL SHALL BE FILLED WITH GRANULAR MATERIAL CONFORMING TO CMS 203.02R. FILL MATERIAL CONTAINING SOD SHALL NOT BE USED. ALL FILL MATERIAL SHALL BE APPROVED BY THE ENGINEER. MATERIAL PLACED IN HOLES SHALL BE THOROUGHLY COMPACTED AND LEVELED OFF AS DIRECTED BY THE ENGINEER.

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN PROVIDED AND HAS BEEN CARRIED TO THE GENERAL SUMMARY:

ITEM 202 - REMOVAL MISC.: WOOD FENCE = 5 FT

**ITEM 202 - REMOVAL, MISC.: LANDSCAPING:**

THIS ITEM INCLUDES THE COMPLETE REMOVAL OF LANDSCAPING AT ADDRESS 6449 RIVERSIDE DR WITHIN THE RIGHT-OF-WAY LIMITS. THE LANDSCAPING INCLUDES TWO SEPARATE AREAS THAT EACH HAVE A STONE WALL, MULCH BED, AND VEGETATION.

ALL HOLES AND VOIDS REMAINING AFTER REMOVAL SHALL BE FILLED WITH GRANULAR MATERIAL CONFORMING TO CMS 203.02R. FILL MATERIAL CONTAINING SOD SHALL NOT BE USED. ALL FILL MATERIAL SHALL BE APPROVED BY THE ENGINEER. MATERIAL PLACED IN HOLES SHALL BE THOROUGHLY COMPACTED AND LEVELED OFF AS DIRECTED BY THE ENGINEER.

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN PROVIDED AND HAS BEEN CARRIED TO THE GENERAL SUMMARY:

ITEM 202 - REMOVAL MISC.: LANDSCAPING = 28 SY

**ITEM 606 - ANCHOR ASSEMBLY, MGS TYPE E, AS PER PLAN (NCHRP 350 OR MASH 2016):**

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

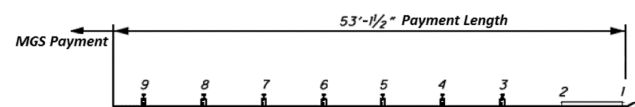
WHEN THE FACE OF THE ADJACENT (ATTACHED) GUARDRAIL IS LESS THAN 4' OFFSET FROM THE PROPOSED EDGE LINE, THE PROPOSED TYPE E ANCHOR ASSEMBLY SHALL BE INSTALLED USING A 25:1 FLARE RATE (24" OFFSET DESIGN) AS DETAILED IN THE SHOP DRAWINGS AND AS DIRECTED BY THE ENGINEER.

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

REFER TO THE MANUFACTURER'S INSTRUCTIONS REGARDING THE INSTALLATION OF, AND THE GRADING AROUND THE FOUNDATION TUBES AND GROUND STRUT. THE TOP OF ANY FOUNDATION TUBE SHOULD BE LESS THAN 4 INCHES ABOVE THE GROUND. THE PLACEMENT OF THE FOUNDATION TUBES SHOULD BE AN APPROPRIATE DEPTH BELOW THE LEVEL LINE IN ORDER TO MAINTAIN THE FINISHED GUARDRAIL HEIGHT OF 31 INCHES FROM THE EDGE OF THE SHOULDER.

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

THE PAYMENT LIMIT (LENGTH) FOR THE PROPOSED ANCHOR ASSEMBLY, (MGS) TYPE E, AS PER PLAN SHALL BE 53'-1 1/2" (TO THE STANDARD MGS CONNECTION) AS DETAILED BELOW.



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

**ITEM 203 - EMBANKMENT, AS PER PLAN:**

QUANTITIES FOR ITEM 203 - EMBANKMENT, AS PER PLAN HAVE BEEN PROVIDED THROUGHOUT THIS PLAN TO BUILD UP FORE-SLOPES AND ENSURE PROPER GRADING FOR THE PROPOSED GUARDRAIL AND ANCHOR ASSEMBLIES. THIS ITEM OF WORK INCLUDES ANY CLEARING AND GRUBBING NECESSARY TO PLACE THE EMBANKMENT AT THE LOCATIONS SPECIFIED OR DIRECTED. THE CONTRACTOR SHALL BE PREPARED TO USE EMBANKMENT AT ALL PROPOSED GUARDRAIL LOCATIONS AND ANY OTHER AREAS "AS DIRECTED BY THE ENGINEER". SEE GUARDRAIL DETAILS ON SHEET 6/54 FOR MORE DETAILS.

**CURVED RAIL ELEMENTS:**

ALL RADII OF CURVED RAIL ARE ESTIMATED AND ACTUAL RADII OF PROPOSED RAIL SHALL BE DETERMINED IN THE FIELD BY THE CONTRACTOR PRIOR TO ORDERING. LENGTH OF CURVED RAIL ELEMENTS, WHERE CALLED FOR IN A RUN, SHALL BE INCLUDED IN THE TOTAL LENGTH OF RUN SHOWN IN THE GUARDRAIL COLUMN AND THE CURVED RAIL ELEMENT TOTAL ARE INCLUDED WITH THE GUARDRAIL TOTALS ON THE GENERAL SUMMARY SHEET. LOCATIONS OF ANY CURVED RAIL ARE IDENTIFIED IN THE PLAN SHEETS.

**CONNECTION BETWEEN EXISTING AND PROPOSED GUARDRAIL:**

WHEN IT IS NECESSARY TO SPLICE PROPOSED GUARDRAIL TO EXISTING GUARDRAIL, ONLY THE EXISTING GUARDRAIL SHALL BE CUT, DRILLED, OR PUNCHED. THE CONNECTION SHALL BE MADE USING A W-BEAM, BEAM SPLICE AS SHOWN IN AASHTO M 180-12, EXCEPT THE BEAM WASHERS ARE NOT TO BE USED. PAYMENT SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE RESPECTIVE GUARDRAIL ITEMS.

**ITEM 606 BRIDGE TERMINAL ASSEMBLY, TYPE 4, AS PER PLAN:**

THIS ITEM SHALL INCLUDE THE COST OF ALL COMPONENTS INCLUDING TYPE 5 GUARDRAIL, POSTS AND OTHER HARDWARE. SEE SHEET 8/54 FOR DETAILS OF THIS WORK.

**ITEM 606 BRIDGE TERMINAL ASSEMBLY, TYPE 4, AS PER PLAN, RADIUS:**

THIS ITEM SHALL INCLUDE THE COST OF ALL COMPONENTS INCLUDING TYPE 5 GUARDRAIL, POSTS AND OTHER HARDWARE. SEE SHEETS 8/54 AND 35/54 FOR DETAILS OF THIS WORK.

**ITEM 606 - GUARDRAIL, MISC.: ALTERNATE GUARDRAIL PLACEMENT:**

THIS ITEM SHALL BE USED WHEN THE CONTRACTOR IS REQUIRED TO USE AN ALTERNATE METHOD TO SET POSTS TO PREVENT DAMAGE TO AN UNDERGROUND OBSTACLE, SUCH AS A UTILITY. THE USE OF THIS ITEM WILL BE AS DEEMED NECESSARY BY THE ENGINEER. THIS ITEM SHALL INCLUDE ALL LABOR, EQUIPMENT, AND MATERIAL NEEDED TO SET AND BACKFILL POSTS WHILE MEETING THE REQUIREMENTS OF THE APPLICABLE GUARDRAIL ITEM BEING PERFORMED. APPLICABLE GUARDRAIL ITEMS INCLUDE BUT ARE NOT LIMITED TO SETTING POSTS (AND SLEEVES) FOR TYPE 5, TYPE MGS, ANCHOR ASSEMBLIES, AND BRIDGE TERMINAL ASSEMBLIES. PAYMENT SHALL BE AT THE UNIT BID PRICE OF EACH AND SHALL BE PAID FOR IN ADDITION TO THE APPLICABLE GUARDRAIL PLACEMENT ITEM LISTED ABOVE.

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN PROVIDED AND HAS BEEN CARRIED TO THE GENERAL SUMMARY:

ITEM 606 - GUARDRAIL, MISC.: ALTERNATIVE GUARDRAIL PLACEMENT = 150 FT

**ITEM 606 - GUARDRAIL, MISC.: PANELS REMOVED AND REPLACED:**

THIS ITEM SHALL INCLUDE THE REMOVAL OF THE W-BEAM PANEL PORTION OF GUARDRAIL AND THE INSTALLATION OF NEW W-BEAM PANELS, AS LOCATED IN THESE PLANS. DO NOT DISTURB ANY TUBULAR BACK UP OR POSTS. THIS ITEM SHALL INCLUDE THE COST OF ALL MATERIAL, LABOR, EQUIPMENT, AND COMPONENTS, INCLUDING MGS W-BEAM RAIL AND OTHER HARDWARE.

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**ITEM 623 - MONUMENT BOX ADJUSTED TO GRADE:**

THIS ITEM OF WORK WILL PROVIDE ALL MATERIAL, LABOR, EQUIPMENT, AND HARDWARE NECESSARY TO ADJUST TO GRADE THE EXISTING MONUMENT BOXES TO 1/4 INCH BELOW THE PROPOSED ASPHALT ELEVATION AT THE FOLLOWING LOCATIONS:

ROUTE	INTERSECTION	QUANTITY
DEL-257	SLM 4.11 (SOUTH OF HOME RD PAVEMENT BREAK)	1
DEL-257	BUTTS RD (CR 137)	1
DEL-257	CLARK-SHAW RD (TR 139)	1

THE FOLLOWING QUANTITY HAS BEEN PROVIDED AND THE TOTAL HAS BEEN CARRIED TO THE GENERAL SUMMARY:

ITEM 623 - MONUMENT BOX ADJUSTED TO GRADE = 3 EACH

**ITEM 623 - MONUMENT BOX RECONSTRUCTED TO GRADE:**

THIS ITEM OF WORK WILL PROVIDE ALL MATERIAL, LABOR, EQUIPMENT, AND HARDWARE NECESSARY TO RECONSTRUCT TO GRADE AN EXISTING MONUMENT BOX TO 1/4 INCH BELOW THE PROPOSED ASPHALT ELEVATION AT THE FOLLOWING LOCATION:

ROUTE	INTERSECTION	QUANTITY
DEL-257	BEAN-OLLER RD (TR 140)	1

THE FOLLOWING QUANTITY HAS BEEN PROVIDED AND THE TOTAL HAS BEEN CARRIED TO THE GENERAL SUMMARY:

ITEM 623 - MONUMENT BOX RECONSTRUCTED TO GRADE = 1 EACH

**ITEM 690 - MAILBOX SUPPORT:**

THE CONTRACTOR SHALL PROVIDE ALL MATERIAL, LABOR, EQUIPMENT, AND HARDWARE NECESSARY TO INSTALL THE EXISTING MAILBOX AT ADDRESS 6157 RIVERSIDE DR ON A NEW SUPPORT. SEE SHEET 35/54 FOR LOCATION, APPROXIMATELY STA. 321+98.09.

WOOD POSTS SHALL BE NOMINAL 4 INCHES BY 4 INCHES SQUARE OR 4.5 INCHES DIAMETER ROUND, AND CONFORM TO 710.14. STEEL POSTS SHALL BE NOMINAL PIPE SIZE 2 INCHES I.D., AND CONFORM TO AASHTO M 181. ALL HARDWARE INCLUDING BUT NOT LIMITED TO PLATES, SCREWS, BOLTS, AND ETC. SHALL BE COMMERCIAL-GRADE GALVANIZED STEEL. POSTS SHALL BE SET PER THE FIRST PARAGRAPH OF 606.03, AND SHALL IN NO INSTANCE BE ENCASED IN CONCRETE. SUPPORT HARDWARE SHALL ACCOMMODATE EITHER A SINGLE OR A DOUBLE MAILBOX INSTALLATION, AND NO MORE THAN TWO BOXES MAY BE MOUNTED ON A SINGLE POST.

THE MAILBOX SHALL BE SECURELY AND NEATLY ATTACHED BY THE CONTRACTOR TO THE NEW SUPPORT. THE CONTRACTOR SHALL FURNISH ALL NECESSARY ATTACHMENT HARDWARE (NUTS, BOLTS, PLATES, SPACERS, AND WASHERS) AS NECESSARY TO ACCOMMODATE THE COMPLETE INSTALLATION.

IN THE ABSENCE OF A NEW BOX SUPPLIED BY THE OWNER, THE CONTRACTOR SHALL SALVAGE THE EXISTING BOX AND PLACE IT ON THE NEW SUPPORT. DUE CARE SHALL BE EXERCISED IN SUCH AN OPERATION, AND THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING OR REPLACING ANY BOX DAMAGED BY IMPROPER HANDLING ON HIS PART, AS JUDGED AND DIRECTED BY THE ENGINEER.

THIS ITEM IS NOT INTENDED FOR MAILBOX OR MAILBOX POSTS WHICH BECOME DAMAGED BY THE CONTRACTOR. GREAT CARE SHALL BE TAKEN TO PREVENT DAMAGE TO ANY OF THE EXISTING MAILBOXES OR MAILBOX POSTS DURING THE PAVING OPERATIONS. ANY MAILBOX OR MAILBOX POST WHICH BECOMES DAMAGED BY THE CONTRACTOR'S PAVING OPERATIONS SHALL BE REMOVED AND REPLACED AT THE CONTRACTOR'S EXPENSE.

SEE SHEET 7/54 FOR DETAIL.

THE FOLLOWING QUANTITY HAS BEEN PROVIDED AND HAS BEEN CARRIED TO THE GENERAL SUMMARY:

ITEM 690 - MAILBOX SUPPORT = 1 EACH

**ITEM 690 - MAILBOX REMOVED AND RESET:**

THE CONTRACTOR SHALL PROVIDE ALL MATERIAL, LABOR, EQUIPMENT, AND HARDWARE NECESSARY TO REMOVE AND RESET EXISTING MAILBOXES. IT IS EXPECTED THAT THE CONTRACTOR WILL PROVIDE A NEW SUPPORT.

WOOD POSTS SHALL BE NOMINAL 4 INCHES BY 4 INCHES SQUARE OR 4.5 INCHES DIAMETER ROUND, AND CONFORM TO 710.14. STEEL POSTS SHALL BE NOMINAL PIPE SIZE 2 INCHES I.D., AND CONFORM TO AASHTO M 181. ALL HARDWARE INCLUDING BUT NOT LIMITED TO PLATES, SCREWS, BOLTS, AND ETC. SHALL BE COMMERCIAL-GRADE GALVANIZED STEEL. POSTS SHALL BE SET PER THE FIRST PARAGRAPH OF 606.03, AND SHALL IN NO INSTANCE BE ENCASED IN CONCRETE. SUPPORT HARDWARE SHALL ACCOMMODATE EITHER A SINGLE OR A DOUBLE MAILBOX INSTALLATION, AND NO MORE THAN TWO BOXES MAY BE MOUNTED ON A SINGLE POST.

THE MAILBOX SHALL BE SECURELY AND NEATLY ATTACHED BY THE CONTRACTOR TO THE NEW SUPPORT. THE CONTRACTOR SHALL FURNISH ALL NECESSARY ATTACHMENT HARDWARE (NUTS, BOLTS, PLATES, SPACERS, AND WASHERS) AS NECESSARY TO ACCOMMODATE THE COMPLETE INSTALLATION.

IN THE ABSENCE OF A NEW BOX SUPPLIED BY THE OWNER, THE CONTRACTOR SHALL SALVAGE THE EXISTING BOX AND PLACE IT ON THE NEW SUPPORT. DUE CARE SHALL BE EXERCISED IN SUCH AN OPERATION, AND THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING OR REPLACING ANY BOX DAMAGED BY IMPROPER HANDLING ON HIS PART, AS JUDGED AND DIRECTED BY THE ENGINEER.

THIS ITEM IS NOT INTENDED FOR MAILBOX OR MAILBOX POSTS WHICH BECOME DAMAGED BY THE CONTRACTOR. GREAT CARE SHALL BE TAKEN TO PREVENT DAMAGE TO ANY OF THE EXISTING MAILBOXES OR MAILBOX POSTS DURING THE PAVING OPERATIONS. ANY MAILBOX OR MAILBOX POST WHICH BECOMES DAMAGED BY THE CONTRACTOR'S PAVING OPERATIONS SHALL BE REMOVED AND REPLACED AT THE CONTRACTOR'S EXPENSE.

SEE SHEET 7/54 FOR DETAIL.

**GRADING AND EROSION CONTROL:**

AREAS DISTURBED BY GUARDRAIL ACTIVITIES, AREAS WHERE EMBANKMENT HAS BEEN PLACED, AND OTHER AREAS OF EARTH DISTURBANCE SHALL BE REPAIRED WITH THE FOLLOWING QUANTITIES, AS DIRECTED BY THE ENGINEER. THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN PROVIDED:

ITEM	QUANTITY	UNIT	DESCRIPTION
659	711	CY	TOPSOIL
659	6,404	SY	SEEDING AND MULCHING
659	320	SY	REPAIR SEEDING AND MULCHING
659	320	SY	INTER-SEEDING
659	0.86	TON	COMMERCIAL FERTILIZER
659	1.32	ACRE	LIME
659	34	MGAL	WATER

**ITEM 251 - PARTIAL DEPTH PAVEMENT REPAIR (ASPHALT CONCRETE BASE), AS PER PLAN, 3.0":**

REPAIR AREAS SHALL BE DETERMINED BY THE PROJECT ENGINEER BEFORE THE BEGINNING OF WORK. REPAIRS SHALL CONSIST OF REMOVING 3.0" OF PAVEMENT, INCLUDING CONCRETE AND ASPHALT CONCRETE, AND PLACING 3.0" OF ITEM 301 - ASPHALT CONCRETE BASE, PG64-22. WORK SHALL BE PERFORMED PRIOR TO RESURFACING AND REPAIR AREAS SHALL RECEIVE THE SAME TREATMENT AS THE ADJACENT EXISTING PAVEMENT. SEE SHEET 6/54 FOR MORE DETAILS. THE BELOW PROVIDED CONTINGENCY QUANTITY SHALL BE USED AS DIRECTED BY THE ENGINEER.

IN ADDITION TO THE PAVEMENT REPAIRS IDENTIFIED ON SHEETS 18-19, THE FOLLOWING CONTINGENCY QUANTITY HAS BEEN PROVIDED AND THE TOTAL HAS BEEN CARRIED TO THE GENERAL SUMMARY:

ITEM 251 - PARTIAL DEPTH PAVEMENT REPAIR (ASPHALT CONCRETE BASE), AS PER PLAN, 3.0" = 63 SY

**ITEM 251 - PARTIAL DEPTH PAVEMENT REPAIR (ASPHALT CONCRETE BASE), AS PER PLAN, 4.0":**

REPAIR AREAS SHALL BE DETERMINED BY THE PROJECT ENGINEER BEFORE THE BEGINNING OF WORK. REPAIRS SHALL CONSIST OF REMOVING 4.0" OF PAVEMENT AND PLACING 4.0" OF ITEM 301 - ASPHALT CONCRETE BASE, PG64-22. WORK SHALL BE PERFORMED PRIOR TO RESURFACING AND REPAIR AREAS SHALL RECEIVE THE SAME TREATMENT AS THE ADJACENT EXISTING PAVEMENT. SEE SHEET 6/54 FOR MORE DETAILS. THE BELOW PROVIDED CONTINGENCY QUANTITY SHALL BE USED AS DIRECTED BY THE ENGINEER.

IN ADDITION TO THE PAVEMENT REPAIRS IDENTIFIED ON SHEETS 18-19, THE FOLLOWING CONTINGENCY QUANTITY HAS BEEN PROVIDED AND THE TOTAL HAS BEEN CARRIED TO THE GENERAL SUMMARY:

ITEM 251 - PARTIAL DEPTH PAVEMENT REPAIR (ASPHALT CONCRETE BASE), AS PER PLAN, 4.0" = 461 SY

**ITEM 253 - PAVEMENT REPAIR, AS PER PLAN, 7.5":**

REPAIR AREAS SHALL BE DETERMINED BY THE PROJECT ENGINEER BEFORE THE BEGINNING OF WORK. REPAIRS SHALL CONSIST OF SAWCUTTING AND REMOVING 7.5" OF PAVEMENT AND PLACING 6.0" OF ITEM 301 - ASPHALT CONCRETE BASE, PG64-22 AND 1.5" OF ITEM 442 - ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A, PG70-22M. ITEM 301 SHALL BE PLACED IN TWO LIFTS AND FABRIC IS TO BE PLACED BETWEEN THE TWO LIFTS. PROVIDED BELOW ARE THE ALLOWABLE PRODUCTS FOR THE FABRIC MATERIAL.

Fabric/Grid Table				
Manufacturer	Product Name	Roll Width (in)	Address	Phone
Chase /Roystan	Pave-Glass	24	128 First St., Pittsburgh, PA 15238	412-828-1500
St Gobain	Glass Grid 8502	60	8000 S. Riverside Dr., Aurora, OH 44202	276-632-1605
Owens Corning	Trupave	150	8000 S. Riverside Dr., Aurora, OH 44202	276-632-1605
St Gobain	Glass Grid CG100	60	8000 S. Riverside Dr., Aurora, OH 44202	276-632-1605

WORK SHALL BE PERFORMED PRIOR TO RESURFACING AND THE REPAIR AREAS WITH THE RESURFACING LIMITS SHALL RECEIVE THE SAME TREATMENT AS THE ADJACENT EXISTING PAVEMENT. THE PERIMETER JOINT OF REPAIR AREAS OUTSIDE OF THE RESURFACING LIMITS SHALL BE SEALED AS PER CMS 253.03. SEE SHEET 6/54 FOR MORE DETAILS. THE BELOW PROVIDED CONTINGENCY QUANTITY SHALL BE USED AS DIRECTED BY THE ENGINEER.

IN ADDITION TO THE PAVEMENT REPAIRS IDENTIFIED ON SHEETS 18-19, THE FOLLOWING CONTINGENCY QUANTITY HAS BEEN PROVIDED AND THE TOTAL HAS BEEN CARRIED TO THE GENERAL SUMMARY:

ITEM 251 - PAVEMENT REPAIR, AS PER PLAN, 7.5" = 171 SY

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**ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE:**

THE CONTRACTOR SHALL BE TOTALLY RESPONSIBLE FOR ANY AND ALL DAMAGE TO THE CONTRACTORS EQUIPMENT THAT MAY RESULT FROM THE PLANING OPERATION, INCLUDING DAMAGE CAUSED BY CASTINGS AND LOOP DETECTORS. THE DEPTH OF PLANING CLOSE TO THE CASTINGS SHALL BE AS DIRECTED; TO ACHIEVE A SMOOTH RIDING FINISHED PAVEMENT. GREAT CARE SHALL BE TAKEN TO PREVENT THE REMOVAL OF THE EXISTING PAVEMENT CROSS-SLOPE (CROWN) DURING THE PLANING OPERATIONS.

THE CONTRACTOR SHALL LIMIT THE PLANING OPERATION TO ONE LANE AT A TIME AS TO ENSURE THAT THE PROPOSED SURFACE COURSE IS BUTTING UP TO EITHER PROPOSED OR EXISTING ASPHALT.

PLANED PAVEMENT SHALL NOT BE EXPOSED TO TRAFFIC FOR MORE THAN 7 CALENDAR DAYS. FAILURE TO MEET THIS REQUIREMENT WILL SUBJECT THE CONTRACTOR TO A DISINCENTIVE OF \$600/DAY FOR EACH DAY THE PLANED SURFACE IS NOT RESURFACED.

BUTT JOINTS SHALL BE PROVIDED AT THE BEGINNING AND END OF PAVING LIMITS AND AT THE APPROACH SLABS OF ALL STRUCTURES NOT BEING PAVED.

**ITEM 617 - WATER:**

THE FOLLOWING QUANTITY HAS BEEN PROVIDED AND THE TOTAL HAS BEEN CARRIED TO THE GENERAL SUMMARY:

ITEM 617 - WATER = 2 MGAL

**ITEM 630 - SIGNING, MISC.: REMOVAL OF WOOD ADDRESS POST AND REERECTION:**

THIS ITEM SHALL INCLUDE THE REMOVAL AND REERECTION OF THE ADDRESS AND PARK AREA WOODEN MARKER POSTS. FOLLOW C&MS 630.12.

THIS ITEM IS NOT INTENDED FOR POSTS WHICH BECOME DAMAGED BY THE CONTRACTOR. GREAT CARE SHALL BE TAKEN TO PREVENT DAMAGE TO ANY OF THE EXISTING POSTS DURING THE CONSTRUCTION OPERATIONS. ANY POST WHICH BECOMES DAMAGED BY THE CONTRACTOR'S CONSTRUCTION OPERATIONS SHALL BE REMOVED AND REPLACED AT THE CONTRACTOR'S EXPENSE.

THIS ITEM SHALL INCLUDE THE COST OF ALL MATERIAL, LABOR AND EQUIPMENT NECESSARY TO COMPLETE THE REMOVAL AND REERECTION.

**ITEM 621 - RPM:**

THE RPMs FROM STA. 94+77.94 TO STA. 99+08.76 SHALL BE INSTALLED AFTER THE PLACEMENT OF ITEM 888, HIGH FRICTION SURFACE COURSE.

**ITEM 642 - REMOVAL OF PAVEMENT MARKING:**

THIS ITEM IS TO BE USED TO REMOVE THE WORK ZONE PAVEMENT MARKINGS FROM STA. 94+77.94 TO STA. 99+08.76, WHERE ITEM 888, HIGH FRICTION SURFACE COURSE IS USED, AS PER SS888.03.

THE FOLLOWING QUANTITY HAS BEEN PROVIDED AND THE TOTAL HAS BEEN CARRIED TO THE GENERAL SUMMARY:

ITEM 642 - REMOVAL OF PAVEMENT MARKINGS = 0.25 MILE

**PROPOSED NO PASSING ZONES:**

THE PROPER PLACEMENT OF THE PASSING AND NO PASSING ZONES AS SHOWN ON PLAN SHEETS 44-47 SHALL BE CONFIRMED BY THE CONTRACTOR AND PLACED BY USING THE CONTROL POINTS SHOWN ON THE PLAN SHEETS.

SLM'S ON THE PASSING ZONE SHEETS COULD BE DIFFERENT THAN THE SLM'S SHOWN ON THE PAVING PLAN. ALL START AND STOP SLM LOCATIONS SHALL BE WITHIN 0.005 MILES OF THE LOCATIONS SHOWN ON THE PLAN SHEETS LISTED ABOVE. A LETTER OF VERIFICATION OF ALL PASSING AND NO PASSING ZONES SHALL BE SUBMITTED TO THE PROJECT ENGINEER FOR PLACEMENT IN THE PROJECT RECORDS. ANY IMPROPERLY PLACED PASSING OR NO PASSING ZONES SHALL BE IMMEDIATELY CORRECTED.

**ITEM 644 - PAVEMENT MARKING**

**ITEM 646 - PAVEMENT MARKING:**

WITH THE EXCEPTION OF THE PROPOSED PASSING ZONES, IT IS THE INTENT OF THE PROPOSED PAVEMENT MARKINGS TO BE THE SAME AS EXISTING. ANY DEVIATION FROM EXISTING WILL BE IDENTIFIED WITHIN THIS PLAN. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE LOCATION, SIZE AND SHAPE OF THESE EXISTING PAVEMENT MARKINGS BEFORE THE RESURFACING WORK OBLITERATES THEM. ANY PAVEMENT MARKING WHICH IS PLACED AT THE WRONG LOCATION SHALL BE REMOVED AND REPLACED AT THE CONTRACTORS EXPENSE.

THE FOLLOWING CONTINGENCY QUANTITIES HAVE BEEN PROVIDED FOR USE AS DIRECTED BY THE ENGINEER IN AREAS DISTURBED BY PAVEMENT REPAIRS OUTSIDE OF THE RESURFACING LIMITS. THE TOTALS HAVE BEEN CARRIED TO THE GENERAL SUMMARY:

ITEM 644 - EDGE LINE, 6" = 0.10 MILE

ITEM 644 - CENTER LINE = 0.10 MILE

ITEM 644 - DOTTED LINE, 6" = 500 FT

**ITEM 623 - CONSTRUCTION LAYOUT STAKES AND SURVEYING, AS PER PLAN:**

THE ITEM SHALL CONSIST OF STATION USING 3 FT LATH STAKES OR PAINT MARKINGS. THE STAKES OR PAINT MARKINGS SHALL BE SPACED EVERY 200' FOR THE ENTIRE LENGTH. PLACEMENT OF THE STAKES OR PAINT MARKINGS SHALL BE AS DIRECTED BY THE ENGINEER. THE CONTRACTOR IS RESPONSIBLE FOR REPLACING ANY DAMAGED, MISSING STAKES, OR PAINT MARKINGS. PAINT MARKINGS SHALL BE PLACED ON CURBS AND USED IN AREAS WERE THE PLACEMENT OF STAKES IS NOT POSSIBLE AND APPROVED BY THE PROJECT ENGINEER.

THIS ITEM SHALL ALSO BE USED TO ESTABLISH THE EXISTING RIGHT OF WAY TO VERIFY THAT ALL WORK (OUTSIDE THE ROADWAY) IS CONTAINED WITHIN THE EXISTING RIGHT OF WAY LIMITS.

**STREAM IMPACTS:**

THE CONTRACTOR SHALL NOT IMPACT ANY STREAMS/RIVERS WITH THIS PROJECT (SCIOTO RIVER OR O'SHAUGHNESSY RESERVOIR). THE CONTRACTOR SHALL UTILIZE APPROPRIATE BMPS TO AVOID ANY IMPACTS TO RESOURCES SUCH AS, INCORPORATE BUFFERS AND CATCHMENT MECHANISMS TO ENSURE NO DEBRIS OR HAZARDOUS WASTE ENTERS THE AFOREMENTIONED WATER BODIES.

CALCULATED  
KLM  
CHECKED  
XXX

GENERAL NOTES

DEL-257-1.53

**GENERAL:**

ALL TRAFFIC CONTROL DEVICES SHALL BE FURNISHED, ERECTED, MAINTAINED, AND REMOVED BY THE CONTRACTOR IN ACCORDANCE WITH THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (OMUTCD - CURRENT EDITION). COPIES ARE AVAILABLE FROM:

THE OHIO DEPARTMENT OF TRANSPORTATION  
BUREAU OF TRAFFIC,  
1980 WEST BROAD STREET  
COLUMBUS, OHIO 43223.

LENGTH AND DURATION OF LANE CLOSURES AND RESTRICTIONS SHALL BE AT THE APPROVAL OF THE ENGINEER. IT IS THE INTENT TO MINIMIZE THE IMPACT TO THE TRAVELING PUBLIC. LANE CLOSURES OR RESTRICTIONS OVER SEGMENTS OF THE PROJECT IN WHICH NO WORK IS ANTICIPATED WITHIN A REASONABLE TIME FRAME, AS DETERMINED BY THE ENGINEER, SHALL NOT BE PERMITTED. THE LEVEL OF UTILIZATION OF MAINTENANCE OF TRAFFIC DEVICES SHALL BE COMMENSURATE WITH THE WORK IN PROGRESS.

ALL WORK AND TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH CMS 614 AND OTHER APPLICABLE PORTIONS OF THE SPECIFICATIONS, AS WELL AS THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.

ALL PERMANENT TRAFFIC CONTROLS NOT IN CONFLICT WITH THE TEMPORARY TRAFFIC CONTROLS SHALL BE MAINTAINED THROUGHOUT THIS PROJECT BY THE CONTRACTOR. PERMANENT TRAFFIC CONTROLS MAY BE TEMPORARILY RELOCATED BY THE ENGINEER. THE CONTRACTOR SHALL ASSUME ALL LIABILITY FOR MISSING, DAMAGED, AND PROPERLY PLACED SIGNS.

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

**LANES OPEN DURING HOLIDAYS AND SPECIAL EVENTS:**

NO WORK SHALL BE PERFORMED AND THE SAME NUMBER OF LANES AS WERE AVAILABLE AT THE START OF THE PROJECT SHALL BE OPEN TO TRAFFIC DURING THE FOLLOWING DESIGNATED HOLIDAYS OR EVENTS:

**HOLIDAYS**

CHRISTMAS	FOURTH OF JULY
NEW YEARS	LABOR DAY
MEMORIAL DAY	THANKSGIVING

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

DAY OF HOLIDAY	TIME ALL LANES MUST BE OPEN TO TRAFFIC
SUNDAY	12:00 NOON FRIDAY THROUGH 6:00 AM MONDAY
MONDAY	12:00 NOON FRIDAY THROUGH 6:00 AM TUESDAY
TUESDAY	12:00 NOON MONDAY THROUGH 6:00 AM WEDNESDAY
WEDNESDAY	12:00 NOON TUESDAY THROUGH 6:00 AM THURSDAY
THURSDAY	12:00 NOON WEDNESDAY THROUGH 6:00 AM FRIDAY
THANKSGIVING	5:00 AM WEDNESDAY THROUGH 6:00 AM MONDAY
FRIDAY	12:00 NOON THURSDAY THROUGH 6:00 AM MONDAY
SATURDAY	12:00 NOON FRIDAY THROUGH 6:00 AM MONDAY

**SPECIAL EVENT**

MEMORIAL GOLF TOURNAMENT - LANE OR SHOULDER CLOSURES ARE NOT PERMITTED DURING THE WEEK OF THE GOLF TOURNAMENT 5AM-10PM DAILY.

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

SHOULD THE CONTRACTOR FAIL TO MEET ANY OF THESE REQUIREMENTS, THE CONTRACTOR SHALL BE ASSESSED A DISINCENTIVE PER THE LANE VALUE CONTRACT (PN 127).

**NOTIFICATION OF TRAFFIC RESTRICTIONS:**

THROUGHOUT THE DURATION OF THE PROJECT, THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER IN WRITING OF ALL TRAFFIC RESTRICTIONS AND UPCOMING MAINTENANCE OF TRAFFIC CHANGES. THE CONTRACTOR SHALL ENSURE THE WRITTEN NOTIFICATION IS SUBMITTED IN A TIMELY MANNER TO ALLOW THE PROJECT ENGINEER TO MEET THE REQUIRED TIME FRAMES SET FORTH IN THE TABLE BELOW TO INFORM SPECIAL HAULING (HAULING.PERMITS@DOT.OHIO.GOV) AND THE DISTRICT PUBLIC INFORMATION OFFICE (PIO). THIS NOTIFICATION SHALL BE RECEIVED BY THE PROJECT ENGINEER PRIOR TO THE PHYSICAL SETUP OF ANY APPLICABLE SIGNS OR MESSAGE BOARDS.

INFORMATION SHOULD INCLUDE BUT IS NOT LIMITED TO ALL CONSTRUCTION ACTIVITIES THAT IMPACT OR INTERFERE WITH TRAFFIC AND SHALL LIST THE SPECIFIC LOCATION, TYPE OF WORK, ROAD STATUS, DATE AND TIME OF RESTRICTION, DURATION OF RESTRICTION, NUMBER OF LANES MAINTAINED, NUMBER OF LANES CLOSED, DETOUR ROUTES IF APPLICABLE, AND ANY OTHER INFORMATION REQUESTED BY THE PROJECT ENGINEER.

Item	Duration of Closure	Notification due to District 6 Communications Office	Sign Displayed to Public
Ramp & Road Closures	>= 2 weeks	21 calendar days prior to closure	14 calendar days prior to closure
	> 12 hours & < 2 weeks	14 calendar days prior to closure	7 calendar days prior to closure
	< 12 hours	4 business days prior to closure	2 business days prior to closure
Lane Closures & Restrictions	>= 2 weeks	14 calendar days prior to closure	
	< 2 weeks	5 business days prior to closure	
Start of Construction & Traffic Pattern Changes	N/A	14 calendar days prior to implementation	

ANY UNFORESEEN CONDITIONS NOT SPECIFIED IN THE PLANS REQUIRING TRAFFIC RESTRICTIONS SHALL ALSO BE REPORTED TO THE PROJECT ENGINEER USING THE NOTIFICATION TIME FRAME TABLE.

**NOTIFICATION OF CONSTRUCTION INITIATION:**

AT LEAST FOURTEEN DAYS PRIOR TO STARTING INITIAL CONSTRUCTION ACTIVITIES, THE CONTRACTOR SHALL ADVISE THE DISTRICT OFFICE OF COMMUNICATIONS VIA EMAIL AT [d06.pio@dot.ohio.gov](mailto:d06.pio@dot.ohio.gov), THE DISTRICT WORK ZONE TRAFFIC MANAGER VIA EMAIL AT [d06.mot@dot.ohio.gov](mailto:d06.mot@dot.ohio.gov) AND THE CENTRAL OFFICE SPECIAL HAUL PERMITS SECTION BY FAX AT (614)728-4099 OF THE ANTICIPATED START DATE OF ANY CONSTRUCTION ACTIVITIES INCLUDING BUT NOT LIMITED TO THE PLACING OF WORK ZONE SIGNS. THE NOTIFICATION SHALL ALSO INCLUDE THE PROJECT NUMBER, PID, NAME AND PHONE NUMBER OF THE CONTRACTOR, A POINT OF CONTACT AND THE ANTICIPATED IMPACT ON TRAFFIC. THE CONTRACTOR WILL IMMEDIATELY INFORM THE DISTRICT OFFICE OF COMMUNICATIONS AND THE DISTRICT WORK ZONE TRAFFIC MANAGER OF ANY AND ALL DELAYS AND/OR CHANGES REGARDING THE CONSTRUCTION INITIATION DATE.

**DRIVEWAY ACCESS:**

MAINTAIN ACCESS TO RESIDENTIAL AND COMMERCIAL PROPERTIES AT ALL TIMES. WHEN A RESIDENTIAL OR COMMERCIAL DRIVE IS CLOSED FOR CONSTRUCTION, MAINTAIN ALTERNATE ACCESS TO THE PROPERTY. IT MAY BE REQUIRED FOR THE CONTRACTOR TO MAINTAIN ONE PASSABLE LANE WITHIN A CLOSURE IN ORDER FOR VEHICLES TO ACCESS RESIDENTIAL OR COMMERCIAL PROPERTY WITH A VEHICLE.

**PUBLIC OUTREACH AND NOTIFICATION:**

THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING THE DISTRICT 6 PUBLIC INFORMATION OFFICE VIA EMAIL AT [d06.pio@dot.ohio.gov](mailto:d06.pio@dot.ohio.gov) TO COORDINATE EFFORTS TO NOTIFY ADJACENT RESIDENTS, BUSINESSES, AND EMERGENCY SERVICES OF THE UPCOMING RESURFACING PROJECT. ADVANCE NOTIFICATION SHALL OCCUR NO LATER THAN FOURTEEN (14) DAYS PRIOR TO A NEW LOCATION. ALL NOTIFICATIONS SHALL BE MADE UTILIZING THE TEMPLATE PROVIDED BY THE DISTRICT 6 PUBLIC INFORMATION OFFICE.

**USE OF STANDARD DRAWINGS:**

FOR THE PURPOSE OF THIS PROJECT, "MOVING OPERATION" SHALL BE LIMITED TO PAVEMENT MARKING STRIPING. IT MAY BE NECESSARY TO EXTEND THE ADVANCE WARNING AND BUFFER ZONES BEYOND THE MINIMUM DISTANCES SHOWN ON THE STANDARD DRAWINGS. THIS MAY BE DUE TO HORIZONTAL ALIGNMENT, VERTICAL ALIGNMENT, RAMP LOCATIONS, OR OTHER SIGHT OBSTRUCTIONS. LOCATIONS OF THE TAPER ZONES MAY BE ADJUSTED AS DIRECTED BY THE ENGINEER, BUT TAPER LENGTHS MUST MEET THE MINIMUM STANDARDS. TAPERS SHOULD BE PLACED IN TANGENT SECTIONS WHENEVER POSSIBLE. ADDITIONAL YIELD SIGNS MAY BE REQUIRED FOR RAMPS WITHIN 1,000 FEET OF A WORK ZONE. PAYMENT SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614, MAINTAINING TRAFFIC.

FOR ANY MULTILANE HIGHWAY, DEVICE SPACING SHALL BE A MAXIMUM OF 40' (FEET) CENTER ON CENTER IN THE TAPERS AND 80' (FEET) CENTER ON CENTER IN THE TANGENT SECTIONS.

**WORK SITE LIGHTING:**

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.

**DROPOFFS IN WORK ZONES:**

THE DROPOFF ADJACENT TO THE TRAVELED LANE SHALL MEET THE CRITERIA OUTLINED IN STANDARD DRAWING MT-101.90. NO ADDITIONAL COMPENSATION SHALL BE MADE FOR MATERIALS, LABOR OR EQUIPMENT NECESSARY TO MEET THE REQUIREMENTS OF MT-101.90.

**RIGHT OF WAY PERMITS:**

THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL APPLICABLE RIGHT OF WAY USE PERMITS TO INSTALL MAINTENANCE OF TRAFFIC SIGNING.

**CONSTRUCTION TRAFFIC:**

ALL CONSTRUCTION TRAFFIC SHALL USE ACCEPTABLE TRUCK ROUTES IN ACCORDANCE WITH CMS 105.13 TO ACCESS THE CONSTRUCTION AREA. USE OF LOCAL RESIDENTIAL STREETS IS STRICTLY PROHIBITED UNLESS ALLOWED IN WRITING BY THE LOCAL ENFORCEMENT AUTHORITY.

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**TRUCK MOUNTED ATTENUATOR (TMA):**

WHEN WORKING IN A CLOSED LANE OR SHOULDER ON A TWO LANE HIGHWAY WITHOUT TEMPORARY OR PERMANENT TRAFFIC BARRIERS SEPARATING THE WORK AREA FROM THE TRAVELED LANE, A TRUCK MOUNTED ATTENUATOR (TMA) SHALL BE PROVIDED TO PROTECT EACH WORK AREA IN ACCORDANCE WITH OMUTCD TYPICAL APPLICATION (TA) 4, TA-6 AND TA-17, ALONG WITH STANDARD CONSTRUCTION DRAWING (SCD) MT-97.10. THE TMA SHALL BE PLACED IN SUCH A WAY TO ADEQUATELY PROTECT THE WORKERS INSIDE THE WORK ZONE. THE TMA IS NOT INTENDED TO BE USED AS OR SUBSTITUTED FOR THE FLAGGERS AND/OR WARNING SIGNS AND DEVICES. THE TMA SHALL MEET NCHRP 350 TEST LEVEL 3 CRITERIA FOR STANDARD AND OPTIONAL TESTS AT 100 KM/H (62 MPH) FOR DESIGN IMPACTS. THE COST FOR PROVIDING THE TMA SHALL INCLUDE ALL MATERIAL, LABOR, EQUIPMENT, AND HARDWARE REPLACEMENT AND IS TO BE INCLUDED IN THE LUMP SUM BID PRICE FOR ITEM 614 MAINTAINING TRAFFIC.

**MAINTENANCE OF TRAFFIC FOR MARKING PAVEMENT REPAIRS:**

PROVIDE LANE CLOSURES AS PER THE MAINTENANCE OF TRAFFIC NOTES IN THESE PLANS A MINIMUM OF 24 HOURS PRIOR TO PERFORMING PAVEMENT REPAIRS TO ALLOW THE ENGINEER TO IDENTIFY AND MARK THE AREAS OF THE PAVEMENT IN NEED OF REPAIRS.

PAYMENT FOR ALL LABOR, EQUIPMENT, MATERIALS, LEO HOURS, AND INCIDENTALS NEEDED TO PERFORM THE ABOVE LISTED WORK IS CONSIDERED INCIDENTAL TO MAINTAINING TRAFFIC ON THE PROJECT AND WILL BE INCLUDED IN THE LUMP SUM BID PRICE FOR ITEM 614 MAINTAINING TRAFFIC.

**MAINTENANCE OF TRAFFIC:**

BELOW IS A SUMMARY OF MOT REQUIREMENTS FOR THIS PROJECT:

\* MAINTAIN ONE LANE OF TRAFFIC AT ALL TIMES ON DEL-257 WITH FLAGGERS AS PER SCD MT-97.10 AND MT-97.12 IN ACCORDANCE WITH THE LANE VALUE CONTRACT TABLE.

**PERMITTED LANE CLOSURES:**

THE EXISTING NUMBER OF LANES IN EACH DIRECTION SHALL BE MAINTAINED AT ALL TIMES EXCEPT DURING PERIODS OF WORK AT WHICH TIME LANES MAY BE CLOSED IN ACCORDANCE WITH THE LANE VALUE CONTRACT TABLE FOR EACH LOCATION UNLESS OTHERWISE SHOWN IN THE PLANS.

LENGTH AND DURATION OF LANE CLOSURES AND RESTRICTIONS SHALL BE AT THE APPROVAL OF THE ENGINEER. IT IS THE INTENT TO MINIMIZE THE IMPACT TO THE TRAVELING PUBLIC. LANE CLOSURES OR RESTRICTIONS OVER SEGMENTS OF THE PROJECT IN WHICH NO WORK IS ANTICIPATED WITHIN A REASONABLE TIME FRAME, AS DETERMINED BY THE ENGINEER, SHALL NOT BE PERMITTED. THE LEVEL OF UTILIZATION OF MAINTENANCE OF TRAFFIC DEVICES SHALL BE COMMENSURATE WITH THE WORK IN PROGRESS.

ALL WORK AND TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH CMS 614 AND OTHER APPLICABLE PORTIONS OF THE SPECIFICATIONS, AS WELL AS THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.

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

**LANE VALUE CONTRACT TABLE:**

THE CONTRACTOR SHALL BE ASSESSED A DISINCENTIVE AS DESIGNATED IN THE LANE VALUE CONTRACT TABLE FOR EACH UNIT OF TIME A LANE/SHOULDER/RAMP IS CLOSED BY THE CONTRACTOR'S ACTION WHILE NOT OTHERWISE PERMITTED BY THE LANE VALUE CONTRACT TABLE.

LANE VALUE CONTRACT TABLE					
Section (SLM)	Existing Number of Through Lanes per Direction	Lane closures are NOT permitted:			Disincentive Amounts per minute per lane
		Lane Reduction	Mon to Fri	Sat & Sun	
MAR-23					
Franklin County Line (0.00) to Zoo Delivery Entrance (1.44)	2	2 to 1	6AM-9AM & 3PM-6PM	No Restriction	\$90
Zoo Delivery Entrance (1.44) to Home Road (4.45)	2	1 Shared Lane	6AM-9AM & 3PM-6PM	No Restriction	\$85
Home Road (4.45) to Bean Oller Road (7.20)	2	1 Shared Lane	No Restriction	No Restriction	\$50
Bean Oller Road (7.20) to US 42 (7.80)	2	1 Shared Lane	6AM-9AM & 3PM-6PM	No Restriction	\$50

**COORDINATION WITH ADJACENT PROJECTS:**

THE CONTRACTOR SHALL COORDINATE WITH ODOT AND THE CONTRACTORS ON THE ADJACENT PROJECT. DEL-42-1.41, PID 108685. COORDINATION SHALL BE MADE TO PREVENT CONFLICTING ADVANCE WARNING SIGNS, CONFLICTING DETOUR ROUTES, OVERLAPPING/CONFLICTING LANE CLOSURES, AND TO ENSURE THAT A MINIMUM DISTANCE OF 2 MILES BETWEEN ADJACENT LANE CLOSURES IS MAINTAINED. THIS IS NOT AN EXHAUSTIVE LIST OF COORDINATION ITEMS THAT MAY NEED TO BE RESOLVED BETWEEN PROJECTS. THE DEPARTMENT RESERVES THE RIGHT TO DECIDE WHICH PROJECT'S ACTIVITIES TAKE PRECEDENCE. PROJECTS THAT HAVE ACTIVITIES DELAYED DUE TO CONFLICTS WILL CONSIDER THIS AS AN EXCUSABLE, NON-COMPENSABLE DELAY PER 108.06.B. ON PROJECT THAT HAVE ACTIVITIES DELAYED DUE TO CONFLICTS WHERE THE CONTRACTOR FAILED TO MEET THE NOTIFICATION REQUIREMENTS, THE DELAYS SHALL NOT BE CONSIDERED EXCUSABLE OR COMPENSABLE.

ATTENDANCE AT DEPARTMENT ORDERED TRAFFIC COORDINATION MEETINGS BETWEEN ADJACENT PROJECTS SHALL BE CONSIDERED MANDATORY FOR EACH PROJECT'S SUPERINTENDENT AND WORKSITE TRAFFIC SUPERVISOR (WTS), AND INCIDENTAL TO THE LUMP SUM MAINTENANCE OF TRAFFIC PAYMENT ITEM.

DEL-42-1.41, PID 108685  
CLOSURE OF US 42 UTILIZING SR 257 AS DETOUR.

**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 WILL NOT BE PERMITTED AT PROJECT COST. 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:

\* WHEN TRAFFIC NEEDS TO BE DIRECTED THROUGH AN ENERGIZED TRAFFIC SIGNAL CONTRARY TO THE SIGNAL DISPLAY (E.G., DIRECTING MOTORISTS THROUGH A RED LIGHT).

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 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 LEO'S DUTIES AND PLACEMENT, AND WILL RESOLVE AND 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. ONCE THE LEO HAS COMPLETED THE DUTIES DESCRIBED ABOVE AND STILL HAS TIME REMAINING ON HIS/HER SHIFT, THE LEO MAY BE ASKED TO PATROL THROUGH THE WORK ZONE (WITH FLASHING LIGHTS OFF) OR BE PLACED AT A LOCATION TO DETER MOTORISTS FROM SPEEDING. 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 WITH 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 HOURS PAID SHALL INCLUDE ANY MINIMUM SHOW-UP TIME REQUIRED BY THE LAW ENFORCEMENT AGENCY INVOLVED. 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.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY:

ITEM 614 - LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE

= 20 HOUR

**ITEM 614 - WORK ZONE MARKING SIGN, AS PER PLAN:**

"DO NOT PASS" AND "PASS WITH CARE" SIGNS SHALL BE PLACED TO REFLECT THE EXISTING PASSING AND NO PASSING ZONES. THESE SIGNS SHALL BE COVERED OR REMOVED WITHIN 24 HOURS OF THE PLACEMENT OF THE CORRECTED CENTERLINE MARKINGS AT LOCATIONS SHOWN ON PLAN SHEETS 44-47 . "NO EDGE LINE" SIGNS SHALL BE PLACED AS PER SPECIFICATIONS OF ITEM 614.

ROUTE	R4-1-18	R4-2-18	W8-H12A-36
	NO EDGE LINES	DO NOT PASS	PASS WITH CARE
	EACH	EACH	EACH
DEL-257	10	14	14
TOTAL	38		

THE FOLLOWING QUANTITY HAS BEEN PROVIDED AND THE TOTAL HAS BEEN CARRIED TO THE GENERAL SUMMARY:

ITEM 614 - WORK ZONE MARKING SIGN, AS PER PLAN = 38 EACH

**ITEM 614 - WORK ZONE PAVEMENT MARKING, CLASS III, 642 PAINT:**

WORK ZONE CENTER LINE SHALL BE PLACED TO REFLECT THE PROPOSED CENTER LINE AS DETERMINED FROM THE PROPOSED MARKINGS WITHIN THE PROJECT LIMITS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE LOCATION, SIZE, AND TYPE OF WORK ZONE MARKINGS NEEDED MEETING THE REQUIREMENTS OF ITEM 614 BEFORE THE REMOVAL OR RESURFACING OBLITERATES THE EXISTING.

ITEM 614 - WORK ZONE CENTER LINE, CLASS III, 642 PAINT:

DEL-257 1.53 - 7.77 = 6.24 MILE  
 TOTAL = 6.24 MILE  
 X 2 APPLICATIONS = 12.48 MILE

ITEM 614 - WORK ZONE CHANNELIZING LINE, CLASS III, 8", 642 PAINT:

DEL-257 NB @ 108+73.87 = 275 FT CREIGHTON DR  
 DEL-257 SB @ 112+30.70 = 296 FT CREIGHTON DR  
 TOTAL = 571 FT  
 X 2 APPLICATIONS = 1142 FT

ITEM 614 - WORK ZONE STOP LINE, CLASS III, 642 PAINT:

DEL-257 @ 2.408 = 11 FT ON SELDOM SEEN RD (TR 121)  
 DEL-257 @ 2.697 = 11 FT ON BAYPOINTE DR  
 DEL-257 @ 2.971 = 11 FT ON LAKEVIEW DR (TR 331)  
 DEL-257 @ 3.575 = 12 FT ON BRUST DR (TR 357)  
 DEL-257 @ 7.177 = 9 FT ON BEAN-OLLER RD (TR 140)  
 SUBTOTAL = 54 FT  
 X 2 APPLICATIONS = 108 FT  
 DEL-257 @ 7.770 = 10 FT AT US 42  
 SUBTOTAL = 118 FT

THE FOLLOWING QUANTITIES HAVE BEEN PROVIDED AND THE TOTALS HAVE BEEN CARRIED TO THE GENERAL SUMMARY:

ITEM 614 - WORK ZONE CENTER LINE, CLASS III, 642 PAINT = 12.48 MILE

ITEM 614 - WORK ZONE CHANNELIZING LINE, CLASS III, 8", 642 PAINT = 1142 FT

ITEM 614 WORK ZONE STOP LINE, CLASS III, 642 PAINT = 118 FT

WORK ZONE PAVEMENT MARKINGS ARE NOT TO BE SUBSTITUTED FOR PERMANENT PAVEMENT MARKINGS.

**USE OF WEIGHTED CHANNELIZER:**

THE WEIGHTED CHANNELIZER MAY BE USED IN ACCORDANCE WITH THIS SECTION. THE WEIGHTED CHANNELIZER SHALL BE PREDOMINANTLY ORANGE IN COLOR AND SHALL BE MADE OF LIGHTWEIGHT, FLEXIBLE, AND DEFORMABLE MATERIAL. THEY SHALL BE AT LEAST 42 INCHES IN HEIGHT WITH A WEIGHTED BASE. THEY MAY HAVE A HANDLE OR LIFTING DEVICE WHICH EXTENDS ABOVE THE 42" MINIMUM HEIGHT.

THE MARKINGS ON THE WEIGHTED CHANNELIZER SHALL BE HORIZONTAL, CIRCUMFERENTIAL, ALTERNATING ORANGE AND WHITE RETROREFLECTIVE STRIPES 6 INCHES WIDE. EACH WEIGHTED CHANNELIZER SHALL HAVE A MINIMUM OF TWO ORANGE AND TWO WHITE STRIPES. ANY NON-RETROREFLECTIVE SPACES BETWEEN THE HORIZONTAL ORANGE AND WHITE STRIPES SHALL NOT EXCEED 2 INCHES WIDE. THE WEIGHTED CHANNELIZER SHALL HAVE A 4-INCH MINIMUM WIDTH, REGARDLESS OF ORIENTATION.

USE OF WEIGHTED CHANNELIZERS ON FREEWAYS AND MULTILANE HIGHWAYS SHALL BE LIMITED TO SHORT-TERM OPERATION FOR EITHER DAY OR NIGHT. UPON COMPLETION OF WORK, THE WEIGHTED CHANNELIZERS SHALL BE REMOVED. THE WEIGHTED CHANNELIZERS MAY AGAIN BE PLACED ON THE HIGHWAY WHEN THE WORK IS TO RESUME ON THE FOLLOWING DAY OR NIGHT. ANY LANE CLOSURE USING CHANNELIZATION DEVICES, EXPECTED TO REMAIN FOR MORE THAN TWELVE HOURS, SHALL REQUIRE THE USE OF DRUMS OR BARRIERS.

WHEN USED AT NIGHT, WEIGHTED CHANNELIZERS SHALL ONLY BE PLACED IN THE TANGENT AREA. THE TANGENT AREA IS DEFINED AS THE AREA AFTER THE TRANSITION TAPER WHERE THE WORK TAKES PLACE. DRUMS SHALL BE USED IN THE TRANSITION TAPERS FOR NIGHT OPERATIONS. MAXIMUM SPACING OF THE WEIGHTED CHANNELIZER SHALL BE 40 FEET AT NIGHT.

STEPS SHOULD BE TAKEN TO ENSURE THAT THE WEIGHTED CHANNELIZERS WILL NOT BE BLOWN OVER OR DISPLACED BY WIND OR MOVING TRAFFIC. BALLASTS SHOULD NOT PRESENT A HAZARD IF THE WEIGHTED CHANNELIZERS ARE INADVERTENTLY STRUCK, NOR SHOULD THEY AFFECT THE VISIBILITY OF THE WEIGHTED CHANNELIZERS. ALL BALLASTS USED SHOULD BE IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.

PAYMENT SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614, MAINTAINING TRAFFIC.

**ITEM 614 - MAINTENANCE OF TRAFFIC: PAYMENT**

NO ADDITIONAL COMPENSATION SHALL BE MADE BEYOND THE QUANTITIES LISTED ABOVE. ANY OTHER WORK SHALL BE PAID UNDER THE LUMP SUM PAY ITEM FOR ITEM 614, MAINTAINING TRAFFIC.

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MAINTENANCE OF TRAFFIC NOTES

DEL-257-1.53



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SHEET NUMBER										PARTICIPATION				ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
9-12	13-15	18	19	20	21	42	43	48		01/SI2/PV	02/SI2/BR	03/STR/PV							
ROADWAY																			
					3131.25					1568.75		1562.50		202	38001	3131.25	FT	GUARDRAIL REMOVED, AS PER PLAN	9
					32					18		14		202	42001	32	EACH	ANCHOR ASSEMBLY REMOVED, TYPE A, AS PER PLAN	9
					3					1		2		202	42041	3	EACH	ANCHOR ASSEMBLY REMOVED, TYPE T, AS PER PLAN	9
					18					12		6		202	47001	18	EACH	BRIDGE TERMINAL ASSEMBLY REMOVED, AS PER PLAN	9
1												1		202	53101	1	EACH	MAILBOX REMOVED, AS PER PLAN	9
					1							1		202	98100	1	EACH	REMOVAL MISC.: ANCHOR ASSEMBLY FOUNDATION	9
1										1				202	98100	1	EACH	REMOVAL MISC.: BUSH	10
52										52				202	98200	52	FT	REMOVAL MISC.: STONE WALL	10
5										5				202	98200	5	FT	REMOVAL MISC.: WOOD FENCE	10
28												28		202	98300	28	SY	REMOVAL MISC.: LANDSCAPING	10
					2137					1191		946		203	20001	2137	CY	EMBANKMENT, AS PER PLAN	10
					70					33		37		209	60200	70	STA	LINEAR GRADING	
					1881.25					418.75		1462.50		606	15050	1881.25	FT	GUARDRAIL, TYPE MGS	
					2975					1687.5		1287.5		606	15100	2975	FT	GUARDRAIL, TYPE MGS WITH LONG POSTS	
					1					1				606	25550	1	EACH	ANCHOR ASSEMBLY, MGS TYPE A	
					20					8		12		606	26151	20	EACH	ANCHOR ASSEMBLY, MGS TYPE E, AS PER PLAN (NCHRP350 OR MASH 2016)	10
					14					11		3		606	26550	14	EACH	ANCHOR ASSEMBLY, MGS TYPE T	
					19					12		7		606	35141	19	EACH	BRIDGE TERMINAL ASSEMBLY, TYPE 4, AS PER PLAN	10
					1					606		1		606	35141	1	EACH	BRIDGE TERMINAL ASSEMBLY, TYPE 4, AS PER PLAN, RADIUS	10
150										62.5		87.5		606	98000	150	FT	GUARDRAIL MISC.: ALTERNATE GUARDRAIL PLACEMENT	10
					137.5					112.5		25.0		606	98000	137.5	FT	GUARDRAIL MISC.: PANELS REMOVED AND REPLACED	10
3										1		2		623	39500	3	EACH	MONUMENT BOX ADJUSTED TO GRADE	
1												1		623	39600	1	EACH	MONUMENT BOX RECONSTRUCTED TO GRADE	
1												1		SPECIAL	69050000	1	EACH	MAILBOX SUPPORT	11
					1							1		SPECIAL	69050350	1	EACH	MAILBOX REMOVED AND RESET	11
EROSION CONTROL																			
711										400		311		659	00300	711	CY	TOPSOIL	
6404										3575		2829		659	10000	6404	SY	SEEDING AND MULCHING	
320										179		141		659	14000	320	SY	REPAIR SEEDING AND MULCHING	
320										179		141		659	15000	320	SY	INTER-SEEDING	
0.86										0.48		0.38		659	20000	0.86	TON	COMMERCIAL FERTILIZER	
1.32										0.74		0.58		659	31000	1.32	ACRE	LIME	
34										19		15		659	35000	34	MGAL	WATER	
										668		332		832	30000	1000	EACH	EROSION CONTROL	
PAVEMENT																			
63		602	22							579		108		251	01041	687	SY	PARTIAL DEPTH PAVEMENT REPAIR (ASPHALT CONCRETE BASE), AS PER PLAN, 3.0"	11
461		2004	2690							3839		1316		251	01041	5155	SY	PARTIAL DEPTH PAVEMENT REPAIR (ASPHALT CONCRETE BASE), AS PER PLAN, 4.0"	11
171		1141	513							1768		57		253	01001	1825	SY	PAVEMENT REPAIR, AS PER PLAN, 7.5"	11
					86324					56633		29691		254	01000	86324	SY	PAVEMENT PLANING, ASPHALT CONCRETE, 1.50"	
					812							812		254	01000	812	SY	PAVEMENT PLANING, ASPHALT CONCRETE, 3.00"	
					1416					1416				254	01000	1416	SY	PAVEMENT PLANING, ASPHALT CONCRETE, VARIABLE DEPTH (1.00" AVG.)	
					325					325				254	01000	325	SY	PAVEMENT PLANING, ASPHALT CONCRETE, VARIABLE DEPTH (2.00" AVG.)	
					7758					5069		2689		407	20000	7758	GAL	NON-TRACKING TACK COAT	
					3708					2464		1244		441	10000	3708	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (446), PG64-22	
					68							68		442	10000	68	CY	ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (446)	
					404					264		140		617	10100	404	CY	COMPACTED AGGREGATE	
2										1		1		617	25000	2	MGAL	WATER	
					1215					1215				888	10000	1215	SY	HIGH FRICTION SURFACE COURSE, SINGLE LIFT	

CALCULATED KLM	CHECKED XXX	<b>GENERAL SUMMARY</b>

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SHEET NUMBER										PARTICIPATION				ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.	CALCULATED KLM CHECKED XXX
9-12	13-15	18	19	20	21	42	43	48		01/S2/PV	02/S2/BR	03/STR/PV								
TRAFFIC CONTROL																				
								474	63		373	164		621	00100	537	EACH	RPM		
								474	51		361	164		621	54000	525	EACH	RAISED PAVEMENT MARKER REMOVED		
					95						47	48		626	00110	95	EACH	BARRIER REFLECTOR, TYPE 2, BIDIRECTIONAL		
											25			630	02100	25	FT	GROUND MOUNTED SUPPORT, NO. 2 POST		
											50			630	03100	50	FT	GROUND MOUNTED SUPPORT, NO. 3 POST		
									34.3		34.3			630	80100	34.3	SF	SIGN, FLAT SHEET		
					10						8	2		630	85100	10	EACH	REMOVAL OF GROUND MOUNTED SIGN AND REERECTION		
					2						1	1		630	97700	2	EACH	SIGNING, MISC.: REMOVAL OF WOOD ADDRESS POST AND REERECTION	12	
											46			642	30000	46	FT	REMOVAL OF PAVEMENT MARKING		
		0.25									0.58			642	30030	0.83	MILE	REMOVAL OF PAVEMENT MARKING		
											11.56			644	00104	11.66	MILE	EDGE LINE, 6"		
											6.11	0.56		644	00300	6.77	MILE	CENTER LINE		
											571	95		644	00400	666	FT	CHANNELIZING LINE, 8"		
											64		19	644	00500	64	FT	STOP LINE		
											1436	111		644	00700	1547	FT	TRANSVERSE/DIAGONAL LINE		
											5			644	01300	5	EACH	LANE ARROW		
											1			644	01350	1	EACH	LANE REDUCTION ARROW		
														644	01510	607	FT	DOTTED LINE, 6"		
		500									107			646	10010	0.02	MILE	EDGE LINE, 6"		
											0.02			646	10200	0.01	MILE	CENTER LINE		
											0.01									
STRUCTURES OVER 20 FOOT SPAN																				
SEE STRUCTURE ESTIMATED QUANTITIES SHEET 52																				
MAINTENANCE OF TRAFFIC																				
												20		614	11110	20	hour	LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE		
														614	12461	38	EACH	WORK ZONE MARKING SIGN, AS PER PLAN	15	
														614	21550	12.48	MILE	WORK ZONE CENTER LINE, CLASS III, 642 PAINT		
														614	23680	1142	FT	WORK ZONE CHANNELIZING LINE, CLASS III, 8", 642 PAINT		
														614	26610	118	FT	WORK ZONE STOP LINE, CLASS III, 642 PAINT		
INCIDENTALS																				
											LS	LS	LS	LS	614	11000	LS	MAINTAINING TRAFFIC		
											LS	LS	LS	LS	623	10001	LS	CONSTRUCTION LAYOUT STAKES AND SURVEYING, AS PER PLAN	12	
											LS	LS	LS	LS	624	10000	LS	MOBILIZATION		

GENERAL SUMMARY

DEL - 257 - 1.53

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LOCATION								DESIGN			QUANTITIES						REMARKS			
COUNTY	ROUTE	BEGIN STA	END STA	BEGIN SLM	END SLM	LENGTH	SIDE	LENGTH	AVG. WIDTH	PAVEMENT AREA	251		251		253					
											PARTIAL DEPTH PAVEMENT REPAIR (ASPHALT CONCRETE BASE), AS PER PLAN, 3.0"		PARTIAL DEPTH PAVEMENT REPAIR (ASPHALT CONCRETE BASE), AS PER PLAN, 4.0"		PAVEMENT REPAIR, AS PER PLAN, 7.5"					
											DEPTH	SY	DEPTH	SY	DEPTH	SY				
				MI			FT	FT	SY	IN	SY	IN	SY	IN	SY					
DEL	257			1.350			NB	67	4	30					7.50	29.8				
DEL	257			1.400			NB	80	4	36					7.50	35.6			LEFT WHEEL TRACK OF INSIDE LANE	
DEL	257			1.450	1.470		NB	106	4	47					7.50	47.0			RIGHT WHEEL TRACK	
DEL	257			1.460			NB	70	6	47					7.50	46.7			NEAR CENTERLINE	
DEL	257			1.470			NB	175	6	117					7.50	116.7			NEAR EDGELINE	
DEL	257			1.490			NB	55	6	37					7.50	36.7			NEAR CENTERLINE	
DEL	257			1.860			NB	276	6	184					7.50	184.0			ABOVE WIDENING JOINT FOR CREIGHTON DR	
DEL	257			2.230			NB	171	6	114					7.50	114.0			ABOVE WIDENING JOINT FOR CREIGHTON DR	
DEL	257			2.390			NB	68	6	45			4.00	45.4						
DEL	257			2.480	2.510		NB	159	6	106			4.00	106.0					INSIDE OF CURVE	
DEL	257			2.520	2.540		NB	106	6	71			4.00	70.7					WITHIN PREVIOUS REPAIR, INSIDE OF CURVE	
DEL	257			2.630			NB	100	6	67			4.00	66.7						
DEL	257			2.850			NB	250	6	167			4.00	166.7					ABOVE STRUCTURE	
DEL	257			3.080			NB	116	6	77			4.00	77.4					ADJACENT TO BRIDGE - NORTH SIDE	
DEL	257			3.210			NB	100	6	67			4.00	66.7						
DEL	257			3.570			NB	125	6	83			4.00	83.4						
DEL	257			3.770			NB	110	6	73			4.00	73.4						
DEL	257			3.970			NB	90	6	60			4.00	60.0						
DEL	257			4.000			NB	100	6	67			4.00	66.7						
DEL	257			4.100			NB	795	6	530					7.50	530.0			ABOVE WIDENING JOINT	
DEL	257			4.870			NB	200	6	133			4.00	133.4						
DEL	257			5.040			NB	105	6	70			4.00	70.0						
DEL	257			5.230			NB	450	2	100	3.00	100.0							CENTERLINE JOINT	
DEL	257			5.410			NB	25	2	6	3.00	5.6							CENTERLINE JOINT	
DEL	257			5.560			NB	125	13	181			4.00	180.6						
DEL	257			5.620			NB	25	6	17			4.00	16.7						
DEL	257			5.880			NB	118	6	79			4.00	78.7						
DEL	257			6.360			NB	50	6	33			4.00	33.4						
DEL	257			6.420			NB	250	6	167			4.00	166.7					OVER CULVERT	
DEL	257			6.550			NB	200	6	133			4.00	133.4						
DEL	257			6.690			NB	24	12	32			4.00	32.0					PLOW BLADE	
DEL	257			6.780			NB	65	12	87			4.00	86.7					INCLUDE THE SHOULDER	
DEL	257			6.830			NB	167	6	111			4.00	111.4						
DEL	257			6.860			NB	60	2	13	3.00	13.4							CENTERLINE JOINT	
DEL	257			6.920			NB	250	2	56	3.00	55.6							CENTERLINE JOINT	
DEL	257			7.280			NB	55	2	12	3.00	12.3							CENTERLINE JOINT	
DEL	257			7.440			NB	117	6	78			4.00	78.0						
DEL	257			3.830			NB/SB	7	24	19	3.00	19.3							CONCRETE CAPPED CULVERT	
DEL	257			3.960			NB/SB	7	24	19	3.00	18.7							CONCRETE CAPPED CULVERT	
DEL	257			4.040			NB/SB	7	24	19	3.00	18.7							CONCRETE CAPPED CULVERT	
DEL	257			4.620			NB/SB	8	24	21	3.00	21.3							CONCRETE CAPPED CULVERT	
DEL	257			4.740			NB/SB	8	24	20	3.00	20.0							CONCRETE CAPPED CULVERT	
DEL	257			4.750			NB/SB	8	24	21	3.00	21.3							CONCRETE CAPPED CULVERT	
DEL	257			5.010			NB/SB	7	24	19	3.00	18.7							CONCRETE CAPPED CULVERT	
DEL	257			5.040			NB/SB	7	24	19	3.00	19.3							CONCRETE CAPPED CULVERT	
DEL	257			5.080			NB/SB	8	24	20	3.00	20.0							CONCRETE CAPPED CULVERT	
DEL	257			5.100			NB/SB	7	24	19	3.00	19.3							CONCRETE CAPPED CULVERT	
DEL	257			5.150			NB/SB	8	24	20	3.00	20.0							CONCRETE CAPPED CULVERT	
DEL	257			5.160			NB/SB	8	24	21	3.00	21.3							CONCRETE CAPPED CULVERT	
DEL	257			5.240			NB/SB	7	24	19	3.00	18.7							CONCRETE CAPPED CULVERT	
DEL	257			5.290			NB/SB	12	24	32	3.00	32.0							CONCRETE CAPPED CULVERT	
DEL	257			5.330			NB/SB	7	24	19	3.00	18.7							CONCRETE CAPPED CULVERT	
DEL	257			5.380			NB/SB	7	24	19	3.00	19.3							CONCRETE CAPPED CULVERT	
DEL	257			5.420			NB/SB	7	24	19	3.00	18.7							CONCRETE CAPPED CULVERT	
DEL	257			5.490			NB/SB	9	24	24	3.00	24.0							CONCRETE CAPPED CULVERT	
DEL	257			5.590			NB/SB	8	24	21	3.00	21.3							CONCRETE CAPPED CULVERT	
DEL	257			5.890			NB/SB	9	24	24	3.00	24.0							CONCRETE CAPPED CULVERT	
TOTALS CARRIED TO GENERAL SUMMARY													602		2004		1141			

CALCULATED  
KLM  
CHECKED  
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PAVEMENT REPAIR SUBSUMMARY

DEL-257-1.53

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LOCATION								DESIGN			QUANTITIES						REMARKS											
COUNTY	ROUTE	BEGIN STA	END STA	BEGIN SLM	END SLM	LENGTH	SIDE	LENGTH	AVG. WIDTH	PAVEMENT AREA	251		251		253													
											PARTIAL DEPTH PAVEMENT REPAIR (ASPHALT CONCRETE BASE), AS PER PLAN, 3.0"		PARTIAL DEPTH PAVEMENT REPAIR (ASPHALT CONCRETE BASE), AS PER PLAN, 4.0"		PAVEMENT REPAIR, AS PER PLAN, 7.5"													
											DEPTH	SY	DEPTH	SY	DEPTH	SY												
				MI	FT	FT	SY	IN	SY	IN	SY	IN	SY															
DEL	257			1.530			SB	88	13	127			4.00	127.2					LANE AND SHOULDER									
DEL	257			1.690	1.660		SB	159	6	106			4.00	106.0					CENTER OF THE LANE									
DEL	257			1.730	1.700		SB	159	6	106			4.00	106.0														
DEL	257			1.829			SB	100	6	67			4.00	66.7					IN HF CURVE									
DEL	257			2.140			SB	20	12	27			4.00	26.7														
DEL	257			2.380			SB	20	12	27			4.00	26.7					DIP ABOVE CULVERT AT SELDOM SEEN RD									
DEL	257			2.420	2.410		SB	53	6	35			4.00	35.3														
DEL	257			2.500			SB	30	12	40			4.00	40.0					REPAIR ABOVE CULVERT									
DEL	257			2.740			SB	70	6	47			4.00	46.7					RIGHT WHEEL PATH									
DEL	257			2.850			SB	100	13	144			4.00	144.4					RUTTING LEADING UP TO CULVERT									
DEL	257			3.020			SB	130	6	87			4.00	86.7					SHOULDER									
DEL	257			3.070	3.040		SB	159	6	106			4.00	106.0					SHOULDER									
DEL	257			3.380			SB	30	13	43			4.00	43.3														
DEL	257			3.680			SB	330	6	220			4.00	220.0														
DEL	257			3.820			SB	50	6	33			4.00	33.3														
DEL	257			3.940			SB	150	6	100			4.00	100.0														
DEL	257			4.130			SB	47	4	21			4.00	20.9														
DEL	257			4.280			SB	670	6	447					7.50	446.7			CENTERED ABOVE WIDENING JOINT									
DEL	257			4.450			SB	100	6	67					7.50	66.7			CENTERED ABOVE WIDENING JOINT									
DEL	257			4.710			SB	20	6	13			4.00	13.3														
DEL	257			5.000			SB	225	6	150			4.00	150.0					MINOR RUTTING AND EDGE FAILURE									
DEL	257			5.100			SB	118	6	79			4.00	78.7														
DEL	257			5.170			SB	100	2	22	3.00	22.2							CENTERLINE JOINT									
DEL	257			5.275			SB	237	6	158			4.00	158.0														
DEL	257			5.340			SB	75	6	50			4.00	50.0														
DEL	257			5.420			SB	50	12	67			4.00	66.7														
DEL	257			5.450			SB	20	12	27			4.00	26.7														
DEL	257			5.470			SB	50	12	67			4.00	66.7					REPAIR THE CENTERLINE AND LANE									
DEL	257			5.570			SB	132	6	88			4.00	88.0					INSIDE OF CURVE									
DEL	257			5.680			SB	80	24	213			4.00	213.3					BUTTS RD - APPROX. 30' N. OF MON. BOX TO APPROX. 50' S. OF MON. BOX									
DEL	257			5.830			SB	20	6	13			4.00	13.3														
DEL	257			5.910			SB	100	6	67			4.00	66.7														
DEL	257			6.060			SB	50	6	33			4.00	33.3														
DEL	257			6.330			SB	45	6	30			4.00	30.0														
DEL	257			6.430			SB	30	6	20			4.00	20.0					DIP ADJACENT TO CULVERT									
DEL	257			6.580			SB	60	6	40			4.00	40.0														
DEL	257			6.630			SB	80	6	53			4.00	53.3														
DEL	257			6.688			SB	50	6	33			4.00	33.3														
DEL	257			6.935			SB	10	6	7			4.00	6.7														
DEL	257			7.120			SB	145	6	97			4.00	96.7					SHOULDER FAILURE MIGRATING INTO THE RIGHT EDGELINE									
DEL	257			7.630	7.270		SB	74	6	49			4.00	49.3					REPAIR IS LOCATED BETWEEN THE TWO SLMs									
TOTALS CARRIED TO GENERAL SUMMARY													22		2690		513											

CALCULATED	KLM	CHECKED	XXX
<b>PAVEMENT REPAIR SUBSUMMARY</b>			
<b>DEL-257-1.53</b>			
19			
54			

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LOCATION							DESIGN				QUANTITIES										REMARKS															
COUNTY	ROUTE	BEGIN STA	END STA	BEGIN SLM	END SLM	LENGTH	TYPICAL SECTION	LENGTH	AVG. WIDTH	PAVEMENT AREA	254		254		254		254		407	441		442		617		888										
											PAVEMENT PLANING, ASPHALT CONCRETE,	1.50"	PAVEMENT PLANING, ASPHALT CONCRETE,	3.00"	PAVEMENT PLANING, ASPHALT CONCRETE,	VAR. DEPTH	PAVEMENT PLANING, ASPHALT CONCRETE,	VAR. DEPTH	NON-TRACKING TACK COAT	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (446), PG64-22	ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (446)		COMPACTED AGGREGATE		HIGH FRICTION SURFACE COURSE, SINGLE LIFT											
											AVG. DEPTH	SY	AVG. DEPTH	SY	AVG. DEPTH	AVG. DEPTH	AVG. DEPTH	AVG. DEPTH	AVG. DEPTH	AVG. DEPTH	IN	CY	IN	CY	IN	CY	SY									
						MI		FT	FT	SY	IN	SY	IN	SY	IN	SY		GAL	IN	CY	IN	CY	IN	CY	SY											
DEL	257	81+92.82	83+50.43	1.533	1.563	0.030	1	158	27.1	475	1.50	475							40	1.50	20			2.00	2											
DEL	257	83+50.43	94+77.94	1.563	1.776	0.214	1	1128	24.0	3007	1.50	3007							256	1.50	125			2.00	14											
DEL	257	94+77.94	99+08.76	1.776	1.858	0.082	2	431	25.4	1215	1.50	1215							103	1.50	51			2.00	5	1215										
DEL	257	99+08.76	101+07.98	1.858	1.895	0.038	1	199	24.5	542	1.50	542							46	1.50	23			2.00	2											
DEL	257	101+07.98	108+03.34	1.895	2.027	0.132	1	695	34.0	2627	1.50	2627							223	1.50	109			2.00	9											
DEL	257	108+03.34	108+65.98	2.027	2.039	0.012	1	63	46.0	320	1.50	320							27	1.50	13			2.00	1											
DEL	257	108+65.98	112+32.94	2.039	2.109	0.070	1	367	51.0	2079	1.50	2079							177	1.50	87			2.00	5											
DEL	257	112+32.94	115+44.25	2.109	2.167	0.059	1	311	39.4	1362	1.50	1362							116	1.50	57			2.00	4											
DEL	257	115+44.25	117+00.00	2.167	2.197	0.029	1	156	37.4	647	1.50	647							55	1.50	27			2.00	2											
DEL	257	117+00.00	118+33.47	2.197	2.222	0.025	4	133	12.1	180	1.50	180							15	1.50	8			2.00	1	LEFT OF CENTERLINE										
DEL	257	117+00.00	118+33.47	2.197	2.222	0.025	4	133	21.9	325							2.00	325	28	3.00	27			2.00	1	RIGHT OF CENTERLINE										
DEL	257	118+33.47	122+13.81	2.222	2.294	0.072	1	380	31.0	1309	1.50	1309							111	1.50	55			2.00	5											
DEL	257	122+13.81	152+00.00	2.294	2.860	0.566	1	2986	24.0	7962	1.50	7962							677	1.50	332			2.00	37											
DEL	257	152+00.00	157+31.13	2.860	2.960	0.101	3	531	24.0	1416					1.00	1416			120	1.50	59			2.00	7											
DEL	257	157+31.13	164+90.33	2.960	3.104	0.144	1	759	23.9	2019	1.50	2019							172	1.50	84			2.00	9											
DEL	257	164+90.33	165+63.00	3.104	3.118	0.014		73																			DO NOT PAVE OVER STRUCTURE DEL-257-0308									
DEL	257	165+63.00	181+95.75	3.118	3.427	0.309	1	1633	24.0	4354	1.50	4354							370	1.50	181			2.00	20											
DEL	257	181+95.75	184+15.75	3.427	3.469	0.042	1	220	28.0	684	1.50	684							58	1.50	29			2.00	3											
DEL	257	184+15.75	186+24.59	3.469	3.508	0.040	1	209	32.0	743	1.50	743							63	1.50	31			2.00	3											
DEL	257	186+24.59	187+28.14	3.508	3.528	0.020	1	104	27.5	316	1.50	316							27	1.50	13			2.00	1											
DEL	257	187+28.14	218+51.58	3.528	4.120	0.592	1	3123	24.0	8329	1.50	8329							708	1.50	347			2.00	39	SUSPEND RESURFACING AT PAVEMENT BREAK S. OF HOME RD										
DEL	257	218+51.58	241+58.48	4.120	4.557	0.437		2307																			NO RESURFACING AT HOME RD ROUNDABOUT									
DEL	257	241+58.48	260+37.54	4.557	4.912	0.356	1	1879	24.0	5011	1.50	5011							426	1.50	209			2.00	23	RESUME RESURFACING AT PAVEMENT BREAK N. OF HOME RD										
DEL	257	260+37.54	263+37.54	4.912	4.969	0.057	1	300	25.0	833	1.50	833							71	1.50	35			2.00	4											
DEL	257	263+37.54	264+24.04	4.969	4.986	0.016	1	87	25.9	249	1.50	249							21	1.50	10			2.00	1											
DEL	257	264+24.04	265+24.04	4.986	5.005	0.019	1	100	25.0	278	1.50	278							24	1.50	12			2.00	1											
DEL	257	265+24.04	301+43.20	5.005	5.690	0.685	1	3619	24.0	9652	1.50	9652							820	1.50	402			2.00	45											
DEL	257	301+43.20	398+10.88	5.690	7.521	1.831	1	9668	24.0	25782	1.50	25782							2191	1.50	1074			2.00	119											
DEL	257	398+10.88	408+86.36	7.521	7.725	0.204	1	1075	25.3	3018	1.50	3018							257	1.50	126			2.00	13											
DEL	257	408+86.36	411+36.36	7.725	7.772	0.047	1	250	29.2	812									114					3.00	68	2.00	3									
SIDE ROADS							SIDE																													
DEL	257	87+90.32		1.646				39	15.0	65	1.50	65							6	1.50	3			2.00	1	SUNSET CT (TR 334)										
DEL	257	94+46.34		1.770				37	15.0	62	1.50	62							5	1.50	3			2.00	1	SUNSET DR (TR 344)										
DEL	257	128+15.18		2.408				47	15.0	79	1.50	79							7	1.50	3			2.00	1	SELDOM SEEN RD (TR 121)										
DEL	257	143+42.01		2.697				46	30.0	155	1.50	155							13	1.50	6			2.00	1	BAYPOINTE DR										
DEL	257	157+84.89		2.971				49	35.0	192	1.50	192							16	1.50	8			2.00	1	LAKEVIEW DR (TR 331)										
DEL	257	176+28.68		3.320				44	20.0	98	1.50	98							8	1.50	4			2.00	1	HIGH RIDGE RD										
DEL	257	189+78.38		3.575				45	60.0	301	1.50	301							26	1.50	13			2.00	1	BRUST DR (TR 357)										
DEL	257	379+93.24		7.177				44	25.0	123	1.50	123							10	1.50	5			2.00	1	BEAN-OLLER RD (TR 140)										
DRIVEWAYS							COUNT																													
DEL	257	81+92.82	301+43.20	1.533	5.690			40	4.0	18	1.50	1152							192	1.50	64					DRIVEWAY										
DEL	257	81+94.82	301+43.20	1.533	5.690			55	4.0	24	1.50	336							42	1.50	14					DRIVEWAY/MAILBOX										
DEL	257	81+95.82	301+43.20	1.533	5.690			30	2.0	7														2.00	13		MAILBOX (GRAVEL)									
DEL	257	301+43.20	410+41.60	5.690	7.800			40	4.0	18	1.50	504							84	1.50	28					DRIVEWAY										
DEL	257	301+43.20	410+41.60	5.690	7.800			55	4.0	24	1.50	264							33	1.50	11					DRIVEWAY/MAILBOX										
DEL	257	301+43.20	410+41.60	5.690	7.800			30	2.0	7														2.00	4		MAILBOX (GRAVEL)									
TOTALS CARRIED TO GENERAL SUMMARY																																				
											86324		812		1416		325		7758													68		404		1215

CALCULATED KLM CHECKED XXX

**PAVEMENT SUBSUMMARY**

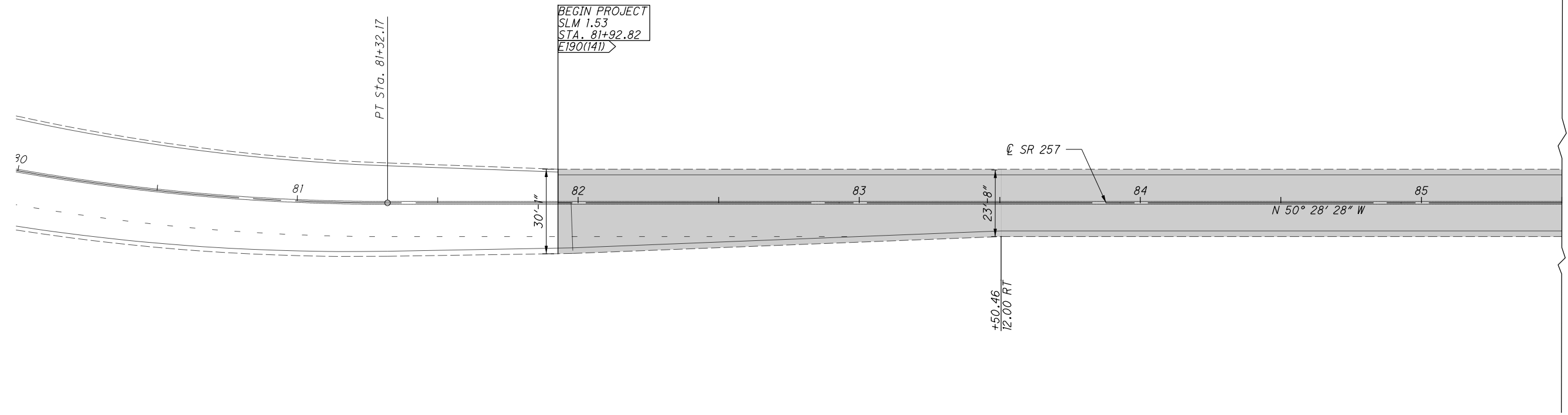
**DEL-257-1.53**

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54

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LOCATION									QUANTITIES																													
SHEET	REFERENCE	COUNTY	ROUTE	BEGIN STA	END STA	BEGIN SLM	END SLM	SIDE	202	202	202	202	202	203	209	606	606	606	606	606	606	626	630	630	690													
									GUARDRAIL REMOVED, AS PER PLAN	ANCHOR ASSEMBLY REMOVED, TYPE A, AS PER PLAN	ANCHOR ASSEMBLY REMOVED, TYPE T, AS PER PLAN	BRIDGE TERMINAL ASSEMBLY REMOVED, AS PER PLAN	REMOVAL MISC.: ANCHOR ASSEMBLY FOUNDATION	EMBANKMENT, AS PER PLAN	LINEAR GRADING	GUARDRAIL, TYPE MGS	GUARDRAIL, TYPE MGS WITH LONG POSTS	ANCHOR ASSEMBLY, MGS TYPE A	ANCHOR ASSEMBLY, MGS TYPE E, AS PER PLAN (NCHRP350 OR MASH 2016)	ANCHOR ASSEMBLY, MGS TYPE T	BRIDGE TERMINAL ASSEMBLY, TYPE 4, AS PER PLAN	BRIDGE TERMINAL ASSEMBLY, TYPE 4, RADIUS	GUARDRAIL, MISC.: PANELS REMOVED AND REPLACED	BARRIER REFLECTOR, TYPE 2, BIDIRECTIONAL	REMOVAL OF GROUND MOUNTED SIGN AND REERECTION	SIGNING, MISC.: REMOVAL OF WOOD ADDRESS POST AND REERECTION	MAILBOX REMOVED AND RESET											
									FT	EACH	EACH	EACH	EACH	CY	STA	FT	FT	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH													
27	GR-1	DEL	257	137+54.23	139+31.38	2.586	2.620	RT	6.25	2		2		43	1.8	87.50							25.00	3	1													
27	GR-2	DEL	257	137+70.42	138+87.66	2.589	2.611	LT	25.00	1	1	2		24	1.2	25.00						25.00	3															
28	GR-3	DEL	257	153+19.82	156+42.13	2.883	2.944	RT	75.00	2		2		64	3.2		200.00					12.50	5															
28	GR-4	DEL	257	153+49.52	155+80.49	2.888	2.932	LT	75.00	2		2		43	2.3		150.00					12.50	4			1												
29	GR-5	DEL	257	164+12.28	167+19.44	3.089	3.148	RT	168.75	1				129	3.1	118.75		1						4	4													
29	GR-6	DEL	257	163+83.12	168+06.99	3.084	3.164	LT	156.25	2				183	4.2	187.50							5	2														
30	GR-7	DEL	257	189+85.82	193+37.03	3.577	3.643	RT	175.00	2				166	3.5		337.5						5	1														
27	GR-8	DEL	257	191+14.79	194+47.85	3.601	3.664	LT	175.00	2				201	3.3		225.0						5															
31 - 32	GR-9	DEL	257	256+55.00	262+15.04	4.840	4.946	RT	350.00	2		2		182	5.6		437.5					18.75	7															
31 - 32	GR-10	DEL	257	258+17.56	262+82.91	4.871	4.959	LT	362.50	2		2		156	4.7		337.5					18.75	6															
33	GR-11	DEL	257	311+74.27	312+80.79	5.885	5.905	RT	12.50	1	1			22	1.1	87.50																						
33	GR-12	DEL	257	310+73.88	315+16.31	5.866	5.950	LT	50.00	2				83	4.4		337.5						6															
35 - 36	GR-13	DEL	257	326+00.92	330+50.70	6.155	6.241	RT	337.50	1	1	2		161	4.5	350.00						12.50	6															
34 - 36	GR-14	DEL	257	320+09.24	328+94.38	6.043	6.211	LT	687.50	2		2		261	8.9	762.50						12.50	10			1												
37	GR-15	DEL	257	339+59.03	343+36.79	6.413	6.484	RT		2		2	1	80	3.8		187.50						5															
37	GR-16	DEL	257	340+14.11	344+56.56	6.423	6.507	LT	25.00	2				77	4.4	262.50							6															
38	GR-17	DEL	257	357+78.62	361+44.63	6.757	6.827	LT	162.50	2				106	3.7		262.5						5															
39 - 40	GR-18	DEL	257	397+17.13	403+23.40	7.503	7.618	LT	287.50	2				156	6.1		500.0						7	2														
TOTALS CARRIED TO GENERAL SUMMARY									3131.25	32	3	18	1	2137	70	1881.25	2975.0	1	20	14	19	1	137.50	95	10	2	1											

<b>ROADWAY SUBSUMMARY</b>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; text-align: center;">CALCULATED</td> <td style="width: 50%; text-align: center;">KLM</td> </tr> <tr> <td style="width: 50%; text-align: center;">CHECKED</td> <td style="width: 50%; text-align: center;">XXX</td> </tr> </table>	CALCULATED	KLM	CHECKED	XXX
CALCULATED	KLM				
CHECKED	XXX				
<b>DEL-257-1.53</b>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; text-align: center;">21</td> <td style="width: 50%; text-align: center;">54</td> </tr> </table>	21	54		
21	54				



**NOTES:**

1. MATCH EXISTING GUARDRAIL OFFSET UNLESS OTHERWISE NOTED.
2. FOR TYPICAL SECTIONS, SEE SHEET 4.
3. FOR PAVEMENT QUANTITIES, SEE SHEETS 18-20.
4. FOR TRAFFIC CONTROL QUANTITIES AND DETAILS, SEE SHEETS 42-47.

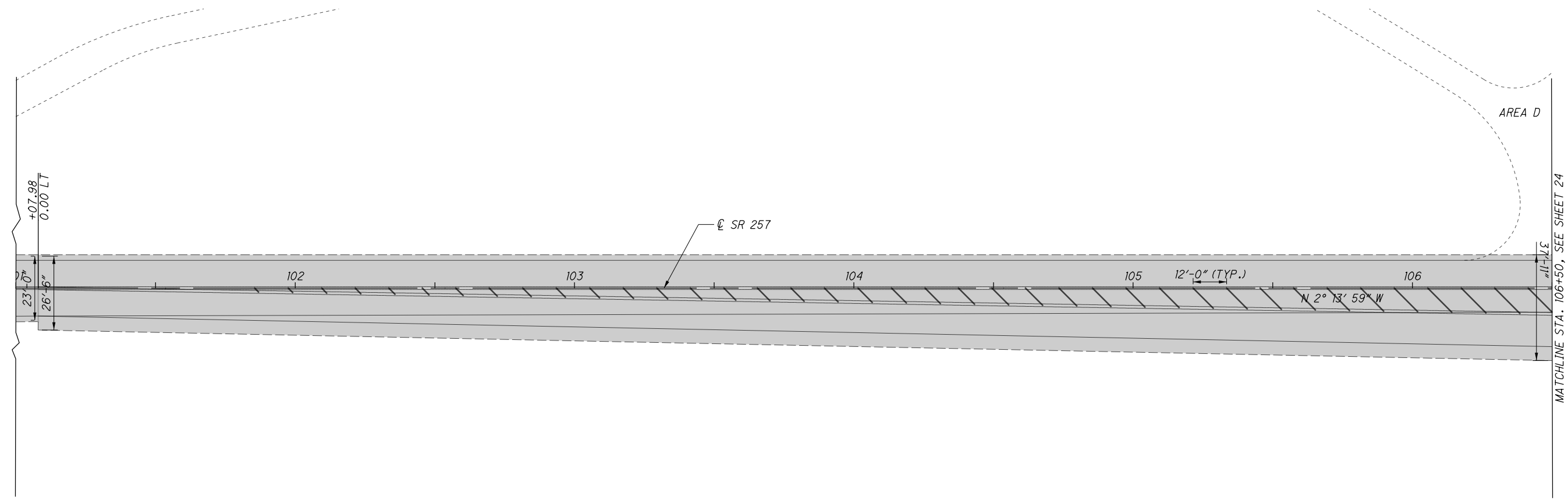
- RESURFACING
- EMBANKMENT, AS PER PLAN AND LINEAR GRADING FOR PROPER GUARDRAIL AND ANCHOR ASSEMBLY GRADING PER MGS-1.1, MGS-5.2, MGS-5.3, AND SECTION A-A AND SECTION B-B ON SHEET 6.

0 20 40 HORIZONTAL SCALE IN FEET
CALCULATED KLM CHECKED XXX

**ROADWAY PLAN - DEL-257  
STA. 80+00 TO STA. 85+50**



**DEL-257-1.53**





**NOTES:**

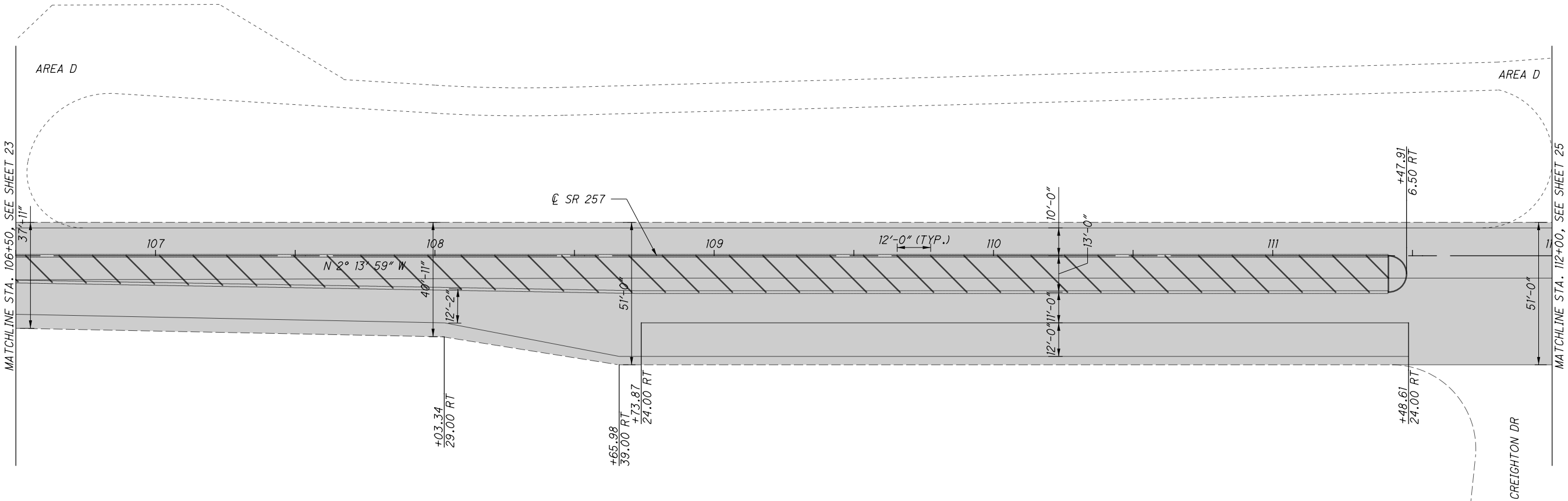
1. MATCH EXISTING GUARDRAIL OFFSET UNLESS OTHERWISE NOTED.
2. FOR TYPICAL SECTIONS, SEE SHEET 4.
3. FOR PAVEMENT QUANTITIES, SEE SHEETS 18-20.
4. FOR TRAFFIC CONTROL QUANTITIES AND DETAILS, SEE SHEETS 42-47.

-  RESURFACING
-  EMBANKMENT, AS PER PLAN AND LINEAR GRADING FOR PROPER GUARDRAIL AND ANCHOR ASSEMBLY GRADING PER MGS-1.1, MGS-5.2, MGS-5.3, AND SECTION A-A AND SECTION B-B ON SHEET 6.

CALCULATED  
KLM  
CHECKED  
XXX

0 20 40  
HORIZONTAL  
SCALE IN FEET

**ROADWAY PLAN - DEL-257  
STA. 101+00 TO STA. 106+50**



NOTES:

1. MATCH EXISTING GUARDRAIL OFFSET UNLESS OTHERWISE NOTED.
2. FOR TYPICAL SECTIONS, SEE SHEET 4.
3. FOR PAVEMENT QUANTITIES, SEE SHEETS 18-20.
4. FOR TRAFFIC CONTROL QUANTITIES AND DETAILS, SEE SHEETS 42-47.

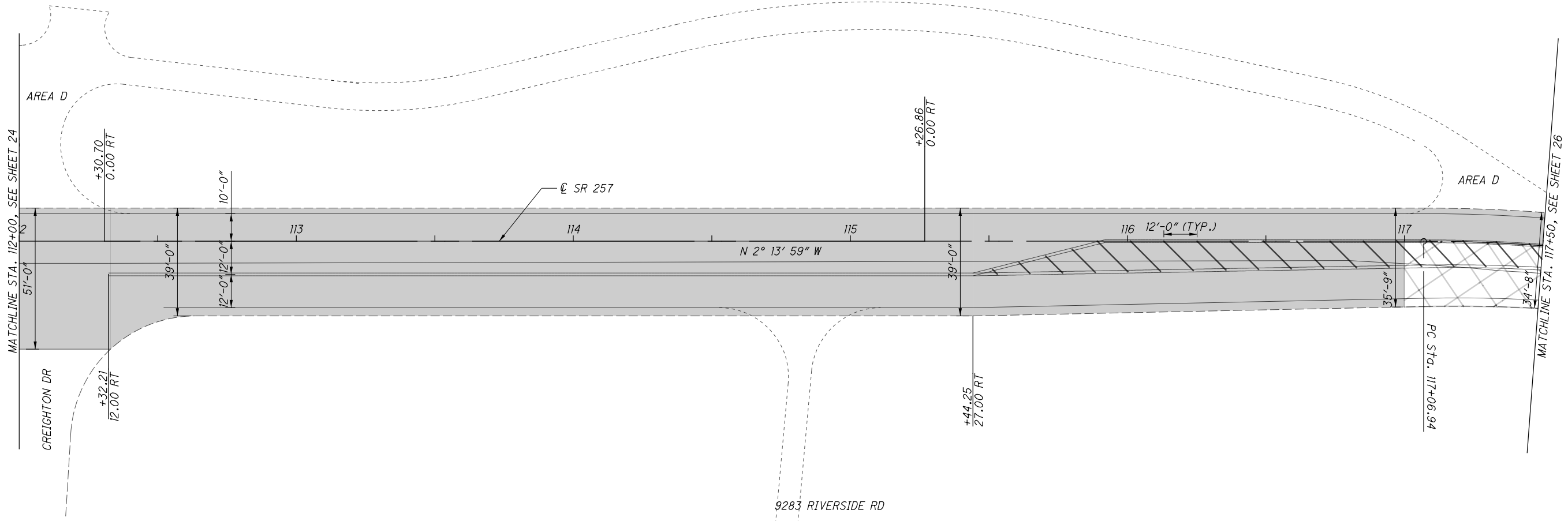
- RESURFACING
- EMBANKMENT, AS PER PLAN AND LINEAR GRADING FOR PROPER GUARDRAIL AND ANCHOR ASSEMBLY GRADING PER MGS-1.1, MGS-5.2, MGS-5.3, AND SECTION A-A AND SECTION B-B ON SHEET 6.

CALCULATED  
KLM  
CHECKED  
XXX




0 20 40  
HORIZONTAL  
SCALE IN FEET

N

**ROADWAY PLAN - DEL-257  
STA. 106+50 TO STA. 112+00**



- NOTES:
1. MATCH EXISTING GUARDRAIL OFFSET UNLESS OTHERWISE NOTED.
  2. FOR TYPICAL SECTIONS, SEE SHEET 4.
  3. FOR PAVEMENT QUANTITIES, SEE SHEETS 18-20.
  4. FOR TRAFFIC CONTROL QUANTITIES AND DETAILS, SEE SHEETS 42-47.

-  RESURFACING
-  EMBANKMENT, AS PER PLAN AND LINEAR GRADING FOR PROPER GUARDRAIL AND ANCHOR ASSEMBLY GRADING PER MGS-1.1, MGS-5.2, MGS-5.3, AND SECTION A-A AND SECTION B-B ON SHEET 6.
-  CROWN CORRECTION, SEE SHEET 5

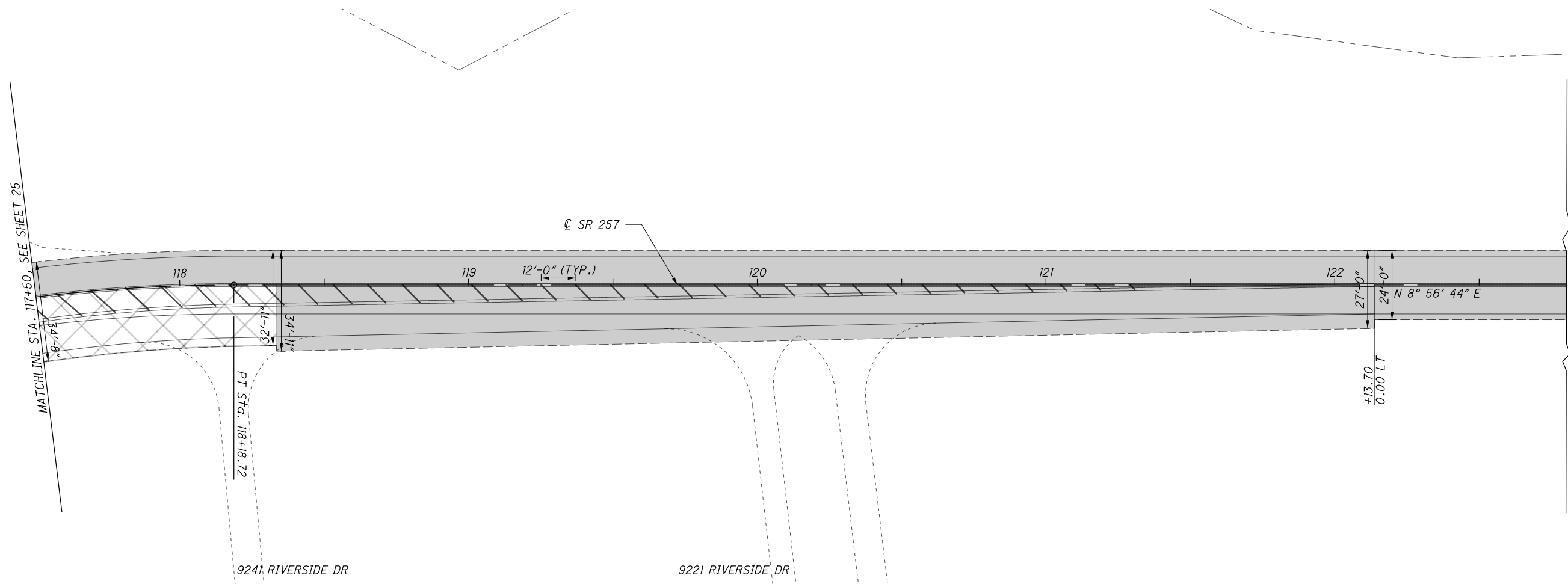
CALCULATED  
KLM  
CHECKED  
XXX

0 20 40  
10  
HORIZONTAL  
SCALE IN FEET

N




**ROADWAY PLAN - DEL-257  
STA. 112+00 TO STA. 117+50**

**DEL-257-1.53**



**NOTES:**

1. MATCH EXISTING GUARDRAIL OFFSET UNLESS OTHERWISE NOTED.
2. FOR TYPICAL SECTIONS, SEE SHEET 4.
3. FOR PAVEMENT QUANTITIES, SEE SHEETS 18-20.
4. FOR TRAFFIC CONTROL QUANTITIES AND DETAILS, SEE SHEETS 42-47.

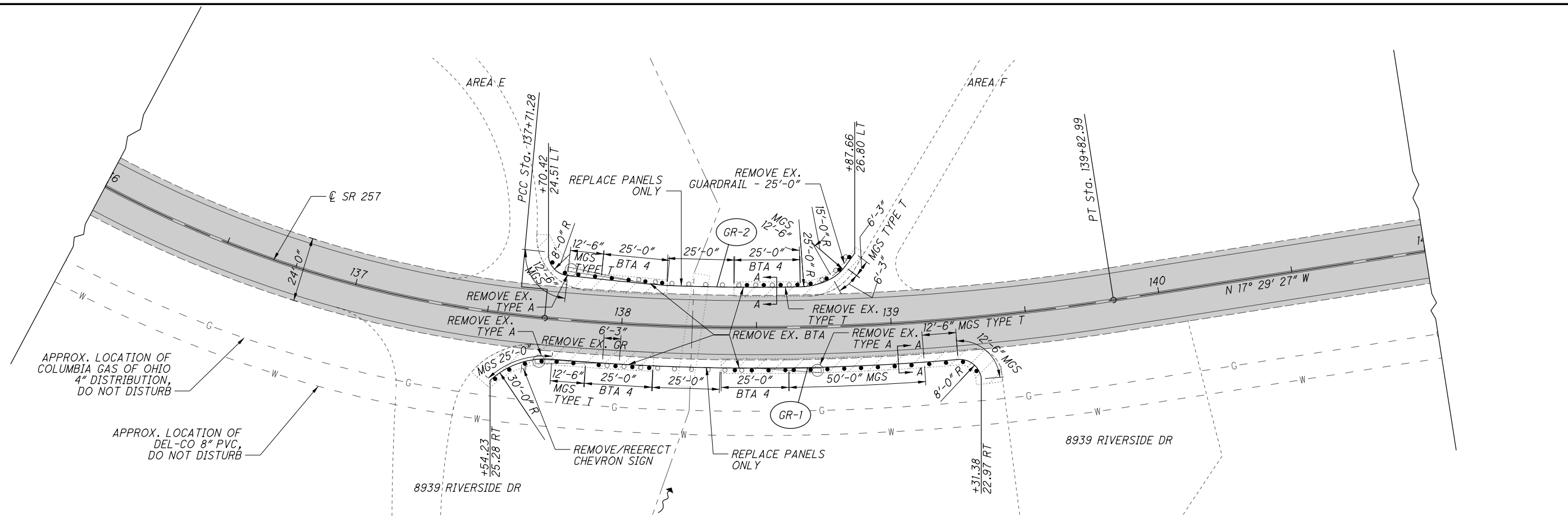
-  RESURFACING
-  EMBANKMENT, AS PER PLAN AND LINEAR GRADING FOR PROPER GUARDRAIL AND ANCHOR ASSEMBLY GRADING PER MGS-1.1, MGS-5.2, MGS-5.3, AND SECTION A-A AND SECTION B-B ON SHEET 6.
-  CROWN CORRECTION, SEE SHEET 5

CALCULATED  
KLM  
CHECKED  
XXX

0 20 40  
HORIZONTAL  
SCALE IN FEET

**ROADWAY PLAN - DEL-257  
STA. 117+50 TO STA. 123+00**

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- NOTES:
1. MATCH EXISTING GUARDRAIL OFFSET UNLESS OTHERWISE NOTED.
  2. FOR TYPICAL SECTIONS, SEE SHEET 4.
  3. FOR PAVEMENT QUANTITIES, SEE SHEETS 18-20.
  4. FOR TRAFFIC CONTROL QUANTITIES AND DETAILS, SEE SHEETS 42-47.

RESURFACING

EMBANKMENT, AS PER PLAN AND LINEAR GRADING FOR PROPER GUARDRAIL AND ANCHOR ASSEMBLY GRADING PER MGS-1.1, MGS-5.2, MGS-5.3, AND SECTION A-A AND SECTION B-B ON SHEET 6.

LOCATION										QUANTITIES														REMARKS								
REFERENCE	COUNTY	ROUTE	BEGIN STA	END STA	BEGIN SLM	END SLM	LENGTH	SIDE		202	202	202	202	202	203	209	606	606	606	606	606	606	606	626	630	630	690					
										GUARDRAIL REMOVED, AS PER PLAN	ANCHOR ASSEMBLY REMOVED, TYPE A, AS PER PLAN	ANCHOR ASSEMBLY REMOVED, TYPE T, AS PER PLAN	BRIDGE TERMINAL ASSEMBLY REMOVED, AS PER PLAN	REMOVAL MISC.: ANCHOR ASSEMBLY FOUNDATION	EMBANKMENT, AS PER PLAN	LINEAR GRADING	GUARDRAIL, TYPE MGS	GUARDRAIL, TYPE MGS WITH LONG POSTS	ANCHOR ASSEMBLY, MGS TYPE A	ANCHOR ASSEMBLY, MGS TYPE E, AS PER PLAN (INCHRP350 OR MASH 2016)	ANCHOR ASSEMBLY, MGS TYPE T	BRIDGE TERMINAL ASSEMBLY, TYPE 4, AS PER PLAN	BRIDGE TERMINAL ASSEMBLY, TYPE 4, AS PER PLAN, RADIUS	GUARDRAIL, MISC.: PANEL REMOVED AND REPLACED	BARRIER REFLECTOR, TYPE 2, BIDIRECTIONAL	REMOVAL OF GROUND MOUNTED SIGN AND REERECTION	SIGNING, MISC.: REMOVAL OF WOOD ADDRESS POST AND REERECTION	MAILBOX REMOVED AND RESET				
							MI			FT	EACH	EACH	EACH	EACH	CY	STA	FT	FT	EACH	EACH	EACH	EACH	FT	EACH	EACH	EACH	EACH					
GR-1	DEL	257	137+54.23	139+31.38	2.586	2.620	0.034	RT		6.25	2		2		43	1.8	87.50						25.00	3	1					SIGN W1-8		
GR-2	DEL	257	137+70.42	138+87.66	2.589	2.611	0.022	LT		25.00	1	1	2		24	1.2	25.00						25.00	3								
QUANTITIES CARRIED TO ROADWAY SUBSUMMARY SHEET 21										31.25	3	1	4		67	3.0	112.5					4	4		50.00	6	1					

ROADWAY PLAN - DEL-257  
STA. 136+00 TO STA. 141+00

DEL-257-1.53

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54

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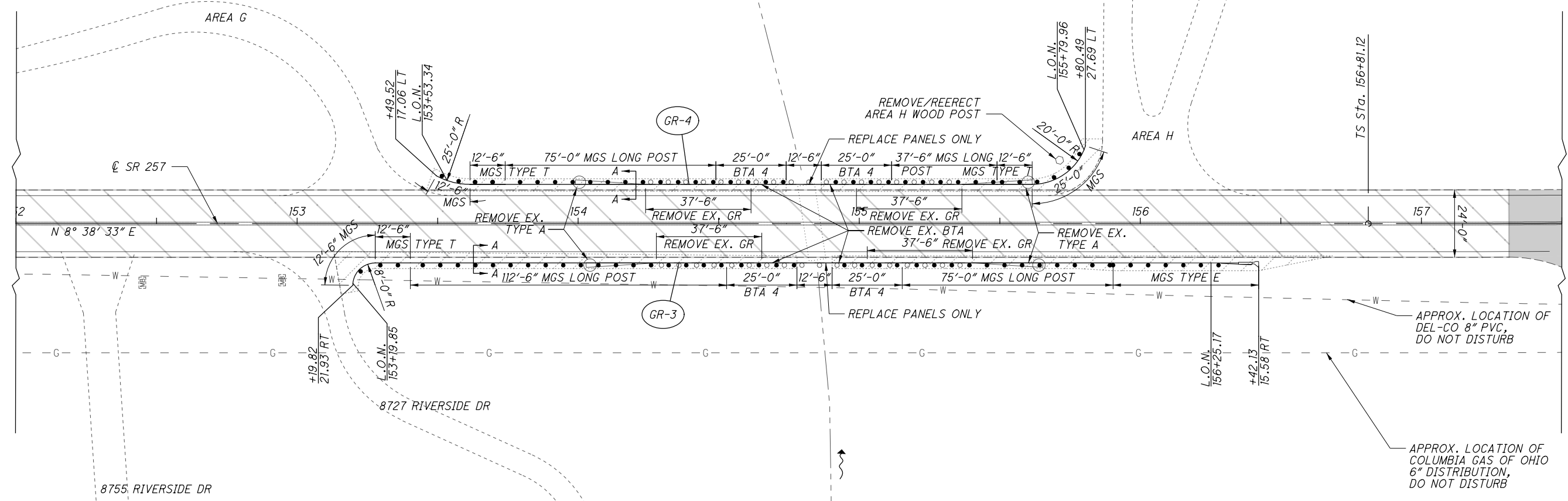
0 20 40  
HORIZONTAL SCALE IN FEET



CALCULATED  
KLM  
CHECKED  
XXX

**ROADWAY PLAN - DEL-257  
STA. 152+00 TO STA. 157+50**

**DEL-257-1.53**



- NOTES:**
1. MATCH EXISTING GUARDRAIL OFFSET UNLESS OTHERWISE NOTED.
  2. FOR TYPICAL SECTIONS, SEE SHEET 4.
  3. FOR PAVEMENT QUANTITIES, SEE SHEETS 18-20.
  4. FOR TRAFFIC CONTROL QUANTITIES AND DETAILS, SEE SHEETS 42-47.

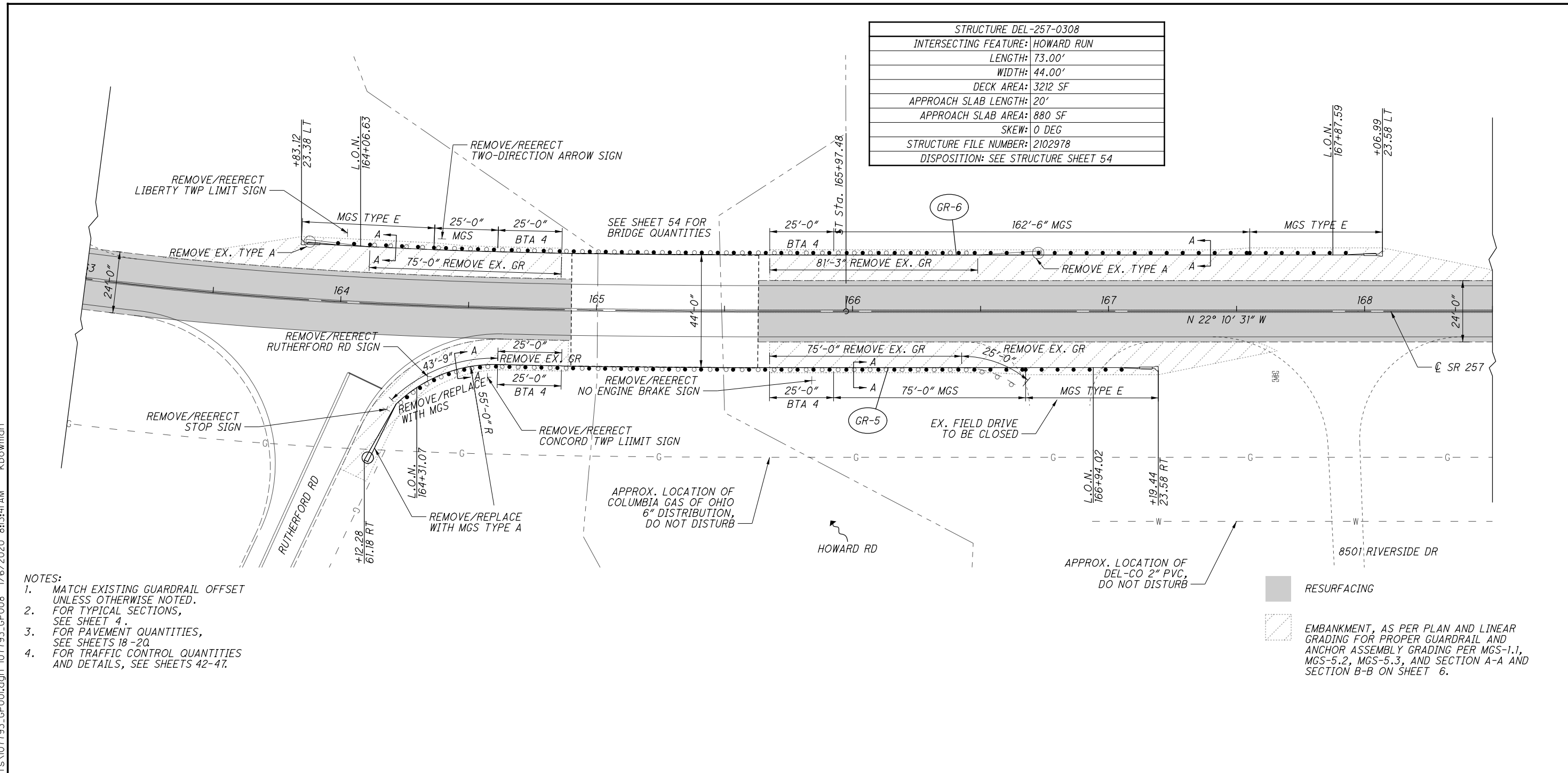
- RESURFACING
- EMBANKMENT, AS PER PLAN AND LINEAR GRADING FOR PROPER GUARDRAIL AND ANCHOR ASSEMBLY GRADING PER MGS-1.1, MGS-5.2, MGS-5.3, AND SECTION A-A AND SECTION B-B ON SHEET 6.
- CROWN CORRECTION, SEE TYPICAL SECTION #3

LOCATION									QUANTITIES														REMARKS				
REFERENCE	COUNTY	ROUTE	BEGIN STA	END STA	BEGIN SLM	END SLM	LENGTH	SIDE	202	202	202	202	202	203	209	606	606	606	606	606	606	606	626	630	630	690	
									GUARDRAIL REMOVED, AS PER PLAN	ANCHOR ASSEMBLY REMOVED, TYPE A, AS PER PLAN	ANCHOR ASSEMBLY REMOVED, TYPE T, AS PER PLAN	BRIDGE TERMINAL ASSEMBLY REMOVED, AS PER PLAN	REMOVAL MISC.: ANCHOR ASSEMBLY FOUNDATION	EMBANKMENT, AS PER PLAN	LINEAR GRADING	GUARDRAIL, TYPE MGS	GUARDRAIL, TYPE MGS WITH LONG POSTS	ANCHOR ASSEMBLY, MGS TYPE A	ANCHOR ASSEMBLY, MGS TYPE E, AS PER PLAN (NCHRP350 OR MASH 2016)	ANCHOR ASSEMBLY, MGS TYPE T	BRIDGE TERMINAL ASSEMBLY, TYPE 4, AS PER PLAN	BRIDGE TERMINAL ASSEMBLY, TYPE 4, AS PER PLAN, RADIUS	GUARDRAIL, MISC.: PANEL REMOVED AND REPLACED	BARRIER REFLECTOR, TYPE 2, BIDIRECTIONAL	REMOVAL OF GROUND MOUNTED SIGN AND REERCTION	SIGNING, MISC.: REMOVAL OF WOOD ADDRESS POST AND REERCTION	MAILBOX REMOVED AND RESET
							MI	FT	EACH	EACH	EACH	EACH	EACH	CY	STA	FT	FT	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	
GR-3	DEL	257	153+19.82	156+42.13	2.883	2.944	0.061	RT	75.00	2		2		64	3.2		200.00		1	1	2		12.50	5			
GR-4	DEL	257	153+49.52	155+80.49	2.888	2.932	0.044	LT	75.00	2		2		43	2.3		150.00				2		12.50	4		1	
QUANTITIES CARRIED TO ROADWAY SUBSUMMARY SHEET 21									150.00	4		4		107	5.5		350.00		1	3	4		25.00	9		1	

POST AREA H - ADDRESS 8700

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- NOTES:
1. MATCH EXISTING GUARDRAIL OFFSET UNLESS OTHERWISE NOTED.
  2. FOR TYPICAL SECTIONS, SEE SHEET 4.
  3. FOR PAVEMENT QUANTITIES, SEE SHEETS 18-20.
  4. FOR TRAFFIC CONTROL QUANTITIES AND DETAILS, SEE SHEETS 42-47.

REFERENCE	COUNTY	ROUTE	LOCATION						QUANTITIES															REMARKS				
			BEGIN STA	END STA	BEGIN SLM	END SLM	LENGTH	SIDE	202	202	202	202	202	203	209	606	606	606	606	606	606	606	626		630	630	690	
			MI	FT	EACH	EACH	EACH	EACH	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA		EA	EA	EA	EA
GR-5	DEL	257	164+12.28	167+19.44	3.089	3.148	0.058	RT	168.75	1					129	3.1	118.75	1	1		2		4	4				SIGNS R1-1, D3-1, I-H2e, AND R20-H1
GR-6	DEL	257	163+83.12	168+06.99	3.084	3.164	0.080	LT	156.25	2					183	4.2	187.50		2		2		5	2				SIGNS I-H2e AND W1-7
QUANTITIES CARRIED TO ROADWAY SUBSUMMARY SHEET 21									325.00	3				312	7.3	306.25	1	3		4		9	6					

0 20 40  
HORIZONTAL SCALE IN FEET

CALCULATED  
KLM  
CHECKED  
XXX

**ROADWAY PLAN - DEL-257  
STA. 163+00 TO STA. 168+50**

**DEL-257-1.53**

29  
54



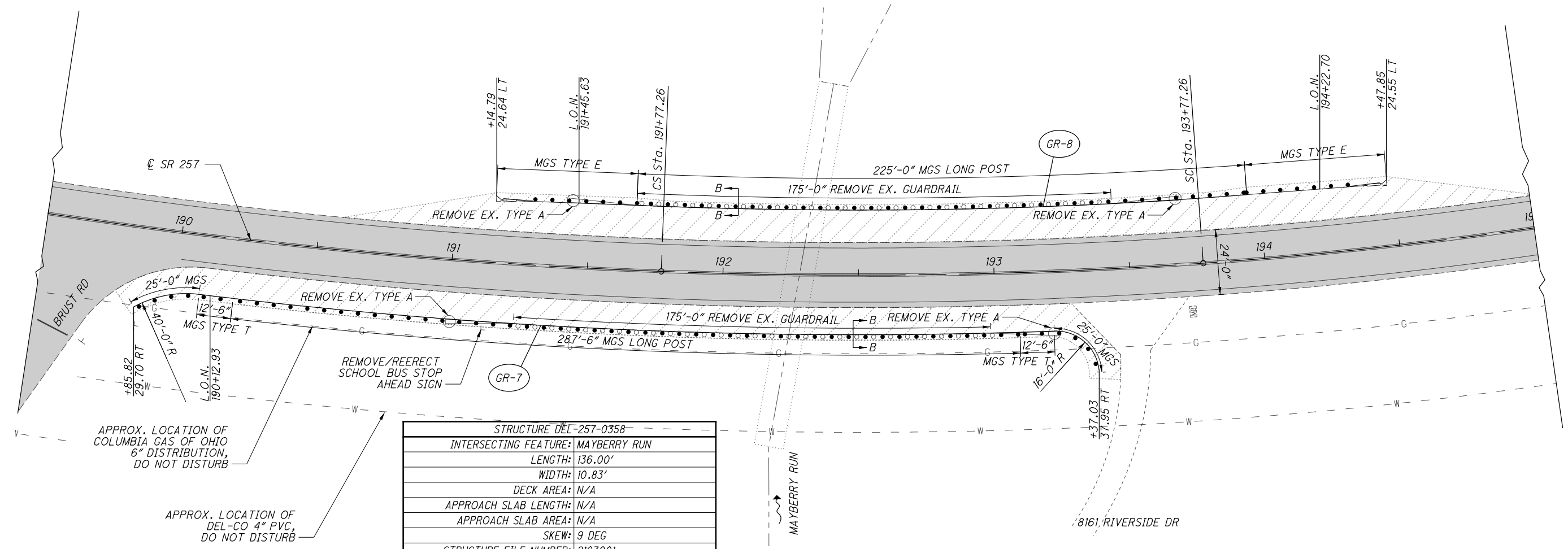


CALCULATED 0  
KLM  
CHECKED XXX

ROADWAY PLAN - DEL-257  
STA. 189+50 TO STA. 195+00

DEL-257-1.53

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STRUCTURE DEL-257-0358	
INTERSECTING FEATURE:	MAYBERRY RUN
LENGTH:	136.00'
WIDTH:	10.83'
DECK AREA:	N/A
APPROACH SLAB LENGTH:	N/A
APPROACH SLAB AREA:	N/A
SKEW:	9 DEG
STRUCTURE FILE NUMBER:	2103001
DISPOSITION:	PAVE OVER

- NOTES:
- MATCH EXISTING GUARDRAIL OFFSET UNLESS OTHERWISE NOTED.
  - FOR TYPICAL SECTIONS, SEE SHEET 4.
  - FOR PAVEMENT QUANTITIES, SEE SHEETS 18-20.
  - FOR TRAFFIC CONTROL QUANTITIES AND DETAILS, SEE SHEETS 42-47.

APPROX. LOCATION OF COLUMBIA GAS OF OHIO 6" DISTRIBUTION, DO NOT DISTURB

APPROX. LOCATION OF DEL-CO 4" PVC, DO NOT DISTURB

RESURFACING

EMBANKMENT, AS PER PLAN AND LINEAR GRADING FOR PROPER GUARDRAIL AND ANCHOR ASSEMBLY GRADING PER MGS-1.1, MGS-5.2, MGS-5.3, AND SECTION A-A AND SECTION B-B ON SHEET 6.

LOCATION										QUANTITIES														REMARKS						
REFERENCE	COUNTY	ROUTE	BEGIN STA	END STA	BEGIN SLM	END SLM	LENGTH	SIDE		202	202	202	202	202	203	209	606	606	606	606	606	606	606	626	630	630	690			
							MI			GUARDRAIL REMOVED, AS PER PLAN	ANCHOR ASSEMBLY REMOVED, TYPE A, AS PER PLAN	ANCHOR ASSEMBLY REMOVED, TYPE T, AS PER PLAN	BRIDGE TERMINAL ASSEMBLY REMOVED, AS PER PLAN	REMOVAL MISC.: ANCHOR ASSEMBLY FOUNDATION	EMBANKMENT, AS PER PLAN	LINEAR GRADING	GUARDRAIL, TYPE MGS	GUARDRAIL, TYPE MGS WITH LONG POSTS	ANCHOR ASSEMBLY, MGS TYPE A	ANCHOR ASSEMBLY, MGS TYPE E, AS PER PLAN (NCHRP350 OR MASH 2016)	ANCHOR ASSEMBLY, MGS TYPE T	BRIDGE TERMINAL ASSEMBLY, TYPE 4, AS PER PLAN	BRIDGE TERMINAL ASSEMBLY, TYPE 4, AS PER PLAN, RADIUS	GUARDRAIL, MISC.: PANEL REMOVED AND REPLACED	BARRIER REFLECTOR, TYPE 2, BIDIRECTIONAL	REMOVAL OF GROUND MOUNTED SIGN AND REERECTION	SIGNING, MISC.: REMOVAL OF WOOD ADDRESS POST AND REERECTION	MAILBOX REMOVED AND RESET		
										FT	EACH	EACH	EACH	EACH	CY	STA	FT	FT	EACH	EACH	EACH	EACH	EACH	FT	EACH	EACH	EACH	EACH		
GR-7	DEL	257	189+85.82	193+37.03	3.577	3.643	0.067	RT		175.00	2				166	3.5		337.5			2				5	1			SCHOOL BUS STOP AHEAD SIGN	
GR-8	DEL	257	191+14.79	194+47.85	3.601	3.664	0.063	LT		175.00	2				201	3.3		225.0		2	2				5					
QUANTITIES CARRIED TO ROADWAY SUBSUMMARY SHEET 21										350.00	4				367	6.8		562.5		2	2			10	1					



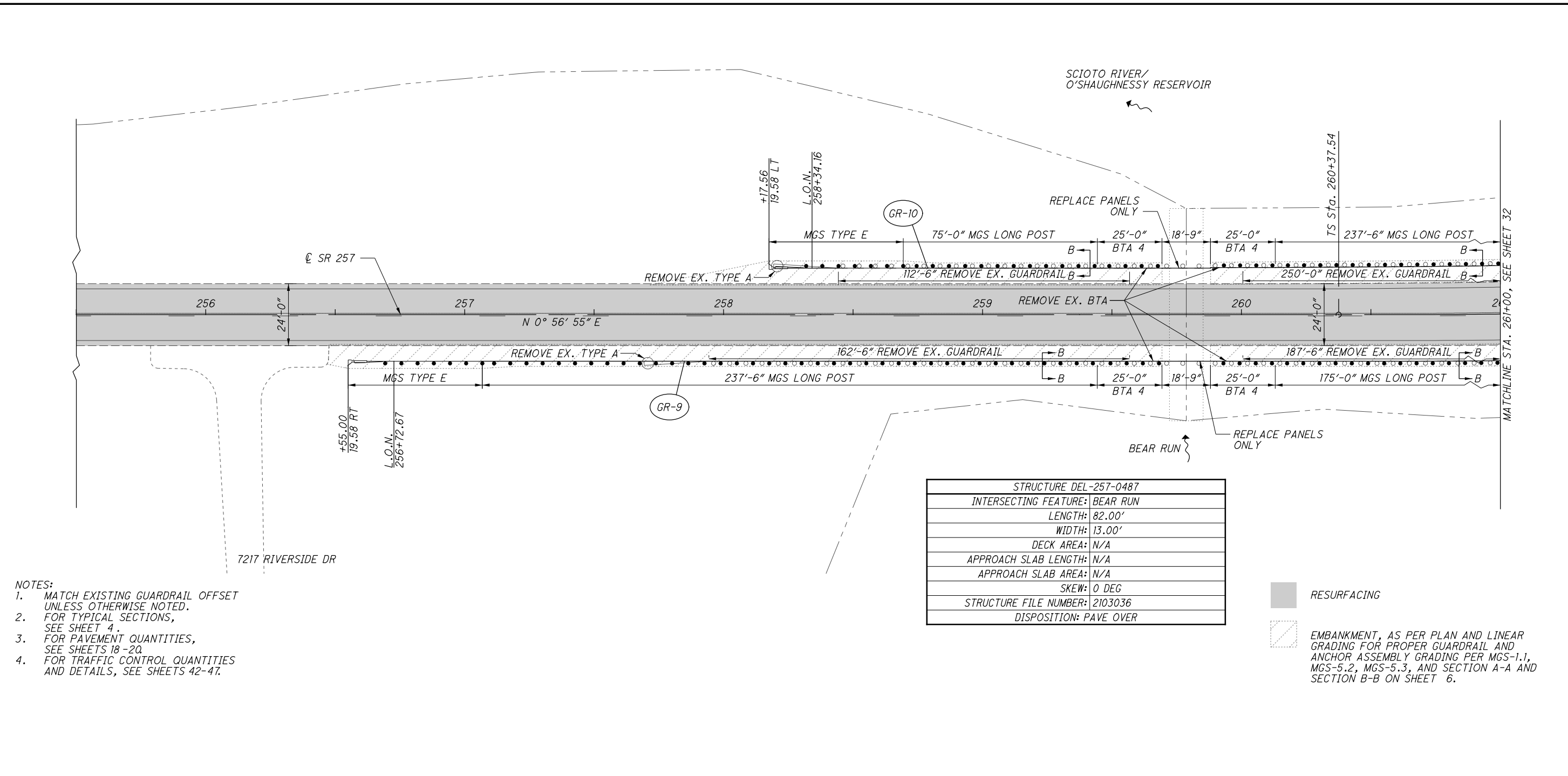
CALCULATED  
KLM  
CHECKED  
XXX

**ROADWAY PLAN - DEL-257**  
**STA. 255+50 TO STA. 261+00**

**DEL-257-1.53**

31  
54

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- NOTES:**
1. MATCH EXISTING GUARDRAIL OFFSET UNLESS OTHERWISE NOTED.
  2. FOR TYPICAL SECTIONS, SEE SHEET 4.
  3. FOR PAVEMENT QUANTITIES, SEE SHEETS 18-20.
  4. FOR TRAFFIC CONTROL QUANTITIES AND DETAILS, SEE SHEETS 42-47.

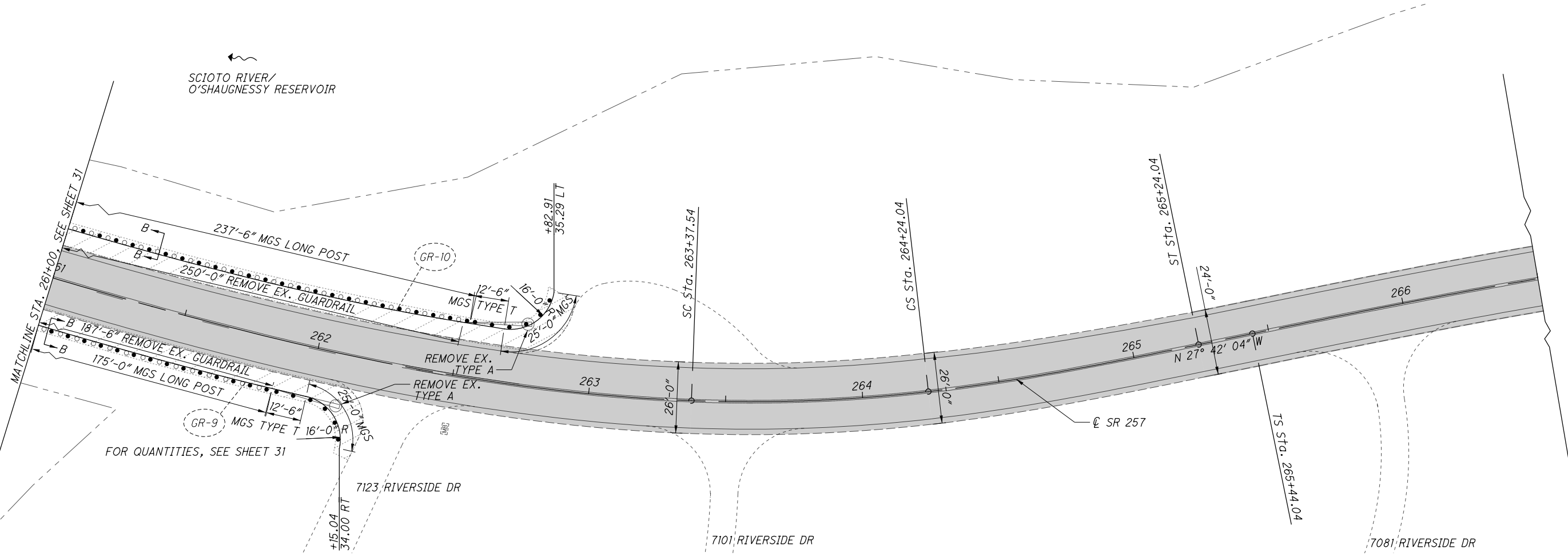
STRUCTURE DEL-257-0487	
INTERSECTING FEATURE:	BEAR RUN
LENGTH:	82.00'
WIDTH:	13.00'
DECK AREA:	N/A
APPROACH SLAB LENGTH:	N/A
APPROACH SLAB AREA:	N/A
SKEW:	0 DEG
STRUCTURE FILE NUMBER:	2103036
DISPOSITION:	PAVE OVER

- RESURFACING
- EMBANKMENT, AS PER PLAN AND LINEAR GRADING FOR PROPER GUARDRAIL AND ANCHOR ASSEMBLY GRADING PER MGS-1.1, MGS-5.2, MGS-5.3, AND SECTION A-A AND SECTION B-B ON SHEET 6.

LOCATION									QUANTITIES														REMARKS				
REFERENCE	COUNTY	ROUTE	BEGIN STA	END STA	BEGIN SLM	END SLM	LENGTH	SIDE	202	202	202	202	202	203	209	606	606	606	606	606	606	606	626	630	630	690	
									GUARDRAIL REMOVED, AS PER PLAN	ANCHOR ASSEMBLY REMOVED, TYPE A, AS PER PLAN	ANCHOR ASSEMBLY REMOVED, TYPE T, AS PER PLAN	BRIDGE TERMINAL ASSEMBLY REMOVED, AS PER PLAN	REMOVAL MISC.: ANCHOR ASSEMBLY FOUNDATION	EMBANKMENT, AS PER PLAN	LINEAR GRADING	GUARDRAIL, TYPE MGS	GUARDRAIL, TYPE MGS WITH LONG POSTS	ANCHOR ASSEMBLY, MGS TYPE A	ANCHOR ASSEMBLY, MGS TYPE E, AS PER PLAN (NCHRP350 OR MASH 2016)	ANCHOR ASSEMBLY, MGS TYPE T	BRIDGE TERMINAL ASSEMBLY, TYPE 4, AS PER PLAN	BRIDGE TERMINAL ASSEMBLY, TYPE 4, AS PER PLAN, RADIUS	GUARDRAIL, MISC.: PANEL REMOVED AND REPLACED	BARRIER REFLECTOR, TYPE 2, BIDIRECTIONAL	REMOVAL OF GROUND MOUNTED SIGN AND REERECTION	SIGNING, MISC.: REMOVAL OF WOOD ADDRESS POST AND REERECTION	MAILBOX REMOVED AND RESET
							MI	FT	EACH	EACH	EACH	EACH	EACH	CY	STA	FT	FT	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	
GR-9	DEL	257	256+55.00	262+15.04	4.840	4.946	0.106	RT	350.00	2		2		182	5.6		437.5		1	1			18.75	7			
GR-10	DEL	257	258+17.56	262+82.91	4.871	4.959	0.088	LT	362.50	2		2		156	4.7		337.5		1	1			18.75	6			
QUANTITIES CARRIED TO ROADWAY SUBSUMMARY SHEET 21									712.50	4		4		338	10.3		775.0		2	2			37.50	13			

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SCIOTO RIVER/  
O'SHAUGNESSY RESERVOIR



FOR QUANTITIES, SEE SHEET 31

- NOTES:
1. MATCH EXISTING GUARDRAIL OFFSET UNLESS OTHERWISE NOTED.
  2. FOR TYPICAL SECTIONS, SEE SHEET 4.
  3. FOR PAVEMENT QUANTITIES, SEE SHEETS 18-20.
  4. FOR TRAFFIC CONTROL QUANTITIES AND DETAILS, SEE SHEETS 42-47.

- RESURFACING
- EMBANKMENT, AS PER PLAN AND LINEAR GRADING FOR PROPER GUARDRAIL AND ANCHOR ASSEMBLY GRADING PER MGS-1.1, MGS-5.2, MGS-5.3, AND SECTION A-A AND SECTION B-B ON SHEET 6.

N

0 20 40  
HORIZONTAL  
SCALE IN FEET

CALCULATED	KLM	CHECKED	XXX
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**ROADWAY PLAN - DEL-257  
STA. 261+00 TO STA. 266+50**

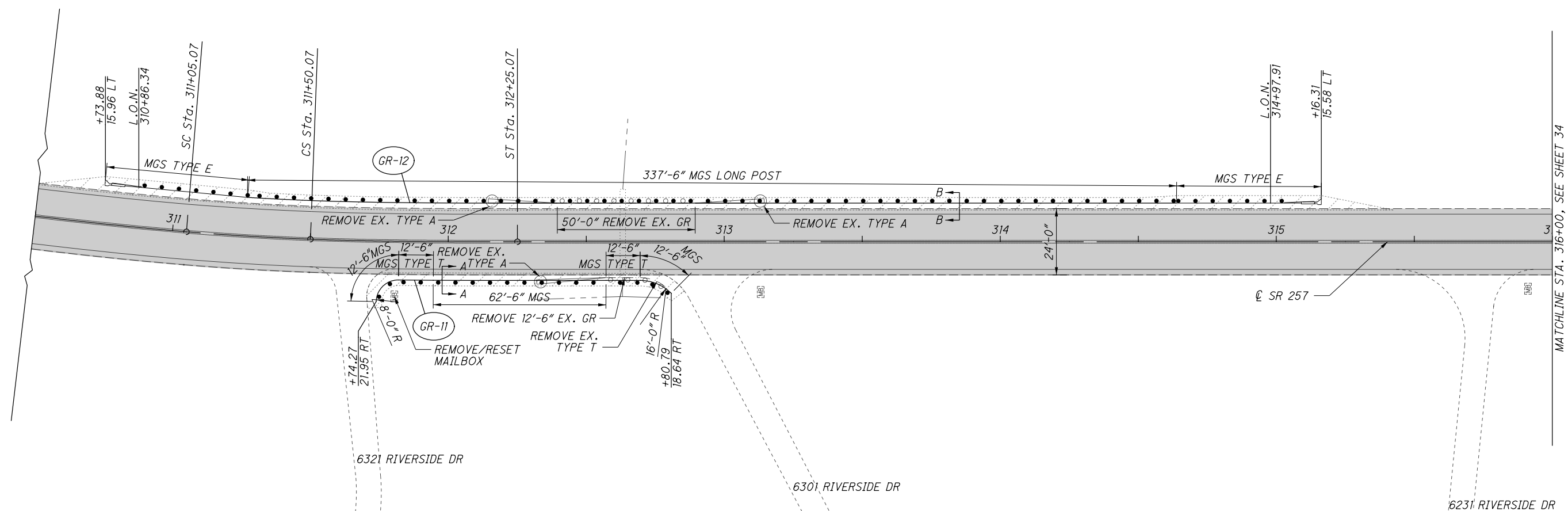
**DEL-257-1.53**

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CALCULATED  
KLM  
CHECKED  
XXX

0 20 40  
HORIZONTAL  
SCALE IN FEET



- NOTES:
1. MATCH EXISTING GUARDRAIL OFFSET UNLESS OTHERWISE NOTED.
  2. FOR TYPICAL SECTIONS, SEE SHEET 4.
  3. FOR PAVEMENT QUANTITIES, SEE SHEETS 18-20.
  4. FOR TRAFFIC CONTROL QUANTITIES AND DETAILS, SEE SHEETS 42-47.

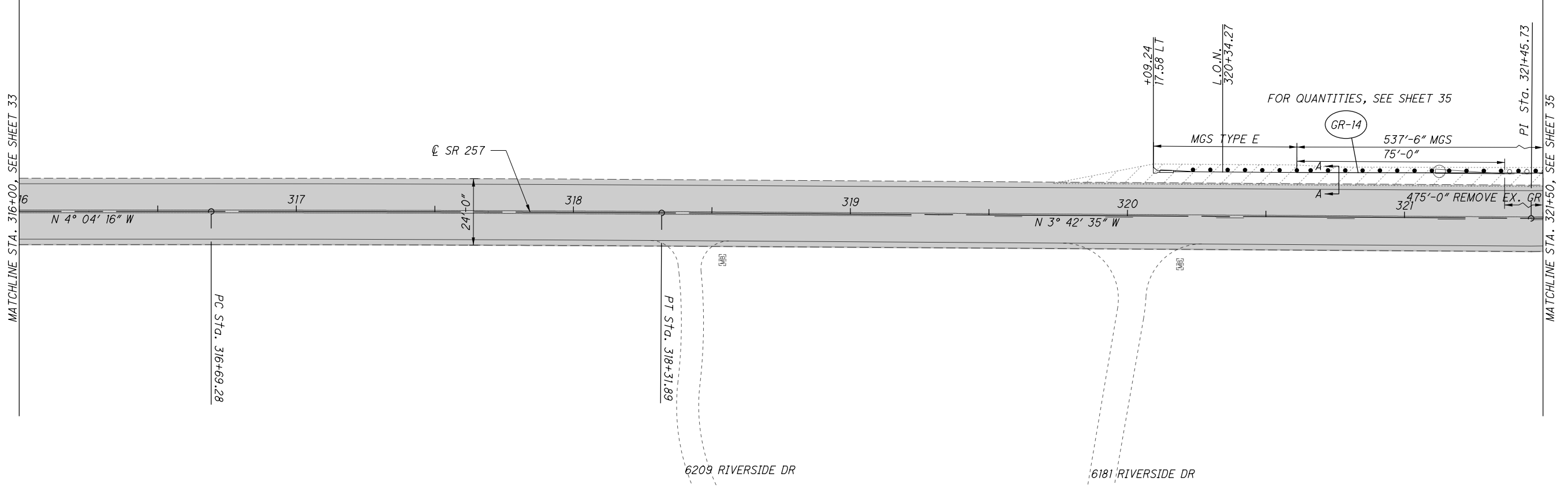
- RESURFACING
- EMBANKMENT, AS PER PLAN AND LINEAR GRADING FOR PROPER GUARDRAIL AND ANCHOR ASSEMBLY GRADING PER MGS-1.1, MGS-5.2, MGS-5.3, AND SECTION A-A AND SECTION B-B ON SHEET 6.

LOCATION										QUANTITIES														REMARKS													
REFERENCE	COUNTY	ROUTE	BEGIN STA	END STA	BEGIN SLM	END SLM	LENGTH	SIDE		202	202	202	202	202	203	209	606	606	606	606	606	606	606	626	630	630	690										
										GUARDRAIL REMOVED, AS PER PLAN	ANCHOR ASSEMBLY REMOVED, TYPE A, AS PER PLAN	ANCHOR ASSEMBLY REMOVED, TYPE T, AS PER PLAN	BRIDGE TERMINAL ASSEMBLY REMOVED, AS PER PLAN	REMOVAL MISC.: ANCHOR ASSEMBLY FOUNDATION	EMBANKMENT, AS PER PLAN	LINEAR GRADING	GUARDRAIL, TYPE MGS	GUARDRAIL, TYPE MGS WITH LONG POSTS	ANCHOR ASSEMBLY, MGS TYPE A	ANCHOR ASSEMBLY, MGS TYPE E, AS PER PLAN (NCHRP350 OR MASH 2016)	ANCHOR ASSEMBLY, MGS TYPE T	BRIDGE TERMINAL ASSEMBLY, TYPE 4, AS PER PLAN	BRIDGE TERMINAL ASSEMBLY, TYPE 4, AS PER PLAN, RADIUS	GUARDRAIL, MISC.: PANEL REMOVED AND REPLACED	BARRIER REFLECTOR, TYPE 2, BIDIRECTIONAL	REMOVAL OF GROUND MOUNTED SIGN AND REERECTION	SIGNING, MISC.: REMOVAL OF WOOD ADDRESS POST AND REERECTION					MAILBOX REMOVED AND RESET					
							MI			FT	EACH	EACH	EACH	EACH	CY	STA	FT	FT	EACH	EACH	EACH	EACH	FT	EACH	EACH	EACH	EACH										
GR-11	DEL	257	311+74.27	312+80.79	5.885	5.905	0.020	RT		12.50	1	1			22	1.1	87.50							3													
GR-12	DEL	257	310+73.88	315+16.31	5.866	5.950	0.084	LT		50.00	2			83	4.4		337.5		2	2			6														
QUANTITIES CARRIED TO ROADWAY SUBSUMMARY SHEET 21										62.50	3	1			105	5.5	87.50	337.5		2	2				9					1							

ROADWAY PLAN - DEL-257  
STA. 310+50 TO STA. 316+00

DEL-257-1.53

33  
54



- NOTES:
1. MATCH EXISTING GUARDRAIL OFFSET UNLESS OTHERWISE NOTED.
  2. FOR TYPICAL SECTIONS, SEE SHEET 4.
  3. FOR PAVEMENT QUANTITIES, SEE SHEETS 18-20.
  4. FOR TRAFFIC CONTROL QUANTITIES AND DETAILS, SEE SHEETS 42-47.

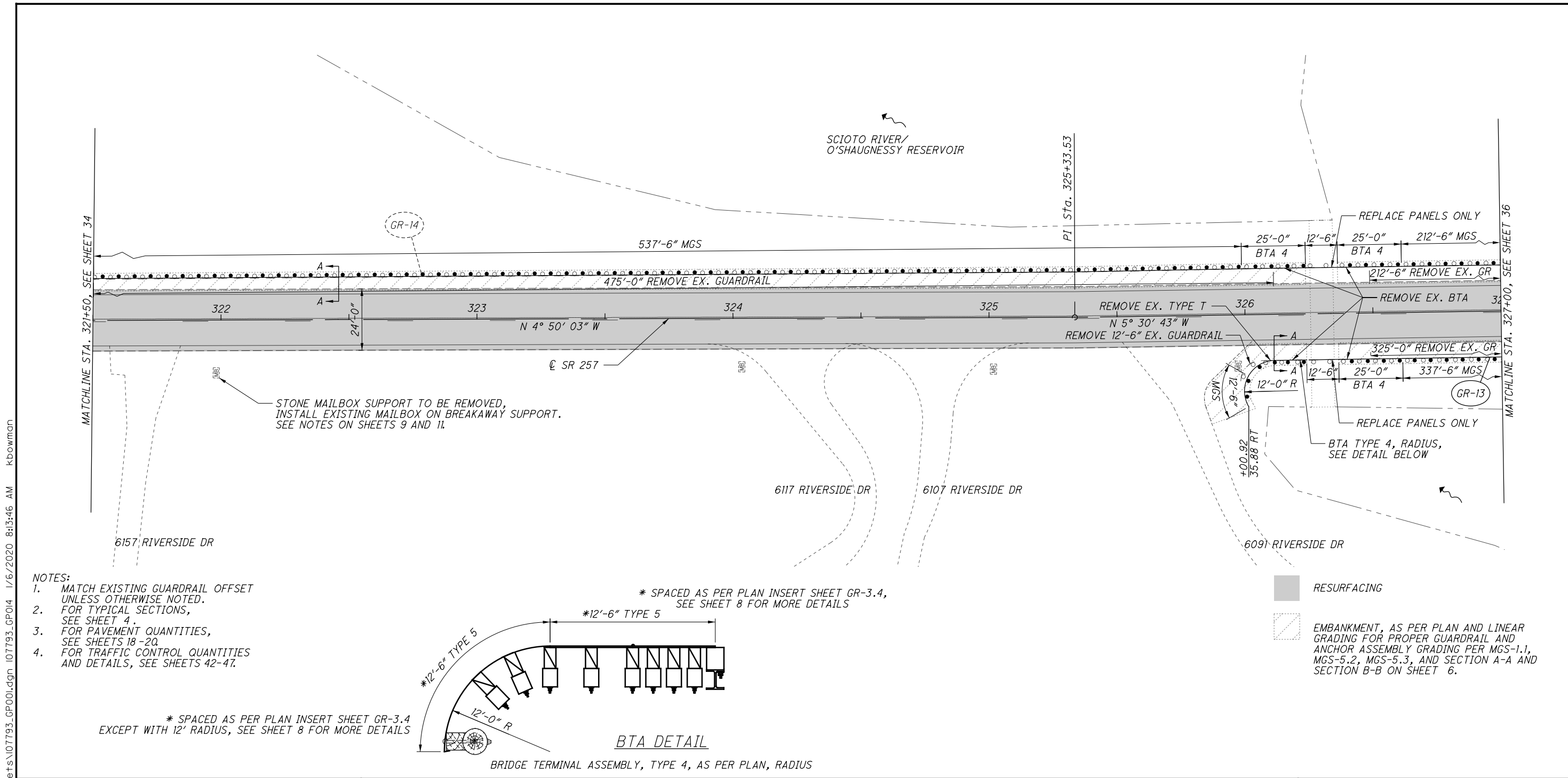
- RESURFACING
- EMBANKMENT, AS PER PLAN AND LINEAR GRADING FOR PROPER GUARDRAIL AND ANCHOR ASSEMBLY GRADING PER MGS-1.1, MGS-5.2, MGS-5.3, AND SECTION A-A AND SECTION B-B ON SHEET 6.

CALCULATED  
KLM  
CHECKED  
XXX

0 20 40  
HORIZONTAL  
SCALE IN FEET

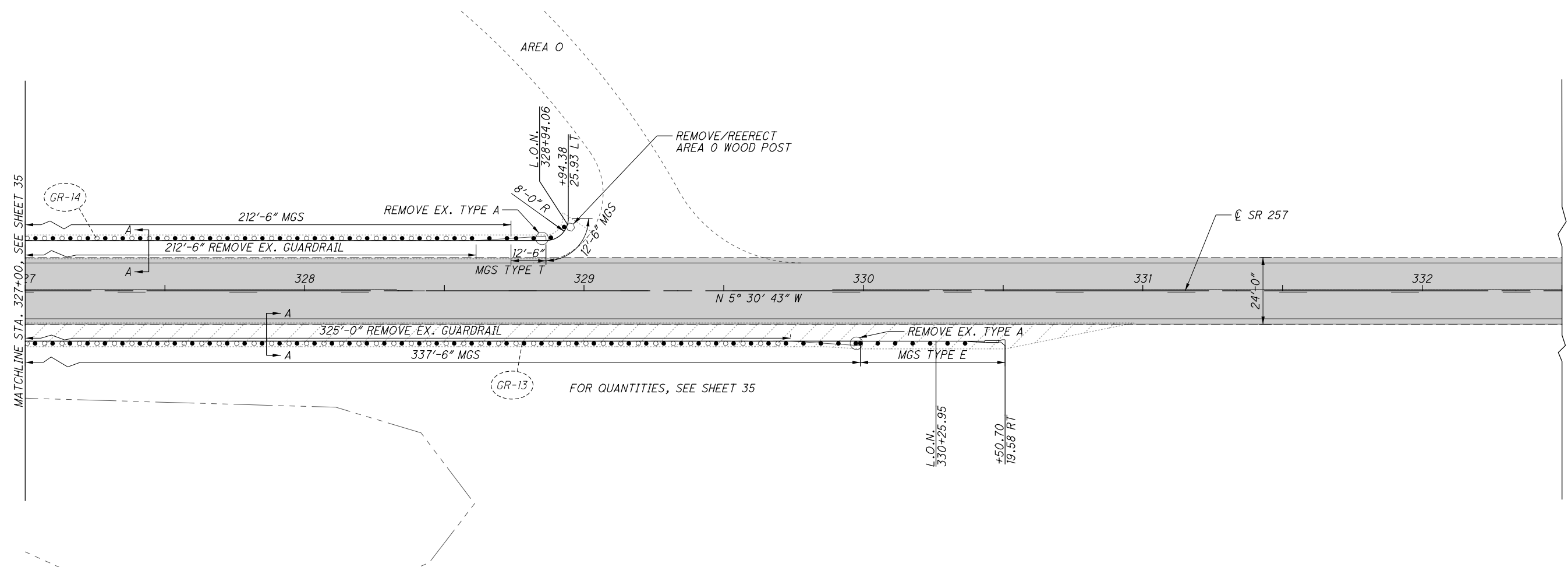
**ROADWAY PLAN - DEL-257  
STA. 316+00 TO STA. 321+50**

**DEL-257-1.53**





LOCATION										QUANTITIES														REMARKS								
REFERENCE	COUNTY	ROUTE	BEGIN STA	END STA	BEGIN SLM	END SLM	LENGTH	SIDE		202	202	202	202	202	203	209	606	606	606	606	606	606	606	626	630	630	690					
							MI			GUARDRAIL REMOVED, AS PER PLAN	ANCHOR ASSEMBLY REMOVED, TYPE A, AS PER PLAN	ANCHOR ASSEMBLY REMOVED, TYPE T, AS PER PLAN	BRIDGE TERMINAL ASSEMBLY REMOVED, AS PER PLAN	REMOVAL MISC.: ANCHOR ASSEMBLY FOUNDATION	EMBANKMENT, AS PER PLAN	LINEAR GRADING	GUARDRAIL, TYPE MGS	GUARDRAIL, TYPE MGS WITH LONG POSTS	ANCHOR ASSEMBLY, MGS TYPE A	ANCHOR ASSEMBLY, MGS TYPE E, AS PER PLAN (NCHRP350 OR MASH 2016)	ANCHOR ASSEMBLY, MGS TYPE T	BRIDGE TERMINAL ASSEMBLY, TYPE 4, AS PER PLAN	BRIDGE TERMINAL ASSEMBLY, TYPE 4, AS PER PLAN, RADIUS	GUARDRAIL, MISC.: PANEL REMOVED AND REPLACED	BARRIER REFLECTOR, TYPE 2, BIDIRECTIONAL	REMOVAL OF GROUND MOUNTED SIGN AND REERECTION	SIGNING, MISC.: REMOVAL OF WOOD ADDRESS POST AND REERECTION	MAILBOX REMOVED AND RESET				
										FT	EACH	EACH	EACH	EACH	CY	STA	FT	FT	EACH	EACH	EACH	EACH	EACH	FT	EACH	EACH	EACH	EACH				
GR-13	DEL	257	326+00.92	330+50.70	6.155	6.241	0.085	RT		337.50	1	1	2		161	4.5	350.0					1	1	1	12.50	6						
GR-14	DEL	257	320+09.24	328+94.38	6.043	6.211	0.168	LT		687.50	2		2		261	8.9	762.5				1	1	2	12.50	10		1			POST AREA 0 - ADDRESS 6020		
QUANTITIES CARRIED TO ROADWAY SUBSUMMARY SHEET 21										1025.00	3	1	4		422	13.4	1112.5				2	1	3	1	25.00	16		1				

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- NOTES:
1. MATCH EXISTING GUARDRAIL OFFSET UNLESS OTHERWISE NOTED.
  2. FOR TYPICAL SECTIONS, SEE SHEET 4.
  3. FOR PAVEMENT QUANTITIES, SEE SHEETS 18-20.
  4. FOR TRAFFIC CONTROL QUANTITIES AND DETAILS, SEE SHEETS 42-47.

FOR QUANTITIES, SEE SHEET 35

-  RESURFACING
-  EMBANKMENT, AS PER PLAN AND LINEAR GRADING FOR PROPER GUARDRAIL AND ANCHOR ASSEMBLY GRADING PER MGS-1.1, MGS-5.2, MGS-5.3, AND SECTION A-A AND SECTION B-B ON SHEET 6.

CALCULATED 0  
KLM  
CHECKED XXX

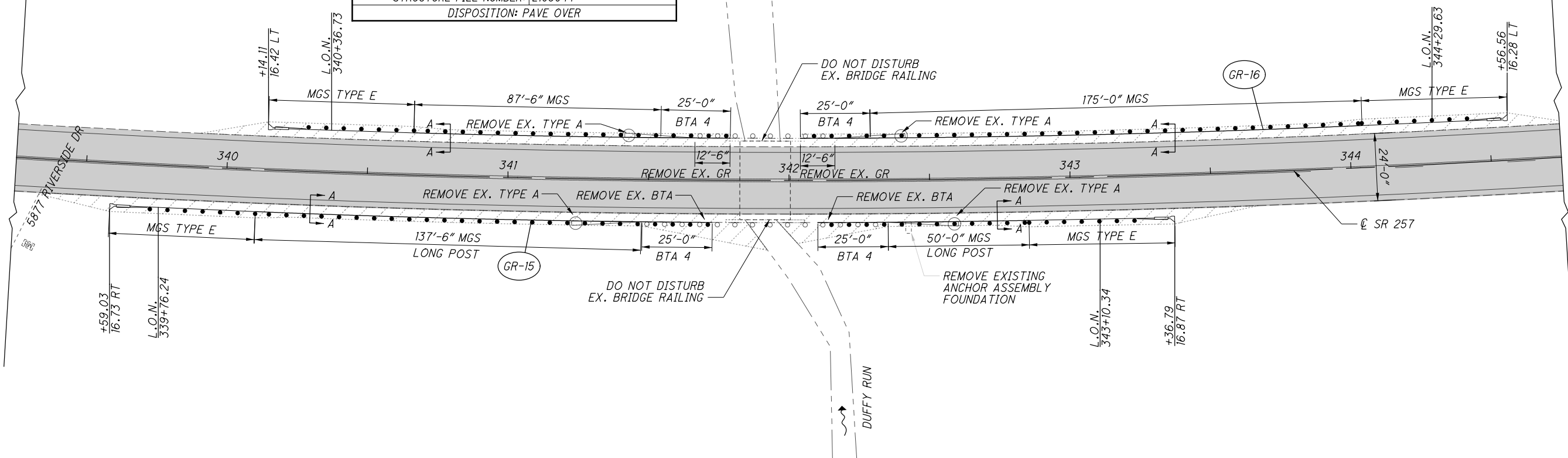
0 20 40  
HORIZONTAL SCALE IN FEET

ROADWAY PLAN - DEL-257  
STA. 327+00 TO STA. 332+50

DEL-257-1.53



STRUCTURE DEL-257-0641	
INTERSECTING FEATURE:	DUFFY RUN
LENGTH:	18.00'
WIDTH:	28.00'
DECK AREA:	N/A
APPROACH SLAB LENGTH:	N/A
APPROACH SLAB AREA:	N/A
SKEW:	2 DEG
STRUCTURE FILE NUMBER:	2103044
DISPOSITION:	PAVE OVER



- NOTES:
- MATCH EXISTING GUARDRAIL OFFSET UNLESS OTHERWISE NOTED.
  - FOR TYPICAL SECTIONS, SEE SHEET 4.
  - FOR PAVEMENT QUANTITIES, SEE SHEETS 18-20.
  - FOR TRAFFIC CONTROL QUANTITIES AND DETAILS, SEE SHEETS 42-47.

- RESURFACING
- EMBANKMENT, AS PER PLAN AND LINEAR GRADING FOR PROPER GUARDRAIL AND ANCHOR ASSEMBLY GRADING PER MGS-1.1, MGS-5.2, MGS-5.3, AND SECTION A-A AND SECTION B-B ON SHEET 6.

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0 20 40  
HORIZONTAL SCALE IN FEET

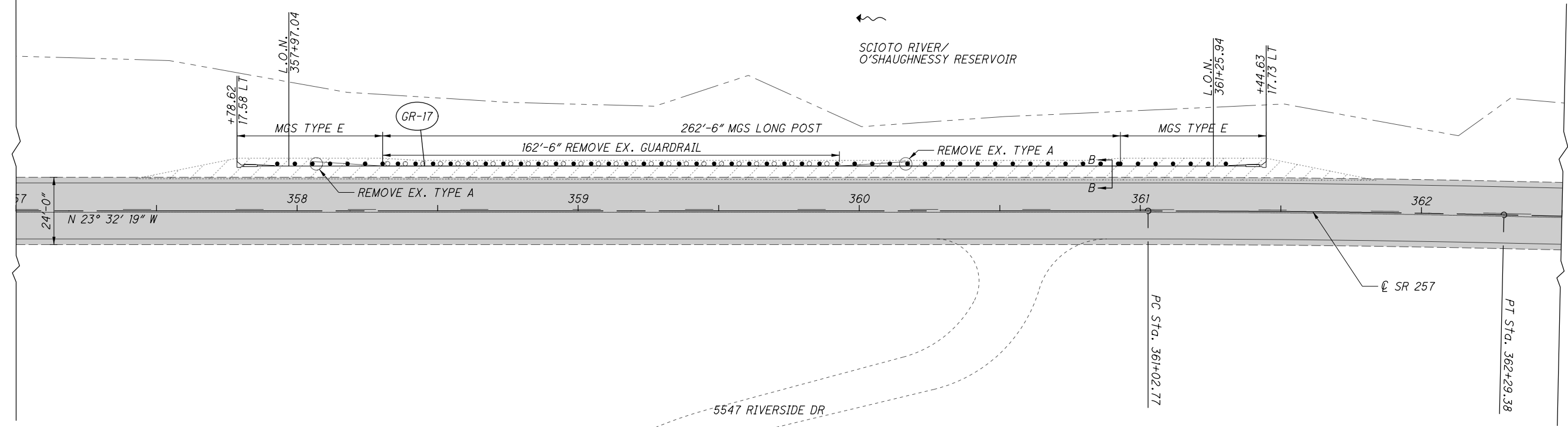
CALCULATED 0  
KLM  
CHECKED XXX

**ROADWAY PLAN - DEL-257  
STA. 339+25 TO STA. 344+75**

LOCATION									QUANTITIES														REMARKS									
REFERENCE	COUNTY	ROUTE	BEGIN STA	END STA	BEGIN SLM	END SLM	LENGTH	SIDE	202	202	202	202	202	203	209	606	606	606	606	606	606	606	626	630	630	690						
									GUARDRAIL REMOVED, AS PER PLAN	ANCHOR ASSEMBLY REMOVED, TYPE A, AS PER PLAN	ANCHOR ASSEMBLY REMOVED, TYPE T, AS PER PLAN	BRIDGE TERMINAL ASSEMBLY REMOVED, AS PER PLAN	REMOVAL MISC.: ANCHOR ASSEMBLY FOUNDATION	EMBANKMENT, AS PER PLAN	LINEAR GRADING	GUARDRAIL, TYPE MGS	GUARDRAIL, TYPE MGS WITH LONG POSTS	ANCHOR ASSEMBLY, MGS TYPE A	ANCHOR ASSEMBLY, MGS TYPE E, AS PER PLAN (NCHRP350 OR MASH 2016)	ANCHOR ASSEMBLY, MGS TYPE T	BRIDGE TERMINAL ASSEMBLY, TYPE 4, AS PER PLAN	BRIDGE TERMINAL ASSEMBLY, TYPE 4, AS PER PLAN, RADIUS	GUARDRAIL, MISC.: PANEL REMOVED AND REPLACED	BARRIER REFLECTOR, TYPE 2, BIDIRECTIONAL	REMOVAL OF GROUND MOUNTED SIGN AND REERECTION	SIGNING, MISC.: REMOVAL OF WOOD ADDRESS POST AND REERECTION	MAILBOX REMOVED AND RESET					
							MI	FT	EACH	EACH	EACH	EACH	EACH	CY	STA	FT	FT	EACH	EACH	EACH	EACH	FT	EACH	EACH	EACH	EACH						
GR-15	DEL	257	339+59.03	343+36.79	6.413	6.484	0.072	RT		2		2	1	80	3.8		187.50		2		2		5								EXTRA EMBANKMENT TO ADDRESS EROSION	
GR-16	DEL	257	340+14.11	344+56.56	6.423	6.507	0.084	LT	25.00	2				77	4.4	262.50			2		2		6									
QUANTITIES CARRIED TO ROADWAY SUBSUMMARY SHEET 21									25.00	4		2	1	157	8.2	262.50	187.5		4		4		11									

**DEL-257-1.53**

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- NOTES:
1. MATCH EXISTING GUARDRAIL OFFSET UNLESS OTHERWISE NOTED.
  2. FOR TYPICAL SECTIONS, SEE SHEET 4.
  3. FOR PAVEMENT QUANTITIES, SEE SHEETS 18-20.
  4. FOR TRAFFIC CONTROL QUANTITIES AND DETAILS, SEE SHEETS 42-47.

RESURFACING

EMBANKMENT, AS PER PLAN AND LINEAR GRADING FOR PROPER GUARDRAIL AND ANCHOR ASSEMBLY GRADING PER MGS-1.1, MGS-5.2, MGS-5.3, AND SECTION A-A AND SECTION B-B ON SHEET 6.

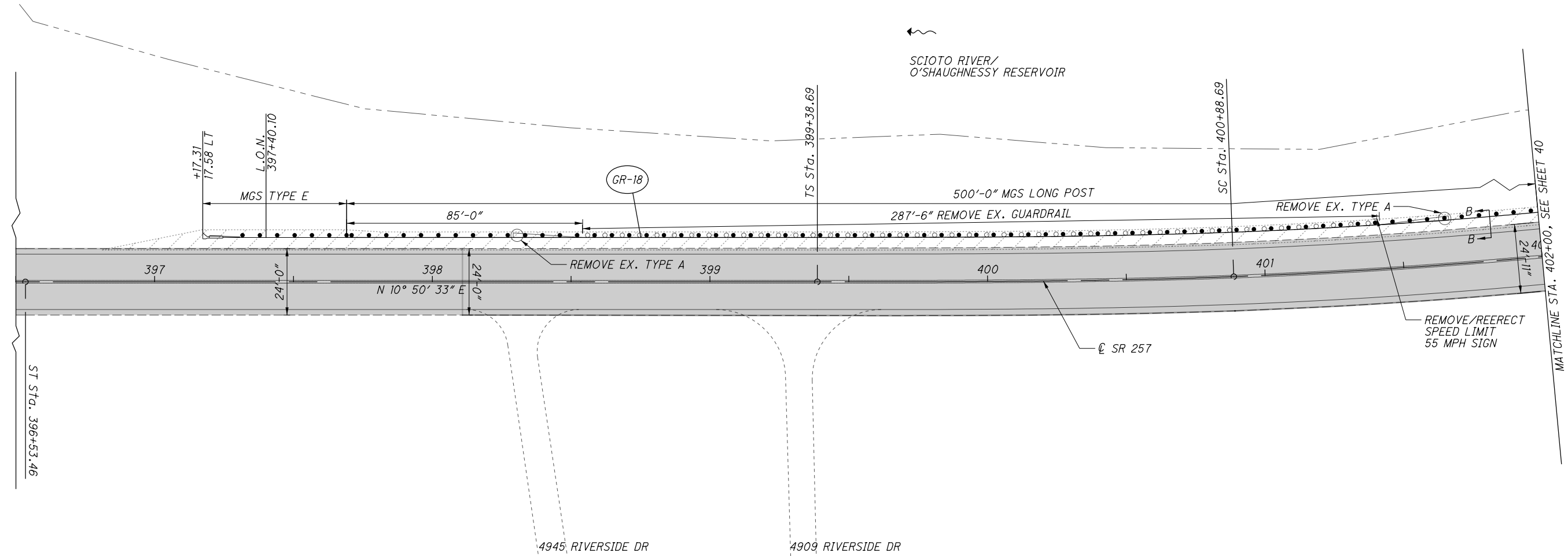
LOCATION									QUANTITIES														REMARKS						
REFERENCE	COUNTY	ROUTE	BEGIN STA	END STA	BEGIN SLM	END SLM	LENGTH	SIDE	202	202	202	202	202	203	209	606	606	606	606	606	606	606	626	630	630	690			
							MI		GUARDRAIL REMOVED, AS PER PLAN	ANCHOR ASSEMBLY REMOVED, TYPE A, AS PER PLAN	ANCHOR ASSEMBLY REMOVED, TYPE T, AS PER PLAN	BRIDGE TERMINAL ASSEMBLY REMOVED, AS PER PLAN	REMOVAL MISC.: ANCHOR ASSEMBLY FOUNDATION	EMBANKMENT, AS PER PLAN	LINEAR GRADING	GUARDRAIL, TYPE MGS	GUARDRAIL, TYPE MGS WITH LONG POSTS	ANCHOR ASSEMBLY, MGS TYPE A	ANCHOR ASSEMBLY, MGS TYPE E, AS PER PLAN (NCHRP350 OR MASH 2016)	ANCHOR ASSEMBLY, MGS TYPE T	BRIDGE TERMINAL ASSEMBLY, TYPE 4, AS PER PLAN	BRIDGE TERMINAL ASSEMBLY, TYPE 4, AS PER PLAN, RADIUS	GUARDRAIL, MISC.: PANEL REMOVED AND REPLACED	BARRIER REFLECTOR, TYPE 2, BIDIRECTIONAL	REMOVAL OF GROUND MOUNTED SIGN AND REERECTION	SIGNING, MISC.: REMOVAL OF WOOD ADDRESS POST AND REERECTION	MAILBOX REMOVED AND RESET		
									FT	EACH	EACH	EACH	EACH	CY	STA	FT	FT	EACH	EACH	EACH	EACH	EACH	FT	EACH	EACH	EACH	EACH		
GR-17	DEL	257	357+78.62	361+44.63	6.757	6.827	0.069	LT	162.50	2				106	3.7		262.5							5					
QUANTITIES CARRIED TO ROADWAY SUBSUMMARY SHEET 21									162.50	2				106	3.7		262.5							5					

CALCULATED 0  
KLM  
CHECKED XXX

0 20 40  
HORIZONTAL SCALE IN FEET

ROADWAY PLAN - DEL-257  
STA. 357+00 TO STA. 362+50

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- NOTES:
1. MATCH EXISTING GUARDRAIL OFFSET UNLESS OTHERWISE NOTED.
  2. FOR TYPICAL SECTIONS, SEE SHEET 4.
  3. FOR PAVEMENT QUANTITIES, SEE SHEETS 18-20.
  4. FOR TRAFFIC CONTROL QUANTITIES AND DETAILS, SEE SHEETS 42-47.

RESURFACING

EMBANKMENT, AS PER PLAN AND LINEAR GRADING FOR PROPER GUARDRAIL AND ANCHOR ASSEMBLY GRADING PER MGS-1.1, MGS-5.2, MGS-5.3, AND SECTION A-A AND SECTION B-B ON SHEET 6.

LOCATION									QUANTITIES															REMARKS						
REFERENCE	COUNTY	ROUTE	BEGIN STA	END STA	BEGIN SLM	END SLM	LENGTH	SIDE	202	202	202	202	202	203	209	606	606	606	606	606	606	626	630	630	690					
							MI		GUARDRAIL REMOVED, AS PER PLAN	ANCHOR ASSEMBLY REMOVED, TYPE A, AS PER PLAN	ANCHOR ASSEMBLY REMOVED, TYPE T, AS PER PLAN	BRIDGE TERMINAL ASSEMBLY REMOVED, AS PER PLAN	REMOVAL MISC.: ANCHOR ASSEMBLY FOUNDATION	EMBANKMENT, AS PER PLAN	LINEAR GRADING	GUARDRAIL, TYPE MGS	GUARDRAIL, TYPE MGS WITH LONG POSTS	ANCHOR ASSEMBLY, MGS TYPE A	ANCHOR ASSEMBLY, MGS TYPE E, AS PER PLAN (NCHRP350 OR MASH 2016)	ANCHOR ASSEMBLY, MGS TYPE T	BRIDGE TERMINAL ASSEMBLY, TYPE 4, AS PER PLAN	BRIDGE TERMINAL ASSEMBLY, TYPE 4, AS PER PLAN, RADIUS	GUARDRAIL, MISC.: PANEL REMOVED AND REPLACED	BARRIER REFLECTOR, TYPE 2, BIDIRECTIONAL	REMOVAL OF GROUND MOUNTED SIGN AND REERECTION	SIGNING, MISC.: REMOVAL OF WOOD ADDRESS POST AND REERECTION	MAILBOX REMOVED AND RESET			
									FT	EACH	EACH	EACH	EACH	CY	STA	FT	FT	EACH	EACH	EACH	EACH	FT	EACH	EACH	EACH	EACH				
GR-18	DEL	257	397+17.13	403+23.40	7.503	7.618	0.115	LT	287.50	2				156	6.1		500.0							7	2				SIGNS R2-1 AND W3-3	
QUANTITIES CARRIED TO ROADWAY SUBSUMMARY SHEET 21									287.50	2				156	6.1		500.0							7	2					

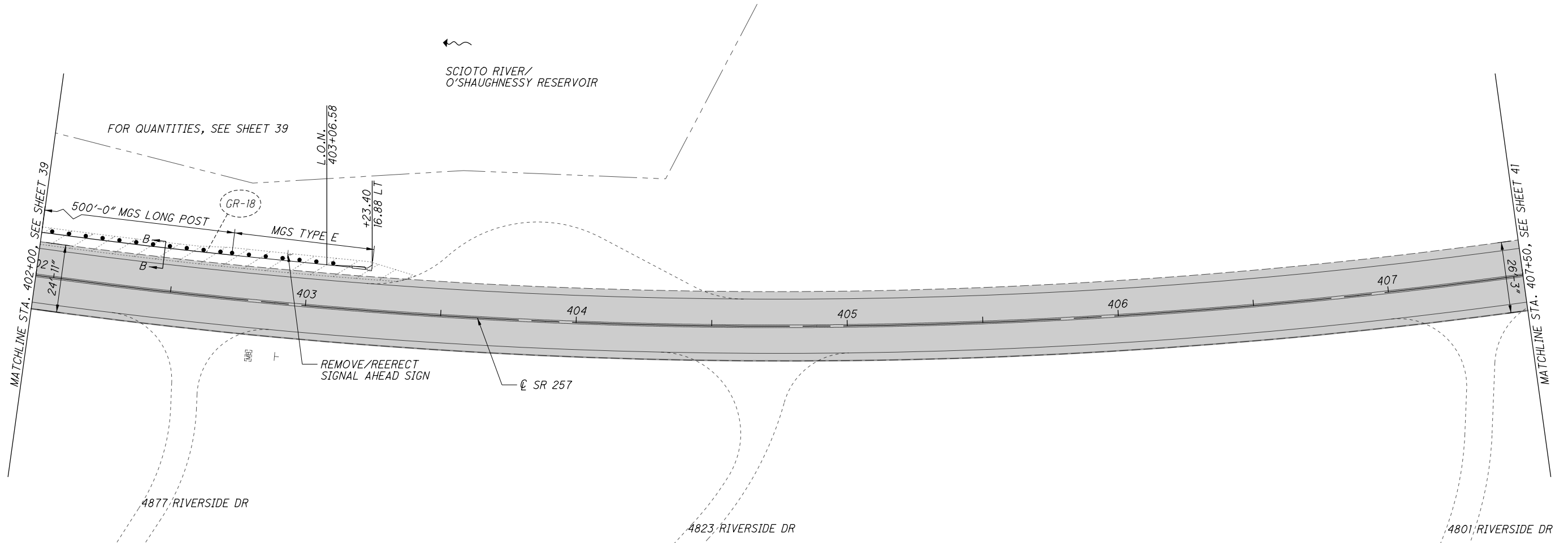
0 20 40  
HORIZONTAL SCALE IN FEET

CALCULATED  
KLM  
CHECKED  
XXX

ROADWAY PLAN - DEL-257  
STA. 396+50 TO STA. 402+00

DEL-257-1.53

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- NOTES:
1. MATCH EXISTING GUARDRAIL OFFSET UNLESS OTHERWISE NOTED.
  2. FOR TYPICAL SECTIONS, SEE SHEET 4.
  3. FOR PAVEMENT QUANTITIES, SEE SHEETS 18-20.
  4. FOR TRAFFIC CONTROL QUANTITIES AND DETAILS, SEE SHEETS 42-47.

RESURFACING

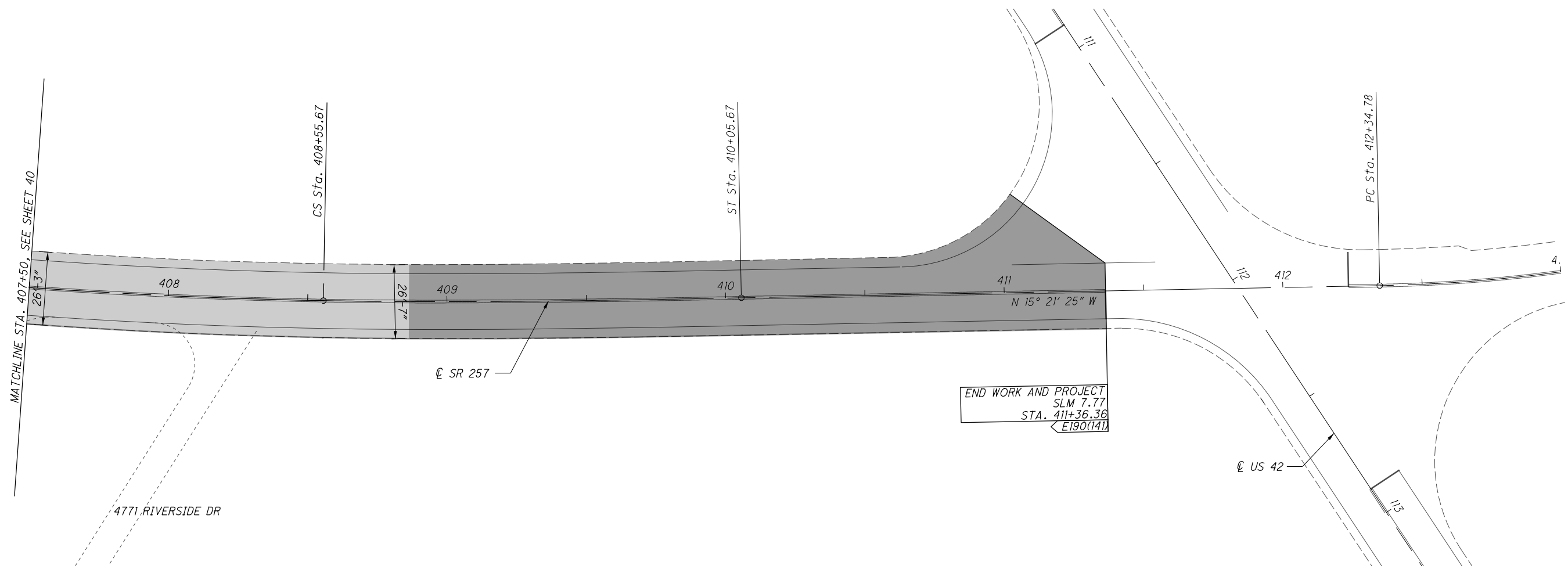
EMBANKMENT, AS PER PLAN AND LINEAR GRADING FOR PROPER GUARDRAIL AND ANCHOR ASSEMBLY GRADING PER MGS-1.1, MGS-5.2, MGS-5.3, AND SECTION A-A AND SECTION B-B ON SHEET 6.

CALCULATED  
KLM  
CHECKED  
XXX

0 10 20 40  
HORIZONTAL  
SCALE IN FEET

ROADWAY PLAN - DEL-257  
STA. 402+00 TO STA. 407+50

DEL-257-1.53



- NOTES:
1. MATCH EXISTING GUARDRAIL OFFSET UNLESS OTHERWISE NOTED.
  2. FOR TYPICAL SECTIONS, SEE SHEET 4.
  3. FOR PAVEMENT QUANTITIES, SEE SHEETS 18-20.
  4. FOR TRAFFIC CONTROL QUANTITIES AND DETAILS, SEE SHEETS 42-47.

	RESURFACING, 1.50"
	RESURFACING, 3.00"
	EMBANKMENT, AS PER PLAN AND LINEAR GRADING FOR PROPER GUARDRAIL AND ANCHOR ASSEMBLY GRADING PER MGS-1.1, MGS-5.2, MGS-5.3, AND SECTION A-A AND SECTION B-B ON SHEET 6.

END WORK AND PROJECT  
 SLM 7.77  
 STA. 411+36.36  
 E190(141)

CALCULATED  
 KLM  
 CHECKED  
 XXX

0 20 40  
 HORIZONTAL  
 SCALE IN FEET

**ROADWAY PLAN - DEL-257  
 STA. 407+50 TO STA. 413+00**

**DEL-257-1.53**

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LOCATION									644							646		REMARKS		
C O U N T Y	R O U T E	B E G I N G S T A	E N D S T A	B E G I N G M	E N D S T M	L E N G T H	L E N G T H	S I D E	EDGE LINE, 6"		LANE LINE, 6"	CENTER LINE	CHANNELIZING LINE, 8"	STOP LINE	TRANSVERSE/DIAGONAL LINE	DOTTED LINE, 6"	EDGE LINE, 6"		CENTER LINE	
									W	Y							W			Y
									FT	MILE	MILE	MILE	FT	FT	FT	FT	MILE		MILE	MILE
DEL	257	81+92.82	164+90.33	1.533	3.104	8298	1.571		3.14		1.57									
DEL	257	164+90.33	165+63.00	3.104	3.118	73	0.014										0.02		0.01	STRUCTURE DEL-257-0308
DEL	257	165+63.00	218+51.58	3.118	4.120	5289	1.002		2.00		1.00									NO RESURFACING AT HOME RD ROUNDABOUT
DEL	257	218+51.58	241+58.48	4.120	4.557	2307	0.437													
DEL	257	241+58.48	301+43.20	4.557	5.690	5985	1.133		2.26		1.13									
DEL	257	301+43.20	411+36.36	5.690	7.772	10993	2.082		4.16		2.08									
DEL	257	81+92.82	82+99.64	1.533	1.553	107	0.020									107				
DEL	257	101+07.98	111+47.91	1.895	2.092	1040	0.197	NB			0.20			994						RIGHT TURN LANE TO CREIGHTON DR
DEL	257	108+73.87	111+48.61	2.041	2.093	275	0.052	NB				275								RIGHT TURN LANE TO CREIGHTON DR
DEL	257	112+30.70	115+26.86	2.108	2.164	296	0.056	SB				296								LEFT TURN LANE TO CREIGHTON DR
DEL	257	115+44.25	122+13.70	2.167	2.294	669	0.127	SB			0.13			442						LEFT TURN LANE TO CREIGHTON DR
DEL	257	128+15.18		2.408				RT					11							ON SELDOM SEEN RD (TR 121)
DEL	257	143+42.01		2.697				RT					11							ON BAYPOINTE DR
DEL	257	157+84.89		2.971				RT					11							ON LAKEVIEW DR (TR 331)
DEL	257	189+78.38		3.575				RT					12							ON BRUST DR (TR 357)
DEL	257	379+93.24		7.177				RT					9							ON BEAN-OLLER RD (TR 140)
DEL	257	411+36.36		7.770				RT					10							AT US 42
TOTALS CARRIED TO GENERAL SUMMARY									11.56		6.11	571	64	1436	107	0.02		0.01		

LANE WIDTH: 10' UNLESS OTHERWISE SHOWN ON ROADWAY PLAN SHEETS

CALCULATED KLM CHECKED XXX	<b>PAVEMENT MARKING SUBSUMMARY</b>	<b>DEL-257-1.53</b>	42 54
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DETAIL	STANDARD DRAWING TC-65.10
1	EDGE LINE
2	CHANNELIZING LINE
3	LANE LINE
4	CENTER LINE

DETAIL	STANDARD DRAWING TC-65.11
5	ENTRANCE RAMP
6	EXIT RAMP
7	4 LANE DIVIDED TO 2 LANE TRANSITION
8	4 LANE UNDIVIDED TO 2 LANE TRANSITION
9	MULTILANE DIVIDED HIGHWAY

DETAIL	STANDARD DRAWING TC-65.11
10	APPROACH W/ LEFT TURN LANE
11	STOP APPROACH
12	TWO WAY LEFT TURN LANE
13	ONE LANE BRIDGE
14	HORIZONTAL CURVE

C O U N T Y	R O U T E	LOCATION								REFLECTOR TYPE										621		REMARKS	
		B E G I N G	E N D I N G	L E N G T H	L E N G T H	S I D E	D I R E C T I O N	ONE WAY			TWO WAY							R A I S E D P A V E M E N T M A R K E R R E M O V E D	R P M				
								W H I T E	Y E L L O	Y E L L O	W H I T E	Y E L L O	Y E L L O	Y E L L O	Y E L L O	Y E L L O	Y E L L O			Y E L L O	Y E L L O		
		R I G H T E D G E L I N E	L A N E L I N E	L E F T E D G E L I N E	R I G H T E D G E L I N E	C H A N N E L I Z I N G L I N E	L A N E L I N E	L E F T E D G E L I N E	C E N T E R L I N E			E A C H	E A C H										
40'	80'	120'	80'	40'	80'	40'	80'	80'	80'	20'	40'			80'									
DEL	257	81+92.82	89+12.80	1.533	1.669	720	0.14													10	10		
DEL	257	89+12.80	93+92.80	1.669	1.760	480	0.09														12		
DEL	257	93+92.80	96+56.80	1.760	1.810	264	0.05														13	13	HORIZONTAL CURVE - 18 DEGREES
DEL	257	96+56.80	101+36.80	1.810	1.901	480	0.09														12		
DEL	257	101+36.80	110+77.60	1.901	2.079	941	0.18														12	12	
DEL	257	110+77.60	115+57.60	2.079	2.170	480	0.09														12		
DEL	257	115+57.60	116+63.20	2.170	2.190	106	0.02														5	5	HORIZONTAL CURVE - 11 DEGREES
DEL	257	116+63.20	121+43.20	2.190	2.281	480	0.09														12		
DEL	257	121+43.20	127+14.40	2.281	2.389	571	0.11														7	7	
DEL	257	127+14.40	131+94.40	2.389	2.480	480	0.09														12		
DEL	257	131+94.40	133+52.80	2.480	2.510	158	0.03														8	8	HORIZONTAL CURVE - 19 DEGREES
DEL	257	133+52.80	134+05.60	2.510	2.520	53	0.01														1		
DEL	257	134+05.60	136+16.80	2.520	2.560	211	0.04														11	11	HORIZONTAL CURVE - 17 DEGREES
DEL	257	136+16.80	136+69.60	2.560	2.570	53	0.01														1	1	
DEL	257	136+69.60	138+28.00	2.570	2.600	158	0.03														4	4	HORIZONTAL CURVE - 7 DEGREES
DEL	257	138+28.00	209+56.00	2.600	3.950	7128	1.35														89	89	
DEL	257	209+56.00	215+36.80	3.950	4.060	581	0.11														15	15	HORIZONTAL CURVE - 7 DEGREES
DEL	257	215+36.80	218+51.58	4.060	4.120	315	0.06														4	4	
DEL	257	218+51.58	241+58.48	4.120	4.560	2307	0.44																
DEL	257	241+58.48	243+35.20	4.560	4.590	177	0.03														4	4	NO RESURFACING AT HOME RD ROUNDABOUT
DEL	257	243+35.20	260+77.60	4.590	4.920	1742	0.33														22	22	HORIZONTAL CURVE - 6 DEGREES
DEL	257	260+77.60	265+00.00	4.920	5.000	422	0.08														11	11	HORIZONTAL CURVE - 7 DEGREES
DEL	257	265+00.00	267+11.20	5.000	5.040	211	0.04														5	5	HORIZONTAL CURVE - 5 DEGREES
DEL	257	267+11.20	285+59.20	5.040	5.390	1848	0.35														23	23	
DEL	257	285+59.20	289+28.80	5.390	5.460	370	0.07														9	9	HORIZONTAL CURVE - 8 DEGREES
DEL	257	289+28.80	291+92.80	5.460	5.510	264	0.05														3	3	
DEL	257	291+92.80	293+51.20	5.510	5.540	158	0.03														4	4	HORIZONTAL CURVE - 9 DEGREES
DEL	257	293+51.20	301+43.20	5.540	5.690	792	0.15														10	10	
DEL	257	301+43.20	380+63.20	5.690	7.190	7920	1.50														99	99	
DEL	257	380+63.20	388+55.20	7.190	7.340	792	0.15														20	20	HORIZONTAL CURVE - 4 DEGREES
DEL	257	388+55.20	411+36.36	7.340	7.772	2281	0.43														29	29	
DEL	257	101+08.37	111+40.54	1.896	2.091	1032	0.20														14	14	RIGHT TURN LANE TO CREIGHTON DR
DEL	257	108+73.87	111+48.61	2.041	2.093	275	0.05						8								8	8	RIGHT TURN LANE TO CREIGHTON DR
DEL	257	112+30.70	115+26.86	2.108	2.164	296	0.06						8								8	8	LEFT TURN LANE TO CREIGHTON DR
DEL	257	115+44.25	122+13.70	2.167	2.294	669	0.13														10	10	LEFT TURN LANE TO CREIGHTON DR
DEL	257	403+36.36	411+36.36	7.621	7.772	800	0.15														16	16	AT US 42
TOTALS CARRIED TO GENERAL SUMMARY																	474	474					

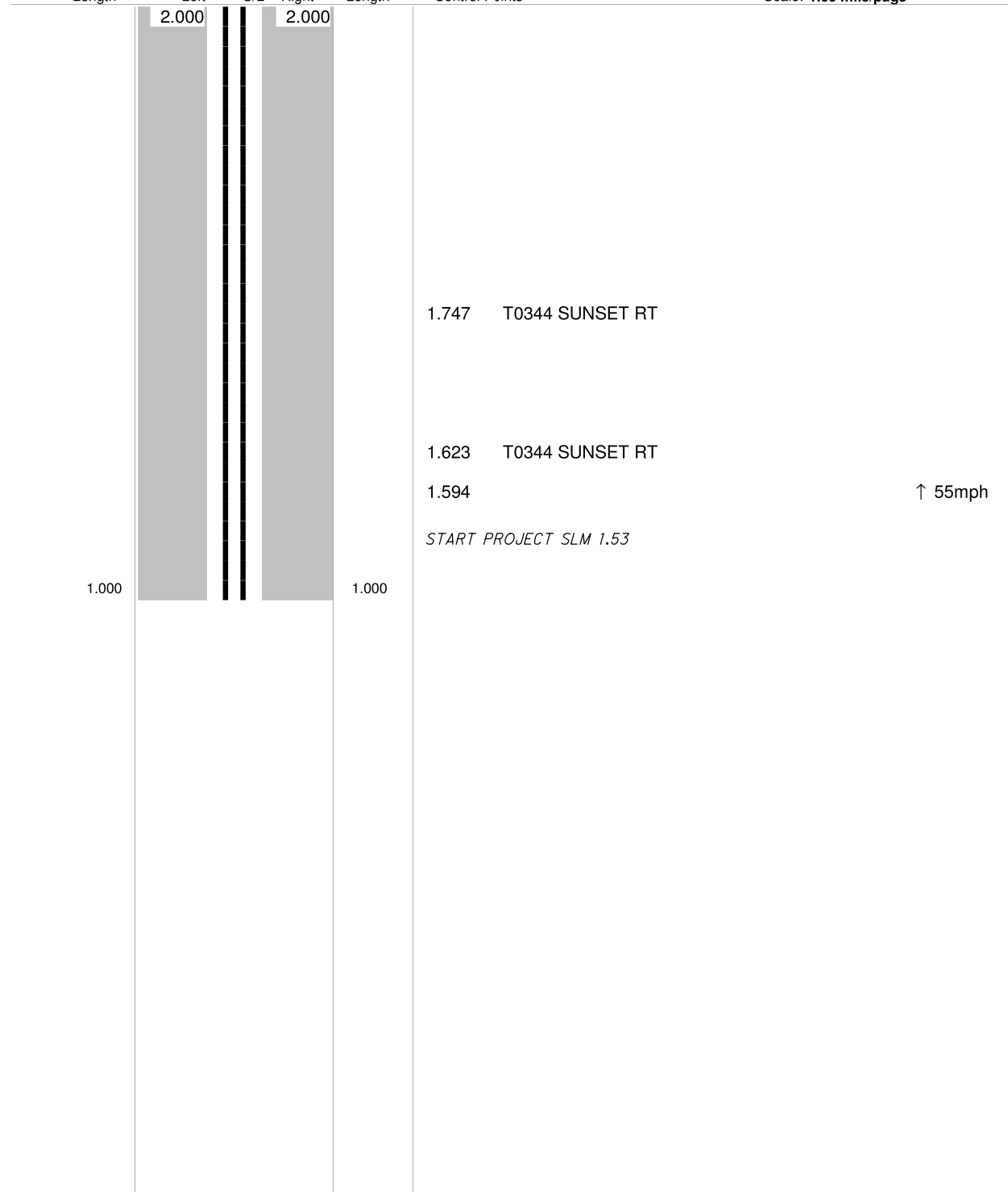
RAISED PAVEMENT MARKER SUBSUMMARY

DEL-257-1.53

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**ODOT District 6 - DEL-257**  
**No Passing Zone Log (DEL)**

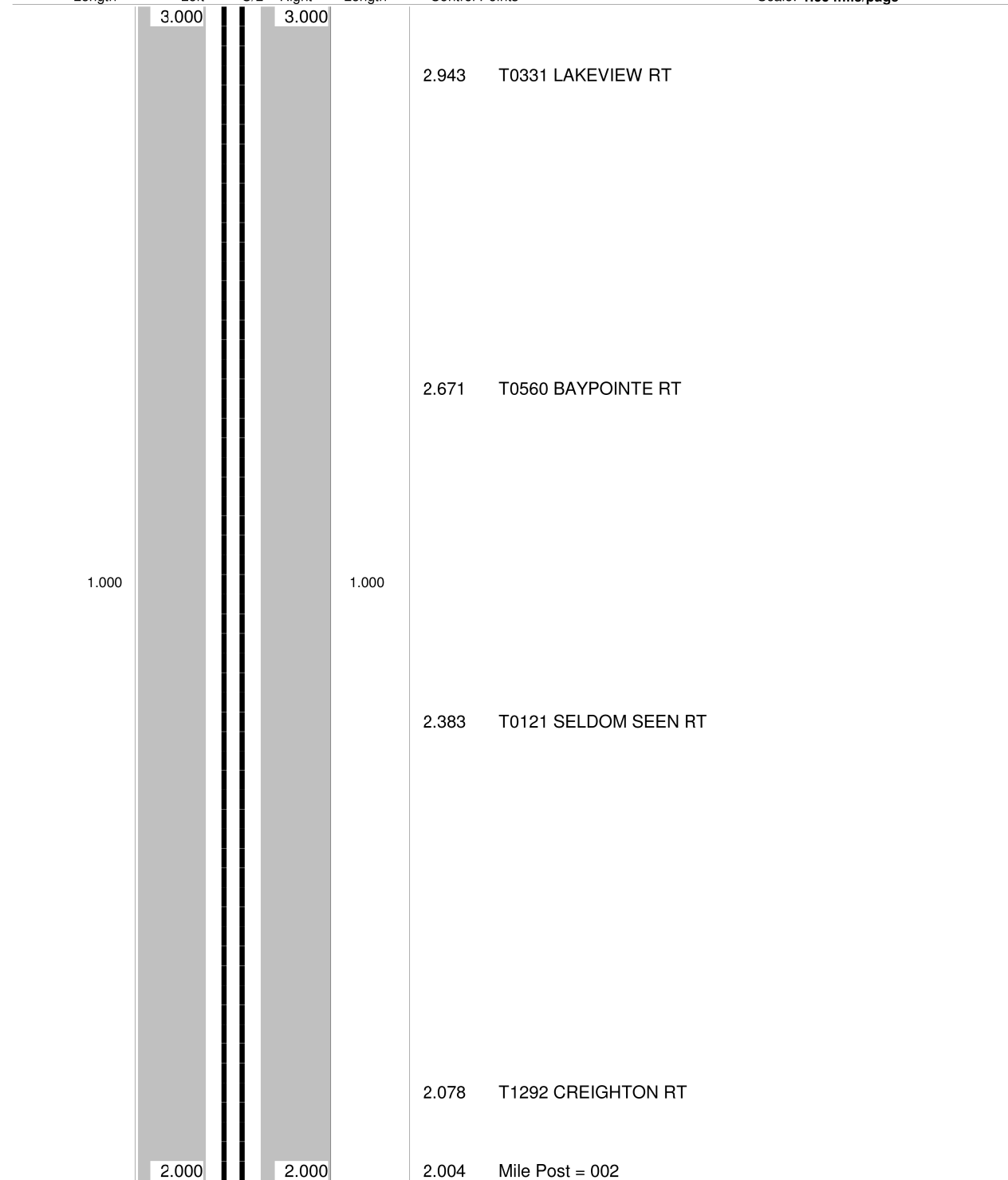
Route: **0257R (SDELSR00257\*\*C)** From: **1.500 LEAVE FRA CO**  
 Length: **6.300** Direction: **North** To: **7.800 ENTER MAR CO**  
 Length Control Points Scale: **1.00 mile/page**



Sheet total equivalent length of solid line: 1.000 Accum. total: 1.000 © 2019 - MasterMind Systems, Inc. - Traffic Safety Suite

**ODOT District 6 - DEL-257**  
**No Passing Zone Log (DEL)**

Route: **0257R (SDELSR00257\*\*C)** From: **1.500 LEAVE FRA CO**  
 Length: **6.300** Direction: **North** To: **7.800 ENTER MAR CO**  
 Length Control Points Scale: **1.00 mile/page**



Sheet total equivalent length of solid line: 2.000 Accum. total: 3.000 © 2019 - MasterMind Systems, Inc. - Traffic Safety Suite

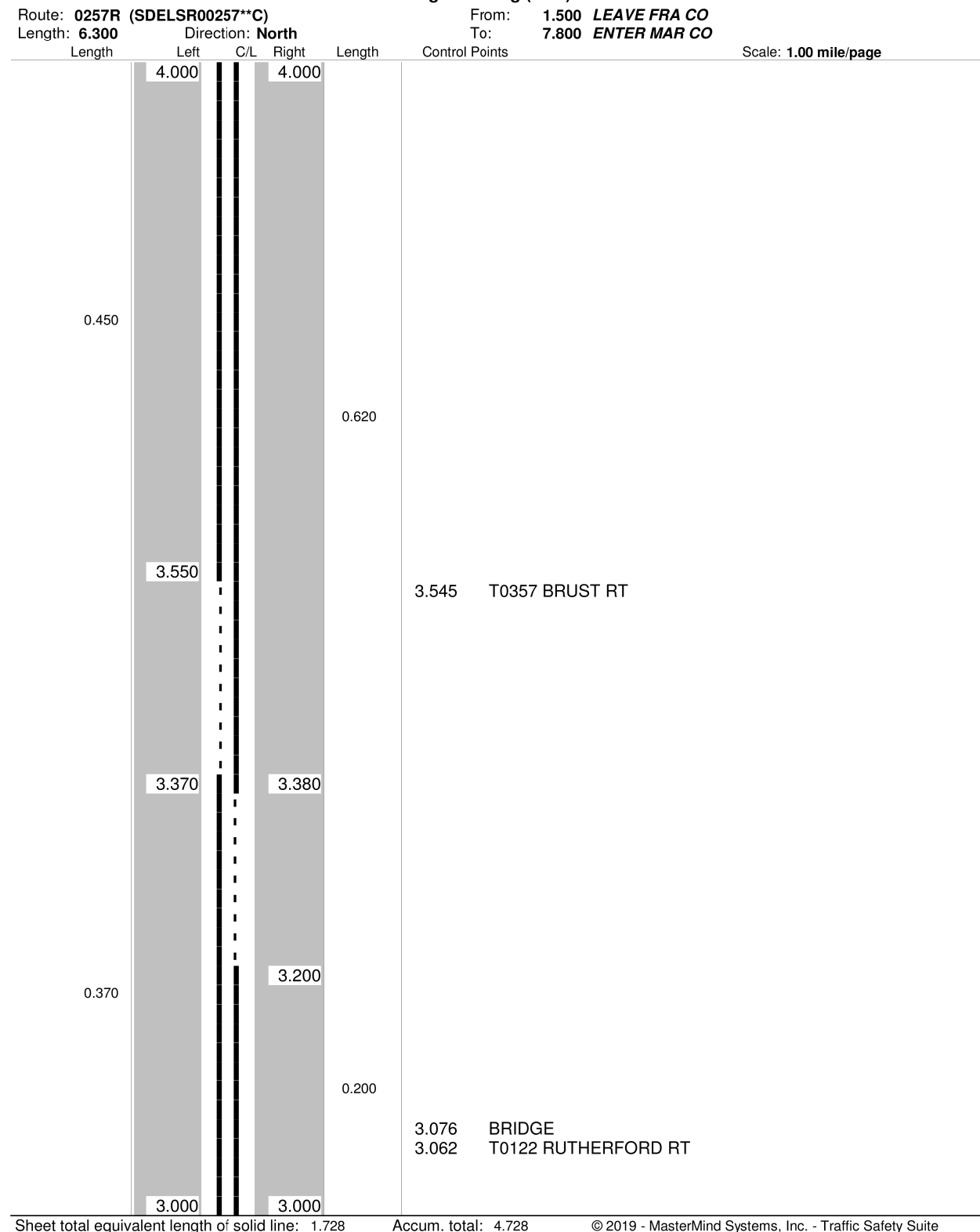
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**NO PASSING ZONES - DEL - 257**

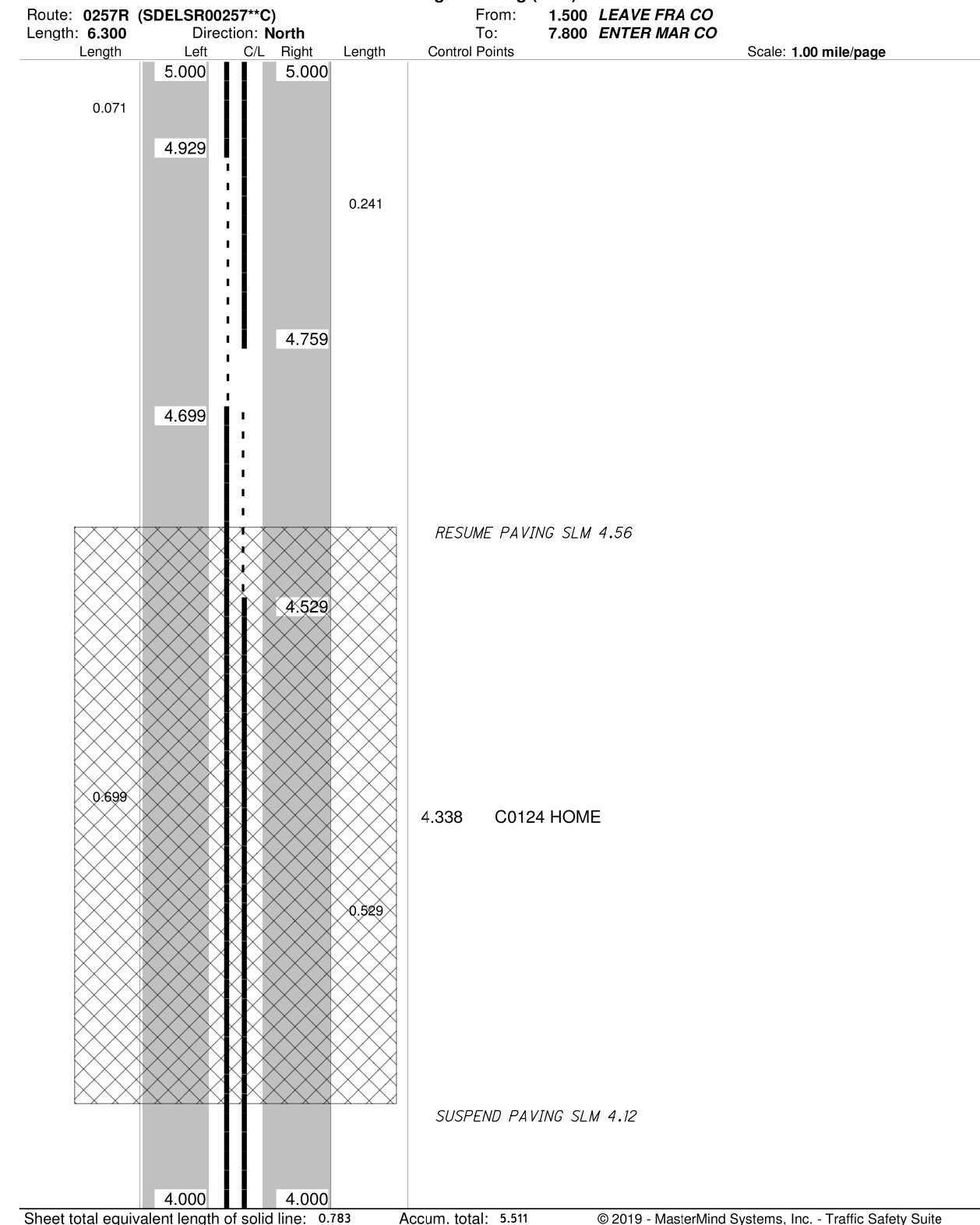
**DEL - 257 - 1.53**



**ODOT District 6 - DEL-257**  
**No Passing Zone Log (DEL)**



**ODOT District 6 - DEL-257**  
**No Passing Zone Log (DEL)**

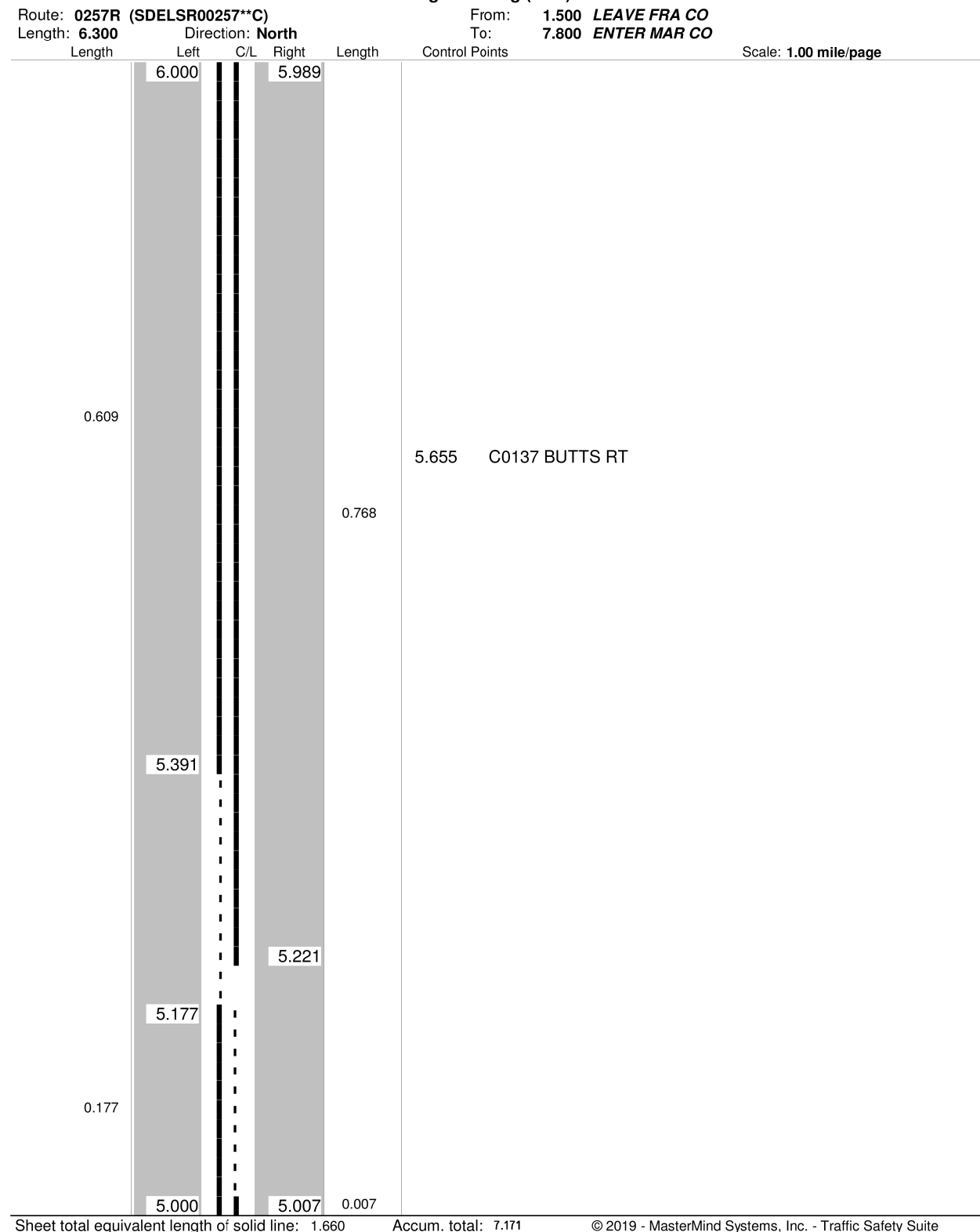


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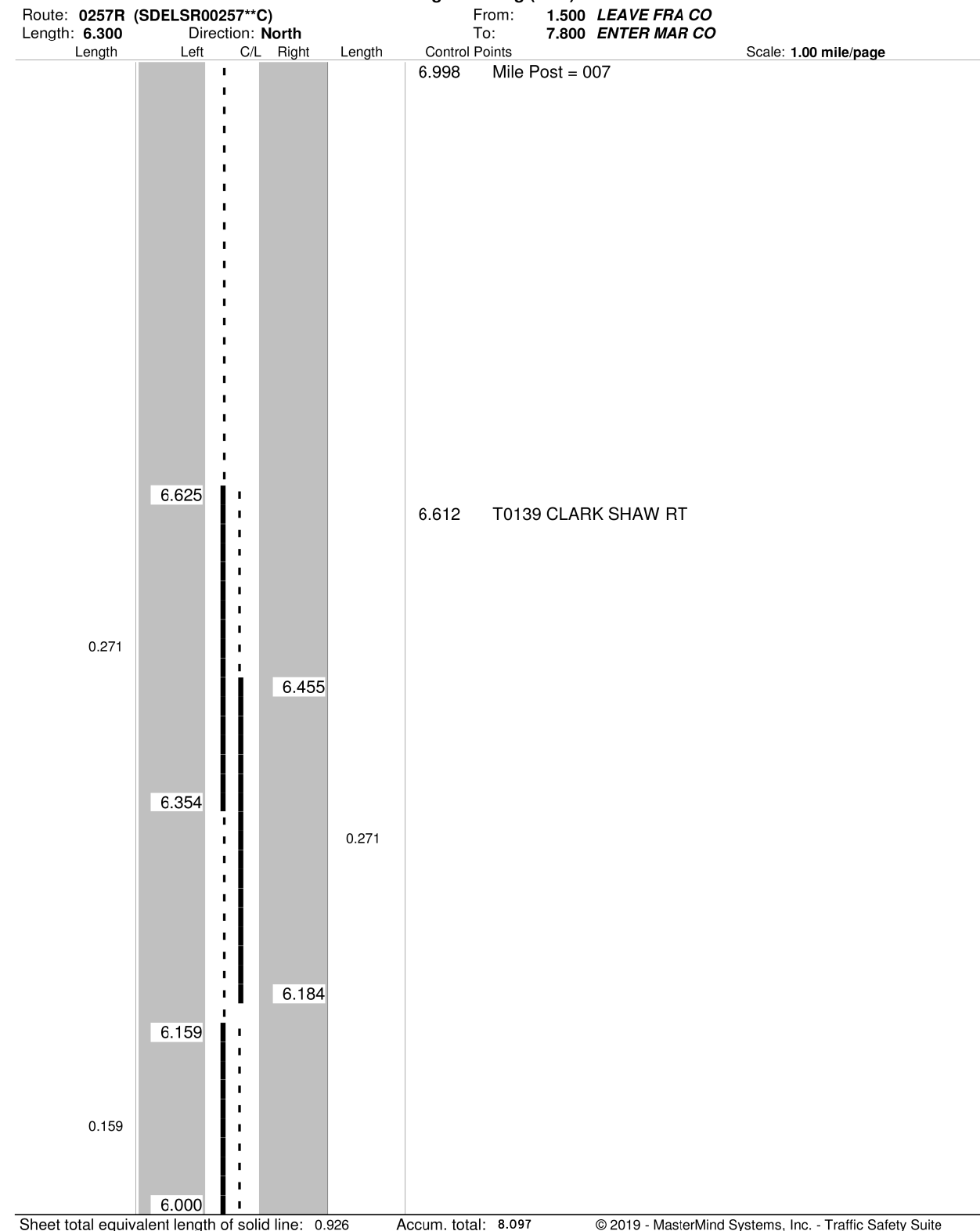
NO PASSING ZONES - DEL-257

DEL-257-1.53

**ODOT District 6 - DEL-257**  
**No Passing Zone Log (DEL)**



**ODOT District 6 - DEL-257**  
**No Passing Zone Log (DEL)**



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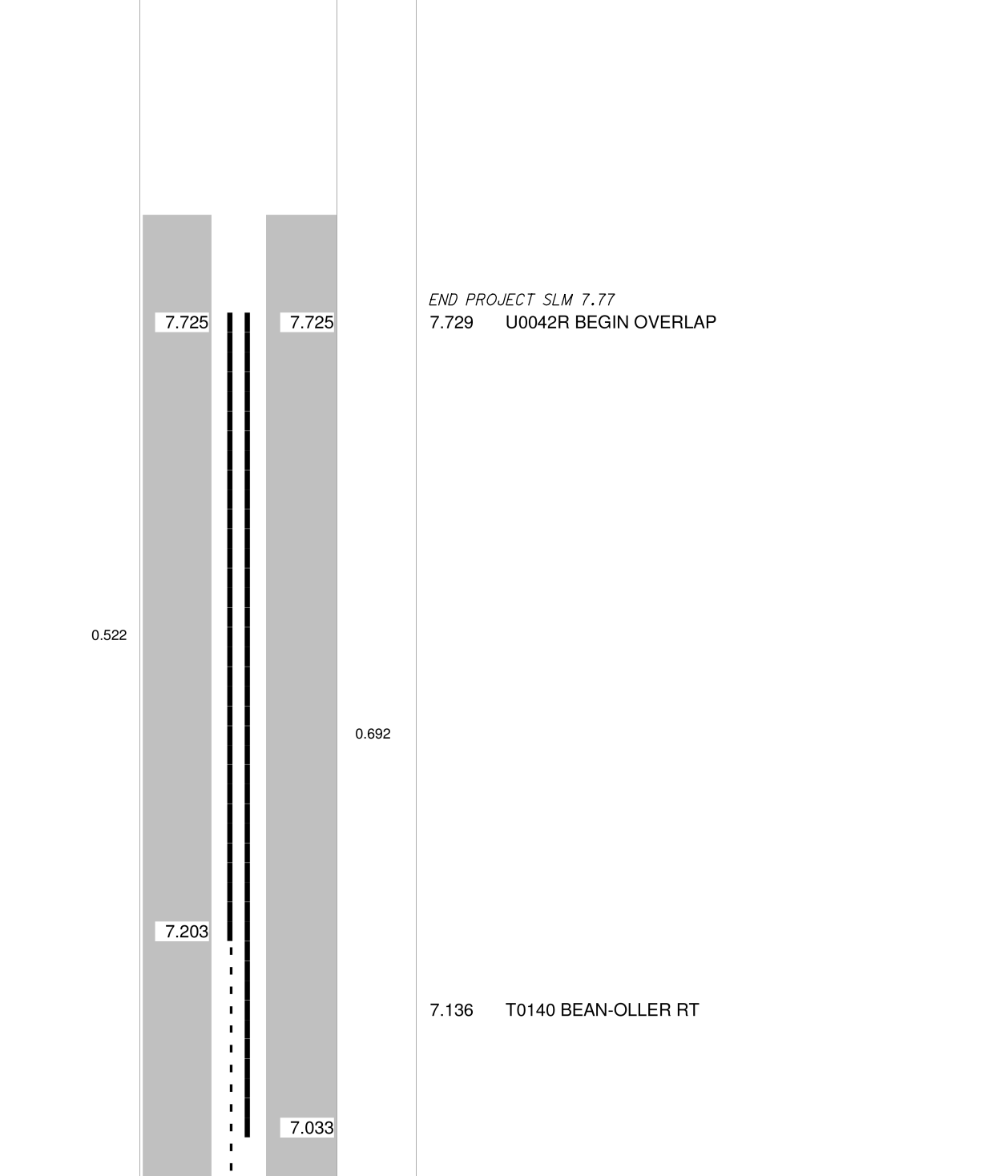
NO PASSING ZONES - DEL - 257

DEL - 257 - 1.53

**ODOT District 6 - DEL-257**  
**No Passing Zone Log (DEL)**

Route: 0257R (SDELSR00257\*\*C)      From: 1.500 LEAVE FRA CO  
 Length: 6.300      Direction: North      To: 7.800 ENTER MAR CO

Length      Left      C/L      Right      Length      Control Points      Scale: 1.00 mile/page



Sheet total equivalent length of solid line: 1.265      Accum. total: 9.362      © 2019 - MasterMind Systems, Inc. - Traffic Safety Suite

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NO PASSING ZONES - DEL - 257

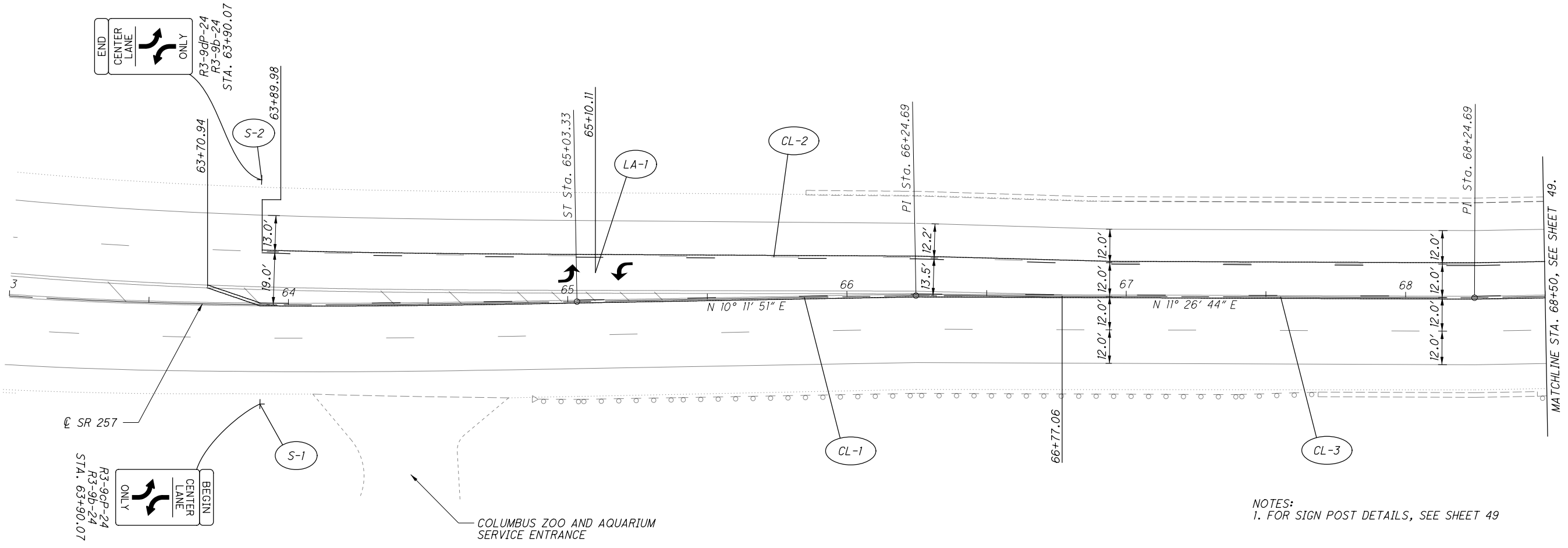
DEL - 257 - 1.53



CALCULATED  
KLM  
CHECKED  
XXX

**TRAFFIC CONTROL PLAN**  
**STA. 63+00 TO STA. 68+50**

**DEL-257-1.53**

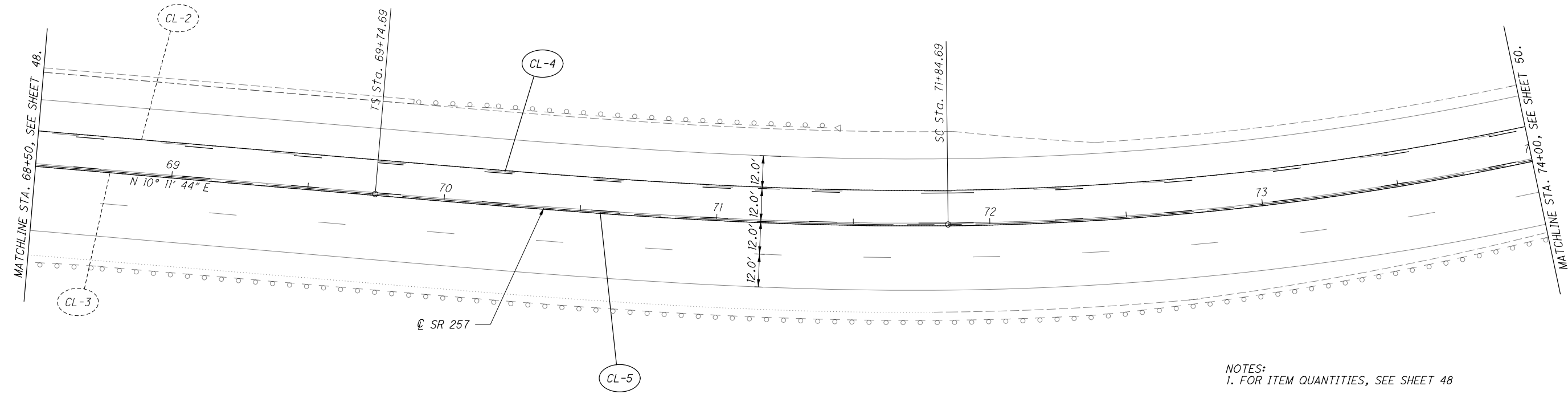


NOTES:  
1. FOR SIGN POST DETAILS, SEE SHEET 49

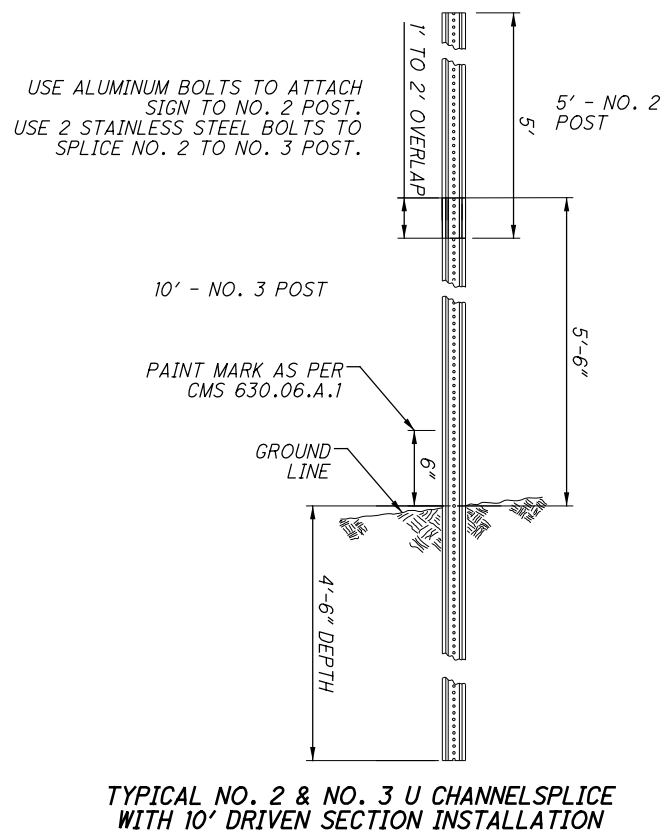
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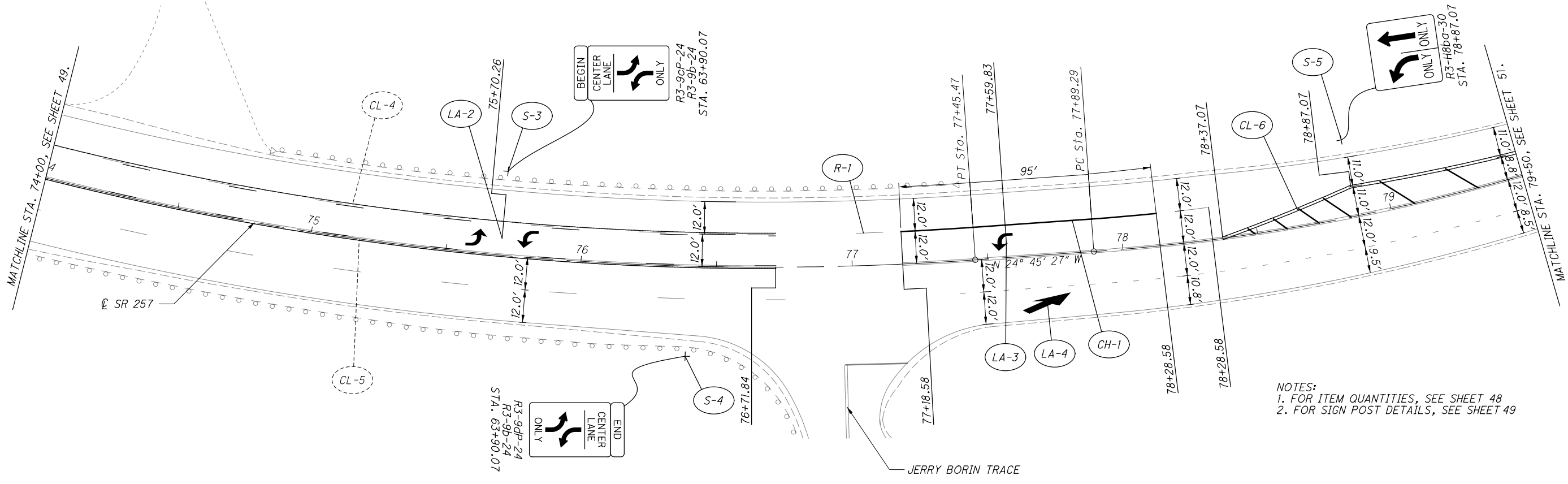
REVISION	DATE	BY	LOCATION							630			642		644				REFLECTOR TYPE					621		REMARKS			
			BEGIN CENTER LANE ONLY	END CENTER LANE ONLY	E	B	E	L	L	S	GROUND MOUNTED SUPPORT, NO. 2 POST	GROUND MOUNTED SUPPORT, NO. 3 POST	SIGN, FLAT SHEET	REMOVAL OF PAVEMENT MARKING	REMOVAL OF PAVEMENT MARKING	CENTER LINE	CHANNELIZING LINE, 8"	TRANSVERSE/DIAGONAL LINE	LANE ARROW	LANE REDUCTION ARROW	TWO WAY						RAISED PAVEMENT MARKER REMOVED	RPM	
																					WHITE	RED	YELLOW						
			ONLY	ONLY	S	S	S	T	T	E	FT	FT	SF	FT	MILE	MILE	FT	FT	EACH	EACH	40'	80'	20'	40'	80'		EACH	EACH	
CL-1	DEL	257	63+70.94	66+77.06	1.188	1.246	306	0.058	CT				46	0.12	0.06													REMOVE TWO DOUBLE SOLID CENTER LINES, DIAGONAL LINES, AND RPMs	
LA-1	DEL	257	65+10.11	69+74.69	1.191	1.302	585	0.111	LT					0.11	0.11				2									REMOVE LANE LINE AND RPMs	
CL-2	DEL	257	63+89.98	69+74.69	1.191	1.302	585	0.111	LT					0.11	0.11													REMOVE LANE LINE AND RPMs	
CL-3	DEL	257	66+77.06	69+74.69	1.246	1.302	298	0.056	CT					0.06	0.06													REMOVE DOUBLE SOLID CENTER LINE AND RPMs	
CL-4	DEL	257	69+74.69	76+71.84	1.302	1.434	697	0.132	LT					0.13	0.13													REMOVE LANE LINE AND RPMs (HORIZONTAL CURVE - 6 DEGREES)	
CL-5	DEL	257	69+74.69	76+71.84	1.302	1.434	697	0.132	CT					0.13	0.13													REMOVE DOUBLE SOLID CENTER LINE AND RPMs (HORIZONTAL CURVE - 6 DEGREES)	
LA-2	DEL	257	75+70.26						LT										2									REMOVE LANE LINE AND RPMs	
R-1	DEL	257	76+71.84	78+33.38	1.434	1.465	162	0.031	LT					0.03														REMOVE LANE LINE AND RPMs	
CH-1	DEL	257	77+18.58	78+13.58	1.443	1.461	95	0.018	LT							95													
LA-3	DEL	257	77+59.83						LT										1										
LA-4	DEL	257	77+70.89						LT											1									
CL-6	DEL	257	81+32.17		1.465	1.521	295	0.056	LT						0.06		111											HORIZONTAL CURVE - 7 DEGREES	
CL-7	DEL	257	81+32.17	81+92.82	1.521	1.533	61	0.011	LT						0.01														
S-1	DEL	257	63+90.07						RT	5	10	7.0																R3-9b, R3-9cP	
S-2	DEL	257	63+90.07						LT	5	10	7.0																R3-9b, R3-9dP	
S-3	DEL	257	75+70.26						LT	5	10	7.0																R3-9b, R3-9cP	
S-4	DEL	257	76+39.33						RT	5	10	7.0																R3-9b, R3-9dP	
S-5	DEL	257	78+87.07						LT	5	10	6.3																R3-H8ba	
<b>TOTALS CARRIED TO GENERAL SUMMARY</b>										25	50	34.3	46	0.58	0.56	95	111	5	1						51	63			

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NOTES:  
1. FOR ITEM QUANTITIES, SEE SHEET 48





NOTES:  
 1. FOR ITEM QUANTITIES, SEE SHEET 48  
 2. FOR SIGN POST DETAILS, SEE SHEET 49

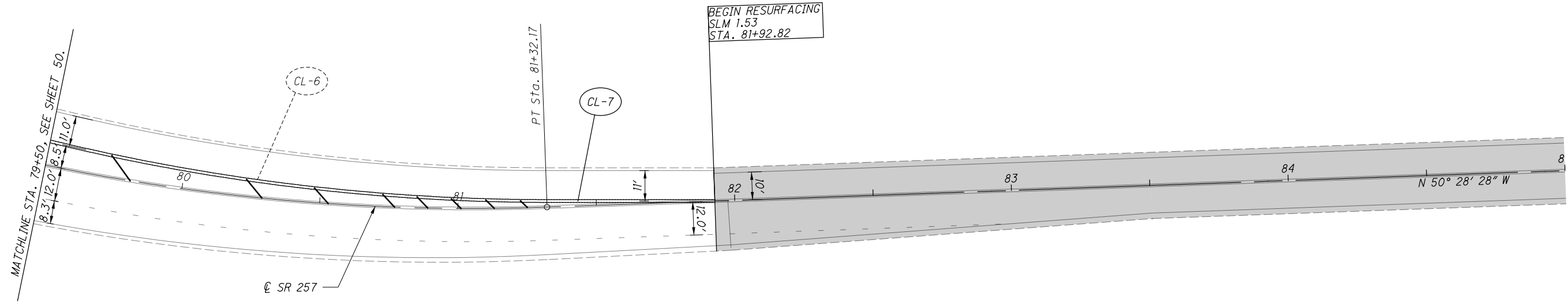
CALCULATED	0
KLM	
CHECKED	XXX

0 20 40  
 HORIZONTAL SCALE IN FEET

**TRAFFIC CONTROL PLAN**  
**STA. 74+00 TO STA. 79+50**

**DEL-257-1.53**

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NOTES:  
 1. FOR ITEM QUANTITIES, SEE SHEET 48

CALCULATED	KLM	CHECKED	XXX
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0 20 40  
 HORIZONTAL SCALE IN FEET

**TRAFFIC CONTROL PLAN**  
**STA. 79+50 TO STA. 85+00**

**DEL-257-1.53**

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SHEET NUMBER										PARTICIPATION				ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
						DEL-257-0308				01/S2/PV	02/S2/BR	03/STR/PV							
						54													
						162.5					162.5			202	38501	162.5	FT	STRUCTURE OVER 20 FOOT SPAN	
						357					357			512	73500	357	SY	DEL-257-0308 SFN: 2102978 BRIDGE RAILING REMOVED, AS PER PLAN	53
						48					48			SPECIAL	51631200	48	FT	TREATING CONCRETE BRIDGE DECKS WITH GRAVITY FED RESIN	
						162.5					162.5			517	72306	162.5	FT	SAWING AND SEALING BITUMINOUS CONCRETE JOINTS	
						162.5					162.5			517	75600	162.5	FT	RAILING (BEEP BEAM RAILING WITH STEEL TUBULAR BACKUP AND TYPE 2 STEEL POSTS)	
																		DEEP BEAM BRIDGE RETROFIT RAILING	

CALCULATED	DKR	CHECKED	KLM
<b>STRUCTURE ESTIMATED QUANTITIES</b>			
<b>DEL-257-1.53</b>			



**STANDARD DRAWINGS AND SUPPLEMENTAL SPECIFICATIONS**

REFER TO THE FOLLOWING STANDARD CONSTRUCTION DRAWINGS:

SCD DBR-2-73 DATED/REVISED 7/19/2002

SCD DBR-3-11 DATED/REVISED 7/15/2011

**DESIGN SPECIFICATIONS**

DESIGN SPECIFICATIONS: THIS STRUCTURE CONFORMS TO THE 8TH EDITION OF THE "LRFD BRIDGE DESIGN SPECIFICATIONS" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 2018 AND THE ODOT BRIDGE DESIGN MANUAL, 2019.

**EXISTING STRUCTURE VERIFICATION**

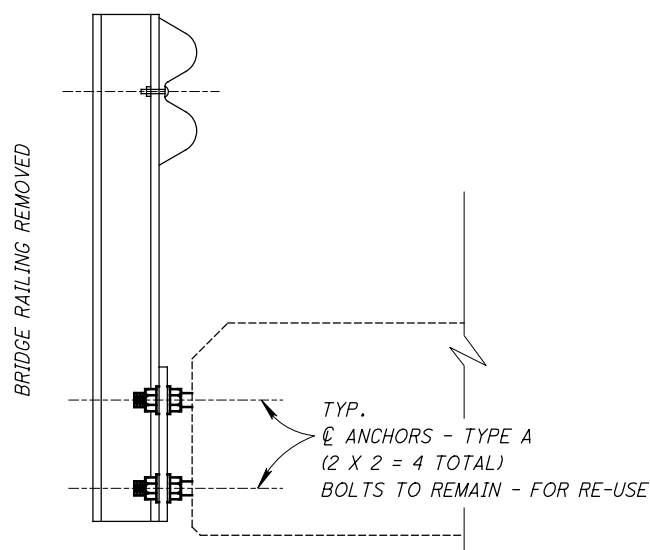
EXISTING STRUCTURE VERIFICATION; DETAILS AND DIMENSIONS SHOWN ON THESE PLANS PERTAINING TO THE EXISTING STRUCTURE HAVE BEEN OBTAINED FROM PLANS OF EXISTING STRUCTURES AND FROM FIELD OBSERVATIONS AND MEASUREMENTS. CONSEQUENTLY, THEY ARE INDICATIVE OF THE EXISTING STRUCTURE AND PROPOSED WORK BY THEY SHALL BE CONSIDERED TENTATIVE AND APPROXIMATE. THE CONTRACTOR IS REFERRED TO CMS SECTIONS 102.05, 105.02 AND 513.04. BASE CONTRACT BID PRICES UPON A RECOGNITION OF UNCERTAINTIES DESCRIBED ABOVE AND UPON A PREBID EXAMINATION OF THE EXISTING STRUCTURE. HOWEVER, THE DEPARTMENT WILL PAY FOR ALL PROJECT WORK BASED UPON ACTUAL DETAILS AND DIMENSIONS WHICH HAVE BEEN VERIFIED IN THE FIELD.

**REMOVED MATERIALS**

ALL REMOVED MATERIALS EXCEPT AS NOTED ELSEWHERE IN THE PLANS BECOME THE PROPERTY OF THE CONTRACTOR AND MUST BE REMOVED FROM THE JOB SITE.

**ITEM 202 - BRIDGE RAILING REMOVED, AS PER PLAN:**

IN ADDITION TO THE REQUIREMENTS OF ITEM 202, THE CONTRACTOR SHALL USE GREAT CARE AS TO NOT DAMAGE THE EXISTING BRIDGE ANCHOR BOLTS. ANY BOLTS THAT ARE DAMAGED DURING THE REMOVAL SHALL BE REMEDIED AT THE CONTRACTOR'S EXPENSE.



**ITEM SPECIAL - SAWING AND SEALING BITUMINOUS CONCRETE JOINTS**

**1) DESCRIPTION:**

THIS WORK SHALL CONSIST OF CUTTING AND SEALING TRANSVERSE JOINTS IN THE NEW BITUMINOUS CONCRETE OVERLAY OF BRIDGES. BITUMINOUS CONCRETE JOINTS SHALL BE CONSTRUCTED DIRECTLY OVER, AND IN LINE WITH, THE EXISTING UNDERLYING TRANSVERSE ABUTMENT AND APPROACH SLAB JOINTS.

**2) MATERIALS:**

THE JOINT SEALANT SHALL MEET THE REQUIREMENTS OF ITEM 705.04, JOINT SEALANTS, HOT-POURED, FOR CONCRETE AND ASPHALT PAVEMENTS. ACCEPTABLE ALTERNATE MATERIALS ARE:

A SILICONE SEALANT MEETING FEDERAL SPECIFICATIONS TT-S-001543A CLASS A (ONE-PART SILICONE SEALANTS) AND TT-S-00230C CLASS A (ONE-COMPONENT SEALANTS), SUCH AS THOSE MANUFACTURED BY GENERAL ELECTRIC, SILICONE PRODUCTS DIVISION, 4015 EXECUTIVE PARK DRIVE, CINCINNATI, OHIO 45242 (513-243-1953) OR DOW CORNING, 400 TECHNE CENTER, SUITE 103, MILFORD, OHIO 45150 (513-831-3586); OR SOF-SEAL, A COLD-APPLIED, LOW-MODULUS, TWO-COMPONENT POLY-MERIC COMPOUND HORIZONTAL SEALANT AS MANUFACTURED BY W.R.MEADOWS, INC., P.O. BOX 543, ELGIN, ILLINOIS 60121 (800-342-5976).

**3) CONSTRUCTION DETAILS:**

A) GENERAL: THE CONTRACTOR SHALL CONDUCT HIS OPERATION SO THAT THE CUTTING, CLEANING AND SEALING OF TRANSVERSE JOINTS IS A CONTINUOUS OPERATION THAT WILL BE PERFORMED AS SOON AS PRACTICAL AFTER THE PAVING, BUT NO LATER THAN FOUR (4) DAYS AFTER PLACEMENT OF THE ASPHALT CONCRETE SURFACE COURSE. TRAFFIC SHALL NOT BE ALLOWED TO KNEAD TOGETHER OR DAMAGE JOINT CUT PRIOR TO SEALING.

B) CUTTING OF TRANSVERSE JOINTS: THE CONTRACTOR SHALL SAW OR ROUT TRANSVERSE JOINTS TO THE DIMENSIONS SHOWN IN THE DETAILS ON THIS SHEET. THE CUT JOINTS SHALL LIE DIRECTLY ABOVE EACH TRANSVERSE JOINT.

THE BLADE OR BLADES SHALL BE OF SUCH SIZE THAT THE FULL WIDTH AND DEPTH OF THE CUT CAN BE MADE WITH ONE PASS. DRY OR WET CUTTING WILL BE ALLOWED. JOINTS SHALL EXTEND THE FULL WIDTH OF THE BRIDGE.

C) CLEANING JOINTS: DRY SAWED JOINTS SHALL BE THOROUGHLY CLEANED WITH A SUFFICIENT AMOUNT OF COMPRESSED AIR TO REMOVE ANY DIRT, DUST, OR DELETERIOUS MATTER. WET SAWED JOINTS SHALL BE WASHED CLEAN OF ALL CUTTINGS BY FLUSHING WITH A JET OF WATER AND WITH OTHER TOOLS AS NECESSARY. AFTER FLUSHING, THE JOINT SHALL BE BLOWN OUT WITH COMPRESSED AIR. WHEN THE SURFACES ARE THOROUGHLY CLEAN AND DRY, AND JUST PRIOR TO PLACING THE JOINT SEALER, COMPRESSED AIR HAVING A PRESSURE OF AT LEAST 90 PSI SHALL BE USED TO BLOW OUT THE JOINT AND REMOVE ALL TRACES OF DUST.

IN THE EVENT FRESHLY CUT JOINTS BECOME CONTAMINATED BEFORE THEY ARE SEALED, THEY SHALL BE RE-CLEANED OF ALL FOREIGN MATERIAL BY HIGH PRESSURE WATER JET.

D) SEALING JOINTS: THE JOINT SHALL BE THOROUGHLY DRY WHEN THE SEALANT IS PLACED. AFTER CLEANING AND DRYING, A BOND-BREAKER MATERIAL SHALL BE APPLIED TO THE BOTTOM OF THE GROOVE.

HOT-POURED JOINT SEALANT MATERIAL SHALL BE HEATED IN A KETTLE OR MELTER CONSTRUCTED AS A DOUBLE BOILER, WITH THE SPACE BETWEEN THE INNER AND OUTER SHELLS FILLED WITH OIL OR OTHER HEAT TRANSFER MEDIUM. POSITIVE TEMPERATURE CONTROL AND MECHANICAL AGITATION SHALL BE PROVIDED. HEATING MUST BE IN STRICT ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATION. JOINT SEALER MATERIAL SHALL NEVER BE KEPT HEATED AT THE POURING TEMPERATURE FOR MORE THAN FOUR (4) HOURS AND SHALL NEVER BE REHEATED. SEALER LEFT IN THE APPLICATOR AT THE END OF A DAY'S WORK SHALL NOT BE USED.

HOT-POURED SEALANT SHALL BE APPLIED IMMEDIATELY THROUGH A NOZZLE, WHICH MUST PROJECT INTO THE SAWED JOINT, FILLING FROM THE BOTTOM UP. THE SEALANT SHALL COMPLETELY FILL THE JOINT IN SUCH A MANNER THAT, AFTER COOLING, THE LEVEL OF THE SEALANT WILL NOT BE HIGHER THAN 1/8" BELOW THE PAVEMENT SURFACE. ANY DEPRESSION IN THE COOLED SEAL GREATER THAN 1/4" SHALL BE BROUGHT UP TO THE SPECIFIED LIMIT BY FURTHER ADDITION OF HOT-POURED SEALANT. CARE SHALL BE TAKEN IN THE SEALING OF THE JOINTS SO THAT THE FINAL APPEARANCE WILL PRESENT A NEAT FINE LINE.

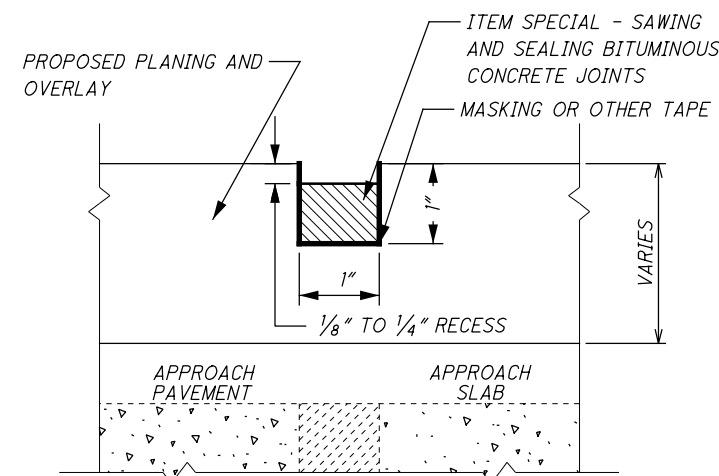
THE COLD APPLIED SEALANT MATERIALS (POLYURETHANE, SILICONE, AND POLYMERIC COMPOUNDS) SHALL BE INSTALLED AS PER MANUFACTURERS' RECOMMENDATIONS, EXCEPT AS MODIFIED BY THIS DRAWING. THE SEALANT SHALL BE INSTALLED WHEN THE AMBIENT TEMPERATURE IS 40 DEGREES F OR HIGHER. TRAFFIC SHALL NOT BE ALLOWED ON THE JOINT FOR ONE HOUR AFTER APPLICATION OF THE SEALANT.

**4) METHOD OF MEASUREMENT:**

THE QUANTITY TO BE PAID FOR UNDER THIS ITEM WILL BE THE NUMBER OF LINEAR FEET OF JOINTS SAWED AND SEALED AS PER THE ABOVE REQUIREMENTS.

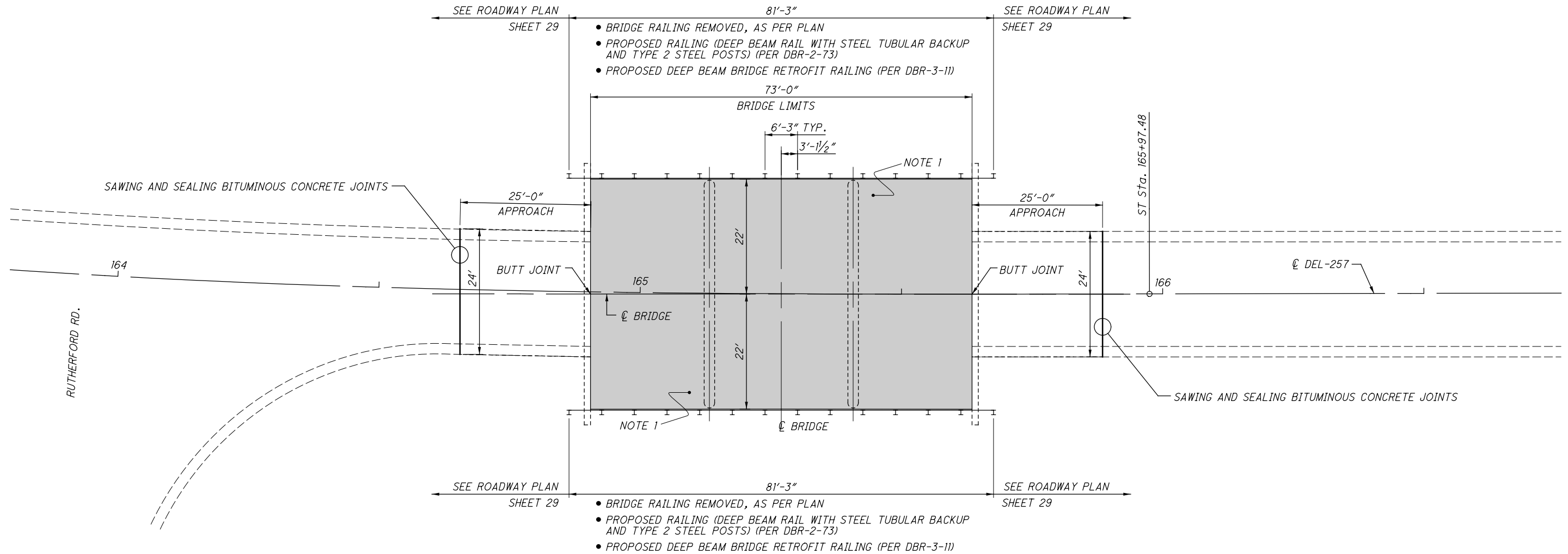
**5) BASIS OF PAYMENT:**

THE UNIT PRICE PER LINEAR FOOT FOR ITEM SPECIAL - "SAWING AND SEALING BITUMINOUS CONCRETE JOINTS" SHALL INCLUDE THE COST OF ALL LABOR, MATERIALS, AND EQUIPMENT NECESSARY TO COMPLETE THE WORK, INCLUDING THE FURNISHING AND PLACING OF THE JOINT SEALER MATERIAL.



DESIGNED		CHKD	CLM	STRUCTURE NOTES		DEL-257-0308	BRIDGE OVER HOWARD RUN
CHKD	DKR	CHKD	KLM	STRUCTURE NOTES		DEL-257-0308	BRIDGE OVER HOWARD RUN
REVIEWED	DKR	REVISD	XXX	STRUCTURE NOTES		DEL-257-0308	BRIDGE OVER HOWARD RUN
DATE	8/22/2019	STRUCTURE FILE NUMBER	2102978	STRUCTURE NOTES		DEL-257-0308	BRIDGE OVER HOWARD RUN
DESIGN AGENCY	OHIO DEPARTMENT OF		TRANSPORTATION DISTRICT 6	STRUCTURE NOTES		DEL-257-0308	BRIDGE OVER HOWARD RUN
DEL-257-1.53		PID No. 107793		STRUCTURE NOTES		DEL-257-0308	BRIDGE OVER HOWARD RUN
1/2		53		STRUCTURE NOTES		DEL-257-0308	BRIDGE OVER HOWARD RUN
54		53		STRUCTURE NOTES		DEL-257-0308	BRIDGE OVER HOWARD RUN

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**NOTES:**

NOTE 1:  
PROPOSED TREATING OF CONCRETE BRIDGE DECK WITH GRAVITY FED RESIN.

DEL-257-0308 (2102978)  
BRIDGE OVER HOWARD RUN



**LEGEND:**

PROPOSED BRIDGE TREATMENT

STR. NO.							REMARKS
	202	512	516	517	517		
	BRIDGE RAILING REMOVED, AS PER PLAN	TREATING CONCRETE BRIDGE DECKS WITH GRAVITY FED RESIN	SAWING AND SEALING BITUMINOUS CONCRETE JOINTS	RAILING (DEEP BEAM RAILING WITH STEEL TUBULAR BACKUP AND TYPE 2 STEEL POSTS)	DEEP BEAM BRIDGE RETROFIT RAILING		
	FT	SQ YD	FT	FT	FT		
DEL-257-0308			24				REAR APPROACH
DEL-257-0308	162.5	357		162.5	162.5		DECK
DEL-257-0308			24				FORWARD APPROACH
	162.5	357	48	162.5	162.5		

TOTALS CARRIED TO STRUCTURE ESTIMATED QUANTITIES

<b>DEL-257-1.53</b>	<b>SITE PLAN</b>	DESIGN AGENCY OHIO DEPARTMENT OF TRANSPORTATION DISTRICT 6
PID No. 107793	DEL-257-0308 BRIDGE OVER HOWARD RUN	DATE 8/22/2019
2 / 2	DELAWARE COUNTY STA. 164+90.18 STA. 165+63.18	REVIEWED DKR 2102978
54	DESIGNED DKR	DRAWN DKR
54	CHECKED KLM	REVISED XXX