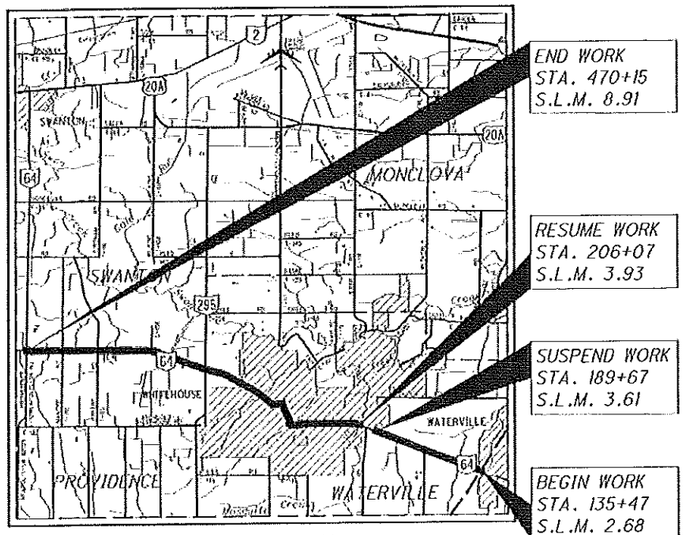
LUC - SR-SR 64-02.68
170290 PID - 95750
Dist 2 4/27/2017

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



LOCATION MAP

LATITUDE: N41°31'27" LONGITUDE: W83°48'49"

SCALE IN MILES
0 1 2 3 4

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

DESIGN DESIGNATION

	2.68-3.61	3.93-6.36	6.36-8.91
CURRENT ADT (2017)	8900	7400	3300
DESIGN YEAR ADT (2029)	11000	8200	3700
DESIGN HOURLY VOLUME (2029)	1100	820	370
DIRECTIONAL DISTRIBUTION	56%	64%	70%
TRUCKS (24 HOUR B&C)	6%	7%	6%
DESIGN SPEED	60MPH	VARIES	60MPH
LEGAL SPEED	55MPH	VARIES	55MPH
DESIGN FUNCTIONAL CLASSIFICATION:			
NHS PROJECT	NO		

DESIGN EXCEPTIONS

NONE

UNDERGROUND UTILITIES

CONTACT BOTH SERVICES TWO WORKING DAYS BEFORE YOU DIG.

OHIO Utilities Protection SERVICE — Call Before You Dig 1-800-362-2764
(Non-members must be called directly)

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

PLAN PREPARED BY:
OHIO DEPARTMENT OF TRANSPORTATION
DISTRICT TWO
BOWLING GREEN, OHIO

ROADWAY:
STATE OF OHIO — JILL M. LAHY — 63302 — REGISTERED PROFESSIONAL ENGINEER
SIGNED: Jill M. Lahy
DATE: 1-26-17

STRUCTURES:
STATE OF OHIO — DAVID J. GECKLE — 72729 — REGISTERED PROFESSIONAL ENGINEER
SIGNED: David J. Geckle
DATE: 1/24/17

STATE OF OHIO
DEPARTMENT OF TRANSPORTATION

LUC-64-2.68

VILLAGE OF WHITEHOUSE

MONCLOVA, SWANTON AND WATERVILLE TOWNSHIPS

LUCAS COUNTY

INDEX OF SHEETS:

PROJECT DESCRIPTION

TWO LANE DISTRICT ALLOCATION FUNDED PROJECT TO RESURFACE SR 64 IN LUCAS COUNTY FROM US 24 TO PROVIDENCE NEAPOLIS SWANTON ROAD INCLUDING BRIDGE WORK AND NECESSARY RELATED WORK.

PROJECT EARTH DISTURBED AREA:	N/A
ESTIMATED CONTRACTOR EARTH DISTURBED AREA:	N/A
NOTICE OF INTENT EARTH DISTURBED AREA: (NOI NOT REQUIRED)	N/A

2016 SPECIFICATIONS

THE STANDARD SPECIFICATIONS OF THE STATE OF OHIO, DEPARTMENT OF TRANSPORTATION, INCLUDING 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 Kurt Hunter
DATE 12/26/17 DISTRICT DEPUTY DIRECTOR

APPROVED Jerry Wray II
DATE 3-6-17 DIRECTOR, DEPARTMENT OF TRANSPORTATION

STANDARD CONSTRUCTION DRAWINGS

BP-3.1	7/18/14	MT-97.10	7/18/14		
BP-4.1	7/19/13	MT-97.12	1/20/17		
BP-5.1	7/19/13				
BP-7.1	7/18/14	TC-41.20	10/18/13		
		TC-42.20	10/18/13		
DM-4.3	1/15/16	TC-52.20	7/15/16		
DM-4.4	1/15/16	TC-64.10	7/17/15		
		TC-65.10	1/17/14		
MGS-1.1	7/19/13	TC-65.11	7/15/16		
MGS-2.1	7/19/13	TC-71.10	1/20/17		
MGS-2.3	7/18/14				
MGS-4.2	7/19/13				
MGS-4.3	1/18/13				
MGS-5.2	7/15/16				

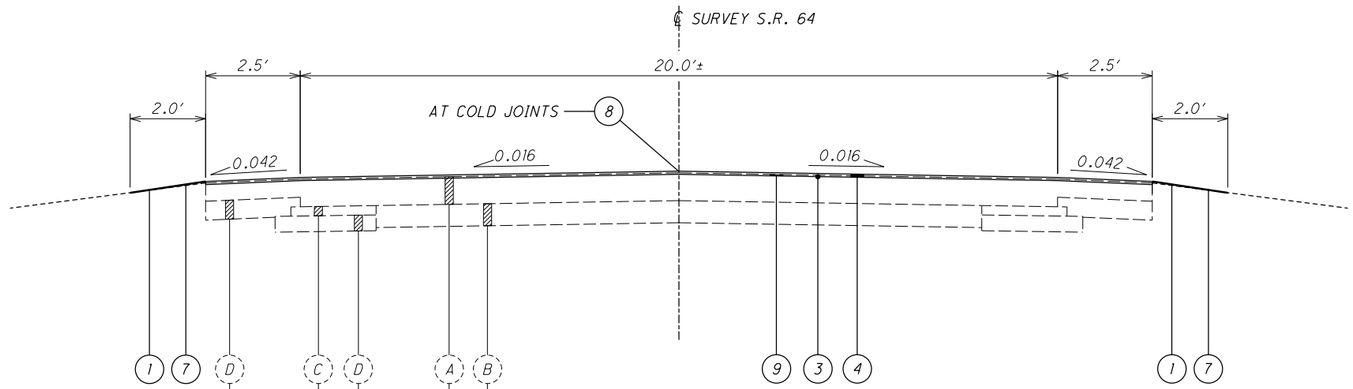
SUPPLEMENTAL SPECIFICATIONS	
800	1/20/17
832	1/17/14
875	1/17/14
897	1/16/15

SPECIAL PROVISIONS

FEDERAL PROJECT NO. E160 (829)
PID NO. 95750
CONSTRUCTION PROJECT NO.
RAILROAD INVOLVEMENT NONE
LUC-64-2.68
1/37

I:\Projects\LUC\95750_LUC-64-2.68\Design\Roadway\Sheets\95750_GT001.dgn

TYPICAL SECTION "A"



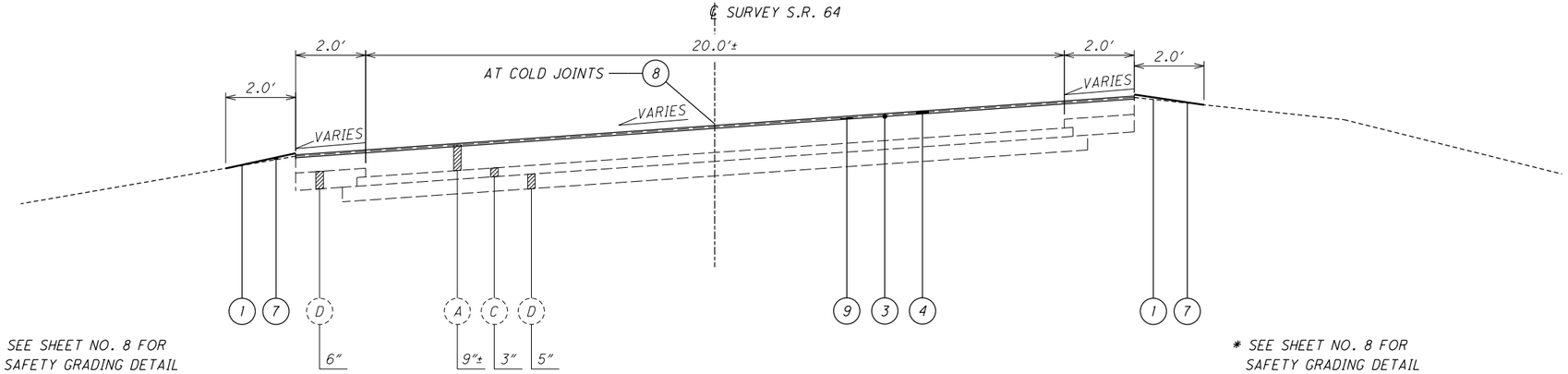
* SEE SHEET NO. 8 FOR SAFETY GRADING DETAIL

* SEE SHEET NO. 8 FOR SAFETY GRADING DETAIL

NORMAL SECTION - S.R. 64

STA. 135+47 TO STA. 189+67 = 5420 FT.

TYPICAL SECTION "B"



* SEE SHEET NO. 8 FOR SAFETY GRADING DETAIL

* SEE SHEET NO. 8 FOR SAFETY GRADING DETAIL

SUPERELEVATED SECTION - S.R. 64

STA. 206+42 TO STA. 206+62 = 20 FT. **

STR. LUC-64-0394 STA. 206+62 TO STA. 207+43

STA. 207+43 TO STA. 213+16 = 573 FT. / 593 FT.

PROPOSED LEGEND

1. ITEM 209 - LINEAR GRADING
2. ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE (THICKNESS AS SHOWN)
3. ITEM 407 - NON-TRACKING TACK COAT
4. ITEM 424 - 1" FINE GRADED POLYMER ASPHALT CONCRETE, TYPE B
5. ITEM 441 - 2" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2 (448)
6. ITEM 442 - 3" ASPHALT CONCRETE INTERMEDIATE COURSE, 19MM, TYPE A (448), PG70-22M, AS PER PLAN
7. ITEM 617 - COMPACTED AGGREGATE
8. ITEM 875 - LONGITUDINAL JOINT ADHESIVE
9. ITEM 897 - PAVEMENT PLANING, ASPHALT CONCRETE, CLASS A @ 1/2" CENTERLINE

**ITEM 897 - PAVEMENT PLANING, ASPHALT CONCRETE, CLASS A @ 1" CENTERLINE

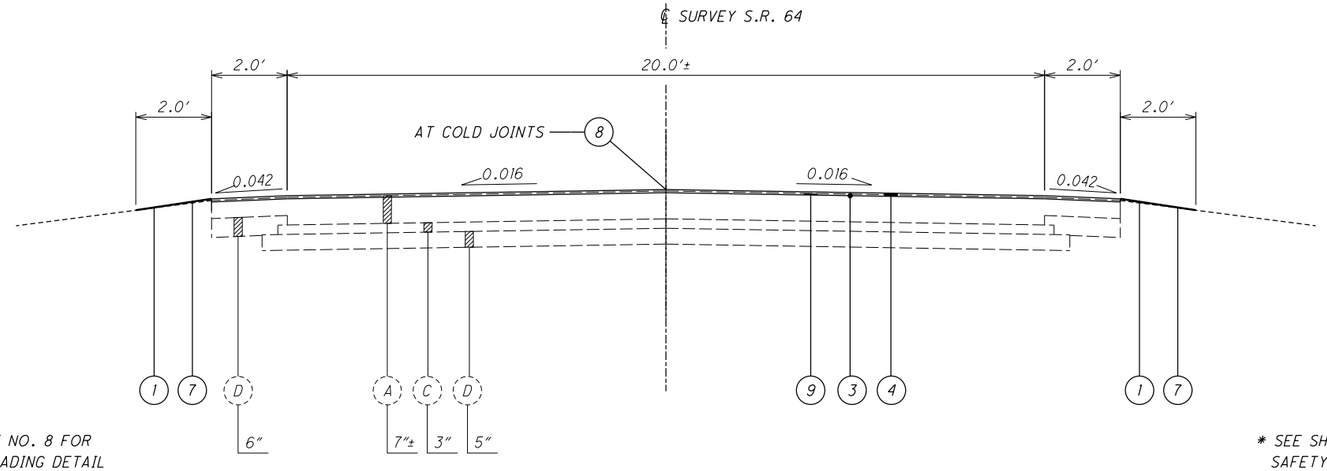
EXISTING LEGEND

- A ASPHALT (THICKNESS AS SHOWN)
- B CONCRETE BASE (THICKNESS AS SHOWN)
- C ASPHALT BASE
- D AGGREGATE BASE
- E WATERBOUND MACADAM (THICKNESS AS SHOWN)

TYPICAL SECTIONS

LUC-64-2.68

TYPICAL SECTION "C"



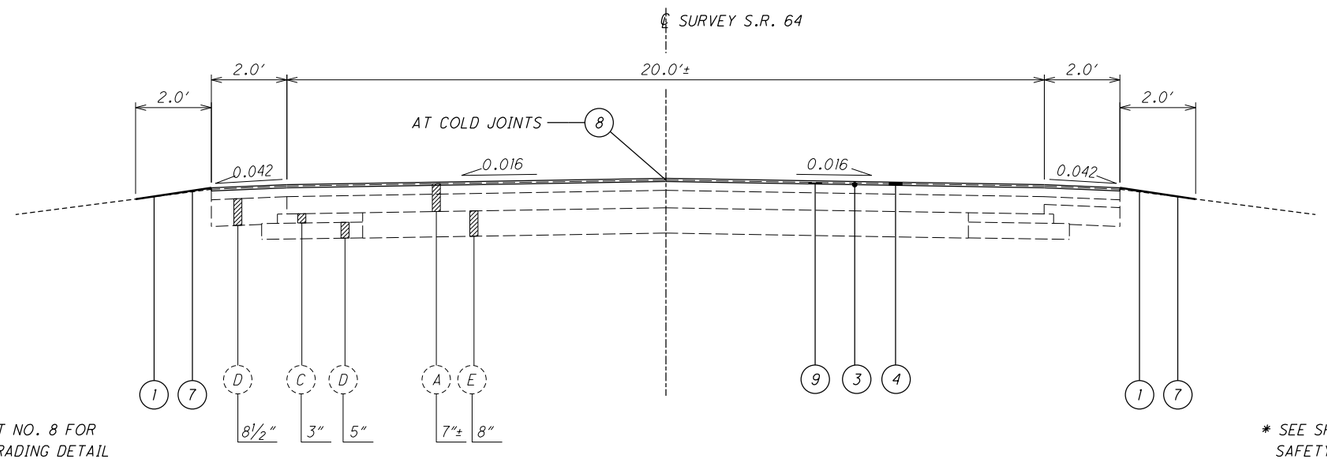
* SEE SHEET NO. 8 FOR SAFETY GRADING DETAIL

* SEE SHEET NO. 8 FOR SAFETY GRADING DETAIL

NORMAL SECTION - S.R. 64

STA. 213+16 TO STA. 214+35 = 119 FT.
STA. 245+10 TO STA. 245+85 = 75 FT.
194 FT.

TYPICAL SECTION "D"



* SEE SHEET NO. 8 FOR SAFETY GRADING DETAIL

* SEE SHEET NO. 8 FOR SAFETY GRADING DETAIL

NORMAL SECTION - S.R. 64

STA. 214+35 TO STA. 245+10 = 3075 FT.
STA. 245+85 TO STA. 252+12 = 627 FT.
3702 FT.

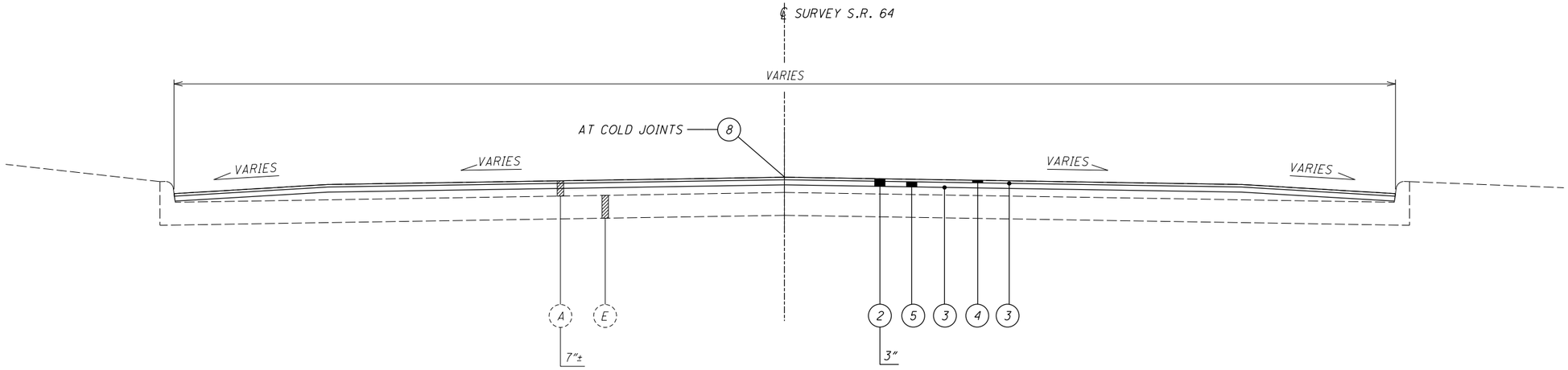
SEE SHEET NO. 2 FOR LEGEND

TYPICAL SECTIONS

LUC-64-2.68

3
37

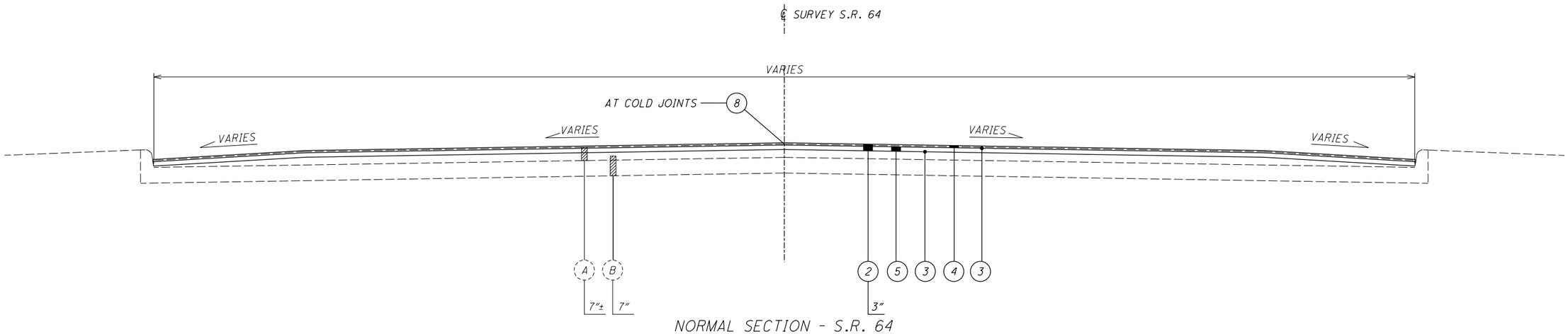
TYPICAL SECTION "E"



NORMAL SECTION - S.R. 64

STA. 252+12 TO STA. 258+65 = 653 FT.

TYPICAL SECTION "F"



NORMAL SECTION - S.R. 64

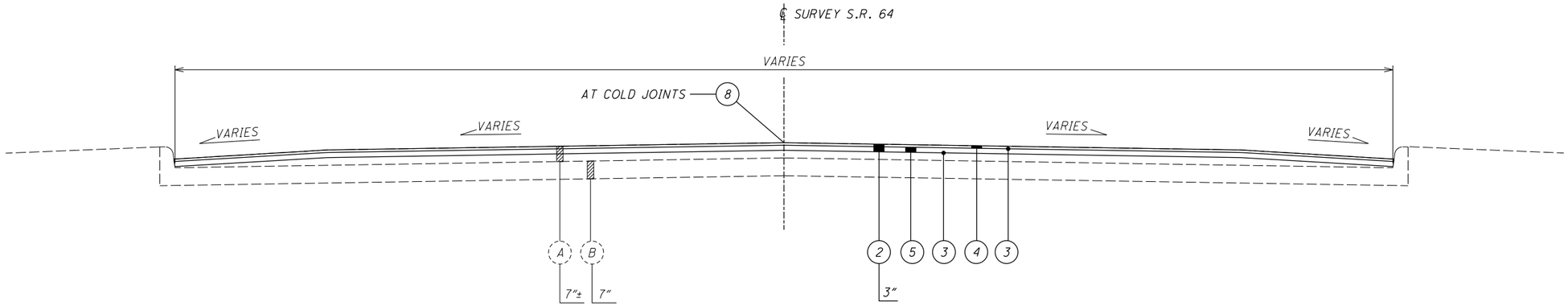
STA. 258+65 TO STA. 261+43 = 278 FT.

SEE SHEET NO. 2 FOR LEGEND

TYPICAL SECTIONS

LUC-64-2.68

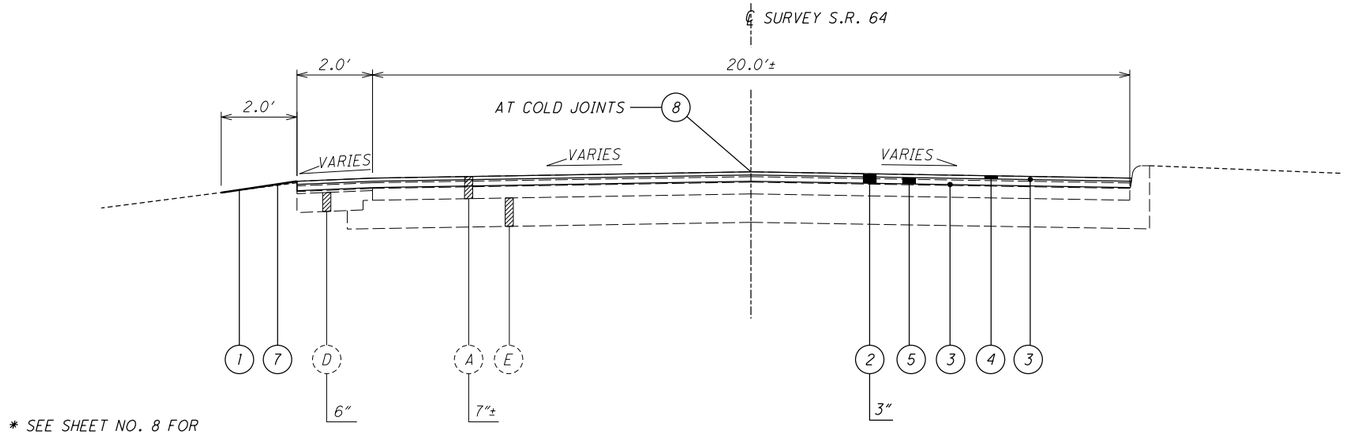
TYPICAL SECTION "G"



NORMAL SECTION - S.R. 64

STA. 261+43 TO STA. 274+62 = 1319 FT.

TYPICAL SECTION "H"



* SEE SHEET NO. 8 FOR SAFETY GRADING DETAIL

NORMAL SECTION - S.R. 64

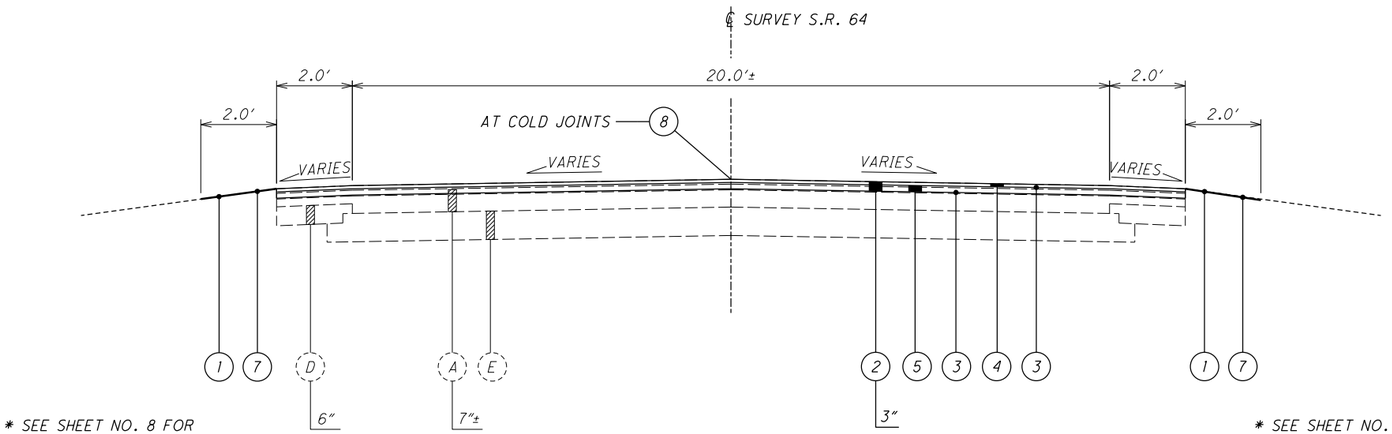
STA. 274+62 TO STA. 275+47 = 85 FT.

SEE SHEET NO. 2 FOR LEGEND

TYPICAL SECTIONS

LUC-64-2.68

TYPICAL SECTION "I"



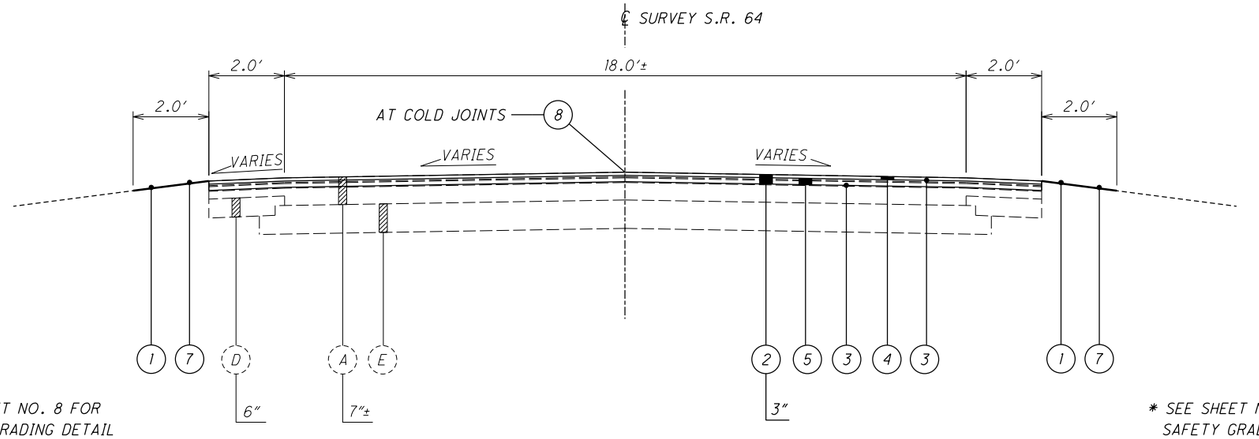
* SEE SHEET NO. 8 FOR SAFETY GRADING DETAIL

* SEE SHEET NO. 8 FOR SAFETY GRADING DETAIL

NORMAL SECTION - S.R. 64

STA. 275+47 TO STA. 303+02 = 2755 FT.

TYPICAL SECTION "J"



* SEE SHEET NO. 8 FOR SAFETY GRADING DETAIL

* SEE SHEET NO. 8 FOR SAFETY GRADING DETAIL

NORMAL SECTION - S.R. 64

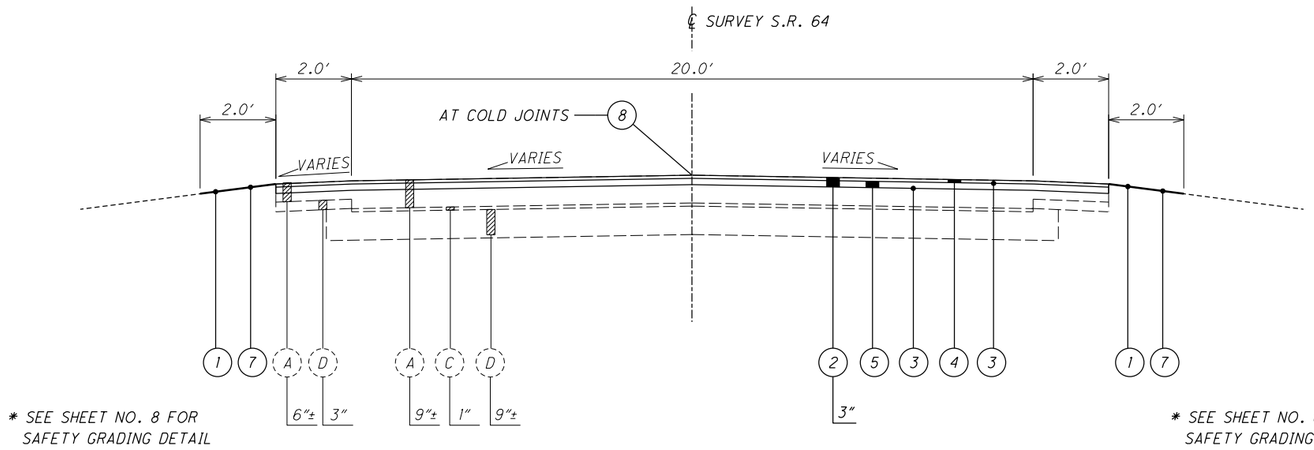
STA. 303+02 TO STA. 335+59 = 3257 FT.

SEE SHEET NO. 2 FOR LEGEND

TYPICAL SECTIONS

LUC-64-2.68

TYPICAL SECTION "J"



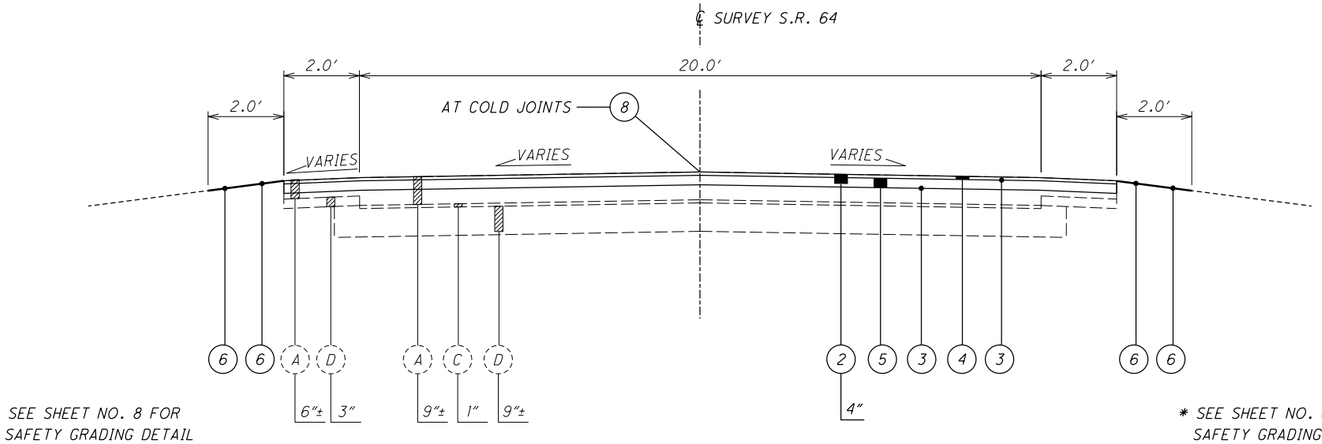
* SEE SHEET NO. 8 FOR SAFETY GRADING DETAIL

* SEE SHEET NO. 8 FOR SAFETY GRADING DETAIL

NORMAL SECTION - S.R. 64

STA. 335+59 TO STA. 465+15 = 12,956 FT.

TYPICAL SECTION "J"



* SEE SHEET NO. 8 FOR SAFETY GRADING DETAIL

* SEE SHEET NO. 8 FOR SAFETY GRADING DETAIL

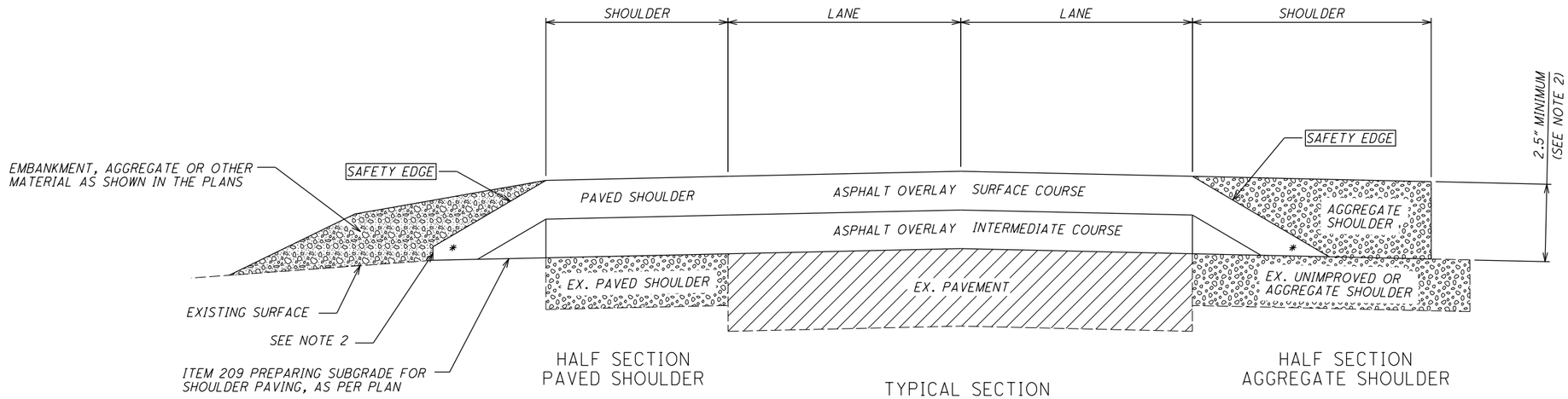
NORMAL SECTION - S.R. 64

STA. 465+15 TO STA. 470+15 = 500 FT.

TYPICAL SECTIONS

LUC-64-2.68

7
37



TYPICAL SECTION

N.T.S.

NOTES:

1.) SAFETY EDGES ARE REQUIRED AT THE OUTSIDE EDGES OF THE PAVED ROADWAY (EDGE OF TRAVEL LANE OR EDGE OF PAVED SHOULDER).

2.) CONSTRUCT THE SAFETY EDGE THE FULL THICKNESS OF ASPHALT CONCRETE BEING PLACED OR 2.5" (63MM) WHICHEVER IS GREATER, NOT TO EXCEED THE MAXIMUM SAFETY EDGE THICKNESS OF 6" (150MM). CONSTRUCT A NEAR-VERTICAL FACE BELOW THE SAFETY EDGE FOR THICKNESS GREATER THAN 6" (150 MM).

3.) BLADE AND SHAPE EXISTING SHOULDER MATERIAL TO FORM A UNIFORM SURFACE UNDER THE SAFETY EDGE PRIOR TO PLACEMENT OF THE ASPHALT CONCRETE OVERLAY.

** 40° MAX*

SAFETY EDGE DETAIL

LUC-64-2.68

ENVIRONMENTAL COMMITMENTS

FOR QUESTIONS, CONTACT ODOT DISTRICT 2 ENVIRONMENTAL COORDINATOR, STACY SCHIMMOELLER (419) 373-4319.

EXISTING RIGHT-OF-WAY

THE CONTRACTOR SHALL PERFORM ALL WORK WITHIN THE EXISTING RIGHT OF WAY.

CONSTRUCTION NOTIFICATION

THE CONTRACTOR WILL ADVISE THE PROJECT ENGINEER A MINIMUM OF EIGHTEEN (18) DAYS PRIOR TO THE FOLLOWING: THE START OF CONSTRUCTION ACTIVITIES, LANE RESTRICTIONS, LANE CLOSURES, AND OR ROAD CLOSURES. THE PROJECT ENGINEER WILL FORWARD THIS INFORMATION TO THE FOLLOWING:

DISTRICT PUBLIC INFORMATION OFFICER (PIO)
OR EMAIL AT: D02.PIO@DOT.STATE.OH.US

DISTRICT PERMIT SECTION
BY FAX AT: (419) 352-7524
OR EMAIL AT: D02.PERMITS@DOT.STATE.OH.US

CENTRAL OFFICE SPECIAL HAUL PERMITS SECTION
BY FAX AT: (614) 728-4099
OR EMAIL AT: HAULING.PERMITS@DOT.STATE.OH.US

THE CONTRACTOR SHALL NOTIFY ODOT A MINIMUM OF 18 DAYS PRIOR TO BEGINNING WORK, ANY MAJOR DISRUPTIVE, TIME DELAYING TRAFFIC CONTROL CHANGES, OR DETOURS DURING CONSTRUCTION. UPON RECEIPT OF NOTICE FROM THE CONTRACTOR, ODOT WILL NOTIFY AFFECTED AGENCIES INCLUDING LOCAL MEDIA OUTLETS, SCHOOLS, POLICE, FIRE, EMERGENCY SERVICES, BUS TRANSPORTATION DEPARTMENTS, AND POST OFFICES 15 DAYS PRIOR THE WORK.

THE PIO WILL, IN TURN, NOTIFY THE PUBLIC, THE LOCAL EMERGENCY SERVICES, AFFECTED SCHOOLS AND BUSINESSES, AND ANY OTHER IMPACTED LOCAL PUBLIC AGENCY OF ANY OF THE ABOVE MENTIONED ITEMS, VIA MEDIA SOURCES.

WORK OVER RIVERS AND STREAMS

THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS TO PREVENT ANY AND ALL MATERIAL FROM GOING OFF THE EDGE OF THE BRIDGE DECK(S) AND EDGE OF THE CULVERTS(S) DURING ALL CONSTRUCTION OPERATIONS. THE CONTRACTOR SHALL IMMEDIATELY REMOVE ANY MATERIAL THAT FALLS INTO THE ROADSIDE DITCHES, STREAMS, WETLANDS, OR OTHER WATERS THROUGH NONOMECHANICAL MEANS. UNDER NO CIRCUMSTANCES SHALL THE CONTRACTOR WORK IN OR STORE EQUIPMENT AND/OR MATERIALS IN ANY WETLANDS, STREAMS, OR OTHER WATERS. NO STAGING OR WORK IS PERMITTED BELOW THE TOP OF BANKS OF ANY STREAM.

BLANDINGS TURTLE

DUE TO THE KNOWN PRESENCE OF OHIO THREATENED BLANDINGS TURTLE WITHIN THE PROJECT AREA, IF ANY TURTLE IS FOUND WITHIN THE PROJECT WORK LIMITS, CREWS SHALL WAIT UNTIL THE SPECIES HAS MOVED OFF OF THE PROJECT SITE UNHARMED BEFORE WORK CAN CONTINUE.

OAK OPENINGS REGION

DUE TO THE LOCATION OF THE PROJECT WITHIN THE GLOBALLY RARE OAK OPENINGS REGION, THERE SHALL BE NO EARTH DISTURBANCE STARTING 3 FEET FROM THE EDGE OF THE EXISTING PAVEMENT FROM LUC-64-2.68 TO LUC-64-8.91. NO WORK SHALL BE DONE OVER 3 FEET OFF THE EXISTING PAVEMENT AND CARE SHALL BE TAKEN TO NOT DISTURB THE EXISTING VEGETATION IN THIS AREA.

INDIANA BAT AND NORTHERN LONG-EARED BAT

THE INTENT OF THIS PROJECT IS TO NOT REMOVE TREES.

THE PROJECT IS LOCATED WITHIN THE KNOWN HABITAT RANGES OF THE FEDERALLY LISTED AND PROTECTED INDIANA BAT AND NORTHERN LONG-EARED BAT. NO TREES SHALL BE REMOVED UNDER THIS PROJECT. THIS REQUIRMENT IS NECESSARY TO AVOID AND MINIMIZE IMPACTS TO THESE SPECIES AS REQUIRED BY THE ENDANGERED SPECIES ACT. FOR THE PURPOSES OF THIS NOTE, A TREE IS DEFINED AS A LIVE, DYING OR DEAD WOODY PLANT, WITH A TRUNK THREE INCHES OR GREATER IN DIAMETER AT A HEIGHT OF 4.5 FEET ABOVE GROUND SURFACE, AND WITH A MINIMUM HEIGHT OF 13 FEET.

DRINKING WATER SOURCE

THIS PROJECT IS LOCATED IN OR NEAR 1 PUBLIC DRINKING WATER SOURCE. IN ORDER TO MINIMIZE THE POTENTIAL FOR A RELEASE IN THIS SENSITIVE AREA DO NOT PERFORM EQUIPMENT FUELING WITHIN THE LOCATIONS IDENTIFIED IN THE IN THE TABLE BELOW. IF REFUELING OF IMMOBILE EQUIPMENT IS NECESSARY WITHIN THESE LIMITS, PROVIDE SECONDARY CONTAINMENT WITH ENOUGH CAPACITY TO COMPLETELY CONTAIN AND COLLECT ALL POTENTIAL LIQUID WASTES IN THE EVENT OF A SPILL. DO NOT PERFORM MAINTENANCE ACTIVITIES ASSOCIATED WITH ANY VISCOUS MATERIAL THAT HAS POTENTIAL TO CONTAMINATE THE GROUNDWATER. ALL EQUIPMENT OR LIQUID CONTAINERS SHALL BE REGULARLY CHECKED FOR LEAKS PRIOR TO ENTERING THE RESTRICTED AREAS. THE CONTRACTOR SHALL DEVELOP A SPILL PREVENTION CONTROL AND COUNTERMEASURE PLAN (SPCC) WHICH SHALL ALSO INCLUDE ALL AREAS OF FUEL STORAGE, EQUIPMENT MAINTENANCE, AND SPILL KITS. ALL AREAS UTILIZED BY THE CONTRACTOR NOT INCLUDED WITHIN THE TABLE BELOW AND NOT IN THE PROJECT LIMITS SHALL BE ASSESSED FOR POTENTIAL GROUNDWATER CONTAMINATION AND BE INDICATED ON THE SPILL PREVENTION CONTROL AND COUNTERMEASURES PLAN. THE CONTRACTOR SHALL IMMEDIATELY TAKE STEPS TO MITIGATE ANY EVENT, SUCH AS A SPILL OF FUELS, OILS, OR CHEMICALS. ANY SUCH SPILL OR EVENT SHALL BE REPORTED IMMEDIATELY TO THE EMERGENCY CONTACT LISTED BELOW FOR EACH DRINKING WATER SOURCE. IF THE SPILL IS A REPORTABLE AMOUNT, THE CONTRACTOR SHOULD CONTACT LUCAS COUNTY EMERGENCY MANAGEMENT (419-213-6506) AND OHIO EPA ENVIRONMENTAL RESPONSE AND REVITALIZATION (419-373-3031 OR 800-282-9378) FOR CLEANUP OF THE SPILL.

DRINKING WATER SOURCE	RESTRICTED REFUELING AND MAINTENANCE AREA	EMERGENCY CONTACT INFORMATION
TWIN ACRES RV PARK	SR-64: SLM 6.45-6.91	419-877-2684

MAINTAINING ACCESS

ACCESS TO THE WABASH-CANNONBALL SOUTH FORK TRAIL SHALL BE MAINTAINED AT ALL TIMES.

CALCULATED TLM
CHECKED JMF

GENERAL NOTES

LUC-64-2.68

ROUNDING

THE ROUNDING AT SLOPE BREAKPOINTS SHOWN ON THE TYPICAL SECTIONS APPLIES TO ALL CROSS-SECTIONS EVEN THOUGH OTHERWISE SHOWN.

UTILITIES

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

AT&T
130 N. ERIE STREET
ROOM 714
TOLEDO, OHIO 43624
(419) 245-7304

BUCKEYE CABLE SYSTEM
4818 ANGOLA ROAD
TOLEDO, OHIO 43615
(419) 724-9820

BUCKEYE PIPELINE COMPANY
P.O. BOX 368
EMMAUS, PA 18049-068
(484) 232-4000

CENTURYLINK
175 ASHLAND ROAD
MANSFIELD, OHIO 44902
(419) 755-7183

LUCAS COUNTY SANITARY
111 SOUTH McCORD ROAD
TOLEDO, OHIO 43528
(419) 213-2926

OHIO GAS COMPANY
P.O. BOX 528
BRYAN, OHIO 43506
(800) 331-7396

TIME WARNER CABLE
3760 INTERCHANGE DRIVE
COLUMBUS, OHIO 43204
(614) 255-6349

TOLEDO EDISON
6099 ANGOLA ROAD
HOLLAND, OHIO 43528
(419) 249-5218

VILLAGE OF WHITEHOUSE
6925 PROVIDENCE STREET
P.O. BOX 2476
WHITEHOUSE, OHIO 43571
(419) 877-5383

WINDSTREAM
6777 ENGLE ROAD
SUITE E
MIDDLEBURG HEIGHTS, OH 44130
(440) 214-0209

O.D.O.T. - DISTRICT TWO
317 EAST POE ROAD
BOWLING GREEN, OHIO 43402
(419) 353-8131

UTILITIES

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

WORK LIMITS

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

PROFILE AND ALIGNMENT

THE PROPOSED PAVEMENT RESURFACING SHALL FOLLOW THE ALIGNMENT AND PROFILE OF THE EXISTING PAVEMENT. THE PROPOSED ASPHALT CONCRETE OVERLAY SHALL BE AS SHOWN ON THE TYPICAL SECTIONS.

ELEVATION DATUM

HORIZONTAL POSITIONS ARE BASED ON THE OHIO STATE PLANE NORTH ZONE, A LAMBERT CONFORMAL CONIC MAP PROJECTION, THE NORTH AMERICAN DATUM OF 1983 ADJUSTED TO THE NATIONAL SPATIAL REFERENCE SYSTEM OF 2011 (NAD 83(NSRS 2011)), AND THE GRS80 ELLIPSOID.

ITEMS ADJUSTED TO GRADE

THE FOLLOWING ITEMS HAVE BEEN CARRIED IN THE PLANS AS CONTINGENCY QUANTITIES AND SHOULD BE USED AS DIRECTED BY THE ENGINEER.

03/S>2/PV FUNDING

ITEM 611 - CATCH BASIN ADJUSTED TO GRADE	11 EACH
ITEM 611 - INLET ADJUSTED TO GRADE	8 EACH
ITEM 611 - MANHOLE ADJUSTED TO GRADE	20 EACH
ITEM 611 - GAS VALVE BOX ADJUSTED TO GRADE	1 EACH
ITEM 638 - VALVE BOX ADJUSTED TO GRADE	22 EACH

QUANTITIES CARRIED TO GENERAL SUMMARY.

ITEM 442, ASPHALT CONRETE INTERMEDIATE COURSE, 19MM, TYPE A (446), AS PER PLAN

ITEM 442, ASPHALT CONCRETE INTERMEDIATE COURSE, 19MM, TYPE A, AS PER PLAN SHALL FOLLOW THE SPECIFICATION FOR THE 442 ITEM EXCEPT FOR SECTION 442.04 ASPHALT BINDER. THE BINDER SHALL BE PG70-22M FOR THE INTERMEDIATE COURSE AND A MAXIMUM OF 20% RAP BY DRY WEIGHT OF MIX CAN BE USED.

ITEM 209, PREPARING SUBGRADE FOR SHOULDER PAVING, AS PER PLAN

PREPARE THE SHOULDER FOR PAVING A CONSISTENT SAFETY EDGE IN BOTH THICKNESS AND WIDTH.

PRIOR TO PAVING THE SAFETY EDGE, GRADE AN ADDITIONAL WIDTH OF 10" OF EMBANKMENT, AGGREGATE, OR OTHER MATERIAL THAT EXISTS AT THE OUTSIDE EDGE OF PAVED ROADWAY TO PROVIDE A CROSS SECTION FOR A UNIFORM THICKNESS AND WIDTH OF SAFETY EDGE.

COMPACT THE GRADED SHOULDER ACCORDING TO 617.05, OR AS DIRECTED BY THE ENGINEER.

THE FOLLOWING QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY:

LUC-64 (SLM 5.20-6.36)
2.32 MILES
-0.58 MILES (GUARDRAIL, DRIVE & CURB AREAS)
1.74 MILES (03/3>2/PV)

LUC-64 (SLM 6.36-8.91)
5.10 MILES
-0.73 MILES (GUARDRAIL, DRIVE & CURB AREAS)
4.37 MILES (01/STR/PV)

A QUANTITY OF 6.11 MILES HAS BEEN CARRIED TO THE GENERAL SUMMARY FOR PREPARING SUBGRADE FOR SHOULDERS.

UNDERGROUND UTILITIES

EXTREME CAUTION SHOULD BE EXERCISED IN THE AREAS WITH UNDERGROUND WATERLINES, DRAINS, CABLES, SEWERS OR OTHER UTILITIES. THE CONTRACTOR IS FULLY RESPONSIBLE FOR ALL DAMAGE INFLICTED ON UNDERGROUND UTILITIES IN THE EXECUTION OF THIS CONTRACT. SECTIONS 105.07 AND 107.16 OF THE OHIO DEPARTMENT OF TRANSPORTATION MATERIALS AND SPECIFICATIONS REQUIRE, AMONG OTHER THINGS, THAT THE CONTRACTOR COOPERATE WITH ALL UTILITIES LOCATED WITHIN THE LIMITS OF THIS CONSTRUCTION PROJECT AND TAKE FULL RESPONSIBILITY FOR THE PROTECTION OF THE UTILITY PROPERTY AND SERVICES.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING ANY UTILITIES THAT MAY BE AFFECTED BY THE WORK PERFORMED FOR THIS CONTRACT. THE CONTRACTOR SHALL NOTIFY THE UTILITIES SUFFICIENTLY BEFORE WORK BEGINS SO THAT THE COMPANIES CAN LOCATE AND MARK THE LOCATION OF THEIR FACILITIES BEFORE ANY EXCAVATION OR POST DRIVING BEGINS. THE CONTRACTOR SHALL ALSO LOCATE AND AVOID UNDERGROUND DRAINAGE PIPES NOT ASSOCIATED WITH A PARTICULAR UTILITY COMPANY.

IF ANY CONFLICTS OCCUR THE ENGINEER SHALL DETERMINE WHETHER THE POSITION OF THE GUARDRAIL CAN BE ADJUSTED TO AVOID THE UTILITY OR IF RELOCATION OF THE UTILITY WILL BE REQUIRED.

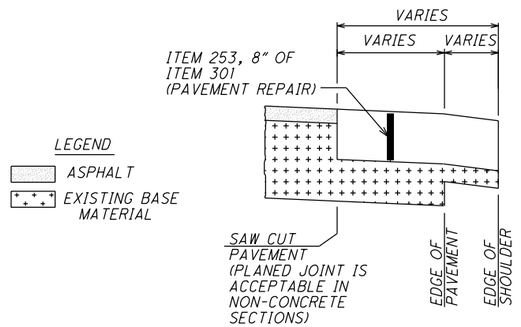
ITEM 253, PAVEMENT REPAIR - S.R. 64 (2.68-3.61) (3.93-4.80) 03/S>2/PV FUNDING :

PAVEMENT SHALL BE PLANED BEFORE PAVEMENT REPAIRS ARE PERFORMED.

THE FOLLOWING ESTIMATED QUANTITIES ARE TO BE USED FOR 8" PAVEMENT REPAIR ON S.R. 64 AS DIRECTED BY THE ENGINEER BASED ON 2% OF THE FOLLOWING AREA.

ITEM 253, PAVEMENT REPAIR 57 CU. YARDS (03/S>2/PV)

ESTIMATED QUANTITIES CARRIED TO THE GENERAL SUMMARY



NOTE: THE ENGINEER SHALL FIELD VERIFY ALL LOCATIONS PRIOR TO THE BEGINNING OF WORK. ANY ADJUSTMENTS NECESSARY SHALL BE AS DIRECTED BY THE ENGINEER.

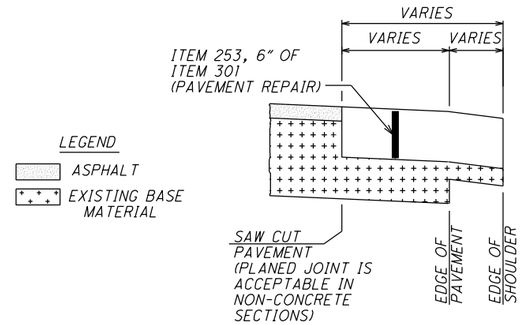
ITEM 253, PAVEMENT REPAIR - S.R. 64 (4.80-6.36) 03/S>2/PV FUNDING :

PAVEMENT SHALL BE PLANED BEFORE PAVEMENT REPAIRS ARE PERFORMED.

THE FOLLOWING ESTIMATED QUANTITIES ARE TO BE USED FOR 6" PAVEMENT REPAIR ON S.R. 64 AS DIRECTED BY THE ENGINEER BASED ON 8% OF THE FOLLOWING AREA.

ITEM 253, PAVEMENT REPAIR 364 CU. YARDS (03/S>2/PV)

ESTIMATED QUANTITIES CARRIED TO THE GENERAL SUMMARY



NOTE: THE ENGINEER SHALL FIELD VERIFY ALL LOCATIONS PRIOR TO THE BEGINNING OF WORK. ANY ADJUSTMENTS NECESSARY SHALL BE AS DIRECTED BY THE ENGINEER.

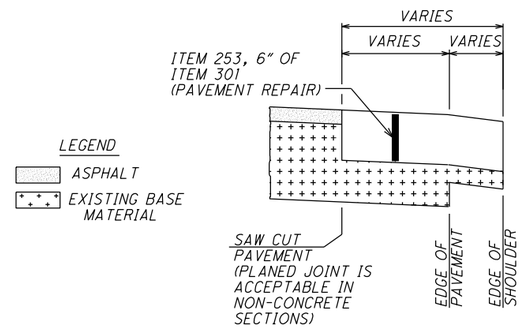
ITEM 253, PAVEMENT REPAIR - S.R. 64 (6.36-8.91) 01/STR/PV FUNDING :

PAVEMENT SHALL BE PLANED BEFORE PAVEMENT REPAIRS ARE PERFORMED.

THE FOLLOWING ESTIMATED QUANTITIES ARE TO BE USED FOR 6" PAVEMENT REPAIR ON S.R. 64 AS DIRECTED BY THE ENGINEER BASED ON 8% OF THE FOLLOWING AREA.

ITEM 253, PAVEMENT REPAIR 493 CU. YARDS (01/STR/PV)

ESTIMATED QUANTITIES CARRIED TO THE GENERAL SUMMARY



NOTE: THE ENGINEER SHALL FIELD VERIFY ALL LOCATIONS PRIOR TO THE BEGINNING OF WORK. ANY ADJUSTMENTS NECESSARY SHALL BE AS DIRECTED BY THE ENGINEER.

CALCULATED TLM CHECKED JMF

GENERAL NOTES

LUC-64-2.68

SAFETY EDGE

ITEM 424 - FINE GRADED POLYMER ASPHALT CONCRETE, TYPE B
ITEM 442 - ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2 (448)
ITEM 442 - ASPHALT CONCRETE INTERMEDIATE COURSE, 19MM, TYPE A (448), APP

IN ADDITION TO THE REQUIREMENTS OF 401.12, ATTACH A DEVICE TO THE SCREED OF THE PAVER THAT CONFINES THE MATERIAL AT THE END GATE AND EXTRUDES THE ASPHALT MATERIAL IN SUCH A WAY THAT RESULTS IN A COMPACTED WEDGE SHAPE PAVEMENT EDGE OF APPROXIMATELY 30 DEGREES (NOT STEEPER THAN 40 DEGREES). ENSURE THE DEVICE MAINTAINS CONTACT WITH THE EXISTING SURFACE, AND ALLOW FOR AUTOMATIC TRANSITION TO CROSS ROADS, DRIVEWAYS AND OBSTRUCTIONS. DO NOT USE CONVENTIONAL SINGLE PLATE STRIKE OFF.

CONSTRUCTION OF SAFETY EDGE CAN BE OMITTED AT LOCATIONS WHERE EXISTING WIDTH OF GRADED SHOULDER OR BERM IS LESS THAN 12". PROJECTS WITH VARYING CONDITIONS SHOULD USE SAFETY EDGE WHERE POSSIBLE. PLAN PREPARATION HAS MADE EVERY REASONABLE ATTEMPT TO IDENTIFY POSSIBLE SAFETY EDGE LOCATIONS.

USE THE TRANSTECH SHOULDER WEDGE MAKER, THE CARLSON SAFETY EDGE END GATE, THE ADVANT-EDGER, THE TROXLER SAFETSLOPE OR A SIMILAR APPROVED EQUAL DEVICE THAT PRODUCES THE SAME WEDGE CONSOLIDATION RESULTS. CONTACT INFORMATION FOR THESE WEDGE SHAPE COMPACTION DEVICES IS THE FOLLOWING:

ADVANT-EDGE PAVING EQUIPMENT LLC
P.O. BOX 9163
NISKAYUNA, NY 12309-0163
518-280-6090
WWW.ADVANTEDGEPAVING.COM

TRANSTECH SYSTEMS, INC.
1594 STATE STREET
SCHENECTADY, NY 12304
1-800-724-6306
WWW.TRANSTECHSYS.COM

CARLSON SAFETY EDGE END GATE
18425 50TH AVENUE EAST
TACOMA, WA 98446
253-875-8000

TROXLER ELECTRONIC LABORATORIES, INC.
3008 E. CORNWALLIS RD.
RESEARCH TRIANGLE PARK, NC 27709
1-877-TROXLER
WWW.TROXLERLABS.COM

IF ELECTING TO USE A SIMILAR DEVICE, PROVIDE PROOF THAT THE DEVICE HAS BEEN USED ON PREVIOUS PROJECTS WITH ACCEPTABLE RESULTS OR CONSTRUCT A TEST SECTION PRIOR TO THE BEGINNING OF WORK AND DEMONSTRATE WEDGE COMPACTION TO THE SATISFACTION OF THE ENGINEER. SHORT SECTIONS OF HANDWORK WILL BE ALLOWED WHEN NECESSARY FOR TRANSITIONS AND TURNOUTS OR OTHERWISE AUTHORIZED BY THE ENGINEER.

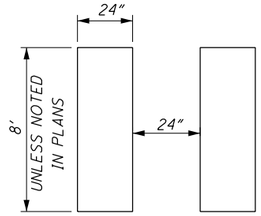
IN ADDITION TO THE REQUIREMENTS OF 401.16, MAKE THE FIRST ROLLER PASS 8 TO 12 INCHES (200 TO 300 MM) AWAY FROM TAPERED EDGE. DO NOT ROLL THE TAPER.

THE FOLLOWING QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY:

03/S>2/PV FUNDING			01/STR/PV FUNDING		
LUCAS - S.R. 64 (5.19 - 6.36)			LUCAS - S.R. 64 (6.36 - 8.81)		
ITEM 424 - FINE GRADED POLYMER ASPHALT CONCRETE, TYPE B	6	CU. YD.	ITEM 424 - FINE GRADED POLYMER ASPHALT CONCRETE, TYPE B	13	CU. YD.
ITEM 441 - ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2 (448)	7	CU. YD.	ITEM 441 - ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2 (448)	17	CU. YD.
			LUCAS - S.R. 64 (8.81 - 8.91)		
			ITEM 424 - FINE GRADED POLYMER ASPHALT CONCRETE, TYPE B	1	CU. YD.
			ITEM 442 - ASPHALT CONCRETE INTERMEDIATE COURSE, 19MM, TYPE A (448), APP	1	CU. YD.

ITEM 642, CROSSWALK LINE, AS PER PLAN

24" WHITE LONGITUDINAL LINES SHALL BE PLACED PARALLEL TO TRAFFIC FLOW AS SHOWN IN FOLLOWING DETAIL. THE MARKING DESIGN SHOULD AVOID THE WHEEL PATHS.



ITEM 630 GROUND MOUNTED NO.3 POST, AS PER PLAN

THIS ITEM SHALL CONSIST OF INSTALLING A GROUND MOUNTED NO. 3 POST WITH THE EMBEDMENT DEPTH OF A MINIMUM OF 48". ADDITIONAL EMBEDMENT DEPTH IS INCLUDED IN THE PLAN QUANTITIY PRICE AS SHOWN ON SHEET NO. 23.

ROAD WEATHER INFORMATION SYSTEM SENSORS @ LUC-64-7.91

THE CONTRACTOR IS RESPONSIBLE FOR THE REMOVAL AND DISPOSAL OF THE EXISTING PAVEMENT SENSORS. THE CONTRACTOR SHALL CONTACT THE OHIO DEPARTMENT OF TRANSPORTATION DISTRICT TWO RWIS CONTACT TWO WEEKS PRIOR TO THE INSTALLATION OF THE NEW PAVEMENT SENSORS TO COORDINATE A FIELD VISIT TO SET THE INSTALLATION LOCATIONS. THE CONTRACTOR SHALL NOTIFY THE FOLLOWING:

OHIO DEPARTMENT OF TRANSPORTATION
DISTRICT 2
ATTENTION: DYLAN FOUKES
317 E. POE ROAD
BOWLING GREEN, OHIO 43402
PH: 419-373-4303

THE CONTRACTOR WILL BE REQUIRED TO PURCHASE AND INSTALL THE FOLLOWING ITEMS TO REPLACE THE SURFACE SENSORS:

COMPLETE WIRELESS PAVEMENT SENSOR 915 MHZ 2 TEMPERATURE PROBES, EXTERNAL PAVEMENT AND SUBGRADE: PART # VX21-2 1 EA

RFMS-915 RX/TX RADIO: PART # VX-TXRX 1 EA

ALL ITEMS MUST BE INSTALLED AND COMMISSIONED ACCORDING TO THE MANUFACTURER'S SPECIFICATIONS. THE CONTACT INFORMATION FOR THE MANUFACTURER'S REPRESENTATIVE IS LISTED BELOW.

MH CORBIN
8355 RAUSCH DR.
PLAIN CITY, OHIO 43604
1 800 380 1718
ATTENTION: MACK CORBIN JR, BILL CORBIN

PAYMENT FOR ALL LABOR, EQUIPMENT AND MATERIALS SHALL BE INCLUDED IN THE LUMP SUM PRICE FOR ITEM SPECIAL, MISC: ROAD WEATHER INFORMATION SYSTEM SENSOR.

CALCULATED TLM
CHECKED JMF

GENERAL NOTES

LUC-64-2.68

ITEM 614, MAINTAINING TRAFFIC (AT ALL TIMES)

A MINIMUM OF ONE LANE OF TRAFFIC IN EACH DIRECTION SHALL BE MAINTAINED AT ALL TIMES BY USE OF THE EXISTING PAVEMENT, THE COMPLETED PAVEMENT, ITEM 502 STRUCTURE FOR MAINTAINING TRAFFIC, ITEM 615 PAVEMENT FOR MAINTAINING TRAFFIC, ITEM 615 ROADS FOR MAINTAINING TRAFFIC, AND TEMPORARY SURFACES USING ITEMS 410, AND 614.

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

CHRISTMAS	FOURTH OF JULY
NEW YEARS	LABOR DAY
MEMORIAL DAY	THANKSGIVING
EASTER	

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

DAY OF HOLIDAY OR EVENT	TIME ALL LANES MUST BE OPEN TO TRAFFIC
SUNDAY	12:00N FRIDAY THROUGH 6:00AM MONDAY
MONDAY	12:00N FRIDAY THROUGH 6:00AM TUESDAY
TUESDAY	12:00N MONDAY THROUGH 6:00AM WEDNESDAY
WEDNESDAY	12:00N TUESDAY THROUGH 6:00AM THURSDAY
THURSDAY	12:00N WEDNESDAY THROUGH 6:00AM MONDAY THURSDAY (THANKSGIVING ONLY) 6:00 AM WEDNESDAY THROUGH 6:00 AM MONDAY
FRIDAY	12:00N THURSDAY THROUGH 6:00AM MONDAY
SATURDAY	12:00N FRIDAY THROUGH 6:00AM MONDAY

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

SHOULD THE CONTRACTOR FAIL TO MEET ANY OF THESE REQUIREMENTS, THE CONTRACTOR SHALL BE ASSESSED LIQUIDATED DAMAGES IN ACCORDANCE WITH CMS 108.07.

ALL WORK AND TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH C&MS 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.

PLACEMENT OF ASPHALT CONCRETE

TWO-WAY TRAFFIC SHALL BE MAINTAINED AT ALL TIMES EXCEPT THAT ONE-WAY TRAFFIC WILL BE PERMITTED FOR MINIMUM PERIODS OF TIME CONSISTENT WITH THE REQUIREMENTS OF THE SPECIFICATIONS FOR PROTECTION OF COMPLETED ASPHALT CONCRETE COURSES.

PLANED SURFACES

NO PLANED SURFACES SHALL BE OPEN TO THE PUBLIC FOR MORE THAN 5 DAYS.

WORK ZONE MARKINGS AND SIGNS

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY FOR USE AT LOCATIONS IDENTIFIED BY THE ENGINEER FOR WORK ZONE PAVEMENT MARKINGS AND SIGNS PER THE REQUIREMENTS OF C&MS 614.04 AND 614.11.

03/S>2/PV FUNDING (2.68 - 6.36) :

ITEM 614 WORK ZONE MARKING SIGN	50 EACH
ITEM 614 WORK ZONE CENTER LINE, CLASS I	6.76 MILE
ITEM 614 WORK ZONE CHANNELIZING LINE, CLASS III	82 FEET
ITEM 614 WORK ZONE STOP LINE, CLASS III, 642 PAINT	312 FEET

01/STR/PV FUNDING (6.36 - 8.91) :

ITEM 614 WORK ZONE MARKING SIGN	20 EACH
ITEM 614 WORK ZONE CENTER LINE, CLASS I	7.65 MILE
ITEM 614 WORK ZONE STOP LINE, CLASS III, 642 PAINT	144 FEET

ITEM 614, REPLACEMENT SIGN

FLATSHEET SIGNS FURNISHED BY THE CONTRACTOR IN ACCORDANCE WITH THE REQUIREMENTS OF THE PLANS, SPECIFICATIONS AND PROPOSAL WHICH BECOME DAMAGED BY TRAFFIC FOR REASONS BEYOND THE CONTROL OF THE CONTRACTOR SHALL BE REPLACED IN KIND WHEN ORDERED BY THE ENGINEER. REPLACEMENT SIGNS SHALL BE NEW. OTHER MATERIALS MAY BE IN USED, BUT GOOD, CONDITION SUBJECT TO APPROVAL BY THE ENGINEER.

PAYMENT FOR THE NEW SIGNS SHALL BE MADE AT THE CONTRACT PRICE PER EACH FOR ITEM 614, REPLACEMENT SIGN, AND SHALL INCLUDE THE COST OF REMOVING AND DISPOSING OF DAMAGED SIGNS, HARDWARE AND SUPPORTS, AND PROVIDING THE NECESSARY REPLACEMENT HARDWARE, SUPPORTS, ETC.

AN ESTIMATED QUANTITY OF 5 EACH HAS BEEN PROVIDED IN THE GENERAL SUMMARY.

ITEM 614, REPLACEMENT DRUM

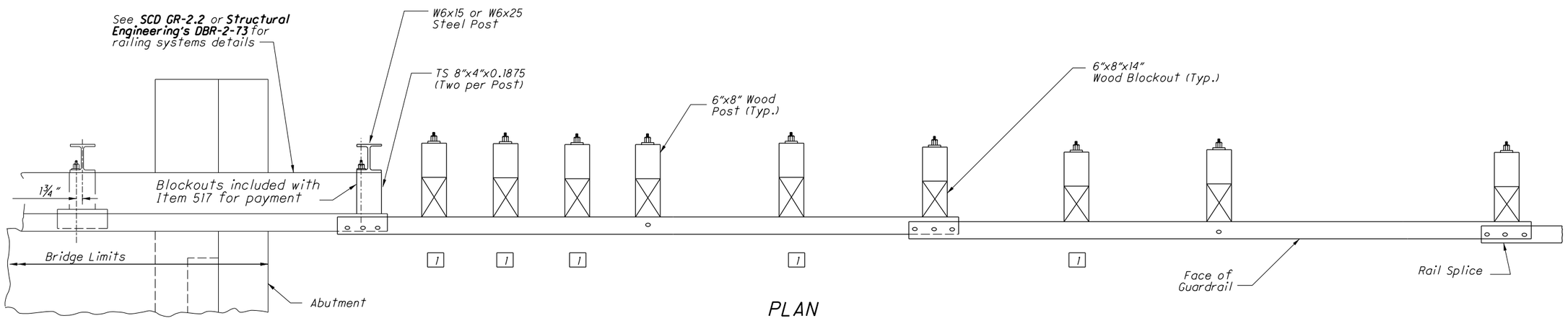
DRUMS FURNISHED BY THE CONTRACTOR IN ACCORDANCE WITH THE REQUIREMENTS OF THE PLANS, SPECIFICATIONS AND PROPOSAL WHICH BECOME DAMAGED BY TRAFFIC FOR REASONS BEYOND THE CONTROL OF THE CONTRACTOR SHALL BE REPLACED IN KIND WHEN ORDERED BY THE ENGINEER. REPLACEMENT DRUMS SHALL BE NEW.

PAYMENT FOR THE NEW DRUMS SHALL BE MADE AT THE CONTRACT PRICE PER EACH FOR ITEM 614, REPLACEMENT DRUM, AND SHALL INCLUDE THE COST OF REMOVING AND DISPOSING OF THE DAMAGED DRUM, AND PROVIDING AND MAINTAINING THE REPLACEMENT DRUM IN ACCORDANCE WITH THE CONTRACT REQUIREMENTS FOR THE ORIGINAL DRUM.

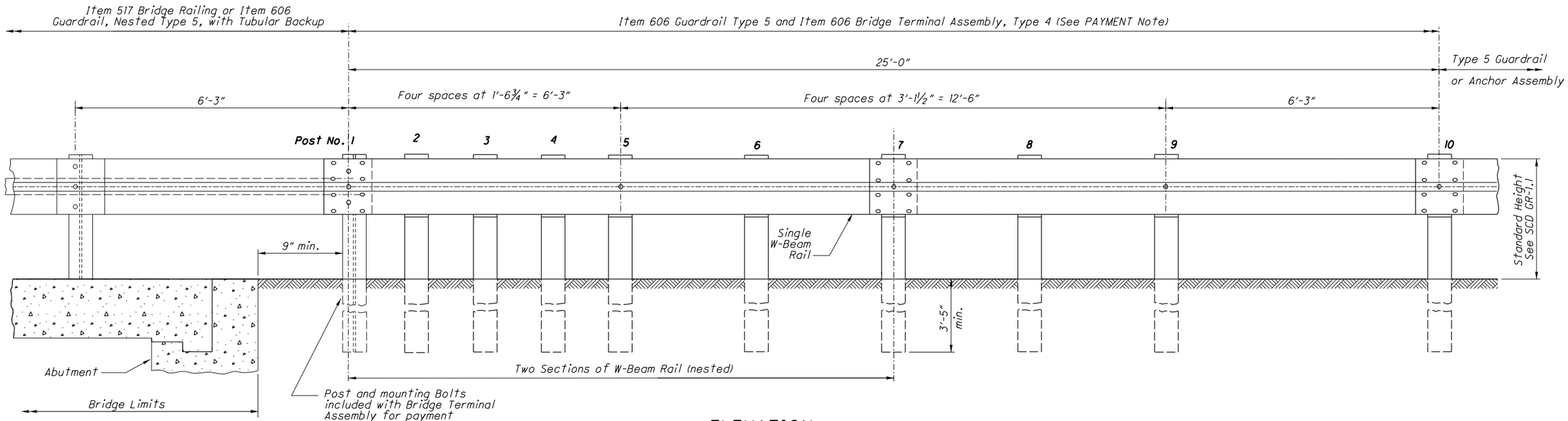
AN ESTIMATED QUANTITY OF 5 EACH HAS BEEN PROVIDED IN THE GENERAL SUMMARY.

DRIVEWAY & PROPERTY ACCESS

ACCESS TO ALL PROPERTIES MUST BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION. DRIVEWAY ACCESS SHALL BE MAINTAINED BY USE OF EXISTING AND PROPOSED PAVEMENT, BERMS, OR SHOULDERS. THE CONTRACTOR SHALL PROVIDE RESIDENTS AND/OR BUSINESSES WITH A MINIMUM TWENTY-FOUR (24) HOUR NOTICE WHEN ACCESS TO THEIR DRIVEWAYS WILL BE RESTRICTED/CHANGED DUE TO CONSTRUCTION.



PLAN



ELEVATION

NOTES

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

APPLICATION: *The Type 4 Bridge Terminal Assembly shall connect Type 5 Guardrail runs to Type 5 Guardrail with Tubular Backup or to Deep Beam Bridge 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 ¾"x2½". 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* ***SCD GR-1.1*** *for additional Post embedment details. Guardrail is not attached to certian 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* ***SCD 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, Each, *includes the cost of extra components in excess of normal guardrail, such as additional posts and other hardware. The TS 8"x4" spacers and tubular backup rail extending to the first post off the bridge is included with* ***Item 517 - Railing,*** *or* ***Item 606 - Guardrail, Nested Type 5 with Tubular Backup,*** *for payment.*

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.*

OFFICE OF ROADWAY ENGINEERING

DESIGNED XXX REVIEWED XXX

REVISION DATE 1/18/2013 CHECKED CHECKED

PLAN INSERT SHEET

BRIDGE TERMINAL ASSEMBLY, TYPE 4

PIS GR-3.4

1 / 1

13 / 37

SHEET NUM.												PART.			ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
10	11	12	16	17	18	19	20	21	22	23	31	01/STR/ PV	02/NHS/ BR	03/S>2/ PV						
																			ROADWAY	
							123							123	202	23000	123	SY	PAVEMENT REMOVED	
			365		1,441							561		1,245	202	23500	1,806	SY	WEARING COURSE REMOVED	
							337							337	202	30000	337	SF	WALK REMOVED	
							29							29	202	32000	29	FT	CURB REMOVED	
							48							48	202	32500	48	FT	CURB AND GUTTER REMOVED	
						2,537.5						550		1,987.5	202	38000	2,537.5	FT	GUARDRAIL REMOVED	
						14						8		6	202	42000	14	EACH	ANCHOR ASSEMBLY REMOVED, TYPE A	
						2						1		1	202	42040	2	EACH	ANCHOR ASSEMBLY REMOVED, TYPE T	
							7							7	203	10000	7	CY	EXCAVATION	
						27						6		21	209	15000	27	STA	RESHAPING UNDER GUARDRAIL	
			4.53	6.31								5.11		5.73	209	60500	10.84	MILE	LINEAR GRADING	
6.11												4.37		1.74	209	72051	6.11	MILE	PREPARING SUBGRADE FOR SHOULDER PAVING, AS PER PLAN	10
						412.5						412.5			606	15050	412.5	FT	GUARDRAIL, TYPE MGS	
						1,788								1,788	606	15100	1,788	FT	GUARDRAIL, TYPE MGS WITH LONG POSTS	
						75						75			606	17360	75	FT	GUARDRAIL, TYPE MGS, LONG-SPAN	
						7						7			606	26150	7	EACH	ANCHOR ASSEMBLY, MGS TYPE E	
						6						1		5	606	26550	6	EACH	ANCHOR ASSEMBLY, MGS TYPE T	
							39							39	608	10000	39	SF	4" CONCRETE WALK	
							363							363	608	52000	363	SF	CURB RAMP	
							262							262	608	52001	262	SF	CURB RAMP, AS PER PLAN	20
							8							8	608	53020	8	SF	DETECTABLE WARNING	
							48							48	609	12000	48	FT	COMBINATION CURB AND GUTTER, TYPE 2	
							10							10	609	26000	10	FT	CURB, TYPE 6	
							22							22	660	30000	22	SY	SODDING UNSTAKED	
																			EROSION CONTROL	
						1,417						424		993	659	10000	1,417	SY	SEEDING AND MULCHING	
						0.19						0.06		0.13	659	20000	0.19	TON	COMMERCIAL FERTILIZER	
						9						3		6	659	35000	9	MGAL	WATER	
												500		500	832	30000	1,000	EACH	EROSION CONTROL	
																			DRAINAGE	
11														11	611	98630	11	EACH	CATCH BASIN ADJUSTED TO GRADE	
											1	1			611	98634	1	EACH	CATCH BASIN RECONSTRUCTED TO GRADE	
8														8	611	99150	8	EACH	INLET ADJUSTED TO GRADE	
20														20	611	99654	20	EACH	MANHOLE ADJUSTED TO GRADE	
1														1	SPECIAL	61199700	1	EACH	GAS VALVE BOX ADJUSTED TO GRADE	10
																			PAVEMENT	
914												493		421	253	02000	914	CY	PAVEMENT REPAIR	
			18,556	44,289	2,812							35,565		30,092	254	01000	65,657	SY	PAVEMENT PLANING, ASPHALT CONCRETE, 3"	
				1,435								1,435			254	01000	1,435	SY	PAVEMENT PLANING, ASPHALT CONCRETE, 4"	
			5,074	6,405	546							5,259		6,766	407	20000	12,025	GAL	NON-TRACKING TACK COAT	
	20		1,339	1,273								1,043		1,589	424	12000	2,632	CY	FINE GRADED POLYMER ASPHALT CONCRETE, TYPE B	
					120							15		105	441	50000	120	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG64-22	
	24		1,031	2,460	185							2,023		1,677	441	50300	3,700	CY	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (448)	
	1			120								121			442	20201	121	CY	ASPHALT CONCRETE INTERMEDIATE COURSE, 19 MM, TYPE A (448), AS PER PLAN PG(70-22M)	10
			237	622								505		354	617	10100	859	CY	COMPACTED AGGREGATE	
			2,553	2,753								2,236		3,070	875	10000	5,306	LB	LONGITUDINAL JOINT ADHESIVE	
			28,468											28,468	897	01010	28,468	SY	PAVEMENT PLANING, ASPHALT CONCRETE, CLASS A, 1"	

CALCULATED TLM
CHECKED JMF

GENERAL SUMMARY

LUC-64-2.68

SHEET NUM.												PART.			ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
10	11	12	16	17	18	19	20	21	22	23	31	01/STR/ PV	02/NHS/ BR	03/S>2/ PV						
																			WATER WORK	
22														22	638	10800	22	EACH	VALVE BOX ADJUSTED TO GRADE	
																			TRAFFIC CONTROL	
								123		275		275		123	621	00100	398	EACH	RPM	
								140		140		140		140	621	54000	280	EACH	RAISED PAVEMENT MARKER REMOVED	
						36						11		25	626	00100	36	EACH	BARRIER REFLECTOR	
										100				100	630	03101	100	FT	GROUND MOUNTED SUPPORT, NO. 3 POST, AS PER PLAN	11
										44				44	630	80100	44	SF	SIGN, FLAT SHEET	
										44				44	630	81100	44	SF	SIGN ERECTED, FLAT SHEET	
										4				4	630	84900	4	EACH	REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL	
										4				4	630	86002	4	EACH	REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL	
								5.84		3.72		3.72		5.84	642	00094	9.56	MILE	EDGE LINE, 6"	
								3.38		1.86		1.86		3.38	642	00290	5.24	MILE	CENTER LINE	
								41						41	644	00400	41	FT	CHANNELIZING LINE, 8"	
								156		48		48		156	644	00500	204	FT	STOP LINE	
								1,074	888					1,962	644	00601	1,962	FT	CROSSWALK LINE, AS PER PLAN	11
									2					2	644	01100	2	EACH	SCHOOL SYMBOL MARKING, 72"	
									2,594					2,594	644	01200	2,594	FT	PARKING LOT STALL MARKING	
									2					2	644	01300	2	EACH	LANE ARROW	
									374					374	644	01500	374	FT	DOTTED LINE, 4"	
									1					1	644	01600	1	EACH	HANDICAP SYMBOL MARKING	
												LS			SPECIAL	69098400	LS		WEATHER MONITORING SENSOR	11
																			STRUCTURE REPAIR (LUC-64-0230)	
																			FOR BRIDGE QUANTITIES, SHEET SHEET NO. 35	
																			STRUCTURE REPAIR (LUC-64-0394)	
																			FOR BRIDGE QUANTITIES, SHEET SHEET NO. 36	
																			MAINTENANCE OF TRAFFIC	
		70										20		50	614	12460	70	EACH	WORK ZONE MARKING SIGN	
		5										2		3	614	12500	5	EACH	REPLACEMENT SIGN	
		5										2		3	614	12600	5	EACH	REPLACEMENT DRUM	
		14.41										7.65		6.76	614	21400	14.41	MILE	WORK ZONE CENTER LINE, CLASS II	
		82												82	614	23000	82	FT	WORK ZONE CHANNELIZING LINE, CLASS I	
		456										144		312	614	26610	456	FT	WORK ZONE STOP LINE, CLASS III, 642 PAINT	
																			INCIDENTALS	
												LS		LS	614	11000	LS		MAINTAINING TRAFFIC	
												LS		LS	623	10000	LS		CONSTRUCTION LAYOUT STAKES AND SURVEYING	
												LS		LS	624	10000	LS		MOBILIZATION	

CALCULATED TLM
CHECKED JMF

GENERAL SUMMARY

LUC-64-2.68

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ROUTE	STATION TO STATION		SIDE	LENGTH L	AVERAGE ROADWAY WIDTH W	AVERAGE LEFT SHOULDER WIDTH W1	AVERAGE RIGHT SHOULDER WIDTH W2	SURFACE AREA A A=Lx(W1+W2+W3) * CALCULATED BY CADD	202 WEARING COURSE REMOVED	254 3" PAVEMENT PLANING, ASPHALT CONCRETE A / 9	254 4" PAVEMENT PLANING, ASPHALT CONCRETE A / 9	209 LINEAR GRADING	407 NON-TRACKING TACK COAT (0.055 GAL/SQ YD) (A / 9) x 0.085	407 NON-TRACKING TACK COAT (0.085 GAL/SQ YD) (A / 9) x 0.055	424 1" FINE GRADED POLYMER ASPHALT CONCRETE, TYPE B (A x 1") / 27	441 1" ASPHALT CONCRETE SURFACE COURSE, TYPE 1 (448) PG(64-22) (A x 1") / 27	441 2" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2 (448) (A x 1.75") / 27	442 3" ASPHALT CONRETE INTERMEDIATE COURSE, 19MM, TYPE A (448), APP (A x 1.75") / 27		617 COMPACTED AGGREGATE ((1" x 2') / 27) x 2	875 LONGITUDINAL JOINT ADHESIVE	897 1" PAVEMENT PLANING, ASPH CONC, CLASS A,
									SQ YD	SQ YD	SQ YD	MILE	GALLON	GALLON	CU YD	CU YD	CU YD	CU YD		CU YD	POUND	SQ YD
S.R. 64	135+47	135+82	LT/RT	35	21	2.5	2.5	910	101			0.02	9		3					1	6	
S.R. 64	135+82	189+32	LT/RT	5350	21	2.5	2.5	139100				2.03	1314		430					67	892	15456
S.R. 64	189+32	189+67	LT/RT	35	21	2.5	2.5	910	101			0.02	9		3					1	6	
S.R. 64	206+07	206+36	LT/RT	29	23	6.5	6.5	1044	116			0.02	10		4					1	5	
STR. LUC-64-0394 SEE SHEET NO. 37 FOR WORK																						
S.R. 64	207+69	207+73	LT/RT	4	23	6.5	4	240 *				0.01	3		1					1	1	27
S.R. 64	207+73	207+90	LT/RT	17	23	3	3.5	451 *				0.01	5		2					1	3	50
S.R. 64	207+90	208+97	LT/RT	107	22	2.5	2.5	2978 *				0.05	29		10					2	18	331
S.R. 64	208+97	209+18	LT/RT	21	22	2	2	493 *				0.01	5		2					1	4	55
S.R. 64	209+18	210+21	LT/RT	103	22	1.5	1.5	2459 *				0.02	24		8					1	18	273
S.R. 64	210+21	211+98	LT/RT	177	22	1	1	4382 *					42		14						30	487
S.R. 64	211+98	212+95	LT/RT	97	21	1.5	1.5	2817 *					27		9						17	313
S.R. 64	212+95	219+48	LT/RT	653	21	2	2	16325				0.25	155		51					9	109	1814
S.R. 64	219+48	220+02	LT/RT	54	21	8	2	1674				0.03	16		6					1	9	186
S.R. 64	220+02	224+19	LT/RT	417	21	14	2	15429				0.08	146		48					3	70	1714
S.R. 64	224+19	224+76	LT/RT	57	21	8	2	1767				0.03	17		6					1	10	196
S.R. 64	224+76	243+85	LT/RT	1909	21	2	2	47725				0.37	451		148					12	319	5303
S.R. 64	243+85	245+49	LT/RT	164	21	2.5	2	4182				0.07	40		13					3	28	465
S.R. 64	245+49	246+14	LT/RT	65	21	2.5	2	1657.5				0.03	16		6					1	11	184
S.R. 64	246+14	251+95	LT/RT	581	21	2	2	14525				0.23	138		45					8	97	1614
S.R. 64	251+95	252+12	LT/RT	17	21	2	2	425	47			0.01	5		2					1	3	
S.R. 64	252+12	252+18	LT/RT	6	21	2	2	150		17		0.01	2	1	1		1			1	1	
S.R. 64	252+18	252+51	LT/RT	33	21	3.5	2	874.5		97		0.02	9	5	3		5			2	6	
S.R. 64	252+51	252+91	LT/RT	40	21	7	4.5	1300		144		0.02	13	8	5		8			2	7	
S.R. 64	252+91	253+17	LT/RT	26	21	9	8	988		110		0.01	10	6	4		6			1	5	
S.R. 64	253+17	253+72	LT/RT	55	40			2200		244			21	13	7		14				10	
S.R. 64	253+72	254+13	LT/RT	41				1309 *		145			13	8	5		8				7	
S.R. 64	254+13	257+85	LT/RT	372	40			14880		1653			141	91	46		92				62	
S.R. 64	257+85	259+36	LT/RT	151				6160 *		684			59	38	20		38				26	
S.R. 64	259+36	261+41	LT/RT	205	44			9020		1002			86	55	28		56				35	
S.R. 64	261+41	263+11	LT/RT	170				5631 *		626			54	34	18		35				29	
S.R. 64	263+11	263+97	LT/RT	86	28			2408		268			23	15	8		15				15	
S.R. 64	263+97	265+16	LT/RT	119				3513 *		390			34	21	11		22				20	
S.R. 64	265+16	267+20	LT/RT	204	44			8976		997			85	55	28		55				34	
S.R. 64	267+20	268+58	LT/RT	138				4226 *		470			40	26	14		26				23	
S.R. 64	268+58	273+25	LT/RT	467	44			20548		2283			195	126	64		127				78	
S.R. 64	273+25	274+57	LT/RT	132				5537 *		615			53	34	18		34				22	
S.R. 64	274+57	276+32	LT/RT	175	24.5	3		4812.5		535		0.04	46	29	15		30			4	30	
S.R. 64	276+32	278+58	LT/RT	226	22	2	2	5876		653		0.09	56	36	19		36			9	38	
S.R. 64	278+58	280+26	LT/RT	168	24	2	2	4704		523		0.07	45	29	15		29			7	28	
S.R. 64	280+26	289+51	LT/RT	925	22	2	2	24050		2672		0.36	228	147	75		148			35	155	
S.R. 64	289+51	289+81	LT/RT	30	21	5	2	840		93		0.02	8	5	3		5			2	5	
S.R. 64	289+81	290+79	LT/RT	98	21	2	2	2450		272		0.04	24	15	8		15			4	17	
S.R. 64	290+79	291+01	LT/RT	22	21	2	6	638		71		0.01	7	4	2		4			1	4	
S.R. 64	291+01	305+38	LT/RT	1437	21	2	2	35925		3992		0.55	340	220	111		222			54	240	
(03/3)2/PV FUNDING) TOTALS CARRIED TO GENERAL SUMMARY									365	18556	0	4.53	5074		1339	0	1031	0		237	2553	28468

CALCULATED TLM
CHECKED JMF

PAVEMENT CALCULATIONS

LUC-64-2.68

PAVEMENT CALCULATIONS

CALCULATED TLM
CHECKED JMF

ROUTE	STATION TO STATION		SIDE	LENGTH L	AVERAGE ROADWAY WIDTH W	AVERAGE LEFT SHOULDER WIDTH W1	AVERAGE RIGHT SHOULDER WIDTH W2	SURFACE AREA A A=Lx(W1+W2+W3) * CALCULATED BY CADD	202 WEARING COURSE REMOVED SQ YD	254 3" PAVEMENT PLANING, ASPHALT CONCRETE A / 9 SQ YD	254 4" PAVEMENT PLANING, ASPHALT CONCRETE A / 9 SQ YD	209 LINEAR GRADING MILE	407 NON-TRACKING TACK COAT (0.055 GAL/SQ YD) (A / 9) x 0.085 GALLON	407 NON-TRACKING TACK COAT (0.085 GAL/SQ YD) (A / 9) x 0.055 GALLON	424 1" FINE GRADED POLYMER ASPHALT CONCRETE, TYPE B CU YD	441 1" ASPHALT CONCRETE SURFACE COURSE, TYPE 1 (448) PG(64-22) (A x 1") / 27 CU YD	441 2" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2 (448) (A x 1.75") / 27 CU YD	442 3" ASPHALT CONRETE INTERMEDIATE COURSE, 19MM, TYPE A (448), APP (A x 1.75") / 27 CU YD		617 COMPACTED AGGREGATE ((3.25" x 2') / 27) x 2 CU YD	618 EDGE LINE, RUMBLE STRIPE (ASPHALT CONCRETE) MILE	897 1" PAVEMENT PLANING, ASPH CONC, CLASS A, SQ YD
S.R. 64	305+38	307+78	LT/RT	240	21	2	2	6000		667		0.10	57	37	19		37			9	0.09	
S.R. 64	307+78	308+26	LT/RT	48	21	5	5	1488		165		0.02	15	9	5		9			2	0.02	
S.R. 64	308+26	308+72	LT/RT	46	21	8	8	1702		189		0.02	17	10	6		11			2	0.02	
S.R. 64	308+72	309+30	LT/RT	58	21	5	5	1798		200		0.03	17	11	6		11			3	0.02	
S.R. 64	309+30	336+31	LT/RT	2701	21	2	2	67525		7503		1.03	638	413	208		417			101	1.02	
(03/32/PV FUNDING) TOTALS CARRIED TO GENERAL SUMMARY									0	8724	0	1.20	1224		244	0	485	0		117	1.17	0
S.R. 64	336+31	418+95	LT/RT	8264	21	2	2	206600		22956		3.14	1951	1263	638		1275			307	3.13	
S.R. 64	418+95	420+40	LT/RT	145	21	2	3	3770		419		0.06	36	23	12		23			6	0.05	
S.R. 64	420+40	443+22	LT/RT	2282	21	2	2	57050		6339		0.87	539	349	176		352			85	0.86	
S.R. 64	443+22	443+89	LT/RT	67	21	2	1.5	1641.5		182		0.03	16	10	5		10			3	0.03	
S.R. 64	443+89	465+15	LT/RT	2126	21	2	1	51024		5669		0.81	482	312	157		315			79	0.81	
S.R. 64	465+15	468+65	LT/RT	350	21	2	1	8400			933	0.14	79	51	26			78		18	0.13	
S.R. 64	468+65	468+71	LT/RT	6	21	2	2.5	153			17	0.01	1	1	1			1		1		
S.R. 64	468+71	469+78	LT/RT	107	21	2	4	2889			321	0.05	27	18	9			27		6	0.04	
S.R. 64	469+78	470+15	LT/RT	37	21			1472 *			164		14	9	5			14				
(01/STR/PV FUNDING) TOTALS CARRIED TO GENERAL SUMMARY									0	35565	1435	5.11	5181		1029	0	1975	120		505	5.05	0

LUC-64-2.68

ROUTE	LOCATION	STATION	SIDE	LENGTH L	MOUTH	THROAT		SURFACE AREA CALCULATED BY CADD	202 WEARING COURSE REMOVED	254 3" PAVEMENT PLANING, ASPHALT CONCRETE A / 9		407 NON-TRACKING TACK COAT (0.055 GAL/SQ YD) (A / 9) x 0.085	441 1" ASPHALT CONCRETE SURFACE COURSE, TYPE 1 (448) PG(64-22) (A x 1") / 27	441 2" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2 (448) (A x 1.75") / 27						
									SQ YD	SQ YD		GALLON	CU YD	CU YD						
S.R. 64	NOWARD RD.	156+25	LT	29	92	19		1152	128			11	4							
S.R. 64	DRIVE	173+50	LT	6	55	38		264	29			2	1							
S.R. 64	CEMETARY RD.	212+25	RT	52	130	41		3168	352			30	10							
S.R. 64	WHITEHOUSE SQUARE BLVD	222+10	LT	36	128	51		2481	276			23	8							
S.R. 64	INDIANAPOLIS AVE.	245+75	RT	18	77	30		853	95			8	3							
S.R. 64	GILEAD ST.	253+50	LT	15	84	25		605		67		6	2	4						
S.R. 64	GILEAD ST.	253+50	RT	15	59	28		621		69		6	2	4						
S.R. 64	PROVIDENCE ST.	258+65	LT	15	68	47		706		78		7	2	4						
S.R. 64	WATERVILLE ST.	258+65	LT	15	70	40		551		61		5	2	3						
S.R. 64	LUCAS ST.	262+00	RT	27	63	34		1189		132		11	4	7						
S.R. 64	ST. LOUIS AVE.	262+75	LT	15	83	26		763		85		7	2	5						
S.R. 64	ST. LOUIS AVE.	262+75	RT	16	68	28		628		70		6	2	4						
S.R. 64	TOLEDO AVE.	264+50	LT	19	69	27		1007		112		10	3	6						
S.R. 64	TOLEDO AVE.	264+50	RT	22	72	26		1037		115		10	3	6						
S.R. 64	MAUMEE ST.	267+80	LT	15	65	26		836		93		8	3	5						
S.R. 64	MAUMEE ST.	267+80	RT	20	70	26		974		108		9	3	6						
S.R. 64	SHEPLER AVE.	273+93	RT	30	83	32		1156		128		11	4	7						
S.R. 64	LENDERVILLE AVE.	273+93	RT	30	35	31		1272		141		12	4	8						
S.R. 64	TEXAS ST.	276+00	RT	19	73	50		1033		115		10	3	6						
S.R. 64	TEXAS ST.	276+00	LT	22	61	21		827		92		8	3	5						
S.R. 64	MERRITT ST.	280+25	LT	30	120	50		1647		183		16	5	10						
S.R. 64	NORTH ST.	283+50	LT	32	99	33		1615		179		15	5	10						
S.R. 64	TEMPERANCE ST.	285+75	LT	22	111	32		1109		123		10	3	7						
S.R. 64	OAK BROOK DR.	296+75	LT	30	114	27		1369		152		13	4	8						
S.R. 64	INDUSTRIAL PKWY.	296+75	RT	58	145	32		3784		420		36	12	23						
S.R. 64	S.R. 295	335+75	LT	23	83	30		1103		123		10	3	7						
S.R. 64	S.R. 295	335+75	RT	30	104	30		1492		166		14	5	9						
(03/3)2/PV FUNDING) TOTALS CARRIED TO GENERAL SUMMARY									880	2812		468	105	154						
S.R. 64	WILKINS RD.	377+64	RT	30	89	27		1451	161			14	4	9						
S.R. 64	OSTRICH LN.	390+50	RT	16	51	16		462	51			4	1	3						
S.R. 64	JEFFERS RD.	417+12	LT	28	90	23		1267	141			12	4	8						
S.R. 64	JEFFERS RD.	417+12	RT	20	80	24		882	98			8	3	5						
S.R. 64	MANORE RD.	443+53	LT	13	55	22		443	49			4	1	3						
S.R. 64	MANORE RD.	443+53	RT	21	49	18		549	61			5	2	3						
(01/STR/PV FUNDING) TOTALS CARRIED TO GENERAL SUMMARY									561	0		78	15	31						

CALCULATED TLM
CHECKED JMF

EXTRA AREAS & DEDUCTIONS

LUC-64-2.68

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REF. NO.	SHEET NO.	STATION TO STATION		SIDE	202 GUARDRAIL REMOVED	202 ANCHOR ASSEMBLY REMOVED, TYPE A	202 ANCHOR ASSEMBLY REMOVED, TYPE T		209 RESHAPING UNDER GUARDRAIL				606 GUARDRAIL, TYPE MGS	606 GUARDRAIL, TYPE MGS WITH LONG POSTS	606 GUARDRAIL, TYPE MGS, LONG-SPAN	606 ANCHOR ASSEMBLY, TYPE E	606 ANCHOR ASSEMBLY, TYPE T					626 BARRIER REFLECTOR			
					FT	EACH	EACH		STA				FT	FT	FT	EACH	EACH					EACH			
GR-1	24	170+46	173+31	LT	300.00	2			3					262.50			2					5			
GR-2	25	173+73	178+14	LT	450.00	2			5					425.00			2					7			
GR-3	25	178+43	189+65	LT	1125.00		1		12					1100.00			1					13			
GR-4	29-30	278+64	279+83	LT	112.50	2			1																
(03/3>2/PV FUNDING) TOTALS					1987.5	6	1		21				0.00	1788	0	0	5					25			
GR-5	33	362+53	364+79	LT	200.00	2			2				125.00			2						3			
GR-6	33	362+19	364+25	RT	137.50	2			2				162.50			2						3			
GR-7	34	411+75	412+27	LT	112.50	1	1		1				62.50		37.5	1	1					3			
GR-8	34	411+75	412+31	RT	100.00	2			1				62.50		37.5	2						2			
(01/STR/PV FUNDING) TOTALS					550.00	7	1		6				412.50	0	75	7	1					11			
TOTALS CARRED TO GENERAL SUMMARY					2537.5	13	2		27				412.50	1788	75	7	6					36			

NOTE: CONTRACTOR MUST CALL OUPS TO LOCATE UTILITIES IN VICINITY OF ANY GUARDRAIL RUN

NOTE: CAUTION SHALL BE USED WHEN PLACING PROPOSED GUARDRAIL, AS TO AVOID DAMAGING ANY EXISTING DRAINAGE (PIPES, CULVERTS, ETC.) WITHIN THE WORK AREA OF ANY RUN OF GUARDRAIL.

THE CONTRACTOR SHALL EXERCISE CAUTION WHEN WORKING IN THE PROXIMITY OF ANY UNDERGROUND UTILITIES. ALL EXISTING UNDERGROUND UTILITIES SHALL REMAIN ACTIVE AND IN PLACE DURING CONSTRUCTION OF ANY GUARDRAIL RUN, UNLESS OTHERWISE NOTED IN THE PLAN.

CAUTION MUST BE USED WHEN REMOVING AND REPLACING GUARDRAIL AS TO MAINTAIN THE EXISTING SHOULDERS AND EMBANKMENT.

THE FOLLOWING ITEMS ARE TO BE USED AS DIRECTED BY THE ENGINEER. THE ESTIMATED QUANTITIES WILL BE CARRIED TO THE GENERAL SUMMARY AND ARE TO BE USED FOR PROPOSED GUARDRAIL RUNS:

01/S>2/PV FUNDING :

ITEM 659	424	SQ. YD.	SEEDING AND MULCHING
ITEM 659	0.06	TON	COMMERCIAL FERTILIZER
ITEM 659	3	MGAL	WATER

03/STR/PV FUNDING :

ITEM 659	993	SQ. YD.	SEEDING AND MULCHING
ITEM 659	0.13	TON	COMMERCIAL FERTILIZER
ITEM 659	6	MGAL	WATER

CALCULATED TLM CHECKED JMF

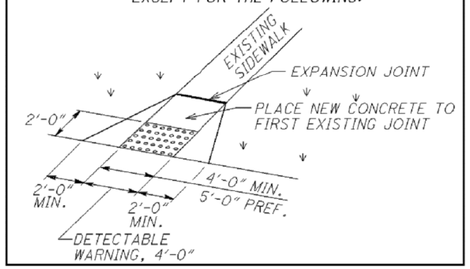
GUARDRAIL CALCULATIONS

LUC-64-2.68

SHEET	REF.	STATION	NEAREST CROSS STREET NAME	SIDE	202 PAVEMENTT REMOVED, ASPHALT	202 WALK REMOVED	202 CURB REMOVED	202 CURB AND GUTTER REMOVED	203 EXCAVATION		608 4" CONCRETE WALK	608 CURB RAMP	608 CURB RAMP, AS PER PLAN	608 DETECTABLE WARNING	609 CURB, TYPE 6	609 CURB AND GUTTER	660 SODDING UNSTAKED
					SQ FT	SQ FT	FT	FT	CU YD		SQ FT	SQ FT	SQ FT	SQ FT	FT	FT	SQ YD
27	CR-1	253+25	GILEAD ST.	RT										8			
27	CR-2	253+27	GILEAD ST.	LT	51		13					51					
29	CR-3	275+69	TEXAS ST.	RT		72	12		0.1		14	53			10		17
29	CR-4	275+82	TEXAS ST.	LT		49			0.5		19		45				
29	CR-5	276+13	TEXAS ST.	LT	47				0.1				41				1
29	CR-6	276+18	TEXAS ST.	LT	25				0.2		6		24				
29	CR-7	276+16	TEXAS ST.	RT								37					
29	CR-8	276+16	TEXAS ST.	RT		17	4					41					
30	CR-9	279+88	MERRITT ST.	LT		36			0.2				42				
30	CR-10	280+39	MERRITT ST.	RT		41		14	0.9			63				14	2
30	CR-11	282+94	NORTH ST.	LT		36			0.3				42				
30	CR-12	283+46	NORTH ST.	RT		49		8	1				68			8	2
30	CR-13	285+56	TEMPERANCE ST.	LT		37		12	0.7			53				12	
30	CR-14	286+00	TEMPERANCE ST.	LT				14	3			65				14	
(03/3›2/PV) TOTALS CARRIED TO GENERAL SUMMARY					123	337	29	48	7		39	363	262	8	10	48	22

CURB RAMP, AS PER PLAN (FLUSH DETAIL)

Existing Sidewalk Level With Street
PER STD. DWG BP-7.1 AND BID ITEM 608
EXCEPT FOR THE FOLLOWING:



CALCULATED TLM
CHECKED JMF

CURB RAMP CALCULATIONS

LUC-64-2.68

TRAFFIC CONTROL CALCULATIONS

REF. NO.	SHEET NO.	LOCATION	STATION OR S.L.M. FROM	STATION OR S.L.M. TO	SIDE	621 RPM YELLOW/ YELLOW	621 RPM WHITE	621 RPM WHITE/ RED	621 RAISED PAVEMENT MARKERS REMOVED	642 EDGE LINE, 6"	642 CENTER LINE DASHED	642 CENTER LINE DASHED SOLID	642 CENTER LINE DOUBLE SOLID	644 CHANNELIZING LINE	644 STOP LINE	644 CROSSWALK, AS PER PLAN		644 SCHOOL MARKING SYMBOL, 72"	644 PARKING LOT STALL MARKING	644 LANE ARROW	644 DOTTED LINE, 4" (YELLOW)	644 HANDICAP SYMBOL MARKING	
						EACH	EACH	EACH	EACH	MILE	MILE	MILE	MILE	FEET	FEET	FEET		EACH	FEET	EACH	FEET	FEET	
	24	S.R. 64	2.68	2.69	℄	62				0.02			0.01										
	24-25	S.R. 64	2.69	3.61	℄					1.84	0.92												
	25-26	S.R. 64	3.93	4.08	℄					0.30			0.15										
	26	S.R. 64	4.08	4.17	℄					0.18		0.09											
	26	S.R. 64	4.17	4.29	℄					0.24	0.12												
	26	S.R. 64	4.29	4.36	℄					0.14		0.07											
	26-27	S.R. 64	4.36	4.80	℄					0.88			0.44										
	27-29	S.R. 64	4.80	5.19	℄				140				0.39										
	29	S.R. 64	5.19	5.23	℄					0.04			0.04										
	29-31	S.R. 64	5.23	5.69	℄					0.92			0.46										
	29-31	S.R. 64	5.69	5.75	℄					0.12			0.06										
	31	S.R. 64	5.78	5.88	℄					0.20		0.10											
	31	S.R. 64	5.88	6.01	℄	38				0.26	0.13												
	31	S.R. 64	6.01	6.14	℄					0.26		0.13											
	31	S.R. 64	6.14	6.18	℄					0.08	0.04												
	31	S.R. 64	6.18	6.26	℄					0.16		0.08											
	31	S.R. 64	6.26	6.36	℄	7	16			0.20		0.10											
CL-1	24	NOWARD RD.	2.96		LT								0.01										
CL-2	26	CEMETARY RD.	4.02		RT								0.01										
CL-3	29	LENDERSON AVE.	5.19		RT								0.01										
CL-4	31	S.R. 295	6.36										0.01										
CL-5	31	S.R. 295	6.36										0.01										
CH-1	26	CEMETARY RD.	212+34		RT									41									
SB-1	26	CEMETARY RD.	212+21	212+51	RT										43								
SB-2	27	S.R. 64	258+10												15								
SB-3	27	PROVIDNCE ST.	258+45	258+82	LT										17								
SB-4	28	S.R. 64	259+10		LT										19								
SB-5	29	S.R. 64	274+42	274+44	LT										12								
SB-6	31	S.R. 64	335+52	335+54	RT										12								
SB-7	31	S.R. 295	335+67	335+80	LT										14								
SB-8	31	S.R. 295	336+01	336+13	RT										12								
SB-9	31	S.R. 64	336+31	336+33	LT										12								
CW-1	26	WHITEHOUSE BLVD	221+86	222+38	LT											110							
CW-2	27	S.R. 64	245+99	246+13	LT/RT											70							
CW-3	27	GILEAD ST.	253+31	253+58	LT											48							
CW-4	27	GILEAD ST.	253+30	253+62	RT											56							
CW-5	27	S.R. 64	258+14	258+22	LT/RT											56							
CW-6	27	PROVIDENCE ST.			LT											64							
CW-7	27	WATERVILLE ST.			LT											48							
CW-8	28	S.R. 64			LT/RT											72							
CW-9	28	S.R. 64			LT/RT											56							
CW-10	28	LUCAS ST.	261+88	262+30	RT											56							
CW-11	28	ST. LOUIS AVE.	262+41	262+83	LT											56							
CW-12	28	ST. LOUIS AVE.	262+46	262+83	RT											48							
CW-13	28	S.R. 65	263+37	263+51	LT/RT											70							
CW-14	28	TOLEDO AVE.	264+28	264+64	LT											72							
CW-15	28	TOLEDO AVE.	264+32	264+64	RT											64							
CW-28	30	NORTH ST.	282+96	283+38	LT											72							
CW-29	30	TEMPERANCE ST.	285+61	285+93	LT											56							
(03/3>2/PV) TOTALS CARRIED TO GENERAL SUMMARY						123			140	5.84	3.38			41	156	1074		0	0	0	0	0	

LUC-64-2.68

I:\ProjectData\LUC\95750_LUC-64-2.68\Design\Traffic\Sheets\95750_TC001.dgn Sheet 1/25/2017 11:32:14 AM tmaas

REF. NO.	SHEET NO.	LOCATION	STATION OR S.L.M. FROM	STATION OR S.L.M. TO	SIDE	621 RPM YELLOW/YELLOW EACH	621 RPM WHITE EACH	621 RPM WHITE/RED EACH	621 RAISED PAVEMENT MARKERS REMOVED EACH	642 EDGE LINE, 6" MILE	642 CENTER LINE DASHED MILE	642 CENTER LINE DASHED SOLID MILE	642 CENTER LINE DOUBLE SOLID MILE	644 CHANNELIZING LINE FEET	644 STOP LINE FEET	644 CROSSWALK, AS PER PLAN FEET	644	644 SCHOOL MARKING SYMBOL, 72" EACH	644 PARKING LOT STALL MARKING FEET	644 LANE ARROW EACH	644 DOTTED LINE, 4" (YELLOW) FEET	644 HANDICAP SYMBOL MARKING FEET	
CW-16	28	S.R. 65	264+85	264+93	LT/RT											56							
CW-17	28	S.R. 65	267+39	267+47	LT/RT											56							
CW-18	28	MAUMEE ST.	267+70	268+07	LT											72							
CW-19	28	MAUMEE ST.	267+74	268+06	RT											56							
CW-20	28	S.R. 64	268+28	268+36	LT/RT											56							
CW-21	29	S.R. 64	273+74	273+82	LT/RT											72							
CW-22	29	SHEPLER AVE.			RT											80							
CW-23	29	S.R. 64	274+32	274+40	LT/RT											72							
CW-24	29	TEXAS ST.	275+72	276+14	RT											72							
CW-25	29	TEXAS ST.	275+86	276+08	LT											40							
CW-26	29	S.R. 65	276+13	276+21	LT/RT											56							
CW-27	30	MERRITT ST.	279+90	283+38	LT											72							
CW-28	30	NORTH ST.	282+96	283+38	LT											72							
CW-29	30	TEMPERANCE ST.	285+61	285+93	LT											56							
SC-1	29	S.R. 64	275+40		RT													1					
SC-2	30	S.R. 64	280+98		LT													1					
PS-1	27	S.R. 64	254+15	254+63	LT														72				
PS-2	27	S.R. 64	254+15	254+87	RT														104				
PS-3	27	S.R. 64	255+16	255+88	LT														104				
PS-4	27	S.R. 64	255+28	256+48	RT														168				
PS-5	27	S.R. 64	256+20	257+88	LT														232				
PS-6	27	S.R. 64	256+70	256+92	RT														38				
PS-7	27	S.R. 64	257+15	257+37	RT														38				
PS-8	27	S.R. 64	257+56	257+78	RT														38				
PS-9	28	S.R. 64	259+43	259+67	RT														40				
PS-10	28	S.R. 64	259+50	260+86	LT														200				
PS-11	28	S.R. 64	260+77	261+41	RT														96				
PS-12	28	S.R. 64	261+39	261+59	LT														36				
PS-13	28	S.R. 64	265+16	265+82	LT														98				
PS-14	28	S.R. 64	265+16	265+82	RT														98				
PS-15	28	S.R. 64	266+54	267+20	LT														98				
PS-16	28	S.R. 64	266+45	266+85	RT														64				
PS-17	28	S.R. 64	268+58	269+44	LT														126				
PS-18	28	S.R. 64	268+58	269+24	RT														98				
PS-19	29	S.R. 64	270+02	270+68	LT														98				
PS-20	29	S.R. 64	270+02	271+34	RT														188				
PS-21	29	S.R. 64	271+04	271+70	LT														98				
PS-22	29	S.R. 64	271+93	273+25	RT														188				
PS-23	29	S.R. 64	272+59	273+25	LT														98				
LA-1	25	CEMETARY RD.	212+27		RT															1			
LA-2	25	CEMETARY RD.	212+41		RT															1			
PS-1	26	S.R. 64	254+15	254+63	LT														72				
PS-2	26	S.R. 64	254+15	254+87	RT														104				
DL-1	27	S.R. 65	261+83	262+88	℄																102		
DL-2	27	S.R. 65	261+83	262+88	℄																102		
DL-3	29	S.R. 64	279+86	280+70	℄																85		
DL-4	29	S.R. 64	279+86	280+70	℄																85		
HC-1	27	S.R. 64	259+60		LT																	1	
(03/3›2/PV) TOTALS CARRIED TO GENERAL SUMMARY						0			0	0.00	0.00			0	0	888		2	2594	2	374	1	

CALCULATED TLM CHECKED JMF

TRAFFIC CONTROL CALCULATIONS

LUC-64-2.68

REF. NO.	SHEET NO.	LOCATION	STATION OR S.L.M. FROM	STATION OR S.L.M. TO	SIDE	621 RPM YELLOW/YELLOW EACH	621 RPM WHITE EACH	621 RPM WHITE/RED EACH	621 RAISED PAVEMENT MARKERS REMOVED EACH	642 EDGE LINE, 6" MILE	642 CENTER LINE DASHED MILE	642 CENTER LINE DASHED SOLID MILE	642 CENTER LINE DOUBLE SOLID MILE	644 CHANNELIZING LINE FEET	644 STOP LINE FEET	644 CROSSWALK, AS PER PLAN FEET		644 SCHOOL MARKING SYMBOL, 72" EACH	644 PARKING LOT STALL MARKING FEET	644 LANE ARROW EACH	644 DOTTED LINE, 4" (YELLOW) FEET	644 HANDICAP SYMBOL MARKING FEET	
	31	S.R. 64	6.36	6.51		13	16		140	0.30			0.15										
	31-32	S.R. 64	6.51	6.55						0.08		0.04											
	32	S.R. 64	6.55	6.63		61				0.16	0.08												
	32	S.R. 64	6.63	6.73						0.20		0.10											
	32-33	S.R. 64	6.73	7.05						0.64	0.32												
	33-34	S.R. 64	7.05	7.36						0.62		0.31											
	34	S.R. 64	7.36	7.48						0.24	0.12												
	34	S.R. 64	7.48	7.84		52		76		0.72	0.36												
	34	S.R. 64	7.84	7.89		66				0.10	0.05												
	34-35	S.R. 64	7.89	8.02						0.26		0.13											
	35	S.R. 64	8.02	8.85						1.66	0.83												
	35	S.R. 64	8.85	8.90		4	16			0.10	0.05												
	35	S.R. 64	8.90	8.91						0.02		0.01											
SB-11	31	S.R. 64	336+31	336+33	LT										12								
SB-12	35	MANORE RD.	443+40	443+52	LT										12								
SB-13	35	MANORE RD.	443+53	443+65	RT										12								
SB-14	35	S.R. 64	469+82	469+84	RT										12								
(01/STR/PV) TOTALS CARRIED TO GENERAL SUMMARY						**275**			**140**	**3.72**	**1.86**			**0**	**48**	**0**		**0**	**0**	**0**	**0**	**0**	

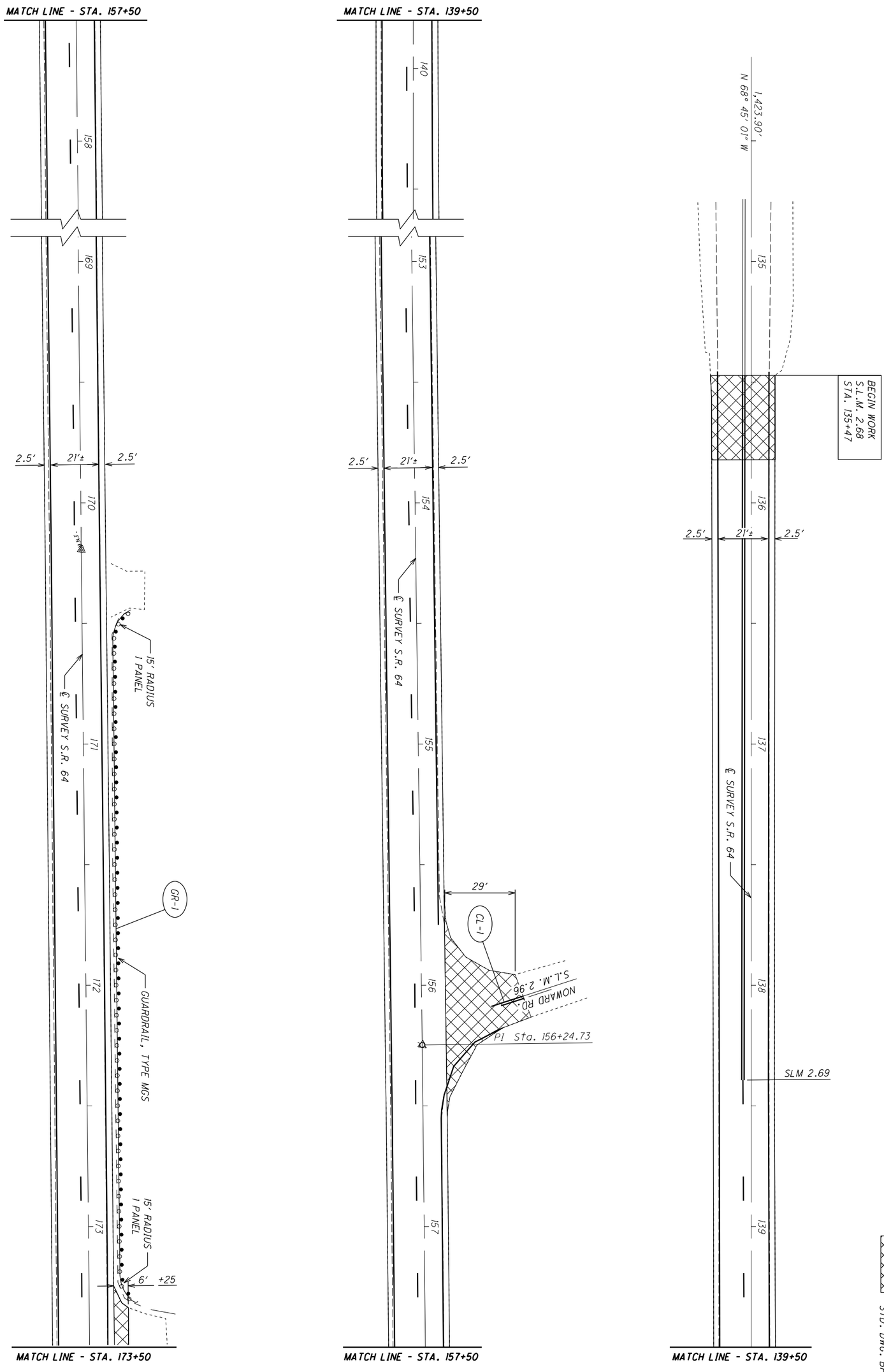
SIGN SUBSUMMARY

REF. NO.	SHEET NO.	LOCATION	STATION	SIDE	CODE	SIZE (INCHES)	630 REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL EACH	630 REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL EACH			630 GROUND MOUNTED SUPPORT, NO. 3 POST, AS PER PLAN FT	630 SIGN, FLAT SHEET SQ FT	630 SIGN ERECTED, FLAT SHEET SQ FT							
SN-1	28	S.R. 64	259+62	LT	R7-8	12x18					13.0	1.50	1.50							
					R7-H8BP	12x6					13.0	0.50	0.50							
SN-2	29	S.R. 64	278+00	LT	W1-1R	30x30					13.0	8.50	8.50							
					W13-1P	18x18					13.0	8.50	8.50							
SN-3	29	S.R. 64	278+55	RT	W1-2R	30x30	1	1												
SN-4	29	S.R. 64	279+45	LT	W1-8L	48x24	1	1												
SN-5	30	S.R. 64	279+45	LT	W1-8L	48x24	1	1												
SN-6	30	S.R. 64	279+45	LT	W1-8L	48x24	1	1												
SN-7	30	S.R. 64	281+22	LT	W1-6R	48x24					11.0/11.0	8.00	8.00							
SN-8	30	S.R. 64	284+00	LT	W1-1L	30x30					13.0	8.50	8.50							
SN-8	30	S.R. 64	284+00	LT	W13-1P	18x18					13.0	8.50	8.50							
(03/STR/PV) TOTALS CARRIED TO GENERAL SUMMARY							**4**	**4**			**100.0**	**44.00**	**44.00**							

CALCULATED TLM CHECKED JMF

TRAFFIC CONTROL & SIGNING CALCULATIONS

LUC-64-2.68

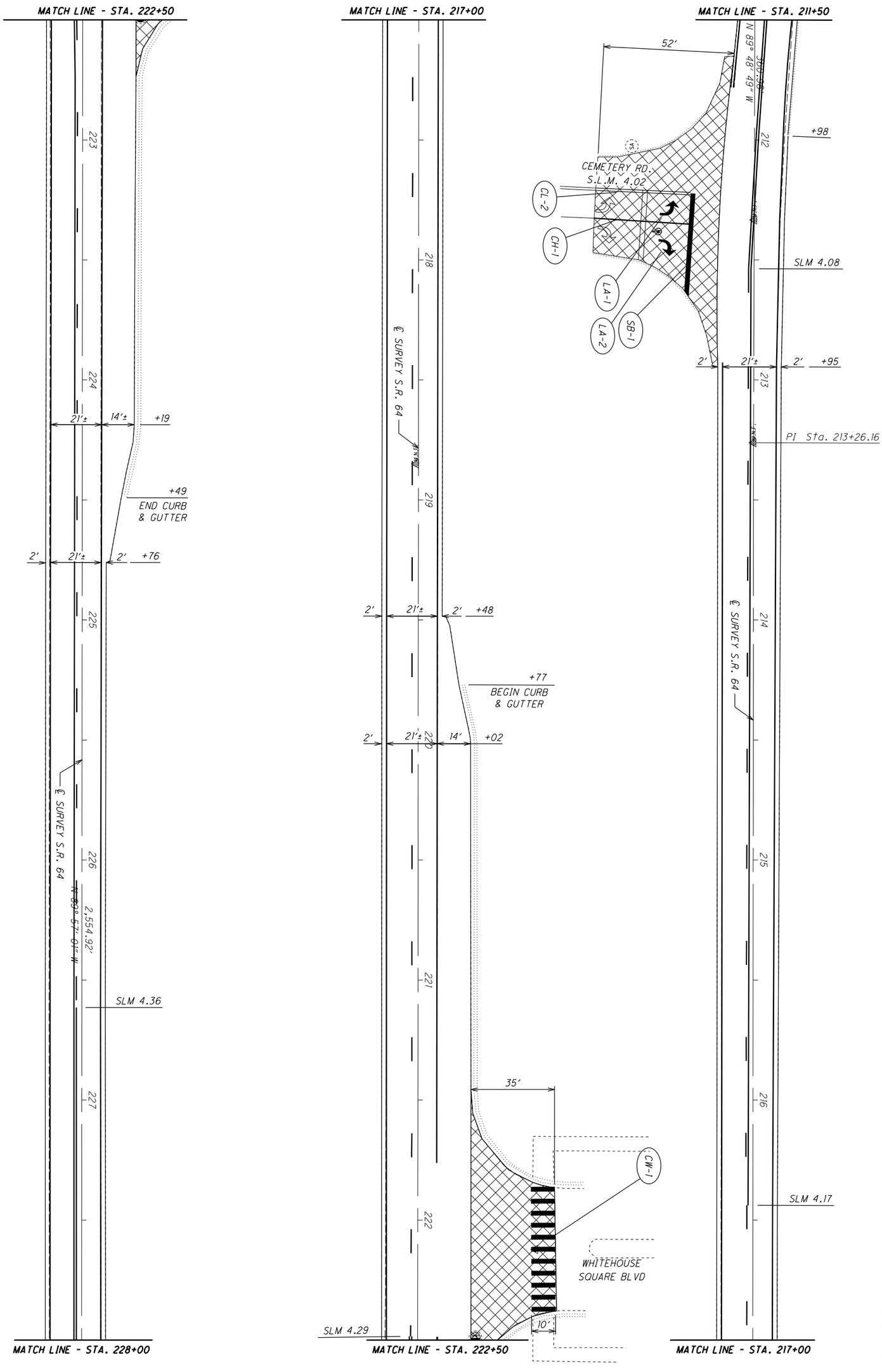

MATCH LINE - STA. 157+50
MATCH LINE - STA. 139+50
158
169
170
171
172
173
153
154
155
156
157
140
135
136
137
138
139
2.5′
21′±
2.5′
℄ SURVEY S.R. 64
15′ RADIUS
1 PANEL
GR-1
GUARDRAIL, TYPE MGS
6′
+25
29′
CL-1
NOWARD RD
S.L.M. 2.96
PI Sta. 156+24.73
N 68° 45′ 01″ W
1,423.90′
BEGIN WORK
S.L.M. 2.68
STA. 135+47
SLM 2.69
MATCH LINE - STA. 173+50
MATCH LINE - STA. 157+50
MATCH LINE - STA. 139+50
= BUTT JOINT AS PER
STD. DWG. BP-3.1.

HORIZONTAL SCALE IN FEET
0 10 20 40

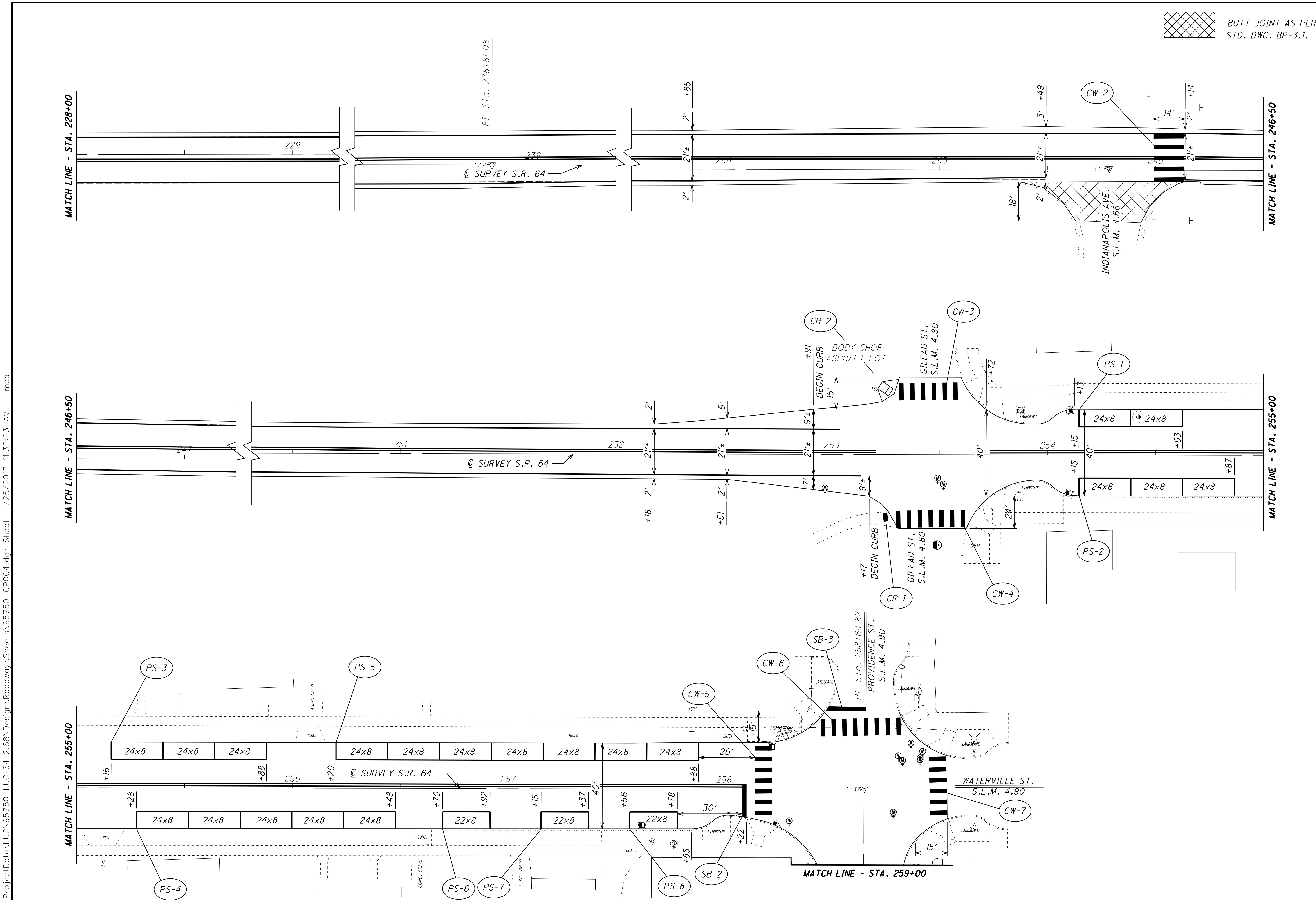
CALCULATED TLM
CHECKED JMF

PLAN SHEET
STA. 173+50 TO STA. 211+50

LUC-64-2.68



= BUTT JOINT AS PER STD. DWG. BP-3.1.



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HORIZONTAL SCALE IN FEET 0 10 20 40

CALCULATED TLM
CHECKED JMF

PLAN SHEET
STA. 228+00 TO STA. 259+00

LUC-64-2.68

HORIZONTAL SCALE IN FEET
0 10 20 40

CALCULATED TLM
CHECKED JMF

PLAN SHEET
STA. 259+00 TO STA. 269+50

LUC-64-2.68

28
37

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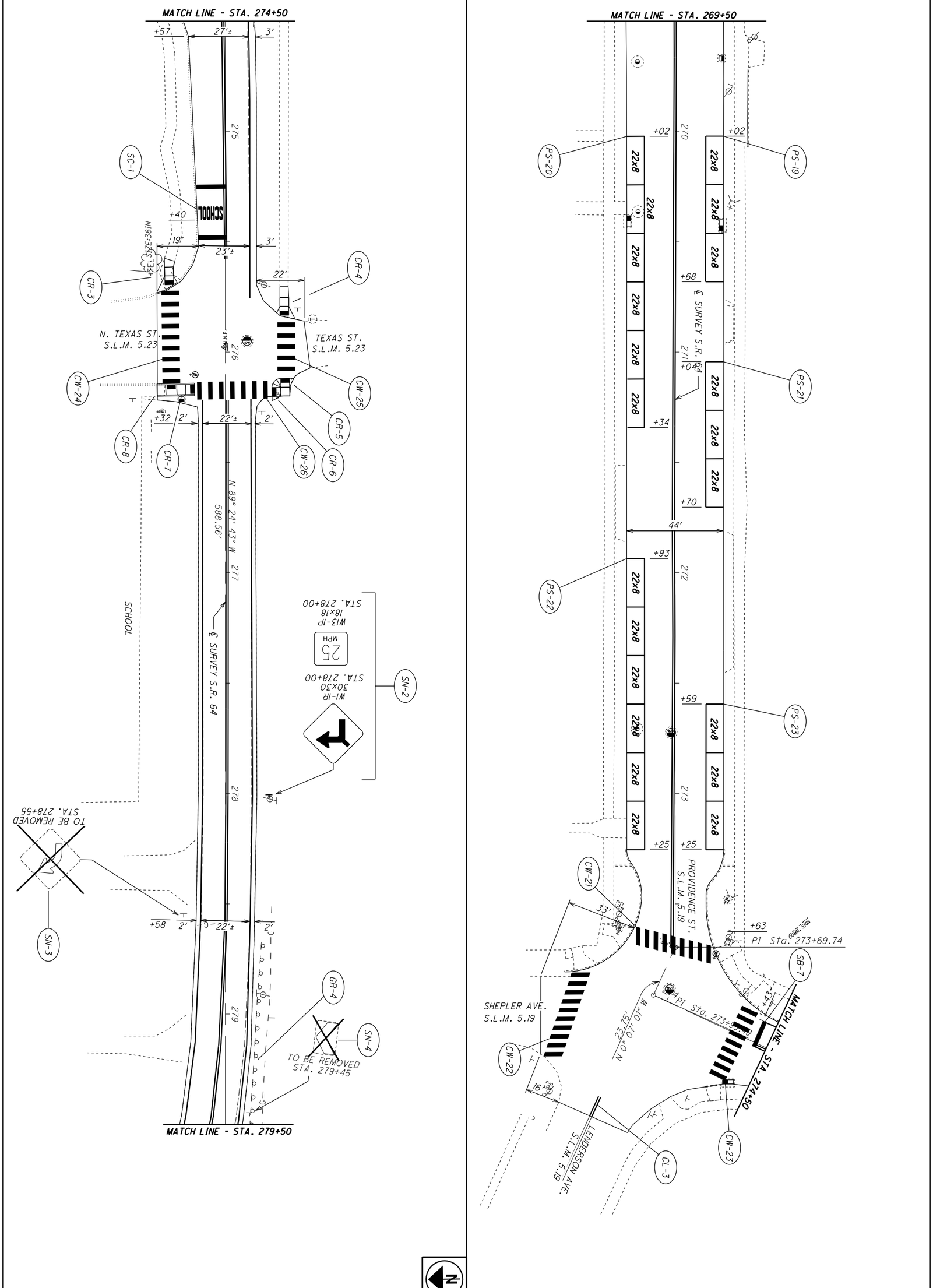

LUC-64-2.68

PLAN SHEET

STA. 269+50 TO STA. 279+50

CALCULATED TLM
CHECKED JMF

0 10 20 40
HORIZONTAL SCALE IN FEET

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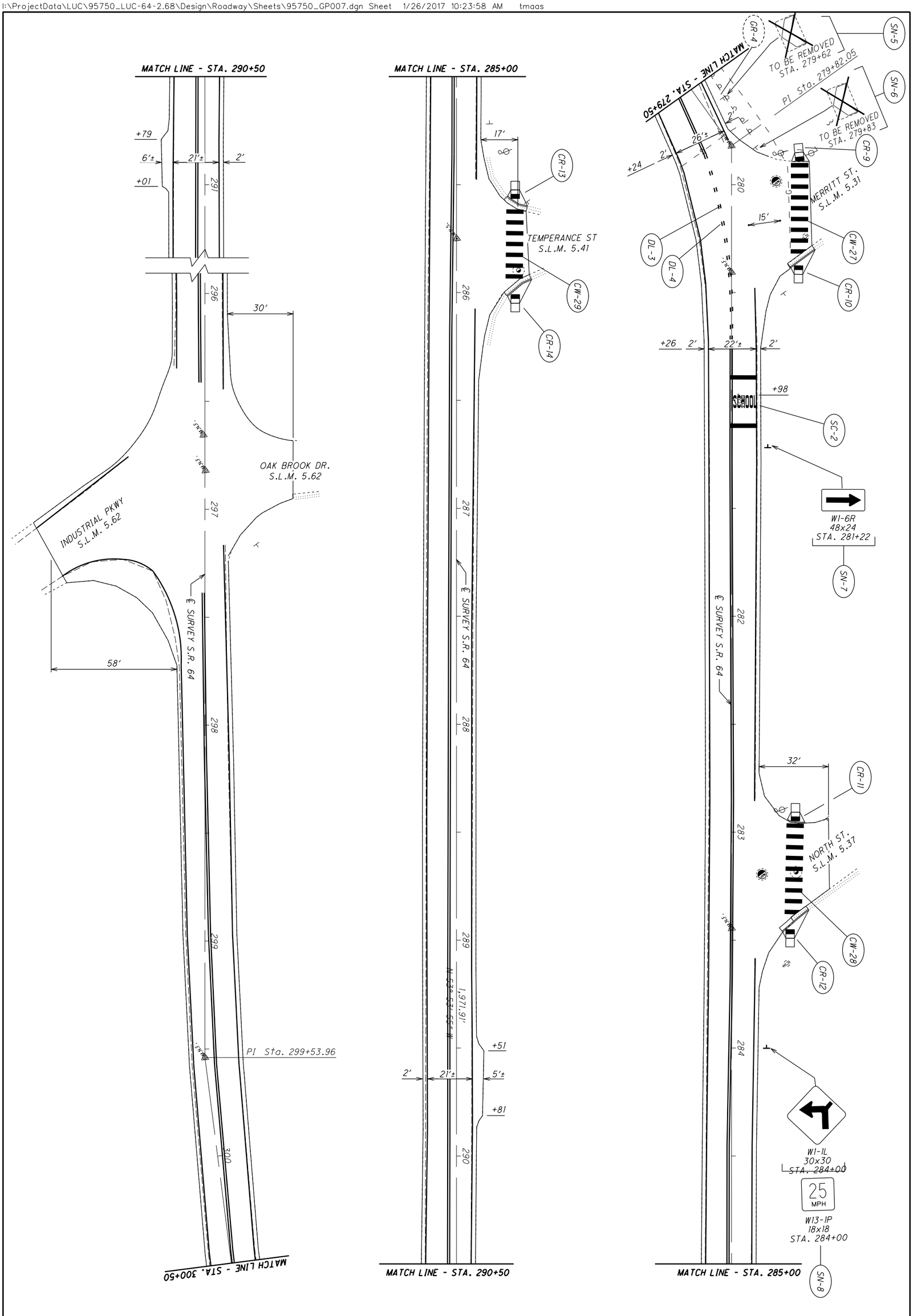
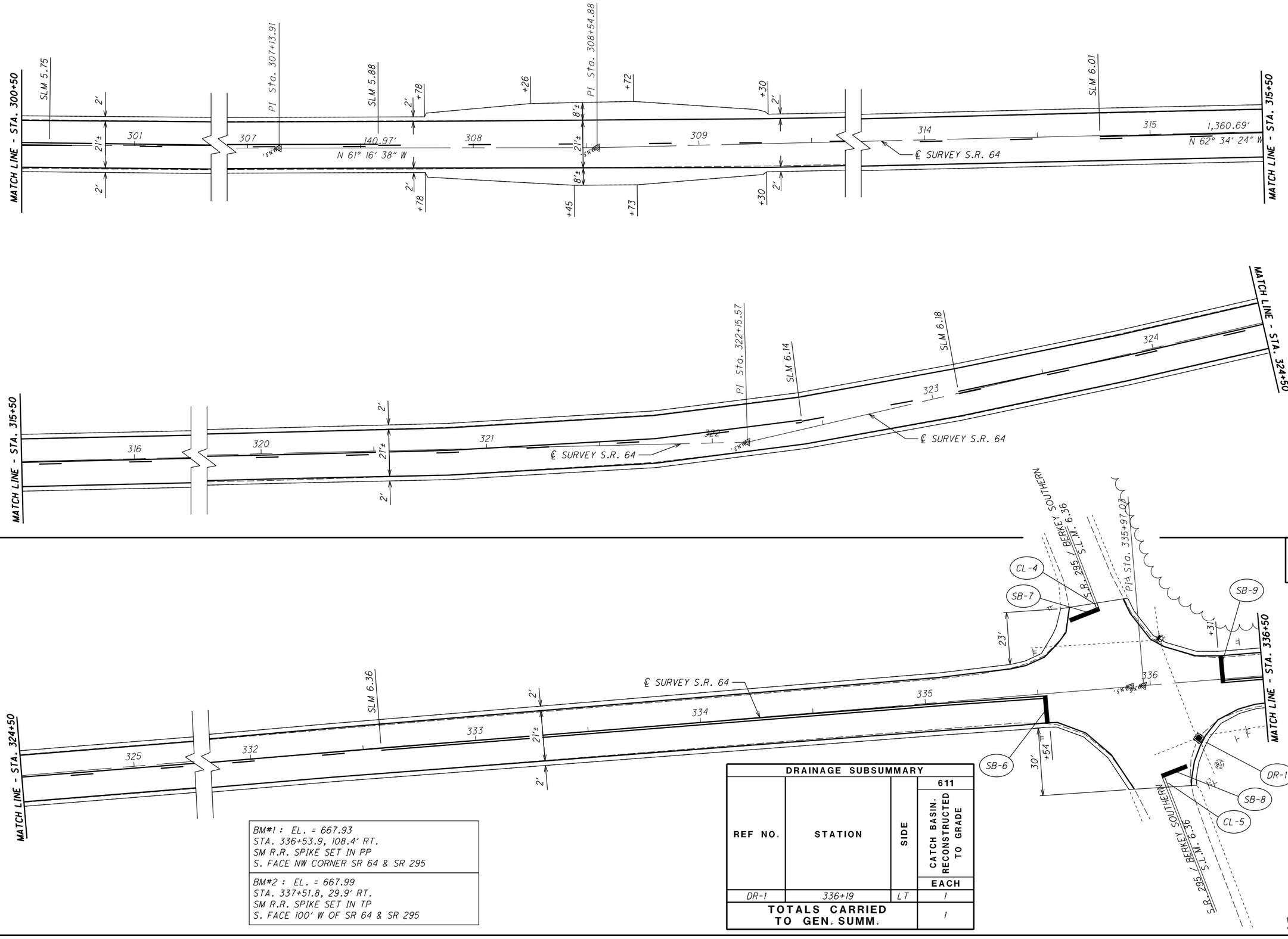


30 / 37	**LUC-64-2.68**	**PLAN SHEET** **STA. 279+50 TO STA. 300+50**	CALCULATED TLM CHECKED JMF	0 10 20 40 HORIZONTAL SCALE IN FEET



BM#1 : EL. = 667.93
STA. 336+53.9, 108.4' RT.
SM R.R. SPIKE SET IN PP
S. FACE NW CORNER SR 64 & SR 295

BM#2 : EL. = 667.99
STA. 337+51.8, 29.9' RT.
SM R.R. SPIKE SET IN TP
S. FACE 100' W OF SR 64 & SR 295

DRAINAGE SUBSUMMARY

REF NO.	STATION	SIDE	611 CATCH BASIN, RECONSTRUCTED TO GRADE EACH
DR-1	336+19	LT	1
TOTALS CARRIED TO GEN. SUMM.			1

HORIZONTAL SCALE IN FEET
0 10 20 40

CALCULATED TLM
CHECKED JMF

PLAN SHEET
STA. 300+50 TO STA. 336+50

LUC-64-2.68

31
37

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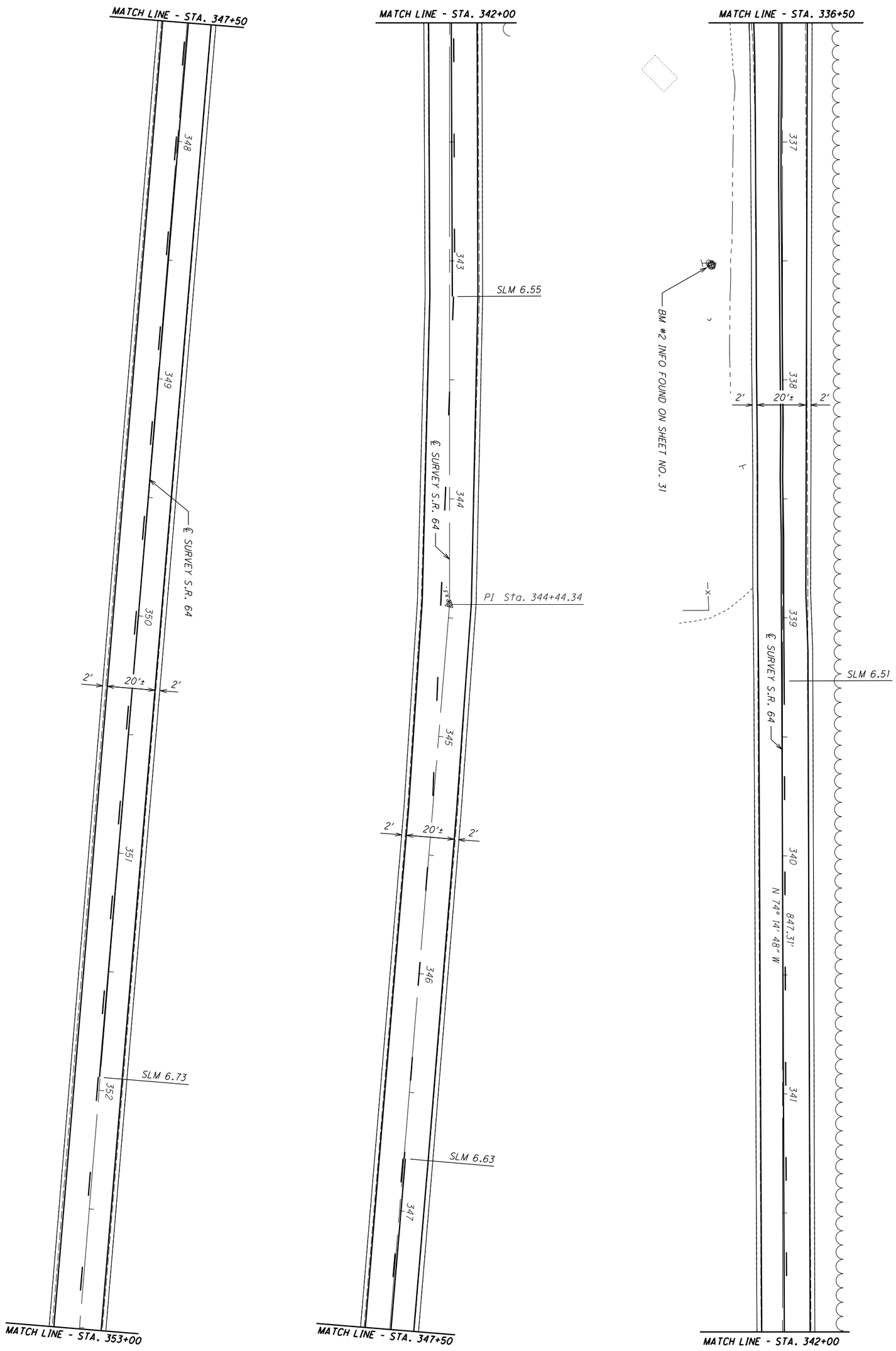

32 / 37	LUC-64-2.68	PLAN SHEET STA. 336+50 TO STA. 353+00	CALCULATED TLM CHECKED JMF	0 10 20 40 HORIZONTAL SCALE IN FEET

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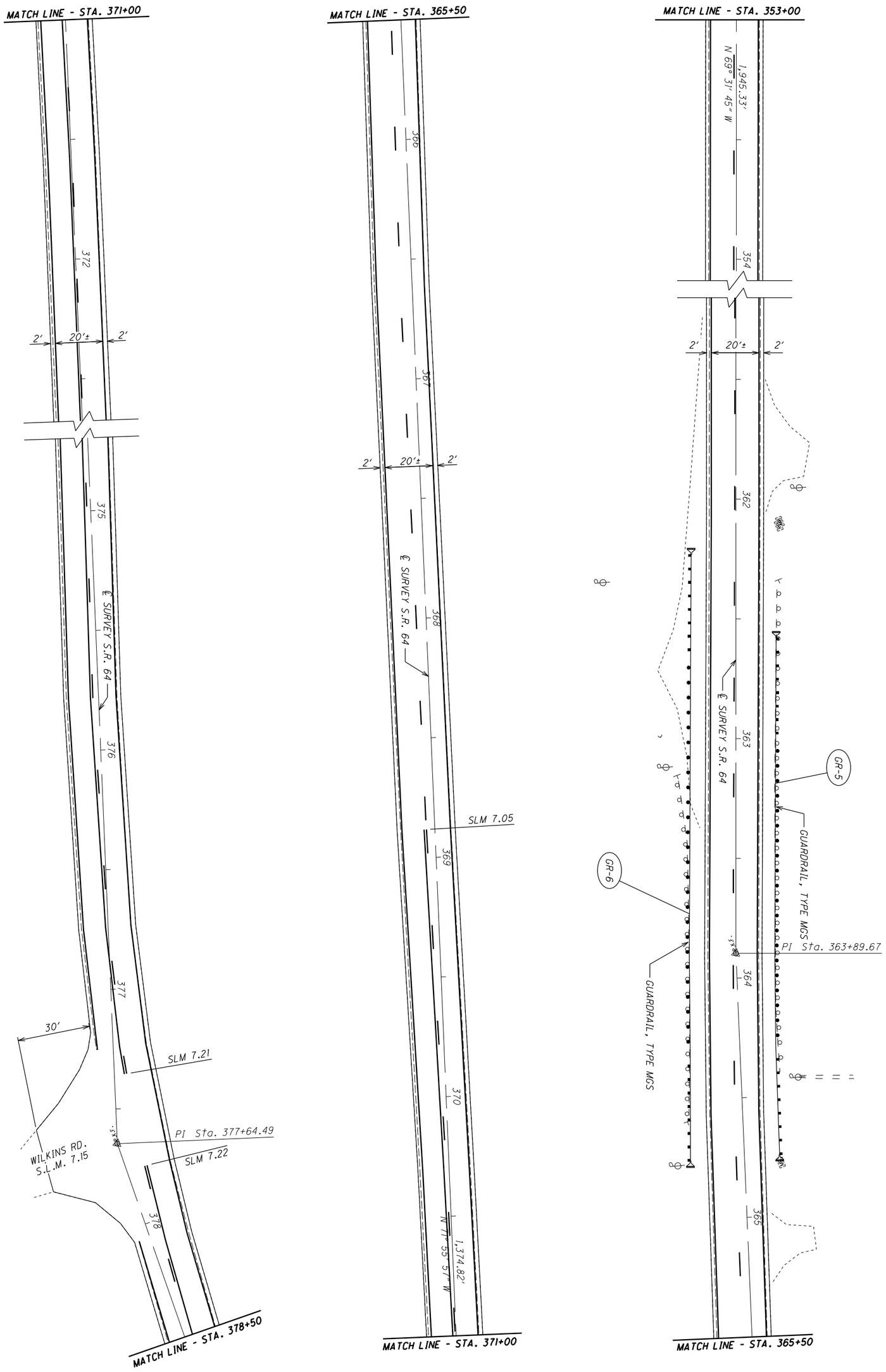
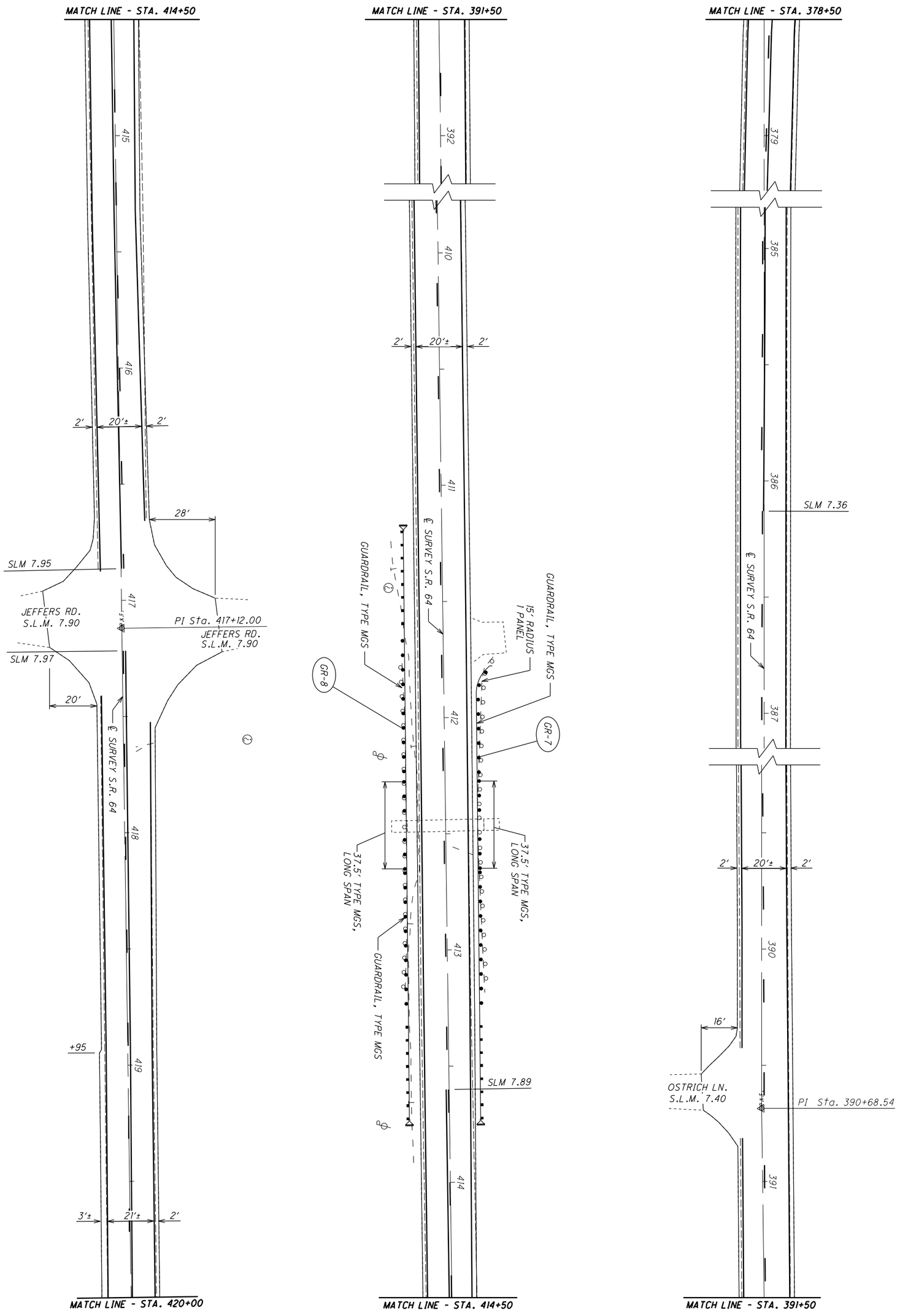
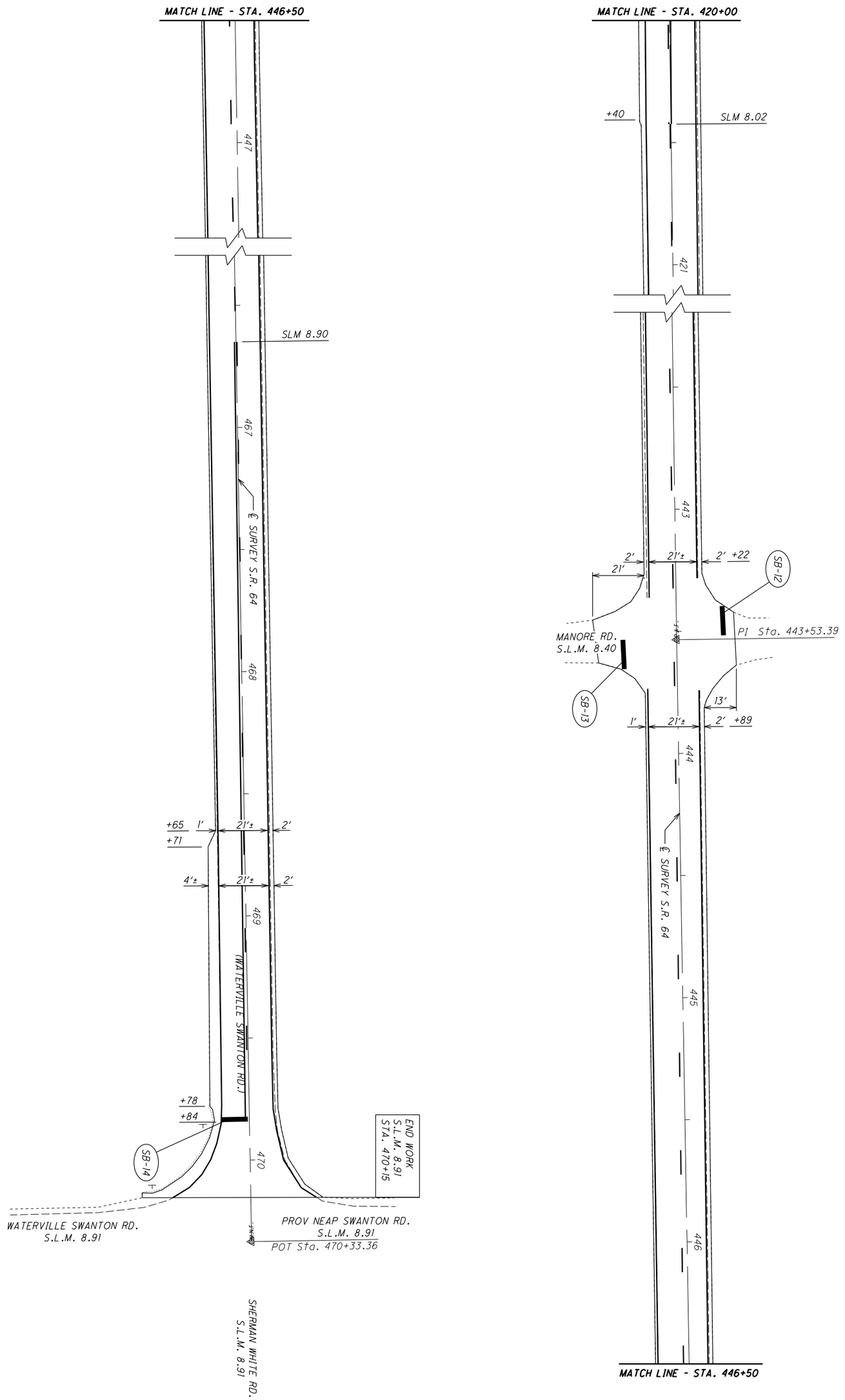
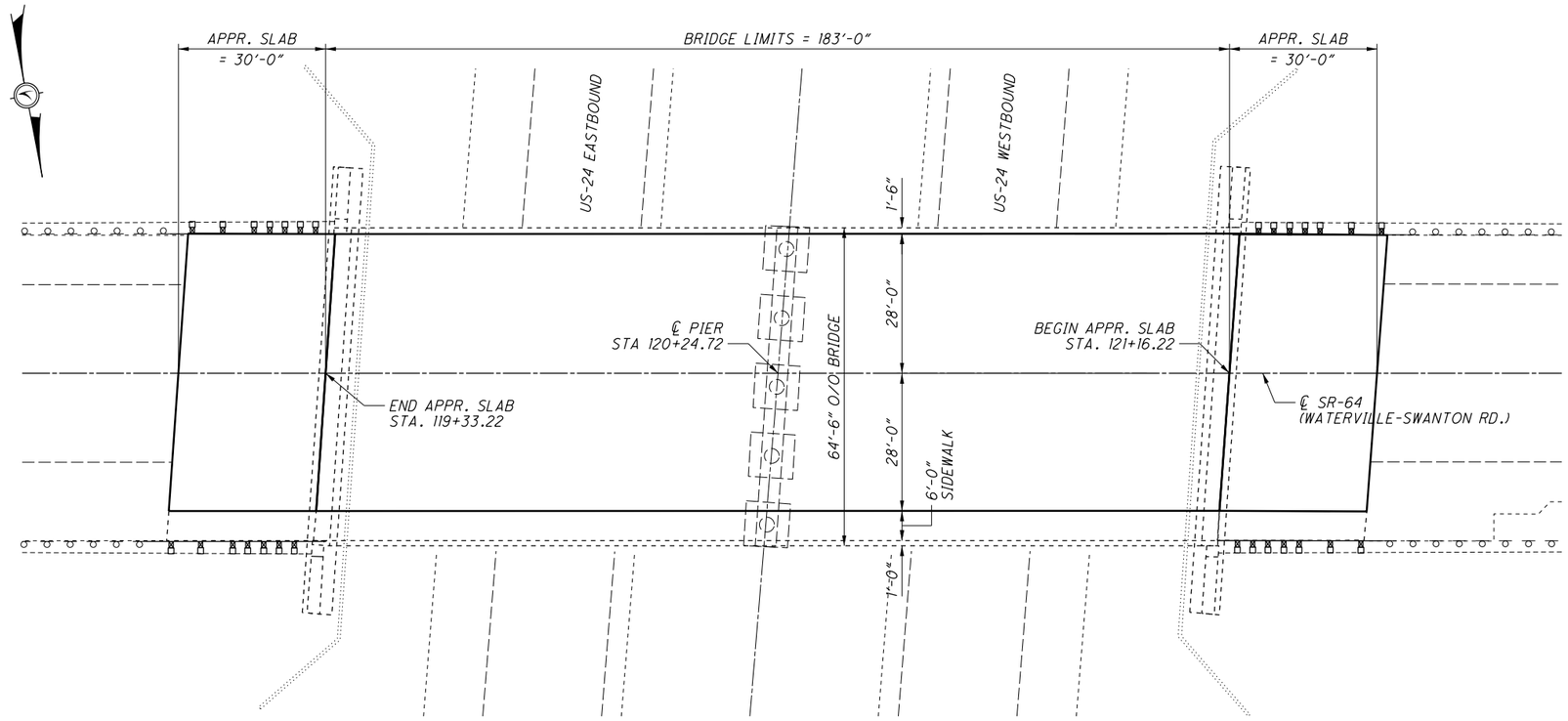


33 / 37	LUC-64-2.68	PLAN SHEET STA. 353+00 TO STA. 378+50	CALCULATED TLM CHECKED JMF	0 10 20 40 HORIZONTAL SCALE IN FEET



34 / 37	LUC-64-2.68	PLAN SHEET STA. 378+50 TO STA. 420+00	CALCULATED TLM CHECKED JMF 0 10 20 40 HORIZONTAL SCALE IN FEET

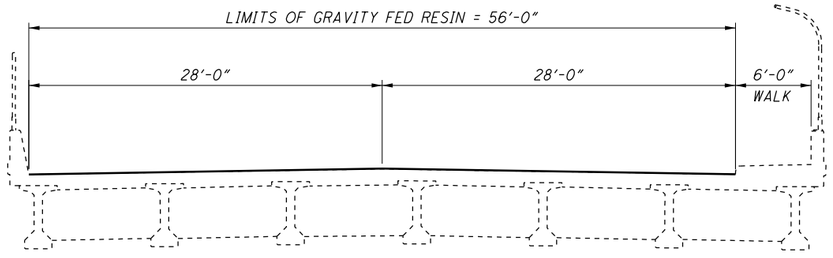

MATCH LINE - STA. 446+50
447
SLM 8.90
467
℄ SURVEY S.R. 64
468
+65
+71
1'
21'±
2'
4'±
21'±
2'
469
(WATERVILLE SWANTON RD.)
+78
+84
SB-14
470
END WORK
S.L.M. 8.91
STA. 470+15
WATERVILLE SWANTON RD.
S.L.M. 8.91
PROV NEAP SWANTON RD.
S.L.M. 8.91
POT Sta. 470+33.36
SHERMAN WHITE RD.
S.L.M. 8.91
MATCH LINE - STA. 420+00
+40
SLM 8.02
421
443
2'
21'
21'±
2'
+22
SB-12
P1 Sta. 443+53.39
MANORE RD.
S.L.M. 8.40
SB-13
13'
1'
21'±
2'
+89
444
℄ SURVEY S.R. 64
445
446
MATCH LINE - STA. 446+50



PLAN

ESTIMATED QUANTITIES (02/NHS/BR)									
ITEM	EXTENSION	TOTAL	UNIT	DESCRIPTION	ABUT.	PIERS	SUPER.	GEN.	SEE SHEET
512	73501	1513	SY	TREATING CONCRETE BRIDGE DECKS WITH GRAVITY FED RESIN, AS PER PLAN			1139	374 *	

* APPR. SLAB



TRANSVERSE SECTION

DESIGN TRAFFIC:
2017 ADT = 8900 2017 ADTT = 540
2029 ADT = 11000 2029 ADTT = 660
DIRECTIONAL DISTRIBUTION = 56%

PROPOSED WORK:

1. MAINTAIN TRAFFIC WITH FLAGGERS AS PER STANDARD DRAWING MT-97.10.
2. TREAT BRIDGE DECK AND APPROACH SLABS WITH GRAVITY FED RESIN, AS PER PLAN.

STANDARD DRAWINGS AND SUPPLEMENTAL SPECIFICATIONS

REFER TO THE FOLLOWING STANDARD DRAWING(S):
MT-97.10 REVISED 7-18-14

EXISTING STRUCTURE VERIFICATION

DETAILS AND DIMENSIONS SHOWN ON THESE PLANS PERTAINING TO THE EXISTING STRUCTURE HAVE BEEN OBTAINED FROM PLANS AND MEASUREMENTS. CONSEQUENTLY, THEY ARE INDICATIVE OF OF THE EXISTING STRUCTURE AND FROM FIELD OBSERVATIONS THE EXISTING STRUCTURE AND THE PROPOSED WORK BUT THEY SHALL BE CONSIDERED TENTATIVE AND APPROXIMATE. THE CONTRACTOR IS REFERRED TO CMS SECTIONS 102.05 AND 513.04.

CONTRACT BID PRICES SHALL BE BASED UPON RECOGNITION OF THE UNCERTAINTIES DESCRIBED ABOVE AND UPON A PREBID EXAMINATION OF THE EXISTING STRUCTURE BY THE CONTRACTOR. HOWEVER, ALL PROJECT WORK SHALL BE BASED UPON ACTUAL DETAILS AND DIMENSIONS WHICH HAVE BEEN VERIFIED BY THE CONTRACTOR IN THE FIELD.

EXISTING BRIDGE PLANS

EXISTING PLANS MAY BE INSPECTED IN THE ODOT DISTRICT 2 OFFICE AT 317 EAST POE RD., BOWLING GREEN, OHIO.

TREATING CONCRETE BRIDGE DECKS WITH GRAVITY FED RESIN, AS PER PLAN

EXISTING PAVEMENT MARKINGS LOCATED ON THE CONCRETE DECKS AND APPROACH SLABS TO BE SEALED WITH GRAVITY FED RESIN ARE TO REMAIN AND TO BE SEALED OVER.

PAVEMENT MARKING COORDINATION

THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER FOURTEEN (14) DAYS PRIOR TO WORK BEING COMPLETED. THE PROJECT ENGINEER SHALL CONTACT THE DISTRICT ROADWAY SEVICE MANAGER AT 419-373-4483 TO SCHEDULE THE PAVEMENT MARKING PLACEMENT.

EXISTING STRUCTURE

TYPE: TWO SPAN PRESTRESSED CONCRETE MOD. TYPE IV (60") I-BEAM BRIDGE ON SEMI-INTEGRAL ABUTMENTS WITH MSE WALL RETAINED EMBANKMENTS AND CAP AND COLUMN PIERS.

SPANS: 90'-0", 90'-0" C/C SUBSTRUCTURES
ROADWAY: 56'-0" TOE/TOE CURB, 6'-0" SIDEWALK, NORTH SIDE
LOADING: HS-25 AND ALTERNATE MILITARY, F.W.S. = 60 PSF
SKEW: 4°00'00" LEFT FORWARD
APPROACH SLABS: AS-1-81 (30'-0" LONG)
WEARING SURFACE: MONOLITHIC CONCRETE
ALIGNMENT: TANGENT
CROWN: 0.016 FT/FT
STRUCTURAL FILE NUMBER: 4802489
DATE BUILT: 2011
COORDINATES: LATITUDE N 41°-30'-30"
LONGITUDE W 83°-45'-15"

DESIGN AGENCY
OHIO DEPARTMENT OF TRANSPORTATION

DESIGNED	DRAWN	REVIEWED	DATE
MRC	MRC	BPN	11/1/16
CHECKED	REVISED	STRUCTURE FILE NUMBER 4802489	

LUCAS COUNTY
STA. 119+33.22
STA. 121+16.22

SITE PLAN
BRIDGE NO. LUC-64-0230
OVER US-24

LUC-64-2.68
PID No. 95750

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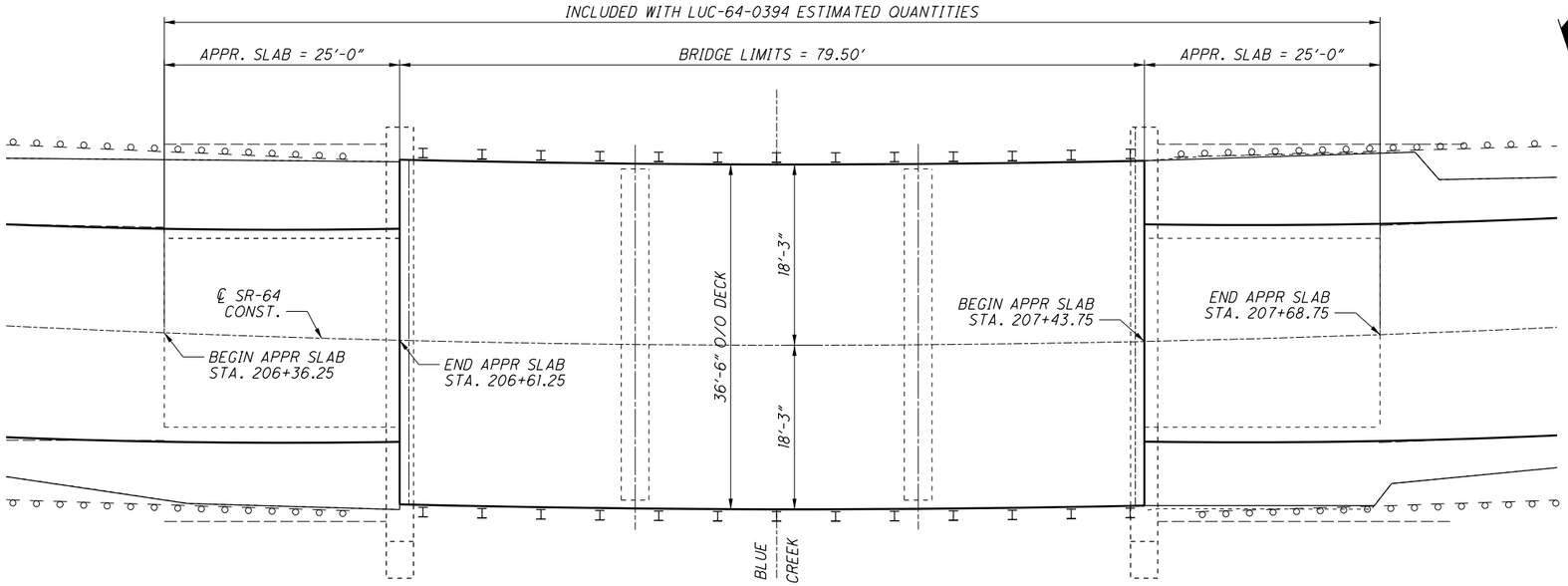
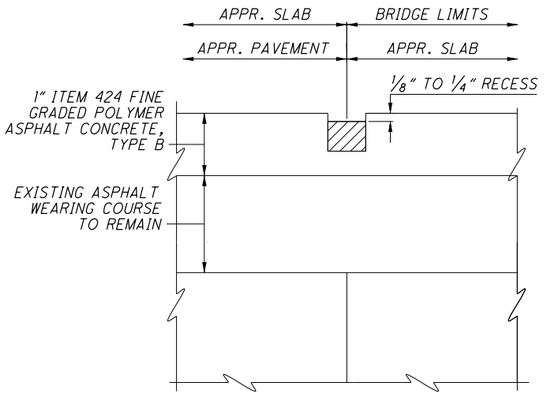


PLAN

ESTIMATED QUANTITIES (03/S>2/PV)

ITEM	EXTENSION	TOTAL	UNIT	DESCRIPTION	ABUT.	PIERS	SUPER.	GEN.	SEE SHEET
424	12000	15	CY	FINE GRADED POLYMER ASPHALT CONCRETE, TYPE B			9	6	
SPECIAL	51631200	146	FT	SAWING AND SEALING BITUMINOUS CONCRETE JOINTS				146	
897	01010	524	SY	PAVEMENT PLANING, ASPHALT CONCRETE, CLASS A, 1"			321	203	



SEALING BITUMINOUS JOINTS

(AT ABUTMENTS AND ENDS OF APPROACH SLABS)

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. BITUMINOUS CONCRETE JOINTS SHALL BE CONSTRUCTED DIRECTLY OVER, AND IN LINE WITH, THE EXISTING UNDERLYING TRANSVERSE JOINT OF THE APPROACH SLAB & APPROACH PAVEMENT.

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 POLYMERIC 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 APPROACH SLAB END. 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 P.S.I 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 RECLEANED OF ALL FOREIGN MATERIAL BY HIGH PRESSURE WATER JET.

D) SEALING JOINT: THE JOIN 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.

PROPOSED WORK:

1. MAINTAIN TRAFFIC WITH FLAGGERS AS PER STANDARD DRAWING MT-97.10.
2. MILL AND FILL EXISTING ASPHALT WEARING COURSE.
3. SAW AND SEAL BITUMINOUS JOINTS.

EXISTING STRUCTURE

TYPE: 3 SPAN CONTINUOUS REINFORCED CONCRETE SLAB WITH CAPPED PILE SUBSTRUCTURES.

SPANS: 24'-0", 30'-0", 24'-0"

ROADWAY: 36'-6" F/F GUARDRAIL

LOADING: S-12-46

SKEW: NONE

APPROACH SLABS: AS-1-54 (25' LONG)

ALIGNMENT: 3°

WEARING SURFACE: ASPHALT CONCRETE

STRUCTURAL FILE NUMBER: 4802497

DATE BUILT: 1954 (REHAB 2002)

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 " BELOW THE PAVEMENT SURFACE. ANY DEPRESSION IN THE COOLED SEAL GREATER THAN " 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 MANUFACTURES' 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. THIS ITEM SHALL MEET THE MATERIAL (SECTION 2) AND SEALING (SECTION 3D) SPECIFICATIONS OF ITEM SPECIAL -SAWING AND SEALING BITUMINOUS CONCRETE JOINTS.

DESIGN AGENCY
OHIO DEPARTMENT OF TRANSPORTATION

DESIGNED MRC | DRAWN MRC | REVIEWED BPN | DATE 11/2/16
CHECKED | REVISED | STRUCTURE FILE NUMBER 4802497

LUCAS COUNTY
STA. 206+61.25
STA. 207+43.75

SITE PLAN
BRIDGE NO. LUC-64-0394
OVER BLUE CREEK

LUC-64-2.68
PID No. 95750

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