DELINEATION OF PORTABLE AND PERMANENT BARRIER

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

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

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

ITEM 614, BARRIER REFLECTOR, TYPE 1 (ONE-WAY) 24 EACH
ITEM 614, OBJECT MARKER, ONE-WAY 24 EACH

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

ITEM 614, BUSINESS ENTRANCE (M4-H15) SIGN, AS PER PLAN

THE BUSINESS ENTRANCE (M4-H15) SIGN SHOULD BE PROVIDED AT EACH TEMPORARILY RELOCATED COMMERCIAL DRIVEWAY FOR WHICH THE RELOCATION IS NOT OBVIOUS TO THE MOTORIST. THE PROJECT ENGINEER SHALL DETERMINE WHETHER OR NOT THE DRIVEWAY RELOCATION IS, OR IS NOT, OBVIOUS AND WHETHER OR NOT A SIGN SHOULD BE PROVIDED. ONLY ONE ONLY ONE SIGN PER BUSINESS SHALL BE PERMITTED. THE SIGN SHALL BE 36 INCH X 48 INCH IN SIZE WITH TYPE G OR TYPE H ORANGE RETROREFLECTIVE SHEETING. THE SIGN LEGEND SHALL BE PLACED ON BOTH SIDES OF THE SIGN (BACK TO BACK). THE SIGN SHALL HAVE THE STANDARD M4-H15 LEGEND WITH THE WORD "BUSINESS" ON THE TOP LINE, EXCEPT UNDER UNUSUAL CIRCUMSTANCES WHERE IT MAY NOT BE INTUITVIVE THAT A DRIVEWAY SERVES A SPECIFIC BUSINESS. IN SUCH UNUSUAL CASES, THE ACTUAL BUSINESS NAME MAY BE SUBSTITUTED FOR THE WORD "BUSINESS".

THE SIGN SHALL BE MOUNTED ON TWO #3 POSTS OR ON TEMPORARY POSTS IN ACCORDANCE WITH SCD MT-105.10 AND IN ACCORDANCE WITH THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION. THE SIGN SHALL BE CLEARLY VISIBLE AND SHALL CLEARLY IDENTIFY THE LOCATION OF THE DRIVEWAY. THE SIGN SHOULD BE POSITIONED AT 90 DEGREES TO THE DIRECTION(S) OF TRAFFIC. THE SIGN MAY NEED TO BE MOVED FOR EACH PHASE OF THE MAINTENANCE OF TRAFFIC OPERATIONS.

PAYMENT FOR ALL COSTS ASSOCIATED WITH MANUFACTURING, MOUNTING, RELOCATING, AND REMOVING THE SIGN, INCLUDING ALL LABOR, MATERIALS AND EQUIPMENT SHALL BE INCLUDED IN THE CONTRACT PRICE PER EACH FOR ITEM 614- BUSINESS ENTRANCE SIGN.

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO TO THE GENERAL SUMMARY FOR THIS ITEM.

ITEM 614, BUSINESS ENTRANCE SIGN 3 EACH

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:

DURING THE ENTIRE ADVANCE PREPARATION AND CLOSURE SEQUENCE WHERE COMPLETE BLOCKAGE OF TRAFFIC IS REQUIRED.

DURING A TRAFFIC SIGNAL INSTALLATION WHEN IMPACTING THE NORMAL FUNCTION OF THE SIGNAL OR THE FLOW OF TRAFFIC, OR WHEN TRAFFIC NEEDS TO BE DIRECTED THROUGH AN ENERGIZED TRAFFIC SIGNAL CONTRARY TO THE SIGNAL DISPLAY (E.G., DIRECTING MOTORISTS THROUGH A RED LIGHT).

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

FOR LANE CLOSURES: DURING INITIAL SET-UP PERIODS, TEAR DOWN PERIODS, SUBSTANTIAL SHIFTS OF A CLOSURE POINT OR WHEN NEW LANE CLOSURE ARRANGEMENTS ARE INITIATED FOR LONG-TERM LANE CLOSURES/SHIFTS (FOR THE FIRST AND LAST DAY OF MAJOR CHANGES IN TRAFFIC CONTROL SETUP).

FOR OPERATIONS WITHOUT POSITIVE PROTECTION OCCURRING WITHIN 10 FEET OF AN OPEN TRAVELED LANE THAT MEET ALL OF THE FOLLOWING CRITERIA:
ON A MULTI-LANE DIVIDED INTERSTATE, OTHER FREEWAY OR EXPRESSWAY; AND
AN AUTHORIZED SPEED LIMIT OF 45 MPH OR GREATER THAT IS IN EFFECT AT THE TIME OF THE OPERATION; AND,
AADT OF 50,000 (OR AADT OF 30,000 WITH 25% OR HIGHER PERCENT TRUCKS)

"WITHOUT POSITIVE PROTECTION" MEANS USE OF DRUMS, CONES, SHADOW VEHICLE, ETC, WITHOUT PROTECTION FROM PORTABLE BARRIER OR OTHER RIGID BARRIER ALONG THE WORK AREA. THIS PHRASE DOES NOT APPLY TO CASES WHERE POSITIVE PROTECTION IS REQUIRED. MOBILE OPERATIONS ARE REGARDED AS "WITHOUT POSITIVE PROTECTION". FOR WORK ZONES USING A COMBINATION OF BARRIER AND TEMPORARY TRAFFIC CONTROL DEVICES (CONES, DRUMS, ETC), THE DESIGNATION SHALL BE BASED UPON THE TYPE OF DEVICES USED IN THE AREA THAT WORKERS ARE LOCATED.

IF MULTIPLE ACTIVE LOCALIZED QUALIFYING WORK AREAS OCCUR WITHOUT POSITIVE PROTECTION, PER MAINLINE TRAFFIC DIRECTION, PROVIDE A UNIFORMED LEO AND OFFICIAL PATROL CAR IN ADVANCE OF:
THE FIRST ACTIVE WORK AREA THAT DRIVERS WILL ENCOUNTER; OR
THE ACTIVE WORK AREA LATERALLY CLOSEST TO THE OPEN TRAVELED LANE; OR
OTHER LOCATION AS APPROVED BY THE ENGINEER.

ITEM 614 - LAW ENFORCEMENT OFFICER (WITH PATROL CAR) FOR ASSISTANCE DURING CONSTRUCTION OPERATIONS (CONT'D)

THE UNIFORMED LEO AND OFFICIAL PATROL CAR MAY RELOCATE AMONG THE LISTED LOCATIONS AS APPROPRIATE AS THE OPERATIONS PROCEED IN THE LOCALIZED QUALIFYING WORK AREAS.

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 LEOS' DUTIES AND PLACEMENT, AND WILL RESOLVE ANY ISSUES THAT MAY ARISE BETWEEN THE TWO PARTIES.

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

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

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

ITEM 614, LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE 1200 HOURS

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 A LEO ARE INCLUDED WITH THE BID UNIT PRICE FOR ITEM 614, LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE.

SEQUENCE OF CONSTRUCTION

THE SEQUENCE OF CONSTRUCTION FOR THIS PROJECT CONSISTS OF THREE (3) PHASES OF CONSTRUCTION.

THE PHASE 9 PROJECT INCLUDES THE CONSTRUCTION OF THE NEW GLEN-ESTE WITHAMSVILLE OVERPASS OVER SR32; AND GUARDRAIL, BARRIER, RETAINING WALL, AND CURB ALONG GLEN-ESTE WITHAMSVILLE.

THE RIGHT-IN MOVEMENT FOR WESTBOUND SR32 TO GLEN ESTE-WITHAMSVILLE ROAD WILL BE PERMANENTLY CLOSED AT THE BEGINNING OF THE PHASE 9 PROJECT. DETOUR IS SHOWN ON SHEET 19

PHASE 1A:

1. CONTRACTOR SHALL CONSTRUCT THE ABUTMENTS AND RELATED WORK ON SR32 FROM STA. 142+00 TO STA. 144+00.
   A. EB SR32 TRAFFIC WILL HAVE SHOULDERS CLOSED PER MT-95.45. WB SR32 TRAFFIC WILL SHIFT PER MT-102.20.
2. CONSTRUCT GLEN-ESTE WITHAMSVILLE FROM STA. 13+00 TO STA. 15+70, AND STA. 24+90 TO 31+50 (EAST SIDE OF ROADWAY).
   A. CONTRACTOR SHALL CONSTRUCT STA. 13+00 TO STA. 15+70 OVERNIGHT OR WEEKEND WITH FLAGGER PER SCD MT-97.10. BASE COURSE PLACED FLUSH WITH EXISTING PAVEMENT IS CONSIDERED INCIDENTAL. DRIVEWAY ACCESS TO JIFFY LUBE SHALL BE MAINTAINED.
   B. THE CENTER ISLAND AT THE CARESPRING/EASTGATESPRING DRIVEWAY (APPROXIMATELY STA. 15+35) SHALL BE CONSTRUCTED AT THE END OF THE PHASE 9 PROJECT. BASE COURSE PLACED FLUSH WITH EXISTING PAVEMENT IS CONSIDERED INCIDENTAL.
   C. CONTRACTOR SHALL FOLLOW ODOT SCD'S, INCLUDING BUT NOT LIMITED TO: MT-95.31 AND MT-101.60.
3. CONSTRUCT NEW GUARDRAIL, RETAINING WALL, CURB AND SIDEWALK LOCATED ALONG GLEN-ESTE WITHAMSVILLE RD.
4. CONTRACTOR SHALL CONSTRUCT PROPOSED TRAFFIC SIGNAL AND/OR RELOCATE EXISTING SIGNAL HEADS WHILE MAINTAINING EXISTING SIGNAL PER ODOT REQUIREMENTS IN THE TEM AND OMUTCD.

PHASE 1B:

1. CONTRACTOR SHALL CONSTRUCT THE MEDIAN PIER AND RELATED WORK ON SR32 FROM STA. 142+00 TO STA. 144+00.
2. CONSTRUCT GLEN-ESTE WITHAMSVILLE FROM STA. 16+80 TO STA. 24+00.
3. CONSTRUCT NEW GUARDRAIL, RETAINING WALL, CURB AND SIDEWALK LOCATED ALONG GLEN-ESTE WITHAMSVILLE RD.

PHASE 2:

1. CONSTRUCT GLEN-ESTE WITHAMSVILLE FROM STA. 15+70 TO STA. 16+80, STA. 16+80 TO STA. 24+00 (CONTINUE CONSTRUCTION), AND STA. 24+90 TO 30+73 (WEST SIDE OF ROADWAY).
2. CONSTRUCT NEW GUARDRAIL, RETAINING WALL, CURB AND SIDEWALK LOCATED ALONG GLEN-ESTE WITHAMSVILLE RD.
3. CONSTRUCT EASTGATE S DR FROM STA. 53+49 EAST TO GLEN-ESTE WITHAMSVILLE DR.
   A. CONTRACTOR SHALL CONSTRUCT STA. 53+39 TO STA. 54+00 OVERNIGHT OR WEEKEND WITH FLAGGER PER SCD MT-97.10. BASE COURSE PLACED FLUSH WITH EXISTING PAVEMENT IS CONSIDERED INCIDENTAL.
4. CONSTRUCT EASTGATE N DR FROM STA. 40+81 EAST TO GLEN-ESTE WITHAMSVILLE DR.
   A. CONTRACTOR SHALL CONSTRUCT STA. 40+81 TO STA. 42+75 OVERNIGHT OR WEEKEND WITH FLAGGER PER SCD MT-97.10. BASE COURSE PLACED FLUSH WITH EXISTING PAVEMENT IS CONSIDERED INCIDENTAL. ACCESS TO DRIVEWAY SHALL BE MAINTAINED AT ALL TIMES.
5. CONTRACTOR SHALL CONSTRUCT PROPOSED TRAFFIC SIGNAL AND/OR RELOCATE EXISTING SIGNAL HEADS WHILE MAINTAINING EXISTING SIGNAL PER ODOT REQUIREMENTS IN THE TEM AND OMUTCD.

PHASE 3:

1. CONSTRUCT CENTER ISLAND ON CARESPRING/EASTGATESPRING DRIVEWAY (APPOXIMATELY STA. 15+35) VIA FLAGGER CONTROL OF 1-LANE, 2-WAY TRAFFIC PER MT-97.10.
2. PLACE ANY REMAINING FINAL SURFACE COURSE AND TRAFFIC CONTROL.

CALCULATED MDH CHECKED STB

MAINTENANCE OF TRAFFIC GENERAL NOTES

CLE-CR55-OVRPASS (PHASE 9)

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MAINTENANCE OF TRAFFIC SUBSUMMARY

CALCULATED MDH
CHECKED STB

SHEET NO.	MOT PHASE			614 WORK ZONE IMPACT ATTENUATOR, 24' WIDE HAZARDS, (UNIDIRECTIONAL) EACH	614 BARRIER REFLECTOR, TYPE 1 (ONE-WAY) EACH	614 OBJECT MARKER, ONE-WAY EACH		614 WORK ZONE CENTER LINE, CLASS I, 648 MILE	614 WORK ZONE CNETER LINE, CLASS III, 642 PAINT MILE	614 WORK ZONE EDGE LINE, CLASS I, 6", 648 MILE	614 WORK ZONE EDGE LINE, CLASS III, 6", 642 PAINT MILE	614 WORK ZONE CHANNELIZING LINE, CLASS I, 8", 648 FT	614 WORK ZONE CHANNELIZING LINE, CLASS III, 12", 642 PAINT FT	614 WORK ZONE DOTTED LINE, CLASS I, 6", 648 FT	614 WORK ZONE DOTTED LINE, CLASS III, 6", 642 PAINT FT	614 WORK ZONE ARROW, CLASS III, 642 PAINT EACH	622 PORTABLE BARRIER, UNANCHORED FT
21 - 26	PHASE 1A			3	28	28			0.21		0.94		3496		324	4	1368
21 - 26	PHASE 1B			1	13	13					0.75		5709				570
27 - 30	PHASE 2								0.16		0.29				325		
	WINTER MARKINGS							0.74		2.84		11528		1298			
	SUBTOTALS ALL PHASES			4	41	41		0.74	0.37	2.84	1.98	11528	9205	1298	649	4	1938
	TOTALS CARRIED TO GENERAL SUMMARY			4	41	41		0.74	0.37	2.84	1.98	11528	9205	1298	649	4	1938

CLE-CR55-OVRPASS (PHASE 9)

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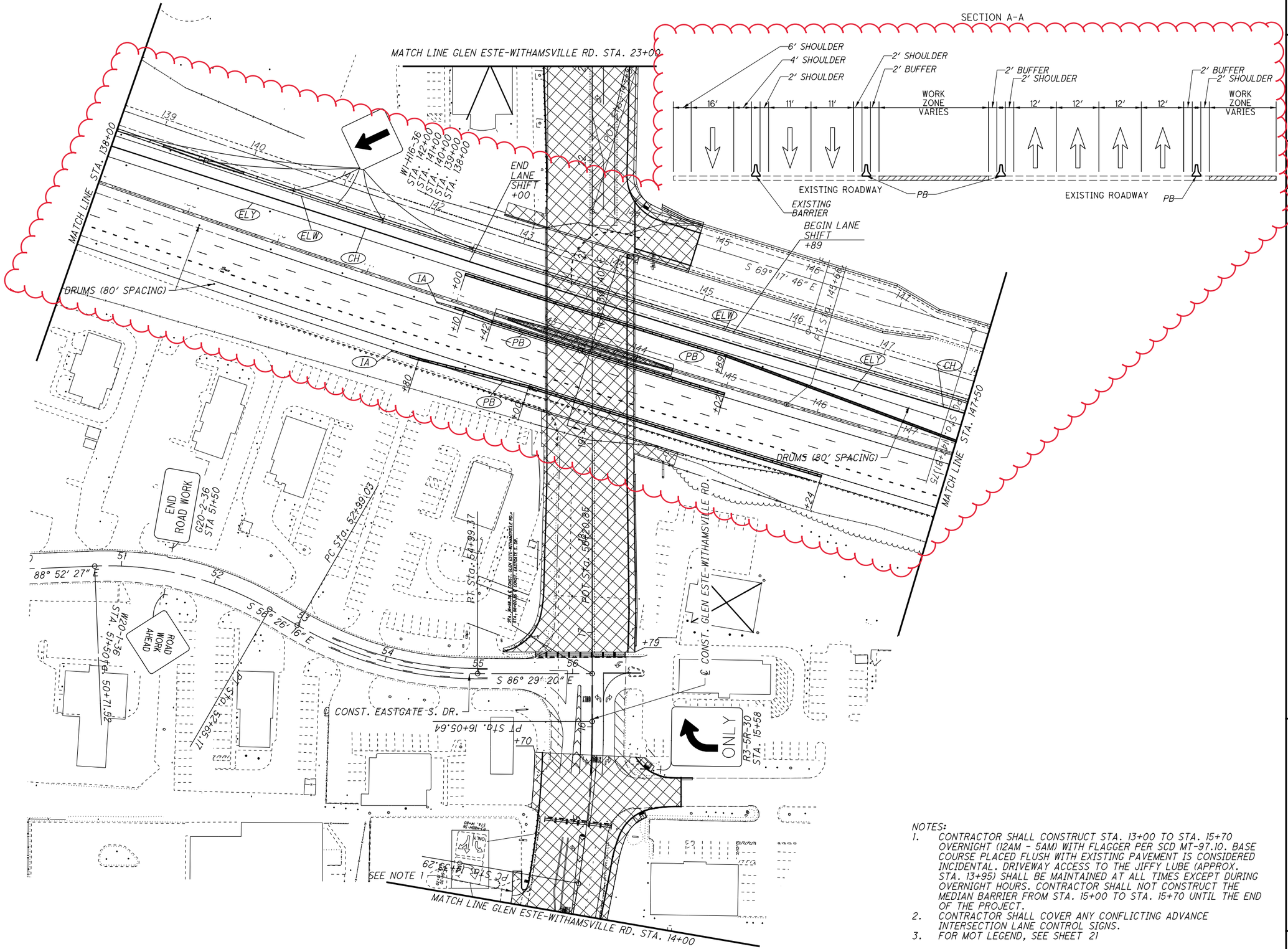

NOTES:

1. CONTRACTOR SHALL CONSTRUCT STA. 13+00 TO STA. 15+70 OVERNIGHT (12AM - 5AM) WITH FLAGGER PER SCD MT-97.10. BASE COURSE PLACED FLUSH WITH EXISTING PAVEMENT IS CONSIDERED INCIDENTAL. DRIVEWAY ACCESS TO THE JIFFY LUBE (APPROX. STA. 13+95) SHALL BE MAINTAINED AT ALL TIMES EXCEPT DURING OVERNIGHT HOURS. CONTRACTOR SHALL NOT CONSTRUCT THE MEDIAN BARRIER FROM STA. 15+00 TO STA. 15+70 UNTIL THE END OF THE PROJECT.
2. CONTRACTOR SHALL COVER ANY CONFLICTING ADVANCE INTERSECTION LANE CONTROL SIGNS.
3. FOR MOT LEGEND, SEE SHEET 21

HORIZONTAL SCALE IN FEET
0 25 50 100
CALCULATED MDH
CHECKED STB

MAINTENANCE OF TRAFFIC
PHASE 1A - STA. 14+00 TO STA. 23+00

CLE-CR55-OVRPASS
(PHASE 9)

22A
353

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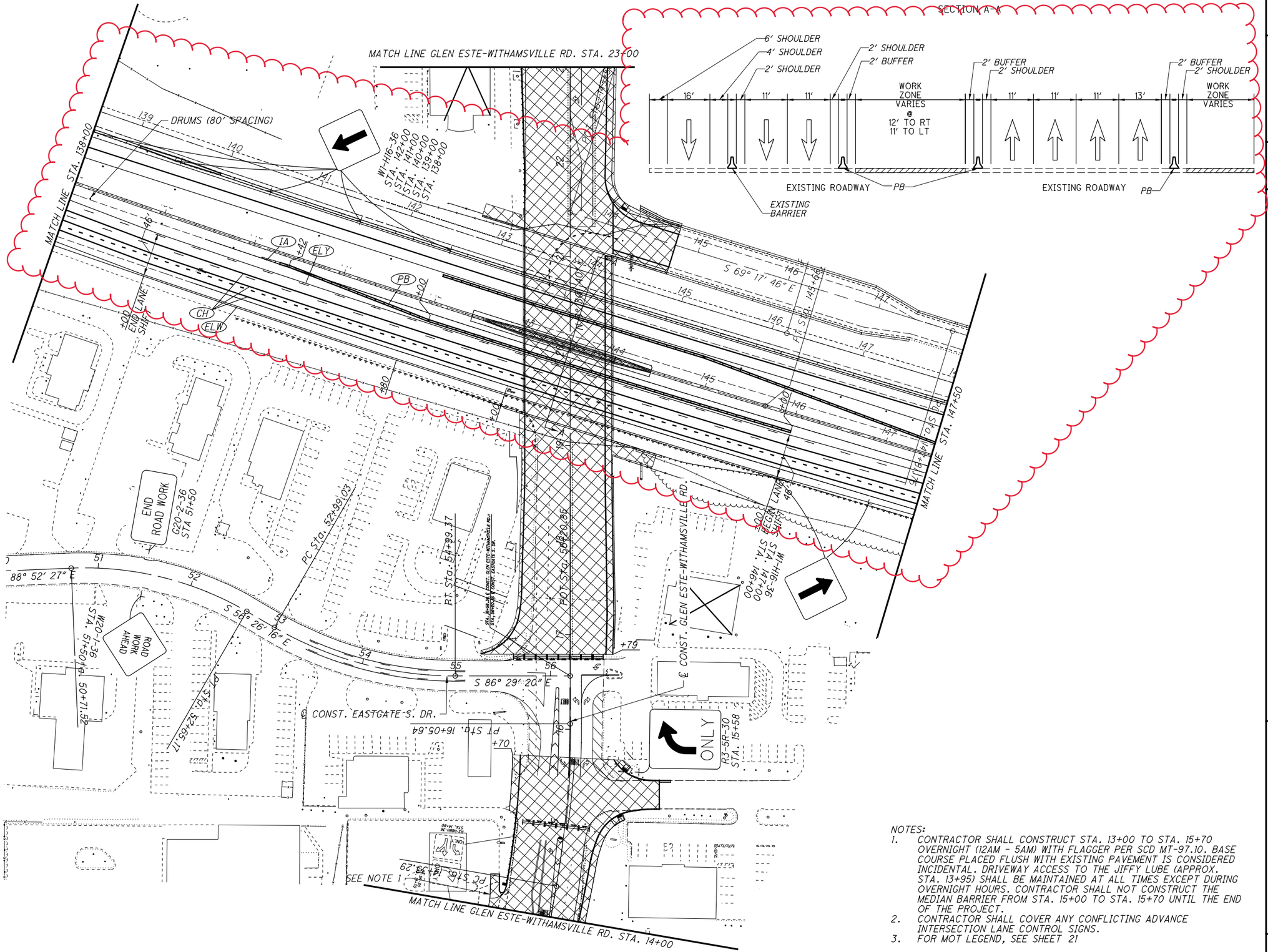

NOTES:

1. CONTRACTOR SHALL CONSTRUCT STA. 13+00 TO STA. 15+70 OVERNIGHT (12AM - 5AM) WITH FLAGGER PER SCD MT-97.10. BASE COURSE PLACED FLUSH WITH EXISTING PAVEMENT IS CONSIDERED INCIDENTAL. DRIVEWAY ACCESS TO THE JIFFY LUBE (APPROX. STA. 13+95) SHALL BE MAINTAINED AT ALL TIMES EXCEPT DURING OVERNIGHT HOURS. CONTRACTOR SHALL NOT CONSTRUCT THE MEDIAN BARRIER FROM STA. 15+00 TO STA. 15+70 UNTIL THE END OF THE PROJECT.
2. CONTRACTOR SHALL COVER ANY CONFLICTING ADVANCE INTERSECTION LANE CONTROL SIGNS.
3. FOR MOT LEGEND, SEE SHEET 21

HORIZONTAL SCALE IN FEET
0 25 50 100
CALCULATED MDH
CHECKED STB

MAINTENANCE OF TRAFFIC
CLE-CR55-OVRPASS (PHASE 9)
PHASE 1B - STA. 14+00 TO STA. 23+00

22B
353

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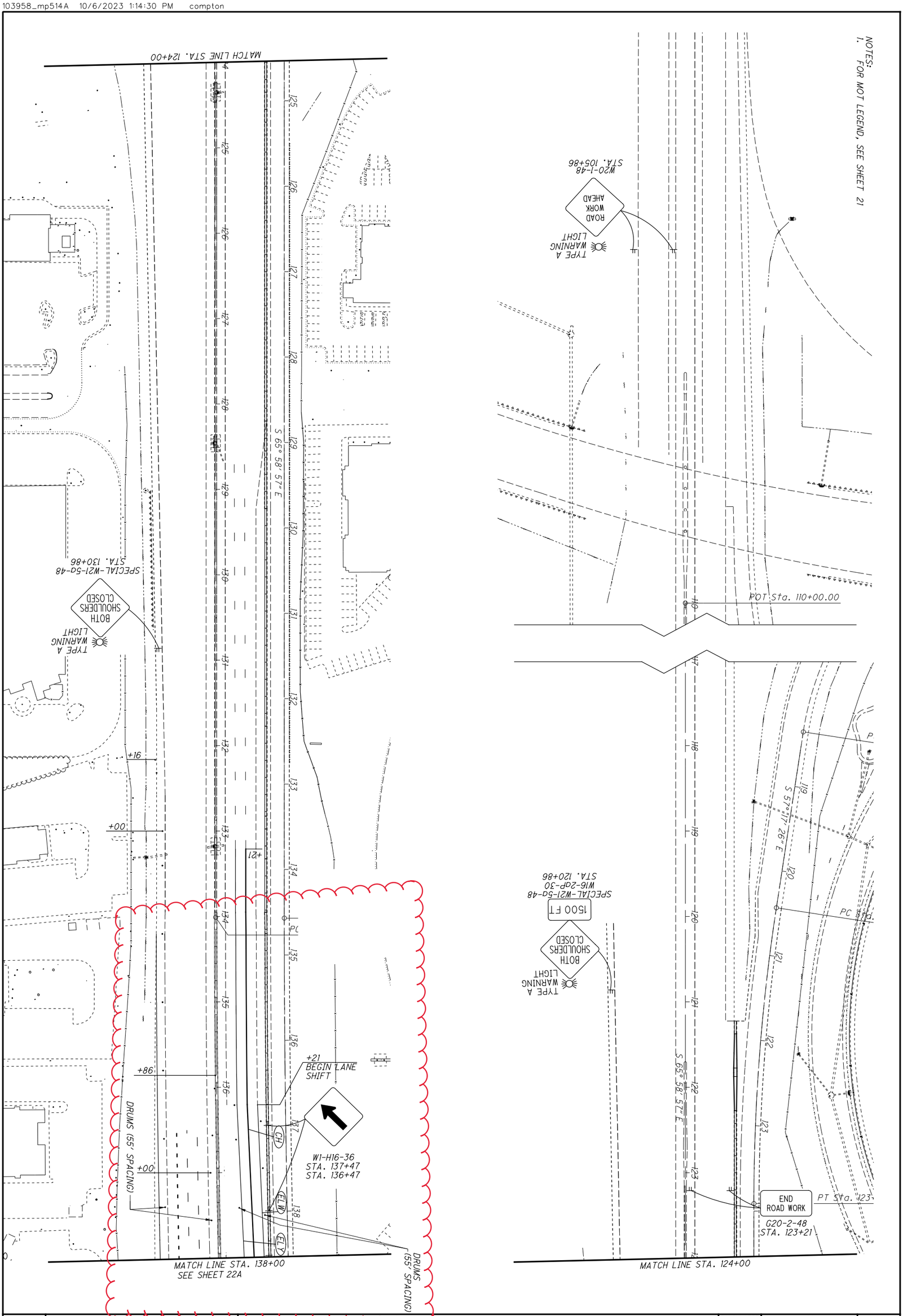


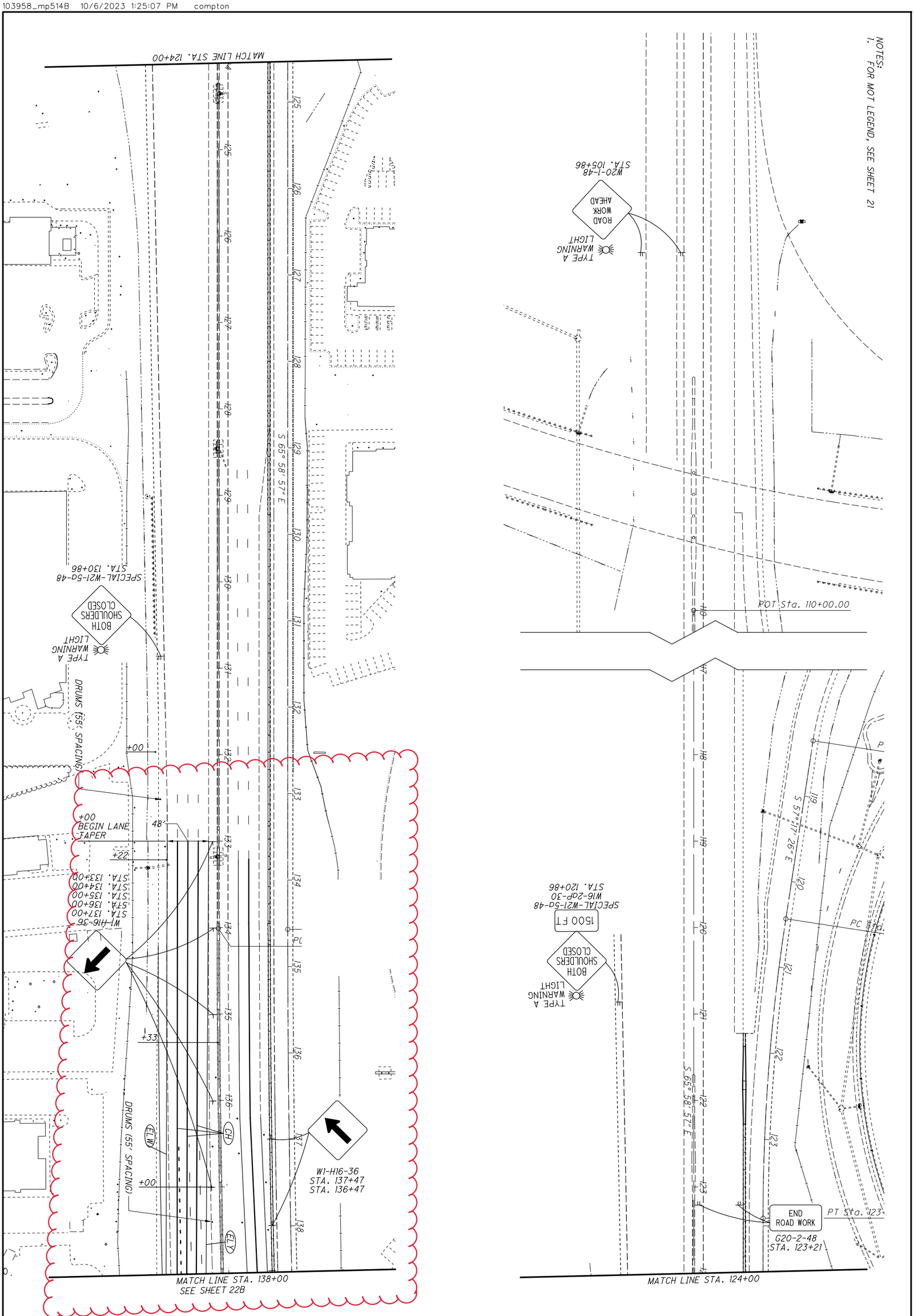
25A
353

CLE-CR55-OVRPASS
(PHASE 9)

MAINTENANCE OF TRAFFIC
PHASE 1A - BEGIN TO STA. 138+00

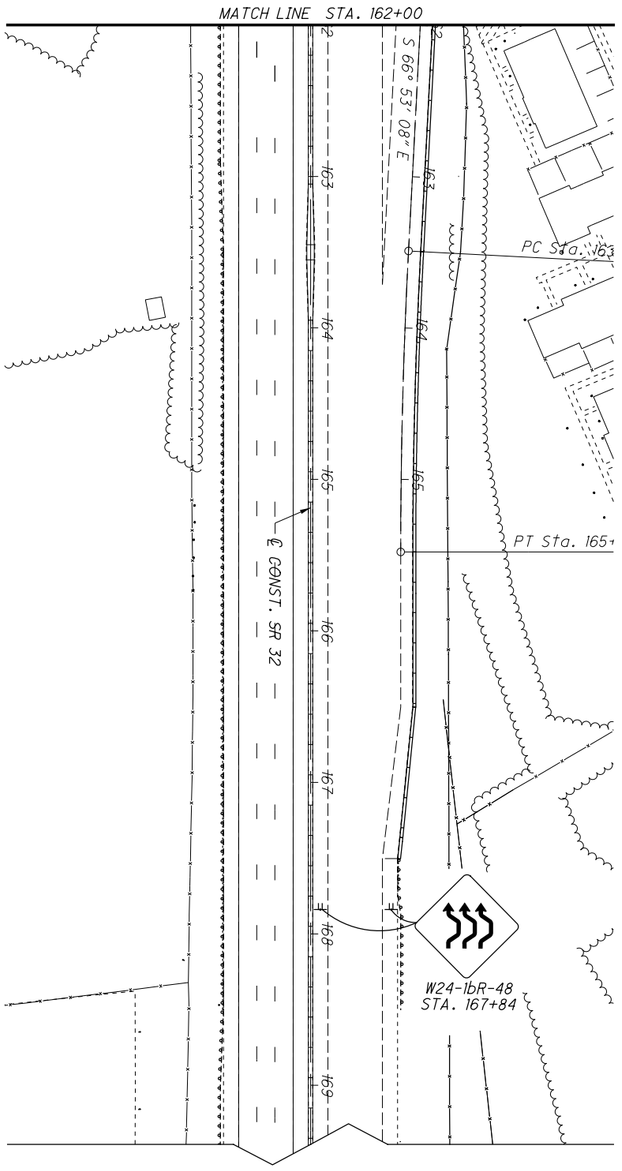
CALCULATED MDH
CHECKED STB

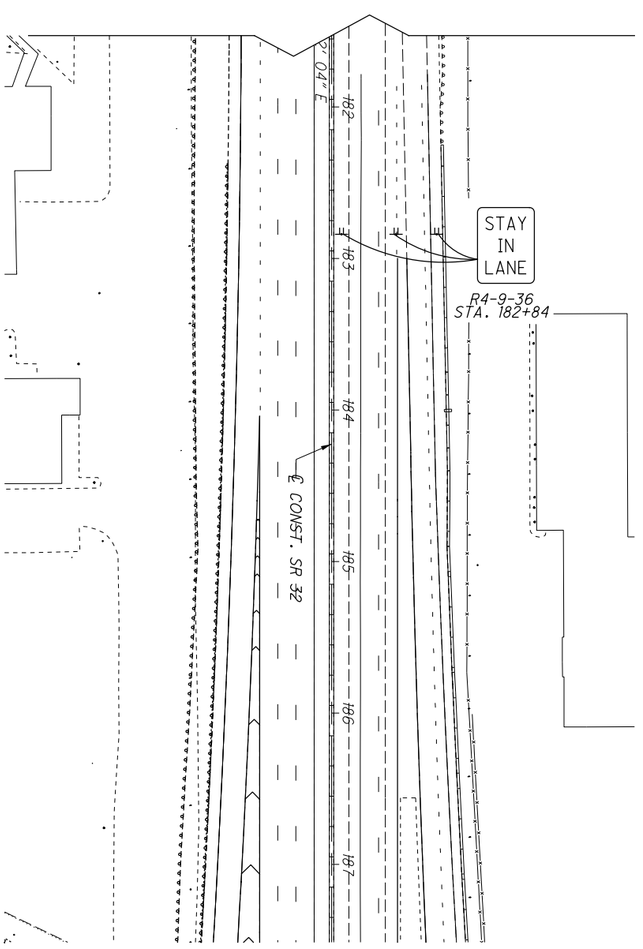
0 25 50 100
HORIZONTAL SCALE IN FEET

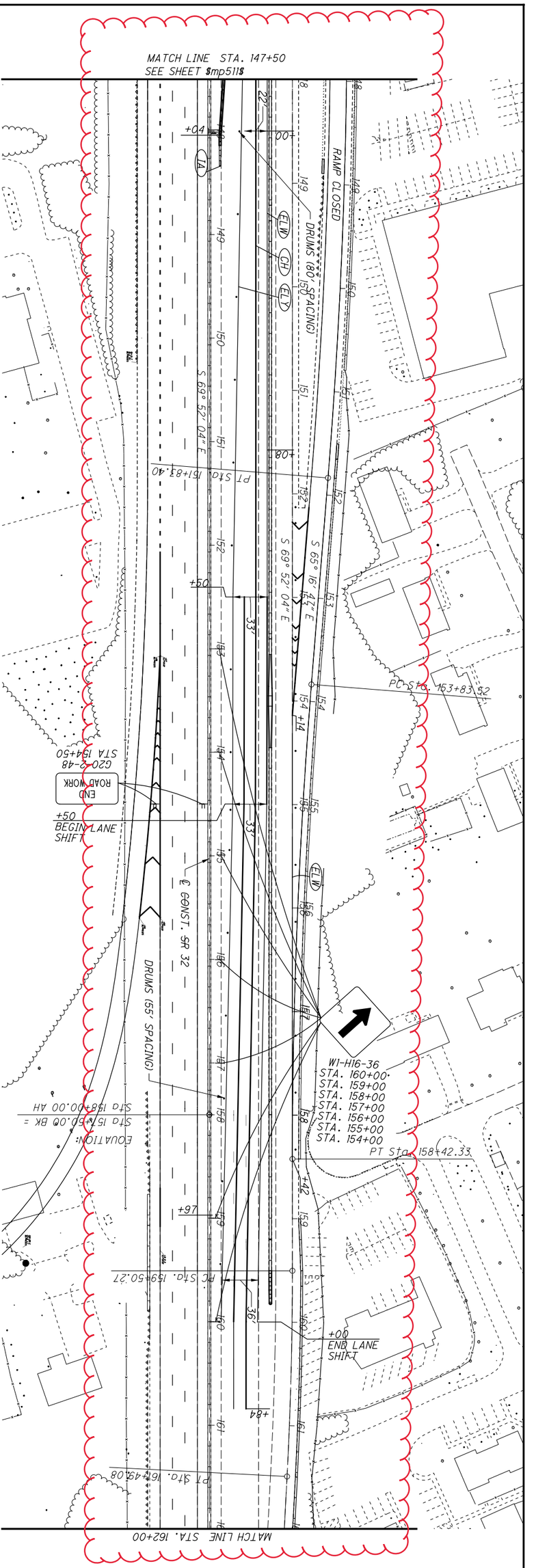


25B 353	CLE-CR55-OVRPASS (PHASE 9)	MAINTENANCE OF TRAFFIC PHASE 1B - BEGIN TO STA. 138+00	CALCULATED MDH CHECKED STB; 0 50 25 100 HORIZONTAL SCALE IN FEET

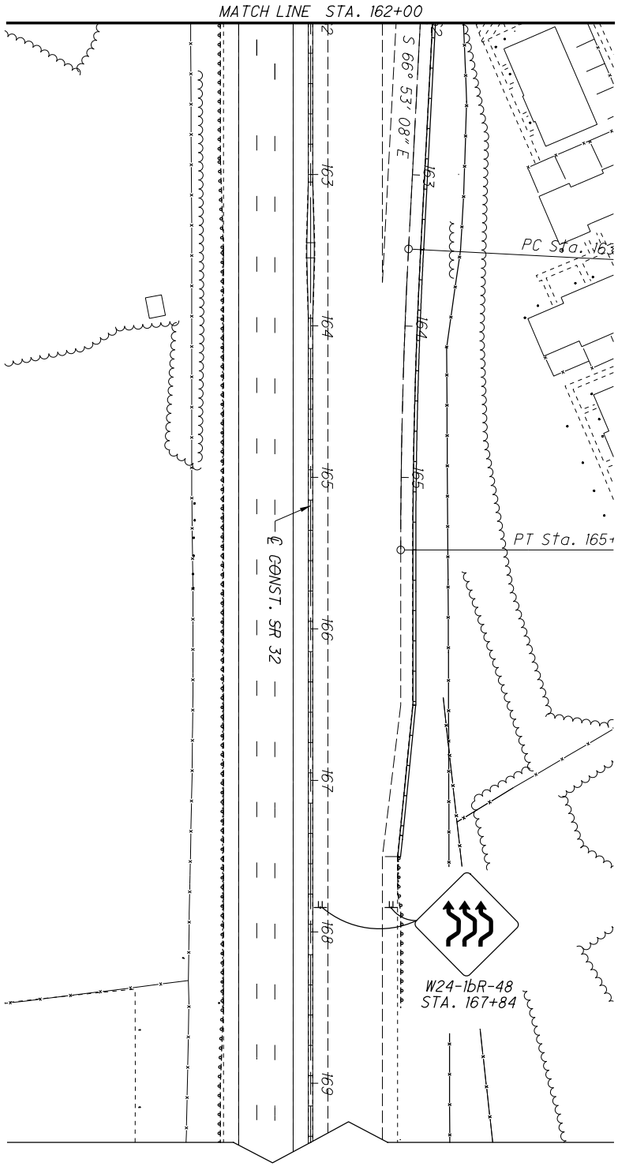
NOTES:
1. FOR MOT LEGEND, SEE SHEET 21

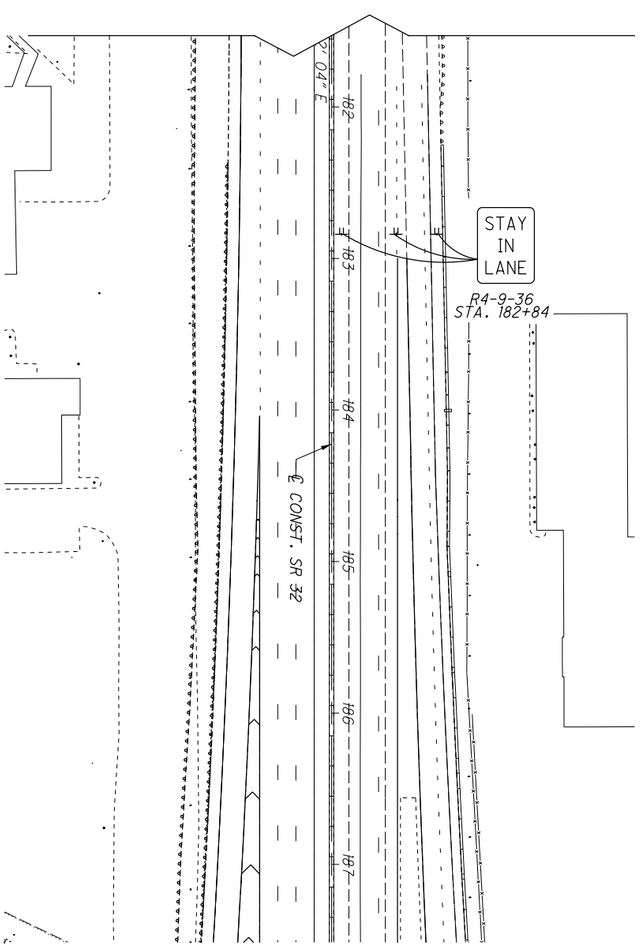


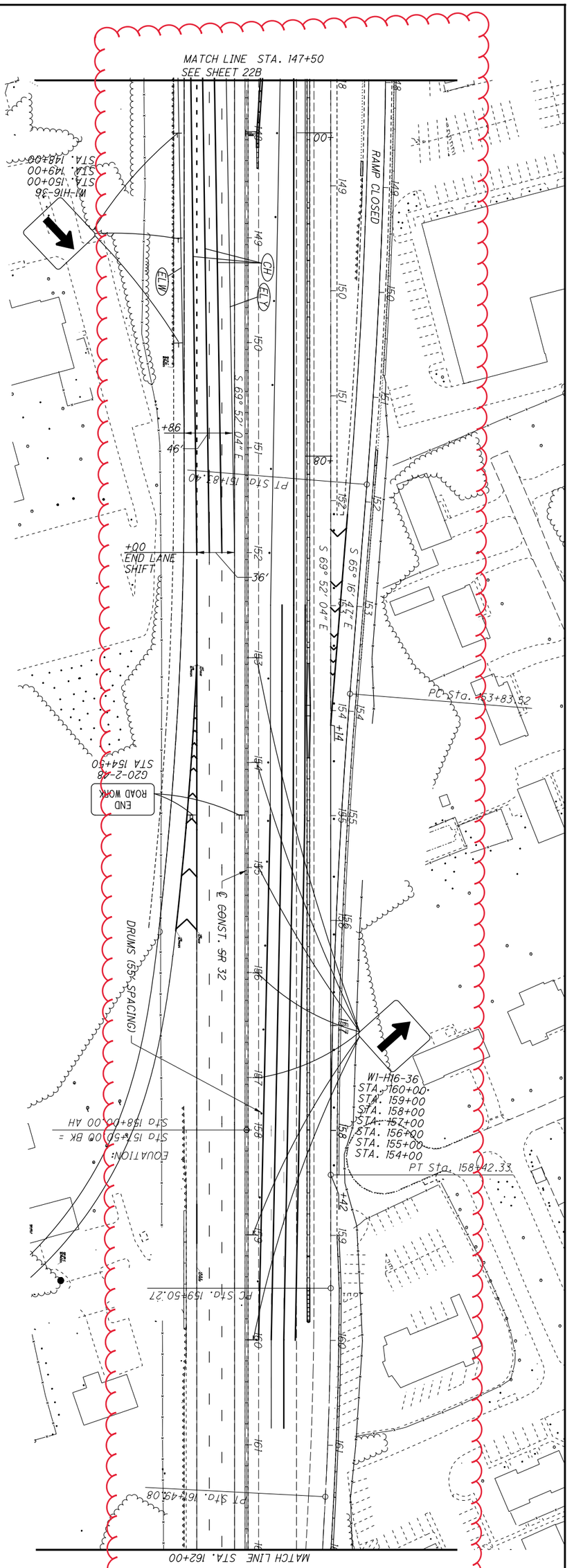




NOTES:
1. FOR MOT LEGEND, SEE SHEET 21







SHEET NUM.													PART.	ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
14	15	15A	38	42	43	44	46	49	122	290			02/NHS/08						
																		ROADWAY	
LS													LS	201	11000	LS		CLEARING AND GRUBBING	
			1										1	202	20010	1	EACH	HEADWALL REMOVED	
			20,087										20,087	202	23000	20,087	SY	PAVEMENT REMOVED	
			5,684										5,684	202	30000	5,684	SF	WALK REMOVED	
			31										31	202	30600	31	SY	CONCRETE MEDIAN REMOVED	
			43										43	202	30700	43	FT	CONCRETE BARRIER REMOVED	
			3,024										3,024	202	32000	3,024	FT	CURB REMOVED	
			4,109										4,109	202	32500	4,109	FT	CURB AND GUTTER REMOVED	
			2,183										2,183	202	35100	2,183	FT	PIPE REMOVED, 24" AND UNDER	
			769										769	202	35200	769	FT	PIPE REMOVED, OVER 24"	
			753										753	202	38000	753	FT	GUARDRAIL REMOVED	
			8										8	202	58000	8	EACH	MANHOLE REMOVED	
			41										41	202	58100	41	EACH	CATCH BASIN REMOVED	
			585										585	202	75000	585	FT	FENCE REMOVED	
			11										11	202	98100	11	EACH	REMOVAL MISC.: PRIVATE SIGN AND FOUNDATION	14
		1											1	202	98100	1	EACH	REMOVAL MISC.: INSPECTION WELL	15A
		10											10	202	98200	10	FT	REMOVAL MISC.: CONDUIT	15A
			72										72	202	98200	72	FT	REMOVAL MISC.: MODULAR BLOCK LANDSCAPE WALL	15
				2,715									2,715	203	10000	2,715	CY	EXCAVATION	
				30,253									30,253	203	20000	30,253	CY	EMBANKMENT	
				15,615									15,615	203	20001	15,615	CY	EMBANKMENT, AS PER PLAN	249
		50											50	203	20001	50	CY	EMBANKMENT, AS PER PLAN A	15A
				4,320									4,320	203	35111	4,320	CY	GRANULAR MATERIAL, TYPE B, AS PER PLAN	249
								22,603					22,603	204	10000	22,603	SY	SUBGRADE COMPACTION	
								2,349					2,349	204	13000	2,349	CY	EXCAVATION OF SUBGRADE	
								2,349					2,349	204	30021	2,349	CY	GRANULAR MATERIAL, TYPE C, AS PER PLAN	15
11													11	204	45000	11	HOUR	PROOF ROLLING	
								3,524					3,524	204	50000	3,524	SY	GEOTEXTILE FABRIC	
									46				46	SPECIAL	45131000	46	FT	PRESSURE RELIEF JOINT, TYPE B	122
					862.5	262.5							1,125	606	15050	1,125	FT	GUARDRAIL, TYPE MGS	
					75								75	606	15150	75	FT	GUARDRAIL, TYPE MGS HALF POST SPACING	
					2								2	606	26150	2	EACH	ANCHOR ASSEMBLY, MGS TYPE E [MASH 2016]	
					2	2							4	606	26550	4	EACH	ANCHOR ASSEMBLY, MGS TYPE T	
					1	2							3	606	35002	3	EACH	MGS BRIDGE TERMINAL ASSEMBLY, TYPE 1	
					1	2							3	606	35102	3	EACH	MGS BRIDGE TERMINAL ASSEMBLY, TYPE 2	
						305							305	607	23000	305	FT	FENCE, TYPE CLT	
						305							305	607	70000	305	FT	FENCELINE SEEDING AND MULCHING	
					4,944								4,944	608	12000	4,944	SF	5" CONCRETE WALK	
					214								214	608	13000	214	SF	6" CONCRETE WALK	
					100								100	608	52000	100	SF	CURB RAMP	
						153							153	622	10140	153	FT	CONCRETE BARRIER, SINGLE SLOPE, TYPE C1	
					152	338							490	622	10161	490	FT	CONCRETE BARRIER, SINGLE SLOPE, TYPE D, AS PER PLAN	15
						2							2	622	25000	2	EACH	CONCRETE BARRIER END SECTION, TYPE D	
						3							3	622	25014	3	EACH	CONCRETE BARRIER, END ANCHORAGE, REINFORCED, TYPE C1	
					2	4							6	622	25050	6	EACH	CONCRETE BARRIER, END ANCHORAGE, REINFORCED, TYPE D	
										9			9	623	38500	9	EACH	MONUMENT ASSEMBLY, TYPE C	
										78			78	623	40520	78	EACH	RIGHT-OF-WAY MONUMENT, TYPE B	
					2	1							3	SPECIAL	69050100	3	EACH	MAILBOX SUPPORT SYSTEM, SINGLE	15
LS													LS	SPECIAL	69098400	LS		CONSULTANT FOR CONCRETE QUALITY CONTROL INCLUDING TESTING AND INSPECTION	14
													LS	878	25000	LS		INSPECTION AND COMPACTION TESTING OF UNBOUND MATERIALS	
																		EROSION CONTROL	
	4												4	601	21050	4	SY	TIED CONCRETE BLOCK MAT WITH TYPE 1 UNDERLAYMENT	
							12						12	601	21060	12	SY	TIED CONCRETE BLOCK MAT WITH TYPE 2 UNDERLAYMENT	
2													2	659	00100	2	EACH	SOIL ANALYSIS TEST	
1,002													1,002	659	00300	1,002	CY	TOPSOIL	
9,025													9,025	659	10000	9,025	SY	SEEDING AND MULCHING	
451													451	659	14000	451	SY	REPAIR SEEDING AND MULCHING	
451													451	659	15000	451	SY	INTER-SEEDING	
1.26													1.26	659	20000	1.26	TON	COMMERCIAL FERTILIZER	
1.86													1.86	659	31000	1.86	ACRE	LIME	

CALCULATED MSW CHECKED GHM

GENERAL SUMMARY

CLE-CR55-OVRPASS (PHASE 9)

SHEET NUM.	PART.	ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
183	02/NHS/08						
						TRAFFIC SIGNALS	
6	6	625	18201	6	EACH	BRACKET ARM, 15', AS PER PLAN	174
3,639	3,639	625	23306	3,639	FT	NO. 10 AWG 600 VOLT DISTRIBUTION CABLE	
305	305	625	25408	305	FT	CONDUIT, 2", 725.051	
177	177	625	25504	177	FT	CONDUIT, 3", 725.051	
10	10	625	25604	10	FT	CONDUIT, 4", 725.051	
424	424	625	25908	424	FT	CONDUIT, JACKED OR DRILLED, 725.052, 4"	
6	6	625	27551	6	EACH	LUMINAIRE, DECORATIVE, AS PER PLAN, 250W HPS, TYPE III	174
447	447	625	29000	447	FT	TRENCH	
2	2	625	30700	2	EACH	PULL BOX, 725.08, 18"	
7	7	625	30706	7	EACH	PULL BOX, 725.08, 24"	
5	5	625	31510	5	EACH	PULL BOX REMOVED	
11	11	625	32000	11	EACH	GROUND ROD	
447	447	625	36010	447	FT	UNDERGROUND WARNING/MARKING TAPE	
13	13	630	79100	13	EACH	SIGN HANGER ASSEMBLY, MAST ARM	
15	15	630	79500	15	EACH	SIGN SUPPORT ASSEMBLY, POLE MOUNTED	
142.25	142.25	630	80100	142.25	SF	SIGN, FLAT SHEET	
5	5	630	80510	5	EACH	SIGN, STREET NAME	
16	16	632	05006	16	EACH	VEHICULAR SIGNAL HEAD, (LED), 3-SECTION, 12" LENS, 1-WAY, POLYCARBONATE, BLACK	
5	5	632	05086	5	EACH	VEHICULAR SIGNAL HEAD, (LED), 5-SECTION, 12" LENS, 1-WAY, POLYCARBONATE, BLACK	
2	2	632	20731	2	EACH	PEDESTRIAN SIGNAL HEAD (LED), TYPE D2, COUNTDOWN, AS PER PLAN	175
21	21	632	25000	21	EACH	COVERING OF VEHICULAR SIGNAL HEAD	
2	2	632	25010	2	EACH	COVERING OF PEDESTRIAN SIGNAL HEAD	
2	2	632	26000	2	EACH	PEDESTRIAN PUSHBUTTON	
1,187	1,187	632	40500	1,187	FT	SIGNAL CABLE, 5 CONDUCTOR, NO. 14 AWG	
1,702	1,702	632	40700	1,702	FT	SIGNAL CABLE, 7 CONDUCTOR, NO. 14 AWG	
5	5	632	64010	5	EACH	SIGNAL SUPPORT FOUNDATION	
1	1	632	64011	1	EACH	SIGNAL SUPPORT FOUNDATION, AS PER PLAN	176
2	2	632	64020	2	EACH	PEDESTAL FOUNDATION	
465	465	632	65200	465	FT	LOOP DETECTOR LEAD-IN CABLE	
66	66	632	68200	66	FT	POWER CABLE, 2 CONDUCTOR, NO. 6 AWG	
90	90	632	68300	90	FT	POWER CABLE, 3 CONDUCTOR, NO. 6 AWG	
320	320	632	69800	320	FT	SERVICE CABLE, 3 CONDUCTOR, NO. 6 AWG	
2	2	632	70001	2	EACH	POWER SERVICE, AS PER PLAN	175
2	2	632	78111	2	EACH	COMBINATION SIGNAL SUPPORT, TYPE TC-12.31, DESIGN 10, AS PER PLAN	175
1	1	632	79131	1	EACH	COMBINATION SIGNAL SUPPORT, TYPE TC-81.22, DESIGN 12, AS PER PLAN	175
2	2	632	79141	2	EACH	COMBINATION SIGNAL SUPPORT, TYPE TC-81.22, DESIGN 13, AS PER PLAN	175
1	1	632	79151	1	EACH	COMBINATION SIGNAL SUPPORT, TYPE TC-81.22, DESIGN 14, AS PER PLAN	175
2	2	632	90001	2	EACH	PEDESTAL, 11', TRANSFORMER BASE, AS PER PLAN	175
1	1	632	90103	1	EACH	REMOVAL OF TRAFFIC SIGNAL INSTALLATION FOR STORAGE, AS PER PLAN	176
1	1	632	90104	1	EACH	REUSE OF TRAFFIC CONTROL ITEM (CENTRACS SYSTEM)	175
2	2	633	67101	2	EACH	CABINET FOUNDATION, AS PER PLAN	177
2	2	633	67201	2	EACH	CONTROLLER WORK PAD, AS PER PLAN	176
1	1	633	68511	1	EACH	COMMUNICATIONS, AS PER PLAN	176
2	2	633	75001	2	EACH	UNINTERRUPTIBLE POWER SUPPLY (UPS), 1000 WATT, AS PER PLAN	176
2	2	633	99000	2	EACH	CONTROLLER ITEM, MISC.: CONTROLLER UNIT, TYPE TS2/A2, WITH CABINET, TYPE TS1	177
1	1	633	99000	1	EACH	CONTROLLER ITEM, MISC.: UNMANAGED ETHERNET SWITCH	176
1	1	805	00101	1	EACH	GLOBAL POSITIONING SYSTEM CLOCK ASSEMBLY, AS PER PLAN	177
1	1	809	60000	1	EACH	CCTV IP-CAMERA SYSTEM, DOME-TYPE	
6	6	809	69000	6	EACH	ADVANCE RADAR DETECTION	179
7	7	809	69100	7	EACH	STOP LINE RADAR DETECTION	179

CALCULATED MSW
CHECKED GHM

GENERAL SUMMARY

CLE-CR55-OVRPASS (PHASE 9)

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SHEET NUM. 16	17	18	20	PART. 02/NHS/08	ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
									MAINTENANCE OF TRAFFIC	
	1,200		4	1,200	614	11110	1,200	HOUR	LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE	
				4	614	12380	4	EACH	WORK ZONE IMPACT ATTENUATOR, 24" WIDE HAZARDS, (UNIDIRECTIONAL)	
		485		485	614	12801	485	EACH	WORK ZONE RAISED PAVEMENT MARKER, AS PER PLAN	18
	41			41	614	13310	41	EACH	BARRIER REFLECTOR, TYPE 1, (ONE-WAY)	
	41			41	614	13350	41	EACH	OBJECT MARKER, ONE WAY	
		12		12	614	18601	12	SNMT	PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN	18
0.74				0.74	614	21360	0.74	MILE	WORK ZONE CENTER LINE, CLASS I, 648	
0.37				0.37	614	21550	0.37	MILE	WORK ZONE CENTER LINE, CLASS III, 642 PAINT	
2.84				2.84	614	22336	2.84	MILE	WORK ZONE EDGE LINE, CLASS I, 6", 648	
1.98				1.98	614	22360	1.98	MILE	WORK ZONE EDGE LINE, CLASS III, 6", 642 PAINT	
11,528				11,528	614	23140	11,528	FT	WORK ZONE CHANNELIZING LINE, CLASS I, 8", 648	
9,205				9,205	614	23690	9,205	FT	WORK ZONE CHANNELIZING LINE, CLASS III, 12", 642 PAINT	
1,298				1,298	614	24142	1,298	FT	WORK ZONE DOTTED LINE, CLASS I, 6", 648	
649				649	614	24612	649	FT	WORK ZONE DOTTED LINE, CLASS III, 6", 642 PAINT	
4				4	614	30650	4	EACH	WORK ZONE ARROW, CLASS III, 642 PAINT	
	3			3	614	40051	3	EACH	BUSINESS ENTRANCE SIGN, AS PER PLAN	17
225				225	616	10000	225	MGAL	WATER	
			1,938	1,938	622	41100	1,938	FT	PORTABLE BARRIER, UNANCHORED	
									INCIDENTALS	
				LS	614	11000	LS		MAINTAINING TRAFFIC	
				LS	623	10000	LS		CONSTRUCTION LAYOUT STAKES AND SURVEYING	
				LS	624	10000	LS		MOBILIZATION	

CALCULATED MDH CHECKED STB

GENERAL SUMMARY

CLE-CR55-OVRPASS (PHASE 9)

37 353

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ESTIMATED QUANTITIES SHEET NO.	202 HEADWALL REMOVED	202 PAVEMENT REMOVED (CONCRETE)	202 PAVEMENT REMOVED (ASPHALT)	202 WALK REMOVED	202 CONCRETE MEDIAN REMOVED	202 CONCRETE BARRIER REMOVED	202 CURB REMOVED	202 CURB AND GUTTER REMOVED	202 PIPE REMOVED, 24" AND UNDER	202 PIPE REMOVED, OVER 24"	202 GUARDRAIL REMOVED	202 BUILDING DEMOLISHED, PARCEL 430-WD, 1 STORY FRAME COMMERCIAL	202 BUILDING DEMOLISHED, PARCEL 821-WD, 1 STORY FRAME COMMERCIAL	202 MANHOLE REMOVED	202 CATCH BASIN REMOVED		202 FENCE REMOVED	202 REMOVAL MISC.: PRIVATE SIGN AND FOUNDATION	202 REMOVAL MISC.: MODULAR BLOCK LANDSCAPE WALL		
	EACH	SY	SY	SF	SY	FT	FT	FT	FT	FT	FT	EACH	EACH	EACH	EACH		FT	EACH	FT		
39	1	314.98	13,639.57	2,192.72	19.71		2,051.47	1,174.99	1,076.31	288.73		1	1	5	11			4	71.50		
40		203.63	1,180.59	2,149.25	11.69		787.15	1,279.47	685.22	480.61	315.00			3	19			5			
41			4,747.96	1,342.24		43.44	185.67	1,654.91	421.48		437.50				11		585.12	2			
SUBTOTALS THIS SHEET	1	518.61	19,568.11	5,684.21	31.41	43.44	3,024.29	4,109.37	2,183.01	769.34	752.50	1	1	8	41		585.12	11	71.50		
TOTALS CARRIED TO GENERAL SUMMARY	1	20,087		5,684	31	43	3,024	4,109	2,183	769	753	1	1	8	41		585	11	72		

CALCULATED MSW
CHECKED MHT

REMOVAL SUBSUMMARY

CLE-CR55-OVRPASS
(PHASE 9)

REMOVAL ESTIMATED QUANTITIES

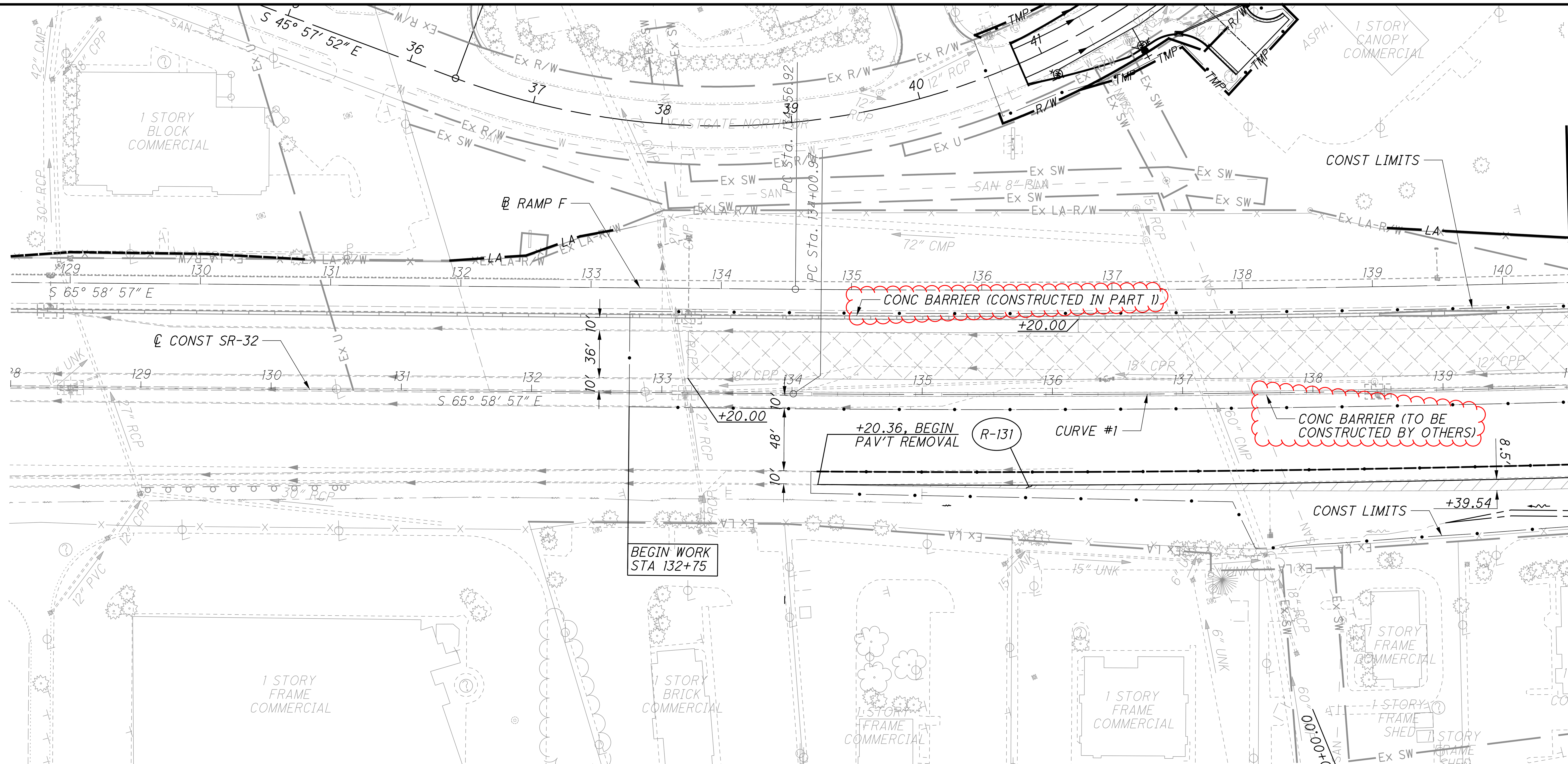
CALCULATED MSW CHECKED MHT

REFERENCE NO.	SHEET NO.	LOCATION	STATION FROM	STATION TO	SIDE	202 HEADWALL REMOVED EACH	202 PAVEMENT REMOVED (CONCRETE) SY	202 PAVEMENT REMOVED (ASPHALT) SY	202 WALK REMOVED SF	202 CONCRETE MEDIAN REMOVED SY	202 CONCRETE BARRIER REMOVED FT	202 CURB REMOVED FT	202 CURB AND GUTTER REMOVED FT	202 PIPE REMOVED, 24" AND UNDER FT	202 PIPE REMOVED, OVER 24" FT	202 GUARDRAIL REMOVED FT		202 MANHOLE REMOVED EACH	202 CATCH BASIN REMOVED EACH	202 FENCE REMOVED FT		202 REMOVAL MISC.: PRIVATE SIGN AND FOUNDATION EACH
R-106	63	EASTGATE NORTH	40+81.00	47+15.90	LT/RT			3,409.07														
R-107	63	EASTGATE NORTH	40+81.00	44+53.78	LT								427.10									
R-108	63	EASTGATE NORTH	40+81.00	42+13.23	RT								189.01									
R-109	63	EASTGATE NORTH	42+41.82	44+37.69	RT								271.36									
R-110	63	EASTGATE NORTH	41+92.07	42+53.98	LT									61.20								
R-111	63	EASTGATE NORTH	41+93.52	42+54.15	LT/RT									70.38					1			
R-112	63	EASTGATE NORTH	42+54.29	42+55.40	LT									4.03					1			
R-113	63	EASTGATE NORTH	41+94.46	42+40.92	RT									58.94					1			
R-114	63	EASTGATE NORTH	43+08.07	43+69.22	RT									86.50					4			
R-119	64	EASTGATE NORTH	44+65.82	46+76.65	RT								221.57									
R-120	64	EASTGATE NORTH	44+69.97	47+01.16	LT								305.63									
R-121	64	EASTGATE NORTH	44+78.23	45+17.26	RT									62.33					1			
R-122	64	EASTGATE NORTH	44+90.96	44+95.98	LT									30.49					1			
R-123	64	EASTGATE NORTH	44+72.55	46+89.45	LT				1,342.24													
R-124	64	EASTGATE NORTH	47+97.16	48+80.00	LT/RT			438.74														
R-125	64	EASTGATE NORTH	47+92.23	48+73.03	LT								108.94									
R-126	64	EASTGATE NORTH	48+03.24	48+77.19	RT								131.30									
R-127	64	EASTGATE NORTH	48+41.89	48+47.89	RT																	1
R-131	65	SR-32	134+20.43	143+00.00	RT			588.04														
R-133	66	SR-32	142+41.96	143+47.61	RT											125.00						
R-134	66	SR-32	143+19.12	145+95.16	RT															282.65		
R-136	66	SR-32	143+00.40	146+11.83	RT							185.67				312.50						
R-137	66	SR-32	140+90.76	143+83.65	LT															302.47		
R-142	67	RAMP R	144+32.35	144+38.47	RT																	1
R-143	67	RAMP R	144+15.04	144+48.90	RT									43.01					1			
R-144	67	RAMP R	144+33.00	144+74.85	LT						43.44											
R-145	67	RAMP R	144+27.18	144+74.85	LT			48.53														
R-146	67	RAMP R	144+43.67	144+45.92	LT									4.60					1			
TOTALS CARRIED TO SHEET 38						0	0.00	4,747.96	1,342.24	0.00	43.44	185.67	1,654.91	421.48	0.00	437.50	0	0	11	585.12		2

CLE-CR55-OVRPASS (PHASE 9)

SR-32

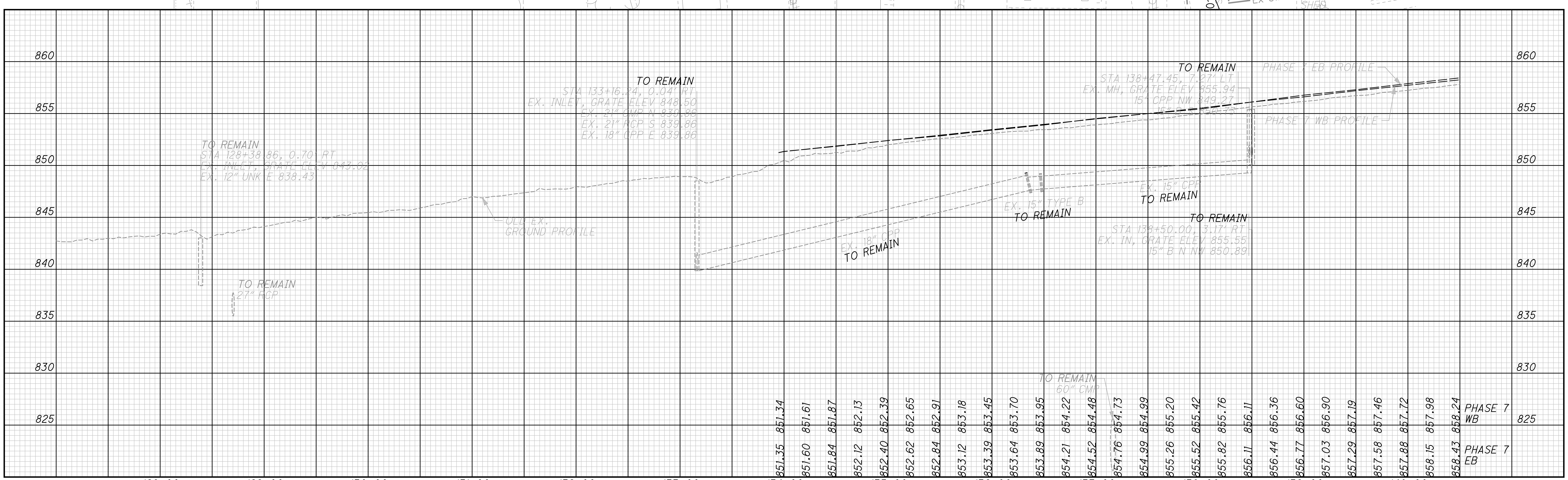
CURVE #1
P.I. Sta. 139+83.95
Δ = 3° 53′ 06″ (LT)
Dc = 0° 20′ 00″
R = 17,188.74′
T = 582.99′
L = 1,165.53′
E = 9.88′
e_{max} = NC
PC Sta. 134+00.97
PT Sta. 145+66.49



LEGEND

▨ ITEM 421 - MICROSURFACING, APP

▨ ASPHALT PAVEMENT REMOVAL



HORIZONTAL SCALE IN FEET 0 25 50 100

CALCULATED MSW
CHECKED GAH

PLAN AND PROFILE - SR-32
STA 128+00 TO STA 140+00

CLE-CR55-OVRPASS (PHASE 9)

65
353

SR-32

CURVE #1
P.I. Sta. 139+83.95
Δ = 3° 53′ 06″ (LT)
Dc = 0° 20′ 00″
R = 17,188.74′
T = 582.99′
L = 1,165.53′
E = 9.88′
e_{max} = NC
PC Sta. 134+00.97
PT Sta. 145+66.49

LEGEND

□ 15′ SS, TYPE C1 END ANCHOR

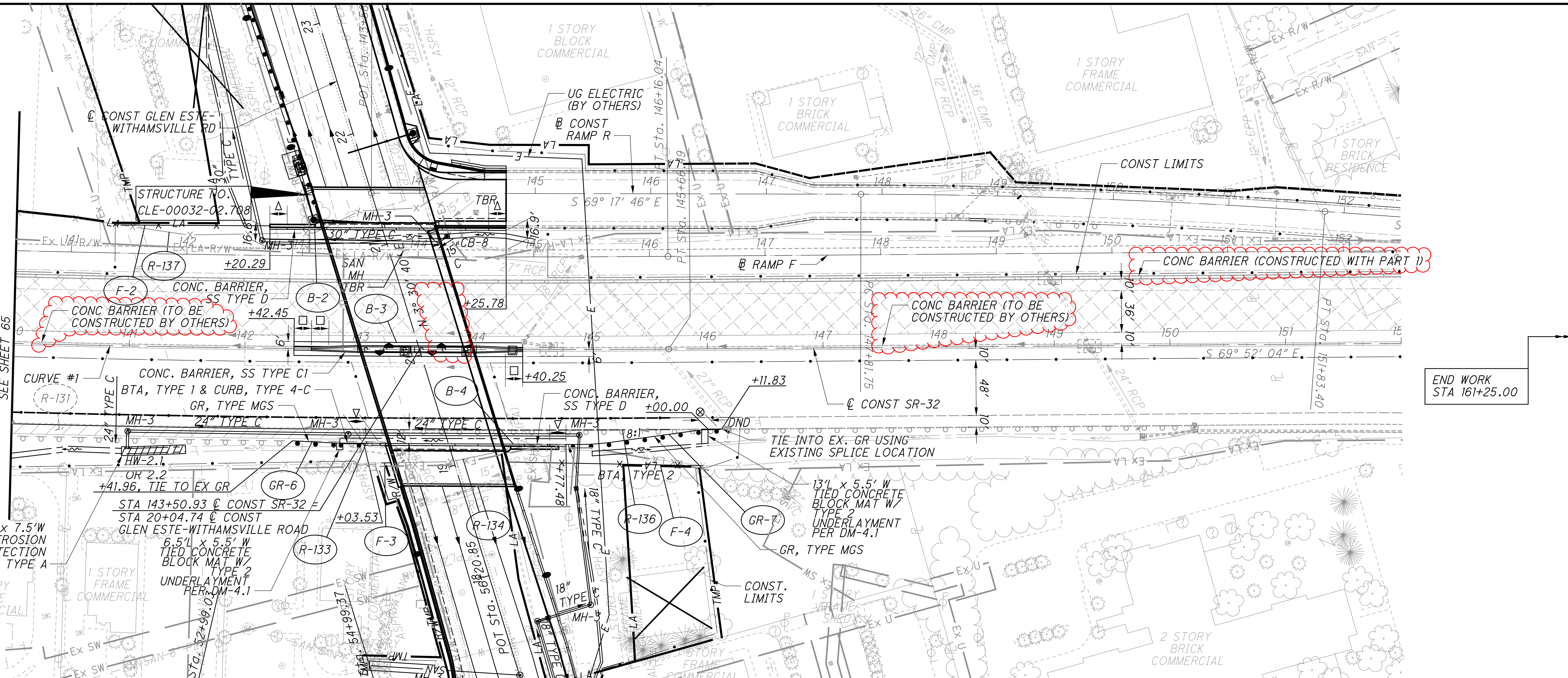
Δ 15′ SS, TYPE D END ANCHOR

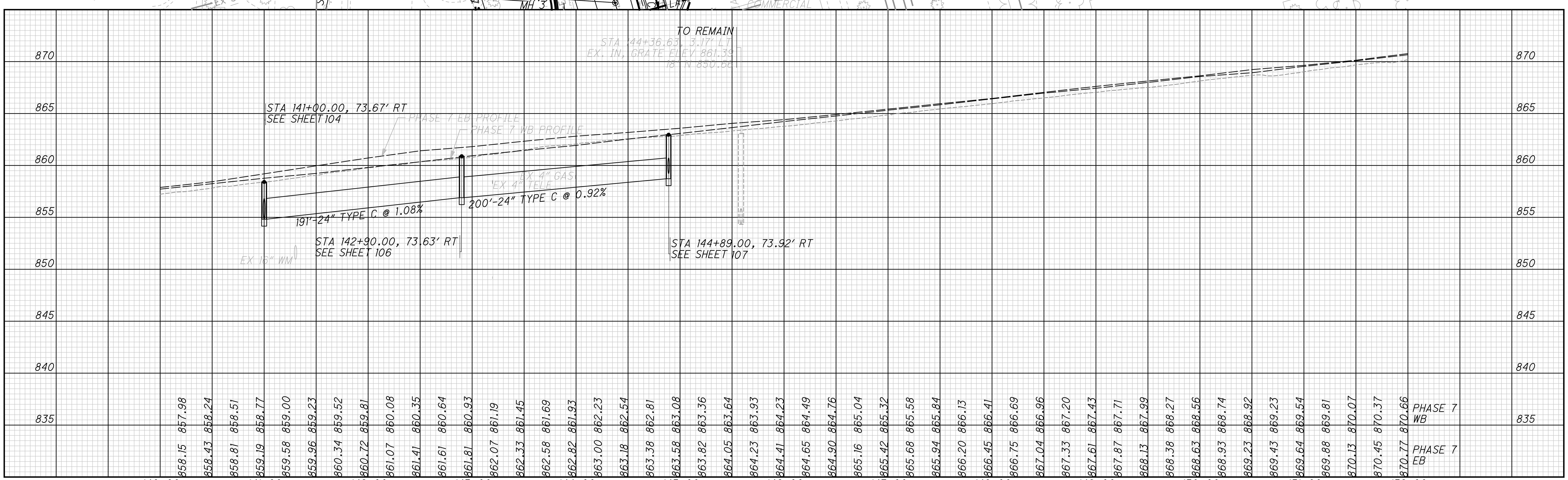
▽ 14′ SS, TYPE D END SECTION

⊗ REPLACE CURB TYPE 4C AND TRANSITION HEIGHT FROM 0″ TO 4″ OVER 10′

ASPHALT PAVEMENT REMOVAL

ITEM 421 - MICROSURFACING, APP





HORIZONTAL SCALE IN FEET 0 25 50 100

CALCULATED MSW CHECKED GAH

PLAN AND PROFILE - SR-32
STA. 140+00 TO STA. 152+00

CLE-CR55-OVRPASS (PHASE 9)

66/353

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SIGNAL ACTIVATION

PRIOR TO ACTIVATING THE NEW TRAFFIC SIGNAL TO STOP-AND-GO MODE AND/OR REMOVING THE EXISTING TRAFFIC SIGNAL FROM SERVICE, ALL ITEMS IN THE PROPOSED SIGNAL PLAN SHALL BE FULLY COMPLETED, (I.E., VEHICLE DETECTION, PEDESTRIAN SIGNAL HEADS, ETC.). IF THERE ARE CONSTRUCTABILITY ISSUES (I.E., ROADWAY WIDENING, ETC.) THAT PREVENT THE SIGNAL FROM BEING COMPLETED PRIOR TO ACTIVATION, IT SHALL BE BROUGHT TO THE ATTENTION OF THE PROJECT ENGINEER AND DISTRICT TRAFFIC ENGINEER. THE DISTRICT TRAFFIC ENGINEER WILL THEN REVIEW, APPROVE OR REJECT PROPOSALS TO ACTIVATE THE TRAFFIC SIGNAL PRIOR TO COMPLETION.

THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER AND DISTRICT TRAFFIC ENGINEER AT LEAST 10 WORKING DAYS PRIOR TO SCHEDULING THE FINAL INSPECTION OF THE SIGNAL INSTALLATION. FINAL INSPECTION IS NOT CONSIDERED COMPLETE UNTIL DESIGNATED DISTRICT TRAFFIC PERSONNEL INSPECT THE TRAFFIC SIGNAL AND ISSUE WRITTEN APPROVAL. IF ISSUES ARE FOUND DURING THE FINAL INSPECTION THAT EFFECT THE SAFETY OF THE TRAVELING PUBLIC AND/OR THE EFFICIENCY OF THE INTERSECTION, THE SIGNAL SHALL NOT BE ACTIVATED ON THE PROPOSED DATE. ANY PUNCH LIST ITEMS THAT ARE FOUND SHALL BE CORRECTED AND REINSPECTED BY DISTRICT TRAFFIC PERSONNEL PRIOR TO FINAL ACCEPTANCE. ODOT FORCES SHALL ONLY ASSUME DAY TO DAY MAINTENANCE OF THE TRAFFIC SIGNAL AFTER FINAL WRITTEN ACCEPTANCE HAS BEEN ISSUED.

NEW TRAFFIC SIGNAL INSTALLATION

THIS WORK CONSISTS OF FURNISHING AND INSTALLING TRAFFIC SIGNAL EQUIPMENT, COMPLETE AND READY FOR SERVICE. THIS WORK ALSO INCLUDES NECESSARY EXCAVATION AND BACKFILL, DISPOSAL OF DISCARDED MATERIALS, RESTORATION OF DISTURBED FACILITIES AND SURFACES TO A CONDITION EQUAL TO THAT EXISTING BEFORE THE WORK STARTED, AND ELECTRICAL TESTING AS SPECIFIED.

PULL BOXES, CONDUITS, GROUND RODS, AND CABLE SPLICING KITS REQUIRED FOR TRAFFIC SIGNAL EQUIPMENT INSTALLATIONS ARE SPECIFIED IN ITEM 625.

BEFORE ANY WORK IS STARTED ON THE TRAFFIC SIGNAL, THE DISTRICT 8 TRAFFIC ENGINEER (513-933-6683) AND THE CONTRACTORS REPRESENTATIVE SHALL REVIEW AND RESOLVE ANY POTENTIAL PROBLEMS AT THE LOCATION WHERE THE NEW SIGNAL WILL BE CONSTRUCTED.

ALL OF THE REQUIRED PERMANENT SIGNS SHALL BE ERECTED AND THE REQUIRED PERMANENT PAVEMENT MARKINGS SHALL BE IN PLACE PRIOR TO THE FINAL ACCEPTANCE OF THE TRAFFIC SIGNAL.

PRIOR TO THE FINAL ACCEPTANCE OF THE COMPLETED TRAFFIC SIGNAL, THE DISTRICT 8 ROADWAY SERVICES REPRESENTATIVE AND THE CONTRACTORS REPRESENTATIVE, SHALL INSPECT AND RESOLVE ANY EXISTING PROBLEMS PRIOR TO THE ACCEPTANCE OF EACH NEW SIGNAL BY THE OHIO DEPARTMENT OF TRANSPORTATION.

ITEM 632 - POWER SERVICE, AS PER PLAN

POWER SERVICE SHALL BE AS PER SPECIFICATION 632 AND STANDARD CONSTRUCTION DRAWING TC-83.10 WITH THE FOLLOWING EXCEPTIONS:

1. THE METER BASE MOUNTING HEIGHT SHALL BE NO MORE THAN FIVE (5) FEET HIGH TO THE CENTER OF THE METER BASE FROM THE GROUND.
2. THE CONTRACTOR SHALL SUPPLY THE NECESSARY METER BASES.
3. ALL POWER SERVICES SHALL BE METERED. THE METER SHALL HAVE A LEVER OPERATED BYPASS.
4. THE POWER SERVICE BLIND HALF COUPLING SHALL BE TWENTY-SEVEN [27] INCHES ABOVE THE BOTTOM OF THE STRAIN POLE BASE PLATE AND SHALL BE WELDED TO THE STRAIN POLE.
5. CONDUIT FROM THE BOTTOM OF THE DISCONNECT SWITCH ENCLOSURE INTO THE BOTTOM OF THE CONTROLLER CABINET WILL NOT BE PERMITTED. POWER SERVICE WIRES FROM THE DISCONNECT SWITCH ENCLOSURE TO THE CONTROLLER CABINET SHALL BE ROUTED THROUGH THE STRAIN POLE.
6. IF INTERSECTION LIGHTING IS SPECIFIED THEN SEPARATE DISCONNECT SWITCHES SHALL BE INSTALLED AND LABELED "LIGHTING" AND "TRAFFIC SIGNAL" WITH A WEATHER PROOF STICKER. MARKER ON THE OUTSIDE OF THE ENCLOSURE IS NOT ACCEPTABLE.
7. THE CONTRACTOR SHALL FURNISH AND INSTALL AN ADDRESS STICKER WITH 4-INCH LETTERING TO THE CABINET. ADDRESS MUST BE VISIBLE FROM THE STREET.

DISCONNECT SWITCH ENCLOSURES FURNISHED SHALL INCLUDE A PADLOCK EQUAL TO MASTER NO. 4BKA OR WILSON BOHANNON 660, WITH LOCK BODY OF BRONZE OR BRASS AND KEYING SHALL BE TO THE STATE MASTER.

THE CONTRACTOR SHALL CONTACT THE METER SECTION OF THE POWER COMPANY FOR INFORMATION REGARDING THE METER BASE INSTALLATION PRIOR TO ORDERING POLES. THE CONTRACTOR WILL BE RESPONSIBLE FOR REQUESTING AND SCHEDULING ANY INSPECTIONS THE POWER COMPANY MAY REQUIRE FOR THE POWER SERVICE HOOK UP. THE CONTRACTOR SHALL CONTACT ODOT DISTRICT 8 TRAFFIC OPERATIONS TO OBTAIN THE POWER SERVICE ADDRESS TO BE USED FOR ON ALL INSPECTIONS. ONCE THE SIGNAL HAS PASSED INSPECTION, THE CONTRACTOR WILL NOTIFY THE PROJECT ENGINEER WHO WILL IN TURN NOTIFY ODOT DISTRICT 8 TRAFFIC OPERATIONS. ODOT DISTRICT 8 TRAFFIC OPERATIONS WILL THEN MAKE APPLICATION FOR POWER FROM THE UTILITY.

UNDER NO CIRCUMSTANCES SHALL THE CONTRACTOR SPLICE POWER CABLE INTO THE POWER COMPANY'S CIRCUITS. THE VOLTAGE SUPPLIED SHALL BE NOMINALLY 120 VOLTS. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ANY NECESSARY PERMITS AND THE PAYING OF ALL FEES. THE EXISTING METER, IF APPLICABLE, IS THE PROPERTY OF THE POWER COMPANY AND SHALL NOT BE REMOVED BY THE CONTRACTOR. PRIOR TO THE EXISTING TRAFFIC SIGNAL REMOVAL, ODOT DISTRICT 8 TRAFFIC OPERATIONS WILL REQUEST THE REMOVAL OF THE METER AND CLOSURE OF THE ACCOUNT.

THE DEPARTMENT WILL MEASURE ITEM 632, POWER SERVICE, AS PER PLAN, BY THE NUMBER OF COMPLETE UNITS AND WILL INCLUDE: WEATHERHEAD, CONDUIT, FITTINGS, CLAMPS, AND OTHER NECESSARY HARDWARE, INSTALLATION OF METER BASE, GROUND WIRE CONNECTIONS, DISCONNECT SWITCH WITH ENCLOSURE, AND COORDINATION WORK WITH UTILITIES.

ANY ADDITIONAL CABLE OR WOOD POLES NECESSARY TO ESTABLISH A POWER SERVICE WITH THE UTILITY COMPANY SHALL BE COVERED UNDER THE PERTINENT PAY ITEMS.

ITEM 632, COMBINATION SIGNAL SUPPORT, TYPE TC-12.31, (BY DESIGN), AS PER PLAN

IN ADDITION TO THE REQUIREMENTS OF CMS 632 AND 732.11, THE FOLLOWING REQUIREMENTS SHALL ALSO APPLY:

THE SUPPORTS SHALL BE POWDER COATED BLACK IN COLOR AND SHALL BE PAINTED IN LIEU OF GALVANIZING.

PAYMENT FOR ITEM 632, COMBINATION SIGNAL SUPPORT, TYPE TC-12.31, (BY DESIGN), AS PER PLAN, SHALL BE MADE AT THE CONTRACT UNIT PRICE AND WILL BE FULL COMPENSATION FOR ALL LABOR, MATERIAL, TOOLS, EQUIPMENT AND OTHER INCIDENTALS NECESSARY FOR EACH SUPPORT FURNISHED, IN PLACE, COMPLETE AND ACCEPTED.

ITEM 632, COMBINATION SIGNAL SUPPORT, TYPE TC-81.22, (BY DESIGN), AS PER PLAN

IN ADDITION TO THE REQUIREMENTS OF CMS 632 AND 732.11, THE FOLLOWING REQUIREMENTS SHALL ALSO APPLY:

THE SUPPORTS SHALL BE POWDER COATED BLACK IN COLOR AND SHALL BE PAINTED IN LIEU OF GALVANIZING.

PAYMENT FOR ITEM 632, COMBINATION SIGNAL SUPPORT, TYPE TC-81.22, (BY DESIGN), AS PER PLAN, SHALL BE MADE AT THE CONTRACT UNIT PRICE AND WILL BE FULL COMPENSATION FOR ALL LABOR, MATERIAL, TOOLS, EQUIPMENT AND OTHER INCIDENTALS NECESSARY FOR EACH SUPPORT FURNISHED, IN PLACE, COMPLETE AND ACCEPTED.

ITEM 632, PEDESTRIAN SIGNAL HEAD (LED), TYPE D2, COUNTDOWN, AS PER PLAN

IN ADDITION TO THE REQUIREMENTS OF CMS 632 AND 732 THE FOLLOWING SHALL APPLY:

1. SIGNAL HEADS AND VISORS SHALL BE CONSTRUCTED OF BLACK POLYCARBONATE PLASTIC AND MEET ITE SPECIFICATIONS.

2. PROPER EXTERIOR COLORS SHALL BE OBTAINED BY USE OF COLORED PLASTIC MATERIAL RATHER THAN PAINTING.

3. PIPE, SPACERS AND FITTINGS CONSTRUCTED OF POLYCARBONATE PLASTIC MAY BE USED IN LIEU OF GALVANIZED STEEL OR ALUMINUM. FITTINGS AND PIPES SHALL BE BLACK.

4. NEW ATTACHMENT HARDWARE AND FITTINGS SHALL USED.

5. THE LIGHT EMITTING DIODE (LED) SIGNAL LAMP UNITS SHALL MEET THE REQUIREMENTS OF CMS 732.04-C. THE CONTRACTOR SHALL PROVIDE ODOT, IN WRITING, WITH THE LED MANUFACTURER NAME, SERIAL NUMBER, PART NUMBER, DESCRIPTION OF LAMP, AND DATE OF MANUFACTURE FOR ALL LED UNITS THAT ARE TO BE USED IN THE SIGNAL HEAD PRIOR TO INSTALLATION, FOR ACCEPTANCE AND WARRANTY PURPOSES.

6. DISPLAY OF MAN AND HAND SHALL BE FILLED IN AND NOT OUTLINE.

7. PEDESTRIAN SIGNAL BRACKET ARMS SHALL BE BOLTED (NOT BANDED) TO THE POLES.

8. THE BOTTOM OF PEDESTRIAN SIGNAL HEADS SHALL BE MOUNTED AT A HEIGHT OF 8 TO 9 FEET ABOVE THE ELEVATION OF THE EXISTING ROADWAY.

PAYMENT FOR ITEM 632, PEDESTRIAN SIGNAL HEAD (LED), TYPE D2, COUNTDOWN, AS PER PLAN SHALL BE MADE FOR THE NUMBER OF COMPLETE SIGNAL HEADS FURNISHED AND INSTALLED, INCLUDING ALL LABOR, EQUIPMENT, MATERIALS AND NEW ATTACHMENT HARDWARE.

DETECTION MAINTENANCE

IF VEHICLE DETECTION BECOMES UNEXPECTEDLY DISABLED, REQUIRES MODIFICATION, OR IS SCHEDULED TO BE TEMPORARILY REMOVED DURING THE CONSTRUCTION PROJECT, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE PROJECT ENGINEER AND DISTRICT TRAFFIC ENGINEER.

IF THE LOSS OF VEHICLE DETECTION IS KNOWN PRIOR TO THE START OF CONSTRUCTION, IT SHALL BE DISCUSSED AT THE PRECONSTRUCTION MEETING. AT SUCH TIME, THE DISTRICT TRAFFIC ENGINEER SHALL ADVISE THE PROJECT ENGINEER AND CONTRACTOR ON THE APPROPRIATE ACTION TO RECTIFY ANY LOSS OF VEHICLE DETECTION. THIS MAY INCLUDE PLACING THE TRAFFIC SIGNAL ON MINIMUM OR MAXIMUM RECALL, MODIFYING THE MINIMUM GREEN TIMES, AND REMOVING THE MALFUNCTIONING DETECTION FROM SERVICE. WHERE NON-INTRUSIVE DETECTION (I.E. VIDEO, RADAR) ALREADY EXISTS, THE CONTRACTOR SHALL INSURE THAT DETECTION IS OPERATING AND MAINTAINED BY RECONFIGURING THE DETECTION UNITS ACCORDINGLY DURING ALL CONSTRUCTION PHASES. THIS IS TO AVOID THE SIGNAL FROM MAXING OUT THE EFFECTED SIGNAL PHASE AND CREATING UNNECESSARY DELAYS.

LOCATIONS WHERE NON-INTRUSIVE DETECTION IS PROPOSED AND THE EXISTING VEHICLE DETECTION IS TO BE ABANDON, THE NON-INTRUSIVE VEHICLE DETECTION SHALL BE INSTALLED, CONFIGURED AND MADE FULLY FUNCTIONAL PRIOR TO THE EXISTING DETECTION BEING DISABLED. THE CONTRACTOR SHALL CONTINUE TO MAINTAIN AND MODIFY THE DETECTION UNTIL FINAL ACCEPTANCE OF THE TRAFFIC SIGNAL. THIS IS TO ENSURE VEHICLE DETECTION REMAINS FULLY FUNCTIONAL THROUGHOUT CONSTRUCTION.

ITEM 632, REUSE OF TRAFFIC CONTROL ITEM (REINSTALL EXISTING CENTRACS COMMUNICATION)

- GLEN ESTE-WITHAMSVILLE RD AND EASTGATE NORTH DRIVE

REMOVE AND SALVAGE EXISTING CENTRACS SYSTEM FROM EXISTING CONTROLLER/CABINET. REUSE EXISTING CENTRACS EQUIPMENT AND RECONNECT TO THE SYSTEM IN NEW CONTROLLER/CABINET.

PAYMENT FOR ITEM 632, REUSE OF TRAFFIC CONTROL ITEM (CENTRACS SYSTEM), SHALL BE MADE AT THE CONTRACT UNIT PRICE AND WILL BE FULL COMPENSATION FOR ALL LABOR, MATERIAL, TOOLS, EQUIPMENT AND OTHER INCIDENTALS NECESSARY FOR EACH SYSTEM FURNISHED, IN PLACE, COMPLETE, TESTED AND ACCEPTED.

ITEM 632, PEDESTAL, 11', TRANSFORMER BASE, AS PER PLAN

IN ADDITION TO THE REQUIREMENTS OF CMS 632 AND 732.11, THE FOLLOWING REQUIREMENTS SHALL ALSO APPLY:

THE SUPPORTS SHALL BE POWDER COATED BLACK IN COLOR AND SHALL BE PAINTED IN LIEU OF GALVANIZING.

PAYMENT FOR ITEM 632, PEDESTAL, 11', TRANSFORMER BASE, AS PER PLAN, SHALL BE MADE AT THE CONTRACT UNIT PRICE AND WILL BE FULL COMPENSATION FOR ALL LABOR, MATERIAL, TOOLS, EQUIPMENT AND OTHER INCIDENTALS NECESSARY FOR EACH SUPPORT FURNISHED, IN PLACE, COMPLETE AND ACCEPTED.

CALCULATED SSS CHECKED SNP

TRAFFIC SIGNAL GENERAL NOTES

CLE-CR55-OVRPASS (PHASE 9)

SHEET NUM.										PART.			ALT	ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
				188		195							(X)						
																		TRAFFIC SIGNALS	
				2		4								625	18201	6	EACH	BRACKET ARM, 15', AS PER PLAN	174
				1,152		2,487								625	23306	3,639	FT	NO. 10 AWG 600 VOLT DISTRIBUTION CABLE	
				235		70								625	25408	305	FT	CONDUIT, 2", 725.051	
				98		79								625	25504	177	FT	CONDUIT, 3", 725.051	
						10								625	25604	10	FT	CONDUIT, 4", 725.051	
				125		299								625	25908	424	FT	CONDUIT, JACKED OR DRILLED, 725.052, 4"	
				2		4								625	27551	6	EACH	LUMINAIRE, DECORATIVE, AS PER PLAN, 250W HPS, TYPE III	174
				308		139								625	29000	447	FT	TRENCH	
				2										625	30700	2	EACH	PULL BOX, 725.08, 18"	
				3		4								625	30706	7	EACH	PULL BOX, 725.08, 24"	
						5								625	31510	5	EACH	PULL BOX REMOVED	190
				4		7								625	32000	11	EACH	GROUND ROD	
				308		139								625	36010	447	FT	UNDERGROUND WARNING/MARKING TAPE	
				5		8								630	79100	13	EACH	SIGN HANGER ASSEMBLY, MAST ARM	
				5		10								630	79500	15	EACH	SIGN SUPPORT ASSEMBLY, POLE MOUNTED	
				1		4								630	80510	5	EACH	SIGN, STREET NAME	
				61.25		81								630	80100	142.25	SF	SIGN, FLAT SHEET	
				10		6								632	05006	16	EACH	VEHICULAR SIGNAL HEAD, (LED), 3-SECTION, 12" LENS, 1-WAY, POLYCARBONATE, BLACK	
						5								632	05086	5	EACH	VEHICULAR SIGNAL HEAD, (LED), 5-SECTION, 12" LENS, 1-WAY, POLYCARBONATE, BLACK	
						2								632	20731	2	EACH	PEDESTRIAN SIGNAL HEAD (LED), TYPE D2, COUNTDOWN, AS PER PLAN	175
				10		11								632	25000	21	EACH	COVERING OF VEHICULAR SIGNAL HEAD	
						2								632	25010	2	EACH	COVERING OF PEDESTRIAN SIGNAL HEAD	
						2								632	26000	2	EACH	PEDESTRIAN PUSHBUTTON	
						1,187								632	40500	1,187	FT	SIGNAL CABLE, 5 CONDUCTOR, NO. 14 AWG	
				765		937								632	40700	1,702	FT	SIGNAL CABLE, 7 CONDUCTOR, NO. 14 AWG	
				1		4								632	64010	5	EACH	SIGNAL SUPPORT FOUNDATION	
				1										632	64011	1	EACH	SIGNAL SUPPORT FOUNDATION, AS PER PLAN	176
						2								632	64021	2	EACH	PEDESTAL FOUNDATION, AS PER PLAN	176
						465								632	65200	465	FT	LOOP DETECTOR LEAD-IN CABLE	
				32		34								632	68200	66	FT	POWER CABLE, 2 CONDUCTOR, NO. 6 AWG	
				44		46								632	68300	90	FT	POWER CABLE, 3 CONDUCTOR, NO. 6 AWG	
						320								632	69800	320	FT	SERVICE CABLE, 3 CONDUCTOR, NO. 6 AWG	
				1		1								632	70001	2	EACH	POWER SERVICE, AS PER PLAN	175
				1		1								632	78111	2	EACH	COMBINATION SIGNAL SUPPORT, TYPE TC-12.31, DESIGN 10, AS PER PLAN	175
						1								632	79131	1	EACH	COMBINATION SIGNAL SUPPORT, TYPE TC-81.22, DESIGN 12, AS PER PLAN	175
				1		1								632	79141	2	EACH	COMBINATION SIGNAL SUPPORT, TYPE TC-81.22, DESIGN 13, AS PER PLAN	175
						1								632	79151	1	EACH	COMBINATION SIGNAL SUPPORT, TYPE TC-81.22, DESIGN 14, AS PER PLAN	175
						2								632	90001	2	EACH	PEDESTAL, 11', TRANSFORMER BASE, AS PER PLAN	175
						1								632	90103	1	EACH	REMOVAL OF TRAFFIC SIGNAL INSTALLATION FOR STORAGE, AS PER PLAN	176
				1		1								633	67101	2	EACH	CABINET FOUNDATION, AS PER PLAN	177
				1		1								633	67201	2	EACH	CONTROLLER WORK PAD, AS PER PLAN	176
						1								632	90104	1	EACH	REUSE OF TRAFFIC CONTROL ITEM (REINSTALL EXISTING CENTRACS COMMUNICATION)	175
				1										633	68511	1	EACH	COMMUNICATIONS, AS PER PLAN	176
				1		1								633	75001	2	EACH	UNINTERRUPTIBLE POWER SUPPLY (UPS), 1000 WATT, AS PER PLAN	176
				1		1								633	99000	2	EACH	CONTROLLER ITEM, MISC.: CONTROLLER UNIT, TYPE TS2/A2, WITH CABINET, TYPE TS1	177
				1										633	99000	1	EACH	CONTROLLER ITEM, MISC.: UNMANAGED ETHERNET SWITCH	177
				1										805	00101	1	EACH	GLOBAL POSITIONING SYSTEM CLOCK ASSEMBLY, AS PER PLAN	177
				1										809	60000	1	EACH	CCTV IP-CAMERA SYSTEM, DOME-TYPE	
				3		3								809	69000	6	EACH	ADVANCE RADAR DETECTION	179
				3		4								809	69100	7	EACH	STOP LINE RADAR DETECTION	179
																		GRAND TOTALS ON THIS SHEET HAVE BEEN CARRIED TO THE GENERAL SUMMARY, SEE SHEET	35

CALCULATED SSS CHECKED SNP

TRAFFIC SIGNAL SUBSUMMARY

CLE-CR55-OVRPASS (PHASE 9)

TRAFFIC SIGNAL ESTIMATED QUANTITIES - GLEN ESTE-WITHAMSVILLE RD & RAMP R (SR 32 WB EXIT)

ITEM	ITEM EXT.	TOTAL	UNIT	DESCRIPTION	SEE SHT.
625	18201	2	EACH	BRACKET ARM, 15', AS PER PLAN	174
625	23306	1152	FT	NO. 10 AWG 600 VOLT DISTRIBUTION CABLE	
625	25408	235	FT	CONDUIT, 2", 725.051	
625	25504	98	FT	CONDUIT, 3", 725.051	
625	25908	125	FT	CONDUIT, JACKED OR DRILLED, 725.052, 4"	
625	27551	2	EACH	LUMINAIRE, DECORATIVE, AS PER PLAN	174
625	29000	308	FT	TRENCH	
625	30700	2	EACH	PULL BOX, 725.08, 18"	
625	30706	3	EACH	PULL BOX, 725.08, 24"	
625	32000	4	EACH	GROUND ROD	
625	36010	308	FT	UNDERGROUND WARNING/MARKING TAPE	
630	79100	5	EACH	SIGN HANGER ASSEMBLY, MAST ARM	
630	79500	5	EACH	SIGN SUPPORT ASSEMBLY, POLE MOUNTED	
630	80510	1	EACH	SIGN, STREET NAME	
630	80100	61.25	SF	SIGN, FLAT SHEET	
632	05006	10	EACH	VEHICULAR SIGNAL HEAD, (LED), 3-SECTION, 12" LENS, 1-WAY, POLYCARBONATE, BLACK	
632	25000	10	EACH	COVERING OF VEHICULAR SIGNAL HEAD	
632	40700	765	FT	SIGNAL CABLE, 7 CONDUCTOR, NO. 14 AWG	
632	64010	1	EACH	SIGNAL SUPPORT FOUNDATION	
632	64011	1	EACH	SIGNAL SUPPORT FOUNDATION, AS PER PLAN	176
632	68200	32	FT	POWER CABLE, 2 CONDUCTOR, NO. 6 AWG	
632	68300	44	FT	POWER CABLE, 3 CONDUCTOR, NO. 6 AWG	
632	70001	1	EACH	POWER SERVICE, AS PER PLAN	175
632	78111	1	EACH	COMBINATION SIGNAL SUPPORT, TYPE TC-12.31, DESIGN 10, AS PER PLAN	175
632	79141	1	EACH	COMBINATION SIGNAL SUPPORT, TYPE TC-81.22, DESIGN 13, AS PER PLAN	175
633	67101	1	EACH	CABINET FOUNDATION, AS PER PLAN	177
633	67201	1	EACH	CONTROLLER WORK PAD, AS PER PLAN	176
633	68511	1	EACH	COMMUNICATIONS, AS PER PLAN	176
633	75001	1	EACH	UNINTERRUPTIBLE POWER SUPPLY (UPS), 1000 WATT, AS PER PLAN	176
633	99000	1	EACH	CONTROLLER ITEM, MISC.: UNMANAGED ETHERNET SWITCH	176
633	99000	1	EACH	CONTROLLER ITEM, MISC.: CONTROLLER UNIT, TYPE TS2/A2, WITH CABINET, TYPE TS1	177
805	00101	1	EACH	GLOBAL POSITIONING SYSTEM CLOCK ASSEMBLY, AS PER PLAN	177
809	60000	1	EACH	CCTV IP-CAMERA SYSTEM, DOME-TYPE	
809	69000	3	EACH	ADVANCE RADAR DETECTION	179
809	69100	3	EACH	STOP LINE RADAR DETECTION	179
				QUANTITIES CARRIED TO TRAFFIC SIGNAL SUBSUMMARY, SEE SHEET	183

CALCULATED SSS CHECKED SNP

TRAFFIC SIGNAL DETAILS
GLEN ESTE-W. RD. & RAMP R (SR 32 WB EXIT)

CLE-CR55-OVRPASS
(PHASE 9)

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TRAFFIC SIGNAL ESTIMATED QUANTITIES - GLEN ESTE-WITHAMSVILLE RD & EASTGATE NORTH DR

ITEM	ITEM EXT.	TOTAL	UNIT	DESCRIPTION	SEE SHT.
625	18201	4	EACH	BRACKET ARM, 15', AS PER PLAN	174
625	23306	2487	FT	NO. 10 AWG 600 VOLT DISTRIBUTION CABLE	
625	25408	70	FT	CONDUIT, 2", 725.051	
625	25504	79	FT	CONDUIT, 3", 725.051	
625	25604	10	FT	CONDUIT, 4", 725.051	
625	25908	299	FT	CONDUIT, JACKED OR DRILLED, 725.052, 4"	
625	27551	4	EACH	LUMINAIRE, DECORATIVE, AS PER PLAN	174
625	29000	139	FT	TRENCH	
625	30706	4	EACH	PULL BOX, 725.08, 24"	
625	31510	5	EACH	PULL BOX REMOVED	190
625	32000	7	EACH	GROUND ROD	
625	36010	139	FT	UNDERGROUND WARNING/MARKING TAPE	
630	79100	8	EACH	SIGN HANGER ASSEMBLY, MAST ARM	
630	79500	10	EACH	SIGN SUPPORT ASSEMBLY, POLE MOUNTED	
630	80510	4	EACH	SIGN, STREET NAME	
630	80100	81	SF	SIGN, FLAT SHEET	
632	05006	6	EACH	VEHICULAR SIGNAL HEAD, (LED), 3-SECTION, 12" LENS, 1-WAY, POLYCARBONATE, BLACK	
632	05086	5	EACH	VEHICULAR SIGNAL HEAD, (LED), 5-SECTION, 12" LENS, 1-WAY, POLYCARBONATE, BLACK	
632	20731	2	EACH	PEDESTRIAN SIGNAL HEAD (LED), TYPE D2, COUNTDOWN, AS PER PLAN	175
632	25000	11	EACH	COVERING OF VEHICULAR SIGNAL HEAD	
632	25010	2	EACH	COVERING OF PEDESTRIAN SIGNAL HEAD	
632	26000	2	EACH	PEDESTRIAN PUSHBUTTON	
632	40500	1187	FT	SIGNAL CABLE, 5 CONDUCTOR, NO. 14 AWG	
632	40700	937	FT	SIGNAL CABLE, 7 CONDUCTOR, NO. 14 AWG	
632	64010	4	EACH	SIGNAL SUPPORT FOUNDATION	
632	64021	2	EACH	PEDESTAL FOUNDATION, AS PER PLAN	176
632	65200	465	FT	LOOP DETECTOR LEAD-IN CABLE	
632	68200	34	FT	POWER CABLE, 2 CONDUCTOR, NO. 6 AWG	
632	68300	46	FT	POWER CABLE, 3 CONDUCTOR, NO. 6 AWG	
632	69800	320	FT	SERVICE CABLE, 3 CONDUCTOR, NO. 6 AWG	
632	70001	1	EACH	POWER SERVICE, AS PER PLAN	175
632	78111	1	EACH	COMBINATION SIGNAL SUPPORT, TYPE TC-12.31, DESIGN 10, AS PER PLAN	175
632	79131	1	EACH	COMBINATION SIGNAL SUPPORT, TYPE TC-81.22, DESIGN 12, AS PER PLAN	175
632	79141	1	EACH	COMBINATION SIGNAL SUPPORT, TYPE TC-81.22, DESIGN 13, AS PER PLAN	175
632	79151	1	EACH	COMBINATION SIGNAL SUPPORT, TYPE TC-81.22, DESIGN 14, AS PER PLAN	175
632	90001	2	EACH	PEDESTAL, 11', TRANSFORMER BASE, AS PER PLAN	175
632	90103	1	EACH	REMOVAL OF TRAFFIC SIGNAL INSTALLATION FOR STORAGE, AS PER PLAN	176
632	90104	1	EACH	REUSE OF TRAFFIC CONTROL ITEM (REINSTALL EXISTING CENTRACS COMMUNICATION)	175
633	99000	1	EACH	CONTROLLER ITEM, MISC.: CONTROLLER UNIT, TYPE TS2/A2, WITH CABINET, TYPE TS1	177
633	67101	1	EACH	CABINET FOUNDATION, AS PER PLAN	177
633	67201	1	EACH	CONTROLLER WORK PAD, AS PER PLAN	176
633	75001	1	EACH	UNINTERRUPTIBLE POWER SUPPLY (UPS), 1000 WATT, AS PER PLAN	176
809	69000	3	EACH	ADVANCE RADAR DETECTION	179
809	69100	4	EACH	STOP LINE RADAR DETECTION	179
				QUANTITIES CARRIED TO TRAFFIC SIGNAL SUBSUMMARY, SEE SHEET	183

CALCULATED SSS
CHECKED SNP

TRAFFIC SIGNAL DETAILS
GLEN ESTE-WITHAMSVILLE RD & EASTGATE NORTH DR
CLE-CR55-OVRPASS
(PHASE 9)

PROJECT DESCRIPTION
THE LIGHTING ACTIVITIES AS PART OF PROJECT CLE-CR171-OLD 74, PID 103955, INCLUDES THE INSTALLATION OF LIGHT POLES WITH LUMINAIRES, CONTROL CENTER, RELATED WIRING, CONDUIT AND PULL BOXES AS SHOWN ON THE PLANS. THE LIGHTING LIMITS ARE AS FOLLOWS:

- ALONG THE WIDENING OF GLEN ESTE-WITHAMSVILLE RD JUST NORTH OF CLEPPER LANE TO JUST NORTH OF EASTGATE NORTH DRIVE (NO LIGHTING ON THE NEW GLEN ESTE-WITHAMSVILLE RD BRIDGE DECK OVER SR 32).
- UNDERPASS LIGHTING ON THE NEW GLEN ESTE-WITHAMSVILLE RD BRIDGE OVER SR 32.

THESE NOTES ARE SUPPLEMENTAL TO ITEMS 625 AND 725 OF THE STATE OF OHIO DEPARTMENT OF TRANSPORTATION CONSTRUCTION AND MATERIAL SPECIFICATIONS.

GENERAL
THE FOLLOWING CRITERIA SHALL BE USED FOR GLEN ESTE-WITHAMSVILLE RD DECORATIVE LIGHTING:
A) POWER SERVICE SHALL BE 120/240 VOLT, 3 WIRE, SINGLE PHASE, GROUNDED NEUTRAL. LUMINAIRES ARE 240 VOLT, 2 WIRE GROUNDED.
B) A NOMINAL 20 FOOT MOUNTING HEIGHT SHALL BE USED. POLE SUPPORTS ARE 18 FEET.
C) CONTROL CENTER SHALL BE 60 AMP.
D) CONTROL CENTER SHALL BE METERED.

UTILITIES
THE CONTRACTOR SHALL CONTACT THE OHIO UTILITY PROTECTION SERVICE BEFORE BEGINNING WORK. THE LOCATION OF THE UNDERGROUND UTILITIES SHOWN ON THE PLANS ARE AS OBTAINED FROM THE OWNERS AS REQUIRED BY SECTION 153.64 ORC.

LAMPS
HIGH PRESSURE SODIUM LAMPS SHALL BE GENERAL ELECTRIC "LUCALOX," OSRAM SYLVANIA "LUMALUX", PHILIPS "CERAMALUX," OR EQUAL AS APPROVED BY THE ENGINEER.

625, LIGHT POLE FOUNDATION, 24" X 6' DEEP, AS PER PLAN
IN ADDITION TO THE REQUIREMENTS OF ODOT CMS, THE LIGHT POLE FOUNDATION SHALL BE MODIFIED TO MATCH THE BOLT CIRCLE OF THE SELECTED LIGHT POLE.

PAYMENT WILL BE MADE AT THE UNIT BID PRICE FOR EACH ITEM 625, "LIGHT POLE FOUNDATION, 24"X 6' DEEP, AS PER PLAN" FOR EACH FOUNDATION WHICH SHALL BE FULL COMPENSATION FOR ALL LABOR, MATERIALS AND INCIDENTALS REQUIRED TO COMPLETE THIS ITEM IN A SATISFACTORY AND WORKMANLIKE MANNER.

625, POWER SERVICE, AS PER PLAN
IN ADDITION TO ODOT ITEM 625.15, ELECTRIC POWER SHALL BE OBTAINED FROM DUKE ENERGY.

THE CONTRACTOR SHALL CONTACT THE METER SECTION OF DUKE ENERGY FOR INFORMATION REGARDING THE METER BASE INSTALLATION, IF ANY.

THE CONTRACTOR SHALL COORDINATE AND COOPERATE WITH THE POWER COMPANY IN THE MAKING OF THE CONNECTIONS TO ESTABLISH ELECTRICAL SERVICE. CHARGES MADE BY THE POWER COMPANY FOR ESTABLISHING OF THE ACCOUNT, EXTENSION OF COMPANY FACILITIES, CONNECTION OF CUSTOMER EQUIPMENT TO THE POWER COMPANY FACILITIES AND ENERGY WILL BE BORNE BY ODOT. AFTER ACCEPTANCE OF THE LIGHTING, THE POWER SERVICE ELECTRICAL ENERGY ACCOUNT SHALL BE TRANSFERRED TO THE MAINTAINING AGENCY NOTED ON THE PLANS.

AFTER ACCEPTANCE OF THE LIGHTING, THE POWER SERVICE ELECTRICAL ENERGY ACCOUNT SHALL BE TRANSFERRED TO THE MAINTAINING AGENCY NOTED ON THE PLANS.

POWER REQUIREMENTS:
ELECTRIC POWER SHALL BE OBTAINED FROM DUKE ENERGY. SERVICE LOCATIONS SHALL BE SUPPLIED AT LOCATIONS AS SHOWN ON THE PLANS. POWER SUPPLIED SHALL BE 120 / 240 VOLTS, 60HZ, SINGLE PHASE, 3-WIRE SERVICE. THE SERVICE SHALL BE PROTECTED BY A 60 AMP FUSE. PROVIDE A WOOD POLE TO SUPPORT THE ELECTRICAL SERVICE EQUIPMENT.

ALL CONNECTIONS TO THE ELECTRIC POWER LINES WILL BE MADE BY THE DUKE ENERGY CREWS. THE CONTRACTOR SHALL COORDINATE WITH CLERMONT COUNTY TRANSPORTATION IMPROVEMENT DISTRICT TO SET UP NEW ELECTRIC SERVICE ACCOUNTS BY CONTACTING DUKE ENERGY.

ALL METERS AND ALL OTHER RELATED EQUIPMENT SHALL BE INCIDENTAL TO ITEM 625 "POWER SERVICE, AS PER PLAN".

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

625, LIGHT POLE FOUNDATION, MISC.: BARRIER MOUNTED
IN ADDITION TO THE REQUIREMENTS OF ODOT CMS, THE LIGHT POLE FOUNDATION SHALL BE MODIFIED TO MATCH ADJACENT CONCRETE BARRIER.

CONTRACTOR SHALL USE ANCHOR BOLTS PROVIDED WITH POLES OR SHALL FURNISH ANCHOR BOLTS PER POLE MANUFACTURER'S SPECIFICATIONS.

THE JUNCTION BOX AT THE POINT WHERE THE STUB CONDUIT TO THE LIGHT POLE JOINS THE MAIN LIGHTING CIRCUIT RACEWAY AND THE STUB CONDUIT FROM THE JUNCTION BOX TO THE LIGHT POLE ARE NOT INCLUDED AND PAID FOR SEPARATELY.

DECORATIVE SPLIT PEDESTAL BASE ACCESS DOORS SHALL NOT BE ORIENTED TOWARDS BLOCK WALL.

FOR ADDITIONAL DETAILS, SEE SHEET 241.

PAYMENT WILL BE MADE AT THE UNIT BID PRICE FOR EACH ITEM 625, "LIGHT POLE FOUNDATION, MISC.: BARRIER MOUNTED" FOR EACH FOUNDATION WHICH SHALL BE FULL COMPENSATION FOR ALL LABOR, MATERIALS AND INCIDENTALS REQUIRED TO COMPLETE THIS ITEM IN A SATISFACTORY AND WORKMANLIKE MANNER.

GROUNDING AND BONDING
THE REQUIREMENTS OF THE CONSTRUCTION AND MATERIAL SPECIFICATIONS (CMS) AND THE HL SERIES OF STANDARD CONSTRUCTION DRAWINGS ARE MODIFIED AS FOLLOWS:

1. ALL METALLIC PARTS CONTAINING ELECTRICAL CONDUCTORS SHALL BE PERMANENTLY JOINED TO FORM AN EFFECTIVE GROUND FAULT CURRENT PATH BACK TO THE GROUNDED CONDUCTOR IN THE POWER SERVICE DISCONNECT SWITCH.
   A. PROVIDE AN EQUIPMENT GROUNDING CONDUCTOR IN METALLIC CONDUITS (725.04) IN ADDITION TO THE CONDUCTORS SPECIFIED AND BOND THE CONDUIT TO THIS GROUNDING CONDUCTOR.
   B. WHEN AN EQUIPMENT GROUNDING CONDUCTOR IS REQUIRED IN PLASTIC CONDUIT (725.05), THE INSTALLATION SHALL INCLUDE A SEPARATE EQUIPMENT GROUNDING CONDUCTOR IN ADDITION TO THE CONDUCTORS SPECIFIED.
   C. IF MULTIPLE CONDUIT RUNS BEGIN AND END AT THE SAME POINTS, ONLY ONE EQUIPMENT GROUNDING CONDUCTOR IS REQUIRED.
2. CONDUITS.
   A. THE 725.04 CONDUIT SHALL HAVE GROUNDING BUSHINGS INSTALLED AT ALL TERMINATION POINTS. THE BUSHING MATERIAL SHALL BE COMPATIBLE WITH GALVANIZED STEEL CONDUIT AND THE GROUNDING LUG MATERIAL SHALL BE COMPATIBLE FOR USE WITH COPPER WIRE. THREADED OR COMPRESSION TYPE BUSHINGS MAY BE USED.
   B. THE 725.05 CONDUIT SHALL HAVE THE INSIDE AND OUTSIDE DIAMETERS OF THE CONDUIT DE-BURRED AT ALL TERMINATION POINTS.
   C. BOTH ENDS OF METALLIC CONDUIT SHALL BE BONDED TO THE EQUIPMENT GROUNDING CONDUCTOR.
   D. METALLIC CONDUIT MAY BE BONDED TO METALLIC BOXES THROUGH THE USE OF CONDUIT FITTINGS UL APPROVED FOR THIS TYPE OF CONNECTION, WITH THE BOX BONDED TO THE EQUIPMENT GROUNDING CONDUCTOR.
3. WIRE FOR GROUNDING AND BONDING.
   A. USE INSULATED, COPPER WIRE FOR THE EQUIPMENT GROUNDING CONDUCTOR. BONDING JUMPERS IN BOXES AND ENCLOSURES MAY BE BARE OR INSULATED COPPER WIRE. WIRE SIZE SHALL BE AS FOLLOWS:
      I. USE 4 AWG BETWEEN THE POWER SERVICE AND POLES.
      II. THE INSULATION SHALL BE GREEN OR GREEN WITH YELLOW STRIPE(S). FOR 4 AWG OR LARGER, INSULATION MAY ALSO BE BLACK WITH GREEN TAPE/LABELS INSTALLED AT ALL ACCESS POINTS.
   B. IN A HIGHWAY LIGHTING SYSTEM, THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE THE SAME WIRE SIZE AS THE DUCT CABLE OR DISTRIBUTION CABLE CIRCUIT CONDUCTORS, WITH THE MINIMUM CONDUCTOR SIZE OF 4 AWG. BONDING JUMPERS WILL BE MINIMUM SIZE 4 AWG.

GROUNDING AND BONDING (CONT.)
4. GROUND ROD.
   A. A 3/4 INCH SCHEDULE 40 PVC CONDUIT WILL BE USED IN FOUNDATIONS AND CONCRETE WALLS FOR THE GROUNDING CONDUCTOR (GROUND WIRE) RACEWAY TO THE GROUND ROD. SHOULD METALLIC CONDUIT BE USED, BOTH ENDS OF THE CONDUIT SHALL BE BONDED TO THE GROUNDING CONDUCTOR.
   B. THE TYPICAL GROUNDING CONDUCTOR (GROUND WIRE) SHALL BE 4 AWG INSULATED, COPPER.
5. POWER SERVICE AND DISCONNECT SWITCH.
   A. AT THE POWER SERVICE LOCATION, THE GROUNDING CONDUCTOR (GROUND WIRE) FROM THE DISCONNECT SWITCH NEUTRAL (AC-) BAR TO THE GROUND ROD SHALL BE A CONTINUOUS, UN-SPLICED CONDUCTOR. IF SPLICED, IT SHALL BE AN EXOTHERMIC WELD BUTT SPLICE.
   B. THE SERVICE NEUTRAL (AC-) SHALL ONLY BE CONNECTED TO GROUND AT THE PRIMARY POWER SERVICE DISCONNECT SWITCH.
      I. NEMA CONTROLLER CABINETS: IF A POWER SERVICE DISCONNECT SWITCH IS LOCATED BEFORE THE CONTROLLER CABINET, THE NEUTRAL (AC-) AND THE GROUNDING BARS IN THE CONTROLLER CABINET SHALL NOT BE CONNECTED TOGETHER AS SHOWN IN NEMA TS-2, FIGURE 5-4.
      II. IF SECONDARY DISCONNECT SWITCHES ARE CONNECTED AFTER THE PRIMARY DISCONNECT SWITCH, THE NEUTRAL (AC-) SHALL ONLY BE GROUNDED AT THE PRIMARY SWITCH. EQUIPMENT GROUNDING CONDUCTORS SHALL BE BROUGHT TO THE PRIMARY SWITCH, BUT SHALL BE GROUNDED AT BOTH SECONDARY AND PRIMARY SWITCHES.
6. PAYMENT - ALL MATERIALS AND WORK REQUIRED TO COMPLETE THE EFFECTIVE GROUND FAULT CURRENT PATH SYSTEM ARE INCIDENTAL TO THE CONDUCTORS INSTALLED BY CONTRACT.

CALCULATED SSS CHECKED MHT

LIGHTING GENERAL NOTES

CLE-CR55-OVRPASS (PHASE 9)

ITEM SPECIAL - SETTLEMENT PLATFORM:

DESCRIPTION: THIS ITEM CONSISTS OF FURNISHING, CONSTRUCTING, AND MAINTAINING SETTLEMENT PLATFORMS AND OBTAINING SETTLEMENT READINGS AS REQUIRED BY THE PLANS OR AS DIRECTED BY THE ENGINEER. AT THE OPTION AND EXPENSE OF THE CONTRACTOR, ADDITIONAL SETTLEMENT PLATFORMS MAY BE INSTALLED AT LOCATIONS APPROVED BY THE ENGINEER. SETTLEMENT READINGS SHALL BE TAKEN WEEKLY DURING CONSTRUCTION AND DURING ANY SPECIFIED WAITING PERIOD. THE READINGS SHALL BE PLOTTED ON GRAPH PAPER PRESENTING DEFORMATION (ON THE NEGATIVE Y-AXIS) AND FILL HEIGHT (ON THE POSITIVE Y-AXIS) VERSUS TIME (ON THE X-AXIS). IN ORDER TO CREATE THE GRAPH, USE THE SETTLEMENT PLATFORM SPREADSHEET LOCATED AT:
https://www.dot.state.oh.us/Divisions/Engineering/Geotechnical/geotechnical_documents/Blank_Settlement_Reading_Plots-English.xls
IN THE OGE WEBSITE PUBLICATIONS AND DOCUMENTS SECTION. PREPARE A SEPARATE GRAPH IN THE SPREADSHEET FOR EACH SETTLEMENT PLATFORM. PROVIDE THE SETTLEMENT PLATFORM DESIGNATION NUMBER, STATION, AND OFFSET ON EACH TAB IN THE SPREADSHEET. A COPY OF EACH CUMULATIVE PLOT SHALL BE SENT TO THE ENGINEER AND THE DISTRICT GEOTECHNICAL ENGINEER AFTER EACH SETTLEMENT READING IS RECORDED.

THE DEPARTMENT WILL CONSIDER VIBRATING WIRE SETTLEMENT MONITORING PLATFORMS IN LIEU OF THE CONVENTIONAL SETTLEMENT PLATFORMS. THE CONTRACTOR SHOULD PROVIDE DETAILS OF THE PROPOSED VIBRATING WIRE SETTLEMENT PLATFORMS AS WELL AS DESIGN DRAWINGS OF THE PROPOSED PLATFORM AND CABLING LAYOUT TO THE ENGINEER AT LEAST 30 DAYS PRIOR TO CONSTRUCTION. THE DEPARTMENT WILL REQUIRE 10 WORKING DAYS FOR REVIEW AND APPROVAL. THE DESIGN DRAWINGS SHOULD ILLUSTRATE THE PROPOSED VIBRATING WIRE SETTLEMENT PLATFORM LOCATIONS WITH ALL EXISTING AND PROPOSED SITE FEATURES TO VERIFY THE PROPOSED CABLING WILL NOT CONFLICT WITH EXISTING FACILITIES, PROPOSED FACILITIES, OR UTILITIES. NO ADDITIONAL PAYMENT WILL BE PROVIDED IF THE CONTRACTOR ELECTS TO UTILIZE VIBRATING WIRE SETTLEMENT PLATFORMS.

MATERIALS: SOUND LUMBER SUCH AS ¾" EXTERIOR GRADE PLYWOOD SHALL BE USED FOR THE BASE. THE PIPE SHALL BE 2½" STANDARD BLACK PIPE WITH THREADED FITTINGS AS SHOWN ON THE PLANS. A STEEL PLATE (36" x 36" x ⅛") MAY BE SUBSTITUTED FOR THE LUMBER FOR THE PLATFORMS, AT THE CONTRACTOR'S OPTION.

THE CONTRACTOR MAY UTILIZE VIBRATING WIRE SETTLEMENT MONITOR DEVICES IN LIEU OF THE SETTLEMENT PLATFORMS AT NO ADDITIONAL COST TO THE PROJECT. THE CONTRACTOR MUST SUBMIT THE PROPOSED VIBRATING WIRE SETTLEMENT MONITORING EQUIPMENT AND METHODS TO THE DISTRICT GEOTECHNICAL ENGINEER FOR APPROVAL PRIOR TO ORDERING MATERIALS OR FIELD INSTALLATION.

ITEM SPECIAL - SETTLEMENT PLATFORM (CONTINUED):

CONSTRUCTION METHODS: THE PLATFORM SHALL CONFORM TO THE DETAILS SHOWN ON THE PLANS. THE PLATFORM SHALL BE SET ON A LEVEL SURFACE. PLACE THE SETTLEMENT PLATFORMS AT THE BOTTOM OF THE GRANULAR MATERIAL, TYPE C USED IN THE ITEM 840 - FOUNDATION PREPARATION WORK. FIRMLY SECURE THE SETTLEMENT PLATFORM ON THE SS840 SUBGRADE BY DRIVING NO. 4 REINFORCING BAR STAKES WITH A 90 DEGREE BEND AT EACH CORNER OF THE SETTLEMENT PLATFORM. THE PIPE SHALL BE FIRMLY SECURED TO THE PLATFORM AND SHALL BE MAINTAINED IN A PLUMB POSITION DURING THE PLACEMENT OF THE EMBANKMENT. THE PIPE SHALL BE MARKED AT 1 FOOT INTERVALS WITH PROJECT ELEVATIONS TO FACILITATE MEASUREMENT OF THE DEPTH AND ELEVATION OF FILL. THE CONTRACTOR SHALL STOP WORK IN ANY LOCATION WHERE THE SETTLEMENT PLATFORM HAS BEEN DISTURBED OR DAMAGED. PLATFORMS OR PIPES DAMAGED OR DISPLACED DURING CONSTRUCTION SHALL BE RESTORED TO THEIR PROPER CONDITION AT THE CONTRACTOR'S EXPENSE.

1. NEW SECTIONS OF PIPE SHALL BE ADDED TO THE TOP OF THE PIPE AS THE EMBANKMENT HEIGHT RISES. IN THIS CASE, THE INCREASE IN THE LENGTH OF THE RISER PIPE SHALL BE DETERMINED AND RECORDED AS WELL AS THE DATE IN WHICH THIS OPERATION WAS PERFORMED. DOCUMENT THE DATE OF PIPE INCREASE ON THE SETTLEMENT GRAPH.

2. THE RISER PIPE SHALL HAVE GUARD STAKES OR BE MARKED WITH HIGH-VISIBILITY FLAGS OR RIBBONS IN ORDER TO PROTECT IT FROM CONSTRUCTION EQUIPMENT. SETTLEMENT PLATFORMS MAY BE PLACED BEYOND THE EDGE OF PAVEMENT BUT INSIDE THE BREAK OF THE SLOPE IN ORDER TO BE OUT OF THE WAY AS MUCH AS POSSIBLE.

3. IF THE PLATFORM OR PIPE IS DISTURBED OR DAMAGED, WORK SHALL BE STOPPED IN THAT LOCATION UNTIL THE CONTRACTOR RESTORES THE SETTLEMENT PLATFORM AND RISER PIPE TO THEIR PROPER CONDITION. DAMAGED SETTLEMENT PLATFORMS SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.

4. PRIOR TO PAVING, THE RISER PIPE SHALL BE CUT OFF 2 FEET BELOW THE TOP OF THE FINISHED SURFACE OF THE SUBGRADE OR THE FINISHED GROUND SURFACE, WHICHEVER IS APPLICABLE.

WAITING PERIOD: THE WAITING PERIOD SHALL NOT BE CONSIDERED TO BEGIN UNTIL ALL FILL LOADING HAS BEEN PLACED TO THE DESIGN SUBGRADE LEVEL FOR BRIDGE APPROACHES OR FINAL EMBANKMENT LEVEL IN AREAS BEYOND THE BRIDGE APPROACH. THE ANTICIPATED WAITING PERIOD IS SUMMARIZED BELOW FOR EACH SETTLEMENT PLATFORM. INCLUDE SPECIFIC ACTIVITIES IN THE CONSTRUCTION SCHEDULE FOR THE SETTLEMENT WAITING PERIOD.

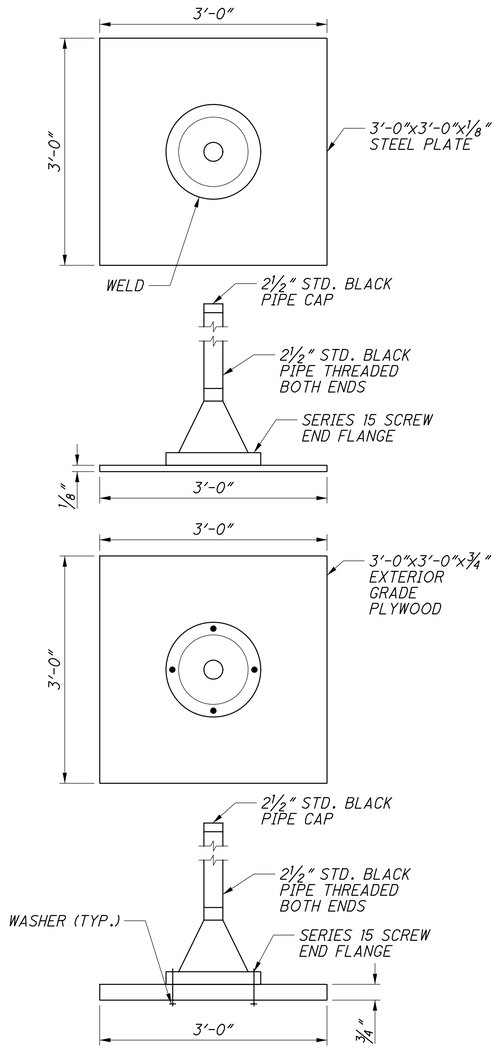
SP-1 @ WALL NO. 3 STA. 13+00.00, 10.0' RT. WAITING PERIOD = 175 DAYS
SP-2 @ WALL NO. 4 STA. 10+30.00, 10.0' LT. WAITING PERIOD = 60 DAYS
SP-3 @ WALL NO. 9 STA. 10+55.00, 10.0' LT. WAITING PERIOD = 153 DAYS

NO CONSTRUCTION ABOVE THE TOP SOIL REINFORCEMENT LAYER (INCLUDING WALL COPING OR CONCRETE RAILING AND MOMENT SLAB ABOVE THE WALLS) OR PAVING SUPPORTED BY EMBANKMENT BEHIND THE WALL SHALL BEGIN UNTIL SETTLEMENT WAITING PERIOD HAS BEEN TERMINATED BY THE ENGINEER.

METHOD OF MEASUREMENT: THE NUMBER OF SETTLEMENT PLATFORMS TO BE PAID FOR SHALL BE THE ACTUAL NUMBER OF SETTLEMENT PLATFORMS COMPLETED, MAINTAINED, AND ACCEPTED BY THE ENGINEER.

ITEM SPECIAL - SETTLEMENT PLATFORM (CONTINUED):

BASIS OF PAYMENT: PAYMENT SHALL BE MADE AT THE CONTRACT UNIT PRICE EACH FOR ITEM SPECIAL - SETTLEMENT PLATFORM WHICH IS COMPENSATION FOR CONSTRUCTING, MAINTAINING, AND MONITORING THE SETTLEMENT PLATFORMS INCLUDING FURNISHING ALL LABOR, EQUIPMENT, MATERIALS, AND INCIDENTALS NECESSARY TO COMPLETE THE WORK. PAYMENT SHALL NOT BE MADE FOR SETTLEMENT PLATFORMS WHICH BECOME USELESS DUE TO DAMAGE CAUSED BY THE CONTRACTOR'S OPERATIONS.



SETTLEMENT PLATFORM DETAILS

DESIGN AGENCY
TranSystems
1100 SUPERIOR AVENUE, SUITE 1000
CLEVELAND, OHIO 44114

DESIGNED GJZ | DRAWN GJZ | CHECKED ZTW | REVIEWED PEG | DATE 03/25/22 | REVISED | STRUCTURE FILE NUMBER

RETAINING WALL GENERAL NOTES - 2
RETAINING WALL NOS. 1, 2, 3, 4, 6, 7, 9, AND 24

CLE-CR55-
OVERPASS
PID No. 103957

STRUCTURE GENERAL NOTES

REFER TO THE FOLLOWING STANDARD BRIDGE DRAWINGS:

AS-1-15	REVISED 01/20/2023
AS-2-15	REVISED 01/20/2023
BR-2-15	REVISED 01/21/2022
PSID-1-13	REVISED 01/20/2023
SBR-1-20	REVISED 01/20/2023
VPF-1-90	REVISED 01/20/2023

AND TO THE FOLLOWING SUPPLEMENTAL SPECIFICATION:

800	DATED 01/20/2023

DESIGN SPECIFICATIONS:

THIS STRUCTURE CONFORMS TO THE 9TH EDITION OF THE "LRFD BRIDGE DESIGN SPECIFICATIONS" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 2020 AND THE ODOT BRIDGE DESIGN MANUAL, 2019.

OPERATIONAL IMPORTANCE:

A LOAD MODIFIER OF 1.0 HAS BEEN ASSUMED FOR THE DESIGN OF THIS STRUCTURE IN ACCORDANCE WITH THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, ARTICLE 1.3.5 AND THE ODOT BRIDGE DESIGN MANUAL.

DESIGN LOADING:

VEHICULAR LIVE LOAD: HL-93
FUTURE WEARING SURFACE (FWS) OF 0.060 KSF
PEDESTRIAN LIVE LOAD: 0.075 KSF

DESIGN DATA:

CONCRETE CLASS QC2:
COMPRESSIVE STRENGTH 4.5 KSI (SUPERSTRUCTURE)

CONCRETE CLASS QC1:
COMPRESSIVE STRENGTH 4.0 KSI (SUBSTRUCTURE)

REINFORCING STEEL - MINIMUM YIELD STRENGTH 60 KSI

STEEL H-PILES - ASTM A572 - YIELD STRENGTH 50 KSI

CONCRETE FOR PRESTRESSED BEAMS:
COMPRESSIVE STRENGTH (FINAL) - 10.0 KSI
COMPRESSIVE STRENGTH (RELEASE) - 8.0 KSI

WELDED WIRE FABRIC - YIELD STRENGTH - 70 KSI

PRESTRESSING STRAND:
AREA = 0.217 SQUARE INCHES
ULTIMATE STRENGTH = 270 KSI
INITIAL STRESS = 202.5 KSI (LOW RELAXATION STRANDS)

MONOLITHIC WEARING SURFACE:

MONOLITHIC WEARING SURFACE IS ASSUMED, FOR DESIGN PURPOSES, TO BE 1 INCH THICK.

NON-USE OF ASBESTOS-CONTAINING MATERIALS:

THE CONTRACTOR SHALL AT NO TIME INCORPORATE ANY MATERIALS WHICH ARE COMPOSED OF OR CONTAIN ANY AMOUNTS OF ASBESTOS. THE SUBSTITUTION OF MATERIALS WHICH CONTAIN ANY AMOUNTS OF ASBESTOS WILL IN NO CIRCUMSTANCES BE ACCEPTABLE. UPON COMPLETION OF THE PROJECT, THE CONTRACTOR SHALL SUBMIT A WRITTEN STATEMENT OF CERTIFICATION ASSERTING THAT NO ASBESTOS CONTAINING MATERIALS WERE USED IN ANY PORTION OF THE CONSTRUCTION.

PILE DRIVING:

THE MINIMUM RATED ENERGY OF THE HAMMER USED TO INSTALL THE PILES SHALL BE 43,000 FOOT-POUNDS. ENSURE THAT STRESSES IN THE PILES DURING DRIVING DO NOT EXCEED 45,000 POUNDS PER SQUARE INCH.

PILES TO BEDROCK:

DRIVE PILES TO REFUSAL ON BEDROCK. THE DEPARTMENT WILL CONSIDER REFUSAL TO BE OBTAINED WHEN THE PILE PENETRATION IS AN INCH OR LESS AFTER RECEIVING AT LEAST 20 BLOWS FROM THE PILE HAMMER. SELECT THE HAMMER SIZE TO ACHIEVE THE REQUIRED DEPTH TO BEDROCK AND REFUSAL AND TO MEET THE REQUIREMENTS STATED IN THE PILE DRIVING NOTE ON THIS SHEET.

THE TOTAL FACTORED LOAD IS 377 KIPS PER PILE FOR THE REAR AND FORWARD ABUTMENT PILES. THE TOTAL FACTORED LOAD IS 299 KIPS PER PILE FOR THE PIER PILES.

REAR ABUTMENT PILES:
HP12x53 PILES 50 FEET LONG, ORDER LENGTH

PIER PILES:
HP12x53 PILES 55 FEET LONG, ORDER LENGTH

FORWARD ABUTMENT PILES:
HP12x53 PILES 55 FEET LONG, ORDER LENGTH

PILE SPLICES:

IN LIEU OF USING THE FULL PENETRATION BUTT WELDS SPECIFIED IN CMS 507.09 TO SPLICE STEEL H-PILES, THE CONTRACTOR MAY USE A MANUFACTURED H-PILE SPLICER. FURNISH SPLICERS FROM THE FOLLOWING MANUFACTURER:

ASSOCIATED PILE AND FITTING CORPORATION
8 WOOD HOLLOW RD. PLAZA 1
PARSIPPANY, NEW JERSEY 07054

INSTALL AND WELD THE SPLICER TO THE PILE SECTIONS IN ACCORDANCE WITH THE MANUFACTURER'S WRITTEN ASSEMBLY PROCEDURE SUPPLIED TO THE ENGINEER BEFORE THE WELDING IS PERFORMED.

DECK PLACEMENT DESIGN ASSUMPTIONS:

THE FOLLOWING ASSUMPTIONS OF CONSTRUCTION MEANS AND METHODS WERE MADE FOR THE ANALYSIS AND DESIGN OF THE SUPERSTRUCTURE. THE CONTRACTOR IS RESPONSIBLE FOR THE DESIGN OF THE FALSEWORK SUPPORT SYSTEM WITHIN THESE PARAMETERS AND WILL ASSUME RESPONSIBILITY FOR SUPERSTRUCTURE ANALYSIS FOR DEVIATION FROM THESE DESIGN ASSUMPTIONS.

AN EIGHT WHEEL FINISHING MACHINE WITH A MAXIMUM WHEEL LOAD OF 3.05 KIPS.

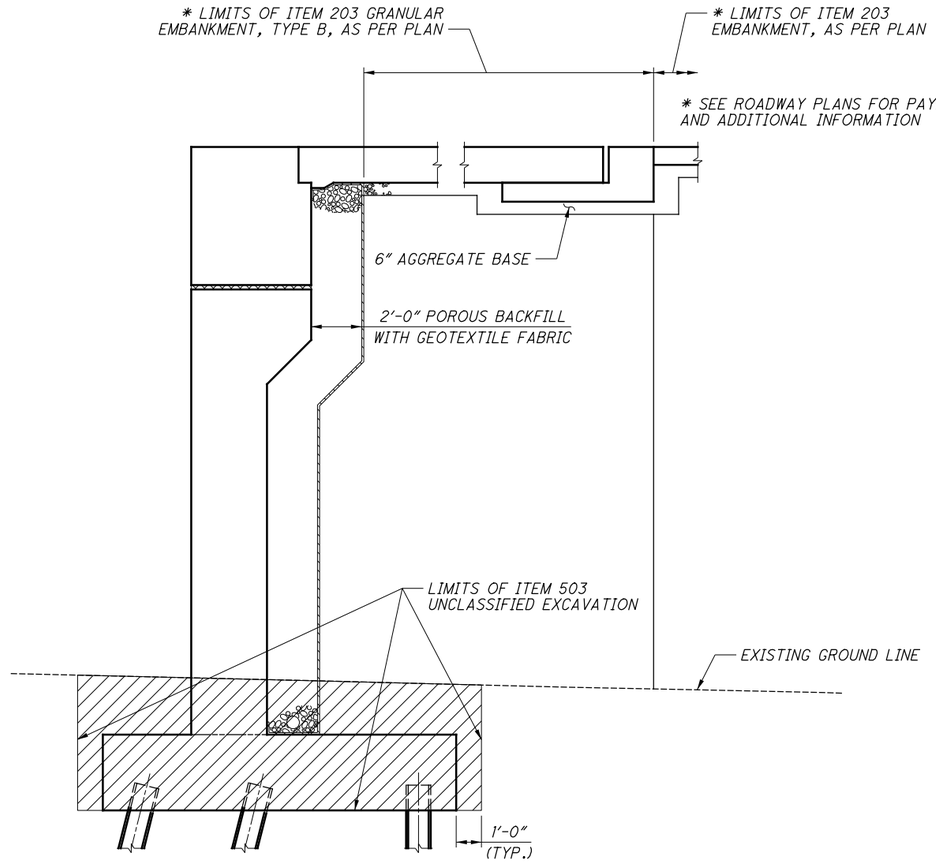
A MINIMUM OUT-TO-OUT WHEEL SPACING AT EACH END OF THE MACHINE OF 103 INCHES.

A MAXIMUM SPACING OF OVERHANG FALSEWORK BRACKETS OF 48 INCHES.

A MAXIMUM DISTANCE FROM THE CENTERLINE OF THE FASCIA GIRDER TO THE FACE OF THE SAFETY HANDRAIL OF 65 INCHES.

ITEM 203 - EMBANKMENT, AS PER PLAN & ITEM 203 - GRANULAR EMBANKMENT, TYPE B, AS PER PLAN:

PLACE AND COMPACT EMBANKMENT MATERIAL IN 6 INCH LIFTS FOR THE CONSTRUCTION OF THE APPROACH EMBANKMENT BETWEEN STATIONS 17+80 TO 18+80 AND 21+51 TO 22+51. SEE ROADWAY PLANS FOR DETAILS AND PAYMENT.



UNCLASSIFIED EXCAVATION AND ITEM 203 DIAGRAM

(ABUTMENT SHOWN, WINGWALL SIMILAR)

DESIGN AGENCY
TranSystems
1100 SUPERIOR AVENUE, SUITE 1000
CLEVELAND, OHIO 44114

DESIGNED	DRAWN	REVIEWED	DATE
ZTW	GJZ	PEG	03/25/22
CHECKED	REVISED	STRUCTURE FILE NUMBER	
PEG		1300339	

GENERAL NOTES - 1
BRIDGE NO. CLE-00032-02.708
GLEN ESTE-WITHAMSVILLE ROAD OVER SR-32

CLE-CR55-
OVERPASS
PID No. 103957

ITEM SPECIAL - SETTLEMENT PLATFORM:

DESCRIPTION: THIS ITEM CONSISTS OF FURNISHING, CONSTRUCTING, AND MAINTAINING SETTLEMENT PLATFORMS AND OBTAINING SETTLEMENT READINGS AS REQUIRED BY THE PLANS OR AS DIRECTED BY THE ENGINEER. AT THE OPTION AND EXPENSE OF THE CONTRACTOR, ADDITIONAL SETTLEMENT PLATFORMS MAY BE INSTALLED AT LOCATIONS APPROVED BY THE ENGINEER. SETTLEMENT READINGS SHALL BE TAKEN WEEKLY DURING CONSTRUCTION AND DURING ANY SPECIFIED WAITING PERIOD. THE READINGS SHALL BE PLOTTED ON GRAPH PAPER PRESENTING DEFORMATION (ON THE NEGATIVE Y-AXIS) AND FILL HEIGHT (ON THE POSITIVE Y-AXIS) VERSUS TIME (ON THE X-AXIS). IN ORDER TO CREATE THE GRAPH, USE THE SETTLEMENT PLATFORM SPREADSHEET LOCATED AT:
https://www.dot.state.oh.us/Divisions/Engineering/Geotechnical/geotechnical_documents/Blank_Settlement_Reading_Plots-English.xls
IN THE OGE WEBSITE PUBLICATIONS AND DOCUMENTS SECTION. PREPARE A SEPARATE GRAPH IN THE SPREADSHEET FOR EACH SETTLEMENT PLATFORM. PROVIDE THE SETTLEMENT PLATFORM DESIGNATION NUMBER, STATION, AND OFFSET ON EACH TAB IN THE SPREADSHEET. A COPY OF EACH CUMULATIVE PLOT SHALL BE SENT TO THE ENGINEER AND THE DISTRICT GEOTECHNICAL ENGINEER AFTER EACH SETTLEMENT READING IS RECORDED.

THE DEPARTMENT WILL CONSIDER VIBRATING WIRE SETTLEMENT MONITORING PLATFORMS IN LIEU OF THE CONVENTIONAL SETTLEMENT PLATFORMS. THE CONTRACTOR SHOULD PROVIDE DETAILS OF THE PROPOSED VIBRATING WIRE SETTLEMENT PLATFORMS AS WELL AS DESIGN DRAWINGS OF THE PROPOSED PLATFORM AND CABLING LAYOUT TO THE ENGINEER AT LEAST 30 DAYS PRIOR TO CONSTRUCTION. THE DEPARTMENT WILL REQUIRE 10 WORKING DAYS FOR REVIEW AND APPROVAL. THE DESIGN DRAWINGS SHOULD ILLUSTRATE THE PROPOSED VIBRATING WIRE SETTLEMENT PLATFORM LOCATIONS WITH ALL EXISTING AND PROPOSED SITE FEATURES TO VERIFY THE PROPOSED CABLING WILL NOT CONFLICT WITH EXISTING FACILITIES, PROPOSED FACILITIES, OR UTILITIES. NO ADDITIONAL PAYMENT WILL BE PROVIDED IF THE CONTRACTOR ELECTS TO UTILIZE VIBRATING WIRE SETTLEMENT PLATFORMS.

MATERIALS: SOUND LUMBER SUCH AS ¾" EXTERIOR GRADE PLYWOOD SHALL BE USED FOR THE BASE. THE PIPE SHALL BE 2½" STANDARD BLACK PIPE WITH THREADED FITTINGS AS SHOWN ON THE PLANS. A STEEL PLATE (36" x 36" x ⅛") MAY BE SUBSTITUTED FOR THE LUMBER FOR THE PLATFORMS, AT THE CONTRACTOR'S OPTION.

THE CONTRACTOR MAY UTILIZE VIBRATING WIRE SETTLEMENT MONITOR DEVICES IN LIEU OF THE SETTLEMENT PLATFORMS AT NO ADDITIONAL COST TO THE PROJECT. THE CONTRACTOR MUST SUBMIT THE PROPOSED VIBRATING WIRE SETTLEMENT MONITORING EQUIPMENT AND METHODS TO THE DISTRICT GEOTECHNICAL ENGINEER FOR APPROVAL PRIOR TO ORDERING MATERIALS OR FIELD INSTALLATION.

ITEM SPECIAL - SETTLEMENT PLATFORM (CONTINUED):

CONSTRUCTION METHODS: THE PLATFORM SHALL CONFORM TO THE DETAILS SHOWN ON THE PLANS. THE PLATFORM SHALL BE SET ON A LEVEL SURFACE. PLACE THE SETTLEMENT PLATFORMS AT THE BOTTOM OF THE GRANULAR MATERIAL, TYPE C USED IN THE ITEM 840 - FOUNDATION PREPARATION WORK. FIRMLY SECURE THE SETTLEMENT PLATFORM ON THE SS840 SUBGRADE BY DRIVING NO. 4 REINFORCING BAR STAKES WITH A 90 DEGREE BEND AT EACH CORNER OF THE SETTLEMENT PLATFORM. THE PIPE SHALL BE FIRMLY SECURED TO THE PLATFORM AND SHALL BE MAINTAINED IN A PLUMB POSITION DURING THE PLACEMENT OF THE EMBANKMENT. THE PIPE SHALL BE MARKED AT 1 FOOT INTERVALS WITH PROJECT ELEVATIONS TO FACILITATE MEASUREMENT OF THE DEPTH AND ELEVATION OF FILL. THE CONTRACTOR SHALL STOP WORK IN ANY LOCATION WHERE THE SETTLEMENT PLATFORM HAS BEEN DISTURBED OR DAMAGED. PLATFORMS OR PIPES DAMAGED OR DISPLACED DURING CONSTRUCTION SHALL BE RESTORED TO THEIR PROPER CONDITION AT THE CONTRACTOR'S EXPENSE.

1. NEW SECTIONS OF PIPE SHALL BE ADDED TO THE TOP OF THE PIPE AS THE EMBANKMENT HEIGHT RISES. IN THIS CASE, THE INCREASE IN THE LENGTH OF THE RISER PIPE SHALL BE DETERMINED AND RECORDED AS WELL AS THE DATE IN WHICH THIS OPERATION WAS PERFORMED. DOCUMENT THE DATE OF PIPE INCREASE ON THE SETTLEMENT GRAPH.

2. THE RISER PIPE SHALL HAVE GUARD STAKES OR BE MARKED WITH HIGH-VISIBILITY FLAGS OR RIBBONS IN ORDER TO PROTECT IT FROM CONSTRUCTION EQUIPMENT. SETTLEMENT PLATFORMS MAY BE PLACED BEYOND THE EDGE OF PAVEMENT BUT INSIDE THE BREAK OF THE SLOPE IN ORDER TO BE OUT OF THE WAY AS MUCH AS POSSIBLE.

3. IF THE PLATFORM OR PIPE IS DISTURBED OR DAMAGED, WORK SHALL BE STOPPED IN THAT LOCATION UNTIL THE CONTRACTOR RESTORES THE SETTLEMENT PLATFORM AND RISER PIPE TO THEIR PROPER CONDITION. DAMAGED SETTLEMENT PLATFORMS SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.

4. PRIOR TO PAVING, THE RISER PIPE SHALL BE CUT OFF 2 FEET BELOW THE TOP OF THE FINISHED SURFACE OF THE SUBGRADE OR THE FINISHED GROUND SURFACE, WHICHEVER IS APPLICABLE.

WAITING PERIOD: THE WAITING PERIOD SHALL NOT BE CONSIDERED TO BEGIN UNTIL APPROACH EMBANKMENT BEHIND THE ABUTMENT HAS REACHED THE TOP OF BEAM SEAT ELEVATION AND EXTENDS AT 1H:1V TO THE SUBGRADE LEVEL AND EXTENDS A MINIMUM DISTANCE OF 250' BEHIND THE ABUTMENT. THE ANTICIPATED WAITING PERIOD IS SUMMARIZED BELOW FOR EACH SETTLEMENT PLATFORM. INCLUDE SPECIFIC ACTIVITIES IN THE CONSTRUCTION SCHEDULE FOR THE SETTLEMENT WAITING PERIOD.

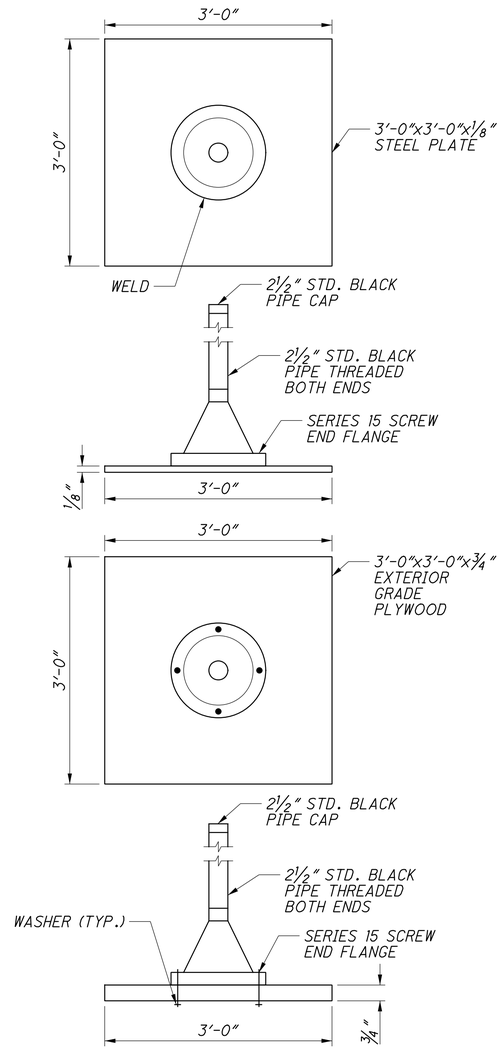
SP-4 ℄ CONSTRUCTION GLEN ESTE-WITHAMSVILLE ROAD STA. 17+83.00, 0.0' OFFSET, WAITING PERIOD = 90 DAYS
SP-5 ℄ CONSTRUCTION GLEN ESTE-WITHAMSVILLE ROAD STA. 18+83.07, 0.0' OFFSET, WAITING PERIOD = 90 DAYS
SP-6 ℄ CONSTRUCTION GLEN ESTE-WITHAMSVILLE ROAD STA. 21+49.30, 0.0' OFFSET, WAITING PERIOD = 90 DAYS
SP-7 ℄ CONSTRUCTION GLEN ESTE-WITHAMSVILLE ROAD STA. 22+49.00, 0.0' OFFSET, WAITING PERIOD = 90 DAYS

ITEM SPECIAL - SETTLEMENT PLATFORM (CONTINUED):

THE CONSTRUCTION OF THE ABUTMENT UP TO THE BEAM SEAT AND WINGWALLS IS PERMITTED PRIOR TO EMBANKMENT BEING PLACED. NO ADDITIONAL CONSTRUCTION OF STRUCTURES (INCLUDING WALL COPING OR CONCRETE RAILING ABOVE THE WALLS) OR PAVING SUPPORTED BY EMBANKMENT BEHIND THE WALL SHALL BEGIN UNTIL SETTLEMENT WAITING PERIOD HAS BEEN TERMINATED BY THE ENGINEER.

METHOD OF MEASUREMENT: THE NUMBER OF SETTLEMENT PLATFORMS TO BE PAID FOR SHALL BE THE ACTUAL NUMBER OF SETTLEMENT PLATFORMS COMPLETED, MAINTAINED, AND ACCEPTED BY THE ENGINEER.

BASIS OF PAYMENT: PAYMENT SHALL BE MADE AT THE CONTRACT UNIT PRICE EACH FOR ITEM SPECIAL - SETTLEMENT PLATFORM WHICH IS COMPENSATION FOR CONSTRUCTING, MAINTAINING, AND MONITORING THE SETTLEMENT PLATFORMS INCLUDING FURNISHING ALL LABOR, EQUIPMENT, MATERIALS, AND INCIDENTALS NECESSARY TO COMPLETE THE WORK. PAYMENT SHALL NOT BE MADE FOR SETTLEMENT PLATFORMS WHICH BECOME USELESS DUE TO DAMAGE CAUSED BY THE CONTRACTOR'S OPERATIONS.



SETTLEMENT PLATFORM DETAILS

LEGEND:

℄	CENTERLINE
CLR.	CLEAR
CMS	CONSTRUCTION AND MATERIAL SPECIFICATIONS
CY	CUBIC YARDS
DIA.	DIAMETER
E.F.	EACH FACE
EL.	ELEVATION
EX.	EXISTING
F.F.	FAR FACE
FT.	FOOT/FEET
HMWM	HIGH MOLECULAR WEIGHT METHACRYLATE
IN.	INCH/INCHES
LBS	POUNDS
MAX.	MAXIMUM
MIN.	MINIMUM
MISC.	MISCELLANEOUS
N.F.	NEAR FACE
P.E.J.F.	PREFORMED EXPANSION JOINT FILLER
SQ.	SQUARE
STA.	STATION
STR.	STRAIGHT
TYP.	TYPICAL
U.N.O.	UNLESS NOTED OTHERWISE
WWR	WELDED WIRE REINFORCEMENT

DESIGN AGENCY
TranSystems
1100 SUPERIOR AVENUE, SUITE 1000
CLEVELAND, OHIO 44114

DESIGNED ZTW | DRAWN GJZ | CHECKED PEG | REVIEWED PEG | DATE 03/25/22 | REVISED | STRUCTURE FILE NUMBER 1300339

GENERAL NOTES - 3

BRIDGE NO. CLE-00032-02.708
GLEN ESTE-WITHAMSVILLE ROAD OVER SR-32

CLE-CR55-
OVERPASS
PID No. 103957

MADE BY: JML DATE: 10/25/2021
CHECKED BY: PEG DATE: 03/24/2022

ESTIMATED QUANTITIES

STRUCTURE FILE NUMBER: 1300339

ITEM	EXTENSION	TOTAL (02/NHS/PV)	UNIT	DESCRIPTION	ABUTMENT	PIER	SUPERSTRUCTURE	GENERAL	REFERENCE SHEET NUMBER
SPECIAL	20365000	4	EA	SETTLEMENT PLATFORM			4		251 / 353
503	11100	LS		COFFERDAMS AND EXCAVATION BRACING				LS	
503	21300	LS		UNCLASSIFIED EXCAVATION				LS	
505	11100	LS		PILE DRIVING EQUIPMENT MOBILIZATION				LS	
507	00200	9,665	FT	STEEL PILES HP12x53, FURNISHED	7,685	1,980			
507	00250	8,750	FT	STEEL PILES HP12x53, DRIVEN	6,950	1,800			
509	10000	378,112	LB	EPOXY COATED REINFORCING STEEL	151,419	33,272	193,421		
509	30020	3,845	FT	NO. 4 GFRP DEFORMED BARS			3,845		
511	33501	2	EACH	SEMI-INTEGRAL DIAPHRAGM GUIDE, AS PER PLAN	2				259 / 353
511	41012	93	CY	CLASS QC1 CONCRETE WITH QC/QA, PIER ABOVE FOOTINGS		93			
511	44112	689	CY	CLASS QC1 CONCRETE WITH QC/QA, ABUTMENT NOT INCLUDING FOOTING	689				
511	46512	547	CY	CLASS QC1 CONCRETE WITH QC/QA, FOOTING	504	43			
511	53012	855	CY	CLASS QC2 CONCRETE, MISC.: CLASS QC2 CONCRETE WITH QC/QA, SUPERSTRUCTURE	185	28	636	6	250 / 353
511	53012	39	CY	CLASS QC2 CONCRETE, MISC.: CLASS QC2 CONCRETE WITH QC/QA, SINGLE SLOPE CONCRETE BRIDGE RAILING			39		250 / 353
512	10050	198	SY	SEALING OF CONCRETE SURFACES (NON-EPOXY)			198		
512	10100	1,522	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	522	173	827		
515	15080	13	EACH	DRAPED STRAND PRESTRESSED CONCRETE BRIDGE I-BEAM MEMBERS, LEVEL 3, TYPE WF42-49 (BEAM LENGTH = 90'-4")			13		
515	15080	13	EACH	DRAPED STRAND PRESTRESSED CONCRETE BRIDGE I-BEAM MEMBERS, LEVEL 3, TYPE WF42-49 (BEAM LENGTH = 113'-2⅝")			13		
515	20000	72	EACH	INTERMEDIATE DIAPHRAGMS			72		
516	10010	198	FT	ARMORLESS PREFORMED JOINT SEAL				198	
516	13600	319	SF	1" PREFORMED EXPANSION JOINT FILLER	17		27	275	
516	13900	1,095	SF	2" PREFORMED EXPANSION JOINT FILLER	1,095				
516	14020	213	FT	SEMI-INTEGRAL ABUTMENT EXPANSION JOINT SEAL	213				
516	44100	13	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE) (10"x21"x2.049" PAD WITH 11"x40"xVARIES LOAD PLATE)			13		
516	44100	13	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE) (10"x23"x2.499" PAD WITH 11"x40"x2.125" BEVELED LOAD PLATE)			13		
516	44101	13	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), AS PER PLAN (10"x21"x2.049" PAD WITH 11"x40"x2" TOP LOAD PLATE, 11"x22"x2.50" BOTTOM LOAD PLATE AND HP SECTION)			13		262 / 353
516	44101	13	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), AS PER PLAN (10"x23"x2.499" PAD WITH 11"x40"x2" TOP LOAD PLATE, 11"x24"x2.75" BOTTOM LOAD PLATE AND HP SECTION)			13		262 / 353
517	75123	235	FT	RAILING (CONCRETE PARAPET WITH TWIN STEEL TUBE RAILING AND VANDAL PROTECTION FENCE), AS PER PLAN			204	31	250 / 353
518	12301	1	EACH	SCUPPERS, INCLUDING SUPPORTS, AS PER PLAN			1		278 / 353
518	21200	372	CY	POROUS BACKFILL WITH GEOTEXTILE FABRIC	372				
518	40000	326	FT	6" PERFORATED CORRUGATED PLASTIC PIPE	326				
518	40010	39	FT	6" NON-PERFORATED CORRUGATED PLASTIC PIPE, INCLUDING SPECIALS	39				
526	30011	628	SY	REINFORCED CONCRETE APPROACH SLABS WITH QC/QA (T=17"), AS PER PLAN				628	250 / 353
526	90030	215	FT	TYPE C INSTALLATION				215	
SPECIAL	53000200	LS		STRUCTURES: VIBRATION MONITORING				LS	250 / 353
607	39900	205	FT	VANDAL PROTECTION FENCE, 6' STRAIGHT, COATED FABRIC			205		
607	39930	225	FT	VANDAL PROTECTION FENCE, 12' CURVED, COATED FABRIC			202	23	
608	53020	12	SF	DETECTABLE WARNING			12		

DESIGN AGENCY
TranSystems
1100 SUPERIOR AVENUE, SUITE 1000
CLEVELAND, OHIO 44114

DESIGNED JML | DRAWN JML | REVIEWED PEG | DATE 03/25/22
CHECKED PEG | REVISED | STRUCTURE FILE NUMBER 1300339

ESTIMATED QUANTITIES
BRIDGE NO. CLE-00032-02.708
GLEN ESTE-WITHAMSVILLE ROAD OVER SR-32

CLE-CR55-
OVERPASS
PID No. 103957

5 / 39

252
353

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