

ITEM 202 – GUARDRAIL REMOVED, AS PER PLAN:

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

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

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

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

EXISTING BRIDGE TERMINAL ASSEMBLIES (NOT IDENTIFIED IN THE PLANS) ENCOUNTERED WITHIN REMOVAL LIMITS SHALL BE REMOVED UNDER THE QUANTITIES PROVIDED FOR ITEM 202 – GUARDRAIL REMOVED, AS PER PLAN, AND BE PAID FOR BY “FEET”.

EXISTING TYPE T ANCHOR ASSEMBLIES (NOT IDENTIFIED IN THE PLANS) ENCOUNTERED WITHIN REMOVAL LIMITS SHALL BE REMOVED UNDER THE QUANTITIES PROVIDED FOR ITEM 202 – GUARDRAIL REMOVED, AS PER PLAN, AND BE PAID FOR BY “FEET”.

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

NO HAZARD SHALL BE LEFT UNPROTECTED EXCEPT FOR THE ACTUAL TIME NECESSARY TO REMOVE THE EXISTING GUARDRAIL, PREPARE THE SITE, AND INSTALL NEW GUARDRAIL IN A CONTINUOUS OPERATION. GUARDRAIL DESIGNATED FOR REMOVAL SHALL BECOME PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF.

ITEM 202 - GUARDRAIL REMOVED FOR REUSE, AS PER PLAN:

THIS ITEM SHALL CONSIST OF REMOVING EXISTING TYPE MGS GUARDRAIL AND SALVAGING RAIL ELEMENTS TO BE REUSED IN CONJUNCTION WITH ITEM 606 - GUARDRAIL REBUILT, TYPE MGS WITH LONG POSTS, AS PER PLAN.

ITEM 202 - REMOVAL MISC.: STONE WALK:

THIS ITEM SHALL BE USED TO CAREFULLY REMOVE HISTORIC STONE WALK DETAILED IN THIS PLAN TO BE REPLACED BY CURB RAMP OR CONCRETE WALK. DUE TO THE SIGNIFICANCE OF THIS MATERIAL TO THE ADJACENT PROPERTY (500 E. HIGH ST), ALL STONE WALK REMOVED IS TO BE COLLECTED BY THE RESPECTIVE PROPERTY OWNER. THE ENGINEER SHALL PROVIDE THE PROPERTY OWNER 30 DAYS TO COLLECT THE MATERIAL OR IT SHALL BE DISPOSED OF BY THE CONTRACTOR.

ITEM 203 – EMBANKMENT, AS PER PLAN:

QUANTITIES FOR ITEM 203 - EMBANKMENT HAVE BEEN PROVIDED THROUGHOUT THIS PLAN TO BUILD UP FORE-SLOPES AND ENSURE PROPER GRADING FOR THE PROPOSED ANCHOR ASSEMBLIES. THIS ITEM OF WORK INCLUDES ANY CLEARING AND GRUBBING NECESSARY TO PLACE THE EMBANKMENT AT THE LOCATIONS SPECIFIED OR DIRECTED. THE CONTRACTOR SHALL BE PREPARED TO USE EMBANKMENT AT THE LOCATIONS SPECIFIED IN THE PLANS AND ANY OTHER AREAS “AS DIRECTED BY THE ENGINEER”.

FOR EMBANKMENT, AS PER PLAN DETAILS, SEE TYPICAL DETAIL ON SHEET P.7.

ITEM 606 - ANCHOR ASSEMBLY, MGS TYPE E:

THIS ITEM SHALL CONSIST OF FURNISHING AND INSTALLING ANY OF THE MASH 2016 TYPE E TANGENETIAL END TREATMENTS FOR TYPE MGS GUARDRAIL AS LISTED UNDER "PRODUCTS ACCEPTED FOR NEW INSTALLATIONS" ON THE ROADWAY APPROVED PRODUCTS LIST POSTED ON ROADWAY ENGINEERING’S WEB PAGE. INSTALLATION SHALL BE AT THE LOCATIONS SPECIFIED IN THE PLANS, IN ACCORDANCE WITH THE MANUFACTURER’S SPECIFICATIONS. REFER TO THE POSTED SHOP DRAWINGS FOR THE MOST CURRENT APPROVED PRODUCT MODELS.

REFER TO THE MANUFACTURER’S INSTRUCTIONS REGARDING THE INSTALLATION OF, AND THE GRADING AROUND THE FOUNDATION TUBES AND GROUND STRUT. THE TOP OF ANY FOUNDATION TUBE SHOULD BE LESS THAN 4 INCHES ABOVE THE GROUND. ON-SITE GRADING IS REQUIRED IF THE TOP OF THE FOUNDATION TUBES OR TOP OF THE GROUND STRUT DOES PROJECT MORE THAN 4 INCHES ABOVE THE GROUND LINE. THE PLACEMENT OF THE FOUNDATION TUBES SHOULD BE AN APPROPRIATE DEPTH BELOW THE LEVEL LINE IN ORDER TO MAINTAIN THE FINISHED GUARDRAIL HEIGHT OF 31 INCHES FROM THE EDGE OF THE SHOULDER.

THE FACE OF THE TYPE E IMPACT HEAD SHALL BE COVERED WITH SOLID FLUORESCENT YELLOW REBOUNDABLE RETROREFLECTIVE SHEETING, PER CMS 730.191.

WHEN THE FACE OF THE ADJACENT (ATTACHED) GUARDRAIL IS LESS THAN 4' OFFSET FROM THE PROPOSED EDGE LINE, AND PERMITTING SITE CONDITIONS EXIST: THE PROPOSED TYPE E ANCHOR ASSEMBLY SHALL BE INSTALLED AT A CONSISTENT FLARE RATE THROUGH THE FULL LENGTH OF THE SYSTEM. THE FLARE RATE SHALL BE A MAXIMUM OF 25:1 (RESULTING IN A 2' OFFSET). THE INSTALLATION SHALL BE IN ACCORDANCE WITH THE SHOP DRAWINGS, PRODUCT INSTALLATION MANUAL/GUIDANCE, AND AS DIRECTED BY THE ENGINEER.

PAYMENT FOR THE ABOVE WORK SHALL BE MADE AT THE UNIT PRICE BID FOR ITEM 606, ANCHOR ASSEMBLY, MGS TYPE E, EACH, AND SHALL INCLUDE ALL LABOR, TOOLS, EQUIPMENT AND MATERIALS NECESSARY TO CONSTRUCT A COMPLETE AND FUNCTIONAL ANCHOR ASSEMBLY SYSTEM, INCLUDING ALL RELATED TRANSITIONS, REFLECTIVE SHEETING, HARDWARE, GRADING, EMBANKMENT AND EXCAVATION NOT SEPARATELY SPECIFIED, AS REQUIRED BY THE MANUFACTURER. THIS ITEM SHALL CONSIST OF FURNISHING AND INSTALLING ANY OF THE GUARDRAIL END TERMINALS FOR TYPE MGS GUARDRAIL AS LISTED ON ROADWAY ENGINEERING’S WEB PAGE UNDER ROADSIDE SAFETY DEVICES FOR APPROVED GUARDRAIL END TREATMENTS. INSTALLATION SHALL BE AT THE LOCATIONS SPECIFIED IN THE PLANS, IN ACCORDANCE WITH THE MANUFACTURER’S SPECIFICATIONS.

ITEM 606 - GUARDRAIL, MISC.: ALTERNATIVE GUARDRAIL PLACEMENT:

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

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

ITEM 606 - GUARDRAIL, MISC.: ALTERNATIVE GUARDRAIL PLACEMENT = 50 FT

ITEM 606 - CURVED RAIL ELEMENTS:

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

ITEM 608 - 4" CONCRETE WALK, AS PER PLAN:

THIS ITEM SHALL BE USED TO PROVIDE ADEQUATE GRADE TRANSITIONS BETWEEN THE EXISTING SIDE WALK AND THE PROPOSED CURB RAMPS. TO PREVENT CHASING THE GRADE INDEFINITELY, THE TRANSITION FROM EXISTING SIDEWALK TO THE PROPOSED CURB RAMP IS NOT REQUIRED TO EXCEED 15 FEET IN LENGTH (SEE PLANS FOR ACTUAL LENGTHS). THIS ITEM SHALL INCLUDE THE COST OF FURNISHING ALL MATERIALS, GRADING, FORMING AND FINISHING OF THE SIDEWALK AT THE PROPOSED GRADE OF THE TRANSITION. SPECIFIC LOCATIONS AND LIMITS OF THIS WORK CAN BE FOUND ON PLAN SHEETS P.29 - P.32.

ITEM 608 - WALKWAY, MISC.:BRICK PAVER, REMOVE AND RESET:

THIS ITEM SHALL BE USED TO CAREFULLY REMOVE AND RESET HISTORIC BRICK PAVERS TO ADJUST RUNNING SLOPE OF BRICK WALK IN CONJUNCTION WITH PROPOSED CURB RAMPS. CARE SHALL BE USED TO REMOVE, STORE AND RESET BRICK PAVERS. IN KIND REPLACEMENT OF THE BRICK WILL BE DONE SHOULD ANY BRICK PAVERS BE DAMAGED DURING REMOVAL AND RESET. THE CONTRACTOR SHALL PROVIDE ALL MATERIAL, LABOR, AND EQUIPMENT TO REMOVE, EXCAVATE, LEVEL AND PLACE BRICK PAVERS TO RESTORE BRICK WALK.

ITEM 659 - GRADING AND EROSION CONTROL:

QUANTITIES HAVE BEEN PROVIDED IN THE PLAN TO REPAIR AREAS DISTURBED BY ROADWAY AND/OR SIDEWALK WORK ACTIVITIES, AS DIRECTED BY THE ENGINEER.

MANHOLES AND OTHER CASTING STRUCTURES:

THESE ITEMS ARE A CONTINGENCY TO BE USED AS DIRECTED BY THE PROJECT ENGINEER AT VARIOUS LOCATIONS AND PROVIDE ALL MATERIAL, LABOR, EQUIPMENT, AND HARDWARE NECESSARY TO ADJUST TO GRADE AN EXISTING CASTING STRUCTURE TO THE PROPOSED ASPHALT ELEVATION.

THE FOLLOWING CONTINGENCY QUANTITIES HAS BEEN PROVIDED AND THE TOTAL HAS BEEN CARRIED TO THE GENERAL SUMMARY.

ITEM 611 – CATCH BASIN ADJUSTED TO GRADE = 4 EACH
ITEM 611 – MANHOLE ADJUSTED TO GRADE = 4 EACH
ITEM 638 – VALVE BOX ADJUSTED TO GRADE = 4 EACH

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

ALL REPAIR AREAS DETAILED IN THE PLAN SHALL BE VERIFIED BY THE PROJECT ENGINEER BEFORE THE BEGINNING OF WORK. THE THE REPAIR AREAS SHALL CONSIST OF REMOVING 3.0 INCHES OF PAVEMENT AND PLACING 3.0 INCHES OF ITEM 301 - ASPHALT CONCRETE BASE, PG64-22, (449). THE AVERAGE WIDTH SHALL NOT BE LESS THAN 4 FEET. FOR MORE INFORMATION SEE DETAIL ON SHEET P.5. WORK SHALL BE PERFORMED PRIOR TO PLANING. NO MORE PARTIAL DEPTH PAVEMENT REPAIR (ASPHALT CONCRETE BASE) SHALL BE STARTED AND PERFORMED THAN CAN BE COMPLETED IN THE SAME WORKING DAY.

FOR LOCATIONS AND QUANTITIES, SEE SHEET P.17.

ITEM 606 - GUARDRAIL REBUILT, TYPE MGS WITH LONG POSTS, AS PER PLAN:

THIS ITEM SHALL CONSIST OF FURNISHING LONG POSTS AND REBUILDING GUARDRAIL, PREVIOUSLY REMOVED FOR REUSE, PER THE SPECIFICATIONS OF ITEM 606 - GUARDRAIL, TYPE MGS WITH LONG POSTS. SEE SHEET P.27 FOR LOCATION (REF: GR-16, GR-17).

ITEM 251 - PARTIAL DEPTH PAVEMENT REPAIR (ASPHALT CONCRETE BASE), AS PER PLAN, 4.5" :

ALL REPAIR AREAS DETAILED IN THE PLAN SHALL BE VERIFIED BY THE PROJECT ENGINEER BEFORE THE BEGINNING OF WORK. THE THE REPAIR AREAS SHALL CONSIST OF REMOVING 4.5 INCHES OF PAVEMENT AND PLACING 4.5 INCHES OF ITEM 301 - ASPHALT CONCRETE BASE, PG64-22, (449). THE AVERAGE WIDTH SHALL NOT BE LESS THAN 4 FEET. FOR MORE INFORMATION SEE DETAIL ON SHEET P.5. WORK SHALL BE PERFORMED PRIOR TO PLANING. NO MORE PARTIAL DEPTH PAVEMENT REPAIR (ASPHALT CONCRETE BASE) SHALL BE STARTED AND PERFORMED THAN CAN BE COMPLETED IN THE SAME WORKING DAY.

FOR LOCATIONS AND QUANTITIES, SEE SHEET P.17.

ITEM 253 - PAVEMENT REPAIR, AS PER PLAN, 12.0":

THIS ITEM SHALL BE USED TO REPAIR ADJACENT PAVEMENT IMPACTED BY THE REMOVAL AND INSTALLATION OF CURB OR CURB RAMPS. THE REPAIR AREAS SHALL CONSIST OF REMOVING 12.0 INCHES OF PAVEMENT AND PLACING 9.0 INCHES OF ITEM 452 - CLASS QC1 NON-REINFORCED CONCRETE PAVEMENT AND 3.0 INCHES OF ITEM 441 - ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (449), PG64-22 (TWO - 1.5" LIFTS). THIS ITEM SHALL INCLUDE AEROSAL SPRAY PAINT, TACK COAT, ASPHALT CONCRETE, SAWCUTTING, PERIMETER SEAL AND ALL LABOR, EQUIPMENT AND MATERIALS NECESSARY TO PERFORM THE WORK NOTED ABOVE. FOR MORE INFORMATION SEE DETAIL ON SHEET P.5.

FOR QUANTITIES, SEE SHEET P.17. FOR LOCATIONS, SEE SHEETS P.29 - P.32.

ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE:

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

PLANED PAVEMENT ON THE MAINLINE SHALL NOT BE EXPOSED TO TRAFFIC FOR MORE THAN 7 CALENDAR DAYS OF THE PLANING OPERATION.

PLANED PAVEMENT ON SIDE ROADS SHALL NOT BE EXPOSED TO TRAFFIC FOR MORE THAN 10 CALENDAR DAYS OF THE PLANING OPERATION.

FAILURE TO MEET THESE REQUIREMENT WILL SUBJECT THE CONTRACTOR TO A DISINCENTIVE OF \$900/DAY FOR EACH DAY THE PLANED SURFACE IS NOT RESURFACED.

ITEM 617 - WATER:

THIS ITEM SHALL BE USED AS DIRECTED BY THE ENGINEER. THE FOLLOWING QUANTITY HAS BEEN PROVIDED AND THE TOTAL HAS BEEN CARRIED TO THE GENERAL SUMMARY:

ITEM 617 - WATER = 2 MGAL

DESIGN AGENCY



DESIGNER

JMB

REVIEWER

DKR 07/25/25

PROJECT ID

112914

SHEET

P.11

TOTAL

38

SHEET NUMBER										PARTICIPATION			ITEM	ITEM EXT.	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
			P.11	P.14	P.17	P.18	P.19	P.28	P.34		01/STR	02/SAF						
																	ROADWAY	
								37				37	202	23000	37	SY	PAVEMENT REMOVED	
								1172				1,172	202	30001	1172	SF	WALK REMOVED, AS PER PLAN	P.10
								148				148	202	32000	148	FT	CURB REMOVED	
							6221.88				6221.88		202	38001	6221.88	FT	GUARDRAIL REMOVED, AS PER PLAN	P.11
							350				350		202	38201	350	FT	GUARDRAIL REMOVED FOR REUSE, AS PER PLAN	P.11
							10				10		202	42001	10	EACH	ANCHOR ASSEMBLY REMOVED, TYPE A, AS PER PLAN	P.11
							1				1		202	42011	1	EACH	ANCHOR ASSEMBLY REMOVED, TYPE E, AS PER PLAN	P.11
								113				113	202	98400	113	SF	REMOVAL MISC.: STONE WALK	P.11
							1228				1228		203	20001	1228	CY	EMBANKMENT, AS PER PLAN	P.11
							74.2				74.2		209	60200	74.2	STA	LINEAR GRADING	
							112.5				112.5		606	15050	112.5	FT	GUARDRAIL, TYPE MGS	
							6131.25				6131.25		606	15100	6131.25	FT	GUARDRAIL, TYPE MGS WITH LONG POSTS	
							350				350		606	16561	350	FT	GUARDRAIL REBUILT, TYPE MGS WITH LONG POSTS, AS PER PLAN	P.11
							1				1		606	25550	1	EACH	ANCHOR ASSEMBLY, MGS TYPE A	
							8				8		606	26150	8	EACH	ANCHOR ASSEMBLY, MGS TYPE E	
							8				8		606	26550	8	EACH	ANCHOR ASSEMBLY, MGS TYPE T	
							4				4		606	35141	4	EACH	BRIDGE TERMINAL ASSEMBLY, TYPE 4, AS PER PLAN	P.9
			50								50		606	98000	50	FT	GUARDRAIL, MISC.: ALTERNATIVE GUARDRAIL PLACEMENT	P.11
								603				603	608	10001	603	SF	4" CONCRETE WALK, AS PER PLAN	P.11
								1192				1,192	608	52000	1192	SF	CURB RAMP	
								20				20	608	53020	20	SF	DETECTABLE WARNING	
								26				26	608	98000	26	SF	WALKWAY, MISC.:BRICK PAVER, REMOVE AND RESET	P.11
																	EROSION CONTROL	
							409	2			409	2	659	00300	411	CY	TOPSOIL	
							3684	49			3684	49	659	10000	3733	SY	SEEDING AND MULCHING	
							187				187		659	14000	187	SY	REPAIR SEEDING AND MULCHING	
							187				187		659	15000	187	SY	INTER-SEEDING	
							0.48	0.05			0.48	0.05	659	20000	0.53	TON	COMMERCIAL FERTILIZER	
							0.51	0.01			0.51	0.01	659	31000	0.52	ACRE	LIME	
							21	1			21	1	659	35000	22	MGAL	WATER	
											1000		832	30000	1000	EACH	EROSION CONTROL	
																	DRAINAGE	
			4								4		611	98630	4	EACH	CATCH BASIN ADJUSTED TO GRADE	
			4								4		611	99654	4	EACH	MANHOLE ADJUSTED TO GRADE	
																	PAVEMENT	
					172						172		251	01041	172	SY	PARTIAL DEPTH PAVEMENT REPAIR (ASPHALT CONCRETE BASE) AS PER PLAN, 3.0"	P.11
					2492						2,492		251	01041	2492	SY	PARTIAL DEPTH PAVEMENT REPAIR (ASPHALT CONCRETE BASE) AS PER PLAN, 4.5"	P.11
					80							80	253	01001	80	SY	PAVEMENT REPAIR, AS PER PLAN, 12.0"	P.11
						94648					94648		254	01000	94648	SY	PAVEMENT PLANING, ASPHALT CONCRETE, 1.5"	
								8				8	304	20000	8	CY	AGGREGATE BASE	
						8048					8048		407	20000	8048	GAL	NON-TRACKING TACK COAT	
						3897					3897		441	10000	3897	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (446), PG64-22	
						45					45		441	70000	45	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (449), PG64-22	
								13				13	609	12000	13	FT	COMBINATION CURB AND GUTTER, TYPE 2	
								104				104	609	26000	104	FT	CURB, TYPE 6	
								27				27	609	70000	27	SY	4" CONCRETE MEDIAN	
						420					420		617	10100	420	CY	COMPACTED AGGREGATE	
			2			7198					7198		617	20000	7198	SY	SHOULDER PREPARATION	
								5.73				5.73	617	25000	2	MGAL	WATER	
													618	43000	5.73	MILE	RUMBLE STRIPES, CENTER LINE (ASPHALT CONCRETE)	
								6.01				6.01	874	21000	6.01	MILE	LONGITUDINAL JOINT PREPARATION	
																	WATER WORK	
			4								4		638	10800	4	EACH	VALVE BOX ADJUSTED TO GRADE	

GENERAL SUMMARY

DESIGN AGENCY



DESIGNER
JMB

REVIEWER
DKR 07/25/25

PROJECT ID
112914

SHEET
P.15

TOTAL
38

LOCATION					ROADWAY													EROSION CONTROL							TRAFFIC		
SEE SHEET	REFERENCE	ROUTE	SLM	SIDE	202	202	202	202		203	209	606	606	606	606	606	606	606	659	659	659	659	659	659	659		626
					GUARDRAIL REMOVED, AS PER PLAN	GUARDRAIL REMOVED FOR REUSE, AS PER PLAN	ANCHOR ASSEMBLY REMOVED, TYPE A, AS PER PLAN	ANCHOR ASSEMBLY REMOVED, TYPE E, AS PER PLAN		EMBANKMENT, AS PER PLAN	LINEAR GRADING	GUARDRAIL, TYPE MGS	GUARDRAIL, TYPE MGS WITH LONG POSTS	GUARDRAIL REBUILT, TYPE MGS WITH LONG POSTS, AS PER PLAN	ANCHOR ASSEMBLY, MGS TYPE A	ANCHOR ASSEMBLY, MGS TYPE E	ANCHOR ASSEMBLY, MGS TYPE T	BRIDGE TERMINAL ASSEMBLY, TYPE 4, AS PER PLAN	TOPSOIL	SEEDING AND MULCHING	REPAIR SEEDING AND MULCHING	INTER-SEEDING	COMMERCIAL FERTILIZER	LIME	WATER		BARRIER REFLECTOR, TYPE 2, BIDIRECTIONAL
					FT	FT	EACH	EACH		CY	STA	FT	FT	FT	EACH	EACH	EACH	EACH	CY	SY	SY	SY	TON	ACRE	MGAL		EACH
P.20	GR-1	SR-229	0.21	LT	187.5		2			39	2.1		100			2		2	13	117	6	6	0.02	0.02	1		4
P.20	GR-2	SR-229	0.21	RT	175		2			30	1.5		100		1	1		2	10	90	5	5	0.01	0.01	0		4
P.21 - P.22	GR-3	SR-229	0.80	LT	1100					170	11.0	12.5	1075				1		57	510	26	26	0.07	0.07	3		12
P.21 - P.22	GR-4	SR-229	0.80	RT	1093.75		1			185	12.0	25.0	1159.375				1		62	555	28	28	0.07	0.08	3		13
P.23	GR-5	SR-229	1.44	LT	137.5		1			36	1.9		137.5			1		12	108	5	5	0.01	0.01	1		3	
P.23	GR-6	SR-229	1.44	RT	350			1		67	4.0		350			1		22	201	10	10	0.03	0.03	1		6	
P.23	GR-7	SR-229	1.44	LT	200					37	2.0		200					12	111	6	6	0.01	0.02	1		3	
P.24	GR-8	SR-229	1.56	RT	209.375					39	2.1		209.375					13	117	6	6	0.02	0.02	1		4	
P.24	GR-9	SR-229	1.65	RT	418.75		1			74	4.5		400			1		25	222	11	11	0.03	0.03	1		6	
P.25	GR-10	SR-229	3.36	LT	325		1			70	4.2	12.5	337.5			1	1	23	210	11	11	0.03	0.03	1		6	
P.25	GR-11	SR-229	3.36	RT	337.5		1			71	4.3	12.5	356.25			1	1	24	213	11	11	0.03	0.03	1		6	
P.25	GR-12	SR-229	3.44	LT	343.75					58	3.4	12.5	318.75				1	19	174	9	9	0.02	0.02	1		5	
P.25	GR-13	SR-229	3.44	RT	343.75					58	3.4	12.5	318.75				1	19	174	9	9	0.02	0.02	1		5	
P.26	GR-14	SR-229	3.59	LT	475		1			95	5.9	12.5	568.75				1	32	285	14	14	0.04	0.04	2		7	
P.26	GR-15	SR-229	3.59	RT	525					86	5.3	12.5	500				1	29	258	13	13	0.03	0.04	1		7	
P.27	GR-16	SR-229	5.30	LT		187.50				58	3.4			187.50				19	174	9	9	0.02	0.02	1		1	
P.27	GR-17	SR-229	5.30	RT		162.50				55	3.2			162.50				18	165	8	8	0.02	0.02	1		1	
TOTALS CARRIED TO GENERAL SUMMARY					6221.88	350	10	1		1228	74.2	112.5	6131.25	350	1	8	8	4	409	3684	187	187	0.48	0.51	21		93

GUARDRAIL SUBSUMMARY

DESIGN AGENCY



DESIGNER

JMB

REVIEWER

DKR 07/25/25

PROJECT ID

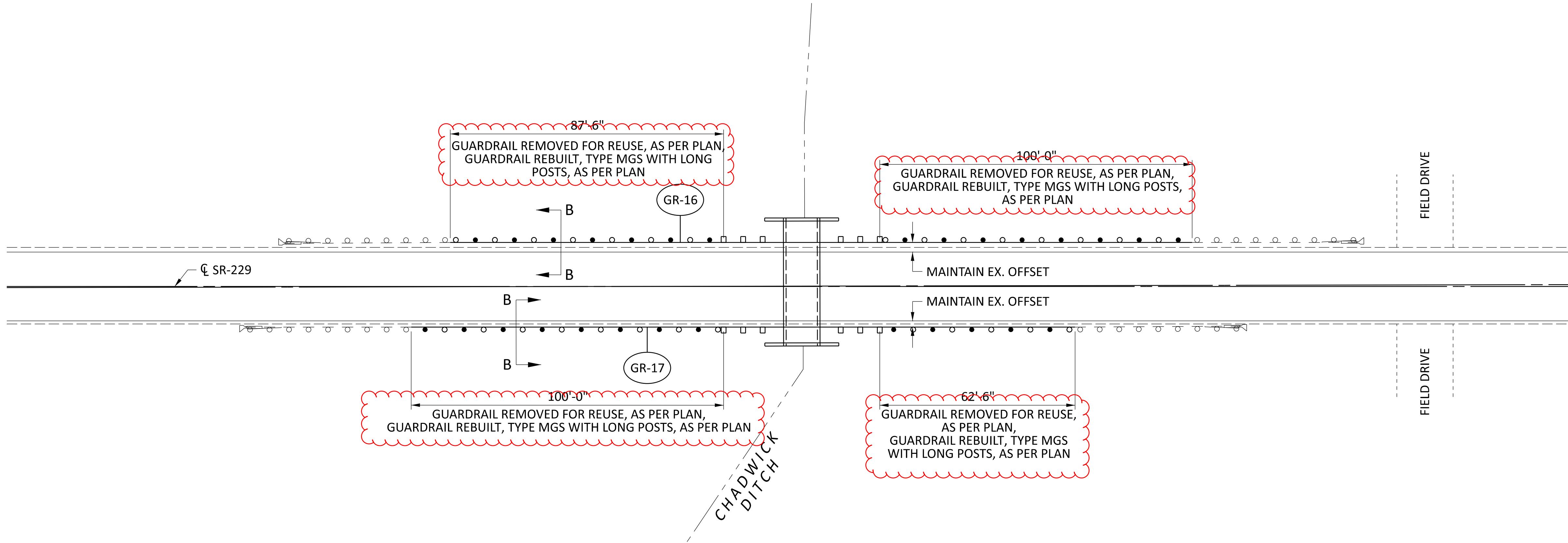
112914

SHEET

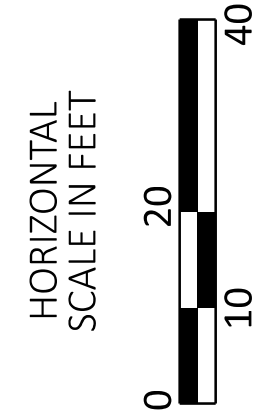
P.19

TOTAL

38



FOR SECTION B-B, SEE
EMBANKMENT DETAIL ON
SHEET P.7



GUARDRAIL PLAN
DEL-229

DESIGN AGENCY



DESIGNER

JMB

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SHEET

P.27

TOTAL

38