	SHEET NUM.													PART.		ITEM	GRAND			SEE	
	P.5	P.8	P.8A	P.12	P.13	P.14	P.15	P.16	P.17	P.25	P.30			01/NHS/BR	ITEM	EXT	TOTAL	UNIT	DESCRIPTION	SHEET NO.	
															000	00400	00		TRAFFIC CONTROL		
							66 25							66 25	630 630	03100 80100	66 25	FT SF	GROUND MOUNTED SUPPORT, NO. 3 POST SIGN, FLAT SHEET		
 							4				<u> </u>			4	630	84900	4	EACH	REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL		
							4							4	630	86002	4	EACH	REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL		
						0.1								0.1	644	00104	0.1	MILE	EDGE LINE, 6"		
						0.18					<u> </u>			0.18	644	00204	0.18	MILE	LANE LINE, 6"		
						0.14					<u> </u>			0.14	644	00300	0.14	MILE	CENTER LINE		
						200 14					<u> </u>			200 14	644 644	00400 00500	200 14	FT FT	CHANNELIZING LINE, 8" STOP LINE		
						4								4	644	01300	4	EACH	LANE ARROW		
																			STRUCTURE OVER 20 FOOT SPAN (LUC-120-1132C)		
											LS			LS	202	11003	LS		STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN	P.30	
											232			232	202	22900	232		APPROACH SLAB REMOVED		
							-				1,014			1,014	202	23500	1,014		WEARING COURSE REMOVED		
											168 LS			168 LS	202 503	35100 11100	168 LS	FT	PIPE REMOVED, 24" AND UNDER COFFERDAMS AND EXCAVATION BRACING		
											1 23				303	11100	20		COLL EVENING VIND EVEN VILLE BLYCOM OF VILLE B		├
											1/2			~~	503	21300	VS_		UNCLASSIFIED EXCAVATION		SUMMARY
											219,664	1		219,664	509	10000	219,664	LB	EPOXY COATED REINFORCING STEEL		≰
											2	1		T.	511	33500	Z.	EACH	SEMI-INTEGRAL DIAPHRAGM GUIDE		€
											499			499	511	34446	499	CY	CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK		=
							-				142		1	142	511	41012	142	CY	CLASS QC1 CONCRETE WITH QC/QA, PIER ABOVE FOOTINGS		S
											381			381	511	44112	381	CY	CLASS QC1 CONCRETE WITH QC/QA, ABUTMENT NOT INCLUDING FOOTING		
											139			139	511	46512	139	CY	CLASS QCT CONCRETE WITH QC/QA, ABOTIMENT NOT INCEDIMG FOOTING CLASS QCT CONCRETE WITH QC/QA, FOOTING		≴
											105			105	511	51512	105	CY	CLASS QC2 CONCRETE WITH QC/QA, SIDEWALK		ENERAL
											363			363	512	10050	363	SY	SEALING OF CONCRETE SURFACES (NON-EPOXY)		Z
											1,139			1,139	512	10100	1,139	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)		
																					Ŋ
							-				27			27	515	15070	27	EACH	DRAPED STRAND PRESTRESSED CONCRETE BRIDGE I-BEAM MEMBERS, LEVEL 3, TYPE WF36-49 (L = 54'-10")		
											21 37			21 37	515 516	20000 13600	21 37	EACH SF	INTERMEDIATE DIAPHRAGMS 1" PREFORMED EXPANSION JOINT FILLER		
											259			259	516	13900	259	SF	2" PREFORMED EXPANSION JOINT FILLER		
											190			190	516	14020	190	FT	SEMI-INTEGRAL ABUTMENT EXPANSION JOINT SEAL		
											36			36	516	44100	36		ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), (BR: 12"x18"x2.50", LP: 13"x19"x0.75")		
											18	~~		18	516	44100	18	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), (BR: 12"x18"x2.50", LP: 13"x19"x1.50") RAININGYCONCREVE PARAMET WITHTWIN STREL YUBERAINING AS PER PLAN	N.30	L .
							1			 (, `	430	\ \ \	 	¥35 \	3// 1	731211	\ \\ \\ \\ \\	V V-/ V	NAIDING CONCRENE PARAMET WITHN WIN STREET NOBENAIDING)) AS PER PLAIT	14.30 V)
										$\vdash \smile$	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\		$\downarrow \downarrow \downarrow$			21200			PORPOS PASKALLANTA SECTEMBER FARRICE TO THE PARRICE		
											234			234	518	40000	234	FT	6" PERFORATED CORRUGATED PLASTIC PIPE		
						1					80			80	518	40011	80	FT	6" NON-PERFORATED CORRUGATED PLASTIC PIPE, INCLUDING SPECIALS, AS PER PLAN	P.30	
						1					163 119		-	163 119	524 524	94704 94802	163 119	FT FT	DRILLED SHAFTS, 36" DIAMETER, INTO BEDROCK DRILLED SHAFTS, 42" DIAMETER. ABOVE BEDROCK		
							1				248		 	248	524 524	94802	248	FT	DRILLED SHAFTS, 42 DIAMETER, ABOVE BEDROCK DRILLED SHAFTS, 42" DIAMETER. INTO BEDROCK		
											1			<u> </u>		3.557	<u> </u>				
											157			157	524	94902	157	FT	DRILLED SHAFTS, 48" DIAMETER, ABOVE BEDROCK		
											441			441	526	25010	441	SY	REINFORCED CONCRETE APPROACH SLABS WITH QC/QA (T=15")		
						1					166			166	526	90010	166	FT	TYPE A INSTALLATION		
											15			15	SPECIAL SPECIAL	53000400	15	EACH	STRUCTURES - MISC.: WATERLINE SUPPORT	P.30 P.30	
											2,176			2,176	SPECIAL	53000600	2,176	SF	STRUCTURES - MISC.: FORMLINER	P.30	
1 }					1	1	1	†	1	 	252	1	1	252	601	32204	252	CY	ROCK CHANNEL PROTECTION, TYPE C WITH GEOTEXTILE FABRIC		DESIGN AGENCY
											33			33	846	00110	33	CF	POLYMER MODIFIED ASPHALT EXPANSION JOINT SYSTEM		
																					\mathbf{r}
																			MAINTENANCE OF TRAFFIC		T Y
1			40											40	614	11110	40	HOUR	LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE		
32		LS 5											-	LS 5	614 614	12421 12500	LS 5	EACH	DETOUR SIGNING, AS PER PLAN REPLACEMENT SIGN, AS PER PLAN	P.8 P.8	
 		30				1	-				1	1	1	30	614	12500 18601	30	SNMT	PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN	P.8 P.8	DESIGNER
15 1					1	1	1			1	1	1	1		014	70007		JI WILL	. STANDED STRINGER IDEE MEGGING FOR STORY EATHERING	7 .0	VVG
20																			INCIDENTALS		REVIEWER WAA 02-09-2
17 [LS	108	30000	LS		CPM PROGRESS SCHEDULE SHORT DURATION PROJECTS		PROJECT ID
<u> </u>		LS												LS	614	11000	LS		MAINTAINING TRAFFIC		102940
							-							LS	623	10000	LS		CONSTRUCTION LAYOUT STAKES AND SURVEYING		SHEET TOTAL P.11 85
		I			<u> </u>			l	l .		1		<u> </u>	LS	624	10000	LS		MOBILIZATION		P*11 85

GENERAL NOTES DGE NO. LUC-120-1132C ER THE OTTAWA RIVER BRIDGE OVER

ITEM 517 - RAILING (CONCRETE PARAPET WITH TWIN STEEL TUBE RAILING), AS PER PLAN

SHOP DRAWINGS:

IN ADDITION TO THE REQUIREMENTS OF 501 AND THE REQUIREMENTS IN THESE NOTES, SUBMIT FOR REVIEW AND ACCEPTANCE, THREE (3) COPIES OF SHOP DRAWINGS, UNLESS ADDITIONAL COPIES ARE REQUESTED. DO NOT BEGIN FABRICATION UNTIL WRITTEN ACCEPTANCE OF THE SUBMITTED DRAWINGS HAS BEEN RECEIVED.

SELECT A FABRICATOR FROM THE PRE-QUALIFIED FABRICATORS LIST IN EFFECT AT THE DATE OF THE CONTRACT LETTING. SELECT A FABRICATOR THAT IS AT LEAST PRE-QUALIFIED AT LEVEL UF. BEFORE OR AT THE PRECONSTRUCTION CONFERENCE, PROVIDE A WRITTEN NOTIFICATION TO THE DISTRICT CONSTRUCTION ENGINEER AND OFFICE OF MATERIALS MANAGEMENT OF THE SELECTED FABRICATORS.

SUBMIT SHOP DRAWINGS PER 501.04, 501.04B AND 501.04C AND PER THE REQUIREMENTS IN THESE NOTES. PREPARE THE SHOP DRAWINGS BY OR UNDER DIRECT SUPERVISORY CONTROL OF AN OHIO REGISTERED PROFESSIONAL ENGINEER HAVING PERSONAL KNOWLEDGE OF AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES AND ITEMS 513 AND 517. THE REGISTERED ENGINEER SHALL SIGN . SEAL AND DATE EACH DRAWING. HAVE QUESTIONS AND COMMENTS ADDRESSED BEFORE SUBMITTING THE SHOP DRAWINGS.

COATING:

LUC-120-11.3

GALVANIZE RAILING COMPONENTS IN ACCORDANCE WITH CMS 711.02. AFTER REMOVING HIGH SPOTS, THE GALVANIZED COATING SHALL BE CLEANED PER SSPC-SP1 THE CLEANING SOLUTION SHALL BE AN ALKALINE SOLUTION WITH A PH RANGING FROM A MINIMUM OF 11 TO A MAXIMUM OF 12. THIS SOLUTION CAN BE APPLIED BY IMMERSION. SPRAY OF SOFT NYLON BRUSH. FOLLOWING CLEANING WITH A HOT WATER OR HOT PRESSURE WASHER RINSE. INDIVIDUAL PIECES SHALL BE SEPARATED AND POSITIONED TO FACILITATE DRAINAGE AND DRYING. THE PIECES SHALL BE COMPLETELY DRY BEFORE PROCEEDING.

AFTER CLEANING, THE PIECES SHALL BE ABRASIVE BLASTED PER SSPC-SP7 BRUSH-OFF BLAST CLEANING. THE BLASTING OPERATION SHALL ROUGHEN THE GALVANIZED SURFACE TO AN ANGULAR SURFACE PROFILE OF 0.25 TO 0.50 MILS. THE BLASTING EQUIPMENT, TECHNIQUE AND ABRASIVE MATERIAL SHALL BE SELECTED TO PROVIDE FOR THE SPECIFIED SURFACE PROFILE WITHOUT REMOVAL OF ZING LAYERS. THE FINAL ZINC MILAGE SHALL NOT BE LESS THAN 3.0 MILS. ALL ABRASIVE RESIDUE SHALL BE REMOVED WITH CLEAN COMPRESSED AIR OF OTHER METHODS ACCEPTABLE TO THE DEPARTMENT.

AFTER OBTAINING AN ACCEPTABLE SURFACE PROFILE, SHOP APPLY A TWO (2) COAT PAINT SYSTEM CONSISTING OF EPOXY INTERMEDIATE COAT AND A URETHANE FINISH COAT MEETING THE REQUIREMENTS OF CMS 514. THE FINISH COAT SHALL MATCH FEDERAL COLOR STANDARD NO. 595-27038 (BLACK).

THE EPOXY INTERMEDIATE COATING SHALL BE APPLIED WITHIN 24 HOURS OF THE BRUSH OFF BLASTING. THE COATINGS SHALL BE APPLIED PER CMS 514 EXCEPT THAT THE REQUIREMENTS FOR SURFACE PREPARATION AND PRIMING SHALL NOT BE PERFORMED. THE COATING SHALL BE SHOP APPLIED AS SPECIFIED IN THESE NOTES WITHOUT THE WORK LIMITATIONS SPECIFIED IN CMS 514. FIELD REPAIRS AND TOUCH UPS SHALL FOLLOW WORK LIMITATIONS SPECIFIED PER CMS 514 AND BE AS DIRECTED BY THE ENGINEER.

THE RAILING SHALL BE INSULATED FROM BINDING CHAINS DURING TRANSPORTATION BY THE USE OF SOFTENERS AND ALL HOOKS AND SLINGS THAT ARE USED TO HOIST/ERECT THE STEEL MEMBERS SHALL BE PADDED. THE CONTRACTOR SHALL REPAIR ANY DAMAGE TO THE PAINT SYSTEM CAUSED DURING STORAGE, TRANSPORTATION AND ERECTION PER CMS 514.22.

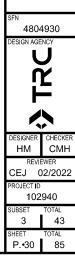
METHOD OR MEASUREMENT:

THE DEPARTMENT WILL MEASURE THE RAILING BY THE NUMBER OF FEET OF RAILING FROM THE ENDS OF EACH TRANSITION.

BASIS OF PAYMENT:

ALL MATERIALS AND LABOR TO INSTALL THE CONCRETE ANCHORS, CONCRETE, INCLUDING THE REINFORCING STEEL, SHALL BE INCLUDED IN THE UNIT BID PRICE FOR THE RAILING.

THE DEPARTMENT WILL PAY FOR ACCEPTED QUANTITIES AT THE CONTRACT PRICE FOR ITEM 517 RAILING (CONCRETE PARAPET WITH TWIN STEEL TUBE RAILING), AS PER PLAN, PER FOOT.



4804930	
GN AGENCY	

ITEM	EVTENICION	TOTAL	LINIT	DESCRIPTION	ADIIT	PIERS	SUPER.	GEN.	SEE
TIEM	EXTENSION	TOTAL	UNIT	DESCRIPTION	ABUT.	PIERS	SUPER.	GEN.	SHEET
202	11003	LS		STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN					2
202	22900	232	SY	APPROACH SLAB REMOVED				232	
202	23500	1014	SY	WEARING COURSE REMOVED			1014		
202	35100	168	FT	PIPE REMOVED, 24" AND UNDER			168		
503	11100	LS		COFFERDAMS AND EXCAVATION BRACING					
503	21300	LS		UNCLASSIFIED EXCAVATION					
509	10000	219.664	LB	EPOXY COATED REINFORCING STEEL	41,699	38.547	139,418		
						· ·			
511	33500	2	EACH	SEMI-INTEGRAL DIAPHRAGM GUIDE	2				
511	34446	499	CY	CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK			499		
511	41012	142	CY	CLASS QC1 CONCRETE WITH QC/QA, PIER ABOVE FOOTINGS		142	1		
511	44112	381	CY	CLASS QC1 CONCRETE WITH QC/QA, ABUTMENT NOT INCLUDING FOOTING	381	† · · · · · · · · · · · · · · · · · · ·	1		
511	46512	139	CY	CLASS QC1 CONCRETE WITH QC/QA, FOOTING	139		1		
511	51512	105	CY	CLASS QC2 CONCRETE WITH QC/QA, SIDEWALK	. 50		105		
3.1	3.072	.50		San			1.00		
512	10050	363	SY	SEALING OF CONCRETE SURFACES (NON-EPOXY)			363		
512	10100	1139	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	274	201	664		
515	15070	27	EACH	DRAPED STRAND PRESTRESSED CONCRETE BRIDGE I-BEAM MEMBERS, LEVEL 3, TYPE WF36-49 (L = 54'-10")			27		
515	20000	21	EACH	INTERMEDIATE DIAPHRAGMS			21		
313	20000	21	EAUT	INTERMEDIATE DIAFTRAGINS			21		
516	13600	37	SF	1" PREFORMED EXPANSION JOINT FILLER			37		
516	13900	259	SF	2" PREFORMED EXPANSION JOINT FILLER			105	154	
516	14020	190	FT	SEMI-INTEGRAL ABUTMENT EXPANSION JOINT SEAL	190				
516	44100	18	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), (BR: 12"x18"x2.50", LP: 13"x19"x1.50")	18				20
540	44400	00	E40//	ELACTOMERIO DE ADIMO MUTULINITEDMAL LAMINATEO AND LOAD DI ATE (MEODDENIE) (DD. 401/401/401/401/407/401/407/401/407/401/401/401/407/401/401/407/401/401/401/401/401/401/401/401/401/401		00			0.1
516	44100	36	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), (BR: 12"x18"x2.50", LP: 13"x19"x0.75")		36			21
								\sim	$ \leftarrow $
	V 2218/V	~ \$5 ~	(FIV)	RAYCING (CONCRETE YARAPE KWIKA TWAN SYEE LATUBE RAYCING), AS PER PLAN	YYY	YYY	Y Y435Y Y	Υ , ,	3, 38, 38,
لت	ىدىد	لند	مد		ىدىد	سب	ىدىد	مت	بد
518	21200	260	CY	POROUS BACKFILL WITH GEOTEXTILE FABRIC	260				
518	40000	234	FT	6" PERFORATED CORRUGATED PLASTIC PIPE	234				
518	40011	80	FT	6" NON-PERFORATED CORRUGATED PLASTIC PIPE, INCLUDING SPECIALS, AS PER PLAN	80				9
524	94704	163	FT	DRILLED SHAFTS, 36" DIAMETER, INTO BEDROCK		163			
524	94802	119	FT	DRILLED SHAFTS, 42" DIAMETER, ABOVE BEDROCK		119			
524	94804	248	FT	DRILLED SHAFTS, 42" DIAMETER, INTO BEDROCK	248				
524	94902	157	FT	DRILLED SHAFTS, 48" DIAMETER, ABOVE BEDROCK	157				
E00	05040	444	OV	DEINEADOED CONCRETE APPROACH SLADS WITH OC/OA /T-45"				111	
526	25010	441	SY	REINFORCED CONCRETE APPROACH SLABS WITH QC/QA (T=15")			+	441	
526	90010	166	FT	TYPE A INSTALLATION			+	166	
SPECIAL	53000400	15	EACH	STRUCTURES - MISC.: WATERLINE SUPPORT			15		33
SPECIAL	53000600	2,176	SF	STRUCTURES - MISC.: FORMLINER			2176		2
201	32204	252	CY	ROCK CHANNEL PROTECTION, TYPE C WITH GEOTEXTILE FABRIC				252	
601		-							
846	00110	33	CF	POLYMER MODIFIED ASPHALT EXPANSION JOINT SYSTEM				33	

ABBREVIATIONS

LUC-120-11.3

THE FOLLOWING ABBREVIATIONS HAVE BEEN USED THROUGHOUT THESE PLANS TO INDICATE THE DESIGNATIONS CIP - CAST-IN-PLACE CONTAINED IN THE LEGEND BELOW:

ABUT. - ABUTMENT ADT - AVERAGE DAILY TRAFFIC ADTT - AVERAGE DAILY TRUCK TRAFFIC ALT. - ALTERNATE APPROX. - APPROXIMATE

ASTM - AMERICAN SOCIETY OF TESTING AND MATERIALS B.F. - BACK FACE ВОТ. - ВОТТОМ

BRG. - BEARING □ - CENTERLINE C/C - CENTER TO CENTER C.J. - CONSTRUCTION JOINT CLR. - CLEARANCE CMS - CONSTRUCTION AND MATERIAL SPECIFICATIONS CONST. - CONSTRUCTION DIA./φ - DIAMETER

EXP. - EXPANSION F.A. - FORWARD ABUTMENT F.F. - FRONT FACE F/F - FACE TO FACE FTG. - FOOTING FT/FT - FOOT PER FOOT DIM. - DIMENSION FWD. - FORWARD DWG. - DRAWING HORIZ. - HORIZONTAL E.F. - EACH FACE I - INTERSTATE ROUTE JT. - JOINT E/P - EDGE OF PAVEMENT LT. - LEFT E/S - EDGE OF SHOULDER

EL. - ELEVATION

EX. - EXISTING

EQ. - EQUAL

MAX. - MAXIMUM MIN. - MINIMUM MOT - MAINTENANCE OF TRAFFIC NB - NORTHBOUND NO. - NUMBER N.C.P.P. - NON-PERFORATED CORRUGATED PLASTIC PIPE O/O - OUT TO OUT OHWM - ORDINARY HIGH WATER MARK P.C.P.P - PERFORATED CORRUGATED PLASTIC PIPE

STA. - STATION STD. - STANDARD STR. - STRAIGHT TEMP. - TEMPORARY T/T - TOE TO TOE P.E.J.F. - PREFORMED EXPANSION TYP. - TYPICAL VERT. - VERTICAL JOINT FILLER PROP. - PROPOSED

нм смн CEJ 02/2022 102940

P.•31 | 85

R.A. - REAR ABUTMENT

SPA. - SPACES OR SPACING

R/W - RIGHT OF WAY

SB - SOUTHBOUND

SER. - SERIES OF

RT. - RIGHT

