ITEM 611 - DRAINAGE STRUCTURE, MISC.: CATCH BASIN LINING

THE EXISTING CATCH BASIN AT STA. 94+66.12, RT SHALL BE LINED ON ALL SIDES AND THE BOTTOM WITH 1/8" PLATES MADE OF ALUMINUM, STAINLESS STEEL, OR HOT-DIPPED GALVANIZED STEEL. THE PLATES SHALL BE SECURELY FASTENED TO THE CATCH BASIN. THE PLATES SHALL NOT COVER ANY PIPE INLETS.

COSTS FOR ALL WORK, LABOR, EQUIPMENT, AND MATERIALS SHALL BE INCLUDED IN THE LUMP SUM BID FOR THIS ITEM. THE FOLLOWING QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY:

611, DRAINAGE STRUCTURE MISC.: LS
CATCH BASIN LINING

ITEM 611 - MANHOLE RECONSTRUCTED TO GRADE, AS PER PLAN 1

FOR EXISTING SANITARY MANHOLES ADJACENT TO OR WITHIN THE PROPOSED CURB AND GUTTER AREA (STA. 80+99, 14.3' LT; STA. 83+37, 16.4' LT; STA. 85+15, 25.9' LT; STA. 91+83, 25.2' LT; AND STA. 101+45, 25.5' LT) THAT INTERFERE WITH CONSTRUCTION OF THE CURB AND GUTTER, AS DETERMINED BY THE ENGINEER, THE CONTRACTOR SHALL REMOVE ENOUGH OF THE EXISTING MANHOLE STRUCTURE IN ORDER TO INSTALL AN ECCENTRIC CONE TOP, PER SCD MH-3, TO ENSURE THAT THE MANHOLE DOES NOT INTERFERE WITH CONSTRUCTION OF THE CURB AND GUTTER. THE CONTRACTOR SHALL APPLY A WATERTIGHT SEAL TO THE LID.

PAYMENT SHALL BE MADE AT THE UNIT PRICE PER EACH AND SHALL INCLUDE ALL LABOR, EQUIPMENT, AND MATERIALS NECESSARY TO COMPLETE THE WORK AS DESCRIBED INCLUDING THE ECCENTRIC CONE TOP.

ITEM 611 - MANHOLE RECONSTRUCTED TO GRADE, AS PER PLAN 2

THE CONTRACTOR SHALL PERFORM ALL WORK AS DEFINED IN THE CMS EXCEPT FOR THE LIMITS OF THE REMOVALS WHICH ARE DEFINED IN THE PLANS. THE CONTRACTOR IS NOT REQUIRED TO REMOVE OR REPAIR THE WALLS OF THE STRUCTURE UNLESS DAMAGED BY THEIR OWN OPERATIONS AS IDENTIFIED BY THE ENGINEER.

CONTRACTION AND/OR EXPANSION JOINTS

ALTHOUGH SPECIFIC LOCATIONS OF CERTAIN CONTRACTION AND EXPANSION JOINTS HAVE BEEN DETAILED ON THIS PLAN, NO WAIVER OF THE SPECIFICATIONS IS INTENDED. IN ALL CASES, THE PROVISION OF EXPANSION JOINTS AT ALL MAJOR STRUCTURES INCLUDING THE MAXIMUM SPACING BETWEEN CONTRACTION JOINTS IS IN ACCORDANCE WITH STANDARD CONSTRUCTION DRAWING BP-2.2 AND THE SPECIFICATIONS.

CONTRACTION JOINTS IN CONCRETE PAVEMENT OR BASE WIDENING

WHERE NEW CONCRETE IS PLACED ADJACENT TO AND TIED TO EXISTING CONCRETE, THE CONTRACTION JOINT SPACING REQUIRED IN STANDARD CONSTRUCTION DRAWING BP-2.2 WILL BE WAIVED. CONSTRUCT CONTRACTION JOINTS IN THE NEW CONCRETE PAVEMENT TO FORM A CONTINUOUS LINE WITH ALL CONTRACTION JOINTS IN THE EXISTING CONCRETE PAVEMENT. INSTALL EXPANSION JOINTS IN THE NEW CONCRETE PAVEMENT TO FORM A CONTINUOUS LINE WITH ALL EXPANSION JOINTS IN THE EXISTING CONCRETE PAVEMENT.

ITEM 202 - REMOVAL MISC.: CONCRETE FOUNDATIONS

THE EXISTING CONCRETE FOUNDATIONS AT STA. 93+21, 20' RT AND STA. 99+04, 20.3' RT SHALL BE REMOVED AND DISPOSED OF. COSTS FOR ALL WORK, LABOR, EQUIPMENT, AND MATERIALS SHALL BE INCLUDED IN THE UNIT PRICE FOR THIS ITEM.

THE FOLLOWING QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY:

202, REMOVAL MISC.: CONCRETE FOUNDATIONS 2 EACH

ITEM 202 - REMOVAL MISC.: STONES, POSTS, LANDSCAPING, AND WALLS

THE EXISTING STONES, POSTS, LANDSCAPING, AND WALLS MARKED SHALL BE REMOVED AND DISPOSED OF AS DIRECTED BY THE ENGINEER.

INCLUDED IN THE LUMP SUM COST OF THIS ITEM ARE THE FOLLOWING QUANTITIES AND LOCATIONS FOR INFORMATION ONLY:

STONES 26 EACH
STA. 79+83, 22' RT; STA. 80+04, 19' RT;
STA. 80+06, 33' RT; STA. 80+12, 19' RT;
STA. 80+35, 18' RT TO STA. 80+76, 19' RT;
STA. 82+69, 22' LT; STA. 83+33, 18' RT;
STA. 85+41, 30' LT; STA. 85+65, 35' LT;
STA. 86+55, 31' RT TO STA. 86+66, 21' RT;
STA. 91+32, 29' RT

POSTS 1 EACH
STA. 82+81, 46' RT

LANDSCAPING 1 EACH
STA. 85+41, 20' LT

WALLS 3 EACH
STA. 77+41, 29' RT; STA. 77+64, 33' RT;
STA. 82+67, 38' RT

COSTS FOR ALL WORK, LABOR, EQUIPMENT, AND MATERIALS SHALL BE INCLUDED IN THE UNIT PRICE FOR THIS ITEM.

THE FOLLOWING QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY:

202, REMOVAL MISC.: STONES, POSTS, LANDSCAPING, AND WALLS LS

ITEM 202 - STRUCTURE REMOVED, AS PER PLAN

THE EXISTING STONE RETAINING WALL AND CONCRETE STAIRS AT STA. 79+32, 30' LT SHALL BE REMOVED AND DISPOSED OF. COSTS FOR ALL WORK, LABOR, EQUIPMENT, AND MATERIALS SHALL BE INCLUDED IN THE UNIT PRICE FOR THIS ITEM.

THE FOLLOWING QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY:

202, STRUCTURE REMOVED, AS PER PLAN LS

ITEM 204 - SUBGRADE COMPACTION AND PROOF ROLLING

CONSTRUCT THE SUBGRADE AS FOLLOWS AND IN THE FOLLOWING SEQUENCE:

1. SHAPE THE SUBGRADE TO WITHIN 0.2 FEET OF THE PLAN SUBGRADE ELEVATION.
2. EXCAVATE AND REPLACE UNSUITABLE SUBGRADE BEFORE PROOF ROLLING. THE EXCAVATION LIMITS ARE SHOWN AND LABELED ON THE CROSS SECTIONS AS UNSUITABLE SUBGRADE. UNSUITABLE SUBGRADE INCLUDES UNSUITABLE SOIL (A-4B, A-2-5, A-5, A-7-5, AND SOIL WITH A LIQUID LIMIT GREATER THAN 65) AND ANY COAL, SHALE, OR ROCK WHICH NEEDS TO BE REMOVED ACCORDING TO SECTION 204.05 OF THE CONSTRUCTION AND MATERIAL SPECIFICATIONS (C&MS).

   IF THERE IS UNSUITABLE SUBGRADE IN A SHALLOW FILL LOCATION, EXCAVATE AND REPLACE THE UNSUITABLE SUBGRADE BEFORE CONSTRUCTING THE SHALLOW FILL AND SHAPING THE SUBGRADE.
3. COMPACT THE SUBGRADE ACCORDING TO C&MS 204.03.
4. APPROXIMATE LIMITS FOR EXCAVATION OF UNSTABLE SUBGRADE ARE SHOWN AND LABELED ON THE CROSS SECTIONS AS UNSTABLE SUBGRADE. THE ENGINEER WILL IDENTIFY THE ACTUAL LIMITS OF EXCAVATION FOR UNSTABLE SUBGRADE BASED ON THE PROOF ROLLING RESULTS AND VISUAL OBSERVATIONS.

   PROOF ROLL THE COMPACTED SUBGRADE ACCORDING TO C&MS 204.06.
5. EXCAVATE UNSTABLE SUBGRADE AS DIRECTED BY THE ENGINEER AND STABILIZE BY REPLACING WITH THE SPECIFIED MATERIALS ACCORDING TO C&MS 204.07. EXCAVATIONS WILL EXTEND 18 INCHES BEYOND THE EDGE OF THE SURFACE OF THE PAVEMENT, PAVED SHOULDERS, OR PAVED MEDIANS.
6. PROOF ROLL THE STABILIZED AREAS ACCORDING TO C&MS 204.06 TO VERIFY STABILITY.
7. FINE GRADE THE SUBGRADE TO THE SPECIFIED GRADE.

THE QUANTITIES FOR EXCAVATING THE UNSUITABLE SUBGRADE AND UNSTABLE SUBGRADE ARE BOTH PAID UNDER ITEM 204, EXCAVATION OF SUBGRADE.

AIRWAY/HIGHWAY CLEARANCE FOR AIRPORTS AND HELIPORTS

THIS PROJECT HAS BEEN IDENTIFIED AS BEING WITHIN THE INFLUENCE AREA OF A PUBLIC USE AIRPORT OR HELIPORT. NO TEMPORARY STRUCTURES OR CONSTRUCTION EQUIPMENT AT MAXIMUM OPERATING HEIGHT SHALL EXCEED A HEIGHT OF 100 FT. IF ANY TEMPORARY STRUCTURES OR CONSTRUCTION EQUIPMENT WILL EXCEED THIS HEIGHT, FURTHER COORDINATION WITH THE FEDERAL AVIATION ADMINISTRATION (FAA), AND ODOT OFFICE OF AVIATION, WILL BE NECESSARY PRIOR TO ERECTING SUCH TEMPORARY STRUCTURES OR OPERATING SUCH EQUIPMENT ON THE PROJECT. THE CONTRACTOR WILL BE REQUIRED TO SUBMIT FORM 7460-1 TO THE FAA. NOTIFY THE ODOT OFFICE OF AVIATION WHEN SUBMITTING FAA FORM 7460-1.

NO TEMPORARY STRUCTURES OR CONSTRUCTION EQUIPMENT SHALL EXCEED THE PERMISSIBLE HEIGHT, UNTIL A COPY OF THE FAA APPROVAL AND THE ODOT OFFICE OF AVIATION PERMIT HAS BEEN FURNISHED TO THE PROJECT ENGINEER.

FEDERAL AVIATION ADMINISTRATION
SOUTHWEST REGIONAL OFFICE
OBSTRUCTION EVALUATION GROUP
10101 HILLWOOD PARKWAY
FORT WORTH, TX 76177
FAX: (817) 222-5920
http://ceaaa.faa.gov

OHIO DEPARTMENT OF TRANSPORTATION OFFICE OF AVIATION
2829 WEST DUBLIN-GRANVILLE ROAD
COLUMBUS, OHIO 43235
Ohio.airport.protection@dot.ohio.gov

ENDANGERED BAT HABITAT REMOVAL

THIS PROJECT IS LOCATED WITHIN THE KNOWN HABITAT RANGES OF THE FEDERALLY LISTED AND PROTECTED INDIANA BAT AND NORTHERN LONG-EARED BAT AND THE STATE LISTED AND PROTECTED LITTLE BROWN BAT AND TRICOLORED BAT. NO TREES SHALL BE REMOVED UNDER THIS PROJECT FROM APRIL 1 THROUGH SEPTEMBER 30. ALL NECESSARY TREE REMOVAL SHALL OCCUR FROM OCTOBER 1 THROUGH MARCH 31. THIS REQUIREMENT IS NECESSARY TO AVOID AND MINIMIZE IMPACTS TO THESE SPECIES AS REQUIRED BY THE ENDANGERED SPECIES ACT (ESA). FOR THE PURPOSES OF THIS NOTE, A TREE IS DEFINED AS: A LIVE, DYING, OR DEAD WOODY PLANT, WITH A TRUNK THREE INCHES OR GREATER IN DIAMETER AT A HEIGHT OF 4.5 FEET ABOVE THE GROUND SURFACE, AND WITH A MINIMUM HEIGHT OF 13 FEET.

THE CONTRACTOR SHALL DEMARCATE CLEARING LIMITS IN THE FIELD TO AVOID ANY UNAUTHORIZED TREE CLEARING. AFTER CLEARING LIMITS ARE MARKED IN THE FIELD, SET UP A FIELD MEETING WITH THE ENGINEER FIVE (5) DAYS PRIOR TO ANY CLEARING ACTIVITY TO APPROVE THE LIMITS.

ITEM 622 - CONCRETE BARRIER, SINGLE SLOPE, TYPE D, AS PER PLAN

THIS ITEM SHALL CONSIST OF CONSTRUCTING CONCRETE BARRIER, SINGLE SLOPE, TYPE D WITH A 9" FOOTER. FOR DETAIL SEE SHEET 159.

ALL LABOR, MATERIALS, EQUIPMENT, EXCAVATION AND INCIDENTALS NECESSARY TO COMPLETE THE WORK SHOWN ON THE PLANS SHALL BE INCLUDED FOR PAYMENT UNDER THE PER FOOT PRICE FOR ITEM 622, CONCRETE BARRIER, SINGLE SLOPE, TYPE D, AS PER PLAN.

ITEM SPECIAL - GAS VALVE BOX ADJUSTED TO GRADE

IN ADDITION TO THE REQUIREMENTS OF CMS 638.18 FOR VALVE BOXES, THE CONTRACTOR WILL MAKE A CLEAN CIRCULAR CUT AROUND THE CASTING (A MINIMUM OF 1'-0" OUTSIDE OF THE CASTING) AND ADJUST THE CASTING TO GRADE (ACCORDING TO THE TOLERANCES AS SHOWN ON STANDARD CONSTRUCTION DRAWING BP-3.1) AFTER THE PAVEMENT SURFACE COURSE HAS BEEN PLACED.

CMS 499 CONCRETE (DYE THE CONCRETE SUCH THAT ITS COLOR CLOSELY MATCHES THE COLOR OF THE SURROUNDING PAVEMENT) WILL BE USED FOR BACKFILLING THE FULL PAVEMENT SECTION AND THE JOINT BETWEEN THE ASPHALT AND CONCRETE WILL BE SEALED WITH CMS 702.01 PG BINDER. EPOXY COATED REBAR SHALL BE PLACED IN THE CONCRETE AT 6" MAXIMUM ON CENTER AND A MINIMUM OF 3.5" CLEARANCE FROM THE TOP, BOTTOM AND SIDES. THE CONCRETE WILL BE VIBRATED SUFFICIENTLY TO ELIMINATE AIR POCKETS UNDER THE FRAME.

PAYMENT WILL INCLUDE REMOVAL OF THE EXISTING MATERIAL, INSTALLATION AND FURNISHING OF A NEW CASTING, AND ALL LABOR AND MATERIALS REQUIRED TO COMPLETE THIS ITEM OF WORK AS DESCRIBED.

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER:

SPECIAL, GAS VALVE BOX ADJUSTED TO GRADE 15 EACH

FENCE LENGTHS

THE LENGTHS OF FENCE SHOWN IN THE PLANS ARE HORIZONTAL DIMENSIONS. MEASUREMENTS OF THE FINAL QUANTITIES WILL BE IN ACCORDANCE WITH ITEM 607.

CALCULATED KAH CHECKED RAK

GENERAL NOTES

CUY-77-4.79

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.

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.

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

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.

614, LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE	240 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 AN LEO ARE INCLUDED WITH THE BID UNIT PRICE FOR ITEM 614, LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE.

TIME LIMITATIONS AND DISINCENTIVES

WALLINGS ROAD SHALL BE OPEN TO TWO-WAY TRAFFIC BEFORE ANY WINTER SEASON WITHIN THE CONTRACT. SEE BELOW FOR RESTRICTIONS AND MILESTONE DATES:

INTERIM DATE:
SEPTEMBER 30, 2024 - TWO-WAY TRAFFIC

SUBSTANTIAL COMPLETION DATE:
SEPTEMBER 30, 2025 - PHASE 4 COMPLETE

A $5000 PER DAY DISINCENTIVE WILL BE APPLIED FOR MISSING EITHER THE INTERIM OR SUBSTANTIAL COMPLETION DATES.

ITEM SPECIAL - WORK ZONE TRAFFIC SIGNAL

THIS WORK SHALL CONSIST OF FURNISHING, ERECTING, OPERATING, MAINTAINING, AND REMOVING A TEMPORARY TRAFFIC SIGNAL. THE CONTRACTOR WILL SUBMIT TEMPORARY SIGNAL PLANS TO THE ENGINEER FOR APPROVAL TWO WEEKS PRIOR TO THE INSTALLATION OF THE SIGNAL. THE TEMPORARY SIGNAL WILL MEET THE REQUIREMENTS OF THE OMUTCD, PART 4. THE CONTRACTOR SHALL ARRANGE FOR AND PAY FOR POWER. ALL MATERIALS AND CONSTRUCTION SHALL COMPLY WITH APPLICABLE PORTIONS OF 630, 632, 633, 730, 732, AND 733 EXCEPT: THE WORKING DRAWING REQUIREMENT OF 632.04 IS WAIVED AND USED MATERIALS IN GOOD CONDITION IS ACCEPTABLE.

THE CONTRACTOR SHALL PROVIDE TEMPORARY VEHICLE DETECTION FOR ANY MOVEMENT WHERE AN EXISTING LOOP DETECTOR IS NO LONGER ABLE TO PROVIDE SUCH DETECTION DUE TO THE SHIFTING OF LANES FOR MAINTENANCE OF TRAFFIC PURPOSES. THE USE OF PHASE RECALL IS NOT AN ACCEPTABLE ALTERNATIVE TO PROVIDING THE REQUIRED TEMPORARY VEHICLE DETECTION.

IF TIMING CHANGES ARE REQUESTED BY THE ENGINEER, THE CHANGES SHALL BE IMPLEMENTED BY THE CONTRACTOR. THE CONTRACTOR SHALL ADJUST THE LOCATIONS OF THE EXISTING, TEMPORARY, OR PROPOSED SIGNAL HEADS FOR EACH PHASE OF CONSTRUCTION IN ACCORDANCE WITH THE OMUTCD. THE CONTRACTOR SHALL ENSURE THAT ALL MINIMUM/MAXIMUM SIGNAL HEAD TO PAVEMENT CLEARANCES ARE MAINTAINED AT ALL TIMES, AND SHALL FIRST BE APPROVED BY THE ENGINEER. NO REDUCTION IN CLEARANCES SHALL BE PERMITTED.

THE COST FOR ALL LABOR, MATERIALS, EQUIPMENT, TOOLS, AND INCIDENTALS NECESSARY TO PROVIDE AND MAINTAIN THE WORK ZONE TRAFFIC SIGNAL SHALL BE INCULDED IN THE UNIT PRICE FOR EACH ITEM SPECIAL - WORK ZONE TRAFFIC SIGNAL. THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY:

SPECIAL, WORK ZONE TRAFFIC SIGNAL	2 EACH

ITEM 615 - PAVEMENT FOR MAINTAINING TRAFFIC, CLASS B

THIS WORK SHALL BE PERFORMED BY THE CONTRACTOR IN ACCORDANCE WITH THE ODOT C&MS. THE FOLLOWING IS AN ESTIMATED QUANTITY FOR EACH LOCATION:

PHASE 1

WALLINGS ROAD	
STA. 76+05 TO STA. 79+62, LT	278 SY
STA. 80+23 TO STA. 85+18, LT	385 SY
STA. 86+00 TO STA. 92+06, LT	270 SY
STA. 93+08 TO STA. 93+97, LT	40 SY
STA. 97+20 TO STA. 98+33, LT	100 SY
STA. 98+72 TO STA. 102+03, LT	454 SY
MILL ROAD	
STA. 26+65 TO STA. 29+72, LT	563 SY
RAMP D2	
STA. 52+23 TO STA. 53+37, RT	83 SY

PHASE 2

RAMP D3	
STA. 53+36 TO STA. 55+32, LT	135 SY
TOTAL CARRIED TO GENERAL SUMMARY:	2,308 SY

ITEM 622 - PORTABLE BARRIER, ANCHORED, AS PER PLAN

THIS ITEM OF WORK CONSISTS OF FURNISHING AND INSTALLING ANCHORED PORTABLE BARRIER IN CONFORMANCE WITH THE PLANS, STANDARD DRAWING PCB-91, AND C&MS 622. THE USE OF PORTABLE BARRIER PER STANDARD DRAWING PCB-91 IS REQUIRED AT BEAM LINE D IN BRIDGE CONSTRUCTION PHASES 2.1 AND 2.2. PORTABLE BARRIER PER STANDARD DRAWING RM-4.2 IS NOT PERMITTED AT THIS LOCATION DUE TO NEED TO ANCHOR PORTABLE BARRIER ON THE EXISTING BRIDGE DECK WITH ZERO OFFSET TO THE DECK CUT LINE.

TEMPORARY VANDAL PROTECTION FENCE, TYPE B, IN ACCORDANCE WITH STANDARD DRAWING TVPF-1-18, SHALL EXTEND OVER THE BRIDGE LIMITS AND WILL BE PAID FOR SEPARATELY UNDER ITEM 607 - TEMPORARY VANDAL FENCE, TYPE B.

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.

INCREASED BARRIER DELINEATION, AS SPECIFIED HEREIN, SHALL BE INSTALLED ON ALL PB AND PERMANENT CONCRETE BARRIER LOCATED WITHIN 5 FEET OF THE EDGE OF THE TRAVELED LANE UNDER EITHER OF THE FOLLOWING CONDITIONS: ALONG TAPERS AND TRANSITION AREAS; OR ALONG CURVES (OUSTIDE ONLY) WITH DEGREE OF CURVATURE GREATER THAN OR EQUAL TO 3 DEGREES.

THE INCREASED BARRIER DELINEATION SHALL CONSIST OF EITHER DELINEATION PANELS OR THE TRIPLE STACKING OF WORK ZONE BARRIER REFLECTORS.

DELINEATION PANELS SHALL CONSIST OF PANELS OF DELINEATION, APPROXIMATELY 34 INCHES LONG AND 6 INCHES WIDE AND SHALL BE "CRIMPED." PANELS SHALL BE INSTALLED AND SPACED PER TRAFFIC SCD MT-101.70.

TRIPLE-STACKED BARRIER REFLECTORS SHALL CONSIST OF ALIGNING THREE BARRIER REFLECTORS VERTICALLY, AT LOCATIONS WHERE A SINGLE BARRIER REFLECTOR WOULD BE OTHERWISE ATTACHED. THERE SHALL BE NO OPEN SPACE BETWEEN THE ADJACENT BARRIER REFLECTORS. THE TRIPLE-STACKED BARRIER REFLECTORS SHALL CONFORM TO C&MS 626, EXCEPT THAT THEY SHALL BE SPACED AND ALIGNED PER TRAFFIC SCD MT-101.70.

THE FOLLOWING PAY ITEMS HAVE BEEN QUANTIFIED IN THE MAINTENANCE OF TRAFFIC SUBSUMMARY:

614, BARRIER REFLECTOR, TYPE 1 (ONE-WAY OR BIDIRECTIONAL)

614, OBJECT MARKER, ONE-WAY

614, OBJECT MARKER, TWO-WAY

614, INCREASED BARRIER DELINEATION

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

ALONG RUNS OF INCREASED BARRIER DELINEATION WHERE THIS ITEM IS PROVIDED, THE QUANTITY SHALL BE MEASURED AS THE ENTIRE LENGTH OF THE RUN OF INCREASED BARRIER DELINEATION, INCLUDING THE SPACES BETWEEN THE INDIVIDUAL DELINEATION PANELS OR STACKS OF BARRIER REFLECTORS.

PHASE 1 BRIDGE WALK REMOVAL

THE FOLLOWING ITEMS HAVE BEEN CARRIED TO THE GENERAL SUMMARY TO BE USED ON THE EXISTING REMAINING BRIDGE PARAPET DURING PHASE 1 OF CONSTRUCTION FOR REMOVAL OF THE WALK ON THE NORTH SIDE OF THE BRIDGE:

614, INCREASED BARRIER DELINIATION	50 FT
614, WORK ZONE IMPACT ATTENUATOR, 24" WIDE HAZARDS, (BIDIRECTIONAL)	2 EACH
614, BARRIER REFLECTOR, TYPE 1, BIDIRECTIONAL	8 EACH
614, OBJECT MARKER, TWO-WAY	8 EACH
614, PORTABLE BARRIER, UNANCHORED	380 FT

CALCULATED KAH CHECKED FRR

MAINTENANCE OF TRAFFIC GENERAL NOTES

CUY-77-4.79

SHEET NUM.													PART.		ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
OFFICE CALCS	13	81	83	84	151	154	154A	164	165	167	181	182	01/SAF/PV	03/NFP/PV						
																			WATER WORK (CONT.)	
			5	1	2	3							3	8	638	98000	11	EACH	WATER WORK, MISC.: 1" SERVICE VALVE & VALVE BOX, COMPLETE	151
			3	1										4	638	98000	4	EACH	WATER WORK, MISC.: CHLORINATION PIT	154
						6								6	638	98000	6	EACH	WATER WORK, MISC.: POUR-THROUGH PITCHER TYPE FILTER	154
					10								10		638	98000	10	EACH	WATER WORK, MISC.: POT-HOLING EXISTING WATER MAIN	151
							LS							LS	638	98100	LS		WATER WORK, MISC.: MAINTENANCE OF WATER SERVICE	154A
					550								550		638	98600	550	FT	WATER WORK, MISC.: FROSTPROOFING FOR 8" WATERMAIN	151
						1,000							150	850	SPECIAL	69099400	1,000	LB	ADDITIONAL DUCTILE IRON FITTINGS	154
																			SANITARY SEWER	
	100												80	20	611	01800	100	FT	8" CONDUIT, TYPE B	
	5												4	1	611	99574	5	EACH	MANHOLE, NO. 3	
	2												2		611	99651	2	EACH	MANHOLE FRAME AND COVER, AS PER PLAN	13
		5											5		611	99654	5	EACH	MANHOLE ADJUSTED TO GRADE	
		5											4	1	611	99661	5	EACH	MANHOLE RECONSTRUCTED TO GRADE, AS PER PLAN 1	14
		1											1		611	99661	1	EACH	MANHOLE RECONSTRUCTED TO GRADE, AS PER PLAN 2	14
	4												4		611	99721	4	EACH	INSPECTION WELL, AS PER PLAN	13
																			LIGHTING	
												6	6		625	00450	6	EACH	CONNECTION, FUSED PULL APART	
												6	6		625	00480	6	EACH	CONNECTION, UNFUSED PERMANENT	
												3	3		625	10503	3	EACH	LIGHT POLE (INSTALLATION ONLY), AS PER PLAN	181
												3	3		625	14000	3	EACH	LIGHT POLE FOUNDATION, 24" X 6' DEEP	
												467	467		625	24320	467	FT	1-1/2" DUCT CABLE WITH THREE NO. 4 AWG 2400 VOLT CABLES	
												3	3		625	27561	3	EACH	LUMINAIRE, INSTALLATION ONLY, AS PER PLAN	181
												437	437		625	29002	437	FT	TRENCH, 24" DEEP	
												1	1		625	30700	1	EACH	PULL BOX, 725.08, 18"	
												3	3		625	32000	3	EACH	GROUND ROD	
											1		1		625	33001	1	EACH	STRUCTURE GROUNDING SYSTEM, AS PER PLAN	181
												437	437		625	36010	437	FT	UNDERGROUND WARNING/MARKING TAPE	
											LS		LS		SPECIAL	62540000	LS		MAINTAIN EXISTING LIGHTING	181
												4	4		625	75800	4	EACH	DISCONNECT CIRCUIT	
																			TRAFFIC CONTROL	
								42					42		621	00100	42	EACH	RPM	
								19					19		621	54000	19	EACH	RAISED PAVEMENT MARKER REMOVED	
										2			2		625	32000	2	EACH	GROUND ROD	
										208			195	13	630	02100	208	FT	GROUND MOUNTED SUPPORT, NO. 2 POST	
										298.4			257.9	40.5	630	03100	298.4	FT	GROUND MOUNTED SUPPORT, NO. 3 POST	
										55			55		630	06400	55	FT	GROUND MOUNTED STRUCTURAL BEAM SUPPORT, S4X7.7	
										71			71		630	07600	71	FT	GROUND MOUNTED STRUCTURAL BEAM SUPPORT, W10X12	
										30			30		630	08100	30	FT	ONE WAY SUPPORT, NO. 4 POST	
										25			25		630	08520	25	FT	STREET NAME SIGN SUPPORT, NO. 3 POST	
										15				15	630	08530	15	FT	STREET NAME SIGN SUPPORT, NO. 4 POST	
										8			7	1	630	08600	8	EACH	SIGN POST REFLECTOR	
										8			8		630	09000	8	EACH	BREAKAWAY STRUCTURAL BEAM CONNECTION	
										2			2		630	76520	2	EACH	SPAN WIRE SIGN SUPPORT, TYPE TC-17.11, DESIGN 8	
										2			2		630	79000	2	EACH	SIGN HANGER ASSEMBLY, SPAN WIRE	
										6			6		630	79100	6	EACH	SIGN HANGER ASSEMBLY, MAST ARM	
										388.2			349	39.2	630	80100	388.2	SF	SIGN, FLAT SHEET	
										166			166		630	80200	166	SF	SIGN, GROUND MOUNTED EXTRUSHEET	
										8			8		630	84500	8	EACH	GROUND MOUNTED STRUCTURAL BEAM SUPPORT FOUNDATION	
										2			2		630	84520	2	EACH	SPAN WIRE SIGN SUPPORT FOUNDATION	
									53				47	6	630	84900	53	EACH	REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL	
									1					1	630	85100	1	EACH	REMOVAL OF GROUND MOUNTED SIGN AND REERECTION	
									25				22	3	630	86002	25	EACH	REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL	
									14				14		630	86102	14	EACH	REMOVAL OF GROUND MOUNTED STRUCTURAL BEAM SUPPORT AND DISPOSAL	
									2				1	1	630	86272	2	EACH	REMOVAL OF GROUND MOUNTED PIPE SUPPORT AND DISPOSAL	
									8				5	3	630	87500	8	EACH	REMOVAL OF POLE MOUNTED SIGN AND DISPOSAL	
										155			155		632	30200	155	FT	MESSENGER WIRE, 7 STRAND, 3/8" DIAMETER WITH ACCESSORIES	

CALCULATED KAH
CHECKED RAK

GENERAL SUMMARY

CUY-77-4.79

SHEET NUM. OFFICE CALCS	SHEET NUM. 164	SHEET NUM. 189	PART. 01/SAF/PV	PART. 03/NFP/PV	ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
									TRAFFIC CONTROL (CONT.)	
	0.29		0.29		644	00104	0.29	MILE	EDGE LINE, 6"	
	0.04		0.04		644	00204	0.04	MILE	LANE LINE, 6"	
	0.79		0.64	0.15	644	00300	0.79	MILE	CENTER LINE	
	1,774		1,774		644	00404	1,774	FT	CHANNELIZING LINE, 12"	
	224		209	15	644	00500	224	FT	STOP LINE	
	289		289		644	00620	289	FT	CROSSWALK LINE, 12"	
	249		249		644	00700	249	FT	TRANSVERSE/DIAGONAL LINE	
	105		105		644	00900	105	SF	ISLAND MARKING	
	47		47		644	01300	47	EACH	LANE ARROW	
	3		3		644	01360	3	EACH	WRONG WAY ARROW	
	530		530		644	01500	530	FT	DOTTED LINE, 4"	
	430		430		644	30000	430	FT	REMOVAL OF PAVEMENT MARKING	
	6		6		644	30020	6	EACH	REMOVAL OF PAVEMENT MARKING	
	0.16		0.16		644	30030	0.16	MILE	REMOVAL OF PAVEMENT MARKING	
	0.07		0.07		646	10200	0.07	MILE	CENTER LINE	
	286		286		646	10310	286	FT	CHANNELIZING LINE, 12"	
	4		4		646	20300	4	EACH	LANE ARROW	
									TRAFFIC SIGNALS	
		27	27		625	25402	27	FT	CONDUIT, 2", 725.05	
		259	259		625	25502	259	FT	CONDUIT, 3", 725.05	
		126	126		625	25602	126	FT	CONDUIT, 4", 725.05	
		552	552		625	25900	552	FT	CONDUIT, JACKED OR DRILLED, 4"	
		248	248		625	29000	248	FT	TRENCH	
		12	12		625	30706	12	EACH	PULL BOX, 725.08, 24"	
		5	5		625	31510	5	EACH	PULL BOX REMOVED	
		8	8		625	32000	8	EACH	GROUND ROD	
		12	12		632	05006	12	EACH	VEHICULAR SIGNAL HEAD, (LED), 3-SECTION, 12" LENS, 1-WAY, POLYCARBONATE (BLACK)	
		3	3		632	05086	3	EACH	VEHICULAR SIGNAL HEAD, (LED), 5-SECTION, 12" LENS, 1-WAY, POLYCARBONATE (BLACK)	
		4	4		632	20731	4	EACH	PEDESTRIAN SIGNAL HEAD (LED), TYPE D2, COUNTDOWN, AS PER PLAN	186
		15	15		632	25000	15	EACH	COVERING OF VEHICULAR SIGNAL HEAD	
		4	4		632	25010	4	EACH	COVERING OF PEDESTRIAN SIGNAL HEAD	
		4	4		632	26000	4	EACH	PEDESTRIAN PUSHBUTTON	
		765	765		632	40200	765	FT	SIGNAL CABLE, 2 CONDUCTOR, NO. 14 AWG	
		785	785		632	40500	785	FT	SIGNAL CABLE, 5 CONDUCTOR, NO. 14 AWG	
		767	767		632	40700	767	FT	SIGNAL CABLE, 7 CONDUCTOR, NO. 14 AWG	
		560	560		632	40900	560	FT	SIGNAL CABLE, 9 CONDUCTOR, NO. 14 AWG	
		4	4		632	64010	4	EACH	SIGNAL SUPPORT FOUNDATION	
		2	2		632	64020	2	EACH	PEDESTAL FOUNDATION	
		6	6		632	64950	6	EACH	TEST HOLE PERFORMED	
		121	121		632	68200	121	FT	POWER CABLE, 2 CONDUCTOR, NO. 6 AWG	
		398	398		632	68300	398	FT	POWER CABLE, 3 CONDUCTOR, NO. 6 AWG	
		2	2		632	70000	2	EACH	POWER SERVICE	
		1	1		632	71368	1	EACH	SIGNAL SUPPORT, TYPE TC-12.31 DESIGN 10 POLE, WITH MAST ARMS TC-81.22 DESIGN 13 AND DESIGN 12	184
		1	1		632	71388	1	EACH	SIGNAL SUPPORT, TYPE TC-12.31 DESIGN 10 POLE, WITH MAST ARMS TC-81.22 DESIGN 14 AND DESIGN 12	184
		1	1		632	72110	1	EACH	SIGNAL SUPPORT, TYPE TC-81.22, DESIGN 4	184
		1	1		632	72130	1	EACH	SIGNAL SUPPORT, TYPE TC-81.22, DESIGN 12	184
		2	2		632	89610	2	EACH	PEDESTAL, 9'	
		3	2	1	632	90101	3	EACH	REMOVAL OF TRAFFIC SIGNAL INSTALLATION, AS PER PLAN	186
		2	2		633	65523	2	EACH	CABINET, TYPE 332L, AS PER PLAN	186
		2	2		633	67100	2	EACH	CABINET FOUNDATION	
		2	2		633	67200	2	EACH	CONTROLLER WORK PAD	
		2	2		633	75001	2	EACH	UNINTERRUPTIBLE POWER SUPPLY (UPS), 1000 WATT, AS PER PLAN	184
		1	1		809	60040	1	EACH	CCTV IP-CAMERA SYSTEM, QUAD MULTI-VIEW FIXED WITH PTZ	
		256	256		809	64550	256	FT	ETHERNET CABLE, OUTDOOR-RATED	
		6	6		809	69101	6	EACH	STOP LINE RADAR DETECTION, AS PER PLAN	186
		2	2		809	69123	2	EACH	ATC CONTROLLER, AS PER PLAN	186

CALCULATED KAH
CHECKED RAK

GENERAL SUMMARY

CUY-77-4.79

REF NO.	SHEET NO.	STATION TO STATION			SIDE	611 12" CONDUIT, TYPE B FT	611 12" CONDUIT, TYPE B, 706.02 FT	611 12" CONDUIT, TYPE B, 707.32 FT	611 15" CONDUIT, TYPE B FT	611 15" CONDUIT, TYPE B, 706.02 FT	611 15" CONDUIT, TYPE B, 706.08 FT	611 15" CONDUIT, TYPE F, 707.05 TYPE C OR 707.21 FT	611 CATCH BASIN, NO. 3 EACH	611 CATCH BASIN, NO. 3A EACH	611 CATCH BASIN, NO. 6 EACH	611 CATCH BASIN ADJUSTED TO GRADE EACH	611 CATCH BASIN RECONSTRUCTED TO GRADE EACH	611 MANHOLE, NO. 3 EACH	611 MANHOLE ADJUSTED TO GRADE (FOR DRAINAGE) EACH	611 MANHOLE ADJUSTED TO GRADE (FOR SANITARY) EACH	611 MANHOLE RECONSTRUCTED TO GRADE (FOR DRAINAGE) EACH	611 MANHOLE RECONSTRUCTED TO GRADE, AS PER PLAN 1 (FOR SANITARY) EACH	611 MANHOLE RECONSTRUCTED TO GRADE, AS PER PLAN 2 (FOR SANITARY) EACH
			TO																				
D-1	86	77+06.51			RT.									1									
D-2	86	77+40.00			LT.									1									
D-3	86	77+40.00			LT.													1					
DJ-1	86	76+69.47			LT.												1						
P-1	86	76+69.47		77+40.00	LT.	71																	
P-2	86	77+01.05		77+06.51	RT.		7																
P-3	86	77+40.00		77+40.00	LT.	5																	
P-4	86	77+40.00		79+83.65	LT.	244																	
D-4	87	79+83.65			LT.													1					
D-5	87	0+37.76			RT.									1									
D-6	87	82+50.00			RT.									1									
D-7	87	82+51.80			LT.									1									
DJ-2	87	82+60.38			RT.												1						
P-5	87	79+83.65		0+37.76	LT.	33																	
P-6	87	82+50.00		82+60.38	RT.	12																	
P-7	87	82+51.80		82+53.75	LT.			7															
SJ-1	87	80+98.82			LT.																	1	
D-8	88	85+34.00			LT.									1									
D-9	88	85+68.59			LT.													1					
D-10	88	85+80.00			RT.									1									
D-11	88	87+00.00			LT.									1									
DJ-3	88	85+90.54			RT.												1						
P-8	88	85+34.00		85+68.59	LT.	35																	
P-9	88	85+68.59		85+71.26	LT.		5																
P-10	88	85+80.00		85+90.54	RT.	12																	
P-11	88	87+00.00		89+12.30	LT.	212																	
SJ-2	88	83+36.61			LT.																	1	
SJ-3	88	84+87.55			LT.																1		
SJ-4	88	85+14.54			LT.																	1	
D-12	89	89+05.00			LT.									1									
D-13	89	89+04.45			RT.										1								
D-14	89	91+98.50			LT.									1									
DJ-4	89	89+12.30			LT.															1			
DJ-5	89	90+83.61			RT.															1			
P-12	89	88+84.49		89+04.45	RT.		20																
P-13	89	89+05.00		89+12.30	LT.	9																	
P-14	89	89+04.45		89+05.14	RT.					5													
P-15	89	89+04.45		89+24.80	RT.		20																
SJ-5	89	88+57.62			LT.																1		
SJ-6	89	91+82.94			LT.																	1	
D-15	90	92+06.00			RT.													1					
D-16	90	92+07.50			RT.									1									
D-17	90	93+75.00			RT.									1									
D-18	90	93+87.97			RT.													1					
D-19	90	93+88.00			LT.									1									
SUBTOTAL						633	52	7		5				13	1		3	5	2	2		4	

CALCULATED KAH
CHECKED BLS

DRAINAGE SUBSUMMARY

CUY-77-4.79

REF NO.	SHEET NO.	STATION TO STATION			SIDE	611 12" CONDUIT, TYPE B FT	611 12" CONDUIT, TYPE B, 706.02 FT	611 12" CONDUIT, TYPE B, 707.32 FT	611 15" CONDUIT, TYPE B FT	611 15" CONDUIT, TYPE B, 706.02 FT	611 15" CONDUIT, TYPE B, 706.08 FT	611 15" CONDUIT, TYPE F, 707.05 TYPE C OR 707.21 FT	611 CATCH BASIN, NO. 3 EACH	611 CATCH BASIN, NO. 3A EACH	611 CATCH BASIN, NO. 6 EACH	611 CATCH BASIN ADJUSTED TO GRADE EACH	611 CATCH BASIN RECONSTRUCTED TO GRADE EACH	611 MANHOLE, NO. 3 EACH	611 MANHOLE ADJUSTED TO GRADE (FOR DRAINAGE) EACH	611 MANHOLE ADJUSTED TO GRADE (FOR SANITARY) EACH	611 MANHOLE RECONSTRUCTED TO GRADE (FOR DRAINAGE) EACH	611 MANHOLE RECONSTRUCTED TO GRADE, AS PER PLAN 1 (FOR SANITARY) EACH	611 MANHOLE RECONSTRUCTED TO GRADE, AS PER PLAN 2 (FOR SANITARY) EACH
			TO																				
D-20	90	93+88.74			RT.													1					
P-15A	90	92+01.00		92+06.00	RT.		5																
P-16	90	91+98.50		92+06.00	LT/RT	43																	
P-17	90	92+06.00		92+07.50	RT.	17																	
P-18	90	92+06.00		93+87.97	RT.				182														
P-19	90	93+75.00		93+87.97	RT.	17																	
P-20	90	93+87.97		93+88.00	LT/RT	30																	
P-21	90	93+87.97		93+88.74	RT.				22														
P-22	90	93+88.74		94+66.12	RT.							85											
SJ-7	90	94+03.48			LT.															1			
D-21	91	97+84.00			RT.									1									
D-22	91	97+97.91			RT.													1					
D-23	91	98+04.00			LT.									1									
D-24	91	29+07.00			LT.								1										
DJ-6	91	99+00.72			RT.																1		
P-23	91	97+84.00		97+97.91	RT.	17																	
P-24	91	97+97.91		98+04.00	LT/RT	35																	
P-24A	91	97+97.91		98+02.91	RT.					5													
P-25	91	29+06.81		29+07.00	LT.		20																
SJ-8	91	98+73.06			LT.																	1	
SJ-9	91	99+67.40			LT.															1			
SJ-10	91	101+44.80			LT.																	1	
D-25	92	102+50.00			RT.									1									
D-26	92	102+50.00			LT.									1									
D-27	92	102+54.69			RT.													1					
DJ-7	92	102+58.58			LT.												1						
P-26	92	102+25.00		102+54.69	RT.					30													
P-27	92	102+43.83		102+54.69	RT.	15																	
P-28	92	102+50.00		102+54.69	RT.	6																	
P-29	92	102+50.00		102+54.69	LT/RT	35																	
P-30	92	102+50.00		102+58.58	LT.	14																	
P-31	92	102+54.69		102+84.93	RT.						30												
SJ-11	92	103+32.64			LT.															1			
D-28	95	28+25.00			LT.									1									
P-32	95	28+24.82		28+25.00	LT.	12																	
P-33	95	28+25.00		28+25.00	LT.		5																
SUBTOTAL THIS SHEET						241	30		204	35	30	85	1	5		1		3		3	1	1	1
QUANTITIES CARRIED FROM SHEET 80						633	52	7		5				13	1		3	5	2	2		4	
TOTALS CARRIED TO GENERAL SUMMARY						874	82	7	204	40	30	85	1	18	1	1	3	8	2	5	1	5	1

DRAINAGE SUBSUMMARY

CALCULATED KAH
CHECKED BLS

CUY-77-4.79

SHEET NO.	LOCATION	625									632										
		PULL BOX, 725.08, 24"	CONDUIT, 2", 725.05	CONDUIT, 3", 725.05	CONDUIT, 4", 725.05	CONDUIT, JACKED OR DRILLED, 4"	TRENCH	PULLBOX REMOVED	GROUND ROD		VEHICULAR SIGNAL HEAD, (LED), 3-SECTION, 12" LENS, 1-WAY, POLYCARBONATE, (BLACK)	VEHICULAR SIGNAL HEAD, (LED), 5-SECTION, 12" LENS, 1-WAY, POLYCARBONATE, (BLACK)	PEDESTRIAN SIGNAL HEAD (LED), TYPE D2, COUNTDOWN, AS PER PLAN	COVERING OF VEHICULAR SIGNAL HEAD	COVERING OF PEDESTRIAN SIGNAL HEAD	SIGNAL CABLE, 2 CONDUCTOR, NO. 14 AWG	SIGNAL CABLE, 5 CONDUCTOR, NO. 14 AWG	SIGNAL CABLE, 7 CONDUCTOR, NO. 14 AWG	SIGNAL CABLE, 9 CONDUCTOR, NO. 14 AWG	POWER CABLE, 2 CONDUCTOR, NO. 6 AWG	POWER CABLE, 3 CONDUCTOR, NO. 6 AWG
		EACH	FT	FT	FT	FT	FT	EACH	EACH		EACH	EACH	EACH	EACH	EACH	FT	FT	FT	FT	FT	EACH
191	WALLINGS RD & RAMP D2/RAMP D4 INTERSECTION	7	18	208	90	278	158	3	4		7	1	2	8	2	385	395	608	114	65	227
195	WALLINGS RD & MILL RD/RAMP D3 INTERSECTION	5	9	51	36	274	90	2	4		5	2	2	7	2	380	390	159	446	56	171
	TOTALS CARRIED TO GENERAL SUMMARY	12	27	259	126	552	248	5	8		12	3	4	15	4	765	785	767	560	121	398

SHEET NO.	LOCATION	632											633				809				
		PEDESTRIAN PUSHBUTTON	SIGNAL SUPPORT FOUNDATION	PEDESTAL FOUNDATION	PEDESTAL, 9'	SIGNAL SUPPORT, TYPE TC-12.31 DESIGN 10 POLE, WITH MAST ARMS TC-81.22 DESIGN 13 AND DESIGN 12	SIGNAL SUPPORT, TYPE TC-12.31 DESIGN 10 POLE, WITH MAST ARMS TC-81.22 DESIGN 14 AND DESIGN 12	SIGNAL SUPPORT,TYPE TC-81.22 DESIGN 4	SIGNAL SUPPORT,TYPE TC-81.22 DESIGN 12	TEST HOLE PERFORMED	REMOVAL OF TRAFFIC SIGNAL INSTALLATION, AS PER PLAN	POWER SERVICE	UINTERRUPTIBLE POWER SUPPLY (UPS), 1000 WATT, AS PER PLAN	CABINET, TYPE 332L, AS PER PLAN	CABINET FOUNDATION	CONTROLLER WORK PAD	STOP LINE RADAR DETECTION, AS PER PLAN	ATC CONTROLLER, AS PER PLAN	CCTV IP-CAMERA SYSTEM, QUAD MULTI-VIEW FIXED WITH PTZ	ETHERNET CABLE, OUTDOOR-RATED	EMERGENCY VEHICLE PREEMPTION, AS PER PLAN
		EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	FT	EACH
191	WALLINGS RD & RAMP D2/RAMP D4 INTERSECTION	2	2	1	1	1		1		3	1	1	1	1	1	1	3	1	1	256	1
195	WALLINGS RD & MILL RD/RAMP D3 INTERSECTION	2	2	1	1		1		1	3	1	1	1	1	1	1	3	1			1
	WALLINGS RD & SKYLINE DR										1										
	TOTALS CARRIED TO GENERAL SUMMARY	4	4	2	2	1	1	1	1	6	3	2	2	2	2	2	6	2	1	256	2

SHEET NO.	LOCATION	809			
		PREEMPT DETECTOR CABLE, AS PER PLAN	PREEMPT PHASE SELECTOR, AS PER PLAN	PREEMPT CONFIRMATION LIGHT, AS PER PLAN	PREEMPT RECEIVING UNIT, AS PER PLAN
		EACH	EACH	EACH	EACH
191	WALLINGS RD & RAMP D2/RAMP D4 INTERSECTION	686	1	3	3
195	WALLINGS RD & MILL RD/RAMP D3 INTERSECTION	552	1	3	3
	TOTALS CARRIED TO GENERAL SUMMARY	1238	2	6	6

CALCULATED JAC
CHECKED DRP

TRAFFIC SIGNAL SUBSUMMARY

CUY-77-4.79

189
289

P:\Broadview Hts - City of\J2017\0056.000 CUY CR57-4.43 Wallings Rd\Transfers\Outbound\20230802 - Re-bid Rev2\Electronic Files\CUY\06239\Design\Signals\Sheets\06239_CS001.dgn Sheet 11/2/2023