THIS ITEM SHALL CONSIST OF THE CONSTRUCTION OF BULK-HEADS IN EXISTING CONDUITS AND FILLING THE AREA THUS SEALED OFF WITH ITEM 613. SAND OR OTHER MATERIAL APPROVED BY THE ENGINEER.

BULKHEADS SHALL BE LOCATED AT THE LIMITS OF THE AREA TO BE FILLED AS INDICATED ON THE PLANS. THE BULKHEADS SHALL CONSIST OF BRICK OR CONCRETE MASONRY WITH A MINIMUM THICKNESS OF 12 INCHES.

THE FILL MATERIAL SHALL BE PUMPED INTO PLACE, OR PLACED BY OTHER MEANS APPROVED BY THE ENGINEER, SO THAT, AFTER SETTLEMENT, AT LEAST 90 PERCENT OF THE CROSS-SECTIONAL AREA OF THE CONDUIT, FOR ITS ENTIRE LENGTH, SHALL BE FILLED. THE LENGTH OF FILLED AND PLUGGED CONDUIT TO BE PAID FOR SHALL BE THE ACTUAL NUMBER OF FEET (MEASURED ALONG THE CENTERLINE OF EACH CONDUIT FROM OUTER FACE TO OUTER FACE OF BULKHEADS) FILLED AND PLUGGED AS DESCRIBED ABOVE.

IN LIEU OF FILLING AND PLUGGING THE EXISTING CONDUIT, THE PIPE MAY BE REMOVED. THE LENGTH, MEASURED AS PROVIDED ABOVE, SHALL BE PAID FOR AT THE CONTRACT PRICE PER FOOT FOR, ITEM SPECIAL, FILL AND PLUG EXISTING CONDUIT.

UNRECORDED STORM WATER DRAINAGE

FURNISH A CONTINUANCE FOR ALL UNRECORDED STORM WATER DRAINAGE, SUCH AS ROOF DRAINS, FOOTER DRAINS, OR YARD DRAINS. DISTURBED BY THE WORK. FURNISH EITHER AN OPEN CONTINUANCE OR AN UNOBSTRUCTED CONTINUANCE BY CONNECT-ING A CONDUIT THROUGH THE CURB OR INTO A DRAINAGE STRUCTURE. THE LOCATION, TYPE, SIZE AND GRADE OF THE NEEDED CONDUIT TO REPLACE OR EXTEND AN EXISTING DRAIN WILL BE DETERMINED BY THE ENGINEER. ALL SUCH CONTINUANCE REQUIRES A RIGHT OF WAY USE PERMIT.

THE FOLLOWING CONDUIT TYPES MAY BE USED: 707.33, 707.41 NON-PERFORATED, 707.42, 707.43, 707.45, 707.46, 707.47, 707.51, 707.52 SDR35.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER FOR THE WORK NOTED ABOVE:

611, 6" CONDUIT, TYPE B	100 FT.
611, 6" CONDUIT, TYPE C	100 FT.
611, 6" CONDUIT, TYPE E	100 FT.
611. 6" CONDUIT. TYPE F	100 FT.

UNRECORDED ACTIVE SANITARY SEWER CONNECTIONS

FURNISH A CONTINUANCE FOR ALL UNRECORDED ACTIVE SANITARY SEWER CONNECTIONS SUCH AS SANITARY, WASTEWATER, CURTAIN/ GRADIENT DRAINS. AND FOUNDATION FLOOR DRAINS DISTURBED BY THE WORK. FURNISH AN UNOBSTRUCTED CONTINUANCE OF THE UNRECORDED ACTIVE SANITARY SEWER CONNECTIONS TO THE SATISFACTION OF THE ENGINEER. ALL SUCH CONTINUANCE REQUIRES A RIGHT OF WAY USE PERMIT. ALL SANITARY AND SANITARY WASTEWATER CONTINUANCE MAY ALSO REQUIRE A NPDES PERMIT FROM THE OHIO ENVIRONMENTAL PROTECTION AGENCY. REPORT ALL CONTINUANCE TO THE LOCAL HEALTH DEPARTMENT.

THE FOLLOWING CONDUIT TYPES MAY BE USED: 707.42, 707.43, 707.44, 707.45, 707.46, 707.47, 707.51, 707.52 SDR35, 706.01, 706.02, OR 706.08 WITH JOINTS AS PER 706.11 OR 706.12.

UNRECORDED ACTIVE SANITARY SEWER CONNECTIONS (CONT)

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER FOR THE WORK NOTED ABOVE:

<i>311,</i>	8" CONDUIT,	TYPE B	100 FT
<i>311,</i>	8" CONDUIT,	TYPE C	100 FT

MANHOLES. CATCH BASINS AND INLETS REMOVED OR ABANDONED

ALL CASTINGS SHALL BE CAREFULLY REMOVED AND STORED WITHIN THE RIGHT OF WAY FOR SALVAGE BY STATE FORCES.

PAYMENT FOR ALL OF THE ABOVE SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE PERTINENT 202 ITEM.

EXISTING UNDERDRAINS

ALL EXISTING UNDERDRAINS NOT REMOVED DURING PROPOSED CONSTRUCTION SHALL BE PROVIDED WITH A POSITIVE OUTLET. ALL MATERIALS, LABOR, AND INCIDENTALS NECESSARY TO PROVIDE AN OUTLET FOR THE EXISTING UNDERDRAIN SHALL BE INCLUDED IN THE FOLLOWING BID ITEMS. CONTINGENCY QUANTITIES HAVE BEEN ESTIMATED BELOW TO BE USED AS DIRECTED BY THE ENGINEER:

611, PRECAST REINFORCED OUTLET	5 EACH
611, 6" CONDUIT, TYPE F FOR UNDERDRAIN OUTLET	200 FT
601. TIED CONCRETE BLOCK MAT. TYPE 1 LINDERLA	YMFNT 10 SY

ITEM SPECIAL - PIPE CLEANOUT

THIS WORK CONSISTS OF REMOVING SEDIMENT AND DEBRIS FROM THE EXISTING DRAINAGE CONDUITS SPECIFIED IN THE PLANS. DISPOSE OF ALL MATERIAL PER 105.16 AND 105.17. CLEAN OUT TO THE APPROVAL OF THE ENGINEER. CLEANOUT OF THE PIPE IS PAID FOR AT THE UNIT PRICE BID FOR ITEM SPECIAL. PIPE CLEANOUT. THIS PRICE INCLUDES THE COST FOR MATERIAL, EQUIPMENT, LABOR, AND ALL INCIDENTALS REQUIRED TO COMPLETE THE CLEANOUT.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR THE WORK NOTED ABOVE:

ITEM SPECIAL, PIPE CLEANOUT	T, 24" AND UNDER	100 FT.
ITEM SPECIAL, PIPE CLEANOUT	T, 27" TO 48"	100 FT.
ITEM SPECIAL, PIPE CLEANOUT	T, OVER 48"	100 FT.

POST CONSTRUCTION STORM WATER TREATMENT

THIS PLAN UTILIZES STRUCTURAL BEST MANAGEMENT PRACTICES (BMPS) FOR POST CONSTRUCTION STORM WATER TREATMENT.

ITEM 202 - REMOVAL MISC.: PAVEMENT

THIS WORK CONSISTS OF THE REMOVAL AND DISPOSAL OF EXISTING PAVEMENT. EXISTING BUILDUP WILL NEED TO BE FIELD VERIFIED. FOR ESTIMATING PURPOSES QUANTITIES PROVIDED ASSUME A 1.0' THICK ASPHALT BUILDUP. THIS ITEM SHALL INCLUDE ALL NECESSARY EQUIPMENT, LABOR AND INCIDENTALS NECESSARY TO REMOVE AND DISPOSE OF THE EXISTING PAVEMENT.

CROSSINGS AND CONNECTIONS TO EXISTING PIPES AND UTILITIES

WHERE PLANS PROVIDE FOR A PROPOSED CONDUIT TO BE CONNECTED TO. OR CROSS OVER OR UNDER AN EXISTING SEWER OR UNDERGROUND UTILITY, THE CONTRACTOR SHALL LOCATE THE EXISTING PIPES OR UTILITIES BOTH AS TO LINE AND GRADE BEFORE STARTING TO LAY THE PROPOSED CONDUIT.

IF IT IS DETERMINED THAT THE ELEVATION OF THE EXISTING CONDUIT. OR EXISTING APPURTENANCE TO BE CONNECTED. DIFFERS FROM THE PLAN ELEVATION OR RESULTS IN A CHANGE IN THE PLAN CONDUIT SLOPE, THE ENGINEER SHALL BE NOTIFIED BEFORE STARTING CONSTRUCTION OF ANY PORTION OF THE PROPOSED CONDUIT WHICH WILL BE AFFECTED BY THE VARIANCE IN THE EXISTING ELEVATIONS.

IF IT IS DETERMINED THAT THE PROPOSED CONDUIT WILL INTERSECT AN EXISTING SEWER OR UNDERGROUND UTILITY IF CONSTRUCTED AS SHOWN ON THE PLAN, THE ENGINEER SHALL BE NOTIFIED BEFORE STARTING CONSTRUCTION OF ANY PORTION OF THE PROPOSED CONDUIT WHICH WOULD BE AFFECTED BY THE INTERFERENCE WITH AN EXISTING FACILITY.

PAYMENT FOR ALL THE OPERATIONS DESCRIBED ABOVE SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE PERTINENT 611 CONDUIT ITEM.

ITEM SPECIAL - OPERATIONS AND MAINTENANCE MANUAL

THE CONTRACTOR SHALL DEVELOP AN OPERATIONS AND MAINTENANCE MANUAL FOLLOWING THE REQUIREMENTS DETAILED IN SPECIAL PROVISIONS: PUMP STATION SPECIFICATIONS DATED 10/13/2023.

ITEM SPECIAL 690E98400 - OPERATIONS MAINTENANCE MANUAL - LUMP SUM HAS BEEN CARRIED TO THE GENERAL SUMMARY FOR THE WORK NOTED ABOVE

ITEM SPECIAL - OPERATIONS AND MAINTENANCE

THE CONTRACTOR SHALL OPERATE AND MAINTAIN THE PUMP STATION INCLUDING GENERATOR FOR 36 MONTHS. THE PUMP STATION IS AUTOMATICALLY ACTIVATED DURING AN EVENT, SO ON-SITE STAFF ARE NOT REQUIRED FOR OPERATION. ONGOING INSPECTIONS AND ROUTINE MAINTENANCE SHALL BE PER THE OPERATIONS AND MAINTENANCE MANUAL.

ALL ESTIMATED COSTS FOR MAINTENANCE SHALL BE SUBMITTED TO ODOT FOR APPROVAL PRIOR TO WORK BEING PERFRMED. ALL MAINTNEANCE COSTS WILL BE PAID FOR USING FORCE ACCOUNT.

ALL ESTIMATED COSTS FOR GENERAL INSPECTIONS SHALL BE INCLUDED IN THIS PAY ITEM.

ITEM SPECIAL 690E99550 - OPERATIONS AND MAINTENANCE - 36 MONTHS HAS BEEN CARRIED TO THE GENERAL SUMMARY FOR THE WORK NOTED ABOVE.

ITEM 503 - COFFERDAMS AND EXCAVATION BRACING. AS PER PLAN. JACKING AND RECEIVING PIT FOR 15" LOCATION ITEM 503 - COFFERDAMS AND EXCAVATION BRACING. AS PER PLAN. JACKING AND RECEIVING PIT FOR 36" LOCATION ITEM 503 - COFFERDAMS AND EXCAVATION BRACING. AS PER PLAN. JACKING AND RECEIVING PIT FOR 42" LOCATION ITEM 503 - COFFERDAMS AND EXCAVATION BRACING. AS PER PLAN. JACKING AND RECEIVING PIT FOR 48" LOCATION ITEM 503 - COFFERDAMS AND EXCAVATION BRACING. AS PER PLAN. JACKING AND RECEIVING PIT FOR 54" LOCATION

THIS WORK IS THE CONSTRUCTION AND REMOVAL OF THE JACKING AND BORING PITS REQUIRED FOR THE INSTALLATION OF THE PIPES LISTED BELOW.

15" CONDUIT UNDER RAMP D AND PADDOCK ROAD 36" CONDUIT UNDER I.R. 75 42" CONDUIT UNDER RAMP D 48" CONDUIT UNDER EXISTING PEDESTRIAN STRUCTURE 54" CONDUIT UNDER PADDOCK ROAD AND I.R. 75.

THE FOLLOWING ITEMS HAVE BEEN CARRIED TO THE GENERAL SUMMARY FOR THE WORK NOTED ABOVE.

ITEM 503 - COFFERDAMS AND EXCAVATION BRACING. AS PER PLAN. JACKING AND RECEIVING PIT FOR 15" LOCATION - LUMP SUM ITEM 503 - COFFERDAMS AND EXCAVATION BRACING. AS PER PLAN. JACKING AND RECEIVING PIT FOR 36" LOCATION - LUMP SUM ITEM 503 - COFFERDAMS AND EXCAVATION BRACING, AS PER PLAN, JACKING AND RECEIVING PIT FOR 42" LOCATION - LUMP SUM ITEM 503 - COFFERDAMS AND EXCAVATION BRACING, AS PER PLAN, JACKING AND RECEIVING PIT FOR 48" LOCATION - LUMP SUM ITEM 503 - COFFERDAMS AND EXCAVATION BRACING, AS PER PLAN, JACKING AND RECEIVING PIT FOR 54" LOCATION - LUMP SUM

ITEM SPECIAL - WATER FOR PUMP STATION TESTING

THIS IS A CONTINGENCY ITEM SHOULD THERE BE INSUFFICIENT STORMWATER AVAILABLE FOR TESTING OF THE PUMP STATION.

THIS WORK CONSISTS OF PROVIDING SUFFICIENT WATER FOR THE TESTING OF THE PUMP STATION SYSTEM CONTROLS FOR EACH PUMP. THE CONTRACTOR SHALL PLUG THE 48" PIPE CONNECTING TO THE UPSTREAM DETENTION SYSTEM. THE WATER WILL BE PLACED INTO THE WETWELL FOR TESTING.

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN INCLUDED IN THE GENERAL SUMMARY FOR THE WORK NOTED ABOVE:

ITEM SPECIAL. WATER FOR PUMP STATION TESTING. 80 MGAL.

ITEM SPECIAL - CONCRETE FOUNDATION REMOVED

THIS WORK CONSISTS OF PROVIDING EQUIPMENT, LABOR AND MATERIALS NECESSARY TO REMOVE THE EXISTING CONCRETE FOUNDATIONS SHOWN IN THE PLANS AND SOIL BORINGS FOR INSTALLATION OF THE TEMPORARY SHORING WALLS FROM STATION 525+00 TO STATION 526+50. A MANHOUR IS DEFINED AS THE NUMBER OF HOURS PER DAY REQUIRED TO REMOVE THE CONCRETE FOUNDATION AND NOT THE TOTAL LABOR HOURS USED.

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN INCLUDED IN THE GENERAL SUMMARY FOR THE WORK NOTED ABOVE:

ITEM SPECIAL, COCNRETE FOUNDATION REMOVED, 40 MNHR.

	1	SHEE	T NUM.	PART.	ITEM	ITEM	GRAND	UNIT	DESCRIPTION	SEE SHEET	
8	10 29	30 31	91	01/IMS/03		EXT	TOTAL			NO.	
	,~~~	·····	······································		·····	······	******	·····	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~	
	1.450			1.450	202	98500	1.450	CY	REMOVAL MISC.: PAVEMENT	8	1
	71		48	48	202 202	32000 32500	48		CURB REMOVED		$\widetilde{-}$
	37			37	202	35100	37		CURB AND GUTTER REMOVED PIPE REMOVED, 24" AND UNDER		
	81			81	202	35200	81		PIPE REMOVED, OVER 24"		
								, ,	THE HEMP TERY STEPT ET		
	836			836	202	38000	836	FT	GUARDRAIL REMOVED		
	1			1	202	56101	1	EACH	BUILDING DEMOLISHED, AS PER PLAN - PARCEL# 056-0062-0261-00	12	
	2		1	3	202	58000	3		MANHOLE REMOVED		
	122			122	SPECIAL	20270000	122		FILL AND PLUG EXISTING CONDUIT, 12" DIA.	8	
)				100	SPECIAL	20270110	100	FT	PIPE CLEANOUT, 24" AND UNDER		
)				100	SPECIAL	20270120	100	FT	PIPE CLEANOUT, 27" TO 48"		
0				100	SPECIAL	20270130	100		PIPE CLEANOUT OVER 48"		
	3,053			3,053	202	75000	3,053		FENCE REMOVED		
	2			2	202	98100	2		REMOVAL MISC.: BILLBOARD	12	
	1			1	202	98100	1	EACH	REMOVAL MISC:: LIGHT POLE	12	
)				40	202	98510	40	MNHR	REMOVAL MISC.:, CONCRETE FOUNDATION REMOVED	8	
				5,442	203	10000	5,442		EXCAVATION		
		842		570 842	203 204	20000	570 842		EMBANKMENT SUBGRADE COMPACTION		_
ip		092		LUMP	503	11101	LS		COFFERDAMS AND EXCAVATION BRACING, AS PER PLAN, JACKING AND RECEIVING PIT FOR 15" LOCATION	8	\dashv
P				LUMP	503	11101	15		COFFERDAMS AND EXCAVATION BRACING, AS PER PLAN, JACKING AND RECEIVING PIT FOR 36" LOCATION	8	
D				LUMP	503	11101	LS		COFFERDAMS AND EXCAVATION BRACING, AS PER PLAN, JACKING AND RECEIVING PIT FOR 42" LOCATION	8	
D				LUMP	503	11101	LS		COFFERDAMS AND EXCAVATION BRACING, AS PER PLAN, JACKING AND RECEIVING PIT FOR 48" LOCATION	8	
P				LUMP	503	11101	LS		COFFERDAMS AND EXCAVATION BRACING, AS PER PLAN, JACKING AND RECEIVING PIT FOR 54" LOCATION	8	
	688			688	606	15050	688	_	GUARDRAIL, TYPE MGS	10	
	2			2	606	26100	2	EACH	ANCHOR ASSEMBLY, TYPE E (MASH 2016)	10	
	2				606	35002	2	EACH	MGS BRIDGE TERMINAL ASSEMBLY, TYPE 1		
	2,328		130	2,458	607	23000	2,458		FENCE, TYPE CLT		
	2,320		1	3	607	61200	3		GATE, TYPE CLT		-
		15		15	608	10000	15		4" CONCRETE WALK		
	1			1	622	25000	1	EACH	CONCRETE BARRIER END SECTION, TYPE D		
10		32		32	SPECIAL		32		BOLLARD		
1P				LUMP	SPECIAL	69098400	LS		OPERATIONS AND MAINTENANCE MANUAL	8	
				36	SPECIAL SPECIAL	69099300 69099550	<i>80</i> <i>36</i>		WATER FOR PUMP STATION TESTING OPERATIONS AND MAINTENANCE	<u> </u>	
		4		4	SPECIAL	69099550	4		TEMPORARY 600 KW GENERATOR	10	
		,			37 201712		,	17117711	TEMPONITY GOO KIN GENERATION	70	
									EROSION CONTROL		
				10	601	21050	10	SY	TIED CONCRETE BLOCK MAT WITH TYPE 1 UNDERLAYMENT		
	2			2	659	00100	2		SOIL ANALYSIS TEST		
	1,104			1,104	659	00300	1,104	CY	TOPSOIL		
	9,939			9,939	659	10000	9,939		SEEDING AND MULCHING		\dashv
	497			497	659	14000	497	SY	REPAIR SEEDING AND MULCHING		
	497			497	659	15000	497	SY	INTER-SEEDING		\dashv
	1.39			1.39	659	20000	1.39		COMMERCIAL FERTILIZER		
	2.06			2.06	659	31000	2.06		LIME		\dashv
	57			57	659	35000	57		WATER		
	23			23	659	40000	23	MSF	MOWING		
						-					
		940		940	670	00700	940		DITCH EROSION PROTECTION		\perp
				LUMP	832	15000	LS		STORM WATER POLLUTION PREVENTION INSPECTIONS		
				L UMP	832 832	15002 15010	LS		STORM WATER POLLUTION PREVENTION INSPECTIONS		
				50,000	832	30000	50,000		STORM WATER POLLUTION PREVENTION INSPECTION SOFTWARE EROSION CONTROL		
					UJZ	30000		LAUII			
									DRAINAGE		
0				200	611	00510	200	FT	6" CONDUIT, TYPE F FOR UNDERDRAIN OUTLETS		
				100	611	00900	100		6" CONDUIT, TYPE B		
)								i .		i	$\overline{}$
)))				100	611	01100 01400	100	+	6" CONDUIT, TYPE C 6" CONDUIT, TYPE E		

1.720220947 TOTALS	\\ \ODOT\HAM\117526_HAM-75-8.91\roadway\s	F1 F2 F3 F4	F1 F1 G1	R6 R7 R8 R9 R10	R1 R2 R3 R4 R5	R1 R2 R3 R4	REF NO. R1 R2
CARRIED TO		144 160 160 160	158 159 143	38 38 38 38 38	38 38 38 38 38 38	37 37 37 37	SHEET NO. 36 36
O GENERAL SUMMARY		507+44.25 519+50.00 522+90.65 523+53.50 531+20.83	494+07.41 512+37.08 495+35.15	522+91.19 531+19.11 530+82.18 531+16.99 531+16.99	511+98.57 519+50.00 521+03.06 524+93.28 526+94.85 526+97.40	512+37.08 513+15.34 519+12.00 507+44.25	499+88.53 495+43.31
		513+94.25 522+67.65 523+53.50 530+55.03 531+36.36	496+39.76 519+50.00 497+22.60	531+36.36 531+34.55 531+78.18 531+24.55	519+19.97 523+00.00 522+35.42 531+33.60 527+77.79	519+50.00 519+50.00 513+86.76	TO 500+63.39 497+36.31
1450					60 1335	\$ 55 \$ 55	S REMOVAL MISC.: PAVEMENT 00
71				71		\frac{1}{2}	T CURB AND GUTTER REMOVED S
37				37			그 PIPE REMOVED, 24" AND UNDER S
81				81			크 PIPE REMOVED, OVER 24" 않
1					1		BUILDING DEMOLISHED, AS PER PLAN - PARCEL# © 056-0062-0261-00
2				1 1			HONHOLE REMOVED 508
836						643	SG GUARDRAIL REMOVED SO SC
3053				1942	402	709	FENCE REMOVED
1						1	REMOVAL MISC.: LIGHT POLE SO
2				1	1		BEMOVAL MISC.: BILLBOARD S
688		575	113				금 GUARDRAIL, TYPE MGS 응
2		1	1				ANCHOR ASSEMBLY, TYPE E 99
2		1	1				MGS BRIDGE TERMINAL 99 会 ASSEMBLY, TYPE 1 9
2328		317 63 631 71	538 708				FENCE, TYPE CLT
2			2				HOATE, TYPE CLT
717					717		CURB, TYPE 6 609
1			1				도 CONCRETE BARRIER END 용 SECTION, TYPE D
122							SPECIAL - FILL AND PLUG SO EXISTING CONDUIT, 12" DIA.
29	HAM-75-8.91		S H	STIMATED	QUANTI	TIES	SEA CHECKED CHECKED
-)							18