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## ROUNDING

THE ROUNDING AT SLOPE BREAKPOINTS SHOWN ON THE TYPICAL SECTIONS APPLIES TO ALL CROSS-SECTIONS EVEN THOUGH OTHERWISE SHOWN.

## UTILITIES

LISTED BELOW ARE ALL UTILITIES LOCATED WITHIN THE PROJECT CONSTRUCTION LIMITS TOGETHER WITH THEIR RESPECTIVE OWNERS:

AEP - AERIAL DISTRIBUTION ATTN: MR. PAUL PAXTON 850 TECH CENTER DR GAHANNA. OH 43230 PHONE: (614) 883-6831 ptpaxton@aep.com

CENTURYLINK ATTN: MS. DEE REED 441 WEST BROAD ST PATASKALA, OH 43062 PHONE: (740) 927-8282 delores.a.reed@centurylink.com

AT&T - OHIO ATTN: MR. MIKE LEE 111 NORTH 4TH ST - ROOM 802 COLUMBUS, OH 43215 PHONE: (614) 223-7162 ml3153@att.com

**SPECTRUM** (FORMERLY CHARTER COMMUNICATIONS) 3760 INTERCHANGE DR COLUMBUS, OH 43204 PHONE: (614) 225-6349 ATTN: MR. SAM LUTZ PHONE: (614) 348-2966 ATTN: MR. KEVIN RICH PHONE: (614) 481-5263 samuel.lutz@charter.com kevin.rich1@charter.com

THE LOCATION OF THE UNDERGROUND UTILITIES SHOWN ON THE PLANS ARE AS OBTAINED FROM THE OWNERS AS REQUIRED BY SECTION 153.64 O.R.C.

## UTILITY NOTIFICATION

THE ODOT CONTRACTOR IS REQUIRED TO CONTACT OHIO811 A MINIMUM OF 48 HOURS EXCLUDING WEEKENDS AND HOLIDAYS TO PERMIT ALL UNDERGROUND UTILITIES AN OPPORTUNITY TO MARK THEIR LINES. IT IS ALSO THE ODOT CONTRACTOR'S RESPONSIBILITY TO CONTACT ALL NONMEMBERS OF OHIO811 ORG. DIRECTLY A MINIMUM OF 48 HOURS' NOTICE EXCLUDING WEEKENDS AND HOLIDAYS TO PROVIDE THEM WITH THE SAME OPPORTUNITY.

## CONSTRUCTION NOISE

ACTIVITIES AND LAND USE ADJACENT TO THIS PROJECT MAY BE AFFECTED BY CONSTRUCTION NOISE. IN ORDER TO MINIMIZE ANY ADVERSE CONSTRUCTION NOISE IMPACTS. DO NOT OPERATE POWER-OPERATED CONSTRUCTION-TYPE DEVICES BETWEEN THE HOURS OF 7 PM AND 7 AM. IN ADDITION, DO NOT OPERATE AT ANY TIME ANY DEVICE IN SUCH A MANNER THAT THE NOISE CREATED SUBSTANTIALLY EXCEEDS THE NOISE CUSTOMARILY AND NECESSARILY ATTENDANT TO THE REASON-ABLE AND EFFICIENT PERFORMANCE OF SUCH EQUIPMENT.

## NON-RUBBER TIRE EQUIPMENT

NO NON-RUBBER TIRE VEHICLE SHALL BE MOVED ON STATE OR COUNTY ROADS. EXCEPTIONS MAY BE GRANTED BY AN AUTHORIZED STATE OR COUNTY OFFICIAL WHERE SHORT DISTANCES AND SPECIAL CIRCUMSTANCES ARE INVOLVED. GRANTING OF EXCEPTIONS MUST BE IN WRITING AND ANY RESULTING DAMAGE MUST BE REPAIRED FOR THE SATISFACTION OF THE STATE OR COUNTY.

#### SURVEYING PARAMETERS

PRIMARY PROJECT CONTROL MONUMENTS GOVERN ALL POSITIONING ON ODOT PROJECTS. SEE SHEET 2 OF THE PLANS FOR A TABLE CONTAINING PROJECT CONTROL INFORMATION.

USE THE FOLLOWING PROJECT CONTROL, VERTICAL POSITIONING, AND HORIZONTAL POSITIONING PARAMETERS FOR ALL SURVEYING:

PROJECT CONTROL

POSITIONING METHOD: ODOT VRS MONUMNET TYPE: TYPE B

VERTICAL POSITIONING

ORTHOMETRIC HEIGHT DATUM: NAVD 88 GEOID: GEOID 12A

HORIZONTAL POSITIONING

REFERENCE FRAME: NAD 83 (CONUS)(MOL) ELLIPSOID: GRS 80 MAP PROJECTION: LAMBERT CONFORMAL CONIC COORDINATE SYSTEM: OHIO STATE PLANE - SOUTH ZONE COMBINED SCALE FACTOR: 1.0000823770 (GRID TO GROUND) ORIGIN OF COORDINATE SYSTEM: (0,0)

USE THE POSITIONING METHODS AND MONUMENT TYPE USED IN THE ORIGINAL SURVEY TO RESTORE ALL MONUMENTS RELATED TO PRIMARY PROJECT CONTROL THAT ARE DAMAGED OR DESTROYED BY CONSTRUCTION ACTIVITIES. RESTORE THE DAMAGED OR DESTROYED MONUMNETS IN ACCORDANCE WITH CMS 623.

UNITS ARE IN U.S. SURVEY FEET.

## **WORK LIMITS**

THE WORK LIMITS SHOWN ON THESE PLANS ARE FOR PHYSICAL CONSTRUCTION ONLY. PROVIDE THE INSTALLATION AND OPERATION OF ALL WORK ZONE TRAFFIC CONTROL AND WORK ZONE TRAFFIC CONTROL DEVICES REQUIRED BY THESE PLANS WHETHER INSIDE OR OUTSIDE THESE WORK LIMITS.

## CLEARING AND GRUBBING

THERE ARE TREES OR STUMPS SPECIFICALLY MARKED FOR REMOVAL WITHIN THE LIMITS OF THE PROJECT. A LUMP SOM-QUANTITX IS INCLUDED IN THE GENERAL SUMMARY FOR ITEM 201, CLEARING AND GRUBBING. ALL PROVISIONS AS SET FORTH IN THE SPECIFICATIONS UNDER THIS ITEM ARE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 201, CLEARING AND GRUBBING.

## BENCHING OF FOUNDATION SLOPES

ALTHOUGH CROSS-SECTIONS INDICATE SPECIFIC DIMENSIONS FOR PROPOSED BENCHING OF THE EMBANKMENT FOUNDATIONS IN CERTAIN AREAS, NO WAIVER OF THE SPECIFICATIONS IS INTENDED. BENCH ALL OTHER SLOPED EMBANKMENT AREAS AS SET FORTH IN 203.05. NO ADDITIONAL PAYMENT WILL BE MADE FOR BENCHING REQUIRED UNDER THE PROVISIONS OF 203.05.

## 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 204.05.

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 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 204.06.

- 5. EXCAVATE UNSTABLE SUBGRADE AS DIRECTED BY THE ENGINEER AND STABILIZE BY REPLACING WITH THE SPECIFIED MATERIALS ACCORDING TO 204.07. EXCAVA-TIONS 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 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.

# 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

THIS ITEM SHALL CONSIST OF FURNISHING AND INSTALLING ANY

ITEM 606 - ANCHOR ASSEMBLY, MGS TYPE E

TREATMENTS. INSTALLATION SHALL BE AT THE LOCATIONS SPECIFIED IN THE PLANS, IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.

THE FACE OF THE TYPE E IMPACT HEAD SHALL BE COVERED WITH A SHEET OF TYPE G REFLECTIVE SHEETING, PER CMS 730.19.

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. 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.

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.

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.

## ITEM 202 - REMOVAL, MISC.: ELECTRIC FENCE REMOVED, ITEM 202 - REMOVAL, MISC.: ELECTRIC GATE REMOVED,

CONTRACTOR SHALL DISCONNECT THE POWER SOURCE TO THE ELECTRIC FENCE AND GATE PRIOR TO THEIR REMOVAL. THEIR MAY BE MULTIPLE SWITCHES FOR EACH WIRE ON THE FENCE AND GATE, DEPENDING ON THE INSTALLATION METHOD; TURN OFF ALL SWITCHES. TEST FOR CURRENT FLOW PRIOR TO REMOVAL. ONCE THE ELECTRIC FENCE AND GATE HAVE BEEN DISCONNECTED FROM THE POWER SOURCE AND FREE FROM ELECTRIC CURRENT THE CONTRACTOR SHALL REMOVE THE GATE AND FENCE AT LOCATIONS INDICATED IN THE PLANS. THESE ITEMS SHALL CONFORM TO ODOT CMS NO.

PAYMENT SHALL BE MADE AT THE UNIT CONTRACT PRICE BID PER FOOT OF ITEM 202, REMOVAL MISC .: ELECTRIC FENCE REMOVED, AS PER PLAN AND UNIT CONTRACT PRICE BID PER EACH OF ITEM 202, REMOVAL MISC.: ELECTRIC GATE REMOVED, AS PER PLAN, WHICH SHALL INCLUDE ALL LABOR, TOOLS, EQUIPMENT AND MATERIALS NECESSARY TO DISCONNECT ELECTRIC FENCE AND GATE FROM POWER SOURCE(S), ELECTRICAL TESTING, FENCE REMOVAL AND DISPOSAL.

## ITEM 605 - AGGREGATE DRAINS

AGGREGATE DRAINS SHALL BE PLACED AT 50 FOOT INTERVALS ON EACH SIDE OF NORMAL CROWNED SECTIONS, STAGGERED SO THAT EACH DRAIN IS 25 FEET FROM THE ADJACENT DRAIN ON THE OPPOSITE SIDE, AND AT 25 FOOT INTERVALS ON THE LOW SIDE ONLY OF SUPER-ELEVATED SECTIONS. AN AGGREGATE DRAIN SHALL BE PLACED AT THE LOW POINT OF EACH SAG VERTICAL CURVE.

<u> </u>				IEET NU	M.			Г	Г	PART.	ITEM	ITEM	GRAND	UNIT	DESCRIPTION	SEE SHEET	CULATE
		6	6A				42	43		BR		EXT	TOTAL			NO.	CAL
	1														STRUCTURE OVER 20 FOOT SPAN (MAD-62-2.79, SFN 4902131)		-
								LS		LS	202	11003	LS		STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN	42	1
								84		84	202	22900	84	SY	APPROACH SLAB REMOVED		1
								875		875	202	23500	875	SY	WEARING COURSE REMOVED		
								10		1.0	502	11100	10		COFFE PRAME AND EVEN/ATION PRACING	1	4
	1							LS LS		LS	503 503	11100 21300	LS LS		COFFERDAMS AND EXCAVATION BRACING UNCLASSIFIED EXCAVATION	1	1
												21000					1
								LS		LS	505	11100	LS		PILE DRIVING EQUIPMENT MOBILIZATION		1
																	4
	-					-	-	800 960		800 960	507 507	00500 00550	800 960	FT FT	12" CAST-IN-PLACE REINFORCED CONCRETE PILES, DRIVEN 12" CAST-IN-PLACE REINFORCED CONCRETE PILES, FURNISHED	<u> </u>	-
								1,080		1,080	507	00700	1,080	FT	16" CAST-IN-PLACE REINFORCED CONCRETE PILES, PORNISHED		-
								1,200		1,200	507	00750	1,200	FT	16" CAST-IN-PLACE REINFORCED CONCRETE PILES, FURNISHED		1
																	1
								105,854		105,854	509	10000	105,854	LB	EPOXY COATED REINFORCING STEEL		4
								301		301	511	21522	301	CY	CLASS QC2 CONCRETE WITH QC/QA, SUPERSTRUCTURE	1	4
								73		73	511	33418	73	CY	CLASS QC2 CONCRETE WITH QC/QA, SUPERSTRUCTURE	1	1
								174		174	511	40512	174	CY	CLASS QC1 CONCRETE WITH QC/QA, PIER ABOVE FOOTINGS		1
								145		145	511	43512	145	CY	CLASS QC1 CONCRETE WITH QC/QA, ABUTMENT INCLUDING FOOTING		
	1							88		88	511	46510	88	CY	CLASS QC1 CONCRETE, FOOTING	1	4
								950		950	512	10050	950	SY	SEALING OF CONCRETE SURFACES (NON-EPOXY)	1	4
								31		31	512	10300	31	SY	SEALING CONCRETE BRIDGE DECKS WITH HMWM RESIN	1	1
																	1
								12		12	515	15080	12	EACH	DRAPED STRAND PRESTRESSED CONCRETE BRIDGE I-BEAM MEMBERS, LEVEL 3, TYPE WF42-49,		
								07		07	545	20000	07	E 4 OL 1	L=93'-8"		4
								27		27	515	20000	27	EACH	INTERMEDIATE DIAPHRAGMS	1	4
								131		131	516	13200	131	SF	1/2" PREFORMED EXPANSION JOINT FILLER		1
								242		242	516	13600	242	SF	1" PREFORMED EXPANSION JOINT FILLER		1
								93		93	516	14014	93	FT	INTEGRAL ABUTMENT EXPANSION JOINT SEAL		
								24		24	516	44101	24	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE)	54	4
															2.88" X 14" X 20" WITH 15" X 21" LOAD PLATE, AS PER PLAN	1	4
								579		579	517	70000	579	FT	RAILING (TWIN STEEL TUBE)		1
											• • • • • • • • • • • • • • • • • • • •	10000				1	1
								86		86	518	21200	86	CY	POROUS BACKFILL WITH GEOTEXTILE FABRIC		
								706		706	SPECIAL	51822300	706	FT	STEEL DRIP STRIP	ļ	4
								115 53		115 53	518 518	40000 40010	115 53	FT FT	6" PERFORATED CORRUGATED PLASTIC PIPE 6" NON-PERFORATED CORRUGATED PLASTIC PIPE, INCLUDING SPECIALS	1	4
								55		55	310	40010	33	ГІ	10 NON-PERFORM TED CORROGATED PLASTIC FIFE, INCLUDING SPECIALS		-
								2		2	523	20000	2	EACH	DYNAMIC LOAD TESTING		1
								4		4	523	20500	4	EACH	RESTRIKE		
	-							470		470	F20	25000	470	CV	DEINICODOED CONODETE ADDDOACH OLADO (T-4511)		4
								178 69		178 69	526 526	25000 90010	178 69	SY FT	REINFORCED CONCRETE APPROACH SLABS (T=15")  TYPE A INSTALLATION	1	-
								645		645	601	32110	645	CY	ROCK CHANNEL PROTECTION, TYPE B WITH AGGREGATE FILTER	1	1
																	1
															MAINTENANCE OF TRAFFIC		ᅪ
			530							530	407	20000	530	GAL	NON-TRACKING TACK COAT	1	4
	1	16	260							260 16	441 614	50000 11110	260 16	CY HOUR	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG64-22  LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE	<del> </del>	-
		10	LS							LS	614	12420	LS	110011	DETOUR SIGNING		┨
			41							41	614	13000	41	CY	ASPHALT CONCRETE FOR MAINTAINING TRAFFIC		
		7								7	616	10000	7	MGAL	WATER		1
			150							150	617	10100	150	CV/	COMPACTED ACCRECATE		4
	-		150 2							150 2	617 617	10100 25000	150 2	CY MGAL	COMPACTED AGGREGATE WATER	<del> </del>	1
	1										011	20000		WOAL		1	┪
-			2.12							2.12	642	00300	2.12	MILE	CENTER LINE, TYPE 1		1
																	]
		1									100	05000			INCIDENTALS	<u> </u>	4
		1.0			1	ī	I I			LS	103	05000	LS		PREMIUM FOR CONTRACT PERFORMANCE BOND AND FOR PAYMENT BOND	1	4
		LS					<del>                                     </del>				611	11000	10		MAINTAINING TRAFFIC		
		LS								LS	614 619	11000 16010	LS 9	MNTH	MAINTAINING TRAFFIC FIELD OFFICE. TYPE B		1
		LS									614 619 623	11000 16010 10000	LS 9 LS	MNTH	MAINTAINING TRAFFIC FIELD OFFICE, TYPE B CONSTRUCTION LAYOUT STAKES AND SURVEYING		╁

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STANDARD DRAWINGS AND SUPPLEMENTAL SPECIFICATIONS:

#### **DESIGN SPECIFICATIONS:**

THIS STRUCTURE CONFORMS TO THE 8TH EDITION OF THE "LRFD BRIDGE DESIGN SPECIFICATIONS" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 2017 AND THE ODOT BRIDGE DESIGN MANUAL, 2019.

#### LRFD LOAD MODIFIERS:

OPERATIONAL IMPORTANCE: A LOAD MODIFIER OF 1.00 HAS BEEN ASSUMED FOR THIS STRUCTURE IN ACCORDANCE WITH THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, ARTICLE 1.3.5 AND THE ODOT BRIDGE DESIGN MANUAL. 2007.

#### DESIGN LOADING:

DESIGN LOADING: HL-93

FUTURE WEARING SURFACE (FWS) OF 0.060 KIPS/FT2

## **DESIGN STRESSES:**

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

CONCRETE FOR PRESTRESSED BEAMS:

COMPRESSIVE STRENGTH (FINAL) - 7.0 KSI

COMPRESSIVE STRENGTH (RELEASE) - 6.0 KSI

WELDED WIRE FABRIC:

YIELD STRENGTH - 70 KSI

PRESTRESSING STRAND:

 $AREA = 0.217 IN^2$ 

ULTIMATE STRENGTH = 270 KSI

INITIAL STRESS = 202.5 KSI (LOW RELAXATION STRANDS)

## DECK PROTECTION METHOD:

EPOXY COATED REINFORCING STEEL 2 1/2" CONCRETE COVER STEEL DRIP STRIP

#### MONOLITHIC WEARING SURFACE:

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

#### ITEM 202 - STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN

REMOVE THE EXISTING STRUCTURE ENTIRELY ABOVE FINISHED GROUND AND ACCORDING TO ITEM 202 OF THE ODOT CMS EXCEPT FOR THE FOLLOWING.

REMOVE THE EXISTING ABUTMENTS TO 1 FT BELOW THE BOTTOM OF THE PROPOSED ROCK CHANNEL PROTECTION.

REMOVE THE EXISTING PIER NUMBER 1 ENTIRELY (EXCEPT FOR THE TIMBER PILES), INCLUDING THE CONCRETE FOOTING.

REMOVE THE EXISTING PIERS NUMBER 2 AND 3 TO THE TOP OF THE CONCRETE FOOTING.

# GENERAL NOTES - STRUCTURES

## PILE DESIGN LOADS (ULTIMATE BEARING VALUE):

THE ULTIMATE BEARING VALUE IS 319 KIPS PER PILE FOR THE VERTICAL REAR AND FORWARD ABUTMENT PILES. THE ULTIMATE BEARING VALUE IS 346 KIPS PER PILE FOR THE INTERMEDIATE PIER PILES, WHICH INCLUDES AN ADDITIONAL 4 KIPS PER PILE OF ULTIMATE BEARING VALUE DUE TO THE POSSIBILITY OF LOSING 6.2 FEET OF FRICTIONAL RESISTANCE

ABUTMENT PILES:

12 INCH DIAMETER PILES 60 FEET LONG, ORDER LENGTH 1 DYNAMIC LOAD TESTING ITEM

16 INCH DIAMETER PILES 50 FEET LONG, ORDER LENGTH

#### 1 DYNAMIC LOAD TESTING ITEM

**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 ASSUMPIONS.

AN EIGHT WHEEL FINISHING MACHINE WITH A MAXIMUM WHEEL LOAD OF 2.25 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.

#### EXISTING PLANS

EXISTING STRUCTURE PLANS ARE AVAILABLE FOR REVIEW AT THE DISTRICT 6

# ITEM SPECIAL - ASBESTOS NOTIFICATION

AN ASBESTOS SURVEY OF THE MAD-62-02.79 BRIDGE OVER DEER CREEK WAS COMPLETED IN JANUARY 2017 BY A CERTIFIED ASBESTOS HAZARD EVALUATION SPECIALIST. NO ASBESTOS MATERIAL (ACM) WAS IDENTIFIED ON THE BRIDGE.

THE REMOVAL AND DISPOSAL OF ALL ASBESTOS CONTAINING MATERIAL WITHIN THE PROJECT WORK LIMITS DURING DEMOLITION OF THE BRIDGE MUST COMPLY WITH THE OHIO ADMINISTRATIVE CODE, THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) REGULATIONS, AND THE NATIONAL EMISSION STANDARD FOR HAZARDOUS AIR POLLUTANTS (NESHAP) STANDARDS FOR ASBESTOS.

A COPY OF THE OHIO ENVIRONMENTAL PROTECTION AGENCY (OEPA) NOTIFICATION OF DEMOLITION AND RENOVATION FORMS WITH SECTIONS I-IV. VI, VII, AND XVI COMPLETED IS INCLUDED WITH THE BID PACKAGE. THE CONTRACTOR SHALL COMPLETE SECTIONS V, VIII-XVIII OF THE FORM AND SUBMIT THE COMPLETED FORM TO THE DISTRICT OFFICE AT LEAST TEN (10) DAYS PRIOR TO DEMOLITION OF THE BRIDGE. THE CONTRACTOR SHALL PROVIDE A COPY OF THE COMPETED FORM TO THE ENGINEER. THE DISTRICT OFFICE IS:

OHIO EPA/DAPC CENTRAL DISTRICT OFFICE P.O. BOX 1049 COLUMBUS, OHIO 43216 PHONE: (614) 728-3778

# THE FOLLOWING ABBREVIATIONS ARE USED:

DIAEA.

ABUT.	= ABUTMENT	INT.	= INTEGRAL
B	= BASELINE	LT	= LEFT
BRG.	= BEARING	MAX.	= MAXIMUM
<u>C</u>	= CENTERLINE	MIN.	= MINIMUM
C.J.	= CONSTRUCTION JOINT	N.F.	= NEAR FACE
CLR.	= CLEARANCE	N.S.	= NEAR SIDE
CMS	= CONSTRUCTION AND	PEJF	= PREFORMED EXPANSION
	MATERIAL CREATERATION		IOINT CILLED

	MATERIAL SPECIFICATION		JOINT FILLER
	= DIAMETER	Æ	= PROPERTY LINE
	= EACH	R.A.	= REAR ABUTMENT
•	= EACH FACE	R∕W	= RIGHT OF WAY
V.	= ELEVATION	RT	= RIGHT

ELE SER. = SERIES = EXISTING FΧ SPA = SPACESFXP. = EXPANSION = FORWARD ABUTMENT STA. = STATION = FAR FACE STD = STANDARD TEMP. = TEMPORARY = FAR SIDE F.S. FT. TYP. = TYPICAL = FFFT SIM. = SIMILAR = FORWARD FWD = FUTURE WEARING SURFACE FWS

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ESTIMATED QUANTITIES
MAD-62-02.79 BRIDGE
OVER DEER CREEK

3 / 16

CALC BY: _AJM									<del>D</del>
TEM	ITEM EXT.	TOTAL	UNIT	DESCRIPTION	ABUTMENTS	PIERS	SUPER- STRUCTURE	GENERAL	AS PER PLAN SHEET NUMBERS
202	11003	LUMP		STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN				LUMP	2
202	22900	84	SY	APPROACH SLAB REMOVED				84	2
202 202	23500	875	SY	WEARING COURSE REMOVED			875	04	
202	23300	073	31	WEANING COOKSE REMOVED			873		
503	11100	LUMP		COFFERDAMS AND EXCAVATION BRACING				LUMP	
503	21300	LUMP		UNCLASSIFIED EXCAVATION	267 CY *	247 CY *			
505	11100	LUMP		PILE DRIVING EQUIPMENT MOBILIZATION				LUMP	
507	00500	800	FT	12" CAST-IN-PLACE REINFORCED CONCRETE PILES, DRIVEN	800				
507	00550	960	FT	12" CAST-IN-PLACE REINFORCED CONCRETE PILES, FURNISHED	960				
507	00700	1080	FT	16" CAST-IN-PLACE REINFORCED CONCRETE PILES, DRIVEN		1080			
507	00750	1200	FT	16" CAST-IN-PLACE REINFORCED CONCRETE PILES, FURNISHED		1200			
				, , , , , , , , , , , , , , , , , , , ,					
500	10000	105.05.1	00/4/0	SDAWY GOLTED DEWEADOWS CITES	0.007	10.051	70.040		
509	10000	105,854	POUND	EPOXY COATED REINFORCING STEEL	9,967	19,051	76,848		
511	21522	301	CY	CLASS QC2 CONCRETE WITH QC/QA, SUPERSTRUCTURE			301		
511	33418	73	CY	CLASS QC2 CONCRETE WITH QC/QA, SUPERSTRUCTURE			73		
511	40512	174	CY	CLASS QC1 CONCRETE WITH QC/QA, PIER ABOVE FOOTING		174	,,,		
511	43512	145	CY	CLASS QC1 CONCRETE WITH QC/QA, ABUTMENT INCLUDING FOOTING	145				
511	46510	88	CY	CLASS QC1 CONCRETE, FOOTING	,,,	88			
512	10050	950	CV	SEALING CONCRETE SURFACES (NON-EPOXY)	34	260	656		
512 512	10300	31	SY SY	SEALING CONCRETE BRIDGE DECKS WITH HMWM RESIN	34	200	31		
312	10300	31	31	SEALING CONCRETE BRIDGE DECKS WITH HMWM RESIN			31		
515	15080	12	EACH	DRAPED STRAND PRESTRESSED CONCRETE BRIDGE I-BEAM MEMBERS, LEVEL 3, TYPE WF42-49, L=93'-8"			12		
515	20000	27	EACH	INTERMEDIATE DIAPHRAGMS			27		
516	13200	131	SF	1/2" PREFORMED EXPANSION JOINT FILLER	131				
516	13600	242	SF	1" PREFORMED EXPANSION JOINT FILLER	242				
516	14014	93	FT	INTEGRAL ABUTMENT EXPANSION JOINT SEAL			93		
516 516	44101	24	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE)	8	16	95		14
310	44101	24	EACH	2.88" X 14" X 20" WITH 15" X 21" LOAD PLATE, AS PER PLAN	0	10			19
				2.00 X II X 20 IIIII IO X 21 EOAD I EAIL, AS I EN I EAN					
517	70000	579	FT	RAILING (TWIN STEEL TUBE)			579		
518	21200	86	CY	POROUS BACKFILL WITH GEOTEXTILE FABRIC				86	
	51822300	706	FT	STEEL DRIP STRIP			706		
518	40000	115	FT	6" PERFORATED CORRUGATED PLASTIC PIPE	115				
518	40010	53	FT	6" NON-PERFORATED CORRUGATED PLASTIC PIPE, INCLUDING SPECIALS	53				
523	20000	2	EACH	DYNAMIC LOAD TESTING				2	
523	20500	4	EACH	RESTRIKE				4	
526	25000	178	SY	REINFORCED CONCRETE APPROACH SLABS (T=15")				178	
526	90010	69	FT	TYPE A INSTALLATION				69	
601	32110	645	CY	ROCK CHANNEL PROTECTION, TYPE B WITH AGGREGATE FILTER				645	
						100000000	······		$\downarrow$
$\overline{\sim}$		~~~	~~~~	······································	$\sim\sim\sim$	X X X X X X X X X X X X X X X X X X X			13
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<sup>\*</sup> UNCLASSIFIED EXCAVATION QUANTITIES ARE INCLUDED FOR INFORMATIONAL PURPOSES ONLY.

