

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. 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 3 INCHES OR GREATER IN DIAMETER AT A HEIGHT OF 4.5 FEET ABOVE THE GROUND SURFACE, AND WITH A MINIMUM HEIGHT OF 13 FEET.

CLEARING AND GRUBBING, AS PER PLAN

ALTHOUGH THERE ARE NO TREES OR STUMPS SPECIFICALLY MARKED FOR REMOVAL WITHIN THE LIMITS OF THE PROJECT, A LUMP SUM QUANTITY IS INCLUDED IN THE GENERAL SUMMARY FOR ITEM 201, CLEARING AND GRUBBING. ALL TREES WITHIN 20 FEET OF THE STRUCTURE SHALL BE REMOVED. TREE DEBRIS LODGED AT THE INLET OF THE CULVERT AND TREE ROOTS THAT HAVE GROWN INTO THE OUTLET OF THE CULVERT SHALL ALSO BE REMOVED AS A PART OF THIS PAY ITEM. 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, AS PER PLAN.

EXISTING STRUCTURE VERIFICATION

DETAILS AND DIMENSIONS SHOW ON THE PROPOSED PLANS PERTAINING TO THE EXISTING STRUCTURE HAVE BEEN OBTAINED FROM PLANS OF THE EXISTING STRUCTURE AND FROM FIELD OBSERVATIONS AND MEASUREMENTS. CONSEQUENTLY, SUCH DETAILS AND DIMENSIONS ARE INDICATIVE OF THE EXISTING STRUCTURE AND THE PROPOSED WORK, BUT THEY SHALL BE CONSIDERED TENTATIVE AND APPROXIMATE. THE CONTRACTOR IS REFERRED TO CMS SECTION 102.05, 105.02 AND 513.04. BASE THE CONTRACT BID PRICES UPON A RECOGNITIONS OF THE UNCERTAINTIES DESCRIBED ABOVE AND UPON A PREBID EXAMINATION OF THE EXISTING STRUCTURE. HOWEVER, THE DEPARTMENT WILL PAY FOR ALL PROJECT WORK BASED UPON ACTUAL DETAILS AND DIMENSIONS THAT HAVE BEEN VERIFIED IN THE FIELD.

ANCHOR ASSEMBLY REMOVED, TYPE A, AS PER PLAN

WHERE DESIGNATED, EXISTING ANCHOR ASSEMBLIES INCLUDING ALL POSTS AND HARDWARE SHALL BE REMOVED. THIS ITEM SHALL ALSO INCLUDE THE REMOVAL OF THE ENTIRE CONCRETE ANCHOR AND CONCRETE ENCASEMENT. ALL HOLES LEFT AFTER REMOVAL OF ASSEMBLIES AND POSTS SHALL BE FILLED WITH GRANULAR MATERIAL AS DIRECTED BY THE ENGINEER. PAYMENT SHALL INCLUDE ALL NECESSARY LABOR AND EQUIPMENT REQUIRED TO PERFORM THE WORK AS INDICATED ABOVE. PAYMENT HALL BE AT THE UNIT BID PRICE.

GUARDRAIL REPLACEMENT

NO HAZARD SHALL BE LEFT UNPROTECTED EXCEPT FOR THE ACTUAL TIME NECESSARY TO REMOVE THE EXISTING GUARDRAIL, PREPARE THE SITE, AND INSTALL THE NEW GUARDRAIL/BARRIER IN A CONTINUOUS OPERATION. THE REMOVAL OF ALL GUARDRAIL/BARRIER SHALL AT ALL TIMES BE AS DIRECTED BY THE ENGINEER. NO GUARDRAIL/BARRIER SHALL BE REMOVED UNTIL THE REPLACEMENT MATERIAL IS ON SITE, READY FOR INSTALLATION. FAILURE TO COMPLY WITH THIS REQUIREMENT SHALL BE DEEMED SUFFICIENT CAUSE TO ORDER WORK SUSPENDED UNTIL SUCH TIME AS THE ENGINEER IS ASSURED OF COMPLIANCE.

COFFERDAMS AND EXCAVATION BRACING, AS PER PLAN

COFFERDAMS AND EXCAVATION BRACING INSTALLED FOR THE PROJECT ARE FOR DEWATERING THE WORK AREA AND ARE CONSIDERED FILL. COFFERDAMS AND EXCAVATION BRACING DESIGN, CONSTRUCTION, AND REIMBURSEMENT FOR DAMAGE IS BASED ON CMS 503. THE CONTRACTOR MUST COMPLY WITH ANY IN-STREAM RESTRICTION IN THE SPECIAL PROVISIONS WATERWAY PERMIT. ADDING FILL TO THE STREAM TO DEWATER THE WORK AREA REQUIRES A TEMPORARY ACCESS FILL (TAF) SUBMISSION PER THE SPECIAL PROVISIONS.

IF THE CONTRACTOR CHOOSES TO IMPACT THE STREAM DURING THE MONTHS OF APRIL THROUGH OCTOBER: ALL REQUIREMENTS OF CMS 503 APPLY, UNLESS STIPULATED ELSEWHERE IN THIS NOTE.

IF THE CONTRACTOR CHOOSES TO IMPACT THE STREAM AT ANY TIME IN THE MONTHS OF NOVEMBER THROUGH MARCH: EVEN IF THE ACTUAL WATER ELEVATION EXCEEDS 3 FEET ABOVE THE STATED ORDINARY HIGH WATER MARK, THE DEPARTMENT WILL NOT REIMBURSE THE CONTRACTOR FOR RESULTING DAMAGE TO THE WORK PROTECTED BY THE COFFERDAM. ALL OTHER REQUIREMENTS OF CMS 503 APPLY.

SEEDING AND MULCHING

THE FOLLOWING QUANTITIES ARE PROVIDED TO PROMOTE GROWTH AND CARE OF PERMANENT SEEDED AREAS:

659, SEEDING AND MULCHING	2220 SQ. YD.
659, COMMERCIAL FERTILIZER	0.3 TON
659, LIME	0.5 ACRES
659, WATER	12.3 M. GAL.

SEEDING AND MULCHING SHALL BE APPLIED TO ALL AREAS OF EXPOSED SOIL BETWEEN THE RIGHT-OF-WAY LINES, AND WITHIN THE CONSTRUCTION LIMITS FOR AREAS OUTSIDE THE RIGHT-OF-WAY LINES COVERED BY WORK AGREEMENT OR SLOPE EASEMENT. QUANTITY CALCULATIONS FOR SEEDING AND MULCHING ARE BASED ON THESE LIMITS.

ITEM 837 - LINER PIPE, AS PER PLAN, 707.75, 748.06

THE PROPOSED PIPE LINER SIZE AS SHOWN IN THESE PLANS IS THE MINIMUM DIMENSIONS REQUIRED FOR HYDRAULIC PURPOSES. THE LINER SHALL MATCH THE EXISTING PIPE AS CLOSELY AS POSSIBLE ALLOWING SUFFICIENT ROOM FOR BACKFILLING THE ANNULAR AREA BETWEEN BOTH PIPES.

ITEM 606 - ANCHOR ASSEMBLY, MGS TYPE E

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.

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

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.

UTILITIES

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

DUKE ELECTRIC (DISTRIBUTION)
2010 DANA AVE
CINCINNATI, OHIO 45207
513-508-9609 (SHANE ERHART)
SHANE.ERHART@DUKE-ENERGY.COM

FRONTIER COMMUNICATIONS
241 SOUTH NELSON AVENUE
WILMINGTON, OHIO 45177
937-283-5735 (DAVID LONGWORTH)
DAVID.M.LONGWORTH@FTR.COM

CHARTER COMMUNICATIONS/SPECTRUM
10920 KENWOOD ROAD
BLUE ASH, OHIO 45242
513-878-6507 (JOSEPH ANGEL)
(SEND ALL PLANS/CORRESPONDENCE TO EMAIL BOX FOR DISTRIBUTION: DL-SOUTHERN-OHIO-OUTSIDE-PLANT@CHARTER.COM)

TATE-MONROE WATER ASSOCIATION
2599 S.R. 232
NEW RICHMOND, OHIO 45157
PHONE 513-734-2236 EXT 20 (JEFF SMITH)
JSMITH@TATEMONROE.COM

DESIGN AGENCY



DESIGNER

MLB

REVIEWER

XXX MM-DD-YY

PROJECT ID

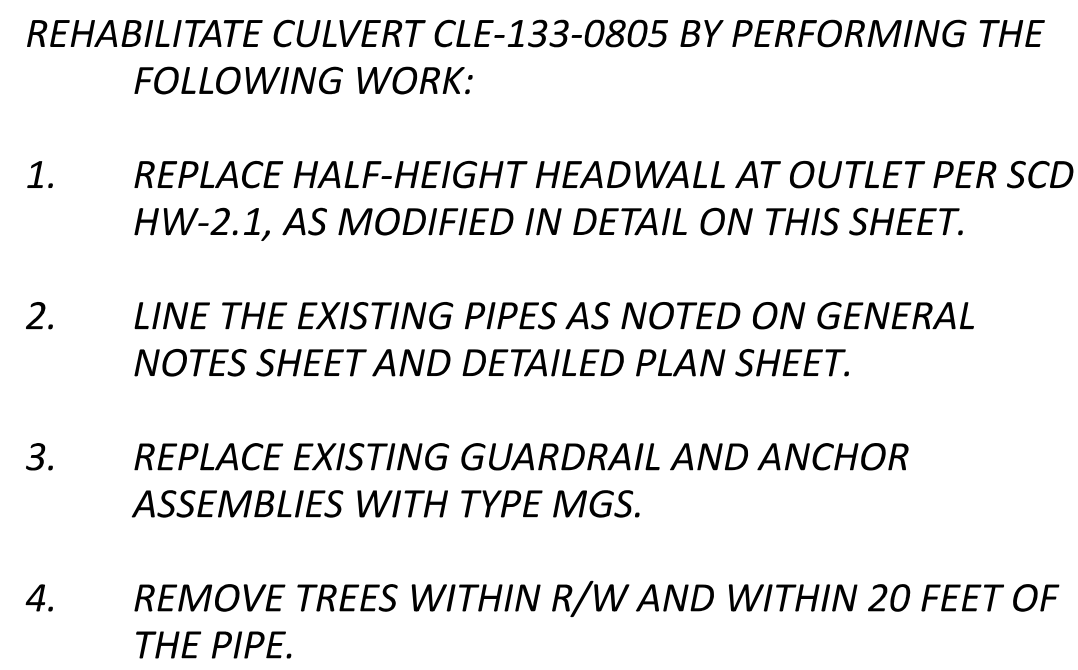
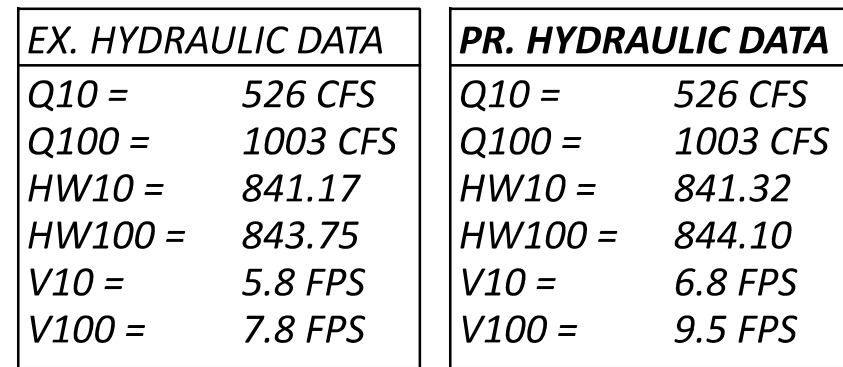
110682

SHEET

02

TOTAL

05



IN ADDITION TO THE BACKFILL & GROUTING REQUIREMENTS OF SUPPLEMENTAL SPECIFICATION 837, THIS ITEM SHALL ALLOW THE GROUT BETWEEN THE LINER PIPE AND HOST PIPE TO BE HYDROPHOBIC POLYURETHANE FOAM GROUT SUCH AS AV-275 SOILGROUT OR APPROVED EQUAL.



EXISTING STRUCTURE	
TYPE:	TWIN CMP PIPE ARCH
SIZE:	TWIN 12'-6" SPAN x 7'-11" RISE, 86' LONG
SKEW:	NONE
ALIGNMENT:	TANGENT
STRUCTURE FILE NUMBER (SFN):	1303155
DATE BUILT:	1961
CONDITION:	POOR
COORDINATES:	LATITUDE: 38.890272 LONGITUDE: -84.091975
STREAM NAME:	TRIBUTARY OF INDIAN CREEK
OHWM:	837.3 (CULVERT INVERT = 836.30)

ESTIMATED QUANTITIES (CARRIED TO GENERAL SUMMARY)			
ITEM	QUANTITY	UNIT	DESCRIPTION
202	1	EA	HEADWALL REMOVED
202	172	FT	PIPE CLEANOUT OVER 48"
202	200	FT	GUARDRAIL REMOVED
202	3	EA	ANCHOR ASSEMBLY REMOVED, TYPE A, AS PER PLAN
202	1	EA	ANCHOR ASSEMBLY REMOVED, TYPE T
503	LS	LS	COFFERDAMS AND EXCAVATION BRACING, AS PER PLAN
601	67.2	CY	ROCK CHANNEL PROTECTION, TYPE B W/ FILTER
602	14.78	CY	CONCRETE MASONRY
606	3	EA	ANCHOR ASSEMBLY, MGS TYPE E
602	1	EA	ANCHOR ASSEMBLY, MGS TYPE T
602	175	FT	GUARDRAIL, TYPE MGS WITH LONG POSTS
626	6	EA	BARRIER REFLECTORS, TYPE 2 BI-DIRECTIONAL
837	172	FT	LINER PIPE, AS PER PLAN, 128" x 83" (MIN.), 707.75, 748.06
837	172	FT	BACKFILL FOR LINER PIPE, AS PER PLAN

