

HENRY COUNTY
DEPARTMENT OF HIGHWAYS

BRIDGE 3-5.80

STATE OF OHIO

2008 SPECIFICATIONS

The Standard Specifications of the Ohio Department of Transportation, including changes and supplemental specifications, listed in the proposal shall govern this improvement.

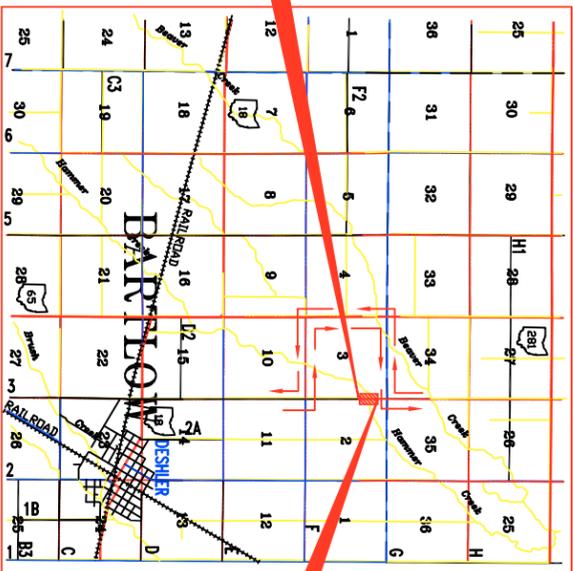
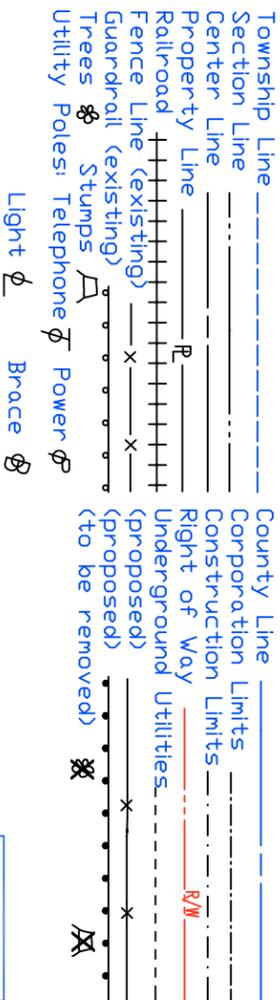
I hereby approve these plans and declare that the making of this improvement will require the closing of the highway and that the necessary lights and signs shall be maintained.

Approved _____ Henry County Engineer
Date _____

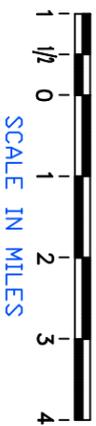
Approved _____ Henry County Commissioner
Date _____

Approved _____ Henry County Commissioner
Date _____

Approved _____ Henry County Commissioner
Date _____



LOCATION MAP



UNDERGROUND UTILITIES
2 WORKING DAYS
BEFORE YOU DIG
CALL 800-362-2764
OHIO UTILITY PROTECTION SERVICE
NON-MEMBERS
MUST BE CALLED DIRECTLY

INDEX OF SHEETS

TITLE SHEET 1
GENERAL NOTES 2
TYPICAL SECTIONS & STRUCTURE DETAILS 3
GENERAL SUMMARY & SUB SUMMARY 4
PLAN AND PROFILE 5
CROSS SECTIONS 6

SUPPLEMENTAL PRINTS OF STANDARD CONSTRUCTION DRAWINGS

GR-1.1	5-6-91		
GR-2.1	1-16-04		
GR-2.2	4-18-03		
DM-1.1	7-19-02		
DBR-2-73	9-19-94		
DS-1-92	12-15-94		
DBR-1-92	3-23-92		
MT-101.60	7-1-92		

SUPPLEMENTAL SPECIFICATIONS

820	3-18-92		
944	3-18-92		

DEPARTMENT OF HIGHWAYS
HENRY COUNTY, OHIO

TITLE SHEET
BRIDGE NO. HEN-3-5.80
OVER HAMMER CREEK
BARTLOW TWP.

Designed: HEN. CO. ENG. Drawn: S.J.K. Checked: R.L.G. File Name: C:\DATA\ENR\3-5.80\TMSHEET

GENERAL NOTES

ELEVATION DATUM
All elevations are based on USGS datum.

EROSION CONTROL
ITEM 601 is provided in the plans for erosion control. Root of a stable nature will not be removed in order to place this item. The Engineer shall check and non-perform quantities or adjust locations and quantities for this item where indicated by field conditions during construction.

UTILITY OWNERSHIP
The following utilities and owners are located within the work limits of this project:

ELECTRIC: HANCOCK-WOOD ELECTRIC CO-OP, INC.
P.O. BOX 190
NORTH BALTIMORE, OHIO 45972
419/257-5015

GAS: KING ENERGY
1700 WESTFIELD DRIVE
FINDLAY, OHIO 45840
419/424-3427
(800) 434-3427

ITEM 603
Payment for manufactured and sections, coupling bonds, precast wingwalls and footings shall be included in the unit price bid for each conduit under this item.

Where plans provide for proposed conduit to be connected to, or to cross either over or under an existing sewer, it shall be the responsibility of the Contractor to locate the existing pipe both as to line and grade before laying the proposed conduit.

Payment for all operations described above shall be included in the unit price bid for the pertinent 603 conduit items.

Immediately after placement of any conduits, the Contractor shall construct the end treatments required by the plans at both the outlet and inlet ends. This shall include headwalls, wingwalls, end sections, concrete riprap, rock channel protection, seeding, etc.

UNDERGROUND UTILITIES
The locations of underground utilities shown on the plans are as obtained from the owners of the utility as required by Section 153164 ORC.

SEEDING
To be performed by county forces.

ANIMAL GUARDS
Animal guards shall be provided at the outlet of all pipes which are to be constructed by the Contractor, as per Standard Construction Drawing DR-1-1, except when they outlet into a drainage structure. Payment for the animal guards shall be included in the price bid for item 603.

INGRESS AND EGRESS TO DRIVES
Ingress and egress to all residential drives shall be maintained at all times during the construction of this project. Temporary closures of any drives shall require permission from the Engineer prior to closure and shall be held to as short a period of time as is necessary.

CONTINGENCY QUANTITIES
The Contractor shall not order materials or perform work listed in the GENERAL SUMMARY for items designated by plan note to be used AS DIRECTED BY ENGINEER unless authorized by the Engineer. The actual work locations and quantities used of the Engineer's discretion shall be made a matter of record by incorporation into the final change order governing completion of this project.

LOCATION OF GUARDRAIL

The locations of guardrail runs, as shown in these plans, are subject to adjustment prior to final acceptance. The Engineer shall be satisfied that all installations will afford maximum protection for traffic.

DETAILS
All necessary signs and sign supports including erecting, maintaining and removing the signs and sign supports shall be provided by the Contractor for the required project detail, as indicated on SH-1.

Signs and sign supports shall be as detailed in the Ohio Manual of Uniform Traffic Control Devices. Payment for providing, erecting, maintaining and removing signs and sign supports shall be included in the lump sum price bid for ITEM 614, MAINTAINING TRAFFIC.

LIGHTS AND SIGNS AT ADJACENT INTERSECTIONS
The Contractor shall, in addition to the general requirements of ITEM 614 on this project, perform the following:

1. Int. T.R. 3 & C.R. 6
2. Int. T.R. 3 & C.R. F

Sign supports and lights for "ROAD CLOSED" signs shall be as detailed in the Ohio Manual of Uniform Traffic Control Devices. Payment for providing, erecting, maintaining, and removing lights, signs, and sign supports shall be included in the lump sum price bid for ITEM 614, MAINTAINING TRAFFIC.

APPEARANCE OF BRIDGE

The Contractor shall be responsible for the removal of all foreign material such as waterproofing primer or other asphaltic materials, as soon as practical from the fascia beams and/or wingwalls.

REMOVAL AND DISPOSAL OF EXISTING BRIDGE

The existing bridge shall be removed and, at the Contractor's option, existing concrete and stone removed may be used as embankment protection material, as directed by the Engineer, providing that the material meets the gradation requirements of Section 60106. Any protruding reinforcing steel shall be burned off at the surface of the concrete. Unusable masonry and other debris shall be disposed of as per Section 202.02.

DESIGN DATA FOR BRIDGE

Design Loading: HL-93 (LRFD)

WATERPROOFING MEMBRANE

Refer to 0101 Proposal Note 445-91 with the following revision.
The paragraph titled "Description" shall read:

This item shall consist of furnishing all necessary labor, materials and equipment to prepare the surface and place a waterproof TYPE 3, 36" wide membrane over the top surface and a TYPE 2, 12" wide membrane over the vertical joints. The joint between the wingwalls and the sides of the three sided structure to be covered by a 36" wide membrane. The membrane shall extend a minimum of 2 feet down each side and overlap the membrane covering the vertical joints.

ALLOWABLE SOIL BEARING PRESSURE

The allowable soil bearing pressure is 2,000 p.s.f.

PROPOSED STRUCTURE

ADDITIONAL EMBANKMENT/BACKFILL MATERIAL

Lump Sum Bid for ITEM 603, PRECAST CONCRETE BOX, shall include any necessary embankment or backfill material required between the Proposed Structure and the excavation limits from ITEM 202, Structure Removed.

CAST IN PLACE ALTERNATE

The Contractor may cast in place the wingwalls and footings in accordance with the STANDARD TABLE shown on the TYPICAL SECTION SHEET

ITEM 603 CONDUIT, TYPE A, 708.051

Lump Sum Bid shall also include all Footings & Wingwalls (As Per Plan)

REINFORCING STEEL

All reinforcing steel used in footings and wingwalls shall be GRADE 60 and EPOXY COATED if Cast in Place Method is Used. Epoxy Coating to conform to item 709.00

DEPARTMENT OF HIGHWAYS
HENRY COUNTY, OHIO

GENERAL NOTES

BRIDGE NO. HEN 3-5.80
HAMMER CREEK
BARTLOW TWP.

Designed	Drawn	Checked	File Name
HEN. CO. ENG.	S.J.K.	R.L.G.	07/15/2023-24-01-01-01



GENERAL SUMMARY

ITEM	ITEM EXT.	GRAND TOTAL	UNIT	DESCRIPTION
				ROADWAY
201	1		LUMP	CLEARING & GRUBBING (ALSO INCLUDES AMT. TREES MARKED FOR REMOVAL ON PLAN SHEET)
202	9		LN. FT.	PIPE REMOVED, 24" & UNDER
202	1		LUMP	STRUCTURE REMOVED (3-5.80) OVER 20' SPAN
203	178		CU. YD.	EXCAVATION (INCLUDES FULL DEPTH PAVEMENT REMOVAL AS SHOWN ON PLAN & X-SEC. SHEET)
203	30		CU. YD.	EMBANKMENT
204	188		SO. YD.	SUBGRADE COMPACTION
517	75.0		LN. FT.	RAILING (DEEP BEAM RAIL W/STEEL TUBULAR BACKUP TYPE 2 STEEL POSTS & ANCHOR BOLTS)
606	75.0		LN. FT.	GUARDRAIL, TYPE 5, (AS PER PLAN)
				EROSION CONTROL
601	126		CU. YD.	ROCK CHANNEL PROTECTION, TYPE D W/O FILTER (AS PER PLAN)
659			M. GAL.	WATER (TO BE PERFORMED BY COUNTY FORCES)
659			SO. YD.	SEEDING & MULCHING (TO BE PERFORMED BY COUNTY FORCES)
659			TON	COMMERCIAL FERTILIZER (TO BE PERFORMED BY COUNTY FORCES)
				DRAINAGE
503	1		LUMP	UNCLASSIFIED EXCAVATION (INCLUDES AMT. AND A FULL SECTION TO VERIFY AMT. FROM EXISTING)
512	38		SO. YD.	TYPE 2, MEMBRANE WATERPROOFING (SEE GENERAL NOTES, SHEET 2)
512	116		SO. YD.	TYPE 3, MEMBRANE WATERPROOFING (SEE GENERAL NOTES, SHEET 2)
603	10		LN. FT.	6" CONDUIT, TYPE E, 707.33
603	1		LUMP	CONDUIT, TYPE A, 706.051
				PRECAST REINFORCED CONC. & STEEL PILE TOPPED CONCRETE
SPECIAL	77		LN. FT.	DRIP STRIP (INCLUDES ALL FORMS & UNIFORMS (AS PER PLAN))
				PAVEMENT
301	29		CU. YD.	ASPHALT CONCRETE BASE
304	47		CU. YD.	AGGREGATE BASE
407	32		GAL.	TACK COAT (APPLIED AT THE RATE OF 0.05 GAL./SQ.Y.)
448	37		CU. YD.	ASPHALT CONCRETE SURFACE COURSE (TO INCLUDE 2 INCH ADMS, 30 LB)
				MISCELLANEOUS
614	1		LUMP	MAINTAINING TRAFFIC
623	1		LUMP	CONSTRUCTION LAYOUT STAKES
624	1		LUMP	MOBILIZATION
103.05	1		LUMP	CONTRACT PERFORMANCE & PAYMENT BOND

SUB-SUMMARY

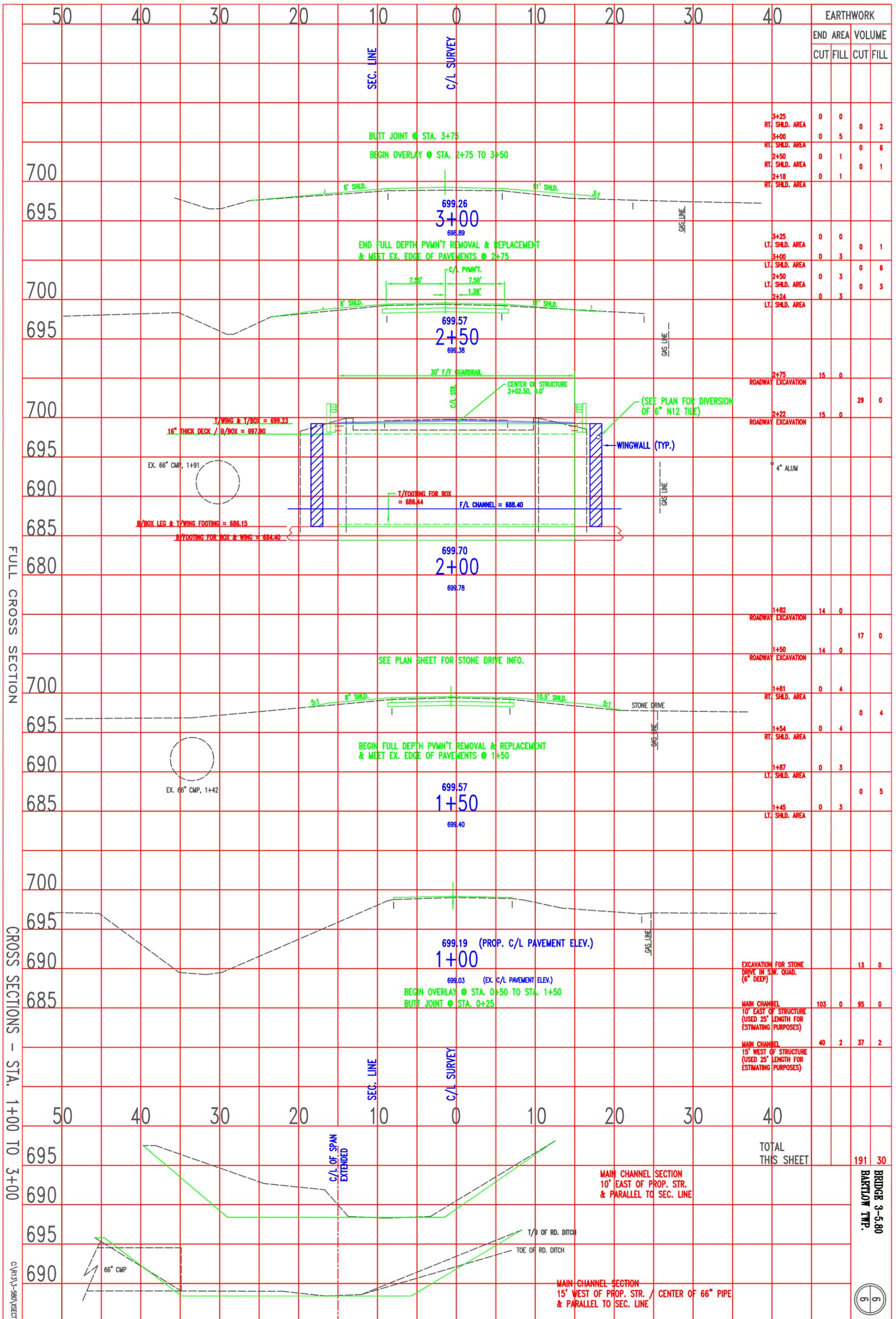
REF. NO.	STATION		SIDE	ROAD	ITEM	UNIT	AMOUNT	SHEETS									
	FROM	TO															
1R	1+81	2+17	L&R	3	PIPE REMOVED 24" & UNDER	LN. FT.	9	5/6									
2R	2+92	2+31	RT.	3	STRUCTURE REMOVED 3-5.80 OVER 20' SPAN	LUMP	1	5/6									
					ROCK CHANNEL PROTECTION, TYPE D W/O FILTER (AS PER PLAN)	CU. YD.	54										
					6" CONDUIT TYPE E 707.33	LN. FT.	10										
					CONDUIT, TYPE A 706.051 (INCLUDES AMT. AND A FULL SECTION TO VERIFY AMT. FROM EXISTING)	LUMP	1										
10	1+87.15 (64.88)	2+17.85 (64.88)	L&R	3	RAILING (DEEP BEAM RAILING W/STEEL TUBULAR BACKUP TYPE 2 STEEL POSTS & ANCHOR BOLTS)	LN. FT.	37.5	3/5/6									
20	2+21	2+31	RT.	3	GUARDRAIL TYPE 5 (AS PER PLAN)	LN. FT.	10	5/6									
1RCP	WEST SIDE OF STRUCTURE		LT.	3				5									
2RCP	THRU STRUCTURE		L&R	3				3/5									
3RCP	EAST SIDE OF STRUCTURE		RT.	3				5									
10R	1+75.43	1+87.77	LT.	3				5									
	1+87.77	2+25.27	LT.	3				3/5/6									
	2+25.27	2+37.77	LT.	3				5									
	2+37.77	2+50.11	LT.	3				5									
2GR	1+54.89	1+67.23	RT.	3				5									
	1+67.23	1+79.73	RT.	3				5									
	1+79.73	2+17.23	RT.	3				3/5/6									
	2+17.23	2+29.57	RT.	3				5									
TOTALS							9	1	126	10	1	75.0	75.0				

DEPARTMENT OF HIGHWAYS
HENRY COUNTY, OHIO

GENERAL SUMMARY & SUB-SUMMARY

BRIDGE NO. HEN-3-5.80
OVER HAMMER CREEK
BARTLOW TWP.

Designed: RLG
Drawn: SJK
Checked: RLG
File Name: HENRYCOUNTY-3-5-80-3-5-80



STATION	EARTHWORK			
	END AREA		VOLUME	
	CUT	FILL	CUT	FILL
3+25 RT. SHLD. AREA	0	0	0	2
3+00 RT. SHLD. AREA	0	5	0	6
2+50 RT. SHLD. AREA	0	1	0	1
2+18 RT. SHLD. AREA	0	1		
3+25 LT. SHLD. AREA	0	0	0	1
3+00 LT. SHLD. AREA	0	3	0	6
2+50 LT. SHLD. AREA	0	3	0	3
2+24 LT. SHLD. AREA	0	3		
2+75 ROADWAY EXCAVATION	15	0		
2+22 ROADWAY EXCAVATION	15	0	29	0
4" ALUM				
1+82 ROADWAY EXCAVATION	14	0		
1+50 ROADWAY EXCAVATION	14	0	17	0
1+81 RT. SHLD. AREA	0	4		
1+54 RT. SHLD. AREA	0	4	0	4
1+87 LT. SHLD. AREA	0	3		
1+45 LT. SHLD. AREA	0	3	0	5
EXCAVATION FOR STONE DRIVE IN S.W. QUAD. (6" DEEP)			15	0
MAIN CHANNEL 10' EAST OF STRUCTURE (USED 25' LENGTH FOR ESTIMATING PURPOSES)	103	0	95	0
MAIN CHANNEL 15' WEST OF STRUCTURE (USED 25' LENGTH FOR ESTIMATING PURPOSES)	40	2	37	2
TOTAL THIS SHEET			191	30

BRIDGE 3-5-80
BARTON TWP.



FULL CROSS SECTION

CROSS SECTIONS - STA. 1+00 TO 3+00

C:\P13-580\XSECT