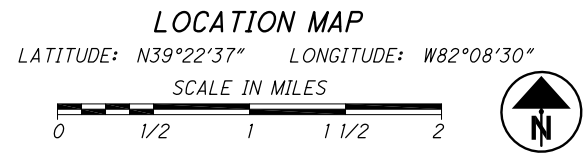
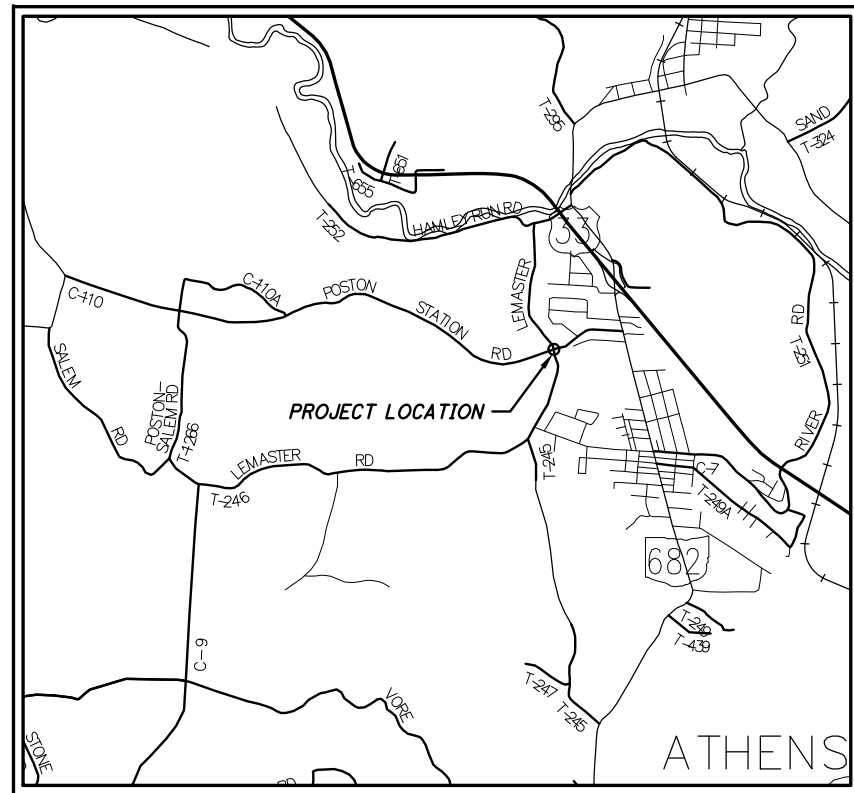


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ATHENS COUNTY ENGINEER

CR 110 POSTON STATION ROAD CULVERT REPLACEMENT PROJECT

PROJECT DESCRIPTION

CULVERT REPLACEMENT ON CR 110 POSTON STATION ROAD AT INTERSECTION OF TR 246 LEMASTER RD.

2013 SPECIFICATIONS

THE STANDARD SPECIFICATIONS OF THE STATE OF OHIO, DEPARTMENT OF TRANSPORTATION, INCLUDING CHANGES AND SUPPLEMENTAL SPECIFICATIONS LISTED IN THE PROPOSAL SHALL GOVERN THIS IMPROVEMENT.

INDEX OF SHEETS:

TITLE SHEET	1
GENERAL NOTES	2
GENERAL SUMMARY	3
SITE PLAN	4
FULL-HEIGHT HEADWALL DETAILS	5

UNDERGROUND UTILITIES

CONTACT BOTH SERVICES
CALL TWO WORKING DAYS
BEFORE YOU DIG

CALL
1-800-362-2764
(TOLL FREE)

OHIO UTILITIES PROTECTION SERVICE
NON-MEMBERS
MUST BE CALLED DIRECTLY

OIL & GAS PRODUCERS UNDERGROUND
PROTECTION SERVICE CALL: **1-800-925-0988**



PLANS PREPARED BY:
 ATHENS COUNTY ENGINEER'S OFFICE
 16000 CANAANVILLE RD
 ATHENS, OHIO 45701

ENGINEER'S SEAL	STANDARD CONSTRUCTION DRAWINGS	SUPPLEMENTAL SPECIFICATIONS
	DM-1.4 1-18-13	SS-800 4-18-14
	HW-1.1 1-18-13	SS-832 1-17-14
	MGS-1.1 7-19-13	
	MGS-4.1 7-19-13	
	MGS-4.2 7-19-13	
	MT-97.10 7-19-13	
	MT-101.60 7-19-13	
	MT-101.70 1-17-14	
	MT-105.10 7-19-13	

SIGNED: _____
 DATE: _____

APPROVED _____
 DATE _____ JEFF MAIDEN, P.E., P.S.
 ATHENS COUNTY ENGINEER

OPWC PROJECT NO. CU32Q
PROJECT NO. 14041
CONSTRUCTION PROJECT NO.
RAILROAD INVOLVEMENT NONE
CR 110 CULVERT
1 5

CONTRACT SPECIFICATIONS

THE JANUARY 1, 2013 VERSION OF THE CONSTRUCTION AND MATERIAL SPECIFICATIONS AS PUBLISHED BY THE OHIO DEPARTMENT OF TRANSPORTATION SHALL GOVERN ALL ASPECTS OF THE CONTRACT WORK. THE CONTRACTOR SHOULD BE FAMILIAR WITH THESE SPECIFICATIONS AND THEIR PROCEDURAL REQUIREMENTS.

STANDARD DRAWINGS

REFERENCE SHOULD BE MADE TO THE STANDARD DRAWINGS SHOWN IN THE TABLE ON THE COVER SHEET.

UTILITIES

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

- (1) WATER & SEWER ATHENS COUNTY WATER & SEWER DISTRICT
11308 JACKSON DRIVE
THE PLAINS, OHIO 45780
CONTACT: RICH KASLER
PHONE: 740-593-7146
- (2) CABLE NELSONVILLE TV CABLE
1 WEST COLUMBUS STREET
NELSONVILLE, OHIO 45764
CONTACT: JIM EDWARDS
PHONE: 740-753-2686
- (3) ELECTRIC AMERICAN ELECTRIC POWER
9135 SR 682
IRONTON, OHIO 45701
CONTACT: CHRIS McDANIELS
PHONE: 740-532-9927
- (4) TELEPHONE ATT
2932 S. SIXTH STREET
IRONTON, OHIO 45638
CONTACT: DAVE MALONE
PHONE: 740-532-9927
- (5) GAS COLUMBIA GAS
843 PLIAT AVENUE
CHILLICOTHE, OHIO 45601
CONTACT: TIFFANY WOODYARD
PHONE: 740-772-9131

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

UTILITY LINES

ALL EXPENSIVE INVOLVED IN RELOCATING (INSTALLING) THE AFFECTED UTILITY LINES SHALL BE BORNE BY THE UTILITY(IES). THE CONTRACTOR AND UTILITY ARE TO COOPERATE BY ARRANGING THEIR WORK IN SUCH A MANNER THAT INCONVENIENCE TO EITHER WILL BE HELD TO A MINIMUM.

WORK LIMITS

ALL PHYSICAL WORK SHALL BE COMPLETED WITHIN THE STATE RIGHT-OF-WAY 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.

ELEVATION DATUM

ALL ELEVATIONS ARE ORTHOMETRIC HEIGHTS USING THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88) AND THE GEOID 12A. HORIZONTAL POSITIONS ARE BASED ON THE OHIO STATE PLANE SOUTH ZONE 3402.

PROFILE AND ALIGNMENT

PLACE THE PROPOSED PAVEMENT TO FOLLOW THE ALIGNMENT AND PROFILE OF THE EXISTING PAVEMENT. PLACE THE PROPOSED ASPHALT CONCRETE OVERLAY AS SHOWN ON THE TYPICAL SECTIONS.

CLEARING AND GRUBBING

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 PROVISIONS AS SET FORTH IN THE SPECIFICATIONS UNDER THIS ITEM ARE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 201, CLEARING AND GRUBBING

ITEM 202 - GUARDRAIL REMOVED

ALL GUARDRAIL THAT IS REMOVED SHALL BECOME PROPERTY OF ATHENS COUNTY. CARE SHALL BE TAKEN TO UNBOLT THE RAIL AND REMOVE WITHOUT DAMAGING. THE CONTRACTOR SHALL ARRANGE FOR THE GUARDRAIL TO BE PICKED UP AT THE SITE BY ATHENS COUNTY FORCES.

SEEDING AND MULCHING

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

659, SEEDING AND MULCHING - 510 SQ. YD.

SEEDING AND MULCHING SHALL BE APPLIED TO ALL AREAS OF EXPOSED SOIL BETWEEN THE EASEMENT LINES. QUANTITY CALCULATIONS FOR SEEDING AND MULCHING ARE BASED ON THESE LIMITS.

ROAD CLOSED/MAINTENANCE OF TRAFFIC

COUNTY ROAD 110 WILL BE CLOSED FOR A MAXIMUM OF 90 DAYS. LOCAL TRAFFIC WILL BE DETOURED.

ITEM 614 - MAINTAINING TRAFFIC

THE CONTRACTOR SHALL PROVIDE, ERECT AND MAINTAIN STANDARD 48" X 30" - "ROAD CLOSED" SIGNS, SIGN SUPPORTS, BARRICADES, GATES, AND LIGHTS, AS DETAILED IN STANDARD CONSTRUCTION DRAWING MT-101.60 AT THE FOLLOWING LOCATIONS DURING PERIODS IN WHICH THE AFFECTED ROADS ARE CLOSED TO TRAFFIC:

(1) INTERSECTION OF COUNTY ROAD 110 POSTON STATION AND STATE ROUTE 682.

(2) ALONG CR 110 500 FEET WEST OF INTERSECTION TOWNSHIP ROAD 246 LEMASTER RD AND COUNTY ROAD 110 POSTON STATION.

ALL WORK AND TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH 614 AND OTHER APPLICABLE PORTIONS OF THE SPECIFICATIONS, AS WELL AS THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. PAYMENT FOR ALL LABOR, EQUIPMENT AND MATERIALS SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR 614, MAINTAINING TRAFFIC.

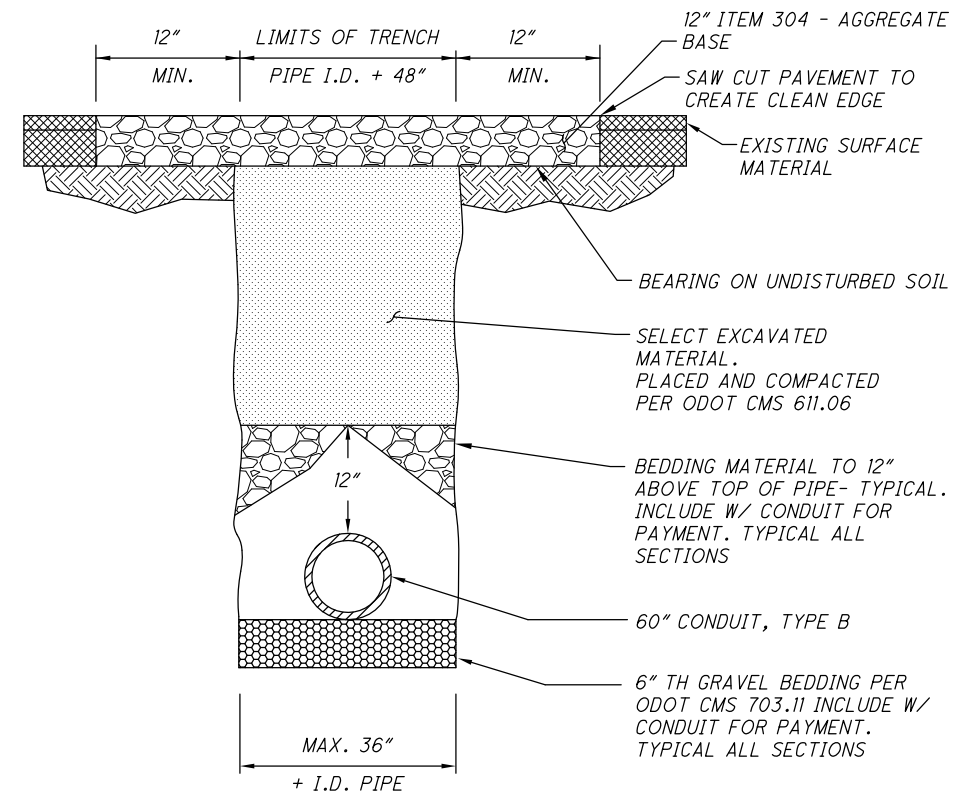
THE ATHENS COUNTY ENGINEER WILL PROVIDE THE SIGNS FOR THE DETOUR ROUTE, AND WILL MAINTAIN THE DETOUR SIGNS.

ITEM 611 - 60" CONDUIT, TYPE B, AS PER PLAN

THE CONDUIT MUST BE EITHER 706.02, 707.01 (ALUM.), OR 707.33. THE CONTRACTOR MAY USE THE EXCAVATED MATERIAL AS BACKFILL ABOVE THE BEDDING MATERIAL AS SHOWN ON THE TRENCH TYPICAL SECTION ON THIS SHEET. THE EXCAVATED MATERIAL MAY BE STORED ON THE EXISTING PAVEMENT AS SHOWN ON SHEET 4 UNTIL IT IS USED AS BACKFILL. THE COST TO REMOVE THE EXISTING CULVERT AND HEADWALL SHALL BE INCLUDED IN THE PRICE OF THE NEW CONDUIT.

STREAM CHANNEL EXCAVATION

THE CONTRACTOR SHALL TAKE PRECAUTIONS NECESSARY TO PREVENT ANY INCIDENTAL DISCHARGES ASSOCIATED WITH THE EXCAVATION AND HAULING OF MATERIAL FROM THE STREAM CHANNEL. THIS PERTAINS TO ANY EXCAVATION OPERATIONS SUCH AS CHANNEL EXCAVATION, ROCK CHANNEL PROTECTION EXCAVATION AND PLACEMENT, AND PLACEMENT OR REMOVAL OF ANY TEMPORARY MATERIALS USED FOR CONSTRUCTION.



TYPICAL SECTION UNDER PAVEMENT

CALCULATED
DES
CHECKED
RJM

GENERAL NOTES

CR 110 CULVERT

2
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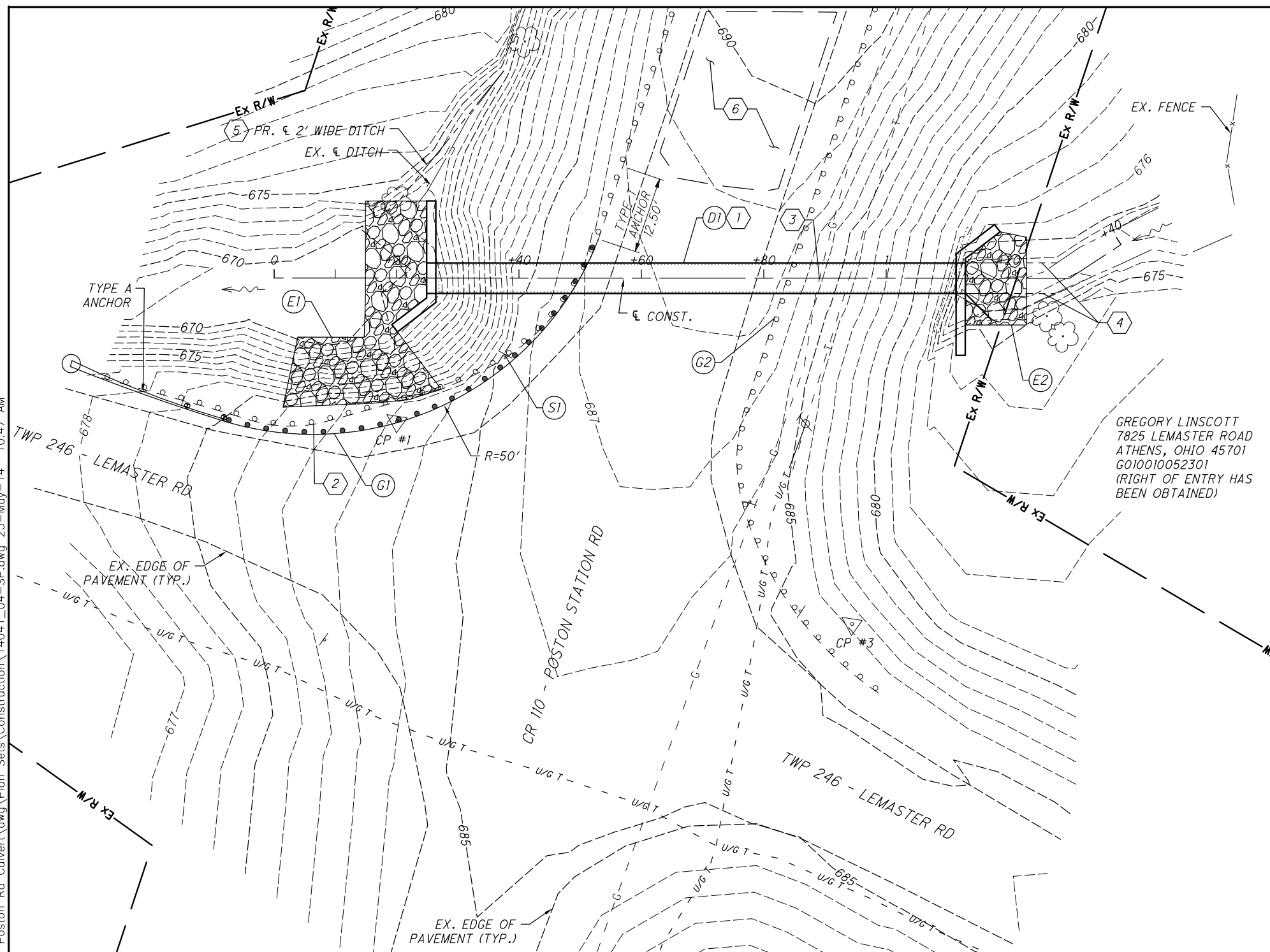
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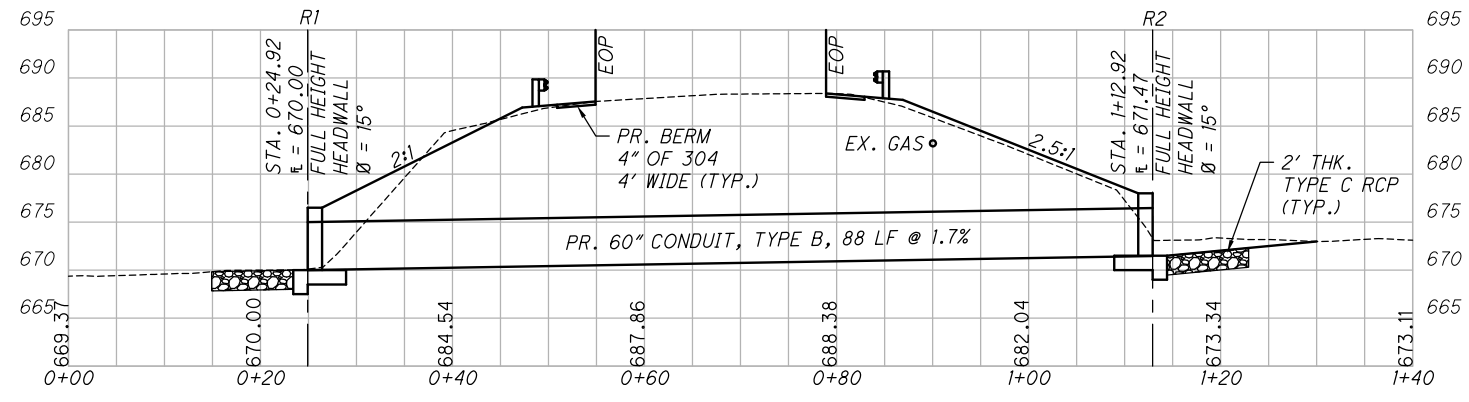
SHEET NUMBER								ITEM NO.	ITEM EXT.	TOTAL	UNIT	ITEM DESCRIPTION	SEE SHEET NO.
2		4											
	LUMP						201	11000	LUMP				
		144					202	38000	144	FT	CLEARING AND GRUBBING		
		112.5					606	13000	112.5	FT	GUARDRAIL REMOVED		
		1					606	25000	1	EACH	GUARDRAIL TYPE 5		
		1					606	26500	1	EACH	ANCHOR ASSEMBLY, TYPE A		
		42					601	32204	42	CY	ANCHOR ASSEMBLY, TYPE T		
	510						659	10000	510	SY	EROSION CONTROL		
		20.6					602	20000	20.6	CY	ROCK CHANNEL PROTECTION, TYPE C, WITH FABRIC FILTER		
		88					611	23801	88	FT	SEEDING AND MULCHING		2
	30	6					304	20000	36	CY	DRAINAGE		
		1					630	85100	1	EACH	PAVEMENT		
		1					630	86010	1	EACH	TRAFFIC CONTROL		
	LUMP						614	11000	LUMP		INCIDENTALS		
							623	10000	LUMP		MAINTAINING TRAFFIC		
							624	10000	LUMP		CONSTRUCTION LAYOUT STAKES		
											MOBILIZATION		

CALCULATED	DES	CHECKED	RJM
GENERAL SUMMARY			
CR 110 CULVERT			
3 5			

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PLAN



PROFILE

REFERENCE NUMBER	STATION		SIDE	ROADWAY				SEE SHEET NO.
	FROM	TO		GUARDRAIL REMOVED	GUARDRAIL, TYPE 5	ANCHOR ASSEMBLY, TYPE A	ANCHOR ASSEMBLY, TYPE T	
	FT	FT		EA	EA	EA	EA	
G1	-0+33.2	0+56.58	LT,RT	119	87.5	1	1	
G2	0+36.98	0+48.52	LT,RT	25	25			
TOTALS TO SHEET 3				144	112.5	1	1	

REFERENCE NUMBER	STATION		SIDE	EROSION CONTROL / DRAINAGE / TRAFFIC CONTROL					SEE SHEET NO.
	FROM	TO		ROCK CHANNEL PROTECTION, TYPE C, WITH FABRIC FILTER	CONCRETE MASONRY	60" CONDUIT, TYPE B AS PER PLAN	REMOVAL OF GROUND MOUNTED SIGN AND REERECTION	REMOVAL OF GROUND MOUNTED POST SUPPORT AND REERECTION	
	CY	CY		FT	EA	EA	EA	EA	
D1	0+24.92	1+12.92	CL		20.6	88			2
E1	0+01.44	0+27.34	LT,RT	32					
E2	1+12.92	1+22.92	LT,RT	10					
S1	0+37.75		RT				1	1	
TOTALS TO SHEET 3				42	20.6	88	1	1	

CODED NOTES

- ① THE COST TO REMOVE THE EXISTING CULVERT AND HEADWALL SHALL BE INCLUDED IN THE COST OF THE NEW CONDUIT. THE NEW CONDUIT SHALL BE EITHER 706.02, 707.01 (ALUM.), OR 707.33.
- ② THE GUARDRAIL THAT IS REMOVED SHALL BECOME PROPERTY OF ATHENS COUNTY.
- ③ THE DEPTH OF THE EXISTING GAS LINE IS UNKNOWN. THE CONTRACTOR SHALL TEMPORARILY SUPPORT THE LINE WHILE THE TRENCH IS OPEN.
- ④ GRADE AND ROUTE THE CHANNEL SO IT FLOWS DIRECTLY IN AND PARALLEL TO THE NEW CULVERT PRIOR TO PLACING THE RCP. COST TO BE INCLUDED IN THE PRICE OF THE ROCK CHANNEL PROTECTION.
- ⑤ GRADE AND ROUTE THE 2' WIDE DITCH AS SHOWN PRIOR TO PLACING THE RCP. COST TO BE INCLUDED IN THE PRICE OF THE ROCK CHANNEL PROTECTION.
- ⑥ CONTRACTOR MAY STORE THE EXCAVATED MATERIAL ON THE EXISTING PAVEMENT UNTIL IT IS USED FOR THE BACKFILL. THE COUNTY WILL SWEEP THE PAVEMENT WHEN CONSTRUCTION IS FINISHED.

EXISTING STRUCTURE TYPE: 54" CMP CULVERT SKEW: 18.5°	PROPOSED STRUCTURE TYPE: 60" CONDUIT, TYPE B SKEW: 18.5°
---	---

SURVEY CONTROL POINTS				
POINT NUMBER	NORTHING	EASTING	ELEVATION	DESCRIPTION
1	501718.908	2069712.102	683.19	HUB WITH TACK
2	501634.136	2069600.515	683.90	PK NAIL
3	501639.18	2069728.441	683.43	HUB WITH TACK

SITE PLAN

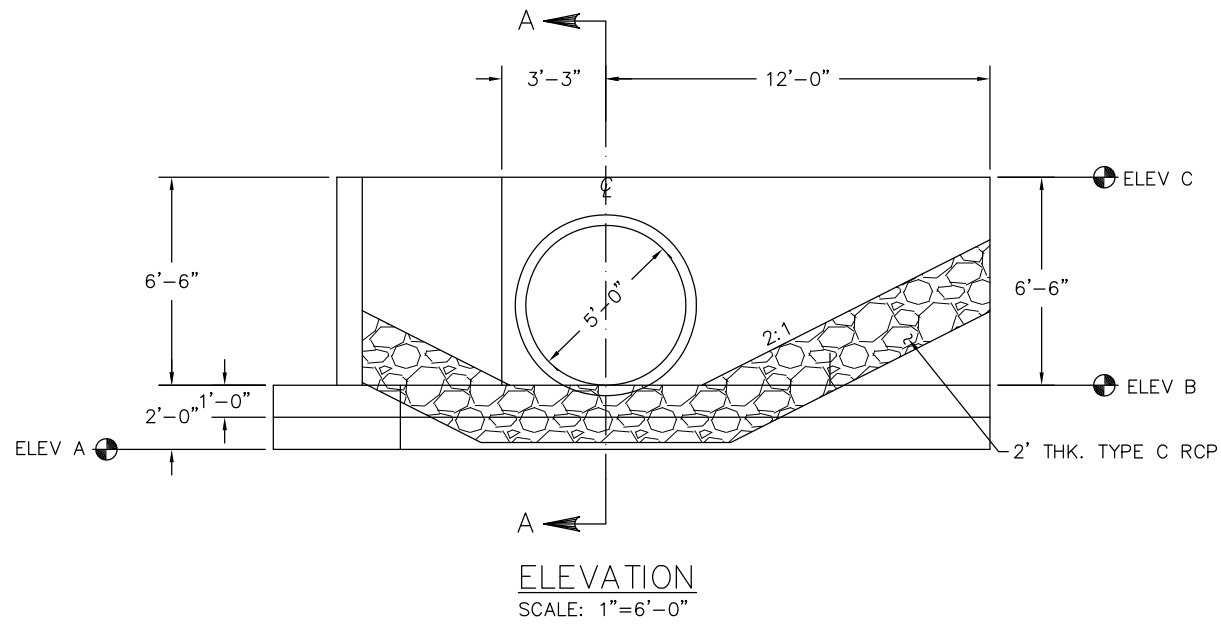
CR 110 CULVERT

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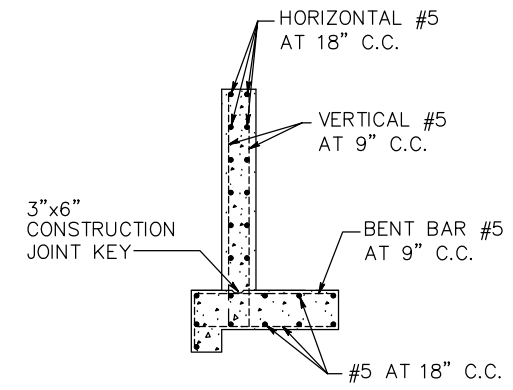
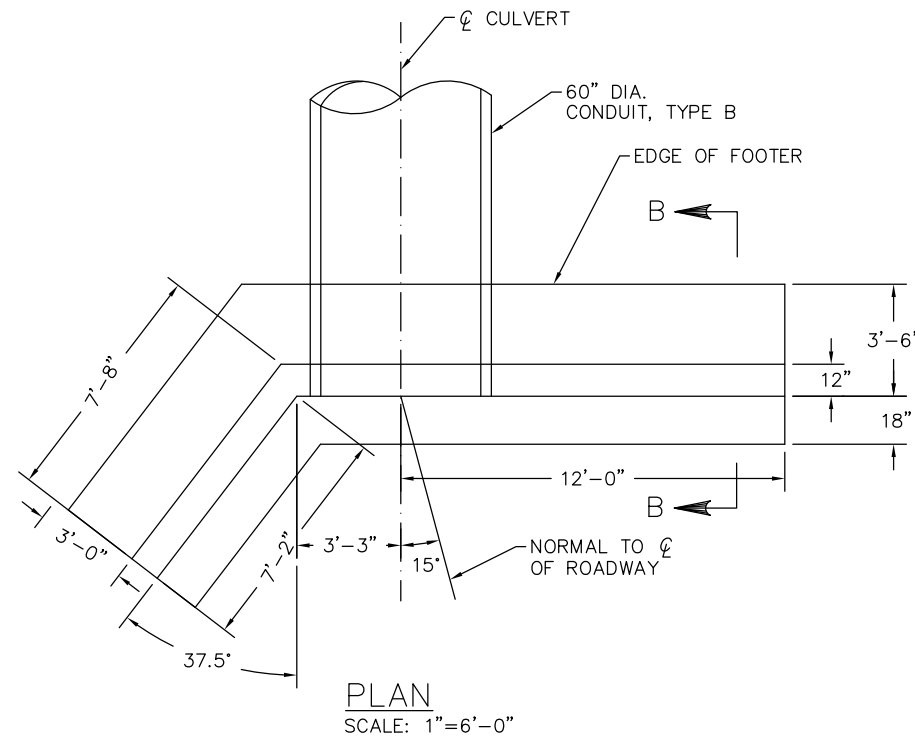
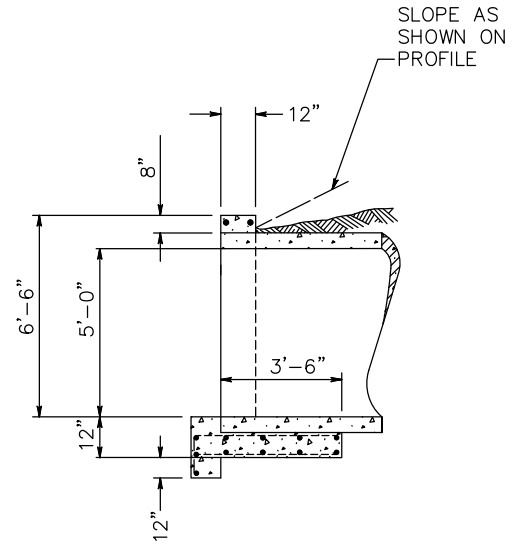
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ELEVATION	STRUCTURE	
	R1	R2
A	668.00	669.47
B	670.00	671.47
C	676.50	677.97



CALCULATED
BMW
CHECKED
DES

FULL-HEIGHT HEADWALL DETAILS

CR 110 CULVERT