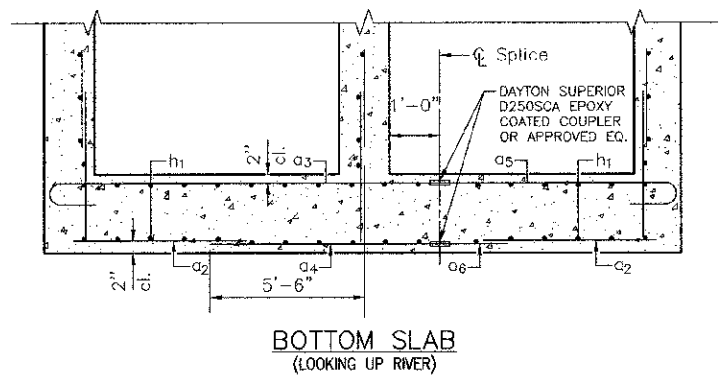
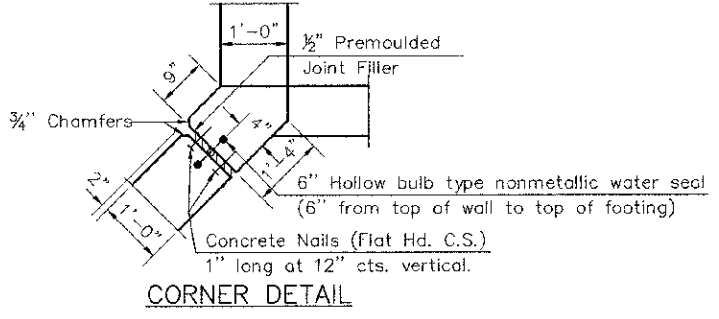
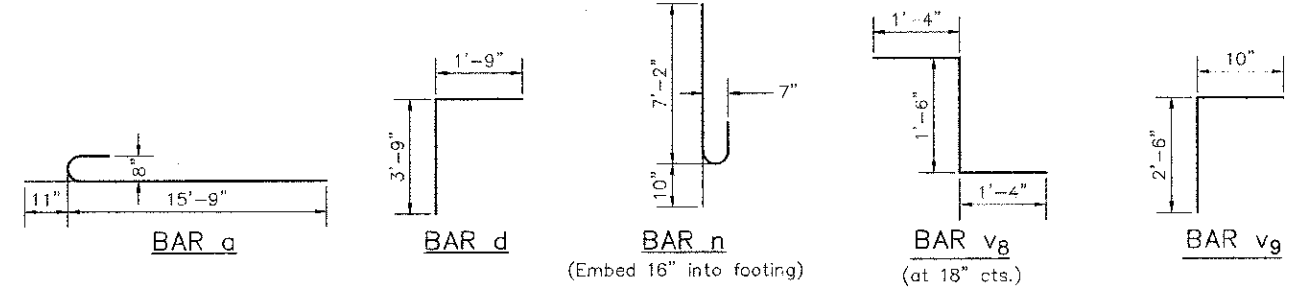


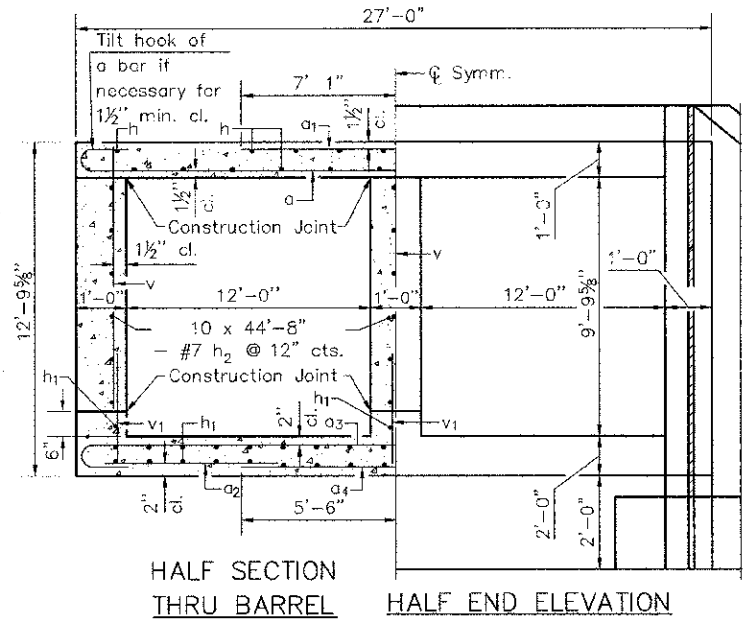
TOP OF CULVERT DETAILING

GENERAL NOTES

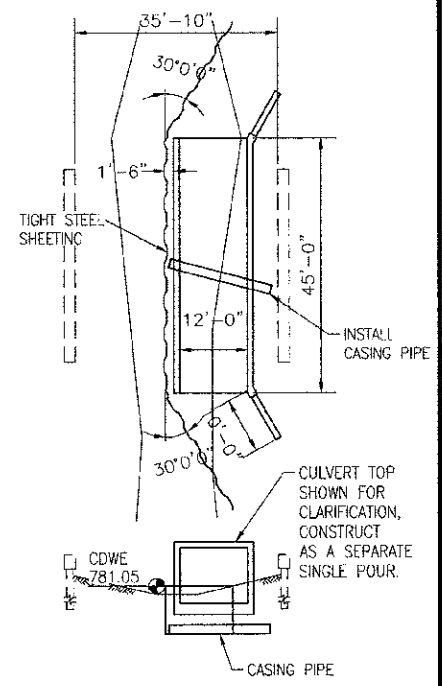
- FASTENERS SHALL BE ASTM A325 TYPE 1, MECHANICALLY GALVANIZED BOLTS (IN PAINTED AREAS AND ASTM A325 TYPE 3 IN UNPAINTED AREAS). BOLTS 3/4 IN. DIA., HOLES 1 1/8 IN. DIA., UNLESS OTHERWISE NOTED.
- NO FIELD WELDING IS PERMITTED EXCEPT AS SPECIFIED IN THE CONTRACT DOCUMENTS.
- REINFORCEMENT BARS DESIGNATED (E) SHALL BE EPOXY COATED.
- IF THE CONTRACTOR ELECTS TO USE CANTILEVER FORMING BRACKETS ON THE EXTERIOR BEAMS OR GIRDERS, THE BRACKETS SHALL BE PLACED AT THE SAME LOCATIONS AS REQUIRED FOR THE HARDWOOD BLOCKS IN ARTICLE 503.06(B) OF THE STANDARD SPECIFICATIONS. IF ADDITIONAL CANTILEVER FORMING BRACKETS ARE REQUIRED, HARDWOOD BLOCKING SHALL BE WEDGED BETWEEN THE EXTERIOR AND FIRST INTERIOR BEAM AT EACH OF THESE ADDITIONAL BRACKET LOCATIONS.
- PROTECTIVE COAT SHALL NOT BE APPLIED TO SURFACES TO WHICH WATERPROOFING MEMBRANE SYSTEM IS APPLIED.
- CONCRETE SEALER SHALL BE APPLIED TO THE DESIGNATED AREAS OF THE TOP SURFACE OF THE BOX CULVERT.
- THE EXISTING STRUCTURAL STEEL COATING CONTAINS LEAD. THE CONTRACTOR SHALL TAKE APPROPRIATE PRECAUTIONS TO DEAL WITH THE PRESENCE OF LEAD ON THIS PROJECT.
- LAYOUT OF THE SLOPE PROTECTION SYSTEM MAY BE VARIED TO SUIT GROUND CONDITIONS IN THE FIELD AS DIRECTED BY THE ENGINEER.
- THE EMBANKMENT CONFIGURATION SHOWN SHALL BE THE MINIMUM THAT MUST BE PLACED AND COMPACTED PRIOR TO CONSTRUCTION OF THE ABUTMENTS.
- THE CONTRACTOR SHALL OBTAIN A CONSTRUCTION PERMIT FROM THE ILLINOIS DEPARTMENT OF NATURAL RESOURCES (IDNR), OFFICE OF WATER RESOURCES FOR ANY TEMPORARY CONSTRUCTION ACTIVITY PLACED IN THE WATER EXCEPT COFFERDAMS. THIS SHALL INCLUDE THE PLACEMENT OF MATERIAL FOR RUN-AROUNDS, CAUSEWAYS, ETC. ANY PERMIT APPLICATION BY THE CONTRACTOR SHALL REFER TO THE IDNR 3704 FLOODWAY CONSTRUCTION PERMIT NUMBER ALLOWING PERMANENT CONSTRUCTION AS SHOWN IN THE CONTRACT PLANS.
- EXCAVATION BEHIND EXISTING ABUTMENT WALLS SHALL BE PERFORMED TO BALANCE FRONT AND BACK SOIL PRESSURE BEFORE REMOVING THE EXISTING SUPERSTRUCTURE. THE CONTRACTOR SHALL SAWCUT THE UPPER PORTION OF THE EXISTING ABUTMENT AT THE STAGE REMOVAL LINE BEFORE STAGE 1 REMOVAL TO ENSURE THE REMAINING PORTION WILL NOT BE PREMATURELY DAMAGED.
- THE CONTRACTOR SHALL CONNECT THE FIRST SHEET TO THE EXISTING ABUTMENT WALL TO ENSURE STABILITY OF SHEETS DRIVEN TO THE TOP OF THE EXISTING FOOTING. THIS CONNECTION SHALL BE REVIEWED AND ACCEPTED BY THE ENGINEER AND INCLUDED IN THE COST FOR TEMPORARY SHEET PILING.
- THE FOUNDATION DESIGN IS BASED ON THE FOLLOWING MAXIMUM REACTIONS APPLIED AT THE TOP OF THE FOOTING/PEDESTAL WALL:
 EXTERIOR FOOTINGS: (WINGWALLS) 16782 lbs/ft (VERTICAL)
 6933 lbs/ft (HORIZONTAL)
 INTERIOR FOOTINGS: (CTR. WALL BOX CULVERT) 46214 lbs/ft (VERTICAL)
 THE CONTRACTOR SHALL VERIFY THAT THE SELECTED STRUCTURE MEETS THESE DESIGN PARAMETERS. IF THE DESIGN PARAMETERS ARE EXCEEDED, A COMPLETE FOUNDATION DESIGN WITH CALCULATIONS, DETAILS, AND THE REQUIRED SEALS SHALL BE SUBMITTED FOR REVIEW AND APPROVAL.



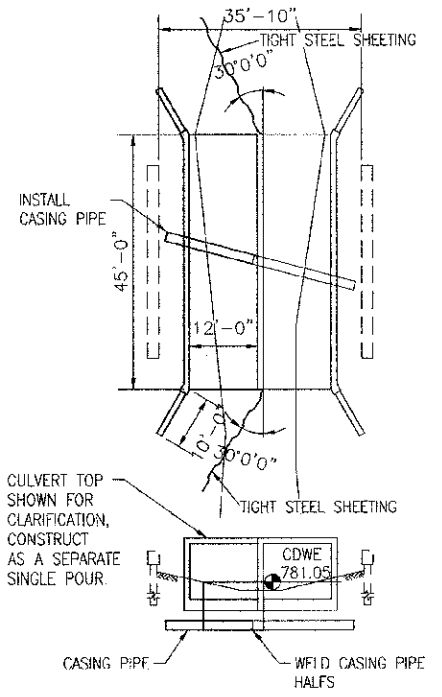
BOTTOM SLAB (LOOKING UP RIVER)



HALF SECTION THRU BARREL HALF END ELEVATION



COFFERDAM DETAIL CONSTRUCT NORTH BARREL SCALE: NONE



COFFERDAM DETAIL CONSTRUCT SOUTH BARREL SCALE: NONE

- Notes:
- All reinforcement bars shall be epoxy coated.
 - a & a3 lap is 58"; h, h1, h2 & h3 lap is 60"; h6 lap is 20"; All other laps are 24 bar diameter.

Nov 08, 2012 - 9:05pm \\system\cod\02841.DS\02841DS-12 - GPE Details n Notes.dwg

REVISIONS: 10-22-12 JR REVISED PLANS PER COMMENTS FROM IDOT, HANOVER PARK, & NORTH COOK SWCD. 11-08-12 JR REVISED PLANS PER COMMENTS FROM IDOT DATED 11-02-12.		DATE BY DESCRIPTION		DATE BY DESCRIPTION		PLOTTED BY: DRD CHECKED BY: RFP DRAWN BY: DRD CHECKED BY: RFP APPROVED BY: DAW	PMO Engineers Pavia-Marting & Co. 910 W. Lake St. Roselle, IL 60172 630-529-8000 Fax: 630-894-4910 <small>Design Firm Professional Registration #18/0002376</small>	TITLE: LONGMEADOW LANE BOX CULVERT REPLACEMENT HANOVER PARK, IL S.N. 016-6046 GPE DETAILS & GEN. NOTES	SCALE: NONE DATE: 10/15/2012 JOB NO: 02841.05 SHEET: 12 OF 20
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