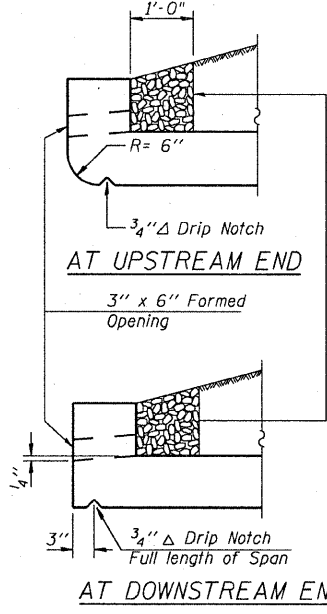
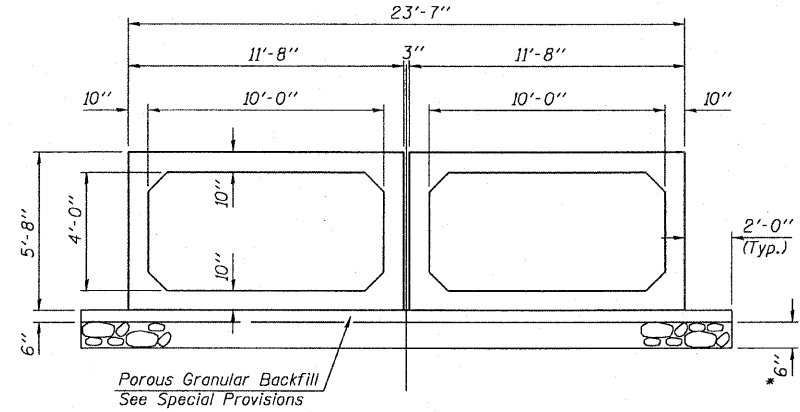


**PLAN**  
West End Shown  
East End Similar  
by Rotating 180°

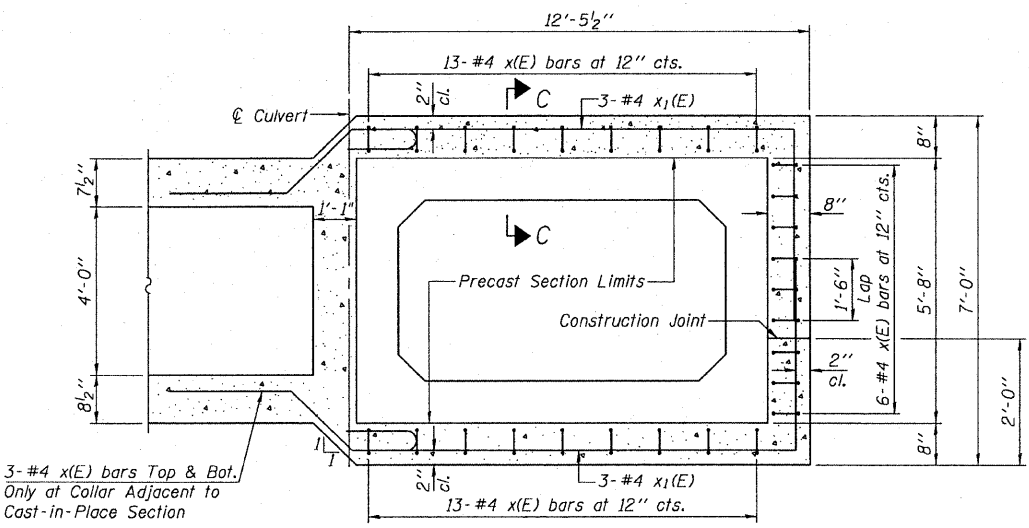
\*Limits of Rock Excavation for Structures  
and Porous Granular Embankment (Special)



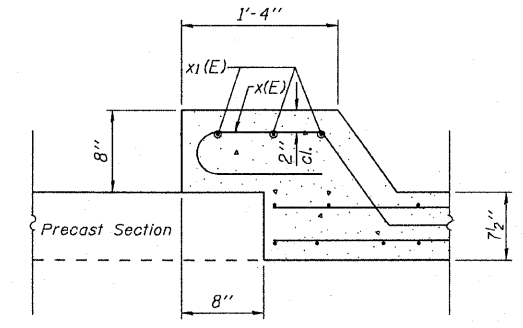
**DRAIN DETAIL**



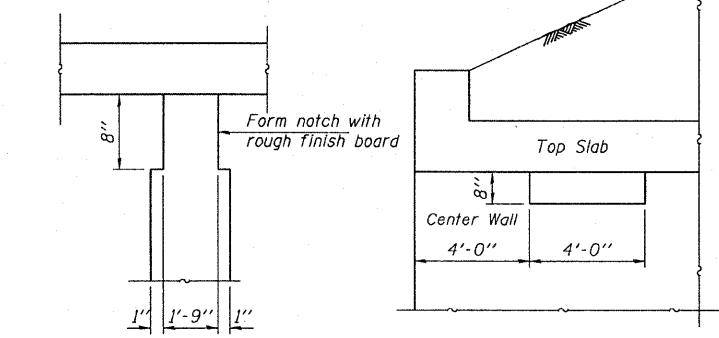
**SECTION THRU PRECAST BARREL**



**SECTION B-B**  
Thru Cast-in-Place Collar

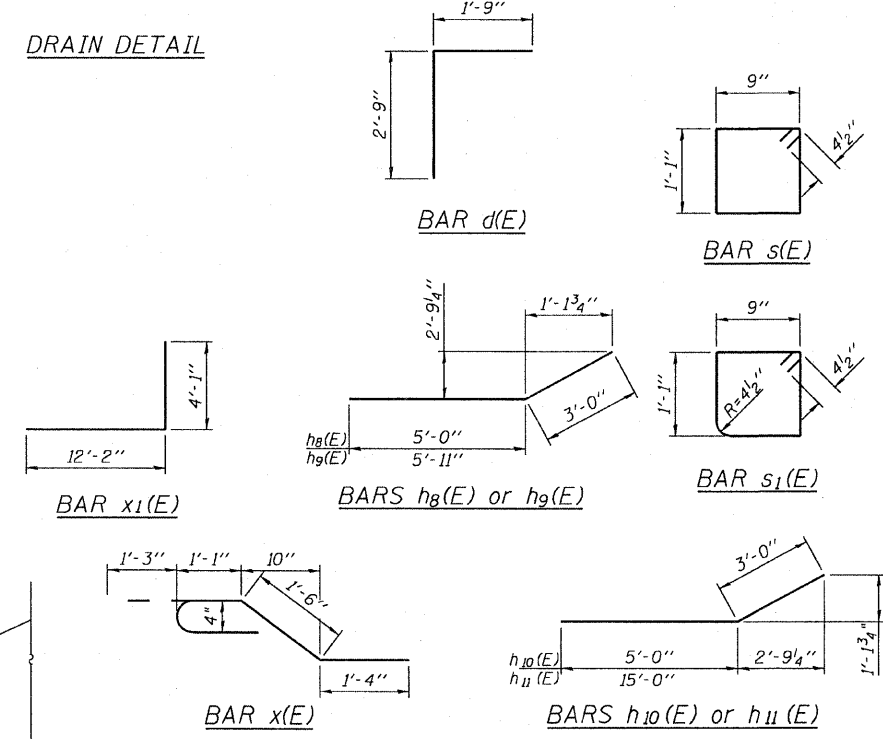


**SECTION C-C**



**CENTER NESTING LEDGE**  
(Center wall, downstream end only,  
4' long, 4' from the end.)

**DOWNSTREAM END**  
(Showing Phoebe Nesting Ledge)



**SCHEDULE OF V(E) BARS IN CULVERT WALLS**

EAST END OF CULVERT			
NORTH WALL	CENTER WALL		SOUTH WALL
SOUTH FACE	NORTH FACE	SOUTH FACE	NORTH FACE
15-#4 v(E) at 9" cts.	28-#4 v(E) at 9" cts.	7-#4 v(E) at 9" cts.	20-#4 v(E) at 9" cts.

WEST END OF CULVERT			
NORTH WALL	CENTER WALL		SOUTH WALL
SOUTH FACE	NORTH FACE	SOUTH FACE	NORTH FACE
20-#4 v(E) at 9" cts.	7-#4 v(E) at 9" cts.	28-#4 v(E) at 9" cts.	15-#4 v(E) at 9" cts.

**WATERWAY INFORMATION TABLE**

Drainage Area = 200.0 acres  
Existing Low Grade Elevation: 893.38 ft. @ STA. 607+76  
Proposed Low Grade Elevation: 893.38 ft. @ STA. 607+76

Flood	Frequency	Discharge	Headwater Elev. (ft.)	
	Year	cfs	Existing	Proposed
Ten-Year	10	294	893.72	892.35
Design	50	413	894.04	893.00
Base	100	469	894.16	893.00
OVT (E)	2	209	893.38	
OVT (P)	108	480		893.38

10-Year Velocity through Existing Culvert = 10.8 fps  
10-Year Velocity through Proposed Culvert = 4.3 fps

Work this Sheet with Sheet 1 of 2.

ILLINOIS DEPARTMENT OF TRANSPORTATION

SHEET TITLE: **CULVERT DETAILS**

PROJECT: FAS ROUTE 1087 (IL. ROUTE 73) SECTION 1077-1 STEPHENSON COUNTY STATION 609+82.56 STRUCTURE NUMBER 089-1111

PROJECT NO. 07075  
DATE: 01/07/08  
DRAWN BY: TFG  
CHECKED BY: BD/KPS/MCB  
DRAWING NO.

**COOMBE-BLOXDORF P.C.**  
Engineers / Land Surveyors  
Springfield, Illinois  
Design Firm License No. 184-002703

2  
OF 2 SHTS

PLOT DATE = 01/23/2008  
FILE NAME = \\sbs\cuser\1821136\m2.dgn  
PLOT SCALE = 0.25000 1" = 10'  
USER NAME = CTC