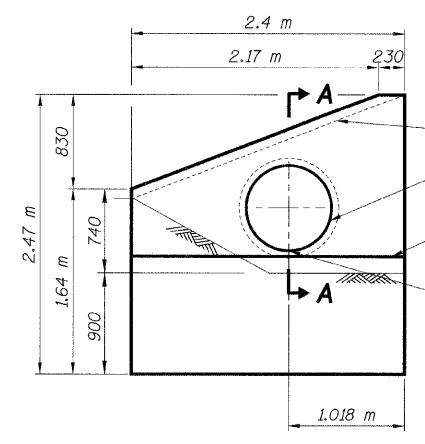
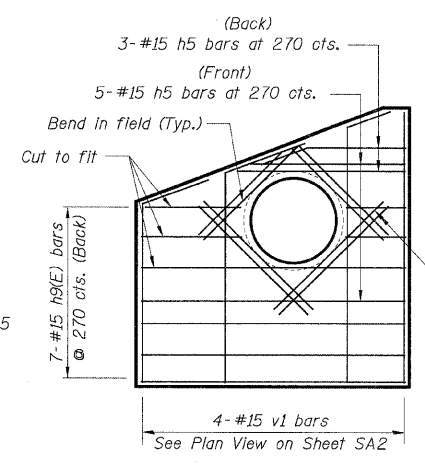


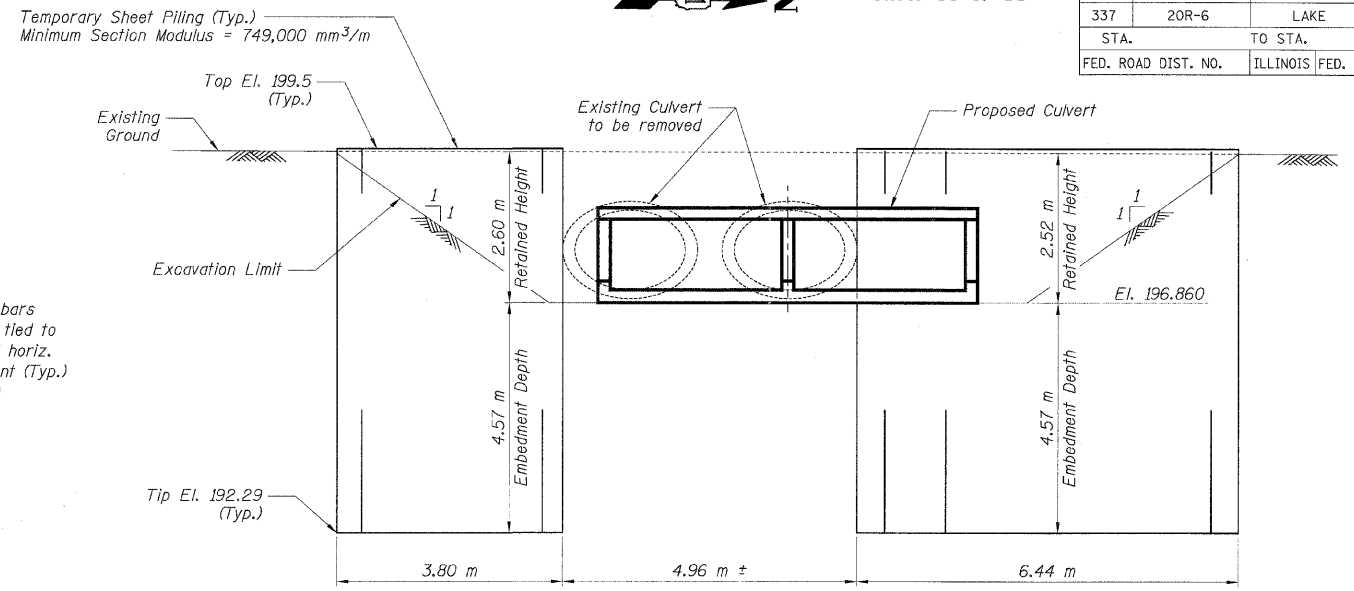
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
337	20R-6	LAKE	149	89
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



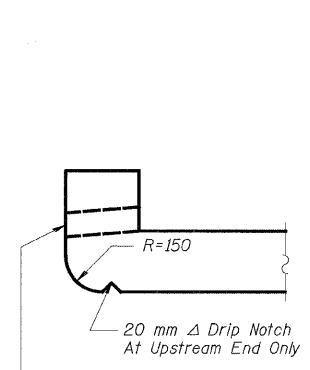
**S-E WINGWALL ELEVATION**



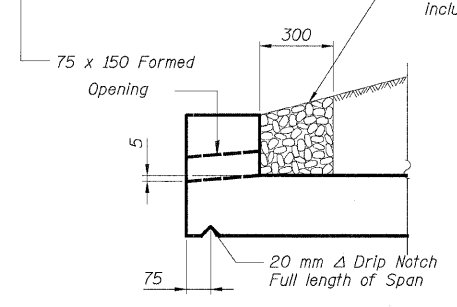
**S-E WINGWALL REINFORCEMENT**



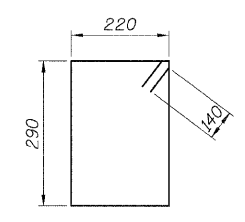
**TEMPORARY SHEET PILING ELEVATION**



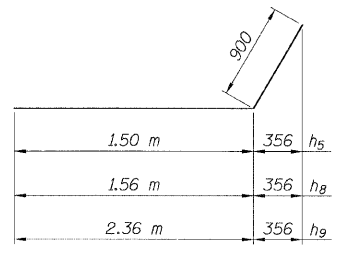
**SECTION A-A**



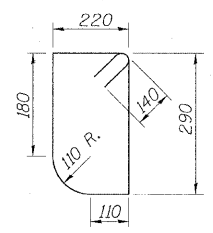
**DRAIN DETAIL**



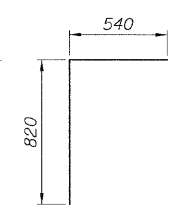
**BAR s**



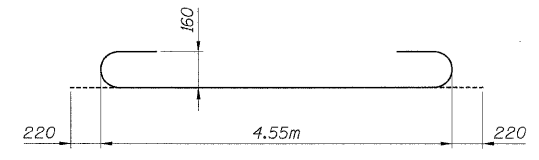
**BARS h5, h8 & h9**



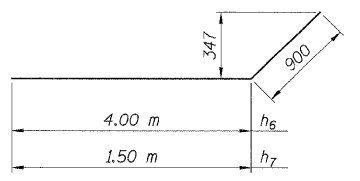
**BAR s1**



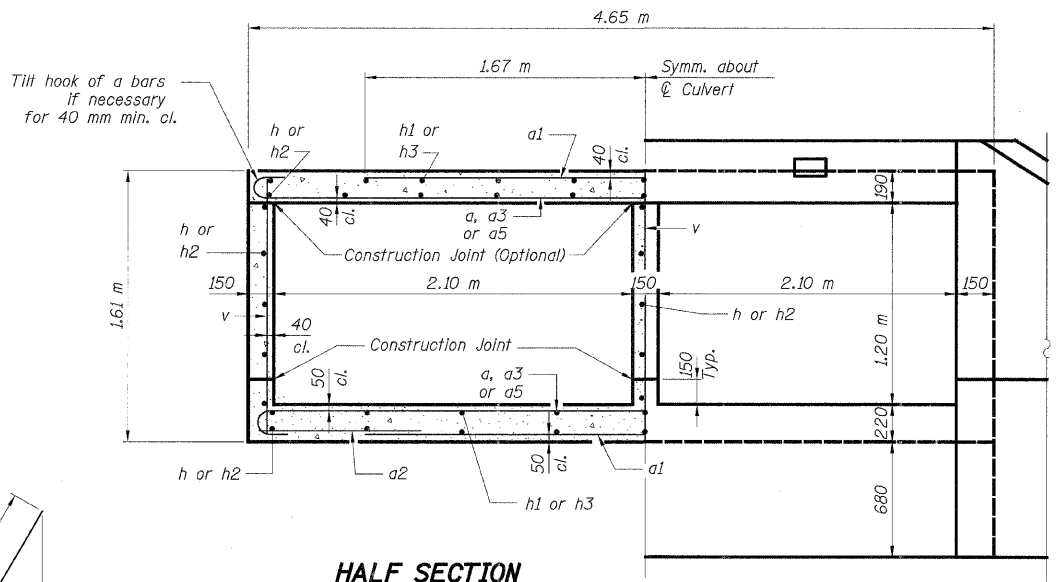
**BAR d**



**BAR a**



**BARS h6 & h7**



**HALF SECTION THRU BARREL**

**HALF END ELEVATION**

MIN. LAP SPLICE	
Bar Size	Min. Lap
#15	640
#20	790
#25	1,320

**BILL OF MATERIAL**

Bar	No.	Size	Length (m)	Shape
a	412	#20	4.99	U
a1	368	#20	3.34	—
a2	184	#15	1.25	—
d	32	#15	1.36	—
d1	8	#15	1.35	—
h	105	#15	9.22	—
h1	80	#15	7.08	—
h2	105	#15	8.90	—
h3	80	#15	6.83	—
h4	40	#20	6.25	—
h5	15	#15	2.40	—
h6	14	#20	4.90	—
h7	14	#20	2.40	—
h8	6	#15	2.46	—
h9	7	#15	3.26	—
s	105	#15	1.30	—
s1	21	#15	1.25	—
v	715	#15	1.52	—
v1	16	#15	2.38	—
Concrete Box Culverts		m <sup>3</sup>	137.7	
Reinforcement Bars		kg	15,890	
Bar Splicers		Each	55	

- Notes:**
1. Bars indicated thus 12 x 4-#15 etc. indicates 12 lines of bars with 4 lengths per line.
  2. All dimensions are in millimeters (mm) except as noted.
  3. Information for the Temporary Sheet Piling shown on this drawing is estimated. If Contractor chooses to alter the temporary cantilevered sheet piling design requirements shown on the plans for lesser design requirements, then full design submittals with the required seals will be expected by the Department, for review and approval.

REVISIONS	
NAME	DATE

**ILLINOIS DEPARTMENT OF TRANSPORTATION**

**CULVERT DETAILS II**  
ILLINOIS ROUTE 22 OVER  
INDIAN CREEK TRIBUTARY

FAP 337 SECTION 20R-6  
STRUCTURE NUMBER 049-0233  
LAKE COUNTY STATION 104+951.34

SCALE: NONE DRAWN BY: E. MROTCZEK  
DATE: 1/28/2009 CHECKED BY: G. HATLESTAD

P:\L\ale\DOT\917\AO\Drawings\STRUCT\Indian\_Creek\_Trib\array\03\_culdet2.dgn  
 T:\koeppen\rdwy.L\isle\2/5/2009 5:17:14 PM  
 PATRICK ENGINEERING INC. LISLE, ILLINOIS