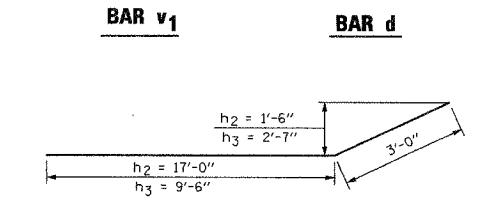
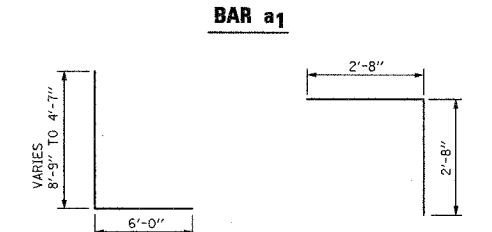
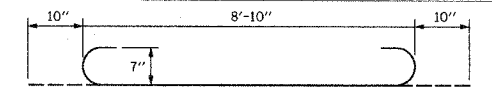
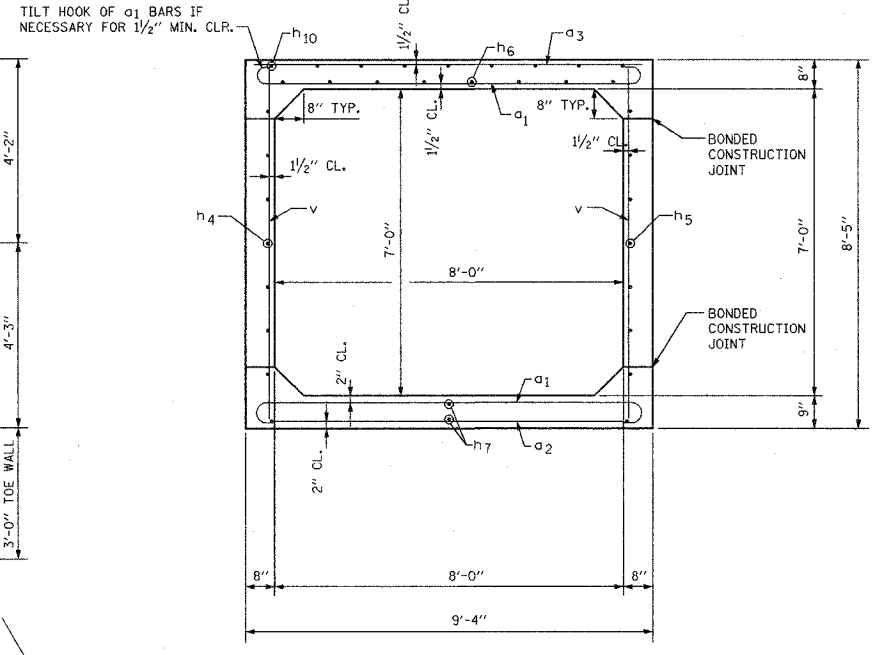
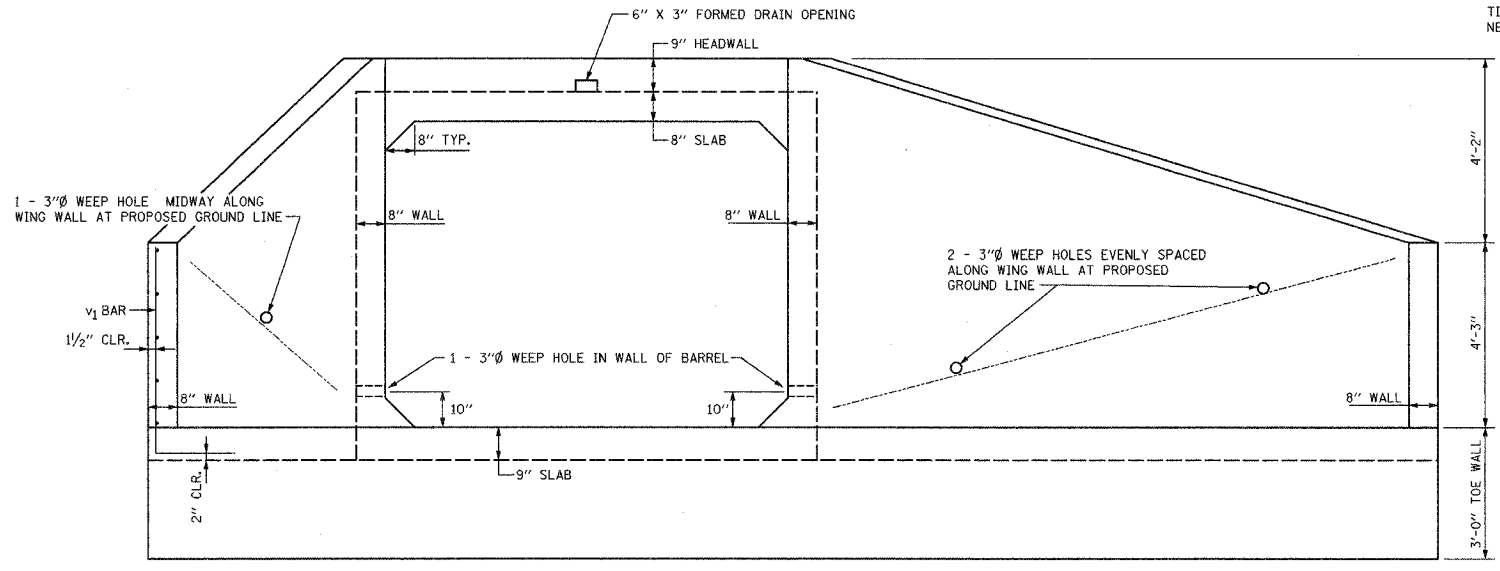


F.A.P. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
315	(55-2)A	McDONOUGH	55	22A
STA.		TO STA.		
FED. ROAD DIST. NO. 4 ILLINOIS FED. AID PROJECT				



END ELEVATION

SECTION A-A

BILL OF MATERIAL
(For Two End Sections)

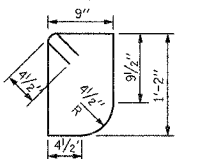
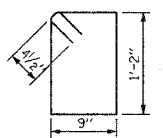
Bar	No.	Size	Length	Shape
* a1	48	#7	10'-6"	C
a2	6	#4	9'-0"	
* a3	8	#5	9'-0"	
* b	24	#4	11'-0" TO 29'-1"	
d	40	#4	5'-4"	
h	4	#6	10'-5"	
h1	4	#6	9'-0"	
h2	18	#6	20'-0"	
h3	18	#6	12'-6"	
h4	14	#6	3'-0"	
h5	8	#6	8'-0"	
* h6	8	#6	11'-6"	
* h7	14	#5	31'-0"	
* h8	10	#5	12'-3"	
* h9	10	#5	13'-3"	
* h10	10	#4	11'-6"	
s	10	#4	4'-7"	
s1	10	#4	4'-5"	
v	32	#4	8'-1"	
* v1	54	#6	13'-9" TO 10'-7"	
x	84	#4	6'-2"	
x1	12	#4	9'-4"	
x2	12	#4	14'-4"	
* MAY FIELD BEND AND/OR FIELD CUT				
Box Culvert End Section, Culvert No. 1	Each			2

- 1) 7 - #7 a1 BARS AT 6" CTS. TOP OF BOTTOM SLAB AND BOTTOM OF TOP SLAB
- 2) 3 - #5 a3 BARS AT 18" CTS. TOP OF TOP SLAB

- 3 - #4 a2 BARS AT 12'-0" CTS. BOTTOM OF BOTTOM SLAB ONLY

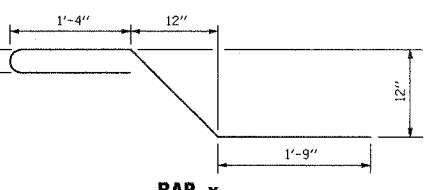
- 5 - #4 v AT 10" CTS. IN WALL
- 7 - #6 h4 BARS AT 12" CTS. IN WALL

- 1) 10 - #7 a1 BARS AT 6" CTS. TOP OF BOTTOM SLAB AND BOTTOM OF TOP SLAB.
- 2) 2 - #5 a3 BARS AT 18" CTS. TOP OF TOP SLAB.
- ORDER a1 AND a3 FULL LENGTH AND CUT TO FIT. BALANCE OF BAR TO BE USED IN END SECTION AT OPPOSITE END OF CULVERT.
- 7 - #6 h5 BARS AT 12" CTS. IN WALL
- 1) 8 - #6 h6 BARS AT 13" CTS. BOTTOM OF TOP SLAB;
- 2) 10 - #4 h10 BARS AT 12" CTS. TOP OF TOP SLAB.
- ORDER h6 AND h10 FULL LENGTH AND CUT TO FIT. BALANCE OF BAR TO BE USED IN END SECTION AT OPPOSITE END OF CULVERT.

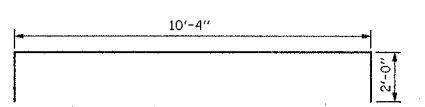


BAR s

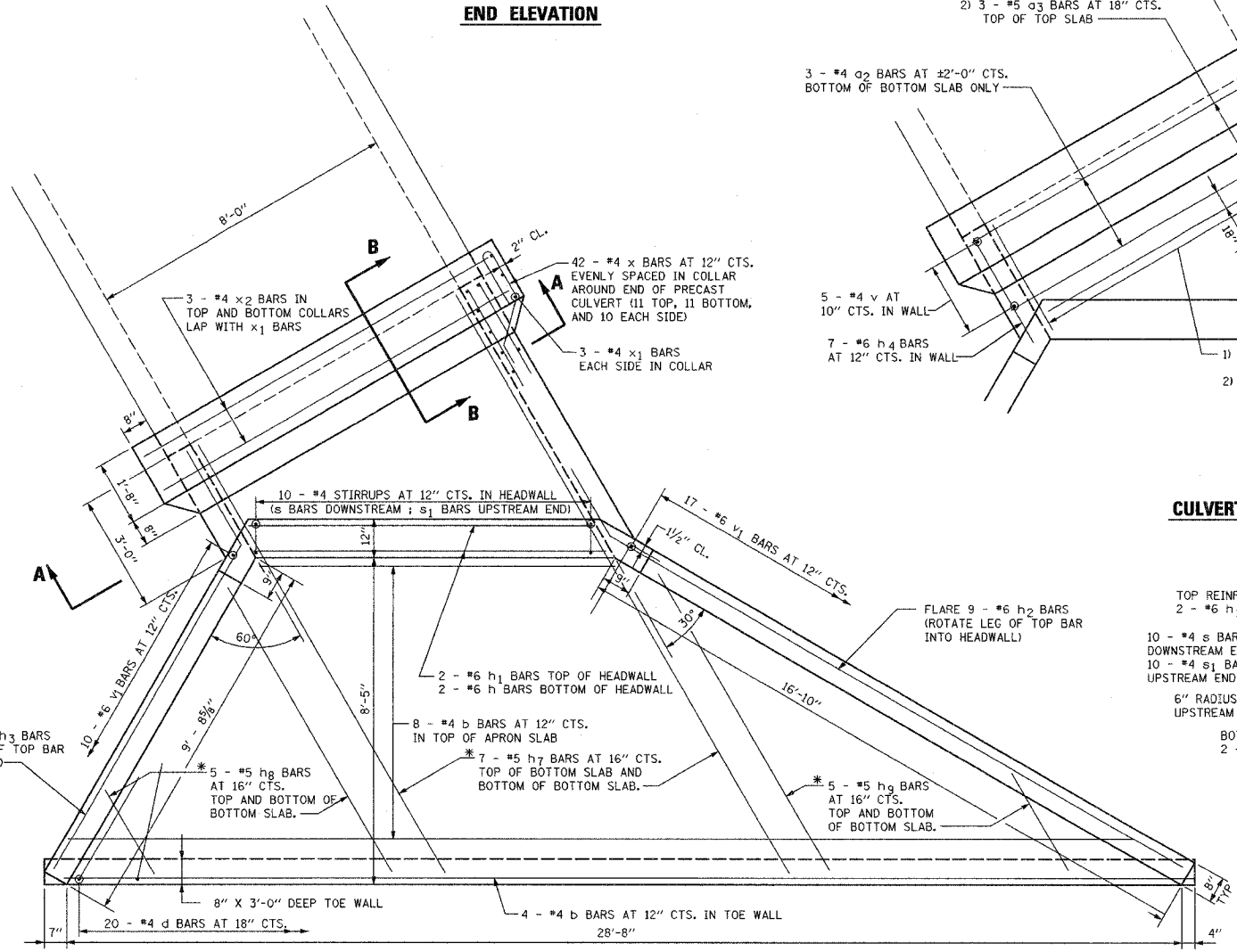
BAR s1



BAR x

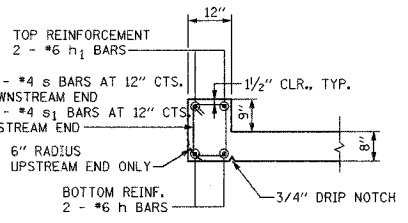


BAR x2

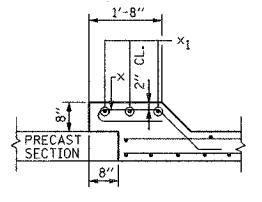


PLAN

CULVERT SLAB PLAN



SECTION THRU HEADWALL



SECTION B-B THRU COLLAR

DESIGN STRESSES

fy = 60,000 psi
f'c = 3,500 psi

LOADING HS 20-44

REVISED
11-2-05

SHEET ADDED

NOTES

1. THE BARREL SHALL BE POURED MONOLITHICALLY WITH THE WINGWALLS.
2. REINFORCEMENT BARS SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M-31 OR M-322, GRADE 60.
3. CHAMFER EXPOSED EDGES 3/4".
4. ALL CONSTRUCTION JOINTS SHALL BE BONDED.
5. THE PRICE FOR BOX CULVERT END SECTION, CULVERT NO. 1, SHALL BE PAYMENT IN FULL FOR ALL LABOR AND MATERIALS NECESSARY TO CONSTRUCT THE END SECTION AS SHOWN ON THE PLANS INCLUDING CONCRETE COLLARS, REINFORCEMENT BARS, CONCRETE, CAST-IN-PLACE SECTIONS OF THE BARREL AND ALL OTHER COLLATERAL WORK.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
BOX CULVERT END SECTION, CULVERT NO. 1
DETAILS
CENTERLINE STA. 510 + 17.89
IL. ROUTE 336

DATE 11/01/05

DRAWN BY DLC
CHECKED BY P.JL