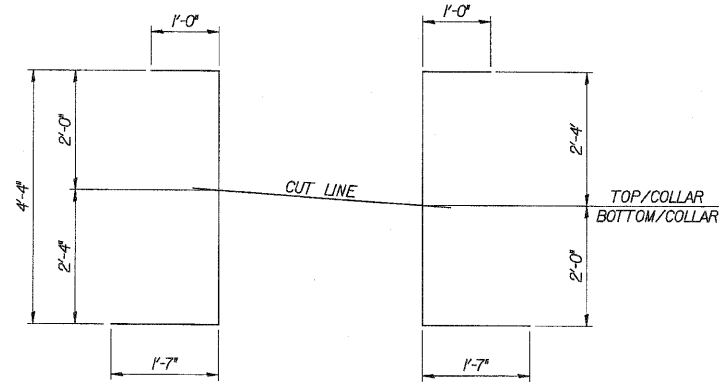


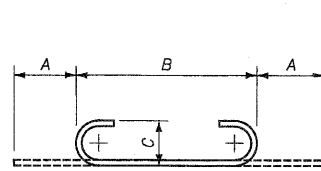
* SECT. (12 & 13) WRS-3
* CONTRACT NO. 62479

BILL OF MATERIAL

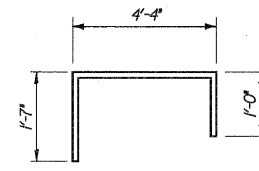
Bar	No.	Size	Length	Shape
a	56	7	10'-4"	[Diagram]
a1	13	5	8'-8"	[Diagram]
a2	9	4	8'-8"	[Diagram]
a3	17	4	5'-8"	[Diagram]
a4	4	4	4'-8"	[Diagram]
d	5	4	6'-11"	[Diagram]
d1	2	6	4'-7"	[Diagram]
d2	2	6	4'-1"	[Diagram]
d3	5	4	8'-6"	[Diagram]
d4	5	4	2'-0"	[Diagram]
d5	8	5	4'-7"	[Diagram]
d6	5	5	9'-7"	[Diagram]
d7	5	4	4'-5"	[Diagram]
d8	5	4	3'-10"	[Diagram]
d9	19	5	2'-8"	[Diagram]
d10	4	4	5'-8"	[Diagram]
h	5	4	12'-10"	[Diagram]
h1	4	4	15'-1"	[Diagram]
h2	4	6	12'-10"	[Diagram]
h3	4	6	15'-1"	[Diagram]
h4	14	5	15'-1"	[Diagram]
h5	14	6	15'-1"	[Diagram]
h6	12	6	8'-8"	[Diagram]
h7	5	5	8'-8"	[Diagram]
h8	11	5	5'-10"	[Diagram]
h9	8	5	5'-4"	[Diagram]
h10	8	5	4'-0"	[Diagram]
h11	8	5	3'-1"	[Diagram]
h12	4	5	3'-9"	[Diagram]
h13	8	5	3'-0"	[Diagram]
h14	7	5	6'-9"	[Diagram]
h15	10	4	6'-9"	[Diagram]
h16	4	5	6'-9"	[Diagram]
h17	3	6	4'-5"	[Diagram]
h18	4	6	3'-9"	[Diagram]
h19	12	4	6'-10"	[Diagram]
h20	8	4	8'-0"	[Diagram]
h21	2	4	8'-8"	[Diagram]
v	49	4	7'-7"	[Diagram]
v1	6	4	3'-10"	[Diagram]
v2	18	4	2'-9"	[Diagram]
v3	4	4	4'-11"	[Diagram]
v4	2	4	5'-9"	[Diagram]
x	6	4	8'-2"	[Diagram]
x1	4	4	4'-4"	[Diagram]
x2	4	4	3'-10"	[Diagram]
x3	12	4	5'-10"	[Diagram]
x4	12	4	3'-10"	[Diagram]
x5	20	4	5'-1"	[Diagram]
CONCRETE BOX CULVERTS			CU. YD.	19.4
REINFORCEMENT BARS			POUND	3,690



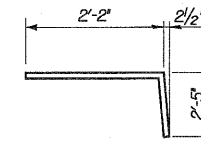
BAR d
5 BARS-1 SET



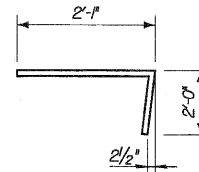
BAR a, a3 OR x



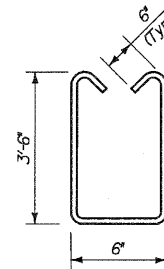
BAR d



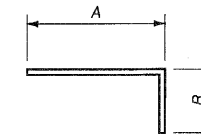
BAR d1



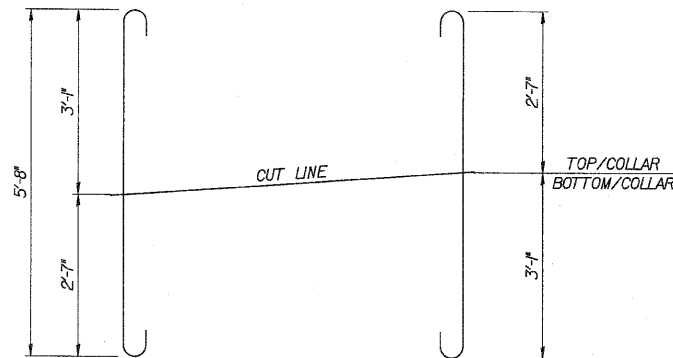
BAR d2



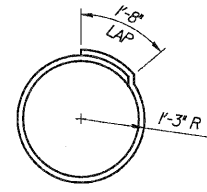
BAR d3



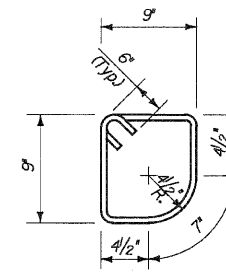
BARS d4, d5, d7, d9, OR d10



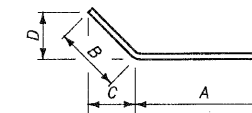
BAR x
6 BARS-1 SET



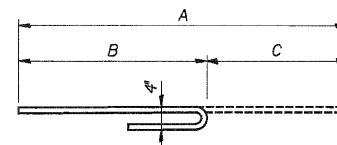
BAR d6



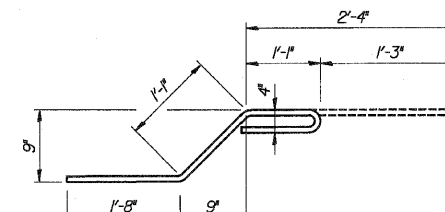
BAR d8



BARS h19 THRU h20



BARS x1 THRU x2



BAR x5

BAR CUTTING DIAGRAMS

ORDER BARS FULL LENGTH. CUT AS SHOWN AND USE REMAINDER OF BARS IN BOTTOM OF CONNECTION COLLAR.

BAR BENDING DIAGRAMS

Bar	A		B		C		D	
	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.
a	0	10	8	8	0	7		
a3	0	6	4	8	0	4		
d4	1	7	0	5				
d5	1	4	3	3				
d7	2	8	1	9				
d9	1	4	1	4				
d10	4	4	1	4				
h19	3	10	3	0	2	1/2	2	1/2
h20	5	0	3	0	2	1/2	2	1/2
x	1	3	5	8	0	4		
x1	4	4	3	1	1	3		
x2	3	10	2	7	1	3		

DESIGNED	ASP
CHECKED	CDS
DRAWN	BEM
CHECKED	ASP

REVISIONS	
NAME	DATE

DLZ 85 W. Algonquin Rd. Ste. 220
Arlington Heights IL 60005

CULVERT 'L'
BARBILL & DETAILS
U.S. ROUTE 30 (LINCOLN HIGHWAY)
F.A.P. 353 (U.S. 30)
SECTION (12 & 13) WRS-3
STATION 387+33.00
WILL COUNTY
STRUCTURE NUMBER 099-C017