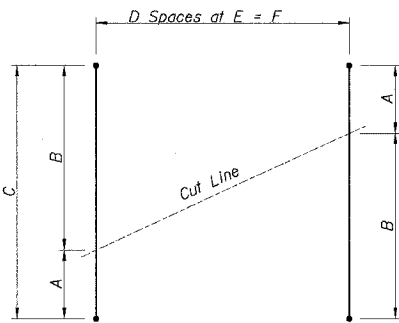


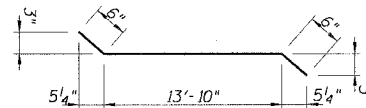
DETAIL B

Furnishing and installing Non-Metallic Sleeve and Non-Shrink Grout is included in the cost of "Concrete Box Culverts". See Sheet M-2 for pipe details.

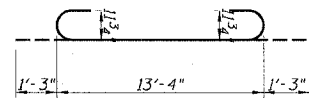


CUTTING DIAGRAM

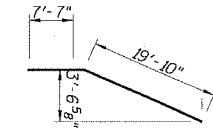
Bar	A	B	C	D	E	F
a1(E)	2'-0"	14'-0"	16'-0"	5	18"	7'-6"
a2(E)	12'-4"	14'-0"	26'-4"	6	18"	9'-0"
a5(E)	2'-1"	12'-3"	14'-4"	3	22"	5'-6"
a6(E)	1'-8"	12'-0"	16'-2"	12	6"	6'-0"
a9(E)	3'-0"	15'-0"	20'-6"	18	6"	9'-0"
h9(E)	9'-10"	18'-1"	27'-11"	12	12"	12'-0"



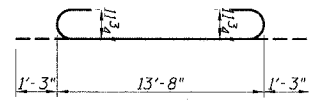
BARS a10(E) & a11(E)



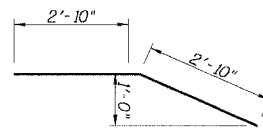
BAR a4(E)



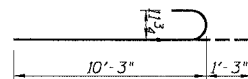
BAR h14(E)



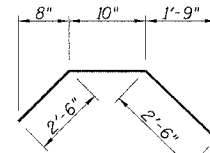
BAR a6(E)



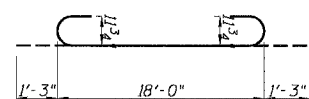
BAR h19(E)



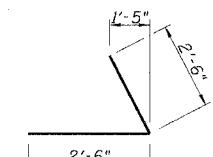
BAR a8(E)



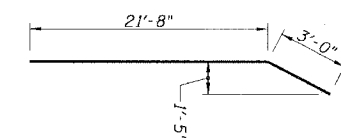
BAR h20(E)



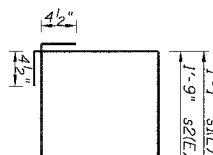
BAR a9(E)



BAR h21(E)



BARS h17(E), h18(E)



BARS s1(E), s2(E)

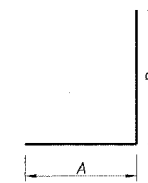
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a1(E)	6	#5	16'-0"	—
a2(E)	7	#5	26'-4"	—
a3(E)	34	#4	12'-3"	—
a4(E)	262	#9	15'-10"	—
a5(E)	8	#5	14'-4"	—
a6(E)	26	#9	16'-2"	—
a7(E)	12	#4	3'-0"	L
a8(E)	72	#9	11'-6"	—
a9(E)	19	#9	20'-6"	—
a10(E)	8	#6	14'-10"	—
a11(E)	16	#10	14'-10"	—
a12(E)	45	#5	12'-3"	—
d1(E)	19	#6	3'-0"	—
d2(E)	6	#4	2'-3"	—
d3(E)	34	#6	3'-0"	—
h1(E)	26	#4	22'-3"	—
h2(E)	80	#7	25'-8"	—
h3(E)	26	#7	22'-6"	—
h4(E)	13	#7	8'-6"	—
h5(E)	26	#4	17'-6"	—
h6(E)	26	#7	18'-5"	—
h7(E)	52	#7	17'-9"	—
h9(E)	26	#7	27'-11"	—
h10(E)	6	#6	12'-0"	—
h11(E)	50	#6	21'-9"	—
h12(E)	20	#6	25'-3"	—
h13(E)	20	#6	8'-0"	—
h14(E)	10	#6	27'-5"	—
h15(E)	10	#6	8'-5"	—
h16(E)	10	#6	19'-5"	—
h17(E)	4	#10	24'-8"	—
h18(E)	24	#6	24'-8"	—
h19(E)	40	#6	5'-8"	—

BILL OF MATERIAL (cont.)

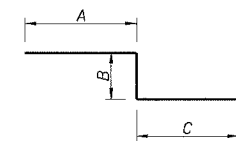
Bar	No.	Size	Length	Shape
h20(E)	10	#6	5'-10"	—
h21(E)	10	#6	5'-0"	—
h22(E)	4	#9	16'-8"	—
h23(E)	24	#5	16'-8"	—
h24(E)	10	#5	4'-8"	—
h25(E)	20	#6	7'-0"	—
h26(E)	8	#5	2'-6"	—
h27(E)	26	#7	25'-0"	—
s1(E)	64	#4	5'-1"	—
s2(E)	47	#4	5'-9"	—
v1(E)	364	#4	9'-3"	—
v2(E)	364	#4	2'-7"	—
v3(E)	22	#5	8'-4"	—
v4(E)	14	#7	15'-11"	—
v5(E)	16	#5	9'-4"	—
v6(E)	32	#7	10'-7"	—
v7(E)	16	#5	6'-1"	—
v8(E)	16	#7	7'-4"	—
v9(E)	10	#7	18'-11"	—
v10(E)	14	#5	10'-9"	—
v11(E)	27	#7	12'-0"	—
v12(E)	14	#6	5'-0"	—
v13(E)	14	#7	7'-8"	—
Bar Splicers			Ea	72
Concrete Box Culverts			Cu. Yd.	147
Concrete Superstructure			Cu. Yd.	8
Controlled Low-Strength Material			Cu. Yd.	440
Protective Coat			Sq. Yd.	18
Reinforcement Bars, Epoxy Coated			Pound	48,430
Removal of Existing Structures			L. Sum	1
Structure Excavation			Cu. Yd.	1695
Sub-base Granular Material, Type B			Cu. Yd.	450
Temporary Soil Retention System			Sq. Ft.	1050
Waterproofing Membrane System			Sq. Yd.	119

Reinforcement bars designated (E) shall be epoxy coated.



BARS a7(E), h24(E), h25(E), v5(E), v6(E), v7(E), v8(E), v10(E) & v11(E)

Bar	A	B
a7(E)	1'-6"	1'-6"
a13(E)	1'-3"	1'-3"
h24(E)	2'-2"	2'-6"
h25(E)	3'-6"	3'-6"
v5(E)	2'-2"	7'-2"
v6(E)	3'-5"	7'-2"
v7(E)	2'-2"	3'-11"
v8(E)	3'-5"	3'-11"
v10(E)	2'-2"	8'-7"
v11(E)	3'-5"	8'-7"



BARS h4(E) & v12(E)

Bar	A	B	C
h4(E)	4'-8"	3"	3'-5"
v12(E)	2'-6"	3"	2'-3"

REVISION	
DATE	DESCRIPTION

PLANS PREPARED BY:

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