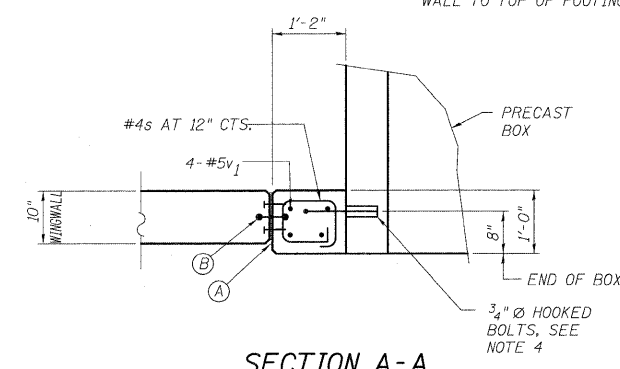
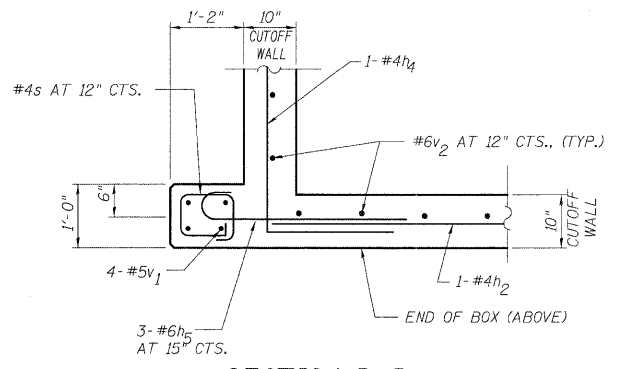


HEADWALL ELEVATION

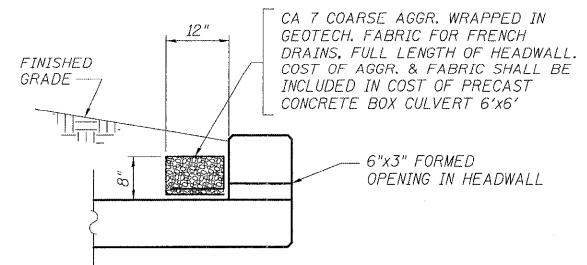
- (A) 1/2" PREMOULDED JOINT FILLER, INSTALL w/ 2 COLUMNS OF CONC. NAILS (FLAT HD. C.S.), 1" LONG, AT 12" CTS., VERTICAL.
- (B) 6" HOLLOW BULB TYPE NONMETALLIC WATER SEAL (6" FROM TOP OF WALL TO TOP OF FOOTING).



SECTION A-A



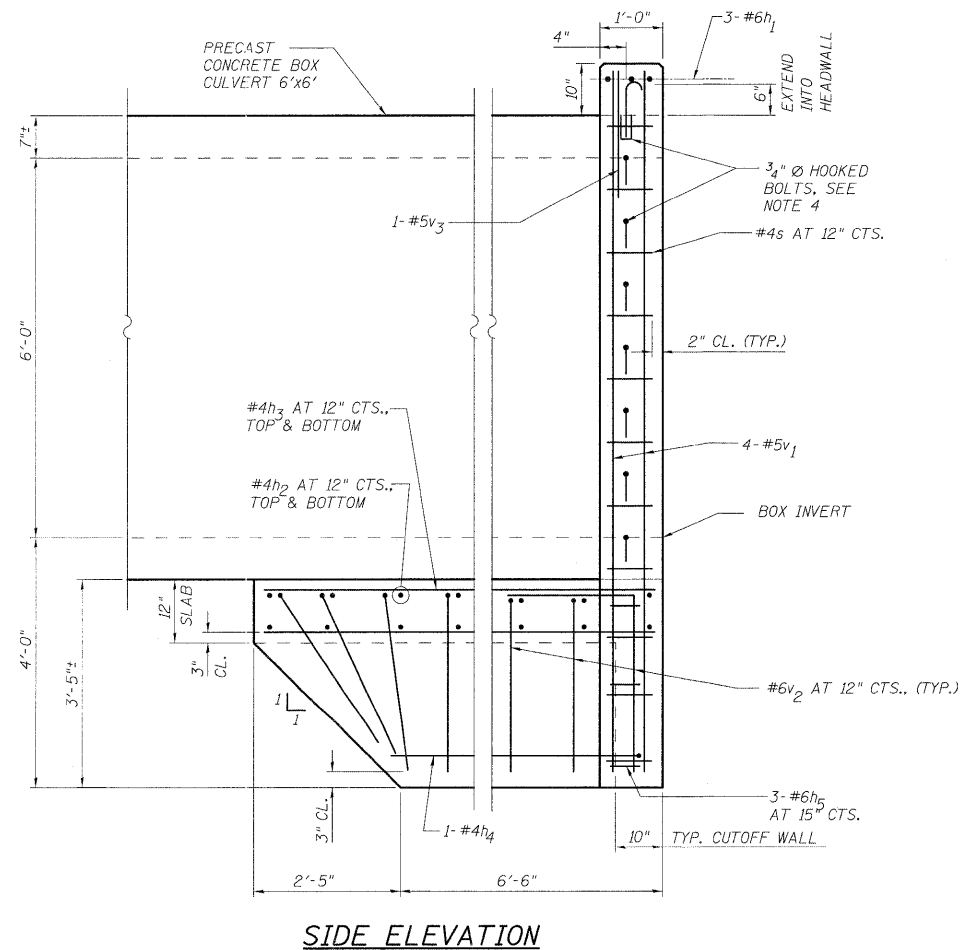
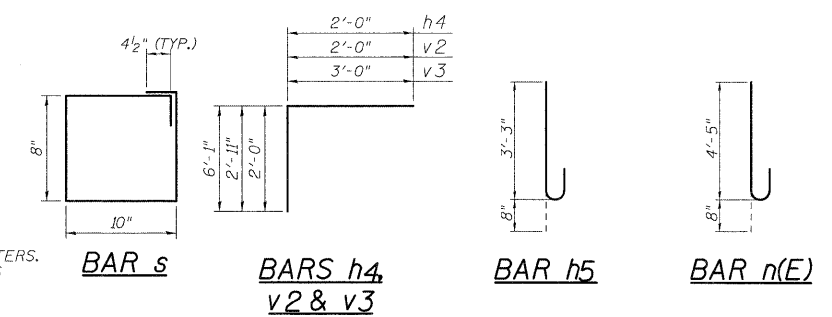
SECTION B-B



DRAINAGE DETAIL

NOTES

1. CONTRACTOR SHALL FIELD VERIFY EXISTING CONDITIONS AND DIMENSIONS BEFORE ORDERING MATERIALS.
2. ALL EDGES SHALL HAVE STANDARD 3/4" CHAMFERS, EXCEPT AS NOTED.
3. REINFORCEMENT BARS DESIGNATED (E) SHALL BE EPOXY COATED.
4. TO CONNECT CAST-IN-PLACE COLLAR TO PRECAST BOX, PROVIDE 3/4" Ø HOOKED BOLTS WITH EMBEDDED INSERTS AT 12" MAXIMUM CENTERS. HOOKED BOLTS SHALL EXTEND 6" INTO HEADWALL AND 9" INTO SIDES OF COLLAR. COST SHALL BE INCLUDED IN THE PRECAST CONCRETE BOX CULVERT 6'x6' ITEM.
5. PROVIDE PROTECTIVE COAT ON TOP HORIZONTAL SURFACES AND TOP 6" ON SIDE FACES OF HEADWALLS.



SIDE ELEVATION

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h	68	#4	12'-8"	—
h ₁	6	#6	9'-2"	—
h ₂	42	#4	6'-10"	—
h ₃	32	#4	8'-7"	—
h ₄	4	#4	8'-1"	┌
h ₅	12	#6	3'-11"	┌
n(E)	64	#6	5'-1"	┌
s	48	#4	3'-9"	□
t	128	#4	6'-1"	—
v	64	#4	9'-9"	—
v ₁	16	#5	11'-0"	—
v ₂	46	#6	4'-11"	┌
v ₃	4	#5	5'-0"	┌
w	40	#5	12'-8"	—
Item	Unit	Quantity		
CONCRETE BOX CULVERTS	CU YD	44.7		
REINFORCEMENT BARS	POUND	3260		
REINFORCEMENT BARS, EPOXY COATED	POUND	490		
STRUCTURE EXCAVATION	CU YD	273		
EARTH EXCAVATION	CU YD	206		
GEOTECHNICAL FABRIC FOR GROUND STABILIZATION	SQ YD	119		
COURSE AGGREGATE BACKFILL (SPECIAL)	CU YD	715		
REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	267		
FILTER FABRIC	SQ YD	46		
STONE RIPRAP, CLASS A4	SQ YD	20		
PRECAST CONCRETE BOX CULVERT 6'x6'	FOOT	35		
PROTECTIVE COAT	SQ YD	11		