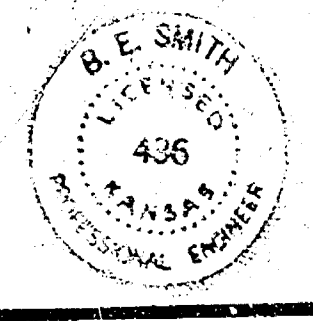
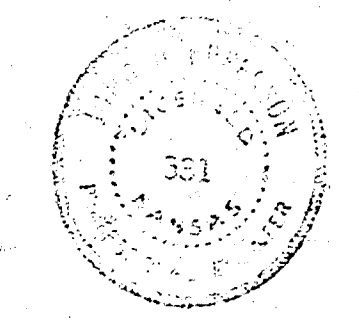
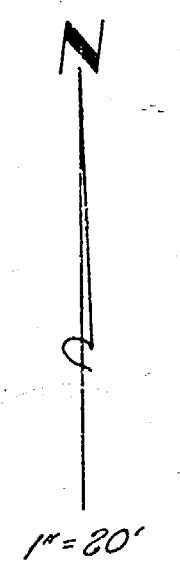
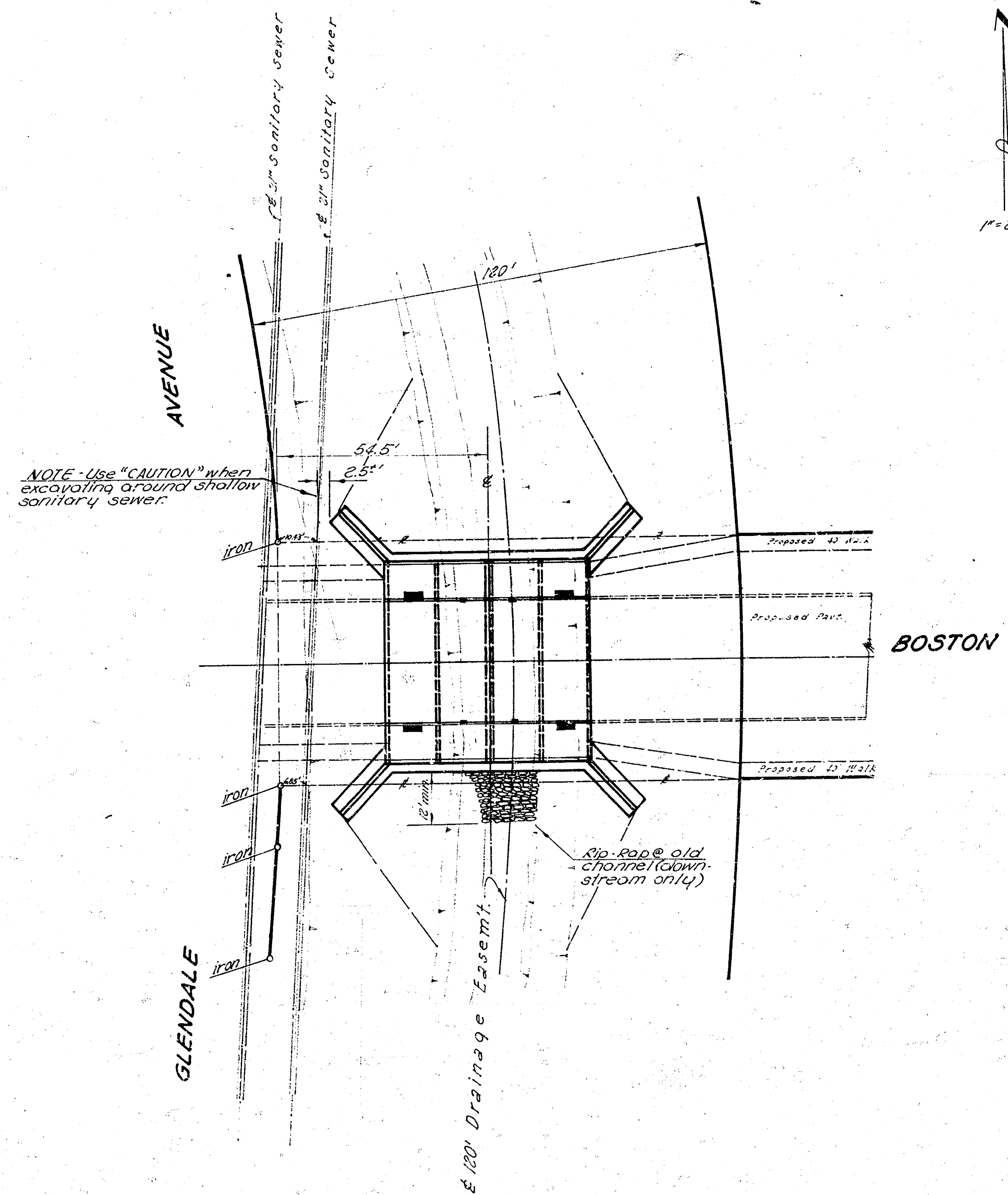
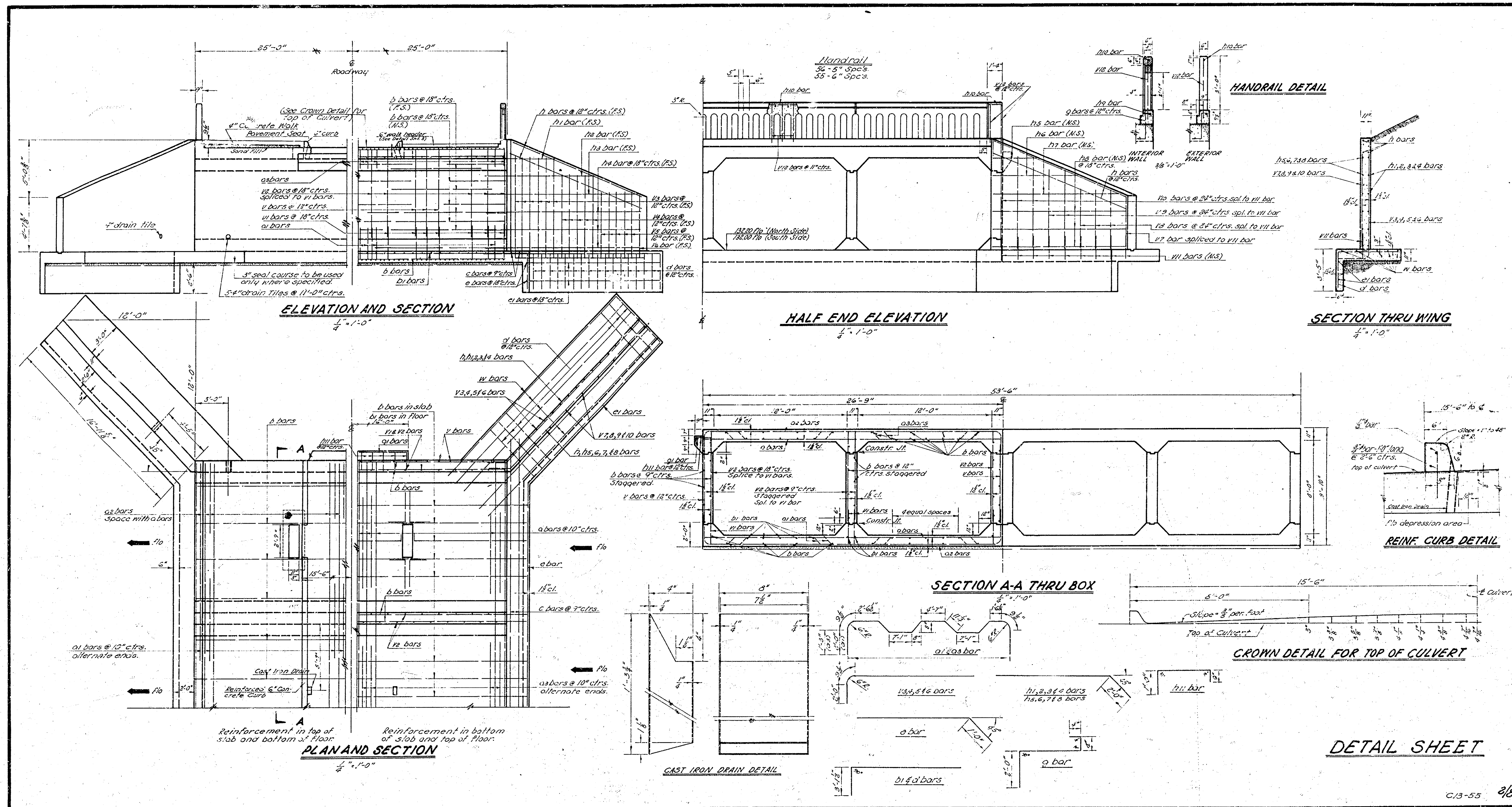


Clearing 350' 350'



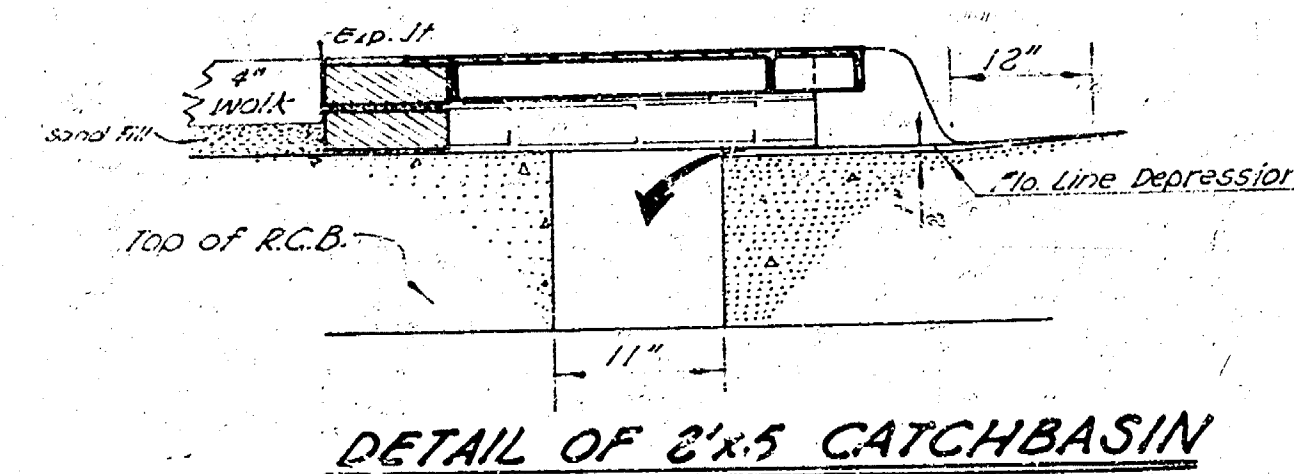
LOCATION MAP
4-12'x8' REINFORCED CONCRETE BOX
Between Glendale & Bleckley on Boston Str.
City of Wichita, Kansas
B.E. Smith City Engineer
Date: _____ Proj. No. C13-55 1/8



BAR SCHEDULE						
bar	size	length	no.	location	shape	spacing
0	#4	26'-4"	240	box		10"
01	#5	32'-6"	100	"		10"
02	#4	25'-9"	240	"		10"
03	#5	30'-8"	220	"		10"
04	#4	25'-9"	220	"		10"
05	#5	31'-9"	98	diagon		9"
06	#5	28'-9"	8	wing		12"
07	#5	25'-6"	8	diagon		12"
08	#5	10'-9"	4	wing		12"
09	#5	9'-9"	108	handrail		12"
10	#5	31'-9"	12	port seal		12"
11	#4	17'-0"	12	wing		12"
12	#4	17'-9"	2	"		12"
13	#4	18'-9"	2	"		12"
14	#4	18'-9"	2	"		12"
15	#4	18'-9"	2	"		12"
16	#4	18'-9"	2	"		12"
17	#4	18'-9"	2	"		12"
18	#4	18'-9"	2	"		12"
19	#4	18'-9"	2	"		12"
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22	#4	18'-9"	2	"		12"
23	#4	18'-9"	2	"		12"
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30	#4	18'-9"	2	"		12"
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90	#4	18'-9"	2	"		12"
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92	#4	18'-9"	2	"		12"
93	#4	18'-9"	2	"		12"
94	#4	18'-9"	2	"		12"
95	#4	18'-9"	2	"		12"
96	#4	18'-9"	2	"		12"
97	#4	18'-9"	2	"		12"
98	#4	18'-9"	2	"		12"
99	#4	18'-9"	2	"		12"
100	#4	18'-9"	2	"		12"

Steel in concrete wall header = 12 pounds

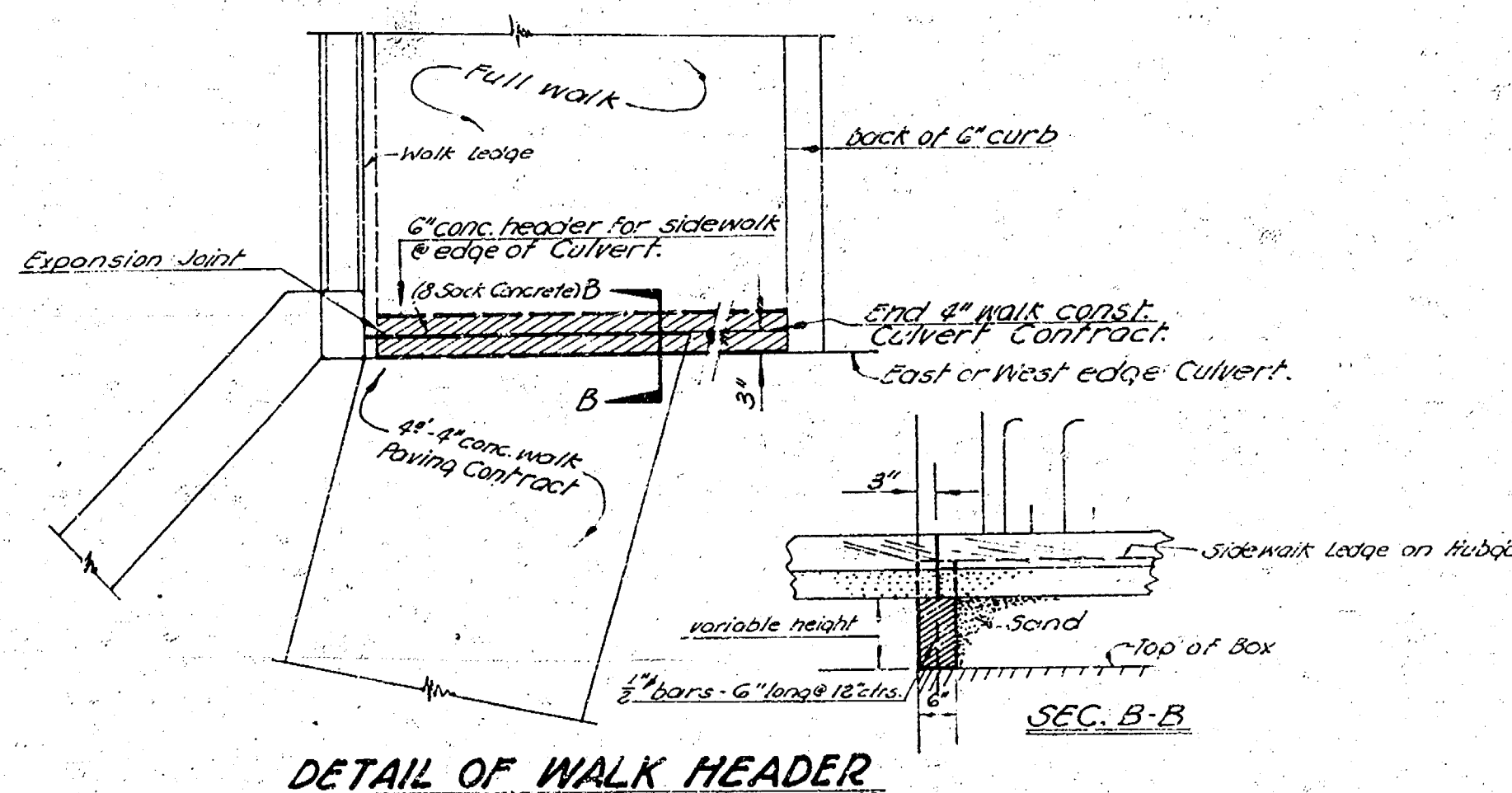
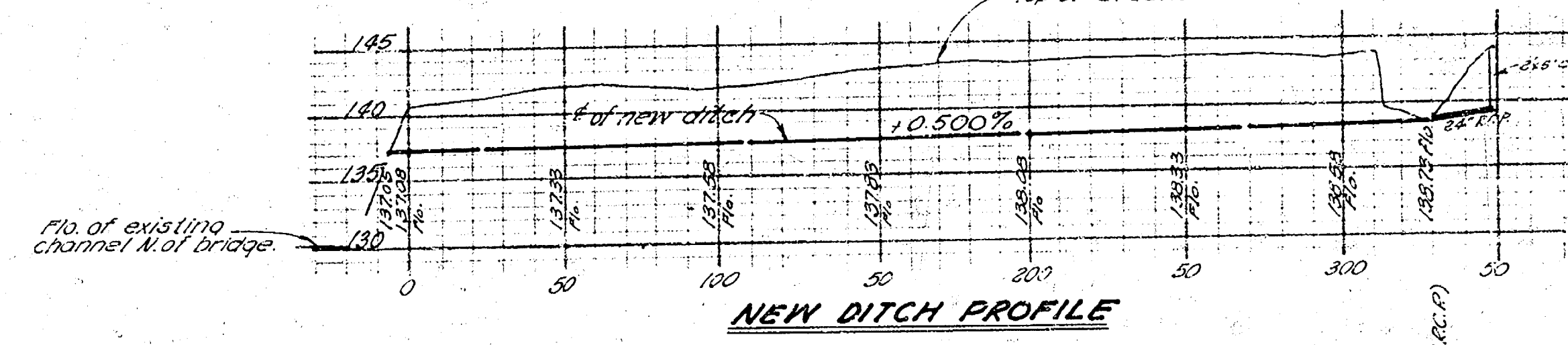
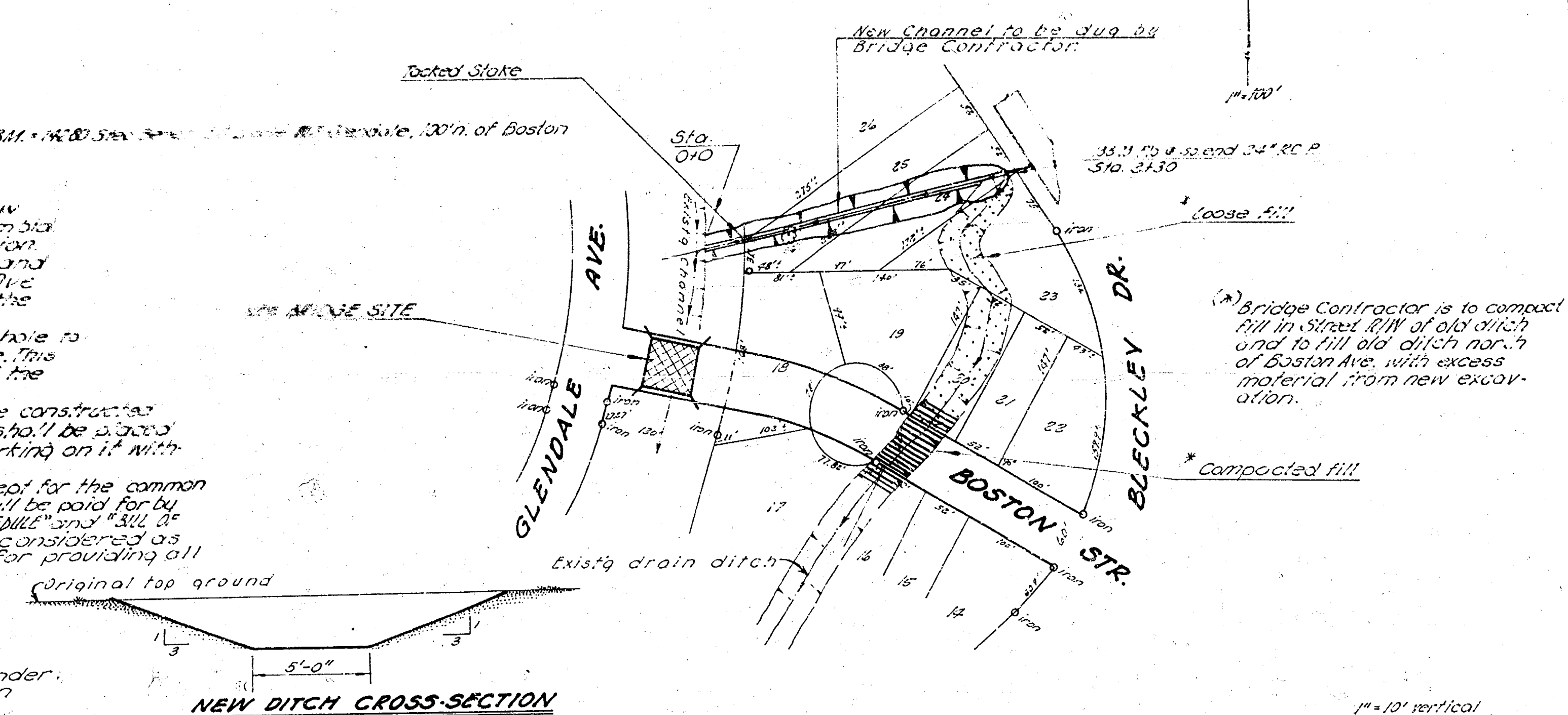
BILL OF MATERIALS		
Item	Quantity	Units
Class A-16 Concrete	341.0	cu yds
Reinforcing Steel	88,390	lbs.
Concrete Handrail	102.0	lin. ft.
Handrail Excavation	7.7	cu yds
Handrail Formwork	4	each
Cast Iron Curb drains	4	each
Reinforced Int. Curb	101	lin. ft.
8" Solid Concrete (sidewalk)	18	cu yds
Sand Fill	18	cu yds
Common Excavation (10%)	8890	cu yds
Compacted Fill (10%)	1010	cu yds
Class A Concrete (Box Culvert)	39.5	cu yds



DETAIL OF 6'x5' CATCHBASIN

General Notes

Class A-16 Concrete shall be used throughout this project. All reinforcing steel shall conform to ASTM specifications. **EARTHWORK:** All earthwork shall be considered as "Common Excavation" except for the toe wall. Toe wall excavation shall be included in the Lump Sum Bid. Excavation of new diversion channel will be considered a part of Culvert project. Tree removal in new channel will be included in Lump Sum bid. Rip-rap included in Lump Sum bid. **BACKFILL:** Shall be compacted to bottom of new pavement construction. All backfill and excavation is to be extended 10' beyond sides of cut and wingwalls. Compacted backfill in existing channel across Boston Ave. will be considered a part of Culvert project. Contractor to backfill to the top of new walk construction across street. **WEAPING HOLES:** Coarse aggregate shall be deposited behind each weep hole to occupy a space extending 18" in all directions above the line of weep hole. This work shall not be paid for directly but shall be considered a part of the excavation work. **SEAL COURSE:** A seal course consisting of (3") class A concrete shall be constructed only where specified on the plans and the Engineer. No reinforcing shall be placed until the seal course has gained sufficient strength to permit working on it without injury. **BIDDING OF CULVERT:** The Culvert shall be bid as a "Lump Sum" bid except for the common excavation, compacted fill and class A concrete units. These units shall be paid for by the "Unit Bid" determined from Final cross-sections. The "SAP STEELING" and "SAP STEELING" shown on plan are to be used as a guide only and not to be considered as final quantities. The Contractor will have full responsibility for providing all materials shown on the detailed plans necessary to complete this project. (Use a 3/4" triangular mauling on all exposed edges unless otherwise noted.) **COMPACTION REQUIREMENTS:** The compacted fill is to be placed under the bridge structure. Highway specifications Sec. C14 Sec. C14. The compaction requirement is Type II, MK-30. **WEARING SURFACE:** The pavement wearing surface of the culvert is to be sealed with emulsified asphalt (State Spec. RS-2) at the rate of 0.07 gal. per sq. yd. Hot core material (State spec. SCM-7) is to be applied at the rate of 100 cu. yds. per sq. yds. This item is to be included in Lump Sum bid.



DETAIL OF WALK HEADER