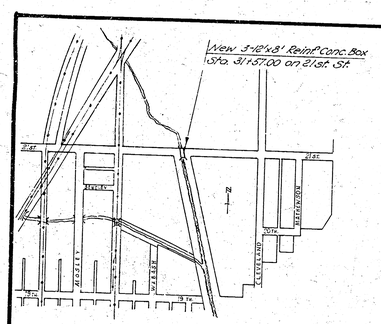
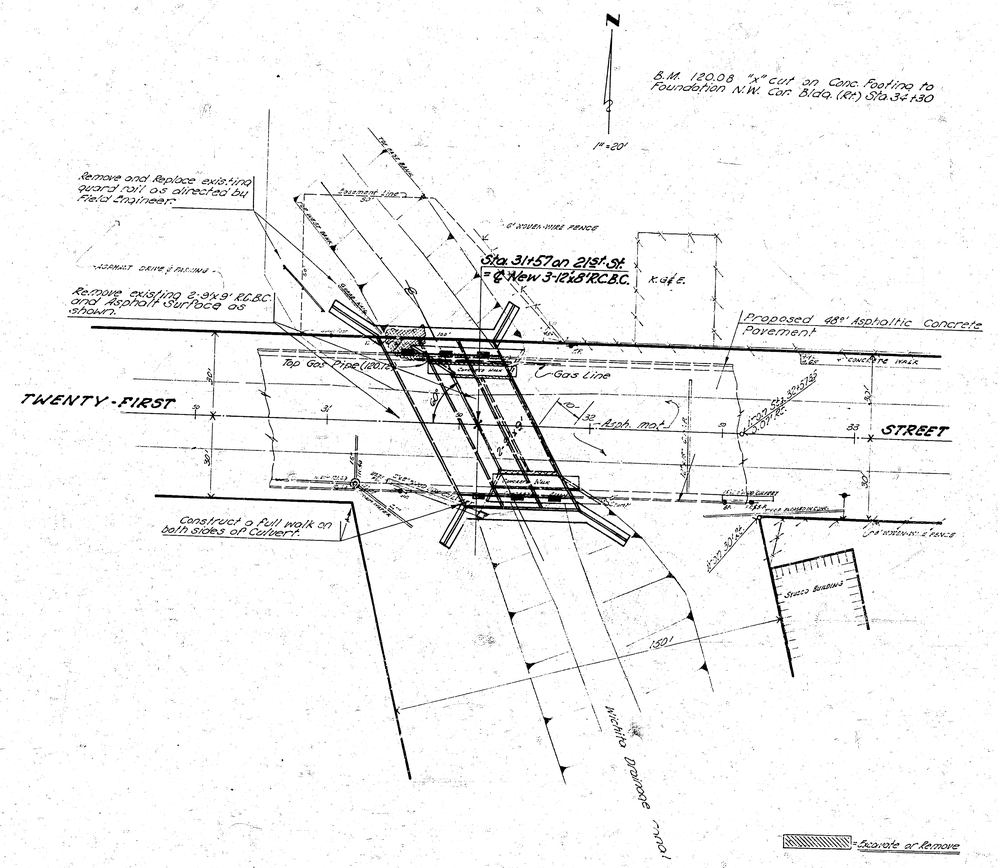


Plot Plan

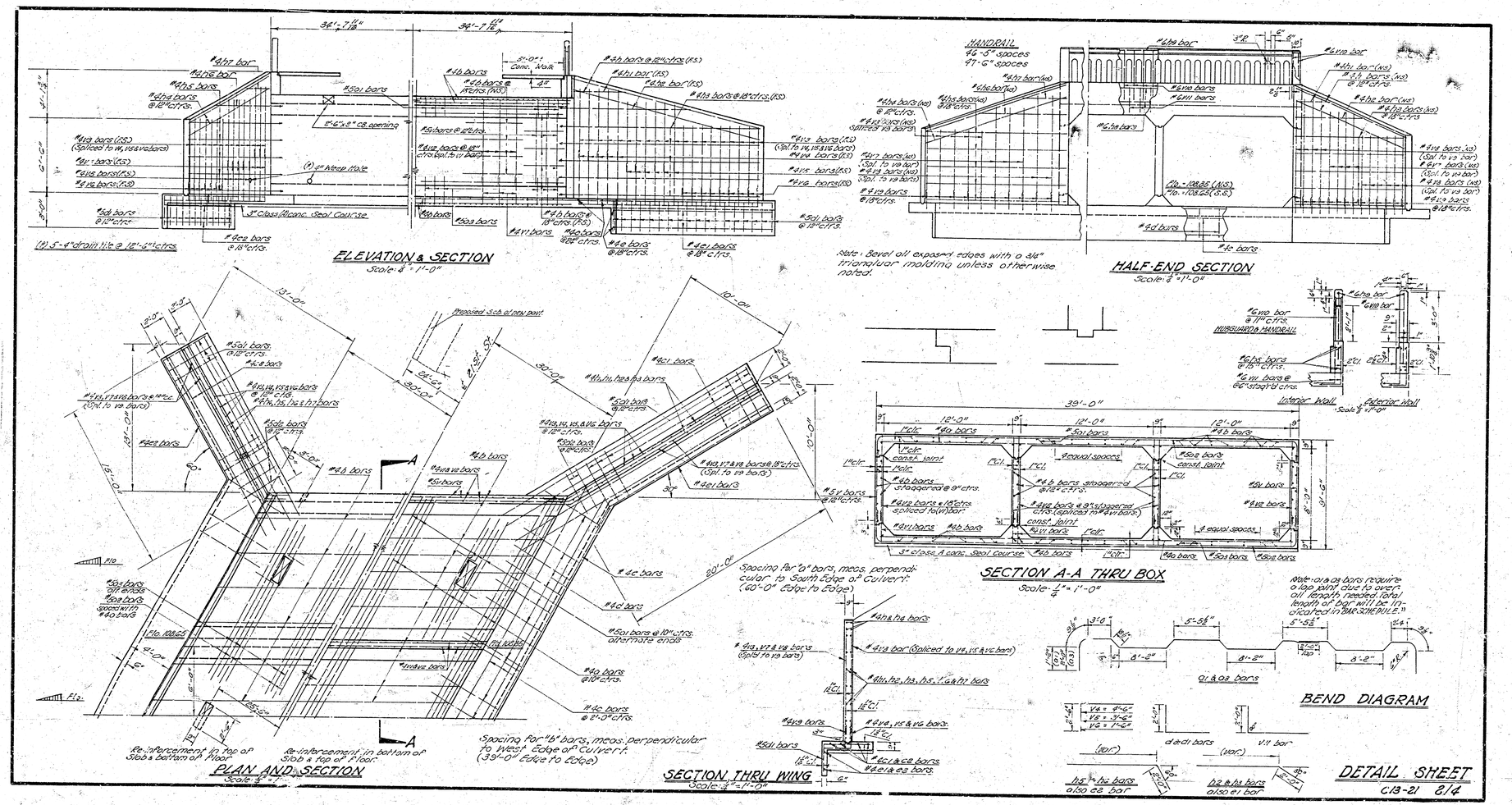


LOCATION MAP

3-12'x8' REINFORCED CONCRETE S. C.
In Connection With 21st Street

City of Wichita, Kansas

B.E. Smith — City Engineer Date. ...


ELEVATION & SECTION
Scale: 3/8" = 1'-0"
HANDRAIL
46'-5" spaces
47'-6" spaces
HALF-END SECTION
Scale: 3/8" = 1'-0"
Note: Bevel all exposed edges with a 3/4" triangular molding unless otherwise noted.
Re-inforcement in top of Slab & bottom of Floor
Re-inforcement in bottom of Slab & top of Floor
PLAN AND SECTION
Scale 3/8" = 1'-0"
"Spacing for "b" bars, meas. perpendicular to West Edge of Culvert. (39'-0" Edge to Edge)
SECTION THRU WING
Scale: 3/4" = 1'-0"
Spacing for "a" bars, meas. perpendicular to South Edge of Culvert (60'-0" Edge to Edge)
SECTION A-A THRU BOX
Scale: 1/4" = 1'-0"
Interior Wall
Exterior Wall
Scale 3/4" = 1'-0"
Note: a1 & a3 bars require a lap joint due to curve, all length needed. Total length of bar will be indicated in "BAR SCHEDULE"
a1 & a3 bars
BEND DIAGRAM
b4 & d4 bars
V11 bar
b5 + b6 bars also e2 bar
b2 & b3 bars also e1 bar
DETAIL SHEET
C.13-21 8/4

BAR Schedule

bar	size	length	number	location	shape	spacing	weight
a	#6	23'-0"	288	box		10"	4424.8
a1	#5	50'-11"	72	"		10"	3823.6
a2	#6	23'-0"	288	"		10"	6904.8
a3	#5	52'-2"	75	"		10"	3948.8
b	#4	35'-4"	153	"		10"	4551.1
c	#6	23'-7"	8	apron		Var.	186.2
c1	#3	23'-0"	8	"		2'-9"	122.3
c2	#6	18'-0"	8	"		18"	96.2
d	#6	8'-0"	44	"		12"	235.1
d1	#5	6'-3"	60	"		Var.	391.1
d2	#5	4'-0"	10	"		12"	41.7
e	#4	23'-8"	8	toe wall		18"	123.8
e1	#2	13'-0"	4	"		18"	50.8
e2	#6	19'-0"	4	"		18"	37.9
f	#4	20'-1"	8	wingwall		12"	107.3
h	#6	5'-8"	4	"		-	13.1
h2	#4	15'-0"	4	"		-	20.1
h3	#3	25'-0"	20	"		18"	293.9
h4	#4	15'-0"	8	"		12"	80.2
h5	#5	16'-10"	20	"		18"	224.9
h6	#4	16'-0"	4	"		18"	28.1
h7	#6	4'-3"	2	"		-	11.4
h8	#6	23'-6"	16	hubguard		12"	364.3
h9	#6	14'-7"	6	handrail		-	131.6
V	#5	6'-0"	138	box		12"	863.6
V1	#6	9'-2"	276	"		18"	460.2
V2	#4	7'-6"	276	"		18"	1382.8
V3	#6	6'-0"	32	wingwall		12"	368.7
V4	#4	7'-0"	16	"		12"	74.8
V5	#6	6'-0"	28	"		12"	88.2
V6	#6	4'-0"	32	"		12"	85.5
V7	#4	8'-0"	16	"		18"	79.8
V8	#6	9'-0"	16	"		18"	72.1
V9	#6	-0"	48	"		18"	54.1
V10	#6	4'-0"	100	handrail		11"	670.8
V11	#6	4'-3"	180	hubguard		12"	1193.0

BILL OF MATERIALS

item	quantity	unit	
Class A-AE Concrete	273.83	Cu. yds.	Lump Sum Items
Reinforcing Steel	31,649.0	Lbs.	
Concrete Handrail	88.4	Lin. Ft.	
Road Excavation	6.2	Cu. yds.	
4" Concrete Walk	43.43	Sq. Ft.	
Concrete Bridge Structure Rem.	1	each	
2x5 Brick Catch Basins	6	"	
Common Excavation	1220.1	cu. yds.	Bid Items
Compacted Fill	273.9	cu. yds.	
Class A Concrete	29.15	cu. yds.	
Asphalt Surface Removed	113.3	sq. yds.	

General Notes:

CLASS A-AE Concrete - shall be used throughout this project. All Reinforcing Steel shall conform to A.S.T.M. Specifications. The Bridge Contractor shall remove and dispose of the existing Concrete Bridge Structure.

EARTHWORK - All earthwork shall be considered as "Common Excavation" except for the toewall. Toewall excavation shall be included in "Lump Sum Bid."

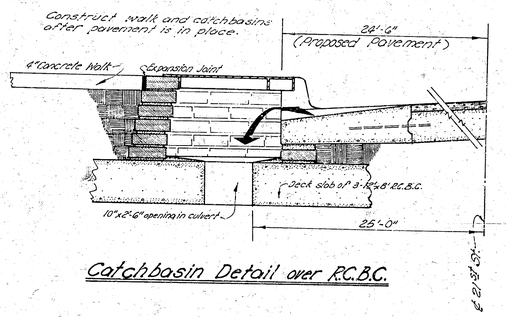
BACKFILL - shall be compacted to the bottom of new pavement grade. All backfill and excavation to extend to (2') beyond sides of box & wingwalls.

WEEP HOLES - Coarse aggregate shall be deposited behind each weep hole to occupy a space extending (18") in all directions above weep hole flowline. 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 or by the Engineer. No reinforcing shall be placed until the seal course has gained sufficient strength to permit wanting upon it without injury.

BIDDING OF CULVERT - The culvert shall be bid on a "Lump Sum Bid" except for the following items: cu.yds. common excavation, cu.yds. compacted fill, cu.yds. class (A) concrete (these will be paid for by the horizontal final cross-sections) & sq.yds. asphalt surface rem. The "BAR SCHEDULE" and the "BILL OF MATERIALS" listed shown on plan are to be used as a guide only and not to be considered as final quantities. The Contractor will have the full responsibility for providing all materials shown on the detailed plans necessary to complete this project.

RELOCATING GUARD RAIL - Bridge Contractor to salvage & re-locate existing guard rail as shown on Sheet (1) of 4. This work to be included in the "Lump Sum Bid."



Catchbasin Detail over R.C.B.C.