

NOTES

SPECIFICATIONS: General-Board of Wayne County Road Commissioners Specifications and Supplementary Specifications for Job No. 131. Structural Steel (Workmanship & Materials)-A.P.E.A., 1925. Concrete Design-Joint Committee, 1924.

LOADING: Roadway-24 Ton Trucks, 25' Impact. Sidewalk-100' Sq. Ft., No Impact.

STRUCTURAL STEEL: Steel will be furnished by Structural Steel Contractor, F.O.B. cars at site of work, and unloaded and erected by Masonry Contractor.

Shop Connections: 3/4" Rivets. Field Connections: 3/4" Bolts.

Holes in diaphragms and diaphragm connection angles only may be punched full size. All other holes shall be sub-punched or drilled 1/8" and reamed to 1/8". Holes in material over 1/2" thick shall be drilled.

If splices are necessary to give camber to built up beams, details of splices must meet the approval of the engineer.

PAINT: Bottom face of bottom flanges of all beams shall be painted one shop coat of red lead and oil, a first field coat of Detroit Graphite #501 (or equal), and a second field coat of Detroit Graphite #308 (or equal). Contact surfaces shall be painted one shop coat of red lead and oil before assembling.

CONCRETE: All concrete shall be proportioned by "water-cement ratio" for 3000 #/sq. ft. at 28 days. For method of proportioning and controlling mix, see specifications. All exposed surfaces shall be rubbed as soon as forms are removed. No cement grout shall be used on rubbed surfaces. All exposed edges shall be sharp unless otherwise detailed.

The wearing surface shall be carefully finished to exact crown of road, and no depression greater than one eighth (1/8) inch will be allowed when measured from a strike board at right angles to center of road. No depression greater than one quarter (1/4) inch will be allowed in a continuous distance of ten (10) feet parallel to center of road.

REINFORCING STEEL: All bars shall be deformed bars of current intermediate grade as specified in the A.S.T.M. Standard Specifications for Steel Reinforcing Bars (Serial Designation A15-14). All bars shall be securely tagged before shipping to job. Bars shall be securely wired together at each intersection. At splices, bars shall lap for a distance of 45 diameters, and shall be securely wired together. No concrete shall be placed until bars to be encased are securely fastened in place.

CONSTRUCTION JOINTS: Construction joints shall not be located at points other than those shown on drawing, except upon written permission from engineer.

WATERPROOFING: The surface of floor slab, under wearing surface shall be painted with a heavy coat (about 1/4" thick) of approved asphalt paint. (See Supplementary Specifications). Where membrane waterproofing is called for, paint the concrete with approved asphalt paint and apply two layers of approved cotton fabric with overlapping joints, mopping each layer with approved asphalt paint. (Karnak or Minwax specifications will be approved).

HAND RAIL: For details of hand rail, see sheets nos. 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30.

BEARING RAILS: Bearing rails are to be furnished by masonry contractor. Second hand rails may be used if in a condition suitable for relaying.

LIGHTING: Fixtures may be furnished by Board of Wayne Co. Road Commissioners and installed by Masonry Contractor. Conduits shall be furnished and installed by Masonry Contractor. For locations and quantities of conduits, and for other details of lighting, see Sheets Nos. P-28, P-29, P-30.

BILL OF REINFORCING BARS FOR ONE BRIDGE				QUANTITIES FOR ONE BRIDGE	
MARK	NO.	SIZE	LENGTH	ITEM	AMOUNT UNIT
JB-60	680	1/2"	6'-0"	Wearing Surface	76 Cu. Yds.
JB-75	68	1/2"	7'-5"	Concrete-Roadway Span	371.8 Cu. Yds.
JB-103	68	1/2"	10'-3"	Sidewalk Spans	134.4 "
J-262	258	1/2"	26'-2"	Total	511.2 "
GB-244	100	1/2"	24'-4"	Reinforcing Steel	36,450 Lbs.
GB-200	200	1/2"	20'-0"	*032 American Steel & Wire Co. Triangle	
GB-207	200	1/2"	20'-7"	Wire Mesh, 4'8" Wide, 1600 Sq. Ft.	352 Lbs.
J-226	136	1/2"	22'-6"	Structural Steel-20 B-1	192,444 Lbs.
GB-129	200	1/2"	12'-9"	4 B-2	42,330 "
J-39	24	1/2"	3'-9"	84 D-1	12,486 "
D-130	274	1/2"	13'-0"	8 D-2	2,087 "
J-228	72	1/2"	22'-8"	388 Bolts, 1/2" x 2 1/2" with Nuts & Washers	407 "
GB-129	80	1/2"	12'-9"	855 Bolts, 1/2" x 2"	795 "
J-128	28	1/2"	12'-6"	Total Structural Steel	250,838 Lbs.
J-99	8	1/2"	9'-9"	Bearing Rails BR-1 & BR-2: 68 Yds of 80" Rail	5,440 Lbs.
HR	JB-29	5/8"	2'-9"	Membrane Waterproofing	.820 Sq. Ft.
	JB-90	6/8"	9'-0"		
	JB-96	1/2"	9'-6"		

NOTE: BILL OF BARS AND QUANTITIES ARE IDENTICAL FOR SANDERS AVE. AND PLEASANT AVE. BRIDGES

REVISIONS

Lighting Details Added.
Hand Rail Dowels Changed.
Cross Section Dimensions Revised 2-27-28
E.G. 7/1/28
Cora. by E.H.C. 7-11-28

Quantities Revised.
E.G. 7/1/28
Cora. by E.H.C. 7-11-28

Length of Diaphragm Encasement Changed.
Minor Rearrangement of Steel Details.
E.G. 7/1/28
Cora. by E.H.C. 7-11-28

Special Detail for Beam Encasement.
Floor Slab Reinforcement.
E.G. 7/1/28
Cora. by E.H.C. 7-11-28

Lighting Details Changed.
E.G. 7/1/28
Cora. by E.H.C. 7-11-28

Construction Joint Detail of Curved Reinforcement.
E.G. 7/1/28
Cora. by E.H.C. 7-11-28

BOARD OF WAYNE COUNTY ROAD COMMISSIONERS
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WILLIAM F. BUTLER, COMMISSIONER

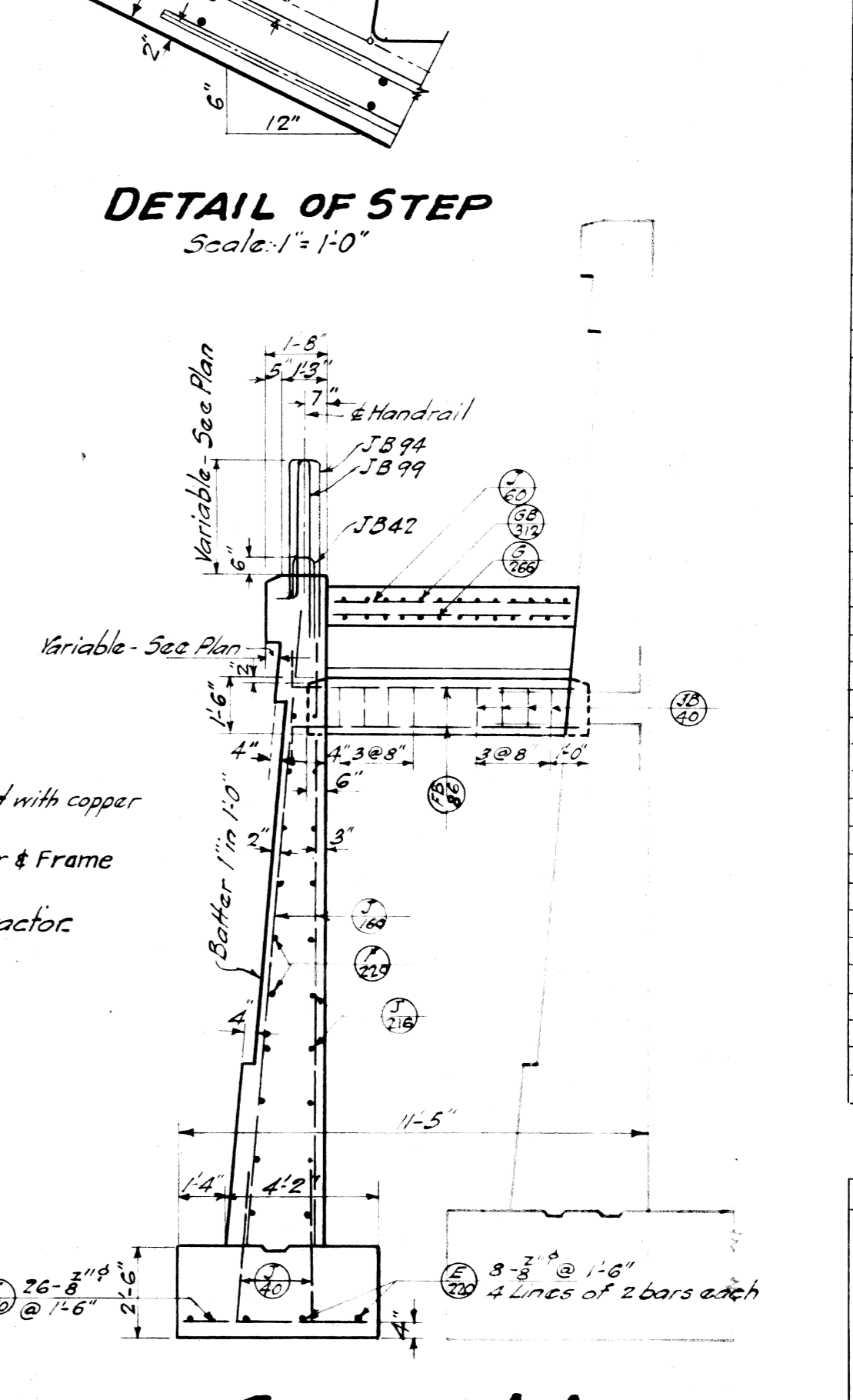
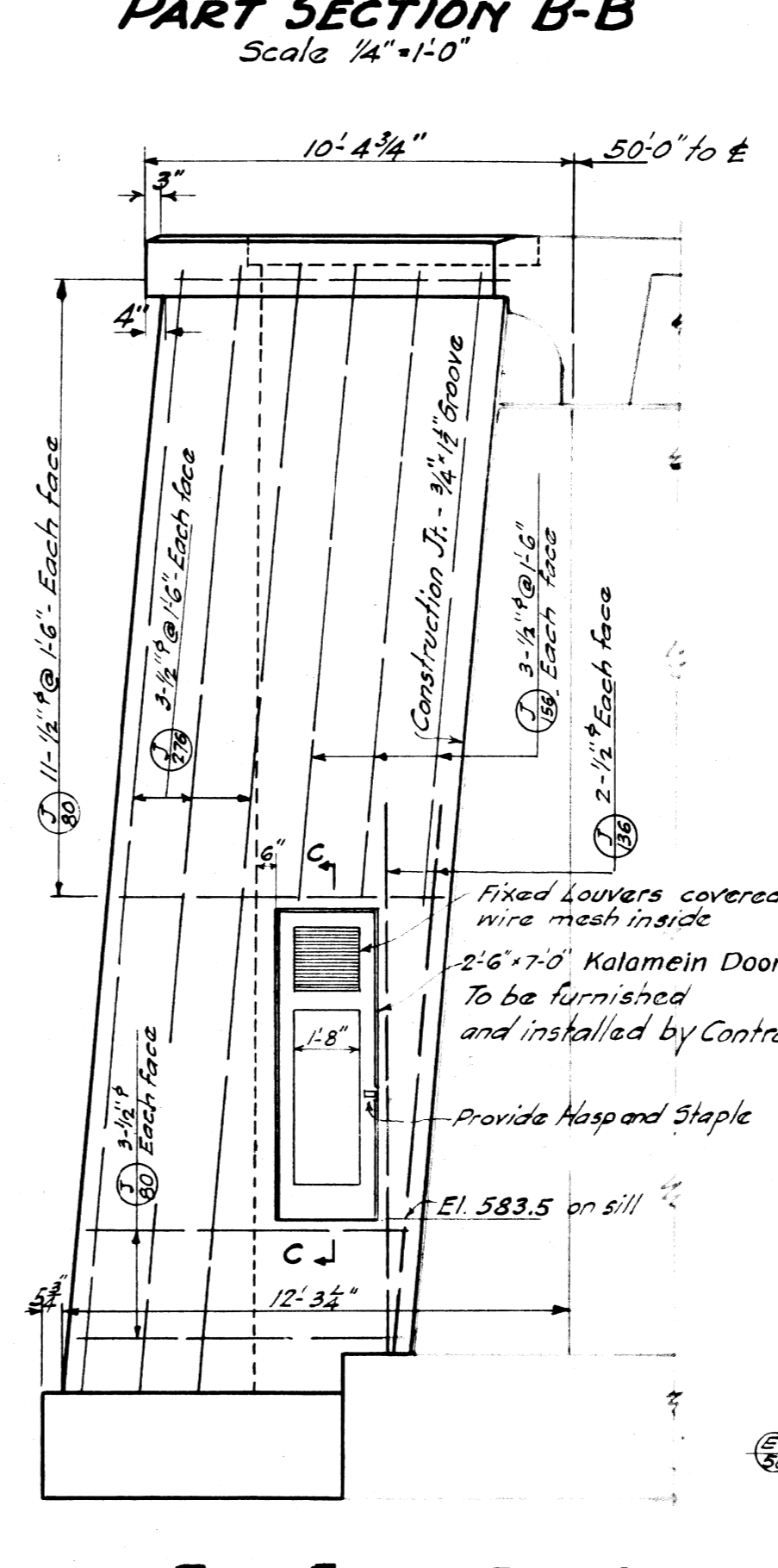
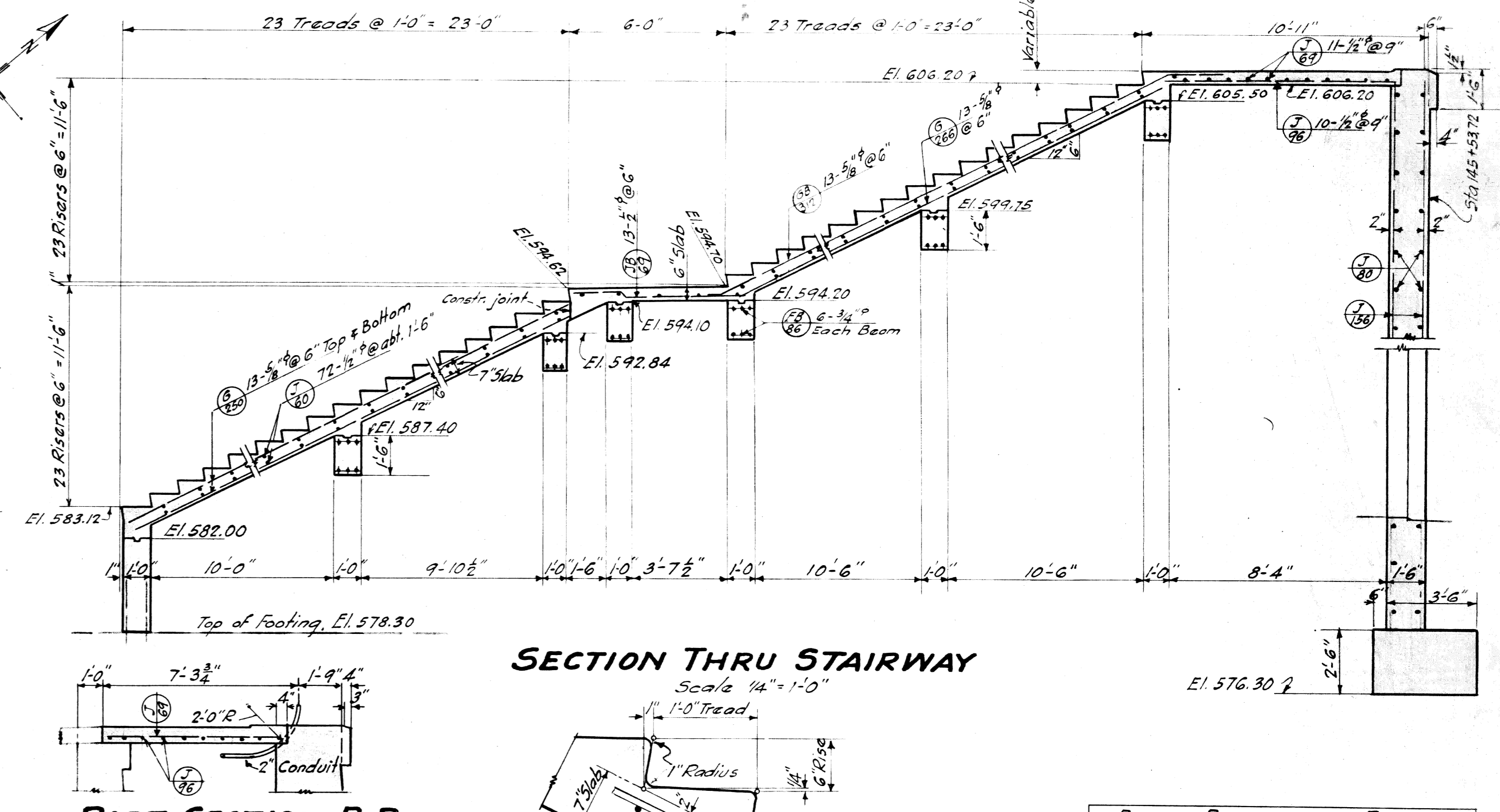
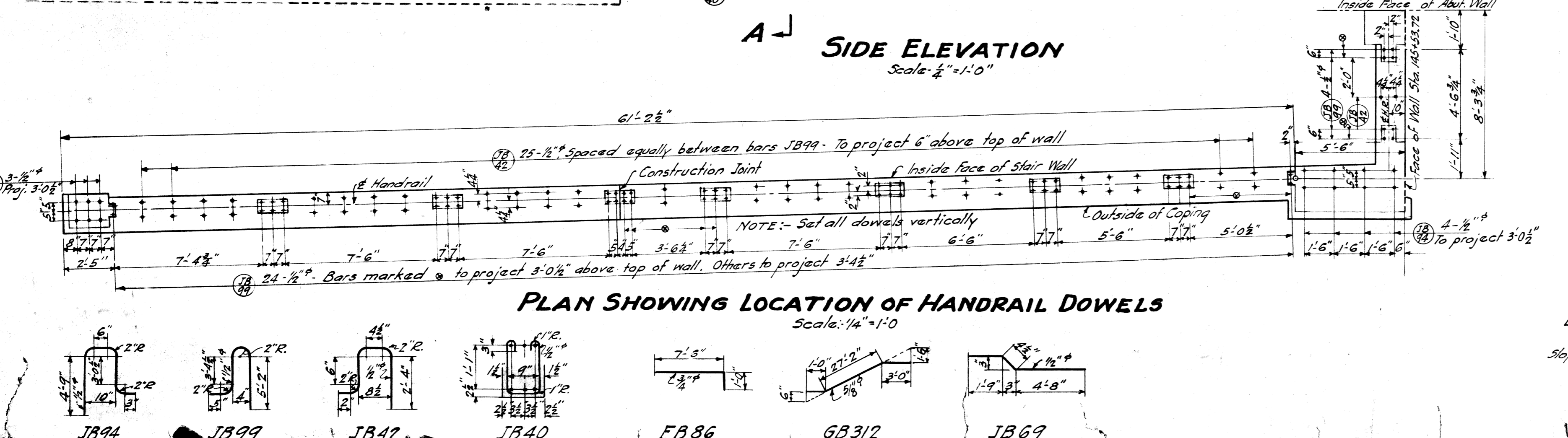
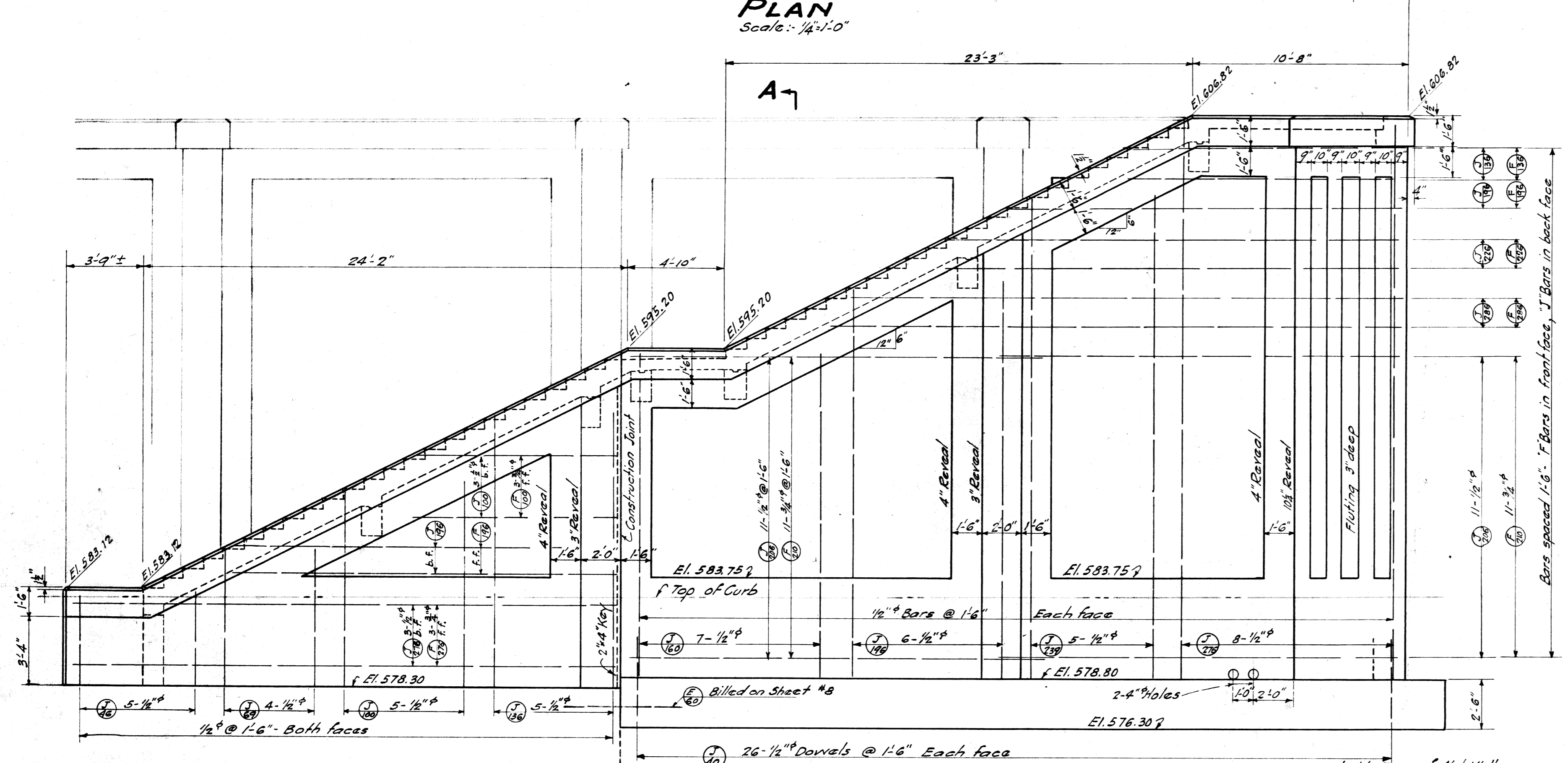
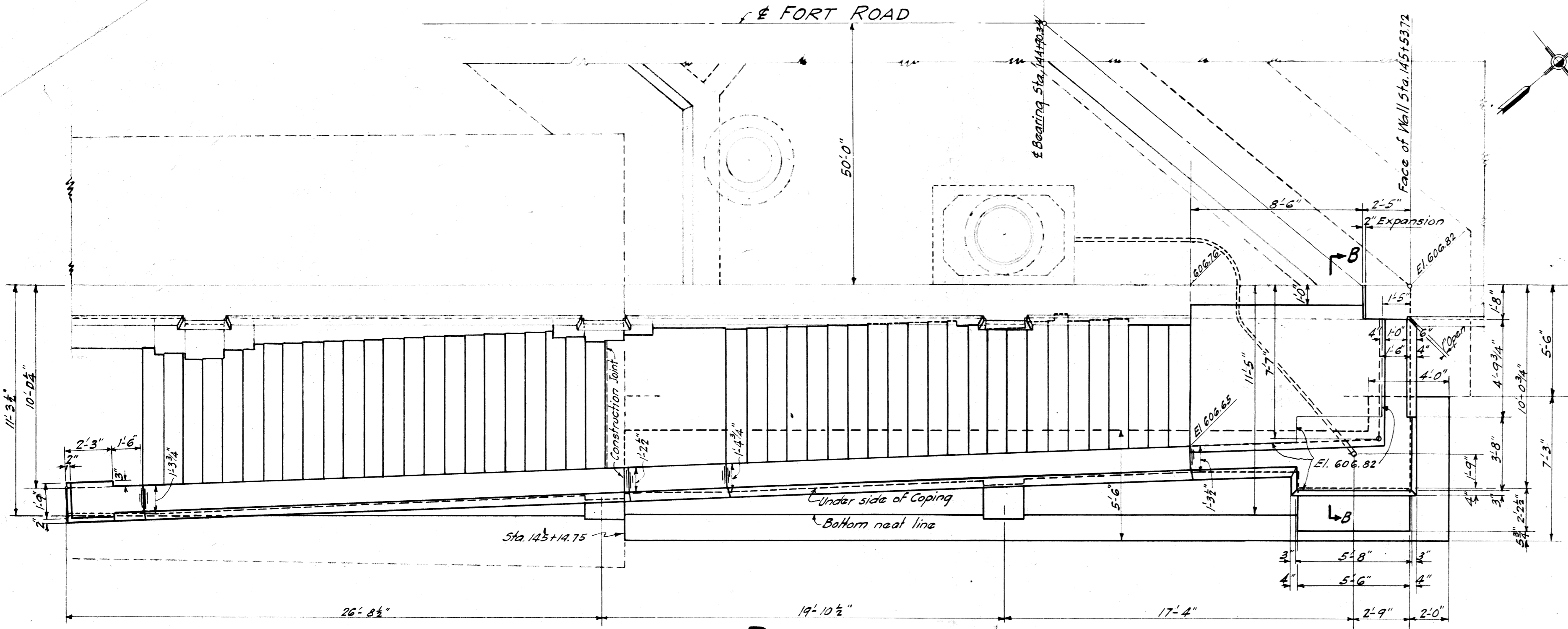
SUPERSTRUCTURE DETAILS OF BRIDGES OVER PLEASANT AND SANDERS AVES FORT ROAD-MILE 2.8 N.
M.C.-PA.-WAB-GRADE SEPARATION X10f 82-22-37

DESIGNED BY J.W.C. DRAWN BY E.G. CHECKED BY F.H.C.
DATE 5/13/28 SCALES AS SHOWN, CORRECT

APPROVED: *[Signature]* REG. CIV. ENGR.
APPROVED: *[Signature]* ENGINEER MANAGER

Job No. 131
ISSUE NO. 8
DATE 4-11-1928

CONT. EE 3088
FILE NO. F 7852 Dwg. #1



Mark	No.	Size	Length	Location
J40	52	1/2"	4'-0"	Footing
F50	26	3/8"	5'-0"	"
F220	8	"	22'-0"	"
J46	10	1/2"	4'-6"	Wall - Vert.
J67	17	"	6'-9"	" & Landing
J100	13	"	10'-0"	" & Hor.
J146	15	"	19'-6"	"
J160	14	"	16'-0"	"
J299	10	"	23'-9"	" & Hor.
J276	25	"	27'-6"	"
J156	6	"	15'-6"	"
J196	16	"	18'-6"	"
J80	28	"	8'-0"	" Hor.
J226	2	"	22'-6"	"
F226	2	3/4"	22'-6"	"
F196	2	"	13'-6"	"
F146	3	"	19'-6"	"
F286	2	"	28'-6"	"
J286	2	1/2"	28'-6"	"
J216	22	"	20'-6"	"
F210	22	1/2"	21'-0"	"
F216	3	"	27'-6"	"
F100	3	"	10'-0"	"
F886	36	"	8'-6"	Beams
J840	48	1/2"	4'-0"	Shirups
J867	13	1/2"	6'-9"	Stair Landing
J92	10	"	9'-6"	"
J80	72	"	6'-0"	" Slab
G250	26	5/8"	25'-0"	"
GB312	13	"	31'-2"	"
F266	13	"	26'-6"	"
J899	28	1/2"	27'-4"	H.R. Dowels
J842	26	"	4'-2"	"

ESTIMATED QUANTITIES	
Concrete	-
Footing	21.5 CY.
Walls	100.0
Slab and Beams	15.6
Total	137.1 CY.
Reinforcing Steel	658.0 Lbs.

NOTE: For General Notes see Sheet No. 24

REVISIONS
Sill elev changed 4-5-29 G.J.P.

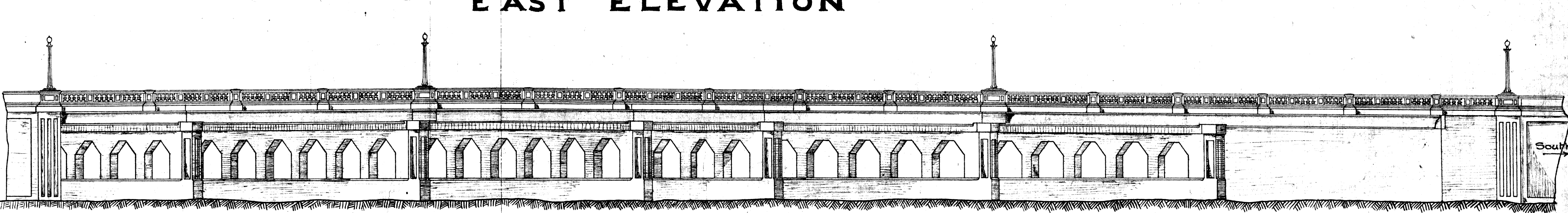
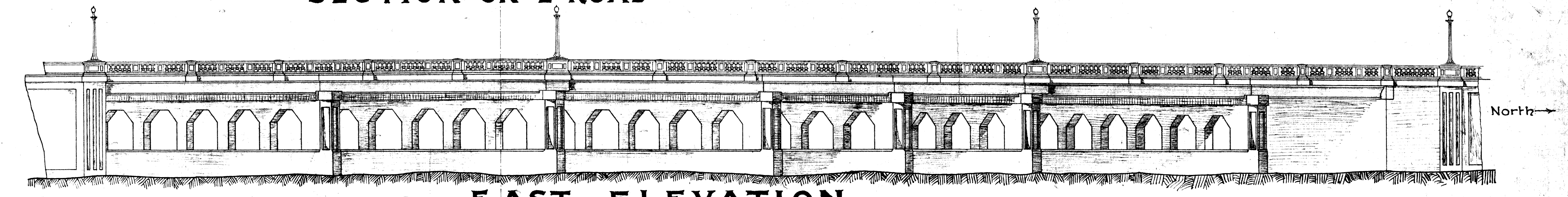
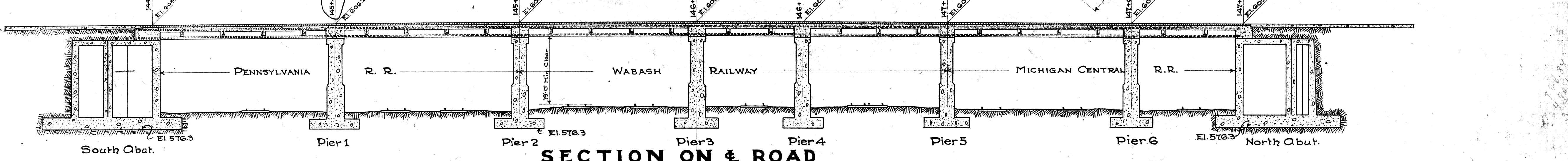
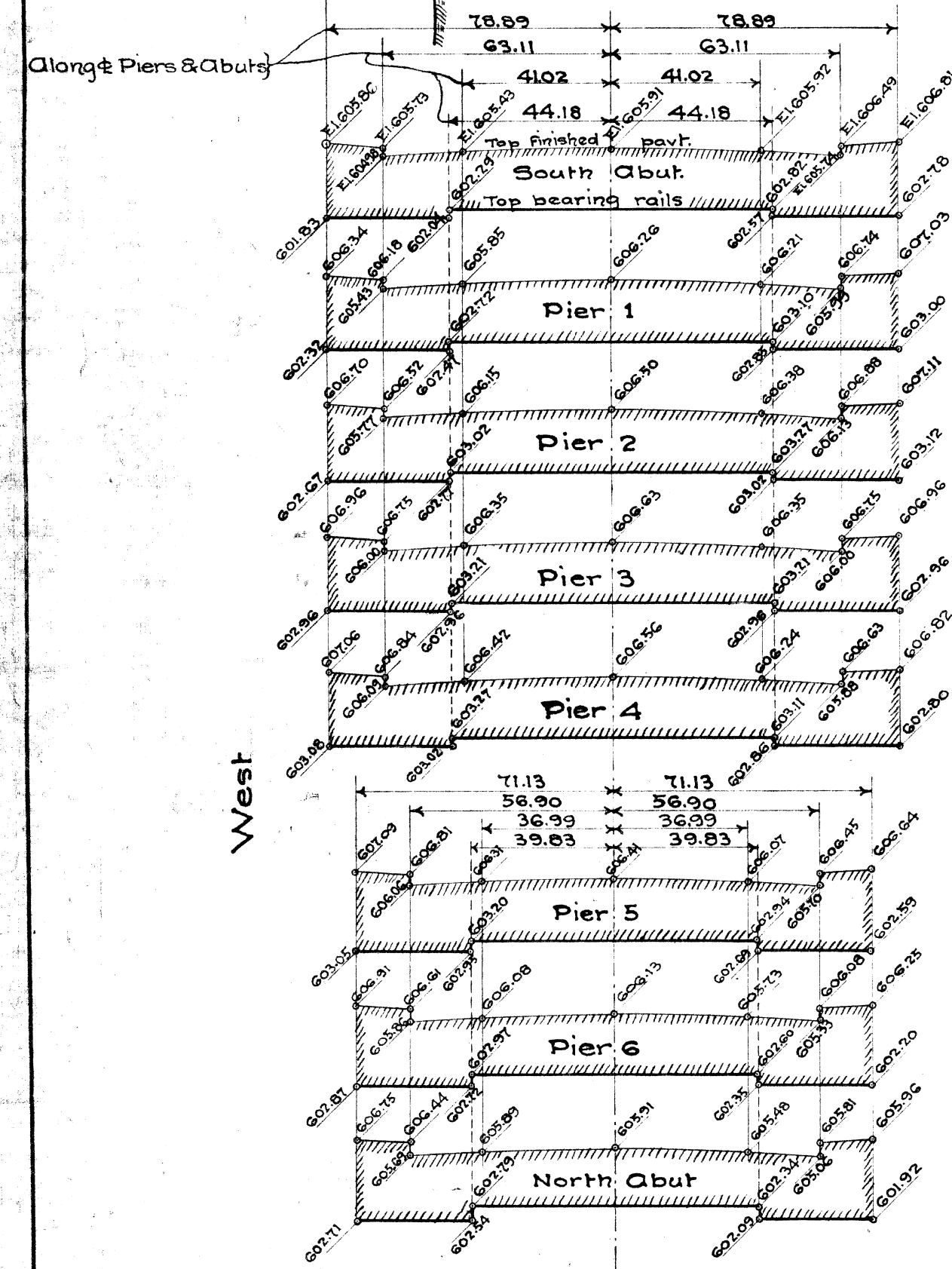
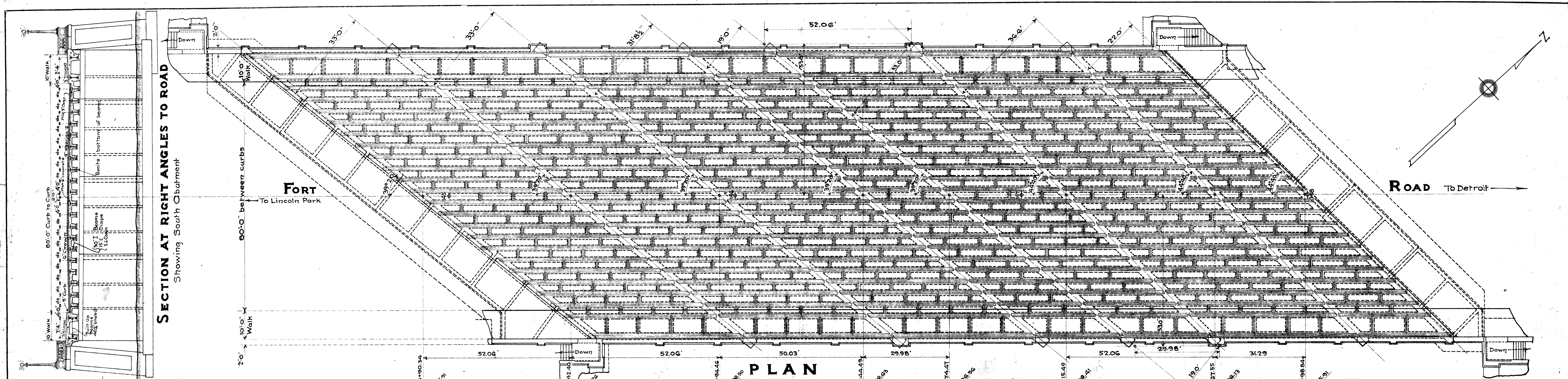
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 DETROIT, MICHIGAN
 WM. F. BUTLER CHAIRMAN JOHN S. HAGGERTY COMMISSIONER
 EDWARD N. HINES, COMMISSIONER

DETAILS OF STEPS "A"
 FORT ROAD—MILE: 2.8 N
 PENNA.—WAB.—M.C.R.R.'S GRADE SEPN. XI OF 82-22-37

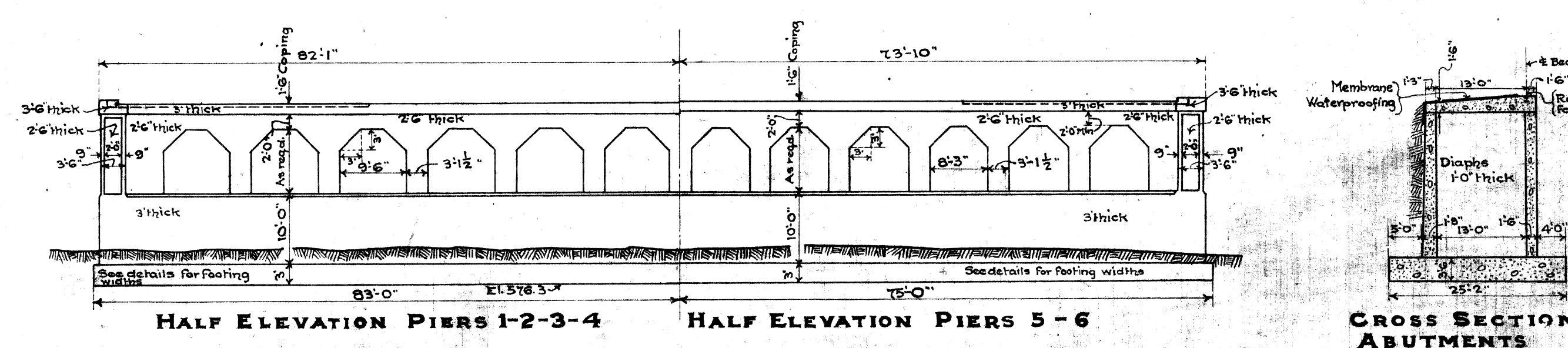
DESIGNED BY J.A.C. DRAWN BY J.W.C. CHECKED BY F.H.G.
 DATE Aug 24, 28 AS SHOWN CORRECT

JOB NO. 131
 SHEET NO. 21

Job #121-2



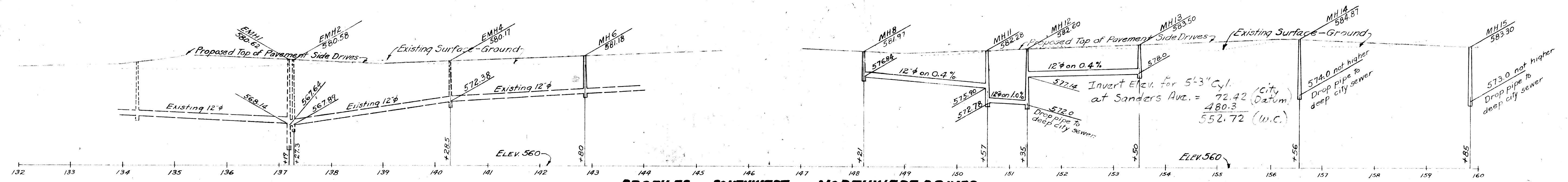
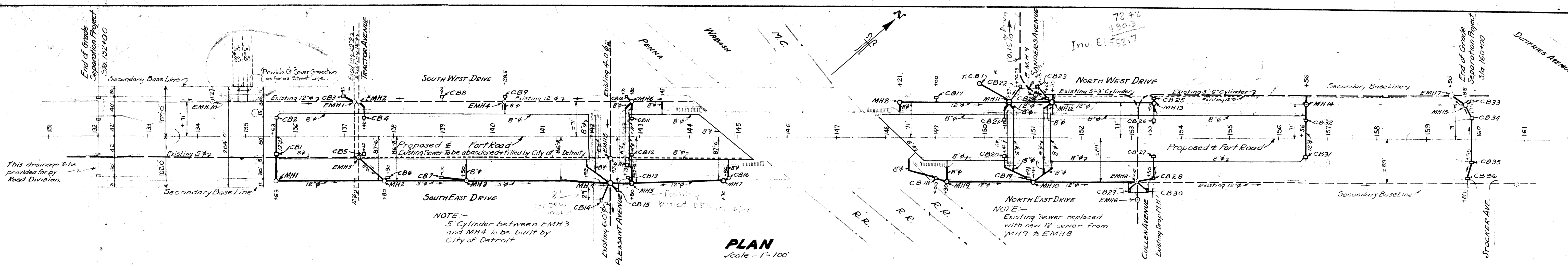
PROFILES ALONG PIER & ABUTMENT
Showing elevations of top of finished pavt and top of bearing rails



SPECIFICATIONS
 GENERAL: Board of Wayne Co. Road Commissioners Specifications for Grade Sepn. XI of 82-22-37 Job 131
 CONCRETE: For design see Joint Committee Specs. of 1924
 REINF. STEEL: Intermediate Grade. For design see Joint Committee Specs. of 1924
 STRUCT. STEEL: For design, workmanship, and material see A.R.E.A. Specs. of 1925
 LOADING: Roadway - 24 Ton Trucks and 25% Impact
 Sidewalks - 100 lbs/ft
 Piers & Abutts. - Above Live Loads with no Impact

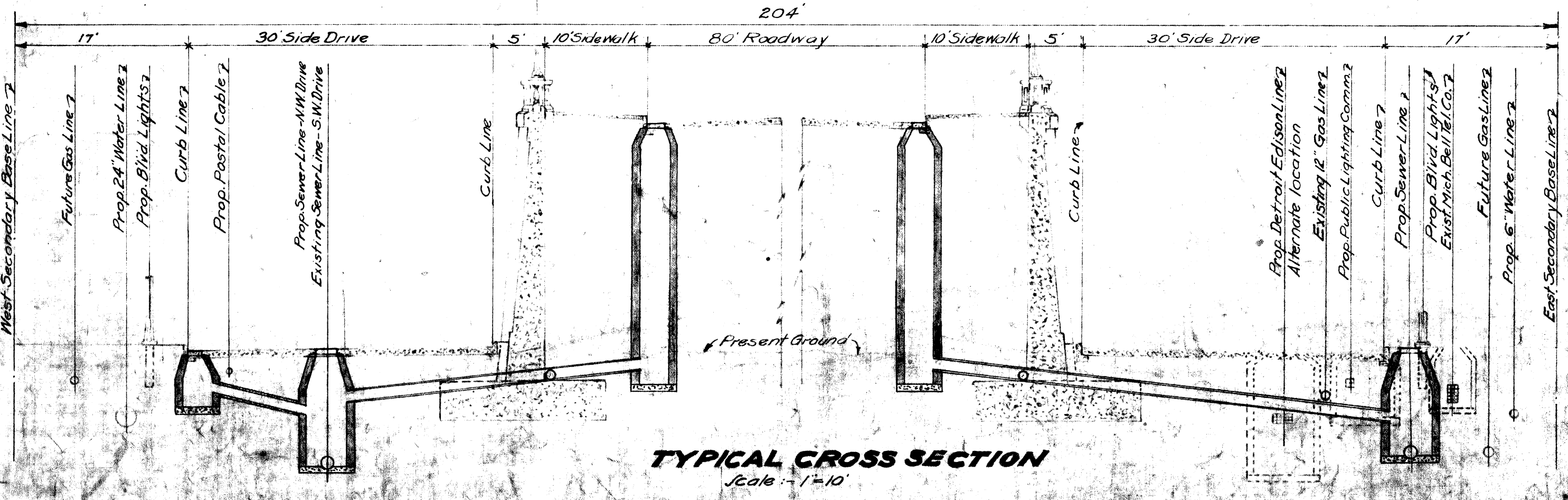
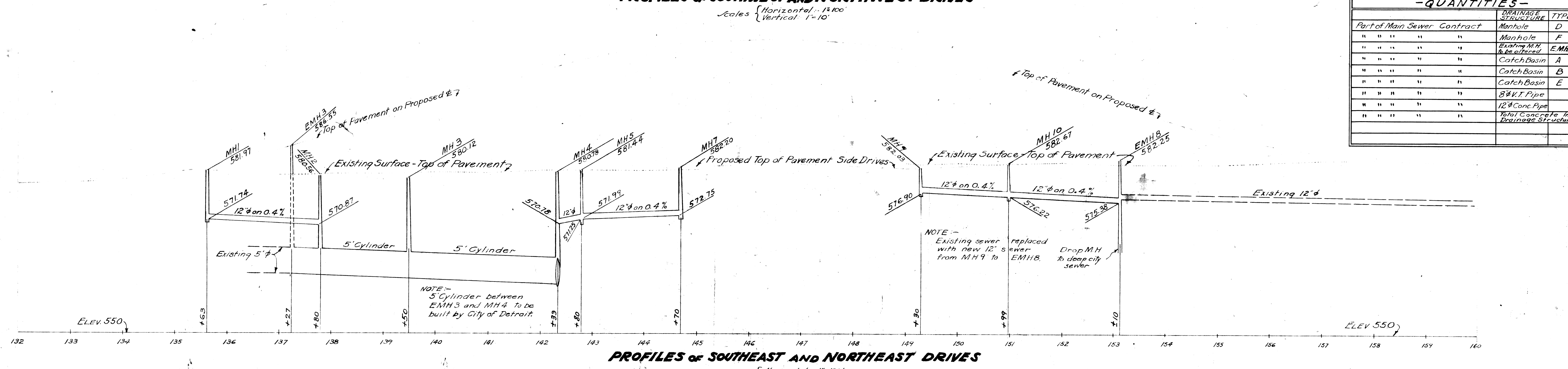
Loose joints removed from beams above Wabash & M.C. R.R.s and coated with waterproofing material Sept. to Nov. 1944 see Report by J. C. ...

REVISIONS Revised & checked changed - Oct 24 1928 W. N. S.	BOARD OF WAYNE COUNTY ROAD COMMISSIONERS DETROIT, MICH. EDWARD N. HINES, CHAIRMAN JOHN S. HAGGERTY, COMMISSIONER WILLIAM F. BUTLER, COMMISSIONER
GENERAL DRAWING BRIDGE OVER R.R. FORT ROAD - MILE 2.8 N PENNA. WABASH - M.C. R.R.s GRADE SEPN XI # 82-22-37	
DESIGNED BY W. N. S. DRAWN BY W. N. S. CHECKED BY E.H.C. DATE May 27, 1928 SCALE 1/16" CORRECTED BY J.C. ... CHIEF DESIGNER	
APPROVED [Signature] BRIDGE ENGINEER REG. CIV. ENR. APPROVED [Signature] ENGINEER MANAGER REG. CIV. ENR.	
JOB 131 ISSUE NO. 4 DATE Nov 1 1928	SHEET NO. 25



-QUANTITIES-

Part of Main Sewer Contract	DRAINAGE STRUCTURE	TYPE	NUMBER
" " " "	Manhole	D	9
" " " "	Manhole	F	3
" " " "	Existing MH like shown	EMH3	1
" " " "	Catch Basin	A	26
" " " "	Catch Basin	B	1
" " " "	Catch Basin	E	10
" " " "	8" V.T. Pipe		470 Lin. Ft.
" " " "	12" Conc. Pipe		2500 Lin. Ft.
" " " "	Total Concrete in Drainage Structures		33.6 Yds.



GENERAL NOTES

PIPE All pipe 12" or over shall be reinforced concrete culvert pipe except as noted. All pipe under 12" shall be bell and spigot vitrified tile.

ALIGNMENT Sewers shall be straight in alignment and slope between Manholes. The alignment of Catch Basin gratings shall be parallel to the alignment of the curb.

ELEVATION The tops of drainage structures shall be set to conform with grades and final elevations of surrounding pavement or ground.

ABUTMENT and WALL DRAINS Abutment and Wall Drains shall be 6" and 8" vitrified tile pipe and shall be laid with open joints.

BACKFILL All sewers in open cut shall be backfilled to the surface of the ground with sand or gravel. Abutment and wall drains shall be covered with not less than 18" of gravel.

CONNECTIONS All connections from Catch Basins to Manholes shall be 12" reinforced concrete culvert pipe unless otherwise specified. Connections from Wall and Abutment drains to Drainage system shall be 8" bell and spigot vitrified tile.

LEGEND New sewers in Main Sewer Contract are shown. Existing sewers to be used in Main Sewer Contract or left undisturbed are shown. Existing sewers to be abandoned are shown.

DETAILS Wall Drains and Abutment Drains to be part of Mesoply Contract are shown. For details of drainage structures see Sheet No. 42.

ABANDONED CATCH BASINS Pipes leading from abandoned Catch Basins shall be sealed and the Catch Basin filled.

XOI of 8221

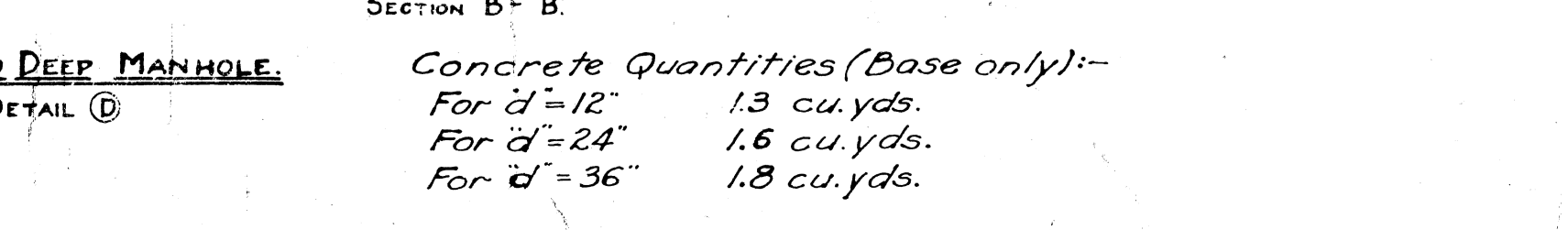
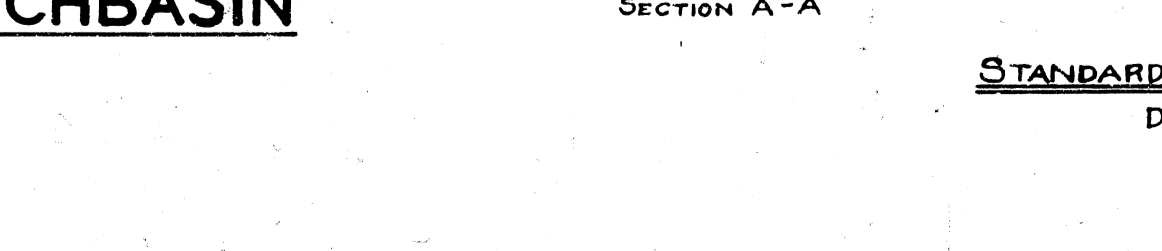
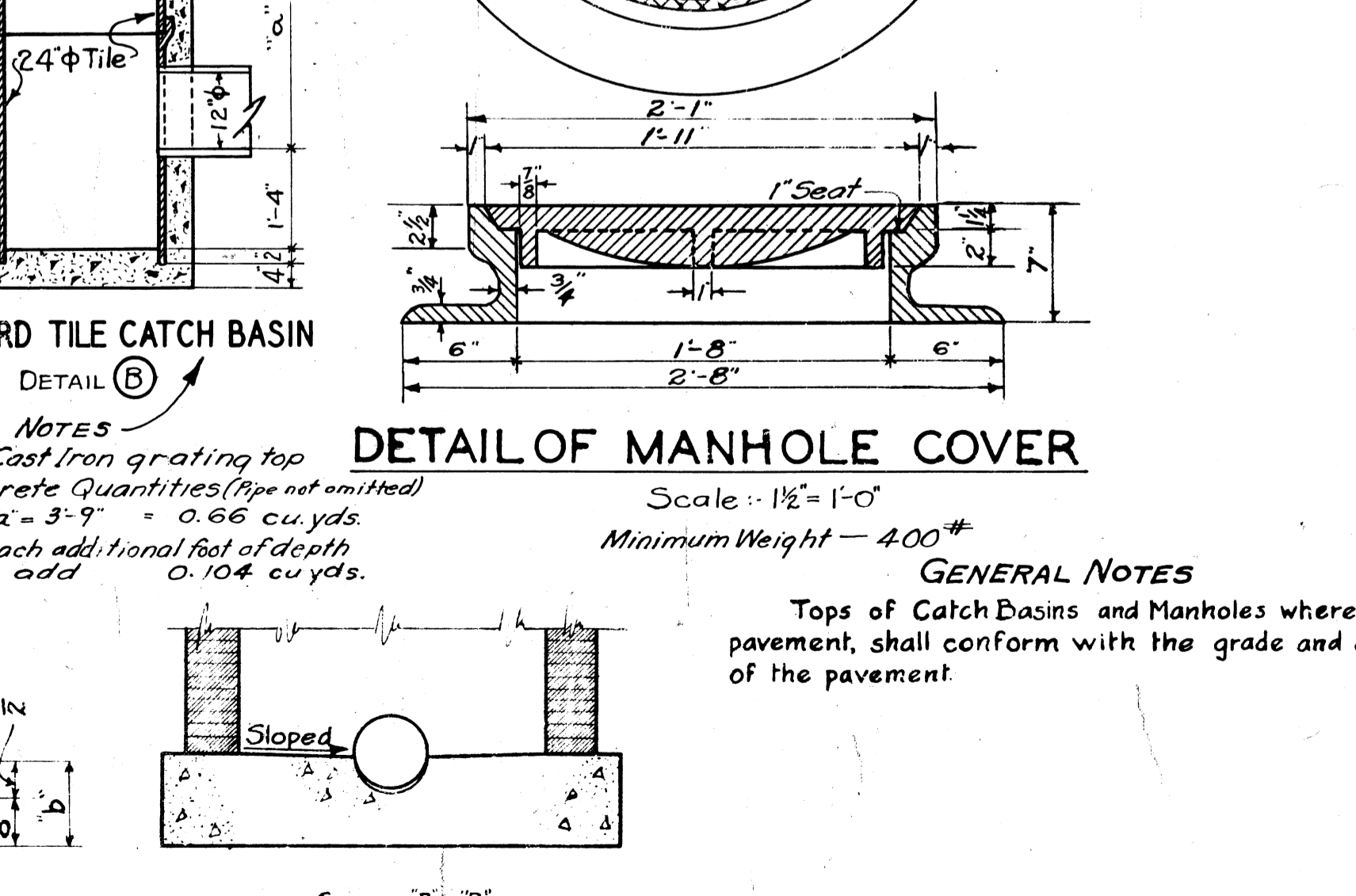
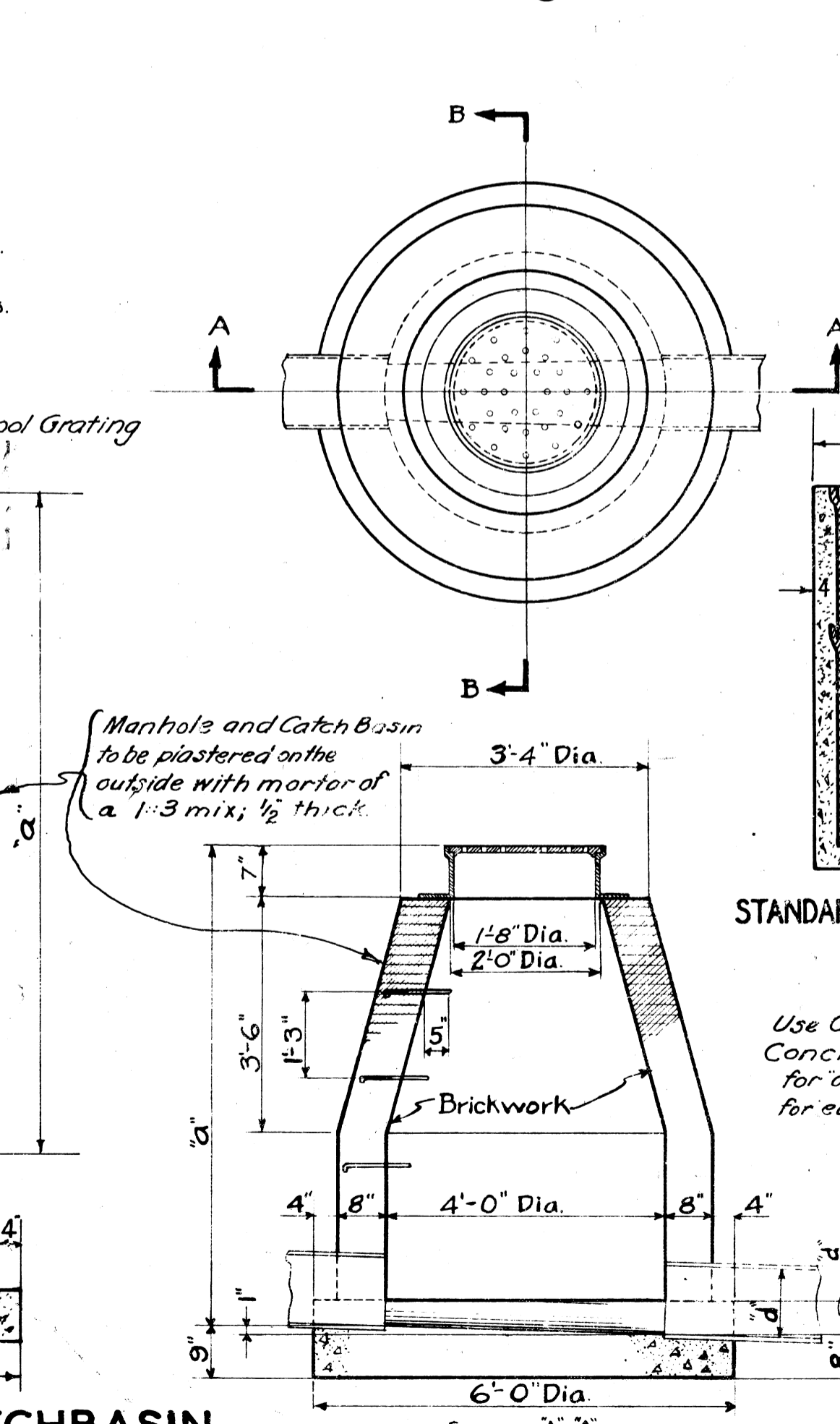
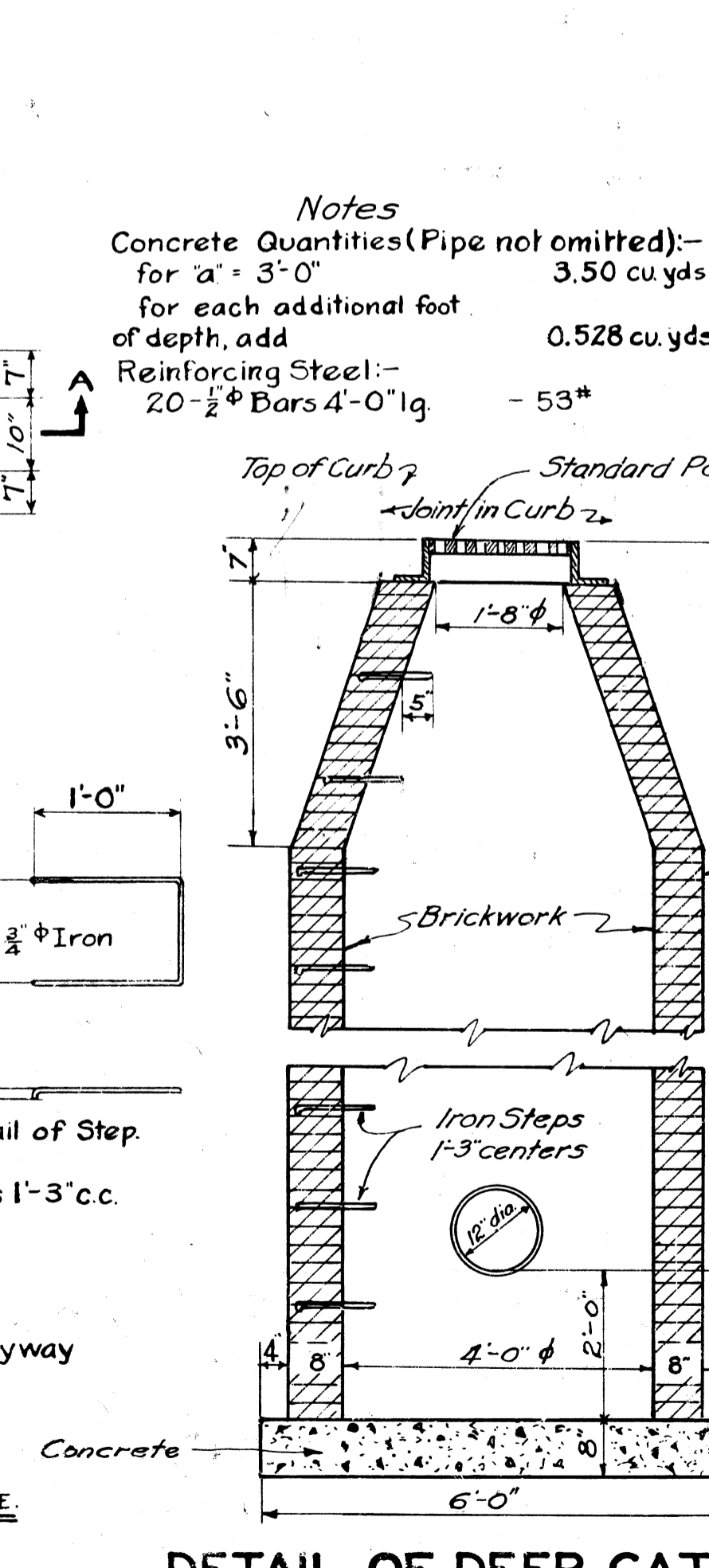
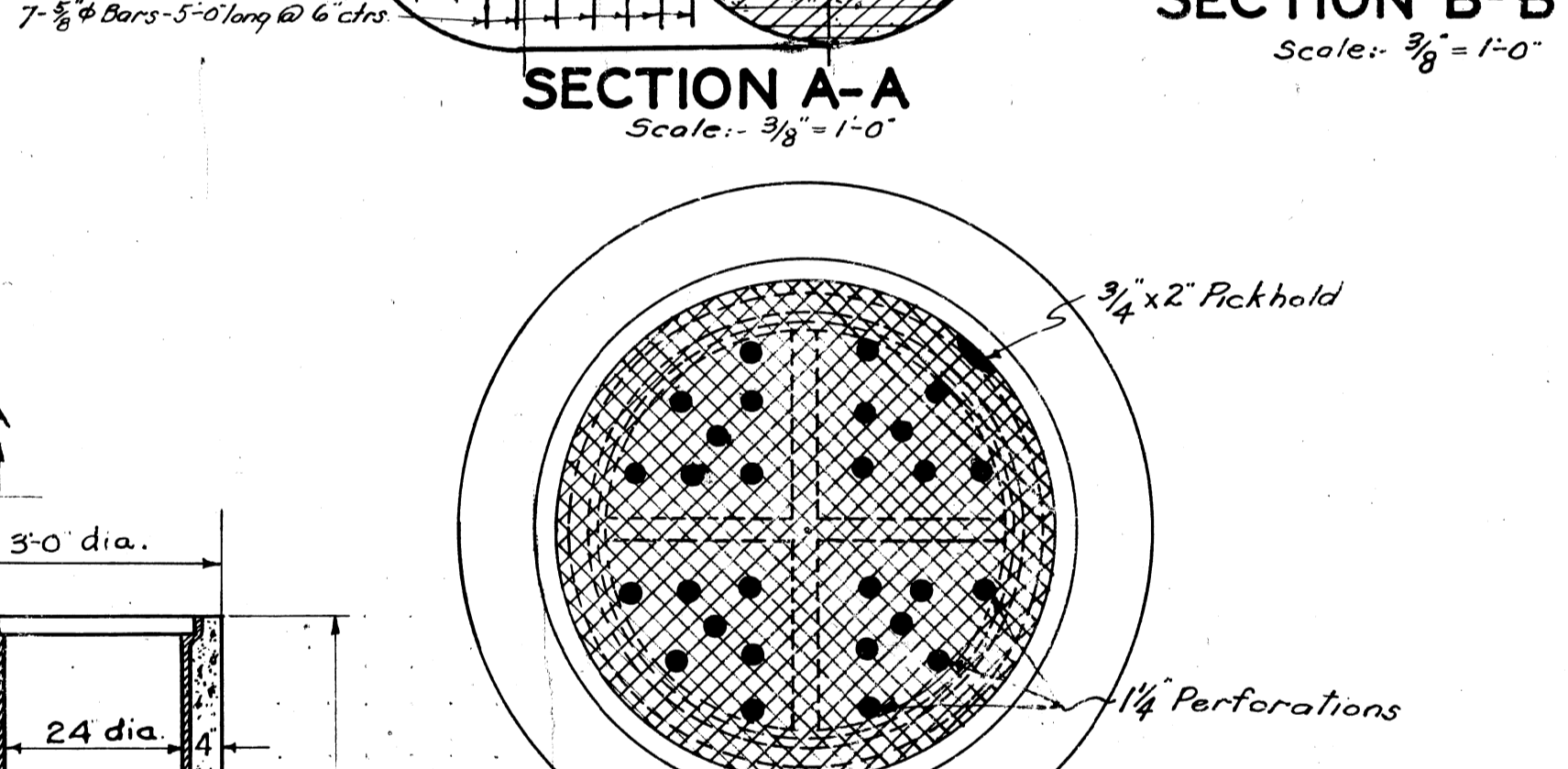
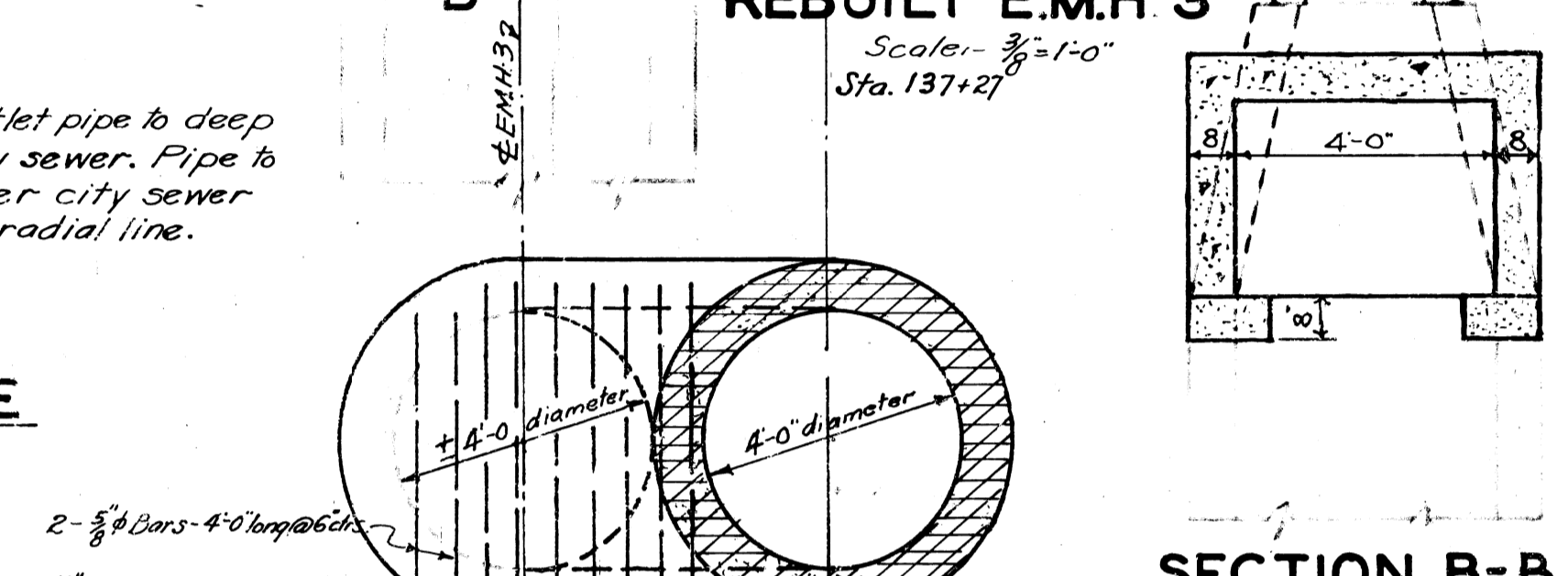
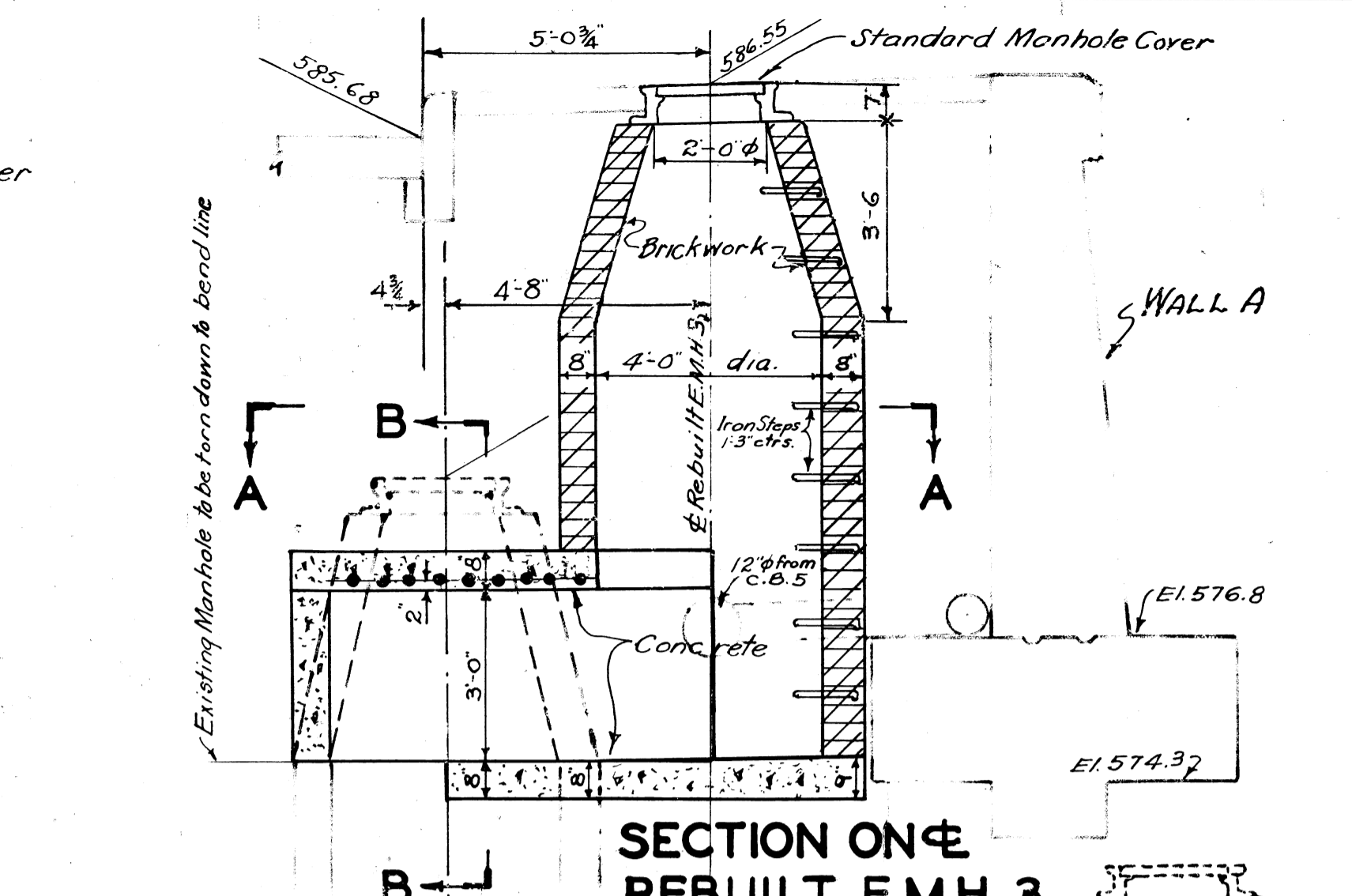
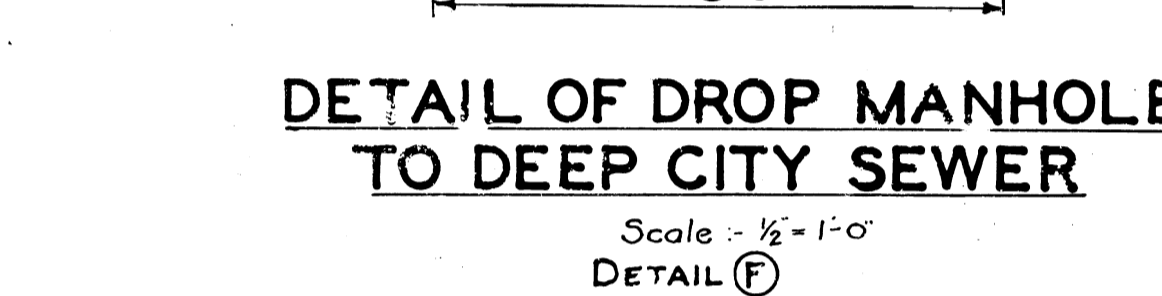
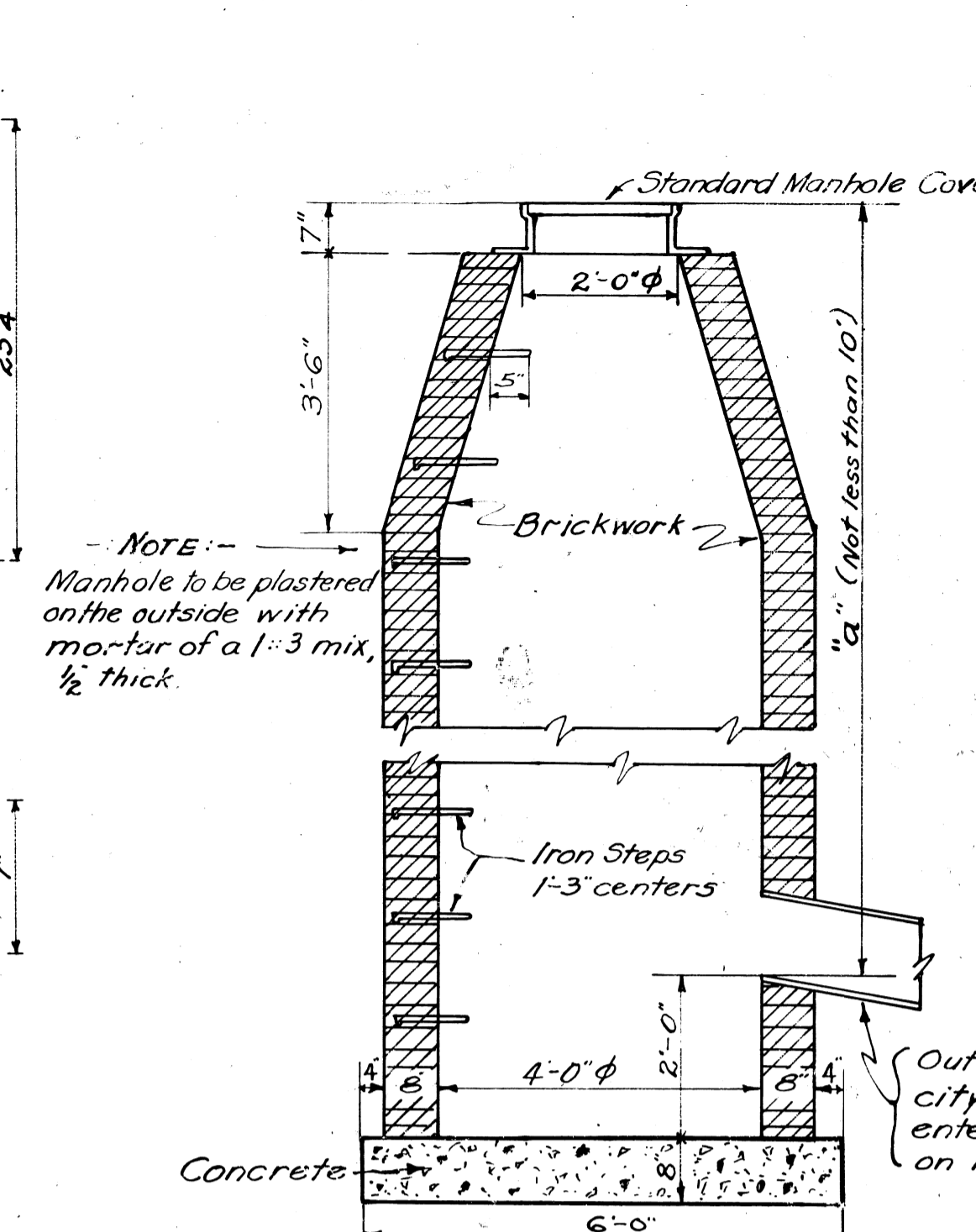
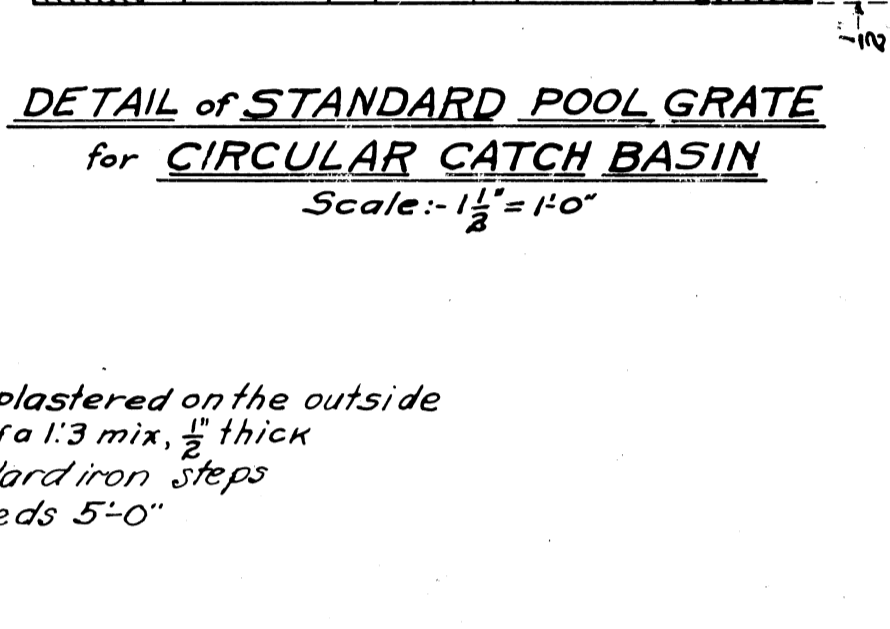
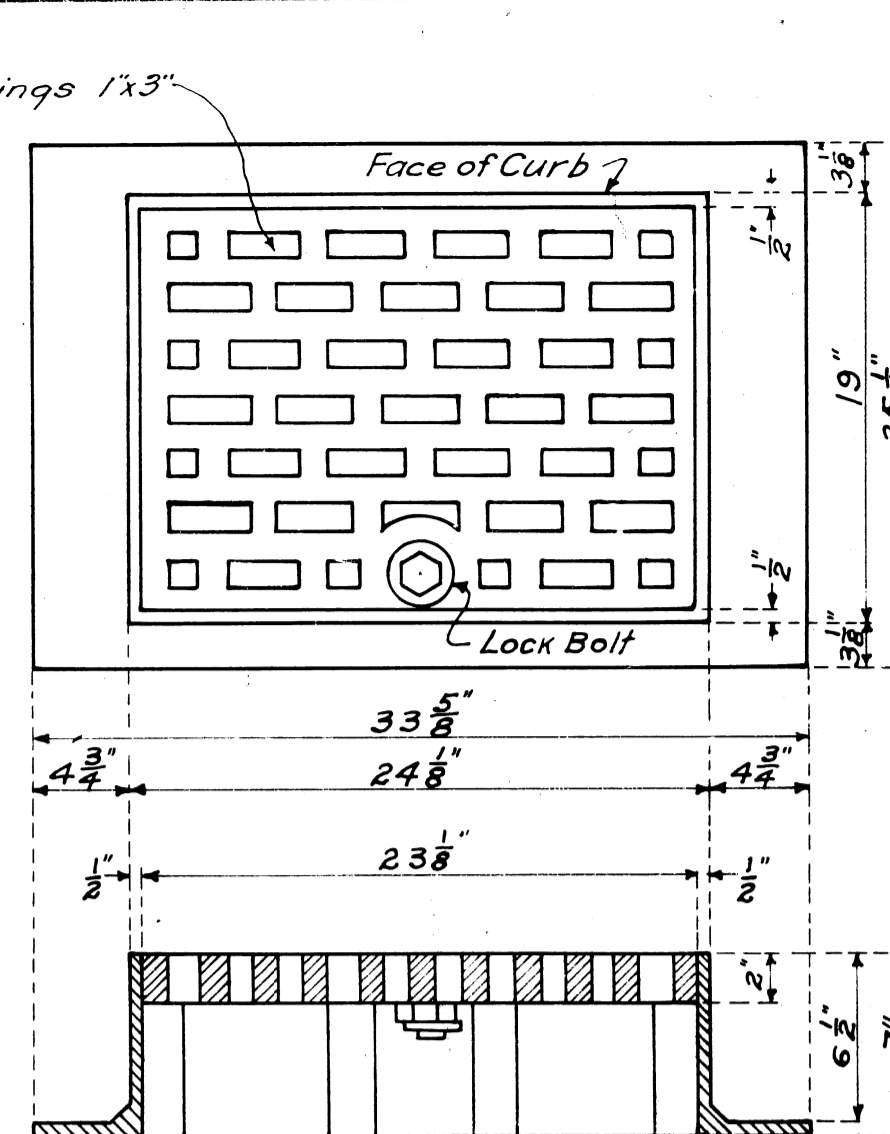
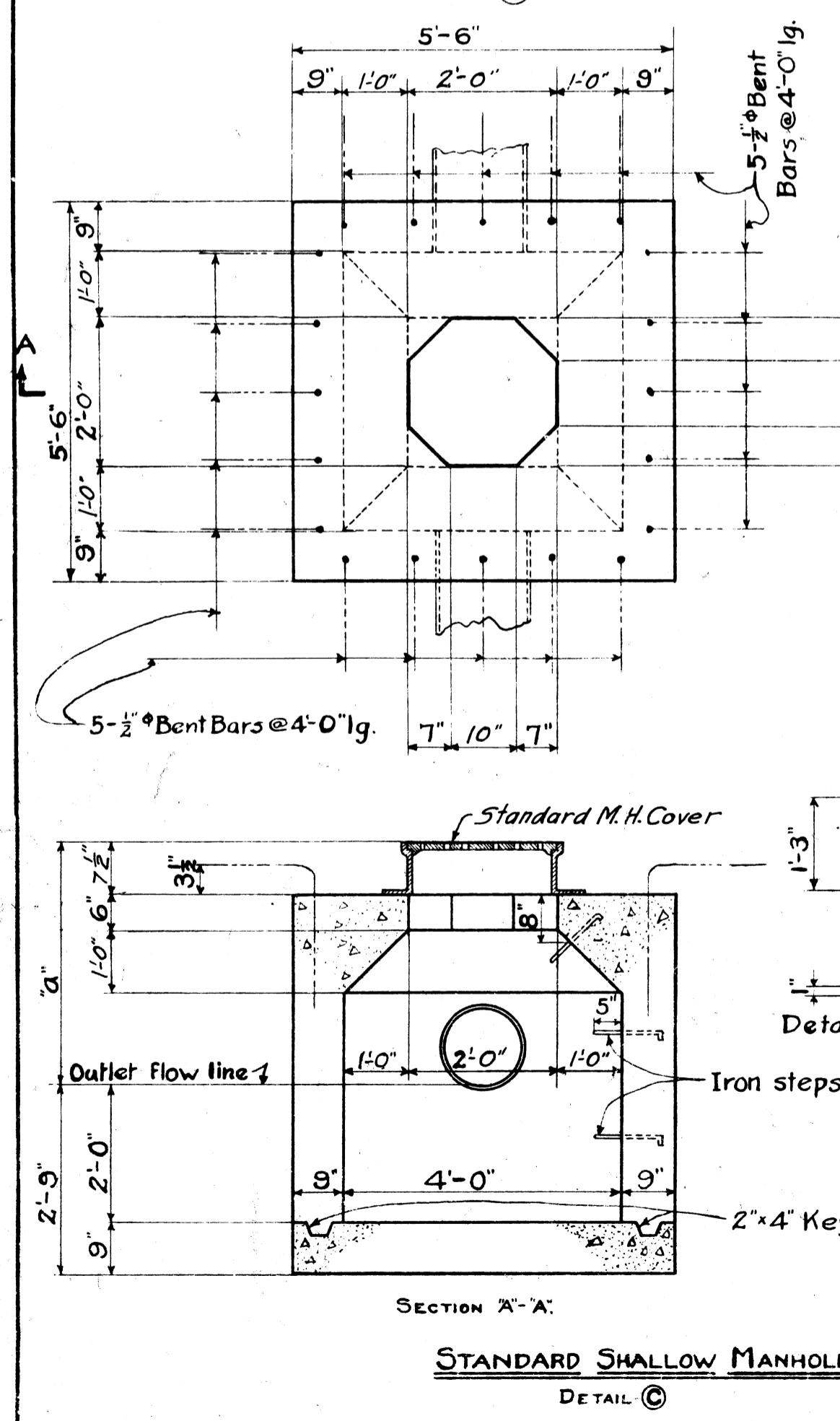
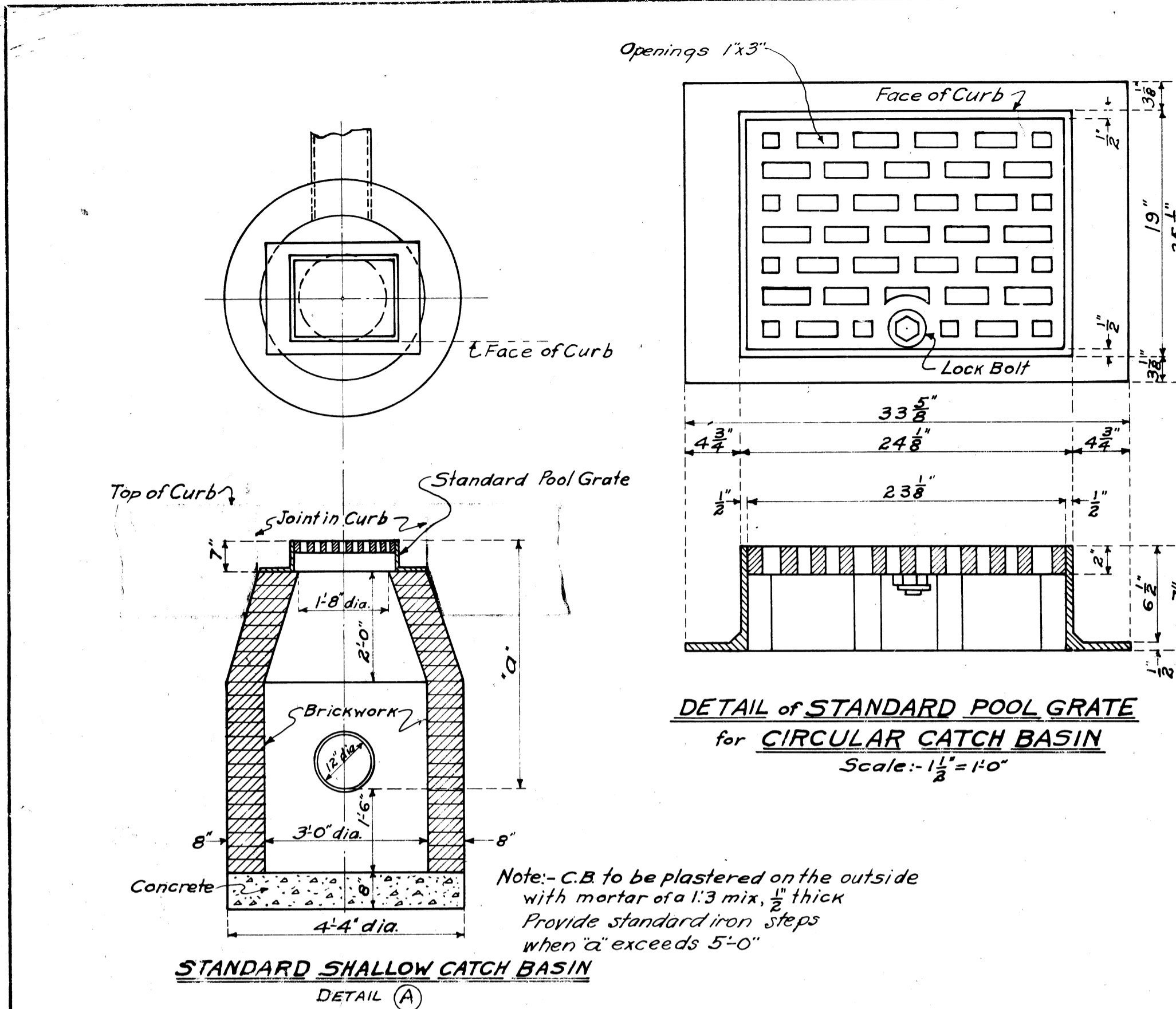
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WILLIAM F. BUTLER, COMMISSIONER

DRAINAGE PLAN
FORT ROAD - MILE 2.8N
PA-WAB-116 R.R.'S. GRADE SEPARATION - XI OF 22-37

DESIGNED BY: M.S. DRAWN BY: M.S. CHECKED BY: J.C.S. DATE: 4-12-28 SCALE: As Shown CORRECT: J.C.S. CHIEF ENGINEER

JOB NO. 131
ISSUE NO. 1
APPROVED: [Signature] SUPERVISOR
APPROVED: [Signature] ENGINEER



Drainage Structure	Station	Elev. Top	Elev. Flowline from C.B.s.	Detail	'a'	'd'	'b'	YARDAGE	REMARKS
M.H.-1	135+63	581.60	571.74	D	9.86	1'-0"	1'-2"	1.3	To be built by City of Detroit
M.H.-2	137+80	580.56	574.0	D	7.45	1'-0"	1'-2"	1.3	To be built by City of Detroit
M.H.-3	139+50	580.20							To be built by City of Detroit
M.H.-4	142+33	581.19							To be built by City of Detroit
M.H.-5	142+80	581.06	571.25	D	10.71	1'-0"	1'-2"	1.3	
M.H.-6	142+80	581.47	574.0	D	7.45	1'-0"	1'-2"	1.3	New Manhole on Existing 12" Sewer
M.H.-7	144+70	582.68	572.75	D	9.93	1'-0"	1'-2"	1.3	
M.H.-8	148+21	581.97	576.84	D	5.13	1'-0"	1'-2"	1.3	
M.H.-9	149+30	582.13	576.90	D	5.23	1'-0"	1'-2"	1.3	
M.H.-10	150+99	582.81	576.22	D	6.59	1'-0"	1'-2"	1.3	
M.H.-11	150+57	582.28	572.78	D	9.50	1'-0"	1'-2"	1.3	
M.H.-12	151+35	582.60	572.0	F	10.6	1'-0"		0.70	
M.H.-13	153+50	583.45	578.0	F	5.45	1'-0"	1'-2"	1.3	
M.H.-14	156+56	584.67	574.0	F	10.67	1'-0"		0.70	
M.H.-15	157+85	583.30	573.0	F	10.30	1'-0"		0.70	
E.M.H.-1	137+19	580.62	563.84						
E.M.H.-2	137+273	580.58	567.87					2.70	
E.M.H.-3	137+27	585.55	561.40						
E.M.H.-4	140+285	580.17	572.38						
E.M.H.-5	142+338	581.10	559.22						
E.M.H.-6	153+10	582.25							To be built by City of Detroit
E.M.H.-7	159+60	583.80							To be built by City of Detroit
E.M.H.-8	153+10	582.25							To be built by City of Detroit
E.M.H.-9	151+05		576.02						
E.M.H.-10	134+27	579.94	569.87						
C.B.-1	135+63	581.85	576.45	A	5.40			0.36	
C.B.-2	135+63	581.85	577.45	A	4.40			0.36	
C.B.-3	136+93	580.53	576.78	A	3.75			0.36	
C.B.-4	137+42	586.13	577.36	E	8.77			0.70	
C.B.-5	137+42	586.13	576.53	E	9.60			0.70	
C.B.-6	137+90	579.42	576.19	A	3.75			0.36	
C.B.-7	139+00	579.42	575.67	A	3.75			0.36	
C.B.-8	139+00	579.42	575.67	A	3.75			0.36	
C.B.-9	140+285	580.03	576.28	A	3.75			0.36	
C.B.-10	142+70	581.17	577.42	A	3.75			0.36	
C.B.-11	142+80	602.18	579.36	E	22.82			0.70	
C.B.-12	142+80	602.18	579.86	E	22.32			0.70	
C.B.-13	142+73	581.26	577.51	A	3.75			0.36	
C.B.-14	142+76	580.78	571.50	E	9.28			0.70	
C.B.-15	142+34	580.78	577.03	A	3.75			0.36	
C.B.-16	144+86	582.20	577.55	A	4.65			0.36	
C.B.-17	149+00	581.41	577.66	A	3.75			0.36	
C.B.-18	149+00	581.41	577.66	A	3.75			0.36	
C.B.-19	150+91	582.17	578.42	A	3.75			0.36	
C.B.-20	150+47	601.13	580.54	E	20.59			0.70	
C.B.-21	150+47	601.13	581.43	F	19.70			0.70	
C.B.-22	150+76	582.17	578.42	A	3.75			0.36	
C.B.-23	151+05	582.17	578.42	A	3.75			0.36	
C.B.-24	151+22	582.30	576.06	A	6.24			0.36	
C.B.-25	153+50	583.21	579.46	A	3.75			0.36	
C.B.-26	153+50	572.05	574.75	E	12.90			0.70	
C.B.-27	153+50	572.05	580.54	E	11.51			0.70	
C.B.-28	153+50	583.21	574.84	E	8.37			0.70	
C.B.-29	153+02	582.46	578.71	A	3.75			0.36	
C.B.-30	153+24	582.46	578.71	A	3.75			0.36	
C.B.-31	156+56	585.20	581.45	A	3.75			0.36	
C.B.-32	156+56	585.20	580.58	A	4.62			0.36	
C.B.-33	159+95	583.05	579.30	A	3.75			0.36	
C.B.-34	159+95	583.12	577.58	A	3.54			0.36	
C.B.-35	159+95	583.12	578.65	A	4.47			0.36	
C.B.-36	159+87	583.17	580.00	A	3.17			0.36	
T.C.B.1	about 120			B				0.66	

Total Concrete in Drainage Structures = 53.6 Cu Yds.

REVISIONS

1. 10/20/20

2. 10/20/20

3. 10/20/20

4. 10/20/20

5. 10/20/20

6. 10/20/20

7. 10/20/20

8. 10/20/20

9. 10/20/20

10. 10/20/20

BOARD OF WAYNE COUNTY ROAD COMMISSIONERS

DETROIT, MICHIGAN

EDWARD N. HINES, CHAIRMAN JOHN S. HAGGERTY, COMMISSIONER

WILLIAM F. BUTLER, COMMISSIONER

STANDARD DRAINAGE STRUCTURE'S

FORT ROAD—MILE 2.8 N

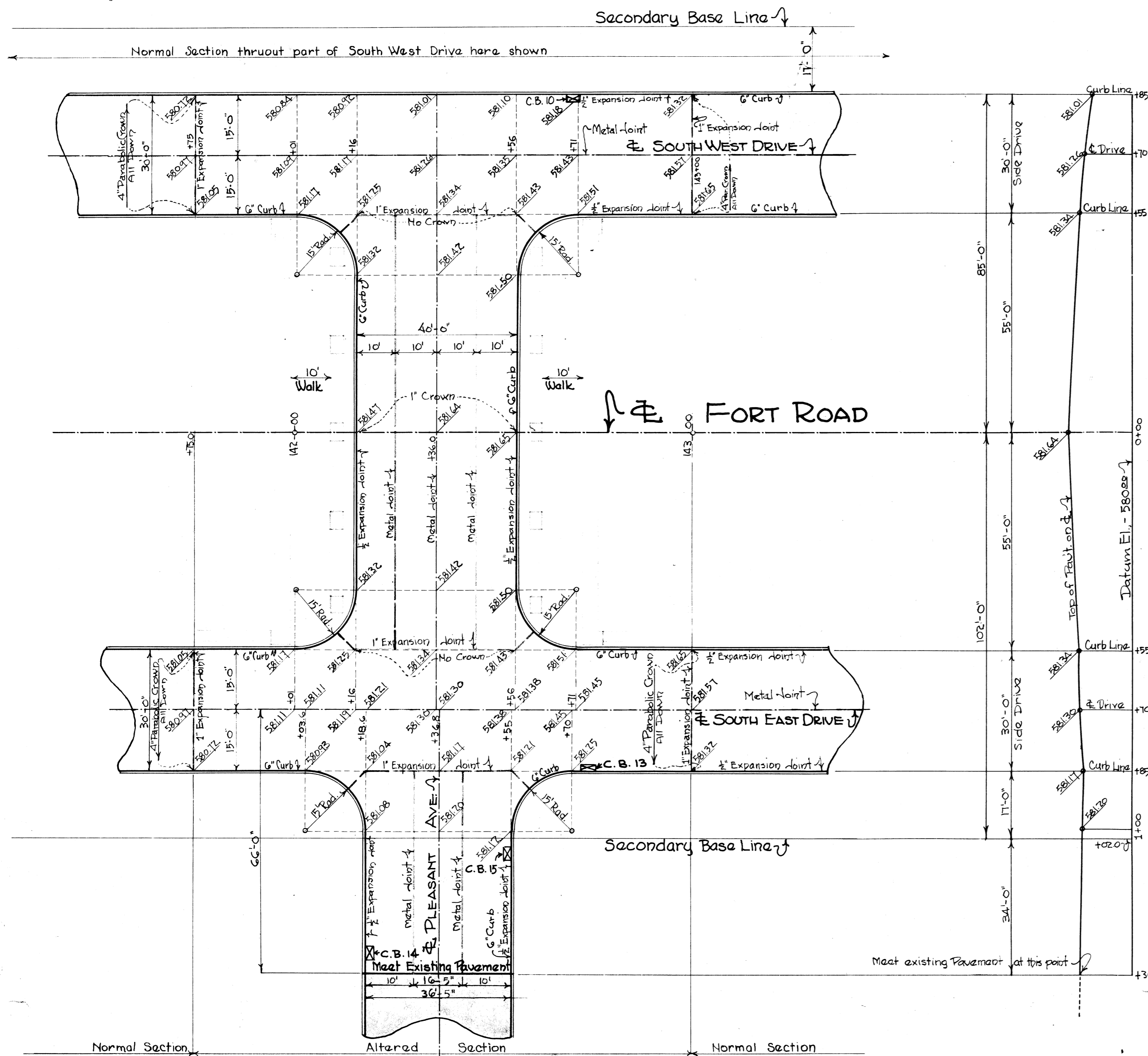
PAWAB.M.C. R.R'S GRADE SEPARATION XI OF 82-22-37

DESIGNED BY: J.P.S. DRAWN BY: J.P.S. CHECKED BY: J.P.S.

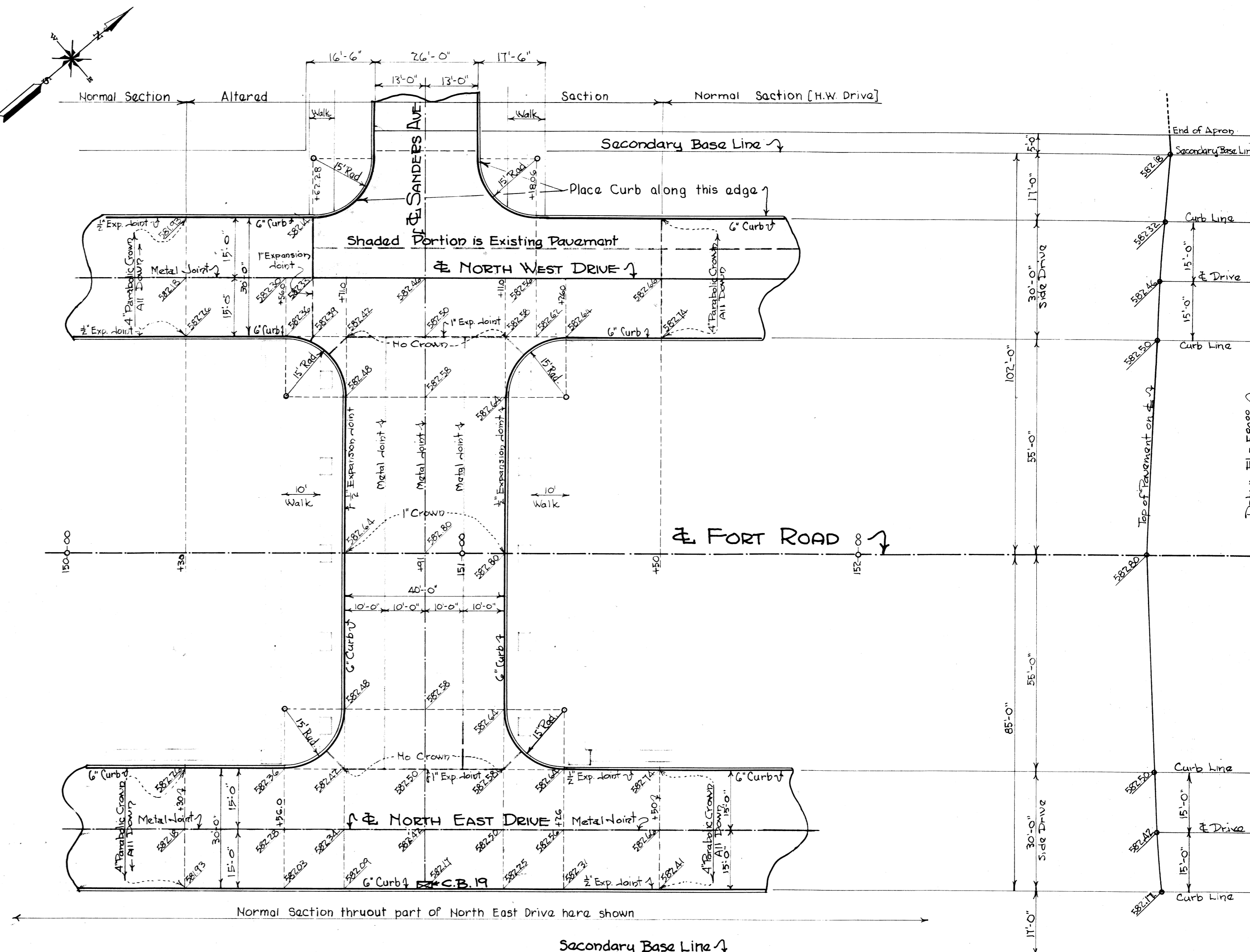
DATE: SCALE: As Shown APPROVED: J.P.S.

CORRECT: J.P.S. APPROVED: J.P.S.

102#191.49

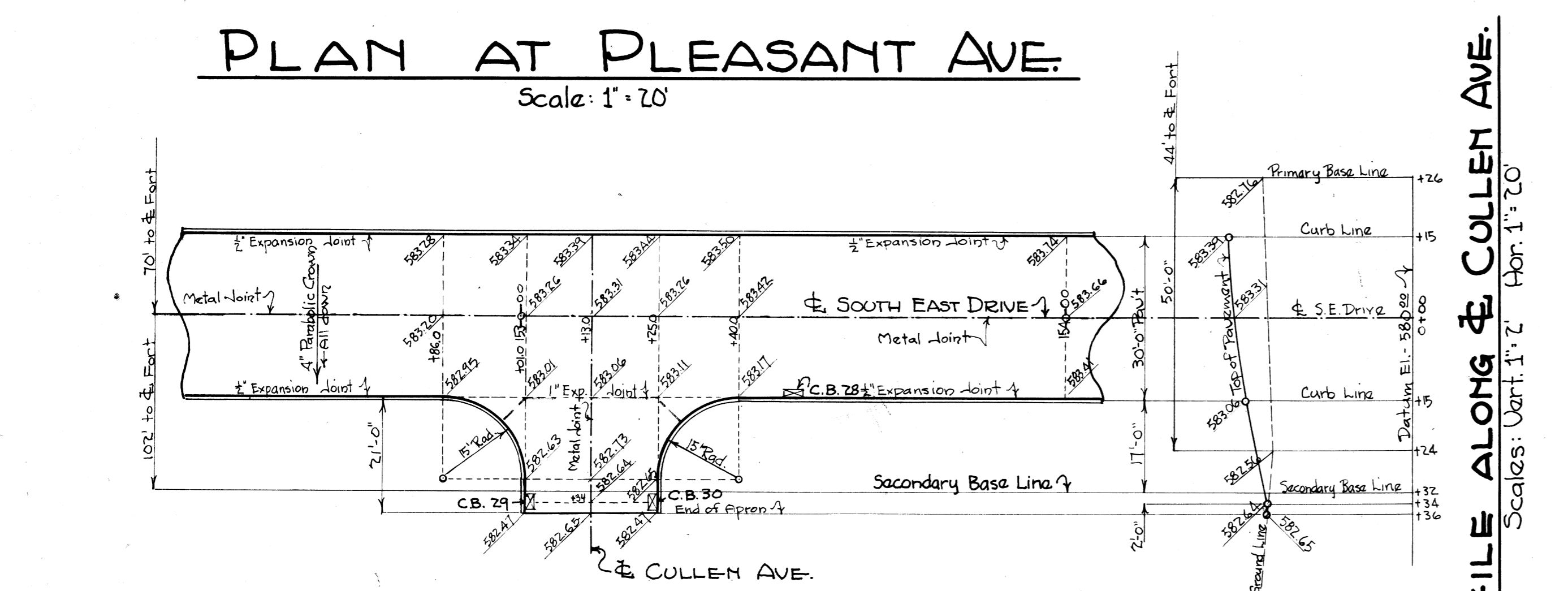


PROFILE ALONG SANDERS AVE.
Scales: Vert. 1" = 2', Hor. 1" = 20'



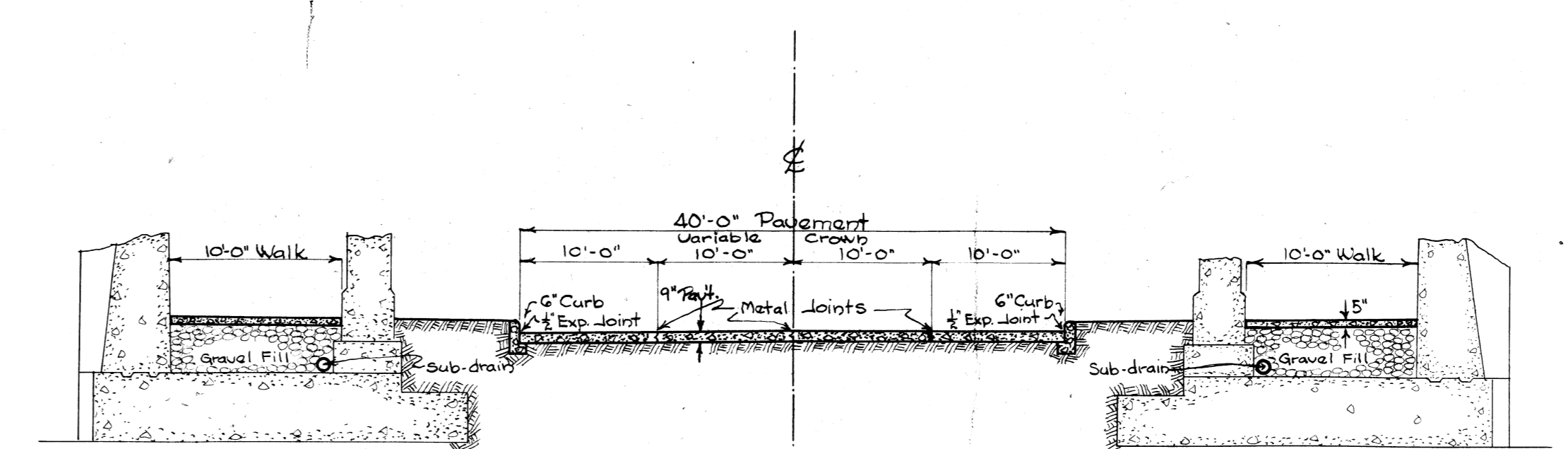
PLAN AT SANDERS AVE.
Scale: 1" = 20'

PROFILE ALONG SANDERS AVE.
Scales: Vert. 1" = 2', Hor. 1" = 20'



PROFILE ALONG CULLEN AVE.
Scales: Vert. 1" = 2', Hor. 1" = 20'

PLAN AT CULLEN AVE.
Scale: 1" = 20'

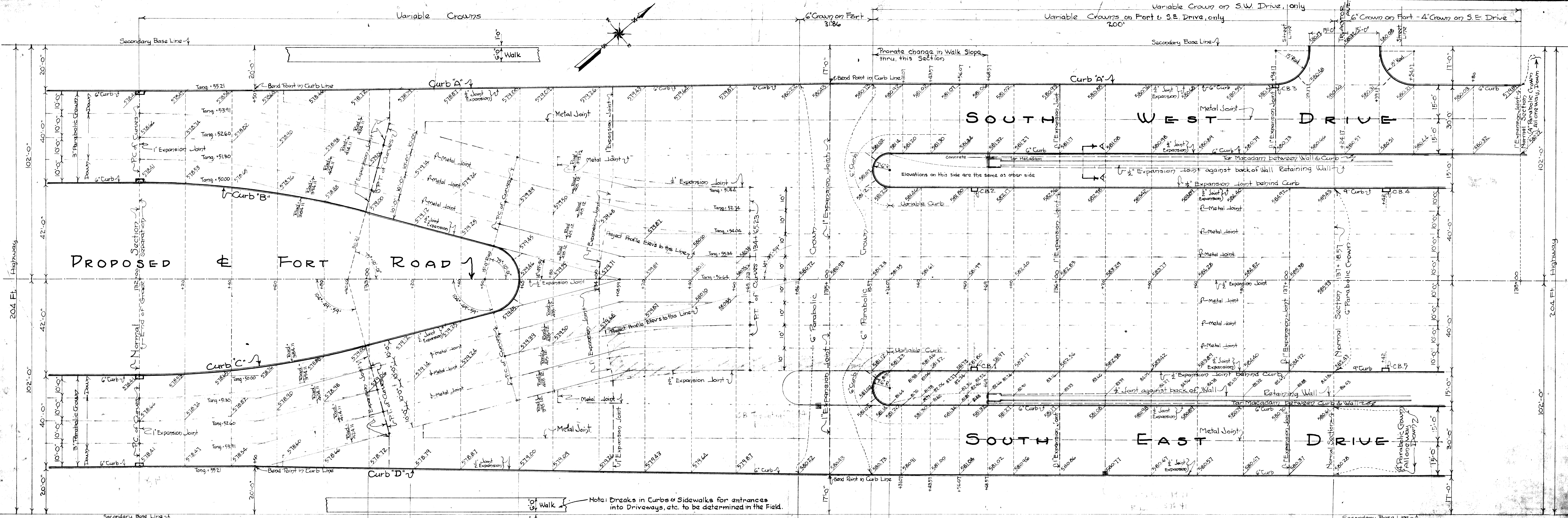


TYPICAL SECTION THRU BRIDGE OVER PLEASANT AVE. OR SANDERS AVE.
Scale: 1/8" = 1'-0"

NOTES

- For complete Profile along Side Drives see Dwg's No 44 & No 45.
- Final Grades of Top of Pavement at the limits must be adjusted in the Field to meet the Grades of the Existing Pavements.
- Transverse Expansion Joints must be placed at 100 ft. intervals across the entire width of the road (not staggered) in the Pavement and Curb.
- Construction Joints in Curb must be placed at 12 ft. intervals.
- Elevations shown are for Top of Pavement.
- For Quantities see Sheets No 44 & No 45

REVISIONS Pavement strips changed in NW Drive from Sanders to Bridge D.E.B. 4-5-29 Plans 3-4-11-29 Side Drives made in E. 18 ft. strips and 12 ft.		BOARD OF WAYNE COUNTY ROAD COMMISSIONERS DETROIT, MICHIGAN WM. F. BUTLER JOHN S. HAGGERTY CHAIRMAN COMMISSIONER EDWARD N. HINES, COMMISSIONER	
DAVING PLAN SANDERS AVE - PLEASANT AVE. FORT ROAD - MILE PENNA. - WABASH - M.C.R.R.'s. GRADE SEPARATION - XI OF 32-27-37		DESIGNED BY: DRAWN BY: D.E.B. CHECKED BY: W.M.S. 1-22-29 DATE: 11-21-28 SCALES AS SHOWN CORRECT CHIEF DESIGNER	
JOB NO. 131 ISSUE NO. DATE: 1922	APPROVED: <i>[Signature]</i> ENGINEER	APPROVED: <i>[Signature]</i> REG. CIV. ENGR.	SHEET NO. 43

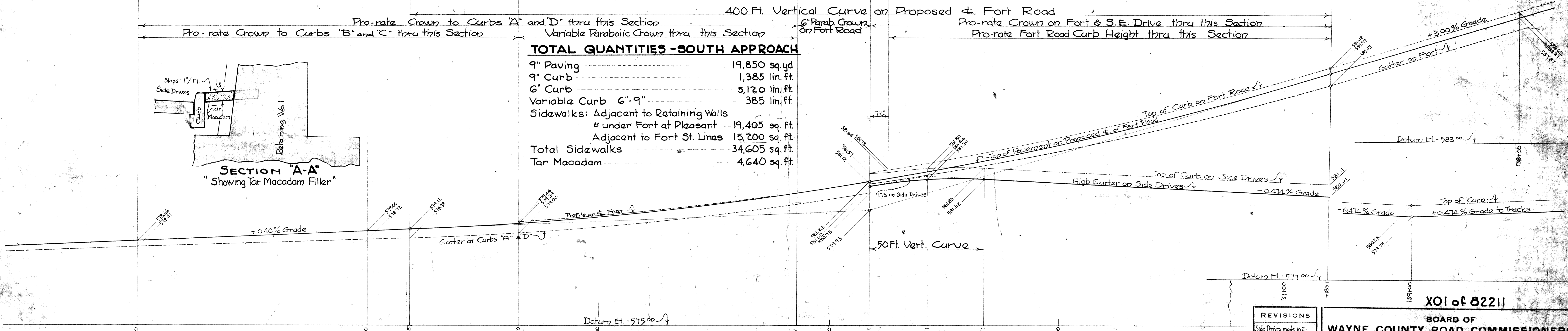
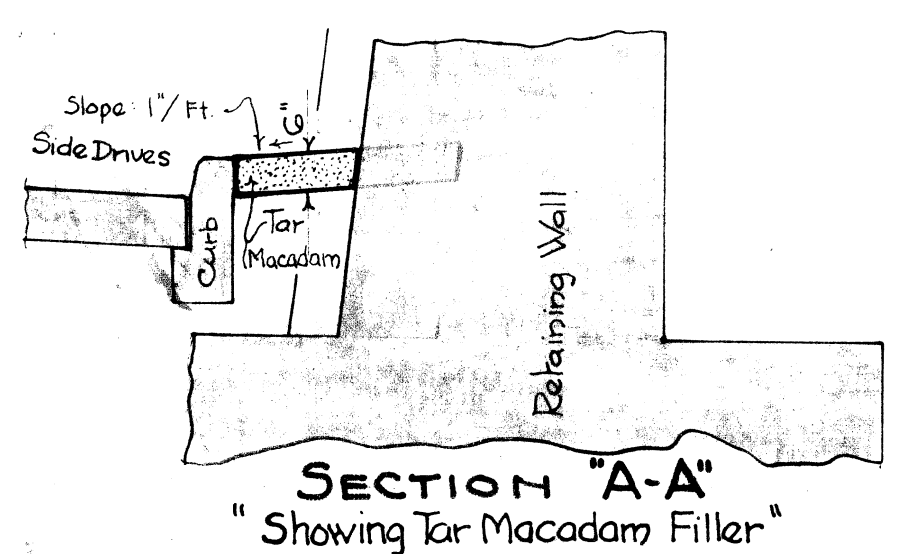


PLAN
Scale: 1" = 20 Ft

Pro-rate Crown to Curbs "A" and "D" thru this Section
 Pro-rate Crown to Curbs "B" and "C" thru this Section
 400 Ft. Vertical Curve on Proposed E Fort Road
 Variable Parabolic Crown thru this Section
 Pro-rate Crown on Fort & S.E. Drive thru this Section
 Pro-rate Fort Road Curb Height thru this Section

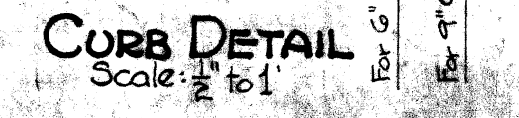
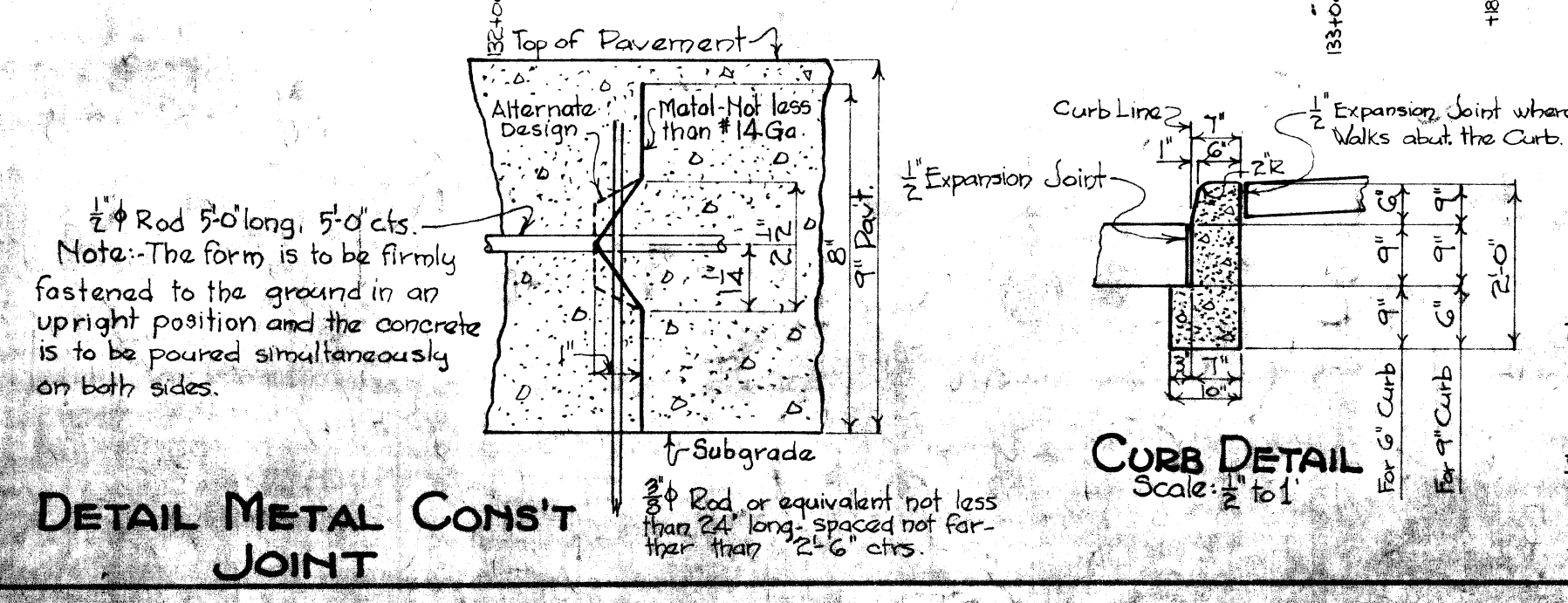
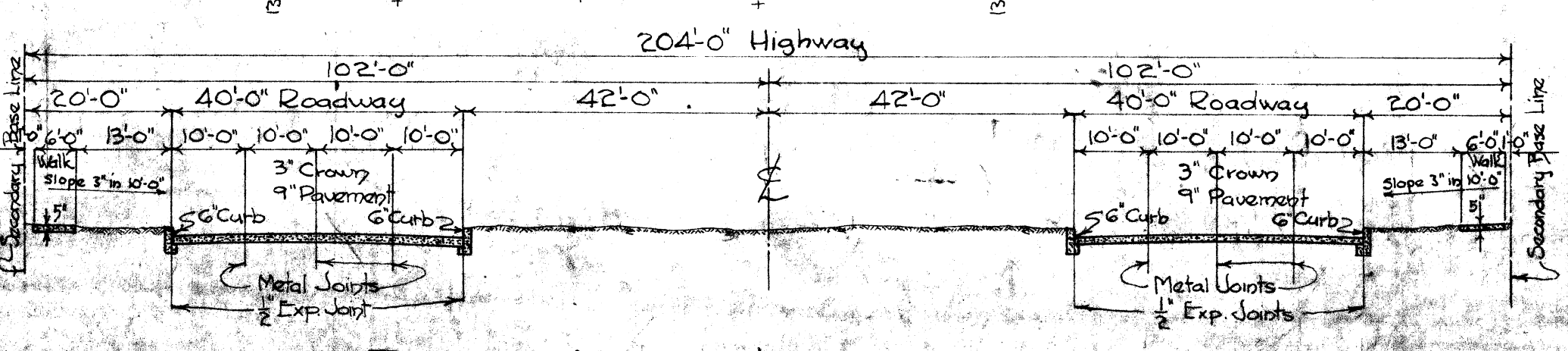
TOTAL QUANTITIES - SOUTH APPROACH

9" Paving	19,850 sq. yd.
9" Curb	1,385 lin. ft.
6" Curb	5,120 lin. ft.
Variable Curb 6"-9"	385 lin. ft.
Sidewalks: Adjacent to Retaining Walls & under Fort at Pleasant	19,405 sq. ft.
Adjacent to Fort St. Lines	15,200 sq. ft.
Total Sidewalks	34,605 sq. ft.
Tar Macadam	4,640 sq. ft.



PROFILES
Scale: (Horiz: 1" = 20 Ft, Vert: 1" = 2 Ft)

NOTES:
 For complete Profile of Top of Pavement on E Fort Road, see Dwg. No. 181-50. Final Grades at Top of Pavement at limits of Grade Separation must be adjusted in the field to meet the Grades of the Existing Pavements. Transverse Expansion Joints must be placed at 100 Ft. intervals across the entire width of the Road (not staggered) in the Pavement and Curb. Construction Joints in Curbs must be placed at 12 Ft. intervals. In general - Elevations shown at Curb Lines are for Top of Pavement. See Dwg. 45 for Typical Normal Section.



WAYNE COUNTY BOARD OF ROAD COMMISSIONERS
 DETROIT, MICHIGAN
 WM. F. BUTLER, CHAIRMAN | JOHN S. HAGGERTY, COMMISSIONER
 EDWARD N. HINES, COMMISSIONER

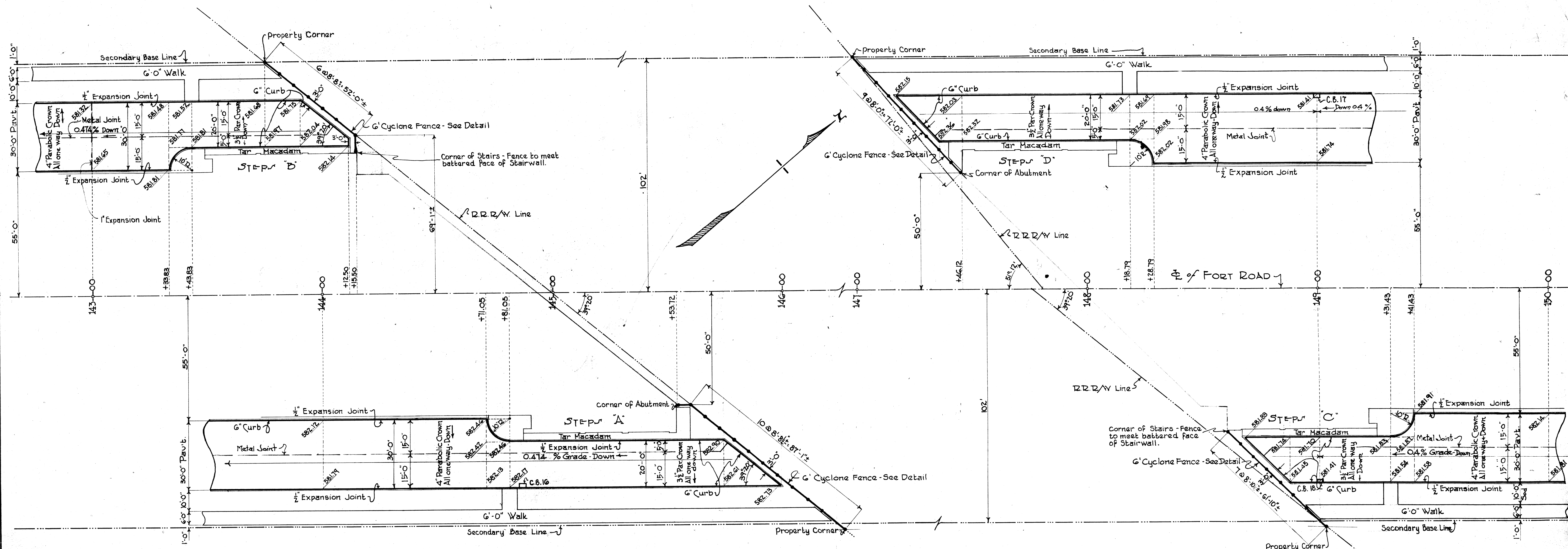
PAVING PLAN - SOUTH END ROAD - MILE
 DENNA WABASH MCRRS GRADE SEPT 11 1915

DESIGNED BY C.R.C. N.Y.C. DRAWN BY D.E.B. CHECKED BY J.S. H.
 DATE 10-18-18. SCALE AS SHOWN. CORRECT. *[Signature]* CHIEF ENGINEER

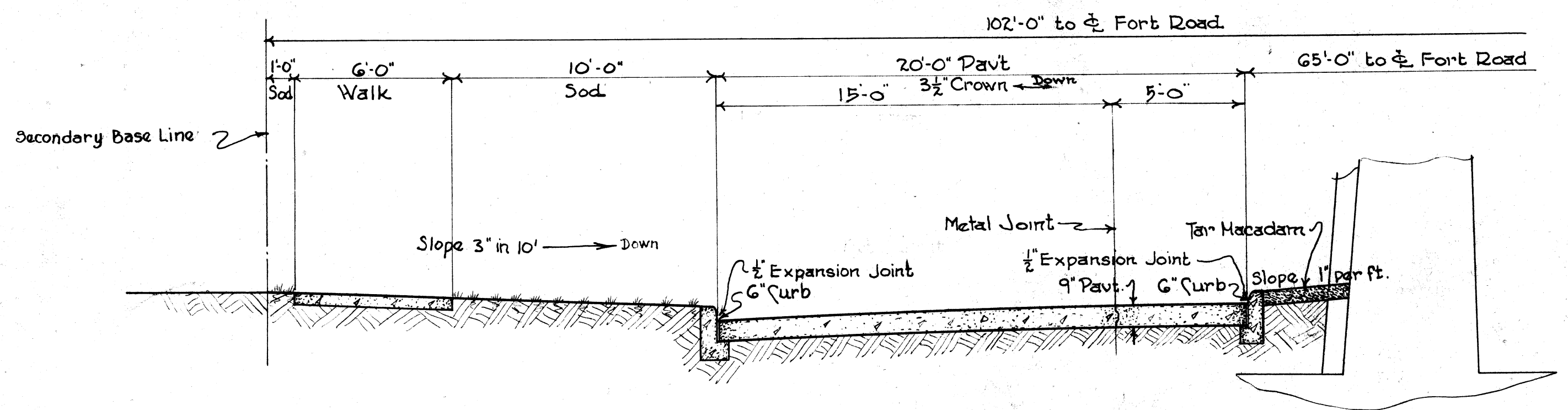
REVISIONS
 Side Drives made in 2-1915. Plans 181-50, 181-51, 181-52, 181-53, 181-54, 181-55, 181-56, 181-57, 181-58, 181-59, 181-60, 181-61, 181-62, 181-63, 181-64, 181-65, 181-66, 181-67, 181-68, 181-69, 181-70, 181-71, 181-72, 181-73, 181-74, 181-75, 181-76, 181-77, 181-78, 181-79, 181-80, 181-81, 181-82, 181-83, 181-84, 181-85, 181-86, 181-87, 181-88, 181-89, 181-90, 181-91, 181-92, 181-93, 181-94, 181-95, 181-96, 181-97, 181-98, 181-99, 181-100.

JOB NO. 181
 SHEET NO. 44

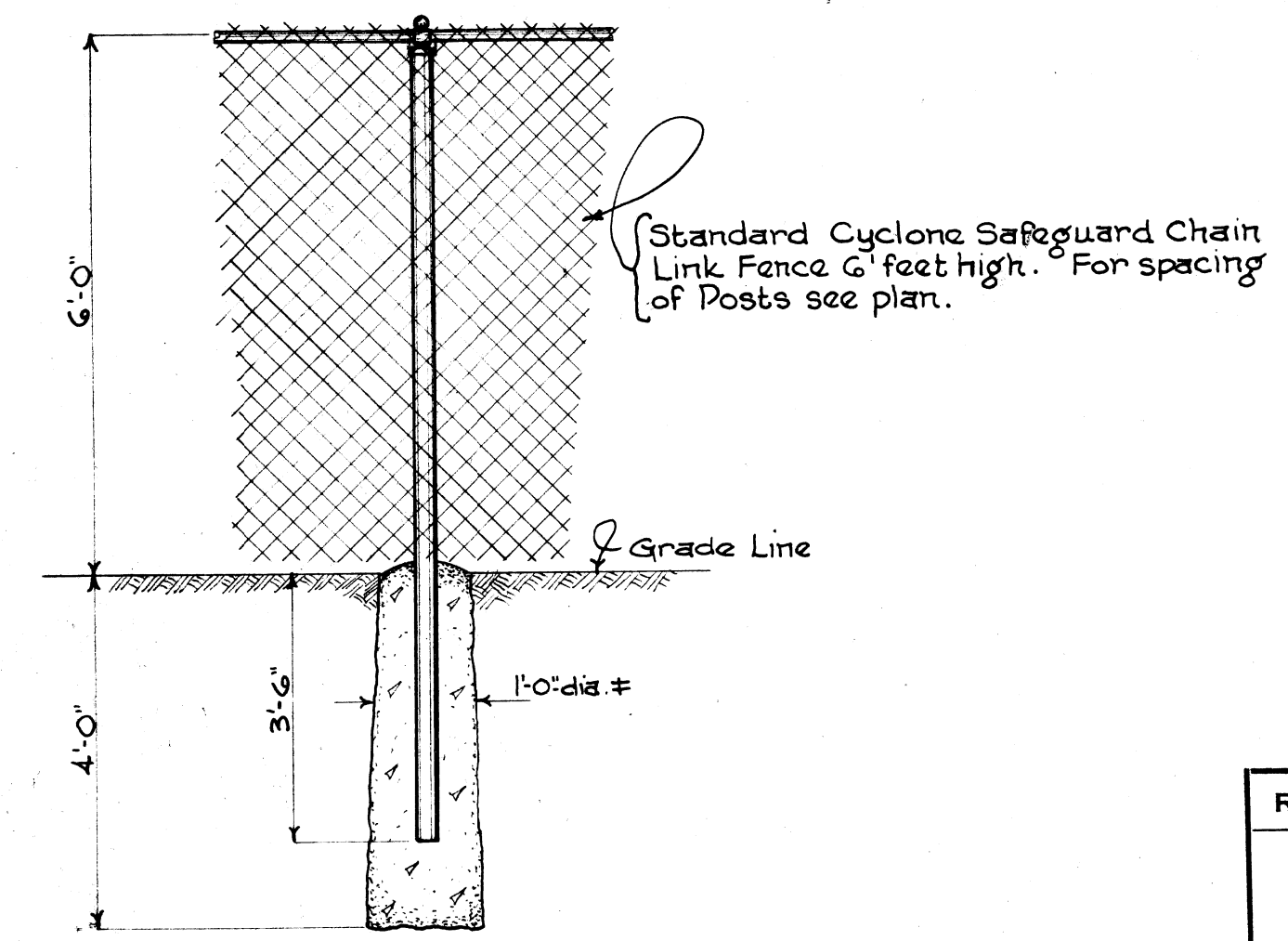
XO1 of 82211



PLAN VIEW
Scale: 1" = 20'



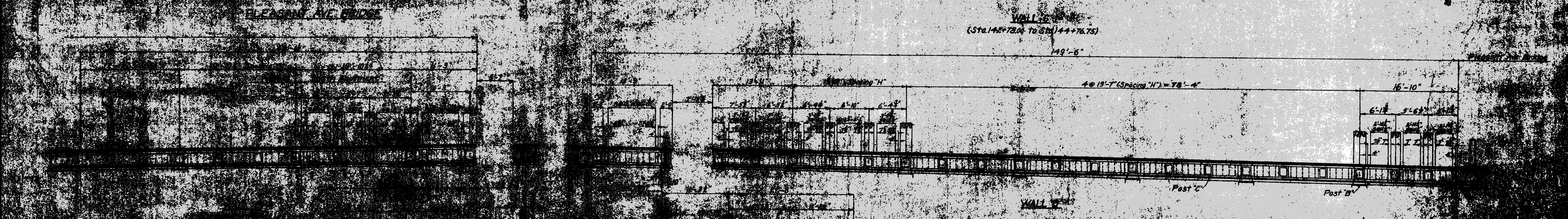
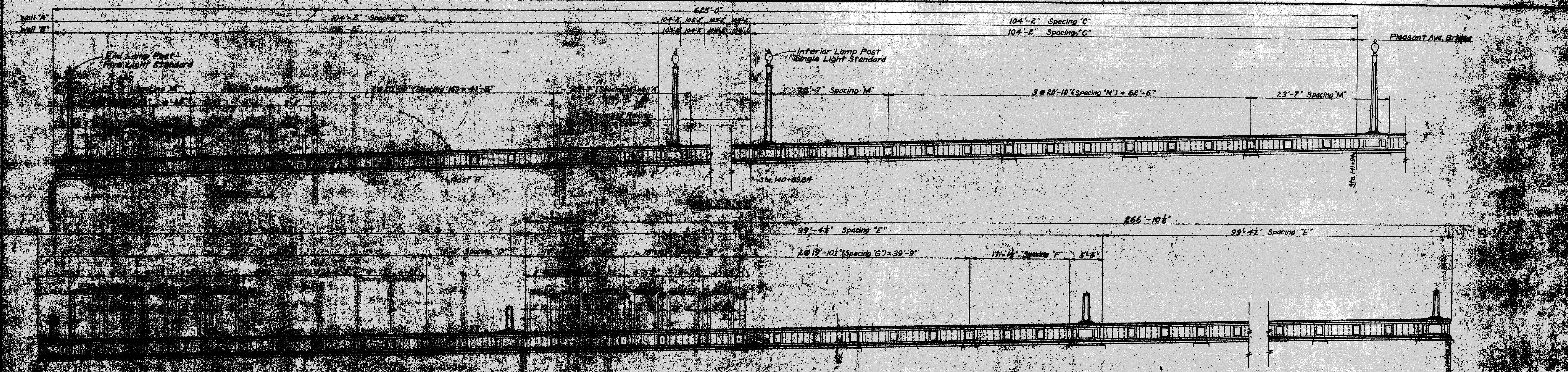
TYPICAL SECTION OF 20' PAVEMENT AT STEPS
Scale: 1/4" = 1'-0"



DETAIL OF FENCE POST
Scale: 1/2" = 1'-0"

NOTE:
For General notes, Profiles, Details of curb and metal joint, Quantities, and etc., see Sheets H244 & H245.

REVISIONS 		BOARD OF WAYNE COUNTY ROAD COMMISSIONERS DETROIT, MICHIGAN WM. F. BUTLER (CHAIRMAN) JOHN S. HAGGERTY (COMMISSIONER) EDWARD N. HINES, (COMMISSIONER)	
JOB NO. 131		PAVING DETAILS AT STEPS FORT ROAD—MILE: PENNA-WAB-MC-RRS GRADE SEPH XI/82-22-31	
DESIGNED BY: <i>D.E.D.</i> DATE: 4-5-29		DRAWN BY: <i>D.E.D.</i> CHECKED BY: <i>G.R.C.</i> SCALE: AS SHOWN CORRECT	
APPROVED: <i>[Signature]</i> ENGINEER		APPROVED: <i>[Signature]</i> CHIEF DESIGNER	
APPROVED: <i>[Signature]</i> ENGINEER		APPROVED: <i>[Signature]</i> CHIEF DESIGNER	
ISSUE NO. 1 DATE: 5-31-1928		SHEET NO. 46	



QUANTITIES

Concrete	354.1 Cu Yds
Reinforcing Steel	41480 Lin. Ft.
Spindles "A"	1857
Spindles "B"	157

NOTES

All Construction Joints in concrete directly above Construction Joints in steel.

For Details of Handrail & Lamp Post, HR7 & HR8.

For Dowels from Walls to Handrail, 5A & 5B.

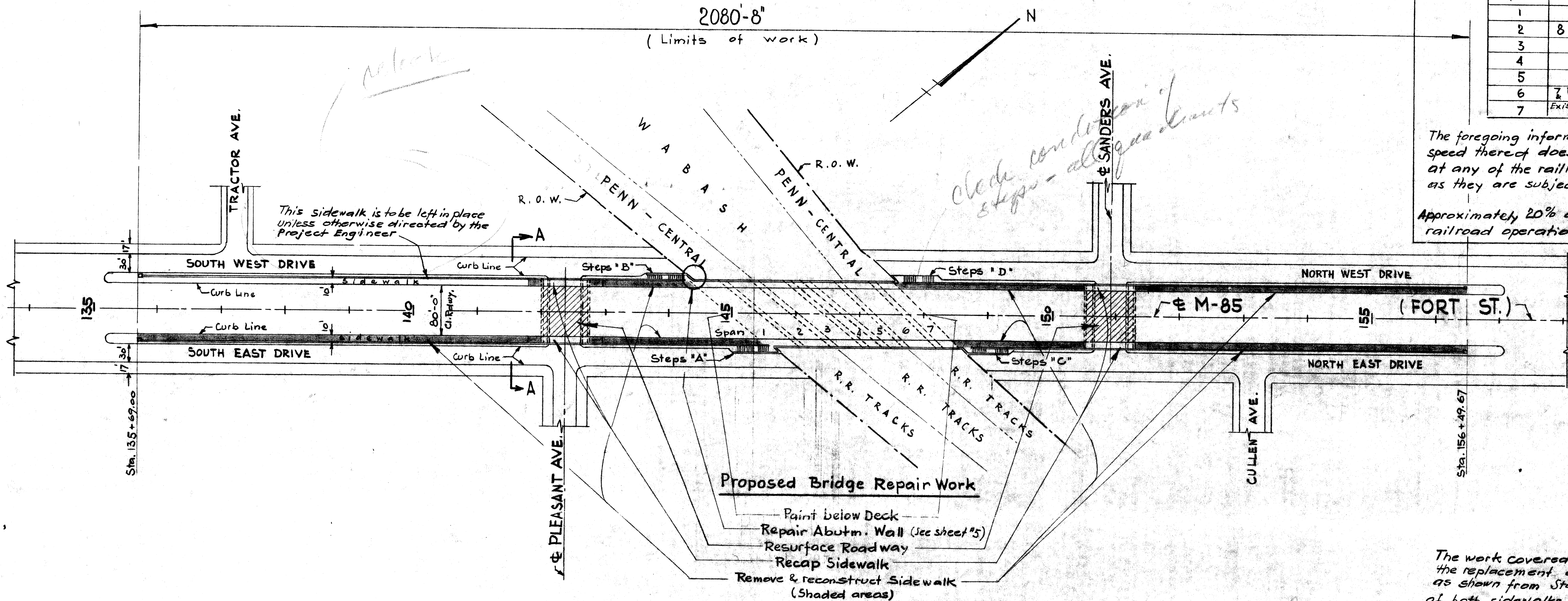
For Dowels from Deck to Handrail, 21 & 22.

For Dowels from Stairs to Handrail, 21 & 22.

For Dowels from Abutments to Shafts, 30 & 31.

REVISIONS	WAY
Checked by: [Signature]	
DETAILS	
JOB NO.	
131	

FILE NO. 41-21



PLAN

Scale: 1" = 100'

TRAIN MOVEMENT				
Movement in Span	PENN CENTRAL R. R.		WABASH R. R.	
	Min. Trains per day (Mostly daytime)	Speed m.p.h.	Min. Trains per day	Speed m.p.h.
1	No tracks			
2	8 Freight Trains	15		
3				
4				
5				
6	7 Freight Trains & Var. Movements	30		
7	Existing communication lines only			

The foregoing information concerning the movements of trains and speed thereof does not represent any commitment on the part of any of the railroads to continue them unchanged, inasmuch as they are subject to change without notice.

Approximately 20% of the contract cost represents a hazard to railroad operations.

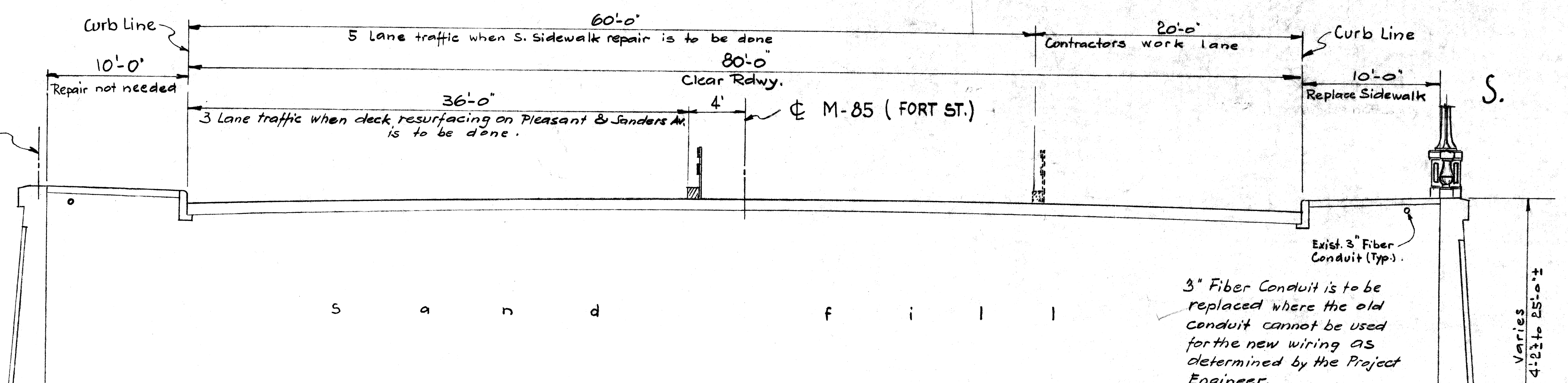
NOTES

The work covered by these plans includes: the replacement of the sidewalks and repair of the spindle railing as shown from Sta. 135+69.00 to Sta. 156+49.67, the recapping of both sidewalks on Pleasant & Sanders Ave. bridges and the resurfacing of their decks, and restoration of the entire lighting system. The repair of the N.W. abutment wall and the repair work below deck are included in these plans.

The contractor shall locate all active utilities inside structures and underground and shall conduct his work in such manner as to assure that these utilities not required to be relocated are not disturbed.

Traffic is to be maintained on the bridge in stages as per Section A-A this sheet.

BLUEPRINT SECTION
 MAR 16 1970
 DEPT. OF STATE HIGHWAYS



SECTION A-A

Scale: 3/16" = 1' - 0"

MISCELLANEOUS QUANTITIES			
Item	Unit	Amount	
Maintaining Traffic	L. S.	Lump Sum	
Remove Concrete Sidewalk	Sq. Yds	3610	
4" Concrete Sidewalk	Sq. Ft.	32490	
Repair Spindle Railing	Lin. Ft.	370	
1/2" Joint Filler	Sq. Ft.	1030	
3" Fiber Conduit - Furnished & placed	Lin. Ft.	308	

A D T 1967 = 45000

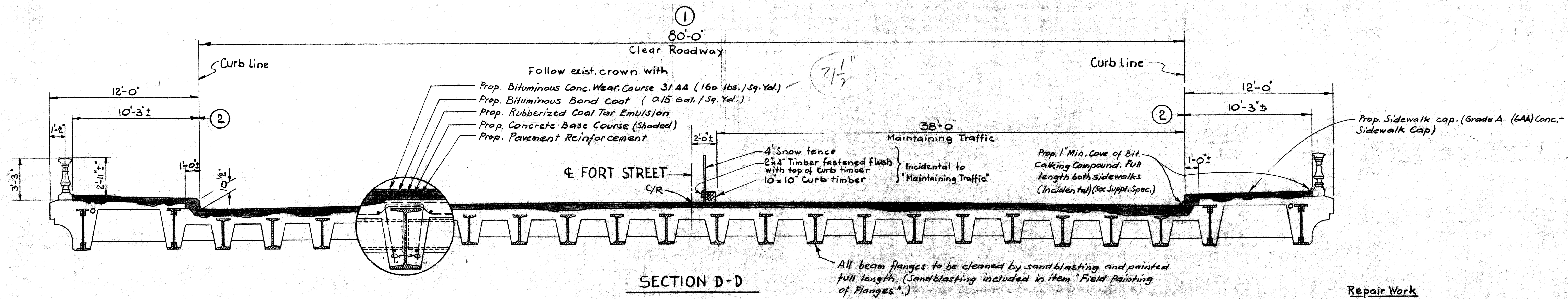
MICHIGAN DEPARTMENT OF STATE HIGHWAYS
 M-85 (Fort St.) over Penn. Central & Wabash R. R. in the City of Detroit

GENERAL PLAN OF REPAIR

PRELIMINARY PLAN "A"

REVISIONS			
NO.	DESCRIPTION	DATE	BY

DESIGNED BY	WDB	3-6-70
DRAWN BY	P R N	3-2-70
CHECKED BY	JDB	4-15-70
APPROVED BY		
SHEET 1 OF 7		
X01 OF 82211 C		



SECTION D-D

Repair Work

MISCELLANEOUS QUANTITIES		
Item	Unit	Amount
Remove Concrete Wearing Course	Sq. Yds	683
Remove Curb Faces	L. S.	Lump Sum
Pavement Reinforcement	Sq. Yds	890
Concrete Base Course	Sq. Yds	110
Grade A (6AA) Concrete Sidewalk Cap	Sq. Yds	26
Steel Reinforcement	Lbs.	710
Grade A (6AA) Concrete - Full depth	Sq. Yds	21
Water Reducing Retarding Admixture	Gal.	20
Rubberized Coal Tar Emulsion	Gal.	207
Bituminous Bond Coat	Gal.	103
Bituminous Conc. Wear. Course 3/AA	Tons	55
1" Joint Filler	Sq. Ft.	200
Two Component Cold Applied Joint Sealer	Lin. Ft.	410
Field Painting of Flanges	Lin. Ft.	1164
Electrical Wiring	L. S.	Lump Sum
Repair Spindle Railing	Lin. Ft.	30

- Remove exist. concrete wearing course including bituminous surface. Remove spalled & deteriorated concrete from top of exist. slab. (Incidental) Place the reinforced concrete base course and seal the surface of the base course with rubberized coal tar emulsion. Then apply bituminous bond coat and place the bituminous concrete wearing course as shown in Section D-D. The 1" min. cove of bituminous calking compound shall be placed at both curb lines full length. (Incidental)
- Remove all spalled & deteriorated concrete from top of sidewalk and remove enough concrete at the curb line to have 1'-0" of new concrete as curb face. (See Section B-B) Chip out exist. concrete for placing the prop. 3" fiber conduit as shown. (Chipping is incidental) Construct new sidewalk cap with grade A (6AA) concrete as shown in Section B-B. Seal the const. joint between exist. railing base and new sidewalk cap with a 1" min. cove of bit. calking compound (Incidental). The removal of spalled & deteriorated concrete is incidental.
- Remove exist. joint filler (6" deep) and place new 1" joint filler and seal with 1 1/2" two component polyurethane joint sealer.

Full depth slab replacements are shown in plan. The Project Engineer shall determine the length of the slab to be replaced. Repair with grade A (6AA) concrete. Also see Section A-A & Section C-C on sheet B.

Traffic shall be maintained on one half of the roadway while work is being done on the opposite half. Also see Section D-D.

Work this sheet with sheet

MICHIGAN DEPARTMENT OF STATE HIGHWAYS

REPAIR DETAILS-SANDERS AVE.

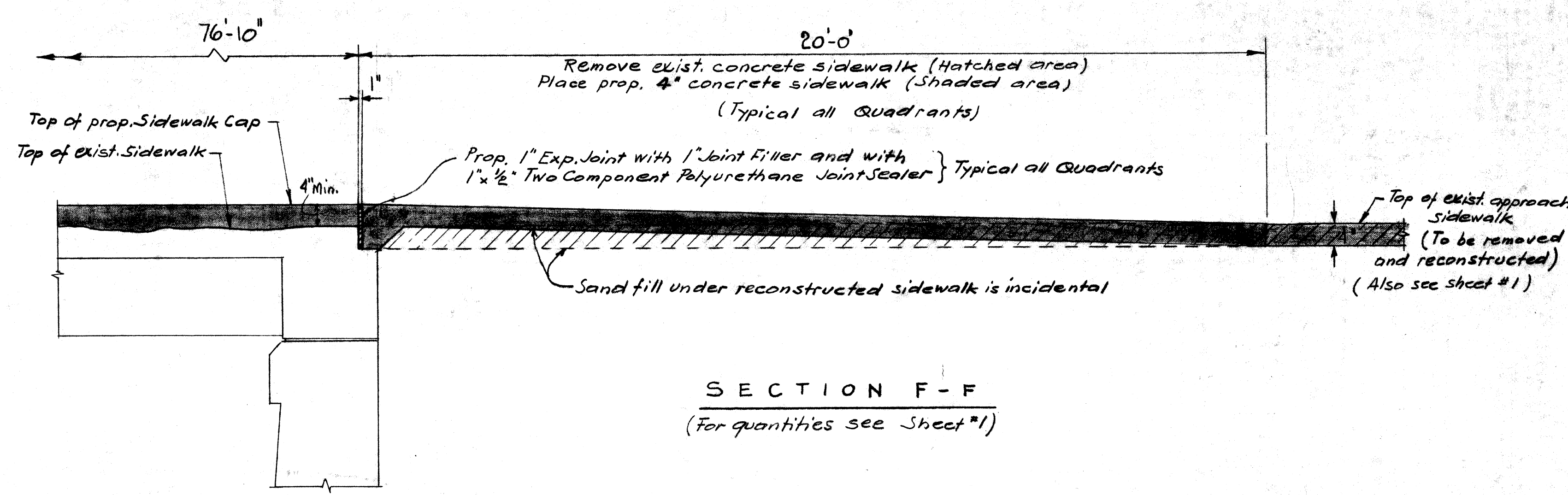
PRELIMINARY PLAN "A"

NO.	DESCRIPTION	DATE	BY

SQUAD BOSS	WDB	3-4-70
DRAWN BY	PRN	3-2-70
TRACED BY		
CHECKED BY		

SHEET 2 OF 7

XOI of 82211 C

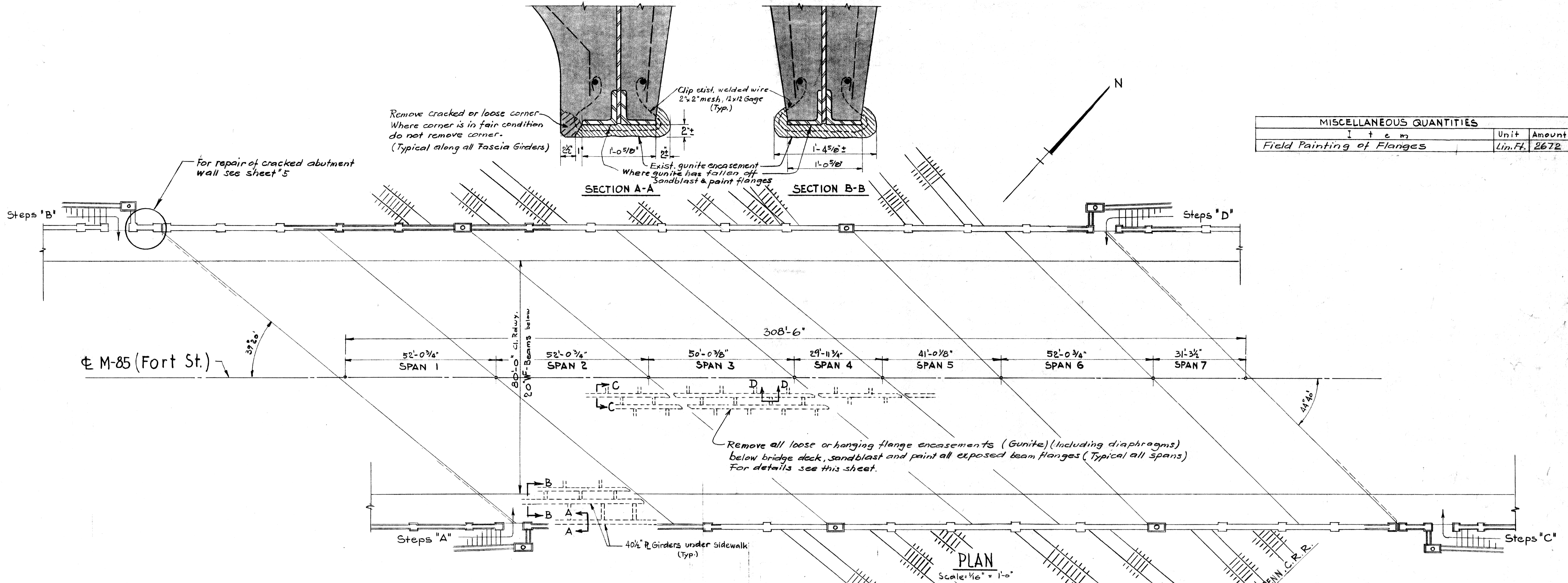


SECTION F-F
(For quantities see Sheet #1)

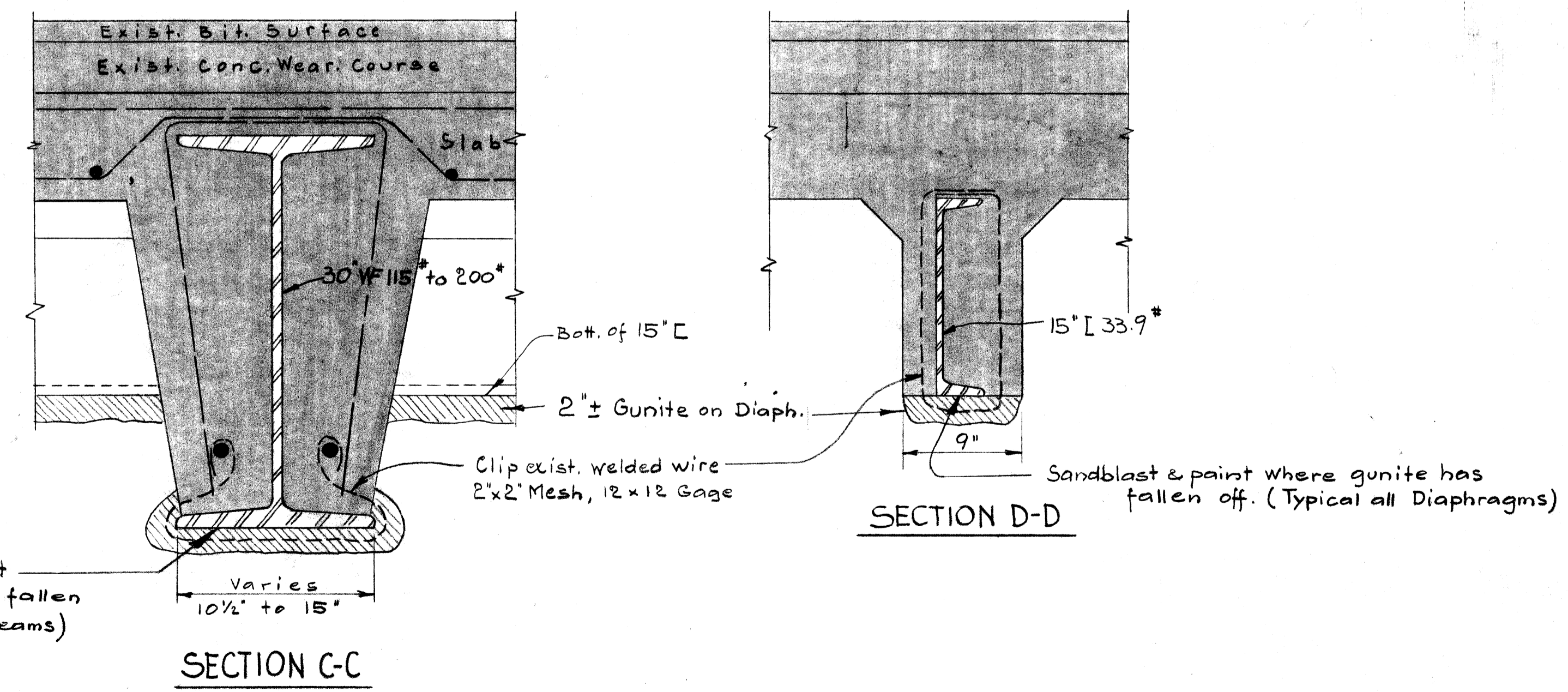
Electricity Notes

* The item of "Electrical Wiring" includes the removal, repair or replacement of all damaged electrical items including light fixtures, so that the entire lighting system on the bridge and below the bridge can be operated in full. The contractor shall contact the Public Lighting Commission, Detroit for further details. Reference sheets 6 & 7 show the exist. lighting system except for possible changes in the field.

Repair Details for Pleasant Ave. are similar



MISCELLANEOUS QUANTITIES		
Item	Unit	Amount
Field Painting of Flanges	Lin. Ft.	2672



REPAIR NOTES

Existing beam encasement (Gunite) shall be removed only on such places where the encasement is loose or hanging down from the beam. The contractor shall remove these pieces of encasement in such a manner as to insure the safety of persons and properties during his work below deck. Removal of loose or hanging encasement is incidental to the item of "Field Painting of Flanges".

For hazard to railroad & train movement see sheet # 1.

MICHIGAN DEPARTMENT OF STATE HIGHWAYS

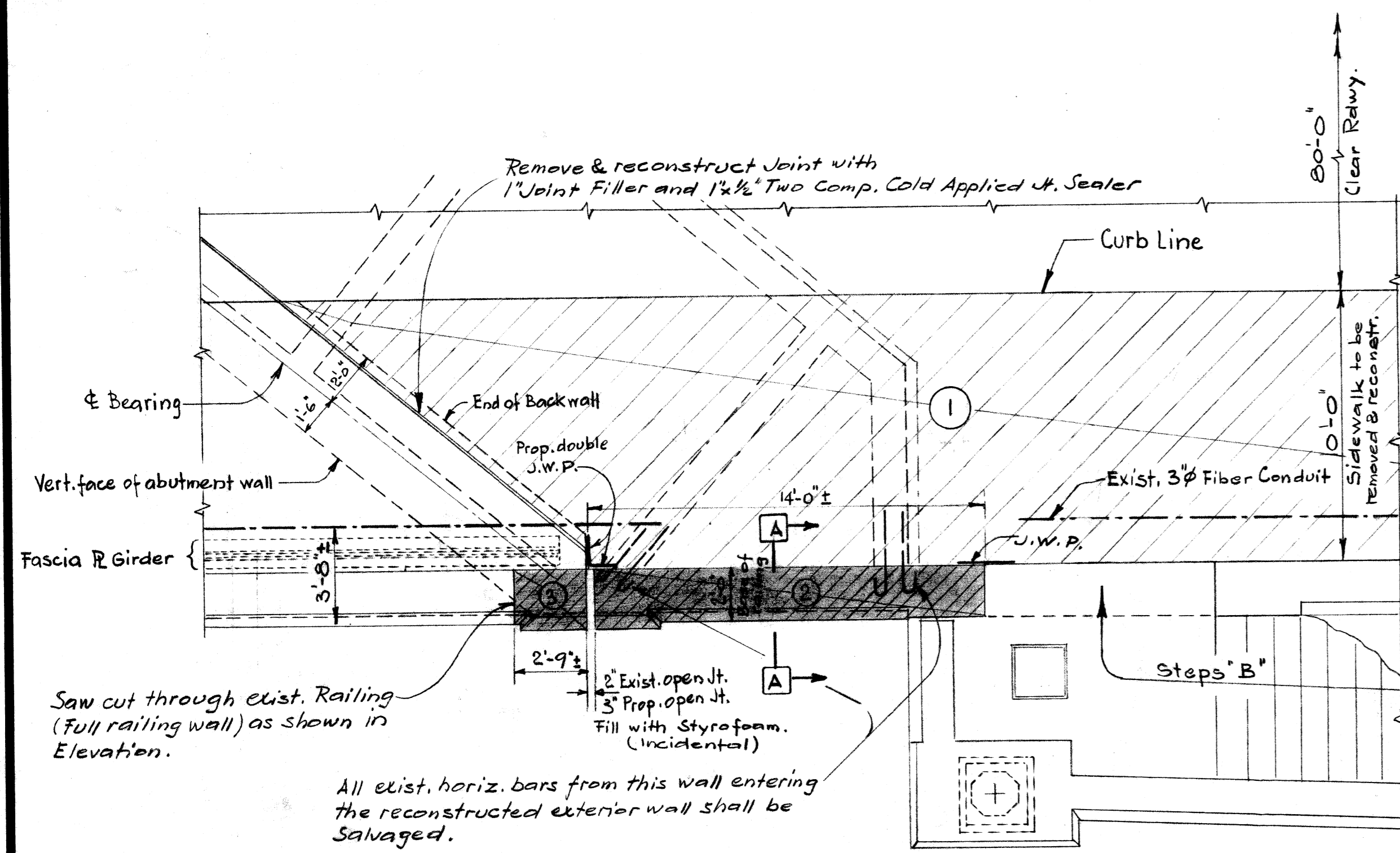
REPAIR BELOW DECK - R.R. BRIDGE

PRELIMINARY PLAN "A"

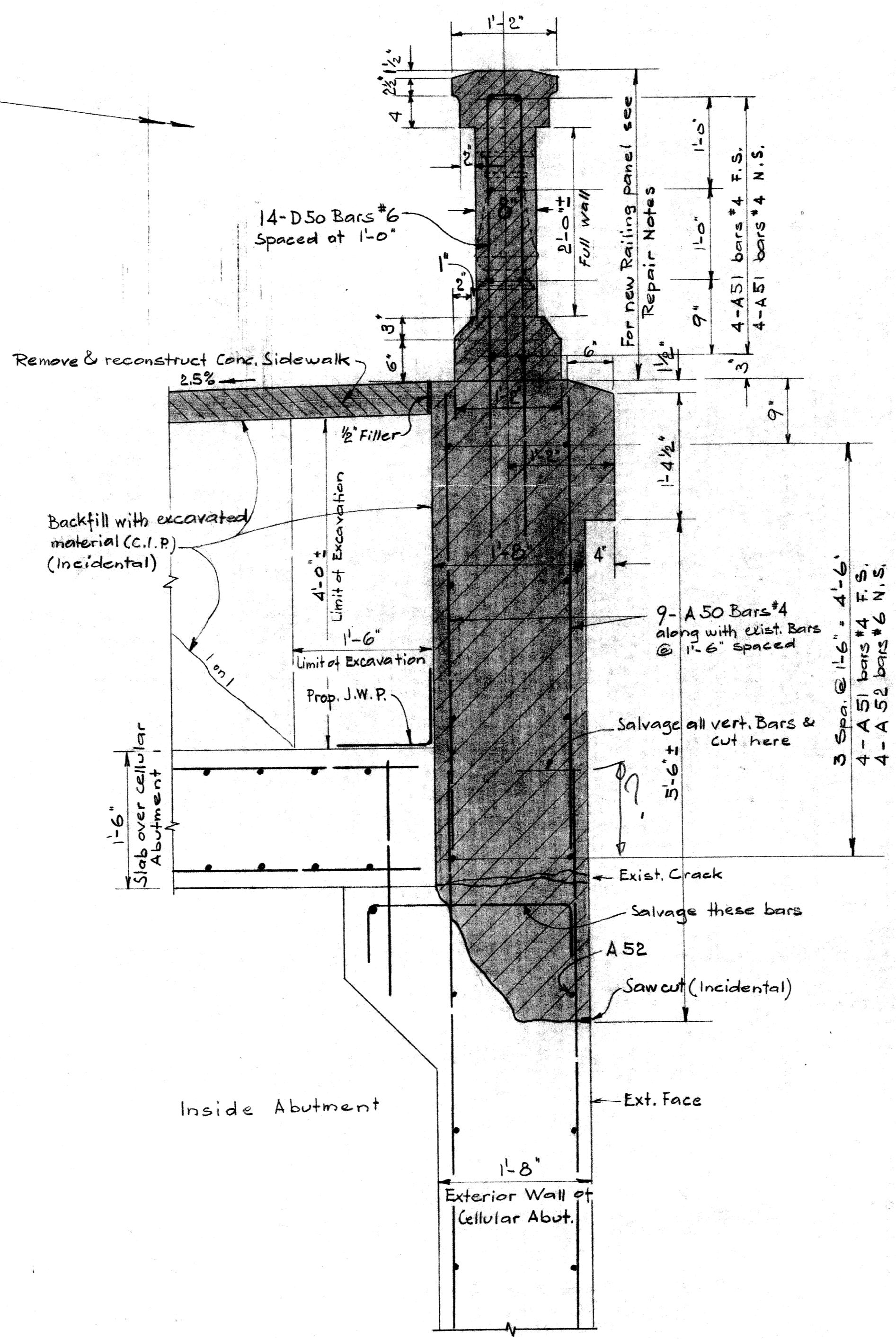
REVISIONS			
NO.	DESCRIPTION	DATE	BY

SQUAD BOSS	WDB	3-6-70
DRAWN BY	PRN	3-2-70
TRACED BY		
CHECKED BY	JDB	1-15-70
SHEET 4 OF 7		

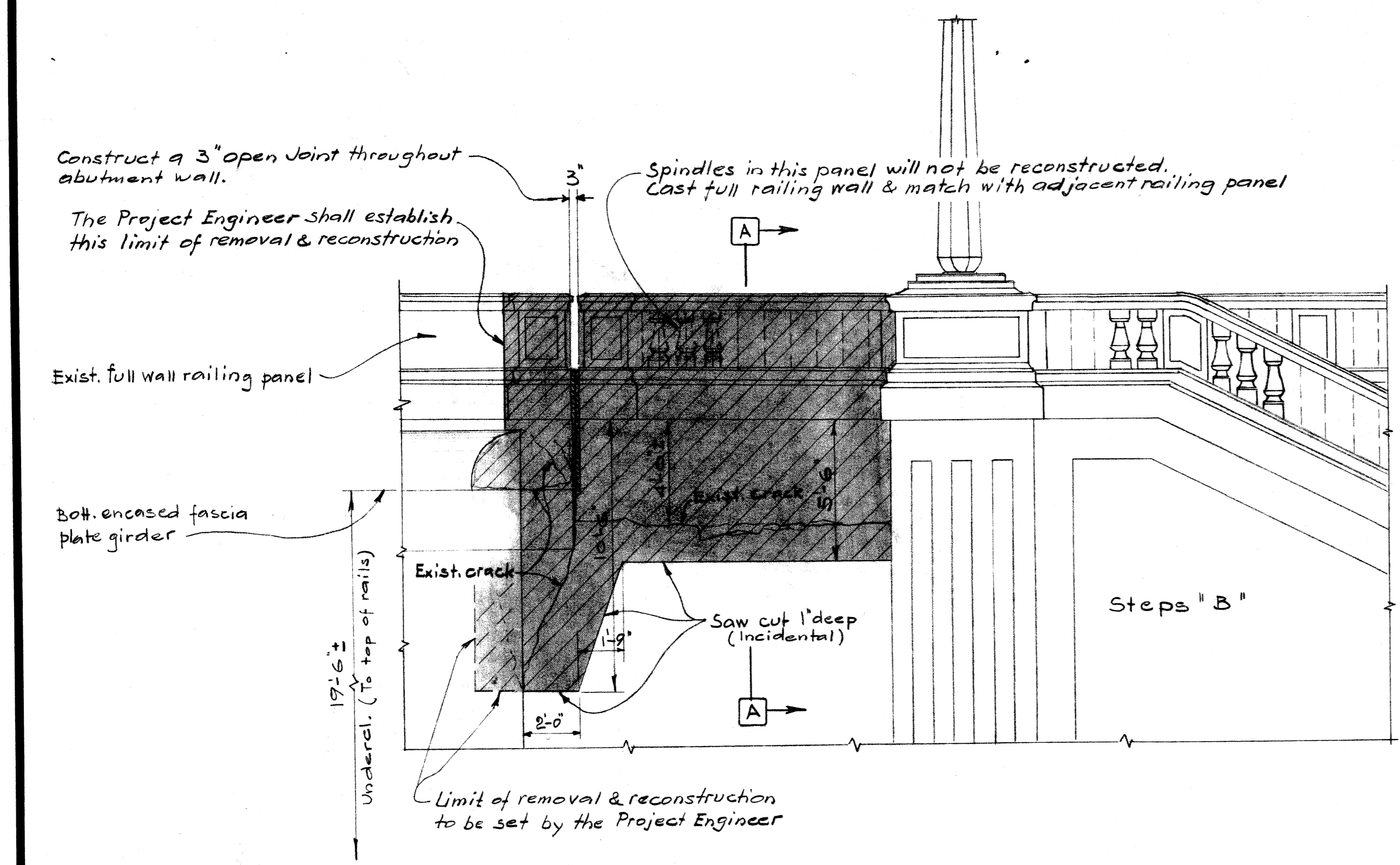
XO1 OF 82211 C



PLAN



SECTION A-A



ELEVATION

Hatched and shaded area shows removal & reconstruction.

Repair Notes

- For location of the repairwork shown this sheet sec plan on sheet 4.
- Remove existing concrete sidewalk as shown. Locate the existing 3" Fiber conduit under the sidewalk and maintain electrical service during repairwork (Street Lighting System) Remove concrete railing panel & pilasters as noted below. Make excavation as necessary.
 - & 3 Remove cracked abutment wall and deteriorated concrete to the limits shown or as directed by the project engineer. Salvage existing vertical Bars in exterior wall and connecting bars with other walls as shown in plan. Construct new wall as per Section A-A with Grade A (6AA) concrete. Form a 3" open joint between 2 and 3. Place double Joint Waterproofing on the inside of the open joint. Backfill under sidewalk with excavated material and replace the 3" Fiber conduit. Construct the 4" Concrete Sidewalk and place new 1" Joint Filler and 1 1/2" Polyurethane Joint Sealer at the end joint.
- Railing Remove the existing railing & pilasters. Reconstruct the railing matching the existing adjacent railing. Option: a. Salvage handrail and base of the exist. railing and cast full wall replacing the spindles, or b. Construct new railing as per Section A-A.

MISCELLANEOUS QUANTITIES		
I t e m	Unit	Amount
Two Component Cold Applied Joint Sealer	Lin. Ft.	17
Maintaining Electrical Service	L. S.	Lump Sum
Unclassified Excavation	Cu. Yds.	4
Removing Spindle Railing	Lin. Ft.	17
Removal of Portion of existing Structure	L. S.	Lump Sum
Grade A (6AA) Concrete - Substructure	Cu. Yds.	5.5
Joint Waterproofing	Sq. Ft.	50
3" Fiber Conduit	Lin. Ft.	100
Concrete Railing - Special	Lin. Ft.	17
1" Joint Filler	Sq. Ft.	16

J.W.P. denotes Joint Waterproofing

MICHIGAN DEPARTMENT OF STATE HIGHWAYS

ABUTMENT REPAIR - R.R. BRIDGE

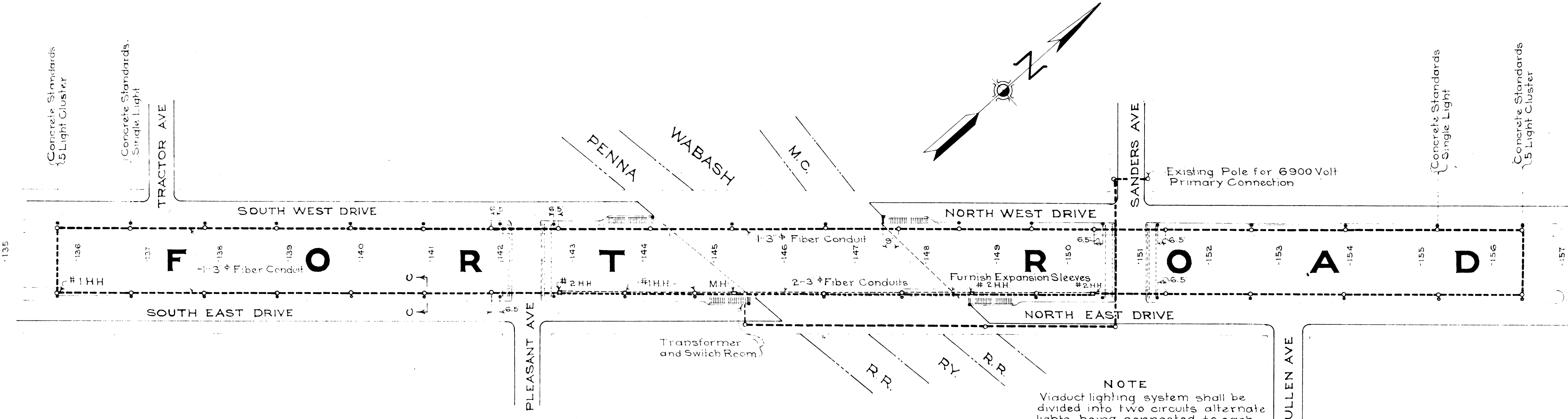
PRELIMINARY PLAN "A"

NO.	DESCRIPTION	DATE	BY

REVISIONS

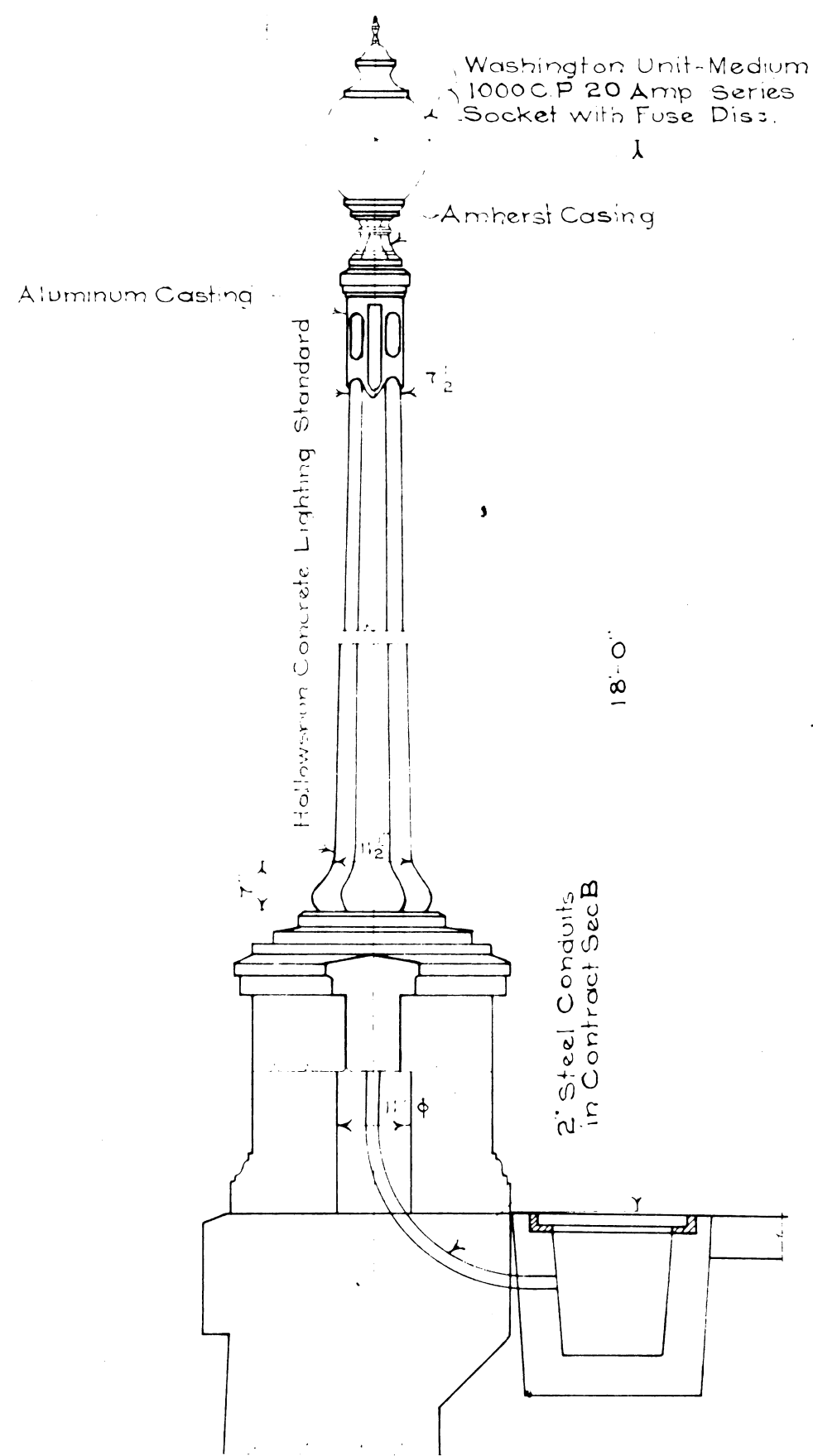
SQUAD BOSS WDB 3-6-70
 DRAWN BY P R N 3-2-70
 TRACED BY
 CHECKED BY LDB JH 3-1-70
 SHEET 5 OF 7

XO1 of 82211 C

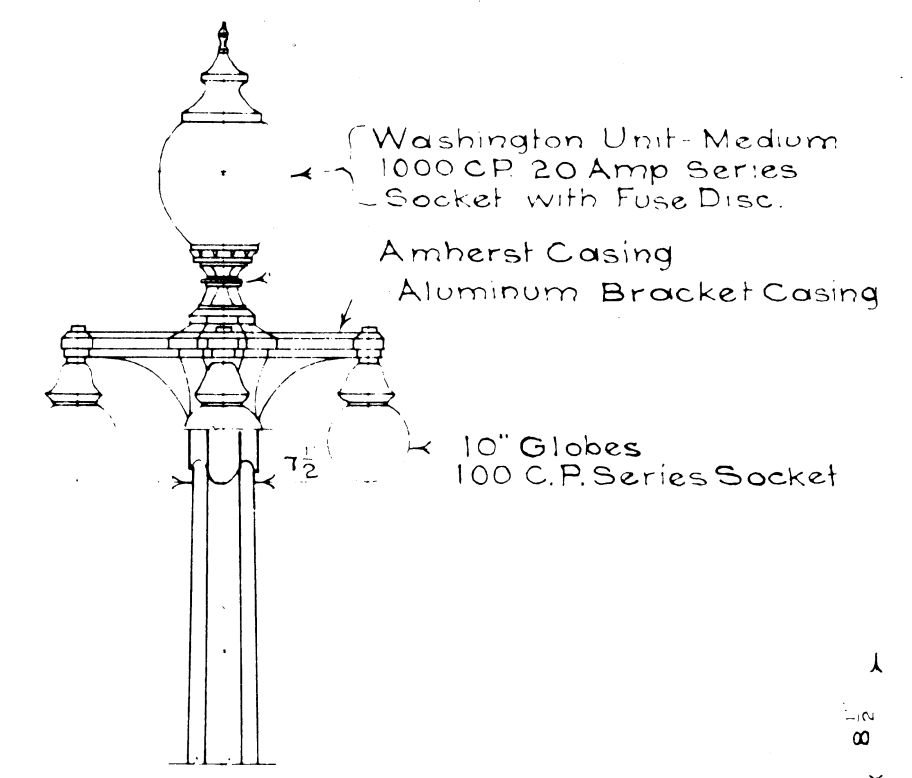


GENERAL PLAN
Scale 1"=100'

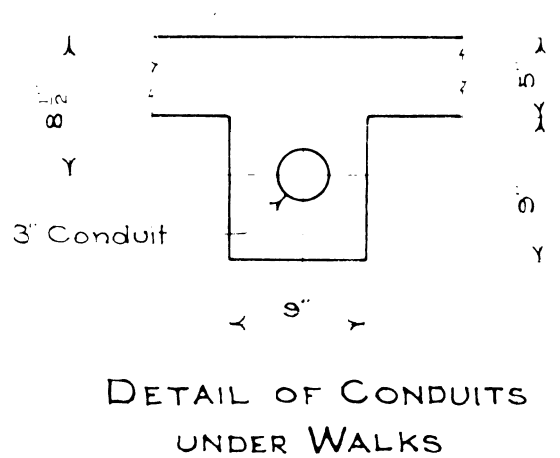
NOTE
Viaduct lighting system shall be divided into two circuits alternate lights being connected to each circuit. This applies to both Fort Rd. lighting and Subway lighting. All wiring shall conform to Underwriters Specifications.



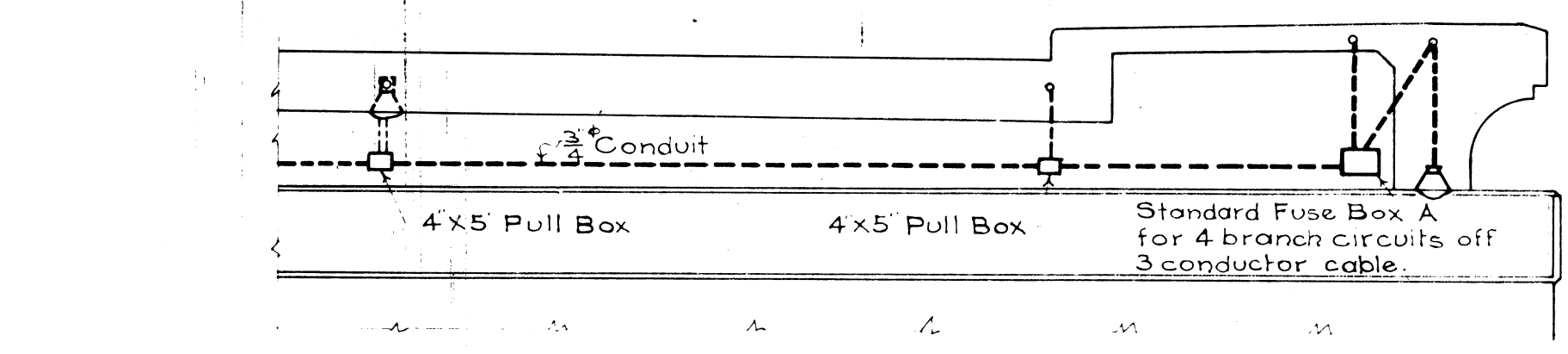
SECTION C-C
Scale 1/2"=1-0'



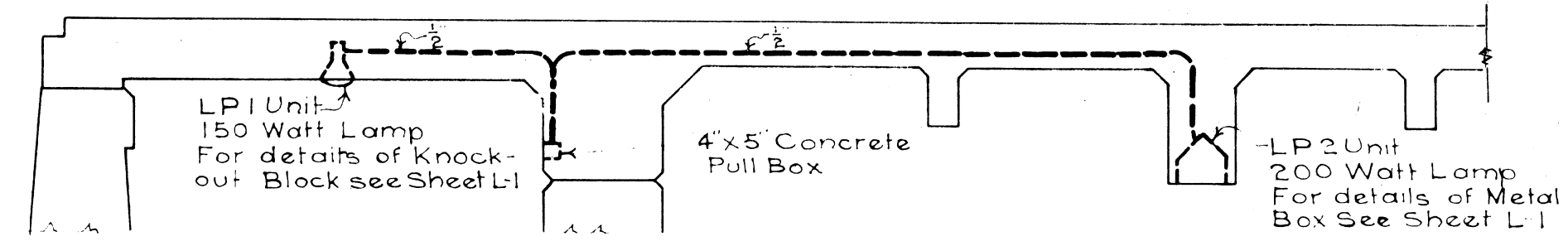
5 LIGHT CLUSTER
To be placed at ends of Separation. Details not shown same as for Single Light Standard.



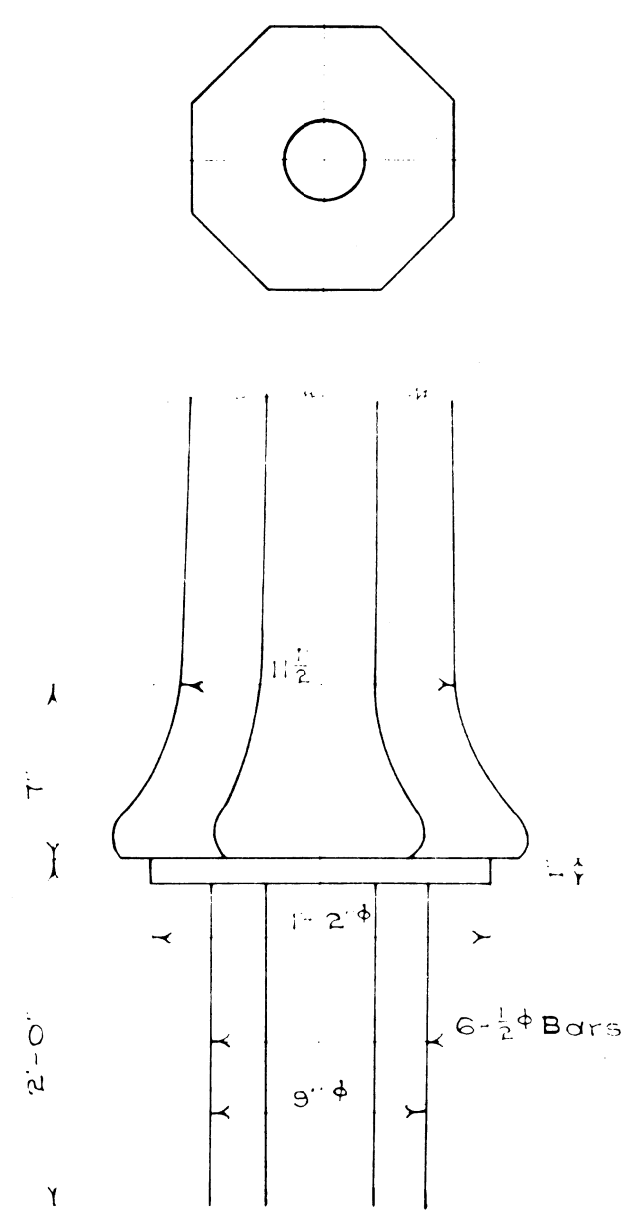
DETAIL OF CONDUITS UNDER WALKS



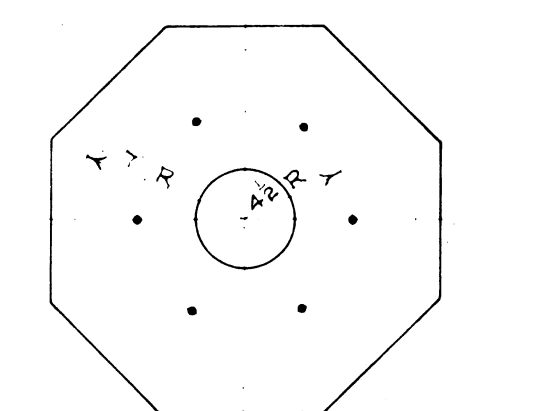
SECTION A-A
Scale 1/2"=1-0'



PART SECTION B-B
Scale 1/4"=1-0'



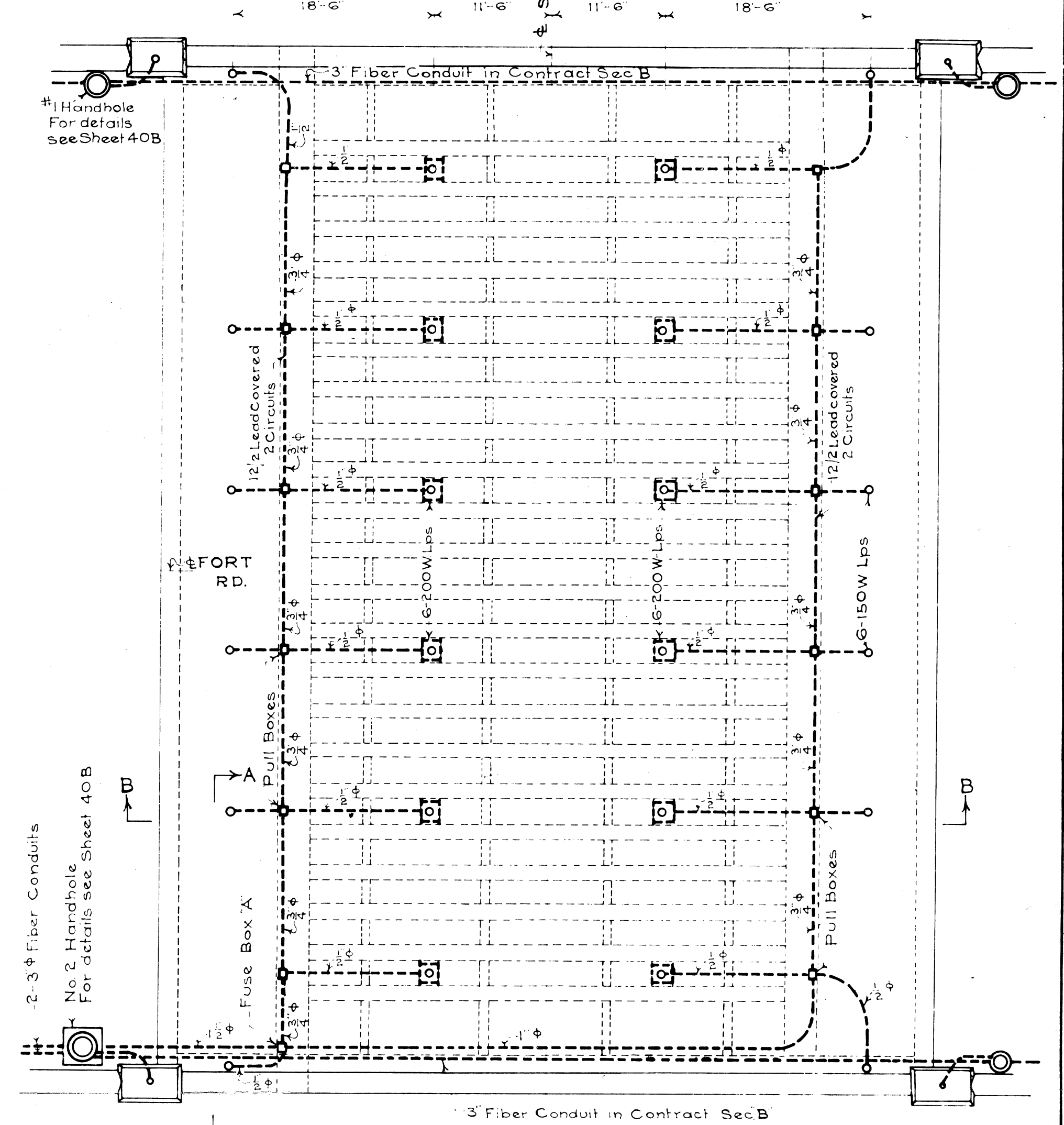
BOTTOM PORTION OF LIGHTING STANDARD
Scale 1 1/2"=1-0'



BOTTOM VIEW OF LIGHTING STANDARD

DIVISION OF WORK

- CONTRACT SEC B** - This contract includes furnishing and placing 2" Steel Conduits in pilasters for all lamp posts and 3" Fiber Conduit where shown in all bridge decks.
- PUBLIC LIGHTING COMMISSION** - Construction of Feed Line from Cable Pole to Transformer Room including furnishing and installing transformers and switches in Room. Furnish (only) all 3" Fiber Conduits except in bridge decks. Furnish all cast iron tops for hand holes and manholes for conduit lines. Furnish and place all cables and wiring for light post and for power service for subway lighting up to Fuse boxes 'A'. Furnish and place any switches or transformers that may be required.
- WAYNE CO. ROAD COMMISSION** - Place all pull boxes and conduits between Transformer Room and lamps including excavation and concrete encasement but exclusive of conduit furnished and placed under Contract Section 'B'. Furnish and place all lighting units. Furnish all conduit 1/2", 1", 1 1/4" and 1 1/2" in diameter including pull boxes and Fuse Box 'A'. Furnish and place all wiring for subway lighting at Pleasant and Sanders Aves. from Fuse Boxes 'A' to lamps. Construct Handholes and Manholes and place P.L.C. cast iron tops thereon.



PLAN OF LIGHTING FOR SANDERS AVE.
Scale 1"=10'

Note Lighting layout for Pleasant Ave same except opposite hand.

For Reference only

Sheet 6 of 7

XOI of 82211 C

BOARD OF WAYNE COUNTY ROAD COMMISSIONERS
DETROIT MICHIGAN

EDWARD N. HINES JOHN S. HAGGERTY
COMMISSIONER CHAIRMAN

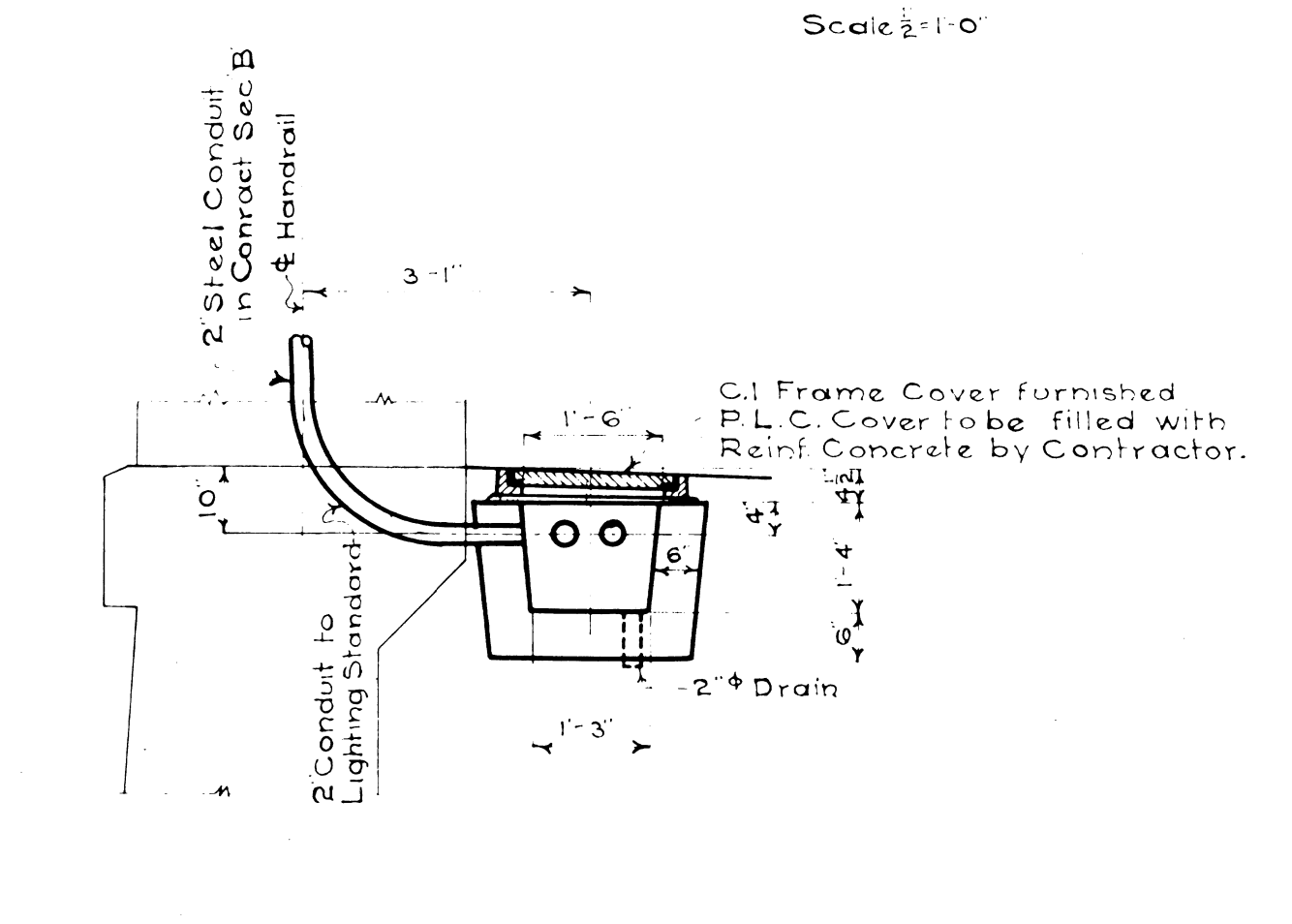
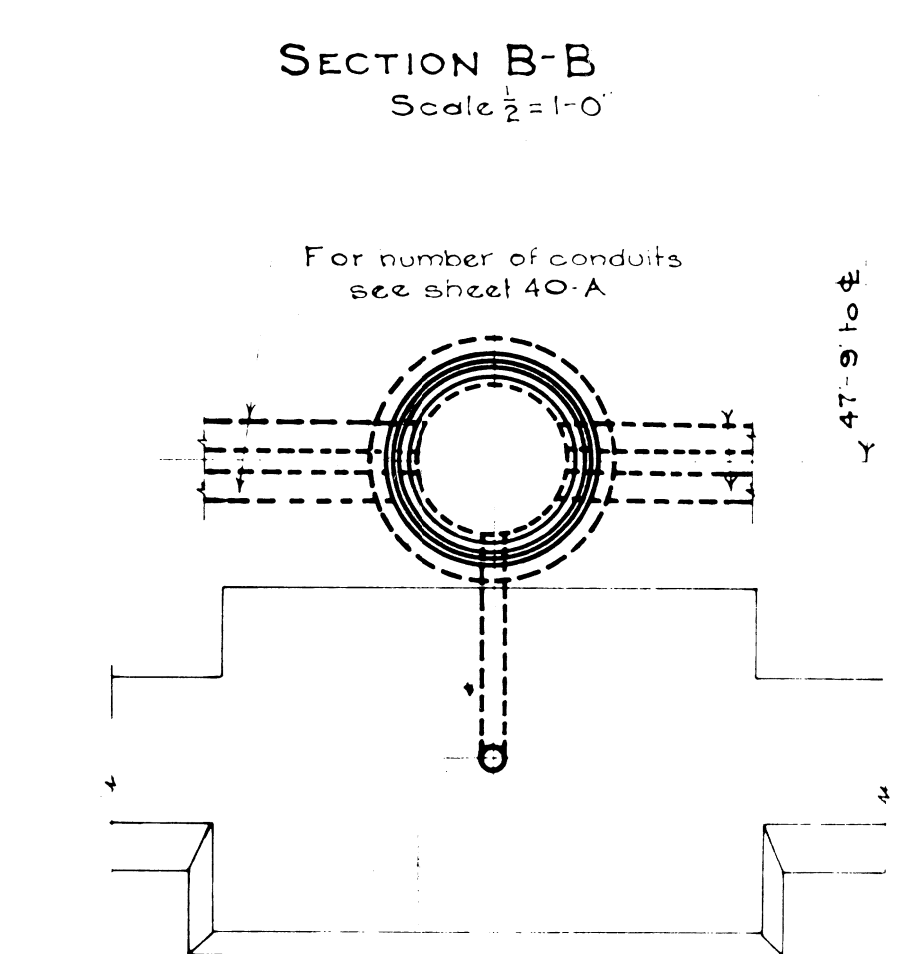
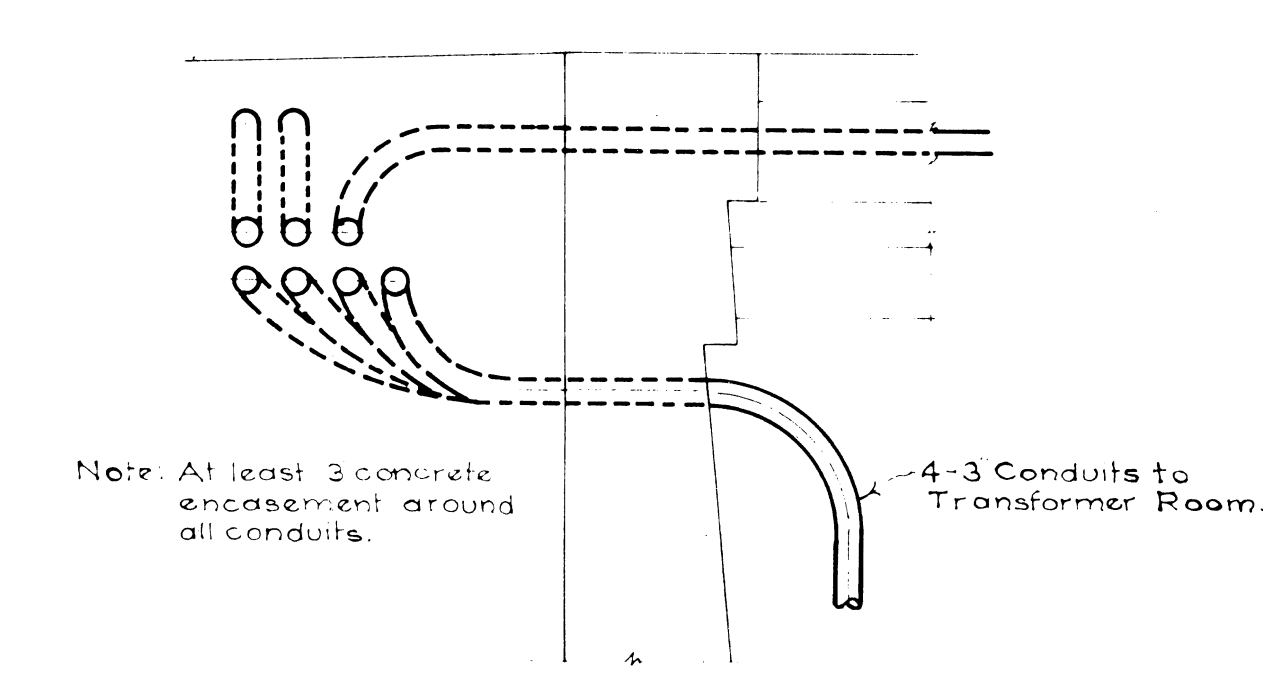
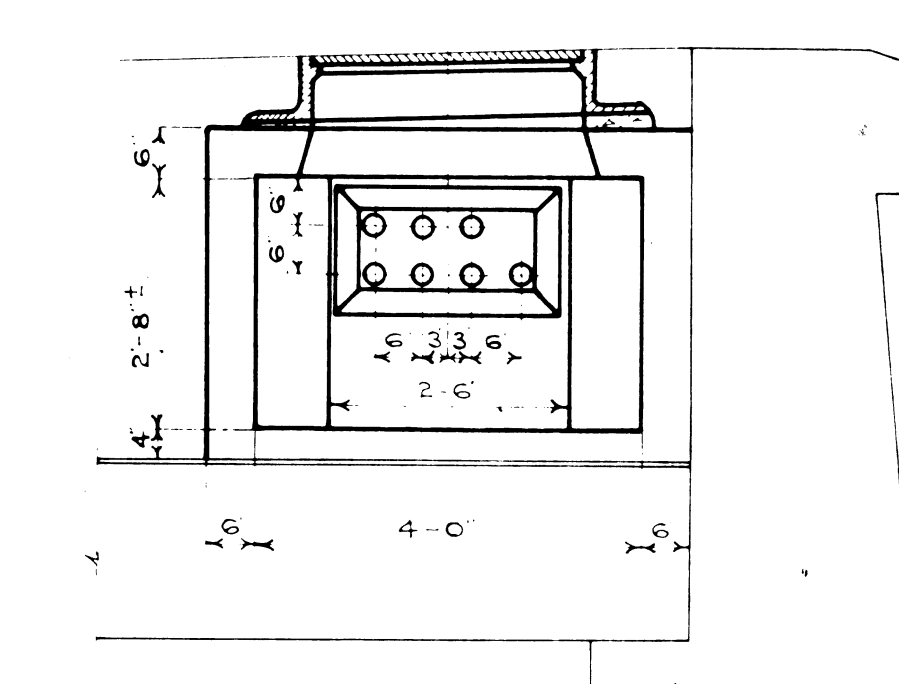
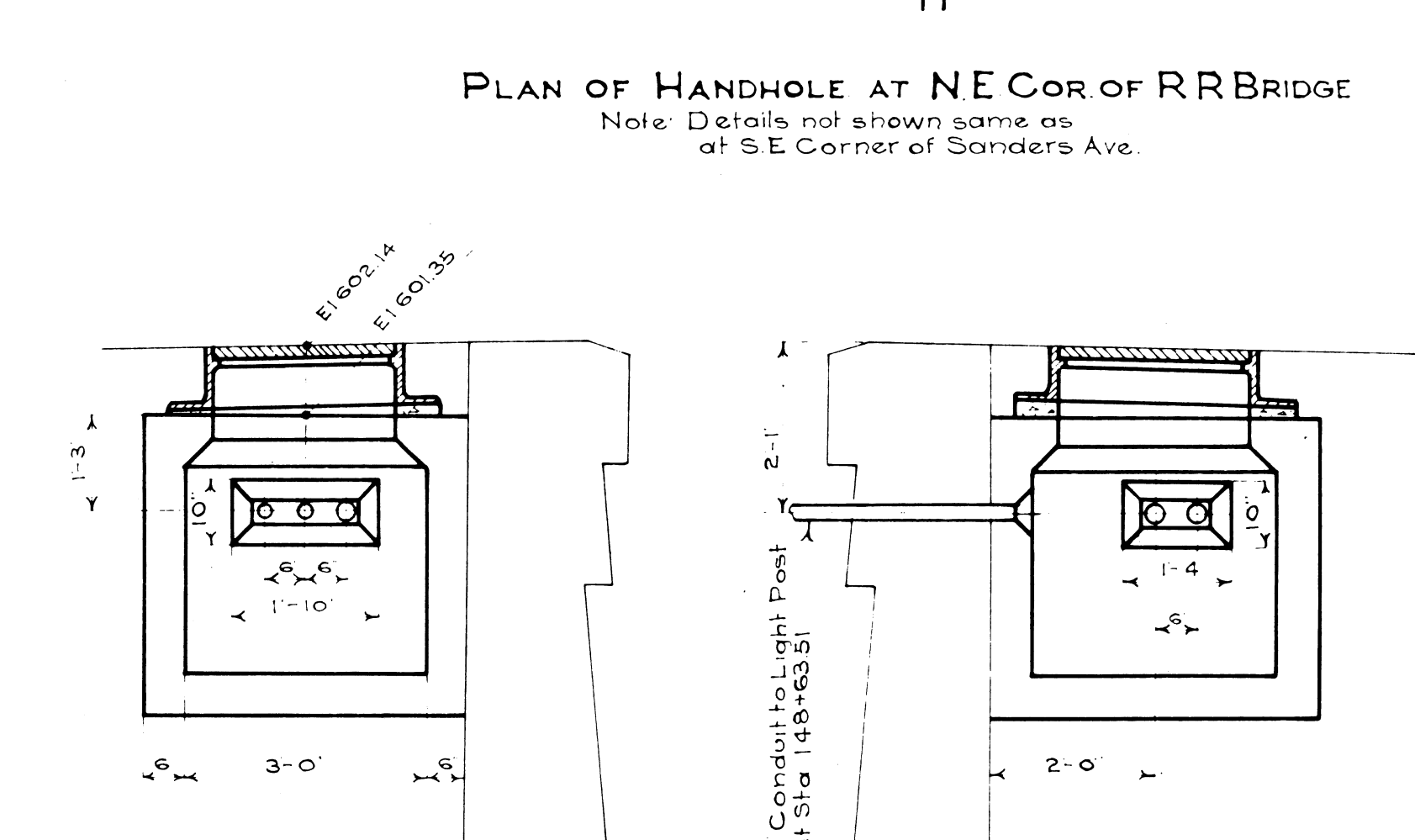
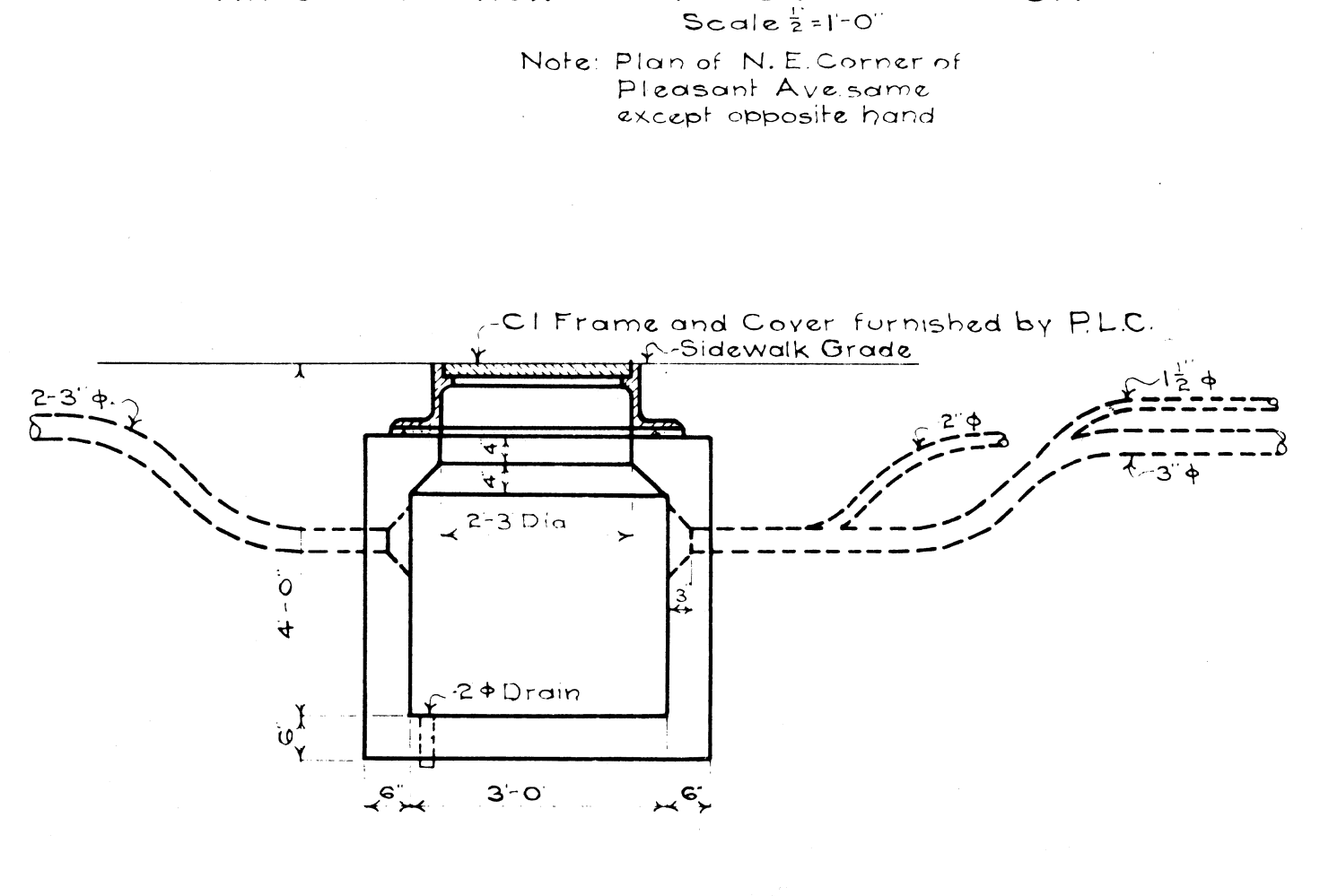
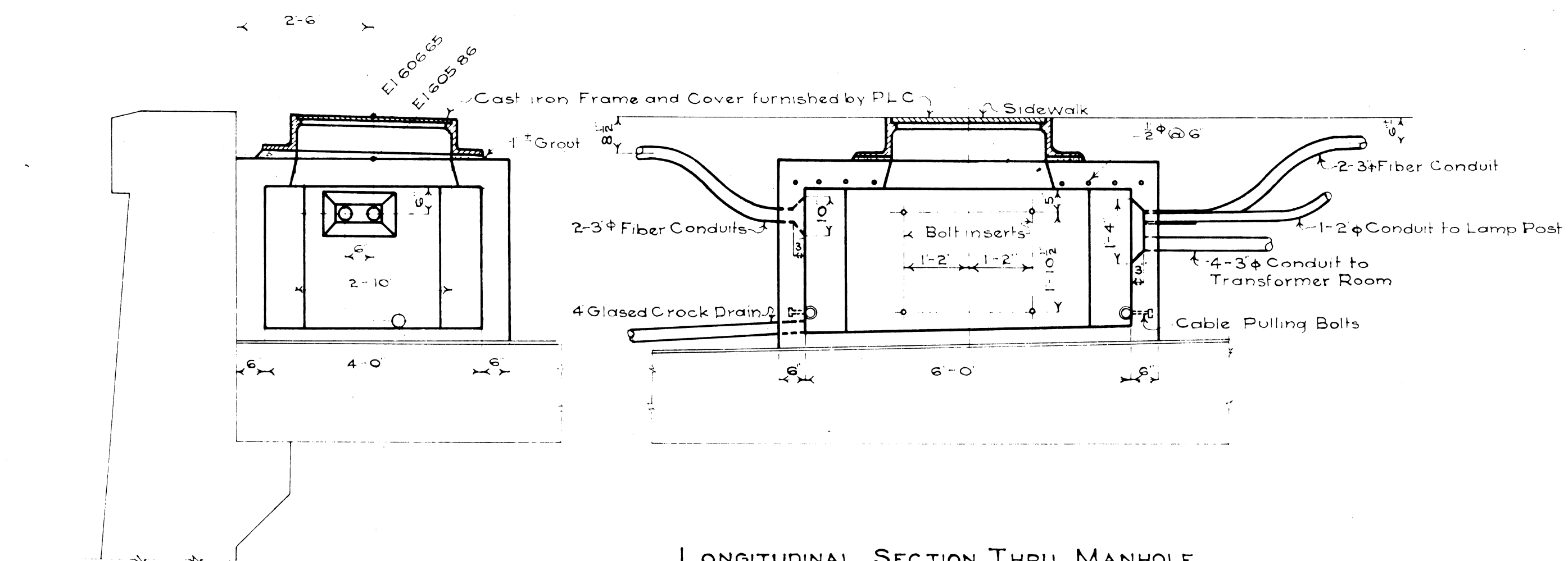
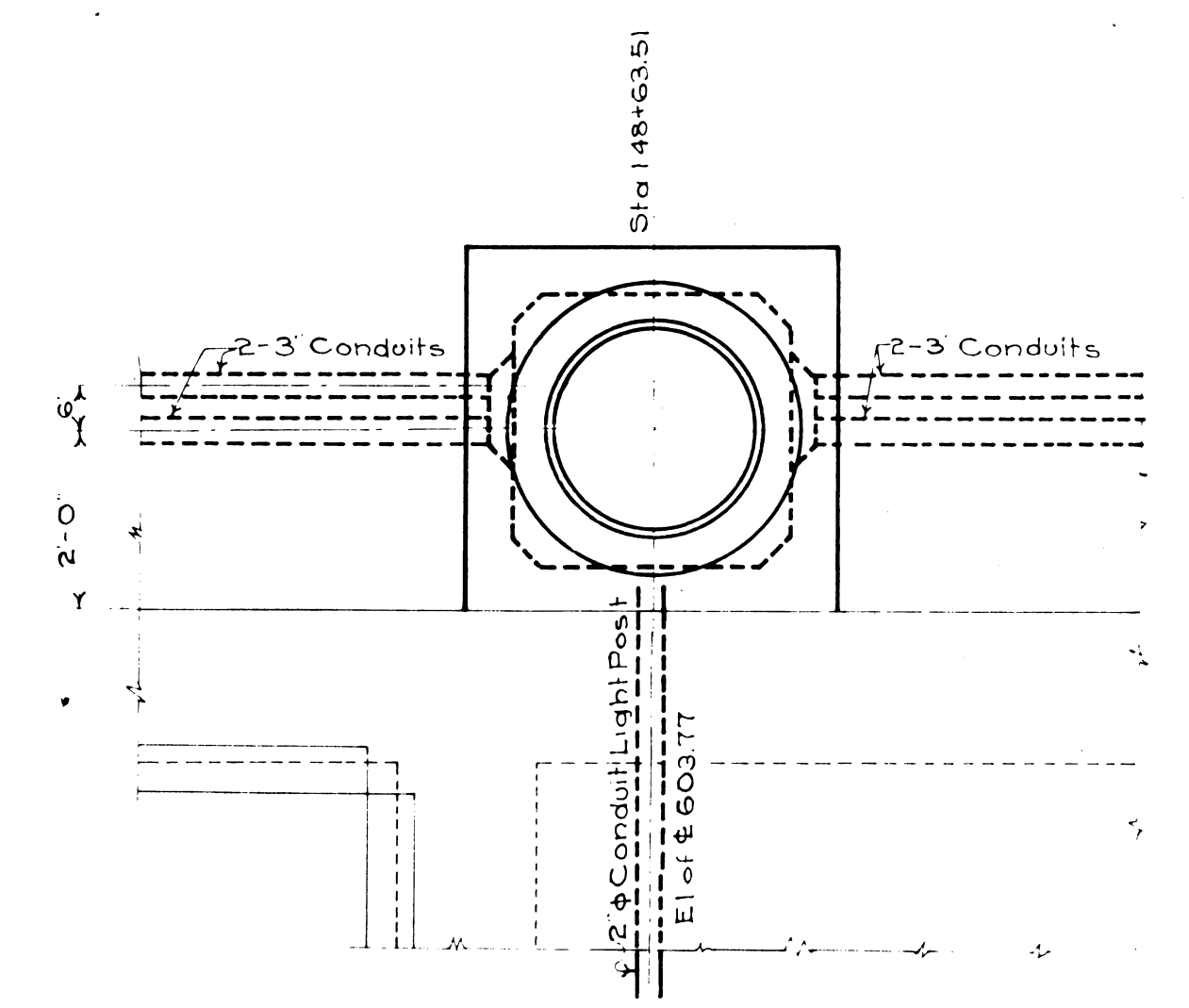
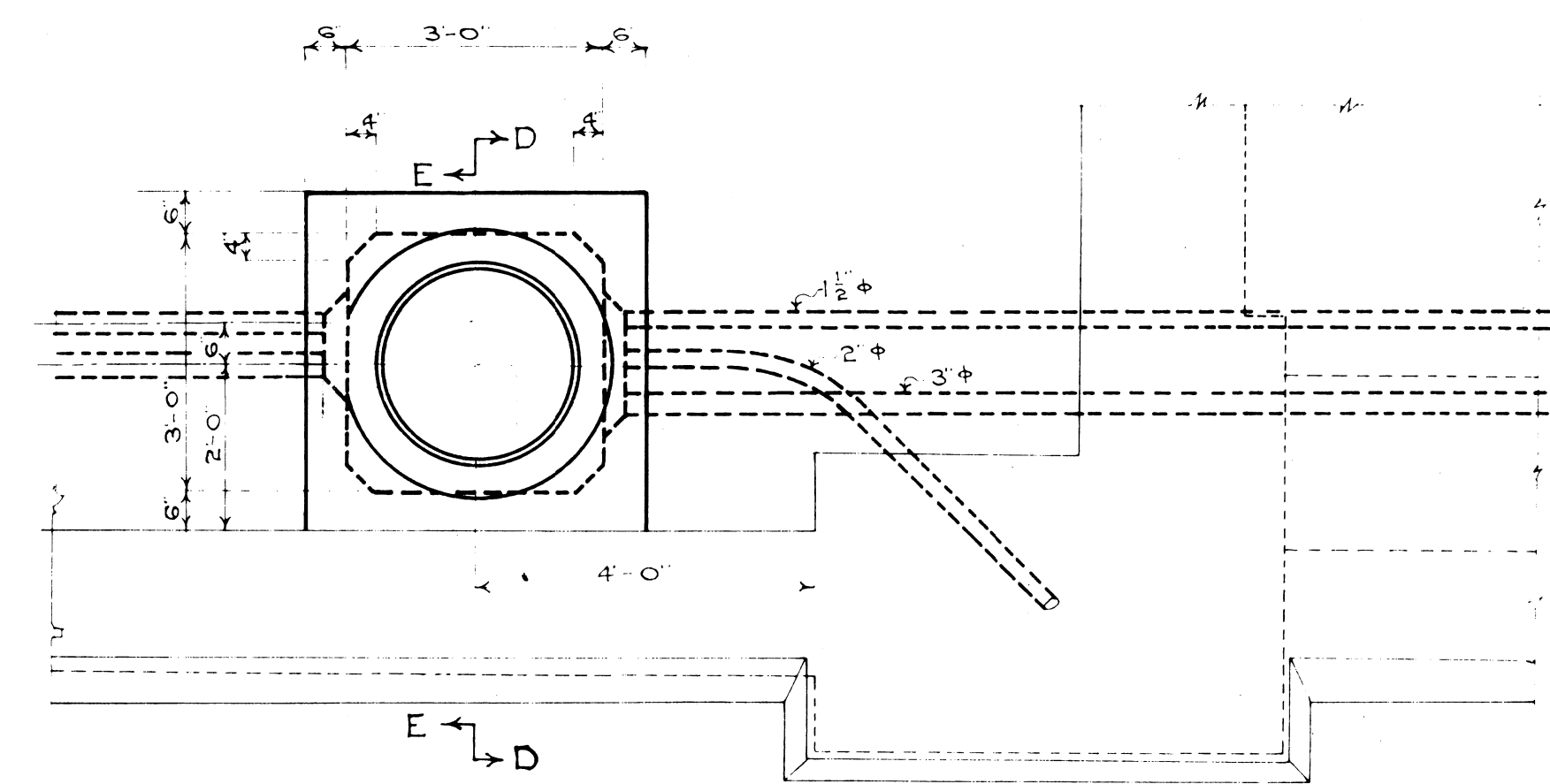
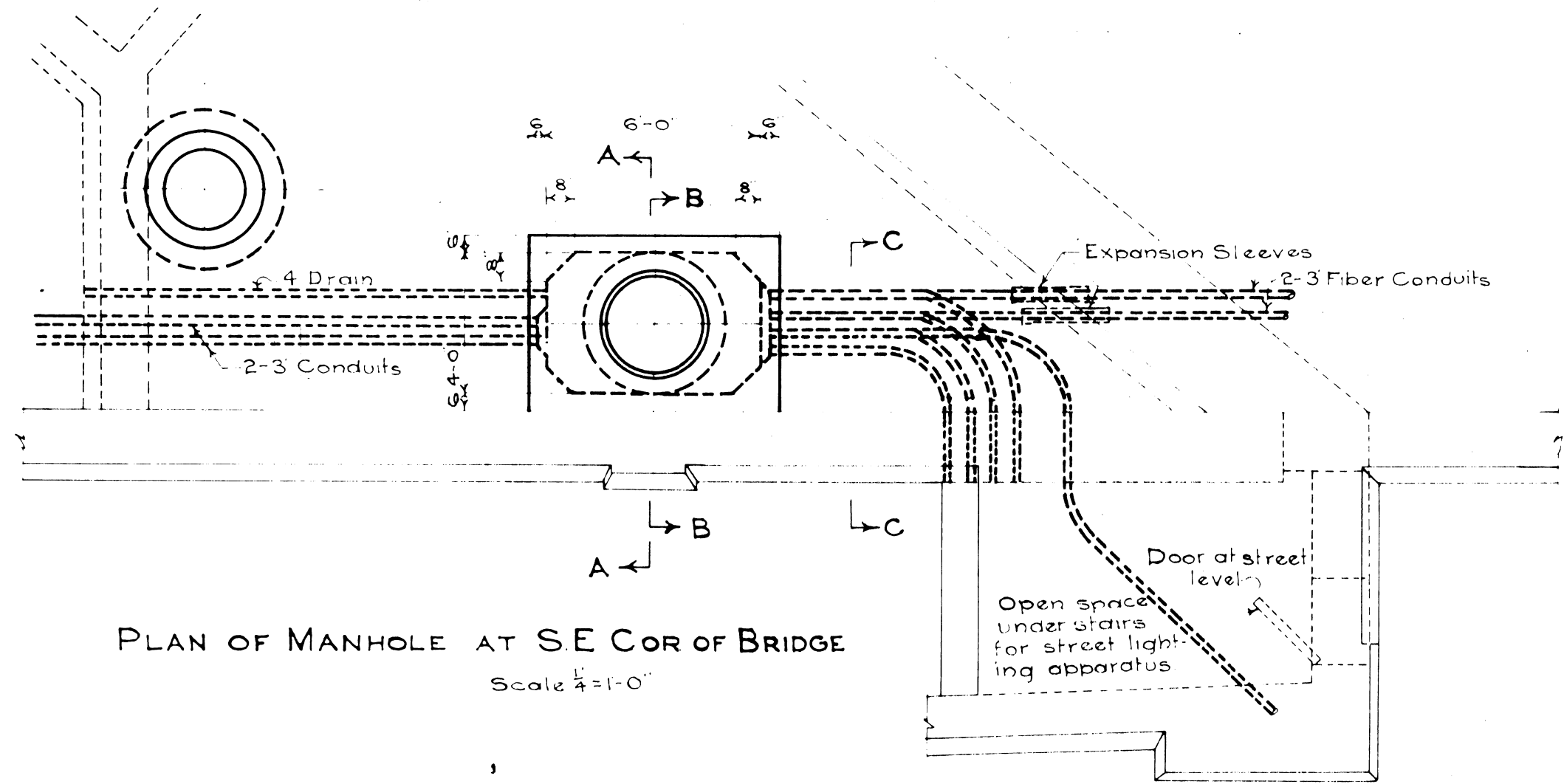
WILLIAM F. BUTLER
COMMISSIONER

LIGHTING SYSTEM LAYOUT
FORT ROAD MILE:
PENNA-WABASH-MC-GD-SEPN-XI-OR-OC-DE-ET

Traced by S.A. J.L.C.
DRAWN BY J.W.C. CHECKED BY F.H.C.
DATE 10-1-28 SCALE AS SHOWN CHECKED BY [Signature] CHIEF DESIGNER

REVISIONS	
JOB NO. 131	APPROVED: [Signature]
ISSUE DATE	DATE

SHEET NO.
40A



Note: Handholes #1 shall be located opposite Light Posts except as shown on sheet 40A

For Reference only Sheet 7 of 7

XO1 of 82211 C

BOARD OF WAYNE COUNTY ROAD COMMISSIONERS
DETROIT, MICHIGAN

EDWARD N. HINES JOHN S. HAGGERTY
COMMISSIONER CHAIRMAN

WILLIAM F. BUTLER
COMMISSIONER

LIGHTING SYSTEM DETAILS
FORT ROAD - MILE:
PENNA-WABASH MCRR, GD SEPN XI of 82-22-37

Traced by S.A. ...
DRAWN BY J.W.C. CHECKED BY F.H.C.

JOB No. 131	DATE	SCALE	DATE	DATE
ISSUE No. DATE				

SHEET No.
40-B