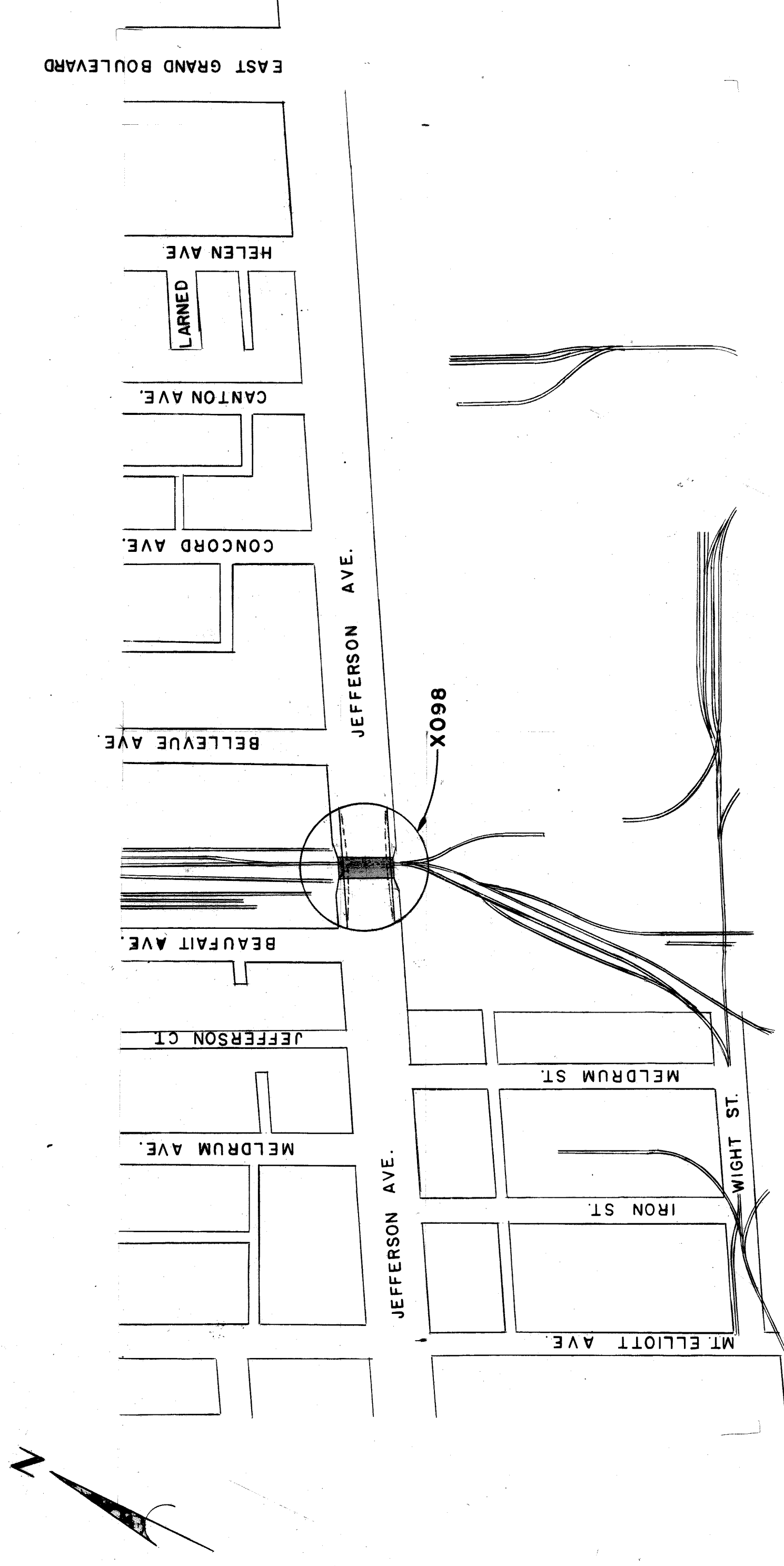


CITY OF DETROIT  
DEPARTMENT OF PUBLIC WORKS  
CITY ENGINEERS OFFICE

PLANS FOR PROPOSED

JEFFERSON AVENUE BRIDGE X098  
OVER PENN-CENTRAL DETROIT BELT LINE  
ROADWAY WIDENING

FOR  
DEPARTMENT OF PUBLIC WORKS



INDEX of DRAWINGS

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- 102 GENERAL PLAN OF SITE
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- 106 SUPERSTRUCTURE DETAILS
- 107,108 WALL DETAILS
- 109 MISCELLANEOUS DETAILS
- 110-112 EXISTING BRIDGE DETAILS
- 113 WIDENING BRIDGE APPROACHES
- 114 STANDARD DETAILS

**PROJECT:**  
JEFFERSON AVENUE BRIDGE X098  
OVER PENN-CENTRAL DETROIT BELT  
LINE ROADWAY WIDENING

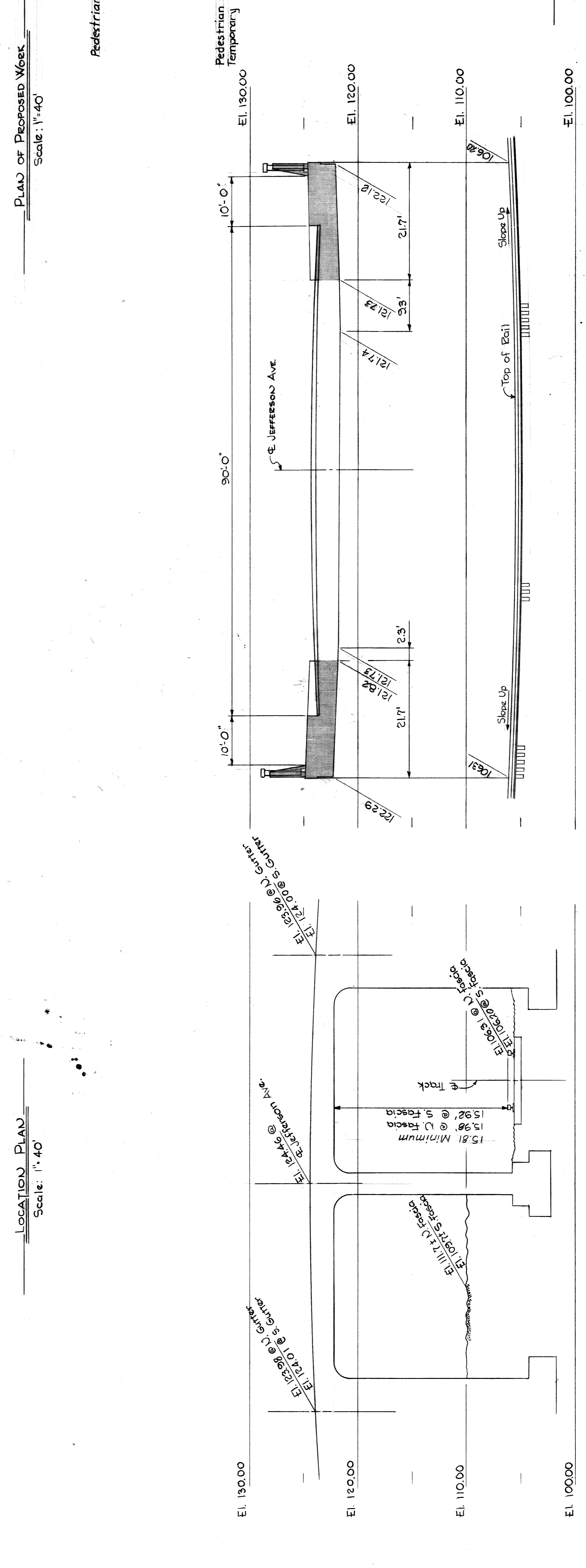
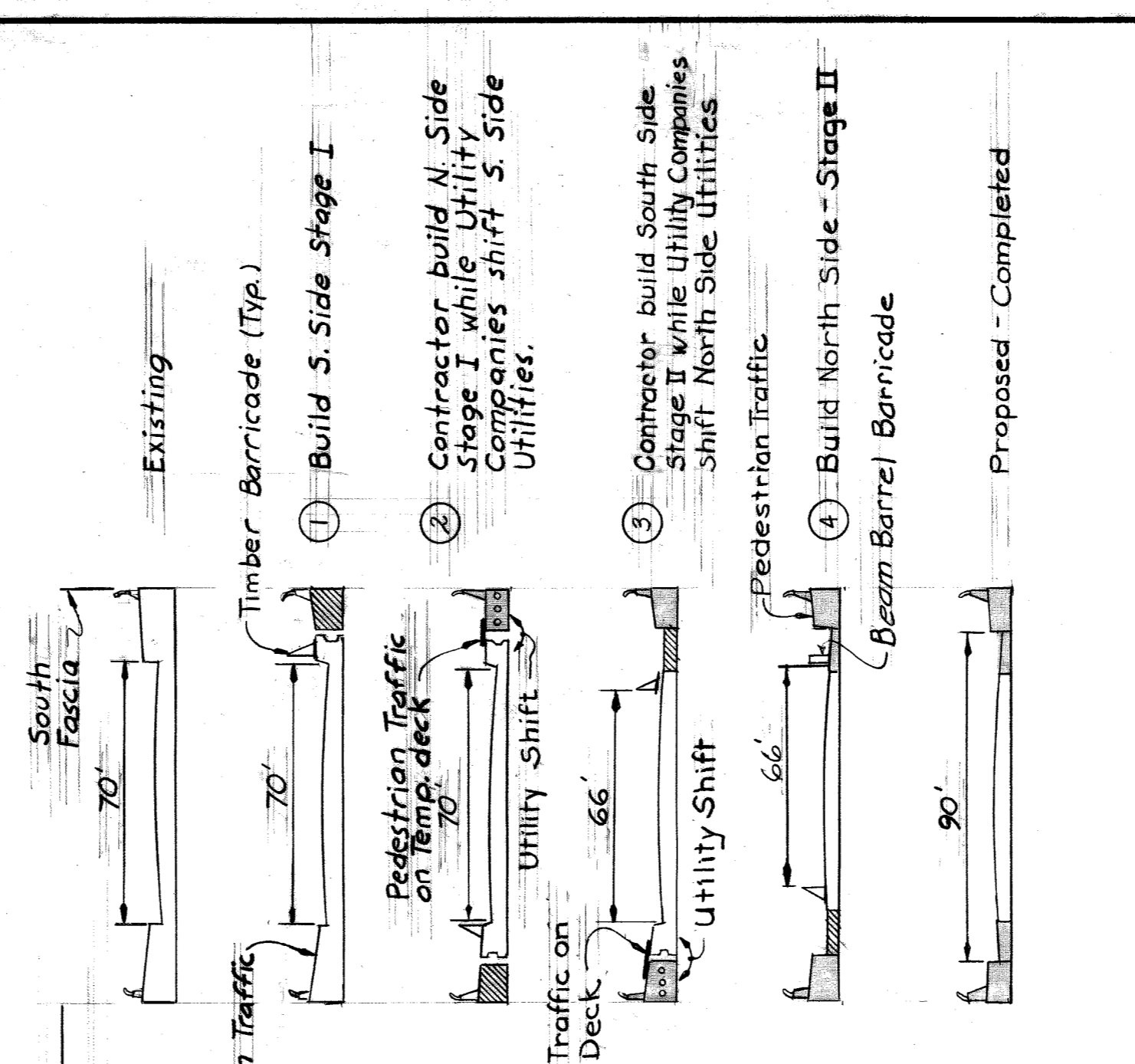
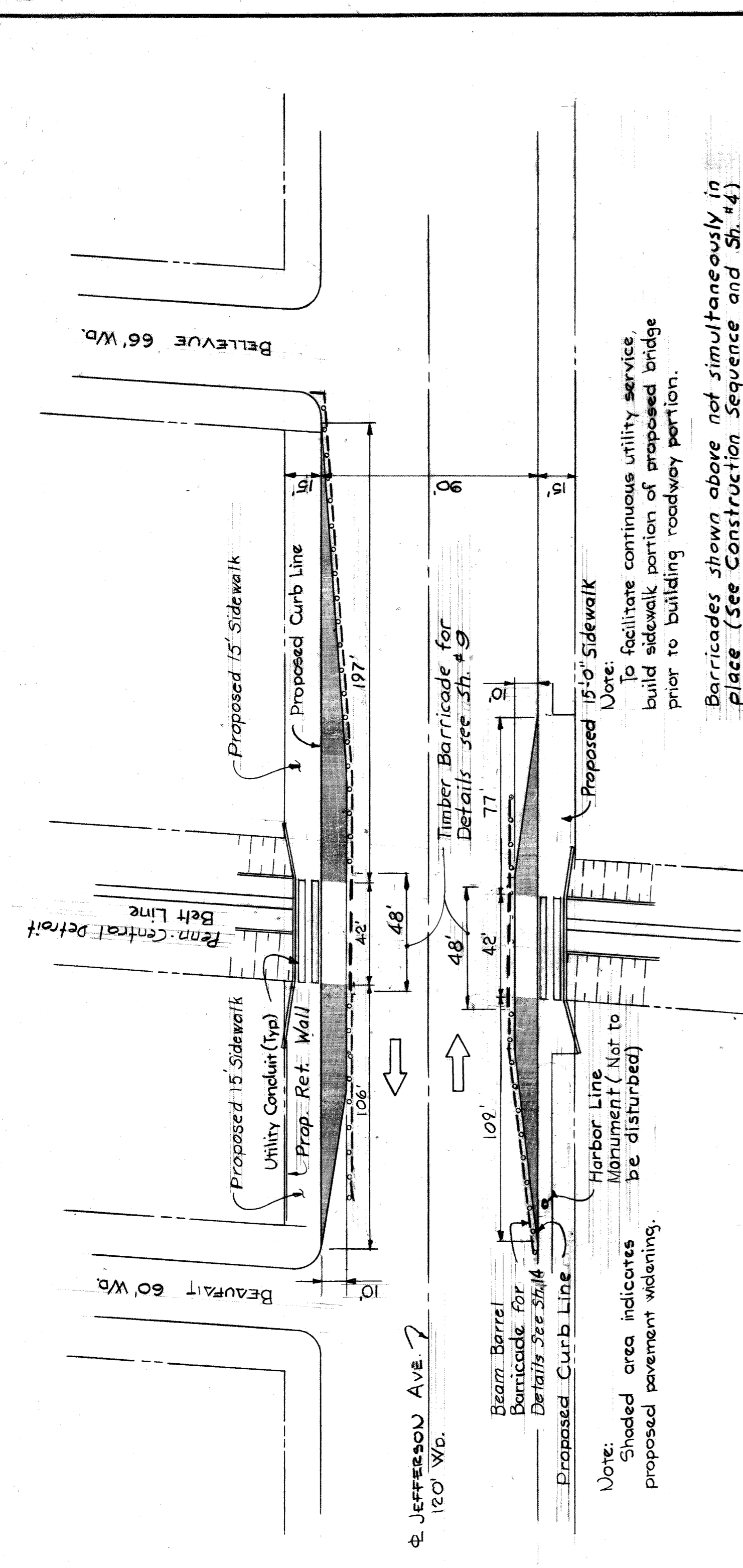
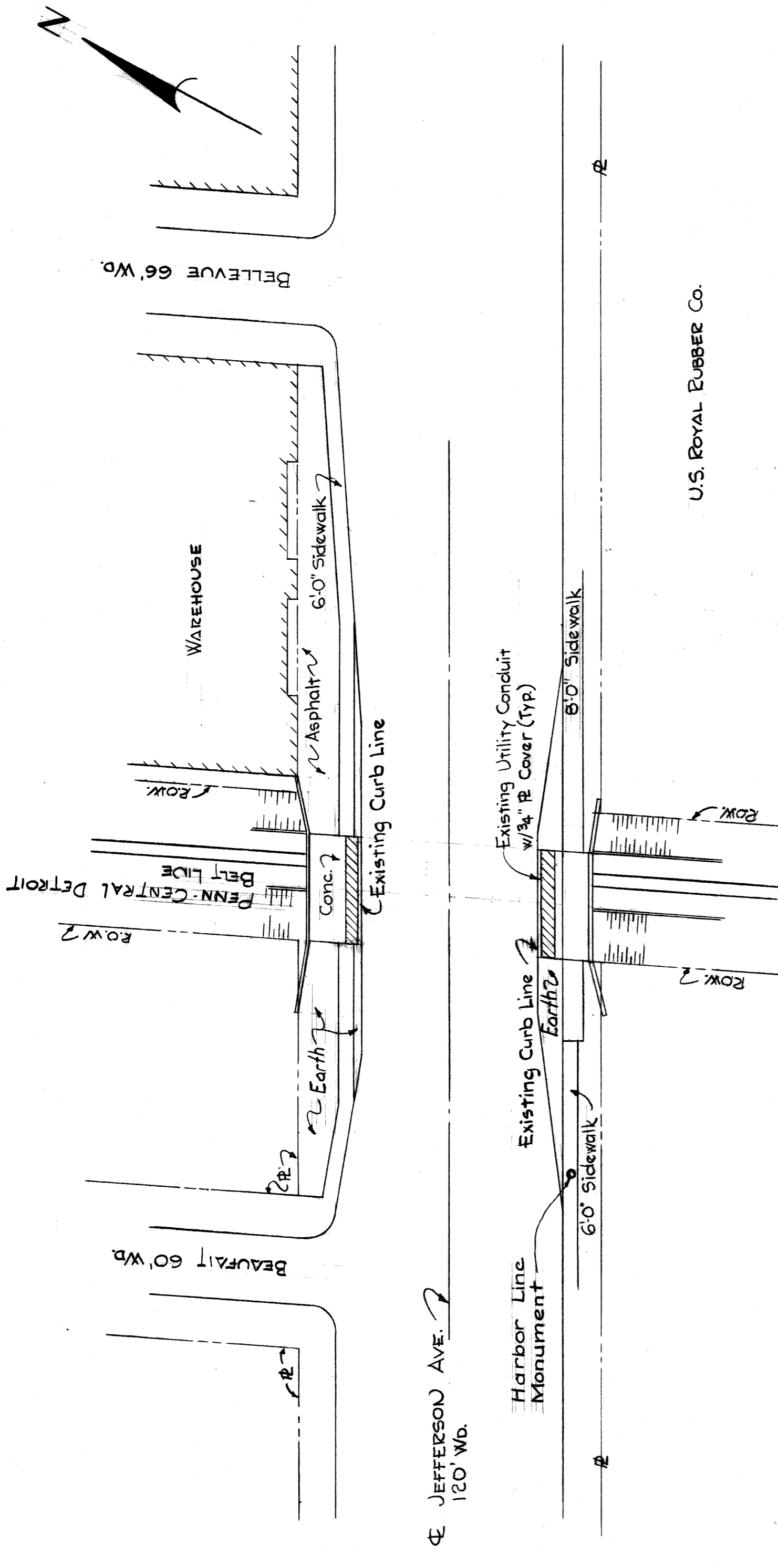
**CONTRACT**  
NO. PW 5769

PLANS PREPARED BY  
DEPARTMENT OF PUBLIC WORKS  
CITY ENGINEERS OFFICE

RECOMMENDED FOR APPROVAL	<i>R. C. M. [Signature]</i>	ENGINEER OF INSPECTION	7-26-68	DATE
RECOMMENDED FOR APPROVAL	<i>[Signature]</i>	HEAD ENGINEER	7-24-68	DATE
APPROVED	<i>[Signature]</i>	ASSISTANT CITY ENGINEER	7-24-68	DATE
APPROVED	<i>[Signature]</i>	CITY ENGINEER	7-25-68	DATE

DATE July 16, 1968

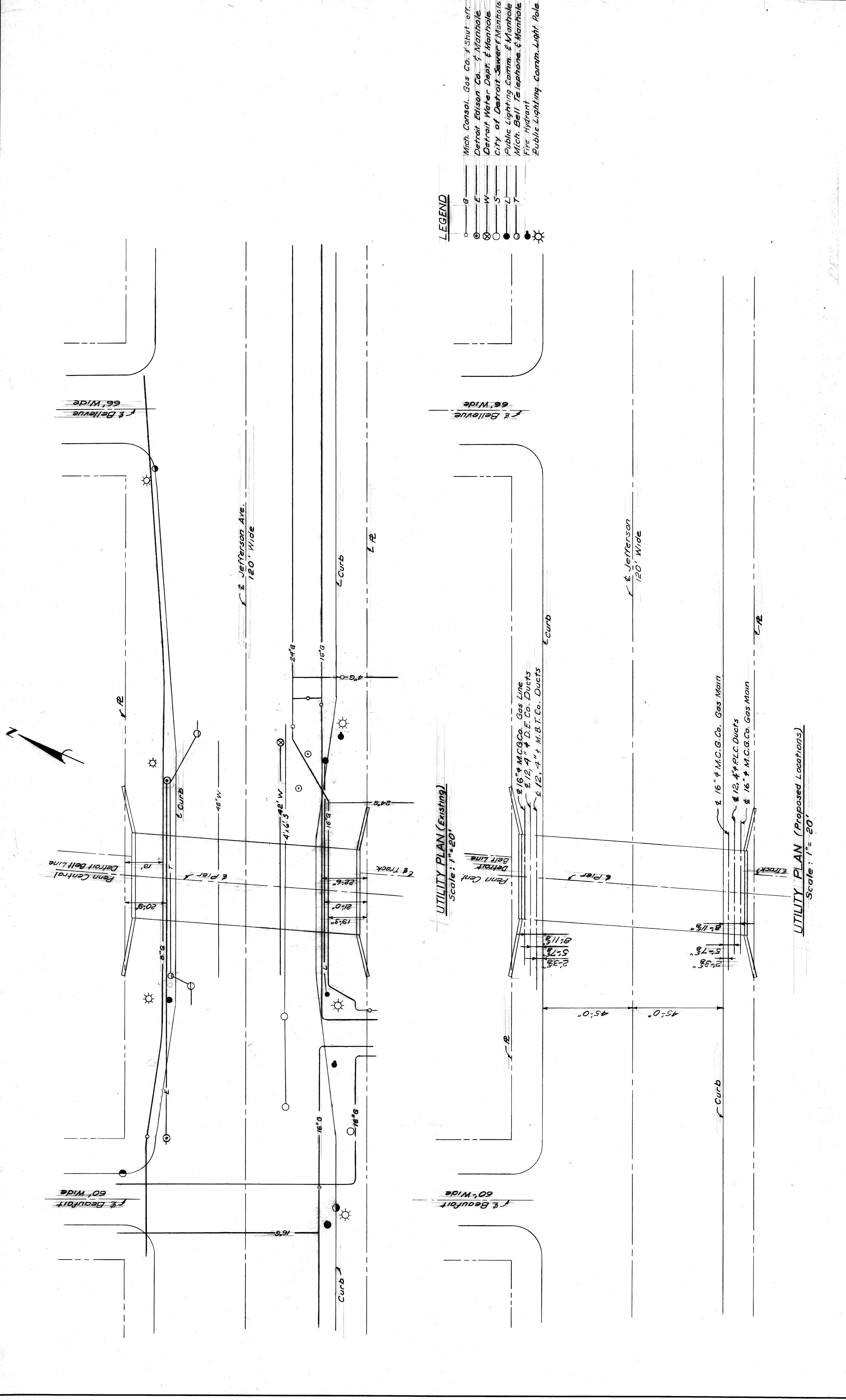
DRWG. NO. 101



Notes:  
These elevations shown are existing.  
Shaded area indicates proposed alteration.

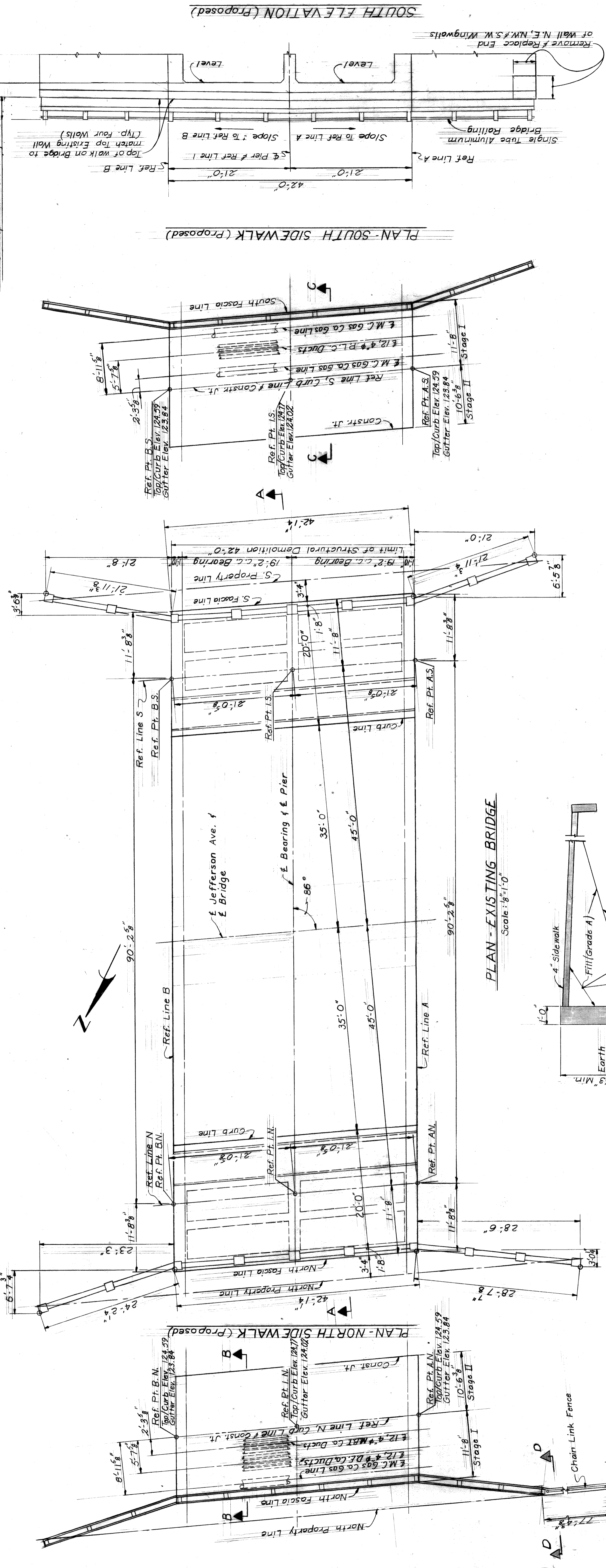
CITY OF DETROIT DEPARTMENT OF PUBLIC WORKS HIGHWAY & EXPRESSWAY DIVISION ROADWAY WIDENING		JEFFERSON AVE, BRIDGE X098 OVER PENN-CENTRAL DETROIT BELT LINE GENERAL PLAN OF SITE	
DESIGNED BY	Locher	APPROVED	J. J. Conant, P.E., Structural Engineer
DRAWN BY	ALLEBERTH	ADMINISTRATIVE ENGINEER	W. R. Samuel
TRACED BY		HEAD CIVIL ENGINEER	Richard J. Helms
CHECKED BY	Stuen		
REFERENCE DRAWINGS			
DESCRIPTION			
REVISIONS LOCATED BY COORDINATES ON SHEET			

SHEET 2 OF 14 SHEETS  
JOB No. PW 5769  
DRWG No. 102  
DATE July 16, 1968



SHEET <b>3</b> OF <b>14</b> SHEETS JOB No. <b>PW-5769</b> DRWG No. <b>103</b> DATE <b>July 16, 1968</b>		CITY OF DETROIT DEPARTMENT OF PUBLIC WORKS HIGHWAY & EXPRESSWAY DIVISION <b>ROADWAY WIDENING</b>		JEFFERSON AVE. BRIDGE X098 OVER PENN-CENTRAL DETROIT BELT LINE EXISTING UTILITIES AND PROPOSED ALTERATIONS	
APPROVED: <i>J. J. Covert</i> STRUCTURAL ENGINEER	DESIGNED BY Locher	DRAWN BY Locher	TRACED BY -	CHECKED BY Swan	REFERENCE DRAWINGS
APPROVED: <i>W. K. Samuel</i> ADMINISTRATIVE ENGINEER HEAD CIVIL ENGINEER	DESCRIPTION REVISIONS LOCATED BY COORDINATES ON SHEET	DATE CVD DATE	DATE DATE	DATE DATE	DATE

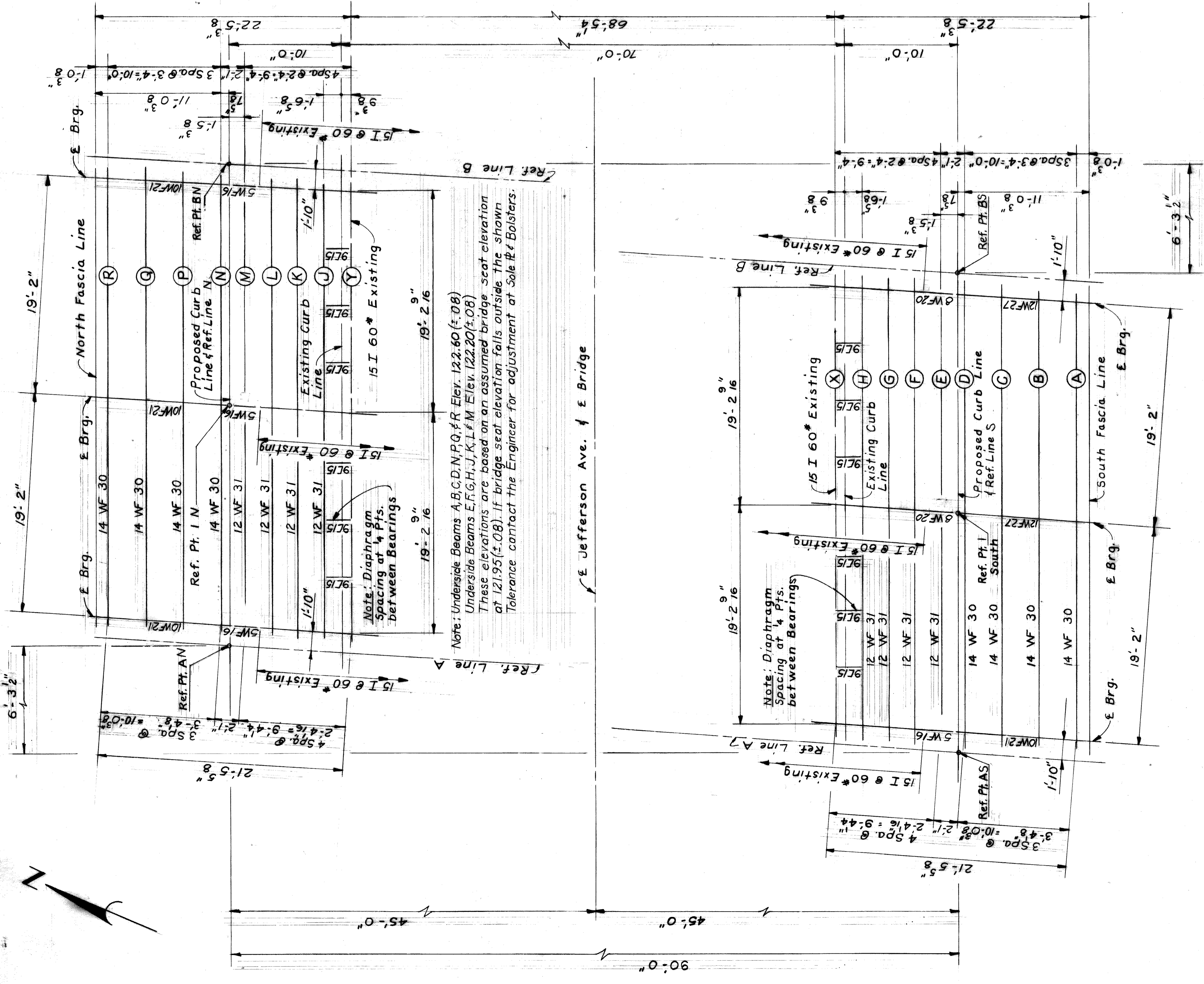
Limit of Prop. New Work Bridge  
Limit of Prop. New Work Wing Walls



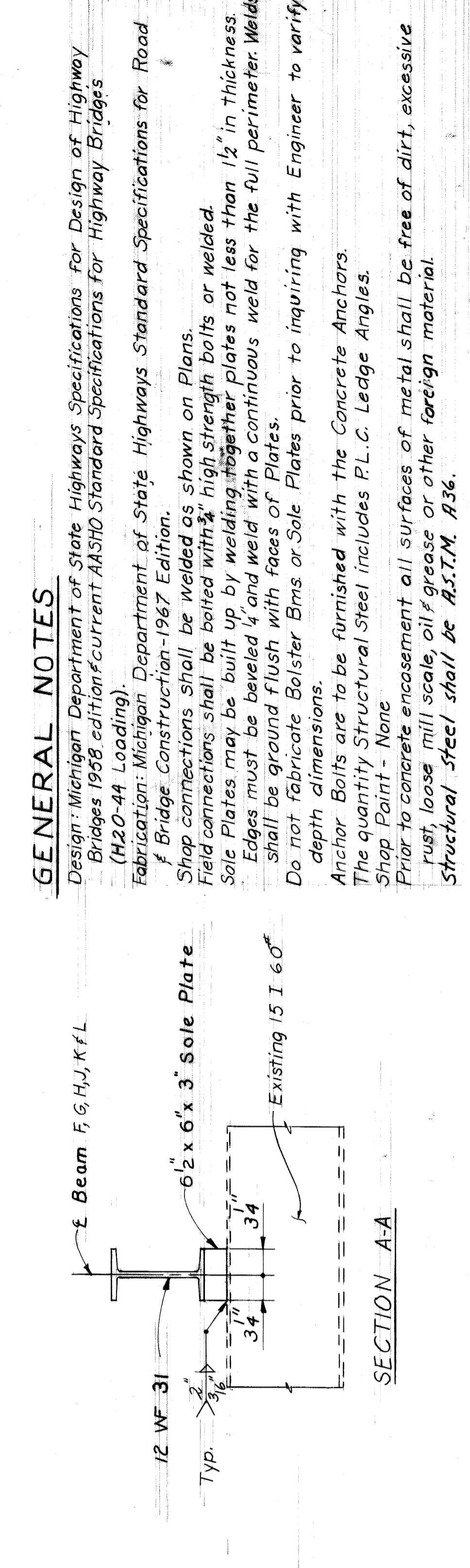
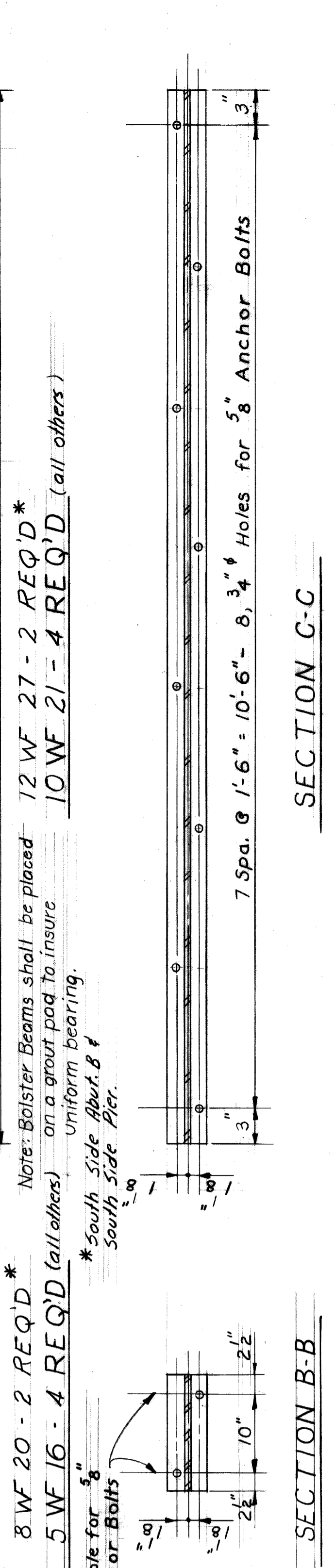
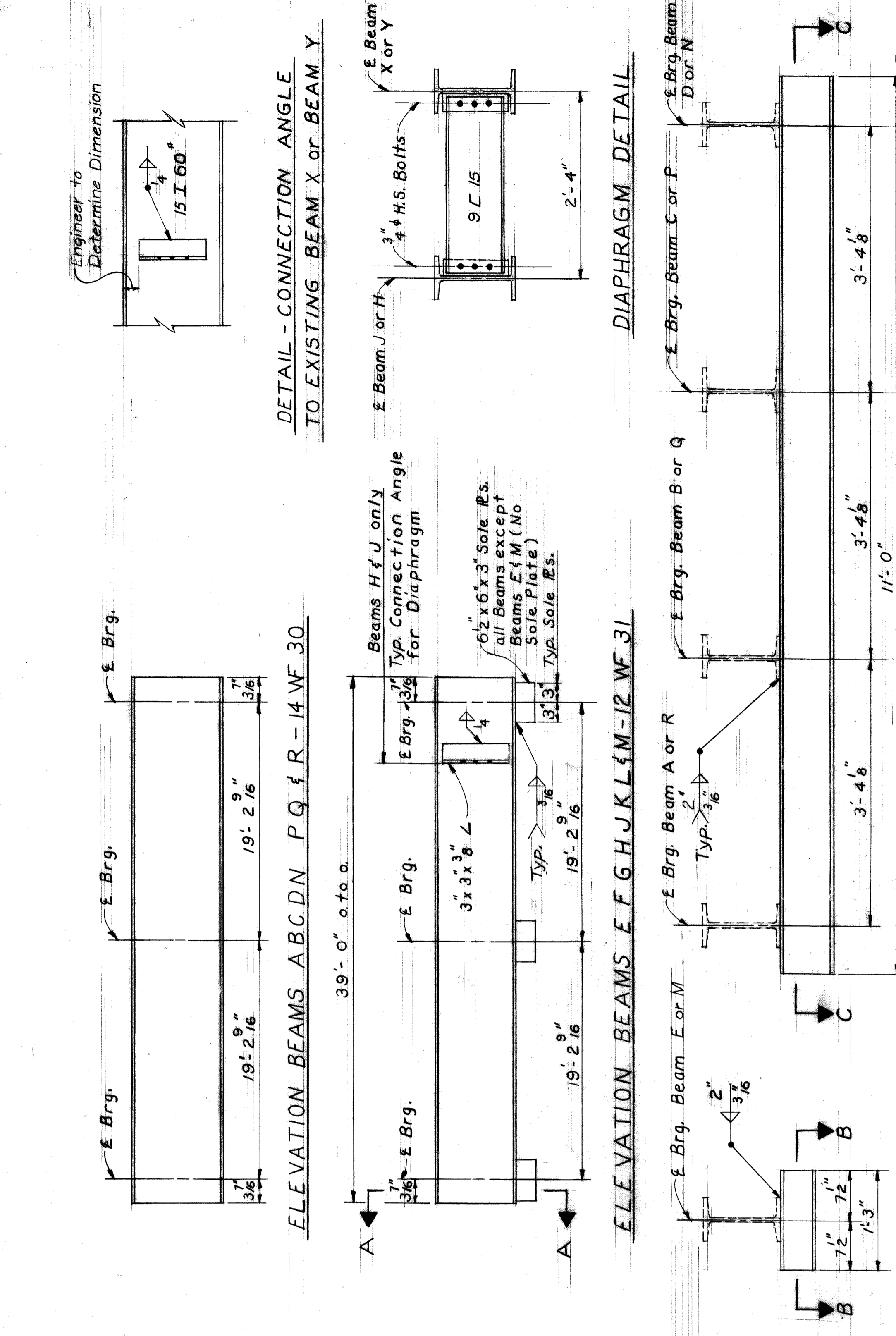
General Notes:

M. C. Gas Co. denotes Michigan Consolidated Gas Co.  
 D. E. Co. denotes Detroit Edison Co.  
 M. B. T. Co. denotes Michigan Bell Telephone Co.  
 P. L. C. denotes Public Lighting Commission.  
 Stage I construction must precede Stage II construction to insure continuous service by utility companies.  
 4" Ducts to be furnished & installed by contractor.  
 20" Sleeves to be furnished by M.C. Gas Co. and installed by contractor.  
 Installation of utilities to be done by utility companies.

DESIGNED BY	W. Locher	APPROVED	J. J. Covert W.L. STRUCTURAL ENGINEER
DRAWN BY	J. Jones		W. J. Schumaker ADMINISTRATIVE ENGINEER
TRACED BY	J. Jones		Raymond J. Hillman HEAD CIVIL ENGINEER
CHECKED BY	Sturm		
REVISIONS LOCATED BY COORDINATES ON SHEET			
DESCRIPTION			



FRAMING PLAN

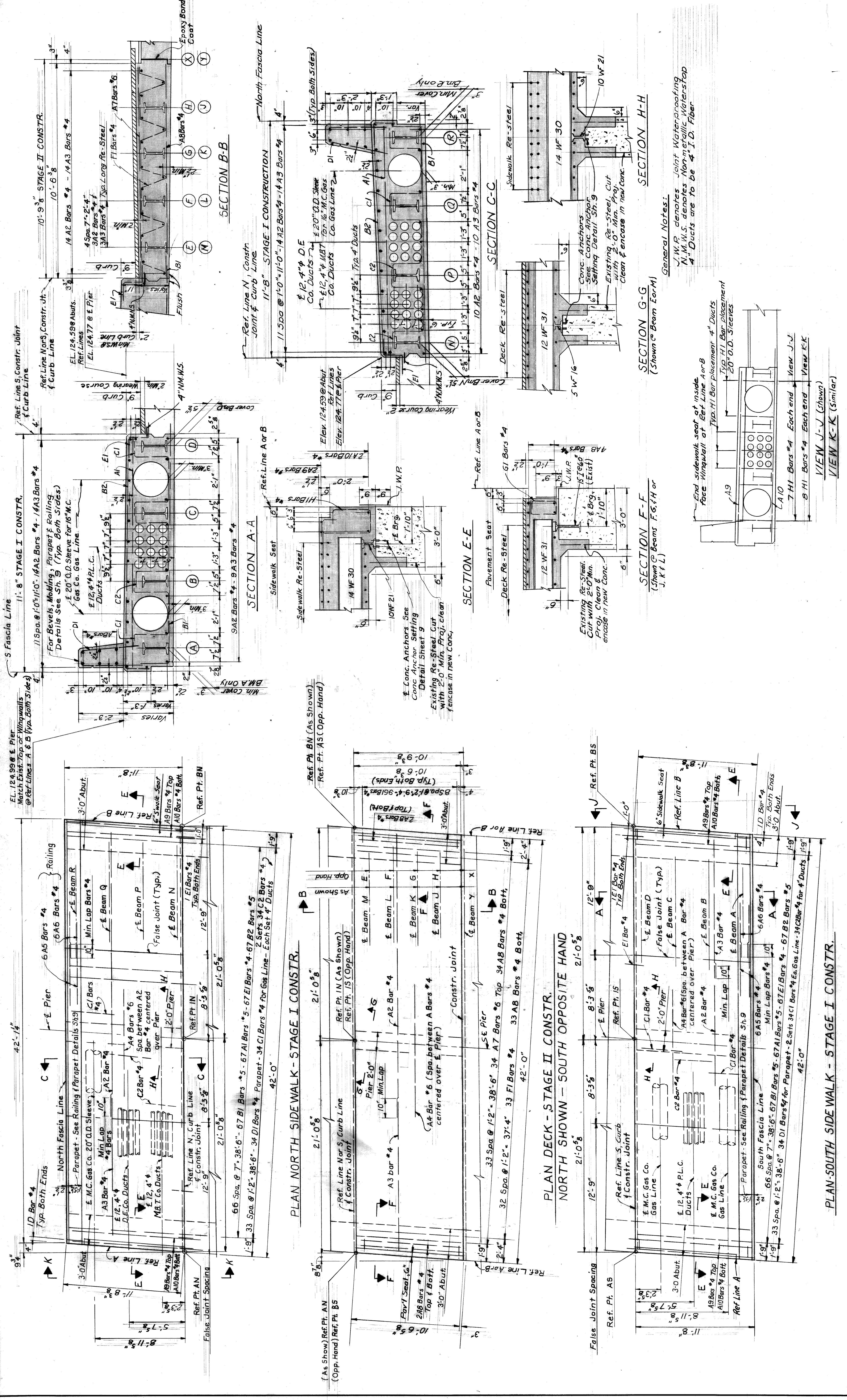


GENERAL NOTES

Design: Michigan Department of State Highways Specifications for Design of Highway Bridges 1958 edition current AASHTO Standard Specifications for Highway Bridges (H20-44 Loading).  
 Fabrication: Michigan Department of State Highways Standard Specifications for Road Bridge Construction-1967 Edition.  
 Shop connections shall be welded as shown on Plans.  
 Field connections shall be bolted with high strength bolts or welded.  
 Sole Plates may be built up by welding together plates not less than 1/2" in thickness. Edges must be beveled 1/4" and weld with a continuous weld for the full perimeter. Welds shall be ground flush with faces of Plates.  
 Do not fabricate Bolster Brms or Sole Plates prior to inquiring with Engineer to verify depth dimensions.  
 Anchor Bolts are to be furnished with the Concrete Anchors.  
 The quantity Structural Steel includes P.L.C. Ledge Angles.  
 Shop Paint - None  
 Prior to concrete encasement all surfaces of metal shall be free of dirt, excessive rust, loose mill scale, oil & grease or other foreign material.  
 Structural steel shall be A.S.T.M. A36.

Note: Bolster Beams shall be placed on a grout pad to insure uniform bearing.  
 \* South Side Abut. B & South Side Pier.

REVISED	Booster Beam	A.G. VAIL	4/69	DESCRIPTION	REVISED LOCATED BY COORDINATES ON SHEET
DESIGNED BY	W. Locher	APPROVED	J. J. Gault	STRUCTURAL ENGINEER	W. Locher
DRAWN BY	W. Locher	ADMINISTRATIVE ENGINEER	W. P. Schmitt	HEAD OFFICE ENGINEER	J. J. Gault
TRACED BY	J. JONES	CHECKED BY	D. Romes	HEAD OFFICE ENGINEER	D. Romes
CITY OF DETROIT	DEPARTMENT OF PUBLIC WORKS	ROADWAY WIDENING			
HIGHWAY & EXPRESSWAY DIVISION					
JEFFERSON AVE. BRIDGE X098	OVER	PENN-CENTRAL DETROIT BELT LINE	STRUCTURAL STEEL DETAILS		
SHEET 5 OF 14 SHEETS	JOB No. PW 5769	DRWG No. 105	DATE July 16, 1968		



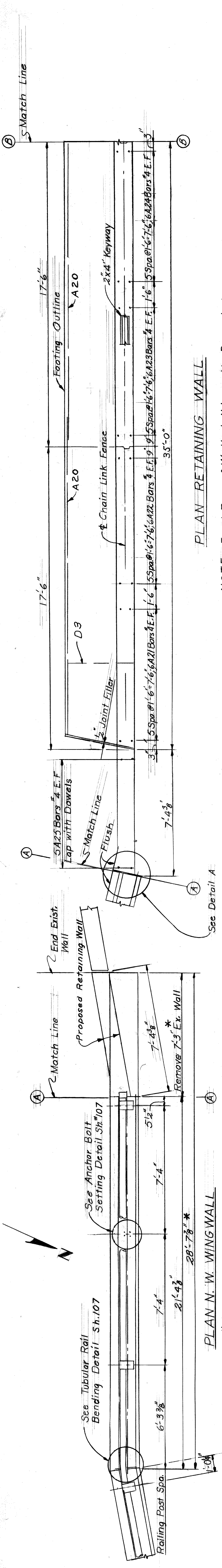
DESIGNER	W. Locher	APPROVED	J. J. Conz
DRAWN	W. Locher	REGISTERED ENGINEER	W. R. Conz
TRACED	J. Jones	ADMINISTRATIVE ENGINEER	J. Jones
CHECKED	D. Romes	HEAD CIVIL ENGINEER	J. Jones
DESCRIPTION	JEFFERSON AVE. BRIDGE X098 OVER PENN-CENTRAL DETROIT BELT LINE SUPERSTRUCTURE DETAILS		
DATE	July 16, 1968		
JOB NO.	PW 5769		
SHEET NO.	106		
DATE	July 16, 1968		

CITY OF DETROIT  
 DEPARTMENT OF PUBLIC WORKS  
 HIGHWAY & EXPRESSWAY DIVISION  
 ROADWAY WIDENING

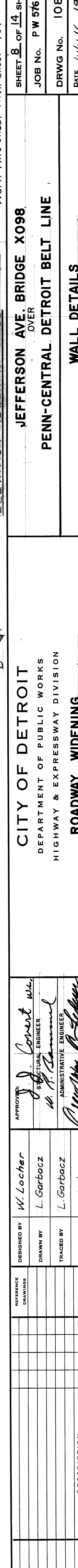
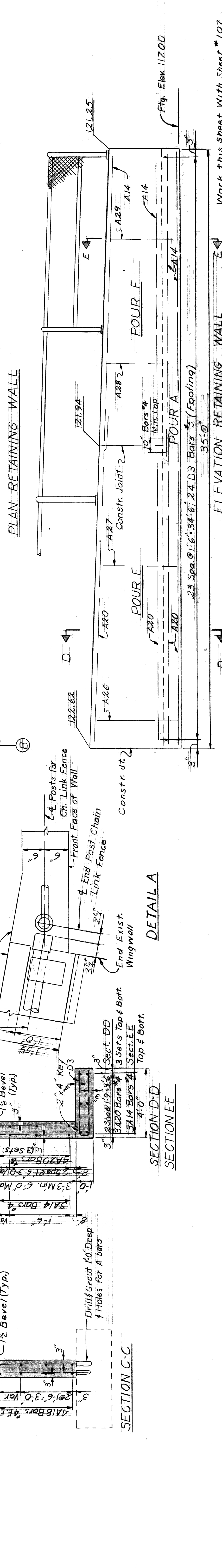
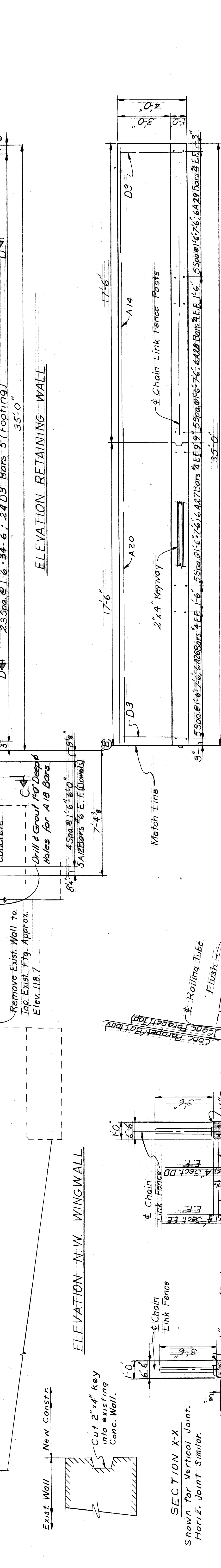
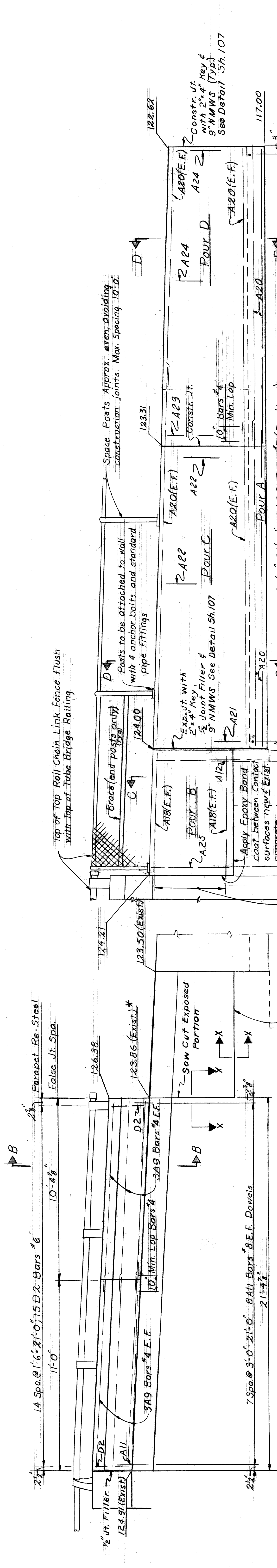
JEFFERSON AVE. BRIDGE X098  
 OVER  
 PENN-CENTRAL DETROIT BELT LINE  
 SUPERSTRUCTURE DETAILS

SHEET 6 OF 14 SHEETS  
 JOB NO. PW 5769  
 DRWG No. 106  
 DATE July 16, 1968





NOTE: Front Face of Wall shall be on the Property Line.



CITY OF DETROIT  
 DEPARTMENT OF PUBLIC WORKS  
 HIGHWAY & EXPRESSWAY DIVISION  
 ROADWAY WIDENING

JEFFERSON AVE. BRIDGE X098  
 OVER  
 PENN-CENTRAL DETROIT BELT LINE  
 WALL DETAILS

NO.	DESCRIPTION	DATE

DESIGNED BY	W. Locher
DRAWN BY	L. Garbocz
TRACED BY	L. Garbocz
CHECKED BY	T. Baker

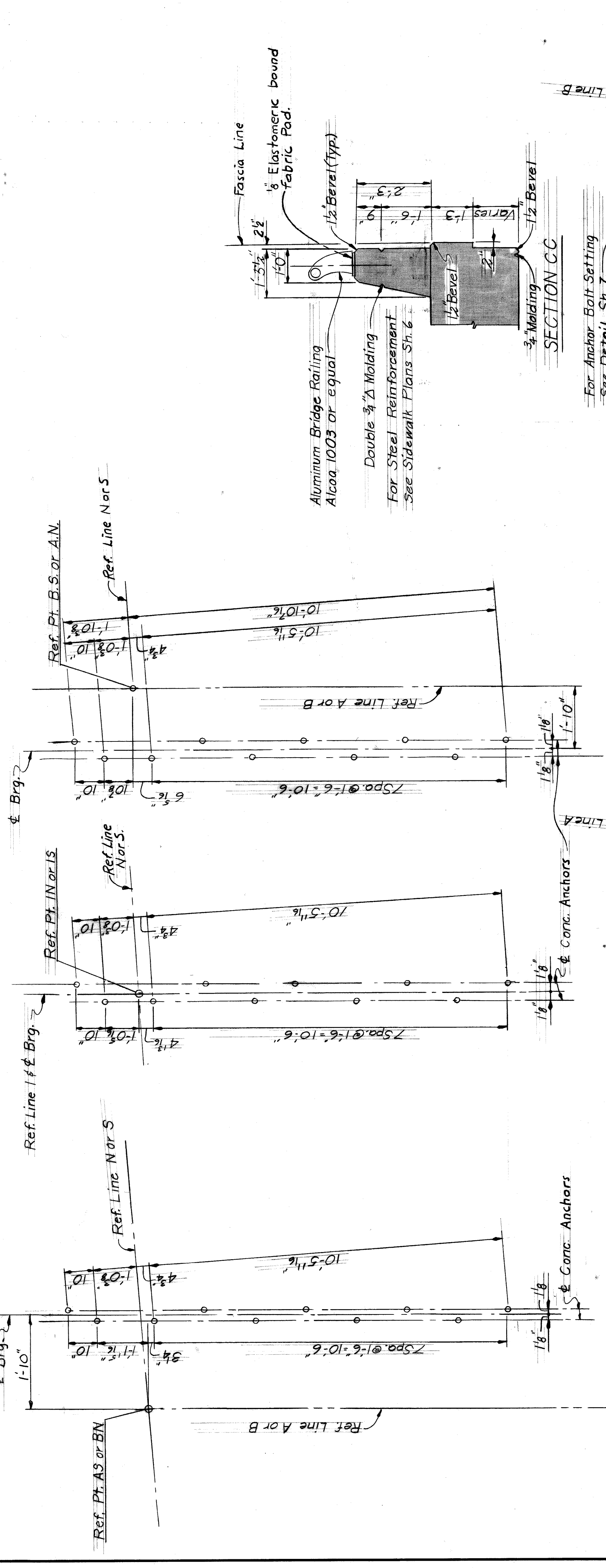
  

APPROVED	<i>J. Lovett</i> STRUCTURAL ENGINEER
	<i>W. P. Samuel</i> ADMINISTRATIVE ENGINEER
	<i>Christopher P. Holden</i> LEAD CIVIL ENGINEER

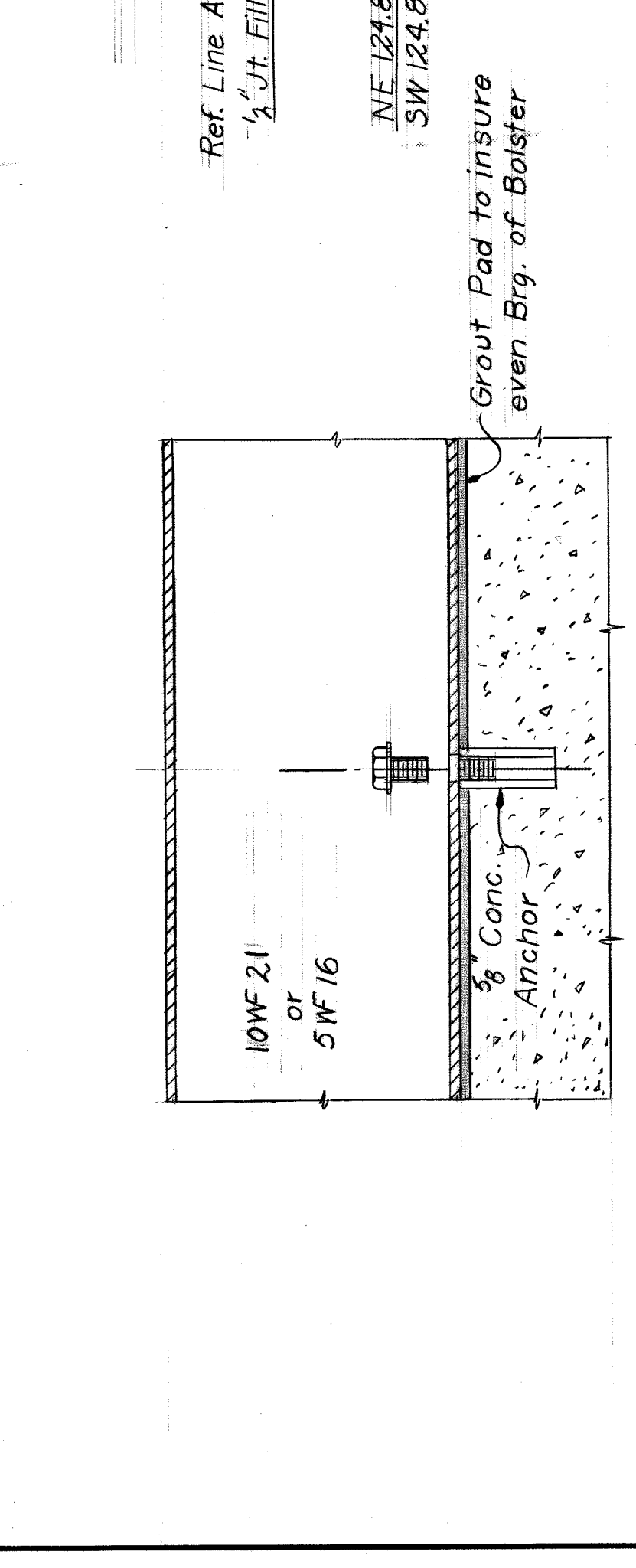


STEEL REINFORCEMENT DETAILS

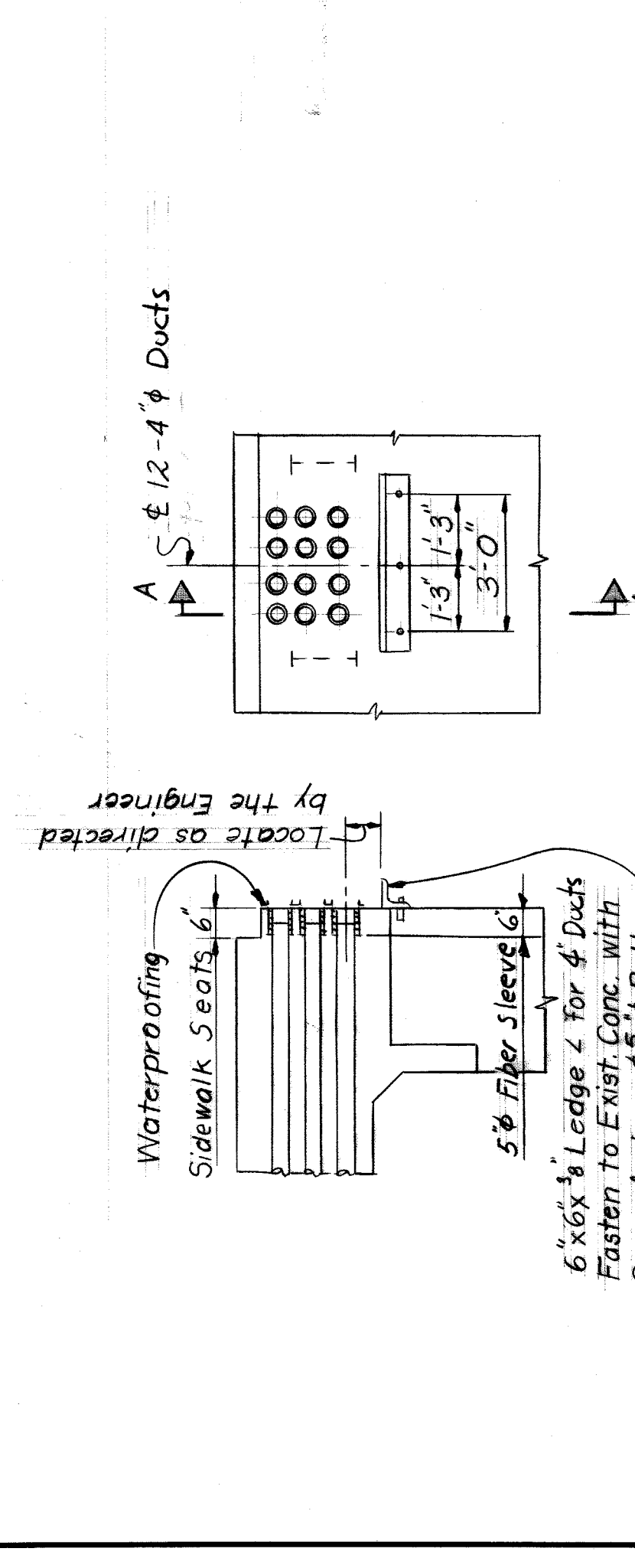
Mark	a	b	c	d	e	Size	Length/No. Reqd.
A1						#5	11'-3" / 134
A2						#4	29'-0" / 75
A3						#4	13'-9" / 75
A4						#6	12'-0" / 38
A5						#4	27'-0" / 12
A6						#4	15'-9" / 12
A7						#6	10'-3" / 68
A8						#4	10'-3" / 150
A9						#4	11'-3" / 20
A10						#8	2'-0" / 56
A11						#6	2'-3" / 10
A12						#6	6'-3" / 12
A13						#4	17'-0" / 12
A14						#6	4'-9" / 6
A15						#6	5'-6" / 6
A16						#4	11'-6" / 12
A17						#4	8'-0" / 8
A18						#4	18'-6" / 42
A19						#4	6'-3" / 12
A20						#4	5'-9" / 12
A21						#4	5'-9" / 12
A22						#4	5'-9" / 12
A23						#4	5'-9" / 12
A24						#4	5'-0" / 10
A25						#4	4'-6" / 12
A26						#4	4'-3" / 12
A27						#4	4'-0" / 12
A28						#4	3'-9" / 12
A29						#4	3'-9" / 12
B1	12'-6"	1'-6 1/2"				#5	14'-0" / 134
B2	11'-3"	0'-11 1/8"				#5	12'-2" / 134
C1	1'-9"	2'-2"	0'-8 1/2"			#4	7'-0" / 102
C2	1'-9"	2'-2"	0'-9"			#4	7'-6" / 102
D1	8"	3'-2"	7 1/4"	3'-2"		#6	7'-0" / 72
D2	8"	2'-1"	2'-0 1/2"	2'-1"		#6	4'-9" / 52
D3	5 1/8"	3'-6"	3'-5 1/8"	0	3'-6"	#5	7'-4" / 48
E1	1'-5"	1'-0"	1'-5"			#4	3'-9" / 138
F1	1'-5"	1'-2"	6 1/2"	1'-3 1/2"	5 1/4"	#4	16'-11" / 66
G1	1'-1"	6"	6"	8"		#4	3'-9" / 36
H1	2'-0 1/2"	6"	9"	1'-1 1/2"	1'-6 1/2"	#4	6'-7" / 30



CONCRETE ANCHOR SETTING DIAGRAM



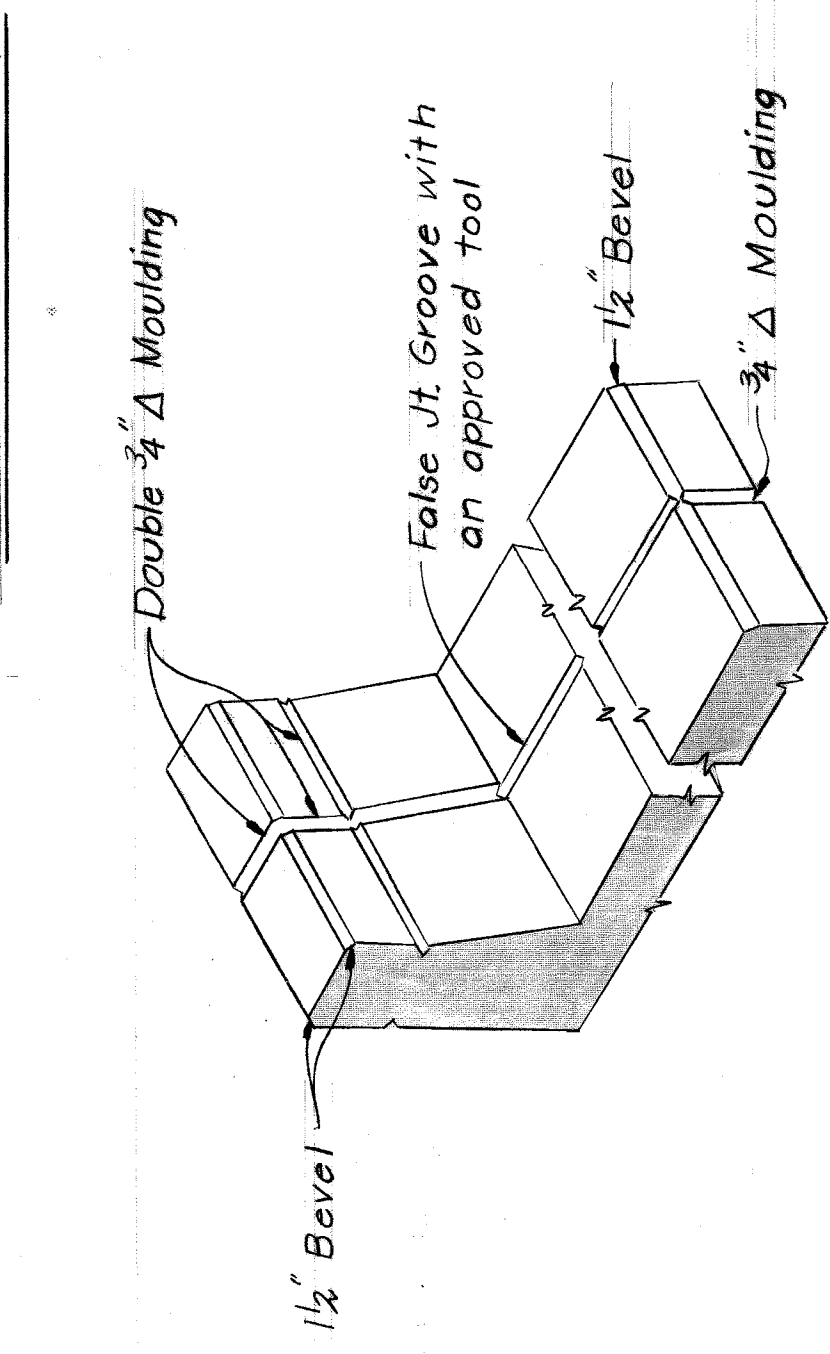
CONCRETE ANCHOR DETAIL



PART ELEVATION BACKWALL

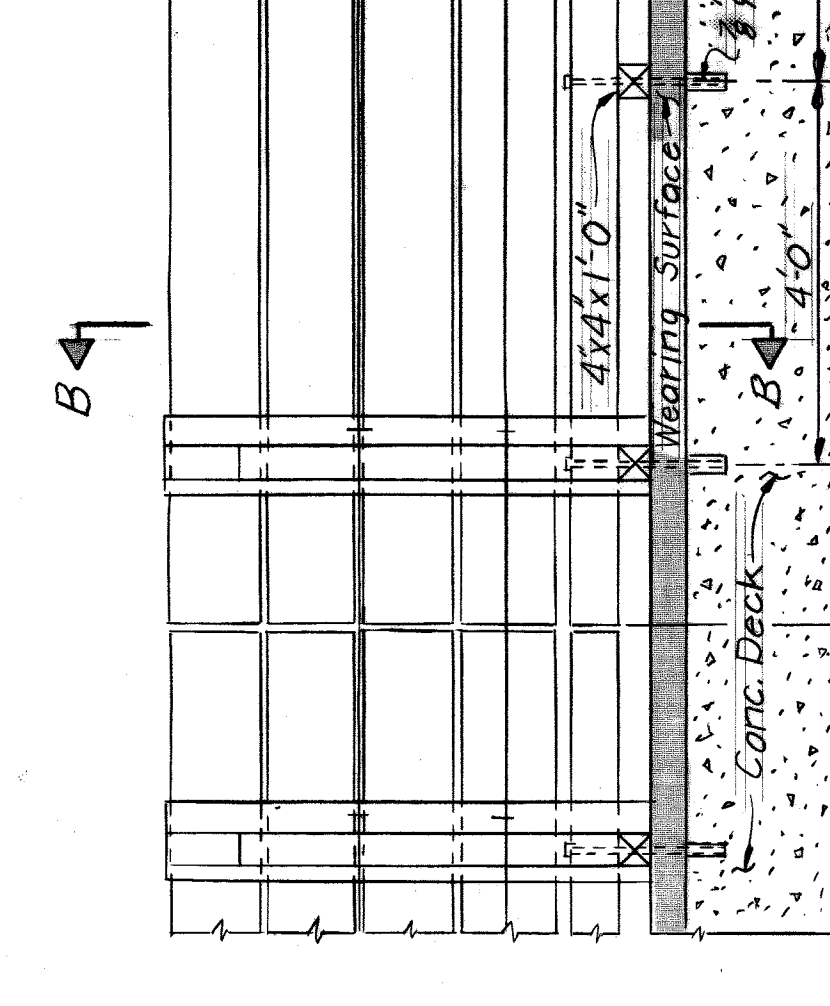
(Showing 4 Ducts)

FASCIA ELEVATION



MOULDING DETAIL

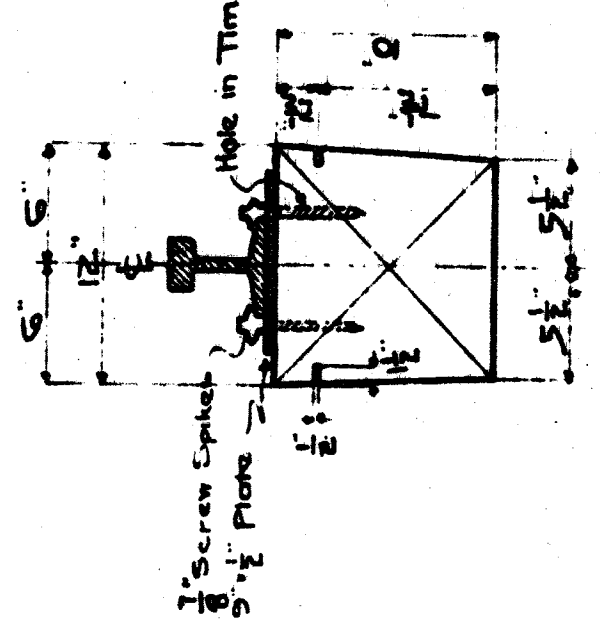
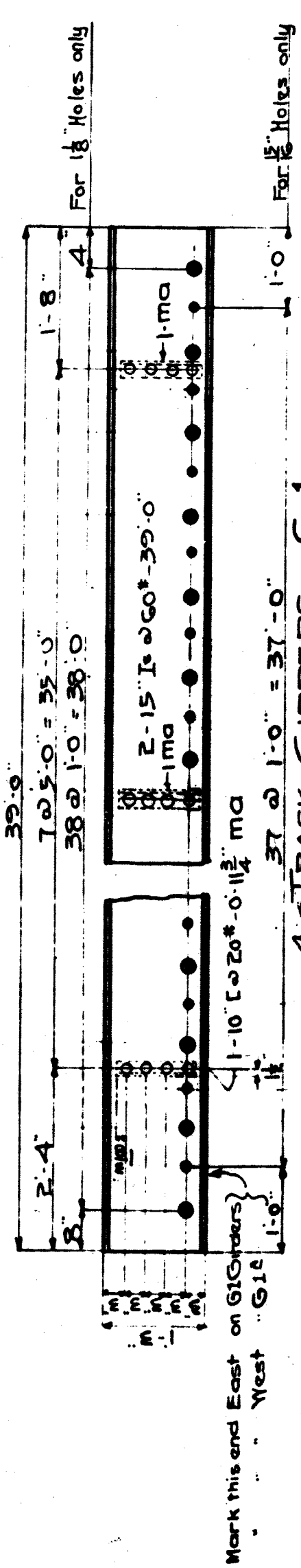
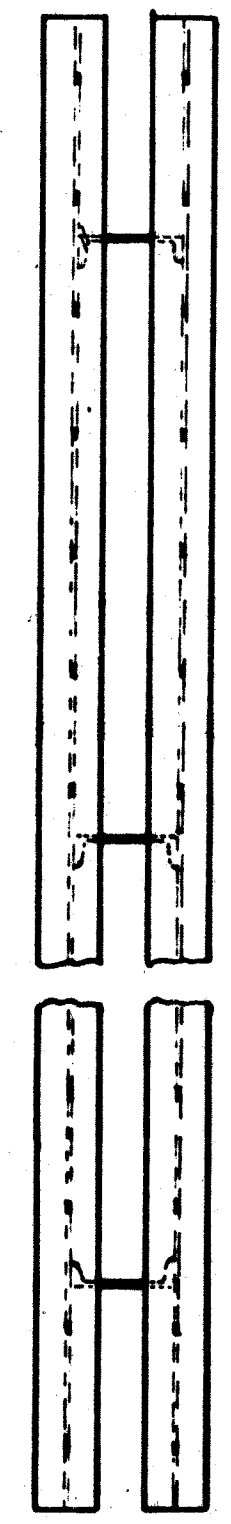
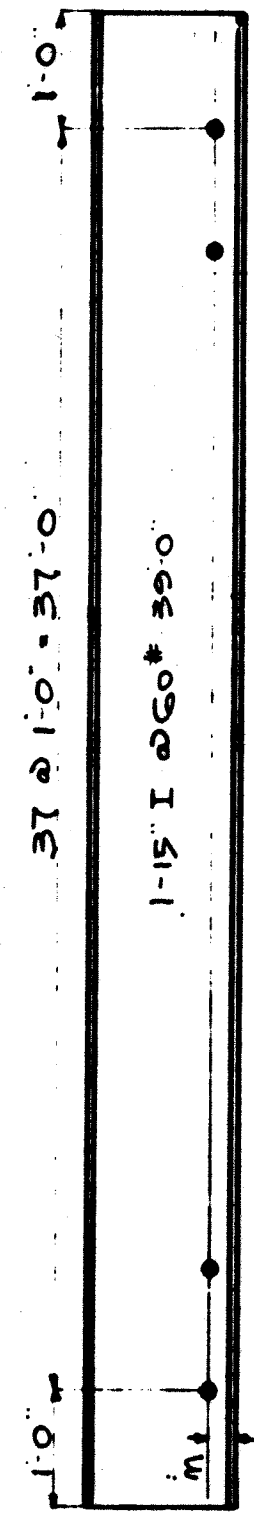
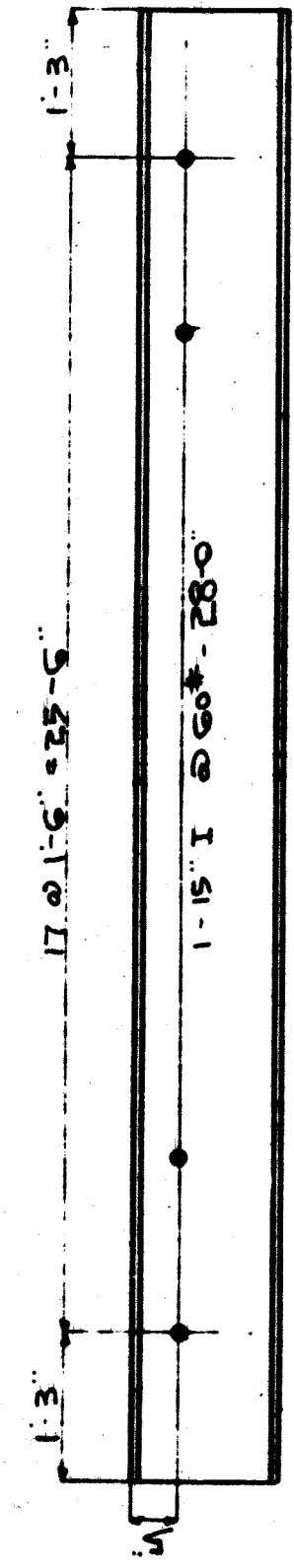
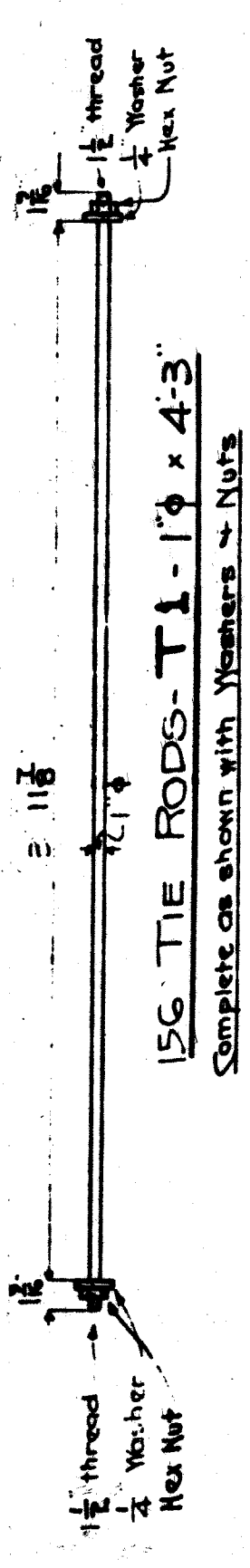
MOULDING DETAIL



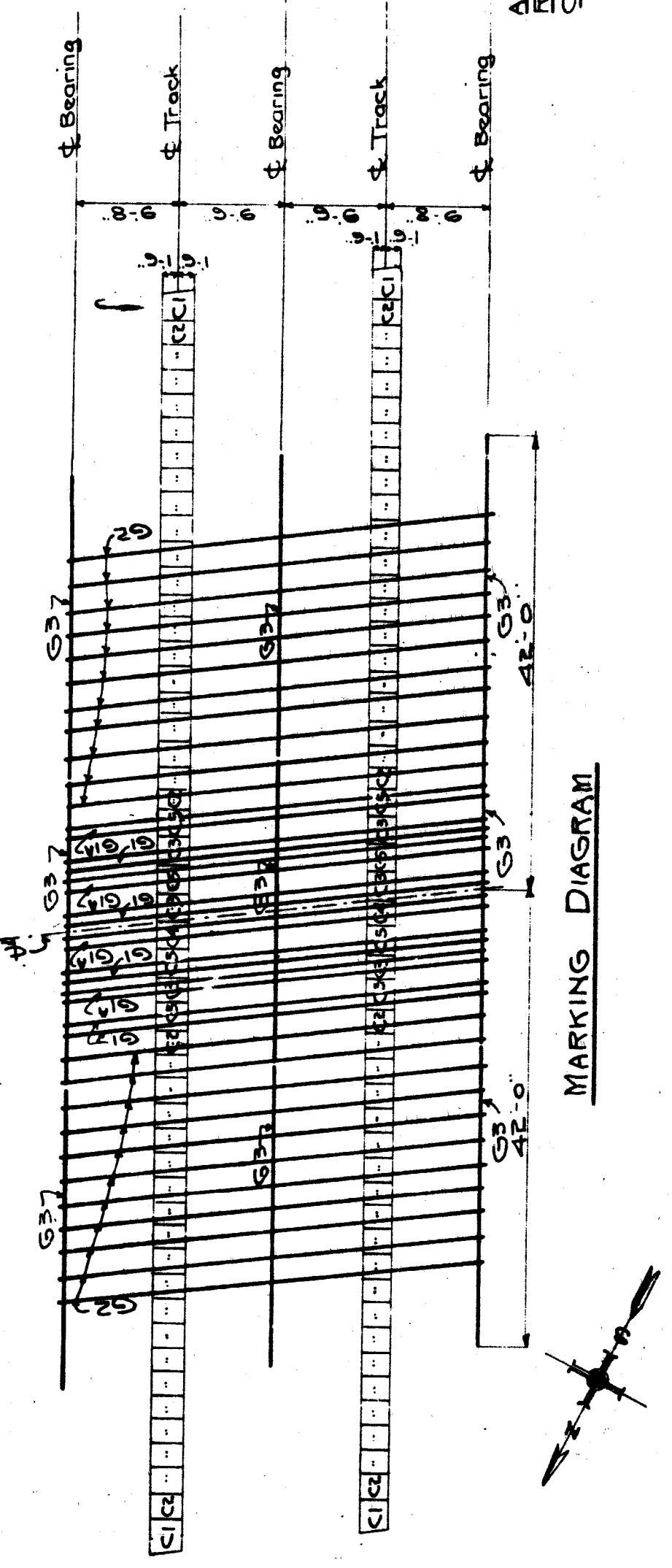
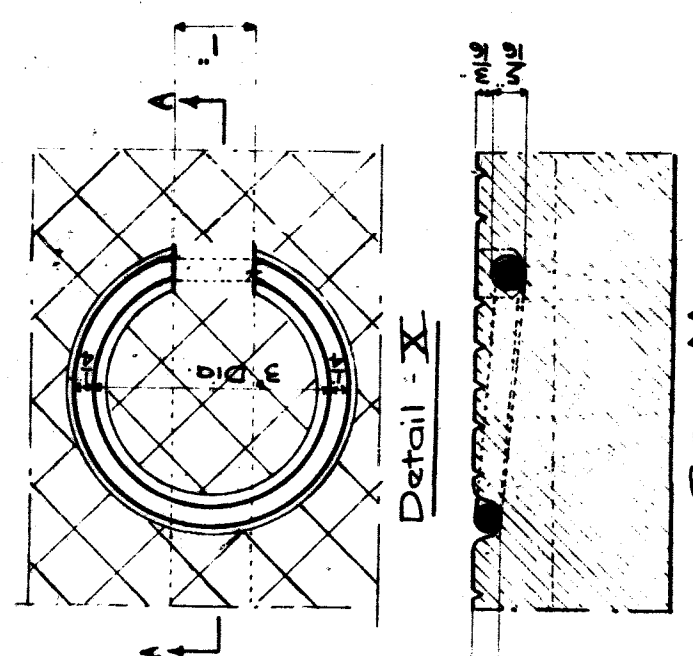
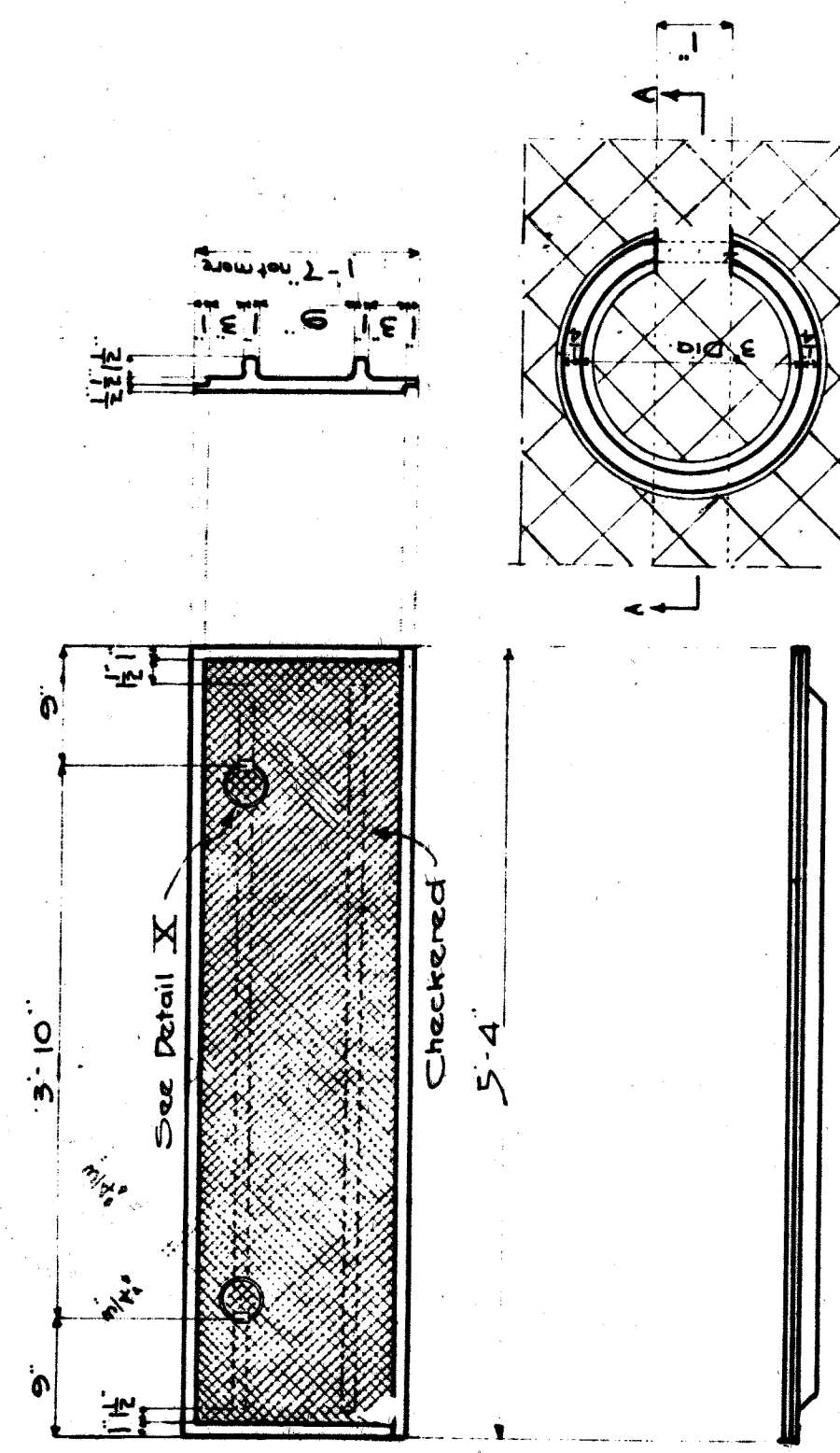
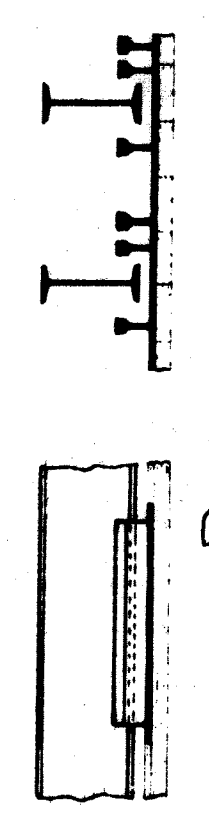
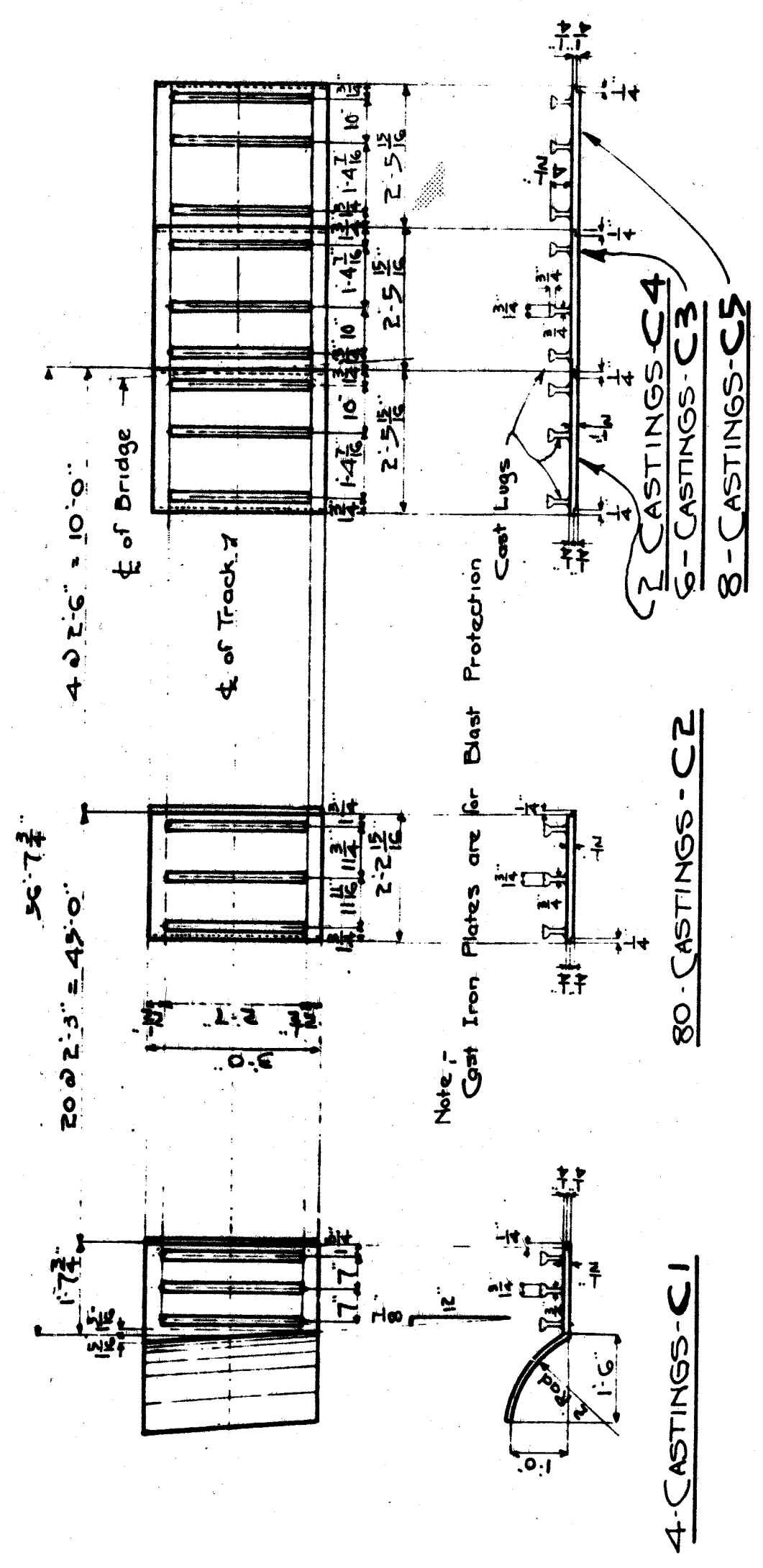
ELEVATION

TIMBER BARRICADE DETAILS

CITY OF DETROIT DEPARTMENT OF PUBLIC WORKS HIGHWAY & EXPRESSWAY DIVISION	APPROVED	DESIGNED BY	W. Locher	REVISIONS LOCATED BY COORDINATES ON SHEET
	STRUCTURAL ENGINEER	DRAWN BY	L. Garbacz	
ROADWAY WIDENING	ADMINISTRATIVE ENGINEER	TRACED BY	L. Garbacz	
ROADWAY WIDENING	HEAD CIVIL ENGINEER	CHECKED BY	D. Romes	
JEFFERSON AVE. BRIDGE X098 OVER		SHEET 9 OF 14 SHEETS		
PENN-CENTRAL DETROIT BELT LINE		JOB No. PW 5769		
MISCELLANEOUS DETAILS		DRWG No. 109		
		DATE July 16, 1968		



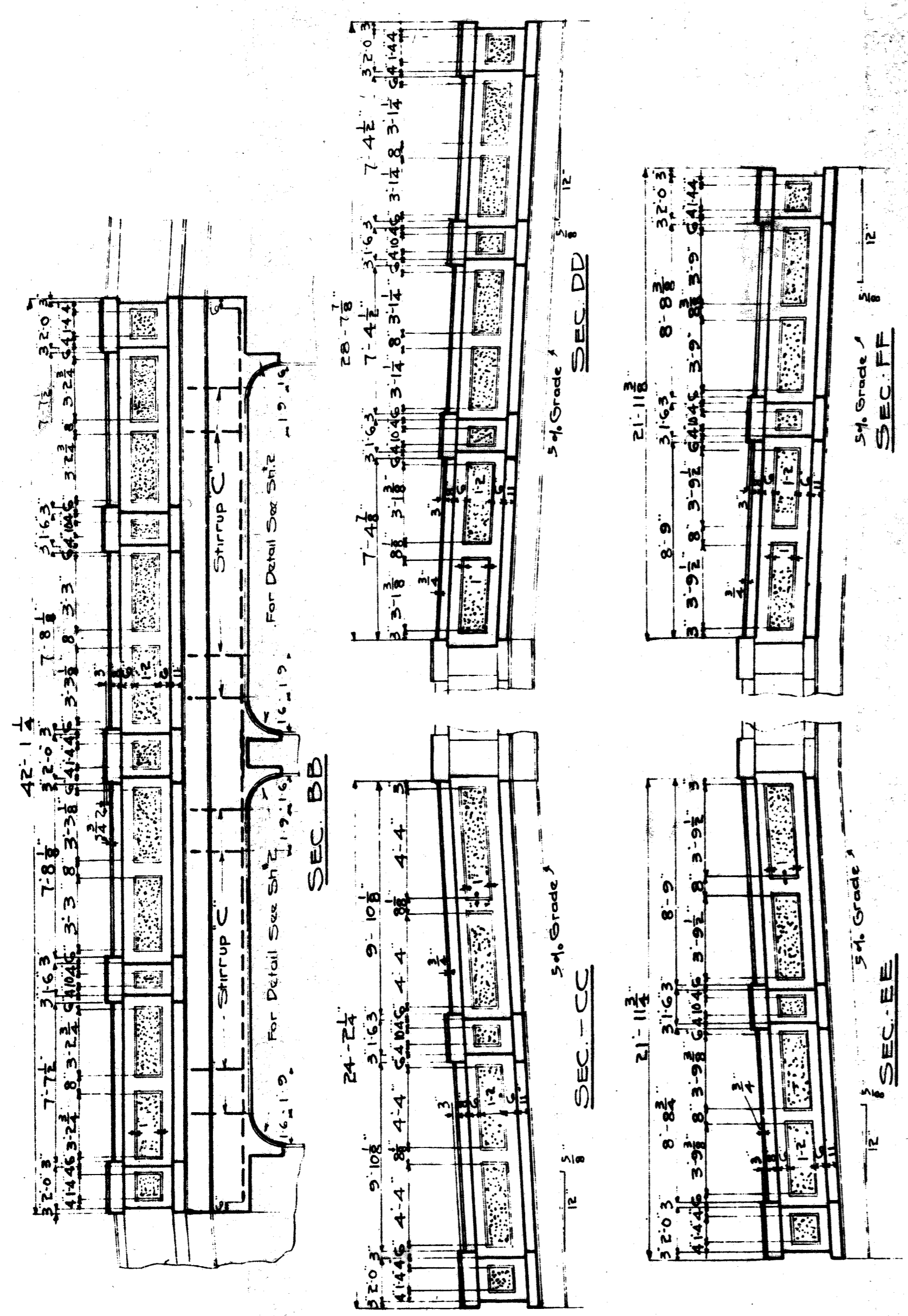
B - CREOSOTED TIMBERS



NOTES  
 According to N.Y.S. Bridge Specifications  
 Rivets to be secured  
 Open Holes to be unless noted

CITY OF DETROIT DEPARTMENT OF PUBLIC WORKS HIGHWAY & EXPRESSWAY DIVISION ROADWAY WIDENING		JEFFERSON AVE. BRIDGE X098 OVER PENN-CENTRAL DETROIT BELT LINE EXISTING BRIDGE DETAILS		SHEET 10 OF 14 SHEETS JOB No. PW 5769 DRWG No. 110 DATE July 16, 1968
APPROVED [Signature] STRUCTURAL ENGINEER	DESIGNED BY [Signature]	DRAWN BY [Signature]	TRACED BY [Signature]	CHECKED BY [Signature]
REFERENCE DRAWINGS	DESCRIPTION REVISIONS LOCATED BY COORDINATES ON SHEET	DATE DRAWN DATE CHECKED	DATE TRACED DATE CHECKED	DATE CHECKED DATE CHECKED





NO.	SIZE	LENGTH	MARK	LOCATION
64	1 1/2"	22'-0"	A	Side-walk Beams
65	1 1/2"	22'-0"	B	
66	1 1/2"	22'-0"	C	
67	1 1/2"	22'-0"	D	Points in Floor of Beams
68	1 1/2"	22'-0"	E	Top Bars in Top Slab
69	1 1/2"	22'-0"	F	
70	1 1/2"	22'-0"	G	
71	1 1/2"	22'-0"	H	
72	1 1/2"	22'-0"	I	
73	1 1/2"	22'-0"	J	
74	1 1/2"	22'-0"	K	Top Slab Reinforcing
75	1 1/2"	22'-0"	L	Top Slab Reinforcing
76	1 1/2"	22'-0"	M	Top Slab Reinforcing
77	1 1/2"	22'-0"	N	Top Slab Reinforcing
78	1 1/2"	22'-0"	O	Top Slab Reinforcing
79	1 1/2"	22'-0"	P	Top Slab Reinforcing
80	1 1/2"	22'-0"	Q	Top Slab Reinforcing
81	1 1/2"	22'-0"	R	Top Slab Reinforcing
82	1 1/2"	22'-0"	S	Top Slab Reinforcing
83	1 1/2"	22'-0"	T	Top Slab Reinforcing
84	1 1/2"	22'-0"	U	Top Slab Reinforcing
85	1 1/2"	22'-0"	V	Top Slab Reinforcing
86	1 1/2"	22'-0"	W	Top Slab Reinforcing
87	1 1/2"	22'-0"	X	Top Slab Reinforcing
88	1 1/2"	22'-0"	Y	Top Slab Reinforcing
89	1 1/2"	22'-0"	Z	Top Slab Reinforcing
90	1 1/2"	22'-0"	AA	Top Slab Reinforcing
91	1 1/2"	22'-0"	AB	Top Slab Reinforcing
92	1 1/2"	22'-0"	AC	Top Slab Reinforcing
93	1 1/2"	22'-0"	AD	Top Slab Reinforcing
94	1 1/2"	22'-0"	AE	Top Slab Reinforcing
95	1 1/2"	22'-0"	AF	Top Slab Reinforcing
96	1 1/2"	22'-0"	AG	Top Slab Reinforcing
97	1 1/2"	22'-0"	AH	Top Slab Reinforcing
98	1 1/2"	22'-0"	AI	Top Slab Reinforcing
99	1 1/2"	22'-0"	AJ	Top Slab Reinforcing
100	1 1/2"	22'-0"	AK	Top Slab Reinforcing

**NOTES**

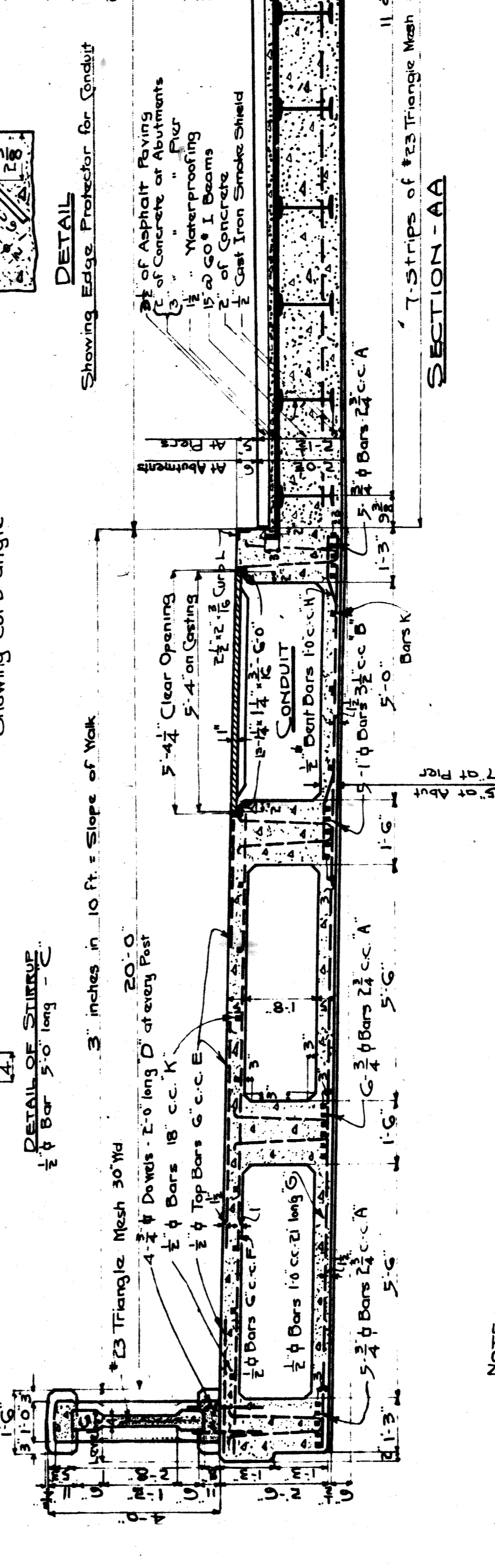
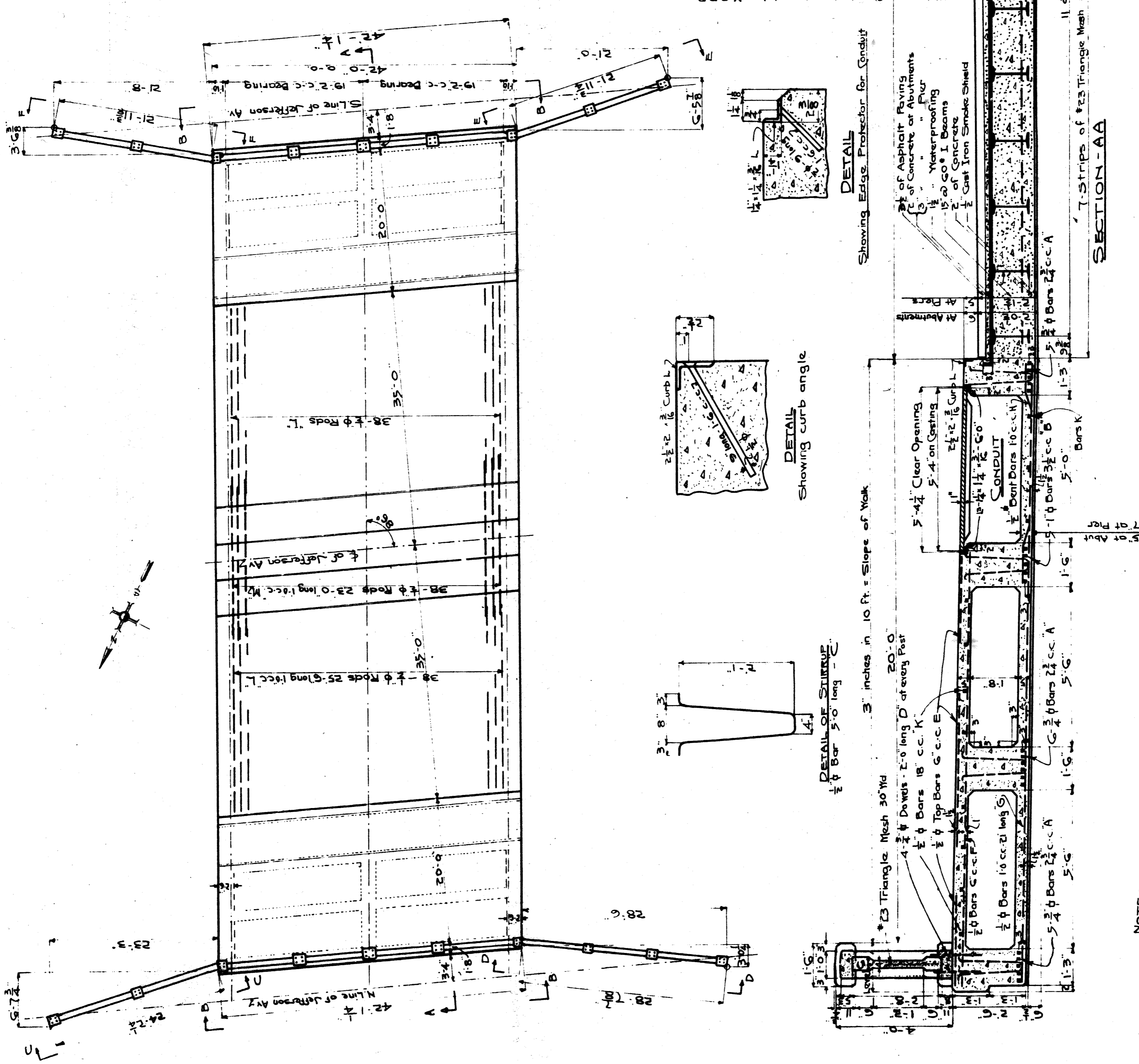
Concrete - Concrete Reinforcing Mesh 13,160 #  
 Reinforcing Bars 13,160 #  
 Waterproofing 2454 #  
 Waterproofer 2300 #

Concrete - To be composed of one part Portland cement, two parts sand and four parts crushed stone. Top surfaces to have side-walk finish. Exposed faces to be rubbed as soon as forms are removed.

Reinforcing - Triangular mesh shall be lapped 4" securely wired at Bars shall be lapped at 45 degrees. Lap length of heavy diameters of the bar shall be 18" and shall be lapped together with 1/2" of #10 wire.

Waterproofing - According to Specifications for Roadway (Separate Contract). Part inside of Conduit with one coat of Sarsco Primer, one coat of Sarsco #1.

Railing - Panels in Hand Railing to have bush hammered finish. All faces to have 1" Gray Granite finish.



**NOTE:**  
 All Beveled Corners of Hand Rail and Coping to be thus -

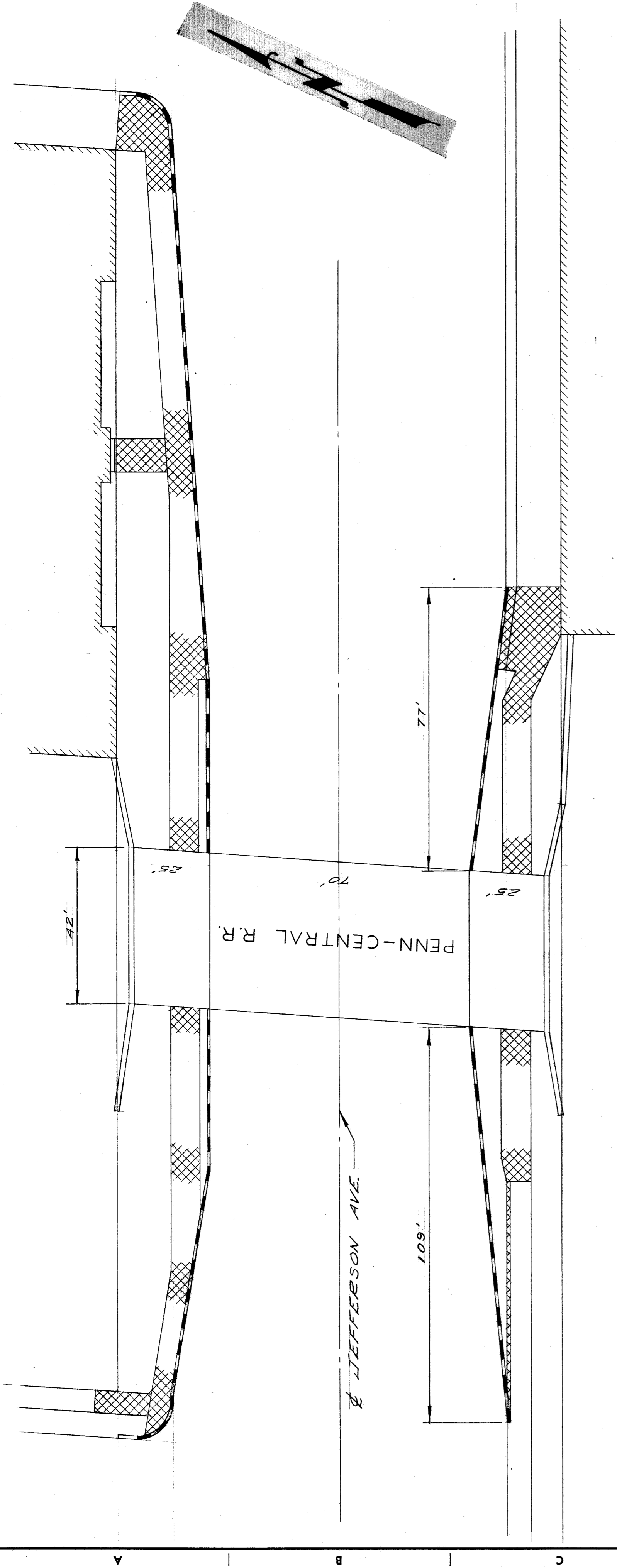
**CLEARANCE OVER TRACK**  
 The contractor must maintain at all times clearance over the track not in excess of fifteen (15) feet above the top of rail and it will be necessary for special provision to carry forms coming under the sidewalk portions owing to the limited space.

JEFFERSON AVE. BRIDGE X098  
 OVER  
 PENN-CENTRAL DETROIT BELT LINE  
 EXISTING BRIDGE DETAILS

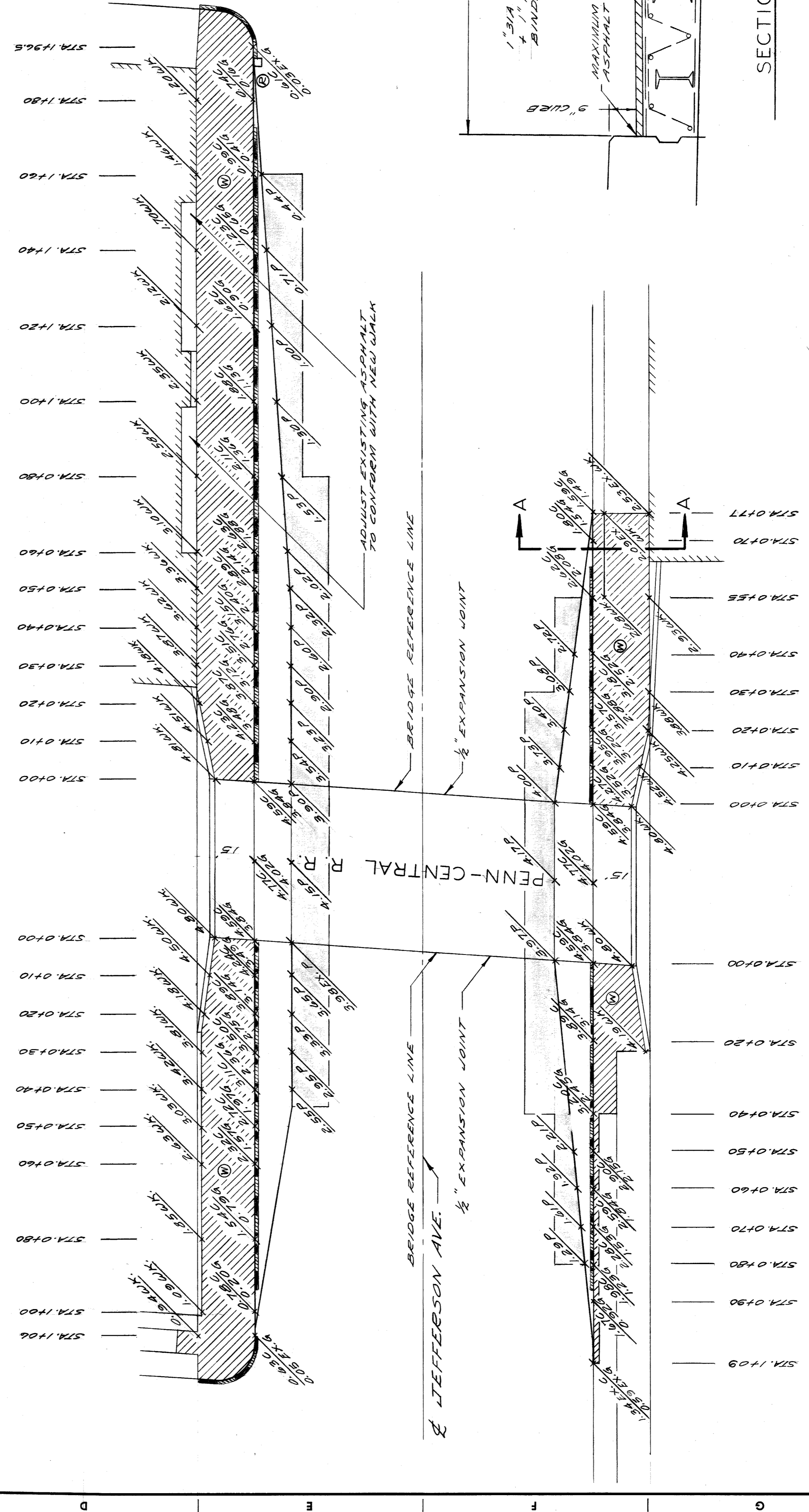
CITY OF DETROIT  
 DEPARTMENT OF PUBLIC WORKS  
 HIGHWAY & EXPRESSWAY DIVISION  
 ROADWAY WIDENING

APPROVED: *J. Conrad W.C.*  
 STRUCTURAL ENGINEER  
 DRAWN BY: *W. J. Thompson*  
 ADMINISTRATIVE ENGINEER  
 TRACED BY: *Margaret L. Adams*  
 CHECKED BY: *Margaret L. Adams*  
 HEAD CIVIL ENGINEER

NO.	DESCRIPTION	DATE



REMOVAL PLAN  
SCALE - 1" = 20'



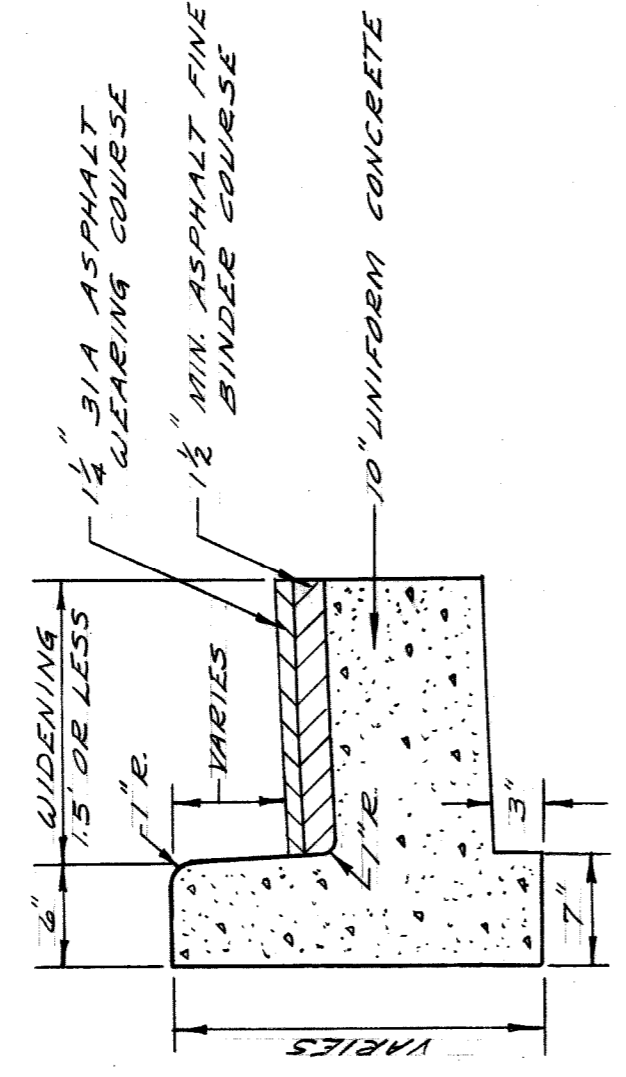
CONSTRUCTION PLAN  
SCALE - 1" = 20'

BENCH MARKS

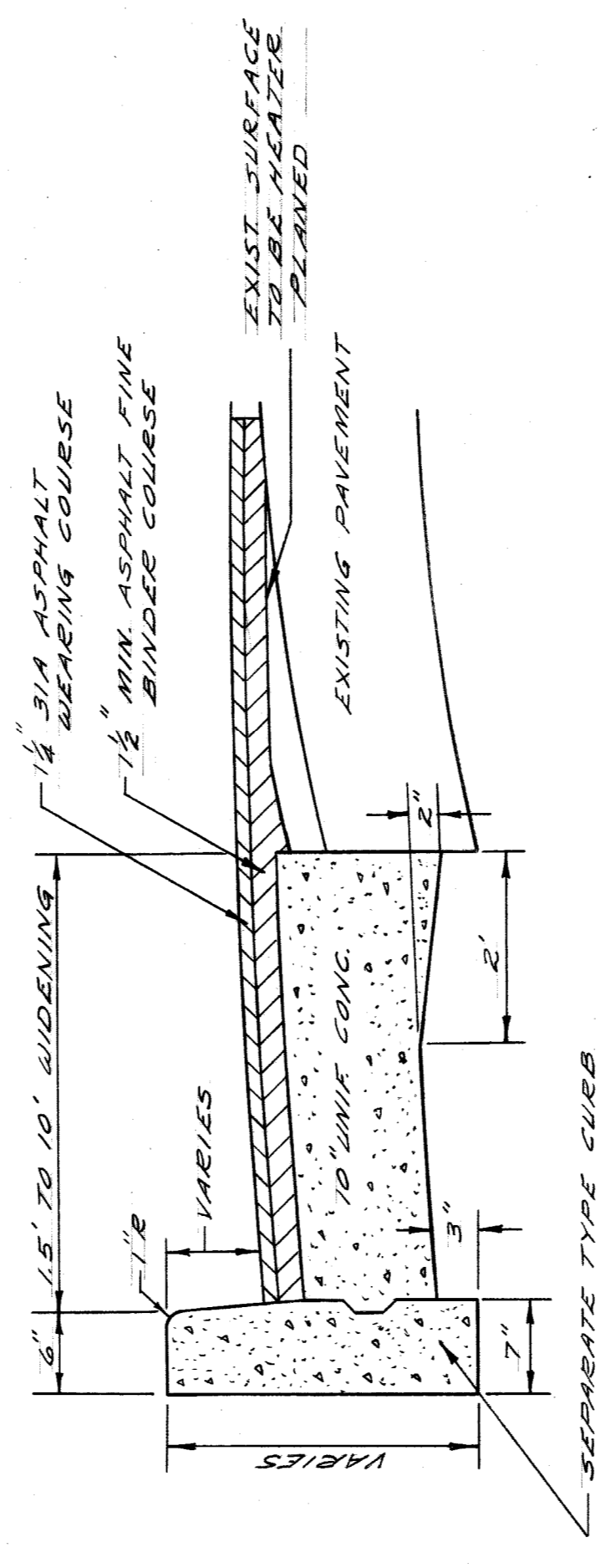
P.B.M. 76-250A N.W. COR. JEFFERSON & BEAUFORT  
120.22 E.  
NOTE: ADD 120.00 TO ALL ELEVATIONS.

LEGEND

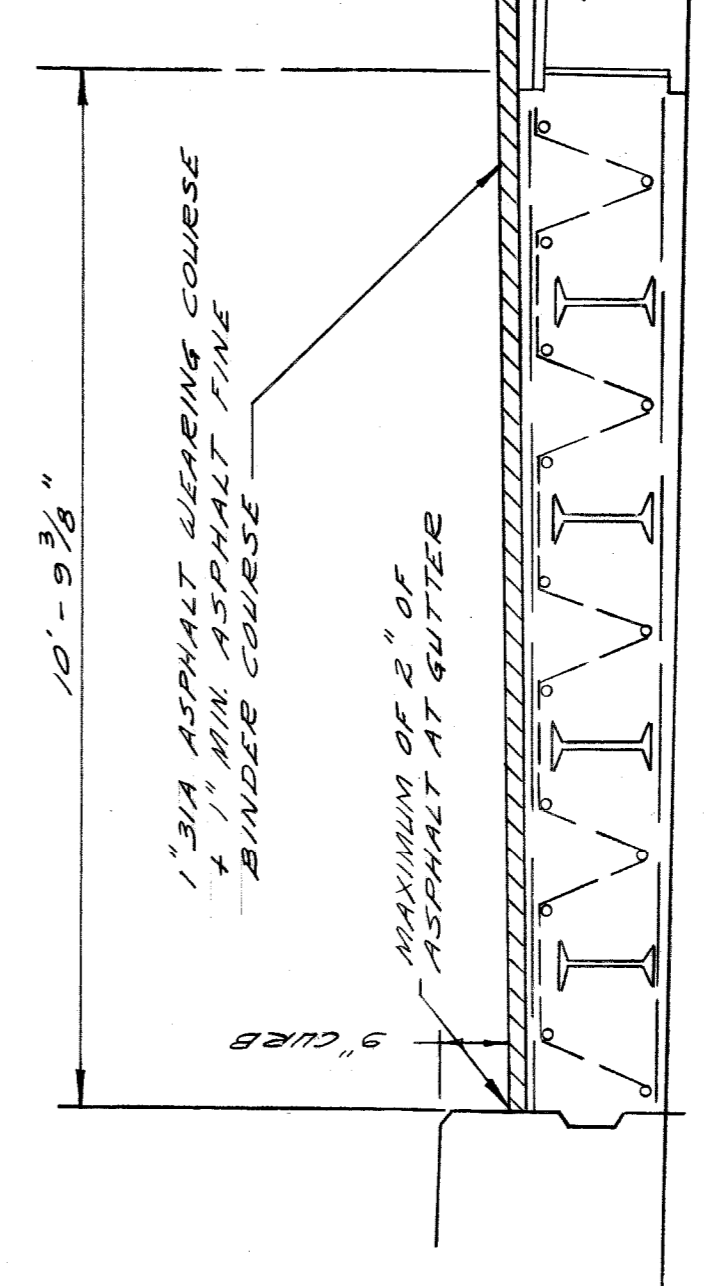
- SIDEWALK REMOVAL
- CURB REMOVAL
- SIDEWALK - STANDARD 4"
- SEPARATE TYPE CURB
- AREA TO BE HEATER PLANNED
- PROPOSED CURB ELEVATION
- PROPOSED BUTTER ELEVATION
- PROPOSED PAVEMENT ELEVATION
- EXISTING ELEVATION
- PROPOSED WALK ELEVATION
- RESET EXIST. CATCH BASIN



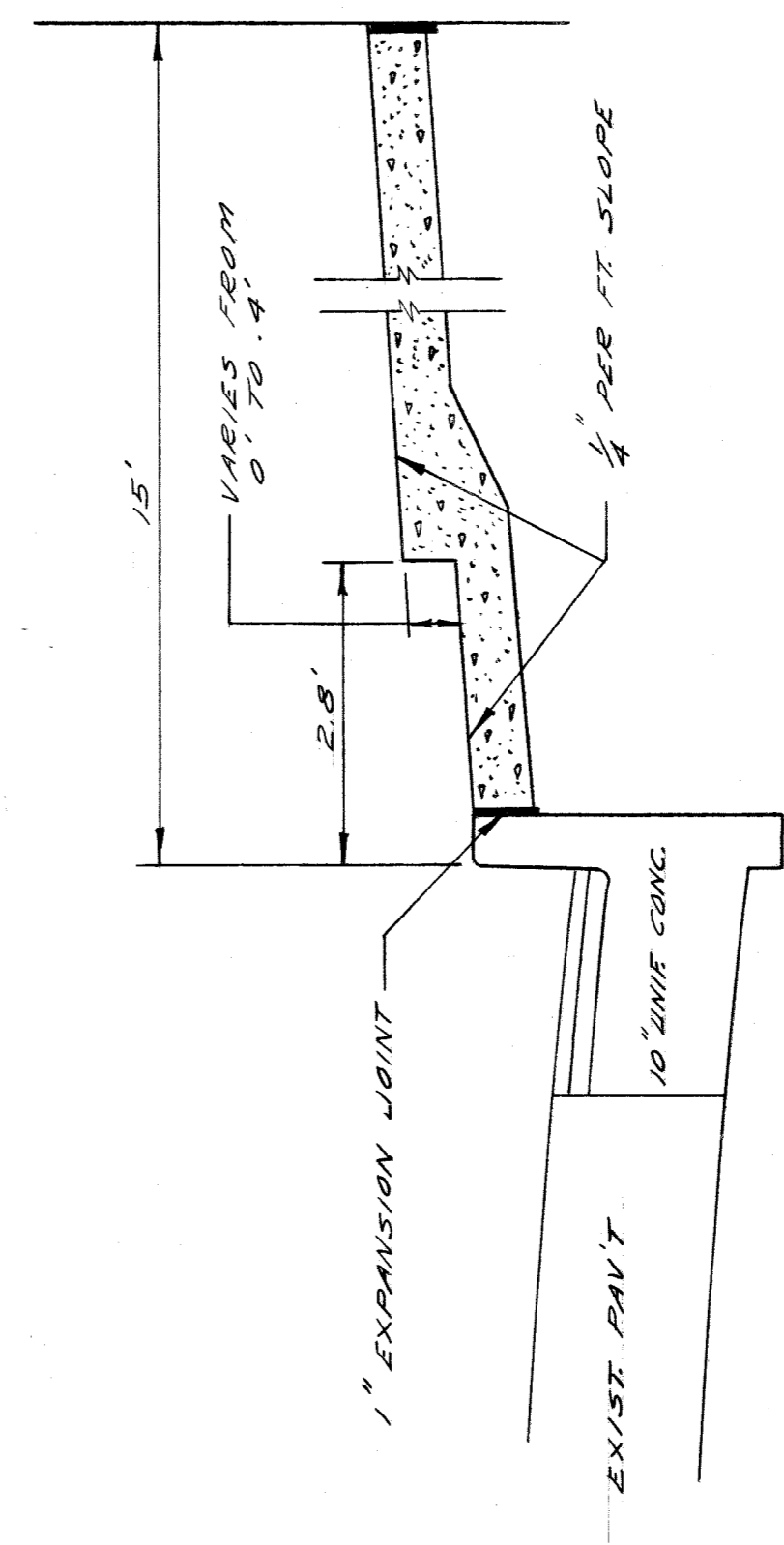
TYPICAL SECTION - 10" UNIF. CONC.  
INTEGRAL CURB  
NO SCALE



TYPICAL SECTION - 10" UNIF. CONC. - NO CURB  
NO SCALE



SECTION ON BRIDGE



SECTION AA - STA. 0+55 TO STA. 0+76  
NO SCALE

SHEET 13 OF 14 SHEETS CONTRACT PW 5769 DRWG NO. 113 DATE JULY 5, 1948	
JEFFERSON AVE. BRIDGE PENN-CENTRAL DETROIT BELT-LINE WIDENING BRIDGE APPROACHES	
CITY OF DETROIT DEPARTMENT OF PUBLIC WORKS CITY ENGINEERS OFFICE <b>ROADWAY WIDENING</b>	
DESIGNED BY E. C. MCGEEHON T. SEYMOUR	APPROVED W. R. Seymour W. R. Seymour ADMINISTRATIVE ENGINEER C.E. CIVIL ENGINEER
TRACED BY E. C. M. 1198	CHECKED BY E. C. M. 1198
REFERENCE DRAWINGS	REVISIONS LOCATED BY COORDINATES ON SHEET

