

INDEX OF SHEETS.

SHEET NO

- 1 TITLE SHEET
- 2 PLAN AND PROFILE
- 3 PLAN AND PROFILE
- 4 GENERAL PLAN
- 5 SUPERSTRUCTURE CONCRETE DETAILS
- 6 STRUCTURAL STEEL DETAILS
- 7 HANDRAIL DETAILS
- 8 ROCKERS, ROLLERS AND BEARING PLATES
- 9 ABUTMENT DETAILS
- 10 ABUTMENT DETAILS
- 11 ABUTMENT DETAILS
- 12 DETAILS OF PIER NO. 1
- 13 DETAILS OF PIER NO. 2
- 14 DETAILS OF PIER NO. 2
- 15 DETAILS OF APPROACH SLAB
- 16 EXISTING 78" BRICK SEWER ALTERATION
- 17 PAVEMENT DETAILS
- 18 CROSS SECTIONS
- 19 CROSS SECTIONS
- 20 CROSS SECTIONS
- 21-22 CROSS SECTIONS
- 23-24 CROSS SECTIONS
- LONGITUDINAL METAL JOINT PAVEMENT FABRIC
- 25
- STANDARD BARRICADE CURB & GUTTER DETAILS
- 26
- STANDARD SYMBOLS
- 27 STANDARD FRAMES & GRATES STD 1516R
- TYPE A2-48 CATCH BASIN
- TYPE A-48 MANHOLE
- 28 TYPE A3 CATCH BASIN & STAND. 2017
- FRAME & GRATE TYPE 30
- 29 STANDARD NAME PLATE (STAND 1882)
- 1744
- 30 PILE DETAILS
- 30A DETAILS AT LA CROSSE AVE.
- 30B DETAILS TYPE A INLET. TYPICAL CROSS-SECTION OF LOCAL DRIVE TYPE 11 FRAME
- 30C CROSS-SECTIONS OF LACROSSE AVE.

EXHIBIT MAINTENANCE

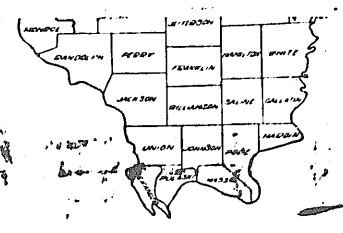
STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS AND BUILDINGS
DIVISION OF HIGHWAYS
PLANS FOR PROPOSED
FEDERAL AID HIGHWAY

PLAN 1 INCH = 100 FT.
PROFILE HOR. 1 INCH = 100 FT.
PROFILE VERT. 1 INCH = 10 FT.
CROSS-SECTIONS 1 INCH = 5 FT.

F.A. ROUTE 99 SEC. 02031.H.B.-H.F.
DEVON AVENUE GRADE SEPARATION
OVER
EDENS SUPERHIGHWAY
COOK CO.
PROJECT U.I. 146 (23)

RETURN THIS PLAN
TO MAINTENANCE
ROOM 706
DRAWER

7

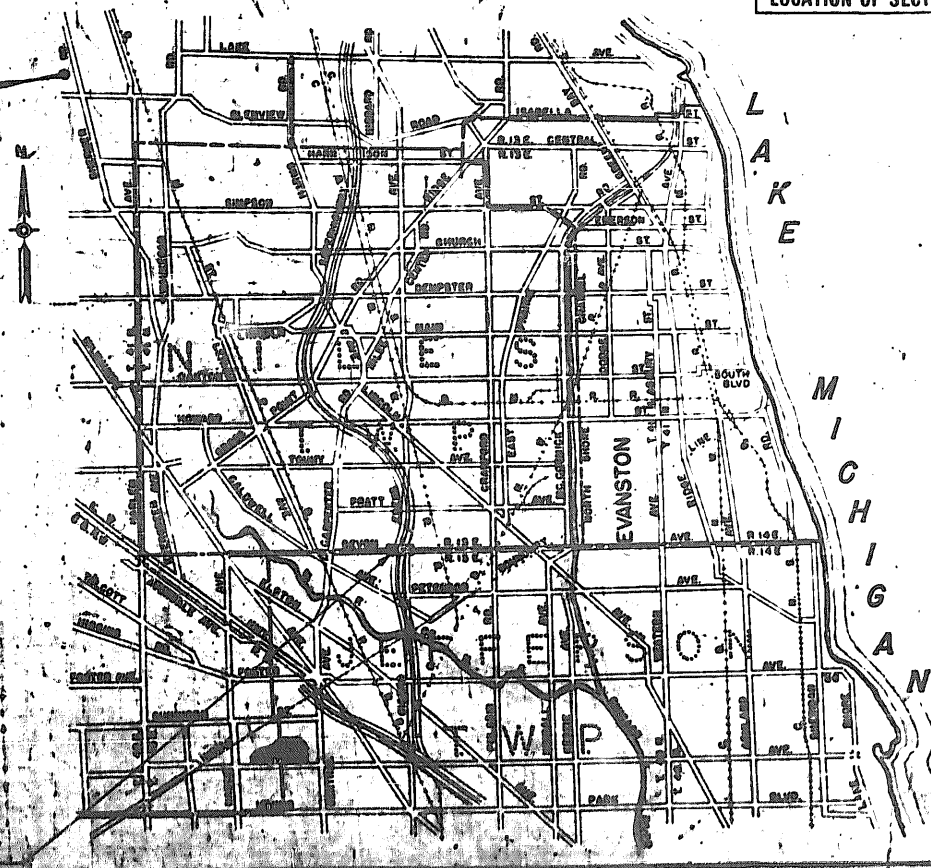


SUMMARY OF QUANTITIES - SEC-HF

FOR EACH ALTERNATE	ITEM	
464.254	LBS.	STRUCTURAL STEEL
463.67	Lin. ft.	Metal Handrail

SUMMARY OF QUANTITIES SEC-HB

TOTAL QUANTITY	ITEM	TOTAL QUANTITY	ITEM
1124.9	CU.YDS. CLASS 'X' CONCRETE	1500	CU.YDS. COMPACTION BY WATERSOAKING
190381	LBS. REINFORCEMENT BARS	4224	CU. YDS. TRENCH BACKFILL
464.254	LBS. STRUCTURAL STEEL	82	CU.YDS. MASONRY REMOVAL
5	EACH TEST PILES	36	INCH DIA. TREE REMOVAL - IN. DIAM.
4608	LIN.FT. FURNISHING PILES		
648	LIN.FT. DRIVING PILES 27 FT. LONG	422	LIN.FT. STORM SEWER TYPE 2 8"
3960	LIN.FT. DRIVING PILES 40 FT. LONG	0.676	ACRES SEEDING
		0.44	ACRES MULCH COVERING
		7	EACH CATCH BASINS TYPE A2 WITH TY. 8 GRATE
		7	EACH CATCH BASINS TYPE A3 WITH TY. 30 FR.
		1	EACH CATCH BASINS TO BE ADJUSTED
		4	EACH MANHOLES TO BE RECONSTRUCTED
		11	EACH FILLING EXISTING CATCH BASINS
		4	EACH FILLING EXISTING INLETS
463.67	LIN.FT. METAL HANDRAIL	21	EACH FURNISHING & ERECTING ROW MARKERS
1	EACH NAME PLATE	2260	CU. YDS. CRUSHED STONE BASE COURSE (10")
12908	CU.YDS. EARTH EXCAVATION	2	EA. INLETS TYPE A
4755	SQ.YDS. PORTLAND CEMENT CONCRETE PAVEMENT (10")	95	CU.YDS. TOP SOIL
3371	SQ.YDS. PORTLAND CEMENT CONCRETE PAVEMENT (10"-10 1/2"-16")	72	LIN.FT. COMB. CONC. CURB & GUTTER TYPE 2 (DEPRESSED)
4755	SQ.YDS. PAVEMENT FABRIC	10	DAYS BASE COURSE MAINTENANCE
118	LIN.FT. COMBINATION CONCRETE CURB & GUTTER TYPE 6 (MODIFIED)		
643	LIN.FT. COMB. CONC. CURB & GUTTER TYPE 2		
320	LIN.FT. COMB. CONC. CURB & GUTTER TYPE 3		
1158	LIN.FT. COMB. CONC. CURB & GUTTER TYPE 6		
750	SQ.YDS. SLOPE PAVEMENT		
8433	SQ.FT. PORTLAND CEMENT CONCRETE SIDEWALK (5")		
44	SQ.YDS. PAVEMENT REPLACEMENT - SURFACE COURSE		
950	CU. YDS. GRANULAR BORROW		
3352	SQ.YDS. PAVEMENT REMOVAL		
1085	LIN.FT. COMB. CURB & GUTTER REMOVAL		
7920	SQ. FT. SIDEWALK REMOVAL		
100	TON CRUSHED STONE - GRADE 8		
2302	GALLONS BITUMINOUS MATERIALS APPLIED (PRIME COAT)		
105.6	TON BIT. SURFACE, SUBCLASS B-3		



LOCATION OF SECTION INDICATED THUS: -

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS AND BUILDINGS
DIVISION OF HIGHWAYS

SUBMITTED: Jan 4 1949
C.H. Apple

EXAMINED: 4-16-49
E. J. Dwyer

DRAWN: 4-16-49
E. J. Dwyer

APPROVED: 4-16-49
W. J. ...

APPROVED: 4-16-49
W. J. ...

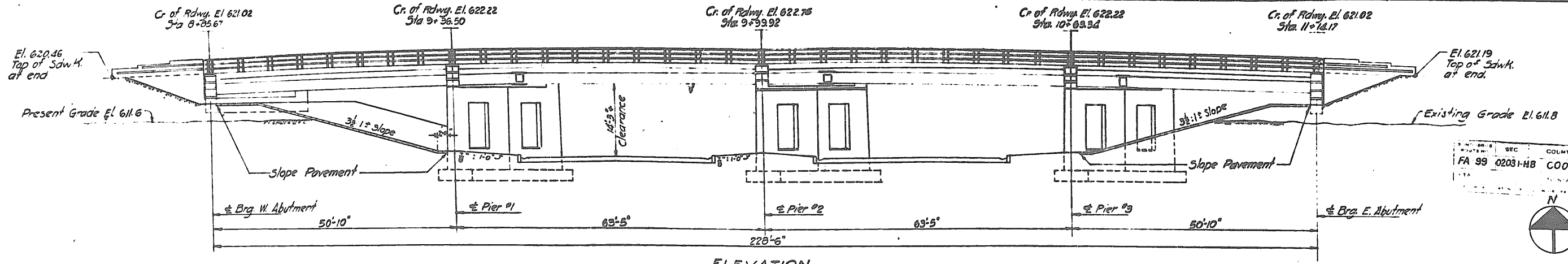
RECOMMENDED FOR APPROVAL DATE

DISTRICT ENGINEER
PUBLIC ROADS ADMINISTRATION
FEDERAL WORKS AGENCY

APPROVED DATE

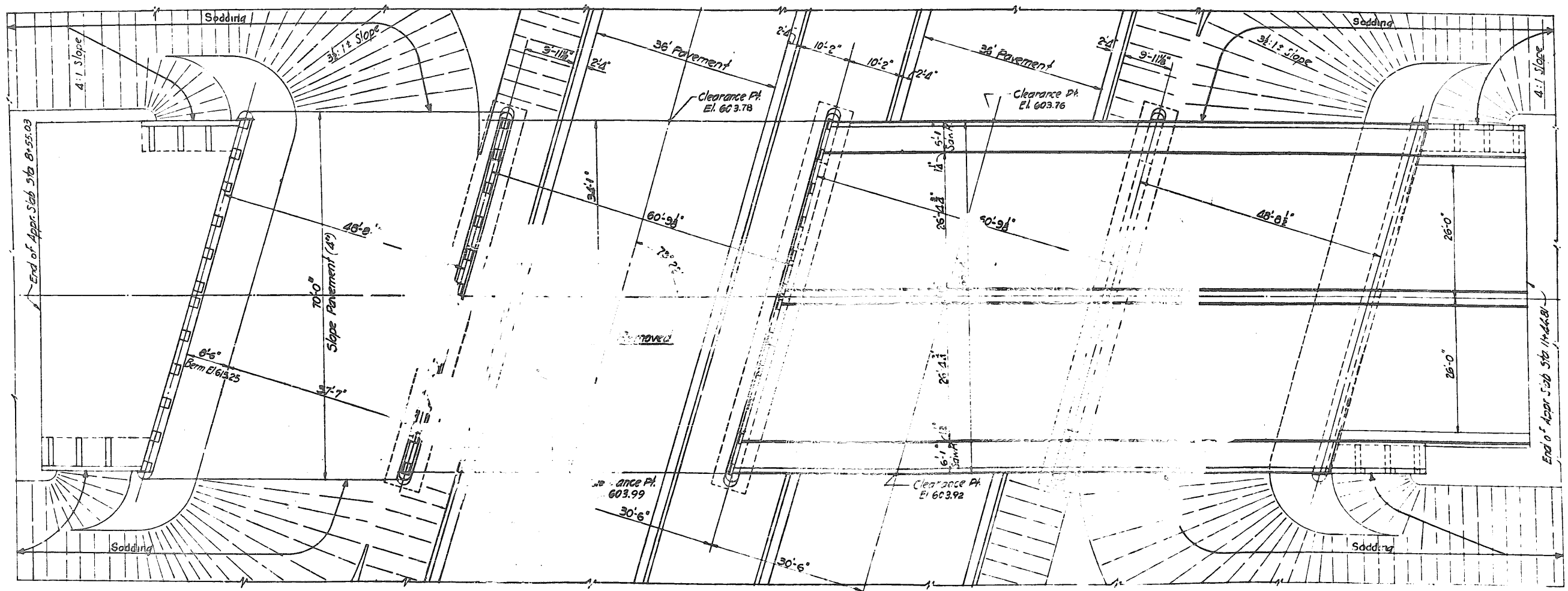
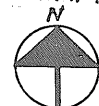
DIVISION ENGINEER
PUBLIC ROADS ADMINISTRATION
FEDERAL WORKS AGENCY

SECTION 02031 & 02031HF INCLUDES:
THE CONSTRUCTION OF AN I-BEAM BRIDGE ON DEVON AVE.
OVER EDENS SUPERHIGHWAY IN THE CITY OF CHICAGO AND
THE MILLAGE OF LINCOLNWOOD, 2 SPANS @ 20'-10" AND 2
SPANS @ 20'-10" AT STATION 27+45.2 A PILE APPROXIMATELY



ELEVATION

SEC. 4
 COUNTY COOK
 FA 99 02031-HB
 UR 146(23)



PLAN
 Scale: 1/2" = 1'-0"

DESIGN DATA

Live Load	420-S16-A2
Earth Pressure	30° Fluid
Structural Steel	18,000 #/sq. in.
Reinforcing Steel	20,000 #/sq. in.
Concrete (without Earth Pressure)	1200 #/sq. in.
Concrete (with Earth Pressure)	800 #/sq. in.
Piles supporting Capacity	350 #/sq. ft.

LETTERING FOR NAME PLATE

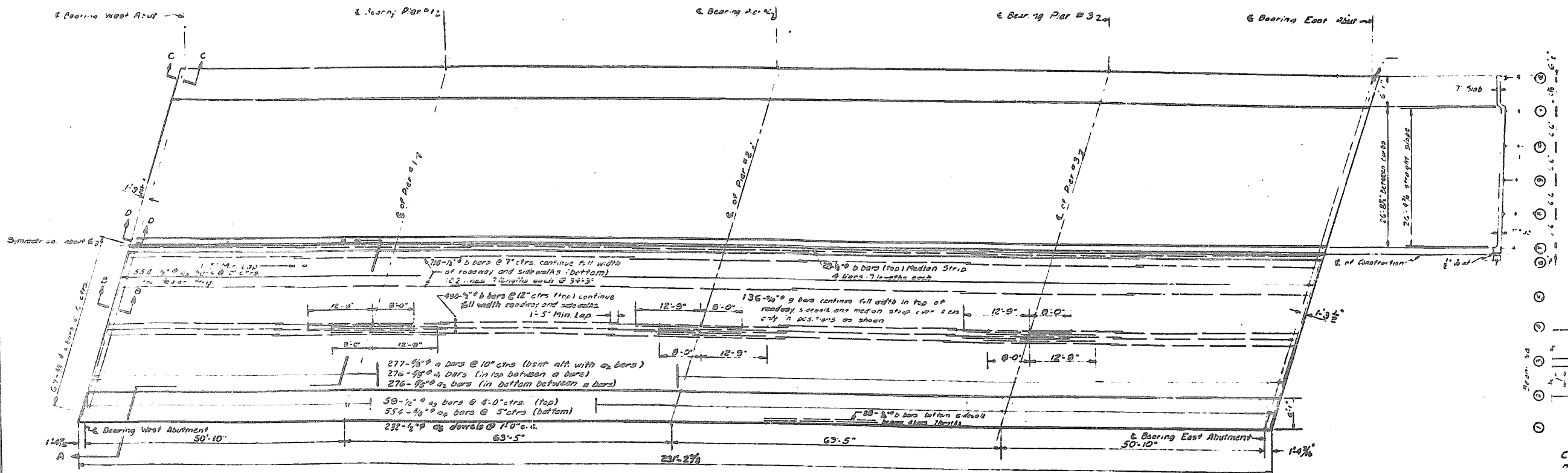
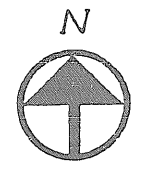
STATION 27-45.2
 BUILT 1949 BY
 STATE OF ILLINOIS
 FED AID RT 99 SEC 02031 HB
 PROJECT U1.146(23)
 DESIGN LOADING H-20/S16

GENERAL NOTES

Slope pavement shall be placed on the embankments within the limits as shown on the plan and shall conform to the specifications under special provisions. The Contractor shall drive test piles as directed by the Engineer in the field before ordering the remaining piles. Test piles shall be part of the permanent pile groups.
 The piles for abutments shall be driven in place before any of the embankment is placed.
 The Contractor shall be responsible for maintaining the position and alignment of the piles during the placing of the embankment.
 The piles shall be driven to obtain a minimum penetration of 10'-0" into a stratum of solid material regardless of bearing capacity developed.
 Before the superstructure is placed the Contractor shall compact the embankments as shown in accordance with Section 16 of the Standard Specifications. Earth embankments shall be compacted by water-soaking in addition to mechanical compaction.

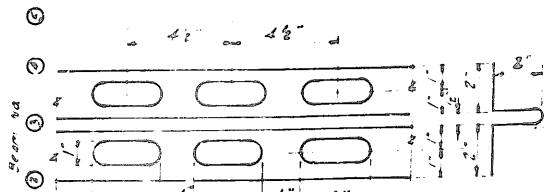
Structural steel shall be inspected by the Illinois Division of Highways before painting.
 Welding shall conform to the Specifications of the American Welding Society for welded Highway and Railroad Bridges for 1941.
 Class X Concrete shall be used throughout the concrete floor slab shall be finished in accordance with Article 61.3 of Standard Specifications as amended to date. Each of the two sections of floor slab shall be poured in one continuous operation from abutment to abutment. The cast of copper water seal and preformed joint fillers as called for on the plans shall be included in the price \$3.00 per cubic yard of Class X Concrete. If copper seal is not furnished in one piece, the splices shall be soldered or brazed. The preformed joint filler shall be in accordance with Article 115.67 to 115.72 of the Standard Specifications.

GENERAL PLAN
DEVON AVE. GRADE SEPARATION
 OVER
EDENS SUPERHIGHWAY



PLAN
 Scale 3/8" = 1'-0"

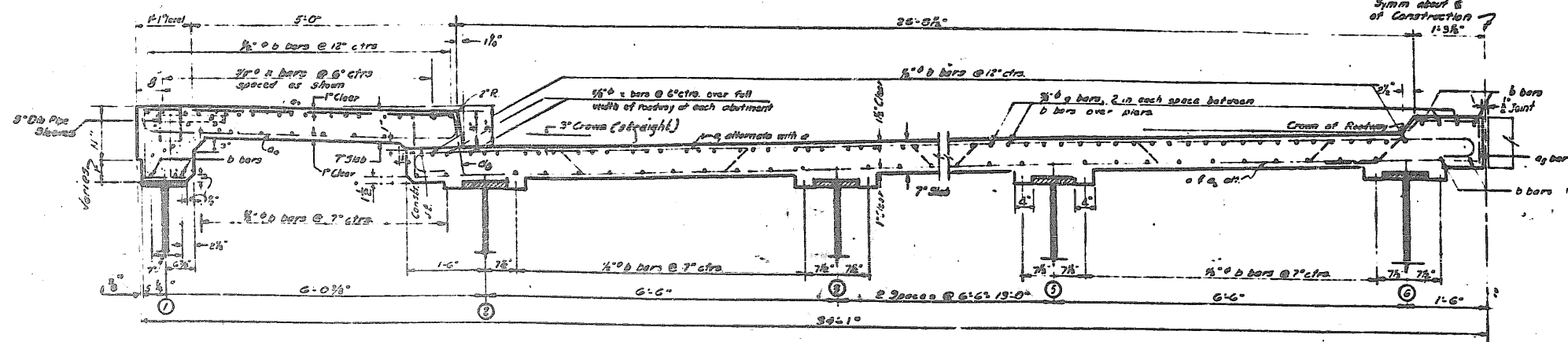
TYPICAL HALF SECTION



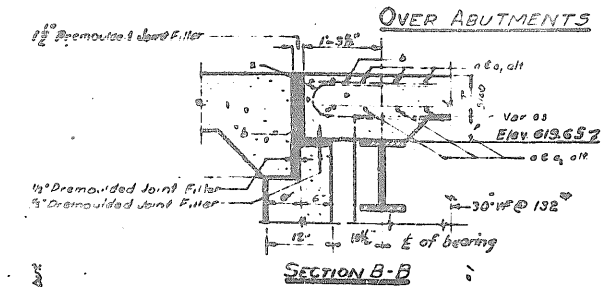
DETAIL OF COPPER SEAL
 Copper Seal shall be 16 oz. Cold Rolled Annealed Copper with perforated flanges. Splices, if necessary, shall be soldered or brazed. Cost shall be included in Contract Unit Price for C. K. Concrete.

ELEVATIONS - FINISHED CONCRETE																
	W. Abut	1st P	2nd P	3rd P	4th P	5th P	6th P	7th P	8th P	9th P	10th P	11th P	12th P	13th P	14th P	E. Abut
B.M. E 12	621.91	622.25	622.49	622.60	622.89	623.07	623.20	623.26	623.25	623.77	623.93	622.82	622.54	622.27	621.95	621.20
" 11	621.01	621.35	621.65	621.80	622.11	622.31	622.44	622.51	622.51	622.94	622.90	622.30	622.10	621.83	621.57	620.81
" 7	621.03	621.40	621.72	622.00	622.23	622.45	622.69	622.73	622.73	622.73	622.73	622.62	622.45	622.22	621.98	621.37
" 6	621.01	621.37	621.70	621.98	622.22	622.45	622.63	622.73	622.76	622.73	622.63	622.45	622.23	622.00	621.72	621.03
" 2	620.57	620.91	621.35	621.57	621.83	622.03	622.10	622.10	622.10	622.10	622.10	622.11	622.11	622.11	621.65	621.35
" 1	621.20	621.60	621.95	622.27	622.54	622.82	623.03	623.17	623.25	623.26	623.20	622.97	622.89	622.59	622.47	621.81

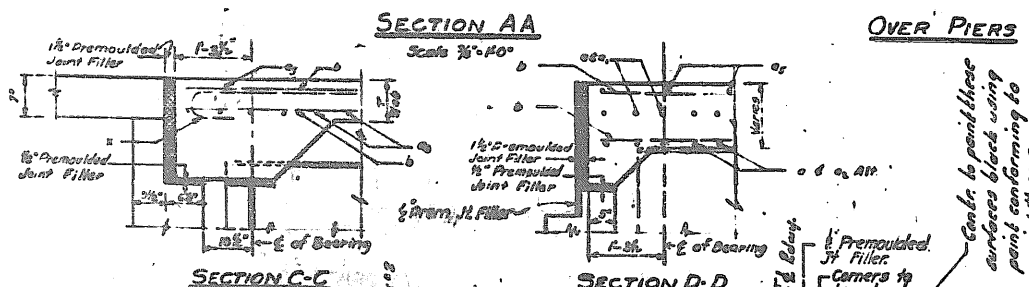
NOTE -
 Finishing of the deck slab shall comply with Article 619 of the standard specifications, as amended to date. Structural grade reinforcement bars will not be permitted. Copper Seal shall be soldered or brazed. The cost of Copper Seal, pre-moulded joint filler shall be included in the unit price bid per cu yd of class 40 concrete. 15 - 2000 #/cu yd. 16 - 1200 # 1350 #/cu yd.



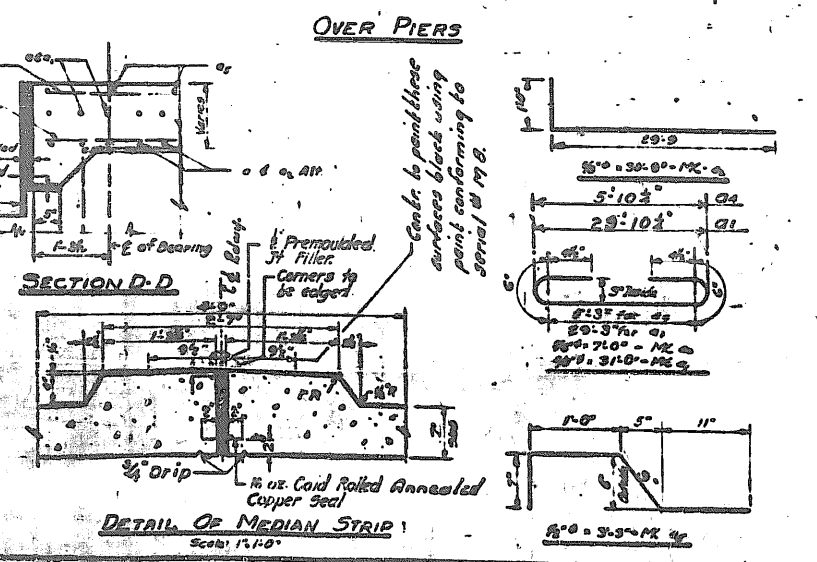
SECTION AA
 Scale 3/8" = 1'-0"



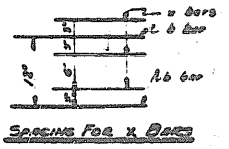
SECTION B-B



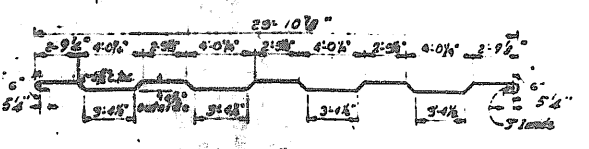
SECTION C-C



DETAIL OF MEDIAN STRIP
 Scale 1/4" = 1'-0"

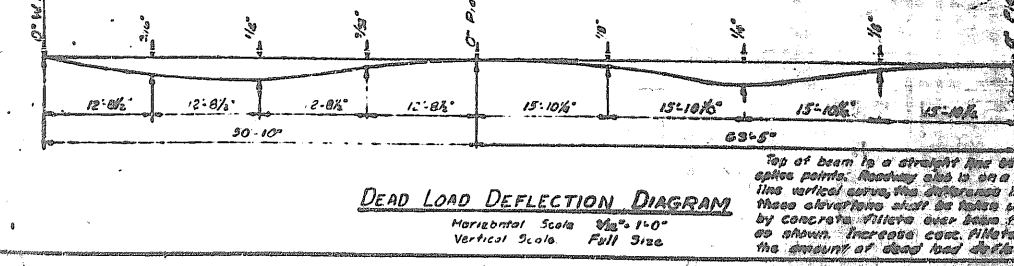


NOTE: All dimensions on leveling diagrams are on E. of bearing except as shown otherwise.



BILL OF MATERIAL			
Bar No	Size	Length	TYPE
a	5/8"	32'-6"	bar
a	3/4"	31'-0"	"
a	3/4"	30'-9"	"
a	1/2"	7'-9"	"
a	1/2"	7'-0"	"
a	5/8"	3'-9"	"
a	1/2"	1'-3"	straight
a	1/2"	9'-3"	straight
b	1200	1/2"	bar
c	400	3/4"	straight
c	200	3/4"	bar

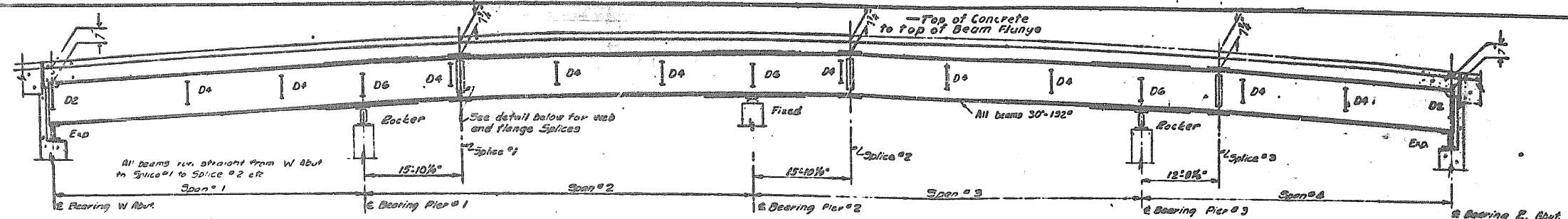
Class 40 Concrete Cu Yds 403.5
 Reinforcement Bars Lbs 107,252



DEAD LOAD DEFLECTION DIAGRAM
 Horizontal Scale 3/8" = 1'-0"
 Vertical Scale Full Size

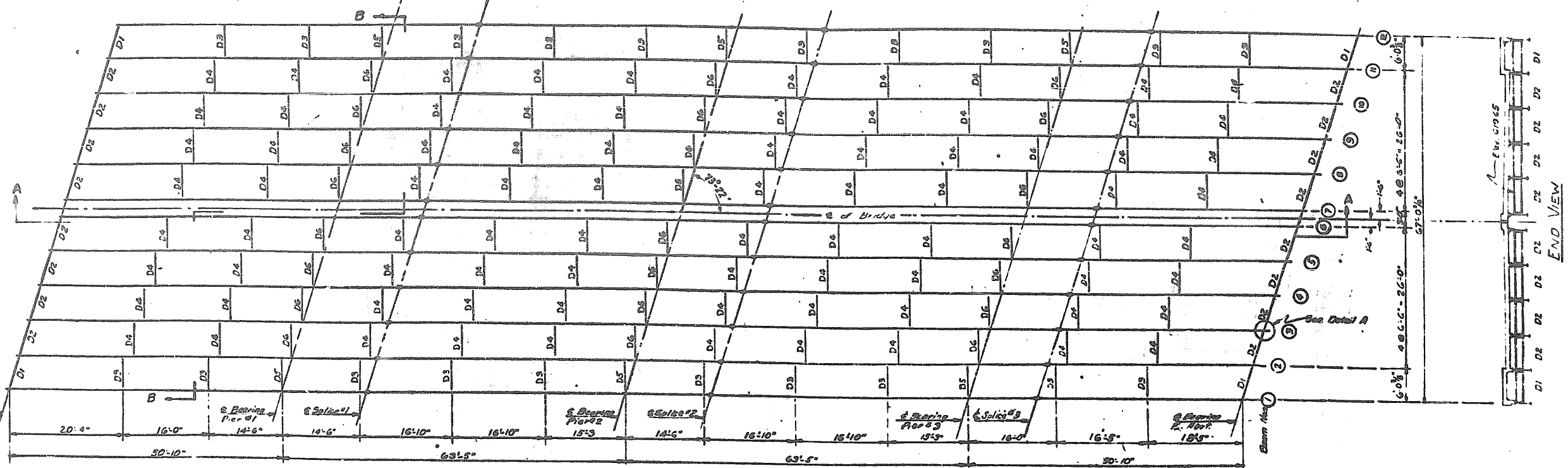
**SUPERSTRUCTURE CONCRETE DETAILS
 DEVON AVE. GRADE SEPARATION
 OVER
 EDENS SUPERHIGHWAY**

ROAD BRIDGE
 COUNTY COOK
 STA. 0209+10
 TO STA. 0209+14
 PROJECT NO. UI-146 (23)



NOTE: For Detail of Beams at Abutments & Piers, See SHEET NO. B.

SECTION AA
Scale 3/4" = 1'-0" Hor. 1/2" = 1'-0" Ver.

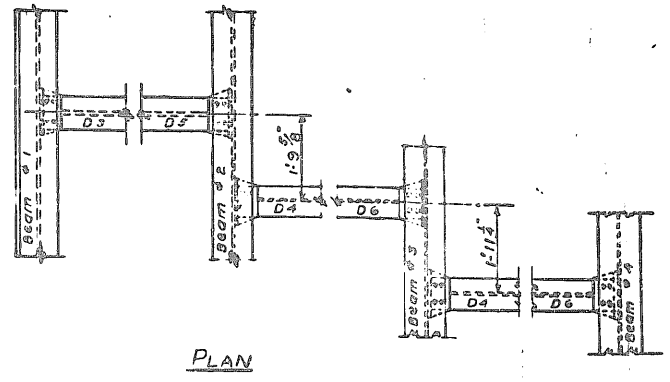


STEEL LAYOUT PLAN

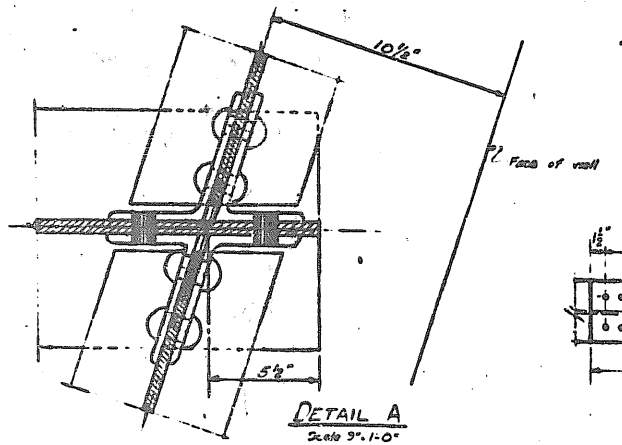
NOTES:
 Structural steel shall be carbon steel and shall conform to A.S.T.M. A-7 - Specifications as amended to Date.

Rivets for WF beams shall be 7/8" with 1/16" open holes.
 All field connections shall be riveted.
 All spans shall be shop assembled to their proper alignment with or without diaphragms, and the splices sub-punched, reamed and match marked. Assembled units shall be inspected by the Illinois Division of Highways before reaming.
 For 7/8" rivets the holes shall be sub-punched 7/8" and reamed to 15/16".
 Welding shall conform to the Specifications for 1967 of the American Welding Society - Welded Highway and Railway Bridges.
 Contact surfaces of shop welded or shop riveted structural steel shall not be coated. See Specifications concerning inaccessible surfaces. Top of beams that are to have concrete poured in contact with them shall not be painted, except that over abutments and piers such surfaces shall be painted for a distance of 5 feet each way from the center line of bearing.
 Structural steel shall be inspected by the Illinois Division of Highways before painting.
 The structural steel shall be given one shop coat of red lead and two field coats of aluminum paint to be furnished by contractor.

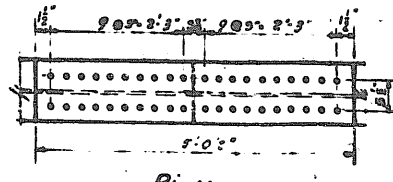
Wt. of structural steel on this sheet, 445,818



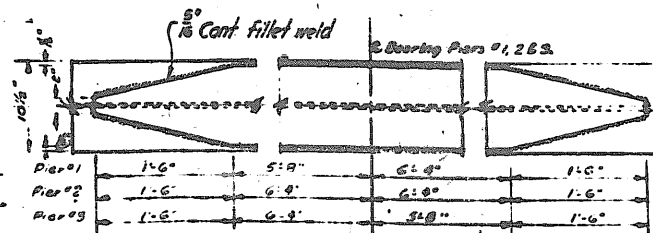
PLAN



DETAIL A
Scale 3/4" = 1'-0"

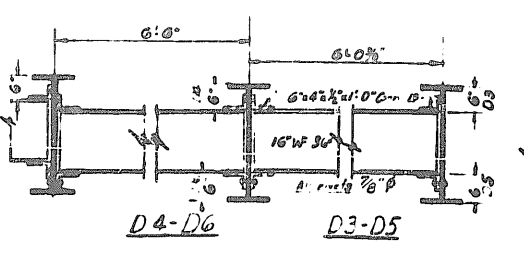


PLAN

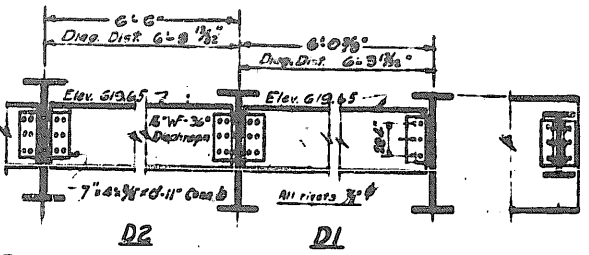


DETAILS OF COVER PLATES

Scale 3/4" = 1'-0"
 Pier #1 - 24 Rivets
 Pier #2 - 24 Rivets
 Pier #3 - 24 Rivets



DIAPHRAGM DETAILS
Scale 3/4" = 1'-0"



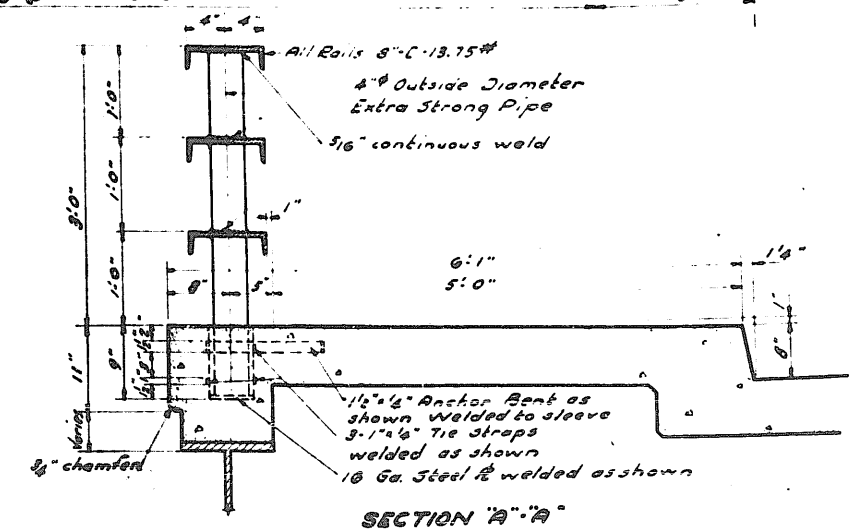
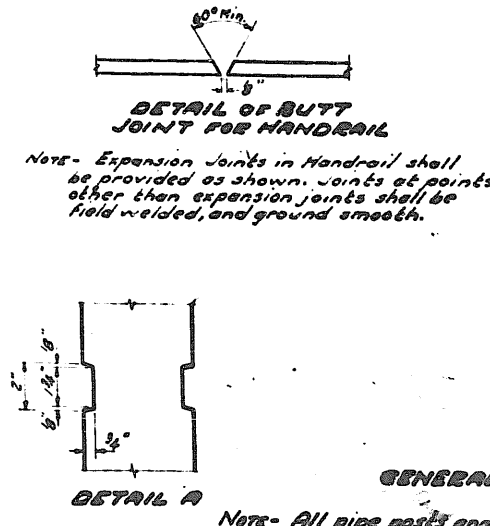
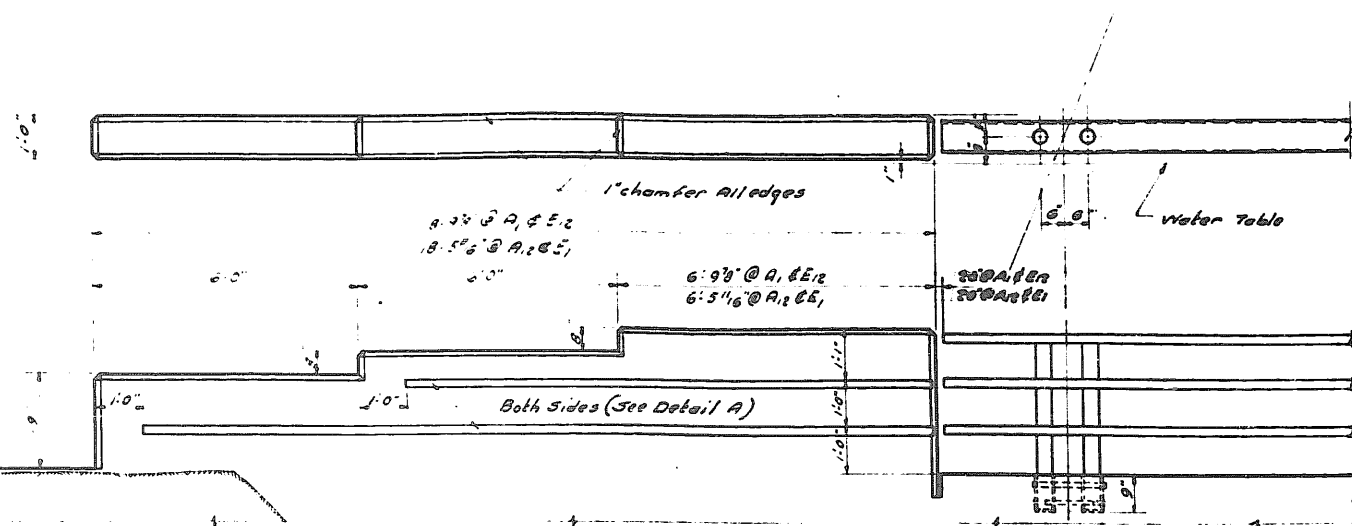
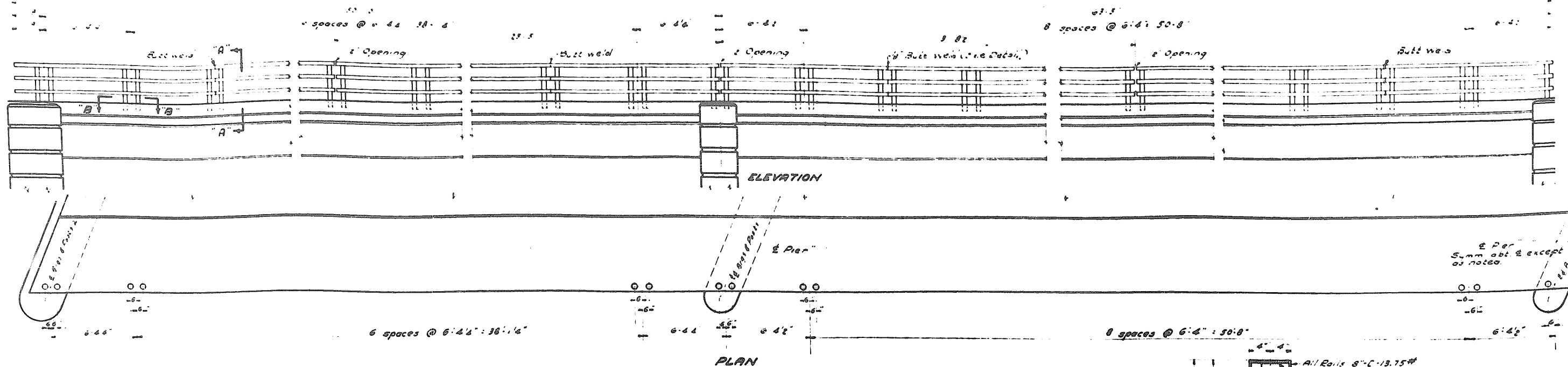
DETAIL OF SPICE PLATES
Scale 3/4" = 1'-0"

TOP OF BEAM ELEVATIONS							
Beam No.	At Abut. @ Brg.	E. Pier #1 @ Splice #1	E. Pier #2 @ Splice #2	E. Pier #3 @ Splice #3	E. Abut. @ Brg.		
1	619.99	621.09	621.45	621.78	621.86	621.38	621.25
2	619.99	621.09	621.45	621.78	621.86	621.38	621.25
3	620.05	621.19	621.54	621.87	621.92	621.41	621.28
4	620.10	621.28	621.63	621.96	622.02	621.51	621.38
5	620.10	621.28	621.63	621.96	622.02	621.51	621.38
6	620.10	621.28	621.63	621.96	622.02	621.51	621.38
7	620.15	621.33	621.68	622.01	622.08	621.57	621.44
8	620.15	621.33	621.68	622.01	622.08	621.57	621.44
9	620.15	621.33	621.68	622.01	622.08	621.57	621.44
10	620.15	621.33	621.68	622.01	622.08	621.57	621.44
11	620.15	621.33	621.68	622.01	622.08	621.57	621.44
12	620.15	621.33	621.68	622.01	622.08	621.57	621.44

STRUCTURAL STEEL DETAILS
 DEVON AVE. GRADE SEPARATION
 OVER
 EDENS SUPERHIGHWAY

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

300 7

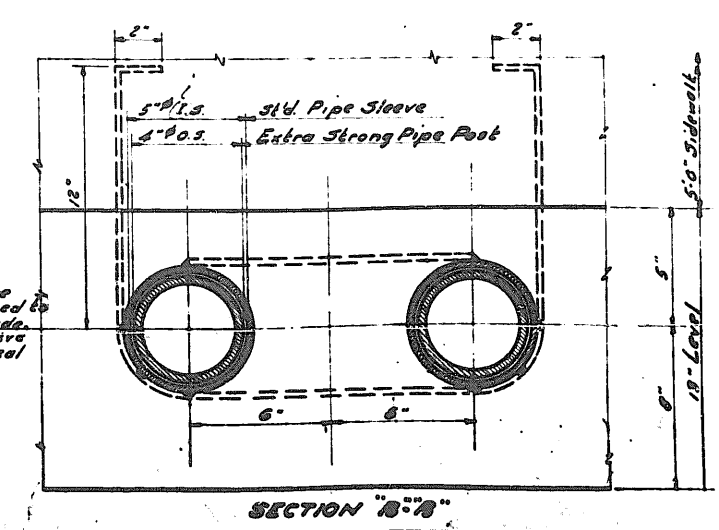


GENERAL NOTES

Notes- All pipe posts and pipe sleeves shall be set vertical and to true alignment. Rails to follow vertical curve. The cost of setting pipe posts, and pipe sleeves in oakum and lead shall be included in the unit price bid per lin. ft. of handrail. Welding shall conform to the Std. Specs. of the American Welding Society for Fusion Welding of Highway and Railroad Bridges. Structural steel for handrails shall be copper bearing steel containing 0.2% copper, and also conforming to the A. S. T. M. - A 7-39 Specs. Handrail shall be given one shop coat of red lead paint, and two field coats of aluminum paint.

BILL OF MATERIALS

Metal Handrail	Lin. Ft. 463'-0"
----------------	------------------

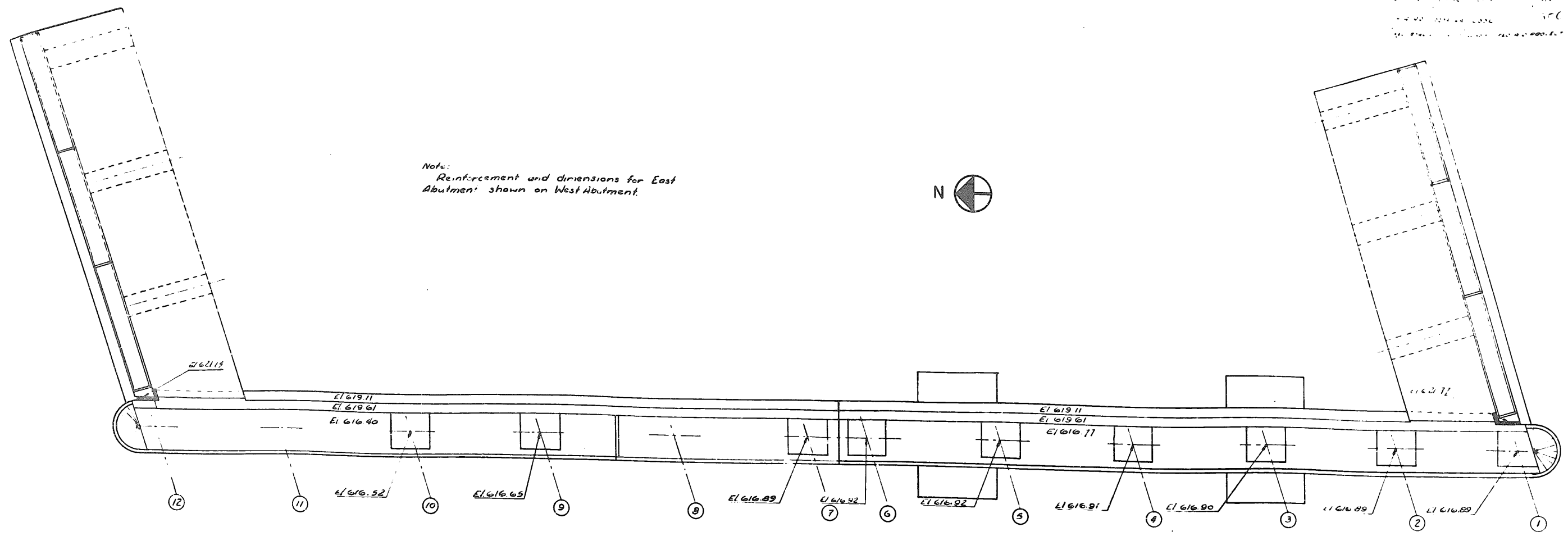


Notes- When posts are set and rails are adjusted to true alignment and grade. Put space between sleeve & post with oakum and seal with lead.

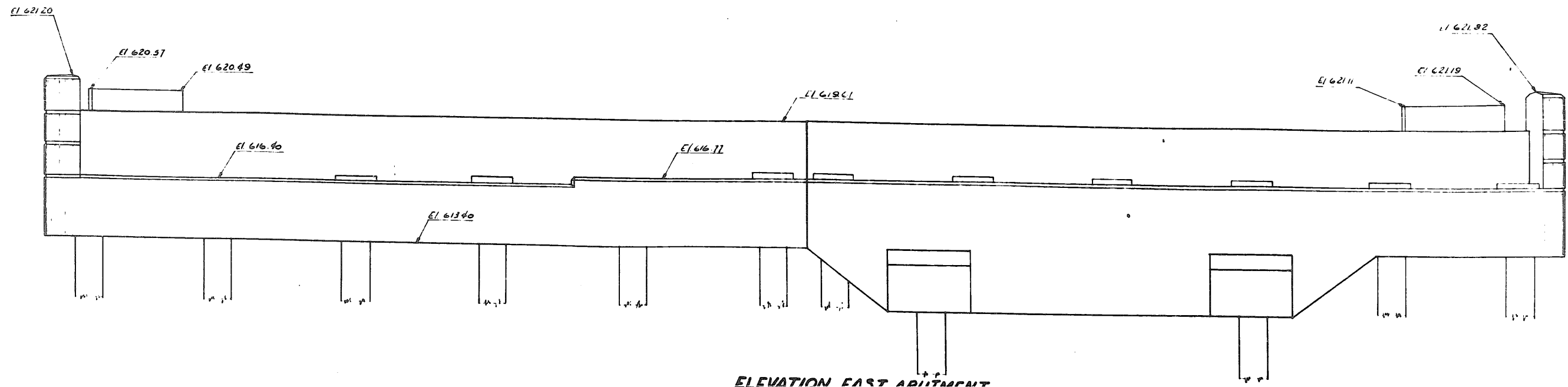
DESIGNED	19
CHECKED	GRADY ENGINEER
DRAWN	ENGINEER OF DESIGN
CHECKED	CHIEF HIGHWAY ENGINEER
EXAMINED	
PASSED	
APPROVED	

HANDRAIL DETAILS
DEVON AVE GRADE SEPARATION
OVER
EDEN'S SUPERHIGHWAY

Note:
Reinforcement and dimensions for East
Abutment shown on West Abutment.

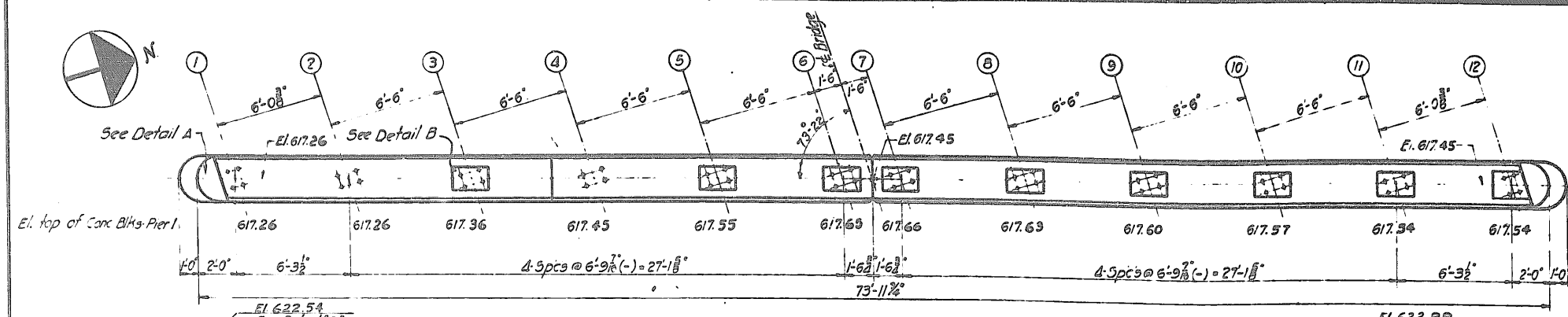
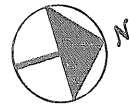


PLAN EAST ABUTMENT

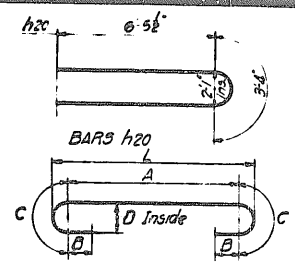
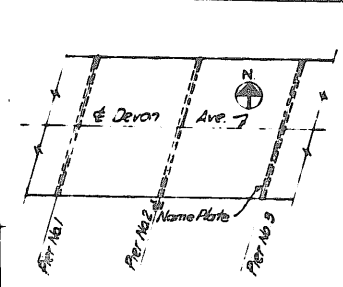


ELEVATION EAST ABUTMENT

EAST ABUTMENT
DEVON AVE. GRADE SEPARATION
OVER
EDENS SUPERHIGHWAY



TOP PLAN



Bar	A	B	C	D	L
h23	24-11"	8"	1'-6"	10"	25-11 1/2"
h24	25-3"	6 1/2"	1'-7"	7"	25-11 1/2"
h26	23-2"	6"	1'-2"	8"	24'-0"
h27	23-4"	6"	1'-1"	7"	24'-0 1/2"
f6	25-5"	6"	1'-2"	8"	26-3"
f8	9-11"	6"	1'-2"	8"	10-9"
f14	5-3"	6 1/2"	1'-4"	7"	5-11 1/2"
f16	6-7"	5 1/2"	9"	5"	6-7 1/2"
f17	7-11"	7"	1'-4"	7"	8-7 1/2"

BILL OF MATERIAL FOR PIERS 1 & 3

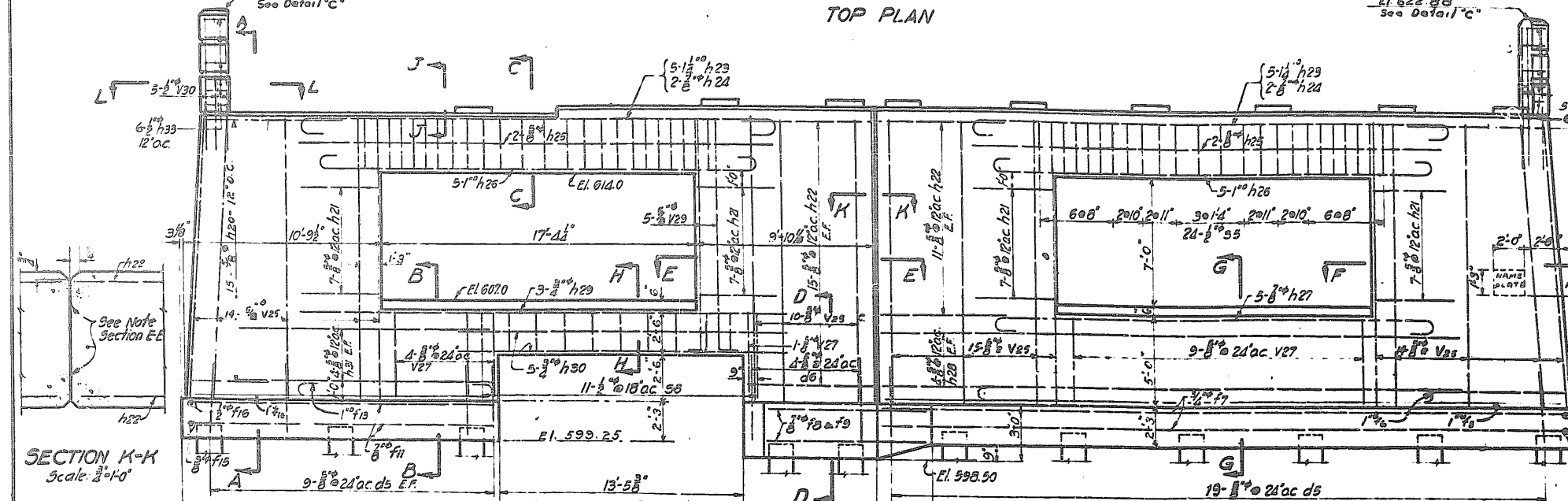
Mark	No	Size	Type	Length
h20	60	3/4"	Bent	16'-3"
h21	56	3/4"	"	11'-0"
h22	104	3/4"	"	7'-0"
h23	20	3/4"	Bent	23'-3"
h24	8	3/4"	"	28'-6"
h25	8	3/4"	Str.	28'-9"
h26	20	3/4"	Bent	25'-6"
h27	10	3/4"	Bent	26'-6"
h28	10	3/4"	Str.	26'-0"
h29	6	3/4"	Str.	32'-0"
h30	10	3/4"	Str.	26'-9"
h31	16	3/4"	Str.	18'-3"

h33	24	3/4"	Bent	6'-0"
V25	106	3/4"	Str.	15'-3"
V27	28	3/4"	Bent	11'-6"
V29	10	3/4"	Bent	13'-9"
V30	20	3/4"	Str.	7'-0"

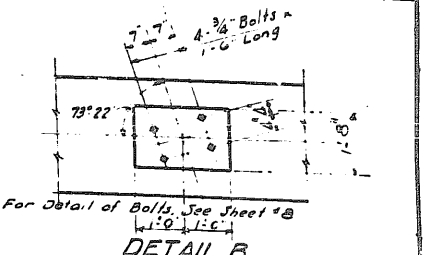
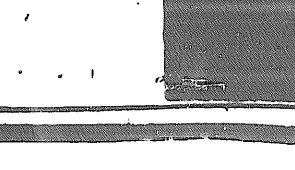
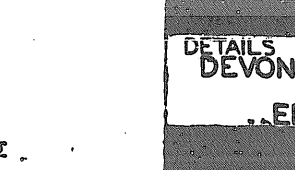
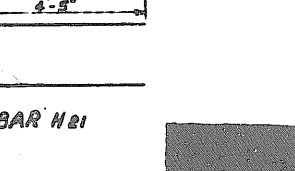
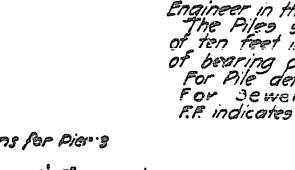
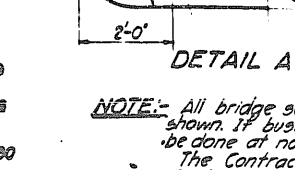
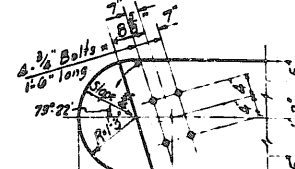
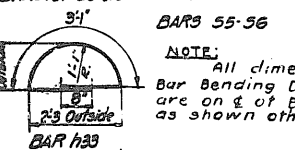
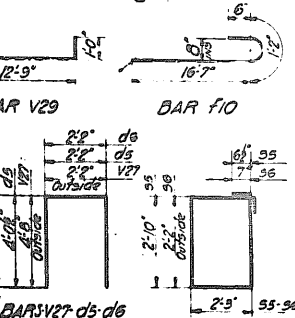
95	96	1/2"	Bent	11'-3"
96	22	1/2"	"	10'-0"
d5	56	3/4"	"	10'-3"
d6	8	3/4"	"	11'-3"
f5	4	1"	Str.	36'-8"
f6	6	1"	Bent	28'-4"
f7	2-1	3/4"	Str.	39'-0"
f8	8	3/4"	"	8'-0"
f9	20	3/4"	"	9'-9"
f10	4	1"	Bent	13'-9"
f11	20	3/4"	Str.	17'-0"
f12	4	1"	"	16'-5"
f13	10	1"	Bent	13'-3"
f14	2	1/2"	"	8'-6"
f15	146	3/4"	"	8'-6"
f16	30	3/4"	Str.	8'-6"
f17	20	3/4"	Bent	11'-3"
f18	6	1/2"	Str.	8'-6"
f19	2	1/2"	Str.	5'-9"

Class X Concrete
Reinforcement Bars
Test Piles
Piles (40'-0" long)

Cu Yds. 247.2
Lbs. 20,275
Eq. 2
Lin Ft. 1840



ELEVATION



NOTE: All bridge seats shall be constructed to the exact elevations shown. If bush hammering or grinding is necessary it shall be done at no additional cost. The Contractor shall drive 2 Test Piles as directed by the Engineer in the field before ordering the remaining Piles. The Piles shall be driven to attain a minimum penetration of ten feet into a stratum of solid material regardless of bearing capacity developed. For Pile detail see Sheet No 14. For Sewer Details see Sheet No 16. R.F. indicates Front Face. B.F. indicates Back Face. E.F. indicates Each Face.

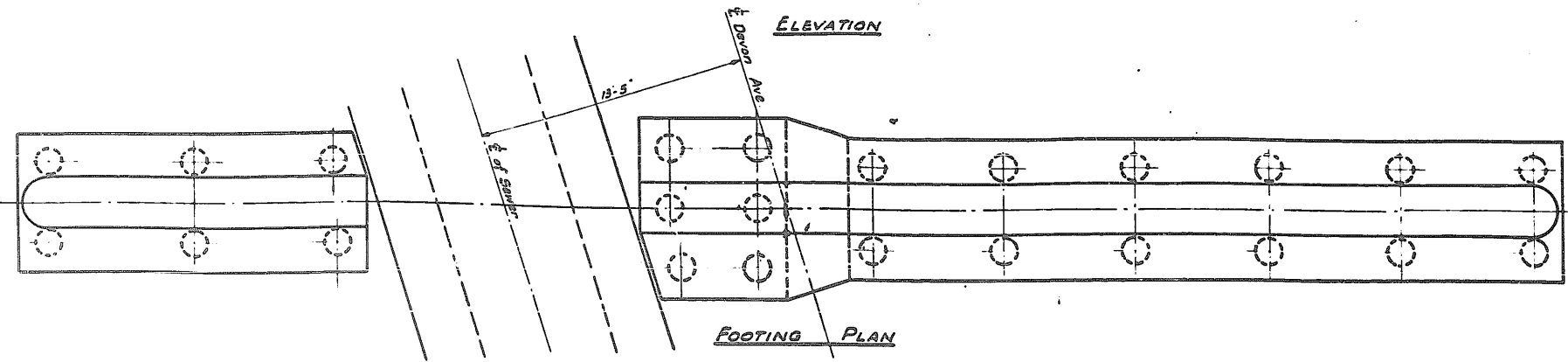
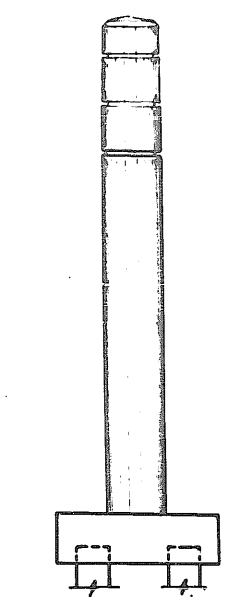
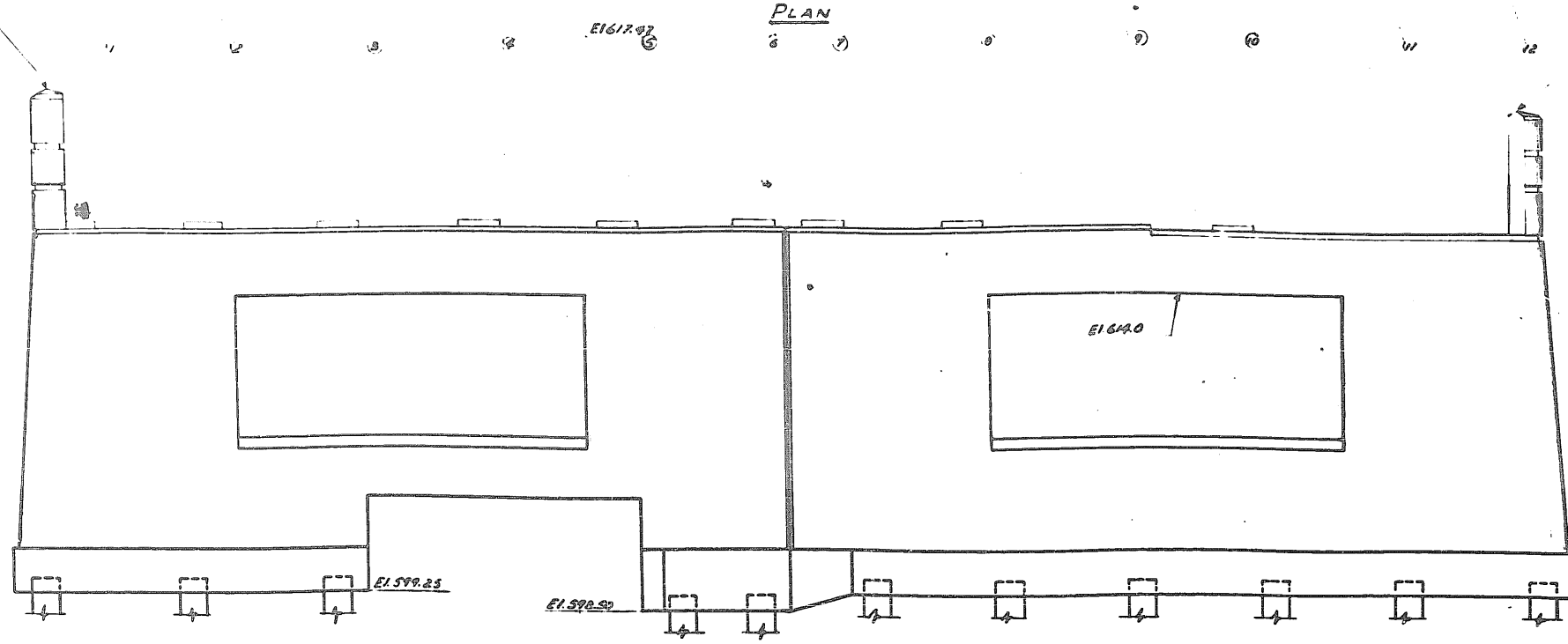
FA 99 02031-HB COOK 30 C 12
U1-146 (2A)

DETAILS OF PIER
DEVON AVE. GRADE SEPARATION
OVER
EDENS SUPERHIGHWAY

E161733 E161755 E161738 E161761 E161765 E161700 E161701 E161736 E161741 E161737 E161727

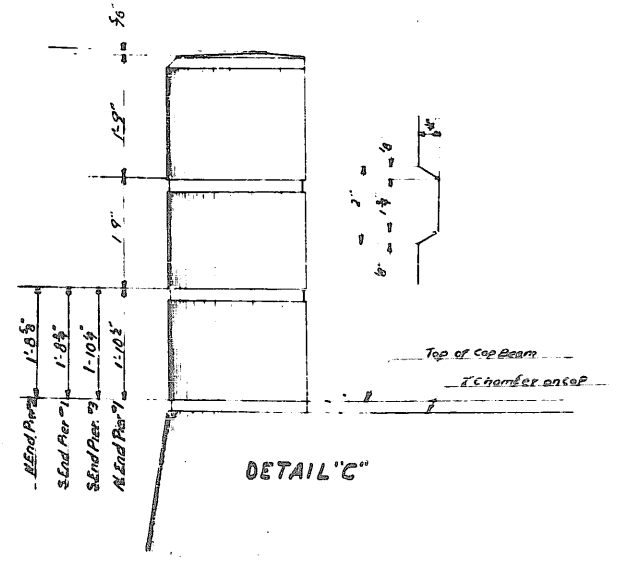
E16220A
See Detail 'C'

E1622 59
See Detail 1/2

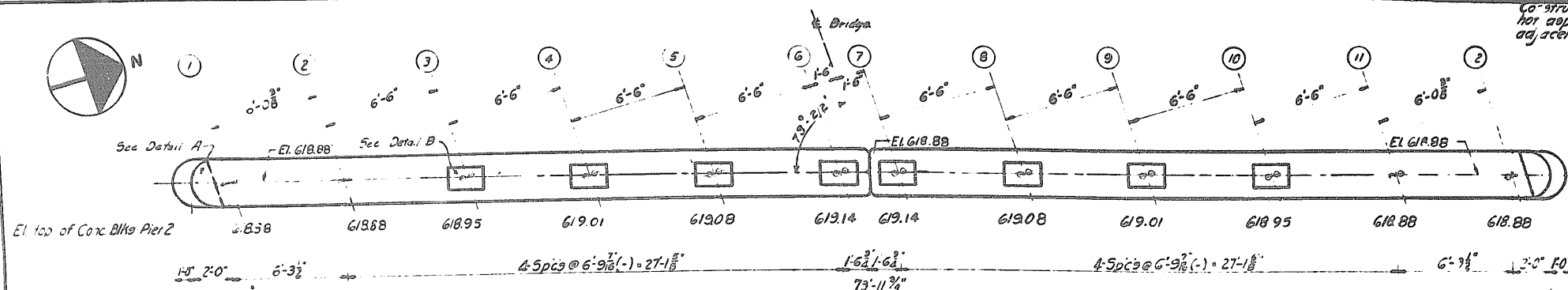
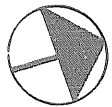


NOTE... All Sections, Details, Dimensions, and Steel Reinforcement are the same as for Pier #1 shown on sheet # 12.

FA 59 02031 HB COOK 30C 13
UI-146(23)



DETAILS OF PIER 3
DEVON AVE. GRADE SEPARATION
OVER
EDENS SUPERHIGHWAY



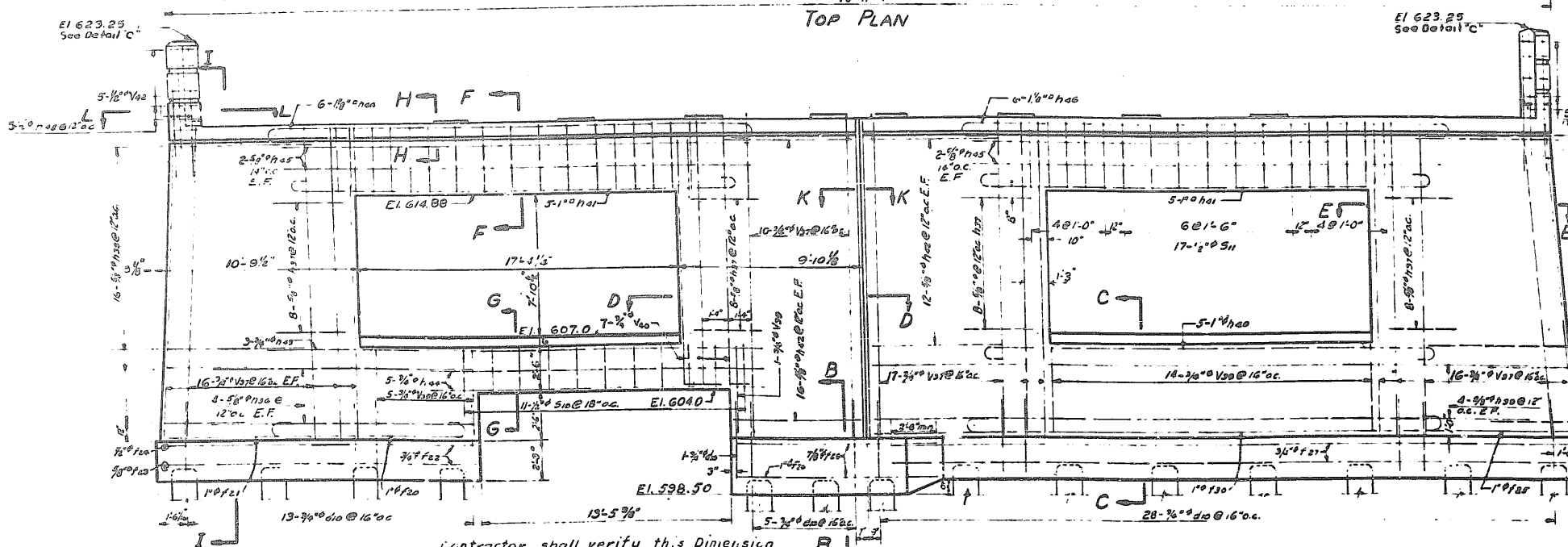
Bar	A	B	C	D	L
F20	5'-11"	6"	1'-2"	0"	10'-9"
F20	6'-1"	5 1/2"	9"	5"	6'-7 1/2"
F20	2'-5 1/2"	6"	1'-2"	0"	2'-6'-3"
F20	7'-11"	7"	1'-1"	7"	8'-7 3/4"
F20	5'-3"	6 1/2"	1'-1"	7"	5'-11 3/4"
H20	2'-3 1/2"	6"	1'-2"	0"	2'-4'-0"
H20	2'-3 1/2"	6"	1'-2"	0"	2'-4'-0"
H20	2'-4 1/2"	8"	1'-6"	10"	2'-11 1/2"

Mark	No.	Size	Type	Length
H20	32	3/8"	5r	10'-3"
H20	32	3/8"	Bent	11'-3"
H20	32	3/8"	Bent	15'-0"
H20	8	3/8"	5r	35'-0"
H20	5	1"	Bent	20'-0"
H20	10	1"	Bent	20'-0"
H20	36	3/8"	5r	2'-0"
H20	3	3/8"	5r	26'-9"
H20	3	3/8"	5r	18'-0"
H20	8	3/8"	5r	25'-0"
H20	12	1/2"	Bent	20'-3"
H20	10	1/2"	Bent	6'-0"
V27	59	3/8"	5r	17'-0"
V20	20	3/8"	Bent	1'-0"
V20	7	3/8"	Bent	15'-3"
V20	10	1/2"	5r	7'-0"
F20	5	1"	Bent	13'-3"
F20	2	1"	Bent	16'-9"
F20	12	3/8"	5r	16'-0"
F20	104	3/8"	Bent	0'-0"
F20	15	3/8"	5r	6'-6"
F20	2	1/2"	5r	37'-0"
F20	2	1/2"	5r	36'-6"
F20	12	3/8"	5r	17'-0"
F20	8	3/8"	5r	11'-0"
F20	4	3/8"	5r	9'-3"
F20	5	1"	Bent	20'-9"
F20	12	3/8"	5r	8'-6"
F20	1	1/2"	Bent	11'-3"
F20	1	1/2"	Bent	8'-6"
F20	1	1/2"	5r	5'-9"
S20	11	1/2"	Bent	10'-0"
S20	34	1/2"	Bent	15'-0"
D20	2	3/8"	Bent	10'-9"

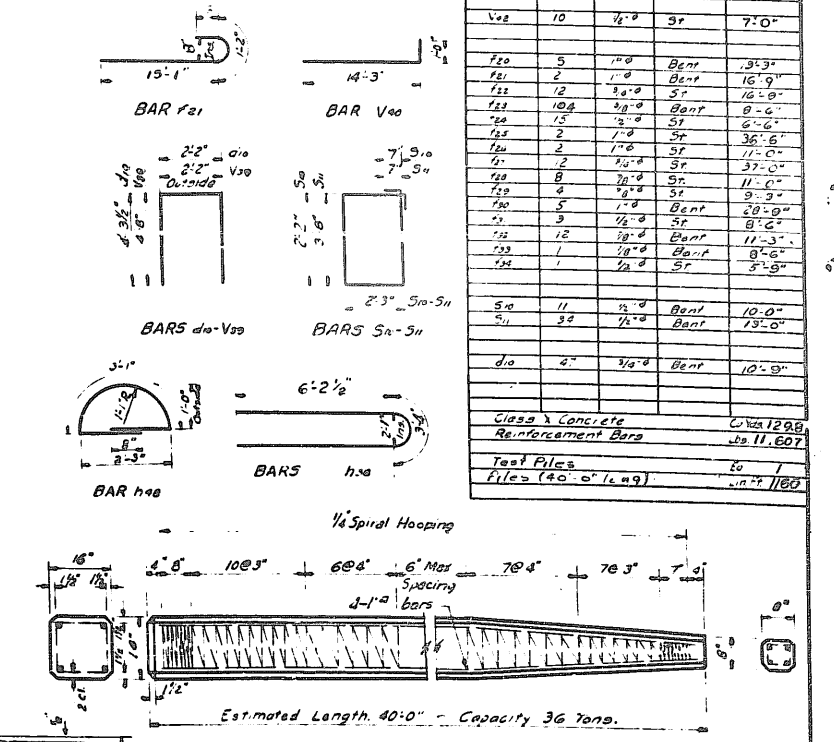
Class 2 Concrete
Reinforcement Bars
Test Piles
Files (40' x 14")

SECTION KK
Scale: 3/8" = 1'-0"

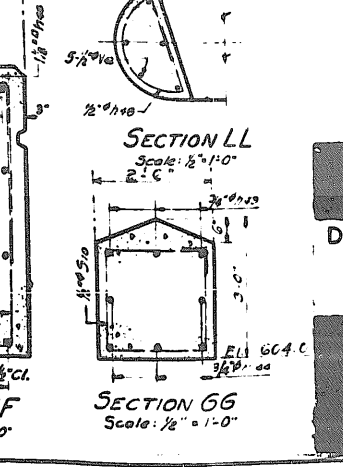
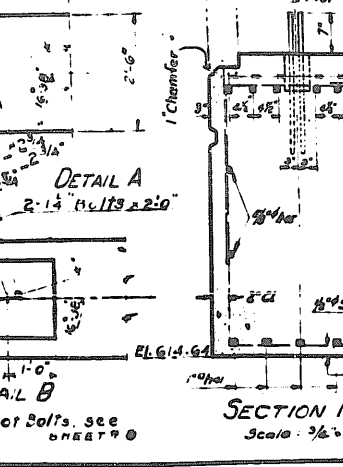
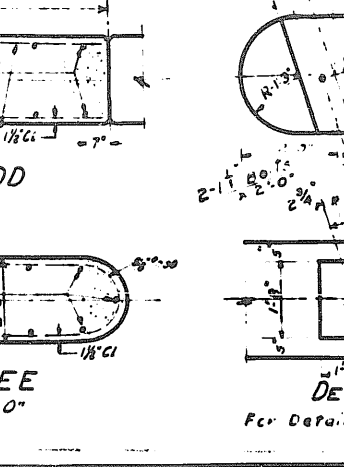
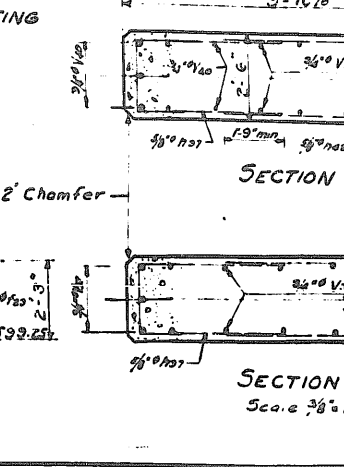
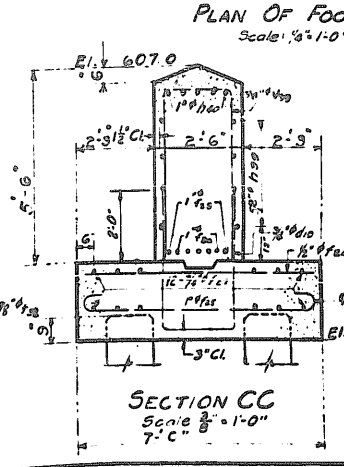
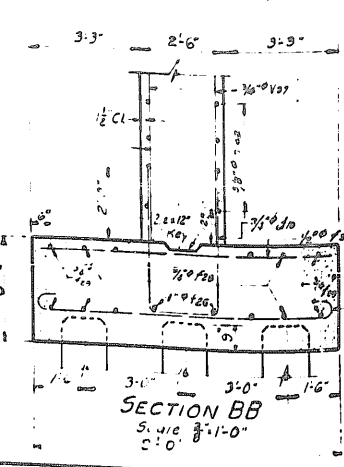
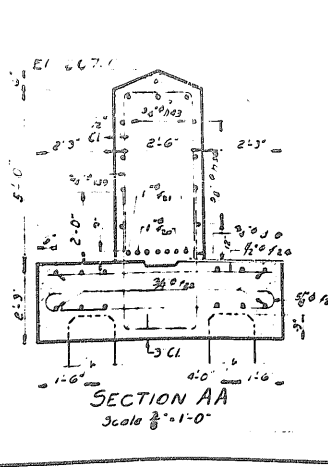
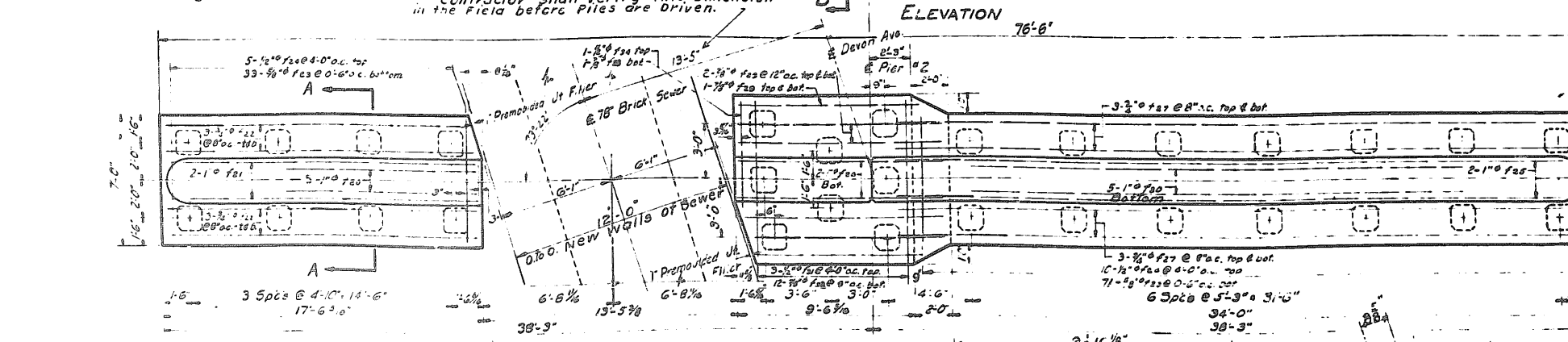
NOTE: All dimensions on Bar Bending Diagrams are on ϕ of Bar except as shown otherwise.



SECTION II



FA-99 0203.1 HB COOR 30C 14
UI-146 (23)

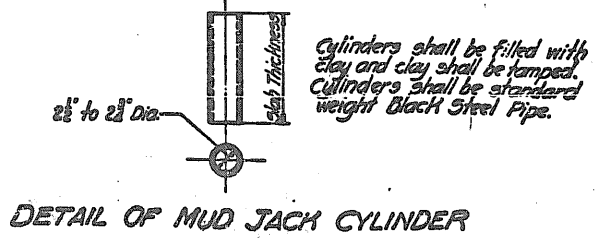
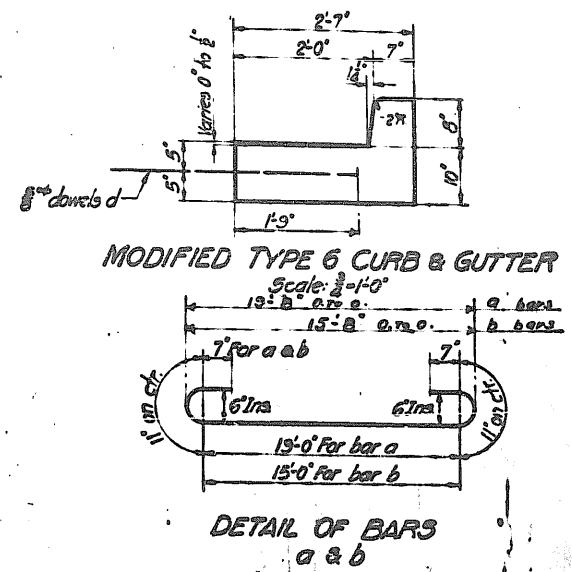
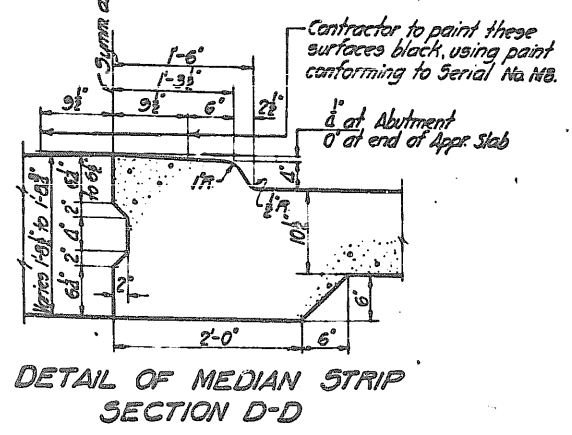
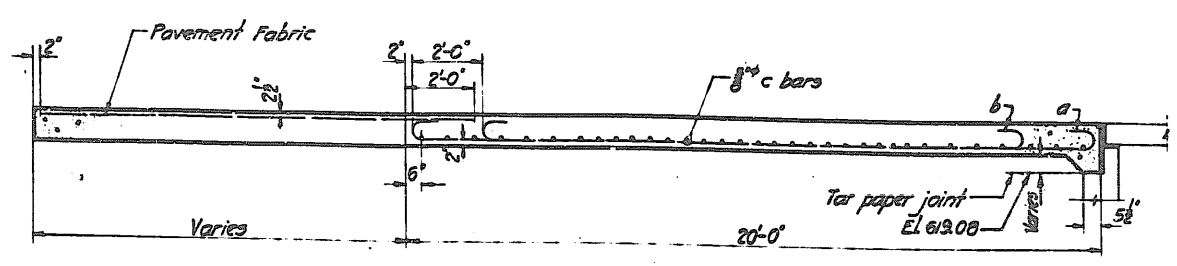
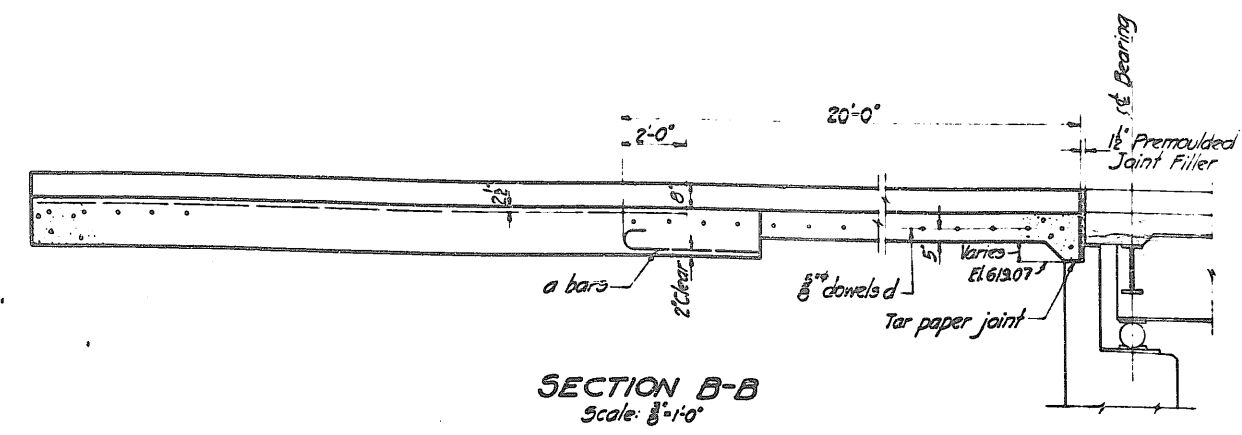
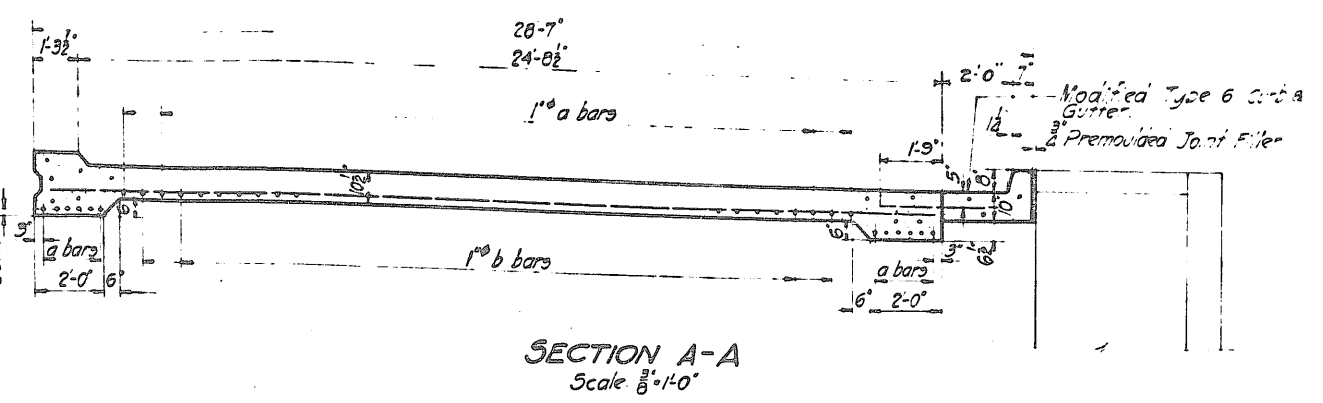
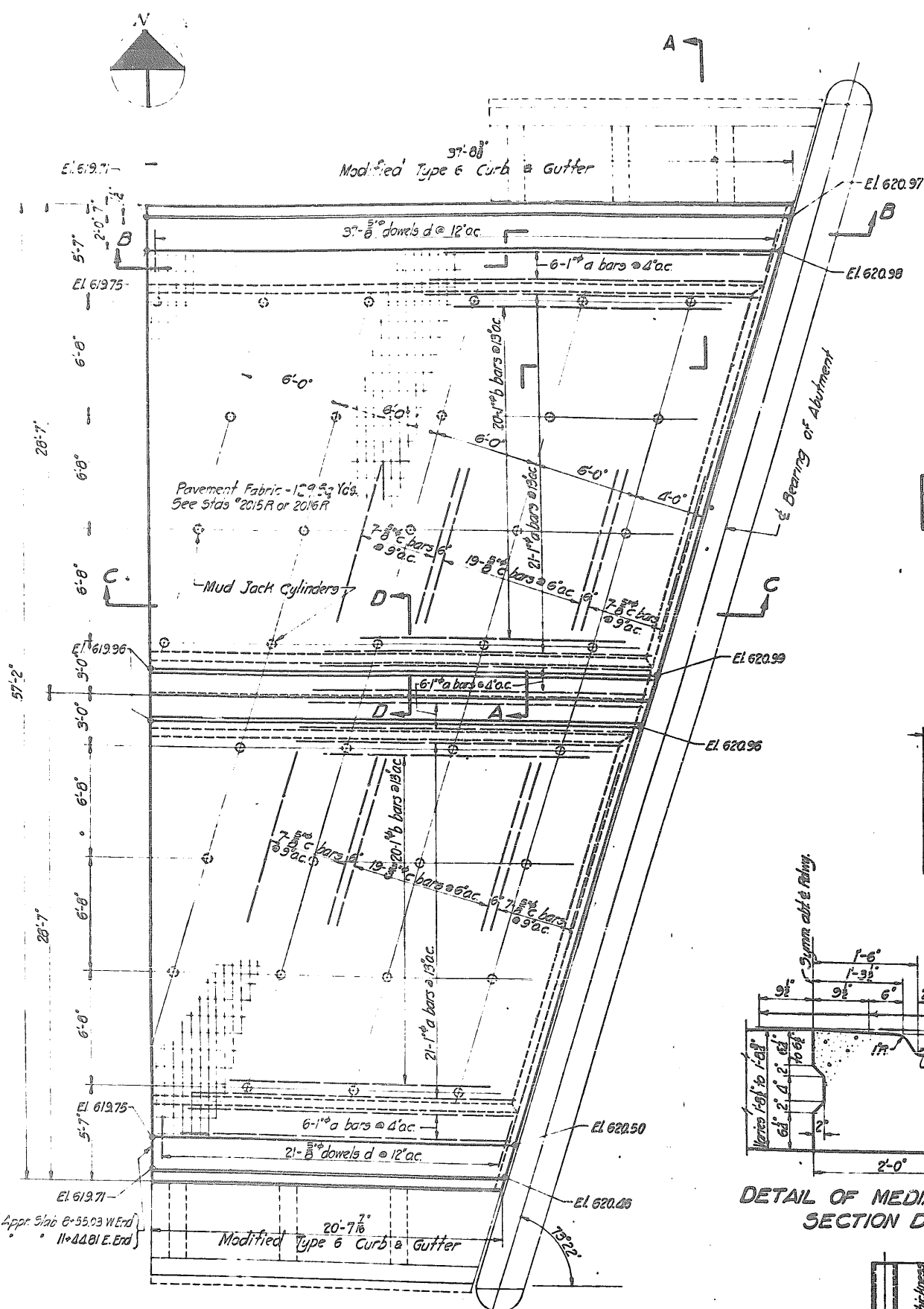


DETAILS OF PIER NO. 2
DEVON AVE. GRADE SEPARATION
OVER EDENS SUPERHIGHWAY

**BILL OF MATERIAL
FOR 2 APPROACH SLABS**

Qty	No	Size	Length	Type	
a	132	1 1/2"	20'-0"	Bar	
b	80	1 1/2"	18'-0"	Bar	
c	132	3/8"	20'-0"	Bar	
d	116	3/8"	3'-6"	Bar	
PC Concrete Pavement				Sq Yds	337.1
Reinforcement Bars				Lbs	15670
Modified Type 6 C & G				Lm ft	113

FA-99 0203.1-MB COOK 30C 15
UI 146 (23)



NOTES:-

The slabs shall be paid for at the contract unit price for PC concrete pavement (16 1/2-10 1/2-16 1/2).

The modified Type 6 Curb & Gutter shall be paid for at the contract unit price for combination Curb & Gutter Modified Type 6.

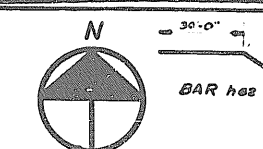
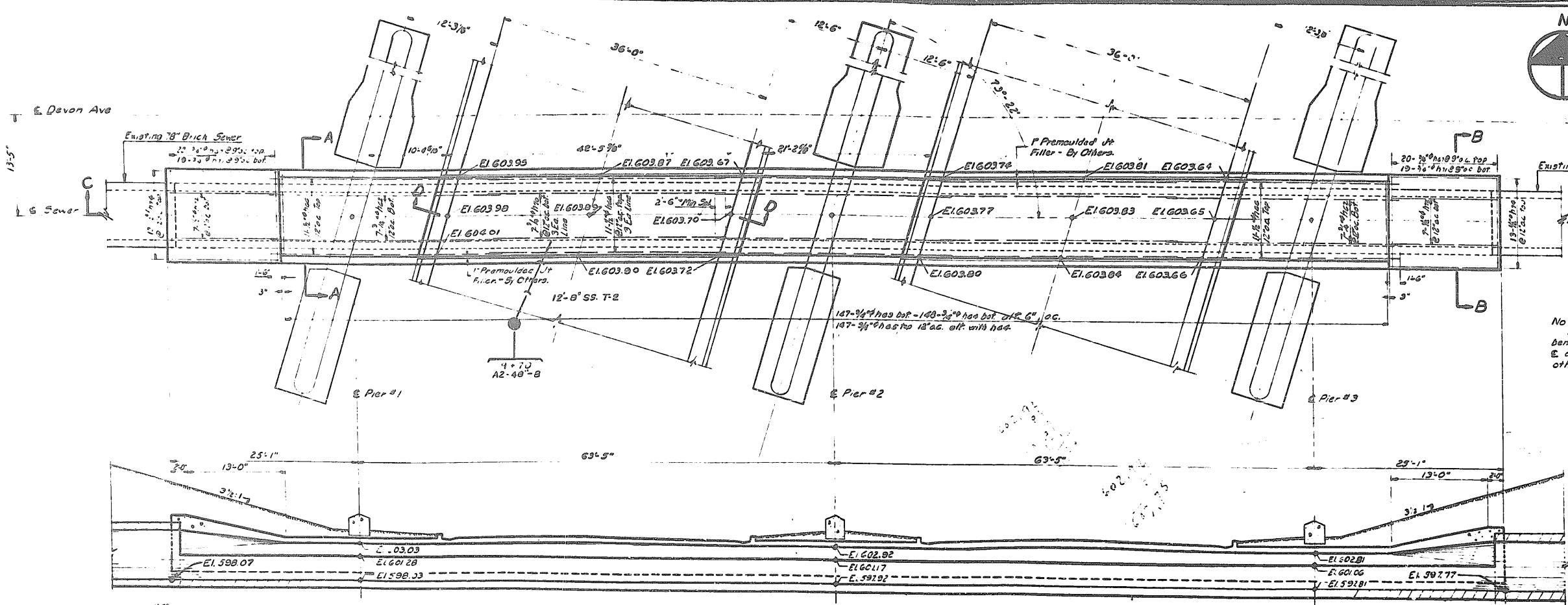
All Reinforcement Bars, including the Curb & Gutter, the bars, shall be paid for at the contract unit price for Reinforcement Bars.

The Mud Jack Cylinders and pavement fabric shall be furnished and installed by the contractor and included in the contract unit price for PC Concrete Pavement (16 1/2-10 1/2-16 1/2).

The cost of the Median Strip and Premoulded Joint Filler shall be included in the unit price for PC concrete Pavement (16 1/2-10 1/2-16 1/2).

The Premoulded Joint Filler shall be as specified in arts 115.67 to 115.72 incl. of the Standard Specifications for Road and Bridge Construction. Cost of painting top of Median Strip shall be included in unit price bid for PC concrete pavement (16 1/2-10 1/2-16 1/2).

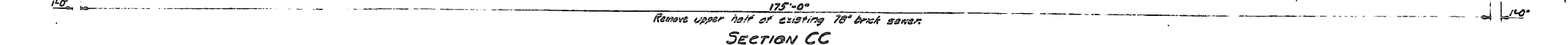
**DETAILS OF APPROACH SLAB
DEVON AVE. GRADE SEPARATION
OVER
EDENS SUPERHIGHWAY**



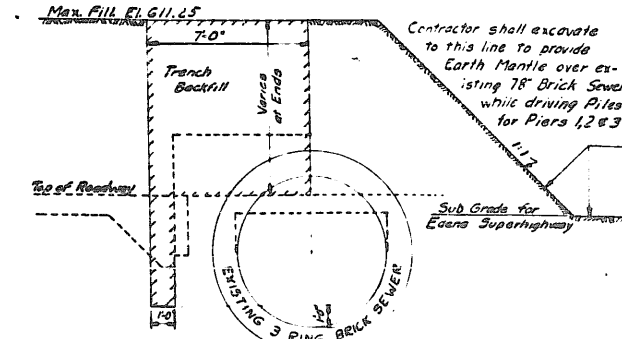
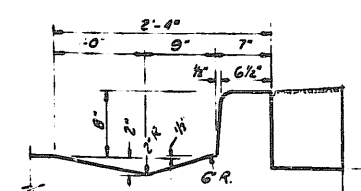
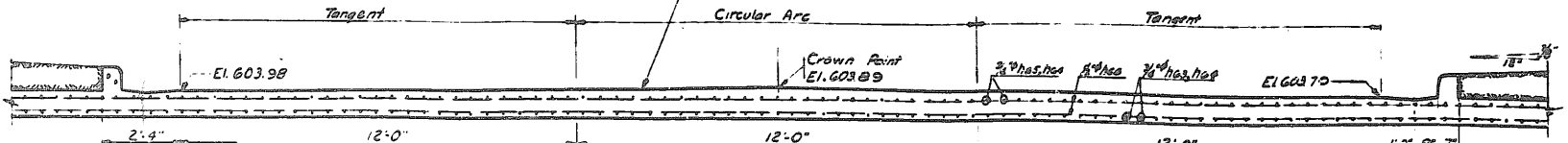
BILL OF MATERIAL
ALTERATIONS TO SEWER

Bar No	Size	Type	Length
h50	20	5/8"	3'-0"
h61	20	5/8"	3'-0"
h62	16	3/4"	3'-0"
h63	16	3/4"	3'-0"
h64	16	3/4"	3'-0"
h65	16	3/4"	3'-0"
h66	16	3/4"	3'-0"
h67	16	3/4"	3'-0"
h68	16	3/4"	3'-0"
h69	16	3/4"	3'-0"
h70	16	3/4"	3'-0"
h71	16	3/4"	3'-0"
h72	16	3/4"	3'-0"
h73	16	3/4"	3'-0"
h74	16	3/4"	3'-0"
h75	16	3/4"	3'-0"
h76	16	3/4"	3'-0"
h77	16	3/4"	3'-0"
h78	16	3/4"	3'-0"
h79	16	3/4"	3'-0"
h80	16	3/4"	3'-0"
h81	16	3/4"	3'-0"
h82	16	3/4"	3'-0"
h83	16	3/4"	3'-0"
h84	16	3/4"	3'-0"
h85	16	3/4"	3'-0"
h86	16	3/4"	3'-0"
h87	16	3/4"	3'-0"
h88	16	3/4"	3'-0"
h89	16	3/4"	3'-0"
h90	16	3/4"	3'-0"
h91	16	3/4"	3'-0"
h92	16	3/4"	3'-0"
h93	16	3/4"	3'-0"
h94	16	3/4"	3'-0"
h95	16	3/4"	3'-0"
h96	16	3/4"	3'-0"
h97	16	3/4"	3'-0"
h98	16	3/4"	3'-0"
h99	16	3/4"	3'-0"
h100	16	3/4"	3'-0"

NOTE: All dimensions on bar bending diagrams are on E of bar except as shown otherwise.



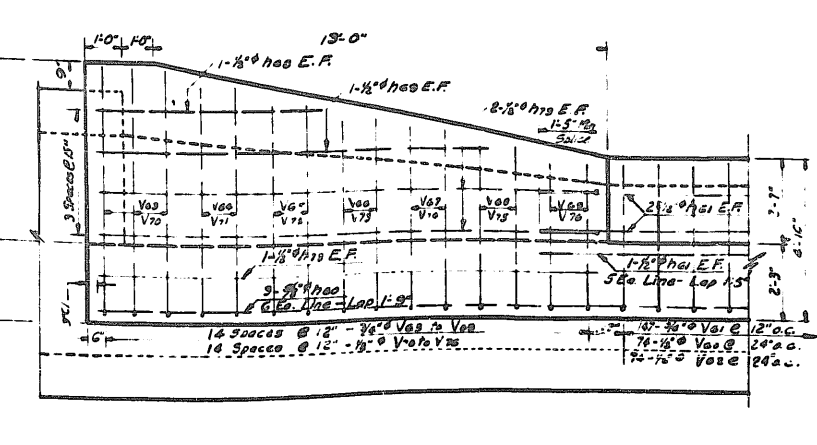
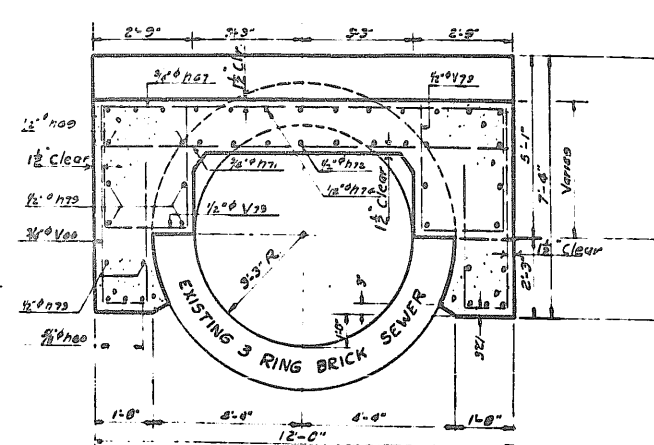
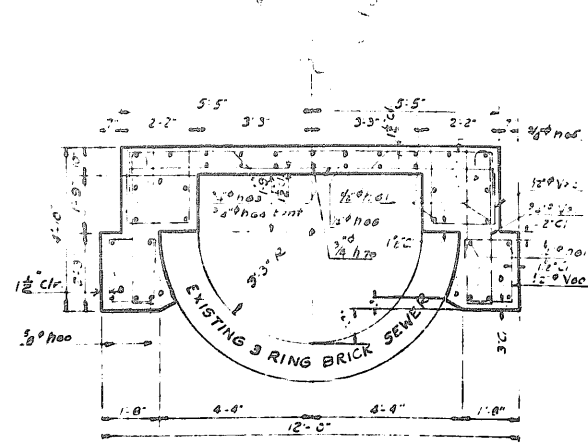
NOTE: This surface shall be finished as pavement in accordance with Article 51.4(j) of the Standard Specifications as amended to date.



NOTES:
The contractor shall use every precaution to prevent damage to the existing 78" brick sewer during construction. The invert shall be kept clean at all times during the process of masonry removal and during the time when forms are built and removed.
Adjustment to brick masonry, together with all necessary labor and materials shall be included in the unit price bid for Class X Concrete.

FA 99 0203-1-NB COOK 30C 16

UI-146(23)



ALTERATIONS TO EXISTING SEWER
DEVON AVE. GRADE SEPARATION
OVER
EDENS SUPERHIGHWAY