

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CONSTRUCTION PLAN INDEX

REEL 91

Marked Sets

ROUTE	SECTION	COUNTY	NO. OF EXP.	REMARKS
	Kennedy Expy.			
FAI-2	0808-456 SB & SF	Cook	11	
FA-173	267-1616-15D 267-1515-15D 267-1515.1-15D 267-1415.2-15D	"	213	
FA-173	267.1212-15D	"	143	
FA-173	267-1212-15D 267-1212.1-15D	"	49	
FAI-2	0808-412 HB	"	34	
FA-173	267-1213-15D 267-1313.1-15D	"	49	
FAI-2	0808-412 HB	"	35	
FAI-2	0808-410 HF	"	6	
FAI-2	0808-412 HF	"	7	

STATE OF ILLINOIS
 COUNTY OF COOK
 DEPARTMENT OF HIGHWAYS

PLANS FOR PROPOSED
 FEDERAL AID HIGHWAY

PLAN 1" = 80 FT.
 PROFILE VERT. 1" = 80 FT.
 CROSS SECTIONS 1" = 5 FT. VERT.
 CROSS SECTIONS 1" = 10 FT. HOR.

FEDERAL AID ROUTE 173 PROJECT U-265(18)
 TWO (2) GRADE SEPARATIONS
 OVER
 NORTHWEST EXPRESSWAY
 N. CENTRAL AVE. SECTION 267-1213-15D
 WEST FOSTER AVE.-SECTION 267-1313.1-15D

EXPIRES
 MAINTENANCE

RETURN THIS PLAN
 TO MAINTENANCE
 ROOM 706

DRAWER

3B

INDEX OF SHEETS

- SHEET NO.
- TITLE PAGE
 - SUMMARY OF QUANTITIES
 - P.C.C. DRIVEWAY PAVEMENT
 DETAILS OF PORTLAND CEMENT CONCRETE SIDEWALK
 CONSTRUCTION
 DETAIL OF ALLEY RETURN
 STANDARD DESIGN FOR PAVEMENT FABRIC
 TYPE "A" AND TYPE "B"
 - LOCATION AND DISPOSITION OF STOCKPILED TOP SOIL
 - WOOD GUARD FENCE (TYPES 1, 2 AND 3)
 DETAILS OF STANDARD BARRICADE
 CURB & GUTTER, FRAME & GRATE TYPE #31
 - ALTERNATE DESIGNS FOR LONGITUDINAL METAL JOINT
 DETAILS OF CURB AND GUTTERS TYPES 1, 3, 4, 5,
 6, 7, AND 10
 - NAME PLATES - STANDARD SYMBOLS
 TYPE A-36" MANHOLE TO BE USED WITH TYPE B MANHOLE
 - MODIFIED TYPE 4 MEDIANS
 STANDARD SECTION MARKER
 DETAILS OF CONCRETE MEDIANS TYPES 1, 2,
 3, AND 4
 - DETAIL OF LATERAL SEWER CONNECTION FOR USE
 WITH 5'-9" X 6'-4" SEMI-ELIP. & 72" CIRCULAR SEWER
 DETAIL OF LATERAL SEWER CONNECTION FOR USE WITH
 6'-6" X 7'-3" SEMI-ELIP. & 84" CIRCULAR SEWER
 - TYPE A2 CATCH BASIN
 DETAIL OF STORM SEWER CONNECTION TO SEWER
 TYPE A MANHOLE
 - FOUNDATION REMOVAL AND PLUGGING EXISTING DRAINS
 AND SEWERS
 TRENCH BACKFILL AND PAVEMENT REPLACEMENT -
 ENTIRE
 DETAILS OF STANDARD FRAMES AND GRATES
 - DETAILS OF PAVEMENT CONSTRUCTION ADJACENT
 TO TYPE 5 FRAME
 DETAILS OF CURB, CURB AND GUTTER AND PAVEMENT
 CONSTRUCTION ADJACENT TO CASTINGS
 - TYPE B MANHOLE 36"-42"-48"-54" AND 60"
 DIAMETER PIPE
 83"-85" TURN MANHOLE 36"-42"-48"-54"-60" AND
 66" DIAMETER PIPE
 - PEDESTRIAN BARRIER
 - FIELD OFFICE AND LABORATORY
 - ELECTRICAL DETAILS
 - NORTHWEST EXPRESSWAY ALIGNMENT AND TIES - PART 1
 - NORTHWEST EXPRESSWAY ALIGNMENT AND TIES - PART 2
 - NORTHWEST EXPRESSWAY ALIGNMENT AND TIES - PART 3
 - NORTHWEST EXPRESSWAY ALIGNMENT AND TIES - PART 4
 - NORTHWEST EXPRESSWAY TIES TO CROSS STREETS - PART 1
 - NORTHWEST EXPRESSWAY TIES TO CROSS STREETS - PART 2
 - 21A-21H EMBANKMENT DETAILS
 - 22-68 DETAILS - W. FOSTER AVE.
 - 69-102 DETAILS - N. CENTRAL AVE.

SECTION NO.	267-1213-15D	267-1313.1-15D	TOTAL
LENGTH OF STRUCTURE	251.50 FT.	347.08 FT.	638.58 FT. (0.1209 MILES)
LENGTH OF ROADWAY	476.27 FT.	520.39 FT.	996.66 FT. (0.1888 MILES)
LENGTH OF CONTRACT	727.77 FT.	907.47 FT.	1,635.24 FT. (0.3097 MILES)
LENGTH ALONG EXPRESSWAY	0.00 FT.	0.00 FT.	0.00 FT.

COUNTY OF COOK
 DEPARTMENT OF HIGHWAYS

APPROVED: *March 21* 1958
 SUPERVISOR

APPROVED: *March 21* 1958
 CHIEF ENGINEER

APPROVED: *March 21* 1958
 SUPERVISOR

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

APPROVED: _____ DATE _____
 CHIEF ENGINEER

APPROVED: _____ DATE _____
 SUPERVISOR

DEPARTMENT OF COMMERCE
 BUREAU OF PUBLIC ROADS

APPROVED: _____ DATE _____
 DIVISION ENGINEER



AS ADVERTISED LETTING OF 5/6/58

PLANS APPROVED
 BY STATE DIVISION OF HIGHWAYS
 4-17-58

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 - 24 GENERAL PLAN AND ELEVATION
 - 25 NORTH ABUTMENT
 - 26 RAMP 23 RETAINING WALL
STA. 0+37.14 RT. TO STA. 1+00.00 RT.
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 - 29 PIER DETAILS - PART II
 - 30 FRAMING PLAN AND DETAILS
 - 31 FRAMING DETAILS
 - 32 CROSS SECTION AND DETAILS
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 - 35 REINFORCING STEEL DETAILS APPROACH SLAB
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 - 39 REINFORCING STEEL DETAILS - PIERS PART I
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 - 41 REINFORCING STEEL DETAILS - DECK SLAB PART I
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 - 52 W. FOSTER AVE. INVERTED SIPHON
GENERAL PLAN AND ELEVATION
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INLET JUNCTION CHAMBER SECTIONS
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OUTLET JUNCTION CHAMBER SECTIONS
 - 58 W. FOSTER AVE. INVERTED SIPHON
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 - 59 W. FOSTER AVE. INVERTED SIPHON
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 - 61 W. FOSTER AVE. INVERTED SIPHON
REINFORCING STEEL DETAILS
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REINFORCING STEEL DETAILS
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 - 64 W. FOSTER AVE. INVERTED SIPHON
REINFORCING STEEL DETAILS
OUTLET JUNCTION CHAMBER - PART 3
 - 65-67 NORTHWEST EXPRESSWAY CROSS SECTIONS
 - 68 W. FOSTER AVE. CROSS SECTIONS

STATE OF ILLINOIS
COUNTY OF COOK
DEPARTMENT OF HIGHWAYS

PLANS FOR PROPOSED
FEDERAL AID HIGHWAY

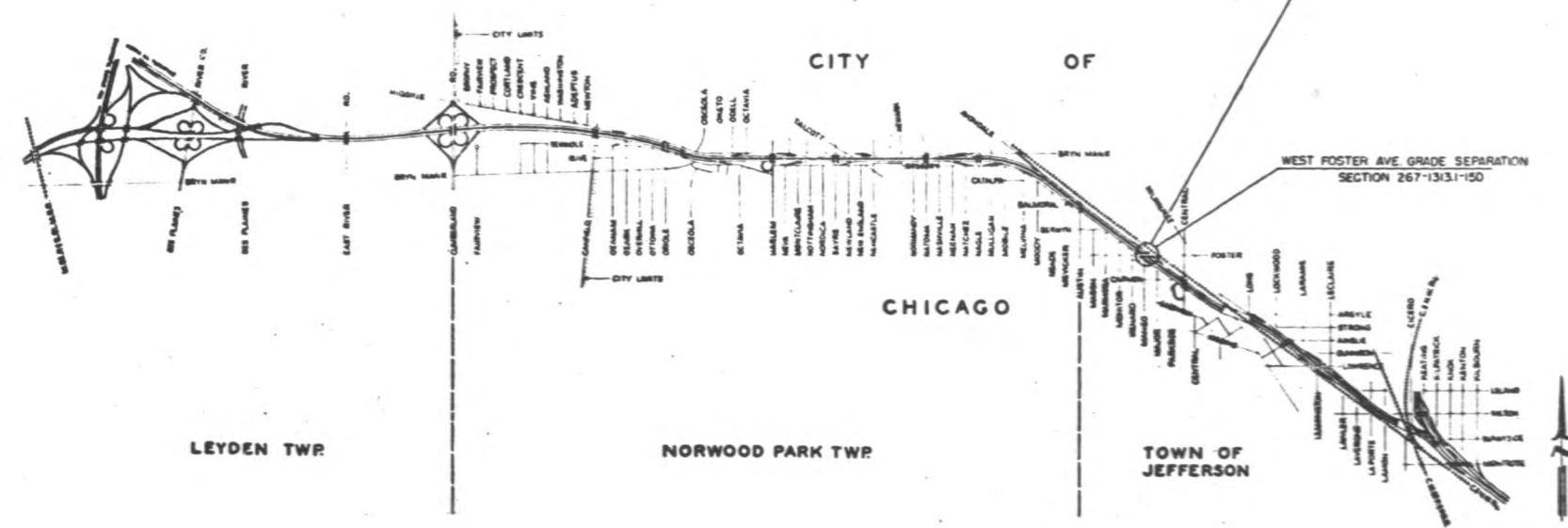
SCALES

PLAN	HOR.	1 INCH	50 FT.
PROFILE HOR.	1 INCH	50 FT.	
PROFILE VERT.	1 INCH	5 FT.	
CROSS SECTIONS	1 INCH	5 FT. VERT.	
CROSS SECTIONS	1 INCH	10 FT. HOR.	

FEDERAL AID ROUTE 173 PROJECT U-265(18)
WEST FOSTER AVE. GRADE SEPARATION
OVER
NORTHWEST EXPRESSWAY
SECTION 267-1313.1-15D

SECTION 267-1313.1-15D INCLUDES CONSTRUCTION OF A BUILT-UP STEEL PLATE GIRDER BRIDGE, SIMPLY-SUPPORTED, FOUR SPANS AT 61'-7", 127'-9", 127'-9" AND 89'-8" ON WEST FOSTER AVENUE OVER NORTHWEST EXPRESSWAY IN THE TOWN OF JEFFERSON, CITY OF CHICAGO, AT STATION 3567+73.32 ON NORTHWEST EXPRESSWAY, A POINT APPROXIMATELY 960 FEET WEST OF THE INTERSECTION OF W. FOSTER AND N. CENTRAL AVENUES. THE CONSTRUCTION OF A CONCRETE-ENCASED INVERTED SEWER SIPHON UNDER THE NORTHWEST EXPRESSWAY AT STA. 3570+25, WITH INLET AND OUTLET CHAMBERS, MANHOLES, AND APPURTENANCES AND APPROXIMATELY 1150 FEET OF CONTRIBUTORY SEWER; THE CONSTRUCTION OF AN R.C. RETAINING WALL APPROXIMATELY 60 FEET LONG.

LENGTH OF STRUCTURE	=	357.06 FT. (0.0733 MILES)
LENGTH OF ROADWAY	=	520.39 FT. (0.0986 MILES)
LENGTH OF CONTRACT	=	907.47 FT. (0.1719 MILES)
LENGTH ALONG EXPRESSWAY	=	(0.00 MILES)



COUNTY OF COOK
DEPARTMENT OF HIGHWAYS

APPROVED: *March 21 1958*

APPROVED: *March 21 1958*

APPROVED: *March 21 1958*

SUPERINTENDENT

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

APPROVED: _____ DATE _____

APPROVED: _____ DATE _____

DIRECTOR

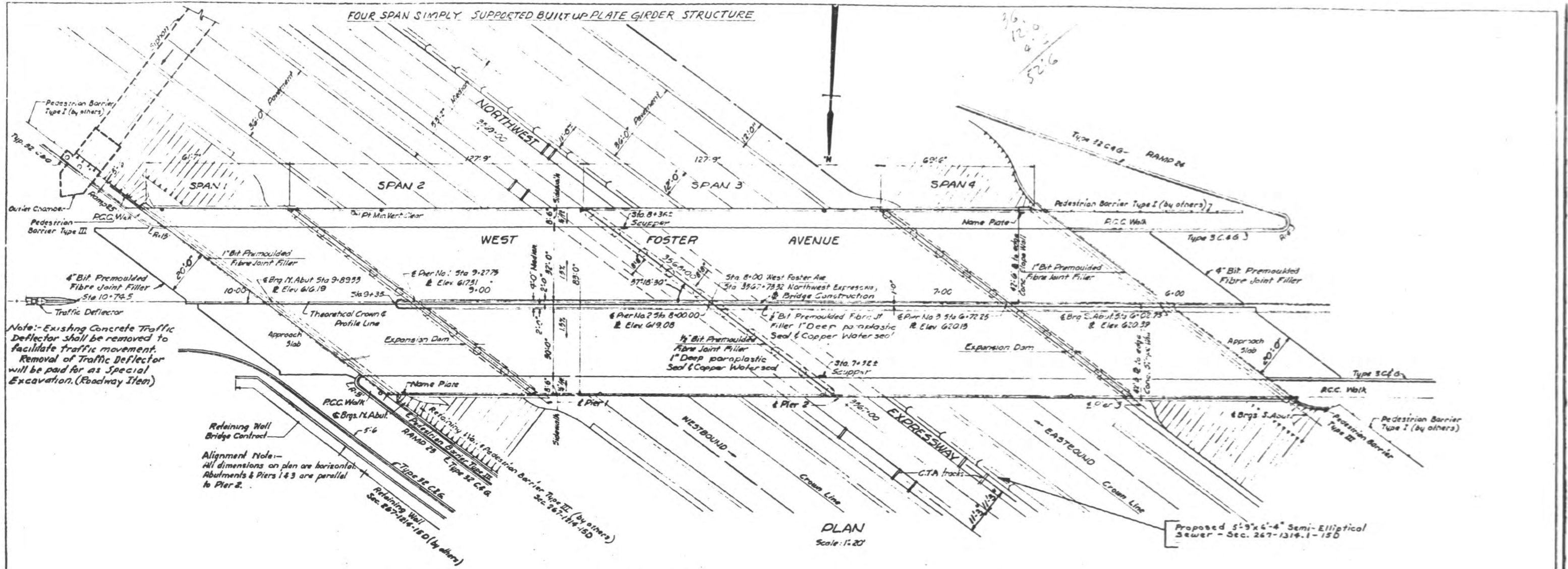
DEPARTMENT OF COMMERCE
BUREAU OF PUBLIC ROADS

APPROVED: _____ DATE _____

DIVISION ENGINEER

FAY SPOFFORD & THORNDIKE, INC.
ENGINEERS BOSTON, MASS.

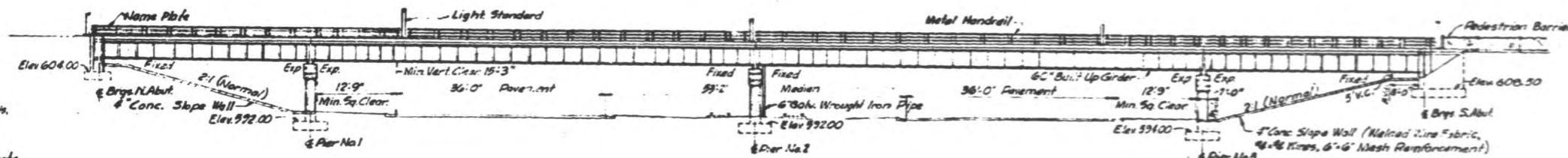
FOUR SPAN SIMPLY SUPPORTED BUILT UP PLATE GIRDER STRUCTURE



Note: Existing Concrete Traffic Deflector shall be removed to facilitate traffic movement. Removal of Traffic Deflector will be paid for as Special Excavation. (Roadway Item)

Alignment Note:— All dimensions on plan are horizontal. Abutments & Piers 1 & 3 are parallel to Pier 2.

PLAN Scale: 1:20'



ELEVATION Scale: 1:20'

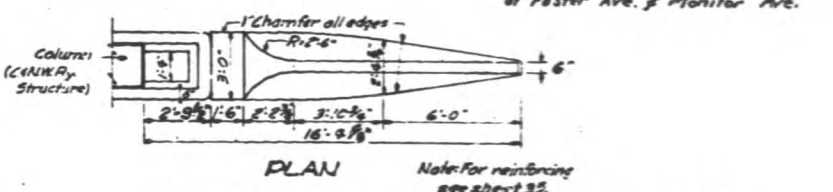
GENERAL NOTES

- Design is in accordance with the following: Standard Specifications for Road and Bridge Construction, State of Illinois, dated Jan 2, 1962 and Supplemental Specifications, A.A.S.H.O. 1963.
- Class "K" concrete shall be used throughout and shall have a minimum ultimate strength of 28 days of 3900 p.s.i.
- All reinforcing shall be intermediate grade steel with an allowable working stress of 20,000 psi.
- Reinforcing bars shall be deformed bars and shall conform to the requirements of Specifications for Billet Steel for Concrete Reinforcement, A.S.T.M. Designation A-19. Deformation on bars shall conform to the requirements of Specifications for the Deformations of Deformed Steel Bars for Concrete Reinforcement, A.S.T.M. Designation A-805, as amended to date.
- Each span of bridge deck shall be poured in one continuous operation. Finishing of the deck slab shall comply with 511B of the Standard Specifications.
- The coat of copper waterproof, rubber, waterproof, copper nails, bituminous fibre joint fillers, paraffin joint sealers, ground mica, and tar paper shall be included in the bid price of Class "K" concrete. The contractor's method of supporting, bracing, and protecting the copper (rubber waterproof and bituminous preformed fibre joint filler during construction, so that the copper waterproof does not become bent, torn or distorted, shall be approved by the Engineer.
- Copper waterproof splices shall be soldered or brazed.
- Rubber waterproof shall be applied as recommended by the manufacturer.
- All backfill behind abutments and wingwalls shall be sand or gravel embankment and shall conform with the special provisions and shall be placed and compacted mechanically in accordance with Section 16 of the Standard Specifications.

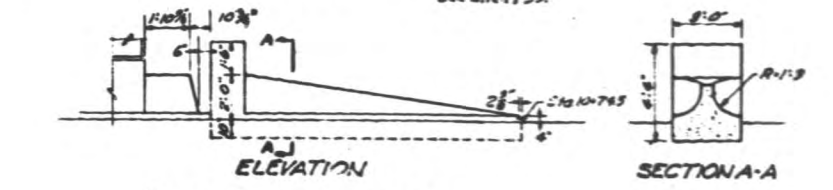
Elevation datum U.S.G.S. Mean Sea Level - Elevation 000
All steel girders, diaphragms, bearing shoes, fabric pads, anchor bolts, sleeves and expansion dams for this bridge will be supplied by the Steel Fabricator E.A.B. at the site to the Contractor. The Contractor shall set all anchor bolts, sleeves, fabric pads, shoes, and erect all structural steel.
Traffic Classification "T"

DESIGN DATA

Design Load A.A.S.H.O. H20-516-44
Design Stresses
Earth Pressure 30° Fluid
Structural Steel 18,000 p.s.i.
Reinforcing Steel 20,000 p.s.i.
Deck Slab & Substructure Concrete (without earth pressure) 1,400 p.s.i.
Substructure Concrete (with earth pressure) 800 p.s.i.
n=10
Max. Bending Pressure 2.5 T.S.E.
Retaining Wall Surcharge 3F.



PLAN

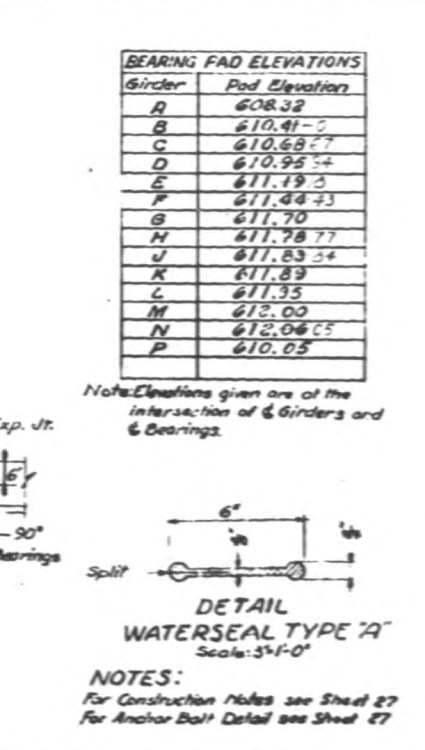
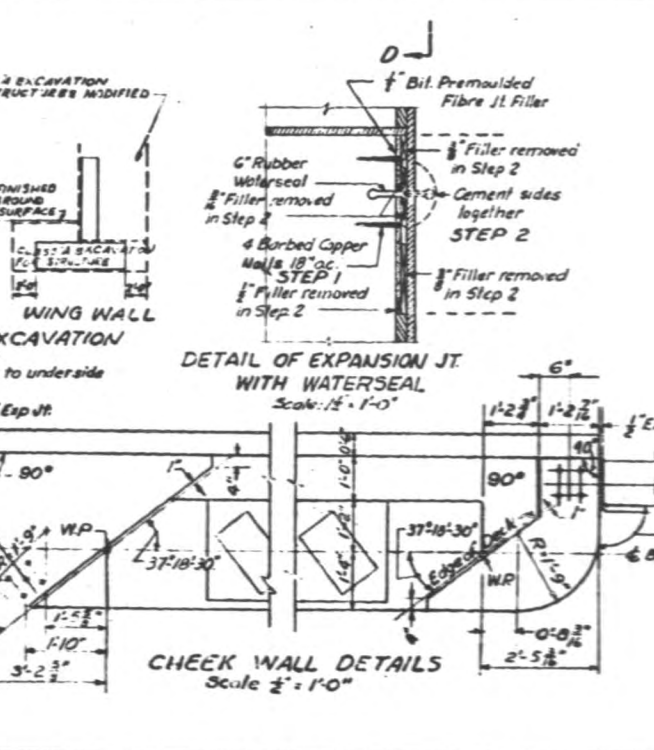
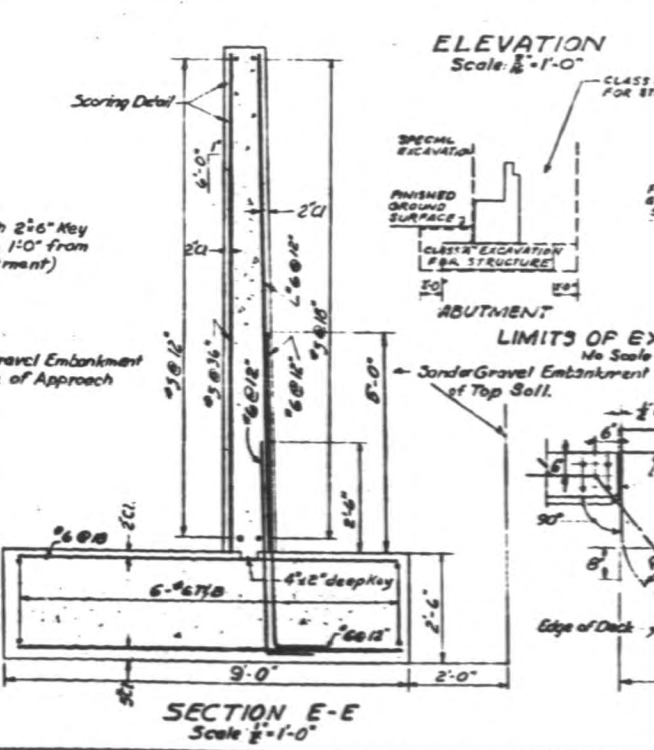
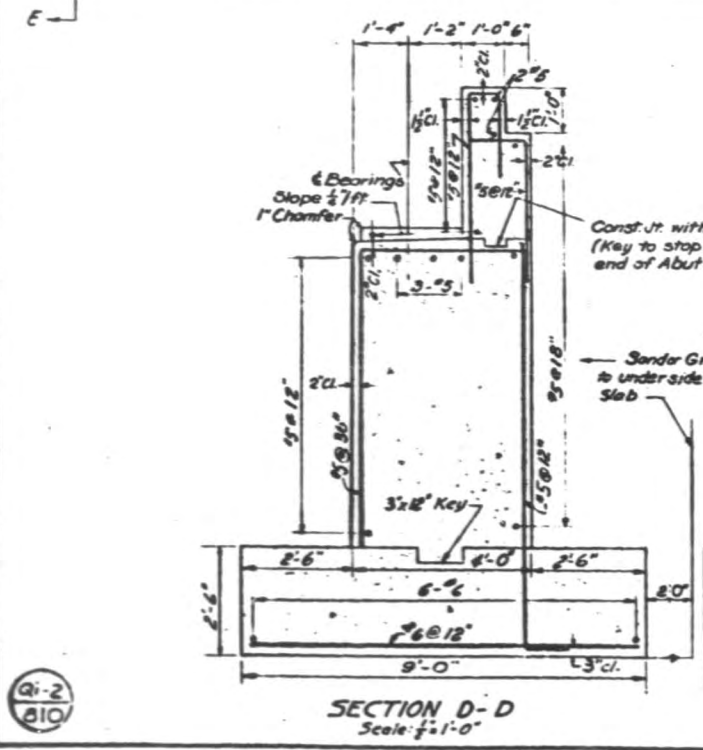
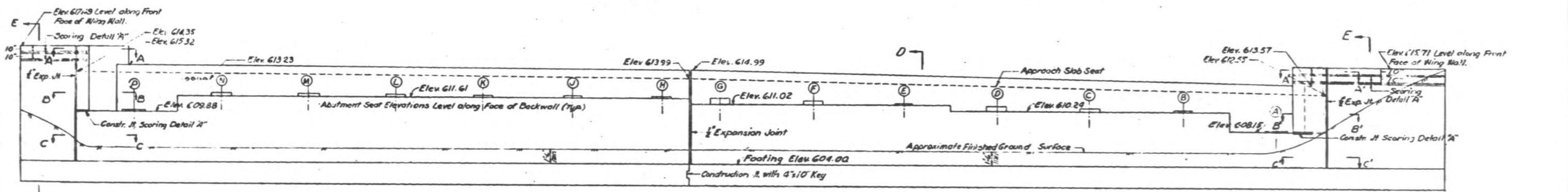
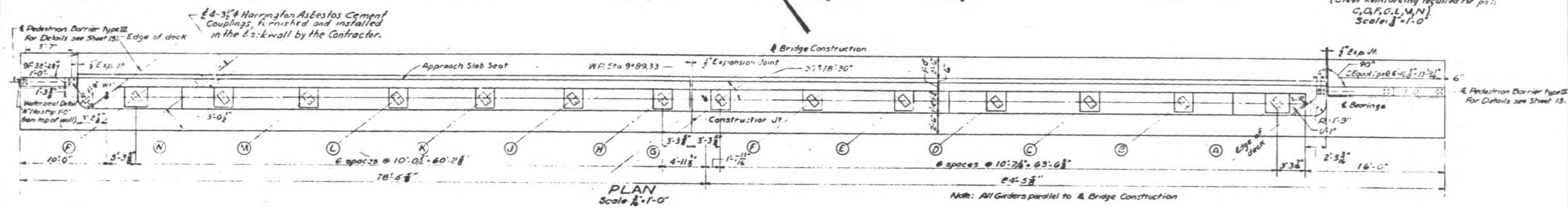
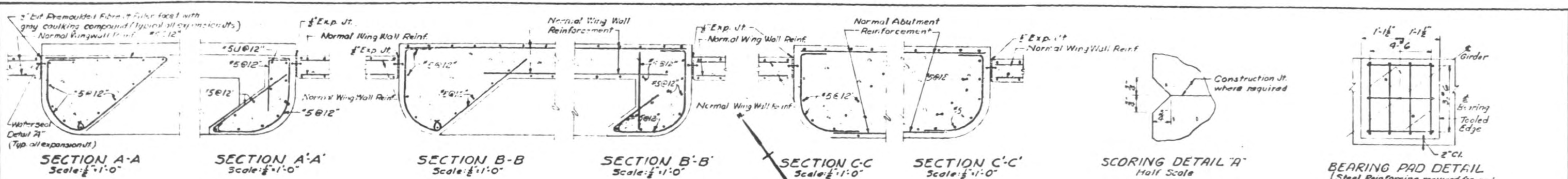


ELEVATION

SECTION A-A

TRAFFIC DEFLECTOR Scale: 1/4"=1'-0"

SEC. 267-13:31 - 15 D	
BILL OF MATERIAL	
3/4" WALL	1890 SQ. YDS.
PEDESTRIAN BARRIER TYPE III	39 LIN. FT.
CLASS "K" CONCRETE	2.3 CU. YDS.
DEPARTMENT OF HIGHWAYS COOK COUNTY, ILLINOIS	
GENERAL PLAN AND ELEVATION W. FOSTER AVE. GRADE SEPARATION OVER NORTHWEST EXPRESSWAY	
COMPUTED H.K.M.	PROJECT U-245 (1A)
DRAWN S.H.	SCALE As Noted
CHECKED P.E.D.	APPROVED
APPROVED	DATE
173	267
24	102
478	5
SAY, SPOFFORD & THORNDIKE, INC. ENGINEERS, BOSTON, MASS., CHICAGO, ILL.	



BEARING PAD ELEVATIONS	
Girder	Pad Elevation
A	608.32
B	610.41-0
C	610.68-7
D	610.95-4
E	611.19-3
F	611.48-3
G	611.70
H	611.78-7
J	611.83-4
K	611.89
L	611.95
M	612.00
N	612.06-5
P	610.05

Note: Elevations given are of the intersection of Girders and Bearings.

SEC. 267-131-150

BILL OF MATERIAL

CLASS X CONCRETE	326 CU.YDS
REINFORCEMENT BARS	12,632 LBS.
CLASS A EXCAVATION FOR STRUCTURES	275 CU.YDS
CLASS A EXCAVATION FOR STRUCTURES MODIFIED	613 CU.YDS
SAND OR GRAVEL EMBANKMENT	680 TONS

DEPARTMENT OF HIGHWAYS
COOK COUNTY, ILLINOIS

DANIEL RYAN
WILLIAM J. MORTIMER

NORTH ABUTMENT
W. FOSTER AVE. GRADE SEPARATION
OVER
NORTHWEST EXPRESSWAY

COMPUTED BY: AT PROJECT: U. 265-18
DRAWN BY: S-U SCALE AS NOTED
CHECKED BY: AT APPROVED BY: [Signature]

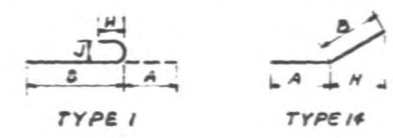
APPROVED BY: [Signature]
DATE: 173 267 25 102 NK479-S

REV. 6-11-50

REINFORCING SCHEDULE

Mark	No.	Size	Length	Stretch	Type	A	B	C	D	E	F	G	H	J	K	O	R	
a ₁	88	5	4-7			0-7	4-0										10-6	0-5
a ₂	26	5	16-6															
a ₃	26	5	16-6															
a ₄	1	5	10-3															
a ₅	1	5	10-0															
a ₆	1	5	5-9															
a ₇	1	5	4-6															
a ₈	5	5	8-0															
a ₉	8	5	9-3															
a ₁₀	26	5	2-6			1-3	1-3										1-0	
b ₁	16	5	52-0															
b ₂	2	5	4-0															
b ₃	2	5	6-6															
b ₄	2	5	8-8															
b ₅	2	5	11-0															
c ₁	73	5	7-7															
c ₂	22	5	5-3															
d ₁	1	6	8-0															
d ₂	46	6	4-9															
d ₃	1	6	3-6															
d ₄	1	6	2-6															
e ₁	36	5	4-9															
e ₂	1	5	3-6															
e ₃	1	5	2-6															
e ₄	1	5	8-0															

BENDING DIAGRAM



GENERAL NOTES

- All Pipe Underdrain shall be 6" Galv. perf. Corrugated Metal Pipe.
- The cost of 6" C.I. pipe and fittings, corrugated metal end caps and fittings, shall be included in the Contract Unit Price bid for Pipe Underdrain.
- All Underdrain to be connected to Highway Drainage System for details, see Sheet No. 53.
- T-Top, B-Bottom, N.F.-Near Face, F.F.-Far Face, E.F.-Each Face.

NOTES

- Stations are along Base Line of Ramp 23
- All linear dimensions of Panel are along Working Line of Wall

SEC. 267-1313.1-15D

BILL OF MATERIAL

POROUS GRANULAR EMBANKMENT	25 CU. YDS.
CLASS X CONCRETE	382 CU. YDS.
REINFORCEMENT BARS	2850 LBS.
CLASS A EXCAVATION FOR STRUCTURES	55 CU. YDS.
CLASS X EXCAVATION FOR STRUCTURES, MODIFIED	110 CU. YDS.
SAND OR GRAVEL EMBANKMENT	183 TONS
PIPE UNDERDRAIN, 6"	48 LIN. FT.

DEPARTMENT OF HIGHWAYS
COOK COUNTY, ILLINOIS

DANIEL RYAN
Project Engineer

WILLIAM J. MORTIMER
Supervisor of Highways

RAMP 23 RETAINING WALL
STA. 0+37.14R TO STA. 1+00.00R
WEST FOSTER AVE. GRADE SEPARATION
OVER NORTHWEST EXPRESSWAY

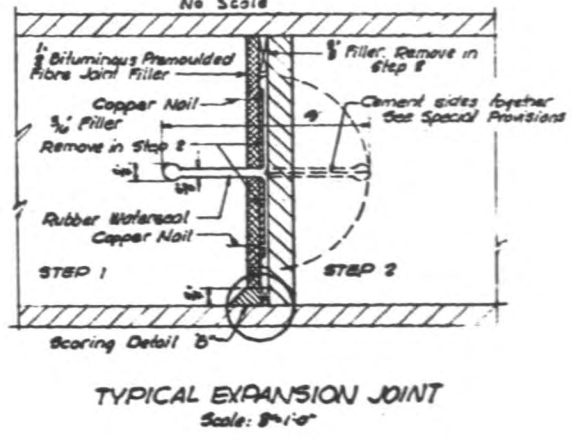
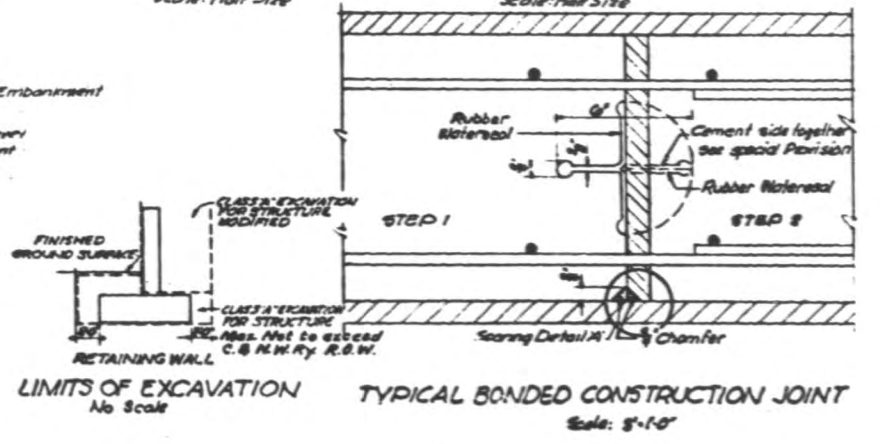
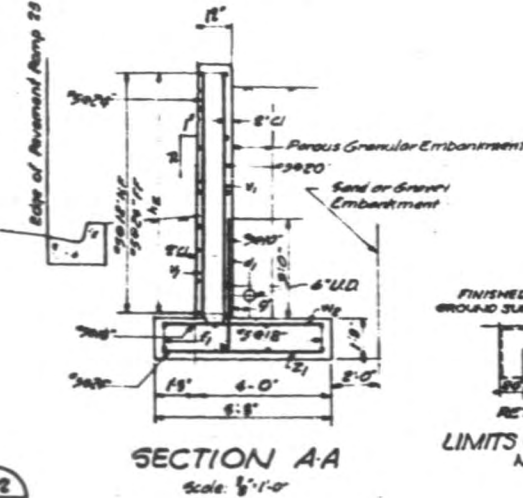
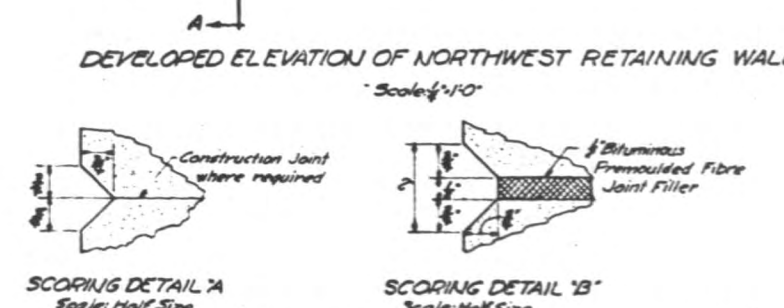
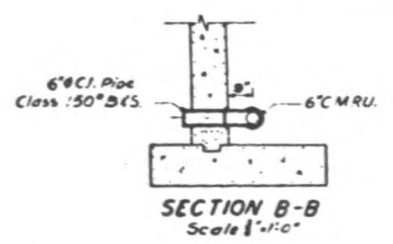
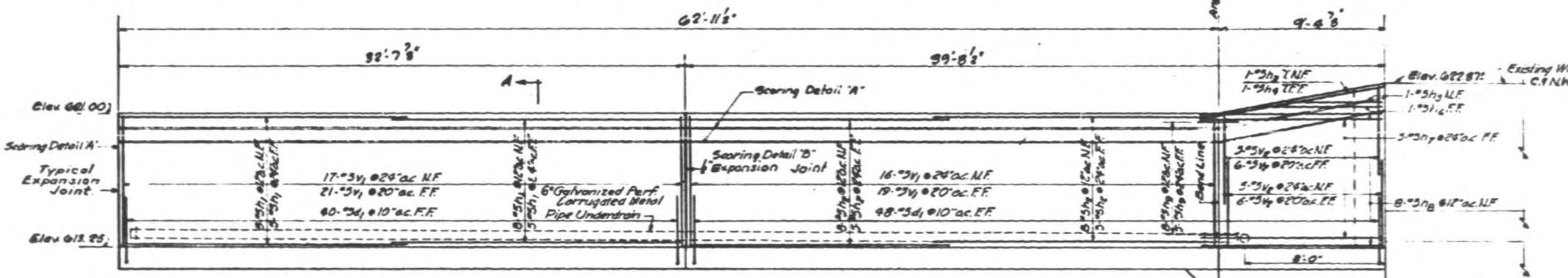
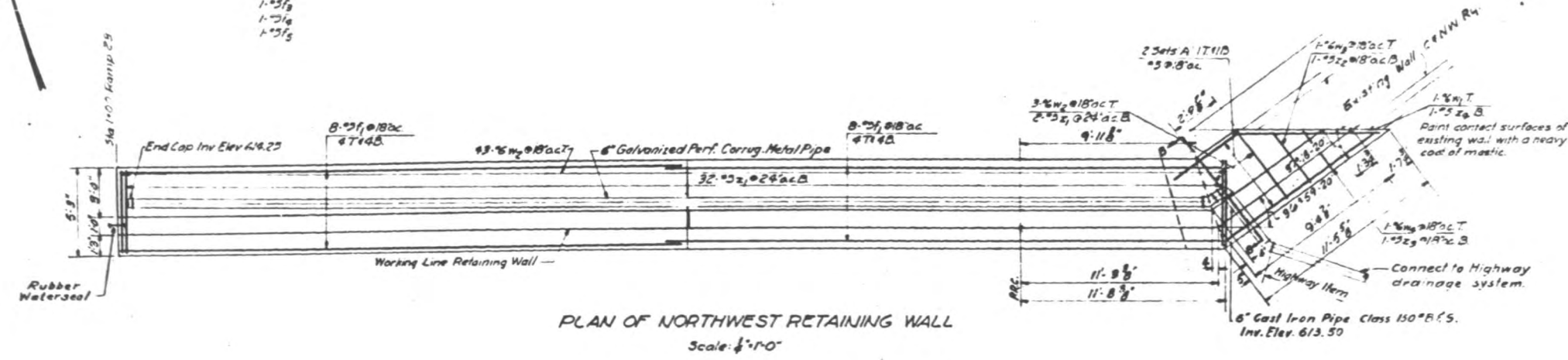
COMPUTED J.N.C. PROJECT U 265 (18)
DRAWN L.M.S. SCALE AS NOTED
CHECKED J.M.K. APPROVED

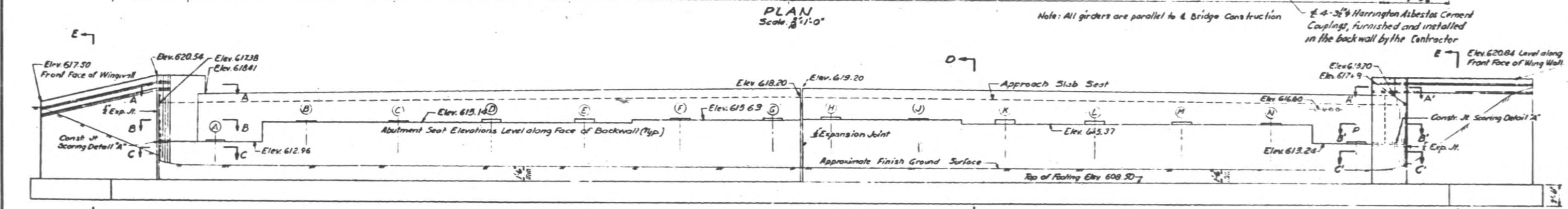
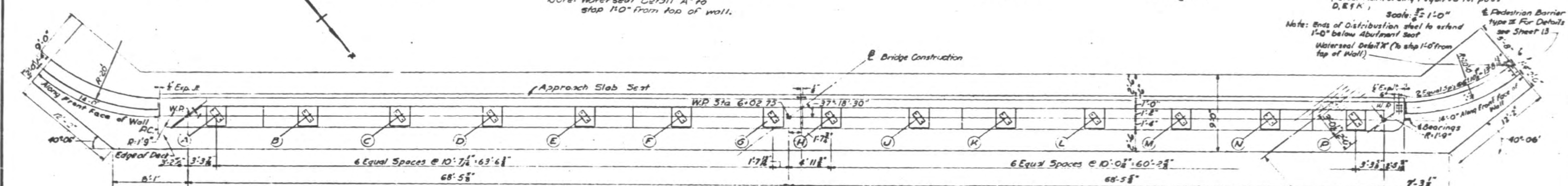
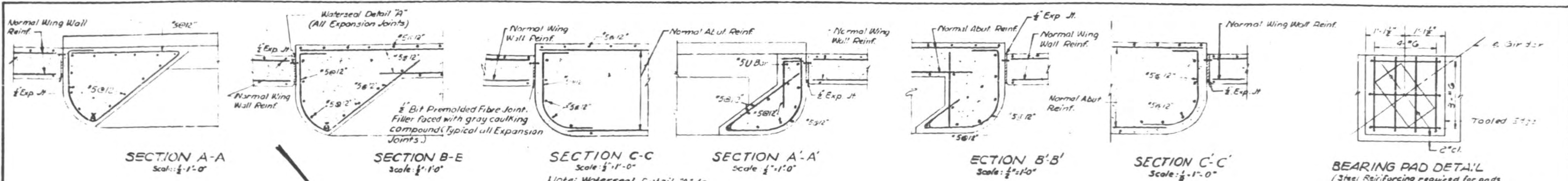
APPROVED: *Shay G. Hall*

Sheet No.	173	Sheet No.	267	Sheet No.	26	Total Sheets	102	Drawing No.	NW480-S
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REV. SPYFORD & THORNE, INC. ENGINEERS, BOSTON, MASS. - CHICAGO, ILL.

SET "A"
2 REQUIRED
1-312
1-313
1-314
1-315

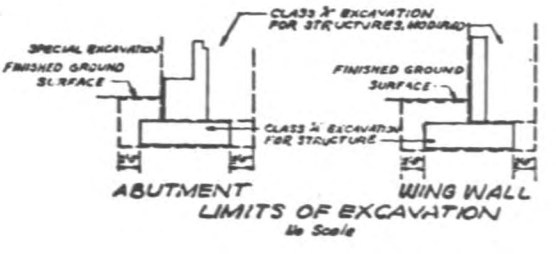
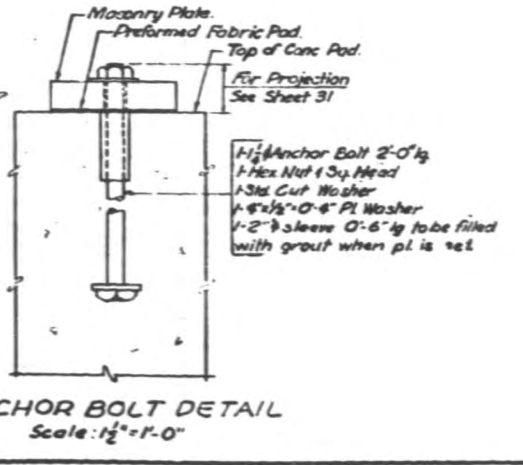
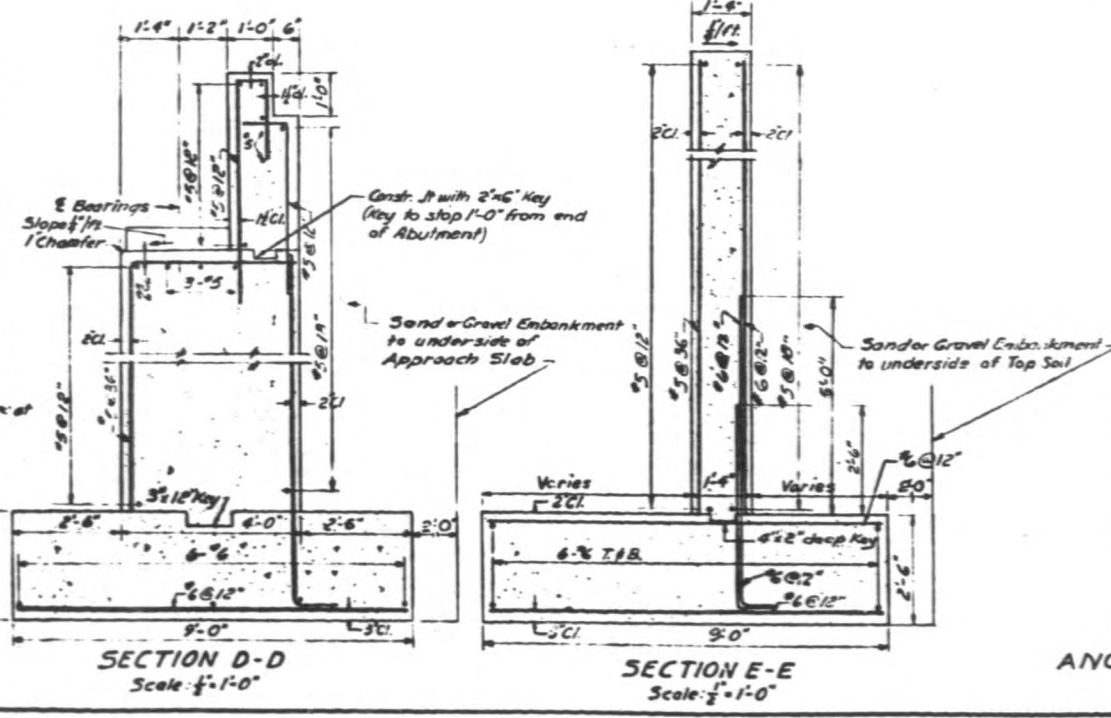




BEARING PAD ELEVATIONS

Girder	Elevation
A	613.13
B	615.31
C	615.44
D	615.96
E	615.68
F	615.01
G	615.92
H	615.91
J	615.83
K	615.76
L	615.68
M	615.61
N	615.54
D	615.41

Note: Elevations given at intersections of Girders and Bearings.



- CONSTRUCTION NOTES**
- All exposed corners to have 1/4" chamfer unless otherwise noted.
 - All bar splices to lap 20 diameters unless otherwise shown.
 - All bar embedments to be 20 diameters, unless otherwise shown.
 - Bearing pads shall be poured monolithically with seats to the elevation shown. If bush hammering or grinding is required it shall be done at no additional cost to the County.
 - For Check Wall Details, Waterseal Detail & Scoring Detail see Sheet 25.

Sec 267-1331-15D

BILL OF MATERIAL

CLASS X CONCRETE	354 CU YDS
REINFORCEMENT BARS	15,169 LBS.
CLASS X EXCAVATION FOR STRUCTURES	277 CU YDS
CLASS X EXCAVATION FOR STRUCTURES, MIN. OF 6" SAND OR GRAVEL ENCAIMENT	696 TONS

DEPARTMENT OF HIGHWAYS
COOK COUNTY, ILLINOIS

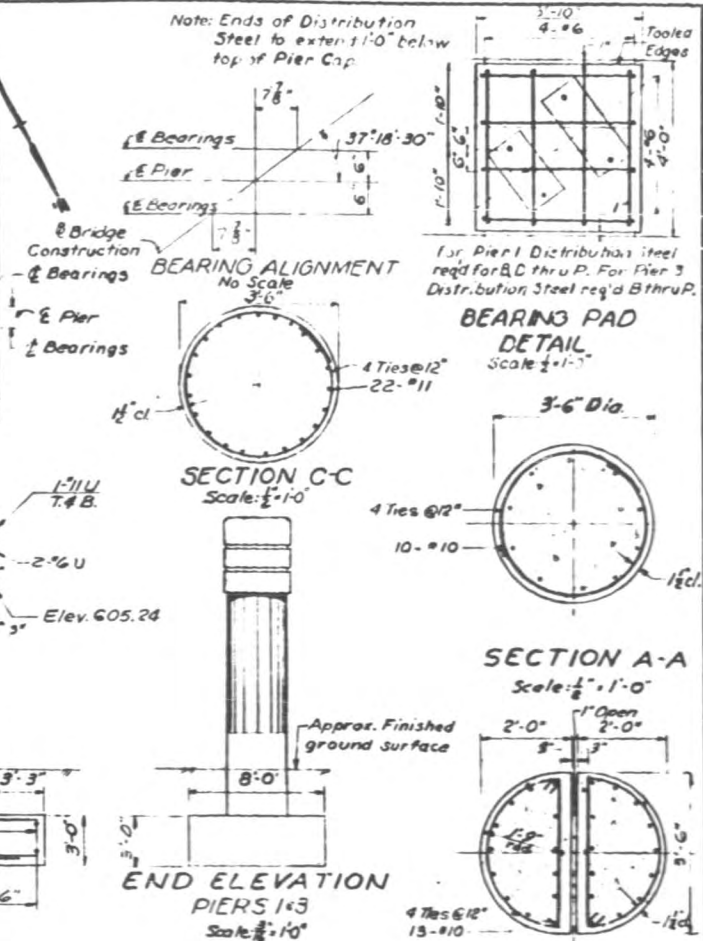
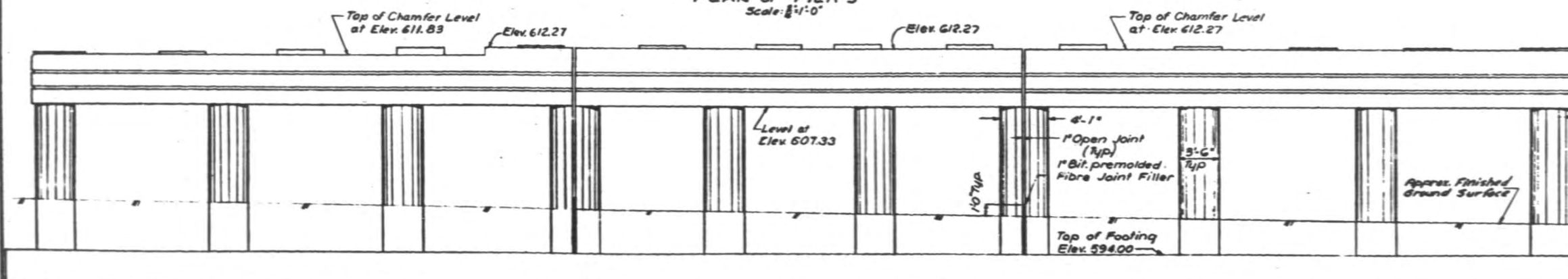
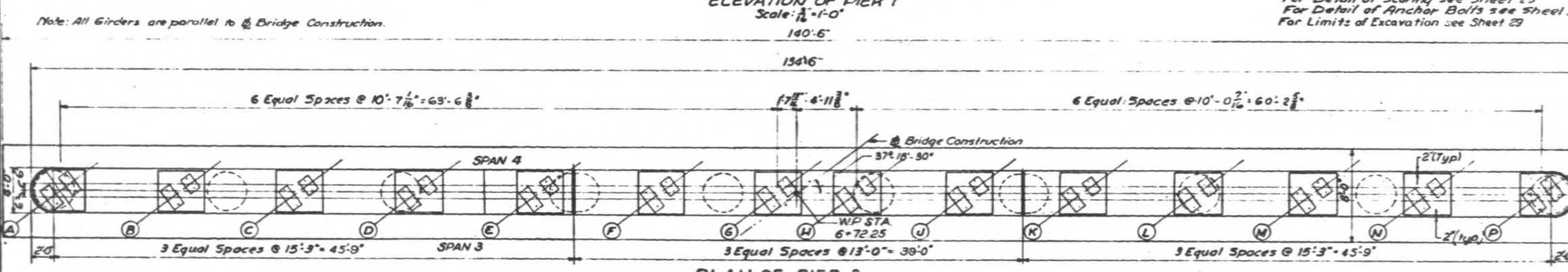
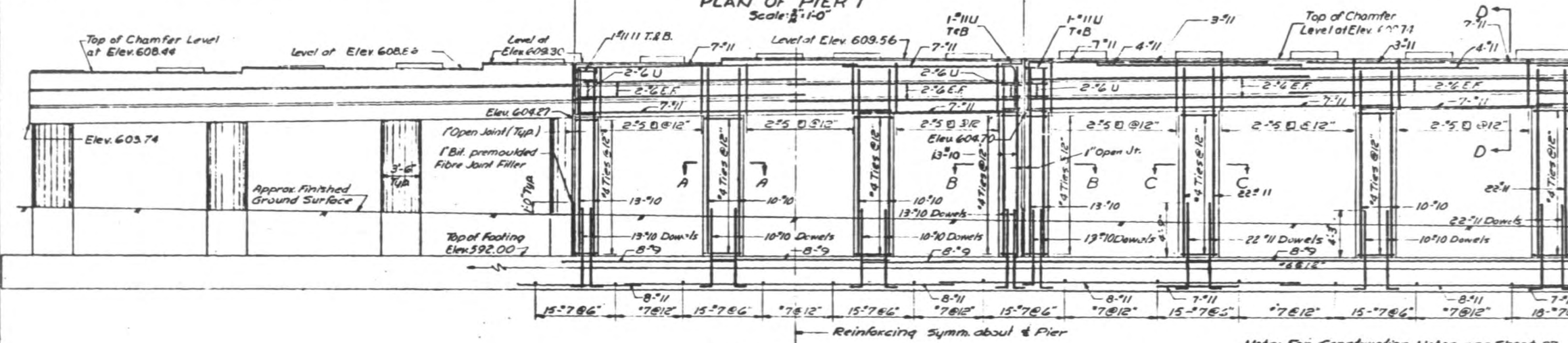
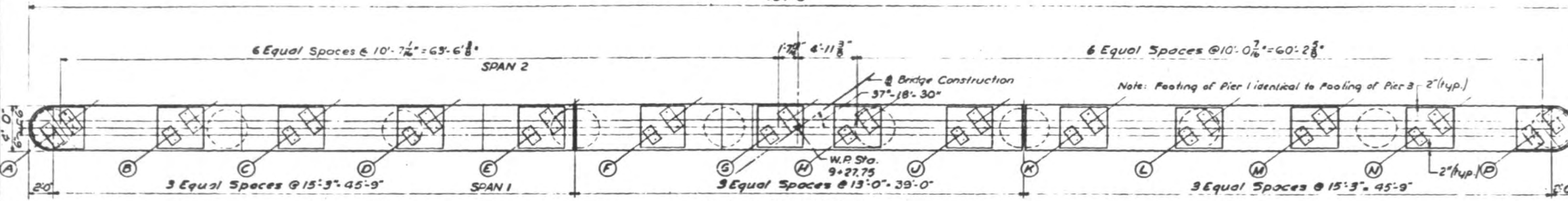
SOUTH ABUTMENT
W. FOSTER AVE. GRADE SEPARATION
OVER
NORTHWEST EXPRESSWAY

COMPUTE	AT	PROJECT	U-265(18)
DRAWN	BY	SCALE	AS NOTED
CHECKED	AT	APPROVED	DATE
173	267	27	122

REV. 6-11-53

REVISED BEARING PAD ELEVATIONS

GIRDER	PIER 1	PIER 3	SPAN 1	SPAN 2	SPAN 3	SPAN 4
A	608.68	608.61	612.00	612.11	612.17	612.35
B	608.87	612.17	609.18	612.35	609.40	612.51
C	609.18	612.35	609.40	612.65	609.89	612.80
D	609.40	612.65	610.12	612.94	610.18	612.94
E	609.89	612.80	610.22	612.89	610.26	612.89
F	610.12	612.94	610.29	612.78	610.32	612.72
G	610.18	612.94	610.33	612.63	610.41	612.55
H	610.22	612.89				
I	610.26	612.89				
J	610.29	612.78				
K	610.32	612.72				
L	610.33	612.63				
M	610.41	612.55				
N	610.41	612.66				



SEE ABOVE FOR REVISED ELEVATIONS

GIRDER	BEARING PAD ELEVATIONS			
	PIER 1	PIER 3	SPAN 3	SPAN 4
A	608.68	608.61	612.00	612.11
B	608.87	612.17	609.18	612.35
C	609.18	612.35	609.40	612.51
D	609.40	612.65	610.12	612.94
E	609.89	612.80	610.18	612.94
F	610.12	612.94	610.22	612.89
G	610.18	612.94	610.26	612.89
H	610.22	612.89	610.29	612.78
I	610.26	612.89	610.32	612.72
J	610.29	612.78	610.33	612.63
K	610.32	612.72	610.41	612.55
L	610.33	612.63		612.66

Note: Elevations given are at the intersection of Girders and Bearings

See 267-15131-150

BILL OF MATERIAL (2PIERS)	
CLASS X CONCRETE	541 CU YDS
REINFORCEMENT BARS	112,079 LBS
CLASS A EXCAVATION FOR STRUCTURES	835 CU YDS

DEPARTMENT OF HIGHWAYS
COOK COUNTY ILLINOIS

DANIEL RYAN
CHIEF ENGINEER

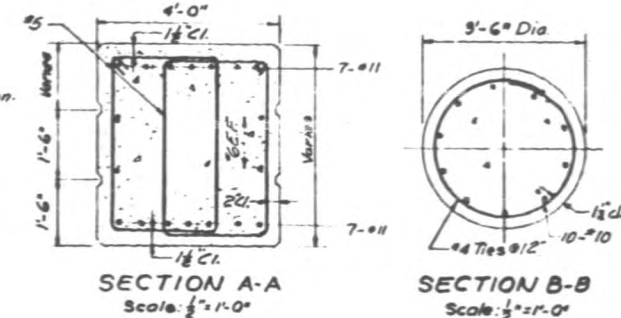
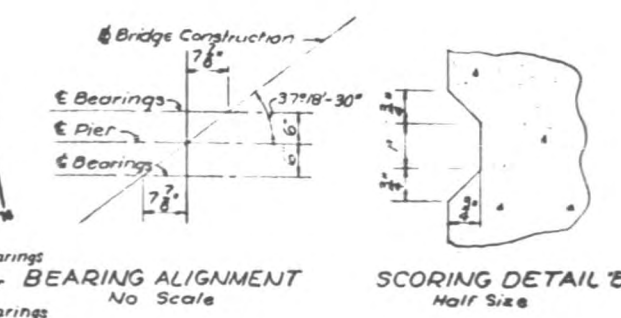
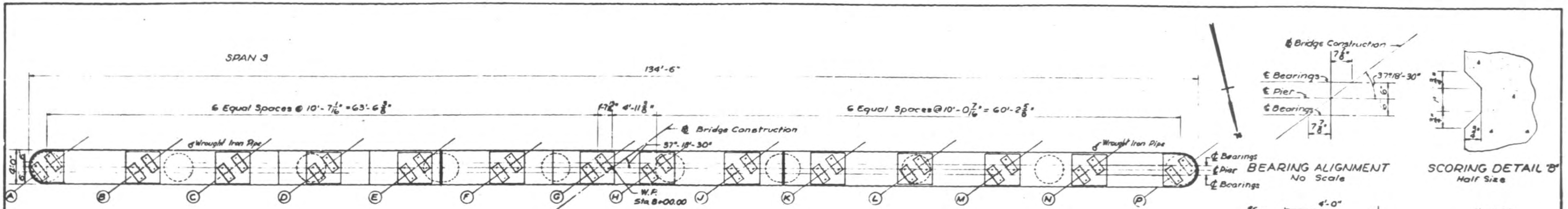
WILLIAM J. MORTIMER
CHIEF OF BUREAU OF HIGHWAYS

PIER DETAILS PART I
W. FOSTER AVE. GRADE SEPARATION
OVER
NORTHWEST EXPRESSWAY

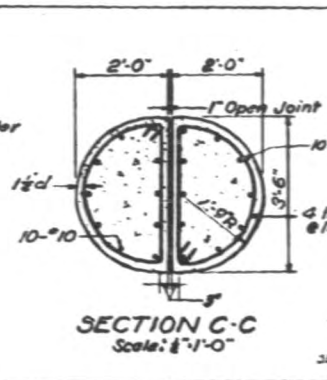
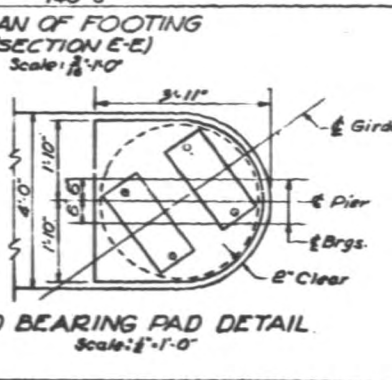
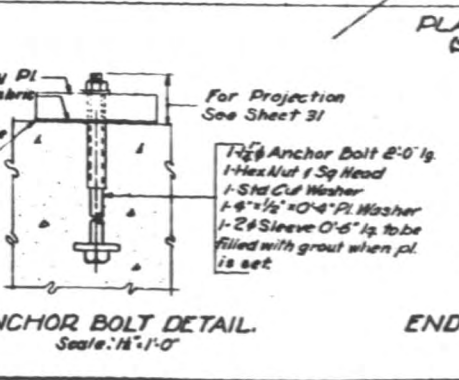
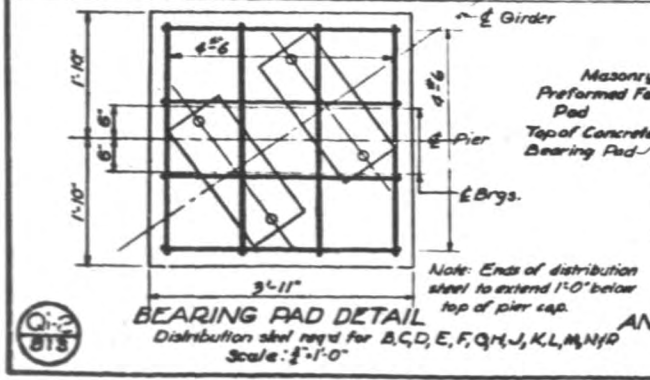
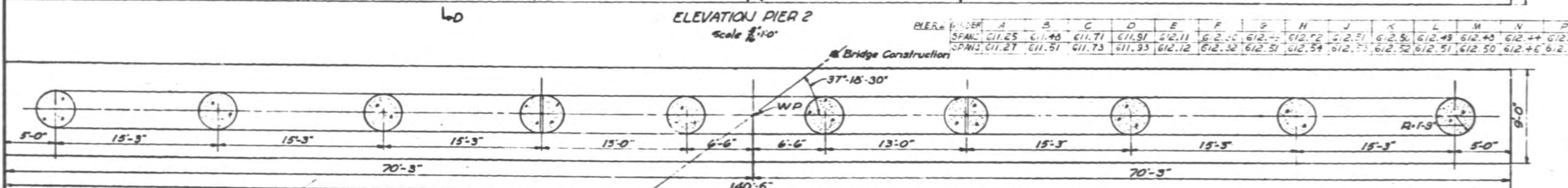
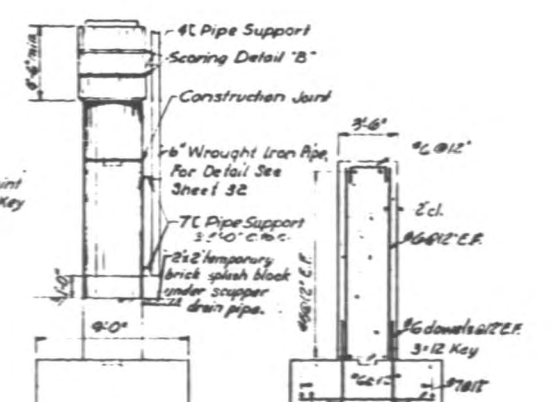
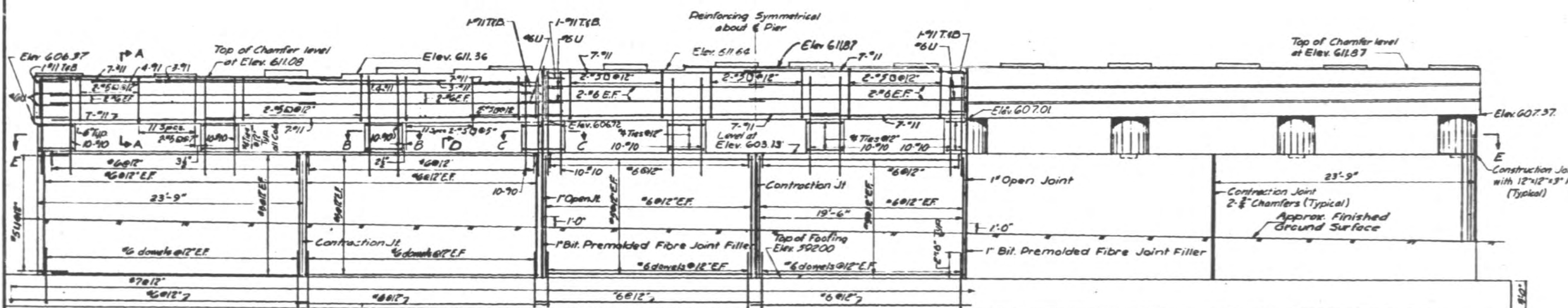
COMPUTED A.F.C.	PROJECT	U-265(10)
DRAWN R.E.	SCALE	AS NOTED
CHECKED A.F.C.	APPROVED	M.F.P.

APPROVED	ISSUED	STATE	SHEET	DATE	DRAWING
[Signature]	173	257	28	102	NK482-S

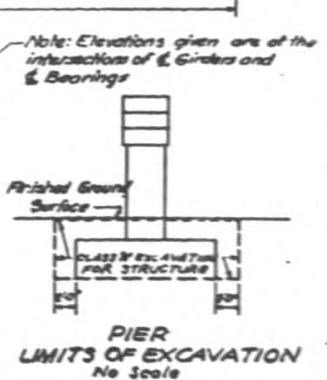
REV. 1-50



Note: All Girders are parallel to Bridge Construction.



GIRDER	SPAN 2	1	3
A	611.25		
B	611.48		
C	611.70		
D	611.90		
E	612.11		
F	612.29		
G	612.49		
H	612.52		
J	612.50		
K	612.49		
L	612.48		
M	612.48		
N	612.44		
P	612.40		



For Construction Notes, see Sheet 27

SEC. 267-13131-150

BILL OF MATERIAL

CLASS 'X' CONCRETE	440 CU. YDS.
REINFORCEMENT BARS	38,820 LBS.
CLASS 'X' EXCAVATION FOR STRUCTURE	536 CU. YDS.

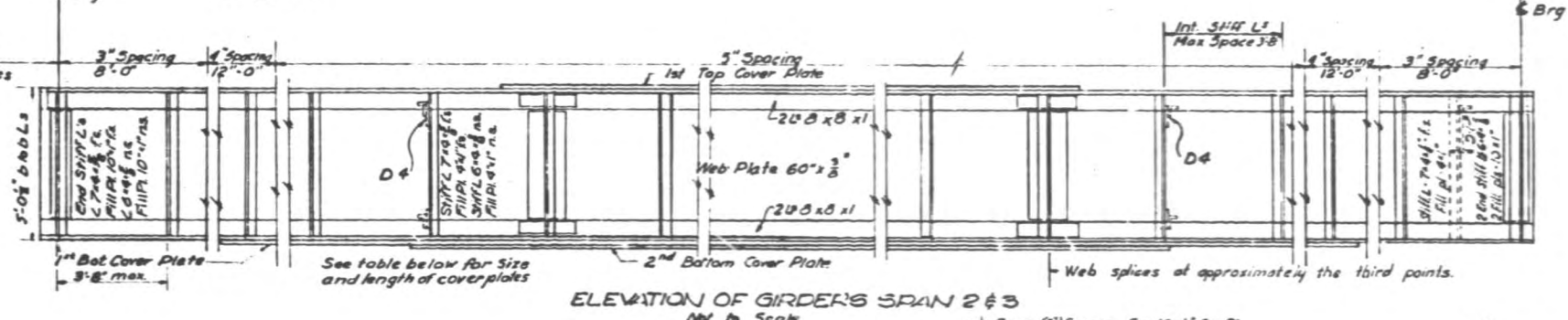
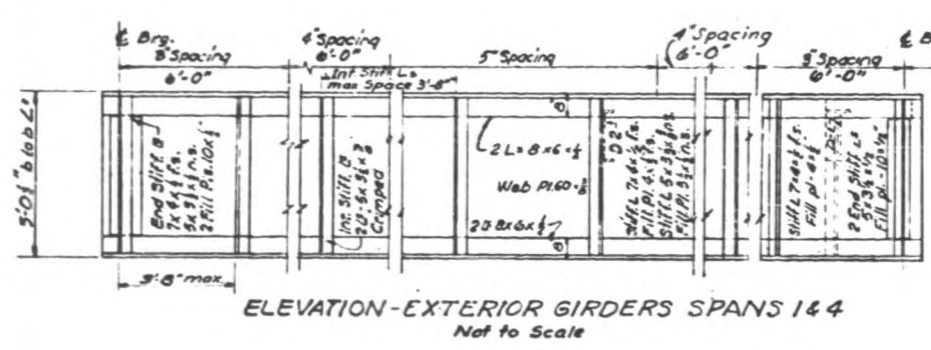
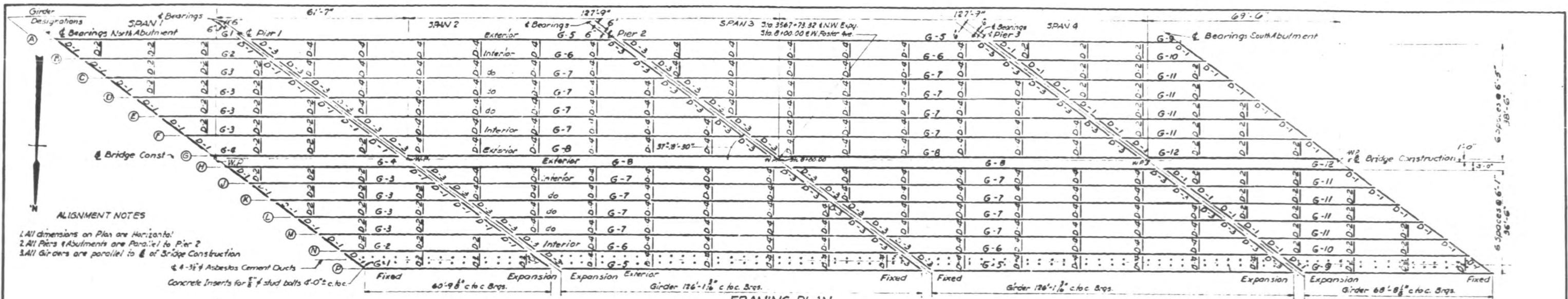
DEPARTMENT OF HIGHWAYS
COOK COUNTY, ILLINOIS

DANIEL RYAN
WILLIAM J. MORTIMER

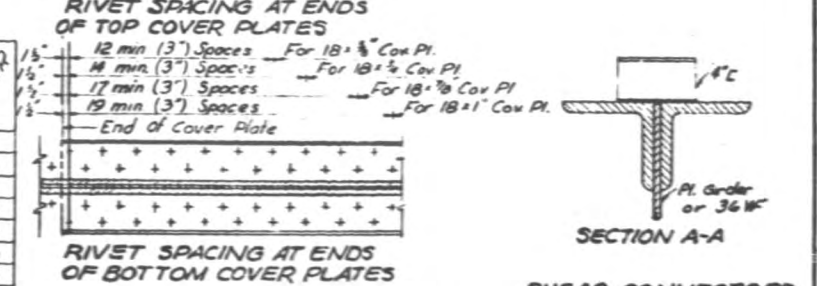
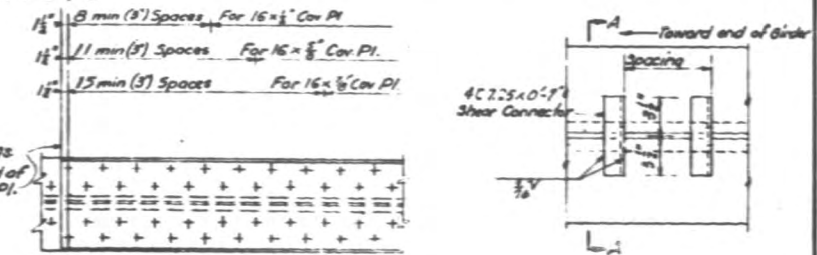
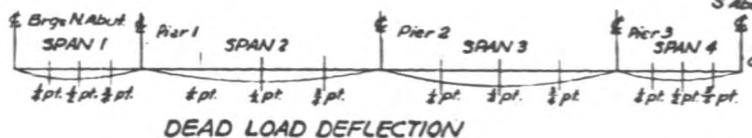
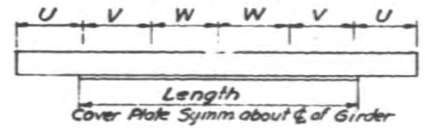
PIER DETAILS PART II
W. FOSTER AVE. GRADE SEPARATION
OVER
NORTHWEST EXPRESSWAY

COMPUTED	AFC	PROJECT	U-265 (18)
DRAWN	CAK	SCALE	AS NOTED
CHECKED	AFC	APPROVED	[Signature]
DATE	1/15/57	SHEET NO.	173
DATE	1/15/57	SHEET NO.	267
DATE	1/15/57	SHEET NO.	29
DATE	1/15/57	SHEET NO.	102
DATE	1/15/57	SHEET NO.	NW483-5

SEE ABOVE FOR REVISED ELEVATIONS



SCHEDULE OF GIRDER COVER PLATES AND SHEAR CONNECTORS



SHEAR CONNECTORS

Sec 267-13.3-1-15D Scale 1/4" = 1'-0"

SPACING OF L SHEAR CONNECTORS

MARK	REQD	SIZE	COVER PLATE			NUMBER
			U	V	W	
SPAN 1	G1	PI	10'-0"	10'-0"	10'-0"	1/8
	G2	36 WF 150	8'-0"	8'-0"	8'-0"	1 1/8
	G3	36 WF 150	8'-0"	8'-0"	8'-0"	1 1/8
	G4	36 WF 150	8'-0"	8'-0"	8'-0"	1 1/8
SPAN 2	G5	PI Gr.	-	-	-	3 3/8
	G6	36 WF 150	8'-0"	8'-0"	8'-0"	4 3/8
	G7	36 WF 150	8'-0"	8'-0"	8'-0"	4 3/8
	G8	36 WF 150	8'-0"	8'-0"	8'-0"	4 3/8
SPAN 3	G9	PI Gr.	-	-	-	3 3/8
	G10	36 WF 150	8'-0"	8'-0"	8'-0"	1 1/8
	G11	36 WF 150	8'-0"	8'-0"	8'-0"	1 1/8
	G12	36 WF 150	8'-0"	8'-0"	8'-0"	1 1/8
SPAN 4	G13	PI Gr.	-	-	-	3 3/8
	G14	36 WF 150	8'-0"	8'-0"	8'-0"	1 1/8
	G15	36 WF 150	8'-0"	8'-0"	8'-0"	1 1/8
	G16	36 WF 150	8'-0"	8'-0"	8'-0"	1 1/8

GIRDER DEAD LOAD DEFLECTION

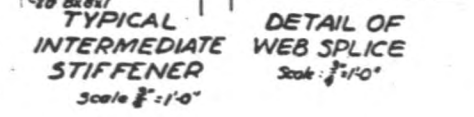
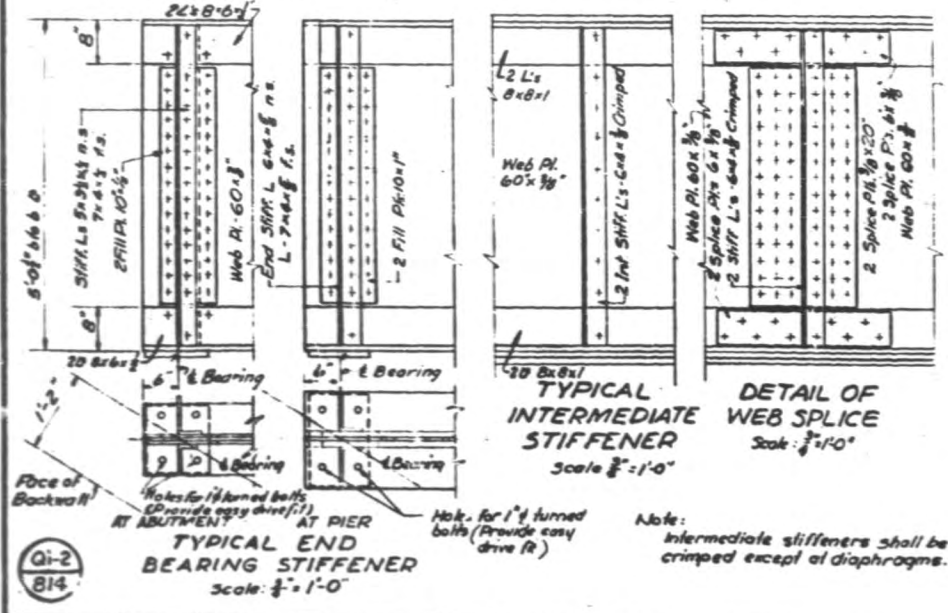
MARK	REQD	SIZE	COVER PLATE SIZE	LENGTH	SPAN 1				SPAN 2				SPAN 3				SPAN 4				NUMBER
					1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	
G1	2	PI	SEE BELOW	44'-0"	1/2	1/2	1/2	-	-	-	-	-	-	-	-	-	-	-	1/8		
G2	2	36 WF 150	8' x 1/2"	44'-0"	1/2	1/2	1/2	-	-	-	-	-	-	-	-	-	-	-	1 1/8		
G3	2	36 WF 150	8' x 1/2"	45'-0"	3/4	1 1/4	3/4	-	-	-	-	-	-	-	-	-	-	-	1 1/8		
G4	2	36 WF 150	8' x 1/2"	45'-0"	3/4	1 1/4	3/4	-	-	-	-	-	-	-	-	-	-	-	1 1/8		
G5	4	PI Gr.	SEE BELOW	-	-	-	-	3 3/8	3 3/8	2 3/8	2 3/8	3 3/8	2 3/8	-	-	-	-	-	4 3/8		
G6	4	PI Gr.	SEE BELOW	-	-	-	-	3 3/8	3 3/8	2 3/8	2 3/8	3 3/8	2 3/8	-	-	-	-	-	4 3/8		
G7	16	PI Gr.	SEE BELOW	-	-	-	-	2 3/8	3 3/8	2 3/8	2 3/8	3 3/8	2 3/8	-	-	-	-	-	4 3/8		
G8	4	PI Gr.	SEE BELOW	-	-	-	-	2 3/8	4	2 3/8	2 3/8	4	2 3/8	-	-	-	-	-	3 3/8		
G9	2	PI Gr.	SEE BELOW	-	-	-	-	-	-	-	-	-	-	3 3/8	1 1/8	3/4	1 1/8	-	1 1/8		
G10	2	36 WF 150	8' x 1/2"	51'-0"	-	-	-	-	-	-	-	-	-	1 1/8	1 1/8	1 1/8	1 1/8	-	2		
G11	2	36 WF 150	10' x 1/2"	54'-0"	-	-	-	-	-	-	-	-	-	1 1/8	1 1/8	1 1/8	1 1/8	-	1 1/8		
G12	2	36 WF 150	8' x 1/2"	49'-0"	-	-	-	-	-	-	-	-	-	1 1/8	1 1/8	1 1/8	1 1/8	-	1 1/8		

GIRDER TOP COVER PLATES BOTTOM COVER PLATES

GIRDER	TOP COVER PLATES		BOTTOM COVER PLATES	
	1st	2nd	1st	2nd
G-1	-	-	-	-
G-2	16' x 25'-0"	16' x 20'-0"	18' x 20'-0"	18' x 20'-0"
G-3	16' x 25'-0"	-	18' x 20'-0"	18' x 20'-0"
G-4	16' x 25'-0"	-	18' x 20'-0"	18' x 20'-0"
G-5	16' x 25'-0"	-	18' x 20'-0"	18' x 20'-0"
G-6	16' x 25'-0"	-	18' x 20'-0"	18' x 20'-0"
G-7	16' x 25'-0"	-	18' x 20'-0"	18' x 20'-0"
G-8	16' x 25'-0"	-	18' x 20'-0"	18' x 20'-0"
G-9	-	-	-	-

Note: Stud shear connectors may be substituted for the channel shear connectors with the approval of the County. 4-3/8" studs are required for each channel.

For Structural Notes See Sheet 32



Note: Intermediate stiffeners shall be crimped except at diaphragms.

Sec 267-13.3-1-15D Scale 1/4" = 1'-0"

DEPARTMENT OF HIGHWAYS
COOK COUNTY, ILLINOIS

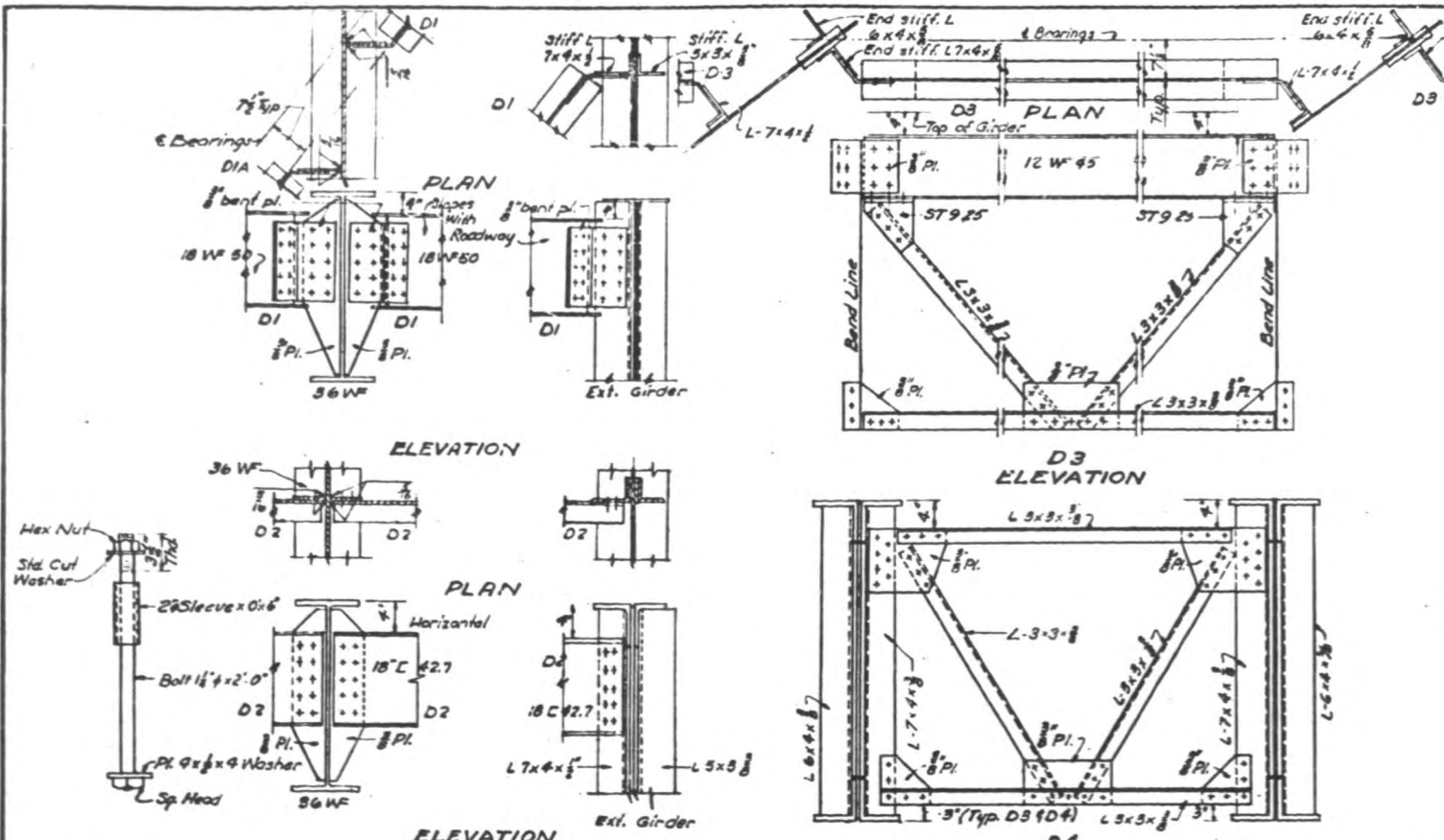
DANIEL RYAN
WILLIAM J. MORTIMER

FRAMING PLAN AND DETAILS
W. FOSTER AVE. GRADE SEPARATION
OVER
NORTHWEST EXPRESSWAY

COMPUTED F.E.D. PROJECT U-263 (13)
DRAWN S. K. R. SCALE AS NOTED
CHECKED F.E.D. APPROVED W. J. P.

APPROVED AND WITNESSED
173 267 30 102 NW 4845

MR. SPYBROOK & THORNTON, INC. ENGINEERS, BOSTON, MASS. CHICAGO, ILL.

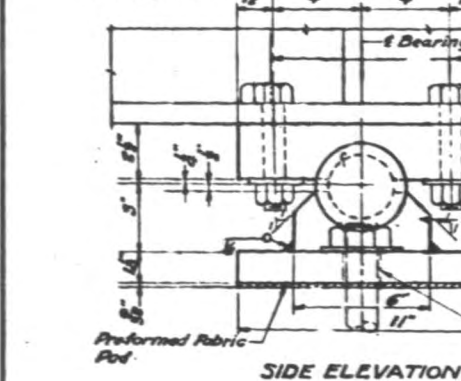


ELEVATION TOP OF GIRDERS & CONCRETE SLAB

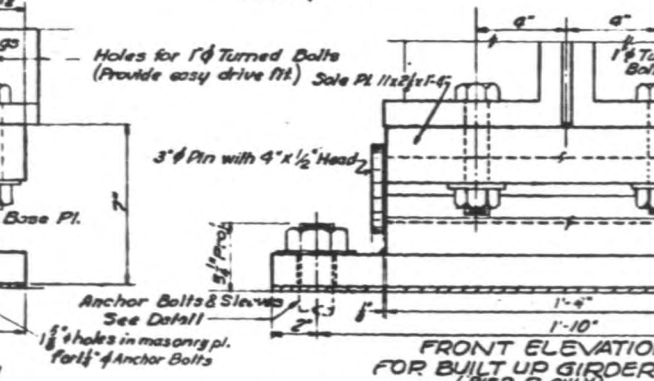
E	Location Top of	E. Brg. N. Abut.	E. Brg. Point	E. Brg. Point	E. Brg. Point	E. Brg. Pier 1 Span 1	E. Brg. Pier 1 Span 2	E. Brg. Pier 2 Span 2	E. Brg. Pier 2 Span 3	E. Brg. Pier 3 Span 3	E. Brg. Pier 3 Span 4	E. Brg. Pier 4 Span 4	E. Brg. Pier 4 Span 5	E. Brg. Pier 5 Span 5	E. Brg. Pier 5 Span 6	E. Brg. Pier 6 Span 6
A	Sidewalk	615.718	615.969	616.089	616.375	616.670	616.701	617.280	617.914	618.303	618.743	618.770	619.158	619.522	619.931	620.795
B	Girder	613.354	614.233	614.483	614.709	614.916	614.934	615.220	615.705	615.643	615.901	615.923	617.308	618.034	618.171	618.248
C	Slab	614.935	615.222	615.313	615.807	616.032	616.122	616.676	617.186	617.652	618.079	618.094	618.469	618.799	619.083	619.334
D	Girder	613.996	614.345	614.661	614.933	615.172	615.194	615.449	615.529	615.868	617.133	617.154	617.709	618.189	618.347	618.432
E	Slab	615.484	615.738	616.021	616.314	616.587	616.616	617.147	617.633	618.073	618.472	618.492	618.842	619.148	619.410	619.627
F	Girder	615.271	615.118	615.420	615.634	615.930	615.897	616.534	617.053	617.512	617.763	617.773	618.278	618.700	619.147	619.508
G	Slab	615.679	615.997	616.283	616.562	616.829	616.858	617.377	617.851	618.281	618.686	618.685	619.024	619.318	619.568	619.773
H	Girder	615.022	615.377	615.684	615.942	616.152	616.139	616.814	617.403	617.718	617.947	617.965	618.461	618.870	619.005	619.254
I	Slab	615.963	616.255	616.537	616.809	617.070	617.088	617.605	618.067	618.485	618.859	618.877	619.204	619.486	619.724	619.918
J	Girder	615.290	615.643	615.944	616.197	616.403	616.379	617.066	617.649	617.946	618.140	618.158	618.665	619.078	619.155	619.199
K	Slab	616.035	616.324	616.602	616.870	617.128	617.155	617.655	618.111	618.520	618.887	618.905	619.499	619.729	619.895	619.999
L	Girder	615.358	615.712	616.009	616.258	616.461	616.436	617.116	617.693	617.981	618.168	618.185	618.635	619.081	619.190	619.195
M	Slab	616.097	616.390	616.653	616.916	617.168	617.194	617.683	618.127	618.526	618.881	618.899	619.207	619.470	619.630	619.664
N	Girder	615.430	615.760	616.052	616.276	616.501	616.475	617.120	617.679	617.963	618.162	618.180	618.644	619.022	619.127	619.145
O	Slab	616.156	616.433	616.701	616.953	617.207	617.222	617.708	618.141	618.529	618.873	618.889	619.186	619.439	619.647	619.610
P	Girder	615.483	615.813	616.100	616.339	616.540	616.503	617.145	617.693	617.966	618.154	618.170	618.623	618.991	619.084	619.091
Q	Slab	616.212	616.484	616.746	616.998	617.239	617.265	617.731	618.152	618.529	618.861	618.878	619.134	619.304	619.304	619.304
R	Girder	615.345	615.664	615.945	616.179	616.372	616.346	617.004	617.556	618.042	618.459	618.472	618.800	619.056	619.239	619.234
S	Slab	616.265	616.532	616.793	617.035	617.271	617.296	617.750	618.160	618.526	618.847	618.863	619.137	619.367	619.532	619.532
T	Girder	615.338	615.612	615.874	616.108	616.301	616.275	617.187	617.712	618.128	618.444	618.464	618.774	619.033	619.155	619.223
U	Sidewalk	617.184	617.446	617.697	617.938	618.159	618.193	618.636	619.035	619.389	619.699	619.714	619.978	620.196	620.370	620.500
V	Girder	615.645	615.965	616.239	616.457	616.633	616.584	617.199	617.737	618.092	618.309	618.324	618.896	619.333	619.691	619.970
W	Sidewalk	617.450	617.714	617.952	618.187	618.412	618.436	618.868	619.256	619.599	619.897	619.912	620.161	620.371	620.534	620.652
X	Girder	616.695	615.893	616.241	616.464	616.655	616.589	617.208	617.748	618.193	618.580	618.605	618.504	618.883	618.874	618.905

Elevation top of type II Bituminous Concrete Surfacing are 2" higher than top of concrete slab Elevations shown.

DETAIL OF ANCHOR BOLT Scale: 1/2"=1'-0"



TYPICAL DIAPHRAGM CONNECTIONS Scale: 1/2"=1'-0"



ESTIMATED WEIGHT OF SOLE, BASE & MASONRY PLATES

MATERIAL	No. Req'd	Weight
Sole Pls.	28	3480 lbs
Base Pls.	28	2090 -
Pins	28	990 -
Masonry Pls.	28	2860 -
1" Turned Bolts	112	216 -
Cut Washers	112	25 -
Total		9661 lbs

ESTIMATED WEIGHT OF SOLE, BASE & MASONRY PLATES

MATERIAL	No. Req'd	Weight
Sole Pls.	28	2170 lbs
Base Pls.	28	1303 -
Pins	28	666 -
Masonry Pls.	28	2188 -
1" Turned Bolts	112	216 -
Cut Washers	112	25 -
Total		6368 lbs

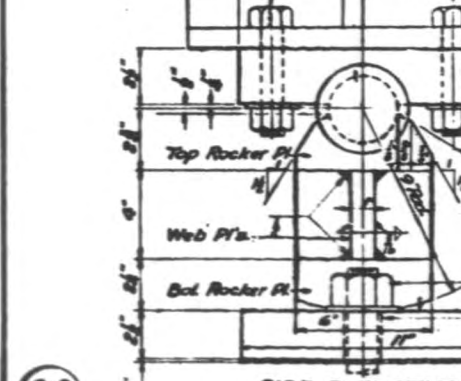
ESTIMATED WEIGHT OF SOLE & MASONRY PLATES & ROCKERS

MATERIAL	No. Req'd	Weight
Sole Pls.	28	2170 lbs
Rockers	28	2840 -
Masonry Pls.	28	4375 -
Pins	28	666 -
1" Turned Bolts	112	216 -
Cut Washers	112	25 -
Dowels	56	29 -
Total		10361 lbs

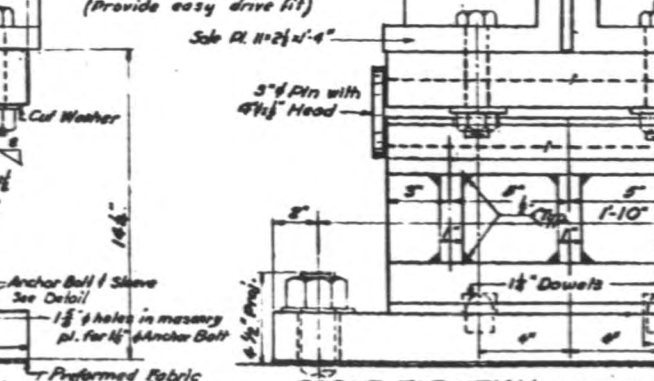
ESTIMATED WEIGHT OF STRUCTURAL STEEL

Furnishing	R7	1829 000 lbs.
Structural Steel	R73	123 900 -
Total Weight		1,952 900 -

FRONT ELEVATION FOR BUILT UP GIRDERS (PIERS 2 ONLY) FIXED BEARING SHOE DETAILS Scale: 3/4"=1'-0"



FRONT ELEVATION FOR ROLLED AND FASCIA GIRDERS (SPANS 1 & 4 ONLY) Scale: 3/4"=1'-0"



ESTIMATED WEIGHT OF SOLE & MASONRY PLATES & ROCKERS

MATERIAL	No. Req'd	Weight
Sole Pls.	28	3480 lbs
Rockers	28	4590 -
Masonry Pls.	28	5690 -
Pins	28	990 -
1" Turned Bolts	112	216 -
Cut Washers	112	25 -
Dowels	56	29 -
Total		15020 lbs

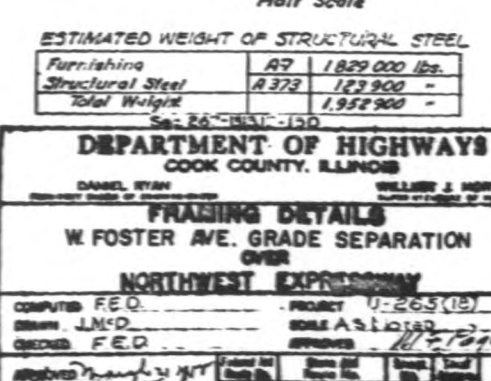
ESTIMATED WEIGHT OF SOLE & MASONRY PLATES & ROCKERS

MATERIAL	No. Req'd	Weight
Sole Pls.	28	2170 lbs
Rockers	28	2840 -
Masonry Pls.	28	4375 -
Pins	28	666 -
1" Turned Bolts	112	216 -
Cut Washers	112	25 -
Dowels	56	29 -
Total		10361 lbs

ESTIMATED WEIGHT OF BEARINGS

MATERIAL	No. Req'd	Weight
1/2" Anchor Bolts	224	2173 lbs
2" Dia. Washers	224	457 -
Cut Washers	224	66 -
2" Pipe Sleeves	224	401 -
Sole & Bearing Pls. and rockers		41,610 -
Total Weight		44,747 lbs

DETAIL OF DOWEL Half Scale



FRONT ELEVATION FOR BUILT UP GIRDERS - SPANS 2 & 3 EXPANSION BEARING SHOE DETAILS Scale: 3/4"=1'-0"



FRONT ELEVATION FOR ROLLED AND FASCIA GIRDERS, SPANS 1 & 4 Scale: 3/4"=1'-0"



DEPARTMENT OF HIGHWAYS
COOK COUNTY, ILLINOIS

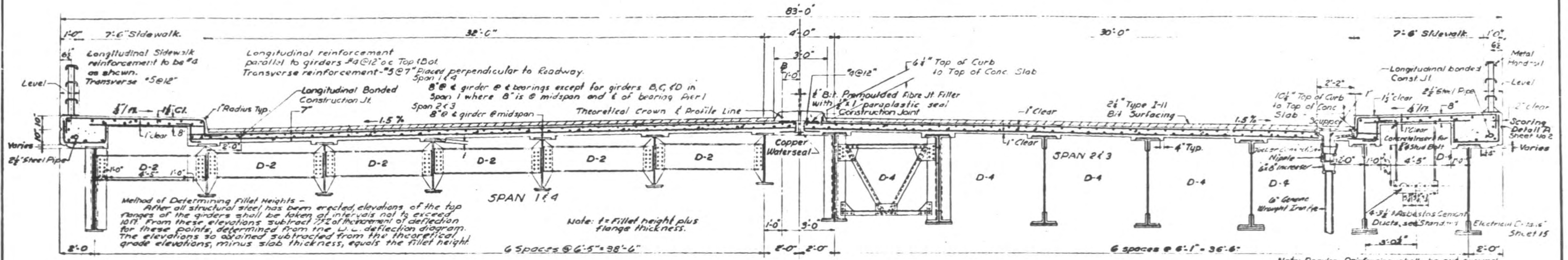
DANIEL WYAN
WILLIAM J. MONTGOMERY

FRASING DETAILS
W FOSTER AVE. GRADE SEPARATION
OVER
NORTHWEST EXPRESSWAY

COMPUTED F.E.D. PROJECT U-265 (15)
DRAWN J.M.C. SCALE AS SHOWN
CHECKED F.E.D. APPROVED [Signature]

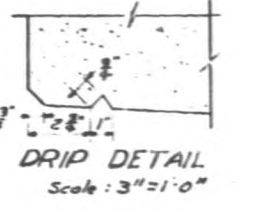
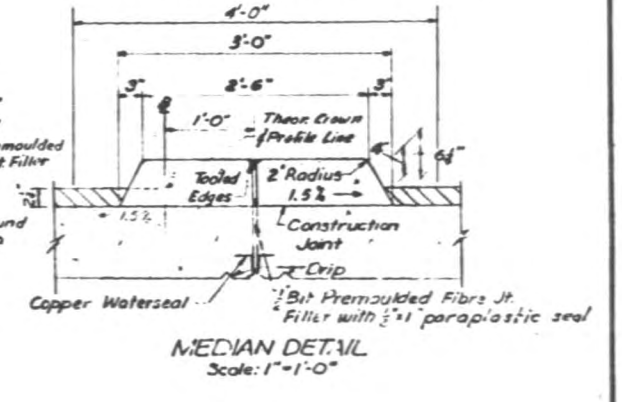
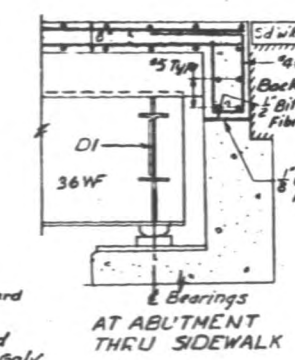
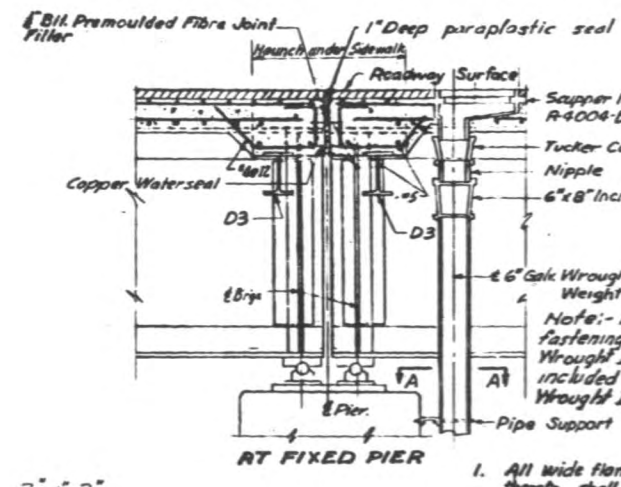
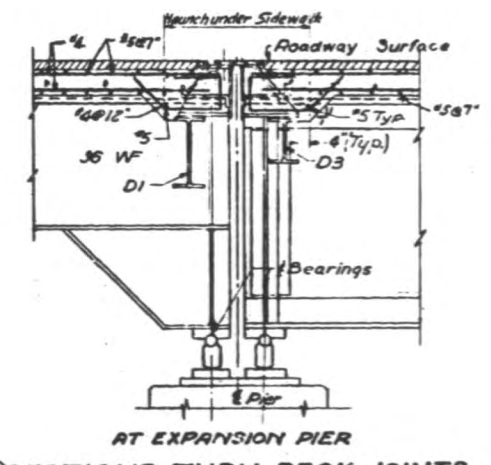
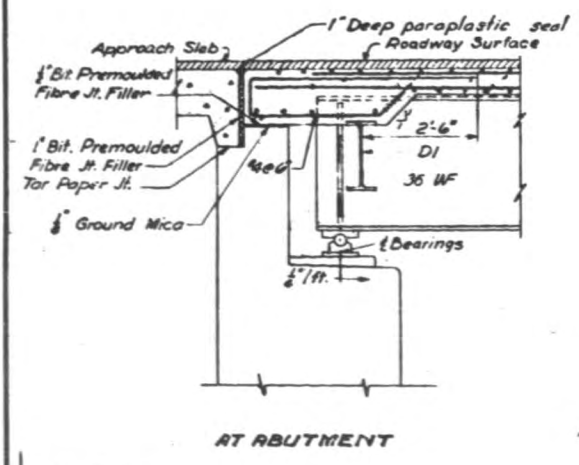
173 267 31 10C NW485-S

DR. GEORGE B. THOMAS, INC. ENGINEERS, CHICAGO, ILL. DRACON, ILL.



CROSS SECTION OF DECK (Looking West)
Scale: 1/2"=1'-0"

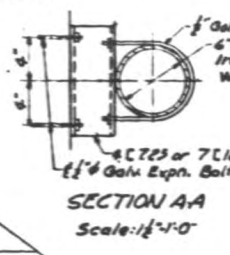
Note: Regular Reinforcing shall be cut around scupper. Extra Reinforcing shall be provided.



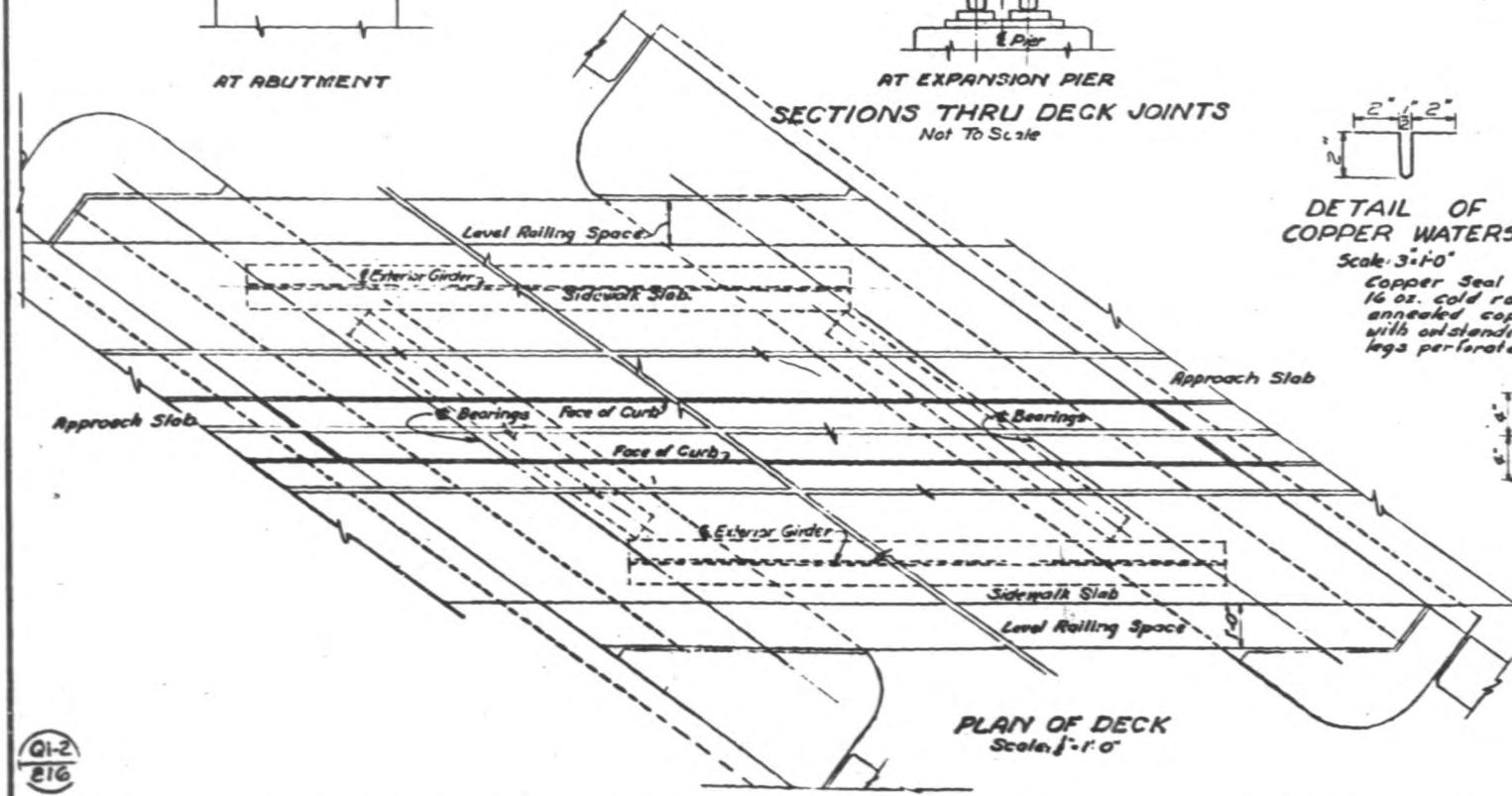
SECTIONS THRU DECK JOINTS
Not To Scale

DETAIL OF COPPER WATERSEAL
Scale: 3"=1'-0"

Copper Seal Shall be 16 oz. cold rolled annealed copper with outstanding legs perforated



- STRUCTURAL NOTES.**
- All wide flange girders and cover plates for over thickness welded thereto shall conform to the requirements of Specifications for Structural Steel for Welding, A.S.T.M. designation A 373. All other structural steel shall conform to A.S.T.M. Specification A 7.
 - All rivets 3/4", holes 1 1/8".
 - 8" High Strength Bolts may be used instead of rivets for all field connections.
 - Welding shall conform to the current Specifications of the American Welding Society for Highway and Railway Bridges.
 - Contact surfaces of shop welded or shop riveted structural steel shall not be painted. See Specifications concerning inaccessible surfaces. Top of girders that are to have concrete placed in contact with them shall not be painted.
 - Structural Steel shall be inspected by the Illinois Division of Highways before painting.
 - The girders shall be cambered for the dead load deflection and the vertical curve of the roadway.
 - Splicing of the flange angles by welding will be permitted within 8 feet of the 6" or end bearings.
 - The structural steel shall be given one shop coat of red lead paint by the Steel Fabricator and two field coats of aluminum paint by the General Contractor.
 - The Steel Fabricator shall furnish an anchor bolt setting plan.
 - The Steel Fabricator shall furnish at the site all structural steel, as beams, diaphragms, bearings, bolts and all preformed fabric pads.
 - The general Contractor shall erect all structural steel.



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

SEC 267-1313.1-15D

BILL OF MATERIAL.	
CLASS X CONCRETE	938 CU YDS
REINFORCEMENT BARS	180,577 LBS
BITUMINOUS MATERIAL (PRIME COAT)	273 GALS
BITUMINOUS CONCRETE BINDER COURSE	200 TONS
BITUMINOUS CONCRETE SURFACE COURSE FINE DENSE GRADED AGGREGATE TYPE 3 (BULK) 1-1/2	1485 TONS
SCUPPERS NEENAH PIER-4004-B, OR EQUAL	2 EA
6" WROUGHT IRON STANDARD WEIGHT PIPE	34 LIN. FT.
TYPE 4 MEDIAN (MODIFIED ON STRUCTURE)	3358 LIN. FT.

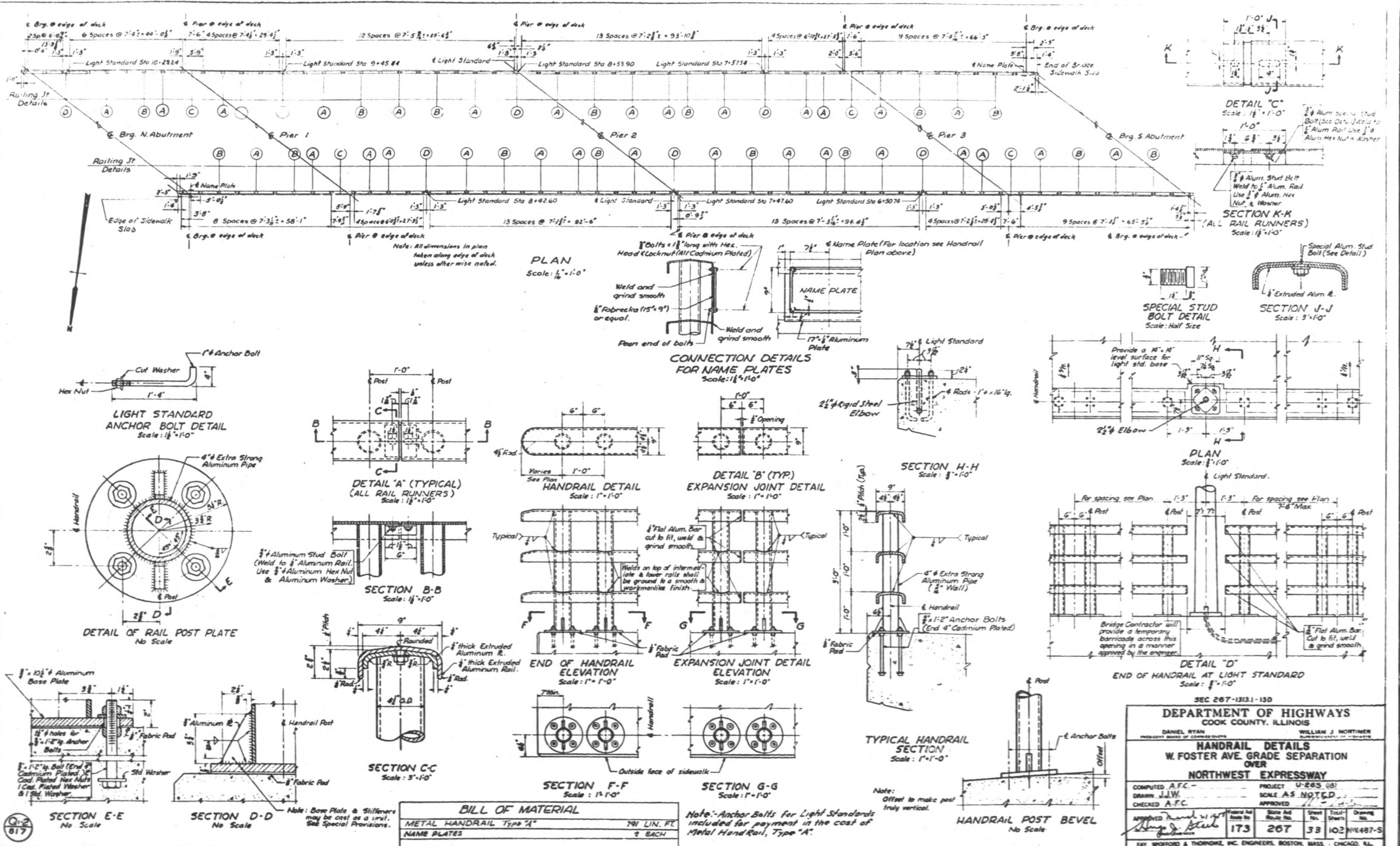
DEPARTMENT OF HIGHWAYS
COOK COUNTY, ILLINOIS

DANIEL RYAN
WILLIAM J. MORTIMER

CROSS SECTION AND DETAILS
W. FOSTER AVE. GRADE SEPARATION
OVER
NORTHWEST EXPRESSWAY

COMPUTED M.A.M.	PROJECT U-265 (18)
DRAWN J.M.E.	SCALE AS NOTED
CHECKED F.E.D.	APPROVED
APPROVED [Signature]	DATE 1/15/57
DATE 1/15/57	173
DATE 1/15/57	267
DATE 1/15/57	32 102 NIM 4866

BY: BRIDGES & THORNDIKE, INC. ENGINEERS, BOSTON, MASS. - CHICAGO, ILL.



SEC 267-1313.1-15D

DEPARTMENT OF HIGHWAYS
COOK COUNTY, ILLINOIS

DANIEL RYAN
PRESIDENT BOARD OF COMMISSIONERS

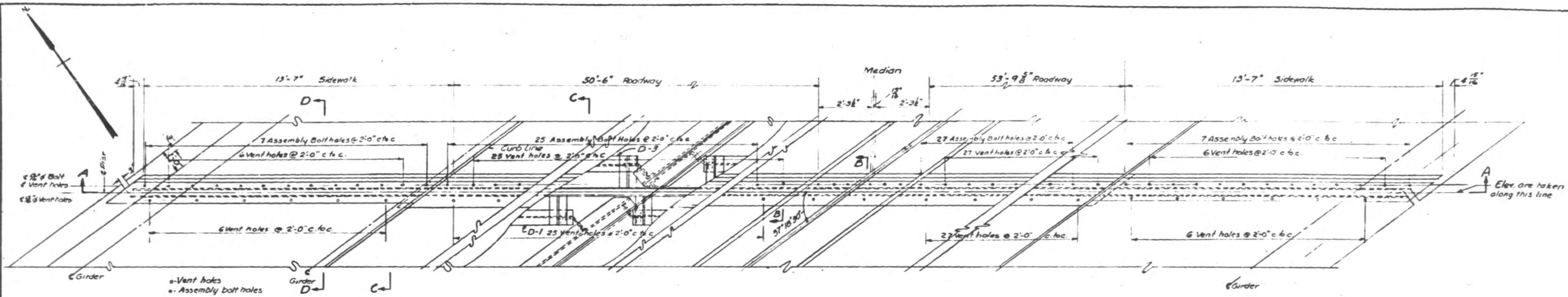
WILLIAM J. MORTIMER
COUNTY CLERK

HANDRAIL DETAILS
W. FOSTER AVE. GRADE SEPARATION
OVER
NORTHWEST EXPRESSWAY

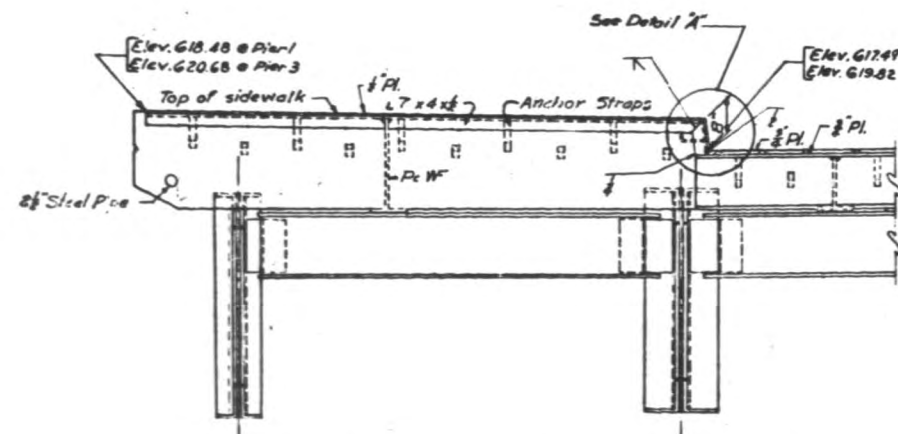
COMPUTED A.F.C.	PROJECT U-265 (18)
DRAWN J.J.W.	SCALE AS NOTED
CHECKED A.F.C.	APPROVED

APPROVED <i>[Signature]</i>	Sheet No.	Total Sheets	Drawing No.
	173	267	33 102 NW487-S

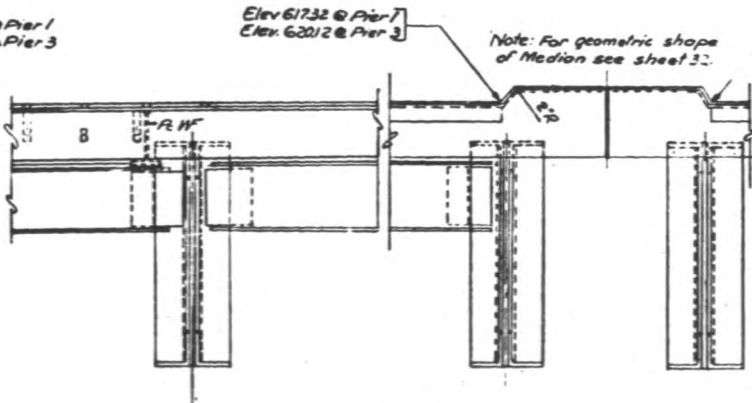
FAY, SPOFFORD & THORNDIKE, INC. ENGINEERS, BOSTON, MASS. - CHICAGO, ILL.



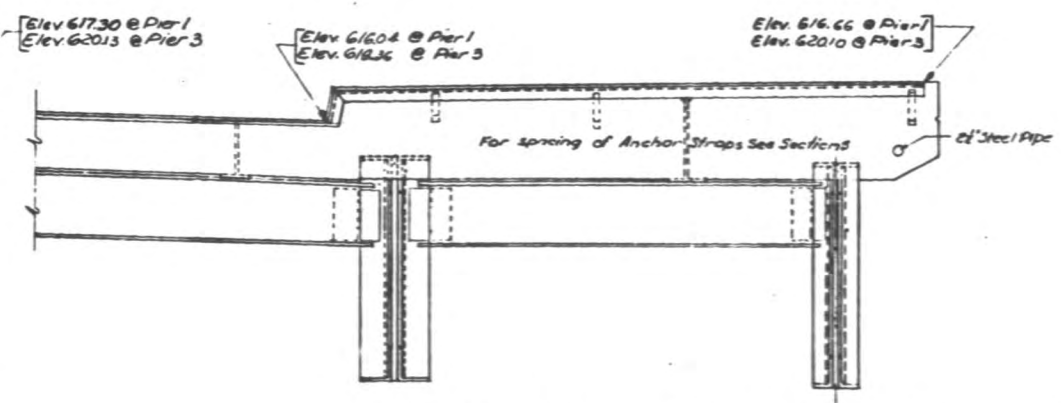
PLAN AT PIER 1 & 3
Scale: 1/4" = 1'-0"



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

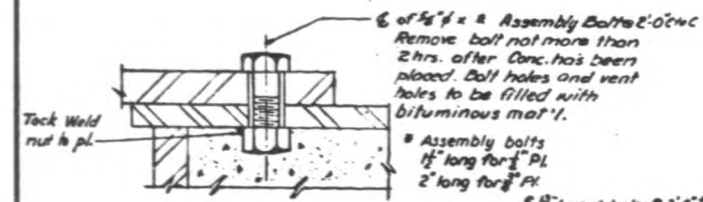


SECTION A-A
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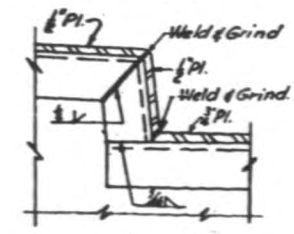


SECTION A-A
Scale: 1/2" = 1'-0"

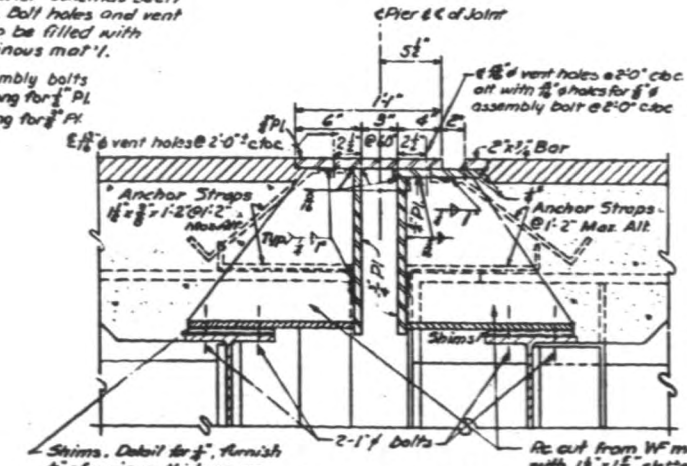
Note: - Installation of Exp. Dams to be included for payment in the cost of Erecting Structural Steel.



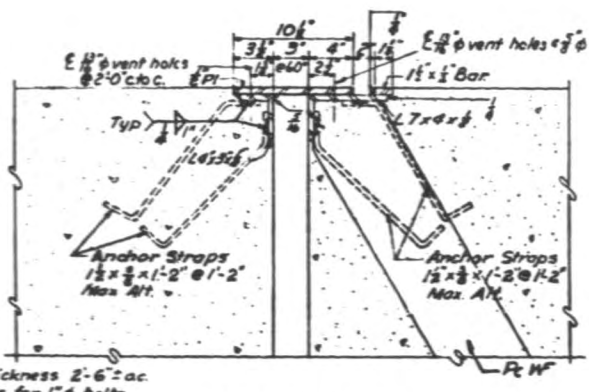
ASSEMBLY BOLT DETAIL
Scale: 6" = 1'-0"



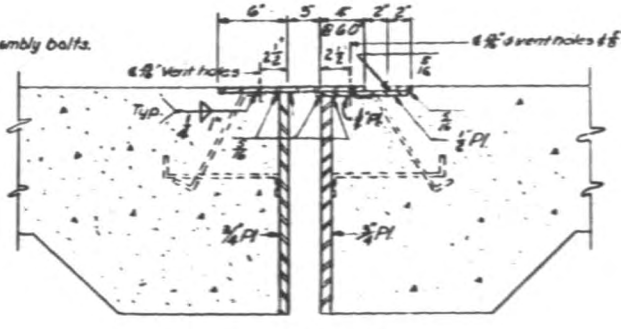
DETAIL "A"
Scale: 1 1/2" = 1'-0"



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



SECTION D-D
Scale: 1 1/2" = 1'-0"



SECTION B-B
Scale: 1 1/2" = 1'-0"

ESTIMATED WEIGHT OF EXPANSION DAMS	
	W. FOSTER AVE
Furnishing Structural Steel	43,520 lbs.
TOTAL	43,520 lbs.

SEC. 667-13131-13 D

DEPARTMENT OF HIGHWAYS
COOK COUNTY, ILLINOIS

DANIEL RYAN
CHIEF ENGINEER

WILLIAM J. NORTHROP
SUPERVISOR OF HIGHWAYS

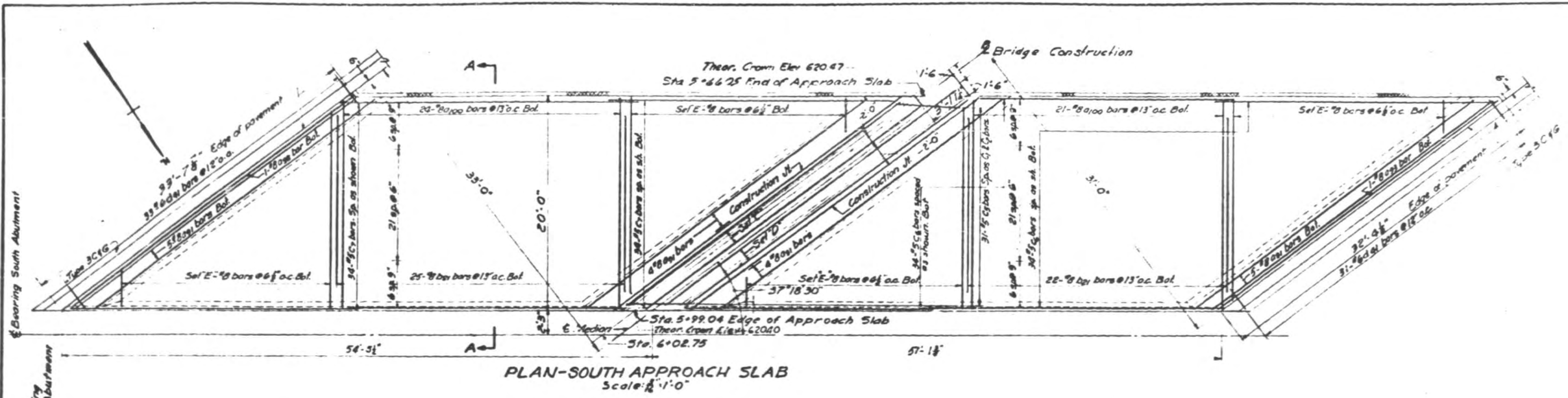
EXPANSION DAM DETAILS
W. FOSTER AVE. GRADE SEPARATION
OVER
NORTHWEST EXPRESSWAY

COMPUTED: F.E.D. PROJECT: U-265(16)
DRAWN: R.M.L. SCALE: AS NOTED
CHECKED: F.E.D. APPROVED: [Signature]

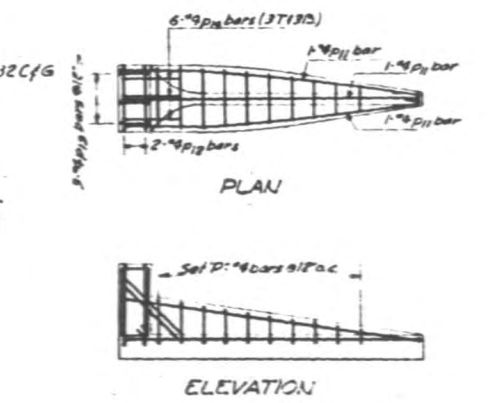
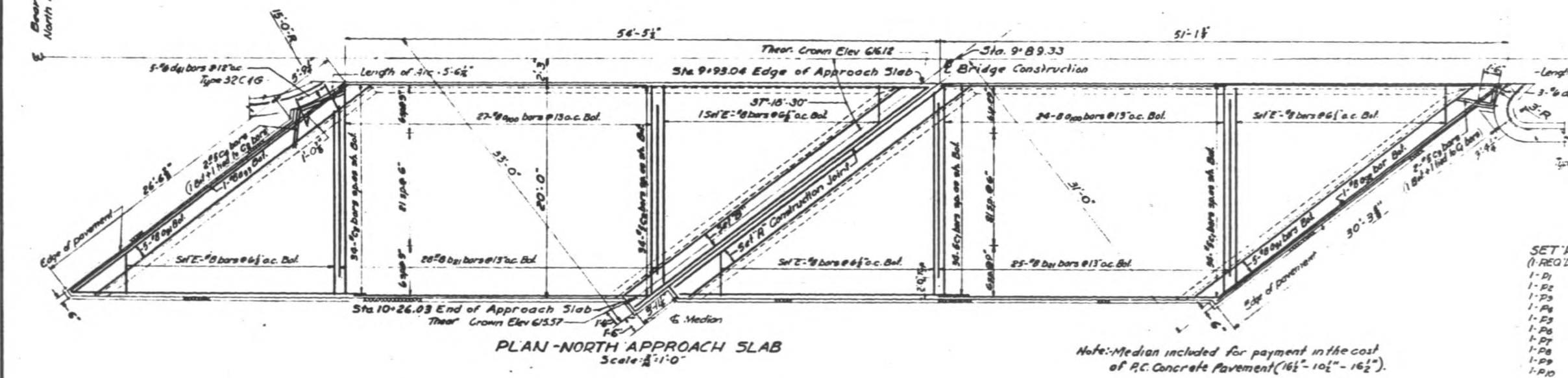
APPROVED: [Signature]

Federal Aid Route No.	State Aid Route No.	Sheet No.	Total Sheets	Drawing No.
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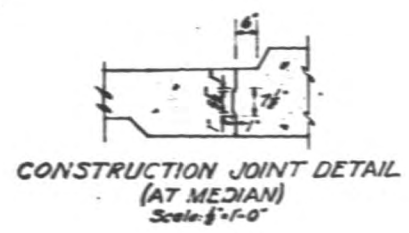
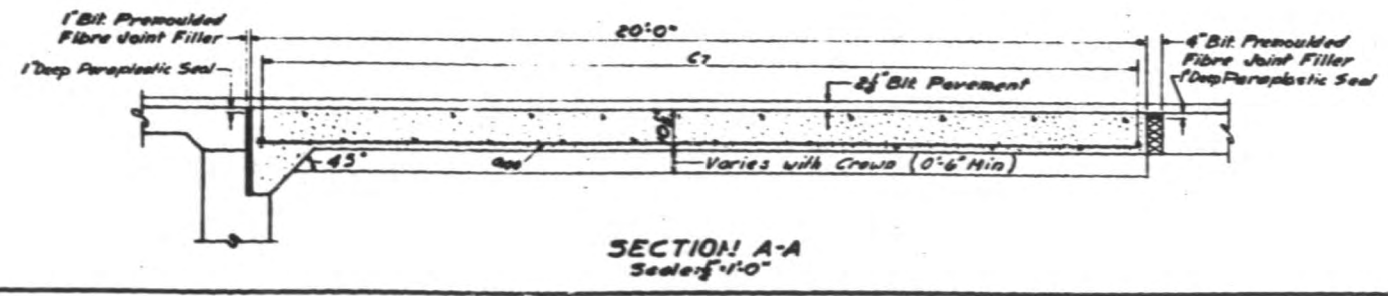
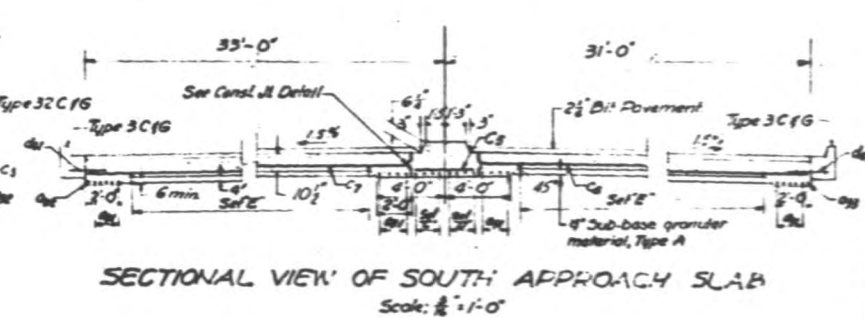
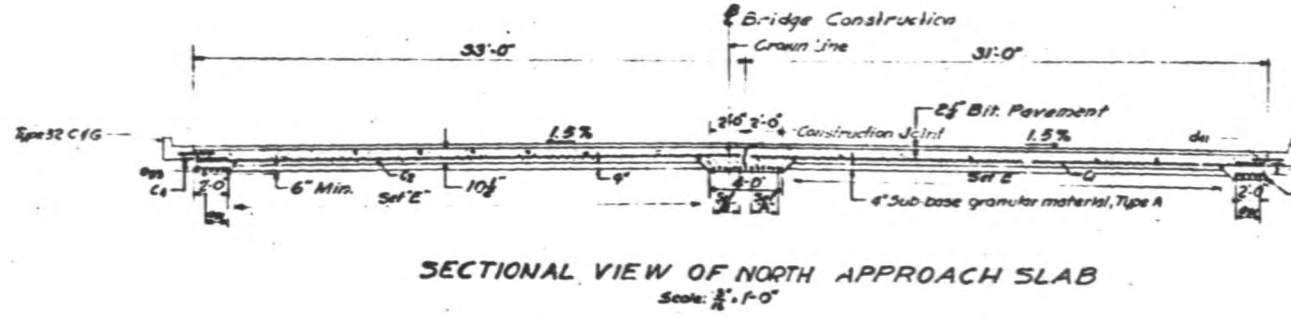
BY: SPENCER & THORNDIKE, INC. ENGINEERS, BOSTON, MASS. - CHICAGO, ILL.



SET A	SET B	SET C	SET D	SET E
(1-REQD)	(1-REQD)	(1-REQD)	(1-REQD)	(8-REQD)
1-096	2-091	1-091	1-091	3-0101
1-095	1-092	1-093	1-092	3-0102
1-094	1-097	1-014	1-015	3-0103
1-093	1-098	1-096	1-099	3-0104
2-091	1-090			3-0105
				3-0106
				3-0107
				3-0108
				3-0109
				3-0110
				3-0111
				3-0112
				3-0113



Note: Median included for payment in the cost of P.C. Concrete Pavement (16 1/2" - 10 1/2" - 16 1/2").



BILL OF MATERIALS	
REINFORCEMENT BARS	30,629 LBS
P.C. CONCRETE PAVEMENT (6 1/2" - 10 1/2" - 16 1/2")	470 SQ YDS
BITUMINOUS MATERIALS (PRIME COURSE)	47 GALS.
BITUMINOUS CONCRETE (BINDER COURSE)	34.4 TONS
BITUMINOUS CONCRETE (PAVEMENT COURSE)	25.2 TONS
DENSE GRADED AGGREGATE TYPE SUB-BASE 2-1/2"	

DEPARTMENT OF HIGHWAYS
 COOK COUNTY, ILLINOIS

DANIEL RYAN
 WILLIAM J. NORTHROP

REINFORCING STEEL DETAILS
APPROACH SLAB
W. FOSTER AVE. GRADE SEPARATION
OVER NORTHWEST EXPRESSWAY

COMPUTED	K.I.C.	PROJECT	U-203 (8)
DRAWN	W.S. S.U.	SCALE	AS NOTED
CHECKED	A.T.	APPROVED	

APPROVED: [Signature]
 173 267 35 102 NW 489-B

REV. WOFFORD & THORNTON, INC. ENGINEERS, BOSTON, MASS. - CHICAGO, ILL.

Q-2
 B/9

BORING WS-1
Station 3568+00 Offset 110.3 L

Sample No.	Sample Elev. (ft)	N	Elevation	Log	Description
1	615.2	11			Dk. brn. & yell. ORGANIC silty CLAY, trace m-f Gravel, trace c-f Sand
2	610.2	27	610		
3	605.2	21			Gray brn. silty CLAY, trace m-f Gravel, trace (-) c-f Sand; very stiff (+)
4	603.2	20			
5	600.2	18	600		
6	598.2	23			
7	595.2	24			
8	593.2	31			
9	590.2	32	590		
10	588.2	27			Gray brn. clayey SILT, little m-f Gravel, trace c-f Sand; hard, at or below PL.
11	581.2	47	580		
12	576.2	39			
13	571.2	43	570		
14	566.2	102			Gray brn. SILT, trace f Gravel, very dense.

Depth of boring 51.5'

BORING WS-2
Station 3569+25 Offset 75.8 L

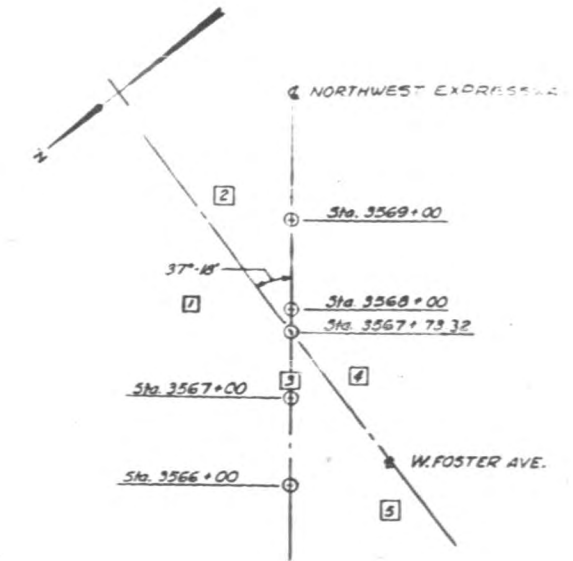
Sample No.	Sample Elev. (ft)	N	Elevation	Log	Description
1	615.1	19			Mott. yell. brn. & gray ORGANIC silty CLAY, roots and organic material; hard
2	611.1	20	610		
3	606.1	19			Gray brn. silty CLAY, trace m-f Gravel, trace c-f Sand; very stiff at or below PL.
4	601.1	19	600		
5	596.1	19			
6	591.1	16	590		
7	589.1	27			Gray brn. clayey SILT, trace f Gravel medium.
8	586.1	22			
9	584.1	35			
10	581.1	57	580		Gray brn. clayey SILT, little m-f Gravel, little c-f Sand; hard.
11	576.1	85			
12	571.1	58	570		
13	566.1	91			Gray brn. SILT and f SAND, trace f Gravel, trace (-) Clay; very dense.
14	561.1	53	560		
15	556.1	22			Gray brn. clayey SILT (-), little m-f Gravel, little (-) c-f Sand; very dense.
16	552.1	200	550		
17	547.1	200			

Depth of boring 70.8'

BORING WS-3
Station 3567+12 Offset On E 15.1 L

Sample No.	Sample Elev. (ft)	N	Elevation	Log	Description
1	617.3	9	619.3		Dk. brn. & yell. brn. ORGANIC clayey Sand
2	616.3	15			
3	614.3	26			Yell. brn. silty CLAY, trace f Gravel, trace c-f Sand; very stiff to hard.
4	612.3	29	610		
5	609.3	29			
6	606.3	27			
7	603.3	19	600		Gray brn. clayey SILT (+), trace f Gravel, trace f Sand; very stiff.
8	601.3	25			
9	600.3	27			
10	598.3	22			
11	595.3	34			
12	594.3	39			
13	592.3	39	590		Gray brn. clayey SILT, trace f Gravel, trace (-) c-f Sand; hard.
14	590.3	37			
15	587.3	36			
16	585.3	36			
17	582.3	30	580		
18	578.3	52			Gray brn. clayey SILT (-), little m-f Gravel, little c-f Sand; very dense. Cored Boulder.
19	572.3	65	570		
20	568.3	66			

Depth of boring 51.5'



LOCATION PLAN
Scale: 1"=100'

BORING WS-4
Station 3567+26 Offset 75.8 R

Sample No.	Sample Elev. (ft)	N	Elevation	Log	Description
1	617.3	8			Dk. brn. & yell. brn. ORGANIC clayey SAND, trace f Gravel; roots & organic matter; loose.
2	612.3	22	610.0		
3	607.3	21			Gray brn. silty CLAY, trace (+) m-f Gravel, trace f Sand; very stiff, generally below PL.
4	602.3	23	600.0		
5	597.3	20			
6	593.3	26			Gray brn. clayey SAND, trace f Gravel; medium.
7	591.3	29	590.0		
8	588.3	24			Gray brn. clayey SILT, trace m-f Gravel, trace c-f Sand; very stiff to hard with increasing depth.
9	586.3	44			
10	583.3	47	580.0		
11	578.3	41			
12	573.3	46	570.0		Gray brn. clayey SILT, trace m-f Gravel, trace (+) c-f Sand; dense.
13	568.3	28			
14	563.3	72			Gray brn. SILT, trace Clay, trace f Sand.
15	558.3	70	560.0		Gray m-f GRAVEL, some c-f Sand, trace Silt; very dense.
16	553.3	49			Gray c-f SAND, trace f Gravel, trace Silt; very dense.

Depth of boring 66.5'

BORING WS-5
Station 3565+76 Offset 110.3 R

Sample No.	Sample Elev. (ft)	N	Elevation	Log	Description
1	618.0	15			Dk. brn. ORGANIC silty CLAY, trace f Sand, roots and organic material
2	613.0	23	610.0		
3	608.0	19			Gray brn. silty CLAY, trace f Gravel, trace c-f Sand; very stiff; at PL.
4	606.0	28			
5	603.0	25			
6	601.0	20	600.0		
7	598.0	17			
8	596.0	34			
9	593.0	29	590.0		
10	591.0	32			Gray brn. clayey SILT, trace c-f Sand, trace (-) f Gravel; hard, - PL.
11	584.0	27	580.0		
12	579.0	31			
13	572.0	33			
14	571.0	50	570.0		Gray brn. SILT, trace Clay, little f Sand dense to very dense.
15	564.0	100			
16	560.0	104	560.0		Gray brn. clayey SILT, little m-f Gravel, trace c-f Sand; very dense, - PL.
17	554.0	90			

Depth of Boring 66.5'

Note: Vertical Scale: 1"=10'0"

NOTE:
N=Number of blows required to drive a 1 1/2" I.D., 2" O.D., split spoon sampler 7.5" with 140 lbs. weight falling 30".

Q1-2
B20

SEC. 267-1831-150

DEPARTMENT OF HIGHWAYS
COOK COUNTY, ILLINOIS

DANIEL RYAN
PRESIDENT BOARD OF COMMISSIONERS

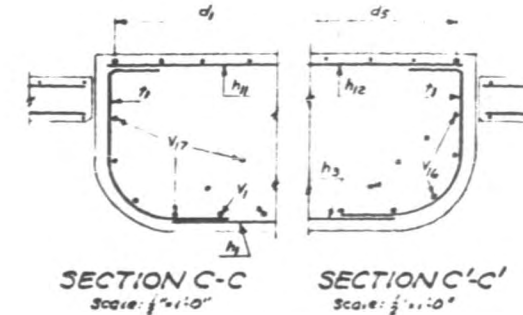
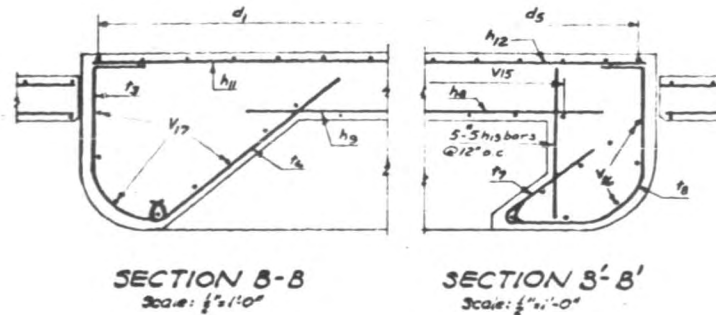
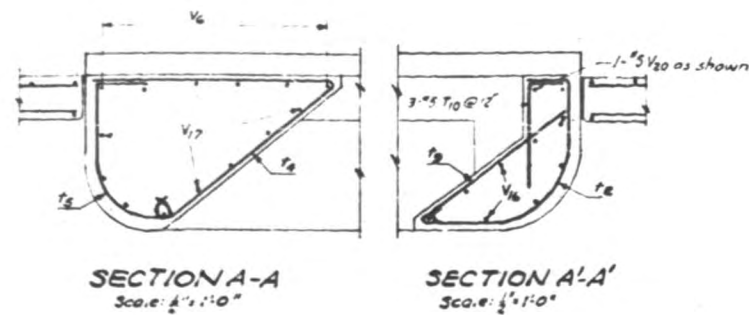
WILLIAM J. NORTIMER
SUPERVISOR

BORING DATA
W. FOSTER AVE. GRADE SEPARATION
OVER
NORTHWEST EXPRESSWAY

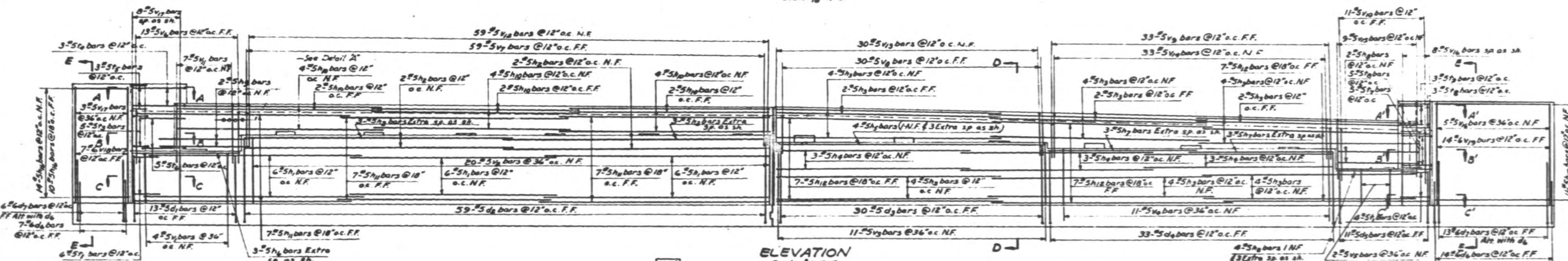
COMPUTED G.L.M. PROJECT U-265 (18)
DRAWN J.J.W. SCALE AS NOTED
CHECKED G.L.M. APPROVED

APPROVED: [Signature] Federal Aid Route No. 173 State Aid Route No. 267 Sheet No. 36 Total Sh. 11 Drawing No. 102 N/A 490 S

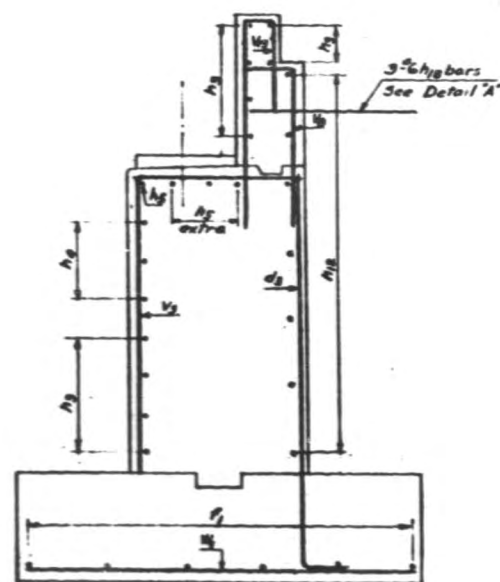
RY, SPOFFORD & THORNDIKE, INC. ENGINEERS, BOSTON, MASS. - CHICAGO, ILL.



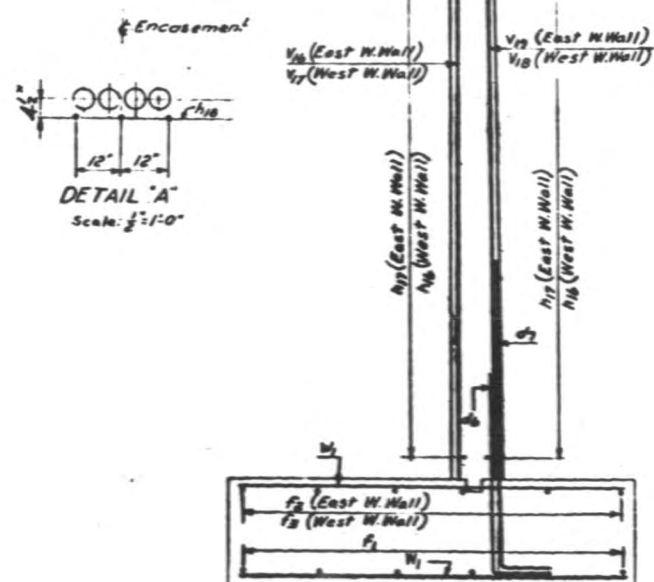
PLAN OF FOOTING
Scale: $\frac{1}{16}'' = 1'-0''$



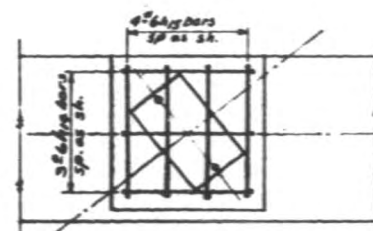
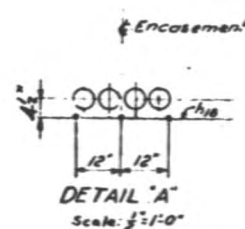
ELEVATION
Scale: $\frac{1}{2}'' = 1'-0''$



SECTION D-D
Scale: $\frac{1}{2}'' = 1'-0''$



SECTION E-E
Scale: $\frac{1}{2}'' = 1'-0''$



BEARING PAD DETAIL
Scale: $\frac{1}{2}'' = 1'-0''$

Distribution Steel required for Pads C, D, F, L, M & N

Q1-2
B&E

SEC. 897-1531-15D

DEPARTMENT OF HIGHWAYS
COOK COUNTY, ILLINOIS

DANIEL RYAN WILLIAM J. MORTIMER
MEMBER BOARD OF SUPERVISORS SUPERVISOR OF HIGHWAYS

REINFORCING STEEL DETAILS
NORTH ABUTMENT
W. FOSTER AVE. GRADE SEPARATION
OVER NORTHWEST EXPRESSWAY

COMPUTED: M.P. PROJECT: 11-264-1B
DRAWN: W.S. SCALE: AS NOTED
CHECKED: A.T. APPROVED:

173 267 37 102 NW 491-S

RAY, SPOFFORD & THORNDIKE, INC. ENGINEERS, BOSTON, MASS. - CHICAGO, ILL.