STATE OF ILLINOIS
CITY OF CHICAGO
DEPARTMENT OF PUBLIC WORKS
BUREAU OF ENGINEERING

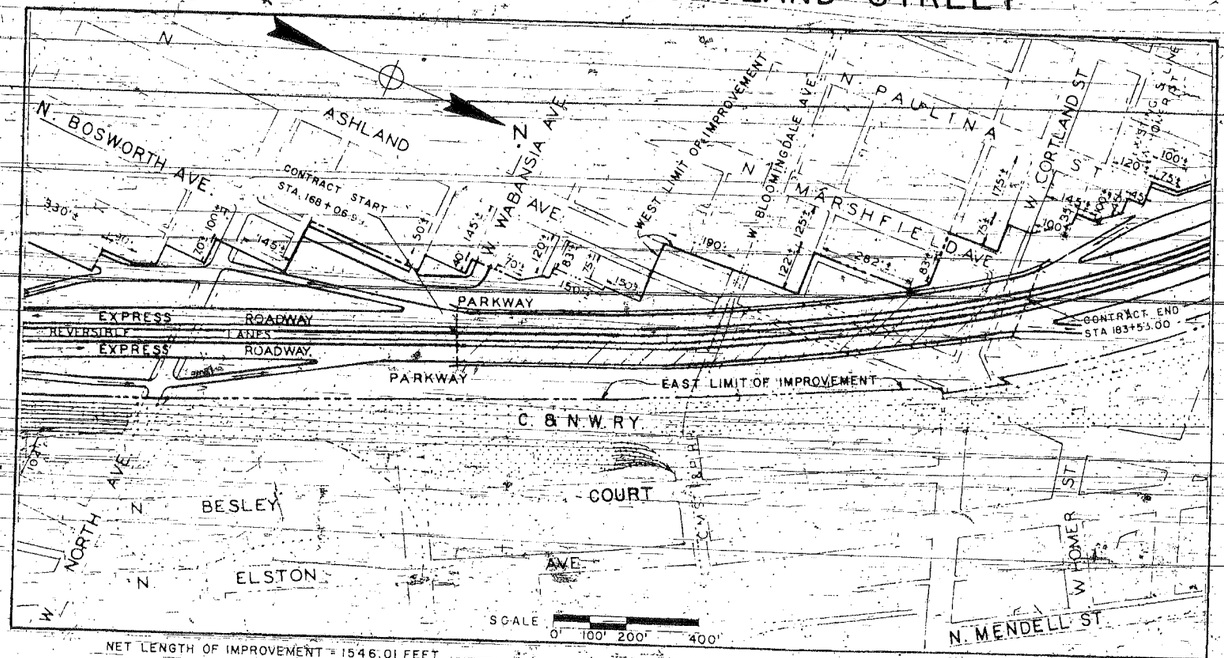
NORTHWEST ROUTE SUPERHIGHWAY

PLANS FOR

F.A.I. 2 SECTION 0505.3-IH PROJECT I-02-2(68)

GRADE SEPARATION

WABANSIA AVENUE TO CORTLAND STREET



NET LENGTH OF IMPROVEMENT = 1546.01 FEET
NET LENGTH OF IMPROVEMENT = 0.293 MILES

PREPARED FOR
THE CITY OF CHICAGO
BY
ALFRED BENESCH AND ASSOCIATES
CONSULTING ENGINEERS

PLANS APPROVED
BY THE STATE DIVISION OF HIGHWAYS

INDEX OF DRAWINGS.

SHEET NO	
1	TITLE SHEET
2	GENERAL NOTES & QUANTITIES
3	GENERAL PLAN - SOUTH PORTION
4	GENERAL PLAN - NORTH PORTION
5	EAST ELEVATION
6	PROPOSED PROFILES
7	BORING DATA
8	DECK PLAN
9	DECK REINFORCEMENT PLAN SPANS 1,2 & 3
10	DECK REINFORCEMENT PLAN SPANS 4,5 & 6
11	DECK REINFORCEMENT PLAN SPANS 7,8,9 & 10
12	DECK REINFORCEMENT PLAN SPANS 11,12 & 13
13	DECK REINFORCEMENT PLAN SPANS 14,15 & 16
14	DECK REINFORCEMENT PLAN SPANS 17 & 18
15	DECK REINFORCEMENT PLAN SPANS 19,20 & 21
16	DECK REINFORCEMENT PLAN SPANS 22 & 23
17	DECK REINFORCEMENT PLAN SPANS 24 & 25
18 TO 20 INCL.	TYPICAL CROSS SECTIONS
21	CONCRETE DIAPHRAGM SCHEDULE
22	FRAMING PLAN SPANS 1,2 & 3
23	FRAMING PLAN SPANS 4,5 & 6
24	FRAMING PLAN SPANS 7,8,9 & 10
25	FRAMING PLAN SPANS 11,12 & 13
26	FRAMING PLAN SPANS 14,15 & 16
27	FRAMING PLAN SPANS 17 & 18
28	FRAMING PLAN SPANS 19,20 & 21
29	FRAMING PLAN SPANS 22 & 23
30	FRAMING PLAN SPANS 24 & 25
31	DETAILS OF 36" PRECAST PRESTRESSED CONCRETE I - BEAMS
32	DETAILS OF 48" PRECAST PRESTRESSED CONCRETE I - BEAMS
33 TO 35 INCL.	CONCRETE I - BEAM SCHEDULE
36	BEARING DETAILS
37	STEEL STRINGER DETAILS
38	STEEL STRINGER SCHEDULE
39	ELEVATION OF FASCIA GIRDER G1
40 & 41	PART - ELEVATION OF FASCIA GIRDER G1
42	ELEVATION OF FASCIA GIRDER G2
43 TO 45 INCL.	PART - ELEVATION OF FASCIA GIRDER G2
46	ELEVATION OF CROSS GIRDER G3 & G9
47	ELEVATION OF CROSS GIRDER G4 & G8
48	ELEVATION OF CROSS GIRDER G5 & G7
49	PART - ELEVATION OF CROSS GIRDER G5 & G7
50	ELEVATION OF CROSS GIRDER G6
51	BRACING FOR GIRDER G1 & G2
52	BRACING FOR CROSS GIRDERS G5, G6 & G7
53	BRACING FOR CROSS GIRDERS G4 & G8
54	BEARING DETAILS
55 & 56	EXPANSION GUARD DETAILS
57 & 58	METAL HANDRAIL EAST ELEVATION
59 & 60	METAL HANDRAIL WEST ELEVATION
61	METAL HANDRAIL DETAILS
62	METAL HANDRAIL DETAILS & NAME PLATES
63	STEEL PLATE BEAM GUARD RAIL
64	STEEL PLATE BEAM GUARD RAIL DETAILS
65	ELECTRIC CONDUITS
66 & 67	HANDHOLE DETAILS
68	ELECTRIC GROUNDING DETAILS
69 TO 71 INCL.	DECK DRAINAGE DETAILS
72	FOUNDATION PLAN - SOUTH PORTION
73	FOUNDATION PLAN - NORTH PORTION
74	CAISSON SCHEDULE
75	SOUTH ABUTMENT
76	NORTH ABUTMENT
77	NORTH ABUTMENT & DETAILS
78 & 79	PIER 1
80 & 81	PIER 2

INDEX OF DRAWINGS

SHEET NO	
82 & 83	PIER 3
84 & 85	PIER 4
86 & 87	PIER 5
88	PIER 6 & 7
89 & 90	PIER 8
91	PIER 9
92 & 93	PIER 10
94 & 95	PIER 11
96	PIER 12
97 & 98	PIER 13
99 & 100	PIER 14
101	PIER 15
102	PIER 16
103	PIER 17
104	PIER 18
105	PIER 19
106 & 107	PIER 20
108 & 109	PIER 21
110	PIER 22
111 TO 113 INCL.	PIER 23
114 & 115	PIER 24
116	DETAILS OF EXCAVATION
117	ABUTMENT PILES
118 TO 124 INCL.	REINFORCEMENT BAR LISTS
125	PLOT PLAN - SOUTH PORTION
126	PLOT PLAN - NORTH PORTION
127	DRAINAGE PLAN AND PROFILE - SOUTH PORTION
128	DRAINAGE PLAN AND PROFILE - NORTH PORTION
129	EXISTING CORTLAND ST. CROSS SECTIONS
130	PROPOSED CORTLAND ST. AND MARSHFIELD AVE.
131	PROPOSED CORTLAND ST. CROSS SECTIONS
132	CORTLAND ST. RUNAROUND CROSS SECTIONS
133	MARSHFIELD AVE. CROSS SECTIONS AND PAVEMENT DETAILS
134	MANHOLES CATCH BASINS AND INLETS
135	SPECIAL MANHOLES, FRAMES AND LIDS
136	PAVEMENT DETAILS

APPROVED AS TO SEWER ALTERATIONS AND ADDITIONS

CHIEF ENGINEER OF SEWERS

DEPUTY FOR SEWERS

CITY OF CHICAGO
DEPARTMENT OF PUBLIC WORKS
BUREAU OF ENGINEERING
DATE JULY 29 1958

APPROVED Edward J. Ryan
CHIEF SUBWAY AND SUPERHIGHWAY ENGINEER

APPROVED
ASST CHIEF ENGINEER

APPROVED Dirk Van Gorp
CHIEF ENGINEER

APPROVED
COMMISSIONER

THE DEPARTMENT OF
PUBLIC WORKS AND BUILDINGS
DIVISION OF HIGHWAYS

APPROVED [redacted] 19[redacted]

APPROVED
CHIEF HIGHWAY ENGINEER
19[redacted]
DIRECTOR

DEPARTMENT OF [redacted]
BUREAU OF PUBLIC [redacted]

APPROVED [redacted]

DIVISION ENGINEER DATE

ROUTE NO.	SECTION	SHEET NO.
FAI 72	505.3-1H & 505.3-2H	136
STA.	TO STA.	
FED. ROAD DIST. NO.	ILLINOIS	PROJECT

SUMMARY OF QUANTITIES

SECTION 0505.3-1H

ITEM NO.	UNIT	QUANTITY	DESCRIPTION
1			PEDIMENT EXCAVATION
2	C.Y.	2,177	CLASS X CONCRETE IN FOOTINGS
3	C.Y.	2,500	ROCK EXCAVATION
4	C.Y.	276	ROCK EMBANKMENT
5	L.F.	1,512	FURNISHING CONCRETE PILES
6	LIN. FT.	11,446	DRIVING CONCRETE PILES
7	EACH	4	CONCRETE TEST PILES
8	LIN. FT.	480	FURNISHING ORDERED PILES (OVER 38 FT.)
9	LIN. FT.	480	DRIVING TIMBER PILES
10	CU. FT.	105,000	CAISSON CONCRETE
11	CU. YDS.	13,610	CLASS X CONCRETE
12	LBS.	3,375,000	REINFORCEMENT BARS
13	LIN. FT.	2,041	FURNISHING & ERECTING 36 INCH PRECAST PRESTRESSED CONCRETE I-BEAMS
14	LIN. FT.	38,215	FURNISHING & ERECTING 48 INCH PRECAST PRESTRESSED CONCRETE I-BEAMS
15	LBS.	2,435,000	ERECTING STRUCTURAL STEEL
16	LBS.	145,000	FURNISHING & ERECTING MISC. STRUCTURAL STEEL
17	LBS.	104,000	FURNISHING & ERECTING LOW ALLOY STRUCTURAL STEEL
18	LBS.	15,000	FURNISHING & ERECTING BRONZE BEARING PLATES
19	LIN. FT.	3,150	FURNISHING & ERECTING METAL HANDRAIL
20	LIN. FT.	3,676	STEEL FLAT PLATE GUARD RAIL, SPECIAL
21	EACH	2	NAME PLATES
22	EACH	65	CAST IRON SCUPPERS
23	LIN. FT.	2,150	WROUGHT IRON PIPE, 6-INCH
24	LIN. FT.	12,500	36-INCH ASBESTOS-CEMENT CONDUITS, WITH HANGERS
25	EACH	27	MANHOLE FRAMES
26	LUMP SUM	1	SPECIAL PIT LIGHTING SYSTEM INSTALLING
27	SQ. YDS.	2,325	PORTLAND CEMENT CONCRETE BASE COURSE, 9 INCH
28	SQ. YDS.	1975	PORTLAND CEMENT CONCRETE PAVEMENT, 8 INCH
29	SQ. FT.	18,800	PORTLAND CEMENT CONCRETE SIDEWALK
30	LIN. FT.	1,560	CONCRETE CURB AND GUTTER, TYPE 3
31	LIN FT	510	CONCRETE CURB, TYPE 4
32	SQ. FT.	310	LONGITUDINAL CURB EXPANSION JOINTS
33	GALS.	235	BITUMINOUS MATERIALS (PRIME COAT)
34	TONS	140	BITUMINOUS CONCRETE, BINDER COURSE
35	TONS	130	BITUMINOUS CONCRETE SURFACE COURSE, FINE DENSE-GRADED AGGREGATE, TYPE, SUB CLASS I-H
36	SQ. YDS.	80	PAVEMENT REPLACEMENT, ENTIRE
37	LIN. FT.	15	STORM SEWERS, TYPE 1, 48-INCH
38	LIN. FT.	35	STORM SEWERS, TYPE 2, 8-INCH
39	LIN. FT.	2,625	STORM SEWERS, TYPE 2, 12-INCH
40	LIN. FT.	210	STORM SEWERS, TYPE 2, 15-INCH
41	LIN. FT.	155	STORM SEWERS, TYPE 2, 18-INCH
42	LIN. FT.	165	STORM SEWERS, TYPE 2, 21-INCH
43	LIN. FT.	130	STORM SEWERS, TYPE 2, 24-INCH
44	LIN. FT.	410	STORM SEWERS, TYPE 2, 30-INCH
45	LIN. FT.	130	STORM SEWERS, TYPE 2, 48-INCH
46	CU. YDS.	400	TRENCH BACK FILL
47	EACH	9	MANHOLES, TYPE A, 4 FT. DIA.
48	EACH	3	MANHOLES, TYPE A, 5 FT. DIA.
49	EACH	21	CATCH BASINS, TYPE A, 4 FT. DIA.
50	EACH	5	INLET ASSEMBLIES WITH TYPE 2 GRATE AND HOOD
51	EACH	1	SPECIAL MANHOLE, TYPE 1
52	EACH	1	SPECIAL MANHOLE, TYPE 2
53	EACH	7	MANHOLES TO BE ADJUSTED
54	EACH	6	CATCH BASINS TO BE ADJUSTED
55	EACH	1	INLETS TO BE ADJUSTED
56	EACH	3	MANHOLES TO BE RECONSTRUCTED
57	EACH	1	FILLING EXISTING INLETS
58	LIN. FT.	2,675	CHAIN LINK FENCE
59	CU. YDS.	3932	CRUSHED STONE SURFACE COURSE, TYPE A
60	SQ. YDS.	1000	ESPLANADE
61	SQ. YDS.	350	SODDING
62	LBS.	6800	MISCELLANEOUS IRON CASTINGS

GENERAL NOTES

SPECIFICATIONS

DESIGN OF STRUCTURE IN ACCORDANCE WITH A.A.S.H.O. STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, 1953 EDITION.

PRECAST PRESTRESSED CONCRETE I-BEAM DESIGN IN ACCORDANCE WITH BUREAU OF PUBLIC ROADS CRITERIA FOR PRESTRESSED CONCRETE BRIDGES, 1954 EDITION.

CONSTRUCTION, MATERIALS AND FABRICATION SHALL CONFORM TO THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION OF THE STATE OF ILLINOIS AND SUPPLEMENTS THERETO.

FOUNDATIONS

CAISSONS SHALL BE FOUNDED ON HARD CLAY HAVING A SAFE BEARING VALUE OF 12,000 LBS PER SQ FT. MATERIAL IN BOTTOM OF CAISSON HOLES SHALL BE TESTED FOR UNCONFINED COMPRESSIVE STRENGTH AND SHALL BE APPROVED BY THE ENGINEER BEFORE CONCRETE IS PLACED IN CAISSONS. SEE SPECIAL PROVISIONS.

THE CONTRACTOR SHALL DRIVE 2 CONCRETE TEST PILES IN A PERMANENT LOCATION AT EACH ABUTMENT AS DIRECTED BY THE ENGINEER BEFORE ORDERING THE REMAINDER OF THE CONCRETE PILES.

CONCRETE

CLASS X CONCRETE SHALL BE USED THROUGHOUT EXCEPT FOR PRECAST CONCRETE I BEAMS.

ALL CONCRETE SHALL BE CAST IN PLACE EXCEPT FOR THE PRECAST PRESTRESSED CONCRETE I-BEAMS.

THE CONCRETE FLOOR SLABS SHALL BE PLACED IN ONE CONTINUOUS OPERATION BETWEEN CONSTRUCTION JOINTS SHOWN ON THE PLANS AND SPECIFIED IN THE SPECIAL PROVISIONS. FINISHING OF THE FLOOR SLABS SHALL BE AS SPECIFIED IN THE STANDARD SPECIFICATIONS.

ALL CORNERS SHALL BE CHAMFERED 3" UNLESS OTHERWISE SHOWN OR NOTED ON PLANS.

ALL REINFORCEMENT SHALL HAVE 2" MIN PROTECTIVE COVERING UNLESS OTHERWISE SHOWN OR NOTED ON PLANS.

FOR GENERAL NOTES REGARDING PRECAST PRESTRESSED CONCRETE I BEAMS SEE SHEET No. 38

STRUCTURAL STEEL

ALL STRUCTURAL STEEL SHALL CONFORM TO THE REQUIREMENTS OF ASTM A7 EXCEPT THE WEB PLATES OF FASCIA GIRDERS G1 AND G2 WHICH SHALL CONFORM TO THE REQUIREMENTS OF ASTM A373 AND STEEL FOR THE EXPANSION PLATES AND BARS OF THE EXPANSION DEVICES WHICH SHALL BE LOW ALLOY STRUCTURAL STEEL CONFORMING TO THE REQUIREMENTS OF ASTM A242.

ALL SHOP CONNECTIONS FOR STRUCTURAL STEEL SHALL BE RIVETED EXCEPT AS SHOWN OR NOTED ON PLANS. ALL FIELD CONNECTIONS SHALL BE HIGH STRENGTH BOLTS EXCEPT THE FIELD SPLICE OF THE FASCIA GIRDERS G1 AND G2 SHALL BE RIVETED.

NOTED IN THE PLANS AND ELEVATION OF GIRDERS G1 TO G6 INCLUSIVE AND RIVETS IN GIRDERS G3 & G4 SHALL BE 7/8" IN 15/16" HOLES. SEE SPECIAL PROVISIONS FOR HOLES THAT MUST BE SUBPUNCHED AND REAMED WHILE ASSEMBLED.

ALL STEEL SHALL BE MILL AND SHOP INSPECTED BY THE CITY OF CHICAGO BEFORE PAINTING. ALL UNITS THAT ARE REQUIRED TO BE SHOP ASSEMBLED FOR REAMING SHALL BE INSPECTED BEFORE AND AFTER REAMING WHILE FULLY ASSEMBLED.

CAST STEEL AND BRONZE BEARING PLATES SHALL CONFORM TO THE REQUIREMENTS OF THE SPECIAL PROVISIONS.

THE CONTRACTOR FOR SECTION 0505.3-1H SHALL FURNISH AND APPLY 1 SHOP COAT RED LEAD PAINT TO ALL STRUCTURAL STEEL & CAST STEEL IN THE SPANS OVER ASHLAND AVE. THE CONTRACTOR FOR SECTION 0505.3-1H SHALL FURNISH AND APPLY 1 SHOP COAT OF RED LEAD PAINT TO ALL OTHER STRUCTURAL STEEL.

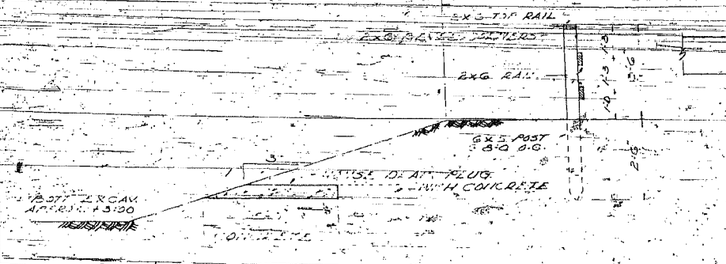
THE CONTRACTOR FOR SECTION 0505.3-1H SHALL FURNISH AND APPLY 2 FIELD COATS OF ALUMINUM PAINT TO ALL STRUCTURAL STEEL AND CAST STEEL.

THE CONTRACTOR FOR SECTION 0505.3-1H & 2H SHALL FURNISH ANCHOR BOLTS SETTING PLANS AND SETTING DIAGRAMS FOR THE EXPANSION DEVICES FOR THE SPANS OVER ASHLAND AVE.

STEEL EXPANSION DEVICES IN PIERS SHALL BE FABRICATED AND SET IN ACCORDANCE WITH ART. 505.3.12(d) OF THE STANDARD SPECIFICATIONS. ALL BEARING ASSEMBLIES SHALL BE FABRICATED AND SET IN ACCORDANCE WITH ARTICLE 505.3.12 OF THE STANDARD SPECIFICATIONS.

SECTION 0505.3-1HF

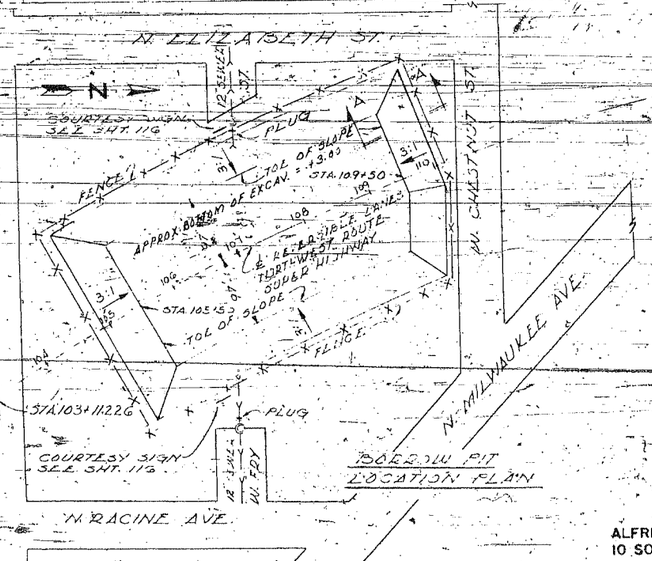
ITEM NO.	UNIT	QUANTITY	DESCRIPTION
1	LBS	2,363,000	FURNISHING STRUCTURAL STEEL
2	LBS	36,000	FURNISHING & ERECTING MISC. STRUCTURAL STEEL
3	LBS	22,000	FURNISHING CAST STEEL
4	LBS	4,000	FURNISHING & ERECTING BRONZE BEARING PLATES



SECTION A-A

NOTE:

THE COST OF FURNISHING, ERECTING AND MAINTAINING THE SIGNS AND WIRE FENCE AROUND THE EXCAVATED AREA, AND THE COST OF PLUGGING SEWERS AND DRAINS ENCOUNTERED DURING EXCAVATION SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR EARTH EXCAVATION.



ALFRED BENESCH & ASSOCIATES
10 SOUTH WABASH AVE.
CONSULTING ENGINEERS
CHICAGO, ILLINOIS

CITY OF CHICAGO
DEPARTMENT OF PUBLIC WORKS
BUREAU OF ENGINEERING

NORTHWEST ROUTE SUPERHIGHWAY GRADE SEPARATION WABANSIA AVE. TO CORTLAND ST.

SECTION 0505.3-1H

GENERAL NOTES & QUANTITIES

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 2	0505.3-1H	COOK	136	3
STA.	TO STA.			
FED. ROAD DIST. NO. 4	ILLINOIS	PROJECT	TOT. PROJ. SHTS.	

MATCH LINE

PLAN - SOUTH PORTION

SCALE 1" = 30

NORTH

DESIGN DATA

LOADING

H-20 - S16-44 & ALTERNATE
FUTURE D.L. - 2" BIT. WEARING SURFACE

SPECIFICATIONS

AASHO 1953 SPECIFICATIONS FOR HIGHWAY BRIDGES
BUREAU OF PUBLIC ROADS CRITERIA FOR "PRESTRESSED CONCRETE BRIDGES" 1954
STANDARD SPECIFICATIONS FOR WELDED HIGHWAY AND RAILROAD BRIDGES OF THE AMERICAN WELDING SOCIETY

ALLOWABLE STRESSES

PRESTRESSED CONCRETE & PRETENSIONING STEEL

f_c	5,000 LBS. PER SQ. IN.
f_{ci}	4,000 LBS. PER SQ. IN. EXCEPT AS NOTED IN I BEAM SCHEDULE
f_c	2,000 LBS PER SQ. IN.
f_{su}	248,000 LBS. PER SQ. IN.
f_{si}	173,600 LBS. PER SQ. IN.

STRUCTURAL STEEL & REINFORCED CONCRETE

f_s STRUCTURAL STEEL	18,000 #/□"
f_s REINFORCING STEEL	20,000 #/□"
f_c ULTIMATE COMPRESSIVE STRENGTH OF CONCRETE	3,500 #/□"
f_c (FLEXURE) COMPRESSIVE STRESS OF CONCRETE WITHOUT EARTH PRESSURE	1,400 #/□"
f_c WITH EARTH PRESSURE	1,400 #/□"
v IN FOOTING	75 #/□"
n	10

FOUNDATION

PIERS - CAISSONS ON HARD CLAY - 12,000 #/□'
ABUTMENTS - 40 TON (CONCRETE PILES)
ABUTMENT WINGWALLS - 10 TON CREOSOTED PILES

NOTE!
FOR SIDEWALKS, CHAIN LINK FENCE AND CRUSHED STONE SURFACE COURSE UNDER BRIDGE SEE SHT. NO. 126

SCALE OF TRACING
1" = 30'
0 5' 10' 20' 30' 40' 60' 80' 100'

APPROVED AS WORKING PLAN
BY [illegible]

REVISIONS OF WORKING PLAN
Issued for contract
Section 0505.3-1HF
May 5, 1959 Added Sign Support

CITY OF CHICAGO
DEPARTMENT OF PUBLIC WORKS
BUREAU OF ENGINEERING

NORTHWEST ROUTE SUPERHIGHWAY
GRADE SEPARATION
WABANSIA AVE. TO CORTLAND ST.
SECTION 0505.3-1H

GENERAL PLAN
SOUTH PORTION

ALFRED BENESCH & ASSOCIATES — CONSULTING ENGINEERS
10 SOUTH WABASH AVE., CHICAGO, ILLINOIS

SHEET NO. 3 OF 136 SHEETS DATE: SEPT. 1958

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI-2	0505.3-1H	COOK	136	4
STA.	/ TO STA.			
FED. ROAD DIST. NO. 1	ILLINOIS	PROJECT 12.02-2(62)		

CURVE "E" S.E. BOUND	CURVE "E" REVERSIBLE LANES	CURVE "E" N.W. BOUND
Δ = 1°-33'-43"	Δ = 1°-33'-43"	Δ = 1°-33'-43"
D = 0°-15'-00"	D = 0°-15'-02"	D = 0°-15'-04"
R = 22,917.906'	R = 22,869.908'	R = 22,821.908'
T = 312.3764'	T = 311.722'	T = 311.068'
L = 624.726'	L = 623.3956'	L = 622.099'
E = 2.1290'	E = 2.125'	E = 2.120'

CURVE "F" S.E. BOUND	CURVE "F" REVERSIBLE LANES	CURVE "F" N.W. BOUND
Δ = 28°-41'-08"	Δ = 28°-41'-08"	Δ = 28°-41'-08"
D = 1°-35'-00"	D = 1°-33'-45"	D = 1°-32'-33"
R = 3,618.783'	R = 3,666.783'	R = 3,714.783'
T = 925.2941'	T = 937.5672'	T = 949.841'
L = 1811.7193'	L = 1,835.7450'	L = 1,859.780'
E = 116.423'	E = 117.767'	E = 119.141'
S = 0.0126	S = 0.0126	S = 0.0126

PLAN OF BASE LINES & ROADWAY CENTER-LINES

SCALE 1" = 100'

PLAN NORTH PORTION

SCALE 1" = 50'

SCALE OF TRACING

0 50 100 200 300 400

APPROVED AS FINAL WITH 29 1958 BY Burton

DIVISION OF WATER PLAN

Set for Contract

Supt. of Water Supply

No. 1 161 Steel Sign Supports

CITY OF CHICAGO
DEPARTMENT OF PUBLIC WORKS
BUREAU OF ENGINEERING

NORTHWEST ROUTE SUPERHIGHWAY
GRADE SEPARATION
WABANSIA AVE. TO CORTLAND ST.
SECTION 0505.3-1H

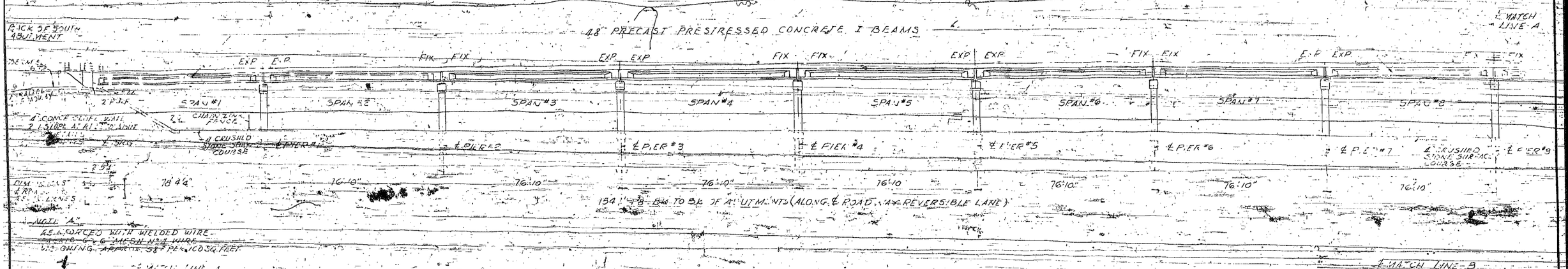
GENERAL PLAN
NORTH PORTION

SHEET NO. 4 OF 136 SHEETS DATE SEPT. 1958

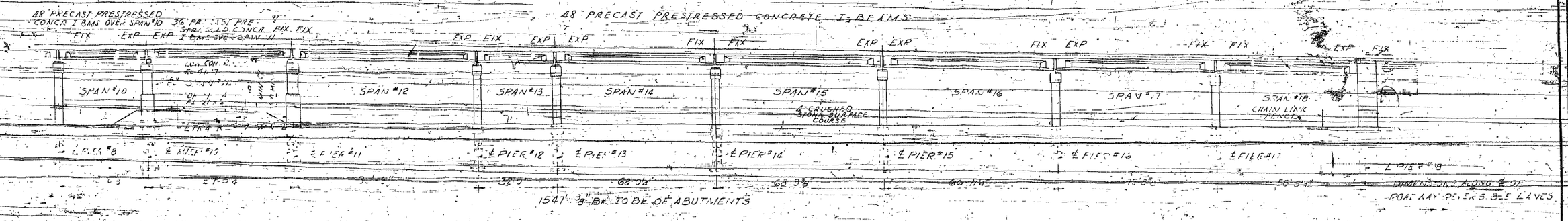
FRED C. DENSEN & ASSOCIATES CONSULTING ENGINEERS
10 SOUTH WABASH AVE. CHICAGO, ILLINOIS

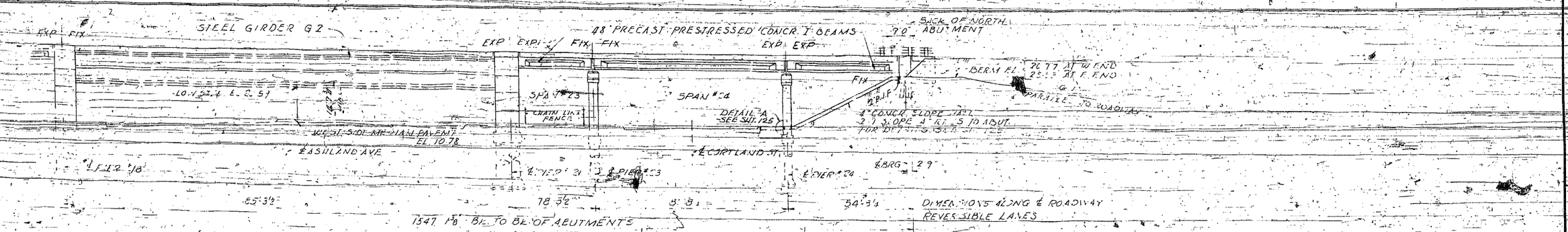
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 2	(E.W.) IH	COOK	136	5
STA.	TO STA.			
FED. ROAD DIST. NO. 1	ILLINOIS	PROJECT	I 02-2(68)	

48" PRECAST PRESTRESSED CONCRETE I BEAMS



48" PRECAST PRESTRESSED CONCR. I BEAMS OVER SPAN #10
36" PR. "SS" PRE-STRESSED CONCR. I BEAMS OVER SPAN #11
48" PRECAST PRESTRESSED CONCRETE I BEAMS





EAST ELEVATION OF STRUCTURE

SCALE 1" = 20'-0"

NORTH

SCALE OF TRACING
1" = 20'-0"
0 5 10 20 40

CITY OF CHICAGO
DEPARTMENT OF PUBLIC WORKS
BUREAU OF ENGINEERING

NORTHWEST ROUTE SUPERHIGHWAY
GRADE SEPARATION
WABANSIA AVE. TO CORTLAND ST.
SECTION 0505,3-IH

EAST ELEVATION

ALFRED BENESCH & ASSOCIATES — CONSULTING ENGINEERS
10 SOUTH WABASH AVE. CHICAGO, ILLINOIS

SHEET NO. 5 OF 136 SHEETS DATE:

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 2	0505.3-IH	COOK	136	G
STA.	TO STA.			
FED. ROAD DIST. NO. 1	ILLINOIS	PROJECT	I-90-2(68)	

PROPOSED PROFILES OF NORTHWEST ROUTE SUPERHIGHWAY

SCALES : 1" = 60' HORIZ.
1" = 10' VERT.

TOP OF RAIL - SOUTH RAIL OF N. TRACK

℄ E.S.E. BOUND ROADWAY

P.C. STA 169+38.373 EL 37.252 — +2.9875% — P.I. STA 173+11.247 EL 48.353 — -0.86524% — HORIZ. P.C. & P.R.C. STA. 176+82.824 EL 45.138 — P.I. STA 178+83.894 EL 43.355 — -3.03997% — P.T. STA 180+92.963 EL 37.252

743.154' V.C. — 412.138' V.C. — 350' V.C.

APPR. GRADE OF ADJACENT STREETS

℄ REVERSIBLE LANES

P.C. STA 169+38.373 EL 37.252 — +2.9875% — P.I. STA 173+11.247 EL 48.353 — -0.86524% — HORIZ. P.C. & P.R.C. STA. 176+82.824 EL 45.138 — P.I. STA 178+83.894 EL 43.355 — P.T. STA 180+92.963 EL 37.252

743.154' V.C. — 412.138' V.C. — 350' V.C.

APPR. GRADE OF ADJACENT STREETS

℄ E.N.W. BOUND ROADWAY

P.C. STA 169+38.373 EL 37.252 — +2.9875% — P.I. STA 173+11.247 EL 48.353 — -0.86524% — HORIZ. P.C. & P.R.C. STA. 176+82.824 EL 45.138 — P.I. STA 178+83.894 EL 43.355 — P.T. STA 180+92.963 EL 37.252

743.154' V.C. — 412.138' V.C. — 350' V.C.

APPR. GRADE OF ADJACENT STREETS

EXISTING TRACK PROFILE

SCALES OF TRACING

1"=60' 0 10' 20' 30' 60' 80' 100' 150'

1"=20' 0 5' 10' 20' 30' 40' 50'

1"=10' 0 5' 10' 20' 30'

ALFRED BENESCH & ASSOCIATES — CONSULTING ENGINEERS
10 SOUTH WABASH AVE. CHICAGO, ILLINOIS

CITY OF CHICAGO
DEPARTMENT OF PUBLIC WORKS
BUREAU OF ENGINEERING

NORTHWEST ROUTE SUPERHIGHWAY
GRADE SEPARATION
WABANSIA AVE. TO CORTLAND ST.
SECTION 0505.3-IH

PROPOSED PROFILES

SHEET NO. G OF 136 SHEETS — DATE:

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 2	0505.3-1H	COOK	136	8
STA.	TO STA.			
FED. ROAD DIST. NO. 4	ILLINOIS	PROJECT I-02 2(68)		

DECK PLAN-NORTH PORTION

SCALE 1"=30'

DECK PLAN-SOUTH PORTION

SCALE 1"=30'

NOTE!
ALL DISTANCES ARE MEASURED HORIZONTALLY.
EDGE OF DECK TO BE A STRAIGHT LINE BETWEEN JOINTS.
FOR DETAILS OF EXPANSION GUARDS SEE SHEETS 55 AND 56.
FOR DETAILS OF HANDRAIL ANCHORS SEE SHT. 30.
FOR DETAIL OF ELECTRIC HANGER ANCHORS SEE SHT. 67
FOR DETAILS OF SCUPPERS SEE SHEETS 69, 70 AND 71.
FOR STEEL PLATE SEAL, SLOTTED RAIL AND ANCHORAGE DETAILS SEE SHEET 60.
FOR DETAILS OF HANDHOLES AND LIGHT STANDARD ANCHORAGE SEE SHEETS 66 AND 67.
DIMENSIONS GIVEN ℄ OF JOINT TO ℄ OF HANDHOLES ARE DIMENSIONS ALONG ℄ OF HANDRAIL AND ℄ OF STEEL PLATE SEAL GUARD RAIL.

SCALE OF TRACING
1"=30'
0 5 10 20 30 40 60 80 100

CITY OF CHICAGO
DEPARTMENT OF PUBLIC WORKS
BUREAU OF ENGINEERING

NORTHWEST ROUTE SUPERHIGHWAY
GRADE SEPARATION
WABANSIA AVE. TO CORTLAND ST.
SECTION 0505.3-1H

DECK PLAN

ALFRED BENESCH & ASSOCIATES
10 SOUTH WABASH AVE.
CONSULTING ENGINEERS
CHICAGO, ILLINOIS

SHEET NO. 8 OF 136 SHEETS DATE SEPT. 1958

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 2	0505.3-1-H	COOK	136	9
STA.	TO STA.			
FED. ROAD DIST. NO. 11 ILLINOIS		PROJECT	I 02 2(62)	

SPAN #1 | SPAN #2 | SPAN #3

℄ BRG SOUTH ABUT.

℄ PIER #1 | ℄ PIER #2 | ℄ PIER #3

SEE DETAIL "A" THIS SHT.

BARS @ VARIOUS SPACINGS

℄ JOINT

℄ RDWY S.E.B. LANES

DECK SLAB PANEL "S1" 2 THUS

DECK SLAB PANEL "S2"

PANEL "S2" 4 THUS

℄ JOINT MEDIAN

℄ RDWY REVERSIBLE LANE

DECK SLAB PANEL "S3"

PANEL "S3" 2 THUS

℄ JOINT MEDIAN

DECK SLAB PANEL "S1"

DECK SLAB PANEL "S2"

DECK SLAB PANEL "S2"

℄ RDWY N.W.B. LANES

SEE DETAIL "A" THIS SHT.

℄ BRG SOUTH ABUT.

NOTE: FOR SPACING OF LONGITUDINAL BOTTOM BARS, SEE SHT. NO. 10 FOR SECT. 3-3 SEE SHT. NO. 10

SEE DET. SHT. NO. 10

℄ PIER #1 | ℄ PIER #2 | ℄ PIER #3

DECK REINFORCEMENT PLAN

SPANS 1 TO 3 INCL.

SCALE: 3/32" = 1'-0"

NORTH

SCALES OF TRACING: 3/32" = 1'-0" | 1/8" = 1'-0" | 3/4" = 1'-0"

DETAIL "A"

SCALE: 1" = 1'-0"

TOP REINFORCEMENT IN DIAPHRAGMS SEE UNIT NO. 27

SECTION "1-1"

SCALE: 1" = 1'-0"

℄ RDWY REVERSIBLE LANES HIGH SIDE ℄ JOINT

℄ JOINT MEDIAN

TYPICAL EXCEPT AS NOTED

VARIES AT PIER #2 FOR DET. SEE SHT. NO. 32

SECTION "2-2"

SCALE: 1" = 1'-0"

BILL OF MATERIAL

ITEM	DESCRIPTION	UNIT	QUANTITY SPAN #1	SPAN #2	SPAN #3
11	CLASS "X" CONCRETE	CU. YD.	470.7	374.3	334.5
12	REINFORCEMENT BARS	LBS.	77 250	71 815	63 [illegible]

CITY OF CHICAGO
DEPARTMENT OF PUBLIC WORKS
BUREAU OF ENGINEERING

NORTHWEST ROUTE SUPERHIGHWAY GRADE SEPARATION WABANSIA AVE. TO CORTLAND ST.

SECTION 0505.3-1-H

DECK REINFORCEMENT PLAN SPANS 1 TO 3

ALFRED BENESCH & ASSOCIATES CONSULTING ENGINEERS
10 SOUTH WABASH AVE. CHICAGO, ILLINOIS

SHEET NO. 9 OF 136 SHEETS DATE

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 7	0508.3-1H	COOK	136	10
STA.	— TO STA.			
FED. ROAD DIST. NO. 4	ILLINOIS	PROJECT	I 07 3(64)	

℄ PIER #3 — SPAN #4 — ℄ PIER #4 — SPAN #5 — ℄ PIER #5 — SPAN #6 — ℄ PIER #6

℄ SIGN #1 — ℄ SIGN #2

FOR ADDITIONAL REINFORCEMENT SEE DETAIL SHEET Nº 10A

DECK SLAB PANEL "S4" — DECK SLAB PANEL "S5" — DECK SLAB PANEL "S6"

℄ RDWY S.E.B. LANES — ℄ JOINT MEDIAN — ℄ RDWY REVERS. LANES — ℄ JOINT MEDIAN — ℄ RDWY N.W.B. LANES

30'-5" — 29'-3" — 18'-9" — 18'-9" — 29'-3" — 35'-1"

PANEL "S4" 4 THUS
123 #5 a 81 @ 7½" O.C. TOP
123 #5 a 1 @ 7½" O.C. BOTT.

PANEL "S5" 6-THUS
62 #5 a 3 @ 15" O.C. TOP OF CURB
62 #5 a 4 @ 15" O.C. TOP OF CURB
PANEL "S6" 3 THUS
123 #5 a 2 @ 7½" O.C. TOP
123 #5 a 2 @ 7½" O.C. BOTT.
62 #5 a 10 @ 15" O.C. TOP OF CURB

62 #5 a 5 @ 15" O.C. TOP OF CURB
62 #5 a 10 @ 15" O.C. BOTTOM OF CURB

NOTE:
FOR SPACING OF LONGITUDINAL BOTTOM BARS SEE SHT Nº 18
FOR SECT "2-2" SEE SHT Nº 9

DECK REINFORCEMENT PLAN
SPANS Nº 4 TO 6 N.L.
SCALE: 3/32" 1'-0"

NORTH

TYPICAL DETAIL AT END OF EXP JT
SCALE: 3/4" 1'-0"

EDGE OF DECK — 12" OPEN C.I.P. — ℄ JOINT — ℄ RDWY S.E.B. LANES — FILL WITH PARA-PLASTIC OR EQUAL — 2" PREMOULDED JOINT FILLER WITH COPPER SEAL — FOR REINFORCEMENT IN DIAPHRAGMS SEE SHT Nº 21 — VARIES AT PIER #2 — TYPICAL EXCEPT AS NOTED — TYPICAL

SECTION 3-3
SCALE: 3/4" 1'-0"

SECTION A-A
SCALE: 3/4" 1'-0"

℄ RDWY REVERSIBLE LANES — ℄ JOINT MEDIAN — VARIES — COPPER WATER SEAL — PARAPLASTIC OR EQUAL — VERTI SEAL SEE NOTE — CEMENT NAILS 2" LONG 12" O.C. — PREMOULDED JOINT FILLER

CURB DETAIL AT FIXED PIER
SCALE: 1"-1'-0"

NOTE:
SEAL VERTICAL CURB JOINT WITH BLACK COLD APPLIED JT. SEALER "VERTISEAL" OR EQUAL.

BILL OF MATERIAL

ITEM	DESCRIPTION	UNIT	QUANTITY 352J SPAN 4	SPAN 5	SPAN 6
1L	CLASS "X" CONCRETE	CU. YD.	352.3	348.0	344.5
7E	REINFORCEMENT BARS	LBS.	66,869	66,586	65,703
					68,678

SCALES OF TRACING
1'-0" 0 4 8 12 24
3/4" 1'-0" 0 6 12 18 36

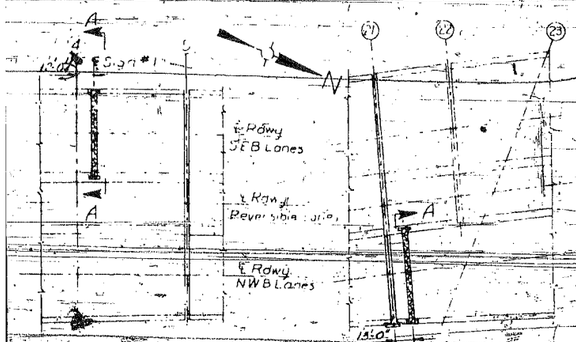
40 ksi STEEL
27# SHIPPED

ALFRED BENESCH & ASSOCIATES — CONSULTING ENGINEERS
10 SOUTH WABASH AVE. — CHICAGO, ILLINOIS

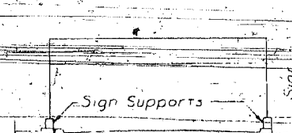
CITY OF CHICAGO
DEPARTMENT OF PUBLIC WORKS
BUREAU OF ENGINEERING
NORTHWEST ROUTE SUPERHIGHWAY
GRADE SEPARATION
WABANSIA AVE. TO CORTLAND ST.
SECTION 0508.3-1H
DECK REINFORCEMENT PLAN
SPANS 4 TO 6

SHEET NO. 10 OF 136 SHEETS — DATE: 1958

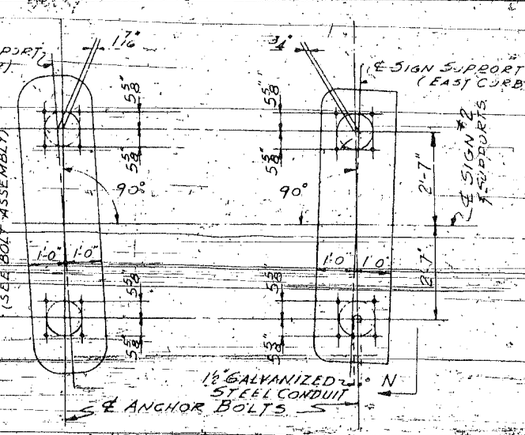
ROUTE NO	SECTION	COUNTY NO	TOTAL SHEETS	SHEET NO
FAI-2	0505.3-1H	COOK	136	10-A
STA:		STA:		
FED HIGHWAYS NO.		APPR'D:	1-02-2(68)	



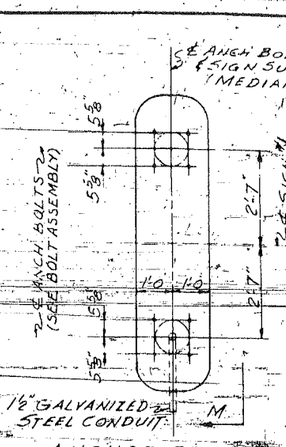
LOCATION PLAN
Scale 1:50'

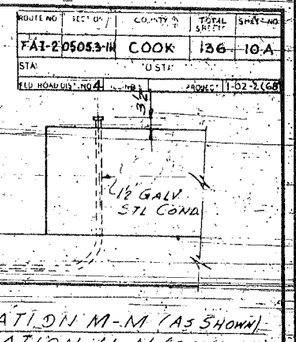


SECTION A-A
Scale: 1"=20'



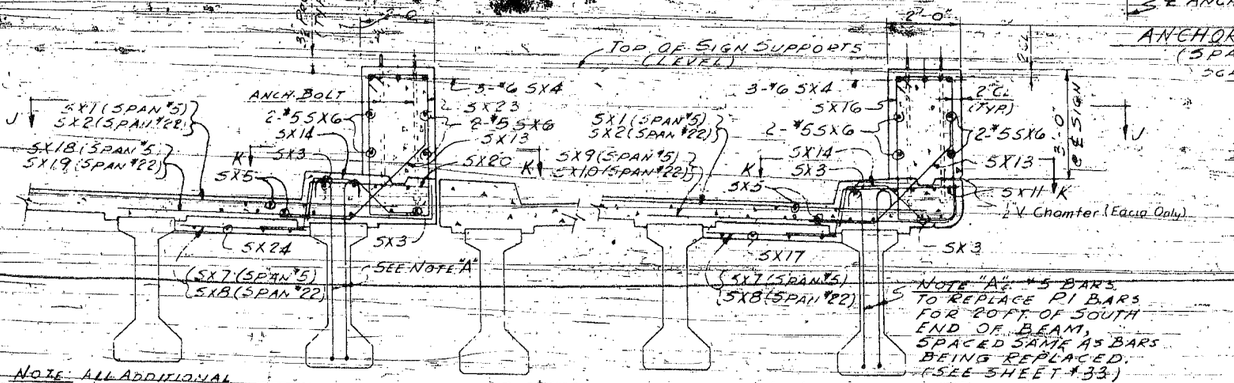
ANCHOR BOLT PLAN
(SPAN #22)
SCALE: ½"=1'-0





ELEVATION M-M (AS SHOWN)
ELEVATION N-N (SIMILAR)

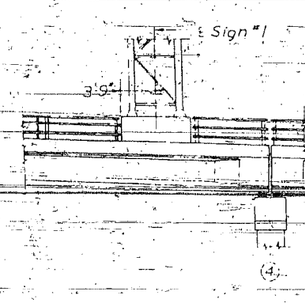
ANCHOR BOLT PLAN
SPAN #5 AT MEDIAN AS SHOWN
AT WEST CURB SIMILAR
SCALE: ½"=1'-0



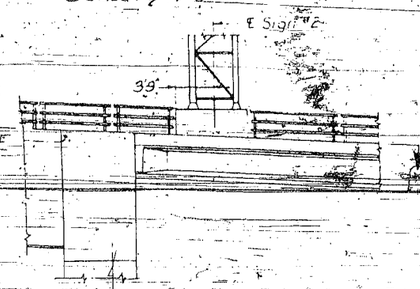
SECTION H-H (SPAN #5)
SECTION L-L (SPAN #22)
SCALE: ½"=1'-0

NOTE "A": #5 BARS TO REPLACE P1 BARS FOR 20 FT OF SOUTH END OF BEAM, SPACED SAME AS BARS BEING REPLACED. (SEE SHEET #33)

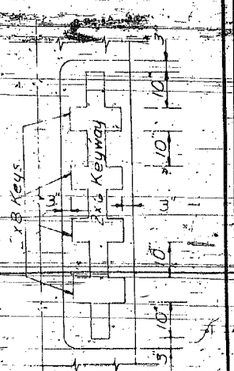
NOTE ALL ADDITIONAL REINFORCEMENT SHOWN TO BE SPACED BETWEEN SUPERSTRUCTURE MAIN REINFORCEMENT BARS



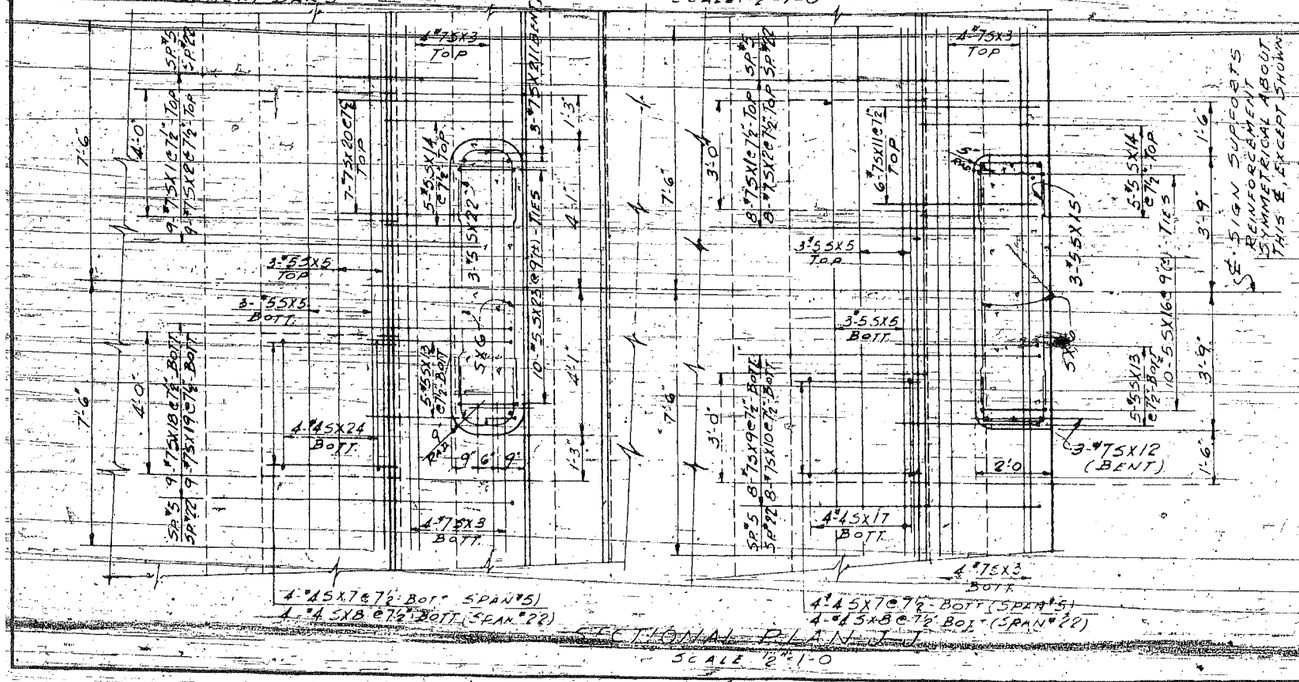
SECTION B-B



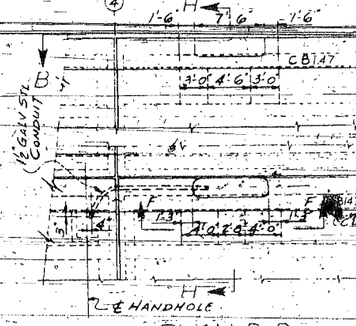
SECTION C-C



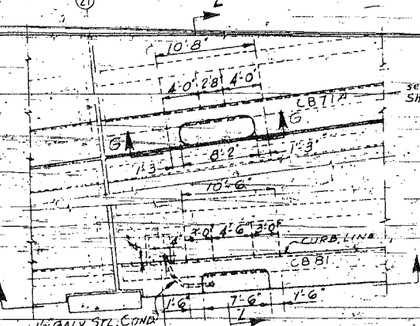
PLAN K-K



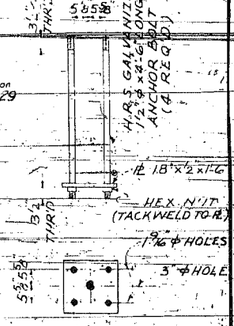
SECTIONAL PLAN J-J
SCALE ½"=1'-0



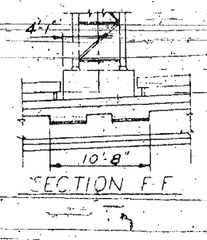
PLAN D-D



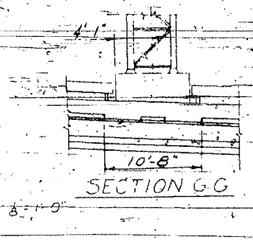
PLAN E-E



BOLT ASSEMBLY
SCALE: 2"=1'-0"
(8 THDS)



SECTION F-F



SECTION G-G

Scale 8"=1'-0

CITY OF CHICAGO
DEPARTMENT OF PUBLIC WORKS
BUREAU OF ENGINEERING

NORTHWEST ROUTE SUPERHIGHWAY GRADE SEPARATION
WABANSIA AVE. TO CORTLAND ST.
SECTION 0505.3-1

SIGN SUPPORT DETAILS

ALFRED BENESCH & ASSOCIATES CONSULTING ENGINEERS
10 SOUTH WABASH AVE. CHICAGO, ILLINOIS SHEET NO. 10A OF 136 SHEETS DATE: MAY 1969

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 2	0505.3 TH	COOK	136	11
STA.	TO STA.			
FED. ROAD DIST. NO. 6	ILLINOIS	PROJECT		

SPAN #7 — SPAN #8 — SPAN #9 — SPAN #10

EPIER #6 — EPIER #7 — EPIER #8 — EPIER #9 — EPIER #10

61 #5 X1 @ 6" O.C. TOP

61 #5 X1 @ 6" O.C. TOP

59 #5 X1 @ 6" O.C. TOP

59 #5 X1 @ 6" O.C. TOP

59 #5 X1 @ 6" O.C. TOP

61 #5 X1 @ 6" O.C. TOP

59 #5 X1 @ 6" O.C. TOP

59 #5 X1 @ 6" O.C. TOP

59 #5 X1 @ 6" O.C. TOP

61 #5 X1 @ 6" O.C. TOP

59 #5 X1 @ 6" O.C. TOP

59 #5 X1 @ 6" O.C. TOP

59 #5 X1 @ 6" O.C. TOP

61 #5 X1 @ 6" O.C. TOP

59 #5 X1 @ 6" O.C. TOP

59 #5 X1 @ 6" O.C. TOP

59 #5 X1 @ 6" O.C. TOP

61 #5 X1 @ 6" O.C. TOP

59 #5 X1 @ 6" O.C. TOP

59 #5 X1 @ 6" O.C. TOP

59 #5 X1 @ 6" O.C. TOP

61 #5 X1 @ 6" O.C. TOP

59 #5 X1 @ 6" O.C. TOP

59 #5 X1 @ 6" O.C. TOP

59 #5 X1 @ 6" O.C. TOP

DECK SLAB PANEL "S7"

DECK SLAB PANEL "S8"

DECK SLAB PANEL "S9"

PANEL "S" 4 THUS

PANEL "S8" 4 THUS

PANEL "S9" 2 THUS

DECK REINFORCEMENT PLAN

SPANS #7 TO 10 INCL

SCALE: 3/32" = 1'-0"

SECTION "9-9"

SCALE: 3/4" = 1'-0"

NOTE!
FOR SPACING OF LONGITUDINAL BOTTOM BARS SEE SHEET NO. 13
FOR SECT. 2-2 SEE SHT. NO. 9
FOR SECT. 3-3 SEE SHT. NO. 10
FOR SECT. 4-4 SEE SHT. NO. 12

NOTE "B"
ORDER a33, a34 & a113 BARS FULL LENGTH. CUT IN FIELD TO FIT REMAINDER OF SKEW.

SCALE OF TRACING
3/32" = 1'-0"
0 4" 8" 16" 24"
3/4" = 1'-0"

BILL OF MATERIAL

ITEM	DESCRIPTION	UNIT	QUANTITY SPAN 7	SPAN 8	SPAN 9	SPAN 10
11	CLASS "X" CONCRETE	CU YD.	384.6	383.9	222.7	
12	REINFORCEMENT BARS	LBS.	68779	65,080	46,384	22090

ALFRED BENESCH & ASSOCIATES
10 SOUTH WABASH AVE.
CONSULTING ENGINEERS
CHICAGO, ILLINOIS

CITY OF CHICAGO
DEPARTMENT OF PUBLIC WORKS
BUREAU OF ENGINEERING
NORTHWEST ROUTE SUPERHIGHWAY
GRADE SEPARATION
WABANSIA AVE. TO CORTLAND ST.
SECTION 0505.3-TH
DECK REINFORCEMENT PLAN
SPANS 7 TO 10

SHEET NO. 11 OF 136 SHEETS
DATE:

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 2	0505.3, H	COOK	136	12
STA.	TO STA.			
FED. ROAD DIST. NO. 1	ILLINOIS	PROJECT	I-90-2(68)	

NOTE 'A'
BARS Q33 + 34 H MARKED SEE NOTE 'A' SHALL BE ORDERED FULL LENGTH & CUT IN FIELD TO FIT SKEW USE REMAINDER OF CUT BARS AT OTHER END.

SEE DETAIL C THIS SHEET

18#5 @ 7½" O.C TOP
18#5 @ 7½" O.C BOTT
SEE NOTE 'A'

℄ PIER #10

℄ PIER #11

℄ PIER #12

℄ PIER #13

4#5644 TOP OF CURB

4#5568 TOP OF CURB

4#5613 TOP OF CURB

46#5 @ 3 @ 5" O.C TOP OF CURB
46#5 @ 3 @ 5" O.C BOTTOM
SEE DETAIL 'F'

28#5 @ 12" O.C TOP

28#5 @ 13 @ 12" O.C BOT.

DETAIL 'A' SEE SHT NO 13

12#5 Q13 @ 6" O.C TOP
12#5 Q33 @ 6 O.C BOTT
SEE NOTE 'B'

PANEL 'S10' - 2 THUS

74#5 a8,9 @ 7½" O.C TOP
74#5 Q21 @ 7½ O.C BOTT
1#5 Q28 TOP & BOTT

65#5 X1 @ 6" O.C TOP
65#5 X1 @ 6" O.C BOTT

6#4 b70
6#4 b71
6#4 b5
6#4 b72
6#4 b105

℄ RDWY S.E.B. LANES

1#5 Q31 TOP & BOTT

63#5 X1 @ 6" O.C TOP
12#5 Q3 @ 6" O.C TOP
12#5 Q33 @ 6" O.C BOTT
SEE NOTE 'B'

PANEL 'S11' - 2 THUS

1#5 Q31 TOP & BOTTOM

74#5 a8,9 @ 7½" O.C TOP
74#5 Q21 @ 7½ O.C BOTT
46#5 Q3 @ 5" O.C TO 10° OF CURB

63#5 X1 @ 6" O.C TOP
89#5 a8,9 @ 6" O.C TOP
89#5 Q21 @ 6" O.C BOTT
45#5 Q30 @ 2'-0" TOP OF CURB

5#4 b71
6#4 b5
6#4 b72
6#4 b106
6#4 b41

BOTT BARS

℄ JOINT MEDIAN

13#5 @ 7½" O.C TOP
13#5 @ 7½" O.C BOTT
SEE NOTE 'A'

℄ RDWY REVERSIBLE LANES

46#5 @ 5" O.C TOP OF CURB

11#5 @ 7½" O.C TOP
11#5 @ 7½" O.C BOTT
SEE NOTE 'B'

1#5 Q35 TOP & BOTT

48#5 @ 15" O.C TOP OF CURB

95#5 @ 7½" O.C TOP
95#5 @ 7½" O.C BOTT

℄ RDWY REVERSIBLE LANES

8#4 b61
8#4 b10
8#4 b7
8#4 b8
7#4 b43

BOTT BARS

81#5 @ 2" O.C TOP

4#5 b2 @ 7½" O.C TOP
74#5 Q21 @ 7½" O.C BOTT

59#5 @ 15" O.C TOP OF CURB

75#5 X1 @ 6" O.C TOP

℄ JOINT MEDIAN

59#5 X1 @ 6" O.C TOP

℄ RDWY N.W.B. LANES

DECK SLAB PANEL 'S11'

63#5 X1 @ 6" O.C TOP

1#5 @ 25 TOP & BOTTOM

111#5 a8,9 @ 6" O.C TOP
111#5 Q21 @ 6" O.C BOTT

61#5 X1 @ 6" O.C TOP

DECK SLAB PANEL 'S13'

64#5 a8,9 @ 6" O.C TOP
64#5 Q21 @ 6" O.C BOTT

61#5 X1 @ 6" O.C TOP

SEE DETAIL 'E' THIS SHT

SEE DETAIL 'D' THIS SHEET

SPAN #11

SPAN #12

SPAN #13

DECK REINFORCEMENT PLAN
SPANS NO 11 TO 13 INCL
SCALE 3/32" = 1'-0"

SCALES OF TRACING
3/32" = 1'-0"
1" = 1'-0"

NORTH

FOR DETAIL OF EXPANSION GUARD SEE SHEET 55

EDGE OF BRIDGE

ROMPER WATER SEAL

CURB LINE

℄ RDWY S.E.B. LANES

℄ PIER #10 & 24

3'CL

DETAIL 'D'
DETAIL 'E' SIMILAR
SCALE 3/4" = 1'-0"

DETAIL 'F'
DETAIL 'G' SIMILAR
SCALE 3/4" = 1'-0"

℄ PIER #10

a34 b12 X1 b11 X1 a34

TYP 4

a35 a35

3"

1'-0" 10½" 9" 4'-0"

FOR REINFORCEMENT IN DIAPHRAGMS SEE SHT NO 21

FILLER & COPPER SEAL

℄ EXPANSION JOINT

a34 b14 X1 b14 X1 a34

1'-0" 1'-0" 9" 1'-0"

SECTION 4-4
SCALE 3/4" = 1'-0"

SECTION 5-5
SCALE 3/4" = 1'-0"

6'-0" MEDIAN

3'-0" 7½" 3'-7½"

b44 a5 b52 a10 a1 b81 b44 HORIZONTAL CONSTR. JT.

a1 b52 b44

NOTE
THE HORIZONTAL CONSTR. JT. BETWEEN 'E' CURB AND THE SLAB MUST BE USED AT ALL SECTIONS WHERE TRAFFIC CONSTR. JT. AT THE EDGE OF PAVEMENT SHALL BE OMITTED WHERE THE HORIZ. CONSTR. JT. IS USED.

SECTION 6-6
SCALE 3/4" = 1'-0"

a3 b44 a1 CONSTR. JT. SEE SHT 18 a1 b44 b52 CONSTR. JOINT

SECTION 7-7
SCALE 3/4" = 1'-0"

NOTE
FOR SPACING OF LONGITUDINAL BOTTOM BARS SEE SHT NO 18
FOR SECT. 2-2 SEE SHT NO 9

BILL OF MATERIAL

ITEM	DESCRIPTION	UNIT	QUANTITY SPAN #11	SPAN #12	SPAN #13
11	CLASS X CONCRETE	CU. YD.	259.3	245.7	54.8
12	REINFORCEMENT BARS	LBS.	49761	53441	12761

CITY OF CHICAGO
DEPARTMENT OF PUBLIC WORKS
BUREAU OF ENGINEERING

NORTHWEST ROUTE SUPERHIGHWAY
GRADE SEPARATION
WABANSIA AVE. TO CORTLAND ST.

SECTION 0505.3-1 H

DECK REINFORCEMENT PLAN
SPANS 11 TO 13

ALFRED BENESCH & ASSOCIATES CONSULTING ENGINEERS
10 SOUTH WABASH AVE. CHICAGO, ILLINOIS

SHEET NO. 12 OF 136 SHEETS DATE

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 2	25.15.3-H	COOK	136	12
STA.	TO STA.			
FED. ROAD DIST. NO. 11	ILLINOIS	PROJECT	202 2(63)	

NOTE A
BARS 53, 1345 & 20 MARKED * SEE NOTE 'A' SHALL BE ORDERED FULL LENGTH & CUT IN FIELD TO FIT SKEW. USE REMAINDER OF CUT BARS AT OTHER END.

SEE DETAIL 5 THIS SHEET

℄ PIER #10 — ℄ PIER #11 — PIER #13

4 #5 b44 TOP OF CURB — 4 #5 b43 TOP OF CURB — 4 #5 b43 TOP OF CURB

46 #5 a5C @ 13" O.C TOP & T. OF CURB
46 #5 a3C @ 5" O.C BOTTOM
SEE DETAIL 'F'

28 #5 a5C @ 12" O.C TOP
28 #5 a13 @ 12" O.C BOTT.

3 #5 a22 @ 12" O.C

DETAIL "A" SEE SHT. N°. 13

18 #5 a12 23 7½ O.C TOP
18 #5 a3 @ 7½ O.C BOTT
SEE NOTE 'A'

12 #5 a1 @ 6" O.C TOP
12 #5 a33 @ 6" O.C BOTT.
SEE NOTE 'B'

PANEL "S10" 2 THUS

74 #5 a8 19 7½ O.C TOP
74 #5 a1 @ 7½ O.C. BOT.
1 #5 a28 TOP & BOT.

1 #5 a28 TO ½ SO.

℄ RDWY. S. B. LANES

1 #5 a31 TOP & BOT.

19 #5 a32 7½ O.C TOP
19 #5 a33 @ 7½ O.C BOT.
SEE NOTE 'A'

63 #5 X1 @ 6" O.C TOP
12 #5 a32 @ 6" O.C TOP
12 #5 a33 @ 6" O.C BOTT.
SEE NOTE 'B'

PANEL "S11" - 2 THUS

1 #5 a31 TOP & BOTTOM

74 #5 a8 16 7½ O.C TOP
74 #5 a1C 7½ O.C BOTT.
46 #5 a3 @ 5" O.C TO ℄ OF CURB

℄ JOINT MEDIAN

89 #5 a8 @ 6" O.C TOP
89 #5 a1 @ 6" O.C BOTT
45 #5 a3 @ 2" O.C TOP OF CURB

59 #5 X1 @ 6" O.C TOP

5 #4 b71
6 #4 b65
6 #4 b72
6 #4 b100
6 #4 b41

BOTT. BARS

℄ RDWY. S. E. D. LANES

48 #5 a4 @ 15" O.C. TOP OF CURB

41 #5 a34 @ 7½" O.C TOP
41 #5 a2 @ 7½" O.C BOT.
SEE NOTE 'B'
1 #5 a35 TOP & BOTT.

95 #5 a1C @ 7½" O.C TOP
95 #5 a1 @ 7½ O.C BOTT.

℄ RDWY. REVERSIBLE LANES

8 #4 b61
8 #4 b10
8 #4 b7
8 #4 b8
7 #4 b43

BOTT. BARS

℄ JOINT MEDIAN

19 #5 a46 7½ O.C TOP
5 #5 a46 7½ O.C BOT.
SEE NOTE 'A'

℄ RDWY. REVERSIBLE LANES

81 #5 X1 @ 5" O.C TOP

74 #5 a2C @ 7½" O.C TOP
74 #5 a1C @ 7½" O.C BOT.

1 #5 a35 TOP & BOTT.

℄ JOINT MEDIAN

59 #5 a46 @ 15" O.C TOP OF CURB

59 #5 X1 @ 6" O.C TOP

DECK SLAB PANEL "S11"

6 #4 b62
6 #4 b68
6 #4 b31
0 #4 b90
0 #4 b18

BOTT. BARS

63 #5 X1 @ 6" O.C TOP
SEE NOTE 'B'

℄ RDWY. N. W. B. LANES

111 #5 a8 @ 6" O.C TOP
111 #5 a1 @ 6" O.C BOTT.

1 #5 a35 TOP & BOTT.

44 #5 a13 @ 18" O.C TOP OF CURB

4 #5 b4
4 #5 b78
4 #5 b79
4 #5 b107

64 #5 a8 @ 6" O.C TOP
64 #5 a1 @ 6" O.C BOTT.

57 #5 X1 @ 6" O.C TOP

64 #5 a8 @ 6" O.C TOP
64 #5 a1 @ 6" O.C BOTT.
61 #5 X1 @ 6" O.C TOP

32 #5 a23 @ 12" O.C TOP OF CURB

32 #5 a15 @ 12" O.C TOP & BOT OF CURB

61 #5 X1 @ 6" O.C TOP

DECK SLAB PANEL "S12"

1 #5 C 63 TOP & BOTTOM
12 #5 a33 @ 6" O.C TOP
6 #5 a32 @ 6" O.C BOTT.
SEE NOTE 'B'

68 #5 a3 @ 12" O.C.
68 #5 a20 @ 12" O.C.
TOP & BOT OF CURB

65 #5 X1 @ 6" O.C TOP

SEE DETAIL 'F' THIS SHT.

SEE DETAIL 'F' THIS SHT.

SPAN #11 — SPAN #12 — SPAN #13

℄ PIER #12 — ℄ PIER #13

DECK REINFORCEMENT PLAN
SPANS Nº 11 TO 13 INCL.
SCALE 3/32" = 1'-0"

SCALES OF TRACING
3/32" = 1'-0"
3/4" = 1'-0"

NORTH

NOTE 1
FOR SPACING OF LONGITUDINAL BOTTOM BARS SEE SHT. N°. 18 FOR SECT. 2 SEE SHT. N°. 9

FOR DETAIL OF EXPANSION GUARD, SEE SHEET 55

EDGE OF BRIDGE

COPPER WATER SEAL

CURB LINE

CURB LINE

℄ PIER #10 & 24

℄ PIER #11 & 23

DETAIL "D"
DETAIL "E" SIMILAR
SCALE 3/4" = 1'-0"

DETAIL "F"
DETAIL "G" SIMILAR
SCALE 3/4" = 1'-0"

℄ PIER #10

a34 b12 X1 b44 X1 a34

b11 b52 a35 a35

TYP. 4

3"

FOR REINFORCEMENT IN DIAPHRAGMS SEE SHT. N°. 21

1'-0" 10'-2" 9" 1'-0"

FILL WITH ASPHALT

1/2" PREMOLDED JOINT FILLER & COPPER SEAL

a34 b11 X1 a34

1'-0" 9" 10'-2" 1'-0"

SECTION 4-4
SCALE 3/4" = 1'-0"

SECTION 5-5
SCALE 3/4" = 1'-0"

6'-0" MEDIAN

3'-3"

b44 a3 a1 b52

HORIZONTAL CONSTR. JT.

a10 b52 a1 b44

a3 a1 b44 b52

CONSTR. JT. SEE SHT. 13

NOTE 1
THE HORIZONTAL CONSTR. JT. BETWEEN THE CURB AND THE SLAB MUST BE USED AT THE SECTIONS SHOWN. THE LONG. CONSTR. JT. AT THE EDGE OF PAVEMENT SHALL BE OMITTED WHERE THE HORIZ. CONSTR. JT. IS USED.

SECTION 6-6
SCALE 3/4" = 1'-0"

SECTION 7-7
SCALE 3/4" = 1'-0"

BILL OF MATERIAL

ITEM	DESCRIPTION	UNIT	QUANTITY SPAN #11	SPAN #12	SPAN #13
11	CLASS X CONCRETE	CU. YD.	259.3	245.7	54.8
12	REINFORCEMENT BARS	LBS.	49961	53441	12761

CITY OF CHICAGO
DEPARTMENT OF PUBLIC WORKS
BUREAU OF ENGINEERING

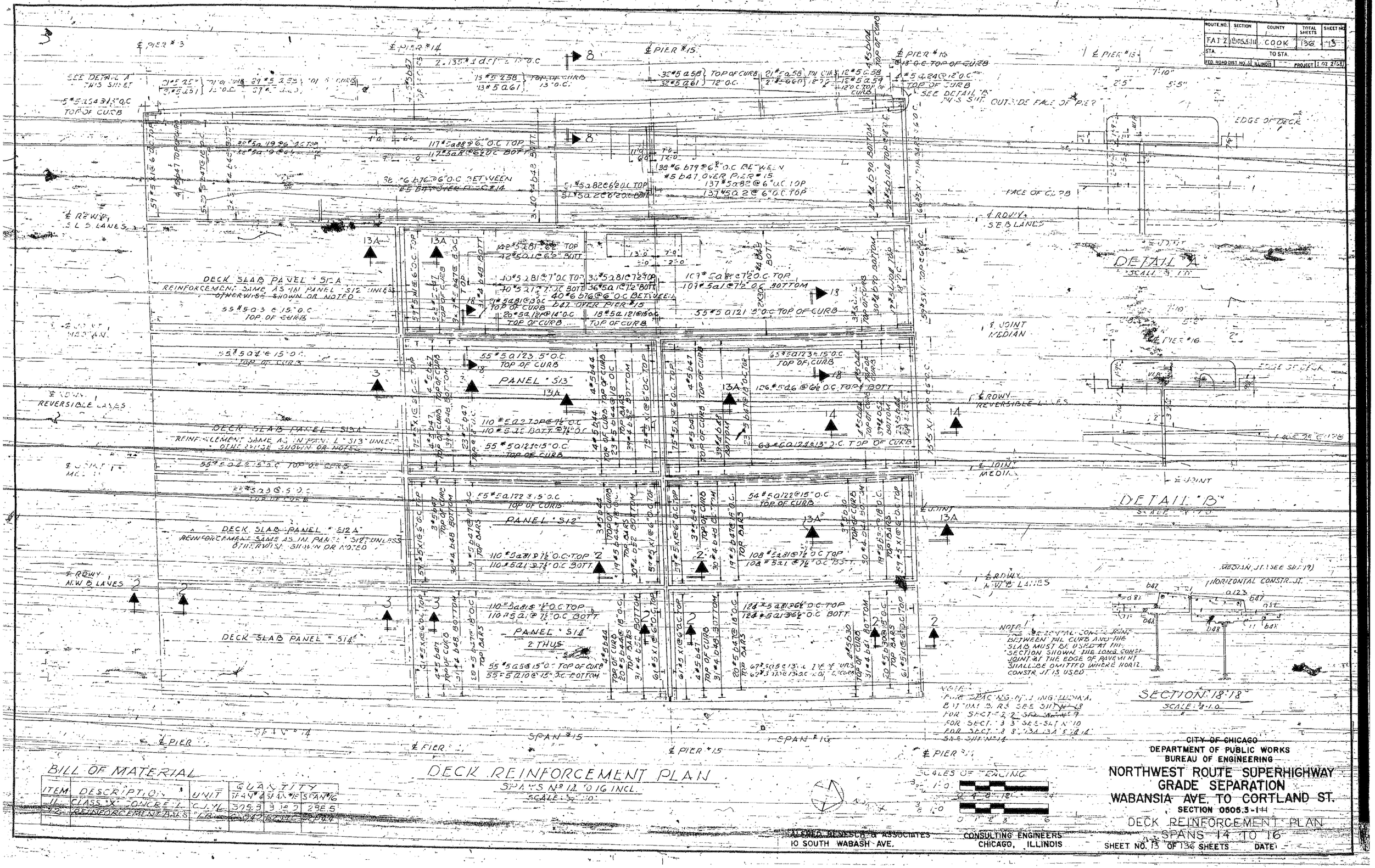
NORTHWEST ROUTE SUPERHIGHWAY GRADE SEPARATION
WABANSIA AVE. TO CORTLAND ST.
SECTION 0505.3-1 H

DECK REINFORCEMENT PLAN
SPANS 11 TO 13

ALFRED BENESCH & ASSOCIATES — CONSULTING ENGINEERS
10 SOUTH WABASH AVE. — CHICAGO, ILLINOIS

SHEET NO. 12 OF 136 SHEETS — DATE

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 2	0505.3 H	COOK	136	13
STA.	TO STA.			
FED. ROAD DIST. NO. 1	ILLINOIS	PROJECT	I 02 2(65)	



BILL OF MATERIAL

ITEM	DESCRIPTION	UNIT	QUANTITY SPAN #15	QUANTITY SPAN #16
1.	CLASS "X" CONCRETE	C.Y.	505.5	298.5
2.	REINFORCEMENT BARS	LBS.	54,200	29,800

DECK REINFORCEMENT PLAN

SPANS No. 14 TO 16 INCL.

SCALE: 3/32" = 1'0

SCALES OF ENLING.

3/32" = 1'0

0 3 6

CITY OF CHICAGO
DEPARTMENT OF PUBLIC WORKS
BUREAU OF ENGINEERING

NORTHWEST ROUTE SUPERHIGHWAY
GRADE SEPARATION
WABANSIA AVE. TO CORTLAND ST.
SECTION 0505.3-1H

DECK REINFORCEMENT PLAN
SPANS 14 TO 16

ALFRED BENESCH & ASSOCIATES
10 SOUTH WABASH AVE.
CONSULTING ENGINEERS
CHICAGO, ILLINOIS

SHEET NO. 13 OF 136 SHEETS DATE:

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
FAI 2	0505.3-H	COOK	136	14
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	PROJECT	T 62 2(6)	

SECTION "16-16"
SCALE: 3/8" = 1'-0"

SECTION "17-17"
SCALE: 3/8" = 1'-0"

SECTION 8-8
SCALE: 3/8" = 1'-0"

SECTION 8A-8A
SCALE: 3/4" = 1'-0"

SECTION "9-9"
SCALE: 3/4" = 1'-0"

SECTION 13-13
SCALE: 3/4" = 1'-0"

SECTION "14A-14A"
SCALE: 3/4" = 1'-0"

SECTION "15-15"
SCALE: 3/4" = 1'-0"

PLAN OF POURING SCHEDULE
1" = 50'-0"

SCALES OF TRACING
3/4" = 1'-0"
3/32" = 1'-0"

NOTE!
THE HORIZONTAL CONSTR. JT. BETWEEN THE CURB AND THE SLAB MUST BE USED AT THE SECTION SHOWN. THE LONG CONSTR. JT. AT THE EDGE OF PAVEMENT SHALL BE OMITTED WHERE HORIZ CONSTR. JT IS USED.

NOTE!
FOR SPACING OF LONGITUDINAL BOTTOM BARS SEE SHT 18
FOR SECT '2 2' SEE SHT. N° 9
FOR SECT '3 3' SEE SHT. N° 10

NOTE!
THE HORIZ. CONSTR. JT. BETWEEN THE CURB AND THE SLAB MUST BE USED AT THE SECT. SHOWN. THE LONG CONSTR. JT. AT THE EDGE OF PAVEMENT SHALL BE OMITTED WHERE THE HORIZ CONSTR. JT. IS USED.

NOTE!
FOR REINFORCEMENT IN DIAPHRAGMS SEE SHT N° 21.

NOTE!
CONSTRUCTION JOINTS SHALL NOT BE PERMITTED IN UNITS II & IV OR IV & V. WHERE IN UNITS II & IV CONCRETE IN ONE UNIT SHALL NOT BE PLACED SIMULTANEOUSLY WITH CONCRETE IN UNITS II, III B, IV & V. THE CONCRETE IN UNIT II A SHALL BE PLACED FIRST AND THE CONCRETE IN UNIT II A MUST REMAIN PLASTIC UNTIL THE CONCRETE IN UNIT III B HAS BEEN PLACED AND THE CONCRETE IN UNIT III B MUST REMAIN PLASTIC UNTIL THE CONCRETE IN UNIT IV HAS BEEN PLACED.

BILL OF MATERIAL

ITEM	DESCRIPTION	UNIT	QUANTITY SPAN 17	QUANTITY SPAN 18
1.2	REINFORCEMENT BARS	LBS.	63,442	54,943

DECK REINFORCEMENT PLAN
SPANS 17 & 18
SCALE 3/32" = 1'

CITY OF CHICAGO
DEPARTMENT OF PUBLIC WORKS
BUREAU OF ENGINEERING

NORTHWEST ROUTE SUPERHIGHWAY
GRADE SEPARATION
WABANSIA AVE. TO CORTLAND ST.

SECTION 0505.3-1 H

DECK REINFORCEMENT PLAN
SPANS 17 & 18

ALFRED BENESCH & ASSOCIATES
10 SOUTH WABASH AVE.
CONSULTING ENGINEERS
CHICAGO, ILLINOIS

SHEET NO. 14 OF 136 SHEETS
DATE

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 2	C 0503 IH	COOK	136	15
STA	TO STA			
FED. ROAD DIST. NO. 9	ILLINOIS	PROJECT	I 112 2(68)	

DECK REINFORCEMENT PLAN
SPANS No. 19 TO 21 INCL.
SCALE 3/32" = 1'-0"

BILL OF MATERIAL

ITEM	DESCRIPTION	UNIT	QUANTITY SPAN #19	SPAN #20	SPAN #21
1	CLASS "A" CONCRETE	C.Y.	376	362	300
2	REINFORCEMENT BARS	LBS	69,136	56,702	63,140

DETAIL "C"
SCALE 3/4" = 1'-0"

DETAIL "D"
SCALE 3/4" = 1'-0"

SECTION 19-19
SCALE 3/4" = 1'-0"

NOTE!
FOR SPACING OF LONGITUDINAL BOTTOM BARS SEE SHT. N° 18
FOR SECT. 2-2 SEE SHT. N° 9
FOR SECT. 3-3 SEE SHT. N° 10
FOR SECT. 13-13 & 11A-11A & 8A-8A SEE SHT. N° 14

NOTE!
THE HORIZ. CONSTR. JT. BETWEEN THE CURBS AND THE SLAB MAY BE OMITTED AT THE SECTION SHOWN IN LONG CONSTR. JT. AT THE SIDE OF PAVEMENT SHALL BE OMITTED WHERE HORIZ. CONSTR. JT. IS USED.

SCALES OF TRACING
3/32" = 1'-0"
0 4 8 12
3" = 1'-0"
0 1 2 3 6

CITY OF CHICAGO
DEPARTMENT OF PUBLIC WORKS
BUREAU OF ENGINEERING
NORTHWEST ROUTE SUPERHIGHWAY
GRADE SEPARATION
WABANSIA AVE. TO CORTLAND ST.
SECTION 0503.3-IH
DECK REINFORCEMENT PLAN
SPANS 19 TO 21

ALFRED BENESCH & ASSOCIATES
10 SOUTH WABASH AVE.
CONSULTING ENGINEERS
CHICAGO, ILLINOIS

SHEET NO. 15 OF 136 SHEETS DATE

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS.	SHEET NO.
FA 17	0505.3-1H	COOK	136	16
STA.	TO STA.			
FED. ROAD DIST. NO. 4	ILLINOIS	PROJECT	I-02-2(64)	

SPAN # 22

SPAN # 23

℄ PIER # 21

℄ PIER # 22

℄ PIER # 23

℄ JOINT

℄ JOINT - MEDIAN

℄ RDWY. S.E.B. LANES

℄ RDWY. REVERSIBLE LANES

℄ RDWY. N.W.B. LANES

℄ SIGN # 2

FOR ADDITIONAL REINFORCEMENT SEE DETAIL SHEET Nº 10A

FOR DETAIL "D" SEE SHT. Nº 15

TOP OF CURB

BOTTOM

TOP BARS

CONSTR. JT.

HORIZONTAL CONSTR. JT.

FOR MEDIAN JT. SEE SHT. 17

VARIES

CURB LINE

6" MD.

DECK REINFORCEMENT PLAN

SPAN Nº 22 & 23

SCALE 3/32" = 1'-0"

SECTION "C-C"

SCALE 1/4" = 1'-0"

DETAIL "A"

SCALE 1" = 1'-0"

SECTION A-A

SCALE 3/4" = 1'-0"

SECTION "B-B"

SCALE 3/4" = 1'-0"

SECTION "11-11"

SCALE 3/4" = 1'-0"

SECTION "12-12"

SCALE 3/4" = 1'-0"

SECTION "10-10"

SCALE 3/4" = 1'-0"

NOTE "B"

ORDER 8 BARS TOP & BOTT. FULL LENGTH CUT IN FIELD TO FIT REMAINDER OF SKEW.

NOTE 1

FOR SPACING OF LONGITUDINAL BOTTOM BARS SEE SHT. Nº

FOR SECT. 2 SEE SHT. Nº

FOR SECT. 3 SEE SHT. Nº

FOR SECT. 4 SEE SHT. Nº

NOTE 1

THE HORIZONTAL CONSTR. JT. BETWEEN THE CURB AND THE SLAB MUST BE USED AT THE SECTIONS SHOWN. THE LONG. JT. AT THE EDGE OF PAVEMENT SHALL BE OMITTED WHERE THE HORIZ. CONSTR. JT. IS USED

BILL OF MATERIAL

353.3

ITEM	DESCRIPTION	UNIT	QUANTITY SPAN Nº 22	QUANTITY SPAN Nº 23
11	CLASS "X" CONCRETE	CU. YD.	248.7	169.1
12	REINFORCEMENT BARS	LBS.	52,883	32,943
				56,439

SCALES OF TRACING

1/2" = 1'-0"

3/32" = 1'-0"

1/4" = 1'-0"

CITY OF CHICAGO
DEPARTMENT OF PUBLIC WORKS
BUREAU OF ENGINEERING

NORTHWEST ROUTE SUPERHIGHWAY GRADE SEPARATION WABANSIA AVE. TO CORTLAND ST.

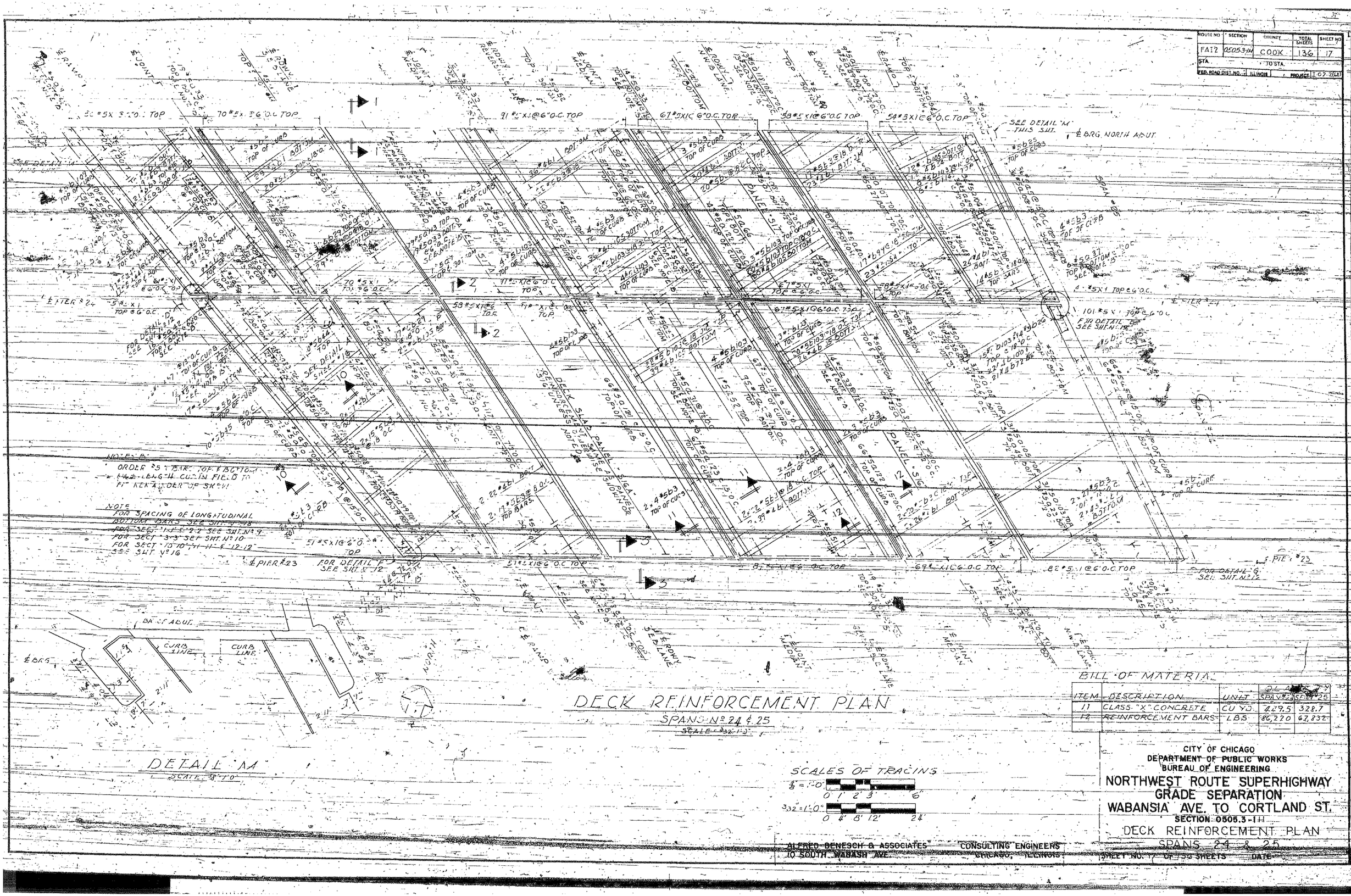
SECTION 0505.3-1 H.

DECK REINFORCEMENT PLAN SPANS 22 & 23

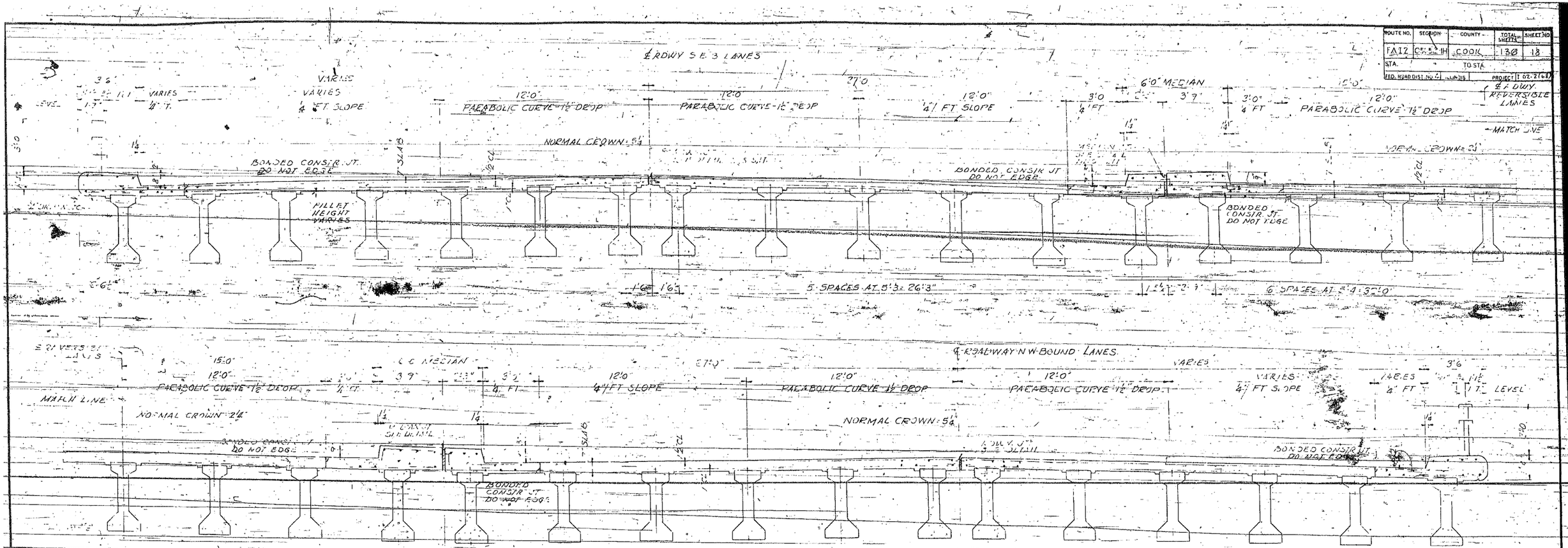
ALFRED BENESCH & ASSOCIATES CONSULTING ENGINEERS
10 SOUTH WABASH AVE. CHICAGO, ILLINOIS

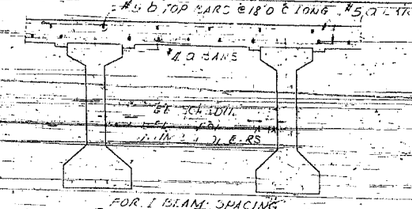
SHEET NO. 16 OF 136 SHEETS DATE: SEPT. 1958

ROUTE NO	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
FAI 2	0505-3-1H	COOK	136	17
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	PROJECT	I 02 7(62)	



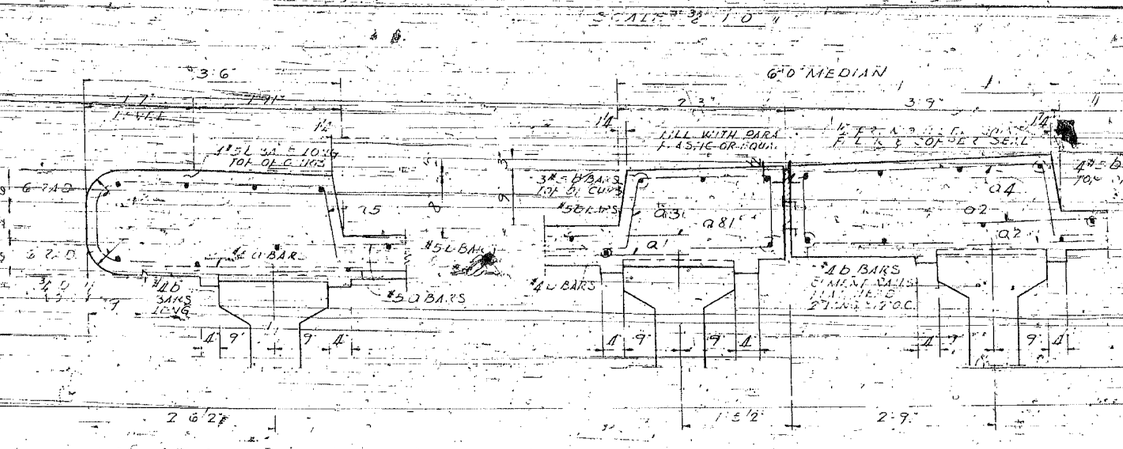
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 2	0505.3 IH	COOK	130	18
STA.	TO STA.			
FED. ROAD DIST. NO. 4 ILLINOIS		PROJECT I 62-2(68)		





TYPICAL DETAIL OF SLAB

℄ CONSTRUCTION JT. IN SLAB SCHEDULE	
I BEAM SPACING	NO OF LONG. BARS @ 10 CTS
4'-0" TO 4'-6"	4
4'-7" TO 5'-4"	5
5'-5" TO 6'-2"	6
6'-3" TO 7'-0"	7
7'-1" TO 7'-9"	8
7'-10" TO 8'-7"	9



TYPICAL SECTION ON TANGENT
SCALE 3/32" = 1'-0"

DETAIL AT ℄ ROADWAY
SCALE 1" = 1'-0"

TYPICAL CURB DETAIL
SCALE 1" = 1'-0"

DETAIL OF MEDIAN ON TANGENT
SCALE 1" = 1'-0"

SCALES OF TRACING
3/32" = 1'-0" 0 1' 2' 4' 6' 8'
1" = 1'-0" 0 3' 6" 9" 1' 2' 3'

CITY OF CHICAGO
DEPARTMENT OF PUBLIC WORKS
BUREAU OF ENGINEERING

NORTHWEST ROUTE SUPERHIGHWAY GRADE SEPARATION WABANSIA AVE. TO CORTLAND ST.

SECTION 0505.3-IH

TYPICAL CROSS SECTIONS

ALFRED BENESCH & ASSOCIATES CONSULTING ENGINEERS
10 SOUTH WABASH AVE. CHICAGO, ILLINOIS

SHEET NO. 18 OF 130 SHEETS DATE

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 2	0505.3 IH	COOK	136	19
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	PROJECT	1 027 (6R)	

℄ ROADWAY S.E. BOUND LANES

VARIES

LEVEL

3'-6"

12'-5" TO 11" VARIES

6" GRAV.

BONDED CONSTR. JT. DO NOT EDGE

SLAB

SUPERELEVATION 0.0125

FILLET HEIGHT VARIES

DO NOT EDGE CONSTR. JT. AT THIS SHT.

BONDED CONSTR. JT. DO NOT EDGE

27'-0"

24'-0"

6'-0" MEDIAN

3'-9" 2'-3" 3'-9"

3'-0"

15'-0"

12'-0"

MEDIAN JOINT SEE DETAIL THIS SHT.

SUPERELEVATION 0.0125

BONDED CONSTR. JT. DO NOT EDGE

FOR SPACING OF I BEAMS SEE FRAMING PLAN

1'-6" 6'-6"

FOR SPACING OF I BEAMS SEE FRAMING PLAN

1'-6" 2'-9" 6 SPACES AT 3'-4"

MATCH LINE

℄ ROADWAY RIVER LANES

15'-0"

12'-0"

3'-0"

6'-0" MEDIAN

3'-9" 2'-3" 3'-9"

3'-0"

27'-0"

24'-0"

℄ ROADWAY N.W. BOUND LANES

VARIES

3'-6" VARIES

SUPERELEVATION 0.055

SUPERELEVATION 0.025

BONDED CONSTR. JT. DO NOT EDGE

BONDED CONSTR. JT. DO NOT EDGE

EXP. JT.

EXP. JT.

GRIP NOTCH

C.J. 4.5" A = 5'-4" 35'-0"

9'-1½"

FOR SPACING OF I BEAMS SEE FRAMING PLAN

1'-6" 1'-6"

FOR SPACING OF I BEAMS SEE FRAMING PLAN

TYPICAL SECTION ON CURVE

SCALE 3/16"=1'-0"

6'-0" MEDIAN

2'-9" 3'-9"

#5 BARS LONG TOP OF CURB

FILL WITH PARAFFINISTIC OR EQUAL

2" PREMOULDED JT. FILLER & COPPER SEAL

#5 BARS LONG TOP OF CURB

#5 BARS

#5 BARS

#4 BARS

Q121

Q123

#5 BARS

#4 BARS

#4 BAR CENTRY NAILS FLAT AT 4'-0" ALONG JT. 2'-0" C

1'-5½"

2'-9"

DETAIL A WEST MEDIAN ON CURVE

SCALE 3"=1'-0"

STANDARD FILLET DETAIL

AFTER ALL PRECAST PRESTRESSED BEAMS HAVE BEEN ERECTED, ELEVATIONS OF THE TOP FLANGES OF THE BEAMS SHALL BE TAKEN AT INTERVALS NOT TO EXCEED 10FT. FROM THESE ELEVATIONS SUBTRACT THE INCREMENT OF DEFLECTIONS FOR THESE POINTS, DETERMINED FROM THE D.L. DEFLECTIONS DIAGRAM. THE ELEVATIONS SO ATTAINED SUBTRACTED ALGEBRAICALLY FROM THE THEORETICAL GRADE ELEVATIONS WILL GIVE THE THICKNESS OF THE SLAB EQUAL THE DIMENSION "t" A POSITIVE VALUE OF "t" EQUALS THE FILLET HEIGHT ABOVE THE TOP OF THE BEAM. A NEGATIVE VALUE OF "t" EQUALS THE EMBEDMENT OF THE BEAM ABOVE THE THEORETICAL BOTTOM OF SLAB ELEVATION

4" PERFORATION

4" PAD

#5 BARS

DETAIL OF COPPER WATERSEAL

SCALE 3"=1'-0"

6'-0" MEDIAN

3'-9"

#5 BARS LONG TOP OF CURB

FILL WITH PARAFFINISTIC OR EQUAL

2" PREMOULDED JT. FILLER & COPPER SEAL

#5 BARS TOP OF CURB

#5 BARS

#5 BARS

#10 BARS

Q124

Q122

#5 BARS

#10 BARS

#5 BARS

1'-5½"

2'-9"

DETAIL A EAST MEDIAN ON CURVE

SCALE 3"=1'-0"

SCALES OF TRACING

3/8" = 1'-0" 0 1' 2' 3' 6'

1" = 1'-0" 0 5'-6" 1' 2'

3" = 1'-0" 0 3' 6' 1'

CITY OF CHICAGO
DEPARTMENT OF PUBLIC WORKS
BUREAU OF ENGINEERING

NORTHWEST ROUTE SUPERHIGHWAY
GRADE SEPARATION
WABANSIA AVE. TO CORTLAND ST.

SECTION 0505.3-IH

TYPICAL CROSS SECTIONS

ALFRED BENESCH & ASSOCIATES CONSULTING ENGINEERS
10 SOUTH WABASH AVE. CHICAGO, ILLINOIS

SHEET NO. 19 OF 136 SHEETS DATE

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 2	[illegible]	COOK	136	20
STA.		TO STA.		
FED. ROAD DIST. NO. 4	ILLINOIS	PROJECT		

℄ ROADWAY SEE BOUND LANES

VARIES

27'-0"

6'-0" MEDIAN

3'-0" 2'-3" 2'-9" 3'-0"

15'-0"

℄ ROADWAY REVERSIBLE LANES

MATCH LINE

BONDED CONSTR. JT. DO NOT EDGE

SUPERELEVATION 0.012'5

SEE FRAMING PLAN FOR SPACING OF STRINGERS

VARIES

SEE FRAMING PLAN FOR SPACING OF STRINGERS

VARIES

SEE FRAMING PLAN FOR SPACING OF STRINGERS

15'-0"

6'-0" MEDIAN

3'-0" 3'-9" 2'-3" 3'-0"

27'-0"

℄ ROADWAY NW BOUND LANES

VARIES

VARIES 22'-12

SUPERELEVATION 0.012'5

BONDED CONSTR. JT. DO NOT EDGE

BONDED CONSTR. JT. DO NOT EDGE

SUPERELEVATION 0.0125

BONDED CONSTR. JT. DO NOT EDGE

SEE FRAMING PLAN FOR SPACING OF STRINGERS

VARIES

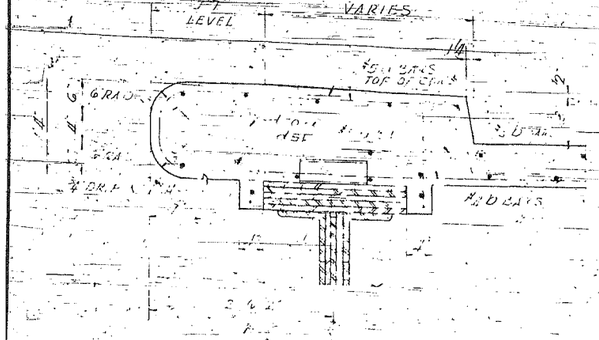
SEE FRAMING PLAN FOR SPACING OF STRINGERS

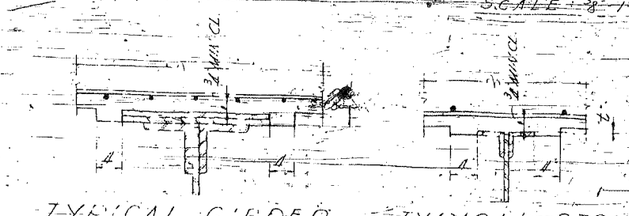
VARIES

SEE FRAMING PLAN FOR SPACING OF STRINGERS

TYPICAL SECTION OVER ASHLAND AVE

SCALE: 3/8" = 1'-0"

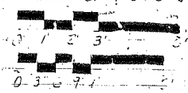




METHOD OF DETERMINING FILLET HEIGHTS f

AFTER ALL STRUCTURAL STEEL HAS BEEN ERECTED, ELEVATIONS OF THE TOP OF FLANGES OF THE BEAMS SHALL BE TAKEN AT INTERVALS NOT TO EXCEED 10 FEET. FROM THESE ELEVATIONS SUBTENDING THE INCREMENT OF CURVATURE FOR THESE POINTS IS DETERMINED. FROM THE DIFFERENCE BETWEEN THE ELEVATIONS SO OBTAINED AND THE THEORETICAL ELEVATION, MINUS FLOOR THICKNESS, EQUAL THE FILLET HEIGHTS f ABOVE TOP OF BEAM.

SCALES OF TRACING



CITY OF CHICAGO
DEPARTMENT OF PUBLIC WORKS
BUREAU OF ENGINEERING

NORTHWEST ROUTE SUPERHIGHWAY
GRADE SEPARATION
WABANSIA AVE. TO CORTLAND ST.
SECTION 0505.3-1H

ALFRED BENESCH & ASSOCIATES
10 SOUTH WABASH AVE.
CONSULTING ENGINEERS,
CHICAGO, ILLINOIS

TYPICAL CROSS SECTIONS

SHEET NO. 20 OF 136 SHEETS
DATE

CONCRETE DIAPHRAGM SCHEDULE

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 72	0505.3 IH	COOK	136	21
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	PROJECT	SP 2760	

NUMBER OF DIAPHRAGMS IN SPAN

SPAN

#1 #2 #3 #4 #5 #6 #7 #8 #9 #10 #11 #12 #13 #14 #15 #16 #17 #18 #19 #20 #21 #22 #23 #24 #25

MARK	STIRRUPS	NO OF BARS PER DIAPHRAGM BOTTOM BARS	SIDE BARS	TOP BARS
D1	4"@K30	2"@K1	2"@K8	2"@K16
D1A	4"@K30	K1	K8	K17
D2	4"@K30	K2	K9	K18
D2A	4"@K30	2"@K2	2"@K9	2"@K19
D3	2"@K30			
D4	7"@K30	2"@K48	2"@K	2"@K19
D4A	7"@K30	K48	K25	K46
D5	2"@K30	K49	K26	K55
D5A	7"@K30	K49	K26	K53
D6	3"@K30	K50	K45	K46
D7	2"@K30	K51	K42	K53
D7A	9"@K30	K51	K42	K40
D8	9"@K30	K52	K55	K37
D9	8"@K30	2"@K3	2"@K10	2"@K20
D9A	2"@K30	K3	K10	K5
D9B	4"@K30	K3	K10	K5
C-6	4"@K30	K1	K9	K6
C-6A	4"@K30	K1	K8	K16
C-6B	4"@K30	2"@K1	K8	K17
D11	2"@K30		K11	K13
D11A	2"@K30		2"@K11	2"@K22
D12	2"@K30			
D13	2"@K30	2"@K4	2"@K15	2"@K33
D13A	3"@K30	2"@K4	2"@K15	2"@K24
D14	2"@K30	2"@K35	K	2"@K36
D14A	2"@K30	K35	K37	K31
D14B	1"@K30	K37	K37	K35
C	2"@K30	2"@K32	2"@K	2"@K36
D15	8"@K30	K33	K12	K39
D15A	8"@K30	K33	K	K40
D16	3"@K30	2"@K33	2"@K9	2"@K38
D17	6"@K30	2"@K4	2"@K36	2"@K27
D17A	6"@K30	K34	K36	K32
D18	5"@K30	2"@K2	K9	K18
D18A	5"@K30	K2	K9	K19
D19	4"@K30	K1	K8	K20
D19A	4"@K30	2"@K1	2"@K8	2"@K18
D20	2"@K30			
D21	5"@K30	2"@K35	K20	K21
D21A	5"@K30	K35	K20	K 1
D22	6"@K30	K41	K18	K 1
D22A	6"@K30	K41	K18	K42
D23	2"@K30	K44	K21	K42
D23A	7"@K30	K44	K21	K40
D23B	7"@K30	K44	K21	K39
D24	2"@K30	K48	K25	K19
D24A	7"@K30	K48	K25	K31
D25	3"@K30	K50	K43	K46
D26	4"@K30	2"@K5	2"@K13	2"@K27
C26A	4"@K30	K5	K13	K21
D27	4"@K30	2"@K6	K12	K20
D27A	4"@K30	2"@K6	2"@K14	2"@K27
D28	2"@K30			
D29	4"@K30	2"@K6	2"@K8	2"@K16
D29A	2"@K30	K1	K8	K28
D30	3"@K30	K7	K13	K9
D30A	2"@K30	K7	K13	K16
D31	4"@K30	K3	K10	K21
D31A	3"@K30	K3	K10	K21
D31B	4"@K30	2"@K3	2"@K10	2"@K28
D32	2"@K30	K32	K37	K36
D32A	2"@K30	K32	K21	K36
D32B	4"@K30	K32	K37	K37
D32C	7"@K30	2"@K32	2"@K37	2"@K32
D33	5"@K30	K33	K22	K21
D33A	5"@K30	K33	K20	K19
C33B	5"@K30	2"@K33	2"@K20	2"@K40
D34	2"@K30			
D35	3"@K30	2"@K1	2"@K8	2"@K16

NUMBER OF DIAPHRAGMS IN SPAN

SPAN

#1 #2 #3 #4 #5 #6 #7 #8 #9 #10 #11 #12 #13 #14 #15 #16 #17 #18 #19 #20 #21 #22 #23 #24 #25

MARK	STIRRUPS	NO OF BARS PER DIAPHRAGM BOTTOM BARS	SIDE BARS	TOP BARS
D35A	2"@K30	2"@K1	2"@K8	2"@K16
D36	2"@K30			
D37	6"@K30	2"@K41	2"@K18	2"@K17
D37A	6"@K30	2"@K41	2"@K19	2"@K45
D38	8"@K30	K33	K19	K39
D38A	8"@K30	K33	K19	K39
D40	7"@K30	2"@K40	2"@K21	2"@K45
D41	6"@K30	2"@K34	2"@K26	2"@K
D41A	6"@K30	2"@K34	2"@K26	2"@K36
D42	2"@K30			
D43	6"@K30	2"@K53	2"@K23	2"@K27
D43A	6"@K30	2"@K53	2"@K23	2"@K27
D44	8"@K30	2"@K50	2"@K43	2"@K46
D45	2"@K30	K45	K26	K55
D45A	7"@K30	K45	K26	K55
D46	2"@K30	K54	K56	K10
D46A	2"@K30	K54	K56	K6
D47	2"@K30	K7	K10	K5
D47A	4"@K30	2"@K3	2"@K10	2"@K5
D50	4"@K30	2"@K1	2"@K8	
D51	4"@K30	2"@K1	2"@K9	
D52	5"@K30	2"@K39	2"@K10	
D53	5"@K30	2"@K16	2"@K11	
D54	2"@K30	2"@K35	2"@K19	
D55	2"@K30	2"@K33	2"@K16	
D56	5"@K30	2"@K16	2"@K17	
D57	5"@K30	2"@K16	2"@K17	
D58	2"@K30	2"@K16	2"@K5	
D59	6"@K30	2"@K20	2"@K40	
D60	2"@K30		K21	
D61	2"@K30	K10	K20	
D62	2"@K30	K39	K46	
D63	2"@K30	K41	K19	
D64	2"@K30	K41	K19	
D65	2"@K30	2"@K31	2"@K	
D66	2"@K30	2"@K4	2"@K33	2"@K37
D67	2"@K30	2"@K51	2"@K30	2"@K40
D68	2"@K30			

NOTE:
FOR DETAILS OF DIAPHRAGMS SEE SHT. N°25

CITY OF CHICAGO
DEPARTMENT OF PUBLIC WORKS
BUREAU OF ENGINEERING

NORTHWEST ROUTE SUPERHIGHWAY
GRADE SEPARATION
WABANSIA AVE. TO CORTLAND ST.
SECTION 0505.3-IH

CONCRETE DIAPHRAGM SCHEDULE

ALFRED BENESCH & ASSOCIATES
10 SOUTH WABASH AVE.

CONSULTING ENGINEERS
CHICAGO, ILLINOIS

SHEET NO. 21 OF 136 SHEETS DATE

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 2	0505.3 IH	COOK	136	22
STA.	TO STA.			
FED. ROAD DIST. NO. 4	ILLINOIS	PROJECT	8.07 2(CK)	

ALL BEARINGS UNDER SOUTH END OF BEAMS IN SPAN #2 SHALL HAVE 3/4" THICK SHIM PLATES UNLESS OTHERWISE NOTED.

ALL BEARINGS UNDER SOUTH END OF BEAMS IN SPAN #3 SHALL HAVE 3/8" THICK SHIM PLATES UNLESS OTHERWISE NOTED.

SPAN #1 — SPAN #2 — SPAN #3

℄ BEARINGS SOUTH ABUTMENT — ℄ PIER #1 — ℄ PIER #2 — ℄ PIER #3

℄ JOINT — ℄ BRGS. — ℄ BRG.

℄ RDWY. SEBLINES — ℄ RDWY. NWB LANES — ℄ RDWY. REVERS. LANES

℄ JOINT MEDIAN

TANGENT LINE EXTENDED

90°00' TO TANGENT LINE EXTENDED

90° CO.

STA 165+08.9 — STA 168+86.85 — STA 169+61.68 — STA 170+38.52

DETAIL A

1/2" SHIM PL AT NO BRG.

3/4" SHIM PL AT SO. BRG.

1/4" SHIM PL AT NO BRG.

3/4" SHIM PL AT SO BRG.

CB 1 · CB 2A · CB 3A · CB 5A · CB 5B · CB 5C · CB 2B · CB 2C · CB 3B · CB 4 · CB 5D · CB 5E · CB 5F

25'-0" — 24'-11" — AT RT LS TO ℄ PIERS

FRAMING PLAN

SCALE 1" = 10'

NOTE: ALL DIMENSIONS ARE MEASURED HORIZONTALLY.

SCALE OF TRACING 3/32" = 1'-0"

0 4' 8' 12' 24'

DETAIL A

BILL OF MATERIAL

ITEM	DESCRIPTION	UNIT	QUANTITY SPAN #1	SPAN #2	SPAN #3
14	48" PRECAST PRESTRESSED CONCRETE I-BEAMS	LIN. FT.	2834.7	2681.4	2527.2

NOTE: FIGURES IN BRACKETS (-7½") INDICATE ELEVATION OF TOP OF BEAM WITH REFERENCE TO TOP OF SLAB AT ℄ OF BEARING. TOPS OF ALL OTHER BEAMS SHALL BE 7¼" BELOW TOP OF SLAB AT ℄ OF BEARINGS UNLESS OTHERWISE NOTED.

FOR DETAILS OF SLAB AT EXPANSION JOINTS AND BEAMS AND BEARINGS SEE SHEETS 31 TO 36.

D.L. DEFLECTION DIAGRAM

WEIGHT OF PRESTRESSED I-BEAM NOT INCLUDED

TABLE OF "Y" DIMENSIONS

BEAM MARK	Y-DIMENSION Y 25	Y 50	BEAM MARK	Y-DIMENSION Y 25	Y 50
CB2A, CB3A, CB4, CB3B	5/16	3/8	CB1, CB2B	5/8	7/8
CB5A, B5D, CB2C	5/16	3/8	CB5B, CB5E	5/8	7/8
CB5C, CB5F	7/16	5/8			

CITY OF CHICAGO
DEPARTMENT OF PUBLIC WORKS
BUREAU OF ENGINEERING

NORTHWEST ROUTE SUPERHIGHWAY GRADE SEPARATION WABANSIA AVE. TO CORTLAND ST.

SECTION 0505.3-IH

FRAMING PLAN

ALFRED BENESCH & ASSOCIATES — CONSULTING ENGINEERS — CHICAGO, ILLINOIS

TO SOUTH WABASH AVE.

SHEET NO. 22 OF 136 SHEETS — DATE:

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAIZ	0505.3-1H	COOK	136	23.
STA.	TO STA.			
FED. ROAD DIST. NO. 4	ILLINOIS	PROJECT	I-02-7(68)	

ALL BEARINGS UNDER SOUTH END OF BEAMS IN SPAN #4 SHALL HAVE 3/16 THICK SHIM PLATES UNLESS OTHERWISE NOTED

ALL BEARINGS UNDER SOUTH END OF BEAMS IN SPAN #5 SHALL HAVE 2" THICK SHIM PLATES UNLESS OTHERWISE NOTED

TOPS OF ALL BEAMS IN SPAN #6 SHALL BE 7/8 BELOW TOP OF SLAB AT ℄ OF SOUTH BEARING UNLESS OTHERWISE NOTED

SPAN #4 · SPAN #5 · SPAN #6

℄ PIER #3 · ℄ PIER #4 · ℄ PIER #5 · ℄ PIER #6

℄ BRG. 25'-0" · 24'-11" CB 5E · 24'-11" CB 147 · 24'-11" CB 5E

℄ BRGS. 25'-0"

℄ RDWY. S.E.B. LANES

℄ RDWY. REVERS LANES

℄ RDWY. N.W.B. LANES

℄ JOINT MEDIAN

STA 170+38.52 · STA. 171+15.35 · STA. 171+92.18 · STA. 172+69.02

90°00'

5 SPA. @ 5'-3" = 26'-3" · 5 SPA. @ 5'-3" = 26'-3" · 5 SPA. @ 5'-3" = 26'-3"

6 SPA. @ 5'-2⅛" = 31'-6⅝" · 6 SPA. @ 5'-2⅛" = 31'-6⅝" · 5 SPA. @ 5'-2⅛" = 26'-3"

4 SPA. @ 5'-4" = 21'-4" · 5 SPA. @ 5'-4" = 26'-8" · 5 SPA. @ 5'-4" = 26'-8"

1'-6" · 1'-6½" · 1'-6½"

6 SPA. @ 4'-10" = 29'-0" · 6 SPA. @ 4'-9⅝" = 28'-7¾" · 5 SPA. @ 4'-9⅝" = 23'-10"

11½ · 74'-11" AT RT. LS. TO PIERS

℄ BRGS. 11½ · 74'-11" AT RT. LS. TO PIERS

℄ BRGS. 11½ · 74'-11" AT RT. LS. TO PIERS

℄ BRG. 11½

(-7⅜") · (-7½") · (-7⅝") 7/8" SHIM ℄ AT SO. BRG. · (-7¾") · (-7⅞") · (-8") · 1/2" SHIM ℄ AT SO BRGS · 3/4" SHIM ℄ AT SO BRG · 5/8" SHIM ℄ AT NO BRG · 2" SHIM ℄ AT SO BRG

CB 5A · CB 5B · CB 5C · CB 5D · CB 5E · CB 5F · CB 147

BILL OF MATERIAL

ITEM	DESCRIPTION	UNIT	QUANTITY SPAN #4	SPAN #5	SPAN #6
11	"B" PRECAST PRESTRESSED CONCRETE I-BEAMS	LIN. FT.	2450.7	2450.7	2371.1

NOTE!

FIGURES IN BRACKETS (-7½") INDICATE ELEVATION OF TOP OF BEAM WITH REFERENCE TO TOP OF SLAB AT ℄ OF BEARING

TOPS OF ALL OTHER BEAMS SHALL BE 7½" BELOW TOP OF SLAB AT ℄ OF BEARINGS UNLESS OTHERWISE NOTED

FOR DETAILS OF PRECAST PRESTRESSED I-BEAMS AND BEARINGS SEE SHEETS 31 TO 36.

℄ BRG. · ℄ ERG. · ℄ BRG.

Y 25 · Y 50 · Y 25

¼ SPAN · ¼ SPAN · ¼ SPAN · ¼ SPAN

D.L. DEFLECTION DIAGRAM

WEIGHT OF PRESTRESSED I-BEAM NOT INCLUDED

TABLE OF "Y" DIMENSIONS

BEAM MARK	Y DIMENSION Y. 25	Y. 50	BEAM MARK	Y DIMENSION Y. 25	Y. 50
CB5A, CB5D	5/16	3/8	CB5B, CB5E CB147,	5/8	7/8
CB5C, CB5F	7/16	5/8			

May ℄ 1st Beam CB147 for Sign Support

NORTH

FRAMING PLAN SPANS #4 5 #6

SCALE 3/32"=1'

SCALE OF TRACING 32"=1'-0" (0 · 4 · 8 · 12 · 24)

NOTE — ALL DIMENSIONS ARE ...

CITY OF CHICAGO
DEPARTMENT OF PUBLIC WORKS
BUREAU OF ENGINEERING

NORTHWEST ROUTE SUPERHIGHWAY GRADE SEPARATION WABANSIA AVE. TO CORTLAND ST.

SECTION 0505.3-1H

FRAMING PLAN SPANS #4 5 #6

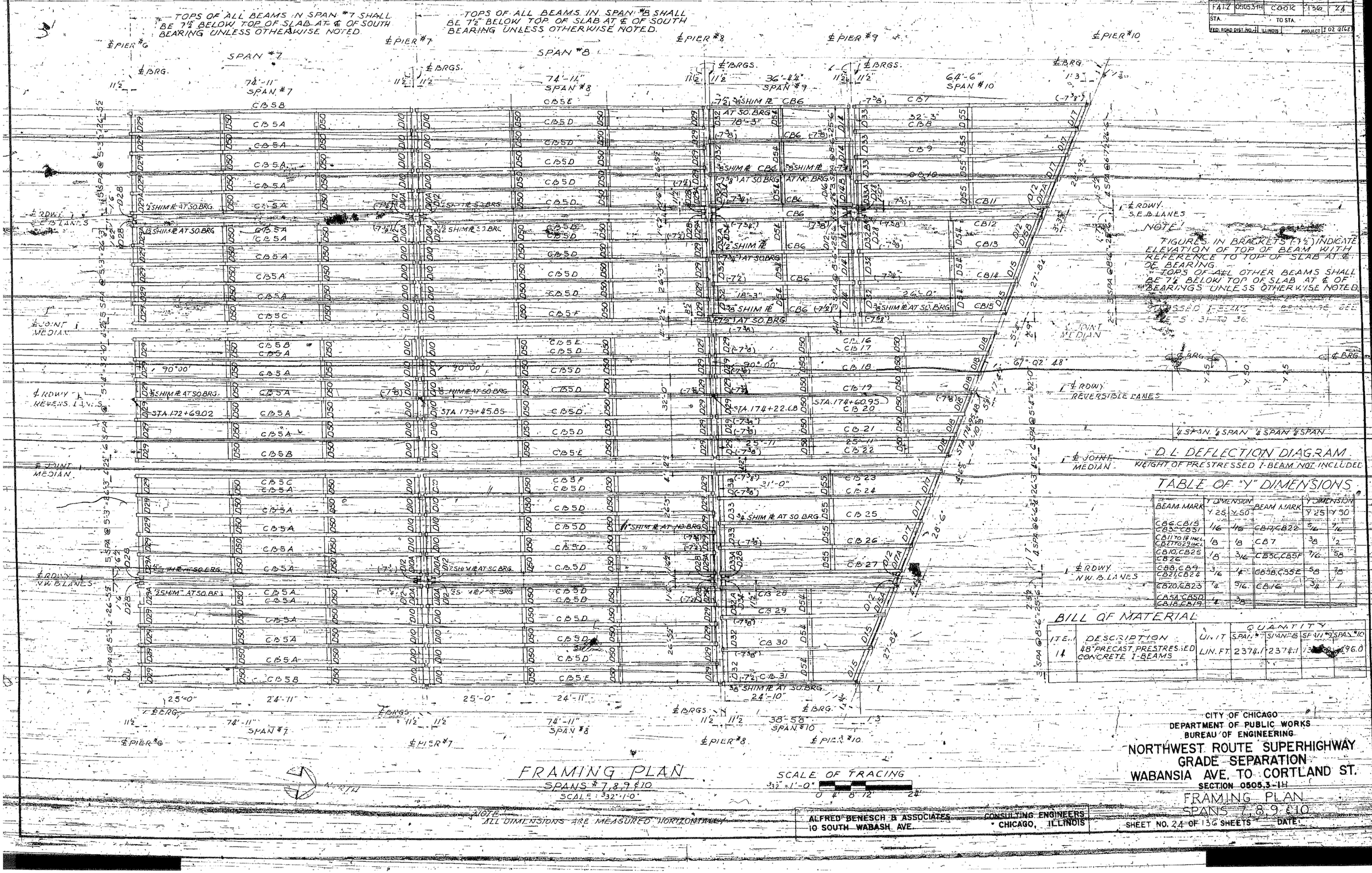
ALFRED BENESCH & ASSOCIATES — CONSULTING ENGINEERS
10 SOUTH WABASH AVE. CHICAGO, ILLINOIS

SHEET NO. 23 OF 136 SHEETS · DATE: SEPT. 1958

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI-Z	0505.3-1H	COOK	136	24
STA.	TO STA.			
FED. ROAD DIST. NO. 11	ILLINOIS	PROJECT I 02 2(62)		

TOPS OF ALL BEAMS IN SPAN #7 SHALL BE 7½" BELOW TOP OF SLAB AT ℄ OF SOUTH BEARING UNLESS OTHERWISE NOTED.

TOPS OF ALL BEAMS IN SPAN #8 SHALL BE 7½" BELOW TOP OF SLAB AT ℄ OF SOUTH BEARING UNLESS OTHERWISE NOTED.



D.L. DEFLECTION DIAGRAM

WEIGHT OF PRESTRESSED I-BEAM NOT INCLUDED

TABLE OF "Y" DIMENSIONS

BEAM MARK	Y DIMENSION Y 25	Y 50	BEAM MARK	Y DIMENSION Y 25	Y 50
CB6, CB15	1/16	1/16	CB17, CB22	5/16	5/16
CB3, CB31					
CB11 TO 14 INCL.	1/8	1/8	CB7	3/8	1/2
CB27 TO 29 INCL.					
CB10, CB25	1/8	3/16	CB3C, CB5F	7/16	5/8
CB26					
CB8, CB9	3/16	1/4	CB5B, CB5E	5/8	7/8
CB21, CB24					
CB20, CB23	1/4	5/16	CB16	3/4	1
CB5A, CB5D	1/4	3/8			
CB18, CB19					

BILL OF MATERIAL

ITEM	DESCRIPTION	UNIT	QUANTITY SPAN #7	SPAN #8	SPAN #9	SPAN #10
1A	48" PRECAST PRESTRESSED CONCRETE I-BEAMS	LIN. FT.	2374.1	2374.1	1796.0	

FRAMING PLAN

SPANS # 7, 8, 9 & 10

SCALE: 3/32" = 1'-0"

SCALE OF TRACING 3/32" = 1'-0"

0 4' 8' 12' 24'

NOTE: ALL DIMENSIONS ARE MEASURED HORIZONTALLY

CITY OF CHICAGO
DEPARTMENT OF PUBLIC WORKS
BUREAU OF ENGINEERING

NORTHWEST ROUTE SUPERHIGHWAY
GRADE SEPARATION
WABANSIA AVE. TO CORTLAND ST.
SECTION 0505.3-1H

FRAMING PLAN
SPANS 7, 8, 9 & 10

ALFRED BENESCH & ASSOCIATES
10 SOUTH WABASH AVE.
CONSULTING ENGINEERS
CHICAGO, ILLINOIS

SHEET NO. 24 OF 136 SHEETS DATE

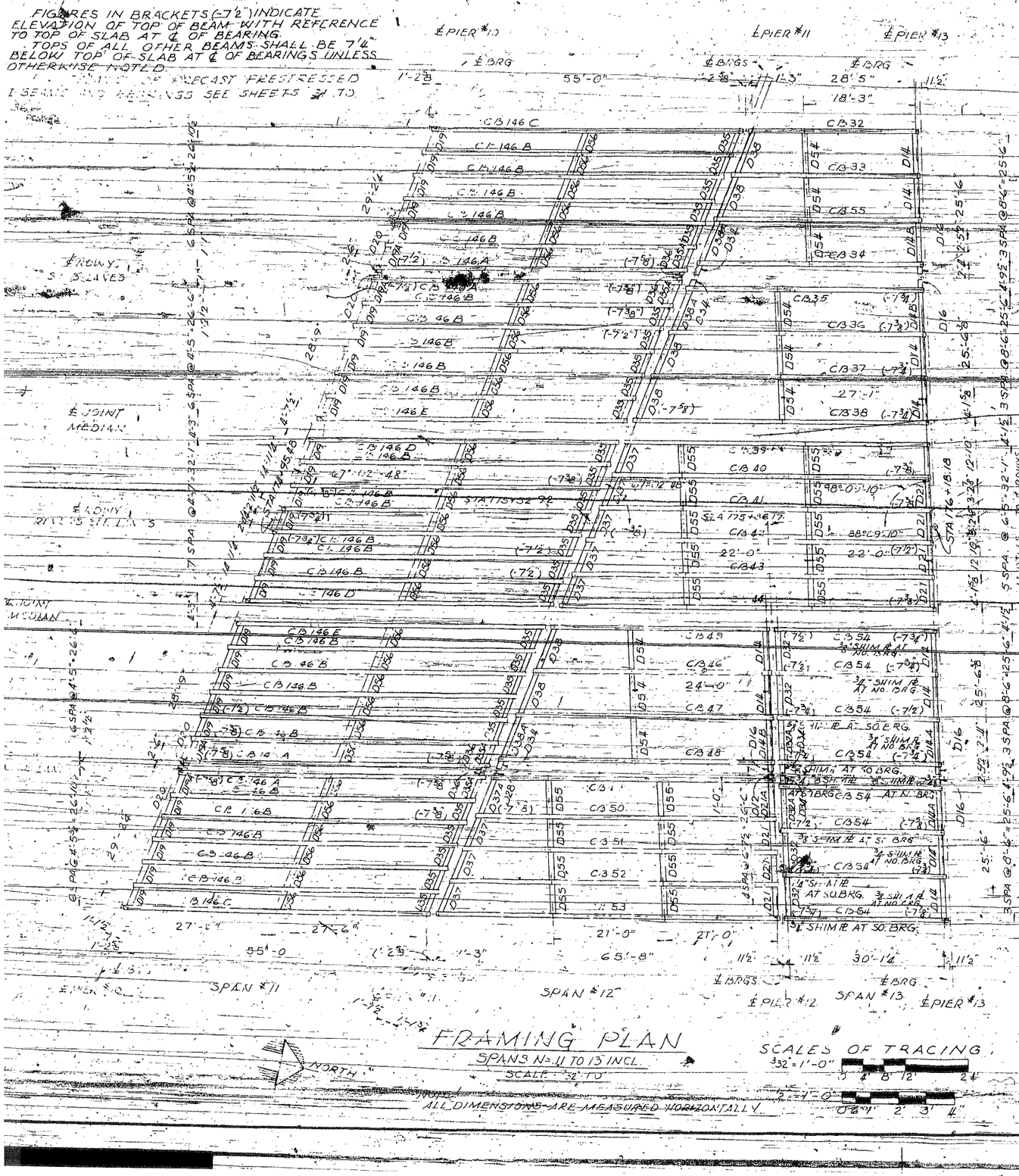
NOTE:

FIGURES IN BRACKETS (-7'2") INDICATE ELEVATION OF TOP OF BEAM WITH REFERENCE TO TOP OF SLAB AT ℄ OF BEARING.

TOPS OF ALL OTHER BEAMS SHALL BE 7¼" BELOW TOP OF SLAB AT ℄ OF BEARINGS UNLESS OTHERWISE NOTED.

[illegible] PRECAST PRESTRESSED I BEAMS SEE SHEETS 31 TO 32

ROUTE NO	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI-7	0505.3-IH	COOK	136	25
STA.	TO STA.			
FED. ROAD DIST. NO 1	ILLINOIS	✓ PROJECT	T 02 2(68)	



FRAMING PLAN

SPANS N-11 TO 13 INCL.

SCALE 1/32" TO 1'-0"

NORTH

ALL DIMENSIONS ARE MEASURED HORIZONTALLY.

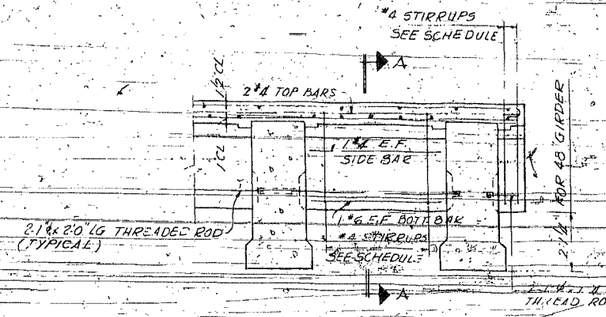
SCALES OF TRACING

3/32" = 1'-0"

1/8" = 1'-0"

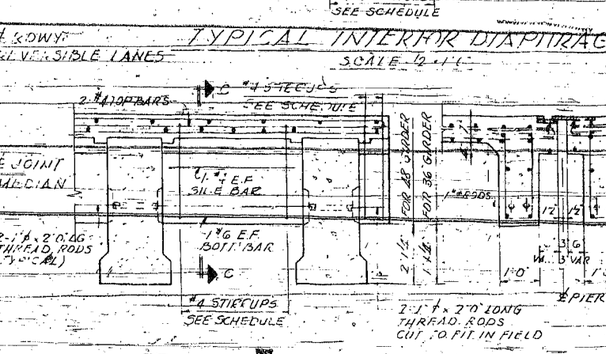
DETAIL OF DIAPHRAGMS AT ABUTMENTS SECTION A-A

SCALE: 1/2" = 1'-0"



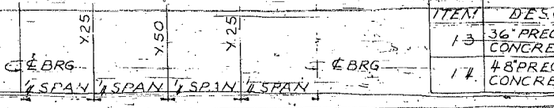
TYPICAL INTERIOR DIAPHRAGMS SECTION B-B

SCALE 1/2" = 1'-0"



TYPICAL BEARING DIAPHRAGM SECT C-C AT EXP. JOINT SECT C-C AT ½ JOINT

NOTE FOR REINFORCING BAR MARKS SEE DIAPHRAGM ARRANGEMENT SHT. N° 21



D.L. DEFLECTION DIAGRAM

WEIGHT OF PRESTRESSED I-BEAM NOT INCLUDED

TABLE OF "Y" DIMENSION

BEAM MARK	"Y" DIMENSION Y.25	Y.50	BEAM MARK	"Y" DIMENSION Y.25	Y.50
CB 32 TO 35 INCL. CB 45, CB 54	1/16	1/16	CB 146 B, CB 33, CB 42	1/4	5/16
CB 36, CB 46 TO 48 INCL.	1/8	1/8	CB 146 C, CB 146 E, CB 146 F, CB 43	1/4	3/8
CB 37, CB 49, CB 50	1/8	3/16	CB 146 D, CB 53	3/8	1/2
CB 38, CB 146 A, CB 40, CB 41, CB 51, CB 52	3/16	1/4	CB 44	1/2	3/4

BILL OF MATERIAL

ITEM	DESCRIPTION	UNIT	QUANTITY SPAN #11	SPAN #12	SPAN #13
13	36" PRECAST, PRESTRESSED CONCRETE I-BEAMS	LIN FT	264'-0		
14	48" PRECAST PRESTRESSED CONCRETE I-BEAMS	LIN FT		172'-6	254'-0

ALFRED BENESCH & ASSOCIATES
10 SOUTH WABASH AVE.
CONSULTING ENGINEERS
CHICAGO, ILLINOIS

CITY OF CHICAGO
DEPARTMENT OF PUBLIC WORKS
BUREAU OF ENGINEERING

NORTHWEST ROUTE SUPERHIGHWAY
GRADE SEPARATION
WABANSIA AVE. TO CORTLAND ST.

SECTION 0505.3-IH

FRAMING PLAN
SPANS 11, 12 & 13

SHEET NO. 25 OF 136 SHEETS DATE:

ROUTE NO:	SECTION	COUNTY	TOT. SHEETS	PLAN NO.
FA 12	0506.3-1H	COOK	136	YR
STA.	TO STA.			
FED. ROAD DIST. NO. 11	ILLINOIS	PROJECT	1	26

SUPERELEVATION TRANSITION

ALL ELEVATIONS ARE ON TOP OF ROADWAY

STA.	N.W.B. LANES EAST GUTTER	12' E OF ℄	℄	12' W OF ℄	WEST GUTTER	REVERS. LANES EAST GUTTER	12' E OF ℄	℄	12' E OF ℄	WEST GUTTER	S.E.B. LANES EAST GUTTER	12' E OF ℄	℄	12' W OF ℄	WEST GUTTER
176+07.82	45.21	45.53	45.65	45.53	45.21	45.46	45.53	45.65	45.53	45.46	45.21	45.53	45.65	45.53	45.21
176+10	45.21	45.52	45.64	45.52	45.20	45.46	45.52	45.64	45.52	45.45	45.21	45.52	45.64	45.52	45.20
176+20	45.21	45.48	45.59	45.46	45.16	45.44	45.48	45.59	45.46	45.40	45.21	45.48	45.59	45.46	45.16
176+30	45.21	45.45	45.53	45.40	45.11	45.40	45.45	45.53	45.40	45.34	45.21	45.45	45.53	45.40	45.11
176+40	45.20	45.40	45.47	45.34	45.06	45.36	45.40	45.47	45.34	45.28	45.20	45.40	45.47	45.34	45.06
176+50	45.18	45.35	45.40	45.27	44.99	45.32	45.35	45.40	45.27	45.21	45.18	45.35	45.40	45.27	44.99
176+60	45.16	45.30	45.33	45.21	44.92	45.27	45.30	45.33	45.21	45.14	45.16	45.30	45.33	45.21	44.92
176+70	45.13	45.24	45.25	45.11	44.86	45.22	45.24	45.25	45.11	45.06	45.13	45.24	45.25	45.11	44.86
176+80	45.10	45.17	45.16	45.04	44.80	45.16	45.17	45.16	45.04	44.98	45.10	45.17	45.16	45.04	44.80
176+82.22	45.09	45.15	45.14	45.02	44.78	45.15	45.15	45.14	45.02	44.97	45.09	45.15	45.14	45.02	44.78
176+90	45.08	45.13	45.12	45.00	44.76	45.14	45.13	45.12	45.00	44.95	45.08	45.13	45.12	45.00	44.76
177+00	45.05	45.08	45.06	44.94	44.70	45.11	45.08	45.06	44.94	44.89	45.05	45.08	45.06	44.94	44.70
177+10	44.97	44.99	44.98	44.86	44.62	45.03	44.99	44.98	44.86	44.81	44.97	44.99	44.98	44.86	44.62
177+20	44.92	44.86	44.78	44.63	44.21	44.97	44.86	44.78	44.63	44.57	44.92	44.86	44.78	44.63	44.21
177+30	44.86	44.71	44.57	44.36	43.92	44.91	44.71	44.57	44.36	44.30	44.86	44.71	44.57	44.36	43.92
177+40	44.80	44.67	44.55	44.34	43.90	44.85	44.67	44.55	44.34	44.28	44.80	44.67	44.55	44.34	43.90
177+50	44.73	44.57	44.43	44.23	43.79	44.78	44.57	44.43	44.23	44.17	44.73	44.57	44.43	44.23	43.79
177+57.82	44.67	44.48	44.33	44.13	43.69	44.72	44.48	44.33	44.13	44.07	44.67	44.48	44.33	44.13	43.69

NOTE!

FOR LIST OF ALL CONCRETE & REINFORCING STEEL QUANTITIES SEE SHEET NO. 37

FOR LIST OF ALL STRUCTURAL STEEL QUANTITIES SEE SHEET NO. 38

FOR DETAILS OF PRESTRESSED I-BEAMS AND BEARINGS SEE SHEETS 39 TO 54

FOR DETAILS OF STEEL STRINGERS AND GIRDERS SEE SHEETS 37 TO 54

Δ DEFLECTION DIAGRAM

WEIGHT OF PRESTRESSED I-BEAMS NOT INCLUDED

TABLE OF "Y" DIMENSION

BEAM MARK	Y DIMENSION Y 25	Y 50	BEAM MARK	Y DIMENSION Y 25	Y 50
CB56C, CB56E, CB56G, CB56A, CB56A, CB56A, CB56C, CB56C, CB56A, CB56A, CB56A, CB56E, CB56D, CB56A, CB56A, CB56A, CB56C, CB56C, CB56A, CB56A, CB56A, CB56B	3/16	1/4	CB57C, CB57E, CB57A, CB57A, CB57A, CB57E, CB57D, CB57A, CB57A, CB57A, CB57C, CB57C, CB57A, CB57A, CB57A, CB57B	3/8	1/2
CB56A, CB56A, CB56A, CB56A, CB56A, CB56A, CB56C, CB56C, CB56A, CB56A, CB56A, CB56B	1/4	5/16	CB58B, CB58B, CB58B, CB58B, CB58D, CB58A, CB58A, CB58A, CB58C, CB58C, CB58A, CB58A, CB58A, CB58B	1/16	3/16
CB56D, CB57D, CB58D	1/4	3/8			

BILL OF MATERIAL

ITEM	DESCRIPTION	UNIT	QUANTITY SPAN #14	SPAN #15	SPAN #16
14	48" PRECAST PRESTRESSED CONCRETE I-BEAMS	LIN. FT.	1425.5	1089.3	466.7
15	PAINTING STRUCTURAL STEEL	LBS		926.0	

CITY OF CHICAGO
DEPARTMENT OF PUBLIC WORKS
BUREAU OF ENGINEERING

NORTHWEST ROUTE SUPERHIGHWAY
GRADE SEPARATION
WABANSIA AVE. TO CORTLAND ST.
SECTION 0506.3-1H

FRAMING PLAN
SPANS 14, 15 & 16

ALFRED BENESCH & ASSOCIATES
10 SOUTH WABASH AVE.
CONSULTING ENGINEERS
CHICAGO, ILLINOIS

SHEET NO. 26 OF 136 SHEETS
DATE

FRAMING PLAN

SPANS No. 14, 15 & 16

SCALE: 3/32" = 1'-0"

SCALE OF TRACING
3/32" = 1'-0"
0 4 8 12 24

NORTH

ALL DIMENSIONS ARE HORIZONTAL

℄ PIER #13 — ℄ PIER #14 — ℄ PIER #15 — ℄ PIER #16

SPAN #14 65'-9 3/8" — SPAN #15 68'-3 3/8" — SPAN #16 67'-5 1/4"

℄ BRG. FASCIA GIRDER G1

INTERMEDIATE STIFFENER SPACING OF STEEL STRINGERS (SPACING GIVEN TO NEAREST 1/4 INCH)

GIRDER G1

BOTTOM FLANGE BRACING

℄ BRG. GIRD. G3

℄ BRG. GIRD. G4

℄ BRG. GIRD. G5

SHIM AT SO. BRG

SHIM AT NO. BRG

℄ JOINT MEDIAN

℄ EBOUND LANES

℄ WBOUND LANES

REVERSIBLE LANES

STA. 176+87.78

STA. 177+54.55

STA. 178+21.28

SEE SHEET 39

SEE SHEET 39

CB56B 66'-7 7/8"

CB57B 66'-11 5/8"

CB58B 65'-0 1/4"

PARALLEL TO STRINGERS 68'-3 3/8" ALERTS TO PIERS

66'-11 1/4"

℄ BRG.

℄ PIER #13 — ℄ PIER #14 — ℄ PIER #15 — ℄ PIER #16

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 2	0505.3-IH	COOK	136	27
STA.	TO STA.			
FED. ROAD DIST. NO. 4	ILLINOIS	PROJECT	I 07-2(CT)	

PIER #16 — ℄ BRG FASCIA GIRDER G1 — SPAN #17 — PIER #17 — SPAN #18 — PIER #18

℄ BRG CB 61

INTERMEDIATE STIFFENER SPACING (SPACING GIVEN TO BACK OF ∠ AT TOP OF STRINGERS)

8 @ 3'-1⅛" = 25'-1⅛" 7 @ 3'-2½" = 22'-5½" 6 @ 3'-3" = 19'-6" — 54'-7⅛"

11½" 11½" — CB 61 CB 62 CB 63 CB 64 CB 65 CB 66 CB 67

SB 11 SB 12 SB 13 SB 13A SB 14 SB 15 SB 15 SB 15 SB 16 SB 17 SB 18 SB 18 SB 18 SB 18 SB 19 SB 20 SB 20 SB 20 SB 20 CB 59A CB 59A CB 59A CB 59A CB 59B

SB 22 SB 23 SB 24 SB 25 SB 26 SB 27 SB 28 SB 29 SB 30 SB 31 SB 32 SB 33 SB 34 SB 35 SB 36 SB 37 SB 38 SB 39 SB 40 SB 41 CB 60

85°-28'-38" 87°-28'-33" 90°-23'-24" 90°-23'-24" 57°-12'-03" 89°-12'-44" 90°-23'-24" 90°-23'-24" 90°-23'-24" 90°-19'-10" 90°-23'-24" 90°-13'-39" 90°-23'-24" 90°-23'-24" 89°-41'-02" 91°-33'-01" 90°-00' 90°-00' 90°-15'-18" 90°-00' 91°-27'-21" 90°-00' 92°-37'-56" 90°-00' 92°-37'-56" 90°-00' 73°-34'-23"

℄ BRG GIRDER G5 — ℄ BRG GIRDER G6 — ℄ BRG GIRDER G7 — ℄ BRG CB60

VARIES 4@3'-4"=13'-4" — VARIES 5@3'-0"=15'-0" — VARIES 5@3'-1"=15'-5" — VARIES 5@3'-1"=16'-8"

STA. 178+94.21 — STA. 179+52.65 — STA. 178+21.48

BOTTOM FLANGE STIFFENING

EJOINT MEDIAN — ℄ REVERSIBLE LANES — ℄ EBRG MEDIAN — ℄ WBRG N.W.H. 4 LNES

G5: 6 SPA @ 6'-10"=41'-0" — 5 SPA @ 6'-5"=32'-1" — 4 SPA @ 6'-5"=25'-8" — 2 SPA @ 6'-5"=12'-10"

G6: 6 SPA @ 6'-10"=41'-0" — 5 SPA @ 6'-5"=32'-1" — 4 SPA @ 6'-5"=25'-8" — 2 SPA @ 6'-5"=12'-10"

G7: 6 SPA @ 6'-10"=41'-0" — 5 SPA @ 6'-5"=32'-1" — 4 SPA @ 6'-5"=25'-8" — 2 SPA @ 6'-5"=12'-10"

11½" — 23'-0" — 23'-8" — 11½" — 70'-10" ALONG ℄ I-BEAM AT RT ∠S TO PIER #17 — 72'-5⅜" — 11½" — 61'-11⅛" ALONG ℄ I-BEAM AT RT ∠S TO PIER #18

3'-11" — INTERMEDIATE STIFFENER SPACING (=) WORK LINE OF FRAME X4 — 3'-5½"

℄ BRG CB60

NORTH

NOTE: PIER #16 IS PARALLEL TO PIER #17

FRAMING PLAN

SPANS No 17 & 18

SCALE 3/32" = 1'-0"

NOTE: ALL DIMENSIONS ARE MEASURED HORIZONTALLY

SCALE OF TRACING 3/32" = 1'-0" (0 4' 8' 12' 24')

DETAIL A

SWAY FRAME "X4"

SCALE ½" = 1'-0"

DETAIL "A"

SCALE 1½" = 1'-0"

DETAIL "B"

SCALE 1½" = 1'-0"

SWAY FRAME "X6"

SWAY FRAME "X5" SIMILAR EXCEPT AS NOTED

SCALE ½" = 1'-0"

BRACKETS FOR EXP GUARD AT SWAY FRAME X6 ONLY

12 WF 40

SECT. A

SCALE 1" = 1'-0"

SECT. "B"

SCALE 1½" = 1'-0"

NOTE: FOR DETAILS OF PRECAST PRESTRESSED CONCRETE I-BEAMS AND BEARINGS, SEE SHEETS 31 TO 36. FOR DETAILS OF STEEL STRINGERS AND GIRDERS SEE SHEETS 37 TO 54.

4 SPAN 4 SPAN 4 SPAN 4 SPAN

DL DEFLECTION DIAGRAM

WEIGHT OF PRESTRESSED I-BEAM NOT INCLUDED

TABLE OF "Y" DIMENSION

BEAM MARK	Y DIMENSION Y 25	Y 50	BEAM MARK	Y DIMENSION Y 25	Y 50
CB63 TO CB67 INCL.	⅜	⅜	CB60	7/16	⅜
CB62	5/16	¼	CB61	5/16	7/16
CB59A	¼	5/16	CB59B	7/16	¾

BILL OF MATERIAL

ITEM	DESCRIPTION	UNIT	QUANTITY IN SPANS 17 & 18
14	48 PRE-CAST PRESTRESSED CONCRETE I-BEAM	LIN. FT.	5/16 & 3/8 369.7
15	FASCIA PIER # 16 STEEL	LBS.	

GUSSET PL — 5" MAX. SPACING — 1⅛" HOLE FOR ½" STD BOLT AND NUT ONE STD WASHER ON EACH SIDE HEAD AND NUT WELD TO BOLT TO PREVENT BACKING OFF. DO NOT TURN NUT TIGHT LEAVE SPACE BETWEEN ANGLE AND GUSSET PL

2" R HOOK ALWAYS AT TOP WHEN EMBEDDED IN GIRDER

CITY OF CHICAGO
DEPARTMENT OF PUBLIC WORKS
BUREAU OF ENGINEERING

NORTHWEST ROUTE SUPERHIGHWAY
GRADE SEPARATION
WABANSIA AVE. TO CORTLAND ST.
SECTION 0505.3-IH

FRAMING PLAN
SPANS 17 & 18

ALFRED BENESCH & ASSOCIATES — CONSULTING ENGINEERS — 10 SOUTH WABASH AVE. — CHICAGO, ILLINOIS

SHEET NO. 27 OF 136 SHEETS — DATE

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 2	0505.3 IH	COOK	136	28
STA.	TO STA.			
FED. ROAD DIST. NO. 1	ILLINOIS	PROJECT	I-02-2(68)	

BILL OF MATERIAL

ITEM	DESCRIPTION	UNIT	QUANTITY SPAN #19	SPAN #20	SPAN #21
14	48" PRECAST PRESTRESSED CONCRETE I-BEAMS	LIN FT	982.3	939.3	1301.7
15	ERECTING STRUCTURAL STEEL	LBS.		23,000	

NOTE:
GIRDER G2 IS PERPENDICULAR TO PIERS
ALL STEEL STRINGERS ARE PERPENDICULAR TO CROSSGIRDERS OR PIERS UNLESS OTHERWISE SHOWN OR NOTED.
TOES OF ALL CONCRETE FILLETS AT FACES OF ALL STEEL STRINGERS AT PIERS ARE TO BE TANGENT TO THE FACES OF THE STRINGERS.
NOTE: THUS, 7½ SHIM IR

FOR DETAILS OF PRECAST PRESTRESSED I-BEAMS AND BEARINGS SEE SHEETS 31 TO 36.
FOR DETAILS OF STEEL STRINGERS AND GIRDERS SEE SHEETS 37 TO 54.

D.L. DEFLECTION DIAGRAM

WEIGHT OF PRESTRESSED I-BEAMS NOT INCLUDED

TABLE OF "Y" DIMENSION

BEAM MARK	"Y" DIMENSION Y25	Y50	BEAM MARK	"Y" DIMENSION Y25	Y50
CB 69C	1/8	1/8	CB 68D	1/4	3/8
CB69B, CB 70C, CB70D	1/8	3/16	CB 68E	3/8	1/2
CB68C, CB69A, CB70B, CB70E	3/16	1/4	CB 69A	7/16	5/8
CB68B, CB 70A	1/4	5/16			

FRAMING PLAN

SPANS #19 TO #21

SCALE 3/32" = 1'-0"

SCALE OF TRACING 3/32" = 1'-0"

CITY OF CHICAGO
DEPARTMENT OF PUBLIC WORKS
BUREAU OF ENGINEERING

NORTHWEST ROUTE SUPERHIGHWAY
GRADE SEPARATION
WABANSIA AVE. TO CORTLAND ST.
SECTION 0505.3-IH

FRAMING PLAN

CONSULTING ENGINEERS
10 SOUTH WABASH AVE. CHICAGO, ILLINOIS

SHEET NO. 28 OF 136 SHEETS DATE:

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
FAI-2	0505.3-1H	COOK	136	29
STA.	TO STA.			
FED. ROAD DIST. NO. 4	ILLINOIS	PROJECT	I-90-2(68)	

TOPS OF ALL BEAMS ON NORTH END OF SPAN #22 SHALL BE 7 5/8" BELOW TOP OF SLAB AT ℄ BEARINGS UNLESS OTHERWISE NOTED.

℄ PIER #21 — ℄ BRG. — SPAN #22 50'-4" — ℄ BRGS. — ℄ PIER #22 — SPAN #23 72'-6" — ℄ PIER #23 — ℄ BRG.

11½ — 25'-2" — 11½ — 23'-3" — 23'-3" — 15⅝

CB71A, CB71B, CB71B, CB71B, CB71B, CB71A, CB71B, CB71B, CB71B, CB71B, CB71B, CB71B, CB71B, CB71A, CB71B, CB71B, CB71A, CB72, CB73, CB74, CB75, CB76, CB77, CB78, CB79, CB80, CB81

CB82, CB83, CB84, CB85, CB86, CB87, CB88, CB89, CB90, CB91, CB92, CB93, CB94, CB95, CB96, CB97, CB98, CB99

(-7¾) 1⅛" SHIM ℄ AT NO. BRG.
(-7¾) 1¼" SHIM ℄ AT NO BRG.
(-7¾) ⅜" SHIM ℄ AT NO. BRG.
(-7¾) ⅞" SHIM ℄ AT NO BRG. — ℄ JOINT
(-7¾) 2½" SHIM ℄ AT NO. BRG.
(-7¾) ⅝" SHIM ℄ AT NO. BRG.
(-7½) 1¾" SHIM ℄ AT NO. BRG.
(-7¼) ⅛" SHIM ℄ AT NO. BRG. — ℄ RDWY. S.E.B. LANES
(-7¼) 2¼" SHIM ℄ AT NO. BRG.
(-7½) ½" SHIM ℄ AT NO. BRG.
(-7¾) ½" SHIM ℄ AT NO. BRG.
(-7¾) ⅝" SHIM ℄ AT NO. BRG.
(-7¾) ⅜" SHIM ℄ AT NO. BRG. — ℄ JOINT MEDIAN
(-7¾) .38" SHIM ℄ AT NO. BRG.
(-7¾) ⅜" SHIM ℄ AT NO. BRG. — ℄ RDWY. REVERSIBLE LANES
(-7¾) ⅛" SHIM ℄ AT NO. BRG.
(-7¾) ⅝" SHIM ℄ AT NO. BRG.
(-7¾) ½" SHIM ℄ AT NO. BRG.
(-7¾) ⅝" SHIM ℄ AT NO. BRG. — ℄ JOINT MEDIAN
(-7¾) ⅝" SHIM ℄ AT NO. BRG.
(-7¾) ½" SHIM ℄ AT NO. BRG.
(-7¾) ⅜" SHIM ℄ AT NO. BRG. — ℄ RDWY. N.W.B. LANES
(-7½) ½" SHIM ℄ AT NO. BRG.
(-7¾) ⅜" SHIM ℄ AT NO. BRG.
(-7¾) ⅝" SHIM ℄ AT NO. BRG.
(-7¾) ⅝" SHIM ℄ AT NO. BRG.
(-7¾) ⅝" SHIM ℄ AT NO. BRG.

℄ JOINT — ℄ RDWY. S.E.B. LANES — ℄ JOINT MEDIAN — ℄ RDWY. REVERSIBLE LANES — ℄ JOINT MEDIAN — ℄ RDWY. N.W.B. LANES

4 SPAC. 7'-6" = 30'-0" — 4 SPAC. @ 6'-3" = 25'-0" — 4 SPAC. @ 6'-3" = 25'-0" — 4 SPAC. @ 7'-6" = 30'-0"

STA. 181+37.94 — STA. 181+46.92 — STA. 182+16.92 — STA. 182+59.92

Sign Support — See Note

Note: For Detail of CB71 Under Sign Support see Sheet Nos. 10A & 34

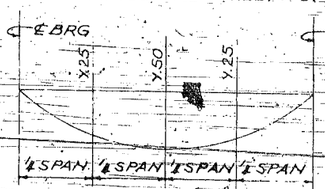
11½ — 32'-3" — 11½ — ℄ BRG. — ℄ BRG. — Cores #21 — Cores #22

ALL DIMENSIONS ARE SHOWN ON THE PLANS

FRAMING PLAN
SPANS Nos. 22 & 23
SCALE: 3/32" = 1'-0"

SCALE OF TRACING
3" 4' 8' 12' 24'

NOTE!
FIGURES IN BRACKETS (-7¾) INDICATE ELEVATION OF TOP OF BEAM WITH REFERENCE TO TOP OF SLAB AT ℄ OF BEARING.
TOPS OF ALL OTHER BEAMS SHALL BE 1" BELOW TOP OF SLAB AT ℄ OF BEARINGS UNLESS OTHERWISE NOTED.
FOR DETAILS OF PRECAST PRESTRESSED I-BEAMS AND BEARINGS SEE SHEETS 31 TO 36.



D.L. DEFLECTION DIAGRAM
WEIGHT OF PRESTRESSED I-BEAM NOT INCLUDED

TABLE OF "Y" DIMENSION

BEAM MARK	"Y" DIMENSION Y.25	Y.50	BEAM MARK	"Y" DIMENSION Y.25	Y.50
CB79, CB80	–	1/16	CB85, CB86, CB88	1/8	3/16
CB81					
CB92 to CB95 Incl.	–	1/16	CB73, CB87	3/16	1/4
CB71A, CB74, CB77, CB78	1/8	1/8	CB84	1/4	5/16
CB89, CB90, CB91, CB71A, CB75	1/8	3/16	CB72, CB83, CB82	5/16	3/8
				1/16	9/16

Revised to conform to 0505.3 Revised D.L. Deflections March 6, 1959
May 5, 1959 Added Sign Support

BILL OF MATERIAL

ITEM	DESCRIPTION	UNIT	QUANTITY SPAN #22	SPAN #23
14	48" PRECAST PRESTRESSED CONCRETE I-BEAMS	LIN. FT.	1447.7	851.2

CITY OF CHICAGO
DEPARTMENT OF PUBLIC WORKS
BUREAU OF ENGINEERING
NORTHWEST ROUTE SUPERHIGHWAY
GRADE SEPARATION
WABANSIA AVE. TO CORTLAND ST.
SECTION 0505.3-1H
FRAMING PLAN
SPANS 22 & 23

ALFRED BENESCH & ASSOCIATES CONSULTING ENGINEERS
10 SOUTH WABASH AVE. CHICAGO, ILLINOIS
SHEET NO. 29 OF 136 SHEETS

ROUTE NO.	SECTION	COUNTY	SHEET NO.
FAI 2	0505.3-1H	COOK	136 31
		TO STA.	
FED. ROAD DIST. NO. 21	ILLINOIS		1.02 (68)

56'8" FOR CB146A, CB146B, CB146D & CB146E. 57'3" FOR CB146C

3@18"-3@21"-3@24"-3@27"-3@30" SPACING OF 6" WIDE SHEAR KEYS

3'6" FOR CB146A, B, D, E
3'9" FOR CB146C

7'-0"

7 3/4" DEEP RECESS INSERT

1" Ø

3-P2 BARS

I-BEAM DETAILS SYMM. ABOUT ℄

3-P2 BARS

INSERT

1½" LIFTING HOOK R·6

3" TYPICAL
6" FOR EXTERIOR I BEAM CB146C

4½"

4 ½" Ø, 0-10 BOLTS 4" THRD. CAST IN CONCRETE BEAM AT EXPANSION END ONLY SPACE AT 3½" GAUGE. OMIT BOLTS ON EXTERIOR I-BEAMS

10" TYPICAL EXCEPT FOR EXTERIOR I-BEAM

10" TYPICAL EXCEPT FOR EXTERIOR I-BEAM

FIXED BEARING E

55'-0

℄ CONTINUOUS CHAMFER

EXPANSION BEARING B

146 C 13"

FIXED BRG. DETAIL B5 5"-9@6" 9@7" 9@8" 6@9" 9@10" SPACING OF P1 BARS IN PAIRS

9@10" SPACING OF STEEL STRAPPING

3"

B

A

ELEVATION OF 36" CONCRETE I BEAMS-CB146

SCALE ½" = 1'-0" (36 REQUIRED)

EXP BRG DETAIL B6

NOTE:
INSERTS FOR 1" BARS ARE TO BE RICHMOND TYPE GT FOR INTERIOR I BEAM AND TYPE TL 2F FOR EXTERIOR I-BEAM OR EQUAL.

OMIT RECESS & INSERT ON OUTER FACE OF EXTERIOR I-BEAM

0.035" ϕ STEEL STRAPPING

10 x 1'-3½" BRG ⌀
4 - ¾ / 10" LONG. ANCH. WELD TO ⌀ WITH ⅜" G FILLET WELD ALL AROUND.

18" x 6" PINTLE HOLES FOR FIXED BEARINGS ONLY. BOTTOM SURFACE OF EXP. BRG. PLATE MUST BE FINISHED

1'-0"

1 NICH x 6" WIDE SHEAR KEYS

ALL REINFORCING SHALL HAVE 1" MIN CLEARANCE

3 BARS P2

1'-6"

12" x 1'-6" x 1½" RECESS

P1

INSERTS FOR 1" BARS

OMIT INSERT ON OUTER FACE OF EXTERIOR I BEAM

¾" CHAMFER

1'-6"

SECTION A-A

SECTION B-B

SCALE 1" = 1'-0"

5 x 2 SLOPING STRANDS

C ℄

D

12" x 42" ⌀

2 ENDS
6 S-ENDS
6 STRANDS

BAND POINT

5'-6"

5'-6"

BAND POINT

ALL DETAILS ARE SYMMETRICAL ABOUT ℄

INITIAL STRESS IN EACH STRAND = 18,900 #
TOTAL INITIAL PRESTRESSING FORCE: 491400

DETAILS OF PRESTRESSING STEEL FOR 36" CONCRETE I BEAMS-CB146

1½" OPEN JOINT

EDGE OF DECK

1½ 1½

2" DEEP BLOCKING

℄ EXTERIOR I-BEAM

5½" DEEP BLOCKING

EXTERIOR I-BEAM

FACE OF CURB

1'-6" TOP FLANGE

1'-4" TOP FLANGE

1'-4" LEVEL

3'-6" CURB

℄ DIAPHRAGM

5½" DEEP BLOCKING

℄ INT. I-BEAM

END OF DECK

"E"

"F"

"G"

"H"

"J"

"K"

"L"

"M"

"N"

"P"

"R"

"S"

"T"

"U"

"V"

"W"

"X"

"Y"

"Z"

"AA"

"BB"

"CC"

"DD"

"EE"

"FF"

"GG"

"HH"

"JJ"

"KK"

"LL"

"MM"

"NN"

"PP"

"RR"

"SS"

"TT"

"UU"

"VV"

"WW"

"XX"

"YY"

"ZZ"

"AAA"

"BBB"

"CCC"

"DDD"

"EEE"

"FFF"

"GGG"

"HHH"

"JJJ"

"KKK"

"LLL"

"MMM"

"NNN"

"PPP"

"RRR"

"SSS"

"TTT"

"UUU"

"VVV"

"WWW"

"XXX"

"YYY"

"ZZZ"

"AAAA"

"BBBB"

"CCCC"

"DDDD"

"EEEE"

"FFFF"

"GGGG"

"HHHH"

"JJJJ"

"KKKK"

"LLLL"

"MMMM"

"NNNN"

"PPPP"

"RRRR"

"SSSS"

"TTTT"

"UUUU"

"VVVV"

"WWWW"

"XXXX"

"YYYY"

"ZZZZ"

NOTE
SHADED AREA INDICATES THICKENED PORTION OF DECK SLAB

℄ PIER "10

℄ PIER "11

EXPANSION JOINT

FIXED JOINT

PARTIAL PLAN OF DECK ON PIERS "10 & "11

SCALE 2" = 1'-0"

5½" DEEP BLOCKING

8½" 1'-0" 2½" 7" 2½"

1'-0" 3" 2½" 7" 2½"

SOUTH END

NORTH END

1'-0" 8½"

TYPICAL TOP PLAN AT ENDS OF INT. I-BEAMS

SCALE 1" = 1'-0"

1'-0" 1'-0"

1'-0" 1'-0"

SLOPING STRANDS

SLOPING STRANDS

SECT. C-C

SECT. D-D

SCALE 1" = 1'-0"

BAR SCHEDULE

C D

TOP

B FRONT

TYPE B

MARK	SIZE	TYPE	LENGTH	B	C	D	E	F	H	K
P1	#5	B	4'-6"	08	32	08				
P2	#6		29'-0"							

2" DEEP BLOCKING

OMIT RECESS ON EXTERIOR FACE OF CB146C

OMIT RECESS ON EXTERIOR FACE OF CB146C

5½" DEEP BLOCKING

1'-0" 1'-4"

6 1'-0"

SOUTH END

NORTH END

TOP PLAN AT ENDS OF EXTERIOR I-BEAMS

SCALE 1" = 1'-0"

3" CLEAR AT RIGHT ANGLES

⌀28

⌀28

SECTION E-E

SECTION F-F

SCALES OF TRACING

½"=1'-0" 0 6" 1' 2' 3' 4' 5' 6'

1"=1'-0" 0 3" 6" 9" 1' 2' 3'

1½"=1'-0" 0 3" 6" 9" 1' 2'

ALFRED BENESCH & ASSOCIATES
10 SOUTH WABASH AVE.
CONSULTING ENGINEERS
CHICAGO, ILLINOIS

CITY OF CHICAGO
DEPARTMENT OF PUBLIC WORKS
BUREAU OF ENGINEERING

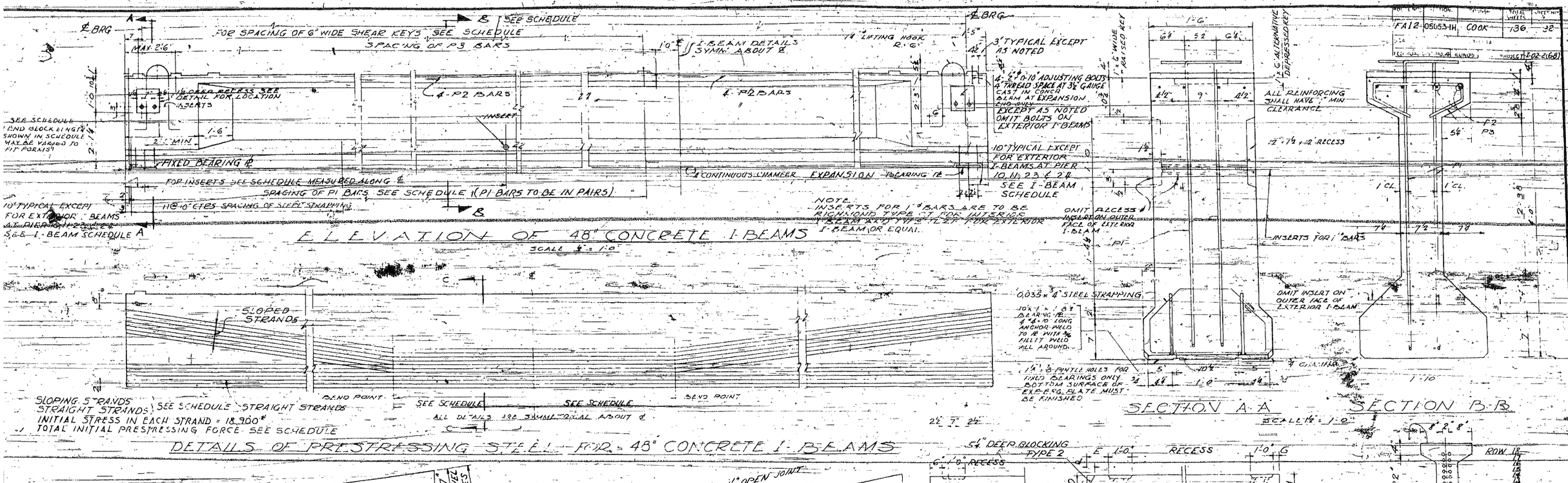
NORTHWEST ROUTE SUPERHIGHWAY
GRADE SEPARATION
WABANSIA AVE. TO CORTLAND ST.

SECTION 0505.3-1H

DETAILS OF 36" PRECAST PRESTRESSED CONCRETE I BEAMS

SHEET NO. 31 OF 136 SHEETS DATE

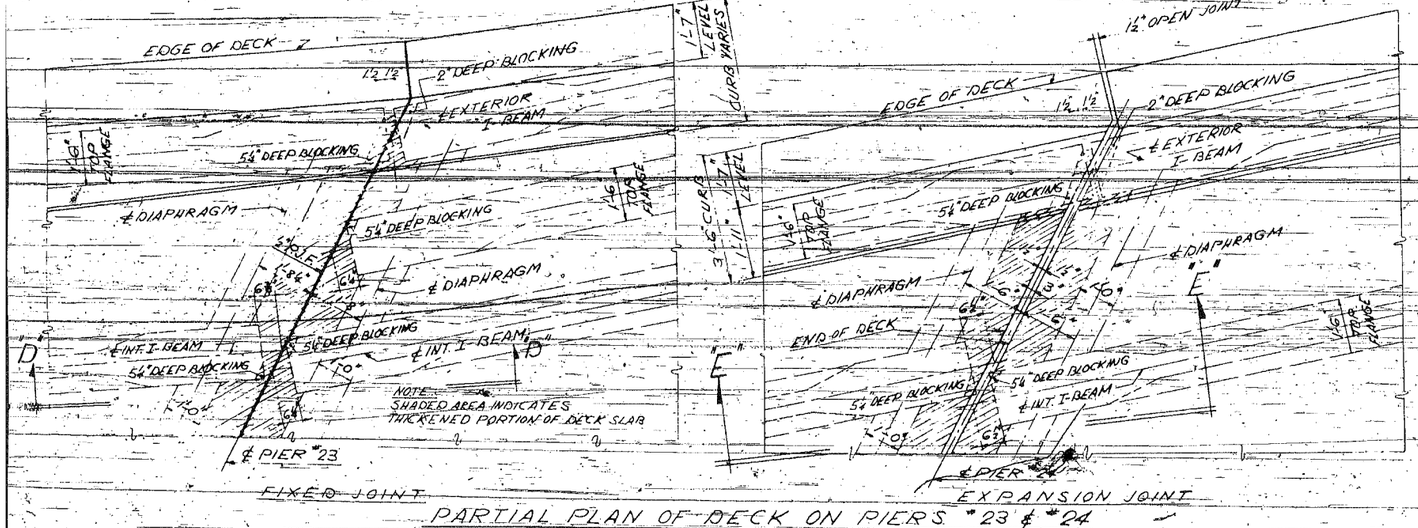
FA12-0505.3-IH | COOK | SHEETS 136 | SHEET NO. 32



ELEVATION OF 48" CONCRETE I-BEAMS

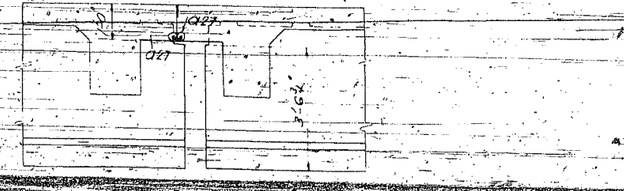
SCALE ½" = 1'-0"

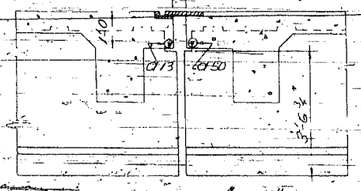
DETAILS OF PRESTRESSING STEEL FOR 48" CONCRETE I-BEAMS



PARTIAL PLAN OF DECK ON PIERS "23 & "24

SCALE ½" = 1'-0"





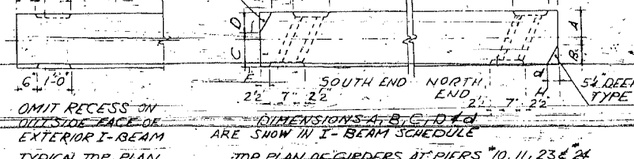
STEEL STRAPPING SHALL HAVE FS = 110,000 LBS./SQ.IN. (2200 LBS.) AND SHALL BE FASTENED WITH FASTENER TO DEVELOP THE SAME STRENGTH OF STRAPPING.

IN LIEU OF THE RAISED SHEAR KEYS FOR THE 48" DEEP I-BEAMS ONLY, THE CONTRACTOR MAY PROVIDE DEPRESSED SHEAR KEYS AS SHOWN IN SECTION "A-A" AT SAME SPACING SHOWN IN SCHEDULE FOR RAISED KEYS.

SCALES OF TRACING

½"=1'-0" 0 6" 1' 2' 3' 4' 5' 6'

1½"=1'-0" 0 3" 6" 9" 1' 2'



OMIT RECESS ON OUTSIDE FACE OF EXTERIOR I-BEAM

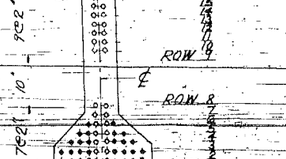
TYPICAL TOP PLAN

DIMENSIONS A, B, C, D & d ARE SHOWN IN I-BEAM SCHEDULE

TOP PLAN OF GIRDERS AT PIERS "10, 11, 23 & 24

DETAILS AT END OF I-BEAMS

I-BEAM NUMBER	RECESS E	F	G	H	OMIT RECESS ON ℄ OUTSIDE FACE OF	2" DEEP BLOCKING ON OUTSIDE FACE OF
CB7 TO CB31	6"	6"	3"	10½"	CB7 & CB31	CB31
CB32 TO CB53	10½"	3"	6"	6"	CB32 & CB53	CB36
CB55	10½"	3"	6"	6"		
CB72 TO CB99	6"	6"	6"	12"	CB81 & CB82	CB81
CB100 TO CB127	12½"	3"	6"	4"	CB100 & CB127	CB100 & CB127
CB128 TO CB145	14"	3"	6"	15"	CB128 & CB145	CB128



ALL STRANDS SYMM. ABOUT ℄ FOR NUMBER OF STRANDS SEE SCHEDULE STRANDS SHOWN THUS ⊕ ARE PRESENT IN ALL I-BEAMS STRANDS SHOWN THUS ⊖ ARE SLOPED STRANDS

BAR SCHEDULE

MARK	SIZE	TYPE	LENGTH	B	C	D	L	F	H	K
P1	#5	B	5'-6"	0'-6"	1'-6"	6'-0"				
P2	#6	STRAIGHT CONTINUOUS (CAP TO CAP) SPLICES*								
P3	#5	A	2'-11"	OMIT	0'-2½"	4	0'-2½"	OMIT	0'-2½"	OMIT

NOTES

PRECAST PRESTRESSED CONCRETE I-BEAMS ARE DESIGNED IN ACCORDANCE WITH THE A.A.S.H.O. STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, 1953, AND THE CRITERIA FOR PRESTRESSED CONCRETE BRIDGES, 1954, OF THE BUREAU OF PUBLIC ROADS.

PRESTRESSING STRANDS SHALL CONSIST OF UNCOATED SEVEN WIRE STRANDS WHICH HAVE A NOMINAL DIAMETER OF ½", AND A CROSS SECTIONAL AREA OF 0.1089 SQUARE INCHES.

ALL REINFORCING STEEL, PRESTRESSING STRANDS, LIFTING HOOKS, INSERTS, BEARING PLATES AND OTHER ITEMS WHICH ARE CAST INTO THE PRECAST CONCRETE I-BEAMS SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE PER LINEAL FOOT FOR "FURNISHING AND ERECTING PRECAST PRESTRESSED CONCRETE I-BEAMS".

PRESTRESSED CONCRETE I-BEAMS SHALL BE LIFTED ONLY BY THE LIFTING HOOKS PROVIDED IN THE TOP FLANGES AT THE ENDS OF THE BEAMS.

SEE SPECIAL PROVISIONS FOR ADDITIONAL INFORMATION REGARDING MATERIALS, PRESTRESSING EQUIPMENT AND OPERATIONS, CONSTRUCTION AND HANDLING METHODS, AND OTHER REQUIREMENTS FOR THE PRECAST PRESTRESSED CONCRETE I-BEAMS.

STEEL FOR LIFTING HOOK SHALL BE DEFORMED BARS OF STRUCTURAL OR INTERMEDIATE GRADE BILLET STEEL.

CITY OF CHICAGO
DEPARTMENT OF PUBLIC WORKS
BUREAU OF ENGINEERING

NORTHWEST ROUTE SUPERHIGHWAY
GRADE SEPARATION
WABANSIA AVE. TO CORTLAND ST.
SECTION 0505.3-IH

DETAILS OF 48" PRECAST PRESTRESSED CONCRETE I-BEAMS

ALFRED BENESCH & ASSOCIATES CONSULTING ENGINEERS
10 SOUTH WABASH AVE. CHICAGO, ILLINOIS

SHEET NO. 32 OF 136 SHEETS DATE

48" DEEP PRECAST - PRESTRESSED CONCRETE I-BEAM SCHEDULE

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 2	0505-3:JH	COOK	136	33
STA.		TO STA.		
FED. ROAD DIST. NO. 4	ILLINOIS		PROJECT: I-90-2(48)	

I-BEAM NUMBER	QUANTITY	LENGTH C TO C BRG	END BLOCK LENGTH	INSERT NORTH	INSERT SOUTH	SPACING OF 6" WIDE SHEAR KEYS	BLOCKING OF I-BEAM FLANGES NORTH BRG. TYPE	A	B	d	BLOCKING OF I-BEAM FLANGES SOUTH BRG. TYPE	C	D	d
CB 1	1	75'-7"	3'-1½"	25'-2"	25'-2"	6@48"-3@60"								
CB 2	3	75'-3"	3'-5½"	25'-7"	25'-7"	5@48"-3@60"								
CB 3	2	75'-1"	3'-4½"	25'-0"	25'-0"	5@48"-3@60								
CB 4	2	75'-0"	3'-4½"	25'-1"	25'-1"	5@48"-3@60								
CB 5	252	74'-11½"	3'-3½"	25'-0"	25'-0"	5@48"-3@60"								
CB 6	8	36'-4"	3'-0"	18'-1"	18'-3"	2@20"-30"-36"-42"-48"								
CB 7	1	64'-6"	3'-1"	32'-3"	32'-3"	30"-2@36"-2@42"-48"-2@60"	L	2"	10"	6½"				
CB 8	1	64'-8"	3'-2"	32'-5"	32'-3"	30"-2@36"-2@42"-2@48"-60"	L	10¾"	7¼"	3"				
CB 9	1	66'-4"	2'-3½"	33'-2"	32'-3"	30"-2@36"-2@42"-3@48"	L	10¾"	7¼"	3"				
CB10	1	56'-7"	3'-4½"	23'-10"	32'-3"	30"-2@36"-42"-48"-56"-60"	1	10¾"	7¼"	3"				
CB11	1	53'-3"	3'-5½"	21'-0"	32'-3"	30"-2@36"-2@42"-48"-60"	1	10¾"	7¼"	3"				
CB12	1	52'-0"	3'-4½"	26'-0"	26'-0"	4@20"-3@30"-36"-42"-48"	1	10¾"	7¼"	3"				
CB13	1	48'-5"	3'-0½"	28'-5"	26'-0"	3@20"-3@30"-36"-42"-48"	1	10¾"	7¼"	3"				
CB14	1	44'-9"	3'-3½"	18'-7"	26'-0"	2@20"-2@30"-36"-42"-48"	1	10¾"	7¼"	3"				
CB15	1	41'-2"	3'-5"	15'-2"	26'-0"	2@20"-2@30"-36"-42"-48"	1	10¾"	7¼"	3"				
CB16	1	77'-5"	3'-0½"	26'-7"	25'-11"	2@30"-42"-2@48"-54"-3@60"	1	10¾"	7¼"	8"				
CB17	1	75'-1"	3'-4½"	23'-3"	25'-11"	2@30"-2@42"-48"-54"-3@60"	1	10¾"	7¼"	3"				
CB18	1	72'-10"	3'-5½"	21'-0"	25'-11"	30"-42"-48"-2@56"-3@60"	1	10¾"	7¼"	3"				
CB19	1	70'-7"	3'-1½"	18'-9"	25'-11"	36"-2@42"-48"-54"-3@60"	1	10¾"	7¼"	3"				
CB20	1	68'-4"	3'-0"	16'-6"	25'-11"	30"-36"-42"-48"-54"-3@60"	1	10¾"	7¼"	3"				
CB21	1	66'-1"	3'-4½"	14'-3"	25'-11"	2@30"-36"-42"-48"-54"-3@60"	1	10¾"	7¼"	3"				
CB22	1	63'-10"	3'-3"	12'-0"	25'-11"	2@30"-36"-42"-48"-3@60"	1	10¾"	7¼"	3"				
CB23	1	62'-1"	3'-4½"	31'-1"	31'-0"	30"-2@36"-2@42"-48"-50"-60"	1	10¾"	7¼"	3"				
CB24	1	59'-3"	3'-5½"	28'-3"	31'-0"	30"-2@36"-2@42"-2@48"-54"	1	10¾"	7¼"	3"				
CB25	1	56'-6"	3'-1"	25'-6"	31'-0"	30"-36"-2@42"-48"-56"-60"	1	10¾"	7¼"	3"				
CB26	1	53'-9"	3'-2½"	22'-9"	31'-0"	30"-36"-2@42"-2@48"-54"	1	10¾"	7¼"	3"				
CB27	1	50'-11"	3'-3½"	19'-11"	31'-0"	2@30"-36"-42"-3@48"	1	10¾"	7¼"	3"				
CB28	1	49'-3"	3'-5½"	24'-7"	24'-8"	3@20"-3@30"-36"-42"-48"	1	10¾"	7¼"	3"				
CB29	1	45'-8"	3'-2"	21'-0"	24'-8"	2@20"-3@30"-36"-42"-48"	1	10¾"	7¼"	3"				
CB30	1	42'-0"	3'-4"	17'-4"	24'-8"	20"-3@30"-36"-42"-48"	1	10¾"	7¼"	3"				
CB31	1	38'-5"	3'-0½"	13'-9"	24'-8"	20"-2@30"-36"-42"-48"	1	2"	16"	6½"				
CB32	1	28'-5"	3'-0½"	18'-3"	10'-2"	20"-2@30"-2@36"	2	2"	16"	6½"				
CB33	1	32'-4"	3'-0½"	18'-3"	14'-1"	20"-2@30"-42"-48"	2	10¾"	7¼"	3"				
CB34	1	40'-1"	3'-4½"	18'-3"	21'-8"	2@30"-2@36"-42"-48"	2	10¾"	7¼"	3"				
CB35	1	42'-3"	3'-5½"	27'-1"	15'-2"	20"-3@30"-36"-42"-48"	2	10¾"	7¼"	3"				
CB36	1	46'-1"	3'-4½"	27'-1"	19'-0"	2@20"-3@30"-36"-42"-48"	2	10¾"	7¼"	3"				
CB37	1	50'-0"	3'-4"	27'-1"	22'-11"	3@20"-3@30"-36"-42"-48"	2	10¾"	7¼"	3"				
CB38	1	53'-10"	3'-3"	27'-1"	26'-9"	3@20"-4@30"-36"-42"-48"	2	10¾"	7¼"	3"				
CB39	1	55'-9"	3'-2½"	22'-0"	17'-9"	30"-2@36"-42"-48"-56"-60"	2	10¾"	7¼"	3"				
CB40	1	58'-8"	3'-2"	22'-0"	14'-8"	30"-2@36"-2@42"-3@48"	2	10¾"	7¼"	3"				
CB41	1	60'-7"	3'-1½"	22'-0"	17'-7"	30"-2@36"-2@42"-2@48"-60"	2	10¾"	7¼"	3"				
CB42	1	64'-6"	3'-1"	22'-0"	20'-6"	2@30"-2@36"-3@42"-48"-60"	2	10¾"	7¼"	3"				
CB43	1	67'-5"	3'-0½"	22'-0"	23'-5"	20"-2@30"-2@36"-2@42"-3@48"	2	10¾"	7¼"	3"				
CB44	1	70'-4"	3'-0"	22'-0"	26'-4"	3@20"-2@36"-3@42"-48"-60"	2	10¾"	7¼"	3"				
CB45	1	40'-3"	3'-5½"	24'-0"	16'-3"	20"-3@30"-36"-2@42"	2	10¾"	7¼"	3"				
CB46	1	44'-1"	3'-4½"	24'-0"	20'-1"	2@20"-3@30"-36"-42"-48"	2	10¾"	7¼"	3"				
CB47	1	48'-0"	3'-4"	24'-0"	24'-0"	3@20"-3@30"-36"-42"-48"	2	10¾"	7¼"	3"				
CB48	1	51'-10"	3'-3"	24'-0"	27'-10"	4@20"-3@30"-36"-42"-48"	2	10¾"	7¼"	3"				
CB147	2	74'-11"	3'-3½"	25'-0"	26'-0"	7@20",3@24"-2@32"-4@40"								

PI BARS	STRENGTH	STRANDS SLOPED	STRANDS TOTAL	TOTAL FORCE#	STRANDS LOCATION AT ℄ ROW 1	2	3	4	5	6	7	8	16	18
5"-16@6-18@8-21@10"	32	8	40	756000	10	10	10	8	2					
5"-16@6-18@8-21@10"	32	8	40	756000	10	10	10	8	2					
5"-16@6-18@8-12@10-7@12"	32	8	40	756000	10	10	10	8	2					
5"-16@6-18@8-12@10-7@12	32	8	40	756000	10	10	10	8	2					
5"-16@6-18@8-12@10-7@12	32	8	40	756000	10	10	10	8	2					
15@5"-6@6-6@7-6@8-2@10"	10	6	16	302400	8	2	2	2	2					
5"-24@6-6@7-6@8-15@10"	22	8	30	567000	10	10	8	2						
5"-24@6-6@7-12@8-7@12"	26	8	34	642600	10	10	10	4						
5"-24@6-6@7-12@8-6@10-2@12"	26	8	34	642600	8	8	8	2	2					
5"-32@6-7@8"-6@10-2@13"	18	8	26	491400	8	10	4	2	2					
5"-17@76-12@7-6@8-6@10-2@12	14	6	20	378000	10	8	2							
21@5"-11@6-11@8"-2@9"	18	8	26	491400	8	8	4	2	2	2				
25@5"-11@6-11@8"-AC-9"	18	8	26	491400	8	8	2	2	2	2	2			
21@5"-11@6-13@8"	18	8	26	491400	8	8	2	2	2	2	2			
27@5"-13@6-6@8"-2@10"	10	6	16	302400	8	2	2	2	2					
5"-17@6-12@8-6@9-19@10"-2@12"	30	10	40	756000	10	10	10	8	2					
5"-17@6-6@7-6@8-6@9-6@10-12@12	30	10	40	756000	10	10	10	8	2					
5"-20@6-14@8-6@10"-12@12	30	10	40	756000	10	10	10	8	2					
5"-13@6-6@7-6@8-6@9"6@10-12@12	30	10	40	756000	10	10	10	8	2					
5"-11@6-6@7-6@8-6@9-6@10-12@12	26	8	34	642600	10	10	10	4						
5"-16@6-6@8"-6@9"-6@10-10@12"-7.5	22	8	30	567000	10	10	8	2						
5"-16@6-6@7-6@8-6@10-10@12"-15	18	8	26	491400	10	10	4	2						
5"-24@6"-6@7-6@8-5@10-6@12-14	18	8	26	491400	10	10	4	2						
5"-24@6"-6@7-10@8-6@9"-2@10	22	8	30	567000	8	8	8	2	2	2				
5"-25@6-13@8"-6@10-2@12"	18	8	26	491400	8	10	4	2	2					
5"-18@6"-6@7-12@8-6@9"-2@10	18	8	26	491400	8	8	4	2	2	2				
5"-16@6"-6@7"-18@8"-2@12"	14	6	20	378000	10	8	2							
25@5"-11@6"-6@7"-6@8"-2@10	14	6	20	378000	10	8	2							
21@5"-11@6"-6@7"-6@8"-2@9"	18	8	26	491400	8	8	2	2	2	2	2			
17@5"-11@6"-6@7"-8@8"	18	8	26	491400	8	8	2	2	2	2	2			
11@5"-11@6"-6@7"-8@8"-9"	10	6	16	302400	8	2	2	2	2					
11@5"-17@6"-2@9"	10	4	14	264600	6	2	2	2					2	
11@5"-5@6"-6@7"-9@8"	10	6	16	302400	8	2	2	2	2					
13@5"-12@6-6@7"-6@8"-2@9"	10	6	16	302400	8	2	2	2	2					
17@5"-11@6"-6@7"-6@8"-2@9"	14	6	20	378000	8	6	2	2	2					
21@5"-11@6"-6@7"-6@8"-2@10"	18	8	26	491400	10	10	4	2						
25@5"-17@6"-6@7"-9@8"	22	8	30	567000	8	8	6	2	2	2	2			
25@5"-16@6"-6@7"-6@8-2@9"	18	8	26	491400	8	8	4	2	2	2				
5"-24@6-13@8"-6@10"-2@12"	18	8	26	491400	8	8	4	2	2	2				
5"-24@6"-6@7"-18@8"-2@10"	22	8	30	567000	8	8	8	2	2	2				
5"-24@6"-6@7"-12@8"-6@10-2@12	26	8	34	642600	8	8	10	4	2	2				
5"-29@6-12@7"-6@8-8@10"	30	10	40	756000	8	8	10	8	2	2	2			
11@5"-24@6-6@7-20@8"-9"	30	10	40	756000	10	10	10	8	2					
19@5"-19@6-12@7-6@8-6@10-2@12	30	10	40	756000	10	10	10	8	2					
17@5"-11@6-12@7"-2@10	10	6	16	302400	8	2	2	2	2					
21@5"-11@6-6@7"-8@8"	18	8	26	491400	8	8		2	2	2	2	2		
25@5"-17@6"-6@7"-6@8"-2@10"	18	8	26	491400	8	8	2	2	2	2	2			
29@5"-11@6-6@7"-9@8"	18	8	26	491400	8	8	4	2	2	2				
27@5"-12@6"-8@8"-17@10"-NOTE 6	32	16	48	864000	10	8	10	8	4	2	2	2		

STRANDS LOCATION AT END ROW 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	BEND POINT FROM ℄	BEARING TYPE NORTH	BEARING TYPE SOUTH	REMARKS
10	8	8	6										2	2	2	2		7'-6"	B1	B2	SEE NOTE "A"
10	8	8	6										2	2	2	2		7'-6"	B1	B2	SEE NOTE "B"
10	8	8	6										2	2	2	2		7'-6"			SEE NOTE "A"
10	8	8	6										2	2	2	2		7'-6"	B2	B1	
10	8	8	6										2	2	2	2		7'-6"			SEE NOTE "A"
8	2							2	2	2								3'-8"	B3	B4	SEE NOTE "B"
8	8	6									2	2	2	2				6'-6"	B1	B2	SEE NOTE "A"
8	8	8	2								2	2	2	2				6'-3"	B1	B2	SEE NOTE "A"
8	8	6									2	2	2	2				6'-0"	B1	B2	SEE NOTE "A"
8	8	2									2	2	2	2				5'-8"	B1	B2	SEE NOTE "A"
8	6											2	2	2				6'-5"	B1	B2	SEE NOTE "A"
8	8	2										2	2	2				5'-3"	B1	B2	SEE NOTE "A"
8	8	2											2	2	2			4'-11"	B1	B2	SEE NOTE "A"
8	8		2										2	2	2			4'-9"	B3	B4	SEE NOTE "A"
8	2							2	2	2								4'-2"	B3	B4	SEE NOTE "A"
8	8	8	6								2	2	2	2				7'-10"	B1	B2	SEE NOTE "A"
8	8	8	6								2	2	2	2				7'-7"	B1	B2	SEE NOTE "B"
8	8	8	6								2	2	2	2				7'-4"	B1	B2	
8	8	8	6								2	2	2	2				7'-7"	B1	B2	
8	8	8	2									2	2	2				6'-11"	B1	B2	
8	8	6										2	2	2				6'-8"	B1	B2	
8	8	2										2	2	2				6'-6"	B1	B2	
8	8	2										2	2	2				6'-3"	B1	B2	
8	8	6											2	2				6'-0"	B1	B2	
8	8	2											2	2	2			5'-9"	B1	B2	
8	8	2											2	2	2			5'-6"	B1	B2	
8	6												2	2				5'-2"	B1	B2	
8	6											2	2	2				5'-0"	B1	B2	
8	6												2	2	2			4'-8"	B1	B2	
8	6												2	2	2			4'-3"	B3	B4	SEE NOTE "A"
8	8	2											2	2	2			4'-1"	B3	B4	SEE NOTE "B"
8	8	2											2	2	2			3'-11"	B3	B4	SEE NOTE "A"
8	8	2											2	2	2			3'-4"	B3	B4	SEE NOTE "B"
8	8	2											2	2	2			4'-1"	B3	B4	
8	8	2											2	2	2			4'-4"	B3	B4	
8	8	2											2	2	2			4'-8"	B1	B2	
8	8	2											2	2	2			5'-1"	B1	B2	
8	8	2											2	2	2			5'-5"	B1	B2	
8	8	2											2	2	2			5'-8"	B1	B2	
8	8	6											2	2	2			5'-11"	B1	B2	
8	8	8	2										2	2	2			6'-3"	B1	B2	
8	8	8	6										2	2	2			6'-6"	B1	B2	
8	8	8	6										2	2	2			6'-9"	B1	B2	
8	8	8	6										2	2	2			7'-1"	B1	B2	SEE NOTE "B"
8	2							2	2	2								4'-3"	B3	B4	
8	8	2											2	2	2			4'-7"	B3	B4	
8	8	2											2	2	2			5'-0"	B1	B2	
8	8	2											2	2	2			5'-5"	B1	B2	
8	6	8	6	2	2	2	2	2	2	2	2	2	2	2	2	2	2	7'-6"	B1	B2	FOR PI BARS SEE DETAIL SHEET NO 10A

NOTE "A" BEAMS ON FRAMING PLANS WITH A LETTER ADDED AT END OF BEAM MARK NUMBER ARE SAME AS THOSE SHOWN IN SCHEDULE ABOVE FOR NUMBER WITHOUT LETTER. FOR BEARING ARRANGEMENTS AND VARIATIONS OF END OVERHANGS AND LOCATION OF ADJUSTMENT BOLTS FROM TYPICAL DETAILS SHOWN ON SHEET N° 32 SEE "SUPPLEMENTARY I-BEAM DATA" TABLE ON SHT N° 36

NOTE "B" PROVIDE INSERTS IN CONCRETE I-BEAM FOR ELECTRICAL HANDRAIL FOR LOCATION AND DETAILS OF HANDRAIL SEE SHEETS 60, 60A & 60B

NOTE "C" PI BARS FOR SOUTH 20FT OF BEAM SHALL HAVE 180° HOOKS ON TOP AS SHOWN ON SHT 10A

BEAM MARK	MIN. f'ci
CB1 TO CB17 INCL.	4000
CB18 & CB19	4200
CB20 TO CB41 INCL.	4000
CB42 TO CB44	4200

BEAM MARK	MIN. f'ci
CB45 TO CB58 INCL.	4000
CB59 CB68	4300
CB60 TO CB67 INCL.	4200
CB69 TO CB100 INCL.	4000

BEAM MARK	MIN. f'ci
CB101 TO CB124 INCL.	4400
CB125 TO CB185 INCL.	4000
CB186	4200
CB147	4600

May 5, 1967, Beam CB147 added for Sign Support

TABLE OF CONCRETE STRENGTH AT TIME OF INITIAL STRESS

CITY OF CHICAGO
DEPARTMENT OF PUBLIC WORKS
BUREAU OF ENGINEERING

NORTHWEST ROUTE SUPERHIGHWAY
GRADE SEPARATION
WABANSIA AVE. TO CORTLAND ST.
SECTION 0505-3-JH

CONCRETE I-BEAM SCHEDULE

10 SOUTH WABASH AVE. CHICAGO, ILLINOIS SHEET NO. 33 OF 136 SHEETS DATE: SEPT. 1958

48" DEEP PRECAST PRESTRESSED CONCRETE I-BEAM SCHEDULE

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI-2	0505.3-IH	COOK	136	34
STA.	TO STA.			
FED. ROAD DIST. NO. 4	ILLINOIS	PROJECT	I-02-2(68)	

I-BEAM NUMBER	QUANTITY	LENGTH ℄ BEG	END BLOCK LENGTH	INSERT NORTH	INSERT SOUTH	SPACING OF ¾" WIDE SHEAR KEYS	BLOCKING OF GIRDER FLANGES NORTH BEG TYPE	A	B	d	SOUTH BRG TYPE	C	D	d	P1 BARS	STRANDS STRAIGHT	STRANDS SLOPED	STRANDS TOTAL	STRANDS TOTAL FORCE#	STRANDS LOCATION AT ℄ ROW 1	2	3	4	5	6	7	8	16	18	STRANDS LOCATION AT END ROW 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	BEND POINT FROM ℄	BEARING TYPE NORTH	SOUTH	REMARKS
CB49	1	53'-7"	3'-1½"	21'-0"	11'-7"	2@30-38-42-48-56-60"					2	10¾"	7¼"	3"	5 23@6-13@8-6@10-2@13"	14	6	20	378000	10	8	2							8	6																	5'-6"	B1	B2	
CB50	1	56'-7"	3'-1½"	21'-0"	14'-7"	2@30-36-2@42-3@48"					2	10¾"	7¼"	3"	5 23@6-6@7-21@8	22	8	30	567000	8	8	8	2	2	2				8	8	6																	5'-10"	B1	B2	
CB51	1	59'-7"	3'-1½"	21'-0"	17'-7"	2@30-36-1@42-2@48-6@60					2	10¾"	7¼"	3"	4 24@6-6@7-12@8-8@10"	22	8	30	567000	8	10	8	2	2					8	8	6																	6'-2"	B1	B2	
CB52	1	62'-8"	3'-2½"	21'-0"	20'-8"	2@30-2@36-2@42-3@48					2	10¾"	7¼"	3"	7@5-24@6-6@7-21@8"	26	8	34	642600	8	10	10	4	2					8	8	8	2																6'-5"	B1	B2	
CB53	1	65'-8"	3'-2"	21'-0"	23'-8"	2@30-2@36-2@42-2@48-6@60					2	10¾"	7¼"	3"	7@5-24@6-6@7-12@8-8@10"	22	8	30	567000	10	10	8	2						8	8	6																	6'-7"	B1	B2	SEE NOTE "A"
CB53	1	65'-8"	3'-2"	21'-0"	23'-8"	2@30-2@36-2@42-2@48-6@60					2	2	16"	6½"	11@5-12@6-5@8-2@9	10	4	14	264600	6	2	2	2					2	6	2																	3'-1"	B3	B4	SEE NOTE "A"
CB54	8	30'-1"	3'-4½"			20-30-2@36"-40"									11@5-10@6-6@7-6@8-2@1"	10	6	16	302400	8	2	2	2						8	2					2	2	2									3'-8"	B3	B4	
CB55	1	36'-8"	3'-5"	18'-3"	17'-11"	20-30-2@30-42"-48					2	10¾"	7¼"	3"	7@5-24@6-6@7-12@8-6@10-2@12"	30	8	38	718200	10	8	8	8	2	2				10	8	6	6															6'-8"	B2	B1	SEE NOTE "A"
CB56	1	66'-2"	3'-5"	22'-0"	22'-0"	2@30-2@36-2@42-2@48-6@60									7@5-24@6-6@7-12@8-6@10-2@12	30	8	38	718200	10	8	8	8	2	2				10	8	6	6															6'-8"	B1	B2	ADJUST SHIM PACKETS AT EACH END OF I-BEAM
CB57	16	66'-5"	3'-0½"	22'-1"	22'-1"	2@30-2@36-2@42-2@48-6@60									1@5-24@6-6@7-12@8-6@9-3@11	30	8	38	718200	10	8	8	8	2	2				10	8	6	6															6'-6"	B2	B1	SEE NOTE "B"
CB58	10	65'-0"	3'-1"	21'-9"	21'-9"	2@30-2@36-2@42-2@48-54									5 23@6-6@7-6@8-6@9-6@10-12@12-2@13	30	10	40	756000	10	10	10	8	2					8	8	8	6															7'-1"	B2	B1	SEE NOTE "B"
CB59	6	70'-10"	3'-3"	23'-8"	23'-8"	36-2@42-48-54-3@60									5 23@6-6@7-12@8-6@9	18	8	26	491400	8	10	4	2	2					8	8	2																	6'-0"	B1	B2	FOR LOCATION OF INSERTS FOR DIAPH. SLAB AT SKEW & SEE SHT.
CB60	1	57'-7"	3'-4½"			2@30-36-2@42-2@48-54									3 1@5-27@6-6@7-9@8	30	8	38	718200	10	8	8	8	2	2				10	6	6	6															7'-2"	B2	B1	
CB61	1	68'-1"	3'-1½"			6@20-4@30-2@36-4@48									17@5-12@6-12@7-6@9-2@12	14	6	20	378000	10	8	2							8	6																	5'-3"	B1	B2	SEE NOTE "B"
CB62	1	52'-8"	3'-2"	19'-6"	13'-5"	20-2@30-2@36-2@42-54									17@5-12@6-12@7-9@9"	18	8	26	491400	8	8	4	2	2	2				8	8	2																	5'-3"	B1	B2	
CB63	1	53'-0"	3'-1"	19'-6"	14'-0"	20-2@30-2@36-2@42-54"									17@5-12@6-12@7-9@9"	18	8	26	491400	8	8	4	2	2	2				8	8	2																	5'-4"	B1	B2	
CB64	1	53'-1"	3'-0"	19'-6"	14'-1"	20-2@30-2@36-2@42-54									17@5-12@6-12@7-9@9"	18	8	26	491400	8	8	4	2	2	2				8	8	2																	5'-4"	B1	B2	
CB65	1	53'-8"	3'-2"	19'-6"	14'-8"	20-2@30-2@36-42-48-54									17@5-12@6-6@7-6@8-6@9-2@11"	18	8	26	491400	8	8	4	2	2	2				8	8	2																	5'-5"	B1	B2	
CB66	1	54'-0"	3'-1"	19'-6"	15'-0"	20-2@30-2@36-42-48-54									17@5-12@6-6@7-6@8-9@9"	18	8	26	491400	8	8	4	2	2	2				8	8	2																	5'-6"	B1	B2	
CB67	1	54'-3"	2'-11½"	19'-6"	15'-3"	20-2@30-2@36-42-48-54									17@5-12@6-6@7-6@8-9@9	18	8	26	491400	8	8	4	2	2	2	2			8	8	2																	6'-10"	B1	B2	ADJUST BOLTS AT EACH END OF I-BM
CB68	14	68'-0"	3'-1"	22'-10"	22'-10"	2@30-2@36-2@42-2@48-54									11@5-24@6-6@7-12@8-6@9-2@11	32	8	40	756000	8	10	10	8	2	2				8	8	8	6	2															5'-4"	B2	B1	SEE NOTE "A" & SEE NOTE "B"
CB69	17	53'-7"	3'-1½"	17'-10"	17'-10"	3@20-4@30-36-2@42"									25@5-16@6-12@7-2@10"	26	6	32	604800	6	6	6	6	6	2				6	6	6	4	4														5'-9"	B1	B2	SEE NOTE "B"
CB70	22	57'-6"	3'-1"	19'-2"	19'-2"	4@20-4@30-36-42-48									29@5-16@6-6@7-6@8-2@9"	30	8	38	718200	8	6	8	8	2	2	2	2		8	6	8	8															5'-0"	B2	B1	ADJUST BOLTS AT 135'-4 END OF I-BM (For CB71-Sign Support)
CB71	18	50'-1"	3'-0"	25'-2"	25'-2"	3@20-3@30-36-42-48									25@5-11@6-6@7-8@8	20	8	28	620200	8	8	2	2	2	2	2	2		8	8	2	2															6'-7"	B2	B1	
CB72	1	65'-1"	3'-4½"	24'-1"	20'-6"	2@30-2@36-2@42-2@48-54	1	13"	5"	3"					1@5-21@6-6@7-12@8-9@9"	20	8	28	529200	10	10	4	4						8	8	2	2															6'-3"	B2	B1	
CB73	1	61'-7"	3'-1½"	20'-7"	20'-6"	30-2@36-2@42-48-54-60	1	13"	5"	3"					5 24@6-6@7-6@8-6@9-6@10-2@11	26	8	34	642600	8	8	10	4	2	2				8	8	8	2															5'-10"	B2	B1	
CB74	1	58'-1"	3'-4½"	17'-1"	20'-6"	36-2@36-2@42-3@48	1	13"	5"	3"					5 21@6-6@7-18@8-2@10"	22	8	30	567000	8	8	4	2	2	2				8	8	6																5'-6"	B2	B1	
CB75	1	54'-7"	3'-1½"	3'-7"	20'-6"	30-36-2@42-2@48-54	1	13"	5"	3"					5 18@6-6@7-12@8-6@9-3@10"	18	8	26	491400	8	8	4	2	2	2				8	8	2																5'-2"	B2	B1	
CB76	1	51'-1"	3'-4½"	10'-7"	20'-6"	2@30-36-42-2@48-54	1	13"	5"	3"					5 16@6-6@7-12@8-6@9-2@10"	14	6	20	378000	10	8	2							8	6																	5'-0"	B2	B1	
CB77	1	49'-3"	3'-0½"	26'-0"	22'-7"	3@20-3@30-36-42-48	1	13"	5"	3"					25@5-11@6-6@7-6@8-2@10"	16	4	20	378000	8	6	2	2						8	8	2																4'-7"	B2	B1	
CB78	1	45'-1"	3'-4½"	22'-6"	22'-7"	2@20-3@30-36-42-48	1	13"	5"	3"					21@5-11@6-6@7-8@8	18	8	26	491400	8	8	2	2	2	2	2			8	6																	4'-2"	B4	B3	
CB79	1	40'-10"	3'-3"	18'-3"	22'-7"	2@20-2@30-36-42-48	1	13"	5"	3"					13@5-11@6-6@7-6@8-2@10"	16	4	20	378000	8	6	2	2					2	8	6																	3'-8"	B4	B3	SEE NOTE "C"
CB80	1	36'-7"	2'-7½"	14'-0"	22'-7"	20-3@30-42-48	1	13"	5"	3"					11@5-10@6-6@7-6@8-2@10"	10	6	16	302400	8	2	2	2	2					8	2					2	2	2									3'-4"	B4	B3	SEE NOTE "A"
CB81	1	32'-3"	2'-11½"	9'-9"	22'-7"	20-30-36-42-48	1	4"	14"	8"					5@5-11@6-6@7-6@8-2@9"	10	4	14	264600	6	2	2	2					2	6	2					2	2	2									11'-3"	B2	B1	SEE NOTE "A" & SEE NOTE "B"
CB82	1	72'-6"	3'-1"	26'-0"	23'-3"	2@30-36-2@42-48-54-2@60	1	5"	13"	8"					13@5-13@6-6@7-6@8-6@9-14@10	30	10	40	756000	10	10	10	8	2					8	8	8	6															7'-0"	B2	B1	
CB83	1	69'-5"	3'-0½"	22'-11"	23'-3"	2@30-2@36-42-48-54-2@60	1	13"	5"	3"					13@5-12@6-6@7-6@8-6@9-14@10	30	10	40	756000	10	10	10	8	2					8	8	6	6															6'-8"	B2	B1	
CB84	1	66'-8"	3'-5½"	19'-7"	23'-3"	3@30-36-2@42-48-54-60	1	13"	5"	3"					13@5-11@6-12@7-6@8-6@9-6@10-2@12	28	10	38	718200	10	8	8	8	2	2				8	8	6																	6'-4"	B2	B1	
CB85	1	63'-2"	3'-5"	16'-8"	23'-3"	2@30-36-42-2@48-2@60	1	13"	5"	3"					13@5-13@6-12@8-12@10-2@12"	22	8	30	567000	10	10	8	2						8	8	6																	6'-3"	B2	B1	
CB86	1	67'-6"	3'-1"	32'-6"	29'-0"	4@20-2@30-2@36-42-2@48	1	13"	5"	3"					22@5-17@6-6@7-12@8-2@10"	22	8	30	567000	8	10	8	2	2					8	8	6																	5'-10"	B2	B1	
CB87	1	57'-7"	3'-2½"	20'-9"	21'-0"	2@20-30-36-42-48-54	1	13"	5"	3"					15@5-18@6-6@7-6@8-9@9"	22	8	30	567000	8	8	10	2	2					8	8	6																	5'-5"	B2	B1	
CB88	1	54'-0"	3'-4"	25'-0"	21'-0"	20-2@30-2@36-2@48-54	1	13"	5"	3"					11@5-17@6-12@8-6@9-2@11	20	8	28	529200	8	8	2	2	2	2	2			8	8	2	2															5'-4"	B2	B1	
CB89	1	50'-3"	3'-5½"	21'-3"	21'-0"	20-3@30-2@36-42-54	1	13"	5"	8"					11@5-22@6-6@7-6@9-2@11"	14	6	20	378000	8	8	2	2						8	6																	1'-11"	B2	B1	
CB90	1	48'-7"	3'-1⅛"	26'-1"	22'-6"	2@20-2@30-2@36-42-54	1	13"	5"	3"					9@5-22@6-6@7-6@9-2@12	14	6	20	378000	8	6	2	2	2					8	6																	4'-6"	B2	B1	
CB91	1	45'-1"	3'-4½"	22'-1"	22'-6"	3@30-2@36-42-48	1	13"	5"	3"					7@5-22@6-6@7-6@8-2@10"	14	6	20	378000	8	6	2	2	2					8	6																	4'-3"	B4	B3	
CB92	1	41'-6"	3'-1"	19'-0"	22'-6"	30-3@36-42-48	1	13"	5"	3"					7@5-18@6-6@7-6@8-2@10"	16	6	16	302400	8	2	2	2	2					8	2					2	2	2									3'-11"	B4	B3	
CB93	1	38'-0"	3'-4"	15'-6"	22'-6"	20-30-2@36-42-48	1	13"	5"	3"					5@5-17@6-6@7-9@8	10	6	16	302400	8	2	2	2	2					8	2					2	2	2									3'-6"	B4	B3	
CB94	1	34'-6"	3'-1"	18'-0"	22'-6"	2@30-36-42-48	1	13"	5"	3"					7@5-11@6-6@7-6@8-2@10"	10	4	14	264600	6	2	2	2					2	6	2					2	2	2									3'-3"	B4	B3	
CB95	1	32'-3"	3'-5½"			20-30-36-42-48	1	13"	5"	3"					1@5-6@6-6@7-6@8-2@9"	10	4	14	264600	6	2	2	2					2	6	2					2	2	2									2'-10"	B4	B3	
CB96	1	28'-0"	3'-4½"			20-24-30-36-42"	1	13"	5"	3"					5@5-15@6-6@7-2@9"	10	4	14	264600	6	2	2	2					2	6	2					2	2	2												

NOTE "A"
BEAMS ON FRAMING PLANS WITH LETTER ADDED AT END OF BEAM MARK NUMBER ARE SAME AS THOSE SHOWN IN SCHEDULE ABOVE FOR NUMBER WITHOUT LETTER FOR BEARING ARRANGEMENTS AND VARIATIONS OF END OVERHANGS AND LOCATION OF ADJUSTMENT BOLTS FROM TYPICAL DETAILS SHOWN ON SHEET No 32 SEE "SUPPLEMENTARY I-BEAM DATA TABLE" ON SHT. No 36.

PROVIDE INSERTS IN CURB AT HANDHOLE
FOR LOCATION AND DETAILS OF HANDHOLE SEE SHEETS 65, 66 & 67

NOTE "C"
P1 BARS FOR SOUTH 20FT. OF BEAM SHALL HAVE 180° HOOKS ON TOP AS SHOWN ON SHT. 10A.

May 5, 1959 Added Sign Support

CITY OF CHICAGO
DEPARTMENT OF PUBLIC WORKS
BUREAU OF ENGINEERING
NORTHWEST ROUTE SUPERHIGHWAY
GRADE SEPARATION
WABANSIA AVE. TO CORTLAND ST.
SECTION 0505.3-IH
CONCRETE I-BEAM SCHEDULE

CONSULTING ENGINEERS
CHICAGO, ILLINOIS
10 SOUTH WABASH AVE.

SHEET NO. 34 OF 136 SHEETS DATE SEPT. 1958

48" DEEP PRECAST PRESTRESSED CONCRETE I BEAM SCHEDULE

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI	0505.2-1H	COOK	136	35
STA.		TO STA.		

FED. HWY. SYS. NO. 41 ILLINOIS — PROJECT NO. 0505-147

I-BEAM MARK	QUAN'TY	LENGTH E-BRG	END SLOPE LENGTH	INSERT NORTH	INSERT SOUTH	SPACING OF SHEAR KEYS	BLOCKING OF GIRDER FLANGES NORTH BRG TYPE A	B	d	SOUTH BRG TYPE C	D	d	PI BARS	STRANDS STRAIGHT	STRANDS SLOPED	STRANDS TOTAL	TOTAL FORCE	STRANDS LOCATION AT ℄ ROW 1	2	3	4	5	6	7	8	16	18	STRANDS LOCATION AT END ROW 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	B.M.S. NO.	A	B	REMARKS
CB97	1	23'-8"	3'-2"			36@30"=36"	1	13"	5"	3"			2"@5"-16@6"-2@8"	10	4	14	264600	6	2	2				2				6	2							2	2													1'-5"	5'-4"	5'-2"	
CB98	1	19'-4"	3'-0"			30-2@36"	1	13"	5"	3"			2"@5"-12@6"-2@8"	10	4	14	264600	6	2	2	2			2				6	2							2	2													2'-0"	6'-4"	6'-2"	
CB99	1	15'-1"	2'-4½"			28-2@30"	1	13"	5"	3"			2"@5"-8@6"	10	4	14	264600	6	2	2	2			2				6	2							2	2													1'-7"	6'-4"	6'-3"	
CB100	1	6'-7"	3'-1½"	29'-2"	29'-2"	2@6"-2@4"-2@6.45"-54"-3@6"	1	1"	4"	0"	2	7"	11"	7"	5"-20@6"-6@7"-20@9"-6@10"-10@12"-3@13"	30	10	40	756300	10	10	10	8	2						8	8	8	6					2	2											2'-10"	8'-1"	8'-2"	SEE NOTE "A"
CB101	1	8'-5"	3'-0"	28'-10"	28'-10"	2@36"-2@4"-2@40"-54"-3@60"	1	11½"	6½"	4"	2	12"	6"	4"	5"-20@6"-6@7"-12@8"-6@9"-5@10"-13@12"	30	16	46	869400	10	8	10	8	4	2	2				8	6	8	6					2	2											2'-7"	8'-1"	8'-2"	
CB102	1	8'-5"	3'-5"	28'-5"	28'-5"	2@36"-2@4"-2@40"-54"-3@60"	1	11½"	6½"	4"	2	12"	6"	4"	5"-20@6"-6@7"-12@8"-6@9"-5@10"-10@12"-2@15"	30	16	46	869400	10	8	10	8	4	2	2				8	6	8	6					2	2											2'-7"	8'-1"	8'-2"	
CB103	1	84'-0"	3'-4"	28'-0"	28'-0"	2@36"-2@4"-2@40"-54"-3@60"	1	11½"	6½"	4"	2	12"	6"	4"	5"-20@6"-6@7"-12@8"-6@9"-5@10"-13@12"	30	16	46	869400	10	8	10	8	4	2	2				8	6	8	6					2	2											2'-6"	8'-1"	8'-2"	
CB104	1	82'-11"	3'-3½"	27'-8"	27'-8"	2@36"-2@4"-2@40"-54"-3@60"	1	11½"	6½"	4"	2	12"	6"	4"	5"-20@6"-6@7"-12@8"-6@9"-5@10"-13@12"	30	16	46	869400	10	8	10	8	4	2	2				8	6	8	6					2	2											2'-6"	8'-1"	8'-2"	
CB105	2	81'-9"	3'-2½"	27'-3"	27'-3"	2@36"-2@4"-2@40"-54"-3@60"	1	11½"	6½"	4"	2	12"	6"	4"	5"-13@6"-6@7"-12@8"-6@9"-5@10"-10@12"-3@14"	30	16	46	869400	10	8	10	8	4	2	2				8	6	8	6					2	2											2'-6"	8'-1"	8'-2"	
CB106	2	80'-11"	3'-2½"	26'-11"	26'-11"	2@36"-2@4"-2@40"-54"-3@60"	1	11½"	6½"	4"	2	12"	6"	4"	5"-13@6"-6@7"-12@8"-6@9"-5@10"-13@12"	30	16	46	869400	10	8	10	8	4	2	2				8	6	8	6					2	2											2'-6"	8'-1"	8'-2"	
CB107	2	80'-8"	3'-2"	26'-11"	26'-11"	2@36"-2@4"-2@40"-54"-3@60"	1	11½"	6½"	4"	2	12"	6"	4"	5"-13@6"-6@7"-12@8"-6@9"-5@10"-13@12"	30	16	46	869400	10	8	10	8	4	2	2				8	6	8	6					2	2											2'-6"	8'-1"	8'-2"	
CB108	2	80'-7"	3'-1½"	26'-10"	26'-10"	2@36"-2@4"-2@40"-54"-3@60"	1	11½"	6½"	4"	2	12"	6"	4"	5"-13@6"-6@7"-12@8"-6@9"-5@10"-13@12"	30	16	46	869400	10	8	10	8	4	2	2				8	6	8	6					2	2											2'-6"	8'-1"	8'-2"	
CB109	2	80'-6"	3'-1½"	26'-10"	26'-10"	2@36"-2@4"-2@40"-54"-3@60"	1	11½"	6½"	4"	2	12"	6"	4"	5"-13@6"-6@7"-12@8"-6@9"-5@10"-10@12"-2@15"	30	16	46	869400	10	8	10	8	4	2	2				8	6	8	6					2	2											2'-6"	8'-1"	8'-2"	
CB110	2	80'-5"	3'-1"	26'-10"	26'-10"	2@36"-2@4"-2@40"-54"-3@60"	1	11½"	6½"	4"	2	12"	6"	4"	5"-13@6"-6@7"-12@8"-6@9"-5@10"-10@12"-2@15"	30	16	46	869400	10	8	10	8	4	2	2				8	6	8	6					2	2											2'-6"	8'-1"	8'-2"	
CB111	2	80'-4"	3'-0"	26'-9"	26'-9"	2@36"-2@4"-2@40"-54"-3@60"	1	11½"	6½"	4"	2	12"	6"	4"	5"-13@6"-6@7"-12@8"-6@9"-5@10"-10@12"-2@15"	30	16	46	869400	10	8	10	8	4	2	2				8	6	8	6					2	2											2'-6"	8'-1"	8'-2"	
CB112	2	80'-3"	3'-0"	26'-9"	26'-9"	2@36"-2@4"-2@40"-54"-3@60"	1	11½"	6½"	4"	2	12"	6"	4"	5"-13@6"-6@7"-12@8"-6@9"-5@10"-10@12"-2@15"	30	16	46	869400	10	8	10	8	4	2	2				8	6	8	6					2	2											2'-6"	8'-1"	8'-2"	
CB113	2	80'-2"	3'-0"	26'-9"	26'-9"	2@36"-2@4"-2@40"-54"-3@60"	1	11½"	6½"	4"	2	12"	6"	4"	5"-13@6"-6@7"-12@8"-6@9"-5@10"-10@12"-2@15"	30	16	46	869400	10	8	10	8	4	2	2				8	6	8	6	2				2	2											2'-6"	8'-1"	8'-2"	
CB114	2	80'-1"	3'-0"	26'-8"	26'-8"	2@36"-2@4"-2@40"-54"-3@60"	1	11½"	6½"	4"	2	12"	6"	4"	5"-13@6"-6@7"-12@8"-6@9"-5@10"-10@12"-2@15"	30	16	46	869400	10	8	10	8	4	2	2				8	6	8	6	2				2	2											2'-6"	8'-1"	8'-2"	
CB115	2	80'-0"	3'-0"	26'-8"	26'-8"	2@36"-2@4"-2@40"-54"-3@60"	1	11½"	6½"	4"	2	12"	6"	4"	5"-13@6"-6@7"-12@8"-6@9"-5@10"-10@12"-2@15"	30	16	46	869400	10	8	10	8	4	2	2				8	6	8	6	2				2	2											2'-6"	8'-1"	8'-2"	
CB116	2	77'-11"	3'-3½"	26'-8"	26'-8"	2@36"-2@4"-2@40"-54"-3@60"	1	11½"	6½"	4"	2	12"	6"	4"	5"-13@6"-6@7"-12@8"-6@9"-5@10"-10@12"-2@14"	30	16	46	869400	10	8	10	8	4	2	2				8	6	8	6	2				2	2											2'-6"	8'-1"	8'-2"	
CB117	2	77'-10"	3'-3"	26'-7"	26'-7"	2@36"-2@4"-2@40"-54"-3@60"	1	11½"	6½"	4"	2	12"	6"	4"	5"-13@6"-6@7"-12@8"-6@9"-5@10"-10@12"-2@14"	30	16	46	869400	10	8	10	8	4	2	2				8	6	8	6	2				2	2											2'-6"	8'-1"	8'-2"	
CB118	2	77'-9"	3'-3"	26'-7"	26'-7"	2@36"-2@4"-2@40"-54"-3@60"	1	11½"	6½"	4"	2	12"	6"	4"	5"-13@6"-6@7"-12@8"-6@9"-5@10"-10@12"-2@14"	30	16	46	869400	10	8	10	8	4	2	2				8	6	8	6	2				2	2											2'-6"	8'-1"	8'-2"	
CB119	3	77'-8"	3'-3"	26'-7"	26'-7"	2@36"-2@4"-2@40"-54"-3@60"	1	11½"	6½"	4"	2	12"	6"	4"	5"-13@6"-6@7"-12@8"-6@9"-5@10"-10@12"-2@14"	30	16	46	869400	10	8	10	8	4	2	2				8	6	8	6	2				2	2											2'-6"	8'-1"	8'-2"	
CB120	1	77'-2"	3'-5"	26'-5"	26'-5"	2@36"-2@4"-2@40"-54"-3@60"	1	11½"	6½"	4"	2	12"	6"	4"	5"-13@6"-6@7"-12@8"-6@9"-5@10"-13@12"	30	16	46	869400	10	8	10	8	4	2	2				8	6	8	6					2	2											2'-6"	8'-1"	8'-2"	
CB121	1	75'-8"	3'-5"	26'-3"	26'-3"	2@36"-2@4"-2@40"-54"-3@60"	1	11½"	6½"	4"	2	12"	6"	4"	5"-13@6"-6@7"-12@8"-6@9"-5@10"-13@12"	30	16	46	869400	10	8	10	8	4	2	2				8	6	8	6					2	2											2'-6"	8'-1"	8'-2"	
CB122	1	75'-2"	3'-5"	26'-1"	26'-1"	2@36"-2@4"-2@40"-54"-3@60"	1	11½"	6½"	4"	2	12"	6"	4"	5"-13@6"-6@7"-12@8"-6@9"-5@10"-13@12"	30	16	46	869400	10	8	10	8	4	2	2				8	6	8	6					2	2											2'-6"	8'-1"	8'-2"	
CB123	1	77'-9"	3'-2"	25'-11"	25'-11"	30-2@42"-2@48"-54"-3@60"	1	11½"	6½"	4"	2	12"	6"	4"	5"-12@6"-6@7"-12@8"-6@9"-3@10"-12@12"	30	16	46	869400	10	8	10	8	4	2	2				8	6	8	6					2	2											2'-6"	8'-1"	8'-2"	
CB124	1	77'-3"	3'-2½"	25'-9"	25'-9"	2@36"-2@4"-2@40"-54"-3@60"	1	11½"	6½"	4"	2	12"	6"	4"	5"-11@6"-6@7"-12@8"-6@9"-5@10"-12@12"	30	16	46	869400	10	8	10	8	4	2	2				8	6	8	6					2	2											2'-6"	8'-1"	8'-2"	
CB125	1	75'-9"	3'-2"	25'-7"	25'-7"	2@36"-2@4"-2@40"-54"-3@60"	1	11½"	6½"	4"	2	12"	6"	4"	5"-11@6"-6@7"-12@8"-6@9"-5@10"-15@12"	30	10	40	756300	10	10	10	8	2						8	8	8	6					2	2											2'-6"	8'-1"	8'-2"	
CB126	1	76'-3"	3'-5½"	25'-5"	25'-5"	2@36"-2@4"-2@40"-54"-3@60"	1	11½"	6½"	4"	2	12"	6"	4"	5"-11@6"-6@7"-12@8"-6@9"-3@10"-15@12"	30	10	40	756300	10	10	10	8	2						8	8	8	6					2	2											2'-6"	8'-1"	8'-2"	
CB127	1	76'-10"	3'-3"	25'-3"	25'-3"	2@36"-2@4"-2@40"-54"-3@60"	1	11½"	6½"	4"	2	12"	6"	4"	5"-11@6"-6@7"-12@8"-6@9"-5@10"-15@12"	30	10	40	756300	10	10	10	8	2						8	8	8	6					2	2											2'-6"	8'-1"	8'-2"	
CB128	1	56'-11"	3'-4½"	25'-0½"	25'-0"	4@20"-2@30"-3@36"-2@45"	2	11½"	6½"	4"	2	12"	6"	4"	2"@5"-18@6"-7"@8"-2@10"	18	8	26	491400	8	8	2	2	2	2	2				8	8	2						2	2											2'-6"	8'-1"	8'-2"	
CB129	1	54'-7"	3'-2½"	27'-4½"	27'-4"	4"-2@20"-30"-3@36"-4@45"	2	11½"	6½"	4"	2	12"	6"	4"	2@5"-18@6"-6@7"-12@8"-6@9"-2@10"	18	8	26	491400	8	8	2	2	2	2	2				8	8	2						2	2											2'-6"	8'-1"	8'-2"	
CB130	1	56'-5"	3'-0½"	26'-8½"	26'-8½"	4@20"-2@30"-3@36"-4@45"	2	11½"	6½"	4"	2	12"	6"	4"	2@5"-18@6"-6@7"-12@8"	18	8	26	491400	8	8	2	2	2	2	2				8	8	2						2	2											2'-6"	8'-1"	8'-2"	
CB131	1	52'-2"	3'-5"	26'-1"	26'-1"	3@20"-3@30"-3@36"-4"-4"	2	11½"	6½"	4"	2	12"	6"	4"	17@5"-18@6"-6@7"-7@8"	18	8	26	491400	8	8	2	2	2	2	2				8	8	2						2	2											2'-6"	8'-1"	8'-2"	
CB132	2	5'-0"	3'-4"	25'-6"	25'-6"	3@20"-2@30"-2@36"-4@48"	2	11½"	6½"	4"	2	12"	6"	4"	25@5"-3@6"-6@7"-6@8"-2@10"	18	10	28	539200	8	8	2	2	2	2	2				8	8	2						2	2											2'-6"	8'-1"	8'-2"	
CB133	2	50'-11"	3'-3½"	25'-5"	25'-5"	3@20"-2@30"-3@36"-4@48"	2	11½"	6½"	4"	2	12"	6"	4"	25@5"-12@6"-6@7"-6@8"-2@10"	18	10	28	539200	8	8	2	2	2	2	2				8	8	2						2	2											2'-6"	8'-1"	8'-2"	
CB134	3	50'-10"	3'-3"	25'-5"	25'-5"	3@20"-2@30"-2@36"-4@48"	2	11½"	6½"	4"	2	12"	6"	4"	25@5"-12@6"-6@7"-6@8"-2@10"	18	10	28	539200	8	8	2	2	2	2	2				8	8	2						2	2											2'-6"	8'-1"	8'-2"	
CB135	2	50'-9"	3'-2½"	25'-4½"	25'-4½"	3@20"-2@30"-2@36"-4@48"	2	11½"	6½"	4"	2	12"	6"	4"	25@3"-12@6"-6@7"-6@8"-2@10"	18	10	28	539200	8	8	2	2	2	2	2				8	8	2						2	2											2'-6"	8'-1"	8'-2"	
CB136	2	50'-8"	3'-2½"	25'-4"	25'-4"	3@20"-2@30"-2@36"-4@48"	2	11½"	6½"	4"	2	12"	6"	4"	25@5"-12@6"-6@7"-6@8"-2@10"	18	10	28	539200	8	8	2	2	2	2	2				8	8	2						2	2											2'-6"	8'-1"	8'-2"	
CB137	3	50'-7"	3'-1½"	25'-3½"	25'-3½"	3@20"-2@30"-2@36"-4@48"	2	11½"	6½"	4"	2	12"	6"	4"	25@5"-12@6"-6@7"-6@8"-2@9"	18	10	28	539200	8	8	2	2	2	2	2				8	8	2						2	2											2'-6"	8'-1"	8'-2"	
CB138	3	50'-5"	3'-0½"	25'-3"	25'-3"	3@20"-2@30"-2@36"-4@48"	2	11½"	6½"	4"	2	12"	6"	4"	25@5"-12@6"-6@7"-6@8"-2@9"	18	8	26	491400	8	8	2	2	2	2	2				8	8	2						2	2											2'-6"	8'-1"	8'-2"	
CB139	3	50'-5"	3'-0½"	25'-2½"	25'-2½"	3@20"-2@30"-2@36"-4@48"	2	11½"	6½"	4"	2	12"	6"	4"	25@5"-12@6"-6@7"-6@8"-2@9"	18	8	26	491400	8	8	2	2	2	2	2				8	8	2						2	2											2'-6"	8'-1"	8'-2"	
CB140	2	50'-4"	3'-0"	25'-2"	25'-2"	3@20"-2@30"-2@36"-4@48"	2	11½"	6½"	4"	2	12"	6"	4"	25@5"-12@6"-6@7"-6@8"-2@9"	18	8	26	491400	8	8	2	2	2	2	2				8	8	2						2	2											2'-6"	8'-1"	8'-2"	
CB141	2	50'-3"	3'-0½"	25'-1½"	25'-1½"	3@20"-2@30"-2@36"-4@48"	2	11½"	6½"	4"	2	12"	6"	4"	25@5"-12@6"-6@7"-6@8"-2@9"	18	8	26	491400	8	8	2	2	2	2	2				8	8	2						2	2											2'-6"	8'-1"	8'-2"	
CB142	2	50'-2"	3'-0"	25'-1"	25'-1"	3@20"-2@30"-2@36"-4@48"	2	11½"	6½"	4"	2	12"	6"	4"	25@5"-12@6"-6@7"-6@8"-2@9"	18	8	26	491400	8	8	2	2	2	2	2				8	8	2						2	2											2'-6"	8'-1"	8'-2"	
CB143	1	47'-3"	3'-3½"	24'-7½"	24'-7½"	2@20"-2@30"-3@36"-4"-4"	2	11½"	6½"	4"	2	12"	6"	4"	15@5"-18@6"-6@7"-9@8"	18	8	26	491400	8	8	2	2	2	2	2				8	8	2						2	2											2'-6"	8'-1"	8'-2"	
CB144	1	47'-3"	3'-3½"	24'-11½"	24'-11½"	2@20"-2@30"-3@36"-4"-4"	2	11½"	6½"	4"	2	12"	6"	4"	15@5"-17@6"-6@7"-9@8"	18	8	26	491400	8	8	2	2	2	2	2				8	8	2						2	2											2'-6"	8'-1"	8'-2"	
CB145	1	46'-5"	3'-0½"	23'-2½"	23'-2½"	2@20"-2@30"-3@36"-4"-4"	2	1"	17"	10½"			15"-5"-17@6"-6@7"-6@8"-2@9"	18	8	26	491400	8	8	2	2	2	2	2				8	8	2						2	2											2'-6"	8'-1"	8'-2"	

NOTE "A"
BEAMS ON FRAMING PLANS WITH A LETTER ADDED AT END OF BEAM MARK NUMBER ARE SAME AS THOSE SHOWN IN SCHEDULE ABOVE FOR A MEMBER WITHOUT LETTER FOR BEARING ARRANGEMENTS AND VARIATIONS OF END OVERHANGS AND LOCATION OF ADJUSTMENT BOLTS FROM TYPICAL DETAILS SHOWN ON SHEET N° 32 SEE SUPPLEMENTARY I-BEAM DATA TABLE ON SHT N° 36.

MANHOLE
FOR LOCATION AND DETAILS OF MANHOLE SEE SHEETS 65, 66 & 67

CITY OF CHICAGO
DEPARTMENT OF PUBLIC WORKS
BUREAU OF ENGINEERING

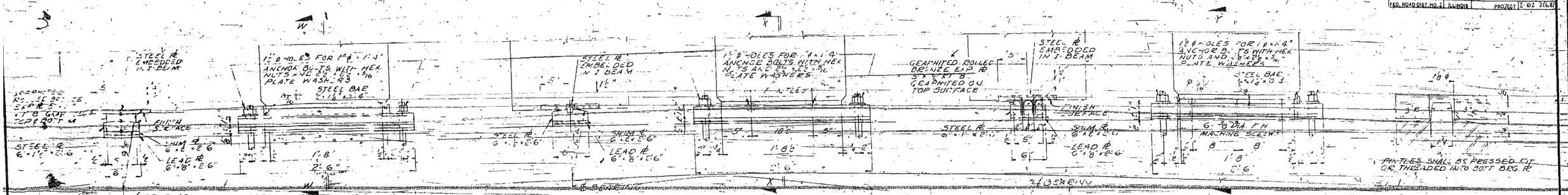
NORTHWEST ROUTE SUPERHIGHWAY
GRADE SEPARATION
WABANSIA AVE. TO CORTLAND ST.
SECTION 0505.3-1H

CONCRETE I BEAM SCHEDULE

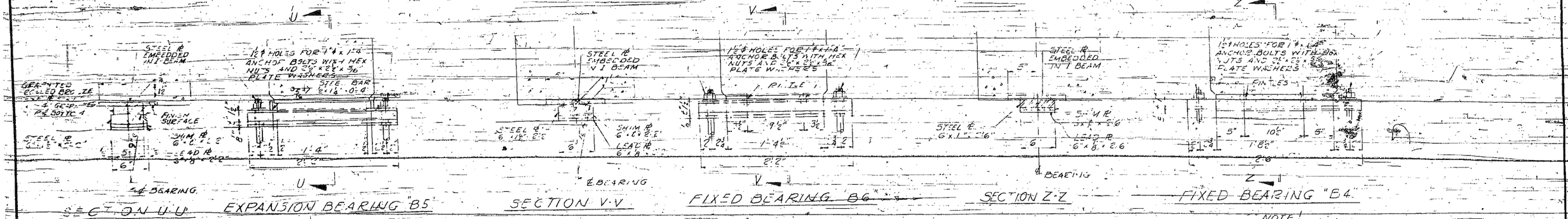
ALFRED BENESCH & ASSOCIATES — CONSULTING ENGINEERS
10 SOUTH WABASH AVE. CHICAGO, ILLINOIS

SHEET NO. 35 OF 136 SHEETS — DATE

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 2	0505.3 IH	COOK	136	36
STA.	TO STA.			
FED. ROAD DIST. NO. 1	ILLINOIS	PROJECT	I. 02 2(68)	



SECTION "W-W" EXPANSION BEARING "B1" — SECTION "X-X" FIXED BEARING "B2" — SECTION "Y-Y" EXPANSION BEARING "B3" — PINTLE DETAIL



SECTION U-U EXPANSION BEARING "B5" — SECTION V-V FIXED BEARING "B6" — SECTION Z-Z FIXED BEARING "B4"

NOTE!
SHIMPLATES TO BE USED ONLY WHEN REQUIRED
SEE FRAMING PLANS FOR LOCATION AND THICKNESS OF SHIMPLATES

SUPPLEMENTARY I-BEAM DATA

MARK	BRG TYPE NO.	BRG TYPE CO.	END OVERHANG NORTH	END OVERHANG SOUTH	END BLOCK LGTH NORTH	END BLOCK LGTH SOUTH	LOCATION OF ADJ BOLTS NORTH	LOCATION OF ADJ BOLTS SOUTH	REMARKS
CB2A	B1	B2							
CB2B, CB2C	B2	B1							
CB3A	B1	B2							
CB3B	B2	B1							
CB5A & CB5B	B1	B2							
CB5C	B1	B2							
CB5D CB5E	B2	B1							
CB5F	B2	B1							
CB6			13½"	10"	3'-4½"	3'-1"			
CB8							3"	3"	
CB9							3"	3"	
GB10							3"	3"	
CB11							3"	3"	
CB12							3"	3"	
CB13							3"	3"	
CB14							3"	3"	
CB15							3"	3"	
CB31			13½"	10"	3'-4"	3'-0½"			
CB32			10"	13½"	3'-05"	3'-4"			
CB53			10"	13½"	3'-2"	3'-5½"			
CB54							3"	3"	
CB56, CB56B							3"	3"	
CB56H							3"	3"	
CB60			10"	2'-2½"	3'-4½"	5'-4½"			
CB61			2'-0⅜"	10"	5'-4½"	3'-4½"			
CB70D CB70E							3"	3"	
CB81			15"	10"	3'-4½"	2'-11½"			
CB82			15"	10"	3'-6"	3'-1"			
CB120			16½"	13"	3'-8"	3'-4½"			
CB121			16½"	15"	3'-9½"	3'-8"			
CB123			10"	16½"	3'-4½"	3'-7"			
CB125			10"	16½"	3'-0½"	3'-7"			

NOTE!
ALL DIMENSIONS OR DETAILS NOT SHOWN ARE SAME AS SHOWN IN CONCRETE & REINF SCHEDULE FOR

SCALE OF TRACING
1½" = 1'-0"

CITY OF CHICAGO
DEPARTMENT OF PUBLIC WORKS
BUREAU OF ENGINEERING
NORTHWEST ROUTE SUPERHIGHWAY
GRADE SEPARATION
WABANSIA AVE. TO CORTLAND ST.
SECTION 0505.3-IH
BEARING DETAILS

ALFRED BENESCH & ASSOCIATES
10 SOUTH WABASH AVE.
CONSULTING ENGINEERS
CHICAGO, ILLINOIS

SHEET NO. 36 OF 136 SHEETS — DATE

ROUTE NO	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
FAI 2	05053-1H	COOK	136	37
STA.	TO STA			
FED. ROAD DIST. NO. 11	ILLINOIS	PROJECT	I-90-2(68)	

SHEAR CONNECTOR SPACING, SEE SCHEDULE

RIVET SPACING FOR TOP AND BOTTOM FLANGES

PANEL A PANEL B PANEL C PANEL D MAX. 6" SPACING PANEL D PANEL C PANEL B PANEL A

SEE WEB SPLICE DETAIL BELOW
DISTANCE E OF BRG. 12 & 13 = 10' SKEW SEE SCHEDULE

ELEVATION

SCALE 1/4" = 1'-0"

2" ø HOLE IN 1" STRAP @ 1'-6" CENTER

6 SP. @ 3" = 1'-6" VALUES

VARY TO FIT STIFFENER SPACING

1" H.T. BOLTS

13 x 1 STRUT PLATE

STRINGER WEB

STRINGER FLANGE ANGLE

2" FILLET

SEE WEB VIEW

BOTTOM STIFF ANGLE

GIRDER G-8

SEE BEARING DETAILS THIS SHEET

TYPICAL PIER CAP

WEB SPLICE

PLATE 1/2 x 40

STIFFENER

SCALE 1/4" = 1'-0"

SECTION C-C

SCALE 1/2" = 1'-0"

SECTION THROUGH STRINGER X-X

SCALE 1/4" = 1'-0"

BEARING PIER 11

SCALE 1/4" = 1'-0"

SEE SHEETS FOR EXP. GUIDE AT ENTRY FRAME 12 ONLY

2" ø RING

SEE RING FILL IDENTIFICATION

TYPICAL SECTION 12

CONCRETE AS PER SPECIFICATIONS

SCALE 1/2" = 1'-0"

FOR DETAILS OF BRACING SEE SHEETS 52-53

CUTTERS G4 & G5 AS SHOWN
GIRDER G3 SAME SIDE LAP

DETAIL A

SCALE 1" = 1'-0"

(FOR CONNECTIONS AT GIRDERS G5 & G7 SEE SHEET 38)

TYPICAL STRINGER GIRDER CONNECTION
GIRDERS G3 G4 G6 G8 G9

SCALE 1/2" = 1'-0"

NOTE:
FOR FLANGE ANGLE, COVER PLATE, WEB PLATE, RIVET SPACING AND BRACING DETAILS SEE SHEETS 26 TO 28.
FOR STEEL END ANGLE SPACING, LOCATION OF SWAY FRAMES & SHIM PLATES SEE FRAMING PLANS, SHEETS 26 TO 28.

SECTION W-W

TYPICAL EXPANSION BEARING FOR STEEL STRINGERS AT PIERS 13, 14, 15, 16, 17, 18, 19, 20, 21

SCALE 1" = 1'-0"

SEE BEARING DETAILS THIS SHEET

TYPICAL FIXED BEARING STEEL STRINGERS @ PIER 17

SECOND COVER PL (IF ANY)

FIRST COVER PL

STEEL PL 6½"x1"x1'-1"
STEEL PL 6½"x2"x1'-1"
SHIM PL 6"x6"x1/16"
FLANGE 6"x8"x1/16"

PLAN OF BOTTOM COVER PLATE

SECTION V-V

PINTLES SHALL BE DRESSED FIT & THREADED IN THE BOTTOM OF PLATE

PINTLE DETAIL

SCALES OF TRACING

3/8"=1'-0" 0 6" 1' 2' 3' 4' 5'

3/4"=1'-0" 0 6" 1' 2' 3'

1 1/2"=1'-0" 0 3" 6" 9" 1' 2'

ALFRED BENESCH & ASSOCIATES
10 SOUTH WABASH AVE.
CONSULTING ENGINEERS
CHICAGO, ILLINOIS

CITY OF CHICAGO
DEPARTMENT OF PUBLIC WORKS
BUREAU OF ENGINEERING

NORTHWEST ROUTE SUPERHIGHWAY
GRADE SEPARATION
WABANSIA AVE. TO CORTLAND ST.
SECTION 0505.3-1H

STEEL STRINGER DETAILS

SHEET NO. 37 OF 136 SHEETS

STEEL STRINGER SCHEDULE

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI-2	0505.3-1H	COOK	136	38
STA.	TO STA.			
FED. ROAD DIST. NO. 1	ILLINOIS	PROJECT I 02 7(4)		

SEE SHT 52.

SIEEL	FIELD SPLICE OF GIRDER	FIELD SPLICE BOTTOM COVER PLATES	FIELD SPLICE BOTTOM ANGLES	FIELD SPLICE TOP ANGLES	MAR. CONNECTOR SPACING	RIVET SPACING PANEL A	RIVET SPACING LAVE B	RIVET SPACING PANEL C	RIVET SPACING LAVE D	CAMBER DIM. Y
SB 1						4"	4½"	5"	6"	
SB						4"	4½"	5"	6"	
SB						4"	4½"	4¾"	5½"	
SB						4"	4½"	4¾"	5½"	
SB						4"	4½"	4¾"	5½"	
SB						4"	4½"	4¾"	5½"	
SB						4"	4½"	4¾"	5½"	
SB						4"	4½"	4¾"	5½"	
SB						4"	4½"	5"	6"	
SB						4"	4½"	5"	6"	
SB						4"	4½"	5"	6

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
RTE 2	0505.3-1H	COOK	136	139

PIER #13 — PIER #14 — PIER #15 — PIER #16

ELEVATION OF FASCIA GIRDER G1

SCALE 1"=10'

NOTE:
ALL DIMENSIONS SHOWN ARE PARALLEL TO WORK LINE. END STIFFENERS & STIFFENERS AT CROSS GIRDERS ARE VERTICAL. ALL OTHER STIFFENERS ARE AT RIGHT ANGLES TO WORK LINE

CAMBER DIAGRAM

NO SCALE

FOR DETAILS OF CAMBERED OR DEFLECTED GIRDER & FOR VERT. CURVE DATA

SECTION A-A

FOR LOCATION SEE SHEET 26

SCALES OF TRACING

5'-0" 0 4 8 16

4" 1'-0" 0 1 2 3 4 8

WORK LINES AND GIRDERS

CITY OF CHICAGO
DEPARTMENT OF PUBLIC WORKS
BUREAU OF ENGINEERING

NORTHWEST ROUTE SUPERHIGHWAY
GRADE SEPARATION
WABANSIA AVE. TO CORTLAND ST.
SECTION 0505.3-1H

ELEVATION OF FASCIA GIRDER G1

SHEET NO. 39 OF 136 SHEETS

DATE

DANIEL BENSON & ASSOC.
10 SOUTH WABASH AVE.
CHICAGO, ILLINOIS

ROUTE NO	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 7	0505.3-1H	COOK	136	40
STA				

FED. PROJECT NO. [illegible] ILLINOIS PROJECT NO. 56-2762

PART ELEVATION OF FASCIA GIRDER G1

SCALE: 1/4" TO 1'

SECTION A-B

SECTION C-C

SECTION D-D

SCALES OF TRACING

CITY OF CHICAGO
DEPARTMENT OF PUBLIC WORKS
BUREAU OF ENGINEERING

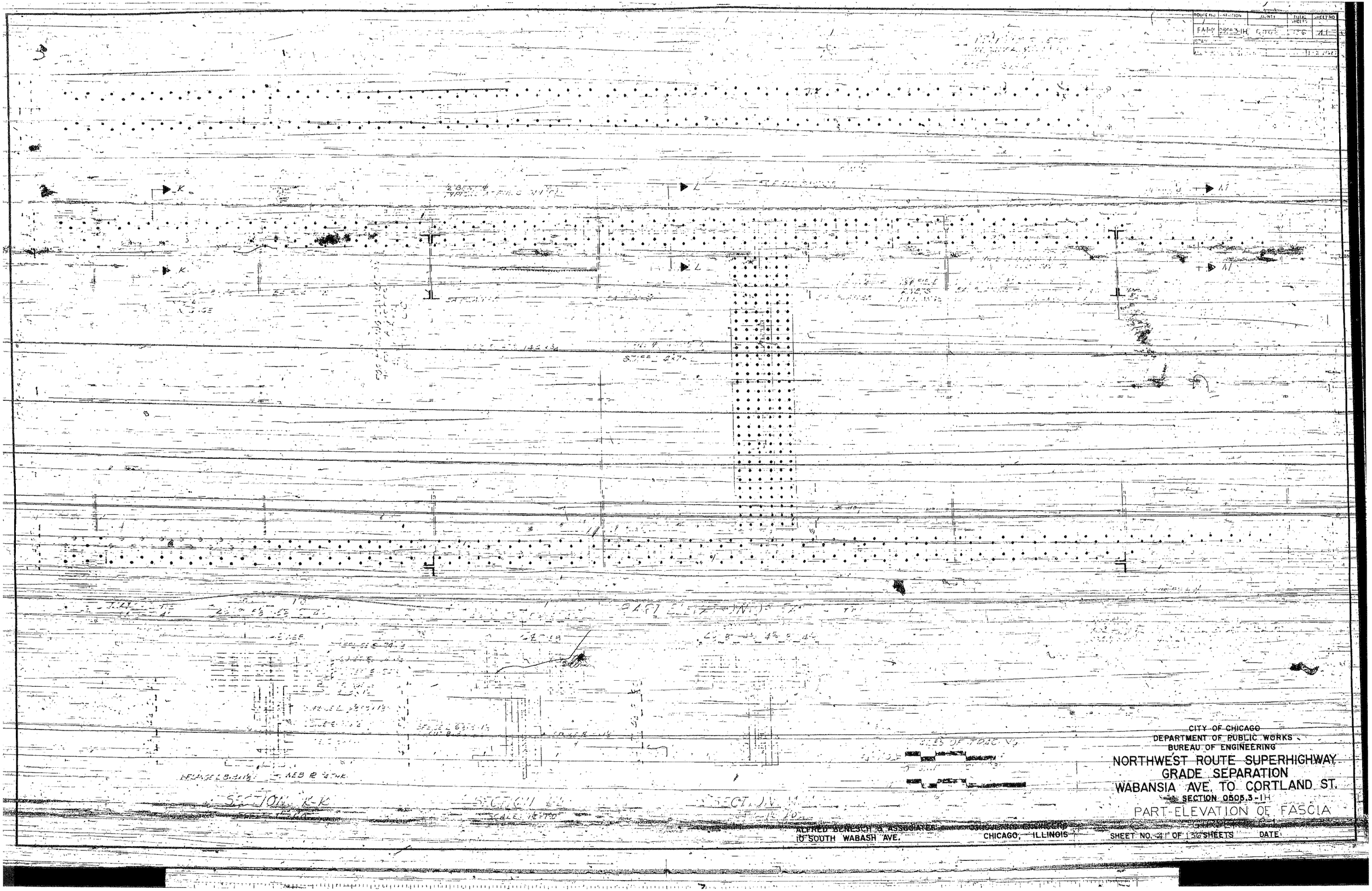
NORTHWEST ROUTE SUPERHIGHWAY
GRADE SEPARATION
WABANSIA AVE. TO CORTLAND ST.
SECTION 0505.3-1H

PART ELEVATION OF FASCIA GIRDER G1

ALFRED BENESCH & ASSOCIATES
10 SOUTH WABASH AVE.
CHICAGO, ILLINOIS
CONSULTING ENGINEERS

SHEET NO. 40 OF 136 SHEETS DATE:

ROUTE NO.	SECTION	UNITS	TOTAL SHEETS	SHEET NO.
FAP 319	0505.3-1H	U.S.	136	41



CITY OF CHICAGO
DEPARTMENT OF PUBLIC WORKS
BUREAU OF ENGINEERING

NORTHWEST ROUTE SUPERHIGHWAY
GRADE SEPARATION
WABANSIA AVE. TO CORTLAND ST.
SECTION 0505.3-1H

PART-ELEVATION OF FASCIA

ALFRED BENESCH & ASSOCIATES 10 SOUTH WABASH AVE. CHICAGO, ILLINOIS SHEET NO. 41 OF 136 SHEETS DATE

				SHEET NO.
FAI 05053 IH	COOK			12

ELEVATION OF FASCIA GIRDER G2

ALL 1" = 1'-0"

NOTES:
1. WORK LINE AND SKEW ANGLES ARE FOR REFERENCE ONLY.
2. CROSS GIRDERS ARE NOT SHOWN FOR CLARITY.
3. STIFFENERS ARE AT RIGHT ANGLES TO WORK LINE

WORKLINE

INSERT LINES FOR GIRDER G2

NO SCALE

GIRDER CAMBERS FOR DL DEFLECTION & FOR VERTICAL CURVE

SECTION B-B

3/4" = 1'-0"

FOR LOCATION SEE SHEET 428

SCALES OF TRACING

9" = 1'-0"

1/4" = 1'-0"

CITY OF CHICAGO
DEPARTMENT OF PUBLIC WORKS
BUREAU OF ENGINEERING

NORTHWEST ROUTE SUPERHIGHWAY
GRADE SEPARATION
WABANSIA AVE. TO CORTLAND ST.
SECTION 0505.3-IH

ELEVATION OF FASCIA GIRDER G2

ALFRED BENESCH & ASSOCIATES CONSULTING ENGINEERS
10 SOUTH WABASH AVE. CHICAGO

SHEET NO. OF SHEETS DATE

FATE CONSTR. COOK 136 33

DETAIL A END OF COVERPL

CONDUITS

SEE PL 144 x 34

TYP

6 C 10.5

VIEW E

TYPICAL CROSS FRAME X8

CROSS FRAME X9 SIMILAR

SCALE 3/4" = 1'-0"

ELEVATION OF FASCIA GIRDER AT PIER 21 SECTION AA

SCALE 3/4" = 1'-0"

1 1/32" REAMED HOLES FOR 1" Ø TURNED BOLTS SEE BEARING DETAIL SHT 54

HOLES FOR 7/8" Ø FIELD RIVETS

SECTION D-D

SCALE 3/4" = 1'-0"

SECTION G-G

SCALE 3/4" = 1'-0"

H.H FASCIA GIRDER G2 ELEVATION AT PIER #18

SCALE 3/4" = 1'-0"

SEE SHT 44

SECTION "C-C" SEE SHT 47

SECTION E-F

SCALE 3"=1'-0"

DETAIL "X"

SCALE 3"=1'-0"

SCALE OF TRACING

3"=1'-0"

0 6" 1' 2' 3'

CITY OF CHICAGO
DEPARTMENT OF PUBLIC WORKS
BUREAU OF ENGINEERING

NORTHWEST ROUTE SUPERHIGHWAY
GRADE SEPARATION
WABANSIA AVE. TO CORTLAND ST.
SECTION 0505.3-1H

PART ELEVATION OF FASCIA

ALFRED BENESCH & ASSOCIATES — CONSULTING ENGINEERS
10 SOUTH WABASH AVE. CHICAGO, ILLINOIS

SHEET NO. 43 OF 136 SHEETS DATE

ROUTE NO	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 2	0505.3-1H	COOK	136	44

STA
JOB 27403

CUT COVER PL 24"x1" — CUT COVER PL 16"x1" — CUT 2 PL 8"x1"

1 1/8" ϕ FIELD RIVETS IN COVER PL EA FLANGE

BREAK IN SAGE

℄ PIER 2

℄ CROSS GIRDER G9
FOR DETAIL SEE SHT 46

SPLICE 4 WEBS
6 PL 8"x1" (w/ 4 L)
BREAK IN SAGE

℄ 40° NEB SPLICE

"2" BENT PL
TYP AT FIELD SPLICE

SPLICE 8 WEBS
DELETE L 6"x6"x1" (w/ 4 L)
BREAK IN SAGE

CUT SIDE PL
8"x1" 45°
EACH FLANGE

PL 10"x1"
TYPICAL AT FIELD SPLICE

WEB PL 44"x3/8"

CUT SIDE PL
7 3/8"
EACH FLANGE

CUT SIDE PL
11 5/8"x1"
EACH FLANGE

1 1/8" ϕ FIELD RIVET
EACH FLANGE

SPLICE PL 16"x1"
TYP FOR 4 FLANGES
DELETE WEB EXTRA

CUT SIDE PL
11 5/8"x1"
EACH FLANGE

SEE SHT 40

℄ E 10.5

12'-0" BACK TO BACK LS

SEE SHT #43

BREAK IN SAGE

PARTIAL ELEVATION OF FASCIA GIRDER G2

TOP FLANGE SIMILAR
BOTT FLANGE SIMILAR

SPLICE L 6"x8"x1/8"
FLANGE L 8"x8"x1/8"

SECTION A-A
SCALE: 1"=1'-0"

SCALE: 1"=1'-0"

ALFRED BENESCH & ASSOCIATES
10 SOUTH WABASH AVE.
CHICAGO, ILLINOIS

CITY OF CHICAGO
DEPARTMENT OF PUBLIC WORKS
BUREAU OF ENGINEERING

NORTHWEST ROUTE SUPERHIGHWAY
GRADE SEPARATION
WABANSIA AVE. TO CORTLAND ST.

SECTION 0505.3-1H

PART ELEVATION OF FASCIA

CONSULTING ENGINEERS
SHEET NO. 44 OF 136 SHEETS
DATE

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 90	0505.3H	COOK	136	45
STA.	TO			

19 Ø FIELD RIVETS IN COVER

BREAK IN GAGE

CUT L 8"x3"x1/8" N.S.

5'-10"

5'-10"

5'-10"

5'-10 3/16"

P

END OF SPLICE - 8.3/8" x 1/8" F.S.

BREAK IN GAGE

CUT L 8"x3"x1/8" F.S.

CUT 5.06 @ 17"x3" EX. FLANGE

WEB @ 144"x3/4"

L OF SPLICE 8"x3"x1/8" N.S.

P

6'-10.5

10½" BACK TO BACK L's

WEB

E WEB

32.3/4"x3/8"

32.3/4"x3/8"

41.7

41.7

41.7

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	ARMY AID
F.A.I. 90	0505.3 H	COOK	136	46
STA.		TO STA.		
E.O. STATE DIV. NO. 7	ILLINOIS	F.A.I. ROUTE 90	SEC. E(CH)	

ELEVATION CROSSGIRDER G3

SCALE 4" = 1'-0"

ELEVATION CROSSGIRDER G9

SCALE 4" = 1'-0"

SECTION E4-E4

SCALE 2" = 1'-0"

SECTION T.S. E5-E5

DEAD LOAD DEFLECTION DIAGRAM

SCALE 3" = 1'-0"

SCALES OF TRACING

4" = 1'-0"

1" = 1'-0"

ALFRED BENESCH & ASSOCIATES
10 SOUTH WABASH AVE.
CHICAGO, ILLINOIS

CONSULTING ENGINEERS

SHEET NO. 46 OF 136 SHEETS

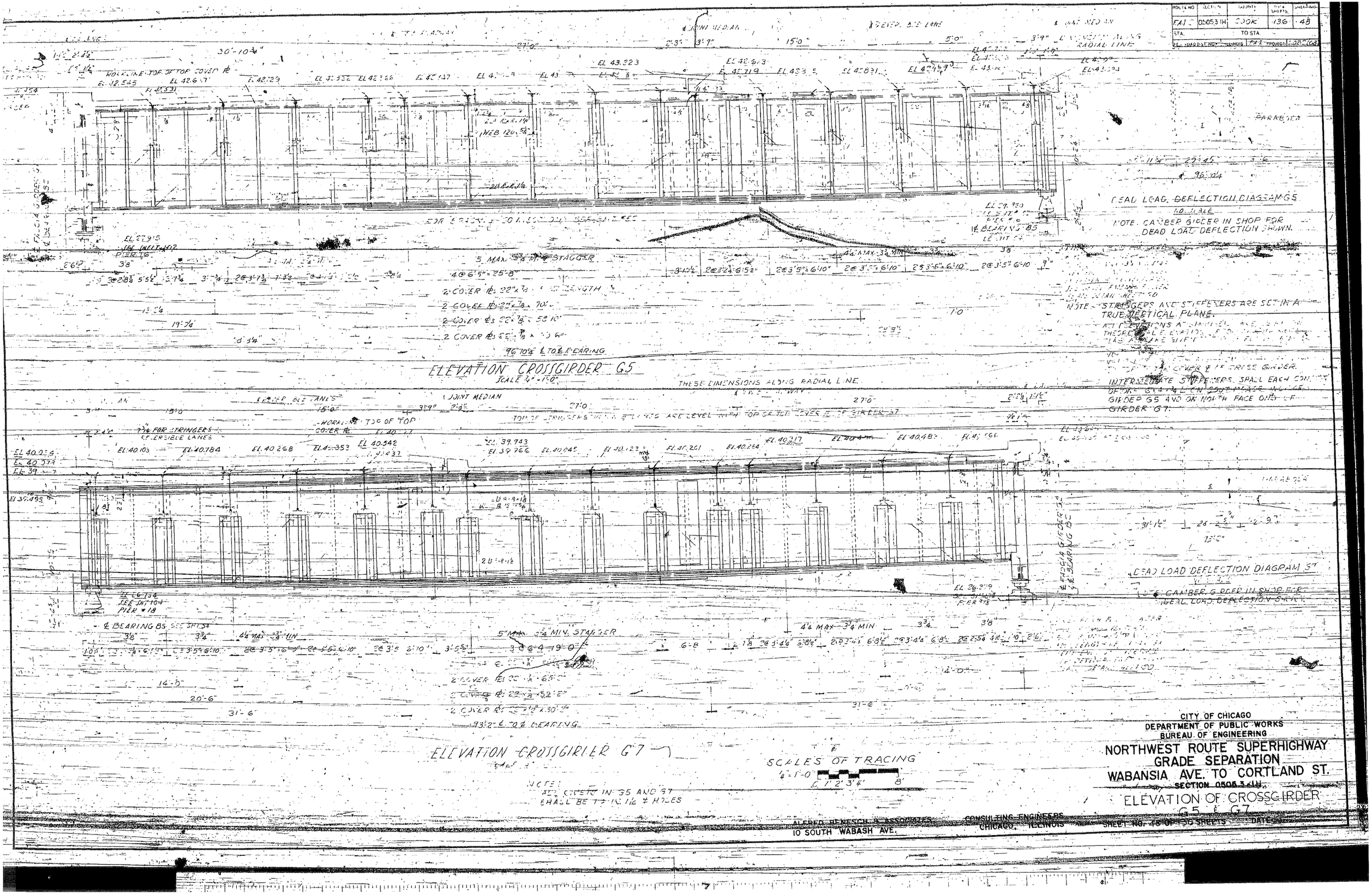
DATE

CITY OF CHICAGO
DEPARTMENT OF PUBLIC WORKS
BUREAU OF ENGINEERING

NORTHWEST ROUTE SUPERHIGHWAY
GRADE SEPARATION
WABANSIA AVE. TO CORTLAND ST.
SECTION 0505.3 H

ELEVATION OF CROSSGIRDER

ROUTE NO	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
FAI	0505.3 IH	COOK	136	48
STA.	TO STA.			
EL. QUARTER NO.	ILLINOIS	FAI PROJECT	32-2(62)	



CITY OF CHICAGO
DEPARTMENT OF PUBLIC WORKS
BUREAU OF ENGINEERING

NORTHWEST ROUTE SUPERHIGHWAY
GRADE SEPARATION
WABANSIA AVE. TO CORTLAND ST.
SECTION 0505.3 IH.

ELEVATION OF CROSSGIRDER G5 & G7

ALFRED BENESCH & ASSOCIATES
CONSULTING ENGINEERS
10 SOUTH WABASH AVE.
CHICAGO, ILLINOIS

SHEET NO. 48 OF 136 SHEETS — DATE

ROUTE NO		COUNTY	TOTAL SHEETS	SHEET NO
F.A.I. 2 0505.3 1H			35	49
STA	TO STA			

PART-ELEVATION GIRDER G5

PART-ELEVATION GIRDER G7

SECTION G-G

SECTION D-D
SECTION E-E SIMILAR
SCALE: 3/4" 1'0

NOTE:
RIVETS FOR GIRDER G1 ... 13 NOTED
* MATERIAL MARKED THUS TO BE FOR ALLOY
STRUCTURAL STEEL CONFORMING TO ASTM A 242
FOR DEVELOPMENT OF COVER PLATE DETAILS
SEE SHEET #30
INTERMEDIATE STIFFENERS ... EXCEPT
OF ONE 6"x4"x3/4" ... ON SOUTH END OF GIRDER
G5 AND ON NORTH END OF GIRDER G6

SCALE
3/4" 1'-0"

CITY OF CHICAGO
DEPARTMENT OF PUBLIC WORKS
BUREAU OF ENGINEERING

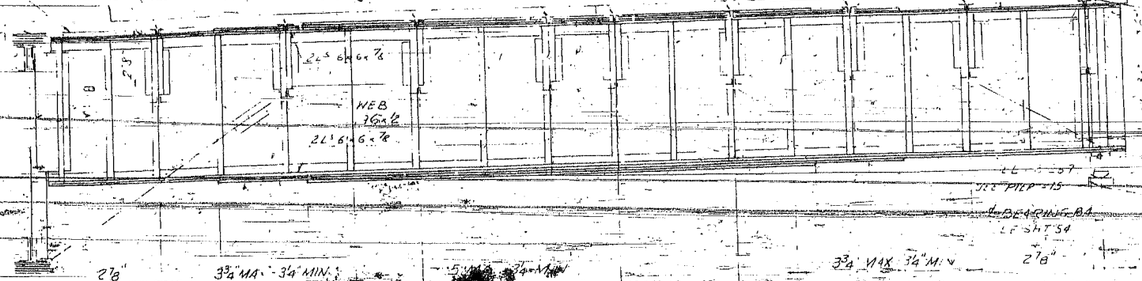
NORTHWEST ROUTE SUPERHIGHWAY
GRADE SEPARATION
WABANSIA AVE. TO CORTLAND ST.
SECTION 0505.3-1H

PART-ELEVATION OF CROSSGIRDER G5 & G7

ALFRED BENESCH & ASSOCIATES
10 SOUTH WABASH AVE.
CONSULTING ENGINEERS
CHICAGO, ILLINOIS

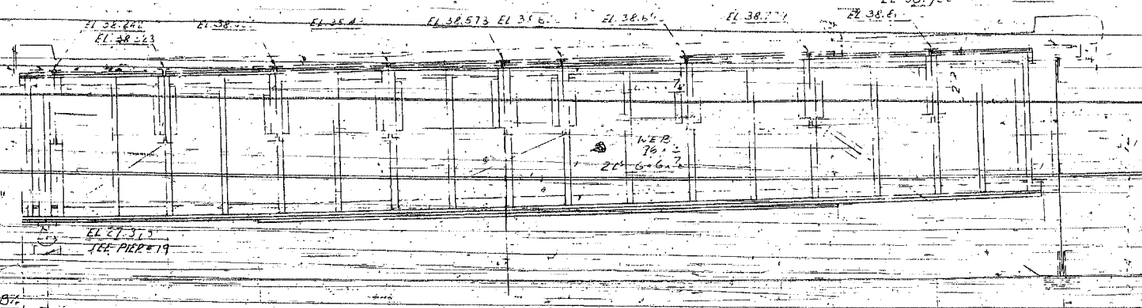
SHEET NO. 49 OF 134 SHEETS DATE:

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI				
STA.				
FED. PROJ. NO.				



ELEVATION CROSSGIRDER G4

SCALE 4"=1'-0"



ELEVATION CROSSGIRDER G8

SCALE 4"=1'-0"

DEVELOPMENT OF COVERPLATE DETAILS

SCALE 4"=1'-0"

PART ELEVATION CROSSGIRDER G4

SECTION C-C

SCALES OF DRAWINGS

4"=1'-0"

0 1' 2' 3' 4' 5'

¾"=1'-0"

0 6" 12" 24" 3'

CITY OF CHICAGO
DEPARTMENT OF PUBLIC WORKS
BUREAU OF ENGINEERING

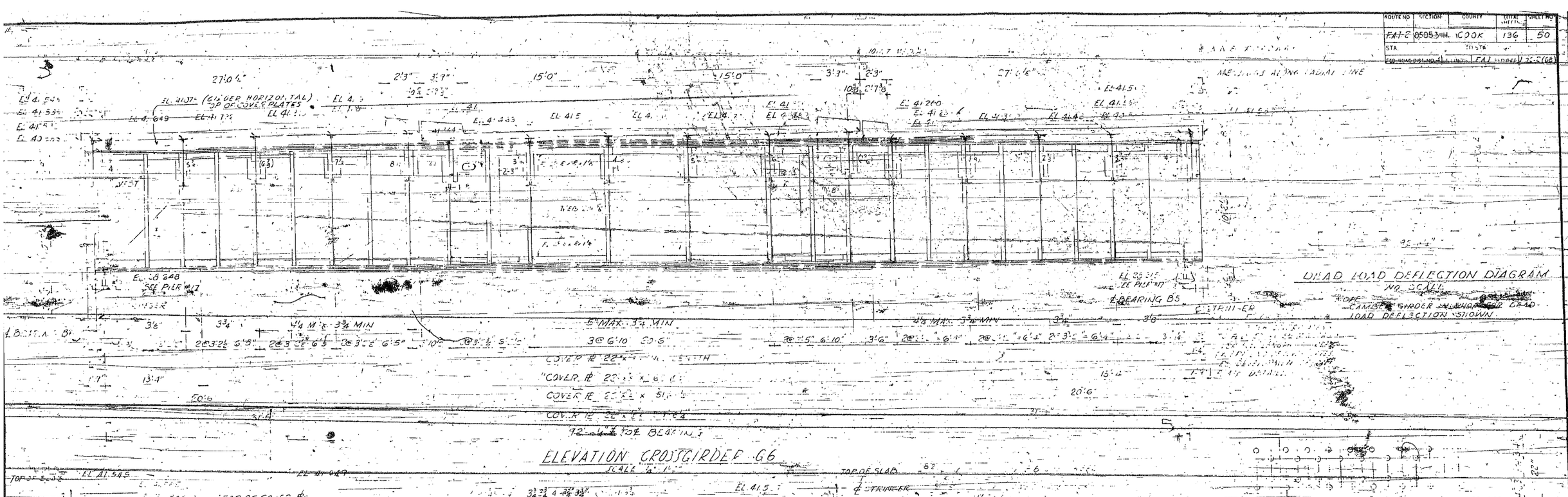
NORTHWEST ROUTE SUPERHIGHWAY
GRADE SEPARATION
WABANSIA AVE. TO CORTLAND ST.
SECTION 0505.3-1H

ELEVATION OF CROSSGIRDER G4 & G8

ALFRED BENESCH & ASSOCIATES CONSULTING ENGINEERS CHICAGO ILLINOIS

SHEETS

ROUTE NO	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
FAI-E	0505.3-1H.	COOK	136	50
STA.		STA.		
FED. ROAD DIST. NO. 1	ILLINOIS	FAI ROUTE	290 (90)	


ELEVATION CROSTGIRDER G6
SCALE 1" = 1'
DEAD LOAD DEFLECTION DIAGRAM
NO SCALE
CAMBER GIRDER IN SHOP FOR DEAD LOAD DEFLECTION SHOWN
℄ BEARING B5
℄ TRAINER
EL 41.5
EL 41.545
EL 41.075
EL 4.649
EL 41.240
EL 41.415
EL 41.443
EL 41.348
EL 41.144
EL 41.333
EL 41.393
EL 41.243
EL 41.443
EL 41.415
EL 41.348
EL 41.243
EL 41.443
EL 41.415
EL 41.348
EL 41.243
EL 41.443
EL 41.415
EL 41.348

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 3	0505.3-IH	COOK	36	51
STA.	TO STA.			

FED. HIGHWAY NO. | F.A.I. | STATE | (63)

℄ CROSS-GIRDER G3

℄ CROSS-GIRDER G4

℄ CROSS-GIRDER G5

FOR DETAIL SEE SHEET #40 SECTION A-A

PIER #2 — DETAIL SIMILAR TO SEC. G-G IN SHT. 43

℄ ERECT GIRDER G1

DETAIL 3 PIER #5

PIER #6 — FOR DETAIL SEE SHEET #41 SECTION C-C

DETAIL "5"
SCALE 4-1.0

FOR DETAIL SEE SHT. 53 SEC. E-E

DETAIL 4

DETAIL 5

DETAIL 6

DETAIL 7

DETAIL 9

DETAIL 9A

DETAIL "7"
SCALE 4-1.0

℄ CROSS-GIRDER G8

#11 FOR DETAIL SEE SHT 43 SEC. G-G

℄ CROSS-GIRDER G7

DETAIL SIMILAR TO SEC. C-C ON HFRS. PIER #6

PIER #1 — SEE SHT #43 SECTION D-D

FOR DETAIL SEE SHT. 53 SEC. D-D

℄ ERECTION GIRDER G6

TRUSS-SPACING (AS GIVEN ON ℄ STIFFENS. OF GIRDERS) SEE SHT. 46

CROSS-GIRDER SPACING

℄ ERECTION GIRDER G5

℄ ERECTION GIRDER G4

℄ ERECTION GIRDER G3

ERECTION OF GIRDER G4

NOTE:
DIMENSIONS SHOWN ARE PARALLEL TO WORK LINES 10'-0" & 12'-0" SHT. SHTS. 37 & 42
FOR SECT. E-E, E1-E1, F1-F2, F2-F3, F3-E3 SEE SHT 53
FOR SECT. G-G, H-H, J-J SEE SHT 46

DETAIL "2"
SCALE 3/4"-1.0
DETAIL 2A SIMILAR

SECTION B-B
SCALE 3/4"-1.0

DETAIL "3"
DETAIL 3A SIMILAR
SCALE 3/4"-1.0

SECTION C-C
SCALE 3/4"-1.0

NOTE A:
PROVIDE 3/4" CLEARANCE BETWEEN SLAB AND STEEL GIRDER AS REQUIRED BY SPECIFICATIONS

TYPICAL SECTION A-A
SCALE 3/4"-1.0
SIMILAR

NOTE:
PAINTS FOR BRIDGING TO BE APPLIED AS NOTED

SECTION D-D
SCALE 3/4"-1.0

DETAIL "9"
DETAIL "9A" SIMILAR
SCALE 3/4"-1.0

SECTION X-X
(ENLARGED)

DETAIL "8"
SCALE 3/4"-1.0

SCALE OF TRACING
0 2 4 6 8 12 16
0 1 2 3

CITY OF CHICAGO
DEPARTMENT OF PUBLIC WORKS
BUREAU OF ENGINEERING

NORTHWEST ROUTE SUPERHIGHWAY
GRADE SEPARATION
WABANSIA AVE. TO CORTLAND ST.
SECTION 0505.3-IH

BRACING GIRDERS G1 & G2

ALFRED BENESCH & ASSOCIATES
10 SOUTH WABASH AVE.
CONSULTING ENGINEERS
CHICAGO, ILLINOIS

SHEET NO. 51 OF 136 SHEETS DATE

ROUTE NO.				SHEET NO.
FAI 2	0505.3 IH	C00 c	135	55
STA		TO STA		

E SPANDREL

E STRINGER

E STRINGER

E STRINGER

E SPANDREL

(SIMILAR TO CROSS-GIRDER G5 & G7 SIMILAR)

PARTIAL ELEVATION SHOWING STRINGERS

SCALE 3/4" = 1'-0"

SECTION C-C

SCALE 3/4" = 1'-0"

NOTE

SPLICES FOR GIRDERS TO BE AT POINTS AS NOTED.

SECTION A-A

SECTION B-B

SCALE 1"

BRACING PLAN FOR GIRDER G5

BRACING PLAN FOR GIRDER G7

BRACING PLAN FOR GIRDER G6

SCALE OF TRUSS

CITY OF CHICAGO
DEPARTMENT OF PUBLIC WORKS
BUREAU OF ENGINEERING

NORTHWEST ROUTE SUPERHIGHWAY
GRADE SEPARATION
WABANSIA AVE. TO CORTLAND ST.
SECTION 0505.3-1H

ALFRED BENESCH & ASSOCIATES — CONSULTING ENGINEERS
10 SOUTH WABASH AVE. — CHICAGO, ILLINOIS — SHEET NO. 55 OF 136 SHEETS — DATE

ROUTE NO.	SECTION			SHEET NO.
FAI 8	0505.3 HI	COOK	136	53
STA.		TO STA.		
FED. ROAD DIST. NO. 4	ILLINOIS	F.A.P. RTE. 72		

CROSS GIRDER G4 SIMILAR

GIRDER G4

BRG. VI PLAN FOR GIRDER G4

WORK LINE GIRDER G4

SCALE

44 WORK POINTS SEE PLAN OF BENTS BELOW

SECTION E3-E3

SECTION E5-E5

SECTION E6-E6

STRINGER

BEND LINE

RIVET PITCH GAGE

MARINE DITCH

CITY OF CHICAGO
DEPARTMENT OF PUBLIC WORKS
BUREAU OF ENGINEERING

NORTHWEST ROUTE SUPERHIGHWAY
GRADE SEPARATION
WABANSIA AVE. TO CORTLAND ST.
SECTION 0505.3-HI

ALFRED BENESCH & ASSOCIATES CONSULTING ENGINEERS
10 SOUTH WABASH AVE. CHICAGO, ILLINOIS

SHEET NO. 53 OF 136 SHEETS DATE

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 2	(3) 7-H	COOK	136	54
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	PROJECT		

DETAIL OF PIN

SCALE: 1" = 1"

PLAN

DETAIL OF COLLAR ON PIN

ELEVATION

BRONZE BEARING PL. B1

DETAIL A

BRONZE BRG. PL. B3 B4

EXPANSION BEARING B5 REQ'D

CITY OF CHICAGO
DEPARTMENT OF PUBLIC WORKS
BUREAU OF ENGINEERING

NORTHWEST ROUTE SUPERHIGHWAY
GRADE SEPARATION
WABANSIA AVE. TO CORTLAND ST.
SECTION 0505.3-IH

BEARING DETAILS

ALFRED BENESCH & ASSOCIATES
10 SOUTH WABASH AVE.
CONSULTING ENGINEERS
CHICAGO, ILLINOIS

SHEET NO. 54 OF 136 SHEETS
DATE:

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
FAI 2	0505.3-1H	COOK	136	55
STA		TO STA		
		ILLINOIS	FED. AID PROJ.	

DOWN GRADE

UP GRADE

BOW(I) GRADE

UP GRADE

RIGHT

RIGHT

5'-1" ℄

12½" ℄

5" ℄ CANTILEVER

1" ℄ EACH FACE

13/16" SLOTTED HOLES

1 SAW CUT FOR EXPANSION BETWEEN BEAMS & WELD TO 1 PLATE

TWO NUTS AND FOUR STD WASHERS INCLUDED IN STRUCTURAL STEEL.

1½" BOLT INCLUDED IN DETAILS OF PRECAST PRESTRESSED CONCRETE ITEM SEE NOTE A

NOTE A
DIMENSIONS SHOWN ARE FOR BEARINGS AT 68°F. ADJUSTMENTS SHALL BE MADE FOR OTHER TEMPERATURES AT TIME OF ERECTION AND JOINT SHALL BE SET TO PROPER WIDTH. SEE TABLE FOR DIMENSIONS.

SECTION A-A
SCALE 1"=1'-0"

SECTION B-B
SCALE 1"=1'-0"

1½" ⅜" I-3 BAR @ 9" C-C IN SIDE WALKS & MEDIANS WELD TO ½" ℄

VARIES

CUT AND WELD ½" ℄ ALONG CURB. SET 12" × ½" ℄ FLUSH WITH FACE OF CURB. GRIND ALL WELDS SMOOTH.

12WF40

X8 X3 X2

FOR SECTION C-C SEE SHEET #56

4 CONDUITS

SEE FRAMING PLANS

TYPICAL SECTION-STEEL GIRDERS
G-2 ON PIER 17-C & PIERS SIMILAR
SCALE 3/8"=1'-0"

3'-6"
1'-7" 1'-11"
LEVEL ON SLOPE
1'-9¾" 1'-4"

CB 60 OR CB 61

VARIES

X2 X2

TYPICAL SECTION-STEEL STRINGERS
AT PIER 16 - CB 61 - SIMILAR AT CB 60
SCALE 3/8"=1'-0"

EDGE OF CURB 1'-6" RT ℄ 8" SLAB

SHOP WELD AND GRIND SMOOTH

12"×½" CHECKERED ℄

5"×½" ℄

12"×1" ℄ WITH ANTI-SKID SURFACE

5"×½" ℄

SEE SHT. 54

4

SECTION E-D
SCALE 1½"=1'-0"

⅝" ℄ CHAMFER

BOUNDARIES SEE SHT. 7-673

WORK POINT

OPEN EXP. JOINT IN CONCRETE DECK

TYPICAL CURB DETAIL
SCALE 1½"=1'-0"

SCALES OF TRACING

⅛"=1'-0"
1"=1'-0"
1½"=1'-0"

TYPICAL SECTION-CONCRETE BEAMS
SCALE

SEE SHT. 54

CURB LINE

SLOPE JOINT

ALLEY

ALLEY PLAN
SCALE ⅛"=1'-0"

GENERAL NOTES FOR EXPANSION GUARDS

ROADWAY EXPANSION GUARDS SHALL BE FABRICATED AND ERECTED TO CONFORM TO ROADWAY CROWN.

STRUCTURAL STEEL (LOW ALLOY) SHALL BE USED FOR [illegible] PLATES, STRUCTURAL SHAPES AND [illegible] BARS.

DIMENSIONS NOTED AT 68°F SHALL BE INCREASED [illegible] TEMPERATURE [illegible]

ASSEMBLE IN SHOP FOR INSPECTION.

ALL SURFACES INACCESSIBLE AFTER ERECTION SHALL RECEIVE TWO SHOP COATS OF RED LEAD PAINT EXCEPT FOR SURFACES EMBEDDED IN CONCRETE.

EXPANSION GUARD AT ENDS OF STRUCTURAL STEEL SPANS INCLUDING STRUCTURAL STEEL (LOW ALLOY) AND STRUCTURAL STEEL (CARBON) SHALL BE FURNISHED UNDER SECTION 0505.3-1HF AND INSTALLED UNDER SECTION 0505.3-1H. ESTIMATED WEIGHT [illegible] STRUCTURAL STEEL (LOW ALLOY) AND [illegible] LBS. STRUCTURAL STEEL (CARBON).

EXPANSION GUARD AT THE ENDS OF ALL CONCRETE SPANS SHALL BE FURNISHED AND INSTALLED UNDER SECTION 0505.3-1H. ESTIMATED WEIGHT 15,103,120 LBS. STRUCTURAL STEEL (LOW ALLOY) AND 3,270 LBS. STRUCTURAL STEEL (CARBON).

THE 2.355 PATTERN FOR THE ANTI SKID SURFACE OF THE EXPANSION PLATES MAY BE ROLLED INTO THE PLATE AT THE MILL OR IT MAY BE APPLIED IN THE SHOP AS WELDING.

CORRECTION FOR TEMPERATURE

DATA IN [illegible] COLUMN

[illegible] SET AT [illegible]

PLATE [illegible]

[illegible] SETTING

** KNOWN TO INCREASE 2 FOR EACH 10° INCREASE IN TEMPERATURE

CITY OF CHICAGO
DEPARTMENT OF PUBLIC WORKS
BUREAU OF ENGINEERING

NORTHWEST ROUTE SUPERHIGHWAY
GRADE SEPARATION
WABANSIA AVE. TO CORTLAND ST.
SECTION 0505.3-1H

EXPANSION GUARD DETAILS

SHEET NO. 55 OF 136 SHEETS DATE

ALFRED BENESCH & ASSOCIATES
10 SOUTH WABASH AVE.
CHICAGO, ILLINOIS
CONSULTING ENGINEERS

		TOTAL SHEETS	SHEET NO.
FAI 4 05.3-1H	COOK	36	36

SECTION D-D
TYPICAL FOR ALL CONCRETE STEEL STRINGERS
SCALE 1"=1'-0"

TYPICAL FOR ALL STEEL TO CONCRETE T-BEAMS
SCALE 1"=1'-0"

TYPICAL DETAIL BRACKET B1
SCALE 1"=1'-0"

TYPICAL DETAIL BRACKET B2
SCALE 1"=1'-0"

TYPICAL FOR SUPPORT BRACKETS B1 AND B2
SCALE 1"=1'-0"

TYPICAL SECTION AT GIRDER 5
SCALE 1"=1'-0"

TYPICAL SECTION AT GIRDER 7
SCALE 1"=1'-0"

PLATES FOR SUPPORTS ON END FRAMES X-E AND X-2
SCALE 1"=1'-0"

SCALE OF TRACING
1'-0

ALFRED BENESCH & ASSOCIATES
10 SOUTH WABASH AVE.
CHICAGO, ILLINOIS
CONSULTING ENGINEERS

CITY OF CHICAGO
DEPARTMENT OF PUBLIC WORKS
BUREAU OF ENGINEERING

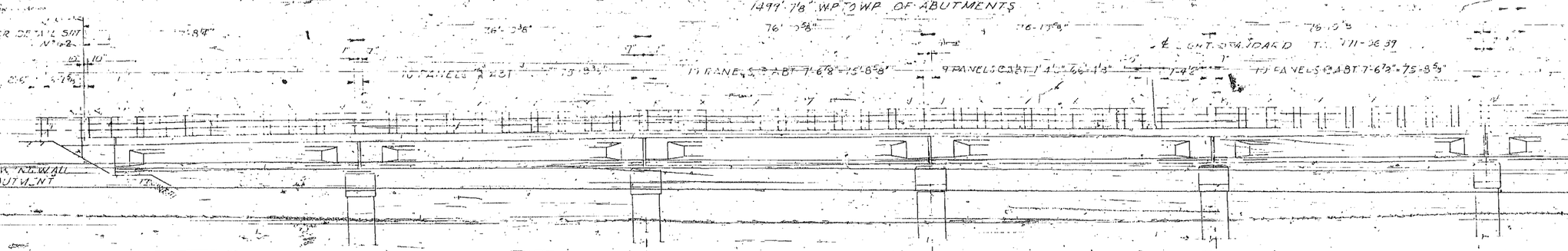
NORTHWEST ROUTE SUPERHIGHWAY
GRADE SEPARATION
WABANSIA AVE. TO CORTLAND ST.
SECTION 0505.3-1H

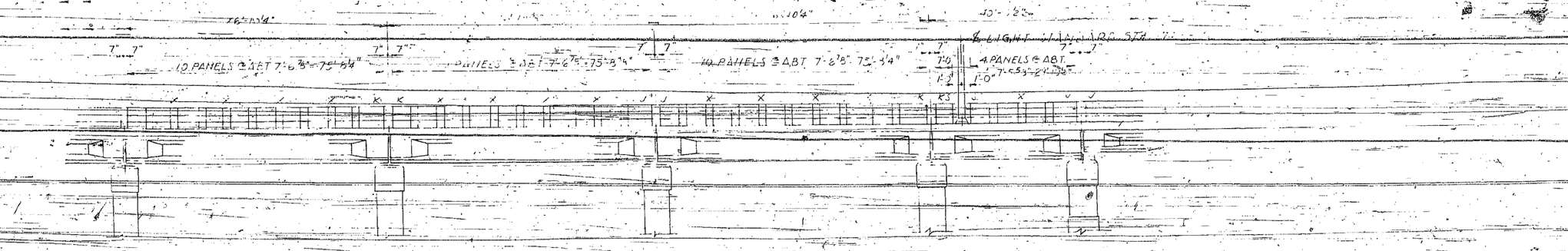
EXPANSION GUARD DETAILS

SHEET NO. 36 OF 36 SHEETS
DATE

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 2	0505.3 HI	COOK	136	57
STA	TO STA			
FED. ROAD DIST. NO.	ILLINOIS	PARK		32-2.66

1499'-7⅛" W.P. TO W.P. OF ABUTMENTS





RAILING EAST ELEVATION

SCALE: 1"=15'

SCALE OF TRACING

1"=15' 0 5' 10' 15' 30' 45' 60'

NORTH

NOTE!

ALL DIMENSIONS ARE HORIZONTAL AND NOT TRUE DIMENSIONS ALONG SURFACE OF THE BRIDGE

FOR DETAILS OF METAL HANDRAIL SEE SHEETS 61 AND 62.

CITY OF CHICAGO
DEPARTMENT OF PUBLIC WORKS
BUREAU OF ENGINEERING

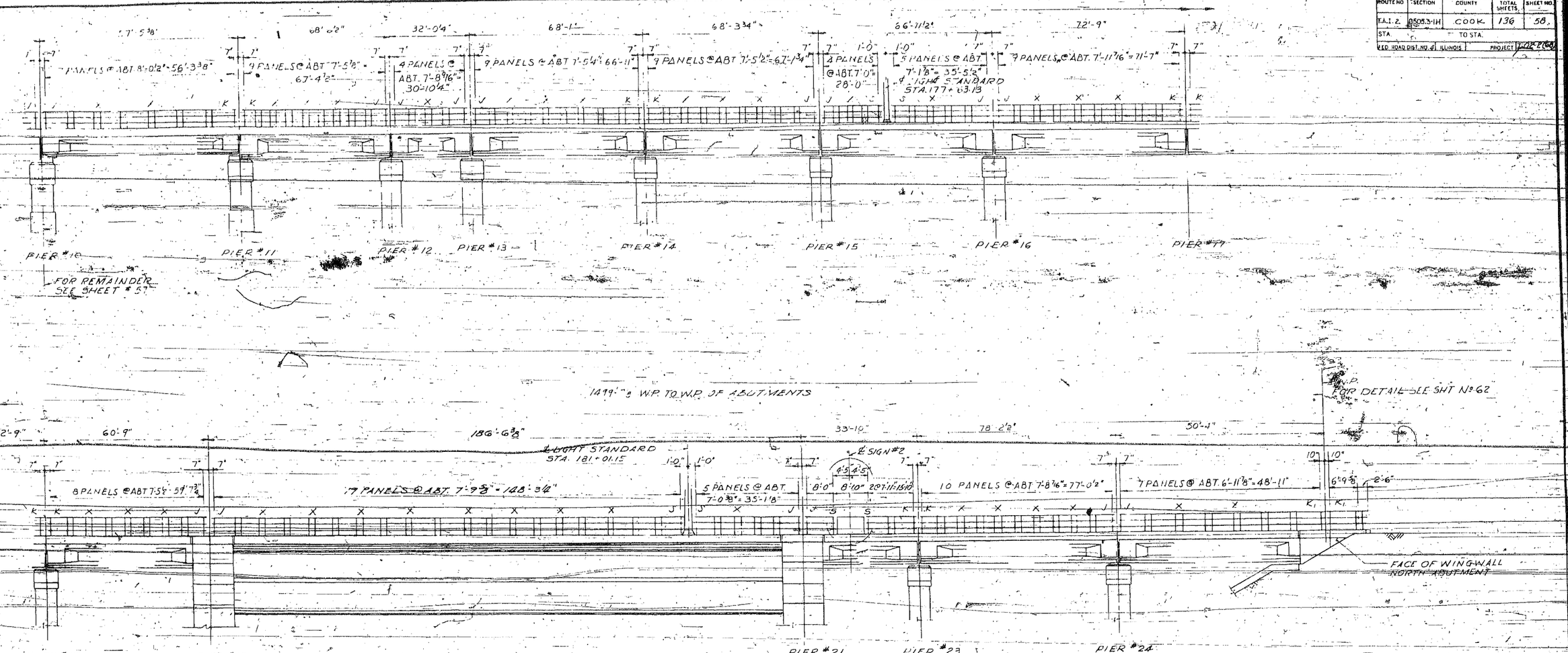
NORTHWEST ROUTE SUPERHIGHWAY
GRADE SEPARATION
WABANSIA AVE. TO CORTLAND ST.
SECTION 0505.3-HI

METAL HANDRAIL
ELEVATION

ALFRED BENESCH & ASSOCIATES — CONSULTING ENGINEERS
10 SOUTH WABASH AVE. — CHICAGO, ILLINOIS

SHEET NO. 57 OF 136 SHEETS — DATE:

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
T.A.I. 2	0506.3-1H	COOK	136	58
STA.	TO STA.			
FED. ROAD DIST. NO. 4	ILLINOIS	PROJECT		



NORTH

RAILING EAST ELEVATION

SCALE 1" = 15'

SCALE OF TRACING

1" = 15'

0 5' 10' 15' 30' 45' 60'

NOTE

ALL DIMENSIONS ARE HORIZONTAL AND NOT TRUE DIMENSIONS ALONG SURFACE OF THE BRIDGE

FOR DETAILS OF METAL HANDRAIL SEE SHEETS 61 AND 62

ISSUED FOR CONTRACT
SECTION 0506.3-1H
May 5, 1951 Dated
Sign Out 378

CITY OF CHICAGO
DEPARTMENT OF PUBLIC WORKS
BUREAU OF ENGINEERING

NORTHWEST ROUTE SUPERHIGHWAY
GRADE SEPARATION
WABANSIA AVE. TO CORTLAND ST.

SECTION 0506.3-1H

METAL HANDRAIL
EAST ELEVATION

ALFRED BENESCH & ASSOCIATES
10 SOUTH WABASH AVE.
CONSULTING ENGINEERS
CHICAGO, ILLINOIS

SHEET NO. 58 OF 136 SHEETS
DATE SEPT. 1951

ROUTE NO.	SECTION	COUNTY.	TOTAL SHEETS	SHEET NO.
FAP 318	0505-3-1H	COOK	153	53
STA.	TO STA.			
F.A. HIGHWAY NO.	ILLINOIS	STATE	CONTRACT NO.	

W.P. SEE DETAIL SHEET # 62

12 PANELS @ ABT 7'-5⅝" = 91'-7"

7 PANELS @ ABT 7'-2⅛" = 51'-0½"

7 PANELS @ ABT 7'-5½"

9 PANEL @ ABT 7'-0" = 64'-2"

℄ LIGHT STANDARD STA 182+62.32

FACE OF WALL WITH 45° SLANT

PIER #24 PIER #23 PIER #22 PIER #21 PIER #20 PIER #19

NORTH

ALL ABUTMENTS

27 PANELS @ ABT 7'-5⅜" = 202'-5"

PIER #14 PIER #15 PIER #17 PIER #16 PIER #13

FOR REMAINDER SEE SHEET #60

PAILING WEST ELEVATION

SCALE 1" = 15'

SCALE OF TRACING

1" = 15'

0 5" 10" 15" 30' 45' 60'

NOTE

ALL DIMENSIONS ARE HORIZONTAL AND NOT TRUE DIMENSIONS ALONG SURFACE OF THE BRIDGE

FOR DETAILS OF METAL HANDRAIL SEE SHEETS 61 AND 62

CITY OF CHICAGO
DEPARTMENT OF PUBLIC WORKS
BUREAU OF ENGINEERING

NORTHWEST ROUTE SUPERHIGHWAY
GRADE SEPARATION
WABANSIA AVE. TO CORTLAND ST.
SECTION 0505,3-1H

METAL HANDRAIL
WEST ELEVATION

ALFRED BENESCH & ASSOCIATES
10 SOUTH WABASH AVE.
CONSULTING ENGINEERS
CHICAGO, ILLINOIS

SHEET NO. 59 OF 153 SHEETS. DATE:

ROUTE NO	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 2	0505.3-IH	COOK	136	60
STA.	TO STA.			
FED. ROAD DIST. NO. 4	ILLINOIS	PROJECT	I-02-2(68)	

F.I.R. - INITIATION SEE SHEET # 59

1604'-7 3/8" W.P. TO W.P. OF ABUTMENTS

68'-0 3/8" | 55'-1 3/8" | 57'-5 3/8" | 67'-5 3/8" | 38'-5 3/8" | 16'-0 3/4" | 16'-3 3/8" | 76'-10 3/4"

℄ LIGHT STD STA. 176+71.0

5 PANELS @ ABT 7'-6 3/8" = 37'-1 7/8"

5 PANELS @ ABT 7'-6 3/8" = 37'-5 3/8"

5 PANELS @ ABT 7'-6 3/8" = 37'-5 3/8"

15 PANELS AT ABT 7'-6 3/8" = 112'-4 3/4"

15 PANELS AT ABT 7'-6 3/8" = 112'-4 3/4"

℄ LIGHT STD STA. 172+85.85

15 PANELS AT ABT 7'-6 3/8" = 112'-4 3/4"

PIER # 12 | PIER # 11 | PIER # 10 | PIER # 9 | PIER # 8 | PIER # 7 | PIER # 6 | PIER # 5

FOR REMAINDER SEE SHEET # 59

NORTH

1604'-7 3/8" W.P. TO W.P. OF ABUTMENTS

W.P. SEE DETAIL SHT. # 62

8'-1"

76'-0 1/4" | 76'-10 1/4" | 76'-11" | 77'-2 5/8" | 78'-3 3/4"

℄ LIGHT STD STA. 169+39.16

8 PANELS @ 7'-5 3/4" = 59'-10"

10 PANELS @ ABT 7'-6 3/8" = 75'-8 1/4"

5 PANELS @ ABT 7'-6 3/8" = 75'-9"

3 PANELS @ ABT 6'-11 3/4" = 20'-11 1/4"

7 PANELS @ 7'-7" = 53'-0 3/8"

10 PANELS @ ABT 7'-8 1/4" = 76'-10 3/4"

7'-3" | 2'-6"

E SIGN # 1

4'-5" | 4'-5"

8'-10" | 7'-0 1/4"

FACE OF WINGWALL SOUTH ABUTMENT

PIER # 5 | PIER # 4 | PIER # 3 | PIER # 2 | PIER # 1

RAILING WEST ELEVATION

SCALE: 1" = 15'

SCALE OF TRACING

1" = 15'

5' 10' 15' 30' 45' 60'

NOTE:
ALL DIMENSIONS ARE HORIZONTAL AND NOT TRUE DIMENSIONS ALONG SURFACE OF THE BRIDGE.
FOR DETAILS OF METAL HANDRAIL SEE SHEETS 61 AND 62

ISSUED FOR CONTRACT
SECTION 0505.3-IH
MAY 5, 1951
Dill Siggard

CITY OF CHICAGO
DEPARTMENT OF PUBLIC WORKS
BUREAU OF ENGINEERING

NORTHWEST ROUTE SUPERHIGHWAY
GRADE SEPARATION
WABANSIA AVE. TO CORTLAND ST.
SECTION 0505.3-IH

METAL HANDRAIL
WEST ELEVATION

ALFRED BENESCH & ASSOCIATES
10 SOUTH WABASH AVE.
CONSULTING ENGINEERS
CHICAGO, ILLINOIS

SHEET NO. 60 OF 136 SHEETS
DATE: SEPT. 1950

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 2	0505.3 IH	COOK	156	30
STA.	TO STA.			
FED. ROAD DIST. NO. 9	ILLINOIS	PROJECT I-90-2(68)		

℄ JOINT ℄ RDWY. S.E.B. LANES ℄ JOINT MEDIAN ℄ RDWY. REVERS. LANE ℄ JOINT MEDIAN ℄ RDWY. N.W.B. LANES ℄ JOINT

4 SPA @ 8'-1 1/8" = 35'-9 1/2" 3 @ 9'-3 3/4" = 27'-11 1/4" 10'-3" 5'-0" 5'-3 1/2" 4 SPA @ 7'-1 1/2" = 31'-6" 4'-11 1/4" 4 SPA @ 9'-7" = 38'-4" 4'-11 1/4" 4 SPA @ 7'-9 3/4" = 31'-3" 3'-7 1/4" 3 SPA @ 8'-2 1/2" = 24'-7 1/2" 5'-11 1/2" 3 @ 7'-11 1/2" = 23'-10 1/2"

19'-2 1/4" + 19'-1 3/4"

℄ BRG. N. ABUT

SPAN #25

SPAN #24

℄ PIER #24

℄ BRGS.

STA. 182+98.92

122°-22'-02"

12°-04'-31"

℄ BRG.

℄ PIER #23

STA. 182+16.23

18'-9 3/8"

18'-9 3/8"

6 SPA @ 5'-4" = 32'-0" 5 @ 4'-11" = 24'-7" 3'-3" ℄ 5'-1 1/2" = 30'-7" 4'-10 1/2" 7 SPA @ 5'-4" = 37'-5 3/4" 4'-10 1/2" 6 SPA @ 5'-1 5/8" = 30'-6 3/4" 3'-8 3/8" 8 SPA @ 4'-8 1/2" = 37'-8"

NOTE!
FIGURES IN BRACKETS (-7 1/2") INDICATE ELEVATION OF TOP OF BEAM WITH REFERENCE TO TOP OF SLAB AT ℄ OF BEARING.
TOPS OF ALL OTHER BEAMS SHALL BE 7 1/4" BELOW TOP OF SLAB AT ℄ OF BEARINGS UNLESS OTHERWISE NOTED.
FOR DETAILS OF PRECAST PRESTRESSED I-BEAMS AND BEARINGS, SEE SHEET 31 TO 36.

D.L. DEFLECTION DIAGRAM

WEIGHT OF PRESTRESSED I-BEAM NOT INCLUDED.

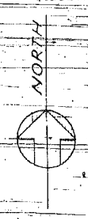


TABLE OF "Y" DIMENSION

BEAM MARK	Y DIMENSION Y 25	Y 50	BEAM MARK	Y DIMENSION Y 25	Y 50
CB 134, CB 135	-	1/8	CB 106, CB 107	3/8	1/2
CB 130 TO CB 133 INCL.	1/8	1/8	CB 108, CB 109	3/8	1/2
CB 130, CB 137	1/8	1/8	CB 111, CB 113	3/8	1/2
CB 132A, CB 134A	1/8	1/8	CB 114, CB 116	3/8	1/2
CB 132A, CB 135B	1/8	1/8	CB 117, CB 118	3/8	1/2
CB 129, CB 32B	1/8	3/16	CB 119A, CB 120	7/16	9/16
CB 133	1/8	3/16	CB 101 TO CB 104 INCL. CB 112A, CB 116A	7/16	9/16
CB 136B	1/8	3/16	CB	9/16	3/4
CB 138A	1/8	3/16	CB	9/16	3/4
CB 128	3/16	1/4	CB 127	5/8	7/8
CB 126	1/4	3/8	CB 112B, CB 116B	13/16	1 1/16
CB 105, CB 106, CB 108	1/16	1/16	CB 100	7/8	1 1/2
CB 121 TO CB 125 INCL.					

FRAMING PLAN

SPANS #24 & 25

SCALE 3/32"=1'-0"

NOTE!
ALL DIMENSIONS ARE MEASURED HORIZONTALLY

SCALE OF TRACING
3/32"=1'-0"
0 4" 8" 12" 24"

BILL OF MATERIAL

ITEM	DESCRIPTION	UNIT	QUANTITY SPAN #24	QUANTITY SPAN #25
14	48" PRECAST PRESTRESSED CONCRETE I-BEAMS	℄ IN FT	3608.8	1676.4

CITY OF CHICAGO
DEPARTMENT OF PUBLIC WORKS
BUREAU OF ENGINEERING

NORTHWEST ROUTE SUPERHIGHWAY
GRADE SEPARATION
WABANSIA AVE. TO CORTLAND ST.
SECTION 0505.3-IH

FRAMING PLAN
SPANS 24 & 25

SHEET NO. 30 OF 156 SHEETS DATE

ALFRED BENESCH & ASSOCIATES CONSULTING ENGINEERS
10 SOUTH WABASH AVE. CHICAGO, ILLINOIS