STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS AND BUILDINGS
BUREAU OF DESIGN

CONSTRUCTION PLAN INDEX

REEL 0-52

ROUTE	SECTION	COUNTY	NO. OF EXP.	REMARKS
SBI-53 (FA-61)	531-1 HB-8	COOK	27	
SBI-53 (FA-62)	3277-S-Y	COOK	34	
SBI-53 (FA-62)	3277-Z-Y-1	COOK	74	
SBI-54	54-7	COOK	10	
SBI-55 SA-166 SA-055	55-4 166-2324 055-2020 1961-12-R	COOK	14	
SBI-58, 60	583 TL	COOK	6	
SBI-58	583-S-1L	COOK	5	
SBI-58	584 & 584-B	WOOK	55	
SBI-63	631 V-A	COOK	21	10-18 missing
SBI-63 FA-173	1953-7 W	COOK	22	
SBI-5	7 Y-T	COOK	10	
FA-98	207-0101-2B	COOK	24	
FA-98	1616-4	COOK	7	
FA-98	1616-VBR-1	COOK	18	
FA-99	0203.1-HB-HF	COOK	38	
FA-99	0809.1-HB-HF-H	COOK	33	
FA-99	0909	COOK	8	
FA-99	1515.3	COOK-LAKE	39	
FA-99	1515.4	COOK-LAKE	8	
FA-99	1515.5	COOK-LAKE	11	

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS AND BUILDINGS
BUREAU OF DESIGN

CONSTRUCTION PLAN INDEX

REEL 0-52

ROUTE	SECTION	COUNTY	NO. OF EXP.	REMARKS
FA-99, 121	3239 B-X-E-T	COOK	24	
FA-121 SA-67	29 R-I 3113-15 D-I	COOK	7	
FA-121	1011 RS	COOK	5	
FA-121	3239 Y-1-RS	COOK	18	
		Total	518	

FEDERAL-AID ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.61	531-1-HB-8	Cook	27	1
B. P. R. REG. NO. 4	ILLINOIS	PROJECT U-184(25)		

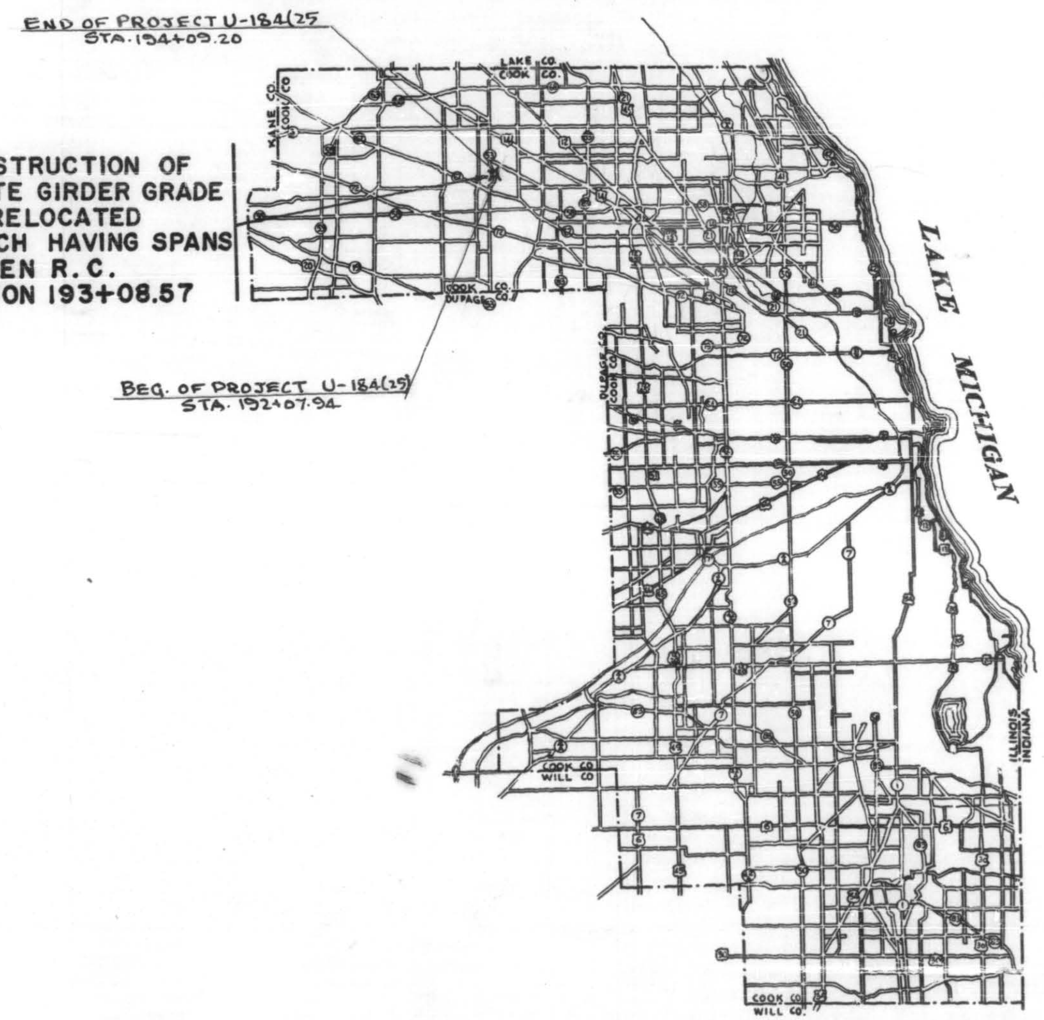
STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS AND BUILDINGS
DIVISION OF HIGHWAYS
PLANS FOR PROPOSED FEDERAL AID HIGHWAY

DISTRICT 10
RELOCATED S.B.I. ROUTE 53 (F.A. ROUTE 61) SECTION 531-1 HB-8
DUAL STRUCTURES OVER KIRCHOFF ROAD
PROJECT U-184(25)
COOK COUNTY

GROSS LENGTH 201.26 LIN. FT.

PROJECT U-184(25) NET LENGTH 201.26 LIN. FT. OR 0.038 MILES

SECTION 531-1-HB-8 INCLUDES THE CONSTRUCTION OF DUAL 3-SPAN CONTINUOUS WELDED PLATE GIRDER GRADE SEPARATION STRUCTURES (TO CARRY RELOCATED ROUTE 53 OVER KIRCHOFF ROAD), EACH HAVING SPANS 2 AT 42'-9" AND 1 AT 110'-3", WITH OPEN R.C. ABUTMENTS AND R.C. PIERS, AT STATION 193+08.57 IN PALATINE TOWNSHIP.



LOCATION OF SECTION INDICATED THUS:—

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

SUBMITTED Sept 28 1962
Marshall Suloway
DISTRICT ENGINEER

EXAMINED October 1 1962
A V Van Ausdall
ENGINEER OF ROAD PLANS AND CONTRACTS

PASSED October 1 1962
[illegible]
ENGINEER OF DESIGN

APPROVED October [illegible] 1962
[illegible]
CHIEF HIGHWAY ENGINEER

APPROVED October [illegible] 1962
[illegible] Jr
DIRECTOR

DEPARTMENT OF COMMERCE
BUREAU OF PUBLIC ROADS

APPROVED

DIVISION ENGINEER | DATE

JOB NO 22707

FEDERAL-AID ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.61	531-1-HB-8 HF-8	Cook	27	1
U. P. R. REG. NO. 4	ILLINOIS	PROJECT U-184(25)		

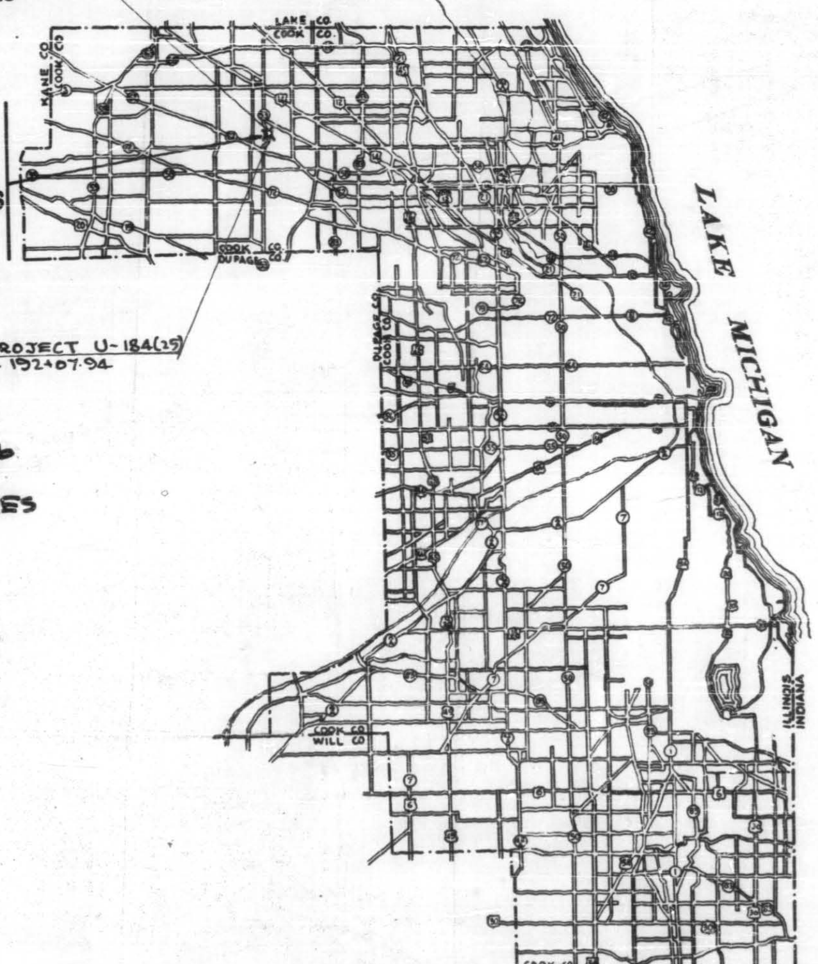
STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS AND BUILDINGS
DIVISION OF HIGHWAYS
PLANS FOR PROPOSED FEDERAL AID HIGHWAY

DISTRICT 10
RELOCATED S.B.I. ROUTE 53 (F.A. ROUTE 61) SECTION 531-1 HB-8, HF-8
DUAL STRUCTURES OVER KIRCHOFF ROAD
PROJECT U-184(25)
COOK COUNTY

GROSS LENGTH 201.26 LIN. FT.

PROJECT U-184(25) NET LENGTH 201.26 LIN. FT. OR 0.038 MILES

END OF PROJECT U-184(25)
STA. 194+09.20



BEG. OF PROJECT U-184(25)
STA. 192+07.94

N

SECTION 531-1-HB-8 INCLUDES THE CONSTRUCTION OF DUAL 3-SPAN CONTINUOUS WELDED PLATE GIRDER GRADE SEPARATION STRUCTURES (TO CARRY RELOCATED ROUTE 53 OVER KIRCHOFF ROAD), EACH HAVING SPANS 2 AT 42'-9" AND 1 AT 110'-3", WITH OPEN R.C. ABUTMENTS AND R.C. PIERS, AT STATION 193+08.57 IN PALATINE TOWNSHIP.

SECTION 531-1 HF-8 INCLUDES FURNISHING, FABRICATING SHOP PAINTING AND DELIVERY OF THE STRUCTURAL STEEL f.o.b THE C & N.W.R.R. AT PALATINE FOR DUAL 3-SPAN WELDED PLATEGIRDER AND WF-BEAM GRADE SEPARATION STRUCTURES AT STATION 193+08.57

LOCATION OF SECTION INDICATED THUS:—

Special Cover Sheet Prepared for Bureau of Public Roads

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

SUBMITTED Sept 28 19 62
Marshall Suloway
DISTRICT ENGINEER

EXAMINED Oct 1 19 62
ENGINEER OF ROAD PLANS AND CONTRACTS

PASSED Oct 1 19 62
ENGINEER OF DESIGN

APPROVED Oct 1 19 62
CHIEF HIGHWAY ENGINEER

APPROVED Oct 1 19 62
DIRECTOR

DEPARTMENT OF COMMERCE
BUREAU OF PUBLIC ROADS
APPROVED
DIVISION ENGINEER
DATE

Cook COUNTY SECTION 531-1-HB-8 F. A. ROUTE 61

PLANS PREPARED BY BUREAU OF DESIGN	Kenneth L. Brown	DATE 9-27-62
EXAMINED BY BUREAU OF CONSTRUCTION	[illegible]	DATE 9-28-62
EXAMINED BY BUREAU OF MAINTENANCE	[illegible]	DATE 9-27-62
EXAMINED BY BUREAU OF TRAFFIC	Walter C. Peterman	DATE 9-27-62
ENTIRE SECTION INSPECTED AND APPROVED AS TO POLICY DISTRICT ENGINEER	Marshall Fulsway	DATE 9-28-62

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.-61	531-1-HB-8	Cook	27	2

STA. TO STA.

U.S. BUR. PUB. ROADS, DIV. 4 | ILLINOIS | F. A. PROJECT

INDEX OF SHEETS

SUMMARY OF QUANTITIES

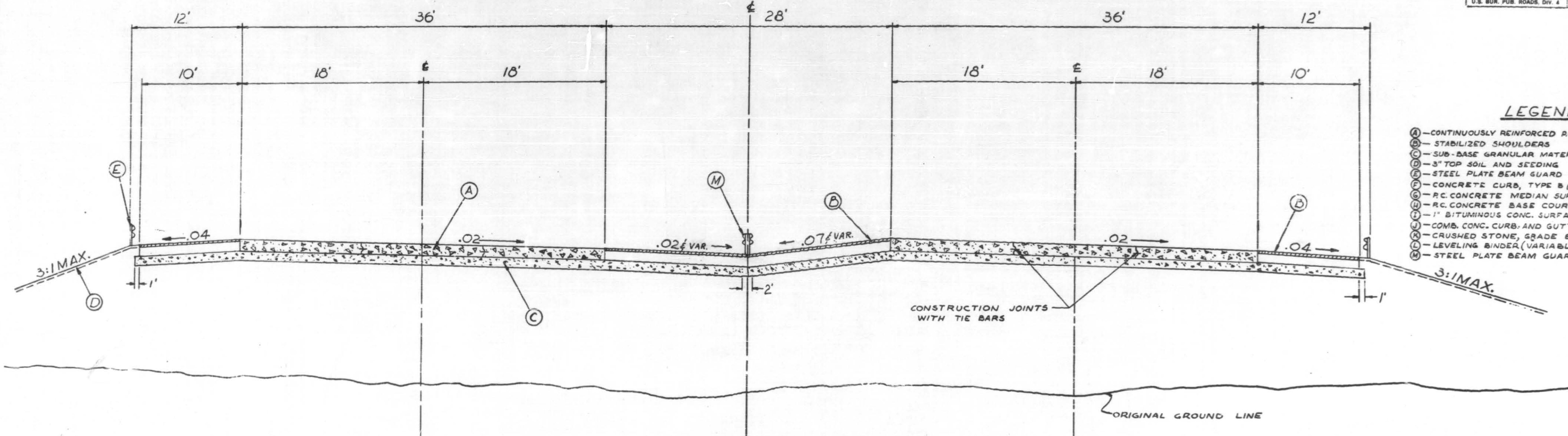
	ITEM	UNIT	TOTAL	
1.	EARTH EXCAVATION	CU.YDS.	130	011001
2.	EMBANKMENT	CU.YDS.	38,200	016001
3.	~~SUB-BASE GRANULAR MATERIAL, TYPE A~~	~~CU.YDS.~~	~~170~~	~~024002~~
4.	PORTLAND CEMENT CONCRETE PAVEMENT, 8"	SQ.YDS.	1,491	048006
~~5.~~	~~PORTLAND CEMENT CONCRETE PAVEMENT, 16 1/2 - 12 - 16 1/2~~	~~SQ.YDS.~~	~~950~~	~~040012~~
6.	CLASS A EXCAVATION FOR STRUCTURES	CU.YDS.	500	050001
7.	CLASS X CONCRETE	CU.YDS.	~~1,650.6~~ 1637.6	052003
8.	PROTECTIVE COAT	SQ.YDS.	2,894	052021
9.	ERECTING STRUCTURAL STEEL	POUNDS	1,005,660	054003
10.	REINFORCEMENT BARS	POUNDS	~~301,062~~ 250,970	059001
11.	FURNISHING CREOSOTED PILES UP TO 20 FEET	LIN.FT.	660	060004
12.	FURNISHING CREOSOTED PILES 20.1 TO 38 FEET	LIN.FT.	6,480	060005
13.	TEST PILE, TIMBER	EACH	1	060007
14.	DRIVING TIMBER PILES	LIN.FT.	7,140	060008
15.	FURNISHING ~~PRECAST~~ CONCRETE PILES, ~~14"~~	LIN.FT.	1,630	~~060010~~ 060044
16.	TEST PILE, ~~PRECAST~~ CONCRETE	EACH	1	~~060012~~ 060047
17.	DRIVING ~~PRECAST~~ CONCRETE PILES	LIN.FT.	1,630	~~060013~~ 060043
18.	NAME PLATES	EACH	2	061001
19.	SLOPE WALL 4"	SQ.YDS.	2,380	083002
20.	ALUMINUM HANDRAIL	LIN.FT.	792	Z00004
21.	PERMANENT BARRICADES	LIN.FT.	181	Z00870

NOTE: THE "STANDARD SPECIFICATIONS FOR ROAD & BRIDGE CONSTRUCTION" ADOPTED JANUARY 2, 1958 AND THE SUPPLEMENTAL SPECIFICATIONS EFFECTIVE APRIL 2, 1962, SHALL GOVERN THE CONSTRUCTION OF THIS WORK

AXLE LOAD LIMITS:
SINGLE - 18,000 LBS
TANDEM - 24,000 LBS

DHV-20	CLASSIFICATION	DESIGN SPEED
8358	M	70

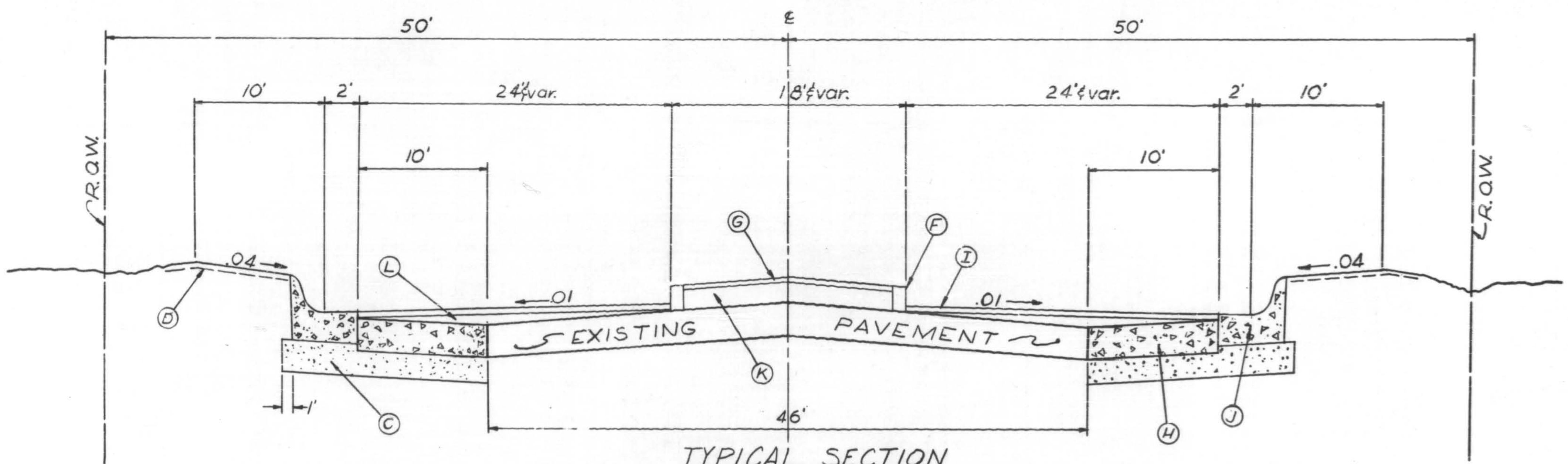
BOND ISSUE ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.61	531-1-HB-B	COOK	27	3
STA.		TO STA.		
U.S. BUR. PUB. ROADS. DIV. 4	ILLINOIS	F. A. PROJECT		



TYPICAL SECTION
RELOCATED ROUTE 53

LEGEND

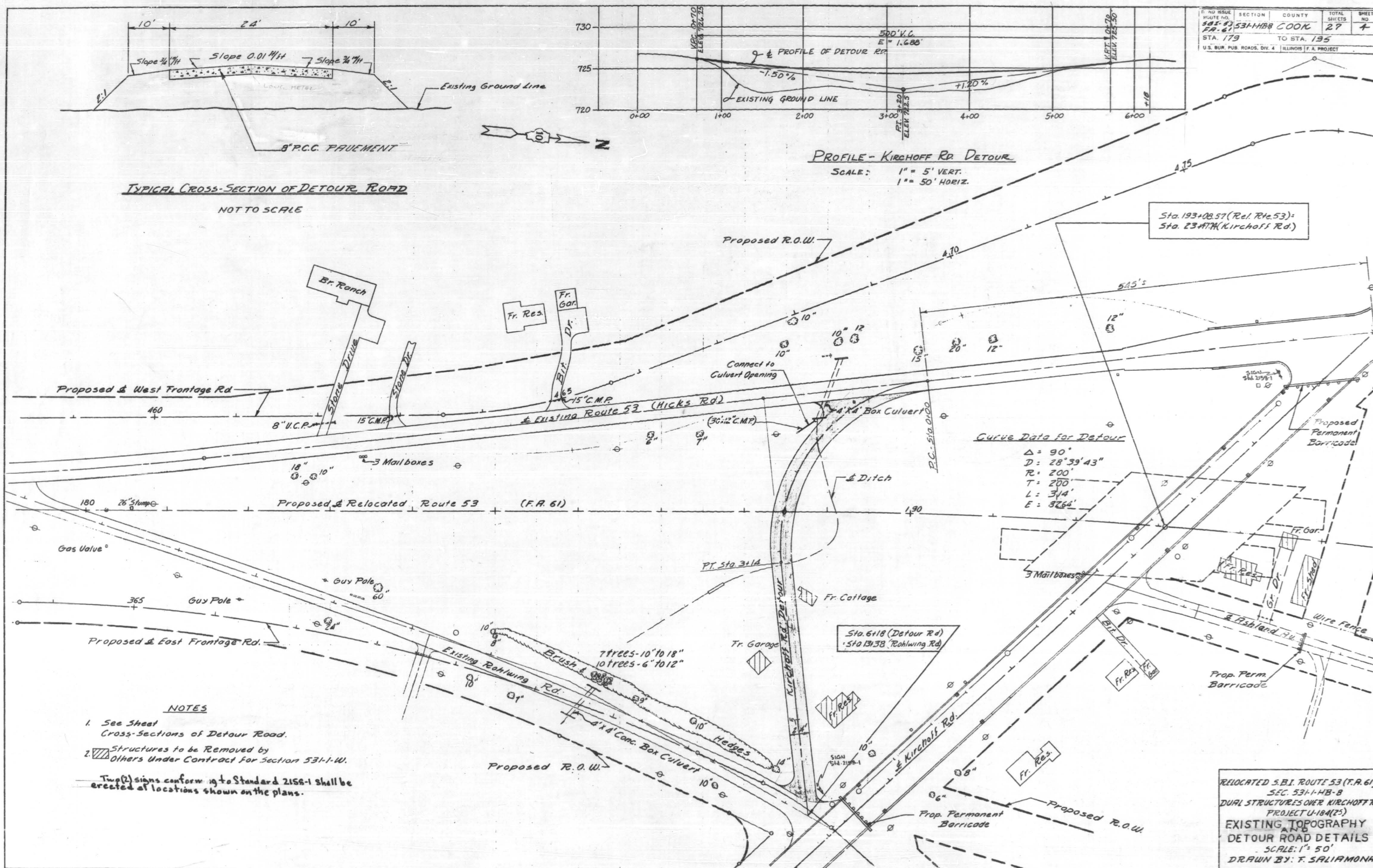
- Ⓐ — CONTINUOUSLY REINFORCED P.C. CONCRETE PAV'T 8"
- Ⓑ — STABILIZED SHOULDERS
- Ⓒ — SUB-BASE GRANULAR MATERIAL, TYPE "A" (6")
- Ⓓ — 3" TOP SOIL AND SEEDING
- Ⓔ — STEEL PLATE BEAM GUARD RAIL
- Ⓕ — CONCRETE CURB, TYPE B (MOD)
- Ⓖ — P.C. CONCRETE MEDIAN SURFACE (2 1/2")
- Ⓗ — P.C. CONCRETE BASE COURSE (9")
- Ⓘ — 1" BITUMINOUS CONC. SURFACE COURSE, SUB CLASS I-11
- Ⓙ — COMB. CONC. CURB. AND GUTTER, TYPE B-6.24 (MOD)
- Ⓚ — CRUSHED STONE, GRADE B (COMPACTED)
- Ⓛ — LEVELING BINDER (VARIABLE THICKNESS)
- Ⓜ — STEEL PLATE BEAM GUARD RAIL (SPECIAL)



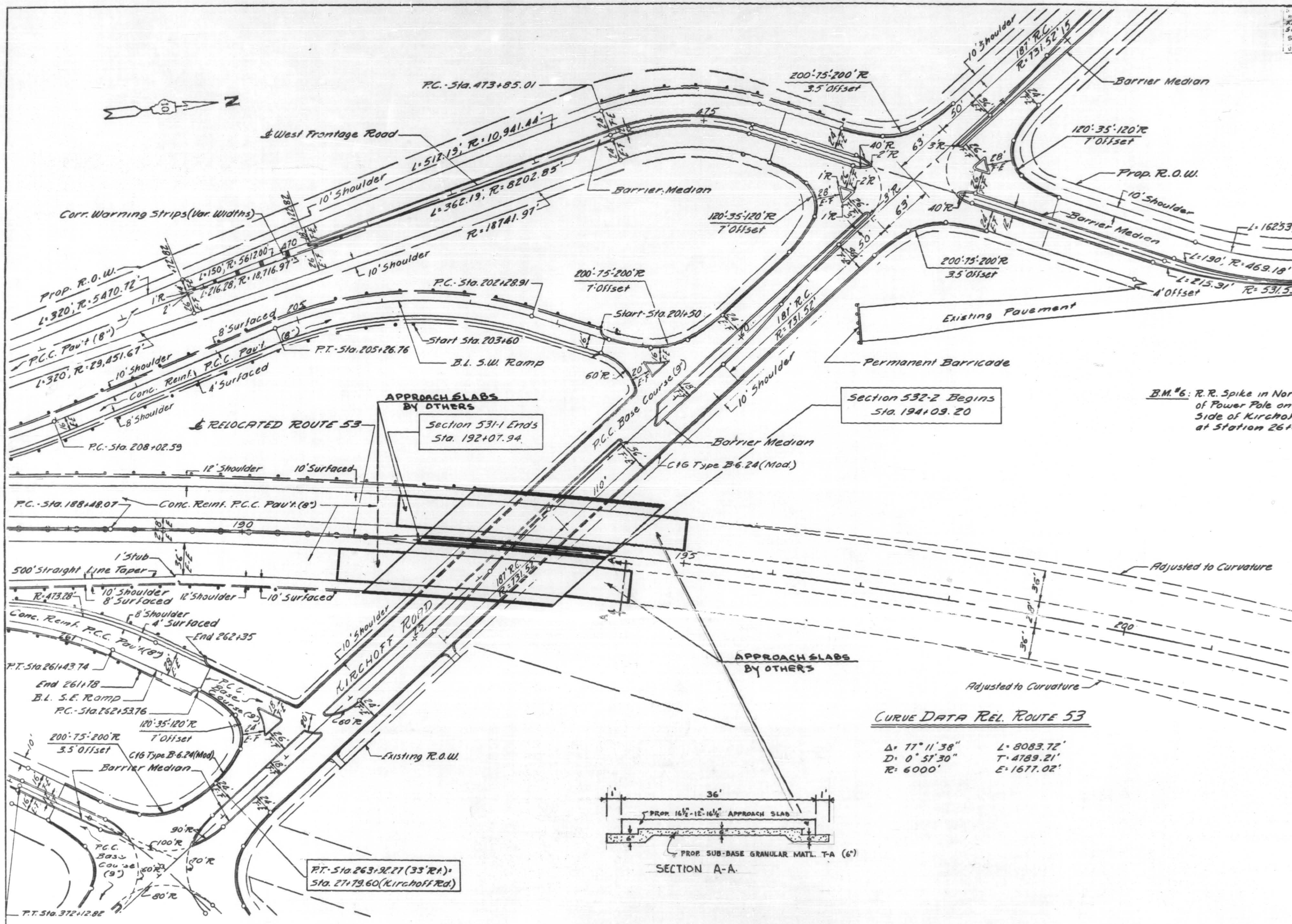
TYPICAL SECTION
KIRCHOFF ROAD

RELOCATED S.B.I RTE53
F.A. RTE. 61 SEC. 531-1-HBB

TYPICAL
SECTIONS
(BY OTHERS)

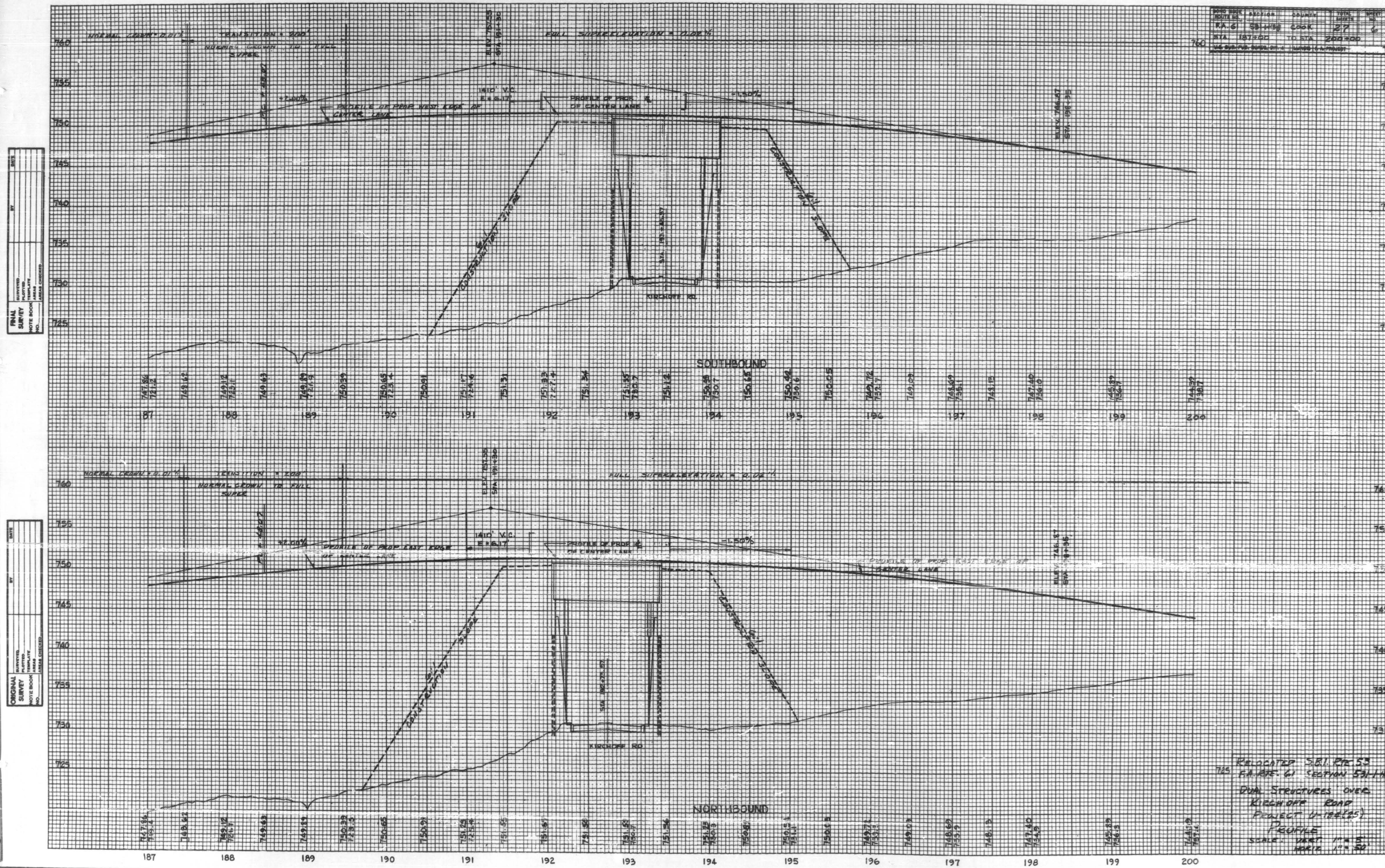


F.A.I. ROUTE NO. SBI-53 F.A. 61
SECTION 531-1-HB8
COUNTY COOK
TOTAL SHEETS 27
SHEET NO. 4
STA. 179 TO STA. 195
U.S. BUR. PUB. ROADS, DIV. 4 ILLINOIS F.A. PROJECT
10'
24'
10'
Slope 3/4"/ft
Slope 0.01'/ft
Slope 3/4"/ft
Existing Ground Line
8" P.C.C. PAVEMENT
TYPICAL CROSS-SECTION OF DETOUR ROAD
NOT TO SCALE
500' V.C.
E = 1.688'
℄ PROFILE OF DETOUR RD.
-1.50%
+1.20%
EXISTING GROUND LINE
V.P.C. 0+70 ELEV. 726.25
P.T. 3+20 ELEV. 722.5
V.P.T. 5+70 ELEV. 725.50
730
725
720
0+00
1+00
2+00
3+00
4+00
5+00
6+00
PROFILE - KIRCHOFF RD. DETOUR
SCALE: 1" = 5' VERT.
1" = 50' HORIZ.
N
Sta. 193+08.57 (Rel. Rte. 53) = Sta. 23+47.74 (Kirchoff Rd.)
Proposed R.O.W.
Br. Ranch
Fr. Res.
Fr. Gar.
Bit. Dr.
Stone Drive
Stone Dr.
Proposed ℄ West Frontage Rd.
8" V.C.P.
15" C.M.P.
℄ Existing Route 53 (Hicks Rd.)
(30" C.M.P.)
Connect to Culvert Opening
4'x4' Box Culvert
P.C. Sta. 0+00
3 Mailboxes
℄ Ditch
Curve Data for Detour
Δ = 90°
D = 28°39'43"
R = 200'
T = 200'
L = 314'
E = 82.66'
Proposed Permanent Barricade
Proposed ℄ Relocated Route 53 (F.A. 61)
26" Stump
Gas Valve
P.T. Sta. 3+14
Guy Pole
Fr. Cottage
Proposed ℄ East Frontage Rd.
Tr. Garage
Sta. 6+18 (Detour Rd.) = Sta. 13+38 (Rohlwing Rd.)
Kirchoff Rd. Detour
Existing Rohlwing Rd.
Brush & Trees
7 trees - 10" to 18"
10 trees - 6" to 12"
Hedges
4'x4' Conc. Box Culvert
Proposed R.O.W.
Fr. Res.
℄ Kirchoff Rd.
3 Mailboxes
Fr. Gar.
Gr. Dr.
Fr. Shed
℄ Ashland Av.
Wire Fence
Bit. Dr.
Prop. Perm. Barricade
Prop. Permanent Barricade
Proposed R.O.W.
NOTES
1. See Sheet Cross-Sections of Detour Road.
2. Structures to be Removed by Others Under Contract for Section 531-1-W.
Two (2) signs conforming to Standard 2158-1 shall be erected at locations shown on the plans.
RELOCATED S.B.I. ROUTE 53 (F.A. 61)
SEC. 531-1-HB-8
DUAL STRUCTURES OVER KIRCHOFF RD.
PROJECT U-184(25)
EXISTING TOPOGRAPHY AND DETOUR ROAD DETAILS
SCALE: 1" = 50'
DRAWN BY: F. SALIAMONAS



RELOCATED ROUTE 53 (F.A. 61)
SEC. 531-1-HB-8
DUAL STRUCTURES OVER KIRCHOFF
PROJECT U-184(25)
PLAN
OF APPROACHES
SCALE: 1" = 50'

F.S.



BOND ISSUE ROUTE NO. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO.
F.A. 61 | 531-1HB | COOK | 27 | 6
STA 187+00 TO STA 200+00
U.S. BUR. PUB. ROADS, DIV. 4 | ILLINOIS F.A. PROJECT
NORMAL CROWN
TRANSITION = 200'
NORMAL CROWN TO FULL SUPER
FULL SUPERELEVATION
1410' V.C.
PROFILE OF PROP. WEST EDGE OF CENTER LANE
PROFILE OF PROP. ℄ OF CENTER LANE
-1.50%
KIRCHOFF RD.
SOUTHBOUND
PROFILE OF PROP. EAST EDGE OF CENTER LANE
NORTHBOUND
FINAL SURVEY
ORIGINAL SURVEY
187
188
189
190
191
192
193
194
195
196
197
198
199
200
RELOCATED S.B.I. RTE. 53
F.A. RTE. 61 SECTION 531-1HB
DUAL STRUCTURES OVER KIRCHOFF ROAD
PROJECT U-184(25)
PROFILE
SCALE: VERT. 1" = 5'
HORIZ. 1" = 50'

FINAL SURVEY

NOTE BOOK NO.

SURVEYED

PLOTTED

TEMPLATE

AREAS

AREAS CHECKED

BY

DATE

ORIGINAL SURVEY

NOTE BOOK NO.

SURVEYED

PLOTTED

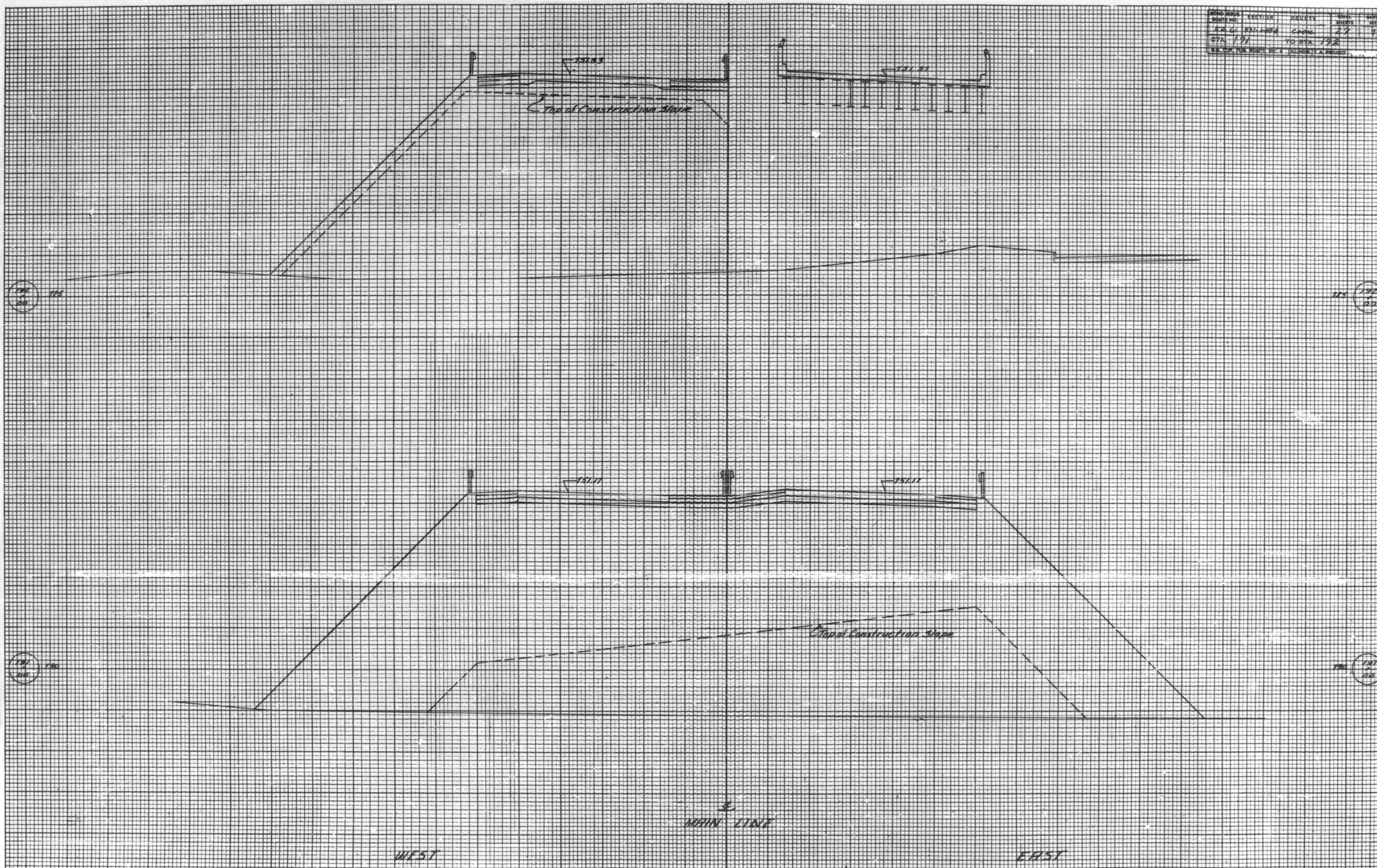
TEMPLATE

AREAS

AREAS CHECKED

BY

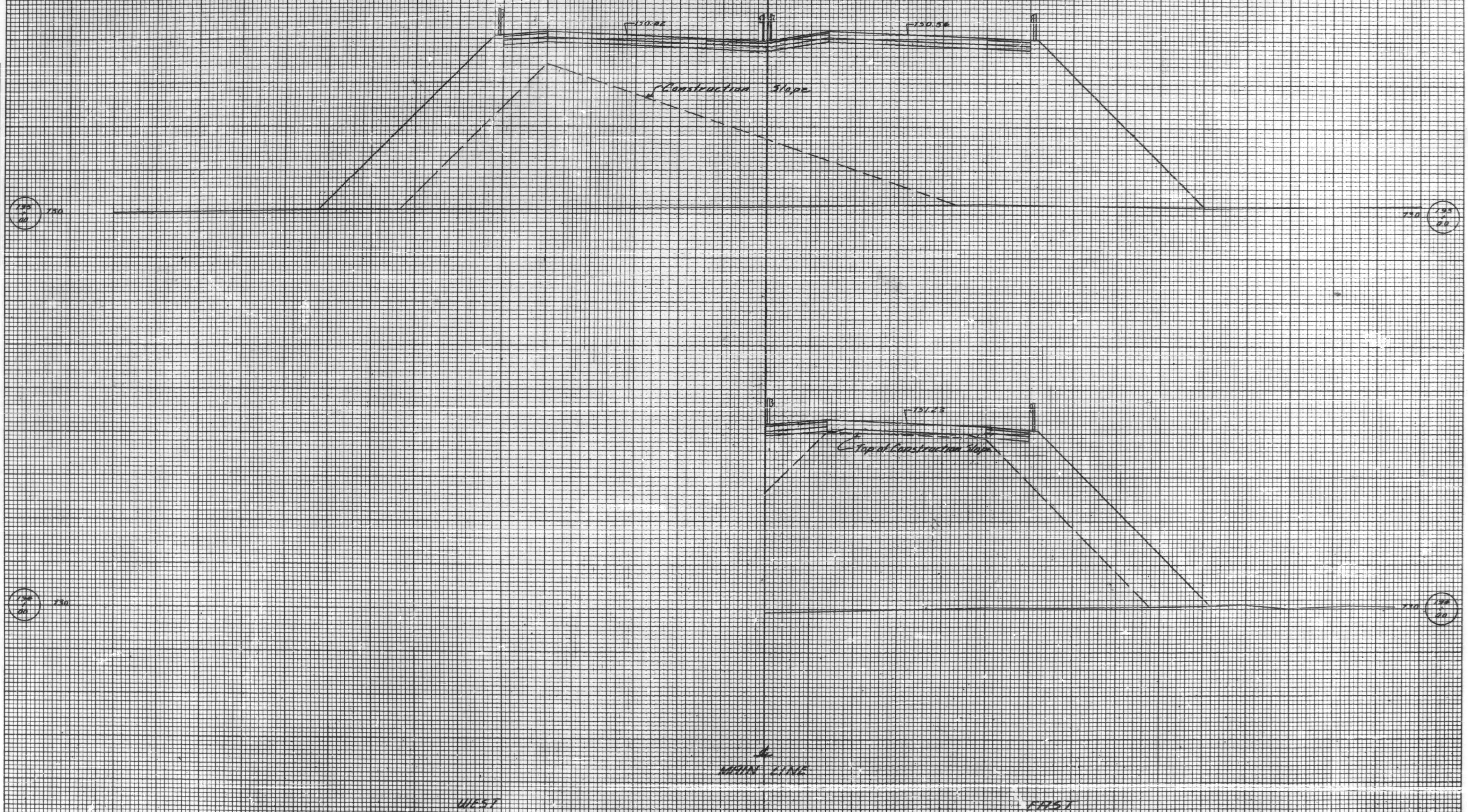
DATE



ROAD STATE ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA 61	531-1-HB-8	COOK	27	8
STA. 194		TO STA. 195		
U.S. BUR. PUB. ROADS, DIV. 4	ILLINOIS	F.A. PROJECT		

FINAL SURVEY	BY	DATE
SURVEYED		
PLOTTED		
TEMPLATE		
AREAS		
AREAS CHECKED		
NOTE BOOK NO.		

ORIGINAL SURVEY	BY	DATE
SURVEYED		
PLOTTED		
TEMPLATE		
AREAS		
AREAS CHECKED		
NOTE BOOK NO.		

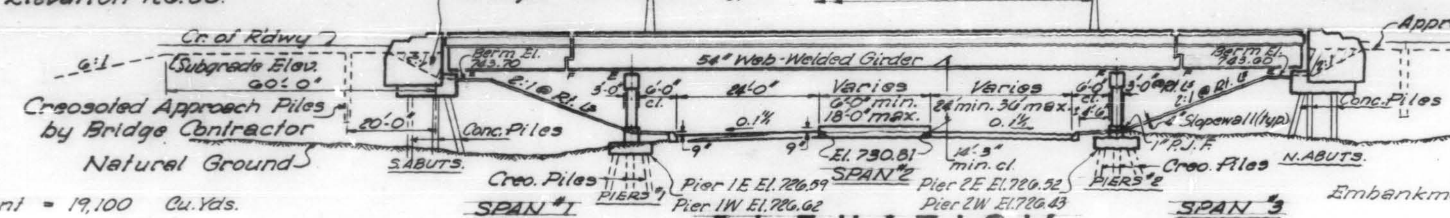


ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S.B.I. 53 F.A. 61	531-1-HB-8	COOK	27	9
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

SHEET NO. 1
SHEETS 15

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

B.M. Railroad Spike in North Face of Power Pole on South Side of Kirchoff Road, ±300 ft. East of Proposed ℄ of Route 53. Elevation 786.80.

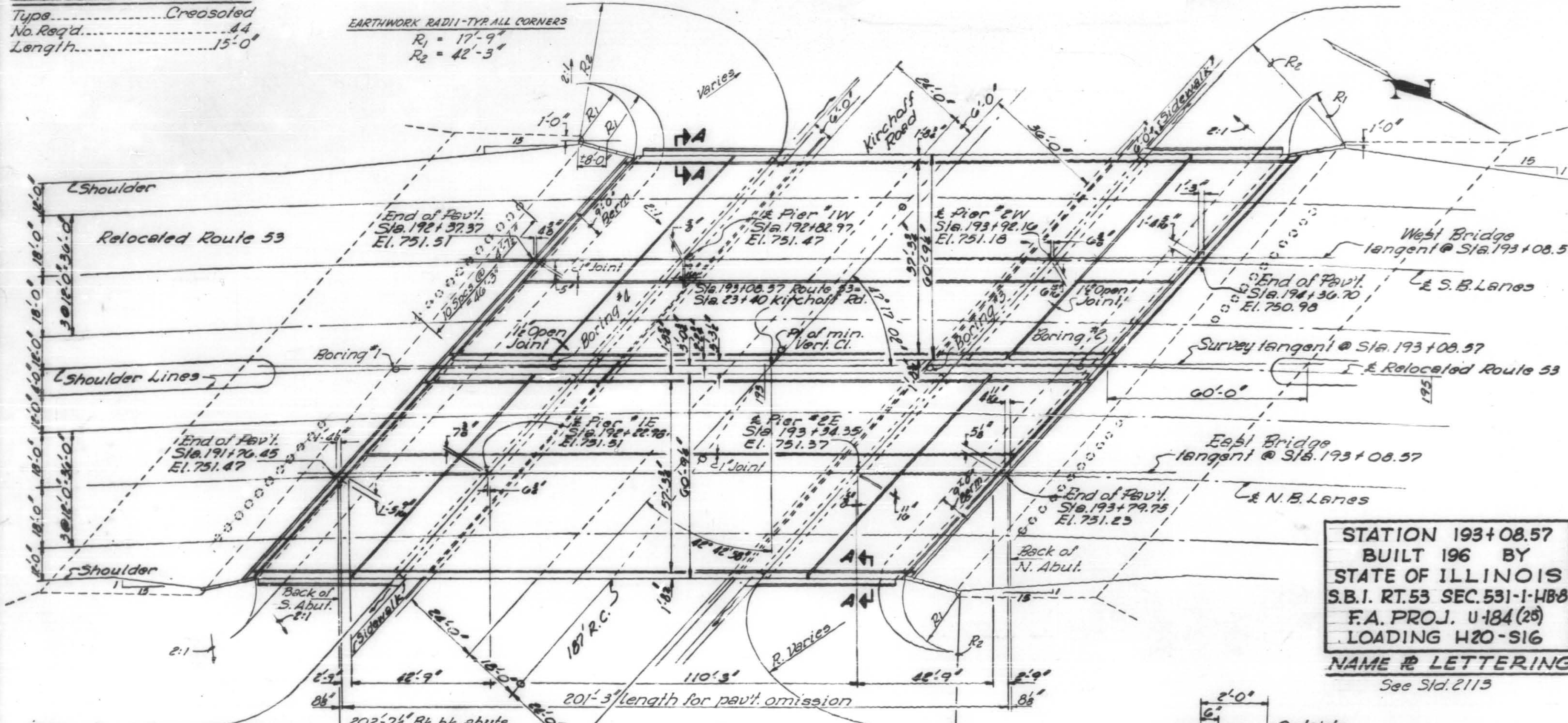


ELEVATION

*NOTE: STABILIZED SHOULDERS ADJACENT TO APPROACH SLABS BY PAVING CONTRACTOR

APPROACH PILE DATA

Type............Creosoted
No. Req'd............44
Length............15'-0"

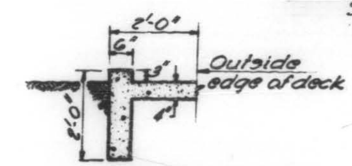


STATION 193+08.57
BUILT 196 BY
STATE OF ILLINOIS
S.B.I. RT. 53 SEC. 531-1-HB8
F.A. PROJ. U-184 (25)
LOADING H20-S16

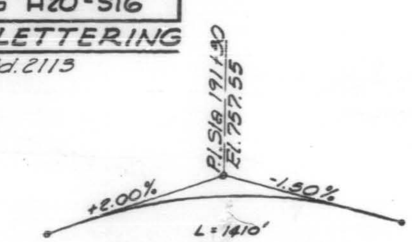
NAME & LETTERING
See Std. 2113

Note: ℄ of Roadway Stations referenced to ℄ Relocated S.B.I. Rt. 53.

PLAN



SEC. A-A



PROFILE-RELOCATED RT. 53

GENERAL NOTES

* Coarse aggregate to be used in parapet handrails and end posts must be absolutely free of chert, flint, limonite, lignite and soft sandstone.

The concrete floor slab shall be finished in accordance with Article 51.19 of the Standard Specifications.

Slope wall shall be reinforced with welded wire fabric 6"x6" mesh, weighing 58# per 100 sq. ft.

All reinforcement bars shall be lapped 20 diameters unless otherwise shown.

Rivets ¾"φ, open holes 13/16"φ unless otherwise noted.

Anchor bolts shall be set before before riveting diaphragms and cross frames over supports.

The exposed surfaces of the expansion guard shall be given two shop coats of red lead paint, the contact surfaces shall be given one coat of red lead paint. Anchor studs shall not be painted.

Expansion guards are included in the quantity of structural steel. Estimated weight = 8,690 lbs.

Except as otherwise provided, all structural steel shall receive one shop coat of red lead paint and two field coats of aluminum paint. See Article 56.1 to 56.5 inclusive of the Standard Specifications.

The Contractor shall drive two test piles. One concrete test pile in a permanent location in the south east abutment and one timber test pile near Pier 2W as directed by the Engineer before ordering remainder of piles.

Concrete piles at abutments shall be driven in holes precored through the embankment in accordance with Article 60.9(C) of the Standard Specifications

Permanent forms will not be permitted in forming the concrete floor.

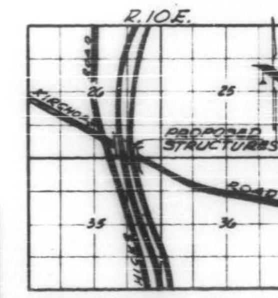
All material for the proposed lighting of the Kirchoff Road sidewalks and the Route 53 structure decks shall, with the exception of the anchor bolts and the 1" conduit, be furnished and installed under the provisions of future contracts.

The Contractor shall pour the full width of the concrete decks in the end units before pouring the center unit deck between the hinge joints.

Reinforcement bars designated thus: 26 x 6 indicates 26 lines of bars with 6 lengths per line.

Except as otherwise provided, all Structural Steel shall conform to A.S.T.M. Specifications - designation A-36.

Wherever in these plans reference is made to "Standard Specifications" it is understood to include the "Supplemental Specifications", effective Apr. 2, 1962.



LOCATION PLAN

TOTAL BILL OF MATERIAL-SEC. 531-1-HB-8*

ITEM	UNIT	SUPER.	SUB.	TOTAL
Embankment	Cu. yds.			38,200
Class A Excav. for Struct.	Cu. yds.			500
Class X Concrete	Cu. yds.	675.6	962.0	1,637.6
Structural Steel	Lbs.	1,005,660		1,005,660
Aluminum Handrail	Lin. ft.	792		792
Reinforcement Bars	Lbs.	165,780	85,210	250,990
Creosoted Piles	Lin. ft.		6,480	7,140
Test Piles (Timber)	Ea.		1	1
Concrete Piles	Lin. ft.		1,630	1,630
Test Piles (Concrete)	Ea.		1	1
Name Plates	Ea.		2	2
Slope Wall	Sq. yd.			2,380
Protective Coat	Sq. yd.			2,894

TOTAL BILL OF MATERIAL-SEC. 531-1-HF-8

ITEM	UNIT			TOTAL
Structural Steel	Lbs.			1,005,660

*EXCLUDING DETOUR ROAD AND APPROACH SLABS

RELOCATED ROUTE 53 OVER KIRCHOFF ROAD

DESIGN STRESSES

fc = ...1,400 psi Super
fs = ...20,000 psi Reinf.
fs = 20,000 psi Struct. (A 36)

vc = ...75 psi Footings
n = 10

HORIZONTAL CURVE DATA

Δ = 77° 11' 38"
D = 0° 57' 17.8"
R = 6,000'
T = 4,789.21'
L = 8,083.72
E = 1,677.02
S.E. = .02'/'

LOADING H20-S16-44

DESIGNED	J. B. Nolan
CHECKED	German Roncancio R. / J. Mullenix
DRAWN	J. B. N.
CHECKED	G.R.

SEPT 22 1962

EXAMINED: W. E. Baumann — ENGINEER OF BRIDGE AND TRAFFIC STRUCTURES
PASSED: E. L. Erickson — ENGINEER OF DESIGN
APPROVED: R. R. Bartelsmeyer — CHIEF HIGHWAY ENGINEER

GENERAL PLAN & ELEVATION

PROJECT U-184 (25)
S.B.I. ROUTE 53
SEC. 531-1-H(B,F) 8
COOK COUNTY
STATION 193+08.57

BRIDGE FOUNDATION BORING LOG

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

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S.B.I. 53 / F.A. 61	531-1-HB-8	Cook	27	10

SHEET NO. 2
SHEETS 15

PROJECT
ROUTE S.B.I. 53
SEC 531-1-HB-8
COUNTY Cook
BRIDGE Relocated Route 53 over Kirchoff Road
STA. 193+01
Date June 1962
Bored By R. Moody
Checked By G. R. B.

Surface Water El. / Groundwater El. at Completion / After ... Hours

Boring No. 1 — Station 191+95, Offset centerline — Ground Surface 727.4

Medium Black Organic topsoil	725.4
Stiff gray mottled clay	720.4
Very stiff gray clay till	715.4
Medium gray silty loam	712.9
Very stiff gray clay till	707.9
Stiff gray clay till	692.9
Very stiff gray clay till	687.9
Stiff gray silty clay till	680.4
Very stiff gray clay till	668.4

N	Qu t/s.f.
5	1.0
17	2.3 B
22	2.2 Est.
16	
15	2.5 B
20	2.3 B
10	1.6 B
12	1.8 B
11	1.6 B
8	1.5 Est.
10	1.5 B
12	1.6 B
43	3.5 Est.
16	2.8 B
11	Lost
11	1.2 B
15	1.8 B
19	2.2 B
20	2.3 B
21	2.2 B
23	3.0 B
27	3.2 B

Boring No. 2 — Station 194+01, Offset centerline — Ground Surface 729.1

Medium black organic top soil	727.1
Soft gray silty and sandy clay	719.6
Very stiff gray clay till	704.6
Stiff gray clay till	689.6
Very stiff gray clay till	
Very stiff gray clay till	

N	Qu t/s.f.
4	0.7 B
5	0.8 B
8	2.2 B
18	3.4 B
17	3.5 B
14	2.2 B
13	2.1 B
11	2.0 B
11	1.5 B
9	1.6 B
12	1.4 B
18	1.6 B
14	1.6 B
13	1.3 B
15	2.2 B
23	3.4 B
19	2.7 B
17	2.2 B
18	3.2 B
20	3.6 B

Boring No. 3 — Station 173+56, Offset centerline — Ground Surface 730.4

Medium black organic top soil	728.4
Soft gray mottled clay	723.4
Stiff gray clay till	720.9
Very stiff gray clay till	705.9
Stiff gray clay till	688.4
Very stiff gray clay till	675.9
Very stiff pebbly gray clay till	673.9

N	Qu t/s.f.
5	
7	1.6 B
13	2.2 B
11	2.4 B
10	3.4 B
9	2.0 B
7	2.3 B
12	2.8 B
7	1.6 B
10	1.4 B
9	1.8 B
13	1.7 B
12	1.5 B
10	1.4 B
15	1.3 B
18	2.6 B
15	2.3 B
17	2.4 B
14	2.2 B
13	2.5 B
20	3.6 B

Boring No. 4 — Station 192+42, Offset centerline — Ground Surface 728.0

Loose black organic top soil	725.5
Stiff gray mottled clay	721.0
Hard gray clay till	718.5
Very stiff gray clay till	715.0
Stiff gray clay till	708.5
Very stiff gray clay till	698.5
Stiff gray clay till	688.5
Very stiff gray clay till	678.5
Very stiff gray pebbly clay till	671.5

N	Qu t/s.f.
10	1.1 B
18	4.7 B
20	3.3 B
14	1.8 B
11	1.5
15	1.8 B
14	2.6 B
16	2.7 B
14	2.4 B
12	2.1 B
9	1.3 B
14	1.6 B
12	1.4 B
10	1.3 B
16	2.2 B
18	2.5 B
23	2.7 B
19	2.4 B
31	2.9 B
23	3.1 B
26	3.3 B

N – Standard Penetration Test – Blows per foot to drive 2" O.D. Split Spoon Sampler 12" with 140# hammer falling 30".

Qu – Unconfined Compressive Strength – t/sf
w – Water Content – percentage of oven dry weight – %.

Type failure:
B – Bulge Failure
S – Shear Failure
E – Estimated Value

DESIGNED J. B. Nolan
CHECKED Norman Roncancio
DRAWN J. H. R.
CHECKED G. R.

Sept 22 1962
EXAMINED W.E. Bauman — ENGINEER OF BRIDGE AND TRAFFIC STRUCTURES
PASSED — ENGINEER OF DESIGN
APPROVED R.R. Bartelsmeyer — CHIEF HIGHWAY ENGINEER

BORING DATA
S.B.I. ROUTE 53
SEC. 531-1-HB-8
COOK COUNTY
STATION 193+08.57

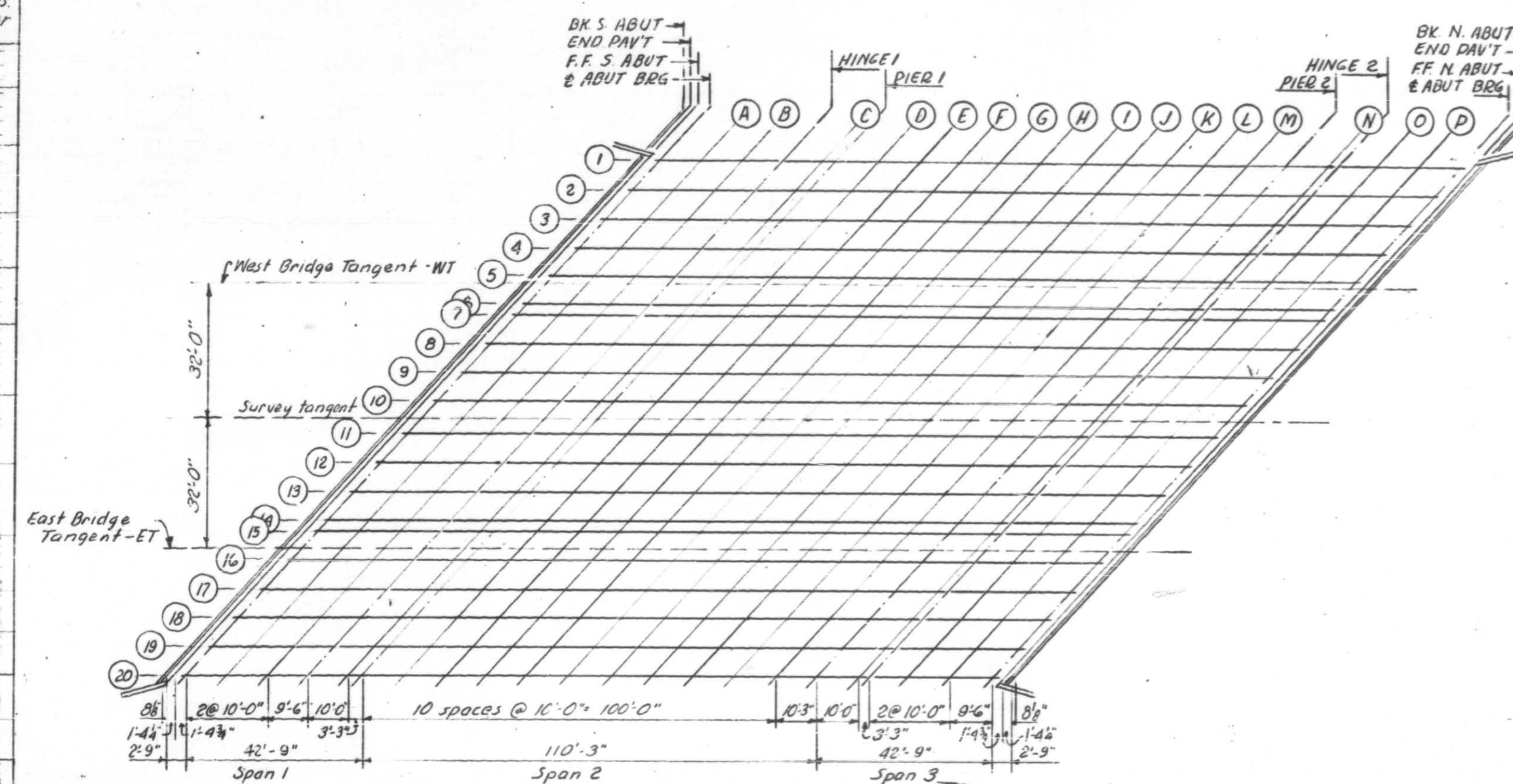
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S.B.I. 53 F.A. 61	531-1-HB-8	Cook	24	11
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

SHEET NO. 3
SHEETS 15

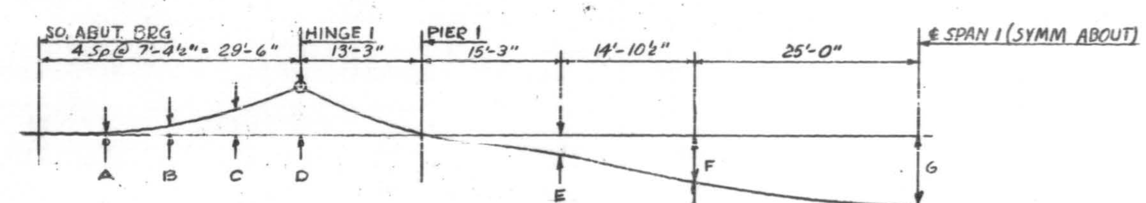
STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

Location	Gird.	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevs adjusted for D.L. Defl.
End Pav't	10	19211.242	27.710	750.948	750.948
	1	19264.713 -	29.161	752.076	752.076
F.F. S. Abut	10	19212.599	27.731	750.948	750.948
	1	19266.058 -	29.152	752.075	752.075
℄ Abut Brg	10	19213.990	27.754	750.949	750.949
	1	19267.435 -	29.142	752.073	752.073
A	10	19223.981	27.903	750.949	750.933
	1	19277.334 -	29.082	752.062	752.046
B	10	19233.974	28.035	750.946	750.907
	1	19287.233 -	29.038	752.048	752.009
Hinge 1	10	19243.467	28.146	750.942	750.872
	1	19296.637 -	29.011	752.033	751.963
C	10	19253.460	28.246	750.936	750.918
	1	19306.537 -	29.000	752.016	751.998
Pier 1	10	19256.708	28.275	750.933	750.933
	1	19309.754 -	29.000	752.010	752.010
D	10	19266.702	28.353	750.924	750.936
	1	19319.653 -	29.010	751.989	752.001
E	10	19276.695	28.415	750.913	750.945
	1	19329.553 -	29.037	751.967	751.999
F	10	19286.689	28.460	750.899	750.963
	1	19339.452 -	29.080	751.942	752.006
G	10	19296.683	28.488	750.883	750.961
	1	19349.351 -	29.140	751.915	751.993
H	10	19306.678	28.499	750.866	750.957
	1	19359.249 -	29.216	751.886	751.978
I	10	19316.672	28.494	750.846	750.937
	1	19369.148 -	29.308	751.855	751.947
J	10	19326.666	28.472	750.823	750.902
	1	19379.046 -	29.418	751.822	751.901
K	10	19336.660	28.434	750.799	750.864
	1	19388.944 -	29.543	751.787	751.852
L	10	19346.654	28.379	750.773	750.806
	1	19398.841 -	29.686	751.750	751.784
M	10	19356.647	28.307	750.744	750.756
	1	19408.738 -	29.844	751.711	751.723
Pier 2	10	19366.891	28.216	750.713	750.713
	1	19418.882 -	30.024	751.668	751.668
N	10	19376.884	28.110	750.680	750.627
	1	19428.778 -	30.216	751.625	751.571
Hinge 2	10	19380.131	28.072	750.669	750.598
	1	19431.994 -	30.282	751.610	751.539
O	10	19390.124	27.945	750.633	750.594
	1	19441.888 -	30.496	751.564	751.525
P	10	19400.116	27.801	750.595	750.580
	1	19451.782 -	30.726	751.515	751.501
℄ Abut Brg.	10	19409.608	27.648	750.557	750.557
	1	19461.181 -	30.961	751.467	751.467
F.F. N. Abut.	10	19410.998	27.625	750.551	750.551
	1	19462.557 -	30.996	751.460	751.460
End Pav't	10	19412.356	27.601	750.546	750.546
	1	19463.902 -	31.031	751.453	751.453

Location	Gird.	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevs. adjusted for D.L. Defl.
End Pav't.	7	19230.421	7.488	751.357	751.357
	6	19233.062	4.689	751.413	751.413
F.F. S. Abut.	7	19231.774	7.506	751.357	751.357
	6	19234.414	4.706	751.413	751.413
℄ Abut. Brg.	7	19233.160	7.524	751.357	751.357
	6	19235.799	4.723	751.412	751.412
A	7	19243.118	7.641	751.352	751.347
	6	19245.753	4.836	751.408	751.402
B	7	19253.078	7.742	751.346	751.327
	6	19255.708	4.932	751.401	751.382
Hinge 1	7	19262.539	7.822	751.338	751.302
	6	19265.165	5.008	751.392	751.357
C	7	19272.499	7.891	751.328	751.319
	6	19275.120	5.073	751.381	751.372
Pier 1	7	19275.736	7.909	751.324	751.324
	6	19278.355	5.090	751.377	751.377
D	7	19285.696	7.956	751.310	751.317
	6	19288.311	5.132	751.363	751.370
E	7	19295.656	7.986	751.295	751.312
	6	19298.266	5.157	751.347	751.365
F	7	19305.616	7.999	751.278	751.311
	6	19308.222	5.166	751.329	751.362
G	7	19315.576	7.995	751.258	751.298
	6	19318.177	5.158	751.309	751.349
H	7	19325.536	7.975	751.236	751.283
	6	19328.132	5.134	751.287	751.334
I	7	19335.496	7.939	751.212	751.259
	6	19338.088	5.093	751.262	751.309
J	7	19345.456	7.886	751.186	751.226
	6	19348.043	5.036	751.236	751.276
K	7	19355.416	7.816	751.158	751.191
	6	19357.998	4.962	751.207	751.240
L	7	19365.375	7.730	751.127	751.145
	6	19367.952	4.871	751.176	751.194
M	7	19375.334	7.627	751.095	751.102
	6	19377.907	4.764	751.143	751.150
Pier 2	7	19385.542	7.504	751.060	751.060
	6	19388.110	4.637	751.107	751.107
N	7	19395.500	7.367	751.023	750.996
	6	19398.063	4.496	751.070	751.043
Hinge 2	7	19398.737	7.319	751.010	750.975
	6	19401.298	4.446	751.057	751.021
O	7	19408.694	7.161	750.971	750.953
	6	19411.251	4.284	751.017	750.999
P	7	19418.651	6.985	750.929	750.924
	6	19421.203	4.104	750.975	750.970
℄ Abut. Brg.	7	19428.110	6.804	750.887	750.887
	6	19430.657	3.918	750.933	750.933
F.F. N. Abut.	7	19429.495	6.776	750.881	750.881
	6	19432.042	3.890	750.926	750.926
End Pav't.	7	19430.848	6.748	750.875	750.875
	6	19433.394	3.862	750.920	750.920



PLAN



GIRDERS	A	B	C	D	E	F	G
1 10 11 20	1/8"	5/16"	9/16	7/8"	1/4"	3/4"	1 3/16"
2 thru 5 8 9 12 13 15 thru 20	1/16"	1/8"	5/16"	1/2"	1/8"	1/2"	3/4"
6 7 14 15	1/16"	1/8"	1/4"	7/16"	1/8"	7/16"	5/8"

DEAD LOAD DEFLECTION DIAGRAM
Includes weight of concrete only

Note: The above deflections are not for use in the field if the Engineer is working from the theoretical Grade Elevations adjusted for Dead Load Deflection.

DESIGNED J. B. Nolan
CHECKED German Rosauro
DRAWN J.B.N.
CHECKED G.R.

SEPT 22 1962
EXAMINED W E Baumann
ENGINEER OF BRIDGE AND TRAFFIC STRUCTURES
PASSED
ENGINEER OF DESIGN
APPROVED R.R. Bartelsmeyer
CHIEF HIGHWAY ENGINEER

DECK ELEVATIONS
S.B.I. ROUTE 53
SEC. 531-1-HB-8
COOK COUNTY
STATION 193+08.57

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

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S.B.I. 53 F.A. 61	531-1-HB-8	Cook	27	12
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

SHEET NO. 4
SHEETS 15

Location	Gird.	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevs. adjusted for D.L. Defl.
End Pav't.	9	19217.649	20.976	751.085	751.085
	8	19224.042	14.236	751.222	751.222
	WT	19237.871 -	.418	751.515	751.515
	5	19239.420 -	2.067	751.548	751.548
	4	19245.765 -	8.830	751.681	751.681
	3	19252.095 -	15.601	751.813	751.813
	2	19258.411 -	22.378	751.945	751.945
F.F. S. Abut.	9	19219.005	20.997	751.086	751.086
	8	19225.397	14.255	751.222	751.222
	WT	19239.222 -	.402	751.514	751.514
	5	19240.771 -	2.051	751.547	751.547
	4	19247.114 -	8.816	751.680	751.680
	3	19253.443 -	15.588	751.813	751.813
	2	19259.757 -	22.366	751.944	751.944
℄ Abut. Brg.	9	19220.394	21.017	751.085	751.085
	8	19226.784	14.274	751.221	751.221
	WT	19240.606 -	.386	751.514	751.514
	5	19242.155 -	2.036	751.546	751.546
	4	19248.496 -	8.802	751.679	751.679
	3	19254.823 -	15.575	751.811	751.811
	2	19261.136 -	22.355	751.943	751.943
A	9	19230.375	21.156	751.084	751.077
	8	19236.754	14.402	751.219	751.212
	WT	19250.552 -	.281	751.508	751.501
	5	19252.098 -	1.933	751.540	751.533
	4	19258.428 -	8.710	751.672	751.665
	3	19264.744 -	15.494	751.803	751.796
	2	19271.046 -	22.284	751.933	751.926
B	9	19240.356	21.278	751.080	751.057
	8	19246.724	14.513	751.214	751.190
	WT	19260.498 -	.193	751.500	751.476
	5	19262.041 -	1.848	751.532	751.508
	4	19268.360 -	8.635	751.662	751.639
	3	19274.665 -	15.429	751.792	751.768
	2	19280.956 -	22.230	751.920	751.897
Hinge 1	9	19249.839	21.378	751.075	751.030
	8	19256.196	14.604	751.207	751.162
	WT	19269.947 -	.124	751.491	751.446
	5	19271.488 -	1.781	751.522	751.478
	4	19277.796 -	8.579	751.651	751.607
	3	19284.091 -	15.383	751.779	751.735
	2	19290.371 -	22.194	751.907	751.862
C	9	19259.821	21.468	751.067	751.056
	8	19266.167	14.683	751.198	751.187
	WT	19279.893 -	.068	751.479	751.468
	5	19281.432 -	1.728	751.510	751.499
	4	19287.729 -	8.536	751.638	751.627
	3	19294.012 -	15.351	751.764	751.753
	2	19300.262 -	22.172	751.891	751.880
Pier 1	9	19263.065	21.493	751.064	751.064
	8	19269.407	14.705	751.194	751.194
	WT	19283.126 -	.054	751.474	751.474
	5	19284.663 -	1.714	751.505	751.505
	4	19290.957 -	8.526	751.633	751.633
	3	19297.237 -	15.344	751.759	751.759
	2	19303.502 -	22.168	751.885	751.885
D	9	19273.047	21.561	751.054	751.062
	8	19279.379	14.762	751.183	751.190
	WT	19293.073 -	.020	751.459	751.467
	5	19294.608 -	1.682	751.490	751.498
	4	19300.890 -	8.504	751.616	751.624
	3	19307.159 -	15.333	751.741	751.749
	2	19313.413 -	22.168	751.866	751.874

Location	Gird.	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevs. adjusted for D.L. Defl.
E	9	19283.030	21.612	751.041	751.062
	8	19289.350	14.802	751.168	751.190
	WT	19303.020 -	.002	751.442	751.464
	5	19304.552 -	1.667	751.473	751.494
	4	19310.823 -	8.500	751.598	751.619
	3	19317.080 -	15.339	751.721	751.743
	2	19323.323 -	22.184	751.844	751.866
F	9	19293.012	21.646	751.026	751.067
	8	19299.321	14.826	751.152	751.194
	WT	19312.967 -	.001	751.423	751.465
	5	19314.496 -	1.669	751.453	751.495
	4	19320.756 -	8.512	751.577	751.618
	3	19327.002 -	15.361	751.699	751.741
	2	19333.234 -	22.217	751.821	751.862
G	9	19302.995	21.664	751.009	751.059
	8	19309.293	14.833	751.134	751.184
	WT	19322.914 -	.017	751.402	751.452
	5	19324.440 -	1.687	751.432	751.482
	4	19330.689 -	8.541	751.554	751.604
	3	19336.924 -	15.400	751.675	751.725
	2	19343.144 -	22.267	751.796	751.846
H	9	19312.978	21.665	750.990	751.049
	8	19319.264	14.823	751.113	751.172
	WT	19332.861 -	.049	751.379	751.437
	5	19334.384 -	1.722	751.408	751.467
	4	19340.622 -	8.586	751.529	751.588
	3	19346.845 -	15.456	751.649	751.708
	2	19353.054 -	22.332	751.768	751.827
I	9	19322.961	21.649	750.969	751.028
	8	19329.236	14.797	751.091	751.150
	WT	19342.807 -	.098	751.353	751.412
	5	19344.328 -	1.773	751.382	751.441
	4	19350.554 -	8.647	751.502	751.561
	3	19356.766 -	15.528	751.621	751.680
	2	19362.964 -	22.415	751.738	751.797
J	9	19332.944	21.617	750.945	750.995
	8	19339.207	14.754	751.066	751.116
	WT	19352.754 -	.163	751.326	751.376
	5	19354.272 -	1.841	751.354	751.405
	4	19360.487 -	8.726	751.473	751.523
	3	19366.687 -	15.616	751.590	751.640
	2	19372.874 -	22.514	751.707	751.757
K	9	19342.926	21.568	750.920	750.961
	8	19349.178	14.695	751.039	751.081
	WT	19362.700 -	.245	751.296	751.338
	5	19364.215 -	1.926	751.324	751.366
	4	19370.419 -	8.820	751.441	751.483
	3	19376.608 -	15.722	751.557	751.599
	2	19382.783 -	22.629	751.673	751.714
L	9	19352.908	21.502	750.892	750.914
	8	19359.149	14.619	751.010	751.032
	WT	19372.646 -	.343	751.264	751.286
	5	19374.159 -	2.027	751.292	751.314
	4	19380.350 -	8.932	751.408	751.430
	3	19386.528 -	15.843	751.523	751.545
	2	19392.692 -	22.761	751.637	751.659
M	9	19362.891	21.420	750.862	750.870
	8	19369.120	14.526	750.979	750.987
	WT	19382.592 -	.458	751.230	751.238
	5	19384.101 -	2.144	751.258	751.266
	4	19390.282 -	9.060	751.372	751.381
	3	19396.448 -	15.981	751.486	751.494
	2	19402.600 -	22.910	751.599	751.607
Pier 2	9	19373.122	21.318	750.829	750.829
	8	19379.339	14.414	750.945	750.945
	WT	19392.786 -	.594	751.193	751.193
	5	19394.292 -	2.282	751.221	751.221
	4	19400.461 -	9.208	751.334	751.334
	3	19406.615 -	16.140	751.446	751.446
	2	19412.756 -	23.079	751.557	751.557

Location	Gird.	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevs. adjusted for D.L. Defl.
N	9	19383.103	21.202	750.795	750.761
	8	19389.309	14.288	750.909	750.876
	WT	19402.730 -	.742	751.155	751.121
	5	19404.234 -	2.433	751.182	751.149
	4	19410.391 -	9.369	751.294	751.260
	3	19416.534 -	16.312	751.405	751.371
	2	19422.663 -	23.261	751.515	751.482
Hinge 2	9	19386.347	21.161	750.783	750.739
	8	19392.549	14.243	750.897	750.853
	WT	19405.962 -	.794	751.142	751.097
	5	19407.465 -	2.486	751.169	751.125
	4	19413.619 -	9.425	751.280	751.236
	3	19419.758 -	16.371	751.391	751.347
	2	19425.883 -	23.323	751.501	751.456
O	9	19396.328	21.023	750.746	750.724
	8	19402.518	14.095	750.859	750.836
	WT	19415.906 -	.965	751.101	751.078
	5	19417.406 -	2.659	751.128	751.105
	4	19423.548 -	9.609	751.238	751.215
	3	19429.676 -	16.565	751.347	751.325
	2	19435.789 -	23.527	751.456	751.433
P	9	19406.309	20.869	750.707	750.701
	8	19412.487	13.930	750.818	750.812
	WT	19425.850 -	1.152	751.058	751.051
	5	19427.347 -	2.849	751.084	751.078
	4	19433.477 -	9.809	751.193	751.187
	3	19439.593 -	16.775	751.301	751.295
	2	19445.695 -	23.748	751.408	751.402
℄ Abut. Brg.	9	19415.790	20.706	750.668	750.668
	8	19421.957	13.758	750.778	750.778
	WT	19435.295 -	1.345	751.015	751.015
	5	19436.790 -	3.044	751.041	751.041
	4	19442.909 -	10.014	751.149	751.149
	3	19449.014 -	16.990	751.255	751.255
	2	19455.104 -	23.972	751.362	751.362
F.F. N. Abut.	9	19417.178	20.681	750.662	750.662
	8	19423.344	13.732	750.772	750.772
	WT	19436.679 -	1.375	751.008	751.008
	5	19438.173 -	3.074	751.034	751.034
	4	19444.290 -	10.045	751.142	751.142
	3	19450.393 -	17.023	751.249	751.249
	2	19456.482 -	24.006	751.355	751.355
End Pav't.	9	19418.534	20.657	750.656	750.656
	8	19424.698	13.706	750.766	750.766
	WT	19438.030 -	1.404	751.002	751.002
	5	19439.523 -	3.103	751.028	751.028
	4	19445.639 -	10.076	751.135	751.135
	3	19451.741 -	17.055	751.242	751.242
	2	19457.828 -	24.040	751.348	751.348
End Pav't.	20	19149.250	27.739	750.870	750.870
	11	19203.879 -	28.579	752.070	752.070
F.F. S. Abut.	20	19150.622	27.775	750.872	750.872
	11	19205.238 -	28.555	752.070	752.070
℄ Abut. Brg.	20	19152.027	27.811	750.874	750.874
	11	19206.630 -	28.532	752.071	752.071
A	20	19162.124	28.064	750.887	750.872
	11	19216.635 -	28.370	752.072	752.057
B	20	19172.223	28.299	750.899	750.859
	11	19226.640 -	28.225	752.071	752.032

Location	Gird.	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevs. adjusted for D.L. Defl.
Hinge 1	20	19181.817	28.507	750.907	750.837
	11	19236.145 -	28.103	752.069	751.998
C	20	19191.917	28.710	750.914	750.897
	11	19246.151 -	27.991	752.064	752.047
Pier 1	20	19195.200	28.773	750.916	750.916
	11	19249.403 -	27.958	752.062	752.062
D	20	19205.301	28.953	750.920	750.932
	11	19259.410 -	27.867	752.054	752.066
E	20	19215.402	29.117	750.922	750.955
	11	19269.416 -	27.794	752.044	752.077
F	20	19225.504	29.264	750.922	750.985
	11	19279.423 -	27.737	752.032	752.096
G	20	19235.606	29.394	750.919	750.997
	11	19289.430 -	27.697	752.018	752.096
H	20	19245.709	29.507	750.914	751.006
	11	19299.438 -	27.673	752.002	752.093
I	20	19255.812	29.603	750.907	750.999
	11	19309.445 -	27.666	751.984	752.075
J	20	19265.916	29.683	750.898	750.976
	11	19319.452 -	27.676	751.963	752.041
K	20	19276.020	29.745	750.887	750.951
	11	19329.459 -	27.703	751.940	752.005
L	20	19286.123	29.791	750.873	750.907
	11	19339.466 -	27.746	751.915	751.949
M	20	19296.228	29.820	750.857	750.870
	11	19349.473 -	27.806	751.888	751.900
Pier 2	20	19306.584	29.832	750.839	750.839
	11	19359.730 -	27.884	751.858	751.858
N	20	19316.688	29.827	750.819	750.766
	11	19369.736 -	27.978	751.827	751.774
Hinge 2	20	19319.972	29.822	750.812	750.741
	11	19372.988 -	28.012	751.816	751.746
O	20	19330.076	29.795	750.789	750.750
	11	19382.994 -	28.127	751.782	751.743
P	20	19340.180	29.750	750.763	750.749
	11	19393.000 -	28.260	751.745	751.731
℄ Abut. Brg.	20	19349.779	29.693	750.737	750.737
	11	19402.504 -	28.401	751.709	751.709
F.F. N. Abut.	20	19351.184	29.683	750.733	750.733
	11	19403.896 -	28.423	751.703	751.703
End Pav't.	20	19352.557	29.673	750.729	750.729
	11	19405.256 -	28.445	751.698	751.698

DESIGNED	F. B. Nelson
CHECKED	German Roucancic
DRAWN	F.B.N.
CHECKED	G.R.

SEPT 22 1962

EXAMINED W.E. Baumann
ENGINEER OF BRIDGE AND TRAFFIC STRUCTURES

PASSED [illegible]
ENGINEER OF DESIGN

APPROVED [illegible]
CHIEF HIGHWAY ENGINEER

DECK ELEVATIONS

S.B.I. ROUTE 53
SEC. 531-1-HB-8
COOK COUNTY
STATION 193+08.57

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

Route No.	Section	County	Total Sheets	Sheet No.
S.B.I. 53 F.A. 61	531-1-HB-8	Cook	27	13
Fed. Road Dist. No. 7		Illinois	Fed. Aid Project-	

SHEET NO. 5
SHEETS 15

Location	Gird.	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevs. adjusted for D.L. Defl.
End Pav't.	ET	19177.722 -	1.419	751.501	751.501
	15	19181.835 -	5.665	751.591	751.591
	14	19184.521 -	8.443	751.650	751.650
F.F. S. Abut.		19179.088 -	1.389	751.502	751.502
	15	19183.199 -	5.637	751.592	751.592
	14	19185.885 -	8.415	751.651	751.651
℄ Abut. Brg.	ET	19180.486 -	1.360	751.503	751.503
	15	19184.596 -	5.608	751.593	751.593
	14	19187.281 -	8.387	751.651	751.651
A	ET	19190.535 -	1.155	751.510	751.505
	15	19194.639 -	5.410	751.599	751.594
	14	19197.319 -	8.193	751.657	751.652
B	ET	19200.585 -	.966	751.515	751.496
	15	19204.682 -	5.228	751.603	751.584
	14	19207.357 -	8.016	751.661	751.642
Hinge 1	ET	19210.133 -	.803	751.518	751.482
	15	19214.223 -	5.071	751.605	751.570
	14	19216.894 -	7.864	751.662	751.626
C	ET	19220.185 -	.647	751.519	751.510
	15	19224.267 -	4.922	751.605	751.596
	14	19226.934 -	7.719	751.661	751.653
Pier 1	ET	19223.451 -	.600	751.519	751.518
	15	19227.532 -	4.878	751.605	751.605
	14	19230.197 -	7.676	751.661	751.661
D	ET	19233.503 -	.467	751.516	751.523
	15	19237.576 -	4.751	751.602	751.608
	14	19240.237 -	7.554	751.657	751.664
E	ET	19243.555 -	.350	751.512	751.529
	15	19247.622 -	4.641	751.596	751.614
	14	19250.277 -	7.448	751.651	751.669
F	ET	19253.608 -	.250	751.506	751.539
	15	19257.667 -	4.548	751.589	751.622
	14	19260.318 -	7.359	751.643	751.677
G	ET	19263.661 -	.167	751.497	751.537
	15	19267.713 -	4.471	751.580	751.620
	14	19270.359 -	7.287	751.633	751.674
H	ET	19273.714 -	.100	751.486	751.533
	15	19277.759 -	4.412	751.568	751.615
	14	19280.400 -	7.232	751.621	751.668
I	ET	19283.767 -	.050	751.473	751.520
	15	19287.805 -	4.369	751.554	751.601
	14	19290.442 -	7.193	751.607	751.654
J	ET	19293.821 -	.018	751.458	751.498
	15	19297.851 -	4.342	751.538	751.578
	14	19300.483 -	7.172	751.590	751.630
K	ET	19303.875 -	.001	751.441	751.474
	15	19307.897 -	4.333	751.520	751.553
	14	19310.525 -	7.166	751.571	751.605
L	ET	19313.928 -	.002	751.421	751.439
	15	19317.944 -	4.340	751.500	751.517
	14	19320.566 -	7.178	751.551	751.568
M	ET	19323.982 -	.019	751.400	751.406
	15	19327.990 -	4.364	751.477	751.484
	14	19330.608 -	7.206	751.527	751.534

Location	Gird.	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevs. adjusted for D.L. Defl.
Pier 2	ET	19334.287 -	.054	751.375	751.375
	15	19338.287 -	4.406	751.452	751.452
	14	19340.900 -	7.253	751.502	751.502
N	ET	19344.340 -	.106	751.349	751.322
	15	19348.333 -	4.464	751.425	751.398
	14	19350.941 -	7.315	751.474	751.447
Hinge 2	ET	19347.607 -	.126	751.340	751.304
	15	19351.598 -	4.486	751.416	751.380
	14	19354.204 -	7.339	751.465	751.429
O	ET	19357.660 -	.199	751.311	751.293
	15	19361.644 -	4.566	751.386	751.368
	14	19364.245 -	7.423	751.434	751.416
P	ET	19367.713 -	.289	751.280	751.275
	15	19371.689 -	4.663	751.354	751.349
	14	19374.286 -	7.525	751.402	751.397
℄ Abut. Brg.	ET	19377.263 -	.391	751.248	751.248
	15	19381.232 -	4.771	751.321	751.321
	14	19383.824 -	7.636	751.369	751.369
F.F. N. Abut.	ET	19378.661 -	.407	751.244	751.244
	15	19382.629 -	4.788	751.316	751.316
	14	19385.221 -	7.654	751.364	751.364
End Pav't.	ET	19380.027 -	.423	751.239	751.239
	15	19383.994 -	4.805	751.312	751.312
	14	19386.585 -	7.671	751.359	751.359
End Pav't.	19	19155.796	21.072	751.016	751.016
	18	19162.328	14.398	751.161	751.161
	17	19168.845	7.717	751.305	751.305
	16	19175.347	1.029	751.449	751.449
	ET	19177.722 -	1.419	751.501	751.501
	13	19190.988 -	15.148	751.791	751.791
	12	19197.441 -	21.860	751.931	751.931
F.F. S. Abut.	19	19157.167	21.106	751.018	751.018
	18	19163.697	14.431	751.163	751.163
	17	19170.212	7.748	751.307	751.307
	16	19176.713	1.059	751.450	751.450
	ET	19179.088 -	1.389	751.502	751.502
	13	19192.350 -	15.122	751.791	751.791
	12	19198.802 -	21.835	751.931	751.931
℄ Abut. Brg.	19	19158.570	21.141	751.020	751.020
	18	19165.098	14.464	751.164	751.164
	17	19171.612	7.780	751.308	751.308
	16	19178.112	1.089	751.451	751.451
	ET	19180.486 -	1.360	751.503	751.503
	13	19193.745 -	15.095	751.792	751.792
	12	19200.195 -	21.810	751.932	751.932
A	19	19168.656	21.383	751.032	751.025
	18	19175.174	14.695	751.175	751.168
	17	19181.677	8.000	751.317	751.311
	16	19188.165	1.298	751.459	751.452
	ET	19190.535 -	1.155	751.510	751.504
	13	19203.772 -	14.912	751.796	751.790
	12	19210.211 -	21.638	751.935	751.928
B	19	19178.744	21.608	751.041	751.018
	18	19185.250	14.909	751.183	751.160
	17	19191.742	8.203	751.324	751.301
	16	19198.219	1.490	751.464	751.441
	ET	19200.585 -	.966	751.515	751.492
	13	19213.799 -	14.746	751.799	751.775
	12	19220.227 -	21.482	751.935	751.912

Location	Gird.	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevs. adjusted for D.L. Defl.
Hinge 1	19	19188.328	21.805	751.049	751.004
	18	19194.823	15.097	751.189	751.145
	17	19201.305	8.360	751.329	751.284
	16	19207.771	1.658	751.467	751.423
	ET	19210.133 -	.803	751.516	751.473
	13	19223.326 -	14.603	751.799	751.754
	12	19229.743 -	21.350	751.934	751.890
C	19	19198.416	21.997	751.054	751.043
	18	19204.901	15.278	751.193	751.182
	17	19211.371	8.551	751.331	751.321
	16	19217.826	1.817	751.469	751.458
	ET	19220.185 -	.647	751.519	751.508
	13	19233.354 -	14.470	751.796	751.785
	12	19239.760 -	21.227	751.931	751.920
Pier 1	19	19201.695	22.056	751.056	751.056
	18	19208.176	15.333	751.194	751.194
	17	19214.643	8.603	751.332	751.332
	16	19221.095	1.865	751.469	751.469
	ET	19223.451 -	.600	751.519	751.518
	13	19236.613 -	14.430	751.795	751.795
	12	19243.015 -	21.190	751.929	751.929
D	19	19211.785	22.226	751.058	751.066
	18	19218.255	15.492	751.195	751.203
	17	19224.710	8.751	751.332	751.340
	16	19231.150	2.003	751.467	751.475
	ET	19233.503 -	.467	751.516	751.524
	13	19246.642 -	14.318	751.790	751.798
	12	19253.033 -	21.089	751.923	751.931
E	19	19221.875	22.379	751.059	751.080
	18	19228.334	15.634	751.194	751.216
	17	19234.778	8.882	751.329	751.351
	16	19241.207	2.124	751.463	751.485
	ET	19243.555 -	.350	751.512	751.534
	13	19256.671 -	14.223	751.783	751.805
	12	19263.051 -	21.005	751.914	751.936
F	19	19231.966	22.515	751.057	751.098
	18	19238.413	15.759	751.191	751.233
	17	19244.846	8.997	751.325	751.366
	16	19251.264	2.227	751.457	751.499
	ET	19253.608 -	.250	751.506	751.547
	13	19266.701 -	14.145	751.774	751.815
	12	19273.069 -	20.938	751.904	751.945
G	19	19242.057	22.634	751.053	751.103
	18	19248.493	15.868	751.186	751.236
	17	19254.914	9.095	751.318	751.368
	16	19261.321	2.315	751.449	751.499
	ET	19263.661 -	.167	751.497	751.547
	13	19276.730 -	14.084	751.763	751.813
	12	19283.088 -	20.887	751.891	751.941
H	19	19252.148	22.737	751.047	751.105
	18	19258.573	15.960	751.178	751.237
	17	19264.983	9.176	751.309	751.368
	16	19271.378	2.385	751.439	751.498
	ET	19273.714 -	.100	751.486	751.545
	13	19286.760 -	14.039	751.749	751.808
	12	19293.106 -	20.853	751.876	751.935
I	19	19262.240	22.822	751.038	751.097
	18	19268.653	16.034	751.169	751.228
	17	19275.052	9.240	751.298	751.357
	16	19281.436	2.438	751.426	751.485
	ET	19283.767 -	.050	751.473	751.532
	13	19296.790 -	14.011	751.733	751.792
	12	19303.125 -	20.835	751.859	751.918
J	19	19272.332	22.891	751.028	751.078
	18	19278.734	16.093	751.157	751.207
	17	19285.121	9.287	751.285	751.335
	16	19291.493	2.475	751.412	751.462
	ET	19293.821 -	.018	751.458	751.508
	13	19306.920 -	14.000	751.715	751.766
	12	19313.143 -	20.835	751.840	751.890
K	19	19282.424	22.943	751.015	751.057
	18	19288.814	16.134	751.143	751.184
	17	19295.190	9.318	751.269	751.311
	16	19301.551	2.495	751.395	751.437
	ET	19303.875 -	.001	751.441	751.482
	13	19316.851 -	14.005	751.695	751.737
	12	19323.162 -	20.851	751.818	751.860

Location	Gird.	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevs. adjusted for D.L. Defl.
L	19	19292.517	22.978	751.000	751.022
	18	19298.895	16.158	751.126	751.148
	17	19305.259	9.332	751.252	751.274
	16	19311.609	2.499	751.376	751.398
	ET	19313.928 -	.002	751.421	751.443
	13	19326.881 -	14.027	751.673	751.695
	12	19333.181 -	20.883	751.795	751.817
M	19	19302.609	22.997	750.983	750.991
	18	19308.976	16.166	751.108	751.116
	17	19315.329	9.329	751.232	751.240
	16	19321.667	2.485	751.355	751.363
	ET	19323.982 -	.019	751.400	751.408
	13	19336.911 -	14.066	751.649	751.657
	12	19343.199 -	20.933	751.769	751.777
Pier 2	19	19312.954	22.990	750.963	750.963
	18	19319.309	16.157	751.087	751.087
	17	19325.650	9.309	751.209	751.209
	16	19331.976	2.454	751.331	751.331
	ET	19334.287 -	.054	751.375	751.375
	13	19347.191 -	14.123	751.621	751.621
	12	19353.463 -	21.000	751.740	751.740
N	19	19323.047	22.982	750.942	750.908
	18	19329.390	16.130	751.064	751.030
	17	19335.719	9.272	751.185	751.151
	16	19342.033	2.407	751.305	751.272
	ET	19344.340 -	.106	751.349	751.315
	13	19357.221 -	14.196	751.592	751.559
	12	19363.486 -	21.084	751.710	751.676
Hinge 2	19	19326.327	22.973	750.934	750.890
	18	19332.666	16.118	751.056	751.011
	17	19338.992	9.256	751.176	751.132
	16	19345.302	2.388	751.296	751.252
	ET	19347.607 -	.126	751.340	751.296
	13	19360.480 -	14.223	751.583	751.538
	12	19366.741 -	21.114	751.700	751.655
O	19	19336.419	22.935	750.910	750.887
	18	19342.747	16.070	751.030	751.007
	17	19349.061	9.197	751.149	751.127
	16	19355.359	2.318	751.268	751.245
	ET	19357.660 -	.199	751.311	751.289
	13	19370.509 -	14.318	751.551	751.528
	12	19376.759 -	21.220	751.667	751.644
P	19	19346.511	22.881	750.883	750.877
	18	19352.827	16.004	751.002	750.996
	17	19359.129	9.121	751.120	751.114
	16	19365.417	2.232	751.237	751.231
	ET	19367.713 -	.289	751.280	751.274
	13	19380.538 -	14.430	751.517	751.511
	12	19386.776 -	21.342	751.632	751.626
℄ Abut. Brg.	19	19356.099	22.813	750.856	750.856
	18	19362.404	15.927	750.973	750.973
	17	19368.694	9.034	751.090	751.090
	16	19374.970	2.134	751.206	751.206
	ET	19377.263 -	.391	751.248	751.248
	13	19390.065 -	14.551	751.483	751.483
	12	19396.292 -	21.473	751.596	751.596
F.F. N. Abut.	19	19357.503	22.802	750.852	750.852
	18	19363.806	15.914	750.969	750.969
	17	19370.095	9.020	751.086	751.086
	16	19376.370	2.119	751.201	751.201
	ET	19378.661 -	.407	751.244	751.244
	13	19391.460 -	14.570	751.478	751.478
	12	19397.685 -	21.493	751.591	751.591
End Pav't.	19	19358.874	22.791	750.847	750.847
	18	19365.176	15.901	750.965	750.965
	17	19371.463	9.005	751.081	751.081
	16	19377.736	2.103	751.197	751.197
	ET	19380.027 -	.423	751.239	751.239
	13	19392.823 -	14.589	751.473	751.473
	12	19399.046 -	21.514	751.586	751.586

DESIGNED	J. B. M.
CHECKED	Norman Roncancio
DRAWN	J.B.M.
CHECKED	G.R.

Sept 22 1962

EXAMINED W.E. Baumann
ENGINEER OF BRIDGE AND TRAFFIC STRUCTURES

PASSED
ENGINEER OF DESIGN

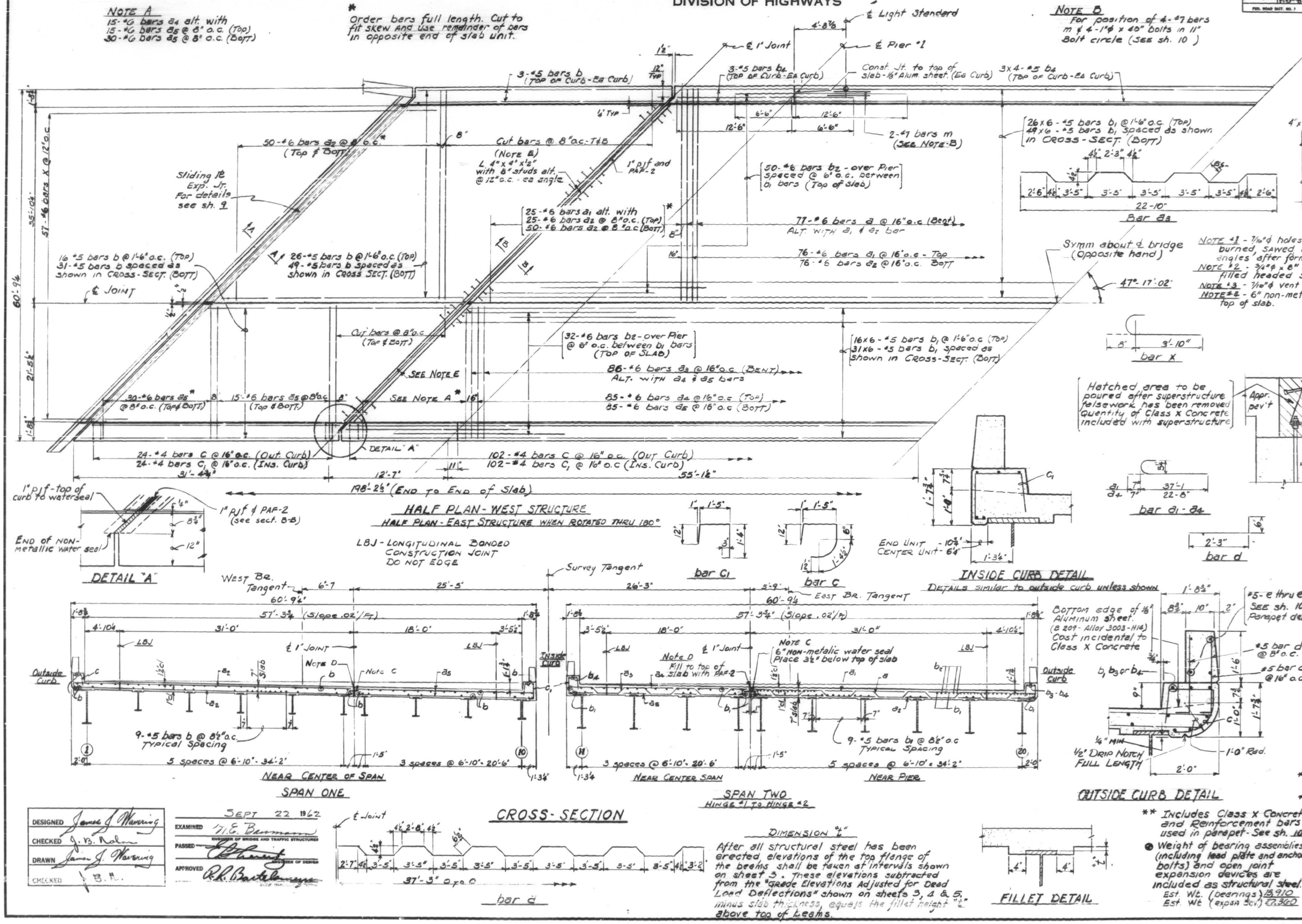
APPROVED
CHIEF HIGHWAY ENGINEER

DECK ELEVATIONS
S.B.I. ROUTE 53
SEC. 531-1-HB-8
COOK COUNTY
STATION 193+08.57

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

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S.B.I. 53 F.A. 61	531-1-HB-8	COOK	27	14

SHEET NO. 6
SHEETS 15



BILL OF MATERIAL - ONE BRIDGE

BAR	NO	SIZE	LENGTH	SHAPE
a	77	#6	38-11	
a1	101	#6	37-8	
a2	351	#6	36'-10"	
a3	86	#6	23'-10"	
a4	100	#6	23'-3"	
a5	310	#6	22'-6"	
b	256	#5	31'-0"	
b1	732	#5	23'-6"	
b2	164	#5	19'-0"	
b3	12	#5	12'-3"	
b4	24	#5	28'-3"	
x	114	#6	4-6	
c	150	#4	4'-5"	
c1	150	#4	4'-0"	
d	894	#5	2'-9"	
m	8	#7	5'-0"	
** Reinforcement Bars			Lbs.	82,890
● Structural Steel			Lbs.	502,830
** Class X Concrete			Cu. Yd.	337.8

** Includes Class X Concrete and Reinforcement bars used in parapet - See sh. 10

● Weight of bearing assemblies (including lead plate and anchor bolts) and open joint expansion devices are included as structural steel.
Est. Wt. (bearings) 13,910
Est. Wt. (expan. dev.) 27,360

DESIGNED James J. Warring
CHECKED J. B. Nolan
DRAWN James J. Warring
CHECKED J. B. H.

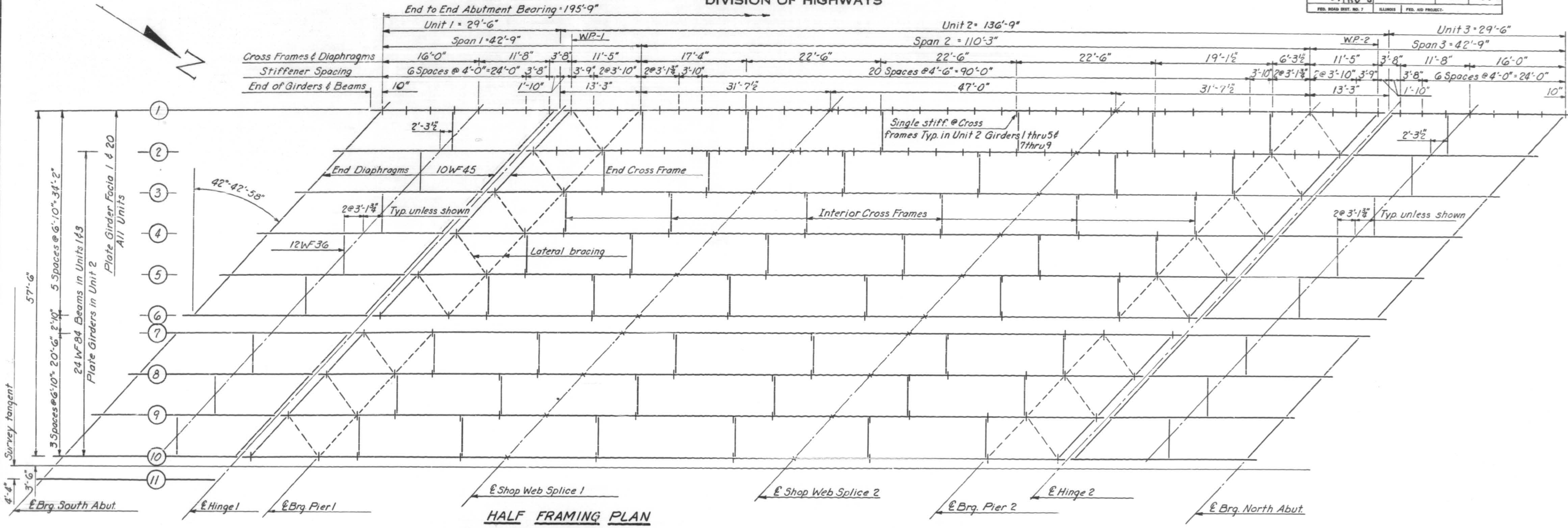
SEPT 22 1962
EXAMINED M. E. Baumann
PASSED
APPROVED R. R. Bartelsmeyer

SUPERSTRUCTURE
S.B.I. ROUTE 53
SEC. 531-1-H(B,F)-8
COOK COUNTY
STATION 193+08.57

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

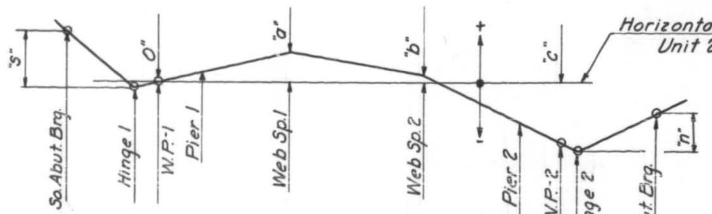
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S.B.I. 53 F.A. 61	531-1 HB-8	Cook	27	15
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

SHEET NO. 7
15 SHEETS



HALF FRAMING PLAN

(West Structure shown - East Structure layout symm. by rotation except as shown)



FABRICATION DIAGRAM

(Girder ordinates are to top of web)

Girders & Beams	"s"	"a"	"b"	"c"	"n"
1 thru 6	2"	+¾"	-1¼"	-4¾"	0"
7 thru 10	2"	+¾"	-¼"	-3¾"	½"
11 thru 14	1¼"	+¾"	0"	-3½"	1"
15 thru 20	1¼"	+1¼"	+1¼"	-2¼"	1¾"

TOP OF FLANGE ELEVATIONS *

Beam or Girder	UNIT 1		UNIT 2						UNIT 3	
	Brg. S. Abut.	Hinge 1	W.P. 1	Pier 1	Web Sp. 1	Web Sp. 2	Pier 2	W.P. 2	Hinge 2	Brg. N. Abut.
1	751.449	751.282	751.285	751.301	751.441	751.274	750.965	750.888	750.876	750.876
2	751.324	751.157	751.160	751.176	751.305	751.138	750.840	750.763	750.751	750.751
3	751.199	751.032	751.035	751.051	751.180	751.013	750.715	750.638	750.626	750.626
4	751.074	750.907	750.910	750.926	751.055	750.888	750.590	750.513	750.501	750.501
5	750.949	750.782	750.785	750.801	750.930	750.763	750.465	750.388	750.376	750.376
6	750.824	750.657	750.660	750.676	750.805	750.638	750.340	750.263	750.251	750.251
7	750.740	750.573	750.576	750.592	750.721	750.638	750.340	750.263	750.251	750.293
8	750.615	750.448	750.451	750.467	750.596	750.513	750.215	750.138	750.126	750.168
9	750.490	750.323	750.326	750.342	750.471	750.388	750.090	750.013	750.001	750.043
10	750.365	750.198	750.201	750.217	750.357	750.274	749.965	749.888	749.876	749.918
11	751.429	751.325	751.328	751.344	751.484	751.422	751.113	751.036	751.024	751.108
12	751.304	751.200	751.203	751.219	751.348	751.286	750.988	750.911	750.899	750.983
13	751.179	751.075	751.078	751.094	751.223	751.161	750.863	750.786	750.774	750.858
14	751.054	750.950	750.953	750.969	751.098	751.036	750.738	750.661	750.649	750.733
15	750.892	750.788	750.792	750.820	750.979	750.979	750.681	750.604	750.592	750.738
16	750.767	750.663	750.667	750.695	750.854	750.854	750.556	750.479	750.467	750.613
17	750.642	750.538	750.542	750.570	750.729	750.729	750.431	750.354	750.342	750.488
18	750.517	750.413	750.417	750.445	750.604	750.604	750.306	750.229	750.217	750.363
19	750.392	750.288	750.292	750.320	750.479	750.479	750.181	750.104	750.092	750.238
20	750.267	750.163	750.167	750.195	750.365	750.365	750.056	749.979	749.967	750.113

*Elevations shown are before deflection

For Girder Elevation and Fabrication Details see sheet #8

DESIGNED J. B. Nalany
CHECKED Gilman Paraurcis
DRAWN W.E. Dickerson
CHECKED G.R.

SEPT 22 1962

EXAMINED W.E. Burmann
ENGINEER OF BRIDGE AND TRAFFIC STRUCTURES
PASSED E. Schmidt
ENGINEER OF DESIGN
APPROVED R.R. Bartelsmeyer
CHIEF HIGHWAY ENGINEER

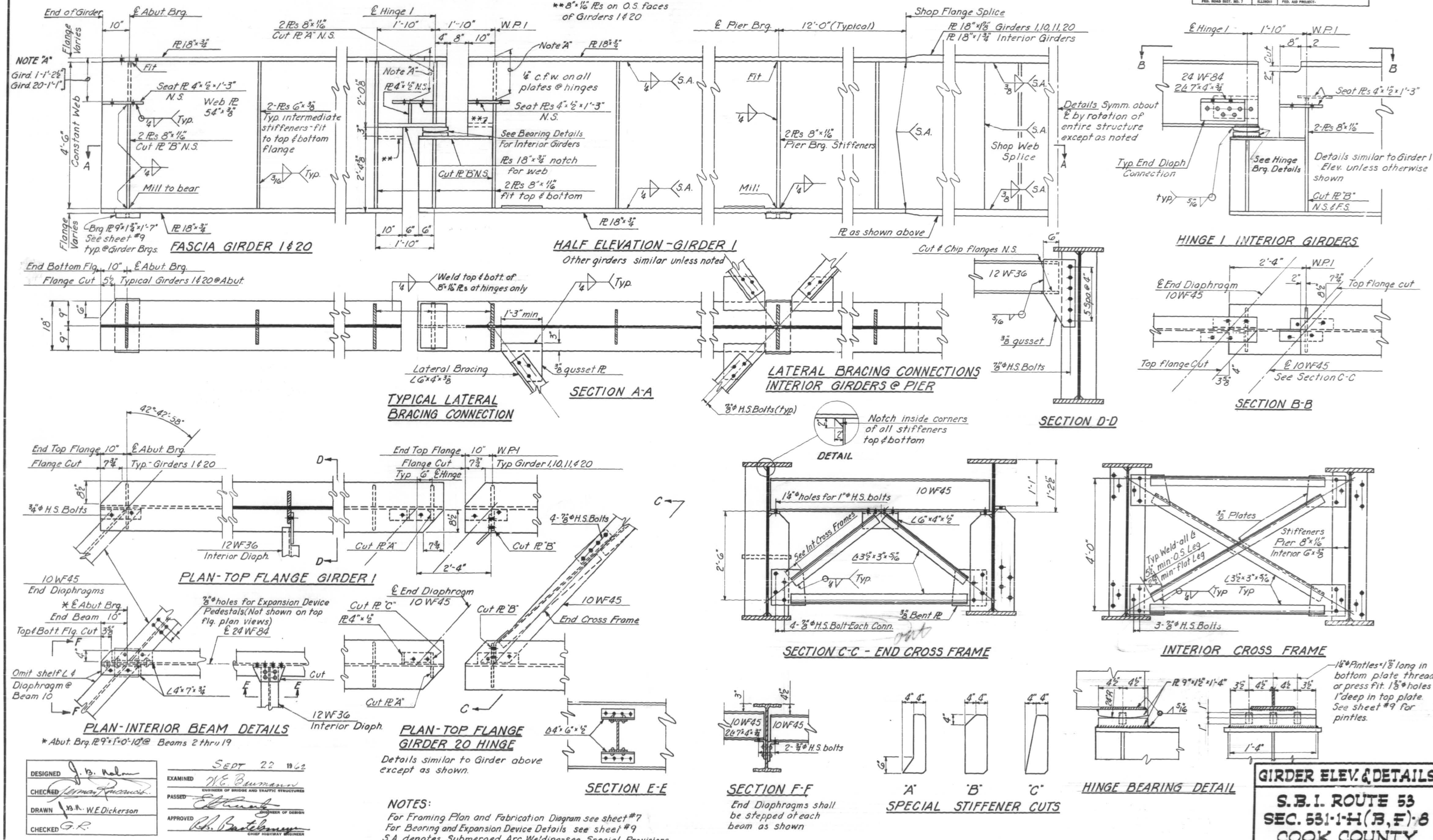
FRAMING PLAN

S.B.I. ROUTE 53
SEC. 531-1-H(B,F)-8
COOK COUNTY
STATION 193+08.57

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

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S.B.I. 53 / F.A. 61	531-1 / H.B-8	Cook	27	16

SHEET NO. 8
15 SHEETS



NOTES:
For Framing Plan and Fabrication Diagram see sheet #7
For Bearing and Expansion Device Details see sheet #9
S.A. denotes Submerged Arc Welding-see Special Provisions

SEPT 22 1962

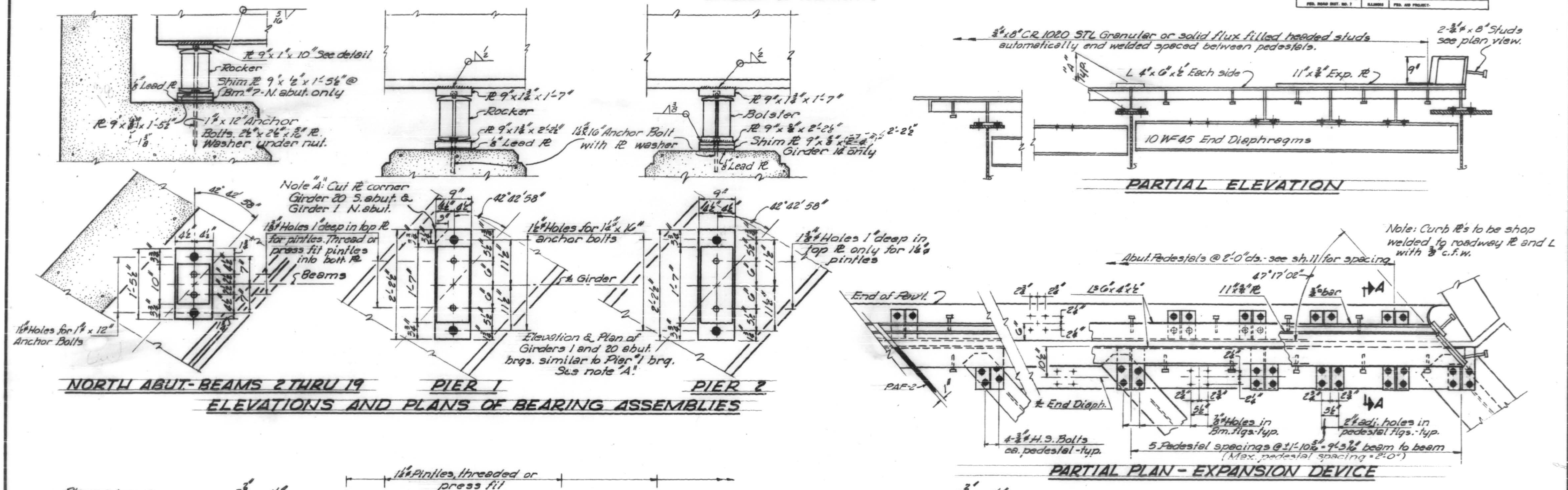
DESIGNED	J. B. Nolan
CHECKED	[signature]
DRAWN	W.E. Dickerson
CHECKED	G.R.
EXAMINED	W.E. Baumann, ENGINEER OF BRIDGE AND TRAFFIC STRUCTURES
PASSED	[signature], ENGINEER OF DESIGN
APPROVED	R.R. Bartelsmeyer, CHIEF HIGHWAY ENGINEER

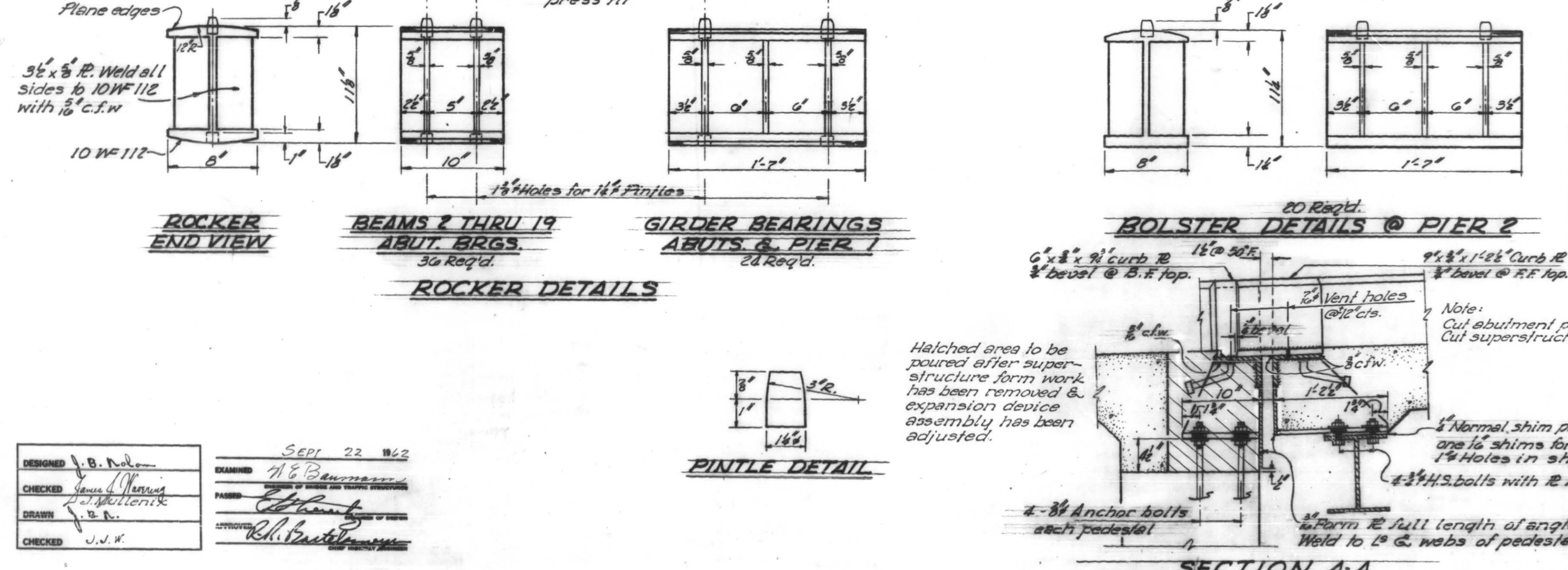
GIRDER ELEV. & DETAILS
S.B.I. ROUTE 53
SEC. 531-1-H(B,F)-8
COOK COUNTY
STATION 196 + 08.67

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

F.A.I. / F.A.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
53 / 61	531-1 HB-8	Cook	27	17

SHEET NO. 9
SHEETS 15





DIMENSIONS "A"

Beams/Girders	1	2	3	4	5	6	7	8	9	10
South Abut.	7½"	7 7/16"	7 5/16"	7¼"	7 3/16"	7 1/16"	7⅜"	7¼"	7⅛"	7"
North Abut.	7 1/16"	7 5/16"	7 9/16"	7¾"	8"	8 3/16"	7⅛"	7 5/16"	7½"	7 11/16"

Beams/Girders	11	12	13	14	15	16	17	18	19	20
South Abut.	7 11/16"	7 9/16"	7⅜"	7 3/16"	8 7/16"	8 3/16"	8"	7¾"	7 9/16"	7 5/16"
North Abut.	7 3/16"	7⅜"	7½"	7⅝"	7"	7⅛"	7¼"	7 5/16"	7 7/16"	7½"

DESIGNED	J. B. Nolan
CHECKED	James J. Manning / J. Mullenix
DRAWN	J. B. N.
CHECKED	J. J. W.

Sept 22 1962

EXAMINED: H. E. Baumann — Engineer of Bridge and Traffic Structures
PASSED: Engineer of Design
APPROVED: R. R. Bartelsmeyer — Chief Highway Engineer

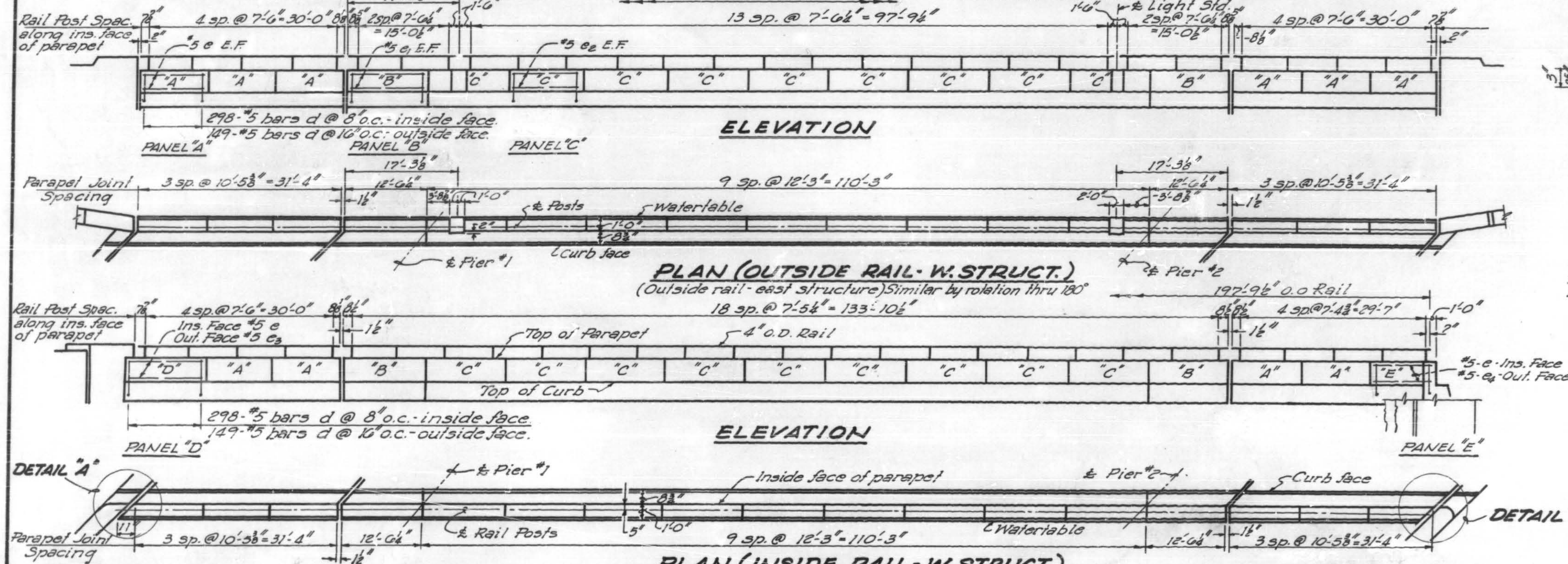
BEARING DETAILS
S.B.I. ROUTE 55
SEC. 531-1-H(B,F)-8
COOK COUNTY
STATION 195 + 08.57

Revised 1/22/62: In ELEVATIONS AND PLANS of BEARING ASSEMBLIES - NORTH ABUT - BEAMS 2 THRU 19 changed plate thickness (left of Anchor Bolt) from ⅜" to 1⅜" - Pier 2 changed shim plate length from 2'-4" to 2'-2½" W.S.
3/15/63: In SECTION A-A revised 3/16" Form plate on Abut. side by removing cross hatched portion below ½" dimension W.S.

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

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 53 / F.A. 61	531-1 HB-8	Cook	27	18

SHEET NO. 10
SHEETS 15

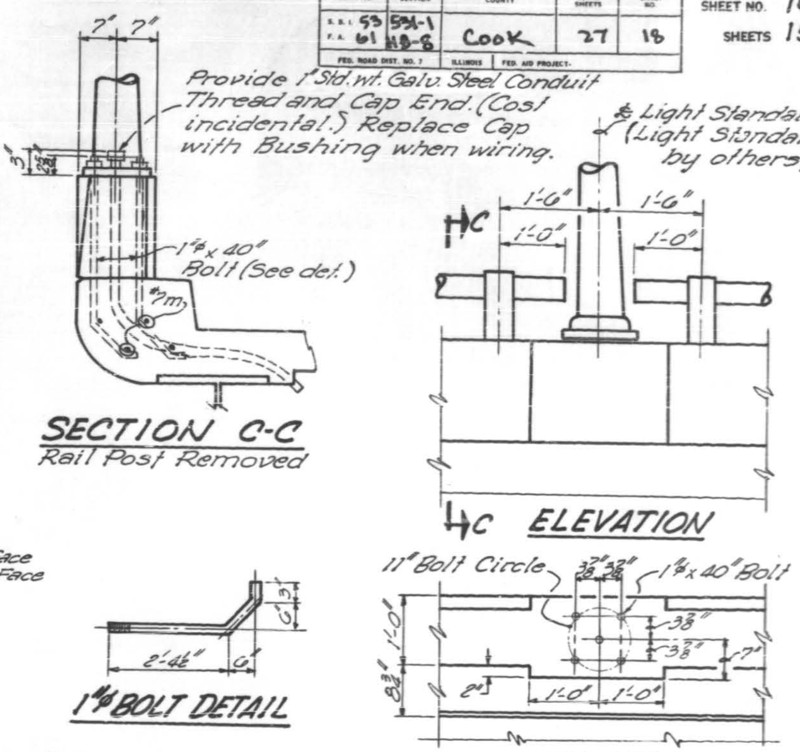


ELEVATION

PLAN (OUTSIDE RAIL - W. STRUCT.)
(Outside rail - east structure) Similar by rotation thru 180°

ELEVATION

PLAN (INSIDE RAIL - W. STRUCT.)
(Inside rail - east structure) similar by rotation thru 180°

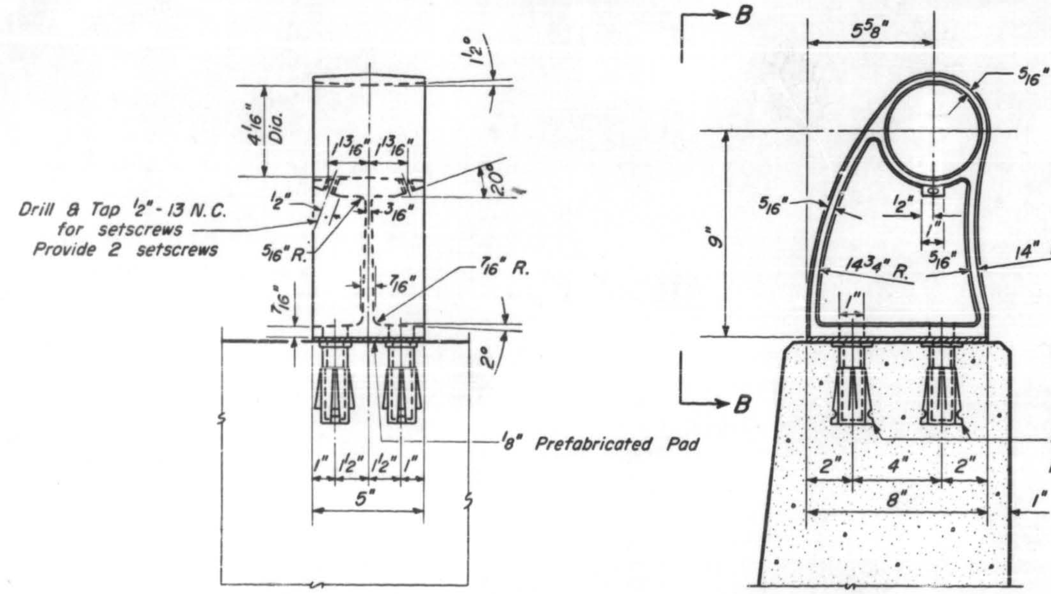


SECTION C-C
Rail Post Removed

ELEVATION

1¼" BOLT DETAIL

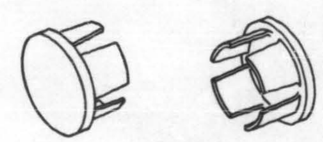
PLAN



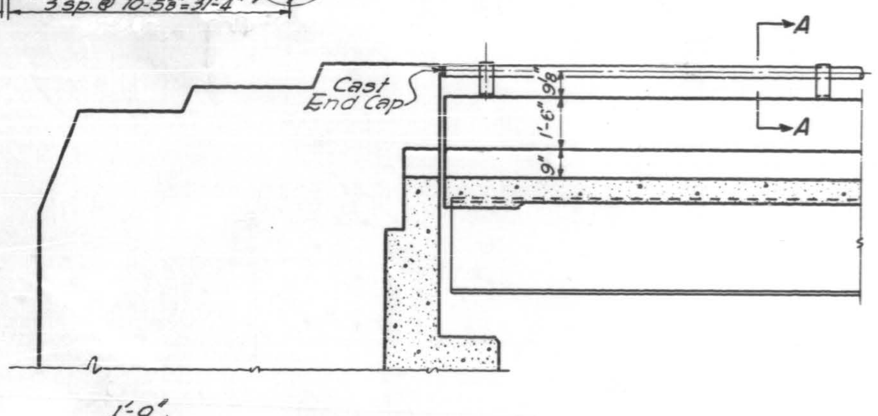
VIEW B-B

SECTION A-A

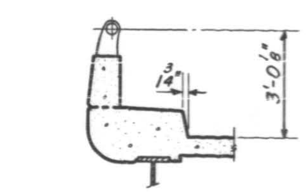
RAIL POST DETAILS



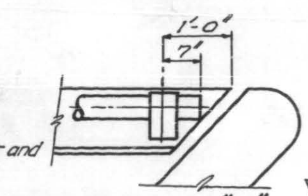
CAST END CAP
DRIVE FIT TYPE
32 - Required
Incidental to item "Aluminum Handrail"



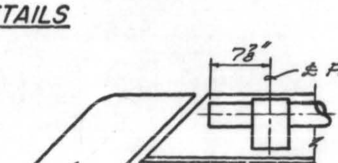
ELEVATION - END POST



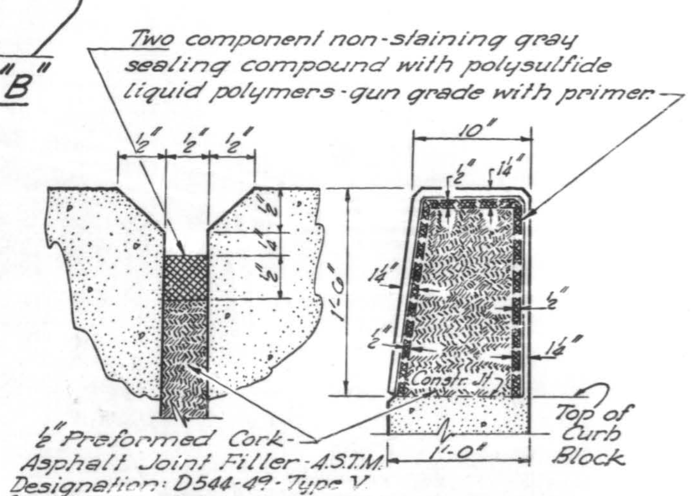
SEC. THRU CURB



DETAIL "B"



DETAIL "A"



PARAPET-TYPE HANDRAIL JOINT

ONE STRUCTURE BILL OF MATERIAL

Item	Unit	Quantity
Aluminum Handrail	Lin. Ft.	396

BAR LIST - ONE STRUCTURE

Bar	No.	Size	Length	Shape
e	44	#5	10'-3"	—
e_1	16	#5	12'-3"	—
e_2	72	#5	12'-0"	—
e_3	2	#5	11'-0"	—
e_4	2	#5	9'-6"	—

Quantities for Reinforcement Bars included in Superstructure Bill of Material Sh. #6.

NOTES
All Posts shall be placed normal to parapet
All Posts shall be of Aluminum conforming to ASTM Specification B-108 alloy SG-70B-T6.
All Rail Tubing shall be of Aluminum conforming to ASTM Specification B-235 alloy GS-11A-T6.

Rail Tubing may extend a maximum of 3 panel lengths.
For material composition of Prefabricated Pad, See Art. 54.9 (f), (Bearings and Anchorage), of the Std. Specs.
Set Screws shall be of Aluminum conforming to ASTM Specification B-211 alloy CG-42A-T4.

DESIGNED J. J. Warring
CHECKED J. B. Nelson / J.C.M.
DRAWN W. A. Sausaman
CHECKED J. B. R.

SEPT 22 1962
EXAMINED W. E. Beumann — ENGINEER OF BRIDGE AND TRAFFIC STRUCTURES
PASSED — ENGINEER OF DESIGN
APPROVED — CHIEF HIGHWAY ENGINEER

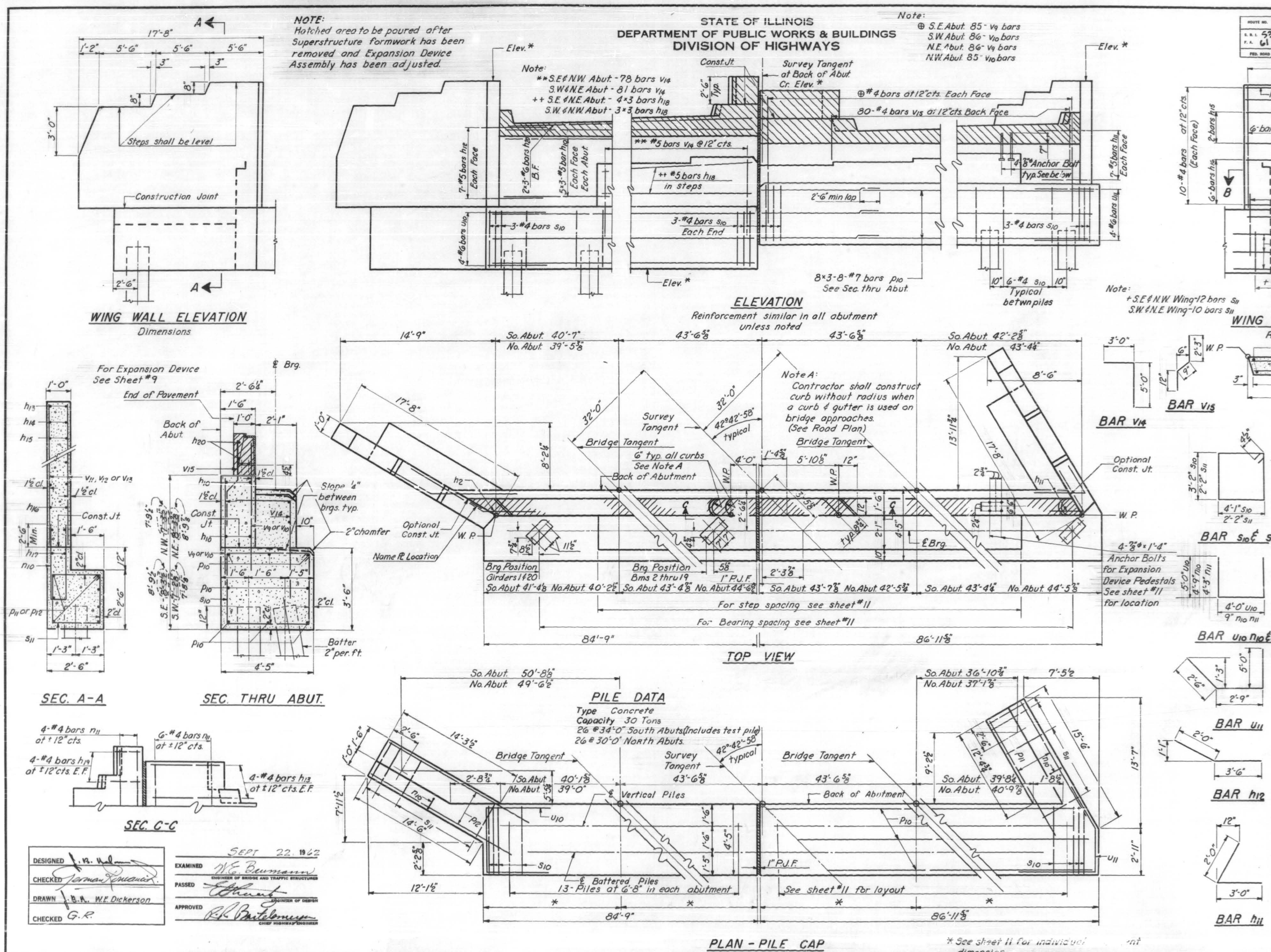
R-10 Drawn 2-16-60

PARAPET & HANDRAIL
S.B.I. ROUTE 53
SEC. 531-1-HB-8
COOK COUNTY
STATION 199+08.57

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

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S.B.I. 53 / F.A. 61	531-1 HB-8	Cook	27	20

SHEET NO. 12
15 SHEETS



TOTAL ABUTMENTS
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h10	120	#5	29'-0"	
h11	28	#5	5'-0"	
h12	28	#5	5'-6"	
h13	24	#4	5'-0"	
h14	8	#4	10'-6"	
h15	16	#4	16'-0"	
h16	48	#4	17'-3"	
h17	8	#4	15'-6"	
h18	42	#5	28'-0"	
h19	16	#4	3'-0"	
h20	24	#6	29'-9"	
n10	56	#6	10'-3"	
n11	20	#4	9'-3"	
p10	96	#7	30'-6"	
p11	14	#11	14'-0"	
p12	14	#11	17'-0"	
s10	312	#4	15'-3"	
s11	56	#4	9'-5"	
u10	8	#6	14'-0"	
u11	8	#6	10'-3"	
v9	342	#4	8'-3"	
v10	342	#4	7'-0"	
v11	48	#4	9'-9"	
v12	48	#4	9'-0"	
v13	48	#4	8'-3"	
v14	318	#4	8'-0"	
v15	320	#4	4'-0"	
Class X Concrete			Cu. Yds	392.0
Reinforcement Bars			Lbs.	27,210
Concrete Piles			Lin. Ft.	1630
Test Piles			Each	1
Name Plates			Each	2

DESIGNED	J. B. H.
CHECKED	Norman Romanick
DRAWN	J.B.H. W.E. Dickerson
CHECKED	G.R.

SEPT 22 1962
EXAMINED W.E. Baumann — ENGINEER OF BRIDGE AND TRAFFIC STRUCTURES
PASSED — ENGINEER OF DESIGN
APPROVED R.R. Bartelsmeyer — CHIEF HIGHWAY ENGINEER

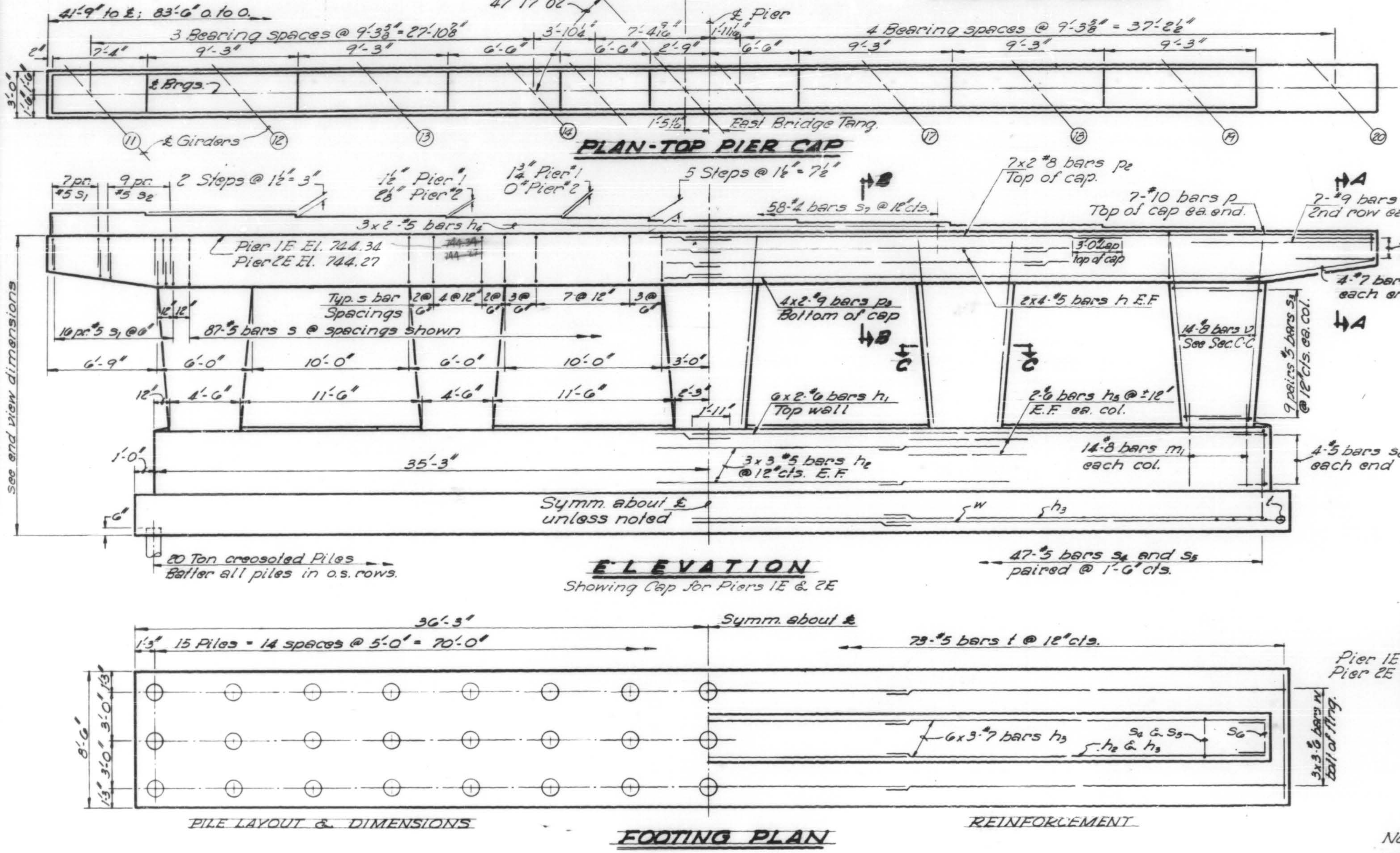
ABUTMENT DETAILS
S.B.I. ROUTE 53
SEC. 531-1-HB-8
COOK COUNTY
STATION 193 + 03.17

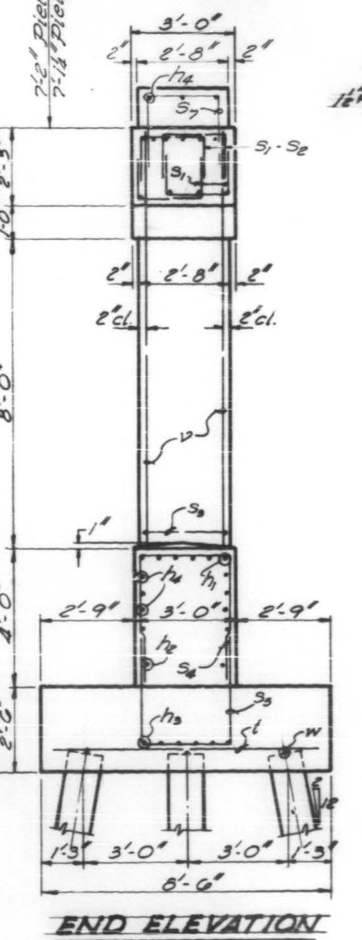
Revised 3/13/63: In SEC. THRU ABUT. changed dimensions from bottom ftg. to top parapet S.E. from 8'-3½" to 8'-9½", S.W. from 7'-2½" to 7'-4½", N.W. from 7'-5½" to 7'-8½", N.E. from 8'-5⅞" to 8'-9⅞" etc.

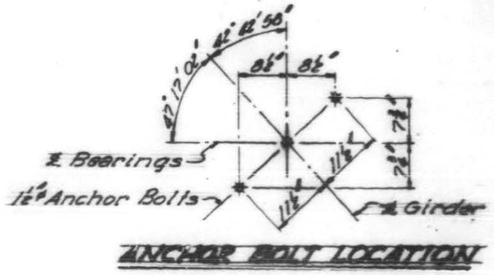
S.B.I. 53 F.A. 61	531-1-HB-8	Cook	27	21

SHEET NO. 13
SHEETS 15

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

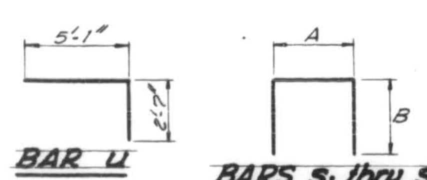






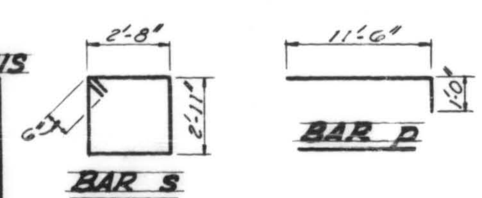
ONE PIER
PILE DATA

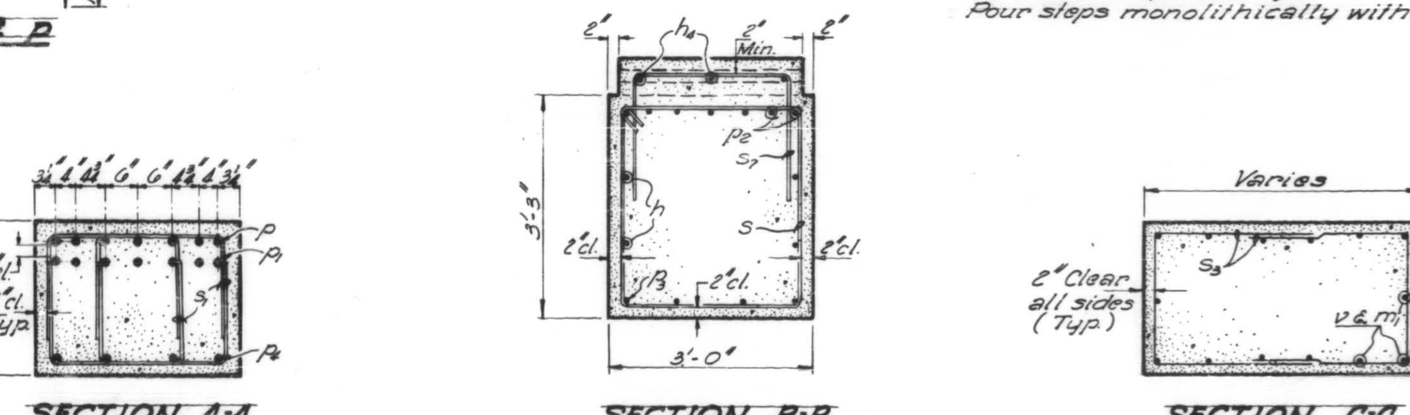
Type .... Creosoted
Capacity .... 20 Tons
Est. Length .... 36'-0"
No. Req'd 45



A & B DIMENSIONS

Bar	A	B
s_1	1'-10"	2'-0"
s_2	1'-10"	2'-6"
s_3	2'-4"	3'-4"
s_4	2'-8"	3'-9"
s_5	2'-8"	3'-6"
s_6	2'-7"	2'-1"
s_7	2'-4"	1'-9"





Note:
Space reinforcement in cap to miss anchor bolts.
Minimum bar laps = 20 diameters unless otherwise noted.
All edges shall have standard ¾" chamfers except footings.
Pour steps monolithically with cap.

BILL OF MATERIAL ONE PIER

Bar	No.	Size	Length	Shape
h	16	#5	21'-9"	——
h_1	12	#6	36'-0"	——
h_2	18	#5	24'-3"	——
h_3	18	#7	24'-6"	——
h_4	6	#5	29'-0"	——
h_8	20	#6	7'-0"	——
m_1	70	#8	5'-9"	——
p	14	#10	12'-6"	⌐
p_1	14	#9	11'-0"	——
p_2	14	#8	36'-9"	——
p_3	8	#9	36'-0"	——
p_4	8	#7	8'-6"	——
s	87	#5	12'-2"	□
s_1	92	#5	5'-10"	⊓
s_2	36	#5	6'-10"	⊓
s_3	90	#5	9'-0"	⊓
s_4	47	#5	10'-2"	⊓
s_5	47	#5	9'-8"	⊓
s_6	8	#5	6'-9"	⊓
s_7	58	#4	5'-10"	⊓
t	73	#5	8'-3"	——
u	6	#6	12'-9"	⊓
v	70	#8	10'-0"	——
w	9	#6	25'-0"	——
Class X Concrete			Cu. Yds.	142.5
Reinforcement Bars			Lbs.	14,500
Creosoted Piles			Lin. Ft.	1,620

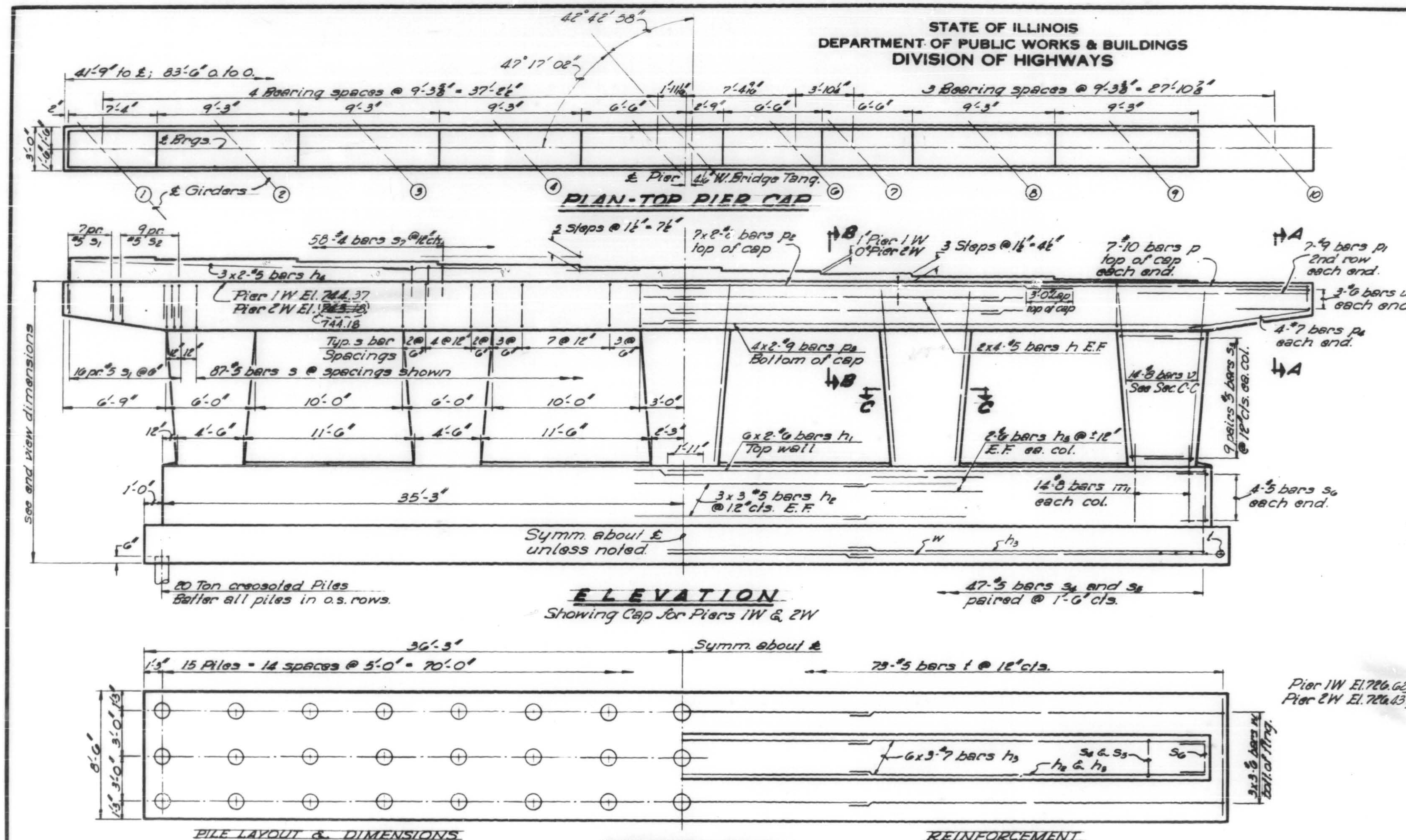
DESIGNED J. B. Nelson
CHECKED German Rasmussen
J. Mutterix
DRAWN J. B. R.
CHECKED G.R.

SEPT 22 1962
EXAMINED W. E. Baumann
PASSED
APPROVED R. R. Bartelsmeyer

PIERS 1E & 2E
S.B.I. ROUTE 53
SEC. 531-1-HB-8
COOK COUNTY
STATION 193+08.57

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

S.B.I. 53 / F.A. 61	531-1-HB-8	Cook	27	22	SHEET NO. 14 / SHEETS 15



PLAN - TOP PIER CAP

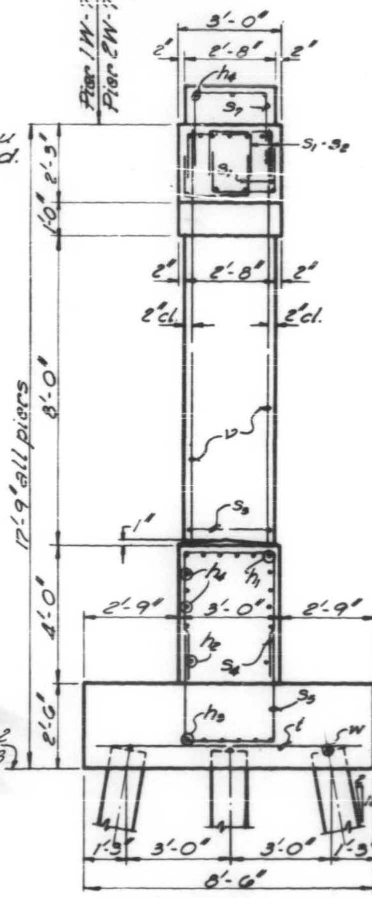
ELEVATION
Showing Cap for Piers 1W & 2W

PILE LAYOUT & DIMENSIONS

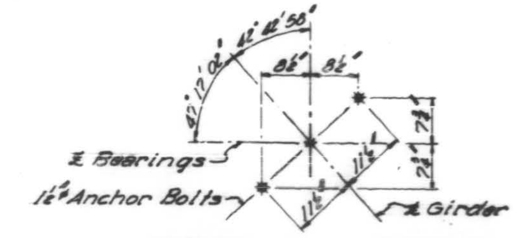
FOOTING PLAN

REINFORCEMENT

℄ Roadway and Pier
Pier 1W:
Sta. 192+82.97; El. 751.47
Pier 2W:
Sta. 193+92.16; El. 751.18



END ELEVATION



ANCHOR BOLT LOCATION

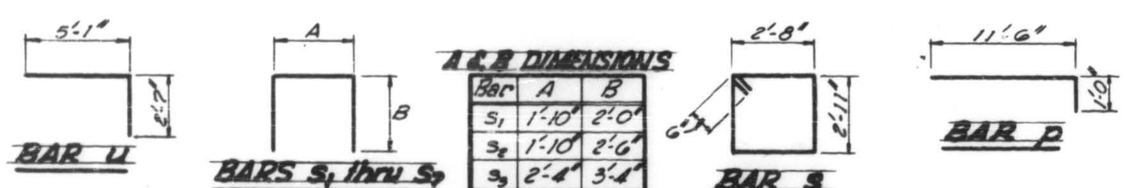
ONE PIER PILE DATA

Type	Creosoted
Capacity	20 Tons
Est. Length	36'-0"
No. Req'd.	45
Test Piles	1 (Pier 2W)

BILL OF MATERIAL ONE PIER

Bar	No.	Size	Length	Shape
h	16	#5	21'-9"	
h_1	12	#6	36'-0"	
h_2	18	#5	24'-3"	
h_3	18	#7	24'-6"	
h_4	6	#5	29'-0"	
h_5	20	#6	7'-0"	
m_1	70	#8	5'-9"	
p	14	#10	12'-6"	
p_1	14	#9	11'-0"	
p_2	14	#8	36'-9"	
p_3	8	#9	36'-0"	
p_4	8	#7	8'-6"	
s	87	#5	12'-2"	
s_1	92	#5	5'-10"	
s_2	36	#5	6'-10"	
s_3	90	#5	9'-0"	
s_4	47	#5	10'-2"	
s_5	47	#5	9'-8"	
s_6	8	#5	6'-9"	
s_7	58	#4	5'-10"	
t	73	#5	8'-3"	
u	6	#6	12'-9"	
v	70	#8	10'-0"	
w	9	#6	25'-0"	
Class X Concrete			Cu. Yds.	142.5
Reinforcement Bars			Lbs.	14,500
Creosoted Piles			Lin. Ft.	1,620
* Test Pile (Timber)			Each	1

* Pier 2W only



BAR u

BARS s_1 thru s_7

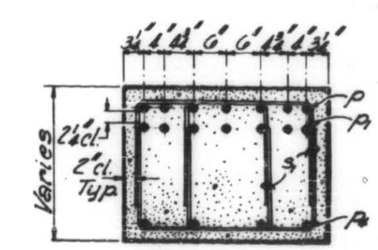
BAR s

BAR p

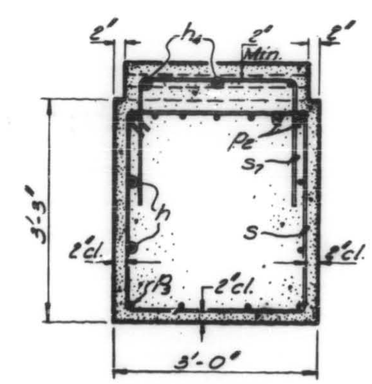
A & B DIMENSIONS

Bar	A	B
s_1	1'-10"	2'-0"
s_2	1'-10"	2'-6"
s_3	2'-4"	3'-4"
s_4	2'-8"	3'-9"
s_5	2'-8"	3'-6"
s_6	2'-7"	2'-1"
s_7	2'-4"	1'-9"

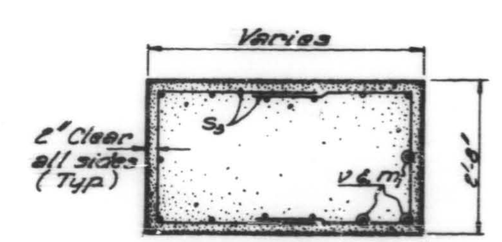
Note:
Space reinforcement in cap to miss anchor bolts.
Minimum bar laps = 20 diameters unless otherwise noted.
All edges shall have standard ¾" chamfers except footings.
Pour steps monolithically with cap.



SECTION A-A



SECTION B-B



SECTION C-C

DESIGNED	J. B. Nolan
CHECKED	Norman Romanchi
	J. Mullenix
DRAWN	J.B.N.
CHECKED	G.R.

SEPT 22 1962
EXAMINED: W. E. Baumann
PASSED: [signature]
APPROVED: R. R. Bartelsmeyer

PIERS 1W & 2W
S.B.I. ROUTE 53
SEC. 531-1-HB-8
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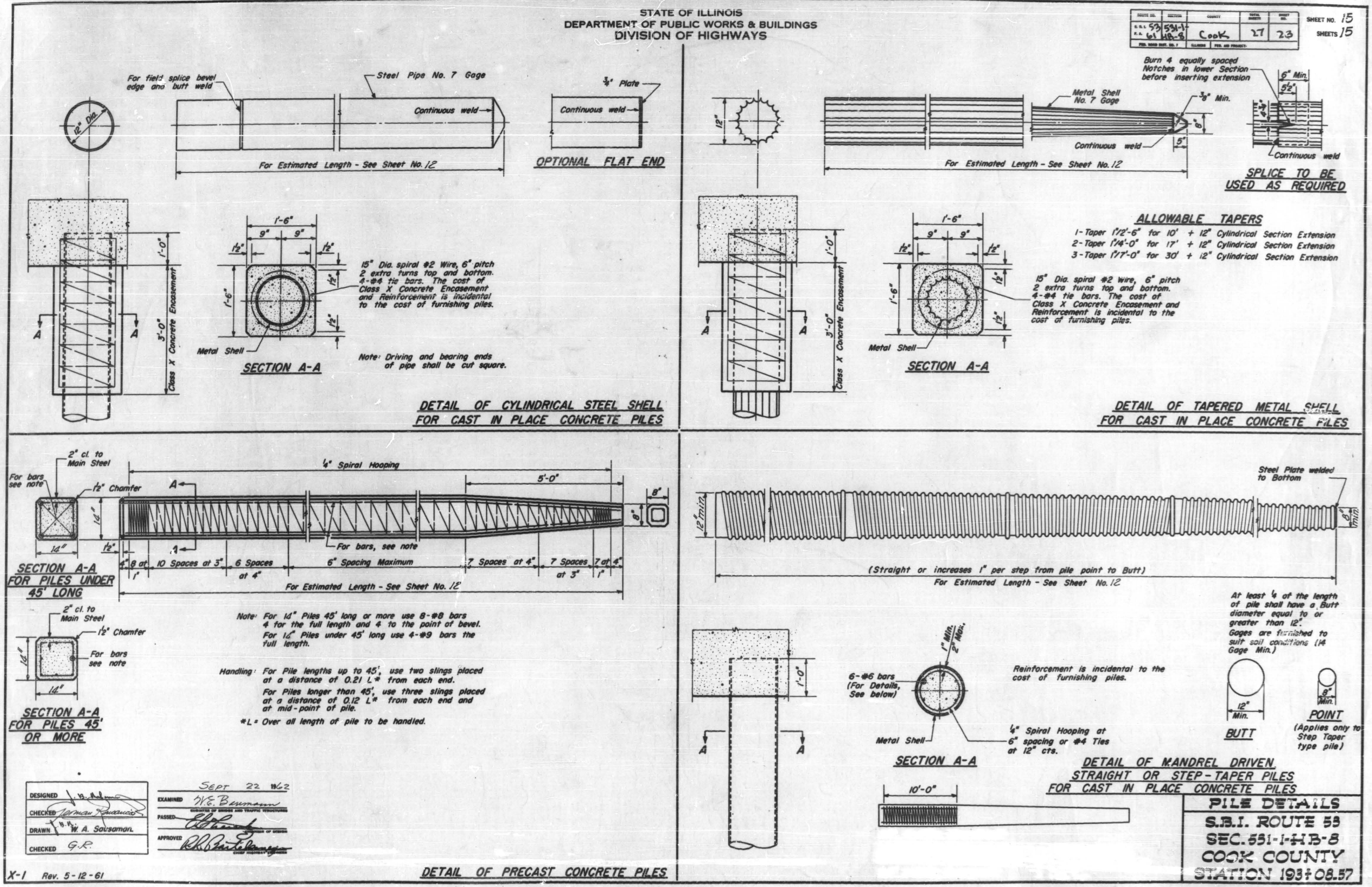
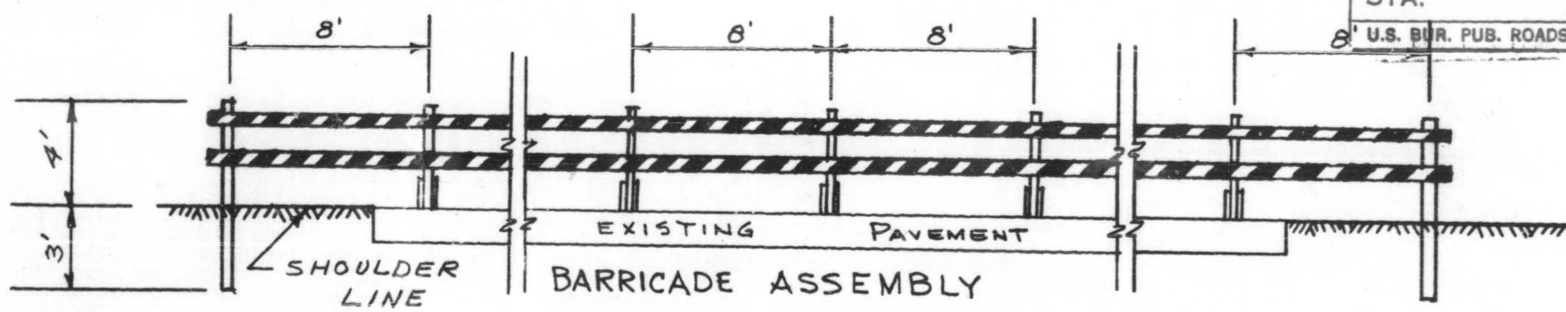
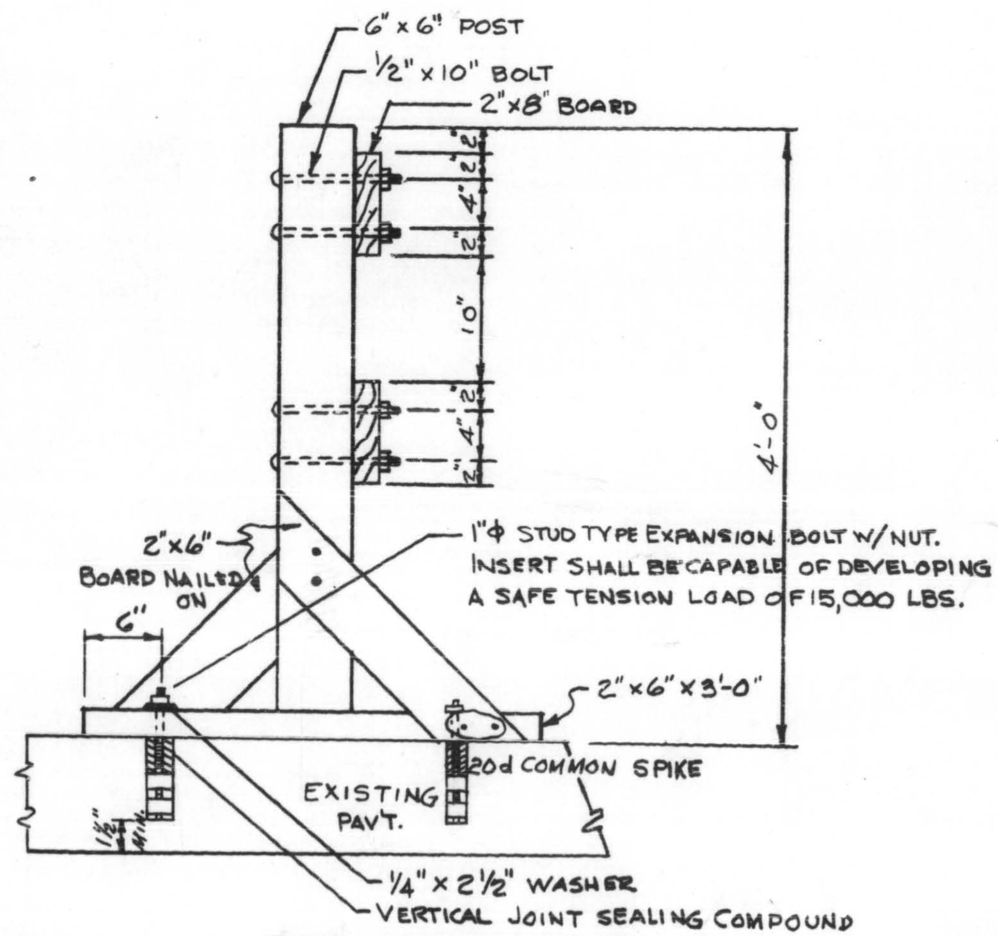
Revised 1/23/63: In ELEVATION changed top of cap elevation Pier 2W from 743.18 to 744.18. H.S.


STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS
S.B.I. 53 531-1-HB-8 Cook 27 23
SHEET NO. 15
SHEETS 15
For field splice bevel edge and butt weld
Steel Pipe No. 7 Gage
12" Dia.
Continuous weld
For Estimated Length - See Sheet No. 12
3/4" Plate
Continuous weld
OPTIONAL FLAT END
1'-6"
9" 9"
1 1/2" 1 1/2"
1'-0"
3'-0" Class X Concrete Encasement
15" Dia. spiral #2 Wire, 6" pitch 2 extra turns top and bottom. 4-#4 tie bars. The cost of Class X Concrete Encasement and Reinforcement is incidental to the cost of furnishing piles.
Metal Shell
SECTION A-A
Note: Driving and bearing ends of pipe shall be cut square.
DETAIL OF CYLINDRICAL STEEL SHELL FOR CAST IN PLACE CONCRETE PILES
Metal Shell No. 7 Gage
Burn 4 equally spaced Notches in lower Section before inserting extension
3/8" Min.
6" Min.
5 1/2"
Continuous weld
For Estimated Length - See Sheet No. 12
Continuous weld
SPLICE TO BE USED AS REQUIRED
ALLOWABLE TAPERS
1-Taper 1'/2'-6" for 10' + 12" Cylindrical Section Extension
2-Taper 1'/4'-0" for 17' + 12" Cylindrical Section Extension
3-Taper 1'/7'-0" for 30' + 12" Cylindrical Section Extension
15" Dia. spiral #2 wire, 6" pitch 2 extra turns top and bottom. 4-#4 tie bars. The cost of Class X Concrete Encasement and Reinforcement is incidental to the cost of furnishing piles.
Metal Shell
SECTION A-A
DETAIL OF TAPERED METAL SHELL FOR CAST IN PLACE CONCRETE PILES
2" cl. to Main Steel
For bars see note
1/2" Chamfer
1/4" Spiral Hooping
5'-0"
For bars, see note
4" 8 at 1" 10 Spaces at 3" 6 Spaces at 4" 6" Spacing Maximum 7 Spaces at 4" 7 Spaces at 3" 7 at 1" 4"
For Estimated Length - See Sheet No. 12
SECTION A-A FOR PILES UNDER 45' LONG
2" cl. to Main Steel
1/2" Chamfer
For bars see note
SECTION A-A FOR PILES 45' OR MORE
Note: For 14" Piles 45' long or more use 8-#8 bars 4 for the full length and 4 to the point of bevel.
For 14" Piles under 45' long use 4-#9 bars the full length.
Handling: For Pile lengths up to 45', use two slings placed at a distance of 0.21 L* from each end.
For Piles longer than 45', use three slings placed at a distance of 0.12 L* from each end and at mid-point of pile.
*L = Over all length of pile to be handled.
DETAIL OF PRECAST CONCRETE PILES
Steel Plate welded to Bottom
12" min.
8" min.
(Straight or increases 1" per step from pile point to Butt)
For Estimated Length - See Sheet No. 12
At least 1/4 of the length of pile shall have a Butt diameter equal to or greater than 12".
Gages are furnished to suit soil conditions (14 Gage Min.)
6-#6 bars (For Details, See below)
1" Min. 2" Max.
Reinforcement is incidental to the cost of furnishing piles.
Metal Shell
1/4" Spiral Hooping at 6" spacing or #4 Ties at 12" cts.
SECTION A-A
12" Min. BUTT
8" Min. POINT (Applies only to Step Taper type pile)
DETAIL OF MANDREL DRIVEN STRAIGHT OR STEP-TAPER PILES FOR CAST IN PLACE CONCRETE PILES
10'-0"
DESIGNED J. B. Rohmer
CHECKED
DRAWN W. A. Sausaman
CHECKED G.R.
SEPT 22 1962
EXAMINED W.E. Baumann
PASSED
APPROVED
PILE DETAILS
S.B.I. ROUTE 53
SEC. 531-1-HB-8
COOK COUNTY
STATION 193+08.57
X-1 Rev. 5-12-61

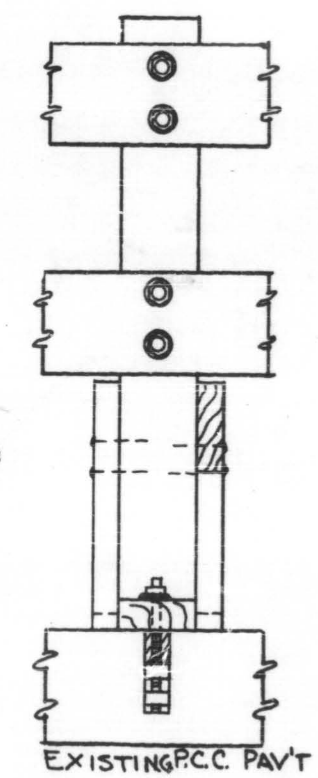
BOND ISSUE ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 61	531-1-HB-B	COOK	27	24
STA.		TO STA.		
U.S. BUR. PUB. ROADS, DIV. 4	ILLINOIS	F. A. PROJECT		



BARRICADE ASSEMBLY



SIDE VIEW OF POST



FRONT VIEW OF POST

NOTE: SEE SHEET FOR LOCATION OF PERMANENT BARRICADE.

CONSTRUCT ACCORDING TO APPLICABLE PORTIONS OF STANDARD 1972-1

DETAIL OF PERMANENT BARRICADE ASSEMBLY

SCALE: NONE