

Plan for Section 6/19/66

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44.	STANDARD 2163-3
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47.	STANDARD 2213-1
48.	STANDARD 2230
49.	STANDARD 2231

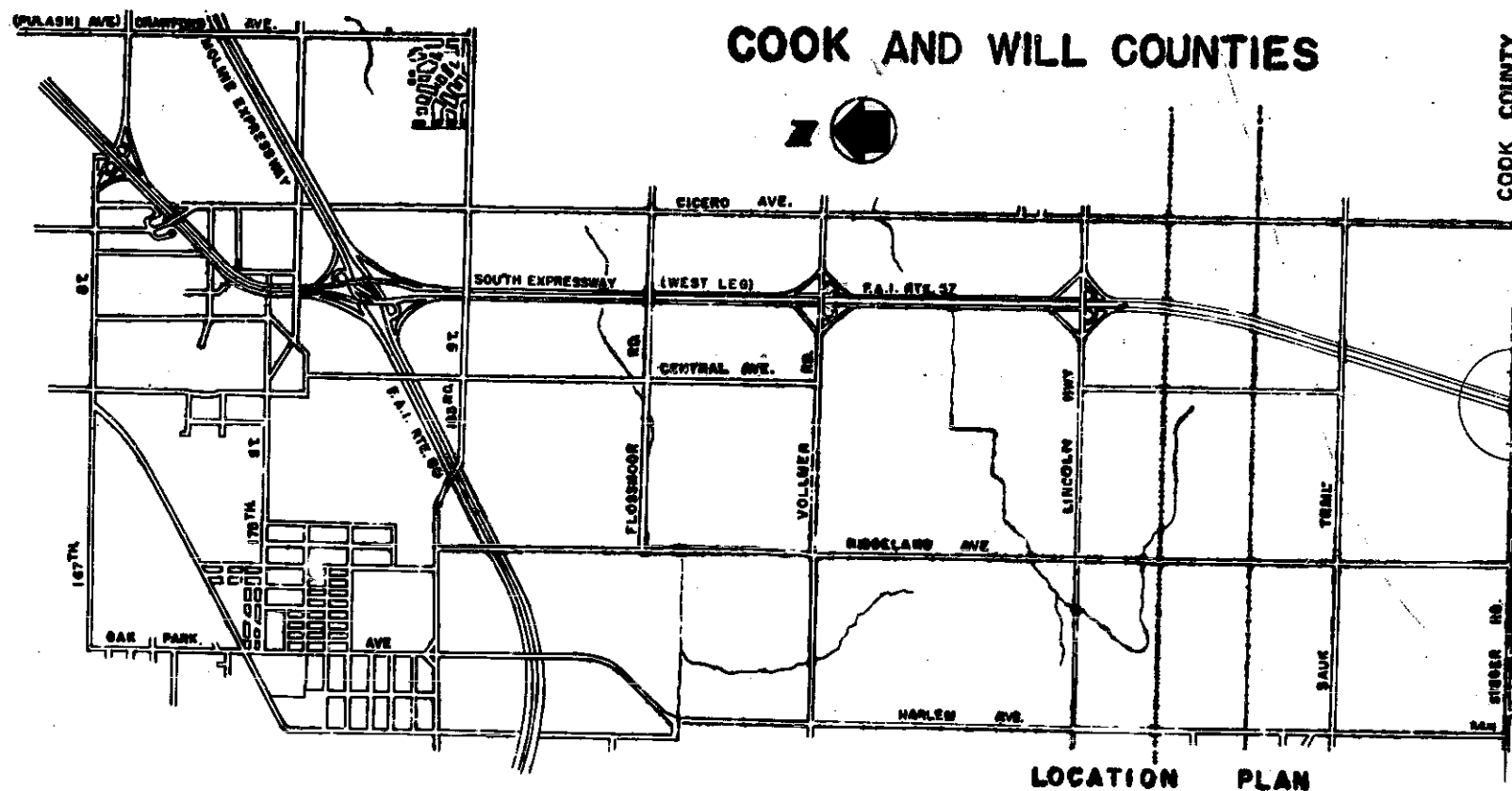
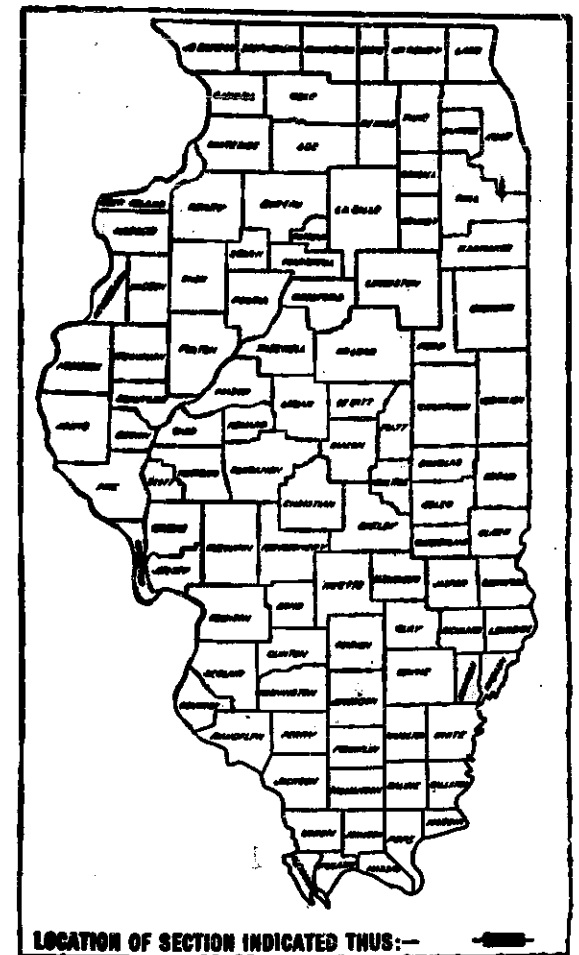
HIGHWAY CLASSIFICATION

F.A.I. ROUTE 57 — 2039-T-70
 STEGER ROAD — 171-T-50

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS AND BUILDINGS
DIVISION OF HIGHWAYS
PLANS FOR PROPOSED
FEDERAL AID HIGHWAY
SOUTH EXPRESSWAY(WEST LEG)
F.A.I. ROUTE 57 SECTION 0101-1000 HB
STEGER ROAD RECONSTRUCTION
& GRADE SEPARATION
PROJECT I-57-7 (142) 340
C-90-587-65
COOK AND WILL COUNTIES

SECTION	SHEET NO.	TOTAL SHEETS	SHEET NO.
57	1	49	1

P-90-803-00



LOCATION PLAN

STA. 48+00 BEGINNING OF IMPROVEMENT
 LOCATION OF IMPROVEMENT
 STA. 45+25.84 END OF IMPROVEMENT

*Revised Hds
3/4, 3/9/63*

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

SUBMITTED: March 30, 1966
 BY: C.A. Benowitz
 EXAMINED: May 16, 1966
 BY: G. W. Van Dusen
 APPROVED: May 16, 1966
 BY: James A. Leary

PREPARED BY: Harold W. ...
 EXAMINED BY: ...
 ENTIRE SECTION INSPECTED
 AND APPROVED AS TO POLICY
 BY: C.A. Benowitz
 DISTRICT ENGINEER

NET LENGTH OF IMPROVEMENT = 2025.84' = 0.384 MILES
 NET LENGTH OF PROJECT = 0.00' = 0.000 MILES

CONTRACT NO. 24627

DESCRIPTION OF IMPROVEMENT: THE WORK UNDER THIS CONTRACT
 CONSISTS OF THE FURNISHING OF ALL MATERIALS AND THE
 COMPLETE CONSTRUCTION OF A 2-SPAN WELDED GIRDER BRIDGE
 AT STA. 55+43.6; CENTERLINE STEGER ROAD WHICH EQUALS
 STA. 28+28.23; CENTERLINE F.A.I. ROUTE 57; CONSTRUCTION,
 MAINTENANCE AND REMOVAL OF THE DETOUR ROAD; THE
 CONSTRUCTION OF EMBANKMENT, STABILIZED BASE COURSE,
 BITUMINOUS CONCRETE SURFACE COURSE, DRAINAGE FACILITIES,
 AND ALL INCIDENTAL AND COLLATERAL WORK NECESSARY TO
 COMPLETE THE IMPROVEMENT AS SHOWN ON THESE PLANS
 AND DESCRIBED IN THE SPECIAL PROVISIONS.

DEPARTMENT OF COMMERCE
 BUREAU OF PUBLIC ROADS

APPROVED: _____
 DIVISION ENGINEER

DATE: _____

Plans to be 6/14/66

INDEX OF SHEETS

NO.	SHEETS
1-1A	TITLE SHEET
2-2A	TYPICAL CROSS SECTIONS
3-4	SUMMARY OF QUANTITIES
5	ALIGNMENT & TIES
5A-B	PLAN PROFILE
6-8	EXISTING TOPOGRAPHY
9-10	DETOUR
11-12	STREET RECONSTRUCTION
13	DRAINAGE & UTILITIES
14	STEEL PLATE BEAM GUARD RAIL, LANDSCAPING, & R.O.W. MARKERS
15-28	BRIDGE PLANS (Includes sheets 15A & 19A as Built)
29	NAME PLATES
30	HEADWALL FOR 8", 10", 12", & 15" PIPE CULVERTS, CONCRETE SHOULDER & SIDEWALK TRANSITION, STANDARD 10-SS-539
31-36	CROSS SECTIONS
37	STANDARD 1683-2
38	STANDARD 1744-1
39	STANDARD 1909-6
40	STANDARD 1971-3
41	STANDARD 1976
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48	STANDARD 2230
49	STANDARD 2231

HIGHWAY CLASSIFICATION

F.A.I. ROUTE 57 — 2039-T-70
STEGER ROAD — 171-T-50

STATE OF ILLINOIS DEPARTMENT OF PUBLIC WORKS AND BUILDINGS

DIVISION OF HIGHWAYS PLANS FOR PROPOSED FEDERAL AID HIGHWAY

SOUTH EXPRESSWAY (WEST LEG)

F.A.I. ROUTE 57 SECTION 0101-1000 HB

STEGER ROAD RECONSTRUCTION

& GRADE SEPARATION

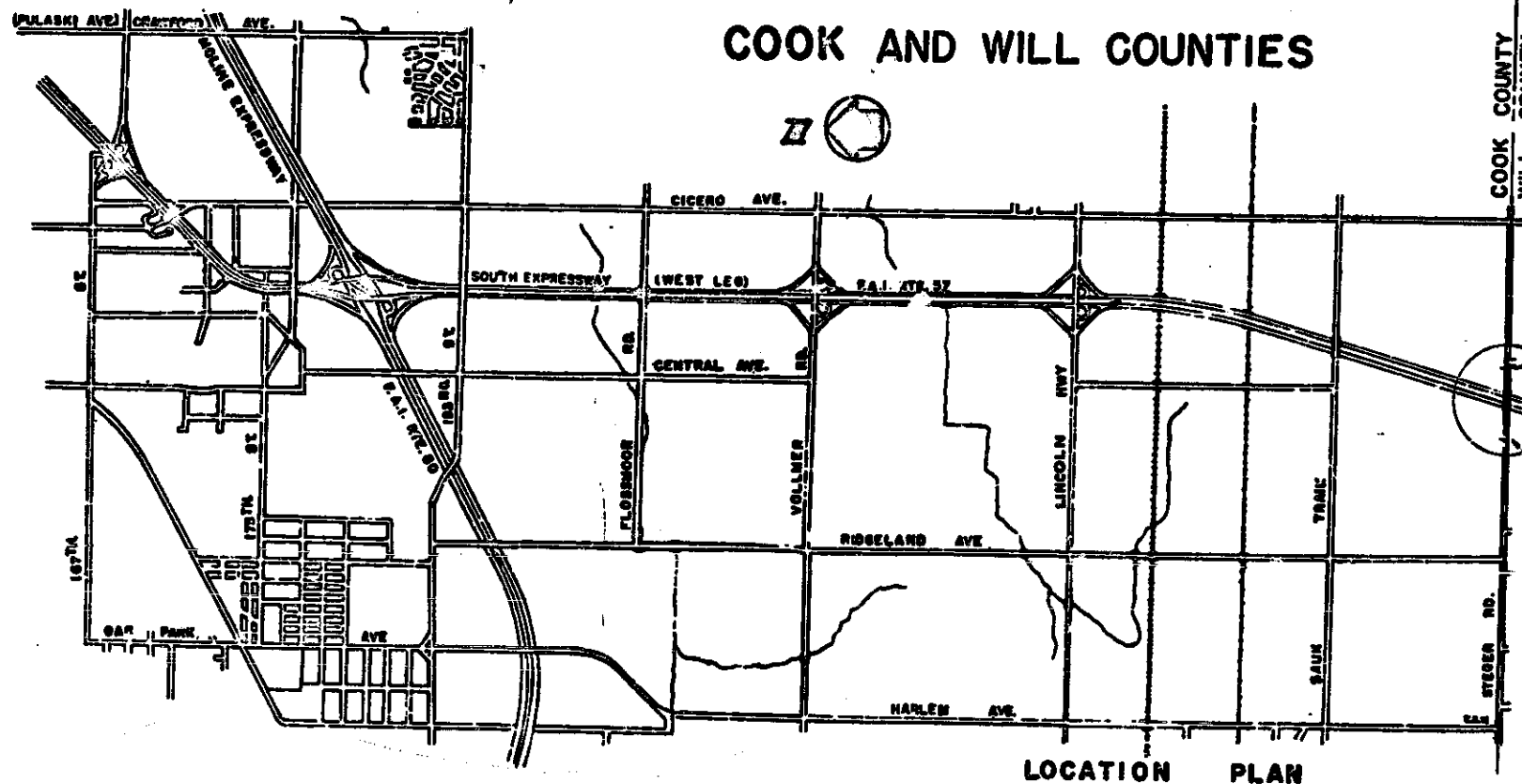
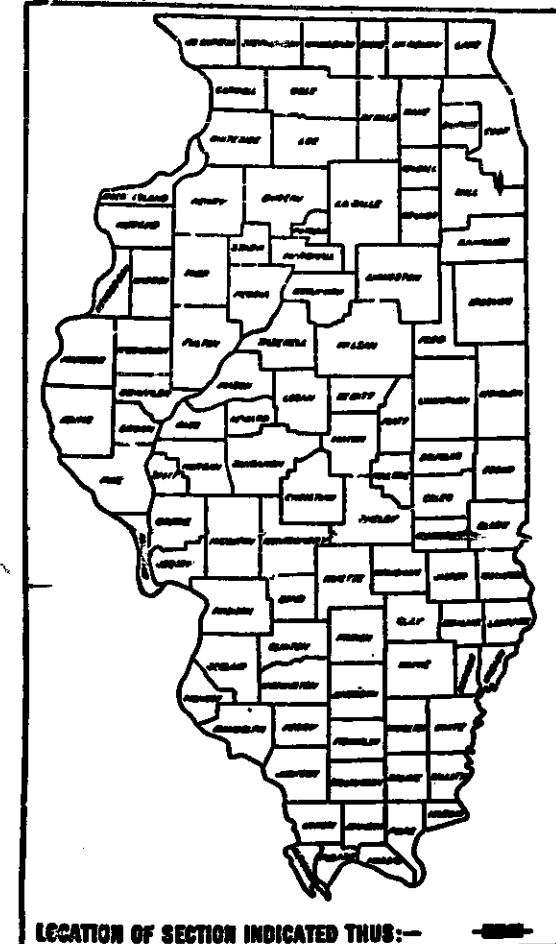
PROJECT I-57-7 (142) 340

C-90-587-65

COOK AND WILL COUNTIES

SECTION NO.	SEC.	EXPRESSWAY	TOTAL FEET	POST MILE
57	100000	(WEST LEG)	49	1A

P-90-503-00



STA. 45+00 BEGINNING OF IMPROVEMENT
 LOCATION OF IMPROVEMENT
 STA. 65+25.84 END OF IMPROVEMENT

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

DESIGNED MARCH 30 1966
C.A. Benowitz

DRAWN MAY 16 1966
C. W. Van Dusen

CHECKED MAY 16 1966
[Signature]

APPROVED MAY 16 1966
[Signature]

PREPARED BY: [Signature]
 EXAMINED BY: [Signature]
 ENTIRE SECTION INSPECTED
 AND APPROVED AS TO POLICY
 BY: C.A. Benowitz
 DISTRICT ENGINEER

NET LENGTH OF IMPROVEMENT • 2025.84 • 0.384 MILES
 NET LENGTH OF PROJECT • 0.00 • 0.000 MILES

CONTRACT NO. 24627

DESCRIPTION OF IMPROVEMENT: THE WORK UNDER THIS CONTRACT CONSISTS OF THE FURNISHING OF ALL MATERIALS AND THE COMPLETE CONSTRUCTION OF A 2-SPAN WELDED GIRDER BRIDGE AT STA. 55+43.6, CENTERLINE STEGER ROAD WHICH EQUALS STA. 28+28.23 CENTERLINE F.A.I. ROUTE 57, CONSTRUCTION, MAINTENANCE AND REMOVAL OF THE DETOUR ROAD, THE CONSTRUCTION OF EMBANKMENT, STABILIZED BASE COURSE, BITUMINOUS CONCRETE SURFACE COURSE, DRAINAGE FACILITIES, AND ALL INCIDENTAL AND COLLATERAL WORK NECESSARY TO COMPLETE THE IMPROVEMENT AS SHOWN ON THESE PLANS AND DESCRIBED IN THE SPECIAL PROVISIONS.

DEPARTMENT OF COMMERCE
BUREAU OF PUBLIC ROADS

APPROVED _____ DATE _____
 DIVISION ENGINEER



B.M. "32 C" C.C.H.D. E.I. 760.679 Standard County Steel Box set on Concrete Monument in N.W. Corner of Intersection 36.5' W. of E. Ridgeland Ave. 27.0' N. of E. Steger Rd.

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

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 1
1-57	1000	Cook	49	15	14 SHEETS
ILLINOIS DIVISION OF HIGHWAYS 3-57-7(100) 340					

GENERAL NOTES

Coarse aggregate to be used in parapet handrails must be 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.
Permanent forms will not be permitted in forming the concrete floor.

All structural steel shall conform to A.S.T.M. Specifications for Structural Steel Designation A-36
Rivets 3/4", open holes 13/16", unless otherwise noted.
Anchor bolts shall be set before riveting diaphragms over supports.
The exposed surfaces of the expansion guards 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.
Except as otherwise provided, all structural steel shall receive one shop coat of red lead paint and two field coats of paint. See Special Provisions for field painting.

The Contractor shall drive 2 concrete test piles in permanent locations one at the East Abutment and another at the West Abutment, as directed by the Engineer before ordering the remainder of piles.
Concrete piles at the Abutment Bents shall be driven in holes precored through the embankment in accordance with Article 60.9(c) of the Standard Specifications.

Excavation for portions of structures in the embankments shall not be classified
See Drainage and Utilities Plans for Drainage Details.

STEEL BRIDGE COMPONENTS OF THE MAIN SPAN SHALL BE PLACED IN THE FIELD AFTER THE STEEL HAS BEEN BRICKED AND THE BRICK FORMS ARE IN PLACE.

STRESS TABLES

MAX. MOMENT ~ COMP. SEC.

	.4 Pt.	Pier
S.D.L.	262.8'k	368.0'k
L.L.+I.	932.7'k	679.8'k
Total	1195.5'k	1047.8'k

SHEARS ~ COMP. SEC.

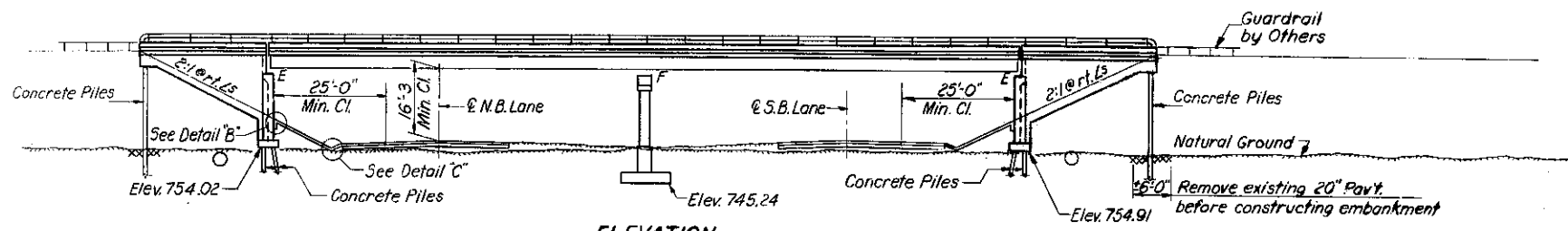
	Abut.	.2 Pt.	.4 Pt.
S.D.L.	15.0 k	7.4 k	0
L.L.+I.	52.8 k	46.0 k	25.4 k
Total	67.8 k	53.4 k	25.4 k

Is = 21015.3 in.⁴
Ss = 944.5 in.³
Ic = 39783.3 in.⁴
Sc = 1126.7 in.³
S.D.L. = Superimposed Dead Load
L.L. = Live Load
I = Impact
Is = Moment of Inertia, Steel Section
Ss = Section Modulus, Steel Section
Ic = Moment of Inertia, Composite Section
Sc = Section Modulus, Composite Section

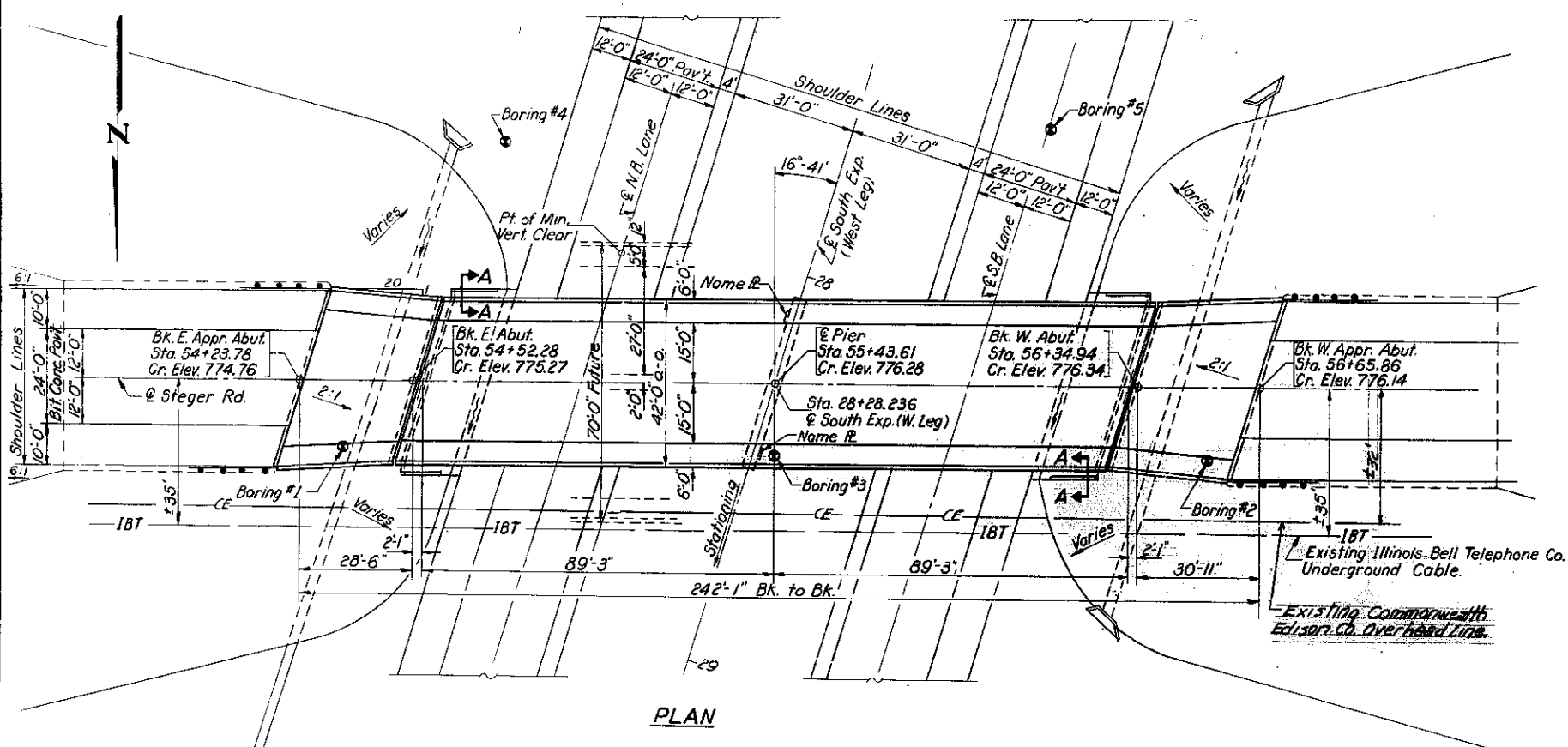
TOTAL BILL OF MATERIAL

Item	Unit	Super.	Sub.	Total
Class A Excavation for Structures	Cu. Yds.		608	608
Structural Steel	Lbs.	266,530	270	266,800
Class X Concrete	Cu. Yds.	419.4	276.7	696.1
Reinforcement Bars	Lbs.	97,810	27,680	125,490
Aluminum Handrail (Alternate Type L)	Lin. Ft.	484		484
Metal Handrail (Alternate Type M)	Lin. Ft.	484		484
Concrete Piles	Lin. Ft.		942	942
Test Piles Concrete	Each		2	2
Name Plates	Each		2	2
Slope Wall	Sq. Yds.		186	186
Protective Coat	Sq. Yds.	1246		1246
Bridge Seat Sealant	Lump Sum			L.S.

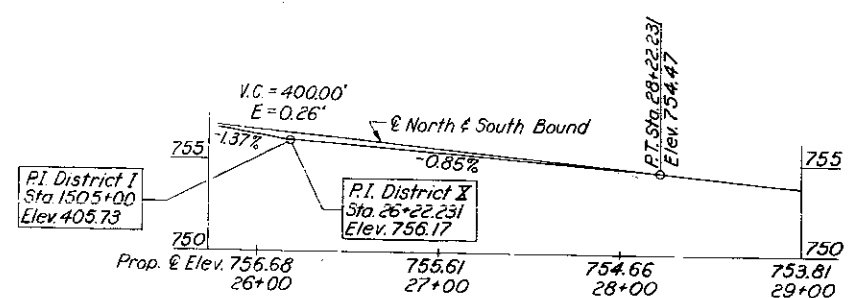
* Apply to abutments only.



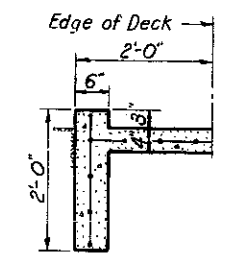
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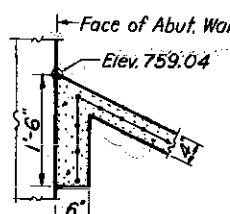
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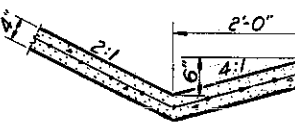
PROFILE & NORTH & SOUTH BOUND SOUTH EXPRESSWAY (WEST LEG)



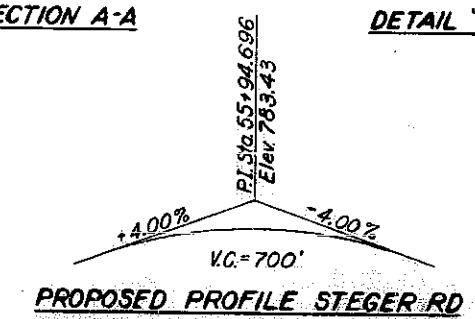
SECTION A-A



DETAIL B



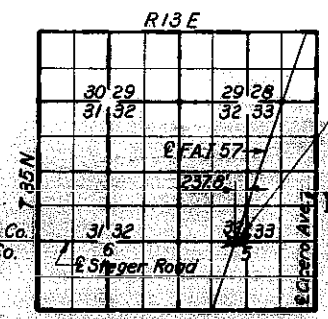
DETAIL C



PROPOSED PROFILE STEGER RD

DESIGN STRESSES

f_c = 1400 psi. Super. & Sub
f_c = 75 psi. Figs.
f_s = 20,000 psi. Reinf.
f_s = 20,000 psi. Struct. (A-36)
n = 10
Live Load Defl. = 1/1200
LOADING HS-20-44



LOCATION SKETCH

DESIGNED	Dec 28 1965
CHECKED	I. Kaspar
DRAWN	J.L. Armstrong
CHECKED	I.K.

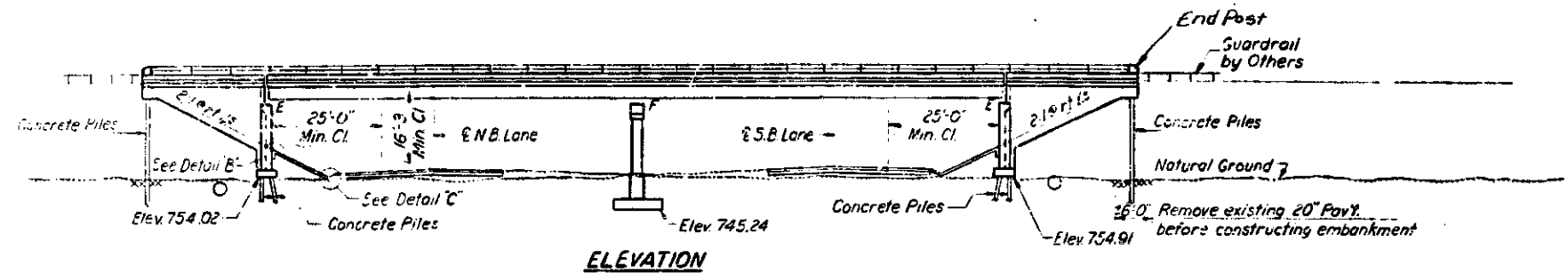
PROJ I-57-7(102) 340
GENERAL PLAN & ELEVATION
F.A.I. RT. 57 SEC. 0101-1000HB
COOK COUNTY
STA. 28+28.236 E.S. EXP. (W. LEG)
STA. 55+43.61 PROP. E. STEGER RD.

Revised 4-27-66 N.C.: Paved Ditch extension removed, Name R detail removed, Culvert information removed, In Total Bill, Borrow Excav. removed, 26,820 Cu. Yds. of Embankment added, Name R's changed from 1 to 2, Pipe Culv. (36") removed, Pipe Culv. 18" x 36" added, Pipe Culv. 18" x 36" added, Pipe Culv. 18" x 36" added, Class X Conc. change from 276.3 to 276.7 Cu. Yds. in Sub & 695.7 to 696.1 Cu. Yds. in Total, Reinf. Bars in Sub changed from 26,730 to 27,680 Lbs. & Total change from 124,540 to 125,490 Lbs.

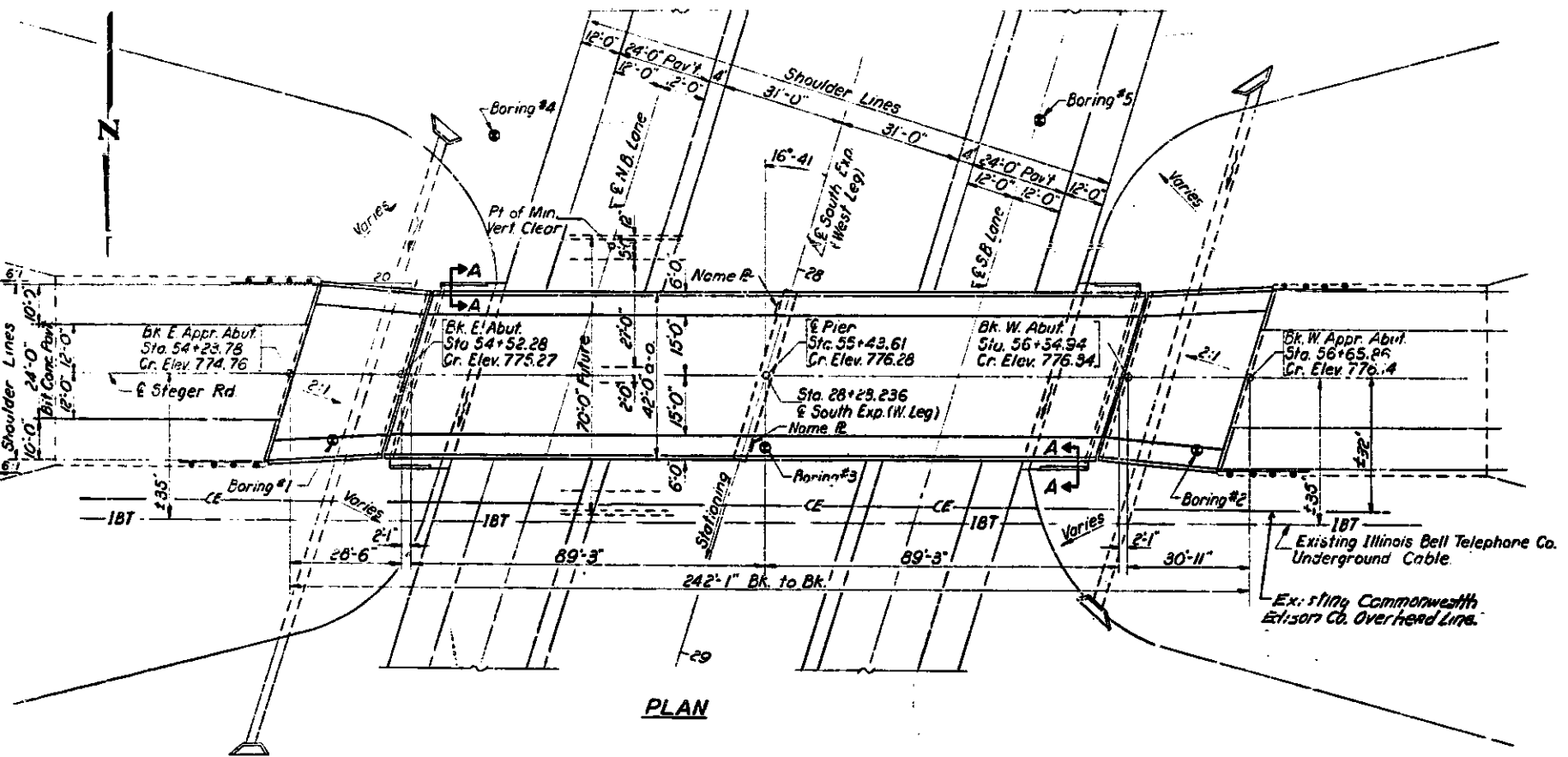
5M 32" CCHD. El. 730.679 Standard County Steel Box set on Concrete Monument in N.W. Corner of Intersection 36.5' W of E Ridgeland Ave 27.0' N of E Steger Rd.

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

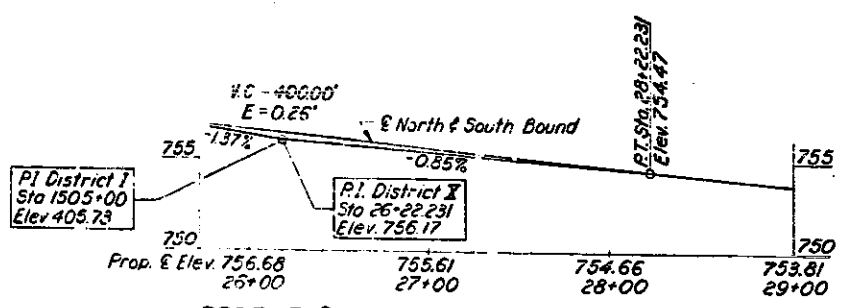
PROJECT NO.	SECTION	SUBJECT	TOTAL SHEETS	SHEET NO.
15A	15A	COOK	49	15A
SHEET NO. 1A				
14 SHEETS				



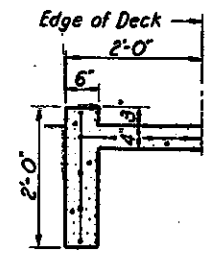
ELEVATION



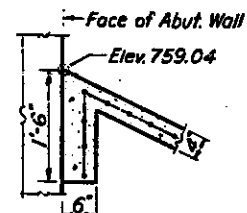
PLAN



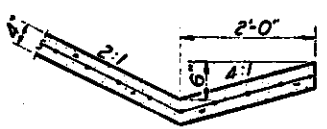
PROFILE & NORTH & SOUTH BOUND SOUTH EXPRESSWAY (WEST LEG)



SECTION A-A

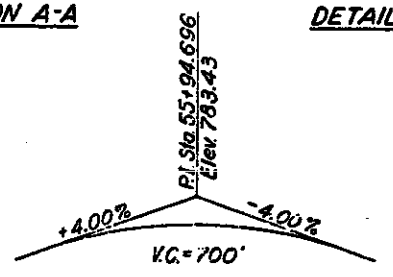


DETAIL B



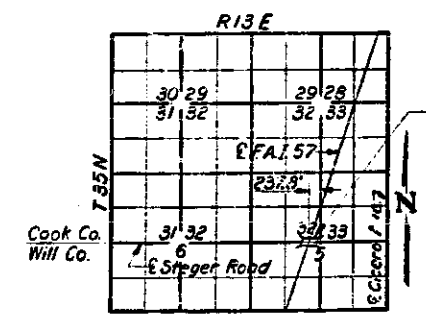
DETAIL C

DESIGNED	W. R. Ashwell	EXAMINED	Dec. 28 1965
CHECKED	J. L. Armstrong	PAIRED	
DRAWN	J. L. Armstrong	APPROVED	
CHECKED	J. K.		



PROPOSED PROFILE STEGER RD

DESIGN STRESSES
 $f_c = 1400$ psi. Super & Sub
 $f_t = 75$ psi. Flgs.
 $f_s = 20,000$ psi. Reinf.
 $f_s = 20,000$ psi. Strud (A-36)
 $n = 10$
 Live Load Defl. = $L/1000$
LOADING HS20-44



LOCATION SKETCH

GENERAL NOTES

Coarse aggregate to be used in parapet handrails must be 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.
 Permanent forms will not be permitted in forming the concrete floor.
 All structural steel shall conform to A.S.T.M. Specifications for Structural Steel Designation A-36.
 Rivets 3/4", open holes 1 1/16", unless otherwise noted.
 Anchor bolts shall be set before riveting diaphragms over supports.
 The exposed surfaces of the expansion guards 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.
 Except as otherwise provided, all structural steel shall receive one shop coat of red lead paint and two field coats of paint. See Special Provisions for field painting.
 The Contractor shall drive 2 concrete test piles in permanent locations one at the East Abutment and another at the West Abutment, as directed by the Engineer before ordering the remainder of piles.
 Concrete piles of the Abutment Bents shall be driven in holes precored through the embankment in accordance with Article 60.9(c) of the Standard Specifications.
 Excavation for portions of structures in the embankments shall not be classified.
 See Drainage and Utilities Plans for Drainage Details.

STRESS TABLES

MAX. MOMENT - COMP. SEC.

	.4 Pt.	Pier
S.D.L.	262.8'k	368.0'k
L.L.+I.	932.7'k	679.8'k
Total	1195.5'k	1047.8'k

SHEARS - COMP. SEC.

	Abut.	.2 Pt.	.4 Pt.
S.D.L.	15.0 k	7.4 k	0
L.L.+I.	52.8 k	46.0 k	25.4 k
Total	67.8 k	53.4 k	25.4 k

$I_s = 21015.3 \text{ in}^4$
 $S_s = 944.5 \text{ in}^3$
 $I_c = 39783.3 \text{ in}^4$
 $S_c = 1126.7 \text{ in}^3$
 S.D.L. = Superimposed Dead Load
 L.L. = Live Load
 I = Impact
 I_s = Moment of Inertia, Steel Section
 S_s = Section Modulus, Steel Section
 I_c = Moment of Inertia, Composite Section
 S_c = Section Modulus, Composite Section

TOTAL BILL OF MATERIAL

Item	Unit	Super	Sub.	Total
Class A Excavation for Structures	Cu. Yds.		608	608
Structural Steel	Lbs.	266,530	290	266,820
Class X Concrete	Cu. Yds.	421.3	275.7	697.0
Reinforcement Bars	Lbs.	98,110	27,580	125,690
Aluminum Handrail (Alternate Type L)	Lin. Ft.	442		442
Metal Handrail (Alternate Type M)	Lin. Ft.	442		442
Concrete Piles	Lin. Ft.		942	942
Test Piles Concrete	Each		2	2
Name Plates	Each		2	2
Slope Wall	Sq. Yds.		186	186
Protective Coat	Sq. Yds.	1246		1246
Bridge Seat Section	Lump Sum			L.S.

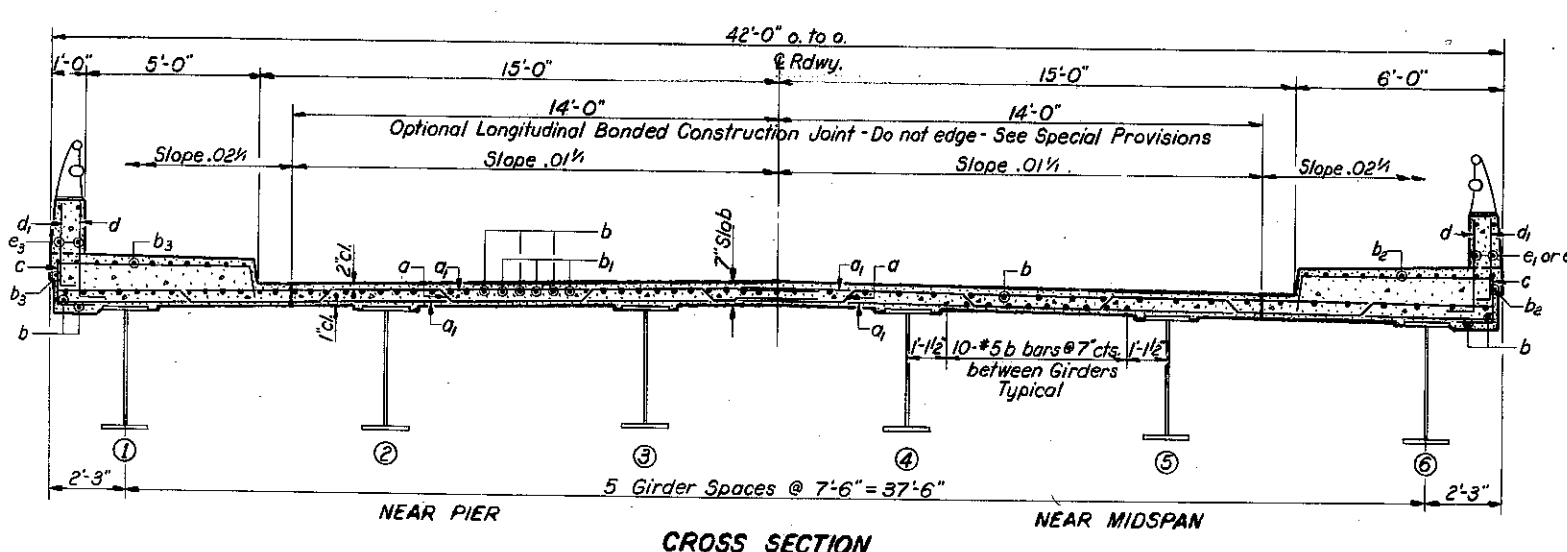
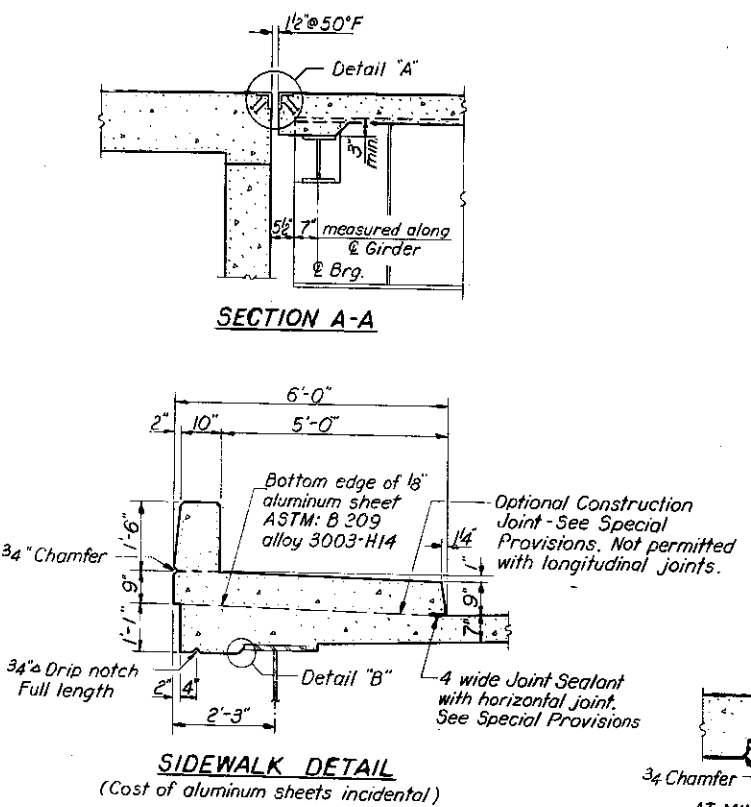
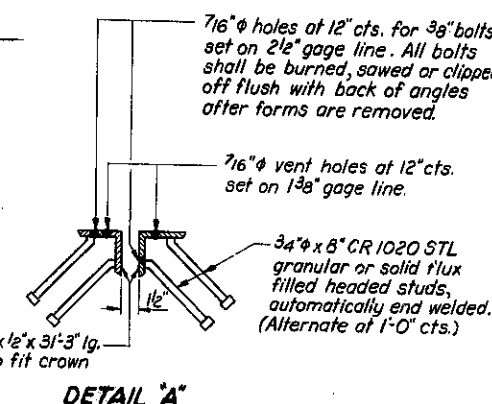
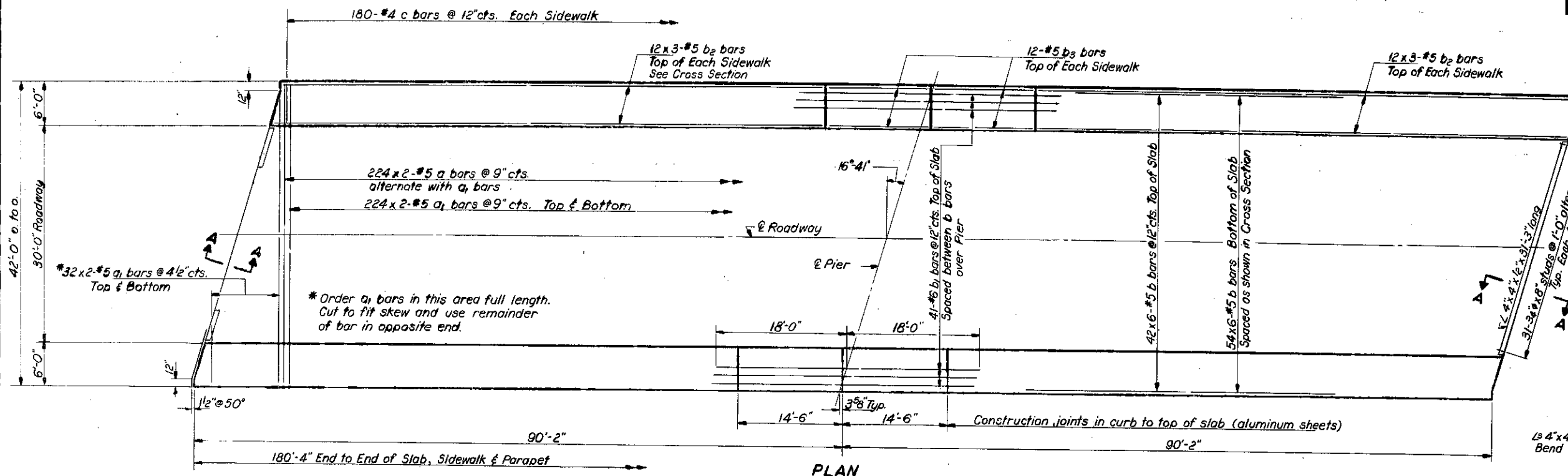
AS BUILT
 PROJ. I-57-7(12) 340
 GENERAL PLAN & ELEVATION
 F.A.I. RT. 57 SEC. 0101-1000HB
 COOK COUNTY
 STA. 28+28.236 & S. EXP. (W. LEG)
 STA. 55+43.61 PROF. & STEGER RD.

Rev. 1-5-67 N.C. END Post Added. Class X Conc. total 676.1 to 678.0 CY. Alum. Handrail from 484 to 442 lin. ft.
 Revised 9-27-67 E.C. RT. 57, 12th extension removed, Name R detail removed, correct information removed. In Total Bill, Excav. removed.
 Class X Conc. change from 276.3 to 276.7 Cu Yds in Sub & 692.7 to 696.1 Cu Yds in Total. Reinf. Bars in Sub changed from 26,730 to 27,680 Lbs & Total change from 124,540 to 125,490 Lbs.

Note: Bars indicated thus 12x3-#5 etc. indicates 12 lines of bars with 3 lengths per line.

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

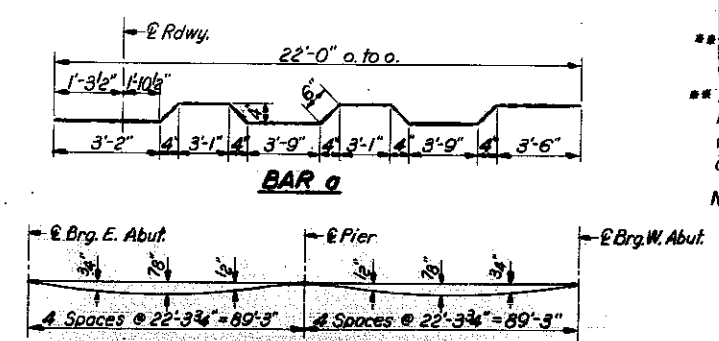
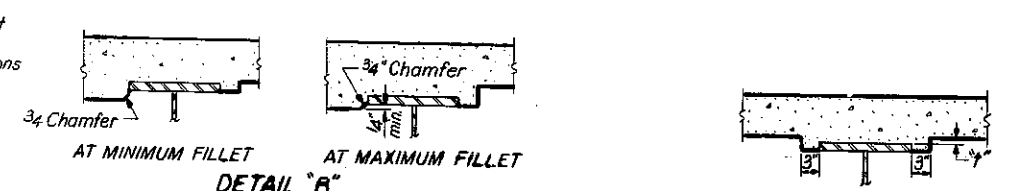
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
U.S. 57	0101-1000HB	Cook	49	16
ILLINOIS		SHEET NO. 2		



BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a	448	#5	22'-10"	~
a ₁	1024	#5	22'-0"	~
b	576	#5	31'-0"	~
b ₁	41	#6	36'-0"	~
b ₂	144	#5	26'-0"	~
b ₃	48	#5	14'-3"	~
c	360	#4	8'-9"	┌
d	362	#6	3'-6"	┌
d ₁	362	#4	2'-9"	┌
e ₁	16	#5	19'-8"	~
e ₂	48	#5	18'-3"	~
e ₃	16	#5	14'-3"	~
Class K Concrete		Cu. Yds.	263.0	
Reinforcement Bars		Lbs.	65780	
** Structural Steel		Lbs.	266,530	

** Includes weight of bearing assemblies with lead plates and anchor bolts; also includes weight of expansion devices and stud shear connectors. Estimated Weight = 11250 Lbs.
Note: See sheet #5 for placement of d & e bars.



DESIGNED: *W. J. Armstrong*
CHECKED: *I. Kasper*
DRAWN: *J.L. Armstrong*
CHECKED: *I.K.*

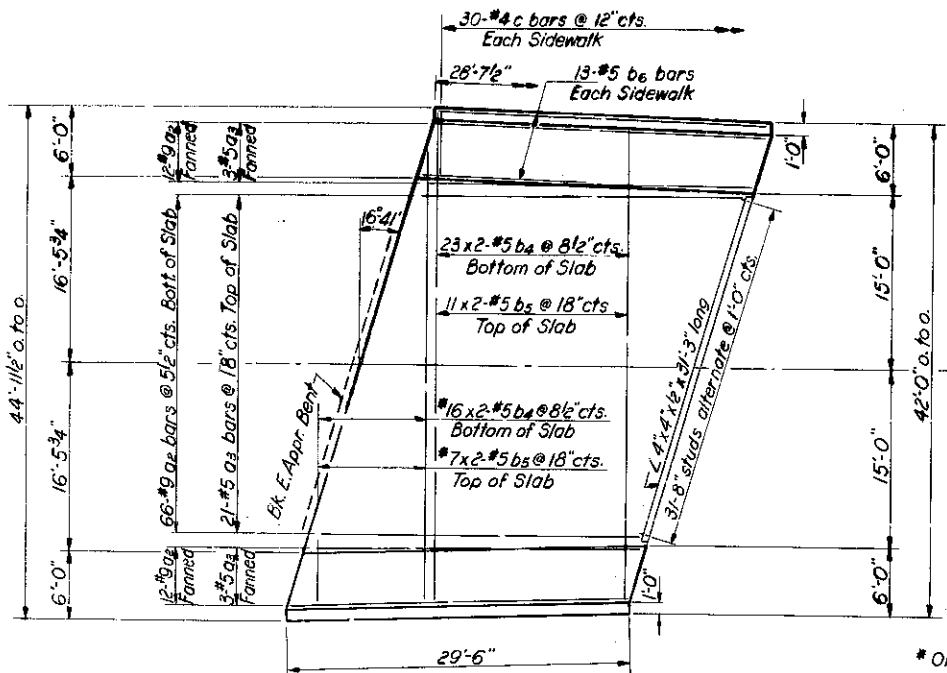
EXAMINED: *W. J. Armstrong*
PASSED: *W. J. Armstrong*
APPROVED: *W. J. Armstrong*

Dec. 28 1965

STANDARD FILLET DETAIL

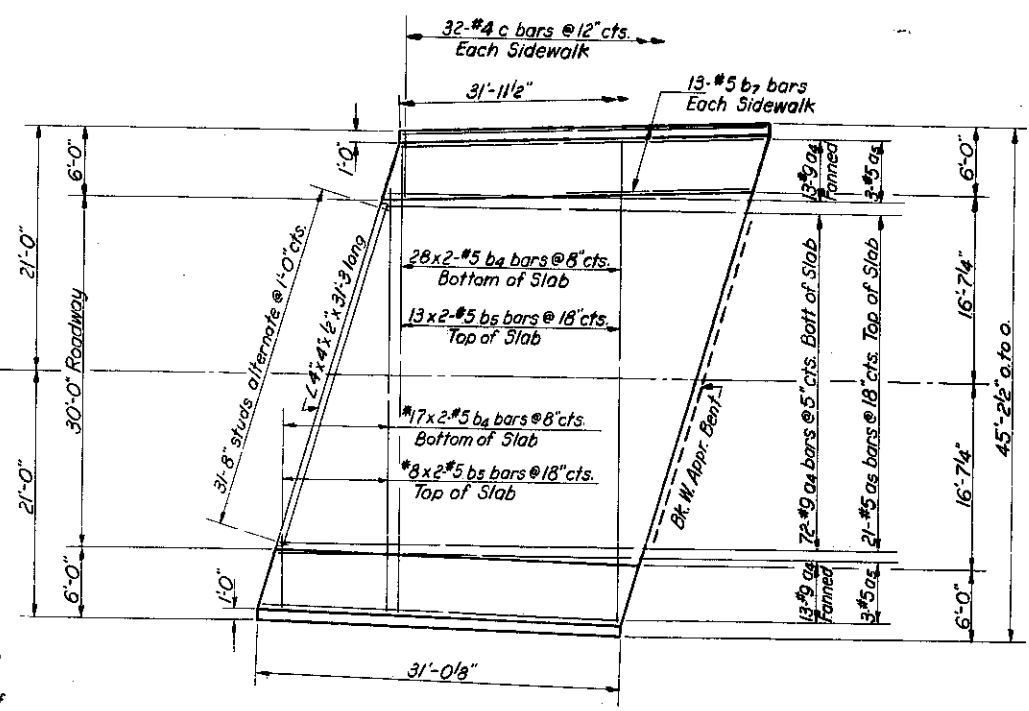
To determine "f": After all structural steel has been erected, elevations of the top flanges of the girders shall be taken at intervals shown on sheet #4. These elevations subtracted from the "Grade Elevations Adjusted for Dead Load Deflections" shown on sheet #4, minus slab thickness, equals the fillet heights "f" above top of girders.

SUPERSTRUCTURE (MAIN SPANS)
F.A.I. RT. 57 SEC. 0101-1000HB
COOK COUNTY
STA. 28+28.236



PLAN - EAST APPROACH SPAN

* Order b4 & b5 bars in this area full length. Cut to fit skew and use remainder of bar in opposite end.

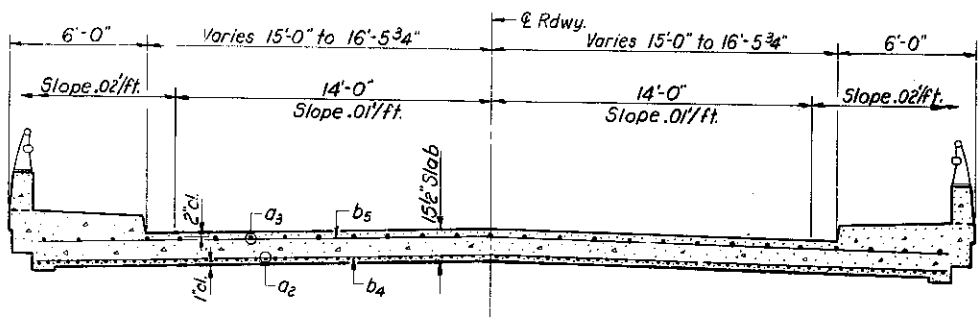


PLAN - WEST APPROACH SPAN

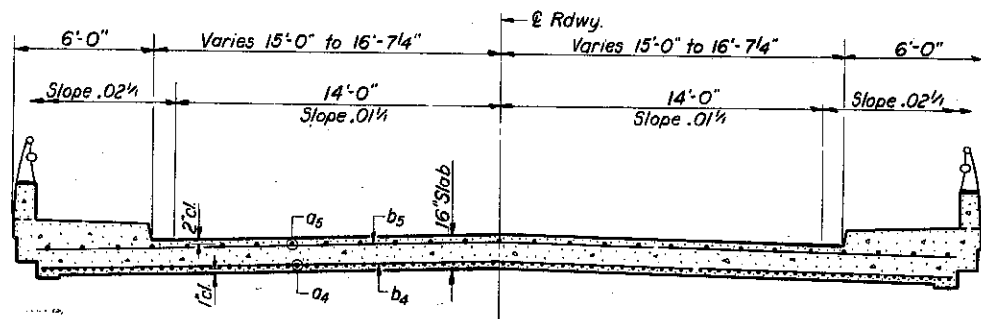
TWO APPROACH SPANS
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a2	90	#9	31'-2"	U
a3	27	#5	28'-9"	—
a4	98	#9	33'-7"	U
a5	27	#5	31'-2"	—
b4	168	#5	22'-6"	—
b5	78	#5	23'-0"	—
b6	26	#5	29'-6"	—
b7	26	#5	32'-2"	—
c	124	#4	8'-9"	U
d	128	#6	3'-6"	U
d1	128	#4	2'-9"	U
e	8	#5	14'-0"	—
e4	8	#5	15'-9"	—
e5	8	#5	14'-6"	—
e6	8	#5	15'-3"	—
Class X Concrete			Cu. Yds.	156.4
Reinforcement Bars			Lbs.	32030

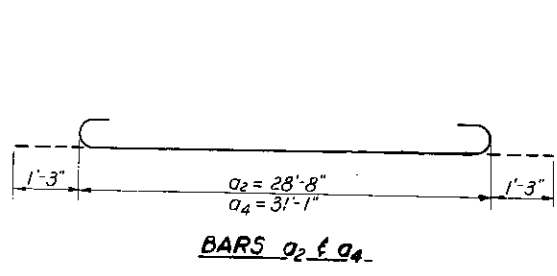
Note: For details of c, d & d1 bars see sheet #2.
For placement of d & e bars see sheet #5.



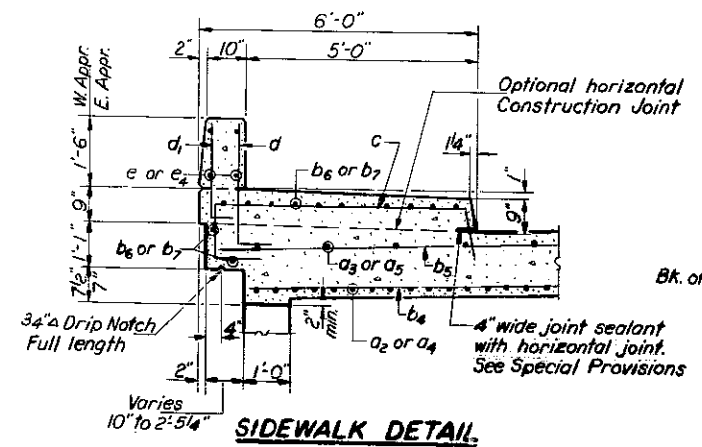
CROSS SECTION - EAST APPROACH



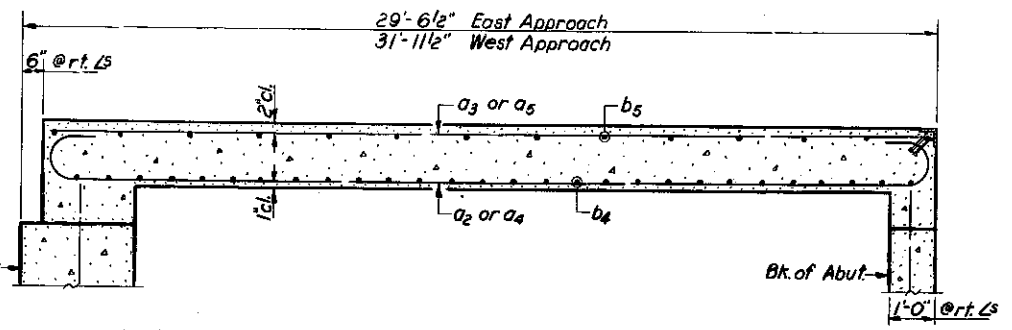
CROSS SECTION - WEST APPROACH



BARS a2 & a4



SIDEWALK DETAIL



LONGITUDINAL SECTION

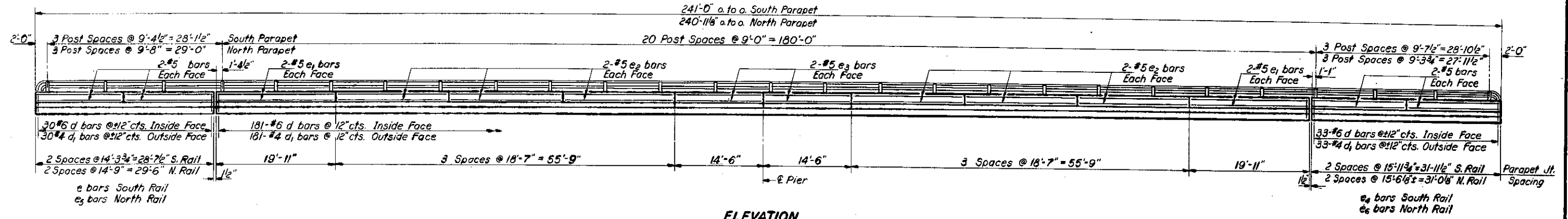
DESIGNED *(Signature)*
CHECKED I. Kaspar
DRAWN J.L. Armstrong
CHECKED I.K.

EXAMINED *(Signature)* DEC. 28 1965
PASSED *(Signature)*
APPROVED *(Signature)*

**SUPERSTRUCTURE
(APPROACH SPANS)**
F.A.I. RT. 57 SEC. 0101-1000HB
COOK COUNTY
STA. 28+28.236

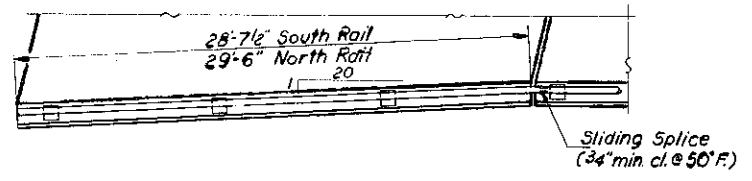
STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 5 14 SHEETS
U.S. 57	0101-1000HB	COOK	49	19	
FED. ROAD DIST. NO. 2		ILLINOIS	FED. AID PROJECT		

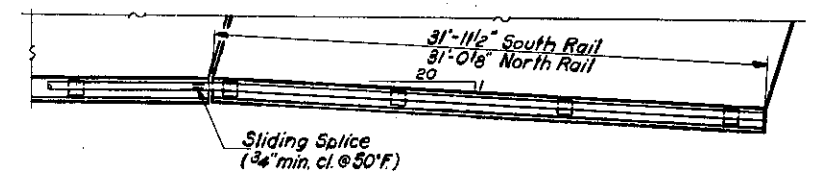


ELEVATION

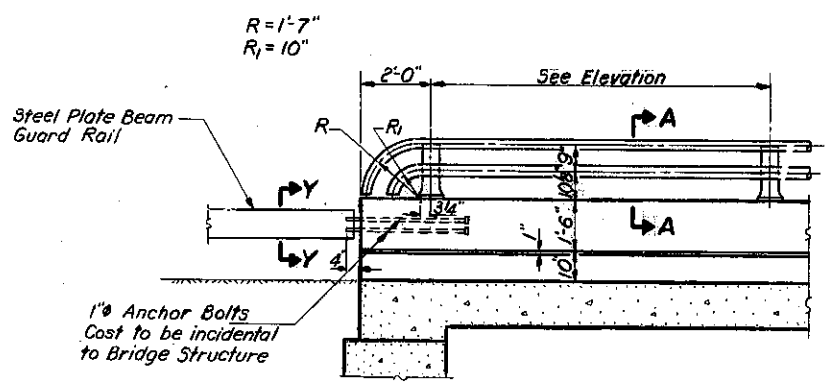
All measurements along inside face of Parapet



PLAN ~ EAST APPROACH

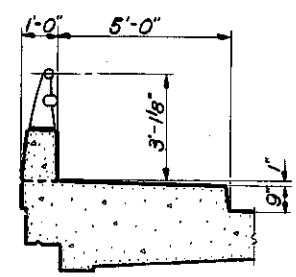


PLAN ~ WEST APPROACH



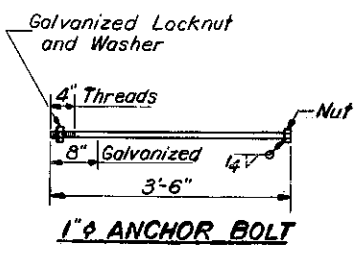
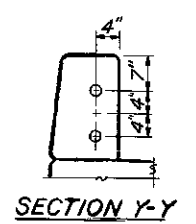
ELEVATION ~ END APPROACH

Note: See sheet #6 for Section A-A



SECTION THRU CURB

NOTE:
Work this sheet with sheet #6 or 7



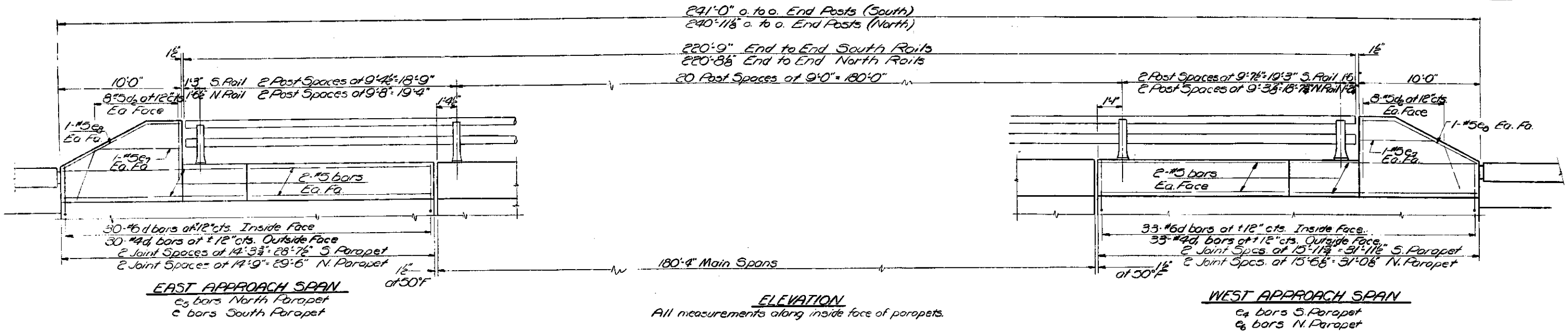
DESIGNED	<i>D. Atwell</i>	EXAMINED	<i>Dec. 28 1965</i>
CHECKED	<i>I. Kaspar</i>	PASSED	<i>H. J. Altos</i>
DRAWN	<i>J. L. Armstrong</i>	APPROVED	<i>W. E. Staff</i>
CHECKED	<i>I. K.</i>		

HANDRAIL LAYOUT
F.A.I. RT. 57 SEC. 0101-1000HB
COOK COUNTY
STA. 28+28.236

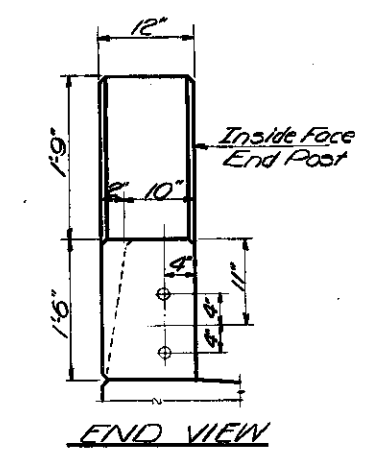
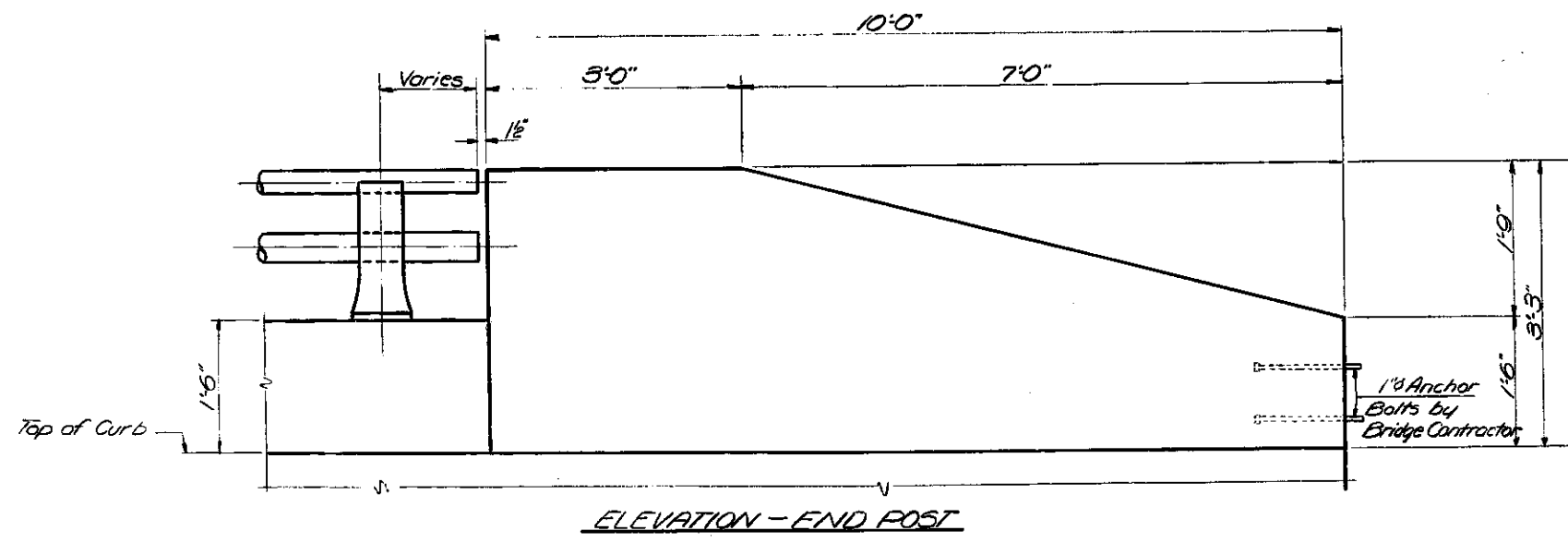
Revised 4-27-66 NC: Anchor Bolts added.

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

ROUTE NO.	DIVISION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 5A
P.A.I. 57	0101 1001HB	Cook	49	19A	14 SHEETS
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT			



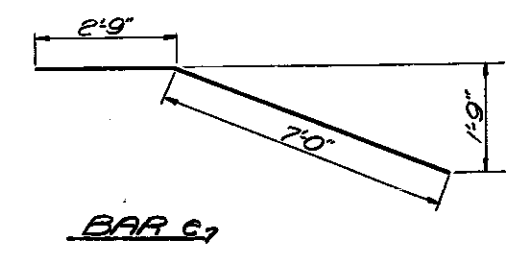
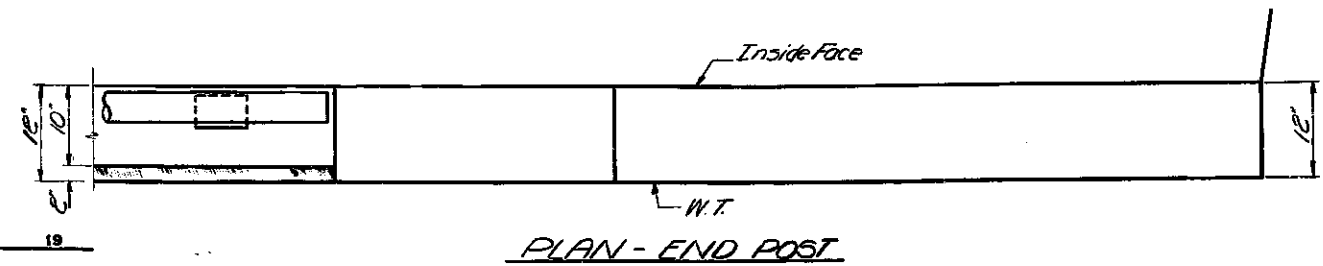
Note: Work this sheet with Sh. #5



**ADDITIONAL
2-PARAPETS BILL OF MATERIALS**

Bar	No	Size	Length	Shape
e ₇	8	#5	6'-3"	—
e ₈	8	#5	9'-9"	—
d ₆	64	#5	2'-6"	—
Reinforcement Bars		Lbs	300	
Class X Concrete		Cu. Yds.	1.9	
*Revised Handrail		Lin. Ft.	442	

*Replaces 484 Lin. Ft. of original.

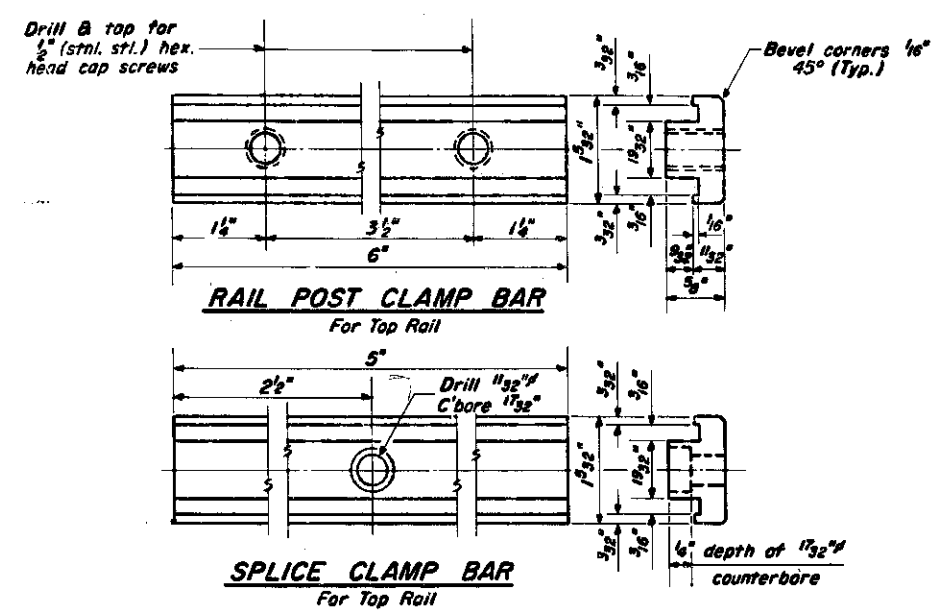
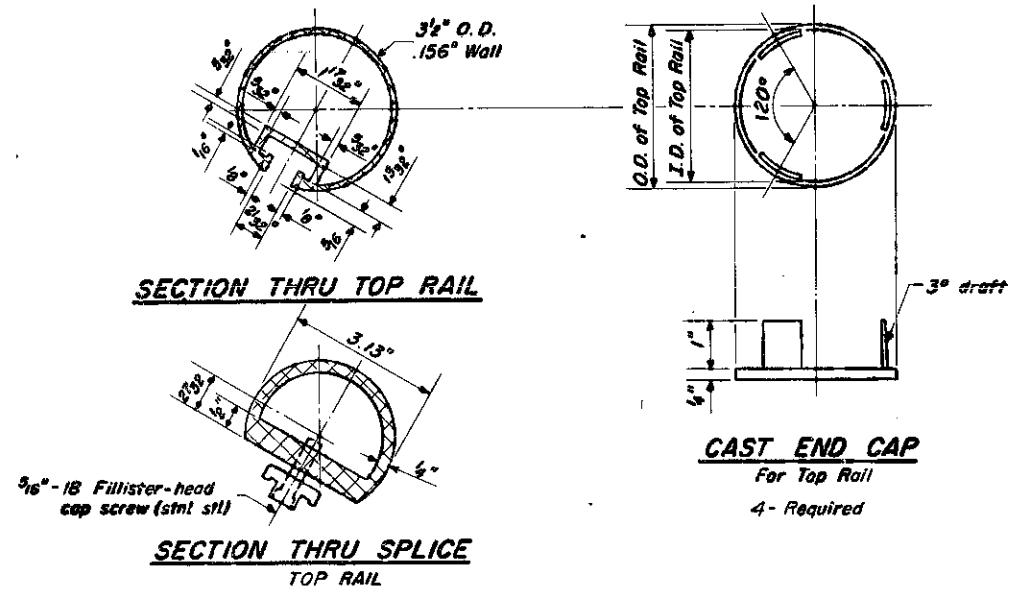


DESIGNED	J. Kelly	EXAMINED	19
CHECKED	J. Karp	PASSED	ENGINEER OF BRIDGE AND TRAFFIC STRUCTURES
DRAWN	R. Ferrando	APPROVED	ENGINEER OF DESIGN
CHECKED	J.K.		CHIEF HIGHWAY ENGINEER

AS BUILT
PARAPET & HANDRAIL LAYOUT
F&T R/E 57-SEC. 0101-1000HB
COOK COUNTY
STA. 28 + 28.236

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

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6. A.I. - 57	0101-1000 HB	COOK	49	20
F.A.I. RT. 57		14 SHEETS		



NOTES

All Posts shall be normal to parapet.

All Aluminum Alloy Extruded Rail shall conform to ASTM specification B-221 alloy 6061-T6, or 6062-T6, and shall extend a minimum of 2 panel lengths (attached to minimum of 3 posts) except at ends or at open joints where a minimum of 1 panel length is required. All joints in railing must be spliced per detail.

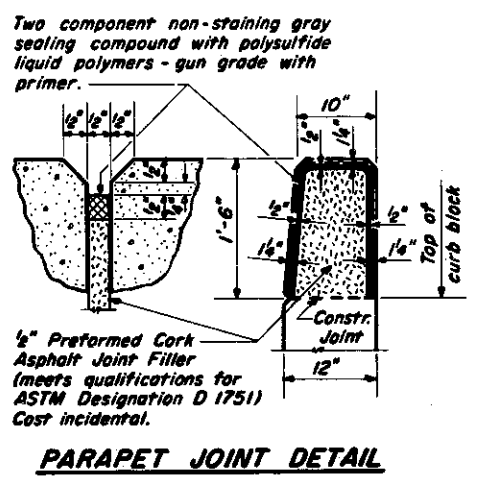
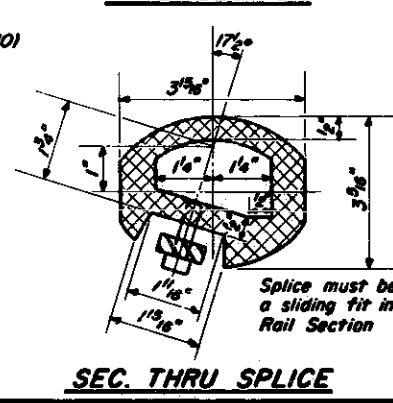
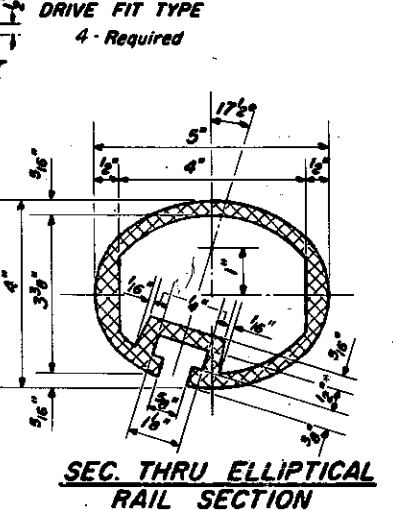
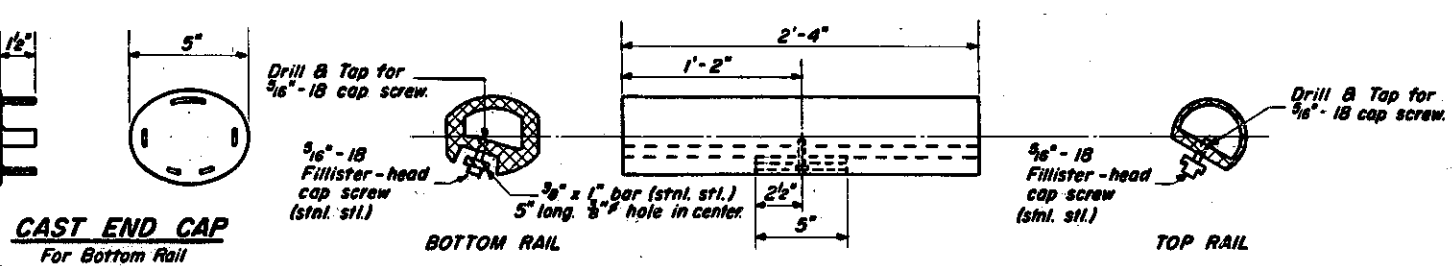
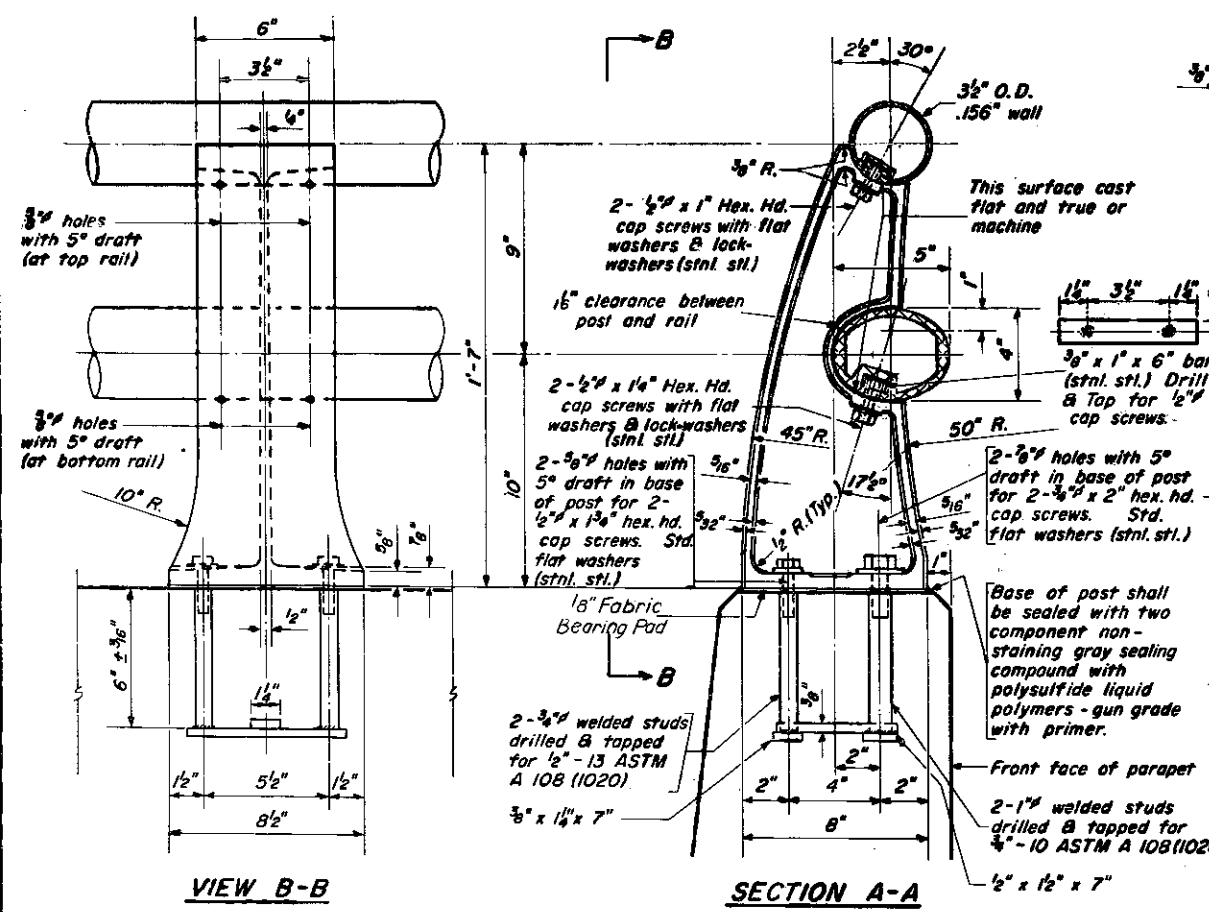
See Special Provisions for following Material Specifications:
Cast Aluminum Alloy Bridge Post - Alloy A344-T4.
Stainless Steel Cap Screws, Washers and Bars.
Fabric Bearing Pads.

METHOD OF MEASUREMENT: Aluminum handrail shall be measured in lineal feet. The length paid for shall be the over all length along the top longitudinal railing member thru all posts and gaps.

BASIS OF PAYMENT: Aluminum handrail shall be paid for at the contract unit price per lineal foot for ALUMINUM HANDRAIL, measured as specified, which price shall be payment in full for all materials, fabrication, transportation and erection.

Cost of rail splice, end caps and hardware to be incidental to item ALUMINUM HANDRAIL.

Provide 1-1/8" and 2-1/8" Aluminum Shims for 25% of the Posts. Rail element shall be parallel to Grade - high spots shall be ground and low spots shimmed.



NOTE: Work this sheet with sheet #5

BILL OF MATERIAL

Item	Unit	Quantity
ALUMINUM HANDRAIL	Lin. Ft.	484.0

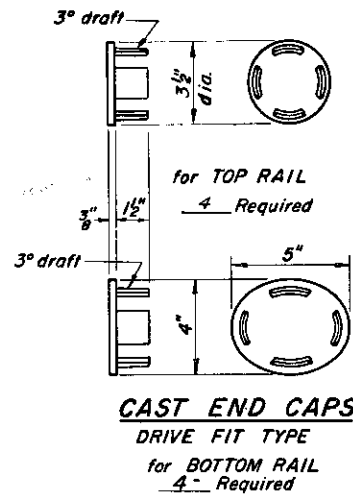
**TYPE L
ALUMINUM HANDRAIL**

HANDRAIL DETAILS
F.A.I. RT. 57 SEC. 0101-1000 HB
COOK COUNTY
STA. 28+28.236

DESIGNED	<i>D. C. Samsell</i>
CHECKED	<i>I. Kasper</i>
DRAWN	J.L.A. W. M. Best W. A. Sausaman Jr.
CHECKED	<i>I.K.</i>

EXAMINED	<i>C. E. Hunsman</i>	DEC. 28 1965
PASSED	<i>J. D. Altor</i>	
APPROVED	<i>D. E. Staff</i>	

R-20 8-16-64 Rev.7-23-65



NOTES:

All Posts shall be normal to parapet.
All Posts shall be malleable cast iron conforming to ASTM A-47, Grade 35018, galvanized to ASTM A-153.
All Rail Tubing shall conform to applicable requirements of ASTM A-53, Grade B, (pipe or tube) galvanized to ASTM A-120.

Provide 1-¹/₈" and 2-¹/₈" galvanized sheet steel shims for 25% of the Posts. Rail element shall be parallel to Grade - high spots shall be ground and low spots shimmed.

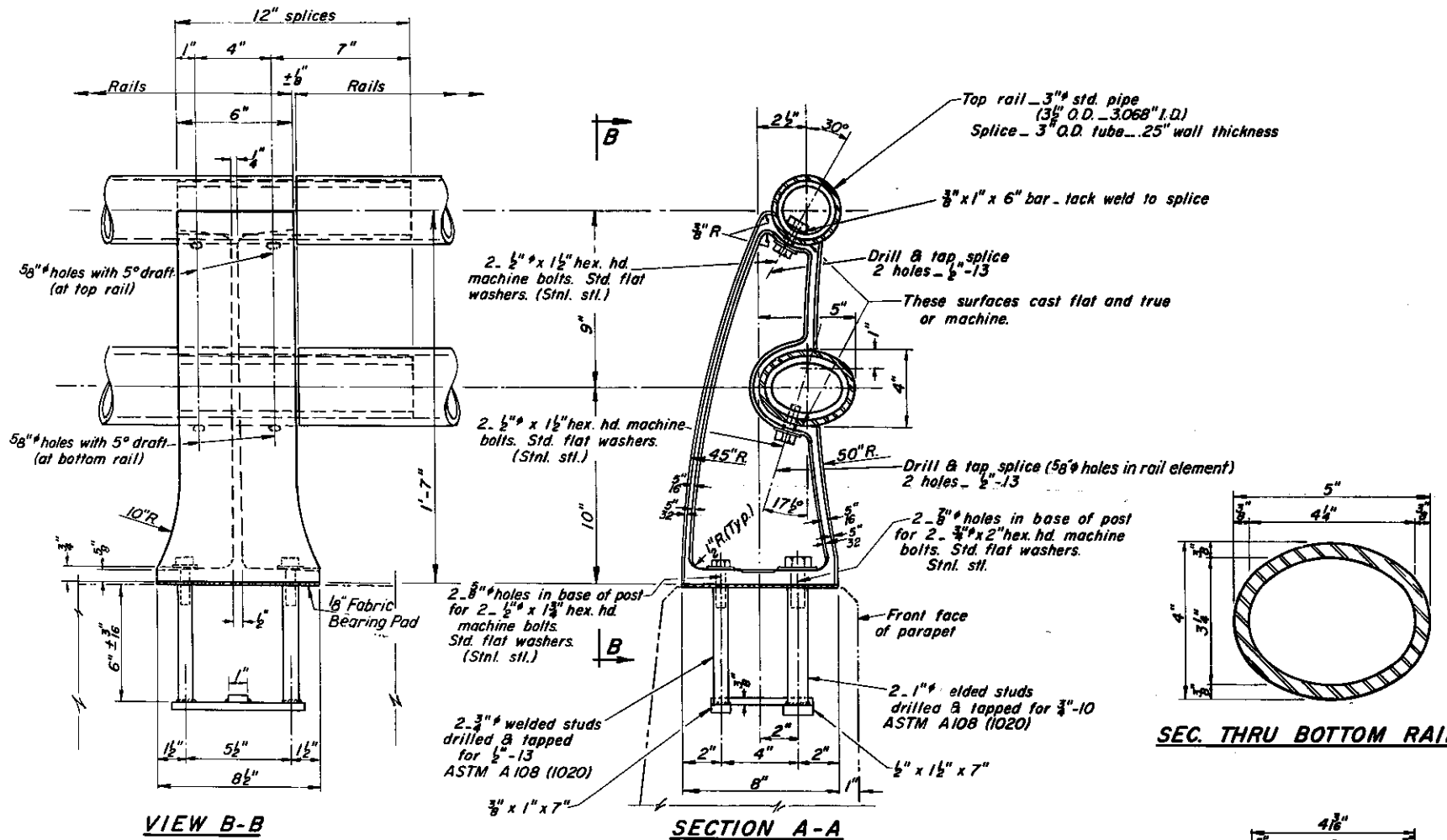
If any of the galvanizing coat is damaged or removed during erection, the affected area shall be painted with one coat of zinc paint in accordance with Military Specification MIL-P-26915 Type 1, air-dry cure.

See Special Provisions for following Material Specifications: Fabric Bearing Pads, Stainless Steel Machine Bolts, Stainless Steel Bars and Stainless Steel Washer.

METHOD of MEASUREMENT: Metal handrail shall be measured in lineal feet. The length paid for shall be the overall length along the top longitudinal railing member through all posts and gaps.

BASIS of PAYMENT: Metal handrail will be paid for at the contract unit price per lineal for METAL HANDRAIL, measured as specified, which price shall be payment in full for all materials, fabrication, transportation and erection.

Cost of rail splice, end caps and hardware to be incidental to item METAL HANDRAIL.

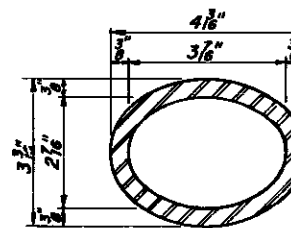
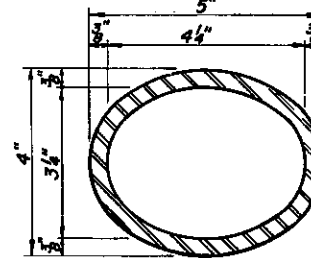


NOTE:
Work this sheet with sheet #5.

BILL of MATERIAL

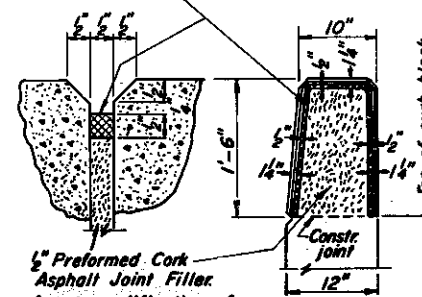
Item	Unit	Quantity
METAL HANDRAIL	Lin. Ft.	484.0

SEC. THRU BOTTOM RAIL



SEC. THRU BOTTOM SPLICE

Two component non-staining gray sealing compound with polysulfide liquid polymers - gun grade with primer.



PARAPET JOINT DETAIL

TYPE M METAL HANDRAIL

HANDRAIL DETAILS
F.A.I. RT. 57 - SEC. 0101-1000 HB
COOK COUNTY
STA. 28+28.236

DESIGNED	J. Kaspar
CHECKED	J.L.A.
DRAWN	Wm. M. Best
CHECKED	J.L.

EXAMINED	DEC 28 1965
PASSED	
APPROVED	

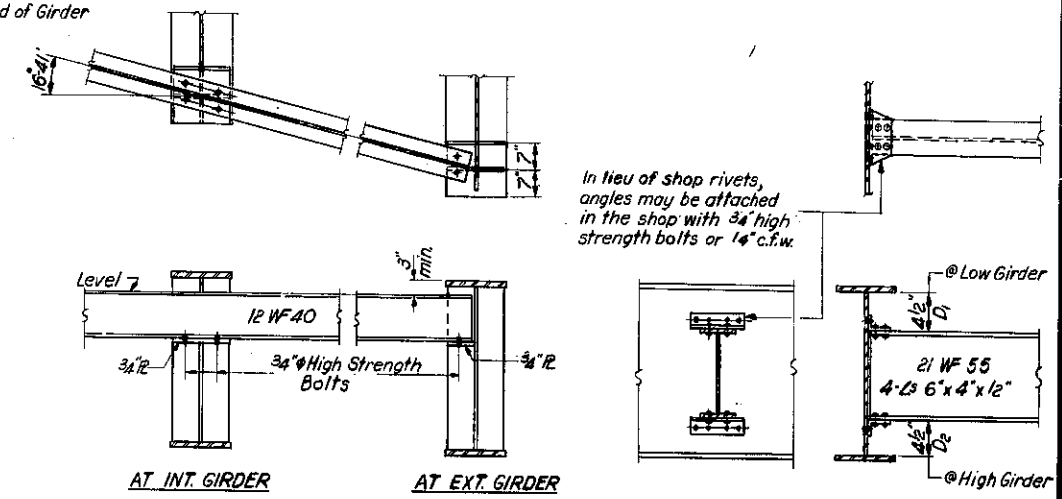
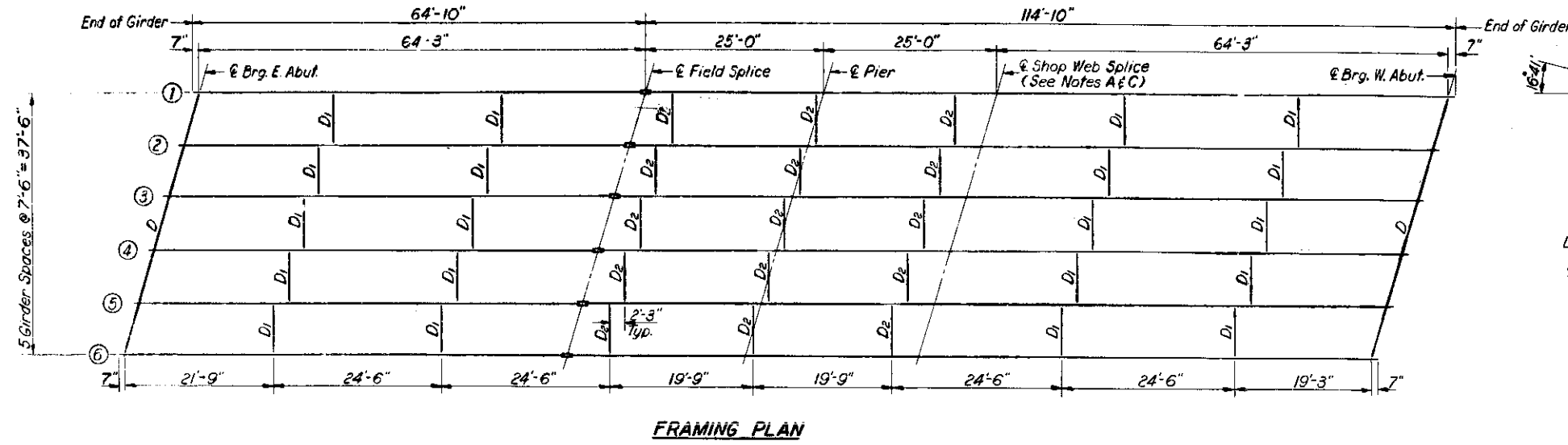
Note! Seal base of post to parapet with two component non-staining gray sealing compound with polysulfide liquid polymers - gun grade with primer.

Note! Splice must be sliding fit in Rail Section.

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

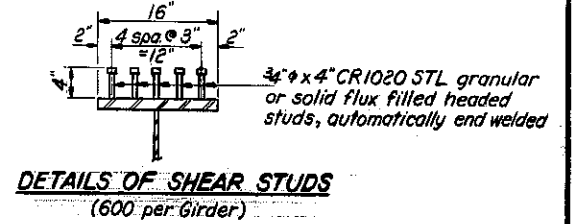
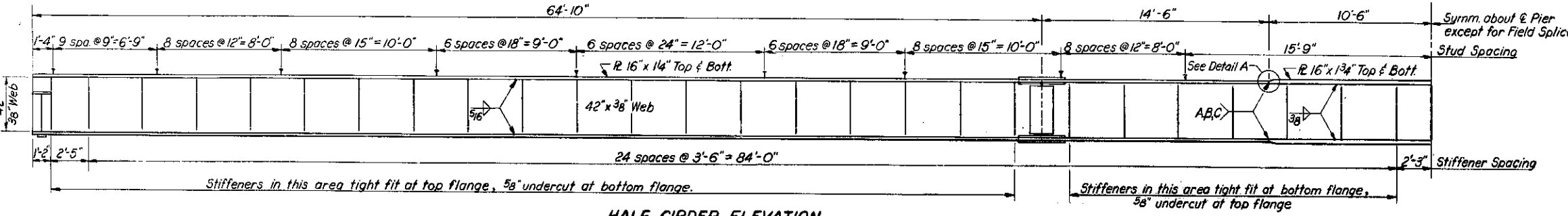
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1-57	1000HB	Cook	49	22
FED. ROAD DIST. OR. Y.		PLANES	FED. AID PROJECT	

SHEET NO. 8
14 SHEETS



In lieu of shop rivets, angles may be attached in the shop with 3/4" high strength bolts or 1/4" c.f.w.

DIAPHRAGMS D₁ & D₂
20-D₁ Required
15-D₂ Required



WELDING REFERENCE
A- Butt weld groove may be of any qualified type permitted by the current A.W.S. Specifications for submerged Arc Welded Bridge Joints.
B- Plate thickness transitions shall conform to Detail A.
C- Finish to required weld conformation by grinding transversely to the welded joints.

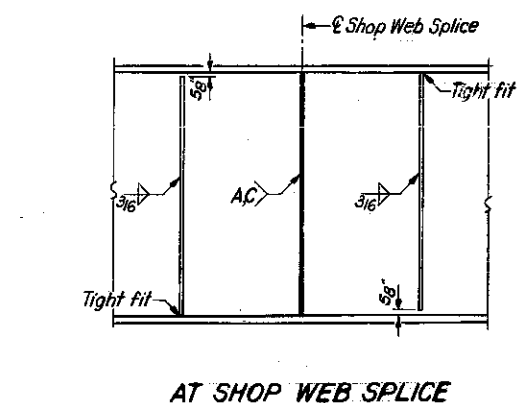
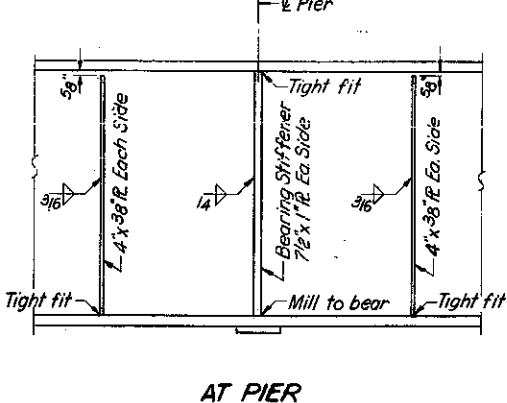
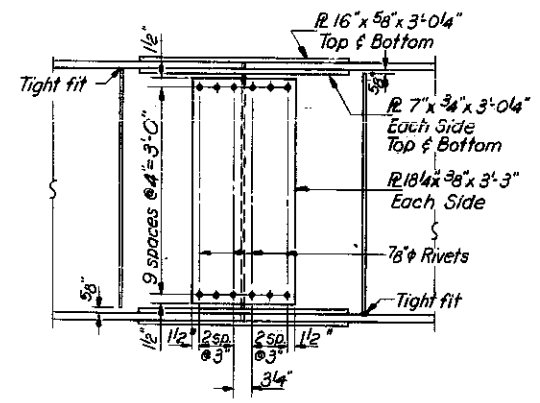
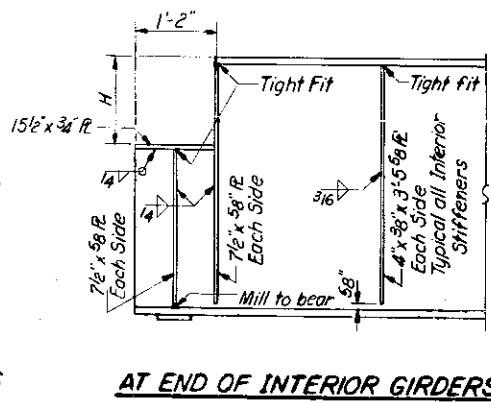
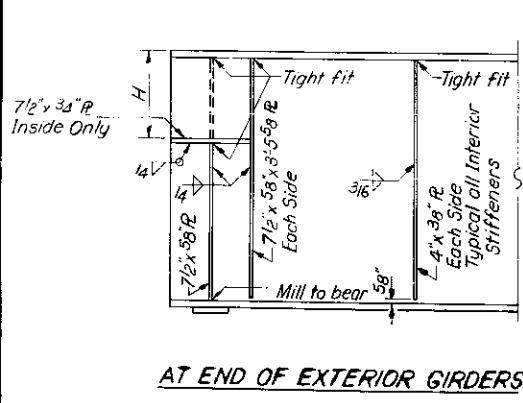
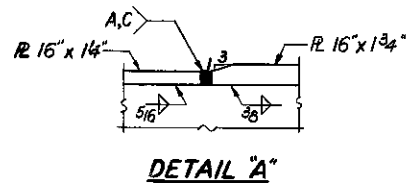
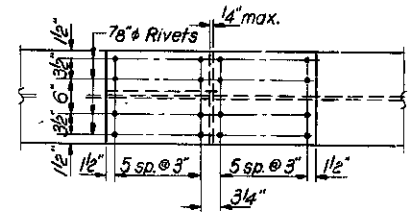
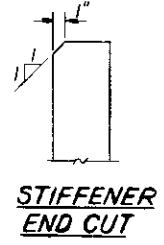


TABLE OF "H" HEIGHTS

Location	Girder	1	2	3	4	5	6
@ Brg. E. Abut.		1'-5 1/8"	1'-6 1/4"	1'-6 3/4"	1'-6 1/4"	1'-5"	1'-3"
@ Brg. W. Abut.		1'-3"	1'-4 1/8"	1'-4 1/2"	1'-4 1/8"	1'-3"	1'-3"

TOP GIRDER ELEVATIONS

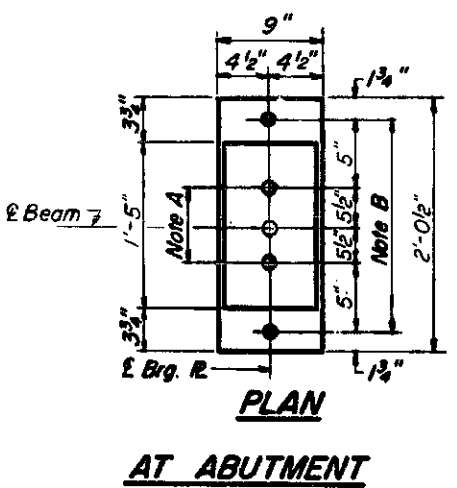
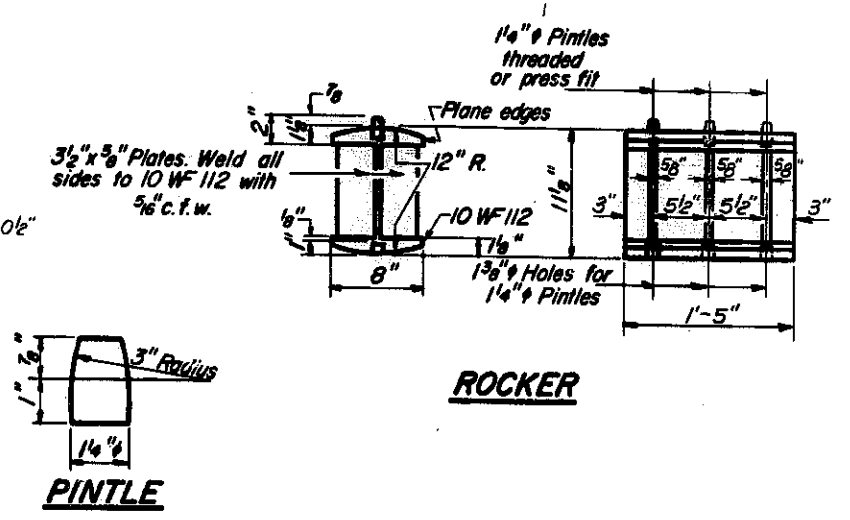
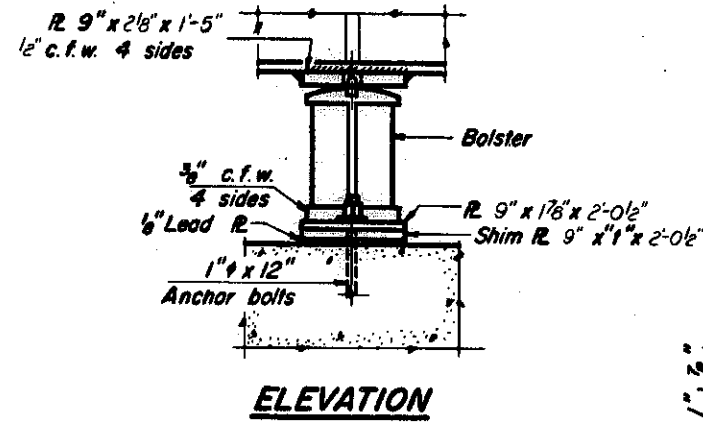
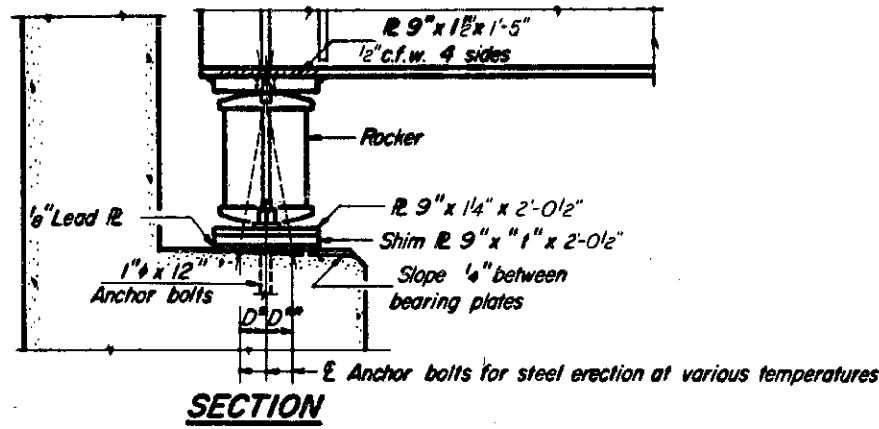
Location	Girder	1	2	3	4	5	6
@ Brg. E. Abut.		774.58	774.67	774.71	774.67	774.56	774.40
@ Field Splice		775.28	775.37	775.41	775.37	775.26	775.20
@ Pier		775.38	775.47	775.51	775.47	775.36	775.31
@ Brg. W. Abut.		775.53	775.62	775.66	775.62	775.53	775.53

Note: Elevations are on top of flange.

DESIGNED *Carroll*
CHECKED *J. Kaspar*
DRAWN *J. L. Armstrong*
CHECKED *I.K.*

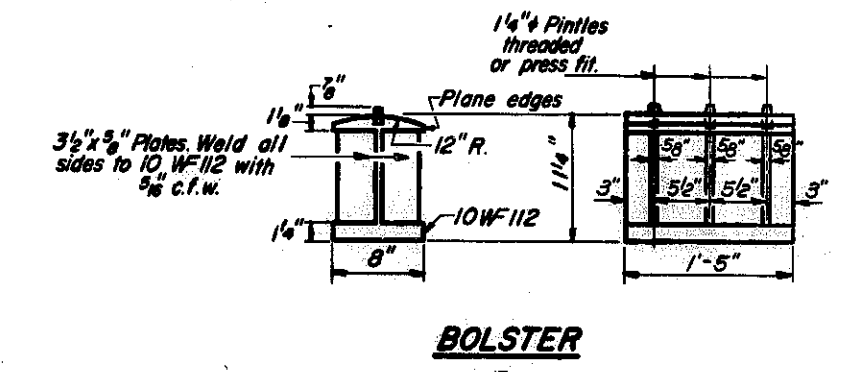
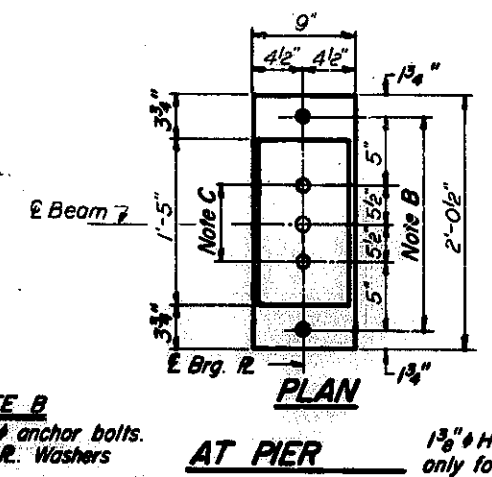
EXAMINED *Dec. 28, 1945*
PASSED *[Signature]*
APPROVED *[Signature]*

STRUCTURAL STEEL
F.A.I. RT. 57 SEC. 0101-1000HB
COOK COUNTY
STA. 28+28.236



SHIM "Y" DIMENSIONS

Girder Location	1	2	3	4	5	6
@ Brg. E. Abut.	-	-	1/2"	-	-	-
@ Pier	-	-	1/2"	-	5/8"	-
@ Brg. W. Abut.	-	-	1/2"	-	-	-



NOTE A
1 3/8" Holes - 1" deep in top R. for pintles. Thread or press fit pintles into bottom R.

NOTE B
1 1/2" Holes for 1" anchor bolts. 2 1/2" x 2 1/2" x 5/16" R. Washers under nut.

NOTE C
1 3/8" Holes 1" deep in top R. only for 1 1/4" pintles.

NOTES ON SETTING OF ANCHOR BOLTS AT EXP. BRGS.

BEARING ASSEMBLY DETAILS

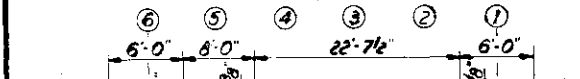
- a) D^* (Side of brg. away from fixed brg.)
 $D^* = 1/8"$ per each 100' of expansion for every 15° fall below the normal temp. of 50°F.
- D^{**} (Side of brg. toward fixed brg.)
 $D^{**} = 1/8"$ per each 100' of expansion for every 15° rise above the normal temp. of 50°F.
- b) After beams have been erected and dimensions D^* or D^{**} determined, holes shall be drilled and anchor bolts shall be grouted in place. All fixed anchor bolts may be built into the masonry.

DESIGNED <i>W. J. Armstrong</i>	EXAMINED <i>W. J. Armstrong</i> DEC 28 1965
CHECKED <i>I. Kasper</i>	PASSED <i>A. J. Oster</i>
DRAWN <i>U. L. Armstrong</i>	APPROVED <i>W. J. Armstrong</i>
CHECKED <i>IK</i>	

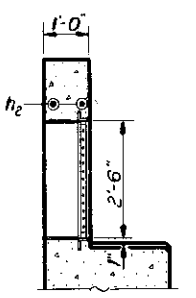
BEARING DETAILS
F.A.I. RT. 57 SEC. 0101-1000HB
COOK COUNTY
STA. 28+28.236

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

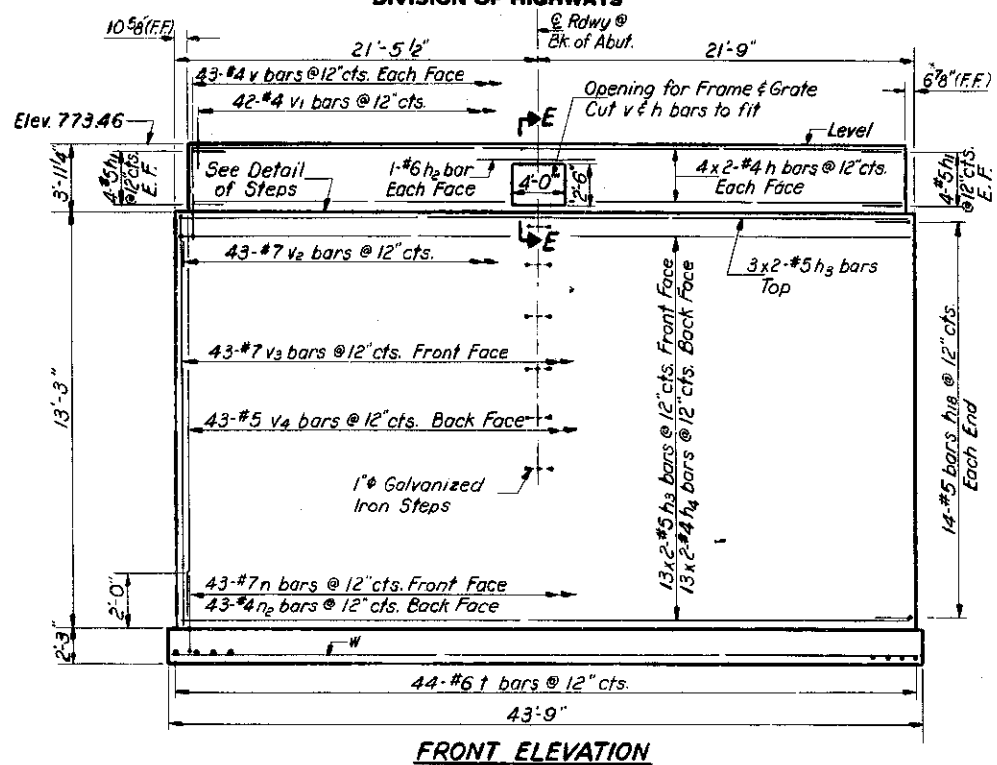
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 10
1-1-57	1000 HB	COOK	49	24	14 SHEETS
ILLINOIS		FED. AID PROJECT			



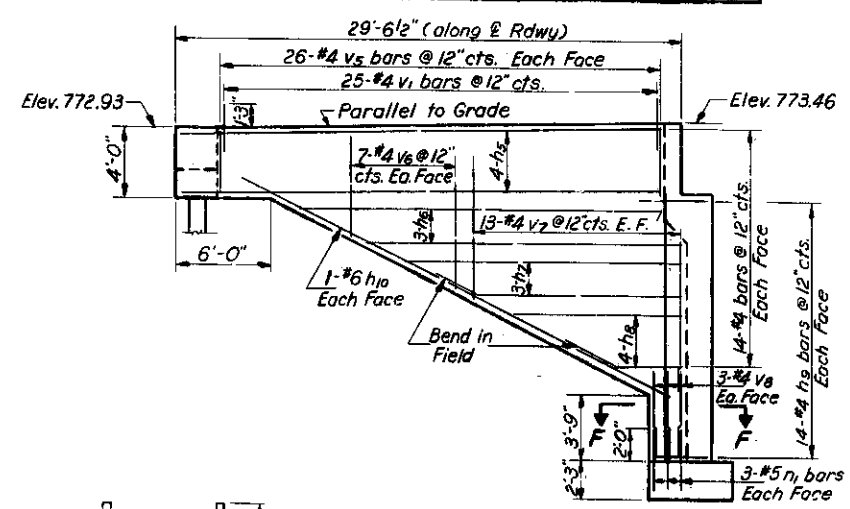
DETAIL OF STEPS



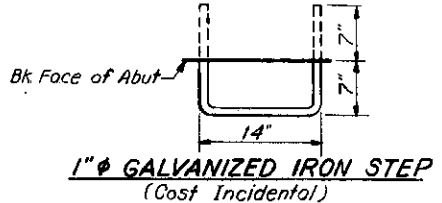
SECTION E-E



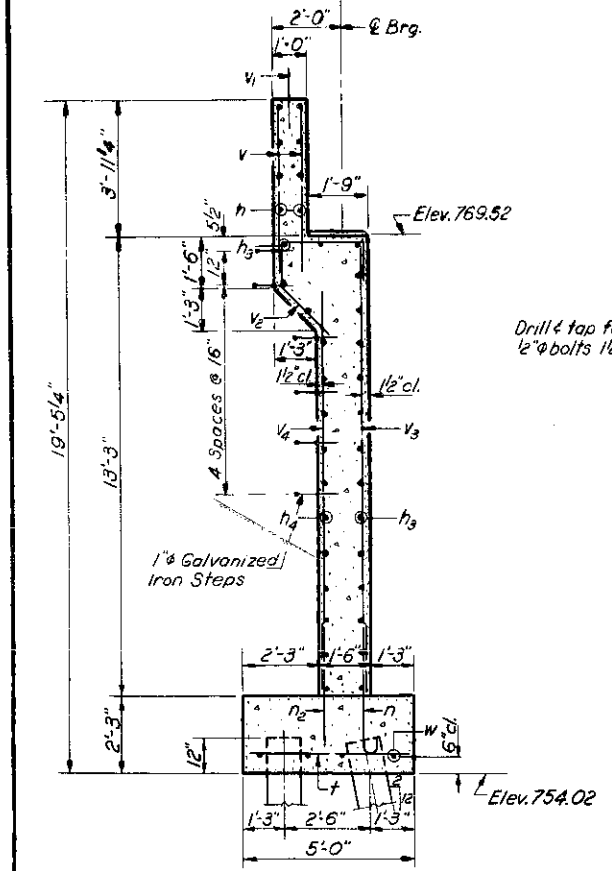
FRONT ELEVATION



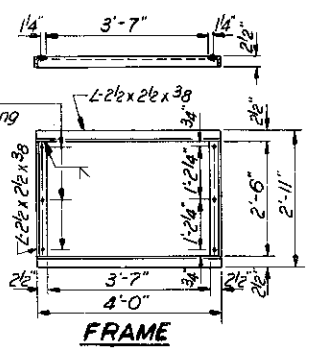
SIDE ELEVATION



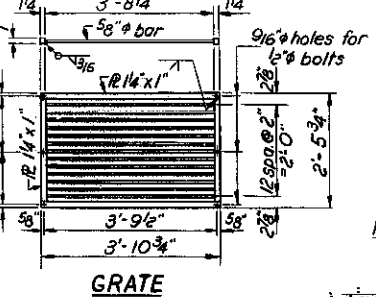
1" GALVANIZED IRON STEP
(Cost Incidental)



SECTION A-A

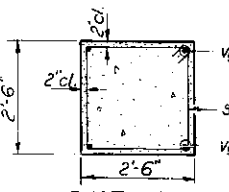


FRAME

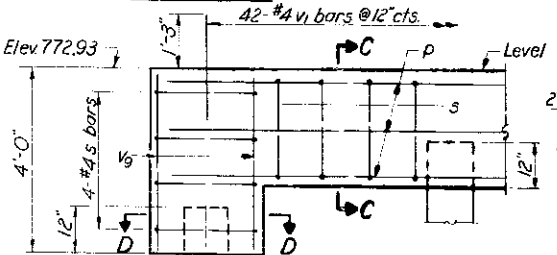


GRATE

DETAILS OF WELDED FRAME & GRATE
Included as Structural Steel

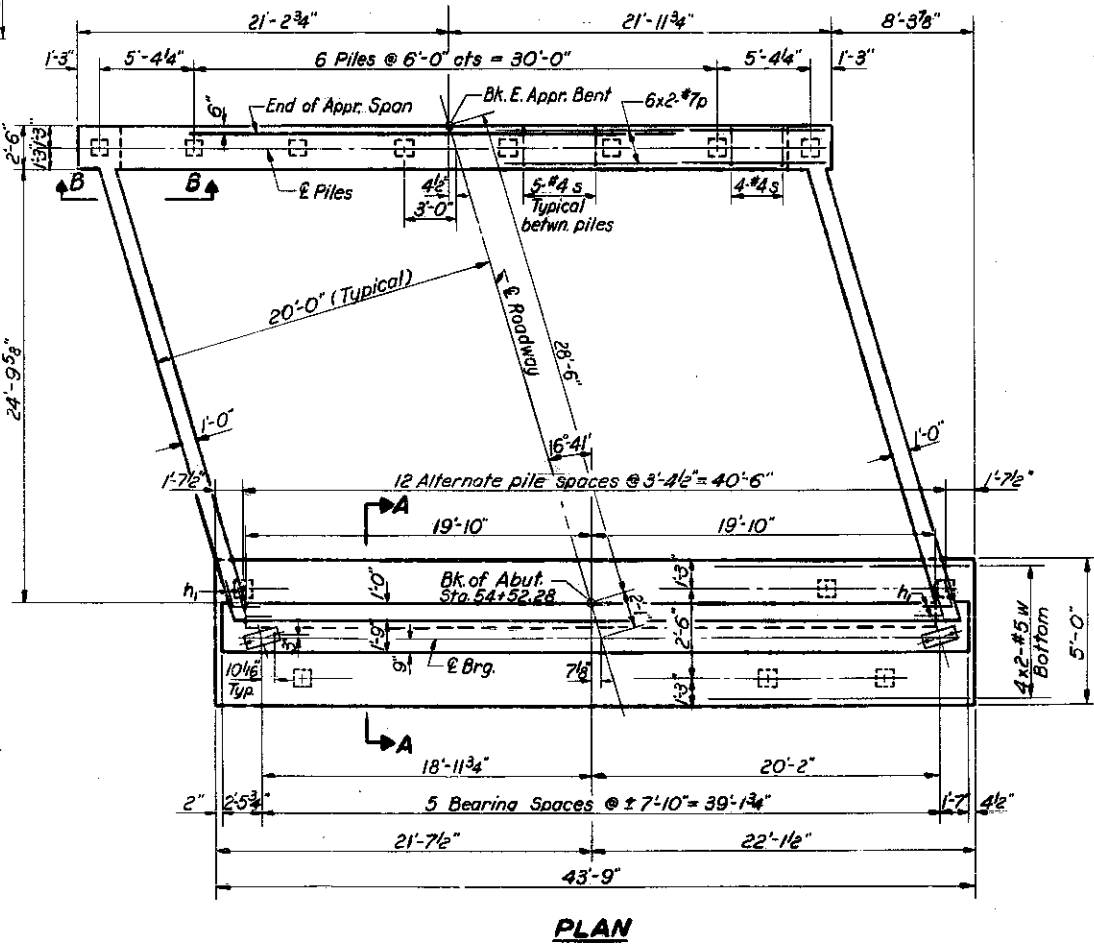


SECTION D-D

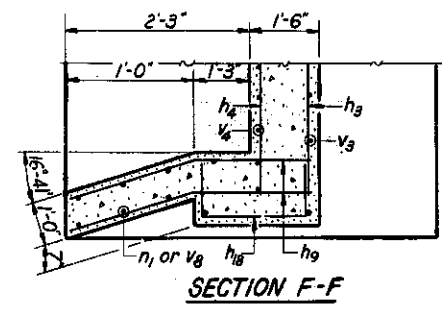


SECTION C-C

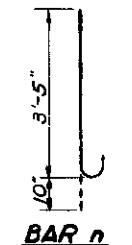
VIEW B-B



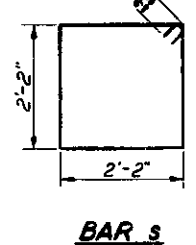
PLAN



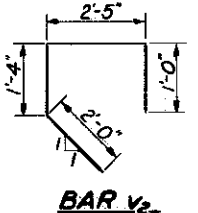
SECTION F-F



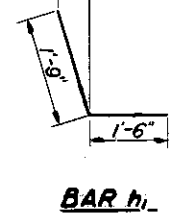
BAR n



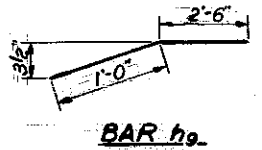
BAR s



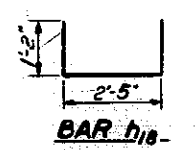
BAR v2



BAR h1



BAR h9



BAR h18

BILL OF MATERIAL

Bar No.	Size	Length	Shape
h	16 #4	21'-9"	
h1	16 #5	3'-3"	
h2	2 #6	8'-0"	
h3	32 #5	22'-3"	
h4	26 #4	21'-6"	
h5	16 #4	28'-0"	
h6	12 #4	21'-0"	
h7	12 #4	16'-0"	
h8	16 #4	10'-0"	
h9	56 #4	3'-6"	
h10	4 #6	28'-0"	
h18	28 #5	4'-9"	
n	43 #7	4'-3"	
n1	12 #5	3'-6"	
n2	43 #4	3'-6"	
p	12 #7	22'-6"	
s	41 #4	9'-5"	
t	44 #6	4'-9"	
v	86 #4	5'-0"	
v1	134 #2	2'-6"	
v2	43 #7	6'-9"	
v3	43 #7	13'-0"	
v4	43 #5	11'-6"	
v5	104 #4	3'-9"	
v6	28 #4	6'-0"	
v7	52 #4	10'-0"	
v8	12 #4	4'-0"	
v9	8 #6	3'-9"	
w	8 #5	22'-6"	
Class X Concrete			Cu. Yds. 95.8
Reinforcement Bars			Lbs. 7960
Concrete Piles			Lin. Ft. 464
Test Piles Concrete			Each 1
Structural Steel			Lbs. 145

EAST ABUTMENT
F.A. RT. 57 SEC. 0101-1000 HB
COOK COUNTY
STA. 28+28.236

DESIGNED *J. K. Asmell*
CHECKED *I. Kasper*
DRAWN *J. L. Armstrong*
CHECKED *I. K.*

EXAMINED *A. J. Hummer*
PASSED *H. J. Altos*
APPROVED *H. E. Staff*

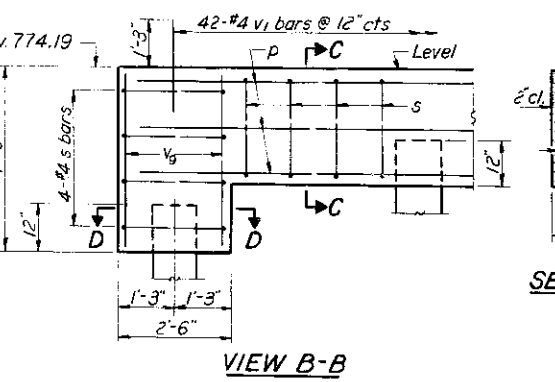
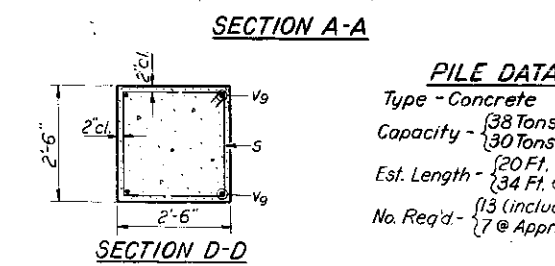
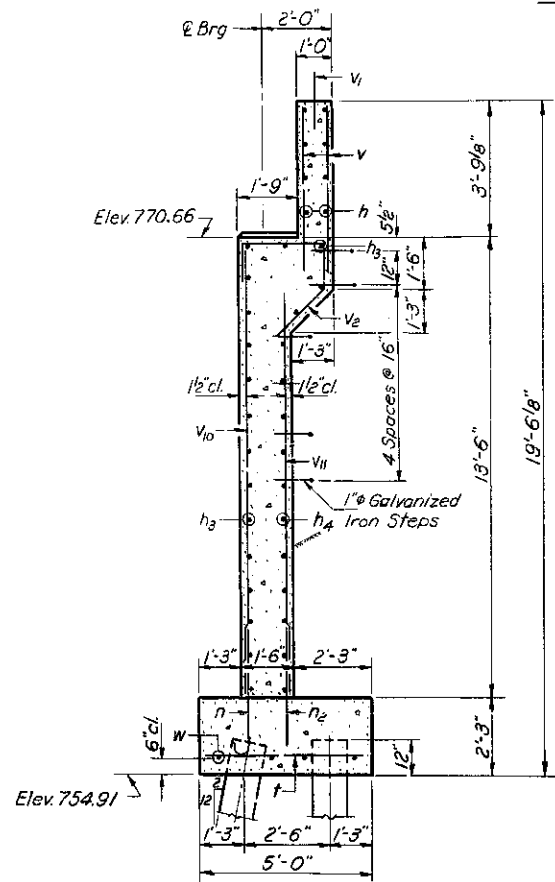
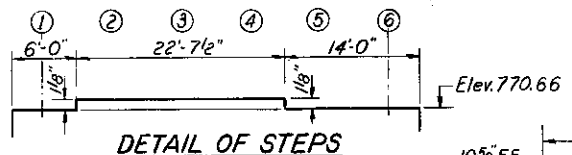
PILE DATA
Type - Concrete
Capacity - 38 Tons @ Abut.
Capacity - 30 Tons @ Appr.
Est. Length - 20 Ft. @ Abut.
Est. Length - 32 Ft. @ Appr.
No. Req'd - 13 (Includes 1 test pile) @ Abut.
No. Req'd - 7 @ Appr.

Revised 4-27-66 N.C.: 1" Galvanized Iron Steps added.

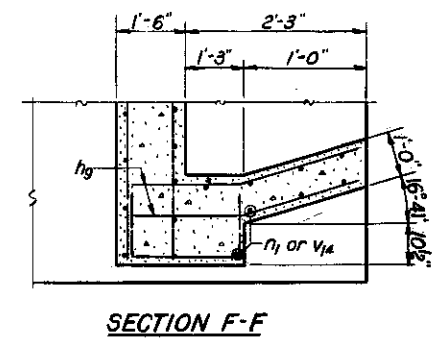
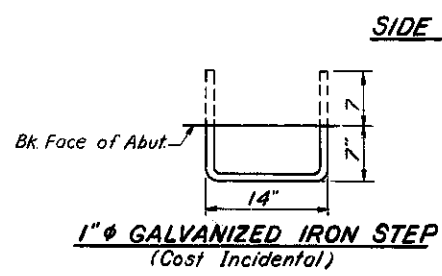
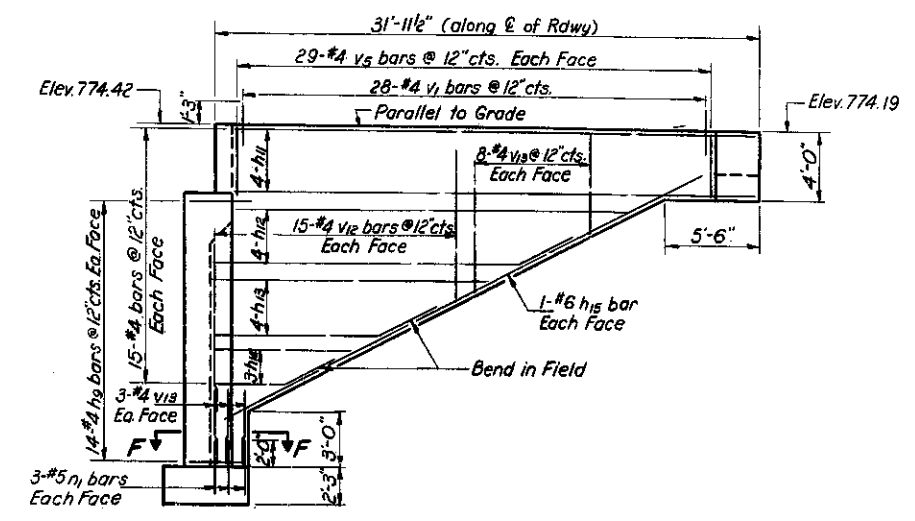
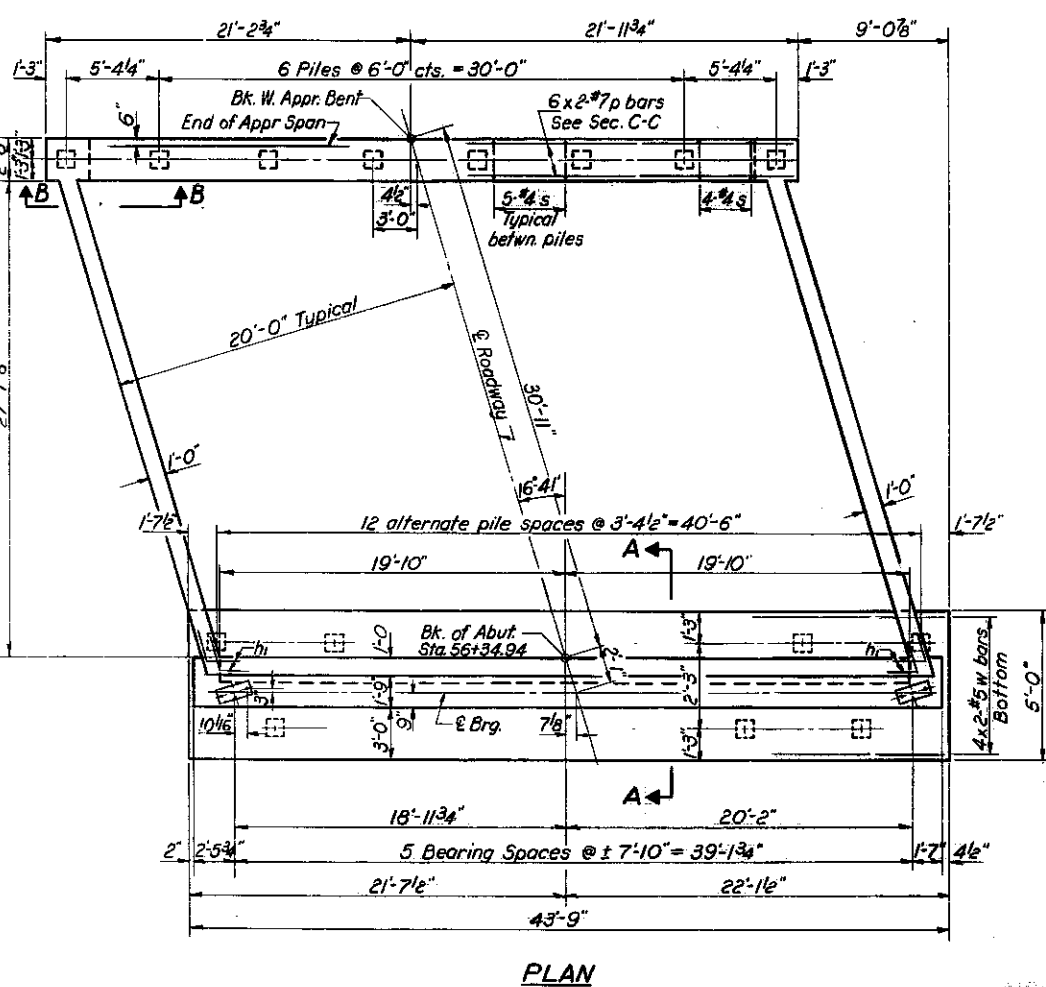
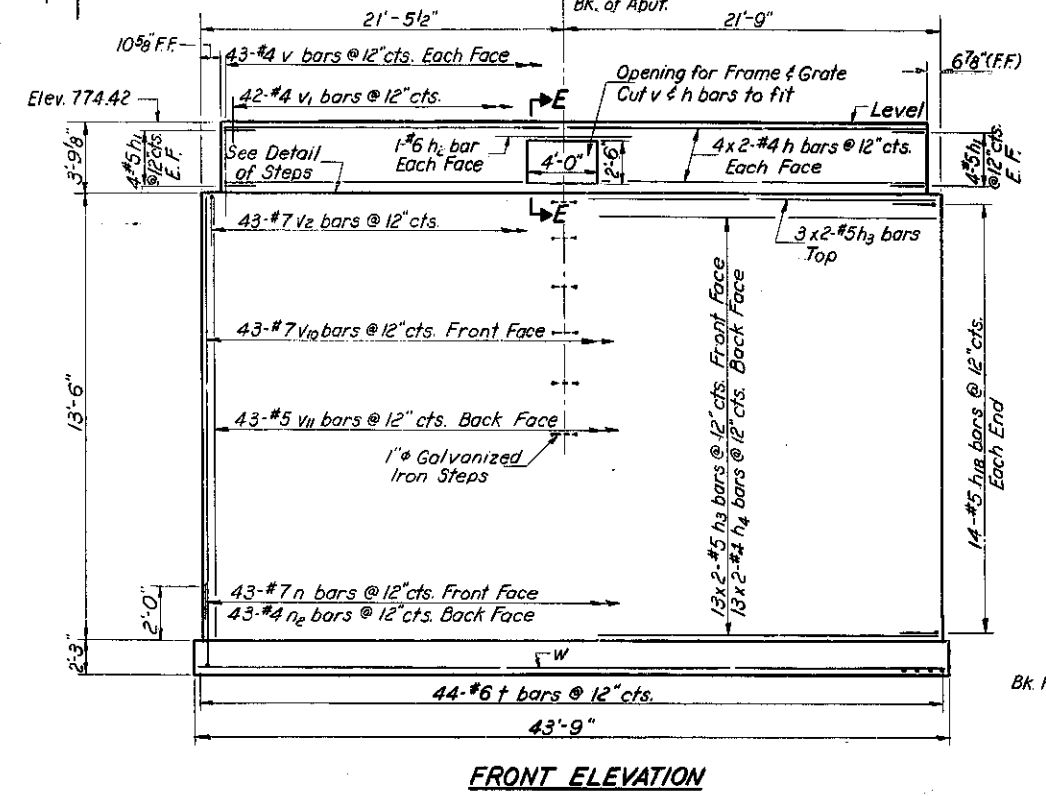
STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1-57	1000HB	Cook	49	25
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT	

SHEET NO. 11
14 SHEETS



FILE DATA
Type - Concrete
Capacity - 38 Tons @ Abut.
30 Tons @ Appr.
Est. Length - 20 Ft. @ Abut.
34 Ft. @ Appr.
No. Req'd - 13 (includes 1 test pile) @ Abut.
7 @ Appr.



NOTE:
See Sheet #10 for
1. Details of bars h1, h9, h10, n, s & v2
2. Section E-E
3. Details of Welded Frame & Grate

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h	16	#4	21'-9"	—
h1	16	#5	3'-3"	—
h2	2	#6	8'-0"	—
h3	32	#5	22'-3"	—
h4	26	#4	21'-6"	—
h9	56	#4	3'-6"	—
h10	16	#4	30'-0"	—
h12	16	#4	23'-0"	—
h13	16	#4	16'-0"	—
h14	12	#4	8'-0"	—
h15	4	#6	30'-0"	—
h18	28	#5	4'-9"	—
n	43	#7	4'-3"	—
n1	12	#5	3'-6"	—
n2	43	#4	3'-6"	—
p	12	#7	22'-6"	—
s	41	#4	9'-5"	—
t	44	#6	4'-9"	—
v	86	#4	5'-0"	—
v1	140	#4	2'-6"	—
v2	43	#7	6'-9"	—
v5	116	#4	3'-9"	—
v9	8	#6	3'-9"	—
v10	43	#7	13'-3"	—
v11	43	#5	12'-0"	—
v12	60	#4	11'-0"	—
v13	32	#4	5'-9"	—
v14	12	#4	3'-6"	—
w	8	#5	22'-6"	—

Class X Concrete	Cu. Yds.	100.6
Reinforcement Bars	Lbs.	8190
Concrete Piles	Lin. Ft.	478
Test Piles Concrete	Each	1
Structural Steel	Lbs.	145

DESIGNED: [Signature]
CHECKED: [Signature]
DRAWN: J.L. Armstrong
CHECKED: I.K.
EXAMINED: [Signature] Dec 28 1965
PASSED: H.J. Allon
APPROVED: [Signature]

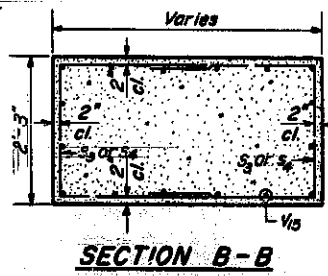
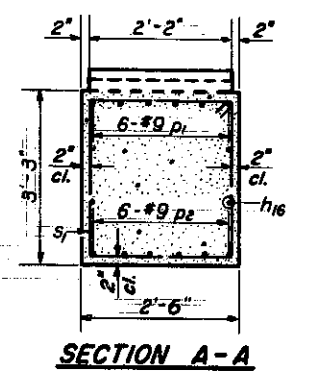
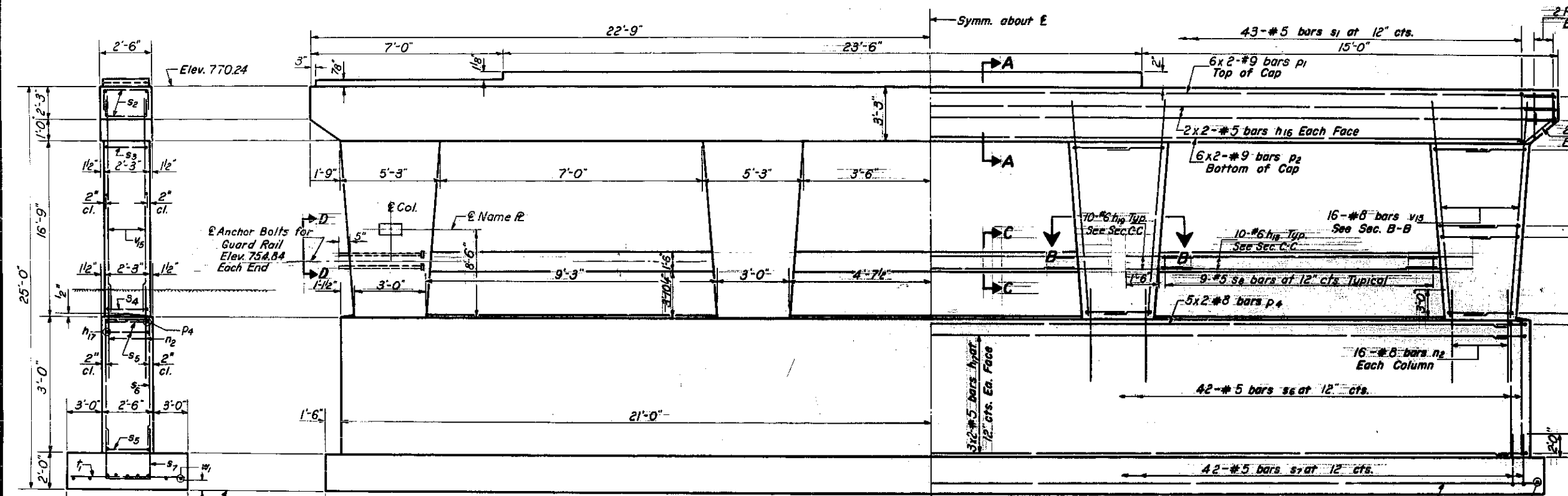
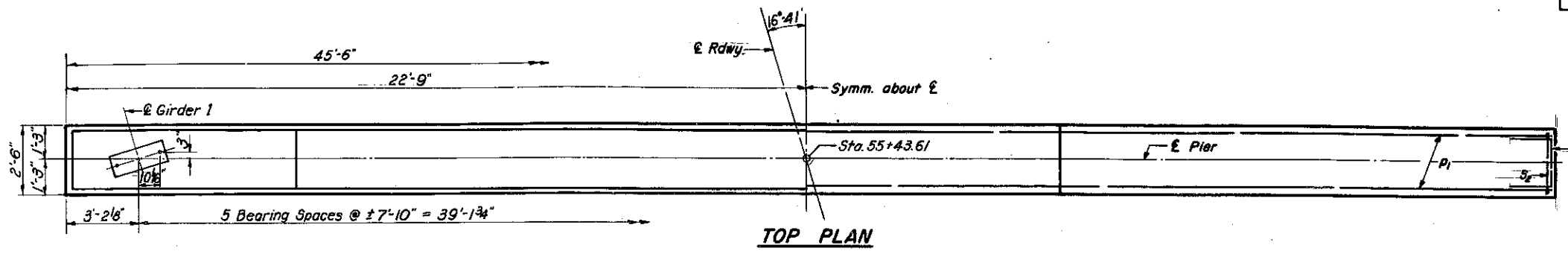
WEST ABUTMENT
F.A.I. RT. 57 SEC. 0101-1000HB
COOK COUNTY
STA. 28+28.236

Revised 4-27-66 NC. 1" Galvanized iron steps added.

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

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1-57	1000HB	Cook	49	26

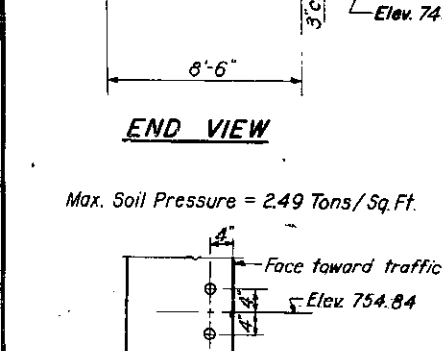
SHEET NO. 12
14 SHEETS



BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h ₁₆	8	#5	23'-3"	—
h ₁₇	12	#5	21'-6"	—
h ₁₈	30	#6	8'-6"	—
h ₁₉	60	#6	3'-0"	—
n ₂	64	#8	3'-6"	—
p ₁	12	#9	23'-9"	—
p ₂	12	#9	22'-0"	—
p ₃	4	#5	2'-9"	—
p ₄	10	#8	21'-9"	—
s ₁	43	#5	11'-4"	□
s ₂	8	#5	5'-10"	—
s ₃	72	#5	8'-7"	□
s ₄	64	#5	7'-3"	□
s ₅	8	#5	5'-0"	□
s ₆	42	#5	7'-0"	□
s ₇	42	#5	9'-6"	□
s ₈	27	#5	7'-0"	□
t ₁	50	#6	8'-3"	□
u	6	#6	8'-0"	□
v ₁₅	64	#8	19'-0"	—
w ₁	18	#5	23'-0"	—

Class X Concrete	Cu. Yds.	80.3
Reinforcement Bars	Lbs.	11530
Name Plates	Each	2



DESIGNED [Signature]

CHECKED I. Kasper

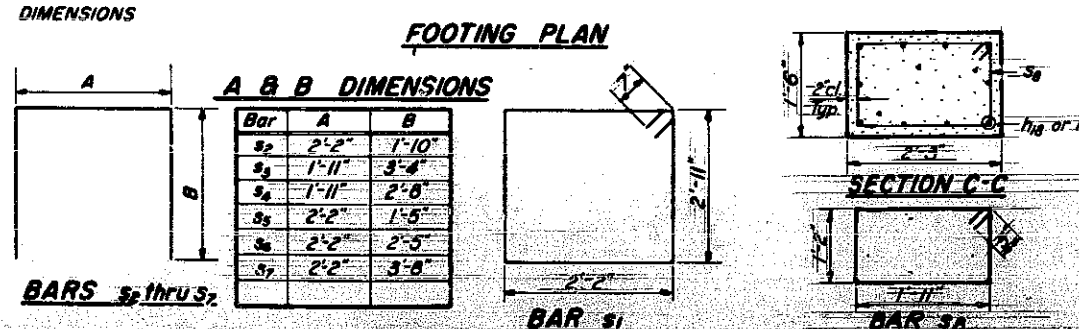
DRAWN W. A. Sausaman Jr.

CHECKED I.K.

EXAMINED [Signature] Dec. 28 1966

PASSED [Signature]

APPROVED [Signature]



Note:
Space reinforcement in cap to miss anchor bolts.
Min. bar laps = 20 dia. unless otherwise noted.
All edges shall have standard 5" chamfers except as noted.
Pour steps monolithically with cap.

PIER
F.A.I. RT. 57 SEC. 0101-1000HB
COOK COUNTY
STA. 26+28.236

P-6 7-2-62
Revised 4-27-66 N.C. Struts between columns added. Crashwall reduced from 4'-0" to 3'-0" ht. Class X Conc. 78.9 to 80.3 Cu. Yds. Reinf. Bars 10580 to 11530 Lbs.

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

PROJECT NO.	SECTION	SHEET NO.	TOTAL SHEETS	SHEET NO. 13
FAI-57	1000HB	COOK	49	27
SHEET NO. 13				14 SHEETS

COUNTY Will-Cook				
Boring No.	Station	Offset	Elevation	Notes
#1	56+22.98	17' Rt. of	750.73	Ground Surface
			747.23	Stiff Black CLAY Topsoil
			743.73	Stiff Mottled CLAY
			738.73	Hard Brown CLAY Till, Pebbles
			733.73	Hard Grey CLAY Till, Pebbles
			731.23	Stiff Grey CLAY, Few Pebbles
			729.73	Grey Medium Dense, Medium Coarse SAND, Layers of Stiff CLAY
			723.73	Hard Grey CLAY Till, Pebbles
			721.73	Stiff Grey CLAY Till

Surface Water El. _____
Groundwater El. at Completion 741.83
After 24 hours 738.43

COUNTY Will-Cook				
Boring No.	Station	Offset	Elevation	Notes
#2	56+22.28	18.6' Rt. of	750.07	Ground Surface
			745.07	Stiff Black CLAY Topsoil
			743.07	Very Stiff Mottled CLAY, Few Pebbles
			738.07	Hard Mottled CLAY, Few Pebbles
			736.07	Hard Brown CLAY, Few Pebbles
			733.07	Very Stiff Grey CLAY, Few Pebbles
			731.07	Stiff Grey CLAY, Few Pebbles
			729.07	Very Stiff Grey CLAY, Few Pebbles
			726.07	Medium Dense Coarse SAND
			722.07	Very Stiff Grey CLAY, Few Pebbles
			716.07	Medium Dense GRAVEL with CLAY layers
			709.07	Stiff Grey CLAY, Few Pebbles

Surface Water El. _____
Groundwater El. at Completion 736.81
After 24 hours 735.81

COUNTY Will-Cook				
Boring No.	Station	Offset	Elevation	Notes
#3	56+23.61	18.7' Rt. of	750.31	Ground Surface
			745.31	Stiff Black CLAY Topsoil
			743.31	Very Stiff Mottled CLAY, Few Pebbles
			740.31	Hard Brown CLAY, Few Pebbles
			735.31	Very Stiff Grey CLAY
			730.31	Hard Grey CLAY, Layers of Coarse SAND
			726.31	Very Stiff Grey CLAY
			724.31	Medium Dense Coarse SAND
			719.31	Stiff Grey CLAY, Few Pebbles

Surface Water El. _____
Groundwater El. at Completion 736.81
After 24 hours 735.81

COUNTY Will-Cook				
Boring No.	Station	Offset	Elevation	Notes
#4	56+27.61	60.1' Lt. of	749.87	Ground Surface
			744.87	Stiff Dark Brown CLAY Topsoil
			740.87	Hard Brown SILTY CLAY, Trace of Sand and Pebbles
			735.87	Hard Brown CLAY, Trace of Pebbles
			733.87	Hard Brown CLAY, Trace of Pebbles

Surface Water El. _____
Groundwater El. at Completion 734.81
After 24 hours 734.81

COUNTY Will-Cook				
Boring No.	Station	Offset	Elevation	Notes
#5	56+22.61	61.65' Lt. of	749.87	Ground Surface
			743.35	Stiff Dark Brown CLAY Topsoil
			741.35	Very Stiff Brown SILTY CLAY, Trace of Pebbles
			738.35	Hard Brown CLAY, Trace of Pebbles
			736.35	Hard Grey CLAY, Trace of Pebbles
			734.35	Hard Grey SILTY CLAY, Trace of Pebbles
			731.35	Very Stiff Grey CLAY, Sand Layers, Few Pebbles
			727.35	Hard Grey CLAY, Trace of Pebbles

DESIGNED *[Signature]*
CHECKED *[Signature]*
DRAWN *[Signature]*
CHECKED *[Signature]*

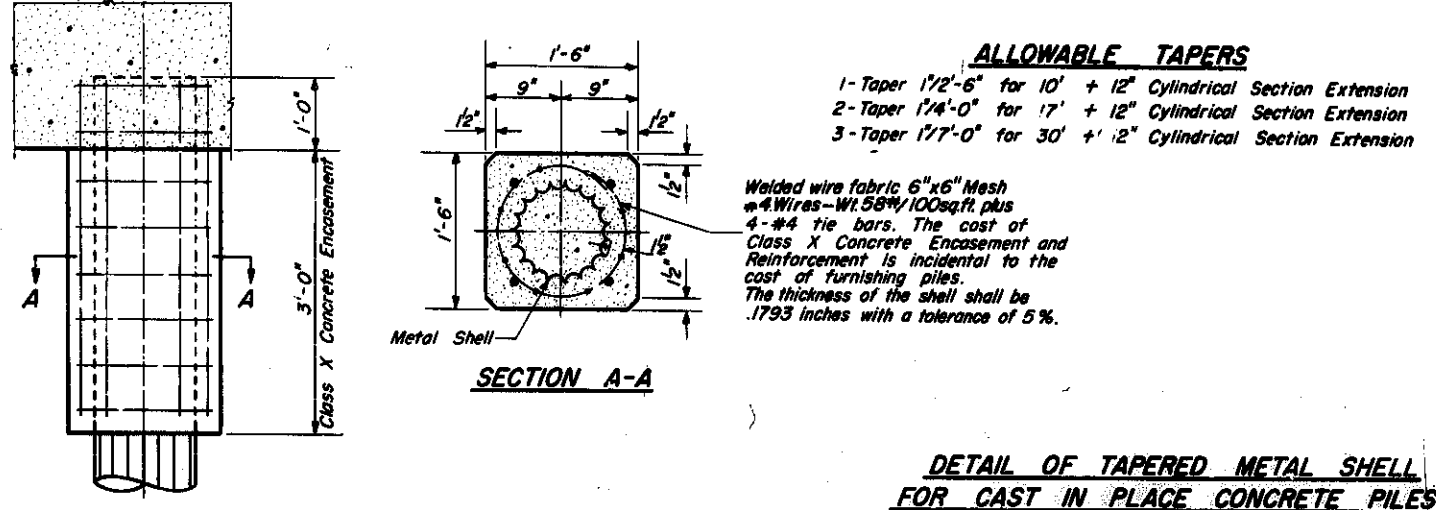
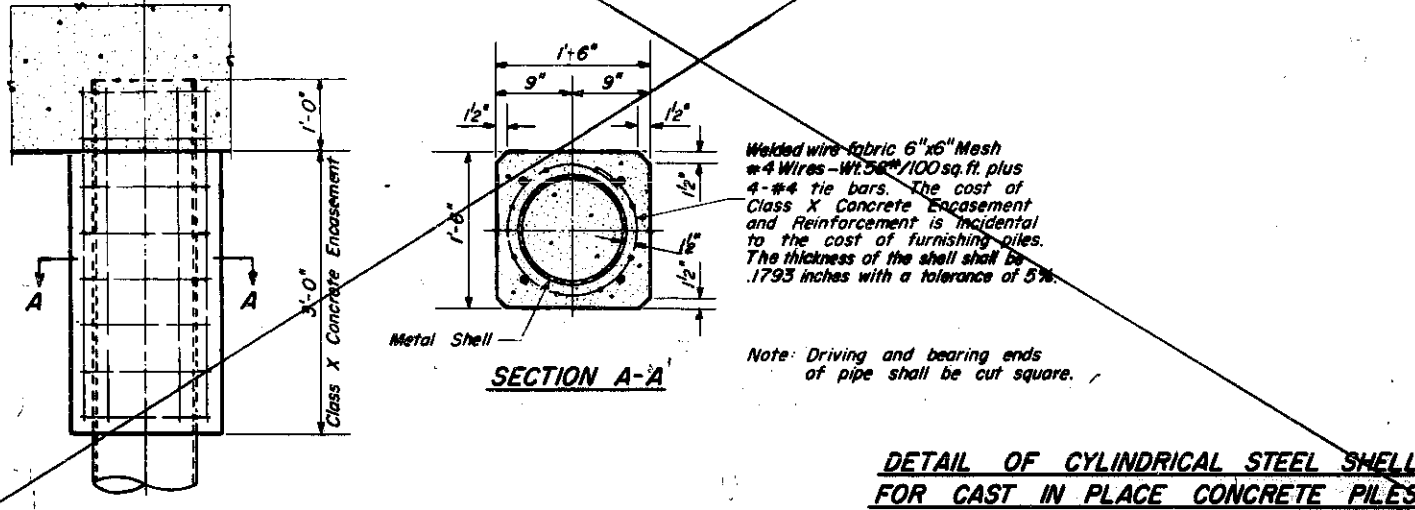
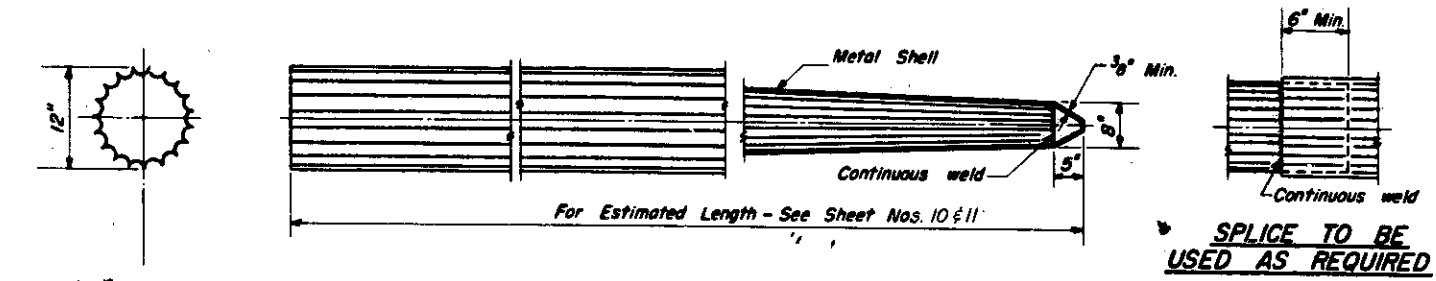
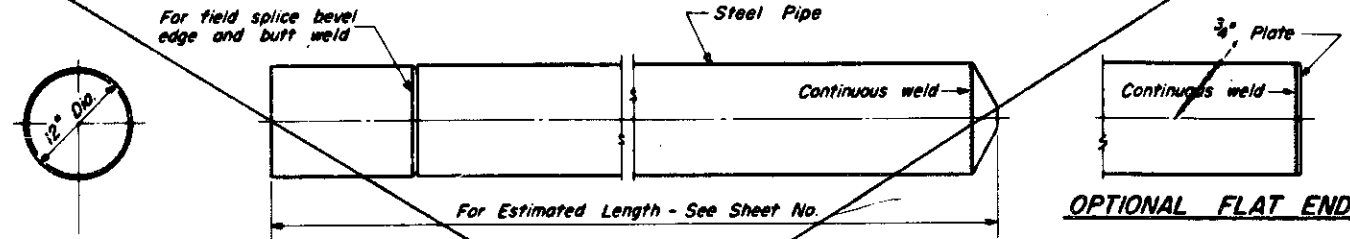
EXAMINED *[Signature]*
PASSED *[Signature]*
APPROVED *[Signature]*

DEC 28 1965

N - Standard Penetration Test - Blows per foot to drive 2" O.D. Split Spoon Sampler with 140# hammer falling 30".
CU - Unconfined Compressive Strength - 140#
W - Water Content - percentage of oven dry weight - G.

1 - Blow Fall
2 - Blow Fall
3 - Blow Fall
4 - Estimated Value

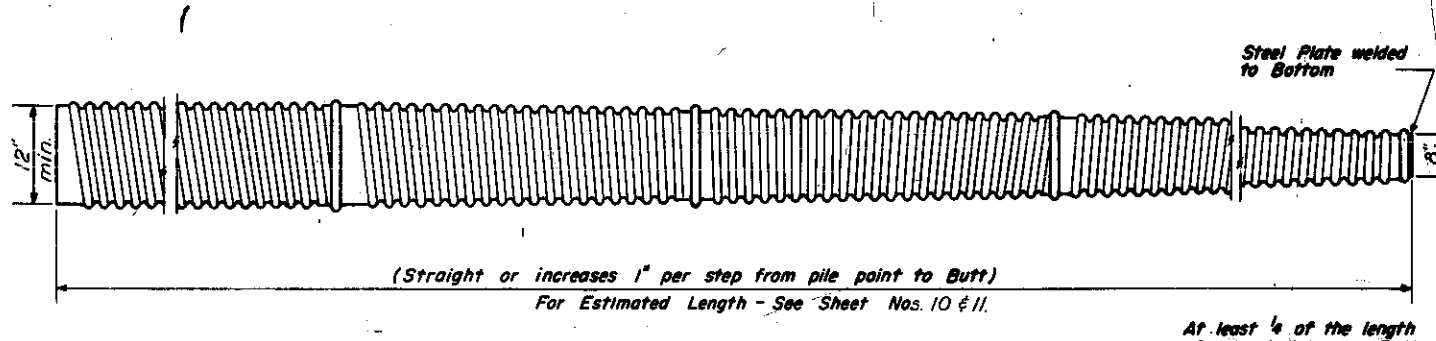
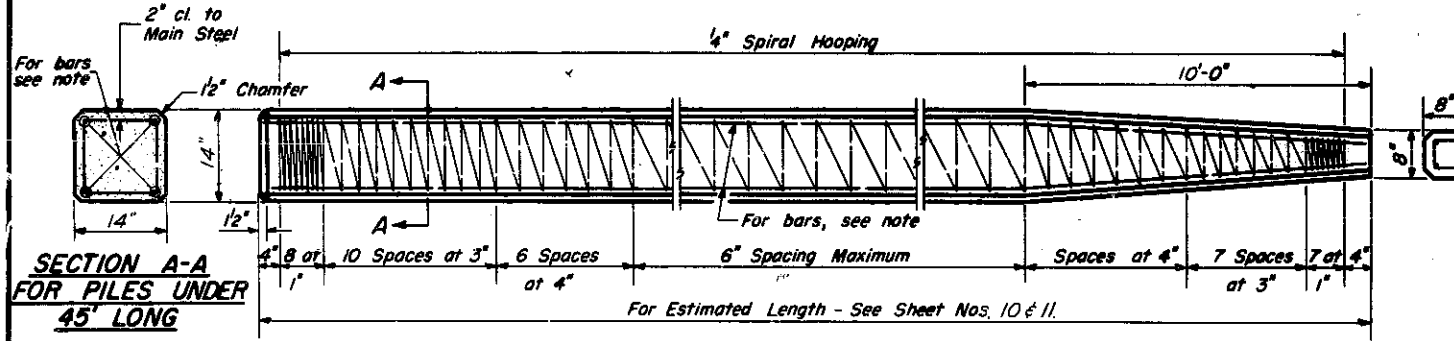
BORINGS
FAI 57 SEC 0101-1000HB
COOK CO.
STA 56+22.28-23.61



- 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

DETAIL OF CYLINDRICAL STEEL SHELL FOR CAST IN PLACE CONCRETE PILES

DETAIL OF TAPERED METAL SHELL FOR CAST IN PLACE CONCRETE PILES



SECTION A-A FOR PILES UNDER 45' LONG

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.

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.)

Reinforcement is incidental to the cost of furnishing piles.

6-#6 bars (For Details, See below)

1/4" Spiral Hooping at 6" spacing or #4 Ties at 12" cts.

BUTT (12" Min.)

POINT (8" Min.) (Applies only to Step Taper type pile)

SECTION A-A FOR PILES 45' OR MORE

DESIGNED: J. Kaspar
CHECKED: I. Kaspar
P.G. Barnett
DRAWN: W. A. Soudaman
CHECKED: I.K.

EXAMINED: C. J. Hummer
PASSED: H. J. Altou
APPROVED: J. E. Slaff

DEC 28 1965

DETAIL OF MANDREL DRIVEN STRAIGHT OR STEP-TAPER PILES FOR CAST IN PLACE CONCRETE PILES

10'-0"

PILE DETAILS
F.A.I. RT. 57 SEC. 0101-1000 HB
COOK COUNTY
STA. 28+28.236

F.A.I. RT. 57 SEC. 0101-1000 HB COOK COUNTY STA. 28+28.236

12 '22

NOTES:
PLATES SHALL BE FURNISHED AND INSTALLED AS SPECIFIED IN SECTION 61 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION ADOPTED JAN. 2, 1958 AND AS SHOWN ON THE PLANS.
DETAILED PLANS OF PLATE AND LETTERING WILL BE FURNISHED TO THE CONTRACTOR AFTER CONTRACT IS AWARDED.
MATERIAL - BEST QUALITY BRASS OR BRONZE BORDER AND LETTERS RAISED 1/8" SQUARE CUT AND NOT TAPERED TOP

SURFACE POLISHED.
THE NAME PLATE SHALL BE EMBEDDED IN THE CONCRETE SO THAT THE FACE OF THE NAME PLATE IS FLUSH WITH THE SURFACE OF THE CONCRETE.
THE NAME PLATE SHALL BE FASTENED TO THE CONCRETE BY FOUR LUGS 3/8" DIAM., AT LEAST 4" LONG CAST ON BACK OF PLATE.

NAME EXPRESSWAY

UNDER

NAME OF ROAD

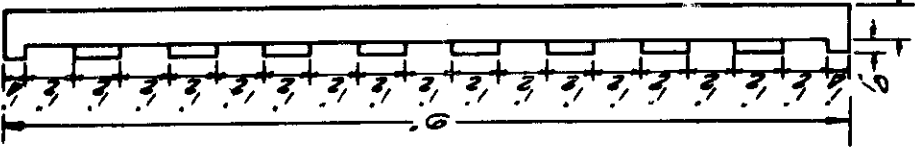
FAI ROUTE XX. SEC XXXX-XXX XX

PROJECT I-XX-X (XX) X

STATION XXX+XX

LOADING HS 20-44

19XX



1'-3"

BUILT BY
STATE OF ILLINOIS
WITH THE CO-OPERATION OF
COUNTY OF COOK
FEDERAL GOVERNMENT
196X

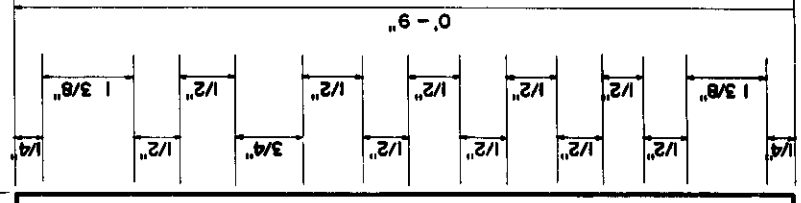


PLATE NO. 2

ILLINOIS DIVISION OF HIGHWAYS
MOLINE EXPRESSWAY

NAME PLATE DETAILS

NOTE:
A). BORDERING AND LETTERING: RAISE 1/8 INCH SQUARE CUT AND NOT TAPERED. TOP SURFACE POLISHED
B). MATERIAL: SHALL BE BEST QUALITY BRASS OR BRONZE
C). FASTENINGS: TO CONCRETE, FOUR (4) LUG OF AT LEAST 3" LONG, CAST ON BACK OF PLATE

SCALE: NOT TO SCALE
DATE
DRAWN BY:
CHECKED BY: