

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
559	582-R-1-I-3	COOK	9	1

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

**PROPOSED  
HIGHWAY PLANS**

FOR INDEX OF SHEETS, SEE SHEET NO. 2

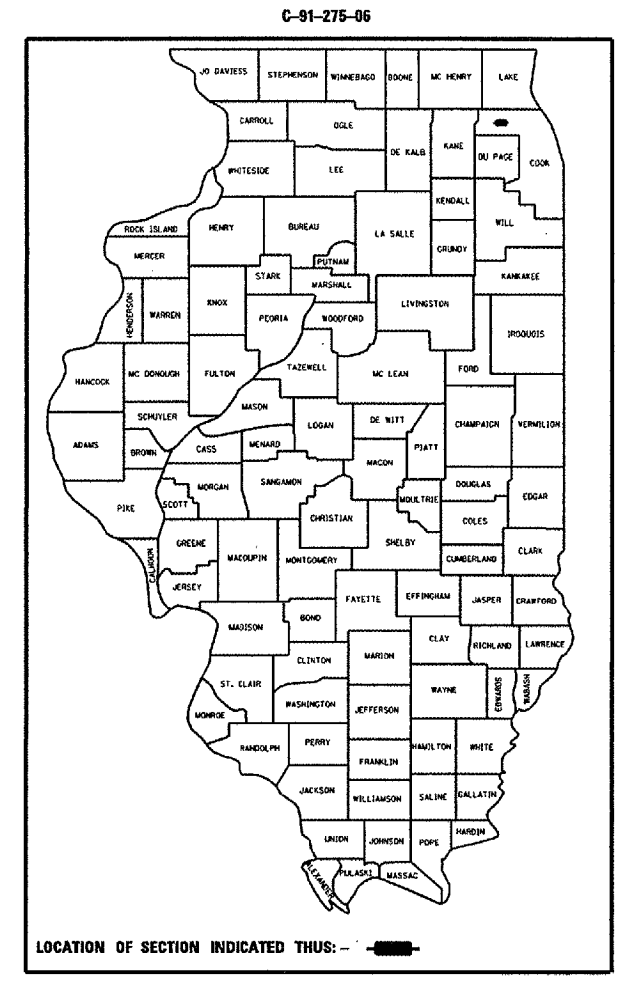
**THIS IMPROVEMENT IS LOCATED  
IN THE VILLAGE OF ROLLING MEADOWS**

**TRAFFIC DATA:**

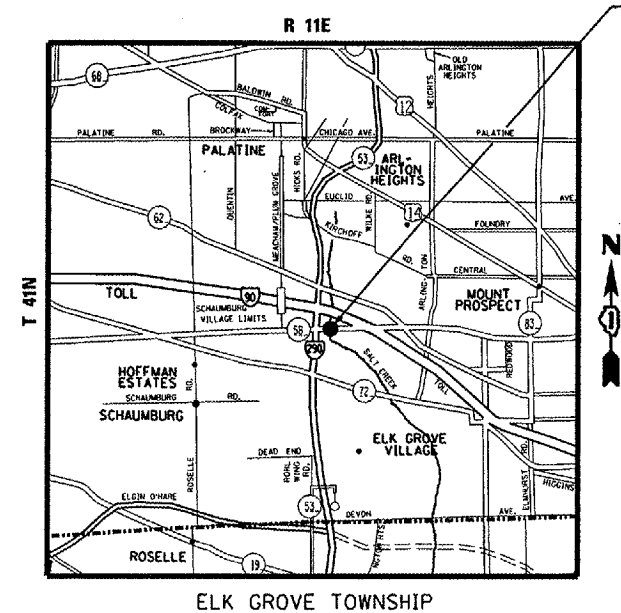
ADT (2004): 56500  
SPEED LIMIT: 40 MPH

**FAP ROUTE 559: IL 58 (GOLF ROAD)  
OVER SALT CREEK  
SN 016-0349  
SECTION: 582R-1-I-3  
PPC DECK BEAM REPLACEMENT  
COOK COUNTY**

**C-91-275-06**



LOCATION  
GOLF RD. OVER SALT CREEK  
SN 016-0349



DISTRICT ONE DESIGN PLAN PREPARATION ENGINEER:  
KEN ENG / ROBERT BORO (847) 705-4718

J.U.L.I.E.  
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION  
1-800-892-0123

CONTRACT NO. 60B12

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

SUBMITTED *March 29, 2006*  
*Diane M. O'Keefe / C*  
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

*May 12, 2006*  
*Mike Hine*  
ENGINEER OF DESIGN AND ENVIRONMENT

*May 12, 2006*  
*Milton R. Sees P.E.*  
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

**PRINTED BY THE AUTHORITY  
OF THE STATE OF ILLINOIS**

F.A.P. SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
597 582-K-1-13	COOK	2	2
STA. _____ TO STA. _____			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT	

INDEX OF SHEETS

1. COVER SHEET
2. INDEX OF SHEETS, GENERAL NOTES, STATE STANDARDS
3. SUMMARY OF QUANTITIES
4. TRAFFIC STAGING DETAIL
5. - 9. BRIDGE PLANS

STATE STANDARDS

- 701301-02 LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
- 701601-04 URBAN LANE CLOSURE, MULTILANE, 1W OR 2W WITH NONTRAVERSABLE MEDIAN
- 701801-03 LANE CLOSURE, MULTILANE 1W OR 2W CROSSWALK OR SIDEWALK CLOSURE
- 702001-06 TRAFFIC CONTROL DEVICES
- 704001-02 TEMPORARY CONCRETE BARRIER

GENERAL NOTES

BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "J.U.L.I.E" AT (800) 892-0123 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE AND GAS UTILITIES. 48 HOUR NOTIFICATION IS REQUIRED.

THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT WRITTEN PERMISSION FROM THE DEPARTMENT.

THE DETACHMENT AND REATTACHMENT OF GUARDRAIL TERMINAL SECTIONS SHALL BE INCLUDED IN THE COST OF TRAFFIC CONTROL AND PROTECTION.

ALL DAMAGE TO EXISTING PAVEMENT MARKINGS OR RAISED REFLECTIVE PAVEMENT MARKERS OUTSIDE THE REMOVAL LINE SHOWN ON THE PLANS SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.

BEFORE BEGINNING ANY WORK, THE CONTRACTOR SHALL RETAIN AND RECORD FOR FUTURE REFERENCE, ALL EXISTING PAVEMENT MARKING LINES AND RAISED REFLECTIVE PAVEMENT MARKERS IN ORDE THAT THESE LOCATIONS CAN BE RE-ESTABLISHED FOR STRIPING. EXACT LOCATIONS OF ALL PAVEMENT MARKINGS SHALL BE AS DIRECTED BY THE ENGINEER.

IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO CONSTRUCTION AND ORDERING OF MATERIALS.

THE CONTRACTOR SHALL CONTACT THE DISTRICT ONE TRAFFIC CONTROL SUPERVISOR AT (847) 705-4470 A MINIMUM OF 72 HOURS IN ADVANCE OF BEGINNING WORK.

THESE PLANS HAVE BEEN PREPARED FROM NOTES RECEIVED FROM BRIDGE INSPECTORS.

DO NOT SCALE PLANS FOR CONSTRUCTION DIMENSIONS.

PLOT DATE \* 3/29/2006  
 PLOT SCALE \* 1/8"=1'-0"  
 USER NAME \* aaronlauer

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION
NAME	DATE	
		GENERAL NOTES, INDEX OF SHEETS, STATE STANDARDS

SCALE: VERT. \_\_\_\_\_  
 HORIZ. \_\_\_\_\_  
 DATE \_\_\_\_\_

DRAWN BY \_\_\_\_\_  
 CHECKED BY \_\_\_\_\_

CONTRACT: 60B12

F.A.D. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
559	500-R-1-3	COOK	---	3
FED. ROAD DIST. NO. 1		ILLINOIS	HIGHWAY PROJECT	

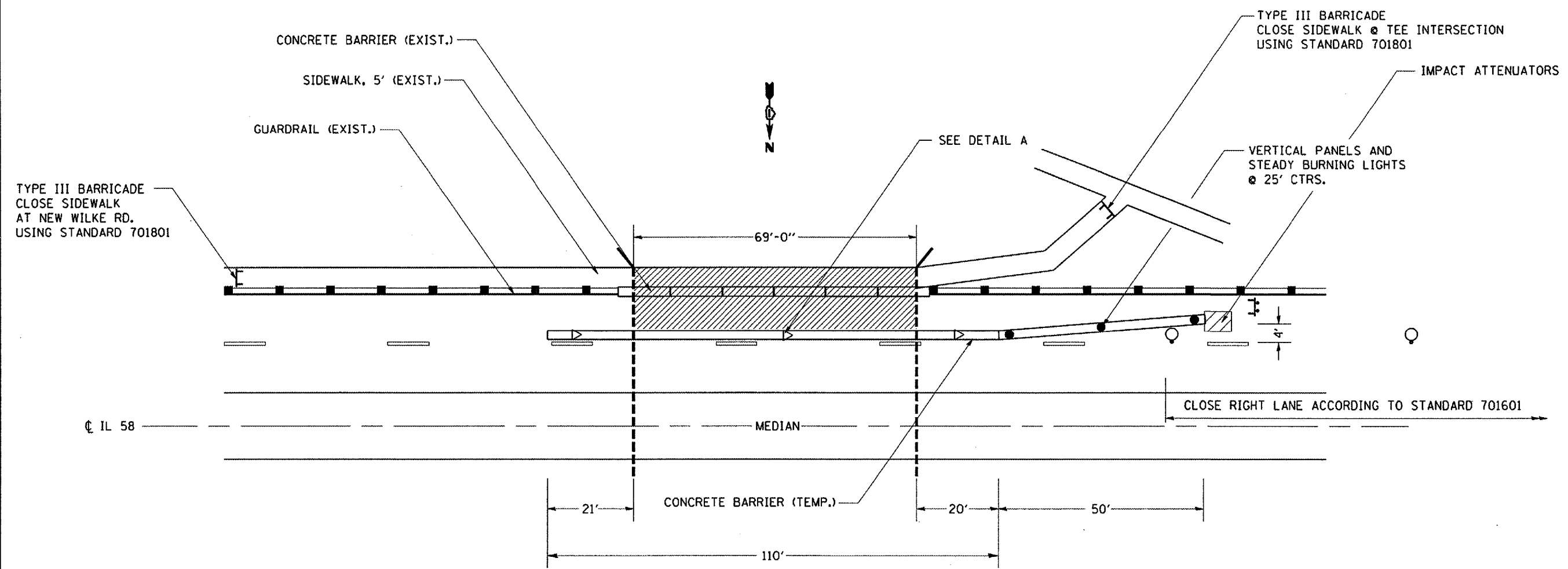
SUMMARY OF QUANTITIES			TOTAL QUANTITIES	CONSTRUCTION TYPE CODE	
CODE NO	ITEM	UNIT		URBAN 100% STATE SFTY-2A	
50102400	CONCRETE REMOVAL	CU YD	10.6	10.6	
50300255	CONCRETE SUPERSTRUCTURE	CU YD	10.8	10.8	
50301200	CONCRETE WEARING SURFACE	SO YD	108.8	108.8	
50400605	PRECAST PRESTRESSED CONCRETE DECK BEAMS (33" DEPTH)	SO FT	1055	1055	
50500405	FURNISHING AND ERECTING STRUCTURAL STEEL	POUND	760	760	
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	3600	3600	
67000500	ENGINEER'S FIELD OFFICE, TYPE B	CAL MO	4	4	
67100100	MOBILIZATION	L SUM	1	1	
70102630	TRAFFIC CONTROL AND PROTECTION, STANDARD 701601	L SUM	1	1	
70102640	TRAFFIC CONTROL AND PROTECTION, STANDARD 701801	L SUM	1	1	
70400100	TEMPORARY CONCRETE BARRIER	FOOT	160	160	
X0320047	REMOVAL OF EXISTING PRECAST PRESTRESSED CONCRETE DECK BEAMS	SO FT	844	844	
X0321781	MECHANICAL SPLICE	EACH	71	71	
X0322933	SILICONE JOINT SEALER, 2.5"	FOOT	102	102	
X0323076	SILICONE JOINT SEALER, 1 3/4"	FOOT	102	102	
Z0003900	BICYCLE RAILING	FOOT	70	70	
Z0001900	ASBESTOS BEARING PAD REMOVAL	EACH	8	8	
Z0030240	IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE), TEST LEVEL 2	EACH	1	1	

© SFTY-3N

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION SUMMARY OF QUANTITIES
NAME	DATE	

PLOT DATE: 3/31/2006

F.A.P. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
557	588-R-1-23	COOK		4
STA. _____		TO STA. _____		
FED. ROAD DIST. NO. _____		ILLINOIS FED. AID PROJECT _____		



TYPE III BARRICADE  
CLOSE SIDEWALK  
AT NEW WILKE RD.  
USING STANDARD 701801

TYPE III BARRICADE  
CLOSE SIDEWALK @ TEE INTERSECTION  
USING STANDARD 701801

IMPACT ATTENUATORS

VERTICAL PANELS AND  
STEADY BURNING LIGHTS  
@ 25' CTRS.

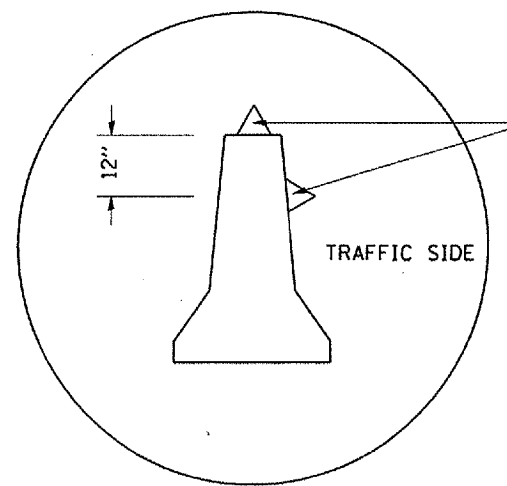
SEE DETAIL A

CLOSE RIGHT LANE ACCORDING TO STANDARD 701601

IL 58

MEDIAN

CONCRETE BARRIER (TEMP.)



DETAIL A  
(BARRIER WALL REFLECTORS)

TYPE C MONODIRECTIONAL  
REFLECTOR ON TANGENT  
PORTION OF BARRIER  
AT 50' CTRS.

LEGEND



WORK ZONE



BARRELS WITH MONO-DIRECTIONAL  
STEADY BURNING LIGHTS



TYPE III BARRICADE WITH STEADY  
BURNING LIGHTS

COST OF TRAFFIC CONTROL ITEMS SHOWN  
ON THIS SHEET ARE INCLUDED IN THE  
COST OF "TRAFFIC CONTROL AND PROTECTION  
STANDARD 701601" UNLESS NOTED ELSEWHERE

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

TRAFFIC STAGING DETAIL

SCALE: VERT.  
HORIZ.  
DATE

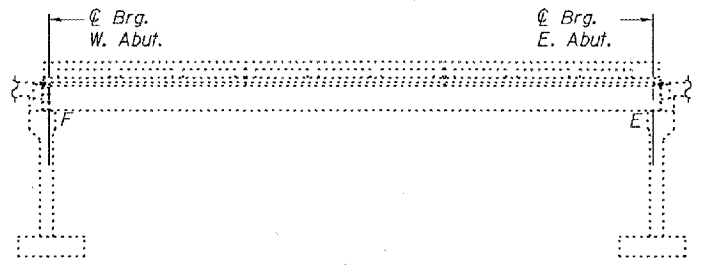
DRAWN BY  
CHECKED BY

PLOT DATE = 3/29/2006  
FILE NAME = c:\p\projects\127066\design\edgn  
PLOT SCALE = 21.0000" = 1"  
USER NAME = kstanger

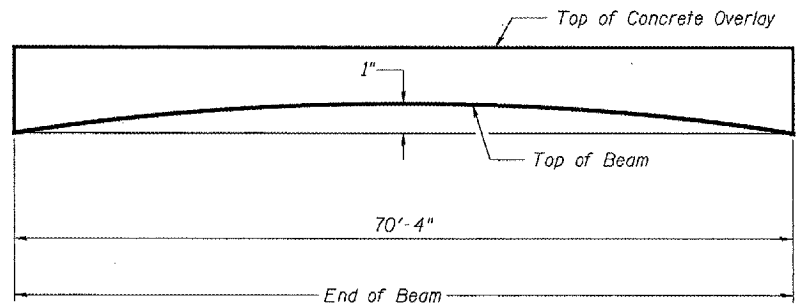
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	SHEET	SHEET NO. 1
		COOK	5	5 SHEETS
FED. ROAD DIST. NO. 7	ALLIANCE	FED. AID PROJECT		

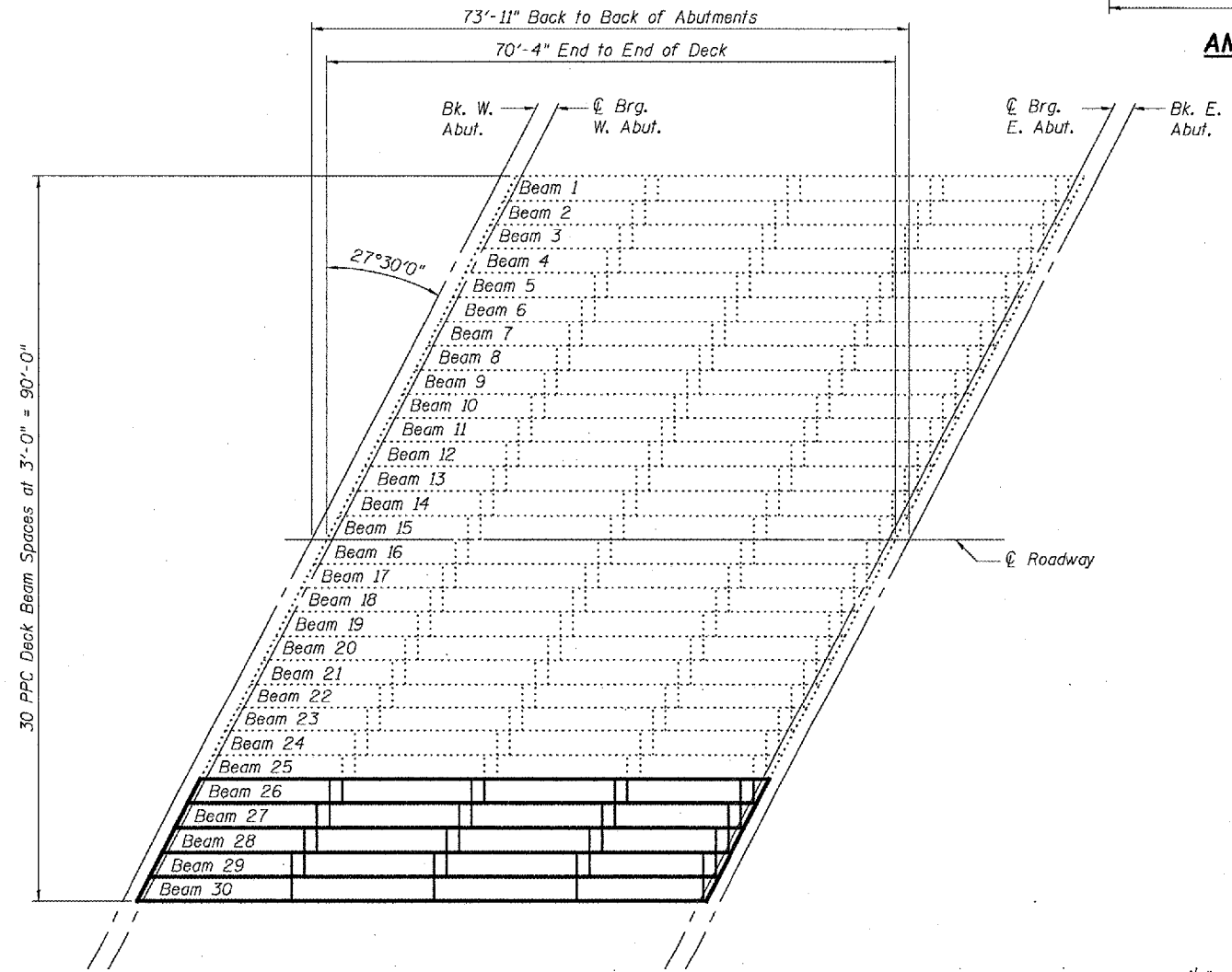
Contract Number: 60B12



ELEVATION



ANTICIPATED INITIAL CAMBER DIAGRAM



PLAN

DESIGN STRESSES  
PRESTRESS UNITS

$f'_c = 5000 \text{ psi}$   
 $f'_{ci} = 4000 \text{ psi}$   
 $f'_s = 270000 \text{ psi}$  ( $1/2 \phi$  low lax strands)  
 $f'_{si} = 201960 \text{ psi}$  ( $1/2 \phi$  low lax strands)

GENERAL NOTES

Plan dimensions and details relative to existing structure have been taken from existing plans and are subject to nominal construction variations. It shall be the Contractor's responsibility to verify such dimensions and details in the field and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in the scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.

Any damage done to the bridge during beam removal shall be repaired by the Contractor. Cost to be included in the cost of "Removal of Existing P.P.C. Deck Beams".

Temporary concrete barrier shall only be anchored into the overlay and not the PPC Deck Beams.

All structural steel shall be shop painted with the inorganic zinc rich primer per AASHTO M300, Type 1. Cost included with Furnishing and Erecting Structural Steel.

All construction joints shall be banded.

The cut strands at each beam end shall be given two coats of zinc dust spray or paint meeting the requirements of ASTM A780. The zinc dust spray or paint shall be applied before corrosion appears and allowed to dry according to the manufacturer's specifications prior to another coat of zinc. A concrete sealer meeting the requirements of Section 587 of the Standard Specifications shall be applied to the exterior face and 9" in on the underside of the fascia beams. The sealer shall be applied after visible crack growth has subsided. This work shall be performed by the producer and included with the cost of the beam.

Existing reinforcement extending into the removal area shall be cleaned, straightened and incorporated into the new construction. Any reinforcement bars that are damaged during concrete removal shall be replaced with an approved bar splicer or anchorage system. Cost shall be included with Concrete Removal.

TOTAL BILL OF MATERIAL

ITEM	UNIT	QUANTITY
PPC Deck Beams (33" Depth)	Sq. Ft.	1055
* Removal of Existing PPC Deck Beams	Sq. Ft.	844
Concrete Wearing Surface	Sq. Yd.	108.8
Bicycle Railing	Foot	70
Reinforcement Bars Epoxy Coated	Pound	3600
Asbestos Bearing Pad Removal	Each	8
Concrete Superstructure	Cu. Yd.	10.8
Silicone Joint Sealer $1\frac{3}{4}$ "	Foot	102
Silicone Joint Sealer $2\frac{1}{2}$ "	Foot	102
Concrete Removal	Cu. Yd.	10.6
Mechanical Splicers	Each	71
Furnishing and Erecting Structural Steel	Pound	760

\*Existing Beam 30 already removed.

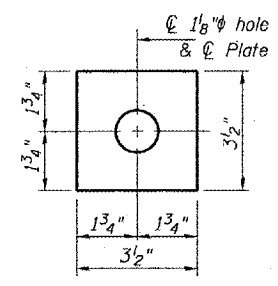
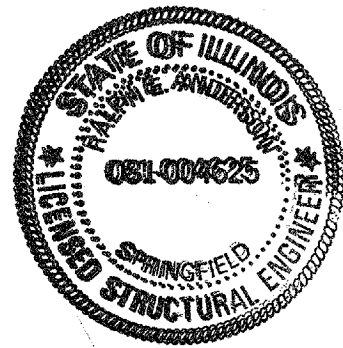
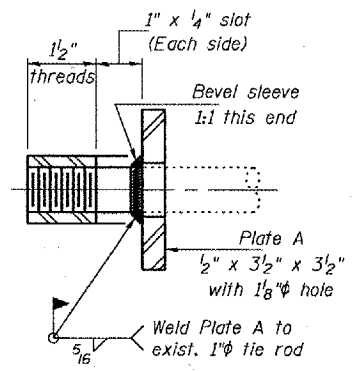
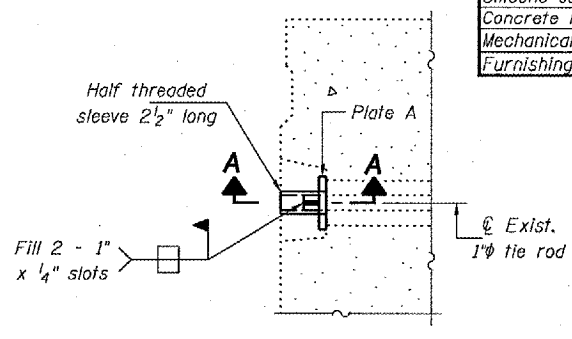


PLATE A  
(4 Required)



SECTION A-A  
(4 Required)



DETAIL A

DESIGNED Victor H. Veliz April 28, 2006  
 CHECKED Adrian T. Holloway  
 DRAWN [Signature]  
 CHECKED VHV A.T.H.  
 EXAMINED John A. Morris  
 PASSED [Signature]  
 ENGINEER OF BRIDGES AND STRUCTURES

Expires November 30, 2006

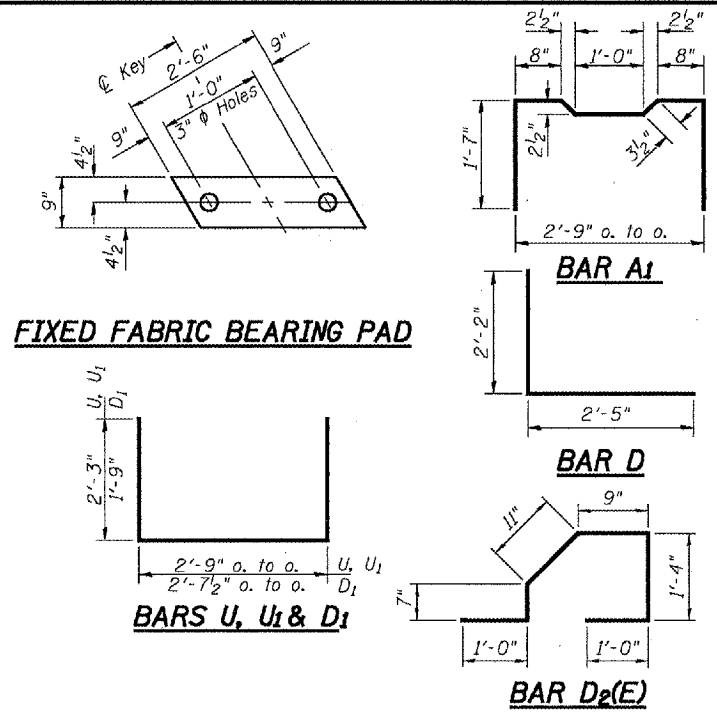
PLAN AND ELEVATION  
F.A.P. RT. 559/339  
COOK COUNTY  
SN 016-0349

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

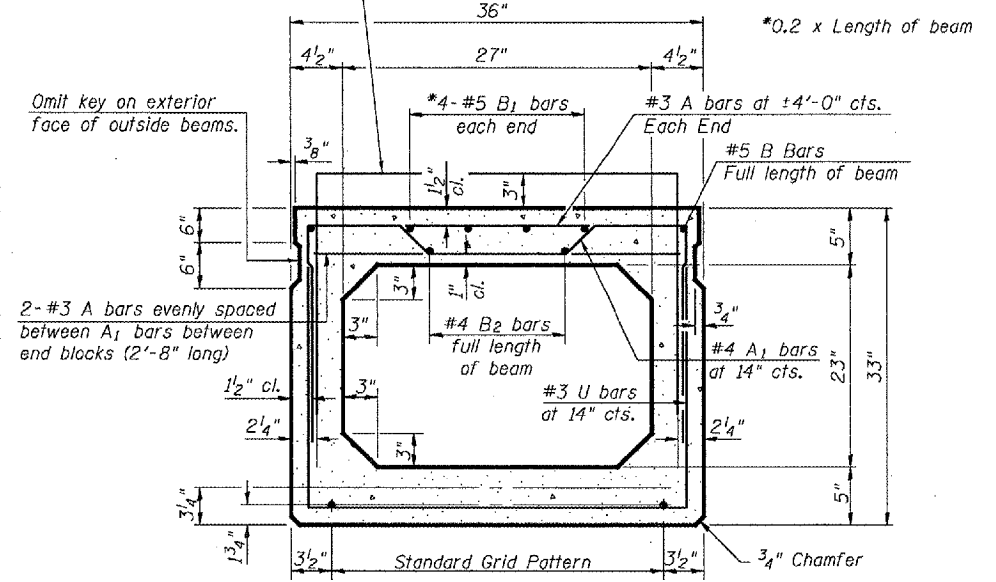
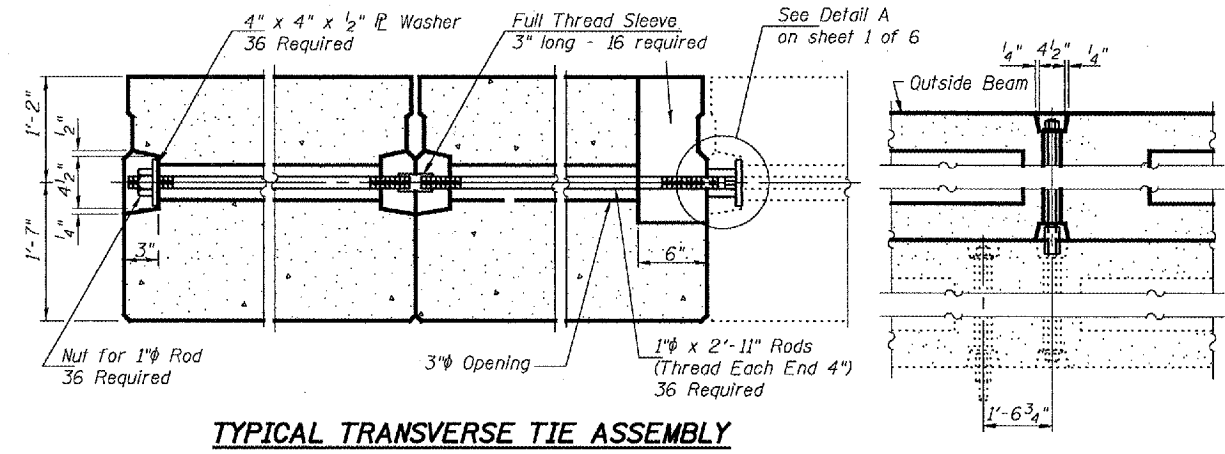
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		Cook	6	2
SHEET NO. 2 5 SHEETS				

Contract Number: 60B12

See Deck Cross Section for location and type of additional bars cast in beams.

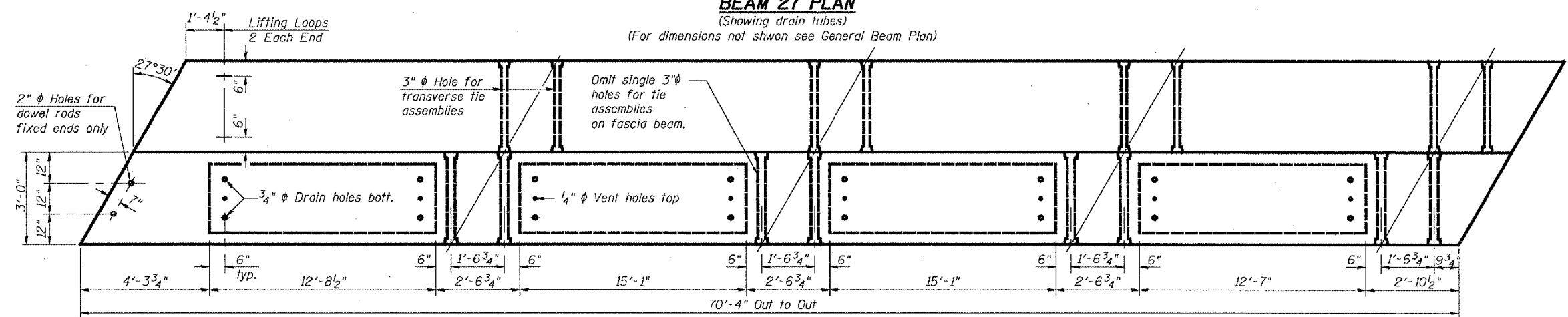
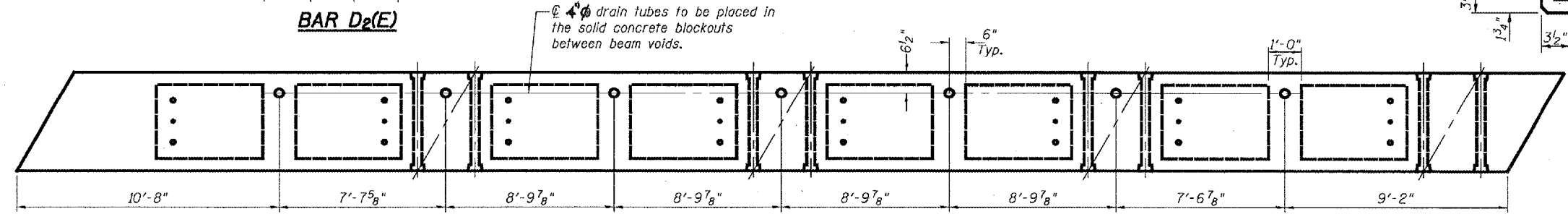


6" x 6" x 1 1/2" Blockout to be filled with Class BD Concrete after Beams have been installed. Cost shall be included in the cost of "Concrete Wearing Surface". North Face of Beam 25 only.



1/2" Strands, Each Strand Stressed to 30,900 Lbs.  
9-Strands 1 3/4" up, 4-Strands 3/4" up

Note: Place strands symmetrically about centerline of beam.



**BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
Precast Prestressed Conc. Deck Bms.			Sq. Ft.	1055
Concrete Wearing Surface			Sq. Yd.	108.8

Reinforcement bars designated (E) shall be epoxy coated.

**EXPANSION FABRIC BEARING PAD**

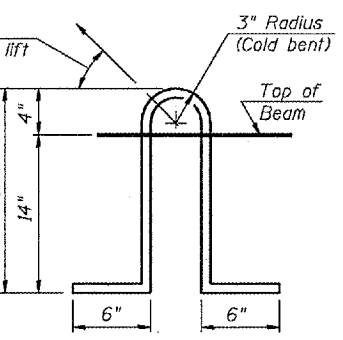
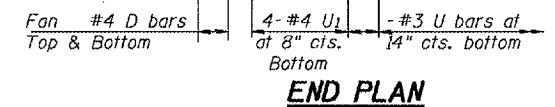
DESIGNED	V.H.V.
CHECKED	A.T.H.
DRAWN	Drew Christopher
CHECKED	V.H.V.

April 24, 2006

EXAMINED *John A. Morris*  
ENGINEER OF STRUCTURAL SERVICES

PASSED *Ralph E. Anderson*  
ENGINEER OF BRIDGES AND STRUCTURES

8 x 3-W2.5 x W5.5 Wire Fabric, W5.5 vert. Full depth of beam. Each End.



**NOTES**

Prestressing steel shall be uncoated high strength, low relaxation 7-wire strand, Grade 270. The nominal diameter shall be 1/2" and the nominal cross-sectional area shall be 0.153 sq. in. Lifting loops shall be 3-1/2" φ-270 ksi strands, as shown.

The 1" rods in the transverse tie assembly shall be tightened to a snug fit and the threads set. Pockets that receive transverse tie bar on outside shall be filled with grout after transverse tie assembly is in place.

The bearing seat surfaces shall be adjusted by shimming to assure firm and even bearing. Two 1/8" fabric adjusting shims of the dimensions shown shall be provided for each bearing.

Keyway surfaces shall be cleaned to remove form oil or other bond breaking material prior to shipment of the beams. Cleaning shall be done by sandblasting the keyway areas between top of the beam and the bottom edge of the key.

Corrosion Inhibitor, as covered in the Special Provisions, shall be used in the concrete for precast prestressed concrete deck beams.

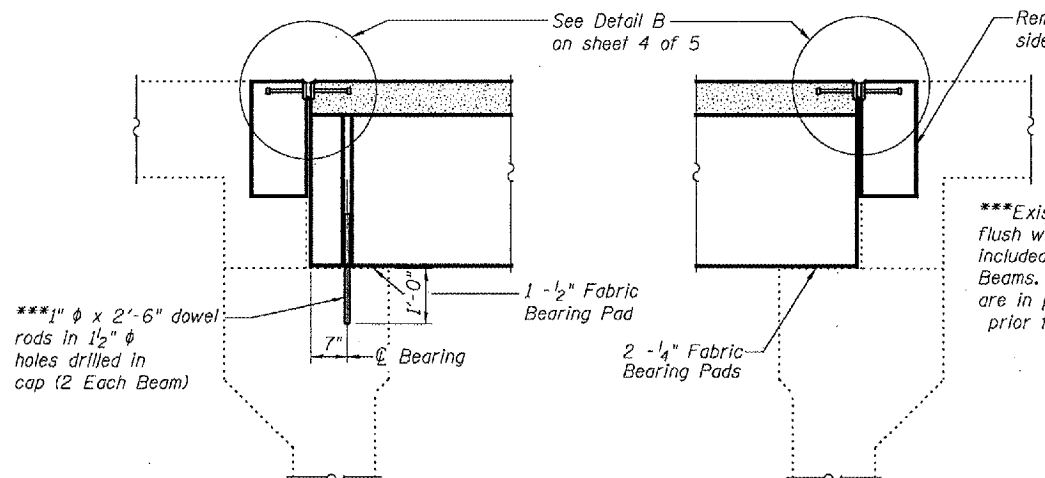
Required Release Strength, f'ci, shall be 4000 p.s.i.

**BEAM DETAILS**  
F.A.P. RT. 559/339  
COOK COUNTY  
SN 016-0349

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	SHEET NO.	SHEET NO. 3
		Cook	7	5 SHEETS
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

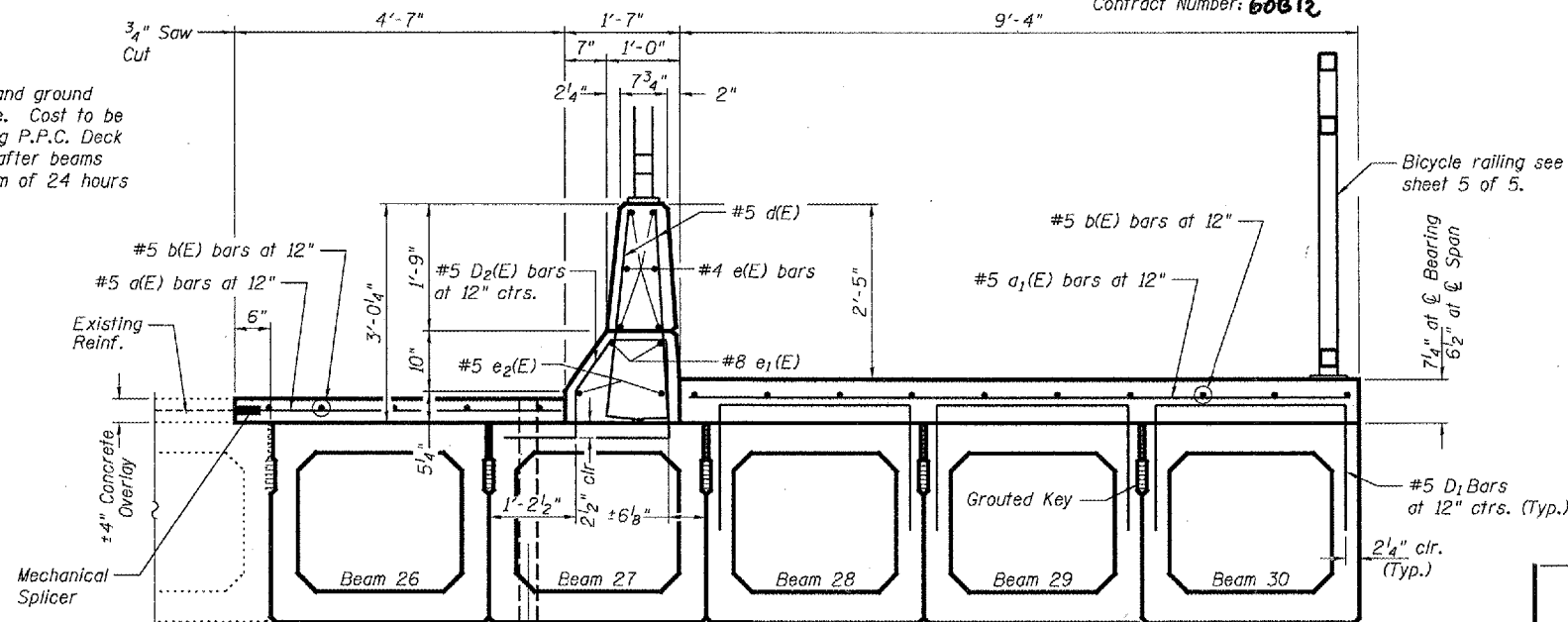
Contract Number: 60012



**SECTION THROUGH SIDEWALK  
AT WEST ABUTMENT**  
(Dims at Rt L's)

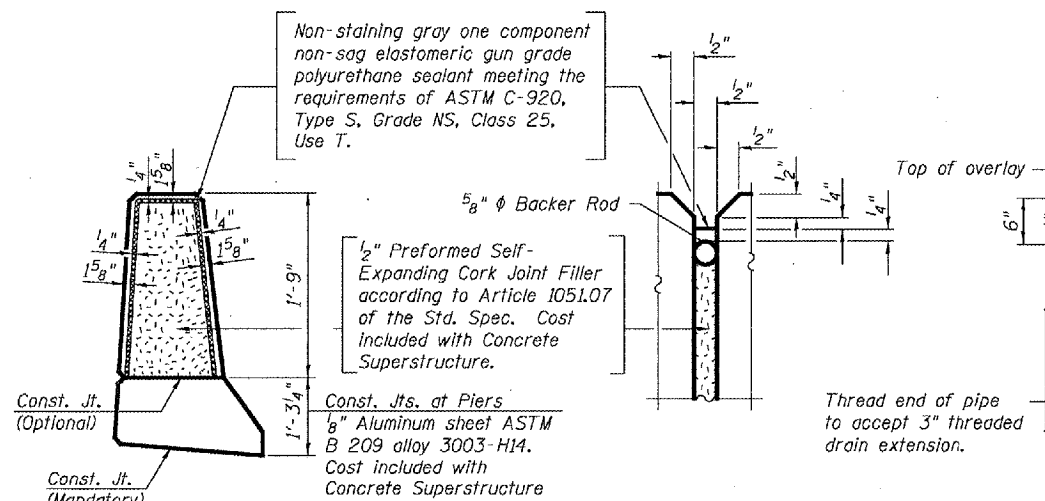
**SECTION THROUGH SIDEWALK  
AT EAST ABUTMENT**  
(Dims at Rt L's)

\*\*\*Existing Dowel Rods shall be cut off and ground flush with the top of the existing concrete. Cast to be included in the cost of Removal of Existing P.P.C. Deck Beams. New Dowel Rods shall be grouted after beams are in place and allowed to cure a Minimum of 24 hours prior to grouting shear keys.

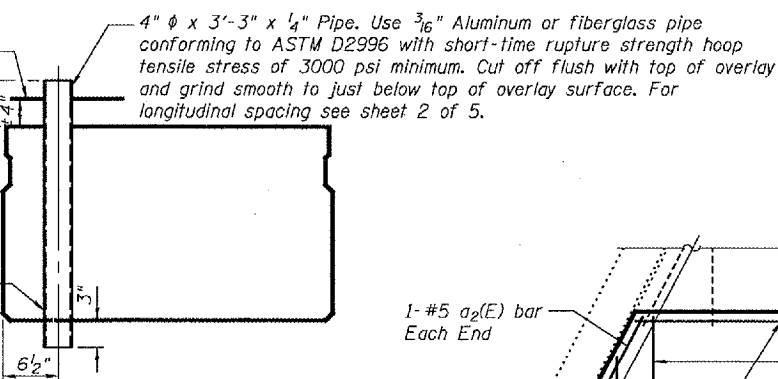


**SECTION AT SOUTH SIDE OF STRUCTURE**  
(Looking East)

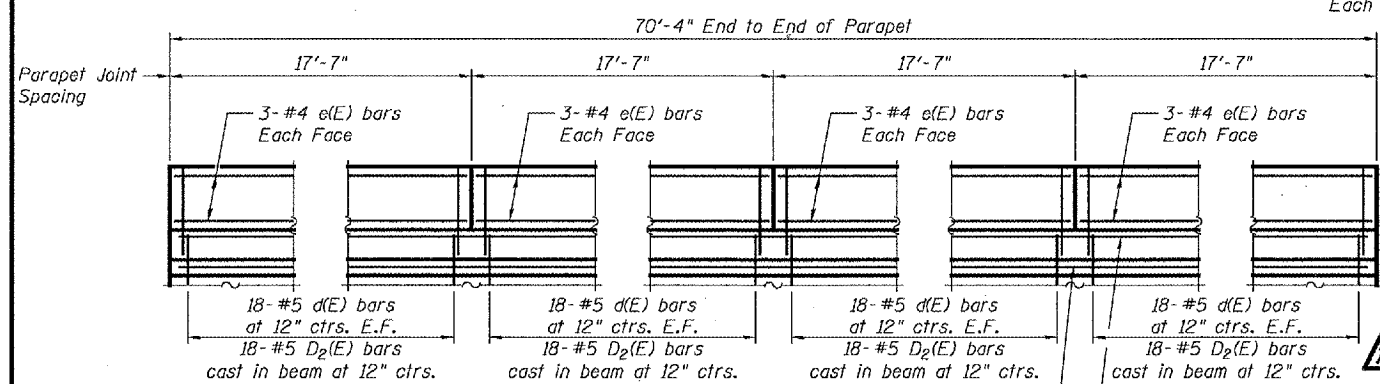
Bituminous and Concrete wearing surface to be removed is included with Removal of Existing PPC Deck Beams. Existing Parapet Removal included with Concrete Removal.



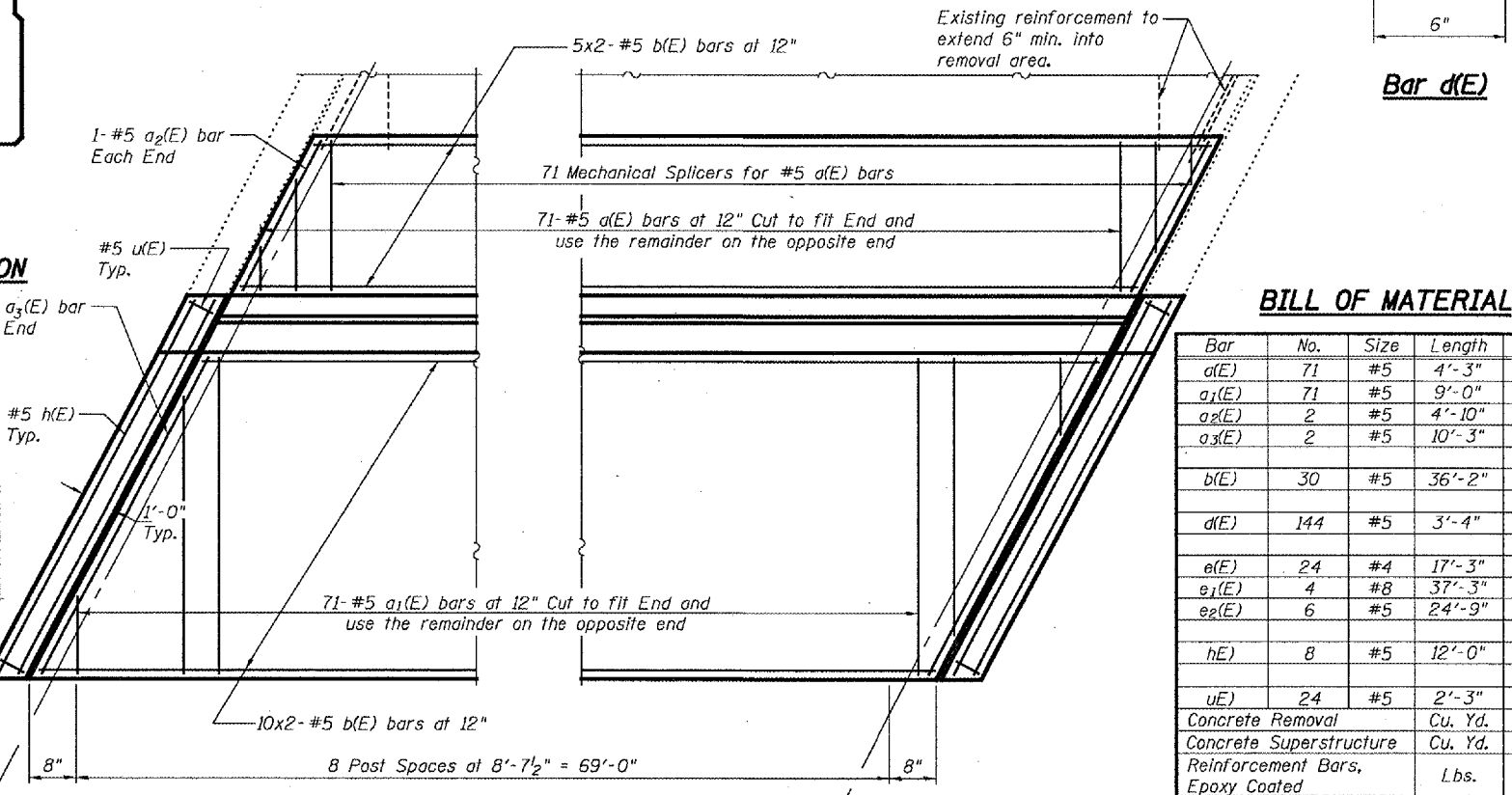
**PARAPET JOINT DETAILS**



**TYPICAL DRAIN SECTION**  
(Beam 27)



**PARAPET INSIDE ELEVATION**  
(Looking South)



**PARTIAL SIDEWALK PLAN**

**BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
a(E)	71	#5	4'-3"	—
a1(E)	71	#5	9'-0"	—
a2(E)	2	#5	4'-10"	—
a3(E)	2	#5	10'-3"	—
b(E)	30	#5	36'-2"	—
d(E)	144	#5	3'-4"	—
e(E)	24	#4	17'-3"	—
e1(E)	4	#8	37'-3"	—
e2(E)	6	#5	24'-9"	—
h(E)	8	#5	12'-0"	—
u(E)	24	#5	2'-3"	—
Concrete Removal			Cu. Yd.	10.6
Concrete Superstructure			Cu. Yd.	10.2
Reinforcement Bars, Epoxy Coated			Lbs.	3,600

**BEAM AND DECK DETAILS**

F.A.P. RT. 559/339

COOK COUNTY

SN 016-0349

DESIGNED	V.H.V.
CHECKED	A.T.H.
DRAWN	Drew Christopher
CHECKED	V.H.V.

April 24, 2006  
EXAMINED *John A. Morris*  
ENGINEER OF STRUCTURAL SERVICES  
PASSED *Ralph E. Anderson*  
ENGINEER OF BRIDGES AND STRUCTURES

**MIN. BAR LAP**

- #4 = 1'-8"
- #5 = 2'-2"
- #8 = 4'-6"

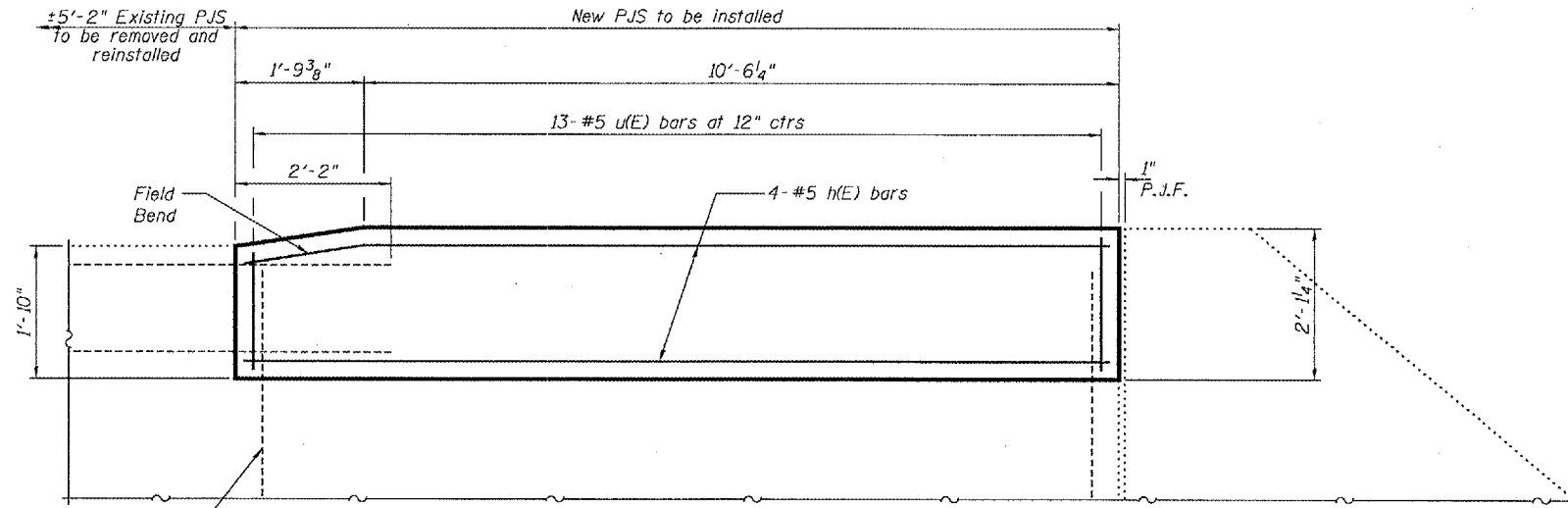
Reinforcement bars designated (E) shall be epoxy coated.  
Bars indicated thus 1 x 2-#5 etc. indicates 1 line of bars with 2 lengths per line.

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	DATE	SHEET
		COOK		5
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT	

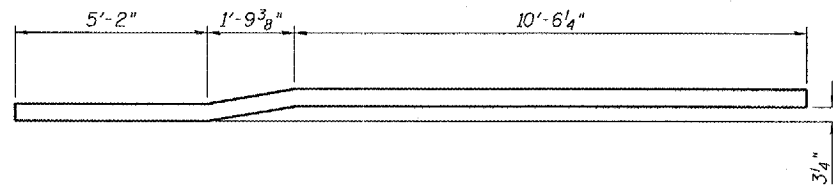
SHEET NO. 4  
5 SHEETS

Contract Number: 60B12



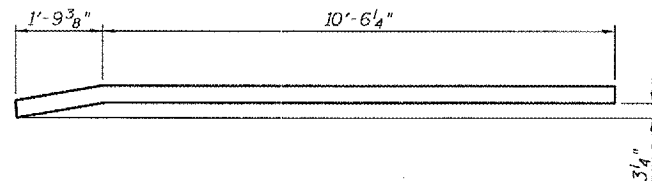
**EAST ABUTMENT ELEVATION**

(Looking East)  
West Abutment Similar



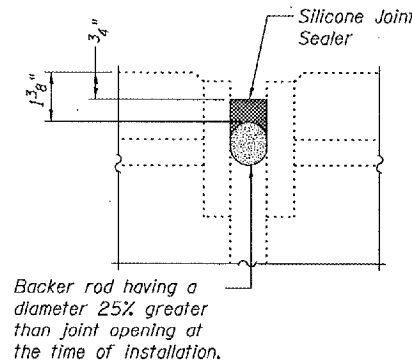
**DECK SIDE JOINT PLATE DETAIL**

(2  $\bar{R}$ 's Required)



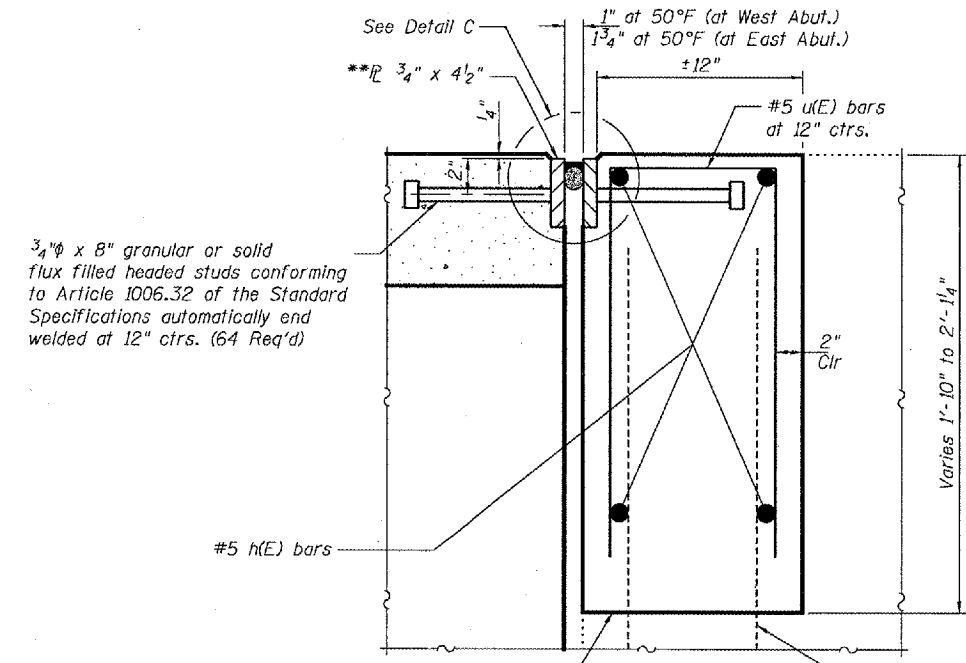
**ABUTMENT SIDE JOINT PLATE DETAIL**

(2  $\bar{R}$ 's Required)



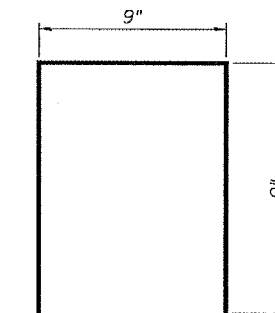
**DETAIL C**

(Joint at existing shown)  
(Joint at new similar)



**DETAIL B**

Existing P.J.S. to be removed and re-installed. Cut and remove existing  $\bar{R}$   $3_4$ " x  $3_4$ " within limits of wearing surface removal on the deck side only. \*\*Seal space between existing and new plates with silicone sealant suitable for Structural Steel. Cost of silicone sealant is included with Furnishing and Erecting Structural Steel.



**Bar u(E)**

DESIGNED	V.H.V.
CHECKED	A.T.H.
DRAWN	Drew Christopher
CHECKED	V.H.V.

April 24, 2006	
EXAMINED	John A. Morris ENGINEER OF STRUCTURAL SERVICES
PASSED	Ralph E. Anderson ENGINEER OF BRIDGES AND STRUCTURES

**ABUTMENT AND JOINT DETAILS**

F.A.P. RT. 559/339

COOK COUNTY

SN 016-0349

Quantity for Reinforcing Bar Epoxy Coated, Concrete Removal, and Concrete Superstructures is included in the Bill of Material on Sheet 3 of 5.

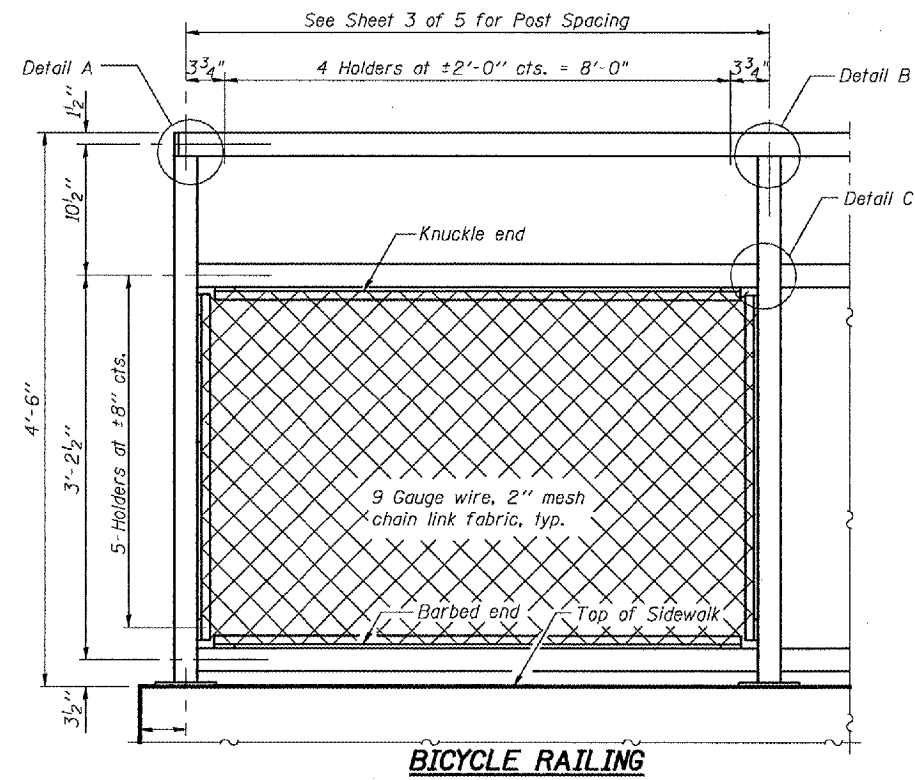


STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

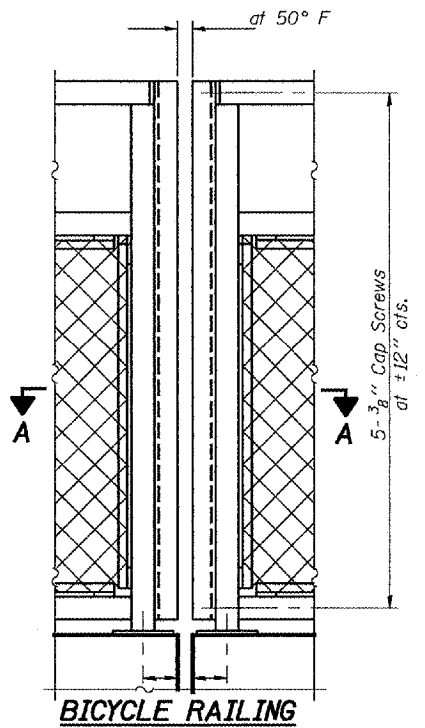
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		COOK	9	5
SHEETS				

Contract Number **6021**  
**NOTES**

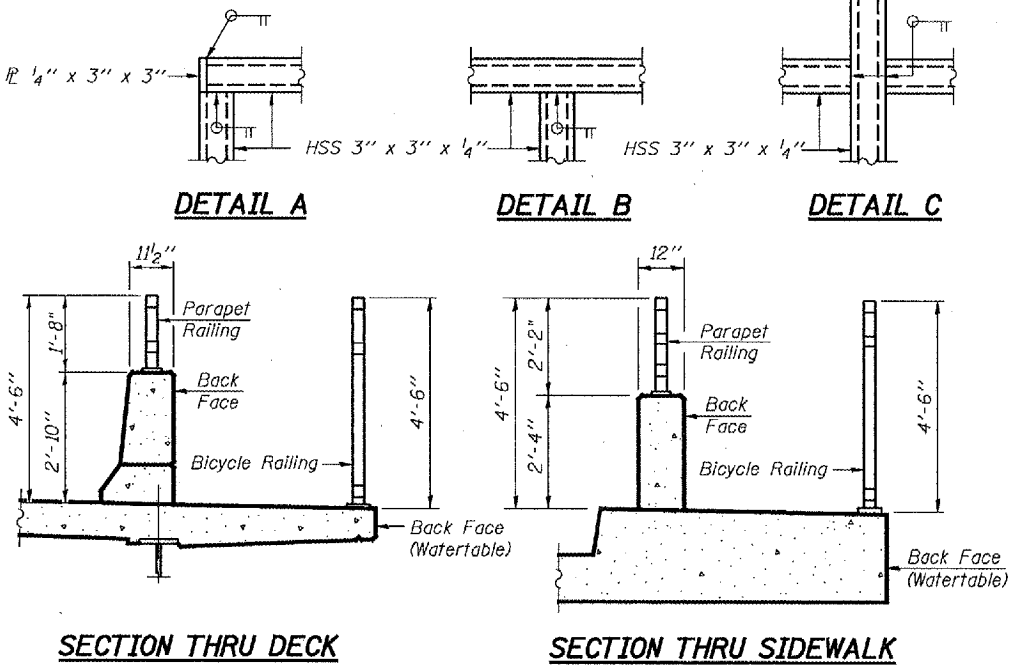
Railing shall be according to Section 509 of the Standard Specifications, except as noted, and will be paid for at the Contract Unit Price per foot for Bicycle Railing.  
The 9 gauge fabric ties shall be according to Article 1006.27 (d) of the Standard Specifications.  
Installation of the chain link fabric shall be according to Section 664 of the Standard Specifications.  
Hollow structural sections shall conform to the requirements of ASTM designation A 500, Grade B, structural steel tubing.  
All other steel shapes and plates shall conform to the requirements of AASHTO M 270 Grade 36.  
The Parapet Railing, furnished and installed shall not be paid for separately but shall be included in the unit bid price for Bicycle Railing.  
The chain link fabric shall be placed along Bicycle Side as shown on Section A-A.  
Stretcher bars shall be used at all four sides of each panel.  
If the option of drilling and epoxy grouting the anchor rods is chosen, the Contractor shall use the capsule or the adhesive cartridge type anchor rods that have been previously tested and given a prior approval by the Department. The Contractor shall install these anchor rods in pre-drilled holes according to the manufacturer's recommendations and procedures. The capsule or the adhesive cartridge shall be sealed with pre-measured amounts of the adhesive chemical.  
Space reinforcement to miss anchor rods.



**BICYCLE RAILING**

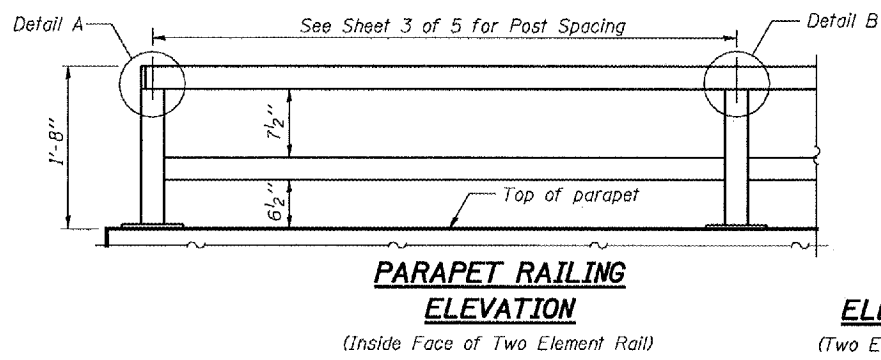


**BICYCLE RAILING**



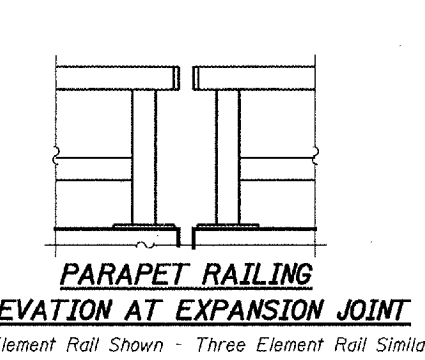
**SECTION THRU DECK**

**SECTION THRU SIDEWALK**

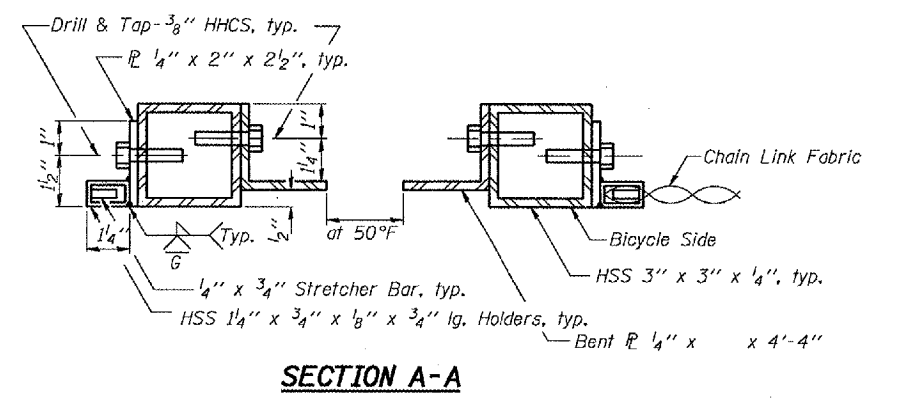


**PARAPET RAILING ELEVATION**

(Inside Face of Two Element Rail)

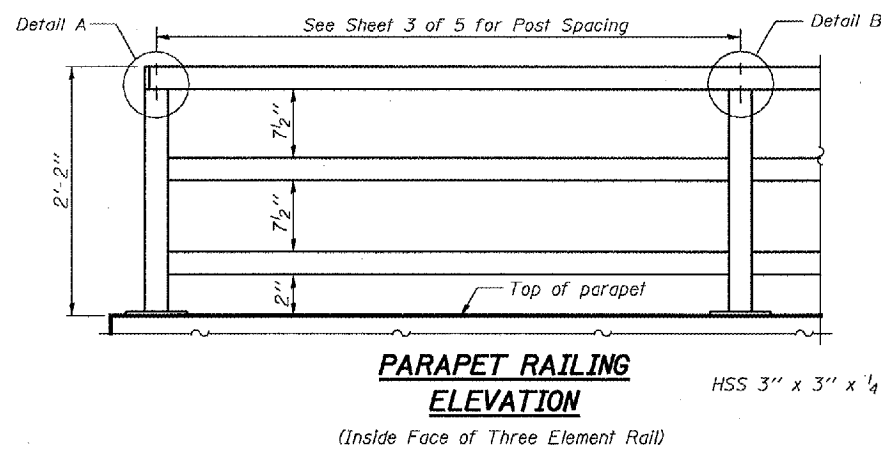


**PARAPET RAILING ELEVATION AT EXPANSION JOINT**



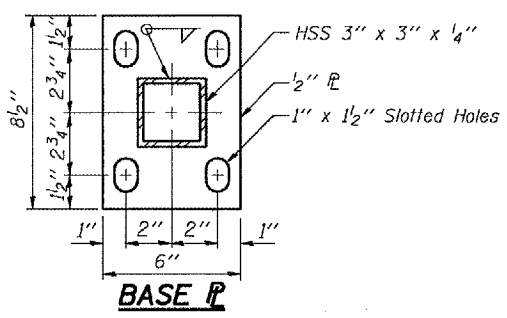
**SECTION A-A**

All posts, railing, splices, anchor devices, and bent plates shall be galvanized after shop fabrication according to AASHTO M 111 and ASTM A 385. All bolts, nuts, washers, and anchor rods shall be galvanized according to AASHTO M 232 except stainless steel bolts as noted.  
Vent holes for galvanizing shall be placed in the posts and rails at locations that will not allow the accumulation of moisture in the members.  
The chain link fabric shall conform to the requirements of Article 1006.27(a)(1), b or c of the Standard Specifications.

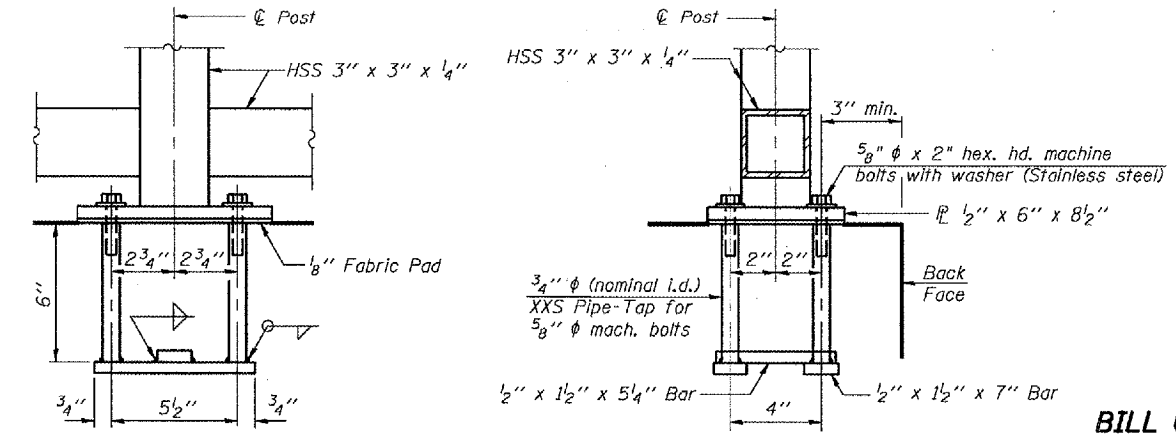


**PARAPET RAILING ELEVATION**

(Inside Face of Three Element Rail)



**BASE P**

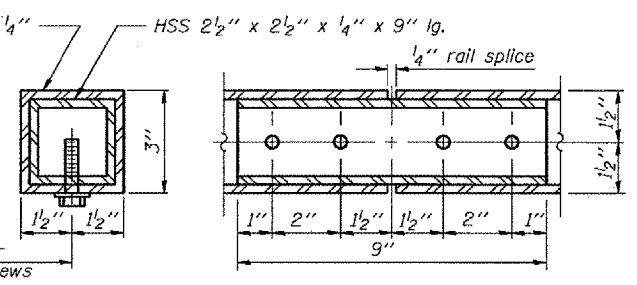


**ANCHOR BOLT DETAILS**

In lieu of the cast-in-place anchor device shown, the Contractor has the option of drilling and epoxy grouting 5/8" φ anchor rods. Embedment shall be according to the manufacturer's specifications.

**BILL OF MATERIAL**

Item	Unit	Quantity
Bicycle Railing	Foot	70



**RAIL SPLICE**

DESIGNED V.H.V.  
CHECKED A.T.H.  
DRAWN Drew Christopher  
CHECKED V.H.V.

April 24, 2006  
EXAMINED John A. Morris  
ENGINEER OF STRUCTURAL SERVICES  
PASSED Ralph E. Anderson  
ENGINEER OF BRIDGES AND STRUCTURES

**BICYCLE RAILING DETAILS**  
F.A.P. RT. 559/339  
COOK COUNTY  
SN 016-0349