

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
348	1515.3BR-1	COOK	13	1
		ILLINOIS	CONTRACT NO. 62B39	

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

**PROPOSED  
HIGHWAY PLANS**

FAP ROUTE 348: IL 43 (HARLEM AVENUE)  
OVER CAL SAG CHANNEL (SN 016-0323)  
SECTION: 1515.3BR-1  
BRIDGE PAINTING, BRIDGE REPAIRS  
COOK COUNTY

C-91-025-16

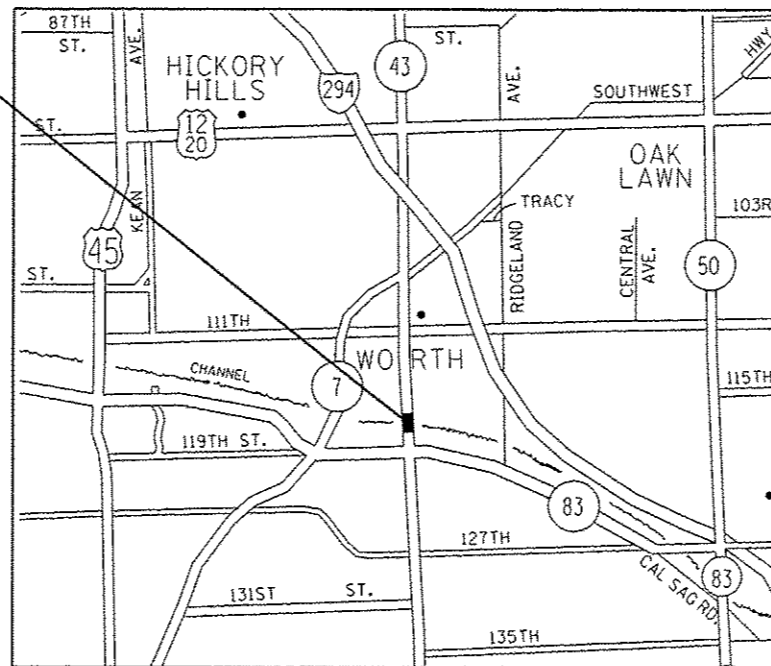
FOR INDEX OF SHEETS, SEE SHEET NO. 2

IMPROVEMENT LOCATED IN THE VILLAGES  
OF PALOS HEIGHTS AND WORTH

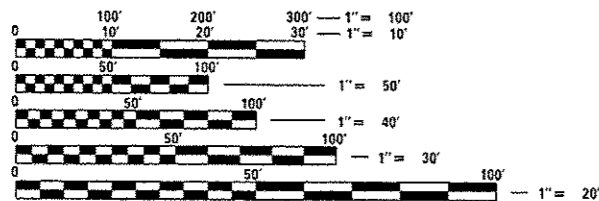
**TRAFFIC DATA**

2013 ADT (HARLEM AVE): 36,300  
SPEED LIMIT: 35 MPH

IMPROVEMENT LOCATION  
SN 016-0323



WORTH TOWNSHIP



FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD  
ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT  
CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS  
ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

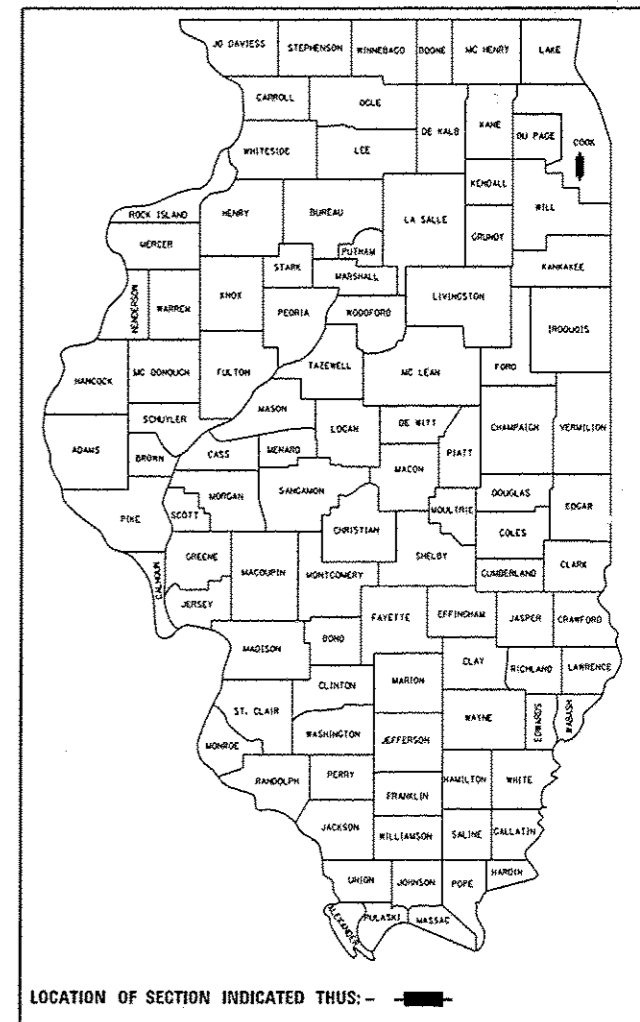
J.U.L.I.E.  
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION  
1-800-892-0123  
OR 811

PROJECT ENGINEER: J. ALAIN MIDY (847) 221-3056  
PROJECT MANAGER: ISSAM RAYYAN (847) 705-4178

CONTRACT NO. 62B39

GROSS LENGTH = 302.75 FT. = 0.057 MILE  
NET LENGTH = 302.75 FT. = 0.057 MILE

D-91-025-16



LOCATION OF SECTION INDICATED THUS: - [black rectangle] -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

SUBMITTED October 21, 2015

John F. [Signature]  
DEPUTY DIRECTOR OF HIGHWAYS, REGION/ENGINEER

Dec 4, 2015  
John D. Baranzelli, P.E.  
acting ENGINEER OF DESIGN AND ENVIRONMENT

Dec 4, 2015  
Omer Osman, P.E.  
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

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

**INDEX OF SHEETS**

- 1. COVER SHEET
- 2. INDEX OF SHEETS, STATE STANDARDS AND GENERAL NOTES
- 3. SUMMARY OF QUANTITIES
- 4-11 BRIDGE REPAIR DETAILS - S.N. 016-0323
- 12 TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS (TC-10)
- 13 ARTERIAL ROAD INFORMATION SIGN (TC-22)

**STATE STANDARDS**

- 701101-04 OFF-RD OPERATIONS. MULTILANE, 15' TO 24: FROM PAVEMENT EDGE
- 701601-09 URBAN LANE CLOSURE. MULTI LANE, 1W OR 2W WITH NONTRAVERSABLE MEDIAN
- 701801-05 SIDEWALK, CORNER OR CROSSWALK CLOSURE
- 701901-04 TRAFFIC CONTROL DEVICES

**GENERAL NOTES**

- 1. BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "J.U.L.I.E." AT (800) 892-0123 OR 811 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE AND GAS UTILITIES. 48 HOUR NOTIFICATION IS REQUIRED.
- 2. THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES, AND THE VILLAGES OF PALOS HEIGHTS AND WORTH.
- 3. THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT WRITTEN PERMISSION FROM THE DEPARTMENT.
- 4. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO CONSTRUCTION AND ORDERING OF MATERIALS.
- 5. THE CONTRACTOR SHALL CONTACT THE DISTRICT ONE TRAFFIC CONTROL SUPERVISOR AT (847)705-4470 A MINIMUM OF 72 HOURS IN ADVANCE OF BEGINNING WORK.
- 6. THESE PLANS HAVE BEEN PREPARED FROM NOTES RECEIVED FROM THE BUREAU OF MAINTENANCE BRIDGE INSPECTORS.
- 7. THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE ACCESS TO ABUTTING PROPERTY AT ALL TIMES DURING THE CONSTRUCTION OF THIS PROJECT
- 8. DO NOT SCALE PLANS FOR CONSTRUCTION DIMENSIONS.
- 9. THE CONTRACTOR SHALL OBTAIN COAST GUARD APPROVAL FOR ANY WORK THAT MAY INTERFERE WITH NAVIGATIONAL OPERATIONS OF THE NAVIGABLE WATERS. A WORK PLAN SHALL BE PREPARED BY THE CONTRACTOR, REVIEWED AND APPROVED BY THE ENGINEER AND BE SUBMITTED BY THE ENGINEER TO THE COAST GUARD AT THE ADDRESS LISTED BELOW FOR APPROVAL.

**GENERAL PAINT NOTES:**

- 1. CLEANING AND PAINTING OF THE EXISTING STRUCTURAL STEEL SHALL BE AS SPECIFIED IN THE SPECIAL PROVISION FOR "CLEANING AND PAINTING EXISTING STEEL STRUCTURES". ALL STRUCTURAL STEEL AT THE LOCATIONS SHOWN IN THE PLANS AND WITHIN THE LIMITS SHOWN ON SHEET 4 OF 8 SHALL BE CLEANED PER COMMERCIAL GRADE POWER TOOL CLEANING - SSPC SP15.
- 2. THE DESIGNATED AREAS CLEANED PER COMMERCIAL GRADE POWER TOOL CLEANING SHALL BE PAINTED ACCORDING TO THE REQUIREMENTS OF PAINT SYSTEM 1 - OZ/E/U. THE COLOR OF THE FINAL FINISH COAT FOR ALL STEEL SURFACES SHALL BE GRAY, MUNSELL NO 5B 7/1.
- 3. A MINIMUM OF ONE (1) AIR MONITOR WILL BE REQUIRED TO MONITOR ABRASIVE OPERATIONS FOR ALL STRUCTURES. SEE SPECIAL PROVISION FOR "CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUE"
- 4. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROTECT AND PRESERVE THE EXISTING BRIDGE LIGHTING AT ANY LOCATION THAT LIGHTING IS ENCOUNTERED ADJACENT TO AN AREA TO BE CLEANED AND PAINTED.

Locations downstream (South) of 16th St Bridge in Lockport, IL:

BRIDGE ADMINISTRATOR  
 US COAST GUARD  
 EIGHTH COAST GUARD DISTRICT  
 1222 SPRUCE ST  
 ST. LOUIS, MO 63103-2832

Roger Wiebesch (314)269-2378

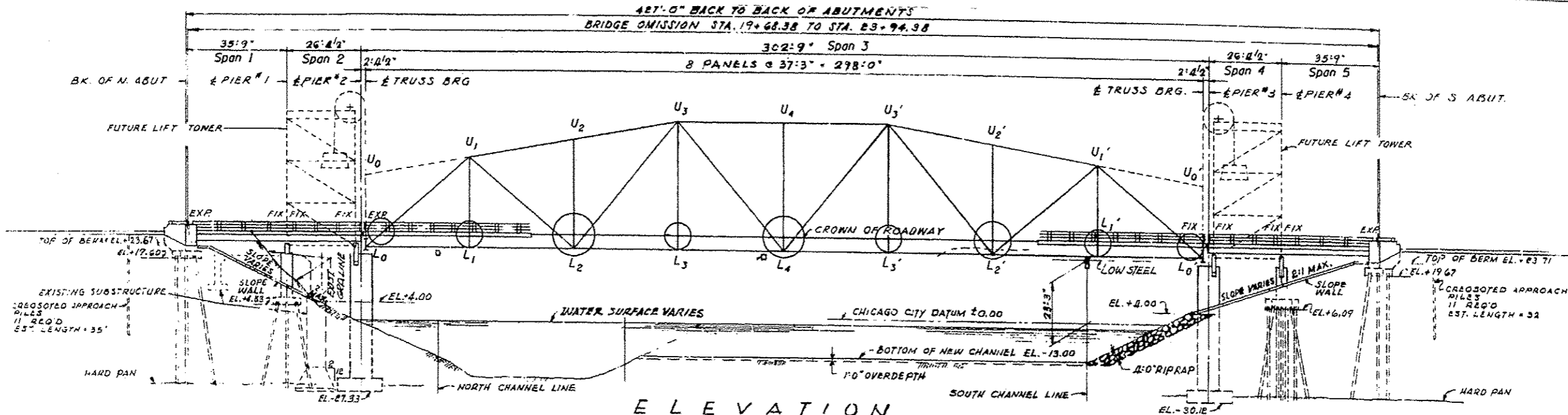
10. THE DEPARTMENT HAS DETERMINED THAT IN STREAM WORK IS NOT REQUIRED FOR THE WORK SPECIFIED IN THIS CONTRACT. THE DEPARTMENT HAS NOT OBTAINED A 404 PERMIT. IF THE CONTRACTOR CHOOSES TO USE ACTIVITIES REQUIRING AN USACE 404 PERMIT IT IS THE CONTRACTOR'S RESPONSIBILITY TO SECURE THE PROPER USACE PERMITS.

11. PLAN DIMENSIONS AND DETAILS RELATIVE TO EXISTING PLANS ARE SUBJECT TO NOMINAL CONSTRUCTION VARIATIONS. THE CONTRACTOR SHALL FIELD VERIFY EXISTING DIMENSIONS AND DETAILS AFFECTING NEW CONSTRUCTION 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 SCOPE OF THE WORK, HOWEVER, THE CONTRACTOR WILL BE PAID FOR THE QUANTITY ACTUALLY FURNISHED BASED AT THE UNIT PRICE BID FOR THE WORK.

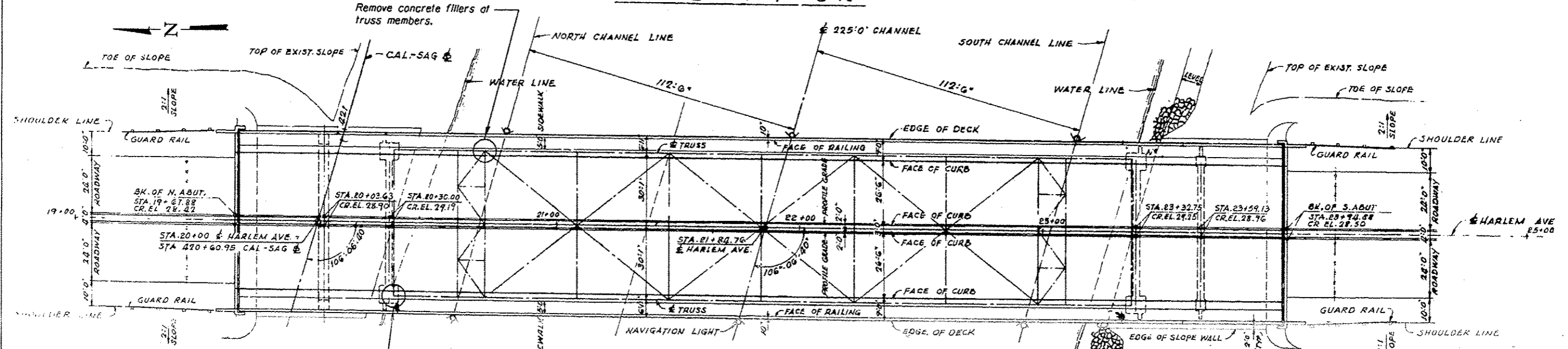
12. SIDEWALK ON ONE SIDE OF THE BRIDGE SHALL REMAIN OPEN WHEN WORK IS BEING PERFORMED ON THE OPPOSITE SIDE OF THE STRUCTURE.

FILE NAME =	USER NAME = jshann	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>IL 43 (HARLEM AVE) OVER CAL SAG CHANNEL (SN 016-0323) INDEX OF SHEETS, STATE STANDARDS, AND GENERAL NOTES</b>	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
Default		CHECKED -	REVISED -			348	1515.38R-1	COOK	13	2	
		DATE -	REVISED -			SCALE: SHEET 1 OF 1 SHEETS		STA. TO STA.		CONTRACT NO. 62839	
						[ILLINOIS] FED. AID PROJECT					





ELEVATION



PLAN

GENERAL NOTES:

Concrete Superstructure shall have a seven day minimum cure.

Reinforcement Bars designated (E) shall be Epoxy Coated.

Prior to pouring the new concrete deck, all heavy or loose rust, loose mill scale, and other loose or potentially detrimental foreign material shall be removed from the surface in contact with concrete. Tightly adhered paint may remain unless otherwise noted. Removal shall be accomplished by methods that will not damage the steel and the cost will be included in the pay item covering removal of the existing concrete.

As directed by the Engineer, existing construction accessories welded to the Truss members within the concrete fillers shall be removed.

The weld areas shall be ground flush and inspected for cracks using Magnetic Particle Testing (MT) or Dye Penetrant Testing (PT) by qualified personnel approved by the Engineer. Any cracks that cannot be removed by grinding 1/4 in. deep shall be identified and reported to the Bureau of Bridges and Structures for further disposition. The cost of removing welded accessories, grinding and inspecting weld areas and grinding cracks will be paid for according to Article 109.04 Of The Standard Specifications.

The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project.

Any reinforcement bars that are damaged during concrete removal operations shall be repaired or replaced using an approved bar splicer or anchorage system. Cost incidental to "Concrete Removal".

TOTAL BILL OF MATERIAL

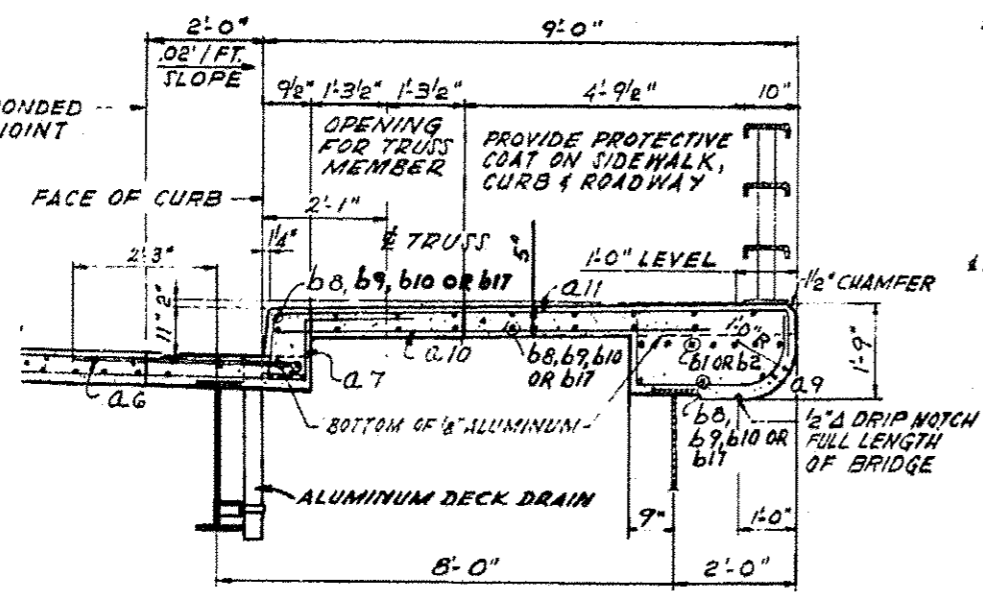
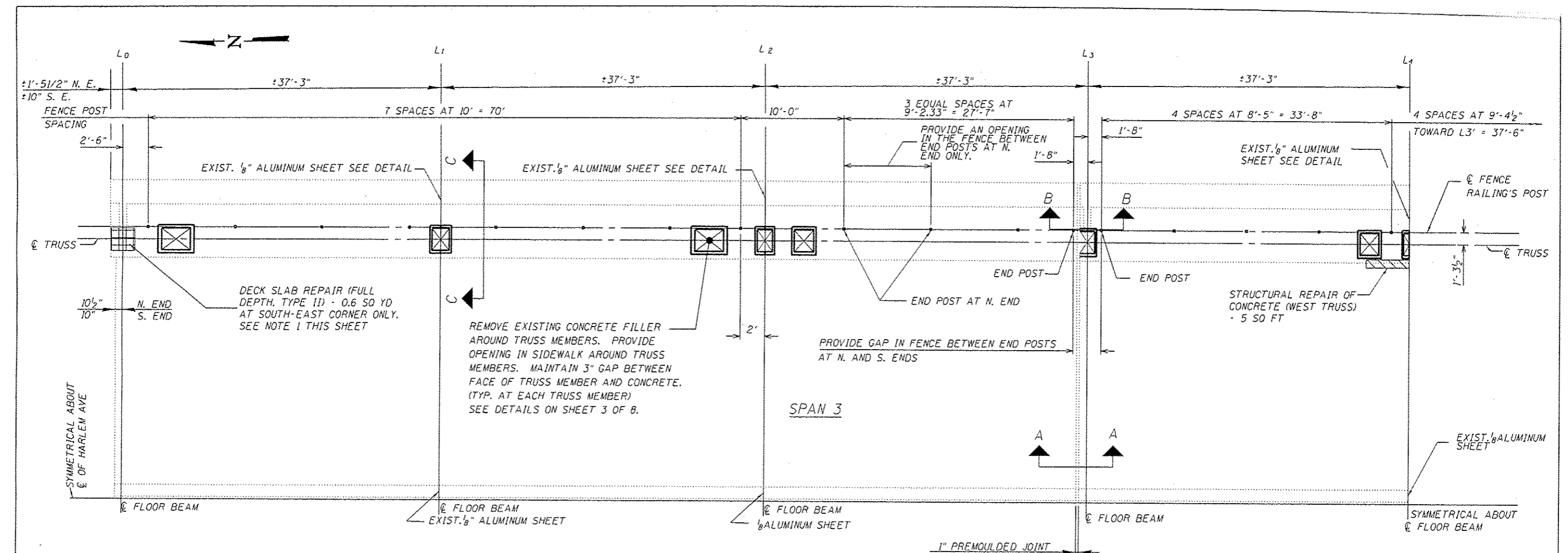
ITEM	UNIT	TOTAL
Concrete Removal	Cu. Yd.	4.3
Concrete Superstructure	Cu. Yd.	2.6
Protective Coat	Sq. Yd.	17
Bridge Fence Railing (Sidewalk)	Foot	571
Containment and Disposal of Lead Paint Cleaning Residues	L. Sum	1
Cleaning and Painting Steel Bridge No.	L. Sum	1
Structural Repair of Concrete (Depth Greater than 5 Inches)	SO FT	5
Deck Slab Repair (Full Depth, Type II)	SO YD	0.6



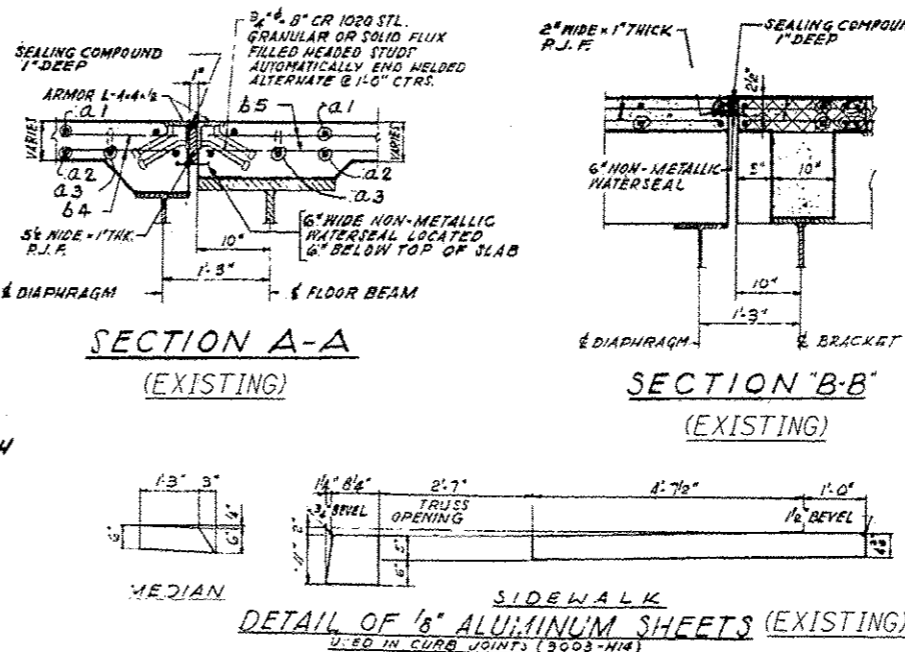
*David Carl Puzey* 11/18/15  
Expires 11/30/16

DESIGNED - JAM	EXAMINED - _____	DATE - _____	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	IL 43 (HARLEM AVE) OVER CALUMET SAG CHANNEL (SN 016-0323)	F.A.P. RFE. 348	SECTION 1515.3BR-1	COUNTY COOK	TOTAL SHEETS 13	SHEET NO. 4
CHECKED - SHR	ACTING ENGINEER OF STRUCTURAL SERVICES	REVISED _____							
DRAWN - _____	PASSED _____	REVISED _____							
CHECKED - _____	ACTING ENGINEER OF BRIDGES AND STRUCTURES	REVISED _____							
				GENERAL PLAN AND ELEVATION		CONTRACT NO. 62B39		ILLINOIS FED. AID PROJECT	

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EXISTING SIDEWALK CROSS SECTION



SECTION A-A (EXISTING)

SECTION B-B (EXISTING)

DETAIL OF 1/8" ALUMINUM SHEETS (EXISTING)  
USED IN CURB JOINTS (3003-H14)

LEGEND:

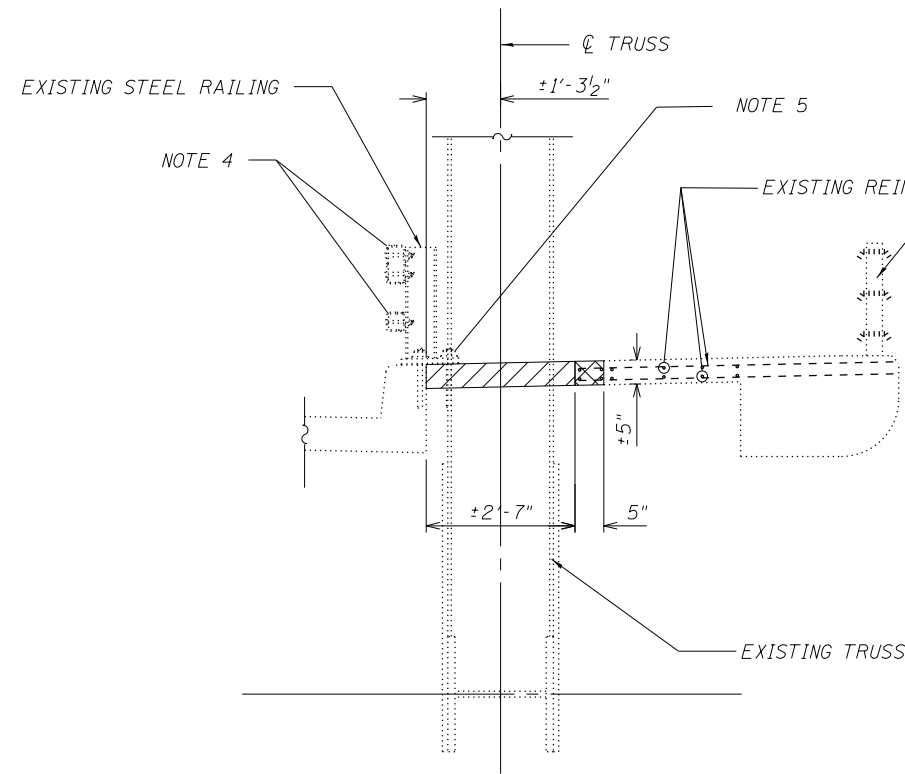
- EXISTING CONCRETE FILLERS TO BE REMOVED. REMOVAL SHALL BE PAID FOR AS CONCRETE REMOVAL
- CONCRETE REMOVAL
- STRUCTURAL REPAIR OF CONCRETE (DEPTH GREATER THAN 5 INCHES)
- DECK SLAB REPAIR (FULL DEPTH, TYPE II)

NOTES:

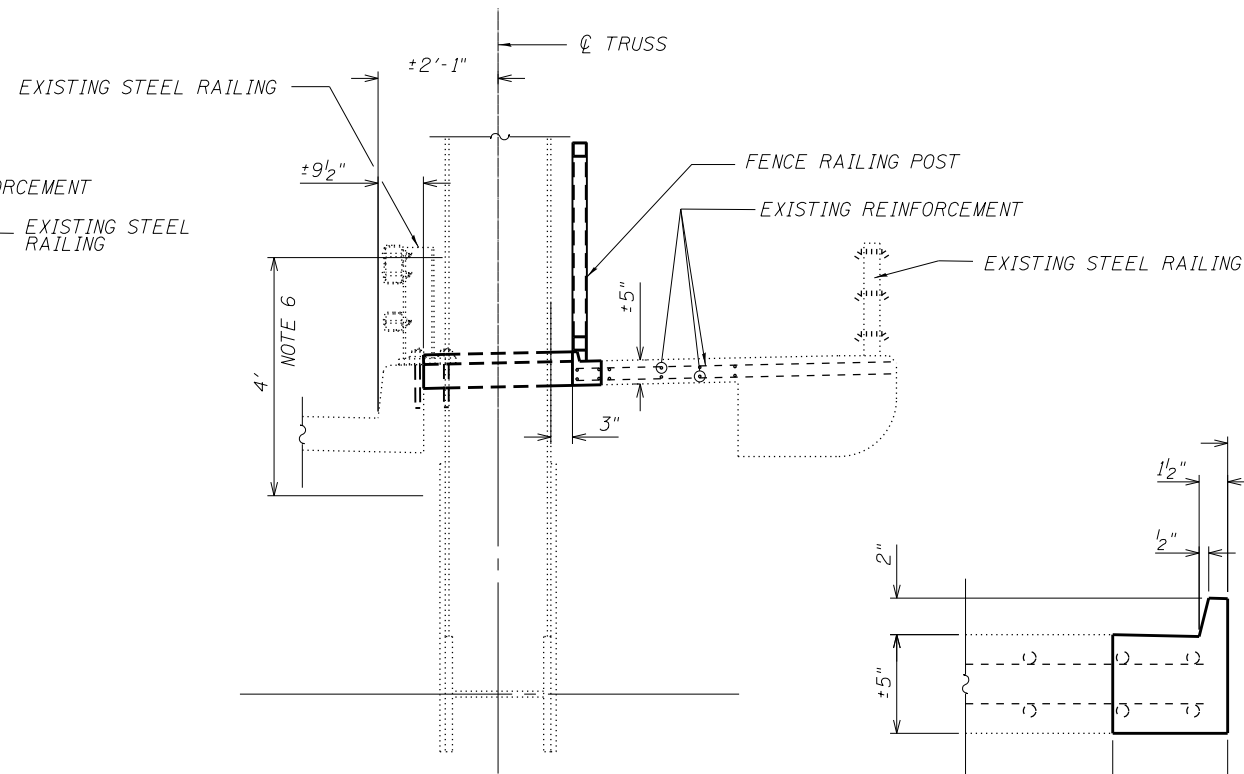
1. STRUCTURAL STEEL AT THIS LOCATION SHALL BE CLEANED AND PAINTED. SEE SHEET 4 OF 8 FOR LIMIT OF AREA TO BE PAINTED.
2. SEE SHEET 3 OF 8 FOR SECTION C-C

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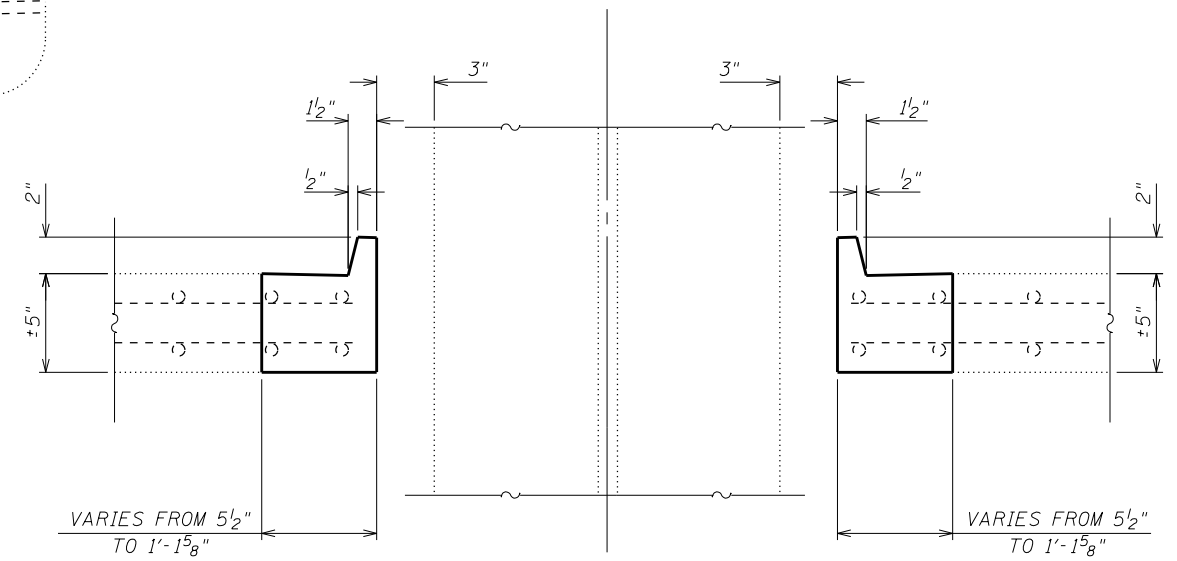
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CHECKED -	ACTING ENGINEER OF STRUCTURAL SERVICES			34B	1515.3BR-1	COOK	13	5	
DRAWN -	REVISOR _____			CONTRACT NO. 62839					
CHECKED -	ACTING ENGINEER OF BRIDGES AND STRUCTURES			ILLINOIS FED. AID PROJECT					
				SHEET NO. 2 OF 8 SHEETS					



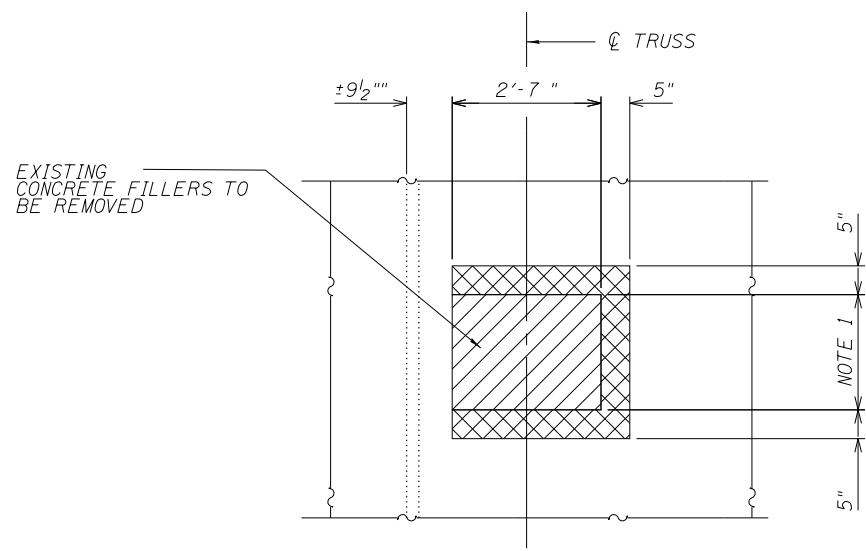
**EXISTING SIDEWALK CROSS SECTION C-C**



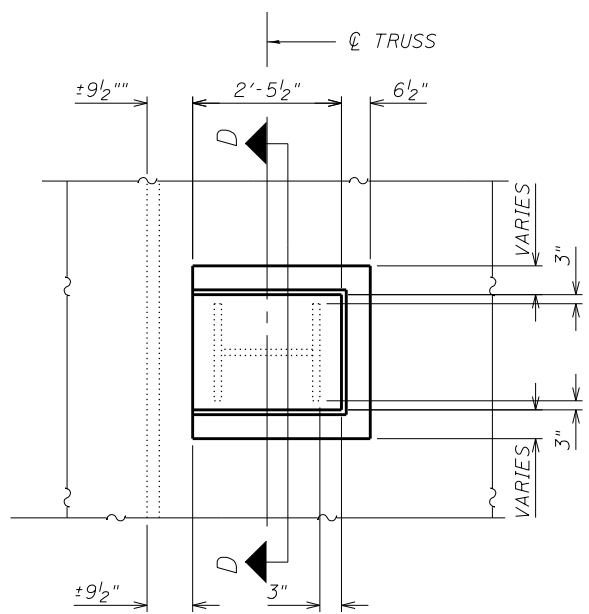
**PROPOSED SIDEWALK CROSS SECTION C-C**



**SECTION D-D**



**EXISTING SIDEWALK PLAN  
AT TRUSS MEMBERS**



**PROPOSED SIDEWALK PLAN  
AT TRUSS MEMBERS**

**NOTES:**

1. EXISTING CONCRETE FILLERS AT TRUSS MEMBERS TO BE REMOVED. SEE SHEET 6 OF 8 FOR FILLER DIMENSIONS.
2. EXISTING BARS WELDED TO TRUSS MEMBERS WITHIN CONCRETE FILLERS TO BE REMOVED USING THE AIR-ARC METHOD AND GRIND SMOOTH ALL WELD MATERIAL REMAINING ON THE STEEL TRUSS MEMBERS.
3. PERIMETERS OF CONCRETE REMOVAL AREAS SHALL BE SAW CUT 3/4" PRIOR TO THE REMOVAL OF THE CONCRETE. EXISTING REINFORCEMENT EXTENDING INTO REMOVAL AREA SHALL BE CLEANED, STRAIGHTENED AND INCORPORATED INTO THE NEW CONSTRUCTION. COST INCLUDED WITH CONCRETE REMOVAL.
4. DISCONNECT AND RECONNECT EXISTING RAILING AS NEEDED. COST INCLUDED IN CONCRETE REMOVAL.
5. REMOVE AND REINSTALL EXISTING BASE PLATE ANCHORS AS NEEDED. COST INCLUDED IN CONCRETE REMOVAL.
6. VERTICAL AND DIAGONAL TRUSS MEMBERS TO BE PAINTED FOR A LIMIT OF 2' ABOVE AND 2' BELOW CENTERLINE OF SIDEWALK.

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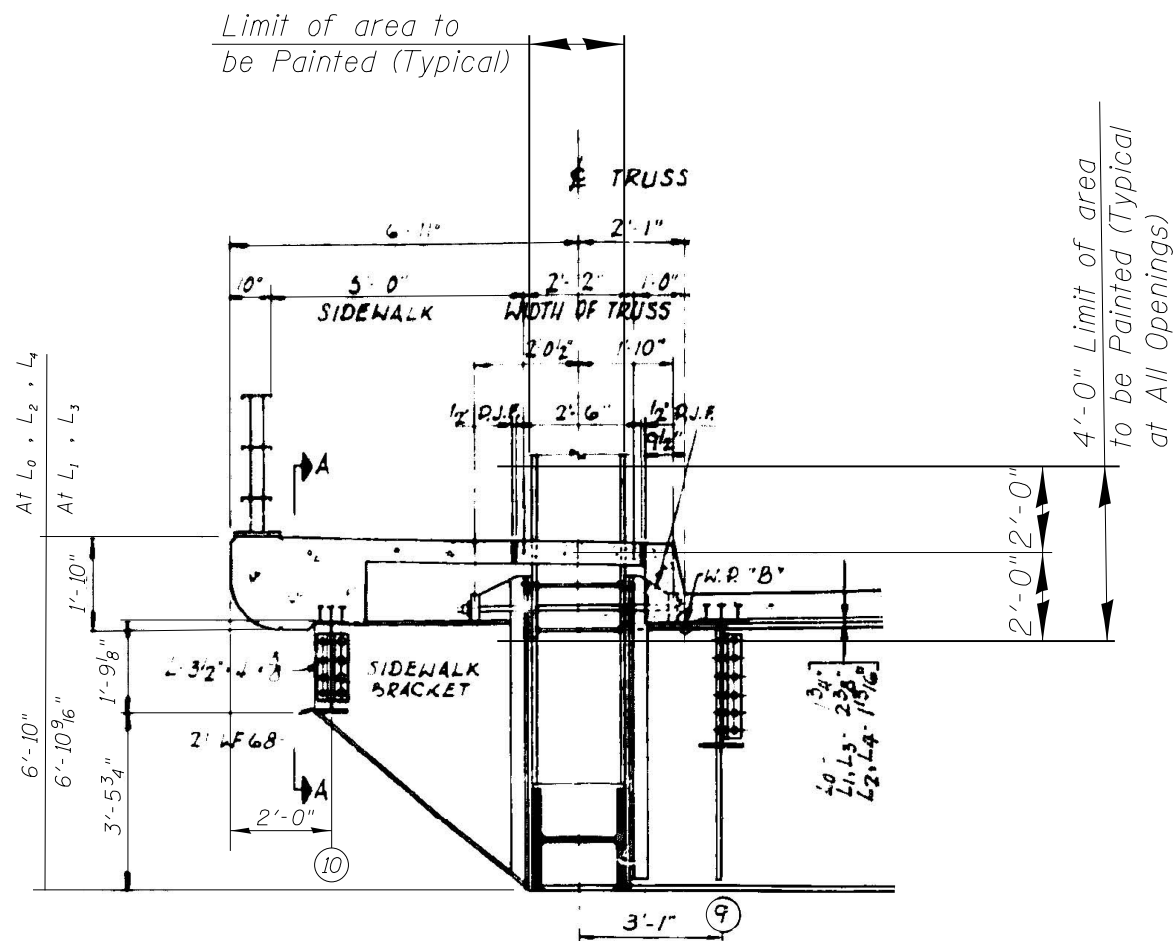
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CHECKED -	ACTING ENGINEER OF STRUCTURAL SERVICES	
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CHECKED -	ACTING ENGINEER OF BRIDGES AND STRUCTURES	REVISED

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

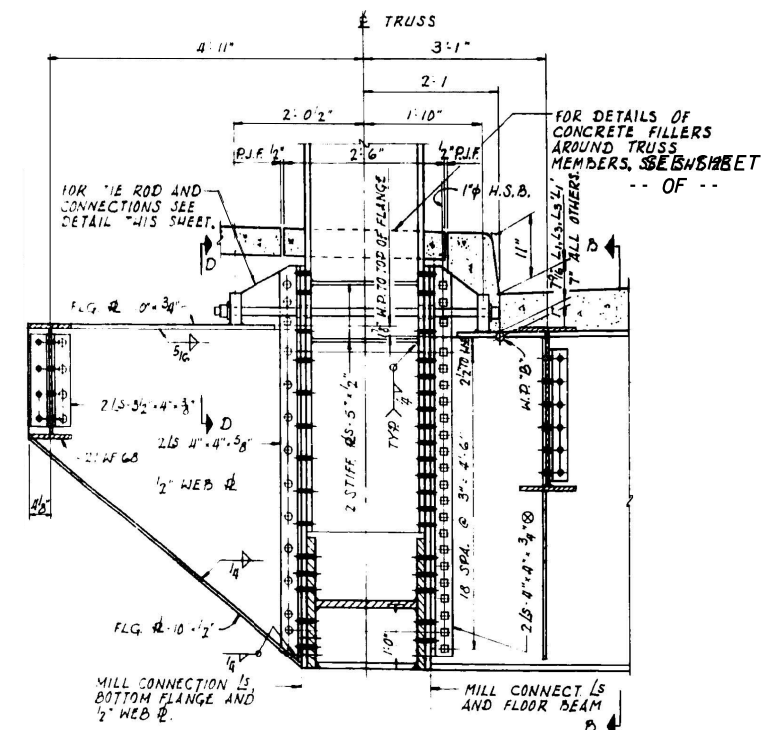
**IL 43 (HARLEM AVE) OVER CALUMET SAG CHANNEL (SN 016-0323)  
DETAILS**

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
348	1515.3BR-1	COOK	13	6
CONTRACT NO. 62B39				
ILLINOIS FED. AID PROJECT				

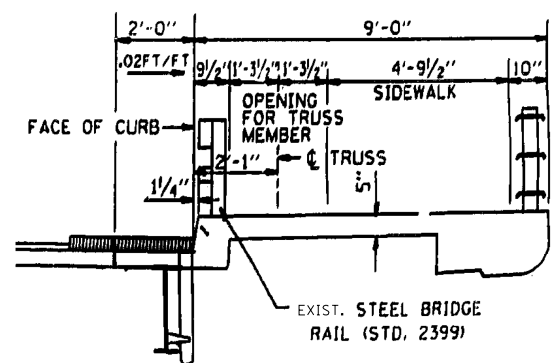
SHEET NO. 3 OF 8 SHEETS



EXISTING TYPICAL CROSS SECTION AT FLOOR BEAMS



EXISTING TYPICAL FLOOR BEAM AND SIDEWALK BRACKET CONNECTIONS



EXISTING SIDEWALK CROSS SECTION

BILL OF MATERIAL

Item	Unit	Quantity
Concrete Removal	CU YD	4.3
Concrete Superstructure	CU YD	2.6
Protective Coat	SQ YD	17
Structural Repair of Concrete (Depth Greater than 5 Inches)	SQ FT	5
Deck Slab Repair (Full Depth, Type II)	SQ YD	0.6

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DESIGNED -	EXAMINED	DATE -
CHECKED -	ACTING ENGINEER OF STRUCTURAL SERVICES	
DRAWN -	PASSED	REVISED
CHECKED -	ACTING ENGINEER OF BRIDGES AND STRUCTURES	REVISED

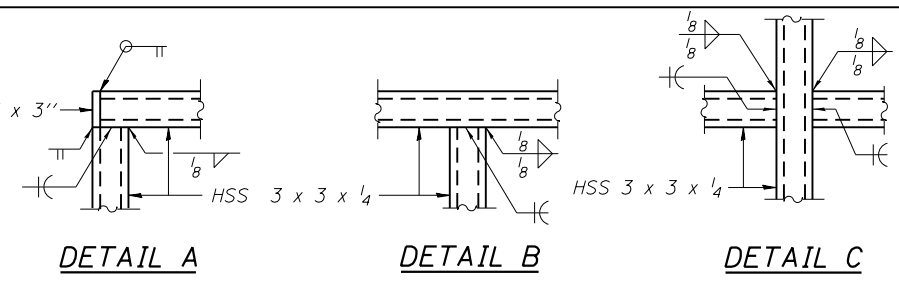
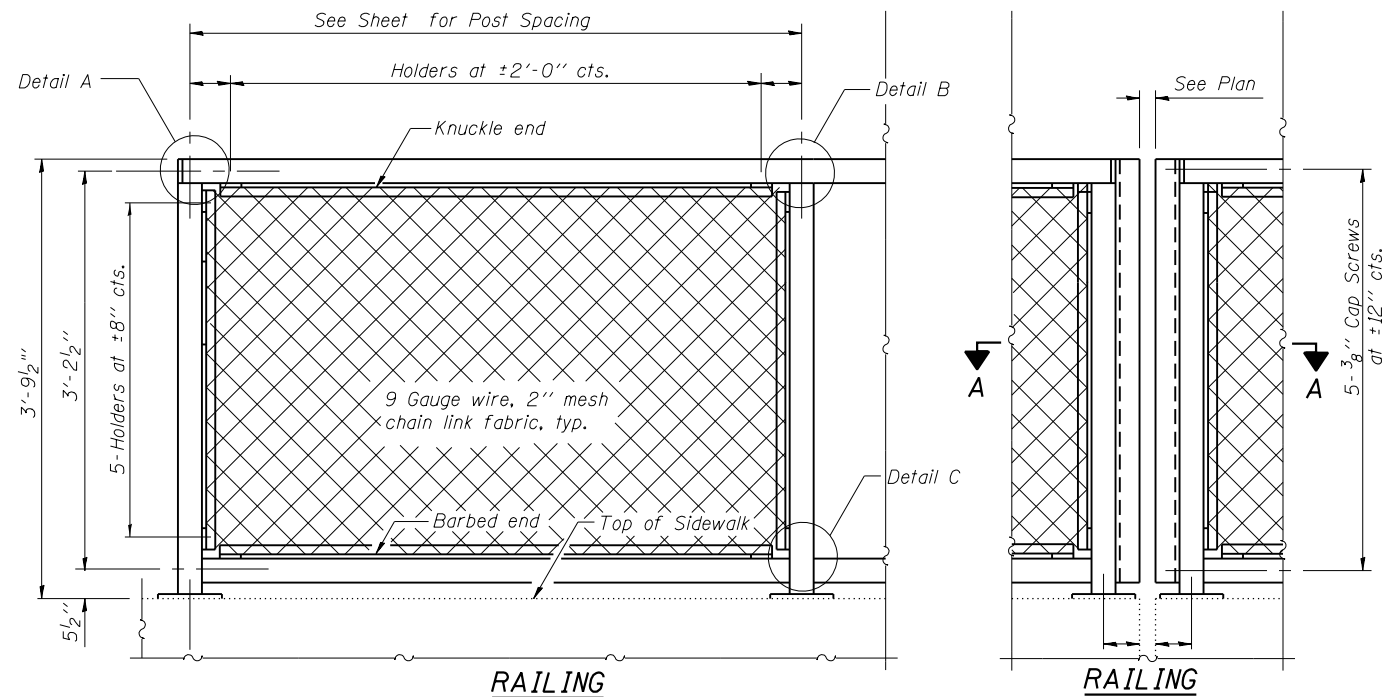
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

IL 43 (HARLEM AVE) OVER CALUMET SAG CHANNEL (SN 016-0323)  
DETAILS

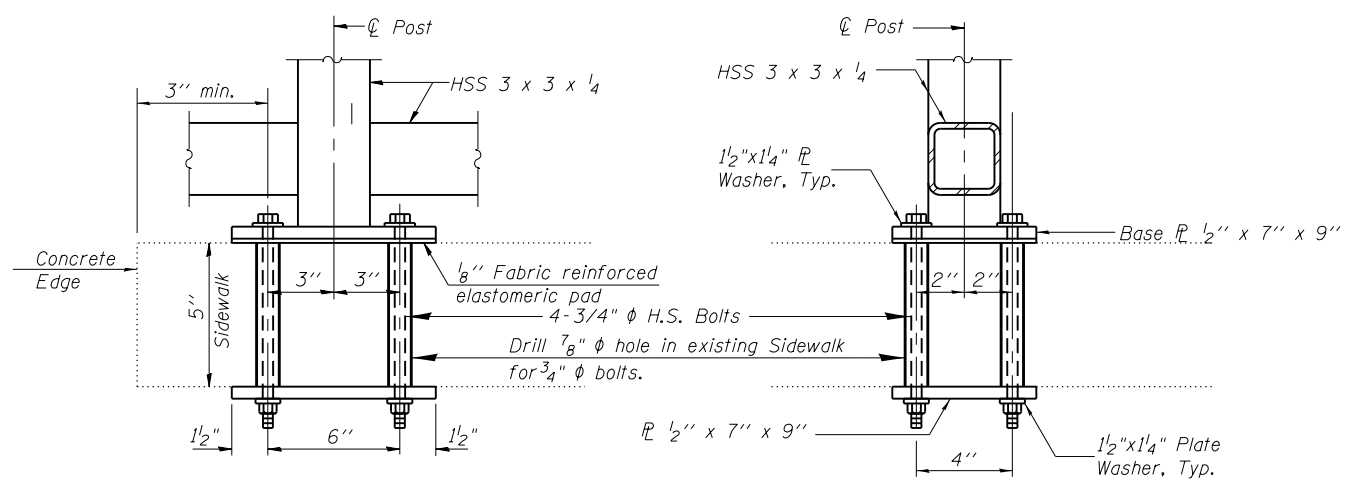
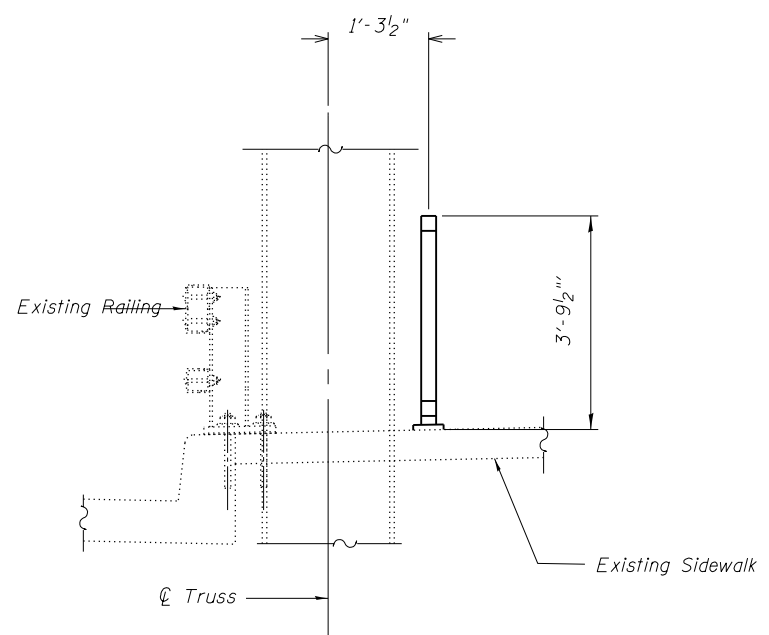
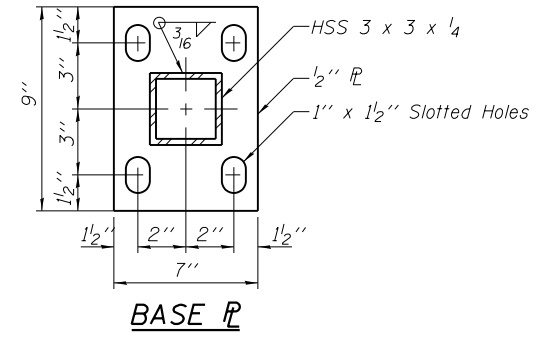
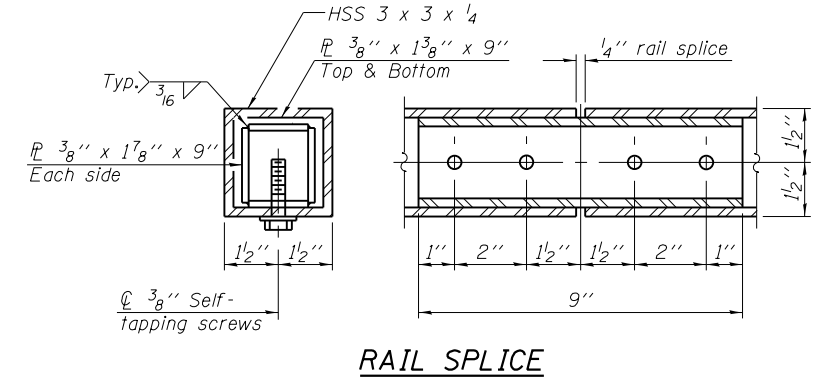
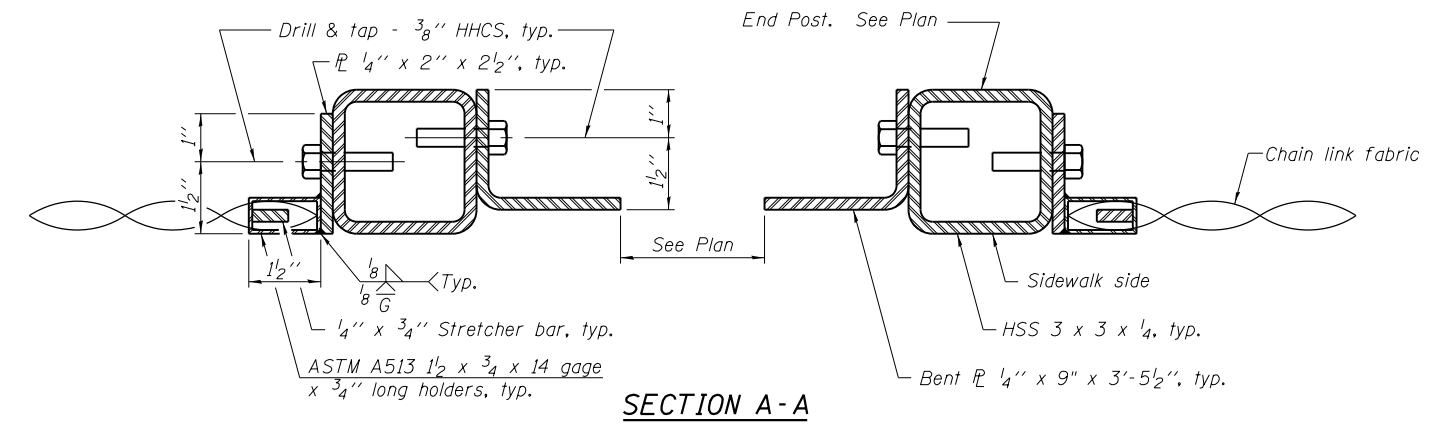
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
348	1515.3BR-1	COOK	13	7
CONTRACT NO. 62B39				

SHEET NO. 4 OF 8 SHEETS

ILLINOIS FED. AID PROJECT



All steel rail elements shall be galvanized according to Article 509.05 of the Standard Specifications.



(10'-0" Maximum Post Spacing. Posts shall be placed between truss members's sidewalk openings)

R-29 (MODIFIED)

**BILL OF MATERIAL**

Item	Unit	Quantity
Bridge Fence Railing (Sidewalk)	Foot	571

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DESIGNED -	EXAMINED -	DATE -
CHECKED -	ACTING ENGINEER OF STRUCTURAL SERVICES	
DRAWN -	PASSED -	REVISED -
CHECKED -	ACTING ENGINEER OF BRIDGES AND STRUCTURES	REVISED -

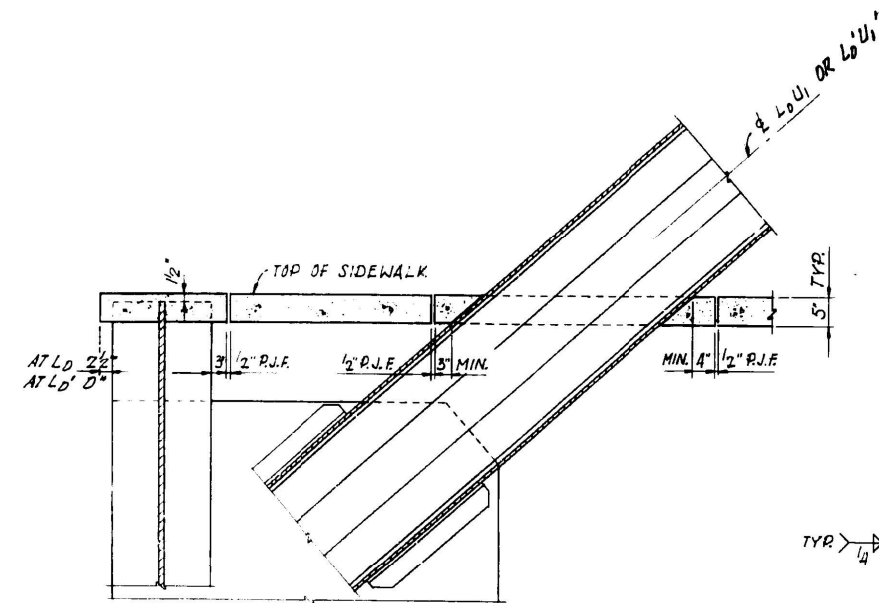
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**IL 43 (HARLEM AVE) OVER CALUMET SAG CHANNEL (SN 016-0323)  
BRIDGE FENCE RAILING (SIDEWALK)**

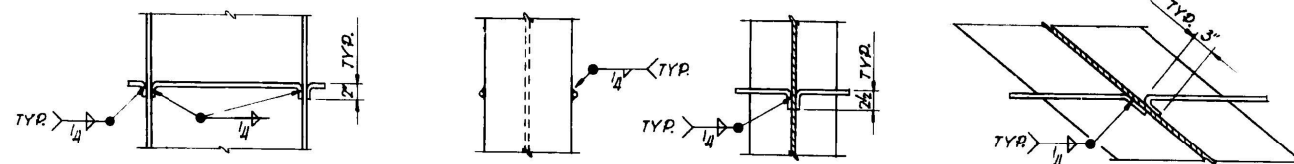
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
348	1515.3BR-1	COOK	13	8
CONTRACT NO. 62B39				
ILLINOIS FED. AID PROJECT				

SHEET NO. 5 OF 8 SHEETS

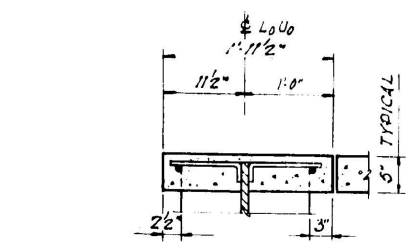
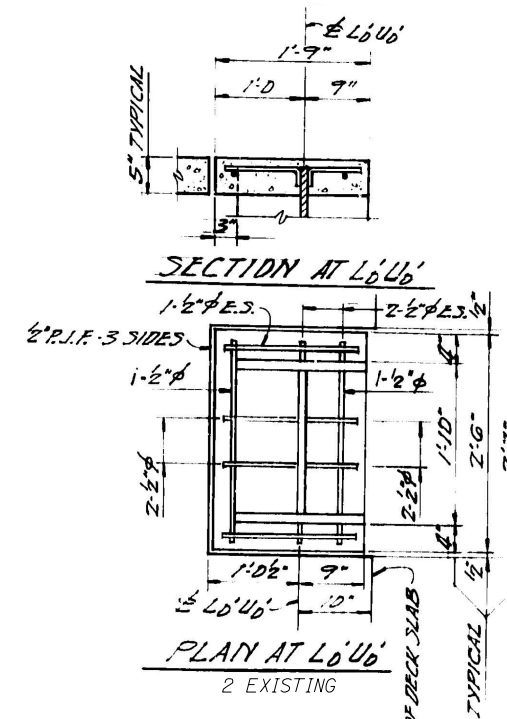




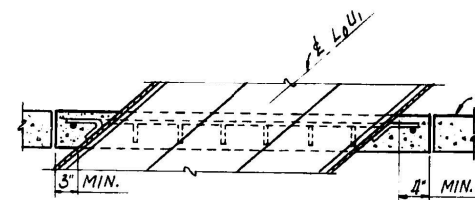
SECTION AT L<sub>0</sub> OF CONCRETE FILLERS AND SIDEWALK  
SECTION AT L<sub>0</sub>' D' SIMILAR



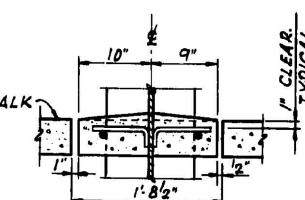
TYPICAL FILLET WELDS (EXISTING)  
FOR CONNECTION OF 1/2" φ BARS TO TRUSS MEMBERS



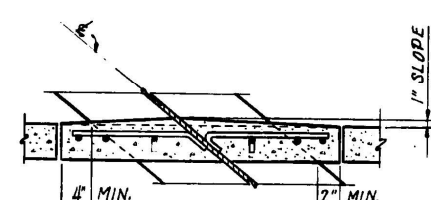
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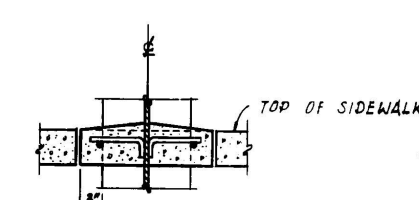
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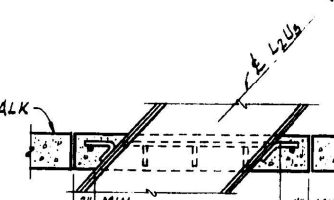
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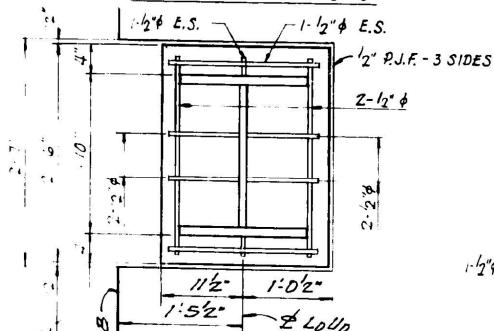
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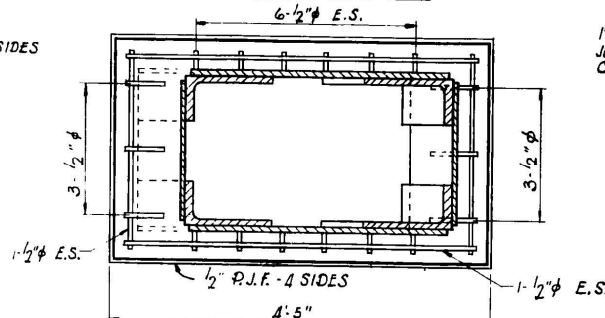
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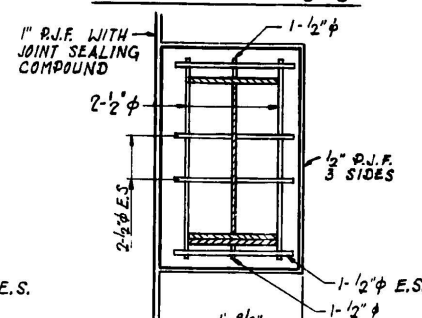
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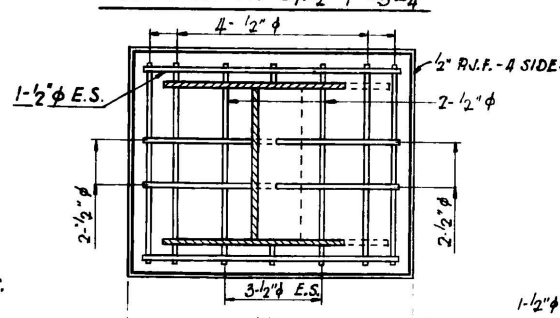
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2 EXISTING



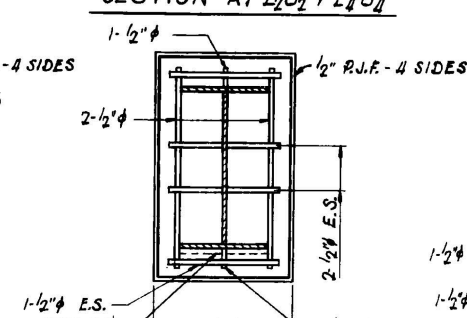
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4 EXISTING



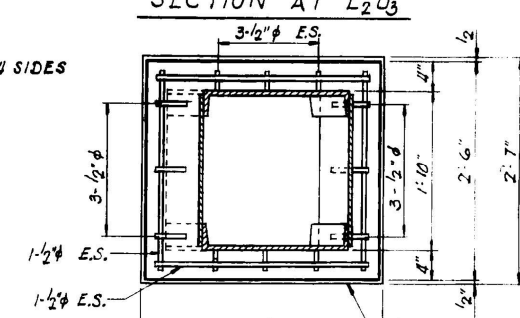
PLAN AT L<sub>3</sub>U<sub>3</sub>  
4 EXISTING



PLAN AT U<sub>1</sub>L<sub>2</sub> & U<sub>3</sub>L<sub>4</sub>  
4 EACH EXISTING



PLAN AT L<sub>1</sub>U<sub>1</sub>, L<sub>2</sub>U<sub>2</sub> & L<sub>4</sub>U<sub>4</sub>  
10 EXISTING



PLAN AT L<sub>2</sub>U<sub>3</sub>  
4 EXISTING

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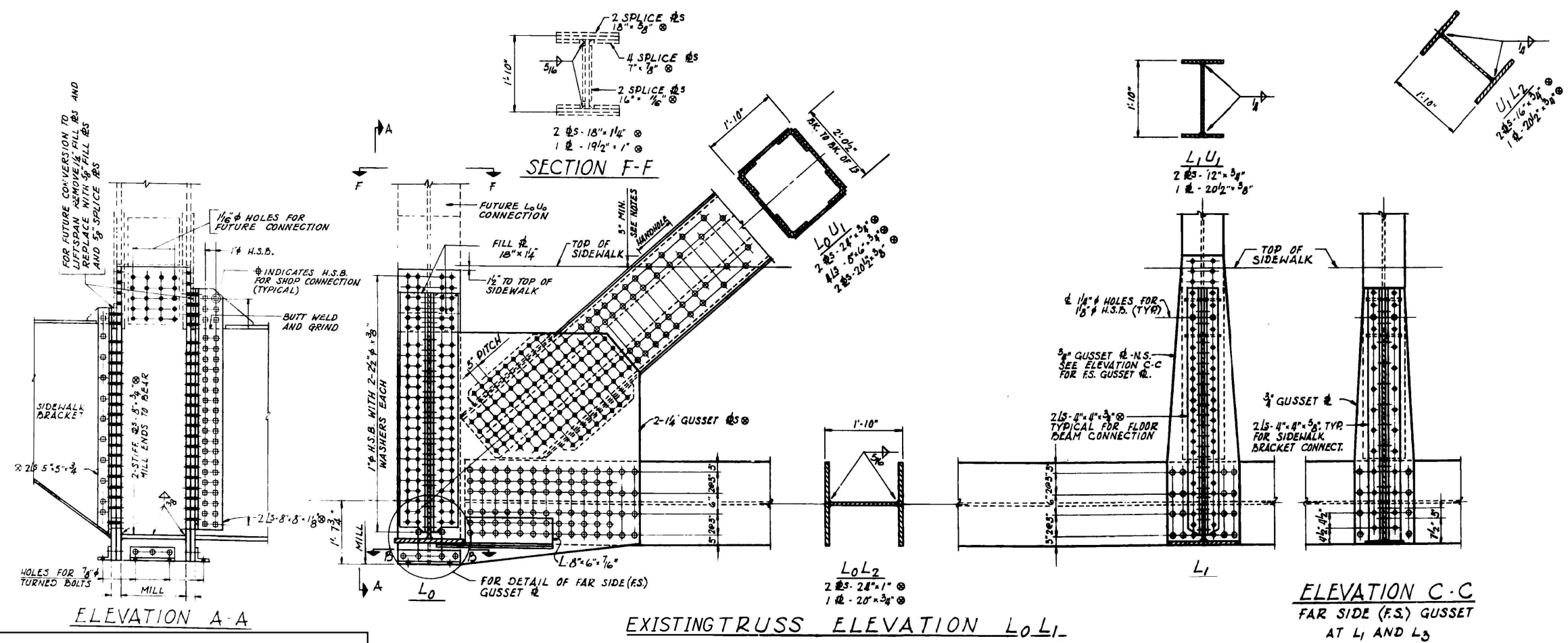
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CHECKED -	ACTING ENGINEER OF STRUCTURAL SERVICES	
DRAWN -	PASSED	REVISED
CHECKED -	ACTING ENGINEER OF BRIDGES AND STRUCTURES	REVISED

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

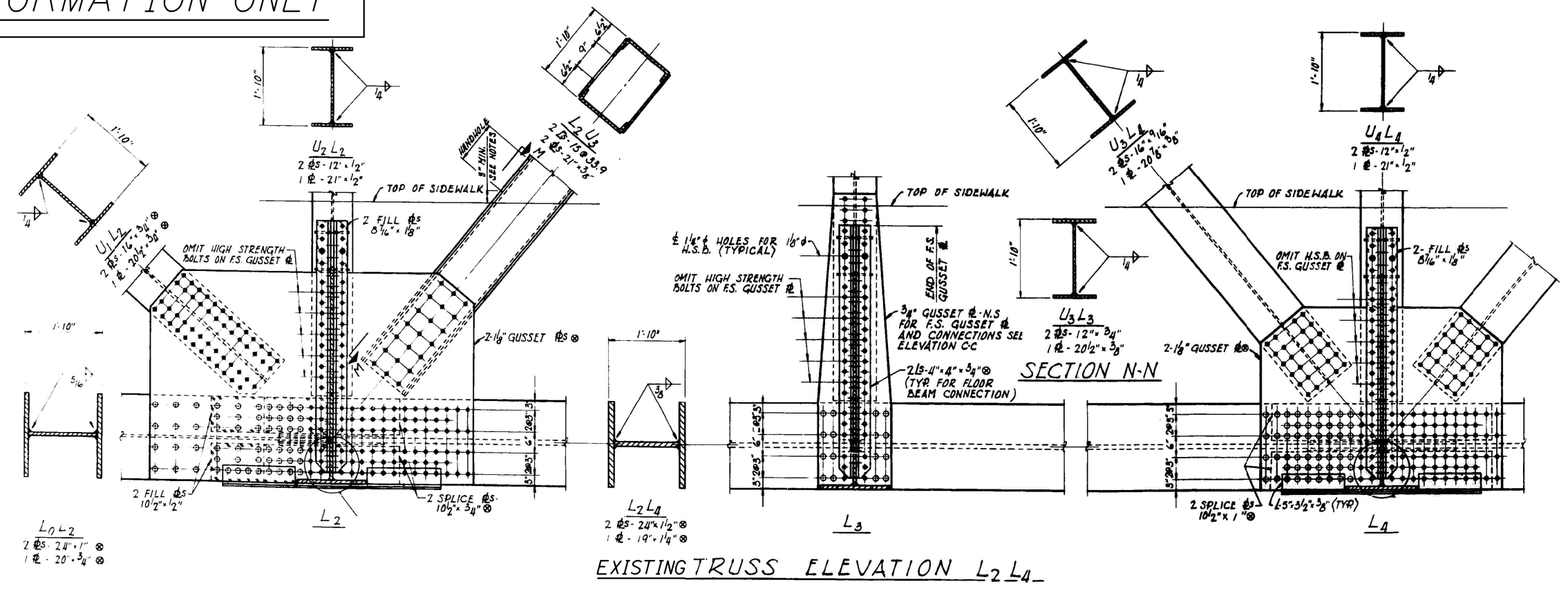
IL 43 (HARLEM AVE) OVER CALUMET SAG CHANNEL (SN 016-0323)  
CONCRETE FILLERS AROUND TRUSS MEMBERS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
348	1515.3BR-1	COOK	13	9
CONTRACT NO. 62B39				
ILLINOIS FED. AID PROJECT				

SHEET NO. 6 OF 8 SHEETS



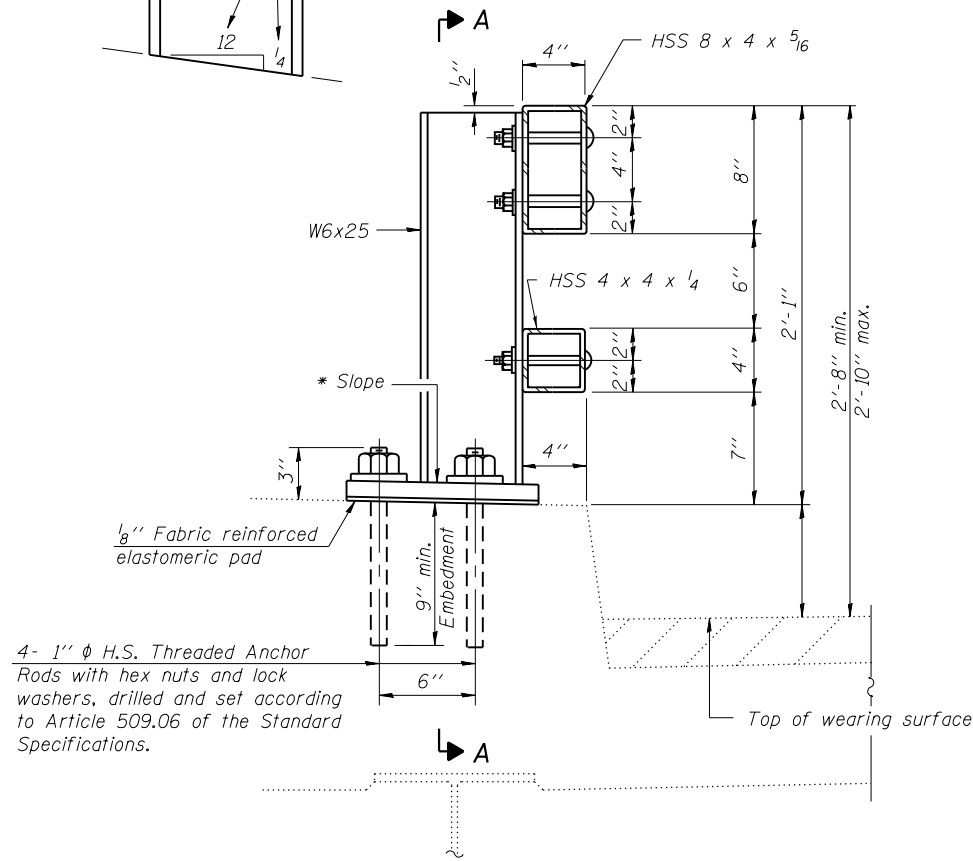
FOR INFORMATION ONLY



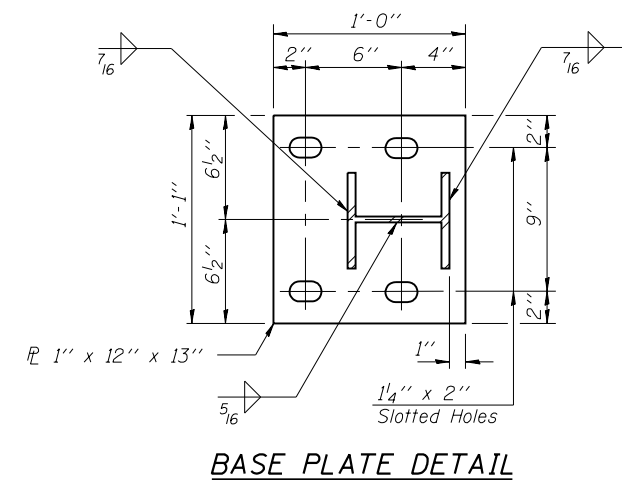
10/21/2015 1:23:11 PM

DESIGNED -	EXAMINED	DATE -	<b>STATE OF ILLINOIS          DEPARTMENT OF TRANSPORTATION</b>	<b>IL 43 (HARLEM AVE) OVER CALUMET SAG CHANNEL (SN 016-0323)</b> <b>TRUSS DETAILS</b>	F.A.P. RFE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
CHECKED -	ACTING ENGINEER OF STRUCTURAL SERVICES	REVISED			348	1515.3BR-1	COOK	13	10	
DRAWN -	PASSED	REVISED			CONTRACT NO. 62B39					
CHECKED -	ACTING ENGINEER OF BRIDGES AND STRUCTURES	REVISED			SHEET NO. 7 OF 8 SHEETS					
				ILLINOIS FED. AID PROJECT						

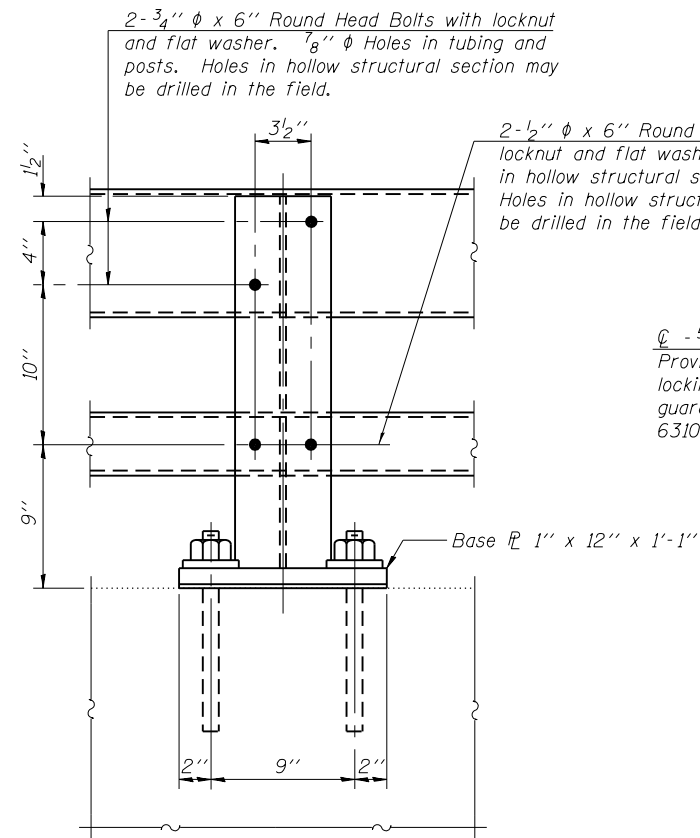
\* Cut bottom end of post to curb slope.



**SECTION AT RAIL POST**

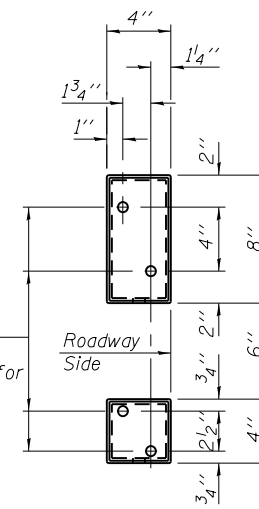


**BASE PLATE DETAIL**

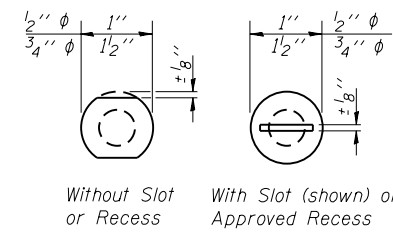


**SECTION A-A**

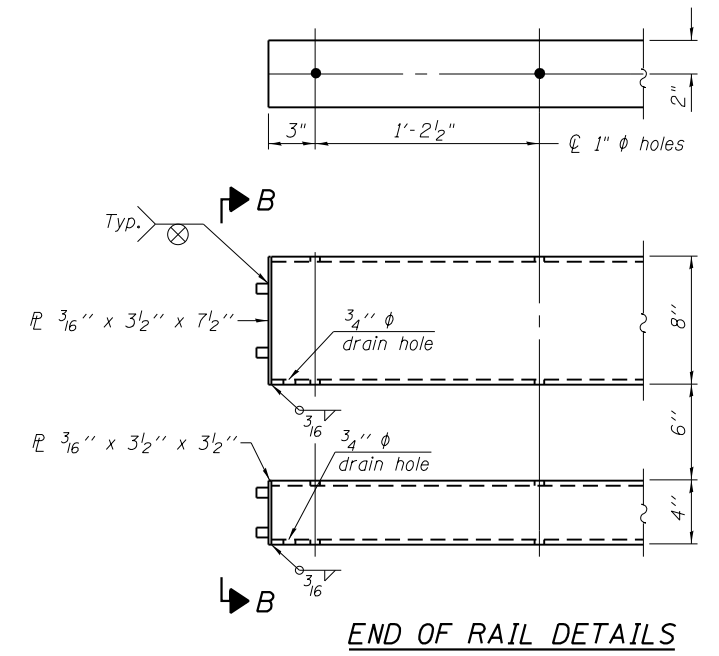
2- 1/2"  $\phi$  x 6" Round Head Bolts with locknut and flat washer. 5/8"  $\phi$  Holes in hollow structural section and post. Holes in hollow structural section may be drilled in the field.



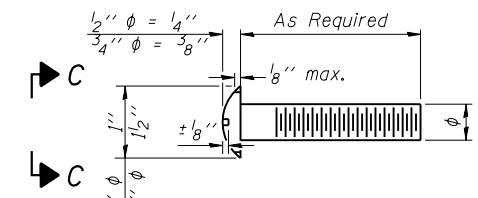
**VIEW B-B**



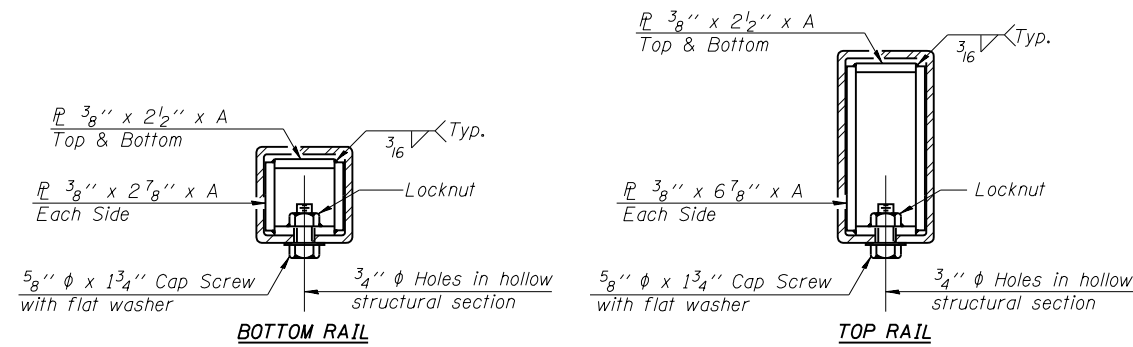
**VIEW C-C**



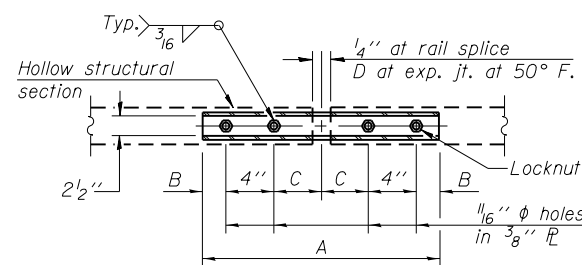
**END OF RAIL DETAILS**



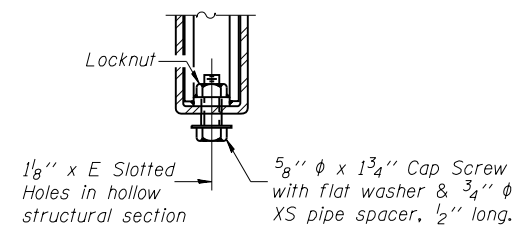
**DETAIL OF 1/2"  $\phi$  & 3/4"  $\phi$  ROUND HEAD BOLTS**



**SECTIONS AT RAIL SPLICE**



**PLAN-BOTT. SPLICE TYPICAL**



**RAIL SPLICE CONNECTION AT EXPANSION JT.**

Notes:  
 Posts shall not be located closer than 1'-3" to an existing bridge expansion joint or end of bridge.  
 Steel Bridge Rail expansion joint shall be provided between any two (2) posts which span a bridge expansion joint. Bolts located at expansion joint shall be provided with locknuts and shall be tightened only to a point that will allow railing movement.  
 Provide one 1/8" and two 1/16" steel shims for 25% of the posts. Shims shall be similar to base plates in size and holes.  
 All steel rail elements shall be galvanized according to Article 509.05 of the Standard Specifications.

**SPLICE DIMENSIONS**

T	D	A	B	C	E
≤ 4"	2 1/2"	1'-8"	2"	4"	2 1/2"
> 4" ≤ 6 1/2"	3 3/4"	2'-0"	2 1/2"	5 1/2"	3 1/2"
> 6 1/2" ≤ 9"	5"	2'-4"	3 1/2"	6 1/2"	9"
> 9" ≤ 13"	7"	2'-10"	4 1/2"	8 1/2"	11"
Rail Splice	4"	1'-8"	2"	4"	—

T = Total movement at expansion joint as shown on the design plans.

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R-31

1-12-15

(6'-3" Maximum Post Spacing)

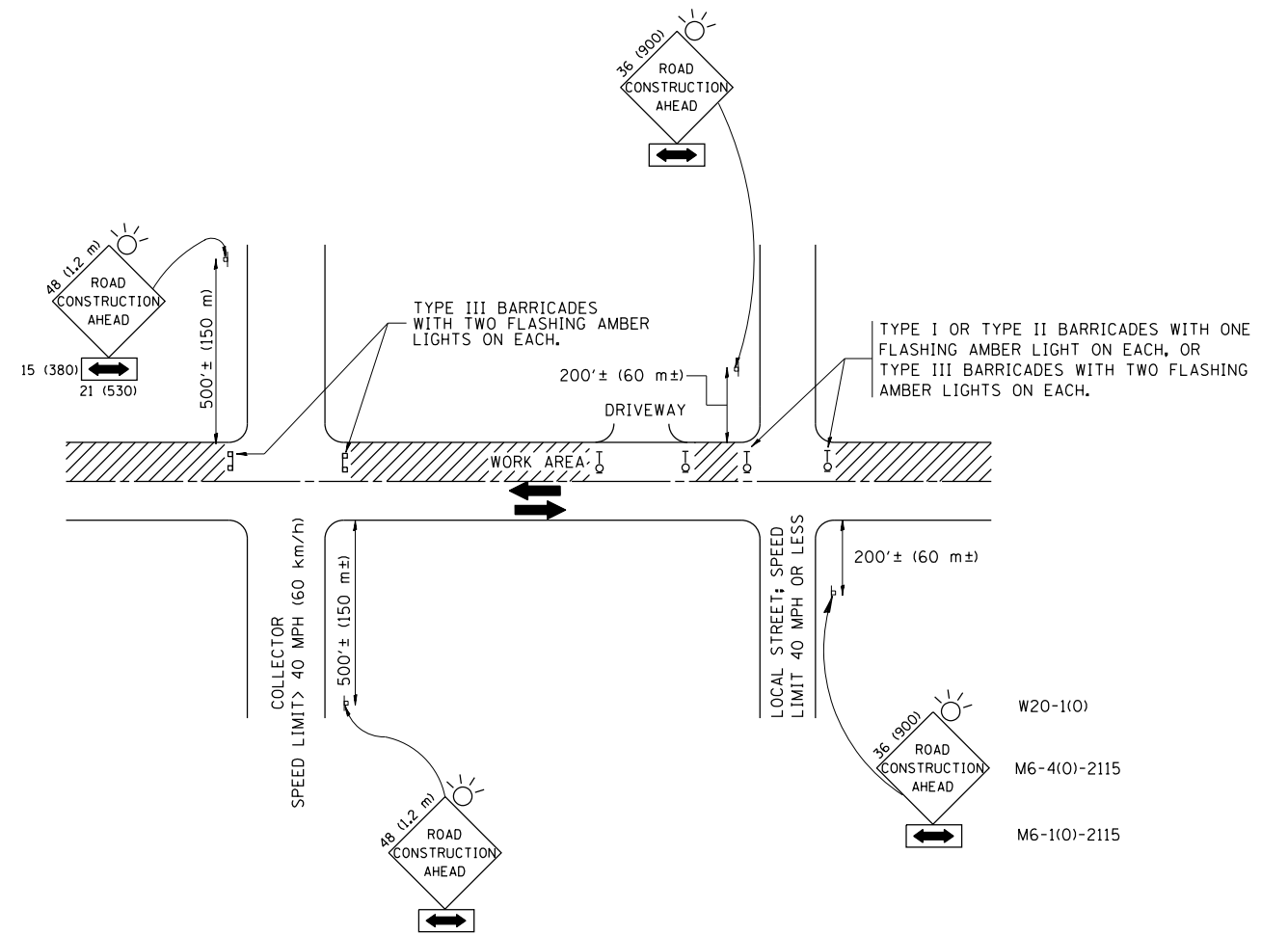
DESIGNED -	EXAMINED	DATE -
CHECKED -	ACTING ENGINEER OF STRUCTURAL SERVICES	
DRAWN -	PASSED	REVISED
CHECKED -	ACTING ENGINEER OF BRIDGES AND STRUCTURES	REVISED

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**STEEL RAILING, TYPE 2399  
 STRUCTURE NO. 016-0323**

SHEET NO. 8 OF 8 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
348	1515.3BR-1	COOK	13	11
CONTRACT NO. 62B39				
ILLINOIS FED. AID PROJECT				



TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS

NOTES:

A. FOR NO LANE RESTRICTION ON THE SIDE ROAD OR DRIVEWAYS

1. SIDE ROAD WITH A SPEED LIMIT OF 40 MPH (60 km/h) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
  - a) ONE ROAD CONSTRUCTION AHEAD SIGN 36 x 36 (900x900) WITH A FLASHER AND FLAG MOUNTED ON IT APPROXIMATELY 200' (60 m) IN ADVANCE OF THE MAIN ROUTE.
  - b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE I, TYPE II OR TYPE III BARRICADES, 1/3 OF THE CROSS SECTION OF THE CLOSED PORTION.
2. SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
  - a) ONE ROAD CONSTRUCTION AHEAD SIGN 48 x 48 (1.2 m x 1.2 m) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 500' (150 m) IN ADVANCE OF THE MAIN ROUTE.
  - b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION OF THE CLOSED PORTION.
3. WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (M6-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (M6-4).

B. FOR A LANE CLOSURE ON A SIDE ROAD OR DRIVEWAY:

- USE APPLICABLE PORTIONS OF THE TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES (STD. 701501, STD. 701606 OR THE APPROPRIATE STANDARD). THE SPACING OF SIGNS AND BARRICADES SHALL BE ADJUSTED FOR FIELD CONDITIONS AS DIRECTED BY THE ENGINEER. THE DIRECTIONAL ARROW SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE SIDE ROAD LANE CLOSURE.
- C. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAY UNLESS OTHERWISE NOTED.
- D. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCIDENTAL TO THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

All dimensions are in millimeters (inches) unless otherwise shown.

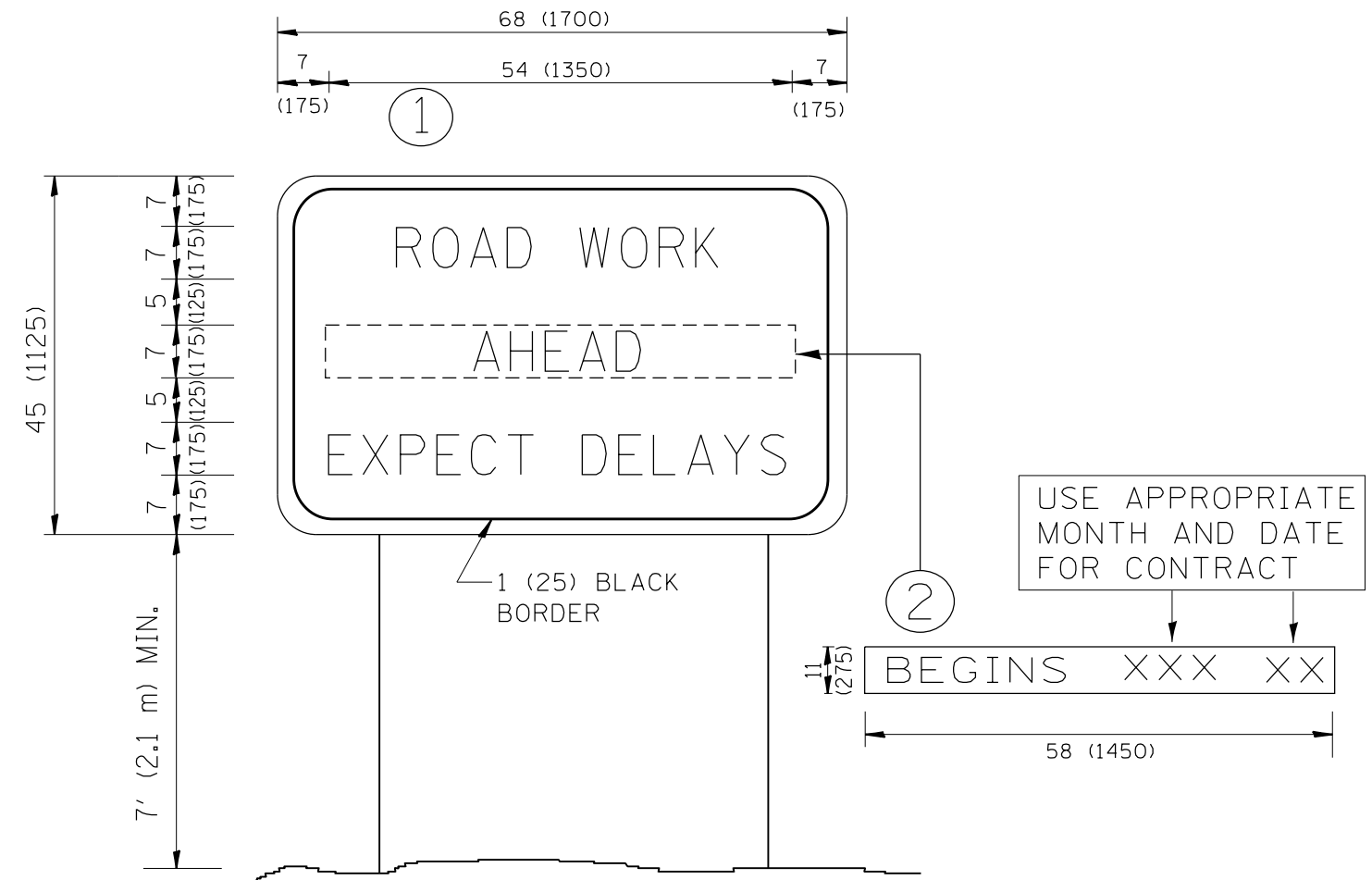
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	PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED - A. HOUSEH 10-15-96
	PLOT DATE = 10/21/2015	DATE - 06-89	REVISED - T. RAMMACHER 01-06-00

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL AND PROTECTION FOR  
SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS

SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
348	1515.3BR-1	COOK	13	12
TC-10			CONTRACT NO. 62B39	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



**NOTES:**

1. USE BLACK LETTERING ON ORANGE BACKGROUND.
2. ERECT SIGNS IN ADVANCE OF THE LOCATION FOR THE "ROAD CONSTRUCTION AHEAD" SIGN AT LOCATIONS AS DIRECTED BY THE ENGINEER.
3. ERECT SIGN ① WITH INSTALLED PANEL ② ONE WEEK PRIOR TO THE START OF CONSTRUCTION.
4. REMOVE PANEL ② SOON AFTER THE START OF CONSTRUCTION.
5. SEE SPECIAL PROVISION FOR "TEMPORARY INFORMATION SIGNING" FOR ADDITIONAL INFORMATION.
6. ONE SIGN ASSEMBLY EQUALS 25.70 SQ. FT. (2.3 SQ. M.)
7. SHALL BE PAID FOR AS TEMPORARY INFORMATION SIGNING.

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

FILE NAME =	USER NAME = dahhr	DESIGNED -	REVISED - R. MIRS 09-15-97	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>ARTERIAL ROAD INFORMATION SIGN</b>	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
p:\11\084EBIDINTEG.illinois.gov\PIWIDOT\Documents\DOT Offices\District 1\Projects\DI025\Drawings\Design\DistStd.dgn		REVISOR	REVISED - R. MIRS 12-11-97			348	1515.3BR-1	COOK	13	13
		CHECKED -	REVISED - T. RAMMACHER 02-02-99			<b>TC-22</b>		<b>CONTRACT NO. 62B39</b>		
		DATE	REVISED - C. JUCIUS 01-31-07			SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	FED. ROAD DIST. NO. 1   ILLINOIS   FED. AID PROJECT