

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
348	(0708.1 & 2323.5)B	COOK	47	1
FED. ROAD DIST. NO. 1		ILLINOIS	CONTRACT NO. 60D69	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

**PROPOSED
HIGHWAY PLANS**

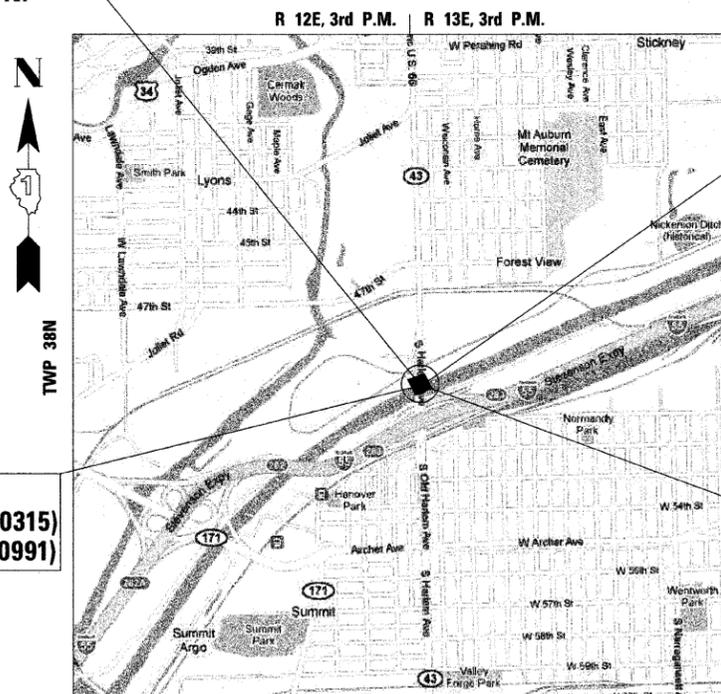
F.A.P. ROUTE 348 (IL ROUTE 43) AT SANITARY & SHIP CANAL
SECTION (0708.1 & 2323.5)B
BRIDGE DECK OVERLAY, BRIDGE JOINT REPAIR
COOK COUNTY
JOB NO. C-91-088-08

FOR INDEX OF SHEETS, SEE SHEET NO. 2
FOR LIST OF STANDARDS, SEE SHEET NO. 2

IMPROVEMENT LOCATED IN
THE VILLAGE OF FOREST VIEW

S.N. 016-0315 NB
S.N. 016-0991 SB
ADT = 19000 (2009)
POSTED SPEED: 40 MPH

PROJECT LOCATION:

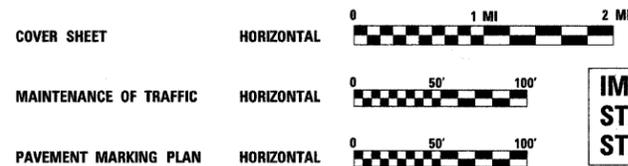


IMPROVEMENT ENDS:
STA. 135 + 17.28 (S.N. 016-0315)
STA. 134 + 66.35 (S.N. 016-0991)

IMPROVEMENT BEGINS:
STA. 130 + 60.78 (S.N. 016-0315)
STA. 130 + 17.67 (S.N. 016-0991)

IL 43 OVER SANITARY & SHIP CANAL
EXISTING S.N. 016-0315 (NB)
EXISTING S.N. 016-0991 (SB)

GRAPHIC SCALES:



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: MICHELLE A. AQUINO - (847) 705-4606
PROJECT MANAGER: RAJENDRA C. SHAH - (847) 705-4555
CONTRACT NO.: 60D69

GROSS AND NET LENGTH OF IMPROVEMENT = 456.50 FEET = 0.086 MILE (NB)
GROSS AND NET LENGTH OF IMPROVEMENT = 448.68 FEET = 0.085 MILE (SB)



Fred M. Lin 3/30/2010

FRED M. LIN, P.E.
ILLINOIS REGISTERED ENGINEER NO. 062-056704
REGISTRATION EXPIRES NOV. 30, 2011

D-91-088-08



LOCATION OF SECTION INDICATED THUS: —

PREPARED BY:
LIN ENGINEERING, LTD.
CHATHAM, ILLINOIS 62629
(217) 483-4168

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED APRIL 1, 2010
Diane M. O'Keefe
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER
May 7 2010
Scott E. Stitt, P.E.
ENGINEER OF DESIGN AND ENVIRONMENT
May 7 2010
Christine M. Roedel
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS

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- 000001-05 STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
- 001001-02 AREA OF REINFORCEMENT BARS
- 001006 DECIMAL OF AN INCH AND OF A FOOT
- 701426-03 LANE CLOSURE, MULTI LANE, INTERMITTENT OR MOVING OPERATION, FOR SPEEDS > 45 MPH
- 701601-06 URBAN LANE CLOSURE, MULTI LANE, 1W OR 2W WITH NON TRAVERSABLE MEDIAN
- 701901-01 TRAFFIC CONTROL DEVICES
- 704001-06 TEMPORARY CONCRETE BARRIER
- 720011-01 METAL POSTS FOR SIGNS, MARKERS & DELINEATORS

DISTRICT STANDARDS (INCLUDED AS PLAN SHEETS 43-47)

- TC11 TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)
- TC13 TYPICAL PAVEMENT MARKINGS
- TC17 TRAFFIC CONTROL DETAILS FOR FREEWAY SHOULDER CLOSURES AND PARTIAL RAMP CLOSURES
- TC21 DETOUR SIGNING FOR CLOSING STATE HIGHWAYS
- TC22 ARTERIAL ROAD INFORMATION SIGN

COMMITMENTS

NO COMMITMENTS HAVE BEEN MADE FOR THIS PROJECT.

GENERAL NOTES

1. THESE PLANS HAVE BEEN PREPARED FROM INFORMATION ACQUIRED FROM EXISTING PLANS AND NOTES RECEIVED FROM IDOT FIELD MAINTENANCE ENGINEERS.
2. PLAN DIMENSIONS AND DETAILS RELATIVE TO EXISTING PLANS ARE SUBJECT TO VARIATIONS FOUND IN THE FIELD. THE CONTRACTOR SHALL FIELD VERIFY EXISTING DIMENSIONS AND DETAILS AFFECTING NEW CONSTRUCTION AND MAKE NECESSARY ADJUSTMENTS PRIOR TO CONSTRUCTION OR ORDERING MATERIALS. ANY ADJUSTMENTS PROPOSED BY THE CONTRACTOR MUST BE APPROVED BY THE ENGINEER. SUCH VARIATIONS SHALL NOT BE CAUSE FOR ADDITIONAL COMPENSATION FOR A CHANGE IN THE SCOPE OF WORK, HOWEVER, THE CONTRACTOR WILL BE PAID FOR THE QUANTITY ACTUALLY FURNISHED BASED UPON THE UNIT PRICE.
3. QUANTITIES FOR DECK SLAB REPAIR ARE APPROXIMATE. LOCATIONS WILL BE DETERMINED BY THE ENGINEER FOLLOWING THE HYDRO-SCARIFICATION. ACTUAL REPAIR LOCATIONS SHALL BE SHOWN ON THE AS-BUILT PLANS.
4. FORTY-EIGHT HOURS BEFORE STARTING EXCAVATION, THE CONTRACTOR WILL CALL J.U.L.I.E. (1-800-892-0123) OR 811 FOR LOCATIONS OF THE EXISTING UTILITIES.
5. THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT WRITTEN PERMISSION FROM THE DEPARTMENT.
6. DO NOT SCALE PLANS FOR CONSTRUCTION DIMENSIONS.
7. WHEN ARTIFICIAL LIGHTING IS UTILIZED IN NIGHT OPERATIONS, THE CONTRACTOR SHALL EXERCISE THE UTMOST PRECAUTIONS IN PREVENTING ADVERSE VISIBILITY TO THE MOTORING PUBLIC AS WELL AS ADJOINING RESIDENTIAL AREAS.
8. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS, AS REQUIRED, PRIOR TO COMMENCING WITH CONSTRUCTION.
9. THE CONTRACTOR SHALL TAKE ALL NECESSARY MEASURES TO ASSURE THAT NO DEBRIS FALLS INTO THE CANAL. THE COST OF THIS WORK SHALL BE INCLUDED IN THE VARIOUS PAY ITEMS.
10. THE CONTRACTOR SHALL CONTACT THE TRAFFIC CONTROL SUPERVISOR AT (847) 705-4470 A MINIMUM OF 72 HOURS PRIOR TO THE PLACEMENT OF ANY TEMPORARY TRAFFIC CONTROL DEVICES.
11. THE CONTRACTOR SHALL CONTACT PATRICE HARRIS, THE AREA TRAFFIC FIELD TECHNICIAN, AT (708) 597-9800 TWO (2) WEEKS PRIOR TO THE PLACEMENT OF PERMANENT PAVEMENT MARKINGS.
12. ALL DAMAGE TO EXISTING PAVEMENT MARKINGS OUTSIDE THE REMOVAL LINE SHOWN ON THE PLANS SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
13. THE CONTRACTOR SHALL USE CARE IN REMOVING OR EXCAVATING NEAR ALL EXISTING ITEMS WHICH WILL REMAIN. ANY DAMAGE DONE TO EXISTING ITEMS BY THE CONTRACTOR SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
14. ACCESS SHALL BE PROVIDED AT ALL TIMES TO PROPERTIES ABUTTING THE PROPOSED IMPROVEMENT.
15. BEFORE BEGINNING ANY WORK, THE CONTRACTOR SHALL RETAIN AND RECORD FOR FUTURE REFERENCE, ALL EXISTING PAVEMENT MARKING LINES (RAISED REFLECTIVE PAVEMENT MARKERS) IN ORDER THAT THESE LOCATIONS CAN BE RE-ESTABLISHED FOR STRIPING, EXACT LOCATIONS OF ALL PAVEMENT MARKINGS SHALL BE AS DIRECTED BY THE ENGINEER.

FILE NAME =	USER NAME = #USER#	DESIGNED - ST	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	INDEX OF SHEETS, STANDARDS, GENERAL NOTES & COMMITMENTS IL-43 (HARLEM AVE.) OVER SANITARY AND SHIP CANAL	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	TOTAL SHEETS
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	PLOT DATE = #DATE#	DATE - 03/2010	REVISED -							
										CONTRACT NO. 60D69
										ILLINOIS FED. AID PROJECT

Rev.

SUMMARY OF QUANTITIES

URBAN
100% STATE

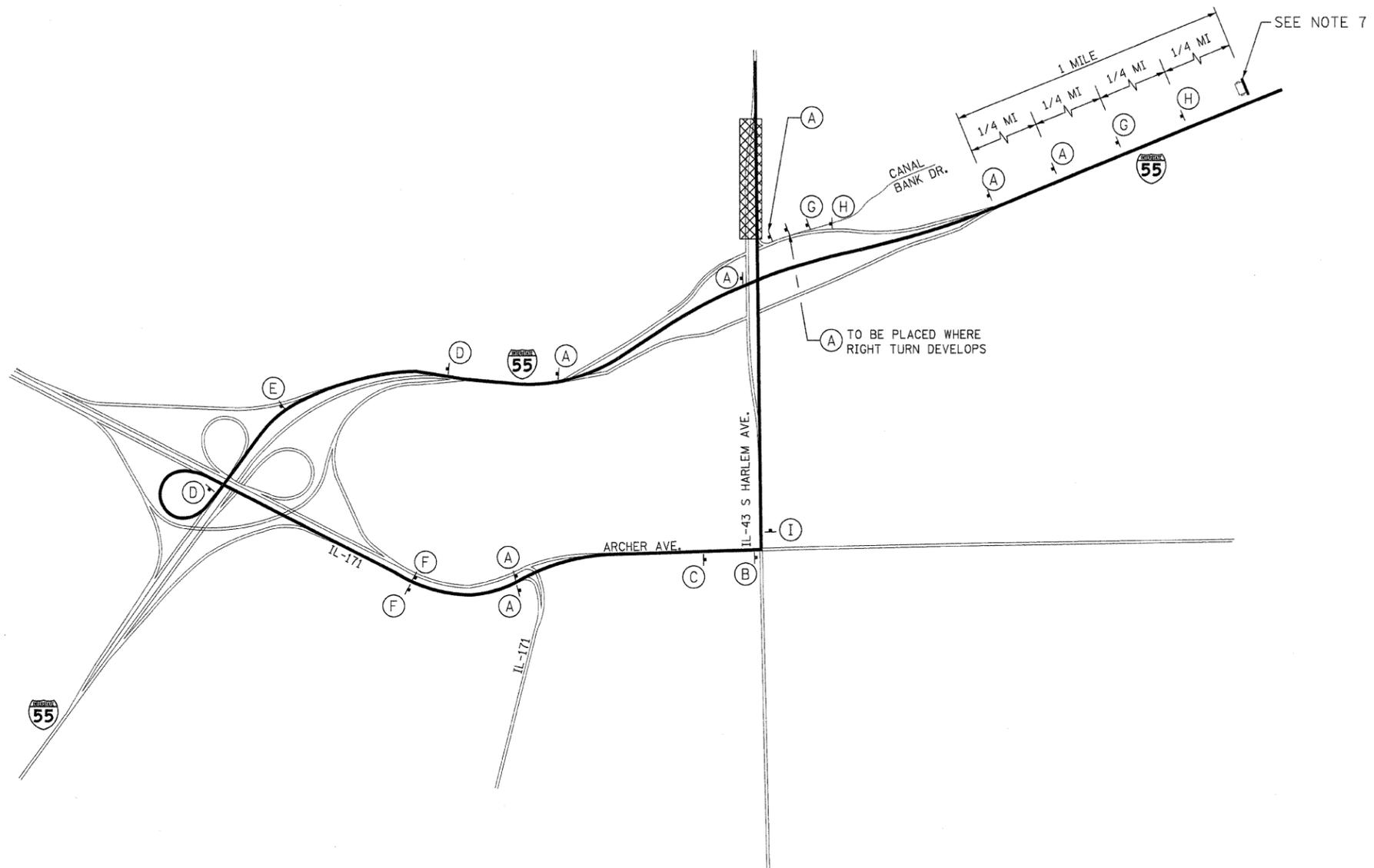
CODE NUMBER	ITEM	UNIT	TOTAL QUANTITY	X031-2A STRUCTURE	I000-2A ROADWAY
50102400	CONCRETE REMOVAL	CU YD	79	79	0
50157300	PROTECTIVE SHIELD	SQ YD	331	331	0
50300255	CONCRETE SUPERSTRUCTURE	CU YD	79	79	0
50300530	FLOOR DRAIN EXTENSION	EACH	21	21	0
50500405	FURNISHING AND ERECTING STRUCTURAL STEEL	POUND	4730	4730	0
50500715	JACK AND REMOVE EXISTING BEARINGS	EACH	24	24	0
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	9090	9090	0
50800515	BAR SPLICERS	EACH	104	104	0
52000110	PREFORMED JOINT STRIP SEAL	FOOT	464	464	0
52100010	ELASTOMERIC BEARING ASSEMBLY, TYPE I	EACH	24	24	0
52100510	ANCHOR BOLTS, 3/4"	EACH	2	2	0
52100520	ANCHOR BOLTS, 1"	EACH	48	48	0
58700300	CONCRETE SEALER	SQ FT	38245	38245	0
59000200	EPOXY CRACK INJECTION	FOOT	154	154	0
59200101	BRIDGE WASHING NO. 1	EACH	1	1	0
59200102	BRIDGE WASHING NO. 2	EACH	1	1	0
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	5	0	5
67100100	MOBILIZATION	L SUM	1	0	1
70101800	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	L SUM	1	0	1
70102550	TRAFFIC CONTROL AND PROTECTION FOR TEMPORARY DETOUR	EACH	1	0	1
70106800	CHANGEABLE MESSAGE SIGN	CAL MO	4	0	4
70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	4019	0	4019
70400100	TEMPORARY CONCRETE BARRIER	FOOT	1100.0	0	1100.0
70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	1100.0	0	1100.0
* 78008200	POLYUREA PAVEMENT MARKING TYPE I - LETTERS AND SYMBOLS	SQ FT	37	0	37
* 78008210	POLYUREA PAVEMENT MARKING TYPE I - LINE 4"	FOOT	6987	0	6987
* 78008230	POLYUREA PAVEMENT MARKING TYPE I - LINE 6"	FOOT	614	0	614
* 78008240	POLYUREA PAVEMENT MARKING TYPE I - LINE 8"	FOOT	840	0	840
* 78008250	POLYUREA PAVEMENT MARKING TYPE I - LINE 12"	FOOT	307	0	307
* 78008270	POLYUREA PAVEMENT MARKING TYPE I - LINE 24"	FOOT	105	0	105
* 78100300	REPLACEMENT REFLECTOR	EACH	98	0	98
* 78200530	BARRIER WALL MARKERS, TYPE C	EACH	356	0	356
78300100	PAVEMENT MARKING REMOVAL	SQ FT	3750	0	3750

CODE NUMBER	ITEM	UNIT	TOTAL QUANTITY	X031-2A STRUCTURE	I000-2A ROADWAY
X0320532	CONCRETE BRIDGE DECK SCARIFICATION (3/8" INCH)	SQ YD	2575	2575	0
X0320887	POLYMER CONCRETE	CU FT	10.0	10.0	0
X0321468	PLUG EXISTING DECK DRAINS	EACH	23	23	0
X0322256	TEMPORARY INFORMATION SIGNING	SQ FT	200	0	200
X0322944	BRIDGE DECK THIN POLYMER OVERLAY 3/8"	SQ YD	2575	2575	0
X0325303	STRUCTURAL REPAIR OF CONCRETE (DEPTH GREATER THAN 5 INCHES)	SQ FT	317	317	0
X0325305	STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES)	SQ FT	409	409	0
X0325775	WET REFLECTIVE TEMPORARY TAPE, TYPE III, 4"	FOOT	11607	0	11607
X0325837	WET REFLECTIVE TEMPORARY TAPE, TYPE III, 6"	FOOT	177	0	177
X0325841	WET REFLECTIVE TEMPORARY TAPE, TYPE III, 24"	FOOT	94	0	94
X0325876	WET REFLECTIVE TEMPORARY TAPE, TYPE III, 8"	FOOT	72	0	72
X7013820	TRAFFIC CONTROL SURVEILLANCE, EXPRESSWAYS	CAL DA	30	0	30
Z0016001	DECK SLAB REPAIR (FULL DEPTH, TYPE I)	SQ YD	0.7	0.7	0
Z0016002	DECK SLAB REPAIR (FULL DEPTH, TYPE II)	SQ YD	21.1	21.1	0
Z0016200	DECK SLAB REPAIR (PARTIAL)	SQ YD	14.5	14.5	0
Z0030260	IMPACT ATTENUATORS, TEMPORARY (FULLY REDIRECTIVE, NARROW), TEST LEVEL 3	EACH	2	0	2
Z0030330	IMPACT ATTENUATORS, RELOCATE (FULLY REDIRECTIVE), TEST LEVEL 3	EACH	2	0	2
Z0073200	TEMPORARY SHORING AND CRIBBING	EACH	2	2	0
X0326909	CENTER LOCK ADJUSTMENT	EACH	2	2	0

*Specialty Items

FILE NAME =	USER NAME = #USER#	DESIGNED - SEW	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SUMMARY OF QUANTITIES IL-43 (HARLEM AVE.) OVER SANITARY AND SHIP CANAL	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
#FILE#		DRAWN - SEW	REVISED -			348	(0708.1 & 2323.5)B	COOK	47	03	
		CHECKED - FML	REVISED -			CONTRACT NO. 60D69					
		DATE - 03/2010	REVISED -			ILLINOIS FED. AID PROJECT					
				SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.				

Rev.



NOTES:

1. THE FOLLOWING DETOUR PLAN IS PROVIDED FOR STAGE I TRUCK TRAFFIC MOVEMENTS FROM SB I-55 TO NB HARLEM AVENUE ONLY. DETOUR SIGNING SHALL BE REMOVED PRIOR TO COMMENCING STAGE II.
2. THE CONTRACTOR SHALL FURNISH THE SIGNS, POSTS, AND FLASHING LIGHTS AS SHOWN ON THE PLAN. SIGN LOCATIONS AS SHOWN ON THE DETOUR PLAN ARE FOR INFORMATION ONLY AND SHALL BE FIELD VERIFIED. THE CONTRACTOR SHALL ONLY PLACE SIGNS AS DIRECTED BY THE ENGINEER.
3. THE HEIGHT TO THE BOTTOM OF THE LOWEST SIGN SHALL NOT BE LESS THAN 6'.
4. ADVANCE SIGNS SHOULD BE PLACED IN ADVANCE OF THE INTERSECTIONS AS SHOWN ON DISTRICT ONE STANDARD TC-21 OR AS DIRECTED BY THE ENGINEER.
5. SEE SHEET 5 FOR SIGNING DETAILS.
6. THE ABOVE NOTED WORK AND AS SHOWN IN THE PLANS SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE PER EACH FOR "TRAFFIC CONTROL AND PROTECTION FOR TEMPORARY DETOUR."
7. SIGN MESSAGE SHALL BE DETERMINED BY THE ENGINEER.

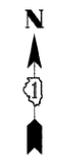
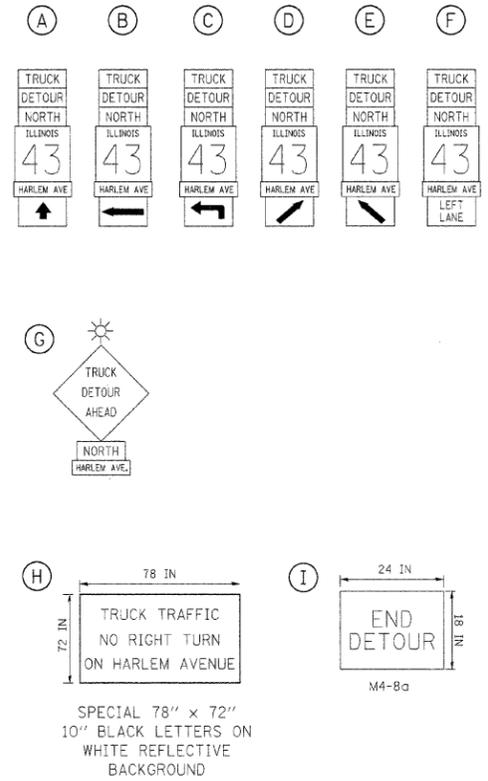
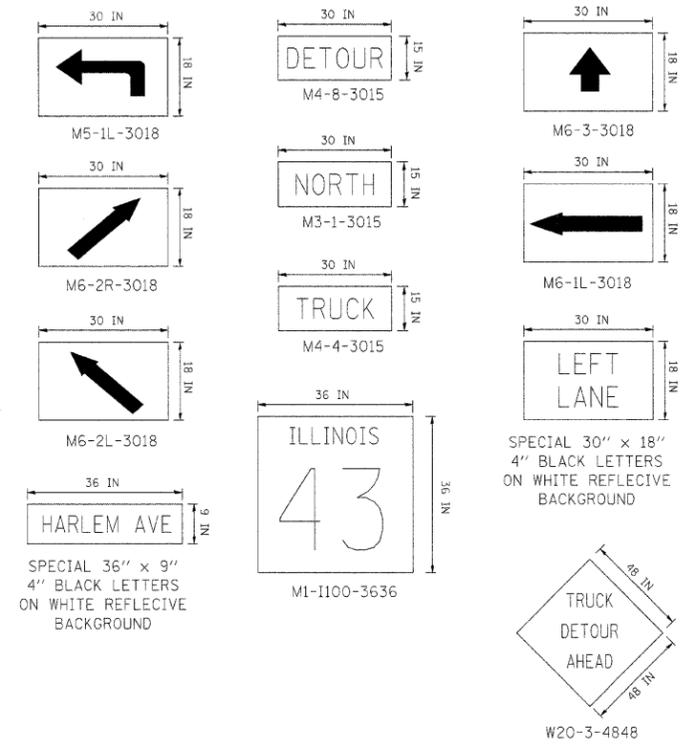
LEGEND

- DETOUR
- ▨ WORK AREA
- CHANGEABLE MESSAGE SIGN
- ↑ POST MOUNTED SIGN



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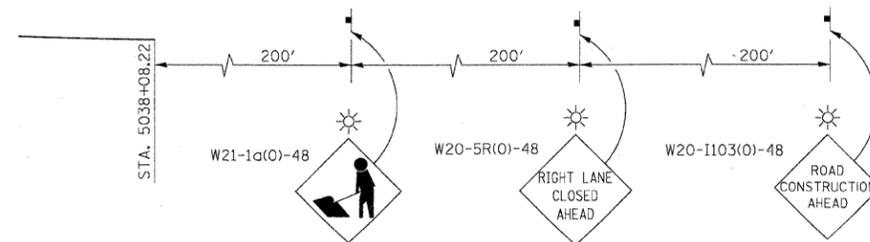
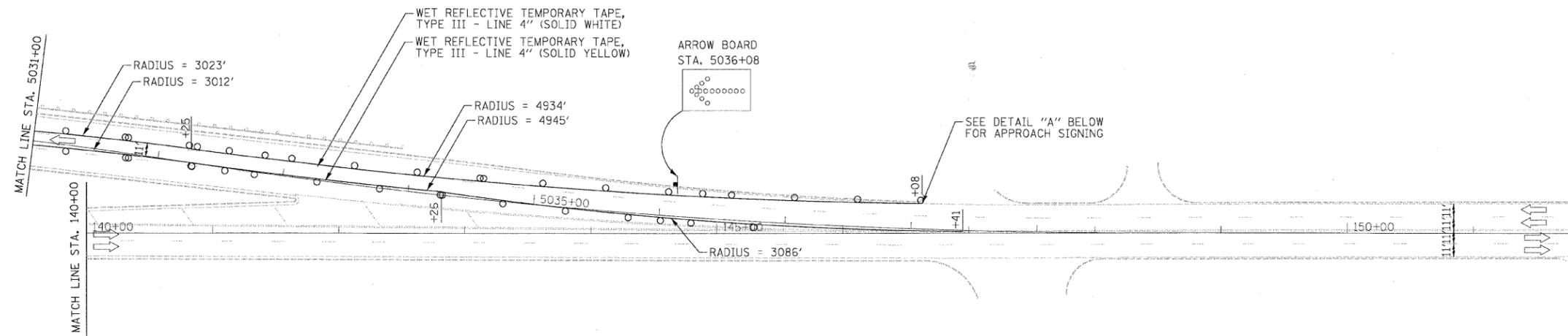
CONTRACTOR FURNISHED SIGNS REQUIRED:



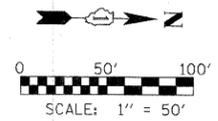
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	DATE - 03/2010	REVISED -			FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT							

LEGEND

-  WORK AREA
-  IMPACT ATTENUATORS, TEMPORARY (FULLY REDIRECTIVE, NARROW), TEST LEVEL 3
-  TYPE III BARRICADE
-  TYPE I OR II BARRICADE
-  TEMPORARY CONCRETE BARRIER
-  DRUM WITH STEADY BURN MONODIRECTIONAL LIGHT
-  DIRECTION INDICATOR BARRICADE
-  SIGN



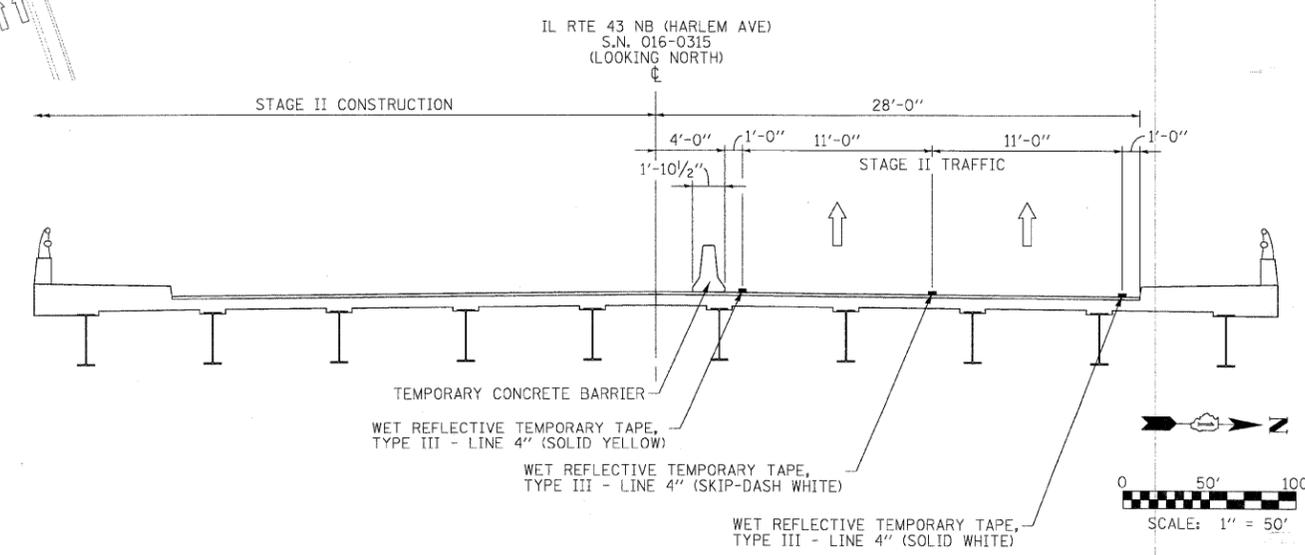
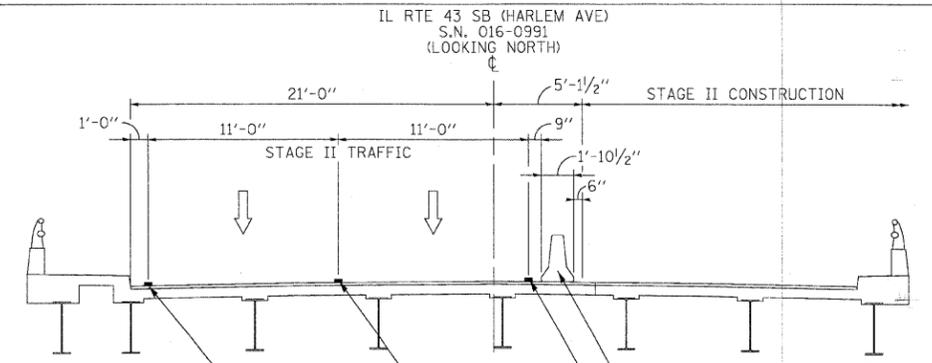
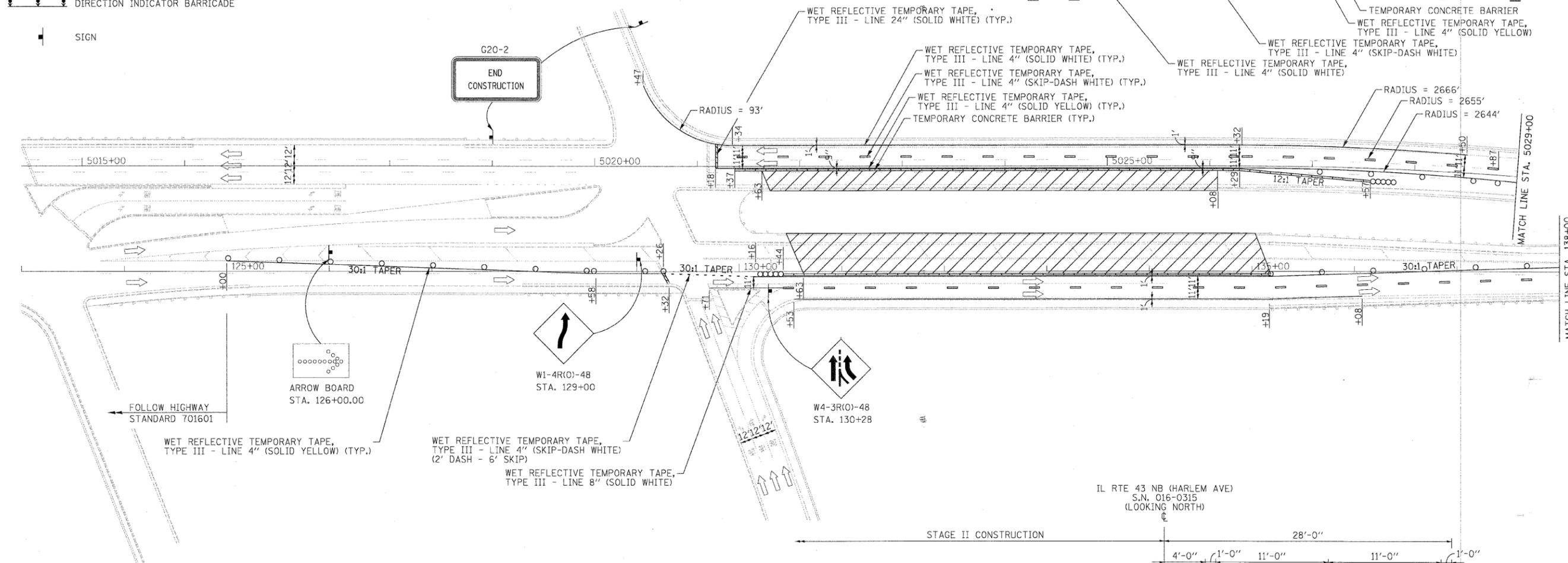
DETAIL "A"



FILE NAME = #FILE#	USER NAME = #USER#	DESIGNED - SEW	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	MAINTENANCE OF TRAFFIC - STAGE I IL-43 (HARLEM AVE.) OVER SANITARY AND SHIP CANAL			F.A.P. RTE. 348	SECTION (0708.1 & 2323.5)B	COUNTY COOK	TOTAL SHEETS 47	SHEET NO. 07
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LEGEND

-  WORK AREA
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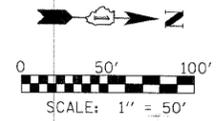
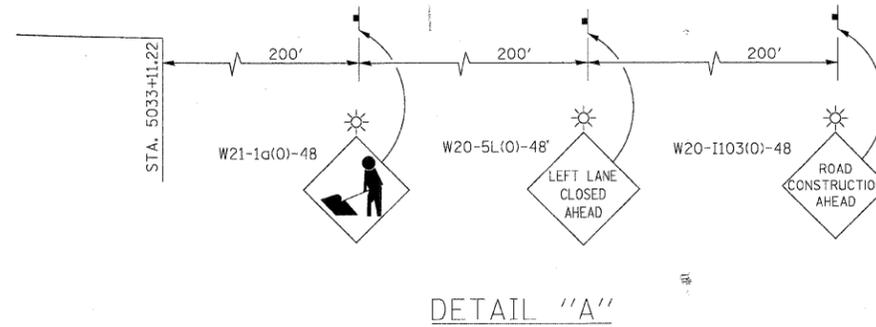
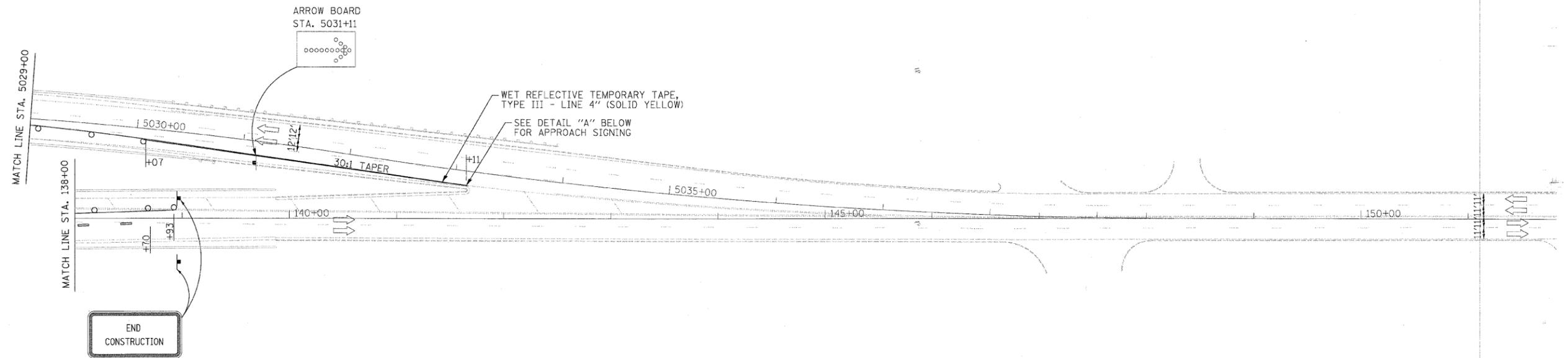
- STAGE II CONSTRUCTION:**
- REMOVE CONFLICTING EXISTING PAVEMENT MARKINGS, RAISED REFLECTIVE PAVEMENT MARKERS AND SIGNS USING FLAGGERS AND ADVANCED SIGNING SIMILAR TO HIGHWAY STANDARD 701426.
 - PUT THREE (3) "ROAD CONSTRUCTION AHEAD" SIGNS WITH STEADY BURN LIGHTS ON I-55 SB EXIT RAMP, AT 500' INTERVALS FROM THE HARLEM AVE. AND I-55 SB EXIT RAMP INTERSECTION.
 - SHIFT TRAFFIC TO OUTSIDE LANES AND EXISTING OUTSIDE SHOULDER, PROVIDING TWO 11' LANES ON THE SB BRIDGE AND TWO 11' LANES ON THE NB BRIDGE UNDER HIGHWAY STANDARD 701601 AND AS SHOWN IN THE PLANS.
 - UPON COMPLETION OF CONSTRUCTION AND REMOVAL OF TRAFFIC CONTROL, PROVIDE PROPOSED PAVEMENT MARKINGS AND RAISED REFLECTIVE PAVEMENT MARKERS TO REVERT TO EXISTING PAVEMENT MARKINGS CONFIGURATION, AS SHOWN ON THE PROPOSED PAVEMENT MARKING PLAN UNDER HIGHWAY STANDARD 701426.

- NOTES:**
- ALL SIGNS SHALL BE MOUNTED WITH STEADY BURN LIGHTS AT ALL TIMES THROUGHOUT THE DURATION OF CONSTRUCTION. THE COST OF THIS WORK AND ALL SIGNS SHALL BE CONSIDERED AS INCLUDED IN THE CONTRACT COST FOR TRAFFIC CONTROL AND PROTECTION (SPECIAL).

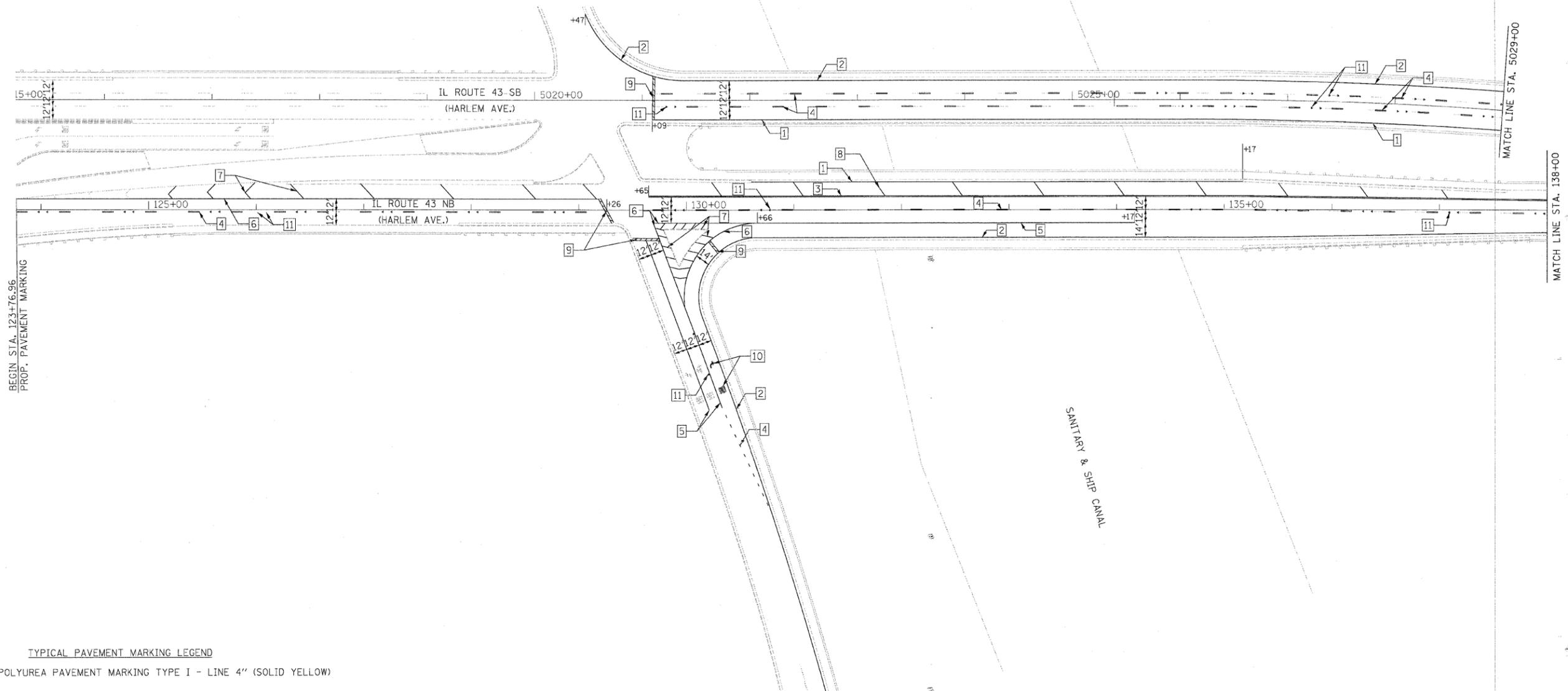
FILE NAME =	USER NAME = #USER#	DESIGNED - SEW	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	MAINTENANCE OF TRAFFIC - STAGE II IL-43 (HARLEM AVE.) OVER SANITARY AND SHIP CANAL	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
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LEGEND

-  WORK AREA
-  IMPACT ATTENUATORS, TEMPORARY (FULLY REDIRECTIVE, NARROW), TEST LEVEL 3
-  TYPE III BARRICADE
-  TYPE I OR II BARRICADE
-  TEMPORARY CONCRETE BARRIER
-  DRUM WITH STEADY BURN MONODIRECTIONAL LIGHT
-  DIRECTION INDICATOR BARRICADE
-  SIGN



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	PLOT DATE = #DATE#	DATE - 03/2010	REVISED -			FED. ROAD DIST. NO.		ILLINOIS		FED. AID PROJECT		

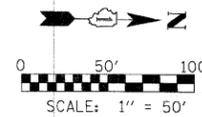


TYPICAL PAVEMENT MARKING LEGEND

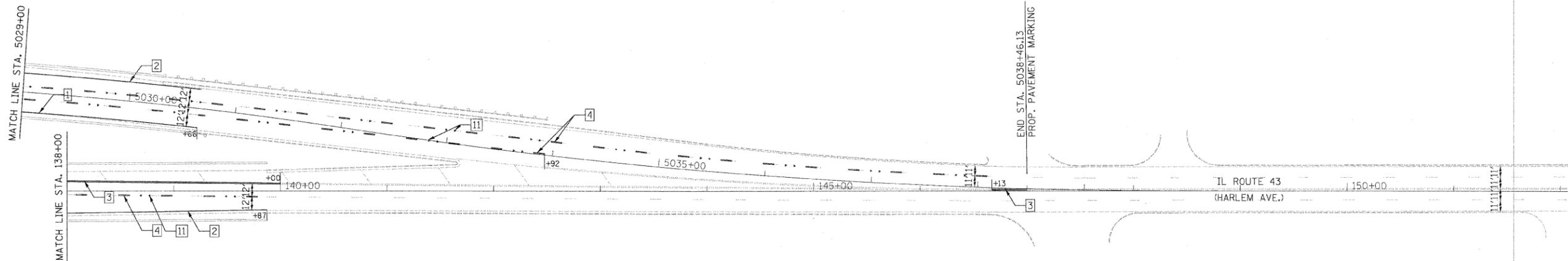
- 1 POLYUREA PAVEMENT MARKING TYPE I - LINE 4" (SOLID YELLOW)
- 2 POLYUREA PAVEMENT MARKING TYPE I - LINE 4" (SOLID WHITE)
- 3 POLYUREA PAVEMENT MARKING TYPE I - LINE 4" (DOUBLE YELLOW)
- 4 POLYUREA PAVEMENT MARKING TYPE I - LINE 4" (SKIP - DASH WHITE)
- 5 POLYUREA PAVEMENT MARKING TYPE I - LINE 6" (SOLID WHITE)
- 6 POLYUREA PAVEMENT MARKING TYPE I - LINE 8" (SOLID WHITE)
- 7 POLYUREA PAVEMENT MARKING TYPE I - LINE 12" (DIAGONAL SOLID WHITE)
- 8 POLYUREA PAVEMENT MARKING TYPE I - LINE 12" (DIAGONAL SOLID YELLOW)
- 9 POLYUREA PAVEMENT MARKING TYPE I - LINE 24" (SOLID WHITE)
- 10 POLYUREA PAVEMENT MARKING TYPE I - LETTERS AND SYMBOLS
- 11 ONE-WAY CRYSTAL MARKER

NOTES:

1. ALL PROPOSED PAVEMENT MARKINGS SHALL BE PLACED IN ACCORDANCE WITH "DISTRICT ONE TYPICAL PAVEMENT MARKINGS" (TC-13).
2. IN ADDITION TO FIELD REVIEW AND AERIAL DATA, PLAN DIMENSIONS AND DETAILS RELATIVE TO THE EXISTING FACILITIES HAVE BEEN TAKEN FROM EXISTING PLANS AND ARE SUBJECT TO CONSTRUCTION VARIATIONS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY SUCH DIMENSIONS AND DETAILS IN THE FIELD. SUCH VARIATIONS SHALL NOT BE A CAUSE FOR ADDITIONAL COMPENSATION DUE TO A CHANGE IN THE SCOPE OF THE WORK. HOWEVER, THE CONTRACTOR WILL BE PAID FOR THE QUANTITY ACTUALLY FURNISHED AT THE BID PRICE FOR THE WORK.



FILE NAME = #FILEL#	USER NAME = #USER#	DESIGNED - SEW	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PAVEMENT MARKING PLAN IL-43 (HARLEM AVE.) OVER SANITARY AND SHIP CANAL		F.A.P. RTE. 348	SECTION (0708.1 & 2323.5)B	COUNTY COOK	TOTAL SHEETS 47	SHEET NO. 10	
	PLOT SCALE = #SCALE#	DRAWN - SEW	REVISED -		SCALE: 1"=50'	SHEET NO. 1 OF 2 SHEETS	STA.	TO STA.	CONTRACT NO. 60D69			
	PLOT DATE = #DATE#	CHECKED - FML	REVISED -		FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT							
		DATE - 03/2010	REVISED -									

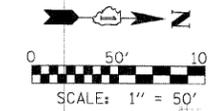


TYPICAL PAVEMENT MARKING LEGEND

- 1 POLYUREA PAVEMENT MARKING TYPE I - LINE 4" (SOLID YELLOW)
- 2 POLYUREA PAVEMENT MARKING TYPE I - LINE 4" (SOLID WHITE)
- 3 POLYUREA PAVEMENT MARKING TYPE I - LINE 4" (DOUBLE YELLOW)
- 4 POLYUREA PAVEMENT MARKING TYPE I - LINE 4" (SKIP - DASH WHITE)
- 5 POLYUREA PAVEMENT MARKING TYPE I - LINE 6" (SOLID WHITE)
- 6 POLYUREA PAVEMENT MARKING TYPE I - LINE 8" (SOLID WHITE)
- 7 POLYUREA PAVEMENT MARKING TYPE I - LINE 12" (DIAGONAL SOLID WHITE)
- 8 POLYUREA PAVEMENT MARKING TYPE I - LINE 12" (DIAGONAL SOLID YELLOW)
- 9 POLYUREA PAVEMENT MARKING TYPE I - LINE 24" (SOLID WHITE)
- 10 POLYUREA PAVEMENT MARKING TYPE I - LETTERS AND SYMBOLS
- 11 ONE-WAY CRYSTAL MARKER

NOTES:

1. ALL PROPOSED PAVEMENT MARKINGS SHALL BE PLACED IN ACCORDANCE WITH "DISTRICT ONE TYPICAL PAVEMENT MARKINGS" (TC-13).
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FILE NAME =	USER NAME = #USER#	DESIGNED - SEW	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PAVEMENT MARKING PLAN IL-43 (HARLEM AVE.) OVER SANITARY AND SHIP CANAL	F.A.P. RTE. 348	SECTION (0708.1 & 2323.5)B	COUNTY COOK	TOTAL SHEETS 47	SHEET NO. 11		
#FILEL#	PLOT SCALE = #SCALE#	CHECKED - FML	REVISED -			SCALE: 1"=50'	SHEET NO. 2 OF 2 SHEETS	STA.	TO STA.	CONTRACT NO. 60D69		
	PLOT DATE = #DATE#	DATE - 03/2010	REVISED -			FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT						

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES

Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60. See Special Provisions.

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 surfaces 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.

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 at the unit price bid for the work.

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

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

All structural steel shall conform to AASHTO Classification M-270 Gr. 36, unless otherwise noted.

Joint openings shall be adjusted according to Article 520.04 of the Standard Specs. when the deck is poured at an ambient temperature other than 50°F.

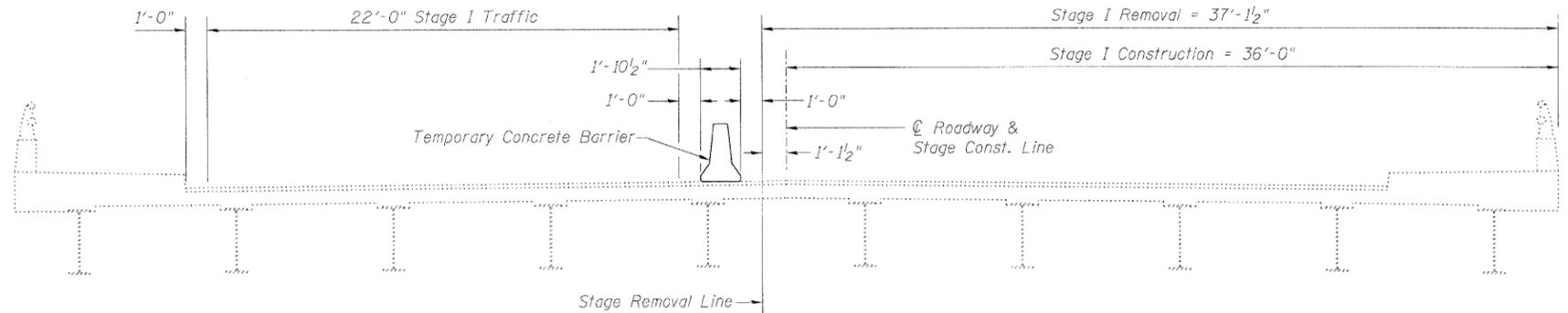
Cost of removal and re-installation of all members necessary to complete the work as detailed on the plans and as specified in the Special Provisions shall be included with Furnishing and Erecting Structural Steel.

The deck surface shall have its final finish tined according to Article 420.09(e)(1) of the Standard Specifications. Cost included with Concrete Superstructure.

If the analysis submitted to the Contractor for the jacking/ temporary support system to be used shows temporary stiffeners are required to prevent web crippling or buckling, the stiffeners shall be steel and bolted to the web. If stiffeners are not required, hardwood timbers shall be installed tightly between the top and bottom flange to prevent flange rotation.

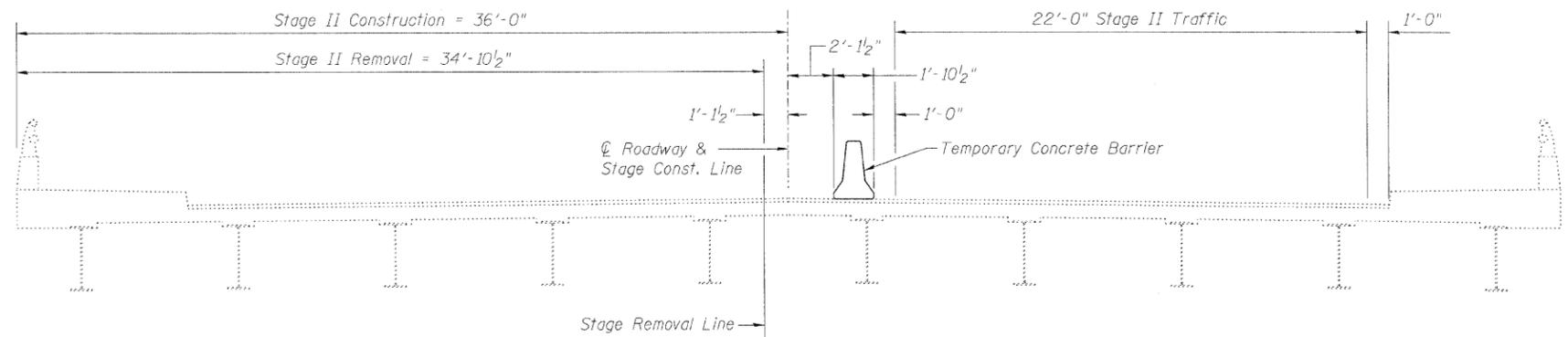
TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Concrete Removal	Cu. Yd.	55.0	-	55.0
Floor Drain Extension	Each	21	-	21
Concrete Superstructure	Cu. Yd.	55.0	-	55.0
Furnishing and Erecting Structural Steel	Pound	-	1400	1400
Jack and Remove Existing Bearings	Each	-	8	8
Reinforcement Bars, Epoxy Coated	Pound	5580	-	5580
Bar Splacers	Each	60	-	60
Preformed Joint Strip Seal	Foot	304	-	304
Elastomeric Bearing Assembly, Type I	Each	-	8	8
Anchor Bolts, 1"	Each	-	16	16
Concrete Sealer	Sq. Ft.	20949	-	20949
Epoxy Crack Injection	Foot	-	154	154
Bridge Washing 1	Each	1	-	1
Concrete Bridge Deck Scarification (3/8 inch)	Sq. Yd.	1265	-	1265
Polymer Concrete	Cu. Ft.	5.0	-	5.0
Plug Existing Deck Drains	Each	23	-	23
Bridge Deck Thin Polymer Overlay 3/8"	Sq. Yd.	1265	-	1265
Structural Repair of Concrete (Depth Greater Than 5 in.)	Sq. Ft.	-	227	227
Structural Repair of Concrete (Depth Equal To or Less Than 5 in.)	Sq. Ft.	-	255	255
Temporary Shoring and Cribbing	Each	-	1	1



STAGE I REMOVAL & CONSTRUCTION

(Looking North)



STAGE II REMOVAL & CONSTRUCTION

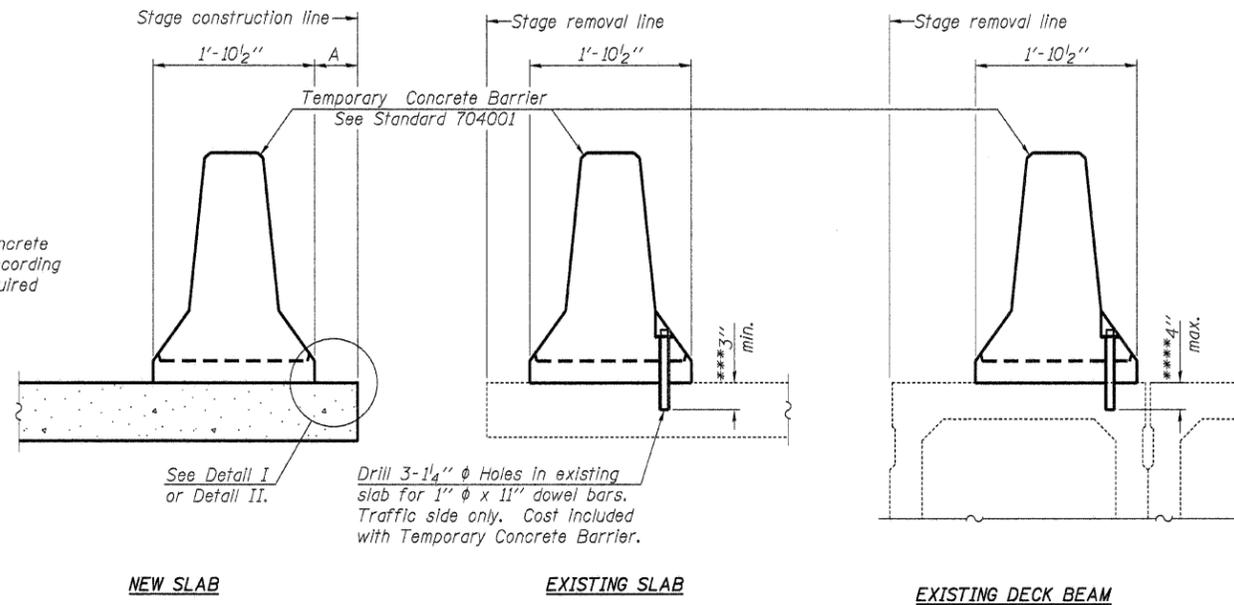
(Looking North)

GENERAL NOTES & DETAILS
STRUCTURE NO. 016-0315

<p>LIN ENGINEERING, LTD. Consulting Engineers Chatham, Illinois</p>	SHEET NO. 2	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	17 SHEETS	348	(0708.1&2323.5)B	COOK	47	13
				CONTRACT NO. 60D69		
ILLINOIS FED. AID PROJECT						

Designed By: ADB Checked By: MTH Drawn By: AIF
Date: March, 2010 File: 016-0315.dgn

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



When "A" is 3'-6" or less, the temporary concrete barrier shall be anchored to the new slab according to Detail I or Detail II. No anchorage is required when "A" is greater than 3'-6".

NEW SLAB

EXISTING SLAB

EXISTING DECK BEAM

SECTIONS THRU SLAB OR DECK BEAM

NOTES

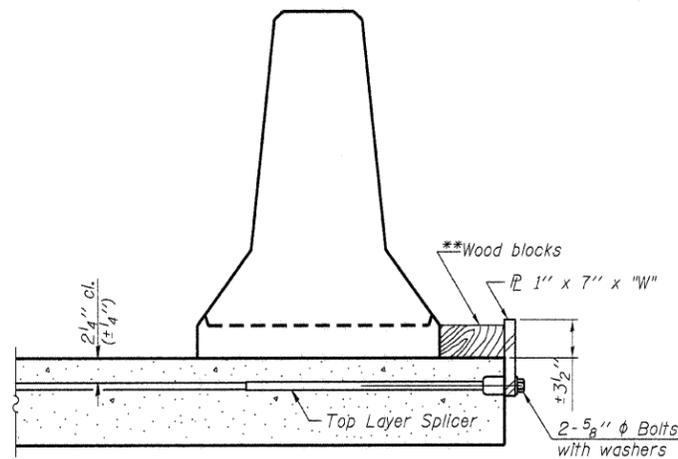
Detail I - With Bar Splicer or Couplers:
Connect one (1) 1"x7"x10" steel \bar{P} to the top layer of couplers with 2-5/8" ϕ bolts screwed to coupler at approximate \bar{C} of each barrier panel.

Detail II - With Extended Reinforcement Bars:
Connect one (1) 1"x7"x10" steel \bar{P} to the concrete slab or concrete wearing surface with 2-5/8" ϕ Expansion Anchors or cast in place Inserts spaced between the top layer of reinforcement at approximate \bar{C} of each barrier panel.

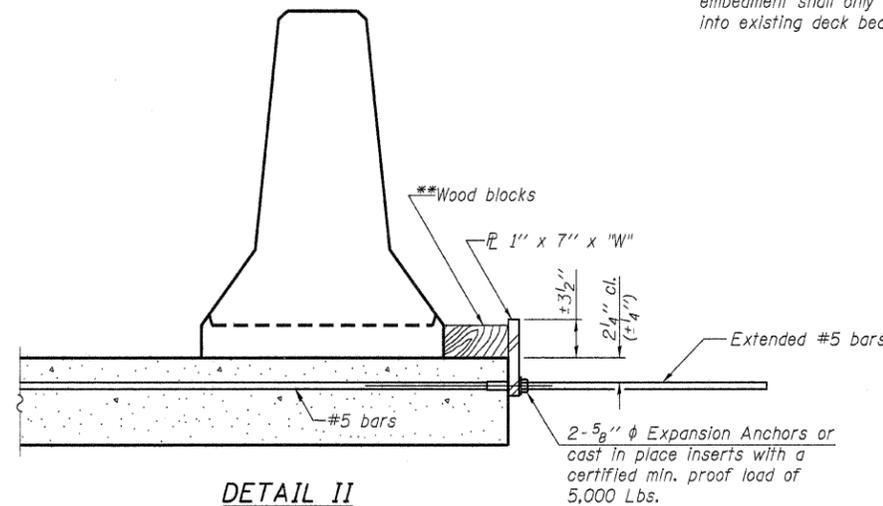
Cost of anchorage is included with Temporary Concrete Barrier. The 1" x 7" x 10" plate shall not be removed until stage II construction forms and all reinforcement bars are in place and the concrete is ready to be placed.

*** Dimension shown is minimum required embedment into concrete. If hot-mix asphalt wearing surface is present, minimum embedment shall be in addition to wearing surface depth.

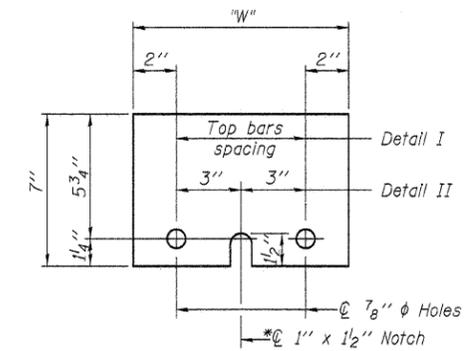
**** If existing deck beam is to remain in place after stage construction, embedment shall only be into wearing surface and not into existing deck beam concrete.



DETAIL I



DETAIL II



STEEL RETAINER \bar{P} 1" x 7" x 10"

* Required only with Detail II

** Wood blocks may be omitted when required to provide minimum stage traffic lane width. When the wood blocks are omitted, the concrete barrier shall be in direct contact with the steel retainer plate.

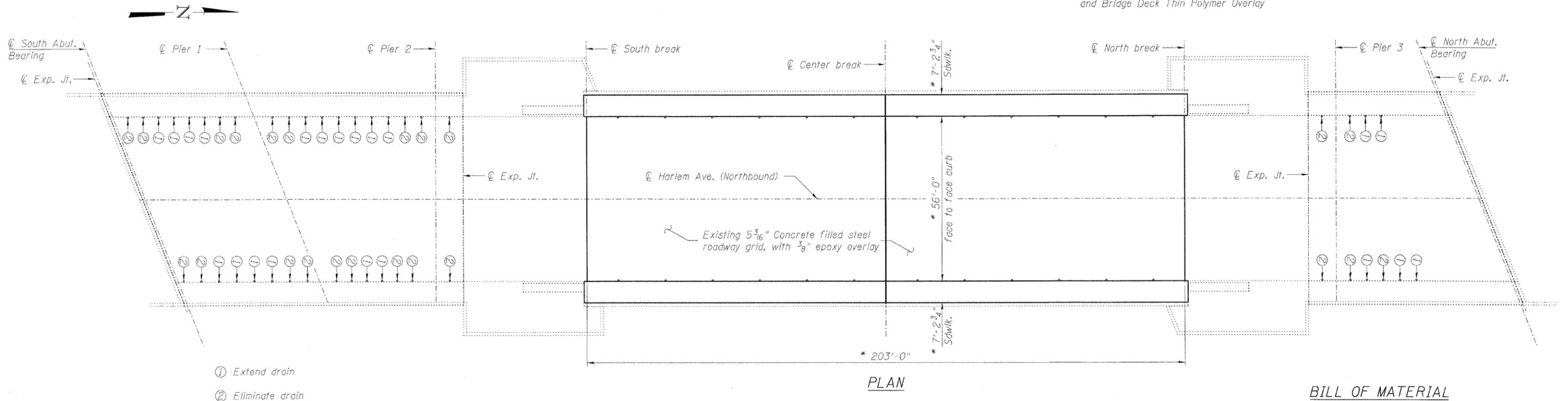
"W" = Top bars spacing + 4"

TEMPORARY CONCRETE BARRIER
FOR STAGE CONSTRUCTION
STRUCTURE NO. 016-0315

 LIN ENGINEERING, LTD. Consulting Engineers Chatham, Illinois	SHEET NO. 3	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	17 SHEETS	348	(0708.1&2323.5)B	COOK	47	14
				CONTRACT NO. 60D69		
		ILLINOIS FED. AID PROJECT				

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

* Limits of Concrete Bridge Deck Scarification
and Bridge Deck Thin Polymer Overlay



Notes:

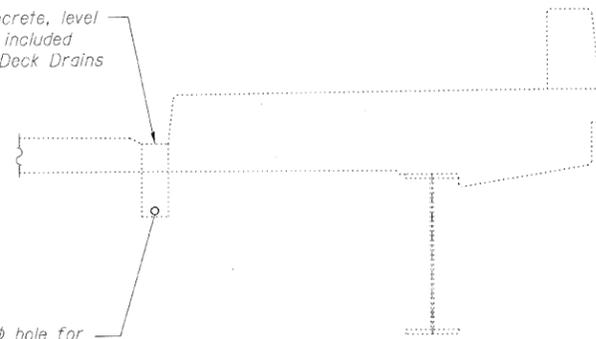
Repair areas of concrete filled grid using Polymer Concrete (as directed by the Engineer).
Bridge deck scarification shall be limited to hand-held blast cleaning methods.
Sidewalks do not require overlay removal and replacement.
Concrete Sealer shall be applied to top of deck surface, top of sidewalks, roadway face of curbs and parapets, and concrete slab above machine houses. Concrete Sealer shall not be applied on areas with Polymer Overlay.

BILL OF MATERIAL

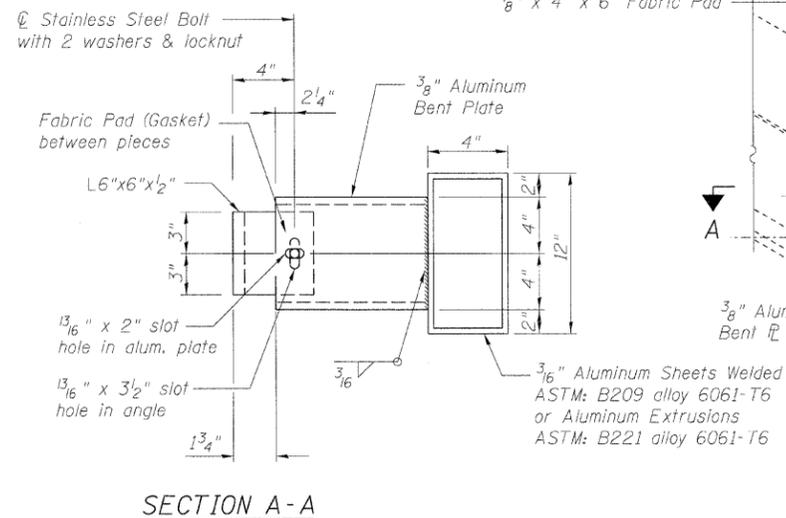
Item	Unit	Total
Bridge Deck Thin Polymer Overlay $\frac{3}{8}$ "	Sq. Yd.	1265
Concrete Bridge Deck Scarification (3/8 inch)	Sq. Yd.	1265
Concrete Sealer	Sq. Ft.	20949
** Polymer Concrete	Cu. Ft.	5.0
Floor Drain Extension	Each	21
Plug Existing Deck Drains	Each	23

** Shall be used if concrete surfaces are below the top of steel grid after scarification, in order to provide a smooth surface for Polymer Overlay. Contractor may substitute Polymer Concrete with an approved equivalent cementitious patching material for concrete.

Plug drain with concrete, level with roadway. Cost included with Plug Existing Deck Drains

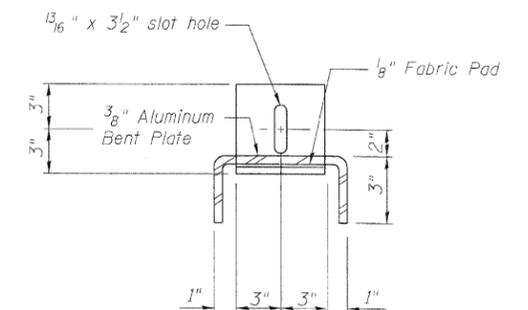
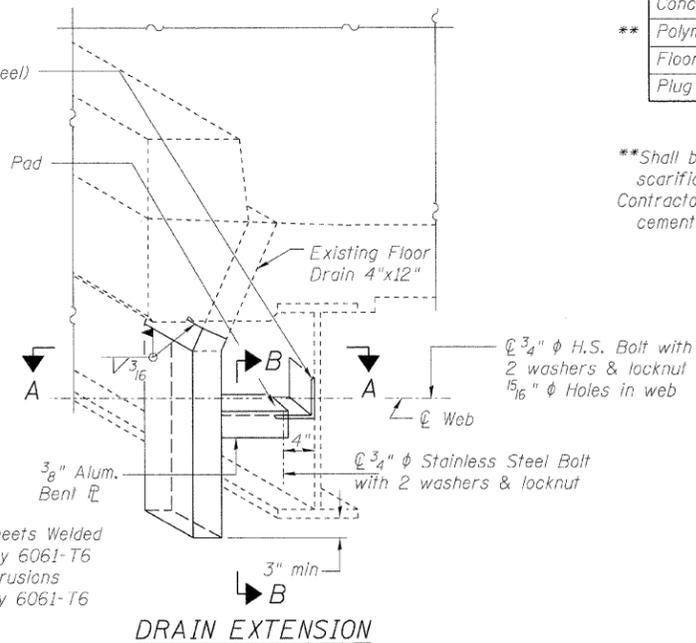


DRAIN ELIMINATION DETAIL



Notes:

1. All plates, angles, nuts, and washers, unless otherwise shown, shall be galvanized according to AASHTO M111 or M232 as applicable.

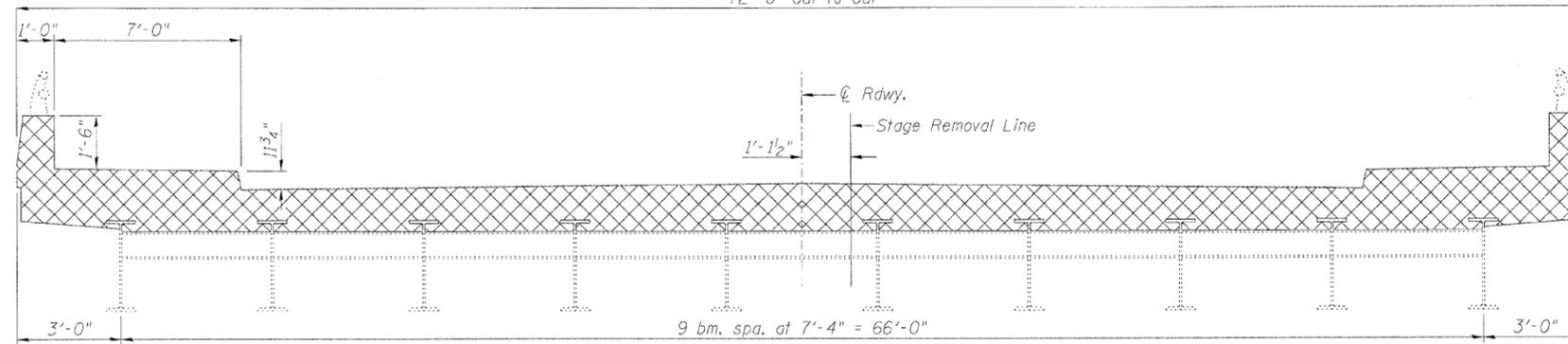


DECK SLAB DETAILS
STRUCTURE NO. 016-0315

<p>LIN ENGINEERING, LTD. Consulting Engineers Chatham, Illinois</p>	SHEET NO. 4 17 SHEETS	F.A.P. RTE. 348	SECTION (0708.1&2323.5)B	COUNTY COOK	TOTAL SHEETS 47	SHEET NO. 15
		CONTRACT NO. 60D69			ILLINOIS FED. AID PROJECT	

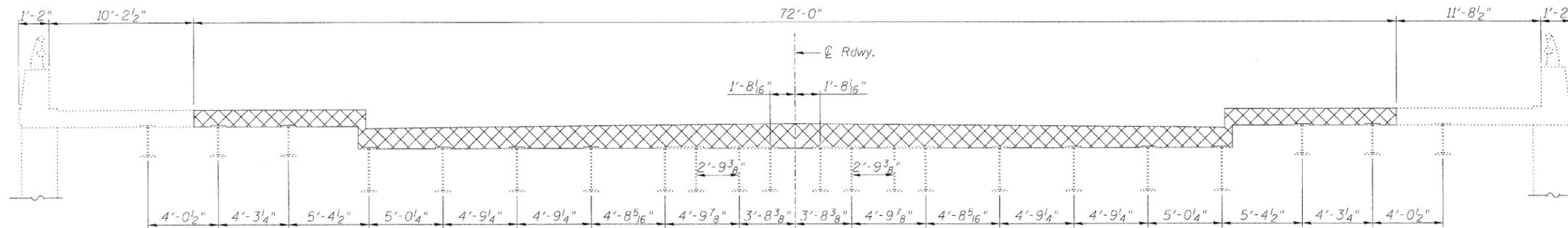
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

72'-0" Out to Out

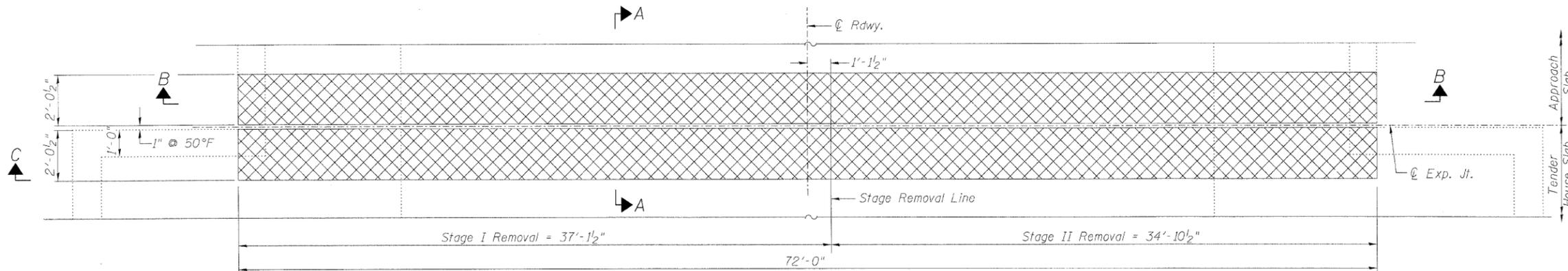


SECTION B-B

Existing rail posts in area of removal to be removed, stored and reinstalled. See sheet 12 of 17 for anchor details.

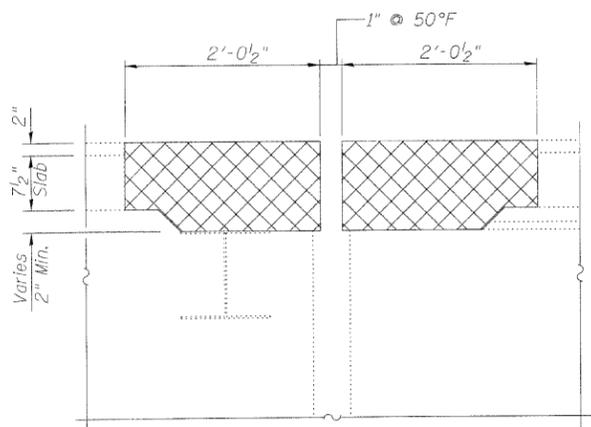


SECTION C-C



PLAN

(South Approach Slab shown, North Approach Slab similar)



SECTION A-A

Notes:

1. Cross hatched area indicates concrete removal.
2. Existing reinforcement bars in the concrete removal area extending in new construction shall be cleaned, straightened, and incorporated into the new construction. Any reinforcement bars that are damaged during concrete removal operations shall be repaired or replaced using an approved bar splicer or anchorage system. Cost included in Concrete Removal.
3. Overlay removal is included in pay item Concrete Removal.

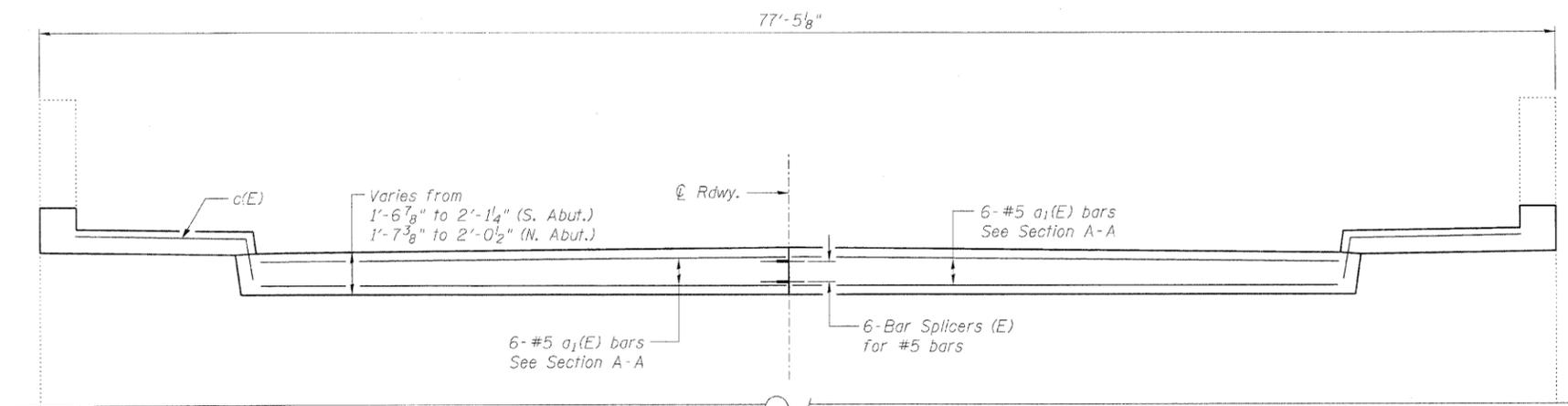
BILL OF MATERIAL

Item	Unit	Total
Concrete Removal	Cu. Yd.	30.5

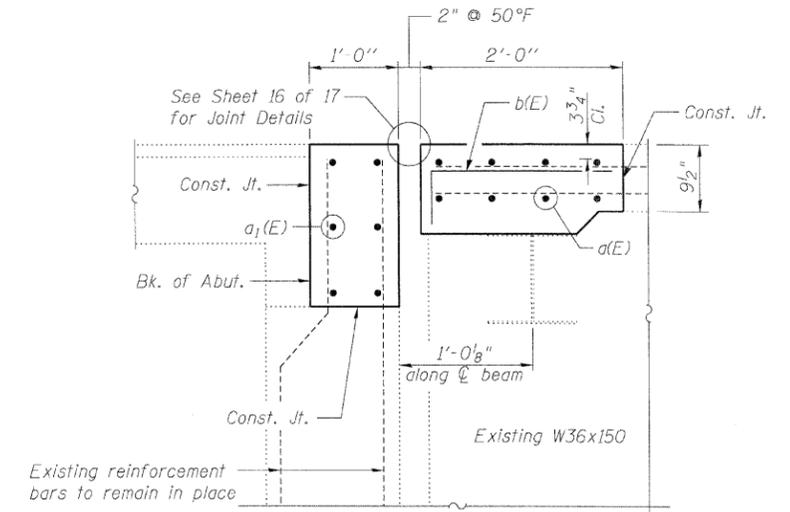
EXPANSION JOINT CONCRETE REMOVAL
AT TENDER HOUSES
STRUCTURE NO. 016-0315

<p>LIN ENGINEERING, LTD. Consulting Engineers Chatham, Illinois</p>	SHEET NO. 6	F.A.P. RTE. 348	SECTION (0708.1&2323.5)B	COUNTY COOK	TOTAL SHEETS 47	SHEET NO. 17
	17 SHEETS	CONTRACT NO. 60D69		ILLINOIS FED. AID PROJECT		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

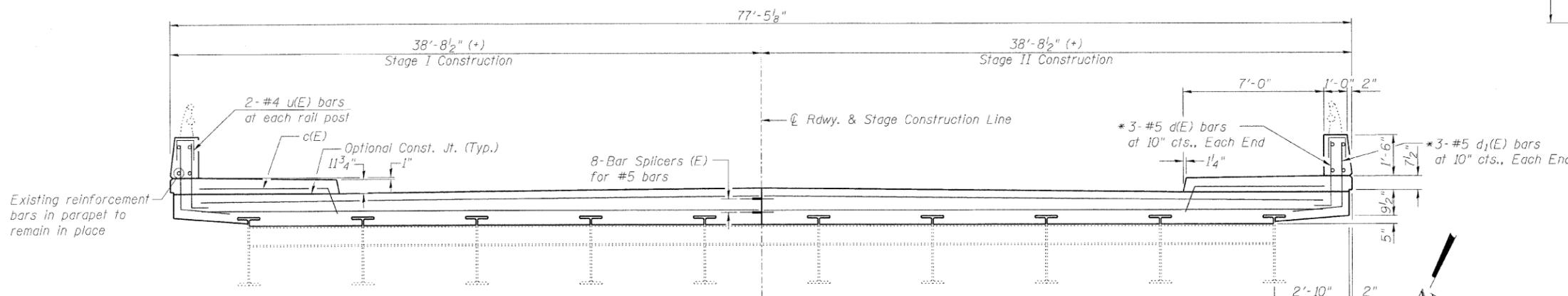


SECTION B-B

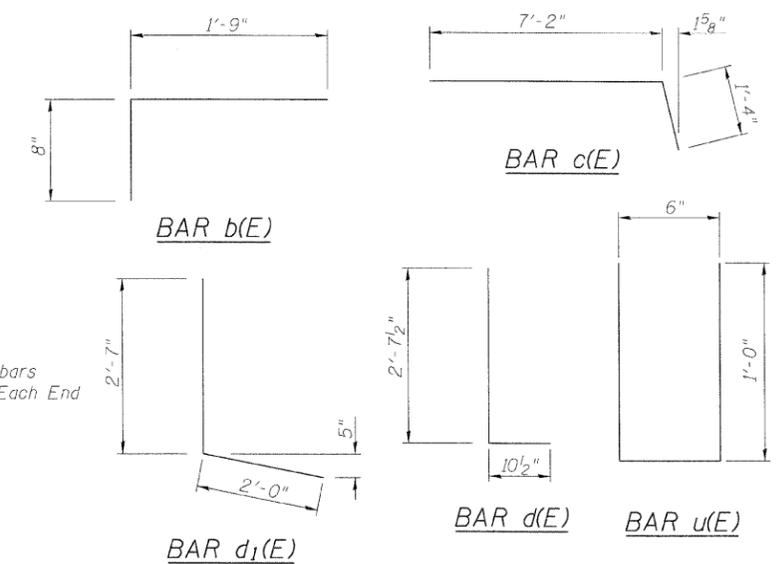


SECTION A-A

(Dimensions @ Rt. L's unless otherwise noted)



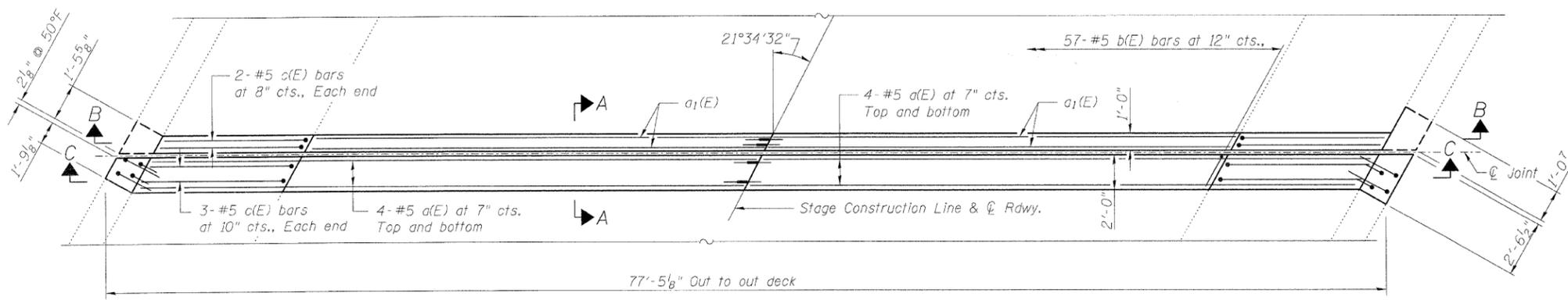
SECTION C-C



BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a(E)	32	#5	37'-4"	—
a1(E)	24	#5	30'-1"	—
b(E)	114	#5	2'-5"	┌
c(E)	20	#5	8'-6"	└
d(E)	12	#5	3'-6"	L
d1(E)	12	#5	4'-7"	L
u(E)	8	#4	2'-6"	U
Reinforcement Bars, Epoxy Coated			Pound	2580
Concrete Superstructure			Cu. Yd.	24.5

EXPANSION JOINT CONCRETE DETAILS
AT ABUTMENTS
STRUCTURE NO. 016-0315



PLAN

(South Abut. shown, North Abut. similar)

* Rotate d(E) and d1(E) bars as necessary to maintain clearance

LIN ENGINEERING, LTD.
Consulting Engineers
Chatham, Illinois

Designed By: ESH
Checked By: WTH
Date: March 2010

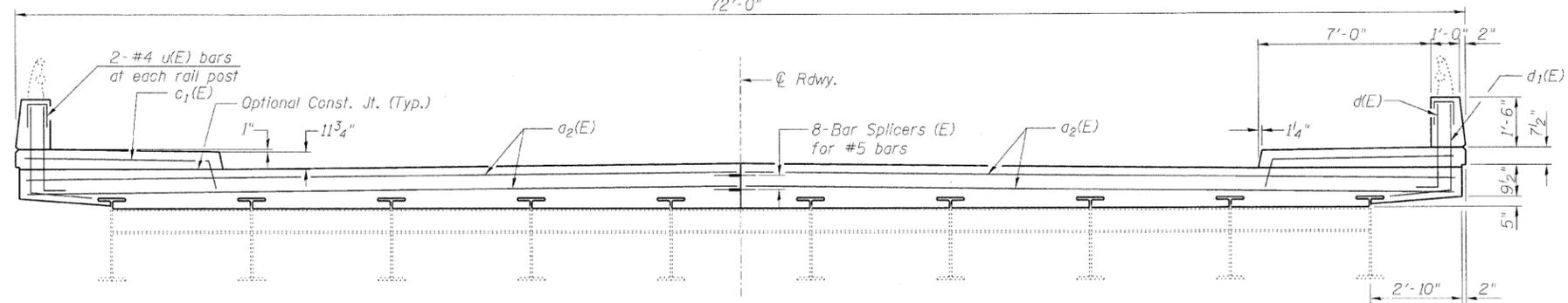
Drawn By: ESH
File: 016-0315.dgn

SHEET NO. 7
17 SHEETS

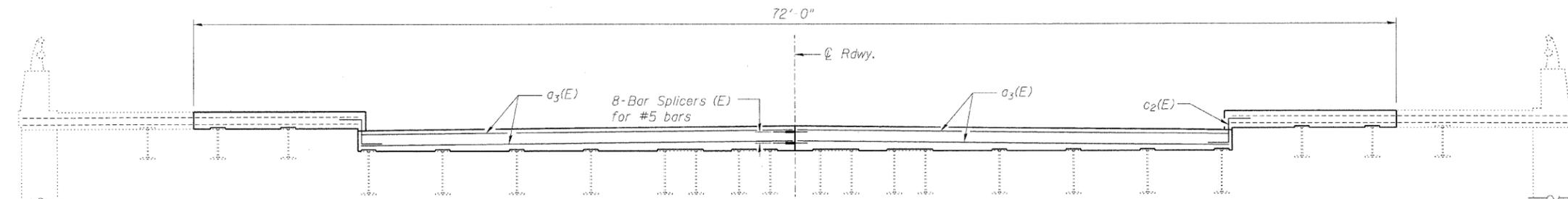
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
348	(0708.1&2323.5)B	COOK	47	18
CONTRACT NO. 60D69			ILLINOIS FED. AID PROJECT	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

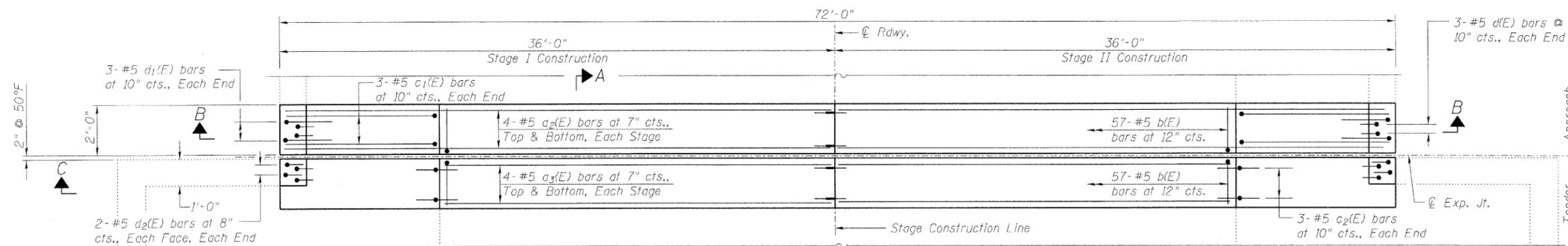
72'-0"



SECTION B-B



SECTION C-C

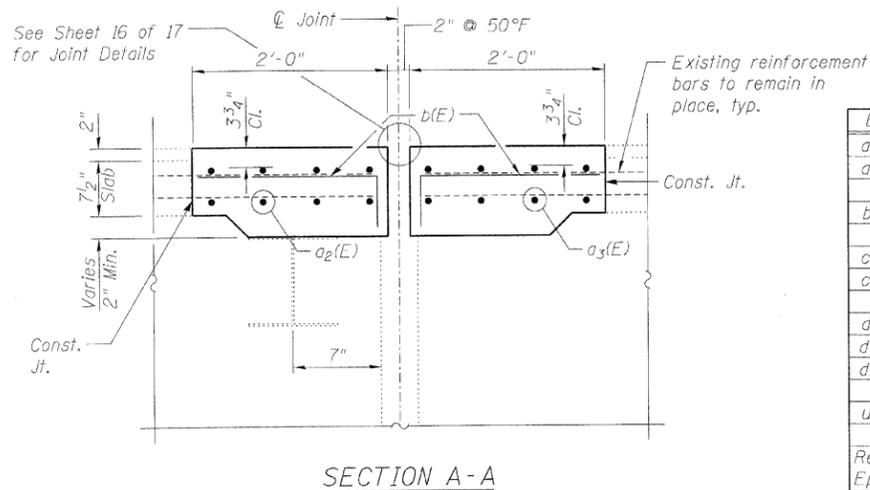


PLAN

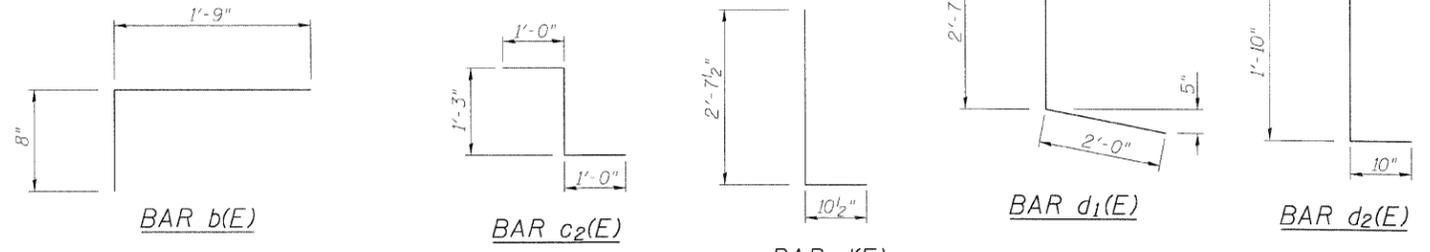
(South Approach Slab shown, North Approach Slab similar)

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a ₂ (E)	32	#5	35'-7"	—
a ₃ (E)	32	#5	27'-9"	—
b(E)	228	#5	2'-5"	┌
c ₁ (E)	12	#5	8'-10"	—
c ₂ (E)	12	#5	3'-3"	┌
d(E)	12	#5	3'-6"	┌
d ₁ (E)	12	#5	4'-7"	┌
d ₂ (E)	16	#5	2'-8"	┌
u(E)	8	#4	2'-6"	U
Reinforcement Bars, Epoxy Coated		Pound	3000	
Concrete Superstructure		Cu. Yd.	30.5	



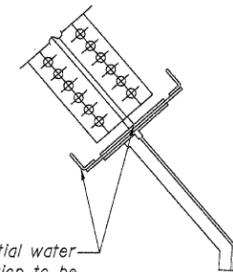
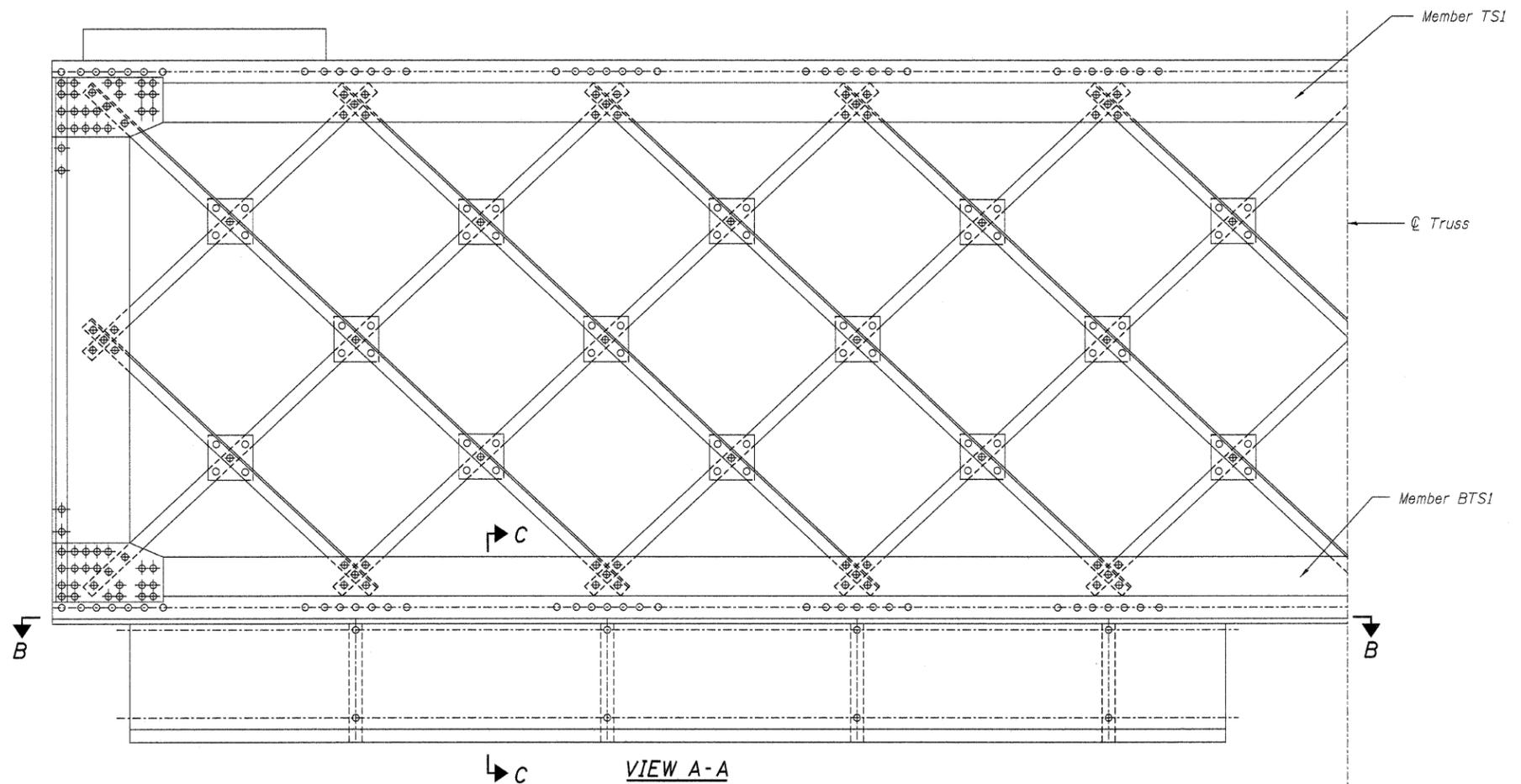
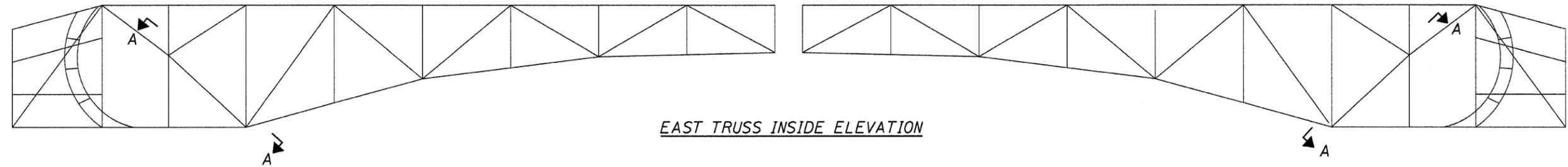
SECTION A-A



EXPANSION JOINT CONCRETE DETAILS
AT TENDER HOUSES
STRUCTURE NO. 016-0315

<p>LIN ENGINEERING, LTD. Consulting Engineers Chatham, Illinois</p>	SHEET NO. 8	F.A.P. RTE. 348	SECTION (0708.1&2323.5)B	COUNTY COOK	TOTAL SHEETS 47	SHEET NO. 19
	17 SHEETS	CONTRACT NO. 60D69		ILLINOIS FED. AID PROJECT		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



Locate 1/2" ϕ holes at areas of potential water collection, each side of web. Location to be designated in field by Engineer.

Notes:
Cost of drilling holes is included with Bridge Washing, see special provision.
All field drilled holes shall be coated with an approved zinc rich paint. Cost included in Bridge Washing, see special provision.

Drill 1/2" ϕ holes at $\pm 4'-0"$ spacing along member BTS1 to allow drainage. Do not place drilled hole in same line as existing bolts. Hole locations shall split existing bolt spacing.

SECTION B-B

MISCELLANEOUS REPAIR DETAILS-1
STRUCTURE NO. 016-0315

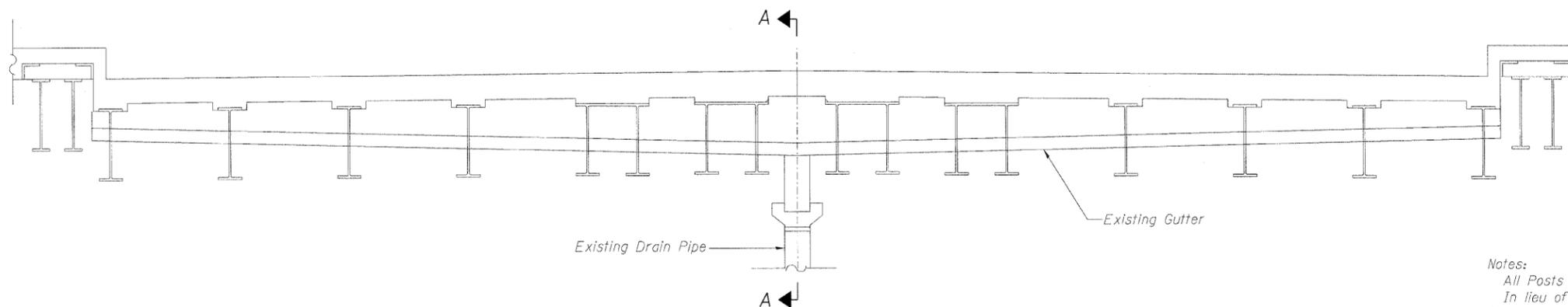
E LIN ENGINEERING, LTD. Consulting Engineers Chatham, Illinois	SHEET NO. 11	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	17 SHEETS	348	(0708.1&2323.5)B	COOK	47	22
			CONTRACT NO. 60D69			
		ILLINOIS FED. AID PROJECT				

Designed By: TBP
Date: March 2002

Checked By: MTH
File: 016-0315.dgn

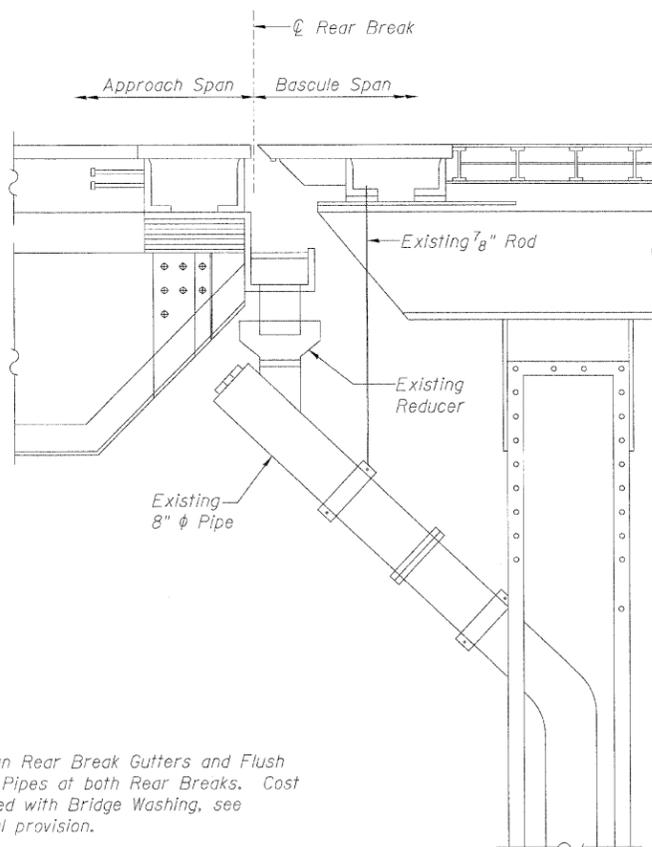
Drawn By: TBP

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



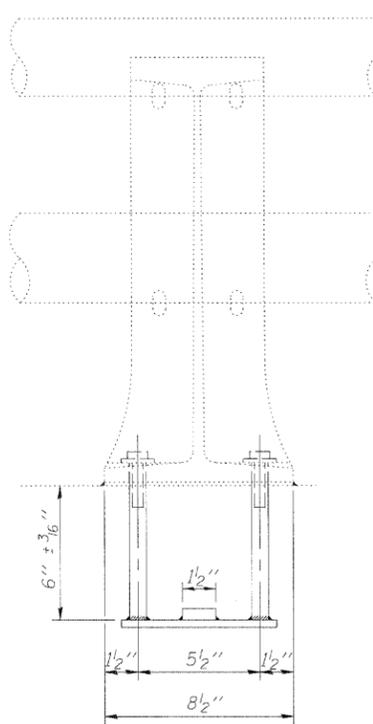
REAR BREAK GUTTER DETAIL

Notes:
All Posts shall be normal to parapet.
In lieu of the cast-in-place anchor device shown, the Contractor has the option of drilling and setting stainless steel anchor rods of the same diameter and grade as the specified cap screws according to Article 509.06 of the Standard Specifications. Embedment shall be according to the manufacturer's specifications.
Removal and re-erection of the existing aluminum handrail, rail post, and all new applicable hardware, including labor and installation shall be included in the cost of Concrete Removal.

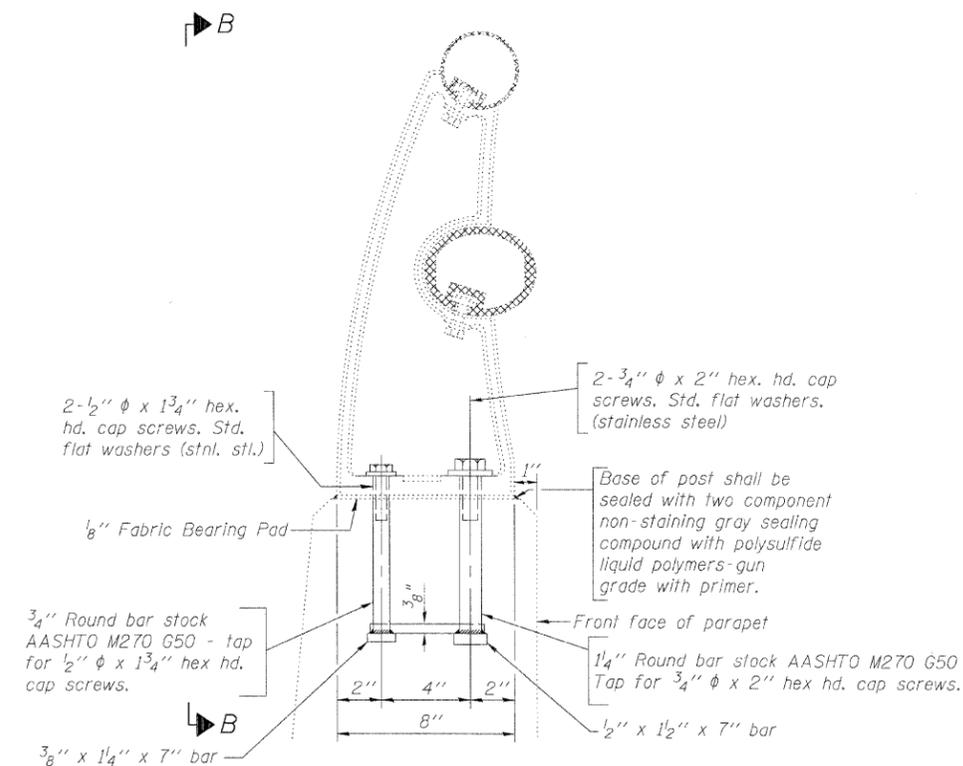


Note:
Clean Rear Break Gutters and Flush Drain Pipes at both Rear Breaks. Cost included with Bridge Washing, see special provision.

SECTION A-A



VIEW B-B



RAIL POST DETAILS

SECTION A-A

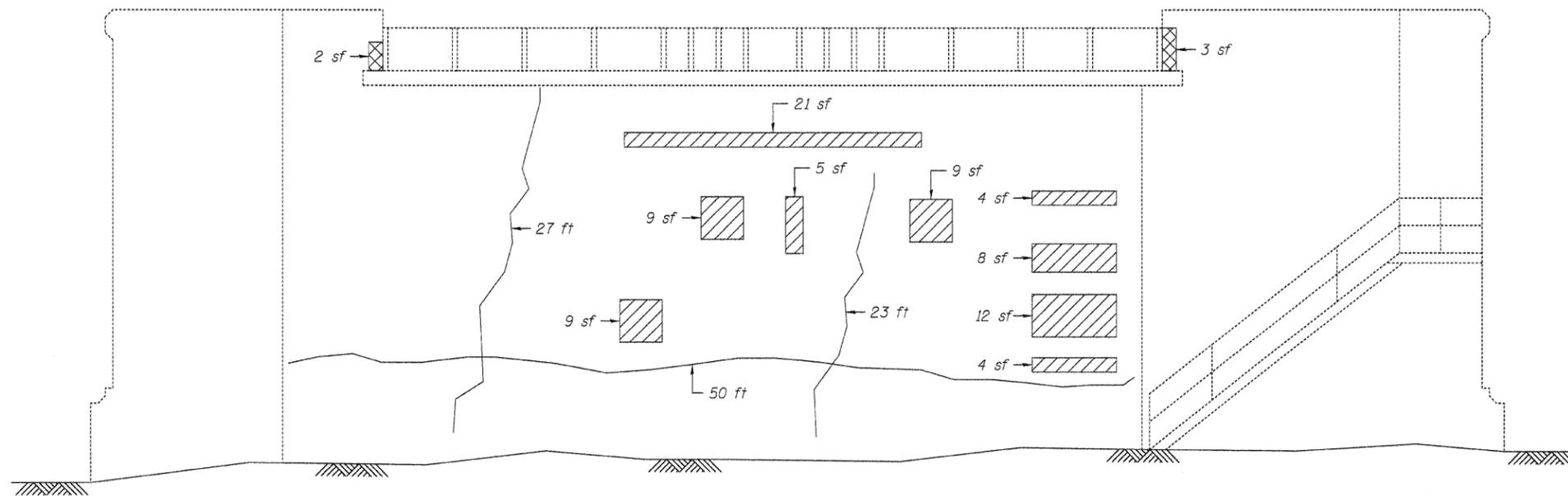
MISCELLANEOUS REPAIR DETAILS-2
STRUCTURE NO. 016-0315

<p>LIN ENGINEERING, LTD. Consulting Engineers Chatham, Illinois</p>	SHEET NO. 12	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	17 SHEETS	348	(0708.1&2323.5)B	COOK	47	23
				CONTRACT NO. 60D69		
ILLINOIS FED. AID PROJECT						

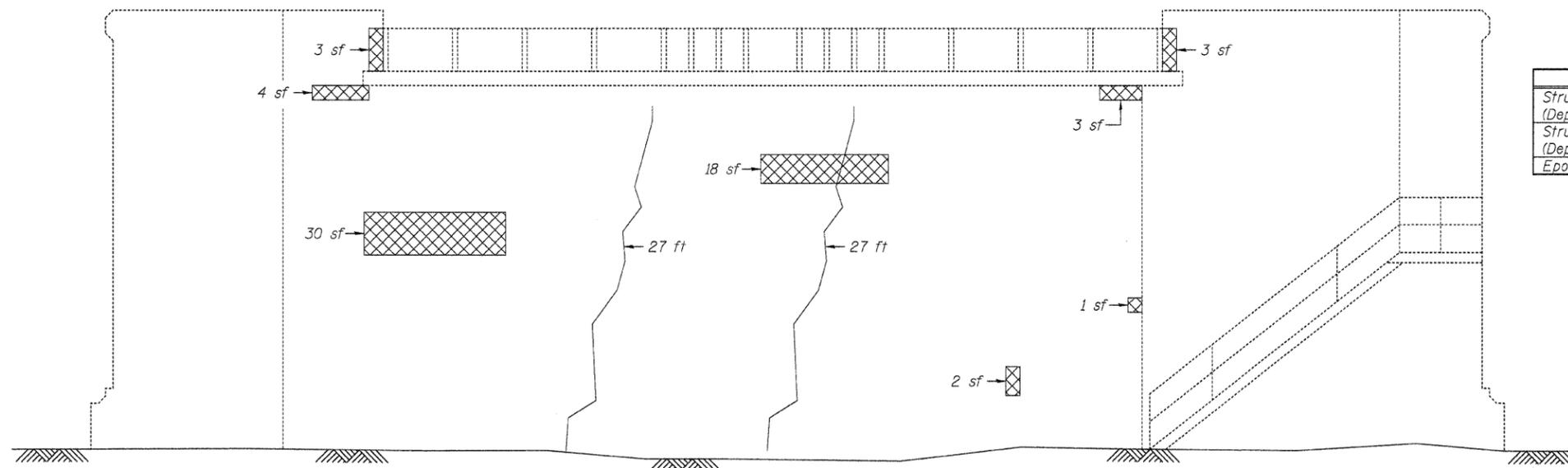
Designed By: TBP
Checked By: MTH
Date: March 2010

Drawn By: TBP
File: 016-0315.dgn

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



ELEVATION OF SOUTH TENDER HOUSE
(Looking North)



ELEVATION OF NORTH TENDER HOUSE
(Looking South)

BILL OF MATERIAL

Item	Unit	Total
Structural Repair of Concrete (Depth Equal to or Less Than 5 in.)	Sq. Ft.	81
Structural Repair of Concrete (Depth Greater Than 5 in.)	Sq. Ft.	69
Epoxy Crack Injection	Foot	154

LEGEND

Structural Repair of Concrete
(Depth Equal to or Less Than 5 in.)

Structural Repair of Concrete
(Depth Greater Than 5 in.)

Epoxy Crack Injection

sf Square Feet

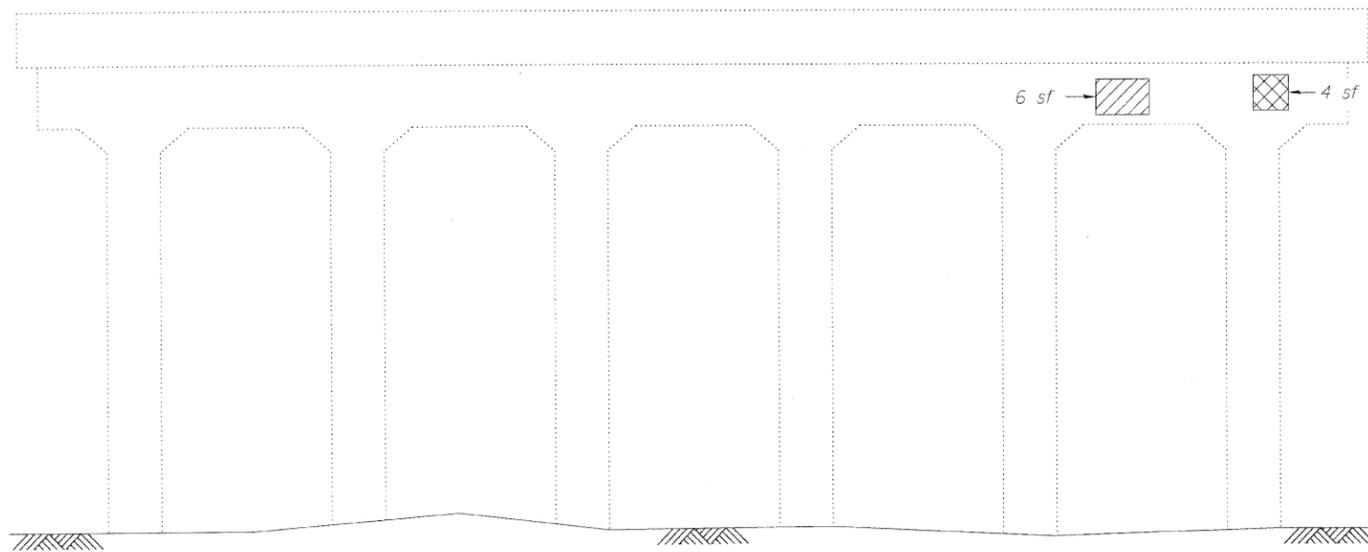
Note:

Repair of the existing tender house shall include but may not be limited to the areas shown. The actual areas to be repaired will be determined by the Engineer at the time of construction.

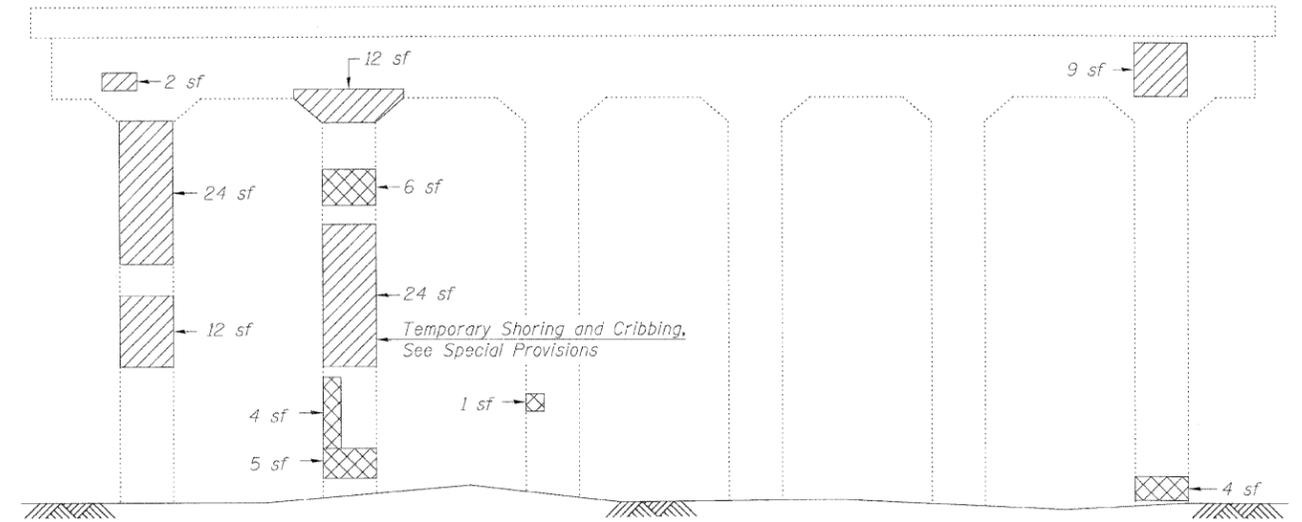
SUBSTRUCTURE REPAIR DETAILS-1
STRUCTURE NO. 016-0315

LIN ENGINEERING, LTD. Consulting Engineers Chatham, Illinois <small>Designed By: RH Checked By: MTH Date: March 2007</small>	SHEET NO. 13	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	17 SHEETS	348	(0708.1&2323.5)B	COOK	47	24
					CONTRACT NO. 60D69	
ILLINOIS FED. AID PROJECT						

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



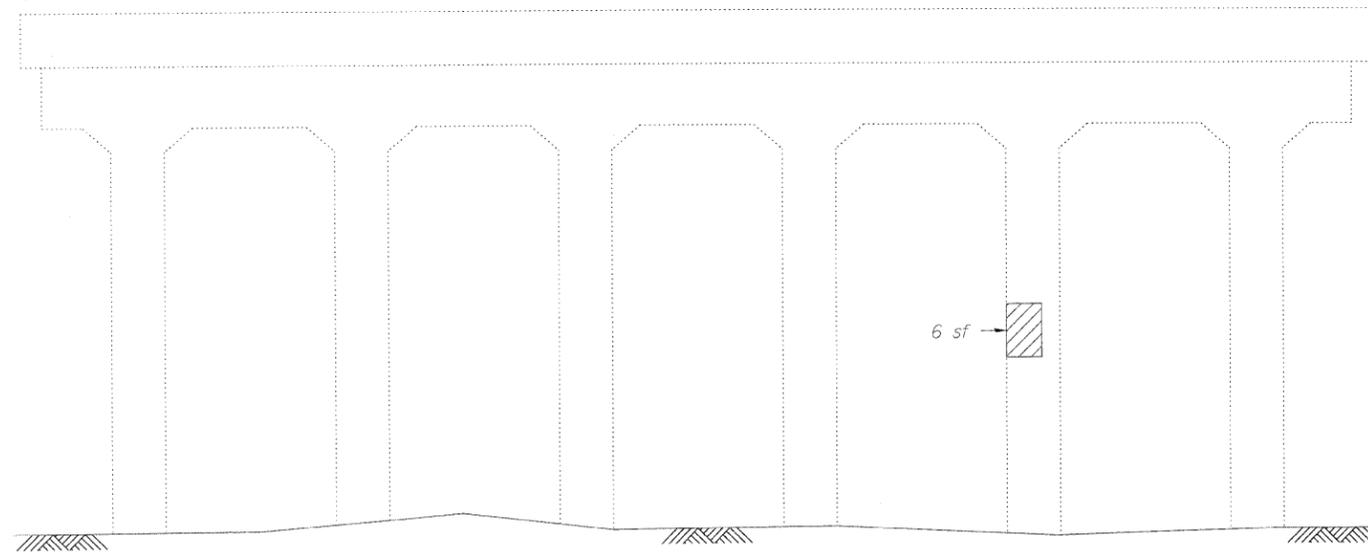
PIER 1
(Looking South)



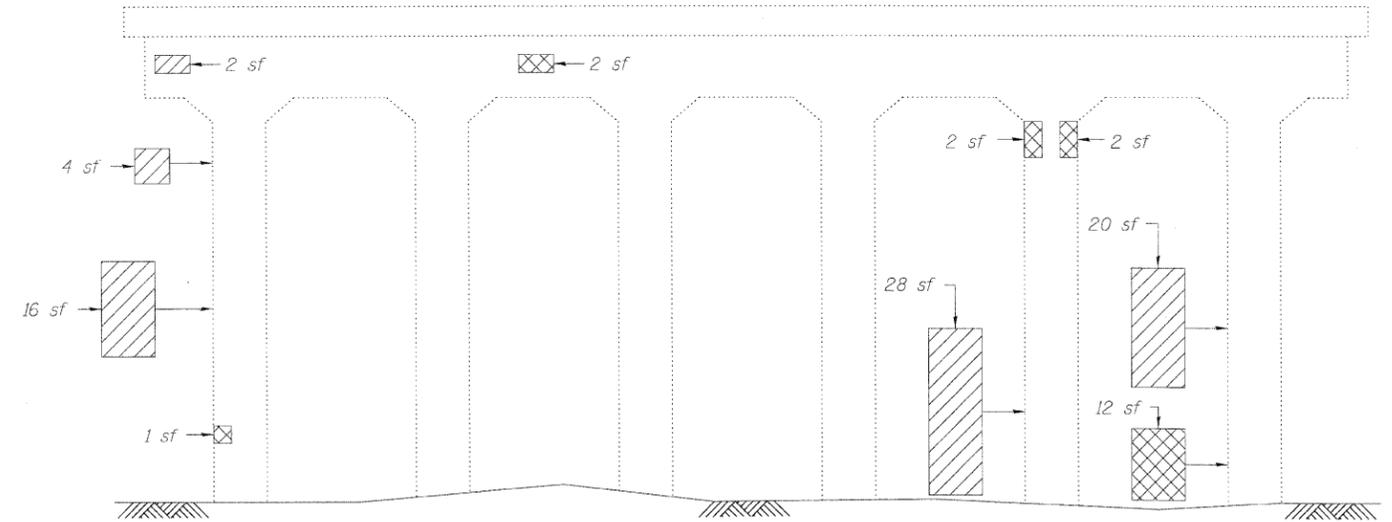
PIER 2
(Looking South)

BEAM REACTION TABLE

Dead Load (K)	39.9
Live Load (K)	58.7
Impact (K)	16.9
Total (K)	115.5



PIER 1
(Looking North)



PIER 2
(Looking North)

BILL OF MATERIAL

Item	Unit	Total
Structural Repair of Concrete (Depth Equal to or Less Than 5 in.)	Sq. Ft.	165
Structural Repair of Concrete (Depth Greater Than 5 in.)	Sq. Ft.	43
Temporary Shoring and Cribbing	Each	1

LEGEND

Structural Repair of Concrete
(Depth Equal to or Less Than 5 in.)

Structural Repair of Concrete
(Depth Greater Than 5 in.)

sf Square Feet

Note:
Repair of the existing piers shall include but may not be limited to the areas shown. The actual areas to be repaired will be determined by the Engineer at the time of construction.

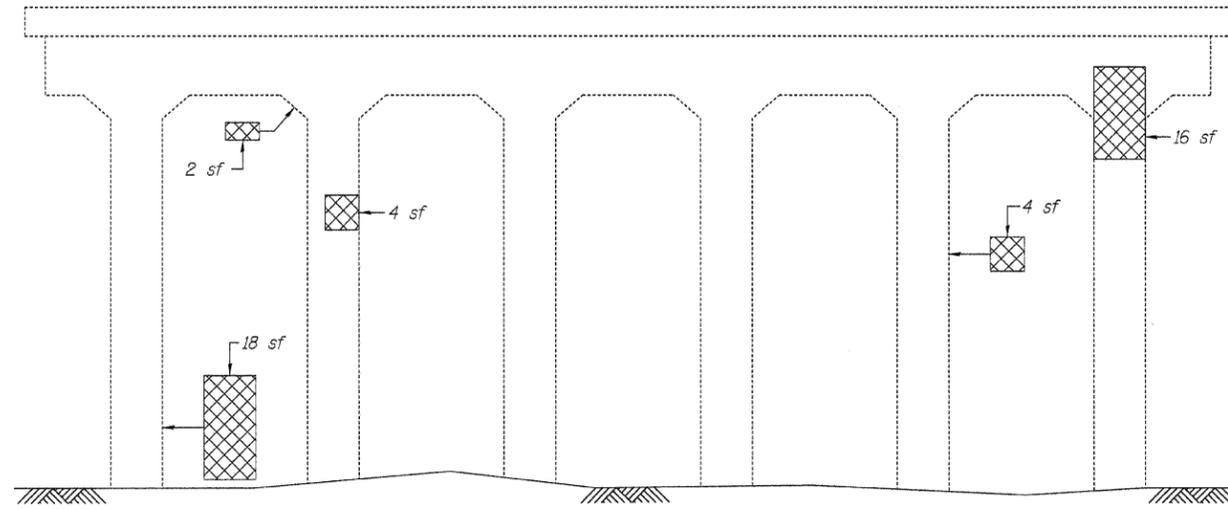
SUBSTRUCTURE REPAIR DETAILS-2
STRUCTURE NO. 016-0315

 LIN ENGINEERING, LTD. Consulting Engineers Chatham, Illinois	SHEET NO. 14	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	17 SHEETS	348	(0708.1&2323.5)B	COOK	47	25
					CONTRACT NO. 60D69	
ILLINOIS FED. AID PROJECT						

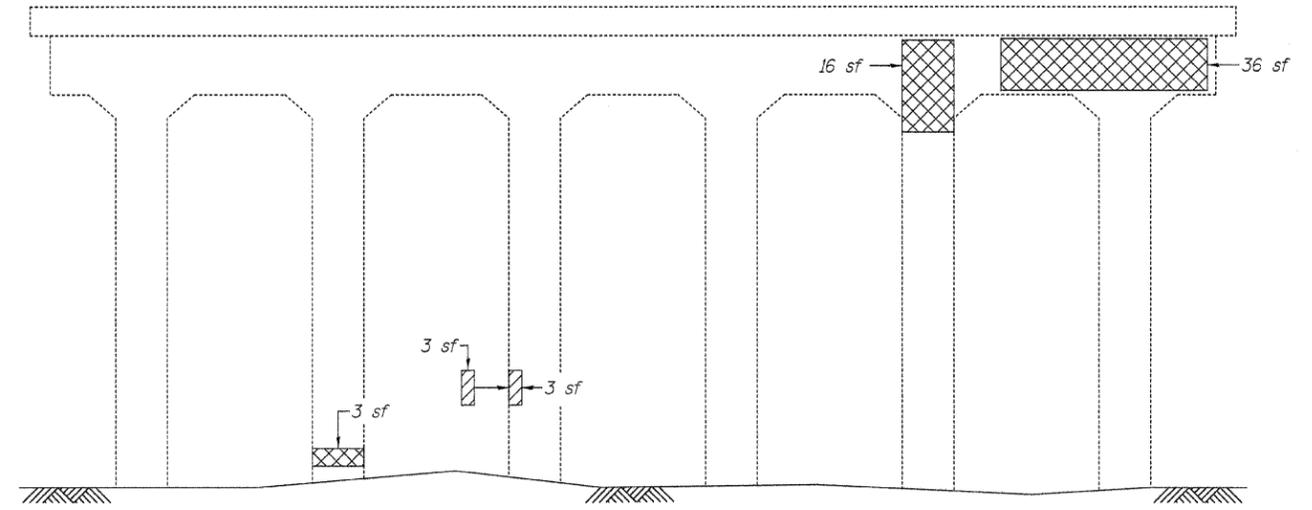
Designed By: Rtl
Checked By: WTH
Date: March, 2010

Drawn By: Rtl
File: 016-0315.dgn

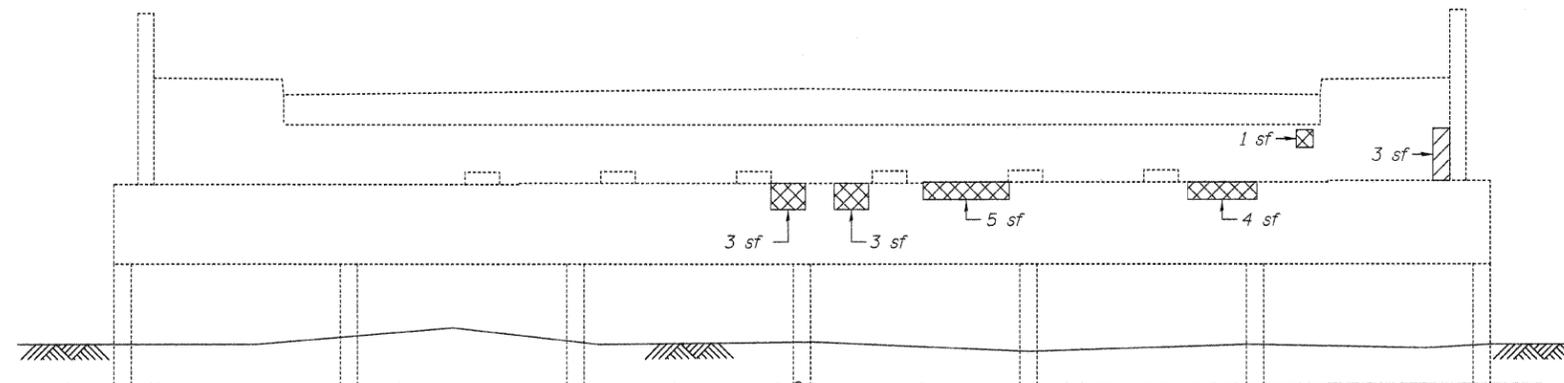
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



PIER 3
(Looking South)



PIER 3
(Looking North)



SOUTH ABUTMENT ELEVATION
(Looking South)

LEGEND

- Structural Repair of Concrete
(Depth Equal to or Less Than 5 in.)
- Structural Repair of Concrete
(Depth Greater Than 5 in.)

sf Square Feet

BILL OF MATERIAL

Item	Unit	Total
Structural Repair of Concrete (Depth Equal to or Less Than 5 in.)	Sq. Ft.	9
Structural Repair of Concrete (Depth Greater Than 5 in.)	Sq. Ft.	115

Note:
Repair of the existing pier and abutment shall include but may not be limited to the areas shown. The actual areas to be repaired will be determined by the Engineer at the time of construction.

SUBSTRUCTURE REPAIR DETAILS-3
STRUCTURE NO. 016-0315

LIN ENGINEERING, LTD. Consulting Engineers Chatham, Illinois	SHEET NO. 15	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	17 SHEETS	348	(0708.1&2323.5)B	COOK	47	26
CONTRACT NO. 60D69						
ILLINOIS FED. AID PROJECT						

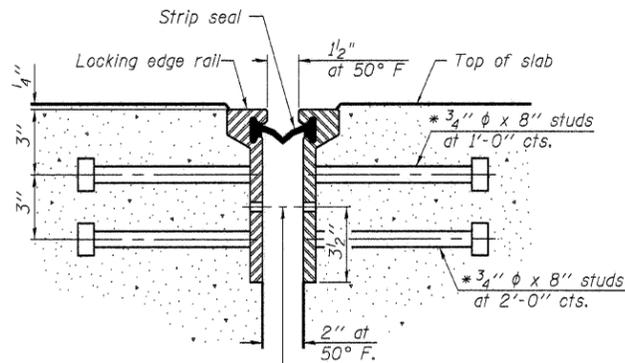
Designed By: RH
Date: March 2010

Checked By: MTH
File: 016-0315.dgn

Drawn By: RH

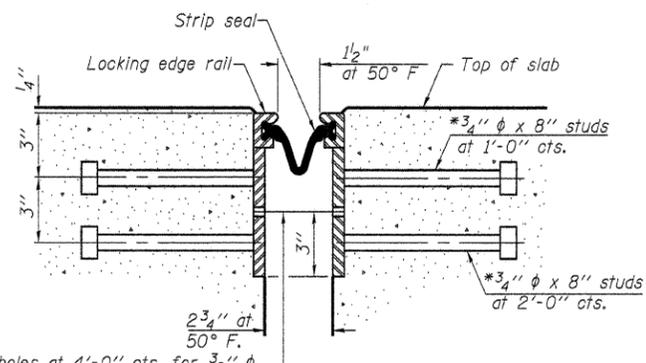
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

* Granular or solid flux filled headed studs conforming to Article 1006.32 of the Std. Specs., automatically end welded.



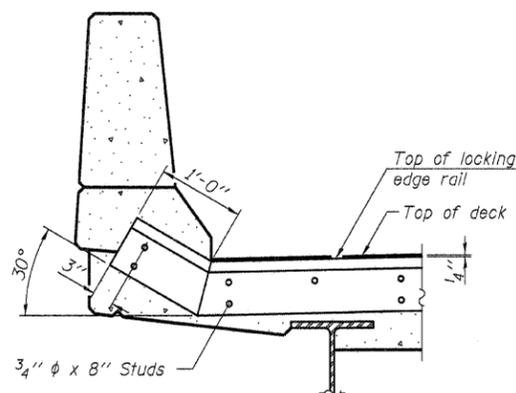
7/16" ϕ holes at 4'-0" cts. for 3/8" ϕ bolts. All bolts shall be burned, sawed, or chipped off flush with the plates after forms are removed, typ.

**SECTION THRU
ROLLED RAIL JOINT**

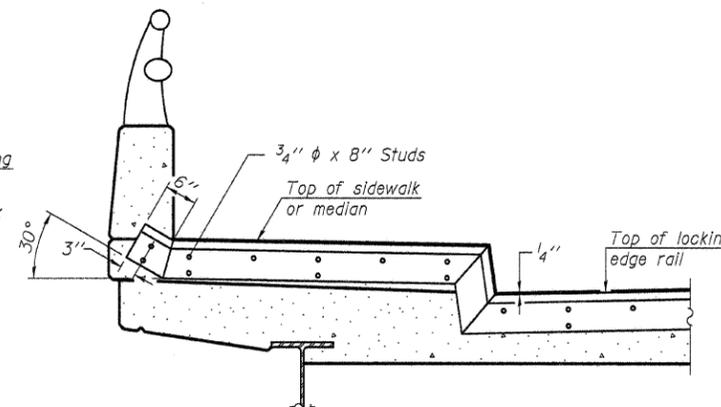


7/16" ϕ holes at 4'-0" cts. for 3/8" ϕ bolts. All bolts shall be burned, sawed, or chipped off flush with the plates after forms are removed, typ.

**SECTION THRU
WELDED RAIL JOINT**



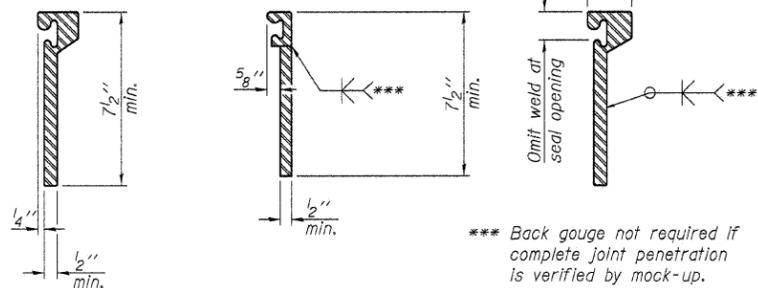
AT PARAPET
See Section A-A for end treatment of skews > 30°.



AT SIDEWALK OR MEDIAN
Shorter plates with a single row of studs at 12" cts. may be necessary on medians which are shallower than 9". See manufacturer's recommendation.

TYPICAL END TREATMENTS

Notes:
The strip seal shall be made continuous and shall have a minimum thickness of 1/4". The configuration of the strip seal shall match the configuration of the Locking Edge Rails. Open or "webbed" strip seal gland configurations are not permitted. The gland shall be sized for a maximum rated movement of 4 inches.
The Locking Edge Rails depicted are conceptual only, except for the minimum dimensions shown. The actual configuration of the Locking Edge Rails and matching strip seal may vary from manufacturer to manufacturer. Flanged edge rails will not be allowed. Locking Edge Rails may be spliced at slope discontinuities.
The manufacturer's recommended installation methods shall be followed.
The joint opening and deck dimensions detailed on the superstructure are based on a rolled rail expansion joint. If the Contractor elects to use the welded rail expansion joint, the opening and deck dimensions shall be modified according to the dimensions detailed on this sheet. Required modifications shall be made at no additional cost to the State.
All steel components shall be galvanized after fabrication according to Article 520.03 of the Standard Specifications.
Maximum space between rail segments at stage lines shall be 3/16", sealed with a suitable sealant.

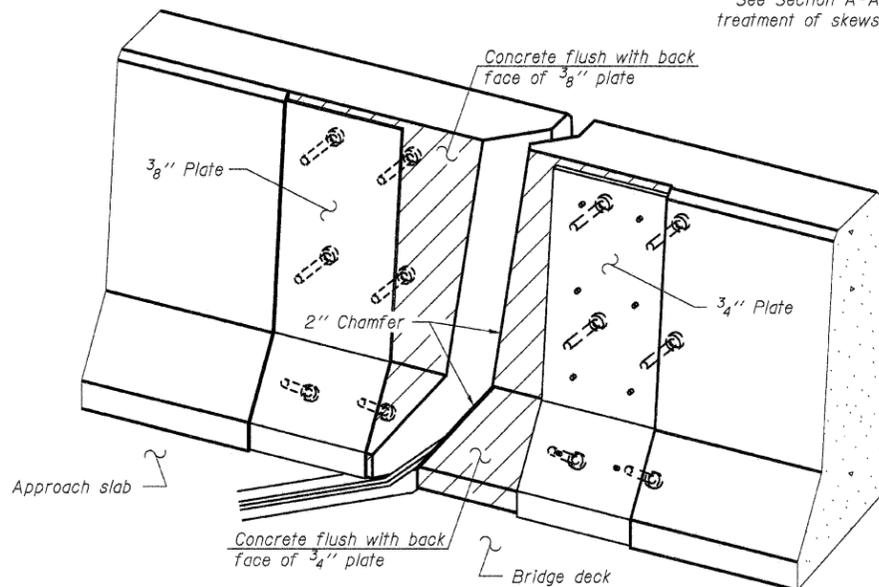


**ROLLED
EXTRUDED RAIL**

WELDED RAIL

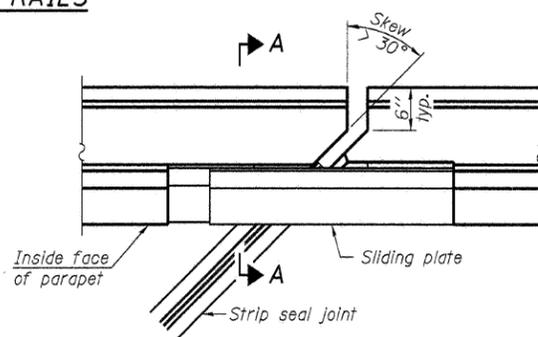
**LOCKING EDGE
RAIL SPLICE**

The inside of the locking edge rail groove shall be free of weld residue.
Rolled rail shown, welded rail similar.

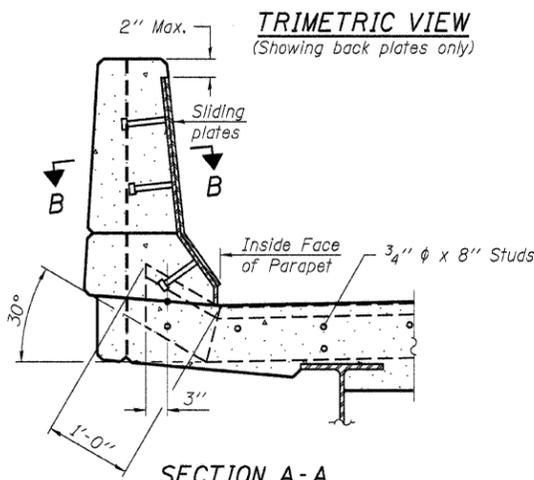


TRIMETRIC VIEW
(Showing back plates only)

LOCKING EDGE RAILS

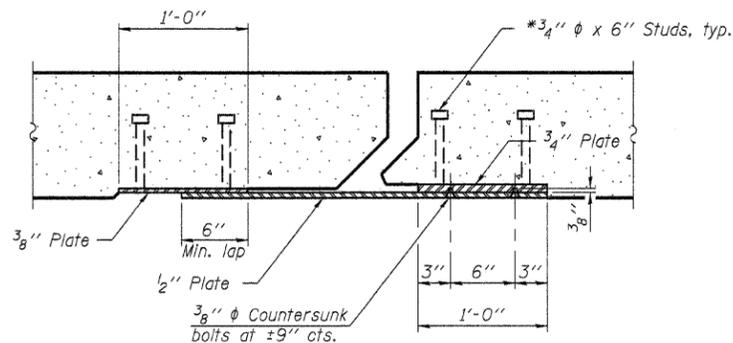


PLAN



SECTION A-A

POINT BLOCK DETAILS
(for skews > 30°)



SECTION B-B

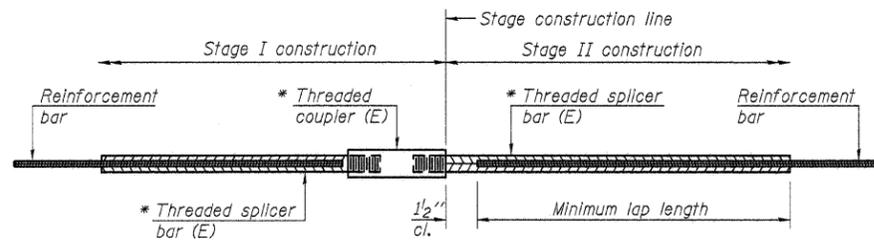
BILL OF MATERIAL

Item	Unit	Total
Preformed Joint Strip Seal	Foot	304

**PREFORMED JOINT STRIP SEAL
STRUCTURE NO. 016-0315**

LIN ENGINEERING LTD. Consulting Engineers Chatham, Illinois	SHEET NO. 16	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	17 SHEETS	348	(0708.1&2323.5)B	COOK	47	27
					CONTRACT NO. 60D69	
ILLINOIS FED. AID PROJECT						

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



STANDARD BAR SPLICER ASSEMBLY

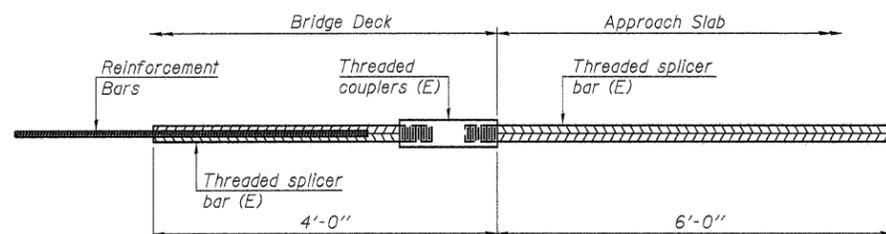
Bar size to be spliced	Minimum Lap Lengths			
	Table 1	Table 2	Table 3	Table 4
3, 4	1'-5"	1'-11"	2'-1"	2'-4"
5	1'-9"	2'-5"	2'-7"	2'-11"
6	2'-1"	2'-11"	3'-1"	3'-6"
7	2'-9"	3'-10"	4'-2"	4'-8"
8	3'-8"	5'-1"	5'-5"	6'-2"
9	4'-7"	6'-5"	6'-10"	7'-9"

Table 1: Black bar, 0.8 Class C
Table 2: Black bar, Top bar lap, 0.8 Class C
Table 3: Epoxy bar, 0.8 Class C
Table 4: Epoxy bar, Top bar lap, 0.8 Class C

Threaded splicer bar length = min. lap length + 1/2" + thread length

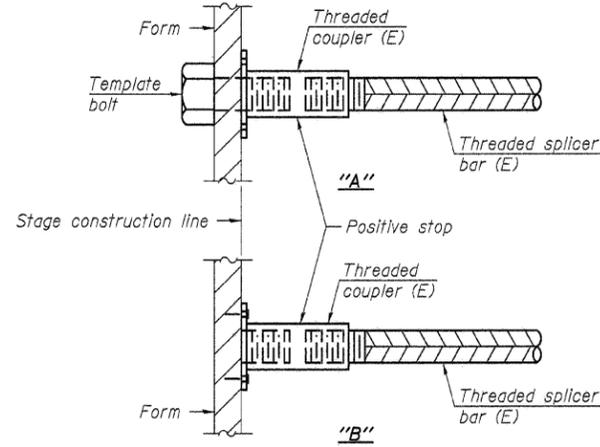
* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Location	Bar size	No. assemblies required	Table for minimum lap length
Joint at S. Abut.	#5	14	Table 3
Joint near Pier 2	#5	16	Table 3
Joint near Pier 3	#5	16	Table 3
Joint at N. Abut.	#5	14	Table 3



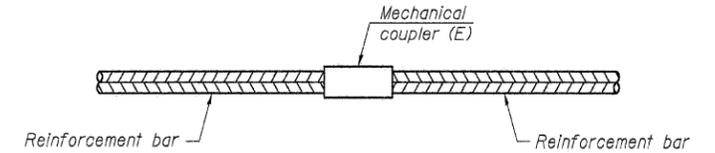
BAR SPLICER ASSEMBLY FOR #5 BAR ON INTEGRAL OR SEMI-INTEGRAL ABUTMENTS

No. required =



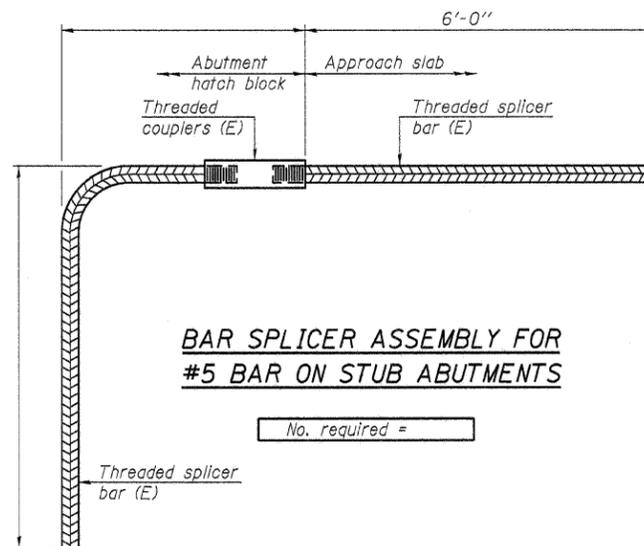
INSTALLATION AND SETTING METHODS

"A": Set bar splicer assembly by means of a template bolt.
"B": Set bar splicer assembly by nailing to wood forms or cementing to steel forms.
(E): Indicates epoxy coating.



STANDARD MECHANICAL SPLICER

Location	Bar size	No. assemblies required



BAR SPLICER ASSEMBLY FOR #5 BAR ON STUB ABUTMENTS

No. required =

NOTES

Splicer bars shall be deformed with threaded ends and have a minimum 60 ksi yield strength.
All reinforcement shall be lapped and tied to the splicer bars.
Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars. See Section 508 of the Standard Specifications.
See special provision for Mechanical Splicers.
See approved list of bar splicer assemblies and mechanical splicers for alternatives.

**BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS
STRUCTURE NO. 016-0315**

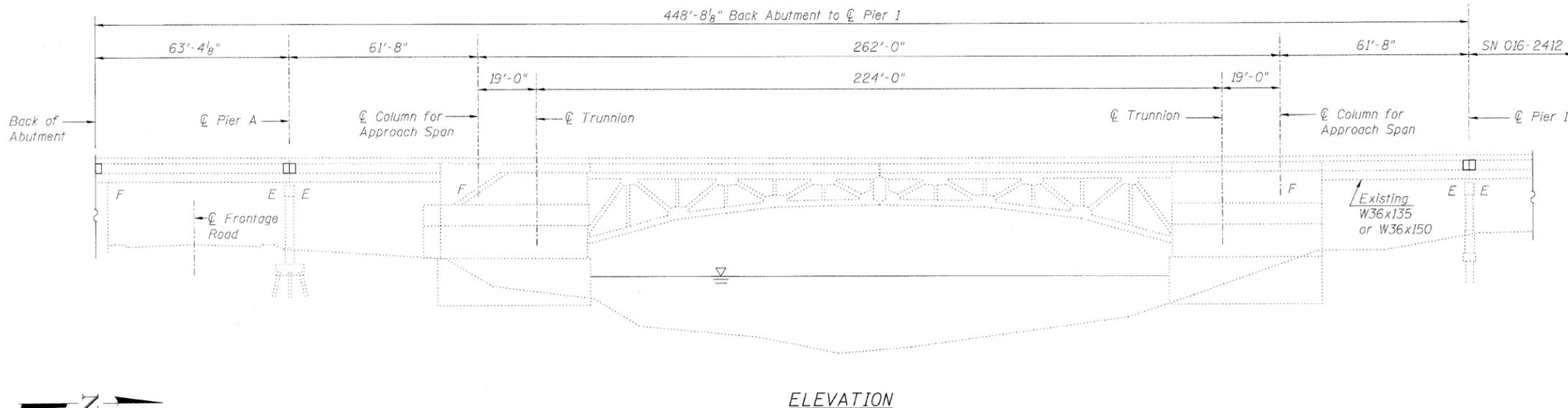
 LIN ENGINEERING, LTD. Consulting Engineers Chatham, Illinois	SHEET NO. 17	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	17 SHEETS	348	(0708.1&2323.5)B	COOK	47	28
Designed By: ESH Checked By: MTH Date: March 2002 Files: 016-0315.dgn			CONTRACT NO. 60D69			
ILLINOIS FED. AID PROJECT						

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

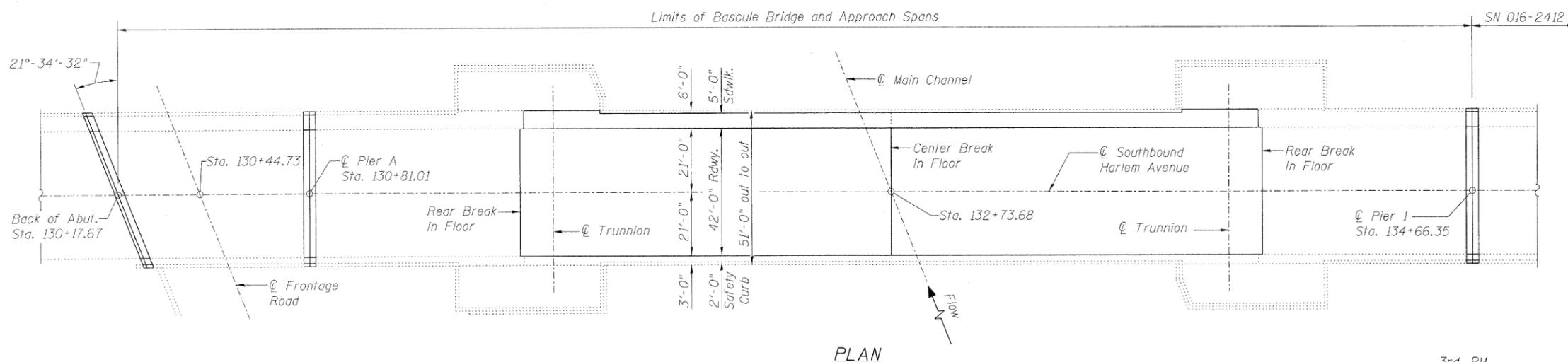
Existing Structure: S.N. 016-0991 built in 1966 as F.A.I. 55, Section 207-0708.1-CF. Existing structure is a double leaf steel bascule bridge with a 4" welded steel grid deck, filled with concrete. Approach spans have steel stringers and reinforced concrete deck. In 1989, the expansion joints at the abutment and Pier A were replaced, the substructure concrete was repaired, a 2" concrete overlay was placed on the approaches and a 3/8" epoxy overlay was placed on the main span. In 1999, the main span deck was repaired and the epoxy overlay was replaced. Bridge length is 448'-8 1/2" from back of abutment to center of pier 1. The abutment, Pier A and Pier 1 are reinforced concrete. Pier A and Pier 1 consist of 3 circular columns with a continuous cap beam. The abutment is counterfort type. Stage Construction shall be utilized to maintain traffic during construction.

SCOPE OF WORK

1. Remove and replace polymer epoxy overlay within main bascule spans.
2. Reconstruct expansion joints at Abutment, Pier A and Pier 1.
3. Repair deck slab on approach spans.
4. Apply Concrete Sealer to top of concrete deck on approach spans and top and inside faces of parapets and sidewalk/curb.
5. Repair deteriorated concrete on Pier A.
6. Jack and remove existing Pier A bearings and replace with elastomeric bearings.
7. Clean Rear Break Gutters.
8. Power wash all steel and concrete surfaces in Tender Houses and remove debris.
9. Pump water and remove debris from pits.
10. Repair components of the catwalk and stairwell in the North Tender House.
11. Re-shim/repair Center Lock.



ELEVATION



PLAN

INDEX OF SHEETS

1. General Plan and Elevation
2. General Notes and Details
3. Temporary Concrete Barrier for Stage Construction
4. Deck Slab Repair
5. Expansion Joint Concrete Removal at Piers
6. Expansion Joint Concrete Removal at S. Abutment
7. Expansion Joint Concrete Details at Piers
8. Expansion Joint Concrete Details at S. Abutment
9. Bearing Details
10. Miscellaneous Repair Details - 1
11. Miscellaneous Repair Details - 2
12. Pier A Repair Details
13. Preformed Joint Strip Seal
14. Bar Splicer Assembly and Mechanical Splicer Details



Michael T. Haley
Licensed Structural Engineer
State of Illinois No. 81-5991
Expires 11/30/2010

Michael J. Hy 5/5/10
Date

DESIGN STRESSES

FIELD UNITS

New Construction

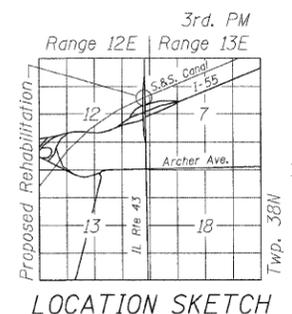
- f'c = 3,500 psi
- fy = 60,000 psi (Reinforcement)
- fy = 36,000 psi (Structural Steel) (M270 Gr. 36)

DESIGN SPECIFICATIONS

(New Construction)
2002 AASHTO "Standard
Specifications for Highway Bridges", 17th Edition

LOADING HS 20-44

(Original Construction)



LOCATION SKETCH

GENERAL PLAN AND ELEVATION
SB IL RTE 43 (HARLEM AVE) OVER
SANITARY & SHIP CANAL
F.A.P. RTE 348 - SECTION (0708.1&2323.5)B
COOK COUNTY
STATION 132+73.68
STRUCTURE NO. 016-0991

<p>LIN ENGINEERING, LTD. Consulting Engineers Chatham, Illinois</p>	SHEET NO. 1	F.A.P. RTE. 348	SECTION (0708.1&2323.5)B	COUNTY COOK	TOTAL SHEETS 47	SHEET NO. 29
	14 SHEETS	CONTRACT NO. 60D69			ILLINOIS FED. AID PROJECT	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES

Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60. See Special Provisions.

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 surfaces 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.

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 at the unit price bid for the work.

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

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

All structural steel shall conform to AASHTO Classification M-270 Gr. 36, unless otherwise noted.

Joint openings shall be adjusted according to Article 520.04 of the Standard Specs. when the deck is poured at an ambient temperature other than 50°F.

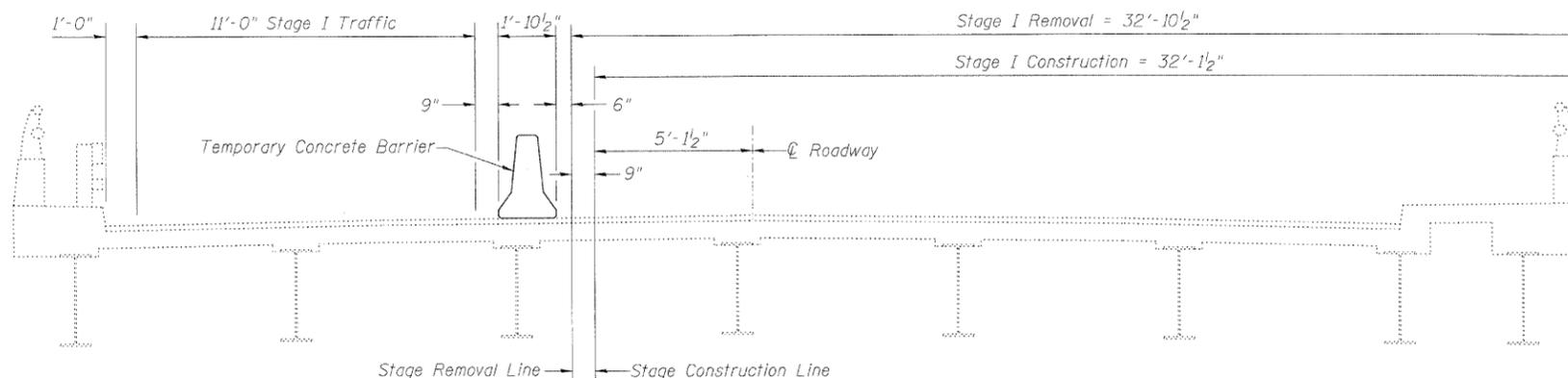
Cost of removal and re-installation of all members necessary to complete the work as detailed on the plans and as specified in the Special Provisions shall be included with Furnishing and Erecting Structural Steel.

The deck surface shall have its final finish tined according to Article 420.09(e)(1) of the Standard Specifications. Cost included with Concrete Superstructure.

If the analysis submitted to the Contractor for the jacking/temporary support system to be used shows temporary stiffeners are required to prevent web crippling or buckling, the stiffeners shall be steel and bolted to the web. If stiffeners are not required, hardwood timbers shall be installed tightly between the top and bottom flange to prevent flange rotation.

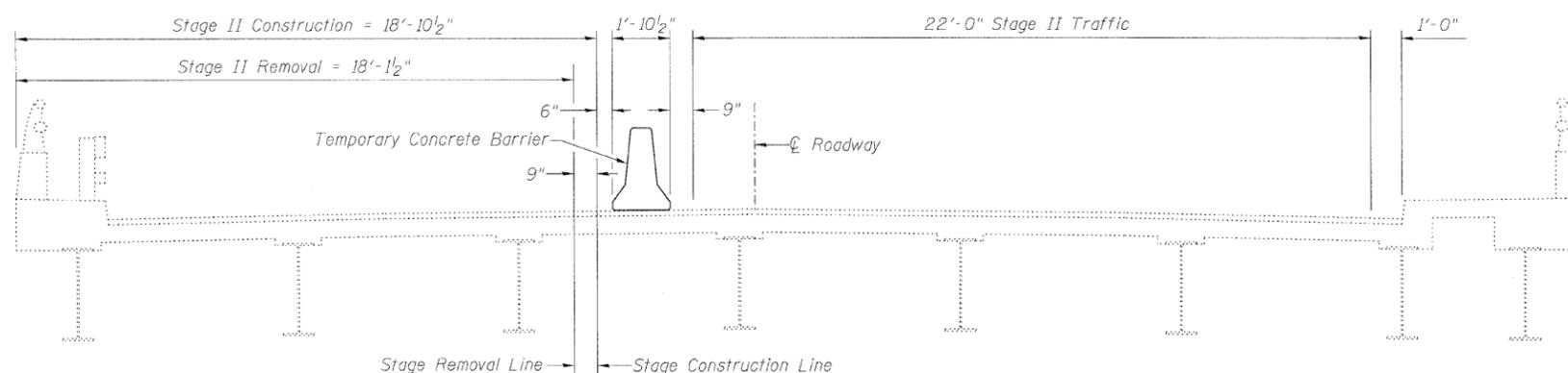
TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Concrete Removal	Cu. Yd.	23.6	-	23.6
Protective Shield	Sq. Yd.	331	-	331
Concrete Superstructure	Cu. Yd.	23.7	-	23.7
Furnishing and Erecting Structural Steel	Pound	-	3330	3330
Jack and Remove Existing Bearings	Each	-	16	16
Reinforcement Bars, Epoxy Coated	Pound	3510	-	3510
Bar Splicers	Each	44	-	44
Preformed Joint Strip Seal	Foot	160	-	160
Elastomeric Bearing Assembly, Type I	Each	-	16	16
Anchor Bolts, 3/4"	Each	-	2	2
Anchor Bolts, 1"	Each	-	32	32
Concrete Sealer	Sq. Ft.	17296	-	17296
Bridge Washing 2	Each	1	-	1
Deck Slab Repair (Full Depth, Type I)	Sq. Yd.	0.7	-	0.7
Deck Slab Repair (Full Depth, Type II)	Sq. Yd.	21.1	-	21.1
Deck Slab Repair (Partial)	Sq. Yd.	14.5	-	14.5
Concrete Bridge Deck Scarification (3/8 inch)	Sq. Yd.	1310	-	1310
Polymer Concrete	Cu. Ft.	5.0	-	5.0
Bridge Deck Thin Polymer Overlay 3/8"	Sq. Yd.	1310	-	1310
Structural Repair of Concrete (Depth Greater Than 5 in.)	Sq. Ft.	-	90	90
Structural Repair of Concrete (Depth Equal To or Less Than 5 in.)	Sq. Ft.	-	154	154
Center Lock Adjustment	Each	2	-	2
Temporary Shoring and Cribbing	Each	-	1	1



STAGE I REMOVAL & CONSTRUCTION

(Looking South)



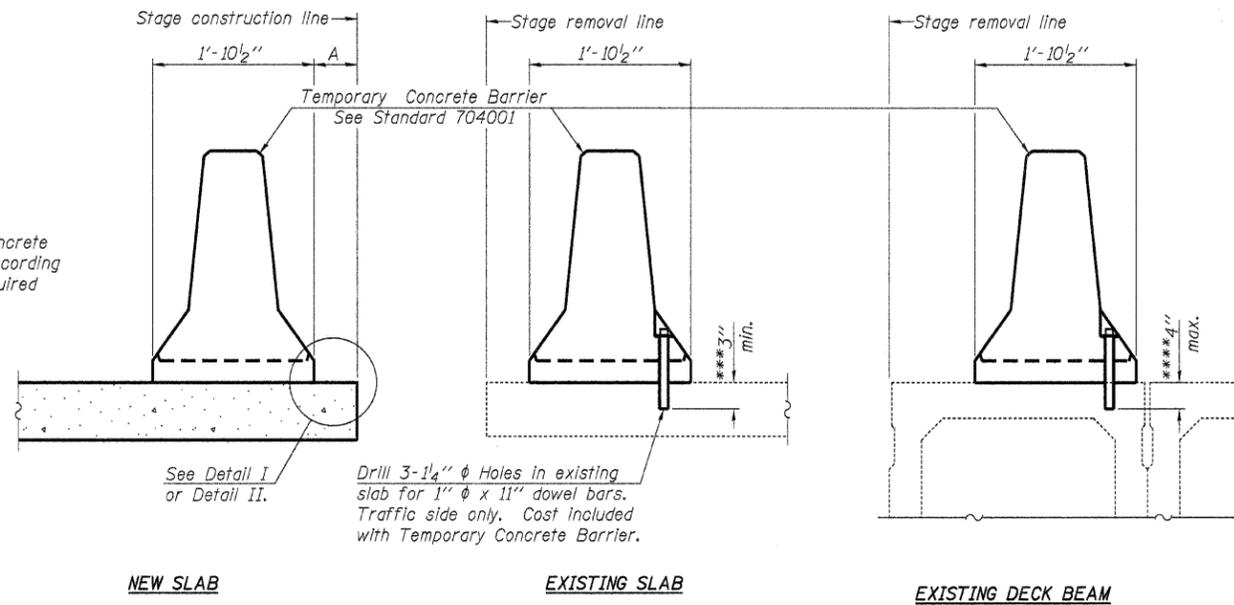
STAGE II REMOVAL & CONSTRUCTION

(Looking South)

GENERAL NOTES & DETAILS
STRUCTURE NO. 016-0991

	SHEET NO. 2	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		348	(0708.1&2323.5)B	COOK	47	30
14 SHEETS	CONTRACT NO. 60D69				ILLINOIS FED. AID PROJECT	
<small>Designed By: ADB Date: March, 2010</small>	<small>Checked By: MTH File: 016-0991.dgn</small>	<small>Drawn By: AJF</small>				

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



NOTES

Detail I - With Bar Splicer or Couplers:
Connect one (1) 1"x7"x10" steel \bar{P} to the top layer of couplers with 2-5/8" ϕ bolts screwed to coupler at approximate \bar{C} of each barrier panel.

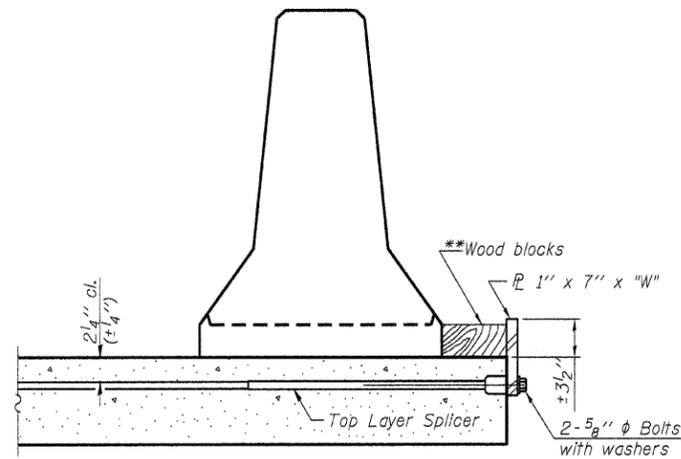
Detail II - With Extended Reinforcement Bars:
Connect one (1) 1"x7"x10" steel \bar{P} to the concrete slab or concrete wearing surface with 2-5/8" ϕ Expansion Anchors or cast in place inserts spaced between the top layer of reinforcement at approximate \bar{C} of each barrier panel.

Cost of anchorage is included with Temporary Concrete Barrier. The 1" x 7" x 10" plate shall not be removed until stage II construction forms and all reinforcement bars are in place and the concrete is ready to be placed.

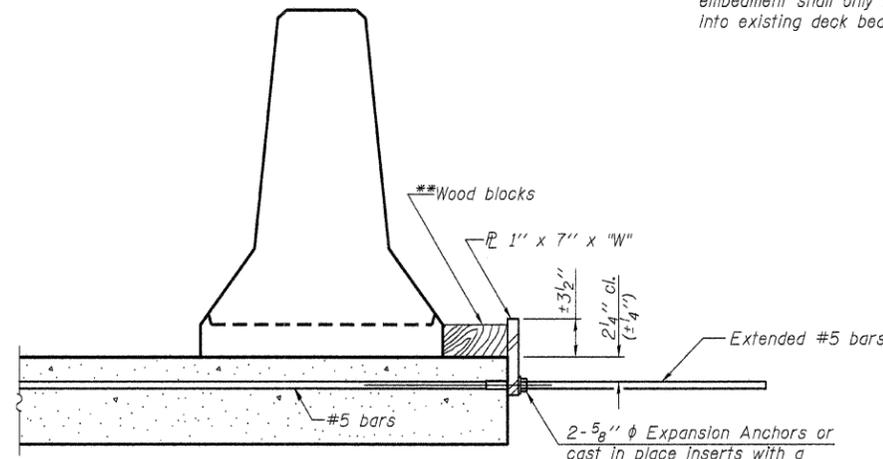
SECTIONS THRU SLAB OR DECK BEAM

*** Dimension shown is minimum required embedment into concrete. If hot-mix asphalt wearing surface is present, minimum embedment shall be in addition to wearing surface depth.

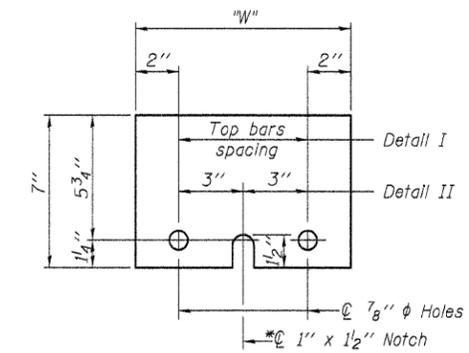
**** If existing deck beam is to remain in place after stage construction, embedment shall only be into wearing surface and not into existing deck beam concrete.



DETAIL I



DETAIL II



STEEL RETAINER \bar{P} 1" x 7" x 10"

* Required only with Detail II

** Wood blocks may be omitted when required to provide minimum stage traffic lane width. When the wood blocks are omitted, the concrete barrier shall be in direct contact with the steel retainer plate.

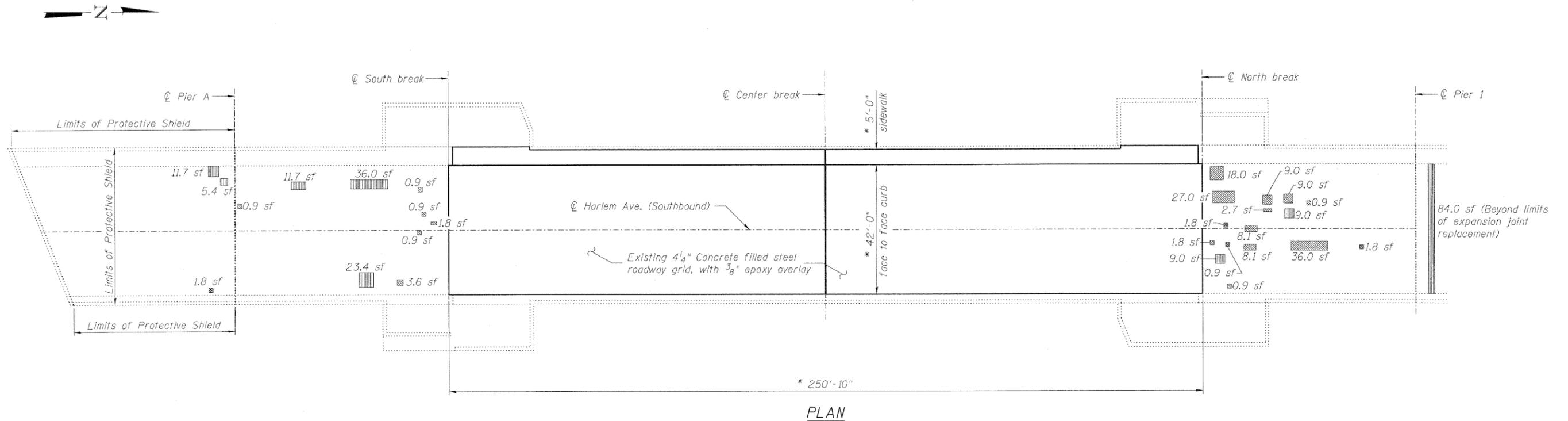
"W" = Top bars spacing + 4"

**TEMPORARY CONCRETE BARRIER
FOR STAGE CONSTRUCTION
STRUCTURE NO. 016-0991**

<p>LIN ENGINEERING, LTD. Consulting Engineers Chatham, Illinois</p>	SHEET NO. 3	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	14 SHEETS	348	(0708.1&2323.5)B	COOK	47	31
					CONTRACT NO. 60D69	
ILLINOIS FED. AID PROJECT						

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

* Limits of Concrete Bridge Deck Scarification
and Bridge Deck Thin Polymer Overlay



Notes:
 Repair of the existing deck slab shall include but may not be limited to the areas shown. The actual area to be repaired will be determined by the Engineer at the time of construction.
 Repair areas of concrete filled grid using Polymer Concrete (as directed by the Engineer).
 Bridge deck scarification shall be limited to hand-held blast cleaning methods.
 Sidewalks do not require overlay removal and replacement.
 Concrete Sealer shall be applied to top of deck surface on approaches, top of sidewalks, roadway face of curbs and parapets, and concrete slab above machine houses. Concrete Sealer shall not be applied on areas with Polymer Overlay.
 Areas of deck repairs shown are estimated. The Engineer shall show actual locations of deck repairs on As-built Plans.

BILL OF MATERIAL

Item	Unit	Total
Deck Slab Repair (Full Depth, Type I)	Sq. Yd.	0.7
Deck Slab Repair (Full Depth, Type II)	Sq. Yd.	21.1
Deck Slab Repair (Partial)	Sq. Yd.	14.5
Protective Shield	Sq. Yd.	331
Bridge Deck Thin Polymer Overlay ³ / ₈ "	Sq. Yd.	1310
Concrete Bridge Deck Scarification (³ / ₈ inch)	Sq. Yd.	1310
** Polymer Concrete	Cu. Ft.	5.0
Concrete Sealer	Sq. Ft.	17296

** Shall be used if concrete surfaces are below the top of steel grid after scarification, in order to provide a smooth surface for Polymer Overlay. Contractor may substitute Polymer Concrete with an approved equivalent cementitious patching material for concrete.

**DECK SLAB REPAIR
STRUCTURE NO. 016-0991**

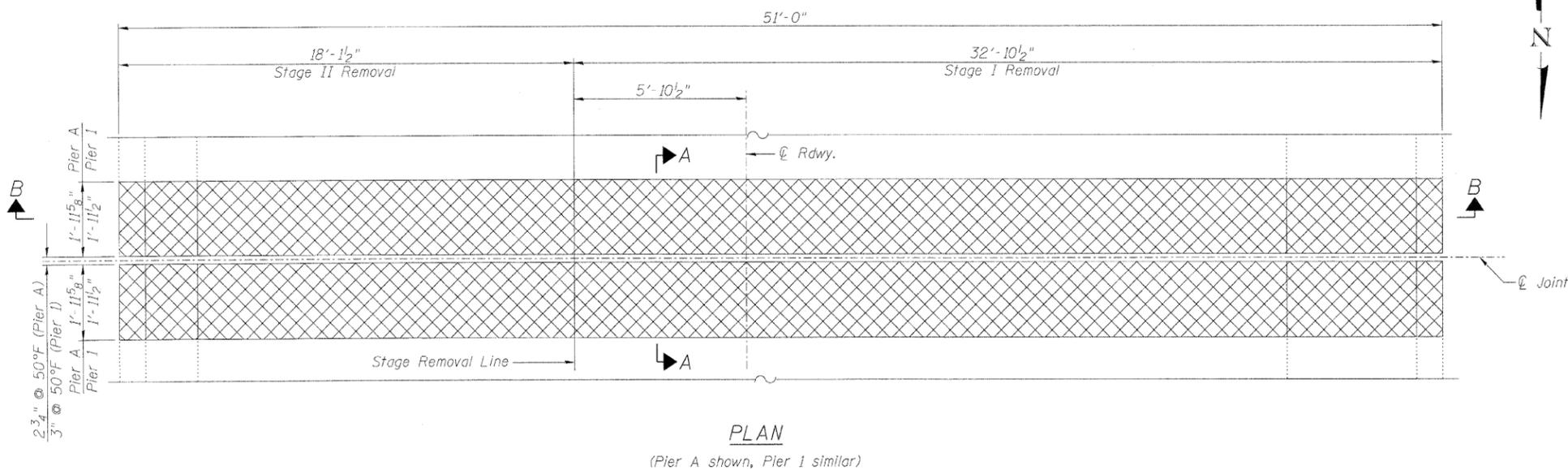
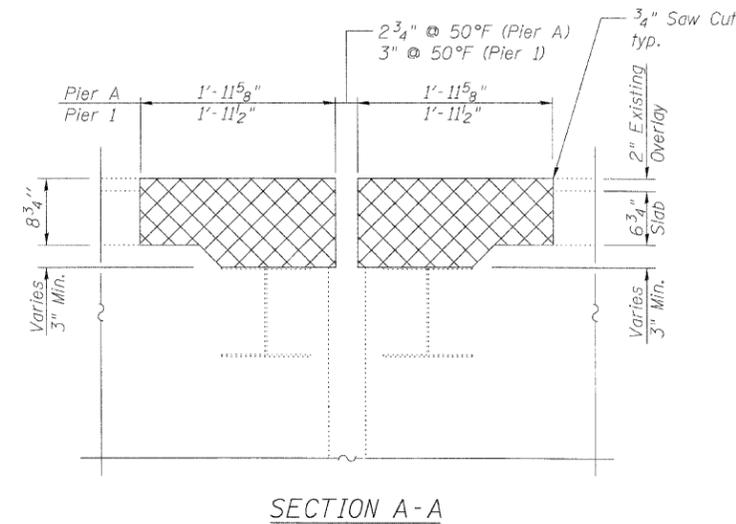
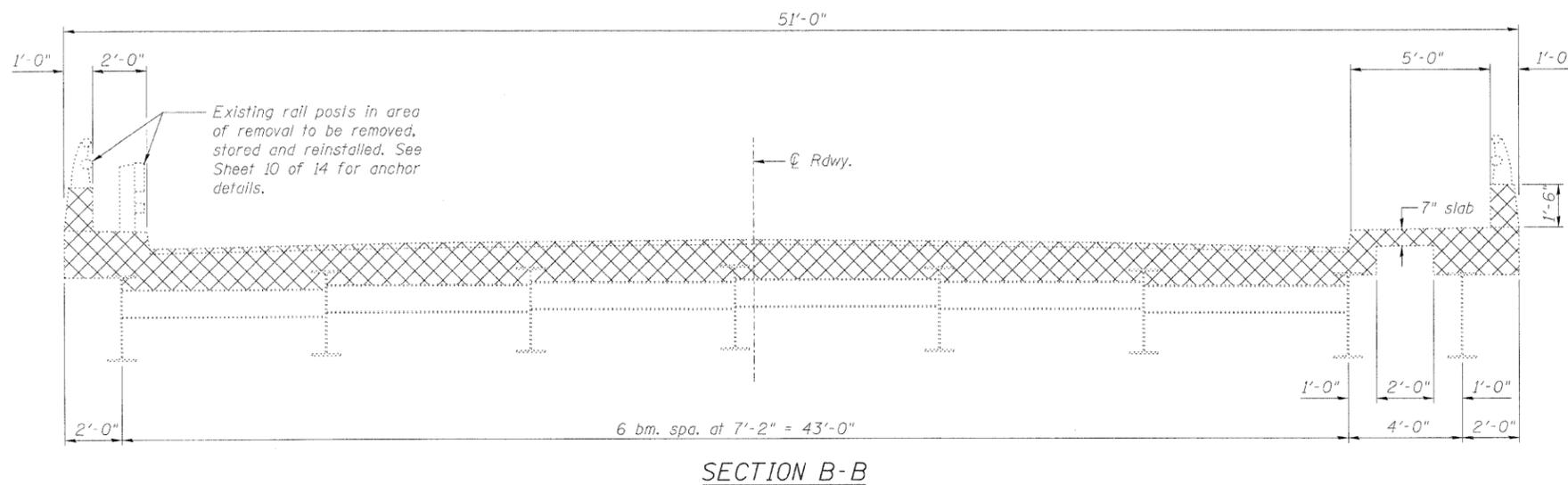
LEGEND

- Indicates Deck Slab Repair (Partial)
- Indicates Deck Slab Repair (Full Depth, Type I)
- Indicates Deck Slab Repair (Full Depth, Type II)

sf Square Feet

 LIN ENGINEERING, LTD. Consulting Engineers Chatham, Illinois	SHEET NO. 4	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	14 SHEETS	348	(0708.1&2323.5)B	COOK	47	32
Designed By: ADB Date: March, 2010	Checked By: MTH File: 016-0991.dwg	Drawn By: ADB	CONTRACT NO. 60D69			
			ILLINOIS FED. AID PROJECT			

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



- Notes:
1. Cross hatched area indicates concrete removal.
 2. Existing reinforcement bars in the concrete removal area extending in new construction shall be cleaned, straightened, and incorporated into the new construction. Any reinforcement bars that are damaged during concrete removal operations shall be repaired or replaced using an approved bar splicer or anchorage system. Cost included in Concrete Removal.
 3. Overlay removal is included in pay item Concrete Removal.

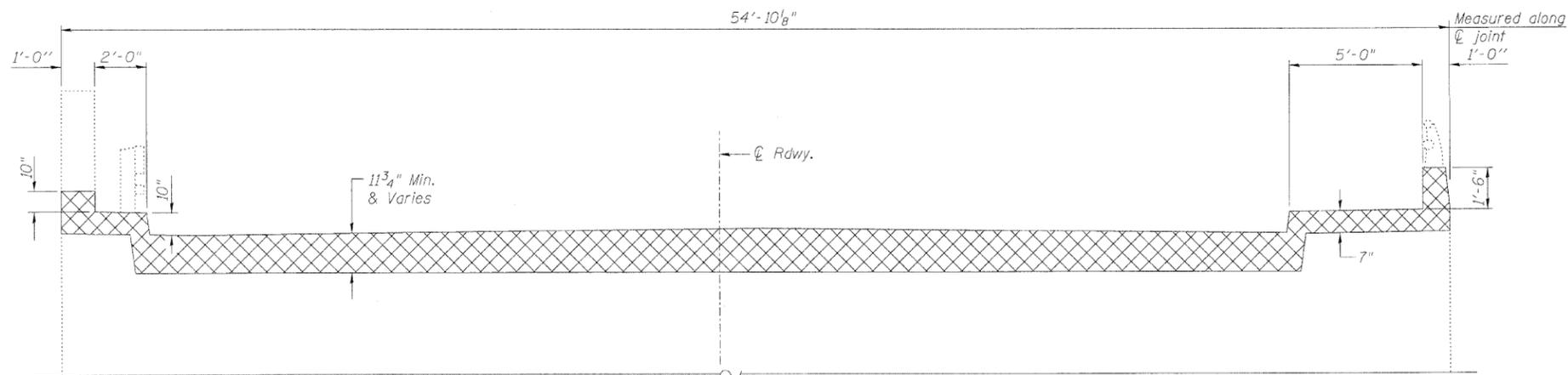
BILL OF MATERIAL

Item	Unit	Total
Concrete Removal	Cu. Yd.	16.6

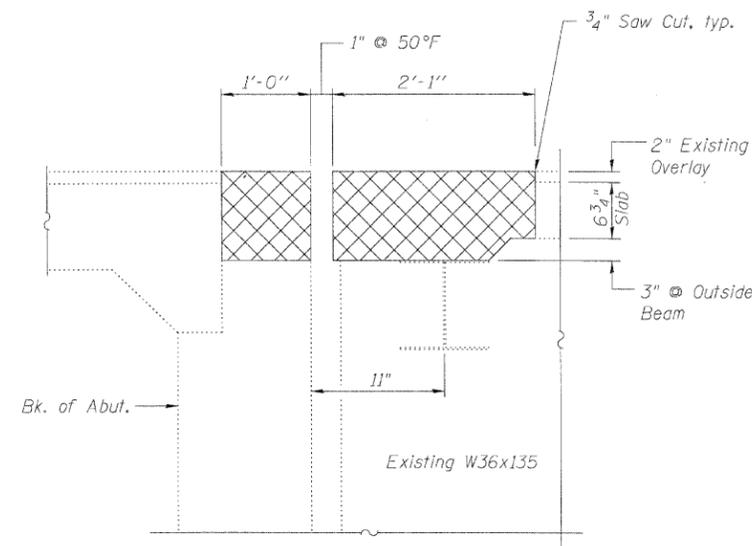
**EXPANSION JOINT CONCRETE REMOVAL
AT PIERS
STRUCTURE NO. 016-0991**

	SHEET NO. 5	F.A.P. RTE. 348	SECTION (0708.1&2323.5)B	COUNTY COOK	TOTAL SHEETS 47	SHEET NO. 33
	14 SHEETS	CONTRACT NO. 60D69		ILLINOIS FED. AID PROJECT		

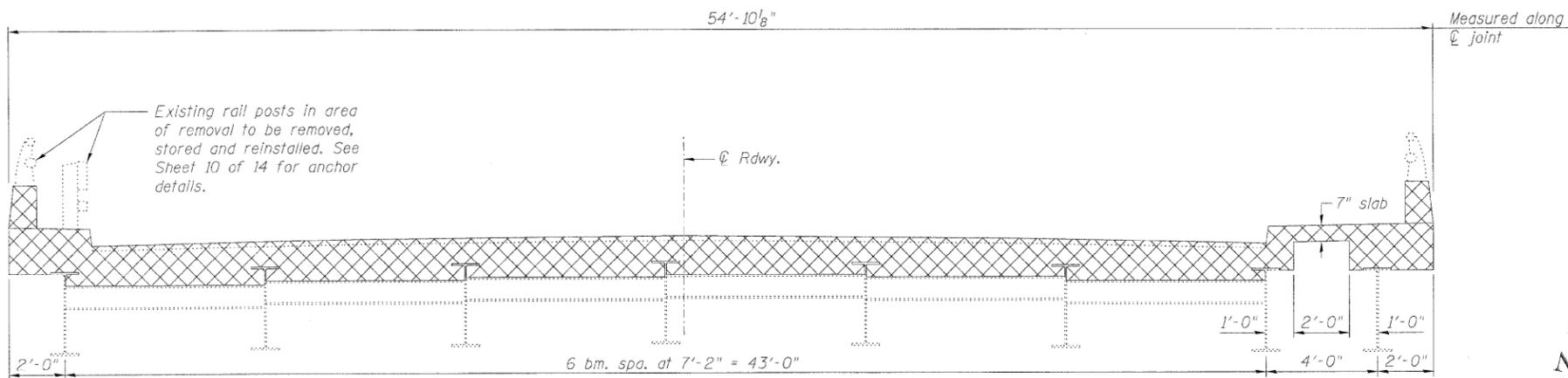
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



SECTION B-B
(Dimensions at Rt. L's)

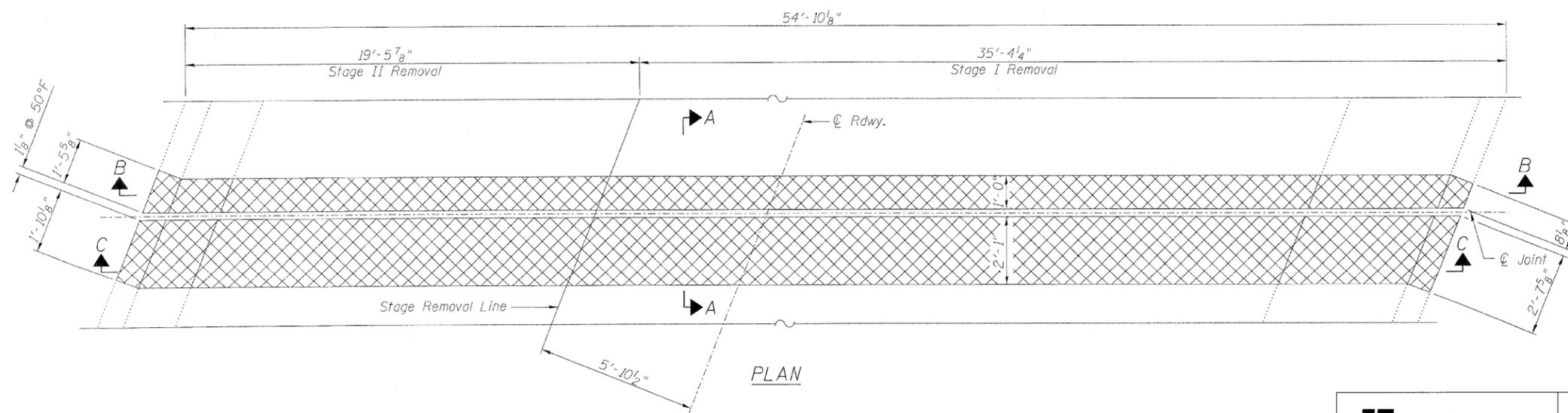


SECTION A-A
(Dimensions @ Rt. L's)



SECTION C-C
(Dimensions at Rt. L's)

- Notes:
1. Cross hatched area indicates concrete removal.
 2. Existing reinforcement bars in the concrete removal area extending in new construction shall be cleaned, straightened, and incorporated into the new construction. Any reinforcement bars that are damaged during concrete removal operations shall be repaired or replaced using an approved bar splicer or anchorage system. Cost included in Concrete Removal.
 3. Overlay removal is included in pay item Concrete Removal.



PLAN

BILL OF MATERIAL

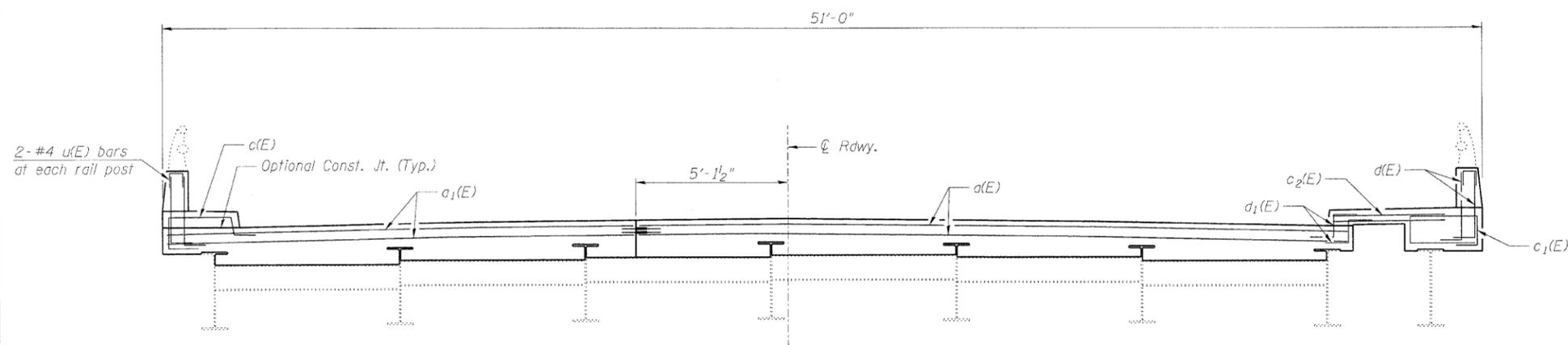
Item	Unit	Total
Concrete Removal	Cu. Yd.	7.0

**EXPANSION JOINT CONCRETE REMOVAL
AT SOUTH ABUTMENT
STRUCTURE NO. 016-0991**

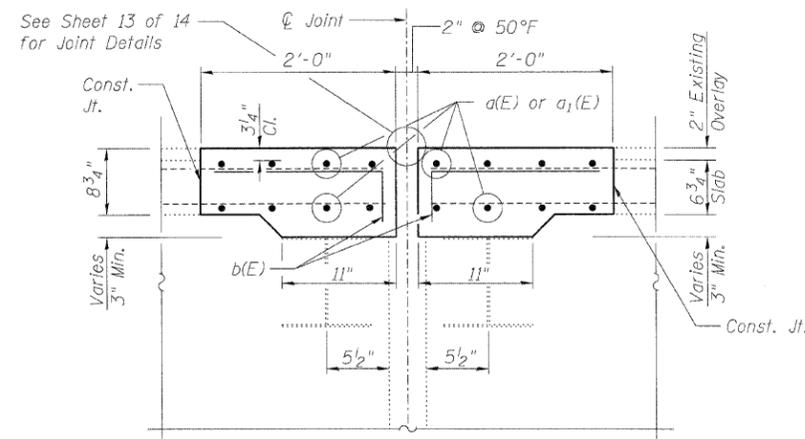
	SHEET NO. 6	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	14 SHEETS	348	(0708.1&2323.5)B	COOK	47	34
			CONTRACT NO. 60D69			
ILLINOIS FED. AID PROJECT						

Designed By: ESH Checked By: WTH Drawn By: ESH
Date: March, 2010 File: 016-0991.dgn

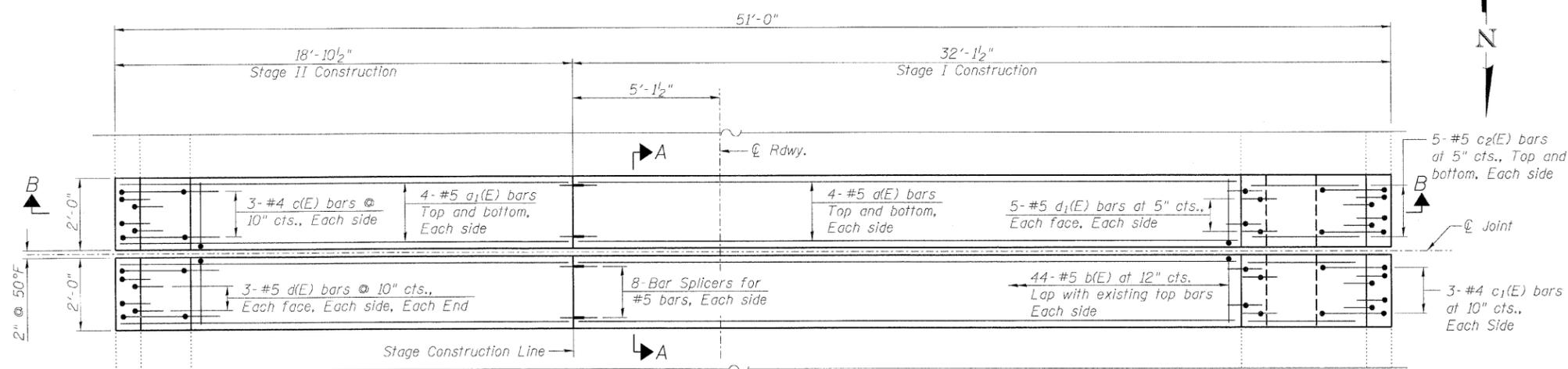
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



SECTION B-B



SECTION A-A

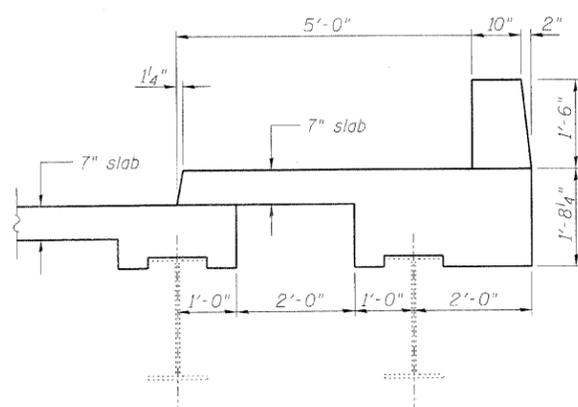


PLAN

(Pier A shown, Pier 1 similar)

BILL OF MATERIAL

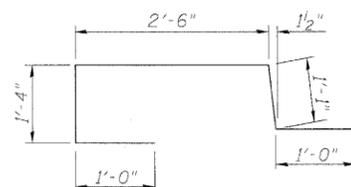
Bar	No.	Size	Length	Shape
a(E)	32	#5	26'-10"	—
a ₁ (E)	32	#5	18'-7"	—
b(E)	176	#5	2'-5"	└
c(E)	12	#4	6'-11"	└
c ₁ (E)	12	#4	8'-6"	└
c ₂ (E)	40	#5	4'-3"	—
d(E)	48	#5	3'-3"	L
d ₁ (E)	40	#5	3'-7"	L
u(E)	16	#4	2'-6"	U
Reinforcement Bars, Epoxy Coated			Pound	2600
Concrete Superstructure			Cu. Yd.	16.9



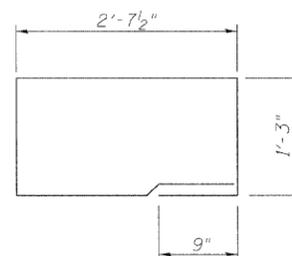
SECTION THRU WEST SIDEWALK



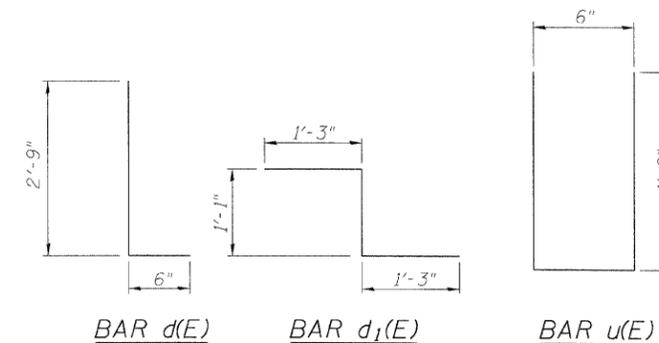
BAR b(E)



BAR c(E)



BAR c₁(E)



BAR d(E)

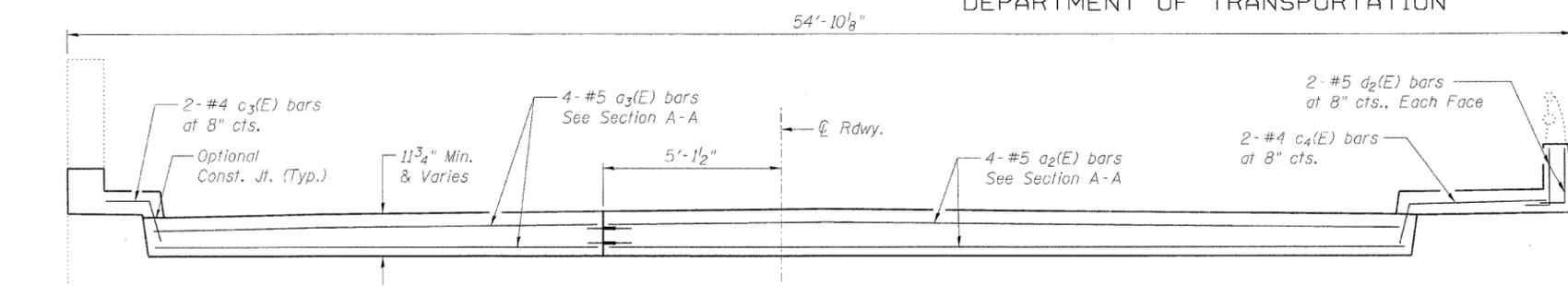
BAR d₁(E)

BAR u(E)

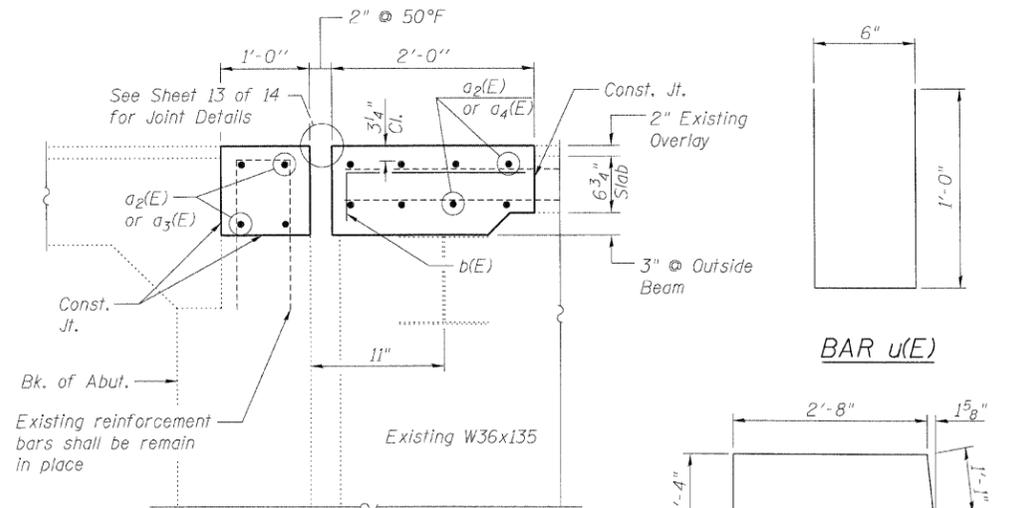
EXPANSION JOINT CONCRETE
DETAILS AT PIERS
STRUCTURE NO. 016-0991

<p>LIN ENGINEERING, LTD. Consulting Engineers Chatham, Illinois</p>	SHEET NO. 7	F.A.P. RTE. 348	SECTION (0708.1&2323.5)B	COUNTY COOK	TOTAL SHEETS 47	SHEET NO. 35
	14 SHEETS	CONTRACT NO. 60D69		ILLINOIS FED. AID PROJECT		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

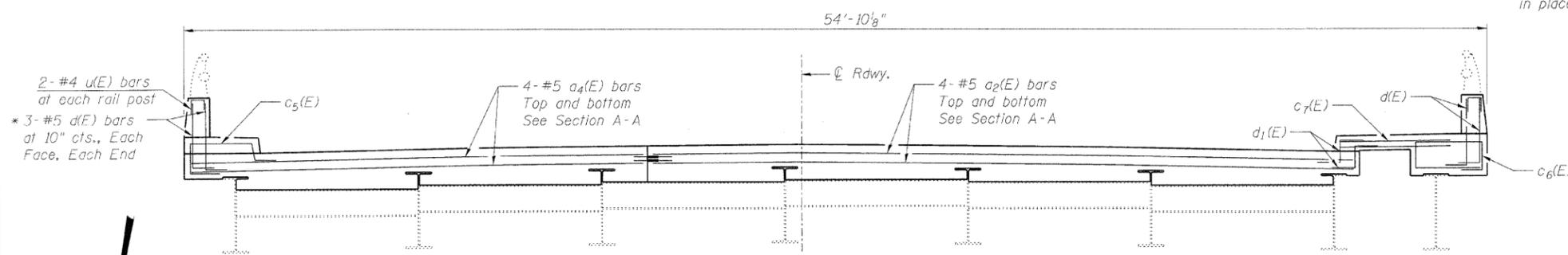


SECTION B-B

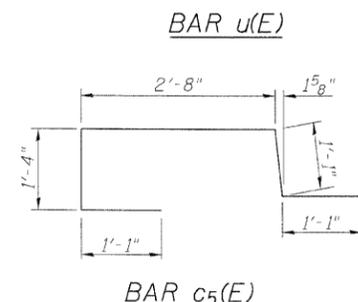


SECTION A-A

(Dimensions @ Rt. L's)

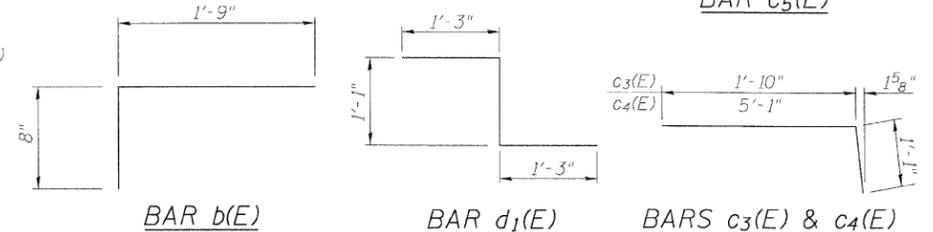


SECTION C-C



BAR u(E)

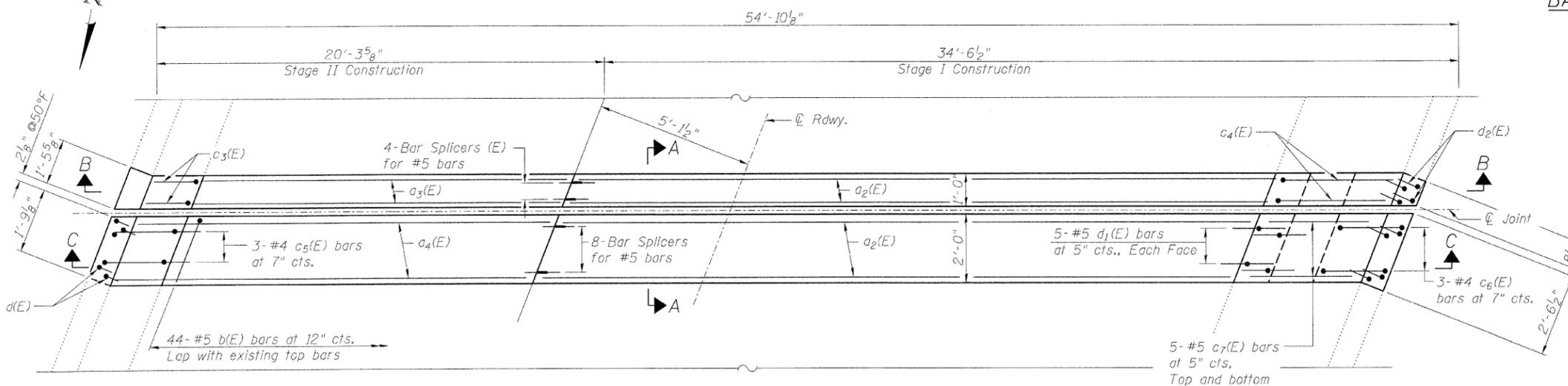
BAR c5(E)



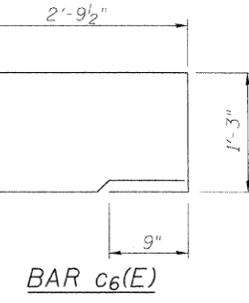
BAR b(E)

BAR d1(E)

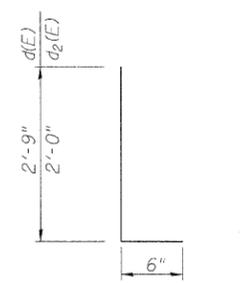
BARS c3(E) & c4(E)



PLAN



BAR c6(E)



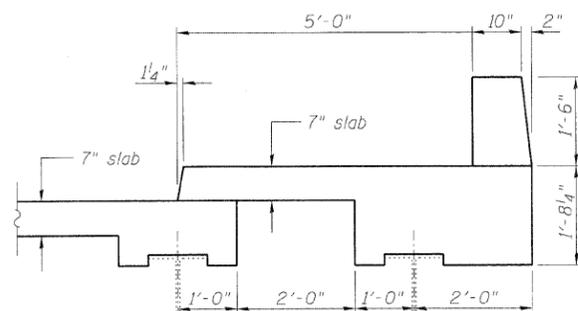
BARS d(E) & d2(E)

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a2(E)	12	#5	28'-8"	—
a3(E)	4	#5	17'-10"	—
a4(E)	8	#5	19'-0"	—
b(E)	44	#5	2'-5"	┌
c3(E)	2	#5	2'-11"	┌
c4(E)	2	#5	6'-2"	┌
c5(E)	3	#4	7'-3"	┌
c6(E)	3	#4	8'-10"	┌
c7(E)	10	#5	5'-1"	—
d(E)	12	#5	3'-3"	┌
d1(E)	10	#5	3'-7"	┌
d2(E)	4	#5	2'-6"	┌
u(E)	4	#4	2'-6"	┌
Reinforcement Bars, Epoxy Coated			Pound	910
Concrete Superstructure			Cu. Yds.	6.8

Note: See sheet 7 of 14 for Section Thru West Sidewalk details

* Rotate as necessary to maintain clearance



SECTION THRU WEST SIDEWALK

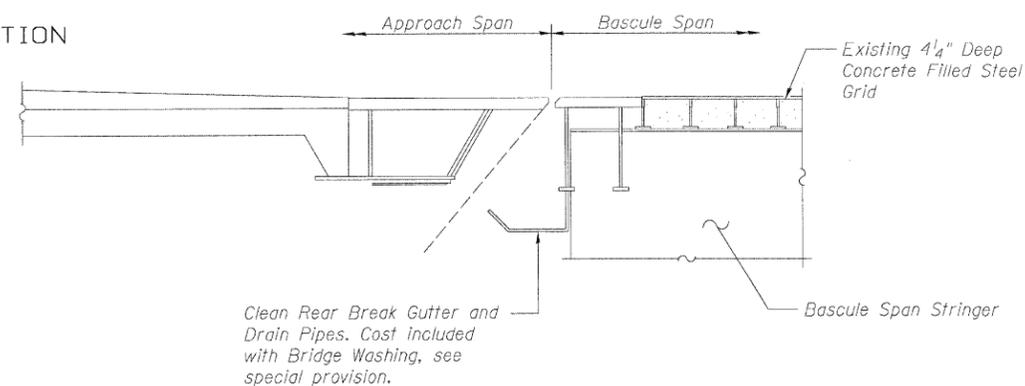
EXPANSION JOINT CONCRETE DETAILS
AT SOUTH ABUTMENT
STRUCTURE NO. 016-0991

	SHEET NO. 8	F.A.P. RTE. 348	SECTION (0708.1&2323.5)B	COUNTY COOK	TOTAL SHEETS 47	SHEET NO. 36
	14 SHEETS	CONTRACT NO. 60D69		ILLINOIS FED. AID PROJECT		

Designed By: ESH
Checked By: WTH
Date: March, 2010

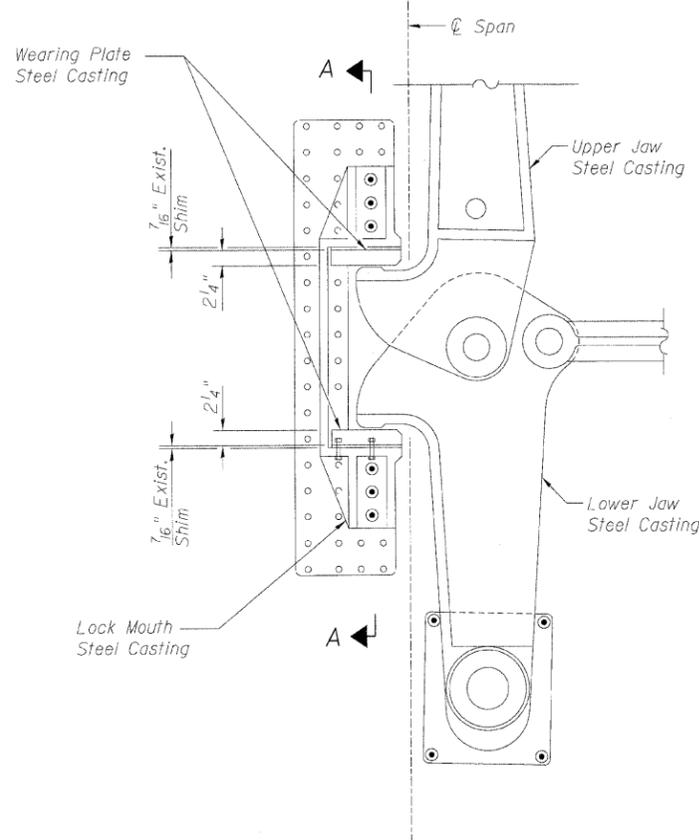
Drawn By: ESH
File: 016-0991.dgn

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



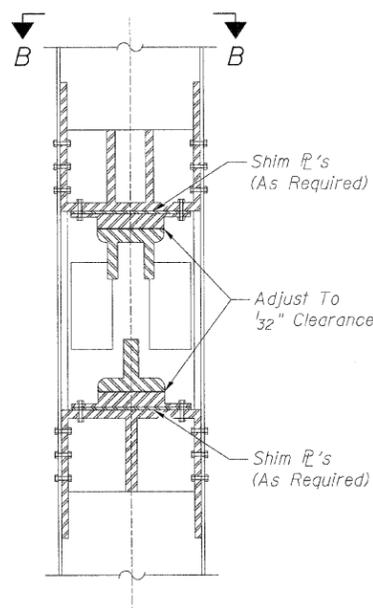
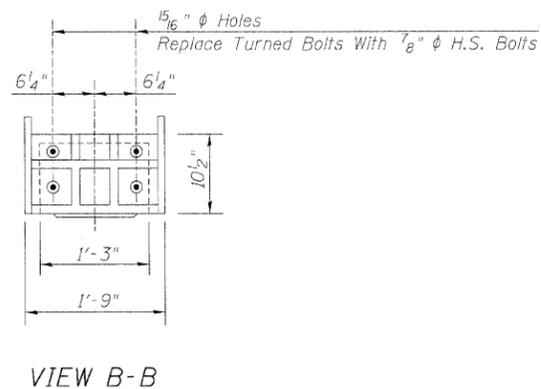
GUTTER AT REAR BREAK

Notes:
All Posts shall be normal to parapet.
In lieu of the cast-in-place anchor device shown, the Contractor has the option of drilling and setting stainless steel anchor rods of the same diameter and grade as the specified cap screws according to Article 509.06 of the Standard Specifications. Embedment shall be according to the manufacturer's specifications.
Removal and re-erection of the existing aluminum handrail, rail post, and all new applicable hardware, including labor and installation shall be included in the cost of Concrete Removal.

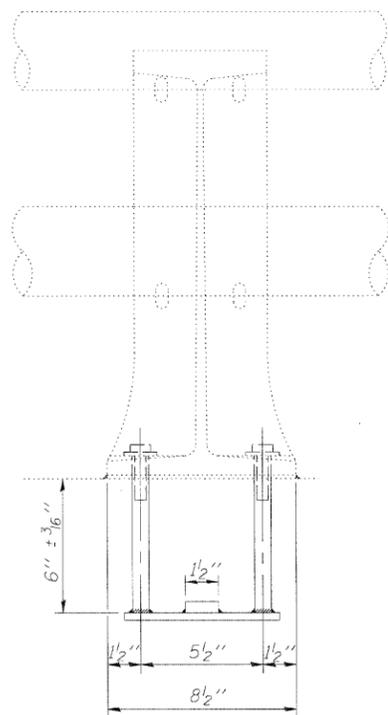


**SHIM PLATE REPLACEMENT
AT CENTER LOCK**

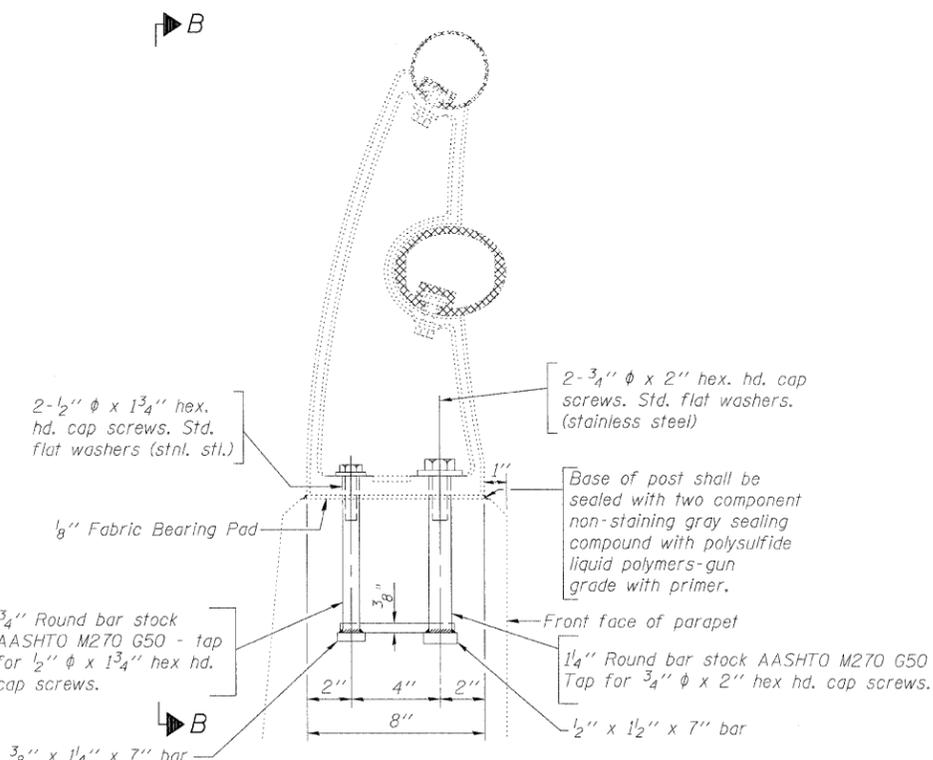
Note:
Replace existing 7/16\"/>



SECTION A-A



VIEW B-B



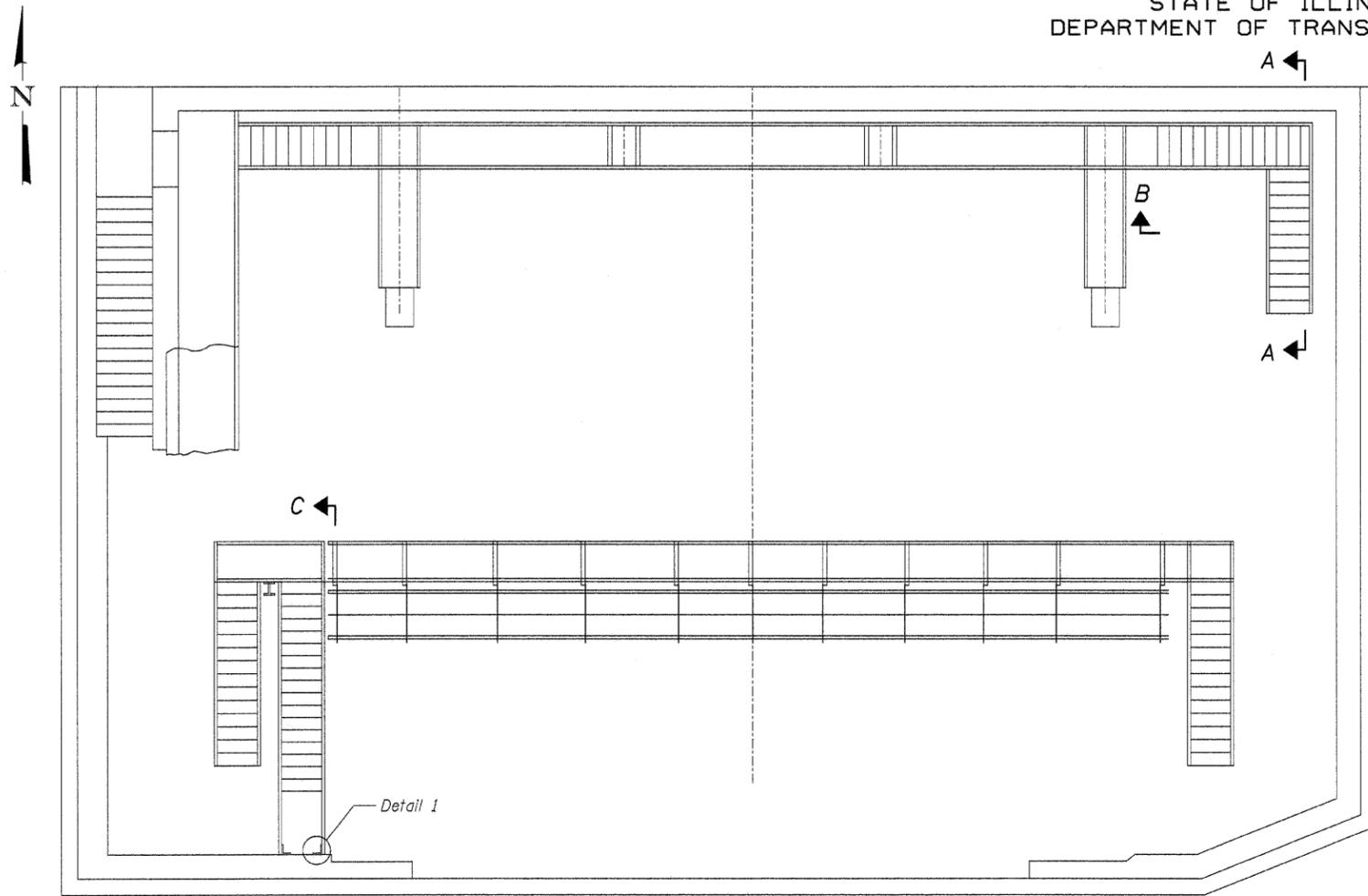
RAIL POST DETAILS

SECTION A-A

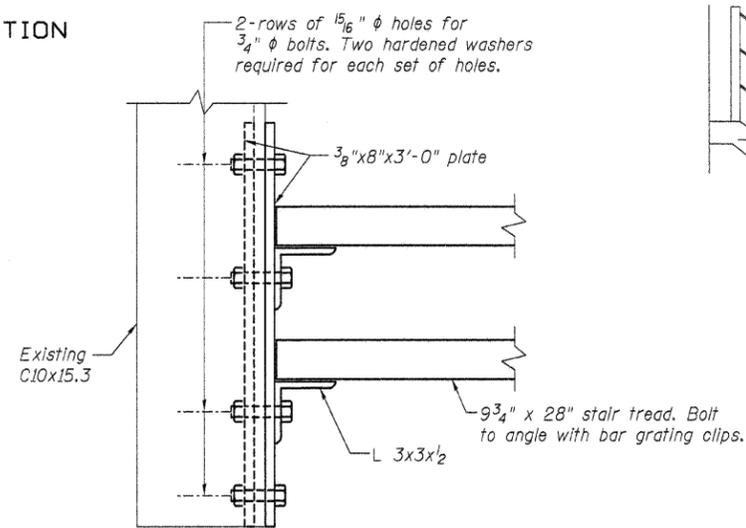
**MISCELLANEOUS REPAIR DETAILS-1
STRUCTURE NO. 016-0991**

<p>LIN ENGINEERING, LTD. Consulting Engineers Chatham, Illinois</p>	SHEET NO. 10	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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					CONTRACT NO. 60D69	
ILLINOIS FED. AID PROJECT						

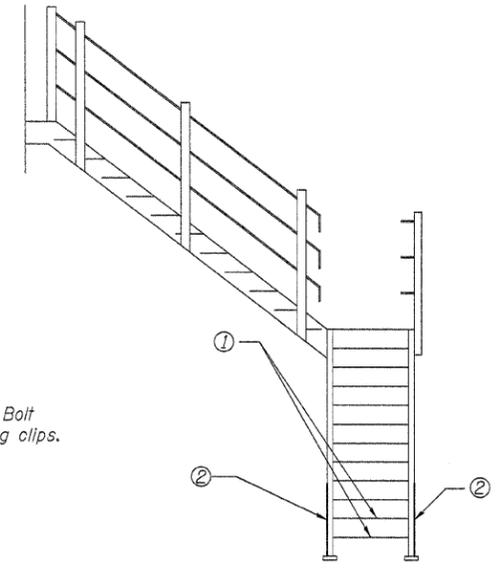
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



NORTH TENDER HOUSE PLAN

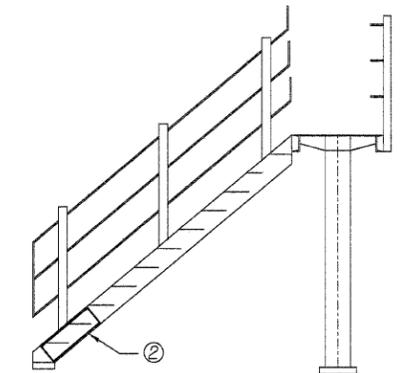


STAIR DETAIL



SECTION A-A

Notes:
Contractor shall verify dimensions prior to ordering materials.
Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. ASTM A307 Grade C anchor bolts may be used in lieu of ASTM F1554 Grade 36 (Fy=36ksi). The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.
Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.
Stair treads, steel members, and all hardware shall be included in the cost of Furnishing and Erecting Structural Steel.
All new steel elements shall be galvanized according to AASHTO M111 or M232 as applicable.

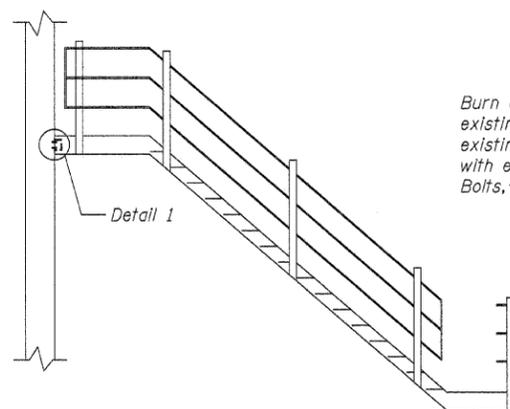


SECTION B-B

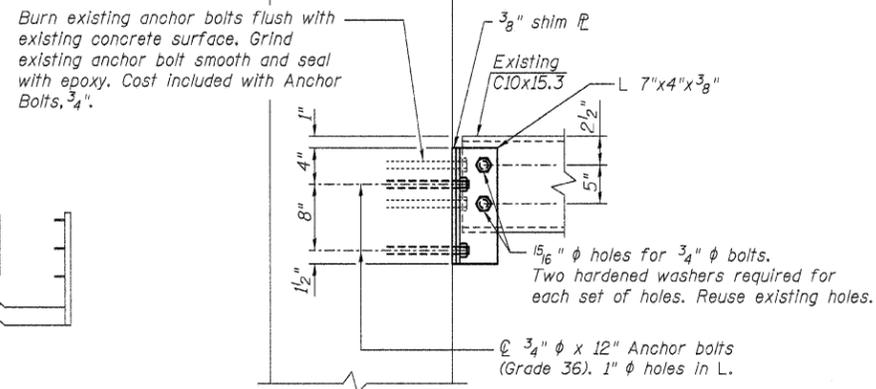
- ① Remove and replace bottom two stair treads with steel welded 19W4 bar grating galvanized tread. Cost included with Furnishing and Erecting Structural Steel. Bearing bars shall be 1" x 3/16". See Stair Detail.
- ② Add 3/8" x 8" x 3'-0" PL to each side of existing channel. Grind any existing welds smooth prior to plate installation. See Stair Detail.

BILL OF MATERIAL

Item	Unit	Total
Furnishing and Erecting Structural Steel	Pound	230
Anchor Bolts, 3/4"	Each	2



SECTION C-C



DETAIL 1

**MISCELLANEOUS REPAIR DETAILS-2
STRUCTURE NO. 016-0991**

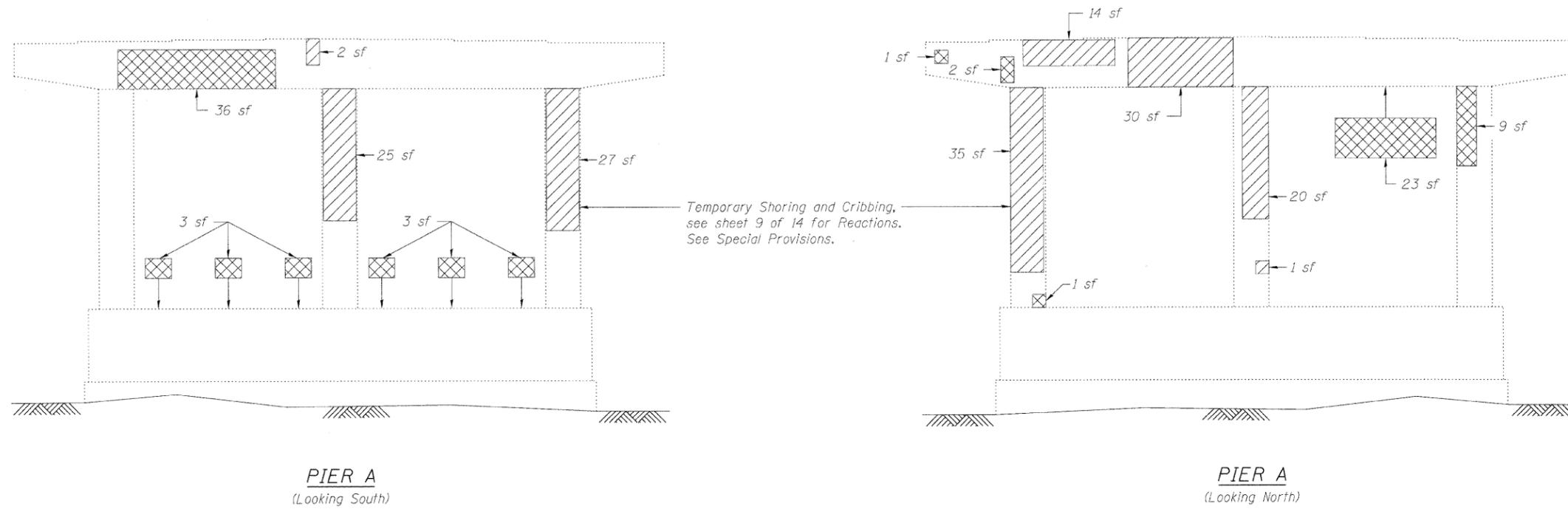
<p>LIN ENGINEERING, LTD. Consulting Engineers Okeham, Illinois</p>	SHEET NO. 11	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	14 SHEETS	348	(0708.1&2323.5)B	COOK	47	39
					CONTRACT NO. 60D69	
ILLINOIS FED. AID PROJECT						

Designed By: TBP
Date: March, 2000

Checked By: MTH
File: 016-0991.dgn

Drawn By: TBP

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



LEGEND

- Structural Repair of Concrete (Depth Equal to or Less Than 5 in.)
- Structural Repair of Concrete (Depth Greater Than 5 in.)
- sf Square Feet

BILL OF MATERIAL

Item	Unit	Total
Structural Repair of Concrete (Depth Equal to or Less Than 5 in.)	Sq. Ft.	154
Structural Repair of Concrete (Depth Greater Than 5 in.)	Sq. Ft.	90
Temporary Shoring and Cribbing	Each	1

Note
Repair of the existing pier shall include but may not be limited to the areas shown. The actual areas to be repaired will be determined by the Engineer at the time of construction.

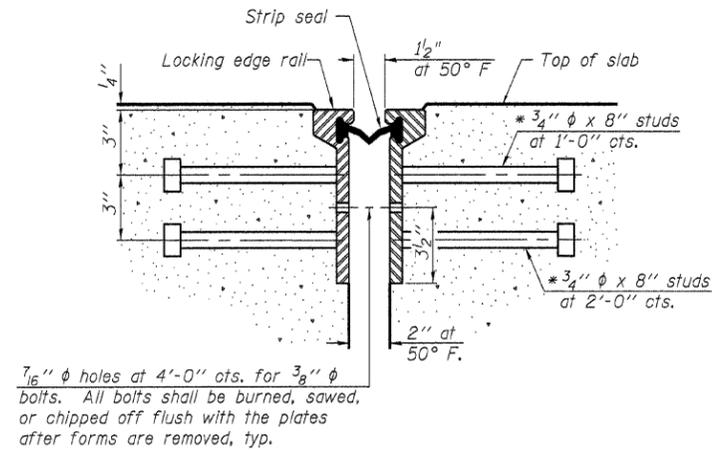
**PIER A REPAIR DETAILS
STRUCTURE NO. 016-0991**

LIN ENGINEERING, LTD. Consulting Engineers Chatham, Illinois	SHEET NO. 12	F.A.P. RTE. 348	SECTION (0708.1&2323.5)B	COUNTY COOK	TOTAL SHEETS 47	SHEET NO. 40
	14 SHEETS	CONTRACT NO. 60D69			ILLINOIS FED. AID PROJECT	

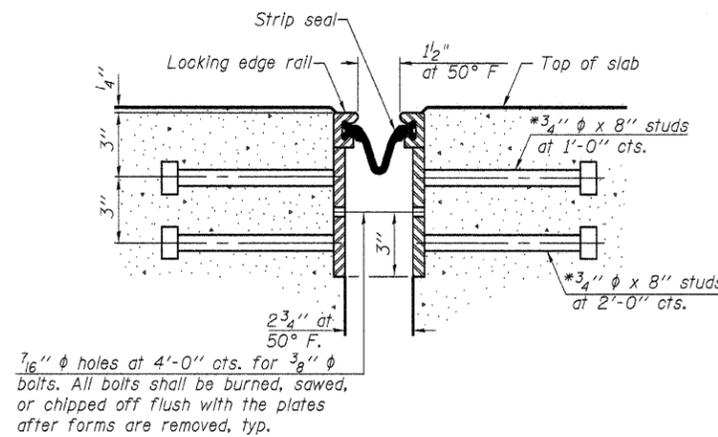
Designed By: RH Checked By: MTH Drawn By: RH
Date: March, 2010 File: 016-0991.dwg

* Granular or solid flux filled headed studs conforming to Article 1006.32 of the Std. Specs., automatically end welded.

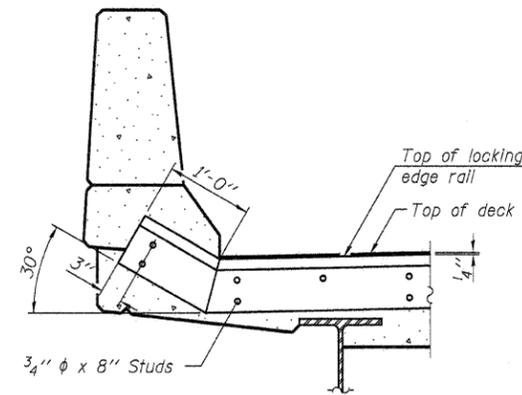
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



**SECTION THRU
ROLLED RAIL JOINT**

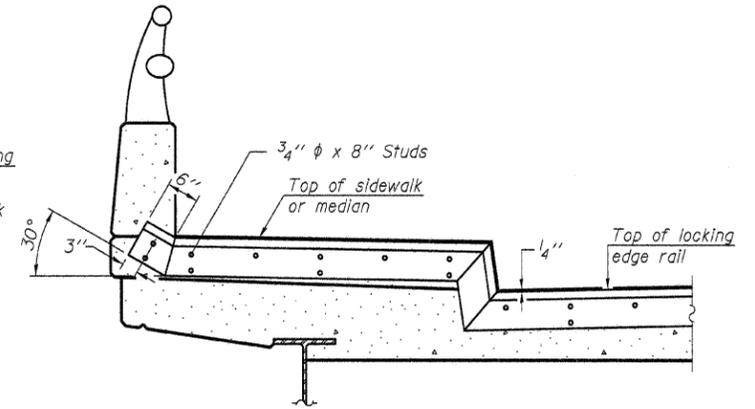


**SECTION THRU
WELDED RAIL JOINT**



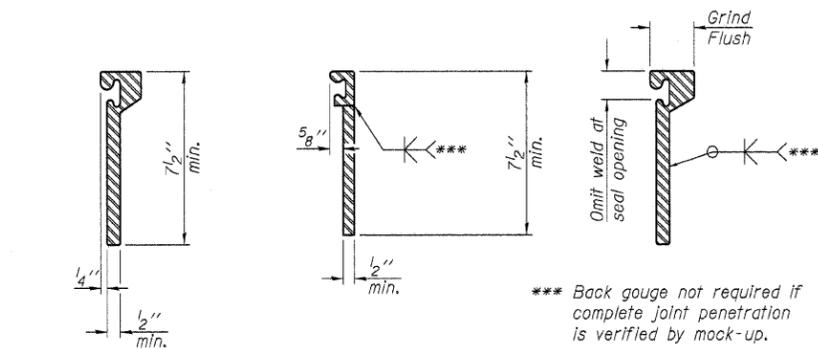
AT PARAPET

See Section A-A for end treatment of skews > 30°.



AT SIDEWALK OR MEDIAN

Shorter plates with a single row of studs at 12" cts. may be necessary on medians which are shallower than 9". See manufacturer's recommendation.

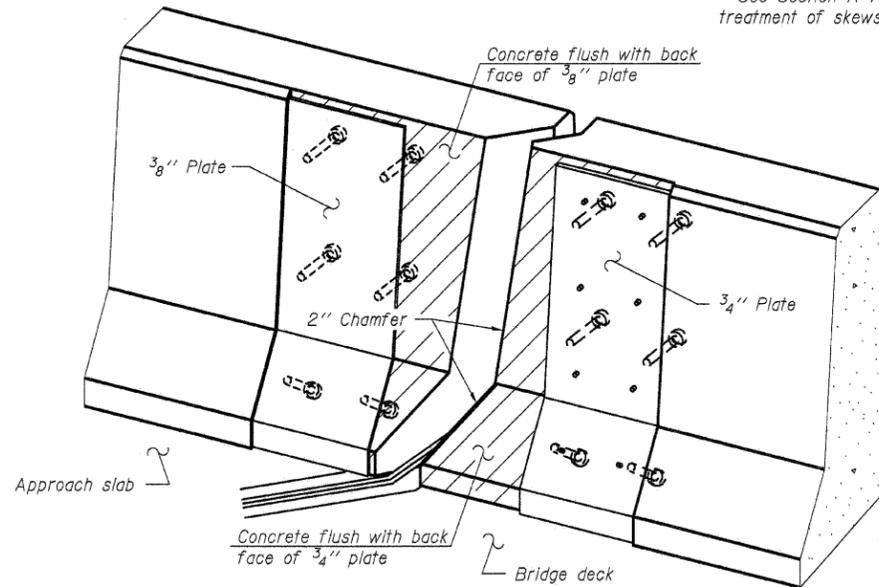


**ROLLED
EXTRUDED RAIL**

WELDED RAIL

**LOCKING EDGE
RAIL SPLICE**

The inside of the locking edge rail groove shall be free of weld residue. Rolled rail shown, welded rail similar.



TYPICAL END TREATMENTS

Notes:

The strip seal shall be made continuous and shall have a minimum thickness of 1/4". The configuration of the strip seal shall match the configuration of the Locking Edge Rails. Open or "webbed" strip seal gland configurations are not permitted. The gland shall be sized for a maximum rated movement of 4 inches.

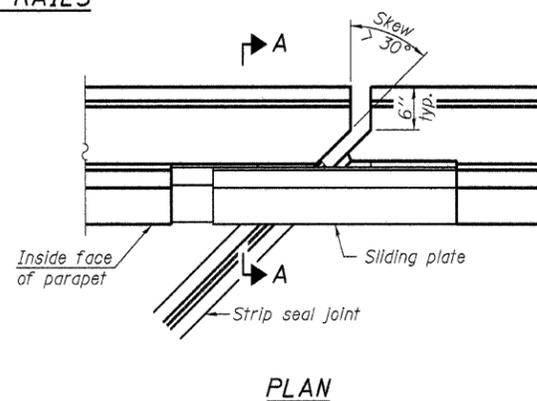
The Locking Edge Rails depicted are conceptual only, except for the minimum dimensions shown. The actual configuration of the Locking Edge Rails and matching strip seal may vary from manufacturer to manufacturer. Flanged edge rails will not be allowed. Locking Edge Rails may be spliced at slope discontinuities.

The manufacturer's recommended installation methods shall be followed. The joint opening and deck dimensions detailed on the superstructure are based on a rolled rail expansion joint. If the Contractor elects to use the welded rail expansion joint, the opening and deck dimensions shall be modified according to the dimensions detailed on this sheet. Required modifications shall be made at no additional cost to the State.

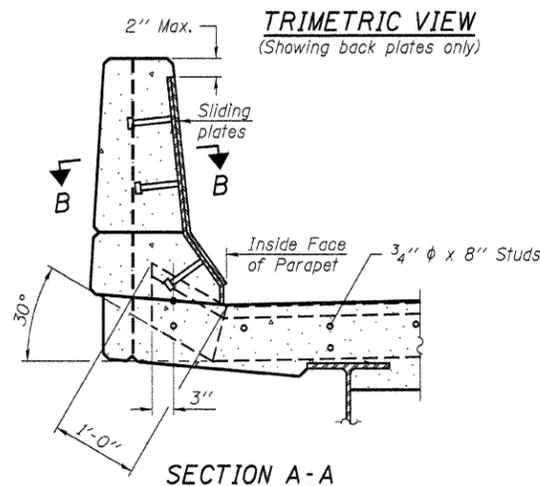
All steel components shall be galvanized after fabrication according to Article 520.03 of the Standard Specifications.

Maximum space between rail segments at stage lines shall be 3/16", sealed with a suitable sealant.

LOCKING EDGE RAILS

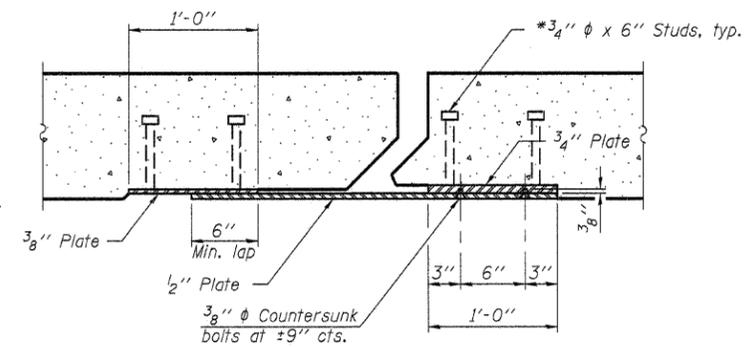


PLAN



SECTION A-A

POINT BLOCK DETAILS
(for skews > 30°)



SECTION B-B

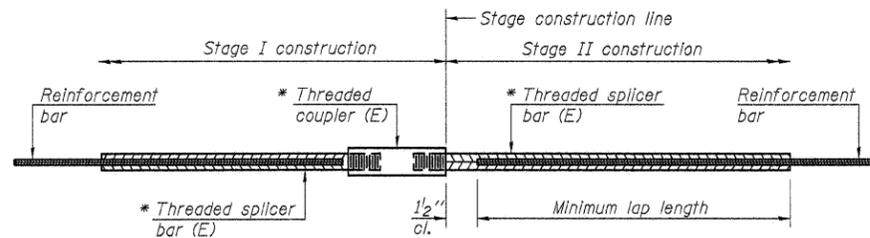
BILL OF MATERIAL

Item	Unit	Total
Preformed Joint Strip Seal	Foot	160

**PREFORMED JOINT STRIP SEAL
STRUCTURE NO. 016-0991**

 LIN ENGINEERING, LTD. Consulting Engineers Chatham, Illinois	SHEET NO. 13	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	14 SHEETS	348	(0708.1&2323.5)B	COOK	47	41
			CONTRACT NO. 60D69			
ILLINOIS FED. AID PROJECT						

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



STANDARD BAR SPLICER ASSEMBLY

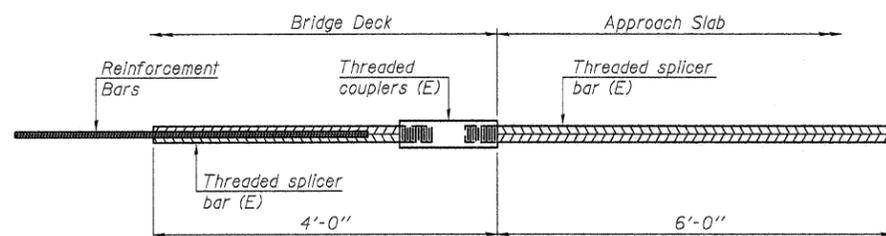
Bar size to be spliced	Minimum Lap Lengths			
	Table 1	Table 2	Table 3	Table 4
3, 4	1'-5"	1'-11"	2'-1"	2'-4"
5	1'-9"	2'-5"	2'-7"	2'-11"
6	2'-1"	2'-11"	3'-1"	3'-6"
7	2'-9"	3'-10"	4'-2"	4'-8"
8	3'-8"	5'-1"	5'-5"	6'-2"
9	4'-7"	6'-5"	6'-10"	7'-9"

Table 1: Black bar, 0.8 Class C
Table 2: Black bar, Top bar lap, 0.8 Class C
Table 3: Epoxy bar, 0.8 Class C
Table 4: Epoxy bar, Top bar lap, 0.8 Class C

Threaded splicer bar length = min. lap length + 1/2" + thread length

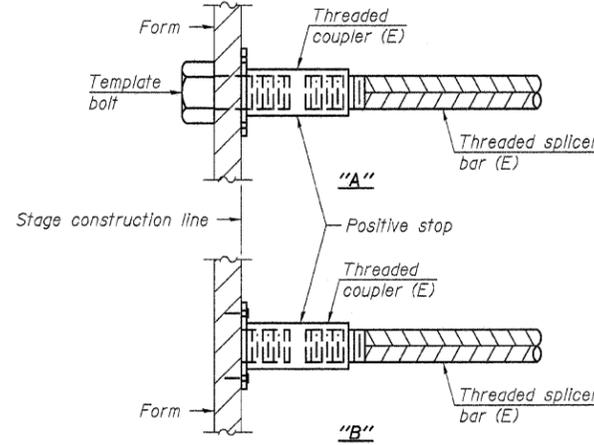
* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Location	Bar size	No. assemblies required	Table for minimum lap length
Joint at S. Abut.	#5	12	Table 3
Joint at Pier A	#5	16	Table 3
Joint at Pier 1	#5	16	Table 3



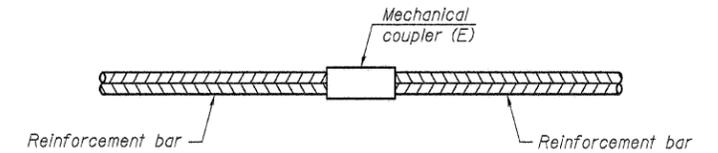
BAR SPLICER ASSEMBLY FOR #5 BAR ON INTEGRAL OR SEMI-INTEGRAL ABUTMENTS

No. required =



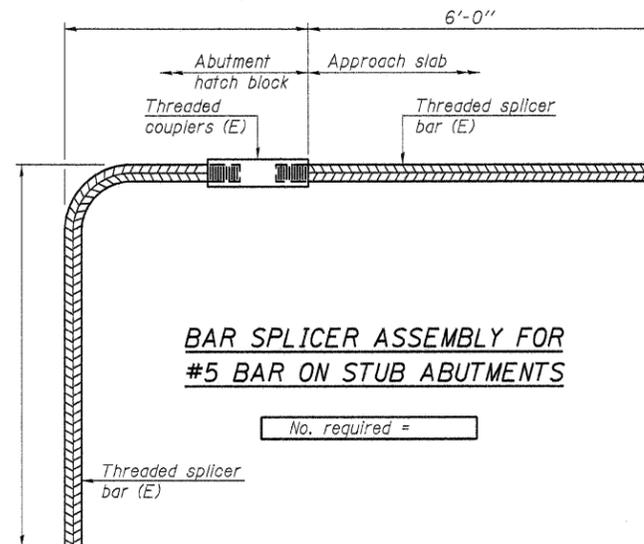
INSTALLATION AND SETTING METHODS

"A": Set bar splicer assembly by means of a template bolt.
"B": Set bar splicer assembly by nailing to wood forms or cementing to steel forms.
(E): Indicates epoxy coating.



STANDARD MECHANICAL SPLICER

Location	Bar size	No. assemblies required



BAR SPLICER ASSEMBLY FOR #5 BAR ON STUB ABUTMENTS

No. required =

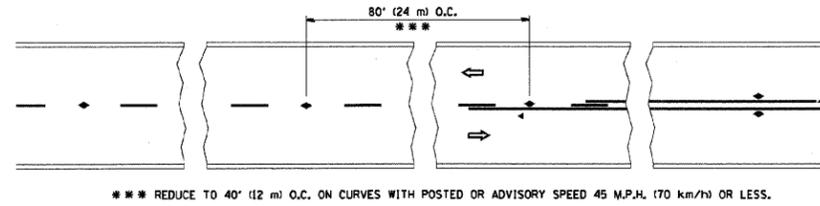
NOTES

Splicer bars shall be deformed with threaded ends and have a minimum 60 ksi yield strength.
All reinforcement shall be lapped and tied to the splicer bars.
Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars. See Section 508 of the Standard Specifications.
See special provision for Mechanical Splicers.
See approved list of bar splicer assemblies and mechanical splicers for alternatives.

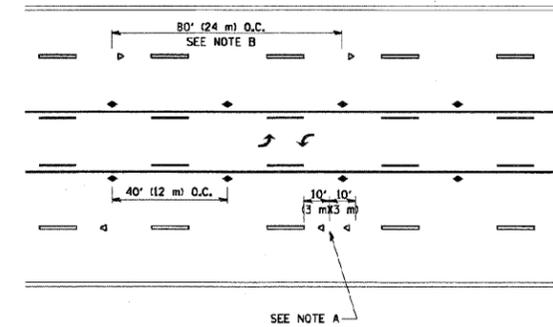
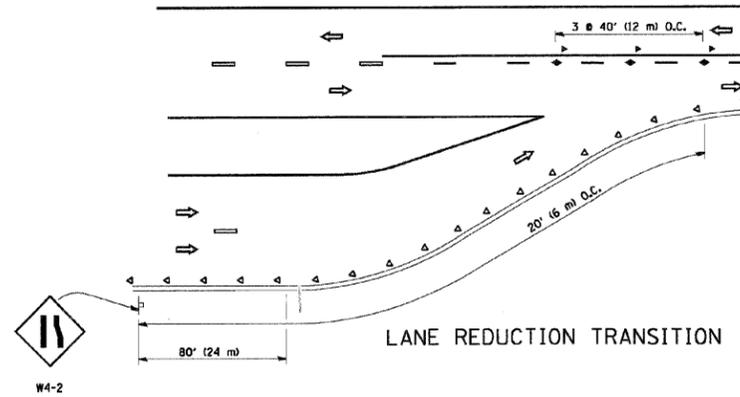
**BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS
STRUCTURE NO. 016-0991**

 LIN ENGINEERING, LTD. Consulting Engineers Chatham, Illinois	SHEET NO. 14	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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CONTRACT NO. 60D69					ILLINOIS FED. AID PROJECT	

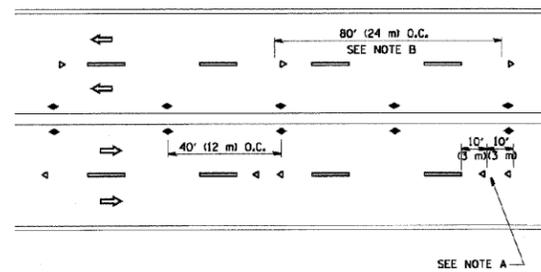
Designed By: ESH
Date: March, 2002
Checked By: MTH
Files: 08-0991.dgn
Drawn By: ESH



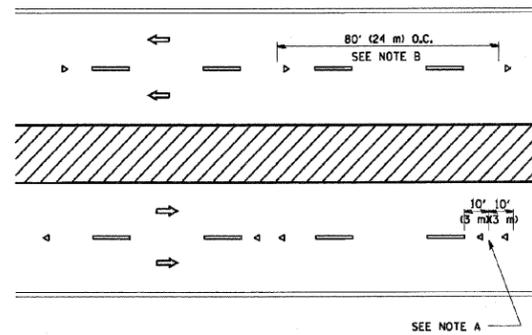
TWO-LANE/TWO-WAY



TWO-WAY LEFT TURN



MULTI-LANE/UNDIVIDED



MULTI-LANE/DIVIDED

GENERAL NOTES

1. MARKERS USED WITH DASHED LINES SHALL BE CENTERED IN THE GAP BETWEEN SEGMENTS.
2. MARKERS USED ADJACENT TO SOLID LINES SHALL BE OFFSET 2 TO 3 (50 TO 75) TOWARD TRAFFIC AS SHOWN.
3. MARKERS THROUGH TANGENTS LESS THAN 500' (150 m) IN LENGTH BETWEEN CURVES SHALL BE INSTALLED AT THE LESSER OF THE TWO CURVE SPACINGS.

SYMBOLS

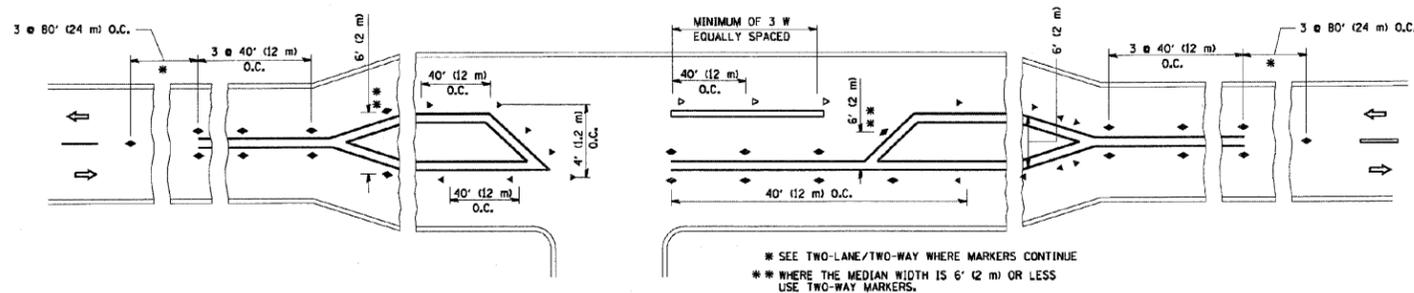
- YELLOW STRIPE
- WHITE STRIPE
- ◀ ONE-WAY AMBER MARKER
- ◄ ONE-WAY CRYSTAL MARKER (W/O)
- ◄ TWO-WAY AMBER MARKER

LANE MARKER NOTES

- B. REDUCE TO 40' (12 m) O.C. ON CURVES WHERE ADVISORY SPEEDS ARE 10 M.P.H. (20 km/h) LOWER THAN POSTED SPEEDS.
- A. USE DOUBLE LANE LINE MARKERS SPACED AS SHOWN.

DESIGN NOTES

1. DOUBLE LANE LINE MARKERS SHALL BE USED UNLESS SPECIFIED OTHERWISE.
2. EXCEPT AS SHOWN ON THE LANE REDUCTION TRANSITION AND FREEWAY EXIT RAMP DETAIL, MARKERS ARE NOT TO BE SPECIFIED ON RIGHT EDGE LINES.
3. THE EXACT MARKER LIMITS, SPACING, AND COLOR SHOULD BE INCLUDED IN THE PLANS.
4. MARKERS SHOULD NOT BE USED ALONGSIDE CURBS EXCEPT FOR EXTREMELY SHORT SECTIONS OF CURBS WHERE NOT MORE THAN TWO MARKERS WOULD BE INVOLVED.

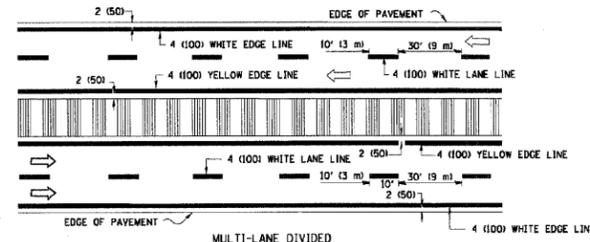
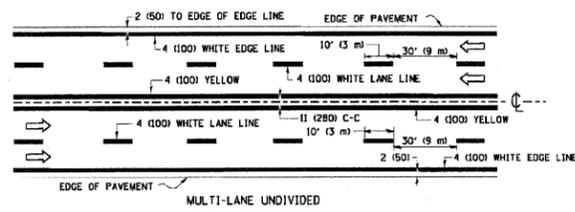
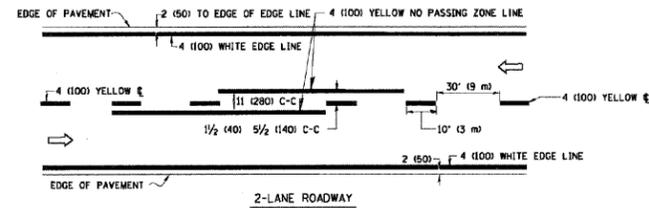


LEFT TURN

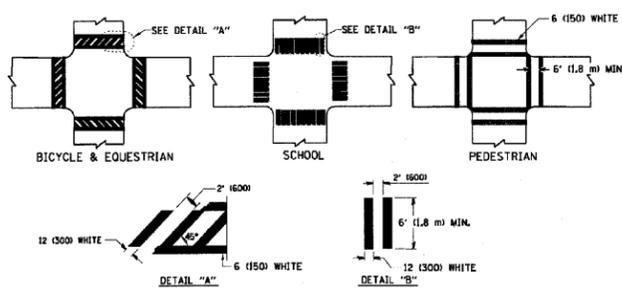
All dimensions are in inches (millimeters) unless otherwise shown.

TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)

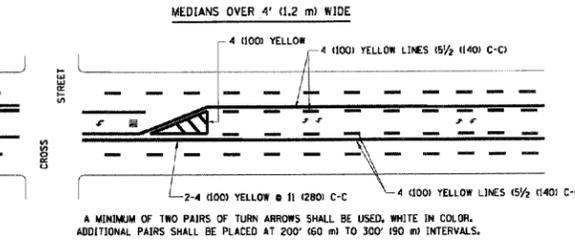
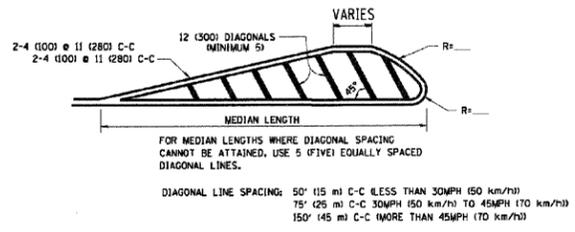
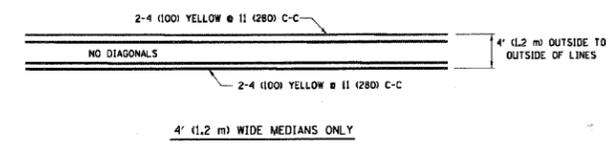
FILE NAME =	USER NAME = #USER#	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DISTRICT STANDARDS IL-43 (HARLEM AVE.) OVER SANITARY AND SHIP CANAL			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.			
#FILE#		DRAWN -	REVISED -		SCALE: NONE	SHEET NO.	OF	SHEETS	STA.	TO STA.	348	(0708.1 & 2323.5)B	COOK	47	43
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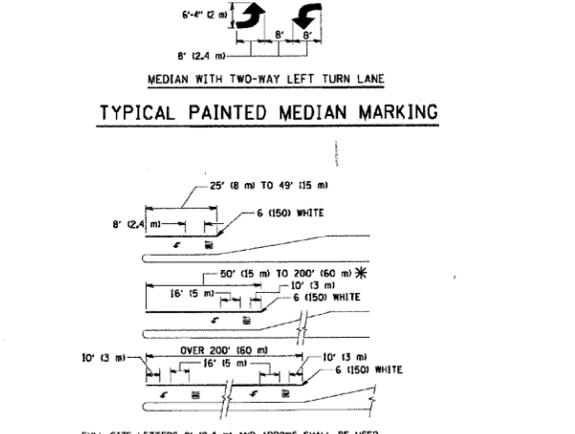
TYPICAL LANE AND EDGE LINE MARKING



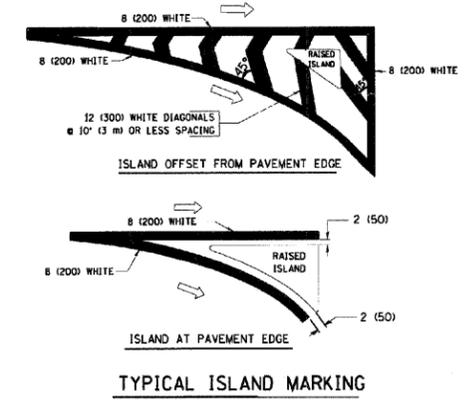
TYPICAL CROSSWALK MARKING



TYPICAL PAINTED MEDIAN MARKING



TYPICAL TURN LANE MARKING



TYPICAL ISLAND MARKING

TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING / REMARKS
CENTERLINE ON 2 LANE PAVEMENT	4 (100)	SKIP-DASH	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE
CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT	2 @ 4 (100)	SOLID	YELLOW	11 (280) C-C
NO PASSING ZONE LINES: FOR ONE DIRECTION	4 (100)	SOLID	YELLOW	5/2 (140) C-C FROM SKIP-DASH CENTERLINE
FOR BOTH DIRECTIONS	2 @ 4 (100)	SOLID	YELLOW	11 (280) C-C OMIT SKIP-DASH CENTERLINE BETWEEN
LANE LINES	4 (100)	SKIP-DASH	WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE
EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS	5 (125)	SKIP-DASH	WHITE	
DOTTED LINES	SAME AS LINE BEING EXTENDED	SKIP-DASH	SAME AS LINE BEING EXTENDED	2' (600) LINE WITH 6' (1.8 m) SPACE
EDGE LINES	4 (100)	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE MOUNTABLE MEDIANS IN YELLOW; EDGE LINES ARE NOT USED NEXT TO BARRIER CURB
TURN LANE MARKINGS	6 (150) LINE; FULL SIZE LETTERS & SYMBOLS 18" (2.4m)	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
TWO WAY LEFT TURN MARKING	2 @ 4 (100) EACH DIRECTION	SKIP-DASH AND SOLID	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH 5/2 (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE
	6' (2.4m) LEFT ARROW	IN PAIRS	WHITE	SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
CROSSWALK LINES (PEDESTRIAN)	2 @ 6 (150)	SOLID	WHITE	NOT LESS THAN 6' (1.8 m) APART
A. DIAGONALS (BICYCLE & EQUESTRIAN)	12 (300) @ 45°	SOLID	WHITE	2' (600) APART
B. LONGITUDINAL BARS (SCHOOL)	12 (300) @ 90°	SOLID	WHITE	2' (600) APART
	NO DIAGONALS USED FOR 4' (1.2 m) WIDE MEDIANS			SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	24 (600)	SOLID	WHITE	PLACE 4' (1.2 m) IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT; OTHERWISE, PLACE AT DESIRED STOPPING POINT. PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE
PAINTED MEDIANS	2 @ 4 (100) WITH 12 (300) DIAGONALS @ 45°	SOLID	YELLOW; TWO WAY TRAFFIC WHITE; ONE WAY TRAFFIC	11 (280) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
EDGE MARKING AND CHANNELIZING LINES	8 (200) WITH 12 (300) DIAGONALS @ 45°	SOLID	WHITE	DIAGONALS: 15' (4.5 m) C-C (LESS THAN 30MPH (50 km/h)) 20' (6 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h) 30' (9 m) C-C (OVER 45MPH (70 km/h))
RAILROAD CROSSING	24 (600) TRANSVERSE LINES; "RR" 15' (4.5 m) LETTERS; 16 (400) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF "RR"=3.6 SQ. FT. (0.33 m²) EACH "X"=54.0 SQ. FT. (5.0 m²)
SHOULDER DIAGONALS	12 (300) @ 45°	SOLID	WHITE - RIGHT YELLOW - LEFT	50' (15 m) C-C (LESS THAN 30MPH (50 km/h)) 75' (25 m) C-C (30 MPH (50 km/h) TO 45MPH (70 km/h)) 150' (45 m) C-C (OVER 45MPH (70 km/h))

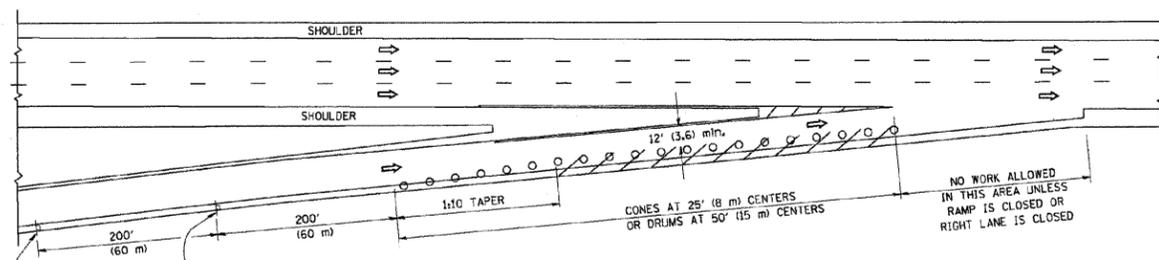
FOR FURTHER DETAILS ON PAVEMENT MARKING REFER TO STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND STATE STANDARD 780001.

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

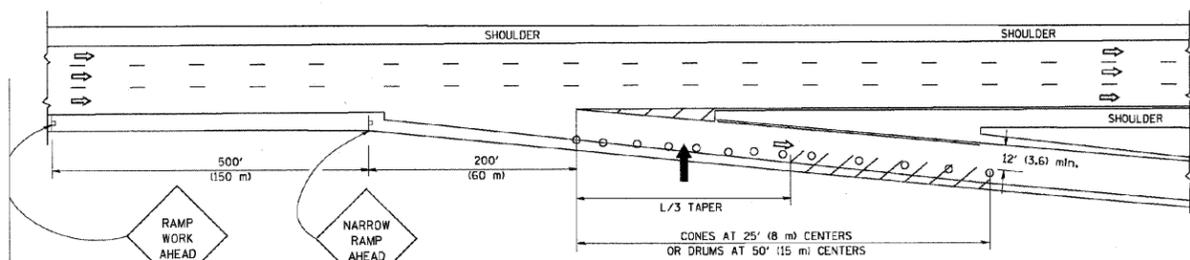
TYPICAL PAVEMENT MARKINGS

FILE NAME = #FILE#	USER NAME = #USER#	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DISTRICT STANDARDS IL-43 (HARLEM AVE.) OVER SANITARY AND SHIP CANAL			F.A.P. R.T.E. 348	SECTION 0708.1 & 2323.5B	COUNTY COOK	TOTAL SHEETS 47	SHEET NO. 44
		DRAWN -	REVISED -		SCALE: NONE	SHEET NO. OF SHEETS STA. TO STA.	TC-13		CONTRACT NO. 60D69			
		CHECKED -	REVISED -				FED. ROAD DIST. NO. ILLINOIS		FED. AID PROJECT			
		DATE -	REVISED -									

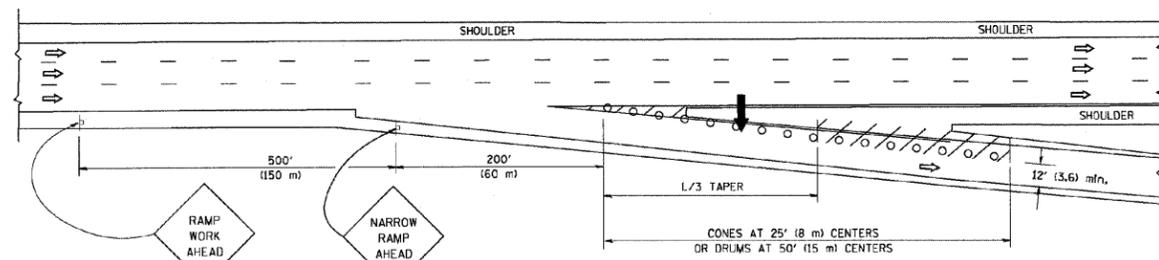
PARTIAL RAMP CLOSURE DETAILS



TYPICAL ENTRANCE RAMP



TYPICAL EXIT RAMP



TYPICAL EXIT RAMP

SYMBOLS

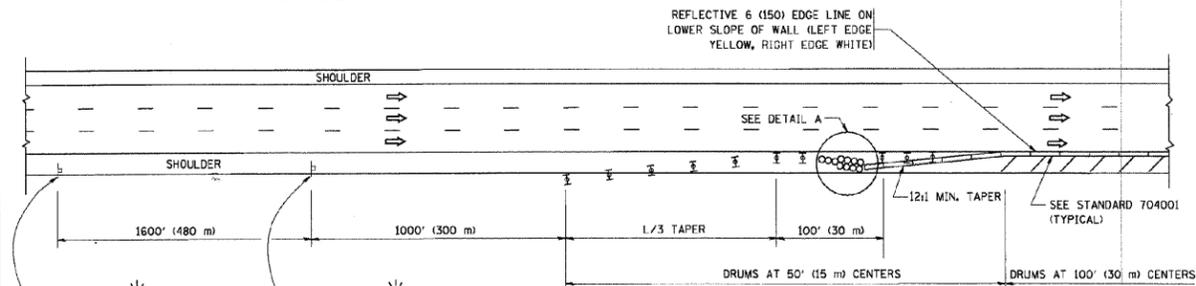
- ➔ ARROWBOARD
- ▨ WORK AREA
- ┆ SIGN ON PORTABLE OR PERMANENT SUPPORT
- FLAGGER WITH CONTROL SIGN
- ⊕ TYPE II BARRICADE, DRUM OR VERTICAL BARRICADE WITH STEADY BURN MONO-DIRECTIONAL LIGHT
- CONE, DRUM OR BARRICADE

GENERAL NOTES

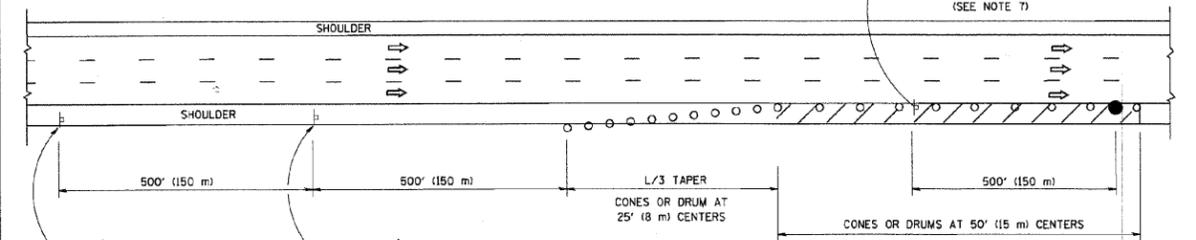
1. THE "L" DISTANCE EQUALS:

SPEED LIMIT	FORMULAS
45 mph (80 km/h) OR GREATER	METRIC: $L=0.65(W/S)$ ENGLISH: $L=(W/S)$
	W = WIDTH OF OFFSET IN FEET (METERS)
	S = NORMAL POSTED SPEED MPH (KM/H)
2. PLASTIC DRUMS WITH HIGH PERFORMANCE REFLECTIVE SHEETING AND STEADY BURNING LIGHTS ARE REQUIRED FOR ALL NIGHTTIME CLOSURES.
3. ALL SIGNS SHALL BE POST MOUNTED IF THE CLOSURE TIME EXCEEDS FOUR DAYS.
4. FLASHING LIGHTS SHALL BE USED DURING THE HOURS OF DARKNESS AND SHALL BE INSTALLED ABOVE THE FIRST TWO SETS OF SIGNS.

SHOULDER CLOSURE DETAILS



PERMANENT SHOULDER CLOSURE



DAYTIME SHOULDER CLOSURE

- THIS DETAIL IS USED WHERE:
1. VEHICLES, EQUIPMENT, WORKERS OR THEIR ACTIVITIES ENCR OACH IN AN AREA CLOSER THAN 15' (4.5 m) TO THE EDGE OF PAVEMENT FOR A PERIOD IN EXCESS OF 15 MINUTES.

ARRAY DESIGN PER MANUFACTURER TO BE NCHRP 350 COMPLIANT FOR POSTED SPEED.

DETAIL "A" IMPACT ATTENUATOR, TEMPORARY (SEE NOTE 5)

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

TRAFFIC CONTROL DETAILS FOR FREEWAY SHOULDER CLOSURES AND PARTIAL RAMP CLOSURES

FILE NAME =	USER NAME = #USER#	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DISTRICT STANDARDS IL-43 (HARLEM AVE.) OVER SANITARY AND SHIP CANAL	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
#FILE#		DRAWN -	REVISED -			348	(0708.1 & 2323.5)B	COOK	47	45	
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	PLOT DATE = #DATE#	DATE -	REVISED -			SCALE: NONE	SHEET NO. OF SHEETS STA. TO STA.	FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT		

ROUTE MARKERS

FOR U.S. ROUTES
M1-40-2424

FOR ILLINOIS ROUTES
M1-50-2424

R.R. UNMARKED ROUTES
SPECIAL 24" x 18" VARIABLE
4" BLACK LETTERS ON WHITE
REFLECTIVE BACKGROUND

ARROWS SIGNS

M5-1L-2115

M5-1R-2115

M6-1-2115

M6-1-9-2115

M6-3-2115

CARDINAL DIRECTION & DETOUR SIGNS

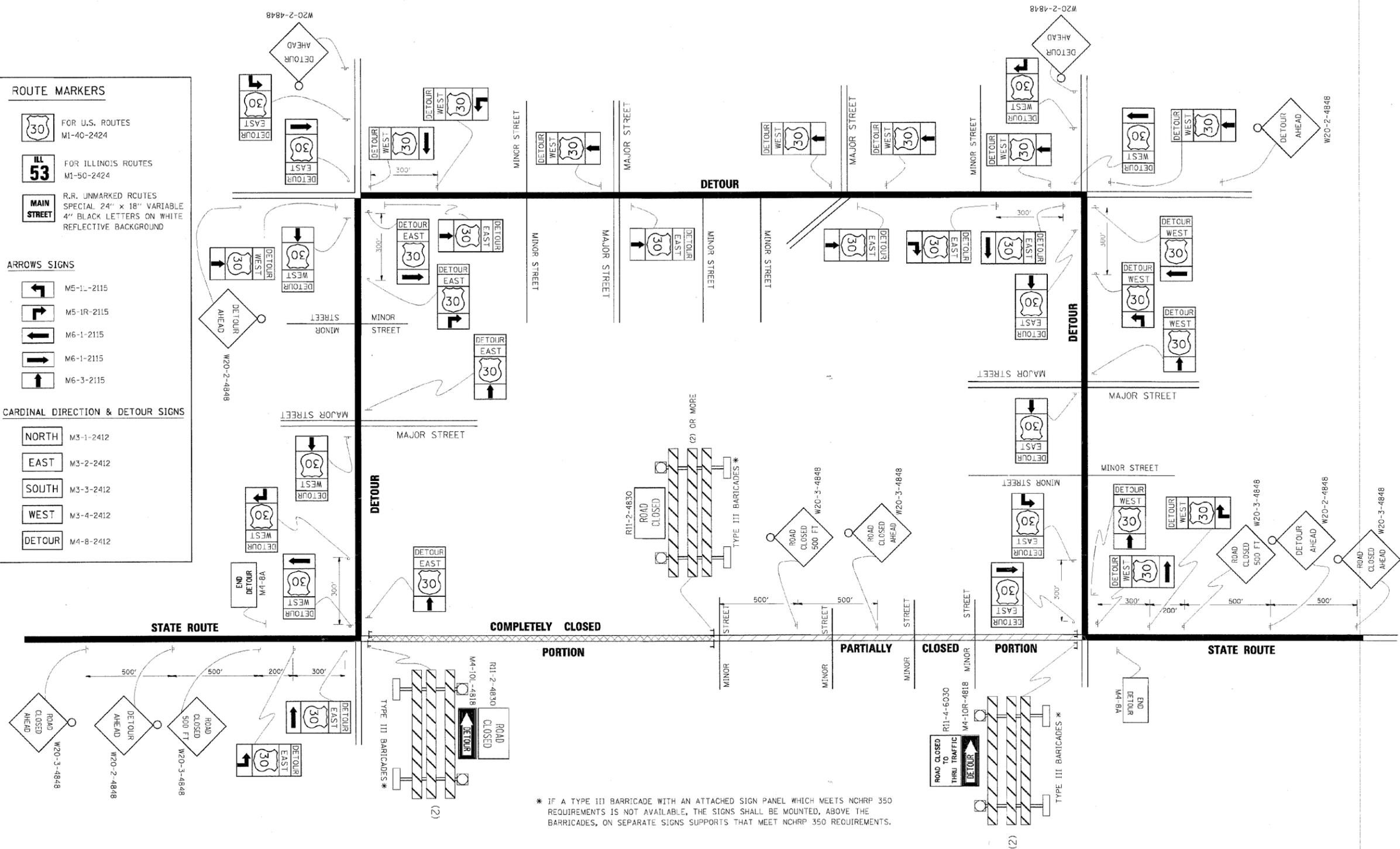
NORTH M3-1-2412

EAST M3-2-2412

SOUTH M3-3-2412

WEST M3-4-2412

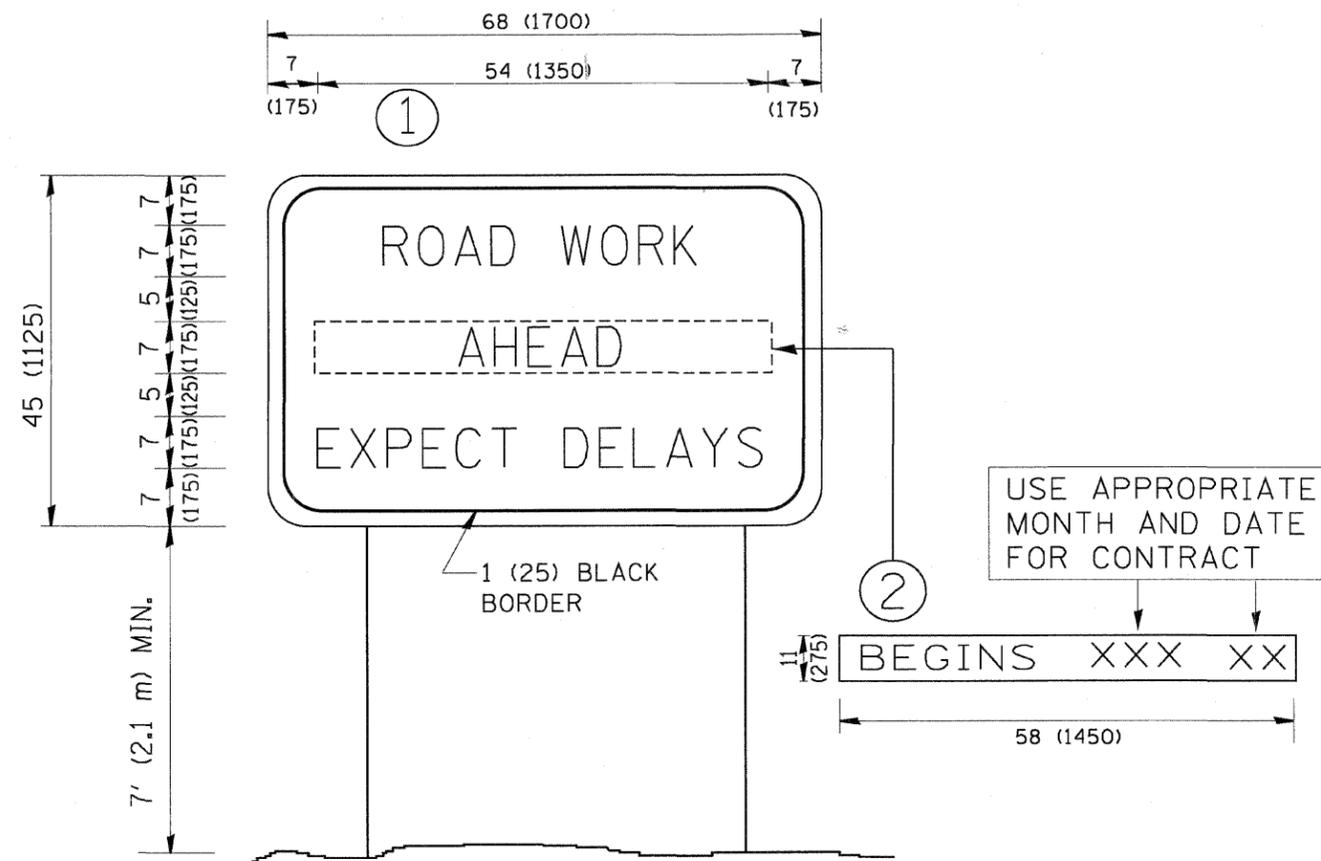
DETOUR M4-8-2412



* IF A TYPE III BARRICADE WITH AN ATTACHED SIGN PANEL WHICH MEETS NCHRP 350 REQUIREMENTS IS NOT AVAILABLE, THE SIGNS SHALL BE MOUNTED, ABOVE THE BARRICADES, ON SEPARATE SIGNS SUPPORTS THAT MEET NCHRP 350 REQUIREMENTS.

DETOUR SIGNING FOR CLOSING STATE HIGHWAYS

FILE NAME =	USER NAME = #USER#	DESIGNED -	REVISED -	<p align="center">STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</p>	<p align="center">DISTRICT STANDARDS IL-43 (HARLEM AVE.) OVER SANITARY AND SHIP CANAL</p>			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
#FILE#		DRAWN -	REVISED -		SCALE: NONE	SHEET NO. OF SHEETS	STA. TO STA.	348	(0708.1 & 2323.5)B	COOK	47	46
		CHECKED -	REVISED -					TC-21		CONTRACT NO. 60D69		
		DATE -	REVISED -					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.

ARTERIAL ROAD INFORMATION SIGN

FILE NAME =	USER NAME = #USER#	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DISTRICT STANDARDS IL-43 (HARLEM AVE.) OVER SANITARY AND SHIP CANAL			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.			
#FILE#		DRAWN -	REVISED -		SCALE: NONE	SHEET NO.	OF	SHEETS	STA.	TO STA.	348	(0708.1 & 2323.5)B	COOK	47	47
		CHECKED -	REVISED -									TC-22	CONTRACT NO. 60D69		
		DATE -	REVISED -									FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT	