

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FAU RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3562	2018-074-BJR	COOK	10	1
		ILLINOIS	CONTRACT NO. 62H17	

D-91-011-19



**PROPOSED
HIGHWAY PLANS**

**FAU ROUTE 3562 /JOLIET ROAD
OVER B&OCT RR (0.5 MILE SOUTH OF IL 171)
SECTION: 2018-074-BJR
BRIDGE REPAIR (SUBSTRUCTURE REPAIRS)
COOK COUNTY**

C-91-210-19

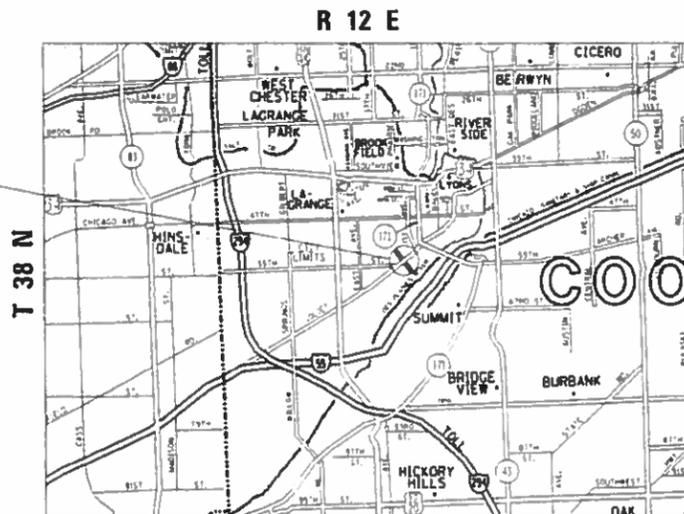
FOR INDEX OF SHEETS, SEE SHEET NO. 2

**IMPROVEMENT LOCATED IN
THE VILLAGE OF MCCOOK**

DESIGN DESIGNATION

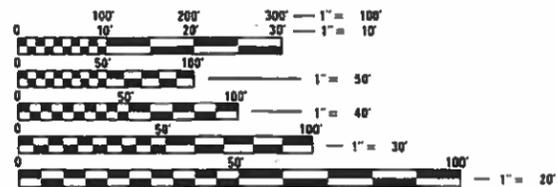
OTHER PRINCIPAL ARTERIAL
ADT 11,800 (2014)
SPEED LIMIT 45 MPH

**IMPROVEMENT LOCATION
FAU 3562 /JOLIET ROAD
OVER B&OCT RR
STRUCTURE NO: 016-0394**



LYONS TOWNSHIP

GROSS AND NET LENGTH = 248.2 FT. = 0.047 MILE



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: ALAIN MIDY (847) 221-3056
PROJECT MANAGER: FAWAD AQUEEL (847) 705-4247

CONTRACT NO. 62H17

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUBMITTED 10-11 2018
AK REGIONAL ENGINEER

Feb 7 2019
[Signature] ENGINEER OF DESIGN AND ENVIRONMENT

Feb 20 2019
[Signature] DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION

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

INDEX OF SHEETS

1. COVER SHEET
2. INDEX OF SHEETS, STATE STANDARDS, GENERAL NOTES AND GENERAL PAINT NOTES
3. SUMMARY OF QUANTITIES
- 4-7. SUBSTRUCTURE REPAIR SHEETS (SN 016-0394)
8. EXISTING BRIDGE FRAMING PLAN
9. EXISTING BEARING DETAILS
10. TRAFFIC CONTROL AND PROTECTION FOR SIDEROADS, INTERSECTIONS AND DRIVEWAYS (TC-10)

STATE STANDARDS

<u>STANDARD NO.</u>	<u>DESCRIPTION</u>
701106-02	OFF-ROAD OPERATIONS, MULTILANE, MORE THAN 15' AWAY
701606-10	URBAN SINGLE LANE CLOSURE, MULTILANE, 2W WITH MOUNTABLE MEDIAN
701901-08	TRAFFIC CONTROL DEVICES

GENERAL NOTES

BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "J.U.L.I.E." (800) 892-0123 OR 811 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE AND GAS UTILITIES. (48 HOUR NOTIFICATION IS REQUIRED).

THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES AND THE VILLAGE OF MCCOOK.

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

THE CONTRACTOR SHALL CONTACT THE DISTRICT ONE TRAFFIC CONTROL SUPERVISOR AT (847) 705-4151 FOR EXPRESSWAYS A MINIMUM OF 72 HOURS IN ADVANCE OF BEGINNING WORK.

THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE ACCESS TO ABUTTING PROPERTY AT ALL TIMES DURING THE CONSTRUCTION OF THIS PROJECT.

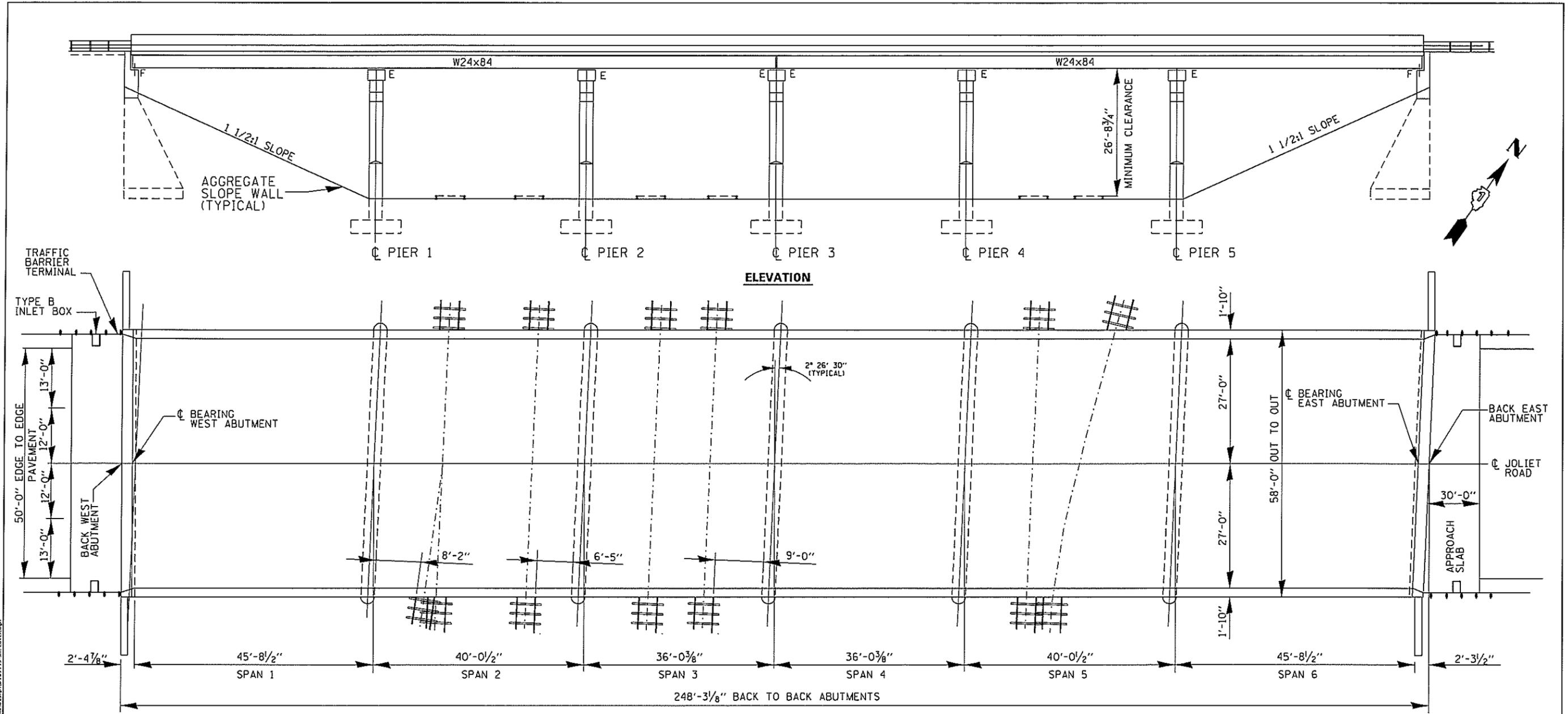
DO NOT SCALE PLANS FOR CONSTRUCTION DIMENSIONS.

THESE PLANS HAVE BEEN PREPARED FROM NOTES RECEIVED FROM THE BUREAU OF MAINTENANCE BRIDGE INSPECTORS.

PLAN DIMENSIONS AND DETAILS RELATIVE TO EXISTING PLANS ARE SUBJECT TO NOMINAL CONSTRUCTION VARIATIONS. THE CONTRACTOR SHALL FIELD VERIFY EXISTING DIMENSIONS AND DETAILS AFFECTING NEW CONSTRUCTION AND MAKE NECESSARY APPROVED ADJUSTMENTS PRIOR TO CONSTRUCTION OR ORDERING OF MATERIALS. SUCH VARIATIONS SHALL NOT BE CAUSE FOR ADDITIONAL COMPENSATION FOR A CHANGE IN SCOPE OF THE WORK, HOWEVER, THE CONTRACTOR WILL BE PAID FOR THE QUANTITY ACTUALLY FURNISHED BASED AT THE UNIT PRICE BID FOR THE WORK.

REV. - MS

FILE NAME =	USER NAME = nullerte	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	JOLIET ROAD OVER B&OCT RR (S OF IL 171) INDEX OF SHEETS, STATE STANDARDS AND GENERAL NOTES	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
pw\11084EBIDINTEG.illinois.gov\PIWIDOT\Documents\IDOT Offices\District 1\Projects\DI0119\DRAND\Design\DI0119-sht-cover.dgn		CHECKED -	REVISED -			3562	2018-074-BJR	COOK	10	2	
Default	PLOT SCALE = 100.0000' / in.	DATE -	REVISED -			CONTRACT NO. 62H17					
	PLOT DATE = 12/18/2018					SCALE:	SHEET	OF	SHEETS	STA.	TO
						ILLINOIS FED. AID PROJECT					



ELEVATION **PLAN**

GENERAL NOTES:
 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 ADJUSTMENT PRIOR TO CONSTRUCTION OR ORDERING OF MATERIALS. SUCH VARIATIONS SHALL NOT BE CAUSE FOR ADDITIONAL COMPENSATION FOR A CHANGE IN SCOPE OF THE WORK, HOWEVER, THE CONTRACTOR WILL BE PAID FOR THE QUANTITY ACTUALLY FURNISHED BASED AT THE UNIT PRICE BID FOR THE WORK.
 NOT TO SCALE PLANS

INTERIOR GIRDER REACTION TABLE				
	W. Abut. & E. Abut.	Pier 1 & Pier 5	Pier 2 & Pier 4	Pier 3 (Sp.#3) & Pier 3 (Sp.#4)
R D.L. (k)	22.1	57.2	46.1	16.9
R L.L. (k)	33.3	39.2	37.9	30.7
Imp. (k)	9.8	11.7	11.4	9.2
R (Total) (k)	65.2	108.1	95.4	56.8



David Carl Perry 1/25/19
 Expires 1/30/20

TOTAL BILL OF MATERIAL		
ITEM	UNIT	QUANTITY
STRUCTURAL REPAIR OF CONCRETE < 5"	SO.FT.	799
STRUCTURAL REPAIR OF CONCRETE > 5"	SO.FT.	120
TEMPORARY SHORING AND CRIBBING	EACH	16

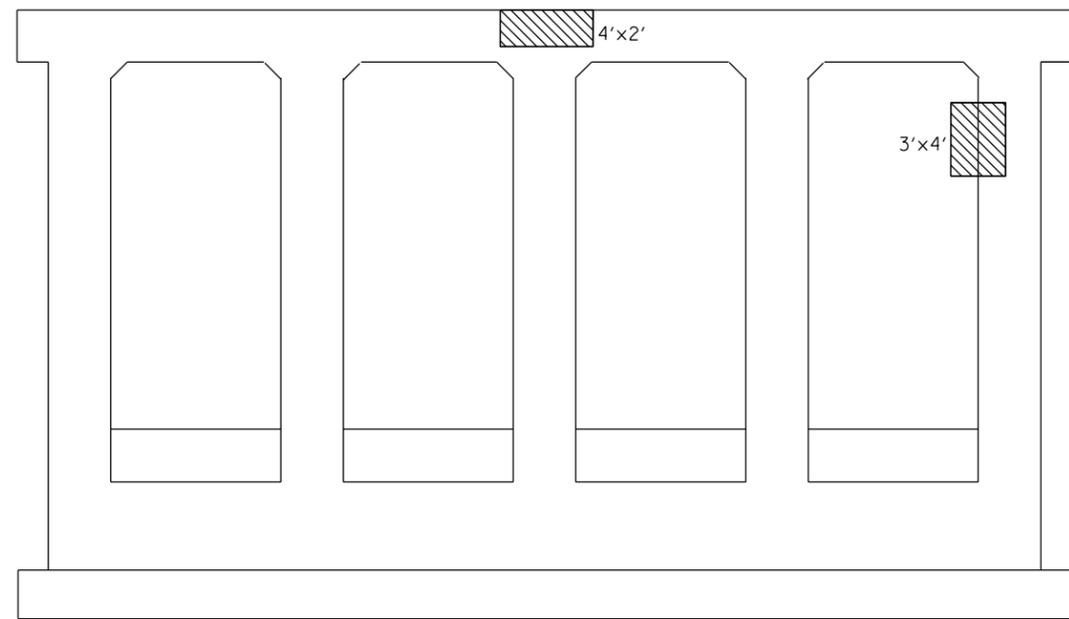
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	DATE -	REVISED -

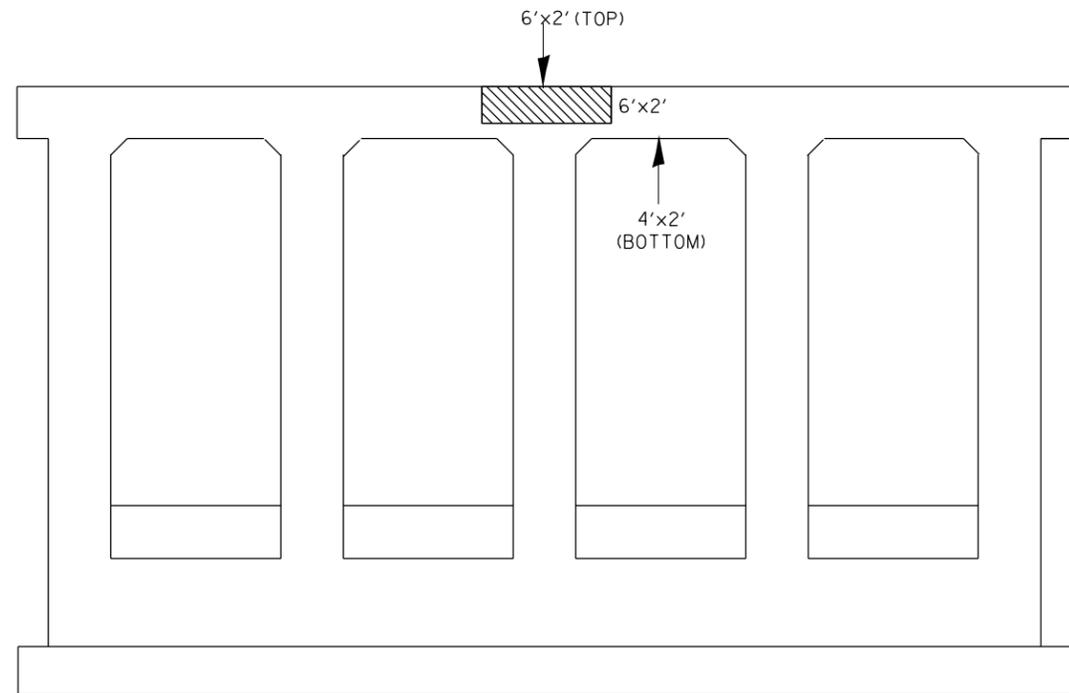
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

JOLIET ROAD OVER B&OCT RR (S OF ILL 171)
 PLAN AND ELEVATION
 S.N. 016-0394

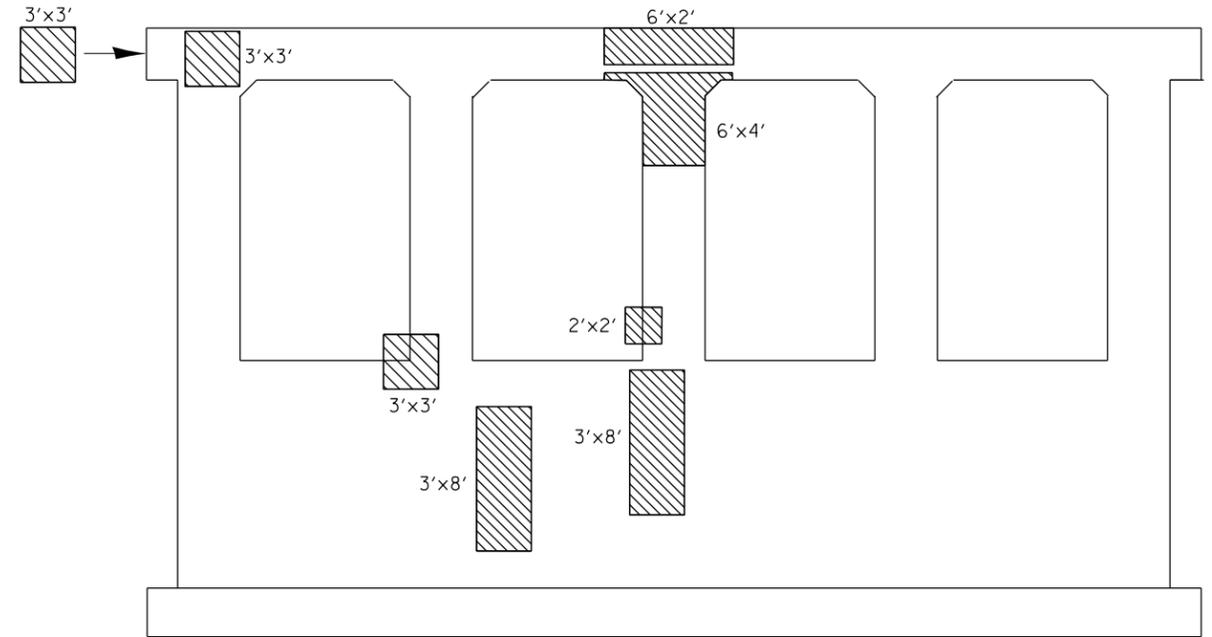
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SCALE: SHEET OF SHEETS STA. TO STA.			CONTRACT NO. 62H17	
ILLINOIS FED. AID PROJECT				



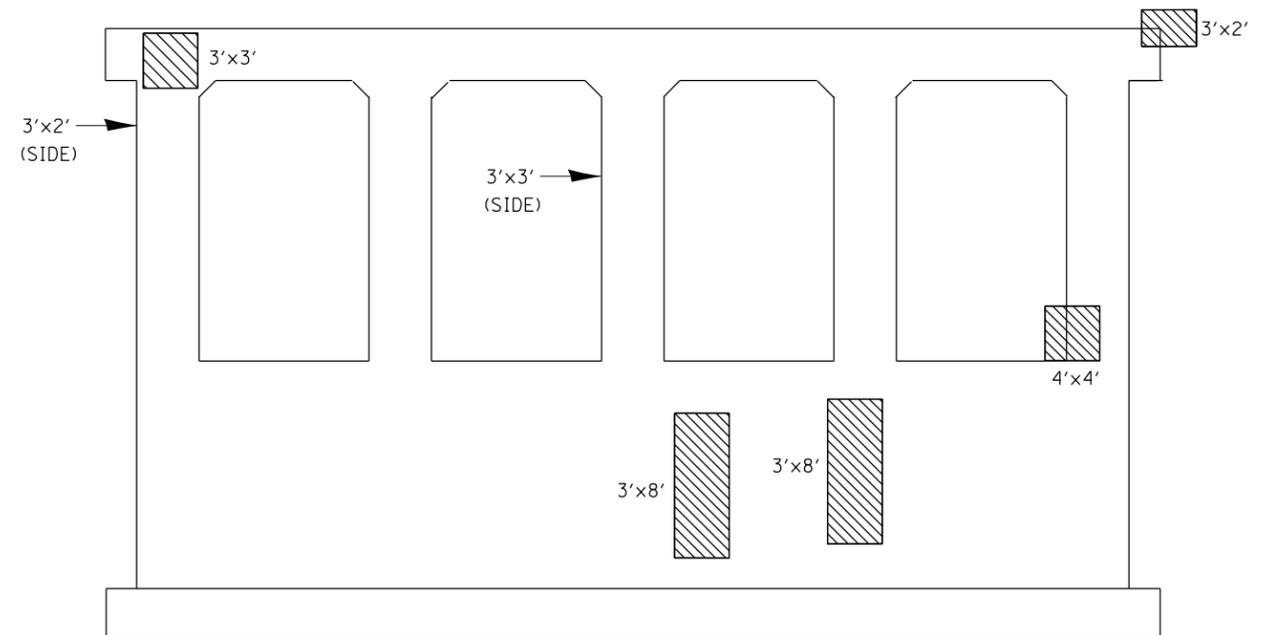
**PIER 1
LOOKING WEST**



**PIER 1
LOOKING EAST**



**PIER 2
LOOKING WEST**



**PIER 2
LOOKING EAST**

LEGEND:



STRUCTURAL REPAIR OF CONCRETE \leq 5"

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
STRUCTURAL REPAIR OF CONCRETE \leq 5"	SQ.FT.	261

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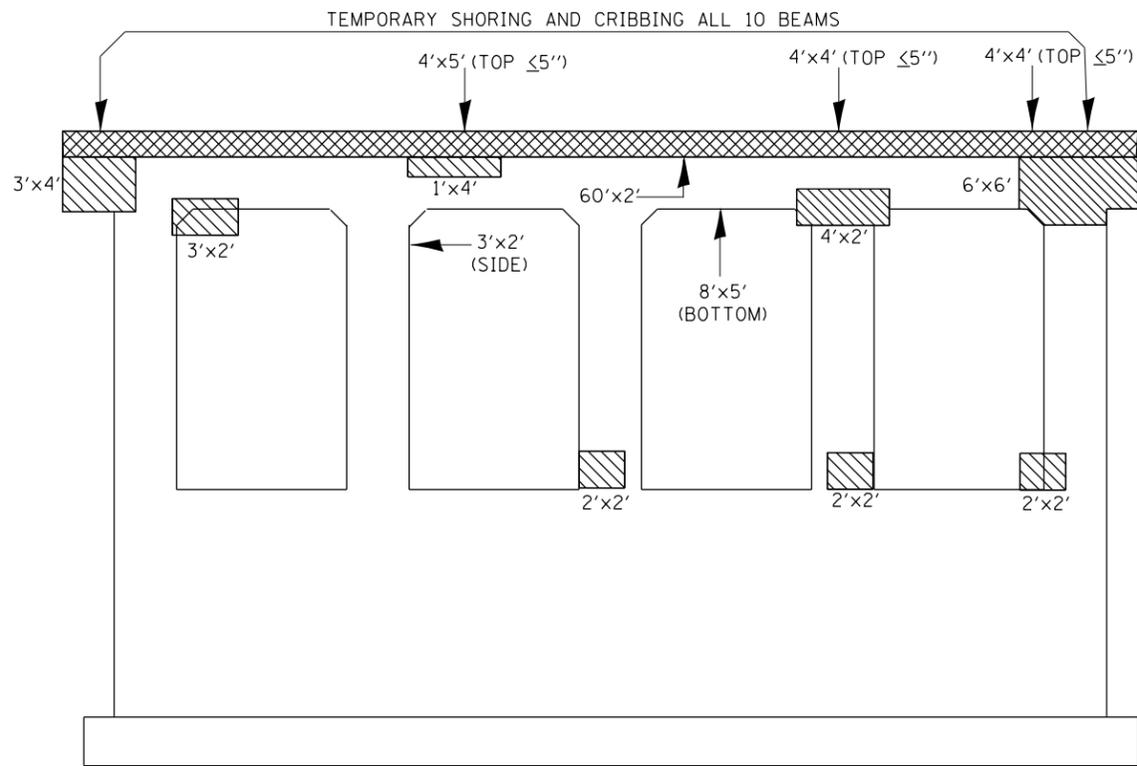
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PLOT DATE = 12/31/2018	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

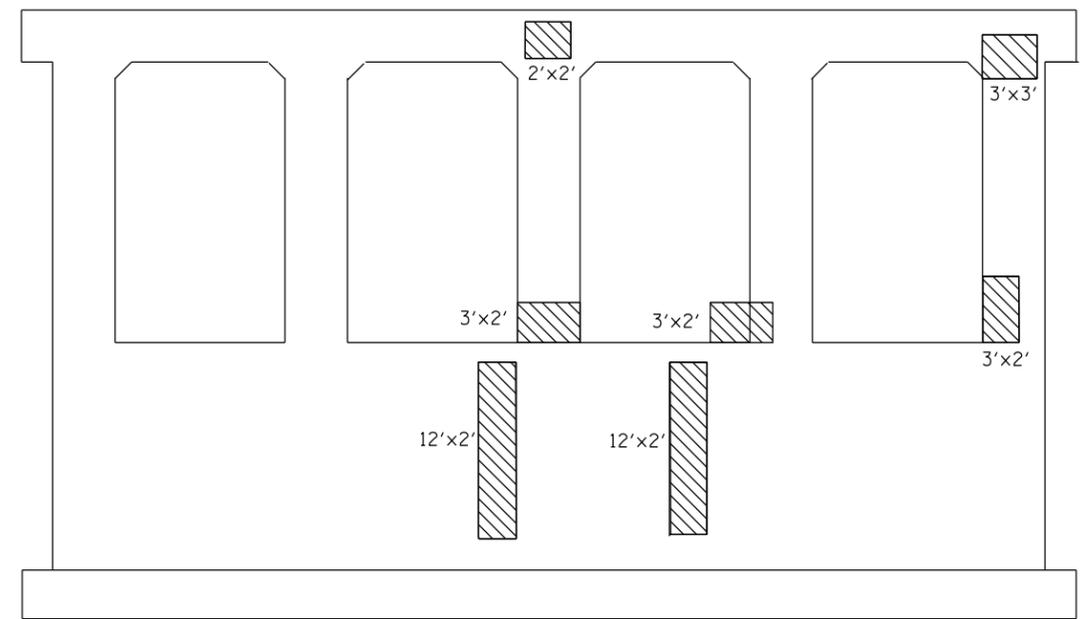
**JOLIET ROAD OVER B&OCT RR (S OF ILL 171)
PLAN AND ELEVATION
S.N. 016-0394**

SCALE: SHEET OF SHEETS STA. TO STA.

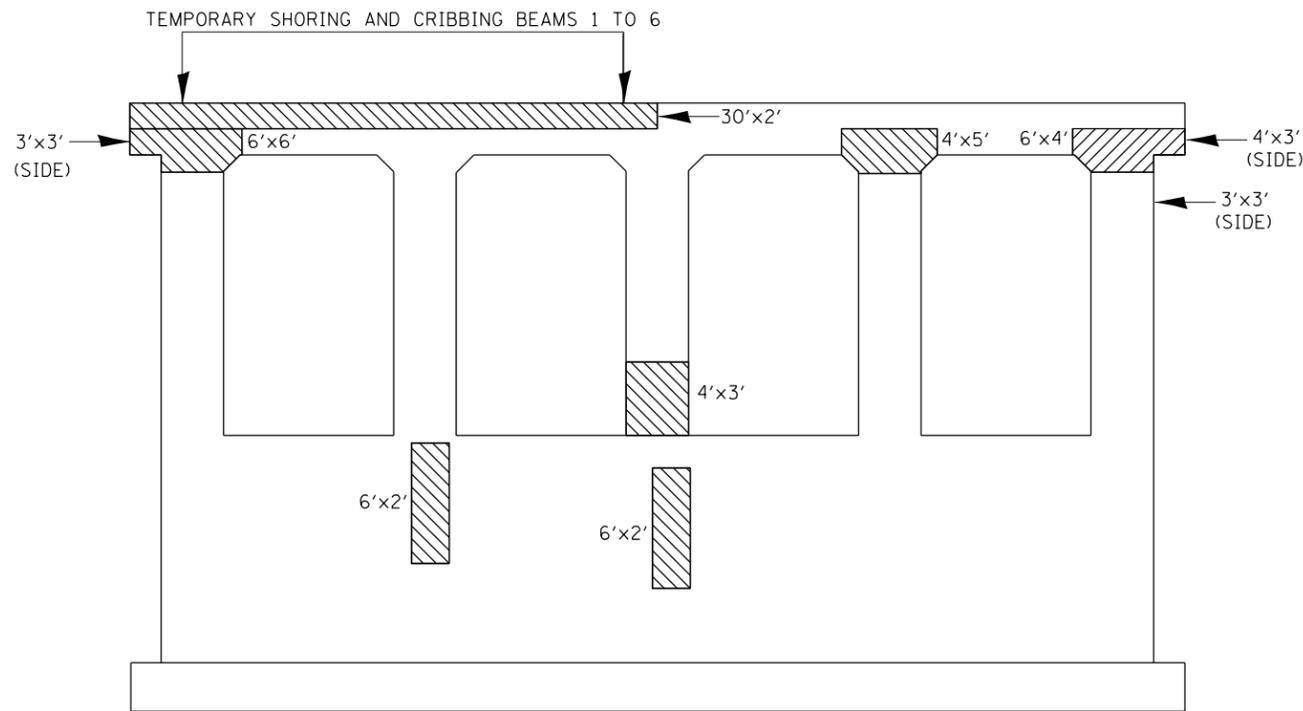
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3562	2018-074-BJR	COOK	10	5
CONTRACT NO. 62H17				
ILLINOIS FED. AID PROJECT				



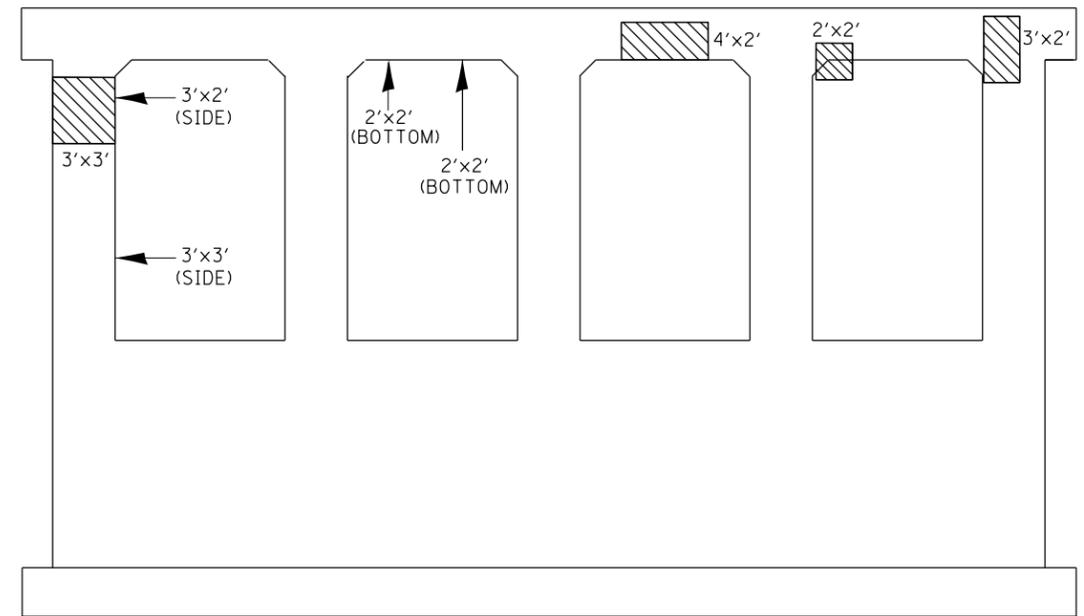
**PIER 3
LOOKING WEST**



**PIER 4
LOOKING WEST**



**PIER 3
LOOKING EAST**



**PIER 4
LOOKING EAST**

LEGEND:



STRUCTURAL REPAIR OF CONCRETE \leq 5"



STRUCTURAL REPAIR OF CONCRETE $>$ 5"

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
STRUCTURAL REPAIR OF CONCRETE \leq 5"	SQ.FT.	511
STRUCTURAL REPAIR OF CONCRETE $>$ 5"	SQ.FT.	120
TEMPORARY SHORING AND CRIBBING	EACH	16

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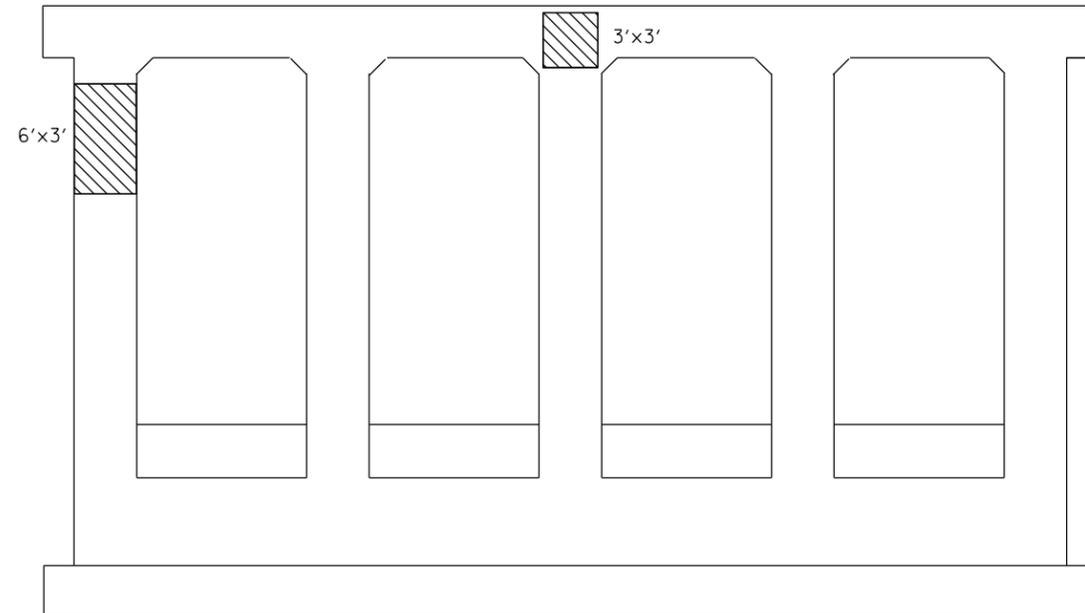
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PLOT DATE = 12/31/2018	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**JOLIET ROAD OVER B&OCT RR (S OF ILL 171)
PLAN AND ELEVATION
S.N. 016-0394**

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.U. RTE. 3562	SECTION 2018-074-BJR	COUNTY COOK	TOTAL SHEETS 10	SHEET NO. 6
CONTRACT NO. 62H17				
ILLINOIS FED. AID PROJECT				



**PIER 5
LOOKING WEST**

LEGEND:



STRUCTURAL REPAIR OF CONCRETE \leq 5"

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
STRUCTURAL REPAIR OF CONCRETE \leq 5"	SQ.FT.	27

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PLOT DATE = 12/31/2018	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**JOLIET ROAD OVER B&OCT RR (S OF ILL 171)
PLAN AND ELEVATION
S.N. 016-0394**

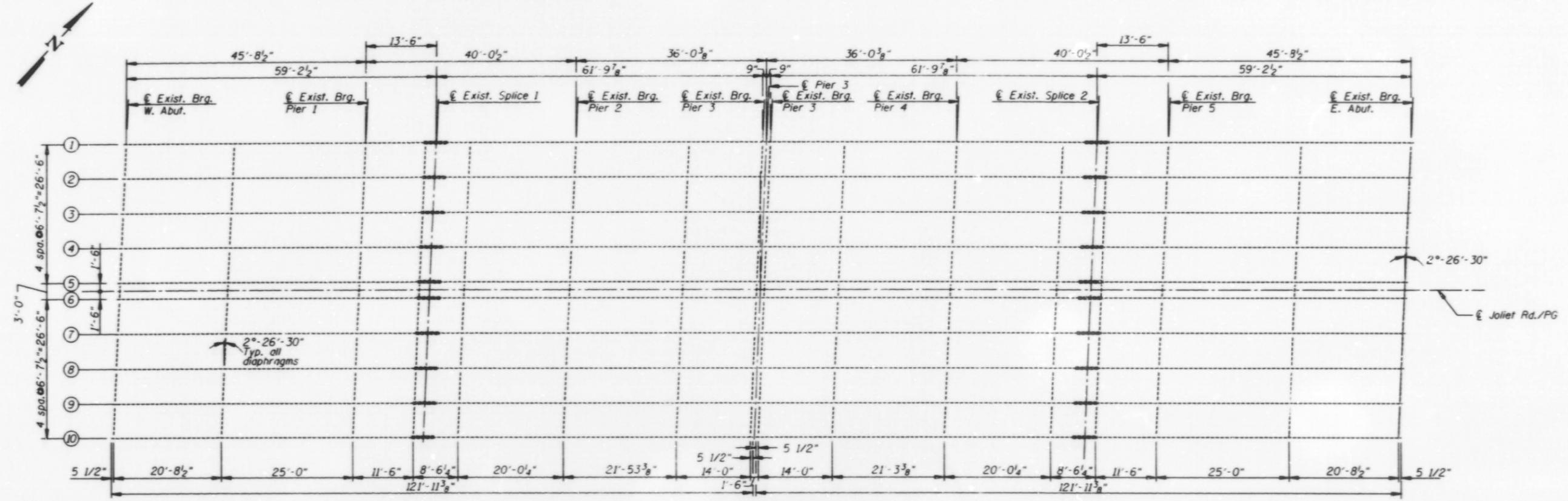
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F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3562	2018-074-BJR	COOK	10	7
ILLINOIS FED. AID PROJECT			CONTRACT NO. 62H17	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DATE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3562	430-VB-R	COOK	52	37
F.A.U. ROUTE 3562		ILLINOIS FED. AID PROJECT		

SHEET NO. 5-11
OF
5-23 SHEETS



FOR INFORMATION ONLY

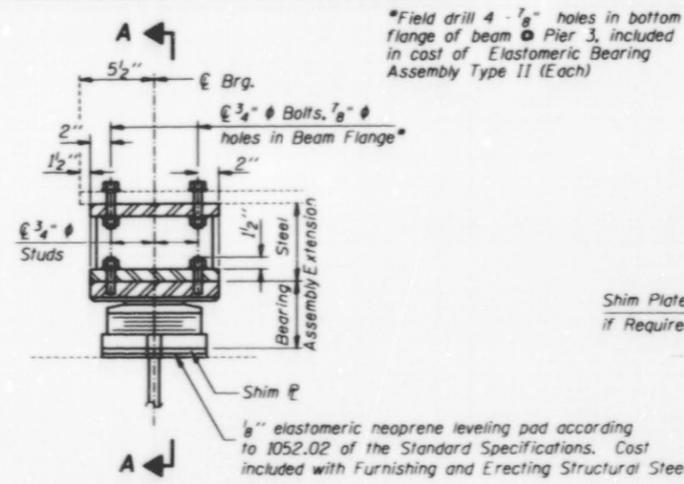
EXISTING FRAMING PLAN
JOLIET ROAD OVER B & O AND IHS RR
F.A.U. ROUTE 3562 SECTION 430-VB-R
COOK COUNTY
STA. 21+00.00
STRUCTURE NO. 016-0394

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	PLOT DATE = 12/18/2018	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

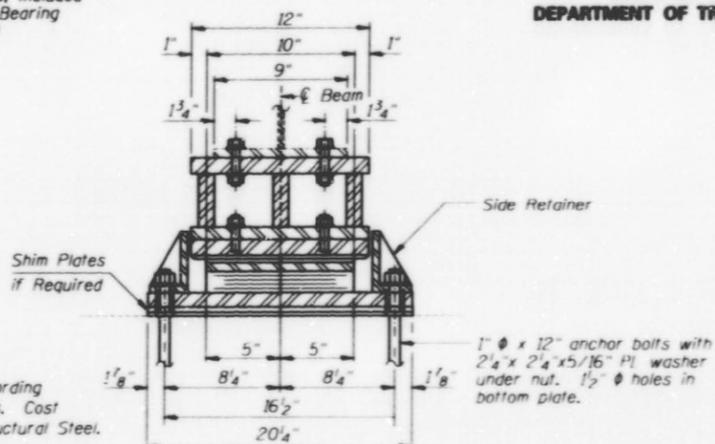
JOLIET ROAD OVER B&OCT RR (S OF IL 171)
EXISTING BRIDGE FRAMING PLAN
SCALE: SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3562	2018-074-BJR	COOK	10	8
ILLINOIS FED. AID PROJECT			CONTRACT NO. 62H17	

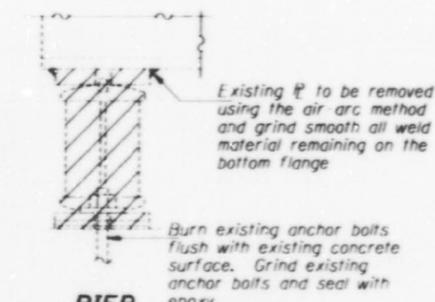


SECTION AT PIER 3

TYPE II ELASTOMERIC EXP. BRG.



SECTION A-A

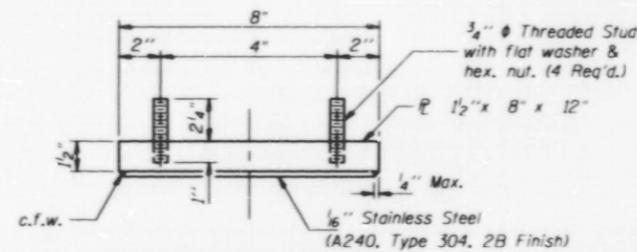


EXISTING BEARING REMOVAL

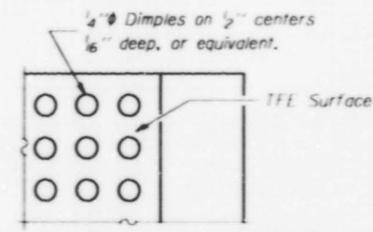
Note:
Hatch area indicates existing bearing to be removed.
See Sheet S 21 for anchor bolt installation.

JACK AND REMOVE EXISTING BEARING PROCEDURE

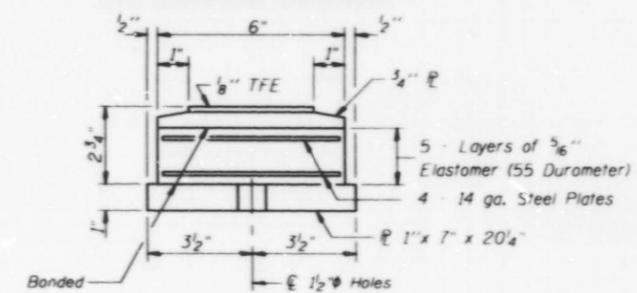
1. The Contractor shall submit plans for jacking and removing bearings to the Engineer for approval prior to commencing replacement of abutment sections and work at the bearings. See Special Provisions. The cost of removal of the existing bearings shall be included with the cost of Jack and Remove Existing Bearings.
2. Jacking and removing shall be done after the existing deck is removed and before the new deck is poured.
3. The beams shall be supported by cribbing prior to removal of existing bearings.
4. The maximum dead load reaction with the deck removed (per bearing) at the pier is 1.5 tons. Minimum jack capacity is 3 tons.
5. The bottom flange area of the existing beam shall be cleaned as specified by the Special Provisions "Cleaning and Painting Adjacent Areas of Existing Steel Structures".
6. The new bearings shall be in place and the jacks shall be lowered before the new concrete deck is poured.
7. In the field, verify the top of concrete elevations before fabrication of the steel extensions.



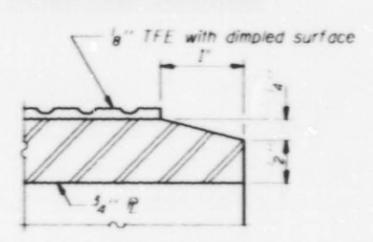
TOP BEARING ASSEMBLY



PLAN-TFE SURFACE

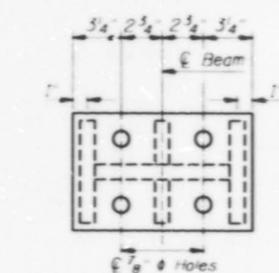


BOTTOM BEARING ASSEMBLY



SECTION THRU TFE

FOR INFORMATION ONLY



PLAN STEEL EXTENSION

BILL OF MATERIAL

Item	Unit	Total
Elastomeric Bearing Assembly Type II	Each	20
Jacking & Removing Existing Bearings	Each	20

BEARING DETAILS

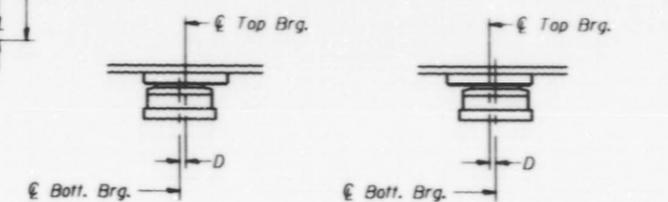
JOLIET ROAD OVER B & O AND IHB RR
F.A.U. ROUTE 3562 SECTION 430-VB-R
COOK COUNTY
STA. 21+00.00

STRUCTURE NO. 016-0394

Harding ESE
A WACTEC COMPANY
DESIGNED: PLEE
CHECKED: JKING
DRAWN: DCERDA

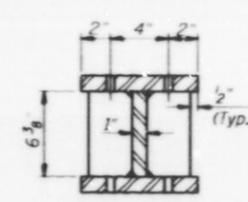
Note: The 1/8" TFE sheet shall be bonded directly to the top steel plate with a two component, medium viscosity epoxy resin, conforming to the requirements of the Federal Specification MMM A 134, Type I. The bond agent shall be applied on the full area of the contact surfaces.

Bonding of 1/8" TFE sheet during vulcanizing process will be permitted provided the process and method of adjusting assembly height is approved by the Engineer.

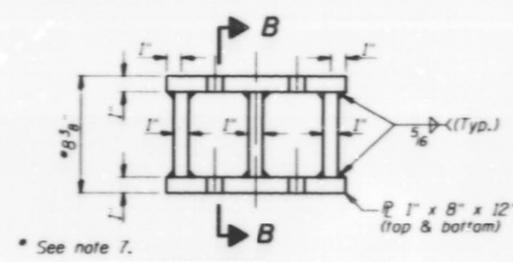


SETTING ANCHOR BOLTS AT EXP. BRG.

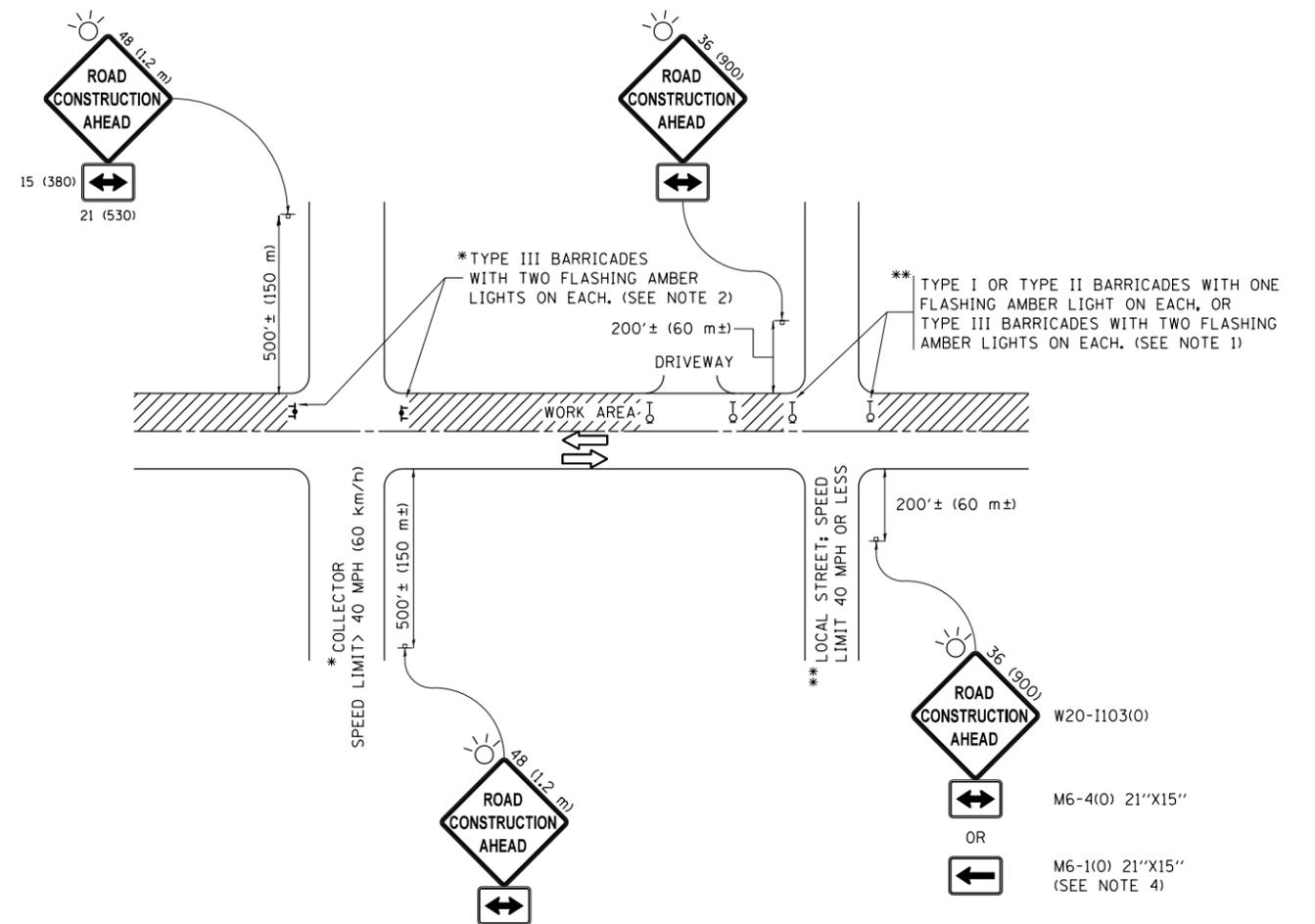
D = 1/8" per each 100' of expansion for every 15° temp. change from the normal temp. of 50°F.



SECTION B-B



ELEVATION STEEL EXTENSION
(20 Required)



NOTES:

1. SIDE ROAD WITH A SPEED LIMIT OF 40 MPH (60 km/h) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
 - a) ONE "ROAD CONSTRUCTION AHEAD" SIGN 36 x 36 (900x900) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 200' (60 m) IN ADVANCE OF THE MAIN ROUTE.
 - b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE I, TYPE II OR TYPE III BARRICADES, 1/3 OF THE CROSS SECTION OF THE CLOSED PORTION.
2. SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
 - a) ONE "ROAD CONSTRUCTION AHEAD" SIGN 48 x 48 (1.2 m x 1.2 m) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 500' (150 m) IN ADVANCE OF THE MAIN ROUTE.
 - b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION OF THE CLOSED PORTION.
3. CONES MAY BE SUBSTITUTED FOR BARRICADES OR DRUMS AT HALF THE SPACING DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28 (710) IN HEIGHT.
4. WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (M6-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (M6-4).
5. WHEN WORK IS BEING PERFORMED ON A SIDE ROAD OR DRIVEWAY, FOLLOW THE APPLICABLE STANDARD(S). THE DIRECTIONAL ARROW (M6-1 OR M6-4) SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE TRAFFIC CONTROL SET-UP.
6. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAYS UNLESS OTHERWISE SPECIFIED IN THE PLANS OR BY THE ENGINEER.
7. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCLUDED IN THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

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

FILE NAME =	USER NAME = mullerto	DESIGNED - L.H.A.	REVISED - A. HOUSEH 10-15-96
pw\11084EBIDINTEG.illinois.gov\PIWIDOT\Documents\IDOT Offices\District 1\Projects\DI0119\RAMM\Design\DI01119-sht-cover.dgn			REVISED - T. RAMMACHER 01-06-00
Default	PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED - A. SCHUETZE 07-01-13
	PLOT DATE = 12/18/2018	DATE - 06-89	REVISED - A. SCHUETZE 09-15-16

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

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

SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3562	2018-074-BJR	COOK	10	10
TC-10			CONTRACT NO. 62H17	
ILLINOIS FED. AID PROJECT				