

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	(263-1212.1-15D) BP 24	ILLINOIS	21	1
			CONTRACT NO. 62X21	
			* COOK, LAKE	

FOR INDEX OF SHEETS, SEE SHEET NO. 2

THIS IMPROVEMENT IS IN THE CITY OF HIGHLAND PARK AND THE VILLAGES OF NORTHFIELD AND SKOKIE

LOCATION #1:
IL-58 (DEMPSTER ST) OVER I-94 (EDENS EXPWY)
SN: 016-0943.

LOCATION #2:
CLAVEY RD OVER US-41 (EDENS)
SN: 049-0165.

LOCATION #3:
TOWER RD OVER I-94/US-41 (EDENS)
SN: 016-0815.

2023 ADT
I-58 = 130,000
I-94 AT CLAVEY RD. = 61,600
I-94 AT TOWER RD. = 104,400

POSTED SPEED LIMITS
I-58 = 55 MPH
I-94 AT CLAVEY RD. = 55 MPH
I-94 AT TOWER RD. = 55 MPH

PROPOSED HIGHWAY PLANS

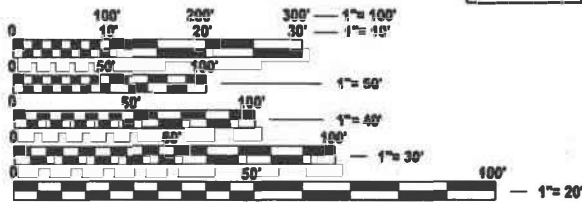
ROUTES: VARIOUS
SECTION : (263-1212.1-15D) BP 24
BRIDGE PAINTING
COOK & LAKE COUNTY

C-91-006-25

LOCATION #2:
CLAVEY RD OVER US-41
SN: 049-0165.
CITY OF HIGHLAND PARK

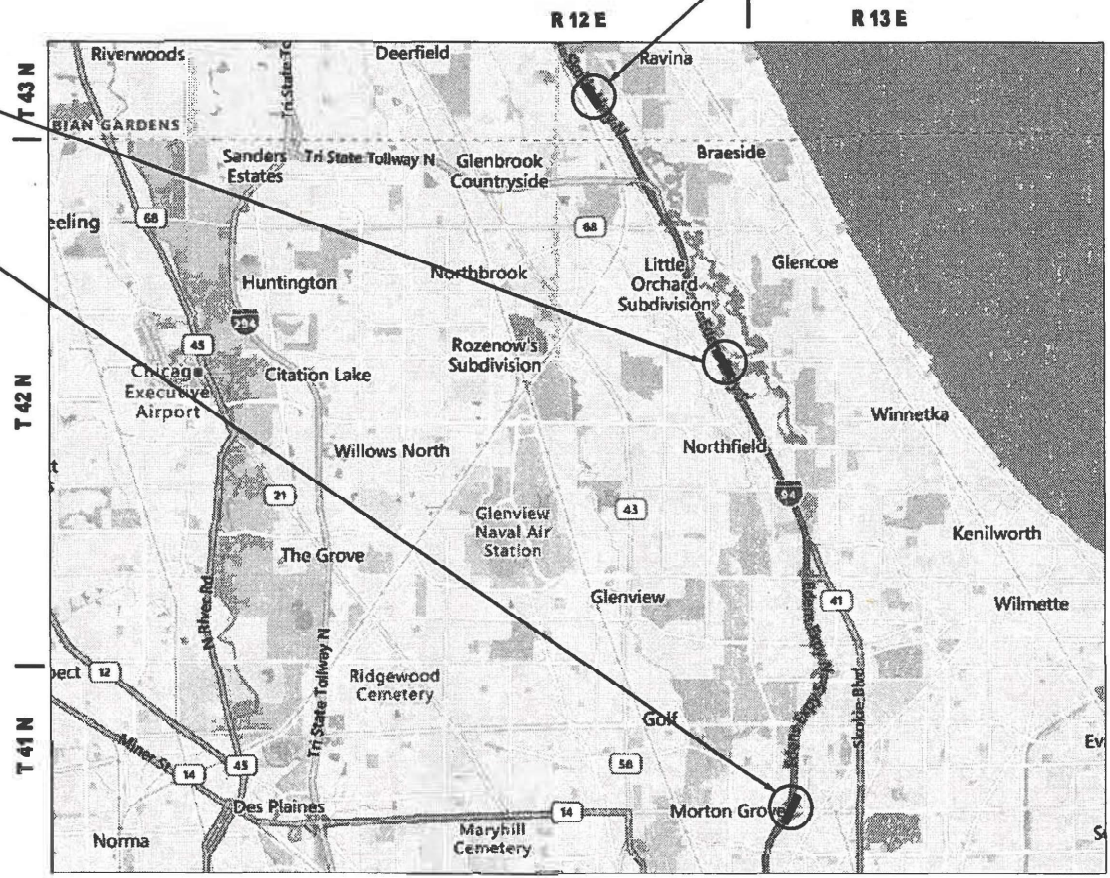
LOCATION #3:
TOWER RD OVER I-94/US-41 (EDENS)
SN: 016-0815.
VILLAGE OF NORTHFIELD

LOCATION #1:
IL-58 (DEMPSTER ST) OVER I-94 (EDENS EXPWY)
SN: 016-0943.
VILLAGE OF SKOKIE



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



MORaine, NILES, AND NORTHFIELD TOWNSHIPS

PROJECT ENGINEER: RODRIGO LEDEZMA (847) 705-4580
PROJECT MANAGER: J. ALAIN MIDY (847) 221-3056

CONTRACT NO. 62X21



LOCATION OF SECTION INDICATED THUS: [Symbol]

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUBMITTED December 6, 2024

REGIONAL ENGINEER

January 31, 2025

ENGINEER OF DESIGN AND ENVIRONMENT

January 31, 2025

DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION

PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS

INDEX OF SHEETS

SHEET NO. DESCRIPTION

1	COVER SHEET
2	INDEX OF SHEETS, STATE STANDARDS AND GENERAL NOTES
3	SUMMARY OF QUANTITIES
4-7	EXISTING BRIDGE PLANS (SN 016-0943)
8-11	EXISTING BRIDGE PLANS (SN 049-0165)
12-17	EXISTING BRIDGE PLANS (SN 016-0815)
18	ENTRANCE AND EXIT RAMP CLOSURE DETAILS (TC-08)
19	TRAFFIC CONTROL DETAILS FOR FREEWAY SINGLE & MULTI-LANE WEAVE (TC-09)
20	TRAFFIC CONTROL DETAILS FOR FREEWAY SHOULDER CLOSURES AND PARTIAL RAMP CLOSURES (TC-17)
21	ARTERIAL ROAD INFORMATION SIGN (TC-22)

STATE STANDARDS

STANDARD NO. DESCRIPTION

000001-08	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
001006	DECIMAL OF AN INCH AND OF A FOOT
701101-05	OFF-ROAD OPERATIONS, MULTILANE, IS' TO 24" FROM PAVEMENT EDGE
701106-02	OFF-ROAD OPERATIONS, MULTILANE, MORE THAN 15' (4.5 M) AWAY APPROACH
701400-12	TO LANE CLOSURE FREEWAY/EXPRESSWAY
701401-13	LANE CLOSURE FREEWAY/EXPRESSWAY
701411-09	LANE CLOSURE, MULTILANE AT ENTRANCE OR EXIT RAMP FOR SPEEDS ≥ 45 MPH
701422-10	LANE CLOSURE MULTILANE, FOR SPEEDS ≥ 45 MPH TO 55 MPH
701428-01	TRAFFIC CONTROL SETUP AND REMOVAL FREEWAY/EXPRESSWAY
701446-11	TWO LANE CLOSURE FREEWAY/EXPRESSWAY
701451-05	RAMP CLOSURE FREEWAY/EXPRESSWAY
701801-06	SIDEWALK, CORNER OR CROSSWALK CLOSURE
701901-10	TRAFFIC CONTROL DEVICES

GENERAL NOTES

- BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "J.U.L.I.E." AT (800) 892-0123 OR 811 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE AND GAS UTILITIES. 48 HOUR NOTIFICATION IS REQUIRED.
- THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES AND THE CITY OF HIGHLAND, AND THE VILLAGES OF SKOKIE AND NORTHFIELD TO OBTAIN ALL NECESSARY PERMITS.
- THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT WRITTEN PERMISSION FROM THE DEPARTMENT.
- THESE PLANS HAVE BEEN PREPARED FROM NOTES RECEIVED FROM THE BUREAU OF MAINTENANCE BRIDGE INSPECTORS.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROTECT AND MAINTAIN THE EXISTING BRIDGE LIGHTING AT ANY LOCATIONS THAT LIGHTING IS ENCOUNTERED ADJACENT TO AN AREA TO BE CLEANED AND PAINTED.
- THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE ACCESS TO ABUTTING PROPERTY AT ALL TIMES DURING THE CONSTRUCTION OF THIS PROJECT.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO CONSTRUCTION AND ORDERING OF MATERIALS.
- WHEN ARTIFICIAL LIGHTING IS UTILIZED IN NIGHTTIME OPERATIONS, THE CONTRACTOR SHALL EXERCISE THE UTMOST PRECAUTIONS PREVENTING ADVERSE VISIBILITY TO THE MOTORING PUBLIC AND ADJACENT RESIDENTIAL AREAS.
- THE CONTRACTOR SHALL TAKE NECESSARY PRECAUTIONS WHEN WORKING NEAR THE ABUTMENTS IF ELECTRICAL JUNCTIONS BOXES AND ATTACHED CONDUITS ARE PRESENT.
- THE "ARTERIAL ROAD INFORMATION SIGN (TC-22)" IS APPLICABLE ONLY TO ARTERIAL ROADS AND SHALL NOT BE APPLIED TO EXPRESSWAYS/TOLLWAYS.
- THE CONTRACTOR SHALL CONTACT THE IDOT EXPRESSWAY TRAFFIC CONTROL SUPERVISOR DISTRICT ONE CARLOS AT CARLOS.MUNOZ@ILLINOIS.GOV A MINIMUM OF 72 HOURS IN ADVANCE OF THE BEGINNING OF WORK.
- THE CONTRACTOR SHALL REQUEST AND GAIN APPROVAL FROM THE ILLINOIS DEPARTMENT OF TRANSPORTATION'S EXPRESSWAY TRAFFIC OPERATIONS ENGINEER AT WWW.IDOTLCS.COM TWENTY-FOUR (24) HOURS IN ADVANCE OF ALL DAILY LANE, RAMP, AND SHOULDER CLOSURES AND SEVEN DAYS IN ADVANCE OF ALL PERMANENT AND WEEKEND CLOSURES ON ALL FREEWAYS AND/OR EXPRESSWAYS IN DISTRICT ONE. THIS ADVANCE NOTIFICATION IS CALCULATED BASED ON THE WORKWEEK OF MONDAY THROUGH FRIDAY AND SHALL NOT INCLUDE WEEKENDS OR HOLIDAYS.

GENERAL PAINT NOTES

- CLEANING AND PAINTING OF THE EXISTING STRUCTURAL STEEL SHALL BE AS SPECIFIED IN THE SPECIAL PROVISION FOR "CLEANING AND PAINTING EXISTING STEEL STRUCTURES".
- ALL ITEMS (SUCH AS, BUT NOT LIMITED TO: CONDUITS, BRACKETS AND DECK DRAINS) ATTACHED TO OUTSIDE OF THE FASCIA BEAMS SHOULD BE CLEANED AND PAINTED.
- LOCATION 1,2 & 3 (SN 016-0943, 049-0165 & SN 016-815): ALL GIRDERS, BEAMS, BEARINGS AND OTHER STRUCTURAL STEEL, SHALL BE CLEANED PER NEAR WHITE BLAST CLEANING SSPC-SP10.
- ALL AREAS THAT ARE DESIGNATED TO BE CLEANED SHALL BE PAINTED ACCORDING TO THE REQUIREMENTS OF PAINT SYSTEM 1 -0Z/E/U. THE COLOR OF THE FINAL FINISH COAT FOR ALL INTERIOR STEEL SURFACES SHALL BE GRAY, MUNSELL NO 5B 7/1. THE COLOR OF THE FINAL FINISH COAT FOR THE EXTERIOR AND BOTTOM FLANGE OF THE FASCIA BEAMS SHALL BE REDDISH BROWN, MUNSELL NO 2. 5YR 3/4.
- A MINIMUM OF 2 AIR MONITORS AT EVERY LOCATION WILL BE REQUIRED TO MONITOR ABRASIVE BLASTING OPERATIONS. SEE SPECAIL PROVISIONS FOR "CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUE".
- SSPC QP1 AND SSPC QP2 CERTIFICATION IS REQUIRED FOR THIS CONTRACT.

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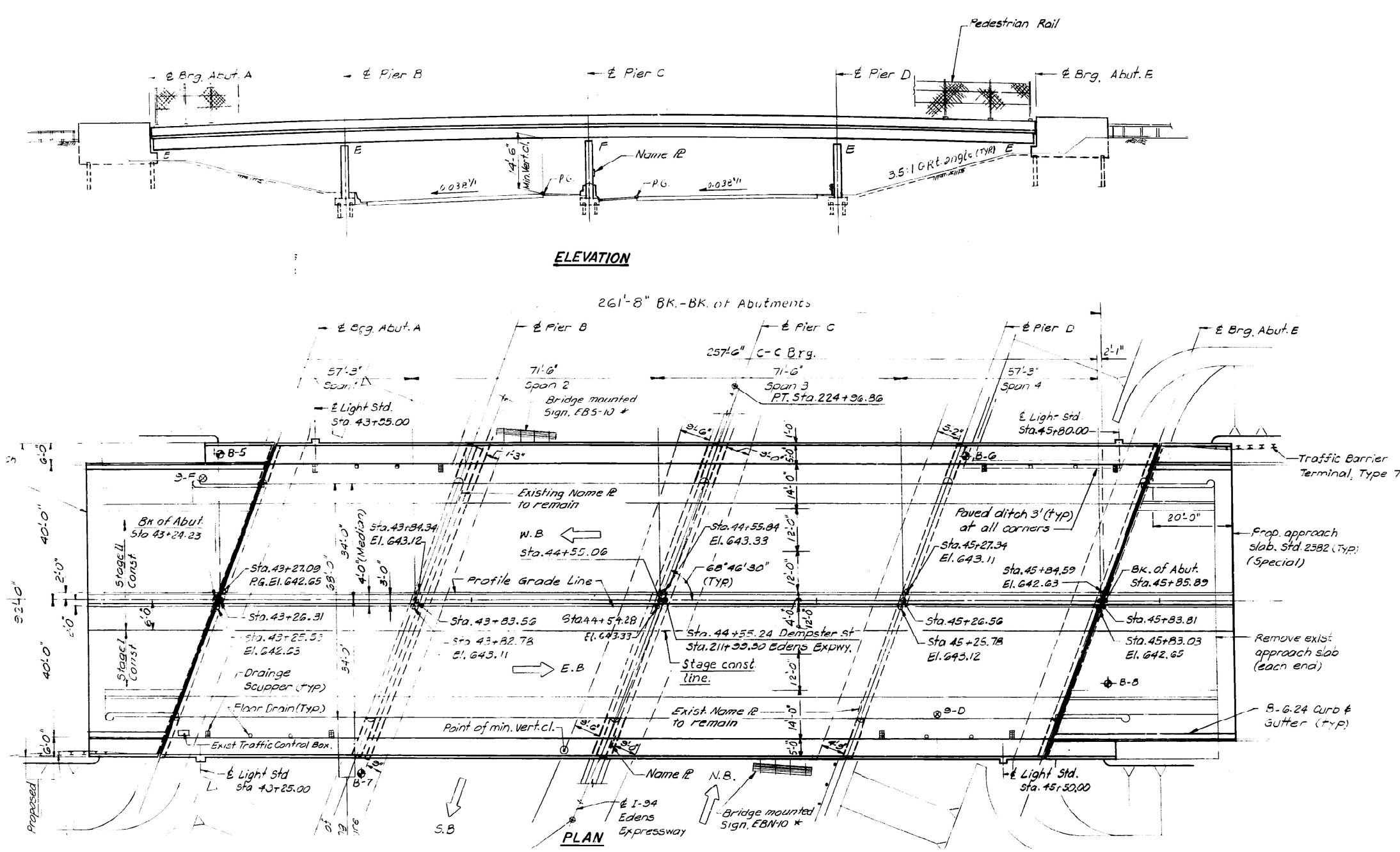
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**INDEX OF SHEETS, STATE STANDARDS, AND GENERAL NOTES
AT VARIOUS LOCATIONS**

SCALE: SHEET 1 OF 1 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	(263-1212.1-15D) BP 24	*	21	2
			CONTRACT NO. 62X21	
ILLINOIS FED. AID PROJECT				



FOR INFORMATION ONLY

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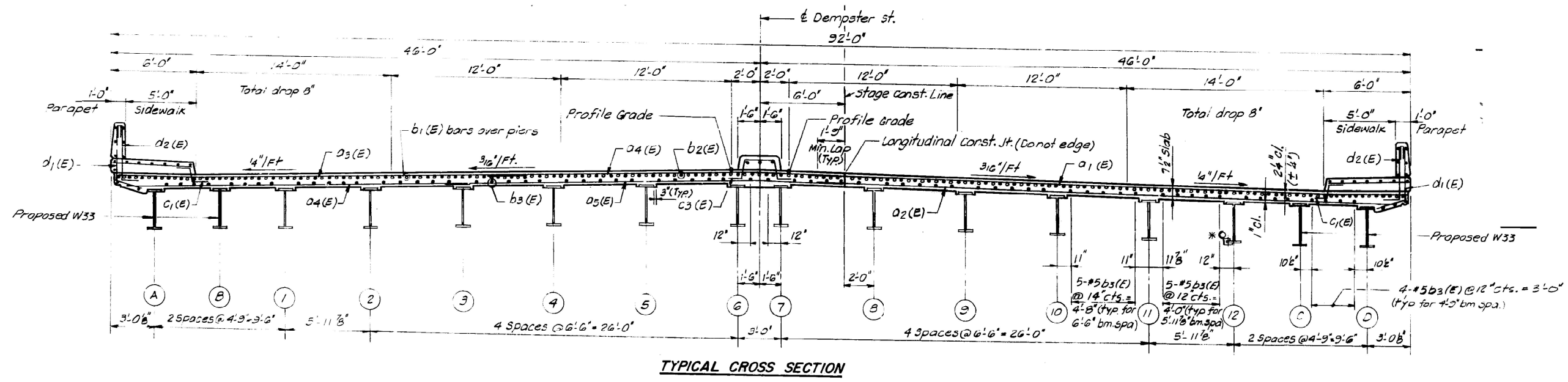
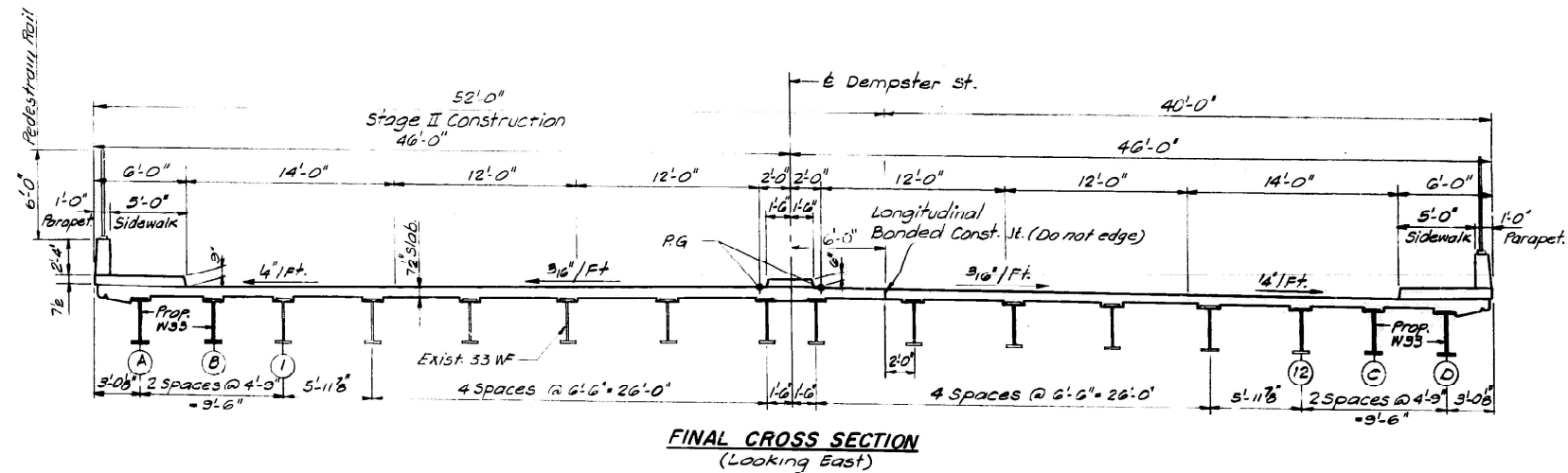
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STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

GENERAL PLAN & ELEVATION
 STRUCTURE NO. 016-0943

SCALE: SHEET 1 OF 1 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	(263-1212.1-15D) BP 24	*	21	4
CONTRACT NO. 62X21				
ILLINOIS FED. AID PROJECT				



FOR INFORMATION ONLY

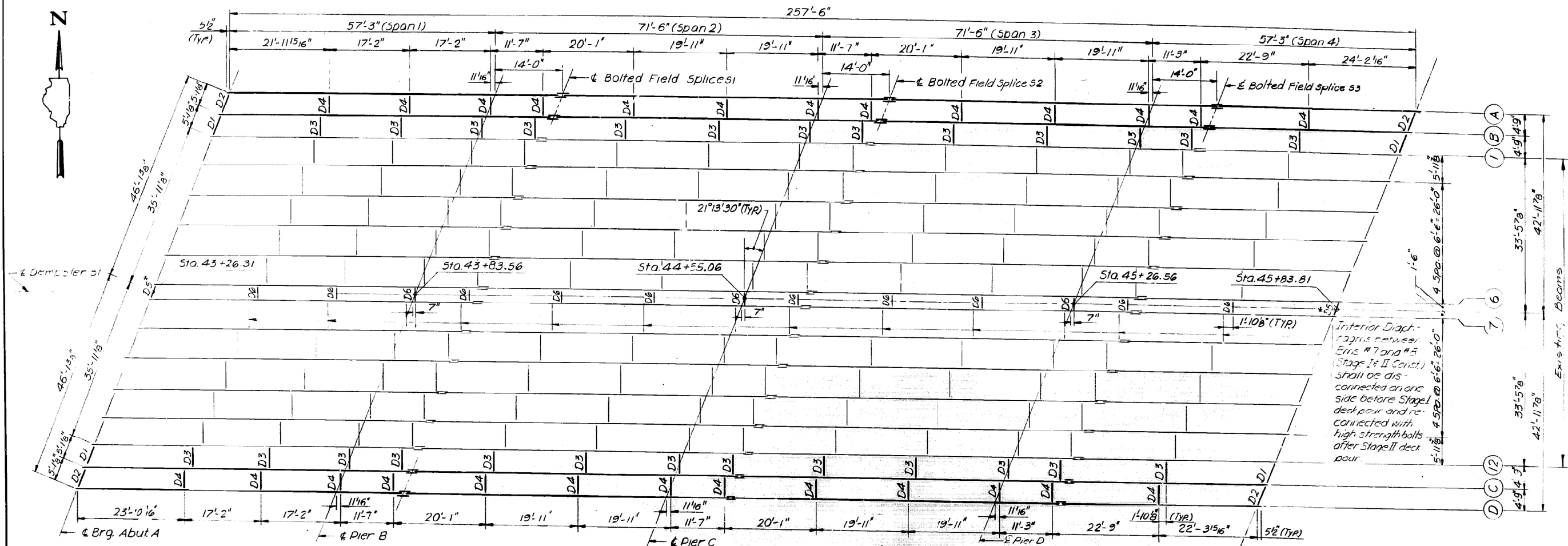
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

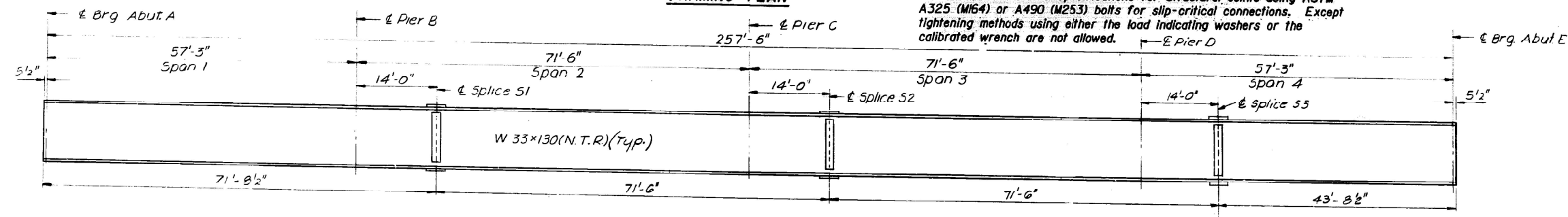
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CONTRACT NO. 62X21				
ILLINOIS FED. AID PROJECT				

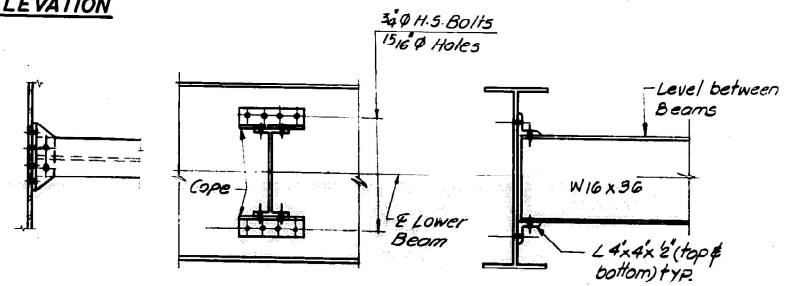


FRAMING PLAN

All high strength bolt connections shall conform to the requirements of the latest issue of the Specifications for Structural Joints using ASTM A325 (M16) or A490 (M253) bolts for slip-critical connections. Except tightening methods using either the load indicating washers or the calibrated wrench are not allowed.



BEAM ELEVATION



INTERIOR DIAPHRAGMS

- D3 (26 Required)
- D4 (26 Required)
- D6 (13 Required)

FOR INFORMATION ONLY

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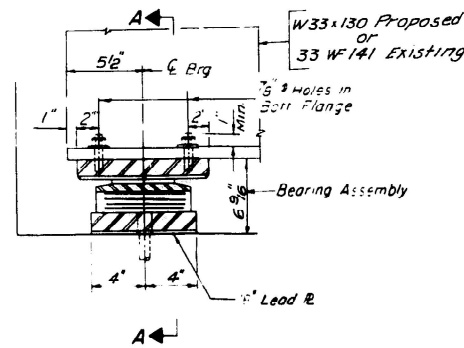
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

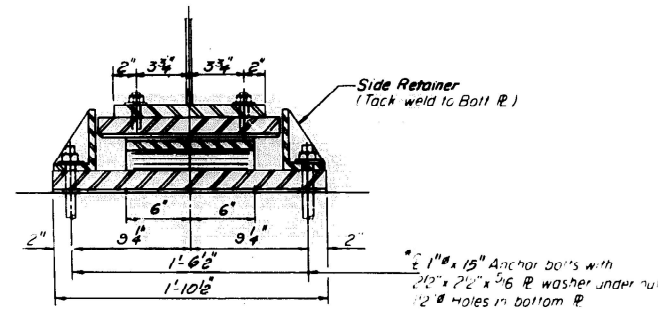
**FRAMING PLAN
STRUCTURE NO. 016-0943**

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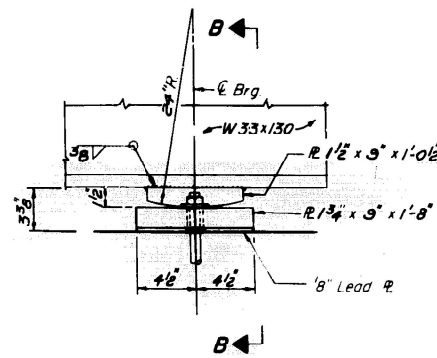
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CONTRACT NO. 62X21				
ILLINOIS FED. AID PROJECT				



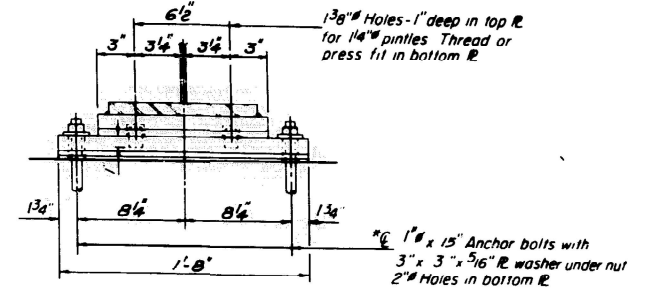
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SECTION A-A



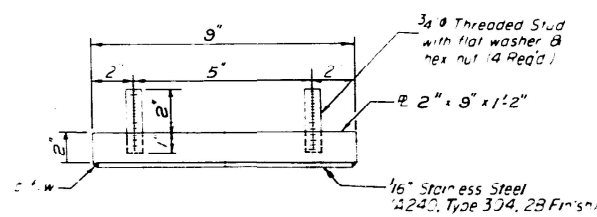
ELEVATION AT PIER



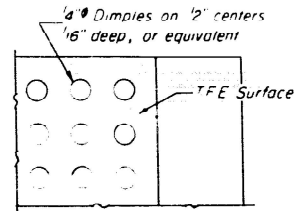
SECTION B-B

TYPE II TFE ELASTOMERIC EXP. BRG. (ABUTMENTS "A" & "E")

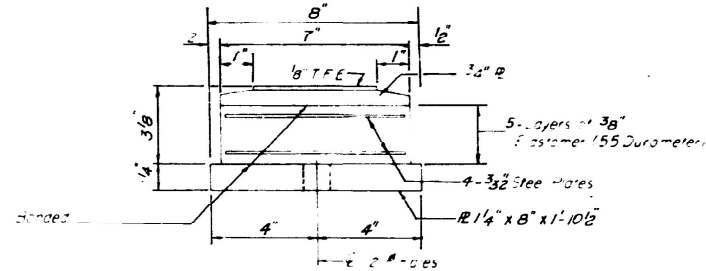
*Note After girders have been erected holes at expansion bearings shall be drilled and anchor bolts grouted in place. Anchor bolts at fixed bearings may be built into the masonry. See Sheet No. 22 for Anchor Bolt installation details.



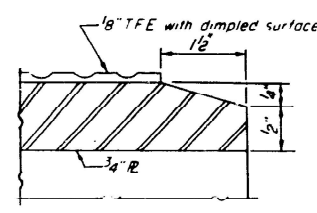
TOP BEARING ASSEMBLY



PLAN - TFE SURFACE



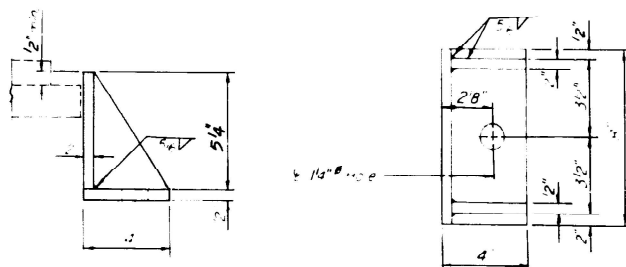
BOTTOM BEARING ASSEMBLY



SECTION THRU TFE

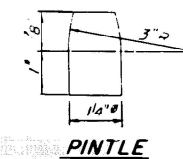
Note: The 1/8" TFE sheet shall be bonded directly to the top steel plate with a two-component, medium viscosity epoxy resin, conforming to the requirements of the Federal Specification MMM-A-134, Type I. The bonding agent shall be applied on the full area of the contact surfaces.

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.



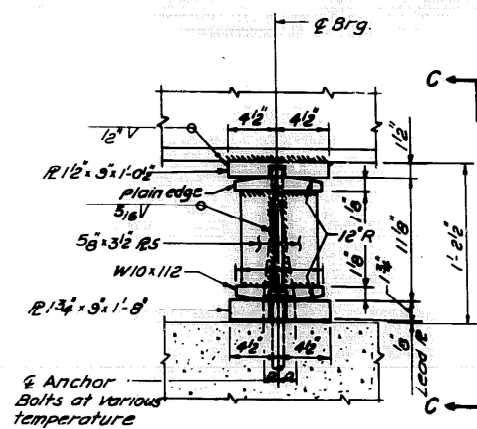
SIDE RETAINER

(Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates)

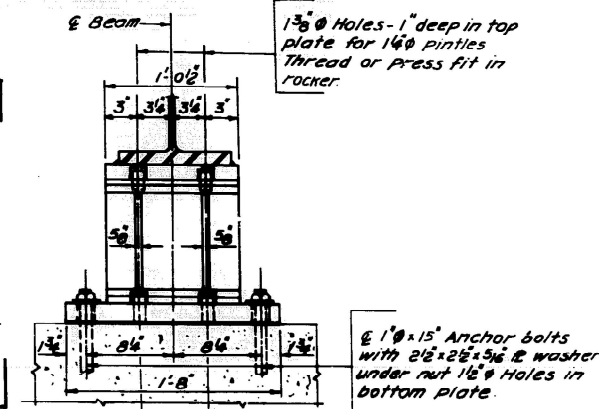


PINTLE

FIXED BEARING (AT PIER "C") (4- Required)



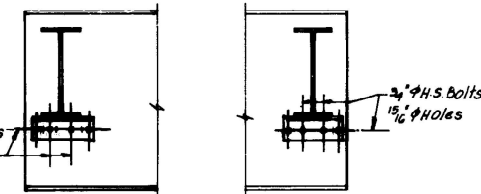
ELEVATION



VIEW C-C

1 3/8" Holes-1" deep in top plate for 1 1/4" pintles Thread or press fit in rocker.

1 3/8" Holes-1" deep in rocker for 1 1/4" pintles Thread or press fit in bottom R.



SECTION A-A SECTION B-B END DIAPHRAGMS

D1 (4 Req'd), D2 (4 Req'd), D5 (2 Req'd)

** Remove existing bearing including top plate welded to the beam. Grind 1/4" continuous fillet weld smooth after removing top plate. Anchor bolts to be left in place & cut flush with surface. The contractor shall submit the jacking detail of existing stringers and the sequence of operations for an approval by the engineer. Minimum Jacking Force = 10T/Beam.

FOR INFORMATION ONLY

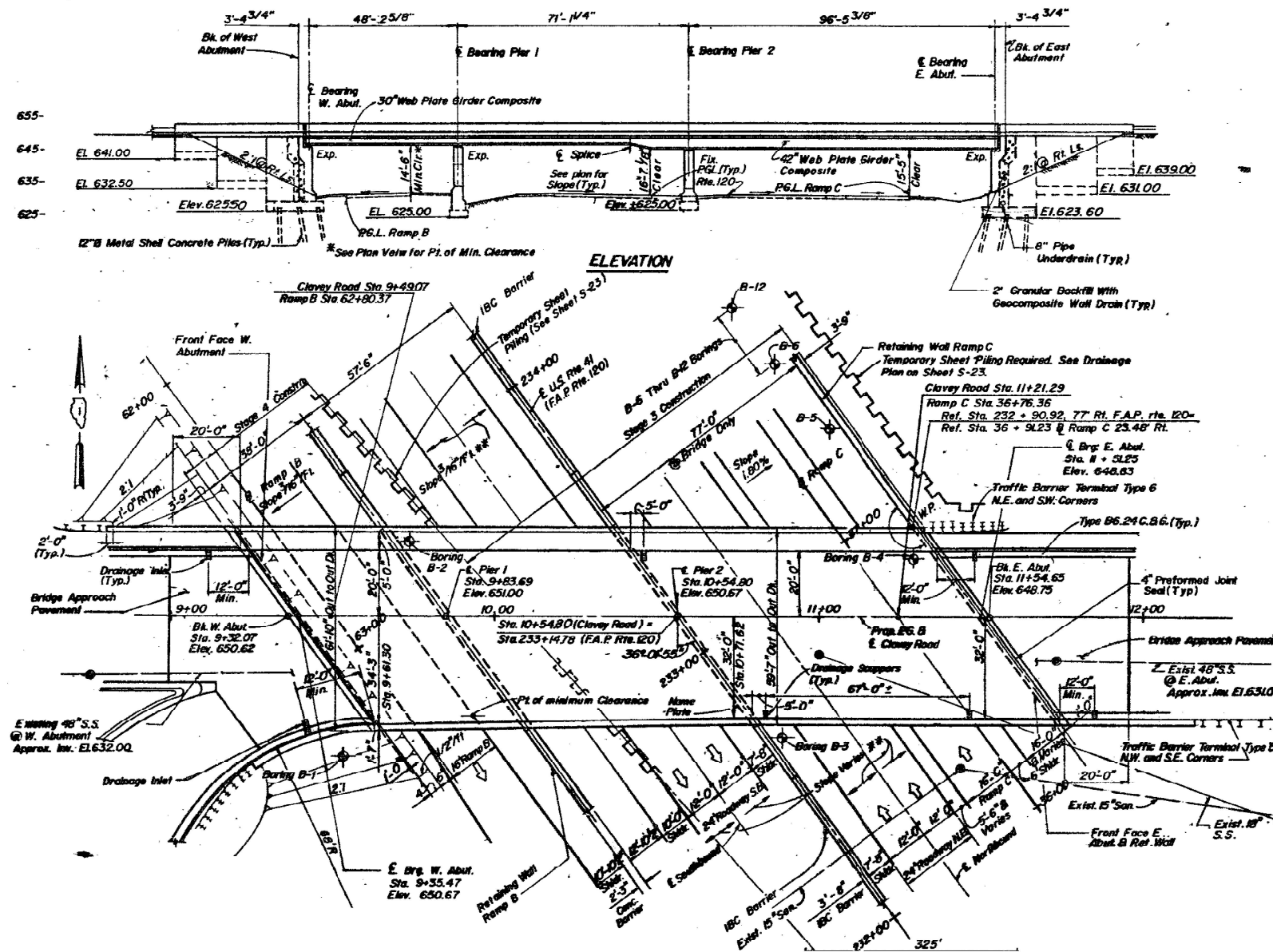
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BEARINGS DETAILS
STRUCTURE NO. 016-0943

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	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 12/19/2024	DATE -	REVISED -

SCALE: SHEET 4 OF 4 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	(263-1212.1-15D) BP 24		21	7
CONTRACT NO. 62X21				
ILLINOIS FED. AID PROJECT				



FOR INFORMATION ONLY

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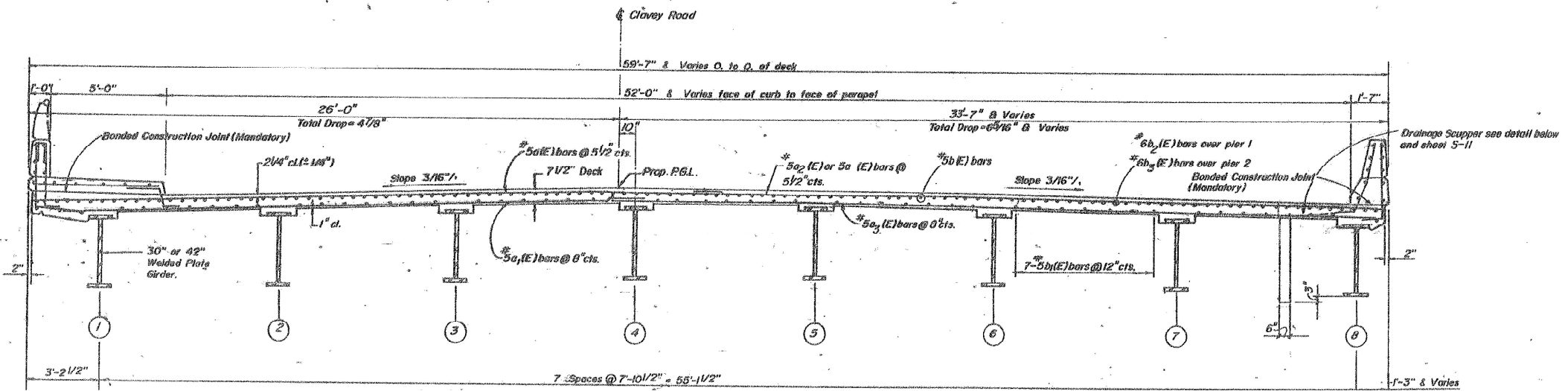
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

GENERAL PLAN & ELEVATION
 STRUCTURE NO. 049-0165

SCALE: SHEET 1 OF 4 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	(263-1212.1-15D) BP 24	*	21	8
CONTRACT NO. 62X21				
ILLINOIS FED. AID PROJECT				

* COOK, LAKE



FOR INFORMATION ONLY

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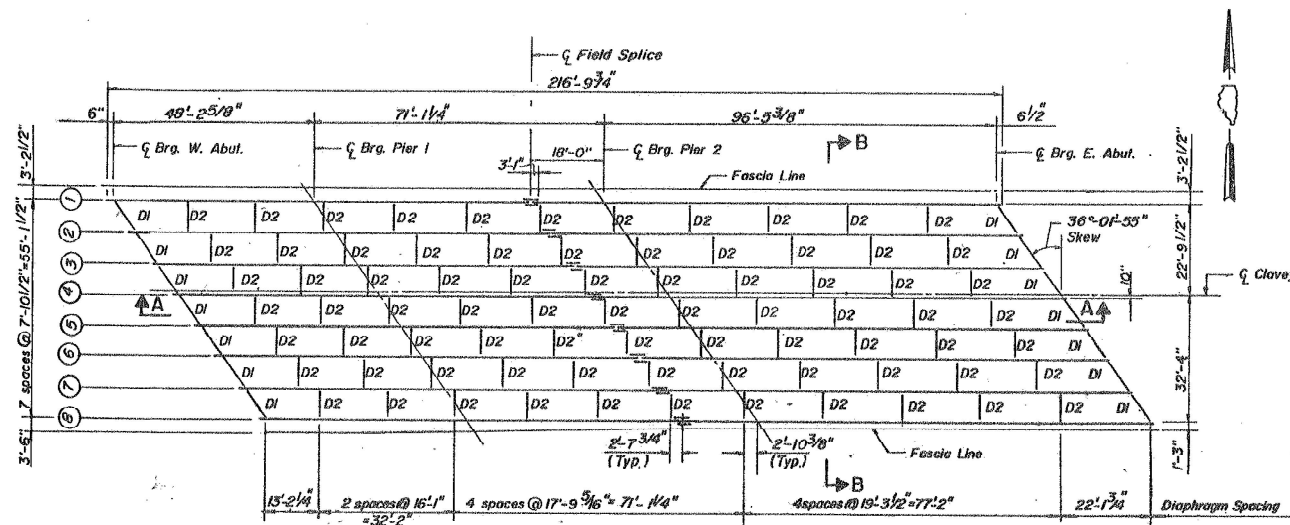
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STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

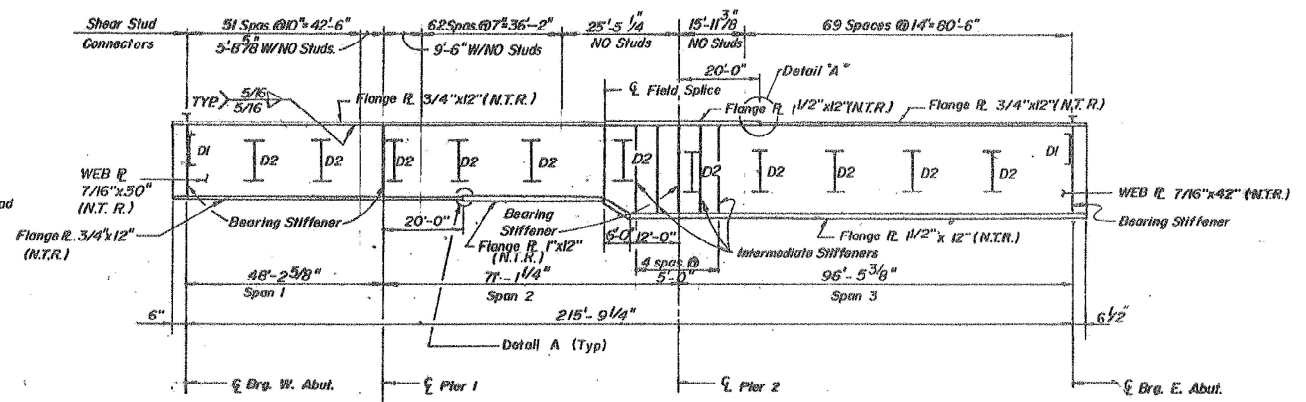
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SCALE: SHEET 2 OF 4 SHEETS STA. TO STA.

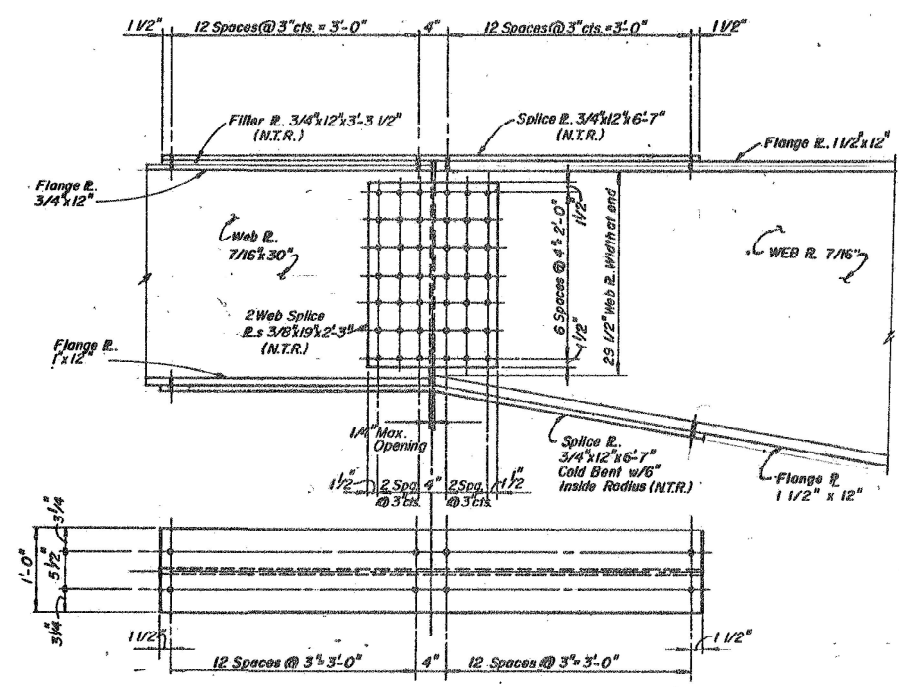
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ILLINOIS FED. AID PROJECT				



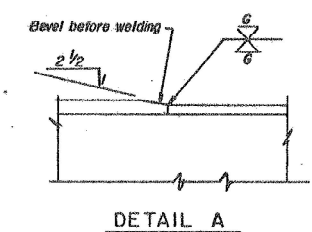
FRAMING PLAN



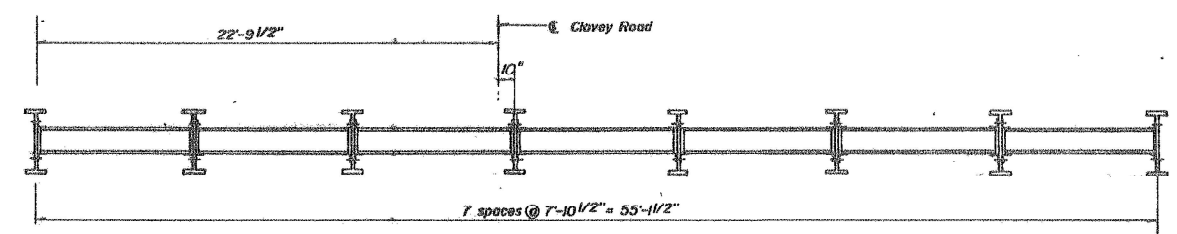
SECTION A-A
TYPICAL STRINGER ELEVATION



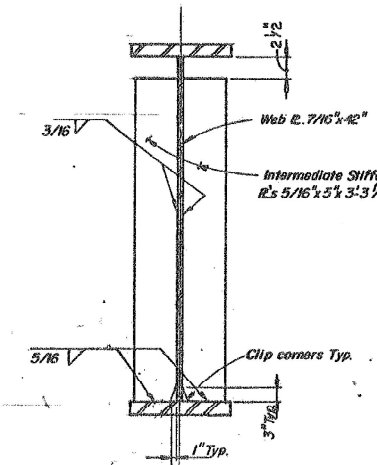
SPLICE DETAIL



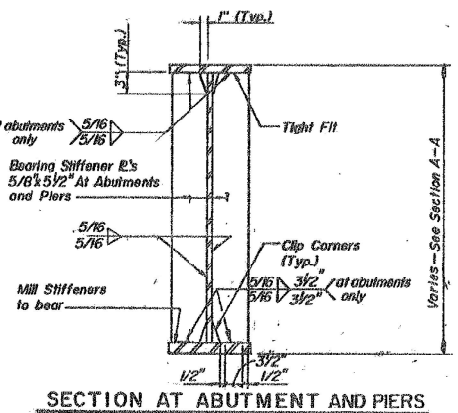
DETAIL A



SECTION B-B

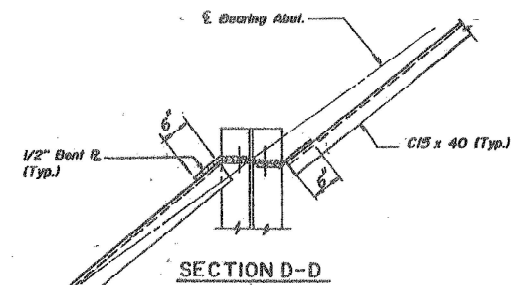


INTERMEDIATE STIFFENER

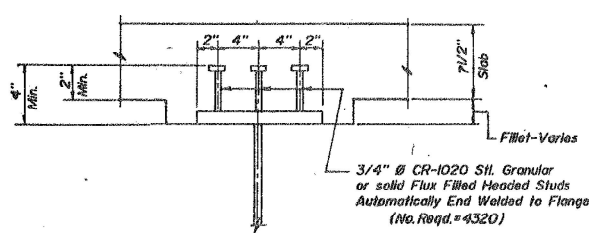


SECTION AT ABUTMENT AND PIERS

NOTES:
1. N.T.R. Denotes plates to which Notch Toughness Requirements are applicable.
2. For camber diagram see sheet S-3



SECTION D-D

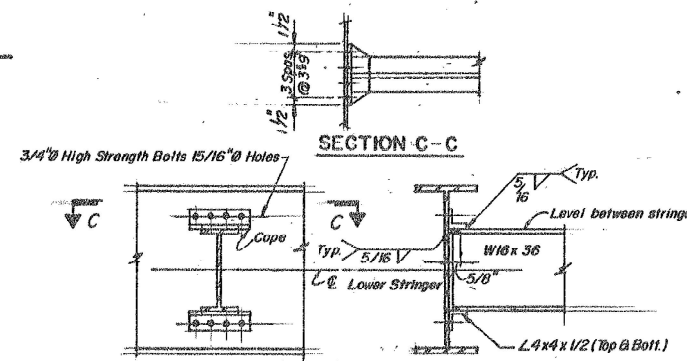


SHEAR CONNECTOR DETAIL

BILL OF MATERIAL

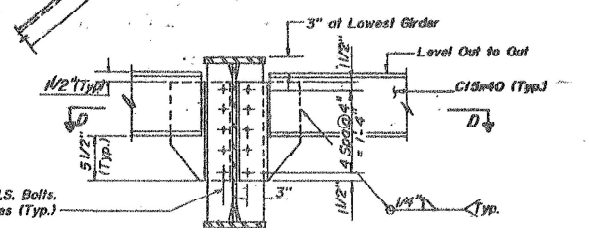
ITEM	UNIT	QUANTITY
ERECT STRUCT STEEL	L.S.	1
STUD SHEAR CONNECTORS	EACH	4,440

NOTE:
The weight of structural steel is 275,100 lbs. and is furnished by others.



INTERIOR DIAPHRAGM D2

NOTE:
Two Hardened washers shall be required over all 15/16" Ø holes.



END DIAPHRAGM D-1

FOR INFORMATION ONLY

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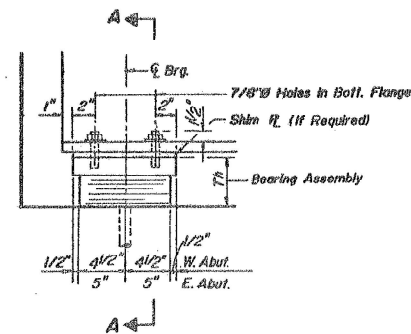
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FRAMING PLAN
STRUCTURE NO. 049-0165

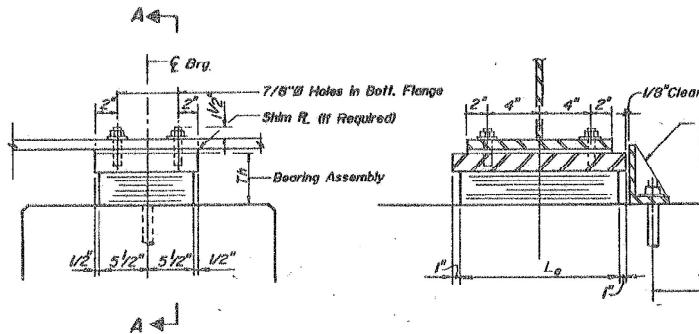
SCALE: SHEET 3 OF 4 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	(263-1212.1-15D) BP 24		21	10
CONTRACT NO. 62X21			ILLINOIS FED. AID PROJECT	

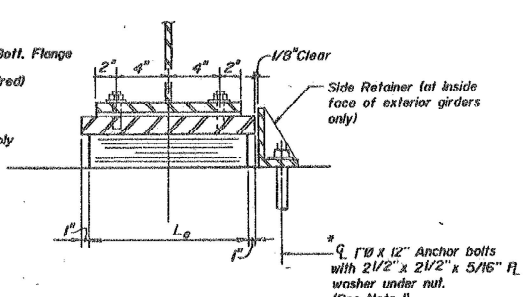
* COOK, LAKE



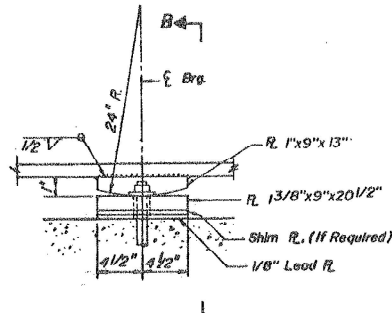
ELEVATIONS AT ABUTMENTS



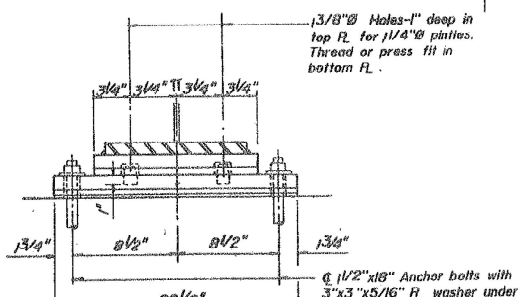
ELEVATION AT PIER 1



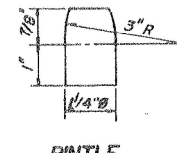
SECTION A-A



ELEVATION AT PIER 2

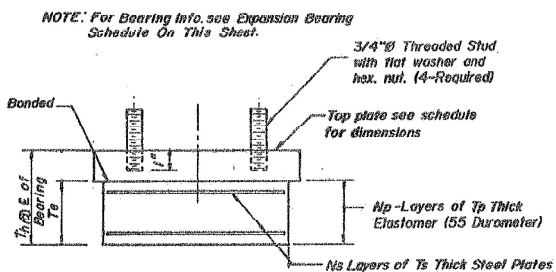


SECTION B-B

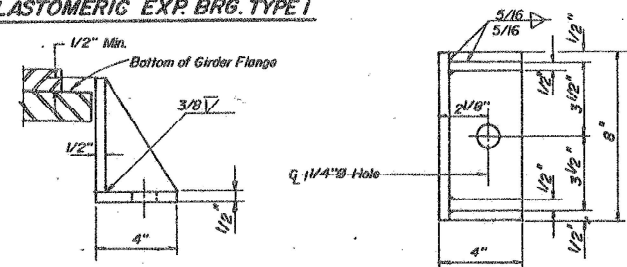


PINTLE

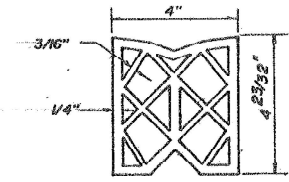
ELASTOMERIC EXP. BRG. TYPE I



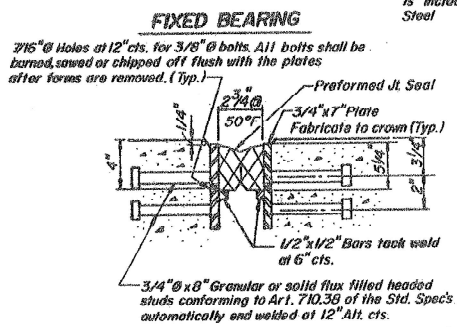
BEARING ASSEMBLY



SIDE RETAINER



PREFORMED JOINT SEAL (4")



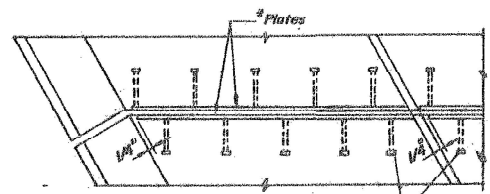
FIXED BEARING

CROSS SECTION

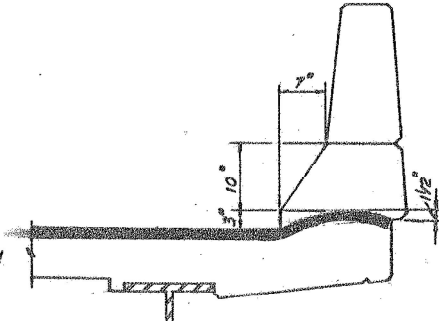
* At 50° F
Dimensions are at right angles

Joint openings shall be adjusted in accordance with Article 50307 (C) of the Std. Spec's. when the deck is poured at an ambient temperature other than 50° F.

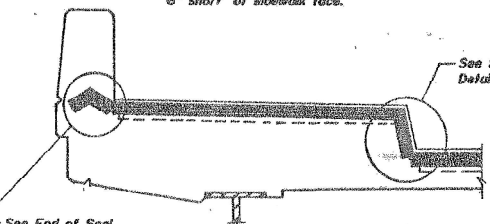
Note: Shim plates shall not be placed under Bearing Assembly.



PLAN

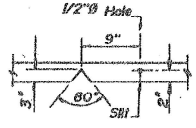


AT PARAPET

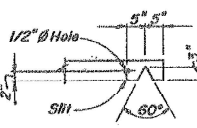


SECTION

AT SIDEWALK



SEAL CUT-OUT AT CURB



SEAL CUT-OUT AT SIDEWALK PAI

TYPICAL END TREATMENTS

FOR INFORMATION ONLY

MODEL: 049-0165-1(Sheet)
FILE NAME: c:\pwworking\illinois.gov\baraa.alsmadi\illinois.gov\056853\0100625-shc-plan.dgn

USER NAME = Baraa.Alsyadi	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 12/19/2024	DATE -	REVISED -

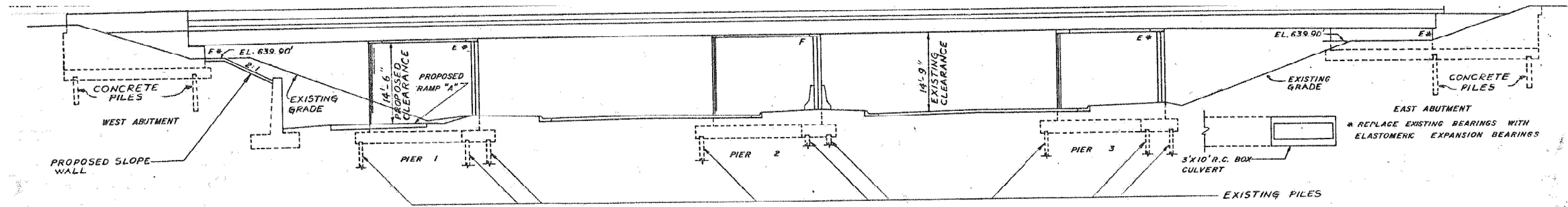
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BEARING DETAILS
STRUCTURE NO. 049-0165

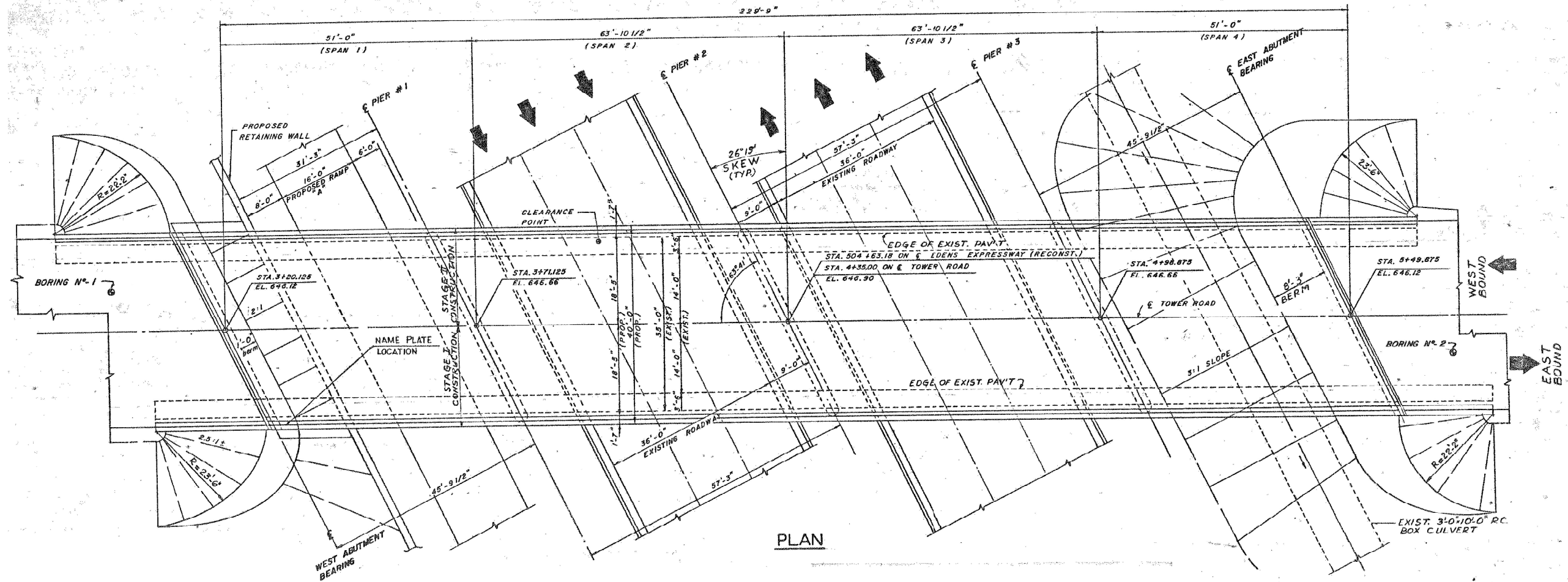
SCALE: SHEET 4 OF 4 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	(263-1212.1-15D) BP 24	*	21	11
			CONTRACT NO. 62X21	
		ILLINOIS FED. AID PROJECT		

* COOK, LAKE



ELEVATION



PLAN

FOR INFORMATION ONLY

MODEL: 016-0815-1(Sheet)
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PLOT DATE = 12/19/2024	DATE -	REVISED -

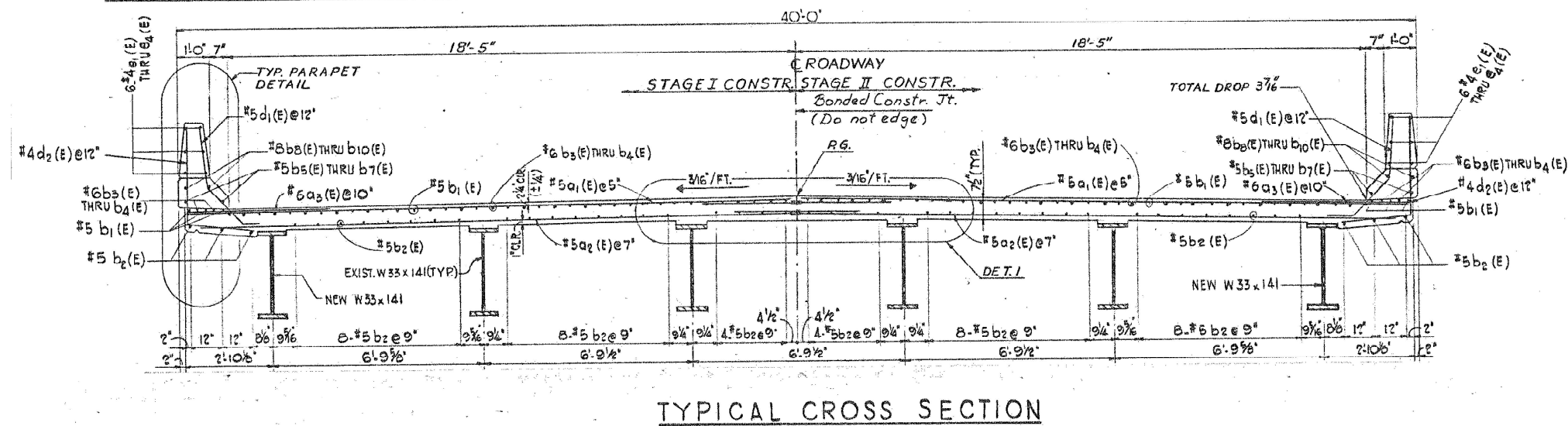
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN & ELEVATION
STRUCTURE NO. 016-0815

SCALE: SHEET 1 OF 6 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	(263-1212.1-15D) BP 24		21	12
CONTRACT NO. 62X21				
ILLINOIS FED. AID PROJECT				

* COOK, LAKE



TYPICAL CROSS SECTION

FOR INFORMATION ONLY

MODEL: 016-0815-2(Sheet)
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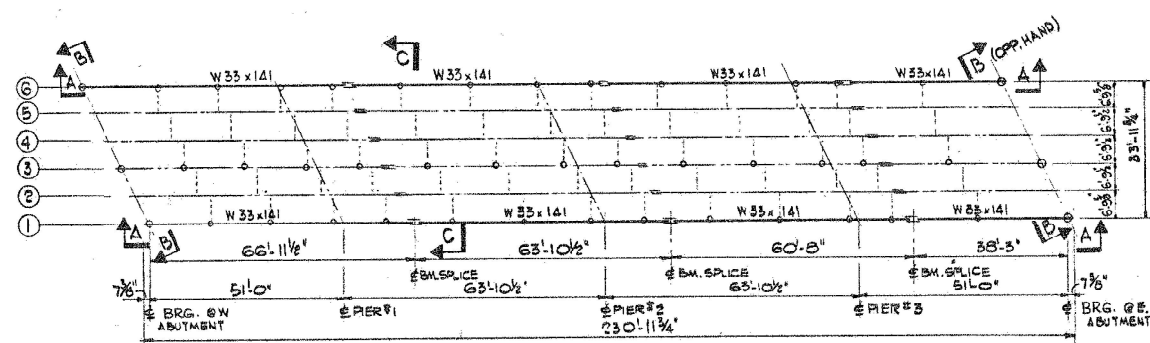
USER NAME = Baraa.Alsyadi	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 12/19/2024	DATE -	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

CROSS SECTION
 STRUCTURE NO. 016-0815

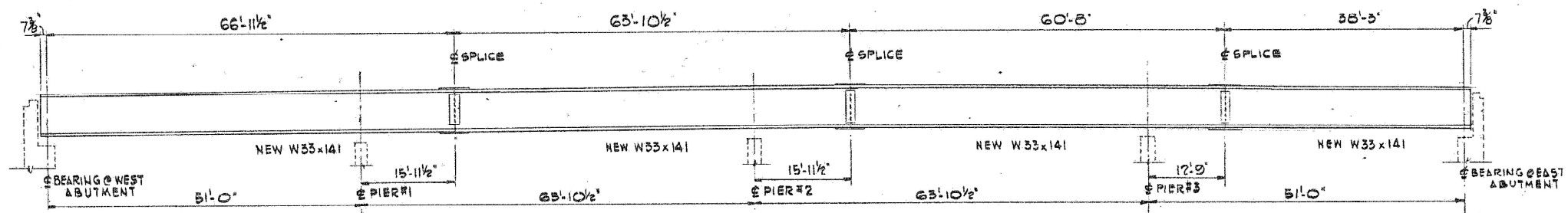
SCALE: SHEET 2 OF 6 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	(263-1212.1-15D) BP 24	*	21	13
CONTRACT NO. 62X21				
ILLINOIS FED. AID PROJECT				

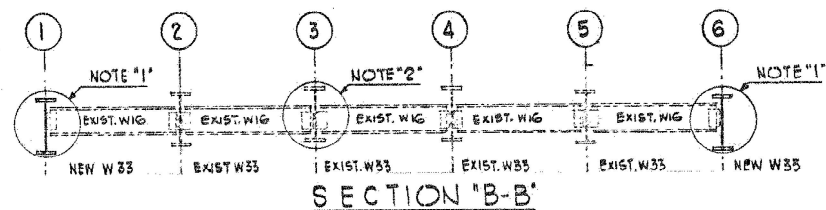


DECK FRAMING PLAN

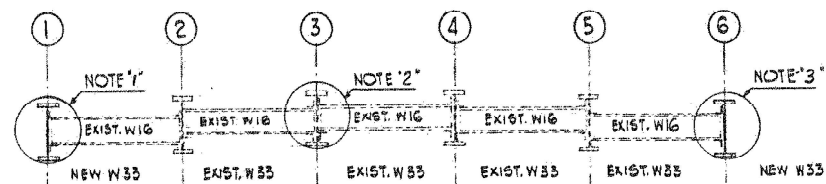
O - INDICATES CONNECTIONS TO BE REMOVED.



SECTION "A-A"



SECTION "B-B"



SECTION "C-C"

FOR INFORMATION ONLY

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USER NAME = Baraa.Alsmadi	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 12/19/2024	DATE -	REVISED -

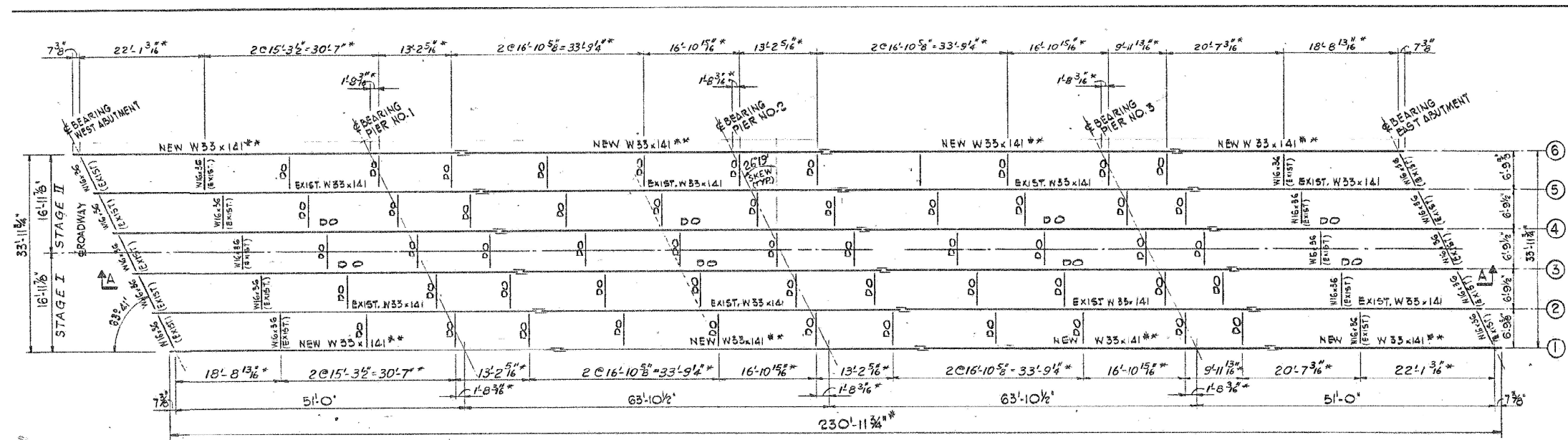
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FRAMING PLAN
STRUCTURE NO. 016-0815

SCALE: SHEET 3 OF 6 SHEETS STA. TO STA.

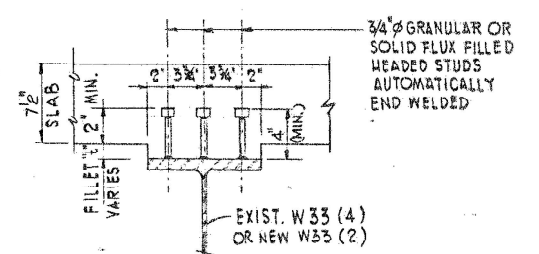
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VAR	(263-1212.1-15D) BP 24	*	21	14
			CONTRACT NO. 62X21	
		ILLINOIS FED. AID PROJECT		

* COOK, LAKE

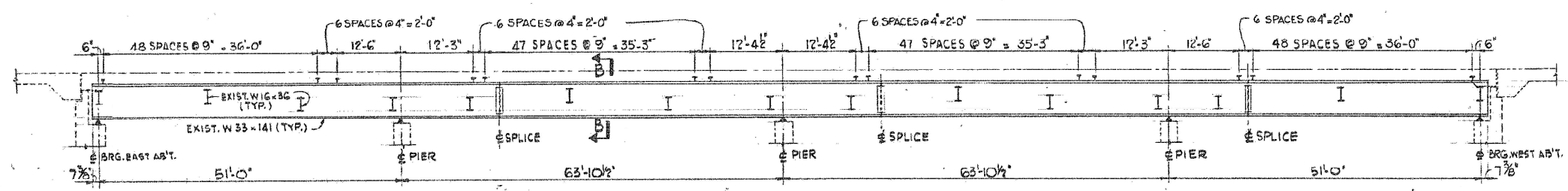


STEEL FRAMING PLAN

* DIMENSIONS FOR REFERENCE ONLY AND REQUIRE FIELD VERIFICATION
 ** WORK INCLUDES REPLACEMENT OF FASCIA BEAM



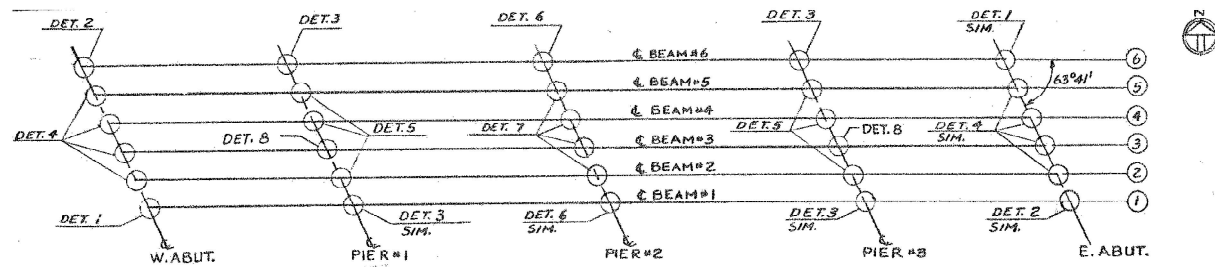
SECTION 'B-B'
 TYP. SHEAR STUDS DETAIL



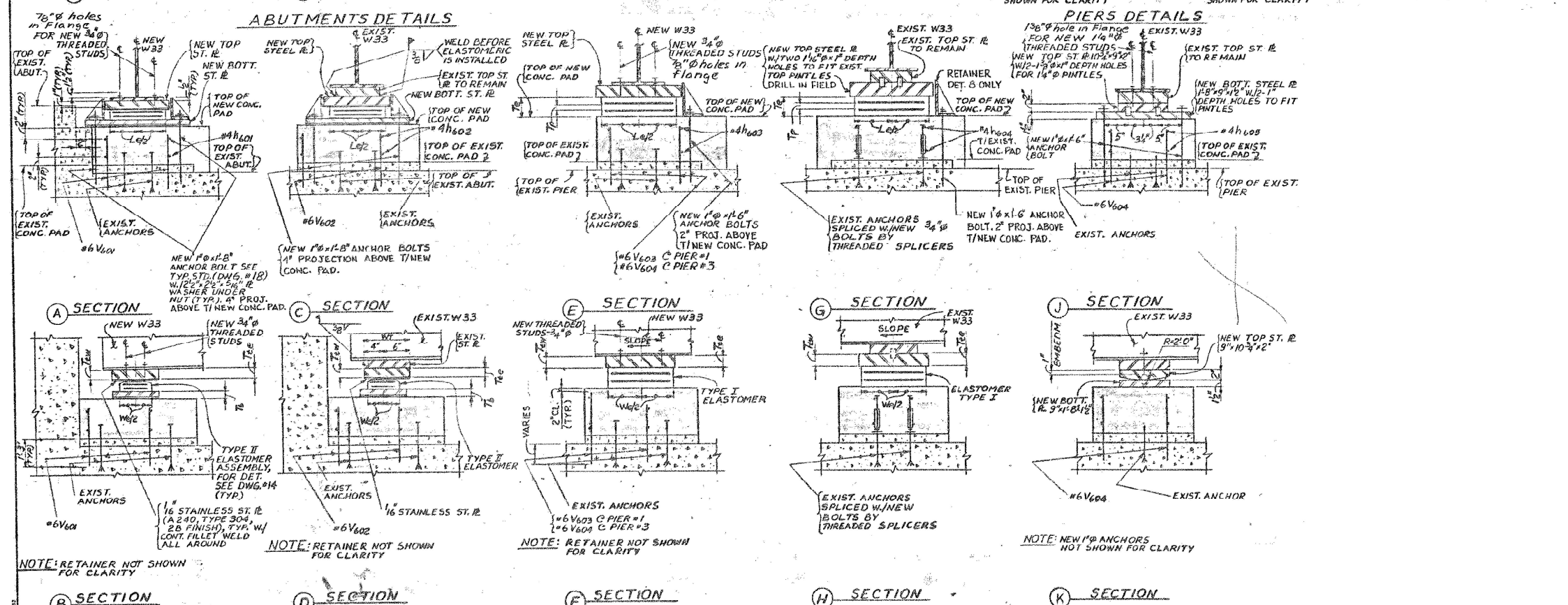
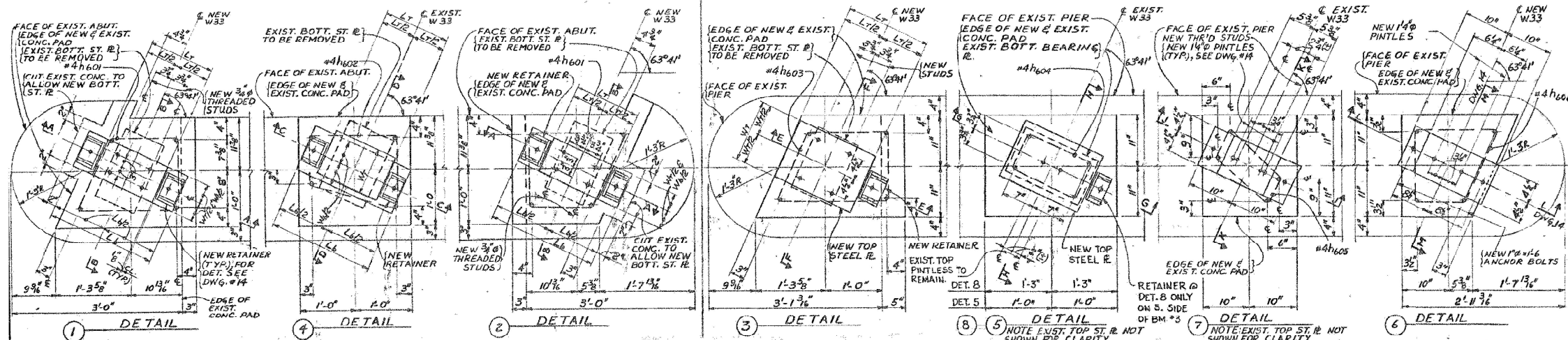
TYPICAL SECTION "A-A"

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USER NAME = Baraa.Alsmadi	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	FRAMING PLAN STRUCTURE NO. 016-0815			F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	DRAWN -	REVISED -		SCALE:	SHEET 4	OF 6 SHEETS	STA.	(263-1212.1-15D) BP 24		21	15
	CHECKED -	REVISED -								CONTRACT NO. 62X21	
PLOT DATE = 12/19/2024	DATE -	REVISED -								ILLINOIS FED. AID PROJECT	



SCHEMATIC BRIDGE DIAGRAM



FOR INFORMATION ONLY

MODEL: 016-0815-15(S)sheet
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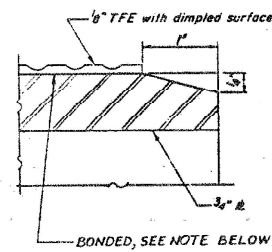
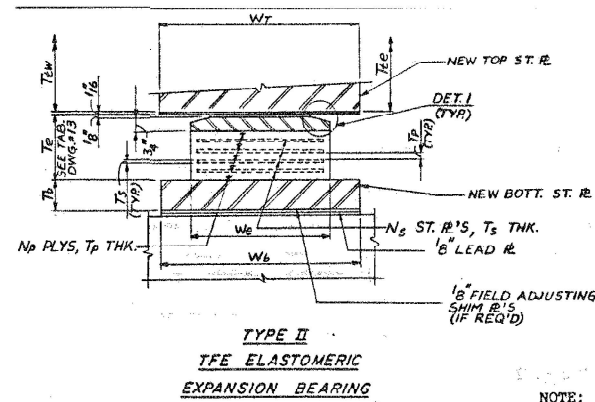
USER NAME = Baraa.Alsamadi	DESIGNED -	REVISED -
DRAWN -	REVISOR -	
CHECKED -	REVISOR -	
DATE - 12/19/2024	DATE -	REVISOR -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BEARING DETAILS STRUCTURE NO. 016-0815			
SCALE:	SHEET 5	OF 6 SHEETS	STA. TO STA.

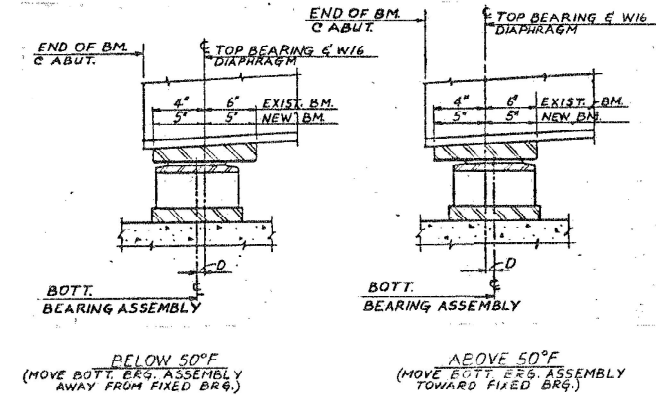
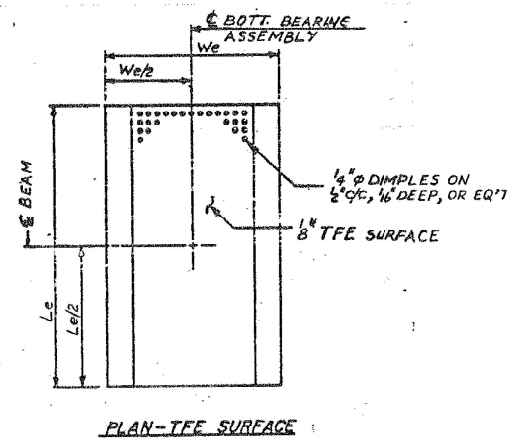
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	(263-1212.1-15D) BP 24		21	16
CONTRACT NO. 62X21				
ILLINOIS FED. AID PROJECT				

* COOK, LAKE

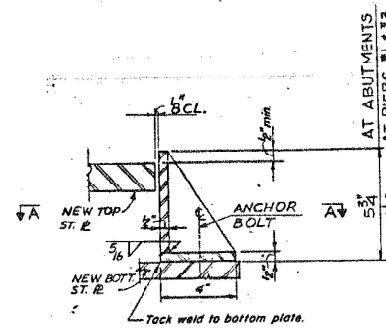


NOTE: THE 1/8" TFE SHEET SHALL BE BONDED DIRECTLY TO THE TOP STEEL PLATE WITH A TWO-COMPONENT, MEDIUM VISCOSITY EPOXY RESIN, CONFORMING TO THE REQUIREMENTS OF THE FEDERAL SPECIFICATION MMM-A-134, TYPE I. THE BOND AGENT SHALL BE APPLIED ON THE FULL AREA OF THE CONTACT SURFACES.

BONDING OF 1/8" TFE SHEET DURING VULCONIZING PROCESS WILL BE PERMITTED PROVIDED THE PROCESS AND METHOD OF ADJUSTING ASSEMBLY HEIGHT IS APPROVED BY THE ENGINEER.

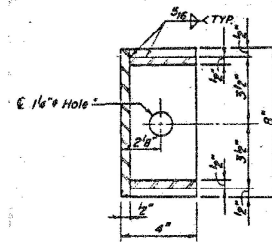


NOTE:
 1. D - 1/8" PER 100' OF EXPANSION FOR EVERY 15° TEMP. CHANGE FROM THE NORMAL TEMP. OF 50°F.
 2. AT 50°F 1/2 OF BOTT. BEARING ASSEMBLY IS COINCIDE W./1/2 OF TOP BEARING & W16 DIAPHRAGM.

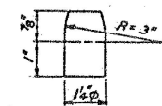


TYPICAL SIDE RETAINER

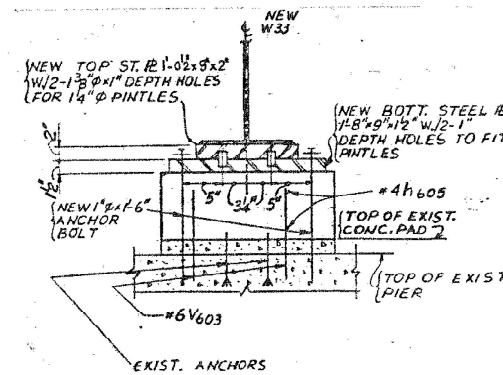
Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates



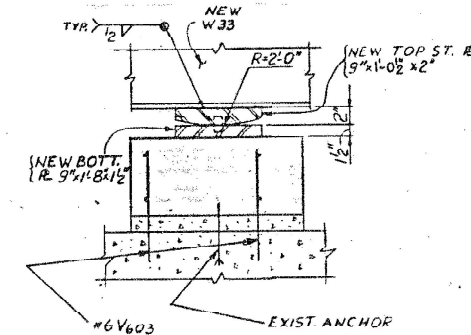
SECTION A



TYPICAL PINTLE



SECTION L



SECTION M

NOTE: NEW 1\"/>

FOR INFORMATION ONLY

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	DRAWN -	REVISED -
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PLOT DATE = 12/19/2024	DATE -	REVISED -

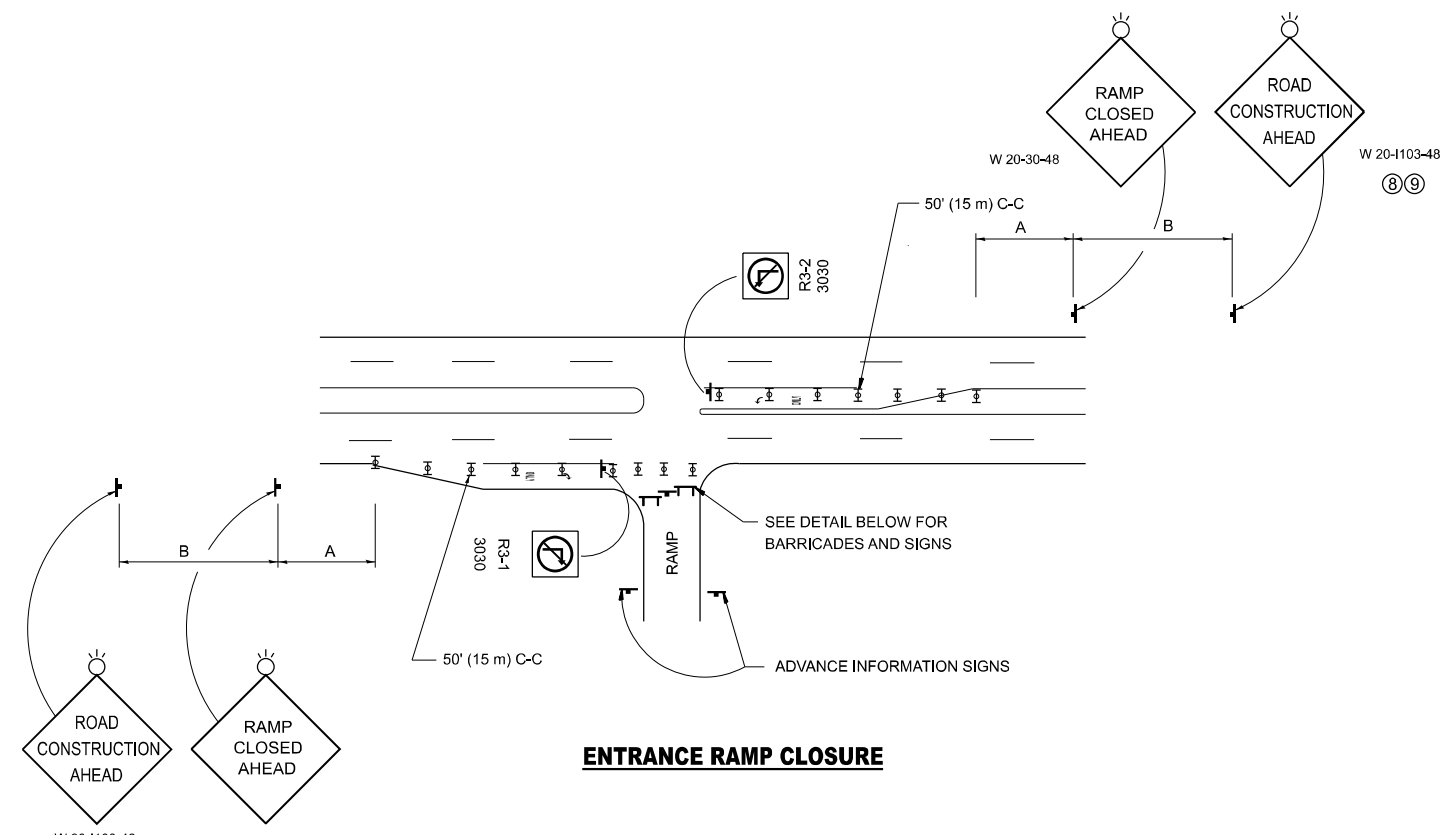
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

BEARING DETAILS STRUCTURE NO. 016-0815			
SCALE:	SHEET 6	OF 6 SHEETS	STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	(263-1212.1-15D) BP 24	*	21	17
			CONTRACT NO. 62X21	
ILLINOIS FED. AID PROJECT				

* COOK, LAKE

MODEL: Plan Single (Sheet)
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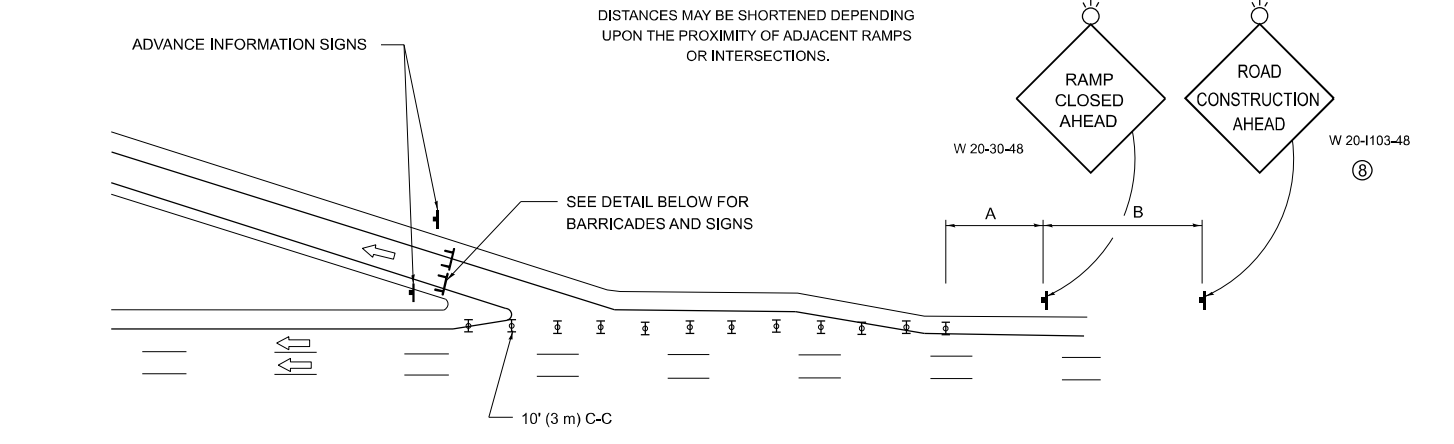


ENTRANCE RAMP CLOSURE

SIGN SPACING TABLE

FACILITY	DISTANCE BETWEEN SIGNS	
	A	B
EXPRESSWAY >24 HOURS	1000' (300 m)	1500' (450 m)
EXPRESSWAY ≤24 HOURS	500' (150 m)	500' (150 m)
ARTERIAL 55 MPH	500' (150 m)	500' (150 m)
ARTERIAL 50-45 MPH	350' (100 m)	350' (100 m)
ARTERIAL <45 MPH	200' (60 m)	200' (60 m)

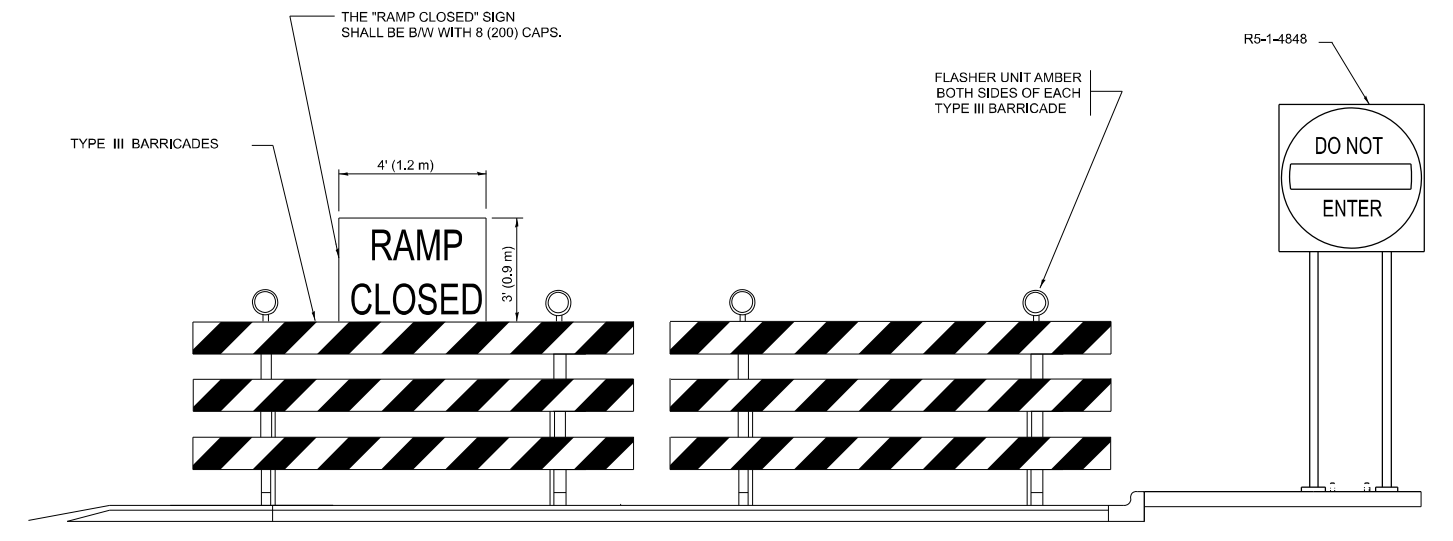
DISTANCES MAY BE SHORTENED DEPENDING UPON THE PROXIMITY OF ADJACENT RAMPS OR INTERSECTIONS.



EXIT RAMP CLOSURE

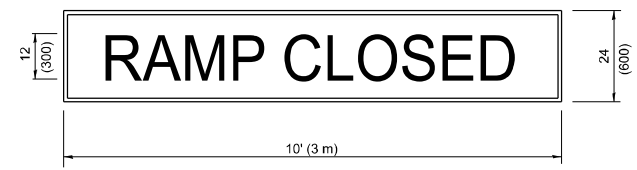
SYMBOLS

- ☐ TYPE II BARRICADE OR DRUM
- ☐ TYPE III BARRICADE WITH 2 FLASHING LIGHTS



DETAIL FOR REQUIRED BARRICADES & SIGNS

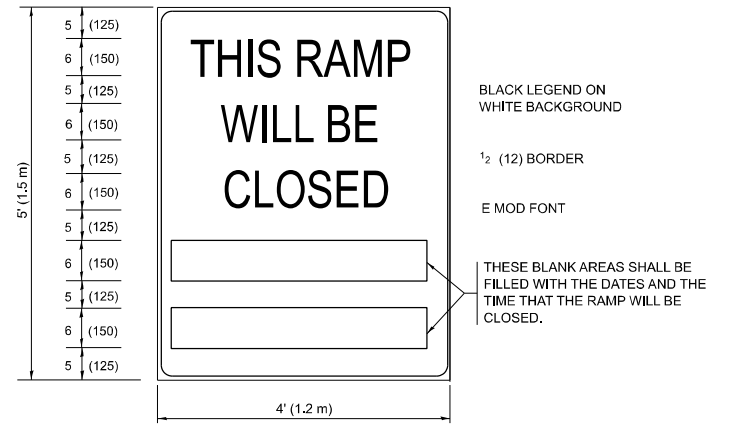
RAMP CLOSURE ADVANCE WARNING SIGN



BLACK LEGEND ON ORANGE BACKGROUND MOUNTED DIAGONALLY
 E MOD FONT
 1 (25) BORDER
 THESE SIGNS ARE REQUIRED ON ALL THE EXIT GUIDE SIGNS FOR EXIT RAMPS THAT WILL BE CLOSED FOR MORE THAN FOUR (4) CONSECUTIVE DAYS.

THESE SIGNS ARE REQUIRED ON BOTH SIDES OF THE RAMP, MINIMUM OF 1 WEEK IN ADVANCE OF THE CLOSURE.
 THESE SIGNS SHALL BE FABRICATED AND PAID FOR ACCORDING TO THE TEMPORARY INFORMATION SIGNING SPECIAL PROVISION

RAMP CLOSURE ADVANCE INFORMATION SIGN



BLACK LEGEND ON WHITE BACKGROUND
 1/2 (12) BORDER
 E MOD FONT
 THESE BLANK AREAS SHALL BE FILLED WITH THE DATES AND THE TIME THAT THE RAMP WILL BE CLOSED.

GENERAL NOTES:

- 1 CONES MAY BE SUBSTITUTED FOR DRUMS OR TYPE II BARRICADES DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28 (700) HIGH.
- 2 VERTICAL BARRICADES SHALL NOT BE USED FOR RAMP CLOSURES.
- 3 A FLAGGER SHALL BE POSITIONED AT EACH CLOSED RAMP THAT IS OPEN TO CONSTRUCTION VEHICLES, PRECEDED BY A W20-7 FLAGGER WARNING SIGN.
- 4 ALL ROUTE MARKERS AND TRAILBLAZER ASSEMBLIES WHICH DIRECT MOTORISTS TO A CLOSED ENTRANCE RAMP SHALL BE COVERED WHEN THE RAMP IS CLOSED FOR MORE THAN FOUR (4) DAYS.
- 5 THE SIGNING AND BARRICADING WHICH IS REQUIRED BY THIS DETAIL SHALL BE INCLUDED IN THE COST OF TRAFFIC CONTROL AND PROTECTION (EXPRESSWAYS).
- 6 AUTHORIZATION FROM THE DISTRICT'S BUREAU OF TRAFFIC IS REQUIRED FOR ALL RAMP CLOSURES.
- 7 THE RAMP CLOSURE ADVANCE INFORMATION SIGNS SHALL BE ERECTED IF THE CLOSURE TIME EXCEEDS TWENTY-FOUR (24) HOURS. ADDITIONAL ADVANCE WARNING SIGNS ON EXIT GUIDE SIGNING WILL BE REQUIRED FOR EXIT RAMP CLOSURES THAT EXCEED FOUR (4) DAYS IN LENGTH.
- 8 ROAD CONSTRUCTION AHEAD SIGNS MAY BE OMITTED WHEN THIS DETAIL IS USED IN CONJUNCTION WITH OTHER TRAFFIC CONTROL THAT ALREADY INCLUDES A ROAD CONSTRUCTION AHEAD SIGN.
- 9 ARTERIAL ROAD CONSTRUCTION AHEAD SIGNS SHALL BE INSTALLED ON THE LEFT SIDE OF TRAFFIC IF THE MEDIAN IS MORE THAN 10 FT WIDE.

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

USER NAME = Eric.L.Thomas	DESIGNED - D.W.S.	REVISED - S.P.B._12-09
	DRAWN -	REVISED - M.D._06-13
	CHECKED -	REVISED - M.D._01-18
PLOT DATE = 8/20/2024	DATE - 02-83	REVISED - D.S._05-24

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

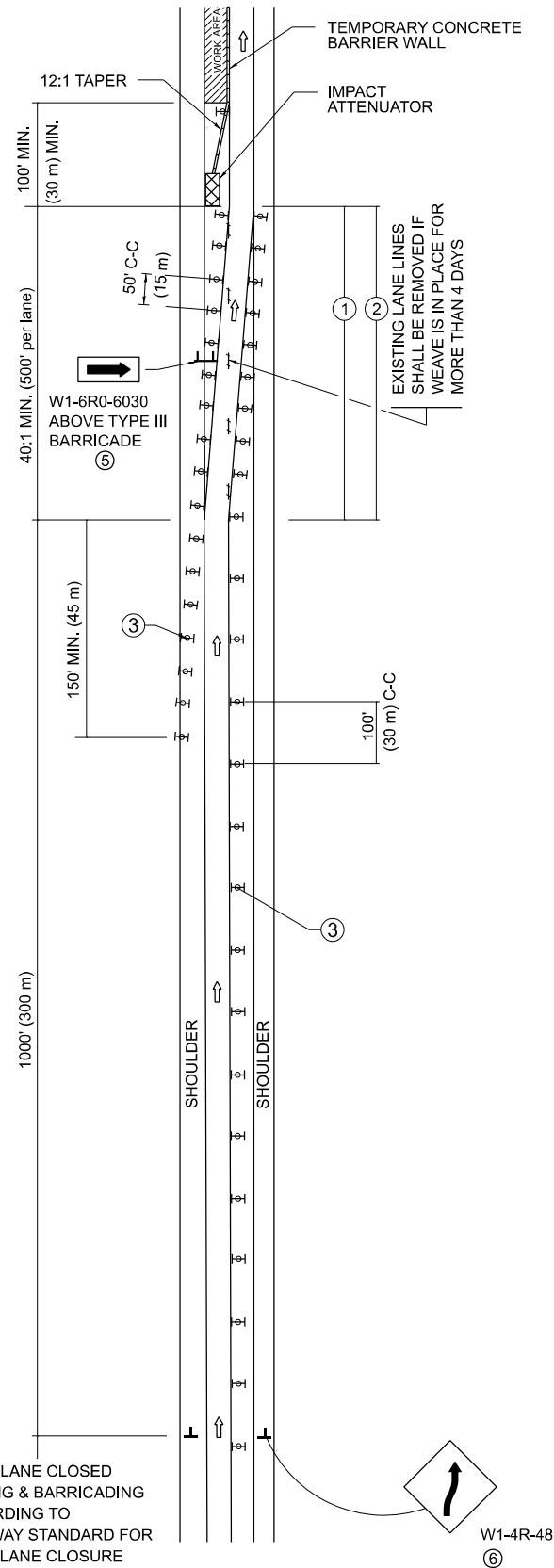
**ENTRANCE AND EXIT RAMP
 CLOSURE DETAILS**

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

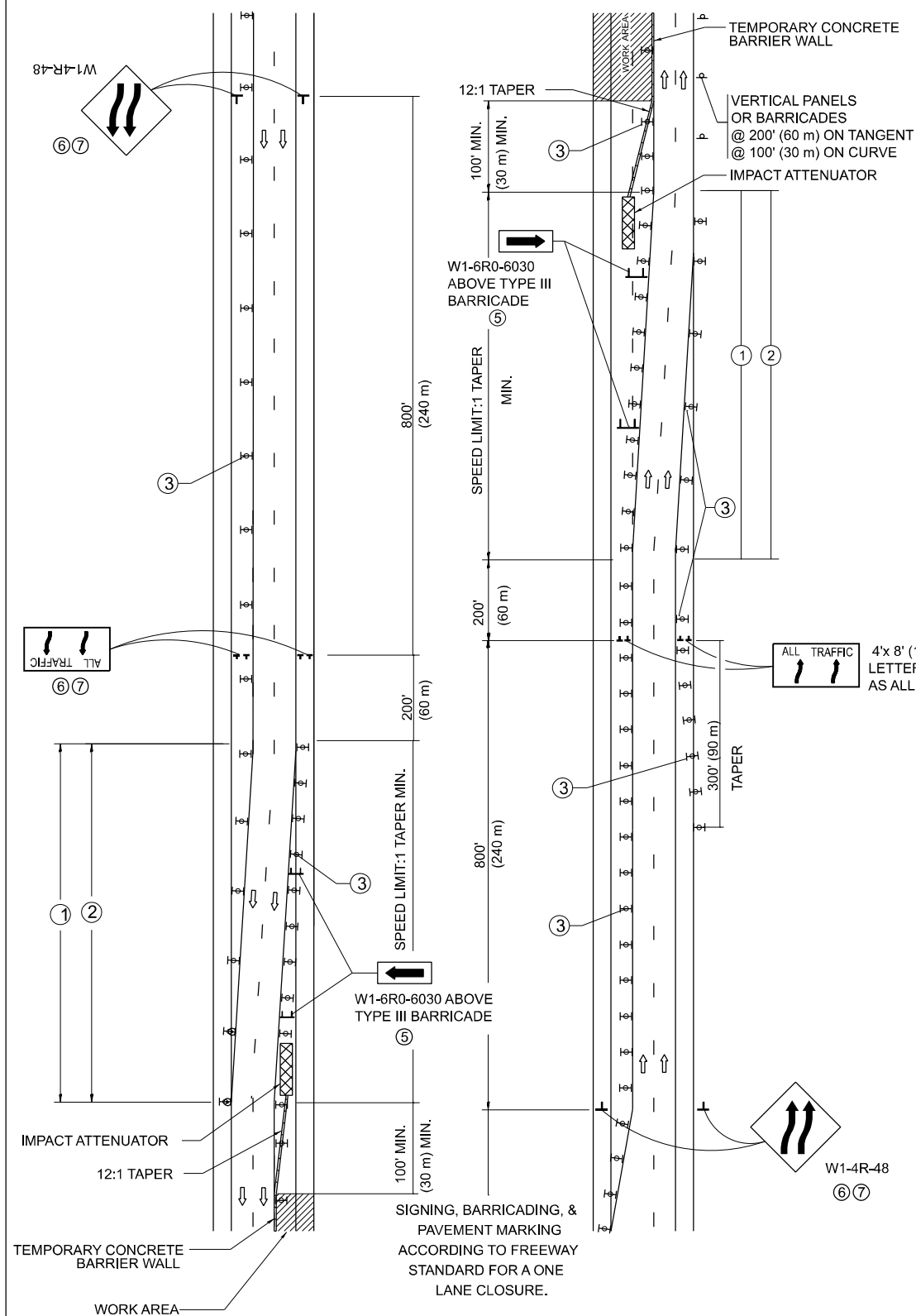
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	(263-1212.1-15D) BP 24	*	21	18
TC-08			CONTRACT NO. 62X21	
ILLINOIS FED. AID PROJECT				

* COOK, LAKE

SINGLE LANE WEAVE



MULTI-LANE WEAVE



GENERAL NOTES:

- EXISTING CONFLICTING PAVEMENT MARKING LINES SHALL BE REMOVED. PAVEMENT MARKING REMOVAL SHALL NOT BE REQUIRED FOR SINGLE LANE WEAVES UNDER 4 DAYS IN DURATION.
- CONTINUOUS REFLECTIVE TEMPORARY PAVEMENT MARKING TAPE SHALL BE PLACED THROUGHOUT THE TAPER AND FOR 300' (90 m) ALONG SIDE THE WORK AREA WHERE THE CLOSURE TIME IS GREATER THAN FOURTEEN DAYS. THE LEFT EDGE LINE SHALL BE YELLOW AND THE RIGHT EDGE LINE SHALL BE WHITE. FOR MULTI-LANE WEAVES LANE LINES SHALL BE 5 INCH, 10'-30' (3 m-9 m) SKIP DASH, WHITE.
- PLASTIC DRUMS WITH STEADY BURN LIGHTS AT 50' (15 m) C-C SPACING IN TAPERS AND 100' (30 m) C-C SPACING IN TANGENTS.
- ALL SIGNS SHALL BE POST MOUNTED IF THE CLOSURE TIME EXCEEDS FOUR DAYS.
- TYPE III BARRICADES MAY BE OMITTED FOR SINGLE-LANE WEAVES UNDER 24-HOURS IN DURATION. W1-6 SIGNS WILL STILL BE REQUIRED. IF THE WIDTH OF OFFSET IS LESS THAN 6' THEN THE TYPE III BARRICADE WITH ATTACHED ARROW SIGN PANEL CAN BE ELIMINATED IN THE TAPER AREAS.
- WHEN THE LENGTH OF THE SHIFTED SEGMENT (DISTANCE BETWEEN WEAVE POINTS) IS LESS THAN 1500', DOUBLE REVERSE CURVE SIGNS (W24-1) SHOULD BE USED INSTEAD OF THE REVERSE CURVE (W1-4) SIGNS. ARROWS ON THE 4'X8' "ALL TRAFFIC" SIGNS SHALL BE THE SAME SHAPE.
- THE NUMBER OF ARROWS ON THESE SIGNS SHALL MATCH THE NUMBER OF LANES OPEN TO TRAFFIC.

SYMBOLS

- DIRECTION OF TRAFFIC
- WORK AREA
- SIGN ON PORTABLE OR PERMANENT SUPPORT
- TYPE II BARRICADE OR DRUM WITH MONO-DIRECTIONAL STEADY BURNING LIGHT
- TEMPORARY CONCRETE BARRIER WALL
- IMPACT ATTENUATOR
- W1-4R-48 (6, 7)
- W24-1-48 (7)

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

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USER NAME = Eric.L.Thomas	DESIGNED - D.W.S.	REVISED - J.A.F. 02-06
	DRAWN -	REVISED - S.P.B. 01-07
	CHECKED -	REVISED - S.P.B. 12-09
PLOT DATE = 8/20/2024	DATE - 02-87	REVISED - M.D. 06-13

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

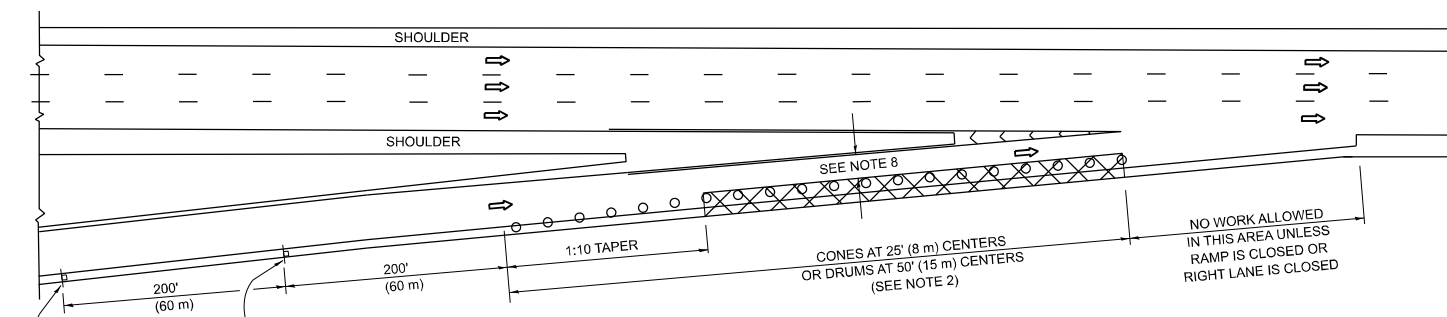
TRAFFIC CONTROL DETAILS FOR
FREEWAY SINGLE & MULTI-LANE WEAVE

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

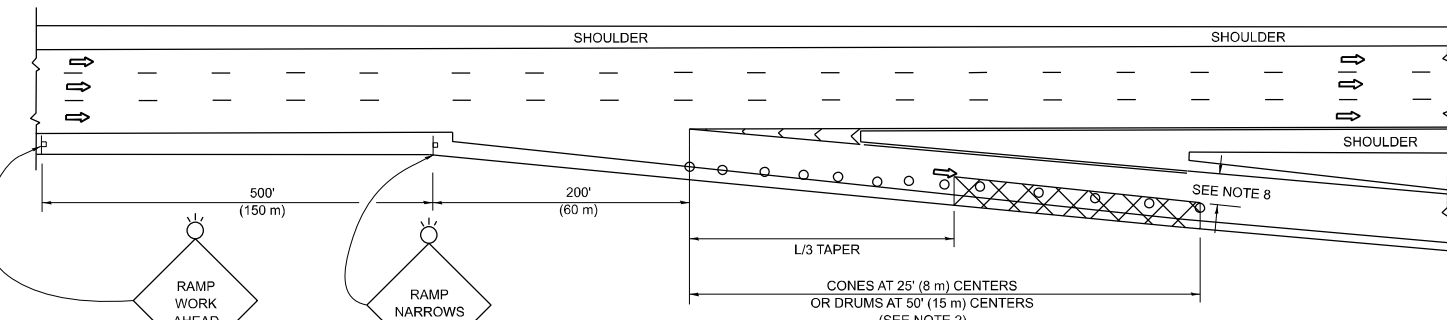
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	(263-1212.1-15D) BP 24	*	21	19
TC-09		CONTRACT NO. 62X21		
ILLINOIS		FED. AID PROJECT		

* COOK, LAKE

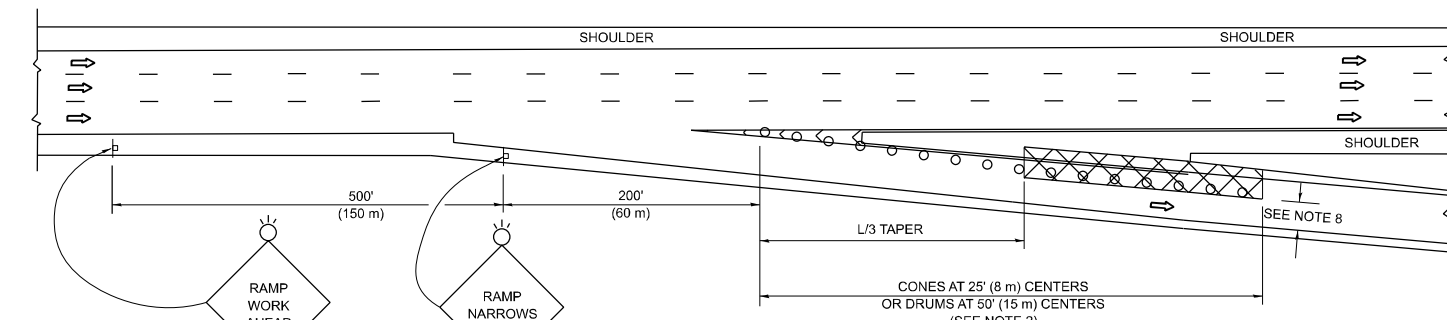
PARTIAL RAMP CLOSURE DETAILS



TYPICAL ENTRANCE RAMP



TYPICAL EXIT RAMP



TYPICAL EXIT RAMP

SYMBOLS

- ACTIVE WORK AREA
- SIGN ON PORTABLE OR PERMANENT SUPPORT
- FLAGGER WITH CONTROL SIGN
- TYPE II BARRICADE OR DRUM
- CONE, DRUM OR BARRICADE
- IMPACT ATTENUATOR OF TYPE AND TEST LEVEL SPECIFIED

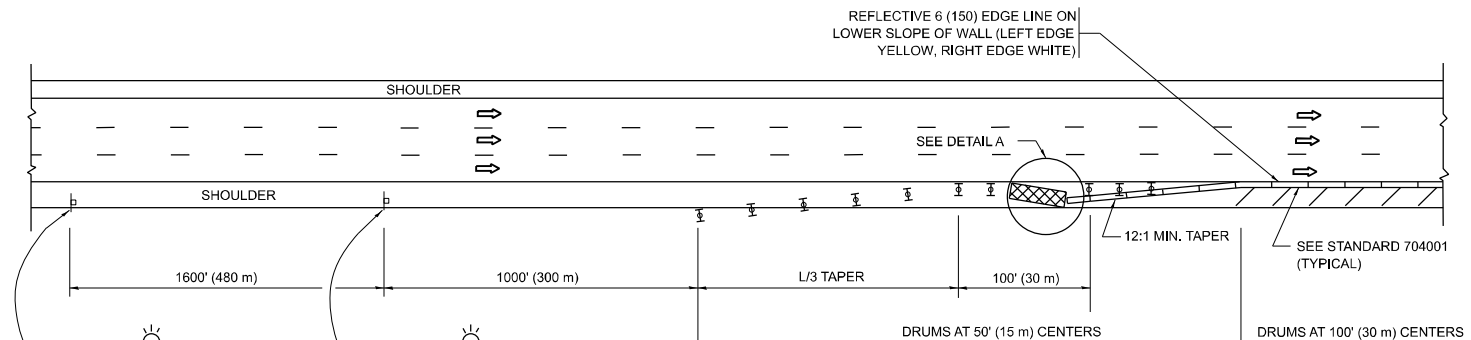
GENERAL NOTES:

- THE "L" DISTANCE EQUALS:

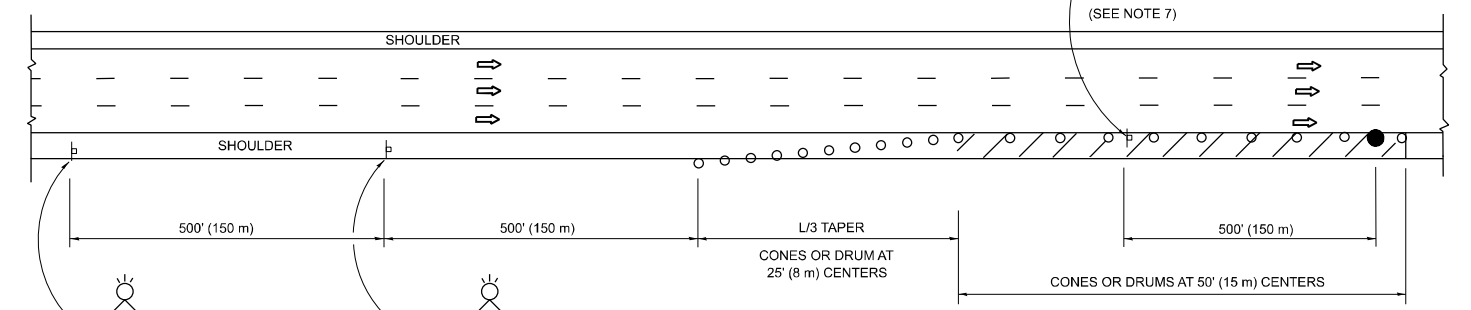
SPEED LIMIT	FORMULAS	
	METRIC	ENGLISH
45 mph (80 km/h) OR GREATER:	$L=0.65(W)(S)$	$L=(W)(S)$

W = WIDTH OF OFFSET IN FEET (METERS)
S = NORMAL POSTED SPEED MPH (KM/H)
- TYPE II BARRICADES OR DRUMS ARE REQUIRED FOR ALL NIGHTTIME CLOSURES. TYPE II BARRICADES OR DRUMS WITH MONODIRECTIONAL STEADY BURN LIGHTS ARE REQUIRED FOR DELINEATING OBSTACLES, EXCAVATIONS, OR HAZARDS EXCEEDING 100 FT (30m) IN LENGTH AT NIGHT.
- ALL SIGNS SHALL BE POST MOUNTED IF THE CLOSURE TIME EXCEEDS FOUR DAYS.
- FLASHING LIGHTS SHALL BE USED DURING THE HOURS OF DARKNESS AND SHALL BE INSTALLED ABOVE THE FIRST TWO SETS OF SIGNS.

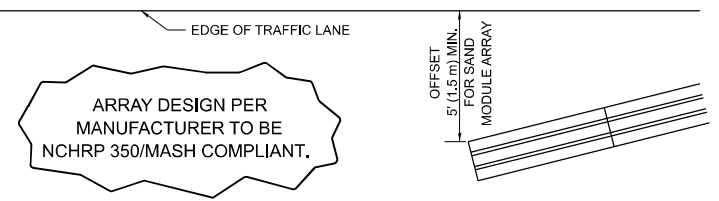
SHOULDER CLOSURE DETAILS



PERMANENT SHOULDER CLOSURE



TEMPORARY SHOULDER CLOSURE



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

- THE IMPACT ATTENUATOR, TEMPORARY IS NOT REQUIRED WHEN THE TEMPORARY CONCRETE BARRIER WALL IS PROTECTED BY OR IS TIED INTO THE EXISTING GUARDRAIL. IF OFFSET IS LESS THAN 5 FEET USE NARROW USE TYPE DEVICE TO MEET NCHRP350/MASH.
- AUTHORIZATION FROM THE DISTRICT'S BUREAU OF TRAFFIC IS REQUIRED FOR ALL FREEWAY CLOSURES.
- THE FLAGGER AND FLAGGER SIGN ARE REQUIRED AT THE ABOVE WORK SITES WHEN:
 - FOUR OR MORE WORK VEHICLES ENTER THE TRAFFIC LANES IN A ONE HOUR PERIOD.
 - THE WORK ACTIVITY REQUIRES FREQUENT ENCR OACHMENT INTO THE LANE OPEN TO TRAFFIC.
 THE FLAGGER SHALL BE STATIONED APPROXIMATELY 100' (30 m) TO 200' (60 m) IN ADVANCE OF THE WORKERS.

- 12' MIN. WIDTH TANGENT SECTION
16' MIN. WIDTH CURVE SECTION.

- TEMPORARY SHOULDER AND NON-SYSTEM INTERCHANGE PARTIAL CLOSURES ARE ALLOWED WEEKDAYS BETWEEN 9:00 A.M. AND 3:00 P.M. AND BETWEEN 7:00 P.M. AND 5:00 A.M. OR AS APPROVED BY THE EXPRESSWAY TRAFFIC OPERATIONS ENGINEER. PERMANENT SHOULDER AND PARTIAL RAMP CLOSURES WILL ONLY BE PERMITTED IF CALLED FOR IN THE PLANS OR AS APPROVED BY THE EXPRESSWAY OPERATIONS ENGINEER.

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

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USER NAME = Eric.L.Thomas	DESIGNED -	REVISED - M.D. 06-13
	DRAWN - D.W.S.	REVISED - M.D. 01-18
	CHECKED -	REVISED - M.D. 10-20
PLOT DATE = 8/20/2024	DATE - 11-96	REVISED - D.S. 05-24

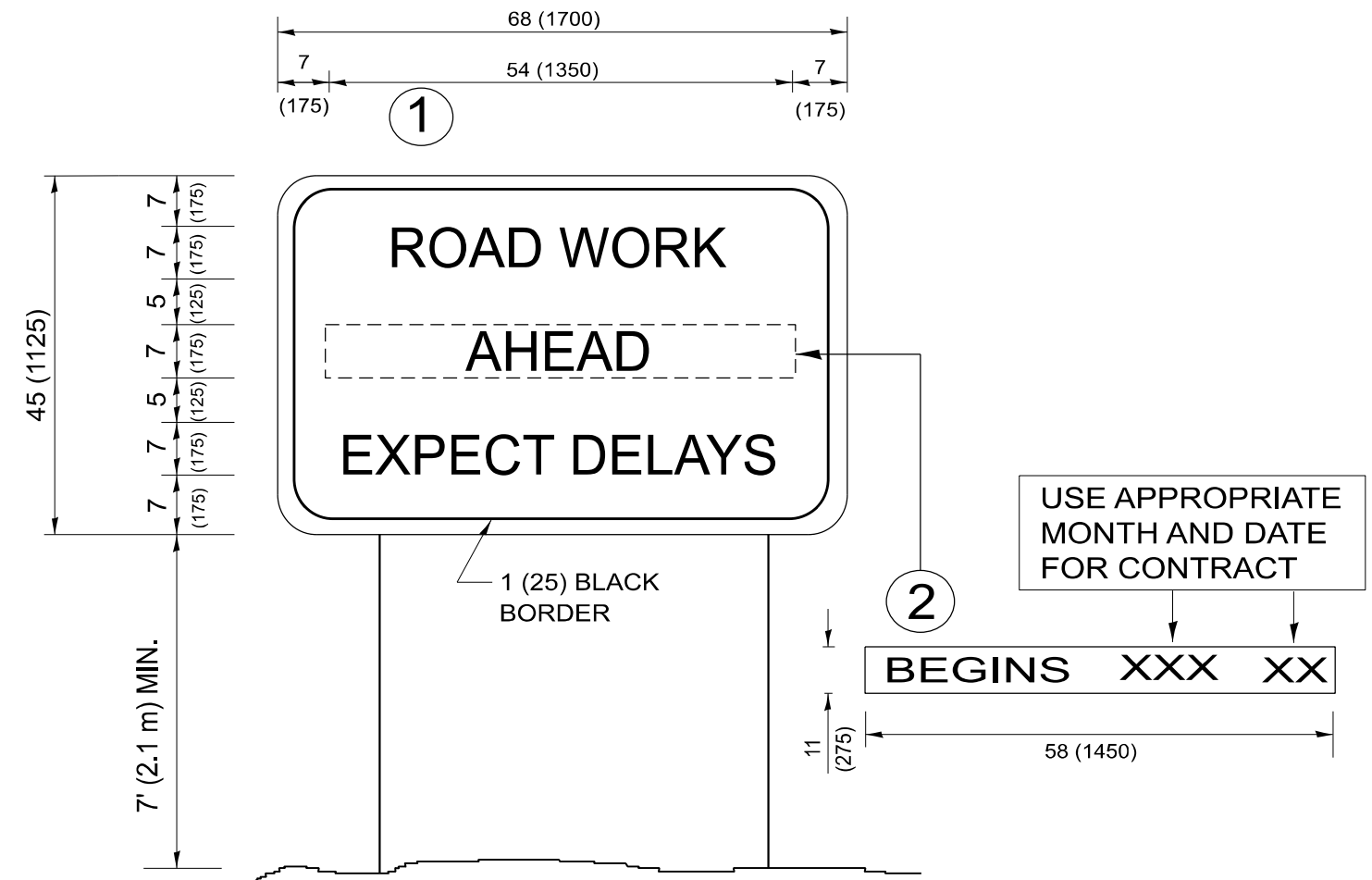
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TRAFFIC CONTROL DETAILS FOR FREEWAY
SHOULDER CLOSURES AND PARTIAL RAMP CLOSURES**

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

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	(263-1212.1-15D) BP 24	*	21	20
TC-17		CONTRACT NO. 62X21		
ILLINOIS FED. AID PROJECT				

MODEL: Plan Sign (Sheet)
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NOTES:

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

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

USER NAME = Eric.L.Thomas	DESIGNED -	REVISED - R. MIRS 09-15-97
	DRAWN -	REVISED - R. MIRS 12-11-97
	CHECKED -	REVISED - T. RAMMACHER 02-02-99
PLOT DATE = 8/20/2024	DATE -	REVISED - C. JUCIUS 01-31-07

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**ARTERIAL ROAD
 INFORMATION SIGN**

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

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	(263-1212.1-15D) BP 24	*	21	21
TC-22			CONTRACT NO. 62X21	
ILLINOIS FED. AID PROJECT				