

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

**PROPOSED
HIGHWAY PLANS**

F.A.P. 345 US 20 (LAKE STREET)
SECTION 8R-1-RS-4
EAST OF WELD RD. TO WEST OF SHALES PARKWAY
BRIDGE REPAIRS AND RESURFACING

COOK AND KANE COUNTIES
C-91-113-11

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
345	8R-1-RS-4	KANE/COOK	124	1
FED. ROAD DIST. NO.	ILLINOIS	CONTRACT NO.	60M46	

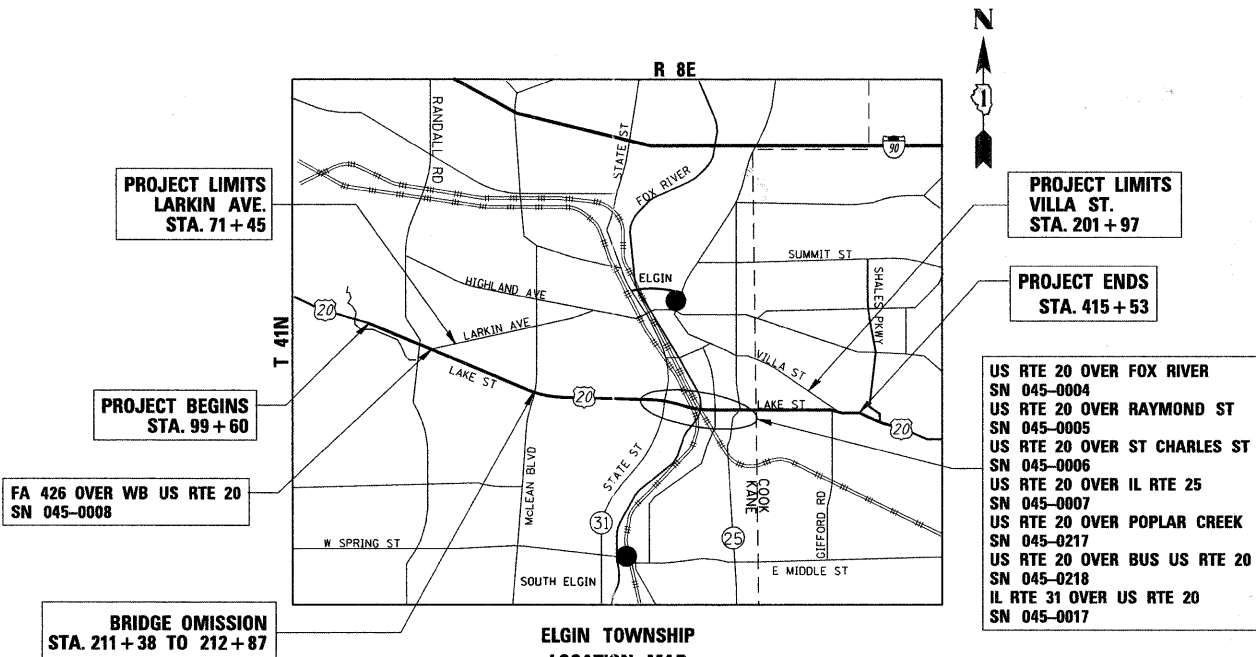
D-91-113-11 *124-2 = 122
*122 + 6 = 128

FOR INDEX OF SHEETS, SEE SHEET NO. 2

THIS IMPROVEMENT IS LOCATED
WITHIN THE CITY OF ELGIN

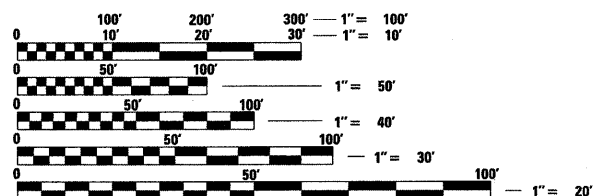
TRAFFIC DATA

2007 ADT: 30,000-58,200
POSTED SPEED LIMIT - 55 MPH



ELGIN TOWNSHIP
LOCATION MAP
1" = 5000'
GROSS OF PROJECT = 31593 = 5.96 MI.
NET LENGTH OF PROJECT = 31443 = 5.95 MI.

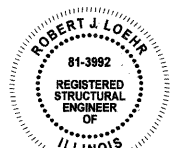
- US RTE 20 OVER FOX RIVER
SN 045-0004
- US RTE 20 OVER RAYMOND ST
SN 045-0005
- US RTE 20 OVER ST CHARLES ST
SN 045-0006
- US RTE 20 OVER IL RTE 25
SN 045-0007
- US RTE 20 OVER POPLAR CREEK
SN 045-0217
- US RTE 20 OVER BUS US RTE 20
SN 045-0218
- IL RTE 31 OVER US RTE 20
SN 045-0017



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

ABNA ENGINEERING, INC.
ROBERT J. LOEHR, S.E.
3992
Robert J. Loehr
DATE: 03/31/2011
SIGNATURE AND SEAL APPLIES TO DRWG NO 101 TO 108



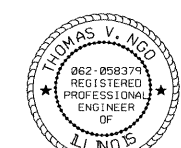
ABNA ENGINEERING, INC.
THOMAS P. PAGLICCHI, P.E.
062-056747
Thomas P. Paglicchi
DATE: 03/31/2011
SIGNATURE AND SEAL APPLIES TO DRWG NO 109 TO 111



LIN ENGINEERING, LTD.
MICHAEL T. HALEY, S.E.
81-5991
Michael T. Haley
DATE: 03/31/2011
SIGNATURE AND SEAL APPLIES TO DRWG NO 69 TO 100



MILLENNIA PROFESSIONAL SERVICES
THOMAS V. NGO, P.E.
062-058379
Thomas V. Ngo
DATE: 03/31/2011
SIGNATURE AND SEAL APPLIES TO DRWG NO 1 TO 68



STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED MARCH 30, 2011

Diana M. O'Keefe
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

May 13 2011
Scott E. Stitt, P.E.
Acting ENGINEER OF DESIGN AND ENVIRONMENT

May 13 2011
Christine M. Road
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

MILLENNIA PROFESSIONAL SERVICES
200 22ND Street, Suite 216, Lombard, IL 60148
630.705.0110 voice, 630.839.2566 fax
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Rev. 6-6-11

DISTRICT ONE - PLAN PREP ENGINEER: KEN ENG (847) 705-4247

CONTRACT NO. 60M46

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LIST OF ILLINOIS DOT HIGHWAY STANDARDS

000001-06	STANDARD SYMBOLS, ABBREVIATIONS, AND PATTERNS
001006	DECIMAL OF AN INCH AND OF A FOOT
280001-05	TEMPORARY EROSION CONTROL SYSTEMS
442201-03	CLASS C AND D PATCHES
482011-03	HMA SHOULDER STRIPS/SHOULDERS WITH RESURFACING OR WIDENING AND RESURFACING PROJECTS
606001-04	CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER
635011-02	REFLECTOR MARKER AND MOUNTING DETAILS
701201-04	LANE CLOSURE, 2L, 2W, DAY ONLY, FOR SPEEDS >= 45 MPH
701301-04	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
701306-03	LANE CLOSURE, 2L, 2W, SLOW MOVING OPERATIONS DAY ONLY, FOR SPEEDS >= 45 MPH
701311-03	LANE CLOSURE, 2L, 2W, MOVING OPERATIONS - DAY ONLY
701336-06	LANE CLOSURE, 2L, 2W, WORK AREAS IN SERIES, FOR SPEEDS > 45 MPH
701400-05	APPROACH TO LANE CLOSURE, FREEWAY/EXPRESSWAY
701401-01	LANE CLOSURE, FREEWAY/EXPRESSWAY
701402-08	LANE CLOSURE, FREEWAY/EXPRESSWAY, WITH BARRIER
701406-06	LANE CLOSURE, FREEWAY/EXPRESSWAY, DAY OPERATIONS ONLY
701411-07	LANE CLOSURE, MULTILANE, AT ENTRANCE OR EXIT RAMP, FOR SPEEDS > 45 MPH
701421-03	LANE CLOSURE, MULTILANE, DAY OPERATIONS ONLY FOR SPEEDS > OR = 45 MPH TO 55 MPH
701426-04	LANE CLOSURE, MULTILANE, INTERMITTENT OR MOVING OPERATIONS FOR SPEEDS > OR = 45 MPH
701446-02	TWO LANE LANE CLOSURE, FREEWAY/EXPRESSWAY
701901-01	TRAFFIC CONTROL DEVICES
704001-06	TEMPORARY CONCRETE BARRIERS
720001-01	SIGN PANEL MOUNTING DETAILS
720011-01	METAL POSTS FOR SIGNS, MARKERS AND DELINEATORS
729001-01	APPLICATIONS OF TYPE A AND B METAL POSTS (FOR SIGNS AND MARKERS)
780001-02	TYPICAL PAVEMENT MARKINGS

COMMITMENTS

THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES AND STAGING/TRAFFIC CONTROL WITH ANY ONGOING PROJECTS IN THE AREA, POSSIBLY INCLUDING CONTRACT 60K90 (MCLEAN BLVD. INTERCHANGE), 62529 (RESURFACING IMMEDIATELY WEST OF THIS CONTRACT), AND LOCAL STREET IMPROVEMENTS AND/OR SEWER WORK UNDERWAY BY PERMIT IN THE CITY OF ELGIN IN THE VICINITY OF IL ROUTE 31 AND/OR IL ROUTE 25 NEAR US 20.

GENERAL NOTES

- BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "J.U.L.I.E." AT 800-892-0123 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE, AND GAS FACILITIES. 48 HOUR NOTIFICATION IS REQUIRED.
- THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH THE UTILITY COMPANIES, CITY OF ELGIN.
- THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT WRITTEN PERMISSION FROM THE DEPARTMENT.
- ANY PAVEMENT MARKINGS AND RAISED REFLECTIVE PAVEMENT MARKERS OBLITERATED BY MILLING AND RESURFACING OPERATIONS ON SIDE STREETS AND ENTRANCES SHALL BE REPLACED AND PAID FOR IN KIND.
- ALL DAMAGE TO EXISTING PAVEMENT MARKING OR RAISED REFLECTIVE PAVEMENT MARKERS OUTSIDE THE REMOVAL LINE SHOWN ON THE PLANS SHALL BE REPLACED AT THE CONTRACTORS EXPENSE. NO ADDITIONAL COST TO THE DEPARTMENT.
- BEFORE BEGINNING ANY WORK, THE CONTRACTOR SHALL RETAIN AND RECORD FOR FUTURE REFERENCES, ALL EXISTING PAVEMENT MARKING LINES AND RAISED REFLECTIVE PAVEMENT MARKERS IN ORDER THAT THESE LOCATIONS CAN BE RE-ESTABLISHED FOR STRIPING. EXACT LOCATIONS OF ALL STRIPING SHALL BE AS DIRECTED BY THE ENGINEER.
- ALL PAVEMENT PATCHING LOCATIONS WILL BE DETERMINED IN THE FIELD BY THE ENGINEER.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO CONSTRUCTION AND ORDERING MATERIALS.
- THE CONTRACTOR SHALL CONTACT THE DISTRICT ONE TRAFFIC CONTROL SUPERVISOR AT (847) 705-4470 A MINIMUM OF 72 HOURS IN ADVANCE OF BEGINNING WORK.
- THE ENGINEER SHALL CONTACT DON CHIARUGI, THE TRAFFIC FIELD ENGINEER AT (847) 741-9857 A MINIMUM OF TWO (2) WEEKS PRIOR TO THE PLACEMENT OF PERMANENT PAVEMENT MARKINGS.
- 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.
- DOUBLE LANE MARKERS ARE TO BE USED AS SHOWN ON THE DISTRICT ONE DETAIL "TYPICAL APPLICATIONS - RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)" SHOWN ON THE PLANS.
- WHEN MILLED PAVEMENT IS OPEN TO TRAFFIC THE MAXIMUM GRADE DIFFERENTIAL BETWEEN PASSES OF THE MILLING MACHINE SHALL NOT EXCEED 1 1/2 INCHES WHERE THE SPEED LIMIT IS 45 MPH OR LESS AND 1 INCH WHERE THE SPEED LIMIT IS GREATER THAN 45 MPH. WITH WRITTEN APPROVAL FROM THE ENGINEER, A MAXIMUM GRADE DIFFERENTIAL OF 3 INCHES MAY BE ALLOWED IF THE EDGE OF THE MILLING IS SLOPED A MINIMUM 1:3 (V:H).
- BUTT JOINTS WILL BE INSTALLED AT THE ENDS OF ALL RESURFACING (WHERE RESURFACING MEETS EXISTING PAVEMENT), IN ACCORDANCE WITH THE "BUTT JOINT AND HOT-MIX ASPHALT TAPER DETAILS" SHEET INCLUDED IN THE PLANS UNLESS OTHERWISE SPECIFIED.
- PAVEMENT MARKING TAPE, TYPE III SHALL BE USED FOR SHORT TERM PAVEMENT MARKINGS ON ALL FINAL SURFACES. THE COST OF THE PAVEMENT MARKING TAPE, TYPE III AND IT'S REMOVAL SHALL BE INCLUDED IN THE COST OF SHORT TERM PAVEMENT MARKING.
- THE CONTRACTOR SHALL PLACE PROPOSED PAVEMENT MARKINGS IN ACCORDANCE WITH DISTRICT 1 TYPICAL PAVEMENT MARKINGS DETAIL (TC-13).
- THE RESIDENT ENGINEER AND CONTRACTOR SHALL VERIFY ALL EXISTING PAVEMENT MARKING PRIOR TO THE PROJECT STARTING. IF A DISCREPANCIES OCCURS BETWEEN EXISTING PAVEMENT MARKINGS AND THE PROPOSED PAVEMENT MARKINGS, THE RESIDENT ENGINEER SHALL CONTACT THE BUREAU OF TRAFFIC OPERATIONS.
CCCC

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 USER = JLN
 DATE = 6/1/2011
 MILLENNIA PROFESSIONAL SERVICES



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DESIGNED - CJD	REVISED - Rev. 6-6-11
DRAWN - CJD	REVISED -
CHECKED - TVN	REVISED -
DATE - 6/1/2011	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

US ROUTE 20 (LAKE STREET)
RANDALL RD TO SHALES PARKWAY
 SCALE: N/A

INDEX OF SHEETS, HIGHWAY
STANDARDS, GENERAL NOTES,
AND COMMITMENTS

F.A.P. / R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
345	BR-1-RS-4	KANE/COOK	124	2
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT			CONTRACT NO. 60M46	

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Existing Structure: S.N. 045-0007 built in 1959 as F.A. Route 6, Section 8R-HB-6 at Station 221+35.32. In 1986, sidewalks and deck at longitudinal bonded construction joints were removed and bridge was widened, expansion joints reconstructed, overlay placed, bearings replaced and substructure was rehabilitated and widened. In 1998, steel beams were repaired and pin and link plate was replaced. In 2002, deck was patched and sealed, and substructure repaired. Structure consists of a three span steel WF beam bridge with 147'-6" back-to-back abutments, varying out-to-out deck width from 74'-8" to 77'-9 1/4", multi-column piers on spread footings and pile supported abutments. Stage construction shall be utilized to maintain one lane of traffic in each direction at all times.

SCOPE OF WORK

1. Replace the preformed joint seals at abutments and hinge joints with Silicone Joint Sealer.
2. Repair deck slab.
3. Clean drains.

INDEX OF SHEETS

1. General Plan and Elevation
2. Stage Construction Details
3. Superstructure Repair

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 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.

See Roadway Plans for maintenance of traffic details.

DESIGN STRESSES

FIELD UNITS

NEW CONSTRUCTION	EXISTING CONSTRUCTION (SUPER)
$f'_c = 3,500$ psi	$f'_c = 1,400$ psi
$f_y = 60,000$ psi (Reinforcement)	$f_s = 20,000$ psi (Reinforcement)

LOADING HS 20

(Original Construction)

DESIGN SPECIFICATIONS

(New Construction)
2002 AASHTO "Standard Specifications for Highway Bridges"

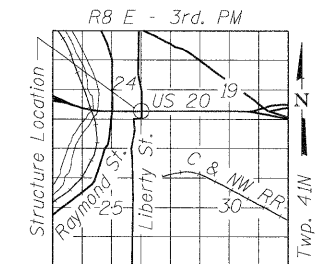
TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Silicone Joint Sealer, 1"	Foot	152	-	152
Silicone Joint Sealer, 1 3/4"	Foot	77	-	77
Silicone Joint Sealer, 2 3/4"	Foot	74	-	74
Floor Drains to be Cleaned	Each	8	-	8
Deck Slab Repair (Partial)	Sq. Yd.	39.7	-	39.7
Protective Shield	Sq. Yd.	539	-	539



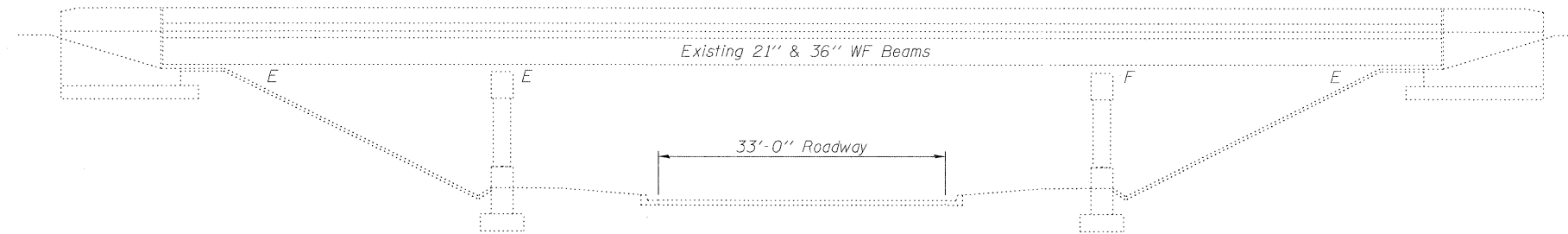
Michael T. Haley
Licensed Structural Engineer
State of Illinois No. 81-5991
Expires 11/30/2012

3-24-2011
Date

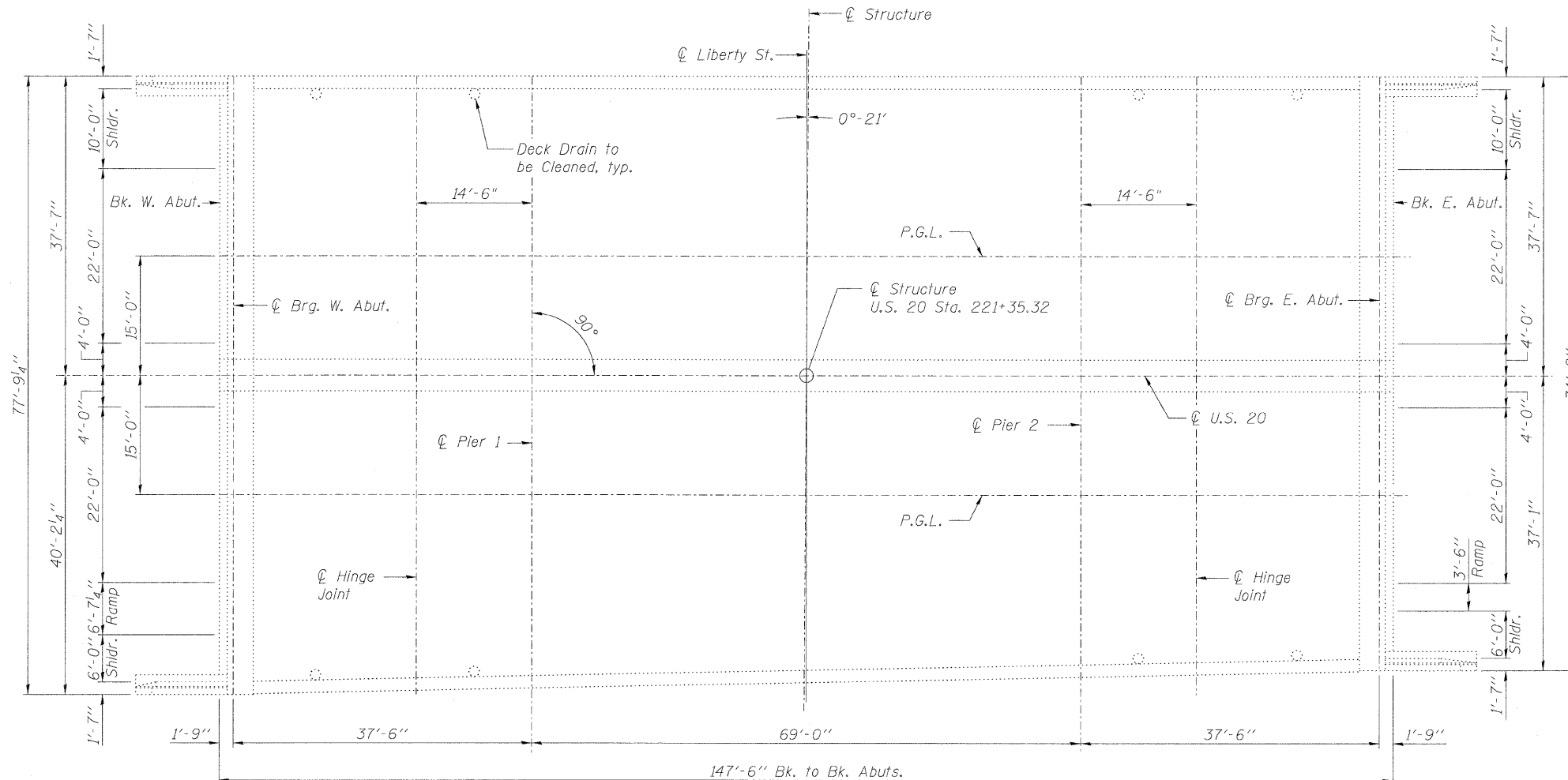
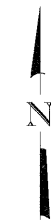


LOCATION SKETCH

GENERAL PLAN AND ELEVATION
US 20 OVER IL 25 (LIBERTY STREET)
FAP RTE 345 - SECTION 8R-1-RS-4
KANE COUNTY
STATION 221+35.32
STRUCTURE NO. 045-0007



ELEVATION



PLAN



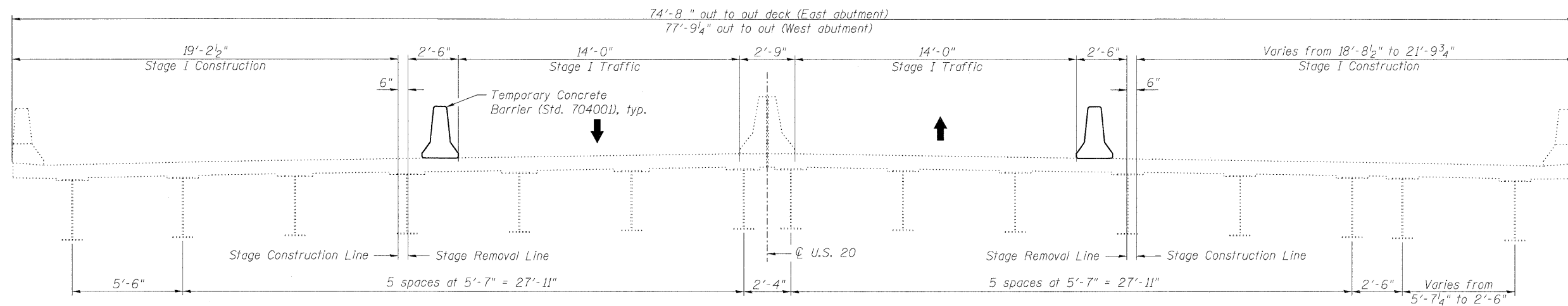
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FILE NAME =	CHECKED - ADB	REVISED -
PLOT SCALE =	DRAWN - AJF	REVISED -
PLOT DATE =	CHECKED - MTH	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

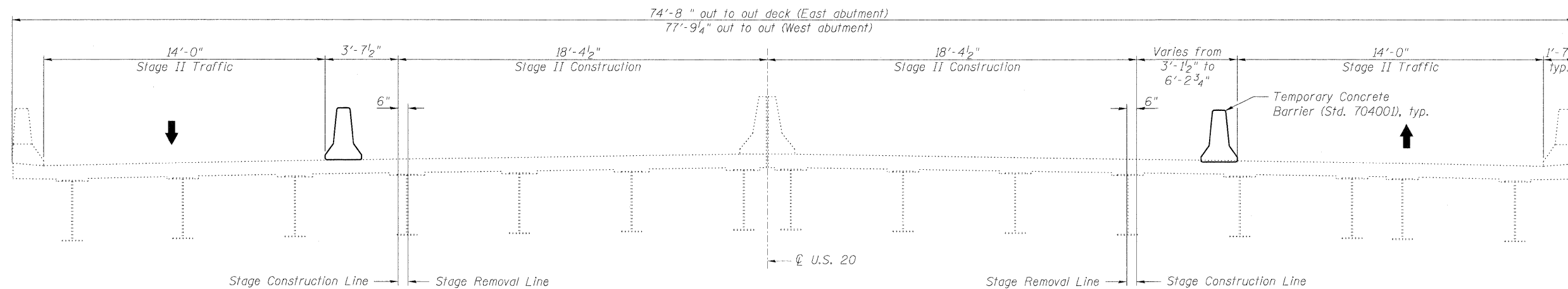
GENERAL PLAN AND ELEVATION
STRUCTURE NO. 045-0007

SHEET NO. 1 OF 3 SHEETS

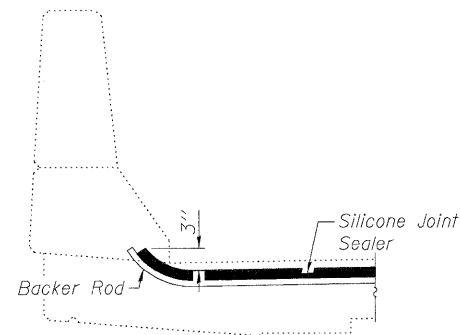
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
345	8R-1-RS-4	KANE	124	87
CONTRACT NO. 60M46				
ILLINOIS FED. AID PROJECT				



STAGE I REMOVAL & CONSTRUCTION
(Looking East)



STAGE II REMOVAL & CONSTRUCTION
(Looking East)

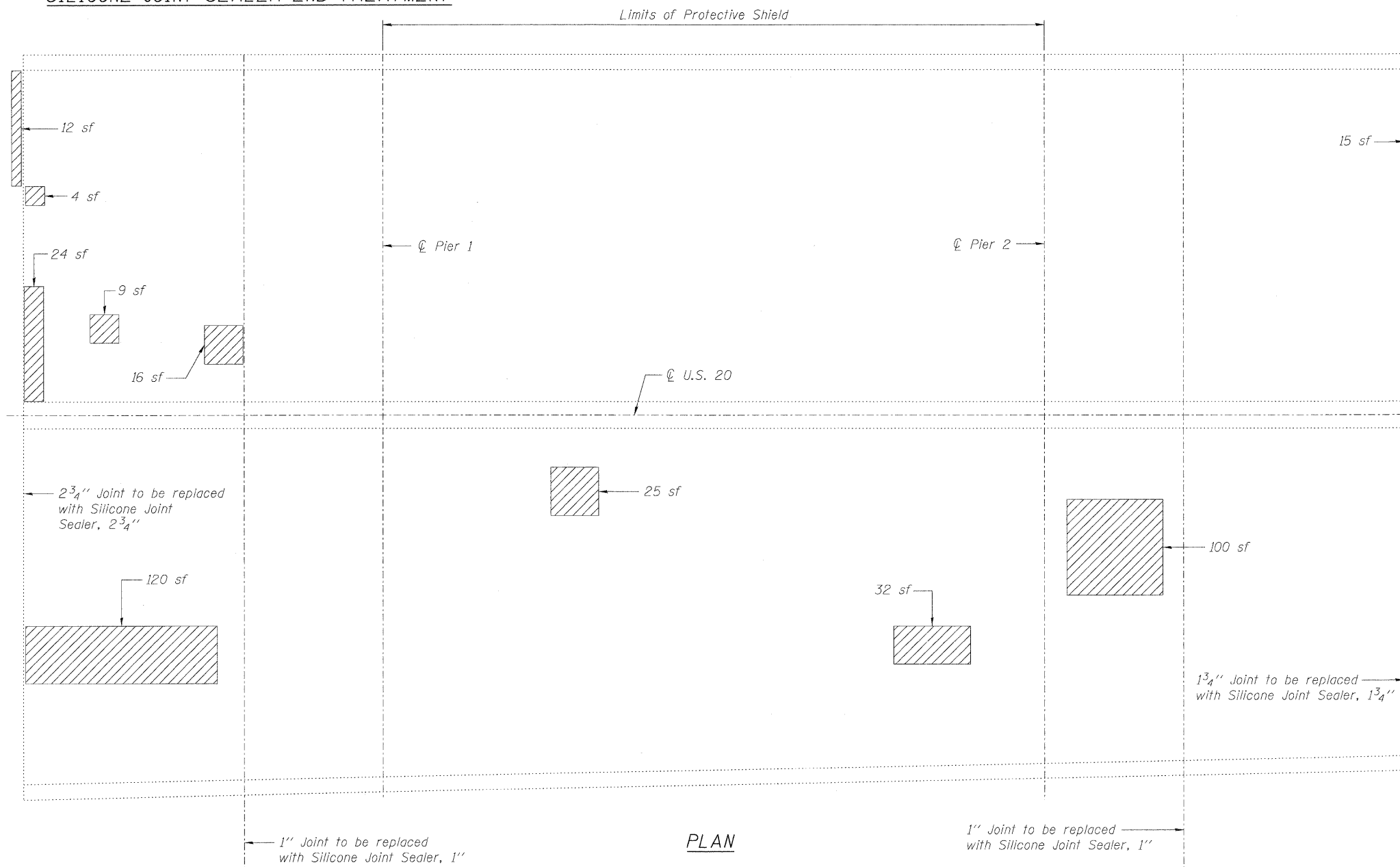


Notes:

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.
 Cost of existing joint removal is included in the cost of Silicone Joint Sealer.
 Cost of concrete overlay removal for deck slab repair is included with the cost of Deck Slab Repair.
 Limits of Protective Shield shall extend longitudinally from Pier 1 to Pier 2 and transversely from North to South fascia beam.



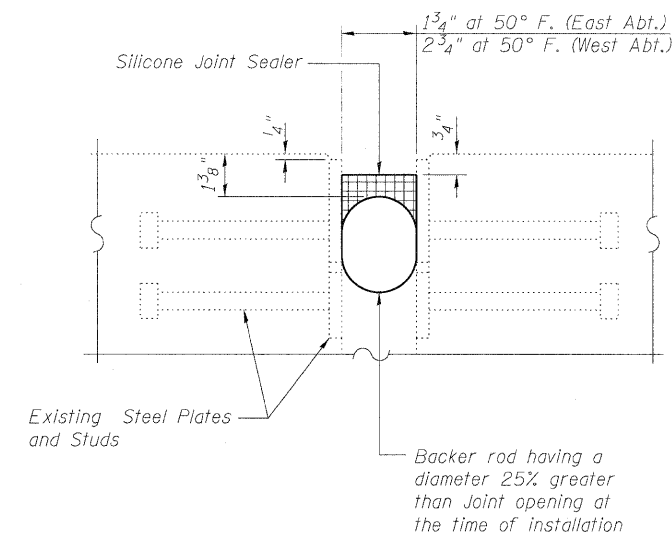
SILICONE JOINT SEALER END TREATMENT



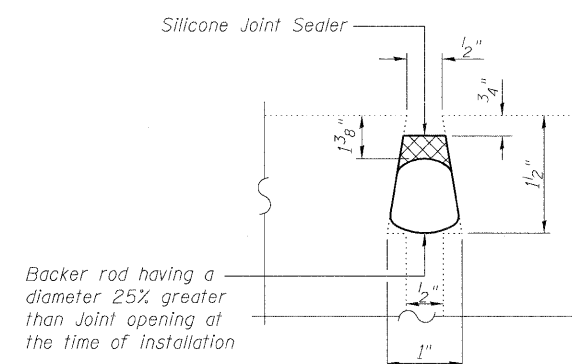
PLAN

LEGEND

- Deck Slab Repair (Partial)
- sf Square Feet



PROPOSED JOINT DETAIL @ ABUTMENTS



PROPOSED JOINT DETAIL @ HINGES

BILL OF MATERIAL

ITEM	UNIT	TOTAL
Deck Slab Repair (Partial)	Sq. Yd.	39.7
Silicone Joint Sealer, 1"	Foot	152
Silicone Joint Sealer, 1 3/4"	Foot	74
Silicone Joint Sealer, 2 3/4"	Foot	77
Protective Shield	Sq. Yd.	539