

LETTING DATE: JUNE 15, 1993

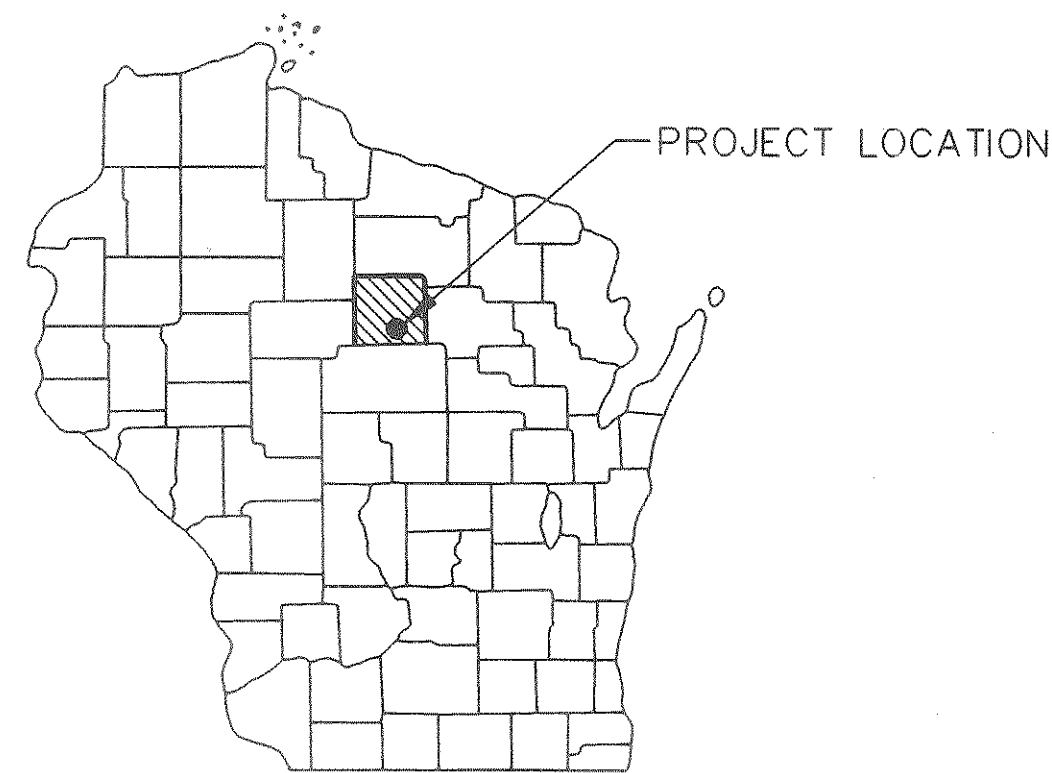
LINCOLN COUNTY

9996-02-70

DRAWING NAME: 321101H  
DATE: 2/25/93

INDEX OF SHEETS

Sheet No. 1	Title
Sheet No.	Typical Sections and Details
Sheet No.	Estimate of Quantities
Sheet No.	Miscellaneous Quantities
Sheet No.	Right of Way Plat
Sheet No.	Plan and Profile
Sheet No.	Standard Detail Drawings
Sheet No.	Sign Plates
Sheet No.	Structure Plans
Sheet No.	Computer Earthwork Data
Sheet No.	Cross Sections
TOTAL SHEETS =	



DESIGN DESIGNATION

A.D.T. (1993)	= 3500
A.D.T. (2013)	= 5000
D.H.V.	= 1500
D.	= 60-40
T.	= 10%
V.	= 25 MPH.
ESAL	= N/A

BEGIN PROJECT 9996-02-70  
 STA. 16+85  
 Y=488,500 (100±)  
 X=2,075,100 (100±)

CONVENTIONAL SIGNS

COUNTY LINE	---	COMBUSTIBLE FLUIDS (UNDER PRESSURE)	CAUTION
CORPORATE LIMITS	////	UNDERGROUND UTILITIES GAS	G
PROPERTY LINE	- - - -	ELECTRIC	E
LOT LINE	----	TELEPHONE	T
LIMITED HIGHWAY EASEMENT	- - - -	SERVICE PEDESTAL	☒
EXISTING RIGHT OF WAY	=====	CABLE MARKER	P
NEW RIGHT OF WAY	=====	POWER POLE	□
REFERENCE LINE	=====	TELEPHONE POLE	⊙
SLOPE INTERCEPTS	~~~~~	RAILROADS	+++++
ORIGINAL GROUND	~~~~~	MARSH	***
MARSH OR ROCK PROFILE	~~~~~	WOODED AREA	~~~~~
CULVERT IN PLACE	====	RIGHT OF WAY MARKER POST	●
CULVERT REQUIRED	====		
CULVERT REQUIRED (Profile)	●		

STATE OF WISCONSIN  
 DEPARTMENT OF TRANSPORTATION

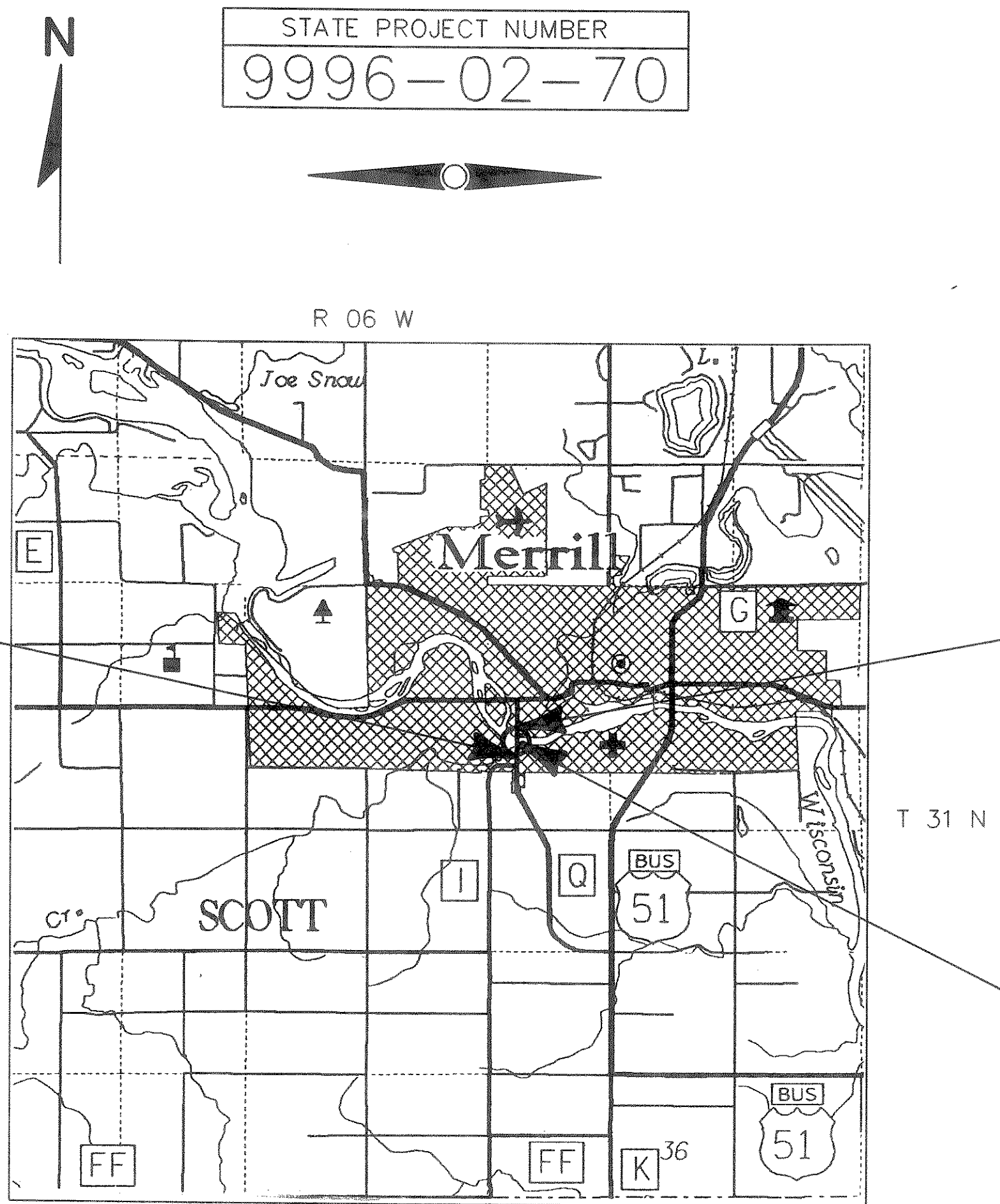
PLAN OF PROPOSED IMPROVEMENT

STATE STREET BRIDGE

CTH Q

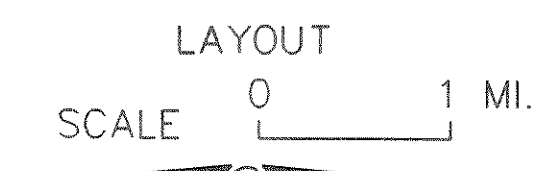
LINCOLN COUNTY

STATE PROJECT NUMBER  
 9996-02-70



END PROJECT 9996-02-70  
 STA. 21+52

STRUCTURE B-35-15



TOTAL NET LENGTH OF CENTERLINE = 0.094 MI. URBAN

COORDINATE NOTE

ALL COORDINATES ARE REFERENCED TO THE WISCONSIN COORDINATE SYSTEM CENTRAL ZONE AND SCALED FROM U.S.G.S. TOPOGRAPHIC MAP MERRILL, WI. 1982, 7.5 MINUTE WISCONSIN QUADRANGLE FOR IDENTIFICATION ONLY.

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
9996-02-70		

FINAL TRACINGS  
 SENT TO WDOT DISTRICT # 7  
 DATE 2/25/93

APPROVED FOR

CITY \_\_\_\_\_ of MERRILL \_\_\_\_\_

DATE \_\_\_\_\_ CITY ENGINEER \_\_\_\_\_

ORIGINAL PLANS PREPARED BY:

DATE \_\_\_\_\_

STATE OF WISCONSIN  
 DEPARTMENT OF TRANSPORTATION

Surveyor S.E.H.

Designer S.E.H.

District Examiner DANIEL T. KUHN

District Supervisor ALLAN J. PETERSON

Proj. Dev. Engineer \_\_\_\_\_

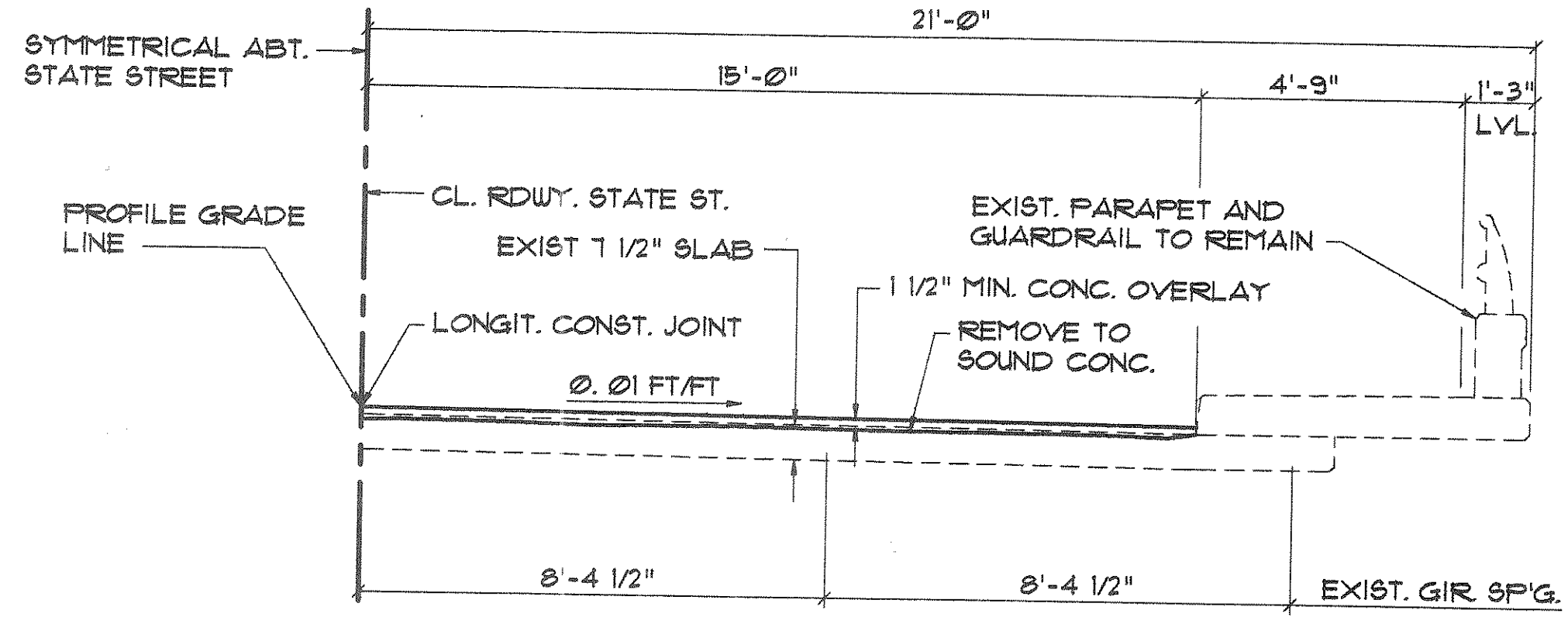
C.O. Examiner \_\_\_\_\_

APPROVED FOR DISTRICT OFFICE

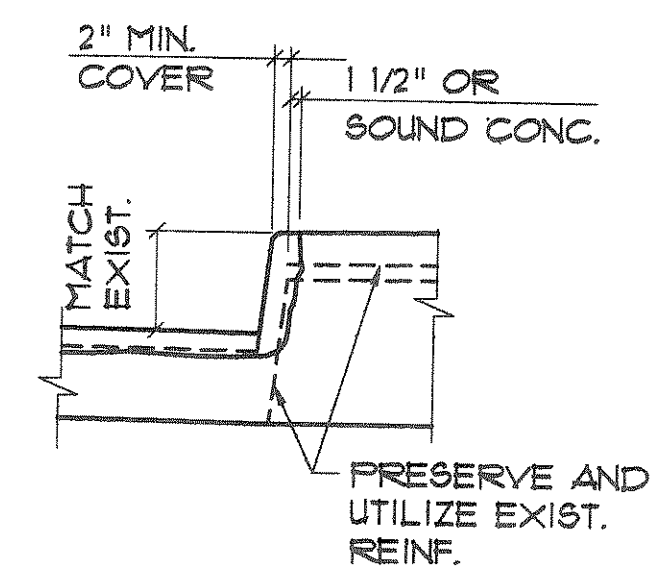
DATE \_\_\_\_\_ DISTRICT CHIEF DESIGN ENGINEER \_\_\_\_\_

AUTHORIZED FOR CENTRAL OFFICE DESIGN

DATE \_\_\_\_\_ REGIONAL CHIEF ROAD DESIGN ENGINEER \_\_\_\_\_



HALF CROSS SECTION THRU RDWY.



CURB DETAIL

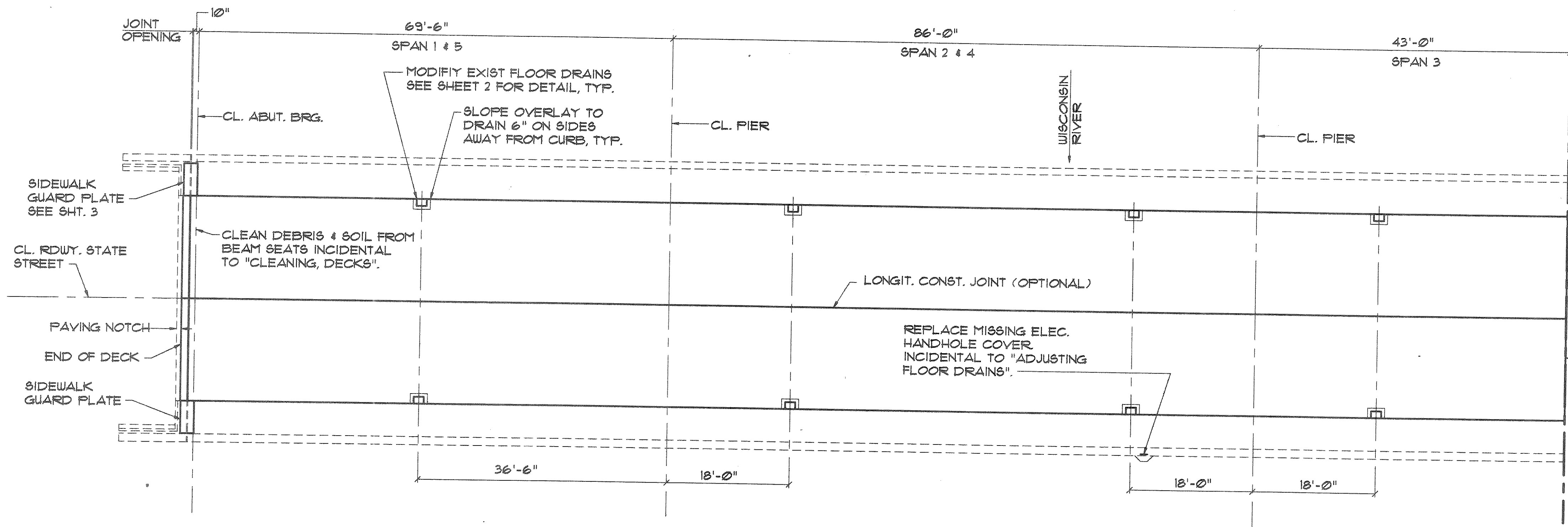
AT DAMAGED AREAS, FLOOR DRAIN AND AT EXPANSION JOINT AREA AS REQUIRED. SEE SHT. 2 FOR DETAIL. CURB REPAIR PAID FOR AS "CONCRETE MASONRY, BRIDGE".

**GENERAL NOTES**

DRAWINGS SHALL NOT BE SCALED.  
CONTRACTOR SHALL VERIFY DIMENSIONS IN FIELD.

**DESIGN DATA**

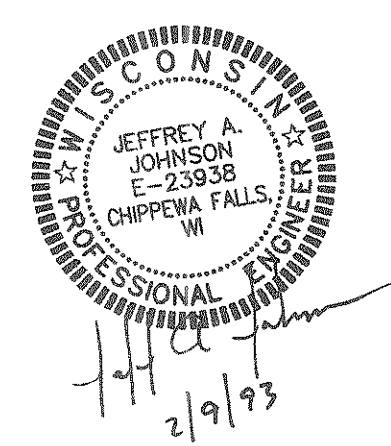
LIVE LOAD:  
INVENTORY RATING = H814  
OPERATING RATING = H823  
MAX. STANDARD PERMIT VEHICLE LOAD = 150 KIPS  
ULTIMATE DESIGN STRESSES:  
CONC. MASONRY SLAB  $f'c = 4,000$  psi



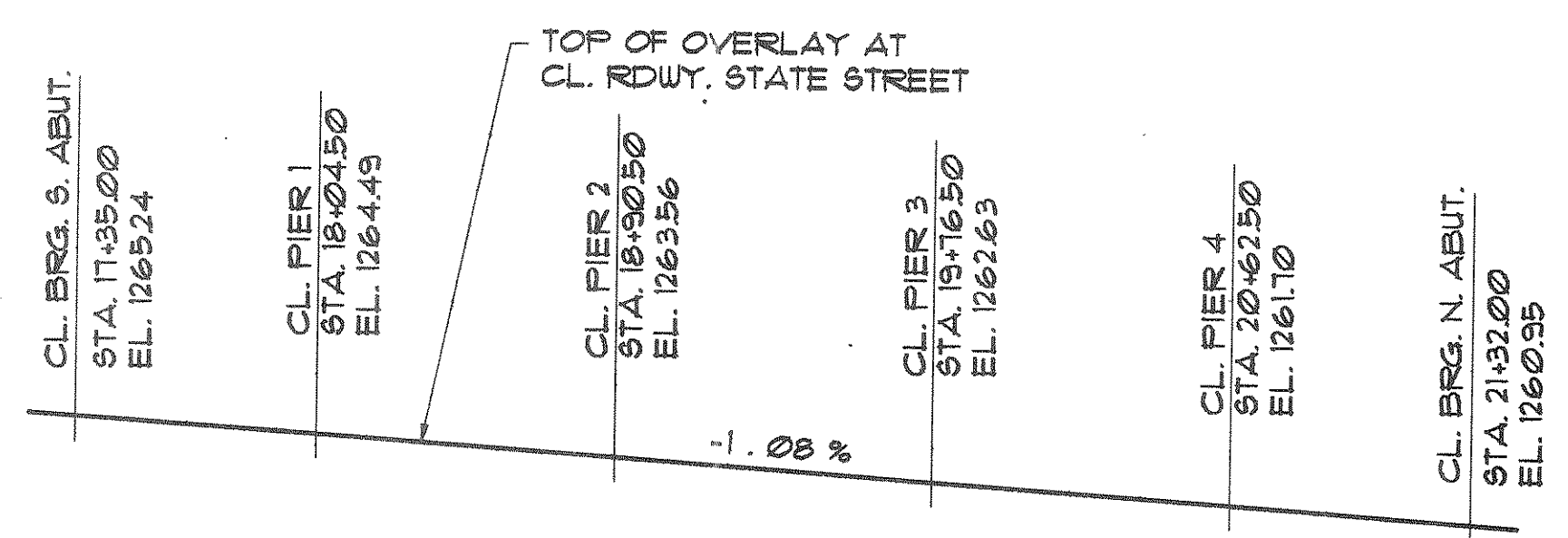
PLAN

**LIST OF DRAWINGS**

1. CONCRETE OVERLAY
2. DETAILS
3. DETAILS



BRIDGE OFFICE CONTACT:  
C. RAY  
(608) 266-8486



PROFILE GRADE LINE

NOTE:  
ELEVATIONS SHOWN ARE BASED ON ADDING 0.13' TO EXIST. TOP OF SLAB  
FIELD MODIFICATIONS TO PROFILE GRADE LINE WHICH INCREASE OVERLAY THICKNESS BY MORE THAN 1/2" MUST BE REPORTED TO BRIDGE OFFICE. THIS INFORMATION IS REQUIRED TO RECALCULATE VEHICLE CAPACITY RATINGS.

**TOTAL ESTIMATED QUANTITIES**

BID ITEMS	UNIT	TOTALS
CONCRETE MASONRY, OVERLAY, DECKS	C.Y.	55
CLEANING, DECKS	S.Y.	1329
CONCRETE MASONRY, BRIDGES	C.Y.	8
PREPARATION, DECKS	S.Y.	97
PROTECTIVE SURFACE TREATMENT	GAL.	110
JOINT REPAIR	S.Y.	21
EXPANSION DEVICE, STRUCTURE B-35-15	L.S.	1
COATED HIGH-STRENGTH BAR STEEL REINFORCEMENT, BRIDGES	LB.	490
ADJUSTING FLOOR DRAINS	EACH	16
CONCRETE MASONRY ANCHORS, TYPES, 5/8-INCH	EACH	30



STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

**STRUCTURE B-35-15**

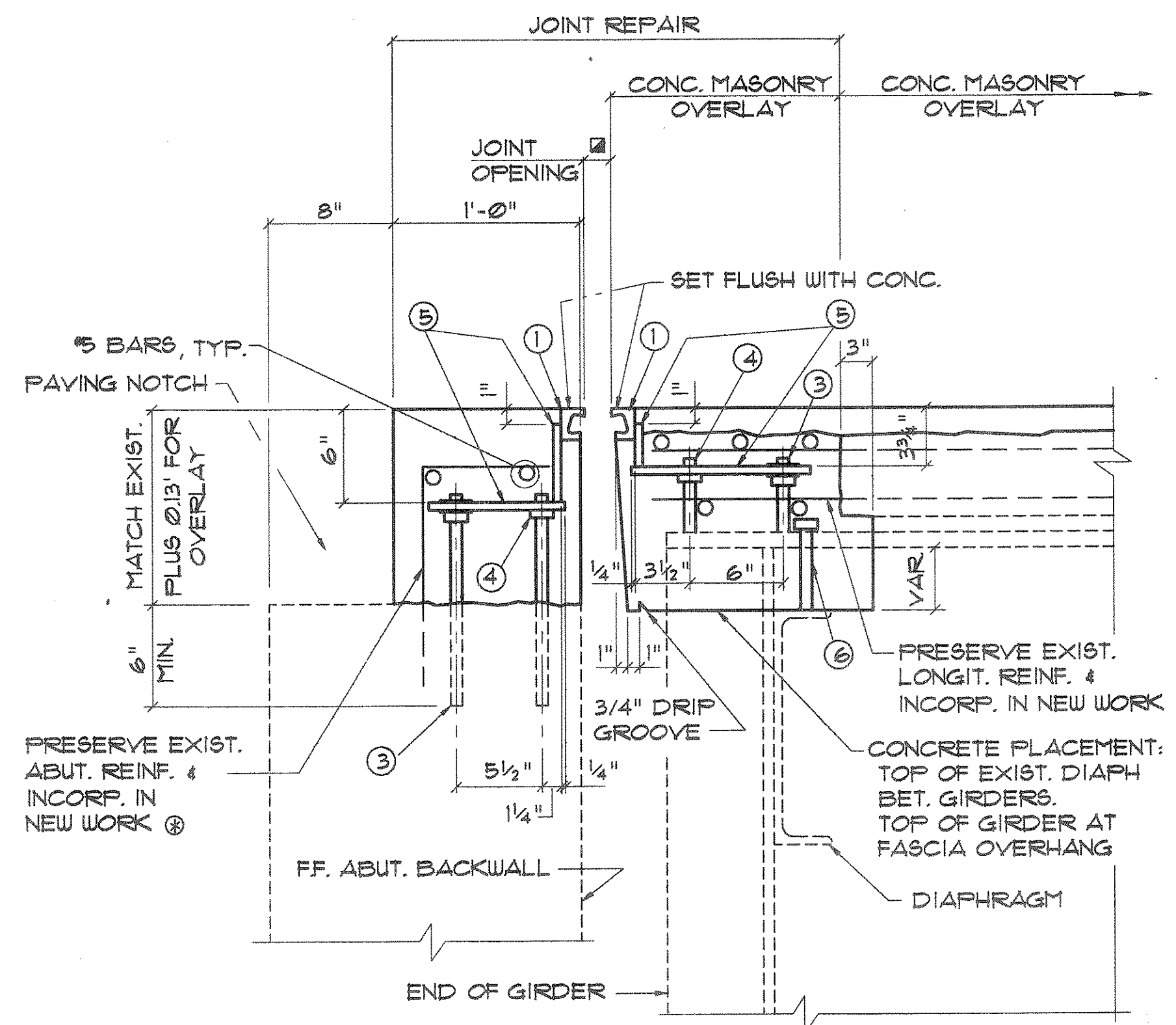
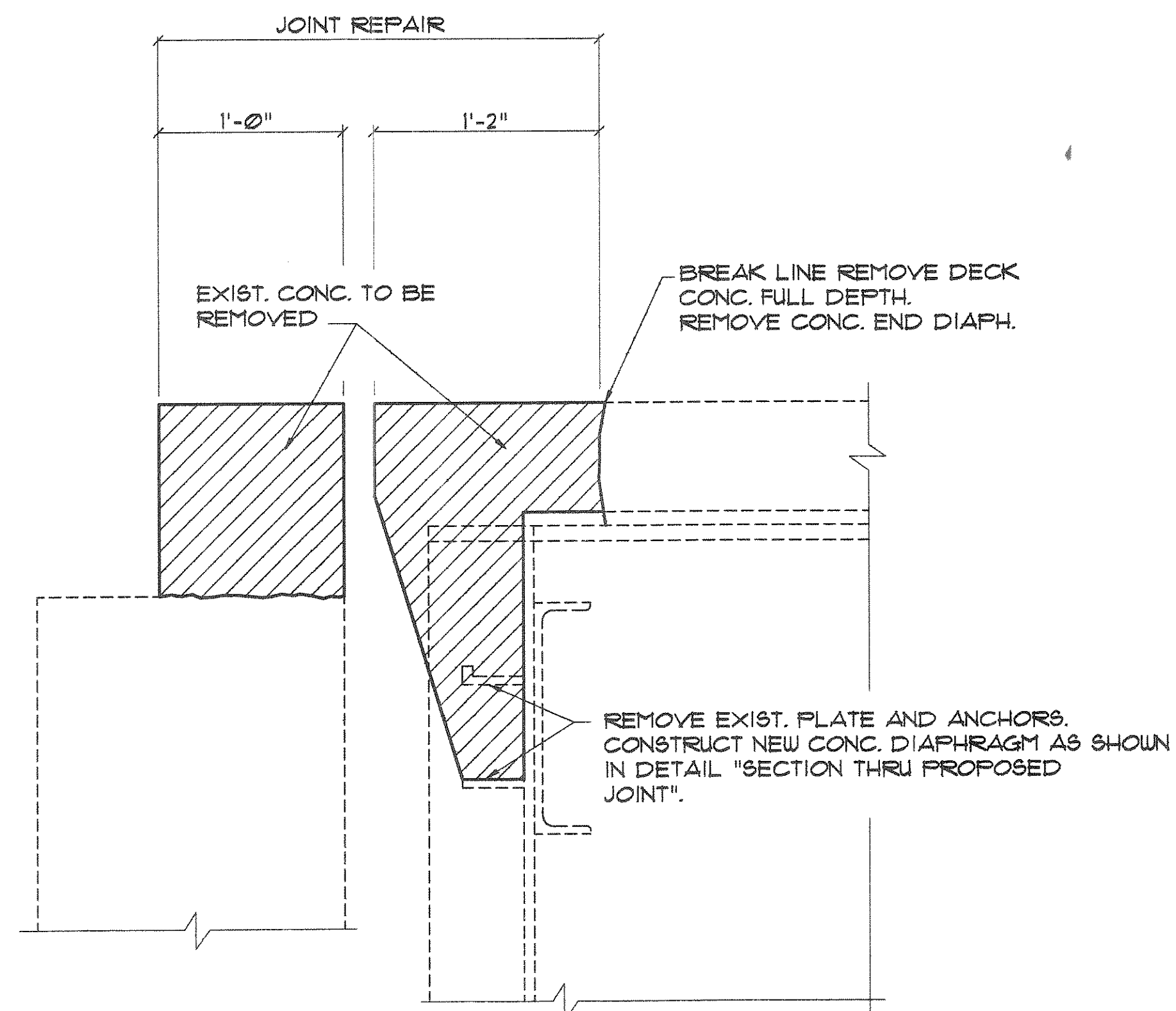
STATE STREET OVER WISCONSIN RIVER

COUNTY LINCOLN	CITY MERRILL
DESIGN SPEC. 1992 AASHTO	LOAD CONST. SPEC. 1989
DESIGNED BY JAJ	DESIGN CK'D. ———
DRAWN BY DLF	PLANS CK'D. JAJ

APPROVED \_\_\_\_\_ STATE BRIDGE ENGINEER \_\_\_\_\_ DATE \_\_\_\_\_

**CONCRETE OVERLAY**

SHEET 1 OF 3



**LEGEND**

- ① NEOPRENE STRIP SEAL & STEEL EXTRUSIONS; BRG. INDUSTRIES BS-400A, D.S. BROWN 65A-400; STRUCTURAL ACCESSORIES SA2-4055; & WATSON-BOWMAN & ACME A3-400E. EXTRUSIONS TO BE ASTM A-36.
- ② STUDS 5/8" DIA. x 6 3/8" LONG AT 6" ALTERNATE CENTERS. WELD TO EXTRUSION & BEND AS SHOWN AFTER WELDING. TYP. EXCEPT STUDS 5/8" DIA. x 4" LONG AT SIDEWALK.
- ③ SUPPORT ROD 3/4" DIA. WITH 2 NUTS & WASHERS WITH ONE END THREADED 4". GROUT THREAD ROD INTO FIELD DRILLED HOLES IN ABUT. BACKWALL AND TACK WELD TO GIRDER AS SHOWN. PLACE AT EACH GIRDER.
- ④ 3/4" DIA. THREADED ROD WITH NUT TACK WELD NUT TO NO. ⑤
- ⑤ FABRICATE SUPPORT FROM 3"x 1/2" BAR AS SHOWN OR EQUIVALENT, ONE PER GIRDER FIELD OR SHOP WELD TO NO. ①. PROVIDE 1 1/2" DIA. HOLE FOR NO. ③ & 1" DIA. HOLE FOR NO. ④.
- ⑥ 5" x 7/8" STUDS @ 1'-0" CTRS. INCIDENTAL TO BID ITEM "JOINT REPAIR".
- ⑦ 3/4" x 1 1/2" STAINLESS STEEL FLAT HEAD MACHINE SCREWS. RECESS 1/16" BELOW PLATE SURFACE.
- ⑧ 3/4" x 4" GALV. HEX HEAD BOLT. BENT 45°.
- ⑨ 3/4" x 2 1/4" GALV. THREADED COUPLING.
- ⑩ SIDEWALK GUARD PLATE 3/8" x 2'-0" WIDE x LIMITS SHOWN. BEND DOWN FACE OF SIDEWALK WITH HOLES FOR NO. ①
- ⑪ 1" x 5" SLOTTED C&K. HOLE FOR NO. ① SLOT PARALLEL TO DIRECTION OF MOVEMENT.

**NOTES:**

ONE FIELD SPLICE PERMITTED IN STEEL EXTRUSION. IF USED, IT SHALL BE LOCATED IN THE CL RDWY. AND DETAILS SHALL BE SUBMITTED FOR APPROVAL. NO SPLICING PERMITTED IN NEOPRENE STRIP SEAL.

AFTER FABRICATION BUT BEFORE SHIPMENT, STRAIGHTEN EXTRUSIONS SUCH THAT THEY WILL BE FREE FROM WARP, TWIST & SWEEP.

AFTER FABRICATION, SAND BLAST CLEAN STEEL EXTRUSIONS SURFACES TO SSPC SP. 10 AND PAINT ALL STEEL EXTRUSION SURFACES WITH 3 MILS OF ORGANIC ZINC RICH PAINT.

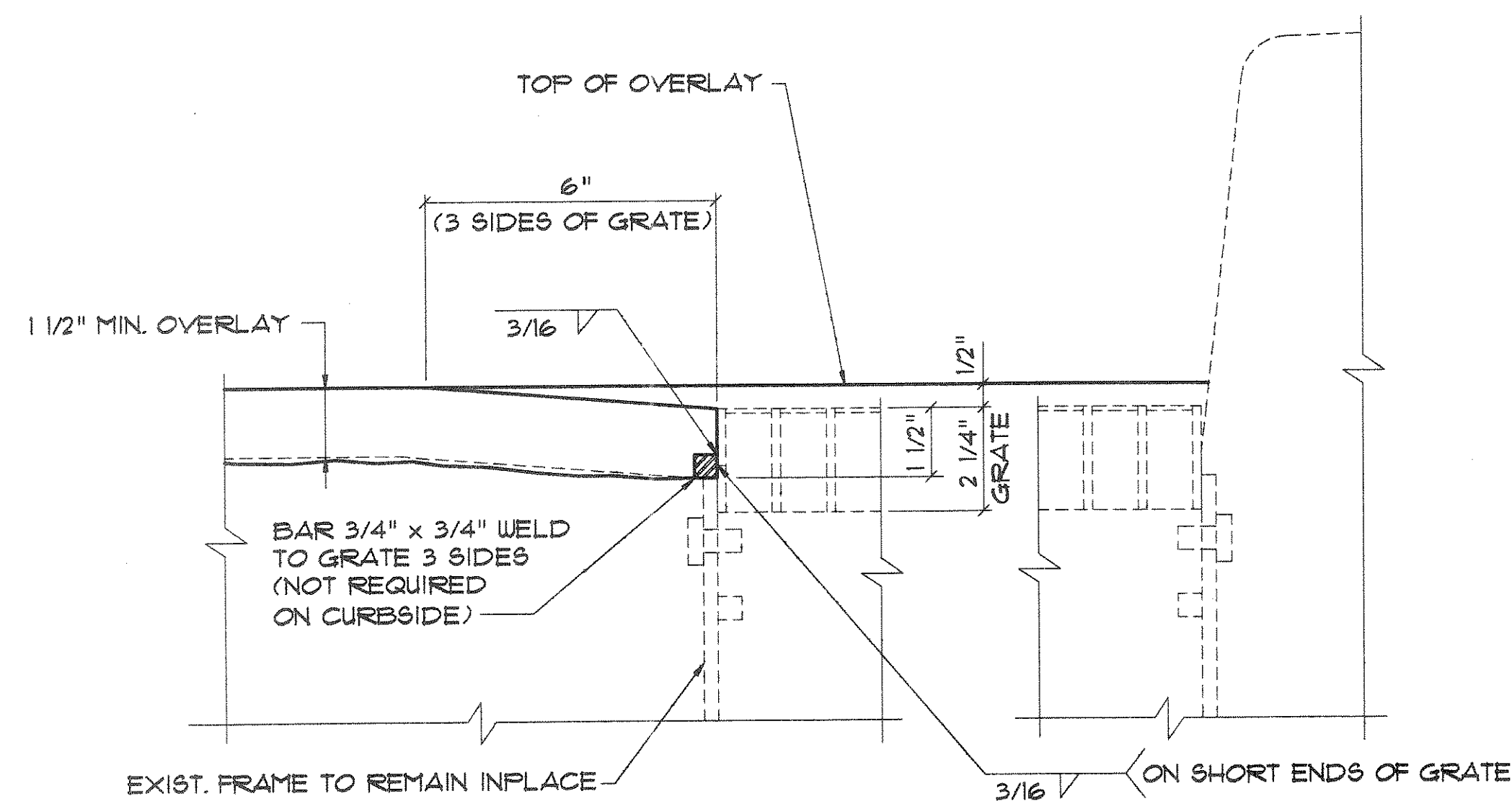
FABRICATOR SHALL PROVIDE MEANS OF KEEPING PAINTED EXTRUSIONS CLEAN DURING SHIPMENT AND PRIOR TO APPLYING LUBRICANT ADHESIVE FOR NEOPRENE GLAND INSTALLATION.

MATERIAL FOR NO. ⑩ SHALL CONFORM TO ASTM A36. MATERIAL SHALL BE FLAME CUT OR SHEARED. REMOVE ALL SLAG OR SHEARED EDGES BY GRINDING TO A SMOOTH UNIFORM SQUARE SURFACE. PRIOR TO BENDING CHECK PLATE FOR FLATNESS TO WITHIN A TOLERANCE OF 1/16" IN ANY DIRECTION. BEND LINE MUST BE PERPENDICULAR TO PLATE GRAIN. SANDBLAST AFTER FABRICATION IN ACCORDANCE WITH SSPC SPEC. SP. 10 "COMMERCIAL BLAST CLEANING". AFTER BLAST CLEANING THE PLATE SHALL BE HOT DIPPED GALVANIZED.

ANCHOR SYSTEM NO. ② & ③ SHALL CONFORM TO ASTM A307 & SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A153 CLASS C & D 124 MILS. MIN.

STRIP SEAL EXPANSION JOINT ASSEMBLY, INCLUDING ANCHOR STUDS, GUARD PLATES, NEOPRENE STRIP SEAL & HARDWARE WILL BE PAID FOR AT THE LUMP SUM PRICE BID FOR "EXPANSION DEVICE".

MANUFACTURE SHALL FURNISH NEOPRENE STRIP SEAL WITH TOP SIDE LABELED.



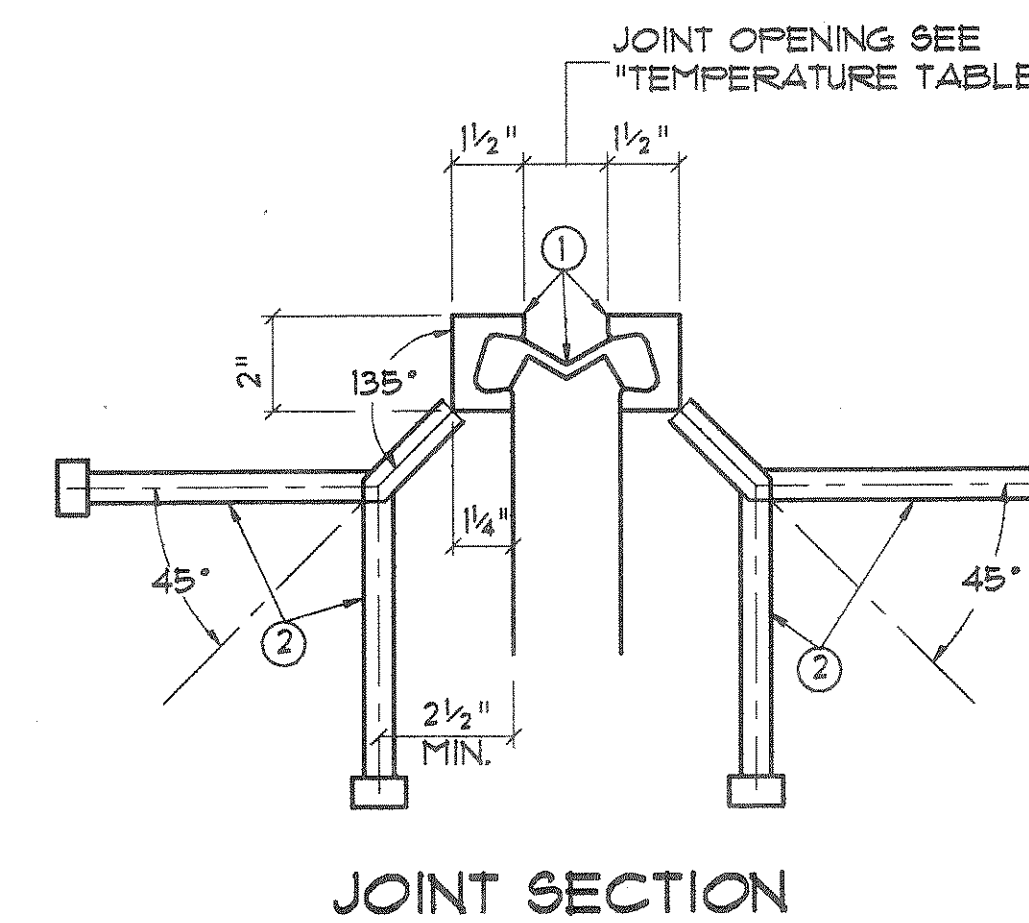
NOTE:

PLACE MODIFIED GRATE ON EXIST. FRAME BEFORE PLACEMENT OF OVERLAY. GRATE WILL BECOME PERMENANT AND NOT REMOVEABLE

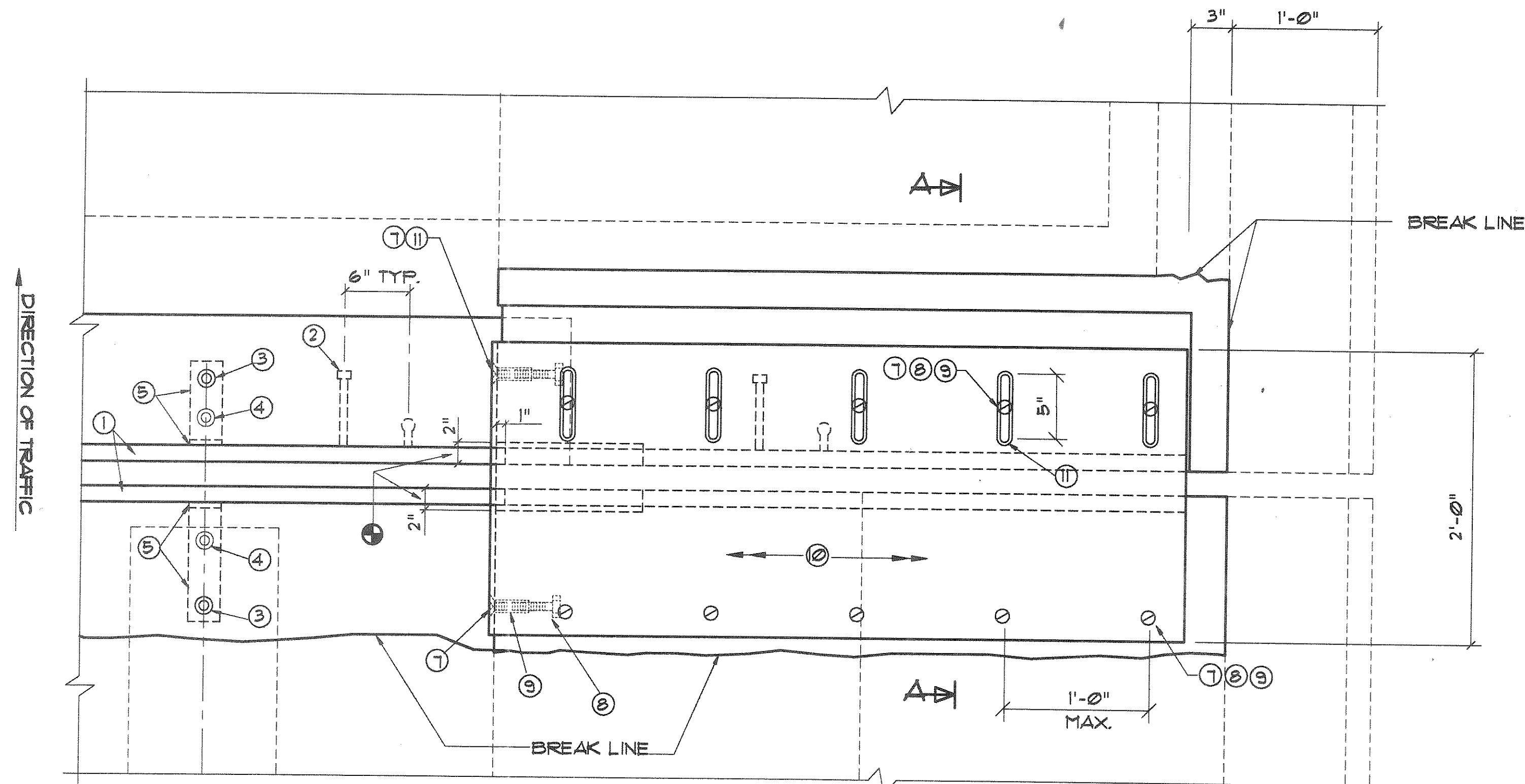
**TEMPERATURE TABLE**

TEMP. *	JOINT OPENING
30 °	1 3/8"
80 °	1 1/2"
70 °	1 5/8"
60 °	1 3/4"
50 °	1 15/16"
40 °	2 1/16"
30 °	2 1/4"

\* SHADED UNDERSIDE DECK TEMPERATURE (°F)



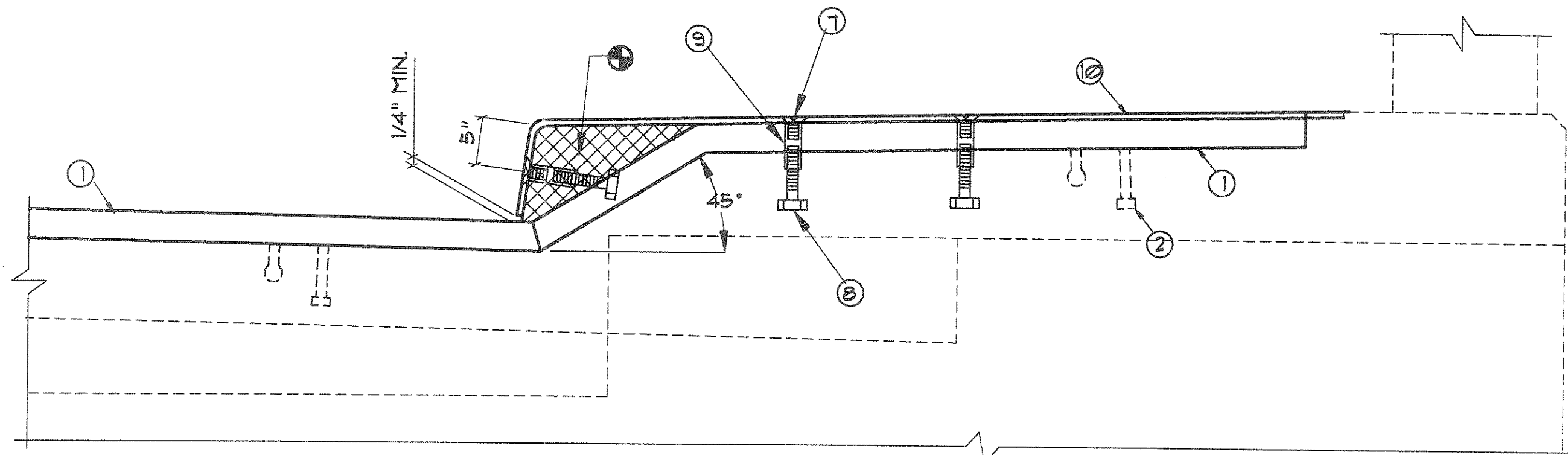
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS			
<b>STRUCTURE B-35-15</b>			
CONST. SPEC.	1989	DRAWN BY DLF	PLANS CK'D. JAU
<b>DETAILS</b>			SHEET 2 OF 2



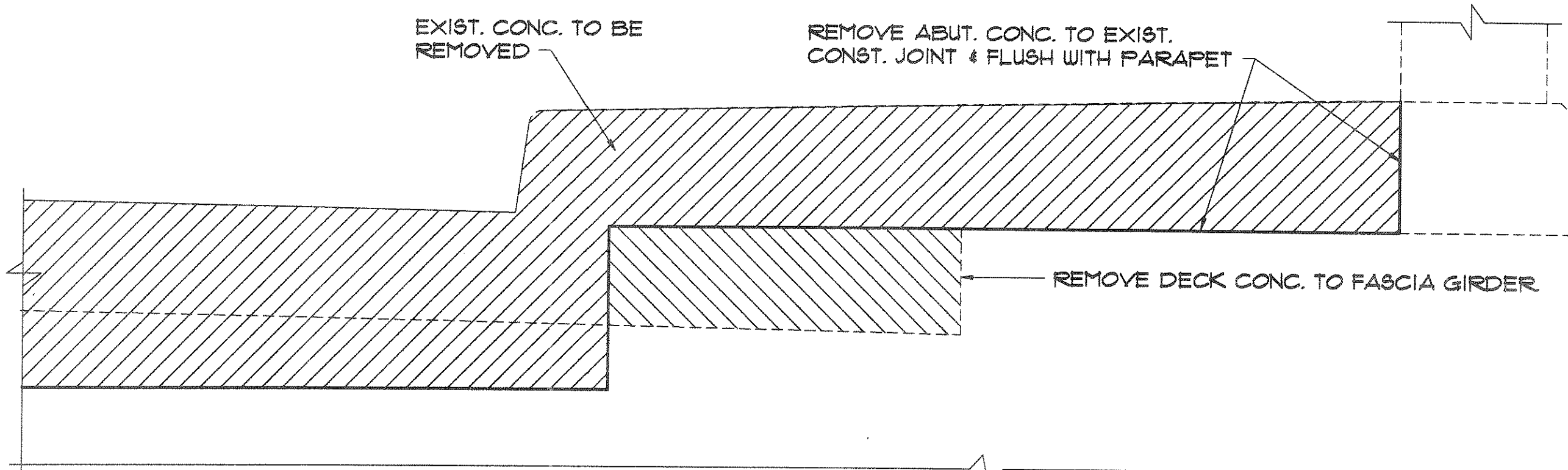
**PLAN AT SIDEWALK**

( N.E. CORNER SHOWN )

⊕ BLOCK OUT CONCRETE 2" EACH SIDE FOR JOINT OPENING.

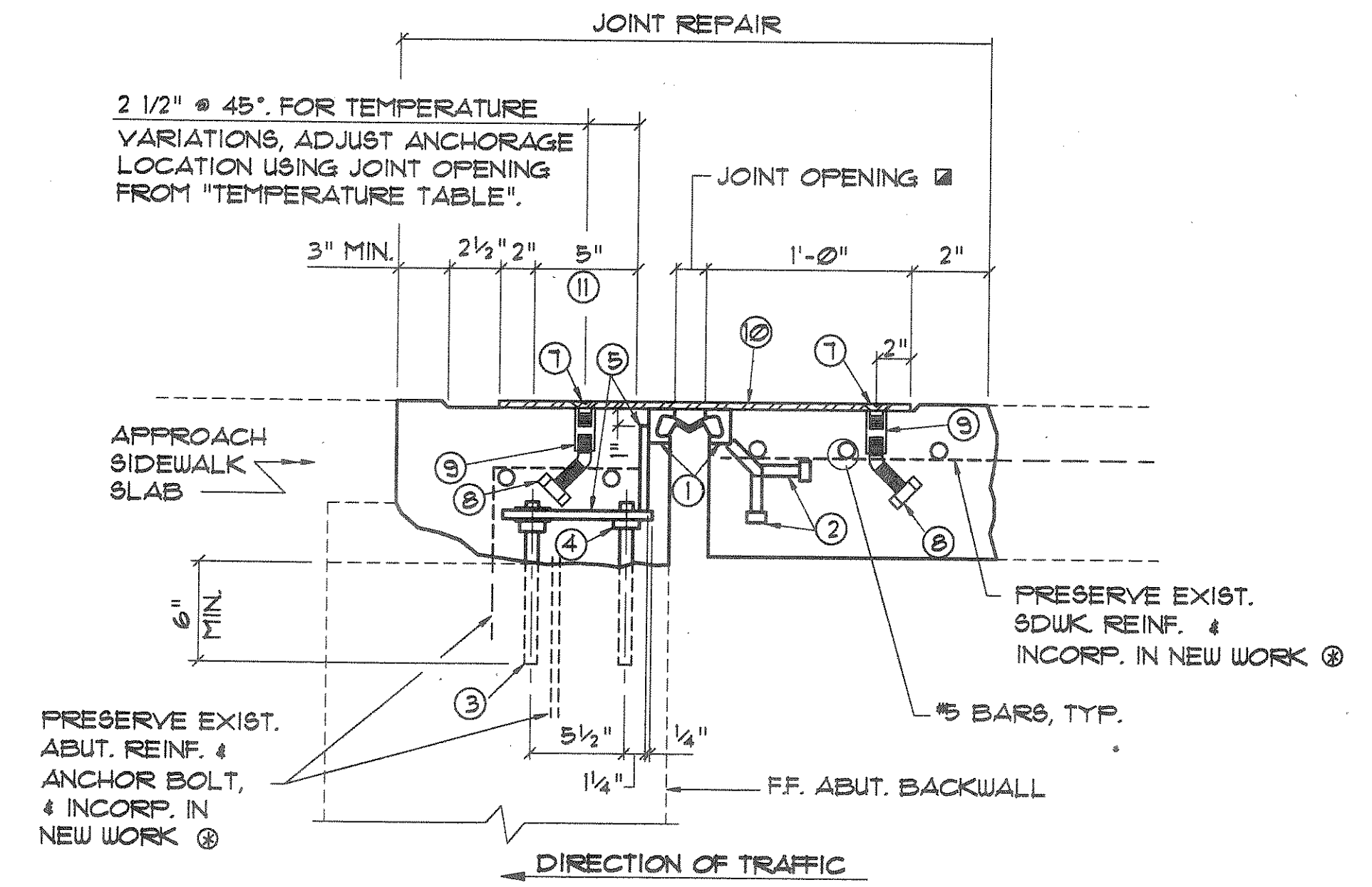


**SECTION AT SIDEWALK**



**SECTION AT SIDEWALK**

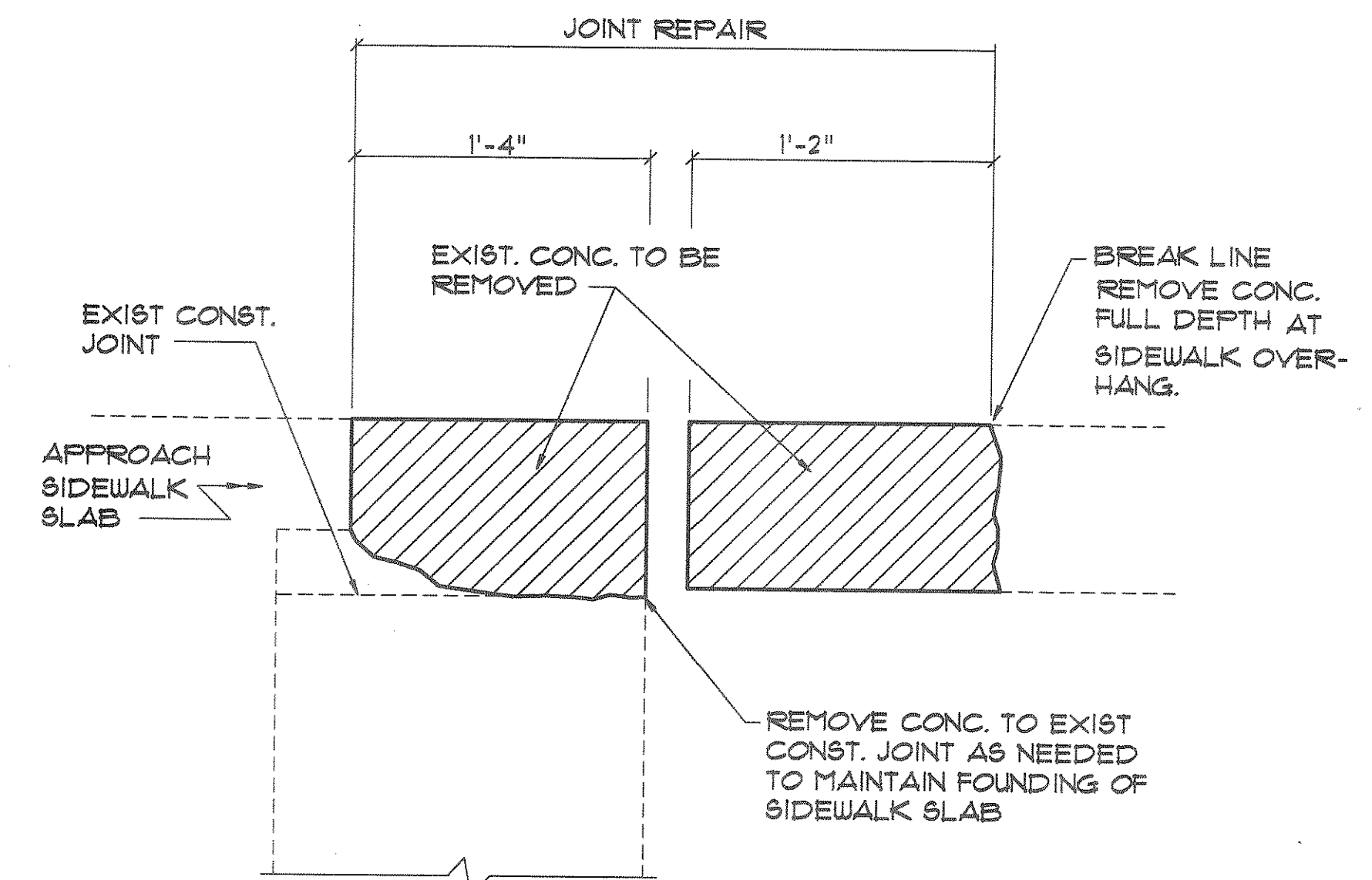
( JOINT REMOVAL )



**SECTION A-A**  
**SECTION THRU PROPOSED JOINT**

( AT SIDEWALK )

⊕ IF EXISTING BARS ARE SEVERELY CORRODED OR DAMAGED DURING CONCRETE REMOVAL, REPLACE WITH "CONCRETE MASONRY ANCHORS, TYPE S, 5/8-INCH", EMBEDDED 1'-0". USE L-SHAPED NO. 5 COATED REBAR.  
⊞ SEE TEMPERATURE TABLE.



**JOINT REMOVAL**

( AT SIDEWALK )

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS			
<b>STRUCTURE B-35-15</b>			
CONST. SPEC.	1989	DRAWN BY DLF	PLANS CK'D. JAJ
<b>DETAILS</b>			SHEET 3 OF 3