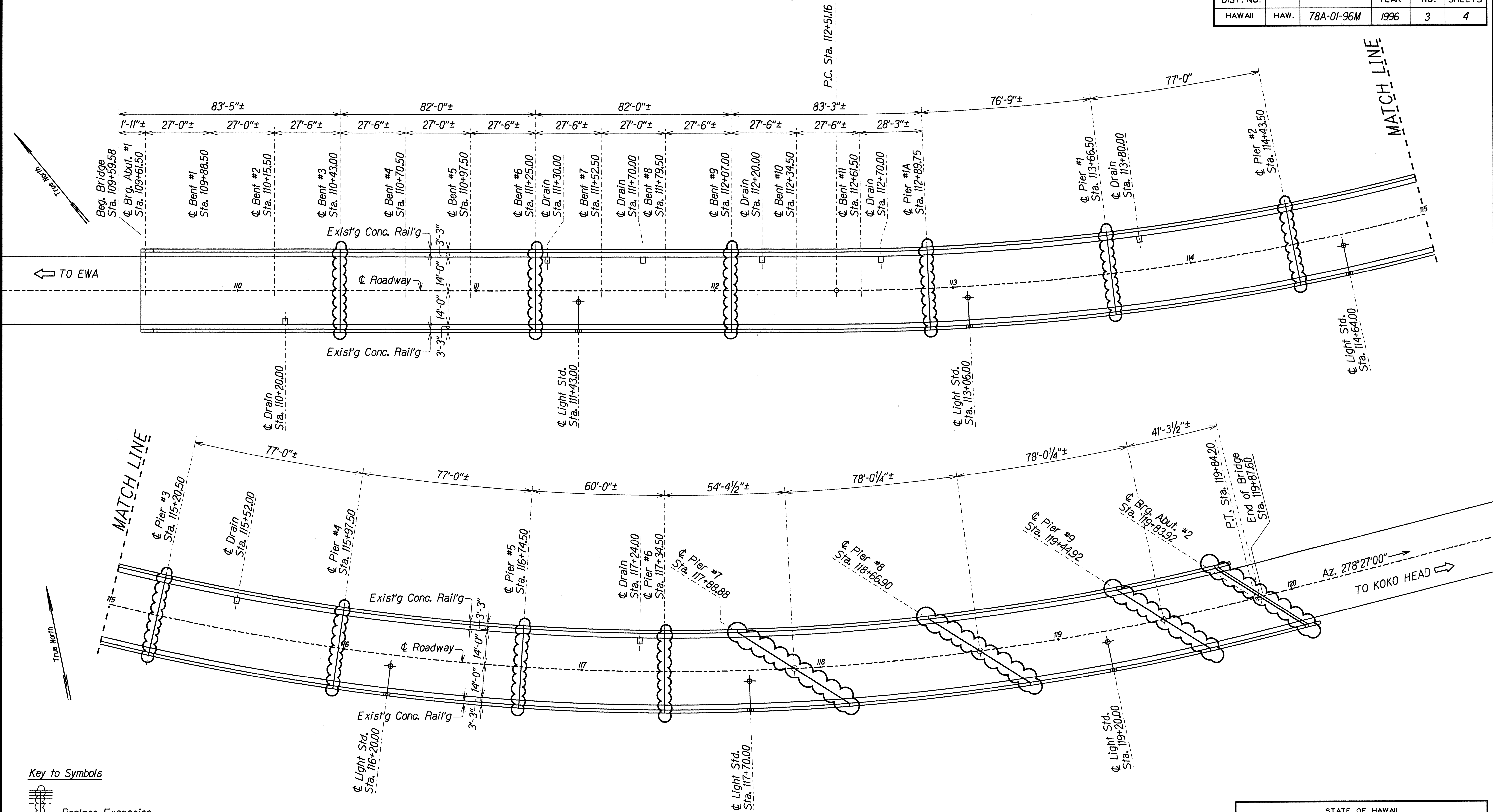


FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	78A-01-96M	1996	3	4



**Key to Symbols**

- Replace Expansion Joint Seals
- Existing Deck Drain Location
- Existing Light Standard

**LAYOUT PLAN--AIEA INTERCHANGE STRUCTURE NO. 2**  
 Scale: 1" = 20'-0"

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTE BOOK	DRAWN BY	DEC 1995
QUANTITIES BY	DESIGNED BY	DEC 1995
CHECKED BY	NOTED BY	DEC 1995

STATE OF HAWAII  
 DEPARTMENT OF TRANSPORTATION  
 HIGHWAYS DIVISION

**REHABILITATION AND BRIDGE REPAIR DETAILS**

**LAYOUT PLAN**  
 Moanalua Freeway Onramp from  
 Kamehameha Highway, Repair Expansion Joints  
 Project No. 78A-01-96M

Scale: As Noted Date: Feb. 1996

SHEET No. 1 OF 2 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	78A-01-96M	1996	4	4

## GENERAL NOTES

- The scope of work for this project consists of replacing the existing joint seals at the expansion joints with new joint seals according to the plans and specifications.
- The Contractor is reminded of the requirements of Subsection 108.01 - Subletting of Contract, which requires him to perform work amounting to not less than 50 percent of the total contract cost less deductible items. Non-compliance with this Subsection may be grounds for rejection of bid.
- The Contractor's attention is directed to the following Sections of the Special Provisions : Subsection 107.I3 - Public Convenience and Safety; and Sections 645 - Traffic Control.
- At the end of each day's work, the Contractor shall remove all equipment and other obstructions to permit free and safe passage of public traffic.

## REPAIR NOTES:

- All deteriorated, damaged, cracked, spalled, honeycombed concrete or concrete over rusted reinforcing bars shall be removed as shown and repaired with magnesium phosphate concrete.
- Provide minimum 1½" concrete cover over reinforcement.
- Reinforcing bars that have rusted more than 25% of their original cross sectional area shall be strengthened as shown on "Reinforcing Bar Repair Splice Detail", this sheet.
- The Engineer shall determine all areas to be repaired and the limits of repair at each area.

**INCIDENTAL ITEMS:** The following items shall be considered incidental to the various pay items or repairs and will not be paid for separately:

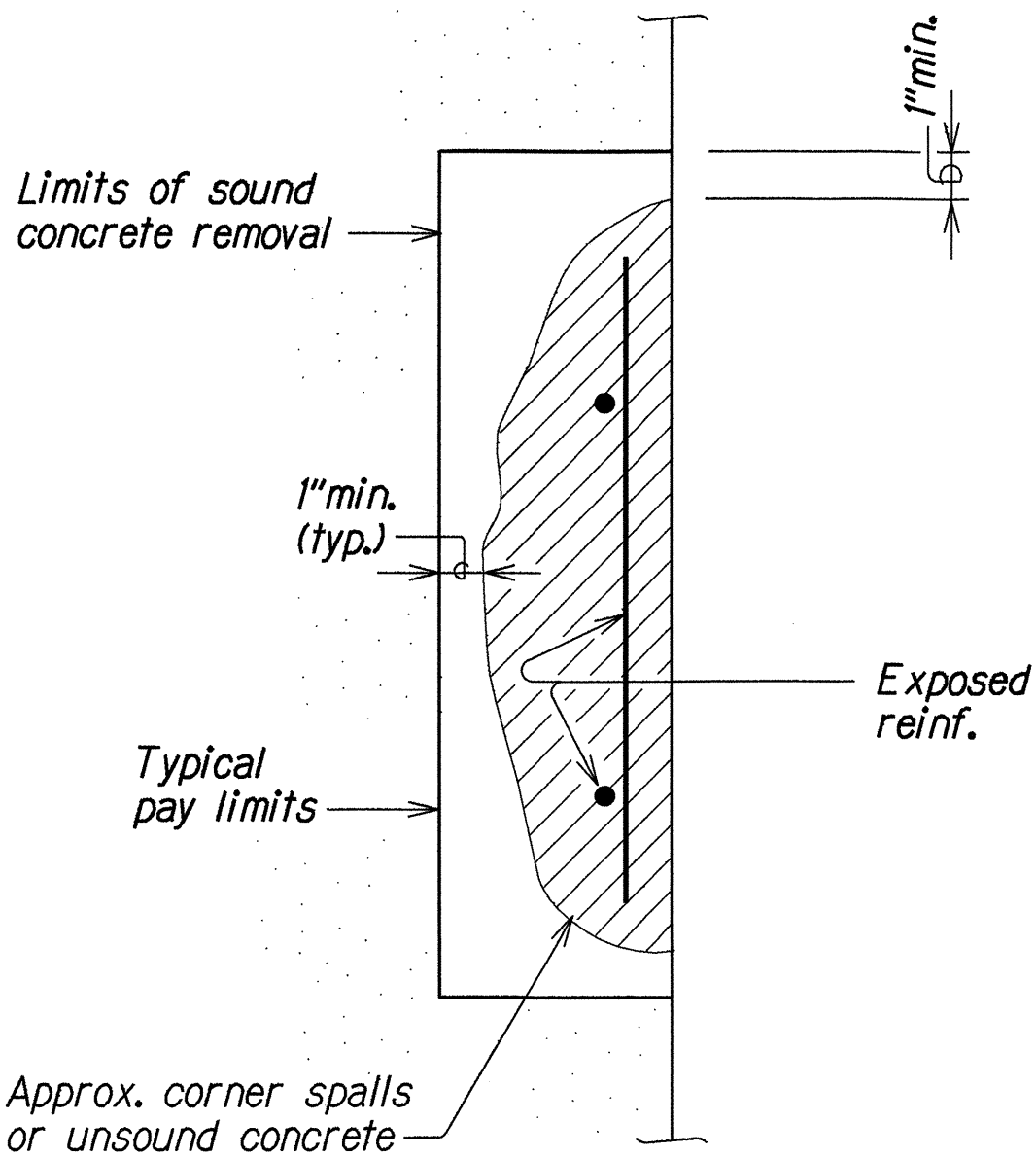
- Cleaning of all exposed, corroded reinforcing steel to sound metal.
- Reinforcing bars of repair splice for strengthening corroded bars.
- Removal and disposal of existing steel plates at expansion joints.

## GENERAL:

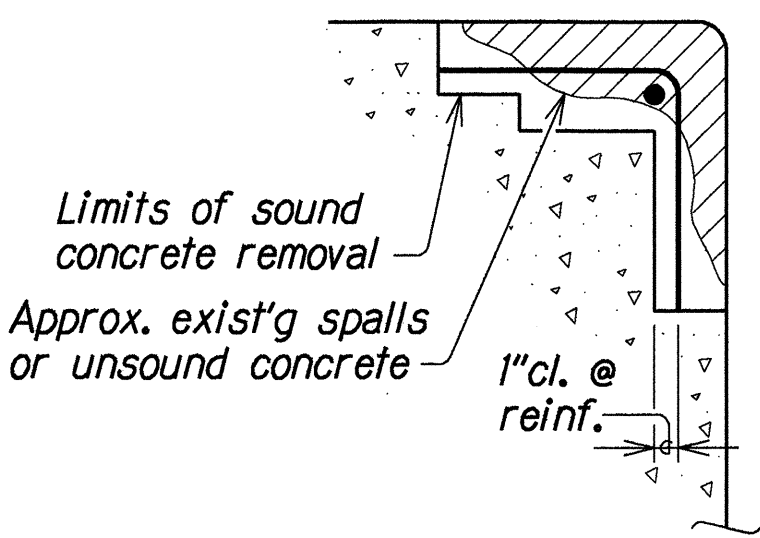
- All reinforcing steel to be ASTM A 615 Grade 40.
- All welding shall be done in accordance with the current edition of the Reinforcing Steel Welding Code AWS D1.4.
- Maintenance # control of traffic--See Special Provisions sub-section 104.04.

## ESTIMATED QUANTITIES

ITEM NO.	DESCRIPTION	UNITS	QUANTITY
677J000	Repair Joint Seals	L.S.	L.S.



PLAN OR ELEVATION

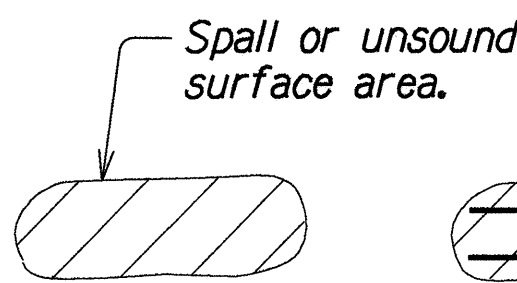


Note:

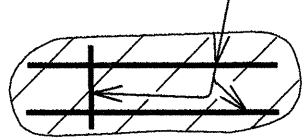
Spalls at expansion joints shall be repaired as recommended by the manufacturer of the joint seal, and shall be incidental to the joint seal and will not be paid for separately.

TYPICAL SECTIONS

## SYMBOLS AND ABBREVIATIONS:



Spall or unsound surface area.

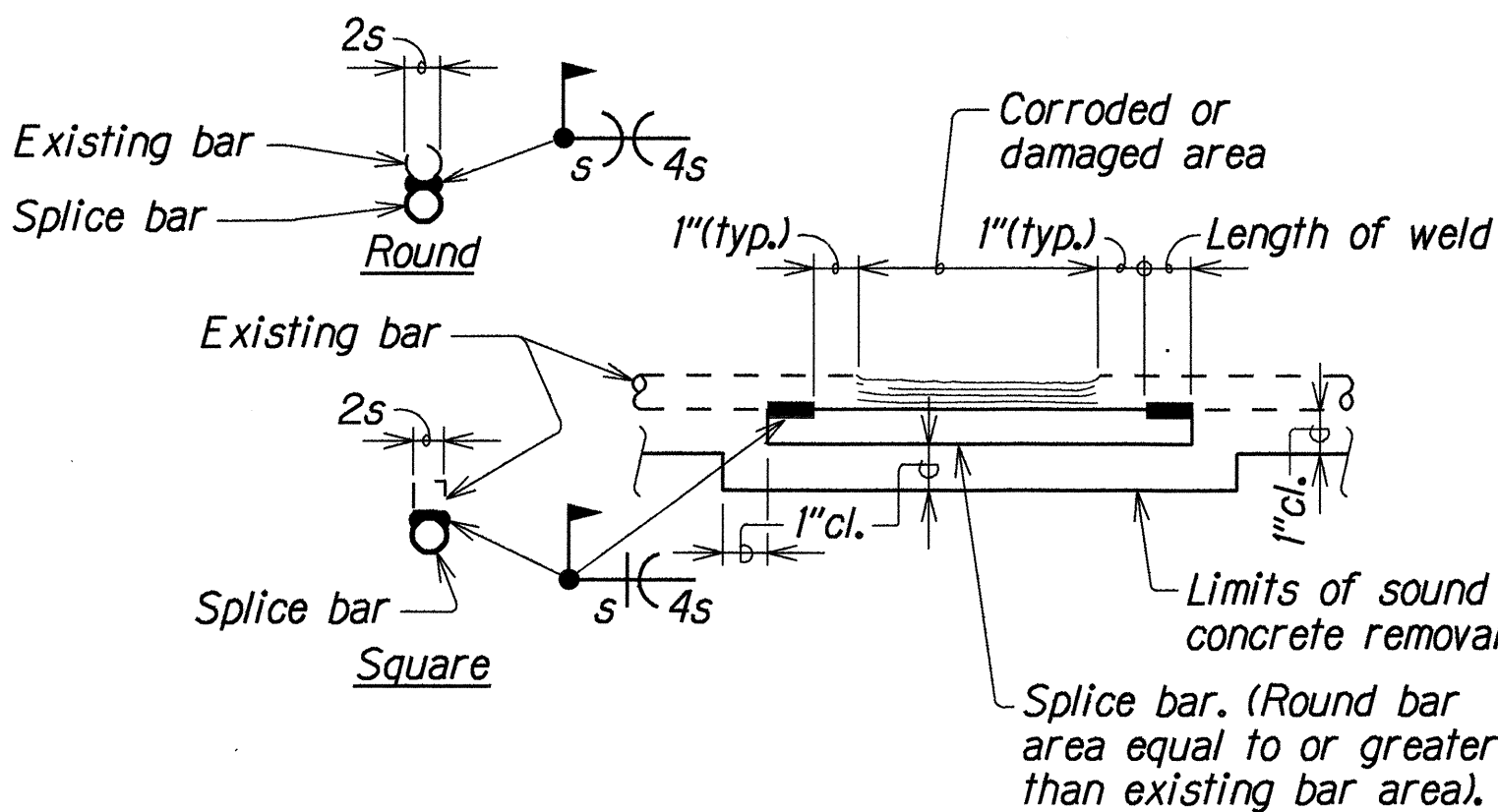


Exposed reinf. bars where occurs.

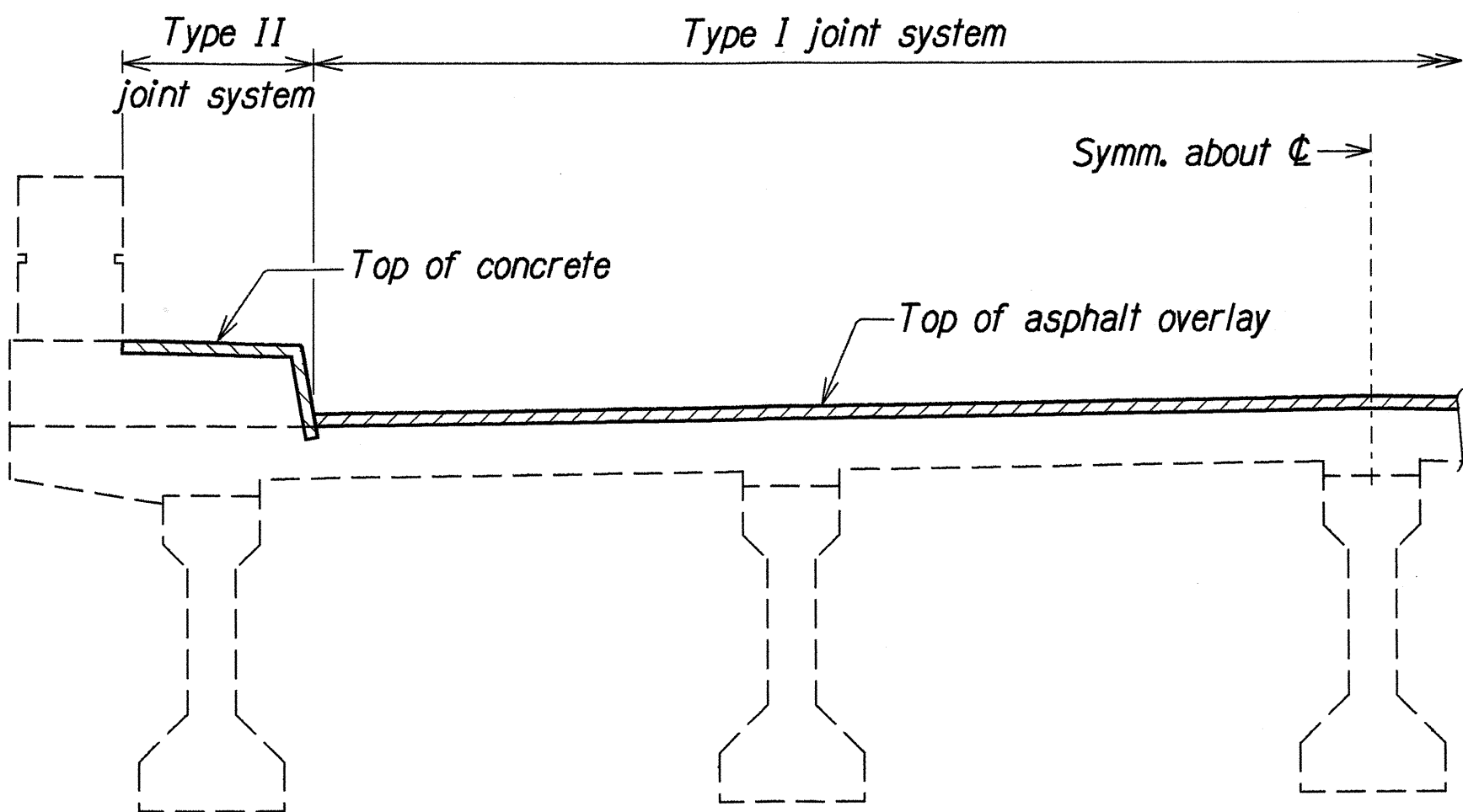
S.S.: Surface spall (Concrete)  
S.C.: Surface crack (Concrete)  
H.C.: Hairline crack  
S.F. or sq. ft.: Square feet  
L.F.: Linear feet

## TYPICAL CONCRETE REPAIRS

Not to Scale

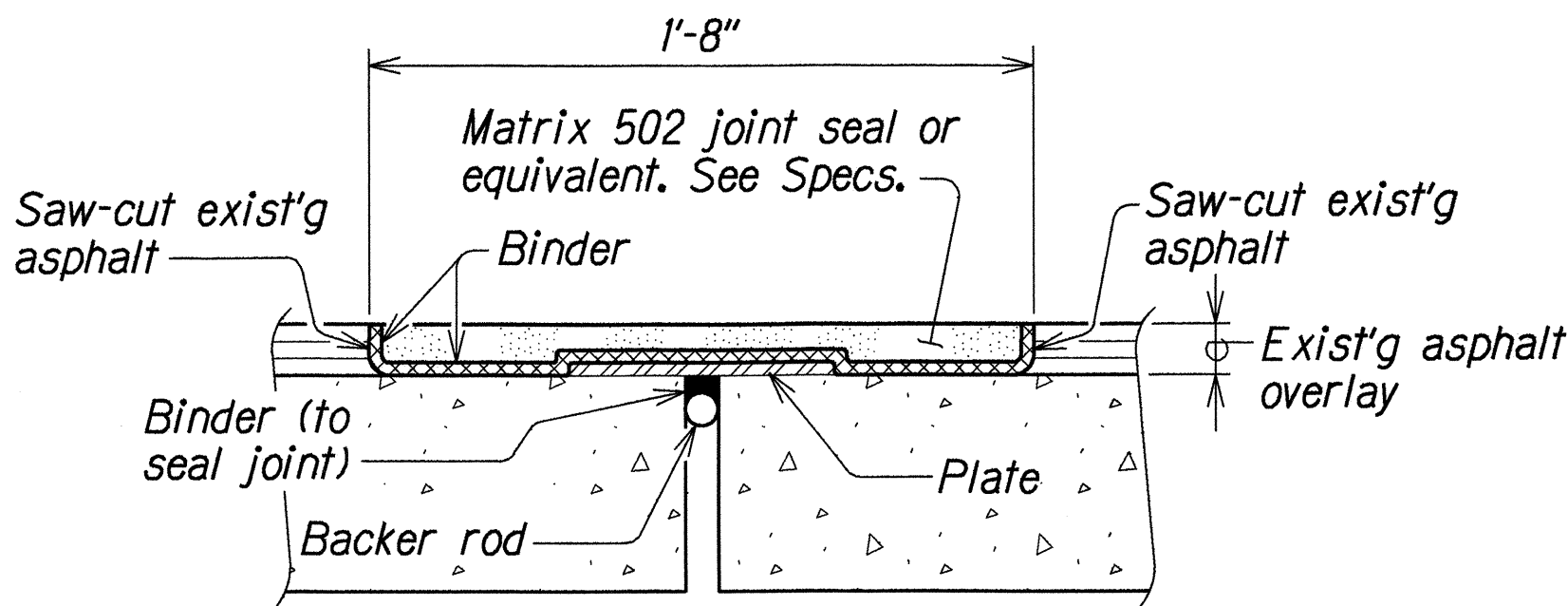


REINFORCING BAR REPAIR SPLICE DETAIL



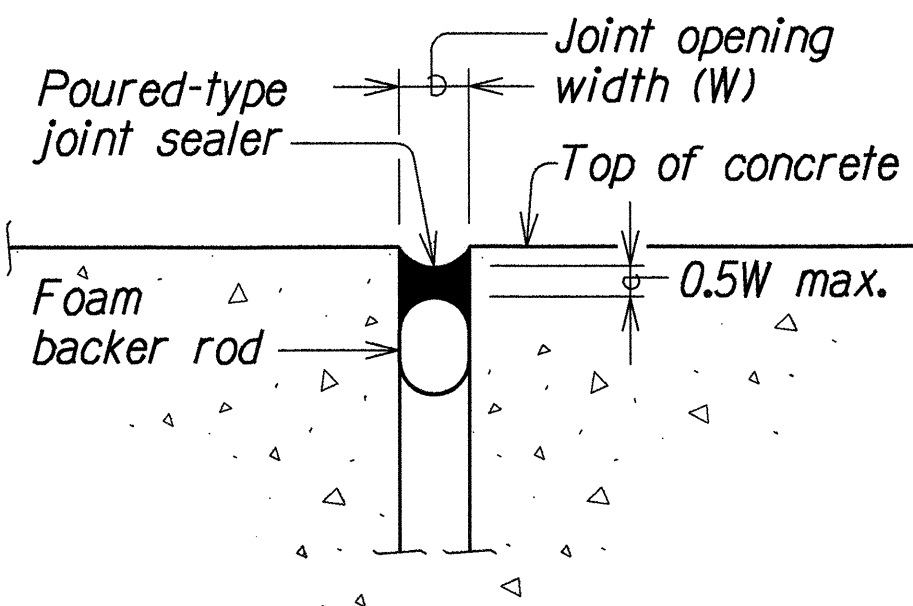
TYPICAL SECTION

Not to Scale



TYPE I JOINT DETAIL

Not to Scale



TYPE II JOINT DETAIL

Not to Scale

## TYPICAL JOINT SEAL REPAIRS

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTE BOOK	DRAWN BY	SEP 1995
QUANTITIES BY	CHECKED BY	SEP 1995
APPROVED BY		

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

REHABILITATION AND BRIDGE REPAIR DETAILS  
DETAILS, GENERAL NOTES AND ESTIMATED QUANTITIES  
Moanalua Freeway Onramp, from  
Kamehameha Highway, Repair Expansion Joints  
Project No. 78A-01-96M

Scale: As Noted  
Date: Feb. 1996