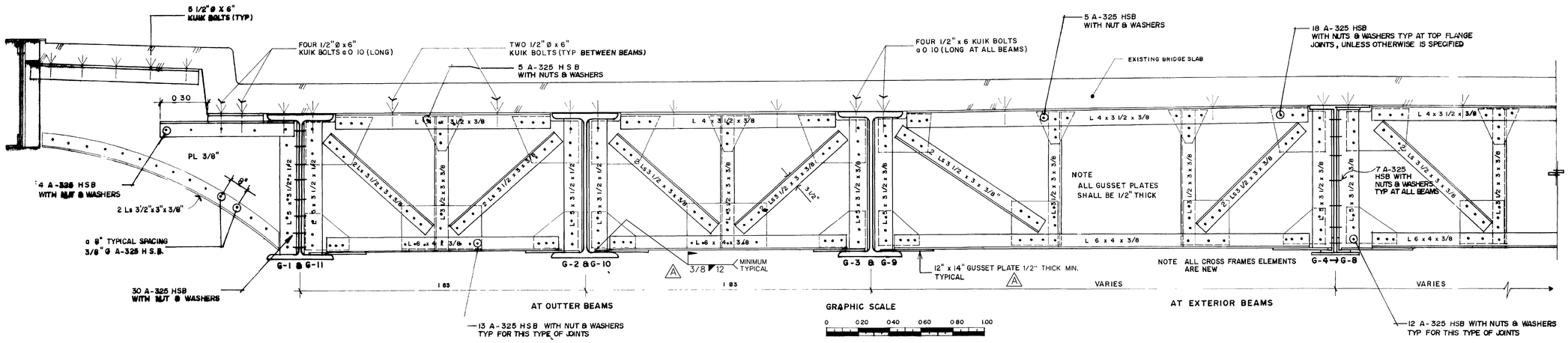
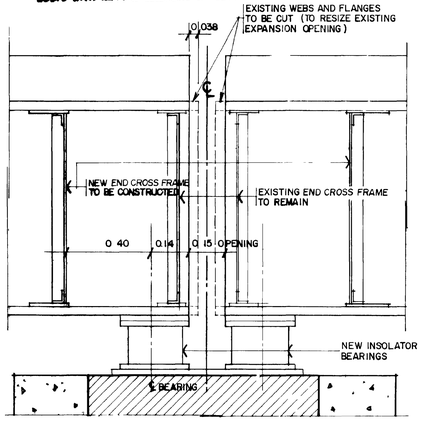
FED AID H'WAY PROJECT NO	A C PROJECT CODE NO	HIGHWAY P R	MUNICIPALITY	ISLAND	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	AC - 200054	P R NO. 2	SAN JUAN	P R	1997	31	67

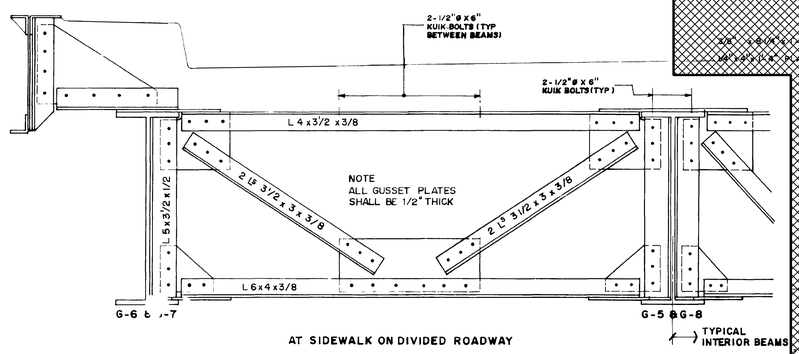


NEW END CROSS FRAME NOTES

1. CROSS FRAMES ELEMENTS SHALL BE FABRICATED FROM STRUCTURAL GRADE STEEL COMPLYING WITH AASHTO M 183
2. HIGH STRENGTH BOLTS NUTS AND HEAVY WASHERS SHALL COMPLY WITH ASTM A-325
3. WELDING ELECTRODES SHALL BE E70XX
4. ALL JOINTS SHALL BE CONNECTED IN SUCH A WAY AS THEY SHALL BE ABLE TO DEVELOPE THE MAXIMUM FORCE THAT CAN BE EXERTED BY THE WEAKEST OF ITS CONNECTING ELEMENTS
5. REMOVE EXISTING RIVETS, SCALE, AND RUST INTERFERING WITH NEW WORKS, APPLY COLD GALVANIZING AND REPLACE RIVETS WITH HIGH STRENGTH BOLTS, NUTS AND WASHERS
6. **JOINT CONNECTING BOLTS SHALL BE EQUAL TO 7/8"Ø HIGH STRENGTH BOLTS WITH NUTS & WASHERS (A-325)**



SECTION A / BR-14
NOT TO SCALE

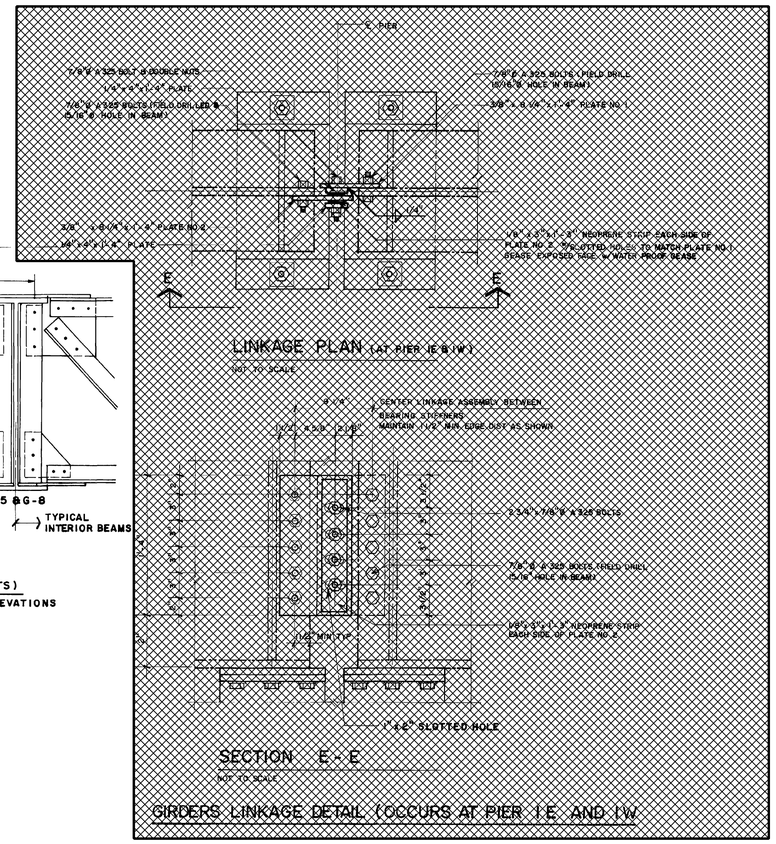


AT SIDEWALK ON DIVIDED ROADWAY

NEW END CROSS FRAME TYPICAL ELEVATIONS (AT EXPANSION JOINTS)

GRAPHIC SCALE

(FOR COMPLETE CROSS FRAME ELEVATIONS SEE DRW BR-13)



NOTES
1. PIPE SUPPORTS NOT SHOWN
H.S. BOLTS 7/8"Ø EXCEPT AS NOTED

PUERTO RICO HIGHWAY AUTHORITY DESIGN AREA STRUCTURAL DESIGN OFFICE	REHABILITATION CONSTITUTION BRIDGE MARTIN PENA CHANNEL BRIDGE SAN JUAN, PUERTO RICO	DATE / REVISION	SCALE: AS SHOWN	NEW CROSS FRAMES TYPICAL DETAILS AND TYPICAL STEEL DETAILS	BR 14

LEGEND

DELETE (NOT APPLICABLE OR NOT IN CONTRACT)

ADDITIONAL NEW END CROSS FRAME NOTES

1. MINIMUM SPACING AND EDGE DISTANCE FOR FASTENERS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF AASHTO STANDARD SPECIFICATION FOR HIGHWAY BRIDGES.
2. SECTION A ON THIS DWG. SHALL APPLY TO ENDS OF ALL GIRDERS BEARING ON PIERS 13, ENDS OF ALL GIRDERS BEARING ON NORTHEAST SIDE OF PIER 16, AND ENDS OF ALL GIRDERS BEARING ON SOUTHWEST SIDE OF PIER 19. (TOTAL OF 45)
3. ALL BOLTS SHALL BE FULLY PRETENSIONED IN ACCORDANCE WITH AISC "SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS".
4. CONTRACTOR SHALL FIELD VERIFY DIMENSIONS OF CROSS FRAMES PRIOR TO SUBMITTING SHOP DRAWINGS.

NOTE: DIMENSIONS SHOWN ON THIS SHEET ARE IN METRIC UNLESS NOTED OTHERWISE.

US Army Corps of Engineers
Jacksonville District

SAFETY ON THIS JOB DEPENDS ON YOU

No.	Symbol	Zone	Description	Approved
2	A	D-5-F-5	REVISED TO ACCOMPANY AMENDMENT NO 0003	

DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
JACKSONVILLE, FLORIDA

WALTER M. RUIZ & ASSOCIATES
72, W. MENDEZ VIGO STREET
MAYAGUEZ, PUERTO RICO

Inv. No. DACW17-02-B-0002
Scale: AS SHOWN
Dated: JULY 2001
D.O.FILE NO. 111-38.213

File name: K4B0207.DGN
Reference files: KBDR.DGN K4B0203R.TIF

RIO PUERTO NUEVO PROJECT
SAN JUAN, PUERTO RICO

CONTRACT 1A
SEISMIC RETROFIT OF CONSTITUTION BRIDGE

NEW CROSS FRAME TYPICAL DETAILS AND TYPICAL STEEL DETAILS

DRAWING NO.
2/07

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