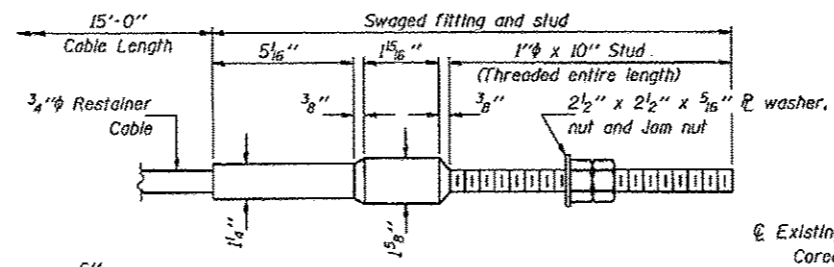
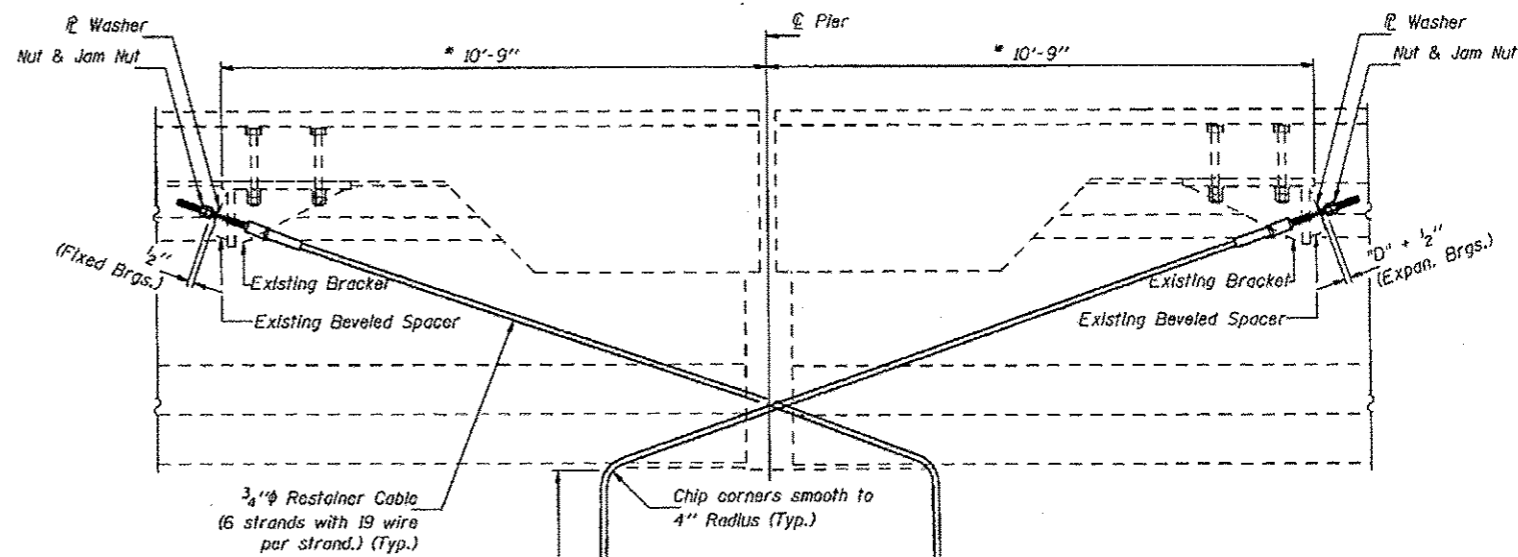
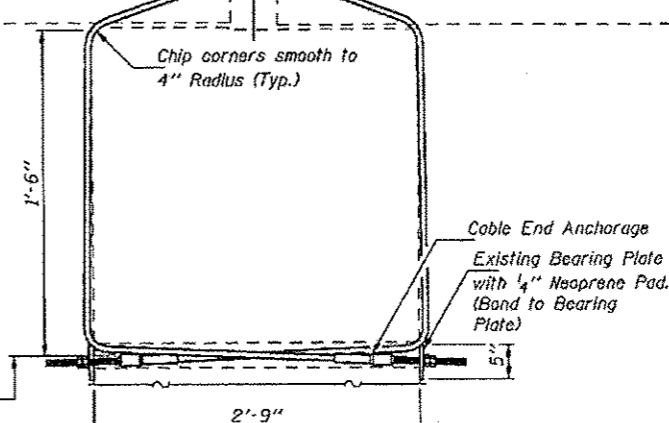


RESTRAINER CABLES AT PIERS #2A THRU #15

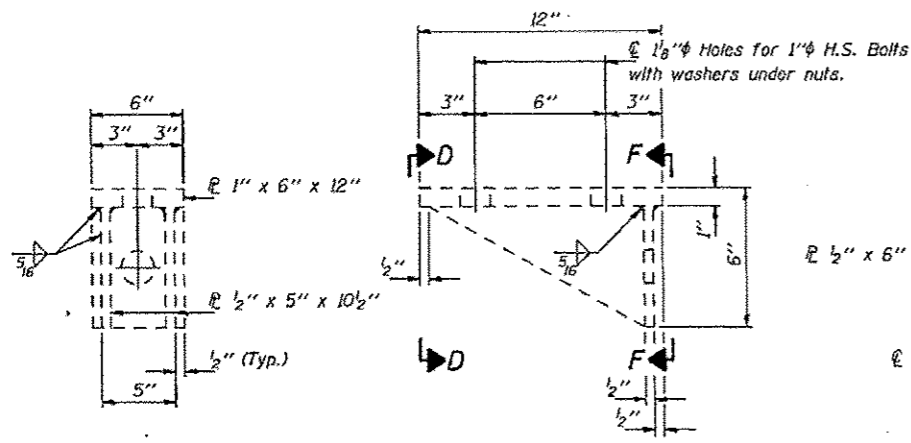


CABLE END ANCHORAGE
(2 Per Cable)



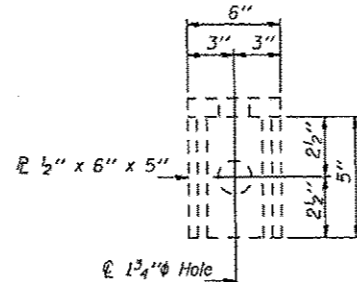
SECTION E-E

* Estimated. Contractor required to check actual length.

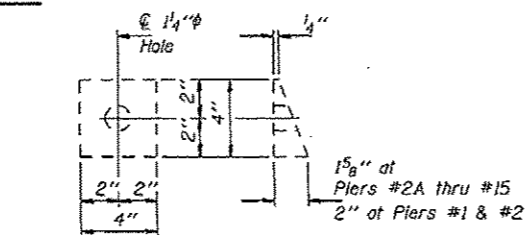


SECTION D-D

ELEVATION
EXISTING BRACKET DETAILS



SECTION F-F



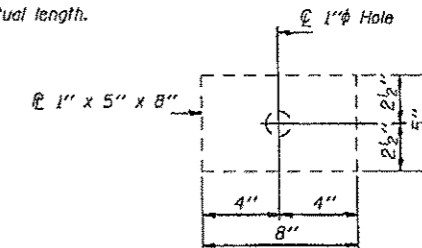
EXISTING BEVELED SPACER

SEISMIC RESTRAINER NOTES

All nuts and washers shall be galvanized in accordance with A.S.T.M. A153. Cables shall be Class C, galvanized in accordance with A.S.T.M. A741. Cable shall be 3/4 inch preformed, 6 x 19 wire strand core or independent wire rope core, minimum breaking strength, 46 Kips in accordance with A.S.T.M. A603. Cost of cables, cable end anchorages, washers and nuts including removal of the existing and installation of the new restrainers will be paid for at the unit bid price each for "SEISMIC RESTRAINER". Each "SEISMIC RESTRAINER" consists of 3/4 inch Restrainer Cable with 2 end anchorage assemblies and misc. hardware.

SEISMIC RESTRAINER INSTALLATION PROCEDURES

- 1.) Locate and install cables snug tight.
- 2.) For Restrainers at fixed bearings, back off the nut at bracket end of cable by 3/4 inch.
- 3.) For Restrainers at expansion bearings, back off the nut at bracket end of cable by "D" + 3/4 inch.
"D" = + 1/8 inch per 100' of expansion length for every 15° F. temperature rise above 50° F. Normal Temperature.
"D" = - 1/8 inch per 100' of expansion length for every 15° F. temperature drop below 50° F. Normal Temperature.
- 4.) Tighten jam nuts.



EXISTING BEARING PLATE

BILL OF MATERIAL

Item	Unit	Total
Seismic Restrainer	Each	324

SEISMIC RESTRAINERS
AT PIERS #2A THRU #15
EAST & WEST STRUCTURES
F.A.I. RT. 57
PULASKI COUNTY
STATION 881+37.61

FILE NAME *	USER NAME * halsteadv	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SCALE: SHEET OF SHEETS STA. TO STA.	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
Default	01\pwork\spaidot\halsteadv\d81788\31\07-0001.0302-shr-plan.dgn	DRAWN -	REVISED -			57	09 SEISMIC MAINT. 2014-1	PULASKI	7	7	
	PLOT SCALE = 32.0000' / in.	CHECKED -	REVISED -			CONTRACT NO. 78405					
	PLOT DATE = 3/19/2014	DATE -	REVISED -			ILLINOIS FEB. 410 PROJECT					