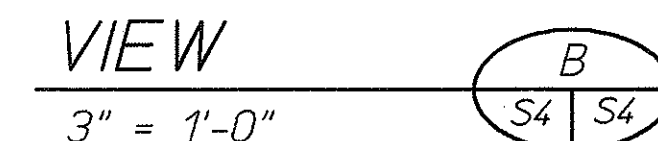
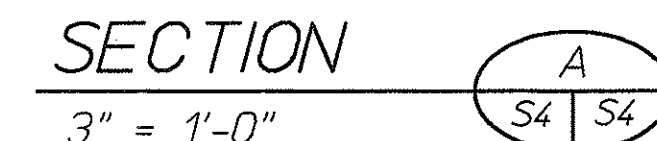
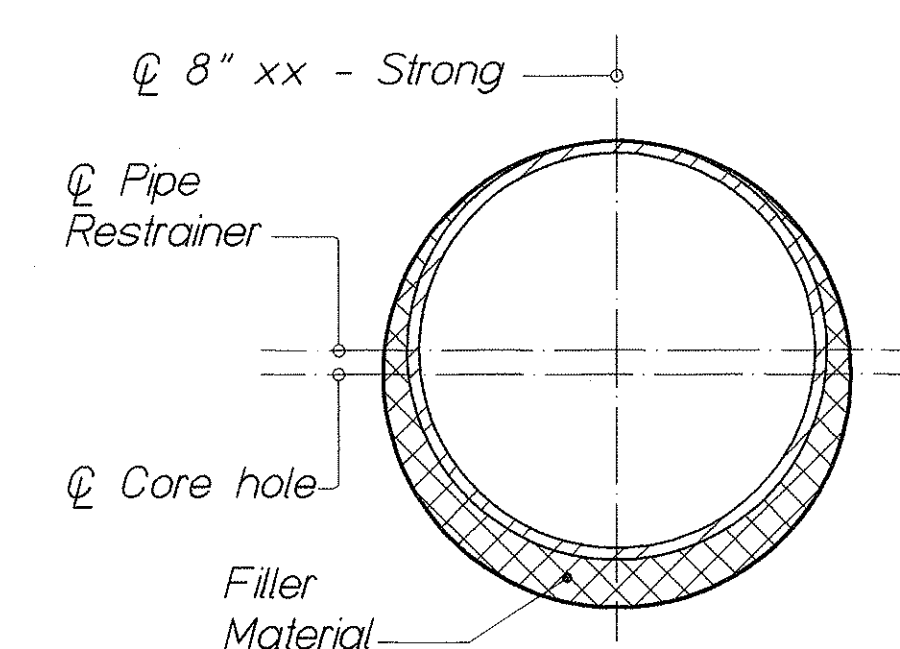
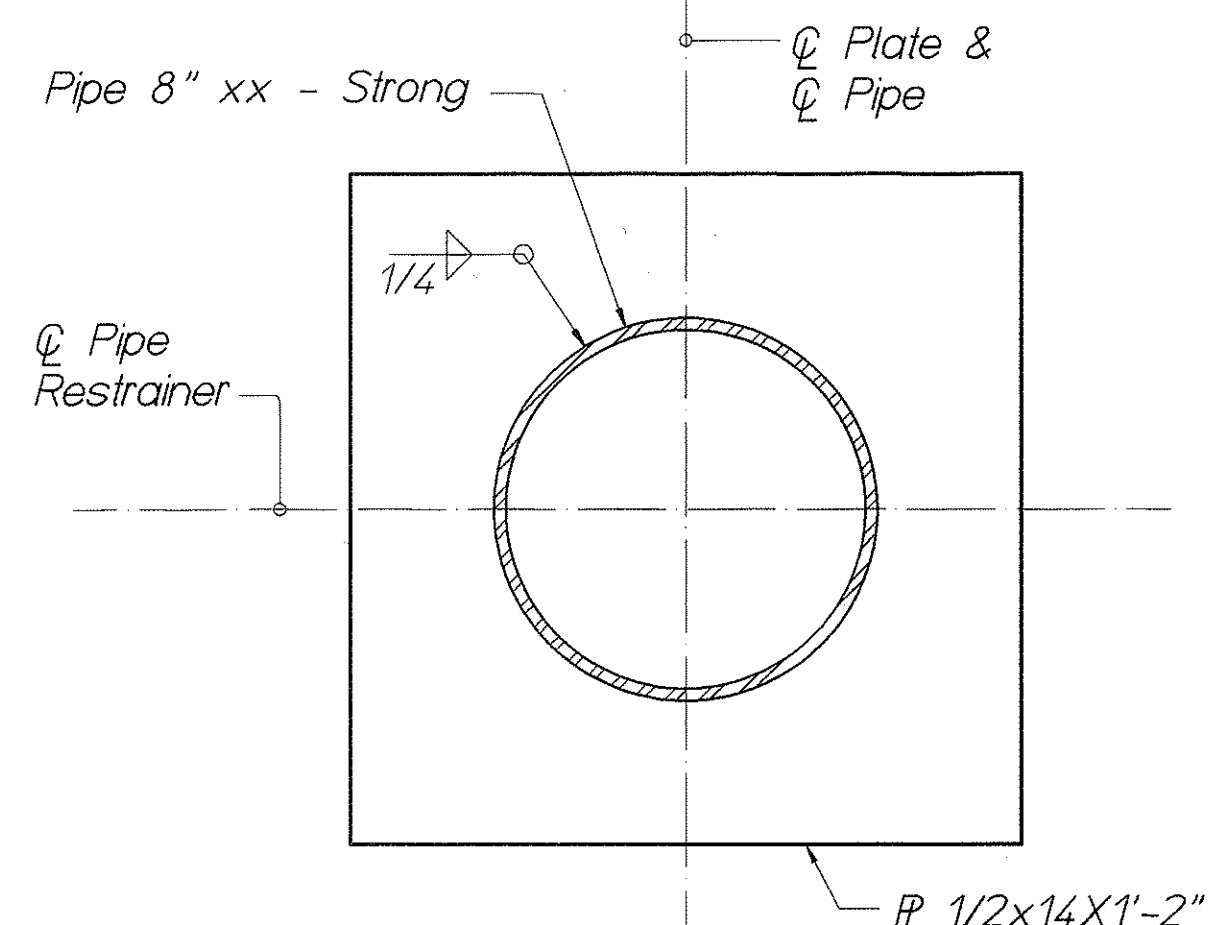
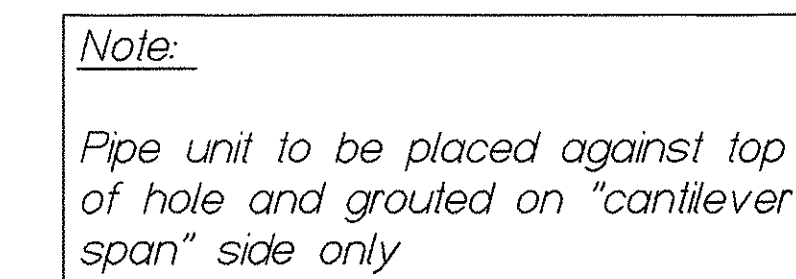
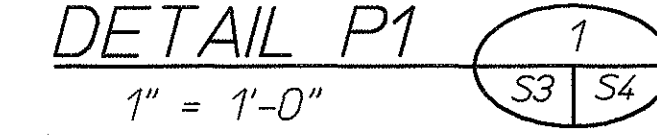
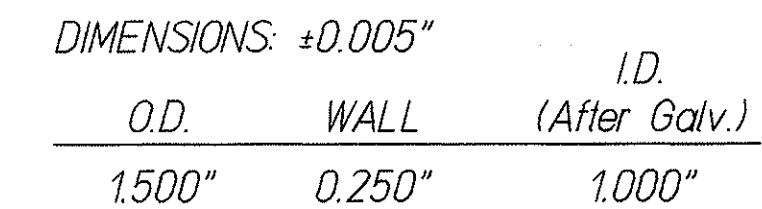
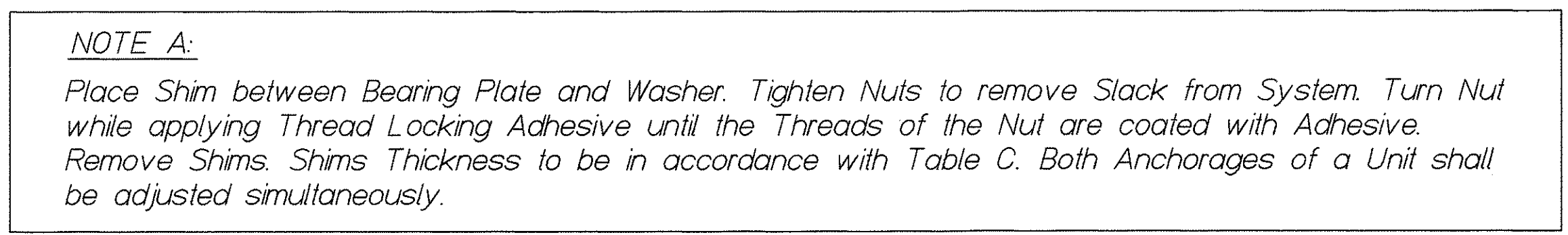
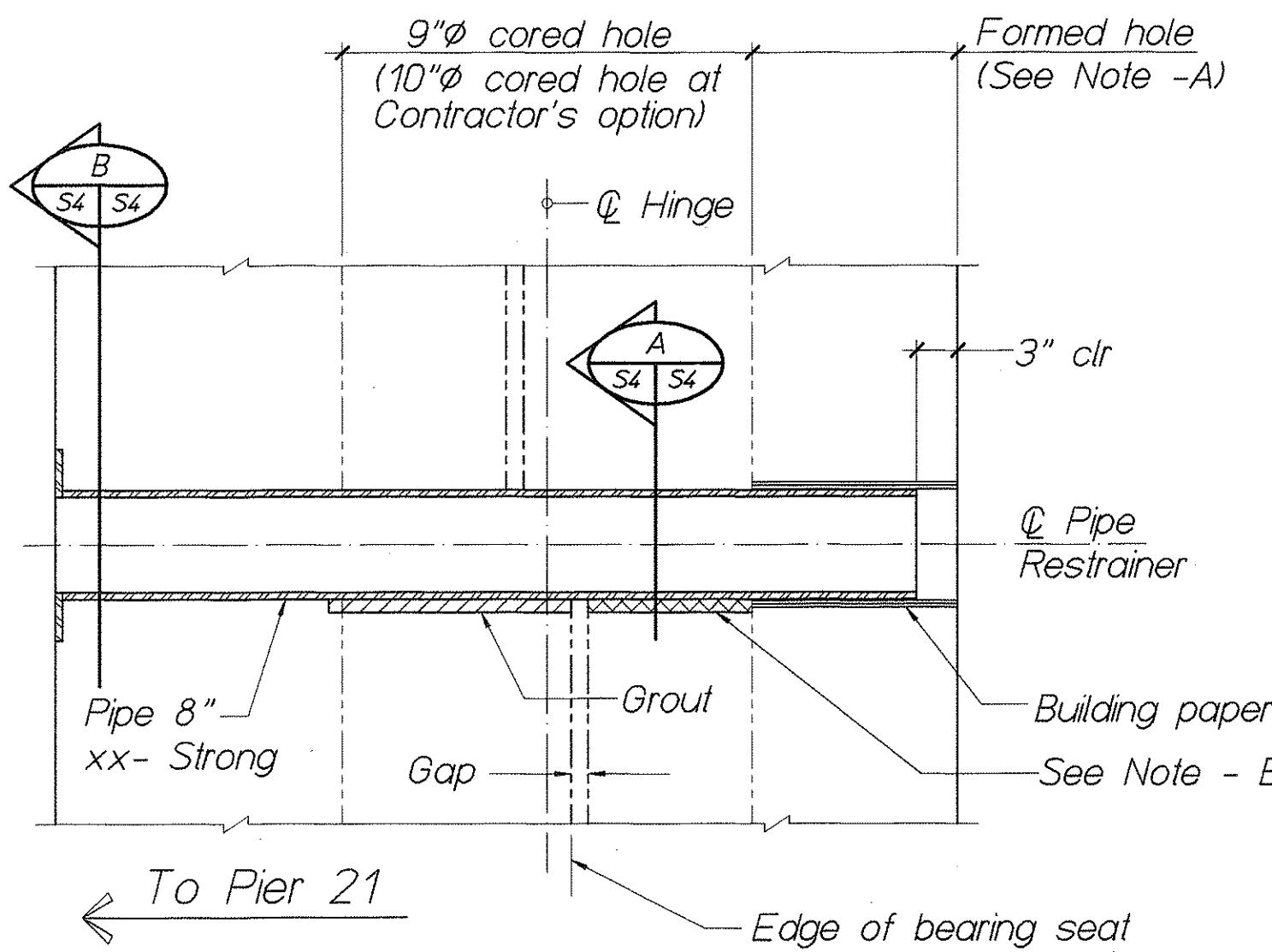
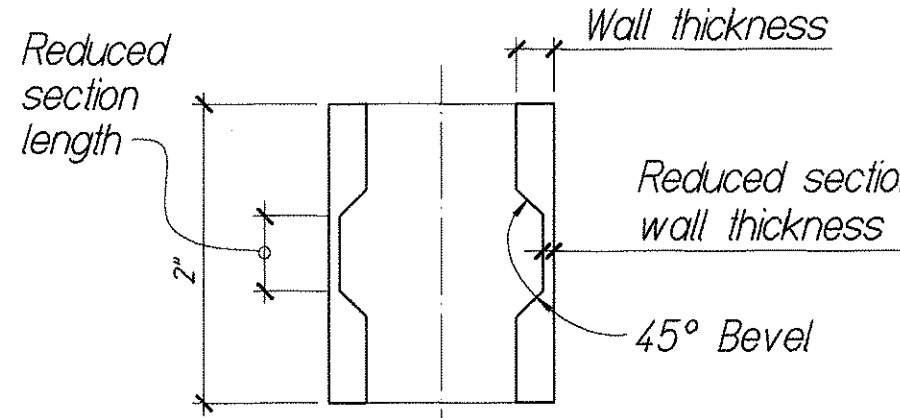
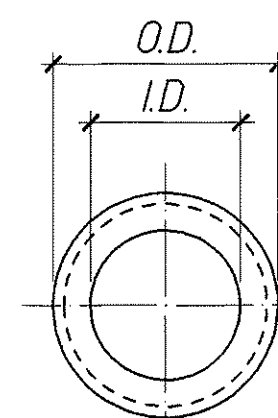
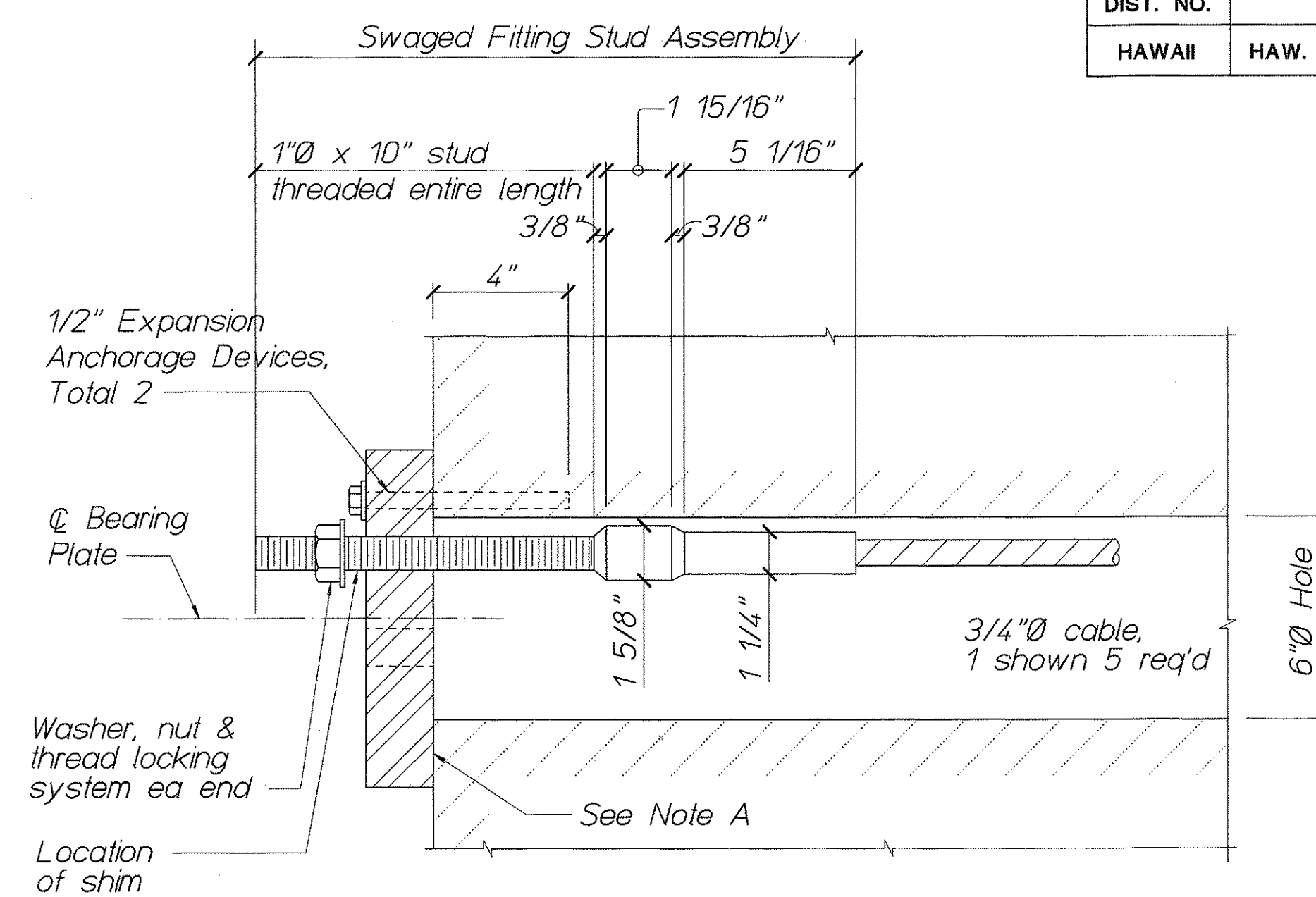
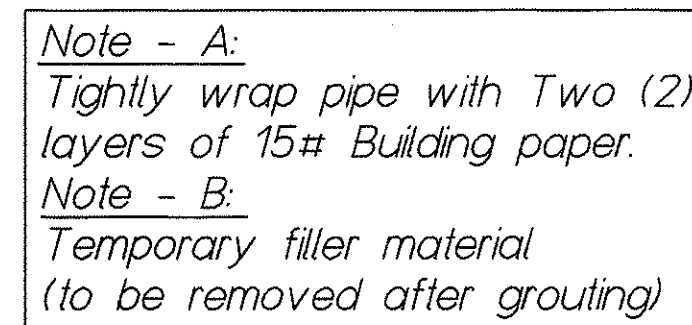


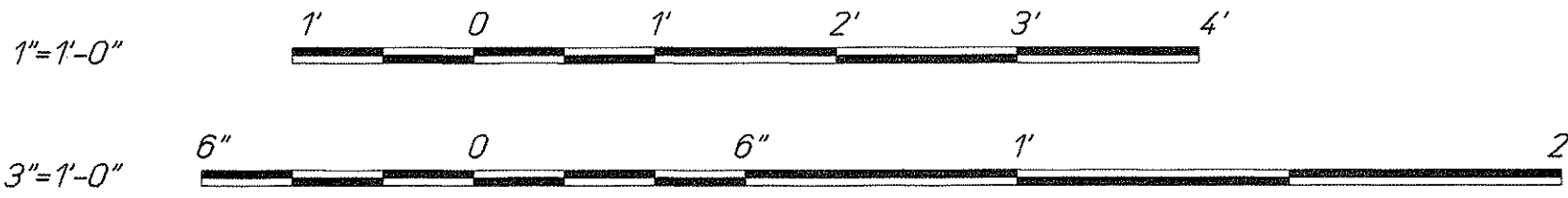
Ambient Temp (F)	Shim Thickness (In)
< 40	1"
40 to 80	3/4"
> 80	1/2"



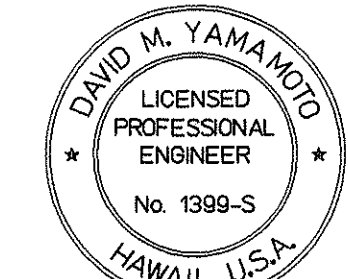
1. Place thread locking system on bent stud prior to tightening cable.
2. Install disc springs on bent side of cable system using steel spherical washers to align discs to stud. Discs shall be installed front to front as shown in "Disc Spring" detail. Install Cable Yield Indicator and Steel Spherical Washers on the hinge side of restrainers as shown in "Cable Unit" detail. Use 12" stud for cable yield indicator end.
3. Tighten the cable from hinge side of restrainer until the disc springs collapse and there is no gap remaining between the discs. The cable should be approximately straight with no sag.
4. Place thread locking system on hinge side stud after tightening the cable, but before backing off the nut. Back off the nut at hinge side a distance equal to the maximum additional amount that the hinge joint is expected to open as shown on the plans for movement rating.

NOTE: If the cable needs to be secured from turning while tightening, use double nut locking technique on the stud to protect the threads.

GRAPHIC SCALES:



* Length L (ft.) ** Minimum Value



THIS WORK WAS PREPARED BY
ME OR UNDER MY SUPERVISION

Nard Yamamoto
SATO & ASSOCIATES, INC.

STATE OF MAHARASHTRA
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

RESTRAINER, CABLE YIELD INDICATOR
& SEAT EXTENDER DETAILS

INTERSTATE ROUTE H-1, SEISMIC RETROFIT
KAPOLIANDI INTERCHANGE, PHASE 2
FEDERAL AID PROJECT NO. BR-HI-(226)

SCALE: AS NOTED DATE: SEPT 2002

SHEET No. S4 OF 9 SHEETS