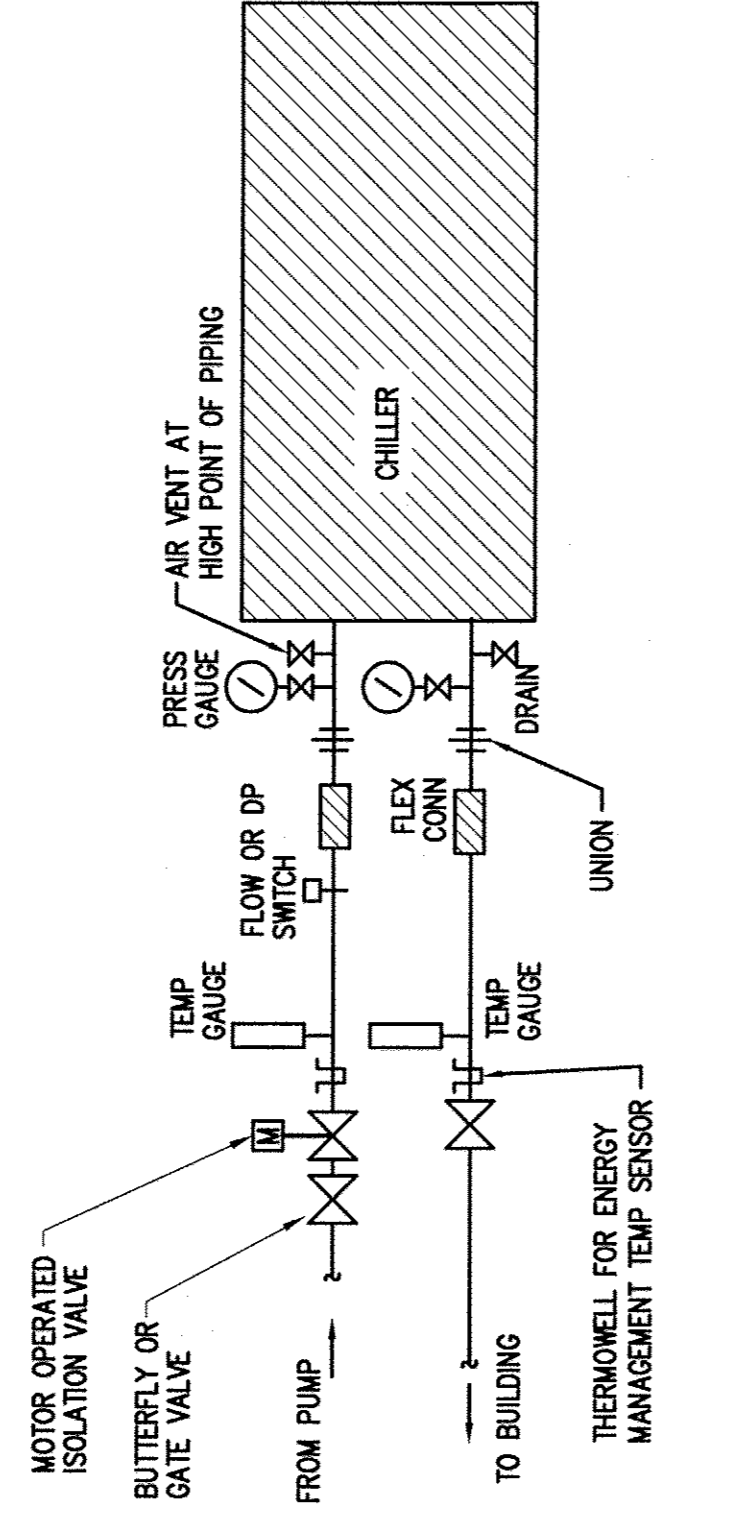
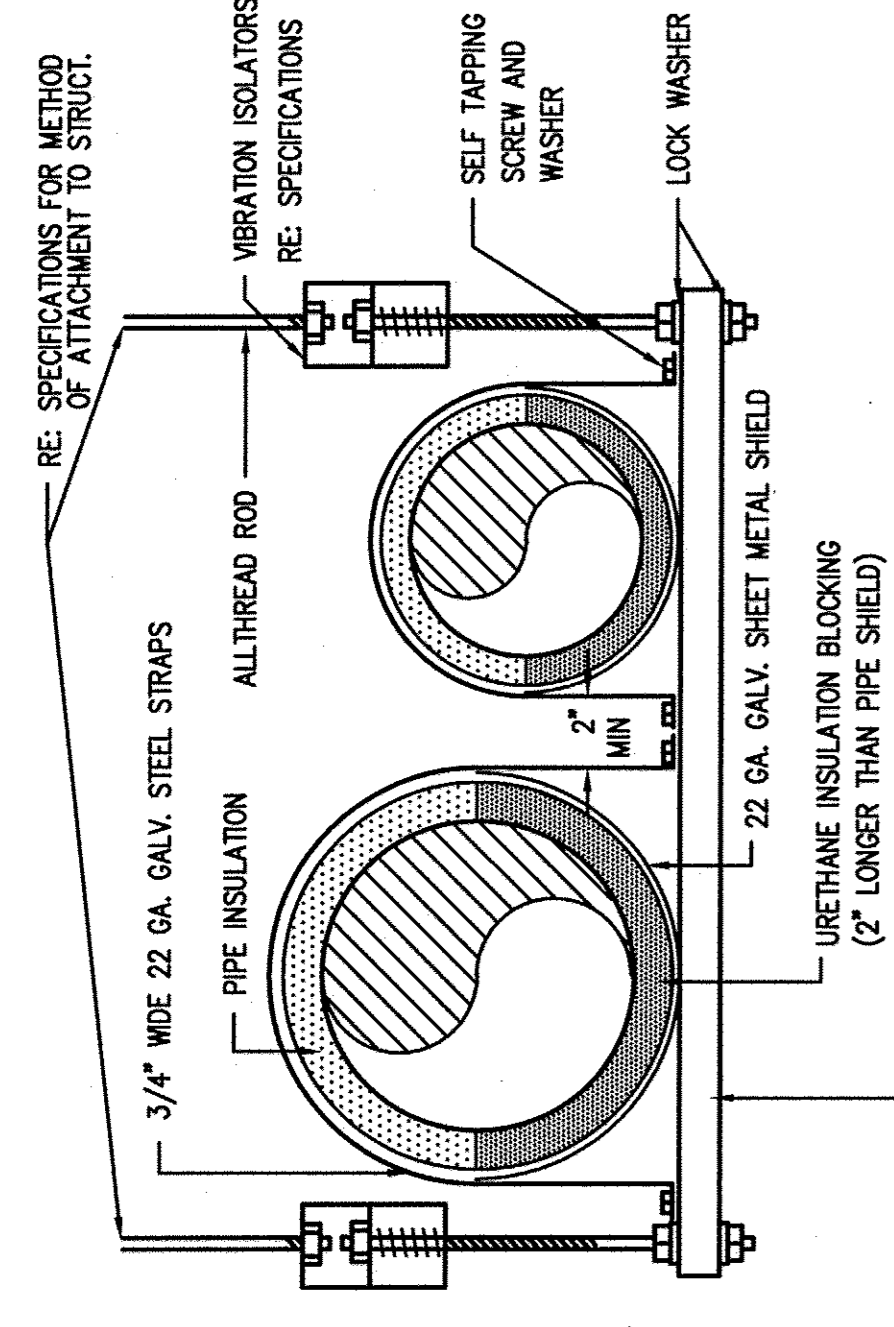


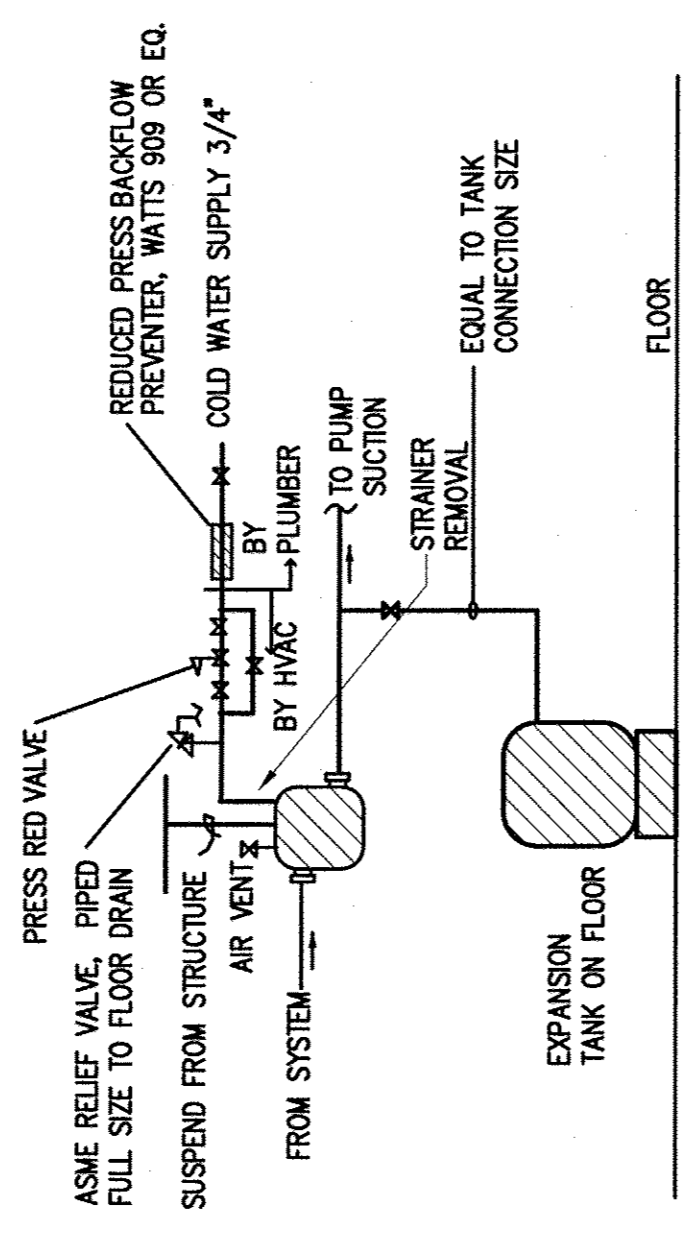
1 BASE MOUNTED CENTRIFUGAL PUMP DETAIL
NOT TO SCALE



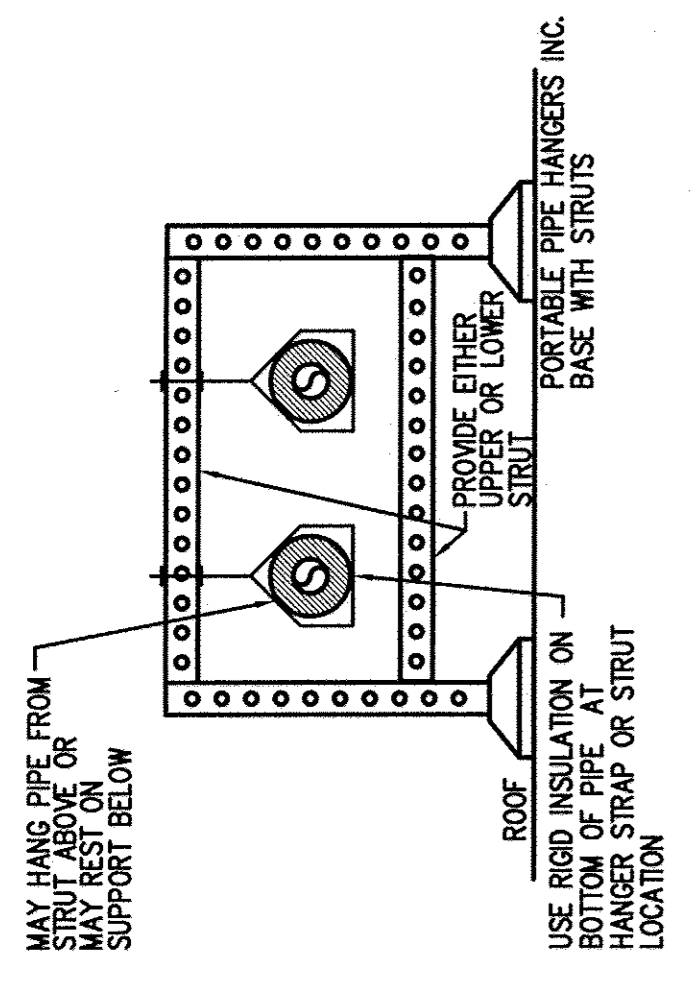
5 CHILLER PIPING DETAIL
NOT TO SCALE



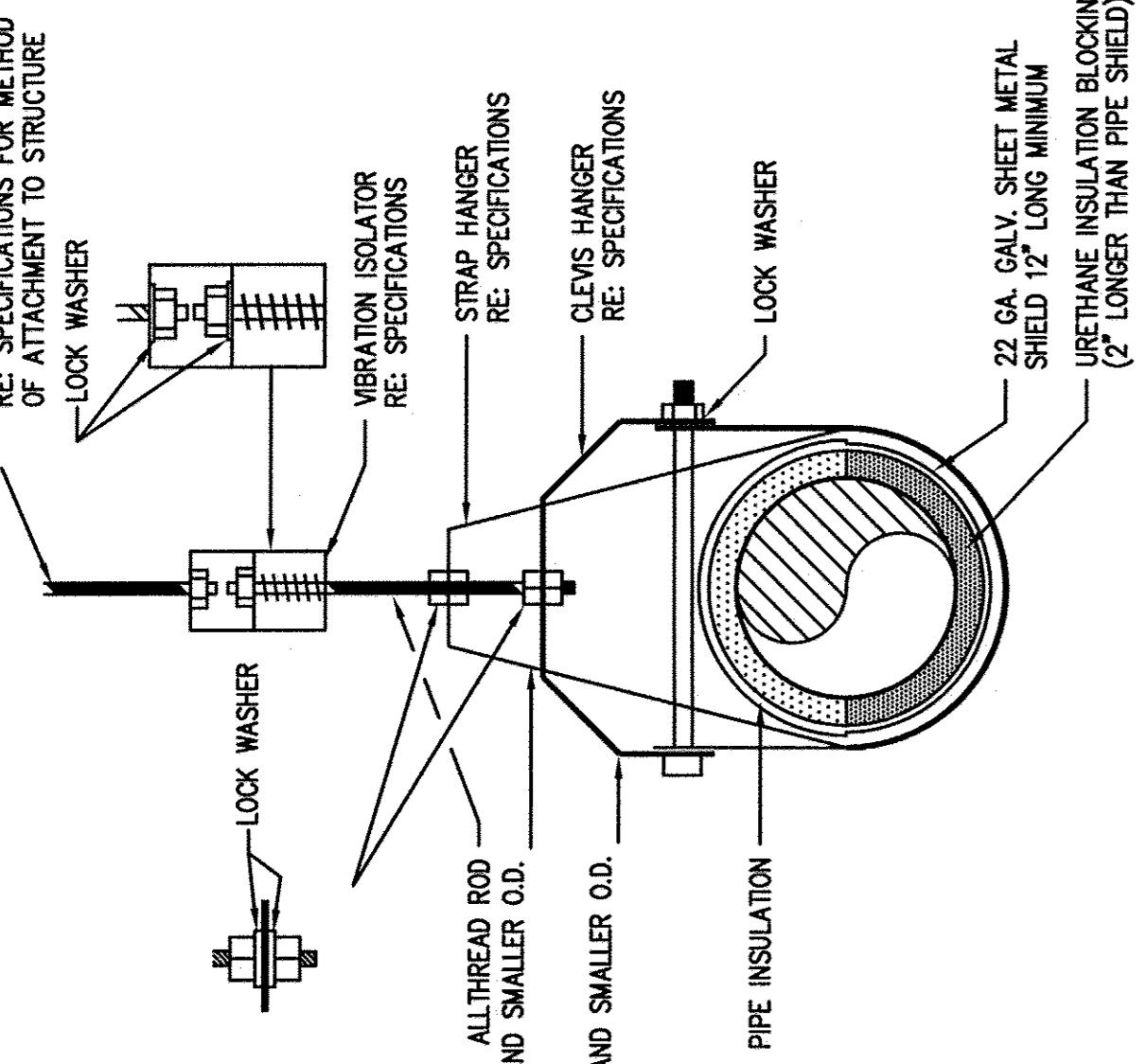
2 MULTIPLE PIPE HANGER
NOT TO SCALE



6 AIR SEPARATOR/MAKEUP WATER DETAIL
NOT TO SCALE
NOTE: CONTRACTOR SHALL RE-USE EXISTING EXPANSION TANK AND AIR SEPARATOR WITH NEW CHILLER AND DISTRIBUTION SYSTEM. THOROUGHLY CLEAN AND SERVICE COMPONENTS FOR RE-USE IN THE SYSTEM.



3 ROOF PIPE SUPPORT DETAIL
NOT TO SCALE



4 SINGLE PIPE HANGER DETAIL
NOT TO SCALE

LEGEND OF MECHANICAL SYMBOLS			
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
CHWS	CHILLED WATER SUPPLY	⊕	THERMOMETER & WELL
CHWR	CHILLED WATER RETURN	⊖	THERMOMETER WELL
-D-	DRAIN LINE	⊕	TEST PLUG
⊕	AUTOMATIC AIR VENT WITH SERVICE VALVE	⊕	PRESSURE GAGE WITH GAGE COCK
⊖	UNION	⊖	GAGE COCK
⊖	CONCENTRIC REDUCER	⊖	SWING CHECK VALVE
⊖	ECCENTRIC REDUCER	⊖	NON-SLAM SPRING OPERATED CHECK
⊖	Y TYPE STRAINER	⊖	STOP VALVE
⊖	FLOWMETER, VENTURI	⊖	STRAIGHT THROUGH CONTROL VALVE
⊖	BALANCING VALVE	⊖	TEMPERATURE TRANSMITTER
PT	PRESSURE TRANSMITTER	⊖	

CHILLER REPLACEMENT PROJECT
MHMRA BUILDING, 7011 SW FREEMWAY
HOUSTON, TX

REDDING CONSULTING ENGINEERS
801 TRAVIS, SUITE 2000
HOUSTON, TEXAS 77002
PH: 713.237.9800
WWW.REDDINGENGINEERS.COM



DATE: 9/30/2010
PROJECT # 10100.00
SHEET #

M-3.3