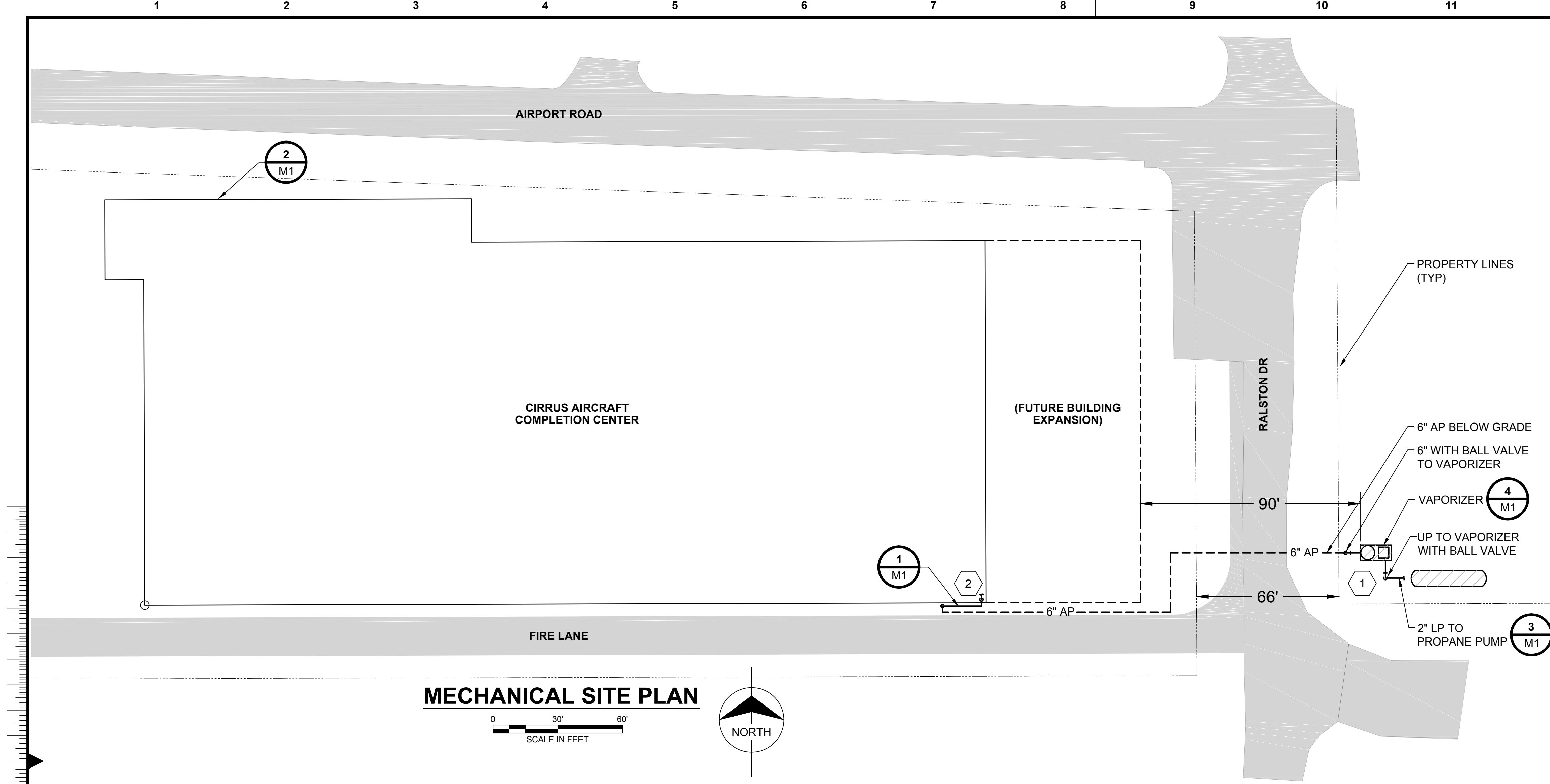
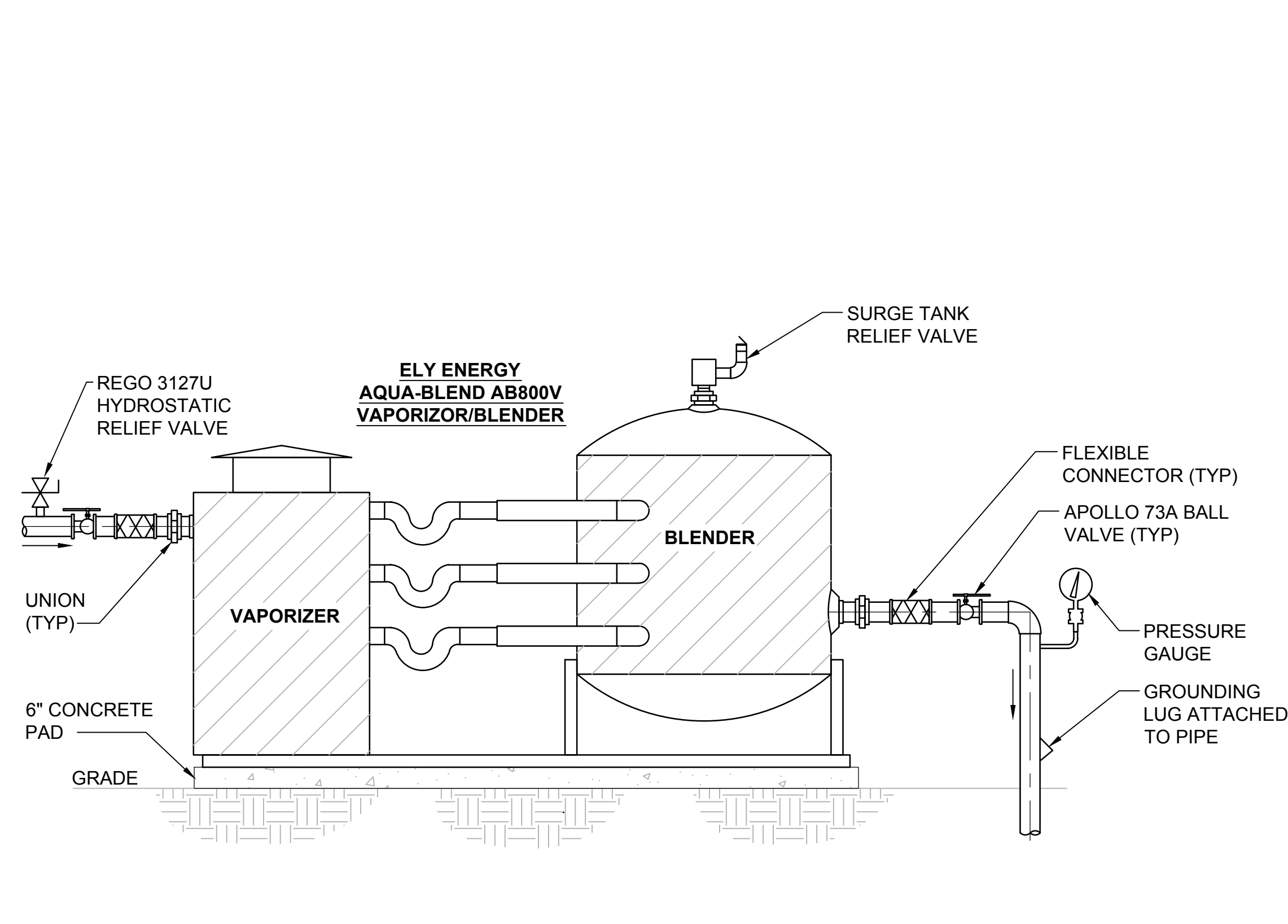


Scale For Microfitting
Inches
Millimeters

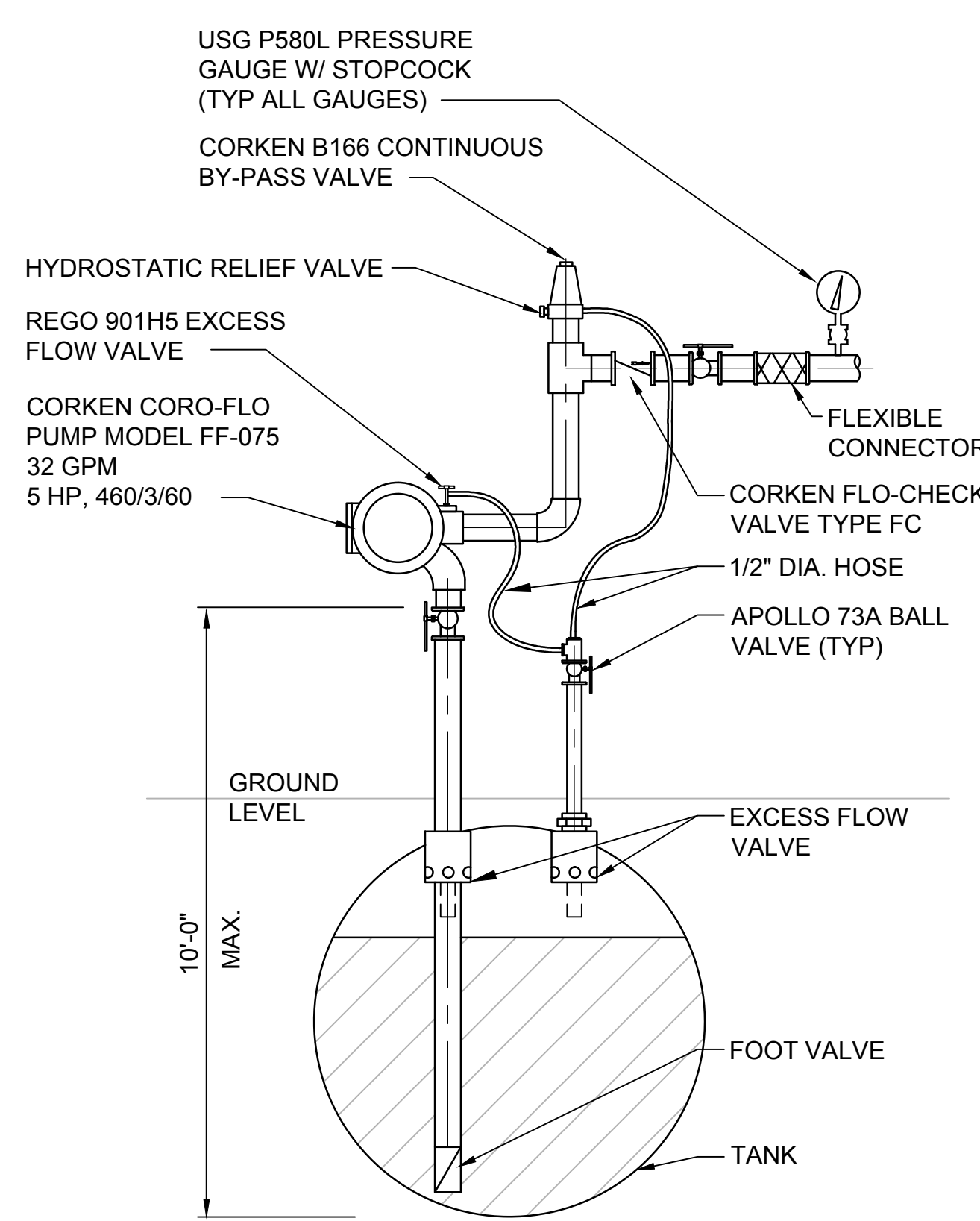


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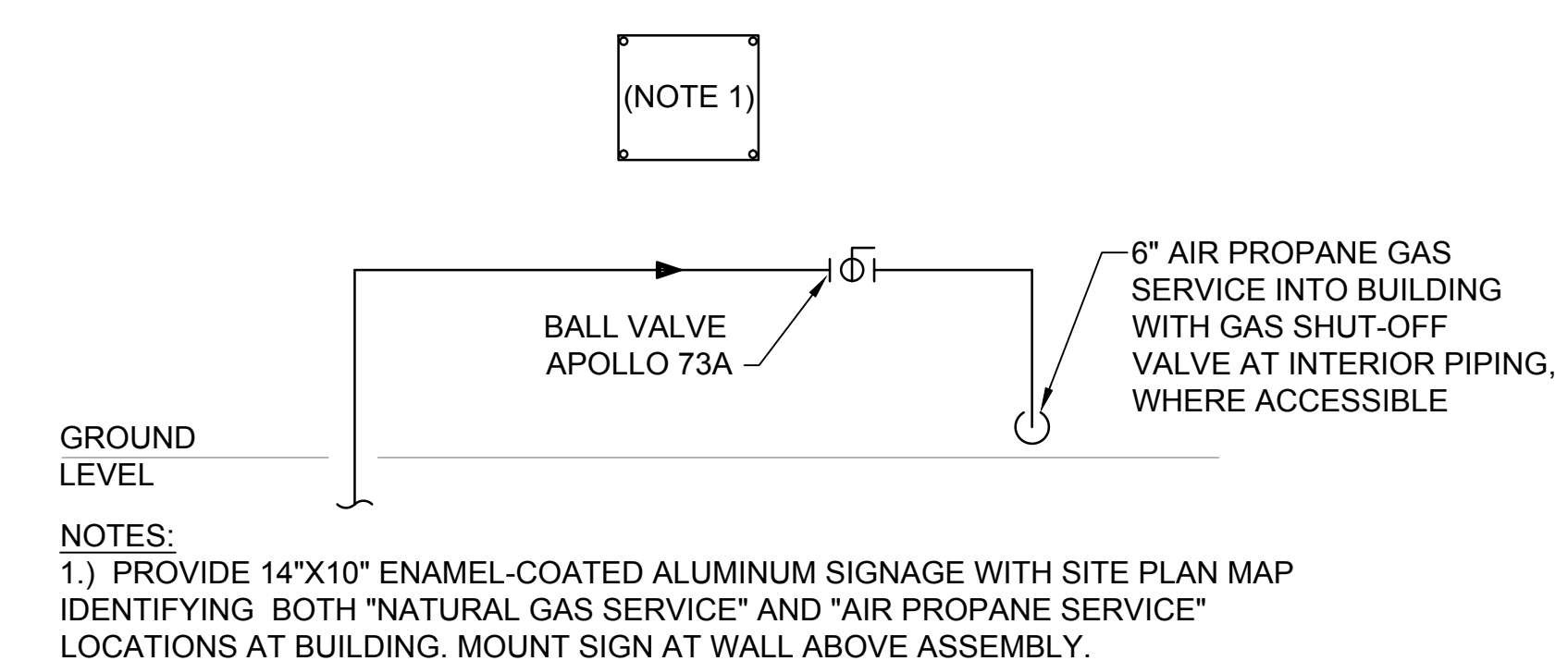
VAPORIZER PIPING DETAIL
NOT TO SCALE

4
M1



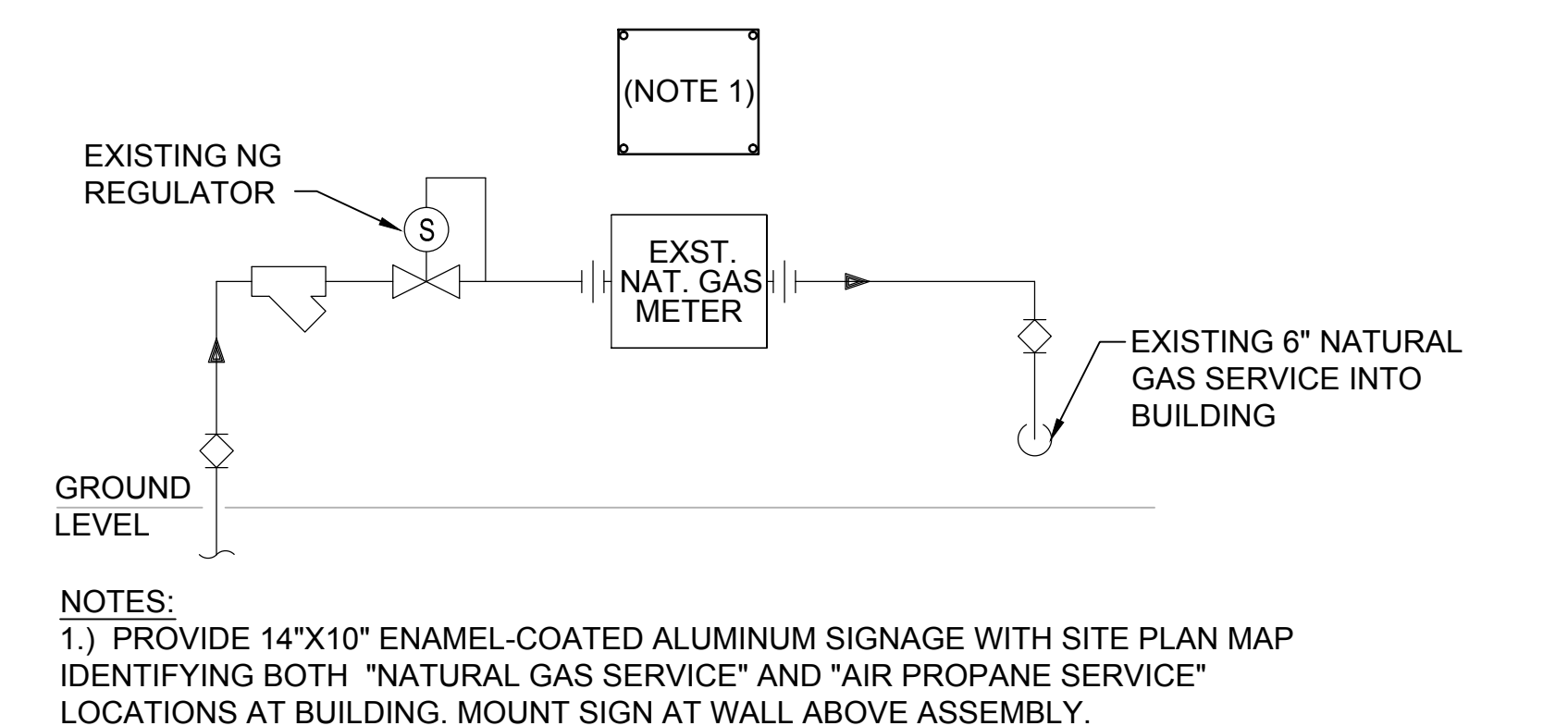
TRANSFER PUMP DETAIL
NOT TO SCALE

3
M1



AIR PROPANE PIPING & SIGNAGE DETAIL
NOT TO SCALE

1
M1



SIGNAGE AT EXISTING NATURAL GAS ASSEMBLY DETAIL
NOT TO SCALE

2
M1

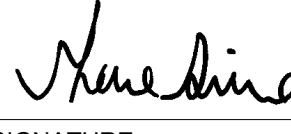

GENERAL NOTES:
1. SYSTEM AND INSTALLATION SHALL COMPLY WITH NFPA 58. EQUIPMENT LOCATIONS SHALL BE IN COMPLIANCE WITH ALL REQUIRED DISTANCES AND CLEARANCES PER NFPA 58.

PIPING SYSTEMS:
1. ABOVE GROUND:
A.) PROPANE PIPING SHALL BE SCHEDULE 40 BLACK STEEL, A53, A106, OR API 5L, GRADE A OR B, OF WELDED CONSTRUCTION.
B.) WELDED FITTINGS AND FLANGES SHALL BE IN ACCORDANCE WITH ASTM STANDARDS A-105 OR A-181.
C.) THREADED PIPE AND FITTINGS SHALL BE SCHEDULE 80 BLACK STEEL, A53, A106, OR API 5L, 2000 LB. FORGED STEEL FITTINGS.

2. BELOW GRADE:
A.) PROPANE PIPING SHALL BE POLYETHYLENE PIPE (UAC 2000), PER ASTM D1248, CLASS B, CATEGORY 5.
B.) FITTINGS SHALL BE SOCKET FUSION TYPE.

CHARGING STATION:
SYSTEM SHALL INCLUDE A NITROGEN CYLINDER RACK, NITROGEN REGULATOR CHARGING VALVE, LATCHING VALVE, AND A LIMITING FEED ORIFICE. THE ASSEMBLY SHALL BE PRE-PIPED AND MOUNTED ON THE CYLINDER RACK. THE EMERGENCY SHUTDOWN STATION SHALL INCLUDE A SIGN POST, SIGN, AND PNEUMATIC SHUTDOWN VALVE. LOCATION OF STATION SHALL BE NO LESS THAN 25 FT. FROM THE LIQUID TRANSFER POINT.

KEYED NOTES:
1. TANK VALVE SHALL BE LOCATED A MINIMUM 15' CLEAR FROM VAPORIZER.
2. 6" AP THROUGH EXTERIOR WALL INTO BUILDING. CONNECT TO EXISTING 6" NG PIPING. INSTALL PLUG-TYPE SHUTOFF VALVE ON INTERIOR, WHERE ACCESSIBLE.

no.	date	by	ckd	description
0	09/21/16	RLP	GMS	ISSUED FOR CONSTRUCTION
1	10/20/16	RLP	GMS	ADDENDUM NO. 01
<div></div>				
<div>I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.</div>				
NAME:		GENE M. SIEVE		
REGISTRATION #:		26032		
<div></div>		OCTOBER 20, 2016		
SIGNATURE:		DATE		
<div><div></div><div>BURNS MCDONNELL</div><div>8201 NORMAN CTR. DR. #300 BLOOMINGTON, MN 55437 952-656-6003</div></div>				
date		detailed		
09/21/2016		R. PEARSON		
designed		checked		
R. PEARSON		G. SIEVE		
<div>CIRRUS AIRCRAFT 4970 AIRPORT ROAD DULUTH, MN 55811</div>				
AIR-PROPANE SYSTEM				
project		contract		
94613				
drawing				rev.
M-1		—		1
sheet 1		of 1		sheets
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