APPENDIX A
WALKDOWN INSPECTION REPORT

SYSTEM
NITROGEN SUPPLY TO BUILDING XYZ

The system maintenance history is satisfactory	Yes (1)
The fittings are standards (ASME B16)	Yes
There are no missing parts on components.	Yes
There is no visible damage, scratches, gouges, distortion, etc.	Yes
The welding is of good quality (visual)	Yes
The flange gaskets have a good record	Yes (1)
The pipe is not dislodged from its support	Yes
The pipe supports are in position	Yes
There are no missing parts on pipe supports	Yes
There is no damage to the building attachment	Yes
There is no visible material degradation	Yes
There is no evidence of leakage	Yes
The operating record indicates no degradation	Yes (1)
The metallurgical review indicates no cause of degradation	Yes (2)
There are no adverse anchor motions	Yes (4)
Equipment is well anchored	Yes (3)
There is no differential motion of support attachments	Yes (4)
There is no large motion of header against a stiff branch	Yes
There is no differential soil settlement	Yes (5)
There are no friction joints in the piping system	Yes
The flange joints have the right rating	Yes
There are no eccentric weights	No (6)
There are no credible or significant interactions	No (7)
Walkdown by: date:	
Walkdown by: date:	

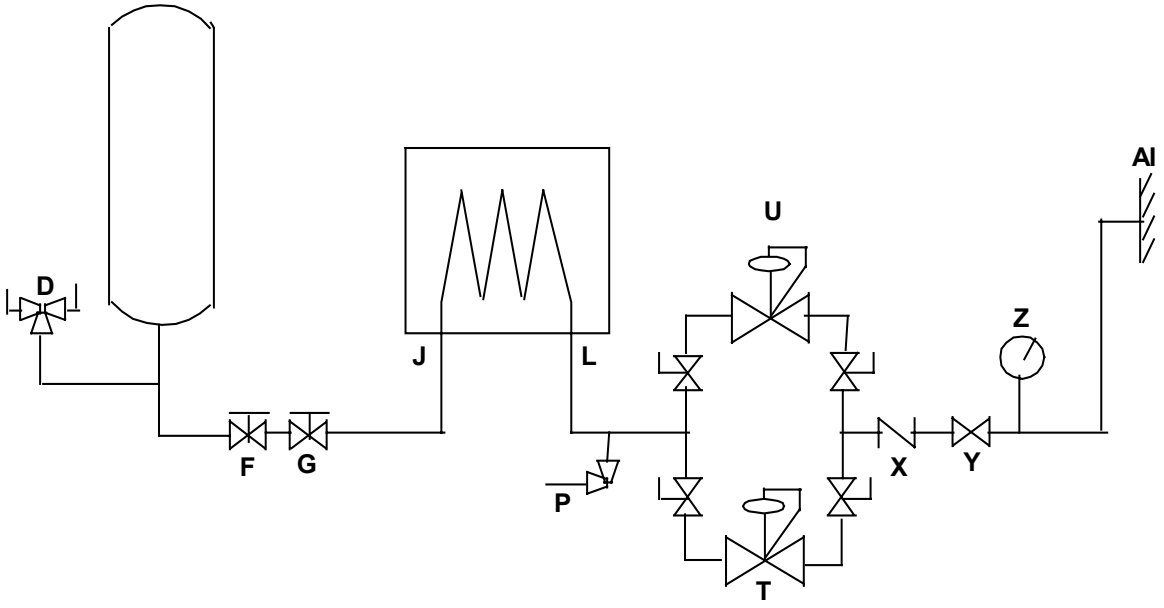
Field Notes:

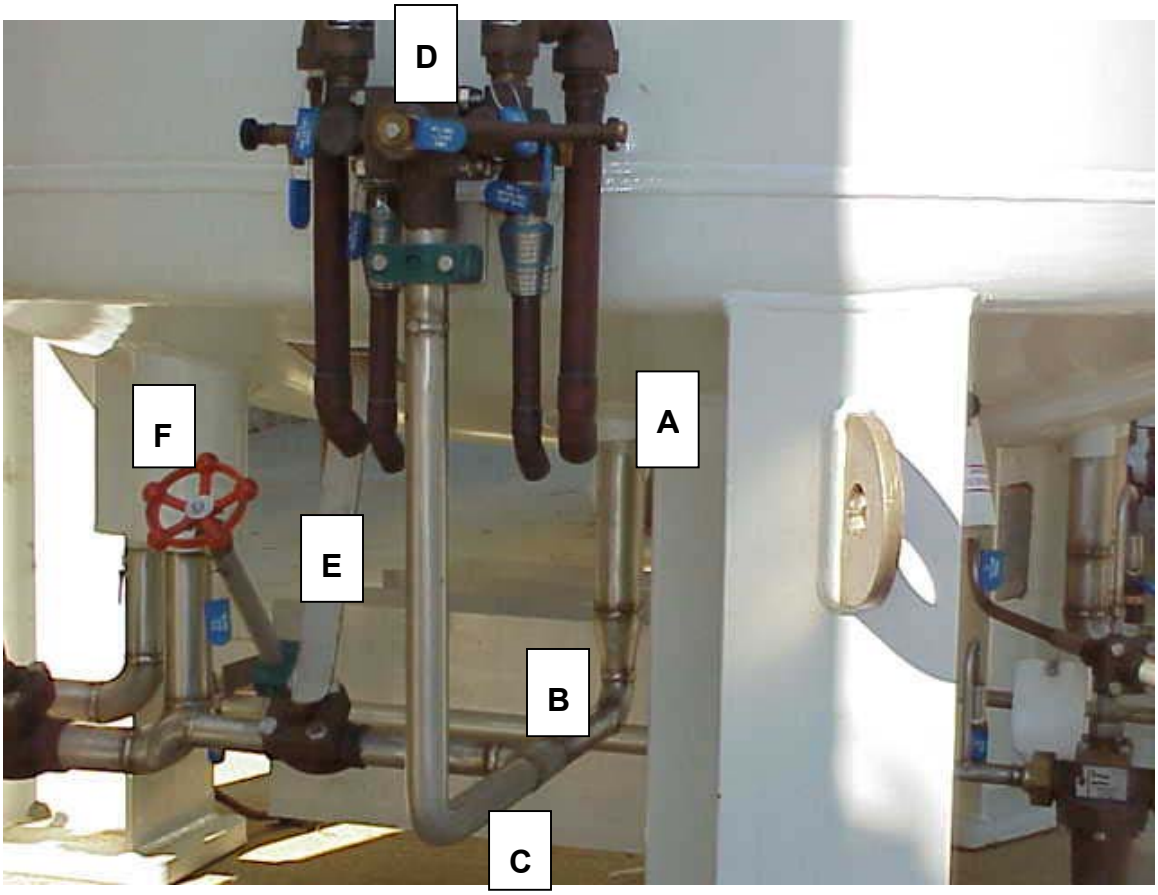
(1) Per input from XYZ, system maintenance mechanic, date X/Y/Z.
(2) Per input from ABC, system supplier from experience with same systems, date X/Y/Z.
(3) Vessel and vaporizer must be evaluated.
(4) Per input from building analysis, ref. DEF, date X/Y/Z.
(5) Per geotechnical evaluation ref. DEF, date X/Y/Z.
(6) The cantilevered pressure relief valves at location C weigh 30 lb each. To be evaluated.
(7) Two potentially credible and significant spatial seismic interactions have been identified: The building block wall, and the second vessel. They need to be evaluated.

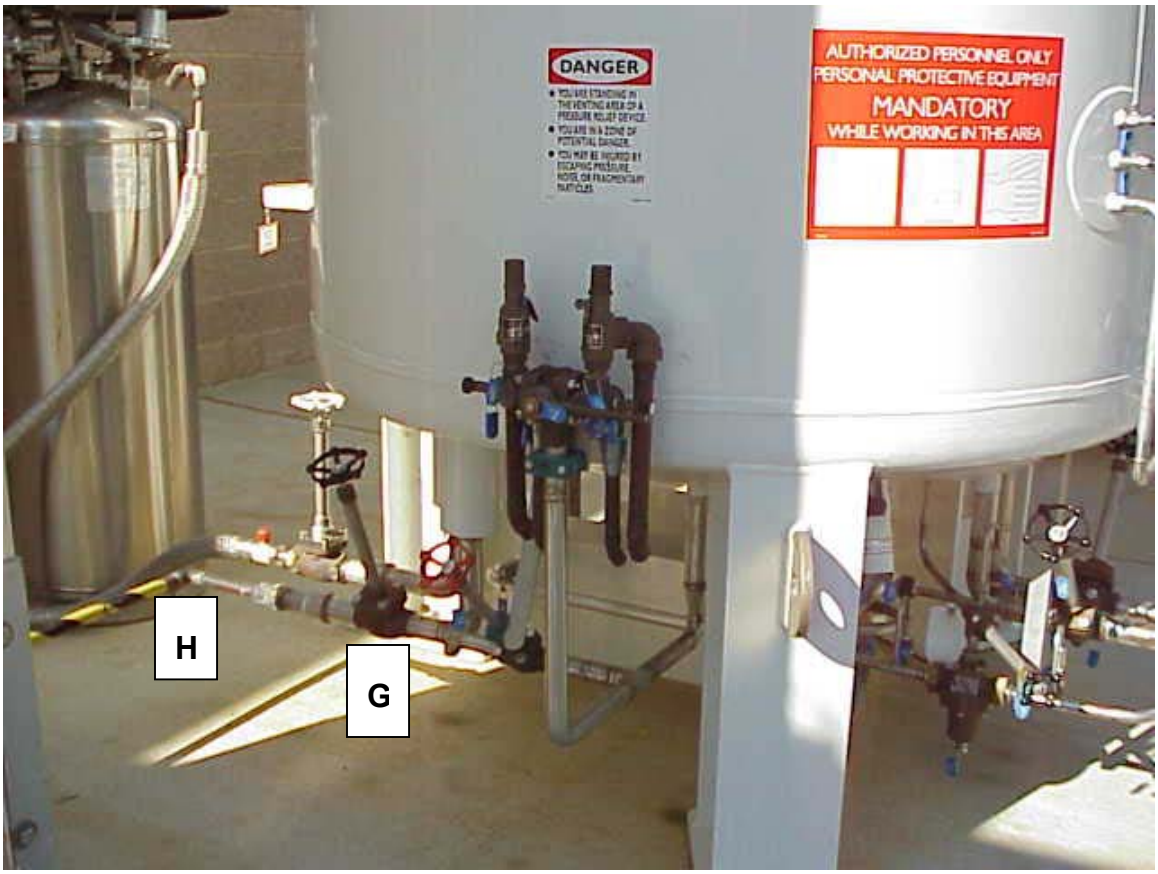
Photo Notes:

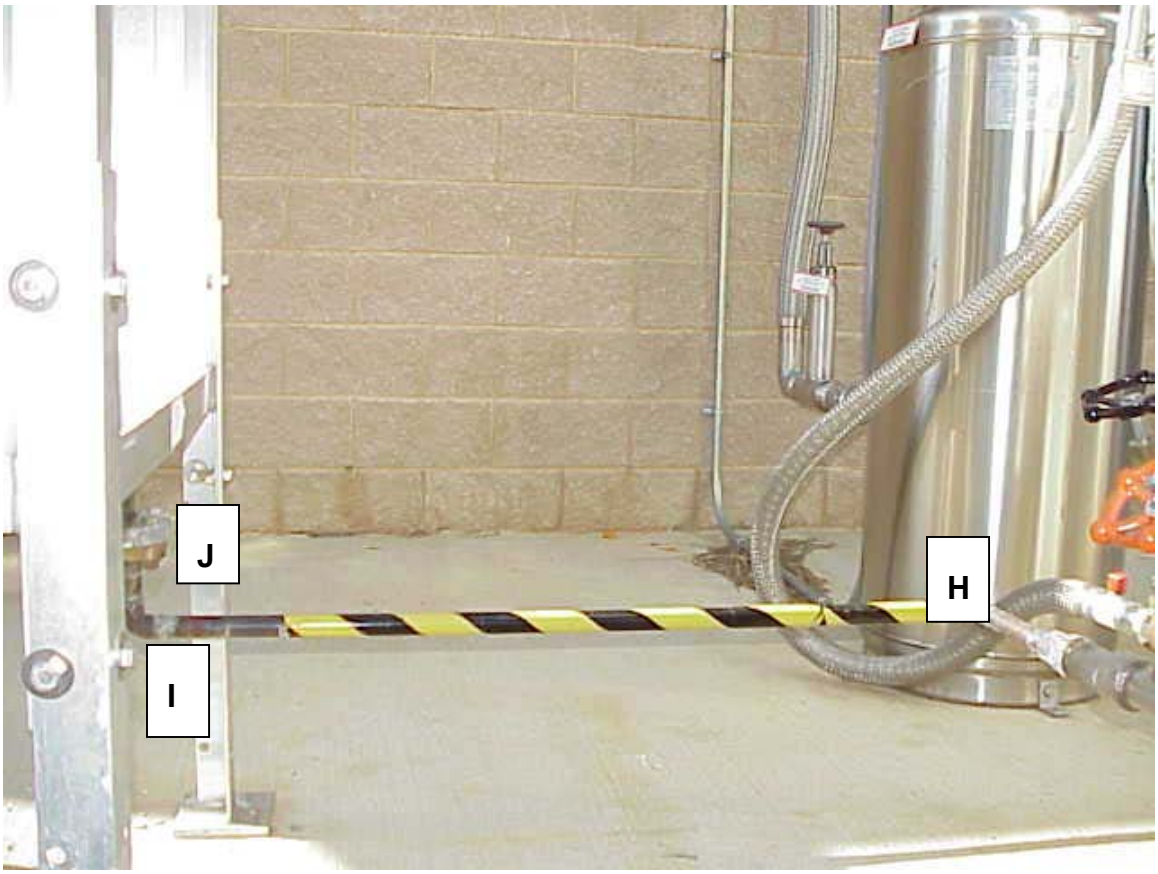
General view of liquid nitrogen vessel (forefront) and vaporizer (left of vessel).
Vessel nameplate data: U stamp, NB number XYZ, manufacturer XYZ, MAWP 350 psi.
A = liquid nitrogen vessel outlet
B = reducer and elbow on 3"x2" outlet pipe
C = elbow on 2" pipe (stainless steel ASTM A372 type 316)
D = dual liquid relief valves
E = tie-back support pipe-to-tank
F = first extended stem gate valve, make XYZ, model XYZ, size XYZ, rating XYZ
G = second extended stem gate valve, make XYZ, model WYZ, size XYZ, rating XYZ
H = elbow
I = elbow to vaporizer
K = vaporizer
J = vaporizer inlet flange class 150
L = vaporizer outlet flange class 150
M = gas pipe elbow (carbon steel ASTM A106 Grade B)
N,O = pipe elbow
P = gas relief valve
Q = tee
R,S = elbows, two plug valves, make XYZ, model XYZ, size XYZ
U,T = self-actuated regulators, make XYZ, model XYZ, size XYZ
V,W = elbows, two plug valves, make XYZ, model XYZ, size XYZ
X = check valv, make XYZ, model XYZ, size XYZ
Y = plug valve, make XYZ, model, XYZ, size XYZ
Z = pressure gage, make XYZ, model XYZ, reading XYZ psi, scale range XYZ psi
AA = elbow
AB, AD, AE, AF, AH = pipe clamps on two-bolt strut, make XYZ, size XYZ
AI = building penetration

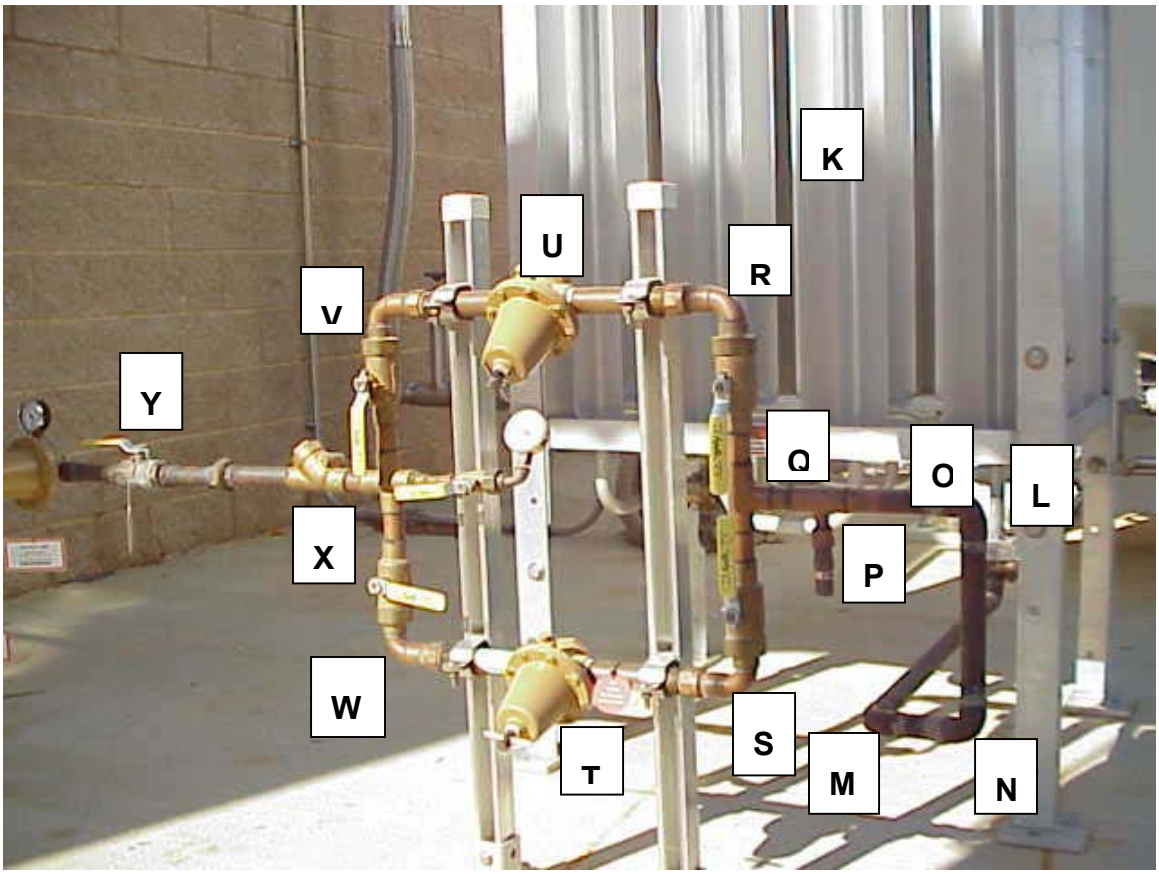
Figure D-1 System Schematic




D
A
F
E
B
C


DANGER
AUTHORIZED PERSONNEL ONLY
PERSONAL PROTECTIVE EQUIPMENT
MANDATORY
WHILE WORKING IN THIS AREA
H
G


J
H
I


K
U
R
V
Y
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L
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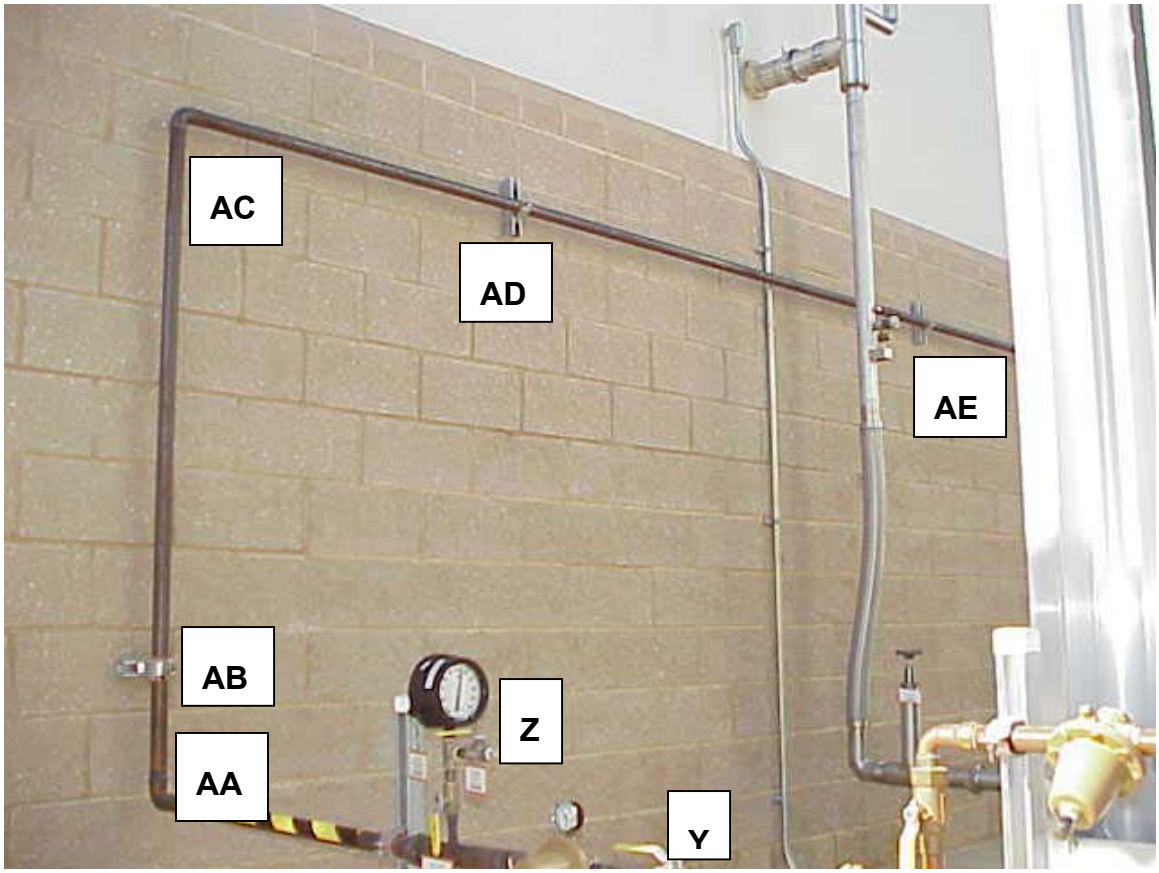
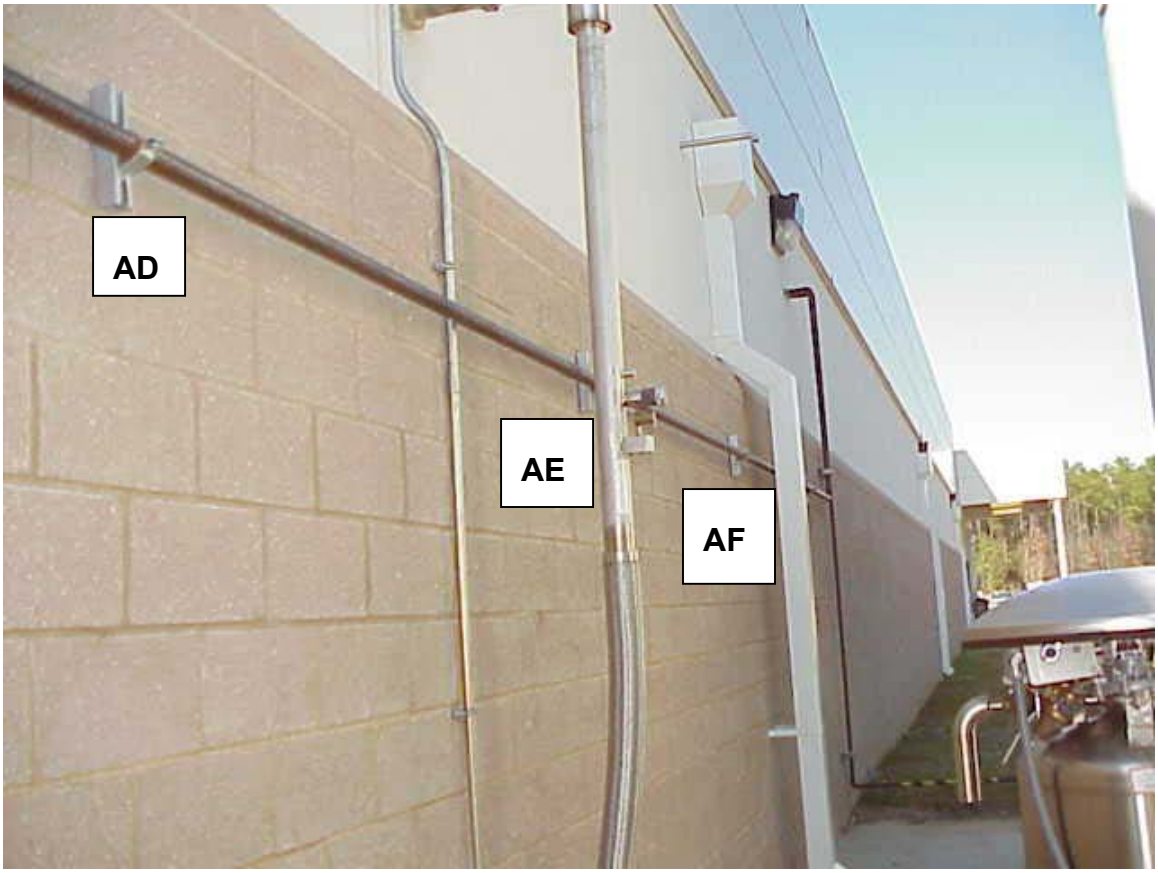
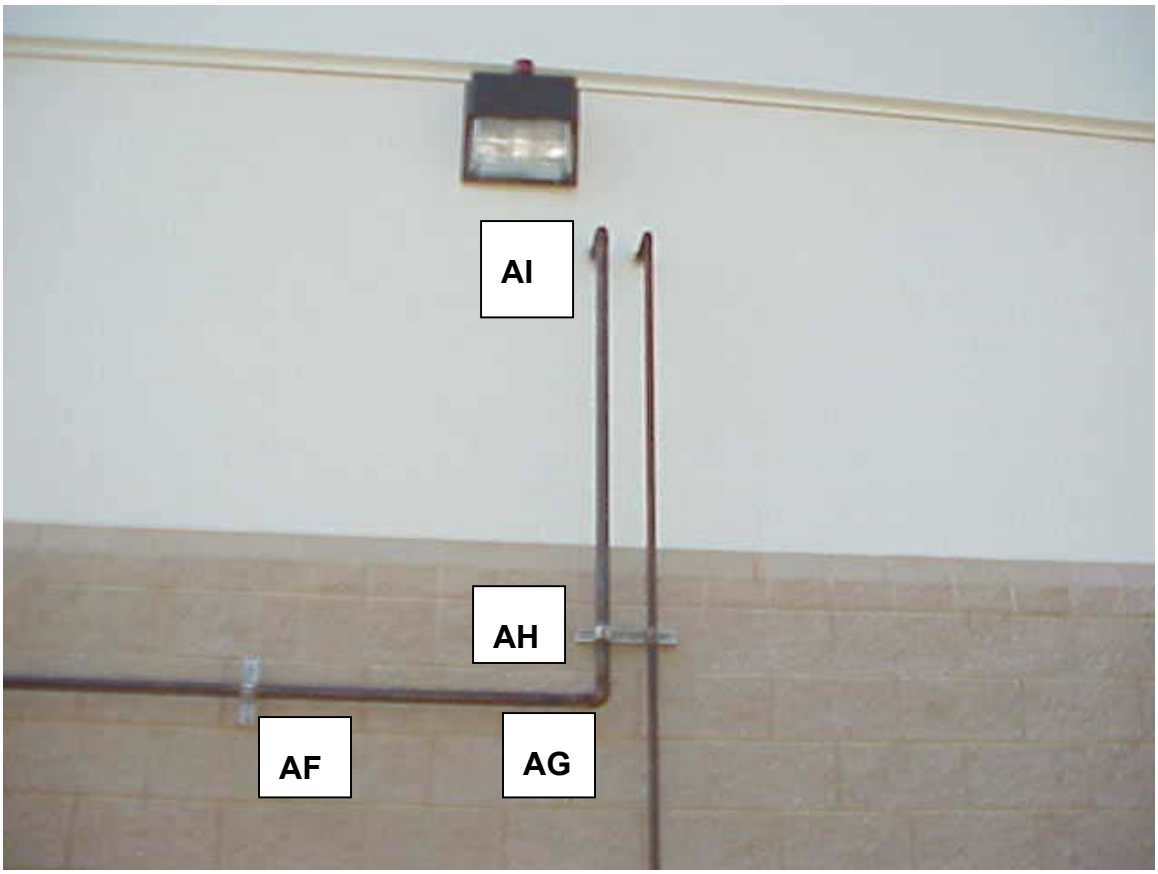

AC
AD
AE
AB
Z
AA
Y


AD
AE
AF


AI
AH
AF
AG