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Landfill Gas Design: A Practical Approach

by
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Outline

- Go Outside
- Ask Questions
- Install System Access Points
- Liquid is the Enemy



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GO OUTSIDE



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Go Outside

- Layout the Landfill Gas Collection and Control System (GCCS) Components onsite
- Work with a surveyor who is familiar with the site
- Be sure that all GCCS components are clearly labeled and re-established prior to the start of Construction
- Be sure that as-built survey data is accurate to more easily facilitate future GCCS expansion and trouble-shooting



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ASK QUESTIONS



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Ask Questions

- Ask about the location of any potential barriers, obstacles, or site conditions that could affect the pipeline route
- For initial installation of a GCCS, ask about potential locations that will not be disturbed and may be ideal for a Blower/Flareskid and Power Supply
- Ask about any compliance deadlines associated with GCCS construction and/or expansion



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INSTALL SYSTEM ACCESS POINTS



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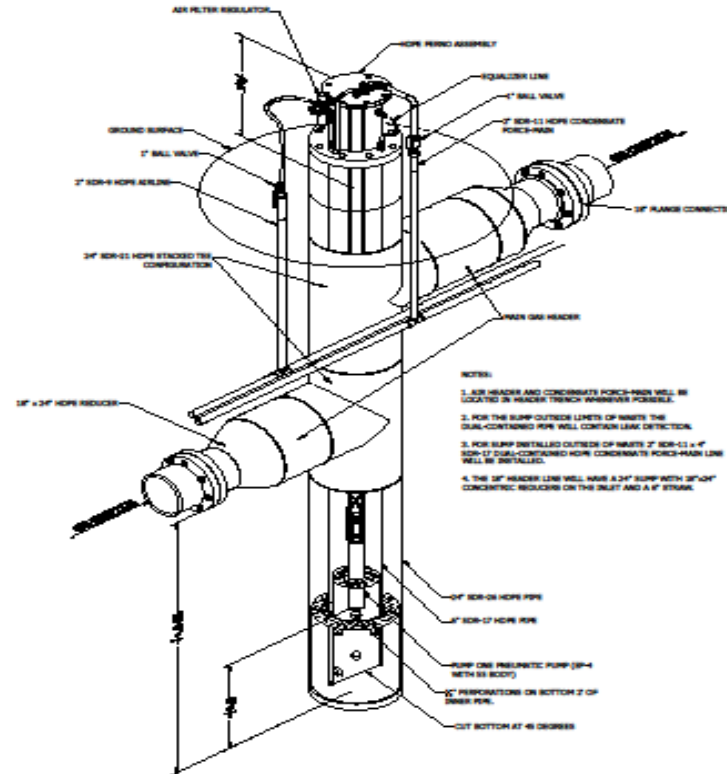
Install System Access Points

- GCCS access points are important for a few reasons:
 - ❖ They are helpful for trouble-shooting the GCCS
 - ❖ They are helpful for GCCS Component maintenance



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Install System Access Points Condensate Sump

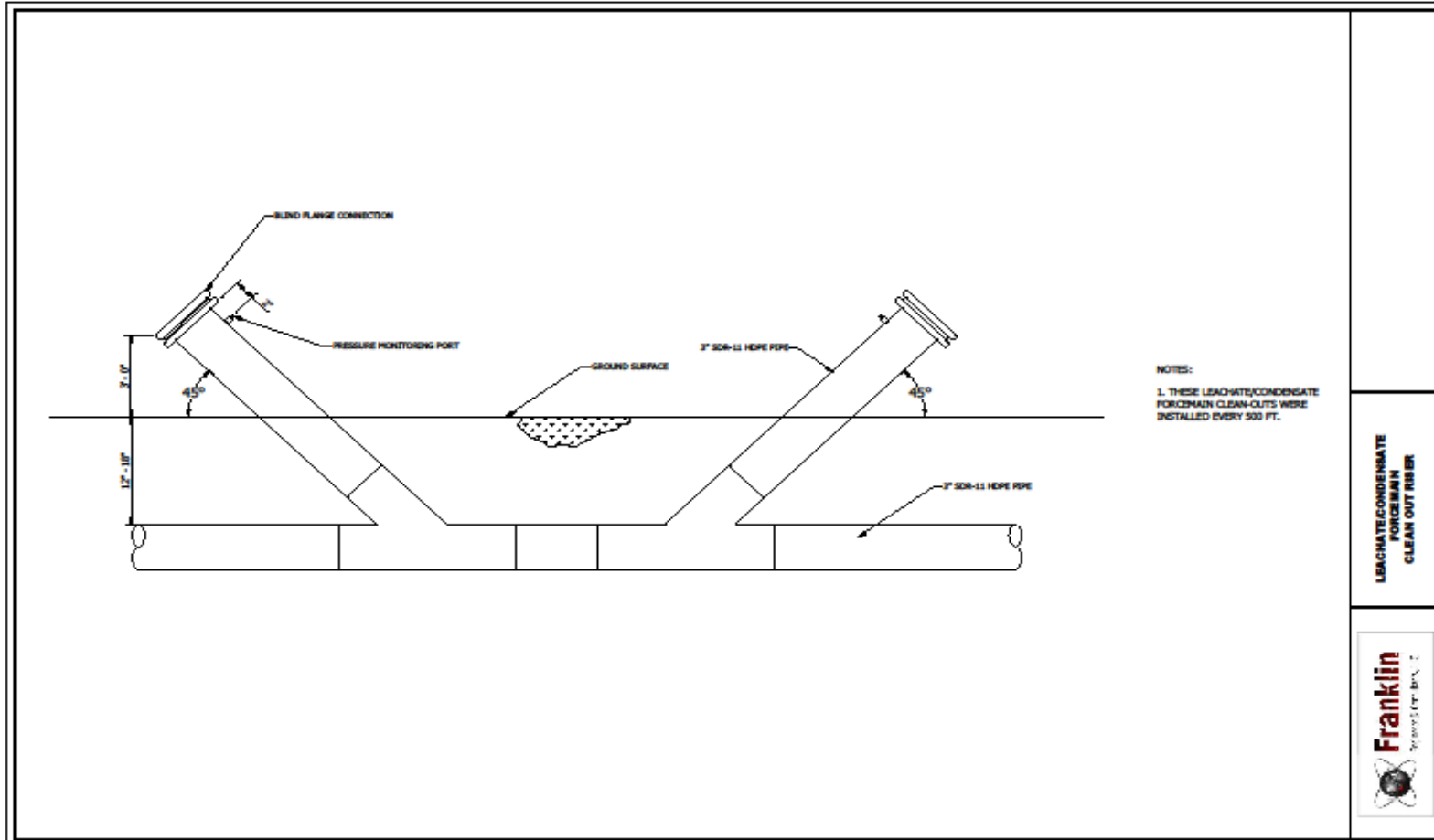


STACKED TEE PNEUMATIC
SINGLE-CONTAINED SUMP



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Install System Access Points Gas Forcemain Line Clean-Outs



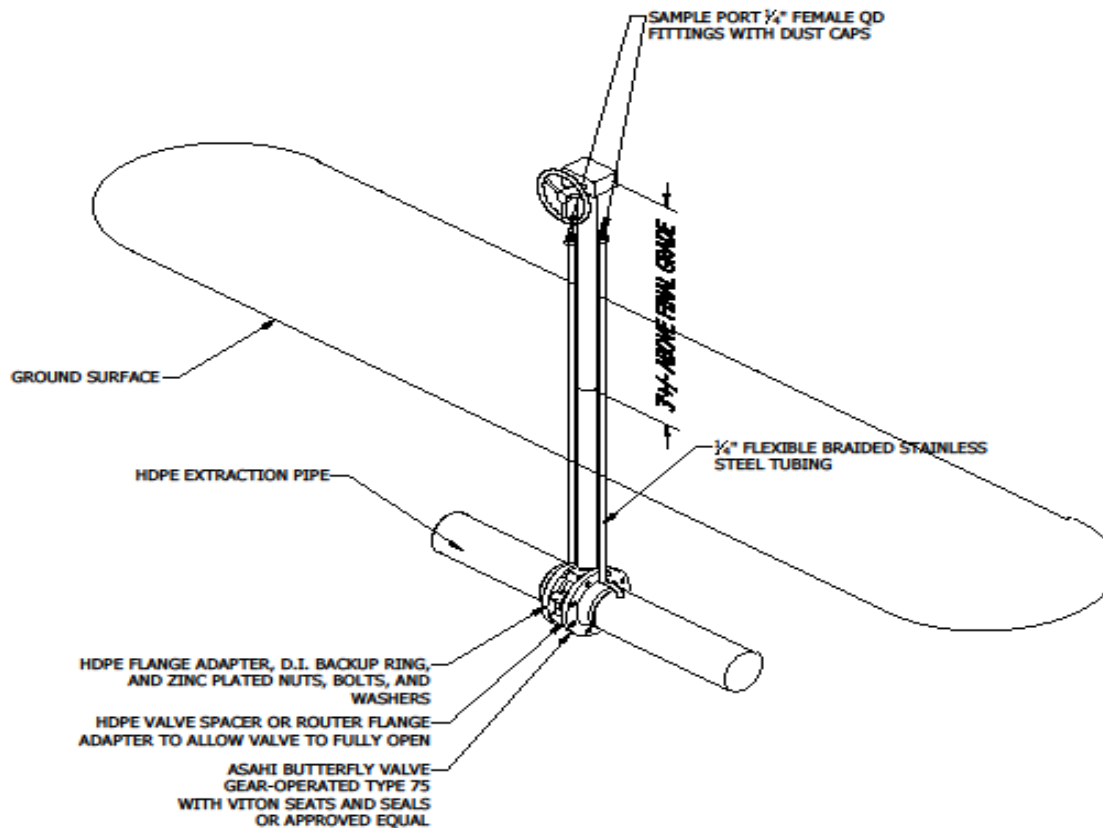
LEAD/ATE/CONDENSATE
FORCEMAIN
CLEAN OUT RISER

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Install System Access Points

Isolation Valve Access Risers



TYPICAL ISOLATION VALVE



LIQUID IS THE ENEMY



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Liquid is the Enemy

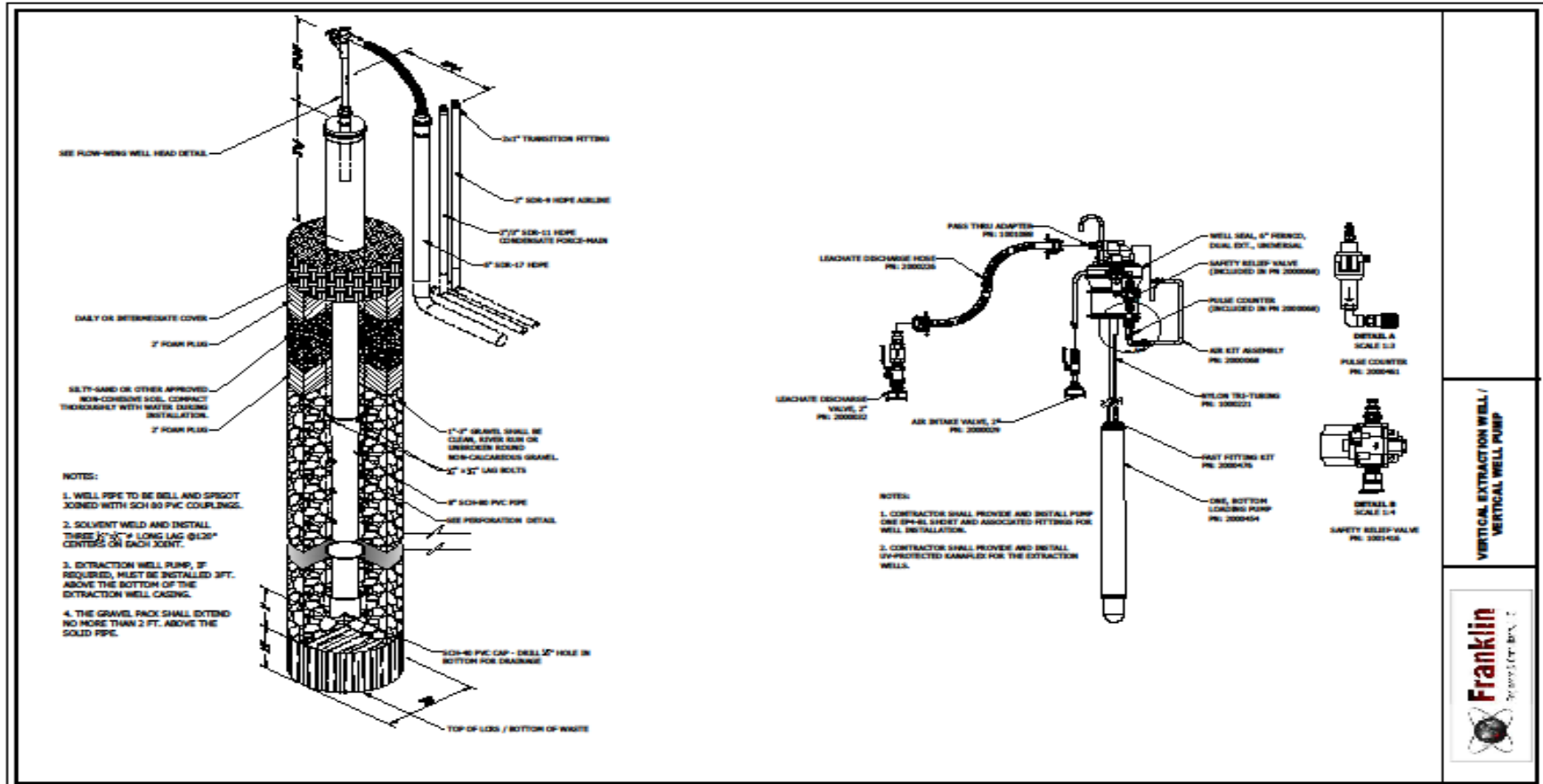
- Excess liquid can inhibit the extraction efficiency of the GCCS
- Excess liquid in the extraction well can reduce the amount of perforations available for LFG extraction
- Excess liquid in the pipe network can cause the following problems within the GCCS:
 - ❖ Inhibit vacuum available throughout the pipe network
 - ❖ Causing surging with the pipe network
 - ❖ Damage to the blower/flare skid components (blowers, flame arrestor, etc.)



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Liquid is the Enemy

Dual-Extraction Well



QUESTIONS/CONTACT INFORMATION

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