

November 4, 2025

Brad Davison
Environmental Specialist
Iowa Department of Natural Resources
6200 Park Avenue Suite 200
Des Moines, Iowa 50321



**RE: CONSTRUCTION CERTIFICATION
PASSIVE GAS VENT TRENCHES
CEDAR COUNTY SLF, IDNR PERMIT NO. 16-SDP-01-76C
HLW PROJECT NO. 6053-23A.200**

Dear Mr. Davison:

This letter shall serve as notice to IDNR that installation of passive gas vent trenches at the Cedar County SLF in Cedar County, Iowa, has been completed.

Record Drawing information is included in Attachment A. Note that some of the information included on the Record Drawings is based on information provided by others and HLW Engineering shall not be responsible for any errors or omissions that may be incorporated as a result of erroneous information provided by others.

I. INTRODUCTION

The 2024 Annual Water Quality Report (AWQR) for the Cedar County Sanitary Landfill dated November 21, 2024 (Doc #111401) included a discussion regarding low-level VOC impacts at numerous monitoring well locations across the site. The data presented in the AWQR did not indicate that VOC detections exceeded a Statistically Significant Level (SSL) at any well location, so further water quality assessment, delineation, and/or corrective measures are not warranted at this site pursuant to applicable rules.

The data presented in the AWQR observed a correlation between apparent landfill gas impacts and VOC impacts in certain distinct locations at the site, namely in the northeast corner (near MW-14 and MW-23) and along the west side (near MW-16, MW-17, and MW-18). The AWQR also noted that gas impacts and VOC detections appear to occur in the same wells.

The AWQR recommended that landfill gas venting in or near the waste boundary be installed in the northeast corner and along the west side of the site to potentially reduce landfill gas readings and VOC concentrations at MW-16, MW-17, MW-18, and MW-23. IDNR agreed on the potential correlation between the presence of landfill gas and VOC's in these areas in the 2024 AWQR review letter dated March 6, 2025.

The passive gas vent trenches were installed by Pederson Land Improvement, Tipton, Iowa in August, 2025. This document serves as the as-constructed records.

II. GAS VENT TRENCH INSTALLATION

Each trench is located outside of the historic waste boundary of the Cedar County SLF. No municipal solid waste was encountered during construction activities. The trenches were constructed as shown on Figures 2 and 3. Each trench had a minimum width of 2 feet and a depth of approximately 15 feet below ground surface. The trenches, with the exception of the top 2 feet, were backfilled with washed river rock with a nominal diameter of 1" to promote gas conveyance to the gas collection piping.

Gas collection piping installed during this project was 6" diameter, PVC Schedule 80 pipe. Each vent consists of 12 feet of screened pipe (0.250" slot) and 8 feet of solid pipe. The slotted gas collection piping was installed in the granular backfill to collect gas from the trenches with the solid conveyance piping installed through the soil cover of the trenches to vent gas from the trenches to the atmosphere. A turbine vent was installed on the top of each vertical gas conveyance pipe (ten total) to encourage gas venting from the trenches.

Two feet of unclassified earthfill was placed over the rock backfill in each trench to support vegetation.

Details on the installation of the vent trenches and gas piping are included in the Record Drawings in Attachment A.

Representative photographs documenting the installation are included in Attachment B.

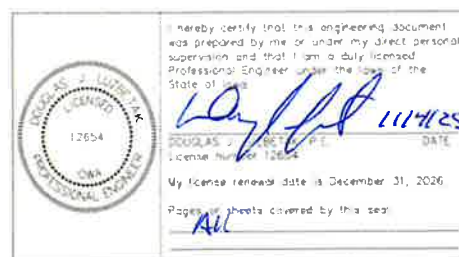
Construction of the system was completed in August, 2025.

III. REEVALUATION OF THE GAS MONITORING SYSTEM PLAN

Ten new monitoring points should be added to the Gas Monitoring System Plan as a result of this project: GV-1 through GV-10.

Monitoring of these points commenced during the October, 2025 semi-annual explosive gas monitoring event. The locations of these points are included on the Record Drawings in Attachment A.

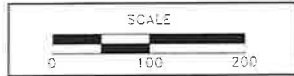
If the IDNR has any questions or if additional information is needed, please contact me at HLW Engineering Group.



cc: Gary Crock, Director, Cedar County Solid Waste Commission (electronic copy)

HLW Engineering Group, 204 West Broad Street, P.O. Box 314, Story City, Iowa 50248
(515) 733-4144  **(515) 733-4146 Fax**

ATTACHMENT A



AERIAL DATED 9/01/2023

VENT OUTSIDE WASTE MASS

RECORD DRAWING

GAS VENT	TOP ELEV.	GROUND ELEV.	BOTTOM ELEV.
1	829.40	823.8	808.70
2	828.69	822.5	808.19
3	827.45	820.8	806.95
4	827.23	820.4	806.73
5	829.00	822.9	808.45
6	828.75	822.7	808.20
7	820.77	814.8	800.32
8	820.97	814.4	800.37
9	812.65	805.6	792.25
10	811.26	804.3	792.11

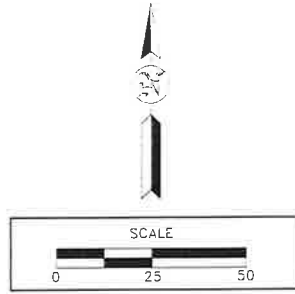


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SITE PLAN
GAS VENT INSTALLATION
CEDAR COUNTY SANITARY LANDFILL
CEDAR COUNTY, IOWA

FIGURE: 1

REVISION	NO.	DATE
DRAWN	1	10/06/25
JGH	PROJECT NO. 6053-23A	DATE 6/19/24

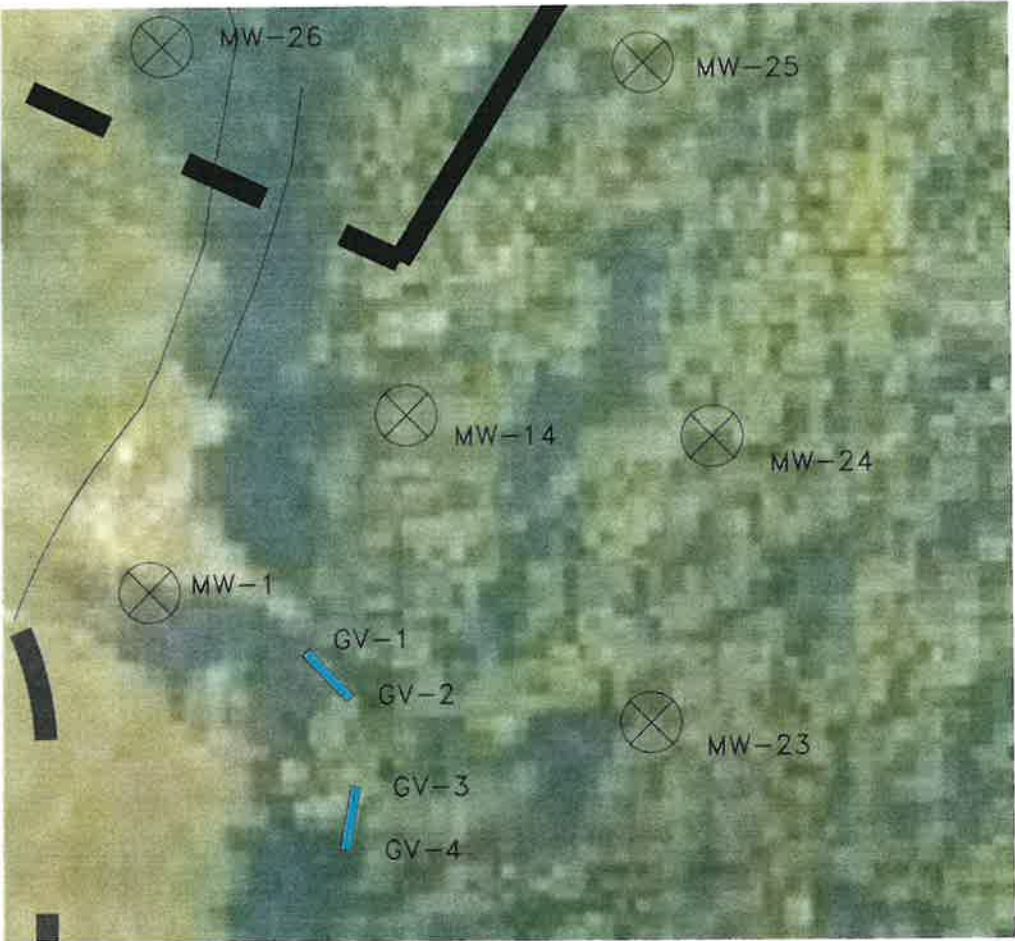


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7	820.77	814.8	800.32
8	820.97	814.4	800.37
9	812.65	805.6	792.25
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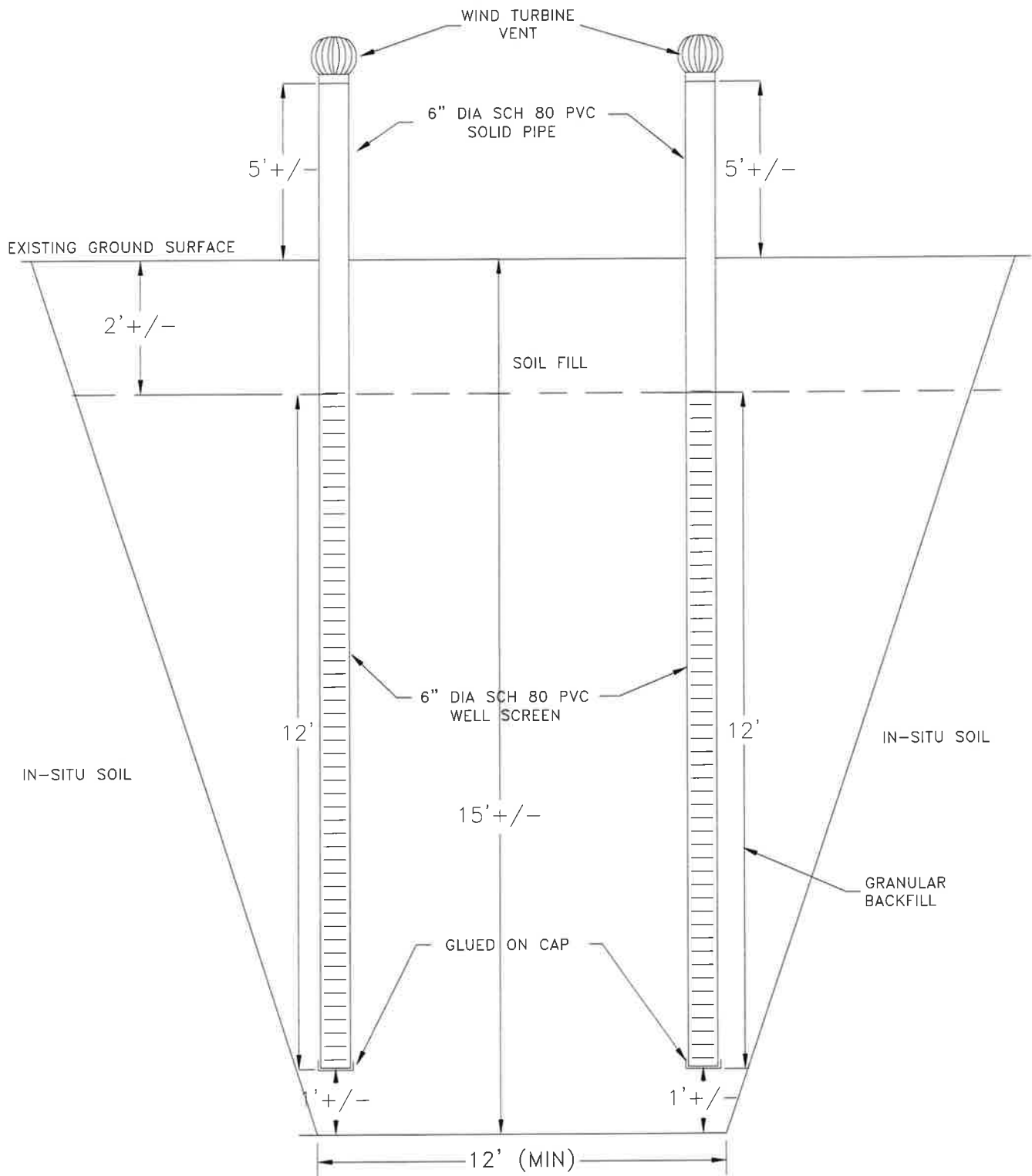


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SITE PLAN
GAS VENT INSTALLATION
CEDAR COUNTY SANITARY LANDFILL
CEDAR COUNTY, IOWA

REVISION	NO.	DATE
JGH	1	10/06/25
PROJECT NO.	6053-23A	DATE
		6/19/24

FIGURE: 1A



NOTES:

1. SLOPE TRENCH SIDE SLOPES AS REQUIRED TO MEET APPLICABLE OSHA REGULATIONS.

RECORD DRAWING

RECORD DRAWINGS WERE PREPARED BASED ON INFORMATION PROVIDED BY OTHERS. HLW ENGINEERING IS UNDER NO OBLIGATION OR DUTY TO VERIFY THE ACCURACY AND/OR COMPLETENESS OF THIS INFORMATION AND HAS NOT DONE SO. HLW ENGINEERING SHALL NOT BE RESPONSIBLE FOR ANY ERRORS OR OMISSIONS THAT MAY BE INCORPORATED AS A RESULT OF ERRONEOUS INFORMATION PROVIDED BY OTHERS.

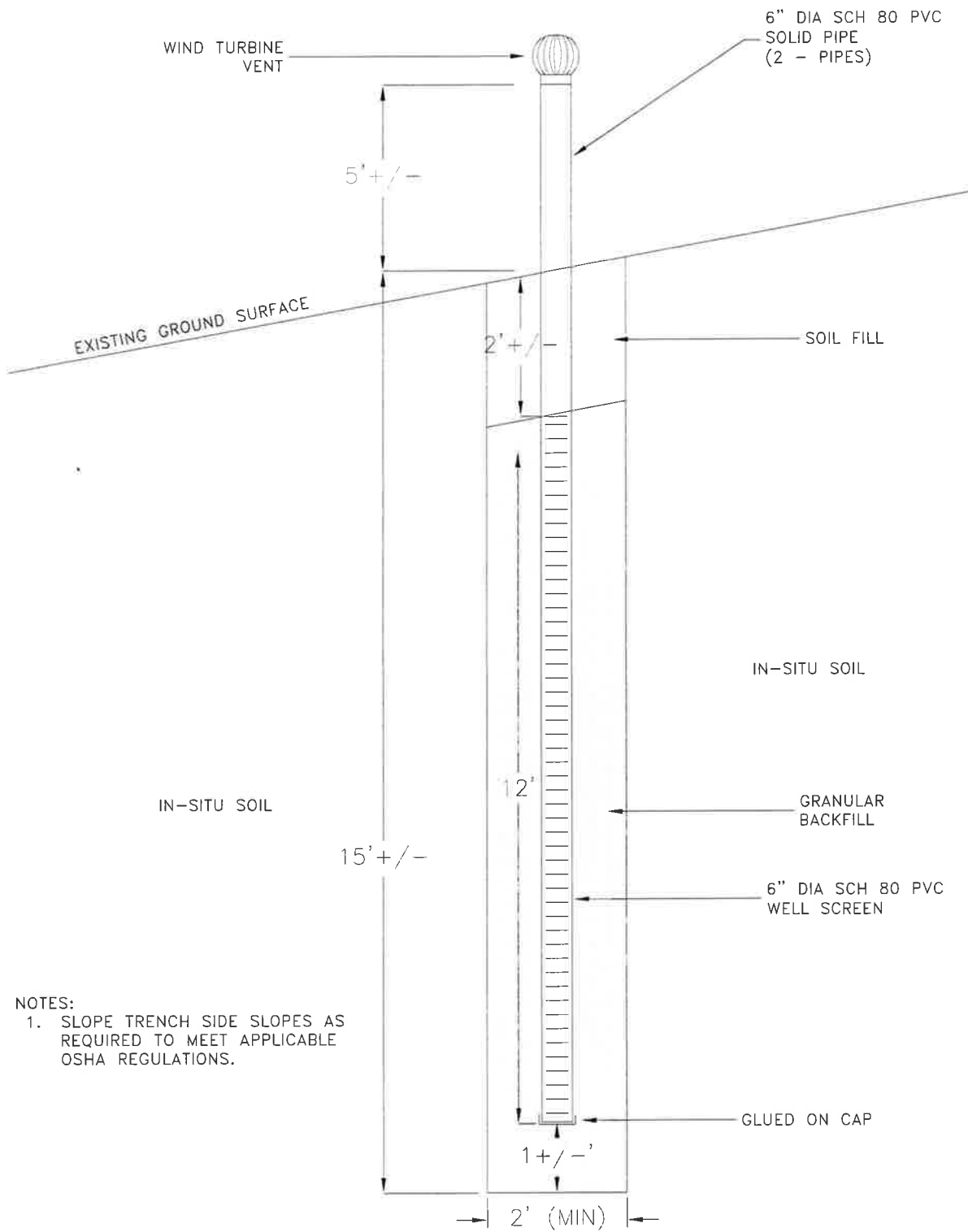
NOT TO SCALE



CROSS SECTION A-A
GAS VENT INSTALLATION OUTSIDE WASTE
CEDAR COUNTY SANITARY LANDFILL
CEDAR COUNTY, IOWA

FIGURE: 2

REVISION	NO.	DATE
DRAWN JGH	PROJECT NO. 6053-23A	DATE 10/16/25



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NOT TO SCALE



CROSS SECTION B-B
GAS VENT INSTALLATION OUTSIDE WASTE
CEDAR COUNTY SANITARY LANDFILL
CEDAR COUNTY, IOWA

FIGURE: 3

REVISION	NO.	DATE
DRAWN JCH	PROJECT NO. 6053-23A	DATE 10/16/25

ATTACHMENT B



Photo 1: Slotted well screen with end cap.



Photo 2: Vent trench excavation.



Photo 3: Backfilling trench/riser pipe.



Photo 4: Turbine vents GV-1 through GV-4, looking south.