



May 2, 2024

Delivery via Email and Trackable Overnight Delivery

Ms. Caitlin Reilly
South Carolina Department of Health and Environmental Control
Assessment and Non-Permitted Petroleum Section
UST Division
2600 Bull Street
Columbia, South Carolina 29201

**Subject: Corrective Action Plan Addendum #3
Products (SE) Pipe Line Corporation
Lewis Drive Remediation Site
Belton, South Carolina
Site ID #18693, "Kinder Morgan Belton Pipeline Release"**

Dear Ms. Reilly,

On behalf of Products (SE) Pipe Line Corporation (PPL), CH2M HILL Engineers, Inc. (Jacobs) has prepared this 3rd addendum to the Corrective Action Plan for the Lewis Drive Release Site dated September 1, 2016.

As presented during a meeting with the South Carolina Department of Health and Environmental Control (DHEC) on March 1, 2024, PPL plans to modify existing horizontal air sparge (HAS) well HAS-6 in the Cupboard Creek Protection Zone (**Figure 1**; CCPZ) to improve performance of the well.

Currently, HAS-6 is constructed as follows:

- 3-inch DR 11 high-density polyethylene (HDPE) pipe, 340 feet (ft) riser, 485 ft screen, depth ranges from 8-18 ft below ground surface (bgs)

Proposed modifications to result in:

- A 1-1/2" diameter conduit pipe will be sliplined inside the 3-inch DR 11 HDPE well, blocking off the first 250 ft of screen and directing compressed air flow to the distal end of the screen, within the most concentrated area of the petroleum plume in groundwater.

The modification will include trench box supported excavation to the depth of the HAS-6 well screen (estimated to be 10 ft) at the proposed manway location shown on **Figure 2**. Approximately 8 ft of screen will be removed and replaced with a new standpipe/access vault and extended stem valve, as shown on **Figure 3**. The excavation will be backfilled with bentonite, sand, and clean fill material (**Figure 3**), and any wastes generated during the modification will be characterized for disposal and managed by Jacobs with oversight by PPL.

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May 2, 2024

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Design flow rates for the modified HAS-6 will range from 0.5-1.0 cubic feet per minute (cfm) screen (similar to Hayfield Zone horizontal well flow rates), using the existing air compressors and manifold system.

An air permit exemption request for the expanded system was approved by Kirk Schneider (DHEC) on May 20, 2021. A modification is not required for the encroachment permit for directional drilling under West Calhoun Road, received on June 30, 2021. An underground injection control permit (#SCHE03020469M4) for construction of the three HAS wells was received by PPL on April 22, 2021. Work will occur within the land disturbance limit as outlined in the Stormwater Pollution Prevention Plan (SWPPP), approved by the Anderson County Stormwater Department on May 17, 2021.

A work summary will be submitted to DHEC to determine if a modification to the current Underground Injection Control (UIC) permit will be required, and if necessary, Jacobs will submit the required documents prior to work beginning. The HAS-6 modification is expected to occur sometime in April/May 2024. DHEC will be notified at least two weeks in advance of excavation and modification activities. In addition, weekly documented erosion prevention and sediment control inspections will be performed during work activities in accordance with the SWPPP.

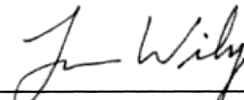
If you have any further questions or concerns, please contact me at 919-859-5789 or Mr. Greg Dempsey with PPL at 770-751-4143.

Regards,

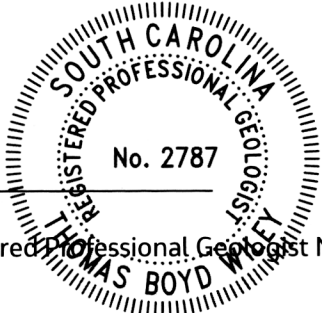


William M. Waldron
Program Manager

The material and data presented in this submittal were prepared consistent with current and accepted consulting principles and practices. This work was supervised by the following Jacobs licensed professional.



Tom Wiley, P.G.
South Carolina Registered Professional Geologist No. 2787



May 2, 2024
Date



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Copies: Greg Dempsey, PPL (Digital, greg_dempsey@kindermorgan.com)
Mary Clair Lyons, Esq., PPL (Digital, Mary_Lyons@kindermorgan.com)
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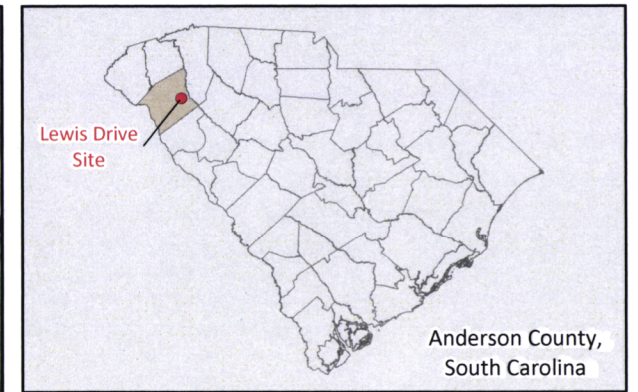
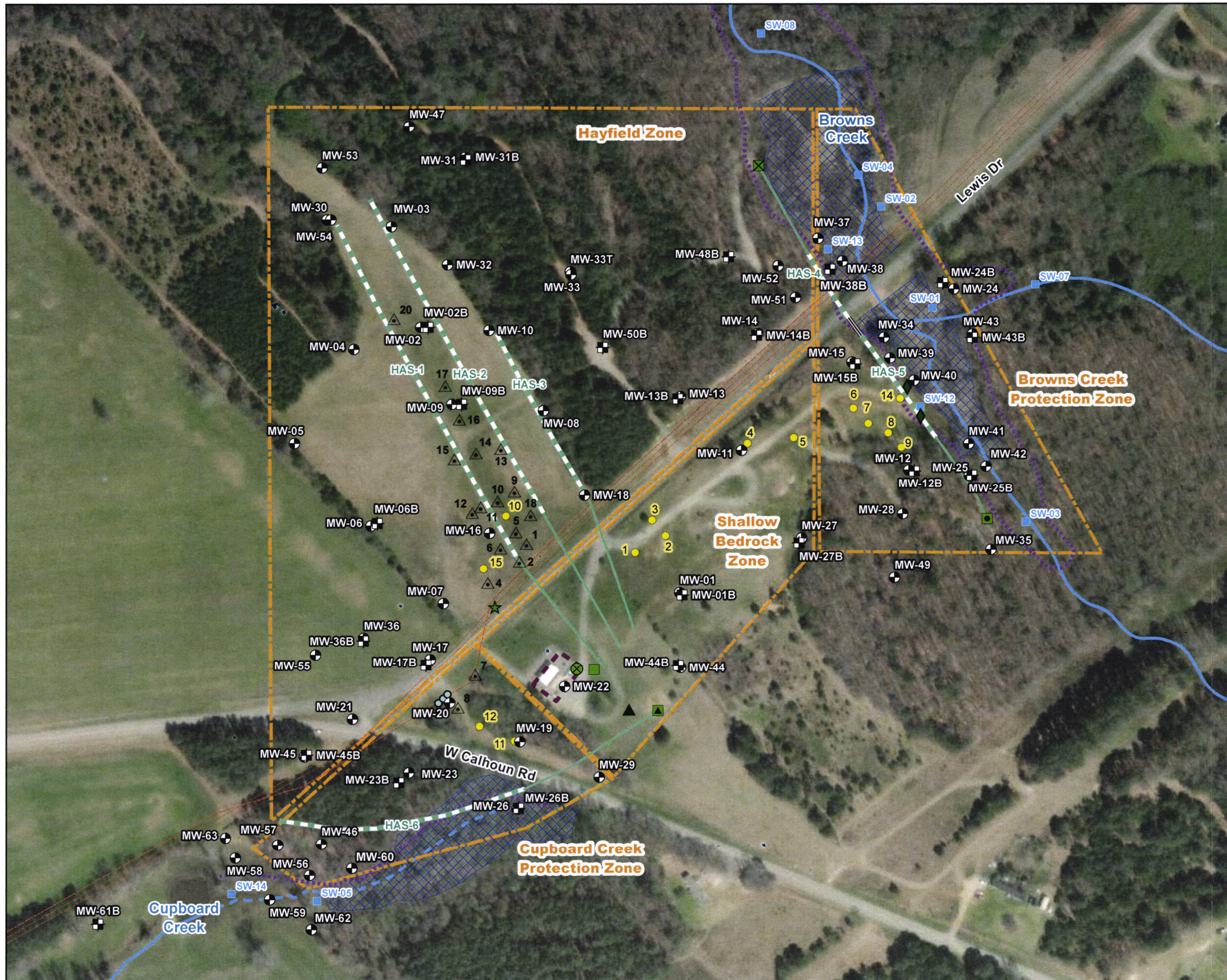
Attachments:

Figure 1: Site Overview

Figure 2: HAS-6 Repair Option

Figure 3: HAS-6 Modification Detail

Figures



LEGEND

- ★ Release Point
- ⊕ Monitoring Well
- ⊕ Bedrock Monitoring Well
- △ Recovery Sump
- Recovery Trench Point
- Recovery Well (4-inch diameter)
- Surface Water Sampling Location
- ▲ Septic Tank
- ◆ Seep Location
- Manway
- ⊗ Valve
- ⊗ HAS-1 Manway
- ⊗ HAS-4/HAS-5 Manway (Distal End)
- ⊗ HAS-4/HAS-5 Manway (Proximal End)
- ▲ HAS-6 Manway (Proximal End)
- Main Valve Box
- ▬ Grout
- ▬ Horizontal Sparging Well Screen
- ▬ Horizontal Sparging Well Riser
- ▬ Pipeline
- ▬ National Hydrography Dataset Stream
- ▬ Intermittent Stream
- ▬ Waterbody
- ▬ Intermittent Stream
- ▭ Delineated Wetland
- ▬ Inspection Route for Sheen or Distressed Vegetation
- ▭ AS System Compound
- ▭ Remediation Zone

Base Map Sources:
 Environmental Systems Research Institute (Esri)
 ArcMap World Imagery, 2022. Basemap features are approximate.
 United States Geological Survey (USGS) National Hydrography Dataset (NHD)

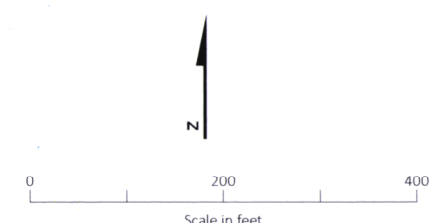
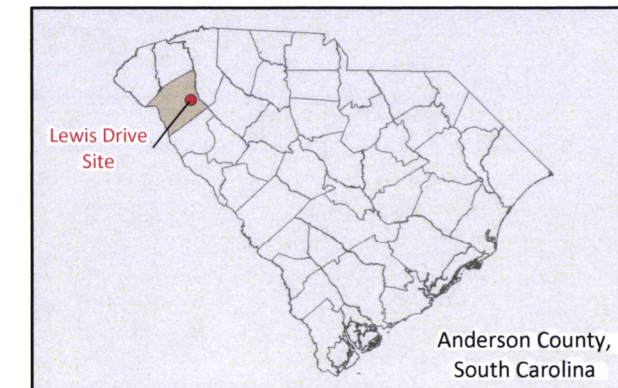
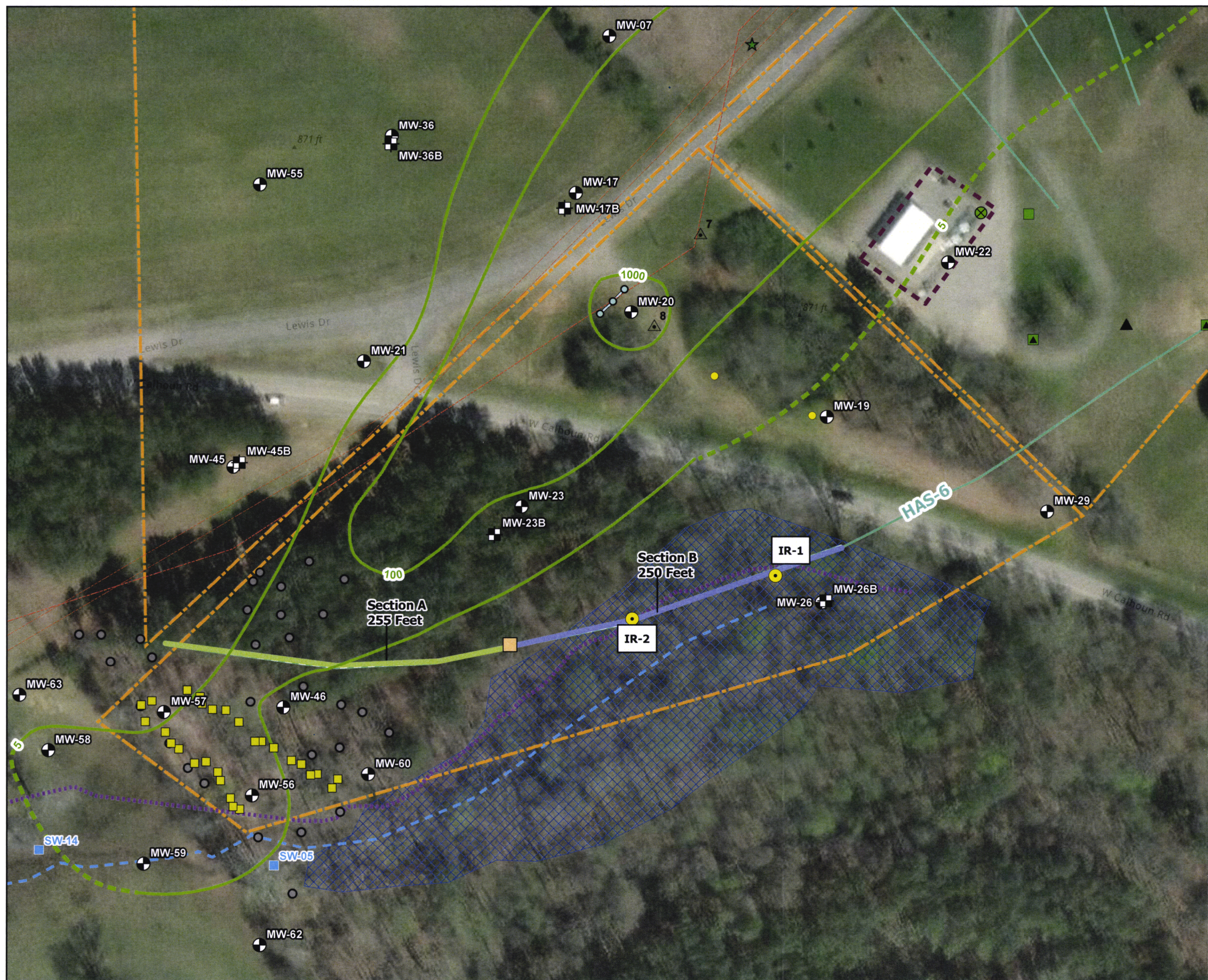


Figure 1. Site Overview
 Lewis Drive Remediation Site
 Belton, South Carolina
 Site ID #18693 "Kinder Morgan Belton Pipeline Release"



- LEGEND**
- ★ Release Point
 - BAM/Sulfate Injection Borings
 - Aperture Repair Location
 - ⊗ HAS-1 Manway
 - ⊗ HAS-4/HAS-5 Manway (Distal End)
 - ⊗ HAS-4/HAS-5 Manway (Proximal End)
 - ▲ HAS-6 Manway (Proximal End)
 - Main Valve Box
 - Proposed HAS-6 Repair Manway
 - ⊗ Monitoring Well
 - ⊗ Bedrock Monitoring Well
 - ◆ Seep Location
 - ▲ Septic Tank
 - △ Recovery Sump
 - Recovery Trench Point
 - 2019 Injection Location
 - Recovery Well (4-inch diameter)
 - Surface Water Sampling Location
 - Dissolved Benzene Plume Extent (ug/L) (dashed where inferred)
 - HAS-6 Repair Option Section A
 - HAS-6 Repair Option Section B
 - Grout
 - Horizontal Sparging Well Screen
 - Horizontal Sparging Well Riser
 - Horizontal Sparging Well Riser
 - Horizontal Sparging Well Screen
 - Pipeline
 - Recovery Trench
 - Inspection Route for Sheen or Distressed Vegetation
 - AS System Compound
 - Remediation Zone

Note:
 All quarterly wells will be sampled biannually.
 All quarterly and semiannual samples will be sampled annually.

Base Map Sources:
 Environmental Systems Research Institute (Esri)
 ArcMap World Imagery, 2022. Basemap features are approximate.

United States Geological Survey (USGS) National Hydrography Dataset (NHD)

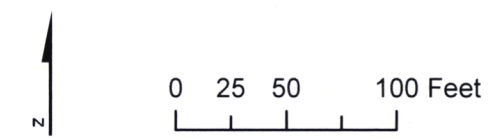
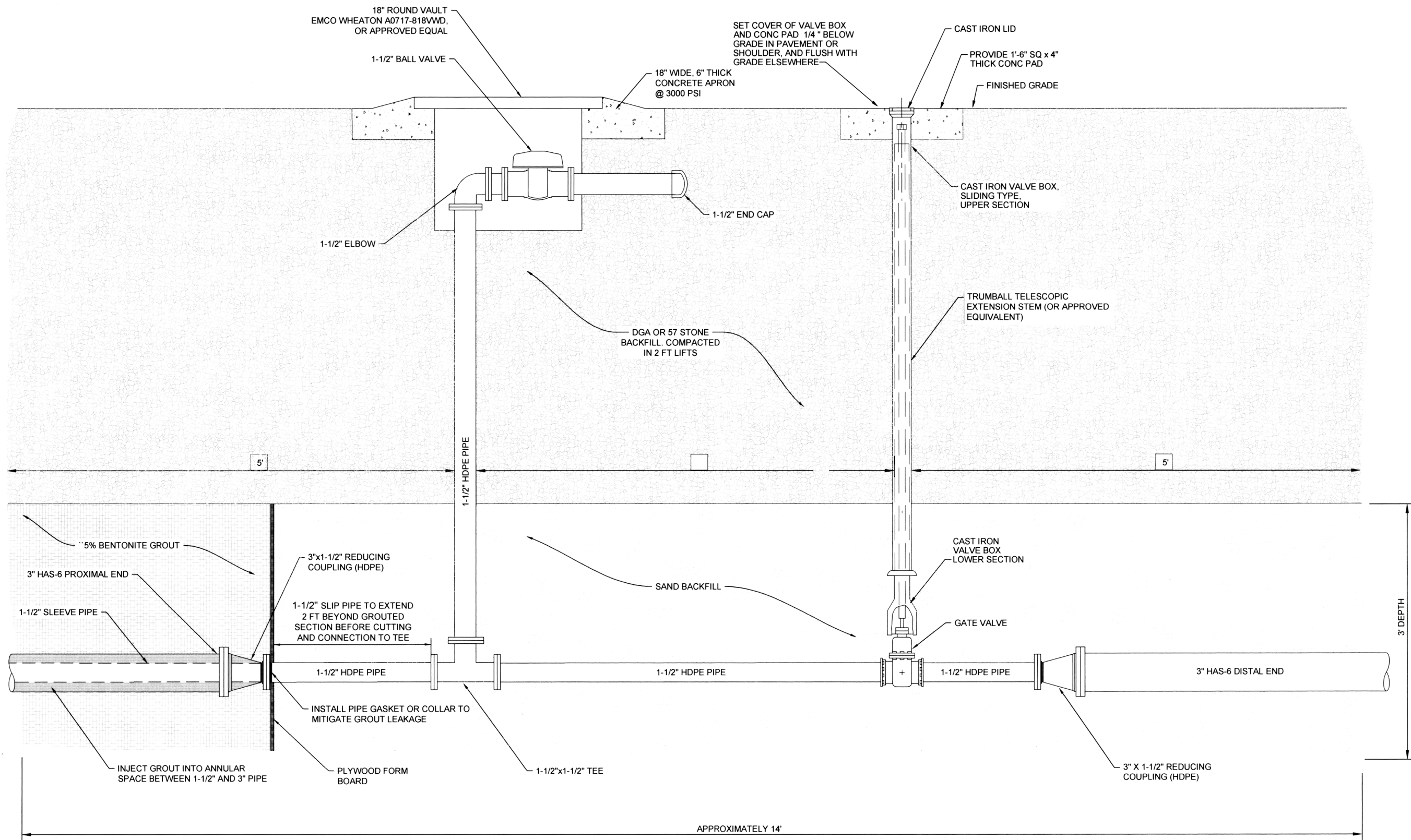


Figure 2. HAS-6 Repair Option
 Lewis Drive Remediation Site
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 Site ID #18693 "Kinder Morgan Belton Pipeline Release"



NO.	DATE	REVISION	BY
DSGN	DR	CHK	APVD

LEWIS DRIVE REMEDIATION SITE
 BELTON, SC. SITE ID # 18693
 KINDER MORGAN
 BELTON PIPELINE RELEASE

Jacobs

HAS-6
 MODIFICATION DETAIL

NO SCALE
VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING. 0 1"
DATE MARCH 2024
PROJ
DWG FIGURE 3
SHEET