LAND RECYCLING PROGRAM
ADDITIONAL SITE ASSESSMENT WORK PLAN

ESCP Corporation
1833W. 2nd Street
Davenport, IA 52802

Prepared For:

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1.0 INTRODUCTION

Hyde Environmental, Inc. (Hyde) is submitting the Additional Site Assessment Work Plan on behalf of ND XLIV LLC for additional groundwater and soil vapor assessment activities at the ESCP Corporation located at 1833 W. 2nd Street, Davenport, IA 52802 (Site). A site location map is provided as Figure 1.

This Additional Site Assessment Work Plan is to communicate the plan to conduct additional groundwater and soil vapor assessment at the Site in order to further define the degree and extent of impacts previously identified. Previous soil, groundwater and soil gas sampling has suggested that groundwater and soil gas impacts may extend off the property to the south/southeast. To facilitate additional assessment to the south/southeast, Hyde contacted the adjacent property owners to gain access to their properties. Adjacent property owners are Canadian Pacific DME to the east, City of Davenport to the south and Davenport Electric Contract Co. to the south. The City of Davenport has granted us access to the alley located south of the ESCP building, the Canadian Pacific DME did not respond to our request and Davenport Electric Contract Co. denied us access to their property. As discussed with the Iowa Department of Natural Resources (IDNR) this work plan presents a summary of the background information, summary of the planned assessment on the southeast corner of the property where we have access, methodologies, and a schedule of implementation.

2.0 BACKGROUND INFORMATION

Sometime between 1910 and 1950, the property located at 1833 W. 2nd Street, Davenport, IA ("Subject Property") was redeveloped from residential to industrial. The southern portion of the property was developed as Uchtorff Company Metal Products, where stamping and metal fabrication were conducted. In addition, several machine shops were located throughout the Subject Property. Other historic occupants of the Subject Property include US Button Company, Gravins Laboratories (paint manufacturing), National Metal Craft Corporation and Ty Enterprises. Based on the historic uses of the property, A3E Environmental Consultants identified several Recognized Environmental Conditions (RECs) in their Phase I ESA dated June 8, 2021.

Based on the RECs identified, a Phase II ESA was conducted on the Subject Property by A3E Environmental Consultants on August 3 and 4, 2021. The Phase II sampling consisted of advancing ten (10) soil borings and converting five (5) of these borings to temporary monitoring wells. In addition, five soil gas sampling points were installed in the interior of the building. Figure 2 illustrates the Site layout and the location of the Phase II ESA samples.

Various volatile organic compounds (VOCs) and polycyclic aromatic hydrocarbons (PAHs) were identified in the ten soil samples, with most detections being below the Iowa Department of Natural Resources (IDNR) statewide standards. The only sample showing VOC impacts greater than the IDNR statewide standards was the sample from boring B-4, located in the southeast corner of the property/building. A concentration of 491 mg/kg of trichloroethene (TCE) was observed at a depth of 4-5 feet below ground (bg). This concentration is about seven (7) times the statewide standard. Samples from borings B-3 and B-4 showed concentrations of PAHs in excess of the statewide soil standards. The sample from boring B-3 (located in the northeast portion of the building) contained benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, dibenzo(a,h)anthracene and indeno(1,2,3-cd)pyrene in excess of the statewide soil standards. The sample for boring B-4 showed dibenzo(a,h)anthracene in excess of the statewide soil standards.

Of the ten borings, five borings (B-1, B-2, B-4, B-6 and B-9) were converted to temporary monitoring wells (TW-1, TW-2, TW-4, TW-6 and TW-9) for the purpose of collecting groundwater samples. A concentration of cis-1,2-Dichloroethene exceeding the statewide standard for protected groundwater was observed in well TW-6/B-6, and for trichloroethene (TCE) in well TW-4/B-4. No PAH compounds were detected in groundwater samples.

Soil gas samples were collected from five locations inside the on-site building (SG-2, SG-4, SG-6, SG-7 and SG-10). Elevated concentrations of TCE were found in all five vapor samples, with the highest concentration (3,290,000 $\mu g/m^3$) in sampling point SG-4, located in the southeast corner of the building. The next highest concentration of TCE was observed in sampling point SG-7 (7,690 $\mu g/m^3$) located in the south-central

portion of the building. Vapor sampling points SG-6 and SG-10 showed TCE concentrations of approximately 1,000 µg/m^3 and the sample collected from SG-2 was the lowest, at
138 µg/m^3. All concentrations exceeded the U.S. Environmental Protection Agency (EPA) vapor intrusion screening level (VISL) of 29.2 µg/m^3. In addition to TCE, tetrachloroethene (PCE) was observed in excess of the EPA VISL in sample SG-4; 1,1,2-Trichloroethane was found above the EPA VISL in samples SG-4, SG-7 and SG-10; and chloroform was found above the EPA VISL in samples SG-2, SG-4 and SG-7.

During the March 2022 Vapor Intrusion Site Investigation (VISI), Sub-slab vapor intrusion samples were collected from ten (10) sampling locations inside building (HV-1 through HV-10) and five (5) Geoprobe® soil gas sampling points located outside the building on the Site (HV-11 through HV-15). Vapor sampling locations were based on providing radial coverage outward from the sampling point showing the highest concentration of PCE and TCE during the August 2021 Phase II ESA sampling (SG-4). The soil vapor sampling locations are illustrated on Figure 2 and 3. VOCs were detected at a concentration which exceeded the EPA VISL for Chloroform (HV-13), PCE (HV-8) and TCE (HV-8, HV-9 and HV-13). The highest concentration of TCE was observed in HV-8, at a concentration of 778,000 µg/m^3, approximately 26,000 times the EPA VISL of 29.2 µg/m^3. Sample HV-8 was collected in the southeast corner of the building, near previous sample SG-4. Based on the samples collected, it appears that vapor impacts above the EPA VISL may extend off-site onto the railroad property to the east, and south onto vacant commercial property and have the potential to impact ambient air inside the Site building.

Ambient indoor air samples were collected at three (3) locations inside the building (AV-2, AV-3, and AV-4) and one (1) location outside the building (AV-1). The outdoor ambient air sample was collected to serve as a background sample for comparison to the indoor air samples. The samples were collected in the southeast portion of the building, where elevated concentration of PCE and TCE were observed in the soil vapor samples during the August 2021 Phase II sampling and the March 2022 VISI. The ambient air sampling locations are illustrated on Figure 2 and 3.

Select VOCs were detected in all ambient indoor air samples (AV-1, AV-2, AV-3, and AV-4). Sample AV-1 was collected outside the building near the main entrance and serves as a background sample. Sample AV-2 was collected in the south-central portion of the building in the area of the presses, sample AV-3 was collected in the southern portion of the building in the welding area and sample AV-4 was collected in the southwest corner of the building where the highest concentrations of VOCs were observed in the sub slab samples. Based on the sub slab sampling conducted in March 2022, contaminates of concern include chloroform, trichloroethene (TCE), tetrachloroethene (PCE) and naphthalene. Chloroform was detected in sample AV-2 but at a concentration below the EPA commercial air screening level. TCE was detected in samples AV-2, AV-3 and AV-4 but all concentrations were below the EPA commercial air screening level. PCE was detected in samples AV-1 (background sample), AV-2 and AV-4 with all concentration

being below the EPA commercial air screening level. Naphthalene was detected in sample AV-2 and was also below the EPA commercial air screening level. The only results with concentrations exceeding the EPA commercial air screening levels were benzene in sample AV-2 and ethylbenzene in samples AV-2 and AV-4. Both benzene and ethylbenzene are common constituents of gasoline. Given the lack of detections of benzene and ethylbenzene in sub slab samples, it is likely that the source of the benzene and ethylbenzene in the ambient air samples is from an interior source and not a contaminant source beneath the building. No contaminants of concern were found to be at concentrations in ambient air in excess of the EPA commercial air screening levels.

Additional soil and groundwater sampling was completed to further define the extent of soil and groundwater impacts. Based on Vapor Intrusion Site Investigation data and soil and groundwater data from the Phase II ESA, we installed five (5) soil borings (B100, B101, MW-2, MW-3 and MW-4) in the area of the PCE and TCE vapor impacts, and two (2) soil borings (B102 and B103), in the area where polycyclic aromatic hydrocarbon (PAH) impacts were identified during the Phase II ESA (Boring B3). Boring locations are illustrated in Figure 2. Initially four (4) soil borings were proposed in the area of Phase II boring B3 but due to drill rig access issues, only two were completed. Four (4) groundwater monitoring wells (MW-1, MW-2, MW-3 andMW-4) were installed for the purpose of groundwater monitoring. Soil samples from boring B100, B101, MW-3 and MW-4 are located in the area where the highest VOC impacts were observed during the August 2021 Phase II sampling and the March 2022 sub slab vapor sampling. Boring in this area were advanced to further define the extent of VOC impacts in soil. TCE was detected in both soil samples from boring B100 (B100a and B100b), and the shallow soil sample (B101a) collected from boring B101. No other VOC compounds were detected in these borings and TCE concentrations were below Iowa Statewide Standards. Various VOCs were detected in the shallow soil samples collected from borings MW-3 and MW-4, with no detection of TCE and no detection of other VOC above the Iowa Statewide Standards. VOCs were not detected in the deeper samples collected from borings B101, MW-3 and MW-4. VOCs were not detected in either of the samples collected from borings MW-1 and MW-2.

Four (4) permanent groundwater monitoring wells (MW-1, MW-2, MW-3, and MW-4) were installed at the Subject Property. Monitoring well locations are illustrated in Figure 2 and 4. The locations are based on the presumed groundwater flow to the southeast, toward the Mississippi River. A track/truck-mounted drill rig (Geoprobe®) with 4.25-inch inside-diameter (ID), continuous flight, hollow-stem augers (HSAs) was used to install two-inch-diameter, monitoring wells. Based on the estimated depth to groundwater of 12 to 14 feet and field observations while drilling, monitoring well were drilled and installed at a depth of approximately 17 feet.

Based on the groundwater elevations, groundwater flows to the southeast, toward the Mississippi River. Well MW-1 was installed on the upgradient side of the area showing VOC impacts in soil and soil gas. Well MW-2 is located slightly side gradient and wells

MW-3 and MW-4 are located down gradient of the impacted area. Sample results showed cis-1,2-dichloroethane in well MW-2 at a concentration exceeding the Iowa Statewide Standard for protected groundwater and showed TCE concentrations exceeding the Statewide Standard for protected groundwater in wells MW-2, MW-3 and MW-4. In addition, the concentration of TCE in well MW-4 also exceeds the Statewide Standard for non-protected groundwater. Concentrations are only slightly over the Statewide Standards, but based on the locations of the wells, indicate that impacts are present in shallow groundwater off the site to the south/southeast.

Based on the sub-slab vapor/soil gas/ambient air sampling, soil and groundwater sampling conducted at the property located at 1833 W. 2nd Street, Davenport, Iowa, we concluded that:

- ambient air in the area where elevated VOCs were identified in sub slab samples does not show concentrations of contaminants of concern exceeding EPA commercial air screening levels

- soil samples do not show significant concentration of contaminants of concern

- groundwater results indicate that TCE and cis-1,2-dichloroethene are present in downgradient wells above the Iowa Statewide Standards and impacts have likely migrated off the property.

- TCE vapor impacts above the EPA VISL are present in the southeast portion of the facility, and impacts may extend off the property.

3.0 ADDITION SITE ASSESSMENT PLAN

At the request of the IDNR, we are proposing to install additional groundwater monitoring wells and soil gas sampling pins to further assess the extent of groundwater and soil gas impacts downgradient of the Site.

3.1 Additional Groundwater Assessment

Additional groundwater sampling is necessary to further define the extent of groundwater impacts. Based on the existing groundwater data we are recommending installation of up to three (3) soil borings/monitoring wells downgradient of the existing monitoring points. Proposed monitoring well locations are illustrated in Figure 4.

We propose to use a track-mounted drill rig (Geoprobe®) to continuously collect soil samples from the soil borings to 15 feet bg. Soil samples will be collected continuously and, at two-foot intervals, screened in the field, using a photoionization detector (PID) to assess the presence of any VOCs. A track/truck-mounted drill rig (Geoprobe®) with 4.25-inch inside-diameter (ID), continuous flight, hollow-stem augers (HSAs) will be used to install two-inch-diameter, monitoring wells. Based on the data collected from the Site previously, the groundwater table is expected to be encountered within 8 to 10 feet of the ground surface. Based on the estimated depth to groundwater, monitoring wells will be drilled and installed at a depth of approximately 15 to 17 feet. The final depth of the monitoring wells will be determined in the field, based on field observations.

The monitoring wells will be constructed by inserting a two-inch ID, Schedule 40, PVC casing attached to a 10-foot section of 2-inch ID, 0.010-inch factory-slotted well screen and a PVC well point into the open portion of the HSA string. The well joints will be factory-threaded and sealed with solvent-resistant O-rings. The monitoring well casing will be topped with an expanding waterproof cap. Filter pack sand will be inserted into the annular space between the well casing and HSA string until it reaches approximately two (2) feet above the well screen. The remainder of the annular space will be sealed with bentonite chips to approximately one foot below finished grade. The monitoring well will be completed with a flush-mounted, bolt-down steel protective cover or above-grade protective cover, and cemented in place.

At the conclusion of monitoring well installation activities, the newly-installed wells will be developed to remove the effects of drilling, including formation sediments and sand pack particles that may have breached the well screen. Development will include surging the well and removal of sediment-laden water, with a goal to produce as sediment-free water as possible, and to provide a groundwater sample representative of local conditions. Purged groundwater will be retained in a steel, 55-gallon drum stored on-site, pending analytical results.

Groundwater samples will be collected from the monitoring wells within approximately one week of installation and development. Prior to collection of the groundwater sample, a groundwater level will be collected from the monitoring well, using a graduated, battery-operated slope indicator. Following the measurement of the groundwater level, groundwater samples will be collected using EPA low flow sampling techniques. Groundwater samples will be collected directly in labeled, laboratory-provided sample containers and sent on ice, under proper chain-of-custody protocols, to a State-certified laboratory for analysis of VOCs.

3.3 Additional Soil Vapor Assessment

Additional vapor samples are proposed to be collected at up to five (5) additional locations, to further define the extent of soil vapor. Proposed additional soil vapor sampling locations are illustrated in Figure 3 and are based on the results of the previous soil vapor sampling results. Additional vapor sampling points will be installed and sampled using a track-mounted drill rig (Geoprobe®). Sample collection will be completed by advancing a hollow rod to approximately four feet deep, using a Geoprobe® Post-Run Tubing System. Using this system, a hollow steel rod with an expendable tip will be driven to approximately four feet deep and pulled back to 3.5 feet, leaving an open annular space at the end of the boring. A one-inch-long threaded vapor sampling tip attached to 3/16-inch inside diameter polyethylene tubing will be inserted into the drilling rod from the surface, and secured to the threaded end of the rod. Hydrated bentonite will be added to the location where the drill rod enters the ground surface/pavement, to prevent short circuiting with the surface. A Summa canister will be attached to the end of the poly tubing and opened, allowing the collection of soil-gas vapors at a rate of 200 mL/m over 30 minutes. Vapor samples will be transported under chain-of-custody to a State-certified laboratory for analysis of VOCs using Compendium Method TO-15.

4.0 REPORTING

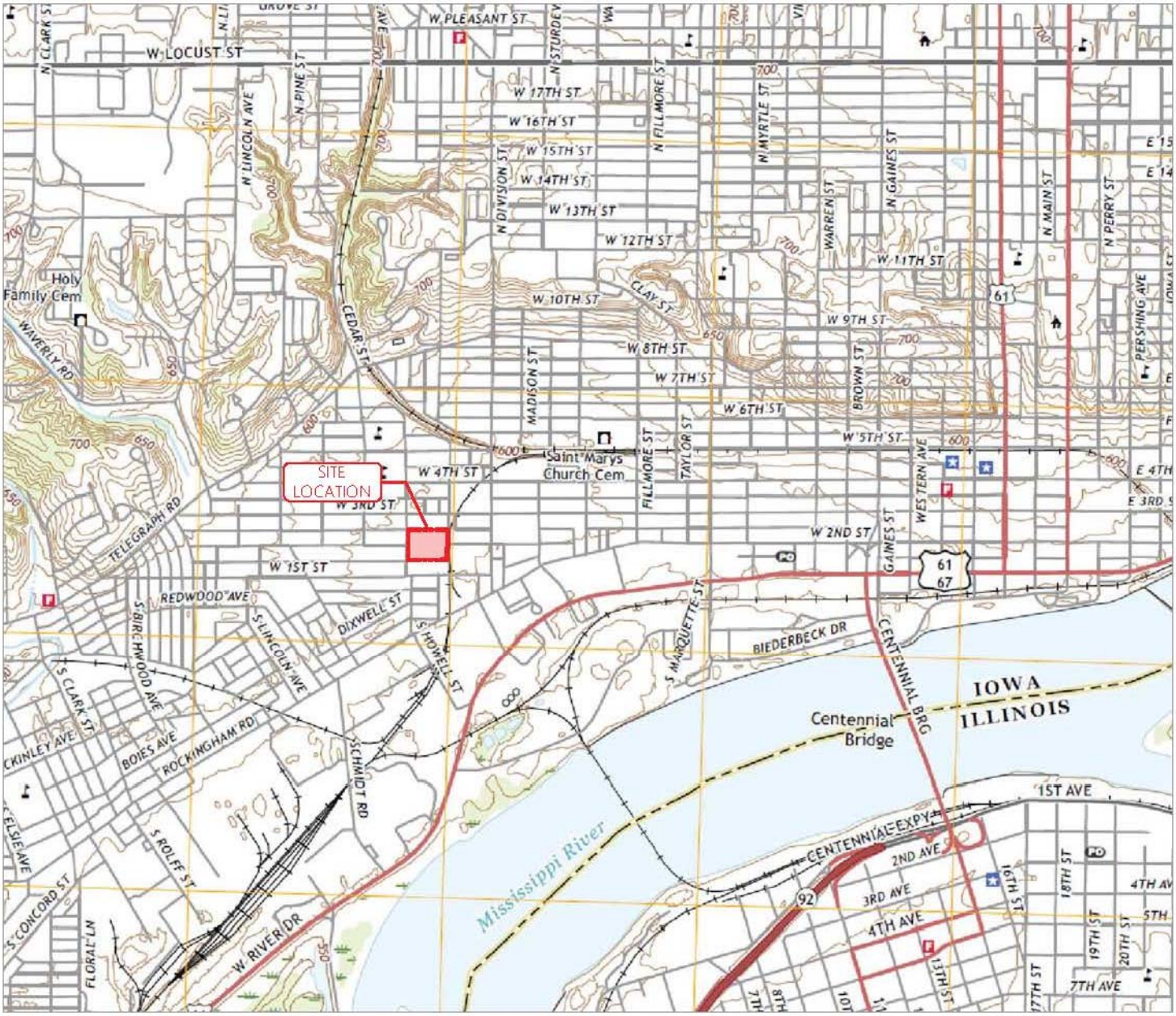
The sampling methods and results of the Additional Site Assessment will be discussed and summarized in a written report. The report will include soil boring logs, well construction and development forms, the laboratory analytical data reports, and tables summarizing all laboratory analytical results; and figures depicting the sampling locations relative to pertinent Site features. The report will include conclusions supported by the data, and recommendations relative to the investigative findings.

5.0 SCHEDULE

The following schedule assumes the basic scope-of-work described above, and is subject to driller availability:

Site Investigation Field work	April 11th and 12th 2024
Site Assessment Report	May 2024

FIGURES



Contour Interval 10 Feet
North American Vertical Datum of 1988
Topographical Map adopted by USGS
Davenport East, IA, IL

1000 0 1000 2000 3000 4000 5000 6000 7000 8000 9000 1000
FEET

1 0.5 0 1
MILES

1 0.5 0 1 2
1000 500 0 1000 2000
KILOMETERS
METERS

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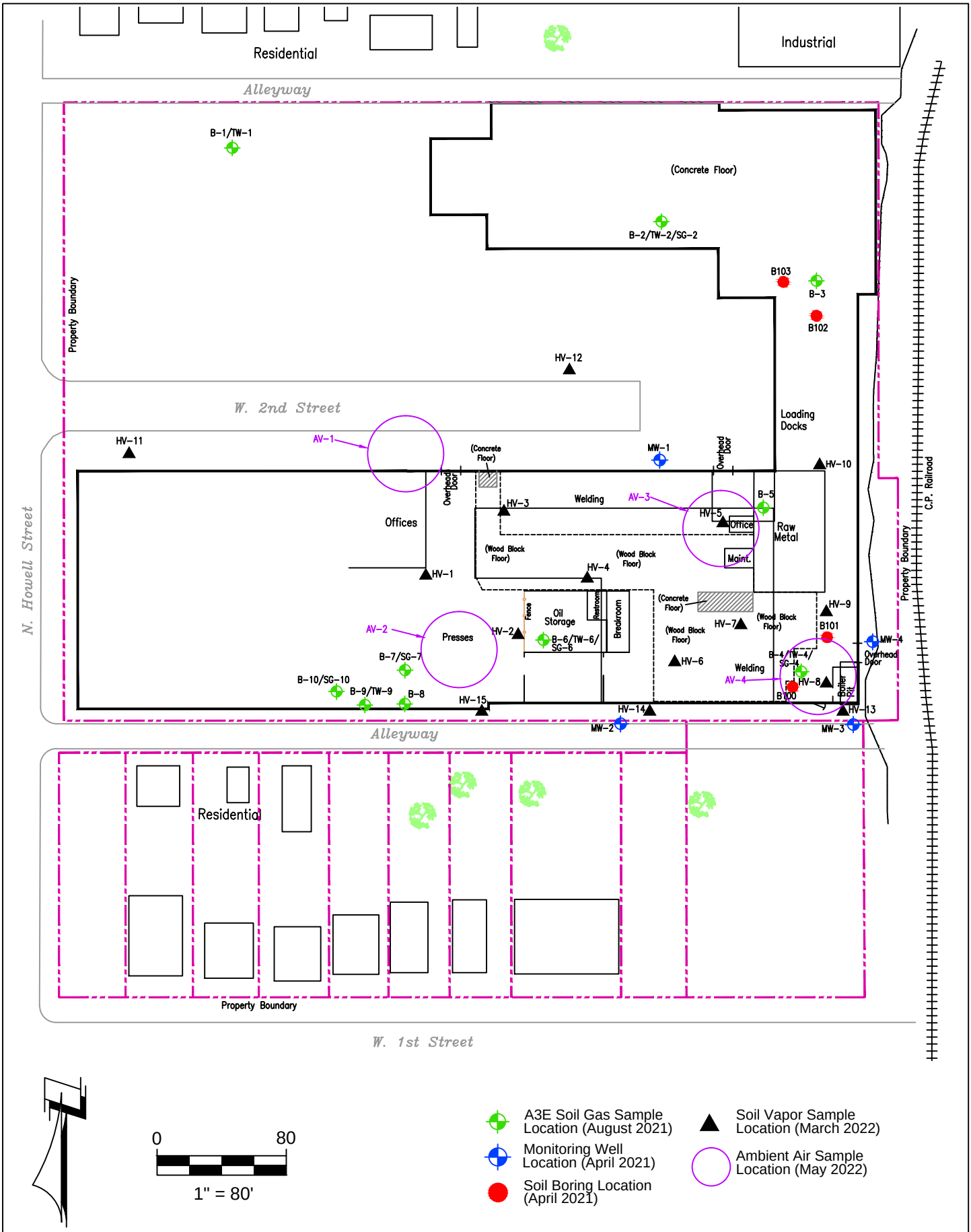
HYDE ENVIRONMENTAL, INC.

FIGURE 1
SITE LOCATION MAP

ESCP Corporation
1833 W 2nd Street, Davenport, IA 52802



HYDE ENVIRONMENTAL, INC.

Figure 2

Site Layout and Sampling Locations

ND XLIV Site
1833 West 2nd Street
Davenport, IA 52802

2/5/2024

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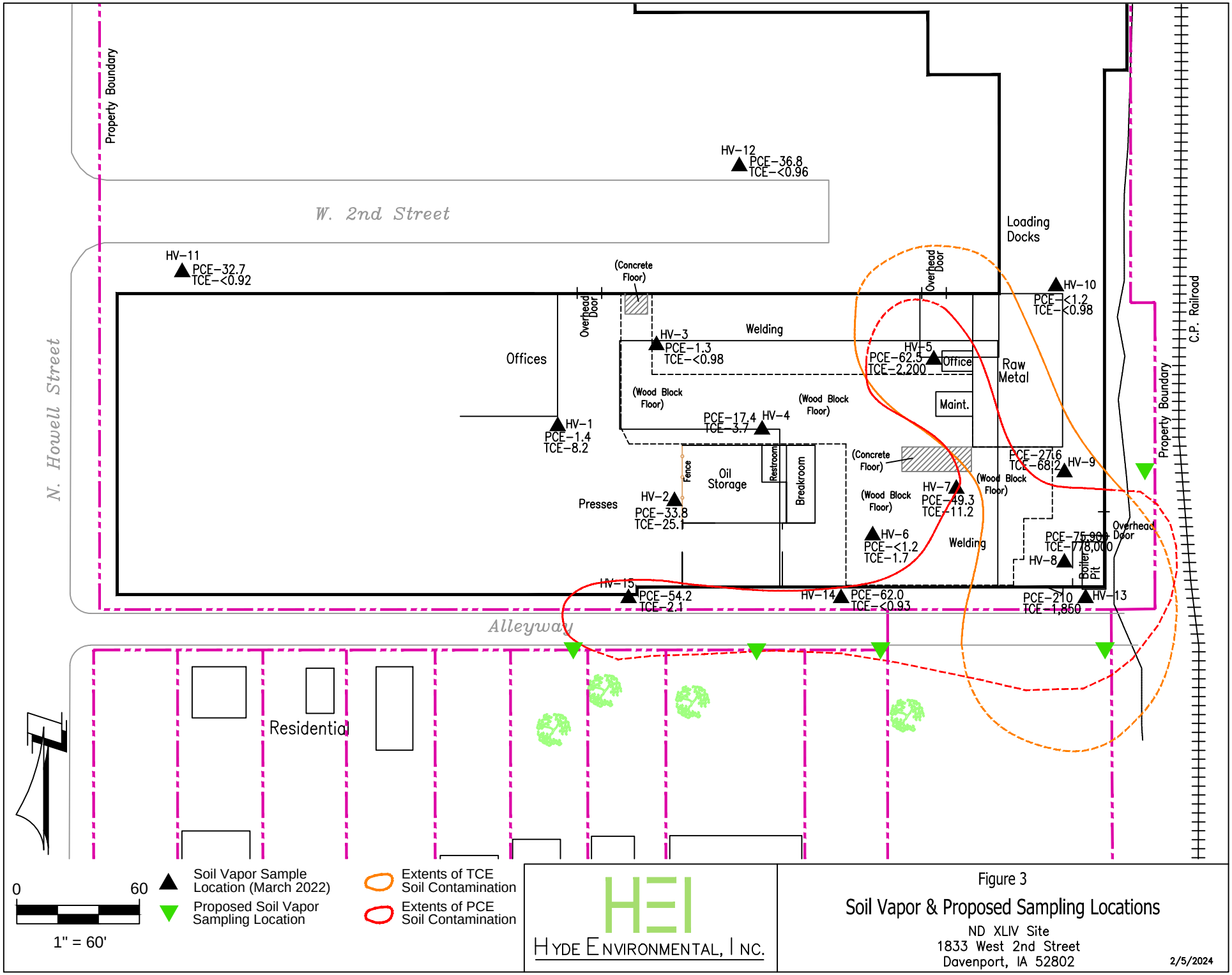

HYDE ENVIRONMENTAL, INC.

Figure 3

Soil Vapor & Proposed Sampling Locations

ND XLIV Site
1833 West 2nd Street
Davenport, IA 52802

2/5/2024

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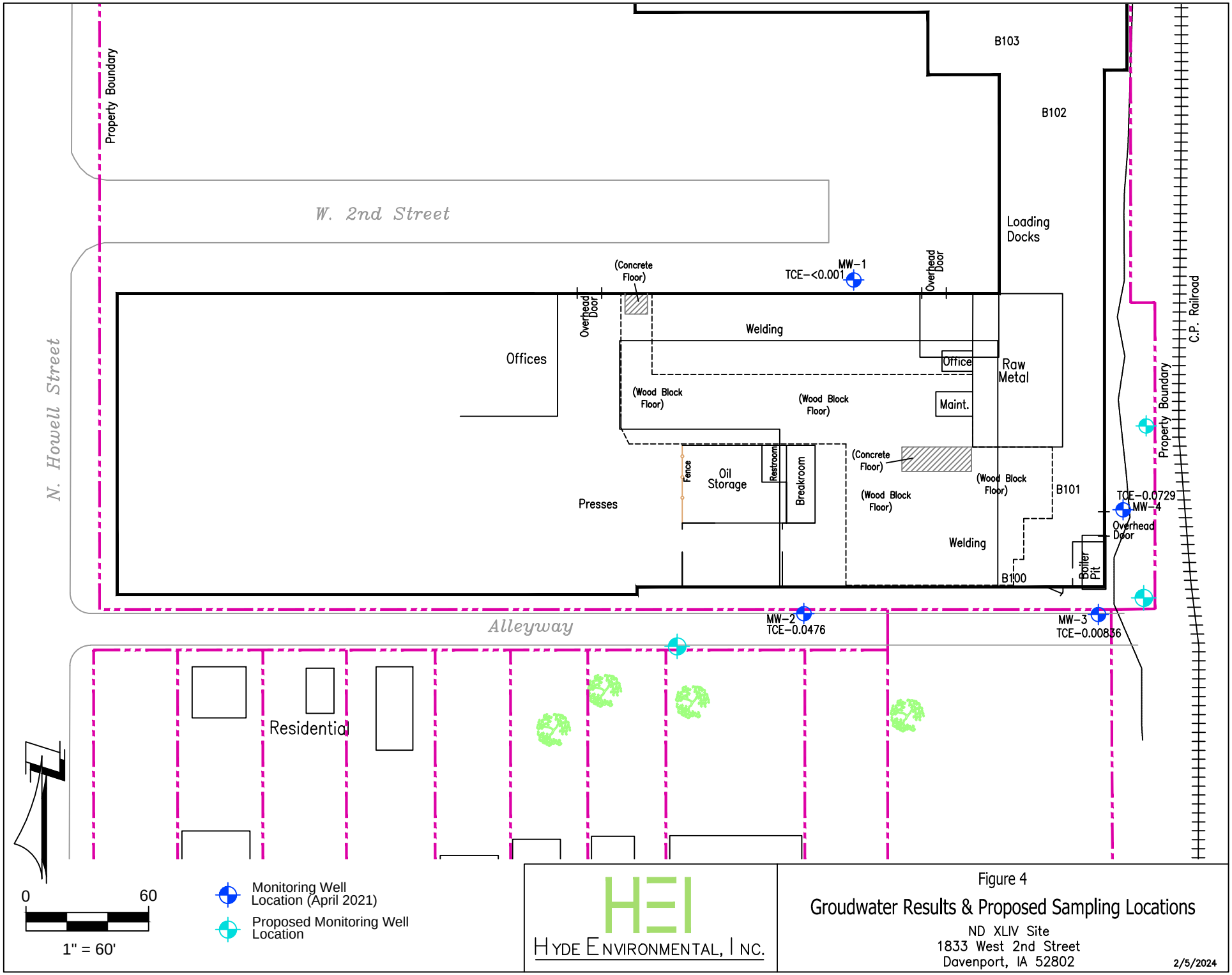

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