

Phase I Environmental Site Assessment Central Station Block

St. Paul, Minnesota MCTO0 146523 | July, 2018



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July 12, 2018

RE: Central Station Block Phase I Environmental Site Assessment St. Paul, Minnesota SEH No. MCTO0 146523

Mr. Michael Greif Associate Planner Metropolitan Council Transit – Transit Oriented Development 560 Sixth Avenue North Minneapolis, MN 55411

Dear Mr. Greif:

Please find enclosed the Phase I Environmental Site Assessment (ESA) for the property located at Central Station Block, St. Paul, Minnesota. I have also included the full document, figures and appendices on CD. Thank you for choosing SEH to complete this assessment. Please feel free to contact me at 651.490.2000 if you have any questions.

Sincerely,

Allen H. Sunderman, PG Project Manager

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Certification

Phase I Environmental Site Assessment Central Station Block St. Paul, Minnesota

SEH No. MCTO0 146523

July 2018

Allen H. Sunderman, PG Project Manager

Ted Feit, PG Environmental Geologist

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Sent to

Michael Greif Metropolitan Council Transit 560 Sixth Avenue North Minneapolis, MN 55411



Executive Summary

Phase I Environmental Site Assessment

Short Elliott Hendrickson Inc. (SEH[®]) was retained by Metropolitan Council Transit to conduct a Phase I Environmental Site Assessment (ESA) of the property located at the Central Station block in St. Paul, Minnesota (herein referred to as "site" or "subject property"). The subject property is depicted on **Figure 1**.

The subject property and surrounding area have been heavily developed since at least the late 1800s with commercial, industrial, and residential uses. By 1974, the majority of these structures were replaced with new structures housing primarily offices and restaurants along the northwest side and a parking lot along the northeast side of the subject property.

The subject property was investigated in 2009 for the Central Corridor Light Rail Transit (LRT) (2009. Braun) project. The project included construction of the Central Station that currently occupies the central portion of the subject property, as well as LRT tracks that transect the property from east to west. During the investigation, eight soil borings were completed at the subject property to depths ranging from 10 to 44 feet bgs. Fill was encountered to depths ranging from 7.5 to 15 feet below ground surface (bgs). Debris was encountered within the fill material in several borings, and included concrete, floor tile, Styrofoam, carpet, brick, sheet vinyl flooring, and wood. It was noted in the Phase II ESA that some of the debris tested positive for asbestos. Soil samples collected from the borings identified petroleum, polycyclic aromatic hydrocarbon (PAH) and arsenic concentrations exceeding Minnesota Pollution Control Agency (MPCA) Industrial SRVs and/or Short Term Worker Soil Reference Values (SRVs). An Amended Response Action Plan, completed in February, 2011, specified that a minimum of 4 feet of clean fill would be placed to separate permeable site features from any remaining ACM not excavated in the area. A RAP Implementation Report was completed for the site in February, 2014 and reviewed by the MPCA in June 2014. The RAP Implementation Report, along with a 2018 Limited Phase I ESA completed by Braun Intertec, indicated that the fill soil impacted with petroleum, PAHs, arsenic, and asbestos-containing debris remains at the subject property at depths between 4 and 15 feet bgs. In addition, petroleum impacted perched groundwater was encountered during excavation. According to the Surficial Hydrogeology atlas for Ramsey County (MGS, 1992), depth to the surficial groundwater table is expected to flow southeast at approximately 40-60 feet bgs at the subject property. Nearby well and boring log data indicate that the depth to groundwater ranges from 33 feet to 80 feet bgs; however, perched groundwater has been encountered within the upper 20 feet bgs periodically throughout the downtown St. Paul area.

The properties surrounding the subject property currently and historically consist of commercial towers and residential structures, with some historical manufacturing and warehouse uses as well. Historical uses of the adjacent properties includes several offices, banks, hotels, printing presses, auto repair shops, municipal garages, parking garages, retail stores, machine shops, restaurants and bakeries, bowling alleys, barber shops, clothing stores, cigar shops, hardware stores, and fuel stations.

In 1951 a fuel station was identified northeast of the subject property on historical fire insurance maps. Additionally, a directory listing identified as "Elk Cleaners and Launderers" is identified at 342 Minnesota Street between at least 1944 and at least 1964. No data was available regarding the launderer/cleaner business, nor any tank removal at the fuel station or associated leaks/releases from either use at the property.

Executive Summary (continued)

In 2000, during excavation of a parking garage located adjacent southeast of the subject property, an abandoned 500 gallon fuel oil tank was encountered adjacent to a former building on the west portion of the property. The underground storage tank (UST) and surrounding soil was removed. Confirmation samples were collected from below the tank and analyzed for diesel range organics (DRO). DRO was not detected in the confirmation samples. Later, during excavation of the same parking garage, another UST was encountered. Upon identification of the UST, both the MPCA Voluntary Investigation and Cleanup (VIC) program staff and MPCA Tanks and Spills Section were notified. A leak number (13708) was assigned, and a tank excavation, confirmation sampling, and closure were conducted in accordance with MCPA guidelines. A total of approximately 111 cubic yards of petroleum impacted soil were excavated around the former tank and disposed at a Minnesota permitted landfill.

Adjacent southwest of the subject property (beyond Cedar Street), a petroleum release was discovered during a tank excavation and reported to the Minnesota State Duty Officer on May 7, 2015. The site was closed on June 25, 2015. The MPCA confirmed the closure status on July 18, 2017. The MPCA also confirmed the removal of one 12,000 gallon UST, one 550 gallon waste oil UST, and one 550 gallon used oil UST on July 19, 2017. A Limited Site Investigation (LSI) completed in 2017 identified soil vapor concentrations (ethylbenzene and xylenes) exceeding the 33x MPCA Residential Intrusion Screening Values (ISVs). Tetrachloroethene (PCE) and trichloroethene (TCE) concentrations were also detected above the Residential ISVs. A RAP/CCP was submitted to the MPCA on May 18, 2017. The RAP/CCP included the installation of a vapor mitigation system and completion of post-mitigation testing to determine system effectiveness.

This Phase I ESA was completed in general accordance with American Society of Testing and Materials (ASTM) Standard Practice E 1527-13. The purpose of this Phase I ESA was to identify, to the extent feasible pursuant to the processes described in E 1527-13 and in a manner consistent with good commercial or customary practice, Recognized Environmental Conditions (RECs), Controlled RECs (CRECs) and Historical RECs (HRECs) in connection with the subject property.

The following RECs were identified for the subject property:

- Soil impacted with petroleum, PAHs, and arsenic, as well as asbestos-containing debris is present on the subject property at depths greater than four feet bgs, **REC**.
- The property adjacent northeast of the subject property was occupied with a launderer/cleaner business between the 1940s and 1960s, as well as a fuel station in at least 1951. No data was available regarding the launderer/cleaner business, nor the fuel station or associated leaks/releases from either use at the property due to the age of the businesses, **REC**.
- An LSI completed on a property adjacent southwest of the subject property identified petroleum VOCs above MPCA action levels. This site also had a previous petroleum release, **REC**.

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Phase I Environmental Site Assessment

Central Station Block

Prepared for Metropolitan Council Transit

1 Introduction

Short Elliott Hendrickson Inc. (SEH) was retained by Metropolitan Council Transit to conduct a Phase I Environmental Site Assessment (ESA) of the property located at the Central Station block in St. Paul, Minnesota (herein referred to as "site" or "subject property"). The subject property location is depicted on **Figure 1**.

The subject property is comprised of five contiguous parcels, and has an extensive history of development, dating back to at least the late 1800s. Most recently, all structures on the subject property were removed and replaced in 2012 by the Central Corridor Light Rail Transit (CCLRT) Central Station, a two-story indoor staircase leading to a skyway over 4th Avenue, and greenspace. According to a Response Action Plan (RAP) Implementation Report completed by Braun Intertec (Braun) for the CCLRT, fill soil impacted with petroleum, polycyclic aromatic hydrocarbons (PAHs), arsenic, and asbestos-containing debris, was encountered during construction, and remains in place at depths greater than 4 feet below ground surface (bgs). Additionally, petroleum impacted water was encountered in a building foundation discovered during excavation.

1.1 Purpose

An SEH environmental professional completed the Phase I ESA in general accordance with ASTM Standard Practice E 1527-13. The purpose of the Phase I ESA is to identify, to the extent feasible pursuant to the processes described in E 1527-13 and in a manner consistent with good commercial or customary practice, Recognized Environmental Conditions (RECs), Controlled RECs (CRECs) and Historical RECs (HRECs) in connection with the subject property.

By ASTM definition, **REC** means "the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to any release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment. *De minimis* conditions are not recognized environmental conditions."

The term **HREC** is defined by ASTM to mean "a past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting the property to any required controls (for example, property use restrictions, activity and use limitations, institutional controls, or engineering controls)."

The term **CREC** is defined by ASTM to mean "a recognized environmental condition resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority (for example, as evidenced by the issuance of a no further action letter or equivalent, or meeting risk-based criteria established by regulatory authority), with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls (for example, property use restrictions, activity and use limitations, institutional controls, or engineering controls)."

1.2 Scope of Services

The Phase I ESA consists of the following four general tasks:

- Records Review The purpose of the records review is to obtain and review reasonably ascertainable records from standard sources (including government records, physical setting sources, and historical use records) to assist in identifying RECs, HRECs and/or CRECs (all referred to as RECs in this section) in connection with the subject property. Publicly-available federal, tribal, state, county and/or city records are reviewed as appropriate to determine if the property has had a history of spills, leaks, hazardous waste storage, regulatory compliance and improper waste disposal practices. Reasonably ascertainable standard historical sources are reviewed as necessary to identify prior uses of the property from the time the property was first developed or 1940, whichever is earlier. Significant data gaps of greater than 5 years in property historical information are identified and discussed.
- Site Reconnaissance The objective of the site reconnaissance is to observe the subject property to obtain information indicating the likelihood of RECs in connection with the subject property. As part of the site reconnaissance, SEH observes the property and structures, if any, located on the property for indications of RECs to the extent not obstructed by thick vegetation, bodies of water, stored materials or product, equipment, or other obstacles. Potential environmental concerns on the subject property and observable environmental concerns on adjoining properties that relate to improper waste storage and disposal, and hazardous materials are noted.
- Interviews The purpose of conducting interviews is to obtain information indicating RECs in connection with the subject property. As appropriate, past and present owners, operators, employees and occupants of the facility, and government officials are interviewed regarding the property. If the subject property is abandoned, one or more owners or occupants of neighboring properties are interviewed.
- Technical Report SEH prepares the technical report summarizing the compiled information, and offers findings, opinions and conclusions based on the available data. If significant data gaps are identified, they are discussed in the report. RECs, if any, identified during performance of the Phase I ESA are described in the report. The report also includes SEH's opinion of the potential impact of each REC, if RECs are identified.

For the tasks listed above, records reviewed will be limited to information that is publicly available, obtainable from its source within reasonable time and cost constraints, is practically reviewable, and determined by the environmental professional to be useful in evaluating the condition of the property.

The Phase I ESA was conducted in accordance with an Agreement between SEH and Metropolitan Council Transit dated April 26, 2018. The Phase I ESA does not include testing or

sampling of materials (for example, soil, water, air or building materials) or any of the other following non-scope considerations specified in Section 13.1.5 of ASTM E 1527-13:

- 1. Asbestos-containing materials;
- 2. Biological agents;
- 3. Cultural and historic resources;
- 4. Ecological resources;
- 5. Endangered species;
- 6. Health and safety;
- 7. Indoor air quality related to *releases* of *hazardous substances* or *petroleum products* into the *environment;*
- 8. Industrial hygiene;
- 9. Lead-based paint;
- 10. Lead in drinking water;
- 11. High voltage power lines.
- 12. Mold;
- 13. Radon;
- 14. Regulatory compliance; and
- 15. Wetlands.

1.3 Significant Assumptions

The following significant assumption has been incorporated into this report:

The local groundwater flow at the subject property and in the vicinity of the subject property is expected to be to the southeast towards the Mississippi River (MGS, 1992).

1.4 Limitations and Exceptions

None of the buildings adjacent to the subject property were inspected by SEH, as it is not within the scope of a Phase I ESA. Contaminant sources and/or environmentally hazardous materials/substances may potentially exist within any structure.

SEH did not have access to maintenance/storage rooms (four total) located at the subject property.

1.5 Special Terms and Conditions

SEH performed the Phase I ESA in general accordance with ASTM E 1527-13 and the Agreement between SEH and Metropolitan Council Transit. Performance of the Phase I ESA in general accordance with ASTM E 1527-13 is intended to reduce, but not eliminate, uncertainty regarding the existence of RECs, CRECs or HRECs in connection with the subject property.

Reasonably ascertainable data was obtained and reviewed; however, the accuracy of the collected data is not the responsibility of SEH. Information provided to SEH by client representatives and site contacts has been accepted in good faith and is assumed to be accurate unless written documentation, available within the scope of this Phase I ESA, or visual observations contradicted it.

The Phase I ESA is not a comprehensive site characterization and should not be construed as such. The findings and conclusions of the Phase I ESA are based on information collected and observed at the time of the Phase I ESA and are not scientific certainties, but probabilities based on professional judgment regarding the significance and accuracy of the collected data.

Because professional judgments incorporated into the report are based on limited evidence, there is inherent uncertainty in the conclusions drawn and reported. The client has determined that the level of effort and corresponding degree of uncertainty are acceptable for the client's purpose. The Phase I ESA may not include all environmental conditions that can materially impact the property and a finding of no RECs, CRECs, or HRECs is not a warranty or guarantee that a property remains free from contamination.

Laws and regulations, if referenced in this report, are provided for information purpose and should not be construed as legal opinion or recommendation.

1.6 User Reliance

The Phase I ESA and all reports, verbal and written, are solely for the use of Metropolitan Council Transit. Any third party may have different interests, purposes, and motives than Metropolitan Council Transit with regard to this assessment and report. Any reliance on the Phase I ESA by any other party shall be at such party's sole risk, unless that party has written authorization from SEH and Metropolitan Council Transit and is a party to the Agreement between SEH and Metropolitan Council Transit.

2 Subject Property Description

2.1 Location and Legal Description

The subject property is located in the downtown area of St. Paul, Minnesota, in Ramsey County (**Figures 1 and 2**). The subject property is comprised of five contiguous parcels (PID Nos. 06-28-22-12-0109, 06-28-22-12-0110, 06-28-22-12-0055, 06-28-22-12-0056, and 06-28-22-12-0100). The subject property is bound by East 5th Street to the northwest, Minnesota Street to the northeast, East 4th Street to the southeast, and Cedar Street to the southwest. The subject property is located in the northeast quadrant of Township 28, Range 22W, Section 6. The legal descriptions are available in **Appendix B**.

2.2 Subject Property and Vicinity General Characteristics

The subject property and surrounding area are located within an urban downtown setting. The area gently slopes with an elevation of approximately 750 to 770-feet above mean sea level (amsl). The subject property is located approximately 900 feet northwest of the Mississippi River.

2.3 Current Use of the Subject Property

The subject property consists of the CCLRT Central Station with the light rail line running diagonally through the subject property from west to east. The area surrounding the light rail line on the subject property is currently greenspace. The approximate property boundary and site features are shown on **Figure 2**.

2.4 Descriptions of Structures, Roads, and Other Improvements on the Subject Property

The subject property includes a light rail line and a two-story indoor staircase connecting the station to the elevated skyway.

2.5 Current Use of Adjoining Properties

Based on information obtained from the site reconnaissance, interviews and historical records, current uses of adjoining properties were identified. Currently, properties surrounding the site are commercial and include the following:

- Southwest St. Paul Athletic Club/Hotel
- South/Southeast beyond East 4th Street Office building and attached parking garage
- Northeast beyond Minnesota Street Office building and attached parking garage
- Northwest beyond East 5th Street Office building and attached parking garage

3 User Provided Information

As specified under the ASTM standard, certain responsibilities generally lie with the "user" of this Phase I ESA. The "user" is the party seeking to use Practice E1527-13 to perform a Phase I ESA of a property. The "user" may include a purchaser of property, a potential tenant of property, an owner of property, a lender, or a property manager. For purposes of this Phase I ESA, the "user" is Metropolitan Council Transit.

Under the ASTM standard, a questionnaire is completed by the "user" and submitted to the environmental professional conducting the ESA. The questionnaire completed by Metropolitan Council Transit is included as **Appendix A**.

It is the responsibility of the "user" to verify whether any environmental liens exist with regard to the property, and provide this information to the environmental professional preparing the Phase I ESA unless specified otherwise in the contract between the "user" and SEH. The "user" must provide the environmental professional information regarding the price of the property versus fair market value of the property if the property were not contaminated. The "user must provide the environmental professional commonly known or reasonably ascertainable information on the property including, but not limited to; past uses of the property; specific chemicals present or once present on the property. Additionally, the "user" must make the professional aware of any specialized knowledge or experience that is material to RECs in connection with the subject property and the degree of obviousness of the presence or likely presence of contamination at the property. The following information was provided by the "user" and is ascepted in good faith and is assumed to be accurate and complete.

3.1 Title Records

A title search was not conducted for this Phase I ESA.

3.2 Environmental Liens or Activity and Use Limitations

The "user" elected to have SEH provide information on environmental liens for the property. SEH retained Historical Information Gatherers (HIG) to provide environmental liens and activity and use limitations (AUL) records for the subject property. The information obtained reveals no RECs for the subject property. A copy of the Environmental Liens and AUL review is included as **Appendix B**.

3.3 Specialized Knowledge

The "user" did not have specialized knowledge or experience related to the property or nearby properties.

3.4 Commonly Known or Reasonably Ascertainable Information

The "user" has indicated that the past uses of the property were mainly commercial, but some printing and photo operations were also previously present. To the knowledge of the "user", no specific chemicals are present or once were present at the property, with the possible exception of printing and photo processing chemicals. The "user" did not know of any spills or chemical releases that have taken place at the property. The "user" has indicated that low-level contaminated soil was removed from the subject property during construction of the CCLRT. According to the "user", contaminants included PAHs, diesel range organics (DRO), and asbestos-containing and debris-containing fill. Approximately 7 feet of contaminated fill was removed. Petroleum-contaminated groundwater was also encountered. Minnesota Pollution Control Agency (MPCA) approved of the response actions and closed the release site file for CCLRT-Civil east, which included the subject parcel, on March 24, 2017.

3.5 Valuation Reduction for Environmental Issues

The fair market value has not been established.

3.6 **Owner, Property Manager, and Occupant Information**

According to the Ramsey County Parcel data, the current owners of the parcels that comprise the subject property are as follows:

County Parcel ID	Owner/Taxpayer	Occupant
06-28-22-12-0109	Housing and Redev. Authority	Vacant greenspace
06-28-22-12-0110	Metropolitan Council	Vacant greenspace
06-28-22-12-0056	Metropolitan Council	METRO Green Line LRT Central Station
06-28-22-12-0055	Metropolitan Council	METRO Green Line LRT Central Station
06-28-22-12-0100	Metropolitan Council	METRO Green Line LRT Central Station

3.7 Reason for Performing the Phase I ESA

The Phase I ESA is being performed to identify, to the extent feasible pursuant to the processes described in E 1527-13 and in a manner consistent with good commercial and customary practice, RECs, CRECs and HRECs in connection with the subject property. Metropolitan Council Transit is expecting to sell the subject property parcels for potential redevelopment.

4 Records Review

The records review was performed to obtain and review reasonably ascertainable records from standard sources (including government records, physical setting sources, and historical use records) to assist in identifying RECs in connection with the subject property. SEH reviewed historical records of aerial photographs, topographic maps, city directories and fire insurance maps where available and deemed necessary to minimize data gaps.

4.1 Standard Environmental Record Review

SEH completed the standard environmental record search of available state and federal environmental databases. A summary of the results are included in **Section 4.1.5**. SEH uses the MPCA "What's in My Neighborhood" (WIMN) website and associated databases as the primary source of environmental listings information.

Additional state, county and/or federal database websites, as well as a database report provided by a third party, were reviewed as secondary sources of information. Information identified from these secondary sources is presented in this section.

4.1.1 MPCA WIMN Identified Sites

SEH used the MPCA WIMN website and associated databases as the primary source of environmental site information. SEH also reviewed WIMN sites with poor location information. MPCA listing locations were field verified and locations were reassigned to the correct property if necessary.

4.1.1.1 MPCA Program Databases

The following MPCA programs are referenced throughout the report.

- Hazardous Waste: Hazardous waste includes substances that are corrosive, explosive, toxic, and/or fire hazards. The MPCA and its county partners regulate hazardous waste to help protect people and the environment. Industries that generate hazardous waste include auto repair and painting shops, medical or dental clinics, dry cleaners, printers and manufacturers.
- Investigation and Cleanup: Investigation and cleanup sites are places that are or were suspected of being contaminated by chemicals. The MPCA and its partners investigate these sites through several different programs, including Superfund, RCRA Cleanup and the VIC program. In some cases, sites are investigated, and no cleanup is necessary. In other cases, sites are found to be a danger to people or the environment, and MPCA staff work to make sure that those sites are cleaned up.
- **Solid Waste**: Solid waste includes recyclable materials, household garbage, industrial waste, and debris from construction or demolition. The MPCA regulates solid waste to ensure that garbage is disposed of in a way that minimizes its impact on the environment, and works to encourage recycling and reuse of materials to keep them out of landfills.
- **Tanks and Leaks**: The tanks and leaks program regulates with large storage tanks and responds to sites where petroleum contamination is suspected. The MPCA regulates tanks to help protect people and the environment from being exposed to the substances stored in those tanks. When leaks or spills occur, MPCA staff work to evaluate and reduce the impacts on the environment.

The following activities are referenced in the above mentioned MPCA programs.

• Air Permit: Many businesses create air pollutants as they generate power, manufacture products, or perform other industrial activities. These emissions might include fine particles, ozone, mercury or other toxic substances that can harm human health or the environment. Air quality permits help to reduce the amounts of pollutants that these facilities put into the air by requiring the facilities to use air pollution control equipment and establishing limits to what a facility can put into the air. Permits may also require air monitoring.

- Hazardous Waste, TSD: A hazardous waste Treatment Storage and /or Disposal facility (TSD) is any business designed to treat, store and/or dispose of hazardous waste. These facilities typically collect hazardous wastes for other businesses and treat it or dispose of it properly. TSD facilities must have valid operating permits issued by the MPCA. This means that they are required to develop detailed plans to train and protect their workers and the environment.
- Hazardous Waste, LQG: A large quantity generator (LQG) is a facility that generates at least 1,000 kilograms (2,200 pounds) of hazardous waste or 1 kilogram (2.2 pounds) of acutely hazardous waste per calendar month. An MPCA permit is not required for a large quantity generator, but the facility must have a current hazardous waste license. This means that they must tell the MPCA what kinds of waste they generate, how much waste they generate, and how they dispose of the waste. For more information on hazardous waste licenses.
- Hazardous Waste, Small to Minimal Quantity Generator: A small to minimal quantity generator is a facility that generates less than 1,000 kilograms (2,200 pounds) of hazardous waste or 1 kilogram (2.2 pounds) of acutely hazardous waste per calendar month. These facilities have less stringent rules than large quantity generators. This group includes Small Quantity Generators (SQGs), which produce 100 1000 kg of hazardous waste per month; Very Small Quantity Generators (VSQGs), which produce less than 100 kg of hazardous waste per month; and Conditionally Exempt Generators, which produce less than 100 kg or 10 gallons of hazardous waste per year. Like large quantity generators, SQGs and VSQGs must have current hazardous waste licenses.
- **CERCLIS**: CERCLIS sites are places that are listed in the federal Comprehensive Environmental Response, Compensation and Liability Information System. This means that they are or were suspected of being contaminated. The CERCLIS database contains information on preliminary assessments, site inspections, and cleanup activities for these sites. After CERCLIS sites are investigated, they may be elevated to state or federal Superfund lists, or it may be determined that no action is necessary.
- RCRA Cleanup: Resource Conservation and Recovery Act Cleanup Sites are places where an existing business with a hazardous waste license or permit may have released hazardous waste to the environment. RCRA Cleanup staff investigates these sites and determine if cleanup is needed. Cleanups may occur at facilities that have current hazardous waste licenses or permits (hazardous waste generators or TSDs (see Hazardous Waste). They may also occur at interim status facilities, which at one time applied to be TSDs, but did not complete the permitting process.
- State and Federal Superfund Projects: Superfund projects occur where known or suspected environmental contamination threatens public health, welfare or the environment. The Superfund Program identifies, investigates and determines appropriate cleanup plans for these sites. Superfund projects often occur at abandoned or uncontrolled sites, for instance, where the business that polluted a site no longer exists. Federal Superfund sites are on the U.S. Environmental Protection Agency's National Priority List (NPL), while State Superfund sites are on Minnesota's Permanent List of Priorities (PLP). MPCA staff may work with Environmental Protection Agency (EPA) staff or other state agencies to investigate and clean up these sites. In Minnesota, sites which may have been contaminated by agricultural chemicals are managed by the Minnesota Department of Agriculture.

- State Assessment Site: State Assessment sites are places that MPCA Site Assessment staff has investigated because of suspected contamination. The sites investigated include abandoned industrial properties, small commercial businesses and publicly-owned land. (Note that petroleum-contaminated sites are investigated by MPCA Tanks and Leaks staff.) These sites may be referred to the Site Assessment program by the Voluntary Investigation and Cleanup (VIC) program, the Petroleum Remediation program, Minnesota Duty Officer reports or citizen complaints. Site Assessment staff do an initial assessment, and then determine if further action is needed. If a site poses a threat to human health or the environment, it is referred to CERCLIS, Superfund, RCRA Cleanup or VIC.
- **Unpermitted Dump Site**: Unpermitted dump sites are landfills that never held a valid permit from the MPCA. Generally, these dumps existed prior to the permitting program established with the creation of the MPCA in 1967. These dumps are not restricted to any type of waste, but were often old farm or municipal disposal sites that accepted household waste. State assessment staff have investigated many of these dump sites.
- Voluntary Investigation & Cleanup (VIC) Site: The VIC Program is a non-Petroleum Brownfield. VIC provides technical assistance to buyers, sellers, developers or local governments seeking to voluntarily investigate or clean up contaminated land. Properties often enter the VIC program in preparation for sale, financing or redevelopment. Voluntary parties that complete investigation and/or cleanup activities under MPCA oversight can receive liability assurances that protect them from future Superfund liability. In some cases, the MPCA may use institutional controls as part of the overall site remedy and notify interested parties of any property use conditions or restrictions.
- **Petroleum Brownfield**: Petroleum Brownfield sites are places that may have been contaminated with petroleum due to a past or current leak. Petroleum Brownfields program staff assesses the risk associated with petroleum contamination at these sites and then provide technical assistance to help get the site cleaned up, developed, and/or transferred to a new owner.
- Landfill, Open: Open landfills are landfills that are still accepting waste. This includes facilities that accept household garbage, industrial waste, and debris from construction or demolition. The MPCA requires that landfills are designed to bury this garbage in a controlled manner and reduce potential impacts on the environment. Many landfills have wells installed so that groundwater can be monitored for any contaminants that might leak into the ground.
- Landfill, Closed: Closed landfills are landfills that are no longer accepting waste. This includes landfills that are privately owned and managed, as well as those that are owned or managed by the MPCA and are part of the formal Closed Landfill Program. The Closed Landfill Program manages qualified closed landfills throughout Minnesota, and conducts cleanup work and maintenance at those sites. At some of these landfills, landfill gasses may be captured and used to create energy.
- Landfill, Permitted by Rule: A landfill that is permitted by rule is not required to obtain an individual solid waste permit if it meets certain eligibility criteria. However, it must comply with waste management rules and regulations. Landfills may be permitted by rule if they have a small capacity and/or operate for a short period of time. Some yard waste composting facilities, recycling facilities and energy recovery facilities are also permitted by rule.

- **Contaminated Soil Treatment Facilities**: Contaminated soil treatment facilities are places that the MPCA has approved or permitted to take petroleum-contaminated soils from leak sites and provide treatment through a number of different processes. The processes include thermal treatment (usually by roasting soils at high temperatures), composting, or thin-spreading soils and allowing natural microorganisms to biodegrade the petroleum.
- Solid Waste Utilization Project: A solid waste utilization project uses certain wastes in a new way to recycle the material instead of putting it into a landfill. An example is using tires to create furniture. The beneficial use of waste products saves landfill capacity for materials that do not have alternative uses. By using solid waste, individuals and organizations can reduce disposal costs, or even generate profit through the sale of materials that have a beneficial use.
- Leak Site: Leak sites are locations where a release of petroleum products has occurred from a tank system. Leak sites can occur from aboveground or underground tank systems as well as from spills at tank facilities. A leak can result from an accident or from activities that occur over a long time. MPCA Petroleum Remediation Program staff investigates potential leaks and works to minimize or clean up contamination at those sites.
- **Tank Site**: A tank site is a place with an underground or aboveground storage tank of a certain size on the premises. One tank site may have multiple tanks, and these tanks may contain food products, petroleum products, or other substances. Tank sites include gas stations, bus companies and trucking companies, as well as factories that process sugar beets, ethanol, pulp and paper, or chemicals. The MPCA requires monitoring and maintenance at these sites, which helps to ensure that tanks do not cause environmental contamination.
- Construction Stormwater Permit: When stormwater drains off of a construction site, it can carry sediment and other pollutants that can harm lakes, streams and wetlands. A construction stormwater permit is designed to limit this pollution during and after construction by controlling the erosion associated with construction activities. Permits are issued to construction site owners and their operators.
- Construction Stormwater Site Subdivision: A construction stormwater site subdivision is a site where a construction project with an existing stormwater permit has been sub-divided into smaller parcels. The subdivisions are subject to the requirements of the original permit.
- Industrial Stormwater Permit: At industrial sites such as factories, salvage yards and airports, stormwater may come into contact with harmful pollutants, including toxic metals, oil, grease, de-icing salts and other chemicals. Industrial stormwater permits are designed to limit the amount of these contaminants that reaches surface water and groundwater, by requiring good practices for storing and handling materials. Facilities with these permits must prepare a Stormwater Pollution Prevention Plan, detailing the practices they will use to limit stormwater pollution.
- MS4 Project: A Municipal Separate Storm Sewer System (MS4) is a system of conveyances - such as gutters, ditches, city streets and storm drains - which is used as a path for stormwater. Regulated MS4s cover large areas, and are owned or operated by a public entity such as a city, county, township, watershed district or university. Runoff from sidewalks, driveways and city streets can contain pollutants, such as fertilizers, oil, road salt, litter and other debris. Permits for MS4s are designed to reduce the amount of stormwater pollution that reaches surface water and groundwater.

- Wastewater Dischargers: A wastewater discharger is a facility that generates or treats wastewater for discharge onto land or into water. Wastewater dischargers include sewage treatment plants, as well as ships with ballast water permits, and some manufacturers. MPCA permits may require treatment and monitoring, and limit the amount of contaminants that a facility can release into the environment. Wastewater permits may be classified as SDS or NPDES/SDS. SDS stands for State Disposal System, and indicates that the facility needs to follow Minnesota rules and regulations for wastewater. NPDES is the National Pollutant Discharge Elimination System, and indicates that the facility is also subject to the regulations of the federal Clean Water Act.
- Feedlots: Feedlots may be small farms or large-scale commercial livestock operations. They are places where animals are confined for feeding, breeding or holding. The MPCA and its county partners place requirements on how manure is managed at feedlots, so that it does not contaminate nearby surface water and groundwater. Most feedlots in Minnesota are only required to register with the MPCA, but larger feedlots may be required to obtain a National Pollutant Discharge Elimination System (NPDES) permit. This means that they must submit plans for how they will reduce their impact on the environment, including their plans to manage manure and control air pollution from the feedlot.

4.1.2 Environmental Database Report

SEH retained GeoSearch to perform an electronic database search of documents published by the EPA and the MPCA. A summary of all records retrieved by the search, the minimum search distances, and the date that source information was last updated is included in the environmental database report in **Appendix C**. A list of data sources is also provided in the report.

The environmental database report review did not include a comprehensive, exhaustive review of all records. Listings identified with additional information are included in **Section 4.1.5**.

4.1.2.1 Unlocatable Listings

In the numerous sources SEH reviews to identify environmental listings for the subject property, adequate information is not always provided to determine the location or status of a listing. As an extra level of due diligence, SEH reviewed MPCA WIMN listings identified within one mile radius of the subject property and WIMN listings with poor location information.

Additionally, environmental database reports typically include a number of "unlocatable" or "orphan" listings. GeoSearch could not specifically locate these listings due to poor address information or other limitations. A total of one unlocatable listing is identified in the environmental database report.

SEH attempted to identify the unlocatable listing that was potentially located within the subject property based on site name, address, and available resources. The focus of this search is placed on sites that may pose the greatest potential for environmental impacts to the subject property. It is not within the scope of this Phase I ESA to conduct an exhaustive investigation to verify the locations of all unlocatable site listings.

The following unlocatable listing did not have adequate location information or documentation to identify if it poses a risk to the project corridor.

Name	Address	Activity	Database ID No.
Kellogg Blvd. #4	Kellogg Blvd. East	VIC	VP2332

4.1.3 MPCA Regulatory Files

SEH reviewed MPCA WIMN listings identified within one mile radius of the subject property. SEH also reviewed WIMN sites with poor location information. MPCA site locations were field verified and locations were reassigned to the correct property parcel if necessary. The following listings were identified for further review.

Name	Location	Database	Listing ID
Former Gas Station	384 Cedar St., St. Paul, MN	Leak	17857
Port Authority Property	50 E. 4 th St., St. Paul, MN	Leak, VIC	13708, VP10450
Skyway Quick Print	315 B. Skyway Bldg, St. Paul, MN	CERCLIS	MND058319807
St. Paul Pioneer Press – Downtown	345 Cedar St., St. Paul, MN	Leak, Brownfield	19805, BF0000381
US Bank	101 5 th St. E., St. Paul, MN	Leaks	7014, 8464
Victory Parking Inc.	344 Wabasha St. N.	Leak	3665

4.1.4 Additional Record Sources

SEH reviewed additional environmental record sources, including the Minnesota Department of Agriculture (MDA) County Spill Records, the MDA *What's in My Neighborhood* interactive mapping program, the MPCA *Petroleum Remediation Program Maps Online,* MPCA *Contaminated Sites Data Online, MPCA Landfill Cleanup Act Participants, the* MPCA *VIC Site Online Search for Sites with Institutional Controls*, and the MPCA Spills database.

The following listing was identified for further review.

Name	Address	Activity	Database ID No.
St. Paul Athletic Club	340 Cedar St.	MDA Spill	181101007439

4.1.5 Standard Environmental Record Review Summary

Based on information reviewed during the Standard Environmental Records Review, none of the sites identified during the Standard Environmental Records Review appear to pose a risk to the subject property, with the exception of the following.

Name	Location	Database	Listing ID
St. Paul Pioneer Press – Downtown [1]	345 Cedar St., St. Paul, MN	Leak, Brownfield	19805, BF0000381

An SEH identification number (presented in bold brackets **[X]** after the listing name) is assigned to the site that is mapped on **Figure 2**. A complete summary of this listing, as well as those listed in **Section 4.1.3 and 4.1.4** is presented in **Section 4.2**.

4.2 **Prior Assessments**

SEH completed previous report and file reviews to evaluate the degree of potential impact to the subject property. Copies of reviewed reports and files are attached as **Appendix D**.

4.2.1 Metropolitan Council Transit Reports

The following reports were provided by Metropolitan Council Transit:

Phase I Environmental Assessment, Light Rail Transit Corridor, Downtown Minneapolis to 46th Street (Braun, 1999)

Fuel stations, an auto repair shop, and a machine shop were identified on and in the vicinity of the subject property.

<u>Phase II Environmental Site Assessment – Interim Investigation Report, Civil East, Section 12 – Along 4th Street from the Intersection of 5th Street/Cedar Avenue to Operations and <u>Maintenance Facility, Central Corridor Light Rail Transit Project, St. Paul, Minnesota (Braun, 2009)</u></u>

The subject property was investigated in 2009 for the Central Corridor LRT (2009, Braun) project. The project included construction of the Central Station that currently occupies the central portion of the subject property, as well as LRT tracks that transect the property from east to west. Eight soil borings (S12-001A, S12-002 through S12-007, and S-12-023) were completed at the subject property to depths ranging from 10 to 44 feet bgs. Fill was encountered to depths ranging from 7.5 to 15 feet bgs. Debris was encountered within the fill material in several borings, and included concrete, floor tile, Styrofoam, carpet, brick, sheet vinyl flooring, and wood. It was noted in the Phase II ESA that some of the debris tested positive for asbestos. Soil samples collected from the borings identified PAH and arsenic concentrations exceeding Industrial SRVs and/or Short Term Worker SRVs. An Amended Response Action Plan, completed in February, 2011, identified asbestos containing debris within the fill material, to depths between 10 and 15 feet bgs. The RAP specified that a minimum of 4 feet of clean fill would be placed to separate permeable site features from any remaining ACM not excavated in the area. A RAP Implementation Report was completed for the site and reviewed by the MPCA in June 2014. The RAP Implementation Report, along with a 2018 Limited Phase I ESA completed by Braun Intertec, indicated that the fill soil impacted with petroleum, PAHs, arsenic, and asbestos-containing debris remains at the subject property at depths between 4 and 15 feet bgs. The MPCA closed the Site and issued a No Further Action Letter in February, 2016. A copy of the Amended RAP, as well as the RAP Implementation Reports for the Civil East Construction Segment and 4th Street Advanced Utility Construction Segment are included in Appendix D.

Limited Phase I Environmental Site Assessment, Trunk Highway 952A (Robert Street) and Annapolis Street to 12th Street, St. Paul, Minnesota (Braun, 2018)

The report noted that 4 feet of fill was excavated during construction of the CCLRT Central Station and replaced with unregulated fill. The Limited Phase I ESA indicated that the impacted fill remains at depths below four feet bgs. Groundwater is expected to flow southeast at approximately 40-60 feet bgs at the subject property.

4.2.2 MPCA and MDA Regulatory Files

The following MPCA and MDA files were reviewed/requested for review. File review information is included in **Appendix D**.

- Former Gas Station (Leak 17857) Petroleum impacts were identified in 2009 during environmental drilling for the CCLRT Phase II ESA. DRO, gasoline range organics (GRO), and benzene concentrations were detected in soil. A limited site investigation (LSI) was completed in 2011. During the LSI, a gasoline station was visible in historic aerial photos at 384 Cedar Street from 1926 through 1951. Two USTs were located at the northwest corner of the fuel station. Four soil borings were completed during the LSI. Groundwater was encountered in each boring between 14 and 20 feet bgs. Petroleum impacted soil appeared to extend laterally for approximately 25 feet. The horizontal and vertical extent of groundwater contamination appeared to be limited. Based on the results of the LSI, the MPCA closed the file on October 4, 2011.
- Port Authority Property (VIC VP10450, Leak 13708) Two portions (An eastern portion and a western portion) of the property bound by East Kellogg Boulevard, Cedar Street, East 4th Street, and Minnesota Street were assessed. A Phase I ESA (AET, 1998) was completed on the eastern half of the site in 1998. The Phase I ESA identified carriage businesses, dispatch buildings and printing operations for the Pioneer Press, a gasoline station, a repair shop and garage, a liquor packing building, a carpentry building, and an office/furniture supply company. The eastern half of the site was developed as a parking lot by 1998. A Phase I ESA completed for the western half of the site was completed in 1999. The 1999 Phase I ESA indicated that the western half of the property was developed with a foundry company, machine shop businesses before being redeveloped as a surface parking lot and an office building by 1999.

A Phase II ESA was conducted on the eastern half of the site in 1999. The Phase II ESA included eight soil borings to depths between 5 and 69.5 feet bgs. Up to 19 feet of debris-laden fill was encountered during the investigation. The debris encountered in the fill consisted of limestone slabs, concrete, brick, and wood. All soil analyte concentrations were below MPCA Tier 1 Residential SRVs. A Limited Phase II ESA Subsurface Soil Assessment (AET, 2000) was completed on the western portion of the site in 2000. The Limited Phase II ESA consisted of two hand auger soil borings through the basement slab of a vacant office building. No soil analyte concentrations were identified above MPCA Tier 1 Residential SRVs. The MPCA issued No Association Determination letters on May 3, 1999 (for the east half of the site) and July 5, 2000 (for the west half of the site).

An Excavation Contingency Plan (AET, 2000) was completed for the property in 2000 to address the removal of the debris-laden fill identified in the 1999 Phase II ESA. Approximately 2,387 cubic yards of fill and demolition debris was removed from the eastern half of the property and disposed of at a Minnesota permitted landfill as impacted soil. Approximately 419 cubic yards of debris-laden and petroleum impacted fill was removed from the western half of the property and disposed of at a Minnesota permitted landfill. During excavation, an abandoned 500 gallon fuel oil tank was encountered adjacent to a former building on the west portion of the property. Soil surrounding the UST was removed and stockpiled, and confirmation samples were

collected from below the tank and analyzed for DRO. DRO was not detected in the confirmation samples.

During excavation at the east portion of the property, another UST was encountered. Upon identification of the UST, both the VIC and MPCA Tanks and Spills Section were notified. A leak number (13708) was assigned, and a tank excavation, confirmation sampling, and closure were conducted in accordance with MCPA guidelines. A total of approximately 111 cubic yards of petroleum impacted soil were excavated and disposed at a Minnesota permitted landfill.

- Skyway Quick Print (MND058319807) A CERCLIS site is registered at this location; however the MPCA did not have any files available for review for this listing.
- St. Paul Athletic Club (MDA Case No. 101053502) In October, 2013, two pool chemicals (believed to be sodium hypochlorite and sodium bicarbonate) were mixed, creating an off-gas. The building was evacuated, the chemicals were containerized, and a maintenance worker was sent to the hospital for evaluation. The MDA closed the file on April 16, 2014.
- St. Paul Pioneer Press Downtown (Leak 19805, Brownfield BF0000381) [1] A petroleum release was discovered during a tank excavation and reported to the Minnesota State Duty Officer on May 7, 2015. The site was closed on June 25, 2015. The MPCA confirmed the closure status on July 18, 2017. The MPCA also confirmed the removal of one 12,000 gallon UST, one 550 gallon waste oil UST, and one 550 gallon used oil UST on July 19, 2017. An LSI completed in 2017 identified soil vapor concentrations (ethylbenzene and xylenes) exceeding the 33x MPCA Residential Intrusion Screening Values (ISVs). Tetrachloroethene (PCE) and trichloroethene (TCE) concentrations were also detected above the Residential ISVs. A RAP/CCP was submitted to the MPCA on May 18, 2017. The RAP/CCP included the installation of a vapor mitigation system and completion of post-mitigation testing to determine system effectiveness.
- US Bank (Leak 7014) A Phase II ESA was completed in November, 1993. Six standard penetration test (SPT) soil borings and one hand auger soil boring were completed. Groundwater was not encountered at the time of the investigation. The investigation identified petroleum compounds at concentrations below regulatory action levels along the north side of an existing 15,000 gallon fuel oil UST. The UST has since been removed. The file was closed by the MPCA on November, 1995.
- US Bank (Leak 8464) A 15,000 gallon #2 fuel oil UST was removed from below the sidewalk at 101 East 5th Street on June 14, 1995. Elevated field screening levels (up to 50 ppm as measured with a PID) were detected in soil. Soil above 10 ppm were removed and stockpiled. 54.74 tons of soil were removed and thermally treated on June 30, 1995. A new tank was installed in the existing tank basin on June 16, 1995. No figures or tables were included in the excavation report. The MPCA closed the file on November 1, 1995.
- Victory Parking Inc. (Leak 3665) Petroleum contamination in soil was discovered in 1990 during the abandonment of two 2,000 gallon USTs at 344 Wabasha Street Northeast. Soil samples collected beneath the east and west tanks identified total petroleum hydrocarbons (TPH) at concentrations of 680 mg/kg and 2,800 mg/kg, respectively. A remedial investigation was completed by Braun Intertec in May, 1991. Several soil samples were collected from four borings completed at the site. No TPH or

VOCs were identified in any of the samples. The Braun Intertec report recommended no further action. The MPCA closed the file in 1991.

4.3 **Physical Setting**

4.3.1 Topography

The northern half of the subject property is depicted on the United States Geological Survey (USGS) 7.5-minute *St. Paul East, MN* topographic map (USGS, 2013) as gently sloping north from the southern half, then relatively flat at the northern half. The map indicates that the surface elevation of the subject property is approximately 760 to 770 feet amsl. The Mississippi River is located approximately 925 feet east of the subject property.

4.3.2 Geology and Soils

Published geology (MGS, 2007) indicates that surficial geology of the subject property and surrounding area consists of clay facies, Grey Cloud terrace, and Langdon terrace deposits. According to the Surficial Geology of the Twin Cities Metro Area (MGS, 2007) the clay facies underlying the subject property are slackwater sediment deposited at the Grey Cloud terrace level in what was likely an abandoned waterfall plunge-pool. The clay overlies boulders in places.

The subject property and surrounding area of downtown St. Paul are home to several buried bedrock gorges, with elevations between approximately 750 to 600 feet above msl (approximately 50 to 150 feet bgs)(MGS, 1992). The uppermost bedrock unit at the subject property is the St. Peter Sandstone, described as white to light gray and medium to fine-grained quartzose sandstone (MGS, 2013). The St. Peter Sandstone is underlain by Prairie du Chien, which is described as dolostone, sandy dolostone, and sandstone. To the west of the subject property, the Platteville and Glenwood Formations overlay the St. Peter Sandstone.

4.3.3 Hydrogeology

According to the Surficial Hydrogeology atlas for Ramsey County (MGS, 1992), depth to the surficial groundwater table is expected to flow southeast at approximately 40-60 feet bgs at the subject property. Nearby well and boring log data indicate that the depth to groundwater ranges from 33 feet to 80 feet bgs; however, perched groundwater has been encountered within the upper 20 feet bgs periodically throughout the downtown St. Paul area.

4.3.4 Water Wells and Wellhead Protection Areas

A review of wells listed in the Minnesota Department of Health (MDH) Minnesota Well Index (MWI) was conducted with an emphasis on abandoned (AB) and monitoring (MW) wells in the vicinity of the subject property. Mapped wells are depicted on **Figure 2**. A number of wells are described in the same quadrant as the subject property; however, there is not adequate information to confirm the exact location or to determine whether or not they exist within the area of interest. It was not within the scope of the Phase I ESA to verify wells with inadequate location information.

The following wells are mapped on the subject property (see also Section 5.4.6):

Unique No.	Well Name	Туре
200031	Federal Land Bank	Commercial
200032	St. Paul Dispatch	Commercial

According to the MPCA Petroleum Remediation Program (PRP) and MDH MWI online mapping programs, the subject property does not fall within a wellhead protection area.

4.4 Historical Use of the Subject Property and Adjacent Properties

A historical review of the site and surrounding area was conducted to identify obvious previous uses of the subject property and surrounding area in order to help assess whether past uses may have led to RECs, CRECs or HRECs in connection with the subject property. According to ASTM E 1527-13 standard the uses of the property "shall be identified from the present, back to property's first developed use, or back to 1940, whichever is earlier". The historical review was completed by examining historic aerial photographs, topographic maps, city directories and fire insurance maps where available. Historical information was also obtained through interviews (**Section 6**). Any significant temporal gaps in historical data are addressed in **Section 8.3** of this report.

4.4.1 Sources

The following sources were used to compile the history of the subject property and adjacent properties presented in **Section 4.4.2**.

4.4.1.1 Aerial photographs

Reasonably ascertainable historical aerial photographs showing the project corridor and surrounding areas were obtained for review from the years 1923, 1940, 1947, 1953, 1958, 1966, 1974, 1982, 1985, 1991, 1994, 2000, 2004, 2009, 2012, and 2016. Due to the scale and quality of some of the photographs, it is difficult to determine minor activities that may have occurred on the project corridor. Copies of the photographs reviewed are included as **Appendix E**.

4.4.1.2 Topographic Maps

The following historical maps were obtained and reviewed:

- USGS, 1896, St. Paul, Minnesota, 15 Minute Topographic Map.
- USGS, 1951, St. Paul, Minnesota, 15 Minute Topographic Map.
- USGS, 1951, St. Paul East, Minnesota, 7.5 Minute Topographic Map.
- USGS, 1967, St. Paul East, Minnesota, 7.5 Minute Topographic Map.
- USGS, 1972, St. Paul East, Minnesota, 7.5 Minute Topographic Map.
- USGS, 1980, St. Paul East, Minnesota, 7.5 Minute Topographic Map.
- USGS, 1993, St. Paul East, Minnesota, 7.5 Minute Topographic Map.
- USGS, 2013, St. Paul East, Minnesota, 7.5 Minute Topographic Map.
- USGS, 2016, St. Paul East, Minnesota, 7.5 Minute Topographic Map.

Copies of topographic maps reviewed are included as Appendix F.

4.4.1.3 Historic Maps

Sanborn and Rasher and Fire Underwriter Bureau fire Insurance maps consist of a uniform series of large-scale detailed maps, dating from 1867 through 1969 and depict the commercial, industrial, and residential sections of urban areas. Fire Underwriters Inspection Bureau Maps, or Fisher maps, are useful for searching smaller communities in Minnesota and North Dakota. The maps were designed to assist fire insurance agents in determining the degree of hazard associated with a particular property. These maps illustrate, in outline form, structural details

such as the size, shape, and construction and building material of dwellings, commercial buildings, and factories.

Coverage of this site on fire insurance and other historic maps for the years 1887, 1892, 1903, 1908, 1916, 1925, 1926, 1928, 1951, and 1969 are included as **Appendix G**.

SEH also reviewed the *MnDOT Right of Way Mapping and Monitoring* interactive website. The website provides statewide coverage depicting MnDOT Right of Way Map information, information about transportation features (roads, railroads, runways and navigable waters), municipal boundaries, etc. The dates of the maps are typically not known, but the time frame can generally be deduced by examining other maps and historic records. The maps can be viewed on the state website at <u>http://www.dot.state.mn.us/maps/gisweb/row/</u>.

4.4.1.4 City Directories

City directories provide a means to investigate the past use of a site by reviewing information for a specific address in incorporated areas. City directories were obtained and reviewed for the subject property for the years 1929, 1934, 1939, 1944, 1949, 1954, 1959, 1964, 1969-1970, 1974, 1979, 1984, 1989, 1994, 1999, 2002, 2007, and 2012. Significant information is incorporated into **Section 4.4.2**. Copies of city directories are included as **Appendix H**.

4.4.2 History of the Subject Property and Adjacent Properties

The following history of the site and adjacent properties was compiled from information contained in the resources listed in **Section 4.4.1**, and interviews.

4.4.2.1 History of the Subject Property

The subject property consists of the Central Station LRT platform, as well as LRT tracks transecting west-northwest to southeast through the subject property. Historically, the subject property has been developed since at least 1887 with various commercial structures and/or dwellings. By 1923, the subject property was developed with several commercial buildings: The Daily News building (later owned by St. Paul Pioneer Press), constructed in 1923 along East 4th Street, the Federal Land Bank building, constructed on the east corner of the subject property in 1908, the Newton building and annex, constructed since at least 1923 along the north corner and northeast side of the subject property, and the Bank 1st building, constructed by 1923 along the west corner of the subject property. Additionally, several structures were present on the northwest and southwest side of the subject property at this time. These structures housed numerous businesses and dwellings, including the Daily News printing operation, several banks, a hardware store, retail stores, an office furniture store, and hotels. By 1974, the majority of structures, with the exception of the Daily News building, were replaced with new structures along the northwest side and a parking lot along the northeast side of the subject property. A small structure was constructed in 1968 on the east portion of the subject property. By 1991, the small structure on the east corner of the subject property was removed and replaced with additional parking. By 2000, the bank located on the north corner of the subject property had been removed and replaced by additional parking. By 2012, the structures on the west and northwest side of the subject property had been removed for the construction of the Central Station LRT platform and associated tracks.

The subject property was investigated in 2009 for the CCLRT project. The project included construction of the Central Station that currently occupies the central portion of the subject property, as well as LRT tracks that transect the property from east to west. During the

investigation, eight soil borings were completed at the subject property to depths ranging from 10 to 44 feet bgs. Fill was encountered to depths ranging from 7.5 to 15 feet below ground surface (bgs). Debris was encountered within the fill material in several borings, and included concrete, floor tile, Styrofoam, carpet, brick, sheet vinyl flooring, and wood. It was noted in the Phase II ESA that some of the debris tested positive for asbestos. Soil samples collected from the borings identified petroleum, polycyclic aromatic hydrocarbon (PAH) and arsenic concentrations exceeding Minnesota Pollution Control Agency (MPCA) Industrial SRVs and/or Short Term Worker Soil Reference Values (SRVs). The 2018 Limited Phase I ESA completed by Braun Intertec indicated that 4 feet of fill was excavated and replaced with unregulated fill. The 2018 Braun Limited Phase I ESA indicated that the impacted fill remains at depths below four feet bgs.

4.4.2.2 History of Adjacent Properties

The properties surrounding the subject property currently and historically consist primarily of commercial and residential structures, with some manufacturing and warehouses as well. The St. Paul Athletic Club, located directly adjacent south of the subject property, was constructed in 1916. Beyond the St. Paul Athletic Club, past the intersection of Cedar Street and East 4th Street, consists of three primary structures: The Commerce Building (built in 1911) on the corner of East 4th Street and Wabasha Street, the Degree of Honor Building (built in 1960) on the corner of East 4th Street and Cedar Street, and the Intercontinental Hotel building (built in 1965) on East Kellogg Boulevard. The properties have been developed since at least 1887 with various structures occupied with commercial and retail uses, including auto repair shops, a hotel, printing and lithograph presses, a municipal garage, fireproof storage and transfer stations, and a candy factory. From at least 1903 until 1960, a structure identified as the Globe building occupied the location of the Degree of Honor building. An underground fuel room is identified under the Globe Building on the fire insurance maps. By 1966, the properties were fully redeveloped with the current structures, A 1,000 gallon diesel fuel AST was registered to this property in 2003. The AST is currently listed as inactive on the MPCA WIMN database. No additional information is available regarding the AST.

Adjacent southwest of the subject property past Cedar Street consists of two office buildings (one on the west corner and one on the Northeast side of the property) and a parking ramp. As early as 1887, this property consisted of the Ramsey County Courthouse and City Hall, as well as a jail. By 1903, the jail was removed. By 1940, the Courthouse was removed, and the structure on the west corner of the property was constructed and listed as Northern States Power Co. offices. By 1958, the structure on the northeast side of the property (known as the Minnesota Mutual Life Insurance Co.), as well as the parking garage, were constructed. MPCA Leak site #19805 and Brownfield site #BF0000381 are associated with this property.

Adjacent west of the subject property, past the intersection of East 4th Street and Cedar Street, consists of a tower on East 5th Street (built in 1966), a tower on East 6th Street (built in 1971), and the Alliance Bank Center Parking Garage (built in 1969), which extends over Cedar Street. These properties have been developed since at least 1887 with various structures, primarily used for hotels, offices, an electric power substation, a telephone exchange company, and city water department offices. By 1974, the properties had been fully redeveloped with the current structures.

Adjacent northwest of the subject property consists of an office building (Northwestern National Bank Building) and parking garage constructed since at least 1969. Historically, the property had been developed since at least 1885 with commercial and/or residential structures, including

retail stores, a bank, warehouses, bowling alleys, printing and photo shops, a plating and gas fixture manufacturing business (in at least 1903) a parking ramp, a fuel station (from at least 1929 through at least 1964), repair shops, and a hotel. This property is also registered as a closed tank release site (#17857), a CERCLIS site (MND058319807) and a hazardous waste generator.

Adjacent north of the subject property consists of the US Bank Center tower, which was built in the 1970s, as well as a small structure built in the 1940s. Prior to the 1970s, this property was developed since at least the 1880s with an opera house, retail, offices, industrial businesses, and dwellings. Historical uses at the property included a marble works company, printing shops, a gun shop, a grinding shop, a machine shop, banks, and a sign painting business. Several closed Leak sites (LS0007014 and LS0008464) and an active UST listing are associated with this property.

Adjacent northeast of the subject property past Minnesota Street consists of several office buildings, including the First National Bank Building. The existing buildings were constructed in 1915 (Merchants Bank building, now part of First National Bank building), 1931 (First National Bank building), and 1968 (First National Bank building addition). The property had been developed since at least 1887 with various commercial structures, including retail stores, restaurants and bakeries, banks, bowling alleys, printing businesses, barber shops, fur and clothing stores, cigar shops, a hardware store, a business identified as "Elk Cleaners and Launderers br" from at least 1944 through at least 1964, a fuel station in at least 1951, a rifle range in the basement of the Merchants Bank building from at least 1951 through 1969, a cleaner from at least 1997 through 2010, and parking garages. This property is also listed as a hazardous waste generator.

An apartment complex, constructed in 1970, is adjacent east of the subject property, past the intersection of Minnesota Street and East 4th Avenue. Prior to 1970, the property had been developed since at least the 1880s. Between the 1880s and 1970, the property was occupied with a life insurance company, the St. Paul Daily News printing press, a bicycle shop, produce shops, a steam laundry shop, machine shops, restaurants, and hotels.

Adjacent southeast of the subject property past East 4th Street consists of parking garages and two buildings: the historic Minnesota Building, and office and dwelling tower built in 1929, and an additional structure on the east corner of the property built in 1960 as a YWCA. The east structure is currently a school. The property has been developed since at least 1887 with various commercial and office buildings containing various uses, including retail stores, warehouses, machine shops, a repair shop, newspaper printing businesses, a creamery, and a fuel station from at least 1951 through 1958. An ash pit and coal bin are depicted beneath the sidewalk on the north corner of the property from at least 1903 through 1926. The property is also registered as a closed tank release site (13708), an inactive VIC/PB Program site (VP10450), and is noted as having soil impacted with petroleum and metals. The site is also listed as a hazardous waste generator.

5 Subject Property Reconnaissance

SEH conducted a site reconnaissance of the subject property and surrounding properties on June 13, 2018. Select photographs of the site are included in **Appendix I**.

5.1 Methodology and Limiting Conditions

The site reconnaissance included a site visit to observe the subject property to the extent not obstructed by bodies of water, buildings, heavy vegetation, stored materials, or other obstacles.

SEH conducted observations of the subject property by walking across the site. Adjacent property observations were made from public road right-of-ways, parking lots and other publicly-accessible areas. Interior inspections of adjacent buildings are not within the scope of a Phase I ESA. Contaminant sources and/or environmentally hazardous materials/substances may potentially exist within any structure.

5.2 General Site Reconnaissance Information

SEH made the following general site reconnaissance observations.

5.2.1 Current Uses of the Subject Property

The subject property is used as a light rail and bus station. An indoor staircase connects the subject property to skyways linked to adjacent properties. A large open grassy area separate the light rail and bus stations.

5.2.2 Current Uses of Adjacent Properties

Properties surrounding the subject property appear to be primarily commercial and residential.

5.2.3 Observable Past Uses of the Subject Property

Past uses of the subject property were not observed.

- 5.2.4 Observable Past Uses of Adjacent Properties Past uses of adjacent properties were not observed.
- 5.2.5 Geologic, Hydrogeologic, Hydrologic, and Topographic Conditions The topography of the subject property and surrounding areas are relatively flat.

5.2.6 General Description of Structures

The structure located on the property is a two-story building with a stairway and elevator connecting the transit stations to the local skyway system.

5.2.7 Roads

Roadways adjacent to the subject property include 5th Street East, Minnesota Street, 4th Street East, and Cedar Street.

5.2.8 Potable Water Supply

Evidence of city water, storm and sanitary systems were observed on the subject property.

5.2.9 Sewage Disposal System

Observations indicate that the property is connected to the city sewage disposal system.

5.2.10 Storage Tanks

No USTs were observed at the time of site reconnaissance.

No ASTs were observed at the time of site reconnaissance.

5.2.11	Odors No noxious odors were noted during the site visit.
5.2.12	Pools of Liquid There were no suspicious pools of liquid observed on the subject property or adjacent properties.
5.2.13	Drums, Totes, and other Containers No drums, totes or other containers were observed on the subject property.
5.2.14	Hazardous Substances and Petroleum Products in Connection with Identified Uses
	No petroleum products or hazardous substances were observed on the subject property or adjacent properties.
5.2.15	Unidentified Substance Containers No unidentified substance containers were observed on or adjacent to the subject property at the time of site reconnaissance.
5.2.16	Polychlorinated Biphenyls (PCBs) One transformer was observed on the subject property. Although the transformer appeared to be in good condition (no rusting, leaking, or staining), no "NON-PCB" stickers were observed on the transformer.
5.3	Interior Observations The interior of the staircase/elevator building was observed during site reconnaissance.
5.3.1	Heating and Cooling The subject property has forced air heating and cooling.
5.3.2	Stains or Corrosion No stains or corrosion were observed within the structure located on the property.
5.3.3	Drains and Sumps No drains or sumps were observed within the building on the subject property.
5.4	Exterior Observations SEH made the following exterior observations during the site reconnaissance.
5.4.1	Pits, Ponds, or Lagoons No pits, ponds, or lagoons were observed on the subject property or surrounding properties.
5.4.2	Stained Soil or Pavement No significant areas of stained soil or pavement were observed on the subject property at the time of site reconnaissance.

5.4.3 Stressed Vegetation

No stressed vegetation was observed on the subject property at the time of site reconnaissance.

5.4.4 Solid Waste

At the time of the site reconnaissance, no landfills or solid waste were observed on or adjacent to the subject property. Small amounts of scattered debris were observed adjacent to roadways, although the amount of debris appeared to be minimal. Dumpsters were observed at industrial and commercial properties.

5.4.5 Waste Water

Observations indicate that the property is connected to the city sanitary sewer.

5.4.6 Wells

The following wells were observed on the subject property or adjacent properties.

- Unique Well ID: 200032, St. Paul Dispatch, commercial use
- Unique Well ID: 200031, Federal Land Bank, commercial use

A review of wells listed in the MDH MWI was conducted. Information from the review is summarized in **Section 5.3.4**.

5.4.7 Septic Systems

See Section 5.2.9 of this report

6 Interviews

Interviews were conducted with persons familiar with the subject property to obtain information regarding the presence or possible presence of RECs, CRECs or HRECs in connection with the subject property.

6.1 Interview with Local Government Officials

On June 11th, 2018, SEH interviewed Josh Williams, senior city planner with the City of St. Paul. Mr. Williams provided SEH with a Phase II ESA and Response Action Plan (RAP) for the subject property that were completed prior to the development of the site as a light rail station. Mr. Williams had no additional knowledge of environmental issues at the site.

On June 14th, 2018, SEH interviewed Karen Riley, environmental coordinator with Ramsey County. Ms. Riley had no knowledge of any environmental spills, releases, or hazardous waste generation issues in the vicinity of the subject property.

7 Identification of Vapor Encroachment Considerations

A Vapor Encroachment Condition (VEC) is the presence or likely presence of chemicals of concern (COC) vapors in the sub-surface of a property caused by the release of vapors from contaminated soil or groundwater either on or near the property with the contaminant source. Under certain conditions vapor encroachment can pose a risk to a property absent of a soil or groundwater condition. The new Phase I ESA standard (ASTM E1527-13) published in 2013 requires evaluation of VECs to address this concern.

The intent of this section of the report is to identify concerns for the subject property solely based on vapor encroachment (specifically in the absence of soil or groundwater RECs. Where a vapor condition is associated with a soil or groundwater REC the discussion is included in **Section 9** of this report. Based on the findings from the vapor consideration assessment, no VECs were identified during completion of this vapor migration assessment.

7.1 Methodology

The Standard Guide for Vapor Encroachment Screening on Property Involved in Real Estate Transactions (ASTM E2600-15) provides an industry consensus methodology to assess vapor migration. Use of E2600-15 methodology is not required to achieve compliance with AAI – an environmental professional (EP) may use alternative methodology as deemed appropriate, but this must be documented in the Phase I report (i.e., it must be "capable of being reconstructed by an EP other than the EP responsible for the Phase I").

In this Phase I investigation, the methodology used to conduct this vapor migration assessment is the Buonicore Methodology (Buonicore 2011). This method can be used when groundwater flow direction is known or can be inferred. The tables below show the distances from the target property that determines the possibility of a site causing/having caused a VEC.

Source Location	Distance (feet) - E 2600-10	Distance (feet) - E 2600-10 with Buonicore Methodology
Up Gradient	1,760	1,760
Down Gradient	1,760	100
Cross Gradient	1,760	365

Net Reduction in Area of Concern of Known or Suspect Chemicals Of Concern (COC) Sources

Net Reduction in Area of Concern of Known or Suspect Petroleum Hydrocarbon (PHC) Sources

Source Location	Distance (feet) - E 2600-10	Distance (feet) - E 2600-10 with Buonicore Methodology
Up Gradient	520	520
Down Gradient	520	100 (LNAPL)
		30 (dissolved)
Cross Gradient	520	165 (LNAPL)
		95 (dissolved)

The MPCA online map *Sites with Identified or Potential Vapor Risks* was unavailable at the time of this assessment.

7.2 Assumptions

As stated in **Section 1.3**, groundwater is expected to flow southeast in the vicinity of the subject property. The water table is expected to be approximately 33 to 80 feet bgs and flow southeast. Perched groundwater may also be present at the subject property and adjacent area.

7.3 Results of Vapor Encroachment Condition Evaluation

Based on the findings from the vapor consideration assessment, no VECs were identified for the subject property during completion of this vapor migration assessment.

RECs that may also pose a vapor concern to the subject property are discussed in Section 9.

8 Findings and Opinions

SEH has completed this Phase I ESA, and based on the information presented above, the following findings and opinions are summarized below. Select features are mapped on **Figure 2**.

8.1 General Overview

According to previous investigations, well logs, and publications, soil on the subject property includes approximately 10 to 15 feet of fill soil above clay facies, Grey Cloud terrace, and Langdon terrace deposits. The clay facies are described as slackwater sediment deposited at the Grey Cloud terrace level in what was likely an abandoned waterfall plunge-pool (MGS, 2007). The uppermost bedrock unit at the subject property is the St. Peter Sandstone, underlain by the Prairie du Chien formation. To the west of the subject property, the Platteville and Glenwood Formations overlay the St. Peter Sandstone.

The subject property and surrounding area have been heavily developed since at least the late 1800s with commercial, industrial, and residential uses. By 1974, the majority of these structures were replaced with new structures housing primarily offices and restaurants along the northwest side and a parking lot along the northeast side of the subject property.

The subject property was investigated in 2009 for the Central Corridor LRT (2009, Braun) project. The project included construction of the Central Station that currently occupies the central portion of the subject property, as well as LRT tracks that transect the property from east to west. Eight soil borings were completed at the subject property to depths ranging from 10 to 44 feet bgs. Fill was encountered to depths ranging from 7.5 to 15 feet bgs. Debris was encountered within the fill material in several borings, and included concrete, floor tile, Styrofoam, carpet, brick, sheet vinyl flooring, and wood. It was noted in the Phase II ESA that some of the debris tested positive for asbestos. Soil samples collected from the borings identified PAH and arsenic concentrations exceeding Industrial SRVs and/or Short Term Worker SRVs. An Amended Response Action Plan, completed in February, 2011, identified asbestos containing debris within the fill material, to depths between 10 and 15 feet bgs. The RAP specified that a minimum of 4 feet of clean fill would be placed to separate permeable site features from any remaining ACM not excavated in the area. A RAP Implementation Report was completed for the site and reviewed by the MPCA in June 2014. A copy of the Amended RAP, as well as the RAP Implementation Reports for the Civil East Construction Segment and 4th Street Advanced Utility Construction Segment are included in Appendix D. The RAP Implementation Report, along with a 2018 Limited Phase I ESA completed by Braun Intertec, indicated that the fill soil impacted with petroleum, PAHs, arsenic, and asbestos-containing debris remains at the subject property at depths between 4 and 15 feet bgs. In addition, petroleum impacted perched groundwater was encountered during excavation. According to the Surficial Hydrogeology atlas for Ramsey County (MGS, 1992), depth to the surficial groundwater table is expected to flow southeast at approximately 40-60 feet bgs at the subject property. Nearby well and boring log data indicate that the depth to groundwater ranges from

33 feet to 80 feet bgs; however, perched groundwater has been encountered within the upper 20 feet bgs periodically throughout the downtown St. Paul area.

The property adjacent northeast of the subject property was occupied with a launderer/cleaner business between the 1940s and 1960s, as well as a fuel station in at least 1951. No data was available regarding the launderer/cleaner business, nor the fuel station or associated leaks/releases from either use at the property due to the age of the businesses.

An LSI completed on a property adjacent southwest of the subject property identified petroleum VOCs in soil vapor above MPCA action levels. This site also had a previous petroleum release.

Additional fuel stations, auto repair shops, print shops, and machine shops were historically located within 500 feet of the subject property. Based on distance and documented groundwater flow direction, these historic features are not expected to be concerns for the subject property.

8.2 Area Wide Concerns

Historical structures such as apartment buildings, commercial/industrial structures, etc., may have remnants of historical structures, such as demolition debris or foundations associated with the removed buildings. The potential exists that buried materials are present within the subject property and surrounding area that require management as solid waste or waste with hazardous materials or regulated substances. Additionally, some structures historically may have used undocumented heating oil tanks.

8.3 Data Gaps and Data Failures

No significant data gaps or data failures were identified in completion of the ESA.

Interviews with all past owners of parcels within the subject property were not within the scope of this Phase I ESA. The history of the subject property and prior assessments provided adequate information to complete the Phase I ESA. This is not a significant data gap.

9 Conclusions and Recommendations

SEH has performed a Phase I Environmental Site Assessment in general conformance with the scope and limitations of ASTM Practice E 1527-13 of the subject property specifically described in **Section 2.1**. Any exceptions to, or deletions or deviations from, this practice are described in **Section 1.4** and **Section 10** of this report.

This Phase I ESA has identified the following RECs or CRECs in connection with the subject property.

- Soil impacted with petroleum, PAHs, and arsenic, as well as asbestos-containing debris is present on the subject property at depths greater than four feet bgs, **REC**.
- The property adjacent northeast of the subject property was occupied with a launderer/cleaner business between the 1940s and 1960s, as well as a fuel station in at least 1951. No data was available regarding the launderer/cleaner business, nor the fuel station or associated leaks/releases from either use at the property due to the age of the businesses, **REC**.
- An LSI completed on a property adjacent southwest of the subject property identified petroleum VOCs above MPCA action levels. This site also had a previous petroleum release, **REC**.

10 Deviations

Other than any limitations and exceptions listed in **Section 1.4** and **Section 8.3**, there were no substantial deletions, deviations, or additions from this practice.

11 Limitations and Standard of Care

This ESA was completed in general accordance with ASTM E 1527-13, *Standard Practice for Environmental Assessments* and SEH's agreement with Metropolitan Council Transit. The findings and conclusions of this report are not scientific certainties, but probabilities based on professional judgment regarding the significance and accuracy of the collected data. When reasonably ascertainable, environmental data was obtained and reviewed. However, the accuracy of the sources and collected data is not the responsibility of SEH.

When a Phase I ESA is completed without subsurface exploration or chemical analyses of the soil and/or groundwater at the site, no statement of scientific certainty can be made regarding the environmental or subsurface conditions resulting from either onsite or offsite pollutant sources. The possibility always exists for contaminants to migrate from one property to another via surface water, groundwater or soil. The ability to accurately assess the environmental risk associated with the transport of pollutants through these media to the site is beyond the scope of this Phase I ESA.

This Phase I ESA report was prepared for the exclusive use of Metropolitan Council Transit. The negotiated scope of work imposed limitations on the collection and interpretation of evidence, consistent with the ASTM Standard, resulting in a commensurate uncertainty as to the conclusions drawn. The degree of uncertainty was deemed acceptable by Metropolitan Council Transit. Any third party interested in using or relying upon this report must first secure written authorization from Metropolitan Council Transit and SEH, and agree to accept SEH's terms and conditions respecting indemnification and agreed upon limitations of liability.

SEH's services were conducted in a manner consistent with the level of care and skill standard to the industry. The conclusions and recommendations contained in this report were arrived at in accordance with generally accepted professional practice at this time and location. Other than this, no warranty is implied or intended.

12 References

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- MDA *What's in my neighborhood*, interactive online mapping, www.mda.state.mn.us/chemicals/spills/incidentresponse/disclaimer.htm
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- Historical Information Gatherers (HIG), June 1, 2018, *Environmental Lien/AUL Search*, Target Property: 335 & 355 Minnesota St/ 55 4th Street E., Ramsey County, Minnesota

Pipeline and Hazardous Materials Safety Administration (PHMSA), 2012, *National Pipeline Mapping System Public Map Viewer*, <u>https://www.npms.phmsa.dot.gov/PublicViewer/composite.jsf</u>

13 | Signature(s) of Environmental Professional(s)

I declare that, to the best of my professional knowledge and belief, I meet the definition of Environmental professional as defined in §312.10 of 40 CFR 312 (**Appendix J**).

I have the specific qualification based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. I have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in §312.10 of 40 CFR 312.

Allen H. Sunderman, PG Project Manager

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Figures

Figure 1 – Site Location Figure 2 – Site Features



This map is neither a legally recorded map nor a survey map and is not intended to be used as one. This map is a compilation of records, information, and data gathered from various sources listed on this map and is to be used for reference purposes only. SEH does not warant that the Geographic Information System (GIS) Data used to prepare this map are error free, and SEH does not represent that the Gis Data used for navigational, tracking, or any other purpose requiring exacting measurement of distance or direction or precision in the depiction of geographic features. The user of this map acknowledges that SEH shall not be liable for any damages which arise out of the user's access or user of data provided to use of a strained to the strained to the liable for any damages which arise out of the user's access or use of data provided to the strained to the strained to the liable for any damages which arise out of the user's access or use of data provided to the strained to the strained to the liable for any damages which arise out of the user's access or use of data provided to the strained to the strained to the liable for any damages which arise out of the user's access or user of adata provided to the strained to the strained



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