

Phase I Environmental Site Assessment

Bassett Creek Main Stem Erosion Repair Project

Bassett Creek from Cedar Lake Road to Dupont Avenue

N/2nd Avenue N, plus Fruen Mill Site

Minneapolis, MN

December 2015

Crystal • Golden Valley • Medicine Lake • Minneapolis
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*Bassett Creek from Cedar Lake Road to Dupont Avenue
N/2nd Avenue N, plus Fruen Mill Site
Minneapolis, Minnesota
December 2015*

Bassett Creek Watershed Management Commission



Prepared by
Barr Engineering Company
4300 MarketPointe Drive, Suite 200
Minneapolis, MN 55435-4803
Phone: 952-832-2600 • Fax: 952-832-2601

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Avenue N, plus Fruen Mill Site
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1.0 Introduction

On behalf of the Bassett Creek Watershed Management Commission (BCWMC), Barr Engineering Co. (Barr) completed a Phase I Environmental Site Assessment (Assessment) of 0.85 mile of Bassett Creek between Glenwood Avenue N and 2nd Avenue N. For the purposes of this Assessment, the Property is defined to include three reaches of the creek plus all properties within 50 feet of the creek centerline. The Property location is shown on Figure 1. For ease of discussion, the Property is divided into three reaches (Reach 1, Reach 2, and Reach 3). Reach 1 extends from Cedar Lake Road to Irving Avenue S. Reach 2 extends from Irving Avenue S. to Dupont Avenue/2nd Avenue N. Reach 3 is adjacent to the Fruen Mill site.

This report summarizes the findings, opinions, and conclusions of the Assessment. Detailed descriptions of the Property setting, utility information, land-use history, regulatory history, and current Property conditions and features are presented in the Phase I documentation in Appendix A. Informational resources are described in Section 5 of this report and are assigned unique reference numbers, which are used throughout the report and Appendix A.

Barr has performed this Assessment in conformance with ASTM, International (ASTM) Practice E 1527-13 (Practice). No intentional deviations from the Practice were made in performing this Assessment except as described in Section 1.4. In following the Practice, this Assessment also complies with the U.S. Environmental Protection Agency 40 CFR Part 312 Standards and Practices for All Appropriate Inquiries; Final Rule.

1.1 Purpose

The purpose of the Assessment is to identify recognized environmental conditions (RECs) in connection with the Property as defined by the Practice and discussed in the findings and opinions section of the report. The Assessment will help determine if possible contamination issues are present and need to be addressed as the BCWMC Bassett Creek Main Stem Erosion Repair Project is designed and constructed.

1.2 Scope of Services

The Assessment involved completion of the following five components described in Section 7 of the Practice: records review, site reconnaissance, interviews, reporting, and file reviews. The following tasks were completed during the Assessment. The details of each task are described below and in Appendix A.

Site Reconnaissance

- A visual inspection of the Property was conducted during a site visit. Current conditions with respect to land use; chemical and waste storage, use, and disposal; facility operations and equipment; utilities; and evidence of potential releases of petroleum products or hazardous substances were documented, if observed. Evidence of historical uses or conditions, if encountered, was also documented. Current land-use and/or occupants of neighboring properties were documented during the site visit. A log of photographs from the site visit is included in Appendix B.

Records Review

- USGS topographic maps were reviewed and used to determine physical setting information. Topographic maps are included in Appendix C, except as noted below:
 - Historical topographic maps for Reach 3 were obtained from a prior Phase I ESA which covered this reach of the creek. These documents can be found in the the 2011 Phase I ESA (Ref. 1e).
- Discretionary physical setting sources including Minnesota Department of Health well and boring records for wells in the Property vicinity and published geological report) were reviewed and used to determine physical setting information.
- Historical aerial photographs, historical maps, and zoning records were reviewed for the Property and surrounding land. Historical aerial photographs and maps are included in Appendix C, except as noted below:
 - Historical photos of Reaches 1 and 2 were obtained from the Hennepin County Bassett Creek Environmental Data Access Tool (Ref. 1e).
 - Historical photos up through 2011 for Reach 3 were obtained from the 2011 Phase I ESA, which covered this reach of the creek (Ref. 1e).
 - The historical documents listed above can be found in the prior assessments (Ref. 1e).
- A fire insurance map search was conducted and maps were reviewed. Historical fire insurance maps are included in Appendix C, except as noted below:
 - Historical fire insurance maps for Reach 3 were obtained from the previous 2011 Phase I ESA and can be found in that document (Ref. 1e).
- A Regulatory Database Report was obtained and federal, state, and readily available tribal records databases were reviewed. The regulatory report is included in Appendix D.
- The Minnesota Pollution Control Agency's (MPCA) What's in My Neighborhood (WIMN) was reviewed to supplement regulatory data.

Interviews

- Interviews were conducted with two Property representatives.

Evaluation and Report Preparation

- This report was prepared to document the resources used during completion of the Assessment and to describe the findings, opinions, and conclusions of the Assessment.

File Review

- The Property and several adjoining properties were identified in the Historical Information Gatherers report. A regulatory file review was not conducted at the time of the Assessment; however, a file review was performed previously for all parcels within the Property as part of previous projects (Ref. 1e), which included a review and summary of previous investigation and remedial action reports and associated documentation. The results of the previous file review were incorporated into the Assessment.

1.3 Significant Assumptions

The following significant assumptions were made to complete the Assessment:

- The detailed history of ownership and land-use to satisfy the requirements and purpose of the Assessment was determined from the activities listed in Section 1.2, Scope of Work, and a title review was not needed. Lack of a title review is not a significant data gap.
- Because the BCWMC does not own the properties on to which the Property extends and no property transaction is involved, this Assessment focuses on potential impacts associated with soil and sediments that are anticipated to be excavated during the implementation of the BCWMC erosion repair project. Implementation of the project will not involve changes the land use or ownership of the Property.
- Other than the edge of the vacant Fruen Mill parcel, the Property does not have enclosed buildings and so vapor intrusion (VI) concerns were not evaluated as part of the Assessment. It is assumed that VI evaluations would be the subject of studies and redevelopment planning based on the anticipated location of future buildings, and the location of the presumed sources of known environmental impacts.

1.4 Limitations, Exceptions, and Data Gaps

The following limitations and exceptions are associated with this Assessment:

- Gaps of greater than five years in historical documentation are present, and are summarized in the following table.

Date Range	Property Changes
Prior to 1896	Historical documentation was not readily ascertainable; therefore, changes in general Property land-uses are unknown.
1901-1938 1938-1945 1945-1956 1956-1976 1993-2006	Gaps greater than five years in historical documentation are present; however, general Property land-uses did not change during the time period(s).

- Certain areas of the Property were not accessible or inspected during the site visit due to no authorized access. These areas include:
 - Private properties.
 - Buildings.
- Due to the large size of the Property, the focused nature of the Assessment, and the density of the surrounding urban neighborhoods, the regulatory database search radius was reduced to 500 feet around the Property.

Potentially Significant Data Gap	Sources of Information Consulted to Address Data Gap	Opinion on Significance of Data Gap
<p>Certain areas of the Property were not accessible or inspected during the site visit due to no authorized access. These areas include:</p> <ul style="list-style-type: none"> ○ Private properties. ○ Buildings. 	<p>Although incursions into buildings and some private properties was restricted, the site visit did include walking all three reaches of the creek allowing observation of the creek banks that will be the subject of the project. The only building located on the Property is the western edges of Fruen Mill. Additionally, aerial photographs were reviewed. Site visit of exterior features was conducted.</p> <p>Extensive information on the area was already available on the Hennepin County EDAT website. Site summaries are reproduced in Appendix E.</p>	<p>This data gap did not affect the ability of the EP to identify RECs on the Property for the purposes of the erosion repair and creek stabilization project.</p>
<p>Vegetation was partially dormant due to seasonal conditions; therefore, vegetative stress could not be determined.</p>	<p>Aerial photographs were reviewed. Extensive information on the area was already available on the Hennepin County EDAT website. Site summaries are reproduced in Appendix E.</p>	<p>This data gap did not affect the ability of the EP to identify RECs on the Property.</p>
<p>Interviews were not conducted with all owners of sites that intersected the Property.</p>	<p>Aerial photographs were reviewed. Site visit of exterior features was conducted.</p> <p>Extensive information on the area surrounding Reaches 1 and 2 was already available on the Hennepin County EDAT website. Site summaries are reproduced in Appendix E. A property representative for Reach 3 was interviewed.</p>	<p>This data gap did not affect the ability of the EP to identify RECs on the Property for the purposes of the erosion repair and creek stabilization project.</p>

1.5 Special Terms and Conditions

The scope of the Assessment did not involve the collection and analysis of any type of sample. The Assessment did not involve completion of any surveys or the offering of any opinions or advice with respect to structural engineering matters, asbestos-containing materials, radon, lead-based paint, lead in drinking water, wetlands, compliance with environmental regulations, cultural and historic resources, industrial hygiene, health and safety, ecological resources, endangered species, indoor air quality, biological agents, mold, or other conditions that are beyond the scope of the Practice.

Barr has performed its work in a manner consistent with the care and skill ordinarily exercised by members of the environmental profession under similar budget and time constraints. Within this context, Barr assumes responsibility for its own observations, along with its interpretation of the information gathered. No other warranty is made or intended.

Because Barr was not retained to verify information, Barr assumes no responsibility for the accuracy of information that it obtained from other sources including, without limitation, regulatory and government agencies, persons interviewed about the Property, and vendors of public data. Performance of the Practice is intended to reduce, but will not eliminate uncertainty regarding the presence of recognized environmental conditions on the Property. To the extent that Barr does not identify recognized environmental conditions on the Property, Barr's opinions in the report are not representations that the Property is free of such conditions. Under no circumstances can Barr represent or warrant that releases of hazardous substances or petroleum products do not exist on the Property.

1.6 User Reliance

The Assessment has been prepared for the exclusive use of the BCWMC, herein referred to as the "User." No others may rely on the Assessment without obtaining a formal authorization in the form of a reliance letter from Barr. Barr will provide reliance letters for additional parties only if authorized by the User.

2.0 Site Description

2.1 Location and Legal Description

The Property is located in parts of sections 20, 21, and 28, Township 27N, Range 24W in Minneapolis, MN. The Property location is shown on Figure 1. The Property consists of three stretches of corridor totaling roughly 1.5 miles in length within 50 feet in any direction of the centerline of Bassett Creek between Glenwood Avenue N and 2nd Avenue N. The Property is segmented into three reaches, as shown on figures 2 and 3.

2.2 Property Setting and Land Use

Topography of the Property slopes from north to south/southeast and is characterized by an incised creek channel surrounded by recreational, urbanized residential, and industrial areas. Shallow groundwater flow direction in the region is anticipated to be to the east toward the Mississippi River (Ref. 2b), although localized groundwater flow likely flows towards the creek during most seasonal conditions near the Property.

The Property is currently used for a recreational creek easement and is zoned for industrial and residential uses (Ref. 1d). Historically, the Property has been used for residential and industrial activities. An active railroad is present along the length of the property, generally to the east of Bassett Creek (Ref. 5a).

Additional descriptions of the Property setting and land-use are presented in Appendix A.

2.3 Erosion Repair Project

The Assessment is part of a concurrent feasibility study being conducted for the Bassett Creek Main Stem Erosion Repair Project on the portion of the creek identified as the Property. The feasibility study purpose is to identify segments of this reach of the creek that have been undergoing significant bank erosion and evaluate the feasibility of restoring and stabilizing those segments.

A main focus of the Assessment included identifying potential areas of environmental concern that may need to be addressed during the Bassett Creek Main Stem Erosion Repair Project. Therefore, the opinions with respect to RECs are focused on the potential for impacted soil or sediment to be encountered during grading, planting or excavation for the project. Known areas of groundwater impacts extending onto the Property from adjacent parcels were also reviewed in the context of its potential to impact future soil/sediment earthwork activities. The RECs identified in this Assessment will help determine whether additional soil investigation is needed, and to identify a scope of work for an investigation, if warranted.

2.4 User-Provided Information

As detailed in Section 6 of the Practice, the User has responsibilities associated with identifying possible recognized environmental conditions in connection with the Property. Barr provided a User Questionnaire to facilitate gathering information required by the Practice. The completed User Questionnaire is included in Appendix F.

Questions related purchase price were not applicable as a Property transaction is not planned. The User has no knowledge of environmental cleanup liens or activity use limitations against the Property. The User did not report conditions indicative of releases or threatened releases, any obvious indicators that point to the presence or likely presence of contamination at the Property, or specialized knowledge about the Property related to the items listed in Section 6 of the Practice (Ref. 4b, Appendix F).

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3.0 Findings and Opinions

This section summarizes observations regarding the presence of hazardous substances or petroleum products on the Property (findings) and discusses the basis for concluding if a finding is or is not a recognized environmental condition.

3.1 Definitions

Finding – For the purpose of this Assessment, a finding is an observation regarding the presence of hazardous substances or petroleum products on the Property which may be considered a recognized environmental condition, a historical recognized environmental condition, or de minimis condition.

Recognized environmental condition (REC) - A REC is defined by the Practice as “the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to 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.”

Historical recognized environmental condition (HREC) - An HREC is defined by the Practice as “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). Before calling the past release a historical recognized environmental condition, the environmental professional must determine whether the past release is a recognized environmental condition at the time the Phase I Environmental Site Assessment is conducted (for example, if there has been a change in the regulatory criteria). If the EP considers the past release to be a recognized environmental condition at the time the Phase I ESA is conducted, the condition shall be included in the conclusions section of the report as a recognized environmental condition.”

Controlled recognized environmental condition (CREC) – A CREC is defined by the Practice as “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). A condition considered by the environmental professional to be a controlled recognized environmental condition shall be listed in the findings section of the Phase I Environmental Site Assessment report, and as a recognized environmental condition in the conclusions section of the Phase I Environmental Site Assessment report.”

De minimis conditions – As defined by the Practice, conditions determined to be “de minimis” generally do not present a threat to human health or the environment and generally would not be subject of an

enforcement action if brought to the attention of appropriate governmental agencies. De minimis conditions are not considered RECs.

3.2 Findings and Opinions

Barr has identified the following findings and developed the following opinions regarding these findings, as summarized in the following table.

Finding	Description of Finding	Opinion with Respect to Finding (REC, CREC, HREC, de minimis)	REC ID #
Identified releases on the Property and adjoining properties	The area surrounding the Property has historically been used for industrial activities associated with petroleum and hazardous chemical releases to the environment. As shown in Tables 1a-1c (Appendix A), several regulated release sites have been documented on parcels within 50 feet of the creek centerline. Groundwater and soil contamination, including hazardous levels of lead in soil has been documented on the Property. Summaries of environmental sites in Reaches 1 and 2 are included in Appendix E and in Reach 3 are included in Table 3 (Appendix A).	The past property uses, documented releases, and remaining soil contamination on the Property is considered a REC.	REC #1
Undocumented dumping and filling	Dumping and filling has historically occurred along most of the Property, most significantly on the south side of Reaches 1 and 2 at the Irving Avenue Dump site. The regulatory report also confirms the presence of unpermitted dump near Reach 3. Some fill mounds and debris were also observed during the site visit.	Debris and chemical contamination has been documented in the fill and dump material on the Property at the Irving Avenue Dump site, and there is potential for contamination to be present in unpermitted dumping and unknown fill material in other areas along the creek. The documented contamination and potential for impacts to soil and groundwater makes this finding a REC.	REC #2
Visible sheen on water	Iridescent sheens were observed in water at the creek along the shores as well as near some culverts.	The nature of the sheen indicates the presence of petroleum product in the water. This finding is considered a REC.	REC #3
Abandoned equipment and material storage near edge of Property	Several large pieces of apparently abandoned machinery and surplus materials were observed in the southwest corner of the Minneapolis School District Transportation Center parcel. The machinery appeared to be rusted and in poor condition and was covered in a black liquid that	No release to the ground surface was identified and the machinery was not on the Property. This finding is not considered a REC for the purposes of the erosion repair and creek stabilization project.	NA

Finding	Description of Finding	Opinion with Respect to Finding (REC, CREC, HREC, de minimis)	REC ID #
	appeared to be petroleum or asphalt-related product. Photos of this area are included in Appendix B.		
Discharge pipes and trenches	Numerous stormwater pipes and runoff trenches were observed with discharge into Bassett Creek. Locations of the discharges are shown on Figure 4.	The pipes and trenches appeared to be in good condition and are probably associated stormwater outfalls with no signs of staining or visible indication of waste discharge. This finding is not considered a REC.	NA
Pole-mounted transformer	A pole-mounted transformer was observed on the Property along Reach 2.	The transformer appeared to be in good condition with no signs of staining or leaking. This finding is not considered a REC.	NA

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4.0 Conclusions

We have performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM Practice E 1527-13 of Bassett Creek from Cedar Lake Road to Dupont Avenue N/2nd Avenue N, plus Fruen Mill Site, Minneapolis, MN, the Property. Any exceptions to, or deletions from, this Practice are described in Section 1.4 of this report. This assessment has revealed no evidence of recognized environmental conditions in connection with the Property except for the following:

REC #1 – Identified releases on the Property and adjoining properties

REC #2 – Undocumented dumping and filling on the Property

REC #3 – Visible sheen on water

See the Findings and Opinions section for additional details.

4.1 Deviations

There were no deletions, deviations from, or additions to the Practice associated with the Assessment other than the limitations and exceptions listed in Section 1.4.

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5.0 References

The following resources are numbered for use as references.

Ref #	Resource	Years Covered or Item Date
Standard Historical Resources		
1a	Aerial Photographs	1938, 1945, 1956, 1967, 1978, 1988, 1993, 2006, 2008, 2009, 2012, 2013, 2014
1b	Fire Insurance Maps	1892, 1904, 1912, 1914, 1924, 1929, 1940, 1952, 1963
	Property Tax Files	Not reviewed
	Recorded Land Title Records	Not reviewed
1c	USGS Topographic Maps	1896, 1901, 1952, 1954, 1967, 1972, 1977, 1993, 2013
	Local Street Directories	Not reviewed
	Building \ Department Records	Not reviewed
1d	Zoning/Land Use Records	2015
	Other Historical Sources	Not reviewed
1e	Prior Assessments: <ul style="list-style-type: none"> Bassett Creek Areawide Groundwater Study, Hennepin County, 2015. https://hennepinedat.barr.com/ Phase I Environmental Site Assessment Bassett Creek – Golden Valley Road to Irving Avenue North, Golden Valley and Minneapolis, Minnesota. Prepared by Barr Engineering Company. June 2011 	November 2015 Verified with MPCA or property representative that information was up to date.
Discretionary and Non-Standard Physical Setting Sources		
2a	County Well Index (online), Minnesota Geological Survey	Accessed on November 5, 2015
2b	Geological Atlas of Hennepin County, Minnesota	1989
Standard Environmental Record Sources		
3a	Historical Information Gatherers Report (Appendix D)	November 2, 2015
Interviews		
4a	Property Owner/Key Site Manager: Lois Eberhart, City of Minneapolis Public Works, 612-673-3260	November 23, 2015
4b	Property Owner/Key Site Manager: Jeff Wallis, Developer for Fruen Mill, 651-247-1434	November 25, 2015
4c	User Representative: Laura Jester, BCWMC Administrator, 952-270-1990	November 4, 2015
Supplemental Resources		
5a	Site Visit Carly Lintner and Liz Maher, Barr Engineering Co.	November 4, 2015

6.0 Signature and Qualifications of Environmental Professional

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. I have the specific qualifications 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 40 CFR Part 312.

Barr performed this Assessment in conformance with the ASTM, International (ASTM) Practice E 1527-13. Special terms, conditions, limitations, and exceptions that apply to the Assessment are described throughout this Report and in the Appendices

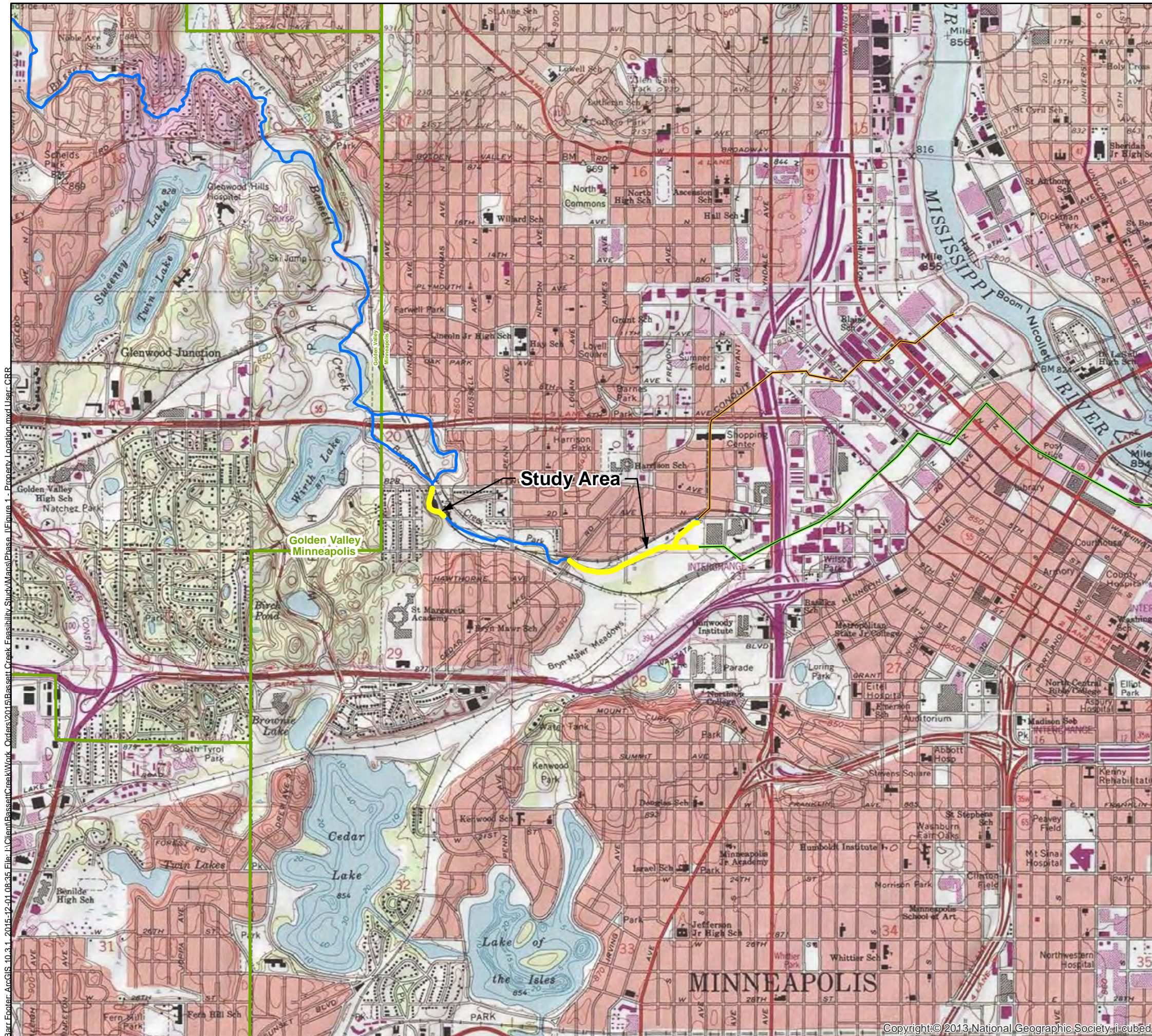
Dan Fetter, Environmental Professional (Date)

Elizabeth Maher, Environmental Support Staff (Date)

Qualifications of the Environmental Professional are summarized in Appendix G.

Figures

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- Study Area
- Stream
- Old Tunnel
- New Tunnel

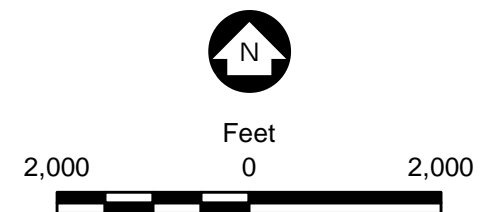
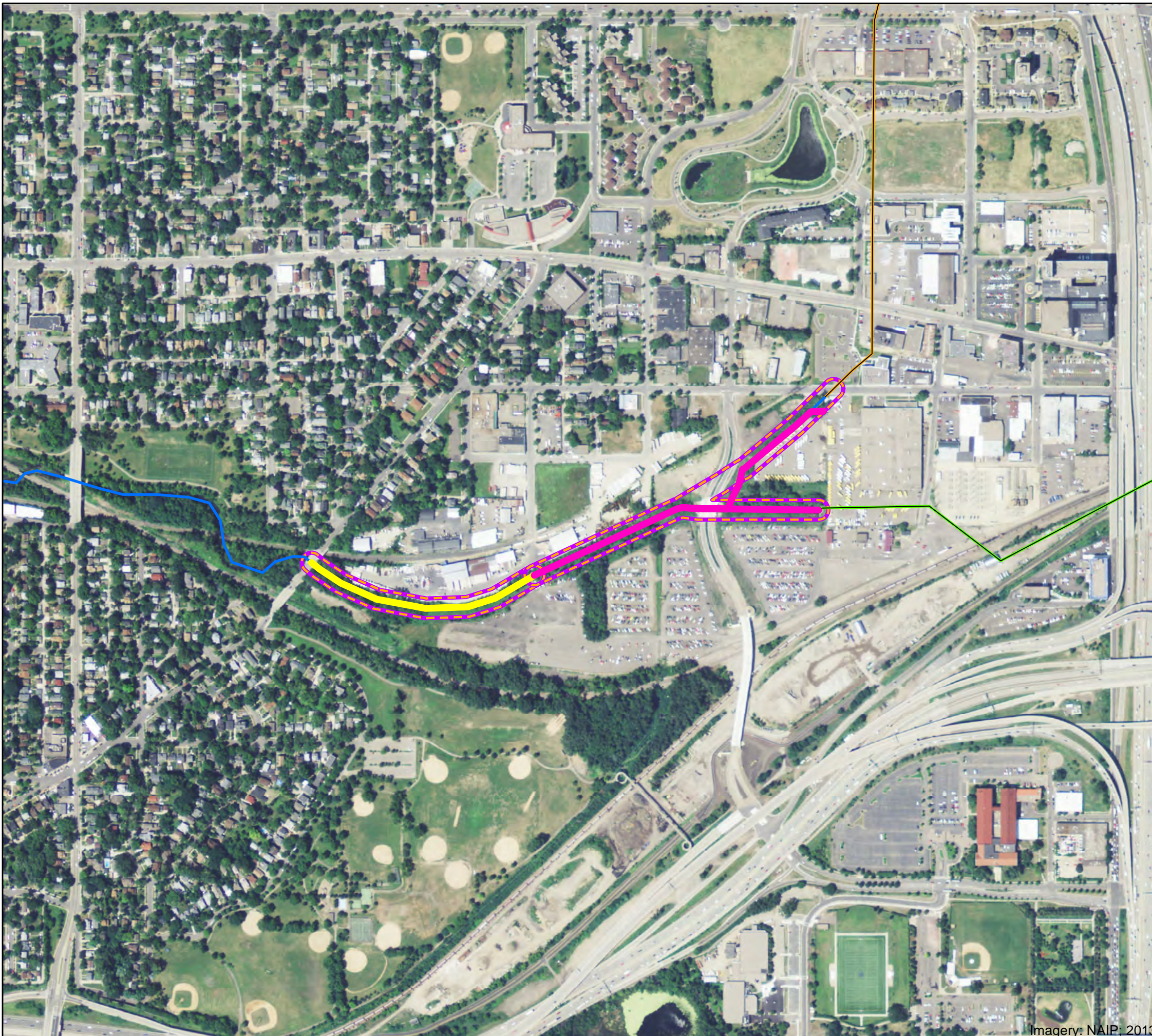


Figure 1

BASSETT CREEK STUDY AREA LOCATION
 Bassett Creek Main Stem Erosion Repair Project
 Bassett Creek Watershed
 Management Commission
 Minneapolis, Minnesota

Bar:Footlet-ArcGIS 10.3.1 - 2015-12-11 08:35 File: I:\Client\BassettCreek\Work_Orders\2015\BassettCreek_Feasibility_Study\Maps\Phase_1\Figure_1_-_Property_Location.mxd User: CRR



- Stream
- Old Tunnel
- New Tunnel
- Cedar Lake Rd to Irving Ave (Reach 1)
- Irving Ave to Dupont/2nd Ave (Reach 2)
- 50-Foot Study Reach Buffer

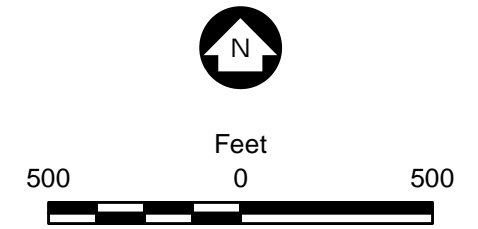


Figure 2
PROPERTY LAYOUT (EAST)
Bassett Creek Main Stem Erosion Repair Project
Bassett Creek Watershed
Management Commission
Minneapolis, Minnesota



- Stream
- Fruen Mill (Reach 3)
- 50-Foot Study Reach Buffer

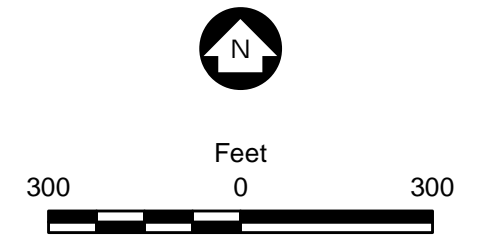
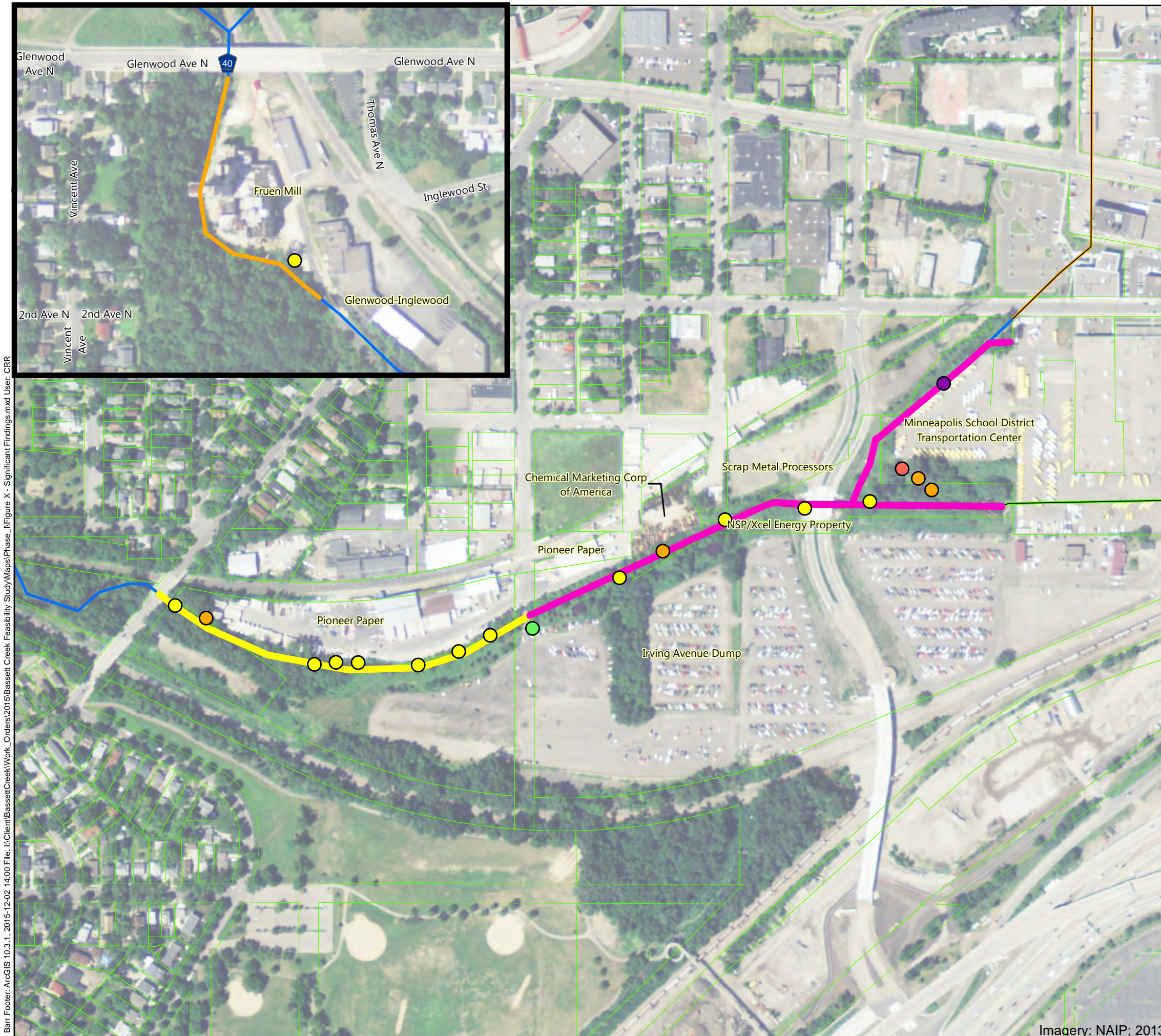


Figure 3

PROPERTY LAYOUT (WEST)
Bassett Creek Main Stem Erosion Repair Project
Bassett Creek Watershed
Management Commission
Minneapolis, Minnesota



- Miscellaneous Dumping
- Discharge Pipe or Trench
- Equipment Storage
- Pole-mounted Transformer
- Sheen Observed in Creek
- Parcels
- Stream
- Old Tunnel
- New Tunnel
- Cedar Lake Rd to Irving Ave (Reach 1)
- Irving Ave to Dupont/2nd Ave (Reach 2)
- Fruen Mill (Reach 3)

Environmental sites with documented contamination

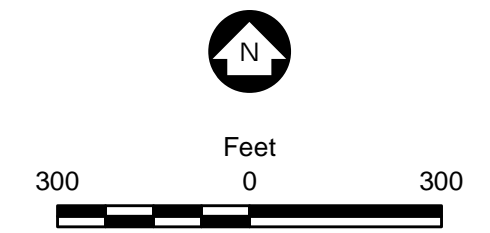


Figure 4

SUMMARY OF FINDINGS
 Bassett Creek Main Stem Erosion Repair Project
 Bassett Creek Watershed
 Management Commission
 Minneapolis, Minnesota

Appendices

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Appendix A

Phase I Documentation

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Appendix A

Phase I Environmental Site Assessment Documentation Bassett Creek Main Stem Erosion Control Project Bassett Creek from Cedar Lake Road to Dupont Avenue N/ 2nd Avenue N, plus Fruen Mill Site Minneapolis, MN December 2015

I. General Property Information

The Property location is shown on Figure 1. The Property consists of a corridor roughly 0.8 mile in length within 50 feet in any direction of the centerline of Bassett Creek. For ease of discussion, the Property is divided into three reaches (Reach 1, Reach 2, and Reach 3), as shown on Figures 2 and 3. Reach 1 extends from Cedar Lake Road to Irving Avenue S. Reach 2 extends from Irving Avenue S. to Dupont Avenue/2nd Avenue N. Reach 3 is adjacent to the Fruen Mill.

Property name: Bassett Creek from Cedar Lake Road to Dupont Avenue N/2nd Avenue N, plus Fruen Mill Site

County: Hennepin

Township: 29N **Range:** 24W **Sections:** 20, 21, 28

Property size: The Property consists of a corridor roughly 0.8 mile in length within 50 feet in any direction of the centerline of Bassett Creek.

Current Property owner and year of purchase: Multiple owners, including but not limited to Minneapolis Park and Recreation Board, City of Minneapolis, Pioneer Industries, June Capital, LLC, and other private owners.

Current Occupant(s): Multiple occupants including Minneapolis Park and Recreation Board, City of Minneapolis Public Works, Minneapolis Public School District and Pioneer Industries. The Fruen Mill site is vacant.

Current Property use: The Property is a recreational creek easement. Uses by occupants along the creek include the City of Minneapolis Impound Lot, Minneapolis public school district bus center, truck and trailer storage, a paper company, and areas of vacant land along Reaches 1 and 2. Park land, vacant buildings (Fruen Mill), and various commercial businesses are located along Reach 3,

II. Physical Setting

Surface elevation: Approximately 800 feet above mean sea level (MSL) (Ref. 1c).

Topographic conditions of Property: Topography surrounding Reaches 1 and 2 is generally flat with some gradual sloping on either bank of Bassett Creek. The western bank of Bassett Creek at Reach 3 slopes up 50 feet; the eastern bank is relatively flat (Refs. 1c, 5a).

Stratigraphy (soils and upper bedrock units): The surficial soils generally consist of organic and lacustrine deposits with clayey to loamy till. Area well logs confirm the presence of clay, sand, and glacial drift deposits existing along the Property. The presence of peat is documented in shallow surficial soils near Reach 1 and Reach 2. Depth to bedrock on the Property ranges from approximately 200-300 feet (Refs. 2a, 2b).

Nearest surface water body (name and distance): Bassett Creek is present on the Property.

Anticipated groundwater depth/flow direction: Regional groundwater flow is anticipated to be to the east toward the Mississippi River (Ref. 2b). Groundwater intercepts the land surface at the creek at an elevation of approximately 800 feet MSL (Ref. 2b). It is anticipated that the water table elevation is approximately equivalent to the elevation of the creek during low flow events.

Regional aquifer: Prairie Du Chein – Jordan Aquifer (2b).

III. Municipal Information & Utility Service to Property

Bassett Creek receives/transmits stormwater flow from adjacent properties, the City of Minneapolis, and other properties and cities upstream of Minneapolis. Besides stormwater discharges to the creek, there are no utilities that service the creek. Adjacent businesses that intercept the land within 50 feet of the creek are likely to have water and sanitary services. Determining the location and condition of these private property services was not performed as part of this Assessment.

Property Zoning

Reach 1 of the Property is zoned mainly as an industrial district with a small residential area in the southwestern quarter of the reach. Reaches 2 and 3 are zoned as industrial districts (Ref. 1d).

IV. Current Property Use

Current Property Waste Management

No operations are associated with the creek that require waste management. Waste management at adjacent properties was not assessed.

V. Property, Adjoining, and Surrounding Area Regulatory Status

The Property consists of the corridor represented by 50 feet in any direction of the centerline of Bassett Creek in each of the three reaches described above. Several properties intercepted by this corridor are listed in the Regulatory Report included in Appendix D. These properties are considered onsite, and the following table summarizes the associated sites and regulatory databases information.

BARR ENGINEERING COMPANY

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\\barr.com\projects\Mpls\23 MN\27\2327051\WorkFiles\CIP\Capital Projects\2017 Bassett Creek Cedar Lake Road to Tunnel\Feasibility Study\Work Files\Phase I ESA\Appendix A - Phase I Documentation\PHIESA_Appendix A.doc

Property and Adjoining Property Regulatory Status

Table 1a – Reach 1 (Cedar Lake Road to Irving Avenue)

ASTM List	Address	Listing Status	Potential or Documented Release to Environment	Was a Regulatory File Review Completed?
PVICP PVIC UAST VICP PCASPILLS	North adjoining – Pioneer Paper Stock Co., 155 Irving Ave. N	Active VIC site	<p>Yes – Soil contamination discovered during placement of borings for new building. Type of contamination unknown.</p> <p>Two 8,000-gallon USTs were removed from the site. One reportedly contained diesel and the other gasoline. No violations reported.</p> <p>Soil contamination discovered during placement of borings for new building. Type of contamination unknown.</p> <p>Eight gallons of hydraulic fluid was spilled in 2015. Site was closed the same year.</p>	*No file review completed. File review previously conducted and summarized in Appendix E.
SF UNPERMDUMPS UNPERMDUMPS CERCLIS NFRAP	South adjoining – Bassett Creek Irving Avenue Dump, 1 st and Irving avenues	Inactive	Unknown	*No file review completed. File review previously conducted and summarized in Appendix E.

Table 1b – Reach 2 (Irving Avenue to Dupont Avenue/2nd Avenue N.)

ASTM List	Address	Listing Status	Potential or Documented Release to Environment	Was a Regulatory File Review Completed?
SF UNPERMDUMPS UNPERMDUMPS CERCLIS NFRAP	Southeast adjoining – Bassett Creek Irving Avenue Dump, 1 st and Irving avenues	Inactive	Unknown	*No file review completed. File review previously conducted and summarized in Appendix E.
VICP	North adjoining – Harrison Redevelopment, Large area-wide VIC site that includes several other regulatory sites in the area	Inactive	Unknown	*No file review completed. File review previously conducted and summarized in Appendix E.
HWCS HWGS	North adjoining – 180 Humboldt Ave. N	Inactive/Unknown	Unknown	*No file review completed. File review previously conducted and summarized in Appendix E.
IC SF UAST VICP CERCLIS NFRAP NLRRCRAG RCRANGR05 RCRASUBC RCRAT	North adjoining – Chemical Marketing Corp of America, 180 Humboldt Ave. N	Active	Yes – Soil and groundwater contamination reported. Soil excavation also reported. Consent order in place. Contamination to the soil and an existing groundwater plume warranting a restrictive covenant (institutional control) to prevent disturbance. Seven USTs (5,000 to 20,000 gallons each) were removed from the site. Reported contents included mineral spirits, “chemical other or unspecified,” and “other substance.” No violations reported. No violations reported for other listings.	*No file review completed. File review previously conducted and summarized in Appendix E.

ASTM List	Address	Listing Status	Potential or Documented Release to Environment	Was a Regulatory File Review Completed?
LUAST PCASPILLS (4) TIERII UAST BF (2) RCRAGR05 HWGS	East adjoining - Transportation Center, 1001 2 nd Ave. N	Active	Yes - A diesel release was reported in 1993. Site closed in 1997. Potential – 20 gallons of light fuel oil and diesel was spilled in 1998. Site closed the same year. Potential – 5 gallons of light fuel oil and diesel was spilled in 1998. Site closed the same year. 30 gallons of light fuel oil and diesel was spilled in 1996. Site closed the same year. 20 gallons of light fuel oil and diesel was spilled in 2001. Site closed the same year. Five USTs (550 to 12,000 gallons each) were removed from the site, two were closed in place. Five tanks are in active use. Reported contents included gasoline, motor oil, used or waste oil, and diesel. No violations reported. Soil and sediments contaminated with petroleum, VOCs, lead, other metals, and PAHs No violations for other listings reported.	*No file review completed. File review previously conducted and summarized in Appendix E.
BF (2)	Southeast adjoining – Northern States Power/Xcel Energy, 101 Fremont Ave. N	Unknown	Yes – Soil contaminated with petroleum, PCBs, VOCs, lead, other metals, and PAHs	*No file review completed. File review previously conducted and summarized in Appendix E.
UAST LUAST PVICP (3) PCASPILLS (5) UAST RCRANGR05 HWGS	North adjoining – Former Scrap Metal Processing Center, 1129 2 nd Ave. N	Inactive	Yes – An undocumented amount of fuel oil was released in 1999. Soil and groundwater contamination were reported. One 2,000-gallon UST used for motor oil and one 1,000-gallon UST used for fuel oil were removed. No violations	*No file review completed. File review previously conducted and summarized in Appendix E.

ASTM List	Address	Listing Status	Potential or Documented Release to Environment	Was a Regulatory File Review Completed?
			<p>reported.</p> <p>50 gallons of used or waste oil spilled in 1993. Site was closed in 1996. Unknown if contamination remains on site.</p> <p>200 gallons of petroleum spilled in 1994. Site was closed the same year.</p> <p>A punctured fuel tank leaked 200 gallons of fuel into the soil in 1996. Site was closed the same year.</p> <p>100 gallons of petroleum spilled in 1995. Site was closed the same year.</p> <p>No violations reported related to two 250-gallon fuel and waste oil tanks still on site.</p> <p>No violations for other listings reported.</p>	

Table 1c – Reach 3 (Fruen Mill)

ASTM List	Address	Listing Status	Potential or Documented Release to Environment	Was a Regulatory File Review Completed?
UNPERMDUMPS	Northwest Property – Promiscuous Dump, NE Corner of Glenwood and Railroad	Inactive	Unknown	No
UAST VICP LUAST	North Adjoining - Fruen Grain Elevator/ Conagra Fruen/ Former Grain Elevator, 301 Thomas Ave North	Inactive LUAST-Active	Two removed fuel oil USTs. LUAST - Groundwater contamination and contaminated soils remaining.	Yes

ASTM List	Address	Listing Status	Potential or Documented Release to Environment	Was a Regulatory File Review Completed?
LUAST (3) HWGS RCRAGN UST	East Adjoining – Glenwood- Inglewood Co, 225 Thomas Ave N	Inactive/Active	Contaminated soils remaining No records of violations associated with generator status. One gasoline fuel UST remains	Yes

ASTM List Definitions:

SF – Superfund Site Information Listing

UNPERMDUMPS – Unpermitted Dump Sites

CERCLIS – Comprehensive Environmental Response, Compensation, and Liability Information System

NFRAP – No Further Remedial Action Planned Sites

VICP – Voluntary Investigation and Cleanup Program Sites

HWGS – Hazardous Waste Generator Sites

LUAST – Registered Leaking Storage Tanks

UAST – Registered Storage Tanks

RCRAGR05 – Resource Conservation & Recovery Act – Generator Facilities

PCASPILLS – Spills Listing

*Due to previous review of the Property regulatory files as part of the Bassett Creek Areawide Groundwater Study for Hennepin County (Ref. 1e) and the existing knowledge of the historical Property use and environmental history, a file review was not completed for Reaches 1 and 2. Previously completed environmental site summaries for Sites adjoining Reaches 1 and 2 are included in Appendix E.

Surrounding Area Regulatory Status

The search radii were adjusted to search for all ASTM required databases within 500 feet of the Property. For the purposes of this Assessment, all sites within this search distance are considered either potentially adjacent or upgradient. Several sites were identified within this search radius in the Regulatory Report. Groundwater generally flows toward the east in the region and towards Bassett Creek (within the Property) from adjacent sites (Ref. Geological Atlas of Hennepin County, Minnesota, 1989). Additionally, topography of the area indicates that surface drainage would be expected to flow towards the Property from adjacent sites (Ref. Minneapolis North and Minneapolis South Quadrangles, United States Geological Survey, 1993). Potentially upgradient or adjacent sites are described in the table below.

Table 2a – Reach 1 (Cedar Lake Road to Irving Avenue)

Name	Address	ASTM Listing(s)	Distance & Direction From Property	Comments (including upgradient, downgradient or sidegradient)	Do issues related to the listing indicate the potential for impacts to soil, groundwater or vapor at the Property?
CP Rail Road	165 James Ave N.	PCASPILLS	0.06 miles east	Upgradient of Property	Yes - A historical release was discovered while doing soil borings for new track, suspect offsite source.
Mavo Systems	167 James Ave N.	HWGS	0.06 miles east	Upgradient of Property	No – no violations reported.
WKD Incorporated	179 Irving Ave N.	PCASPILLS VICP LUAST	0.06 miles east	Upgradient of Property	Yes - An undocumented amount of petroleum was released, reported in 1989.
Leef Holdings Llc	212 James Ave N.	PCASPILLS (3) VICP (2) RCRANGR05	0.06 miles northwest	Upgradient of Property	Yes – An undocumented amount of an unreported substance was released during a tank overflow.
Naugle Leck Inc.	175 James Ave. N.	RCRANGR05 HWGS	0.03 miles east	Upgradient of Property	No – No violations reported for any listings.
Cedar Lake Road	94 Cedar Lake Rd.	PCASPILLS	0.03 miles east	Upgradient of Property	Potential – One gallon of mineral oil was spilled from a transformer in 1997. Site was closed in 2000.

Table 2b – Reach 2 (Irving Avenue to Dupont Avenue/2nd Avenue N.)

Name	Address	ASTM Listing(s)	Distance & Direction From Property	Comments (including upgradient, downgradient or sidegradient)	Do issues related to the listing indicate the potential for impacts to soil, groundwater or vapor at the Property?
Wilson Griak	227 Colfax Ave. N	LUAST HWGS	0.05 mile northeast	Upgradient of the Property	Yes – A leak of an unknown amount of unleaded gasoline was reported in 2003.
Feist Blanchard	1207 2 nd Ave. N	LUAST HWGS PCASPILLS	0.05 mile northeast	Upgradient of the Property	Yes – An undocumented amount of diesel was released in 1999. Groundwater contamination

Name	Address	ASTM Listing(s)	Distance & Direction From Property	Comments (including upgradient, downgradient or sidegradient)	Do issues related to the listing indicate the potential for impacts to soil, groundwater or vapor at the Property?
					was reported. Site was closed the same year. Petroleum, VOCs, lead, other metals, and PAHs, were discovered in the soil during a Phase II ESA in 2004. No violations for other listings reported.
Wunder Kline Donohue	250 Fremont Ave. N	PCASPILLS LUAST	0.05 mile northeast	Upgradient of Property	Yes – An undocumented amount of petroleum spilled from a UST in 1989. Site was closed in 1996. Unknown if contamination remains on site. An undocumented amount of gasoline was released in 1996. Groundwater and offsite contamination were reported. Pump and treat system was installed in 1992 and site was closed in 1996.
Warden Oil	187 Humboldt Ave. N	HWCS HWGS LUAST VICP CERCLIS	0.06 mile northeast	Upgradient of Property	Yes – An undocumented amount of used oil was released in 1992. Groundwater contamination was reported. Site was closed the same year. EPA completed a removal action of the site and capped the site with a passive drainage system and one foot of gravel.
Clevite Engine Parts	1215-1221 2 ND Ave N.	HWGS (2) RCRAGEN05 (2)	0.07 miles east	Upgradient of Property	No – no violations reported.
Washburn Center for Children	Dupont Ave N. and Glenwood Ave	PCASPILLS	0.08 miles northeast	Unknown	Yes – Small volume of DRO contaminated soil discovered at development site during construction.
A & L Laboratories	1001 Glenwood Ave	AGSPILLS (2) BULKSTORA	0.08 miles east	Upgradient of Property	Yes – An undocumented amount of chemical base was released to storm sewer.

Name	Address	ASTM Listing(s)	Distance & Direction From Property	Comments (including upgradient, downgradient or sidegradient)	Do issues related to the listing indicate the potential for impacts to soil, groundwater or vapor at the Property?
		GE HWGS LUAST PCASPILLS (3) VICP			Approximately 1800 gallons of sodium hypochlorite was released from a storage tank onsite.
Old Freighthouse,	Humboldt and Currie aves. N	LUAST VICP	0.05 miles east	Upgradient of Property	Yes – An undocumented amount of diesel was released in 2000. Groundwater was contaminated and contaminated soils remain on site. Site was closed in 2008. Chlorinated solvents were detected in the soil vadose zone and groundwater, restrictive covenant in place
Minneapolis Impound Lot	51 Colfax Ave N	PCASPILLS	0.09 miles east	Upgradient of Property	Potential – A 55-gallon drum containing an unknown waste was abandoned at the city's impound lot at 51 Colfax Ave N.

Tribal Sites

As part of the Historical Information Gatherers Report, locations of Native American reservations equal to or greater than 640 acres in size within the search area are reported. No reservations meeting this size criterion were identified within 1 mile of the Property (Ref. 3a).

Orphan Site Summary

No unmapped (orphan) sites were identified in the regulatory report.

VI. Report and File Review Summary

Previous Environmental Investigations/Remedial Actions of the Property

Previous investigations and remedial actions completed at the sites below in Reaches 1 and 2 of the Property are summarized in Appendix E:

- Chemical Marketing
- Irving Avenue Dump
- Minneapolis School District Transportation Center
- NSP/Xcel Energy
- Pioneer Paper
- Scrap Metal Processors

Previous investigations and remedial actions for Reach 3 are summarized in the table below:

Table 3 – Reach 3 File Review Summary

Site Name, Address, and ASTM Listing	File Review Summary and Potential Impacts to Property (Ref. 1e)	Reports Reviewed at MPCA (Ref. 1e)
Property (Fruen Grain Elevator) 303 North Thomas Avenue, Minneapolis, MN VIC – VP20360 Tank Site - 1696 LUST Site - 15956	<ul style="list-style-type: none"> • Grain processing mill operations started in the early 1900s. • Entered into the VIC Program (VP20360) in 2005. • The VIC site was closed on 8/27/07. • Tank Site #1696 includes: One removed 20,000-gallon fuel oil UST and one removed 8,000-gallon fuel oil UST. Both were reported to be located on the east side of the property. • LUST site (ID 15956) was discovered on 12/10/04. • Between, and to the north, of the two remaining buildings (in 2004) was the location of former railroad spur tracks. Staining has also been observed along the railroad. • Exterior transformers were present. • Pesticides have been used and stored onsite. • Several RECs were identified based on historical conditions. Potential lead paint and asbestos containing material were also reported <p>2004 Investigation:</p> <ul style="list-style-type: none"> • 6 soil borings were installed in the area of the former 8,000 gallon UST basin, outdoor electrical transformers and along the railroad spur. • Two PCB wipe samples were collected near two air compressors and a former electrical transformer. • Four water samples, three from soil borings and one from the building basement were collected and analyzed for DRO, VOCs/BTEX, pesticides and/or PCBs. • Soil samples were collected and analyzed for DRO, VOCs/BTEX, pesticides and/or PCBs. • Highest soil headspace detected at 8 ft below grade in boring SB-2; no staining or odors identified. • DRO was detected in the groundwater sample from boring SB-2, which was east of the former tank basin. No other tested parameters were detected. • DRO was also detected in soil samples from borings SB-1 and SB-2 near the tank basin. No other tested parameters were detected. • PCBs were identified in the wipe samples collected from the 	<p>DPRA Environmental (DPRA). June 28, 1998. <i>Phase 1 Environmental Site Assessment Report</i></p> <p>DPRA Environmental (DPRA). October 11, 2004. <i>Phase 1 Environmental Site Assessment Report</i></p> <p>Protect Environmental Consultants, Inc. February 9, 2005. <i>Limited Subsurface Investigation of 301 North Thomas Avenue, Minneapolis, MN.</i></p> <p>Minnesota Duty Officer incident report from a call made on 12-13-04.</p>

Site Name, Address, and ASTM Listing	File Review Summary and Potential Impacts to Property (Ref. 1e)	Reports Reviewed at MPCA (Ref. 1e)
	<p>base of two air compressors located inside the building. No other PCBs were collected in any of the other samples.</p> <p>Comments:</p> <ul style="list-style-type: none"> Six borings were installed at the site, however only two samples were analyzed for VOC and pesticides, and no samples were collected for PAHs, SVOCs, or metals. Shallow (0-4') soil samples were not collected at the site. 	

Property Historical Releases

Historical releases have occurred on the property as summarized in Table 3 above and Appendix E.

Environmental Liens

No environmental liens were identified for the Property (Ref. 4c).

Activity Use Limitations

No institutional or engineering controls were identified for the Property (Ref. 4c).

Proceedings Involving the Property

No pending, threatened, or past litigation. Administrative proceedings, or government notices relevant to hazardous substances or petroleum products were identified (Ref. 4c).

Adjoining Property File Review Summary

Adjoining property file reviews were not performed. Based on previous file review work as part of the Bassett Creek Areawide Groundwater Study, there is potential for soil and groundwater contamination at adjoining sites (Ref. 1e).

VII. Property and Nearby Property Land-Use History

Property Land-use History

Original Property development (year/use): Historical maps indicates that much of the Property was developed for mixed residential and industrial purposes by the 1890s with two railroads tracks that run roughly parallel to Bassett Creek through the Property (Ref. 1c).

Chronology of Past Property use/ownership: The area has been used for residential and industrial purposes since the 1890s (Ref. 1c). More information about individual parcel ownership and use in the Property is included in Appendix E and Table 3.

Historical Property Structures

Structures have historically been present as part of various industrial uses of Reaches 1 and 2 of the Property, but most were located beyond the Property (50 feet beyond the creek). Information on their demolition was not obtained. Fruen Mill historical structures are still standing; sheds near railroad tracks were reportedly demolished, but vacant mill facility buildings are still present (Ref 4b).

Demolition Debris: Not applicable.

Current Property Structures, Renovations, and Additions

Renovation Debris: Not applicable.

Building Additions: Not applicable.

Nearby Property Land-Use History

Reaches 1 and 2:

North **Historical Use:** Residential and Industrial
 Current Use: Residential and Industrial

South **Historical Use:** Industrial
 Current Use: Industrial

Reach 3:

East **Historical Use:** Residential and Industrial
 Current Use: Vacant, Residential and Industrial/Commercial

West **Historical Use:** Residential and Recreational
 Current Use: Residential and Recreational

General type of current or past uses in the surrounding areas: Most areas surrounding the Property have been historically industrial near Reaches 1 and 2, with some recreational and residential properties to the north and west and sole industrial properties to the south and east. The area surrounding Reach 3 has generally been residential or recreational. The use of properties surrounding the Property has not changed much throughout time (Refs. 1a, 1e).

Historical releases associated with adjacent properties or communities:

Several historical releases have been identified at nearby properties, primarily in Reaches 1 and 2. Information on the specific releases can be found in the Bassett Creek Areawide Groundwater Study and are provided in Appendix E (Ref. 1e).

VIII. Site Reconnaissance

The objective of the site reconnaissance is to obtain information indicating the likelihood of identifying recognized environmental conditions in connection with the property (ASTM 1527-13 Sec 9.1). Existing Property features are shown in the Property layout on Figure 4. Photographs

obtained during the Property inspection are in Appendix B.

The following areas were inaccessible during the site visit and constitute data gaps:

- Private property. Only what could be visually inspected from City of Minneapolis owned property was possible.
- Buildings were not entered for inspection.
- The majority of vegetation throughout the Property was dormant, so a full assessment of stressed vegetation was not possible.

Date of inspection: November 4, 2015

Name of individual conducting site visit: Carly Lintner and Liz Maher

Weather information: 60 degrees Fahrenheit and overcast

Interior Observations

There are several businesses located within 50 feet of the creek. Access for inspection was not obtained during the Assessment.

Exterior Observations

Methodology used to observe the Property: On foot through each reach of the creek.

Access to the Property (vehicular access and restrictions to public access): Bassett Creek is accessible on foot from several locations along the target stretches, including at Fruen Mill and at the intersection with Van White Boulevard.

Periphery of the Property (roads, streets and parking facilities, etc.): The Property is the area located within 50 feet in any direction of the centerline of Bassett Creek between Golden Valley Road to the north and Dupont Ave/22nd Ave. to the east. Surrounding parcels are owned by public and private entities.

Ground surface cover (paved, gravel, grass): Most of the ground cover on the Property consists of vegetated green space except at road or railroad crossings and on private property. Pavement on the east side of Reach 3 and the north side of Reach 1 generally extended to within a few feet of the creek banks.

Visible evidence of filling, excavation, or burned areas: No burned areas were identified. Evidence of debris containing fill was observed in creek banks along Reach 1 and Reach 2. Along Reach 3, concrete was visually identified along the eastern shoreline along the Glenwood Inglewood facility from the vantage point across the creek. No evidence of recent excavation activities identified.

Visible evidence of vegetative stress: None observed.

Pits, ponds, lagoons, and standing surface water: None observed on the Property other than Bassett Creek. Wirth Lake is located adjacent to the Property. Iridescent sheens were observed in the

creek along the shores as well as near some culverts. Photographs of these sheens are in Appendix B. These sheens were identified as non-organic sheens, based on the absence of cracking of the surface sheen into angular shapes when it was disturbed.

Stained soil or pavement: None observed.

Wastewater, stormwater, and other visible liquid discharge points into a pipe, pond, ditch, stream adjoining property or the Property: Numerous stormwater pipes and runoff trenches were observed with discharge into Bassett Creek. Additionally, several unidentified pipes, both open and capped, were observed exiting the bank in Reaches 1 and 2. .

Nonpotable/process wells: None observed.

Pipelines across or into Property: No pipelines observed crossing the creek during site walk. Miscellaneous, unidentified pipes observed with discharge into the Property in Reaches 1 and 2.

Rail lines: Rail lines run along Bassett Creek for the length of the Property, sometimes within the Property boundary, and sometimes up to approximately 500 feet away from the Property boundary.

Transformers: Pole-mounted transformers were incidentally observed on the Property in Reach 2. Documenting the location of all pole-mounted transformers within the vicinity of the creek was not performed.

Outdoor Chemical Storage Areas/Drums: None observed.

Underground Utility Locations: Storm sewer culverts and drainage trenches were observed along Reaches 1, 2 and 3, as shown on Figure 4.

Odors: None noted.

VIII. Interior and Exterior USTs and ASTs

No exterior USTs or ASTs were observed during the site reconnaissance. Interiors of building were not inspected; therefore, the presence of tanks could not be assessed. USTs associated with known tanks sites at or in the vicinity of the Property are discussed in the regulatory report section of this appendix.

IX. Interviews

The objective of interviews is to obtain information indicating recognized environmental condition in connection with the property (ASTM 1527-13 Sec 10.1). Especially relevant information from the interviews is included and documented throughout the Assessment report and Appendix A.

Appendix B

Property Inspection Photographs

DRAFT

Appendix C

Historical Documentation

(on CD)

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Aerial Photographs

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Historical Maps

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Fire Insurance Maps

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Topographic Maps

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Appendix D

Regulatory Records Documentation

(on CD)

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Appendix E

Previous Investigations of Property

(on CD)

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Appendix F

Interview Documentation

(on CD)

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Appendix G

Qualifications

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