



**ROCK RIDGE PUBLIC SCHOOLS
1405 PROGRESS PARKWAY
VIRGINIA MN 55792**

**E-G Regular Meeting Joint Powers
Monday, September 16, 2019 at 6:00 PM
Board Room, 801 Jones St., Eveleth, Minnesota 55734**

AGENDA

1. Call the Meeting to Order.
2. Pledge of Allegiance.
3. Roll Call.
4. Agenda Additions/Deletions.
5. Visitor Input.
6. Approve Agenda.
7. Approve the Treasurer's Report for the Month of July and August.
8. Approve Minutes from Meeting on 8.26.19 2
9. NEW BUSINESS.
1. Approve Second Reading of Policies. 4
2. Approve School Names, Colors, and Mascots. 137
3. Approve Merger Plan for 7-12 Activities. 138
10. DISCUSSION
1. Update from Kraus-Anderson and Cunningham.
2. Final Delineation Report. Site A and B. 147
3. Elementary Schools and Capacity. 412
4. Upcoming Tours of Other Schools.
5. School Business Coordinator.
6. Land Acquisition.
11. ADJOURNMENT.

Organizational Meeting Minutes August 26, 2019

The Organizational and Regular Meetings of the Joint Powers (Eveleth-Gilbert & Virginia) Board were held on Monday, August 26, 2019, at 5:00 p.m. in the Board Room.

Members present: Directors Anderson, Lautigar, Manninen, Sather, Sjoberg, and Sundquist.
Also present: Supt. Jeff Carey and Supt. Dr. Noel Schmidt.

REORGANIZATIONAL MEETING

The meeting was called to order at 5:00 p.m. by Supt. Jeff Carey.

Supt. Carey conducted the election of the Board Chair:

Chair: Stacey Sundquist was nominated by Director Manninen and accepted the nomination. Kelly Sather was nominated by Director Sjoberg and declined the nomination. With no other nominations, Director Sundquist was elected as Board Chair.

Newly elected Chair Sundquist proceeded with the Election of Officers:

Vice Chair: Director Lautigar nominated Kelly Sather. Director Sjoberg supported the nomination. With no other nominations, Kelly Sather was elected as Vice Chair.

Clerk: Director Lautigar nominated Matt Sjoberg. Director Manninen supported the nomination. With no other nominations, Matt Sjoberg was elected as Clerk.

Treasurer: Director Sather nominated Murray Anderson. Director Manninen supported the nomination. With no other nominations, Murray Anderson was elected as Treasurer.

Motion: Manninen, Support: Sjoberg, to designate the Mesabi Daily News as the district's official publication. Motion carried unanimously. Hometown Focus will be utilized for other ads as necessary.

Motion: Manninen, Support: Sather, to not receive a salary for participating on this Board. Motion carried unanimously.

Motion: Lautigar, Support: Anderson, to solicit proposals for legal counsel. Motion carried unanimously.

Motion: Sather, Support: Lautigar, to hold Board meetings on the first Monday of each month at 6:00 p.m. at the Northeast Services Cooperative in Mountain Iron. Due to the Labor Day holiday, the September meeting will be held Monday, September 16, 2019, at 6:00 p.m. at the Northeast Services Cooperative. Motion carried unanimously.

The organizational meeting adjourned at 5:16 p.m.

REGULAR MEETING

Chair Stacey Sundquist called the meeting to order at 5:17 p.m.

Members present: Directors Anderson, Lautigar, Manninen, Sather, Sjoberg, and Sundquist.
Also present: Supt. Jeff Carey and Supt. Dr. Noel Schmidt.

Agenda Additions/Deletions: None.

Visitor Input: None.

Motion: Lautigar, Support: Anderson, to approve the agenda as presented. Motion carried unanimously.

NEW BUSINESS

Motion: Sather, Support: Anderson, to approve the first reading of the mandatory policies. Motion carried unanimously.

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| 102 | Equal Educational Opportunity |
| 202 | School Board Officers |
| 203 | School Board Procedures |
| 206 | Public Participation in School Board Meetings |

Organizational Meeting Minutes

August 26, 2019

209	Code of Ethics
214	Out of State Travel by School Board Members
401	Equal Employment Opportunity
402	Disability Nondiscrimination
406	Public and Private Personnel Data
410	Family and Medical Leave
412	Expense Reimbursement
413	Harassment and Violence
417	Chemical Use and Abuse
418	Drug Free Workplace
419	Tobacco Free Environment
601	School District Curriculum and Instruction
603	Curriculum Development
616	School District System Accountability
620	Credit for Learning
709	Student Transportation Safety
721	Uniform Grant Guidance
722	Public Data Requests
903	Visitors to School District Buildings and Sites

John Huenink, Kraus-Anderson, updated the Board on the current status of site acquisition.

Supt. Schmidt and John Huenink gave the Board an overview on the role of the advisory committee.

Supt. Schmidt discussed the new Eveleth-Gilbert elementary school capacity and why Eveleth-Gilbert should consider building to accommodate approximately 50 more students.

Supt. Schmidt and Supt. Carey discussed the possibility of business partnerships to establish a health care clinic and/or student run bank branch in the new high school.

The meeting adjourned at 5:56 p.m.

The next regular board meeting is scheduled for Monday, September 16, 2019, at 6:00 p.m. at the Northeast Services Cooperative, located at 5525 Emerald Ave., Mountain Iron, MN.

Chair Stacey Sundquist

Clerk Matt Sjoberg

Adopted: _____

MSBA/MASA Model Policy 102

Orig. 1995

Revised: _____

Rev. 2017

102 EQUAL EDUCATIONAL OPPORTUNITY

I. PURPOSE

The purpose of this policy is to ensure that equal educational opportunity is provided for all students of the school district.

II. GENERAL STATEMENT OF POLICY

- A. The policy of the school district is to provide equal educational opportunity for all students. The school district does not unlawfully discriminate on the basis of race, color, creed, religion, national origin, sex, marital status, parental status, status with regard to public assistance, disability, sexual orientation, including gender identity and expression, or age. The school district also makes reasonable accommodations for disabled students.
- B. The school district prohibits the harassment of any individual for any of the categories listed above. For information about the types of conduct that constitute a violation of the school district's policy on harassment and violence and the school district's procedures for addressing such complaints, refer to the school district's policy on harassment and violence.
- C. This policy applies to all areas of education including academics, coursework, co-curricular and extracurricular activities, or other rights or privileges of enrollment.
- D. Every school district employee shall be responsible for complying with this policy conscientiously.
- E. Any student, parent, or guardian having a question regarding this policy should discuss it with the appropriate school district official as provided by policy. In the absence of a specific designee, an inquiry or a complaint should be referred to the superintendent.

Legal References: Minn. Stat. § 121A.03, Subd. 2 (Sexual, Religious, and Racial Harassment and Violence Policy)
Minn. Stat. Ch. 363A (Minnesota Human Rights Act)
20 U.S.C. § 1681 *et seq.* (Title IX of the Education Amendments of 1972)
42 U.S.C. § 12101 *et seq.* (Americans with Disabilities Act)

Cross References: MSBA/MASA Model Policy 402 (Disability Nondiscrimination)
MSBA/MASA Model Policy 413 (Harassment and Violence)

MSBA/MASA Model Policy 521 (Student Disability Nondiscrimination)
MSBA/MASA Model Policy 522 (Student Sex Nondiscrimination)

Adopted: _____

MSBA/MASA Model Policy 202

Orig. 1995

Revised: _____

Rev. 2011

202 SCHOOL BOARD OFFICERS

I. PURPOSE

School board officers are charged with the duty of carrying out the responsibilities entrusted to them for the care, management, and control of the public schools of the school district. The purpose of this policy is to delineate those responsibilities.

II. GENERAL STATEMENT OF POLICY

- A. The school board shall meet annually and organize by selecting a chair, a clerk, a treasurer, and such other officers as determined by the school board. At its option, the school board may appoint a vice-chair to serve in the temporary absence of the chair.
- B. The school board shall appoint a superintendent who shall be an ex officio, non-voting member of the school board.

III. ORGANIZATION

The school board shall meet annually on the first Monday in January, or as soon thereafter as practicable, and organize by selecting a chair, a clerk, a treasurer, and such other officers as determined by the school board. These officers shall hold office for one year and until their successors are elected and qualify.

- A. The persons who perform the duties of clerk and treasurer need not be members of the school board.
- B. The school board by resolution may combine the duties of the offices of clerk and treasurer in a single person in the office of business affairs.

IV. OFFICER'S RESPONSIBILITIES

A. Chair

- 1. The chair when present shall preside at all meetings of the school board, countersign all orders upon the treasurer for claims allowed by the school board, represent the school district in all actions, and perform all duties a chair usually performs.
- 2. In case of absence, inability, or refusal of the clerk to draw orders for the payment of money authorized by a vote of the majority of the school board

to be paid, the chair may draw the orders, or the office of the clerk may be declared vacant by the chair and treasurer and filled by appointment.

B. Treasurer

1. The treasurer shall deposit the funds of the school district in the official depository.
2. The treasurer shall make all reports which may be called for by the school board and perform all duties a treasurer usually performs.
3. In the event there are insufficient funds on hand to pay valid orders presented to the treasurer, the treasurer shall receive, endorse, and process the orders in accordance with Minn. Stat. § 123B.12.

C. Clerk

1. The clerk shall keep a record of all meetings in the books provided.
2. Within three days after an election, the clerk shall notify all persons elected of their election.
3. On or before September 15 of each year, the clerk shall:
 - a. file with the school board a report of the revenues, expenditures, and balances in each fund for the preceding fiscal year.
 - b. make and transmit to the commissioner certified reports, showing:
 - (1) revenues and expenditures in detail, and such other financial information required by law, rule, or as may be called for by the commissioner;
 - (2) length of school term and enrollment and attendance by grades; and
 - (3) other items of information as called for by the commissioner.
4. The clerk shall enter into the clerk's record book copies of all reports and of the teachers' term reports, and of the proceedings of any meeting, and keep an itemized account of all expenses of the school district.
5. The clerk shall furnish to the county auditor, on or before September 30 of each year, an attested copy of the clerk's record, showing the amount of proposed property tax voted by the school district or the school board for school purposes.

6. The clerk shall draw and sign all orders upon the treasurer for the payment of money for bills allowed by the school board for salaries of officers and for teachers' wages and all claims, to be countersigned by the chair.
7. The clerk shall perform such duties as required by the Minnesota Election Law or other applicable laws relating to the conduct of elections.
8. The clerk shall perform the duties of the chair in the event of the chair's and the vice-chair's temporary absences.

D. Vice-Chair [Optional]

The vice-chair shall perform the duties of the chair in the event of the chair's temporary absence.

E. Superintendent

1. The superintendent shall be an ex officio, non-voting member of the school board.
2. The superintendent shall perform the following:
 - a. visit and supervise the schools in the school district, report and make recommendations about their condition when advisable or on request by the school board;
 - b. recommend to the school board employment and dismissal of teachers;
 - c. annually evaluate each school principal assigned responsibility for supervising a school building within the district;
 - d. superintend school grading practices and examinations for promotions;
 - e. make reports required by the commissioner; and
 - f. perform other duties prescribed by the school board.

Legal References: Minn. Stat. § 123B.12 (Finance)
 Minn. Stat. § 123B.14 (Officers)
 Minn. Stat. § 123B.143 (Superintendent)
 Minn. Stat. § 126C.17 (Referendum Revenue)
 Minn. Stat. Ch. 205A (School District Elections)

Cross References: MSBA/MASA Model Policy 101 (Legal Status of the School District)

MSBA/MASA Model Policy 201 (Legal Status of the School Board)
MSBA/MASA Model Policy 203 (Operation of the School Board –
Governing Rules)
MSBA Service Manual, Chapter 1, School District Governance, Powers and
Duties

Adopted: _____

MSBA/MASA Model Policy 203.1

Orig. 1997

Revised: _____

Rev. 1999

203.1 SCHOOL BOARD PROCEDURES; RULES OF ORDER

I. PURPOSE

The purpose of this policy is to provide specific rules of order to conduct meetings of the school board.

II. GENERAL STATEMENT OF POLICY

To ensure that school board meetings are conducted in an orderly fashion, the school board will follow rules of order which will allow the school board:

- A. To establish guidelines by which the business of the school board can be conducted in a regular and internally consistent manner;
- B. To organize the meetings so all necessary matters can be brought to the school board and decisions of the school board can be made in an orderly and reasonable manner;
- C. To insure that members of the school board have the necessary information to make decisions on substantive issues and to insure adequate discussion of decisions to be made; and
- D. To insure that meetings and actions of the school board are conducted so as to be informative to the staff and the public, and to produce a clear record of actions taken and decisions made.

III. RULES OF ORDER

- A. School board members need not rise to gain the recognition of the chair.
- B. A motion will be adopted or carried if it receives the affirmative votes of a majority of those actually voting on the matter. Abstentions are considered to be acquiescence to the vote of the majority. It should be noted that some motions by statute or Robert's Rules of Order require larger numbers of affirmative votes.
- C. All motions that require a second shall receive a second prior to opening the issue for discussion of the school board. If a motion that requires a second does not receive a second, the chair may declare that the motion fails for lack of a second or may provide the second. The names of the members making and seconding a motion shall be recorded in the minutes.

- D. The chair shall decide the order in which school board members will be recognized to address an issue. An attempt should be made to alternate between pro and con positions if appropriate to the discussion. A member shall only speak to an issue after the member is recognized by the chair.
- E. The chair shall rule on all questions relating to motions and points of order brought before the school board.
- F. A ruling by the chair is subject to appeal to the full school board pursuant to Robert's Rules of Order.
- G. The school board shall have authority to recognize any member of the audience regarding a request to be heard at the school board meeting. Members of the public who wish to be heard shall follow school board procedures.
- H. The chair has the authority to declare a recess at any time for the purpose of restoring decorum to the meeting or for any other necessary purpose.
- I. The chair shall repeat a motion or the substance of a motion prior to the vote. The chair shall call for an affirmative and a negative vote on all motions.
- J. The order in which names will be called for roll call votes will be determined by the school board.
- K. The chair has the same right and responsibility as each school board member to vote on all issues.
- L. The chair shall announce the result of each vote. The vote of each member, including abstentions, shall be recorded in the minutes. If the vote is unanimous, it may be reflected as unanimous in the minutes if the minutes also reflect the members present.
- M. A majority of the voting members of the school board constitute a quorum. The absence of a quorum may be raised by the chair or any member. Generally any action taken in the absence of a quorum is null and void. The only legal actions the school board may take in the absence of a quorum are to fix the time at which to adjourn, to adjourn, to recess or to take measures to obtain a quorum.

Legal References: Minn. Stat. § 13D.01, Subd. 4 (Open Meeting Law)
Minn. Stat. § 122A.40 (Employment Contracts, Termination)
Minn. Stat. § 123B.09, Subds. 6 and 7 (School Board Powers)
Minn. Stat. § 126C.53 (Enabling Resolution; Form of Certificates of Indebtedness)
Minn. Stat. § 331A.01, Subd. 6 (Newspapers; Definitions)
Minn. Stat. § 331A.04, Subd. 6 (Newspapers; Exception to Designation Priority)

Minn. Stat. § 471.88 (Exceptions)

Cross References: MSBA/MASA Model Policy 203 (Operation of the School Board – Governing Rules)
MSBA/MASA Model Policy 204 (School Board Meeting Minutes)
MSBA/MASA Model Policy 206 (Public Participation in School Board Meetings/Complaints about Persons at School Board Meetings and Data Privacy Considerations)
MSBA/MASA Model Policy 207 (Public Hearings)

Adopted: _____

MSBA/MASA Model Policy 206

Orig. 1995

Revised: _____

Rev. 2017

206 PUBLIC PARTICIPATION IN SCHOOL BOARD MEETINGS/COMPLAINTS ABOUT PERSONS AT SCHOOL BOARD MEETINGS AND DATA PRIVACY CONSIDERATIONS

I. PURPOSE

- A. The school board recognizes the value of participation by the public in deliberations and decisions on school district matters. At the same time, the school board recognizes the importance of conducting orderly and efficient proceedings, with opportunity for expression of all participants' respective views.
- B. The purpose of this policy is to provide procedures to assure open and orderly public discussion as well as to protect the due process and privacy rights of individuals under the law.

II. GENERAL STATEMENT OF POLICY

- A. The policy of the school board is to encourage discussion by persons of subjects related to the management of the school district at school board meetings. The school board may adopt reasonable time, place, and manner restrictions on public expression in order to facilitate free discussion by all interested parties.
- B. The school board shall, as a matter of policy, protect the legal rights to privacy and due process of employees and students.

III. DEFINITIONS

- A. "Personnel data" means government data on individuals maintained because the individual is or was an employee or applicant for employment. For purposes of this policy, "employee" includes a volunteer or an independent contractor.
- B. Personnel data on current and former employees that is "public" includes:

Name; employee identification number, which must not be the employee's social security number; actual gross salary; salary range; terms and conditions of employment relationship; contract fees; actual gross pension; the value and nature of employer paid fringe benefits; the basis for and the amount of any added remuneration, including expense reimbursement, in addition to salary; bargaining unit; job title; job description; education and training background; previous work experience; date of first and last employment; the existence and status of any complaints or charges against the employee, regardless of whether the

complaint or charge resulted in a disciplinary action; the final disposition of any disciplinary action as defined in Minn. Stat. § 13.43, Subd. 2(b), together with the specific reasons for the action and data documenting the basis of the action, excluding data that would identify confidential sources who are employees of the public body; the complete terms of any agreement settling any dispute arising out of the employment relationship, including a buyout agreement as defined in Minn. Stat. § 123B.143, Subd. 2, except that the agreement must include specific reasons for the agreement if it involves the payment of more than \$10,000 of public money; work location; work telephone number; badge number; work-related continuing education; honors and awards received; and payroll time sheets or other comparable data that are only used to account for employee's work time for payroll purposes, except to the extent that release of time sheet data would reveal the employee's reasons for the use of sick or other medical leave or other not public data.

- C. Personnel data on current and former applicants for employment that is "public" includes:

Veteran status; relevant test scores; rank on the eligible list; job history; education and training; and work availability. Names of applicants shall be private data except when certified as eligible for appointment to a vacancy or when applicants are considered by the appointing authority to be finalists for a position in public employment. For purposes of this subdivision, "finalist" means an individual who is selected to be interviewed by the appointing authority prior to selection.

- D. "Educational data" means data maintained by the school district which relates to a student.
- E. "Student" means an individual currently or formerly enrolled or registered in the school district, or applicants for enrollment, or individuals who receive shared time services.
- F. Data about applicants for appointments to a public body, including a school board, collected by the school district as a result of the applicant's application for appointment to the public body are private data on individuals, except that the following are public: name; city of residence, except where the appointment has a residency requirement that requires the entire address to be public; education and training; employment history; volunteer work; awards and honors; prior government service; any data required to be provided or that is voluntarily provided in an application to a multimember agency pursuant to Minn. Stat. § 15.0597; and veteran status. Once an individual has been appointed to a public body, the following additional items of data are public: residential address; either a telephone number or electronic mail address where the appointee can be reached, or both at the request of the appointee; the first and last dates of service on the public body; the existence and status of any complaints or charges against an appointee; and, upon completion of an investigation of a complaint or charge against an appointee, the final investigative report unless access to the data would jeopardize an active

investigation. Any electronic mail address or telephone number provided by a public body for use by an appointee shall be public. An appointee may use an electronic mail address or telephone number provided by the public body as the designated electronic mail address or telephone number at which the appointee can be reached.

IV. RIGHTS TO PRIVACY

- A. School district employees have a legal right to privacy related to matters which may come before the school board, including, but not limited to, the following:
 - 1. right to a private hearing for teachers, pursuant to Minn. Stat. § 122A.40, Subd. 14 (Teachers Discharge Hearing);
 - 2. right to privacy of personnel data as provided by Minn. Stat. § 13.43 (Personnel Data);
 - 3. right to consideration by the school board of certain data treated as not public as provided in Minn. Stat. § 13D.05 (Not Public Data);
 - 4. right to a private hearing for licensed or unlicensed head varsity coaches to discuss reasons for nonrenewal of a coaching contract pursuant to Minn. Stat. § 122A.33, Subd. 3.
- B. School district students have a legal right to privacy related to matters which may come before the school board, including, but not limited to, the following:
 - 1. right to a private hearing, Minn. Stat. § 121A.47, Subd. 5 (Student Dismissal Hearing);
 - 2. right to privacy of educational data, Minn. Stat. § 13.32 (Educational Data); 20 U.S.C. § 1232g (FERPA);
 - 3. right to privacy of complaints as provided by child abuse reporting and discrimination laws, Minn. Stat. § 626.556 (Reporting of Maltreatment of Minors) and Minn. Stat. Ch. 363A (Minnesota Human Rights Act).

V. THE PUBLIC'S OPPORTUNITY TO BE HEARD

The school board will strive to give all persons an opportunity to be heard and to have complaints considered and evaluated, within the limits of the law and this policy and subject to reasonable time, place, and manner restrictions. Among the rights available to the public is the right to access public data as provided by Minn. Stat. § 13.43, Subd. 2 (Public Data).

VI. PROCEDURES

A. Agenda Items

1. Persons who wish to have a subject discussed at a public school board meeting are encouraged to notify the superintendent's office in advance of the school board meeting. The person should provide his or her name, address, the name of group represented (if any), and the subject to be covered or the issue to be addressed.
2. Persons who wish to address the school board on a particular subject should identify the subject and identify agenda item(s) to which their comments pertain.
3. The school board chair will recognize one speaker at a time and will rule out of order other speakers who are not recognized. Only those speakers recognized by the chair will be allowed to speak. Comments by others are out of order. Individuals who interfere with or interrupt speakers, the school board, or the proceedings may be directed to leave.
4. The school board retains the discretion to limit discussion of any agenda item to a reasonable period of time as determined by the school board. If a group or organization wishes to address the school board on a topic, the school board reserves the right to require designation of one or more representatives or spokespersons to speak on behalf of the group or organization.
5. Matters proposed for placement on the agenda which may involve data privacy concerns, which may involve preliminary allegations, or which may be potentially libelous or slanderous in nature shall not be considered in public, but shall be processed as determined by the school board in accordance with governing law.
6. The school board chair shall promptly rule out of order any discussion by any person, including school board members, that would violate the provisions of state or federal law, this policy or statutory rights of privacy of an individual.
7. Personal attacks by anyone addressing the school board are unacceptable. Persistence in such remarks by an individual shall terminate that person's privilege to address the school board.
8. Depending upon the number of persons in attendance seeking to be heard, the school board reserves the right to impose such other limitations and restrictions as necessary in order to provide an orderly, efficient, and fair opportunity for those present to be heard.

B. Complaints

1. Routine complaints about a teacher or other employee should first be directed to that teacher or employee or to the employee's immediate supervisor.
2. If the complaint is against an employee relating to child abuse, discrimination, racial, religious, or sexual harassment, or other activities involving an intimidating atmosphere, the complaint should be directed to the employee's supervisor or other official as designated in the school district policy governing that kind of complaint. In the absence of a designated person, the matter should be referred to the superintendent.
3. Unresolved complaints from Paragraph 1. of this section or problems concerning the school district should be directed to the superintendent's office.
4. Complaints which are unresolved at the superintendent's level may be brought before the school board by notifying the school board in writing.

C. Open Forum

The school board shall normally provide a specified period of time when persons may address the school board on any topic, subject to the limitations of this policy. The school board reserves the right to allocate a specific period of time for this purpose and limit time for speakers accordingly.

The school board may decide to hold certain types of public meetings where the public will not be invited to address the school board. Possible examples are work sessions and board retreats. The public will still be entitled to notice of these meetings and will be allowed to attend these meetings, but the public will not be allotted time during the meeting to address the board.

D. No Board Action at Same Meeting

Except as determined by the school board to be necessary or in an emergency, the school board will not take action at the same meeting on an item raised for the first time by the public.

VII. PENALTIES FOR VIOLATION OF DATA PRIVACY

- A. The school district is liable for damages, costs and attorneys' fees, and, in the event of a willful violation, punitive damages for violation of state data privacy laws. (Minn. Stat. § 13.08, Subd. 1)
- B. A person who willfully violates data privacy or whose conduct constitutes the knowing unauthorized acquisition of not public data is guilty of a misdemeanor. (Minn. Stat. § 13.09)

- C. In the case of an employee, willful violation of the Minnesota data practices law, Chapter 13, and any rules adopted thereunder, including any action subject to a criminal penalty, constitutes just cause for suspension without pay or dismissal. (Minn. Stat. § 13.09)

Legal References: Minn. Stat. Ch. 13 (Minnesota Government Data Practices Act)
Minn. Stat. § 13.43 (Personnel Data)
Minn. Stat. § 13.601, Subd. 3 (Applicants for Appointment)
Minn. Stat. § 13D.05 (Open Meeting Law)
Minn. Stat. § 121A.47, Subd. 5 (Student Dismissal Hearing)
Minn. Stat. § 122A.33, Subd. 3 (Coaches; Opportunity to Respond)
Minn. Stat. § 122A.40, Subd. 14 (Teacher Discharge Hearing)
Minn. Stat. § 122A.44 (Contracting with Teachers)
Minn. Stat. § 123B.02, Subd. 14 (Employees; Contracts for Services)
Minn. Stat. § 123B.143, Subd. 2 (Disclose Past Buyouts or Contract is Void)
Minn. Stat. Ch. 363A (Minnesota Human Rights Act)
Minn. Stat. § 626.556 (Reporting of Maltreatment of Minors)
20 U.S.C. § 1232g (Family Educational Rights and Privacy Act)
Minn. Op. Atty. Gen. 852 (July 14, 2006)

Cross References: MSBA/MASA Model Policy 205 (Open Meetings and Closed Meetings)
MSBA/MASA Model Policy 207 (Public Hearings)
MSBA/MASA Model Policy 406 (Public and Private Personnel Data)
MSBA/MASA Model Policy 515 (Protection and Privacy of Pupil Records)
MSBA Service Manual, Chapter 13, School Law Bulletin “C” (Minnesota’s Open Meeting Law)
MSBA Service Manual, Chapter 13, School Law Bulletin “I” (School Records – Privacy – Access to Data)

Adopted: _____

MSBA/MASA Model Policy 209

Orig. 1995

Revised: _____

Rev. 2009

209 CODE OF ETHICS

I. PURPOSE

The purpose of this policy is to assist the individual school board member in understanding his or her role as part of a school board and in recognizing the contribution that each member must make to develop an effective and responsible school board.

II. GENERAL STATEMENT OF POLICY

Each school board member shall follow the code of ethics stated in this policy.

A. AS A MEMBER OF THE SCHOOL BOARD, I WILL:

1. Attend school board meetings.
2. Come to the meetings prepared for discussion of the agenda items.
3. Listen to the opinions and views of others (including, but not limited to, other school board members, administration, staff, students, and community members).
4. Vote my conscience after informed discussion, unless I abstain because a conflict of interest exists.
5. Support the decision of the school board, even if my position concerning the issue was different.
6. Recognize the integrity of my predecessors and associates and appreciate their work.
7. Be primarily motivated by a desire to provide the best possible education for the students of my school district.
8. Inform myself about the proper duties and functions of a school board member.

B. IN PERFORMING THE PROPER FUNCTIONS OF A SCHOOL BOARD MEMBER, I WILL:

1. Focus on education policy as much as possible.

2. Remember my responsibility is to set policy – not to implement policy.
3. Consider myself a trustee of public education and do my best to protect, conserve, and advance its progress.
4. Recognize that my responsibility, exercised through the actions of the school board as a whole, is to see that the schools are properly run – not to run them myself.
5. Work through the superintendent – not over or around the superintendent.
6. Delegate the implementation of school board decisions to the superintendent.

C. TO MAINTAIN RELATIONS WITH OTHER MEMBERS OF THE SCHOOL BOARD, I WILL:

1. Respect the rights of others to have and express opinions.
2. Recognize that authority rests with the school board in legal session – not with the individual members of the school board except as authorized by law.
3. Make no disparaging remarks, in or out of school board meetings, about other members of the school board or their opinions.
4. Keep an open mind about how I will vote on any proposition until the board has met and fully discussed the issue.
5. Make decisions by voting in school board meetings after all sides of debatable questions have been presented.
6. Insist that committees be appointed to serve only in an advisory capacity to the school board.

D. IN MEETING MY RESPONSIBILITIES TO MY COMMUNITY, I WILL:

1. Attempt to appraise and plan for both the present and future educational needs of the school district and community.
2. Attempt to obtain adequate financial support for the school district's programs.
3. Insist that business transactions of the school district be ethical and open.
4. Strive to uphold my responsibilities and accountability to the taxpayers in

my school district.

E. IN WORKING WITH THE SUPERINTENDENT OF SCHOOLS AND STAFF, I WILL:

1. Hold the superintendent responsible for the administration of the school district.
2. Give the superintendent authority commensurate with his or her responsibilities.
3. Assure that the school district will be administered by the best professional personnel available.
4. Consider the recommendation of the superintendent in hiring all employees.
5. Participate in school board action after considering the recommendation of the superintendent and only after the superintendent has furnished adequate information supporting the recommendation.
6. Insist the superintendent keep the school board adequately informed at all times.
7. Offer the superintendent counsel and advice.
8. Recognize the status of the superintendent as the chief executive officer and a non-voting, ex officio member of the school board.
9. Refer all complaints to the proper administrative officer or insist that they be presented in writing to the whole school board for proper referral according to the chain of command.
10. Present any personal criticisms of employees to the superintendent.
11. Provide support for the superintendent and employees of the school district so they may perform their proper functions on a professional level.

F. IN FULFILLING MY LEGAL OBLIGATIONS AS A SCHOOL BOARD MEMBER, I WILL:

1. Comply with all federal, state, and local laws relating to my work as a school board member.
2. Comply with all school district policies as adopted by the school board.
3. Abide by all rules and regulations as promulgated by the Minnesota Department of Education and other state and federal agencies with

jurisdiction over school districts.

4. Recognize that school district business may be legally transacted only in an open meeting of the school board.
5. Avoid conflicts of interest and refrain from using my school board position for personal gain.
6. Take no private action that will compromise the school board or administration.
7. Guard the confidentiality of information that is protected under applicable law.

Legal References: Minn. Stat. § 123B.02, Subd. 1 (School District Powers)
Minn. Stat. § 123B.09 (School Board Powers)
Minn. Stat. § 123B.143, Subd. 1 (Superintendent)

Cross References: MSBA Service Manual, Chapter 1, School Board Member Code of Ethics

Adopted: _____

MSBA/MASA Model Policy 214

Orig. 2005

Revised: _____

Rev. 2009

214 OUT-OF-STATE TRAVEL BY SCHOOL BOARD MEMBERS

I. PURPOSE

The purpose of this policy is to control out-of-state travel by school board members as required by law.

II. GENERAL STATEMENT OF POLICY

School board members have an obligation to become informed on the proper duties and functions of a school board member, to become familiar with issues that may affect the school district, to acquire a basic understanding of school finance and budgeting, and to acquire sufficient knowledge to comply with federal, state, and local laws, rules, regulations, and school district policies that relate to their functions as school board members. Occasionally, it may be appropriate for school board members to travel out of state to fulfill their obligations.

III. APPROPRIATE TRAVEL

Travel outside the state is appropriate when the school board finds it proper for school board members to acquire knowledge and information necessary to allow them to carry out their responsibilities as school board members. Travel to regional or national meetings of the National School Boards Association is presumed to fulfill this purpose. Travel to other out-of-state meetings for which the member intends to seek reimbursement from the school district should be preapproved by the school board.

IV. REIMBURSABLE EXPENSES

Expenses to be reimbursed may include transportation, meals, lodging, registration fees, required materials, parking fees, tips, and other reasonable and necessary school district-related expenses.

V. REIMBURSEMENT

- A. Requests for reimbursement must be itemized on the official school district form and are to be submitted to the designated administrator. Receipts for lodging, commercial transportation, registration, and other reasonable and necessary expenses must be attached to the reimbursement form.
- B. Automobile travel shall be reimbursed at the mileage rate set by the school board. Commercial transportation shall reflect economy fares and shall be reimbursed only for the actual cost of the trip.

- C. Amounts to be reimbursed shall be within the school board's approved budget allocations, including attendance at workshops and conventions.

VI. ESTABLISHMENT OF DIRECTIVES AND GUIDELINES

The superintendent shall develop a schedule of reimbursement rates for school district business expenses, including those expenses requiring advance approval and specific rates of reimbursement. The superintendent shall also develop directives and guidelines to address methods and times for submission of requests for reimbursement.

- Legal References:*** Minn. Stat. § 123B.09, Subd. 2 (School Board Member Training)
Minn. Stat. § 471.661 (Out-of-State Travel)
Minn. Stat. § 471.665 (Mileage Allowances)
Minn. Op. Atty. Gen. 1035 (Aug. 23, 1999) (Retreat Expenses)
Minn. Op. Atty. Gen. 161b-12 (Aug. 4, 1997) (Transportation Expenses)
- Cross References:*** MSBA/MASA Model Policy 212 (School Board Member Development)
MSBA/MASA Model Policy 412 (Expense Reimbursement)

Adopted: _____

MSBA/MASA Model Policy 401

Orig. 1995

Revised: _____

Rev. 2017

401 EQUAL EMPLOYMENT OPPORTUNITY

I. PURPOSE

The purpose of this policy is to provide equal employment opportunity for all applicants for school district employment and school district employees.

II. GENERAL STATEMENT OF POLICY

- A. The policy of the school district is to provide equal employment opportunity for all applicants and employees. The school district does not unlawfully discriminate on the basis of race, color, creed, religion, national origin, sex, marital status, status with regard to public assistance, disability, sexual orientation, including gender identity or expression, age, family care leave status, or veteran status. The school district also makes reasonable accommodations for disabled employees.
- B. The school district prohibits the harassment of any individual for any of the categories listed above. For information about the types of conduct that constitute impermissible harassment and the school district's internal procedures for addressing complaints of harassment, please refer to the school district's policy on harassment and violence.
- C. This policy applies to all areas of employment including hiring, discharge, promotion, compensation, facilities, or privileges of employment.
- D. Every school district employee shall be responsible for following this policy.
- E. Any person having a question regarding this policy should discuss it with TBD (specify, e.g., the Personnel Manager).

Legal References: Minn. Stat. Ch. 363A (Minnesota Human Rights Act)
29 U.S.C. § 621 *et seq.* (Age Discrimination in Employment Act)
29 U.S.C. § 2615 (Family and Medical Leave Act)
38 U.S.C. § 4211 *et seq.* (Employment and Training of Veterans)
38 U.S.C. § 4301 *et seq.* (Employment and Reemployment Rights of Members of the Uniformed Services)
42 U.S.C. § 2000e *et seq.* (Title VII of the Civil Rights Act)
42 U.S.C. § 12101 *et seq.* (Equal Opportunity for Individuals with Disabilities)

Cross References: MSBA/MASA Model Policy 402 (Disability Nondiscrimination)

MSBA/MASA Model Policy 405 (Veteran's Preference)
MSBA/MASA Model Policy 413 (Harassment and Violence)

Adopted: _____

MSBA/MASA Model Policy 402

Orig. 1995

Revised: _____

Rev. 2015

402 DISABILITY NONDISCRIMINATION POLICY

I. PURPOSE

The purpose of this policy is to provide a fair employment setting for all persons and to comply with state and federal law.

II. GENERAL STATEMENT OF POLICY

- A. The school district shall not discriminate against qualified individuals with disabilities because of the disabilities of such individuals in regard to job application procedures, hiring, advancement, discharge, compensation, job training, and other terms, conditions, and privileges of employment.
- B. The school district shall not engage in contractual or other arrangements that have the effect of subjecting its qualified applicants or employees with disabilities to discrimination on the basis of disability. The school district shall not exclude or otherwise deny equal jobs or job benefits to a qualified individual because of the known disability of an individual with whom the qualified individual is known to have a relationship or association.
- C. The school district shall make reasonable accommodations for the known physical or mental limitations of an otherwise qualified individual with a disability who is an applicant or employee, unless the accommodation would impose undue hardship on the operation of the business of the school district.
- D. Any job applicant or employee wishing to discuss the need for a reasonable accommodation, or other matters related to a disability or the enforcement and application of this policy, should contact TBD (list the name, title, office address, telephone number, and e-mail address). This individual is the school district's appointed ADA/Section 504 coordinator.

Legal References: Minn. Stat. Ch. 363A (Minnesota Human Rights Act)
29 U.S.C. § 794 *et seq.* (Rehabilitation Act of 1973, § 504)
42 U.S.C., Ch. 126 § 12112 (Americans with Disabilities Act)
29 C.F.R. Part 32
34 C.F.R. Part 35
34 C.F.R. Part 104

Cross References: MSBA/MASA Model Policy 521 (Student Disability Nondiscrimination)

Adopted: _____

MSBA/MASA Model Policy 406

Orig. 1995

Revised: _____

Rev. 2014

406 PUBLIC AND PRIVATE PERSONNEL DATA

I. PURPOSE

The purpose of this policy is to provide guidance to school district employees as to the data the school district collects and maintains regarding its personnel.

II. GENERAL STATEMENT OF POLICY

- A. All data on individuals collected, created, received, maintained or disseminated by the school district, which is classified by statute or federal law as public, shall be accessible to the public pursuant to the procedures established by the school district.
- B. All other data on individuals is private or confidential.

III. DEFINITIONS

- A. “Public” means that the data is available to anyone who requests it.
- B. “Private” means the data is available to the subject of the data and to school district staff who need it to conduct the business of the school district.
- C. “Confidential” means the data is not available to the subject.
- D. “Parking space leasing data” means the following government data on an application for, or lease of, a parking space: residence address, home telephone number, beginning and ending work hours, place of employment, location of parking space, and work telephone number.
- E. “Personnel data” means government data on individuals maintained because they are or were employees of the school district, applicants for employment, or volunteers or independent contractors for the school district, or members of or applicants for an advisory board or commission. Personnel data include data submitted to the school district by an employee as part of an organized self-evaluation effort by the school district to request suggestions from all employees on ways to cut costs, make the school district more efficient, or to improve school district operations. An employee who is identified in a suggestion shall have access to all data in the suggestion except the identity of the employee making the suggestion.
- F. “Finalist” means an individual who is selected to be interviewed by the school board for a position.

- G. “Protected health information” means individually identifiable health information transmitted in electronic form by a school district acting as a health care provider. “Protected health information” excludes health information in education records covered by the federal Family Educational Rights and Privacy Act and employment records held by a school district in its role as employer.
- H. “Public officials” means business managers; human resource directors; athletic directors whose duties include at least 50 percent of their time spent in administration, personnel, supervision, and evaluation; chief financial officers; directors; and individuals defined as superintendents and principals.

IV. PUBLIC PERSONNEL DATA

- A. The following information on employees, including volunteers and independent contractors, is public:
 - 1. name;
 - 2. employee identification number, which may not be the employee’s social security number;
 - 3. actual gross salary;
 - 4. salary range;
 - 5. terms and conditions of employment relationship;
 - 6. contract fees;
 - 7. actual gross pension;
 - 8. the value and nature of employer-paid fringe benefits;
 - 9. the basis for and the amount of any added remuneration, including expense reimbursement, in addition to salary;
 - 10. job title;
 - 11. bargaining unit;
 - 12. job description;
 - 13. education and training background;
 - 14. previous work experience;

15. date of first and last employment;
16. the existence and status of any complaints or charges against the employee, regardless of whether the complaint or charge resulted in a disciplinary action;
17. the final disposition of any disciplinary action, as defined in Minn. Stat. § 13.43, Subd. 2(b), together with the specific reasons for the action and data documenting the basis of the action, excluding data that would identify confidential sources who are employees of the school district;
18. the complete terms of any agreement settling any dispute arising out of the employment relationship, including superintendent buyout agreements, except that the agreement must include specific reasons for the agreement if it involves the payment of more than \$10,000 of public money, and such agreement may not have the purpose or effect of limiting access to or disclosure of personnel data or limiting the discussion of information or opinions related to personnel data;
19. work location;
20. work telephone number;
21. badge number;
22. work-related continuing education;
23. honors and awards received; and
24. payroll time sheets or other comparable data that are used only to account for employee's work time for payroll purposes, except to the extent that release of time sheet data would reveal the employee's reasons for the use of sick or other medical leave or other not public data.

B. The following information on applicants for employment is public:

1. veteran status;
2. relevant test scores;
3. rank on eligible list;
4. job history;
5. education and training; and
6. work availability.

- C. Names of applicants are private data except when certified as eligible for appointment to a vacancy or when they become finalists for an employment position.
- D. Applicants for appointment to a public body.
 - 1. Data about applicants for appointment to a public body are private data on individuals except that the following are public:
 - a. name;
 - b. city of residence, except when the appointment has a residency requirement that requires the entire address to be public;
 - c. education and training;
 - d. employment history;
 - e. volunteer work;
 - f. awards and honors;
 - g. prior government service;
 - h. any data required to be provided or that are voluntarily provided in an application for appointment to a multimember agency pursuant to Minn. Stat. § 15.0597; and
 - i. veteran status.
 - 2. Once an individual is appointed to a public body, the following additional items of data are public:
 - a. residential address;
 - b. either a telephone number or electronic mail address where the appointee can be reached, or both at the request of the appointee;
 - c. first and last dates of service on the public body;
 - d. the existence and status of any complaints or charges against an appointee; and
 - e. upon completion of an investigation of a complaint or charge against an appointee, the final investigative report is public, unless access to the data would jeopardize an active investigation.

3. Notwithstanding paragraph 2., any electronic mail address or telephone number provided by a public body for use by an appointee shall be public. An appointee may use an electronic mail address or telephone number provided by the public body as the designated electronic mail address or telephone number at which the appointee can be reached.
- E. Regardless of whether there has been a final disposition as defined in Minn. Stat. § 13.43, Subd. 2(b), upon completion of an investigation of a complaint or charge against a public official, as defined in Minn. Stat. § 13.43, Subd. 2(e), or if a public official resigns or is terminated from employment while the complaint or charge is pending, all data relating to the complaint or charge are public, unless access to the data would jeopardize an active investigation or reveal confidential sources.
- F. Data relating to a complaint or charge against a public official is public only if: (1) the complaint or charge results in disciplinary action or the employee resigns or is terminated from employment while the complaint or charge is pending; or (2) potential legal claims arising out of the conduct that is the subject of the complaint or charge are released as part of a settlement agreement. Data that is classified as private under another law is not made public by this provision.

V. PRIVATE PERSONNEL DATA

- A. All other personnel data are private and will only be shared with school district staff whose work requires such access. Private data will not be otherwise released unless authorized by law or by the employee's informed written consent.
- B. Data pertaining to an employee's dependents are private data on individuals.
- C. Data created, collected or maintained by the school district to administer employee assistance programs are private.
- D. Parking space leasing data are private.
- E. An individual's checking account number is private when submitted to a government entity.
- F. Personnel data may be disseminated to labor organizations to the extent the school district determines it is necessary for the labor organization to conduct its business or when ordered or authorized by the Commissioner of the Bureau of Mediation Services.
- G. The school district may display a photograph of a current or former employee to prospective witnesses as part of the school district's investigation of any complaint or charge against the employee.
- H. The school district may, if the responsible authority or designee reasonably

determines that the release of personnel data is necessary to protect an employee from harm to self or to protect another person who may be harmed by the employee, release data that are relevant to the concerns for safety to:

1. the person who may be harmed and to the attorney representing the person when the data are relevant to obtaining a restraining order;
 2. a pre-petition screening team conducting an investigation of the employee under Minn. Stat. § 253B.07, Subd. 1; or
 3. a court, law enforcement agency, or prosecuting authority.
- I. Private personnel data or confidential investigative data on employees may be disseminated to a law enforcement agency for the purpose of reporting a crime or alleged crime committed by an employee, or for the purpose of assisting law enforcement in the investigation of such a crime or alleged crime.
- J. A complainant has access to a statement provided by the complainant to the school district in connection with a complaint or charge against an employee.
- K. When allegations of sexual or other types of harassment are made against an employee, the employee shall not have access to data that would identify the complainant or other witnesses if the school district determines that the employee's access to that data would:
1. threaten the personal safety of the complainant or a witness; or
 2. subject the complainant or witness to harassment.

If a disciplinary proceeding is initiated against the employee, data on the complainant or witness shall be available to the employee as may be necessary for the employee to prepare for the proceeding.

- L. The school district shall make any report to the Minnesota Professional Educator Licensing and Standards Board or the state board of education as required by Minn. Stat. § 122A.20, Subd. 2, and shall, upon written request from the licensing board having jurisdiction over a teacher's license, provide the licensing board with information about the teacher from the school district's files, any termination or disciplinary proceeding, and settlement or compromise, or any investigative file in accordance with Minn. Stat. § 122A.20, Subd. 2.
- M. Private personnel data shall be disclosed to the department of economic security for the purpose of administration of the unemployment insurance program under Minn. Stat. Ch. 268.
- N. When a report of alleged maltreatment of a student in a school is made to the Commissioner of Education, data that are relevant and collected by the school about

the person alleged to have committed maltreatment must be provided to the Commissioner on request for purposes of an assessment or investigation of the maltreatment report. Additionally, personnel data may be released for purposes of informing a parent, legal guardian, or custodian of a child that an incident has occurred that may constitute maltreatment of the child, when the incident occurred, and the nature of the conduct that may constitute maltreatment.

- O. The school district shall release to a requesting school district or charter school private personnel data on a current or former employee related to acts of violence toward or sexual contact with a student, if an investigation conducted by or on behalf of the school district or law enforcement affirmed the allegations in writing prior to release and the investigation resulted in the resignation of the subject of the data; or the employee resigned while a complaint or charge involving the allegations was pending, the allegations involved acts of sexual contact with a student, and the employer informed the employee in writing, before the employee resigned, that if the employee resigns while the complaint or charge is still pending, the employer must release private personnel data about the employee's alleged sexual contact with a student to a school district or charter school requesting the data after the employee applies for employment with that school district or charter school and the data remain classified as provided in Minn. Stat. Ch. 13. Data that are released under this paragraph must not include data on the student.
- P. The identity of an employee making a suggestion as part of an organized self-evaluation effort by the school district to cut costs, make the school district more efficient, or to improve school district operations is private.
- Q. Health information on employees is private unless otherwise provided by law. To the extent that the school district transmits protected health information, the school district will comply with all privacy requirements.
- R. Personal home contact information for employees may be used by the school district and shared with another government entity in the event of an emergency or other disruption to ensure continuity of operation for the school district or government entity.
- S. The personal telephone number, home address, and electronic mail address of a current or former employee of a contractor or subcontractor maintained as a result of a contractual relationship between the school district and a contractor or subcontractor entered on or after August 1, 2012, are private data. These data must be shared with another government entity to perform a function authorized by law. The data also must be disclosed to a government entity or any person for prevailing wage purposes.
- T. When a teacher is discharged immediately because the teacher's license has been revoked due to a conviction for child abuse or sexual abuse or when the Commissioner of the Minnesota Department of Education (MDE) makes a final determination of child maltreatment involving a teacher, the school principal or

other person having administrative control of the school must include in the teacher's employment record the information contained in the record of the disciplinary action or the final maltreatment determination, consistent with the definition of public data under Minn. Stat. § 13.41, Subd. 5, and must provide the Minnesota Professional Educator Licensing and Standards Board and the licensing division at MDE with the necessary and relevant information to enable the Minnesota Professional Educator Licensing and Standards Board and MDE's licensing division to fulfill their statutory and administrative duties related to issuing, renewing, suspending, or revoking a teacher's license. In addition to the background check required under Minn. Stat. § 123B.03, a school board or other school hiring authority must contact the Minnesota Professional Educator Licensing and Standards Board and MDE to determine whether the teacher's license has been suspended or revoked, consistent with the discharge and final maltreatment determinations. Unless restricted by federal or state data practices law or by the terms of a collective bargaining agreement, the responsible authority for a school district must disseminate to another school district private personnel data on a current or former teacher (employee or contractor) of the district, including the results of background investigations, if the requesting school district seeks the information because the subject of the data has applied for employment with the requesting school district.

VI. MULTIPLE CLASSIFICATIONS

If data on individuals are classified as both private and confidential by Minn. Stat. Ch. 13, or any other state or federal law, the data are private.

VII. CHANGE IN CLASSIFICATIONS

The school district shall change the classification of data in its possession if it is required to do so to comply with other judicial or administrative rules pertaining to the conduct of legal actions or with a specific statute applicable to the data in the possession of the disseminating or receiving agency.

VIII. RESPONSIBLE AUTHORITY

The school district has designated TBD as the authority responsible for personnel data. If you have any questions, contact [him/her].

IX. EMPLOYEE AUTHORIZATION/RELEASE FORM

An employee authorization form is included as an addendum to this policy.

Legal References: Minn. Stat. Ch. 13 (Minnesota Government Data Practices Act)
Minn. Stat. § 13.02 (Definitions)
Minn. Stat. § 13.37 (General Nonpublic Data)
Minn. Stat. § 13.39 (Civil Investigation Data)

Minn. Stat. § 13.43 (Personnel Data)
Minn. Stat. § 13.601, Subd. 3 (Elected and Appointed Officials)
Minn. Stat. § 122A.20, Subd. 2 (Mandatory Reporting)
Minn. Stat. § 122A.40, Subds. 13 and 16 (Employment; Contracts;
Termination)
Minn. Stat. § 626.556, Subd. 7 (Reporting of Maltreatment of Minors)
P.L. 104-191 (HIPAA)
45 C.F.R. Parts 160 and 164 (HIPAA Regulations)

Cross References: MSBA/MASA Model Policy 206 (Public Participation in School Board Meetings/Complaints about Persons at School Board Meetings and Data Privacy Considerations)
MSBA/MASA Model Policy 515 (Protection and Privacy of Pupil Records)
MSBA Service Manual, Chapter 13, School Law Bulletin “I” (School Records – Privacy – Access to Data)

Adopted: _____

MSBA/MASA Model Policy 410

Orig. 1995

Revised: _____

Rev. 2015

410 FAMILY AND MEDICAL LEAVE POLICY

I. PURPOSE

The purpose of this policy is to provide for family and medical leave to school district employees in accordance with the Family and Medical Leave Act of 1993 (FMLA) and also with parenting leave under state law.

II. GENERAL STATEMENT OF POLICY

The following procedures and policies regarding family and medical leave are adopted by the school district, pursuant to the requirements of the FMLA and consistent with the requirements of the Minnesota parenting leave laws.

III. DEFINITIONS

A. “Covered active duty” means:

1. in the case of a member of a regular component of the Armed Forces, duty during the deployment of the member with the Armed Forces to a foreign country; and
2. in the case of a member of a reserve component of the Armed Forces, duty during the deployment of the member with the Armed Forces to a foreign country under a call or order to active duty under a provision of law referred to in 10 U.S.C. § 101(a)(13)(B).

B. “Covered servicemember” means:

1. a member of the Armed Forces, including a member of the National Guard or Reserves, who is undergoing medical treatment, recuperation, or therapy, is otherwise in outpatient status, or is otherwise on the temporary disability retired list, for a serious injury or illness; or
2. a covered veteran who is undergoing medical treatment, recuperation, or therapy for a serious injury or illness and who was a member of the Armed Forces, including a member of the National Guard or Reserves, and was discharged or released under conditions other than dishonorable, at any time during the period of five years preceding the first date the eligible employee takes FMLA leave to care for the covered veteran.

C. “Eligible employee” means an employee who has been employed by the school

district for a total of at least 12 months and who has been employed for at least 1,250 hours of service during the 12-month period immediately preceding the commencement of the leave. An employee returning from fulfilling his or her Uniformed Services Employment and Reemployment Rights Act (USERRA)-covered service obligation shall be credited with the hours of service that would have been performed but for the period of absence from work due to or necessitated by USERRA-covered service. In determining whether the employee met the hours of service requirement, and to determine the hours that would have been worked during the period of absence from work due to or necessitated by USERRA-covered service, the employee's pre-service work schedule can generally be used for calculations. While the 12 months of employment need not be consecutive, employment periods prior to a break in service of seven years or more may not be counted unless the break is occasioned by the employee's fulfillment of his or her USERRA-covered service obligation or a written agreement, including a collective bargaining agreement, exists concerning the school district's intention to rehire the employee after the break in service.

- D. "Military caregiver leave" means leave taken to care for a covered servicemember with a serious injury or illness.
- E. "Next of kin of a covered servicemember" means the nearest blood relative other than the covered servicemember's spouse, parent, son, or daughter, in the following order of priority: blood relatives who have been granted legal custody of the covered servicemember by court decree or statutory provisions, brothers and sisters, grandparents, aunts and uncles, and first cousins, unless the covered servicemember has specifically designated in writing another blood relative as his or her nearest blood relative for purposes of military caregiver leave under the FMLA. When no such designation is made and there are multiple family members with the same level of relationship to the covered servicemember, all such family members shall be considered the covered servicemember's next of kin, and the employee may take FMLA leave to provide care to the covered servicemember, either consecutively or simultaneously. When such designation has been made, the designated individual shall be deemed to be the covered servicemember's only next of kin.
- F. "Outpatient status" means, with respect to a covered servicemember who is a current member of the Armed Forces, the status of a member of the Armed Forces assigned to:
 - 1. a military medical treatment facility as an outpatient; or
 - 2. a unit established for the purpose of providing command and control of members of the Armed Forces receiving care as outpatients.
- G. "Qualifying exigency" means a situation where the eligible employee seeks leave for one or more of the following reasons:

1. to address any issues that arise from a short-notice deployment (seven calendar days or less) of a covered military member;
 2. to attend military events and related activities of a covered military member;
 3. to address issues related to childcare and school activities of a covered military member's child;
 4. to address financial and legal arrangements for a covered military member;
 5. to attend counseling provided by someone other than a health care provider for oneself, a covered military member, or his/her child;
 6. to spend up to 15 calendar days with a covered military member who is on short-term, temporary rest and recuperation leave during a period of deployment;
 7. to attend post-deployment activities related to a covered military member;
 8. to address parental care needs; and
 9. to address other events related to a covered military member that both the employee and school district agree is a qualifying exigency.
- H. "Serious health condition" means an illness, injury, impairment, or physical or mental condition that involves:
1. inpatient care in a hospital, hospice, or residential medical care facility; or
 2. continuing treatment by a health care provider.
- I. "Spouse" means a husband or wife. For purposes of this definition, husband or wife refers to the other person with whom an individual entered into marriage as defined or recognized under state law for purposes of marriage in the state in which the marriage was entered into or, in the case of a marriage entered into outside of any state, if the marriage is valid in the place where entered into and could have been entered into in at least one state. This definition includes an individual in a same-sex or common law marriage that either: (1) was entered into in a state that recognizes such marriages; or (2) if entered into outside of any state, is valid in the place where entered into and could have been entered into in at least one state.
- J. "Veteran" has the meaning given in 38 U.S.C. § 101.

IV. LEAVE ENTITLEMENT

A. Twelve-week Leave under Federal Law

1. Eligible employees are entitled to a total of 12 work weeks of unpaid family or medical leave during the applicable 12-month period as defined below, plus any additional leave as required by law. Leave may be taken for one or more of the following reasons in accordance with applicable law:
 - a. birth of the employee's child and to care for such child;
 - b. placement of an adopted or foster child with the employee;
 - c. to care for the employee's spouse, son, daughter, or parent with a serious health condition;
 - d. the employee's serious health condition makes the employee unable to perform the functions of the employee's job; and/or
 - e. any qualifying exigency arising from the employee's spouse, son, daughter, or parent being on covered active duty, or notified of an impending call or order to covered active duty in the Armed Forces.
2. For the purposes of this policy, "year" is defined as a rolling 12-month period measured backward from the date an employee's leave is to commence.
3. An employee's entitlement to FMLA leave for the birth, adoption, or foster care of a child expires at the end of the 12-month period beginning on the date of the birth or placement.
4. A "serious health condition" typically requires either inpatient care or continuing treatment by or under the supervision of a health care provider, as defined by applicable law. Family and medical leave generally is not intended to cover short-term conditions for which treatment and recovery are very brief.
5. A "serious injury or illness," in the case of a member of the Armed Forces, including a member of the National Guard or Reserves, means:
 - a. injury or illness that was incurred by the member in the line of duty on active duty in the Armed Forces or that existed before the beginning of the member's active duty and was aggravated by service in the line of duty on active duty in the Armed Forces and that may render the member medically unfit to perform the duties of the member's office, grade, rank, or rating; and
 - b. in the case of a covered veteran who was a member of the Armed Forces, including a member of the National Guard or Reserves, at any time, during the period of five years preceding the date on which the veteran undergoes the medical treatment, recuperation, or

therapy, means a qualifying injury or illness that was incurred by the member in the line of duty on active duty in the Armed Forces or that existed before the beginning of the member's active duty and was aggravated by service in the line of duty in the Armed Forces and that manifested itself before or after the member became a veteran, and is:

- (1) a continuation of a serious injury or illness that was incurred or aggravated when the covered veteran was a member of the Armed Forces and rendered the servicemember unable to perform the duties of the servicemember's office, grade, rank, or rating; or
 - (2) a physical or mental condition for which the covered veteran has received a U.S. Department of Veterans Affairs Service-Related Disability (VASRD) rating of 50 percent or greater and such VASRD rating is based, in whole or in part, on the condition precipitating the need for military caregiver leave; or
 - (3) a physical or mental condition that substantially impairs the covered veteran's ability to secure or follow a substantially gainful occupation by reason of a disability or disabilities related to military service, or would do so absent treatment; or
 - (4) an injury, including a psychological injury, on the basis of which the covered veteran has been enrolled in the Department of Veterans Affairs Program of Comprehensive Assistance for Family Caregivers.
6. Eligible spouses employed by the school district are limited to an aggregate of 12 weeks of leave during any 12-month period for the birth and care of a newborn child or adoption of a child, the placement of a child for foster care, or to care for a parent. This limitation for spouses employed by the school district does not apply to leave taken: by one spouse to care for the other spouse who is seriously ill; to care for a child with a serious health condition; because of the employee's own serious health condition; or pursuant to Paragraph IV.A.1.e. above.
 7. Depending on the type of leave, intermittent or reduced schedule leave may be granted in the discretion of the school district or when medically necessary. However, part-time employees are only eligible for a pro-rata portion of leave to be used on an intermittent or reduced schedule basis, based on their average hours worked per week. Where an intermittent or reduced schedule leave is foreseeable based on planned medical treatment, the school district may transfer the employee temporarily to an available

alternative position for which the employee is qualified and which better accommodates recurring periods of leave than does the employee's regular position, and which has equivalent pay and benefits.

8. If an employee requests a leave for the serious health condition of the employee or the employee's spouse, child, or parent, the employee will be required to submit sufficient medical certification. In such a case, the employee must submit the medical certification within 15 days from the date of the request or as soon as practicable under the circumstances.
9. If the school district has reason to doubt the validity of a health care provider's certification, it may require a second opinion at the school district's expense. If the opinions of the first and second health care providers differ, the school district may require certification from a third health care provider at the school district's expense. An employee may also be required to present a certification from a health care provider indicating that the employee is able to return to work.
10. Requests for leave shall be made to the school district. When leave relates to an employee's spouse, son, daughter, parent, or covered servicemember being on covered active duty, or notified of an impending call or order to covered active duty pursuant to Paragraph IV.A.1.e. above, and such leave is foreseeable, the employee shall provide reasonable and practical notice to the school district of the need for leave. For all other leaves, employees must give 30 days' written notice of a leave of absence where practicable. The failure to provide the required notice may result in a delay of the requested leave. Employees are expected to make a reasonable effort to schedule leaves resulting from planned medical treatment so as not to disrupt unduly the operations of the school district, subject to and in coordination with the health care provider.
11. The school district may require that a request for leave under Paragraph IV.A.1.e. above be supported by a copy of the covered military member's active duty orders or other documentation issued by the military indicating active duty or a call to active duty status and the dates of active duty service. In addition, the school district may require the employee to provide sufficient certification supporting the qualifying exigency for which leave is requested.
12. During the period of a leave permitted under this policy, the school district will provide health insurance under its group health plan under the same conditions coverage would have been provided had the employee not taken the leave. The employee will be responsible for payment of the employee contribution to continue group health insurance coverage during the leave. An employee's failure to make necessary and timely contributions may result in termination of coverage. An employee who does not return to work after the leave may be required, in some situations, to reimburse the school

district for the cost of the health plan premiums paid by it.

13. The school district may request or require the employee to substitute accrued paid leave for any part of the 12-week period. Employees may be allowed to substitute paid leave for unpaid leave by meeting the requirements set out in the administrative directives and guidelines established for the implementation of this policy, if any. Employees eligible for leave must comply with the family and medical leave directives and guidelines prior to starting leave. The superintendent shall be responsible to develop directives and guidelines as necessary to implement this policy. Such directives and guidelines shall be submitted to the school board for annual review.

The school district shall comply with written notice requirements as set forth in federal regulations.

14. Employees returning from a leave permitted under this policy are eligible for reinstatement in the same or an equivalent position as provided by law. However, the employee has no greater right to reinstatement or to other benefits and conditions of employment than if the employee had been continuously employed during the leave.

B. Twelve-week Leave under State Law

An employee who does not qualify for parenting leave under Paragraphs IV.A.1.a. or IV.A.1.b. above may qualify for a 12-week unpaid leave which is available to a biological or adoptive parent in conjunction with the birth or adoption of a child, or to a female employee for prenatal care or incapacity due to pregnancy, childbirth, or related health conditions. The length of the leave shall be determined by the employee but must not exceed 12 weeks unless agreed by the employer. The employee may qualify if he or she has worked for the school district for at least 12 months and has worked an average number of hours per week equal to one-half of the full time equivalent during the 12-month period immediately preceding the leave. This leave is separate and exclusive of the family and medical leave described in the preceding paragraphs but may be reduced by any period of paid parental, disability, personal, or medical, or sick leave, or accrued vacation provided by the employer so that the total leave does not exceed 12 weeks, unless agreed by the employer, or leave taken for the same purpose under the FMLA. The leave taken under this section shall begin at a time requested by the employee. An employee who plans to take leave under this section must give the employer reasonable notice of the date the leave shall commence and the estimated duration of the leave. For leave taken by a biological or adoptive parent in conjunction with the birth or adoption of a child, the leave must begin within 12 months of the birth or adoption; except that, in the case where the child must remain in the hospital longer than the mother, the leave must begin within 12 months after the child leaves the hospital.

C. Twenty-six-week Servicemember Family Military Leave

1. An eligible employee who is the spouse, son, daughter, parent, or next of kin of a covered servicemember shall be entitled to a total of 26 work weeks of leave during a 12-month period to care for the servicemember. The leave described in this paragraph shall be available only during a single 12-month period. For purposes of this leave, the need to care for a servicemember includes both physical and psychological care.
2. During a single 12-month period, an employee shall be entitled to a combined total of 26 work weeks of leave under Paragraphs IV.A. and IV.C. above.
3. The 12-month period referred to in this section begins on the first day the eligible employee takes leave to care for a covered servicemember and ends 12 months after that date.
4. Eligible spouses employed by the school district are limited to an aggregate of 26 weeks of leave during any 12-month period if leave is taken for birth of the employee's child or to care for the child after birth; for placement of a child with the employee for adoption or foster care or to care for the child after placement; to care for the employee's parent with a serious health condition; or to care for a covered servicemember with a serious injury or illness.
5. The school district may request or require the employee to substitute accrued paid leave for any part of the 26-week period. Employees may be allowed to substitute paid leave for unpaid leave by meeting the requirements set out in the administrative directives and guidelines established for the implementation of this policy, if any. Employees eligible for leave must comply with the family and medical leave directives and guidelines prior to starting leave.
6. An employee will be required to submit sufficient medical certification issued by the health care provider of the covered servicemember and other information in support of requested leave and eligibility for such leave under this section within 15 days from the date of the request or as soon as practicable under the circumstances.
7. The provisions of Paragraphs IV.A.7., IV.A.10., IV.A.12., IV.A.13., and IV.A.14. above shall apply to leaves under this section.

V. **SPECIAL RULES FOR INSTRUCTIONAL EMPLOYEES**

- A. An instructional employee is one whose principal function is to teach and instruct students in a class, a small group, or an individual setting. This includes, but is not limited to, teachers, coaches, driver's education instructors, and special education

assistants.

- B. Instructional employees who request foreseeable medically necessary intermittent or reduced work schedule leave greater than 20 percent of the work days in the leave period may be required to:
 - 1. take leave for the entire period or periods of the planned medical treatment; or
 - 2. move to an available alternative position for which the employee is qualified, and which provides equivalent pay and benefits, but not necessarily equivalent duties.
- C. Instructional employees who request continuous leave near the end of a semester may be required to extend the leave through the end of the semester. The number of weeks remaining before the end of a semester does not include scheduled school breaks, such as summer, winter, or spring break.
 - 1. If an instructional employee begins leave for any purpose more than five weeks before the end of a semester and it is likely the leave will last at least three weeks, the school district may require that the leave be continued until the end of the semester.
 - 2. If the employee begins leave for a purpose other than the employee's own serious health condition during the last five weeks of a semester, the school district may require that the leave be continued until the end of the semester if the leave will last more than two weeks or if the employee's return from leave would occur during the last two weeks of the semester.
 - 3. If the employee begins leave for a purpose other than the employee's own serious health condition during the last three weeks of the semester and the leave will last more than five working days, school district may require the employee to continue taking leave until the end of the semester.
- D. The entire period of leave taken under the special rules will be counted as leave. The school district will continue to fulfill the school district's leave responsibilities and obligations, including the obligation to continue the employee's health insurance and other benefits, if an instructional employee's leave entitlement ends before the involuntary leave period expires.

VI. OTHER

- A. The provisions of this policy are intended to comply with applicable law, including the FMLA and applicable regulations. Any terms used from the FMLA will have the same meaning as defined by the FMLA and/or applicable regulations. To the extent that this policy is ambiguous or contradicts applicable law, the language of the applicable law will prevail.

- B. The requirements stated in the collective bargaining agreement between employees in a certified collective bargaining unit and the school district regarding family and medical leaves (if any) shall be followed.

VII. DISSEMINATION OF POLICY

- A. This policy shall be conspicuously posted in each school district building in areas accessible to employees.
- B. This policy will be reviewed at least annually for compliance with state and federal law.

Legal References: Minn. Stat. §§ 181.940-181.944 (Parenting Leave)
10 U.S.C. § 101 *et seq.* (Armed Forces General Military Law)
29 U.S.C. § 2601 *et seq.* (Family and Medical Leave Act)
38 U.S.C. § 101 (Definitions)
29 C.F.R. Part 825 (Family and Medical Leave Act)

Cross References: MSBA Service Manual, Chapter 13, School Law Bulletin “M” (Statutory Provisions Which Grant Leaves to Licensed as well as Non-Licensed School District Employees – Family and Medical Leave Act Summary)

Adopted: _____

MSBA/MASA Model Policy 412

Orig. 1995

Revised: _____

Rev. 2008

412 EXPENSE REIMBURSEMENT

I. PURPOSE

The purpose of this policy is to identify school district business expenses that involve initial payment by an employee and qualify for reimbursement from the school district, and to specify the manner by which the employee seeks reimbursement.

II. AUTHORIZATION

All school district business expenses to be reimbursed must be approved by the supervising administrator. Such expenses to be reimbursed may include transportation, meals, lodging, registration fees, required materials, parking fees, tips, and other reasonable and necessary school district business-related expenses.

III. REIMBURSEMENT

- A. Requests for reimbursement must be itemized on the official school district form and are to be submitted to the designated administrator. Receipts for lodging, commercial transportation, registration, and other reasonable and necessary expenses must be attached to the reimbursement form.
- B. Automobile travel shall be reimbursed at the mileage rate set by the school board. Commercial transportation shall reflect economy fares and shall be reimbursed only for the actual cost of the trip.

IV. AIRLINE TRAVEL CREDIT

- A. Employees utilizing school district funds to pay for airline travel are required to ensure that any credits or other benefits issued by any airline accrue to the benefit of the school district rather than the employee.
 - 1. To the extent an airline will not honor a transfer or assignment of credit or benefit from the employee to the school district, the employee shall report receipt of the credit or benefit to the designated administrator within 90 days of receipt of the credit or benefit.
 - 2. Reports of the receipt of an airline credit or benefit shall be made in writing and shall include verification from the airline as to the credit or benefit received. Reimbursement for airline travel expenses will not be made until such documentation is provided.

- B. Employees who have existing credits or benefits issued by an airline based upon previously reimbursed airline travel for school district purposes will be required to utilize those credits or benefits toward any subsequent airline travel related to school district purposes, prior to reimbursement for such travel, to the extent permitted and/or feasible.
- C. The requirements of this section apply to all airline travel, regardless of where or how the tickets are purchased.

V. ESTABLISHMENT OF DIRECTIVES AND GUIDELINES

The superintendent shall develop a schedule of reimbursement rates for school district business expenses, including those expenses requiring advance approval and specific rates of reimbursement. The superintendent shall also develop directives and guidelines to address methods and times for submission of requests for reimbursement.

Legal References: Minn. Stat. § 15.435 (Airline Travel Credit)
Minn. Stat. § 471.665 (Mileage Allowances)
Minn. Op. Atty. Gen. 1035 (Aug. 23, 1999) (Retreat Expenses)
Minn. Op. Atty. Gen. 161b-12 (Aug. 4, 1997) (Transportation Expenses)
Minn. Op. Atty. Gen. 161B-12 (Jan. 24, 1989) (Operating Expenses of Car)

Cross References: MSBA/MASA Model Policy 214 (Out-of-State Travel by School Board Members).

Adopted: _____

MSBA/MASA Model Policy 413

Orig. 1995

Revised: _____

Rev. 2017

413 HARASSMENT AND VIOLENCE

I. PURPOSE

The purpose of this policy is to maintain a learning and working environment that is free from harassment and violence on the basis of race, color, creed, religion, national origin, sex, age, marital status, familial status, status with regard to public assistance, sexual orientation, including gender identity or expression, or disability.

II. GENERAL STATEMENT OF POLICY

- A. The policy of the school district is to maintain a learning and working environment that is free from harassment and violence on the basis of race, color, creed, religion, national origin, sex, age, marital status, familial status, status with regard to public assistance, sexual orientation, including gender identity or expression, or disability. The school district prohibits any form of harassment or violence on the basis of race, color, creed, religion, national origin, sex, age, marital status, familial status, status with regard to public assistance, sexual orientation, including gender identity or expression, or disability.
- B. A violation of this policy occurs when any student, teacher, administrator, or other school district personnel harasses a student, teacher, administrator, or other school district personnel or group of students, teachers, administrators, or other school district personnel through conduct or communication based on a person's race, color, creed, religion, national origin, sex, age, marital status, familial status, status with regard to public assistance, sexual orientation, including gender identity or expression, or disability, as defined by this policy. (For purposes of this policy, school district personnel include school board members, school employees, agents, volunteers, contractors, or persons subject to the supervision and control of the district.)
- C. A violation of this policy occurs when any student, teacher, administrator, or other school district personnel inflicts, threatens to inflict, or attempts to inflict violence upon any student, teacher, administrator, or other school district personnel or group of students, teachers, administrators, or other school district personnel based on a person's race, color, creed, religion, national origin, sex, age, marital status, familial status, status with regard to public assistance, sexual orientation, including gender identity or expression, or disability.
- D. The school district will act to investigate all complaints, either formal or informal, verbal or written, of harassment or violence based on a person's race, color, creed, religion, national origin, sex, age, marital status, familial status, status with regard

to public assistance, sexual orientation, including gender identity or expression, or disability, and to discipline or take appropriate action against any student, teacher, administrator, or other school district personnel who is found to have violated this policy.

III. DEFINITIONS

A. “Assault” is:

1. an act done with intent to cause fear in another of immediate bodily harm or death;
2. the intentional infliction of or attempt to inflict bodily harm upon another; or
3. the threat to do bodily harm to another with present ability to carry out the threat.

B. “Harassment” prohibited by this policy consists of physical or verbal conduct, including, but not limited to, electronic communications, relating to an individual’s or group of individuals’ race, color, creed, religion, national origin, sex, age, marital status, familial status, status with regard to public assistance, sexual orientation, including gender identity or expression, or disability when the conduct:

1. has the purpose or effect of creating an intimidating, hostile, or offensive working or academic environment;
2. has the purpose or effect of substantially or unreasonably interfering with an individual’s work or academic performance; or
3. otherwise adversely affects an individual’s employment or academic opportunities.

C. “Immediately” means as soon as possible but in no event longer than 24 hours.

D. Protected Classifications; Definitions

1. “Disability” means any condition or characteristic that renders a person a disabled person. A disabled person is any person who:
 - a. has a physical, sensory, or mental impairment which materially limits one or more major life activities;
 - b. has a record of such an impairment; or
 - c. is regarded as having such an impairment.

2. “Familial status” means the condition of one or more minors being domiciled with:
 - a. their parent or parents or the minor’s legal guardian; or
 - b. the designee of the parent or parents or guardian with the written permission of the parent or parents or guardian. The protections afforded against harassment on the basis of family status apply to any person who is pregnant or is in the process of securing legal custody of an individual who has not attained the age of majority.
 3. “Marital status” means whether a person is single, married, remarried, divorced, separated, or a surviving spouse and, in employment cases, includes protection against harassment on the basis of the identity, situation, actions, or beliefs of a spouse or former spouse.
 4. “National origin” means the place of birth of an individual or of any of the individual’s lineal ancestors.
 5. “Sex” includes, but is not limited to, pregnancy, childbirth, and disabilities related to pregnancy or childbirth.
 6. “Sexual orientation” means having or being perceived as having an emotional, physical, or sexual attachment to another person without regard to the sex of that person or having or being perceived as having an orientation for such attachment, or having or being perceived as having a self-image or identity not traditionally associated with one’s biological maleness or femaleness. “Sexual orientation” does not include a physical or sexual attachment to children by an adult.
 7. “Status with regard to public assistance” means the condition of being a recipient of federal, state, or local assistance, including medical assistance, or of being a tenant receiving federal, state, or local subsidies, including rental assistance or rent supplements.
- E. “Remedial response” means a measure to stop and correct acts of harassment or violence, prevent acts of harassment or violence from recurring, and protect, support, and intervene on behalf of a student who is the target or victim of acts of harassment or violence.
- F. Sexual Harassment; Definition
1. Sexual harassment consists of unwelcome sexual advances, requests for sexual favors, sexually motivated physical conduct or other verbal or physical conduct or communication of a sexual nature when:
 - a. submission to that conduct or communication is made a term or

condition, either explicitly or implicitly, of obtaining employment or an education; or

- b. submission to or rejection of that conduct or communication by an individual is used as a factor in decisions affecting that individual's employment or education; or
- c. that conduct or communication has the purpose or effect of substantially or unreasonably interfering with an individual's employment or education, or creating an intimidating, hostile, or offensive employment or educational environment.

2. Sexual harassment may include, but is not limited to:

- a. unwelcome verbal harassment or abuse;
- b. unwelcome pressure for sexual activity;
- c. unwelcome, sexually motivated, or inappropriate patting, pinching, or physical contact, other than necessary restraint of student(s) by teachers, administrators, or other school district personnel to avoid physical harm to persons or property;
- d. unwelcome sexual behavior or words, including demands for sexual favors, accompanied by implied or overt threats concerning an individual's employment or educational status;
- e. unwelcome sexual behavior or words, including demands for sexual favors, accompanied by implied or overt promises of preferential treatment with regard to an individual's employment or educational status; or
- f. unwelcome behavior or words directed at an individual because of sexual orientation, including gender identity or expression.

G. Sexual Violence; Definition

- 1. Sexual violence is a physical act of aggression or force or the threat thereof which involves the touching of another's intimate parts or forcing a person to touch any person's intimate parts. Intimate parts, as defined in Minn. Stat. § 609.341, includes the primary genital area, groin, inner thigh, buttocks, or breast, as well as the clothing covering these areas.
- 2. Sexual violence may include, but is not limited to:
 - a. touching, patting, grabbing, or pinching another person's intimate parts, whether that person is of the same sex or the opposite sex;

- b. coercing, forcing, or attempting to coerce or force the touching of anyone's intimate parts;
- c. coercing, forcing, or attempting to coerce or force sexual intercourse or a sexual act on another; or
- d. threatening to force or coerce sexual acts, including the touching of intimate parts or intercourse, on another.

H. Violence; Definition

Violence prohibited by this policy is a physical act of aggression or assault upon another or group of individuals because of, or in a manner reasonably related to, race, color, creed, religion, national origin, sex, age, marital status, familial status, status with regard to public assistance, sexual orientation, including gender identity or expression, or disability.

IV. **REPORTING PROCEDURES**

- A. Any person who believes he or she has been the target or victim of harassment or violence on the basis of race, color, creed, religion, national origin, sex, age, marital status, familial status, status with regard to public assistance, sexual orientation, including gender identity or expression, or disability by a student, teacher, administrator, or other school district personnel, or any person with knowledge or belief of conduct which may constitute harassment or violence prohibited by this policy toward a student, teacher, administrator, or other school district personnel or group of students, teachers, administrators, or other school district personnel should report the alleged acts immediately to an appropriate school district official designated by this policy. A person may report conduct which may constitute harassment or violence anonymously. However, the school district may not rely solely on an anonymous report to determine discipline or other remedial responses.
- B. The school district encourages the reporting party or complainant to use the report form available from the principal or building supervisor of each building or available from the school district office, but oral reports shall be considered complaints as well.
- C. Nothing in this policy shall prevent any person from reporting harassment or violence directly to a school district human rights officer or to the superintendent. If the complaint involves the building report taker, the complaint shall be made or filed directly with the superintendent or the school district human rights officer by the reporting party or complainant.
- D. In Each School Building. The building principal, the principal's designee, or the building supervisor (hereinafter the "building report taker") is the person responsible for receiving oral or written reports of harassment or violence

prohibited by this policy at the building level. Any adult school district personnel who receives a report of harassment or violence prohibited by this policy shall inform the building report taker immediately. If the complaint involves the building report taker, the complaint shall be made or filed directly with the superintendent or the school district human rights officer by the reporting party or complainant. The building report taker shall ensure that this policy and its procedures, practices, consequences, and sanctions are fairly and fully implemented and shall serve as a primary contact on policy and procedural matters.

- E. A teacher, school administrator, volunteer, contractor, or other school employee shall be particularly alert to possible situations, circumstances, or events that might include acts of harassment or violence. Any such person who witnesses, observes, receives a report of, or has other knowledge or belief of conduct that may constitute harassment or violence shall make reasonable efforts to address and resolve the harassment or violence and shall inform the building report taker immediately. School district personnel who fail to inform the building report taker of conduct that may constitute harassment or violence or who fail to make reasonable efforts to address and resolve the harassment or violence in a timely manner may be subject to disciplinary action.
- F. Upon receipt of a report, the building report taker must notify the school district human rights officer immediately, without screening or investigating the report. The building report taker may request, but may not insist upon, a written complaint. A written statement of the facts alleged will be forwarded as soon as practicable by the building report taker to the human rights officer. If the report was given verbally, the building report taker shall personally reduce it to written form within 24 hours and forward it to the human rights officer. Failure to forward any harassment or violence report or complaint as provided herein may result in disciplinary action against the building report taker.
- G. In the District. The school board hereby designates TBD as the school district human rights officer(s) to receive reports or complaints of harassment or violence prohibited by this policy. If the complaint involves a human rights officer, the complaint shall be filed directly with the superintendent.¹
- H. The school district shall conspicuously post the name of the human rights officer(s), including mailing addresses and telephone numbers.
- I. Submission of a good faith complaint or report of harassment or violence prohibited by this policy will not affect the complainant or reporter's future employment, grades, work assignments, or educational or work environment.
- J. Use of formal reporting forms is not mandatory.
- K. Reports of harassment or violence prohibited by this policy are classified as private

¹ In some school districts the superintendent may be the human rights officer. If so, an alternative individual should be designated by the school board.

educational and/or personnel data and/or confidential investigative data and will not be disclosed except as permitted by law.

- L. The school district will respect the privacy of the complainant(s), the individual(s) against whom the complaint is filed, and the witnesses as much as possible, consistent with the school district's legal obligations to investigate, to take appropriate action, and to comply with any discovery or disclosure obligations.
- M. Retaliation against a victim, good faith reporter, or a witness of violence or harassment is prohibited.
- N. False accusations or reports of violence or harassment against another person are prohibited.
- O. A person who engages in an act of violence or harassment, reprisal, retaliation, or false reporting of violence or harassment, or permits, condones, or tolerates violence or harassment shall be subject to discipline or other remedial responses for that act in accordance with the school district's policies and procedures.

Consequences for students who commit, or are a party to, prohibited acts of violence or harassment or who engage in reprisal or intentional false reporting may range from remedial responses or positive behavioral interventions up to and including suspension and/or expulsion.

Consequences for employees who permit, condone, or tolerate violence or harassment or engage in an act of reprisal or intentional false reporting of violence or harassment may result in disciplinary action up to and including termination or discharge.

Consequences for other individuals engaging in prohibited acts of violence or harassment may include, but not be limited to, exclusion from school district property and events and/or termination of services and/or contracts.

V. INVESTIGATION

- A. By authority of the school district, the human rights officer, within three (3) days of the receipt of a report or complaint alleging harassment or violence prohibited by this policy, shall undertake or authorize an investigation. The investigation may be conducted by school district officials or by a third party designated by the school district.
- B. The investigation may consist of personal interviews with the complainant, the individual(s) against whom the complaint is filed, and others who may have knowledge of the alleged incident(s) or circumstances giving rise to the complaint. The investigation may also consist of any other methods and documents deemed pertinent by the investigator.

- C. In determining whether alleged conduct constitutes a violation of this policy, the school district should consider the surrounding circumstances, the nature of the behavior, past incidents or past or continuing patterns of behavior, the relationships between the parties involved, and the context in which the alleged incidents occurred. Whether a particular action or incident constitutes a violation of this policy requires a determination based on all the facts and surrounding circumstances.
- D. In addition, the school district may take immediate steps, at its discretion, to protect the target or victim, the complainant, and students, teachers, administrators, or other school district personnel pending completion of an investigation of alleged harassment or violence prohibited by this policy.
- E. The alleged perpetrator of the act(s) of harassment or violence shall be allowed the opportunity to present a defense during the investigation or prior to the imposition of discipline or other remedial responses.
- F. The investigation will be completed as soon as practicable. The school district human rights officer shall make a written report to the superintendent upon completion of the investigation. If the complaint involves the superintendent, the report may be filed directly with the school board. The report shall include a determination of whether the allegations have been substantiated as factual and whether they appear to be violations of this policy.

VI. SCHOOL DISTRICT ACTION

- A. Upon completion of an investigation that determines a violation of this policy has occurred, the school district will take appropriate action. Such action may include, but is not limited to, warning, suspension, exclusion, expulsion, transfer, remediation, termination, or discharge. Disciplinary consequences will be sufficiently severe to try to deter violations and to appropriately discipline prohibited behavior. School district action taken for violation of this policy will be consistent with requirements of applicable collective bargaining agreements, Minnesota and federal law, and applicable school district policies and regulations.
- B. The school district is not authorized to disclose to a victim private educational or personnel data regarding an alleged perpetrator who is a student or employee of the school district. School officials will notify the parent(s) or guardian(s) of targets or victims of harassment or violence and the parent(s) or guardian(s) of alleged perpetrators of harassment or violence who have been involved in a reported and confirmed harassment or violence incident of the remedial or disciplinary action taken, to the extent permitted by law.
- C. In order to prevent or respond to acts of harassment or violence committed by or directed against a child with a disability, the school district shall, where determined appropriate by the child's individualized education program (IEP) or Section 504 team, allow the child's IEP or Section 504 plan to be drafted to address the skills

and proficiencies the child needs as a result of the child's disability to allow the child to respond to or not to engage in acts of harassment or violence.

VII. RETALIATION OR REPRISAL

The school district will discipline or take appropriate action against any student, teacher, administrator, or other school district personnel who commits an act of reprisal or who retaliates against any person who asserts, alleges, or makes a good faith report of alleged harassment or violence prohibited by this policy, who testifies, assists, or participates in an investigation of retaliation or alleged harassment or violence, or who testifies, assists, or participates in a proceeding or hearing relating to such harassment or violence. Retaliation includes, but is not limited to, any form of intimidation, reprisal, harassment, or intentional disparate treatment. Disciplinary consequences will be sufficiently severe to deter violations and to appropriately discipline the individual(s) who engaged in the harassment or violence. Remedial responses to the harassment or violence shall be tailored to the particular incident and nature of the conduct.

VIII. RIGHT TO ALTERNATIVE COMPLAINT PROCEDURES

These procedures do not deny the right of any individual to pursue other avenues of recourse which may include filing charges with the Minnesota Department of Human Rights, initiating civil action, or seeking redress under state criminal statutes and/or federal law.

IX. HARASSMENT OR VIOLENCE AS ABUSE

- A. Under certain circumstances, alleged harassment or violence may also be possible abuse under Minnesota law. If so, the duties of mandatory reporting under Minn. Stat. § 626.556 may be applicable.
- B. Nothing in this policy will prohibit the school district from taking immediate action to protect victims of alleged harassment, violence, or abuse.

X. DISSEMINATION OF POLICY AND TRAINING

- A. This policy shall be conspicuously posted throughout each school building in areas accessible to students and staff members.
- B. This policy shall be given to each school district employee and independent contractor who regularly interacts with students at the time of initial employment with the school district.
- C. This policy shall appear in the student handbook.
- D. The school district will develop a method of discussing this policy with students and employees.

- E. The school district may implement violence prevention and character development education programs to prevent and reduce policy violations. Such programs may offer instruction on character education including, but not limited to, character qualities such as attentiveness, truthfulness, respect for authority, diligence, gratefulness, self-discipline, patience, forgiveness, respect for others, peacemaking, resourcefulness, and/or sexual abuse prevention.
- F. This policy shall be reviewed at least annually for compliance with state and federal law.

Legal References: Minn. Stat. § 120B.232 (Character Development Education)
Minn. Stat. § 120B.234 (Child Sexual Abuse Prevention Education)
Minn. Stat. § 121A.03, Subd. 2 (Sexual, Religious, and Racial Harassment and Violence Policy)
Minn. Stat. § 121A.031 (School Student Bullying Policy)
Minn. Stat. Ch. 363A (Minnesota Human Rights Act)
Minn. Stat. § 609.341 (Definitions)
Minn. Stat. § 626.556 *et seq.* (Reporting of Maltreatment of Minors)
20 U.S.C. §§ 1681-1688 (Title IX of the Education Amendments of 1972)
29 U.S.C. § 621 *et seq.* (Age Discrimination in Employment Act)
29 U.S.C. § 794 (Rehabilitation Act of 1973, § 504)
42 U.S.C. § 1983 (Civil Action for Deprivation of Rights)
42 U.S.C. § 2000d *et seq.* (Title VI of the Civil Rights Act of 1964)
42 U.S.C. § 2000e *et seq.* (Title VII of the Civil Rights Act)
42 U.S.C. § 12101 *et seq.* (Americans with Disabilities Act)

Cross References: MSBA/MASA Model Policy 102 (Equal Educational Opportunity)
MSBA/MASA Model Policy 401 (Equal Employment Opportunity)
MSBA/MASA Model Policy 402 (Disability Nondiscrimination Policy)
MSBA/MASA Model Policy 403 (Discipline, Suspension, and Dismissal of School District Employees)
MSBA/MASA Model Policy 406 (Public and Private Personnel Data)
MSBA/MASA Model Policy 414 (Mandated Reporting of Child Neglect or Physical or Sexual Abuse)
MSBA/MASA Model Policy 415 (Mandated Reporting of Maltreatment of Vulnerable Adults)
MSBA/MASA Model Policy 506 (Student Discipline)
MSBA/MASA Model Policy 514 (Bullying Prohibition Policy)
MSBA/MASA Model Policy 515 (Protection and Privacy of Pupil Records)
MSBA/MASA Model Policy 521 (Student Disability Nondiscrimination)
MSBA/MASA Model Policy 522 (Student Sex Nondiscrimination)
MSBA/MASA Model Policy 524 (Internet Acceptable Use and Safety Policy)
MSBA/MASA Model Policy 525 (Violence Prevention)
MSBA/MASA Model Policy 526 (Hazing Prohibition)
MSBA/MASA Model Policy 528 (Student Parental, Family, and Marital)

Status Nondiscrimination)

Adopted: _____

MSBA/MASA Model Policy 417

Orig. 1995

Revised: _____

Rev. 2015

417 CHEMICAL USE AND ABUSE

I. PURPOSE

The school board recognizes that chemical use and abuse constitutes a grave threat to the physical and mental well-being of students and employees and significantly impedes the learning process. Chemical use and abuse also creates significant problems for society in general. The school board believes that the public school has a role in education, intervention, and prevention of chemical use and abuse. The purpose of this policy is to assist the school district in its goal to prevent chemical use and abuse by providing procedures for education and intervention.

II. GENERAL STATEMENT OF POLICY

- A. Use of controlled substances, medical cannabis, toxic substances, and alcohol is prohibited in the school setting in accordance with school district policies with respect to a Drug-Free Workplace/Drug-Free School.
- B. The policy of this school district is to provide an instructional program in every elementary and secondary school in chemical abuse and the prevention of chemical dependency.
- C. The school district shall establish and maintain in every school a chemical abuse preassessment team. The team is responsible for addressing reports of chemical abuse problems and making recommendations for appropriate responses to the individual reported cases.
- D. The superintendent, with the advice of the school board, shall be responsible for establishing a school and community advisory team to address chemical abuse problems in the district.
- E. The school district shall establish and maintain a program to educate and assist employees, students and others in understanding this policy and the goals of achieving drug-free schools and workplaces.

III. DEFINITIONS

- A. “Chemical abuse” means use of any psychoactive or mood-altering chemical substance, without compelling medical reason, in a manner that induces mental, emotional, or physical impairment and causes socially dysfunctional or socially disordering behavior, to the extent that the student’s normal function in academic, school, or social activities is chronically impaired.

- B. “Chemicals” includes, but is not limited to, alcohol, toxic substances, medical cannabis, and controlled substances as defined in the school district’s Drug-Free Workplace/Drug-Free School policy.
- C. “Use” includes to sell, buy, manufacture, distribute, dispense, use, or be under the influence of alcohol and/or controlled substances, whether or not for the purpose of receiving remuneration.
- D. “School location” includes any school building or on any school premises; on any school-owned vehicle or in any other school-approved vehicle used to transport students to and from school or school activities; off-school property at any school-sponsored or school-approved activity, event, or function, such as a field trip or athletic event, where students are under the jurisdiction of the school district; or during any period of time such employee is supervising students on behalf of the school district or otherwise engaged in school district business.

IV. STUDENTS

A. Instruction

- 1. Every school shall provide an instructional program in chemical abuse and the prevention of chemical dependency. The school district may involve parents, students, health care professionals, state department staff, and members of the community in developing the curriculum.
- 2. Each school shall have age-appropriate and developmentally based activities that:
 - a. address the consequences of violence and the illegal use of drugs, as appropriate;
 - b. promote a sense of individual responsibility;
 - c. teach students that most people do not illegally use drugs;
 - d. teach students to recognize social and peer pressure to use drugs illegally and the skills for resisting illegal drug use;
 - e. teach students about the dangers of emerging drugs;
 - f. engage students in the learning process; and
 - g. incorporate activities in secondary schools that reinforce prevention activities implemented in elementary schools.

3. Each school shall have activities that involve families, community sectors (which may include appropriately trained seniors), and a variety of drug and violence prevention providers in setting clear expectations against violence and illegal use of drugs and appropriate consequences for violence and illegal use of drugs.
4. Each school shall disseminate drug and violence prevention information within the school and to the community.
5. Each school shall have professional development and training for, and involvement of, school personnel, student services personnel, parents, and interested community members in prevention, education, early identification and intervention, mentoring, or rehabilitation referral, as related to drug and violence prevention.
6. Each school shall have drug and violence prevention activities that may include the following:
 - a. Community-wide planning and organizing activities to reduce violence and illegal drug use, which may include gang activity prevention.
 - b. The hiring and mandatory training, based on scientific research, of school security personnel who interact with students in support of youth drug and violence prevention activities under this policy that are implemented in the school.
 - c. Conflict resolution programs, including peer mediation programs that educate and train peer mediators and a designated faculty supervisor, and youth anti-crime and anti-drug councils and activities.
 - d. Counseling, mentoring, referral services, and other student assistance practices and programs, including assistance provided by qualified school-based mental health services providers and the training of teachers by school-based mental health services providers in appropriate identification and intervention techniques for students at risk of violent behavior and illegal use of drugs.
 - e. Programs that encourage students to seek advice from, and to confide in, a trusted adult regarding concerns about violence and illegal drug use.

B. Reports of Chemical Use and Abuse

1. In the event that a school district employee knows that a student is abusing, possessing, transferring, distributing, or selling chemicals in a school

location:

- a. The employee shall immediately either take the student to an administrator or notify an appropriate administrator of the observation and continue to observe the student until the administrator arrives.
 - b. The administrator will notify the student's parents. If there is a medical emergency, the administrator will notify the school nurse and/or outside medical personnel as appropriate.
 - c. The administrator will notify law enforcement officials, the student's counselor, and the chemical preassessment team.
 - d. The administrator and/or law enforcement officials will confiscate the chemicals and/or conduct a search of the student's person, effects, locker, vehicle, or areas within the student's control. Searches by school district officials shall be in accordance with school board policies regarding search and seizure.
 - e. The school district will take appropriate disciplinary action in compliance with the student discipline code. Such discipline may include immediate suspension, initiation of expulsion proceedings, and/or referral to a detoxification center or medical center.
2. If a school district employee has reason to believe that a student is abusing, possessing, transferring, distributing, or selling chemicals:
- a. The employee shall notify the building administrator or a member of the preassessment team and shall describe the basis for the suspicion. The building administrator and/or team will determine what action should be taken. Action may include conducting an investigation, gathering data, scheduling a conference with the student or parents, or providing a meeting between a single member of the team and the student to discuss the behaviors that have been reported and attempting to ascertain facts regarding chemical abuse.
 - b. The team may determine there is no chemical abuse. If the team determines there is chemical abuse, the team will select an appropriate course of action, which may include referral to a school counselor; referral to a treatment program; referral for screening, assessment, and treatment planning; participation in support groups; or other appropriate measures.
3. Students involved in the abuse, possession, transfer, distribution, or sale of chemicals shall be suspended in compliance with the student discipline policy and the Pupil Fair Dismissal Act, Minn. Stat. § 121A.40-121A.56,

and proposed for expulsion.

4. Searches by school district officials in connection with the abuse, possession, transfer, distribution, or sale of chemicals will be conducted in accordance with school board policies related to search and seizure.

C. Preassessment Team

1. Every school shall have a chemical abuse preassessment team designated by the superintendent or designee. The team will be composed of classroom teachers, administrators, and other appropriate professional staff to the extent they exist in each school, such as the school nurse, school counselor or psychologist, social worker, chemical abuse specialist, or others.
2. The team is responsible for addressing reports of chemical abuse problems and making recommendations for appropriate responses to the individual reported cases.
3. Within forty-five (45) days after receiving an individual reported case, the team shall make a determination whether to provide the student and, in the case of a minor, the student's parents with information about school and community services in connection with chemical abuse.

D. Data Practices

1. Student data may be disclosed without consent in health and safety emergencies pursuant to Minn. Stat. § 13.32 and applicable federal law and regulations.
2. Destruction of Records
 - a. If the preassessment team decides not to provide a student and, in the case of a minor, the student's parents with information about school or community services in connection with chemical abuse, records created or maintained by the team about the student shall be destroyed not later than six (6) months after the determination is made.
 - b. If the team decides to provide the student and, in the case of a minor or a dependent student, the student's parents with such information, records created or maintained by the team about the student shall be destroyed not later than six (6) months after the student is no longer enrolled in the district.
 - c. This section shall govern destruction of records notwithstanding provisions of the Records Management Act, Minn. Stat. § 138.163.

E. Consent

Any minor may give effective consent for medical, mental, and other health services to determine the presence of or to treat conditions associated with alcohol and other drug abuse, and the consent of no other person is required.

F. School and Community Advisory Team

1. The superintendent, with the advice of the school board, shall establish a school and community advisory team to address chemical abuse problems. The advisory team will be composed of representatives from the school preassessment teams to the extent possible, law enforcement agencies, county attorney's office, social service agencies, chemical abuse treatment programs, parents, and the business community.
2. The advisory team shall:
 - a. build awareness of the problem within the community, identify available treatment and counseling programs for students, and develop good working relationships and enhance communication between the schools and other community agencies; and
 - b. develop a written procedure clarifying the notification process to be used by the chemical abuse preassessment team when a student is believed to be in possession of or under the influence of alcohol or a controlled substance. The procedure must include contact with the student and the student's parents or guardian in the case of a minor student.

V. EMPLOYEES

- A. The superintendent or designee shall undertake and maintain a drug-free awareness and prevention program to inform employees, students, and others about:
1. The dangers and health risks of chemical abuse in the workplace/school.
 2. The school district's drug-free workplace/drug-free school policy.
 3. Any available drug or alcohol counseling, treatment, rehabilitation, re-entry, and/or assistance programs available to employees and/or students.
 4. The penalties that may be imposed on employees for drug abuse violations.
- B. The superintendent or designee shall notify any federal granting agency required to be notified under the Drug-Free Workplace Act within ten (10) days after receiving notice of a conviction of an employee for a criminal drug statute violation occurring in the workplace. To facilitate the giving of such notice, any employee aware of

such a conviction shall report the same to the superintendent.

Legal References: Minn. Stat. § 13.32 (Educational Data)
Minn. Stat. § 121A.25-121A.29 (Chemical Abuse)
Minn. Stat. § 121A.40-121A.56 (Pupil Fair Dismissal Act)
Minn. Stat. § 138.163 (Records Management Act)
Minn. Stat. § 144.343 (Pregnancy, Venereal Disease, Alcohol or Drug Abuse, Abortion)
Minn. Stat. § 152.22 (Medical Cannabis; Definitions)
Minn. Stat. § 152.23 (Medical Cannabis; Limitations)
20 U.S.C. § 1232g (Family Educational Rights and Privacy Act)
20 U.S.C. §§ 7101-7165 (Safe and Drug-Free Schools and Communities Act)
41 U.S.C. §§ 8101-8106 (Drug-Free Workplace Act)
34 C.F.R. Part 84 (Government-wide Requirements for Drug-Free Workplace)

Cross References: MSBA/MASA Model Policy 403 (Discipline, Suspension, and Dismissal of School District Employees)
MSBA/MASA Model Policy 416 (Drug and Alcohol Testing)
MSBA/MASA Model Policy 418 (Drug-Free Workplace/Drug Free School)
MSBA/MASA Model Policy 502 (Search of Student Lockers, Desks, Personal Possessions, and Student's Person)
MSBA/MASA Model Policy 506 (Student Discipline)
MSBA/MASA Model Policy 515 (Protection and Privacy of Pupil Records)
MSBA/MASA Model Policy 527 (Student Use and Parking of Motor Vehicles; Patrols, Inspections, and Searches)

Adopted: _____

MSBA/MASA Model Policy 418

Orig. 1995

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Rev. 2015

418 DRUG-FREE WORKPLACE/DRUG-FREE SCHOOL

I. PURPOSE

The purpose of this policy is to maintain a safe and healthful environment for employees and students by prohibiting the use of alcohol, toxic substances, medical cannabis, and controlled substances without a physician's prescription.

II. GENERAL STATEMENT OF POLICY

- A. Use or possession of controlled substances, toxic substances, medical cannabis, and alcohol before, during, or after school hours, at school or in any other school location, is prohibited as general policy. Paraphernalia associated with controlled substances is prohibited.
- B. A violation of this policy occurs when any student, teacher, administrator, other school district personnel, or member of the public uses or possesses alcohol, toxic substances, controlled substances, or medical cannabis in any school location.
- C. The school district will act to enforce this policy and to discipline or take appropriate action against any student, teacher, administrator, school personnel, or member of the public who violates this policy.

III. DEFINITIONS

- A. "Alcohol" includes any alcoholic beverage, malt beverage, fortified wine, or other intoxicating liquor.
- B. "Controlled substances" include narcotic drugs, hallucinogenic drugs, amphetamines, barbiturates, marijuana, anabolic steroids, or any other controlled substance as defined in Schedules I through V of the Controlled Substances Act, 21 U.S.C. § 812, including analogues and look-alike drugs.
- C. "Medical cannabis" means any species of the genus cannabis plant, or any mixture or preparation of them, including whole plant extracts and resins, and is delivered in the form of: (1) liquid, including, but not limited to, oil; (2) pill; (3) vaporized delivery method with use of liquid or oil but which does not require the use of dried leaves or plant form; or (4) any other method, excluding smoking, approved by the commissioner.
- D. "Toxic substances" includes glue, cement, aerosol paint, or other substances used or possessed with the intent of inducing intoxication or excitement of the central

nervous system.

- E. “Use” includes to sell, buy, manufacture, distribute, dispense, possess, use, or be under the influence of alcohol and/or controlled substances, whether or not for the purpose of receiving remuneration or consideration.
- F. “Possess” means to have on one’s person, in one’s effects, or in an area subject to one’s control.
- G. “School location” includes any school building or on any school premises; in any school-owned vehicle or in any other school-approved vehicle used to transport students to and from school or school activities; off school property at any school-sponsored or school-approved activity, event, or function, such as a field trip or athletic event, where students are under the jurisdiction of the school district; or during any period of time such employee is supervising students on behalf of the school district or otherwise engaged in school district business.

IV. EXCEPTIONS

- A. A violation of this policy does not occur when a person brings onto a school location, for such person’s own use, a controlled substance, except medical cannabis, which has a currently accepted medical use in treatment in the United States and the person has a physician’s prescription for the substance. The person shall comply with the relevant procedures of this policy.
- B. A violation of this policy does not occur when a person possesses an alcoholic beverage in a school location when the possession is within the exceptions of Minn. Stat. § 624.701, Subd. 1a (experiments in laboratories; pursuant to a temporary license to sell liquor issued under Minnesota laws or possession after the purchase from such a temporary license holder).

V. PROCEDURES

- A. Students who have a prescription from a physician for medical treatment with a controlled substance, except medical cannabis, must comply with the school district’s student medication policy.
- B. Employees who have a prescription from a physician for medical treatment with a controlled substance, except medical cannabis, are permitted to possess such controlled substance and associated necessary paraphernalia, such as an inhaler or syringe. The employee must inform his or her supervisor. The employee may be required to provide a copy of the prescription.
- C. Each employee shall be provided with written notice of this Drug-Free Workplace/Drug-Free School policy and shall be required to acknowledge that he or she has received the policy.

- D. Employees are subject to the school district's drug and alcohol testing policies and procedures.
- E. Members of the public are not permitted to possess controlled substances in a school location except with the express permission of the superintendent.
- F. No person is permitted to possess or use medical cannabis on a school bus or van; or on the grounds of any preschool or primary or secondary school; or on the grounds of any child care facility.
- G. Possession of alcohol on school grounds pursuant to the exceptions of Minn. Stat. § 624.701, Subd. 1a, shall be by permission of the school board only. The applicant shall apply for permission in writing and shall follow the school board procedures for placing an item on the agenda.

VI. ENFORCEMENT

A. Students

- 1. A student who violates the terms of this policy shall be subject to discipline in accordance with the school district's discipline policy. Such discipline may include suspension or expulsion from school.
- 2. The student may be referred to a drug or alcohol assistance or rehabilitation program and/or to law enforcement officials when appropriate.

B. Employees

- 1. As a condition of employment in any federal grant, each employee who is engaged either directly or indirectly in performance of a federal grant shall abide by the terms of this policy and shall notify his or her supervisor in writing of his or her conviction of any criminal drug statute for a violation occurring in any of the places listed above on which work on a school district federal grant is performed, no later than five (5) calendar days after such conviction. Conviction means a finding of guilt (including a plea of nolo contendere) or imposition of sentence, or both, by any judicial body charged with the responsibility to determine violations of the federal or state criminal drug statutes.
- 2. An employee who violates the terms of this policy is subject to disciplinary action, including nonrenewal, suspension, termination, or discharge as deemed appropriate by the school board.
- 3. In addition, any employee who violates the terms of this policy may be required to satisfactorily participate in a drug and/or alcohol abuse assistance or rehabilitation program approved by the school district. Any employee who fails to satisfactorily participate in and complete such a

program is subject to nonrenewal, suspension, or termination as deemed appropriate by the school board.

4. Sanctions against employees, including nonrenewal, suspension, termination, or discharge shall be pursuant to and in accordance with applicable statutory authority, collective bargaining agreements, and school district policies.

C. The Public

A member of the public who violates this policy shall be informed of the policy and asked to leave. If necessary, law enforcement officials will be notified and asked to provide an escort.

Legal References: Minn. Stat. § 121A.22 (Administration of Drugs and Medicine)
Minn. Stat. § 152.22 (Medical Cannabis; Definitions)
Minn. Stat. § 152.23 (Medical Cannabis; Limitations)
Minn. Stat. § 340A.403 (3.2 Percent Malt Liquor Licenses)
Minn. Stat. § 340A.404 (Intoxicating Liquor; On-Sale Licenses)
Minn. Stat. § 609.684 (Sale of Toxic Substances to Children; Abuse of Toxic Substances)
Minn. Stat. § 624.701 (Alcohol in Certain Buildings or Grounds)
20 U.S.C. § 7101-7165 (Safe and Drug-Free Schools and Communities Act)
21 U.S.C. § 812 (Schedules of Controlled Substances)
41 U.S.C. §§ 8101-8106 (Drug-Free Workplace Act)
21 C.F.R. §§ 1308.11-1308.15 (Controlled Substances)
34 C.F.R. Part 84 (Government-wide Requirements for Drug-Free Workplace)

Cross References: MSBA/MASA Model Policy 403 (Discipline, Suspension, and Dismissal of School District Employees)
MSBA/MASA Model Policy 416 (Drug and Alcohol Testing)
MSBA/MASA Model Policy 417 (Chemical Use and Abuse)
MSBA/MASA Model Policy 506 (Student Discipline)
MSBA/MASA Model Policy 516 (Student Medication)

Adopted: _____

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Rev. 2019

419 TOBACCO-FREE ENVIRONMENT; POSSESSION AND USE OF TOBACCO, TOBACCO-RELATED DEVICES, AND ELECTRONIC DELIVERY DEVICES

I. PURPOSE

The purpose of this policy is to maintain a learning and working environment that is tobacco free.

II. GENERAL STATEMENT OF POLICY

- A. A violation of this policy occurs when any student, teacher, administrator, other school personnel of the school district, or person smokes or uses tobacco, tobacco-related devices, or carries or uses an activated electronic delivery device in a public school. This prohibition extends to all facilities, whether owned, rented, or leased, and all vehicles that a school district owns, leases, rents, contracts for, or controls. In addition, this prohibition includes vehicles used, in whole or in part, for work purposes, during hours of school operation, if more than one person is present. This prohibition includes all school district property and all off-campus events sponsored by the school district.
- B. A violation of this policy occurs when any elementary school, middle school, or secondary school student possesses any type of tobacco, tobacco-related devices, or electronic delivery devices in a public school. This prohibition extends to all facilities, whether owned, rented, or leased, and all vehicles that a school district owns, leases, rents, contracts for, or controls and includes vehicles used, in whole or in part, for school purposes, during hours of school operation, if more than one person is present. This prohibition includes all school district property and all off-campus events sponsored by the school district.
- C. The school district will act to enforce this policy and to discipline or take appropriate action against any student, teacher, administrator, school personnel, or person who is found to have violated this policy.

[Note: The following language is not required by law but is recommended by MSBA for inclusion in this policy.]

- D. ***The school district will not solicit or accept any contributions or gifts of money, curricula, materials, or equipment from companies that directly manufacture and are identified with tobacco products, tobacco-related devices, or electronic delivery devices. The school district will not promote or allow promotion of tobacco products or electronic delivery devices on school property or at school-sponsored events.***

III. TOBACCO AND TOBACCO-RELATED DEVICES DEFINED

- A. “Electronic delivery device” means any product containing or delivering nicotine, lobelia, or any other substance intended for human consumption that can be used by a person to simulate smoking in the delivery of nicotine or any other substance through inhalation of vapor from the product. Electronic delivery device includes any component part of a product, whether or not marketed or sold separately. Electronic delivery device does not include any product that has been approved or certified by the United States Food and Drug Administration for sale as a tobacco-cessation product, as a tobacco-dependence product, or for other medical purposes, and is marketed and sold for such an approved purpose.
- B. “Tobacco” means cigarettes and any product containing, made, or derived from tobacco that is intended for human consumption, whether chewed, smoked, absorbed, dissolved, inhaled, snorted, sniffed, or ingested by any other means, or any component, part, or accessory of a tobacco product, including, but not limited to, cigars; cheroots; stogies; perique; granulated, plug cut, crimp cut, ready rubbed, and other smoking tobacco; snuff; snuff flour; cavendish; plug and twist tobacco; fine cut and other chewing tobacco; shorts; refuse scraps, clippings, cuttings and sweepings of tobacco; and other kinds and forms of tobacco.
- C. “Tobacco-related devices” means cigarette papers or pipes for smoking or other devices intentionally designed or intended to be used in a manner which enables the chewing, sniffing, smoking, or inhalation of vapors of tobacco or tobacco products. Tobacco-related devices include components of tobacco-related devices which may be marketed or sold separately.
- D. “Smoking” means inhaling, exhaling, burning, or carrying any lighted or heated cigar, cigarette, pipe, or any other lighted or heated product containing, made, or derived from nicotine, tobacco, marijuana, or other plant, whether natural or synthetic, that is intended for inhalation. Smoking includes carrying or using an activated electronic delivery device.

IV. EXCEPTIONS

- A. A violation of this policy does not occur when an Indian adult lights tobacco on school district property as a part of a traditional Indian spiritual or cultural ceremony. An Indian is a person who is a member of an Indian tribe as defined under Minnesota law.
- B. A violation of this policy does not occur when an adult nonstudent possesses a tobacco or nicotine product that has been approved by the United States Food and Drug Administration for sale as a tobacco-cessation product, as a tobacco-dependence product, or for other medical purposes, and is being marketed and sold solely for such an approved purpose. Nothing in this exception authorizes smoking or use of tobacco, tobacco-related devices, or electronic delivery devices on school

property or at off-campus events sponsored by the school district.

V. ENFORCEMENT

- A. All individuals on school premises shall adhere to this policy.
- B. Students who violate this tobacco-free policy shall be subject to school district discipline procedures.
- C. School district administrators and other school personnel who violate this tobacco-free policy shall be subject to school district discipline procedures.
- D. School district action taken for violation of this policy will be consistent with requirements of applicable collective bargaining agreements, Minnesota or federal law, and school district policies.
- E. Persons who violate this tobacco-free policy may be referred to the building administration or other school district supervisory personnel responsible for the area or program at which the violation occurred.
- F. School administrators may call the local law enforcement agency to assist with enforcement of this policy. Smoking or use of any tobacco product in a public school is a violation of the Minnesota Clean Indoor Air Act and/or the Freedom to Breathe Act of 2007 and is a petty misdemeanor. A court injunction may be instituted against a repeated violator.
- G. No persons shall be discharged, refused to be hired, penalized, discriminated against, or in any manner retaliated against for exercising any right to a smoke-free environment provided by the Freedom to Breathe Act of 2007 or other law.

VI. DISSEMINATION OF POLICY

- A. This policy shall appear in the student handbook.
- B. The school district will develop a method of discussing this policy with students and employees.

Legal References: Minn. Stat. §§ 144.411-144.417 (Minnesota Clean Indoor Air Act)
Minn. Stat. § 609.685 (Sale of Tobacco to Children)
2007 Minn. Laws Ch. 82 (Freedom to Breathe Act of 2007)

Cross References: MSBA/MASA Model Policy 403 (Discipline, Suspension, and Dismissal of School District Employees)
MSBA/MASA Model Policy 506 (Student Discipline)
MSBA Service Manual, Chapter 2, Students; Rights, Responsibilities and Behavior

Adopted: _____

MSBA/MASA Model Policy 601

Orig. 1995

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Rev. 2017

601 SCHOOL DISTRICT CURRICULUM AND INSTRUCTION GOALS

I. PURPOSE

The purpose of this policy is to establish broad curriculum parameters for the school district that encompass the Minnesota Graduation Standards and federal law and are aligned with creating the world's best workforce.

II. GENERAL STATEMENT OF POLICY

The policy of the school district is to establish the "world's best workforce" in which all learning in the school district should be directed and for which all school district learners should be held accountable.

III. DEFINITIONS

- A. "Academic standard" means a summary description of student learning in a required content area or elective content area.
- B. "Benchmark" means specific knowledge or skill that a student must master to complete part of an academic standard by the end of the grade level or grade band.
- C. "Curriculum" means district or school adopted programs and written plans for providing students with learning experiences that lead to expected knowledge, skills, and career and college readiness.
- D. "Instruction" means methods of providing learning experiences that enable students to meet state and district academic standards and graduation requirements.
- E. "Performance measures" are measures to determine school district and school site progress in striving to create the world's best workforce and must include at least the following:
 - 1. the size of the academic achievement gap and rigorous course taking, including college-level advanced placement, international baccalaureate, postsecondary enrollment options, including concurrent enrollment, other rigorous courses of study or industry certification courses or programs, and enrichment experiences by student subgroup;
 - 2. student performance on the Minnesota Comprehensive Assessments;
 - 3. high school graduation rates; and

4. career and college readiness under Minn. Stat. § 120B.30, Subd. 1.
- F. “World’s best workforce” means striving to: meet school readiness goals; have all third-grade students achieve grade-level literacy; close the academic achievement gap among all racial and ethnic groups of students and between students living in poverty and students not living in poverty; have all students attain career and college readiness before graduating from high school; and have all students graduate from high school.
 - G. “Experiential learning” means learning for students that includes career exploration through a specific class or course or through work-based experiences such as job shadowing, mentoring, entrepreneurship, service learning, volunteering, internships, other cooperative work experience, youth apprenticeship, or employment.

IV. LONG-TERM STRATEGIC PLAN

- A. The school board, at a public meeting, shall adopt a comprehensive, long-term strategic plan to support and improve teaching and learning that is aligned with creating the world’s best workforce and includes the following:
 1. clearly defined school district and school site goals and benchmarks for instruction and student achievement for all student categories identified in state and federal law;
 2. a process to assess and evaluate each student’s progress toward meeting state and local academic standards, assess and identify students for participation in gifted and talented programs and accelerate their instruction, adopt procedures for early admission to kindergarten or first grade of gifted and talented learners which are sensitive to under-represented groups, and identify the strengths and weaknesses of instruction in pursuit of student and school success and curriculum affecting students’ progress and growth toward career and college readiness and leading to the world’s best workforce;
 3. a system to periodically review and evaluate the effectiveness of all instruction and curriculum, taking into account strategies and best practices, student outcomes, principal evaluations under Minn. Stat. § 123B.147, Subd. 3, students’ access to effective teachers who are members of populations under-represented among the licensed teachers in the district or school and who reflect the diversity of enrolled students under Minn. Stat. § 120B.35, Subd. 3(b)(2), and teacher evaluations under Minn. Stat. § 122A.40, Subd. 8, or 122A.41, Subd. 5;

4. strategies for improving instruction, curriculum, and student achievement, including the English and, where practicable, the native language development and the academic achievement of English learners;
5. a process to examine the equitable distribution of teachers and strategies to ensure low-income and minority children are not taught at higher rates than other children by inexperienced, ineffective, or out-of-field teachers;
6. education effectiveness practices that integrate high-quality instruction, rigorous curriculum, technology, and a collaborative professional culture that develops and supports teacher quality, performance, and effectiveness; and
7. an annual budget for continuing to implement the school district plan.

B. School district site and school site goals shall include the following:

1. All students will be required to demonstrate essential skills to effectively participate in lifelong learning.* These skills include the following:
 - a. reading, writing, speaking, listening, and viewing in the English language;
 - b. mathematical and scientific concepts;
 - c. locating, organizing, communicating, and evaluating information and developing methods of inquiry (i.e., problem solving);
 - d. creative and critical thinking, decision making, and study skills;
 - e. work readiness skills;
 - f. global and cultural understanding.
2. Each student will have the opportunity and will be expected to develop and apply essential knowledge that enables that student to:
 - a. live as a responsible, productive citizen and consumer within local, state, national, and global political, social, and economic systems;
 - b. bring many perspectives, including historical, to contemporary issues;
 - c. develop an appreciation and respect for democratic institutions;
 - d. communicate and relate effectively in languages and with cultures other than the student's own;

- e. practice stewardship of the land, natural resources, and environment;
 - f. use a variety of tools and technology to gather and use information, enhance learning, solve problems, and increase human productivity.
- 3. Students will have the opportunity to develop creativity and self-expression through visual and verbal images, music, literature, world languages, movement, and the performing arts.
- 4. School practices and instruction will be directed toward developing within each student a positive self-image and a sense of personal responsibility for:
 - a. establishing and achieving personal and career goals;
 - b. adapting to change;
 - c. leading a healthy and fulfilling life, both physically and mentally;
 - d. living a life that will contribute to the well-being of society;
 - e. becoming a self-directed learner;
 - f. exercising ethical behavior.
- 5. Students will be given the opportunity to acquire human relations skills necessary to:
 - a. appreciate, understand, and accept human diversity and interdependence;
 - b. address human problems through team effort;
 - c. resolve conflicts with and among others;
 - d. function constructively within a family unit;
 - e. promote a multicultural, gender-fair, disability-sensitive society.
- C. Every child is reading at or above grade level no later than the end of grade 3, including English learners, and teachers provide comprehensive, scientifically based reading instruction, including a program or collection of instructional practices that is based on valid, replicable evidence showing that, when the programs or practices are used, students can be expected to achieve, at a minimum, satisfactory reading progress. The program or collection of practices must include, at a minimum, effective, balanced instruction in all five areas of reading (phonemic

awareness, phonics, fluency, vocabulary development, and reading comprehension), as well as instructional strategies for continuously assessing, evaluating, and communicating the student's reading progress and needs.

1. The school district shall identify, before the end of kindergarten, grade 1, and grade 2, students who are not reading at grade level before the end of the current school year and shall identify students in grade 3 or higher who demonstrate a reading difficulty to a classroom teacher. Reading assessments in English and in the predominant languages of district students, where practicable, must identify and evaluate students' areas of academic need related to literacy. The school district also must monitor the progress and provide reading instruction appropriate to the specific needs of English learners. The school district must use locally adopted, developmentally appropriate, and culturally responsive assessment.
2. At least annually, the school district must give the parent of each student who is not reading at or above grade level timely information about:
 - a. the student's reading proficiency as measured by a locally adopted assessment;
 - b. reading-related services currently being provided to the student and the student's progress; and
 - c. strategies for parents to use at home in helping their students succeed in becoming grade-level proficient in reading English and their native languages.

This provision may not be used to deny a student's right to a special education evaluation.

3. For each student who is not reading at or above grade level, the school district shall provide reading intervention to accelerate student growth and reach the goal of reading at or above grade level by the end of the current grade and school year. If a student does not read at or above grade level by the end of grade 3, the school district must continue to provide reading intervention until the student reads at grade level. Intervention methods shall encourage family engagement and, where possible, collaboration with appropriate school and community programs. Intervention methods may include, but are not limited to, requiring attendance in summer school, intensified reading instruction that may require that the student be removed from the regular classroom for part of the school day, extended day programs, or programs that strengthen students' cultural connections.
4. The school district will provide a personal learning plan for a student who is unable to demonstrate grade-level proficiency, as measured by the statewide reading assessment in grade 3. The school district will determine

the format of the personal learning plan in collaboration with the student's educators and other appropriate professionals. The school district will develop the personal learning plan in consultation with the student's parent or guardian. The personal learning plan will address knowledge gaps and skill deficiencies through strategies such as specific exercises and practices during and outside of the school day, periodic assessments, and reasonable timelines. The personal learning plan may include grade retention if it is in the student's best interest. The student's school will maintain and regularly update and modify the personal learning plan until the student reads at grade level. This paragraph does not apply to a student under an Individualized Education Program.

Legal References: Minn. Stat. § 120B.018 (Definitions)
Minn. Stat. § 120B.02 (Educational Expectations for Minnesota Students)
Minn. Stat. § 120B.11 (School District Process)
Minn. Stat. § 120B.12 (Reading Proficiently no Later than the End of Grade 3)
Minn. Stat. § 120B.30, Subd. 1 (Statewide Testing and Reporting System)
Minn. Stat. § 120B.35, Subd. 3 (Student Academic Achievement and Growth)
Minn. Stat. § 122A.40, Subd. 8 (Employment; Contracts; Termination)
Minn. Stat. § 122A.41, Subd. 5 (Teacher Tenure Act; Cities of the First Class; Definitions)
Minn. Stat. § 123B.147, Subd. 3 (Principals)
20 U.S.C. § 5801, *et seq.* (National Education Goals 2000)
20 U.S.C. § 6301, *et seq.* (Every Student Succeeds Act)

Cross References: MSBA/MASA Model Policy 104 (School District Mission Statement)
MSBA/MASA Model Policy 613 (Graduation Requirements)
MSBA/MASA Model Policy 614 (School District Testing Plan and Procedure)
MSBA/MASA Model Policy 615 (Testing Accommodations, Modifications, and Exemptions for IEPs, Section 504 Plans, and LEP Students)
MSBA/MASA Model Policy 616 (School District System Accountability)
MSBA/MASA Model Policy 618 (Assessment of Student Achievement)

Adopted: _____

MSBA/MASA Model Policy 603

Orig. 1995

Revised: _____

Rev. 2019

603 CURRICULUM DEVELOPMENT

I. PURPOSE

The purpose of this policy is to provide direction for continuous review and improvement of the school curriculum.

II. GENERAL STATEMENT OF POLICY

Curriculum development shall be directed toward the fulfillment of the goals and objectives of the education program of the school district.

III. RESPONSIBILITY

- A. The superintendent shall be responsible for curriculum development and for determining the most effective way of conducting research on the school district's curriculum needs and establishing a long range curriculum development program. Timelines shall be determined by the superintendent that will provide for periodic reviews of each curriculum area.
- B. A district advisory committee shall provide assistance at the request of the superintendent. The advisory committee membership shall be a reflection of the community and, to the extent possible, shall reflect the diversity of the district and its school sites, and shall include parent, teacher, support staff, student, community residents, and administration representation, and shall provide translation to the extent appropriate and practicable. Whenever possible, parents and other community residents shall comprise at least two-thirds of advisory committee members.
- C. Within the ongoing process of curriculum development, the following needs shall be addressed:
 - 1. Provide for articulation of courses of study from kindergarten through grade twelve.
 - 2. Identify minimum objectives for each course and at each elementary grade level.
 - 3. Provide for continuing evaluation of programs for the purpose of attaining school district objectives.
 - 4. Provide a program for ongoing monitoring of student progress.

5. Provide for specific, particular, and special needs of all members of the student community.
 6. Develop a local literacy plan to have every child reading at or above grade level no later than the end of grade 3, including English learners, and teachers providing comprehensive, scientifically based reading instruction consistent with law.
 7. Integrate required and elective course standards in the scope and sequence of the district curriculum.
 8. Meet all applicable requirements of the Minnesota Department of Education and federal law.
- D. Students who do not meet or exceed Minnesota academic standards, as measured by the Minnesota Comprehensive Assessments that are administered during high school, shall be informed that admission to a public school is free and available to any resident under 21 years of age or who meets the requirements of Minn. Stat. § 120A.20, Subd. 1(c). A student's plan under this section shall continue while the student is enrolled.
- E. The superintendent shall be responsible for keeping the school board informed of all state-mandated curriculum changes, as well as recommended discretionary changes, and for periodically presenting recommended modifications for school board review and approval.
- F. The superintendent shall have discretionary authority to develop guidelines and directives to implement school board policy relating to curriculum development.

Legal References: Minn. Stat. § 120B.10 (Findings; Improving Instruction and Curriculum)
Minn. Stat. § 120B.11 (School District Process)
Minn. Stat. § 120B.12 (Reading Proficiently no Later than the End of Grade 3)
Minn. Stat. § 120B.125(f) (Planning for Students' Successful Transition to Postsecondary Education and Employment)
Minn. Rules Part 3500.0550 (Inclusive Educational Program)
Minn. Rules Parts 3501.0640-3501.0655 (Academic Standards for Language Arts)
Minn. Rules Parts 3501.0700-3501.0745 (Academic Standards for Mathematics)
Minn. Rules Parts 3501.0800-3501.0815 (Academic Standards for the Arts)
Minn. Rules Parts 3501.0900-3501.0955 (Academic Standards in Science)
Minn. Rules Parts 3501.1000-3501.1190 (Graduation-Required Assessment for Diploma) (repealed Minn. L. 2013, Ch. 116, Art. 2, § 22)
Minn. Rules Parts 3501.1200-3501.1210 (Academic Standards for English)

Language Development)

Minn. Rules Parts 3501.1300-3501.1345 (Academic Standards for Social Studies)

Minn. Rules Parts 3501.1400-3501.1410 (Academic Standards for Physical Education)

20 U.S.C. § 6301, *et seq.* (Every Student Succeeds Act)

Cross References:

MSBA/MASA Model Policy 604 (Instructional Curriculum)

MSBA/MASA Model Policy 605 (Alternative Programs)

MSBA/MASA Model Policy 613 (Graduation Requirements)

MSBA/MASA Model Policy 614 (School District Testing Plan and Procedure)

MSBA/MASA Model Policy 615 (Testing Accommodations, Modifications, and Exemptions for IEPs, Section 504 Plans, and LEP Students)

MSBA/MASA Model Policy 616 (School District System Accountability)

MSBA/MASA Model Policy 617 (School District Ensurance of Preparatory and High School Standards)

MSBA/MASA Model Policy 618 (Assessment of Student Achievement)

MSBA/MASA Model Policy 619 (Staff Development for Standards)

MSBA/MASA Model Policy 620 (Credit for Learning)

MSBA/MASA Model Policy 623 (Mandatory Summer School Instruction)

Adopted: _____

MSBA/MASA Model Policy 616

Orig. 1997

Revised: _____

Rev. 2019

616 SCHOOL DISTRICT SYSTEM ACCOUNTABILITY

I. PURPOSE

The purpose of this policy is to focus public education strategies on a process which promotes higher academic achievement for all students and ensures broad-based community participation in decisions regarding the implementation of the Minnesota Academic Standards and federal law.

II. GENERAL STATEMENT OF POLICY

Implementation of the Minnesota Academic Standards and federal law will require a new level of accountability for the school district. The school district will establish a system to transition to the graduation requirements of the Minnesota Academic Standards. The school district also will establish a system to review and improve instruction, curriculum, and assessment which will include substantial input by students, parents or guardians, and local community members. The school district will be accountable to the public and the state through annual reporting.

III. DEFINITIONS

- A. “Credit” means a student’s successful completion of an academic year of study or a student’s mastery of the applicable subject matter, as determined by the school district.
- B. “Graduation Standards” means the credit requirements and locally adopted content standards or Minnesota Academic Standards that school districts must offer and certify that students complete to be eligible for a high school diploma.
- C. “World’s best workforce” means striving to: meet school readiness goals; have all third grade students achieve grade-level literacy; close the academic achievement gap among all racial and ethnic groups of students and between students living in poverty and students not living in poverty; have all students attain career and college readiness before graduating from high school; and have all students graduate from high school.

IV. ESTABLISHMENT OF GOALS; IMPLEMENTATION; EVALUATION AND REPORTING

- A. School District Goals

1. The school board has established school district-wide goals which provide broad direction for the school district. Incorporated in these goals are the graduation and education standards contained in the Minnesota Academic Standards and federal law. The broad goals shall be reviewed annually and approved by the school board. The school board shall adopt annual goals based on the recommendations of the Advisory Committee for Comprehensive Continuous Improvement of Student Achievement (Advisory Committee).
 2. The improvement goals should address recommendations identified through the Advisory Committee process. The school district's goal setting process will include consideration of individual site goals. School district goals may be developed through an education effectiveness program, an evaluation of student progress committee, or through some other locally determined process.
- B. System for Reviewing All Instruction and Curriculum. Incorporated in the process will be analysis of the school district's progress toward implementation of the Minnesota Academic Standards. Instruction and curriculum shall be reviewed and evaluated by taking into account strategies and best practices, student outcomes, principal evaluations under Minn. Stat. § 123B.147, Subd. 3, and teacher evaluations under Minn. Stat. § 122A.40, Subd. 8, or 122A.41, Subd. 5.

[Insert Local Cycle in this space]

C. Implementation of Graduation Requirements

1. The school board shall appoint a Graduation Standards Implementation Committee which shall advise the school board on implementation of the state and local graduation requirements, including K-12 curriculum, assessment, student learning opportunities, and other related issues. Recommendations of this committee shall be published annually to the community. The school board shall receive public input and comment and shall adopt or update this policy at least annually. The Graduation Standards Implementation Committee *[will/will not]* be comprised of the Advisory Committee for Comprehensive Continuous Improvement of Student Achievement.
2. The school board shall annually review and determine if student achievement levels at each school site meet federal expectations. If the school board determines that student achievement levels at a school site do not meet federal expectations and the site has not made adequate yearly progress for two consecutive school years, the Graduation Standards Implementation Committee shall work with the school site to adopt a plan to raise student achievement levels to meet federal expectations. The Graduation Standards Implementation Committee may seek assistance from

the Commissioner of the Minnesota Department of Education (MDE) (Commissioner) in developing a plan which must include parental involvement components.

3. The educational assessment system component utilized by the school board to measure individual students' educational progress must be based, to the extent annual tests are administered, on indicators of achievement growth that show an individual student's prior achievement. Indicators of achievement and prior achievement must be based on highly reliable statewide or districtwide assessments. The school board will utilize models developed by the Commissioner for measuring individual student progress. The school board must coordinate with MDE in evaluating school sites and continuous improvement plans, consistent with best practices.

D. Advisory Committee for Comprehensive Continuous Improvement of Student Achievement

1. By [date] of each year, the Advisory Committee will meet to advise and assist the school district in the implementation of the school district system accountability and comprehensive continuous improvement process.
2. The Advisory Committee, working in cooperation with other committees of the school district [*such as the Technology, Educational Effectiveness, Grade Level, Site Instruction, Curriculum and Assessment Committees, etc.*], will provide active community participation in:
 - a. Reviewing the school district instructional and curriculum plan, with emphasis on implementing the Minnesota Graduation Standards;
 - b. Identifying annual instruction and curriculum improvement goals for recommendation to the school board;
 - c. Making recommendations regarding the evaluation process that will be used to measure school district progress toward its goals;
 - d. Advising the school board about development of the annual budget.
3. The Advisory Committee shall meet the following criteria:
 - a. The Advisory Committee shall ensure active community participation in all planning for instruction and curriculum affecting Graduation Standards.
 - b. The Advisory Committee shall make recommendations to the school

board on school district-wide standards, assessments, and program evaluation.

- c. Building teams may be established as subcommittees to develop and implement an education effectiveness plan and to carry out methods to improve instruction, curriculum, and assessments as well as methods to use technology in meeting the school district improvement plan.
 - d. A local plan to evaluate student progress, using a local process, shall be used for developing a plan for assessment of student progress toward the Graduation Standards, as well as program evaluation data for use by the Advisory Committee in the instruction and curriculum review process. This plan shall annually be approved by the school board.
4. The Advisory Committee shall, when possible, be comprised of two-thirds community representatives and shall reflect the diversity of the community. Included in its membership should be:
- a. The Director of Curriculum (or similar educational leader)
 - b. Principal
 - c. School Board Member
 - d. Student Representative
 - e. One teacher from each building or instructional level
 - f. Two parents from each building or instructional level
 - g. Two residents without school-aged children, non-representative of local business or industry
 - h. Two residents representative of local business or industry
 - i. District Assessment Coordinator (if different from “a.” above)
5. Translation services should be provided to the extent appropriate and practicable.
6. The Advisory Committee shall meet the following timeline each year:
- Month: Organizational meeting of the Committee to review the authorizing legislation and the roles and responsibilities of the

Committee as determined by the school board.

Month(s): Agree on the process to be used. Become familiar with the instruction and curriculum of the cycle content area.

Month(s): Review evaluation results and prepare recommendations.

Month: Present recommendations to the school board for its input and approval.

E. Evaluation of Student Progress Committee. A committee of professional staff shall develop a plan for assessment of student progress toward Literacy by Grade 3, the Graduation Standards, as well as program evaluation data for use by the Advisory Committee to review instruction and curriculum, cultural competencies, including cultural awareness and cross-cultural communication, and student achievement at the school site. This plan shall annually be approved by the school board.

F. Reporting

1. Consistent with Minn. Stat. § 120B.36, Subd. 1, the school board shall publish a report in the local newspaper with the largest circulation in the district, by mail, or by electronic means on the school district website. The school board shall hold an annual public meeting to review and revise, where appropriate, student achievement goals, local assessment outcomes, plans, strategies, and practices for improving curriculum and instruction and cultural competency and efforts to equitably distribute diverse, effective, experienced, and in-field teachers, and to review school district success in realizing the previously adopted student achievement goals and related benchmarks and the improvement plans leading to the world's best workforce. The school board must transmit an electronic summary of its report to the Commissioner in the form and manner the Commissioner determines. The school district shall periodically survey affected constituencies in their native languages, where appropriate and practicable, about their connection to and level of satisfaction with school. The school district shall include the results of this evaluation in its published reports and in its summary report to the Commissioner.
2. The school performance report for a school site and a school district must include performance reporting information and calculate proficiency rates as required by the most recently reauthorized Elementary and Secondary Education Act.

Legal References: Minn. Stat. § 120B.018 (Definitions)
Minn. Stat. § 120B.02 (Educational Expectations for Minnesota's Students)
Minn. Stat. § 120B.11 (School District Process)

Minn. Stat. § 120B.35 (Student Achievement Levels)
 Minn. Stat. § 120B.36 (School Accountability; Appeals Process)
 Minn. Stat. § 122A.40, Subd. 8 (Employment; Contracts; Termination)
 Minn. Stat. § 122A.41, Subd. 5 (Teacher Tenure Act; Cities of the First Class; Definitions)
 Minn. Stat. § 123B.04 (Site Decision Making Agreement)
 Minn. Stat. § 123B.147, Subd. 3 (Principals)
 Minn. Rules Parts 3501.0640-3501.0655 (Academic Standards for Language Arts)
 Minn. Rules Parts 3501.0700-3501.0745 (Academic Standards for Mathematics)
 Minn. Rules Parts 3501.0800-3501.0815 (Academic Standards for the Arts)
 Minn. Rules Parts 3501.0900-3501.0955 (Academic Standards in Science)
 Minn. Rules Parts 3501.1300-3501.1345 (Academic Standards for Social Studies)
 Minn. Rules Parts 3501.1400-3501.1410 (Academic Standards for Physical Education)
 20 U.S.C. § 6301, *et seq.* (Every Student Succeeds Act)

Cross References: MSBA/MASA Model Policy 104 (School District Mission Statement)
 MSBA/MASA Model Policy 601 (School District Curriculum and Instruction Goals)
 MSBA/MASA Model Policy 613 (Graduation Requirements)
 MSBA/MASA Model Policy 614 (School District Testing Plan and Procedure)
 MSBA/MASA Model Policy 615 (Testing Accommodations, Modifications, and Exemptions for IEPs, Section 504 Plans, and LEP Students)
 MSBA/MASA Model Policy 617 (School District Ensurance of Preparatory and High School Standards)
 MSBA/MASA Model Policy 618 (Assessment of Student Achievement)
 MSBA/MASA Model Policy 619 (Staff Development for Standards)
 MSBA/MASA Model Policy 620 (Credit for Learning)

Adopted: _____

MSBA/MASA Model Policy 620

Orig. 1998

Revised: _____

Rev. 2017

620 CREDIT FOR LEARNING

I. PURPOSE

The purpose of this policy is to recognize student achievement which occurs in Post-Secondary Enrollment Options and other advanced enrichment programs. The purpose of this policy also is to recognize student achievement which occurs in other schools, in alternative learning sites, and in out-of-school experiences such as community organizations, work-based learning, and other educational activities and opportunities. The purpose of this policy also is to address the transfer of student credit from out-of-state, private, or home schools and online learning programs and to address how the school district will recognize student achievement obtained outside of the school district.

II. GENERAL STATEMENT OF POLICY

The policy of the school district is to provide a process for awarding students credit toward graduation requirements for credits and grades students complete in other schools, post-secondary or higher education institutions, other learning environments, and online courses and programs.

III. DEFINITIONS

- A. “Accredited school” means a school that is accredited by an accrediting agency, recognized according to Minn. Stat. § 123B.445 or recognized by the Commissioner of the Minnesota Department of Education (MDE).
- B. “Blended learning” is a form of digital learning that occurs when a student learns part time in a supervised physical setting and part time through digital delivery of instruction, or a student learns in a supervised physical setting where technology is used as a primary method to deliver instruction.
- C. “Commissioner” means the Commissioner of MDE.
- D. “Digital learning” is learning facilitated by technology that offers students an element of control over the time, place, path, or pace of their learning and includes blended and online learning.
- E. “Eligible institution” means a Minnesota public post-secondary institution, a private, nonprofit two-year trade and technical school granting associate degrees, an opportunities industrialization center accredited by the North Central Association of Colleges and Schools, or a private, residential, two-year or four-year, liberal arts, degree-granting college or university located in Minnesota.

- F. “Nonpublic school” is a private school or home school in which a child is provided instruction in compliance with the Minnesota compulsory attendance laws.
- G. “Online learning” is a form of digital learning delivered by an approved online learning provider.
- H. “Online learning provider” is a school district, an intermediate school district, an organization of two or more school districts operating under a joint powers agreement, or a charter school located in Minnesota that provides online learning to students and is approved by MDE to provide online learning courses.
- I. “Weighted grade” is a letter or numerical grade that is assigned a numerical advantage when calculating the grade point average.

IV. TRANSFER OF CREDIT FROM OTHER SCHOOLS

- A. Transfer of Academic Requirements from Other Minnesota Public Secondary Schools
 - 1. The school district will accept and transfer secondary credits and grades awarded to a student from another Minnesota public secondary school upon presentation of a certified transcript from the transferring public secondary school evidencing the course taken and the grade and credit awarded.
 - 2. Credits and grades awarded from another Minnesota public secondary school may be used to compute honor roll and/or class rank if a student has earned at least ***[insert number]*** credits from the school district.
- B. Transfer of Academic Requirements from Other Schools
 - 1. The school district will accept secondary credits and grades awarded to a student for courses successfully completed at a public school outside of Minnesota or an accredited nonpublic school upon presentation of a certified transcript from the transferring public school in another state or nonpublic school evidencing the course taken and the grade and credit awarded.
 - a. When a determination is made that the content of the course aligns directly with school district graduation requirements, the student will be awarded commensurate credits and grades.
 - b. Commensurate credits and grades awarded from an accredited nonpublic school or public school in another state may be used to compute honor roll and/or class rank if a student has earned at least ***[insert number]*** credits from the school district.

- c. In the event the content of a course taken at an accredited nonpublic school or public school in another state does not fully align with the content of the school district's high school graduation requirements but is comparable to elective credits offered by the school district for graduation, the student may be provided elective credit applied toward graduation requirements. Credit that does not fully align with the school district's high school graduation requirements will not be used to compute honor roll and/or class rank.
 - d. If no comparable course is offered by the school district for which high school graduation credit would be provided, no credit will be provided to the student.
- 2. Students transferring from a non-accredited, nonpublic school shall receive credit from the school district upon presentation of a transcript or other documentation evidencing the course taken and grade and credit awarded.
 - a. Students will be required to provide copies of course descriptions, syllabi, or work samples for determination of appropriate credit. In addition, students also may be asked to provide interviews/conferences with the student and/or student's parent and/or former administrator or teacher; review of a record of the student's entire curriculum at the nonpublic school; and review of the student's complete record of academic achievement.
 - b. Where the school district determines that a course completed by a student at a non-accredited, nonpublic school is commensurate with school district graduation requirements, credit shall be awarded, but the grade shall be "P" (pass).
 - c. In the event the content of a course taken at an non-accredited, nonpublic school does not fully align with the content of the school district's high school graduation requirements but is comparable to elective credits offered by the school district for graduation, the student may be provided elective credit applied toward graduation requirements.
 - d. If no comparable course is offered by the school district for which local high school graduation credit would be provided, no credit will be provided to the student.
 - e. Credit and grades earned from a non-accredited nonpublic school shall not be used to compute honor roll and/or class rank.

V. POST-SECONDARY ENROLLMENT CREDIT

- A. A student who satisfactorily completes a post-secondary enrollment options course

or program under Minn. Stat. § 124D.09 that has been approved as meeting the necessary requirements is not required to complete other requirements of the Minnesota Academic Standards content standards corresponding to that specific rigorous course of study.

- B. Secondary credits granted to a student through a post-secondary enrollment options course or program that meets or exceeds a graduation standard or requirement shall be counted toward the graduation and credit requirements of a student completing the Minnesota Academic Standards.
 - 1. Course credit will be considered by the school district only upon presentation of a certified transcript from an eligible institution evidencing the course taken and the grade and credit awarded.
 - 2. Seven quarter or four semester post-secondary credits shall equal at least one full year of high school credit. Fewer post-secondary credits may be prorated.
 - 3. When a determination is made that the content of the post-secondary course aligns directly with a required course for high school graduation, the commensurate credit and grade will be recorded on the student's transcript as a course credit applied toward graduation requirements.
 - 4. In the event the content of the post-secondary course does not fully align with the content of a high school course required for graduation but is comparable to elective credits offered by the school district for graduation, the school district may provide elective credit and the grade will be recorded on the student's transcript as an elective course credit applied toward graduation requirements.
 - 5. If no comparable course is offered by the school district for which high school graduation credit would be provided, the school district will notify the Commissioner, who shall determine the number of credits that shall be granted to a student.
 - 6. When secondary credit is granted for post-secondary credits taken by a student, the school district will record those credits on the student's transcript as credits earned at a post-secondary institution.
- C. A list of the courses or programs meeting the necessary requirements may be obtained from the school district.

VI. CREDIT FROM ONLINE LEARNING COURSES

- A. Secondary credits granted to a student through an online learning course or program that meets or exceeds a graduation standard or requirement shall be counted toward the graduation and credit requirements of a student completing the Minnesota

Academic Standards.

- B. Course credit will be considered only upon official documentation from the online learning provider evidencing the course taken and the grade and credit awarded to the student.
- C. When a student provides documentation from an online learning provider, the course credit and course grade shall be recorded and counted toward graduation credit requirements for all courses or programs that meet or exceed the school district's graduation requirements in the same manner as credits are awarded for students transferring from another Minnesota public school as set forth in Section IV.A. above.

VII. ADVANCED ACADEMIC CREDIT

- A. The school district will grant academic credit to a student attending an accelerated or advanced academic course offered by a higher education institution or a nonprofit public agency, other than the school district.
- B. Course credit will be considered only upon official documentation from the higher education institution or nonprofit public agency that the student successfully completed the course attended and passed an examination approved by the school district.
- C. When a determination is made that the content of the advanced academic course aligns directly with a required course for high school graduation, the commensurate credit and grade will be recorded on the student's transcript as a course credit applied toward graduation requirements.
- D. In the event the content of the advanced academic course does not fully align with the content of a high school course required for graduation but is comparable to elective credits offered by the school district for graduation, the school district may provide elective credit and the grade will be recorded on the student's transcript as an elective course credit applied toward graduation requirements.
- E. If no comparable course is offered by the school district for which high school graduation credit would be provided, the school district will notify the Commissioner and request a determination of the number of credits that shall be granted to a student.

VIII. WEIGHTED GRADES

[Note: School districts must identify in policy whether they offer courses with weighted grades. Therefore, school districts must include one of the following options in their policies.]

- A. The school district does not offer weighted grades.

[or]

- A. The school district offers weighted grades for courses that are identified as more rigorous or academically challenging as follows:

[List the types of courses that will be awarded weighted grades and the multiplier, similar to the following examples.]

1. A grade awarded in an Advanced Placement course will be multiplied by a factor of ____ (i.e., 1.07).
 2. A grade awarded in an Honors course will be multiplied by a factor of ____.
 3. A grade awarded in a College In the Schools course will be multiplied by a factor of ____.
 4. A grade awarded in a course taken through a Post-Secondary Enrollment Options program will be multiplied by a factor of ____.
 5. A grade awarded in a course in a dual enrollment course will be multiplied by a factor of ____.
- B. The school district will update its website prior to the beginning of each school year with a listing of the courses for which a student may earn a weighted grade.

IX. PROCESS FOR AWARDING CREDIT

- A. The building principal will be responsible for carrying out the process to award credits and grades pursuant to this policy. The building principal will notify students in writing of the decision as to how credits and grades will be awarded.
- B. A student or the student's parent or guardian may seek reconsideration of the decision by the building principal as to credits and/or grades awarded upon request of a student or the student's parent or guardian if the request is made in writing to the superintendent within five school days of the date of the building principal's decision. The request should set forth the credit and/or grade requested and the reason(s) why credit(s)/grade(s) should be provided as requested. Any pertinent documentation in support of the request should be submitted.
- C. The decision of the superintendent as to the award of credits or grades shall be a final decision by the school district and shall not be appealable by the student or student's parent or guardian except as set forth in Section IX.D. below.
- D. If a student disputes the number of credits granted by the school district for a particular post-secondary enrollment course, online learning course, or advanced

academic credit course, the student may appeal the school district's decision to the Commissioner. The decision of the Commissioner shall be final.

- E. At any time during the process, the building principal or superintendent may ask for course descriptions, syllabi, or work samples from a course where content of the course is in question for purposes of determining alignment with graduation requirements or the number of credits to be granted. Students will not be provided credit until requested documentation is available for review, if requested.

Legal References: Minn. Stat. § 120B.02 (Educational Expectations for Minnesota's Students)
Minn. Stat. § 120B.021 (Required Academic Standards)
Minn. Stat. § 120B.11 (School District Process)
Minn. Stat. § 120B.14 (Advanced Academic Credit)
Minn. Stat. § 123B.02 (General Powers of Independent School Districts)
Minn. Stat. § 123B.445 (Nonpublic Education Council)
Minn. Stat. § 124D.03, Subd. 9 (Enrollment Options Program)
Minn. Stat. § 124D.09 (Post-Secondary Enrollment Options Act)
Minn. Stat. § 124D.095 (Online Learning Option)
Minn. Rules Parts 3501.0640-3501.0655 (Academic Standards for Language Arts)
Minn. Rules Parts 3501.0700-3501.0745 (Academic Standards for Mathematics)
Minn. Rules Parts 3501.0800-3501.0815 (Academic Standards for the Arts)
Minn. Rules Parts 3501.0900-3501.0955 (Academic Standards in Science)
Minn. Rules Parts 3501.1000-3501.1190 (Graduation-Required Assessment for Diploma) (repealed Minn. L. 2013, Ch. 116, Art. 2, § 22)
Minn. Rules Parts 3501.1200-3501.1210 (Academic Standards for English Language Development)
Minn. Rules Parts 3501.1300-3501.1345 (Academic Standards for Social Studies)

Cross References: MSBA/MASA Model Policy 104 (School District Mission Statement)
MSBA/MASA Model Policy 601 (School District Curriculum and Instruction Goals)
MSBA/MASA Model Policy 613 (Graduation Requirements)
MSBA/MASA Model Policy 614 (School District Testing Plan and Procedure)
MSBA/MASA Model Policy 615 (Testing Accommodations, Modifications, and Exemptions for IEPs, Section 504 Plans, and LEP Students)
MSBA/MASA Model Policy 616 (School District System Accountability)
MSBA/MASA Model Policy 618 (Assessment of Student Achievement)
MSBA/MASA Model Policy 624 (Online Learning Options)

Adopted: _____

MSBA/MASA Model Policy 709

Orig. 1995

Revised: _____

Rev. 2017

709 STUDENT TRANSPORTATION SAFETY POLICY

I. PURPOSE

The purpose of this policy is to provide safe transportation for students and to educate students on safety issues and the responsibilities of school bus ridership.

II. PLAN FOR STUDENT TRANSPORTATION SAFETY TRAINING

A. School Bus Safety Week

The school district may designate a school bus safety week. The National School Bus Safety Week is the third week in October.

B. Student Training

1. The school district shall provide students enrolled in grades kindergarten (K) through 10 with age-appropriate school bus safety training of the following concepts:
 - a. transportation by school bus is a privilege, not a right;
 - b. school district policies for student conduct and school bus safety;
 - c. appropriate conduct while on the bus;
 - d. the danger zones surrounding a school bus;
 - e. procedures for safely boarding and leaving a school bus;
 - f. procedures for safe vehicle lane crossing; and
 - g. school bus evacuation and other emergency procedures.
2. All students in grades K through 6 who are transported by school bus and are enrolled during the first or second week of school must receive the school bus safety training by the end of the third week of school. All students in grades 7 through 10 who are transported by school bus and are enrolled during the first or second week of school must receive the school bus safety training or receive bus safety instruction materials by the end of the sixth week of school, if they have not previously received school bus training. Students in grades K through 10 who enroll in a school after the

second week of school, are transported by school bus, and have not received training in their previous school districts shall undergo school bus safety training or receive bus safety instructional materials within 4 weeks of their first day of attendance.

3. The school district and a nonpublic school with students transported by school bus at public expense must provide students enrolled in grades K through 3 school bus safety training twice during the school year.
4. Students taking driver's training instructional classes must receive training in the laws and proper procedures for operating a motor vehicle in the vicinity of a school bus as required by Minn. Stat. § 169.446, Subd. 2.
5. The school district and a nonpublic school with students transported by school bus at public expense must conduct a school bus evacuation drill at least once during the school year.
6. The school district will make reasonable accommodations in training for students known to speak English as a second language and students with disabilities.
7. The school district may provide kindergarten students with school bus safety training before the first day of school.
8. The school district may provide student safety education for bicycling and pedestrian safety for students in grades K through 5.
9. The school district shall adopt and make available for public review a curriculum for transportation safety education.
10. Nonpublic school students transported by the school district will receive school bus safety training by their nonpublic school. The nonpublic schools may use the school district's school transportation safety education curriculum. Upon request by the school district superintendent, the nonpublic school must certify to the school district's school transportation safety director that all students enrolled in grades K through 10 have received the appropriate training.

III. CONDUCT ON SCHOOL BUSES AND CONSEQUENCES FOR MISBEHAVIOR

- A. Riding the school bus is a privilege, not a right. The school district's general student behavior rules are in effect for all students on school buses, including nonpublic and charter school students.
- B. Consequences for school bus/bus stop misconduct will be imposed by the school district under adopted administrative discipline procedures. In addition, all school bus/bus stop misconduct will be reported to the school district's transportation

safety director. Serious misconduct may be reported to local law enforcement.

1. School Bus and Bus Stop Rules. The school district school bus safety rules are to be posted on every bus. If these rules are broken, the school district's discipline procedures are to be followed. In most circumstances, consequences are progressive and may include suspension of bus privileges. It is the school bus driver's responsibility to report unacceptable behavior to the school district's Transportation Office/School Office.
2. Rules at the Bus Stop
 - a. Get to your bus stop 5 minutes before your scheduled pick up time. The school bus driver will not wait for late students.
 - b. Respect the property of others while waiting at your bus stop.
 - c. Keep your arms, legs, and belongings to yourself.
 - d. Use appropriate language.
 - e. Stay away from the street, road, or highway when waiting for the bus.
 - f. Wait until the bus stops before approaching the bus.
 - g. After getting off the bus, move away from the bus.
 - h. If you must cross the street, always cross in front of the bus where the driver can see you. Wait for the driver to signal to you before crossing the street.
 - i. No fighting, harassment, intimidation, or horseplay.
 - j. No use of alcohol, tobacco, or drugs.
3. Rules on the Bus
 - a. Immediately follow the directions of the driver.
 - b. Sit in your seat facing forward.
 - c. Talk quietly and use appropriate language.
 - d. Keep all parts of your body inside the bus.
 - e. Keep your arms, legs, and belongings to yourself.

- f. No fighting, harassment, intimidation, or horseplay.
- g. Do not throw any object.
- h. No eating, drinking, or use of alcohol, tobacco, or drugs.
- i. Do not bring any weapons or dangerous objects on the school bus.
- j. Do not damage the school bus.

4. Consequences

- a. Consequences for school bus/bus stop misconduct will apply to all regular and late routes. Decisions regarding a student's ability to ride the bus in connection with cocurricular and extracurricular events (for example, field trips or competitions) will be in the sole discretion of the school district. Parents or guardians will be notified of any suspension of bus privileges.

(1) Elementary (K-6)

1st offense – warning

2nd offense – 3 school-day suspension from riding the bus

3rd offense – 5 school-day suspension from riding the bus

4th offense – 10 school-day suspension from riding the bus/meeting with parent

Further offenses – individually considered. Students may be suspended for longer periods of time, including the remainder of the school year.

(2) Secondary (7-12)

1st offense – warning

2nd offense – 5 school-day suspension from riding the bus

3rd offense – 10 school-day suspension from riding the bus

4th offense – 20 school-day suspension from riding the bus/meeting with parent

5th offense – suspended from riding the bus for the remainder of the school year

Note: When any student goes 60 transportation days without a report, the student's consequences may start over at the first offense.

(3) Other Discipline

Based on the severity of a student's conduct, more serious consequences may be imposed at any time. Depending on the nature of the offense, consequences such as suspension or expulsion from school also may result

from school bus/bus stop misconduct.

(4) Records

Records of school bus/bus stop misconduct will be forwarded to the individual school building and will be retained in the same manner as other student discipline records. Reports of student misbehavior on a school bus or in a bus-loading or unloading area that are reasonably believed to cause an immediate and substantial danger to the student or surrounding persons or property shall be provided by the school district to local law enforcement and the Department of Public Safety in accordance with state and federal law.

(5) Vandalism/Bus Damage

Students damaging school buses will be responsible for the damages. Failure to pay such damages (or make arrangements to pay) within 2 weeks may result in the loss of bus privileges until damages are paid.

(6) Notice

School bus and bus stop rules and consequences for violations of these rules will be reviewed with students annually and copies of these rules will be made available to students. School bus rules are to be posted on each school bus.

(7) Criminal Conduct

In cases involving criminal conduct (for example, assault, weapons, drug possession, or vandalism), the appropriate school district personnel and local law enforcement officials will be informed.

IV. PARENT AND GUARDIAN INVOLVEMENT

A. Parent and Guardian Notification

The school district school bus and bus stop rules will be provided to each family. Parents and guardians are asked to review the rules with their children.

B. Parents/Guardians Responsibilities for Transportation Safety

Parents/Guardians are responsible to:

1. Become familiar with school district rules, policies, regulations, and the principles of school bus safety, and thoroughly review them with their children;

2. Support safe riding and walking practices, and recognize that students are responsible for their actions;
3. Communicate safety concerns to their school administrators;
4. Monitor bus stops, if possible;
5. Have their children to the bus stop 5 minutes before the bus arrives;
6. Have their children properly dressed for the weather; and
7. Have a plan in case the bus is late.

V. SCHOOL BUS DRIVER DUTIES AND RESPONSIBILITIES

- A. School bus drivers shall have a valid Class A, B, or C Minnesota driver's license with a school bus endorsement. A person possessing a valid driver's license, without a school bus endorsement, may drive a type III vehicle set forth in Sections VII.B. and VII.C., below. Drivers with a valid Class D driver's license, without a school bus endorsement, may operate a "type A-I" school bus as set forth in Section VII.D., below.
- B. The school district shall conduct mandatory drug and alcohol testing of all school district bus drivers and bus driver applicants in accordance with state and federal law and school district policy.
- C. A school bus driver, with the exception of a driver operating a type A-I school bus or type III vehicle, who has a commercial driver's license and who is convicted of a criminal offense, a serious traffic violation, or of violating any other state or local law relating to motor vehicle traffic control, other than a parking violation, in any type of motor vehicle in a state or jurisdiction other than Minnesota, shall notify the Minnesota Division of Driver and Vehicle Services (Division) of the conviction within 30 days of the conviction. For purposes of this paragraph, a "serious traffic violation" means a conviction of any of the following offenses:
 1. excessive speeding, involving any single offense for any speed of 15 miles per hour or more above the posted speed limit;
 2. reckless driving;
 3. improper or erratic traffic lane changes;
 4. following the vehicle ahead too closely;
 5. a violation of state or local law, relating to motor vehicle traffic control, arising in connection with a fatal accident;

6. driving a commercial vehicle without obtaining a commercial driver's license or without having a commercial driver's license in the driver's possession.
- D. A school bus driver, with the exception of a driver operating a type A-I school bus or type III vehicle, who has a commercial driver's license and who is convicted of violating, in any type of motor vehicle, a Minnesota state or local law relating to motor vehicle traffic control, other than a parking violation, shall notify the person's employer of the conviction within 30 days of conviction. The notification shall be in writing and shall contain all the information set forth in Attachment A accompanying this policy.
- E. A school bus driver, with the exception of a driver operating a type A-I school bus, who has a Minnesota commercial driver's license suspended, revoked, or cancelled by the state of Minnesota or any other state or jurisdiction and who loses the right to operate a commercial vehicle for any period or who is disqualified from operating a commercial motor vehicle for any period shall notify the person's employer of the suspension, revocation, cancellation, lost privilege, or disqualification. Such notification shall be made before the end of the business day following the day the employee received notice of the suspension, revocation, cancellation, lost privilege, or disqualification. The notification shall be in writing and shall contain all the information set forth in Attachment B accompanying this policy.
- F. A person who operates a type III vehicle and who sustains a conviction as described in Section VII.C.1.g. (i.e., driving while impaired offenses), VII.C.1.h. (i.e., felony, controlled substance, criminal sexual conduct offenses, or offenses for surreptitious observation, indecent exposure, use of minor in a sexual performance, or possession of child pornography or display of pornography to a minor), or VII.C.1.i. (multiple moving violations) while employed by the entity that owns, leases, or contracts for the school bus, shall report the conviction to the person's employer within 10 days of the date of the conviction. The notification shall be in writing and shall contain all the information set forth in Attachment C accompanying this policy.

VI. SCHOOL BUS DRIVER TRAINING

A. Training

1. All new school bus drivers shall be provided with pre-service training, including in-vehicle (actual driving) instruction, before transporting students and shall meet the competency testing specified in the Minnesota Department of Public Safety Model School Bus Driver Training Manual. All school bus drivers shall receive in-service training annually. For purposes of this section, "annually" means at least once every 380 days from the initial or previous evaluation and at least once every 380 days from the initial or previous license verification. The school district shall retain on file

an annual individual school bus driver “evaluation certification” form for each school district driver as contained in the Model School Bus Driver Training Manual.

2. All bus drivers operating a type III vehicle will be provided with annual training and certification as set forth in Section VII.C.1.b., below, by either the school district or the entity from whom such services are contracted by the school district.

B. Evaluation

School bus drivers with a Class D license will be evaluated annually and all other bus drivers will be assessed periodically for the following competencies:

1. Safely operate the type of school bus the driver will be driving;
2. Understand student behavior, including issues relating to students with disabilities;
3. Ensure orderly conduct of students on the bus and handling incidents of misconduct appropriately;
4. Know and understand relevant laws, rules of the road, and local school bus safety policies;
5. Handle emergency situations; and
6. Safely load and unload students.

The evaluation must include completion of an individual “school bus driver evaluation form” (road test evaluation) as contained in the Model School Bus Driver Training Manual.

VII. OPERATING RULES AND PROCEDURES

A. General Operating Rules

1. School buses shall be operated in accordance with state traffic and school bus safety laws and the procedures contained in the Minnesota Department of Public Safety Model School Bus Driver Training Manual.
2. Only students assigned to the school bus by the school district shall be transported. The number of students or other authorized passengers transported in a school bus shall not be more than the legal capacity for the bus. No person shall be allowed to stand when the bus is in motion.
3. The parent/guardian may designate, pursuant to school district policy, a day

care facility, respite care facility, the residence of a relative, or the residence of a person chosen by the parent or guardian as the address of the student for transportation purposes. The address must be in the attendance area of the assigned school and meet all other eligibility requirements.

4. Bus drivers must minimize, to the extent practical, the idling of school bus engines and exposure of children to diesel exhaust fumes.
5. To the extent practical, the school district will designate school bus loading/unloading zones at a sufficient distance from school air-intake systems to avoid diesel fumes from being drawn into the systems.
6. A bus driver may not operate a school bus while communicating over, or otherwise operating, a cellular phone for personal reasons, whether hand-held or hands free, when the vehicle is in motion or a part of traffic. For purposes of this paragraph, “school bus” has the meaning given in Minn. Stat. § 169.011, Subd. 71. In addition, “school bus” also includes type III vehicles when driven by employees or agents of the school district. “Cellular phone” means a cellular, analog, wireless, or digital telephone capable of sending or receiving telephone or text messages without an access line for service.

B. Type III Vehicles

1. Type III vehicles are restricted to passenger cars, station wagons, vans, and buses having a maximum manufacturer’s rated seating capacity of 10 or fewer people including the driver and a gross vehicle weight rating of 10,000 pounds or less. A van or bus converted to a seating capacity of 10 or fewer and placed in service on or after August 1, 1999, must have been originally manufactured to comply with the passenger safety standards.
2. Type III vehicles must be painted a color other than national school bus yellow.
3. Type III vehicles shall be state inspected in accordance with legal requirements.
4. A type III vehicle cannot be older than 12 years old unless excepted by state and federal law.
5. If a type III vehicle is school district owned, the school district name will be clearly marked on the side of the vehicle. The type III vehicle must not have the words “school bus” in any location on the exterior of the vehicle or in any interior location visible to a motorist.
6. A “type III vehicle” must not be outwardly equipped and identified as a type A, B, C, or D bus.

7. Eight-lamp warning systems and stop arms must not be installed or used on type III vehicles.
8. Type III vehicles must be equipped with mirrors as required by law.
9. Any type III vehicle may not stop traffic and may not load or unload before making a complete stop and disengaging gears by shifting into neutral or park. Any type III vehicle used to transport students must not load or unload so that a student has to cross the road, except where not possible or impractical, then the driver or assistant must escort a student across the road. If the driver escorts the student across the road, then the motor must be stopped, the ignition key removed, the brakes set, and the vehicle otherwise rendered immobile.
10. Any type III vehicle used to transport students must carry emergency equipment including:
 - a. Fire extinguisher. A minimum of one 10BC rated dry chemical type fire extinguisher is required. The extinguisher must be mounted in a bracket, and must be located in the driver's compartment and be readily accessible to the driver and passengers. A pressure indicator is required and must be easily read without removing the extinguisher from its mounted position.
 - b. First aid kit and body fluids cleanup kit. A minimum of a 10-unit first aid kit and a body fluids cleanup kit is required. They must be contained in removable, moisture- and dust-proof containers mounted in an accessible place within the driver's compartment and must be marked to indicate their identity and location.
 - c. Passenger cars and station wagons may carry a fire extinguisher, a first aid kit, and warning triangles in the trunk or trunk area of the vehicle if a label in the driver and front passenger area clearly indicates the location of these items.
11. Students will not be regularly transported in private vehicles that are not state inspected as type III vehicles. Only emergency, unscheduled transportation may be conducted in vehicles with a seating capacity of 10 or fewer without meeting the requirements for a type III vehicle. Also, parents may use a private vehicle to transport their own children under a contract with the district. The school district has no system of inspection for private vehicles.
12. All drivers of type III vehicles will be licensed drivers and will be familiar with the use of required emergency equipment. The school district will not knowingly allow a person to operate a type III vehicle if the person has been

convicted of an offense that disqualifies the person from operating a school bus.

13. Type III vehicles will be equipped with child passenger restraints, and child passenger restraints will be utilized to the extent required by law.

C. Type III Vehicle Driven by Employees with a Driver's License Without a School Bus Endorsement

1. The holder of a Class A, B, C, or D driver's license, without a school bus endorsement, may operate a type III vehicle, described above, under the following conditions:
 - a. The operator is an employee of the entity that owns, leases, or contracts for the school bus, which may include the school district.
 - b. The operator's employer, which may include the school district, has adopted and implemented a policy that provides for annual training and certification of the operator in:
 - (1) safe operation of a type III vehicle;
 - (2) understanding student behavior, including issues relating to students with disabilities;
 - (3) encouraging orderly conduct of students on the bus and handling incidents of misconduct appropriately;
 - (4) knowing and understanding relevant laws, rules of the road, and local school bus safety policies;
 - (5) handling emergency situations;
 - (6) proper use of seat belts and child safety restraints;
 - (7) performance of pretrip vehicle inspections;
 - (8) safe loading and unloading of students, including, but not limited to:
 - (a) utilizing a safe location for loading and unloading students at the curb, on the nontraffic side of the roadway, or at off-street loading areas, driveways, yards, and other areas to enable the student to avoid hazardous conditions;
 - (b) refraining from loading and unloading students in a

vehicular traffic lane, on the shoulder, in a designated turn lane, or a lane adjacent to a designated turn lane;

- (c) avoiding a loading or unloading location that would require a student to cross a road, or ensuring that the driver or an aide personally escort the student across the road if it is not reasonably feasible to avoid such a location;
 - (d) placing the type III vehicle in “park” during loading and unloading;
 - (e) escorting a student across the road under clause (c) only after the motor is stopped, the ignition key is removed, the brakes are set, and the vehicle is otherwise rendered immobile; and
- (9) compliance with paragraph V.F. concerning reporting convictions to the employer within 10 days of the date of conviction.
- c. A background check or background investigation of the operator has been conducted that meets the requirements under Minn. Stat. § 122A.18, Subd. 8, or Minn. Stat. § 123B.03 for school district employees; Minn. Stat. § 144.057 or Minn. Stat. Ch. 245C for day care employees; or Minn. Stat. § 171.321, Subd. 3, for all other persons operating a type III vehicle under this section.
- d. Operators shall submit to a physical examination as required by Minn. Stat. § 171.321, Subd. 2.
- e. The operator’s employer requires preemployment drug testing of applicants for operator positions. Current operators must comply with the employer’s policy under Minn. Stat. § 181.951, Subds. 2, 4, and 5. Notwithstanding any law to the contrary, the operator’s employer may use a breathalyzer or similar device to fulfill random alcohol testing requirements.
- f. The operator’s driver’s license is verified annually by the entity that owns, leases, or contracts for the type III vehicle as required by Minn. Stat. § 171.321, Subd. 5.
- g. A person who sustains a conviction, as defined under Minn. Stat. § 609.02, of violating Minn. Stat. § 169A.25, § 169A.26, § 169A.27 (driving while impaired offenses), or § 169A.31 (alcohol-related school bus driver offenses), or whose driver’s license is revoked under Minn. Stat. §§ 169A.50 to 169A.53 of the implied consent

law, or who is convicted of violating or whose driver's license is revoked under a similar statute or ordinance of another state, is precluded from operating a type III vehicle for 5 years from the date of conviction.

- h. A person who has ever been convicted of a disqualifying offense as defined in Minn. Stat. § 171.3215, Subd.1(c), (i.e., felony, controlled substance, criminal sexual conduct offenses, or offenses for surreptitious observation, indecent exposure, use of minor in a sexual performance, or possession of child pornography or display of pornography to a minor) may not operate a type III vehicle.
- i. A person who sustains a conviction, as defined under Minn. Stat. § 609.02, of a moving offense in violation of Minn. Stat. Ch. 169 within 3 years of the first of 3 other moving offenses is precluded from operating a type III vehicle for 1 year from the date of the last conviction.
- j. Students riding the type III vehicle must have training required under Minn. Stat. § 123B.90, Subd. 2 (See Section II.B., above).
- k. Documentation of meeting the requirements listed in this section must be maintained under separate file at the business location for each type III vehicle operator. The school district or any other entity that owns, leases, or contracts for the type III vehicle operating under this section is responsible for maintaining these files for inspection.

- 2. The type III vehicle must bear a current certificate of inspection issued under Minn. Stat. § 169.451.
- 3. An employee of the school district who is not employed for the sole purpose of operating a type III vehicle may, in the discretion of the school district, be exempt from paragraphs VII.C.1.d. (physical examination) and VII.C.1.e. (drug testing), above.

D. Type A-I “Activity” Buses Driven by Employees with a Driver’s License Without a School Bus Endorsement

- 1. The holder of a Class D driver’s license, without a school bus endorsement, may operate a type A-I school bus or a Multifunction School Activity Bus (MFSAB) under the following conditions:
 - a. The operator is an employee of the school district or an independent contractor with whom the school district contracts for the school bus and is not solely hired to provide transportation services under this paragraph.

- b. The operator drives the school bus only from points of origin to points of destination, not including home-to-school trips to pick up or drop off students.
 - c. The operator is prohibited from using the 8-light system if the vehicle is so equipped.
 - d. The operator has submitted to a background check and physical examination as required by Minn. Stat. § 171.321, Subd. 2.
 - e. The operator has a valid driver's license and has not sustained a conviction of a disqualifying offense as set forth in Minn. Stat. § 171.02, Subd. 2a(h) - 2a(j).
 - f. The operator has been trained in the proper use of child safety restraints as set forth in the National Highway Traffic Safety Administration's "Guideline for the Safe Transportation of Pre-school Age Children in School Buses," if child safety restraints are used by passengers, in addition to the training required in Section VI., above.
 - g. The bus has a gross vehicle weight rating of 14,500 pounds or less and is designed to transport 15 or fewer passengers, including the driver.
- 2. The school district shall maintain annual certification of the requirements listed in this section for each Class D license operator.
 - 3. A school bus operated under this section must bear a current certificate of inspection.
 - 4. The word "School" on the front and rear of the bus must be covered by a sign that reads "Activities" when the bus is being operated under authority of this section.

VIII. SCHOOL DISTRICT EMERGENCY PROCEDURES

- A. If possible, school bus drivers or their supervisors shall call "911" or the local emergency phone number in the event of a serious emergency.
- B. School bus drivers shall meet the emergency training requirements contained in Unit III "Crash & Emergency Preparedness" of the Minnesota Department of Public Safety Model School Bus Driver Training Manual. This includes procedures in the event of a crash (accident).
- C. School bus drivers and bus assistants for special education students requiring

special transportation service because of their handicapping condition shall be trained in basic first aid procedures, shall within 1 month after the effective date of assignment participate in a program of in-service training on the proper methods for dealing with the specific needs and problems of students with disabilities, assist students with disabilities on and off the bus when necessary for their safe ingress and egress from the bus; and ensure that protective safety devices are in use and fastened properly.

- D. Emergency Health Information shall be maintained on the school bus for students requiring special transportation service because of their handicapping condition. The information shall state:
1. the student's name and address;
 2. the nature of the student's disabilities;
 3. emergency health care information; and
 4. the names and telephone numbers of the student's physician, parents, guardians, or custodians, and some person other than the student's parents or custodians who can be contacted in case of an emergency.

IX. SCHOOL DISTRICT VEHICLE MAINTENANCE STANDARDS

- A. All school vehicles shall be maintained in safe operating conditions through a systematic preventive maintenance and inspection program adopted or approved by the school district.
- B. All school vehicles shall be state inspected in accordance with legal requirements.
- C. A copy of the current daily pre-trip inspection report must be carried in the bus. Daily pre-trip inspections shall be maintained on file in accordance with the school district's record retention schedule. Prompt reports of defects to be immediately corrected will be submitted.
- D. Daily post-trip inspections shall be performed to check for any children or lost items remaining on the bus and for vandalism.

X. SCHOOL TRANSPORTATION SAFETY DIRECTOR

The school board has designated an individual to serve as the school district's school transportation safety director. The school transportation safety director shall have day-to-day responsibility for student transportation safety, including transportation of nonpublic school children when provided by the school district. The school transportation safety director will assure that this policy is periodically reviewed to ensure that it conforms to law. The school transportation safety director shall certify annually to the school board that each school bus driver meets the school bus driver training competencies required by Minn.

Stat. § 171.321, Subd. 4. The transportation safety director also shall annually verify or ensure that the private contractor utilized by the school has verified the validity of the driver's license of each employee who regularly transports students for the school district in a type A, B, C, or D school bus, type III vehicle, or MFSAB with the National Driver Register or the Department of Public Safety. Upon request of the school district superintendent or the superintendent of the school district where nonpublic students are transported, the school transportation safety director also shall certify to the superintendent that students have received school bus safety training in accordance with state law. The name, address and telephone number of the school transportation safety director are on file in the school district office. Any questions regarding student transportation or this policy may be addressed to the school transportation safety director.

XI. STUDENT TRANSPORTATION SAFETY COMMITTEE

The school board may establish a student transportation safety committee. The chair of the student transportation safety committee is the school district's school transportation safety director. The school board shall appoint the other members of the student transportation safety committee. Membership may include parents, school bus drivers, representatives of school bus companies, local law enforcement officials, other school district staff, and representatives from other units of local government.

Legal References: Minn. Stat. § 122A.18, Subd. 8 (Board to Issue Licenses)
Minn. Stat. § 123B.03 (Background Check)
Minn. Stat. § 123B.42 (Textbooks; Individual Instructor or Cooperative Learning Material; Standard Tests)
Minn. Stat. § 123B.88 (Independent School Districts; Transportation)
Minn. Stat. § 123B.885 (Diesel School Buses; Operation of Engine; Parking)
Minn. Stat. § 123B.90 (School Bus Safety Training)
Minn. Stat. § 123B.91 (School District Bus Safety Responsibilities)
Minn. Stat. § 144.057 (Background Studies on Licensees and Other Personnel)
Minn. Stat. Ch. 169 (Traffic Regulations)
Minn. Stat. § 169.011, Subds. 15, 16, and 71 (Definitions)
Minn. Stat. § 169.02 (Scope)
Minn. Stat. § 169.443 (Safety of School Children; Bus Driver's Duties)
Minn. Stat. § 169.446, Subd. 2 (Driver Training Programs)
Minn. Stat. § 169.451 (Inspecting School and Head Start Buses; Rules; Misdemeanor)
Minn. Stat. § 169.454 (Type III Vehicle Standards)
Minn. Stat. § 169.4582 (Reportable Offense on School Buses)
Minn. Stat. §§ 169A.25-169A.27 (Driving While Impaired)
Minn. Stat. § 169A.31 (Alcohol-Related School Bus or Head Start Bus Driving)
Minn. Stat. §§ 169A.50-169A.53 (Implied Consent Law)
Minn. Stat. § 171.02, Subds. 2, 2a, and 2b (Licenses; Types, Endorsements,

Restrictions)

Minn. Stat. § 171.168 (Notification of Conviction for Violation by a Commercial Driver)

Minn. Stat. § 171.169 (Notification of Suspension of License of Commercial Driver)

Minn. Stat. § 171.321 (Qualifications of School Bus Driver)

Minn. Stat. § 171.3215, Subd. 1(c) (Canceling Bus Endorsement for Certain Offenses)

Minn. Stat. § 181.951 (Authorized Drug and Alcohol Testing)

Minn. Stat. Ch. 245C (Human Services Background Studies)

Minn. Stat. § 609.02 (Definitions)

Minn. Rules Parts 7470.1000-7470.1700 (School Bus Inspection)

49 C.F.R. § 383.31 (Notification of Convictions for Driver Violations)

49 C.F.R. § 383.33 (Notification of Driver's License Suspensions)

49 C.F.R. § 383.5 (Transportation Definitions)

Cross References:

MSBA/MASA Model Policy 416 (Drug and Alcohol Testing)

MSBA/MASA Model Policy 506 (Student Discipline)

MSBA/MASA Model Policy 515 (Protection and Privacy of Pupil Records)

MSBA/MASA Model Policy 707 (Transportation of Public Students)

MSBA/MASA Model Policy 708 (Transportation of Nonpublic Students)

MSBA/MASA Model Policy 710 (Extracurricular Transportation)

Adopted: _____

MSBA/MASA Model Policy 721
Orig. 2016

Revised: _____

721 UNIFORM GRANT GUIDANCE POLICY REGARDING FEDERAL REVENUE SOURCES

I. PURPOSE

The purpose of this policy is to ensure compliance with the requirements of the federal Uniform Grant Guidance regulations by establishing uniform administrative requirements, cost principles, and audit requirements for federal grant awards received by the school district.

II. DEFINITIONS

A. Grants

1. “State-administered grants” are those grants that pass through a state agency such as the Minnesota Department of Education (MDE).
2. “Direct grants” are those grants that do not pass through another agency such as MDE and are awarded directly by the federal awarding agency to the grantee organization. These grants are usually discretionary grants that are awarded by the U.S. Department of Education (DOE) or by another federal awarding agency.

B. “Non-federal entity” means a state, local government, Indian tribe, institution of higher education, or nonprofit organization that carries out a federal award as a recipient or subrecipient.

C. “Federal award” has the meaning, depending on the context, in either paragraph 1. or 2. of this definition:

1.
 - a. The federal financial assistance that a non-federal entity receives directly from a federal awarding agency or indirectly from a pass-through entity, as described in 2 C.F.R. § 200.101 (Applicability); or
 - b. The cost-reimbursement contract under the federal Acquisition Regulations that a non-federal entity receives directly from a federal awarding agency or indirectly from a pass-through entity, as described in 2 C.F.R. § 200.101 (Applicability).
2. The instrument setting forth the terms and conditions. The instrument is the grant agreement, cooperative agreement, other agreement for assistance covered in paragraph (b) of 2 C.F.R. § 200.40 (Federal Financial

Assistance), or the cost-reimbursement contract awarded under the federal Acquisition Regulations.

3. “Federal award” does not include other contracts that a federal agency uses to buy goods or services from a contractor or a contract to operate federal-government-owned, contractor-operated facilities.

D. “Contract” means a legal instrument by which a non-federal entity purchases property or services needed to carry out the project or program under a federal award. The term, as used in 2 C.F.R. Part 200, does not include a legal instrument, even if the non-federal entity considers it a contract, when the substance of the transaction meets the definition of a federal award or subaward.

E. Procurement Methods

1. “Procurement by micro-purchase” is the acquisition of supplies or services, the aggregate dollar amount of which does not exceed the micro-purchase threshold (generally \$3,000, except as otherwise discussed in 48 C.F.R. Subpart 2.1 or as periodically adjusted for inflation).
2. “Procurement by small purchase procedures” are those relatively simple and informal procurement methods for securing services, supplies, or other property that do not cost more than \$150,000 (periodically adjusted for inflation).
3. “Procurement by sealed bids (formal advertising)” is a publicly solicited and a firm, fixed-price contract (lump sum or unit price) awarded to the responsible bidder whose bid, conforming to all the material terms and conditions of the invitation for bids, is the lowest in price.
4. “Procurement by competitive proposals” is normally conducted with more than one source submitting an offer, and either a fixed-price or cost-reimbursement type contract is awarded. Competitive proposals are generally used when conditions are not appropriate for the use of sealed bids.
5. “Procurement by noncompetitive proposals” is procurement through solicitation of a proposal from only one source.

F. “Equipment” means tangible personal property (including information technology systems) having a useful life of more than one year and a per-unit acquisition cost which exceeds the lesser of the capitalization level established by the non-federal entity for financial statement purposes, or \$5,000.

G. “Compensation for personal services” includes all remuneration, paid currently or accrued, for services of employees rendered during the period of performance under the federal award, including, but not necessarily limited to, wages and salaries.

Compensation for personal services may also include fringe benefits which are addressed in 2 C.F.R. § 200.431 (Compensation - Fringe Benefits).

- H. “Post-retirement health plans” refer to costs of health insurance or health services not included in a pension plan covered by 2 C.F.R. § 200.431(g) for retirees and their spouses, dependents, and survivors.
- I. “Severance pay” is a payment in addition to regular salaries and wages by the non-federal entities to workers whose employment is being terminated.
- J. “Direct costs” are those costs that can be identified specifically with a particular final cost objective, such as a federal award, or other internally or externally funded activity, or that can be directly assigned to such activities relatively easily with a high degree of accuracy.
- K. “Relocation costs” are costs incident to the permanent change of duty assignment (for an indefinite period or for a stated period not less than 12 months) of an existing employee or upon recruitment of a new employee.
- L. “Travel costs” are the expenses for transportation, lodging, subsistence, and related items incurred by employees who are in travel status on official business of the school district.

III. CONFLICT OF INTEREST

- A. Employee Conflict of Interest. No employee, officer, or agent may participate in the selection, award, or administration of a contract supported by a federal award if he or she has a real or apparent conflict of interest. Such a conflict of interest would arise when the employee, officer, or agent, any member of his or her immediate family, his or her partner, or an organization which employs or is about to employ any of the parties indicated herein, has a financial or other interest in or a tangible personal benefit from a firm considered for a contract. The employees, officers, and agents of the school district may neither solicit nor accept gratuities, favors, or anything of monetary value from contractors or parties to subcontracts. However, the school district may set standards for situations in which the financial interest is not substantial or the gift is an unsolicited item of nominal value. The standards of conduct must provide for disciplinary actions to be applied for violations of such standards by employees, officers, or agents of the school district.
- B. Organizational Conflicts of Interest. The school district is unable or appears to be unable to be impartial in conducting a procurement action involving the related organization because of relationships with a parent company, affiliate, or subsidiary organization.
- C. Disclosing Conflicts of Interest. The school district must disclose in writing any potential conflict of interest to MDE in accordance with applicable federal awarding agency policy.

IV. ACCEPTABLE METHODS OF PROCUREMENT

- A. General Procurement Standards. The school district must use its own documented procurement procedures which reflect applicable state laws, provided that the procurements conform to the applicable federal law and the standards identified in the Uniform Grant Guidance.
- B. The school district must maintain oversight to ensure that contractors perform in accordance with the terms, conditions, and specifications of their contracts or purchase orders.
- C. The school district's procedures must avoid acquisition of unnecessary or duplicative items. Consideration should be given to consolidating or breaking out procurements to obtain a more economical purchase. Where appropriate, an analysis will be made of lease versus purchase alternatives and any other appropriate analysis to determine the most economical approach.
- D. The school district must award contracts only to responsible contractors possessing the ability to perform successfully under the terms and conditions of a proposed procurement. Consideration will be given to such matters as contractor integrity, compliance with public policy, record of past performance, and financial and technical resources.
- E. The school district must maintain records sufficient to detail the history of procurement. These records will include, but are not necessarily limited to, the following: rationale for the method of procurement; selection of the contract type; contractor selection or rejection; and the basis for the contract price.
- F. The school district alone must be responsible, in accordance with good administrative practice and sound business judgment, for the settlement of all contractual and administrative issues arising out of procurements. These issues include, but are not limited to, source evaluation, protests, disputes, and claims. These standards do not relieve the school district of any contractual responsibilities under its contracts.
- G. The school district must take all necessary affirmative steps to assure that minority businesses, women's business enterprises, and labor surplus area firms are used when possible.
- H. Methods of Procurement. The school district must use one of the following methods of procurement:
 - 1. Procurement by micro-purchases. To the extent practicable, the school district must distribute micro-purchases equitably among qualified suppliers. Micro-purchases may be awarded without soliciting competitive quotations if the school district considers the price to be reasonable.
 - 2. Procurement by small purchase procedures. If small purchase procedures

are used, price or rate quotations must be obtained from an adequate number of qualified sources.

3. Procurement by sealed bids (formal advertising).
4. Procurement by competitive proposals. If this method is used, the following requirements apply:
 - a. Requests for proposals must be publicized and identify all evaluation factors and their relative importance. Any response to publicized requests for proposals must be considered to the maximum extent practical;
 - b. Proposals must be solicited from an adequate number of qualified sources;
 - c. The school district must have a written method for conducting technical evaluations of the proposals received and for selecting recipients;
 - d. Contracts must be awarded to the responsible firm whose proposal is most advantageous to the program, with price and other factors considered; and
 - e. The school district may use competitive proposal procedures for qualifications-based procurement of architectural/engineering (A/E) professional services whereby competitors' qualifications are evaluated and the most qualified competitor is selected, subject to negotiation of fair and reasonable compensation. The method where price is not used as a selection factor can only be used in procurement of A/E professional services; it cannot be used to purchase other types of services, though A/E firms are a potential source to perform the proposed effort.
5. Procurement by noncompetitive proposals. Procurement by noncompetitive proposals may be used only when one or more of the following circumstances apply:
 - a. The item is available only from a single source;
 - b. The public exigency or emergency for the requirement will not permit a delay resulting from competitive solicitation;
 - c. The DOE or MDE expressly authorizes noncompetitive proposals in response to a written request from the school district; or
 - d. After solicitation of a number of sources, competition is determined inadequate.

- I. Competition. The school district must have written procedures for procurement transactions. These procedures must ensure that all solicitations:
 - 1. Incorporate a clear and accurate description of the technical requirements for the material, product, or service to be procured. Such description must not, in competitive procurements, contain features which unduly restrict competition. The description may include a statement of the qualitative nature of the material, product, or service to be procured and, when necessary, must set forth those minimum essential characteristics and standards to which it must conform if it is to satisfy its intended use. Detailed product specifications should be avoided if at all possible. When making a clear and accurate description of the technical requirements is impractical or uneconomical, a “brand name or equivalent” description may be used as a means to define the performance or other salient requirements of procurement. The specific features of the named brand which must be met by offers must be clearly stated; and
 - 2. Identify all requirements which the offerors must fulfill and all other factors to be used in evaluating bids or proposals.
- J. The school district must ensure that all prequalified lists of persons, firms, or products which are used in acquiring goods and services are current and include enough qualified sources to ensure maximum open and free competition. Also, the school district must not preclude potential bidders from qualifying during the solicitation period.
- K. Non-federal entities are prohibited from contracting with or making subawards under “covered transactions” to parties that are suspended or debarred or whose principals are suspended or debarred. “Covered transactions” include procurement contracts for goods and services awarded under a grant or cooperative agreement that are expected to equal or exceed \$25,000.
- L. All nonprocurement transactions entered into by a recipient (i.e., subawards to subrecipients), irrespective of award amount, are considered covered transactions, unless they are exempt as provided in 2 C.F.R. § 180.215.

V. MANAGING EQUIPMENT AND SAFEGUARDING ASSETS

- A. Property Standards. The school district must, at a minimum, provide the equivalent insurance coverage for real property and equipment acquired or improved with federal funds as provided to property owned by the non-federal entity. Federally owned property need not be insured unless required by the terms and conditions of the federal award.

The school district must adhere to the requirements concerning real property, equipment, supplies, and intangible property set forth in 2 C.F.R. §§ 200.311, 200.314, and 200.315.

B. Equipment

Management requirements. Procedures for managing equipment (including replacement equipment), whether acquired in whole or in part under a federal award, until disposition takes place will, at a minimum, meet the following requirements:

1. Property records must be maintained that include a description of the property; a serial number or other identification number; the source of the funding for the property (including the federal award identification number (FAIN)); who holds title; the acquisition date; the cost of the property; the percentage of the federal participation in the project costs for the federal award under which the property was acquired; the location, use, and condition of the property; and any ultimate disposition data, including the date of disposition and sale price of the property.
2. A physical inventory of the property must be taken and the results reconciled with the property records at least once every two years.
3. A control system must be developed to ensure adequate safeguards to prevent loss, damage, or theft of the property. Any loss, damage, or theft must be investigated.
4. Adequate maintenance procedures must be developed to keep property in good condition.
5. If the school district is authorized or required to sell the property, proper sales procedures must be established to ensure the highest possible return.

VI. FINANCIAL MANAGEMENT REQUIREMENTS

- A. Financial Management. The school district's financial management systems, including records documenting compliance with federal statutes, regulations, and the terms and conditions of the federal award, must be sufficient to permit the preparation of reports required by general and program-specific terms and conditions; and the tracing of funds to a level of expenditures adequate to establish that such funds have been used according to the federal statutes, regulations, and the terms and conditions of the federal award.
- B. Payment. The school district must be paid in advance, provided it maintains or demonstrates the willingness to maintain both written procedures that minimize the time elapsing between the transfer of funds and disbursement between the school district and the financial management systems that meet the standards for fund control.

Advance payments to a school district must be limited to the minimum amounts needed and timed to be in accordance with the actual, immediate cash requirements of the school district in carrying out the purpose of the approved program or project.

The timing and amount of advance payments must be as close as is administratively feasible to the actual disbursements by the non-federal entity for direct program or project costs and the proportionate share of any allowable indirect costs. The school district must make timely payment to contractors in accordance with the contract provisions.

- C. Internal Controls. The school district must establish and maintain effective internal control over the federal award that provides reasonable assurance that the school district is managing the federal award in compliance with federal statutes, regulations, and the terms and conditions of the federal award. These internal controls should be in compliance with guidance in “Standards for Internal Control in the Federal Government,” issued by the Comptroller General of the United States, or the “Internal Control Integrated Framework,” issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

The school district must comply with federal statutes, regulations, and the terms and conditions of the federal award.

The school district must also evaluate and monitor the school district’s compliance with statutes, regulations, and the terms and conditions of the federal award.

The school district must also take prompt action when instances of noncompliance are identified, including noncompliance identified in audit findings.

The school district must take reasonable measures to safeguard protected personally identifiable information considered sensitive consistent with applicable federal and state laws regarding privacy and obligations of confidentiality.

VII. ALLOWABLE USE OF FUNDS AND COST PRINCIPLES

- A. Allowable Use of Funds. The school district administration and board will enforce appropriate procedures and penalties for program, compliance, and accounting staff responsible for the allocation of federal grant costs based on their allowability and their conformity with federal cost principles to determine the allowability of costs.

B. Definitions

1. “Allowable cost” means a cost that complies with all legal requirements that apply to a particular federal education program, including statutes, regulations, guidance, applications, and approved grant awards.
2. “Education Department General Administrative Regulations (EDGAR)” means a compilation of regulations that apply to federal education programs. These regulations contain important rules governing the administration of federal education programs and include rules affecting the allowable use of federal funds (including rules regarding allowable costs, the period of availability of federal awards, documentation requirements, and grants management requirements). EDGAR can be accessed at:

<http://www2.ed.gov/policy/fund/reg/edgarReg/edgar.html>.

3. “Omni Circular” or “2 C.F.R. Part 200s” or “Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards” means federal cost principles that provide standards for determining whether costs may be charged to federal grants.
4. “Advance payment” means a payment that a federal awarding agency or passthrough entity makes by any appropriate payment mechanism, including a predetermined payment schedule, before the non-federal entity disburses the funds for program purposes.

C. Allowable Costs. The following items are costs that may be allowable under the 2 C.F.R. Part 200s under specific conditions:

1. Advisory councils;
2. Audit costs and related services;
3. Bonding costs;
4. Communication costs;
5. Compensation for personal services;
6. Depreciation and use allowances;
7. Employee morale, health, and welfare costs;
8. Equipment and other capital expenditures;
9. Gains and losses on disposition of depreciable property and other capital assets and substantial relocation of federal programs;
10. Insurance and indemnification;
11. Maintenance, operations, and repairs;
12. Materials and supplies costs;
13. Meetings and conferences;
14. Memberships, subscriptions, and professional activity costs;
15. Security costs;
16. Professional service costs;

17. Proposal costs;
18. Publication and printing costs;
19. Rearrangement and alteration costs;
20. Rental costs of building and equipment;
21. Training costs; and
22. Travel costs.

D. Costs Forbidden by Federal Law. 2 CFR Part 200s and EDGAR identify certain costs that may never be paid with federal funds. The following list provides examples of such costs. If a cost is on this list, it may not be supported with federal funds. The fact that a cost is not on this list does not mean it is necessarily permissible. Other important restrictions apply to federal funds, such as those items detailed in the 2 CFR Part 200s; thus, the following list is not exhaustive:

1. Advertising and public relations costs (with limited exceptions), including promotional items and memorabilia, models, gifts, and souvenirs;
2. Alcoholic beverages;
3. Bad debts;
4. Contingency provisions (with limited exceptions);
5. Fundraising and investment management costs (with limited exceptions);
6. Donations;
7. Contributions;
8. Entertainment (amusement, diversion, and social activities and any associated costs);
9. Fines and penalties;
10. General government expenses (with limited exceptions pertaining to Indian tribal governments and Councils of Government (COGs));
11. Goods or services for personal use;
12. Interest, except interest specifically stated in 2 C.F.R. § 200.441 as allowable;
13. Religious use;

14. The acquisition of real property (unless specifically permitted by programmatic statute or regulations, which is very rare in federal education programs);
15. Construction (unless specifically permitted by programmatic statute or regulations, which is very rare in federal education programs); and
16. Tuition charged or fees collected from students applied toward meeting matching, cost sharing, or maintenance of effort requirements of a program.

E. Program Allowability

1. Any cost paid with federal education funds must be permissible under the federal program that would support the cost.
2. Many federal education programs detail specific required and/or allowable uses of funds for that program. Issues such as eligibility, program beneficiaries, caps or restrictions on certain types of program expenses, other program expenses, and other program specific requirements must be considered when performing the programmatic analysis.
3. The two largest federal K-12 programs, Title I, Part A, and the Individuals with Disabilities Education Act (IDEA), do not contain a use of funds section delineating the allowable uses of funds under those programs. In those cases, costs must be consistent with the purposes of the program in order to be allowable.

F. Federal Cost Principles

1. The Omni Circular defines the parameters for the permissible uses of federal funds. While many requirements are contained in the Omni Circular, it includes five core principles that serve as an important guide for effective grant management. These core principles require all costs to be:
 - a. Necessary for the proper and efficient performance or administration of the program.
 - b. Reasonable. An outside observer should clearly understand why a decision to spend money on a specific cost made sense in light of the cost, needs, and requirements of the program.
 - c. Allocable to the federal program that paid for the cost. A program must benefit in proportion to the amount charged to the federal program – for example, if a teacher is paid 50% with Title I funds, the teacher must work with the Title I program/students at least 50% of the time. Recipients also need to be able to track items or services purchased with federal funds so they can prove they were used for

federal program purposes.

- d. Authorized under state and local rules. All actions carried out with federal funds must be authorized and not prohibited by state and local laws and policies.
- e. Adequately documented. A recipient must maintain proper documentation so as to provide evidence to monitors, auditors, or other oversight entities of how the funds were spent over the lifecycle of the grant.

G. Program Specific Fiscal Rules. The Omni Circular also contains specific rules on selected items of costs. Costs must comply with these rules in order to be paid with federal funds.

- 1. All federal education programs have certain program specific fiscal rules that apply. Determining which rules apply depends on the program; however, rules such as supplement, not supplant, maintenance of effort, comparability, caps on certain uses of funds, etc., have an important impact when analyzing whether a particular cost is permissible.
- 2. Many state-administered programs require local education agencies (LEAs) to use federal program funds to supplement the amount of state, local, and, in some cases, other federal funds they spend on education costs and not to supplant (or replace) those funds. Generally, the “supplement, not supplant” provision means that federal funds must be used to supplement the level of funds from non-federal sources by providing additional services, staff, programs, or materials. In other words, federal funds normally cannot be used to pay for things that would otherwise be paid for with state or local funds (and, in some cases, with other federal funds).
- 3. Auditors generally presume supplanting has occurred in three situations:
 - a. School district uses federal funds to provide services that the school district is required to make available under other federal, state, or local laws.
 - b. School district uses federal funds to provide services that the school district provided with state or local funds in the prior year.
 - c. School district uses Title I, Part A, or Migrant Education Program funds to provide the same services to Title I or Migrant students that the school district provides with state or local funds to nonparticipating students.
- 4. These presumptions apply differently in different federal programs and also in schoolwide program schools. Staff should be familiar with the supplement not supplant provisions applicable to their program.

H. Approved Plans, Budgets, and Special Conditions

1. As required by the Omni Circular, all costs must be consistent with approved program plans and budgets.
2. Costs must also be consistent with all terms and conditions of federal awards, including any special conditions imposed on the school district's grants.

I. Training

1. The school district will provide training on the allowable use of federal funds to all staff involved in federal programs.
2. The school district will promote coordination between all staff involved in federal programs through activities, such as routine staff meetings and training sessions.

- J. Employee Sanctions. Any school district employee who violates this policy will be subject to discipline, as appropriate, up to and including the termination of employment.

VIII. COMPENSATION – PERSONAL SERVICES EXPENSES AND REPORTING

A. Compensation – Personal Services

Costs of compensation are allowable to the extent that they satisfy the specific requirements of the Uniform Grant Guidance and that the total compensation for individual employees:

1. Is reasonable for the services rendered and conforms to the established written policy of the school district consistently applied to both federal and non-federal activities; and
2. Follows an appointment made in accordance with a school district's written policies and meets the requirements of federal statute, where applicable.

Unless an arrangement is specifically authorized by a federal awarding agency, a school district must follow its written non-federal, entitywide policies and practices concerning the permissible extent of professional services that can be provided outside the school district for non-organizational compensation.

B. Compensation – Fringe Benefits

1. During leave.

The costs of fringe benefits in the form of regular compensation paid to employees

during periods of authorized absences from the job, such as for annual leave, family-related leave, sick leave, holidays, court leave, military leave, administrative leave, and other similar benefits, are allowable if all of the following criteria are met:

- a. They are provided under established written leave policies;
 - b. The costs are equitably allocated to all related activities, including federal awards; and
 - c. The accounting basis (cash or accrual) selected for costing each type of leave is consistently followed by the school district.
 2. The costs of fringe benefits in the form of employer contributions or expenses for social security; employee life, health, unemployment, and worker's compensation insurance (except as indicated in 2 C.F.R. § 200.447(d)); pension plan costs; and other similar benefits are allowable, provided such benefits are granted under established written policies. Such benefits must be allocated to federal awards and all other activities in a manner consistent with the pattern of benefits attributable to the individuals or group(s) of employees whose salaries and wages are chargeable to such federal awards and other activities and charged as direct or indirect costs in accordance with the school district's accounting practices.
 3. Actual claims paid to or on behalf of employees or former employees for workers' compensation, unemployment compensation, severance pay, and similar employee benefits (e.g., post-retirement health benefits) are allowable in the year of payment provided that the school district follows a consistent costing policy.
 4. Pension plan costs may be computed using a pay-as-you-go method or an acceptable actuarial cost method in accordance with the written policies of the school district.
 5. Post-retirement costs may be computed using a pay-as-you-go method or an acceptable actuarial cost method in accordance with established written policies of the school district.
 6. Costs of severance pay are allowable only to the extent that, in each case, severance pay is required by law; employer-employee agreement; established policy that constitutes, in effect, an implied agreement on the school district's part; or circumstances of the particular employment.
- C. Insurance and Indemnification. Types and extent and cost of coverage are in accordance with the school district's policy and sound business practice.
- D. Recruiting Costs. Short-term, travel visa costs (as opposed to longer-term, immigration visas) may be directly charged to a federal award, so long as they are:

1. Critical and necessary for the conduct of the project;
 2. Allowable under the cost principles set forth in the Uniform Grant Guidance;
 3. Consistent with the school district's cost accounting practices and school district policy; and
 4. Meeting the definition of "direct cost" in the applicable cost principles of the Uniform Grant Guidance.
- E. Relocation Costs of Employees. Relocation costs are allowable, subject to the limitations described below, provided that reimbursement to the employee is in accordance with the school district's reimbursement policy.
- F. Travel Costs. Travel costs may be charged on an actual cost basis, on a per diem or mileage basis in lieu of actual costs incurred, or on a combination of the two, provided the method used is applied to an entire trip and not to selected days of the trip, and results in charges consistent with those normally allowed in like circumstances in the school district's non-federally funded activities and in accordance with the school district's reimbursement policies.

Costs incurred by employees and officers for travel, including costs of lodging, other subsistence, and incidental expenses, must be considered reasonable and otherwise allowable only to the extent such costs do not exceed charges normally allowed by the school district in its regular operations according to the school district's written reimbursement and/or travel policies.

In addition, when costs are charged directly to the federal award, documentation must justify the following:

1. Participation of the individual is necessary to the federal award; and
2. The costs are reasonable and consistent with the school district's established travel policy.

Temporary dependent care costs above and beyond regular dependent care that directly results from travel to conferences is allowable provided the costs are:

1. A direct result of the individual's travel for the federal award;
2. Consistent with the school district's documented travel policy for all school district travel; and
3. Only temporary during the travel period.

Legal References: 2 C.F.R. § 200.12 (Capital Assets)

2 C.F.R. § 200.112 (Conflict of Interest)
 2 C.F.R. § 200.113 (Mandatory Disclosures)
 2 C.F.R. § 200.205(d) (Federal Awarding Agency Review of Risk Posed by Applicants)
 2 C.F.R. § 200.212 (Suspension and Debarment)
 2 C.F.R. § 200.300(b) (Statutory and National Policy Requirements)
 2 C.F.R. § 200.302 (Financial Management)
 2 C.F.R. § 200.303 (Internal Controls)
 2 C.F.R. § 200.305(b)(1) (Payment)
 2 C.F.R. § 200.310 (Insurance Coverage)
 2 C.F.R. § 200.311 (Real Property)
 2 C.F.R. § 200.313(d) (Equipment)
 2 C.F.R. § 200.314 (Supplies)
 2 C.F.R. § 200.315 (Intangible Property)
 2 C.F.R. § 200.318 (General Procurement Standards)
 2 C.F.R. § 200.319(c) (Competition)
 2 C.F.R. § 200.320 (Methods of Procurement to be Followed)
 2 C.F.R. § 200.321 (Contracting with Small and Minority Businesses, Women's Business Enterprises, and Labor Surplus Area Firms)
 2 C.F.R. § 200.328 (Monitoring and Reporting Program Performance)
 2 C.F.R. § 200.338 (Remedies for Noncompliance)
 2 C.F.R. § 200.403(c) (Factors Affecting Allowability of Costs)
 2 C.F.R. § 200.430 (Compensation – Personal Services)
 2 C.F.R. § 200.431 (Compensation – Fringe Benefits)
 2 C.F.R. § 200.447 (Insurance and Indemnification)
 2 C.F.R. § 200.463 (Recruiting Costs)
 2 C.F.R. § 200.464 (Relocation Costs of Employees)
 2 C.F.R. § 200.473 (Transportation Costs)
 2 C.F.R. § 200.474 (Travel Costs)

Cross References: MSBA/MASA Model Policy 208 (Development, Adoption, and Implementation of Policies)
 MSBA/MASA Model Policy 210 (Conflict of Interest – School Board Members)
 MSBA/MASA Model Policy 210.1 (Conflict of Interest – Charter School Board Members)
 MSBA/MASA Model Policy 412 (Expense Reimbursement)
 MSBA/MASA Model Policy 701 (Establishment and Adoption of School District Budget)
 MSBA/MASA Model Policy 701.1 (Modification of School District Budget)
 MSBA/MASA Model Policy 702 (Accounting)
 MSBA/MASA Model Policy 703 (Annual Audit)

Adopted: _____

MSBA/MASA Model Policy 722
Orig. 2017

Revised: _____

722 PUBLIC DATA REQUESTS

I. PURPOSE

The school district recognizes its responsibility relative to the collection, maintenance, and dissemination of public data as provided in state statutes.

II. GENERAL STATEMENT OF POLICY

The school district will comply with the requirements of the Minnesota Government Data Practices Act, Minn. Stat. Ch. 13 (MGDPA), and Minn. Rules Parts 1205.0100-1205.2000 in responding to requests for public data.

III. DEFINITIONS

A. Government Data

“Government data” means all recorded information that the school district has, including paper, email, flash drives, CDs, DVDs, photographs, etc.

B. Inspection

“Inspection” means the visual inspection of paper and similar types of government data. Inspection does not include printing copies by the school district, unless printing a copy is the only method to provide for inspection of the data. For data stored in electronic form and made available in electronic form on a remote access basis to the public by the school district, inspection includes remote access to the data by the public and the ability to print copies of or download the data on the public’s own computer equipment.

C. Public Data

“Public data” means all government data collected, created, received, maintained, or disseminated by the school district, unless classified by statute, temporary classification pursuant to statute, or federal law, as nonpublic or protected nonpublic; or, with respect to data on individuals, as private or confidential.

D. Responsible Authority

“Responsible authority” means the individual designated by the school board as the individual responsible for the collection, use, and dissemination of any set of data on individuals, government data, or summary data, unless otherwise provided by state law. Until an individual is designated by the school board, the responsible authority is the superintendent.

E. Summary Data

“Summary data” means statistical records and reports derived from data on individuals but in which individuals are not identified and from which neither their identities nor any other characteristic that could uniquely identify an individual is ascertainable.

IV. REQUESTS FOR PUBLIC DATA

A. All requests for public data must be made in writing directed to the responsible authority.

1. A request for public data must include the following information:
 - a. Date the request is made;
 - b. A clear description of the data requested;
 - c. Identification of the form in which the data is to be provided (e.g., inspection, copying, both inspection and copying, etc.); and
 - d. Method to contact the requestor (such as phone number, address, or email address).
2. A requestor is not required to explain the reason for the data request.
3. The identity of the requestor is public, if provided, but cannot be required by the government entity.
4. The responsible authority may seek clarification from the requestor if the request is not clear before providing a response to the data request.

B. The responsible authority will respond to a data request at reasonable times and places as follows:

1. The responsible authority will notify the requestor in writing as follows:
 - a. The requested data does not exist; or

- b. The requested data does exist but either all or a portion of the data is not accessible to the requestor; or
 - (1) If the responsible authority determines that the requested data is classified so that access to the requestor is denied, the responsible authority will inform the requestor of the determination in writing, as soon thereafter as possible, and shall cite the specific statutory section, temporary classification, or specific provision of federal law on which the determination is based.
 - (2) Upon the request of a requestor who is denied access to data, the responsible authority shall certify in writing that the request has been denied and cite the specific statutory section, temporary classification, or specific provision of federal law upon which the denial was based.
 - c. The requested data does exist and provide arrangements for inspection of the data, identify when the data will be available for pick-up, or indicate that the data will be sent by mail. If the requestor does not appear at the time and place established for inspection of the data or the data is not picked up within ten (10) business days after the requestor is notified, the school district will conclude that the data is no longer wanted and will consider the request closed.
- 2. The school district's response time may be affected by the size and complexity of the particular request, including necessary redactions of the data, and also by the number of requests made within a particular period of time.
 - 3. The school district will provide an explanation of technical terminology, abbreviations, or acronyms contained in the responsive data on request.
 - 4. The school district is not required by the MGDPA to create or collect new data in response to a data request, or to provide responsive data in a specific form or arrangement if the school district does not keep the data in that form or arrangement.
 - 5. The school district is not required to respond to questions that are not about a particular data request or requests for data in general.

V. REQUEST FOR SUMMARY DATA

- A. A request for the preparation of summary data shall be made in writing directed to the responsible authority.

1. A request for the preparation of summary data must include the following information:
 - a. Date the request is made;
 - b. A clear description of the data requested;
 - c. Identify the form in which the data is to be provided (e.g., inspection, copying, both inspection and copying, etc.); and
 - d. Method to contact requestor (phone number, address, or email address).
- B. The responsible authority will respond within ten (10) business days of the receipt of a request to prepare summary data and inform the requestor of the following:
 1. The estimated costs of preparing the summary data, if any; and
 2. The summary data requested; or
 3. A written statement describing a time schedule for preparing the requested summary data, including reasons for any time delays; or
 4. A written statement describing the reasons why the responsible authority has determined that the requestor's access would compromise the private or confidential data.
- C. The school district may require the requestor to pre-pay all or a portion of the cost of creating the summary data before the school district begins to prepare the summary data.

VI. COSTS

A. Public Data

1. The school district will charge for copies provided as follows:
 - a. 100 or fewer pages of black and white, letter or legal sized paper copies will be charged at 25 cents for a one-sided copy or 50 cents for a two-sided copy.
 - b. More than 100 pages or copies on other materials are charged based upon the actual cost of searching for and retrieving the data

and making the copies or electronically sending the data, unless the cost is specifically set by statute or rule.

- (1) The actual cost of making copies includes employee time, the cost of the materials onto which the data is copied (paper, CD, DVD, etc.), and mailing costs (if any).
- (2) Also, if the school district does not have the capacity to make the copies, e.g., photographs, the actual cost paid by the school district to an outside vendor will be charged.

2. All charges must be paid for in cash in advance of receiving the copies.

B. Summary Data

1. Any costs incurred in the preparation of summary data shall be paid by the requestor prior to preparing or supplying the summary data.
2. The school district may assess costs associated with the preparation of summary data as follows:
 - a. The cost of materials, including paper, the cost of the labor required to prepare the copies, any schedule of standard copying charges established by the school district, any special costs necessary to produce such copies from a machine-based record-keeping system, including computers and microfilm systems;
 - b. The school district may consider the reasonable value of the summary data prepared and, where appropriate, reduce the costs assessed to the requestor.

Data Practices Contacts

Responsible Authority:

[Name]

[Location]

[Phone number; email address]

Data Practices Compliance Official:

[Name]

[Location]

[Phone number; email address]

Data Practices Designee(s):

[Name]

[Location]

[Phone number; email address]

Legal References: Minn. Stat. Ch. 13 (Minnesota Government Data Practices Act)

Cross References: MSBA/MASA Model Policy 406 (Public and Private Personnel Data)
MSBA/MASA Model Policy 515 (Protection and Privacy of Pupil
Records)

Adopted: _____

MSBA/MASA Model Policy 903

Orig. 1995

Revised: _____

Rev. 2017

903 VISITORS TO SCHOOL DISTRICT BUILDINGS AND SITES

I. PURPOSE

The purpose of this policy is to inform the school community and the general public of the position of the school board on visitors to school buildings and other school property.

II. GENERAL STATEMENT OF POLICY

- A. The school board encourages interest on the part of parents and community members in school programs and student activities. The school board welcomes visits to school buildings and school property by parents and community members provided the visits are consistent with the health, education and safety of students and employees and are conducted within the procedures and requirements established by the school district.
- B. The school board reaffirms its position on the importance of maintaining a school environment that is safe for students and employees and free of activity that may be disruptive to the student learning process or employee working environment.

III. POST-SECONDARY ENROLLMENT OPTIONS STUDENTS

- A. A student enrolled in a post-secondary enrollment options course may remain at the school site during regular school hours in accordance with established procedures.
- B. A student enrolled in a post-secondary enrollment options course may be provided with reasonable access, during regular school hours, to a computer and other technology resources that the student needs to complete coursework for a post-secondary enrollment course in accordance with established procedures.

IV. RESPONSIBILITY

- A. The school district administration shall present recommended visitor and post-secondary enrollment options student procedures and requirements to the school board for review and approval. The procedures should reflect input from employees, students and advisory groups, and shall be communicated to the school community and the general public. Upon approval by the school board, such procedures and requirements shall be an addendum to this policy.
- B. The superintendent shall be responsible for providing coordination that may be needed throughout the process and providing for periodic school board review and

approval of the procedures.

V. VISITOR LIMITATIONS

- A. An individual, post-secondary enrollment options student, or group may be denied permission to visit a school or school property or such permission may be revoked if the visitor(s) does not comply with the school district procedures and regulations or if the visit is not in the best interest of students, employees or the school district.
- B. Visitors, including post-secondary enrollment options students, are authorized to park vehicles on school property at times and in locations specified in the approved visitor procedures and requirements which are an addendum to this policy or as otherwise specifically authorized by school officials. When unauthorized vehicles of visitors are parked on school property, school officials may:
 - 1. move the vehicle or require the driver or other person in charge of the vehicle to move it off school district property; or
 - 2. if unattended, provide for the removal of the vehicle, at the expense of the owner or operator, to the nearest convenient garage or other place of safety off of school property.
- C. An individual, post-secondary enrollment options student, or group who enters school property without complying with the procedures and requirements may be guilty of criminal trespass and thus subject to criminal penalty. Such persons may be detained by the school principal or a person designated by the school principal in a reasonable manner for a reasonable period of time pending the arrival of a police officer.

Legal References: Minn. Stat. § 123B.02 (General Powers of Independent School Districts)
Minn. Stat. § 124D.09 (Post-Secondary Enrollment Options Program)
Minn. Stat. § 128C.08 (Assaulting a Sports Official Prohibited)
Minn. Stat. § 609.605, Subd. 4 (Trespasses on School Property)

Cross References:

Enclosure 9.2

I have your survey's set up and ready and to go; we did individual ones for each school. You can just copy and paste the link below and send it out to as many people as you feel is appropriate. To be consistent, along with the link your opening paragraph in the email could read something like this:

In an effort to make our upcoming high school consolidation successful, we are seeking as much input from the public as we can get. The following link is a five minute survey that will allow us to get a feel as to what is most important to you and our community. Thank you in advance for your thoughtful response.

Or you can adjust your opening paragraph to how you prefer. Please let me know if you have any questions or need anything else in the meantime. We are looking forward to doing this process with you.

SURVEY LINKS

Josh - VIRGINIA HIGH SCHOOL :

<https://www.surveymonkey.com/r/VIRGINIAHS>

JoJo - EVELETH-GILBERT HIGH SCHOOL:

<https://www.surveymonkey.com/r/EVELETH-GILBERT>

Thank you,

Marcie Zerr

Executive Assistant

marcie@johnajenson.com

Athletics & Activities Plan



Coming
Together



Fall Athletics & Activities

FOOTBALL

Merge Junior High

Fall 2020- Practice in Eveleth

Co-op Varsity/JV

Fall 2021

Fall 2020 - Virginia will play 2 home games in Eveleth, 2 home games at Mesabi East. Virginia will need to figure out where to practice Fall 2020- possibly 3rd softball field at Padgett Fields- possibly outfield at Stock field.

BOYS AND GIRLS CROSS COUNTRY

Co-op 7 - 12
numbers

Fall 2021 - could go earlier depending on

Fall Athletics and Activities, cont.

VOLLEYBALL

Merge Junior High

Fall 2021

Varsity/JV

New School

Fall 2022

GIRLS TENNIS

Varsity/JV New School

Fall 2022

GIRLS SWIMMING

Co-op 7 - 12

Fall 2021

BOYS AND GIRLS SOCCER

Stays as is - Mesabi East Hosts

Winter Athletics & Activities

Boys and Girls Basketball

Merge Junior High 2021-2022

Varsity/JV New School 2022-2023

Wrestling

Stays as is - already co-oped

Boys Hockey

Varsity/ JV New School 2022-2023

Girls Hockey

Stays as is - already co-oped

Boys Swimming

Co-op 7-12 This winter 19-20- co- coaches.

Winter Athletics & Activities, cont.

Alpine & Nordic Ski

Stay as is - already Co-oped

Danceline (Depending on teachers contract getting settled)

This is brand new to Virginia this year - Co-op this year, Eveleth-Gilbert with Virginia

One Act Play

Co-op this year, Virginia with Eveleth-Gilbert

Speech

Co-op this year, Virginia with Eveleth-Gilbert

Robotics

Eveleth-Gilbert would co-op with Virginia if interested

Spring Athletics and Activities

Baseball

Merge Junior High	Spring 2022
Varsity/JV New School	Spring 2023

Softball

Merge Junior High	Spring 2022
Varsity/JV New School	Spring 2023

Girls Golf/ Boys Golf

Co-op 7 - 12	Spring 2022- depends on numbers.
--------------	----------------------------------

Spring Athletics and Activities, cont.

Boys Tennis

Varsity/ JV New School

Spring 2023

Boys and Girls Track

Co-op 7-12

Spring 2021

*Neither school will have a track. We will need to figure out where to practice - all away meets.

Clay Target

Virginia co-ops with Mesabi East

If Eveleth-Gilbert wants to participate, contact Mesabi East.

School Name, Mascot, & Colors

Process:

Consultant, through Jostens, meets with Josh and JoJo to learn about history of Range, etc.

Prepares survey with ADs help. Link is sent out to community, parents and students through Facebook, area newspapers, Swift, BrightArrow, and email. Public can come to Superintendent's office to complete survey if no internet.

Public will also be able to submit a mascot drawing to the VHS and EGHS Superintendent's Office.

Consultant receives all responses, prepares the data for the 3-5 hour stakeholders meeting.
Tentative date: Sept 30th.

Stakeholders, for example, would include: ADs, joint powers board, student council, coaches, business leaders, community, building principals, superintendents.

School Name, Mascot, & Colors, cont.

Consultant and group narrow down choices to 8-10.

VHS and EGHS Student Councils take over and narrow down to 3-5. They can plan activities for Homecoming, elementary students, etc., to help narrow it down.

Jostens creates artwork for the remaining 3-5 mascot choices.

Consultant creates final survey and link is sent out to same groups to vote.

ADs and Student Councils get together and come up with the final name, mascot and colors.

School name, mascot and school colors are announced at EG vs VHS hockey game on Jan. 23, 2020.



Wetland Delineation Report

Kimley-Horn and Associates, Inc.
Eveleth-Gilbert-Virginia School Sites
Eveleth and Virginia, Minnesota
KIMLE 151300 | August 2019



Building a Better World
for All of Us®

Engineers | Architects | Planners | Scientists

Wetland Delineation Report

Eveleth-Gilbert-Virginia School Sites

Prepared for:
Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100
St. Paul, MN 55114

Prepared by:
Short Elliott Hendrickson Inc.
418 West Superior Street
Duluth, MN 55802-1512
218.279.3000

The procedures described in this report and the field methods used constitute an official wetland delineation in accordance with the 1987 U.S. Army Corps of Engineers *Wetlands Delineation Manual* and applicable *Regional Supplement*.

The field delineation was completed by Natalie White, PWS, CWD; Rebecca Buduhn, PWS, CWD, PSS-IT; Bailey Nelson, CWD-IT; and Ericka Massa. Data from previously approved delineations completed by Kyle Hanson, PWS, CWD and Erin Budrow, CWD in 2016 and 2017 was also included. The methodology meets the standards and criteria described in the manual, and conforms to the applicable standards and regulations in force at the time the fieldwork was completed. The approved 2016 and 2017 delineations remain valid under Minnesota Statute (M.S.) 103G.2242, Subd. 2a. and U.S. Army Corps of Engineers – St. Paul District Policy for Wetland Delineation Review approvals. The results reflect conditions present at the time of the delineation.

I hereby certify that this report was prepared by me or under my direct supervision.

Prepared by:		August 2, 2019
	Ericka Massa, Graduate Biologist Certified Wetland Delineator, In Training	Date
Reviewed by:		July 5, 2019
	Allyz Kramer, Sr. Biologist QA/AC Manager Minnesota Certified Wetland Delineator, No. <u>1023</u> Professional Wetland Scientist, No. <u>1884</u>	Date
Reviewed by:		August 5, 2019
	Deric Deuschle, Sr. Biologist Minnesota Certified Wetland Delineator, No. <u>1009</u>	



Wetland Delineation Review Checklist for Minnesota

This document is intended to provide those reviewing wetland delineations for regulatory purposes with a checklist of basic components that should be considered when reviewing wetland delineations, and to serve as a useful guide for those conducting delineations and preparing reports. This checklist is for most routine wetland delineations in Minnesota. Other report components and review considerations may be applicable depending on the characteristics of the site being evaluated. Users should consult the 1987 Corps of Engineers Wetland Delineation Manual, applicable regional supplement and Board of Water & Soil Resources guidance documents for more specific information and explanations.

Basic Report Components (check to make sure these are in the report)

- ☒ Site location map
- ☒ National Wetland Inventory (NWI) map
- ☒ Soil survey map (use web soil survey at <http://websoilsurvey.nrcs.usda.gov/app/>)
- ☒ MN DNR Protected Waters Inventory Map
- ☒ Recent air photo with sampling point locations, site boundary, and wetland boundaries
- ☐ Survey map (optional depending on local requirements)
- ☒ Wetland delineation data forms corresponding to indicated sampling point locations

Report Contents (review report and data forms for these elements)

General

- ☒ Circular 39 wetland types and Eggers & Reed plant community types identified for each wetland
- ☒ Vegetation and landscape position of all adjacent upland areas identified and described
- ☒ Wetland-upland transitions described for each wetland in terms of vegetation, soils, and hydrology
- ☒ Methodology for identifying potential wetland areas described
- ☒ All potential wetlands from hydric soil, NWI, and other mapping sources adequately investigated and described in the report.

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Wetland Delineation Review Checklist for Minnesota
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Wetland Delineation Report

Eveleth-Gilbert-Virginia School Sites

Prepared for Kimley-Horn and Associates, Inc.

1 Introduction

The purpose of this study was to investigate wetland areas in an area proposed for the construction of the combined Eveleth-Gilbert-Virginia school in Eveleth and Virginia, St. Louis County, Minnesota (**Figure 1**). A Level 2 delineation was completed and 29 (twenty-nine) wetland basins were identified, totaling approximately 63.4 acres.

This report describes the methodology and results of the field delineation performed on June 13, 14, 17, 18 and August 1, 2019. SEH has completed two wetland delineation projects within this area of interest in both 2016 and 2017. These delineations and reports were reviewed and approved by the local, state, and federal wetland regulatory authorities for the project area. Because these approvals remain valid for this current work for the proposed school site, data from these two recently completed and approved wetland delineations have been incorporated into this report. These 2016 and 2017 delineated wetlands and corresponding data sheets are so denoted in the report. Figures referred to in the text are included at the end of the report.

1.1 Site Description

The project site is located in Sections 28, 29, and 32 of Township 58 North, Range 17 West in Eveleth and Virginia, St. Louis County, Minnesota as shown on **Figure 1**. **Figure 2** shows the site on a 2016 aerial photograph background. The approximately 240-acre site is bounded on the north by Bourgin Road, on the east by vacant lands owned by the State of Minnesota and RGGS Land & Minerals LTD, on the south by vacant lands owned by the City of Eveleth, and on the west by industrial businesses. The East Range Academy of Technology and Science is within the area of investigation and is positioned below Mud Lake in the northern portion of the site, with driveway access from Siegel Boulevard (**Figure 2**).

The site is located in the Otter Creek and Elbow Creek minor watersheds, the St. Louis River major watershed (#3), and Bank Service Area (BSA) #1. The project site consists of a variety of upland and wetland plant communities, which are described in detail in the following sections.

2 Wetland Delineation

2.1 Wetlands Definition

Wetlands are defined in federal Executive Order 11990 as follows:

“Those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.”

According to U.S. Army Corps of Engineers *Wetlands Delineation Manual* (USACE 1987) and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region* (USACE 2012), one positive indicator (except in certain situations) from each of three elements must be present in order to make a positive wetland determination, which are as follows:

- Greater than 50 percent dominance of hydrophytic plant species.
- Presence of hydric soil.
- The area is either permanently or periodically inundated, or soil is saturated to the surface during the growing season of the dominant vegetation.

2.2 Methodology

2.2.1 Resource Review

Topographic maps, the U. S. Fish and Wildlife Service (USFWS) National Wetlands Inventory (NWI) map, and the Minnesota Department of Natural Resources (MNDNR) Public Waters Inventory (PWI) map, the Natural Resources Conservation Service (NRCS) Web Soil Survey (USDA 2018) for St. Louis County, the St. Louis County hydric soils list, and LiDAR data were reviewed prior to visiting the site to locate potential wetland habitats. **Figure 3** is a copy of the NWI map. **Figure 4** is a copy of the PWI Map. **Figure 5** is a copy of the NRCS Web Soil Survey map. **Figure 6** shows the site boundary on two-ft LiDAR contours and a digital elevation model. These sources showed twenty-nine (29) wetland areas that were investigated in greater detail during the field delineation.

Previous delineations completed and approved within the project boundaries were reviewed prior to the delineation. Data collected at sampling points and wetland boundaries were reused when appropriate. A delineation for the Virginia Public Utilities Commission was completed by SEH in 2016 (SEH 2016). Two additional delineations were completed in the school site project area of interest completed by SEH in 2017 for the St. Louis and Lake Counties Regional Rail Authority (SEH 2017a, 2017b). The approved 2016 and 2017 delineations remain valid under Minnesota Statute (M.S.) 103G.2242, Subd. 2a. and U.S. Army Corps of Engineers – St. Paul District Policy for Wetland Delineation Review approvals. Additionally, SEH completed wetland delineation and reporting in 2001 for the Virginia-Eveleth Economic Development Authority that encompassed portions of the school site area of interest (SEH 2001). This 2001 delineation was approved, but that data were not reused for this report. The 2001 delineation was simply reviewed for historical context and reference to previous delineation work completed in the area.

2.2.2 Field Procedures

The project site was examined on June 13, 14, 17, 18, and August 1, 2019 for areas meeting the technical wetland criteria in accordance with the U.S. Army Corps of Engineers *Wetlands Delineation Manual* (USACE 1987) and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region* (USACE 2012).

The delineation procedures in the *Corps Manual* (i.e., the Routine Onsite Determination Method), in combination with wetland indicators and guidance provided in the *Regional Supplement* were applied for this delineation. Where differences in the two documents occur, the *Regional Supplement* takes precedence over the *Corps Manual* for applications in the *Northcentral and Northeastern Region* (USACE 2012).

Field notes, samples, and photographs were taken at representative locations in each wetland basin, with data transect locations following spacing guidelines in the *Regional Supplement*. The respective wetland and upland plots for each wetland were documented on Wetland Determination Data Forms (**Appendix A**). Relevant photographs of the site and representative sample locations are included in **Appendix B**. Other photographs will be retained on file at SEH.

Wetland boundaries were located and marked with flagging labeled with "WETLAND BOUNDARY" to allow for field review. The locations of the delineated wetland boundaries were collected with a sub-meter accuracy Global Positioning System (GPS) unit and mapped. Wetland boundaries and locations of sample points are shown on **Figures 7**, and **7-1** through **7-14**. Wetland community types are shown on **Figures 8**, and **8-1** through **8-14**.

2.3 Hydrophytic/Wetland Vegetation

Wetland plant species nomenclature follows the *National Wetland Plant List* (USACE 2016). Identification was aided when necessary with field guides for the region. Vegetation was sampled in nested circular plots: 5-ft radius for herbaceous species, 15-ft radius for shrubs, and 30-ft radius for trees and vines.

2.4 Hydric/Wetland Soils

Soils were observed for hydric soil characteristics. Soils were examined in cores taken with a Dutch auger. Soil profiles were observed at a depth necessary to confirm hydric soil characteristics. Typical soil profile depths are typically within 18-24 inches below ground surface to allow for: (1) observation of an adequate portion of the soil profile to determine presence/absence of hydric soil characteristics; (2) observation of hydrology including depth to the water table and saturated soils; and, (3) identification of disturbances (e.g., buried horizon, plow line, etc.). Soil color determinations were made using Munsell Soil Color Charts (Gretag-Macbeth 1994). Site soil characteristics were compared to those mapped and described in the Soil Survey for St. Louis County (USDA 2018). Hydric soil characteristics were compared to those identified in the *Northcentral and Northeastern Regional Supplement* (USACE 2012) and the most recent version of the NRCS publication *Field Indicators of Hydric Soils in the United States, Version 8.1* (USDA 2017).

2.5 Hydrology

Primary and secondary indicators of hydrology were identified in the field to determine the presence or absence of wetland hydrology, as described in the *Northcentral and Northeastern Regional Supplement* (USACE 2012), and are listed in each wetland description. Subsurface wetland hydrology indicators were examined using the soil cores and/or soil pits as deep as 24 inches.

2.5.1 Wetland Classification

Wetland classification follows the methods described in *Wetlands and Deepwater Habitats of the United States* (Cowardin, et al. 1979) that is used by the USFWS NWI. The Circular 39 classification (Shaw and Fredine 1956) is also provided. Wetland classification is also provided following *Wetland Plants and Plant Communities of Minnesota & Wisconsin* (Eggers and Reed 2014), which is used for classifying wetlands for permitting-related activities under the Minnesota Wetland Conservation Act (WCA) and the USACE *Final St. Paul District Policy for Wetland Compensatory Mitigation in Minnesota* (USACE 2009).

3 Results

At the time of the delineation, the active growing season for the area had commenced. The *Regional Supplement* (USACE 2012) describes several criteria for an active growing season, which include fresh growth on wetland herbaceous vegetative species, bud break on trees or shrubs, and/or active flowering plants.

The field delineation was conducted under temperature and precipitation conditions that were normal as compared to the historical average for the region according to the National Oceanic and Atmospheric Administration (NOAA) Regional Climate Center, for example (**Appendix C**). Most of the vegetation was identifiable, including all dominant species.

Twenty-nine (29) wetland basins were identified, delineated, and classified (**Figures 7 and 8**). The Wetland Determination Data Forms (**Appendix A**) indicate the dominant species of vegetation and the soil and hydrologic characteristics at representative locations around each basin. Wetland Determination Data Forms from the previous delineations that were also used here include forms for Wetland 2 (2-1u, 2-1w), Wetland 6 (6-3u, 6-3w), Wetland 17 (17-2u, 17-2w), Wetland 25 (25-1u, 25-1w), Wetland 26 (26-3u, 26-3w), and Wetland 27 (27-1u, 27-1w). A copy of the wetland boundary approvals for the three delineations are included as **Appendix D**.

Table 1 is a summary of the size and classification of each wetland basin. The wetlands are grouped by wetland habitat classification and described below **Table 1**.

Table 1 – Wetland and Aquatic Resource Characteristics

Wetland ID	Size (acres) ¹	Eggers & Reed Classification	Circular 39/ Cowardin Classification	Surficial Connectivity	Figure Reference
1	0.0110	Shrub-Carr	Type 6 / PSS1B	Linear ditch, adjacent to road	7-1, 8-1
2	0.3346	Hardwood Swamp	Type 7 / PFO1B	Linear ditch	7-2, 8-2
3	0.0046	Coniferous Swamp	Type 7 / PFO4B	Isolated depression	7-1, 8-1
4	0.1454	Hardwood Swamp	Type 7 / PFO1B	Isolated depression	7-1, 7-2, 8-1, 8-2
5	0.2912	Sedge Meadow	Type 2 / PEM1B	Linear ditch, adjacent to road	7-1, 8-1
6	6.6828	Fresh (Wet) Meadow	Type 2 / PEM1B	Surficial connectivity to Mud Lake	7-2, 7-3, 7-6, 8-2, 8-3, 8-6
	10.2217	Coniferous Swamp	Type 7 / PFO4B	Surficial connectivity to Mud Lake	7-1, 7-2, 7-3, 7-4, 7-5, 7-6, 8-1, 8-2, 8-3, 8-4, 8-5, 8-6
	5.6935	Open Water	Type 5 / PUBG	Surficial connectivity to Mud Lake	7-3, 8-3

Table 1 (Continued) – Wetland and Aquatic Resource Characteristics

Wetland ID	Size (acres) ¹	Eggers & Reed Classification	Circular 39/ Cowardin Classification	Surficial Connectivity	Figure Reference
	2.4798	Sedge Meadow	Type 2 / PEM1B	Surficial connectivity to Mud Lake	7-3, 7-4, 8-3, 8-4
	2.1261	Hardwood Swamp	Type 7 / PFO1B	Surficial connectivity to Mud Lake	7-2, 7-3, 8-2, 8-3
	2.0791	Shallow Marsh	Type 3 / PEM1B	Surficial connectivity to Mud Lake	7-2, 7-3, 8-2, 8-3, 7-7, 8-7
	3.4635	Alder Thicket	Type 6 / PSS1B	Surficial connectivity to Mud Lake	7-2, 7-3, 7-7, 8-2, 8-3, 8-7
7	0.0932	Coniferous Swamp	Type 7 / PFO4B	Linear ditch, adjacent to road	7-1, 8-1
8	0.1959	Shrub-Carr	Type 6 / PSS1B	Isolated depression	7-8, 8-8
9	0.0169	Shrub-Carr	Type 6 / PSS1B	Isolated depression	7-8, 8-8
10	0.2426	Coniferous Swamp	Type 7 / PFO4B	Isolated depression	7-4, 8-4
11	0.0132	Shrub-Carr	Type 6 / PSS1B	Isolated depression	7-7, 8-7
12	1.3669	Coniferous Swamp	Type 7 / PFO4B	Linear ditch, adjacent to road	7-1, 7-5, 8-1, 8-5
	0.1969	Shrub-Carr	Type 6 / PSS1B	Linear ditch, adjacent to road	7-1, 8-1
	0.7968	Fresh (Wet) Meadow	Type 2 / PEM1B	Linear ditch, adjacent to road	7-1, 7-5, 8-1, 8-5
	1.6554	Hardwood Swamp	Type 7 / PFO1B	Linear ditch, adjacent to road	7-1, 8-1
13	2.3551	Hardwood Swamp	Type 7 / PFO1B	Linear ditch, adjacent to road, flow through	7-5, 8-5
	0.7228	Coniferous Swamp	Type 7 PFO4B	Linear ditch, adjacent to road, flow through	7-5, 8-5
14	0.2001	Sedge Meadow	Type 2 / PEM1B	Isolated depression	7-5, 8-5
15	0.2444	Sedge Meadow	Type 2 / PEM1B	Isolated depression	7-10, 8-10
16	0.2656	Shrub-Carr	Type 6 / PSS1B	Isolated depression	7-10, 8-10

Table 1 (Continued) – Wetland and Aquatic Resource Characteristics

Wetland ID	Size (acres) ¹	Eggers & Reed Classification	Circular 39/ Cowardin Classification	Surficial Connectivity	Figure Reference
17	1.7354	Coniferous Swamp	Type 7 / PFO4B	Linear ditch, adjacent to road, flow through	7-10, 7-12, 8-10, 8-12
	0.2163	Fresh (Wet) Meadow	Type 2 / PEM1B	Linear ditch, adjacent to road, flow through	7-12, 8-12
	0.7560	Hardwood Swamp	Type 7 / PFO1B	Linear ditch, adjacent to road, flow through	7-10, 8-10
18	0.2412	Hardwood Swamp	Type 7 / PFO1B	Isolated depression	7-12, 8-12
19	3.9943	Hardwood Swamp	Type 7 / PFO1B	Linear ditch, adjacent to road, flow through	7-11, 7-12, 7-13, 8-11, 8-12, 8-13
	1.4757	Alder Thicket	Type 6 / PSS1B	Linear ditch, adjacent to road, flow through	7-11, 7-13, 8-11, 8-13
	1.3660	Fresh (Wet) Meadow	Type 2 / PEM1B	Linear ditch, adjacent to road, flow through	7-13, 7-14, 8-13, 8-14
20	0.2092	Hardwood Swamp	Type 7 / PFO1B	Isolated depression	7-12, 8-12
21	2.2168	Hardwood Swamp	Type 7 / PFO1B	Isolated depression	7-7, 7-10, 8-7, 8-10
22	0.5541	Shrub-Carr	Type 6 / PSS1B	Isolated depression	7-9, 8-9
23	0.4600	Shrub-Carr	Type 6 / PSS1B	Isolated depression	7-10, 8-10
24	0.0491	Coniferous Swamp	Type 7 / PFO4B	Isolated depression	7-1, 8-1
25	0.0199	Shrub-Carr	Type 6 / PSS1B	Linear ditch, adjacent to road, connected to Wetland 19 via culvert	7-12, 8-12
26	6.6090	Hardwood Swamp	Type 7 / PFO1B	Isolated depression	7-14, 8-14
	0.2070	Fresh (Wet) Meadow	Type 2 / PEM1B	Isolated depression	7-14, 8-14
	1.0456	Coniferous Swamp	Type 7 / PFO4B	Flow through	7-14, 8-14
27	0.2801	Hardwood Swamp	Type 7 / PFO1B	Flow through	7-14, 8-14
28	0.0311	Fresh (Wet) Meadow	Type 2 / PEM1B	Isolated depression	7-6, 8-6

Table 1 (Continued) – Wetland and Aquatic Resource Characteristics

Wetland ID	Size (acres) ¹	Eggers & Reed Classification	Circular 39/ Cowardin Classification	Surficial Connectivity	Figure Reference
29	0.0118	Fresh (Wet) Meadow	Type 2 / PEM1B	Linear, drainage ditch	7-7, 8-7
Total acreage	63.3774				

¹ Size includes areas of wetland within the area of investigation only. Wetlands may extend beyond the limits of the area investigated and actual wetland size may be larger than that indicated.

3.1 Open Water

Table 2 – Summary of Open Water Communities

Wetland ID	Size (acres) ¹	Cowardin/Circular 39 Classification	Surficial Connectivity / Notes
6	5.6935	Type 5 / PUBG	Mud Lake
Total acreage	5.6935		
¹ Size includes areas of wetland within the area of investigation only. Wetlands may extend beyond the limits of the area investigated and actual wetland size may be larger than that indicated.			

A portion of Wetland 6 is an open water community located at the northern end of the project area (**Figure 8**). The basin was delineated using Level 1 methodology and not visited during the field delineation. However, the surrounding wetland habitat of different types was delineated using Level 2 field methods, and these results are described in following sections.

The wetland plant community is characterized as open water based on the observed absence of persistent vegetation from aerial photographs. No formal sample points were obtained.

3.2 Shallow Marsh

Table 3 – Summary of Shallow Marsh Communities

Wetland ID	Size (acres) ¹	Cowardin/Circular 39 Classification	Surficial Connectivity / Notes
6	2.0791	Type 3 / PEM1B	Adjacent to Mud Lake; adjacent to stormwater pond
Total acreage	2.0791		
¹ Size includes areas of wetland within the area of investigation only. Wetlands may extend beyond the limits of the area investigated and actual wetland size may be larger than that indicated.			

A portion of Wetland 6 is a shallow marsh community located at the northern end of the project area (**Figure 8**), adjacent to the open water community. A separate basin is adjacent to the stormwater pond. The shallow marsh basins were delineated using Level 1 methodology. The boundaries of the northern shallow marsh, adjacent to Mud Lakes, are completely within the boundaries of Wetland 6 and therefore were not verified during the field visit.

The wetland plant community is characterized as shallow marsh based on the observed lack of tree and shrub vegetation directly adjacent to Mud Lake from aerial photographs. No formal sample points were obtained.

3.3 Sedge Meadow

Table 4 – Summary of Sedge Meadow Communities

Wetland ID	Size (acres) ¹	Cowardin/Circular 39 Classification	Surficial Connectivity / Notes
5	0.2912	Type 2 / PEM1B	Linear ditch
6	2.4798	Type 2 / PEM1B	Adjacent to Mud Lake
14	0.2001	Type 2 / PEM1B	Isolated depression
15	0.2444	Type 2 / PEM1B	Isolated depression
Total acreage	3.2155		
¹ Size includes areas of wetland within the area of investigation only. Wetlands may extend beyond the limits of the area investigated and actual wetland size may be larger than that indicated.			

Wetlands 5, 14, 15 and a portion of Wetland 6 are sedge meadow communities located throughout the project area (**Figure 8**). Wetland 5 is an isolated linear ditch adjacent to White Cedar Drive. Wetland 6 is adjacent to Mud Lake. Wetlands 14 and 15 are isolated depressions with no discernable inlets or outlets.

The wetland vegetation is characterized as sedge meadow by the dominance of sedges, with few plants present in the sapling/shrub and tree strata. The sample points were typically dominated by tussock sedge (*Carex stricta*), nodding sedge (*Carex gynandra*), lakebank sedge (*Carex lacustris*), and greater bladder sedge (*Carex intumescens*) in the herbaceous stratum. Where trees and saplings/shrubs were present, speckled alder (*Alnus incana*), black ash (*Fraxinus nigra*), European buckthorn (*Rhamnus cathartica*), quaking aspen (*Populus tremuloides*), northern white cedar (*Thuja occidentalis*), and meadow willow (*Salix petiolaris*) were typically observed as dominant species.

A typical soil profile in the sedge meadow basins meets the technical hydric soil indicator of A11 – Depleted Below Dark Surface, F2 – Loamy Gleyed Matrix, and/or F6 – Redox Dark Surface. The St. Louis County soil survey identifies soils in Wetland 6 as predominantly hydric, consistent with field observations whereas soils in Wetlands 5, 14, and 15 are identified as predominantly non-hydric. The soil survey is broad scale and does not necessarily account for minor topographic changes such as those present in the small, isolated depressions characteristic of these wetland basins.

The primary wetland hydrology indicator observed included A3 – Saturation. Saturation was encountered at the soil surface at each of the wetland sample points.

The wetland boundary placement was primarily based upon a topographic change and a change in vegetation dominance. The transition to upland was marked by a subtle topographic rise and decreased cover of sedges and increased cover of large-leaf wood-aster (*Eurybia macrophylla*). The surrounding upland areas were dominated by large-leaf wood-aster, northern bracken fern (*Pteridium aquilinum*), false lily-of-the-valley (*Maianthemum canadense*), lady fern (*Athyrium filix-femina*), wild sarsaparilla (*Aralia nudicaulis*), Canadian bunchberry (*Cornus canadensis*), Virginia

strawberry (*Fragaria virginiana*), woodland horsetail (*Equisetum sylvaticum*), starflower (*Trientalis borealis*), common red raspberry (*Rubus idaeus*), and spotted crane's-bill (*Geranium maculatum*) in the herbaceous stratum. Upland soils did not meet for hydric soils criteria. Hydrology indicators were not observed in the upland.

3.4 Fresh (Wet) Meadow

Table 5 – Summary of Fresh (Wet) Meadow Communities

Wetland ID	Size (acres) ¹	Cowardin/Circular 39 Classification	Surficial Connectivity / Notes
6	6.6828	Type 2 / PEM1B	Adjacent to Mud Lake
12	0.7968	Type 2 / PEM1B	Linear ditch, flow through
17	0.2163	Type 2 / PEM1B	Linear ditch, flow through
19	1.3660	Type 2 / PEM1B	Linear ditch, flow through
26	0.2070	Type 2 / PEM1B	Flow through
28	0.0311	Type 2 / PEM1B	Isolated depression
29	0.0118	Type 2 / PEM1B	Drainage ditch
Total acreage	9.3118		
¹ Size includes areas of wetland within the area of investigation only. Wetlands may extend beyond the limits of the area investigated and actual wetland size may be larger than that indicated.			

Portions of Wetlands 6, 12, 17, 19, 26, 28, and 29 are fresh (wet) meadow communities located throughout the project area (**Figure 8**). Wetland 6 is adjacent to Mud Lake. Wetland 12 includes linear ditches along U.S. Highway 53. Wetlands 17 and 19 include a linear ditches along Industrial Parkway. Wetland 26 is connects to wetland outside of the project boundaries. Wetland 28 is an isolated depression. Wetland 29 is a drainage ditch adjacent to the East Range School.

The wetland vegetation is characterized as fresh (wet) meadow by the dominance of grasses, with few plants present in the sapling/shrub and tree strata. The sample points were typically dominated by woodland horsetail, bluejoint (*Calamagrostis canadensis*), woolgrass (*Scirpus cyperinus*), and field horsetail (*Equisetum arvense*) in the herbaceous stratum. Where trees and saplings/shrubs were present, speckled alder, pussy willow (*Salix discolor*), black ash, European buckthorn, quaking aspen, red maple (*Acer rubrum*), boxelder (*Acer negundo*), and balsam poplar (*Populus balsamifera*) were typically observed as dominant species.

A typical soil profile in the fresh (wet) meadow basins meets the technical hydric soil indicator of A11 – Depleted Below Dark Surface, F3 – Depleted Matrix, and/or F6 – Redox Dark Surface. The St. Louis County soil survey identifies soils in Wetland 6 as predominantly hydric, consistent with field observations whereas soils in Wetlands 12, 17, 19, 26, 28, and 29 are identified as predominantly non-hydric. The soil survey is broad scale and does not necessarily account for minor topographic changes such as those present in the small linear ditches and isolated depressions characteristic of these wetland basins.

The primary wetland hydrology indicator observed included A3 – Saturation. Saturation was encountered at the soil surface at Wetland 6, 12, 17, and 26. Saturation was encountered 2 inches below the soil surface at Wetland 19, 28, and 29. The water table was encountered 3 inches below the soils surface at Wetland 12 and 5 inches below the soil surface at Wetland 19,

which meets primary indicator A2 – High Water Table. Primary hydrology indicators B4 - Algal Mat and C1 – Hydrogen Sulfide Odor were also observed at Wetland 19.

The wetland boundary placement was primarily based upon a topographic change and a change in vegetation dominance. The transition to upland was marked by a subtle topographic rise and decreased cover of grasses and increased cover of large-leaf wood-aster and Kentucky bluegrass (*Poa pratensis*). The surrounding upland areas were dominated by large-leaf wood-aster, Kentucky bluegrass, graceful sedge (*Carex gracillima*), marginal wood fern (*Dryopteris marginalis*), feathery false Solomon's seal (*Mainantheum racemosum*), lady fern, false lily-of-the-valley, Canadian bunchberry, common red raspberry, red maple, interrupted fern (*Osmunda claytoniana*), bush honeysuckle (*Diervilla lonicera*), and bluebead lily (*Clintonia borealis*) in the herbaceous stratum. Upland soils did not meet for hydric soils criteria. Hydrology indicators were not observed in the upland.

3.5 Shrub-Carr / Alder Thicket

Table 6 – Summary of Shrub-Carr / Alder Thicket Communities

Wetland ID	Size (acres) ¹	Cowardin/Circular 39 Classification	Surficial Connectivity / Notes
1	0.0110	Type 6 / PSS1B	Linear ditch
6	3.4635	Type 6 / PSS1B	Adjacent to Mud Lake and stormwater pond
8	0.1959	Type 6 / PSS1B	Isolated depression
9	0.0169	Type 6 / PSS1B	Isolated depression
11	0.0132	Type 6 / PSS1B	Isolated depression
12	0.1969	Type 6 / PSS1B	Linear ditch
16	0.2656	Type 6 / PSS1B	Isolated depression
19	1.4757	Type 6 / PSS1B	Linear ditch, flow through
22	0.5541	Type 6 / PSS1B	Isolated depression
23	0.4600	Type 6 / PSS1B	Isolated depression
25	0.0199	Type 6 / PSS1B	Linear ditch
Total acreage	6.6726		
¹ Size includes areas of wetland within the area of investigation only. Wetlands may extend beyond the limits of the area investigated and actual wetland size may be larger than that indicated.			

Wetlands 1, 8, 9, 11, 16, 22, 23, 25 and a portion of Wetlands 6, 12, and 19 are shrub-carr or alder thicket communities located throughout the project area (**Figure 8**). Most of the wetland basins are isolated depressions or linear ditches. Wetland 6 includes an area adjacent to Mud Lake.

The wetland plant communities were classified based on the dominance of alder or willow vegetation. The sample points were typically dominated by speckled alder, pussy willow, and meadow willow in the sapling/shrub stratum. Field horsetail, sensitive fern, lakebank sedge, pointed broom sedge (*Carex scoparia*), woolgrass, tussock sedge, and Virginia strawberry were dominant species in the herbaceous stratum. When trees were present, balsam fir (*Abies balsamea*) and black ash were dominant species.

A typical soil profile in the shrub-carr / alder thicket basins meets the technical hydric soil indicator of A3 – Black Histic, A11 – Depleted Below Dark Surface, F2 – Loamy Gleyed Matrix, F3 – Depleted Matrix, F6 – Redox Dark Surface, and/or F8 – Redox Depressions. The St. Louis County soil survey identifies soils in Wetland 6 as predominantly hydric, consistent with field observations whereas soils in Wetlands 1, 8, 9, 11, 12, 16, 19, 22, 23, and 25 are identified as predominantly non-hydric. The soils survey is broad scale and do not necessarily account for minor topographic changes such as those present in the small linear ditches and isolated depressions characteristic of these wetland basins.

The primary wetland hydrology indicator observed included A3 – Saturation. Saturation was encountered at the soil surface at all of the shrub-carr / alder thicket wetland basins. Additional primary hydrologic indicators observed included A2 – High Water Table for Wetland 9, where the water table was encountered 4 inches below the soils surface.

The wetland boundary placement was primarily based upon a topographic change and a change in vegetation dominance. The transition to upland was marked by a subtle topographic rise and decreased cover of wetland forbs and increased cover of large-leaf wood-aster. The surrounding upland areas were dominated by large-leaf wood-aster, northern bracken fern, false lily-of-the-valley, Canadian bunchberry, late lowbush blueberry (*Vaccinium angustifolium*), field horsetail, common red raspberry, Kentucky bluegrass, yellow hawkweed (*Hieracium caespitosum*), spinulose wood fern, lady fern, Virginia strawberry, starflower, interrupted fern, wild sarsaparilla, and reed canary grass (*Phalaris arundinacea*) in the herbaceous stratum. Upland soils did not meet for hydric soils criteria. Hydrology indicators were not observed in the upland.

3.6 Hardwood Swamp

Table 7 – Summary of Hardwood Swamp Communities

Wetland ID	Size (acres) ¹	Cowardin/Circular 39 Classification	Surficial Connectivity / Notes
2	0.3346	Type 7 / PFO1B	Linear ditch
4	0.1454	Type 7 / PFO1B	Isolated depression
6	2.1261	Type 7 / PFO1B	Adjacent to Mud Lake
12	1.6554	Type 7 / PFO1B	Linear ditch, flow through
13	2.3551	Type 7 / PFO1B	Linear ditch, flow through
17	0.7560	Type 7 / PFO1B	Linear ditch, flow through
18	0.2412	Type 7 / PFO1B	Isolated depression
19	3.9943	Type 7 / PFO1B	Linear ditch, flow through
20	0.2092	Type 7 / PFO1B	Isolated depression
21	2.2168	Type 7 / PFO1B	Isolated depression
26	6.6090	Type 7 / PFO1B	Flow through
27	0.2801	Type 7 / PFO1B	Flow through
Total acreage	20.9231		
¹ Size includes areas of wetland within the area of investigation only. Wetlands may extend beyond the limits of the area investigated and actual wetland size may be larger than that indicated.			

Wetlands 2, 4, 18, 20, 21, 27 and portions of Wetlands 6, 12, 13, 17, 19, and 26 are hardwood swamp communities located throughout the project area (**Figure 8**). Many of the basins are

isolated depressions and a few extend into linear ditches adjacent to roads. Wetland 6 is adjacent to Mud Lake.

The wetland plant communities were classified based on the dominance of deciduous hardwood tree species. The sample points were typically dominated by balsam poplar, black ash, quaking aspen, and red maple in the tree stratum. Reed canary grass, dwarf red raspberry (*Rubus pubescens*), marsh blue violet (*Viola cucullata*), bluejoint, field horsetail, jack-in-the-pulpit (*Arisaema triphyllum*), greater bladder sedge, and nodding sedge were dominant species in the herbaceous stratum. When present, black ash, speckled alder, European buckthorn, and meadow willow were dominant species in the sapling/shrub stratum.

A typical soil profile in the hardwood swamp basins meets the technical hydric soil indicator of A11 – Depleted Below Dark Surface, F1 – Loamy Mucky Mineral, and/or A10 – 2 cm Muck. The St. Louis County soil survey identifies soils in Wetland 6 and 13 as predominantly hydric, consistent with field observations whereas soils in Wetlands 2, 4, 12, 17, 18, 19, 20, 21, 26, and 27 are identified as predominantly non-hydric. The soils survey is broad scale and do not necessarily account for minor topographic changes such as those present in the small linear ditches and isolated depressions characteristic of these wetland basins.

The primary wetland hydrology indicator observed included A3 – Saturation. Saturation was encountered at the soil surface at all of the hardwood swamp wetland basins. Additionally, primary hydrologic indicator A2 – High Water Table was observed 6 inches below the soil surface at Wetland 4 and 4 inches below the surface at Wetland 18.

The wetland boundary placement was primarily based upon a topographic change and a change in vegetation dominance. The transition to upland was marked by a subtle topographic rise and decreased cover of wetland forbs and increased cover of large-leaf wood-aster. The surrounding upland areas were dominated by large-leaf wood-aster, northern bracken fern, false lily-of-the-valley, reed canary grass, Kentucky bluegrass, spinulose wood fern, lady fern, Virginia strawberry, field horsetail, common red raspberry, spotted crane's-bill, and red maple in the herbaceous stratum. Upland soils did not meet for hydric soils criteria. Hydrology indicators were not observed in the upland.

3.7 Coniferous Swamp

Table 8 – Summary of Coniferous Swamp Communities

Wetland ID	Size (acres) ¹	Cowardin/Circular 39 Classification	Surficial Connectivity / Notes
3	0.0046	Type 7 / PFO4B	Isolated basin
6	10.2217	Type 7 / PFO4B	Adjacent to Mud Lake
7	0.0932	Type 7 / PFO4B	Linear ditch
10	0.2426	Type 7 / PFO4B	Isolated basin
12	1.3669	Type 7 / PFO4B	Linear ditch, flow through
13	0.7228	Type 7 / PFO4B	Linear ditch, flow through
17	1.7354	Type 7 / PFO4B	Linear ditch, flow through

Table 8 (Continued) – Summary of Coniferous Swamp Communities

Wetland ID	Size (acres) ¹	Cowardin/Circular 39 Classification	Surficial Connectivity / Notes
24	0.0491	Type 7 / PFO4B	Isolated basin
26	1.0456	Type 7 / PFO4B	Flow through
Total acreage	15.4819		
¹ Size includes areas of wetland within the area of investigation only. Wetlands may extend beyond the limits of the area investigated and actual wetland size may be larger than that indicated.			

Wetlands 3, 7, 10, 24 and portions of 6, 12, 13, 17, and 26 are coniferous swamp communities located throughout the project area (**Figure 8**). Many of the basins are isolated depressions and a few extend into linear ditches adjacent to roads. Wetland 6 is adjacent to Mud Lake.

The wetland plant communities were classified based on the dominance of lowland coniferous tree species. The sample points were typically dominated by northern white cedar, balsam fir, tamarack (*Larix laricina*), and white spruce (*Picea glauca*) in the tree stratum. Coltsfoot (*Petasites frigidus*), lady fern, dwarf red raspberry, field horsetail, Canadian bunchberry, interrupted fern, greater bladder sedge, nodding sedge, Virginia strawberry, and spotted crane's-bill are dominant species in the herbaceous stratum. When present, European buckthorn, white spruce, speckled alder, balsam fir, and black ash were dominant species in the sapling/shrub stratum.

A typical soil profile in the hardwood swamp basins meets the technical hydric soil indicator of A11 – Depleted Below Dark Surface, F3 – Depleted Matrix, and/or F6 – Redox Dark Surface. The St. Louis County soil survey identifies soils in Wetland 6 and 13 as predominantly hydric, consistent with field observations whereas soils in Wetlands 3, 7, 10, 12, 17, 24, and 26 are identified as predominantly non-hydric. The soils survey is broad scale and do not necessarily account for minor topographic changes such as those present in the small linear ditches and isolated depressions characteristic of these wetland basins.

The primary wetland hydrology indicator observed included A3 – Saturation. Saturation was encountered at the soil surface at all of the hardwood swamp wetland basins. Additionally, primary hydrologic indicator A2 – High Water Table was observed 4 inches below the soils surface at Wetland 10.

The wetland boundary placement was primarily based upon a topographic change and a change in vegetation dominance. The transition to upland was marked by a subtle topographic rise and decreased cover of wetland forbs and increased cover of large-leaf wood-aster and wild sarsaparilla. The surrounding upland areas were dominated by large-leaf wood-aster, northern bracken fern, wild sarsaparilla, Canadian bunchberry, spotted crane's-bill, starflower, red maple, spinulose wood fern, and feathery false Solomon's seal in the herbaceous stratum. Upland soils did not meet for hydric soils criteria. Hydrology indicators were not observed in the upland.

3.8 Stormwater Ponds

A man-made stormwater pond lies within the project boundaries in the northern portion of the area of investigation (**Figure 2**). The exact date or year of construction is unknown, but there are no visible signatures in aerial photographs from 1991. The pond is visible in 2003. Aerial imagery between 1991 and 2003 was not readily available.

A shallow marsh portion of Wetland 6 is just south of the stormwater pond. A buffer of primarily glossy buckthorn (*Frangula alnus*) and red raspberry is situated between the two areas. Connectivity between the two areas is possible, although a direct drainage was not located during the field visit. Photographs of both areas are included in **Appendix B**.

A second man-made stormwater pond is located near the building at 1402 Progress Park. This stormwater pond likely was constructed at the same time as the building as the parcel boundary follows the outline of the stormwater pond. The pond is bordered by a berm on the property boundary. The exact date or year of construction is unknown, but there are no visible signatures in serial photographs from 2003. The pond and the building are visible in 2006. Aerial imagery between 2003 and 2006 was not available.

Stormwater features constructed to store, treat, or convey stormwater are excluded under Section 404 of the Clean Water Act and are not considered to be Waters of the United States. Therefore, no wetland boundaries were marked nor data transects collected at these features.

4 Regulatory Considerations

Wetlands in the project area are regulated by agencies at the local, regional, state, and federal levels including the USACE and the EPA at the federal level, the Minnesota Board of Water and Soil Resources (BWSR) and the Minnesota Pollution Control Agency (MPCA) at the state level, and the Cities of Eveleth and Virginia at the local level. The City of Eveleth has accepted the responsibility for the administration of the WCA of 1991 in Eveleth and the City of Virginia has accepted the responsibility for the administration of the Minnesota Wetland Conservation Act (WCA) of 1991 in Virginia.

Construction plans that propose any direct alteration or indirect impact to wetlands or watercourses within the project area will require permits from the appropriate regulatory agencies. Violation of wetland regulations can result in substantial civil and/or criminal penalties.

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Figures

Figure 1 – Site Location

Figure 2 – 2016 Aerial Photograph

Figure 3 – NWI Map

Figure 4 – PWI Map

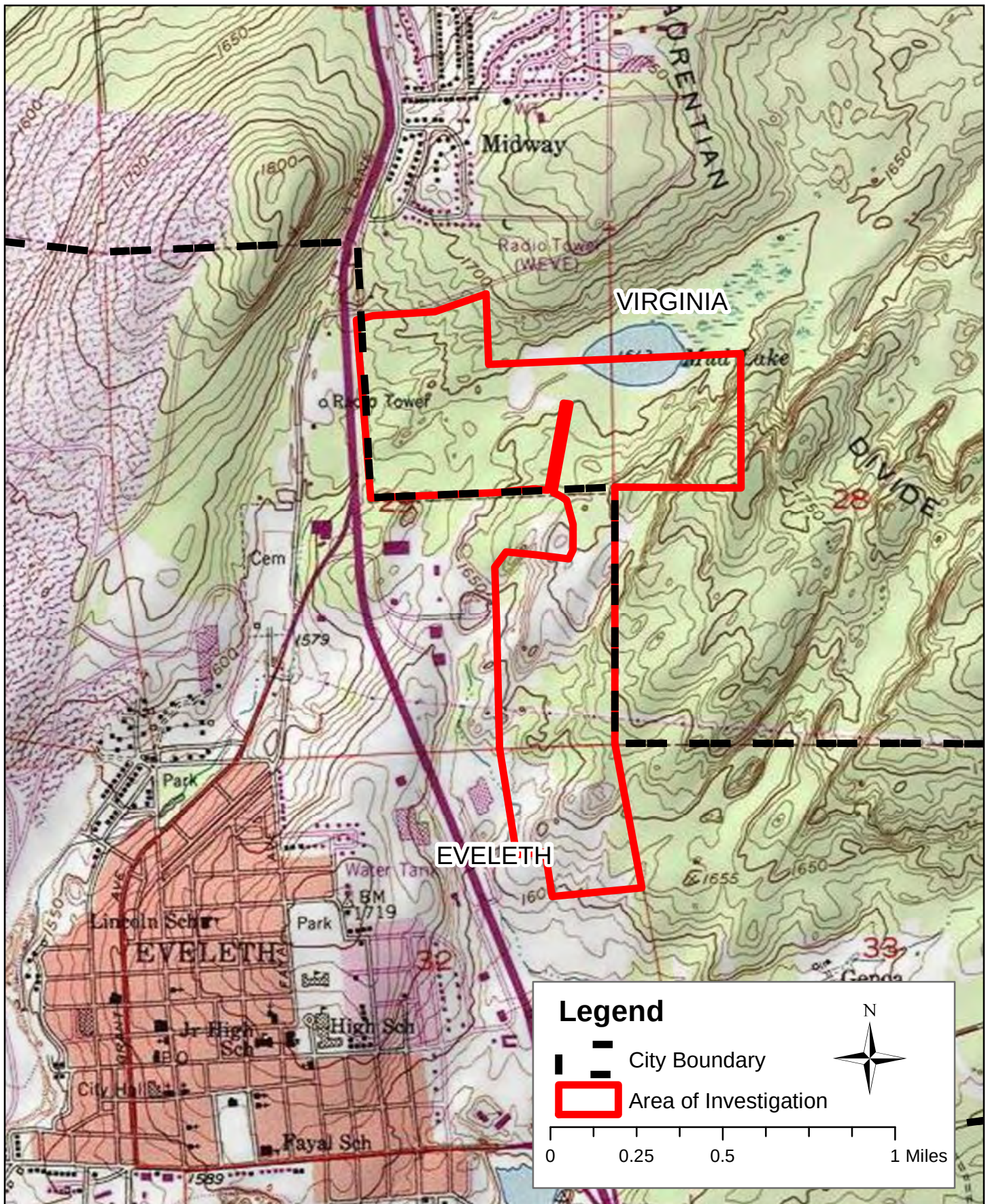
Figure 5 – NRCS Web Soil Survey Map

Figure 6 – 2-Foot LIDAR Topography

Figure 7 – Wetland Boundaries and Sample Points

Figure 8 – Wetland Delineation Results

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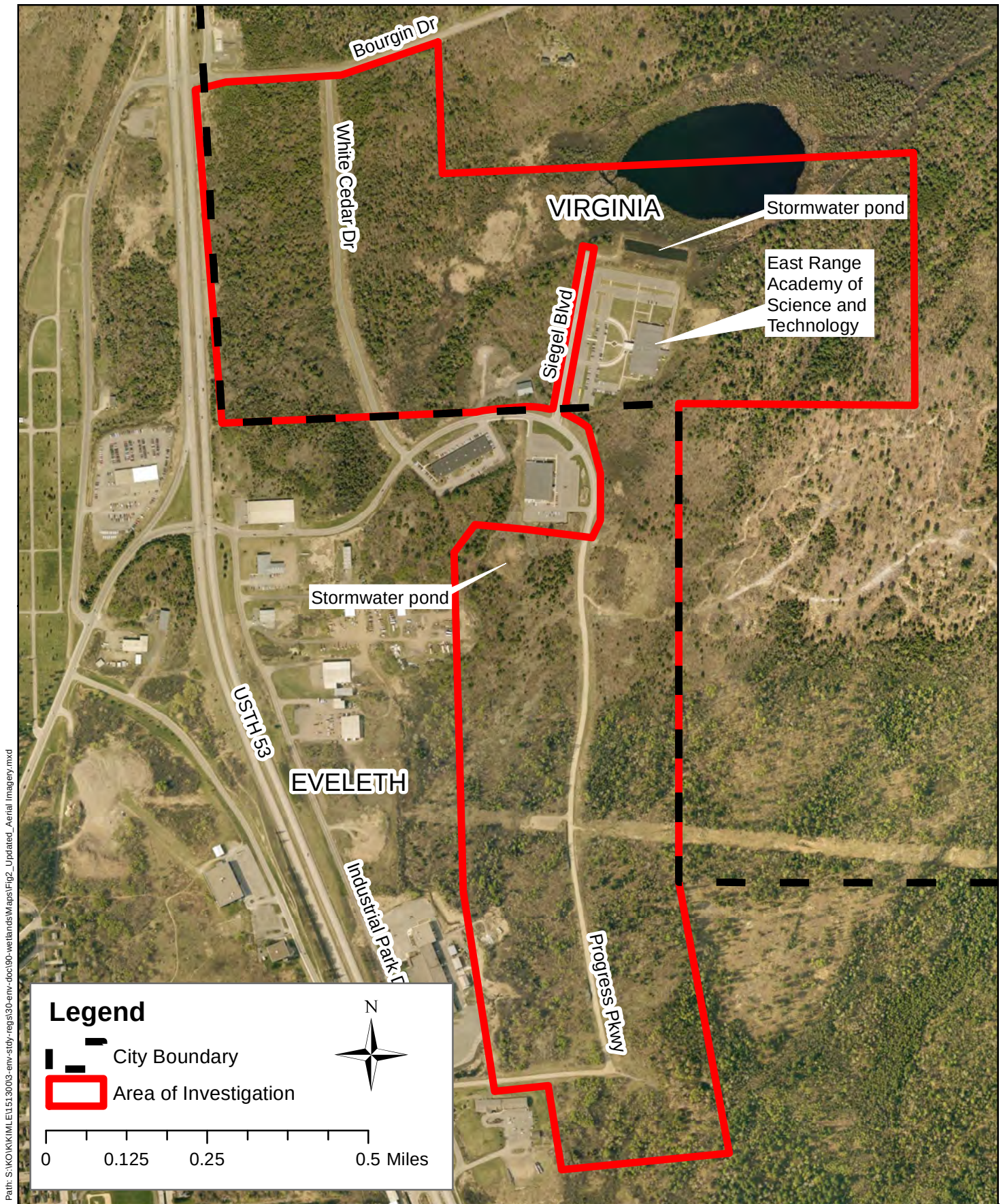


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Site Location
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1



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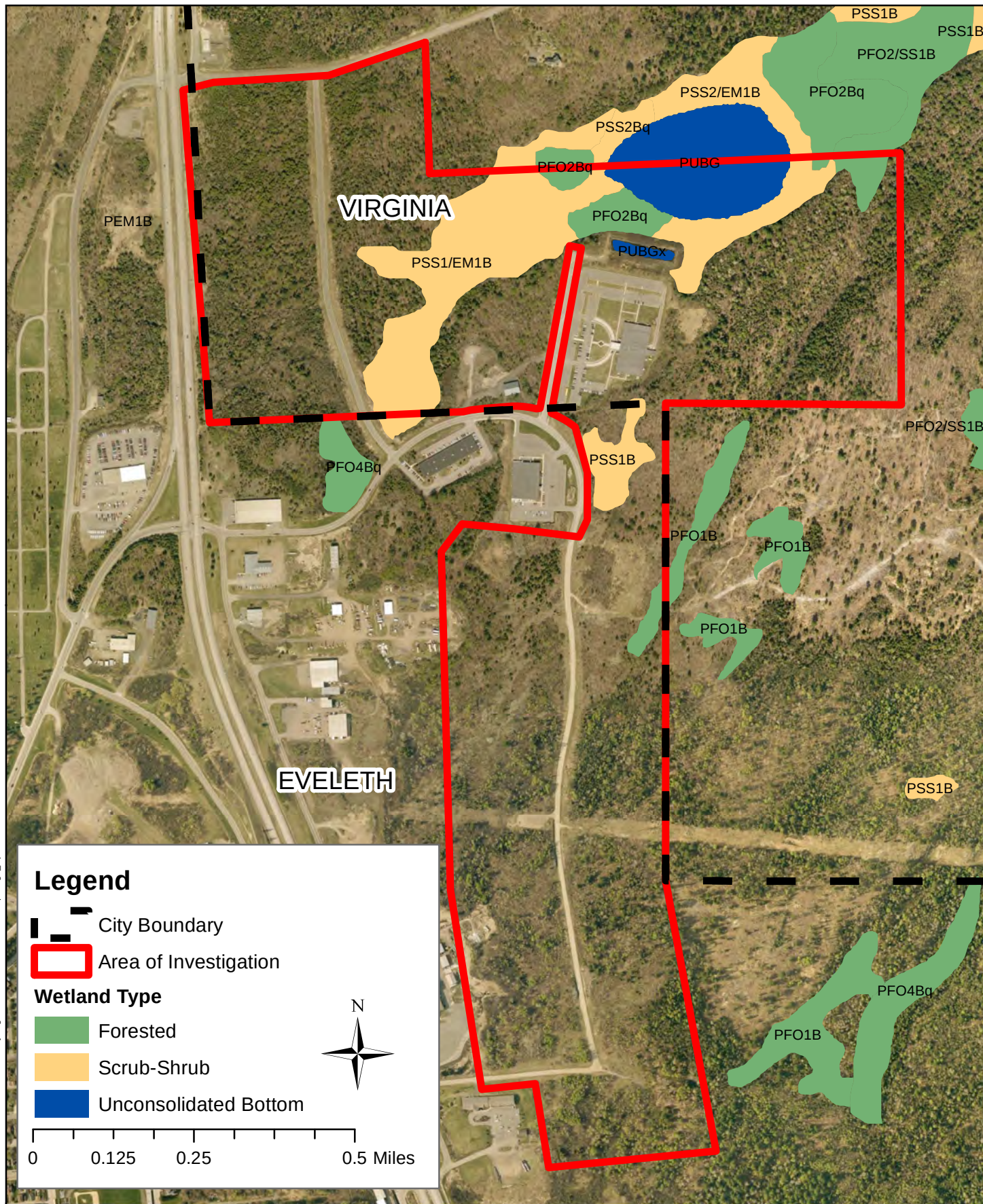
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2016 Aerial Imagery
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Figure
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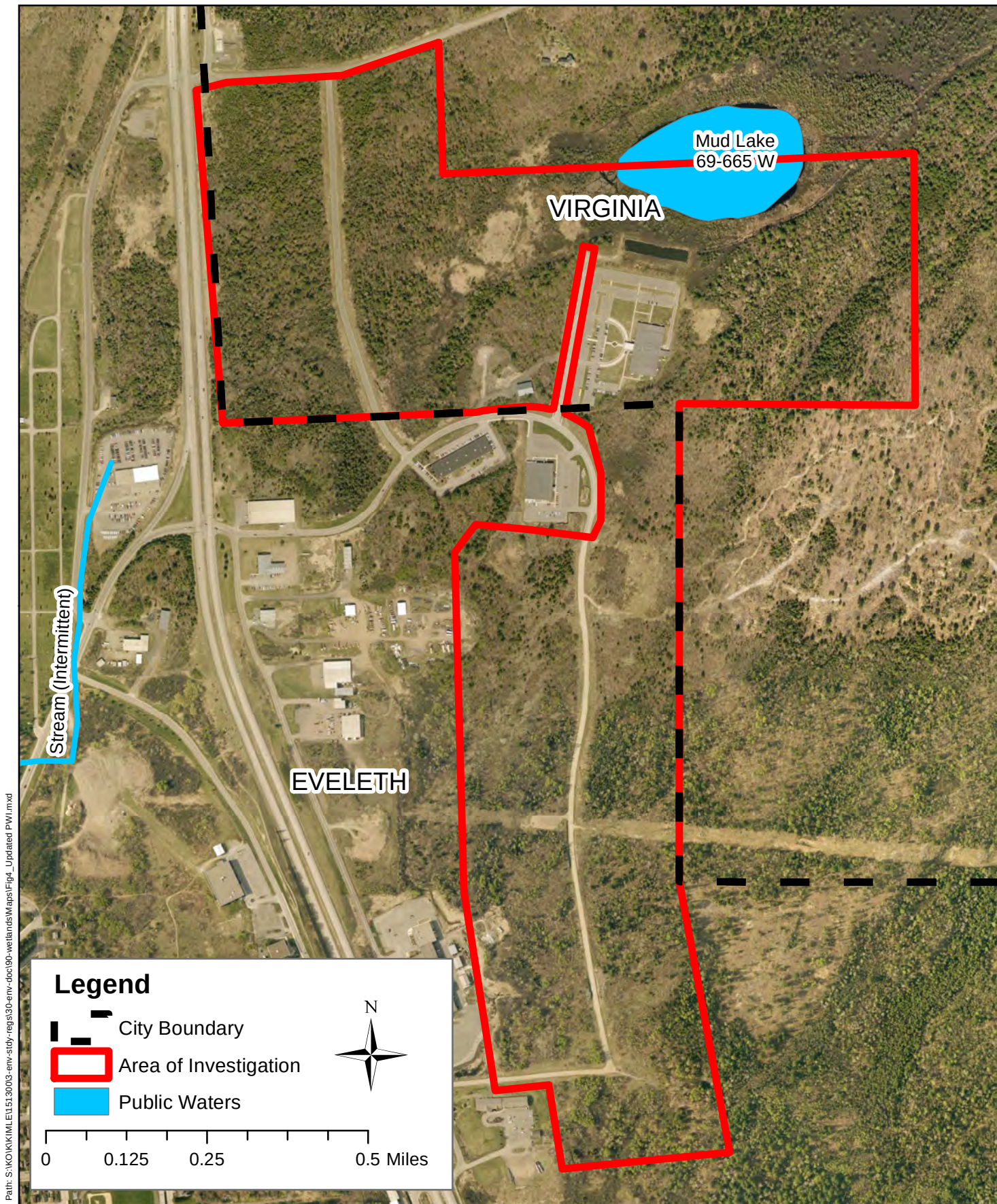


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Figure
3



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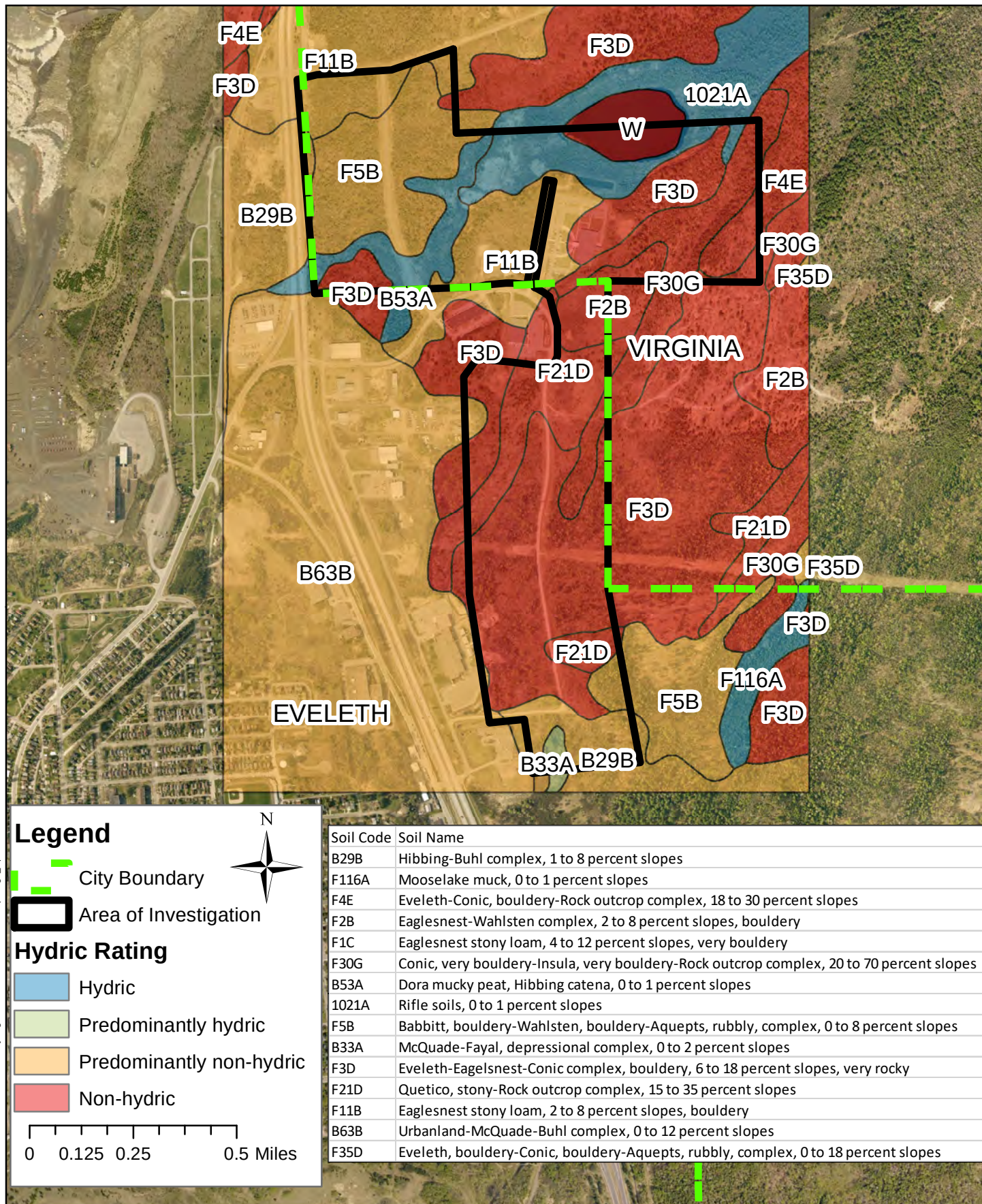
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Figure
4

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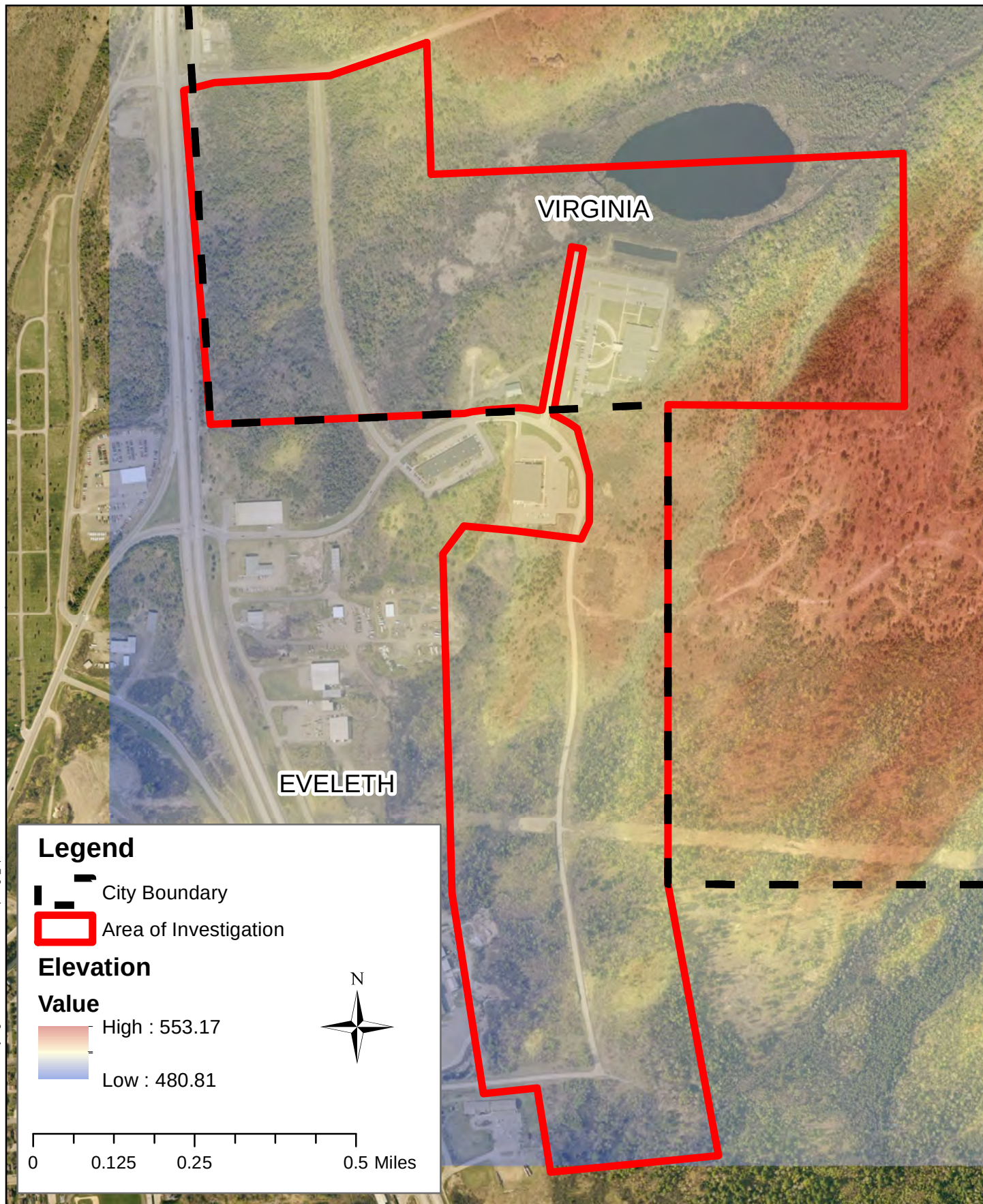
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St. Louis County Soil Survey
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Figure
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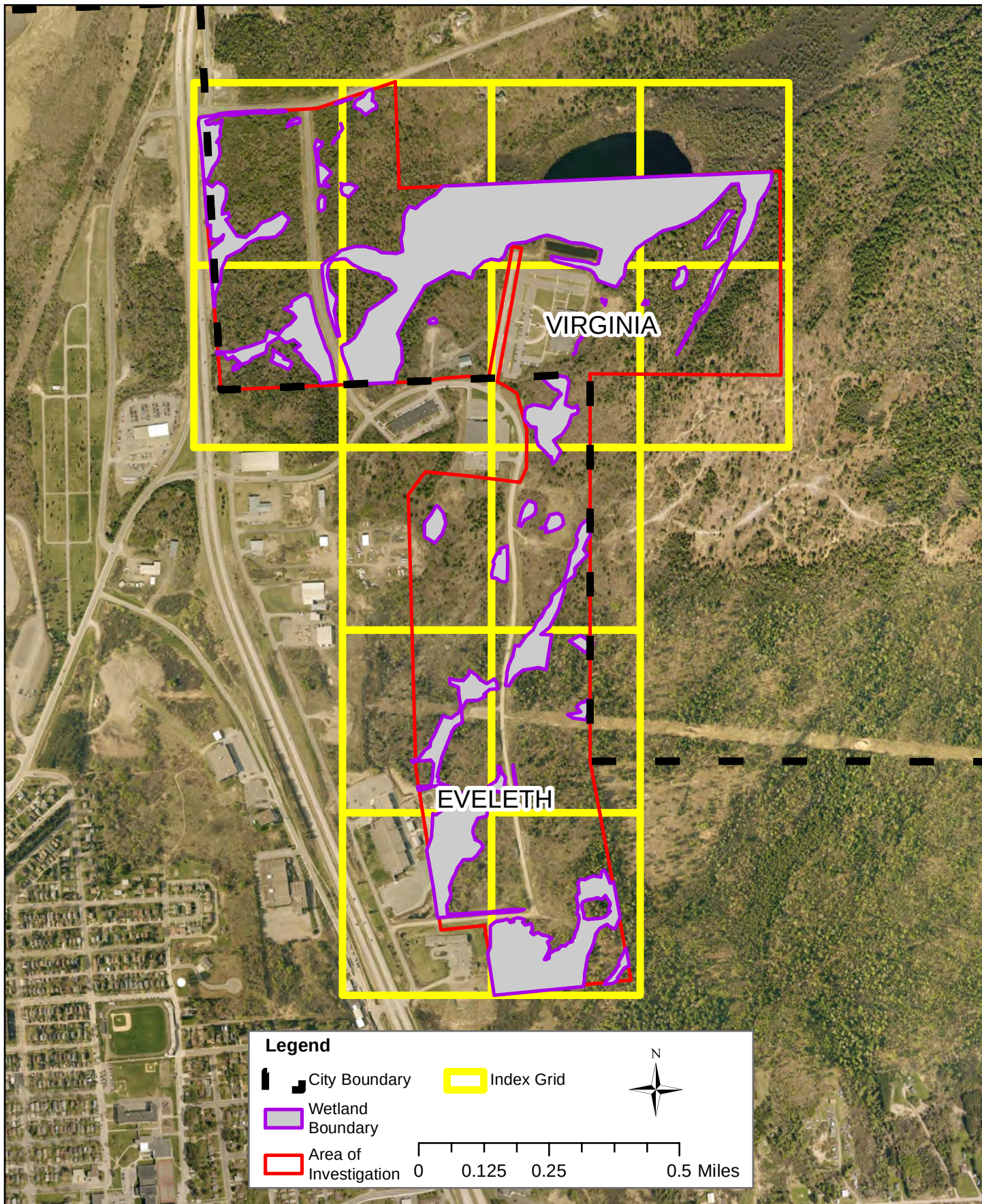
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Figure
6



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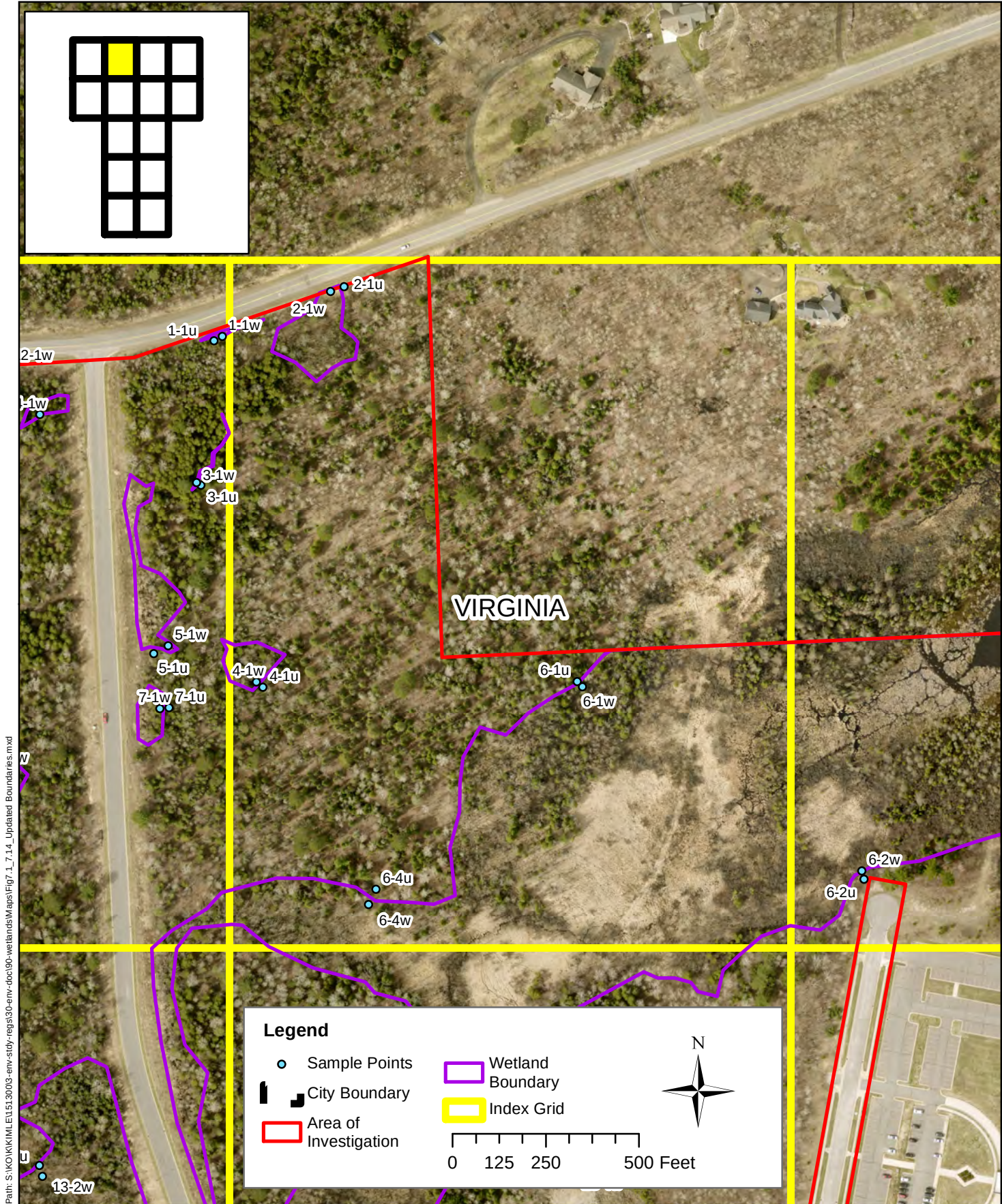
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Figure
7



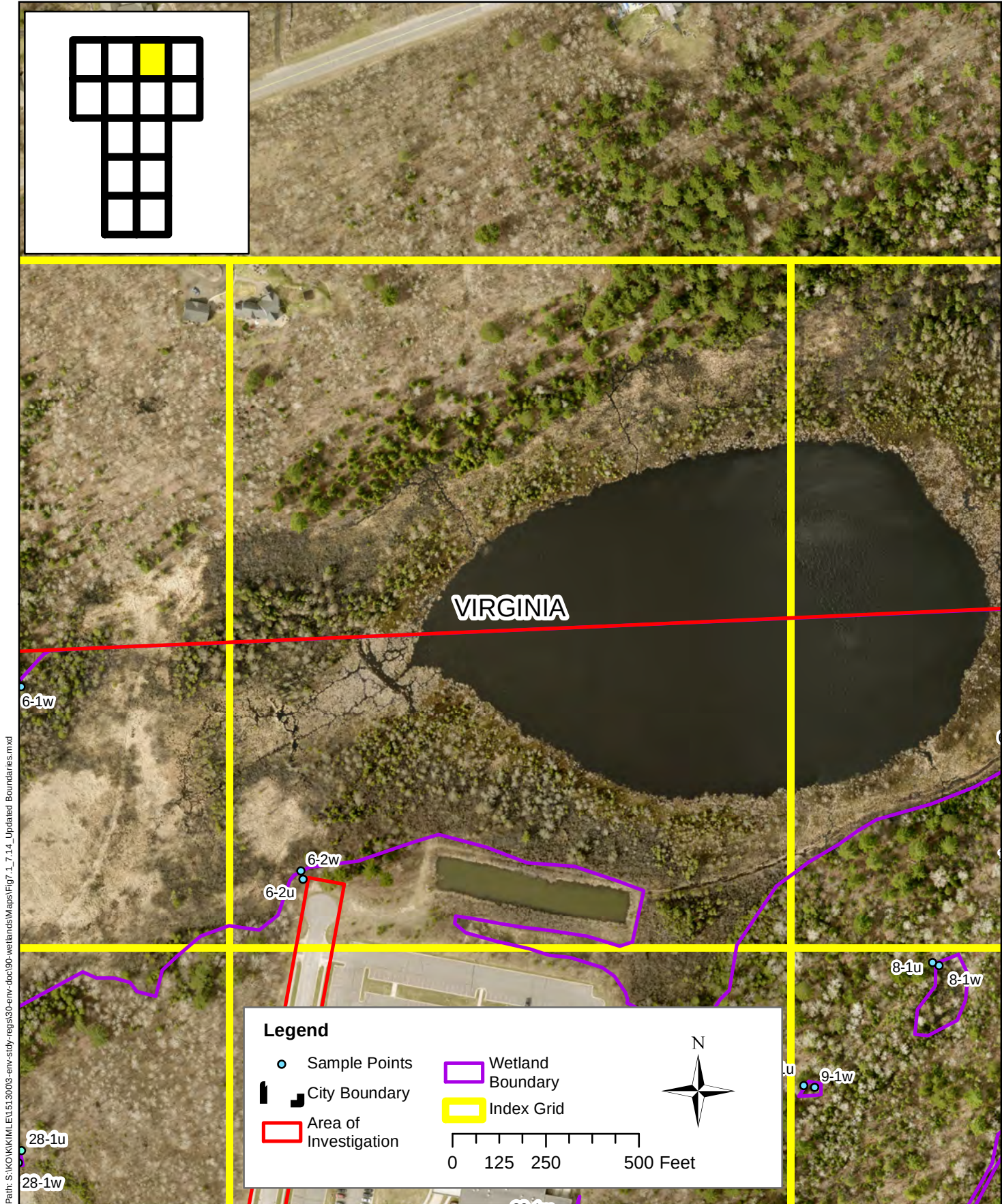
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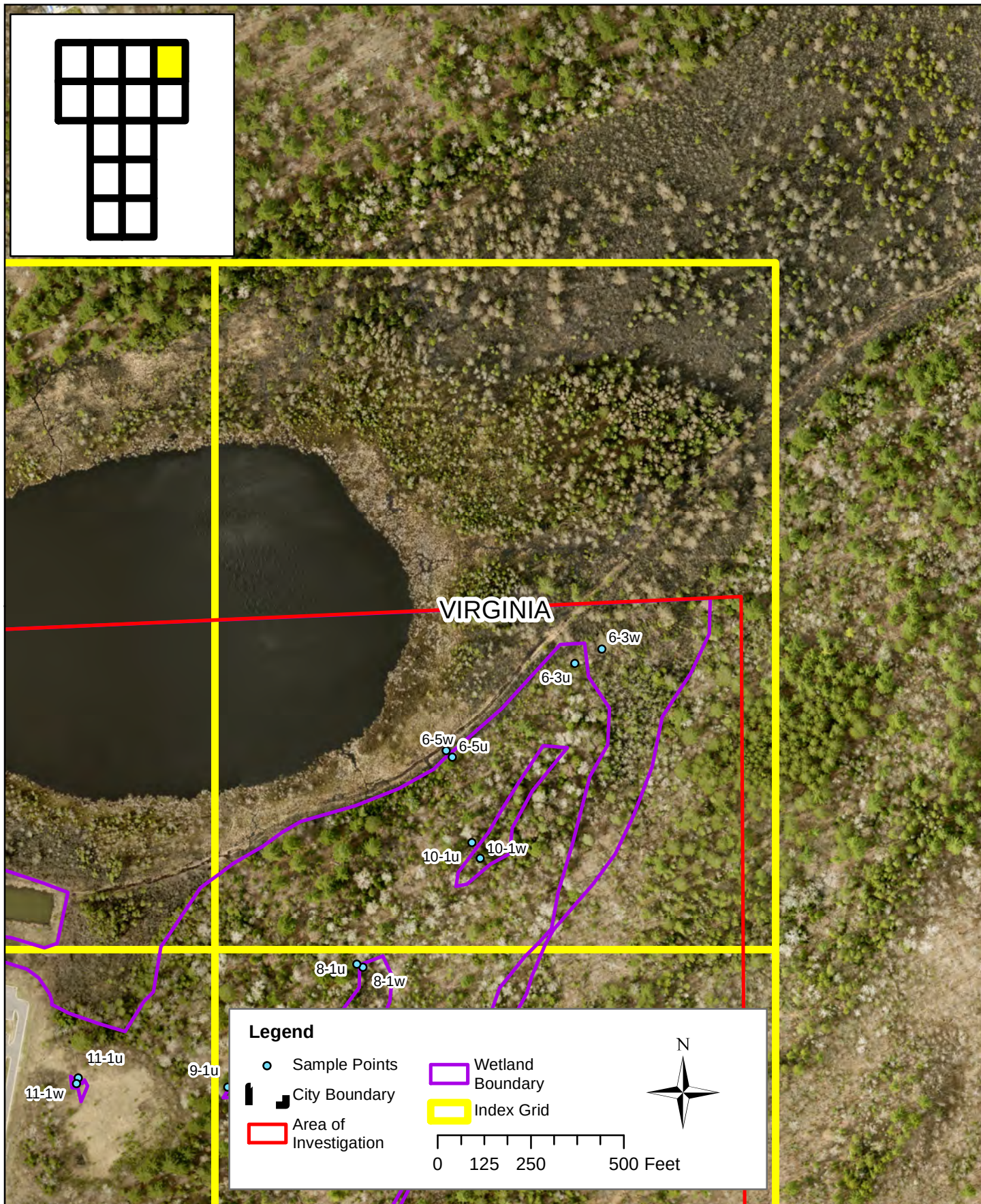
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7-2



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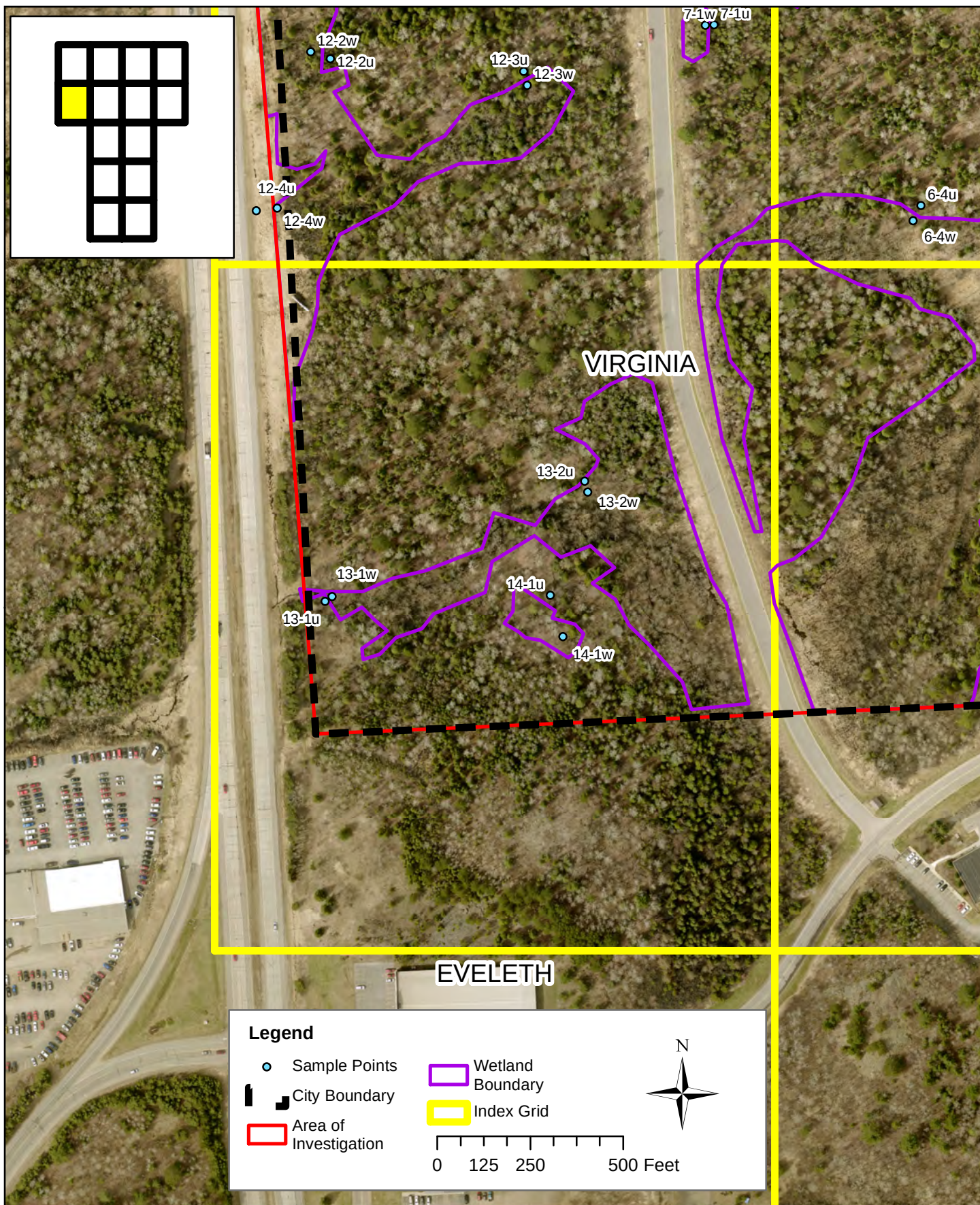
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**Figure
7-4**

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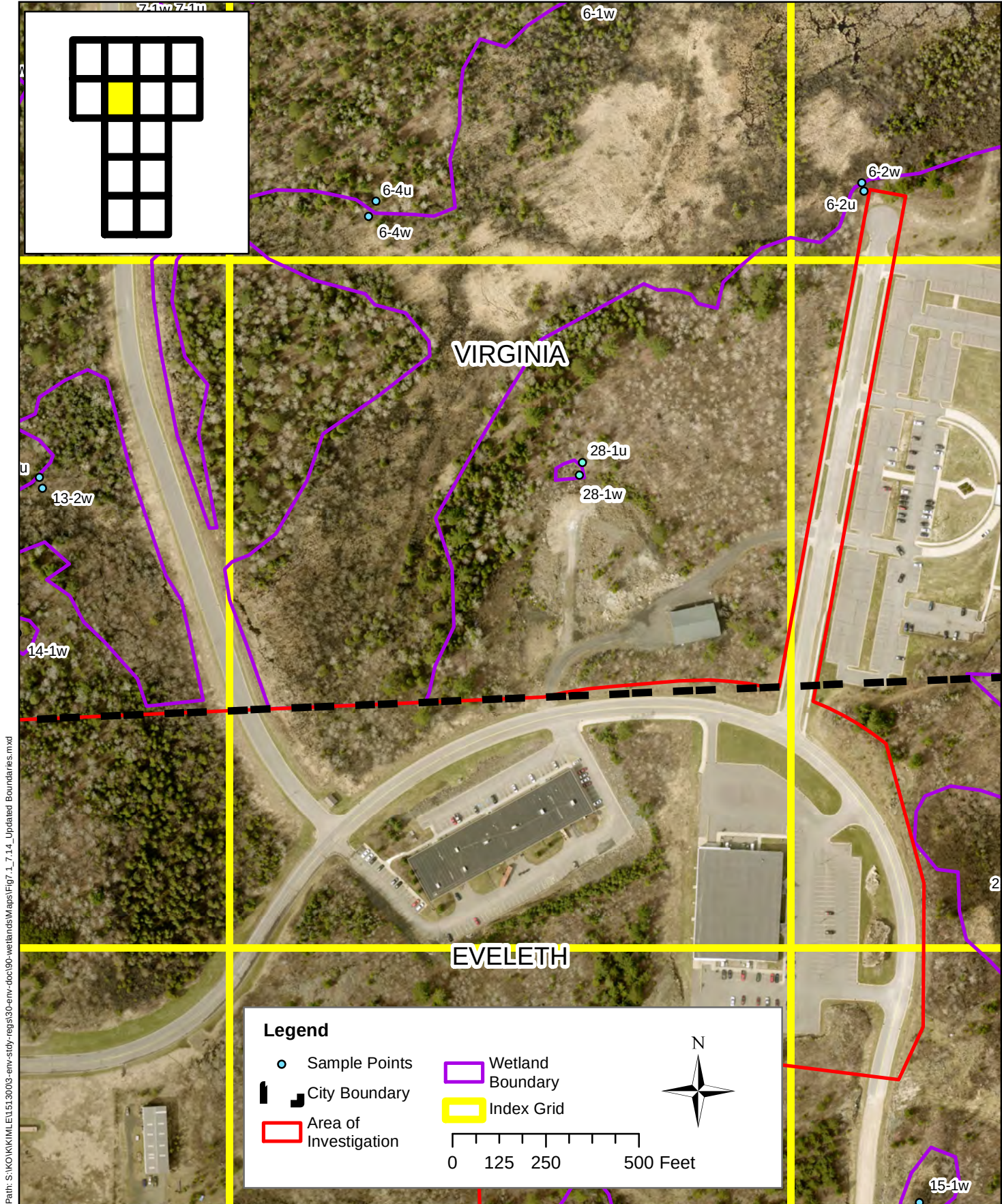
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Figure
7-5



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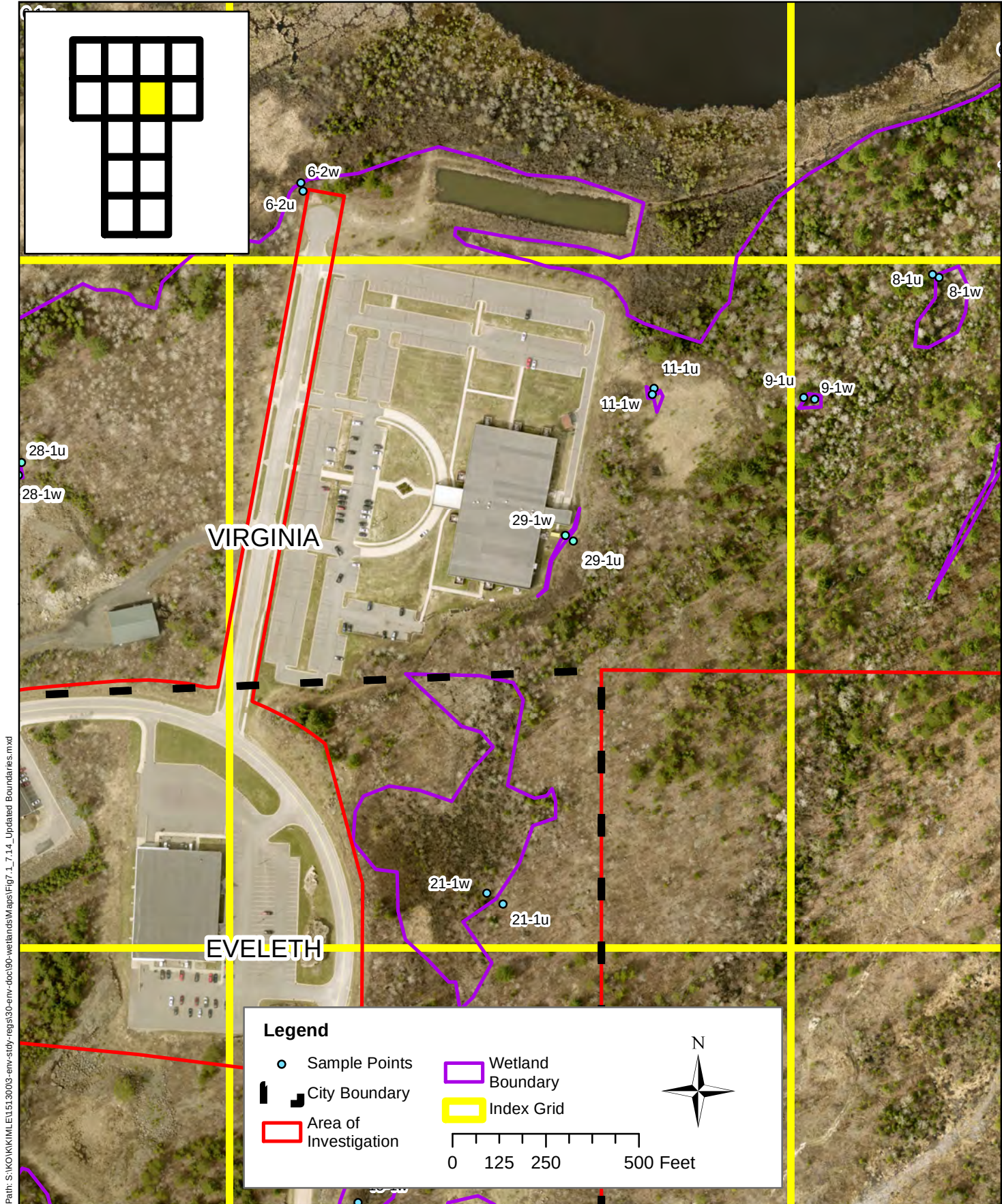
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Figure
7-6



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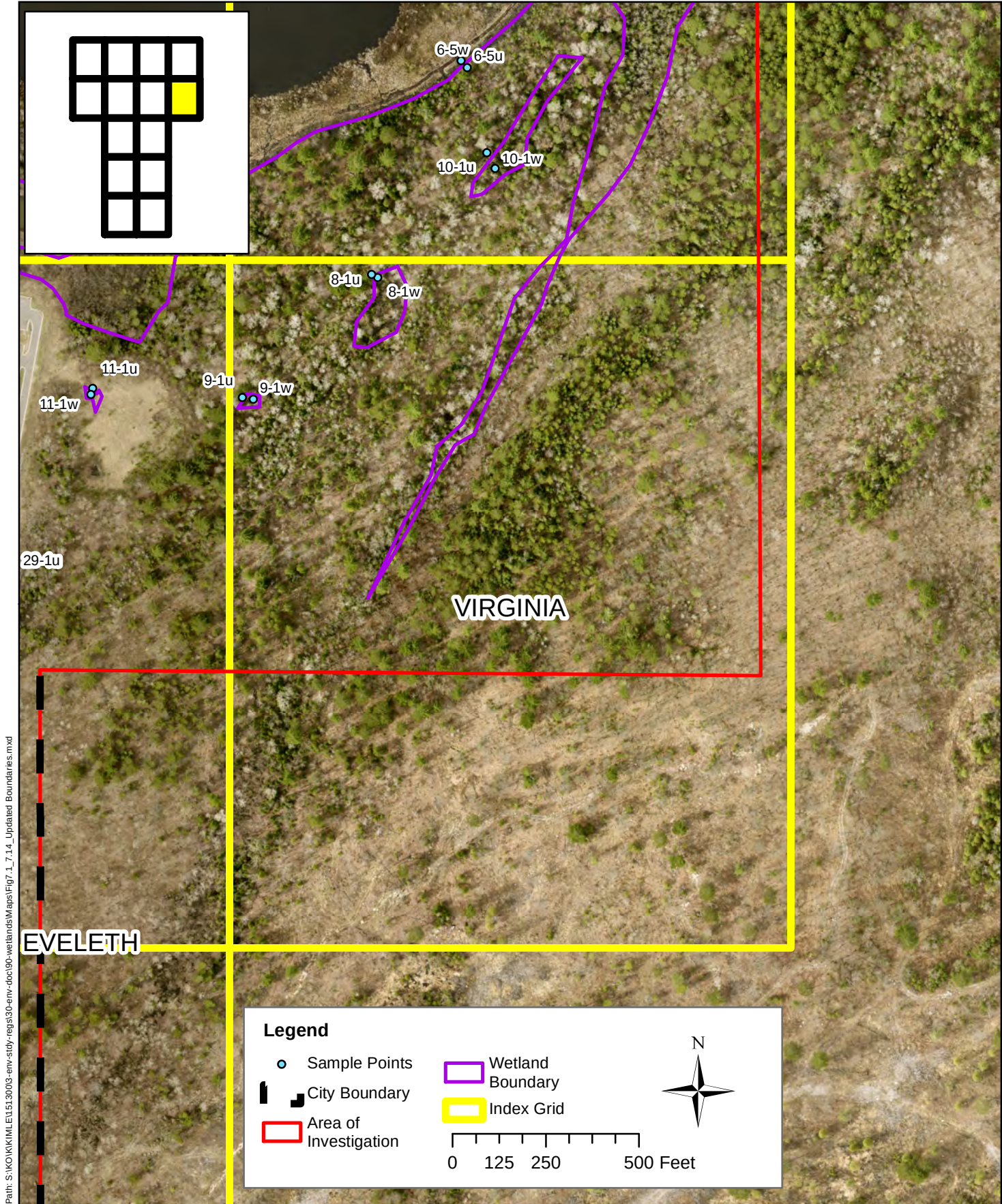
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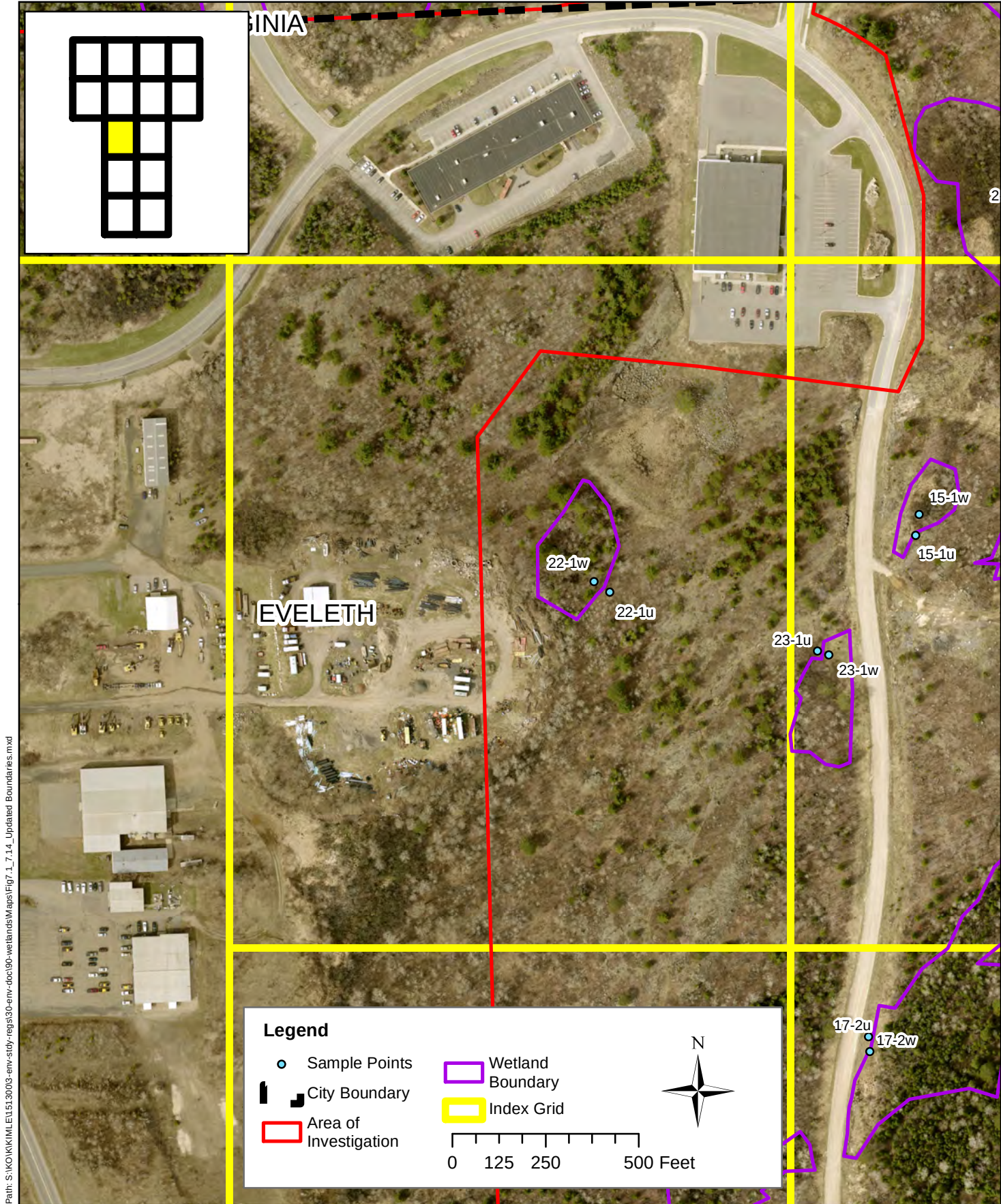
Figure
7-7

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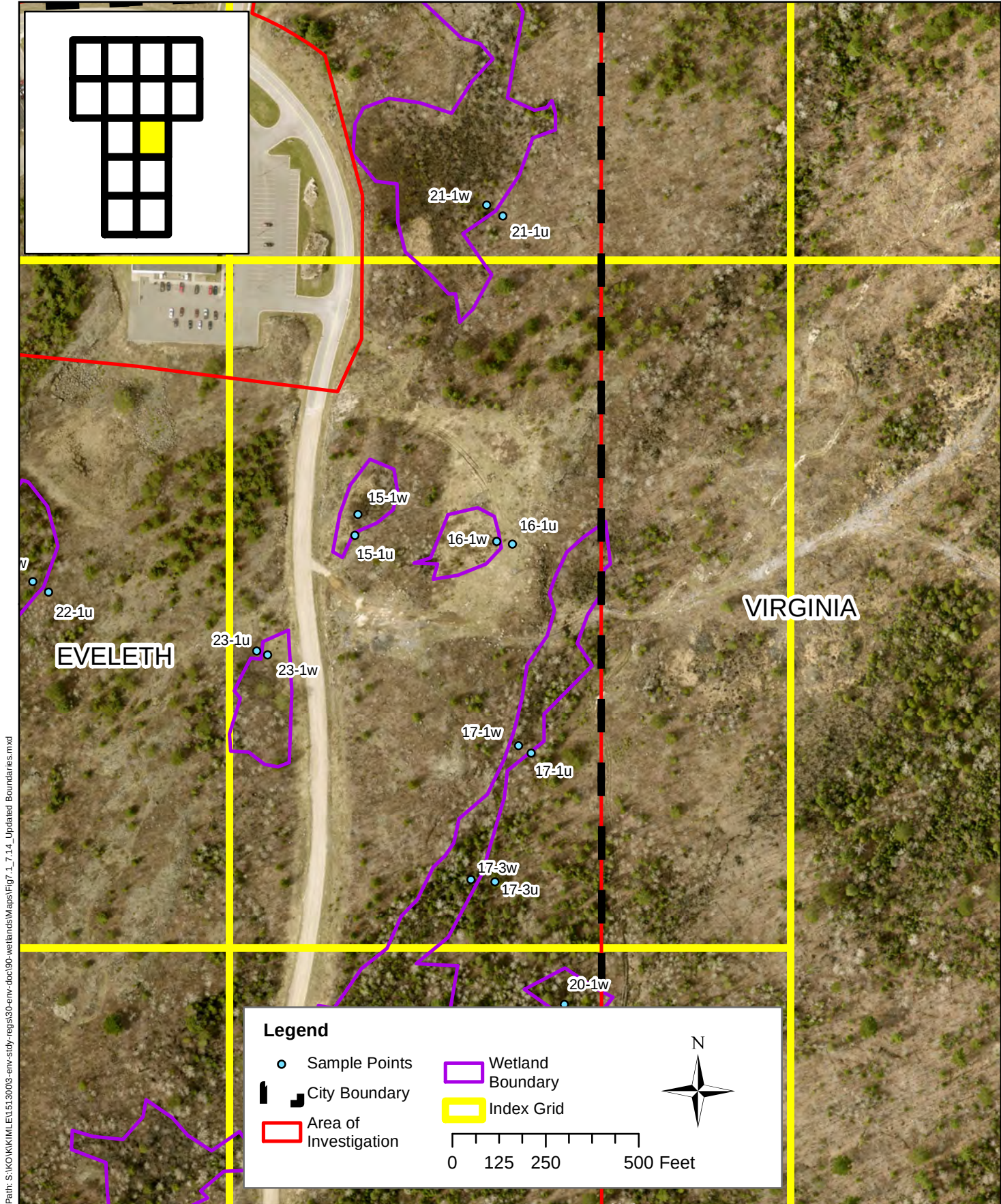
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Figure
7-9



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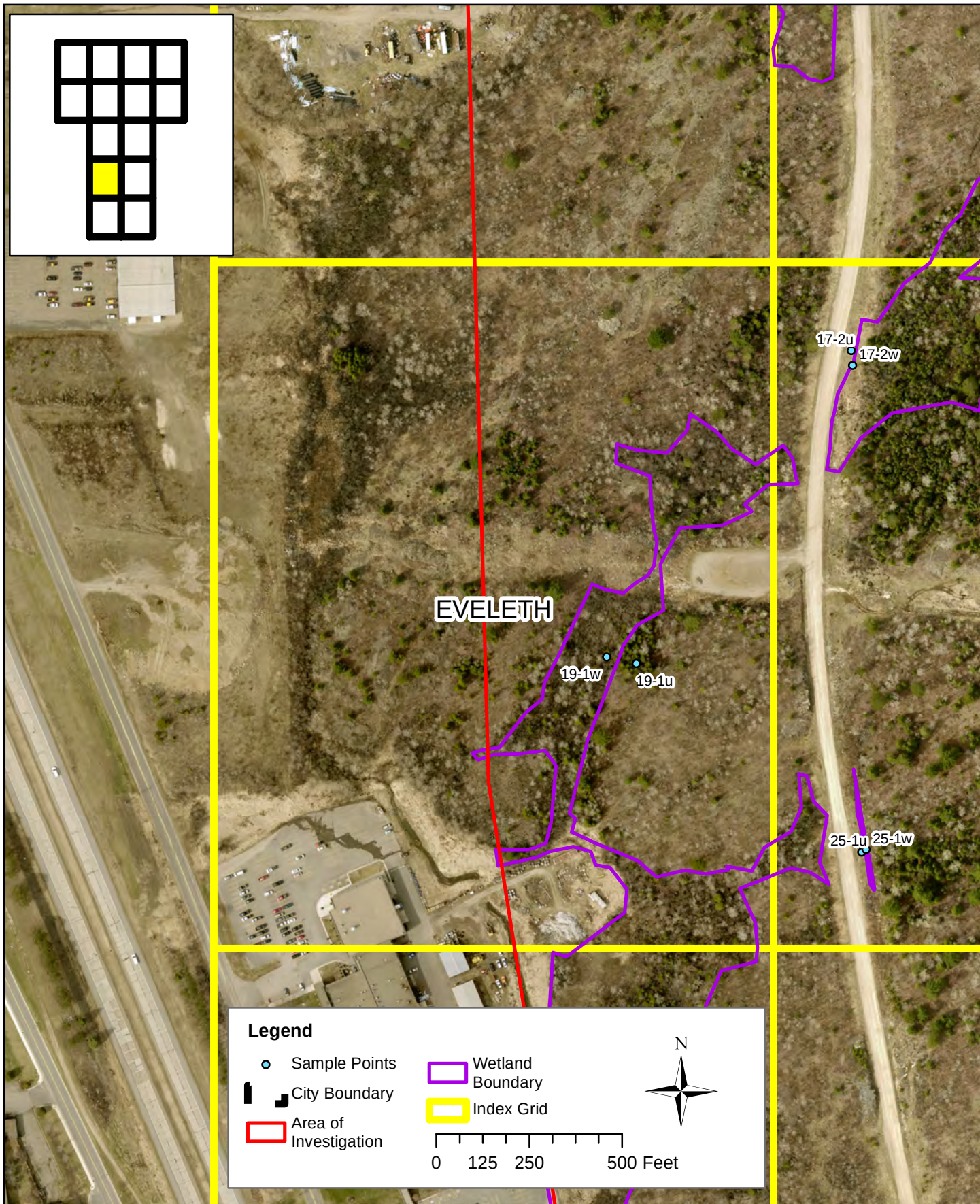
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Figure 7-10

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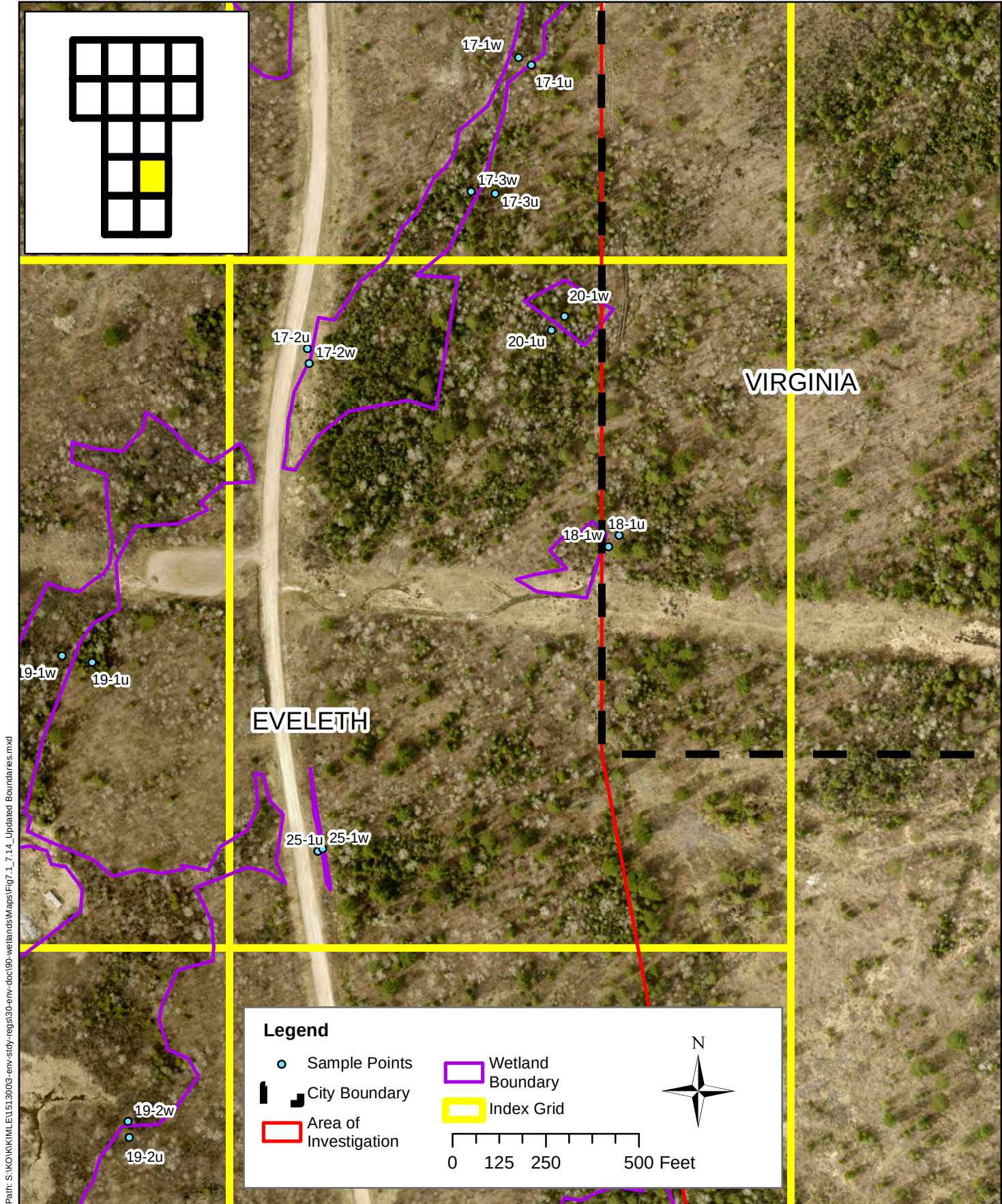
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**Figure
7-11**

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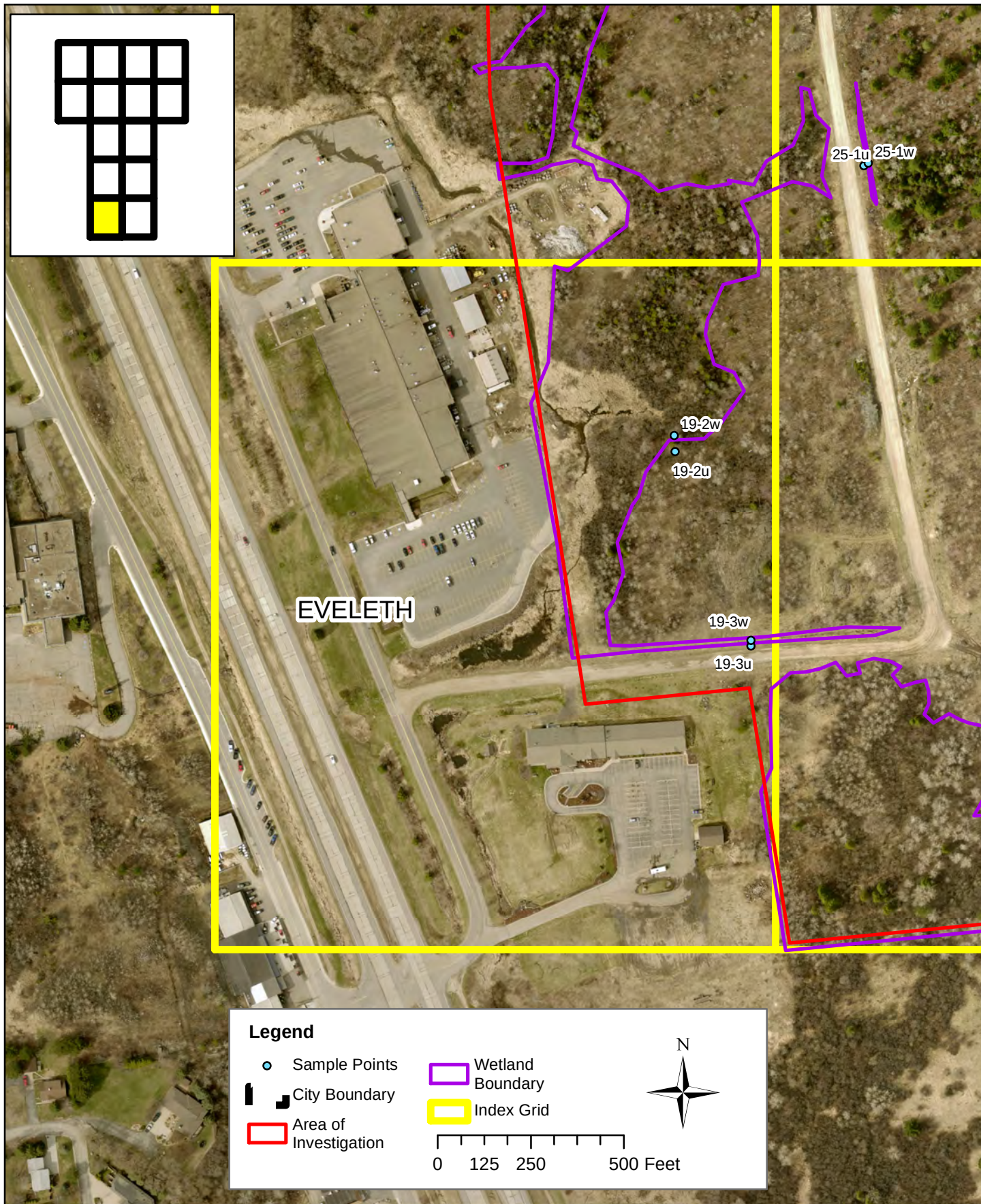
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Figure 7-12

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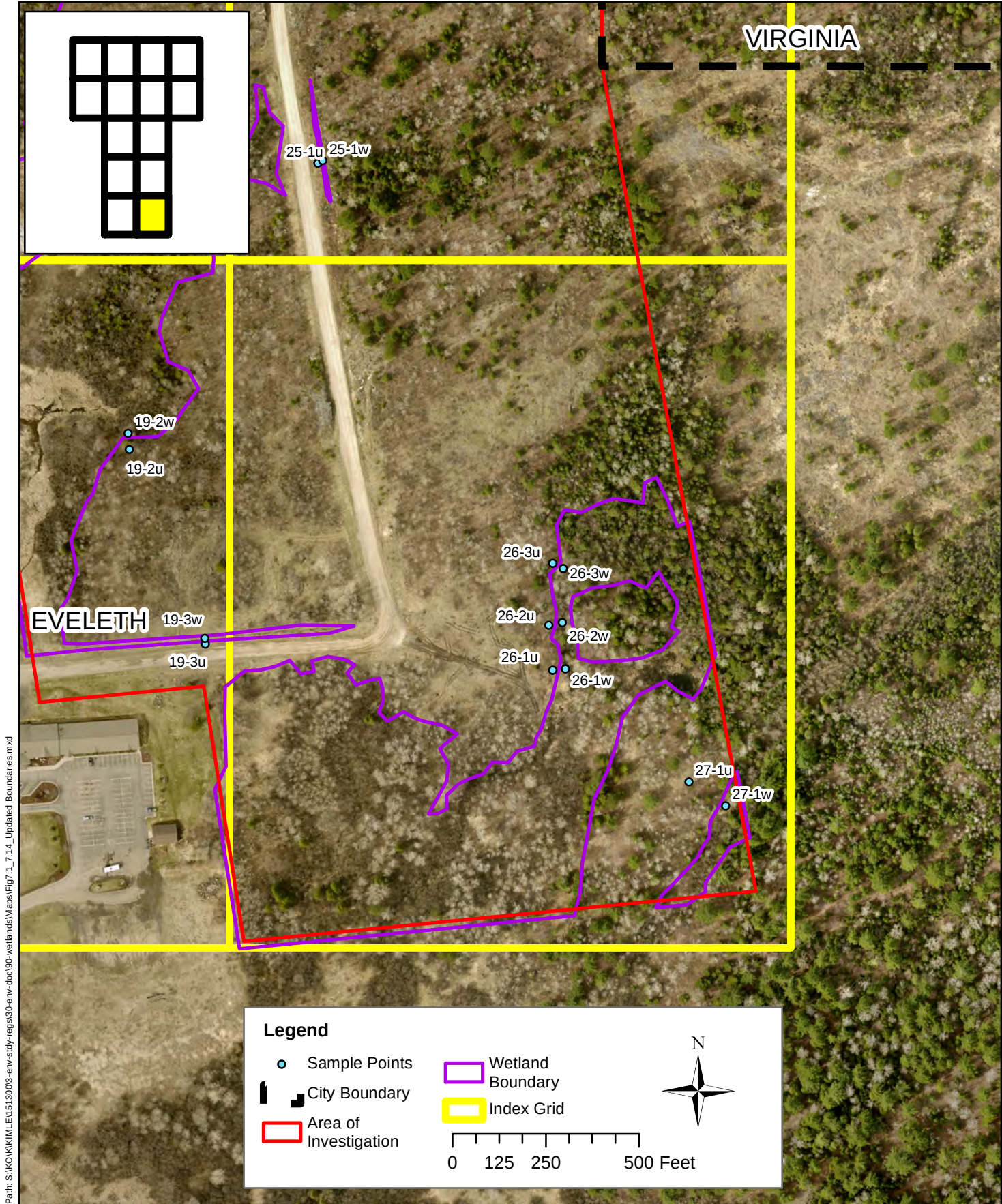
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Source: St. Louis County, SEH

Wetland Boundaries & Sample Points

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Eveleth - Gilbert - Virginia School Sites

Figure
7-13



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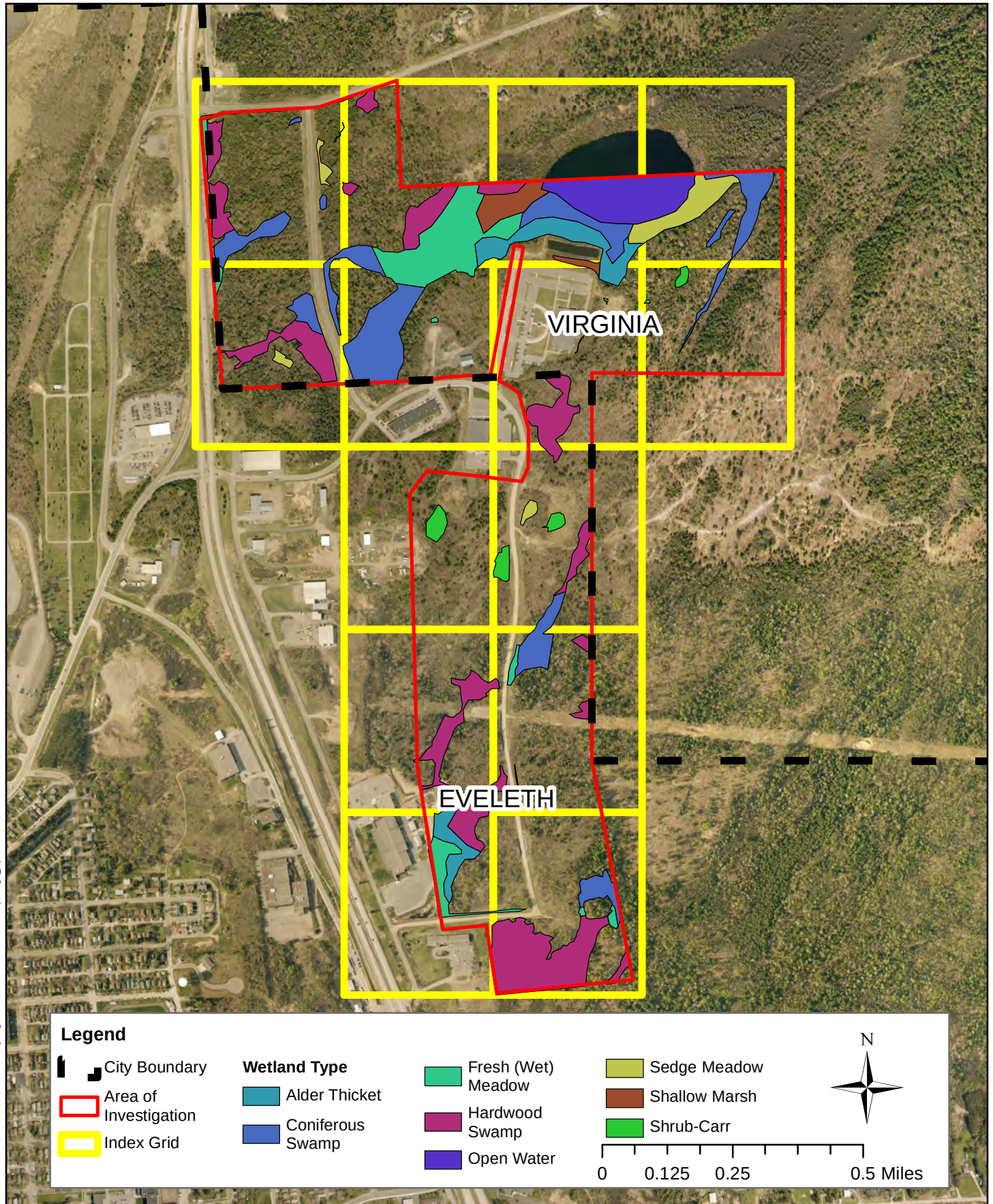
Project: KIMLE 151300
Print Date: 8/2/2019

Map by: emassa
Projection: NAD 1983 Zone 15N
Source: St. Louis County, SEH

Wetland Boundaries & Sample Points
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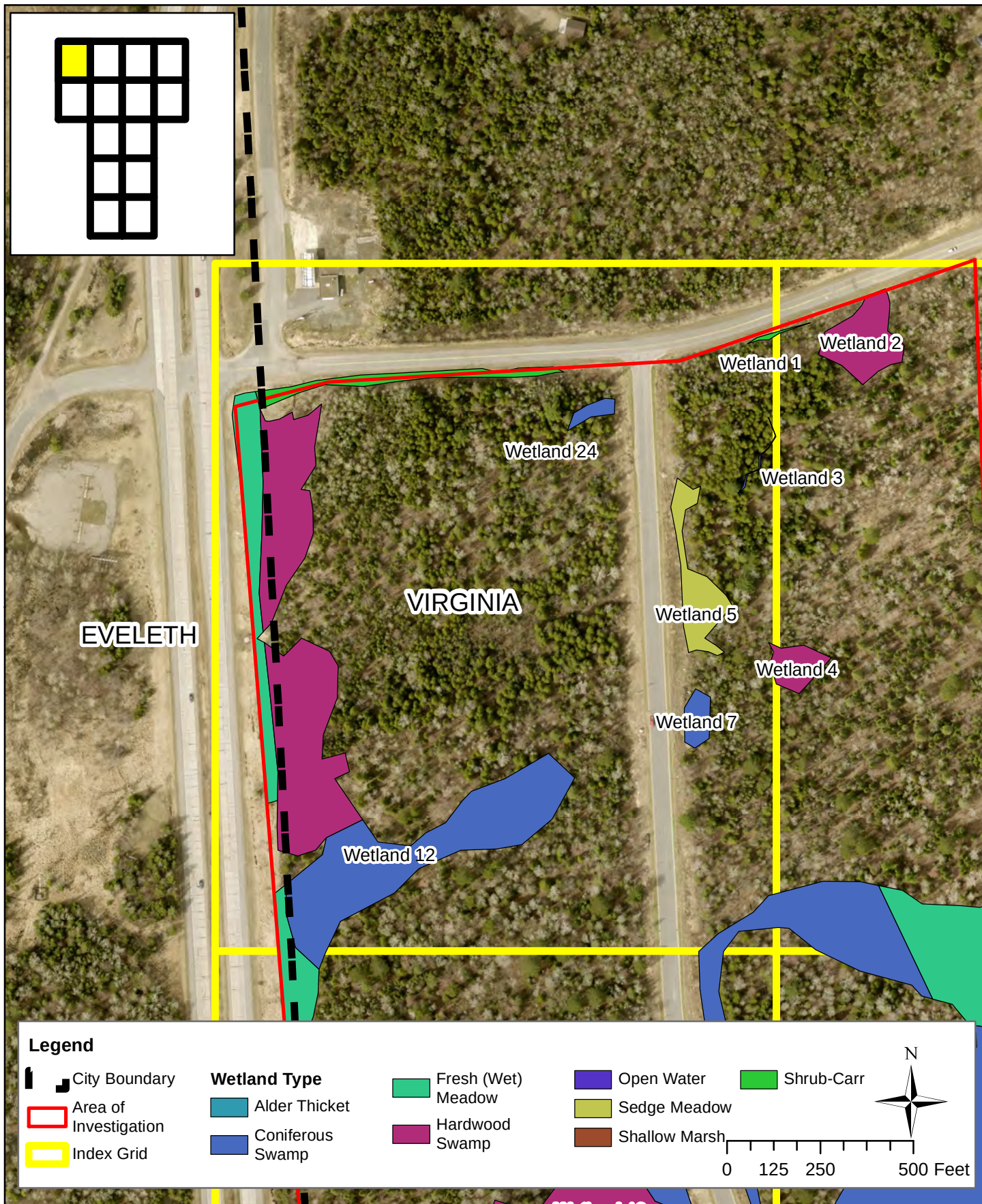
Figure 7-14

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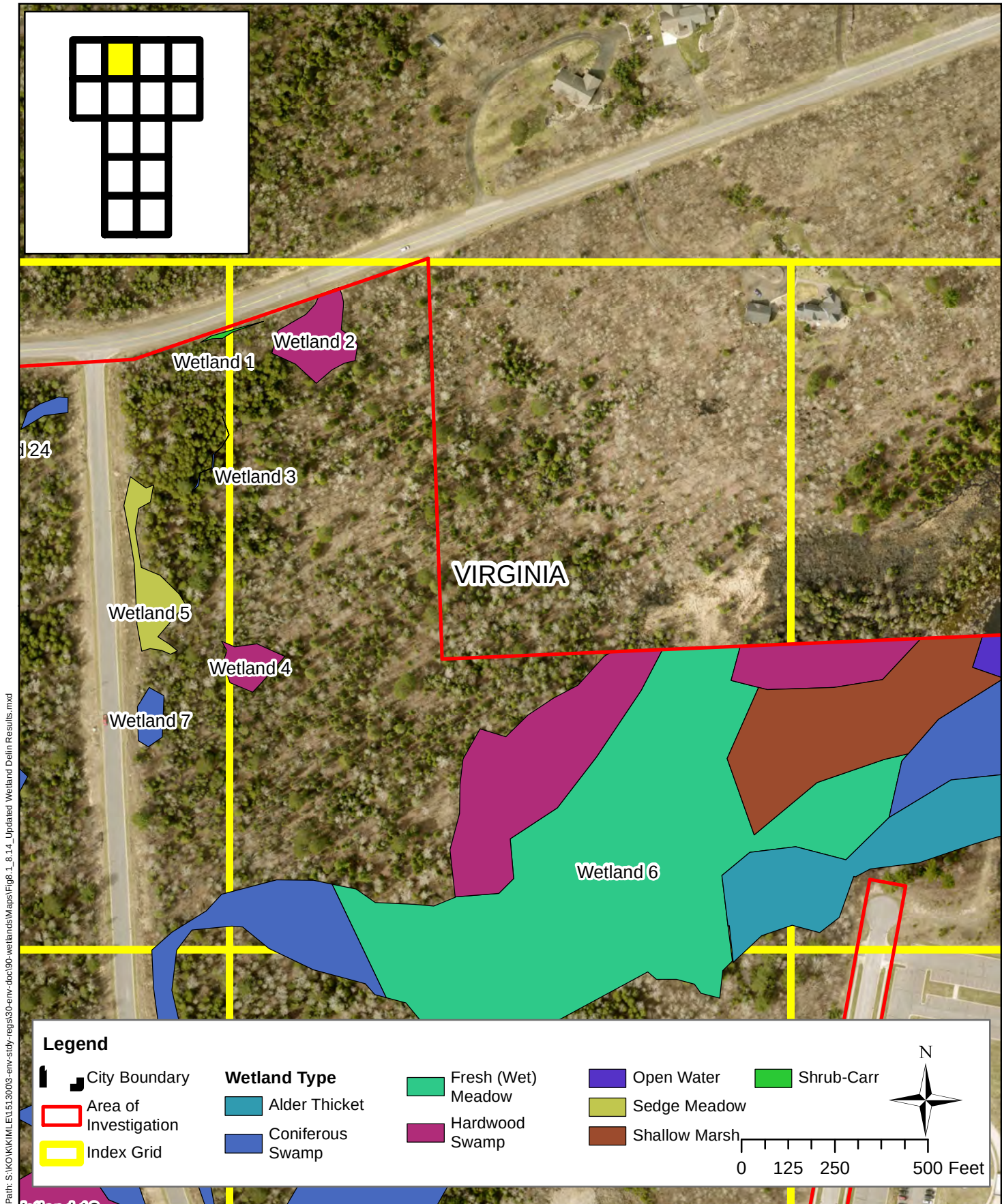
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Projection: NAD 1983 Zone 15N
Source: St. Louis County, SEH

Wetland Delineation Results

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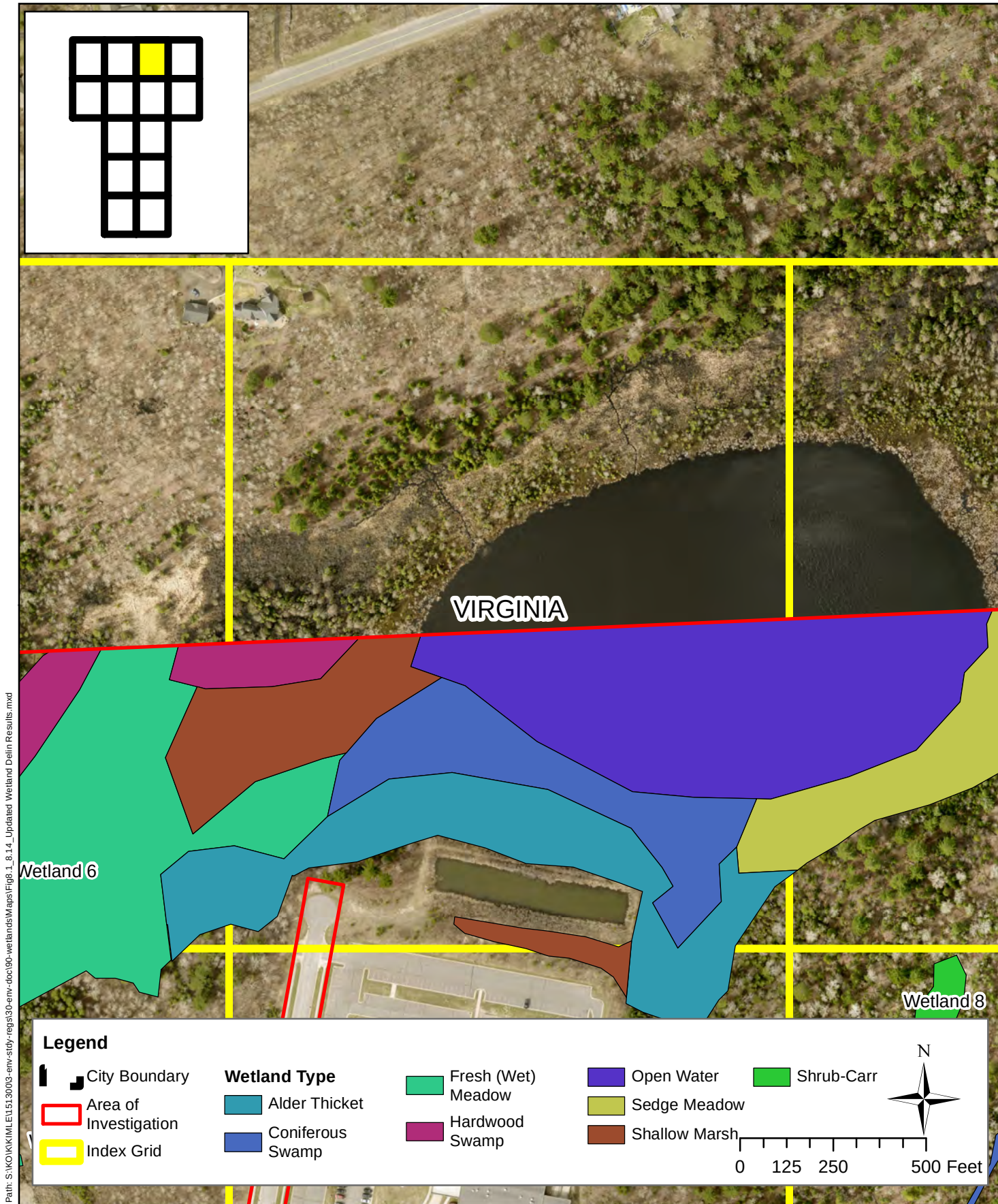
Figure
8-1



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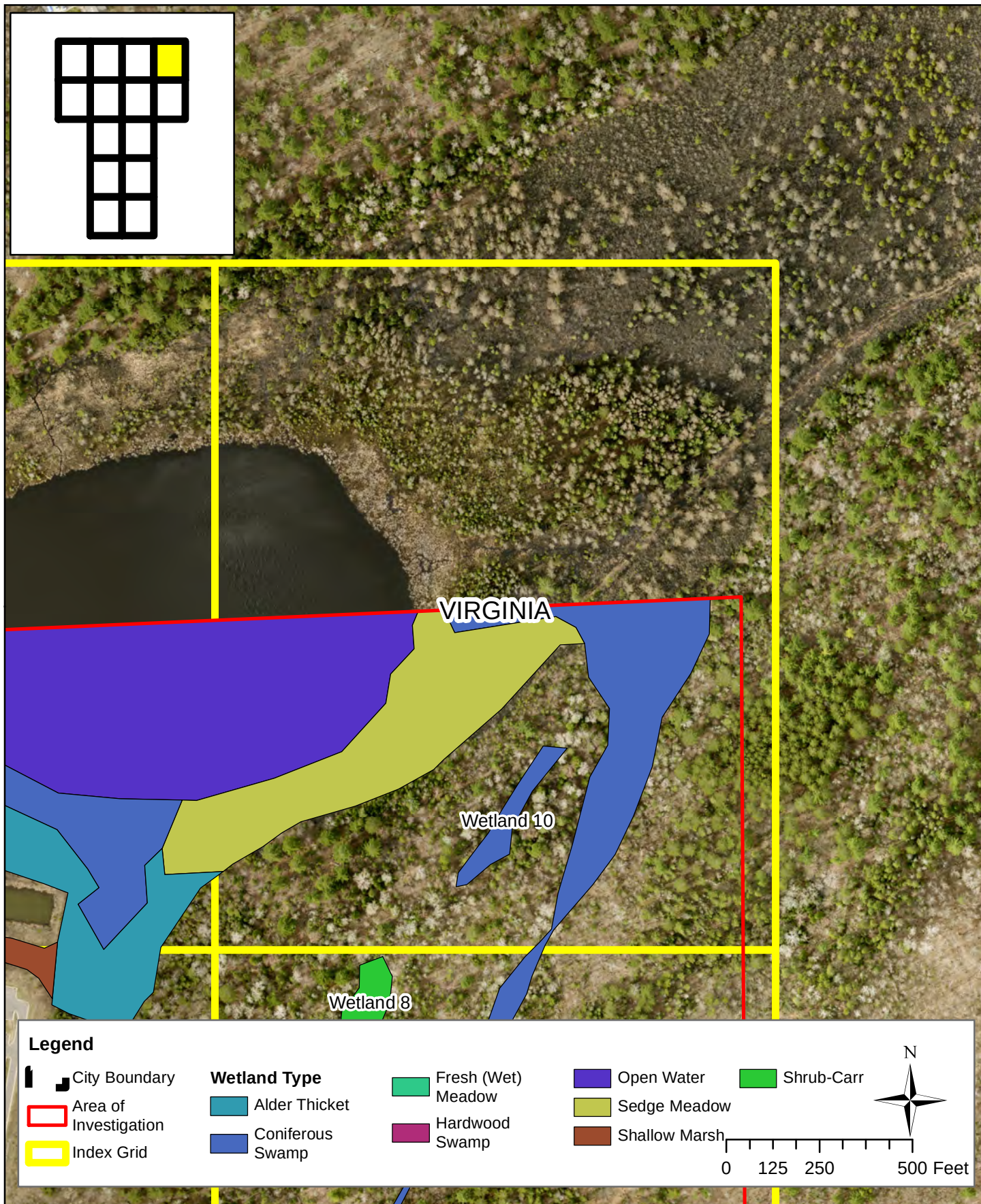
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Wetland Delineation Results
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**Figure
8-3**

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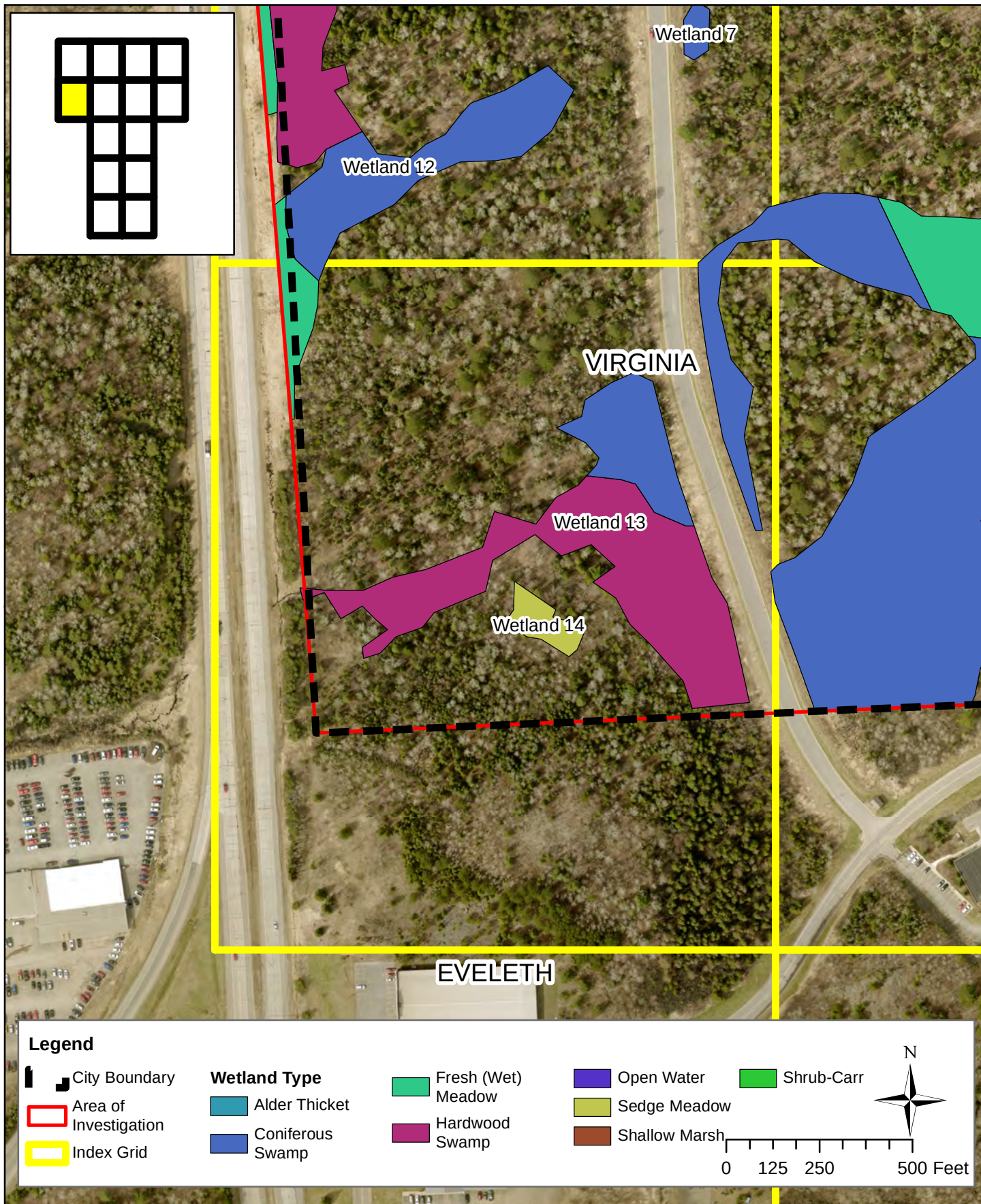
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Map by: emassa
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Source: St. Louis County, SEH

Wetland Delineation Results
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Figure
8-4

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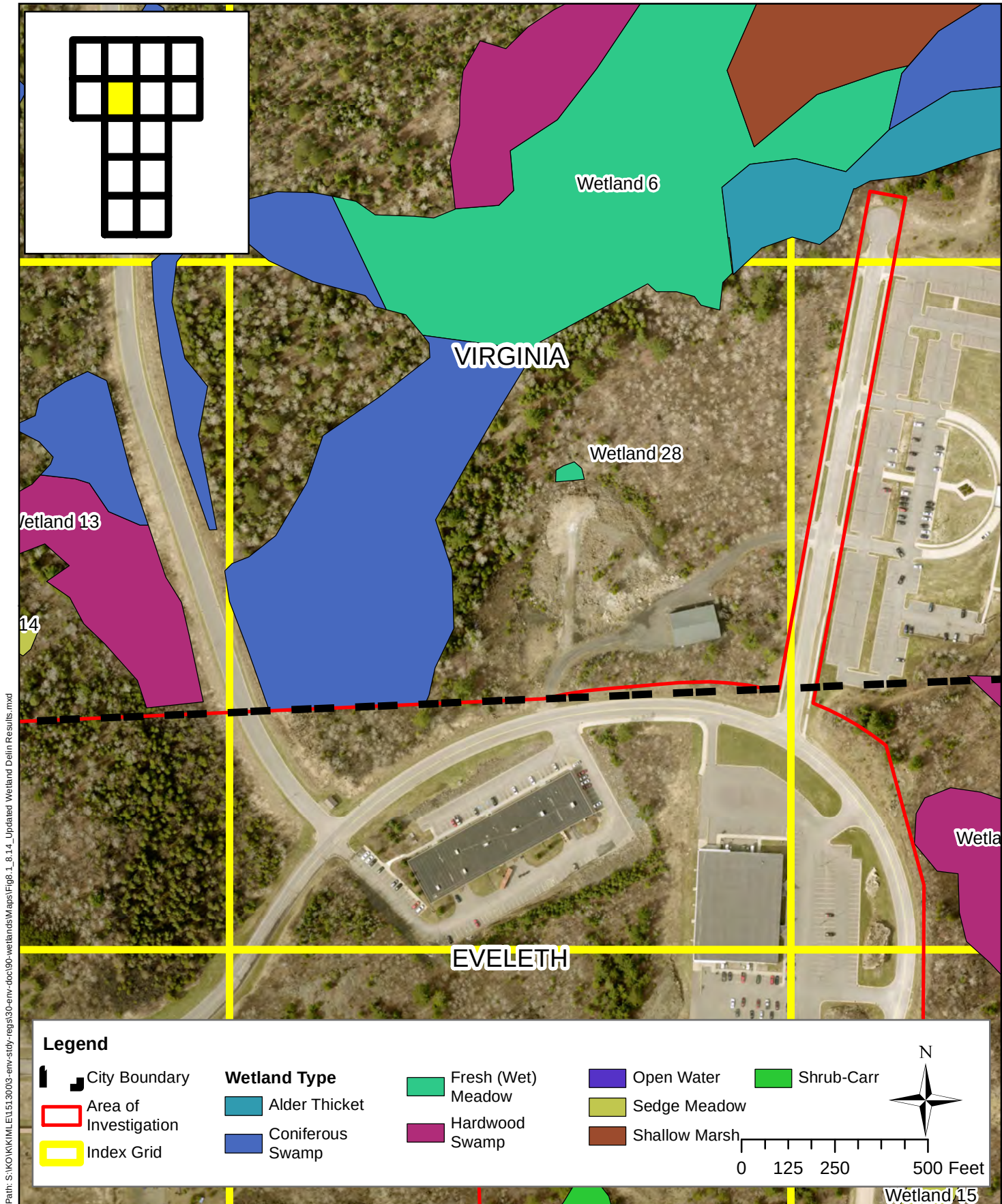
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Print Date: 8/2/2019

Map by: emassa
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Wetland Delineation Results

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Figure
8-5



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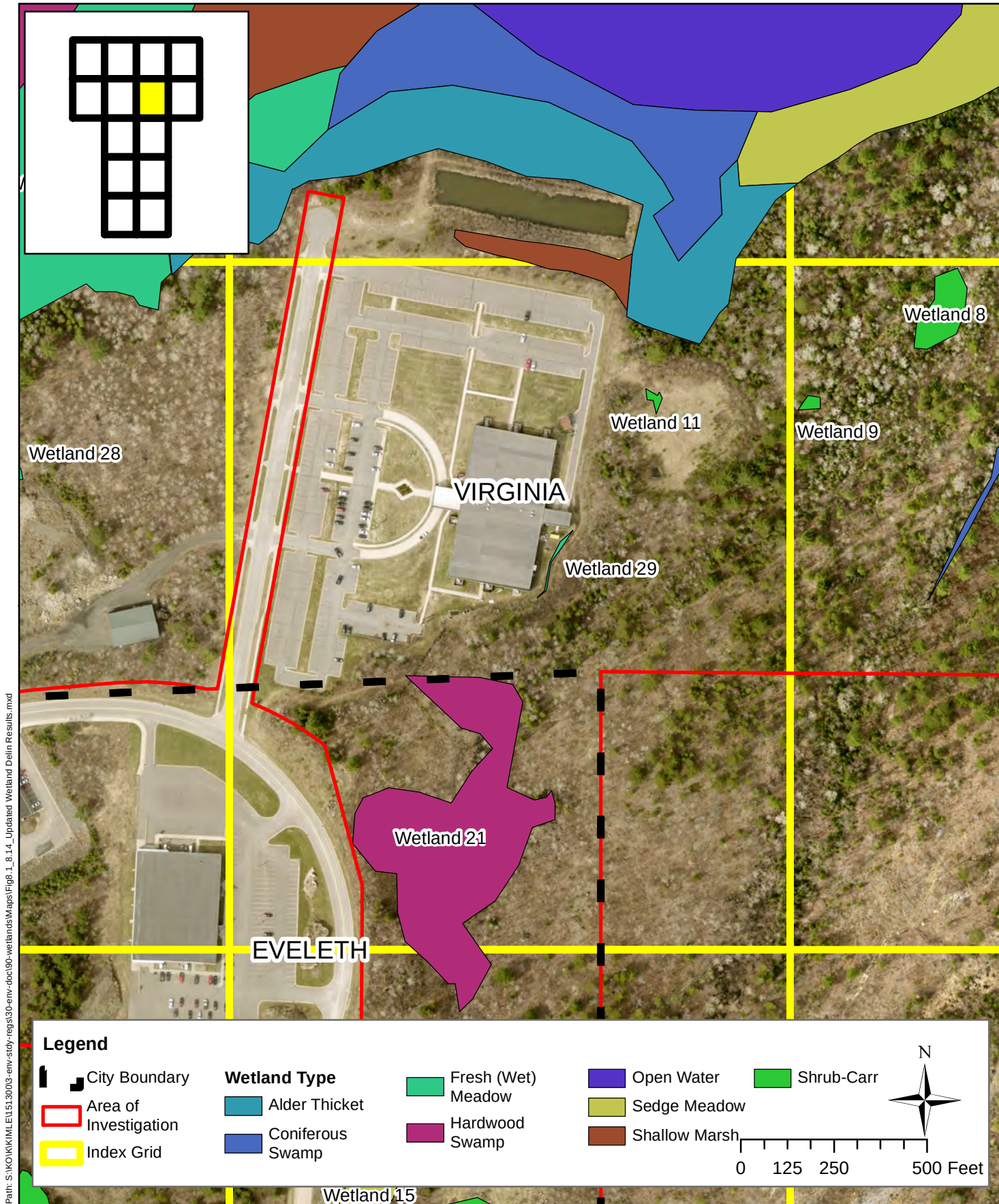
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Figure
8-6



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Legend

- | | | | | |
|-----------------------|---------------------|--------------------|--------------|------------|
| City Boundary | Wetland Type | Fresh (Wet) Meadow | Open Water | Shrub-Carr |
| Area of Investigation | Alder Thicket | Hardwood Swamp | Sedge Meadow | |
| Index Grid | Coniferous Swamp | Shallow Marsh | | |

0 125 250 500 Feet



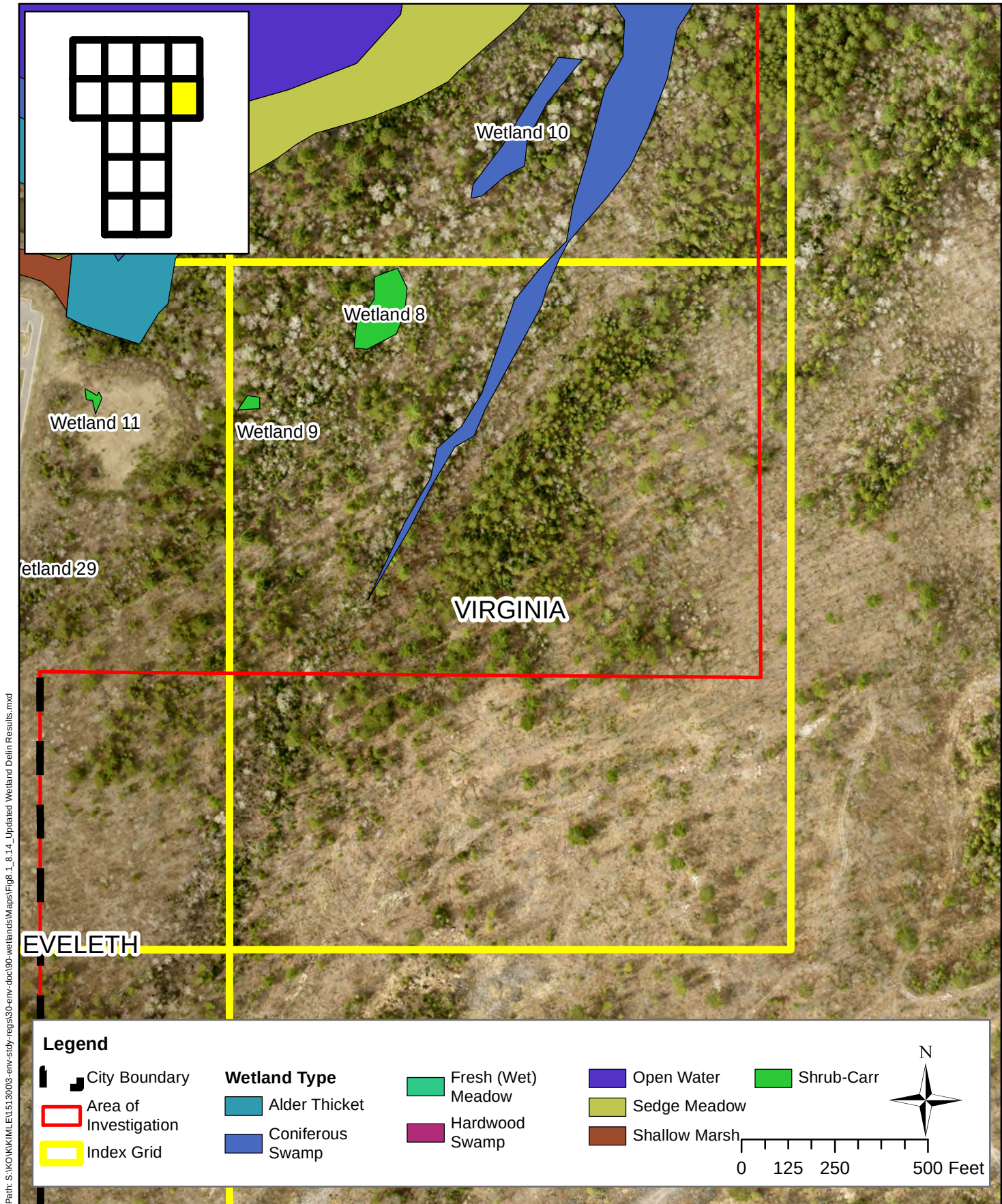
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Figure
8-7

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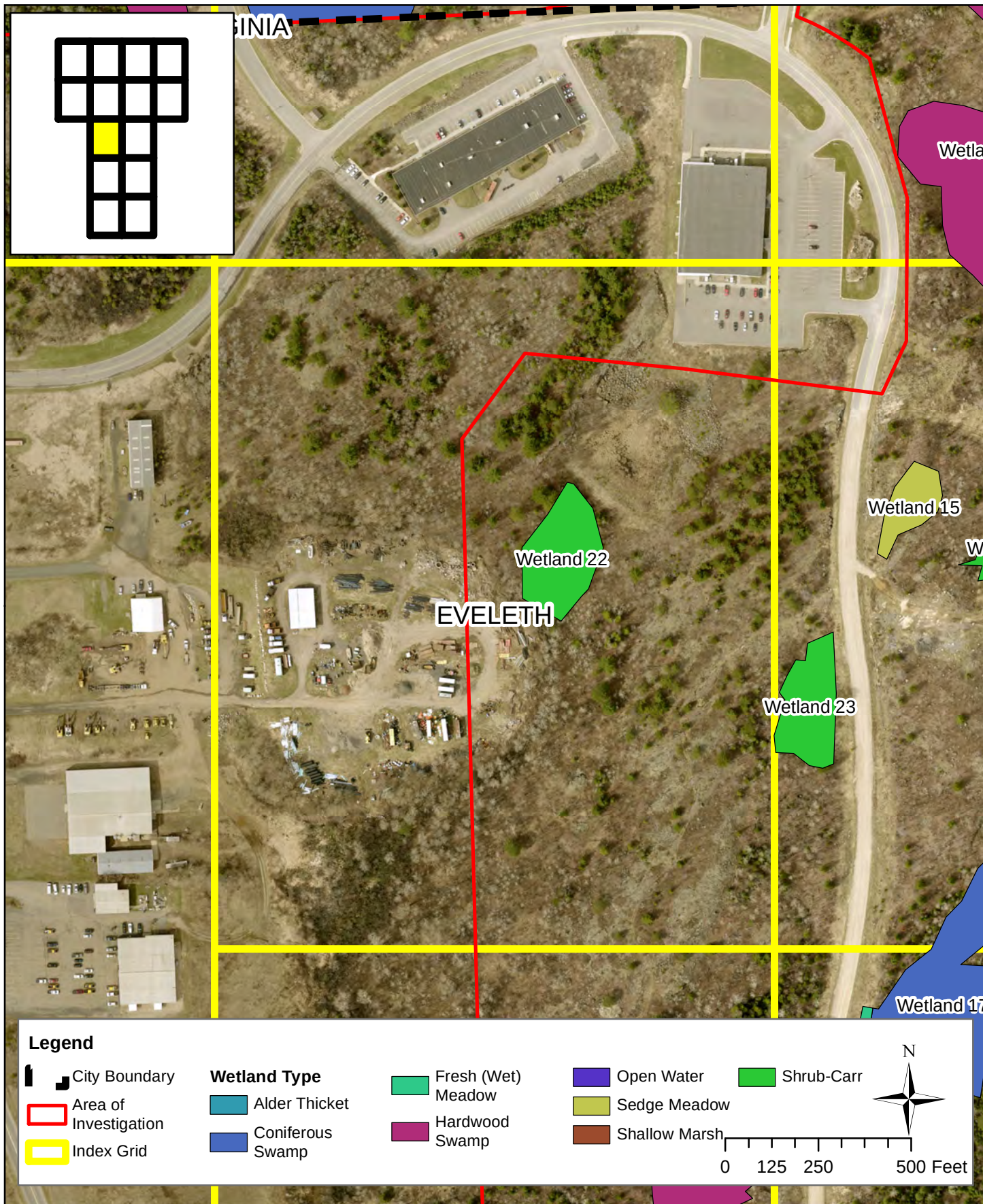
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Figure
8-8

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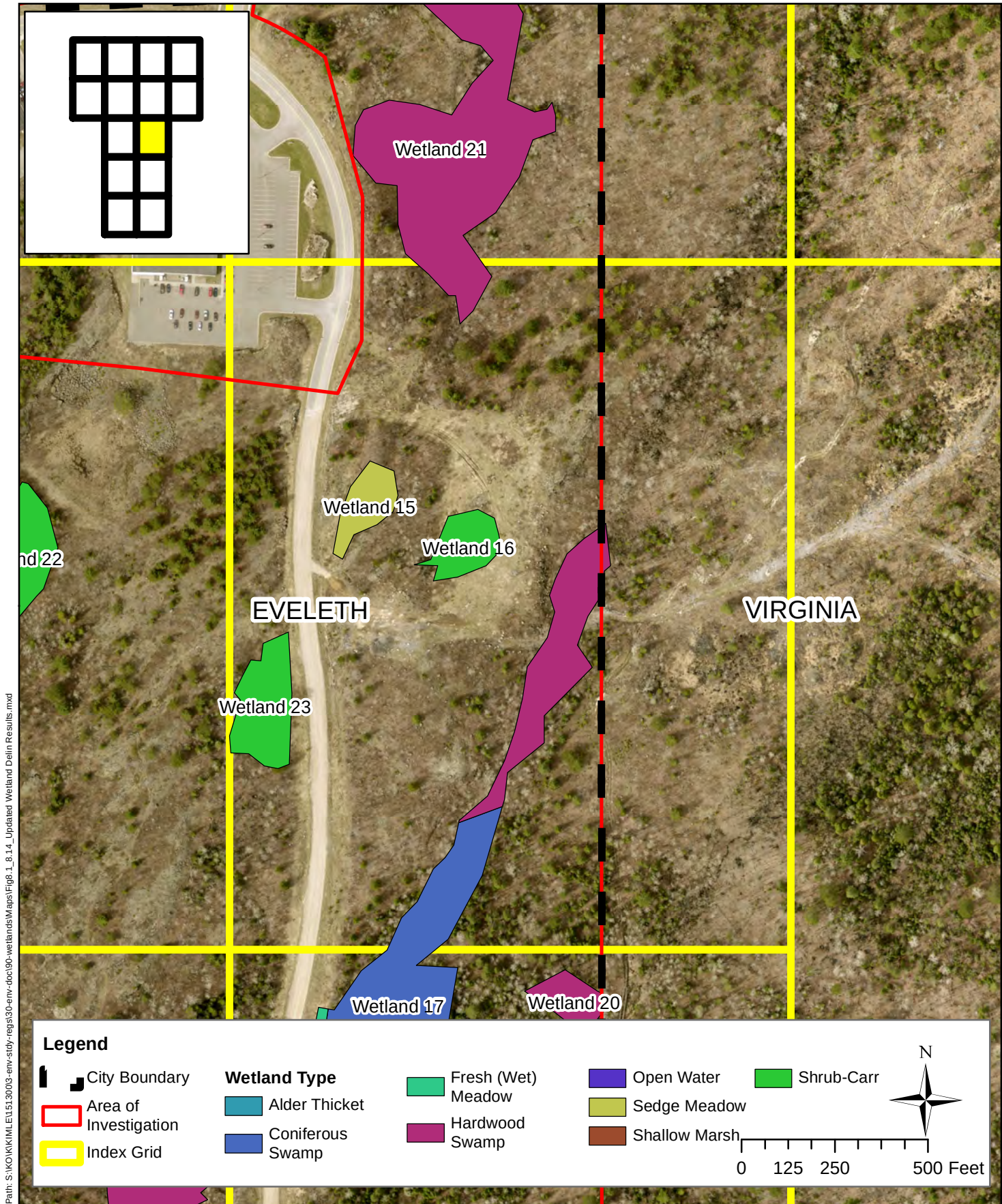
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Wetland Delineation Results

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Figure
8-9

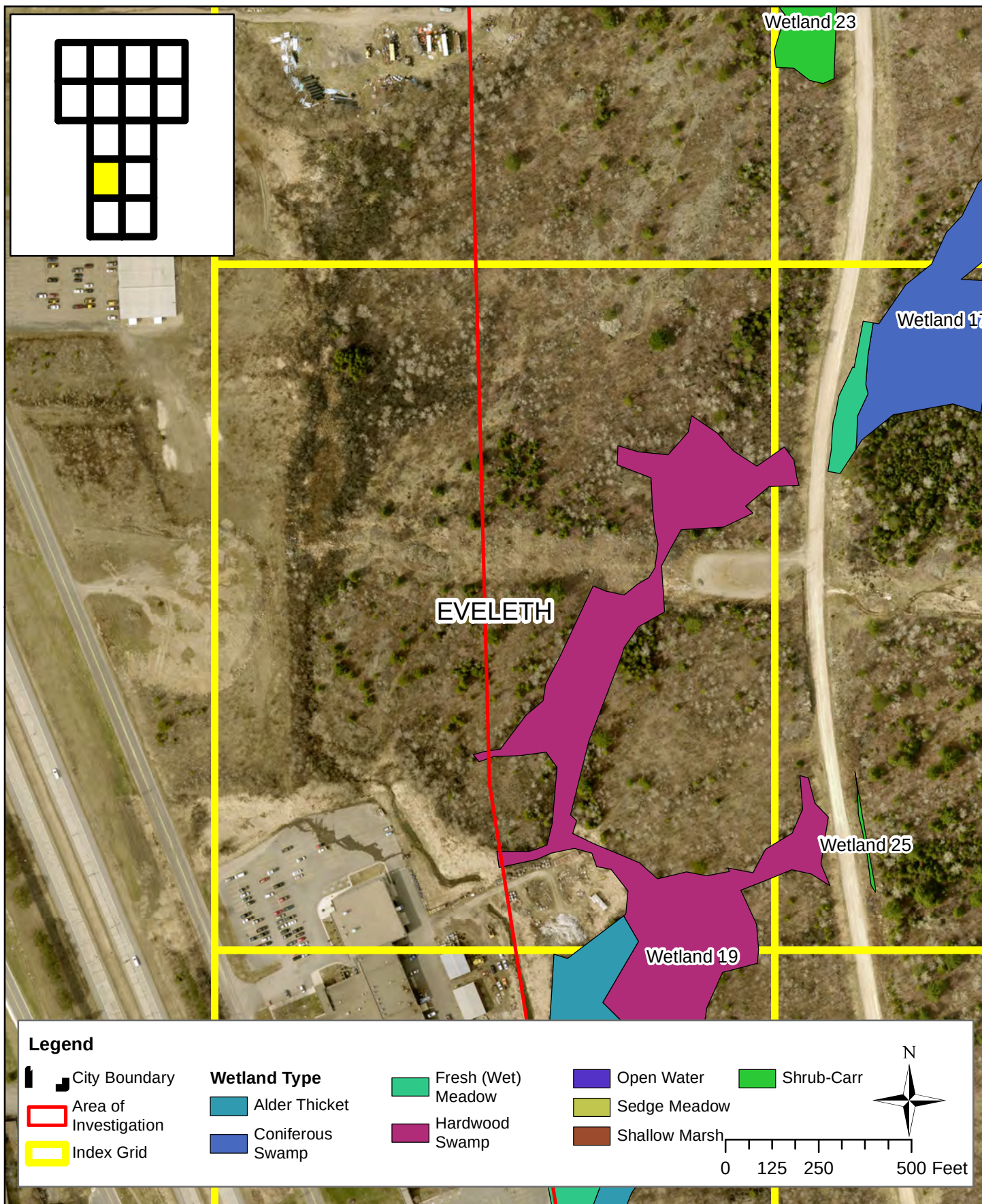


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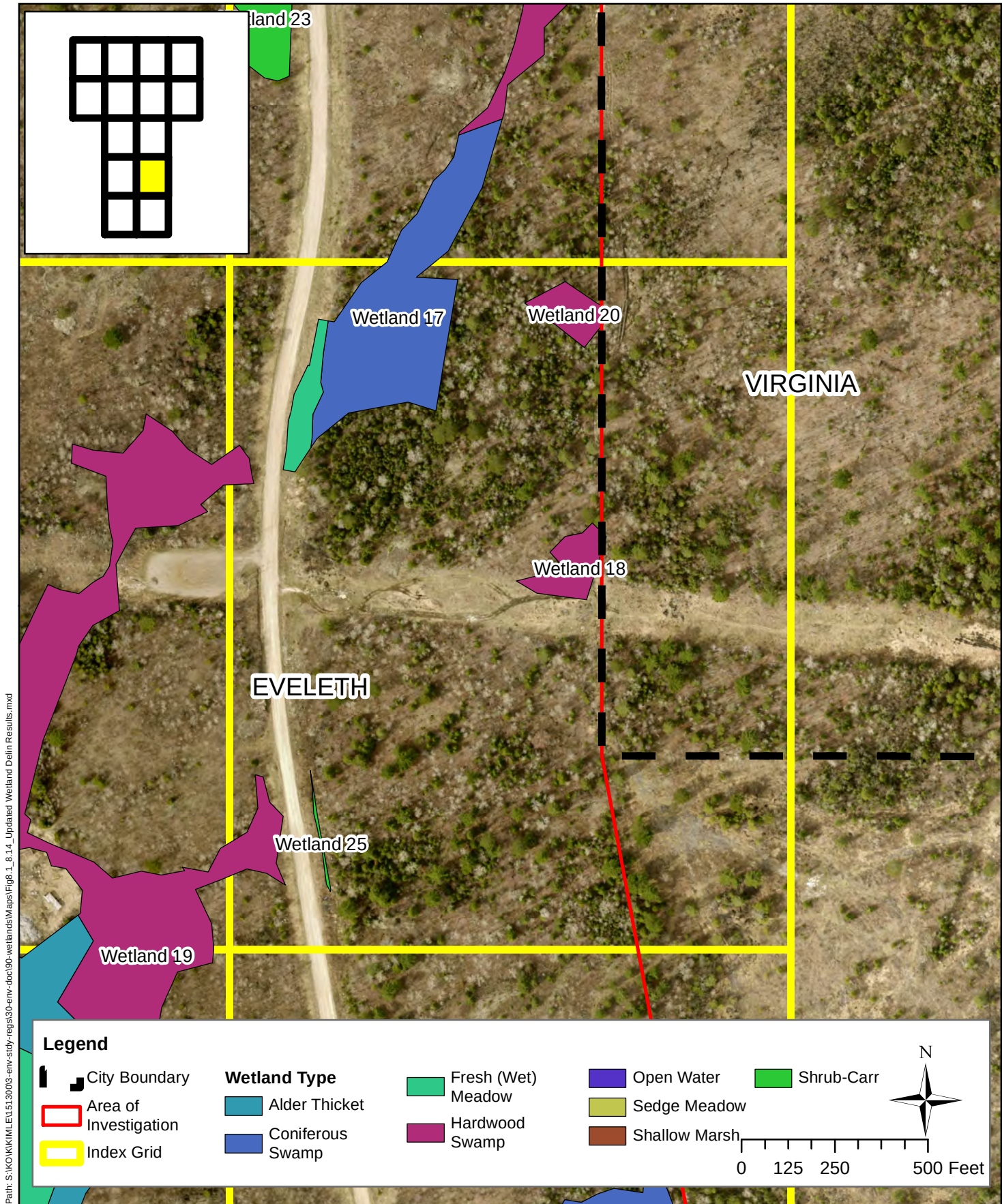
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Projection: NAD 1983 Zone 15N
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Wetland Delineation Results

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Figure
8-11

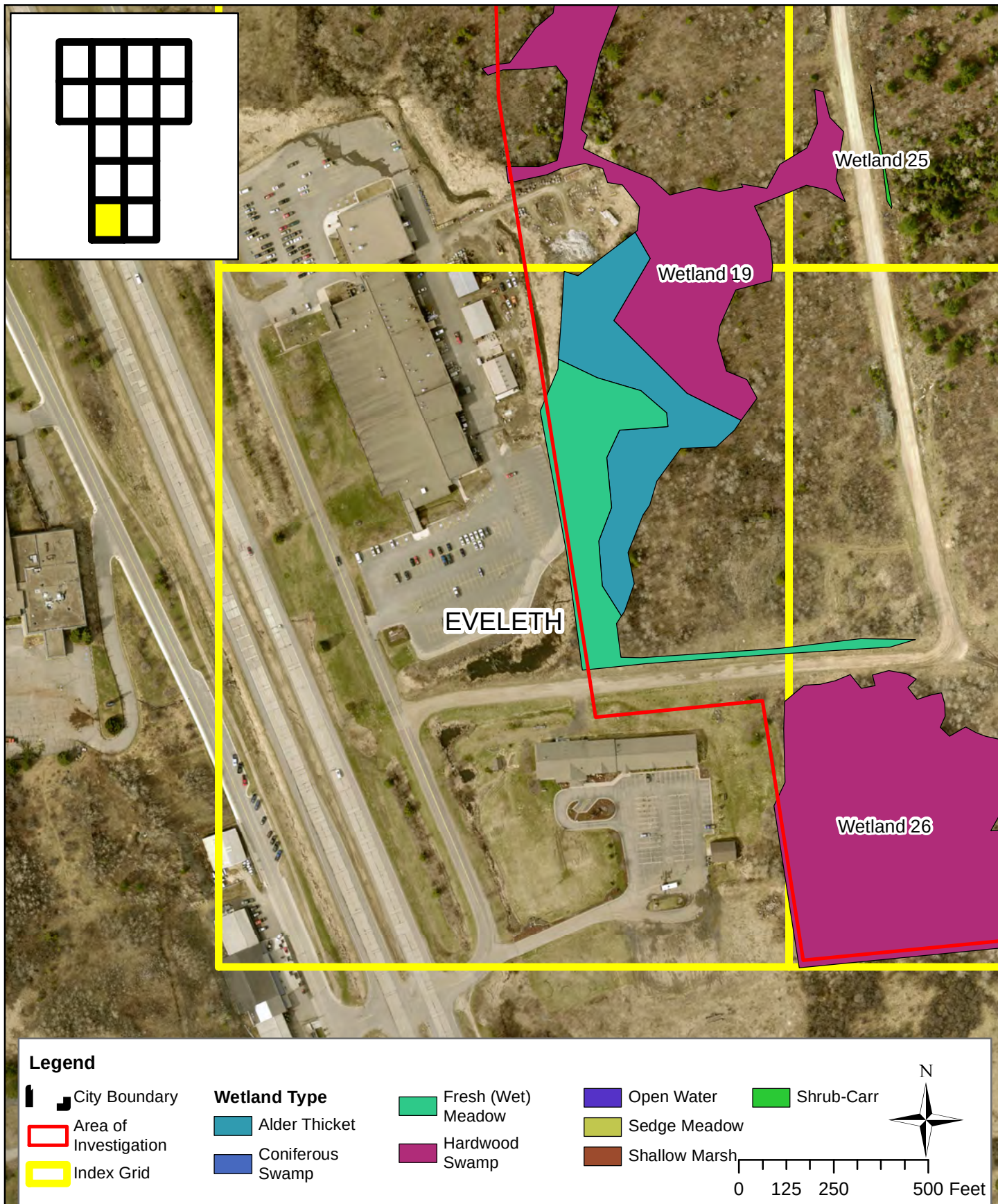


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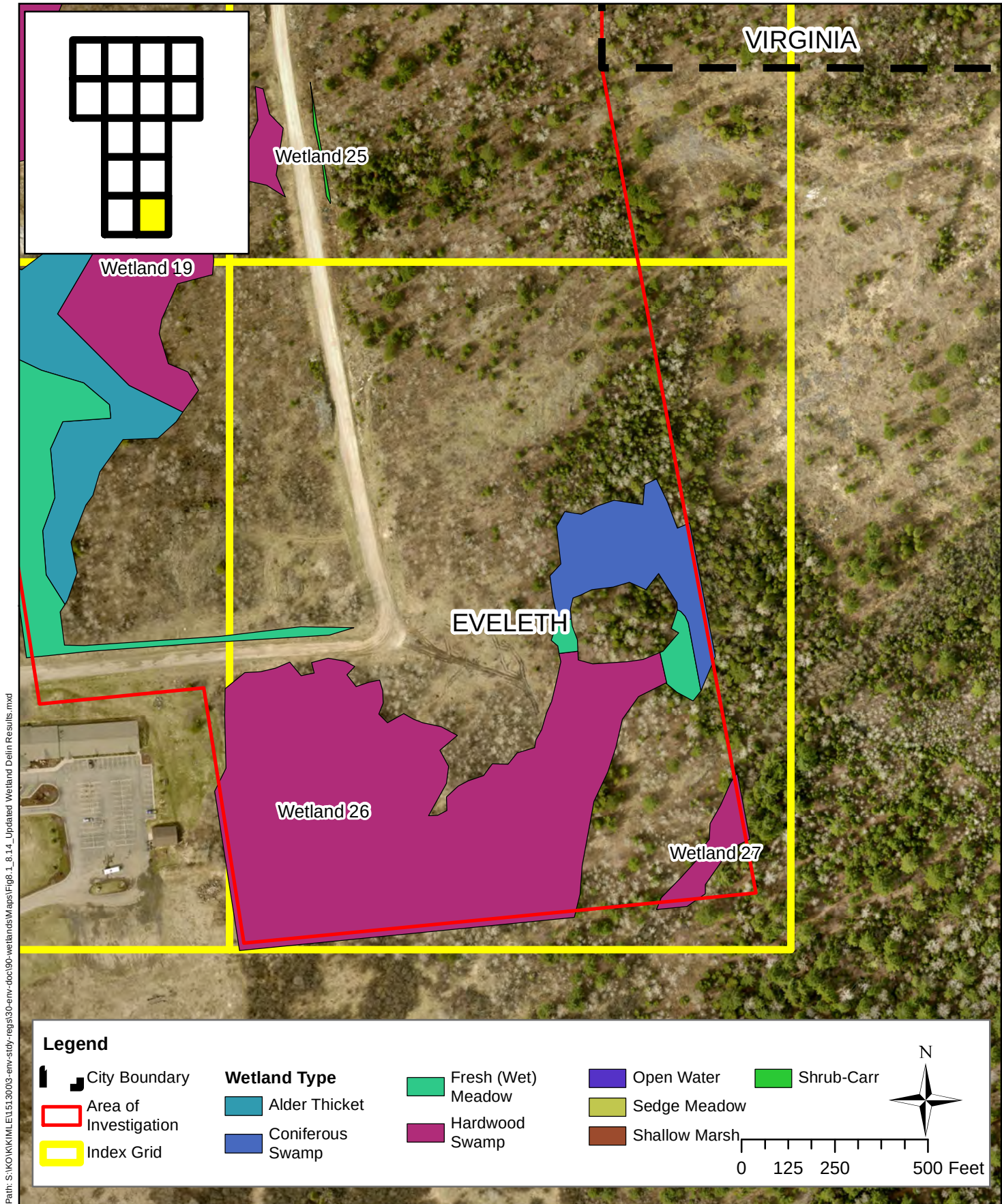
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Wetland Delineation Results

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Figure
8-13



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Legend

- City Boundary
- Area of Investigation
- Index Grid

Wetland Type

- Alder Thicket
- Coniferous Swamp

- Fresh (Wet) Meadow
- Hardwood Swamp

- Open Water
- Sedge Meadow
- Shallow Marsh

- Shrub-Carr

0 125 250 500 Feet



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Wetland Delineation Results

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Figure
8-14

Appendix A

Wetland Delineation Data Forms

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Evelth-Gilbert-Virginia School City/County: Evelth/St. Louis Sampling Date: 6/13/19
 Applicant/Owner: Kimley-Horn and Associates, Inc. State: Minnesota Sampling Point: 1-1u
 Investigator(s): Bailey Nelson, Ericka Massa Section, Township, Range: S29, T58N, R17W
 Landform (hillslope, terrace, etc.): footslope Local relief (concave, convex, none): none
 Slope (%): 15% Lat.: 47.484806 Long.: -92.526589 Datum: NAD 1983 UTM Zone 15N
 Soil Map Unit Name: Eaglesnest stony loam 2-8% slopes, bouldery NW1 Classification: none
 Are climatic/hydrologic conditions of the site typical for this time of the year? Yes (If no, explain in remarks)
 Are vegetation , soil , or hydrology significantly disturbed? Are "normal
 Are vegetation , soil , or hydrology naturally problematic? circumstances" present? Yes
 (If needed, explain any answers in remarks)

SUMMARY OF FINDINGS

Hydrophytic vegetation present?	<u> N </u>	Is the sampled area within a wetland? <u> N </u> If yes, optional wetland site ID: _____
Hydric soil present?	<u> N </u>	
Indicators of wetland hydrology present?	<u> N </u>	
Remarks: (Explain alternative procedures here or in a separate report.)		

HYDROLOGY

Primary Indicators (minimum of one is required; check all that apply)			Secondary Indicators (minimum of two required)		
☐ Surface Water (A1)	☐	☐ Water-Stained Leaves (B9)	☐	☐	☐ Surface Soil Cracks (B6)
☐ High Water Table (A2)	☐	☐ Aquatic Fauna (B13)	☐	☐	☐ Drainage Patterns (B10)
☐ Saturation (A3)	☐	☐ Marl Deposits (B15)	☐	☐	☐ Moss Trim Lines (B16)
☐ Water Marks (B1)	☐	☐ Hydrogen Sulfide Odor (C1)	☐	☐	☐ Dry-Season Water Table (C2)
☐ Sediment Deposits (B2)	☐	☐ Oxidized Rhizospheres on Living	☐	☐	☐ Crayfish Burrows (C8)
☐ Drift Deposits (B3)	☐	☐ Roots (C3)	☐	☐	☐ Saturation Visible on Aerial Imagery
☐ Algal Mat or Crust (B4)	☐	☐ Presence of Reduced Iron (C4)	☐	☐	☐ (C9)
☐ Iron Deposits (B5)	☐	☐ Recent Iron Reduction in Tilled	☐	☐	☐ Stunted or Stressed Plants (D1)
☐ Inundation Visible on Aerial	☐	☐ Soils (C6)	☐	☐	☐ Geomorphic Position (D2)
☐ Imagery (B7)	☐	☐ Thin Muck Surface (C7)	☐	☐	☐ Shallow Aquitard (D3)
☐ Sparsely Vegetated Concave	☐	☐ Other (Explain in Remarks)	☐	☐	☐ FAC-Neutral Test (D5)
☐ Surface (B8)	☐		☐	☐	☐ Microtopographic Relief (D4)

Field Observations:			Indicators of wetland hydrology present? <u> N </u>
Surface water present?	Yes ☐	No ☒ Depth (inches):	
Water table present?	Yes ☐	No ☒ Depth (inches):	
Saturation present?	Yes ☐	No ☒ Depth (inches):	
(includes capillary fringe)			
Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks:			

VEGETATION - Use scientific names of plants

						50/20 Thresholds		20%		50%	
Tree Stratum		Plot Size (30' Radius)	Absolute % Cover	Dominant Species	Indicator Status	Tree Stratum		0	0		
1		--				Sapling/Shrub Stratum		5	13		
2		--				Herb Stratum		5	13		
3		--				Woody Vine Stratum		0	0		
4		--									
5		--									
6		--									
7		--									
8		--									
9		--									
10		--									
			0	= Total Cover							
Sapling/Shrub Stratum		Plot Size (15' Radius)	Absolute % Cover	Dominant Species	Indicator Status						
1	<i>Betula papyrifera</i>	-- Paper Birch	15	Y	FACU						
2	<i>Populus tremuloides</i>	-- Quaking Aspen	5	Y	FAC						
3	<i>Abies balsamea</i>	-- Balsam Fir	5	Y	FAC						
4		--									
5		--									
6		--									
7		--									
8		--									
9		--									
10		--									
			25	= Total Cover							
Herb Stratum		Plot Size (5' Radius)	Absolute % Cover	Dominant Species	Indicator Status						
1	<i>Eurybia macrophylla</i>	-- Large-Leaf Wood-Aster	10	Y	UPL						
2	<i>Pteridium aquilinum</i>	-- Northern Bracken Fern	5	Y	FACU						
3	<i>Maianthemum canadense</i>	-- False Lily-of-the-Valley	5	Y	FACU						
4	<i>Hieracium aurantiacum</i>	-- Orange Hawkweed	3	N	UPL						
5	<i>Anemone quinquefolia</i>	-- Nightcaps	3	N	FACU						
6		--									
7		--									
8		--									
9		--									
10		--									
11		--									
12		--									
13		--									
14		--									
15		--									
			26	= Total Cover							
Woody Vine Stratum		Plot Size (30' Radius)	Absolute % Cover	Dominant Species	Indicator Status						
1		--									
2		--									
3		--									
4		--									
5		--									
			0	= Total Cover							

50/20 Thresholds

20% 50%

Tree Stratum 0 0

Sapling/Shrub Stratum 5 13

Herb Stratum 5 13

Woody Vine Stratum 0 0

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across all Strata: 6 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 33.33% (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species 0 x 1 = 0

FACW species 0 x 2 = 0

FAC species 10 x 3 = 30

FACU species 28 x 4 = 112

UPL species 13 x 5 = 65

Column totals 51 (A) 207 (B)

Prevalence Index = B/A = 4.06

Hydrophytic Vegetation Indicators:

— Rapid test for hydrophytic vegetation

— Dominance test is >50%

— Prevalence index is ≥3.0*

Morphological adaptations* (provide supporting data in Remarks or on a separate sheet)

Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Definitions of Vegetation Strata:

Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines - All woody vines greater than 3.28 ft in height.

Hydrophytic vegetation present? N

Remarks: (Include photo numbers here or on a separate sheet)

Note: This data sheet has been adapted to use the 2012 National Wetland Plant List:

Robert W. Lichvar and John T. Kartesz. 2009. North American Digital Flora: National Wetland Plant List, version 2.4.0 (https://wetland_plants.usace.army.mil). U.S. Army Corps of Engineers, Engineer Research and Development Center, Cold Regions Research and Engineering Laboratory, Hanover, NH, and BONAP, Chapel Hill, NC. (2012)

Sampling Point: 1-1u

[illegible]

**Location: PL=Pore Lining, M=Matrix

Indicators for Problematic Hydric Soils:

- *Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Hydric soil present? N

Remarks:

Northcentral and Northeast Region

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Eveleth-Gilbert-Virginia School City/County: Eveleth/St. Louis Sampling Date: 6/13/19
Applicant/Owner: Kimley-Horn and Associates, Inc. State: Minnesota Sampling Point: 1-1w
Investigator(s): Bailey Nelson, Ericka Massa Section, Township, Range: S29, T58N, R17W
Landform (hillslope, terrace, etc.): toeslope Local relief (concave, convex, none): concave
Slope (%): 1% Lat.: 47.484828 Long.: -92.526528 Datum: NAD 1983 UTM Zone 15N
Soil Map Unit Name: Eaglesnest stony loam 2-8% slopes, bouldery NWI Classification: none
Are climatic/hydrologic conditions of the site typical for this time of the year? Yes (If no, explain in remarks)
Are vegetation, soil, or hydrology significantly disturbed? Are "normal
Are vegetation, soil, or hydrology naturally problematic? circumstances" present? Yes
(If needed, explain any answers in remarks)

SUMMARY OF FINDINGS

Hydrophytic vegetation present?	<u>Y</u>	Is the sampled area within a wetland?	<u>Y</u>
Hydric soil present?	<u>Y</u>		
Indicators of wetland hydrology present?	<u>Y</u>	If yes, optional wetland site ID:	<u>Wetland 1</u>
Remarks: (Explain alternative procedures here or in a separate report.)			

HYDROLOGY

Primary Indicators (minimum of one is required; check all that apply) ☐ Surface Water (A1) ☐ Water-Stained Leaves (B9) ☐ High Water Table (A2) ☐ Aquatic Fauna (B13) ☒ Saturation (A3) ☐ Marl Deposits (B15) ☐ Water Marks (B1) ☐ Hydrogen Sulfide Odor (C1) ☐ Sediment Deposits (B2) ☐ Oxidized Rhizospheres on Living ☐ Drift Deposits (B3) ☐ Roots (C3) ☐ Algal Mat or Crust (B4) ☐ Presence of Reduced Iron (C4) ☐ Iron Deposits (B5) ☐ Recent Iron Reduction in Tilled ☐ Inundation Visible on Aerial ☐ Soils (C6) ☐ Imagery (B7) ☐ Thin Muck Surface (C7) ☐ Sparsely Vegetated Concave ☐ Other (Explain in Remarks) ☐ Surface (B8)		Secondary Indicators (minimum of two required) ☐ Surface Soil Cracks (B6) ☐ Drainage Patterns (B10) ☐ Moss Trim Lines (B16) ☐ Dry-Season Water Table (C2) ☐ Crayfish Burrows (C8) ☐ Saturation Visible on Aerial Imagery ☐ (C9) ☐ Stunted or Stressed Plants (D1) ☒ Geomorphic Position (D2) ☐ Shallow Aquitard (D3) ☐ FAC-Neutral Test (D5) ☐ Microtopographic Relief (D4)	
Field Observations: Surface water present? Yes ☐ No ☒ Depth (inches): <u> </u> Water table present? Yes ☐ No ☒ Depth (inches): <u> </u> Saturation present? Yes ☒ No ☐ Depth (inches): <u>0</u> (includes capillary fringe)		Indicators of wetland hydrology present? <u>Y</u>	
Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks:			

VEGETATION - Use scientific names of plants

					Sampling Point: 1-1w		
					50/20 Thresholds		
					20% 50%		
Tree Stratum					Tree Stratum		
Plot Size (30' Radius)					Sapling/Shrub Stratum		
Absolute % Cover					Herb Stratum		
Dominant Species					Woody Vine Stratum		
Indicator Status							
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
0 = Total Cover							
Sapling/Shrub Stratum							
Plot Size (15' Radius)							
Absolute % Cover							
Dominant Species							
Indicator Status							
1 <i>Alnus incana</i> -- <i>Speckled Alder</i>							
2 <i>Salix discolor</i> -- <i>Pussy Willow</i>							
3 <i>Abies balsamea</i> -- <i>Balsam Fir</i>							
4 <i>Pinus strobus</i> -- <i>Eastern White Pine</i>							
5 <i>Thuja occidentalis</i> -- <i>Eastern Arborvitae</i>							
6							
7							
8							
9							
10							
47 = Total Cover							
Herb Stratum							
Plot Size (5' Radius)							
Absolute % Cover							
Dominant Species							
Indicator Status							
1 <i>Onoclea sensibilis</i> -- <i>Sensitive Fern</i>							
2 <i>Fragaria virginiana</i> -- <i>Virginia Strawberry</i>							
3 <i>Equisetum arvense</i> -- <i>Field Horsetail</i>							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
11 = Total Cover							
Woody Vine Stratum							
Plot Size (30' Radius)							
Absolute % Cover							
Dominant Species							
Indicator Status							
1							
2							
3							
4							
5							
0 = Total Cover							
Remarks: (Include photo numbers here or on a separate sheet)							
Note: This data sheet has been adapted to use the 2012 National Wetland Plant List: Robert W. Lichvar and John T. Kartesz. 2009. North American Digital Flora: National Wetland Plant List, version 2.4.0 (https://wetland.plants.usace.army.mil). U.S. Army Corps of Engineers, Engineer Research and Development Center, Cold Regions Research and Engineering Laboratory, Hanover, NH, and BONAP, Chapel Hill, NC. (2012)							

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 4 (A)
Total Number of Dominant Species Across all Strata: 5 (B)
Percent of Dominant Species that are OBL, FACW, or FAC: 80.00% (A/B)

Prevalence Index Worksheet

Total % Cover of:
OBL species 0 x 1 = 0
FACW species 42 x 2 = 84
FAC species 8 x 3 = 24
FACU species 8 x 4 = 32
UPL species 0 x 5 = 0
Column totals 58 (A) 140 (B)
Prevalence Index = B/A = 2.41

Hydrophytic Vegetation Indicators:

☐ Rapid test for hydrophytic vegetation
☒ Dominance test is >50%
☒ Prevalence index is ≤3.0*
Morphological adaptations* (provide supporting data in Remarks or on a separate sheet)
☐ Problematic hydrophytic vegetation* (explain)
*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Definitions of Vegetation Strata:

Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.
Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
Woody vines - All woody vines greater than 3.28 ft in height.

Hydrophytic vegetation present? Y

SOIL	Sampling Point:	1-1w
-------------	------------------------	------

Sampling Point: 1-1w

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

[illegible]

*Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains

**Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

Indicators for Problematic Hydric Soils:

- | | | |
|--|----------------------------------|--|
| ☐ Histosol (A1) | Polyvalue Below Surface | 2 cm Muck (A10) (LRR K, L, MLRA 149B) |
| ☐ Histic Epipedon (A2) | (S8) (LRR R, MLRA 149B) | Coast Prairie Redox (A16) (LRR K, L, R) |
| ☐ Black Histic (A3) | Thin Dark Surface (S9) | 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) |
| ☐ Hydrogen Sulfide (A4) | (LRR R, MLRA 149B) | Dark Surface (S7) (LRR K, L) |
| ☐ Stratified Layers (A5) | Loamy Mucky Mineral (F1) | Polyvalue Below Surface (S8) (LRR K, L) |
| ☒ Depleted Below Dark Surface (A11') | (LRR K, L) | Thin Dark Surface (S9) (LRR K, L) |
| ☐ Thick Dark Surface (A12) | X Loamy Gleyed Matrix (F2) | Iron-Manganese Masses (F12) (LRR K, L, R) |
| ☐ Sandy Mucky Mineral (S1) | X Depleted Matrix (F3) | Piedmont Floodplain Soils (F19) (MLRA 149B) |
| ☐ Sandy Gleyed Matrix (S4) | Redox Dark Surface (F6) | Mesic Sodic (TA6) (MLRA 144A, 145, 149B) |
| ☐ Sandy Redox (S5) | Depleted Dark Surface (F7) | Red Parent Material (TF2) |
| ☐ Stripped Matrix (S6) | Redox Depressions (F8) | Very Shallow Dark Surface (TF12) |
| ☐ Dark Surface (S7) (LRR R, MLRA 149B) | | Other (Explain in Remarks) |

*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric soil present? Y

Remarks:

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WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Eveleth-Gilbert-Virginia School City/County: Eveleth/St. Louis Sampling Date: 5-16-2016
 Applicant/Owner: Kimley-Horn and Associates, Inc. State: Minnesota Sampling Point: 2-1u
 Investigator(s): Kyle Hanson, Erin Budrow Section, Township, Range: S29, T58N, R17W
 Landform (hillslope, terrace, etc.): road shoulder Local relief (concave, convex, none): convex
 Slope (%): 10% Lat.: 47.48509 Long.: -92.5257 Datum: NAD 83, UTM 15N
 Soil Map Unit Name: Eaglesnest stony loam, 2 to 8 percent slopes, bouldery NWI Classification: none
 Are climatic/hydrologic conditions of the site typical for this time of the year? yes (If no, explain in remarks)
 Are vegetation , soil , or hydrology significantly disturbed? Are "normal
 Are vegetation , soil , or hydrology naturally problematic? circumstances" present? Yes
 (If needed, explain any answers in remarks)

SUMMARY OF FINDINGS

Hydrophytic vegetation present?	<u>Y</u>	Is the sampled area within a wetland?	<u>N</u>
Hydric soil present?	<u>N</u>		
Indicators of wetland hydrology present?	<u>Y</u>	If yes, optional wetland site ID:	<u>-</u>
Remarks: (Explain alternative procedures here or in a separate report.)			

HYDROLOGY

Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)	
☐ Surface Water (A1)	☐ Water-Stained Leaves (B9)	☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Aquatic Fauna (B13)	☐ Drainage Patterns (B10)	
☒ Saturation (A3)	☐ Marl Deposits (B15)	☐ Moss Trim Lines (B16)	
☐ Water Marks (B1)	☐ Hydrogen Sulfide Odor (C1)	☐ Dry-Season Water Table (C2)	
☐ Sediment Deposits (B2)	☐ Oxidized Rhizospheres on Living	☐ Crayfish Burrows (C8)	
☐ Drift Deposits (B3)	☐ Roots (C3)	☐ Saturation Visible on Aerial Imagery	
☐ Algal Mat or Crust (B4)	☐ Presence of Reduced Iron (C4)	☐ (C9)	
☐ Iron Deposits (B5)	☐ Recent Iron Reduction in Tilled	☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial	☐ Soils (C6)	☐ Geomorphic Position (D2)	
☐ Imagery (B7)	☐ Thin Muck Surface (C7)	☐ Shallow Aquitard (D3)	
☐ Sparsely Vegetated Concave	☐ Other (Explain in Remarks)	☐ FAC-Neutral Test (D5)	
☐ Surface (B8)		☐ Microtopographic Relief (D4)	
Field Observations:		Indicators of wetland hydrology present? <u>Y</u>	
Surface water present?	Yes <u> </u> No <u>X</u> Depth (inches): <u> </u>		
Water table present?	Yes <u> </u> No <u>X</u> Depth (inches): <u> </u>		
Saturation present?	Yes <u>X</u> No <u> </u> Depth (inches): <u>4</u>		
(includes capillary fringe)			
Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks:			

US Army Corps of Engineers

Northcentral and Northeast Region

VEGETATION - Use scientific names of plants

					Sampling Point: <u>2-1u</u>		
					50/20 Thresholds		
Tree Stratum	Plot Size (<u>30-ft</u>)	Absolute % Cover	Dominant Species	Indicator Status	Tree Stratum	20%	50%
1	<u>--</u>	<u> </u>	<u> </u>	<u> </u>	Sapling/Shrub Stratum	0	0
2	<u>--</u>	<u> </u>	<u> </u>	<u> </u>	Herb Stratum	24	59
3	<u>--</u>	<u> </u>	<u> </u>	<u> </u>	Woody Vine Stratum	0	0
4	<u>--</u>	<u> </u>	<u> </u>	<u> </u>			
5	<u>--</u>	<u> </u>	<u> </u>	<u> </u>			
6	<u>--</u>	<u> </u>	<u> </u>	<u> </u>			
7	<u>--</u>	<u> </u>	<u> </u>	<u> </u>			
8	<u>--</u>	<u> </u>	<u> </u>	<u> </u>			
9	<u>--</u>	<u> </u>	<u> </u>	<u> </u>			
10	<u>--</u>	<u> </u>	<u> </u>	<u> </u>			
		<u>0</u>	= Total Cover				
Sapling/Shrub Stratum	Plot Size (<u>15-ft</u>)	Absolute % Cover	Dominant Species	Indicator Status			
1	<u>--</u>	<u> </u>	<u> </u>	<u> </u>			
2	<u>--</u>	<u> </u>	<u> </u>	<u> </u>			
3	<u>--</u>	<u> </u>	<u> </u>	<u> </u>			
4	<u>--</u>	<u> </u>	<u> </u>	<u> </u>			
5	<u>--</u>	<u> </u>	<u> </u>	<u> </u>			
6	<u>--</u>	<u> </u>	<u> </u>	<u> </u>			
7	<u>--</u>	<u> </u>	<u> </u>	<u> </u>			
8	<u>--</u>	<u> </u>	<u> </u>	<u> </u>			
9	<u>--</u>	<u> </u>	<u> </u>	<u> </u>			
10	<u>--</u>	<u> </u>	<u> </u>	<u> </u>			
		<u>0</u>	= Total Cover				
Herb Stratum	Plot Size (<u>5-ft</u>)	Absolute % Cover	Dominant Species	Indicator Status			
1	<u>Phalaris arundinacea</u>	<u>70</u>	<u>Y</u>	<u>FACW</u>			
2	<u>Poa pratensis</u>	<u>30</u>	<u>Y</u>	<u>FACU</u>			
3	<u>Rubus idaeus</u>	<u>8</u>	<u>N</u>	<u>FAC</u>			
4	<u>Rumex crispus</u>	<u>5</u>	<u>N</u>	<u>FAC</u>			
5	<u>Taraxum officinale</u>	<u>5</u>	<u>N</u>	<u>UPL</u>			
6	<u>--</u>	<u> </u>	<u> </u>	<u> </u>			
7	<u>--</u>	<u> </u>	<u> </u>	<u> </u>			
8	<u>--</u>	<u> </u>	<u> </u>	<u> </u>			
9	<u>--</u>	<u> </u>	<u> </u>	<u> </u>			
10	<u>--</u>	<u> </u>	<u> </u>	<u> </u>			
11	<u>--</u>	<u> </u>	<u> </u>	<u> </u>			
12	<u>--</u>	<u> </u>	<u> </u>	<u> </u>			
13	<u>--</u>	<u> </u>	<u> </u>	<u> </u>			
14	<u>--</u>	<u> </u>	<u> </u>	<u> </u>			
15	<u>--</u>	<u> </u>	<u> </u>	<u> </u>			
		<u>118</u>	= Total Cover				
Woody Vine Stratum	Plot Size (<u>30-ft</u>)	Absolute % Cover	Dominant Species	Indicator Status			
1	<u>--</u>	<u> </u>	<u> </u>	<u> </u>			
2	<u>--</u>	<u> </u>	<u> </u>	<u> </u>			
3	<u>--</u>	<u> </u>	<u> </u>	<u> </u>			
4	<u>--</u>	<u> </u>	<u> </u>	<u> </u>			
5	<u>--</u>	<u> </u>	<u> </u>	<u> </u>			
		<u>0</u>	= Total Cover				
Remarks: (Include photo numbers here or on a separate sheet)							
Note: This data sheet has been adapted to use the 2016 National Wetland Plant List: Lichvar, R.W., D.L. Banks, W.N. Kirchner, and N.C. Melvin. 2016. The National Wetland Plant List: 2016 wetland ratings. Phytoneuron 2016-30: 1-17. Published 28 April 2016. ISSN 2153 733X							

US Army Corps of Engineers

Northcentral and Northeast Region

Sampling Point: 2-1u

[illegible]

**Location: PL=Pore Lining, M=Matrix

Indicators for Problematic Hydric Soils:

- *Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Hydric soil present? N

Remarks:

Northcentral and Northeast Region

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Eveleth-Gilbert-Virginia School City/County: Eveleth/St. Louis Sampling Date: 5-16-2016
 Applicant/Owner: Kimley-Horn and Associates, Inc. State: MN Sampling Point: 2-1w
 Investigator(s): Kyle Hanson, Erin Budrow Section, Township, Range: S29, T58N, R17W
 Landform (hillslope, terrace, etc.): ditch, road shoulder Local relief (concave, convex, none): none
 Slope (%): 0% Lat.: 47.48505 Long.: -92.52573 Datum: NAD 83, UTM 15N
 Soil Map Unit Name: Eaglesnest stony loam, 2 to 8 percent slopes, bouldery NWI Classification: none
 Are climatic/hydrologic conditions of the site typical for this time of the year? yes (If no, explain in remarks)
 Are vegetation , soil , or hydrology significantly disturbed? Are "normal
 Are vegetation , soil , or hydrology naturally problematic? circumstances" present? Yes
 (If needed, explain any answers in remarks)

SUMMARY OF FINDINGS

Hydrophytic vegetation present?	<u>Y</u>	Is the sampled area within a wetland?	<u>Y</u>
Hydric soil present?	<u>Y</u>		
Indicators of wetland hydrology present?	<u>Y</u>	If yes, optional wetland site ID:	<u>Wetland 2</u>
Remarks: (Explain alternative procedures here or in a separate report.)			

HYDROLOGY

Primary Indicators (minimum of one is required; check all that apply) ☐ Surface Water (A1) ☐ Water-Stained Leaves (B9) ☐ High Water Table (A2) ☐ Aquatic Fauna (B13) ☒ Saturation (A3) ☐ Marl Deposits (B15) ☐ Water Marks (B1) ☐ Hydrogen Sulfide Odor (C1) ☐ Sediment Deposits (B2) ☐ Oxidized Rhizospheres on Living ☐ Drift Deposits (B3) ☐ Roots (C3) ☐ Algal Mat or Crust (B4) ☐ Presence of Reduced Iron (C4) ☐ Iron Deposits (B5) ☐ Recent Iron Reduction in Tilled ☐ Inundation Visible on Aerial ☐ Soils (C6) ☐ Imagery (B7) ☐ Thin Muck Surface (C7) ☐ Sparsely Vegetated Concave ☐ Other (Explain in Remarks) ☐ Surface (B8) ☐ Microtopographic Relief (D4)		Secondary Indicators (minimum of two required) ☐ Surface Soil Cracks (B6) ☐ Drainage Patterns (B10) ☐ Moss Trim Lines (B16) ☐ Dry-Season Water Table (C2) ☐ Crayfish Burrows (C8) ☐ Saturation Visible on Aerial Imagery ☐ (C9) ☐ Stunted or Stressed Plants (D1) ☐ Geomorphic Position (D2) ☐ Shallow Aquitard (D3) ☐ FAC-Neutral Test (D5) ☐ Microtopographic Relief (D4)
Field Observations: Surface water present? Yes <u> </u> No <u>X</u> Depth (inches): <u> </u> Water table present? Yes <u> </u> No <u>X</u> Depth (inches): <u> </u> Saturation present? Yes <u>X</u> No <u> </u> Depth (inches): <u>0</u> (includes capillary fringe)	Indicators of wetland hydrology present? <u>Y</u>	
Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

US Army Corps of Engineers

Northcentral and Northeast Region

VEGETATION - Use scientific names of plants

						Sampling Point: <u>2-1w</u>		
						50/20 Thresholds		
Tree Stratum	Plot Size (<u>30-ft</u>)	Absolute % Cover	Dominant Species	Indicator Status		Tree Stratum	20%	50%
1	<u>Populus balsamifera</u> -- <u>Balsam Poplar</u>	<u>25</u>	<u>Y</u>	<u>FACW</u>		Sapling/Shrub Stratum	6	15
2	<u>Acer rubrum</u> -- <u>Red Maple</u>	<u>5</u>	<u>N</u>	<u>FAC</u>		Herb Stratum	3	8
3	<u> </u>	<u> </u>	<u> </u>	<u> </u>		Woody Vine Stratum	21	53
4	<u> </u>	<u> </u>	<u> </u>	<u> </u>			0	0
5	<u> </u>	<u> </u>	<u> </u>	<u> </u>		Dominance Test Worksheet		
6	<u> </u>	<u> </u>	<u> </u>	<u> </u>		Number of Dominant Species that are OBL, FACW, or FAC: <u>3</u> (A)		
7	<u> </u>	<u> </u>	<u> </u>	<u> </u>		Total Number of Dominant Species Across all Strata: <u>3</u> (B)		
8	<u> </u>	<u> </u>	<u> </u>	<u> </u>		Percent of Dominant Species that are OBL, FACW, or FAC: <u>100.00%</u> (A/B)		
9	<u> </u>	<u> </u>	<u> </u>	<u> </u>		Prevalence Index Worksheet		
10	<u> </u>	<u>30</u>	<u>=</u>	<u>Total Cover</u>		Total % Cover of:		
						OBL species <u>0</u> x 1 = <u>0</u>		
						FACW species <u>140</u> x 2 = <u>280</u>		
						FAC species <u>10</u> x 3 = <u>30</u>		
						FACU species <u>0</u> x 4 = <u>0</u>		
						UPL species <u>0</u> x 5 = <u>0</u>		
						Column totals <u>150</u> (A) <u>310</u> (B)		
						Prevalence Index = B/A = <u>2.07</u>		
						Hydrophytic Vegetation Indicators:		
						<u> </u> Rapid test for hydrophytic vegetation		
						<u>X</u> Dominance test is >50%		
						<u>X</u> Prevalence index is ≤3.0*		
						Morphological adaptations* (provide supporting data in Remarks or on a separate sheet)		
						<u> </u> Problematic hydrophytic vegetation* (explain)		
						*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic		
						Definitions of Vegetation Strata:		
						Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.		
						Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.		
						Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.		
						Woody vines - All woody vines greater than 3.28 ft in height.		
						Hydrophytic vegetation present? <u>Y</u>		
						Remarks: (Include photo numbers here or on a separate sheet)		
						Note: This data sheet has been adapted to use the 2016 National Wetland Plant List: Lichvar, R.W., D.L. Banks, W.N. Kirchner, and N.C. Melvin. 2016. The National Wetland Plant List: 2016 wetland ratings. Phytoneuron 2016-30: 1-17. Published 28 April 2016. ISSN 2153 733X		

US Army Corps of Engineers

Northcentral and Northeast Region

Sampling Point: 2-1w

[illegible]

**Location: PL=Pore Lining, M=Matrix

Indicators for Problematic Hydric Soils:

- *Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Hydric soil present? Y

Northcentral and Northeast Region

Project/Site: <u>Eveleth-Gilbert-Virginia School</u>	City/County: <u>Eveleth/St. Louis</u>	Sampling Date: <u>6/13/19</u>
Applicant/Owner: <u>Kimley Horn and Associates, Inc.</u>	State: <u>Minnesota</u>	Sampling Point: <u>3-1u</u>
Investigator/s: <u>Bailey Nelson, Erica Massa</u>	Section, Township, Range: <u>S29, T58N, R17W</u>	
Landform (hillslope, terrace, etc.): <u>footslope</u>	Local relief (concave, convex, none): <u>none</u>	
Slope (s): <u>10%</u> Lat.: <u>47.484087</u> Long.: <u>-92.526685</u>	Date: <u>NAD 1983 UTM Zone 15N</u>	
Soil Map Unit Name: <u>Babbitt, bouldery-Hawsten, bouldery-Aqueps, rubbly, complex, 0-8NWH1</u>	Classification: <u>none</u>	
Are climatic/hydrologic conditions of the site typical for this time of the year? <u>Yes</u>	(If no, explain in remarks)	
Are vegetation <u> </u> , soil <u> </u> , or hydrology <u> </u> significantly disturbed?	Are "normal circumstances" present?	<u>Yes</u>
Are vegetation <u> </u> , soil <u> </u> , or hydrology <u> </u> naturally problematic?		
(If needed, explain any answers in remarks)		

Hydrophytic vegetation present?	<u> N </u>	Is the sampled area within a wetland? <u> N </u> If yes, optional wetland site ID: _____
Hydric soil present?	<u> N </u>	
Indicators of wetland hydrology present?	<u> N </u>	
Remarks: (Explain alternative procedures here or in a separate report.)		

Primary Indicators (minimum of one is required; check all that apply)			Secondary Indicators (minimum of two required)		
☐ Surface Water (A1)	☐ Water-Stained Leaves (B9)		☐ Surface Soil Cracks (B6)		
☐ High Water Table (A2)	☐ Aquatic Fauna (B13)		☐ Drainage Patterns (B10)		
☐ Saturation (A3)	☐ Marl Deposits (B15)		☐ Moss Trim Lines (B16)		
☐ Water Marks (B1)	☐ Hydrogen Sulfide Odor (C1)		☐ Dry-Season Water Table (C2)		
☐ Sediment Deposits (B2)	☐ Oxidized Rhizospheres on Living		☐ Crayfish Burrows (C8)		
☐ Drift Deposits (B3)	☐ Roots (C3)		☐ Saturation Visible on Aerial Imagery		
☐ Algal Mat or Crust (B4)	☐ Presence of Reduced Iron (C4)		☐ (C9)		
☐ Iron Deposits (B5)	☐ Recent Iron Reduction in Tilled		☐ Stunted or Stressed Plants (D1)		
☐ Inundation Visible on Aerial	☐ Soils (C6)		☒ Geomorphic Position (D2)		
☐ Imagery (B7)	☐ Thin Muck Surface (C7)		☐ Shallow Aquitard (D3)		
☐ Sparsely Vegetated Concave	☐ Other (Explain in Remarks)		☐ FAC-Neutral Test (D5)		
☐ Surface (B8)			☐ Microtopographic Relief (D4)		

Field Observations: Surface water present? Yes ☐ No ☐ X Depth (inches): Water table present? Yes ☐ No ☐ X Depth (inches): Saturation present? Yes ☐ No ☐ X Depth (inches): (includes capillary fringe)			Indicators of wetland hydrology present? <u> N </u>
Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks:			

Tree Stratum				Plot Size (30' Radius)		Absolute % Cover	Dominant Species	Indicator Status
1	<i>Thuja occidentalis</i>	--	<i>Eastern Arborvitae</i>	10	Y	FACW		
2	--	--						
3	--	--						
4	--	--						
5	--	--						
6	--	--						
7	--	--						
8	--	--						
9	--	--						
10	--	--						
				10	=	Total Cover		
Sapling/Shrub Stratum				Plot Size (15' Radius)		Absolute % Cover	Dominant Species	Indicator Status
1	<i>Corylus cornuta</i>	--	<i>Beaked Hazelnut</i>	5	Y	FACU		
2	--	--						
3	--	--						
4	--	--						
5	--	--						
6	--	--						
7	--	--						
8	--	--						
9	--	--						
10	--	--						
				5	=	Total Cover		
Herb Stratum				Plot Size (5' Radius)		Absolute % Cover	Dominant Species	Indicator Status
1	<i>Eurybia macrophylla</i>	--	<i>Large-Leaf Wood-Aster</i>	30	Y	UPL		
2	<i>Pteridium aquilinum</i>	--	<i>Northern Bracken Fern</i>	10	Y	FACU		
3	--	--						
4	--	--						
5	--	--						
6	--	--						
7	--	--						
8	--	--						
9	--	--						
10	--	--						
11	--	--						
12	--	--						
13	--	--						
14	--	--						
15	--	--						
				40	=	Total Cover		
Woody Vine Stratum				Plot Size (30' Radius)		Absolute % Cover	Dominant Species	Indicator Status
1	--	--						
2	--	--						
3	--	--						
4	--	--						
5	--	--						
				0	=	Total Cover		

50/20 Thresholds

20%

50%

Tree Stratum

2

5

Sapling/Shrub Stratum

1

3

Herb Stratum

8

20

Woody Vine Stratum

0

0

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC:

1

(A)

Total Number of Dominant Species Across all Strata:

4

(B)

Percent of Dominant Species that are OBL, FACW, or FAC:

25.00%

(A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species

0

x 1 =

0

FACW species

10

x 2 =

20

FAC species

0

x 3 =

0

FACU species

15

x 4 =

60

UPL species

30

x 5 =

150

Column totals

55

(A)

230

(B)

Prevalence Index = B/A =

4.18

Hydrophytic Vegetation Indicators:

Rapid test for hydrophytic vegetation

Dominance test is >50%

Prevalence index is $\geq 3.0^*$

Morphological adaptations* (provide supporting data in Remarks or on a separate sheet)

Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Definitions of Vegetation Strata:

Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines - All woody vines greater than 3.28 ft in height.

Hydrophytic vegetation present?

N

Remarks: (Include photo numbers here or on a separate sheet)

Note: This data sheet has been adapted to use the 2012 National Wetland Plant List:

Robert W. Lichvar and John T. Kartesz. 2009. North American Digital Flora: National Wetland Plant List, version 2.4.0 (https://wetland_plants.usace.army.mil/). U.S. Army Corps of Engineers, Engineer Research and Development Center, Cold Regions Research and Engineering Laboratory, Hanover, NH, and BONAP, Chapel Hill, NC. (2012)

[illegible]

US Army Corps of Engineers	Northcentral and Northeast Region	US Army Corps of Engineers	Northcentral and Northeast Region
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Project/Site: Eveleth-Gilbert-Virginia School City/County: Eveleth/St. Louis Sampling Date: 6/13/19
 Applicant/Owner: Kimley-Horn and Associates, Inc. State: Minnesota Sampling Point: 3-1W
 Investigator/s: Bailey Nelson, Erica Massa Section, Township, Range: S29, T58N, R17W
 Landform (hill/slope, terrace, etc.): toeslope Local relief (concave, convex, none): concave
 Slope (cont.): 1% Lat.: 47.484101 Long.: -92.526718 Datum: NAD 1983 UTM Zone 15N
 Soil Map Unit Name: Babbitt, bouldery-Wahstien, bouldery-Aguets, rubbly, complex, 0-8 NWVI classification: none
 Are climatic/hydrologic conditions of the site typical for this time of the year? Yes (If no, explain in remarks)
 Are vegetation _____, soil _____, or hydrology _____ significantly disturbed? Are "normal
 Are vegetation _____, soil _____, or hydrology _____ naturally problematic? circumstances" present? Yes
 (If needed, explain any answers in remarks)

Hydrophytic vegetation present?	<u>Y</u>	Is the sampled area within a wetland? <u>Y</u> If yes, optional wetland site ID: <u>Wetland 3</u>
Hydric soil present?	<u>Y</u>	
Indicators of wetland hydrology present?	<u>Y</u>	
Remarks: (Explain alternative procedures here or in a separate report.)		

Primary Indicators (minimum of one is required; check all that apply)				Secondary Indicators (minimum of two required)			
☐ Surface Water (A1)	☐	☐ Water-Stained Leaves (B9)	☐	☐ Surface Soil Cracks (B6)	☐	☐	☐
☐ High Water Table (A2)	☐	☐ Aquatic Fauna (B13)	☐	☐ Drainage Patterns (B10)	☐	☐	☐
☒ Saturation (A3)	☐	☐ Marl Deposits (B15)	☐	☐ Moss Trim Lines (B16)	☐	☐	☐
☐ Water Marks (B1)	☐	☐ Hydrogen Sulfide Odor (C1)	☐	☐ Dry-Season Water Table (C2)	☐	☐	☐
☐ Sediment Deposits (B2)	☐	☐ Oxidized Rhizospheres on Living	☐	☐ Crayfish Burrows (C8)	☐	☐	☐
☐ Drift Deposits (B3)	☐	☐ Roots (C3)	☐	☐ Saturation Visible on Aerial Imagery	☐	☐	☐
☐ Algal Mat or Crust (B4)	☐	☐ Presence of Reduced Iron (C4)	☐	☐ (C9)	☐	☐	☐
☐ Iron Deposits (B5)	☐	☐ Recent Iron Reduction in Tilled	☐	☐ Stunted or Stressed Plants (D1)	☐	☐	☐
☐ Inundation Visible on Aerial	☐	☐ Soils (C6)	☐	☒ Geomorphic Position (D2)	☐	☐	☐
☐ Imagery (B7)	☐	☐ Thin Muck Surface (C7)	☐	☐ Shallow Aquitard (D3)	☐	☐	☐
☐ Sparsely Vegetated Concave	☐	☐ Other (Explain in Remarks)	☐	☐ FAC-Neutral Test (D5)	☐	☐	☐
☐ Surface (B8)	☐		☐	☐ Microtopographic Relief (D4)	☐	☐	☐

Field Observations:				Indicators of wetland hydrology present? <u> Y </u>						
Surface water present?	Yes	☐	No					☒	Depth (inches):	<u> </u>
Water table present?	Yes	☐	No					☒	Depth (inches):	<u> </u>
Saturation present?	Yes	☒	No					☐	Depth (inches):	<u> 0 </u>
(includes capillary fringe)										
Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:										
Remarks:										

Tree Stratum				Plot Size (30' Radius)			50/20 Thresholds		
				Absolute % Cover	Dominant Species	Indicator Status	20%	50%	
1	<i>Thuja occidentalis</i>	--	<i>Eastern Arborvitae</i>	20	Y	FACW	Tree Stratum	5 13	
2	<i>Abies balsamea</i>	--	<i>Balsam Fir</i>	5	Y	FAC	Sapling/Shrub Stratum	2 5	
3	--	--	--				Herb Stratum	4 11	
4	--	--	--				Woody Vine Stratum	0 0	
5	--	--	--				Dominance Test Worksheet		
6	--	--	--				Number of Dominant Species that are OBL, FACW, or FAC: <u>5</u> (A)		
7	--	--	--				Total Number of Dominant Species Across all Strata: <u>5</u> (B)		
8	--	--	--				Percent of Dominant Species that are OBL, FACW, or FAC: <u>100.00%</u> (A/B)		
9	--	--	--						
10	--	--	--	<u>25</u>	=	Total Cover			
Sapling/Shrub Stratum				Plot Size (15' Radius)					
1	<i>Fraxinus pennsylvanica</i>	--	<i>Green Ash</i>	10	Y	FACW			
2	--	--	--						
3	--	--	--						
4	--	--	--						
5	--	--	--						
6	--	--	--						
7	--	--	--						
8	--	--	--						
9	--	--	--						
10	--	--	--	<u>10</u>	=	Total Cover			
Herb Stratum				Plot Size (5' Radius)					
1	<i>Petasites frigidus</i>	--	<i>Arctic Sweet-Coll's-Foot</i>	15	Y	FACW			
2	<i>Athyrium filix-femina</i>	--	<i>Lady Fern</i>	5	Y	FAC			
3	<i>Rubus pubescens</i>	--	<i>Dwarf Red Raspberry</i>	2	N	FACW			
4	--	--	--						
5	--	--	--						
6	--	--	--						
7	--	--	--						
8	--	--	--						
9	--	--	--						
10	--	--	--						
11	--	--	--						
12	--	--	--						
13	--	--	--						
14	--	--	--						
15	--	--	--	<u>22</u>	=	Total Cover			
Woody Vine Stratum				Plot Size (30' Radius)					
1	--	--	--						
2	--	--	--						
3	--	--	--						
4	--	--	--						
5	--	--	--	<u>0</u>	=	Total Cover			
Remarks: (Include photo numbers here or on a separate sheet)									
Note: This data sheet has been adapted to use the 2012 National Wetland Plant List: Robert W. Lichvar and John T. Kartesz. 2009. North American Digital Flora: National Wetland Plant List, version 2.0 (https://wetland_plants.usace.army.mil). U.S. Army Corps of Engineers, Engineer Research and Development Center, Cold Regions Research and Engineering Laboratory, Hanover, NH, and BONAP, Chapel Hill, NC. (2012)									

Sampling Point: 3-1w

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

*Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains
 **Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

Indicators for Problematic Hydric Soils:

- | | | |
|---|----------------------------|--|
| ☐ Histosol (A1) | Polyvalue Below Surface | ☐ 2 cm Muck (A10) (LRR K, L, MLRA 149B |
| ☐ Histic Epipedon (A2) | (S8) (LRR R, MLRA 149B) | ☐ Coast Prairie Redox (A16) (LRR K, L, R) |
| ☐ Black Histic (A3) | Thin Dark Surface (S9) | ☐ 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) |
| ☐ Hydrogen Sulfide (A4) | (LRR R, MLRA 149B | ☐ Dark Surface (S7) (LRR K, L) |
| ☐ Stratified Layers (A5) | Loamy Mucky Mineral (F1) | ☐ Polyvalue Below Surface (S8) (LRR K, L) |
| ☐ Depleted Below Dark Surface (A11) | (LRR K, L) | ☐ Thin Dark Surface (S9) (LRR K, L) |
| ☐ Thick Dark Surface (A12) | Loamy Gleyed Matrix (F2) | ☐ Iron-Manganese Masses (F12) (LRR K, L, R) |
| ☐ Sandy Mucky Mineral (S1) | Depleted Matrix (F3) | ☐ Piedmont Floodplain Soils (F19) (MLRA 149B) |
| ☐ Sandy Gleyed Matrix (S4) | Redox Dark Surface (F6) | ☐ Mesic Sodic (TA6) (MLRA 144A, 145, 149B) |
| ☐ Sandy Redox (S5) | Depleted Dark Surface (F7) | ☐ Red Parent Material (TF2) |
| ☐ Stripped Matrix (S6) | Redox Depressions (F8) | ☐ Very Shallow Dark Surface (TF12) |
| ☐ Dark Surface (S7) (LRR R, MLRA 149B) | | ☒ Other (Explain in Remarks) |

*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):

Type: Rock
Depth (inches): 3

Hydric soil present? Y

Remarks:

Rocky swale within Northern white cedar stand. Soils were not deep enough to confirm a positive hydric soils indicator. Hydric soils were presumed based on the presence of saturation to the soil surface and dominance of hydrophytic plant species.

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WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site:	Eveleth-Gilbert-Virginia School		City/County:	Eveleth/St. Louis	Sampling Date:	6/13/19
Applicant/Owner:	Kimley-Horn and Associates, Inc.		State:	Minnesota	Sampling Point:	4-1u
Investigator/s:	Bailey Nelson, Ericka Massa		Section, Township, Range:	S29, T58N, R17W		
Landform (hill/slope, terrace, etc.):	foothole		Local relief (concave, convex, none):	none		
Slope (°):	5%	Lat.: 47.483083	Long.: -92.526229	Date:	NAD 1983 UTM Zone 15N	
Soil Map Unit Name:	Babbitt, bouldery-Wahlisten, bouldery-Aquepts, rubbly, complex, 0-8NW1 Classification: none					
Are climatic/hydrologic conditions of the site typical for this time of the year?				Yes (If no, explain in remarks)		
Are vegetation _____, soil _____, or hydrology _____ significantly disturbed?				Are "normal circumstances" present?		
Are vegetation _____, soil _____, or hydrology _____ naturally problematic?				Yes		
(If needed, explain any answers in remarks)						

SUMMARY OF FINDINGS

Hydrophytic vegetation present?	<u> N </u>	Is the sampled area within a wetland? <u> N </u> If yes, optional wetland site ID: _____
Hydric soil present?	<u> N </u>	
Indicators of wetland hydrology present?	<u> N </u>	
Remarks: (Explain alternative procedures here or in a separate report.)		

HYDROLOGY

Primary Indicators (minimum of one is required; check all that apply)				Secondary Indicators (minimum of two required)	
☐ Surface Water (A1)	☐ Water-Stained Leaves (B9)	☐ Surface Soil Cracks (B6)			
☐ High Water Table (A2)	☐ Aquatic Fauna (B13)	☐ Drainage Patterns (B10)			
☐ Saturation (A3)	☐ Marl Deposits (B15)	☐ Moss Trim Lines (B16)			
☐ Water Marks (B1)	☐ Hydrogen Sulfide Odor (C1)	☐ Dry-Season Water Table (C2)			
☐ Sediment Deposits (B2)	☐ Oxidized Rhizospheres on Living	☐ Crayfish Burrows (C8)			
☐ Drift Deposits (B3)	☐ Roots (C3)	☐ Saturation Visible on Aerial Imagery			
☐ Algal Mat or Crust (B4)	☐ Presence of Reduced Iron (C4)	☐ (C9)			
☐ Iron Deposits (B5)	☐ Recent Iron Reduction in Tilled	☐ Stunted or Stressed Plants (D1)			
☐ Inundation Visible on Aerial	☐ Soils (C6)	☐ Geomorphic Position (D2)			
☐ Imagery (B7)	☐ Thin Muck Surface (C7)	☐ Shallow Aquitard (D3)			
☐ Sparsely Vegetated Concave	☐ Other (Explain in Remarks)	☐ FAC-Neutral Test (D5)			
☐ Surface (B8)		☐ Microtopographic Relief (D4)			
Field Observations: Surface water present? Yes ☐ No ☐ X Depth (inches): Water table present? Yes ☐ No ☐ X Depth (inches): Saturation present? Yes ☐ No ☐ X Depth (inches): (includes capillary fringe)			Indicators of wetland hydrology present? N		
Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:					
Remarks:					

VEGETATION - Use scientific names of plants

Tree Stratum				Plot Size (30' Radius)		Absolute % Cover	Dominant Species	Indicator Status
1	<i>Acer rubrum</i>	--	<i>Red Maple</i>		20	Y	FAC	
2	<i>Abies balsamea</i>	--	<i>Balsam Fir</i>		5	Y	FAC	
3		--						
4		--						
5		--						
6		--						
7		--						
8		--						
9		--						
10		--			25	= Total Cover		

Sapling/Shrub Stratum		Plot Size (15' Radius)		Absolute % Cover	Dominant Species	Indicator Status
1		--				
2		--				
3		--				
4		--				
5		--				
6		--				
7		--				
8		--				
9		--				
10		--			0	= Total Cover

Herb Stratum		Plot Size (5' Radius)		Absolute % Cover	Dominant Species	Indicator Status
1	<i>Eurybia macrophylla</i>	--	<i>Large-Leaf Wood-Aster</i>	20	Y	UPL
2	<i>Pteridium aquilinum</i>	--	<i>Northern Bracken Fern</i>	10	Y	FACU
3	<i>Clintonia borealis</i>	--	<i>Yellow Bluebead-Lily</i>	5	N	FAC
4	<i>Maianthemum canadense</i>	--	<i>False Lily-of-the-Valley</i>	5	N	UPL
5	<i>Anemone quinquefolia</i>	--	<i>Nightcups</i>	2	N	FACU
6	<i>Trientalis borealis</i>	--	<i>Maystar</i>	2	N	FAC
7	<i>Maianthemum racemosum</i>	--	<i>Feathery False Solomon's-Seal</i>	2	N	FACU
8		--				
9		--				
10		--				
11		--				
12		--				
13		--				
14		--				
15		--			46	= Total Cover

Woody Vine Stratum		Plot Size (30' Radius)		Absolute % Cover	Dominant Species	Indicator Status
1		--				
2		--				
3		--				
4		--				
5		--				
				0	= Total Cover	

50/20 Thresholds		20%	50%
Tree Stratum		5	13
Sapling/Shrub Stratum		0	0
Herb Stratum		9	23
Woody Vine Stratum		0	0

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across all Strata: 4 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 50.00% (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	32	x 3 =	96
FACU species	14	x 4 =	56
UPL species	25	x 5 =	125
Column totals	71	(A)	277 (B)

Prevalence Index = B/A = 3.90

Hydrophytic Vegetation Indicators:

☐ Rapid test for hydrophytic vegetation
☐ Dominance test >50%
☐ Prevalence index is ≤3.0*

Morphological adaptations* (provide supporting data in Remarks or on a separate sheet)

Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Definitions of Vegetation Strata:

Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines - All woody vines greater than 3.28 ft in height.

Hydrophytic vegetation present?

N

Remarks: (Include photo numbers here or on a separate sheet)

Note: This data sheet has been adapted to use the 2012 National Wetland Plant List:

Robert W. Lichvar and John T. Kartesz. 2009. North American Digital Flora: National Wetland Plant List, version 2.4.0 (https://wetland_plants.usace.army.mil/). U.S. Army Corps of Engineers, Engineer Research and Development Center, Cold Regions Research and Engineering Laboratory, Hanover, NH, and BONAP, Chapel Hill, NC. (2012)

Sampling Point: 4-1u

[illegible]

**Location: PL=Pore Lining, M=Matrix

Indicators for Problematic Hydric Soils:

- *Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Hydric soil present? N

Remarks:

Northcentral and Northeast Region

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site:	<u>Eveleth-Gilbert-Virginia School</u>	City/County:	<u>Eveleth/St. Louis</u>	Sampling Date:	<u>6/13/19</u>
Applicant/Owner:	<u>Kimley-Horn and Associates, Inc.</u>	State:	<u>Minnesota</u>	Sampling Point:	<u>4-1W</u>
Investigator(s):	<u>Bailey Nelson, Ericka Massa</u>	Section, Township, Range:	<u>S29, T58N, R17W</u>		
Landowner (hillside, terrace, etc.):	<u>toeslope</u>	Local relief (concave, convex, none):	<u>none</u>		
Slope (0% - 0.1%):	<u>Lat. 47.483109</u>	Long.: <u>-92.526276</u>	Datum:	<u>NAD 1983 UTM Zone 15N</u>	
Soil Map Unit Name:	<u>Babbitt, bouldery-Wahlsten, bouldery-Aguets, rubbly, complex, 0-8NWI</u>				
Classification:	<u>none</u>				
Are climatic/hydrologic conditions of the site typical for this time of the year? <u>Yes</u> (If no, explain in remarks)					
Are vegetation <u> </u> , soil <u> </u> , or hydrology <u> </u> significantly disturbed?			Are "normal circumstances" present? <u>Yes</u>		
Are vegetation <u> </u> , soil <u> </u> , or hydrology <u> </u> naturally problematic?					
(If needed, explain any answers in remarks)					

SUMMARY OF FINDINGS

Hydrophytic vegetation present?	<u>Y</u>	Is the sampled area within a wetland? <u>Y</u> If yes, optional wetland site ID: <u>Wetland 4</u>
Hydric soil present?	<u>Y</u>	
Indicators of wetland hydrology present?	<u>Y</u>	
Remarks: (Explain alternative procedures here or in a separate report.)		

HYDROLOGY

Primary Indicators (minimum of one is required; check all that apply)			Secondary Indicators (minimum of two required)		
☐	Surface Water (A1)	☐	Water-Stained Leaves (B9)	☐	Surface Soil Cracks (B6)
☒	High Water Table (A2)	☐	Aquatic Fauna (B13)	☐	Drainage Patterns (B10)
☒	Saturation (A3)	☐	Marl Deposits (B15)	☐	Moss Trim Lines (B16)
☐	Water Marks (B1)	☐	Hydrogen Sulfide Odor (C1)	☐	Dry-Season Water Table (C2)
☐	Sediment Deposits (B2)	☐	Oxidized Rhizospheres on Living	☐	Crayfish Burrows (C8)
☐	Drift Deposits (B3)	☐	Roots (C3)	☐	Saturation Visible on Aerial Imagery
☐	Algal Mat or Crust (B4)	☐	Presence of Reduced Iron (C4)	☐	(C9)
☐	Iron Deposits (B5)	☐	Recent Iron Reduction in Tilled	☐	Stunted or Stressed Plants (D1)
☐	Inundation Visible on Aerial	☐	Soils (C6)	☒	Geomorphic Position (D2)
☐	Imagery (B7)	☐	Thin Muck Surface (C7)	☐	Shallow Aquitard (D3)
☐	Sparsely Vegetated Concave	☐	Other (Explain in Remarks)	☐	FAC-Neutral Test (D5)
☐	Surface (B8)			☐	Microtopographic Relief (D4)

Field Observations:				Indicators of wetland hydrology present?
Surface water present?	Yes ☐	No ☒	Depth (inches):	
Water table present?	Yes ☒	No ☐	Depth (inches):	
Saturation present?	Yes ☒	No ☐	Depth (inches):	
(includes capillary fringe)				Y ☐

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION - Use scientific names of plants

50/20 Thresholds						20%	50%
Tree Stratum	Plot Size (30' Radius)	Absolute % Cover	Dominant Species	Indicator Status	Tree Stratum	5	13
1	<i>Fraxinus pennsylvanica</i> -- Green Ash	15	Y	FACW	Sapling/Shrub Stratum	3	8
2	<i>Abies balsamea</i> -- Balsam Fir	10	Y	FAC	Herb Stratum	5	13
3	--				Woody Vine Stratum	0	0
4	--						
5	--						
6	--						
7	--						
8	--						
9	--						
10	--						
		25	=	Total Cover			
Sapling/Shrub Stratum	Plot Size (15' Radius)	Absolute % Cover	Dominant Species	Indicator Status			
1	<i>Fraxinus pennsylvanica</i> -- Green Ash	10	Y	FACW			
2	<i>Alnus incana</i> -- Speckled Alder	5	Y	FACW			
3	--						
4	--						
5	--						
6	--						
7	--						
8	--						
9	--						
10	--						
		15	=	Total Cover			
Herb Stratum	Plot Size (5' Radius)	Absolute % Cover	Dominant Species	Indicator Status			
1	<i>Rubus pubescens</i> -- Dwarf Red Raspberry	7	Y	FACW			
2	<i>Viola cucullata</i> -- Marsh Blue Violet	7	Y	OBL			
3	<i>Petasites frigidus</i> -- Arctic Sweet-Coll's-Foot	5	N	FACW			
4	<i>Trientalis borealis</i> -- Maystar	5	N	UPL			
5	<i>Athyrium filix-femina</i> -- Lady Fern	2	N	FAC			
6	--						
7	--						
8	--						
9	--						
10	--						
11	--						
12	--						
13	--						
14	--						
15	--						
		26	=	Total Cover			
Woody Vine Stratum	Plot Size (30' Radius)	Absolute % Cover	Dominant Species	Indicator Status			
1	--						
2	--						
3	--						
4	--						
5	--						
		0	=	Total Cover			

Remarks: (Include photo numbers here or on a separate sheet)

Note: This data sheet has been adapted to use the 2012 National Wetland Plant List:

Robert W. Lichvar and John T. Kartesz. 2009. North American Digital Flora: National Wetland Plant List, version 2.4.0 (<https://wetland.plants.usace.army.mil/>). U.S. Army Corps of Engineers, Engineer Research and Development Center, Cold Regions Research and Engineering Laboratory, Hanover, NH, and BONAP, Chapel Hill, NC. (2012)

Sampling Point: 4-1w

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WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site:	<u>Eveleth-Gilbert-Virginia School</u>	City/County:	<u>Eveleth/St. Louis</u>	Sampling Date:	<u>6/13/19</u>
Applicant/Owner:	<u>Kimley-Horn and Associates, Inc.</u>	State:	<u>Minnesota</u>	Sampling Point:	<u>5-1u</u>
Investigator(s):	<u>Bailey Nelson, Ericka Massa</u>	Section, Township, Range:	<u>S29, T58N, R17W</u>		
Landform (hillslope, terrace, etc.):	<u>footslope</u>	Local relief (concave, convex, none):	<u>none</u>		
Slope (°):	<u>10%</u>	Lat.:	<u>47.48325</u>	Long.:	<u>-92.52703</u>
		Datum:	<u>NAD 1983 UTM Zone 15N</u>		
Soil Map Unit Name:	<u>Babbitt, bouldery-Wahstien, bouldery-Aquepts, rubbly, complex, 0-8NWI Classification: none</u>				
Are climatic/hydrologic conditions of the site typical for this time of the year?	<u>Yes</u> (If no, explain in remarks)				
Are vegetation <u> </u> , soil <u> </u> , or hydrology <u> </u> significantly disturbed?	<u>Are "normal circumstances" present?</u>				
Are vegetation <u> </u> , soil <u> </u> , or hydrology <u> </u> naturally problematic?	<u>Yes</u>				
(If needed, explain any answers in remarks)					

SUMMARY OF FINDINGS

Hydrophytic vegetation present?	<u> N </u>	Is the sampled area within a wetland? <u> N </u> If yes, optional wetland site ID: _____
Hydric soil present?	<u> Y </u>	
Indicators of wetland hydrology present?	<u> N </u>	
Remarks: (Explain alternative procedures here or in a separate report.)		

HYDROLOGY

Primary Indicators (minimum of one is required; check all that apply)						Secondary Indicators (minimum of two required)	
☐ Surface Water (A1)		☐ Water-Stained Leaves (B9)		☐ Surface Soil Cracks (B6)			
☐ High Water Table (A2)		☐ Aquatic Fauna (B13)		☐ Drainage Patterns (B10)			
☐ Saturation (A3)		☐ Marl Deposits (B15)		☐ Moss Trim Lines (B16)			
☐ Water Marks (B1)		☐ Hydrogen Sulfide Odor (C1)		☐ Dry-Season Water Table (C2)			
☐ Sediment Deposits (B2)		☐ Oxidized Rhizospheres on Living		☐ Crayfish Burrows (C8)			
☐ Drift Deposits (B3)		☐ Roots (C3)		☐ Saturation Visible on Aerial Imagery			
☐ Algal Mat or Crust (B4)		☐ Presence of Reduced Iron (C4)		☐ (C9)			
☐ Iron Deposits (B5)		☐ Recent Iron Reduction in Tilled		☐ Stunted or Stressed Plants (D1)			
☐ Inundation Visible on Aerial		☐ Soils (C6)		☐ Geomorphic Position (D2)			
☐ Imagery (B7)		☐ Thin Muck Surface (C7)		☐ Shallow Aquitard (D3)			
☐ Sparsely Vegetated Concave		☐ Other (Explain in Remarks)		☐ FAC-Neutral Test (D5)			
☐ Surface (B8)				☐ Microtopographic Relief (D4)			
Field Observations:						Indicators of wetland hydrology present? <u> N </u>	
Surface water present?	Yes ☐	No ☒	X Depth (inches):	<u> </u>			
Water table present?	Yes ☐	No ☒	X Depth (inches):	<u> </u>			
Saturation present? (includes capillary fringe)	Yes ☐	No ☒	X Depth (inches):	<u> </u>			
Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:							
Remarks:							

VEGETATION - Use scientific names of plants

Tree Stratum				Plot Size (30' Radius)		Absolute % Cover	Dominant Species	Indicator Status	50/20 Thresholds	
1	<i>Acer rubrum</i>	--	Red Maple	15	Y	FAC	Tree Stratum	20%	50%	
2	<i>Abies balsamea</i>	--	Balsam Fir	5	Y	FAC	Sapling/Shrub Stratum	3	8	
3	--	--	--				Herb Stratum	12	30	
4	--	--	--				Woody Vine Stratum	0	0	
5	--	--	--				Dominance Test Worksheet			
6	--	--	--				Number of Dominant Species that are OBL, FACW, or FAC: <u>3</u> (A)			
7	--	--	--				Total Number of Dominant Species Across all Strata: <u>6</u> (B)			
8	--	--	--				Percent of Dominant Species that are OBL, FACW, or FAC: <u>50.00%</u> (A/B)			
9	--	--	--							
10	--	--	--	20	= Total Cover					
Sapling/Shrub Stratum				Plot Size (15' Radius)		Absolute % Cover	Dominant Species	Indicator Status		
1	<i>Populus tremuloides</i>	--	Quaking Aspen	15	Y	FAC				
2	--	--	--							
3	--	--	--							
4	--	--	--							
5	--	--	--							
6	--	--	--							
7	--	--	--							
8	--	--	--							
9	--	--	--							
10	--	--	--	15	= Total Cover					
Herb Stratum				Plot Size (5' Radius)		Absolute % Cover	Dominant Species	Indicator Status		
1	<i>Eurybia macrophylla</i>	--	Large-Leaf Wood-Aster	20	Y	UPL				
2	<i>Pteridium aquilinum</i>	--	Northern Bracken Fern	15	Y	FACU				
3	<i>Maianthemum canadense</i>	--	False Lily-of-the-Valley	15	Y	FACU				
4	<i>Cornus canadensis</i>	--	Canadian Bunchberry	5	N	FAC				
5	<i>Hieracium aurantiacum</i>	--	Orange Hawkweed	5	N	UPL				
6	--	--	--							
7	--	--	--							
8	--	--	--							
9	--	--	--							
10	--	--	--							
11	--	--	--							
12	--	--	--							
13	--	--	--							
14	--	--	--							
15	--	--	--	60	= Total Cover					
Woody Vine Stratum				Plot Size (30' Radius)		Absolute % Cover	Dominant Species	Indicator Status		
1	--	--	--							
2	--	--	--							
3	--	--	--							
4	--	--	--							
5	--	--	--							
				0	= Total Cover					
Prevalence Index Worksheet Total % Cover of: OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>0</u> x 2 = <u>0</u> FAC species <u>40</u> x 3 = <u>120</u> FACU species <u>30</u> x 4 = <u>120</u> UPL species <u>25</u> x 5 = <u>125</u> Column totals <u>95</u> (A) <u>365</u> (B) Prevalence Index = B/A = <u>3.84</u>										
Hydrophytic Vegetation Indicators: ___ Rapid test for hydrophytic vegetation ___ Dominance test is >50% ___ Prevalence index is >3.0* Morphological adaptations* (provide supporting data in Remarks or on a separate sheet) ___ Problematic hydrophytic vegetation* (explain) *Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic										
Definitions of Vegetation Strata: Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines - All woody vines greater than 3.28 ft in height.										
Hydrophytic vegetation present? <u>N</u>										
Remarks: (Include photo numbers here or on a separate sheet)										

Note: This data sheet has been adapted to use the 2012 National Wetland Plant List:

Robert W. Lichvar and John T. Kartesz. 2009. North American Digital Flora: National Wetland Plant List, version 2.4.0 (<https://wetland.plants.usace.army.mil/>). U.S. Army Corps of Engineers, Engineer Research and Development Center, Cold Regions Research and Engineering Laboratory, Hanover, NH, and BONAP, Chapel Hill, NC. (2012)

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US Army Corps of Engineers

US Army Corps of Engineers

Northcentral and Northeast Region

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: <u>Eveleth-Gilbert-Virginia School</u>		City/County: <u>Eveleth/St. Louis</u>		Sampling Date: <u>6/13/19</u>	
Applicant/Owner: <u>Kimley-Horn and Associates, Inc.</u>		State: <u>Minnesota</u>		Sampling Point: <u>5-1w</u>	
Investigator(s): <u>Bailey Nelson, Ericka Massa</u>		Section, Township, Range: <u>S29, T58N, R17W</u>			
Location (hillside, terrace, etc.): <u>toeslope</u>		Local relief (concave, convex, none): <u>concave</u>			
Slope (ft): <u>1%</u>		Lat.: <u>47.483288</u>		Long.: <u>-92.526924</u>	
		Datum: <u>NAD 1983 UTM Zone 15N</u>			
Soil Map Unit Name: <u>Babbitt, bouldery-Hawfless, bouldery-Aquepts, rubbly, complex, 0-8NWI Classification, none</u>					
Are climatic/hydrologic conditions of the site typical for this time of the year? <u>Yes</u> (If no, explain in remarks)					
Are vegetation <u> </u> , soil <u> </u> , or hydrology <u> </u> significantly disturbed? <u>Are "normal</u>					
Are vegetation <u> </u> , soil <u> </u> , or hydrology <u> </u> naturally problematic? <u>circumstances</u> present? <u>Yes</u>					
(If needed, explain any answers in remarks)					

SUMMARY OF FINDINGS

Hydrophytic vegetation present? <u>Y</u> Hydric soil present? <u>Y</u> Indicators of wetland hydrology present? <u>Y</u>	Is the sampled area within a wetland? <u>Y</u> If yes, optional wetland site ID: <u>Wetland 5</u>
Remarks: (Explain alternative procedures here or in a separate report.)	

HYDROLOGY

Primary Indicators (minimum of one is required; check all that apply) ☐ Surface Water (A1) ☐ Water-Stained Leaves (B9) ☐ High Water Table (A2) ☐ Aquatic Fauna (B13) ☒ Saturation (A3) ☐ Marl Deposits (B15) ☐ Water Marks (B1) ☐ Hydrogen Sulfide Odor (C1) ☐ Sediment Deposits (B2) ☐ Oxidized Rhizospheres on Living ☐ Drift Deposits (B3) ☐ Roots (C3) ☐ Algal Mat or Crust (B4) ☐ Presence of Reduced Iron (C4) ☐ Iron Deposits (B5) ☐ Recent Iron Reduction in Tilled ☐ Inundation Visible on Aerial ☐ Soils (C6) Imagery (B7) ☐ Thin Muck Surface (C7) ☐ Sparsely Vegetated Concave ☐ Other (Explain in Remarks) Surface (B8)			Secondary Indicators (minimum of two required) ☐ Surface Soil Cracks (B6) ☐ Drainage Patterns (B10) ☐ Moss Trim Lines (B16) ☐ Dry-Season Water Table (C2) ☐ Crayfish Burrows (C8) ☐ Saturation Visible on Aerial Imagery (C9) ☐ Stunted or Stressed Plants (D1) ☒ X Geomorphic Position (D2) ☐ Shallow Aquitard (D3) ☐ FAC-Neutral Test (D5) ☐ Microtopographic Relief (D4)		
Field Observations: Surface water present? Yes ☐ No ☒ Depth (inches): Water table present? Yes ☐ No ☒ Depth (inches): Saturation present? Yes ☒ No ☐ Depth (inches): 0 (includes capillary fringe)			Indicators of wetland hydrology present? ☒ Y		
Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:					
Remarks:					

VEGETATION - Use scientific names of plants

Tree Stratum				Plot Size (30' Radius)		Absolute % Cover	Dominant Species	Indicator Status
1	<i>Populus tremuloides</i>	--	<i>Quaking Aspen</i>	10	Y	FAC		
2	<i>Thuja occidentalis</i>	--	<i>Eastern Arborvitae</i>	5	Y	FACW		
3	--	--	--					
4	--	--	--					
5	--	--	--					
6	--	--	--					
7	--	--	--					
8	--	--	--					
9	--	--	--					
10	--	--	--	15	=	Total Cover		

Sapling/Shrub Stratum				Plot Size (15' Radius)		Absolute % Cover	Dominant Species	Indicator Status
1	<i>Populus tremuloides</i>	--	<i>Quaking Aspen</i>	10	Y	FAC		
2	<i>Salix petiolaris</i>	--	<i>Meadow Willow</i>	5	Y	FACW		
3	--	--	--					
4	--	--	--					
5	--	--	--					
6	--	--	--					
7	--	--	--					
8	--	--	--					
9	--	--	--					
10	--	--	--	15	=	Total Cover		

Herb Stratum				Plot Size (5' Radius)		Absolute % Cover	Dominant Species	Indicator Status
1	<i>Calamagrostis canadensis</i>	--	<i>Bluejoint</i>	20	Y	OBL		
2	<i>Carex stricta</i>	--	<i>Upright Sedge</i>	20	Y	OBL		
3	<i>Equisetum fluviatile</i>	--	<i>Water Horsetail</i>	15	Y	OBL		
4	<i>Typha latifolia</i>	--	<i>Broad-Leaf Cat-Tail</i>	5	N	OBL		
5	--	--	--					
6	--	--	--					
7	--	--	--					
8	--	--	--					
9	--	--	--					
10	--	--	--					
11	--	--	--					
12	--	--	--					
13	--	--	--					
14	--	--	--					
15	--	--	--	60	=	Total Cover		

Woody Vine Stratum				Plot Size (30' Radius)		Absolute % Cover	Dominant Species	Indicator Status
1	--	--	--					
2	--	--	--					
3	--	--	--					
4	--	--	--					
5	--	--	--					
	--	--	--	0	=	Total Cover		

50/20 Thresholds

Tree Stratum	20%	50%
Sapling/Shrub Stratum	3	8
Herb Stratum	12	30
Woody Vine Stratum	0	0

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC:	7	(A)
Total Number of Dominant Species Across all Strata:	7	(B)
Percent of Dominant Species that are OBL, FACW, or FAC:	100.00%	(A/B)

Prevalence Index Worksheet

Total % Cover of:	
OBL species	60 x 1 = 60
FACW species	10 x 2 = 20
FAC species	20 x 3 = 60
FACU species	0 x 4 = 0
UPL species	0 x 5 = 0
Column totals	90 (A) 140 (B)
Prevalence Index = B/A =	1.56

Hydrophytic Vegetation Indicators:

☒ Rapid test for hydrophytic vegetation
☒ Dominance test is >50%
☒ Prevalence index is $\geq 3.0^*$
Morphological adaptations* (provide supporting data in Remarks or on a separate sheet)
Problematic hydrophytic vegetation* (explain)
*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Definitions of Vegetation Strata:

Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.
Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
Woody vines - All woody vines greater than 3.28 ft in height.

Hydrophytic vegetation present?	Y
---------------------------------	---

Remarks: (Include photo numbers here or on a separate sheet)

Note: This data sheet has been adapted to use the 2012 National Wetland Plant List:
 Robert W. Lichvar and John T. Kartesz. 2009. North American Digital Flora: National Wetland Plant List, version 2.4.0 (https://wetland_plants.usace.army.mil). U.S. Army Corps of Engineers, Engineer Research and Development Center, Cold Regions Research and Engineering Laboratory, Hanover, NH, and BONAP, Chapel Hill, NC. (2012)

Sampling Point: 5-1w

[illegible]

**Location: PL=Pore Lining, M=Matrix

Indicators for Problematic Hydric Soils:

- *Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Hydric soil present? Y

Remarks:

Northcentral and Northeast Region

Project/Site:	<u>Eveleth-Gilbert-Virginia School</u>		City/County:	<u>Eveleth/St. Louis</u>	Sampling Date:	<u>6/13/19</u>	
Applicant/Owner:	<u>Kimley-Horn and Associates, Inc.</u>		State:	<u>Minnesota</u>	Sampling Point:	<u>6-1u</u>	
Investigator/s:	<u>Bailey Nelson, Ericka Massa</u>		Section, Township, Range:	<u>S29, T58N, R17W</u>			
Landform (hill/slope, terrace, etc.):	<u>footslope</u>	Local relief (concave, convex, none):	<u>none</u>				
Slope (%) :	<u>10%</u>	Lat.:	<u>47.483111</u>	Long.:	<u>-92.523916</u>	Date:	<u>NAD 1983 UTM Zone 15N</u>
Soil Map Unit Name:	<u>Dora mucky peat, Hibbing catena, 0-1% slopes</u>		NW1 Classification: <u>none</u>				
Are climatic/hydrologic conditions of the site typical for this time of the year?				<u>Yes</u>	(If no, explain in remarks)		
Are vegetation _____, soil _____, or hydrology _____	significantly disturbed?			Are "normal circumstances" present?		<u>Yes</u>	
Are vegetation _____, soil _____, or hydrology _____	naturally problematic?						
(If needed, explain any answers in remarks)							

Hydrophytic vegetation present?	<u> N </u>	Is the sampled area within a wetland? <u> N </u> If yes, optional wetland site ID: _____
Hydric soil present?	<u> N </u>	
Indicators of wetland hydrology present?	<u> N </u>	
Remarks: (Explain alternative procedures here or in a separate report.)		

Primary Indicators (minimum of one is required; check all that apply) ☐ Surface Water (A1) ☐ Water-Stained Leaves (B9) ☐ High Water Table (A2) ☐ Aquatic Fauna (B13) ☐ Saturation (A3) ☐ Marl Deposits (B15) ☐ Water Marks (B1) ☐ Hydrogen Sulfide Odor (C1) ☐ Sediment Deposits (B2) ☐ Oxidized Rhizospheres on Living ☐ Drift Deposits (B3) ☐ Roots (C3) ☐ Algal Mat or Crust (B4) ☐ Presence of Reduced Iron (C4) ☐ Iron Deposits (B5) ☐ Recent Iron Reduction in Tilled ☐ Inundation Visible on Aerial ☐ Soils (C6) Imagery (B7) ☐ Thin Muck Surface (C7) ☐ Sparsely Vegetated Concave ☐ Other (Explain in Remarks) Surface (B8)			Secondary Indicators (minimum of two required) ☐ Surface Soil Cracks (B6) ☐ Drainage Patterns (B10) ☐ Moss Trim Lines (B16) ☐ Dry-Season Water Table (C2) ☐ Crayfish Burrows (C8) ☐ Saturation Visible on Aerial Imagery (C9) ☐ Stunted or Stressed Plants (D1) ☐ Geomorphic Position (D2) ☐ Shallow Aquitard (D3) ☐ FAC-Neutral Test (D5) ☐ Microtopographic Relief (D4)		
Field Observations: Surface water present? Yes ☐ No ☐ X ☐ Depth (inches): Water table present? Yes ☐ No ☐ X ☐ Depth (inches): Saturation present? Yes ☐ No ☐ X ☐ Depth (inches): (includes capillary fringe)			Indicators of wetland hydrology present? <u> </u> ☐ <u> </u> ☐		
Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:					
Remarks:					

						50/20 Thresholds		
						20%	20%	50%
Tree Stratum	Plot Size (30' Radius)		Absolute % Cover	Dominant Species	Indicator Status	Tree Stratum	0	0
1	--					Sapling/Shrub Stratum	5	13
2	--					Herb Stratum	8	21
3	--					Woody Vine Stratum	0	0
4	--							
5	--							
6	--							
7	--							
8	--							
9	--							
10	--							
			0	= Total Cover				
Sapling/Shrub Stratum	Plot Size (15' Radius)		Absolute % Cover	Dominant Species	Indicator Status			
1	<i>Corylus cornuta</i> -- <i>Beaked Hazelnut</i>		10	Y	FACU			
2	<i>Acer spicatum</i> -- <i>Mountain Maple</i>		10	Y	FACU			
3	<i>Populus tremuloides</i> -- <i>Quaking Aspen</i>		5	Y	FAC			
4	--							
5	--							
6	--							
7	--							
8	--							
9	--							
10	--							
			25	= Total Cover				
Herb Stratum	Plot Size (5' Radius)		Absolute % Cover	Dominant Species	Indicator Status			
1	<i>Eurybia macrophylla</i> -- <i>Large-Leaf Wood-Aster</i>		20	Y	FACU			
2	<i>Aralia nudicaulis</i> -- <i>Wild Sarsaparilla</i>		10	Y	FACU			
3	<i>Pteridium aquilinum</i> -- <i>Northern Bracken Fern</i>		7	N	FACU			
4	<i>Maianthemum canadense</i> -- <i>False Lily-of-the-Valley</i>		5	N	FACU			
5	--							
6	--							
7	--							
8	--							
9	--							
10	--							
11	--							
12	--							
13	--							
14	--							
15	--							
			42	= Total Cover				
Woody Vine Stratum	Plot Size (30' Radius)		Absolute % Cover	Dominant Species	Indicator Status			
1	--							
2	--							
3	--							
4	--							
5	--							
			0	= Total Cover				
						Dominance Test Worksheet Number of Dominant Species that are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across all Strata: <u>5</u> (B) Percent of Dominant Species that are OBL, FACW, or FAC: <u>20.00%</u> (A/B)		
						Prevalence Index Worksheet Total % Cover of: OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>0</u> x 2 = <u>0</u> FAC species <u>5</u> x 3 = <u>15</u> FACU species <u>42</u> x 4 = <u>168</u> UPL species <u>20</u> x 5 = <u>100</u> Column totals <u>67</u> (A) <u>283</u> (B) Prevalence Index = B/A = <u>4.22</u>		
						Hydrophytic Vegetation Indicators: <u> </u> Rapid test for hydrophytic vegetation <u> </u> Dominance test is >50% <u> </u> Prevalence index is >3.0* Morphological adaptations* (provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic hydrophytic vegetation* (explain) *Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic		
						Definitions of Vegetation Strata: Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines - All woody vines greater than 3.28 ft in height.		
						Hydrophytic vegetation present? <u> N </u>		
Remarks: (Include photo numbers here or on a separate sheet)								
Note: This data sheet has been adapted to use the 2012 National Wetland Plant List: Robert W. Lichvar and John T. Kartez. 2009. North American Digital Flora: National Wetland Plant List, version 2.4.0 (https://wetland_plants.usace.army.mil/). U.S. Army Corps of Engineers, Engineer Research and Development Center, Cold Regions Research and Engineering Laboratory, Hanover, NH, and BONAP, Chapel Hill, NC. (2012)								

Sampling Point: 6-1u

[illegible]

**Location: PL=Pore Lining, M=Matrix

Indicators for Problematic Hydric Soils:

- *Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Type: _____
Depth (inches): _____

Remarks:

Northcentral and Northeast Region

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site:	Eveleth-Gilbert-Virginia School		City/County:	Eveleth St. Louis	Sampling Date:	6/13/19	
Applicant/Owner:	Kimley-Horn and Associates, Inc.		State:	Minnesota	Sampling Point:	6-1w	
Investigator(s):	Bailey Nelson, Ericka Massa		Section, Township, Range:	S29, T58N, R17W			
Location (hillside, terrace, etc.):	toeslope		Local relief (concave, convex, none):	none			
Slope (ft):	1%	Lat.: 47.483086	Long.: -92.523388	Datum:	NAD 1983 UTM Zone 15N		
Soil Map Unit Name:	Dora mucky peat, Hibbing catena, 0-1% slopes		NW1 Classification: PSS1/EM1B				
Are climatic/hydrologic conditions of the site typical for this time of the year?				Yes	(If no, explain in remarks)		
Are vegetation _____, soil _____, or hydrology _____ significantly disturbed?		Are "normal circumstances" present?					
Are vegetation _____, soil _____, or hydrology _____ naturally problematic?		Yes					
(If needed, explain any answers in remarks)							

SUMMARY OF FINDINGS

Hydrophytic vegetation present? <u>Y</u> Hydric soil present? <u>Y</u> Indicators of wetland hydrology present? <u>Y</u>	Is the sampled area within a wetland? <u>Y</u> If yes, optional wetland site ID: <u>Wetland 6</u>
Remarks: (Explain alternative procedures here or in a separate report.)	

HYDROLOGY

Primary Indicators (minimum of one is required; check all that apply)				Secondary Indicators (minimum of two required)	
☐	Surface Water (A1)	☐	Water-Stained Leaves (B9)	☐	Surface Soil Cracks (B6)
☒	High Water Table (A2)	☐	Aquatic Fauna (B13)	☐	Drainage Patterns (B10)
☒	Saturation (A3)	☐	Mud Deposits (B15)	☐	Moss Trim Lines (B16)
☐	Water Marks (B1)	☐	Hydrogen Sulfide Odor (C1)	☐	Dry-Season Water Table (C2)
☐	Sediment Deposits (B2)	☐	Oxidized Rhizospheres on Living	☐	Crayfish Burrows (C8)
☐	Drift Deposits (B3)	☐	Roots (C3)	☐	Saturation Visible on Aerial Imagery
☐	Algal Mat or Crust (B4)	☐	Presence of Reduced Iron (C4)	☐	(C9)
☐	Iron Deposits (B5)	☐	Recent Iron Reduction in Tilled	☐	Stunted or Stressed Plants (D1)
☐	Inundation Visible on Aerial	☐	Soils (C6)	☐	Geomorphic Position (D2)
☐	Imagery (B7)	☐	Thin Muck Surface (C7)	☐	Shallow Aquitard (D3)
☐	Sparsely Vegetated Concave	☐	Other (Explain in Remarks)	☐	FAC-Neutral Test (D5)
☐	Surface (B8)	☐		☐	Microtopographic Relief (D4)
Field Observations: Surface water present? Yes ☐ No ☒ Depth (inches): <u> </u> Water table present? Yes ☒ No ☐ Depth (inches): <u>1.5</u> Saturation present? Yes ☒ No ☐ Depth (inches): <u>0</u> (includes capillary fringe)				Indicators of wetland hydrology present? <u>Y</u>	
Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:					
Remarks:					

VEGETATION - Use scientific names of plants

Tree Stratum				Plot Size (30' Radius)		Absolute % Cover	Dominant Species	Indicator Status	50/20 Thresholds	
1	<i>Abies balsamea</i>	--	Balsam Fir	15	Y	FAC	Tree Stratum	5	13	
2	<i>Fraxinus pennsylvanica</i>	--	Green Ash	10	Y	FACW	Sapling/Shrub Stratum	3	8	
3	--	--	--				Herb Stratum	13	33	
4	--	--	--				Woody Vine Stratum	0	0	
5	--	--	--							
6	--	--	--							
7	--	--	--							
8	--	--	--							
9	--	--	--							
10	--	--	--	25	= Total Cover					
Sapling/Shrub Stratum				Plot Size (15' Radius)		Absolute % Cover	Dominant Species	Indicator Status		
1	<i>Salix discolor</i>	--	Pussy Willow	10	Y	FACW				
2	<i>Alnus incana</i>	--	Speckled Alder	5	Y	FACW				
3	--	--	--							
4	--	--	--							
5	--	--	--							
6	--	--	--							
7	--	--	--							
8	--	--	--							
9	--	--	--							
10	--	--	--	15	= Total Cover					
Herb Stratum				Plot Size (5' Radius)		Absolute % Cover	Dominant Species	Indicator Status		
1	<i>Onclea sensibilis</i>	--	Sensitive Fern	20	Y	FACW				
2	<i>Caltha palustris</i>	--	Yellow Marsh-Marigold	15	Y	OBL				
3	<i>Calamagrostis canadensis</i>	--	Bluejoint	10	N	OBL				
4	<i>Equisetum arvense</i>	--	Field Horsetail	10	N	FAC				
5	<i>Viola cucullata</i>	--	Marsh Blue Violet	5	N	OBL				
6	<i>Athyrium filix-femina</i>	--	Lady Fern	5	N	FAC				
7	--	--	--							
8	--	--	--							
9	--	--	--							
10	--	--	--							
11	--	--	--							
12	--	--	--							
13	--	--	--							
14	--	--	--							
15	--	--	--	65	= Total Cover					
Woody Vine Stratum				Plot Size (30' Radius)		Absolute % Cover	Dominant Species	Indicator Status		
1	--	--	--							
2	--	--	--							
3	--	--	--							
4	--	--	--							
5	--	--	--	0	= Total Cover					

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 6 (A)

Total Number of Dominant Species Across all Strata: 6 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 100.00% (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species 30 x 1 = 30

FACW species 45 x 2 = 90

FAC species 30 x 3 = 90

FACU species 0 x 4 = 0

UPL species 0 x 5 = 0

Column totals 105 (A) 210 (B)

Prevalence Index = B/A = 2.00

Hydrophytic Vegetation Indicators:

☒ Rapid test for hydrophytic vegetation

☒ Dominance test is >50%

☒ Prevalence index is >3.0*

Morphological adaptations* (provide supporting data in Remarks or on a separate sheet)

Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Definitions of Vegetation Strata:

Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines - All woody vines greater than 3.28 ft in height.

Hydrophytic vegetation present? Y

Remarks: (Include photo numbers here or on a separate sheet)

Note: This data sheet has been adapted to use the 2012 National Wetland Plant List:

Robert W. Lichvar and John T. Kartesz. 2009. North American Digital Flora: National Wetland Plant List, version 2.4.0 (https://wetland_plants.usace.army.mil). U.S. Army Corps of Engineers, Engineer Research and Development Center, Cold Regions Research and Engineering Laboratory, Hanover, NH, and BONAP, Chapel Hill, NC. (2012)

Sampling Point: 6-1w

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

[illegible]

*Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains

**Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

Indicators for Problematic Hydric Soils:

- | | | |
|---|----------------------------|---|
| ☐ Histosol (A1) | Polyvalue Below Surface | 2 cm Muck (A10) (LRR K, L, MLRA 149B |
| ☐ Histic Epipedon (A2) | (S8) (LRR R, MLRA 149B) | Coast Prairie Redox (A16) (LRR K, L, R) |
| ☒ Black Histic (A3) | Thin Dark Surface (S9) | 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) |
| ☐ Hydrogen Sulfide (A4) | (LRR R, MLRA 149B | Dark Surface (S7) (LRR K, L) |
| ☐ Stratified Layers (A5) | Loamy Mucky Mineral (F1) | Polyvalue Below Surface (S8) (LRR K, L) |
| ☐ Depleted Below Dark Surface (A11) | (LRR K, L) | Thin Dark Surface (S9) (LRR K, L) |
| ☐ Thick Dark Surface (A12) | Loamy Gleyed Matrix (F2) | Iron-Manganese Masses (F12) (LRR K, L, R) |
| ☐ Sandy Mucky Mineral (S1) | Depleted Matrix (F3) | Piedmont Floodplain Soils (F19) (MLRA 149B) |
| ☐ Sandy Gleyed Matrix (S4) | Redox Dark Surface (F6) | Mesic Spodic (TA6) (MLRA 144A, 145, 149B) |
| ☐ Sandy Redox (S5) | Depleted Dark Surface (F7) | Red Parent Material (TF2) |
| ☐ Stripped Matrix (S6) | Redox Depressions (F8) | Very Shallow Dark Surface (TF12) |
| ☐ Dark Surface (S7) (LRR R, MLRA 149B) | | Other (Explain in Remarks) |

*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):

Type: _____

Depth (inches):

Hydric soil present? Y

Remarks:

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WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site:	Eveleth-Gilbert-Virginia School		City/County:	Eveleth/St. Louis		Sampling Date:	6/13/19	
Applicant/Owner:	Kirmley-Horn and Associates, Inc.		State:	Minnesota		Sampling Point:	6-2u	
Investigator(s):	Bailey Nelson, Ericka Massa		Section, Township, Range:	S29, T58N, R17W				
Landform (hillslope, terrace, etc.):	footslope		Local relief (concave, convex, none):	none				
Slope (%) :	15%	Lat.:	47.48213	Long.:	-92.521808	Datum:	NAD 1983 UTM Zone 15N	
Soil Map Unit Name:	Eaglesnest stony loam, 2-8% slopes, bouldery		NW1 Classification:		none			
Are climatic/hydrologic conditions of the site typical for this time of the year?				Yes		(If no, explain in remarks)		
Are vegetation _____, soil _____, or hydrology _____ significantly disturbed?		Are "normal		circumstances" present?				
Are vegetation _____, soil _____, or hydrology _____ naturally problematic?		Yes						
(If needed, explain any answers in remarks)								

SUMMARY OF FINDINGS

Hydrophytic vegetation present?	<u>Y</u>	Is the sampled area within a wetland? <u>N</u>
Hydric soil present?	<u>N</u>	
Indicators of wetland hydrology present?	<u>N</u>	
Remarks: (Explain alternative procedures here or in a separate report.)		If yes, optional wetland site ID: _____

HYDROLOGY

Primary Indicators (minimum of one is required; check all that apply)			Secondary Indicators (minimum of two required)		
☐ Surface Water (A1)	☐	☐ Water-Stained Leaves (B9)	☐	☐	☐ Surface Soil Cracks (B6)
☐ High Water Table (A2)	☐	☐ Aquatic Fauna (B13)	☐	☐	☐ Drainage Patterns (B10)
☐ Saturation (A3)	☐	☐ Marl Deposits (B15)	☐	☐	☐ Moss Trim Lines (B16)
☐ Water Marks (B1)	☐	☐ Hydrogen Sulfide Odor (C1)	☐	☐	☐ Dry-Season Water Table (C2)
☐ Sediment Deposits (B2)	☐	☐ Oxidized Rhizospheres on Living	☐	☐	☐ Crayfish Burrows (C8)
☐ Drift Deposits (B3)	☐	☐ Roots (C3)	☐	☐	☐ Saturation Visible on Aerial Imagery
☐ Algal Mat or Crust (B4)	☐	☐ Presence of Reduced Iron (C4)	☐	☐	☐ (C9)
☐ Iron Deposits (B5)	☐	☐ Recent Iron Reduction in Tilled	☐	☐	☐ Stunted or Stressed Plants (D1)
☐ Inundation Visible on Aerial	☐	☐ Soils (C6)	☐	☐	☐ Geomorphic Position (D2)
☐ Imagery (B7)	☐	☐ Thin Muck Surface (C7)	☐	☐	☐ Shallow Aquitard (D3)
☐ Sparsely Vegetated Concave	☐	☐ Other (Explain in Remarks)	☐	☐	☐ FAC-Neutral Test (D5)
☐ Surface (B8)	☐		☐	☐	☐ Microtopographic Relief (D4)

Field Observations:			Indicators of wetland hydrology present? <u> N </u>
Surface water present?	Yes ☐	No ☒ Depth (inches):	
Water table present?	Yes ☐	No ☒ Depth (inches):	
Saturation present?	Yes ☐	No ☒ Depth (inches):	
(includes capillary fringe)			
Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks:			

VEGETATION - Use scientific names of plants

						50/20 Thresholds		20%	50%
Tree Stratum	Plot Size (30' Radius)	Absolute % Cover	Dominant Species	Indicator Status					
1	<i>Betula papyrifera</i> -- Paper Birch	15	Y	FACU				5	13
2	<i>Populus tremuloides</i> -- Quaking Aspen	10	Y	FAC				1	4
3	--							10	25
4	--							0	0
5	--								
6	--								
7	--								
8	--								
9	--								
10	--								
		25 = Total Cover							
Sapling/Shrub Stratum	Plot Size (15' Radius)	Absolute % Cover	Dominant Species	Indicator Status					
1	<i>Alnus incana</i> -- Speckled Alder	5	Y	FACW					
2	<i>Rhamnus cathartica</i> -- European Buckthorn	2	Y	FAC					
3	--								
4	--								
5	--								
6	--								
7	--								
8	--								
9	--								
10	--								
		7 = Total Cover							
Herb Stratum	Plot Size (5' Radius)	Absolute % Cover	Dominant Species	Indicator Status					
1	<i>Aralia nudicaulis</i> -- Wild Sarsaparilla	15	Y	FACU					
2	<i>Eurybia macrophylla</i> -- Large-Leaf Wood-Aster	10	Y	UPL					
3	<i>Rubus idaeus</i> -- Common Red Raspberry	10	Y	FAC					
4	<i>Equisetum sylvaticum</i> -- Woodland Horsetail	10	Y	FACW					
5	<i>Impatiens capensis</i> -- Spotted Touch-Me-Not	5	N	FACW					
6	--								
7	--								
8	--								
9	--								
10	--								
11	--								
12	--								
13	--								
14	--								
15	--								
		50 = Total Cover							
Woody Vine Stratum	Plot Size (30' Radius)	Absolute % Cover	Dominant Species	Indicator Status					
1	--								
2	--								
3	--								
4	--								
5	--								
		0 = Total Cover							
						Dominant Species Summary: Number of Dominant Species that are OBL, FACW, or FAC: _____ Total Number of Dominant Species Across all Strata: _____ Percent of Dominant Species that are OBL, FACW, or FAC: _____			
						Prevalence Index Worksheet Total % Cover of: OBL species 0 x 1 = 0 FACW species 20 x 2 = 40 FAC species 22 x 3 = 66 FACU species 30 x 4 = 120 UPL species 10 x 5 = 50 Column totals 82 (A) 276 (B) Prevalence Index = B/A = 3.37			
						Hydrophytic Vegetation Indicators: ☒ Rapid test for hydrophytic vegetation ☒ Dominance test is >50% ☒ Prevalence index is ≥3.0* Morphological adaptations* (provide supporting data in Remarks or on a separate sheet) Problematic hydrophytic vegetation* (explain) *Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic			
						Definitions of Vegetation Strata: Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines - All woody vines greater than 3.28 ft in height.			
						Hydro			

Sampling Point: 6-2u

[illegible]

**Location: PL=Pore Lining, M=Matrix

Indicators for Problematic Hydric Soils:

- *Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Hydric soil present? N

Remarks:

Northcentral and Northeast Region

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Eveleth-Gilbert-Virginia School City/County: Eveleth/St. Louis Sampling Date: 6/13/19
Applicant/Owner: Kimley-Horn and Associates, Inc. State: Minnesota Sampling Point: 6-2w
Investigator(s): Bailey Nelson, Ericka Massa Section, Township, Range: S29, T58N, R17W
Landform (hillslope, terrace, etc.): toeslope Local relief (concave, convex, none): concave
Slope (%): 0% Lat.: 47.48217 Long.: -92.521824 Datum: NAD 1983 UTM Zone 15N
Soil Map Unit Name: Eaglesnest stony loam, 2-8% slopes, bouldery NWI Classification: PSS1/EM1b
Are climatic/hydrologic conditions of the site typical for this time of the year? Yes (If no, explain in remarks)
Are vegetation , soil , or hydrology significantly disturbed? Are "normal
Are vegetation , soil , or hydrology naturally problematic? circumstances" present? Yes
(If needed, explain any answers in remarks)

SUMMARY OF FINDINGS

Hydrophytic vegetation present?	<u>Y</u>	Is the sampled area within a wetland?	<u>Y</u>
Hydric soil present?	<u>Y</u>		
Indicators of wetland hydrology present?	<u>Y</u>	If yes, optional wetland site ID:	<u>Wetland 6</u>
Remarks: (Explain alternative procedures here or in a separate report.)			

HYDROLOGY

Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)	
☐ Surface Water (A1)	☐ Water-Stained Leaves (B9)	☐ Surface Soil Cracks (B6)	
☒ High Water Table (A2)	☐ Aquatic Fauna (B13)	☐ Drainage Patterns (B10)	
☒ Saturation (A3)	☐ Marl Deposits (B15)	☐ Moss Trim Lines (B16)	
☐ Water Marks (B1)	☐ Hydrogen Sulfide Odor (C1)	☐ Dry-Season Water Table (C2)	
☐ Sediment Deposits (B2)	☐ Oxidized Rhizospheres on Living	☐ Crayfish Burrows (C8)	
☐ Drift Deposits (B3)	☐ Roots (C3)	☐ Saturation Visible on Aerial Imagery	
☐ Algal Mat or Crust (B4)	☐ Presence of Reduced Iron (C4)	☐ (C9)	
☐ Iron Deposits (B5)	☐ Recent Iron Reduction in Tilled	☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial	☐ Soils (C6)	☐ Geomorphic Position (D2)	
☐ Imagery (B7)	☐ Thin Muck Surface (C7)	☐ Shallow Aquitard (D3)	
☐ Sparsely Vegetated Concave	☐ Other (Explain in Remarks)	☐ FAC-Neutral Test (D5)	
☐ Surface (B8)		☐ Microtopographic Relief (D4)	
Field Observations:		Indicators of wetland hydrology present? <u>Y</u>	
Surface water present?	Yes <u> </u> No <u>X</u>	Depth (inches):	<u> </u>
Water table present?	Yes <u>X</u> No <u> </u>	Depth (inches):	<u>10</u>
Saturation present?	Yes <u>X</u> No <u> </u>	Depth (inches):	<u>0</u>
(includes capillary fringe)			
Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks:			

US Army Corps of Engineers

Northcentral and Northeast Region

VEGETATION - Use scientific names of plants

Tree Stratum					Plot Size (30' Radius)	Absolute % Cover	Dominant Species	Indicator Status
1	<u>Alnus incana</u>	<u>--</u>	<u>Speckled Alder</u>	<u>10</u>	<u>Y</u>	<u>FACW</u>		
2	<u> </u>	<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>		
3	<u> </u>	<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>		
4	<u> </u>	<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>		
5	<u> </u>	<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>		
6	<u> </u>	<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>		
7	<u> </u>	<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>		
8	<u> </u>	<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>		
9	<u> </u>	<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>		
10	<u> </u>	<u>--</u>	<u> </u>	<u>10</u>	<u>=</u>	<u>Total Cover</u>		
Sapling/Shrub Stratum					Plot Size (15' Radius)	Absolute % Cover	Dominant Species	Indicator Status
1	<u>Alnus incana</u>	<u>--</u>	<u>Speckled Alder</u>	<u>20</u>	<u>Y</u>	<u>FACW</u>		
2	<u> </u>	<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>		
3	<u> </u>	<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>		
4	<u> </u>	<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>		
5	<u> </u>	<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>		
6	<u> </u>	<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>		
7	<u> </u>	<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>		
8	<u> </u>	<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>		
9	<u> </u>	<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>		
10	<u> </u>	<u>--</u>	<u> </u>	<u>20</u>	<u>=</u>	<u>Total Cover</u>		
Herb Stratum					Plot Size (5' Radius)	Absolute % Cover	Dominant Species	Indicator Status
1	<u>Calamagrostis canadensis</u>	<u>--</u>	<u>Bluejoint</u>	<u>10</u>	<u>Y</u>	<u>OBL</u>		
2	<u>Onoclea sensibilis</u>	<u>--</u>	<u>Sensitive Fern</u>	<u>10</u>	<u>Y</u>	<u>FACW</u>		
3	<u>Equisetum arvense</u>	<u>--</u>	<u>Field Horsetail</u>	<u>10</u>	<u>Y</u>	<u>FAC</u>		
4	<u>Calla palustris</u>	<u>--</u>	<u>Water-Dragon</u>	<u>5</u>	<u>N</u>	<u>OBL</u>		
5	<u>Impatiens capensis</u>	<u>--</u>	<u>Spotted Touch-Me-Not</u>	<u>2</u>	<u>N</u>	<u>FACW</u>		
6	<u> </u>	<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>		
7	<u> </u>	<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>		
8	<u> </u>	<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>		
9	<u> </u>	<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>		
10	<u> </u>	<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>		
11	<u> </u>	<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>		
12	<u> </u>	<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>		
13	<u> </u>	<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>		
14	<u> </u>	<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>		
15	<u> </u>	<u>--</u>	<u> </u>	<u>37</u>	<u>=</u>	<u>Total Cover</u>		
Woody Vine Stratum					Plot Size (30' Radius)	Absolute % Cover	Dominant Species	Indicator Status
1	<u> </u>	<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>		
2	<u> </u>	<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>		
3	<u> </u>	<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>		
4	<u> </u>	<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>		
5	<u> </u>	<u>--</u>	<u> </u>	<u>0</u>	<u>=</u>	<u>Total Cover</u>		
Remarks: (Include photo numbers here or on a separate sheet)								
Note: This data sheet has been adapted to use the 2012 National Wetland Plant List: Robert W. Lichvar and John T. Kartesz. 2009. North American Digital Flora: National Wetland Plant List, version 2.4.0 (https://wetland.plants.usace.army.mil). U.S. Army Corps of Engineers, Engineer Research and Development Center, Cold Regions Research and Engineering Laboratory, Hanover, NH, and BONAP, Chapel Hill, NC. (2012)								

US Army Corps of Engineers

Northcentral and Northeast Region

SOIL Sampling Point: 6-2w

Sampling Point: 6-2w

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

[illegible]

*Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains

**Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

Indicators for Problematic Hydric Soils:

- | | | |
|---|----------------------------------|--|
| ___ Histosol (A1) | Polyvalue Below Surface | 2 cm Muck (A10) (LRR K, L, MLRA 149B) |
| ___ Histic Epipedon (A2) | (S8) (LRR R, MLRA 149B) | Coast Prairie Redox (A16) (LRR K, L, R) |
| ___ Black Histic (A3) | Thin Dark Surface (S9) | 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) |
| ___ Hydrogen Sulphide (A4) | (LRR R, MLRA 149B) | Dark Surface (S7) (LRR K, L) |
| ___ Stratified Layers (A5) | Loamy Mucky Mineral (F1) | Polyvalue Below Surface (S8) (LRR K, L) |
| X Depleted Below Dark Surface (A11') | (LRR K, L) | Thin Dark Surface (S9) (LRR K, L) |
| ___ Thick Dark Surface (A12) | Loamy Gleyed Matrix (F2) | Iron-Manganese Masses (F12) (LRR K, L, R) |
| ___ Sandy Mucky Mineral (S1) | X Depleted Matrix (F3) | Piedmont Floodplain Soils (F19) (MLRA 149B) |
| ___ Sandy Gleyed Matrix (S4) | Redox Dark Surface (F6) | Mesic Podzol (TA6) (MLRA 144A, 145, 149B) |
| ___ Sandy Redox (S5) | Depleted Dark Surface (F7) | Red Parent Material (TF2) |
| ___ Stripped Matrix (S6) | Redox Depressions (F8) | Very Shallow Dark Surface (TF12) |
| ___ Dark Surface (S7) (LRR R, MLRA 149B) | | ___ Other (Explain in Remarks) |

*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric soil present? Y

Remarks:

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WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site:	Eveleth-Gilbert-Virginia School		City/County:	Eveleth/St. Louis	Sampling Date:	5/15/17
Applicant/Owner:	Kimley-Horn and Associates, Inc.		State:	Minnesota	Sampling Point:	6-3u
Investigator(s):	Kyle Hanson		Section, Township, Range:	S29, T58N, R7W		
Landform (hillslope, terrace, etc.):	footslope		Local relief (concave, convex, none):	none		
Slope (%) :	10%	Lat.: 47.48321	Long.: -92.515574	Datum:	NAD 1983 UTM Zone 15N	
Soil Map Unit Name:	Eveleth-convex, bedrock-rock outcrop complex, 18-30% slopes		NWDI Classification: none			
Are climatic/hydrologic conditions of the site typical for this time of the year?				Yes	(If no, explain in remarks)	
Are vegetation _____, soil _____, or hydrology _____ significantly disturbed?		Are "normal circumstances" present?				
Are vegetation _____, soil _____, or hydrology _____ naturally problematic?		Yes				
(If needed, explain any answers in remarks)						

SUMMARY OF FINDINGS

Hydrophytic vegetation present?	<u> N </u>	Is the sampled area within a wetland? <u> N </u> If yes, optional wetland site ID: _____
Hydric soil present?	<u> N </u>	
Indicators of wetland hydrology present?	<u> N </u>	
Remarks: (Explain alternative procedures here or in a separate report.)		

HYDROLOGY

Primary Indicators (minimum of one is required; check all that apply)			Secondary Indicators (minimum of two required)		
☐ Surface Water (A1)	☐	☐ Water-Stained Leaves (B9)	☐	☐	☐ Surface Soil Cracks (B6)
☐ High Water Table (A2)	☐	☐ Aquatic Fauna (B13)	☐	☐	☐ Drainage Patterns (B10)
☐ Saturation (A3)	☐	☐ Marl Deposits (B15)	☐	☐	☐ Moss Trim Lines (B16)
☐ Water Marks (B1)	☐	☐ Hydrogen Sulfide Odor (C1)	☐	☐	☐ Dry-Season Water Table (C2)
☐ Sediment Deposits (B2)	☐	☐ Oxidized Rhizospheres on Living	☐	☐	☐ Crayfish Burrows (C8)
☐ Drift Deposits (B3)	☐	☐ Roots (C3)	☐	☐	☐ Saturation Visible on Aerial Imagery
☐ Algal Mat or Crust (B4)	☐	☐ Presence of Reduced Iron (C4)	☐	☐	☐ (C9)
☐ Iron Deposits (B5)	☐	☐ Recent Iron Reduction in Tilled	☐	☐	☐ Stunted or Stressed Plants (D1)
☐ Inundation Visible on Aerial	☐	☐ Soils (C6)	☐	☐	☐ Geomorphic Position (D2)
☐ Imagery (B7)	☐	☐ Thin Muck Surface (C7)	☐	☐	☐ Shallow Aquitard (D3)
☐ Sparsely Vegetated Concave	☐	☐ Other (Explain in Remarks)	☐	☐	☐ FAC-Neutral Test (D5)
☐ Surface (B8)	☐		☐	☐	☐ Microtopographic Relief (D4)
Field Observations:			Indicators of wetland hydrology present?		
Surface water present?	Yes ☐	No ☒	Depth (inches):		
Water table present?	Yes ☐	No ☒	Depth (inches):		
Saturation present?	Yes ☐	No ☒	Depth (inches):		
(includes capillary fringe)			N		
Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:					
Remarks:					

VEGETATION - Use scientific names of plants

						50/20 Thresholds		20%	50%
Tree Stratum		Plot Size (30' Radius)	Absolute % Cover	Dominant Species	Indicator Status			13	33
1	<i>Abies balsamea</i>	-- Balsam Fir	30	Y	FAC	Tree Stratum		3	8
2	<i>Betula papyrifera</i>	-- Paper Birch	15	Y	FACU	Sapling/Shrub Stratum		8	20
3	<i>Pinus strobus</i>	-- Eastern White Pine	15	Y	FACU	Herb Stratum		0	0
4	<i>Acer rubrum</i>	-- Red Maple	5	N	FAC	Woody Vine Stratum			
5	--	--							
6	--	--							
7	--	--							
8	--	--							
9	--	--							
10	--	--	65	= Total Cover					
Sapling/Shrub Stratum		Plot Size (15' Radius)	Absolute % Cover	Dominant Species	Indicator Status				
1	<i>Abies balsamea</i>	-- Balsam Fir	15	Y	FAC				
2	--	--							
3	--	--							
4	--	--							
5	--	--							
6	--	--							
7	--	--							
8	--	--							
9	--	--							
10	--	--	15	= Total Cover					
Herb Stratum		Plot Size (5' Radius)	Absolute % Cover	Dominant Species	Indicator Status				
1	<i>Lycopodium clavatum</i>	-- Running Ground-Pine	20	Y	FAC				
2	<i>Maianthemum canadense</i>	-- False Lily-of-the-Valley	15	Y	FACU				
3	<i>Eurybia macrophylla</i>	-- Large-Leaf Wood-Aster	5	N	UPL				
4	--	--							
5	--	--							
6	--	--							
7	--	--							
8	--	--							
9	--	--							
10	--	--							
11	--	--							
12	--	--							
13	--	--							
14	--	--	40	= Total Cover					
Woody Vine Stratum		Plot Size (30' Radius)	Absolute % Cover	Dominant Species	Indicator Status				
1	--	--							
2	--	--							
3	--	--							
4	--	--							
5	--	--	0	= Total Cover					
Dominance Test Worksheet Number of Dominant Species that are OBL, FACW, or FAC: 3 (A) Total Number of Dominant Species Across all Strata: 6 (B) Percent of Dominant Species that are OBL, FACW, or FAC: 50.00% (A/B)						Prevalence Index Worksheet Total % Cover of: OBL species 0 x 1 = 0 FACW species 0 x 2 = 0 FAC species 70 x 3 = 210 FACU species 45 x 4 = 180 UPL species 5 x 5 = 25 Column totals 120 (A) 415 (B) Prevalence Index = B/A = 3.46			
Hydrophytic Vegetation Indicators: Rapid test for hydrophytic vegetation Dominance test is >50% Prevalence index is <3.0* Morphological adaptations* (provide supporting data in Remarks or on a separate sheet) Problematic hydrophytic vegetation* (explain) *Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic						Definitions of Vegetation Strata: Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines - All woody vines greater than 3.28 ft in height.			
Hydrophytic vegetation present? N									
Remarks: (Include photo numbers here or on a separate sheet)									

Note: This data sheet has been adapted to use the 2012 National Wetland Plant List:

Robert W. Lichvar and John T. Kartesz. 2009. North American Digital Flora: National Wetland Plant List, version 2.4.0 (<https://wetland.plants.usace.army.mil/>). U.S. Army Corps of Engineers, Engineer Research and Development Center, Cold Regions Research and Engineering Laboratory, Hanover, NH, and BONAP, Chapel Hill, NC. (2012)

Sampling Point: 6-3u

[illegible]

**Location: PL=Pore Lining, M=Matrix

Indicators for Problematic Hydric Soils:

- *Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Hydric soil present? N

Remarks:

Northcentral and Northeast Region

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Eveleth-Gilbert-Virginia School City/County: Eveleth/St. Louis Sampling Date: 5/15/17
Applicant/Owner: Kimley-Horn and Associates, Inc. State: Minnesota Sampling Point: 6-3w
Investigator(s): Kyle Hanson Section, Township, Range: S29, T58N, R17W
Landform (hillslope, terrace, etc.): toeslope Local relief (concave, convex, none): concave
Slope (%): 0% Lat.: 47.483284 Long.: -92.515373 Datum: NAD 1983 UTM Zone 15N
Soil Map Unit Name: Eveleth-Conic, bouldery-rock outcrop complex, 18-30% slopes NWI Classification: PFO2Bq
Are climatic/hydrologic conditions of the site typical for this time of the year? Yes (If no, explain in remarks)
Are vegetation , soil , or hydrology significantly disturbed? Are "normal
Are vegetation , soil , or hydrology naturally problematic? circumstances" present? Yes
(If needed, explain any answers in remarks)

SUMMARY OF FINDINGS

Hydrophytic vegetation present?	<u>Y</u>	Is the sampled area within a wetland?	<u>Y</u>
Hydric soil present?	<u>Y</u>		
Indicators of wetland hydrology present?	<u>Y</u>	If yes, optional wetland site ID:	<u>Wetland 6</u>
Remarks: (Explain alternative procedures here or in a separate report.)			

HYDROLOGY

Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)	
☒ Surface Water (A1)	☐ Water-Stained Leaves (B9)	☐ Surface Soil Cracks (B6)	
☒ High Water Table (A2)	☐ Aquatic Fauna (B13)	☐ Drainage Patterns (B10)	
☒ Saturation (A3)	☐ Marl Deposits (B15)	☐ Moss Trim Lines (B16)	
☐ Water Marks (B1)	☐ Hydrogen Sulfide Odor (C1)	☐ Dry-Season Water Table (C2)	
☐ Sediment Deposits (B2)	☐ Oxidized Rhizospheres on Living	☐ Crayfish Burrows (C8)	
☐ Drift Deposits (B3)	☐ Roots (C3)	☐ Saturation Visible on Aerial Imagery	
☐ Algal Mat or Crust (B4)	☐ Presence of Reduced Iron (C4)	☐ (C9)	
☐ Iron Deposits (B5)	☐ Recent Iron Reduction in Tilled	☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial	☐ Soils (C6)	☒ Geomorphic Position (D2)	
☐ Imagery (B7)	☐ Thin Muck Surface (C7)	☐ Shallow Aquitard (D3)	
☐ Sparsely Vegetated Concave	☐ Other (Explain in Remarks)	☒ FAC-Neutral Test (D5)	
☐ Surface (B8)		☐ Microtopographic Relief (D4)	
Field Observations:		Indicators of wetland hydrology present? <u>Y</u>	
Surface water present?	Yes ☒ No ☐ Depth (inches): <u>6</u>		
Water table present?	Yes ☒ No ☐ Depth (inches): <u>0</u>		
Saturation present?	Yes ☒ No ☐ Depth (inches): <u>0</u>		
(includes capillary fringe)			
Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks:			

US Army Corps of Engineers

Northcentral and Northeast Region

VEGETATION - Use scientific names of plants

Tree Stratum					Plot Size (30' Radius)	Absolute % Cover	Dominant Species	Indicator Status	Sampling Point: 6-3w					
1					<u>Larix laricina</u>	<u>--</u>	<u>American Larch</u>	<u>70</u>	<u>Y</u>	<u>FACW</u>	50/20 Thresholds			
2					<u>Picea mariana</u>	<u>--</u>	<u>Black Spruce</u>	<u>25</u>	<u>Y</u>	<u>FACW</u>	20% 50%			
3					<u>Acer rubrum</u>	<u>--</u>	<u>Red Maple</u>	<u>5</u>	<u>N</u>	<u>FAC</u>	Tree Stratum 21 53			
4					<u>Abies balsamea</u>	<u>--</u>	<u>Balsam Fir</u>	<u>5</u>	<u>N</u>	<u>FAC</u>	Sapling/Shrub Stratum 5 13			
5											Herb Stratum 5 13			
6											Woody Vine Stratum 0 0			
7											Dominance Test Worksheet			
8											Number of Dominant Species that are OBL, FACW, or FAC: <u>4</u> (A)			
9											Total Number of Dominant Species Across all Strata: <u>5</u> (B)			
10											Percent of Dominant Species that are OBL, FACW, or FAC: <u>80.00%</u> (A/B)			
						<u>105</u>	=	Total Cover			Prevalence Index Worksheet			
Sapling/Shrub Stratum					Plot Size (15' Radius)	Absolute % Cover	Dominant Species	Indicator Status				Total % Cover of:		
1					<u>Alnus incana</u>	<u>--</u>	<u>Speckled Alder</u>	<u>25</u>	<u>Y</u>	<u>FACW</u>	OBL species <u>15</u> x 1 = <u>15</u>			
2											FACW species <u>120</u> x 2 = <u>240</u>			
3											FAC species <u>10</u> x 3 = <u>30</u>			
4											FACU species <u>10</u> x 4 = <u>40</u>			
5											UPL species <u>0</u> x 5 = <u>0</u>			
6											Column totals <u>155</u> (A) <u>325</u> (B)			
7											Prevalence Index = B/A = <u>2.10</u>			
8														
9														
10														
						<u>25</u>	=	Total Cover			Hydrophytic Vegetation Indicators:			
Herb Stratum					Plot Size (5' Radius)	Absolute % Cover	Dominant Species	Indicator Status				☐ Rapid test for hydrophytic vegetation		
1					<u>Calamagrostis canadensis</u>	<u>--</u>	<u>Bluejoint</u>	<u>15</u>	<u>Y</u>	<u>OBL</u>	☒ Dominance test is >50%			
2					<u>Maianthemum canadense</u>	<u>--</u>	<u>False Lily-of-the-Valley</u>	<u>10</u>	<u>Y</u>	<u>FACU</u>	☒ Prevalence index is ≤3.0*			
3											Morphological adaptations* (provide supporting data in Remarks or on a separate sheet)			
4											☐ Problematic hydrophytic vegetation* (explain)			
5											*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic			
6											Definitions of Vegetation Strata:			
7											Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.			
8											Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.			
9											Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.			
10											Woody vines - All woody vines greater than 3.28 ft in height.			
11											Hydrophytic vegetation present? <u>Y</u>			
12														
13														
14														
15														
						<u>25</u>	=	Total Cover						
Woody Vine Stratum					Plot Size (30' Radius)	Absolute % Cover	Dominant Species	Indicator Status						
1														
2														
3														
4														
5														
						<u>0</u>	=	Total Cover						
Remarks: (Include photo numbers here or on a separate sheet)														
Note: This data sheet has been adapted to use the 2012 National Wetland Plant List: Robert W. Lichvar and John T. Kartesz. 2009. North American Digital Flora: National Wetland Plant List, version 2.4.0 (https://wetland.plants.usace.army.mil), U.S. Army Corps of Engineers, Engineer Research and Development Center, Cold Regions Research and Engineering Laboratory, Hanover, NH, and BONAP, Chapel Hill, NC. (2012)														

US Army Corps of Engineers

Northcentral and Northeast Region

SOIL	Sampling Point:	6-3w
-------------	------------------------	------

Sampling Point: 6-3w

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

[illegible]

*Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains

**Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

Indicators for Problematic Hydric Soils:

- | | | |
|---|--------------------------------------|--|
| ___ Histosol (A1) | Polyvalve Below Surface | ___ 2 cm Muck (A10) (LRR K, L, MLRA 149B) |
| <u>X</u> Histic Epipedon (A2) | ___ (S8) (LRR R, MLRA 149B) | ___ Coast Prairie Redox (A16) (LRR K, L, R) |
| ___ Black Histic (A3) | ___ Thin Dark Surface (S9) | ___ 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) |
| ___ Hydrogen Sulfide (A4) | ___ (LRR R, MLRA 149B) | ___ Dark Surface (S7) (LRR K, L) |
| ___ Stratified Layers (A5) | ___ Loamy Mucky Mineral (F1) | ___ Polyvalve Below Surface (S8) (LRR K, L) |
| ___ Depleted Below Dark Surface (A11') | ___ (LRR K, L) | ___ Thin Dark Surface (S9) (LRR K, L) |
| ___ Thick Dark Surface (A12) | ___ Loamy Gleyed Matrix (F2) | ___ Iron-Manganese Masses (F12) (LRR K, L, R) |
| ___ Sandy Mucky Mineral (S1) | ___ Depleted Matrix (F3) | ___ Piedmont Floodplain Soils (F19) (MLRA 149B) |
| ___ Sandy Gleyed Matrix (S4) | ___ Redox Dark Surface (F6) | ___ Mesic Spodic (TA6) (MLRA 144A, 145, 149B) |
| ___ Sandy Redox (S5) | ___ Depleted Dark Surface (F7) | ___ Red Parent Material (TF2) |
| ___ Stripped Matrix (S6) | ___ Redox Depressions (F8) | ___ Very Shallow Dark Surface (TF12) |
| ___ Dark Surface (S7) (LRR R, MLRA 149B) | ___ | ___ Other (Explain in Remarks) |

*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):

Type: Rocks

Depth (inches): 6

Hydric soil present? Y

Remarks:

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WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Eveleth-Gilbert-Virginia Associates City/County: Eveleth/St. Louis Sampling Date: 6/13/19
 Applicant/Owner: Kimley-Horn and Associates, Inc. State: Minnesota Sampling Point: 6-4u
 Investigator(s): Bailey Nelson, Ericka Massa Section, Township, Range: S29, T58N, R17W
 Landform (hillslope, terrace, etc.): foothole Local relief (concave, convex, none): none
 Slope (°): 10% Lat.: 47.482079 Long.: -92.525396 Datum: NAD 1983 UTM Zone 15N
 Soil Map Unit Name: Eaglesnest stony loam, 2-8% slopes, bouldery NWVI Classification: none
 Are climatic/hydrologic conditions of the site typical for this time of the year? Yes (If no, explain in remarks)
 Are vegetation , soil , or hydrology significantly disturbed? Are "normal
 Are vegetation , soil , or hydrology naturally problematic? circumstances" present? Yes
 (If needed, explain any answers in remarks)

SUMMARY OF FINDINGS

Hydrophytic vegetation present?	<u> N </u>	Is the sampled area within a wetland? <u> N </u>
Hydric soil present?	<u> N </u>	
Indicators of wetland hydrology present?	<u> N </u>	
Remarks: (Explain alternative procedures here or in a separate report.)		If yes, optional wetland site ID: _____

HYDROLOGY

Primary Indicators (minimum of one is required; check all that apply)				Secondary Indicators (minimum of two required)	
☐ Surface Water (A1)		☐ Water-Stained Leaves (B9)		☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)		☐ Aquatic Fauna (B13)		☐ Drainage Patterns (B10)	
☐ Saturation (A3)		☐ Marl Deposits (B15)		☐ Moss Trim Lines (B16)	
☐ Water Marks (B1)		☐ Hydrogen Sulfide Odor (C1)		☐ Dry-Season Water Table (C2)	
☐ Sediment Deposits (B2)		☐ Oxidized Rhizospheres on Living		☐ Crayfish Burrows (C8)	
☐ Drift Deposits (B3)		☐ Roots (C3)		☐ Saturation Visible on Aerial Imagery	
☐ Algal Mat or Crust (B4)		☐ Presence of Reduced Iron (C4)		☐ (C9)	
☐ Iron Deposits (B5)		☐ Recent Iron Reduction in Tilled		☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial		☐ Soils (C6)		☐ Geomorphic Position (D2)	
☐ Imagery (B7)		☐ Thin Muck Surface (C7)		☐ Shallow Aquitard (D3)	
☐ Sparsely Vegetated Concave		☐ Other (Explain in Remarks)		☐ FAC-Neutral Test (D5)	
☐ Surface (B8)				☐ Microtopographic Relief (D4)	

Field Observations:				Indicators of wetland hydrology present? ☐ N	
Surface water present?	Yes ☐	No ☐	☐ Depth (inches):		
Water table present?	Yes ☐	No ☐	☐ Depth (inches):		
Water present?	Yes ☐	No ☐	☐ Depth (inches):		
(includes capillary fringe)					
Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:					
Remarks:					

VEGETATION - Use scientific names of plants

					50/20 Thresholds		
					20% 50%		
Tree Stratum	Plot Size (30' Radius)	Absolute % Cover	Dominant Species	Indicator Status	Tree Stratum	20%	50%
1	<i>Betula papyrifera</i> -- Paper Birch	20	Y	FACU	Sapling/Shrub Stratum	1	3
2	<i>Populus tremuloides</i> -- Quaking Aspen	5	Y	FAC	Herb Stratum	13	33
3	--				Woody Vine Stratum	0	0
4	--						
5	--						
6	--						
7	--						
8	--						
9	--						
10	--	25	= Total Cover				
					Dominance Test Worksheet		
					Number of Dominant Species that are OBL, FACW, or FAC: 2 (A)		
					Total Number of Dominant Species Across all Strata: 5 (B)		
					Percent of Dominant Species that are OBL, FACW, or FAC: 40.00% (A/B)		
Sapling/Shrub Stratum	Plot Size (15' Radius)	Absolute % Cover	Dominant Species	Indicator Status			
1	<i>Alnus incana</i> -- Speckled Alder	5	Y	FACW			
2	--						
3	--						
4	--						
5	--						
6	--						
7	--						
8	--						
9	--						
10	--	5	= Total Cover				
					Prevalence Index Worksheet		
					Total % Cover of:		
					OBL species 0 x 1 = 0		
					FACW species 5 x 2 = 10		
					FAC species 20 x 3 = 60		
					FACU species 40 x 4 = 160		
					UPL species 30 x 5 = 150		
					Column totals 95 (A) 380 (B)		
					Prevalence Index = B/A = 4.00		
Herb Stratum	Plot Size (5' Radius)	Absolute % Cover	Dominant Species	Indicator Status			
1	<i>Eurybia macrophylla</i> -- Large-Leaf Wood-Aster	30	Y	UPL			
2	<i>Aralia nudicaulis</i> -- Wild Sarsaparilla	20	Y	FACU			
3	<i>Rubus idaeus</i> -- Common Red Raspberry	10	N	FAC			
4	<i>Equisetum arvense</i> -- Field Horsetail	5	N	FAC			
5	--						
6	--						
7	--						
8	--						
9	--						
10	--						
11	--						
12	--						
13	--						
14	--						
15	--	65	= Total Cover				
					Hydrophytic Vegetation Indicators:		
					-- Rapid test for hydrophytic vegetation		
					-- Dominance test is >50%		
					-- Prevalence index is <3.0*		
					Morphological adaptations* (provide supporting data in Remarks or on a separate sheet)		
					Problematic hydrophytic vegetation* (explain)		
					*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic		
					Definitions of Vegetation Strata:		
					Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.		
					Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.		
					Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.		
					Woody vines - All woody vines greater than 3.28 ft in height.		
Woody Vine Stratum	Plot Size (30' Radius)	Absolute % Cover	Dominant Species	Indicator Status			
1	--						
2	--						
3	--						
4	--						
5	--						
					Hydrophytic vegetation present? N		
Remarks: (Include photo numbers here or on a separate sheet)							
Note: This data sheet has been adapted to use the 2012 National Wetland Plant List:							
Robert W. Lichvar and John T. Kartesz. 2009. North American Digital Flora: National Wetland Plant List, version 2.4.0 (https://wetland_plants.usace.army.mil). U.S. Army Corps of Engineers, Engineer Research and Development Center, Cold Regions Research and Engineering Laboratory, Hanover, NH, and BONAP, Chapel Hill, NC. (2012)							

SOIL Sampling Point: 6-4u

Sampling Point: 6-4u

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

[illegible]

*Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains

**Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

Indicators for Problematic Hydric Soils:

- | | | |
|---|----------------------------|--|
| ☐ Histosol (A1) | Polyvalue Below Surface | ☐ 2 cm Muck (A10) (LRR K, L, MLRA 149B |
| ☐ Histic Epipedon (A2) | (S8) (LRR R, MLRA 149B) | ☐ Coast Prairie Redox (A16) (LRR K, L, R) |
| ☐ Black Histic (A3) | Thin Dark Surface (S9) | ☐ 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) |
| ☐ Hydrogen Sulfide (A4) | (LRR R, MLRA 149B | ☐ Dark Surface (S7) (LRR K, L) |
| ☐ Stratified Layers (A5) | Loamy Mucky Mineral (F1) | ☐ Polyvalue Below Surface (S8) (LRR K, L) |
| ☐ Depleted Below Dark Surface (A11) | (LRR K, L) | ☐ Thin Dark Surface (S9) (LRR K, L) |
| ☐ Thick Dark Surface (A12) | Loamy Gleyed Matrix (F2) | ☐ Iron-Manganese Masses (F12) (LRR K, L, R) |
| ☐ Sandy Mucky Mineral (S1) | Depleted Matrix (F3) | ☐ Piedmont Floodplain Soils (F19) (MLRA 149B) |
| ☐ Sandy Gleyed Matrix (S4) | Redox Dark Surface (F6) | ☐ Mesic Spodic (TA6) (MLRA 144A, 145, 149B) |
| ☐ Sandy Redox (S5) | Depleted Dark Surface (F7) | ☐ Red Parent Material (TF2) |
| ☐ Stripped Matrix (S6) | Redox Depressions (F8) | ☐ Very Shallow Dark Surface (TF12) |
| ☐ Dark Surface (S7) (LRR R, MLRA 149B) | | ☐ Other (Explain in Remarks) |

*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):

Type: Rock

Depth (inches): 6

Hydric soil present? N

Remarks:

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WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Eveleth-Gilbert-Virginia School City/County: Eveleth/St. Louis Sampling Date: 6/13/19
 Applicant/Owner: Kimley-Horn and Associates, Inc. State: Minnesota Sampling Point: 6-4w
 Investigator(s): Bailey Nelson, Ericka Massa Section, Township, Range: S29, T58N, R17W
 Landform (hillslope, terrace, etc.): toeslope Local relief (concave, convex, none): concave
 Slope (%): 0% Lat.: 47.482003 Long.: -92.525453 Datum: NAD 1983 UTM Zone 15N
 Soil Map Unit Name: Eaglesnest stony loam, 2-8% slopes, bouldery NWI Classification: PSS1/EM1B
 Are climatic/hydrologic conditions of the site typical for this time of the year? Yes (If no, explain in remarks)
 Are vegetation , soil , or hydrology significantly disturbed? Are "normal
 Are vegetation , soil , or hydrology naturally problematic? circumstances" present? Yes
 (If needed, explain any answers in remarks)

SUMMARY OF FINDINGS

Hydrophytic vegetation present?	<u>Y</u>	Is the sampled area within a wetland?	<u>Y</u>
Hydric soil present?	<u>Y</u>		
Indicators of wetland hydrology present?	<u>Y</u>	If yes, optional wetland site ID:	<u>Wetland 6</u>
Remarks: (Explain alternative procedures here or in a separate report.)			

HYDROLOGY

Primary Indicators (minimum of one is required; check all that apply) ☐ Surface Water (A1) ☐ Water-Stained Leaves (B9) ☒ High Water Table (A2) ☐ Aquatic Fauna (B13) ☒ Saturation (A3) ☐ Marl Deposits (B15) ☐ Water Marks (B1) ☐ Hydrogen Sulfide Odor (C1) ☐ Sediment Deposits (B2) ☐ Oxidized Rhizospheres on Living ☐ Drift Deposits (B3) ☐ Roots (C3) ☐ Algal Mat or Crust (B4) ☐ Presence of Reduced Iron (C4) ☐ Iron Deposits (B5) ☐ Recent Iron Reduction in Tilled ☐ Inundation Visible on Aerial ☐ Soils (C6) ☐ Imagery (B7) ☐ Thin Muck Surface (C7) ☐ Sparsely Vegetated Concave ☐ Other (Explain in Remarks) ☐ Surface (B8)		Secondary Indicators (minimum of two required) ☐ Surface Soil Cracks (B6) ☐ Drainage Patterns (B10) ☐ Moss Trim Lines (B16) ☐ Dry-Season Water Table (C2) ☐ Crayfish Burrows (C8) ☐ Saturation Visible on Aerial Imagery ☐ (C9) ☐ Stunted or Stressed Plants (D1) ☐ Geomorphic Position (D2) ☐ Shallow Aquitard (D3) ☐ FAC-Neutral Test (D5) ☐ Microtopographic Relief (D4)
Field Observations: Surface water present? Yes <u> </u> No <u>X</u> Depth (inches): <u> </u> Water table present? Yes <u>X</u> No <u> </u> Depth (inches): <u>10</u> Saturation present? Yes <u>X</u> No <u> </u> Depth (inches): <u>0</u> (includes capillary fringe)	Indicators of wetland hydrology present? <u>Y</u>	
Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

VEGETATION - Use scientific names of plants

					Sampling Point: <u>6-4w</u>		
					50/20 Thresholds		
Tree Stratum	Plot Size (<u>30'</u> Radius)	Absolute % Cover	Dominant Species	Indicator Status	Tree Stratum	20%	50%
1	<u> </u>	<u> </u>	<u> </u>	<u> </u>	Tree Stratum	<u>0</u>	<u>0</u>
2	<u> </u>	<u> </u>	<u> </u>	<u> </u>	Sapling/Shrub Stratum	<u>0</u>	<u>0</u>
3	<u> </u>	<u> </u>	<u> </u>	<u> </u>	Herb Stratum	<u>19</u>	<u>48</u>
4	<u> </u>	<u> </u>	<u> </u>	<u> </u>	Woody Vine Stratum	<u>0</u>	<u>0</u>
5	<u> </u>	<u> </u>	<u> </u>	<u> </u>	Dominance Test Worksheet		
6	<u> </u>	<u> </u>	<u> </u>	<u> </u>	Number of Dominant Species that are OBL, FACW, or FAC: <u>1</u> (A)		
7	<u> </u>	<u> </u>	<u> </u>	<u> </u>	Total Number of Dominant Species Across all Strata: <u>1</u> (B)		
8	<u> </u>	<u> </u>	<u> </u>	<u> </u>	Percent of Dominant Species that are OBL, FACW, or FAC: <u>100.00%</u> (A/B)		
9	<u> </u>	<u> </u>	<u> </u>	<u> </u>	Prevalence Index Worksheet		
10	<u> </u>	<u>0</u> = Total Cover	<u> </u>	<u> </u>	Total % Cover of:		
Sapling/Shrub Stratum	Plot Size (<u>15'</u> Radius)	Absolute % Cover	Dominant Species	Indicator Status	OBL species <u>75</u> x 1 = <u>75</u>		
1	<u> </u>	<u> </u>	<u> </u>	<u> </u>	FACW species <u>10</u> x 2 = <u>20</u>		
2	<u> </u>	<u> </u>	<u> </u>	<u> </u>	FAC species <u>10</u> x 3 = <u>30</u>		
3	<u> </u>	<u> </u>	<u> </u>	<u> </u>	FACU species <u>0</u> x 4 = <u>0</u>		
4	<u> </u>	<u> </u>	<u> </u>	<u> </u>	UPL species <u>0</u> x 5 = <u>0</u>		
5	<u> </u>	<u> </u>	<u> </u>	<u> </u>	Column totals <u>95</u> (A) <u>125</u> (B)		
6	<u> </u>	<u> </u>	<u> </u>	<u> </u>	Prevalence Index = B/A = <u>1.32</u>		
7	<u> </u>	<u> </u>	<u> </u>	<u> </u>	Hydrophytic Vegetation Indicators:		
8	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u> Rapid test for hydrophytic vegetation		
9	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u>X</u> Dominance test is >50%		
10	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u>X</u> Prevalence index is ≤3.0*		
Herb Stratum	Plot Size (<u>5'</u> Radius)	Absolute % Cover	Dominant Species	Indicator Status	Morphological adaptations* (provide supporting data in Remarks or on a separate sheet)		
1	<u>Calamagrostis canadensis</u>	<u>70</u>	<u>Bluejoint</u>	<u>OBL</u>	<u> </u> Problematic hydrophytic vegetation* (explain)		
2	<u>Oncoclea sensibilis</u>	<u>10</u>	<u>Sensitive Fern</u>	<u>FACW</u>	*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic		
3	<u>Equisetum arvense</u>	<u>10</u>	<u>Field Horsetail</u>	<u>FAC</u>	Definitions of Vegetation Strata:		
4	<u>Caltha palustris</u>	<u>5</u>	<u>Yellow Marsh-Marigold</u>	<u>OBL</u>	Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.		
5	<u> </u>	<u> </u>	<u> </u>	<u> </u>	Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.		
6	<u> </u>	<u> </u>	<u> </u>	<u> </u>	Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.		
7	<u> </u>	<u> </u>	<u> </u>	<u> </u>	Woody vines - All woody vines greater than 3.28 ft in height.		
8	<u> </u>	<u> </u>	<u> </u>	<u> </u>	Hydrophytic vegetation present? <u>Y</u>		
9	<u> </u>	<u> </u>	<u> </u>	<u> </u>	Remarks: (Include photo numbers here or on a separate sheet)		
10	<u> </u>	<u>95</u> = Total Cover	<u> </u>	<u> </u>	Note: This data sheet has been adapted to use the 2012 National Wetland Plant List:		
Woody Vine Stratum	Plot Size (<u>30'</u> Radius)	Absolute % Cover	Dominant Species	Indicator Status	Robert W. Lichvar and John T. Kartesz. 2009. North American Digital Flora: National Wetland Plant List, version 2.4.0 (https://wetland.plants.usace.army.mil), U.S. Army Corps of Engineers, Engineer Research and Development Center, Cold Regions Research and Engineering Laboratory, Hanover, NH, and BONAP, Chapel Hill, NC. (2012)		
1	<u> </u>	<u> </u>	<u> </u>	<u> </u>			
2	<u> </u>	<u> </u>	<u> </u>	<u> </u>			
3	<u> </u>	<u> </u>	<u> </u>	<u> </u>			
4	<u> </u>	<u> </u>	<u> </u>	<u> </u>			
5	<u> </u>	<u>0</u> = Total Cover	<u> </u>	<u> </u>			

Sampling Point: 6-4w

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

[illegible]

*Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains

**Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

Indicators for Problematic Hydric Soils:

- | | | |
|--|--|---|
| ☐ Histosol (A1) | Polyvalue Below Surface | 2 cm Muck (A10) (LRR K, L, MLRA 149B |
| ☐ Histic Epipedon (A2) | (S8) (LRR R, MLRA 149B) | Coast Prairie Redox (A16) (LRR K, L, R) |
| ☐ Black Histic (A3) | Thin Dark Surface (S9) | 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) |
| ☐ Hydrogen Sulfide (A4) | (LRR R, MLRA 149B | Dark Surface (S7) (LRR K, L) |
| ☐ Stratified Layers (A5) | Loamy Mucky Mineral (F1) | Polyvalue Below Surface (S8) (LRR K, L) |
| ☒ Depleted Below Dark Surface (A11') | (LRR K, L) | Thin Dark Surface (S9) (LRR K, L) |
| ☐ Thick Dark Surface (A12) | Loamy Gleyed Matrix (F2) | Iron-Manganese Masses (F12) (LRR K, L, R) |
| ☐ Sandy Mucky Mineral (S1) | ☒ Depleted Matrix (F3) | Piedmont Podzolized Soils (F19) (MLRA 149B) |
| ☐ Sandy Gleyed Matrix (S4) | Redox Dark Surface (F6) | Mesic Spodic (TA6) (MLRA 144A, 145, 149B) |
| ☐ Sandy Redox (S5) | Depleted Dark Surface (F7) | Red Parent Material (TF2) |
| ☐ Stripped Matrix (S6) | Redox Depressions (F8) | Very Shallow Dark Surface (TF12) |
| ☐ Dark Surface (S7) (LRR R, MLRA 149B) | | Other (Explain in Remarks) |

*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):

Type: _____

Depth (inches):

Hydric soil present? Y

Remarks:

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Project/Site:	Eveleth-Gilbert-Virginia School		City/County:	Eveleth/St. Louis	Sampling Date:	6/14/19
Applicant/Owner:	Kirmley-Horn and Associates, Inc.		State:	Minnesota	Sampling Point:	6-5u
Investigator(s):	Bailey Nelson, Enicka Massa		Section, Township, Range:	S29, T58N, R17W		
Landform (hillslope, terrace, etc.):	backslope		Local relief (concave, convex, none):	none		
Slope (°):	15%	Lat.: 47.482744	Long.: -92.516474	Datum:	NAD 1983 UTM Zone 15N	
Soil Map Unit Name:	Eveleth-Conic, bulldozer-rock outcrop complex, 18-30% slopes		NWI Classification: none			
Are climatic/hydrologic conditions of the site typical for this time of the year?				Yes	(If no, explain in remarks)	
Are vegetation _____, soil _____, or hydrology _____ significantly disturbed?				Yes	Are "normal circumstances" present?	
Are vegetation _____, soil _____, or hydrology _____ naturally problematic?				Yes		
(If needed, explain any answers in remarks)						

Hydrophytic vegetation present?	<u> N </u>	Is the sampled area within a wetland? <u> N </u>
Hydric soil present?	<u> N </u>	
Indicators of wetland hydrology present?	<u> N </u>	
If yes, optional wetland site ID: _____		
Remarks: (Explain alternative procedures here or in a separate report.)		

Primary Indicators (minimum of one is required; check all that apply)				Secondary Indicators (minimum of two required)	
☐ Surface Water (A1)	☐	☐ Water-Stained Leaves (B9)	☐	☐ Surface Soil Cracks (B6)	☐
☐ High Water Table (A2)	☐	☐ Aquatic Fauna (B13)	☐	☐ Drainage Patterns (B10)	☐
☐ Saturation (A3)	☐	☐ Marl Deposits (B15)	☐	☐ Moss Trim Lines (B16)	☐
☐ Water Marks (B1)	☐	☐ Hydrogen Sulfide Odor (C1)	☐	☐ Dry-Season Water Table (C2)	☐
☐ Sediment Deposits (B2)	☐	☐ Oxidized Rhizospheres on Living	☐	☐ Crayfish Burrows (C8)	☐
☐ Drift Deposits (B3)	☐	☐ Roots (C3)	☐	☐ Saturation Visible on Aerial Imagery	☐
☐ Algal Mat or Crust (B4)	☐	☐ Presence of Reduced Iron (C4)	☐	☐ (C9)	☐
☐ Iron Deposits (B5)	☐	☐ Recent Iron Reduction in Tilled	☐	☐ Stunted or Stressed Plants (D1)	☐
☐ Inundation Visible on Aerial	☐	☐ Soils (C6)	☐	☐ Geomorphic Position (D2)	☐
☐ Imagery (B7)	☐	☐ Thin Muck Surface (C7)	☐	☐ Shallow Aquitard (D3)	☐
☐ Sparsely Vegetated Concave	☐	☐ Other (Explain in Remarks)	☐	☐ FAC-Neutral Test (D5)	☐
☐ Surface (B8)	☐		☐	☐ Microtopographic Relief (D4)	☐

Field Observations:				Indicators of wetland hydrology present? <u> N </u>	
Surface water present?	Yes <u> </u>	No <u> </u>	<u> X </u> Depth (inches): <u> </u>		
Water table present?	Yes <u> </u>	No <u> </u>	<u> X </u> Depth (inches): <u> </u>		
Saturation present?	Yes <u> </u>	No <u> </u>	<u> X </u> Depth (inches): <u> </u>		
(includes capillary fringe)					
Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:					
Remarks:					

						50/20 Thresholds		20%	50%
Tree Stratum	Plot Size (30' Radius)	Absolute % Cover	Dominant Species	Indicator Status					
1	Betula papyrifera -- Paper Birch	20	Y	FACU				6	15
2	Populus tremuloides -- Quaking Aspen	10	Y	FAC				0	0
3									
4									
5	--								
6	--								
7	--								
8	--								
9	--								
10	--								
		30 = Total Cover							
Sapling/Shrub Stratum	Plot Size (15' Radius)	Absolute % Cover	Dominant Species	Indicator Status					
1	--								
2	--								
3	--								
4	--								
5	--								
6	--								
7	--								
8	--								
9	--								
10	--								
		0 = Total Cover							
Herb Stratum	Plot Size (5' Radius)	Absolute % Cover	Dominant Species	Indicator Status					
1	Eurybia macrophylla -- Large-Leaf Wood-Aster	20	Y	UPL					
2	Aralia nudicaulis -- Wild Sarsaparilla	15	Y	FACU					
3	Pteridium aquilinum -- Northern Bracken Fern	15	Y	FACU					
4	Cornus canadensis -- Canadian Bunchberry	5	N	FAC					
5	--								
6	--								
7	--								
8	--								
9	--								
10	--								
11	--								
12	--								
13	--								
14	--								
15	--								
		55 = Total Cover							
Woody Vine Stratum	Plot Size (30' Radius)	Absolute % Cover	Dominant Species	Indicator Status					
1	--								
2	--								
3	--								
4	--								
5	--								
		0 = Total Cover							
Dominance Test Worksheet									
Number of Dominant Species that are OBL, FACW, or FAC: _____ 1 (A)									
Total Number of Dominant Species Across all Strata: _____ 5 (B)									
Percent of Dominant Species that are OBL, FACW, or FAC: _____ 20.00% (A/B)									
Prevalence Index Worksheet									
Total % Cover of:									
OBL species	0	x 1 =	0						
FACW species	0	x 2 =	0						
FAC species	15	x 3 =	45						
FACU species	50	x 4 =	200						
UPL species	20	x 5 =	100						
Column totals	85	(A)	345	(B)					
Prevalence Index = B/A =			4.06						
Hydrophytic Vegetation Indicators:									
___ Rapid test for hydrophytic vegetation									
___ Dominance test is >50%									
___ Prevalence index is >3.0*									
Morphological adaptations* (provide supporting data in Remarks or on a separate sheet)									
___ Problematic hydrophytic vegetation* (explain)									
*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic									
Definitions of Vegetation Strata:									
Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.									
Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.									
Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.									
Woody vines - All woody vines greater than 3.28 ft in height.									
Hydrophytic vegetation present? _____ N									
Remarks: (Include photo numbers here or on a separate sheet)									
Note: This data sheet has been adapted to use the 2012 National Wetland Plant List: Robert W. Lichvar and John T. Kartesz. 2009. North American Digital Flora: National Wetland Plant List, version 2.4.0 (https://wetland_plants.usace.army.mil/). U.S. Army Corps of Engineers, Engineer Research and Development Center, Cold Regions Research and Engineering Laboratory, Hanover, NH, and BONAP, Chapel Hill, NC. (2012)									

[illegible]

US Army Corps of Engineers

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Northcentral and Northeast Region

Project/Site:	<u>Eveleth-Gilbert-Virginia School</u>	City/County:	<u>Eveleth/St. Louis</u>	Sampling Date:	<u>6/14/19</u>
Applicant/Owner:	<u>Kimley-Horn and Associates, Inc.</u>	State:	<u>Minnesota</u>	Sampling Point:	<u>6-5W</u>
Investigator(s):	<u>Bailey Nelson, Ericka Massa</u>	Section, Township, Range:	<u>S29, T58N, R17W</u>		
Landform (hillslope, terrace, etc.):	<u>toeslope</u>	Local relief (concave, convex, none):	<u>concave</u>		
Slope (%):	<u>0%</u>	Lat.:	<u>47.482777</u>	Long.:	<u>-92.51625</u>
				Datum:	<u>NAD 1983 UTM Zone 15N</u>
Soil Map Unit Name:	<u>Eveleth-Conic, bouldery-rock outcrop complex, 18-30% slopes</u>		<u>NWI Classification: PSS1/EM1B</u>		
Are climatic/hydrologic conditions of the site typical for this time of the year?				<u>Yes</u>	(If no, explain in remarks)
Are vegetation _____, soil _____, or hydrology _____	significantly disturbed?			Are "normal	
Are vegetation _____, soil _____, or hydrology _____	naturally problematic?			circumstances" present?	<u>Yes</u>
(If needed, explain any answers in remarks)					

Hydrophytic vegetation present?	<u>Y</u>	Is the sampled area within a wetland? <u>Y</u>
Hydric soil present?	<u>Y</u>	
Indicators of wetland hydrology present?	<u>Y</u>	
Remarks: (Explain alternative procedures here or in a separate report.)		If yes, optional wetland site ID: <u>Wetland 6</u>

Primary Indicators (minimum of one is required; check all that apply) ☒ Surface Water (A1) ☐ Water-Stained Leaves (B9) ☒ High Water Table (A2) ☐ Aquatic Fauna (B13) ☒ Saturation (A3) ☐ Marl Deposits (B15) ☐ Water Marks (B1) ☐ Hydrogen Sulfide Odor (C1) ☐ Sediment Deposits (B2) ☐ Oxidized Rhizospheres on Living ☐ Drift Deposits (B3) ☐ Roots (C3) ☐ Algal Mat or Crust (B4) ☐ Presence of Reduced Iron (C4) ☐ Iron Deposits (B5) ☐ Recent Iron Reduction in Tilled ☐ Inundation Visible on Aerial ☐ Soils (C6) ☐ Imagery (B7) ☐ Thin Muck Surface (C7) ☐ Sparsely Vegetated Concave ☐ Other (Explain in Remarks) ☐ Surface (B8)				Secondary Indicators (minimum of two required) ☐ Surface Soil Cracks (B6) ☐ Drainage Patterns (B10) ☐ Moss Trim Lines (B16) ☐ Dry-Season Water Table (C2) ☐ Crayfish Burrows (C8) ☐ Saturation Visible on Aerial Imagery ☐ (C9) ☐ Stunted or Stressed Plants (D1) ☐ Geomorphic Position (D2) ☐ Shallow Aquitard (D3) ☐ FAC-Neutral Test (D5) ☐ Microtopographic Relief (D4)			
Field Observations: Surface water present? Yes ☒ No ☐ Depth (inches): <u>2</u> Water table present? Yes ☒ No ☐ Depth (inches): <u>0</u> Saturation present? Yes ☒ No ☐ Depth (inches): <u>0</u> (includes capillary fringe)				Indicators of wetland hydrology present? <u>Y</u>			
Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:							
Remarks:							

						50/20 Thresholds		
						20%	50%	
Tree Stratum	Plot Size (30' Radius)		Absolute % Cover	Dominant Species	Indicator Status	Tree Stratum	0	0
1	--					Sapling/Shrub Stratum	3	8
2	--					Herb Stratum	13	33
3	--					Woody Vine Stratum	0	0
4	--							
5	--							
6	--							
7	--							
8	--							
9	--							
10	--		0	= Total Cover				
Sapling/Shrub Stratum	Plot Size (15' Radius)		Absolute % Cover	Dominant Species	Indicator Status			
1	<i>Alnus incana</i> -- <i>Speckled Alder</i>		15	Y	FACW			
2	--							
3	--							
4	--							
5	--							
6	--							
7	--							
8	--							
9	--							
10	--		15	= Total Cover				
Herb Stratum	Plot Size (5' Radius)		Absolute % Cover	Dominant Species	Indicator Status			
1	<i>Carex lacustris</i> -- <i>Lakebank Sedge</i>		30	Y	OBL			
2	<i>Carex intumescens</i> -- <i>Greater Bladder Sedge</i>		15	Y	FACW			
3	<i>Caltha palustris</i> -- <i>Yellow Marsh-Marigold</i>		15	Y	OBL			
4	<i>Equisetum sylvaticum</i> -- <i>Woodland Horsetail</i>		5	N	FACW			
5	--							
6	--							
7	--							
8	--							
9	--							
10	--							
11	--							
12	--							
13	--							
14	--							
15	--		65	= Total Cover				
Woody Vine Stratum	Plot Size (30' Radius)		Absolute % Cover	Dominant Species	Indicator Status			
1	--							
2	--							
3	--							
4	--							
5	--							
			0	= Total Cover				
Remarks: (Include photo numbers here or on a separate sheet)								
Note: This data sheet has been adapted to use the 2012 National Wetland Plant List: Robert W. Lichvar and John T. Kartez. 2009. North American Digital Flora: National Wetland Plant List, version 2.4.0 (https://wetland_plants.usace.army.mil/), U.S. Army Corps of Engineers, Engineer Research and Development Center, Cold Regions Research and Engineering Laboratory, Hanover, NH, and BONAP, Chapel Hill, NC. (2012)								

SOIL Sampling Point: 6-5w

Sampling Point: 6-5w

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

[illegible]

*Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains

**Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

Indicators for Problematic Hydric Soils:

- | | | | | |
|---|--------------------------------------|----------------------------|---|---|
| — | Histisol (A1) | Polyvalue Below Surface | — | 2 cm Muck (A10) (LRR K, L, MLRA 149B |
| X | Histic Epipedon (A2) | (S8) (LRR R, MLRA 149B) | — | Coast Prairie Redox (A16) (LRR K, L, R) |
| — | Black Histic (A3) | Thin Dark Surface (S9) | — | 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) |
| — | Hydrogen Sulfide (A4) | (LRR R, MLRA 149B | — | Dark Surface (S7) (LRR K, L) |
| — | Stratified Layers (A5) | Loamy Mucky Mineral (F1) | — | Polyvalue Below Surface (S8) (LRR K, L) |
| — | Depleted Below Dark Surface (A11) | (LRR K, L) | — | Thin Dark Surface (S9) (LRR K, L) |
| — | Thick Dark Surface (A12) | Loamy Gleyed Matrix (F2) | — | Iron-Manganese Masses (F12) (LRR K, L, R) |
| — | Sandy Mucky Mineral (S1) | Depleted Matrix (F3) | — | Piedmont Floodplain Soils (F19) (MLRA 149B) |
| — | Sandy Gleyed Matrix (S4) | Redox Dark Surface (F6) | — | Mesic Spodic (TA6) (MLRA 144A, 145, 149B) |
| — | Sandy Redox (S5) | Depleted Dark Surface (F7) | — | Red Parent Material (TF2) |
| — | Stripped Matrix (S6) | Redox Depressions (F8) | — | Very Shallow Dark Surface (TF12) |
| — | Dark Surface (S7) (LRR R, MLRA 149B) | | — | Other (Explain in Remarks) |

*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):

Type: Rocks

Depth (inches): 6

Hydric soil present? Y

Remarks:

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WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site:	<u>Eveleth-Gilbert-Virginia School</u>	City/County:	<u>Eveleth/St. Louis</u>	Sampling Date:	<u>6/13/19</u>
Applicant/Owner:	<u>Kimley-Horn and Associates, Inc.</u>	State:	<u>Minnesota</u>	Sampling Point:	<u>7-1u</u>
Investigator/s:	<u>Bailey Nelson, Ericka Massa</u>	Section, Township, Range:	<u>S29, T58N, R17W</u>		
Landform (hillslope, terrace, etc.):	<u>foothlope</u>	Local relief (concave, convex, none):	<u>none</u>		
Slope (°):	<u>10%</u>	Lat.:	<u>47.284891</u>	Long.:	<u>-92.526919</u>
Soil Map Unit Name:	<u>Babbitt, bouldery-Wahlsen, bouldery-Aguets, rubbly, convex</u>		<u>0-8NNDI Classification: none</u>		
Are climatic/hydrologic conditions of the site typical for this time of the year? <u>Yes</u> (If no, explain in remarks)					
Are vegetation <u> </u> , soil <u> </u> , or hydrology <u> </u> significantly disturbed?			Are "normal circumstances" present? <u>Yes</u>		
Are vegetation <u> </u> , soil <u> </u> , or hydrology <u> </u> naturally problematic?					
(If needed, explain any answers in remarks)					

SUMMARY OF FINDINGS

Hydrophytic vegetation present?	<u>Y</u>	Is the sampled area within a wetland? <u>N</u>
Hydric soil present?	<u>N</u>	
Indicators of wetland hydrology present?	<u>N</u>	
If yes, optional wetland site ID: _____		
Remarks: (Explain alternative procedures here or in a separate report.)		

HYDROLOGY

Primary Indicators (minimum of one is required; check all that apply)				Secondary Indicators (minimum of two required)			
☐ Surface Water (A1)		☐ Water-Stained Leaves (B9)		☐ Surface Soil Cracks (B6)			
☐ High Water Table (A2)		☐ Aquatic Fauna (B13)		☐ Drainage Patterns (B10)			
☐ Saturation (A3)		☐ Marl Deposits (B15)		☐ Moss Trim Lines (B16)			
☐ Water Marks (B1)		☐ Hydrogen Sulfide Odor (C1)		☐ Dry-Season Water Table (C2)			
☐ Sediment Deposits (B2)		☐ Oxidized Rhizospheres on Living		☐ Crayfish Burrows (C8)			
☐ Drift Deposits (B3)		☐ Roots (C3)		☐ Saturation Visible on Aerial Imagery			
☐ Algal Mat or Crust (B4)		☐ Presence of Reduced Iron (C4)		☐ (C9)			
☐ Iron Deposits (B5)		☐ Recent Iron Reduction in Tilled		☐ Stunted or Stressed Plants (D1)			
☐ Inundation Visible on Aerial		☐ Soils (C6)		☐ Geomorphic Position (D2)			
☐ Imagery (B7)		☐ Thin Muck Surface (C7)		☐ Shallow Aquitard (D3)			
☐ Sparsely Vegetated Concave		☐ Other (Explain in Remarks)		☐ FAC-Neutral Test (D5)			
☐ Surface (B8)				☐ Microtopographic Relief (D4)			

Field Observations:				Indicators of wetland hydrology present?	
Surface water present?	Yes ☐	No ☐	X ☐	Depth (inches):	
Water table present?	Yes ☐	No ☐	X ☐	Depth (inches):	
Water present?	Yes ☐	No ☐	X ☐	Depth (inches):	
(includes capillary fringe)				N	
Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:					
Remarks:					

VEGETATION - Use scientific names of plants

						50/20 Thresholds		
Tree Stratum	Plot Size (30' Radius)	Absolute % Cover	Dominant Species	Indicator Status		20%	50%	
1	<i>Abies balsamea</i> -- Balsam Fir	20	Y	FAC		Tree Stratum	6	15
2	<i>Populus tremuloides</i> -- Quaking Aspen	10	Y	FAC		Sapling/Shrub Stratum	1	2
3	--					Herb Stratum	12	29
4	--					Woody Vine Stratum	0	0
5	--					Dominance Test Worksheet		
6	--					Number of Dominant Species that are OBL, FACW, or FAC: <u>3</u> (A)		
7	--					Total Number of Dominant Species Across all Strata: <u>4</u> (B)		
8	--					Percent of Dominant Species that are OBL, FACW, or FAC: <u>75.00%</u> (A/B)		
9	--							
10	--	30	= Total Cover					
Sapling/Shrub Stratum	Plot Size (15' Radius)	Absolute % Cover	Dominant Species	Indicator Status				
1	<i>Vaccinium angustifolium</i> -- Late Lowbush Blueberry	3		FACU		Prevalence Index Worksheet		
2	--					Total % Cover of:		
3	--					OBL species <u>0</u> x 1 = <u>0</u>		
4	--					FACW species <u>0</u> x 2 = <u>0</u>		
5	--					FAC species <u>60</u> x 3 = <u>180</u>		
6	--					FACU species <u>31</u> x 4 = <u>124</u>		
7	--					UPL species <u>0</u> x 5 = <u>0</u>		
8	--					Column totals <u>91</u> (A) <u>304</u> (B)		
9	--					Prevalence Index = B/A = <u>3.34</u>		
10	--	3	= Total Cover					
Herb Stratum	Plot Size (5' Radius)	Absolute % Cover	Dominant Species	Indicator Status		Hydrophytic Vegetation Indicators:		
1	<i>Aralia nudicaulis</i> -- Wild Sarsaparilla	15	Y	FACU		Rapid test for hydrophytic vegetation		
2	<i>Cornus canadensis</i> -- Canadian Bunchberry	15	Y	FAC		☒ Dominance test is >50%		
3	<i>Clintonia borealis</i> -- Yellow Bluebead-Lily	10	N	FAC		☐ Prevalence index is $\geq 3.0^*$		
4	<i>Dendrolycopodium dendroideum</i> -- Prickley Tree-Club-Moss	10	N	FACU		Morphological adaptations* (provide supporting data in Remarks or on a separate sheet)		
5	<i>Equisetum arvense</i> -- Field Horsetail	5	N	FAC		Problematic hydrophytic vegetation* (explain)		
6	<i>Pteridium aquilinum</i> -- Northern Bracken Fern	3	N	FACU				
7	--					*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic		
8	--							
9	--							
10	--							
11	--							
12	--							
13	--							
14	--							
15	--	58	= Total Cover			Definitions of Vegetation Strata:		
Woody Vine Stratum	Plot Size (30' Radius)	Absolute % Cover	Dominant Species	Indicator Status		Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.		
1	--					Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.		
2	--					Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.		
3	--					Woody vines - All woody vines greater than 3.28 ft in height.		
4	--							
5	--	0	= Total Cover			Hydrophytic vegetation present? <u>Y</u>		

Remarks: (Include photo numbers here or on a separate sheet)

Note: This data sheet has been adapted to use the 2012 National Wetland Plant List:

Robert W. Lichvar and John T. Kartesz. 2009. North American Digital Flora: National Wetland Plant List, version 2.4.0 (https://wetland_plants.usace.army.mil). U.S. Army Corps of Engineers, Engineer Research and Development Center, Cold Regions Research and Engineering Laboratory, Hanover, NH, and BONAP, Chapel Hill, NC. (2012)

SOIL Sampling Point: 7-1u

Sampling Point: 7-1u

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

[illegible]

*Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains

**Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

Indicators for Problematic Hydric Soils:

- | | | |
|---|----------------------------------|--|
| ___ Histosol (A1) | Polyvalue Below Surface | ___ 2 cm Muck (A10) (LRR K, L, MLRA 149B) |
| ___ Black Epipedon (A2) | (S8) (LRR R, MLRA 149B) | ___ Coast Prairie Redox (A16) (LRR K, L, R) |
| ___ Histic Histic (A3) | ___ Thin Dark Surface (S9) | ___ 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) |
| ___ Hydrogen Sulfide (A4) | (LRR R, MLRA 149B) | ___ Dark Surface (S7) (LRR K, L) |
| ___ Stratified Layers (A5) | ___ Loamy Mucky Mineral (F1) | ___ Polyvalue Below Surface (S8) (LRR K, L) |
| ___ Depleted Below Dark Surface (A11') | (LRR K, L) | ___ Thin Dark Surface (S9) (LRR K, L) |
| ___ Thick Dark Surface (A12) | ___ Loamy Gleyed Matrix (F2) | ___ Iron-Manganese Masses (F12) (LRR K, L, R) |
| ___ Sandy Mucky Mineral (S1) | ___ Depleted Matrix (F3) | ___ Piedmont Floodplain Soils (F19) (MLRA 149B) |
| ___ Sandy Gleyed Matrix (S4) | ___ Redox Dark Surface (F6) | ___ Mesic Spodic (Ta6) (MLRA 144A, 145, 149B) |
| ___ Sandy Redox (S5) | ___ Depleted Dark Surface (F7) | ___ Red Parent Material (TF2) |
| ___ Stripped Matrix (S6) | ___ Redox Depressions (F8) | ___ Very Shallow Dark Surface (TF12) |
| ___ Dark Surface (S7) (LRR R, MLRA 149B) | | ___ Other (Explain in Remarks) |

*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):

Type: Rock

Depth (inches): 8

Hydric soil present? N

Remarks:

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WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Eveleth-Gilbert-Virginia School City/County: Eveleth/St. Louis Sampling Date: 6/13/19
Applicant/Owner: Kimley-Horn and Associates, Inc. State: Minnesota Sampling Point: 7-1w
Investigator(s): Bailey Nelson, Ericka Massa Section, Township, Range: S29, T58N, R17W
Landform (hillslope, terrace, etc.): toeslope Local relief (concave, convex, none): concave
Slope (%): 0-5% Lat.: 47.482977 Long.: -92.526984 Datum: NAD 1983 UTM Zone 15N
Soil Map Unit Name: Babbitt, bouldery-Wahlsten, bouldery-Aquepts, rubbly, complex, 0-8NW1 Classification: none
Are climatic/hydrologic conditions of the site typical for this time of the year? Yes (If no, explain in remarks)
Are vegetation , soil , or hydrology significantly disturbed? Are "normal
Are vegetation , soil , or hydrology naturally problematic? circumstances" present? Yes
(If needed, explain any answers in remarks)

SUMMARY OF FINDINGS

Hydrophytic vegetation present?	<u>Y</u>	Is the sampled area within a wetland?	<u>Y</u>
Hydric soil present?	<u>Y</u>		
Indicators of wetland hydrology present?	<u>Y</u>	If yes, optional wetland site ID:	<u>Wetland 7</u>
Remarks: (Explain alternative procedures here or in a separate report.)			

HYDROLOGY

Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)	
☐ Surface Water (A1)	☐ Water-Stained Leaves (B9)	☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Aquatic Fauna (B13)	☐ Drainage Patterns (B10)	
☒ Saturation (A3)	☐ Marl Deposits (B15)	☐ Moss Trim Lines (B16)	
☐ Water Marks (B1)	☐ Hydrogen Sulfide Odor (C1)	☐ Dry-Season Water Table (C2)	
☐ Sediment Deposits (B2)	☐ Oxidized Rhizospheres on Living	☐ Crayfish Burrows (C8)	
☐ Drift Deposits (B3)	☐ Roots (C3)	☐ Saturation Visible on Aerial Imagery	
☐ Algal Mat or Crust (B4)	☐ Presence of Reduced Iron (C4)	☐ (C9)	
☐ Iron Deposits (B5)	☐ Recent Iron Reduction in Tilled	☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial	☐ Soils (C6)	☒ Geomorphic Position (D2)	
☐ Imagery (B7)	☐ Thin Muck Surface (C7)	☐ Shallow Aquitard (D3)	
☐ Sparsely Vegetated Concave	☐ Other (Explain in Remarks)	☐ FAC-Neutral Test (D5)	
☐ Surface (B8)		☐ Microtopographic Relief (D4)	
Field Observations:		Indicators of wetland hydrology present? <u>Y</u>	
Surface water present?	Yes <u> </u> No <u>X</u>	Depth (inches): <u> </u>	
Water table present?	Yes <u> </u> No <u>X</u>	Depth (inches): <u> </u>	
Saturation present?	Yes <u>X</u> No <u> </u>	Depth (inches): <u>0</u>	
(includes capillary fringe)			
Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks:			

US Army Corps of Engineers

Northcentral and Northeast Region

VEGETATION - Use scientific names of plants

					Sampling Point: <u>7-1w</u>		
					50/20 Thresholds		
					20% 50%		
Tree Stratum Plot Size (<u>30'</u> Radius)					Absolute % Cover	Dominant Species	Indicator Status
1	<u>Thuja occidentalis</u>	--	<u>Eastern Arborvitae</u>	20	Y	FACW	
2		--					
3		--					
4		--					
5		--					
6		--					
7		--					
8		--					
9		--					
10		--					
				20 = Total Cover			
Sapling/Shrub Stratum Plot Size (<u>15'</u> Radius)					Absolute % Cover	Dominant Species	Indicator Status
1	<u>Alnus incana</u>	--	<u>Speckled Alder</u>	10	Y	FACW	
2	<u>Abies balsamea</u>	--	<u>Balsam Fir</u>	10	Y	FAC	
3		--					
4		--					
5		--					
6		--					
7		--					
8		--					
9		--					
10		--					
				20 = Total Cover			
Herb Stratum Plot Size (<u>5'</u> Radius)					Absolute % Cover	Dominant Species	Indicator Status
1	<u>Equisetum arvense</u>	--	<u>Field Horsetail</u>	10	Y	FAC	
2	<u>Cornus canadensis</u>	--	<u>Canadian Bunchberry</u>	10	Y	FAC	
3	<u>Petasites frigidus</u>	--	<u>Arctic Sweet-Colt's-Foot</u>	7	Y	FACW	
4	<u>Osmunda claytoniana</u>	--	<u>Interrupted Fern</u>	7	Y	FAC	
5	<u>Carex stricta</u>	--	<u>Upright Sedge</u>	5	N	OBL	
6	<u>Ranunculus acris</u>	--	<u>Tail Butternut</u>	3	N	FAC	
7		--					
8		--					
9		--					
10		--					
11		--					
12		--					
13		--					
14		--					
15		--					
				42 = Total Cover			
Woody Vine Stratum Plot Size (<u>30'</u> Radius)					Absolute % Cover	Dominant Species	Indicator Status
1		--					
2		--					
3		--					
4		--					
5		--					
				0 = Total Cover			
Remarks: (Include photo numbers here or on a separate sheet)							
Note: This data sheet has been adapted to use the 2012 National Wetland Plant List: Robert W. Lichvar and John T. Kartesz. 2009. North American Digital Flora: National Wetland Plant List, version 2.4.0 (https://wetland.plants.usace.army.mil), U.S. Army Corps of Engineers, Engineer Research and Development Center, Cold Regions Research and Engineering Laboratory, Hanover, NH, and BONAP, Chapel Hill, NC. (2012)							

US Army Corps of Engineers

Northcentral and Northeast Region

Sampling Point: 7-1w

[illegible]

**Location: PL=Pore Lining, M=Matrix

Indicators for Problematic Hydric Soils:

- *Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Hydric soil present? Y

Hydric soils indicators were not observed but the shallow layer of soil immediately underlain by rock made it difficult to observe the soils. We believe hydric soils are present based on the hydrophytic vegetation present and saturation of soil to the surface.

Northcentral and Northeast Region

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site:	<u>Eveleth-Gilbert-Virginia School</u>	City/County:	<u>Eveleth/St. Louis</u>	Sampling Date:	<u>6/14/19</u>
Applicant/Owner:	<u>Kimley-Horn and Associates, Inc.</u>	State:	<u>Minnesota</u>	Sampling Point:	<u>8-1u</u>
Investigator/s:	<u>Bailey Nelson, Erica Massa</u>	Section, Township, Range:	<u>S29, T58N, R17W</u>		
Landform (hillside, terrace, etc.):	<u>foothole</u>	Local relief (concave, convex, none):	<u>none</u>		
Slope (°):	<u>10%</u>	Lat.:	<u>47.481714</u>	Long.:	<u>-92.517178</u>
				Date:	<u>NAD 1983 UTM Zone 15N</u>
Soil Map Unit Name:	<u>Eveleth-Eaglesnest-Conic complex, bouldery, 6-18% slopes, very r</u>	NCW Classification:	<u>none</u>		
Are climatic/hydrologic conditions of the site typical for this time of the year?	<u>Yes</u>	(If no, explain in remarks)			
Are vegetation <u> </u> , soil <u> </u> , or hydrology <u> </u> significantly disturbed?		Are "normal circumstances" present?	<u>Yes</u>		
Are vegetation <u> </u> , soil <u> </u> , or hydrology <u> </u> naturally problematic?					
(If needed, explain any answers in remarks)					

SUMMARY OF FINDINGS

Hydrophytic vegetation present?	<u> N </u>	Is the sampled area within a wetland? <u> N </u> If yes, optional wetland site ID: _____
Hydric soil present?	<u> N </u>	
Indicators of wetland hydrology present?	<u> N </u>	
Remarks: (Explain alternative procedures here or in a separate report.)		

HYDROLOGY

Primary Indicators (minimum of one is required; check all that apply)				Secondary Indicators (minimum of two required)	
☐ Surface Water (A1)		☐ Water-Stained Leaves (B9)		☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)		☐ Aquatic Fauna (B13)		☐ Drainage Patterns (B10)	
☐ Saturation (A3)		☐ Marl Deposits (B15)		☐ Moss Trim Lines (B16)	
☐ Water Marks (B1)		☐ Hydrogen Sulfide Odor (C1)		☐ Dry-Season Water Table (C2)	
☐ Sediment Deposits (B2)		☐ Oxidized Rhizospheres on Living		☐ Crayfish Burrows (C8)	
☐ Drift Deposits (B3)		☐ Roots (C3)		☐ Saturation Visible on Aerial Imagery	
☐ Algal Mat or Crust (B4)		☐ Presence of Reduced Iron (C4)		☐ (C9)	
☐ Iron Deposits (B5)		☐ Recent Iron Reduction in Tilled		☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial		☐ Soils (C6)		☐ Geomorphic Position (D2)	
☐ Imagery (B7)		☐ Thin Muck Surface (C7)		☐ Shallow Aquitard (D3)	
☐ Sparsely Vegetated Concave		☐ Other (Explain in Remarks)		☐ FAC-Neutral Test (D5)	
☐ Surface (B8)				☐ Microtopographic Relief (D4)	

Field Observations:				Indicators of wetland hydrology present? <u> </u> N	
Surface water present?	Yes <u> </u>	No <u> </u>	<u> </u> X <u> </u> Depth (inches): <u> </u>		
Water table present?	Yes <u> </u>	No <u> </u>	<u> </u> X <u> </u> Depth (inches): <u> </u>		
Saturation present?	Yes <u> </u>	No <u> </u>	<u> </u> X <u> </u> Depth (inches): <u> </u>		
(includes capillary fringe)					
Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:					
Remarks:					

VEGETATION - Use scientific names of plants

Tree Stratum				50/20 Thresholds		
Plot Size (30' Radius)	Absolute % Cover	Dominant Species	Indicator Status	20%	50%	
1 <i>Pinus strobus</i> -- Eastern White Pine	20	Y	FACU	8	20	
2 <i>Abies balsamea</i> -- Balsam Fir	10	Y	FAC	3	8	
3 <i>Populus tremuloides</i> -- Quaking Aspen	10	Y	FAC	9	24	
4 --				0	0	
5 --						
6 --						
7 --						
8 --						
9 --						
10 --						
	40	= Total Cover				
Sapling/Shrub Stratum				50/20 Thresholds		
Plot Size (15' Radius)	Absolute % Cover	Dominant Species	Indicator Status	20%	50%	
1 <i>Abies balsamea</i> -- Balsam Fir	10	Y	FAC	8	20	
2 <i>Acer spicatum</i> -- Mountain Maple	5	Y	FACU	3	8	
3 --				9	24	
4 --				0	0	
5 --						
6 --						
7 --						
8 --						
9 --						
10 --						
	15	= Total Cover				
Herb Stratum				50/20 Thresholds		
Plot Size (5' Radius)	Absolute % Cover	Dominant Species	Indicator Status	20%	50%	
1 <i>Eurybia macrophylla</i> -- Large-Leaf Wood-Aster	15	Y	UPL	8	20	
2 <i>Cornus canadensis</i> -- Canadian Bunchberry	10	Y	FAC	3	8	
3 <i>Vaccinium angustifolium</i> -- Late Lowbush Blueberry	10	Y	FACU	9	24	
4 <i>Pteridium aquilinum</i> -- Northern Bracken Fern	5	N	FACU	0	0	
5 <i>Hieracium aurantiacum</i> -- Orange Hawkweed	5	N	UPL			
6 <i>Maianthemum canadense</i> -- False Lily-of-the-Valley	2	N	FACU			
7 --						
8 --						
9 --						
10 --						
11 --						
12 --						
13 --						
14 --						
15 --						
	47	= Total Cover				
Woody Vine Stratum				50/20 Thresholds		
Plot Size (30' Radius)	Absolute % Cover	Dominant Species	Indicator Status	20%	50%	
1 --						
2 --						
3 --						
4 --						
5 --						
	0	= Total Cover				

Remarks: (Include photo numbers here or on a separate sheet)

Note: This data sheet has been adapted to use the 2012 National Wetland Plant List:

Robert W. Lichvar and John T. Kartesz. 2009. North American Digital Flora: National Wetland Plant List, version 2.4.0 (https://wetland_plants.usace.army.mil/). U.S. Army Corps of Engineers, Engineer Research and Development Center, Cold Regions Research and Engineering Laboratory, Hanover, NH, and BONAP, Chapel Hill, NC. (2012)

[illegible]

US Army Corps of Engineers

US Army Corps of Engineers

Northcentral and Northeast Region

Project/Site:	<u>Eveleth-Gilbert-Virginia School</u>		City/County:	<u>Eveleth/St. Louis</u>	Sampling Date:	<u>6/14/19</u>
Applicant/Owner:	<u>Kimley-Horn and Associates, Inc.</u>		State:	<u>Minnesota</u>	Sampling Point:	<u>8-1w</u>
Investigator/s:	<u>Bailey Nelson, Ericka Massa</u>		Section, Township, Range:	<u>S29, T58N, R17W</u>		
Landform (hillslope, terrace, etc.):	<u>toeslope</u>	Local relief (concave, convex, none):	<u>concave</u>			
Slope (°):	<u>1%</u>	Lat.: <u>47.4817</u>	Long.: <u>-92.517131</u>	Datum:	<u>NAD 1983 UTM Zone 15N</u>	
Soil Map Unit Name:	<u>Eveleth-Eaglesnest-Conic complex, bouldery, 6-18% slopes, very rNWI Classification; none</u>					
Are climatic/hydrologic conditions of the site typical for this time of the year?	<u>Yes</u>		(If no, explain in remarks)			
Are vegetation _____, soil _____, or hydrology _____ significantly disturbed?						
Are vegetation _____, soil _____, or hydrology _____ naturally problematic?						
(If needed, explain any answers in remarks)						
Are "normal circumstances" present?						<u>Yes</u>

Hydrophytic vegetation present?	<u>Y</u>	Is the sampled area within a wetland? <u>Y</u>
Hydric soil present?	<u>Y</u>	
Indicators of wetland hydrology present?	<u>Y</u>	
Remarks: (Explain alternative procedures here or in a separate report.)		If yes, optional wetland site ID: <u>Wetland 8</u>

Primary Indicators (minimum of one is required; check all that apply)				Secondary Indicators (minimum of two required)	
☐ Surface Water (A1)		☐ Water-Stained Leaves (B9)		☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)		☐ Aquatic Fauna (B13)		☐ Drainage Patterns (B10)	
☒ Saturation (A3)		☐ Marl Deposits (B15)		☐ Moss Trim Lines (B16)	
☐ Water Marks (B1)		☐ Hydrogen Sulfide Odor (C1)		☐ Dry-Season Water Table (C2)	
☐ Sediment Deposits (B2)		☐ Oxidized Rhizospheres on Living		☐ Crayfish Burrows (C8)	
☐ Drift Deposits (B3)		☐ Roots (C3)		☐ Saturation Visible on Aerial Imagery	
☐ Algal Mat or Crust (B4)		☐ Presence of Reduced Iron (C4)		☐ (C9)	
☐ Iron Deposits (B5)		☐ Recent Iron Reduction in Tilled		☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial		☐ Soils (C6)		☐ Geomorphic Position (D2)	
☐ Imagery (B7)		☐ Thin Muck Surface (C7)		☐ Shallow Aquitard (D3)	
☐ Sparsely Vegetated Concave		☐ Other (Explain in Remarks)		☐ FAC-Neutral Test (D5)	
☐ Surface (B8)				☐ Microtopographic Relief (D4)	
Field Observations: Surface water present? Yes ☐ No ☒ Depth (inches): Water table present? Yes ☐ No ☒ Depth (inches): Saturation present? Yes ☒ No ☐ Depth (inches): 0 (includes capillary fringe)				Indicators of wetland hydrology present? Y	
Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:					
Remarks:					

						50/20 Thresholds		
Tree Stratum		Plot Size (30' Radius)	Absolute % Cover	Dominant Species	Indicator Status	Tree Stratum	20%	50%
1	<i>Abies balsamea</i>	-- Balsam Fir	10	Y	FAC	Sapling/Shrub Stratum	3	8
2	<i>Fraxinus nigra</i>	-- Black Ash	5	Y	FACW	Herb Stratum	8	20
3	--	--				Woody Vine Stratum	0	0
4	--	--						
5	--	--						
6	--	--						
7	--	--						
8	--	--						
9	--	--						
10	--	--						
			15 = Total Cover					
Sapling/Shrub Stratum		Plot Size (15' Radius)	Absolute % Cover	Dominant Species	Indicator Status			
1	<i>Acer spicatum</i>	-- Mountain Maple	7	Y	FACU			
2	<i>Salix discolor</i>	-- Pussy Willow	5	Y	FACW			
3	<i>Abies balsamea</i>	-- Balsam Fir	5	Y	FAC			
4	--	--						
5	--	--						
6	--	--						
7	--	--						
8	--	--						
9	--	--						
10	--	--						
			17 = Total Cover					
Herb Stratum		Plot Size (5' Radius)	Absolute % Cover	Dominant Species	Indicator Status			
1	<i>Carex stricta</i>	-- Uplight Sedge	30	Y	OBL			
2	<i>Carex disperma</i>	-- Soft-Leaf Sedge	10	Y	OBL			
3	--	--						
4	--	--						
5	--	--						
6	--	--						
7	--	--						
8	--	--						
9	--	--						
10	--	--						
11	--	--						
12	--	--						
13	--	--						
14	--	--						
15	--	--						
			40 = Total Cover					
Woody Vine Stratum		Plot Size (30' Radius)	Absolute % Cover	Dominant Species	Indicator Status			
1	--	--						
2	--	--						
3	--	--						
4	--	--						
5	--	--						
			0 = Total Cover					
						Dominance Test Worksheet		
						Number of Dominant Species that are OBL, FACW, or FAC: <u>6</u> (A)		
						Total Number of Dominant Species Across all Strata: <u>7</u> (B)		
						Percent of Dominant Species that are OBL, FACW, or FAC: <u>85.71%</u> (A/B)		
						Prevalence Index Worksheet		
						Total % Cover of:		
						OBL species <u>40</u> x 1 = <u>40</u>		
						FACW species <u>10</u> x 2 = <u>20</u>		
						FAC species <u>15</u> x 3 = <u>45</u>		
						FACU species <u>7</u> x 4 = <u>28</u>		
						UPL species <u>0</u> x 5 = <u>0</u>		
						Column totals <u>72</u> (A) <u>133</u> (B)		
						Prevalence Index = B/A = <u>1.85</u>		
						Hydrophytic Vegetation Indicators:		
						Rapid test for hydrophytic vegetation		
						☒ Dominance index is >50%		
						☒ Prevalence index is ≤3.0*		
						Morphological adaptations* (provide supporting data in Remarks or on a separate sheet)		
						Problematic hydrophytic vegetation* (explain)		
						*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic		
						Definitions of Vegetation Strata:		
						Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.		
						Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.		
						Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.		
						Woody vines - All woody vines greater than 3.28 ft in height.		
						Hydrophytic vegetation present? <u>Y</u>		
Remarks: (Include photo numbers here or on a separate sheet)								
Note: This data sheet has been adapted to use the 2012 National Wetland Plant List:								
Robert W. Lichvar and John T. Kartesz. 2009. North American Digital Flora: National Wetland Plant List, version 2.4.0 (https://wetland_plants.usace.army.mil/). U.S. Army Corps of Engineers, Engineer Research and Development Center, Cold Regions Research and Engineering Laboratory, Hanover, NH, and BONAP, Chapel Hill, NC. (2012)								

Sampling Point: 8-1w

[illegible]

**Location: PL=Pore Lining, M=Matrix

Indicators for Problematic Hydric Soils:

- *Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Hydric soil present? Y

Remarks:

Northcentral and Northeast Region

Project/Site	<u>Eveleth-Gilbert-Virginia School</u>	City/County:	<u>Eveleth/St. Louis</u>	Sampling Date:	<u>6/14/19</u>
Applicant/Owner:	<u>Kimley-Horn and Associates, Inc.</u>	State:	<u>Minnesota</u>	Sampling Point:	<u>9-1u</u>
Investigator(s):	<u>Bailey Nelson, Ericka Massa</u>	Section, Township, Range:	<u>S29, T58N, R17W</u>		
Landform (hillslope, terrace, etc.):	<u>footslope</u>	Local relief (concave, convex, none):	<u>none</u>		
Slope (s):	<u>5%</u>	Lat.:	<u>47.481104</u>	Long.:	<u>-92.518127</u>
		Datum:	<u>NAD 1983 UTM Zone 15N</u>		
Soil Map Unit Name:	<u>Conic, very bouldery-Insula, very bouldery-Rock outcrop, 20-70% s NW1 Classification: none</u>				
Are climatic/hydrologic conditions of the site typical for this time of the year? <u>Yes</u> (if no, explain in remarks)					
Are vegetation _____, soil _____, or hydrology _____ significantly disturbed?	<u>Are "normal circumstances" present?</u>				
Are vegetation _____, soil _____, or hydrology _____ naturally problematic?	<u>Yes</u>				
(If needed, explain any answers in remarks)					

Hydrophytic vegetation present?	<u>Y</u>	Is the sampled area within a wetland? <u>N</u>
Hydric soil present?	<u>N</u>	
Indicators of wetland hydrology present?	<u>Y</u>	
If yes, optional wetland site ID: _____		
Remarks: (Explain alternative procedures here or in a separate report.)		

Primary Indicators (minimum of one is required; check all that apply)			Secondary Indicators (minimum of two required)		
☐ Surface Water (A1) ☐ High Water Table (A2) ☒ Saturation (A3) ☐ Water Marks (B1) ☐ Sediment Deposits (B2) ☐ Drift Deposits (B3) ☐ Algal Mat or Crust (B4) ☐ Iron Deposits (B5) ☐ Inundation Visible on Aerial Imagery (B7) ☐ Sparsely Vegetated Concave Surface (B8)	☐ Water-Stained Leaves (B9) ☐ Aquatic Fauna (B13) ☐ Marl Deposits (B15) ☐ Hydrogen Sulfide Odor (C1) ☐ Oxidized Rhizospheres on Living Roots (C3) ☐ Presence of Reduced Iron (C4) ☐ Recent Iron Reduction in Tilled Soils (C6) ☐ Thin Muck Surface (C7) ☐ Other (Explain in Remarks)	☐ Surface Soil Cracks (B6) ☐ Drainage Patterns (B10) ☐ Moss Trim Lines (B16) ☐ Dry-Season Water Table (C2) ☐ Crayfish Burrows (C8) ☐ Saturation Visible on Aerial Imagery (C9) ☐ Stunted or Stressed Plants (D1) ☐ Geomorphic Position (D2) ☐ Shallow Aquitard (D3) ☐ FAC-Neutral Test (D5) ☐ Microtopographic Relief (D4)			
Field Observations: Surface water present? Yes ☐ No ☒ Depth (inches): Water table present? Yes ☐ No ☒ Depth (inches): Saturation present? Yes ☒ No ☐ Depth (inches): 6 (includes capillary fringe)			Indicators of wetland hydrology present? ☒		
Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:					
Remarks: Rain overnight may have caused saturation					

Tree Stratum				Plot Size (30' Radius)	Absolute % Cover	Dominant Species	Indicator Status
1	<i>Abies balsamea</i>	--	<i>Balsam Fir</i>	15	Y	FAC	
2	<i>Acer rubrum</i>	--	<i>Red Maple</i>	10	Y	FAC	
3		--					
4		--					
5		--					
6		--					
7		--					
8		--					
9		--					
10		--		25	= Total Cover		
Sapling/Shrub Stratum				Plot Size (15' Radius)	Absolute % Cover	Dominant Species	Indicator Status
1		--					
2		--					
3		--					
4		--					
5		--					
6		--					
7		--					
8		--					
9		--					
10		--		0	= Total Cover		
Herb Stratum				Plot Size (5' Radius)	Absolute % Cover	Dominant Species	Indicator Status
1	<i>Eurybia macrophylla</i>	--	<i>Large-Leaf Wood-Aster</i>	20	Y	FAC	
2	<i>Equisetum arvense</i>	--	<i>Field Horsetail</i>	10	Y	FAC	
3	<i>Equisetum sylvaticum</i>	--	<i>Woodland Horsetail</i>	5	N	FACW	
4	<i>Vaccinium angustifolium</i>	--	<i>Late Lowbush Blueberry</i>	5	N	FACU	
5	<i>Pteridium aquilinum</i>	--	<i>Northern Bracken Fern</i>	3	N	FACU	
6	<i>Anemone quinquefolia</i>	--	<i>Nightcups</i>	2	N	FACU	
7	<i>Maianthemum canadense</i>	--	<i>False Lily-of-the-Valley</i>	2	N	FACU	
8		--					
9		--					
10		--					
11		--					
12		--					
13		--					
14		--					
15		--		47	= Total Cover		
Woody Vine Stratum				Plot Size (30' Radius)	Absolute % Cover	Dominant Species	Indicator Status
1		--					
2		--					
3		--					
4		--					
5		--					
				0	= Total Cover		

50/20 Thresholds

20%

5%

13%

0%

24%

0%

Tree Stratum

Sapling/Shrub Stratum

Herb Stratum

Woody Vine Stratum

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC:

3 (A)

Total Number of Dominant Species Across all Strata:

4 (B)

Percent of Dominant Species that are OBL, FACW, or FAC:

75.00% (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species

0 x 1 = 0

FACW species

5 x 2 = 10

FAC species

35 x 3 = 105

FACU species

12 x 4 = 48

UPL species

20 x 5 = 100

Column totals

72 (A)

263 (B)

Prevalence Index = B/A = 3.65

Hydrophytic Vegetation Indicators:

Rapid test for hydrophytic vegetation

X Dominance test is >50%

UPL Prevalence index is <3.0*

Morphological adaptations* (provide supporting data in Remarks or on a separate sheet)

Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Definitions of Vegetation Strata:

Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines - All woody vines greater than 3.28 ft in height.

Hydrophytic vegetation present?

Y

Remarks: (Include photo numbers here or on a separate sheet)

Note: This data sheet has been adapted to use the 2012 National Wetland Plant List:

Robert W. Lichvar and John T. Kartesz. 2009. North American Digital Flora: National Wetland Plant List, version 2.4.0 (<https://wetland.plants.usace.army.mil/>), U.S. Army Corps of Engineers, Engineer Research and Development Center, Cold Regions Research and Engineering Laboratory, Hanover, NH, and BONAP, Chapel Hill, NC. (2012)

[illegible]

US Army Corps of Engineers

US Army Corps of Engineers

Northcentral and Northeast Region

Project/Site: <u>Eveleth-Gilbert-Virginia School</u>	City/County: <u>Eveleth/St. Louis</u>	Sampling Date: <u>6/14/19</u>
Applicant/Owner: <u>Kimley Horn and Associates, Inc.</u>	State: <u>Minnesota</u>	Sampling Point: <u>9-1W</u>
Investigator/s: <u>Bailey Nelson, Ericka Massa</u>	Section, Township, Range: <u>S29, T58N, R17W</u>	
Landform (hillslope, terrace, etc.): <u>toeslope</u>	Local relief (concave, convex, none): <u>concave</u>	
Slope (%): <u>1%</u>	Lat.: <u>47.481094</u>	Long.: <u>-92.518046</u>
	Date: <u>NAD 1983</u>	UTM Zone: <u>15N</u>
Soil Map Unit Name: <u>Conic, very bouldery-Insula, very-bouldery Rock outcrop 20-70% st</u>	NW1 Classification: <u>none</u>	
Are climatic/hydrologic conditions of the site typical for this time of the year? <u>Yes</u> (If no, explain in remarks)		
Are vegetation <u> </u> , soil <u> </u> , or hydrology <u> </u> significantly disturbed?	Are "normal circumstances" present? <u>Yes</u>	
Are vegetation <u> </u> , soil <u> </u> , or hydrology <u> </u> naturally problematic?		
(If needed, explain any answers in remarks)		

Hydrophytic vegetation present?	<u>Y</u>	Is the sampled area within a wetland? <u>Y</u>
Hydric soil present?	<u>Y</u>	
Indicators of wetland hydrology present?	<u>Y</u>	
Remarks: (Explain alternative procedures here or in a separate report.)		If yes, optional wetland site ID: <u>Wetland 9</u>

Primary Indicators (minimum of one is required; check all that apply)				Secondary Indicators (minimum of two required)	
☐	Surface Water (A1)	☐	Water-Stained Leaves (B9)	☐	Surface Soil Cracks (B6)
☒	High Water Table (A2)	☐	Aquatic Fauna (B13)	☐	Drainage Patterns (B10)
☒	Saturation (A3)	☐	Marl Deposits (B15)	☐	Moss Trim Lines (B16)
☐	Water Marks (B1)	☐	Hydrogen Sulfide Odor (C1)	☐	Dry-Season Water Table (C2)
☐	Sediment Deposits (B2)	☐	Oxidized Rhizospheres on Living	☐	Crayfish Burrows (C8)
☐	Drift Deposits (B3)	☐	Roots (C3)	☐	Saturation Visible on Aerial Imagery
☐	Algal Mat or Crust (B4)	☐	Presence of Reduced Iron (C4)	☐	(C9)
☐	Iron Deposits (B5)	☐	Recent Iron Reduction in Tilled	☐	Stunted or Stressed Plants (D1)
☐	Inundation Visible on Aerial	☐	Soils (C6)	☐	Geomorphic Position (D2)
☐	Imagery (B7)	☐	Thin Muck Surface (C7)	☐	Shallow Aquitard (D3)
☐	Sparsely Vegetated Concave	☐	Other (Explain in Remarks)	☐	FAC-Neutral Test (D5)
☐	Surface (B8)			☐	Microtopographic Relief (D4)
Field Observations: Surface water present? Yes ☒ No ☐ Depth (inches): Water table present? Yes ☒ No ☐ Depth (inches): 4 Saturation present? Yes ☒ No ☐ Depth (inches): 0 (includes capillary fringe)				Indicators of wetland hydrology present? Y	
Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:					
Remarks:					

						50/20 Thresholds		
		20%	50%					
Tree Stratum	Plot Size (30' Radius)	Absolute % Cover	Dominant Species	Indicator Status		Tree Stratum	0	0
1	---	---	---	---		Sapling/Shrub Stratum	2	5
2	---	---	---	---		Herb Stratum	3	8
3	---	---	---	---		Woody Vine Stratum	0	0
4	---	---	---	---				
5	---	---	---	---				
6	---	---	---	---				
7	---	---	---	---				
8	---	---	---	---				
9	---	---	---	---				
10	---	0 = Total Cover	---	---				
Sapling/Shrub Stratum	Plot Size (15' Radius)	Absolute % Cover	Dominant Species	Indicator Status				
1	<i>Alnus incana</i> -- <i>Speckled Alder</i>	10	Y	FACW				
2	---	---	---	---				
3	---	---	---	---				
4	---	---	---	---				
5	---	---	---	---				
6	---	---	---	---				
7	---	---	---	---				
8	---	---	---	---				
9	---	---	---	---				
10	---	10 = Total Cover	---	---				
Herb Stratum	Plot Size (5' Radius)	Absolute % Cover	Dominant Species	Indicator Status				
1	<i>Carex stricta</i> -- <i>Upright Sedge</i>	15	Y	OBL				
2	---	---	---	---				
3	---	---	---	---				
4	---	---	---	---				
5	---	---	---	---				
6	---	---	---	---				
7	---	---	---	---				
8	---	---	---	---				
9	---	---	---	---				
10	---	---	---	---				
11	---	---	---	---				
12	---	---	---	---				
13	---	---	---	---				
14	---	---	---	---				
15	---	15 = Total Cover	---	---				
Woody Vine Stratum	Plot Size (30' Radius)	Absolute % Cover	Dominant Species	Indicator Status				
1	---	---	---	---				
2	---	---	---	---				
3	---	---	---	---				
4	---	---	---	---				
5	---	0 = Total Cover	---	---				
Remarks: (Include photo numbers here or on a separate sheet)								

50/20 Thresholds

20% 50%

Tree Stratum 0 0

Sapling/Shrub Stratum 2 5

Herb Stratum 3 8

Woody Vine Stratum 0 0

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across all Strata: 2 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 100.00% (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species 15 x 1 = 15

FACW species 10 x 2 = 20

FAC species 0 x 3 = 0

FACU species 0 x 4 = 0

UPL species 0 x 5 = 0

Column totals 25 (A) 35 (B)

Prevalence Index = B/A = 1.40

Hydrophytic Vegetation Indicators:

___ Rapid test for hydrophytic vegetation

X Dominance test is >50%

X Prevalence index is <3.0*

Morphological adaptations* (provide supporting data in Remarks or on a separate sheet)

___ Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Definitions of Vegetation Strata:

Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines - All woody vines greater than 3.28 ft in height.

Hydrophytic vegetation present? Y

Note: This data sheet has been adapted to use the 2012 National Wetland Plant List:

Robert W. Lichvar and John T. Kartesz. 2009. North American Digital Flora: National Wetland Plant List, version 2.4.0 (https://wetland_plants.usace.army.mil/), U.S. Army Corps of Engineers, Engineer Research and Development Center, Cold Regions Research and Engineering Laboratory, Hanover, NH, and BONAP, Chapel Hill, NC. (2012)

Sampling Point: 9-1w

[illegible]

**Location: PL=Pore Lining, M=Matrix

Indicators for Problematic Hydric Soils:

- *Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Hydric soil present? Y

Remarks:

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Project/Site:	<u>Eveleth-Gilbert-Virginia School</u>		City/County:	<u>Eveleth/St. Louis</u>		Sampling Date:	<u>6/14/19</u>	
Applicant/Owner:	<u>Kimley-Horn and Associates, Inc.</u>			State:	<u>Minnesota</u>	Sampling Point:	<u>10-1u</u>	
Investigator/s:	<u>Bailey Nelson, Ericka Massa</u>			Section, Township, Range:	<u>S29, T58N, R17W</u>			
Landform (hillslope, terrace, etc.):	<u>foothlope</u>		Local relief (concave, convex, none):	<u>none</u>				
Slope (°):	<u>15%</u>	Lat.:	<u>47.482319</u>	Long.:	<u>-92.516332</u>	Datum:	<u>NAD 1983 UTM Zone 15N</u>	
Soil Map Unit Name:	<u>Eveleth-Eaglesnest-Conic complex, bulldery, 6-18% slopes, very rNWI Classification: none</u>							
Are climatic/hydrologic conditions of the site typical for this time of the year?	<u>Yes</u>			(If no, explain in remarks)				
Are vegetation _____, soil _____, or hydrology _____ significantly disturbed?								
Are vegetation _____, soil _____, or hydrology _____ naturally problematic?								
(If needed, explain any answers in remarks)								
Are "normal circumstances" present?								<u>Yes</u>

Hydrophytic vegetation present?	<u>Y</u>	Is the sampled area within a wetland? <u>N</u>
Hydric soil present?	<u>N</u>	
Indicators of wetland hydrology present?	<u>N</u>	
If yes, optional wetland site ID: _____		
Remarks: (Explain alternative procedures here or in a separate report.)		

Primary Indicators (minimum of one is required; check all that apply)				Secondary Indicators (minimum of two required)			
☐ Surface Water (A1)		☐ Water-Stained Leaves (B9)		☐ Surface Soil Cracks (B6)			
☐ High Water Table (A2)		☐ Aquatic Fauna (B13)		☐ Drainage Patterns (B10)			
☐ Saturation (A3)		☐ Marl Deposits (B15)		☐ Moss Trim Lines (B16)			
☐ Water Marks (B1)		☐ Hydrogen Sulfide Odor (C1)		☐ Dry-Season Water Table (C2)			
☐ Sediment Deposits (B2)		☐ Oxidized Rhizospheres on Living		☐ Crayfish Burrows (C8)			
☐ Drift Deposits (B3)		☐ Roots (C3)		☐ Saturation Visible on Aerial Imagery			
☐ Algal Mat or Crust (B4)		☐ Presence of Reduced Iron (C4)		☐ (C9)			
☐ Iron Deposits (B5)		☐ Recent Iron Reduction in Tilled		☐ Stunted or Stressed Plants (D1)			
☐ Inundation Visible on Aerial		☐ Soils (C6)		☐ Geomorphic Position (D2)			
☐ Imagery (B7)		☐ Thin Muck Surface (C7)		☐ Shallow Aquitard (D3)			
☐ Sparsely Vegetated Concave		☐ Other (Explain in Remarks)		☐ FAC-Neutral Test (D5)			
☐ Surface (B8)				☐ Microtopographic Relief (D4)			

Field Observations:				Indicators of wetland hydrology present?	
Surface water present?	Yes ☐	No ☐	X ☐	Depth (inches):	
Water table present?	Yes ☐	No ☐	X ☐	Depth (inches):	
Saturation present?	Yes ☐	No ☐	X ☐	Depth (inches):	
(includes capillary fringe)				N	

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

						50/20 Thresholds		
Tree Stratum	Plot Size (30' Radius)		Absolute % Cover	Dominant Species	Indicator Status	Tree Stratum	20%	50%
1	<i>Acer rubrum</i>	-- Red Maple	20	Y	FAC	Sapling/Shrub Stratum	7	18
2	<i>Abies balsamea</i>	-- Balsam Fir	15	Y	FAC	Herb Stratum	4	10
3	--	--				Woody Vine Stratum	0	0
4	--	--						
5	--	--						
6	--	--						
7	--	--						
8	--	--						
9	--	--						
10	--	--						
			35 = Total Cover					
Sapling/Shrub Stratum	Plot Size (15' Radius)		Absolute % Cover	Dominant Species	Indicator Status			
1	<i>Abies balsamea</i>	-- Balsam Fir	10	Y	FAC			
2	<i>Corylus cornuta</i>	-- Beaked Hazelnut	10	Y	FACU			
3	--	--						
4	--	--						
5	--	--						
6	--	--						
7	--	--						
8	--	--						
9	--	--						
10	--	--						
			20 = Total Cover					
Herb Stratum	Plot Size (5' Radius)		Absolute % Cover	Dominant Species	Indicator Status			
1	<i>Aralia nudicaulis</i>	-- Wild Sarsaparilla	10	Y	FACU			
2	<i>Cornus canadensis</i>	-- Canadian Bunchberry	5	Y	FAC			
3	<i>Clintonia borealis</i>	-- Yellow Bluebeard-Lily	3	N	FAC			
4	<i>Maianthemum canadense</i>	-- False Lily-of-the-Valley	2	N	FACU			
5	--	--						
6	--	--						
7	--	--						
8	--	--						
9	--	--						
10	--	--						
11	--	--						
12	--	--						
13	--	--						
14	--	--						
15	--	--						
			20 = Total Cover					
Woody Vine Stratum	Plot Size (30' Radius)		Absolute % Cover	Dominant Species	Indicator Status			
1	--	--						
2	--	--						
3	--	--						
4	--	--						
5	--	--						
			0 = Total Cover					
Dominance Test Worksheet								
Number of Dominant Species that are OBL, FACW, or FAC:						4	(A)	
Total Number of Dominant Species Across all Strata:						6	(B)	
Percent of Dominant Species that are OBL, FACW, or FAC:						66.67%	(A/B)	
Prevalence Index Worksheet								
Total % Cover of:								
OBL species						0	x 1 =	0
FACW species						0	x 2 =	0
FAC species						53	x 3 =	159
FACU species						22	x 4 =	88
UPL species						0	x 5 =	0
Column totals						75	(A)	247 (B)
Prevalence Index = B/A =						3.29		
Hydrophytic Vegetation Indicators:								
Rapid test for hydrophytic vegetation								
☒ Dominance test is >50%								
☐ Prevalence index is ≥3.0*								
Morphological adaptations* (provide supporting data in Remarks or on a separate sheet)								
☐ Problematic hydrophytic vegetation* (explain)								
*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic								
Definitions of Vegetation Strata:								
Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.								
Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.								
Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.								
Woody vines - All woody vines greater than 3.28 ft in height.								
Hydrophytic vegetation present?						Y		
Remarks: (Include photo numbers here or on a separate								

Sampling Point: 10-1u

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

*Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains
 **Location: PL=Pore Lining, M=Matrix

Indicators for Problematic Hydric Soils:

- | | | |
|---|----------------------------|--|
| ☐ Histosol (A1) | Polyvalue Below Surface | ☐ 2 cm Muck (A10) (LRR K, L, MLRA 149B |
| ☐ Histic Epipedon (A2) | (S8) (LRR R, MLRA 149B) | ☐ Coast Prairie Redox (A16) (LRR K, L, R) |
| ☐ Black Histic (A3) | Thin Dark Surface (S9) | ☐ 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) |
| ☐ Hydrogen Sulfide (A4) | (LRR R, MLRA 149B | ☐ Dark Surface (S7) (LRR K, L) |
| ☐ Stratified Layers (A5) | Loamy Mucky Mineral (F1) | ☐ Polyvalue Below Surface (S8) (LRR K, L) |
| ☐ Depleted Below Dark Surface (A11) | (LRR K, L) | ☐ Thin Dark Surface (S9) (LRR K, L) |
| ☐ Thick Dark Surface (A12) | Loamy Gleyed Matrix (F2) | ☐ Iron-Manganese Masses (F12) (LRR K, L, R) |
| ☐ Sandy Mucky Mineral (S1) | Depleted Matrix (F3) | ☐ Piedmont Floodplain Soils (F19) (MLRA 149B) |
| ☐ Sandy Gleyed Matrix (S4) | Redox Dark Surface (F6) | ☐ Mesic Spodic (Ta6) (MLRA 144A, 145, 149B) |
| ☐ Sandy Redox (S5) | Depleted Dark Surface (F7) | ☐ Red Parent Material (TF2) |
| ☐ Stripped Matrix (S6) | Redox Depressions (F8) | ☐ Very Shallow Dark Surface (TF12) |
| ☐ Dark Surface (S7) (LRR R, MLRA 149B) | | ☐ Other (Explain in Remarks) |

*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Hydric soil present? N

Type: Rock
Depth (inches): 4

Remarks:

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WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Eveleth-Gilbert-Virginia School City/County: Eveleth/St. Louis Sampling Date: 6/14/19
Applicant/Owner: Kimley-Horn and Associates, Inc. State: Minnesota Sampling Point: 10-1w
Investigator(s): Bailey Nelson, Ericka Massa Section, Township, Range: S29, T58N, R17W
Landform (hillslope, terrace, etc.): toeslope Local relief (concave, convex, none): concave
Slope (%): 1% Lat.: 47.482242 Long.: -92.516269 Datum: NAD 1983 UTM Zone 15N
Soil Map Unit Name: Eveleth-Eaglesnest-Conic complex, bouldery, 6-18% slopes, very r NWI Classification: none
Are climatic/hydrologic conditions of the site typical for this time of the year? Yes (If no, explain in remarks)
Are vegetation , soil , or hydrology significantly disturbed? Are "normal
Are vegetation , soil , or hydrology naturally problematic? circumstances" present? Yes
(If needed, explain any answers in remarks)

SUMMARY OF FINDINGS

Hydrophytic vegetation present?	<u>Y</u>	Is the sampled area within a wetland?	<u>Y</u>
Hydric soil present?	<u>Y</u>		
Indicators of wetland hydrology present?	<u>Y</u>	If yes, optional wetland site ID:	<u>Wetland 10</u>
Remarks: (Explain alternative procedures here or in a separate report.)			

HYDROLOGY

Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)	
☐ Surface Water (A1)	☐ Water-Stained Leaves (B9)	☐ Surface Soil Cracks (B6)	
☒ High Water Table (A2)	☐ Aquatic Fauna (B13)	☐ Drainage Patterns (B10)	
☒ Saturation (A3)	☐ Marl Deposits (B15)	☐ Moss Trim Lines (B16)	
☐ Water Marks (B1)	☐ Hydrogen Sulfide Odor (C1)	☐ Dry-Season Water Table (C2)	
☐ Sediment Deposits (B2)	☐ Oxidized Rhizospheres on Living	☐ Crayfish Burrows (C8)	
☐ Drift Deposits (B3)	☐ Roots (C3)	☐ Saturation Visible on Aerial Imagery	
☐ Algal Mat or Crust (B4)	☐ Presence of Reduced Iron (C4)	☐ (C9)	
☐ Iron Deposits (B5)	☐ Recent Iron Reduction in Tilled	☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial	☐ Soils (C6)	☐ Geomorphic Position (D2)	
☐ Imagery (B7)	☐ Thin Muck Surface (C7)	☐ Shallow Aquitard (D3)	
☐ Sparsely Vegetated Concave	☐ Other (Explain in Remarks)	☐ FAC-Neutral Test (D5)	
☐ Surface (B8)		☐ Microtopographic Relief (D4)	
Field Observations:		Indicators of wetland hydrology present? <u>Y</u>	
Surface water present?	Yes <u> </u> No <u>X</u> Depth (inches): <u> </u>		
Water table present?	Yes <u>X</u> No <u> </u> Depth (inches): <u>4</u>		
Saturation present?	Yes <u>X</u> No <u> </u> Depth (inches): <u>0</u>		
(includes capillary fringe)			
Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks:			

VEGETATION - Use scientific names of plants

Tree Stratum					Plot Size (30' Radius)	Absolute % Cover	Dominant Species	Indicator Status	Sampling Point: 10-1w						
1	<u>Abies balsamea</u>					<u>--</u>	<u>Balsam Fir</u>	<u>25</u>	<u>Y</u>	<u>FAC</u>	50/20 Thresholds				
2	<u>--</u>					<u>--</u>	<u>--</u>	<u>--</u>	<u>--</u>	<u>--</u>	20%	50%			
3	<u>--</u>					<u>--</u>	<u>--</u>	<u>--</u>	<u>--</u>	<u>--</u>	Tree Stratum	5	13		
4	<u>--</u>					<u>--</u>	<u>--</u>	<u>--</u>	<u>--</u>	<u>--</u>	Sapling/Shrub Stratum	3	8		
5	<u>--</u>					<u>--</u>	<u>--</u>	<u>--</u>	<u>--</u>	<u>--</u>	Herb Stratum	7	17		
6	<u>--</u>					<u>--</u>	<u>--</u>	<u>--</u>	<u>--</u>	<u>--</u>	Woody Vine Stratum	0	0		
7	<u>--</u>					<u>--</u>	<u>--</u>	<u>--</u>	<u>--</u>	<u>--</u>	Dominance Test Worksheet				
8	<u>--</u>					<u>--</u>	<u>--</u>	<u>--</u>	<u>--</u>	<u>--</u>	Number of Dominant Species that are OBL, FACW, or FAC: <u>4</u> (A)				
9	<u>--</u>					<u>--</u>	<u>--</u>	<u>--</u>	<u>--</u>	<u>--</u>	Total Number of Dominant Species Across all Strata: <u>4</u> (B)				
10	<u>--</u>					<u>--</u>	<u>--</u>	<u>25</u>	<u>=</u>	<u>Total Cover</u>	Percent of Dominant Species that are OBL, FACW, or FAC: <u>100.00%</u> (A/B)				
Sapling/Shrub Stratum					Plot Size (15' Radius)	Absolute % Cover	Dominant Species	Indicator Status	Prevalence Index Worksheet						
1	<u>Alnus incana</u>					<u>--</u>	<u>Speckled Alder</u>	<u>15</u>	<u>Y</u>	<u>FACW</u>	Total % Cover of: <u> </u>				
2	<u>--</u>					<u>--</u>	<u>--</u>	<u>--</u>	<u>--</u>	<u>--</u>	OBL species <u>7</u> x 1 = <u>7</u>				
3	<u>--</u>					<u>--</u>	<u>--</u>	<u>--</u>	<u>--</u>	<u>--</u>	FACW species <u>40</u> x 2 = <u>80</u>				
4	<u>--</u>					<u>--</u>	<u>--</u>	<u>--</u>	<u>--</u>	<u>--</u>	FAC species <u>27</u> x 3 = <u>81</u>				
5	<u>--</u>					<u>--</u>	<u>--</u>	<u>--</u>	<u>--</u>	<u>--</u>	FACU species <u>0</u> x 4 = <u>0</u>				
6	<u>--</u>					<u>--</u>	<u>--</u>	<u>--</u>	<u>--</u>	<u>--</u>	UPL species <u>0</u> x 5 = <u>0</u>				
7	<u>--</u>					<u>--</u>	<u>--</u>	<u>--</u>	<u>--</u>	<u>--</u>	Column totals <u>74</u> (A) <u>168</u> (B)				
8	<u>--</u>					<u>--</u>	<u>--</u>	<u>--</u>	<u>--</u>	<u>--</u>	Prevalence Index = B/A = <u>2.27</u>				
9	<u>--</u>					<u>--</u>	<u>--</u>	<u>--</u>	<u>--</u>	<u>--</u>					
10	<u>--</u>					<u>--</u>	<u>--</u>	<u>15</u>	<u>=</u>	<u>Total Cover</u>	Hydrophytic Vegetation Indicators:				
Herb Stratum					Plot Size (5' Radius)	Absolute % Cover	Dominant Species	Indicator Status	<u> </u> Rapid test for hydrophytic vegetation						
1	<u>Carex intumescens</u>					<u>--</u>	<u>Greater Bladder Sedge</u>	<u>10</u>	<u>Y</u>	<u>FACW</u>	<u>X</u> Dominance test is >50%				
2	<u>Rubus pubescens</u>					<u>--</u>	<u>Dwarf Red Raspberry</u>	<u>10</u>	<u>Y</u>	<u>FACW</u>	<u>X</u> Prevalence index is ≤3.0*				
3	<u>Carex disperma</u>					<u>--</u>	<u>Soft-Leaf Sedge</u>	<u>5</u>	<u>N</u>	<u>OBL</u>	Morphological adaptations* (provide supporting data in Remarks or on a separate sheet)				
4	<u>Petasites frigidus</u>					<u>--</u>	<u>Arctic Sweet-Colt's-Foot</u>	<u>5</u>	<u>N</u>	<u>FACW</u>	<u> </u> Problematic hydrophytic vegetation* (explain)				
5	<u>Caltha palustris</u>					<u>--</u>	<u>Yellow Marsh-Marigold</u>	<u>2</u>	<u>N</u>	<u>OBL</u>	*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic				
6	<u>Trientalis borealis</u>					<u>--</u>	<u>Maystar</u>	<u>2</u>	<u>N</u>	<u>FAC</u>	Definitions of Vegetation Strata:				
7	<u>--</u>					<u>--</u>	<u>--</u>	<u>--</u>	<u>--</u>	<u>--</u>	Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.				
8	<u>--</u>					<u>--</u>	<u>--</u>	<u>--</u>	<u>--</u>	<u>--</u>	Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.				
9	<u>--</u>					<u>--</u>	<u>--</u>	<u>--</u>	<u>--</u>	<u>--</u>	Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.				
10	<u>--</u>					<u>--</u>	<u>--</u>	<u>--</u>	<u>--</u>	<u>--</u>	Woody vines - All woody vines greater than 3.28 ft in height.				
11	<u>--</u>					<u>--</u>	<u>--</u>	<u>--</u>	<u>--</u>	<u>--</u>	Hydrophytic vegetation present? <u>Y</u>				
12	<u>--</u>					<u>--</u>	<u>--</u>	<u>--</u>	<u>--</u>	<u>--</u>					
13	<u>--</u>					<u>--</u>	<u>--</u>	<u>--</u>	<u>--</u>	<u>--</u>					
14	<u>--</u>					<u>--</u>	<u>--</u>	<u>--</u>	<u>--</u>	<u>--</u>					
15	<u>--</u>					<u>--</u>	<u>--</u>	<u>34</u>	<u>=</u>	<u>Total Cover</u>	Remarks: (Include photo numbers here or on a separate sheet)				
Woody Vine Stratum					Plot Size (30' Radius)	Absolute % Cover	Dominant Species	Indicator Status	Note: This data sheet has been adapted to use the 2012 National Wetland Plant List:						
1	<u>--</u>					<u>--</u>	<u>--</u>	<u>--</u>	<u>--</u>	<u>--</u>	Robert W. Lichvar and John T. Kartesz. 2009. North American Digital Flora: National Wetland Plant List, version 2.4.0 (https://wetland.plants.usace.army.mil), U.S. Army Corps of Engineers, Engineer Research and Development Center, Cold Regions Research and Engineering Laboratory, Hanover, NH, and BONAP, Chapel Hill, NC. (2012)				
2	<u>--</u>					<u>--</u>	<u>--</u>	<u>--</u>	<u>--</u>	<u>--</u>					
3	<u>--</u>					<u>--</u>	<u>--</u>	<u>--</u>	<u>--</u>	<u>--</u>					
4	<u>--</u>					<u>--</u>	<u>--</u>	<u>--</u>	<u>--</u>	<u>--</u>					
5	<u>--</u>					<u>--</u>	<u>--</u>	<u>0</u>	<u>=</u>	<u>Total Cover</u>					

SOIL Sampling Point: 10-1w

Sampling Point: 10-1w

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

[illegible]

*Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains

**Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

Indicators for Problematic Hydric Soils:

- | | | |
|--|---|---|
| ☐ Histosol (A1) | Polyvalue Below Surface | ☐ 2 cm Muck (A10) (LRR K, L, MLRA 149B) |
| ☐ Histic Epipedon (A2) | (S8) (LRR R, MLRA 149B) | ☐ Coast Prairie Redox (A16) (LRR K, L, R) |
| ☐ Black Histic (A3) | Thin Dark Surface (S9) | ☐ 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) |
| ☐ Hydrogen Sulfide (A4) | ☒ (LRR R, MLRA 149B) | ☐ Dark Surface (S7) (LRR K, L) |
| ☐ Stratified Layers (A5) | Loamy Mucky Mineral (F1) | ☐ Polyvalue Below Surface (S8) (LRR K, L) |
| ☒ Depleted Below Dark Surface (A11') | (LRR K, L) | ☐ Thin Dark Surface (S9) (LRR K, L) |
| ☐ Thick Dark Surface (A12) | Loamy Gleyed Matrix (F2) | ☐ Iron-Manganese Masses (F12) (LRR K, L, R) |
| ☐ Sandy Mucky Mineral (S1) | ☒ Depleted Matrix (F3) | ☐ Piedmont Floodplain Soils (F19) (MLRA 149B) |
| ☐ Sandy Gleyed Matrix (S4) | ☒ Redox Dark Surface (F6) | ☐ Mesic Podzol (TA6) (MLRA 144A, 145, 149B) |
| ☐ Sandy Redox (S5) | Depleted Dark Surface (F7) | ☐ Red Parent Material (TF2) |
| ☐ Stripped Matrix (S6) | Redox Depressions (F8) | ☐ Very Shallow Dark Surface (TF12) |
| ☐ Dark Surface (S7) (LRR R, MLRA 149B) | | ☐ Other (Explain in Remarks) |

*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):

Type: _____

Depth (inches):

Hydric soil present? Y

Remarks:

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Project/Site:	<u>Evelth-Gilbert-Virginia School</u>	City/County:	<u>Evelth/St. Louis</u>	Sampling Date:	<u>6/14/19</u>
Applicant/Owner:	<u>Kimley-Horn and Associates, Inc.</u>	State:	<u>Minnesota</u>	Sampling Point:	<u>11-U</u>
Investigator/s:	<u>Bailey Nelson, Ericka Massa</u>	Section, Township, Range:	<u>S29, T58N, R17W</u>		
Landform (hillslope, terrace, etc.):	<u>hillslope</u>	Local relief (concave, convex, none):	<u>none</u>		
Slope (°):	<u>12%</u>	Lat.:	<u>47.481119N</u>	Long.:	<u>-92.51924</u>
			Datum:	<u>NAD 1983 UTM Zone 15N</u>	
Soil Map Unit Name:	<u>Evelth-Eaglesnest-Conic complex, bouldery, 6-18% slopes, very r</u>				
	<u>NWI Classification: none</u>				
Are climatic/hydrologic conditions of the site typical for this time of the year? <u>Yes</u> (If no, explain in remarks)					
Are vegetation <u> </u> , soil <u> </u> , or hydrology <u> </u> significantly disturbed? <u> </u>					
Are vegetation <u> </u> , soil <u> </u> , or hydrology <u> </u> naturally problematic? <u> </u>					
Are "normal circumstances" present? <u> </u>					
(If needed, explain any answers in remarks)					

Hydrophytic vegetation present?	<u>Y</u>	Is the sampled area within a wetland? <u>N</u>
Hydric soil present?	<u>N</u>	
Indicators of wetland hydrology present?	<u>N</u>	
If yes, optional wetland site ID: _____		
Remarks: (Explain alternative procedures here or in a separate report.)		

Primary Indicators (minimum of one is required; check all that apply)				Secondary Indicators (minimum of two required)			
☐ Surface Water (A1)		☐ Water-Stained Leaves (B9)		☐ Surface Soil Cracks (B6)			
☐ High Water Table (A2)		☐ Aquatic Fauna (B13)		☐ Drainage Patterns (B10)			
☐ Saturation (A3)		☐ Marl Deposits (B15)		☐ Moss Trim Lines (B16)			
☐ Water Marks (B1)		☐ Hydrogen Sulfide Odor (C1)		☐ Dry-Season Water Table (C2)			
☐ Sediment Deposits (B2)		☐ Oxidized Rhizospheres on Living		☐ Crayfish Burrows (C8)			
☐ Drift Deposits (B3)		☐ Roots (C3)		☐ Saturation Visible on Aerial Imagery			
☐ Algal Mat or Crust (B4)		☐ Presence of Reduced Iron (C4)		☐ (C9)			
☐ Iron Deposits (B5)		☐ Recent Iron Reduction in Tilled		☐ Stunted or Stressed Plants (D1)			
☐ Inundation Visible on Aerial		☐ Soils (C6)		☐ Geomorphic Position (D2)			
☐ Imagery (B7)		☐ Thin Muck Surface (C7)		☐ Shallow Aquitard (D3)			
☐ Sparsely Vegetated Concave		☐ Other (Explain in Remarks)		☐ FAC-Neutral Test (D5)			
☐ Surface (B8)				☐ Microtopographic Relief (D4)			

Field Observations:				Indicators of wetland hydrology present?	
Surface water present?	Yes ☐	No ☐	X ☐	Depth (inches):	
Water table present?	Yes ☐	No ☐	X ☐	Depth (inches):	
Saturation present?	Yes ☐	No ☐	X ☐	Depth (inches):	
(includes capillary fringe)				N	

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

50/20 Thresholds				20%	50%
Tree Stratum	Plot Size (30' Radius)	Absolute % Cover	Dominant Species	Indicator Status	
1	--				Tree Stratum 0 0
2	--				Sapling/Shrub Stratum 2 5
3	--				Herb Stratum 14 35
4	--				Woody Vine Stratum 0 0
5	--				
6	--				
7	--				
8	--				
9	--				
10	--				
		0 = Total Cover			
Sapling/Shrub Stratum	Plot Size (15' Radius)	Absolute % Cover	Dominant Species	Indicator Status	
1	Salix discolor -- Pussy Willow	10	Y	FACW	
2	--				
3	--				
4	--				
5	--				
6	--				
7	--				
8	--				
9	--				
10	--				
		10 = Total Cover			
Herb Stratum	Plot Size (5' Radius)	Absolute % Cover	Dominant Species	Indicator Status	
1	Rubus idaeus -- Common Red Raspberry	30	Y	FAC	
2	Eurybia macrophylla -- Large-Leaf Wood-Aster	20	Y	UPL	
3	Tanacetum vulgare -- Common Tansy	10	N	FACU	
4	Cirsium arvense -- Canadian Thistle	5	N	FACU	
5	Solidago canadensis -- Canadian Goldenrod	5	N	FACU	
6	--				
7	--				
8	--				
9	--				
10	--				
11	--				
12	--				
13	--				
14	--				
15	--				
		70 = Total Cover			
Woody Vine Stratum	Plot Size (30' Radius)	Absolute % Cover	Dominant Species	Indicator Status	
1	--				
2	--				
3	--				
4	--				
5	--				
		0 = Total Cover			
					Dominance Test Worksheet Number of Dominant Species that are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across all Strata: <u>3</u> (B) Percent of Dominant Species that are OBL, FACW, or FAC: <u>66.67%</u> (A/B)
					Prevalence Index Worksheet Total % Cover of: OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>10</u> x 2 = <u>20</u> FAC species <u>30</u> x 3 = <u>90</u> FACU species <u>20</u> x 4 = <u>80</u> UPL species <u>20</u> x 5 = <u>100</u> Column totals <u>80</u> (A) <u>290</u> (B) Prevalence Index = B/A = <u>3.63</u>
					Hydrophytic Vegetation Indicators: Rapid test for hydrophytic vegetation <u>X</u> Dominance test is >50% <u> </u> Prevalence index is <3.0* Morphological adaptations* (provide supporting data in Remarks or on a separate sheet) Problematic hydrophytic vegetation* (explain) *Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic
					Definitions of Vegetation Strata: Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines - All woody vines greater than 3.28 ft in height.
					Hydrophytic vegetation present? <u>Y</u>
Remarks: (Include photo numbers here or on a separate sheet)					
Note: This data sheet has been adapted to use the 2012 National Wetland Plant List: Robert W. Lichvar and John T. Kartesz. 2009. North American Digital Flora: National Wetland Plant List, version 2.4.0 (https://wetland_plants.usace.army.mil). U.S. Army Corps of Engineers, Engineer Research and Development Center, Cold Regions Research and Engineering Laboratory, Hanover, NH, and BONAP, Chapel Hill, NC. (2012)					

Sampling Point: 11-1u

[illegible]

**Location: PL=Pore Lining, M=Matrix

Indicators for Problematic Hydric Soils:

- *Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Hydric soil present? N

Northcentral and Northeast Region

Project/Site:	<u>Eveleth-Gilbert-Virginia School</u>	City/County:	<u>Eveleth/St. Louis</u>	Sampling Date:	<u>6/14/19</u>
Applicant/Owner:	<u>Kimley-Horn and Associates, Inc.</u>	State:	<u>Minnesota</u>	Sampling Point:	<u>11-1w</u>
Investigator/s:	<u>Bailey Nelson, Ericka Massa</u>	Section, Township, Range:	<u>S29, T58N, R17W</u>		
Landform (hillslope, terrace, etc.):	<u>toeslope</u>	Local relief (concave, convex, none):	<u>concave</u>		
Slope (°):	<u>10%</u>	Lat.:	<u>47.481149N</u>	Long.:	<u>-92.519228W</u>
			Datum: <u>NAD 1983 UTM Zone 15N</u>		
Soil Map Unit Name:	<u>Eveleth-Eaglesnest-Conic complex, bulldozer, 6-18% slopes, very rNWI Classification, none</u>				
Are climatic/hydrologic conditions of the site typical for this time of the year?	<u>Yes</u> (If no, explain in remarks)				
Are vegetation <u> </u> , soil <u> </u> , or hydrology <u> </u> significantly disturbed?	<u>Are "normal</u>				
Are vegetation <u> </u> , soil <u> </u> , or hydrology <u> </u> naturally problematic?	<u>circumstances" present?</u>				
(If needed, explain any answers in remarks)	<u>Yes</u>				

Hydrophytic vegetation present?	<u>Y</u>	Is the sampled area within a wetland? <u>Y</u>
Hydric soil present?	<u>Y</u>	
Indicators of wetland hydrology present?	<u>Y</u>	
Remarks: (Explain alternative procedures here or in a separate report.)		If yes, optional wetland site ID: <u>Wetland 11</u>

Primary Indicators (minimum of one is required; check all that apply)				Secondary Indicators (minimum of two required)	
☐ Surface Water (A1)		☐ Water-Stained Leaves (B9)		☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)		☐ Aquatic Fauna (B13)		☐ Drainage Patterns (B10)	
☒ Saturation (A3)		☐ Marl Deposits (B15)		☐ Moss Trim Lines (B16)	
☐ Water Marks (B1)		☐ Hydrogen Sulfide Odor (C1)		☐ Dry-Season Water Table (C2)	
☐ Sediment Deposits (B2)		☐ Oxidized Rhizospheres on Living		☐ Crayfish Burrows (C8)	
☐ Drift Deposits (B3)		☐ Roots (C3)		☐ Saturation Visible on Aerial Imagery	
☐ Algal Mat or Crust (B4)		☐ Presence of Reduced Iron (C4)		☐ (C9)	
☐ Iron Deposits (B5)		☐ Recent Iron Reduction in Tilled		☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial		☐ Soils (C6)		☐ Geomorphic Position (D2)	
☐ Imagery (B7)		☐ Thin Muck Surface (C7)		☐ Shallow Aquitard (D3)	
☐ Sparsely Vegetated Concave		☐ Other (Explain in Remarks)		☐ FAC-Neutral Test (D5)	
☐ Surface (B8)				☐ Microtopographic Relief (D4)	
Field Observations: Surface water present? Yes ☐ No ☒ Depth (inches): Water table present? Yes ☐ No ☒ Depth (inches): Saturation present? Yes ☒ No ☐ Depth (inches): 0 (includes capillary fringe)				Indicators of wetland hydrology present? Y	
Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:					
Remarks:					

						50/20 Thresholds		
		Absolute % Cover	Dominant Species	Indicator Status		20%	50%	
Tree Stratum	Plot Size (30' Radius)				Tree Stratum	0	0	
1	--				Sapling/Shrub Stratum	7	18	
2	--				Herb Stratum	17	42	
3	--				Woody Vine Stratum	0	0	
4	--							
5	--							
6	--							
7	--							
8	--							
9	--							
10	--							
		0 = Total Cover						
Sapling/Shrub Stratum	Plot Size (15' Radius)	Absolute % Cover	Dominant Species	Indicator Status				
1	<i>Populus balsamifera</i> -- Balsam Poplar	20	Y	FACW				
2	<i>Salix petiolaris</i> -- Meadow Willow	10	Y	FACW				
3	<i>Salix discolor</i> -- Pussy Willow	5	N	FACW				
4	--							
5	--							
6	--							
7	--							
8	--							
9	--							
10	--							
		35 = Total Cover						
Herb Stratum	Plot Size (5' Radius)	Absolute % Cover	Dominant Species	Indicator Status				
1	<i>Scirpus cyperinus</i> -- Cottongrass Bulrush	75	Y	OBL				
2	<i>Calamagrostis canadensis</i> -- Bluejoint	5	N	OBL				
3	<i>Equisetum arvense</i> -- Field Horsetail	1	N	FAC				
4	<i>Rubus idaeus</i> -- Common Red Raspberry	1	N	FAC				
5	<i>Persicaria lapathifolia</i> -- Dock-Leaf Smartweed	1	N	FACW				
6	--							
7	--							
8	--							
9	--							
10	--							
11	--							
12	--							
13	--							
14	--							
15	--							
		83 = Total Cover						
Woody Vine Stratum	Plot Size (30' Radius)	Absolute % Cover	Dominant Species	Indicator Status				
1	--							
2	--							
3	--							
4	--							
5	--							
		0 = Total Cover						
Dominance Test Worksheet								
Number of Dominant Species that are OBL, FACW, or FAC:						3	(A)	
Total Number of Dominant Species Across all Strata:						3	(B)	
Percent of Dominant Species that are OBL, FACW, or FAC:						100.00%	(A/B)	
Prevalence Index Worksheet								
Total % Cover of:								
OBL species	80	x 1 =	80					
FACW species	36	x 2 =	72					
FAC species	2	x 3 =	6					
FACU species	0	x 4 =	0					
UPL species	0	x 5 =	0					
Column totals	118	(A)	158	(B)				
Prevalence Index = B/A =						1.34		
Hydrophytic Vegetation Indicators:								
Rapid test for hydrophytic vegetation								
X	Dominance index is >50%							
X	Prevalence index is ≥3.0*							
Morphological adaptations* (provide supporting data in Remarks or on a separate sheet)								
Probabilistic hydrophytic vegetation* (explain)								
*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic								
Definitions of Vegetation Strata:								
Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.								
Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.								
Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.								
Woody vines - All woody vines greater than 3.28 ft in height.								
Hydrophytic vegetation present?						Y		
Remarks: (Include photo numbers here or on a separate sheet)								

Note: This data sheet has been adapted to use the 2012 National Wetland Plant List:

Robert W. Lichvar and John T. Kartesz. 2009. North American Digital Flora: National Wetland Plant List, version 2.4.0 (https://wetland_plants.usace.army.mil/). U.S. Army Corps of Engineers, Engineer Research and Development Center, Cold Regions Research and Engineering Laboratory, Hanover, NH, and BONAP, Chapel Hill, NC. (2012)

SOIL Sampling Point: 11-1w

Sampling Point: 11-1w

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

[illegible]

*Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains

**Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

Indicators for Problematic Hydric Soils:

- | | | |
|---|----------------------------|--|
| ☐ Histosol (A1) | Polyvalue Below Surface | ☐ 2 cm Muck (A10) (LRR K, L, MLRA 149B |
| ☐ Histic Epipedon (A2) | (S8) (LRR R, MLRA 149B) | ☐ Coast Prairie Redox (A16) (LRR K, L, R) |
| ☐ Black Histic (A3) | Thin Dark Surface (S9) | ☐ 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) |
| ☐ Hydrogen Sulfide (A4) | (LRR R, MLRA 149B | ☐ Dark Surface (S7) (LRR K, L) |
| ☐ Stratified Layers (A5) | Loamy Mucky Mineral (F1) | ☐ Polyvalue Below Surface (S8) (LRR K, L) |
| ☐ Depleted Below Dark Surface (A11) | (LRR K, L) | ☐ Thin Dark Surface (S9) (LRR K, L) |
| ☐ Thick Dark Surface (A12) | Loamy Gleyed Matrix (F2) | ☐ Iron-Manganese Masses (F12) (LRR K, L, R) |
| ☐ Sandy Mucky Mineral (S1) | X Depleted Matrix (F3) | ☐ Piedmont Floodplain Soils (F19) (MLRA 149B) |
| ☐ Sandy Gleyed Matrix (S4) | Redox Dark Surface (F6) | ☐ Mesic Spodic (TA6) (MLRA 144A, 145, 149B) |
| ☐ Sandy Redox (S5) | Depleted Dark Surface (F7) | ☐ Red Parent Material (TF2) |
| ☐ Stripped Matrix (S6) | Redox Depressions (F8) | ☐ Very Shallow Dark Surface (TF12) |
| ☐ Dark Surface (S7) (LRR R, MLRA 149B) | | ☐ Other (Explain in Remarks) |

*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):

Type: Rock

Depth (inches): 8

Hydric soil present? Y

Remarks:

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WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Eveleth-Gilbert-Virginia School City/County: Eveleth/St. Louis Sampling Date: 6/14/19
Applicant/Owner: Kimley-Horn and Associates, Inc. State: Minnesota Sampling Point: 12-1u
Investigator(s): Bailey Nelson, Ericka Massa Section, Township, Range: S29, T58N, R17W
Landform (hillslope, terrace, etc.): footslope Local relief (concave, convex, none): none
Slope (%): 15% Lat.: 47.484632 Long.: -92.528095 Datum: NAD 1983 UTM Zone 15N
Soil Map Unit Name: Eaglesnest stony loam, 2-8% slopes, bouldery NWI Classification: none
Are climatic/hydrologic conditions of the site typical for this time of the year? Yes (If no, explain in remarks)
Are vegetation , soil , or hydrology significantly disturbed? Are "normal
Are vegetation , soil , or hydrology naturally problematic? circumstances" present? Yes
(If needed, explain any answers in remarks)

SUMMARY OF FINDINGS

Hydrophytic vegetation present?	<u>N</u>	Is the sampled area within a wetland?	<u>N</u>
Hydric soil present?	<u>N</u>		
Indicators of wetland hydrology present?	<u>N</u>	If yes, optional wetland site ID: _____	
Remarks: (Explain alternative procedures here or in a separate report.)			

HYDROLOGY

Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)	
☐ Surface Water (A1)	☐ Water-Stained Leaves (B9)	☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Aquatic Fauna (B13)	☐ Drainage Patterns (B10)	
☐ Saturation (A3)	☐ Marl Deposits (B15)	☐ Moss Trim Lines (B16)	
☐ Water Marks (B1)	☐ Hydrogen Sulfide Odor (C1)	☐ Dry-Season Water Table (C2)	
☐ Sediment Deposits (B2)	☐ Oxidized Rhizospheres on Living	☐ Crayfish Burrows (C8)	
☐ Drift Deposits (B3)	☐ Roots (C3)	☐ Saturation Visible on Aerial Imagery	
☐ Algal Mat or Crust (B4)	☐ Presence of Reduced Iron (C4)	☐ (C9)	
☐ Iron Deposits (B5)	☐ Recent Iron Reduction in Tilled	☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial	☐ Soils (C6)	☐ Geomorphic Position (D2)	
☐ Imagery (B7)	☐ Thin Muck Surface (C7)	☐ Shallow Aquitard (D3)	
☐ Sparsely Vegetated Concave	☐ Other (Explain in Remarks)	☐ FAC-Neutral Test (D5)	
☐ Surface (B8)		☐ Microtopographic Relief (D4)	
Field Observations:		Indicators of wetland hydrology present? <u>N</u>	
Surface water present?	Yes <u> </u> No <u>X</u>	Depth (inches): <u> </u>	
Water table present?	Yes <u> </u> No <u>X</u>	Depth (inches): <u> </u>	
Saturation present?	Yes <u> </u> No <u>X</u>	Depth (inches): <u> </u>	
(includes capillary fringe)			
Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks:			

VEGETATION - Use scientific names of plants

Tree Stratum					Plot Size (30' Radius)	Absolute % Cover	Dominant Species	Indicator Status	Sampling Point: 12-1u				
1					<u>Abies balsamea</u>	<u>--</u>	<u>Balsam Fir</u>	<u>30</u>	<u>Y</u>	<u>FAC</u>	50/20 Thresholds		
2					<u>Populus tremuloides</u>	<u>--</u>	<u>Quaking Aspen</u>	<u>30</u>	<u>Y</u>	<u>FAC</u>	20% 50%		
3					<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	Tree Stratum 12 30		
4					<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	Sapling/Shrub Stratum 12 30		
5					<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	Herb Stratum 26 65		
6					<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	Woody Vine Stratum 0 0		
7					<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>			
8					<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>			
9					<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>			
10					<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>			
						<u>60</u>	=	Total Cover					
Sapling/Shrub Stratum					Plot Size (15' Radius)	Absolute % Cover	Dominant Species	Indicator Status	Dominance Test Worksheet				
1					<u>Betula papyrifera</u>	<u>--</u>	<u>Paper Birch</u>	<u>50</u>	<u>Y</u>	<u>FACU</u>	Number of Dominant Species that are OBL, FACW, or FAC: <u>3</u> (A)		
2					<u>Salix discolor</u>	<u>--</u>	<u>Pussy Willow</u>	<u>10</u>	<u>N</u>	<u>FACW</u>	Total Number of Dominant Species Across all Strata: <u>7</u> (B)		
3					<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	Percent of Dominant Species that are OBL, FACW, or FAC: <u>42.86%</u> (A/B)		
4					<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>			
5					<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>			
6					<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>			
7					<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>			
8					<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>			
9					<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>			
10					<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>			
						<u>60</u>	=	Total Cover					
Herb Stratum					Plot Size (5' Radius)	Absolute % Cover	Dominant Species	Indicator Status	Prevalence Index Worksheet				
1					<u>Diervilla lonicera</u>	<u>--</u>	<u>Bush Honeysuckle</u>	<u>50</u>	<u>Y</u>	<u>UPL</u>	Total % Cover of: <u> </u>		
2					<u>Eurybia macrophylla</u>	<u>--</u>	<u>Large-Leaf Wood-Aster</u>	<u>20</u>	<u>Y</u>	<u>UPL</u>	OBL species <u>0</u> x 1 = <u>0</u>		
3					<u>Clintonia borealis</u>	<u>--</u>	<u>Yellow Bluebeard-Lily</u>	<u>20</u>	<u>Y</u>	<u>FAC</u>	FACW species <u>10</u> x 2 = <u>20</u>		
4					<u>Maianthemum canadense</u>	<u>--</u>	<u>False Lily-of-the-Valley</u>	<u>20</u>	<u>Y</u>	<u>FACU</u>	FAC species <u>90</u> x 3 = <u>270</u>		
5					<u>Pteridium aquilinum</u>	<u>--</u>	<u>Northern Bracken Fern</u>	<u>10</u>	<u>N</u>	<u>FACU</u>	FACU species <u>80</u> x 4 = <u>320</u>		
6					<u>Athyrium filix-femina</u>	<u>--</u>	<u>Lady Fern</u>	<u>10</u>	<u>N</u>	<u>FAC</u>	UPL species <u>70</u> x 5 = <u>350</u>		
7					<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	Column totals <u>250</u> (A) <u>960</u> (B)		
8					<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	Prevalence Index = B/A = <u>3.84</u>		
9					<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>			
10					<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>			
11					<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>			
12					<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>			
13					<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>			
14					<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>			
15					<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>			
						<u>130</u>	=	Total Cover					
Woody Vine Stratum					Plot Size (30' Radius)	Absolute % Cover	Dominant Species	Indicator Status	Hydrophytic Vegetation Indicators:				
1					<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u> Rapid test for hydrophytic vegetation		
2					<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u> Dominance test is >50%		
3					<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u> Prevalence index is ≤3.0*		
4					<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u> Morphological adaptations* (provide supporting data in Remarks or on a separate sheet)		
5					<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u> Problematic hydrophytic vegetation* (explain)		
						<u>0</u>	=	Total Cover			*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic		
Remarks: (Include photo numbers here or on a separate sheet)													
Note: This data sheet has been adapted to use the 2012 National Wetland Plant List: Robert W. Lichvar and John T. Kartesz. 2009. North American Digital Flora: National Wetland Plant List, version 2.4.0 (https://wetland.plants.usace.army.mil), U.S. Army Corps of Engineers, Engineer Research and Development Center, Cold Regions Research and Engineering Laboratory, Hanover, NH, and BONAP, Chapel Hill, NC. (2012)													

SOIL	Sampling Point:	12-1u
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Sampling Point: 12-1u

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

[illegible]

*Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains

**Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

Indicators for Problematic Hydric Soils:

- | | | |
|---|----------------------------------|--|
| ___ Histosol (A1) | Polyvalue Below Surface | 2 cm Muck (A10) (LRR K, L, MLRA 149B) |
| ___ Histic Epipedon (A2) | (S8) (LRR R, MLRA 149B) | Coast Prairie Redox (A16) (LRR K, L, R) |
| ___ Black Histic (A3) | Thin Dark Surface (S9) | 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) |
| ___ Hydrogen Sulphide (A4) | (LRR R, MLRA 149B) | Dark Surface (S7) (LRR K, L) |
| ___ Stratified Layers (A5) | Loamy Mucky Mineral (F1) | Polyvalue Below Surface (S8) (LRR K, L) |
| ___ Depleted Below Dark Surface (A11') | (LRR K, L) | Thin Dark Surface (S9) (LRR K, L) |
| ___ Thick Dark Surface (A12) | Loamy Gleyed Matrix (F2) | Iron-Manganese Masses (F12) (LRR K, L, R) |
| ___ Sandy Mucky Mineral (S1) | Depleted Matrix (F3) | Piedmont Floodplain Soils (F19) (MLRA 149B) |
| ___ Sandy Gleyed Matrix (S4) | Redox Dark Surface (F6) | Mesic Spodic (TA6) (MLRA 144A, 145, 149B) |
| ___ Sandy Redox (S5) | Depleted Dark Surface (F7) | Red Parent Material (TF2) |
| ___ Stripped Matrix (S6) | Redox Depressions (F8) | Very Shallow Dark Surface (TF12) |
| ___ Dark Surface (S7) (LRR R, MLRA 149B) | | ___ Other (Explain in Remarks) |

*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):

Type: Rock

Depth (inches): 6

Hydric soil present? N

Remarks:

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WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site:	<u>Eveleth-Gilbert-Virginia School</u>	City/County:	<u>Eveleth St. Louis</u>	Sampling Date:	<u>6/14/19</u>
Applicant/Owner:	<u>Kimley-Horn and Associates, Inc.</u>	State:	<u>Minnesota</u>	Sampling Point:	<u>12-1w</u>
Investigator(s):	<u>Bailey Nelson, Ericka Massa</u>	Section, Township, Range:	<u>S29 T58N R17W</u>		
Landform (hill/slope, terrace, etc.):	<u>toeslope</u>	Local relief (concave, convex, none):	<u>none</u>		
Slope (ft):	<u>1%</u>	Lat.: <u>47.484676</u>	Long.: <u>-92.528117</u>	Datum:	<u>NAD 1983 UTM Zone 15N</u>
Soil Map Unit Name:	<u>Eaglesnest stony loam, 2-8% slopes, bouldery</u>		NW1 Classification:	<u>none</u>	
Are climatic/hydrologic conditions of the site typical for this time of the year?			<u>Yes</u>	(If no, explain in remarks)	
Are vegetation _____, soil _____, or hydrology _____ significantly disturbed?	<u>Are "normal</u>				
Are vegetation _____, soil _____, or hydrology _____ naturally problematic?	<u>circumstances</u> present? <u>Yes</u>				
(If needed, explain any answers in remarks)					

SUMMARY OF FINDINGS

Hydrophytic vegetation present?	<u>Y</u>	Is the sampled area within a wetland? <u>Y</u>
Hydric soil present?	<u>Y</u>	
Indicators of wetland hydrology present?	<u>Y</u>	
Remarks: (Explain alternative procedures here or in a separate report.)		If yes, optional wetland site ID: <u>Wetland 12</u>

HYDROLOGY

Primary Indicators (minimum of one is required; check all that apply)				Secondary Indicators (minimum of two required)	
☐ Surface Water (A1)	☐	☐ Water-Stained Leaves (B9)	☐	☐ Surface Soil Cracks (B6)	☐
☒ High Water Table (A2)	☐	☐ Aquatic Fauna (B13)	☐	☐ Drainage Patterns (B10)	☐
☒ Saturation (A3)	☐	☐ Marl Deposits (B15)	☐	☐ Moss Trim Lines (B16)	☐
☐ Water Marks (B1)	☐	☐ Hydrogen Sulfide Odor (C1)	☐	☐ Dry-Season Water Table (C2)	☐
☐ Sediment Deposits (B2)	☐	☐ Oxidized Rhizospheres on Living	☐	☐ Crayfish Burrows (C8)	☐
☐ Drift Deposits (B3)	☐	☐ Roots (C3)	☐	☐ Saturation Visible on Aerial Imagery	☐
☐ Algal Mat or Crust (B4)	☐	☐ Presence of Reduced Iron (C4)	☐	☐ (C9)	☐
☐ Iron Deposits (B5)	☐	☐ Recent Iron Reduction in Tilled	☐	☐ Stunted or Stressed Plants (D1)	☐
☐ Inundation Visible on Aerial	☐	☐ Soils (C6)	☐	☐ Geomorphic Position (D2)	☐
☐ Imagery (B7)	☐	☐ Thin Muck Surface (C7)	☐	☐ Shallow Aquitard (D3)	☐
☐ Sparsely Vegetated Concave	☐	☐ Other (Explain in Remarks)	☐	☐ FAC-Neutral Test (D5)	☐
☐ Surface (B8)	☐		☐	☐ Microtopographic Relief (D4)	☐
Field Observations: Surface water present? Yes ☐ No ☒ Depth (inches): Water table present? Yes ☒ No ☐ Depth (inches): 3 Saturation present? Yes ☒ No ☐ Depth (inches): 0 (includes capillary fringe)				Indicators of wetland hydrology present? Y	
Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:					
Remarks:					

VEGETATION - Use scientific names of plants

					50/20 Thresholds		20% 50%	
Tree Stratum	Plot Size (30' Radius)	Absolute % Cover	Dominant Species	Indicator Status	Tree Stratum	0	0	
1	--				Sapling/Shrub Stratum	4	10	
2	--				Herb Stratum	16	41	
3	--				Woody Vine Stratum	0	0	
4	--							
5	--							
6	--							
7	--							
8	--							
9	--							
10	--							
		0	= Total Cover					
Sapling/Shrub Stratum	Plot Size (15' Radius)	Absolute % Cover	Dominant Species	Indicator Status				
1	<i>Salix discolor</i> -- <i>Pussy Willow</i>	10	Y	FACW				
2	<i>Alnus incana</i> -- <i>Speckled Alder</i>	10	Y	FACW				
3	--							
4	--							
5	--							
6	--							
7	--							
8	--							
9	--							
10	--							
		20	= Total Cover					
Herb Stratum	Plot Size (5' Radius)	Absolute % Cover	Dominant Species	Indicator Status				
1	<i>Equisetum arvense</i> -- <i>Field Horsetail</i>	40	Y	FAC				
2	<i>Carex gynandra</i> -- <i>Nodding Sedge</i>	20	Y	OBL				
3	<i>Alnus incana</i> -- <i>Speckled Alder</i>	10	N	FACW				
4	<i>Rubus pubescens</i> -- <i>Dwarf Red Raspberry</i>	5	N	FACW				
5	<i>Solidago gigantea</i> -- <i>Late Goldenrod</i>	5	N	FACW				
6	<i>Alisma triviale</i> -- <i>Northern Water-Plantain</i>	2	N	OBL				
7	--							
8	--							
9	--							
10	--							
11	--							
12	--							
13	--							
14	--							
15	--							
		82	= Total Cover					
Woody Vine Stratum	Plot Size (30' Radius)	Absolute % Cover	Dominant Species	Indicator Status				
1	--							
2	--							
3	--							
4	--							
5	--							
		0	= Total Cover					
Remarks: (Include photo numbers here or on a separate sheet)								
Note: This data sheet has been adapted to use the 2012 National Wetland Plant List: Robert W. Lichvar and John T. Kartesz. 2009. North American Digital Flora: National Wetland Plant List, version 2.4.0 (https://wetland.plants.usace.army.mil/). U.S. Army Corps of Engineers, Engineer Research and Development Center, Cold Regions Research and Engineering Laboratory, Hanover, NH, and BONAP, Chapel Hill, NC. (2012)								

SOIL Sampling Point: 12-1w

Sampling Point: 12-1w

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

[illegible]

*Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains

**Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

Indicators for Problematic Hydric Soils:

- | | | |
|---|--|--|
| ☐ Histosol (A1) | Polyvalue Below Surface | ☐ 2 cm Muck (A10) (LRR K, L, MLRA 149B |
| ☐ Histic Epipedon (A2) | (S8) (LRR R, MLRA 149B) | ☐ Coast Prairie Redox (A16) (LRR K, L, R) |
| ☐ Black Histic (A3) | Thin Dark Surface (S9) | ☐ 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) |
| ☐ Hydrogen Sulfide (A4) | (LRR R, MLRA 149B | ☐ Dark Surface (S7) (LRR K, L) |
| ☐ Stratified Layers (A5) | Loamy Mucky Mineral (F1) | ☐ Polyvalue Below Surface (S8) (LRR K, L) |
| ☒ Depleted Below Dark Surface (A11) | (LRR K, L) | ☐ Thin Dark Surface (S9) (LRR K, L) |
| ☐ Thick Dark Surface (A12) | Loamy Gleyed Matrix (F2) | ☐ Iron-Manganese Masses (F12) (LRR K, L, R) |
| ☐ Sandy Mucky Mineral (S1) | ☒ Depleted Matrix (F3) | ☐ Piedmont Floodplain Soils (F19) (MLRA 149B) |
| ☐ Sandy Gleyed Matrix (S4) | Redox Dark Surface (F6) | ☐ Mesic Spodic (TA6) (MLRA 144A, 145, 149B) |
| ☐ Sandy Redox (S5) | Depleted Dark Surface (F7) | ☐ Red Parent Material (TF2) |
| ☐ Stripped Matrix (S6) | Redox Depressions (F8) | ☐ Very Shallow Dark Surface (TF12) |
| ☐ Dark Surface (S7) (LRR R, MLRA 149B) | | ☐ Other (Explain in Remarks) |

*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):

Type: Rock

Depth (inches): 8

Hydric soil present? Y

Remarks:

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Project/Site:	<u>Eveleth-Gilbert-Virginia School</u>		City/County:	<u>Eveleth/St. Louis</u>	Sampling Date:	<u>6/14/19</u>
Applicant/Owner:	<u>Kimley-Horn and Associates, Inc.</u>		State:	<u>Minnesota</u>	Sampling Point:	<u>12-2u</u>
Investigator/s:	<u>Bailey Nelson, Ericka Massa</u>		Section, Township, Range:	<u>S29, T58N, R17W</u>		
Landform (hillside, terrace, etc.):	<u>foothlope</u>	Local relief (concave, convex, none):	<u>none</u>			
Slope (°):	<u>10%</u>	Lat.: <u>47.48281</u>	Long.: <u>-92.529746</u>	Datum:	<u>NAD 1983 UTM Zone 15N</u>	
Soil Map Unit Name:	<u>Babbitt, bouldery-Wahlsen, bouldery-Aquepts, 0-8% slopes, rubbly NWD Classification: none</u>					
Are climatic/hydrologic conditions of the site typical for this time of the year?	<u>Yes</u>			<u>(If no, explain in remarks)</u>		
Are vegetation _____, soil _____, or hydrology _____ significantly disturbed?				<u>Are "normal circumstances" present?</u>		
Are vegetation _____, soil _____, or hydrology _____ naturally problematic?				<u>Yes</u>		
<u>(If needed, explain any answers in remarks)</u>						

Hydrophytic vegetation present?	<u>Y</u>	Is the sampled area within a wetland? <u>N</u>
Hydric soil present?	<u>N</u>	
Indicators of wetland hydrology present?	<u>N</u>	
If yes, optional wetland site ID: _____		
Remarks: (Explain alternative procedures here or in a separate report.)		

Primary Indicators (minimum of one is required; check all that apply)				Secondary Indicators (minimum of two required)			
☐ Surface Water (A1)		☐ Water-Stained Leaves (B9)		☐ Surface Soil Cracks (B6)			
☐ High Water Table (A2)		☐ Aquatic Fauna (B13)		☐ Drainage Patterns (B10)			
☐ Saturation (A3)		☐ Marl Deposits (B15)		☐ Moss Trim Lines (B16)			
☐ Water Marks (B1)		☐ Hydrogen Sulfide Odor (C1)		☐ Dry-Season Water Table (C2)			
☐ Sediment Deposits (B2)		☐ Oxidized Rhizospheres on Living		☐ Crayfish Burrows (C8)			
☐ Drift Deposits (B3)		☐ Roots (C3)		☐ Saturation Visible on Aerial Imagery			
☐ Algal Mat or Crust (B4)		☐ Presence of Reduced Iron (C4)		☐ (C9)			
☐ Iron Deposits (B5)		☐ Recent Iron Reduction in Tilled		☐ Stunted or Stressed Plants (D1)			
☐ Inundation Visible on Aerial		☐ Soils (C6)		☐ Geomorphic Position (D2)			
☐ Imagery (B7)		☐ Thin Muck Surface (C7)		☐ Shallow Aquitard (D3)			
☐ Sparsely Vegetated Concave		☐ Other (Explain in Remarks)		☐ FAC-Neutral Test (D5)			
☐ Surface (B8)				☐ Microtopographic Relief (D4)			

Field Observations:				Indicators of wetland hydrology present?	
Surface water present?	Yes ☐	No ☐	X ☐	Depth (inches):	
Water table present?	Yes ☐	No ☐	X ☐	Depth (inches):	
Saturation present?	Yes ☐	No ☐	X ☐	Depth (inches):	
(includes capillary fringe)				N	

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

						50/20 Thresholds		
Tree Stratum		Plot Size (30' Radius)	Absolute % Cover	Dominant Species	Indicator Status	20% 50%		
1	<i>Populus balsamifera</i>	-- Balsam Poplar	20	Y	FACW	Tree Stratum	8	20
2	<i>Fraxinus nigra</i>	-- Black Ash	10	Y	FACW	Sapling/Shrub Stratum	4	10
3	<i>Abies balsamea</i>	-- Balsam Fir	10	Y	FAC	Herb Stratum	10	24
4	--	--				Woody Vine Stratum	0	0
5	--	--						
6	--	--						
7	--	--						
8	--	--						
9	--	--						
10	--	--	40	= Total Cover				
						Dominance Test Worksheet		
Sapling/Shrub Stratum						Number of Dominant Species that are OBL, FACW, or FAC: <u>6</u> (A)		
1 <i>Fraxinus nigra</i> -- Black Ash						Total Number of Dominant Species Across all Strata: <u>7</u> (B)		
2 <i>Alnus incana</i> -- Speckled Alder						Percent of Dominant Species that are OBL, FACW, or FAC: <u>85.71%</u> (A/B)		
3 --								
4 --								
5 --								
6 --								
7 --								
8 --								
9 --								
10 --								
						Prevalence Index Worksheet		
1 <i>Fraxinus nigra</i> -- Black Ash						Total % Cover of:		
2 <i>Alnus incana</i> -- Speckled Alder						OBL species <u>0</u> x 1 = <u>0</u>		
3 --						FACW species <u>50</u> x 2 = <u>100</u>		
4 --						FAC species <u>27</u> x 3 = <u>81</u>		
5 --						FACU species <u>11</u> x 4 = <u>44</u>		
6 --						UPL species <u>20</u> x 5 = <u>100</u>		
7 --						Column totals <u>108</u> (A) <u>325</u> (B)		
8 --						Prevalence Index = B/A = <u>3.01</u>		
9 --								
10 --								
						Hydrophytic Vegetation Indicators:		
Herb Stratum						☒ Rapid test for hydrophytic vegetation ☒ X Dominance index is >50% ☒ Prevalence Index is >3.0* Morphological adaptations* (provide supporting data in Remarks or on a separate sheet) ☐ Problematic hydrophytic vegetation* (explain) *Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic		
1 <i>Eurybia macrophylla</i> -- Large-Leaf Wood-Aster								
2 <i>Athyrium Filix-femina</i> -- Lady Fern								
3 <i>Diervilla lonicera</i> -- Bush Honeysuckle								
4 <i>Anemone quinquefolia</i> -- Nightcups								
5 <i>Trillium cernuum</i> -- Whip-Poor-Will-Flower								
6 <i>Carex gracillima</i> -- Graceful Sedge								
7 <i>Maianthemum canadense</i> -- False Lily-of-the-Valley								
8 <i>Thalictrum dioicum</i> -- Early Meadow-Rue								
9 --								
10 --								
11 --								
12 --								
13 --								
14 --								
15 --								
						Definitions of Vegetation Strata:		
1 <i>Eurybia macrophylla</i> -- Large-Leaf Wood-Aster						Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.		
2 <i>Athyrium Filix-femina</i> -- Lady Fern						Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.		
3 <i>Diervilla lonicera</i> -- Bush Honeysuckle						Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.		
4 <i>Anemone quinquefolia</i> -- Nightcups						Woody vines - All woody vines greater than 3.28 ft in height.		
5 <i>Trillium cernuum</i> -- Whip-Poor-Will-Flower								
6 <i>Carex gracillima</i> -- Graceful Sedge								
7 <i>Maianthemum canadense</i> -- False Lily-of-the-Valley								
8 <i>Thalictrum dioicum</i> -- Early Meadow-Rue								
9 --								
10 --								
11 --								
12 --								
13 --								
14 --								
15 --								
						Hydrophytic vegetation present? <u>Y</u>		
Remarks: (Include photo numbers here or on a separate sheet)								
Note: This data sheet has been adapted to use the 2012 National Wetland Plant List:								
Robert W. Lichvar and John T. Kartesz. 2009. North American Digital Flora: National Wetland Plant List, version 2.4.0 (https://wetland_plants.usace.army.mil/), U.S. Army Corps of Engineers, Engineer Research and Development Center, Cold Regions Research and Engineering Laboratory, Hanover, NH, and BONAP, Chapel Hill, NC. (2012)								

SOIL	Sampling Point:	12-2u
-------------	------------------------	-------

Sampling Point: 12-2u

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

[illegible]

*Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains

**Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

Indicators for Problematic Hydric Soils:

- | | | |
|--|---------------------------------|---|
| ___ Histosol (A1) | Polyvalue Below Surface | 2 cm Muck (A10) (LRR K, L, MLRA 149B) |
| ___ Histic Epipedon (A2) | (S8) (LRR R, MLRA 149B) | Coast Prairie Redox (A16) (LRR K, L, R) |
| ___ Black Histic (A3) | Thin Dark Surface (S9) | 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) |
| ___ Hydrogen Sulphide (A4) | (LRR R, MLRA 149B) | Dark Surface (S7) (LRR K, L) |
| ___ Stratified Layers (A5) | Loamy Mucky Mineral (F1) | Polyvalue Below Surface (S8) (LRR K, L) |
| ___ Depleted Below Dark Surface (A11') | (LRR K, L) | Thin Dark Surface (S9) (LRR K, L) |
| ___ Thick Dark Surface (A12) | Loamy Gleyed Matrix (F2) | Iron-Manganese Masses (F12) (LRR K, L, R) |
| ___ Sandy Mucky Mineral (S1) | Depleted Matrix (F3) | Piedmont Floodplain Soils (F19) (LRR K, L, MLRA 149B) |
| ___ Sandy Gleyed Matrix (S4) | Redox Dark Surface (F6) | Mesic Podzol (TA6) (MLRA 144A, 145, 149B) |
| ___ Sandy Redox (S5) | Depleted Dark Surface (F7) | Red Parent Material (TF2) |
| ___ Stripped Matrix (S6) | Redox Depressions (F8) | Very Shallow Dark Surface (TF12) |
| ___ Dark Surface (S7) (LRR R, MLRA 149B) | | ___ Other (Explain in Remarks) |

*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):

Type: Rock

Depth (inches): 8

Hydric soil present? N

Remarks:

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WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Eveleth-Gilbert-Virginia School City/County: Eveleth/St. Louis Sampling Date: 6/14/19
Applicant/Owner: Kimley-Horn and Associates, Inc. State: Minnesota Sampling Point: 12-2w
Investigator(s): Bailey Nelson, Ericka Massa Section, Township, Range: S29, T58N, R17W
Landform (hillslope, terrace, etc.): toeslope Local relief (concave, convex, none): none
Slope (%): 1% Lat.: 47.482845 Long.: -92.529893 Datum: NAD 1983 UTM Zone 15N
Soil Map Unit Name: Babbitt, bouldery-Wahlsten, bouldery-Aquepts, 0-8% slopes, rubbly NWI Classification: none
Are climatic/hydrologic conditions of the site typical for this time of the year? Yes (If no, explain in remarks)
Are vegetation , soil , or hydrology significantly disturbed? Are "normal
Are vegetation , soil , or hydrology naturally problematic? circumstances" present? Yes
(If needed, explain any answers in remarks)

SUMMARY OF FINDINGS

Hydrophytic vegetation present?	<u>Y</u>	Is the sampled area within a wetland?	<u>Y</u>
Hydric soil present?	<u>Y</u>		
Indicators of wetland hydrology present?	<u>Y</u>	If yes, optional wetland site ID:	<u>Wetland 12</u>
Remarks: (Explain alternative procedures here or in a separate report.)			

HYDROLOGY

Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)	
☐ Surface Water (A1)	☐ Water-Stained Leaves (B9)	☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Aquatic Fauna (B13)	☐ Drainage Patterns (B10)	
☒ Saturation (A3)	☐ Marl Deposits (B15)	☐ Moss Trim Lines (B16)	
☐ Water Marks (B1)	☐ Hydrogen Sulfide Odor (C1)	☐ Dry-Season Water Table (C2)	
☐ Sediment Deposits (B2)	☐ Oxidized Rhizospheres on Living	☐ Crayfish Burrows (C8)	
☐ Drift Deposits (B3)	☐ Roots (C3)	☐ Saturation Visible on Aerial Imagery	
☐ Algal Mat or Crust (B4)	☐ Presence of Reduced Iron (C4)	☐ (C9)	
☐ Iron Deposits (B5)	☐ Recent Iron Reduction in Tilled	☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial	☐ Soils (C6)	☐ Geomorphic Position (D2)	
☐ Imagery (B7)	☐ Thin Muck Surface (C7)	☐ Shallow Aquitard (D3)	
☐ Sparsely Vegetated Concave	☐ Other (Explain in Remarks)	☐ FAC-Neutral Test (D5)	
☐ Surface (B8)		☐ Microtopographic Relief (D4)	
Field Observations:		Indicators of wetland hydrology present? <u>Y</u>	
Surface water present?	Yes <u> </u> No <u>X</u>	Depth (inches): <u> </u>	
Water table present?	Yes <u> </u> No <u>X</u>	Depth (inches): <u> </u>	
Saturation present?	Yes <u>X</u> No <u> </u>	Depth (inches): <u>0</u>	
(includes capillary fringe)			
Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks:			

VEGETATION - Use scientific names of plants

Tree Stratum					Plot Size (30' Radius)	Absolute % Cover	Dominant Species	Indicator Status	Sampling Point: 12-2w			
1	<u>Abies balsamea</u>	<u>--</u>	<u>Balsam Fir</u>	<u>5</u>	<u>Y</u>	<u>FAC</u>	50/20 Thresholds			20%	50%	
2	<u> </u>	<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	Tree Stratum			1	3	
3	<u> </u>	<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	Sapling/Shrub Stratum			14	35	
4	<u> </u>	<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	Herb Stratum			15	39	
5	<u> </u>	<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	Woody Vine Stratum			0	0	
6	<u> </u>	<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	Dominance Test Worksheet					
7	<u> </u>	<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	Number of Dominant Species that are OBL, FACW, or FAC:			<u>4</u>	(A)	
8	<u> </u>	<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	Total Number of Dominant Species Across all Strata:			<u>4</u>	(B)	
9	<u> </u>	<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	Percent of Dominant Species that are OBL, FACW, or FAC:			<u>100.00%</u>	(A/B)	
10	<u> </u>	<u>--</u>	<u> </u>	<u>5</u>	<u>=</u>	<u>Total Cover</u>	Prevalence Index Worksheet					
Sapling/Shrub Stratum							Plot Size (15' Radius)	Absolute % Cover	Dominant Species	Indicator Status	Total % Cover of:	
1	<u>Fraxinus nigra</u>	<u>--</u>	<u>Black Ash</u>	<u>60</u>	<u>Y</u>	<u>FACW</u>	OBL species		<u>5</u>	x 1 =	<u>5</u>	
2	<u>Alnus incana</u>	<u>--</u>	<u>Speckled Alder</u>	<u>10</u>	<u>N</u>	<u>FACW</u>	FACW species		<u>115</u>	x 2 =	<u>230</u>	
3	<u> </u>	<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	FAC species		<u>32</u>	x 3 =	<u>96</u>	
4	<u> </u>	<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	FACU species		<u>0</u>	x 4 =	<u>0</u>	
5	<u> </u>	<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	UPL species		<u>0</u>	x 5 =	<u>0</u>	
6	<u> </u>	<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	Column totals		<u>152</u>	(A)	<u>331</u> (B)	
7	<u> </u>	<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	Prevalence Index = B/A =		<u>2.18</u>			
8	<u> </u>	<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>						
9	<u> </u>	<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>						
10	<u> </u>	<u>--</u>	<u> </u>	<u>70</u>	<u>=</u>	<u>Total Cover</u>	Hydrophytic Vegetation Indicators:					
Herb Stratum							Plot Size (5' Radius)	Absolute % Cover	Dominant Species	Indicator Status	<u> </u> Rapid test for hydrophytic vegetation	
1	<u>Equisetum sylvaticum</u>	<u>--</u>	<u>Woodland Horsetail</u>	<u>30</u>	<u>Y</u>	<u>FACW</u>	<u>X</u> Dominance test is >50%					
2	<u>Athyrium filix-femina</u>	<u>--</u>	<u>Lady Fern</u>	<u>25</u>	<u>Y</u>	<u>FAC</u>	<u>X</u> Prevalence index is ≤3.0*					
3	<u>Rubus pubescens</u>	<u>--</u>	<u>Dwarf Red Raspberry</u>	<u>15</u>	<u>N</u>	<u>FACW</u>	Morphological adaptations* (provide supporting data in Remarks or on a separate sheet)					
4	<u>Carex gynandra</u>	<u>--</u>	<u>Nodding Sedge</u>	<u>5</u>	<u>N</u>	<u>OBL</u>	Problematic hydrophytic vegetation* (explain)					
5	<u>Trillium cernuum</u>	<u>--</u>	<u>Whip-Poor-Will-Flower</u>	<u>2</u>	<u>N</u>	<u>FAC</u>	*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic					
6	<u> </u>	<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	Definitions of Vegetation Strata:					
7	<u> </u>	<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.					
8	<u> </u>	<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.					
9	<u> </u>	<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.					
10	<u> </u>	<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	Woody vines - All woody vines greater than 3.28 ft in height.					
11	<u> </u>	<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	Hydrophytic vegetation present? <u>Y</u>					
12	<u> </u>	<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>						
13	<u> </u>	<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>						
14	<u> </u>	<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>						
15	<u> </u>	<u>--</u>	<u> </u>	<u>77</u>	<u>=</u>	<u>Total Cover</u>						
Woody Vine Stratum							Plot Size (30' Radius)	Absolute % Cover	Dominant Species	Indicator Status		
1	<u> </u>	<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>						
2	<u> </u>	<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>						
3	<u> </u>	<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>						
4	<u> </u>	<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>						
5	<u> </u>	<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>						
							<u>0</u>	<u>=</u>	<u>Total Cover</u>			
Remarks: (Include photo numbers here or on a separate sheet)												
Note: This data sheet has been adapted to use the 2012 National Wetland Plant List: Robert W. Lichvar and John T. Kartesz. 2009. North American Digital Flora: National Wetland Plant List, version 2.4.0 (https://wetland.plants.usace.army.mil), U.S. Army Corps of Engineers, Engineer Research and Development Center, Cold Regions Research and Engineering Laboratory, Hanover, NH, and BONAP, Chapel Hill, NC. (2012)												

SOIL Sampling Point: 12-2w

Sampling Point: 12-2w

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

[illegible]

*Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains

**Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

Indicators for Problematic Hydric Soils:

- | | | |
|--|----------------------------------|---|
| ☐ Histosol (A1) | Polyvalue Below Surface | ☐ 2 cm Muck (A10) (LRR K, L, MLRA 149B) |
| ☐ Histic Epipedon (A2) | (S8) (LRR R, MLRA 149B) | ☐ Coast Prairie Redox (A16) (LRR K, L, R) |
| ☐ Black Histic (A3) | Thin Dark Surface (S9) | ☐ 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) |
| ☐ Hydrogen Sulfide (A4) | (LRR R, MLRA 149B) | ☐ Dark Surface (S7) (LRR K, L) |
| ☐ Stratified Layers (A5) | Loamy Mucky Mineral (F1) | ☐ Polyvalue Below Surface (S8) (LRR K, L) |
| ☒ Depleted Below Dark Surface (A11) | (LRR K, L) | ☐ Thin Dark Surface (S9) (LRR K, L) |
| ☐ X Thick Dark Surface (A12) | Loamy Gleyed Matrix (F2) | ☐ Iron-Manganese Masses (F12) (LRR K, L, R) |
| ☐ Sandy Mucky Mineral (S1) | Depleted Matrix (F3) | ☐ Piedmont Floodplain Soils (F19) (MLRA 149B) |
| ☐ Sandy Gleyed Matrix (S4) | Redox Dark Surface (F6) | ☐ Mesic Podzol (TA6) (MLRA 144A, 145, 149B) |
| ☐ Sandy Redox (S5) | Depleted Dark Surface (F7) | ☐ Red Parent Material (TF2) |
| ☐ Stripped Matrix (S6) | Redox Depressions (F8) | ☐ Very Shallow Dark Surface (TF12) |
| ☐ Dark Surface (S7) (LRR R, MLRA 149B) | | ☐ Other (Explain in Remarks) |

*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):

Type: _____

Depth (inches):

Hydric soil present? Y

Remarks:

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Project/Site: Eveleth-Gilbert-Virginia School City/County: Eveleth/St. Louis Sampling Date: 6/14/19
 Applicant/Owner: Kimley-Horn and Associates, Inc. State: Minnesota Sampling Point: 12-3u
 Investigator/s: Bailey Nelson, Erica Massa Section, Township, Range: S29, T58N, R17W
 Landform (hillslope, terrace, etc.): footslope Local relief (concave, convex, none): none
 Slope (s): 10% Lat.: 47.482748 Long.: -92.528322 Datum: NAD 1983 UTM Zone 15N
 Soil Map Unit Name: Babbitt, bouldery-Wahstien, bouldery-Aquepsu, 0-8% slopes, rubbly NW1 Classification: none
 Are climatic/hydrologic conditions of the site typical for this time of the year? Yes (If no, explain in remarks)
 Are vegetation _____, soil _____, or hydrology _____ significantly disturbed? Are "normal
 Are vegetation _____, soil _____, or hydrology _____ naturally problematic? circumstances" present? Yes
 (If needed, explain any answers in remarks)

Hydrophytic vegetation present?	<u> N </u>	Is the sampled area within a wetland? <u> N </u> If yes, optional wetland site ID: _____
Hydric soil present?	<u> N </u>	
Indicators of wetland hydrology present?	<u> N </u>	
Remarks: (Explain alternative procedures here or in a separate report.)		

Primary Indicators (minimum of one is required; check all that apply)				Secondary Indicators (minimum of two required)	
☐ Surface Water (A1)		☐ Water-Stained Leaves (B9)		☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)		☐ Aquatic Fauna (B13)		☐ Drainage Patterns (B10)	
☐ Saturation (A3)		☐ Marl Deposits (B15)		☐ Moss Trim Lines (B16)	
☐ Water Marks (B1)		☐ Hydrogen Sulfide Odor (C1)		☐ Dry-Season Water Table (C2)	
☐ Sediment Deposits (B2)		☐ Oxidized Rhizospheres on Living		☐ Crayfish Burrows (C8)	
☐ Drift Deposits (B3)		☐ Roots (C3)		☐ Saturation Visible on Aerial Imagery	
☐ Algal Mat or Crust (B4)		☐ Presence of Reduced Iron (C4)		☐ (C9)	
☐ Iron Deposits (B5)		☐ Recent Iron Reduction in Tilled		☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial		☐ Soils (C6)		☐ Geomorphic Position (D2)	
☐ Imagery (B7)		☐ Thin Muck Surface (C7)		☐ Shallow Aquitard (D3)	
☐ Sparsely Vegetated Concave		☐ Other (Explain in Remarks)		☐ FAC-Neutral Test (D5)	
☐ Surface (B8)				☐ Microtopographic Relief (D4)	
Field Observations: Surface water present? Yes ☐ No ☐ X Depth (inches): Water table present? Yes ☐ No ☐ X Depth (inches): Saturation present? Yes ☐ No ☐ X Depth (inches): (includes capillary fringe)				Indicators of wetland hydrology present? N	
Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:					
Remarks:					

Tree Stratum					Plot Size (30' Radius)		Absolute % Cover	Dominant Species	Indicator Status
1	<i>Thuja occidentalis</i>	--	<i>Eastern Arborvitae</i>			10	Y	FACW	
2	<i>Picea glauca</i>	--	<i>White Spruce</i>			10	Y	FACU	
3	<i>Pinus resinosa</i>	--	<i>Red Pine</i>			5	Y	FACU	
4	--	--	--						
5	--	--	--						
6	--	--	--						
7	--	--	--						
8	--	--	--						
9	--	--	--						
10	--	--	--						
						25	=	Total Cover	
Sapling/Shrub Stratum					Plot Size (15' Radius)		Absolute % Cover	Dominant Species	Indicator Status
1	--	--	--						
2	--	--	--						
3	--	--	--						
4	--	--	--						
5	--	--	--						
6	--	--	--						
7	--	--	--						
8	--	--	--						
9	--	--	--						
10	--	--	--						
						0	=	Total Cover	
Herb Stratum					Plot Size (5' Radius)		Absolute % Cover	Dominant Species	Indicator Status
1	<i>Aralia nudicaulis</i>	--	<i>Wild Sarsaparilla</i>			15	Y	UPL	
2	<i>Cornus canadensis</i>	--	<i>Canadian Bunchberry</i>			15	Y	UPL	
3	<i>Eurybia macrophylla</i>	--	<i>Large-Leaf Wood-Aster</i>			10	N	UPL	
4	<i>Geranium maculatum</i>	--	<i>Spotted Crane's-Bill</i>			5	N	FACU	
5	<i>Dryopteris carthusiana</i>	--	<i>Spinulose Wood Fern</i>			5	N	FACW	
6	<i>Trientalis borealis</i>	--	<i>Maystar</i>			2	N	FACU	
7	<i>Maianthemum racemosum</i>	--	<i>Feathery False Solomon's-Seal</i>			2	N	FACU	
8	--	--	--						
9	--	--	--						
10	--	--	--						
11	--	--	--						
12	--	--	--						
13	--	--	--						
14	--	--	--						
15	--	--	--						
						54	=	Total Cover	
Woody Vine Stratum					Plot Size (30' Radius)		Absolute % Cover	Dominant Species	Indicator Status
1	--	--	--						
2	--	--	--						
3	--	--	--						
4	--	--	--						
5	--	--	--						
						0	=	Total Cover	

50/20 Thresholds

Tree Stratum	5	13
Sapling/Shrub Stratum	0	0
Herb Stratum	11	27
Woody Vine Stratum	0	0

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across all Strata: 5 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 20.00% (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species	0	x 1 =	0
FACW species	15	x 2 =	30
FAC species	2	x 3 =	6
FACU species	22	x 4 =	88
UPL species	40	x 5 =	200
Column totals	79	(A)	324 (B)
Prevalence Index = B/A =	<u>4.10</u>		

Hydrophytic Vegetation Indicators:

 Rapid test for hydrophytic vegetation

 Dominance test is >50%

 Prevalence Index is >3.0*

Morphological adaptations* (provide supporting data in Remarks or on a separate sheet)

 Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology should be present, unless disturbed or problematic

Definitions of Vegetation Strata:

Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines - All woody vines greater than 3.28 ft in height.

Hydrophytic vegetation present? N

Remarks: (Include photo numbers here or on a separate sheet)

Note: This data sheet has been adapted to use the 2012 National Wetland Plant List:

Robert W. Lichvar and John T. Kartesz. 2009. North American Digital Flora: National Wetland Plant List, version 2.4.0 (https://wetland_plants.usace.army.mil/). U.S. Army Corps of Engineers, Engineer Research and Development Center, Cold Regions Research and Engineering

Sampling Point: 12-3u

[illegible]

**Location: PL=Pore Lining, M=Matrix

Indicators for Problematic Hydric Soils:

- *Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Hydric soil present? N

Northcentral and Northeast Region

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site:	Eveleth-Gilbert-Virginia School		City/County:	Eveleth/St. Louis		Sampling Date:	6/14/19	
Applicant/Owner:	Kimley-Horn and Associates, Inc.		State:	Minnesota		Sampling Point:	12-3w	
Investigator(s):	Bailey Nelson, Ericka Massa		Section, Township, Range:	S29, T58N, R17W				
Landform (hillslope, terrace, etc.):	toeslope		Local relief (concave, convex, none):	none				
Slope (phi):	1%	Lat.: 47.482678	Long.: -92.528298	Date:	NAD 1983 UTM Zone 15N			
Soil Map Unit Name:	Babbitt, bouldery-Wahsthen, bouldery-Aguets, 0-8% slopes, rubby NWI Classification: none							
Are climatic/hydrologic conditions of the site typical for this time of the year? Yes (If no, explain in remarks)								
Are vegetation _____, soil _____, or hydrology _____ significantly disturbed?			Are "normal circumstances" present? Yes					
Are vegetation _____, soil _____, or hydrology _____ naturally problematic?								
(If needed, explain any answers in remarks)								

SUMMARY OF FINDINGS

Hydrophytic vegetation present? <u>Y</u> Hydric soil present? <u>Y</u> Indicators of wetland hydrology present? <u>Y</u>	Is the sampled area within a wetland? <u>Y</u> If yes, optional wetland site ID: <u>Wetland 12</u>
Remarks: (Explain alternative procedures here or in a separate report.)	

HYDROLOGY

Primary Indicators (minimum of one is required; check all that apply) ☐ Surface Water (A1) ☐ Water-Stained Leaves (B9) ☐ High Water Table (A2) ☐ Aquatic Fauna (B13) ☒ Saturation (A3) ☐ Marl Deposits (B15) ☐ Water Marks (B1) ☐ Hydrogen Sulfide Odor (C1) ☐ Sediment Deposits (B2) ☐ Oxidized Rhizospheres on Living ☐ Drift Deposits (B3) ☐ Roots (C3) ☐ Algal Mat or Crust (B4) ☐ Presence of Reduced Iron (C4) ☐ Iron Deposits (B5) ☐ Recent Iron Reduction in Tilled ☐ Inundation Visible on Aerial ☐ Soils (C6) Imagery (B7) ☐ Thin Muck Surface (C7) ☐ Sparsely Vegetated Concave ☐ Other (Explain in Remarks) Surface (B8)			Secondary Indicators (minimum of two required) ☐ Surface Soil Cracks (B6) ☐ Drainage Patterns (B10) ☐ Moss Trim Lines (B16) ☐ Dry-Season Water Table (C2) ☐ Crayfish Burrows (C8) ☐ Saturation Visible on Aerial Imagery (C9) ☐ Stunted or Stressed Plants (D1) ☐ Geomorphic Position (D2) ☐ Shallow Aquitard (D3) ☐ FAC-Neutral Test (D5) ☐ Microtopographic Relief (D4)		
Field Observations: Surface water present? Yes ☐ No ☒ Depth (inches): Water table present? Yes ☐ No ☒ Depth (inches): Saturation present? Yes ☒ No ☐ Depth (inches): 0 (includes capillary fringe)			Indicators of wetland hydrology present? ☒ Y		
Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:					
Remarks:					

VEGETATION - Use scientific names of plants

					50/20 Thresholds		20%	50%
Tree Stratum	Plot Size (30' Radius)	Absolute % Cover	Dominant Species	Indicator Status	Tree Stratum	7	18	
1	<i>Thuja occidentalis</i> -- <i>Eastern Arborvitae</i>	15	Y	FACW	Sapling/Shrub Stratum	2	5	
2	<i>Fraxinus nigra</i> -- <i>Black Ash</i>	15	Y	FACW	Herb Stratum	8	21	
3	<i>Acer rubrum</i> -- <i>Red Maple</i>	5	N	FAC	Woody Vine Stratum	0	0	
4	--							
5	--							
6	--							
7	--							
8	--							
9	--							
10	--							
		35	= Total Cover					
Sapling/Shrub Stratum	Plot Size (15' Radius)	Absolute % Cover	Dominant Species	Indicator Status				
1	<i>Alnus incana</i> -- <i>Speckled Alder</i>	10	Y	FACW				
2	--							
3	--							
4	--							
5	--							
6	--							
7	--							
8	--							
9	--							
10	--							
		10	= Total Cover					
Herb Stratum	Plot Size (5' Radius)	Absolute % Cover	Dominant Species	Indicator Status				
1	<i>Carex gynandria</i> -- <i>Nodding Sedge</i>	15	Y	OBL				
2	<i>Carex intumescens</i> -- <i>Greater Bladder Sedge</i>	10	Y	FACW				
3	<i>Equisetum arvense</i> -- <i>Field Horsetail</i>	10	Y	FAC				
4	<i>Fragaria virginiana</i> -- <i>Virginia Strawberry</i>	5	N	FACU				
5	<i>Geranium maculatum</i> -- <i>Spotted Crane's-Bill</i>	2	N	FACU				
6	--							
7	--							
8	--							
9	--							
10	--							
11	--							
12	--							
13	--							
14	--							
15	--							
		42	= Total Cover					
Woody Vine Stratum	Plot Size (30' Radius)	Absolute % Cover	Dominant Species	Indicator Status				
1	--							
2	--							
3	--							
4	--							
5	--							
		0	= Total Cover					

Remarks: (Include photo numbers here or on a separate sheet)

50/20 Thresholds

Tree Stratum	7	18
Sapling/Shrub Stratum	2	5
Herb Stratum	8	21
Woody Vine Stratum	0	0

Dominant Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 6 (A)

Total Number of Dominant Species Across all Strata: 6 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 100.00% (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species	15	x 1 =	15
FACW species	50	x 2 =	100
FAC species	15	x 3 =	45
FACU species	7	x 4 =	28
UPL species	0	x 5 =	0
Column totals	87	(A)	188
Prevalence Index = B/A =			2.16

Hydrophytic Vegetation Indicators:

☒ Rapid test for hydrophytic vegetation

☒ Dominance test is >50%

☒ Prevalence index is >3.0*

Morphological adaptations* (provide supporting data in Remarks or on a separate sheet)

Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Definitions of Vegetation Strata:

Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines - All woody vines greater than 3.28 ft in height.

Hydrophytic vegetation present? Y

Note: This data sheet has been adapted to use the 2012 National Wetland Plant List:

Robert W. Lichvar and John T. Kartesz. 2009. North American Digital Flora: National Wetland Plant List, version 2.4.0 (<https://wetland.plants.usace.army.mil/>). U.S. Army Corps of Engineers, Engineer Research and Development Center, Cold Regions Research and Engineering Laboratory, Hanover, NH, and BONAP, Chapel Hill, NC. (2012)

Sampling Point: 12-3w

[illegible]

**Location: PL=Pore Lining, M=Matrix

Indicators for Problematic Hydric Soils:

- *Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Hydric soil present? Y

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Project/Site:	<u>Eveleth-Gilbert-Virginia School</u>		City/County:	<u>Eveleth/St. Louis</u>	Sampling Date:	<u>6/14/19</u>
Applicant/Owner:	<u>Kimley-Horn and Associates, Inc.</u>		State:	<u>Minnesota</u>	Sampling Point:	<u>12-4u</u>
Investigator/s:	<u>Bailey Nelson, Ericka Massa</u>		Section, Township, Range:	<u>S29, T58N, R17W</u>		
Landform (hillslope, terrace, etc.):	<u>toeslope</u>	Local relief (concave, convex, none):		<u>none</u>		
Slope (%):	<u>3%</u>	Lat.: <u>47.482054</u>	Long.: <u>-92.530293</u>	Date:	<u>NAD 1983 UTM Zone 15N</u>	
Soil Map Unit Name:	<u>Babbitt, bouldery-Wahstien, bouldery-Aguetsu, 0-8% slopes, rubbly NWI Classification: none</u>					
Are climatic/hydrologic conditions of the site typical for this time of the year?	<u>Yes</u>			<u>(If no, explain in remarks)</u>		
Are vegetation _____, soil _____, or hydrology _____ significantly disturbed?						
Are vegetation _____, soil _____, or hydrology _____ naturally problematic?	<u>Are "normal circumstances" present?</u>					
<u>(If needed, explain any answers in remarks)</u>						
						<u>Yes</u>

Hydrophytic vegetation present?	<u> N </u>	Is the sampled area within a wetland? <u> N </u> If yes, optional wetland site ID: _____
Hydric soil present?	<u> N </u>	
Indicators of wetland hydrology present?	<u> N </u>	
Remarks: (Explain alternative procedures here or in a separate report.)		

Primary Indicators (minimum of one is required; check all that apply) ☐ Surface Water (A1) ☐ Water-Stained Leaves (B9) ☐ High Water Table (A2) ☐ Aquatic Fauna (B13) ☐ Saturation (A3) ☐ Marl Deposits (B15) ☐ Water Marks (B1) ☐ Hydrogen Sulfide Odor (C1) ☐ Sediment Deposits (B2) ☐ Oxidized Rhizospheres on Living ☐ Drift Deposits (B3) ☐ Roots (C3) ☐ Algal Mat or Crust (B4) ☐ Presence of Reduced Iron (C4) ☐ Iron Deposits (B5) ☐ Recent Iron Reduction in Tilled ☐ Inundation Visible on Aerial ☐ Soils (C6) Imagery (B7) ☐ Thin Muck Surface (C7) ☐ Sparsely Vegetated Concave ☐ Other (Explain in Remarks) Surface (B8)			Secondary Indicators (minimum of two required) ☐ Surface Soil Cracks (B6) ☐ Drainage Patterns (B10) ☐ Moss Trim Lines (B16) ☐ Dry-Season Water Table (C2) ☐ Crayfish Burrows (C8) ☐ Saturation Visible on Aerial Imagery (C9) ☐ Stunted or Stressed Plants (D1) ☐ Geomorphic Position (D2) ☐ Shallow Aquitard (D3) ☐ FAC-Neutral Test (D5) ☐ Microtopographic Relief (D4)		
Field Observations: Surface water present? Yes ☐ No ☐ X Depth (inches): _____ Water table present? Yes ☐ No ☐ X Depth (inches): _____ Saturation present? Yes ☐ No ☐ X Depth (inches): _____ (includes capillary fringe)			Indicators of wetland hydrology present? <u> N </u>		
Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:					
Remarks:					

						50/20 Thresholds		
		Absolute % Cover	Dominant Species	Indicator Status		20%	50%	
Tree Stratum	Plot Size (30' Radius)				Tree Stratum	0	0	
1	--				Sapling/Shrub Stratum	0	0	
2	--				Herb Stratum	15	38	
3	--				Woody Vine Stratum	0	0	
4	--							
5	--							
6	--							
7	--							
8	--							
9	--							
10	--							
		0 = Total Cover						
Sapling/Shrub Stratum	Plot Size (15' Radius)	Absolute % Cover	Dominant Species	Indicator Status				
1	--							
2	--							
3	--							
4	--							
5	--							
6	--							
7	--							
8	--							
9	--							
10	--							
		0 = Total Cover						
Herb Stratum	Plot Size (5' Radius)	Absolute % Cover	Dominant Species	Indicator Status				
1	Bromus inermis -- Smooth Brome	40		UPL				
2	Tanacetum vulgare -- Common Tansy	15		FACU				
3	Phalaris arundinacea -- Reed Canary Grass	10		FACW				
4	Taraxacum officinale -- Common Dandelion	10		FACU				
5	--							
6	--							
7	--							
8	--							
9	--							
10	--							
11	--							
12	--							
13	--							
14	--							
15	--							
		75 = Total Cover						
Woody Vine Stratum	Plot Size (30' Radius)	Absolute % Cover	Dominant Species	Indicator Status				
1	--							
2	--							
3	--							
4	--							
5	--							
		0 = Total Cover						

Remarks: (Include photo numbers here or on a separate sheet)

Note: This data sheet has been adapted to use the 2012 National Wetland Plant List:
 Robert W. Lichvar and John T. Kartesz. 2009. North American Digital Flora: National Wetland Plant List, version 2.4.0 (https://wetland_plants.usace.army.mil/). U.S. Army Corps of Engineers, Engineer Research and Development Center, Cold Regions Research and Engineering Laboratory, Hanover, NH, and BONAP, Chapel Hill, NC. (2012)

SOIL Sampling Point: 12-4u

Sampling Point: 12-4u

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

[illegible]

*Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains

**Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

Indicators for Problematic Hydric Soils:

- | | | |
|---|----------------------------|--|
| ☐ Histosol (A1) | Polyvalue Below Surface | ☐ 2 cm Muck (A10) (LRR K, L, MLRA 149B |
| ☐ Histic Epipedon (A2) | (S8) (LRR R, MLRA 149B) | ☐ Coast Prairie Redox (A16) (LRR K, L, R) |
| ☐ Black Histic (A3) | Thin Dark Surface (S9) | ☐ 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) |
| ☐ Hydrogen Sulfide (A4) | (LRR R, MLRA 149B | ☐ Dark Surface (S7) (LRR K, L) |
| ☐ Stratified Layers (A5) | Loamy Mucky Mineral (F1) | ☐ Polyvalue Below Surface (S8) (LRR K, L) |
| ☐ Depleted Below Dark Surface (A11) | (LRR K, L) | ☐ Thin Dark Surface (S9) (LRR K, L) |
| ☐ Thick Dark Surface (A12) | Loamy Gleyed Matrix (F2) | ☐ Iron-Manganese Masses (F12) (LRR K, L, R) |
| ☐ Sandy Mucky Mineral (S1) | Depleted Matrix (F3) | ☐ Piedmont Floodplain Soils (F19) (MLRA 149B) |
| ☐ Sandy Gleyed Matrix (S4) | Redox Dark Surface (F6) | ☐ Mesic Spodic (TA6) (MLRA 144A, 145, 149B) |
| ☐ Sandy Redox (S5) | Depleted Dark Surface (F7) | ☐ Red Parent Material (TF2) |
| ☐ Stripped Matrix (S6) | Redox Depressions (F8) | ☐ Very Shallow Dark Surface (TF12) |
| ☐ Dark Surface (S7) (LRR R, MLRA 149B) | | ☐ Other (Explain in Remarks) |

*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):

Type: Rock

Depth (inches): 6

Hydric soil present? N

Remarks:

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WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Eveleth-Gilbert-Virginia School City/County: Eveleth/St. Louis Sampling Date: 6/14/19
 Applicant/Owner: Kimley-Horn and Associates, Inc. State: Minnesota Sampling Point: 12-4w
 Investigator(s): Bailey Nelson, Ericka Massa Section, Township, Range: S29, T58N, R17W
 Landform (hillslope, terrace, etc.): toeslope Local relief (concave, convex, none): concave
 Slope (%): 1% Lat.: 47.482066 Long.: -92.530139 Datum: NAD 1983 UTM Zone 15N
 Soil Map Unit Name: Babbitt, bouldery-Wahlsten, bouldery-Aquepts, 0-8% slopes, rubbly NWI Classification: none
 Are climatic/hydrologic conditions of the site typical for this time of the year? Yes (If no, explain in remarks)
 Are vegetation , soil , or hydrology significantly disturbed? Are "normal
 Are vegetation , soil , or hydrology naturally problematic? circumstances" present? Yes
 (If needed, explain any answers in remarks)

SUMMARY OF FINDINGS

Hydrophytic vegetation present?	<u>Y</u>	Is the sampled area within a wetland?	<u>Y</u>
Hydric soil present?	<u>Y</u>		
Indicators of wetland hydrology present?	<u>Y</u>	If yes, optional wetland site ID:	<u>Wetland 12</u>
Remarks: (Explain alternative procedures here or in a separate report.)			

HYDROLOGY

Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)	
☐ Surface Water (A1)	☐ Water-Stained Leaves (B9)	☐ Surface Soil Cracks (B6)	
☒ High Water Table (A2)	☐ Aquatic Fauna (B13)	☐ Drainage Patterns (B10)	
☒ Saturation (A3)	☐ Marl Deposits (B15)	☐ Moss Trim Lines (B16)	
☐ Water Marks (B1)	☐ Hydrogen Sulfide Odor (C1)	☐ Dry-Season Water Table (C2)	
☐ Sediment Deposits (B2)	☐ Oxidized Rhizospheres on Living	☐ Crayfish Burrows (C8)	
☐ Drift Deposits (B3)	☐ Roots (C3)	☐ Saturation Visible on Aerial Imagery	
☐ Algal Mat or Crust (B4)	☐ Presence of Reduced Iron (C4)	☐ (C9)	
☐ Iron Deposits (B5)	☐ Recent Iron Reduction in Tilled	☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial	☐ Soils (C6)	☐ Geomorphic Position (D2)	
☐ Imagery (B7)	☐ Thin Muck Surface (C7)	☐ Shallow Aquitard (D3)	
☐ Sparsely Vegetated Concave	☐ Other (Explain in Remarks)	☐ FAC-Neutral Test (D5)	
☐ Surface (B8)		☐ Microtopographic Relief (D4)	
Field Observations:		Indicators of wetland hydrology present? <u>Y</u>	
Surface water present?	Yes <u> </u> No <u>X</u> Depth (inches): <u> </u>		
Water table present?	Yes <u>X</u> No <u> </u> Depth (inches): <u>2</u>		
Saturation present?	Yes <u>X</u> No <u> </u> Depth (inches): <u>0</u>		
(includes capillary fringe)			
Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks:			

VEGETATION - Use scientific names of plants

					Sampling Point: <u>12-4w</u>		
					50/20 Thresholds		
					20% 50%		
Tree Stratum					Tree Stratum		
Plot Size (30' Radius)					Sapling/Shrub Stratum		
Absolute % Cover					Herb Stratum		
Dominant Species					Woody Vine Stratum		
Indicator Status							
1	<u> </u>	<u> </u>	<u> </u>	<u> </u>			
2	<u> </u>	<u> </u>	<u> </u>	<u> </u>			
3	<u> </u>	<u> </u>	<u> </u>	<u> </u>			
4	<u> </u>	<u> </u>	<u> </u>	<u> </u>			
5	<u> </u>	<u> </u>	<u> </u>	<u> </u>			
6	<u> </u>	<u> </u>	<u> </u>	<u> </u>			
7	<u> </u>	<u> </u>	<u> </u>	<u> </u>			
8	<u> </u>	<u> </u>	<u> </u>	<u> </u>			
9	<u> </u>	<u> </u>	<u> </u>	<u> </u>			
10	<u> </u>	<u> </u>	<u> </u>	<u> </u>			
					Dominance Test Worksheet		
					Number of Dominant		
					Species that are OBL,		
					FACW, or FAC: <u>1</u> (A)		
					Total Number of Dominant		
					Species Across all Strata: <u>1</u> (B)		
					Percent of Dominant		
					Species that are OBL,		
					FACW, or FAC: <u>100.00%</u> (A/B)		
Sapling/Shrub Stratum					Prevalence Index Worksheet		
Plot Size (15' Radius)					Total % Cover of:		
Absolute % Cover					OBL species <u>20</u> x 1 = <u>20</u>		
Dominant Species					FACW species <u>80</u> x 2 = <u>160</u>		
Indicator Status					FAC species <u>0</u> x 3 = <u>0</u>		
1	<u>Salix petiolaris</u>	<u>--</u>	<u>Meadow Willow</u>	<u>10</u>	<u>Y</u>	<u>FACW</u>	FACU species <u>0</u> x 4 = <u>0</u>
2	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	UPL species <u>0</u> x 5 = <u>0</u>
3	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	Column totals <u>100</u> (A) <u>180</u> (B)
4	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	Prevalence Index = B/A = <u>1.80</u>
5	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	
6	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	
7	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	
8	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	
9	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	
10	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	
					Hydrophytic Vegetation Indicators:		
					<u> </u> Rapid test for hydrophytic vegetation		
					<u>X</u> Dominance test is >50%		
					<u>X</u> Prevalence index is ≤3.0*		
					Morphological adaptations* (provide supporting data in Remarks or on a separate sheet)		
					<u> </u> Problematic hydrophytic vegetation* (explain)		
					*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic		
					Definitions of Vegetation Strata:		
					Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.		
					Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.		
					Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.		
					Woody vines - All woody vines greater than 3.28 ft in height.		
					Hydrophytic vegetation present? <u>Y</u>		
Herb Stratum							
Plot Size (5' Radius)							
Absolute % Cover							
Dominant Species							
Indicator Status							
1	<u>Phalaris arundinacea</u>	<u>--</u>	<u>Reed Canary Grass</u>	<u>70</u>	<u> </u>	<u>FACW</u>	
2	<u>Calamagrostis canadensis</u>	<u>--</u>	<u>Bluejoint</u>	<u>20</u>	<u> </u>	<u>OBL</u>	
3	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	
4	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	
5	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	
6	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	
7	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	
8	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	
9	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	
10	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	
11	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	
12	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	
13	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	
14	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	
15	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	
					Woody Vine Stratum		
Plot Size (30' Radius)							
Absolute % Cover							
Dominant Species							
Indicator Status							
1	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	
2	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	
3	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	
4	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	
5	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	
					Remarks: (Include photo numbers here or on a separate sheet)		
Note: This data sheet has been adapted to use the 2012 National Wetland Plant List: Robert W. Lichvar and John T. Kartesz. 2009. North American Digital Flora: National Wetland Plant List, version 2.4.0 (https://wetland.plants.usace.army.mil), U.S. Army Corps of Engineers, Engineer Research and Development Center, Cold Regions Research and Engineering Laboratory, Hanover, NH, and BONAP, Chapel Hill, NC. (2012)							

SOIL	Sampling Point:	12-4w
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Sampling Point: 12-4w

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

[illegible]

*Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains

**Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

Indicators for Problematic Hydric Soils:

- | | | |
|--|---|---|
| ☐ Histosol (A1) | Polyvalue Below Surface | ☐ 2 cm Muck (A10) (LRR K, L, MLRA 149B) |
| ☐ Histic Epipedon (A2) | ☐ (S8) (LRR R, MLRA 149B) | ☐ Coast Prairie Redox (A16) (LRR K, L, R) |
| ☐ Black Histic (A3) | ☐ Thin Dark Surface (S9) | ☐ 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) |
| ☐ Hydrogen Sulfide (A4) | ☐ (LRR R, MLRA 149B) | ☐ Dark Surface (S7) (LRR K, L) |
| ☐ Stratified Layers (A5) | ☐ Loamy Mucky Mineral (F1) | ☐ Polyvalue Below Surface (S8) (LRR K, L) |
| ☐ Depleted Below Dark Surface (A11') | ☐ (LRR K, L) | ☐ Thin Dark Surface (S9) (LRR K, L) |
| ☐ Thick Dark Surface (A12) | ☐ Loamy Gleyed Matrix (F2) | ☐ Iron-Manganese Masses (F12) (LRR K, L, R) |
| ☐ Sandy Mucky Mineral (S1) | ☒ Depleted Matrix (F3) | ☐ Piedmont Floodplain Soils (F19) (MLRA 149B) |
| ☐ Sandy Gleyed Matrix (S4) | ☐ Redox Dark Surface (F6) | ☐ Mesic Podzol (TA6) (MLRA 144A, 145, 149B) |
| ☐ Sandy Redox (S5) | ☐ Depleted Dark Surface (F7) | ☐ Red Parent Material (TF2) |
| ☐ Stripped Matrix (S6) | ☐ Redox Depressions (F8) | ☐ Very Shallow Dark Surface (TF12) |
| ☐ Dark Surface (S7) (LRR R, MLRA 149B) | | ☐ Other (Explain in Remarks) |

*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):

Type: Rock

Depth (inches): 5

Hydric soil present? Y

Remarks:

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WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site:	Eveleth-Gilbert-Virginia School		City/County:	Eveleth/St. Louis	Sampling Date:	6/14/19	
Applicant/Owner:	Kirmley-Horn and Associates, Inc.		State:	Minnesota	Sampling Point:	13-1u	
Investigator/s:	Bailey Nelson, Enicka Massa		Section, Township, Range:	S29, T58N, R17W			
Landform (hill/slope, terrace, etc.):	foothlope		Local relief (concave, convex, none):	none			
Slope (°):	10%	Lat.: 47.480108	Long.: -92.529787	Datum:		NAD 1983 UTM Zone 15N	
Soil Map Unit Name:	Dora muchly peat, Hibbing catena, 0-1% slopes		NW1 Classification:		none		
Are climatic/hydrologic conditions of the site typical for this time of the year?				Yes		(If no, explain in remarks)	
Are vegetation _____, soil _____, or hydrology _____ significantly disturbed?					Are "normal circumstances" present?		
Are vegetation _____, soil _____, or hydrology _____ naturally problematic?					Yes		
(If needed, explain any answers in remarks)							

SUMMARY OF FINDINGS

Summary of Presence		Hydric soil present? <u>N</u> Hydric soil present? <u>N</u> Indicators of wetland hydrology present? <u>N</u>		Is the sampled area within a wetland? <u>N</u> If yes, optional wetland site ID: _____	
Remarks: (Explain alternative procedures here or in a separate report.)					

HYDROLOGY

Primary Indicators (minimum of one is required; check all that apply)				Secondary Indicators (minimum of two required)	
☐ Surface Water (A1)	☐	☐ Water-Stained Leaves (B9)	☐	☐ Surface Soil Cracks (B6)	☐
☐ High Water Table (A2)	☐	☐ Aquatic Fauna (B13)	☐	☐ Drainage Patterns (B10)	☐
☐ Saturation (A3)	☐	☐ Marl Deposits (B15)	☐	☐ Moss Trim Lines (B16)	☐
☐ Water Marks (B1)	☐	☐ Hydrogen Sulfide Odor (C1)	☐	☐ Dry-Season Water Table (C2)	☐
☐ Sediment Deposits (B2)	☐	☐ Oxidized Rhizospheres on Living	☐	☐ Crayfish Burrows (C8)	☐
☐ Drift Deposits (B3)	☐	☐ Roots (C3)	☐	☐ Saturation Visible on Aerial Imagery	☐
☐ Algal Mat or Crust (B4)	☐	☐ Presence of Reduced Iron (C4)	☐	☐ (C9)	☐
☐ Iron Deposits (B5)	☐	☐ Recent Iron Reduction in Tilled	☐	☐ Stunted or Stressed Plants (D1)	☐
☐ Inundation Visible on Aerial	☐	☐ Soils (C6)	☐	☐ Geomorphic Position (D2)	☐
☐ Imagery (B7)	☐	☐ Thin Muck Surface (C7)	☐	☐ Shallow Aquitard (D3)	☐
☐ Sparsely Vegetated Concave	☐	☐ Other (Explain in Remarks)	☐	☐ FAC-Neutral Test (D5)	☐
☐ Surface (B8)	☐		☐	☐ Microtopographic Relief (D4)	☐
Field Observations: Surface water present? Yes ☐ No ☐ X Depth (inches): Water table present? Yes ☐ No ☐ X Depth (inches): Saturation present? Yes ☐ No ☐ X Depth (inches): (includes capillary fringe)				Indicators of wetland hydrology present? ☐ N ☐	
Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:					
Remarks:					

VEGETATION - Use scientific names of plants

50/20 Thresholds				20%	50%
Tree Stratum	Plot Size (30' Radius)	Absolute % Cover	Dominant Species	Indicator Status	
1	<i>Fraxinus nigra</i> -- Black Ash	5	Y	FACW	
2	--				
3	--				
4	--				
5	--				
6	--				
7	--				
8	--				
9	--				
10	--				
		5	= Total Cover		
Sapling/Shrub Stratum	Plot Size (15' Radius)	Absolute % Cover	Dominant Species	Indicator Status	
1	<i>Corylus cornuta</i> -- Beaked Hazelnut	70	Y	FACU	
2	--				
3	--				
4	--				
5	--				
6	--				
7	--				
8	--				
9	--				
10	--				
		70	= Total Cover		
Herb Stratum	Plot Size (5' Radius)	Absolute % Cover	Dominant Species	Indicator Status	
1	<i>Sanguinaria canadensis</i> -- Bloodroot	40	Y	FACU	
2	<i>Athyrium Filix-femina</i> -- Lady Fern	30	Y	FAC	
3	<i>Diervilla lonicera</i> -- Bush Honeysuckle	20	Y	UPL	
4	<i>Maianthemum stellatum</i> -- Starry False Solomon's-Seal	5	N	FAC	
5	<i>Thalictrum dioicum</i> -- Early Meadow-Rue	2	N	FACU	
6	--				
7	--				
8	--				
9	--				
10	--				
11	--				
12	--				
13	--				
14	--				
15	--				
		97	= Total Cover		
Woody Vine Stratum	Plot Size (30' Radius)	Absolute % Cover	Dominant Species	Indicator Status	
1	--				
2	--				
3	--				
4	--				
5	--				
		0	= Total Cover		

Remarks: (Include photo numbers here or on a separate sheet)

50/20 Thresholds

Tree Stratum	1	3
Sapling/Shrub Stratum	14	35
Herb Stratum	19	49
Woody Vine Stratum	0	0

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across all Strata: 5 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 40.00% (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species	<u>0</u> x 1 =	<u>0</u>
FACW species	<u>5</u> x 2 =	<u>10</u>
FAC species	<u>35</u> x 3 =	<u>105</u>
FACU species	<u>112</u> x 4 =	<u>448</u>
UPL species	<u>20</u> x 5 =	<u>100</u>
Column totals	<u>172</u> (A)	<u>663</u> (B)

Prevalence Index = B/A = 3.85

Hydrophytic Vegetation Indicators:

 Rapid test for hydrophytic vegetation

 Dominance index is >50%

 Prevalence index is <3.0*

Morphological adaptations* (provide supporting data in Remarks or on a separate sheet)

 Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Definitions of Vegetation Strata:

Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines - All woody vines greater than 3.28 ft in height.

Hydrophytic vegetation present? N

Note: This data sheet has been adapted to use the 2012 National Wetland Plant List:

Robert W. Lichvar and John T. Kartesz. 2009. North American Digital Flora: National Wetland Plant List, version 2.4.0 (<https://wetland.plants.usace.army.mil/>). U.S. Army Corps of Engineers, Engineer Research and Development Center, Cold Regions Research and Engineering Laboratory, Hanover, NH, and BONAP, Chapel Hill, NC. (2012)

SOIL **Sampling Point:** 13-1u

Sampling Point: 13-1u

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

[illegible]

*Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains

**Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

Indicators for Problematic Hydric Soils:

- | | | |
|---|----------------------------------|--|
| ___ Histosol (A1) | Polyvalue Below Surface | 2 cm Muck (A10) (LRR K, L, MLRA 149B) |
| ___ Histic Epipedon (A2) | (S8) (LRR R, MLRA 149B) | Coast Prairie Redox (A16) (LRR K, L, R) |
| ___ Black Histic (A3) | Thin Dark Surface (S9) | 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) |
| ___ Hydrogen Sulphide (A4) | (LRR R, MLRA 149B) | Dark Surface (S7) (LRR K, L) |
| ___ Stratified Layers (A5) | Loamy Mucky Mineral (F1) | Polyvalue Below Surface (S8) (LRR K, L) |
| ___ Depleted Below Dark Surface (A11') | (LRR K, L) | Thin Dark Surface (S9) (LRR K, L) |
| ___ Thick Dark Surface (A12) | Loamy Gleyed Matrix (F2) | Iron-Manganese Masses (F12) (LRR K, L, R) |
| ___ Sandy Mucky Mineral (S1) | Depleted Matrix (F3) | Piedmont Floodplain Soils (F19) (MLRA 149B) |
| ___ Sandy Gleyed Matrix (S4) | Redox Dark Surface (F6) | Mesic Podzol (TA6) (MLRA 144A, 145, 149B) |
| ___ Sandy Redox (S5) | Depleted Dark Surface (F7) | Red Parent Material (TF2) |
| ___ Stripped Matrix (S6) | Redox Depressions (F8) | Very Shallow Dark Surface (TF12) |
| ___ Dark Surface (S7) (LRR R, MLRA 149B) | | ___ Other (Explain in Remarks) |

*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):

Type: Rock

Depth (inches): 8

Hydric soil present? N

Remarks:

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WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Eveleth-Gilbert-Virginia School City/County: Eveleth/St. Louis Sampling Date: 6/14/19
Applicant/Owner: Kimley-Horn and Associates, Inc. State: Minnesota Sampling Point: 13-1w
Investigator(s): Bailey Nelson, Ericka Massa Section, Township, Range: S29, T58N, R17W
Landform (hillslope, terrace, etc.): toeslope Local relief (concave, convex, none): concave
Slope (%): 1% Lat.: 47.480131 Long.: -92.529734 Datum: NAD 1983 UTM Zone 15N
Soil Map Unit Name: Dora mucky peat, Hibbing catena, 0-1% slopes NWI Classification: none
Are climatic/hydrologic conditions of the site typical for this time of the year? Yes (If no, explain in remarks)
Are vegetation , soil , or hydrology significantly disturbed? Are "normal
Are vegetation , soil , or hydrology naturally problematic? circumstances" present? Yes
(If needed, explain any answers in remarks)

SUMMARY OF FINDINGS

Hydrophytic vegetation present?	<u>Y</u>	Is the sampled area within a wetland?	<u>Y</u>
Hydric soil present?	<u>Y</u>		
Indicators of wetland hydrology present?	<u>Y</u>	If yes, optional wetland site ID:	<u>Wetland 13</u>
Remarks: (Explain alternative procedures here or in a separate report.)			

HYDROLOGY

Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)	
☐ Surface Water (A1)	☐ Water-Stained Leaves (B9)	☐ Surface Soil Cracks (B6)	
☒ High Water Table (A2)	☐ Aquatic Fauna (B13)	☐ Drainage Patterns (B10)	
☒ Saturation (A3)	☐ Marl Deposits (B15)	☐ Moss Trim Lines (B16)	
☐ Water Marks (B1)	☐ Hydrogen Sulfide Odor (C1)	☐ Dry-Season Water Table (C2)	
☐ Sediment Deposits (B2)	☐ Oxidized Rhizospheres on Living	☐ Crayfish Burrows (C8)	
☐ Drift Deposits (B3)	☐ Roots (C3)	☐ Saturation Visible on Aerial Imagery	
☐ Algal Mat or Crust (B4)	☐ Presence of Reduced Iron (C4)	☐ (C9)	
☐ Iron Deposits (B5)	☐ Recent Iron Reduction in Tilled	☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial	☐ Soils (C6)	☐ Geomorphic Position (D2)	
Imagery (B7)	☐ Thin Muck Surface (C7)	☐ Shallow Aquitard (D3)	
☐ Sparsely Vegetated Concave	☐ Other (Explain in Remarks)	☐ FAC-Neutral Test (D5)	
Surface (B8)		☐ Microtopographic Relief (D4)	
Field Observations:			
Surface water present?	Yes <u> </u> No <u>X</u> Depth (inches): <u> </u>	Indicators of wetland hydrology present? <u>Y</u>	
Water table present?	Yes <u>X</u> No <u> </u> Depth (inches): <u>8</u>		
Saturation present?	Yes <u>X</u> No <u> </u> Depth (inches): <u>0</u>		
(includes capillary fringe)			
Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks:			

US Army Corps of Engineers

Northcentral and Northeast Region

VEGETATION - Use scientific names of plants

Tree Stratum					Plot Size (30' Radius)	Absolute % Cover	Dominant Species	Indicator Status	Sampling Point: 13-1w						
1	<u>Fraxinus nigra</u>					--	<u>Black Ash</u>	<u>60</u>	<u>Y</u>	<u>FACW</u>	50/20 Thresholds				
2											20%	50%			
3											Tree Stratum	12	30		
4											Sapling/Shrub Stratum	0	0		
5											Herb Stratum	14	35		
6											Woody Vine Stratum	0	0		
7											Dominance Test Worksheet				
8											Number of Dominant Species that are OBL, FACW, or FAC: <u>4</u> (A)				
9											Total Number of Dominant Species Across all Strata: <u>4</u> (B)				
10											Percent of Dominant Species that are OBL, FACW, or FAC: <u>100.00%</u> (A/B)				
						<u>60</u>	=	Total Cover							
Sapling/Shrub Stratum					Plot Size (15' Radius)	Absolute % Cover	Dominant Species	Indicator Status	Prevalence Index Worksheet						
1										Total % Cover of:					
2										OBL species <u>40</u> x 1 = <u>40</u>					
3										FACW species <u>85</u> x 2 = <u>170</u>					
4										FAC species <u>5</u> x 3 = <u>15</u>					
5										FACU species <u>0</u> x 4 = <u>0</u>					
6										UPL species <u>0</u> x 5 = <u>0</u>					
7										Column totals <u>130</u> (A) <u>225</u> (B)					
8										Prevalence Index = B/A = <u>1.73</u>					
9															
10															
						<u>0</u>	=	Total Cover							
Herb Stratum					Plot Size (5' Radius)	Absolute % Cover	Dominant Species	Indicator Status	Hydrophytic Vegetation Indicators:						
1	<u>Calamagrostis canadensis</u>					--	<u>Bluejoint</u>	<u>25</u>	<u>Y</u>	<u>OBL</u>	<u> </u> Rapid test for hydrophytic vegetation				
2	<u>Onoclea sensibilis</u>					--	<u>Sensitive Fern</u>	<u>20</u>	<u>Y</u>	<u>FACW</u>	<u>X</u> Dominance test is >50%				
3	<u>Caltha palustris</u>					--	<u>Yellow Marsh-Marigold</u>	<u>15</u>	<u>Y</u>	<u>OBL</u>	<u>X</u> Prevalence index is ≤3.0*				
4	<u>Thalictrum dasycarpum</u>					--	<u>Purple Meadow-Rue</u>	<u>5</u>	<u>N</u>	<u>FACW</u>	Morphological adaptations* (provide supporting data in Remarks or on a separate sheet)				
5	<u>Viola sororia</u>					--	<u>Hooded Blue Violet</u>	<u>5</u>	<u>N</u>	<u>FAC</u>	<u> </u> Problematic hydrophytic vegetation* (explain)				
6											*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic				
7											Definitions of Vegetation Strata:				
8											Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.				
9											Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.				
10											Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.				
11											Woody vines - All woody vines greater than 3.28 ft in height.				
12											Hydrophytic vegetation present? <u>Y</u>				
13															
14															
15															
						<u>70</u>	=	Total Cover							
Woody Vine Stratum					Plot Size (30' Radius)	Absolute % Cover	Dominant Species	Indicator Status							
1															
2															
3															
4															
5															
						<u>0</u>	=	Total Cover							
Remarks: (Include photo numbers here or on a separate sheet)															
Note: This data sheet has been adapted to use the 2012 National Wetland Plant List: Robert W. Lichvar and John T. Kartesz. 2009. North American Digital Flora: National Wetland Plant List, version 2.4.0 (https://wetland.plants.usace.army.mil), U.S. Army Corps of Engineers, Engineer Research and Development Center, Cold Regions Research and Engineering Laboratory, Hanover, NH, and BONAP, Chapel Hill, NC. (2012)															

US Army Corps of Engineers

Northcentral and Northeast Region

SOIL	Sampling Point:	13-1w
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Sampling Point: 13-1w

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

[illegible]

*Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains

**Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

Indicators for Problematic Hydric Soils:

- | | | |
|---|---------------------------------|--|
| ☐ Histosol (A1) | Polyvalue Below Surface | 2 cm Muck (A10) (LRR K, L, MLRA 149B) |
| ☐ Histic Epipedon (A2) | (S8) (LRR R, MLRA 149B) | Coast Prairie Redox (A16) (LRR K, L, R) |
| ☐ Black Histic (A3) | Thin Dark Surface (S9) | 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) |
| ☐ Hydrogen Sulphide (A4) | (LRR R, MLRA 149B) | Dark Surface (S7) (LRR K, L) |
| ☐ Stratified Layers (A5) | Loamy Mucky Mineral (F1) | Polyvalue Below Surface (S8) (LRR K, L) |
| ☐ Depleted Below Dark Surface (A11) | (LRR K, L) | Thin Dark Surface (S9) (LRR K, L) |
| ☐ Thick Dark Surface (A12) | Loamy Gleyed Matrix (F2) | Iron-Manganese Masses (F12) (LRR K, L, R) |
| ☐ Sandy Mucky Mineral (S1) | Depleted Matrix (F3) | Piedmont Floodplain Soils (F19) (MLRA 149B) |
| ☐ Sandy Gleyed Matrix (S4) | X Redox Dark Surface (F6) | Mesic Podzol (TA6) (MLRA 144A, 145, 149B) |
| ☐ Sandy Redox (S5) | Depleted Dark Surface (F7) | Red Parent Material (TF2) |
| ☐ Stripped Matrix (S6) | Redox Depressions (F8) | Very Shallow Dark Surface (TF12) |
| ☐ Dark Surface (S7) (LRR R, MLRA 149B) | | Other (Explain in Remarks) |

*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):

Type: Rock

Depth (inches): 12

Hydric soil present? Y

Remarks:

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WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Eveleth-Gilbert-Virginia School City/County: Eveleth/St. Louis Sampling Date: 6/14/19
Applicant/Owner: Kimley-Horn and Associates, Inc. State: Minnesota Sampling Point: 13-2u
Investigator(s): Bailey Nelson, Ericka Massa Section, Township, Range: S29, T58N, R17W
Landform (hillslope, terrace, etc.): footslope Local relief (concave, convex, none): none
Slope (%): 0% Lat.: 47.480706 Long.: -92.527872 Datum: NAD 1983 UTM Zone 15N
Soil Map Unit Name: Dora mucky peat, Hibbing catena, 0-1% slopes NWI Classification: none
Are climatic/hydrologic conditions of the site typical for this time of the year? Yes (If no, explain in remarks)
Are vegetation , soil , or hydrology significantly disturbed? Are "normal
Are vegetation , soil , or hydrology naturally problematic? circumstances" present? Yes
(If needed, explain any answers in remarks)

SUMMARY OF FINDINGS

Hydrophytic vegetation present?	<u>Y</u>	Is the sampled area within a wetland?	<u>N</u>
Hydric soil present?	<u>N</u>		
Indicators of wetland hydrology present?	<u>N</u>	If yes, optional wetland site ID: _____	
Remarks: (Explain alternative procedures here or in a separate report.)			

HYDROLOGY

Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)	
☐ Surface Water (A1)	☐ Water-Stained Leaves (B9)	☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Aquatic Fauna (B13)	☐ Drainage Patterns (B10)	
☐ Saturation (A3)	☐ Marl Deposits (B15)	☐ Moss Trim Lines (B16)	
☐ Water Marks (B1)	☐ Hydrogen Sulfide Odor (C1)	☐ Dry-Season Water Table (C2)	
☐ Sediment Deposits (B2)	☐ Oxidized Rhizospheres on Living	☐ Crayfish Burrows (C8)	
☐ Drift Deposits (B3)	☐ Roots (C3)	☐ Saturation Visible on Aerial Imagery	
☐ Algal Mat or Crust (B4)	☐ Presence of Reduced Iron (C4)	☐ (C9)	
☐ Iron Deposits (B5)	☐ Recent Iron Reduction in Tilled	☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial	☐ Soils (C6)	☐ Geomorphic Position (D2)	
☐ Imagery (B7)	☐ Thin Muck Surface (C7)	☐ Shallow Aquitard (D3)	
☐ Sparsely Vegetated Concave	☐ Other (Explain in Remarks)	☐ FAC-Neutral Test (D5)	
☐ Surface (B8)		☐ Microtopographic Relief (D4)	
Field Observations:		Indicators of wetland hydrology present? <u>N</u>	
Surface water present?	Yes <u> </u> No <u>X</u>	Depth (inches): <u> </u>	
Water table present?	Yes <u> </u> No <u>X</u>	Depth (inches): <u> </u>	
Saturation present?	Yes <u> </u> No <u>X</u>	Depth (inches): <u> </u>	
(includes capillary fringe)			
Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks:			

VEGETATION - Use scientific names of plants

Tree Stratum					Plot Size (30' Radius)	Absolute % Cover	Dominant Species	Indicator Status	Sampling Point: 13-2u					
1					<u>Picea glauca</u>	<u>--</u>	<u>White Spruce</u>	<u>15</u>	<u>Y</u>	<u>FACU</u>	50/20 Thresholds			
2					<u>Acer rubrum</u>	<u>--</u>	<u>Red Maple</u>	<u>5</u>	<u>Y</u>	<u>FAC</u>	20% 50%			
3					<u> </u>	<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	Tree Stratum 4 10			
4					<u> </u>	<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	Sapling/Shrub Stratum 0 0			
5					<u> </u>	<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	Herb Stratum 23 59			
6					<u> </u>	<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	Woody Vine Stratum 0 0			
7					<u> </u>	<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	Dominance Test Worksheet			
8					<u> </u>	<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	Number of Dominant Species that are OBL, FACW, or FAC: <u>5</u> (A)			
9					<u> </u>	<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	Total Number of Dominant Species Across all Strata: <u>6</u> (B)			
10					<u> </u>	<u>--</u>	<u> </u>	<u>20</u>	=	Total Cover	Percent of Dominant Species that are OBL, FACW, or FAC: <u>83.33%</u> (A/B)			
Sapling/Shrub Stratum					Plot Size (15' Radius)	Absolute % Cover	Dominant Species	Indicator Status	Prevalence Index Worksheet					
1					<u> </u>	<u>--</u>	<u> </u>	<u> </u>	<u> </u>	Total % Cover of:				
2					<u> </u>	<u>--</u>	<u> </u>	<u> </u>	<u> </u>	OBL species <u>0</u> x 1 = <u>0</u>				
3					<u> </u>	<u>--</u>	<u> </u>	<u> </u>	<u> </u>	FACW species <u>10</u> x 2 = <u>20</u>				
4					<u> </u>	<u>--</u>	<u> </u>	<u> </u>	<u> </u>	FAC species <u>87</u> x 3 = <u>261</u>				
5					<u> </u>	<u>--</u>	<u> </u>	<u> </u>	<u> </u>	FACU species <u>30</u> x 4 = <u>120</u>				
6					<u> </u>	<u>--</u>	<u> </u>	<u> </u>	<u> </u>	UPL species <u>0</u> x 5 = <u>0</u>				
7					<u> </u>	<u>--</u>	<u> </u>	<u> </u>	<u> </u>	Column totals <u>127</u> (A) <u>401</u> (B)				
8					<u> </u>	<u>--</u>	<u> </u>	<u> </u>	<u> </u>	Prevalence Index = B/A = <u>3.16</u>				
9					<u> </u>	<u>--</u>	<u> </u>	<u> </u>	<u> </u>					
10					<u> </u>	<u>--</u>	<u> </u>	<u>0</u>	=	Total Cover	Hydrophytic Vegetation Indicators:			
Herb Stratum					Plot Size (5' Radius)	Absolute % Cover	Dominant Species	Indicator Status	<u>X</u> Rapid test for hydrophytic vegetation					
1					<u>Cornus canadensis</u>	<u>--</u>	<u>Canadian Bunchberry</u>	<u>20</u>	<u>Y</u>	<u>FAC</u>	<u>X</u> Dominance test is >50%			
2					<u>Trillium cernuum</u>	<u>--</u>	<u>Whip-Poor-Will-Flower</u>	<u>20</u>	<u>Y</u>	<u>FAC</u>	Prevalence index is ≤3.0*			
3					<u>Trientalis borealis</u>	<u>--</u>	<u>Maystar</u>	<u>15</u>	<u>Y</u>	<u>FAC</u>	Morphological adaptations* (provide supporting data in Remarks or on a separate sheet)			
4					<u>Acer rubrum</u>	<u>--</u>	<u>Red Maple</u>	<u>15</u>	<u>Y</u>	<u>FAC</u>	<u> </u> Problematic hydrophytic vegetation* (explain)			
5					<u>Fragaria virginiana</u>	<u>--</u>	<u>Virginia Strawberry</u>	<u>10</u>	<u>N</u>	<u>FACU</u>	*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic			
6					<u>Athyrium filix-femina</u>	<u>--</u>	<u>Lady Fern</u>	<u>10</u>	<u>N</u>	<u>FAC</u>	Definitions of Vegetation Strata:			
7					<u>Carex arctata</u>	<u>--</u>	<u>Drooping Wood Sedge</u>	<u>10</u>	<u>N</u>	<u>FACW</u>	Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.			
8					<u>Dryopteris carthusiana</u>	<u>--</u>	<u>Spinulose Wood Fern</u>	<u>10</u>	<u>N</u>	<u>FACW</u>	Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.			
9					<u>Aralia nudicaulis</u>	<u>--</u>	<u>Wild Sarsaparilla</u>	<u>5</u>	<u>N</u>	<u>FACU</u>	Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.			
10					<u>Arisaema triphyllum</u>	<u>--</u>	<u>Jack-in-the-Pulpit</u>	<u>2</u>	<u>N</u>	<u>FAC</u>	Woody vines - All woody vines greater than 3.28 ft in height.			
11					<u> </u>	<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	Hydrophytic vegetation present? <u>Y</u>			
12					<u> </u>	<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>				
13					<u> </u>	<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>				
14					<u> </u>	<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>				
15					<u> </u>	<u>--</u>	<u> </u>	<u>117</u>	=	Total Cover				
Woody Vine Stratum					Plot Size (30' Radius)	Absolute % Cover	Dominant Species	Indicator Status	Remarks: (Include photo numbers here or on a separate sheet)					
1					<u> </u>	<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>				
2					<u> </u>	<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>				
3					<u> </u>	<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>				
4					<u> </u>	<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>				
5					<u> </u>	<u>--</u>	<u> </u>	<u>0</u>	=	Total Cover				
Note: This data sheet has been adapted to use the 2012 National Wetland Plant List:														
Robert W. Lichvar and John T. Kartesz. 2009. North American Digital Flora: National Wetland Plant List, version 2.4.0 (https://wetland.plants.usace.army.mil), U.S. Army Corps of Engineers, Engineer Research and Development Center, Cold Regions Research and Engineering Laboratory, Hanover, NH, and BONAP, Chapel Hill, NC. (2012)														

SOIL Sampling Point: 13-2u

SOIL Sampling Point: 13-2u

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

[illegible]

*Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains

**Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:	Indicators for Problematic Hydric Soils:
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Hydric Soil Indicators:	Indicators for Problematic Hydric Soils:
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- | | | |
|---|----------------------------|--|
| ☐ Histosol (A1) | Polyvalue Below Surface | ☐ 2 cm Muck (A10) (LRR K, L, MLRA 149B |
| ☐ Histic Epipedon (A2) | (S8) (LRR R, MLRA 149B) | ☐ Coast Prairie Redox (A16) (LRR K, L, R) |
| ☐ Black Histic (A3) | Thin Dark Surface (S9) | ☐ 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) |
| ☐ Hydrogen Sulfide (A4) | (LRR R, MLRA 149B | ☐ Dark Surface (S7) (LRR K, L) |
| ☐ Stratified Layers (A5) | Loamy Mucky Mineral (F1) | ☐ Polyvalue Below Surface (S8) (LRR K, L) |
| ☐ Depleted Below Dark Surface (A11) | (LRR K, L) | ☐ Thin Dark Surface (S9) (LRR K, L) |
| ☐ Thick Dark Surface (A12) | Loamy Gleyed Matrix (F2) | ☐ Iron-Manganese Masses (F12) (LRR K, L, R) |
| ☐ Sandy Mucky Mineral (S1) | Depleted Matrix (F3) | ☐ Piedmont Floodplain Soils (F19) (MLRA 149B) |
| ☐ Sandy Gleyed Matrix (S4) | Redox Dark Surface (F6) | ☐ Mesic Spodic (TA6) (MLRA 144A, 145, 149B) |
| ☐ Sandy Redox (S5) | Depleted Dark Surface (F7) | ☐ Red Parent Material (TF2) |
| ☐ Stripped Matrix (S6) | Redox Depressions (F8) | ☐ Very Shallow Dark Surface (TF12) |
| ☐ Dark Surface (S7) (LRR R, MLRA 149B) | | ☐ Other (Explain in Remarks) |

*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):

Type: Rock

Depth (inches): 3

Hydric soil present? N

Remarks:	
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WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: <u>Evelth-Gilbert-Virginia School</u>		City/County: <u>Evelth/St. Louis</u>		Sampling Date: <u>6/14/19</u>	
Applicant/Owner: <u>Kimley-Horn and Associates, Inc.</u>		State: <u>Minnesota</u>		Sampling Point: <u>13-2w</u>	
Investigator(s): <u>Bailey Nelson, Ericka Massa</u>		Section, Township, Range: <u>S29, T58N, R17W</u>			
Landform(s) (hillslope, terrace, etc.): <u>teoslope</u>		Local relief (concave, convex, none): <u>concave</u>			
Slope (ft): <u>1%</u>		Lat.: <u>47.480652</u>		Long.: <u>-92.527851</u>	
		Datum: <u>NAD 1983 UTM Zone 15N</u>			
Soil Map Unit Name: <u>Dora mucky peat, Hibbing catena, 0-1% slopes</u>		NW1 Classification: <u>none</u>			
Are climatic/hydrologic conditions of the site typical for this time of the year? <u>Yes</u>				(If no, explain in remarks)	
Are vegetation <u> </u> , soil <u> </u> , or hydrology <u> </u> significantly disturbed?		Are "normal circumstances" present? <u>Yes</u>			
Are vegetation <u> </u> , soil <u> </u> , or hydrology <u> </u> naturally problematic?					
(If needed, explain any answers in remarks)					

SUMMARY OF FINDINGS

Hydrophytic vegetation present?	<u>Y</u>	Is the sampled area within a wetland? <u>Y</u>
Hydric soil present?	<u>Y</u>	
Indicators of wetland hydrology present?	<u>Y</u>	
Remarks: (Explain alternative procedures here or in a separate report.)		If yes, optional wetland site ID: <u>Wetland 13</u>

HYDROLOGY

Primary Indicators (minimum of one is required; check all that apply)			Secondary Indicators (minimum of two required)		
☐	Surface Water (A1)	☐	Water-Stained Leaves (B9)	☐	Surface Soil Cracks (B6)
☒	High Water Table (A2)	☐	Aquatic Fauna (B13)	☐	Drainage Patterns (B10)
☒	Saturation (A3)	☐	Marl Deposits (B15)	☐	Moss Trim Lines (B16)
☐	Water Marks (B1)	☐	Hydrogen Sulfide Odor (C1)	☐	Dry-Season Water Table (C2)
☐	Sediment Deposits (B2)	☐	Oxidized Rhizospheres on Living	☐	Crayfish Burrows (C8)
☐	Drift Deposits (B3)	☐	Roots (C3)	☐	Saturation Visible on Aerial Imagery
☐	Algal Mat or Crust (B4)	☐	Presence of Reduced Iron (C4)	☐	(C9)
☐	Iron Deposits (B5)	☐	Recent Iron Reduction in Tilled	☐	Stunted or Stressed Plants (D1)
☐	Inundation Visible on Aerial	☐	Soils (C6)	☐	Geomorphic Position (D2)
☐	Imagery (B7)	☐	Thin Muck Surface (C7)	☐	Shallow Aquitard (D3)
☐	Sparsely Vegetated Concave	☐	Other (Explain in Remarks)	☐	FAC-Neutral Test (D5)
☐	Surface (B8)			☐	Microtopographic Relief (D4)

Field Observations:				Indicators of wetland hydrology present?
Surface water present?	Yes ☒	No ☒	Depth (inches): 4	
Water table present?	Yes ☒	No ☐	Depth (inches): 0	
Saturation present?	Yes ☒	No ☐	Depth (inches): 0	
(includes capillary fringe)				
Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:				
Remarks:				

VEGETATION - Use scientific names of plants

Tree Stratum				Plot Size (30' Radius)		Absolute % Cover	Dominant Species	Indicator Status
1	<i>Fraxinus nigra</i>	--	Black Ash	20	Y	FACW		
2	<i>Acer rubrum</i>	--	Red Maple	10	Y	FAC		
3		--						
4		--						
5		--						
6		--						
7		--						
8		--						
9		--						
10		--		30	= Total Cover			

Sapling/Shrub Stratum				Plot Size (15' Radius)		Absolute % Cover	Dominant Species	Indicator Status
1	<i>Alnus incana</i>	--	Speckled Alder	60	Y	FACW		
2		--						
3		--						
4		--						
5		--						
6		--						
7		--						
8		--						
9		--						
10		--		60	= Total Cover			

Herb Stratum				Plot Size (5' Radius)		Absolute % Cover	Dominant Species	Indicator Status
1	<i>Galium triflorum</i>	--	Fragrant Bedstraw	25	Y	FACU		
2	<i>Caltha palustris</i>	--	Yellow Marsh-Marigold	25	Y	OBL		
3	<i>Onoclea sensibilis</i>	--	Sensitive Fern	15	N	FACW		
4	<i>Carex gynandra</i>	--	Nodding Sedge	10	N	OBL		
5	<i>Calamagrostis canadensis</i>	--	Bluejoint	10	N	OBL		
6	<i>Athyrium Filix-femina</i>	--	Lady Fern	5	N	FAC		
7	<i>Carex intumescens</i>	--	Greater Bladder Sedge	5	N	FACW		
8	<i>Thalictrum dasycarpum</i>	--	Purple Meadow-Rue	5	N	FACW		
9		--						
10		--						
11		--						
12		--						
13		--						
14		--						
15		--		100	= Total Cover			

Woody Vine Stratum				Plot Size (30' Radius)		Absolute % Cover	Dominant Species	Indicator Status
1		--						
2		--						
3		--						
4		--						
5		--						
		--		0	= Total Cover			

50/20 Thresholds			
Tree Stratum	20%	20%	50%
Sapling/Shrub Stratum	12	30	
Herb Stratum	20	50	
Woody Vine Stratum	0	0	

Dominance Test Worksheet			
Number of Dominant Species that are OBL, FACW, or FAC: <u>4</u> (A)			
Total Number of Dominant Species Across all Strata: <u>5</u> (B)			
Percent of Dominant Species that are OBL, FACW, or FAC: <u>80.00%</u> (A/B)			

Prevalence Index Worksheet			
Total % Cover of:			
OBL species	<u>45</u>	x 1 =	<u>45</u>
FACW species	<u>105</u>	x 2 =	<u>210</u>
FAC species	<u>15</u>	x 3 =	<u>45</u>
FACU species	<u>25</u>	x 4 =	<u>100</u>
UPL species	<u>0</u>	x 5 =	<u>0</u>
Column totals	<u>190</u> (A)		<u>400</u> (B)
Prevalence Index = B/A = <u>2.11</u>			

Hydrophytic Vegetation Indicators:			
☐ Rapid test for hydrophytic vegetation ☒ Dominance test is >50% ☒ Prevalence index is <3.0* Morphological adaptations* (provide supporting data in Remarks or on a separate sheet) Problematic hydrophytic vegetation* (explain) *Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic			

Definitions of Vegetation Strata:			
Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines - All woody vines greater than 3.28 ft in height.			

Hydrophytic vegetation present?			
<u>Y</u>			

Remarks: (Include photo numbers here or on a separate sheet)

Note: This data sheet has been adapted to use the 2012 National Wetland Plant List:

Robert W. Lichvar and John T. Kartesz. 2009. North American Digital Flora: National Wetland Plant List, version 2.4.0 (<https://wetland.plants.usace.army.mil/>). U.S. Army Corps of Engineers, Engineer Research and Development Center, Cold Regions Research and Engineering Laboratory, Hanover, NH, and BONAP, Chapel Hill, NC. (2012)

SOIL Sampling Point: 13-2w

Sampling Point: 13-2w

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

[illegible]

*Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains

**Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

Indicators for Problematic Hydric Soils:

- | | | |
|--|----------------------------------|---|
| ☐ Histosol (A1) | Polyvalue Below Surface | ☐ 2 cm Muck (A10) (LRR K, L, MLRA 149B) |
| ☐ Histic Epipedon (A2) | (S8) (LRR R, MLRA 149B) | ☐ Coast Prairie Redox (A16) (LRR K, L, R) |
| ☐ Black Histic (A3) | Thin Dark Surface (S9) | ☐ 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) |
| ☐ Hydrogen Sulfide (A4) | (LRR R, MLRA 149B) | ☐ Dark Surface (S7) (LRR K, L) |
| ☐ Stratified Layers (A5) | Loamy Mucky Mineral (F1) | ☐ Polyvalue Below Surface (S8) (LRR K, L) |
| ☐ Depleted Below Dark Surface (A11') | (LRR K, L) | ☐ Thin Dark Surface (S9) (LRR K, L) |
| ☐ Thick Dark Surface (A12) | Loamy Gleyed Matrix (F2) | ☐ Iron-Manganese Masses (F12) (LRR K, L, R) |
| ☐ Sandy Mucky Mineral (S1) | Depleted Matrix (F3) | ☐ Piedmont Floodplain Soils (F19) (MLRA 149B) |
| ☐ Sandy Gleyed Matrix (S4) | Redox Dark Surface (F6) | ☐ Mesic Podzol (TA6) (MLRA 144A, 145, 149B) |
| ☐ Sandy Redox (S5) | Depleted Dark Surface (F7) | ☐ Red Parent Material (TF2) |
| ☐ Stripped Matrix (S6) | Redox Depressions (F8) | ☐ Very Shallow Dark Surface (TF12) |
| ☐ Dark Surface (S7) (LRR R, MLRA 149B) | | ☒ Other (Explain in Remarks) |

*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):

Type: Rock

Depth (inches): 8

Hydric soil present? Y

Remarks:

We were unable to take a deep soil sample based on the presence of rock at 8 inches below the soil surface. We believe the soils are hydric based on the observed saturation and water table and the presence of hydrophytic vegetation.

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Project/Site:	<u>Eveleth-Gilbert-Virginia School</u>		City/County:	<u>Eveleth/St. Louis</u>	Sampling Date:	<u>6/17/19</u>
Applicant/Owner:	<u>Kimley-Horn and Associates, Inc.</u>		State:	<u>Minnesota</u>	Sampling Point:	<u>14-1u</u>
Investigator/s:	<u>Rebecca Buduhn</u>		Section, Township, Range:	<u>S29, T58N, R17W</u>		
Landform (hillslope, terrace, etc.):	<u>footslope</u>	Local relief (concave, convex, none):	<u>none</u>			
Slope (%):	<u>3%</u>	Lat.: <u>47.480137</u>	Long.: <u>-92.528126</u>	Datum:	<u>NAD 1983 UTM Zone 15N</u>	
Soil Map Unit Name:	<u>Eveleth-Eaglesnest-Conic complex, bulldery, 6-18% slopes, very rNWI Classification: none</u>					
Are climatic/hydrologic conditions of the site typical for this time of the year?	<u>Yes</u>		(If no, explain in remarks)			
Are vegetation <u> </u> , soil <u> </u> , or hydrology <u> </u> significantly disturbed?						
Are vegetation <u> </u> , soil <u> </u> , or hydrology <u> </u> naturally problematic?						
(If needed, explain any answers in remarks)	Are "normal circumstances" present? <u>Yes</u>					

Hydrophytic vegetation present?	<u>Y</u>	Is the sampled area within a wetland? <u>N</u>
Hydric soil present?	<u>N</u>	
Indicators of wetland hydrology present?	<u>N</u>	
If yes, optional wetland site ID: _____		
Remarks: (Explain alternative procedures here or in a separate report.)		

Primary Indicators (minimum of one is required; check all that apply) ☐ Surface Water (A1) ☐ Water-Stained Leaves (B9) ☐ High Water Table (A2) ☐ Aquatic Fauna (B13) ☐ Saturation (A3) ☐ Marl Deposits (B15) ☐ Water Marks (B1) ☐ Hydrogen Sulfide Odor (C1) ☐ Sediment Deposits (B2) ☐ Oxidized Rhizospheres on Living ☐ Drift Deposits (B3) ☐ Roots (C3) ☐ Algal Mat or Crust (B4) ☐ Presence of Reduced Iron (C4) ☐ Iron Deposits (B5) ☐ Recent Iron Reduction in Tilled ☐ Inundation Visible on Aerial ☐ Soils (C6) Imagery (B7) ☐ Thin Muck Surface (C7) ☐ Sparsely Vegetated Concave ☐ Other (Explain in Remarks) Surface (B8)			Secondary Indicators (minimum of two required) ☐ Surface Soil Cracks (B6) ☐ Drainage Patterns (B10) ☐ Moss Trim Lines (B16) ☐ Dry-Season Water Table (C2) ☐ Crayfish Burrows (C8) ☐ Saturation Visible on Aerial Imagery (C9) ☐ Stunted or Stressed Plants (D1) ☐ Geomorphic Position (D2) ☐ Shallow Aquitard (D3) ☐ FAC-Neutral Test (D5) ☐ Microtopographic Relief (D4)		
Field Observations: Surface water present? Yes ☐ No ☐ X Depth (inches): Water table present? Yes ☐ No ☐ X Depth (inches): Saturation present? Yes ☐ No ☐ X Depth (inches): (includes capillary fringe)			Indicators of wetland hydrology present? <u> N </u>		
Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:					
Remarks:					

					50/20 Thresholds			20%			50%				
Tree Stratum		Plot Size (30' Radius)		Absolute % Cover		Dominant Species		Indicator Status		Tree Stratum		20%		50%	
1	<i>Acer rubrum</i>	--	Red Maple	10		Y		FAC		Tree Stratum	2	5			
2	--	--	--							Sapling/Shrub Stratum	4	10			
3	--	--	--							Herb Stratum	19	48			
4	--	--	--							Woody Vine Stratum	0	0			
5	--	--	--												
6	--	--	--												
7	--	--	--												
8	--	--	--												
9	--	--	--												
10	--	--	--	10	=	Total Cover									
Sapling/Shrub Stratum		Plot Size (15' Radius)		Absolute % Cover		Dominant Species		Indicator Status							
1	<i>Rhamnus cathartica</i>	--	European Buckthorn	20		Y		FAC							
2	--	--	--												
3	--	--	--												
4	--	--	--												
5	--	--	--												
6	--	--	--												
7	--	--	--												
8	--	--	--												
9	--	--	--												
10	--	--	--	20	=	Total Cover									
Herb Stratum		Plot Size (5' Radius)		Absolute % Cover		Dominant Species		Indicator Status							
1	<i>Athyrium Filix-femina</i>	--	Lady Fern	20		Y		FAC							
2	<i>Aralia nudicaulis</i>	--	Wild Sarsaparilla	15		Y		FACU							
3	<i>Cornus canadensis</i>	--	Canadian Bunchberry	10		Y		FAC							
4	<i>Fragaria virginiana</i>	--	Virginia Strawberry	10		Y		FACU							
5	<i>Equisetum sylvaticum</i>	--	Woodland Horsetail	10		Y		FACW							
6	<i>Trientalis borealis</i>	--	Maystar	10		Y		FAC							
7	<i>Geranium maculatum</i>	--	Spotted Crane's-Bill	10		Y		FACU							
8	<i>Acer rubrum</i>	--	Red Maple	5		N		FAC							
9	<i>Dryopteris carthusiana</i>	--	Spinulose Wood Fern	5		N		FACW							
10	--	--	--												
11	--	--	--												
12	--	--	--												
13	--	--	--												
14	--	--	--												
15	--	--	--	95	=	Total Cover									
Woody Vine Stratum		Plot Size (30' Radius)		Absolute % Cover		Dominant Species		Indicator Status							
1	--	--	--												
2	--	--	--												
3	--	--	--												
4	--	--	--												
5	--	--	--												
				0	=	Total Cover									

Remarks: (Include photo numbers here or on a separate sheet)

Note: This data sheet has been adapted to use the 2012 National Wetland Plant List:

Robert W. Lichvar and John T. Kartesz. 2009. North American Digital Flora: National Wetland Plant List, version 2.4.0 (https://wetland_plants.usace.army.mil). U.S. Army Corps of Engineers, Engineer Research and Development Center, Cold Regions Research and Engineering Laboratory, Hanover, NH, and BONAP, Chapel Hill, NC. (2012)

Sampling Point: 14-1u

[illegible]

**Location: PL=Pore Lining, M=Matrix

Indicators for Problematic Hydric Soils:

- *Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Hydric soil present? N

Remarks:

Northcentral and Northeast Region

Project/Site:	Eveleth-Gilbert-Virginia School		City/County:	Eveleth/St. Louis	Sampling Date:	6/17/19
Applicant/Owner:	Kimley-Horn and Associates, Inc.		State:	Minnesota	Sampling Point:	14-1w
Investigator/s:	Rebecca Buduhn		Section, Township, Range:	S29, T58N, R17W		
Landform (hillslope, terrace, etc.):	footslope	Local relief (concave, convex, none):	none			
Slope (%):	2%	Lat.: 47.479931	Long.: -92.528035	Datum:	NAD 1983 UTM Zone 15N	
Soil Map Unit Name:	Eveleth-Eaglesnest-Conic complex, bulldery, 6-18% slopes, very rNWI Classification: none					
Are climatic/hydrologic conditions of the site typical for this time of the year?	Yes		(If no, explain in remarks)			
Are vegetation _____, soil _____, or hydrology _____ significantly disturbed?	No		Are "normal circumstances" present?			
Are vegetation _____, soil _____, or hydrology _____ naturally problematic?	No		Yes			
(If needed, explain any answers in remarks)						

Summary of Observations	
Hydrophytic vegetation present?	<u>Y</u>
Hydric soil present?	<u>Y</u>
Indicators of wetland hydrology present?	<u>Y</u>
Is the sampled area within a wetland? <u>Y</u>	
If yes, optional wetland site ID: <u>Wetland 14</u>	
Remarks: (Explain alternative procedures here or in a separate report.)	

Primary Indicators (minimum of one is required; check all that apply)				Secondary Indicators (minimum of two required)	
☐ Surface Water (A1)	☐	☐ Water-Stained Leaves (B9)	☐	☐ Surface Soil Cracks (B6)	☐
☐ High Water Table (A2)	☐	☐ Aquatic Fauna (B13)	☐	☐ Drainage Patterns (B10)	☐
☒ Saturation (A3)	☐	☐ Marl Deposits (B15)	☐	☐ Moss Trim Lines (B16)	☐
☐ Water Marks (B1)	☐	☐ Hydrogen Sulfide Odor (C1)	☐	☐ Dry-Season Water Table (C2)	☐
☐ Sediment Deposits (B2)	☐	☐ Oxidized Rhizospheres on Living	☐	☐ Crayfish Burrows (C8)	☐
☐ Drift Deposits (B3)	☐	☐ Roots (C3)	☐	☐ Saturation Visible on Aerial Imagery	☐
☐ Algal Mat or Crust (B4)	☐	☐ Presence of Reduced Iron (C4)	☐	☐ (C9)	☐
☐ Iron Deposits (B5)	☐	☐ Recent Iron Reduction in Tilled	☐	☐ Stunted or Stressed Plants (D1)	☐
☐ Inundation Visible on Aerial	☐	☐ Soils (C6)	☐	☐ Geomorphic Position (D2)	☐
☐ Imagery (B7)	☐	☐ Thin Muck Surface (C7)	☐	☐ Shallow Aquitard (D3)	☐
☐ Sparsely Vegetated Concave	☐	☐ Other (Explain in Remarks)	☐	☐ FAC-Neutral Test (D5)	☐
☐ Surface (B8)	☐		☐	☐ Microtopographic Relief (D4)	☐
Field Observations: Surface water present? Yes ☐ No ☒ Depth (inches): Water table present? Yes ☐ No ☒ Depth (inches): Saturation present? Yes ☒ No ☐ Depth (inches): 0 (includes capillary fringe)				Indicators of wetland hydrology present? Y	
Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:					
Remarks:					

						50/20 Thresholds		
		Absolute % Cover	Dominant Species	Indicator Status	20% 50%			
Tree Stratum	Plot Size (30' Radius)				Tree Stratum	7	18	
1	<i>Fraxinus nigra</i> -- Black Ash	35	Y	FACW	Sapling/Shrub Stratum	3	8	
2	--				Herb Stratum	23	58	
3	--				Woody Vine Stratum	0	0	
4	--				Dominance Test Worksheet			
5	--				Number of Dominant Species that are OBL, FACW, or FAC: 5 (A)			
6	--				Total Number of Dominant Species Across all Strata: 5 (B)			
7	--				Percent of Dominant Species that are OBL, FACW, or FAC: 100.00% (A/B)			
8	--				Prevalence Index Worksheet			
9	--				Total % Cover of:			
10	--	35 = Total Cover			OBL species 25 x 1 = 25			
					FACW species 90 x 2 = 180			
					FAC species 50 x 3 = 150			
					FACU species 0 x 4 = 0			
					UPL species 0 x 5 = 0			
					Column totals 165 (A) 355 (B)			
					Prevalence Index = B/A = 2.15			
Sapling/Shrub Stratum	Plot Size (15' Radius)	Absolute % Cover	Dominant Species	Indicator Status	Hydrophytic Vegetation Indicators:			
1	<i>Rhamnus cathartica</i> -- European Buckthorn	15	Y	FAC	Rapid test for hydrophytic vegetation			
2	--				X Dominance test is >50%			
3	--				X Prevalence index is >3.0*			
4	--				Morphological adaptations* (provide supporting data in Remarks or on a separate sheet)			
5	--				Problematic hydrophytic vegetation* (explain)			
6	--				*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic			
7	--				Definitions of Vegetation Strata:			
8	--				Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.			
9	--				Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.			
10	--				Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.			
		15 = Total Cover			Woody vines - All woody vines greater than 3.28 ft in height.			
					Hydrophytic vegetation present? Y			
Herb Stratum	Plot Size (5' Radius)	Absolute % Cover	Dominant Species	Indicator Status	Remarks: (Include photo numbers here or on a separate sheet)			
1	<i>Onoclea sensibilis</i> -- Sensitive Fern	35	Y	FACW				
2	<i>Carex gynandra</i> -- Nodding Sedge	20	Y	OBL				
3	<i>Athyrium filix-femina</i> -- Lady Fern	15	Y	FAC				
4	<i>Equisetum arvense</i> -- Field Horsetail	10	N	FACW				
5	<i>Equisetum sylvaticum</i> -- Woodland Horsetail	10	N	FAC				
6	<i>Rhamnus cathartica</i> -- European Buckthorn	10	N	FACW				
7	<i>Carex intumescens</i> -- Greater Bladder Sedge	10	N	OBL				
8	<i>Carex stricta</i> -- Uplight Sedge	5	N					
9	--							
10	--							
11	--							
12	--							
13	--							
14	--							
15	--	115 = Total Cover						
Woody Vine Stratum	Plot Size (30' Radius)	Absolute % Cover	Dominant Species	Indicator Status				
1	--							
2	--							
3	--							
4	--							
5	--							
		0 = Total Cover						

Note: This data sheet has been adapted to use the 2012 National Wetland Plant List:

Robert W. Lichvar and John T. Kartesz. 2009. North American Digital Flora: National Wetland Plant List, version 2.4.0 (https://wetland_plants.usace.army.mil/). U.S. Army Corps of Engineers, Engineer Research and Development Center, Cold Regions Research and Engineering Laboratory, Hanover, NH, and BONAP, Chapel Hill, NC. (2012)

SOIL Sampling Point: 14-1w

Sampling Point: 14-1w

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

[illegible]

*Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains

**Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

Indicators for Problematic Hydric Soils:

- | | | |
|---|----------------------------|--|
| ☐ Histosol (A1) | Polyvalue Below Surface | ☐ 2 cm Muck (A10) (LRR K, L, MLRA 149B |
| ☐ Histic Epipedon (A2) | (S8) (LRR R, MLRA 149B) | ☐ Coast Prairie Redox (A16) (LRR K, L, R) |
| ☐ Black Histic (A3) | Thin Dark Surface (S9) | ☐ 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) |
| ☐ Hydrogen Sulfide (A4) | (LRR R, MLRA 149B | ☐ Dark Surface (S7) (LRR K, L) |
| ☐ Stratified Layers (A5) | Loamy Mucky Mineral (F1) | ☐ Polyvalue Below Surface (S8) (LRR K, L) |
| ☐ Depleted Below Dark Surface (A11) | (LRR K, L) | ☐ Thin Dark Surface (S9) (LRR K, L) |
| ☐ Thick Dark Surface (A12) | Loamy Gleyed Matrix (F2) | ☐ Iron-Manganese Masses (F12) (LRR K, L, R) |
| ☐ Sandy Mucky Mineral (S1) | Depleted Matrix (F3) | ☐ Piedmont Floodplain Soils (F19) (MLRA 149B) |
| ☐ Sandy Gleyed Matrix (S4) | X Redox Dark Surface (F6) | ☐ Mesic Spodic (TA6) (MLRA 144A, 145, 149B) |
| ☐ Sandy Redox (S5) | Depleted Dark Surface (F7) | ☐ Red Parent Material (TF2) |
| ☐ Stripped Matrix (S6) | Redox Depressions (F8) | ☐ Very Shallow Dark Surface (TF12) |
| ☐ Dark Surface (S7) (LRR R, MLRA 149B) | | ☐ Other (Explain in Remarks) |

*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):

Type: Rock

Depth (inches): 7

Hydric soil present? Y

Remarks:

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WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site:	<u>Eveleth-Gilbert-Virginia School</u>	City/County:	<u>Eveleth/St. Louis</u>	Sampling Date:	<u>6/17/19</u>
Applicant/Owner:	<u>Kimley-Horn And Associates, Inc.</u>	State:	<u>Minnesota</u>	Sampling Point:	<u>15-1u</u>
Investigator(s):	<u>Rebecca Buduhn</u>	Section, Township, Range:	<u>S29, T58N, R17W</u>		
Landform (hill/slope, terrace, etc.):	<u>foothlope</u>	Local relief (concave, convex, none):	<u>none</u>		
Slope (°):	<u>10%</u>	Lat.: <u>47.476996</u>	Long.: <u>-92.521425</u>	Datum:	<u>NAD 1983 UTM Zone 15N</u>
Soil Map Unit Name:	<u>Quetico, stony-rock outcrop complex, 15-35% slopes</u>		<u>NWI Classification: none</u>		
Are climatic/hydrologic conditions of the site typical for this time of the year?			<u>Yes</u>	(If no, explain in remarks)	
Are vegetation <u> </u> , soil <u> </u> , or hydrology <u> </u> significantly disturbed?			Are "normal circumstances" present? <u>Yes</u>		
Are vegetation <u> </u> , soil <u> </u> , or hydrology <u> </u> naturally problematic?					
(If needed, explain any answers in remarks)					

SUMMARY OF FINDINGS

Hydrophytic vegetation present?	<u>N</u>	Is the sampled area within a wetland?	<u>N</u>
Hydric soil present?	<u>N</u>		
Indicators of wetland hydrology present?	<u>N</u>	If yes, optional wetland site ID:	<u> </u>
Remarks: (Explain alternative procedures here or in a separate report.)			

HYDROLOGY

Primary Indicators (minimum of one is required; check all that apply)						Secondary Indicators (minimum of two required)	
☐ Surface Water (A1)		☐ Water-Stained Leaves (B9)		☐ Surface Soil Cracks (B6)			
☐ High Water Table (A2)		☐ Aquatic Fauna (B13)		☐ Drainage Patterns (B10)			
☐ Saturation (A3)		☐ Marl Deposits (B15)		☐ Moss Trim Lines (B16)			
☐ Water Marks (B1)		☐ Hydrogen Sulfide Odor (C1)		☐ Dry-Season Water Table (C2)			
☐ Sediment Deposits (B2)		☐ Oxidized Rhizospheres on Living		☐ Crayfish Burrows (C8)			
☐ Drift Deposits (B3)		☐ Roots (C3)		☐ Saturation Visible on Aerial Imagery			
☐ Algal Mat or Crust (B4)		☐ Presence of Reduced Iron (C4)		☐ (C9)			
☐ Iron Deposits (B5)		☐ Recent Iron Reduction in Tilled		☐ Stunted or Stressed Plants (D1)			
☐ Inundation Visible on Aerial		☐ Soils (C6)		☐ Geomorphic Position (D2)			
☐ Imagery (B7)		☐ Thin Muck Surface (C7)		☐ Shallow Aquitard (D3)			
☐ Sparsely Vegetated Concave		☐ Other (Explain in Remarks)		☐ FAC-Neutral Test (D5)			
☐ Surface (B8)				☐ Microtopographic Relief (D4)			
Field Observations:						Indicators of wetland hydrology present? <u> N </u>	
Surface water present?	Yes ☐	No ☒	X Depth (inches):				
Water table present?	Yes ☐	No ☒	X Depth (inches):				
Saturation present?	Yes ☐	No ☒	X Depth (inches):				
(includes capillary fringe)							
Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:							
Remarks:							

VEGETATION - Use scientific names of plants

				5020 Thresholds		20%	50%
Tree Stratum	Plot Size (30' Radius)	Absolute % Cover	Dominant Species	Indicator Status	Tree Stratum	0	0
1	--				Sapling/Shrub Stratum	4	10
2	--				Herb Stratum	7	18
3	--				Woody Vine Stratum	0	0
4	--						
5	--						
6	--						
7	--						
8	--						
9	--						
10	--						
		0 = Total Cover					
Sapling/Shrub Stratum	Plot Size (15' Radius)	Absolute % Cover	Dominant Species	Indicator Status			
1	<i>Diervilla lonicera</i> -- Bush Honeysuckle	10	Y	UPL			
2	<i>Rhamnus cathartica</i> -- European Buckthorn	10	Y	FAC			
3	--						
4	--						
5	--						
6	--						
7	--						
8	--						
9	--						
10	--						
		20 = Total Cover					
Herb Stratum	Plot Size (5' Radius)	Absolute % Cover	Dominant Species	Indicator Status			
1	<i>Eurybia macrophylla</i> -- Large-Leaf Wood-Aster	20	Y	UPL			
2	<i>Rubus idaeus</i> -- Common Red Raspberry	10	Y	FAC			
3	<i>Dryopteris carthusiana</i> -- Spinulose Wood Fern	5	N	FACW			
4	--						
5	--						
6	--						
7	--						
8	--						
9	--						
10	--						
11	--						
12	--						
13	--						
14	--						
15	--						
		35 = Total Cover					
Woody Vine Stratum	Plot Size (30' Radius)	Absolute % Cover	Dominant Species	Indicator Status			
1	--						
2	--						
3	--						
4	--						
5	--						
		0 = Total Cover					

Remarks: (Include photo numbers here or on a separate sheet)

Notes: This data sheet has been adapted to use the 2012 National Wetland Plant List:
 Robert W. Lichvar and John T. Kartesz. 2009. North American Digital Flora: National Wetland Plant List, version 2.4.0 (https://wetland_plants.usace.army.mil). U.S. Army Corps of Engineers, Engineer Research and Development Center, Cold Regions Research and Engineering Laboratory, Hanover, NH, and BONAP, Chapel Hill, NC. (2012)

SOIL Sampling Point: 15-1u

Sampling Point: 15-1u

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

[illegible]

*Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains

**Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

Indicators for Problematic Hydric Soils:

- | | | |
|---|----------------------------|--|
| ☐ Histosol (A1) | Polyvalue Below Surface | ☐ 2 cm Muck (A10) (LRR K, L, MLRA 149B |
| ☐ Histic Epipedon (A2) | (S8) (LRR R, MLRA 149B) | ☐ Coast Prairie Redox (A16) (LRR K, L, R) |
| ☐ Black Histic (A3) | Thin Dark Surface (S9) | ☐ 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) |
| ☐ Hydrogen Sulfide (A4) | (LRR R, MLRA 149B | ☐ Dark Surface (S7) (LRR K, L) |
| ☐ Stratified Layers (A5) | Loamy Mucky Mineral (F1) | ☐ Polyvalue Below Surface (S8) (LRR K, L) |
| ☐ Depleted Below Dark Surface (A11) | (LRR K, L) | ☐ Thin Dark Surface (S9) (LRR K, L) |
| ☐ Thick Dark Surface (A12) | Loamy Gleyed Matrix (F2) | ☐ Iron-Manganese Masses (F12) (LRR K, L, R) |
| ☐ Sandy Mucky Mineral (S1) | Depleted Matrix (F3) | ☐ Piedmont Floodplain Soils (F19) (MLRA 149B) |
| ☐ Sandy Gleyed Matrix (S4) | Redox Dark Surface (F6) | ☐ Mesic Spodic (TA6) (MLRA 144A, 145, 149B) |
| ☐ Sandy Redox (S5) | Depleted Dark Surface (F7) | ☐ Red Parent Material (TF2) |
| ☐ Stripped Matrix (S6) | Redox Depressions (F8) | ☐ Very Shallow Dark Surface (TF12) |
| ☐ Dark Surface (S7) (LRR R, MLRA 149B) | | ☐ Other (Explain in Remarks) |

*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):

Type: Rock

Depth (inches): 0

Hydric soil present? N

Remarks:

No soils, all rock / bedrock

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Eveleth-Gilbert-Virginia School City/County: Eveleth/St. Louis Sampling Date: 6/17/19
 Applicant/Owner: Kimley-Horn and Associates, Inc. State: Minnesota Sampling Point: 15-1w
 Investigator(s): Rebecca Buduhn Section, Township, Range: S29, T58N, R17W
 Landform (hillslope, terrace, etc.): toeslope Local relief (concave, convex, none): none
 Slope (%): 10% Lat.: 47.477102 Long.: -92.521403 Datum: NAD 1983 UTM Zone 15N
 Soil Map Unit Name: Quetico, stony-rock outcrop complex, 15-35% slopes NWI Classification: none
 Are climatic/hydrologic conditions of the site typical for this time of the year? Yes (If no, explain in remarks)
 Are vegetation , soil , or hydrology significantly disturbed? Are "normal
 Are vegetation , soil , or hydrology naturally problematic? circumstances" present? Yes
 (If needed, explain any answers in remarks)

SUMMARY OF FINDINGS

Hydrophytic vegetation present?	<u>Y</u>	Is the sampled area within a wetland?	<u>Y</u>
Hydric soil present?	<u>Y</u>		
Indicators of wetland hydrology present?	<u>Y</u>	If yes, optional wetland site ID:	<u>Wetland 15</u>
Remarks: (Explain alternative procedures here or in a separate report.)			

HYDROLOGY

Primary Indicators (minimum of one is required; check all that apply) ☐ Surface Water (A1) ☐ Water-Stained Leaves (B9) ☐ High Water Table (A2) ☐ Aquatic Fauna (B13) ☒ Saturation (A3) ☐ Marl Deposits (B15) ☐ Water Marks (B1) ☐ Hydrogen Sulfide Odor (C1) ☐ Sediment Deposits (B2) ☐ Oxidized Rhizospheres on Living ☐ Drift Deposits (B3) ☐ Roots (C3) ☐ Algal Mat or Crust (B4) ☐ Presence of Reduced Iron (C4) ☐ Iron Deposits (B5) ☐ Recent Iron Reduction in Tilled ☐ Inundation Visible on Aerial ☐ Soils (C6) ☐ Imagery (B7) ☐ Thin Muck Surface (C7) ☐ Sparsely Vegetated Concave ☐ Other (Explain in Remarks) ☐ Surface (B8)		Secondary Indicators (minimum of two required) ☐ Surface Soil Cracks (B6) ☐ Drainage Patterns (B10) ☐ Moss Trim Lines (B16) ☐ Dry-Season Water Table (C2) ☐ Crayfish Burrows (C8) ☐ Saturation Visible on Aerial Imagery ☐ (C9) ☐ Stunted or Stressed Plants (D1) ☐ Geomorphic Position (D2) ☐ Shallow Aquitard (D3) ☐ FAC-Neutral Test (D5) ☐ Microtopographic Relief (D4)
Field Observations: Surface water present? Yes <u> </u> No <u>X</u> Depth (inches): <u> </u> Water table present? Yes <u> </u> No <u>X</u> Depth (inches): <u> </u> Saturation present? Yes <u>X</u> No <u> </u> Depth (inches): <u>0</u> (includes capillary fringe)	Indicators of wetland hydrology present? <u>Y</u>	
Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

VEGETATION - Use scientific names of plants

					Sampling Point: 15-1w		
					50/20 Thresholds		
Tree Stratum	Plot Size (30' Radius)	Absolute % Cover	Dominant Species	Indicator Status	20%	50%	
1	--				Tree Stratum	0	0
2	--				Sapling/Shrub Stratum	3	8
3	--				Herb Stratum	16	40
4	--				Woody Vine Stratum	0	0
5	--						
6	--						
7	--						
8	--						
9	--						
10	--						
		0	= Total Cover				
Sapling/Shrub Stratum	Plot Size (15' Radius)	Absolute % Cover	Dominant Species	Indicator Status			
1	<i>Alnus incana</i> -- <i>Speckled Alder</i>	15	Y	FACW			
2	--						
3	--						
4	--						
5	--						
6	--						
7	--						
8	--						
9	--						
10	--						
		15	= Total Cover				
Herb Stratum	Plot Size (5' Radius)	Absolute % Cover	Dominant Species	Indicator Status			
1	<i>Carex lacustris</i> -- <i>Lakebank Sedge</i>	30	Y	OBL			
2	<i>Carex intumescens</i> -- <i>Greater Bladder Sedge</i>	20	Y	FACW			
3	<i>Equisetum arvense</i> -- <i>Field Horsetail</i>	15	N	FAC			
4	<i>Calamagrostis canadensis</i> -- <i>Bluejoint</i>	15	N	OBL			
5	--						
6	--						
7	--						
8	--						
9	--						
10	--						
11	--						
12	--						
13	--						
14	--						
15	--						
		80	= Total Cover				
Woody Vine Stratum	Plot Size (30' Radius)	Absolute % Cover	Dominant Species	Indicator Status			
1	--						
2	--						
3	--						
4	--						
5	--						
		0	= Total Cover				
Remarks: (Include photo numbers here or on a separate sheet)							
Note: This data sheet has been adapted to use the 2012 National Wetland Plant List: Robert W. Lichvar and John T. Kartesz. 2009. North American Digital Flora: National Wetland Plant List, version 2.4.0 (https://wetland.plants.usace.army.mil), U.S. Army Corps of Engineers, Engineer Research and Development Center, Cold Regions Research and Engineering Laboratory, Hanover, NH, and BONAP, Chapel Hill, NC. (2012)							

Sampling Point: 15-1w

50/20 Thresholds	20%	50%
Tree Stratum	0	0
Sapling/Shrub Stratum	3	8
Herb Stratum	16	40
Woody Vine Stratum	0	0

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 3 (A)
 Total Number of Dominant Species Across all Strata: 3 (B)
 Percent of Dominant Species that are OBL, FACW, or FAC: 100.00% (A/B)

Prevalence Index Worksheet

Total % Cover of:
 OBL species 45 x 1 = 45
 FACW species 35 x 2 = 70
 FAC species 15 x 3 = 45
 FACU species 0 x 4 = 0
 UPL species 0 x 5 = 0
 Column totals 95 (A) 160 (B)
 Prevalence Index = B/A = 1.68

Hydrophytic Vegetation Indicators:

 Rapid test for hydrophytic vegetation
X Dominance test is >50%
X Prevalence index is ≤3.0*
 Morphological adaptations* (provide supporting data in Remarks or on a separate sheet)
 Problematic hydrophytic vegetation* (explain)
 *Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Definitions of Vegetation Strata:

Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.
Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
Woody vines - All woody vines greater than 3.28 ft in height.

Hydrophytic vegetation present? Y

SOIL Sampling Point: 15-1w

Sampling Point: 15-1w

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

[illegible]

*Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains

**Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

Indicators for Problematic Hydric Soils:

- | | | |
|---|----------------------------|--|
| ☐ Histosol (A1) | Polyvalue Below Surface | ☐ 2 cm Muck (A10) (LRR K, L, MLRA 149B |
| ☐ Histic Epipedon (A2) | (S8) (LRR R, MLRA 149B) | ☐ Coast Prairie Redox (A16) (LRR K, L, R) |
| ☐ Black Histic (A3) | Thin Dark Surface (S9) | ☐ 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) |
| ☐ Hydrogen Sulfide (A4) | (LRR R, MLRA 149B | ☐ Dark Surface (S7) (LRR K, L) |
| ☐ Stratified Layers (A5) | Loamy Mucky Mineral (F1) | ☐ Polyvalue Below Surface (S8) (LRR K, L) |
| ☐ Depleted Below Dark Surface (A11) | (LRR K, L) | ☐ Thin Dark Surface (S9) (LRR K, L) |
| ☐ Thick Dark Surface (A12) | Loamy Gleyed Matrix (F2) | ☐ Iron-Manganese Masses (F12) (LRR K, L, R) |
| ☐ Sandy Mucky Mineral (S1) | Depleted Matrix (F3) | ☐ Piedmont Floodplain Soils (F19) (MLRA 149B) |
| ☐ Sandy Gleyed Matrix (S4) | Redox Dark Surface (F6) | ☐ Mesic Spodic (TA6) (MLRA 144A, 145, 149B) |
| ☐ Sandy Redox (S5) | Depleted Dark Surface (F7) | ☐ Red Parent Material (TF2) |
| ☐ Stripped Matrix (S6) | Redox Depressions (F8) | ☐ Very Shallow Dark Surface (TF12) |
| ☐ Dark Surface (S7) (LRR R, MLRA 149B) | | ☒ Other (Explain in Remarks) |

*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):

Type: Rock

Depth (inches): 6

Hydric soil present? Y

Remarks:

No hydric soils observed in the top 6 inches of the soil sample. Rock prevented a deeper sample. We argue that hydric soils are present based on the geomorphic position and presence of hydrophytic vegetation.

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Project/Site:	<u>Eveleth-Gilbert-Virginia School</u>	City/County:	<u>Eveleth/St. Louis</u>	Sampling Date:	<u>6/17/19</u>
Applicant/Owner:	<u>Kimley-Horn and Associates, Inc.</u>	State:	<u>Missouri</u>	Sampling Point:	<u>16-1u</u>
Investigator/s:	<u>Rebecca Buduhn</u>	Section, Township, Range:	<u>S29, T58N, R17W</u>		
Landform (hillslope, terrace, etc.):	<u>summit</u>	Local relief (concave, convex, none):	<u>none</u>		
Slope (%):	<u>0%</u>	Lat.:	<u>47.476954</u>	Long.:	<u>-92.520268</u>
				Date:	<u>NAD 1983 UTM Zone 15N</u>
Soil Map Unit Name:	<u>Quelico, stony-rock outcrop complex, 15-35% slopes</u>	NWI Classification:	<u>none</u>		
Are climatic/hydrologic conditions of the site typical for this time of the year?	<u>Yes</u>	(If no, explain in remarks)			
Are vegetation <u> </u> , soil <u> </u> , or hydrology <u> </u> significantly disturbed?			Are "normal circumstances" present? <u>Yes</u>		
Are vegetation <u> </u> , soil <u> </u> , or hydrology <u> </u> naturally problematic?					
(If needed, explain any answers in remarks)					

Hydrophytic vegetation present?	<u> N </u>	Is the sampled area within a wetland? <u> N </u> If yes, optional wetland site ID: _____
Hydric soil present?	<u> N </u>	
Indicators of wetland hydrology present?	<u> N </u>	
Remarks: (Explain alternative procedures here or in a separate report.)		

Primary Indicators (minimum of one is required; check all that apply)				Secondary Indicators (minimum of two required)			
☐ Surface Water (A1)		☐ Water-Stained Leaves (B9)		☐ Surface Soil Cracks (B6)			
☐ High Water Table (A2)		☐ Aquatic Fauna (B13)		☐ Drainage Patterns (B10)			
☐ Saturation (A3)		☐ Marl Deposits (B15)		☐ Moss Trim Lines (B16)			
☐ Water Marks (B1)		☐ Hydrogen Sulfide Odor (C1)		☐ Dry-Season Water Table (C2)			
☐ Sediment Deposits (B2)		☐ Oxidized Rhizospheres on Living		☐ Crayfish Burrows (C8)			
☐ Drift Deposits (B3)		☐ Roots (C3)		☐ Saturation Visible on Aerial Imagery			
☐ Algal Mat or Crust (B4)		☐ Presence of Reduced Iron (C4)		☐ (C9)			
☐ Iron Deposits (B5)		☐ Recent Iron Reduction in Tilled		☐ Stunted or Stressed Plants (D1)			
☐ Inundation Visible on Aerial		☐ Soils (C6)		☐ Geomorphic Position (D2)			
☐ Imagery (B7)		☐ Thin Muck Surface (C7)		☐ Shallow Aquitard (D3)			
☐ Sparsely Vegetated Concave		☐ Other (Explain in Remarks)		☐ FAC-Neutral Test (D5)			
☐ Surface (B8)				☐ Microtopographic Relief (D4)			

Field Observations:				Indicators of wetland hydrology present?	
Surface water present?	Yes ☐	No ☐	X ☐	Depth (inches):	
Water table present?	Yes ☐	No ☐	X ☐	Depth (inches):	
Saturation present?	Yes ☐	No ☐	X ☐	Depth (inches):	
(includes capillary fringe)				N	

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

					50/20 Thresholds		
				20%	50%		
Tree Stratum	Plot Size (30' Radius)	Absolute % Cover	Dominant Species	Indicator Status			
1	--						
2	--						
3	--						
4	--						
5	--						
6	--						
7	--						
8	--						
9	--						
10	--						
		0	= Total Cover				
Sapling/Shrub Stratum	Plot Size (15' Radius)	Absolute % Cover	Dominant Species	Indicator Status			
1	<i>Pinus resinosa</i> -- <i>Red Pine</i>	10	Y	FACU			
2	--						
3	--						
4	--						
5	--						
6	--						
7	--						
8	--						
9	--						
10	--						
		10	= Total Cover				
Herb Stratum	Plot Size (5' Radius)	Absolute % Cover	Dominant Species	Indicator Status			
1	<i>Poa pratensis</i> -- <i>Kentucky Blue Grass</i>	30	Y	FACU			
2	<i>Hieracium caespitosum</i> -- <i>Yellow Hawkweed</i>	15	Y	UPL			
3	<i>Trifolium hybridum</i> -- <i>Alsike Clover</i>	10	N	FACU			
4	<i>Fragaria virginiana</i> -- <i>Virginia Strawberry</i>	10	N	FACU			
5	<i>Rubus idaeus</i> -- <i>Common Red Raspberry</i>	10	N	FAC			
6	<i>Solidago gigantea</i> -- <i>Late Goldenrod</i>	5	N	FACW			
7	<i>Dryopteris carthusiana</i> -- <i>Spinulose Wood Fern</i>	5	N	FACW			
8	<i>Leucanthemum vulgare</i> -- <i>Ox-Eye Daisy</i>	5	N	UPL			
9	--						
10	--						
11	--						
12	--						
13	--						
14	--						
15	--						
		90	= Total Cover				
Woody Vine Stratum	Plot Size (30' Radius)	Absolute % Cover	Dominant Species	Indicator Status			
1	--						
2	--						
3	--						
4	--						
5	--						
		0	= Total Cover				

50/20 Thresholds

Tree Stratum 0 0

Sapling/Shrub Stratum 2 5

Herb Stratum 18 45

Woody Vine Stratum 0 0

20% 50%

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across all Strata: 3 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 0.00% (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species 0 x 1 = 0

FACW species 10 x 2 = 20

FAC species 10 x 3 = 30

FACU species 80 x 4 = 240

UPL species 20 x 5 = 100

Column totals 100 (A) 390 (B)

Prevalence Index = B/A = 3.90

Hydrophytic Vegetation Indicators:

___ Rapid test for hydrophytic vegetation

___ Dominance test is >50%

___ Prevalence index is >3.0*

Morphological adaptations* (provide supporting data in Remarks or on a separate sheet)

___ Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology should be present, unless disturbed or problematic

Definitions of Vegetation Strata:

Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines - All woody vines greater than 3.28 ft in height.

Hydrophytic vegetation present? N

Remarks: (Include photo numbers here or on a separate sheet)

Note: This data sheet has been adapted to use the 2012 National Wetland Plant List:

Robert W. Lichvar and John T. Kartesz. 2009. North American Digital Flora: National Wetland Plant List, version 2.4.0 (https://wetland_plants.usace.army.mil/). U.S. Army Corps of Engineers, Engineer Research and Development Center, Cold Regions Research and Engineering Laboratory, Hanover, NH, and BONAP, Chapel Hill, NC. (2012)

[illegible]

US Army Corps of Engineers	Northcentral and Northeast Region	US Army Corps of Engineers	Northcentral and Northeast Region
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WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Eveleth-Gilbert-Virginia School City/County: Eveleth/St. Louis Sampling Date: 6/17/19
 Applicant/Owner: Kimley-Horn and Associates, Inc. State: Minnesota Sampling Point: 16-1w
 Investigator(s): Rebecca Buduhn Section, Township, Range: S29, T58N, R17W
 Landform (hillslope, terrace, etc.): toeslope Local relief (concave, convex, none): none
 Slope (%): 0% Lat.: 47.476966 Long.: -92.520382 Datum: NAD 1983 UTM Zone 15N
 Soil Map Unit Name: Quetico, stony-rock outcrop complex, 15-35% slopes NWI Classification: none
 Are climatic/hydrologic conditions of the site typical for this time of the year? Yes (If no, explain in remarks)
 Are vegetation , soil , or hydrology significantly disturbed? Are "normal
 Are vegetation , soil , or hydrology naturally problematic? circumstances" present? Yes
 (If needed, explain any answers in remarks)

SUMMARY OF FINDINGS

Hydrophytic vegetation present?	<u>Y</u>	Is the sampled area within a wetland?	<u>Y</u>
Hydric soil present?	<u>Y</u>		
Indicators of wetland hydrology present?	<u>Y</u>	If yes, optional wetland site ID:	<u>Wetland 16</u>
Remarks: (Explain alternative procedures here or in a separate report.)			

HYDROLOGY

Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)	
☐ Surface Water (A1)	☐ Water-Stained Leaves (B9)	☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Aquatic Fauna (B13)	☐ Drainage Patterns (B10)	
☒ Saturation (A3)	☐ Marl Deposits (B15)	☐ Moss Trim Lines (B16)	
☐ Water Marks (B1)	☐ Hydrogen Sulfide Odor (C1)	☐ Dry-Season Water Table (C2)	
☐ Sediment Deposits (B2)	☐ Oxidized Rhizospheres on Living	☐ Crayfish Burrows (C8)	
☐ Drift Deposits (B3)	☐ Roots (C3)	☐ Saturation Visible on Aerial Imagery	
☐ Algal Mat or Crust (B4)	☐ Presence of Reduced Iron (C4)	☐ (C9)	
☐ Iron Deposits (B5)	☐ Recent Iron Reduction in Tilled	☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial	☐ Soils (C6)	☐ Geomorphic Position (D2)	
☐ Imagery (B7)	☐ Thin Muck Surface (C7)	☐ Shallow Aquitard (D3)	
☐ Sparsely Vegetated Concave	☐ Other (Explain in Remarks)	☐ FAC-Neutral Test (D5)	
☐ Surface (B8)		☐ Microtopographic Relief (D4)	
Field Observations:		Indicators of wetland hydrology present? <u>Y</u>	
Surface water present?	Yes <u> </u> No <u>X</u> Depth (inches): <u> </u>		
Water table present?	Yes <u> </u> No <u>X</u> Depth (inches): <u> </u>		
Saturation present?	Yes <u>X</u> No <u> </u> Depth (inches): <u>0</u>		
(includes capillary fringe)			
Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks:			

US Army Corps of Engineers

Northcentral and Northeast Region

VEGETATION - Use scientific names of plants

					Sampling Point: <u>16-1w</u>		
					50/20 Thresholds		
					20% 50%		
Tree Stratum					Tree Stratum		
Plot Size (30' Radius)					Sapling/Shrub Stratum		
Absolute % Cover					Herb Stratum		
Dominant Species					Woody Vine Stratum		
Indicator Status							
1	<u> </u>	<u> </u>	<u> </u>	<u> </u>			
2	<u> </u>	<u> </u>	<u> </u>	<u> </u>			
3	<u> </u>	<u> </u>	<u> </u>	<u> </u>			
4	<u> </u>	<u> </u>	<u> </u>	<u> </u>			
5	<u> </u>	<u> </u>	<u> </u>	<u> </u>			
6	<u> </u>	<u> </u>	<u> </u>	<u> </u>			
7	<u> </u>	<u> </u>	<u> </u>	<u> </u>			
8	<u> </u>	<u> </u>	<u> </u>	<u> </u>			
9	<u> </u>	<u> </u>	<u> </u>	<u> </u>			
10	<u> </u>	<u> </u>	<u> </u>	<u> </u>			
<u>0</u> = Total Cover							
Sapling/Shrub Stratum					Dominance Test Worksheet		
Plot Size (15' Radius)					Number of Dominant		
Absolute % Cover					Species that are OBL,		
Dominant Species					FACW, or FAC: <u>3</u> (A)		
Indicator Status					Total Number of Dominant		
1	<u>Salix petiolaris</u>	<u>-- Meadow Willow</u>	<u>35</u>	<u>Y</u>	Species Across all Strata: <u>3</u> (B)		
2	<u>Alnus incana</u>	<u>-- Speckled Alder</u>	<u>10</u>	<u>Y</u>	Percent of Dominant		
3	<u> </u>	<u> </u>	<u> </u>	<u> </u>	Species that are OBL,		
4	<u> </u>	<u> </u>	<u> </u>	<u> </u>	FACW, or FAC: <u>100.00%</u> (A/B)		
5	<u> </u>	<u> </u>	<u> </u>	<u> </u>			
6	<u> </u>	<u> </u>	<u> </u>	<u> </u>			
7	<u> </u>	<u> </u>	<u> </u>	<u> </u>			
8	<u> </u>	<u> </u>	<u> </u>	<u> </u>			
9	<u> </u>	<u> </u>	<u> </u>	<u> </u>			
10	<u> </u>	<u> </u>	<u> </u>	<u> </u>			
<u>45</u> = Total Cover							
Herb Stratum					Prevalence Index Worksheet		
Plot Size (5' Radius)					Total % Cover of:		
Absolute % Cover					OBL species <u>5</u> x 1 = <u>5</u>		
Dominant Species					FACW species <u>70</u> x 2 = <u>140</u>		
Indicator Status					FAC species <u>0</u> x 3 = <u>0</u>		
1	<u>Carex scoparia</u>	<u>-- Pointed Broom Sedge</u>	<u>25</u>	<u>Y</u>	FACU species <u>0</u> x 4 = <u>0</u>		
2	<u>Fragaria virginiana</u>	<u>-- Virginia Strawberry</u>	<u>5</u>	<u>N</u>	UPL species <u>5</u> x 5 = <u>25</u>		
3	<u>Carex stricta</u>	<u>-- Upright Sedge</u>	<u>5</u>	<u>N</u>	Column totals <u>80</u> (A) <u>170</u> (B)		
4	<u> </u>	<u> </u>	<u> </u>	<u> </u>	Prevalence Index = B/A = <u>2.13</u>		
5	<u> </u>	<u> </u>	<u> </u>	<u> </u>			
6	<u> </u>	<u> </u>	<u> </u>	<u> </u>			
7	<u> </u>	<u> </u>	<u> </u>	<u> </u>			
8	<u> </u>	<u> </u>	<u> </u>	<u> </u>			
9	<u> </u>	<u> </u>	<u> </u>	<u> </u>			
10	<u> </u>	<u> </u>	<u> </u>	<u> </u>			
11	<u> </u>	<u> </u>	<u> </u>	<u> </u>			
12	<u> </u>	<u> </u>	<u> </u>	<u> </u>			
13	<u> </u>	<u> </u>	<u> </u>	<u> </u>			
14	<u> </u>	<u> </u>	<u> </u>	<u> </u>			
15	<u> </u>	<u> </u>	<u> </u>	<u> </u>			
<u>35</u> = Total Cover							
Woody Vine Stratum					Hydrophytic Vegetation Indicators:		
Plot Size (30' Radius)					<u> </u> Rapid test for hydrophytic vegetation		
Absolute % Cover					<u>X</u> Dominance test is >50%		
Dominant Species					<u>X</u> Prevalence index is ≤3.0*		
Indicator Status					Morphological adaptations* (provide supporting data in Remarks or on a separate sheet)		
1	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u> Problematic hydrophytic vegetation* (explain)		
2	<u> </u>	<u> </u>	<u> </u>	<u> </u>	*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic		
3	<u> </u>	<u> </u>	<u> </u>	<u> </u>			
4	<u> </u>	<u> </u>	<u> </u>	<u> </u>			
5	<u> </u>	<u> </u>	<u> </u>	<u> </u>			
<u>0</u> = Total Cover					Definitions of Vegetation Strata:		
Remarks: (Include photo numbers here or on a separate sheet)					Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.		
					Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.		
					Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.		
					Woody vines - All woody vines greater than 3.28 ft in height.		
					Hydrophytic vegetation present? <u>Y</u>		
Note: This data sheet has been adapted to use the 2012 National Wetland Plant List: Robert W. Lichvar and John T. Kartesz. 2009. North American Digital Flora: National Wetland Plant List, version 2.4.0 (https://wetland.plants.usace.army.mil), U.S. Army Corps of Engineers, Engineer Research and Development Center, Cold Regions Research and Engineering Laboratory, Hanover, NH, and BONAP, Chapel Hill, NC. (2012)							

US Army Corps of Engineers

Northcentral and Northeast Region

Sampling Point: 16-1w

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

[illegible]

*Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains

**Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

Indicators for Problematic Hydric Soils:

- | | | |
|---|----------------------------|--|
| ☐ Histosol (A1) | Polyvalue Below Surface | ☐ 2 cm Muck (A10) (LRR K, L, MLRA 149B |
| ☐ Histic Epipedon (A2) | (S8) (LRR R, MLRA 149B) | ☐ Coast Prairie Redox (A16) (LRR K, L, R) |
| ☐ Black Histic (A3) | Thin Dark Surface (S9) | ☐ 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) |
| ☐ Hydrogen Sulfide (A4) | (LRR R, MLRA 149B | ☐ Dark Surface (S7) (LRR K, L) |
| ☐ Stratified Layers (A5) | Loamy Mucky Mineral (F1) | ☐ Polyvalue Below Surface (S8) (LRR K, L) |
| ☐ Depleted Below Dark Surface (A11) | (LRR K, L) | ☐ Thin Dark Surface (S9) (LRR K, L) |
| ☐ Thick Dark Surface (A12) | Loamy Gleyed Matrix (F2) | ☐ Iron-Manganese Masses (F12) (LRR K, L, R) |
| ☐ Sandy Mucky Mineral (S1) | Depleted Matrix (F3) | ☐ Piedmont Floodplain Soils (F19) (MLRA 149B) |
| ☐ Sandy Gleyed Matrix (S4) | Redox Dark Surface (F6) | ☐ Mesic Spodic (TA6) (MLRA 144A, 145, 149B) |
| ☐ Sandy Redox (S5) | Depleted Dark Surface (F7) | ☐ Red Parent Material (TF2) |
| ☐ Stripped Matrix (S6) | X Redox Depressions (F8) | ☐ Very Shallow Dark Surface (TF12) |
| ☐ Dark Surface (S7) (LRR R, MLRA 149B) | | ☐ Other (Explain in Remarks) |

*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):

Type: Rock

Depth (inches): 7

Hydric soil present? Y

Remarks:

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Project/Site: Eveleth-Gilbert-Virginia School City/County: Eveleth/St. Louis Sampling Date: 6/17/19
 Applicant/Owner: Kimley-Horn and Associates, Inc. State: Minnesota Sampling Point: 17-1u
 Investigator/s: Rebecca Buduhn Section, Township, Range: S29, T58N, R17W
 Landform (hillslope, terrace, etc.): backslope Local relief (concave, convex, none): none
 Slope (%): 6% Lat.: 47.475914 Long.: -92.520127 Datum: NAD 1983 UTM Zone 15N
 Soil Map Unit Name: Conic, very bouldery-insula, very bouldery-rock outcrop, 20-70% silt NW1 classification: none
 Are climatic/hydrologic conditions of the site typical for this time of the year? Yes (If no, explain in remarks)
 Are vegetation _____, soil _____, or hydrology _____ significantly disturbed? Are "normal circumstances" present? Yes
 Are vegetation _____, soil _____, or hydrology _____ naturally problematic?
 (If needed, explain any answers in remarks)

Hydrophytic vegetation present?	<u>Y</u>	Is the sampled area within a wetland? <u>N</u>
Hydric soil present?	<u>N</u>	
Indicators of wetland hydrology present?	<u>N</u>	
If yes, optional wetland site ID: _____		
Remarks: (Explain alternative procedures here or in a separate report.)		

Primary Indicators (minimum of one is required; check all that apply) ☐ Surface Water (A1) ☐ Water-Stained Leaves (B9) ☐ High Water Table (A2) ☐ Aquatic Fauna (B13) ☐ Saturation (A3) ☐ Marl Deposits (B15) ☐ Water Marks (B1) ☐ Hydrogen Sulfide Odor (C1) ☐ Sediment Deposits (B2) ☐ Oxidized Rhizospheres on Living ☐ Drift Deposits (B3) ☐ Roots (C3) ☐ Algal Mat or Crust (B4) ☐ Presence of Reduced Iron (C4) ☐ Iron Deposits (B5) ☐ Recent Iron Reduction in Tilled ☐ Inundation Visible on Aerial ☐ Soils (C6) Imagery (B7) ☐ Thin Muck Surface (C7) ☐ Sparsely Vegetated Concave ☐ Other (Explain in Remarks) Surface (B8)			Secondary Indicators (minimum of two required) ☐ Surface Soil Cracks (B6) ☐ Drainage Patterns (B10) ☐ Moss Trim Lines (B16) ☐ Dry-Season Water Table (C2) ☐ Crayfish Burrows (C8) ☐ Saturation Visible on Aerial Imagery (C9) ☐ Stunted or Stressed Plants (D1) ☐ Geomorphic Position (D2) ☐ Shallow Aquitard (D3) ☐ FAC-Neutral Test (D5) ☐ Microtopographic Relief (D4)		
Field Observations: Surface water present? Yes ☐ No ☐ X Depth (inches): Water table present? Yes ☐ No ☐ X Depth (inches): Saturation present? Yes ☐ No ☐ X Depth (inches): (includes capillary fringe)			Indicators of wetland hydrology present? <u> N </u>		
Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:					
Remarks:					

Tree Stratum				50/20 Thresholds		
Plot Size (30' Radius)	Absolute % Cover	Dominant Species	Indicator Status	20%	50%	
1 <i>Acer rubrum</i> -- <i>Red Maple</i>	35	Y	FAC	10	25	
2 <i>Picea glauca</i> -- <i>White Spruce</i>	15	Y	FACU	7	18	
3				14	35	
4				0	0	
5						
6						
7						
8						
9						
10						
	50	= Total Cover				
Sapling/Shrub Stratum				50/20 Thresholds		
Plot Size (15' Radius)	Absolute % Cover	Dominant Species	Indicator Status	20%	50%	
1 <i>Acer rubrum</i> -- <i>Red Maple</i>	20	Y	FAC	10	25	
2 <i>Alnus incana</i> -- <i>Speckled Alder</i>	15	Y	FACW	7	18	
3				14	35	
4				0	0	
5						
6						
7						
8						
9						
10						
	35	= Total Cover				
Herb Stratum				50/20 Thresholds		
Plot Size (5' Radius)	Absolute % Cover	Dominant Species	Indicator Status	20%	50%	
1 <i>Eurybia macrophylla</i> -- <i>Large-Leaf Wood-Aster</i>	20	Y	UPL	10	25	
2 <i>Acer rubrum</i> -- <i>Red Maple</i>	10	Y	FAC	7	18	
3 <i>Osmunda claytoniana</i> -- <i>Interrupted Fern</i>	10	Y	FAC	14	35	
4 <i>Athyrium Filix-femina</i> -- <i>Lady Fern</i>	10	Y	FAC	0	0	
5 <i>Cornus canadensis</i> -- <i>Canadian Bunchberry</i>	10	Y	FAC			
6 <i>Dryopteris carthusiana</i> -- <i>Spinulose Wood Fern</i>	5	N	FACW			
7 <i>Maianthemum racemosum</i> -- <i>Feathery False Solomon's-Seal</i>	5	N	FACU			
8						
9						
10						
11						
12						
13						
14						
15						
	70	= Total Cover				
Woody Vine Stratum				50/20 Thresholds		
Plot Size (30' Radius)	Absolute % Cover	Dominant Species	Indicator Status	20%	50%	
1						
2						
3						
4						
5						
	0	= Total Cover				

Remarks: (Include photo numbers here or on a separate sheet)

Note: This data sheet has been adapted to use the 2012 National Wetland Plant List:

Robert W. Lichvar and John T. Kartesz. 2009. North American Digital Flora: National Wetland Plant List, version 2.4.0 (https://wetland_plants.usace.army.mil/). U.S. Army Corps of Engineers, Engineer Research and Development Center, Cold Regions Research and Engineering Laboratory, Hanover, NH, and BONAP, Chapel Hill, NC. (2012)

[illegible]

US Army Corps of Engineers	Northcentral and Northeast Region	US Army Corps of Engineers	Northcentral and Northeast Region
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WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Eveleth-Gilbert-Virginia School City/County: Eveleth/St. Louis Sampling Date: 6/17/19
Applicant/Owner: Kimley-Horn and Associates, Inc. State: Minnesota Sampling Point: 17-1w
Investigator(s): Rebecca Buduhn Section, Township, Range: S29, T58N, R17W
Landform (hillslope, terrace, etc.): toeslope Local relief (concave, convex, none): none
Slope (%): 0% Lat.: 47.475952 Long.: -92.520223 Datum: NAD 1983 UTM Zone 15N
Soil Map Unit Name: Conic, very bouldery-Insula, very bouldery-Rock outcrop, 20-70% siNW1 Classification: PFO1B
Are climatic/hydrologic conditions of the site typical for this time of the year? Yes (If no, explain in remarks)
Are vegetation , soil , or hydrology significantly disturbed? Are "normal
Are vegetation , soil , or hydrology naturally problematic? circumstances" present? Yes
(If needed, explain any answers in remarks)

SUMMARY OF FINDINGS

Hydrophytic vegetation present?	<u>Y</u>	Is the sampled area within a wetland?	<u>Y</u>
Hydric soil present?	<u>Y</u>		
Indicators of wetland hydrology present?	<u>Y</u>	If yes, optional wetland site ID:	<u>Wetland 17</u>
Remarks: (Explain alternative procedures here or in a separate report.)			

HYDROLOGY

Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)	
☐ Surface Water (A1)	☐ Water-Stained Leaves (B9)	☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Aquatic Fauna (B13)	☐ Drainage Patterns (B10)	
☒ Saturation (A3)	☐ Marl Deposits (B15)	☐ Moss Trim Lines (B16)	
☐ Water Marks (B1)	☐ Hydrogen Sulfide Odor (C1)	☐ Dry-Season Water Table (C2)	
☐ Sediment Deposits (B2)	☐ Oxidized Rhizospheres on Living	☐ Crayfish Burrows (C8)	
☐ Drift Deposits (B3)	☐ Roots (C3)	☐ Saturation Visible on Aerial Imagery	
☐ Algal Mat or Crust (B4)	☐ Presence of Reduced Iron (C4)	☐ (C9)	
☐ Iron Deposits (B5)	☐ Recent Iron Reduction in Tilled	☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial	☐ Soils (C6)	☐ Geomorphic Position (D2)	
☐ Imagery (B7)	☐ Thin Muck Surface (C7)	☐ Shallow Aquitard (D3)	
☐ Sparsely Vegetated Concave	☐ Other (Explain in Remarks)	☐ FAC-Neutral Test (D5)	
☐ Surface (B8)		☐ Microtopographic Relief (D4)	
Field Observations:		Indicators of wetland hydrology present? <u>Y</u>	
Surface water present?	Yes <u> </u> No <u>X</u>	Depth (inches): <u> </u>	
Water table present?	Yes <u> </u> No <u>X</u>	Depth (inches): <u> </u>	
Saturation present?	Yes <u>X</u> No <u> </u>	Depth (inches): <u>0</u>	
(includes capillary fringe)			
Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks:			

VEGETATION - Use scientific names of plants

Tree Stratum					Plot Size (30' Radius)	Absolute % Cover	Dominant Species	Indicator Status	Sampling Point: 17-1w			
1	<u>Acer rubrum</u>	<u>--</u>	<u>Red Maple</u>	<u>20</u>	<u>Y</u>	<u>FAC</u>	50/20 Thresholds			20%	50%	
2	<u>Populus tremuloides</u>	<u>--</u>	<u>Quaking Aspen</u>	<u>20</u>	<u>Y</u>	<u>FAC</u>	Tree Stratum			8	20	
3	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	Sapling/Shrub Stratum			4	10	
4	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	Herb Stratum			19	48	
5	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	Woody Vine Stratum			0	0	
6	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	Dominance Test Worksheet					
7	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	Number of Dominant Species that are OBL, FACW, or FAC:			<u>6</u>	(A)	
8	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	Total Number of Dominant Species Across all Strata:			<u>6</u>	(B)	
9	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	Percent of Dominant Species that are OBL, FACW, or FAC:			<u>100.00%</u>	(A/B)	
10	<u> </u>	<u> </u>	<u> </u>	<u>40</u>	<u>=</u>	<u>Total Cover</u>	Prevalence Index Worksheet					
Sapling/Shrub Stratum							Plot Size (15' Radius)	Absolute % Cover	Dominant Species	Indicator Status	Total % Cover of:	
1	<u>Alnus incana</u>	<u>--</u>	<u>Speckled Alder</u>	<u>15</u>	<u>Y</u>	<u>FACW</u>	OBL species		<u>45</u>	<u>x 1 =</u>	<u>45</u>	
2	<u>Acer rubrum</u>	<u>--</u>	<u>Red Maple</u>	<u>5</u>	<u>Y</u>	<u>FAC</u>	FACW species		<u>55</u>	<u>x 2 =</u>	<u>110</u>	
3	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	FAC species		<u>55</u>	<u>x 3 =</u>	<u>165</u>	
4	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	FACU species		<u>0</u>	<u>x 4 =</u>	<u>0</u>	
5	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	UPL species		<u>0</u>	<u>x 5 =</u>	<u>0</u>	
6	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	Column totals		<u>155</u>	(A)	<u>320</u> (B)	
7	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	Prevalence Index = B/A =		<u>2.06</u>			
8	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>						
9	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>						
10	<u> </u>	<u> </u>	<u> </u>	<u>20</u>	<u>=</u>	<u>Total Cover</u>	Hydrophytic Vegetation Indicators:					
Herb Stratum							Plot Size (5' Radius)	Absolute % Cover	Dominant Species	Indicator Status	<u> </u> Rapid test for hydrophytic vegetation	
1	<u>Impatiens capensis</u>	<u>--</u>	<u>Spotted Touch-Me-Not</u>	<u>40</u>	<u>Y</u>	<u>FACW</u>	<u>X</u> Dominance test is >50%		<u>X</u> Prevalence index is ≤3.0*			
2	<u>Carex gynandra</u>	<u>--</u>	<u>Nodding Sedge</u>	<u>30</u>	<u>Y</u>	<u>OBL</u>	Morphological adaptations* (provide supporting data in Remarks or on a separate sheet)					
3	<u>Caltha palustris</u>	<u>--</u>	<u>Yellow Marsh-Marigold</u>	<u>15</u>	<u>N</u>	<u>OBL</u>	<u> </u> Problematic hydrophytic vegetation* (explain)					
4	<u>Athyrium filix-femina</u>	<u>--</u>	<u>Lady Fern</u>	<u>10</u>	<u>N</u>	<u>FAC</u>	*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic					
5	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	Definitions of Vegetation Strata:					
6	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.					
7	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.					
8	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.					
9	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	Woody vines - All woody vines greater than 3.28 ft in height.					
10	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	Hydrophytic vegetation present? <u>Y</u>					
11	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	Remarks: (Include photo numbers here or on a separate sheet)					
12	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>						
13	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>						
14	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>						
15	<u> </u>	<u> </u>	<u> </u>	<u>95</u>	<u>=</u>	<u>Total Cover</u>						
Woody Vine Stratum							Plot Size (30' Radius)	Absolute % Cover	Dominant Species	Indicator Status		
1	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>						
2	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>						
3	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>						
4	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>						
5	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>						
							<u>0</u>	<u>=</u>	<u>Total Cover</u>			
Note: This data sheet has been adapted to use the 2012 National Wetland Plant List: Robert W. Lichvar and John T. Kartesz. 2009. North American Digital Flora: National Wetland Plant List, version 2.4.0 (https://wetland.plants.usace.army.mil), U.S. Army Corps of Engineers, Engineer Research and Development Center, Cold Regions Research and Engineering Laboratory, Hanover, NH, and BONAP, Chapel Hill, NC. (2012)												

SOIL	Sampling Point:	17-1w
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Sampling Point: 17-1w

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

[illegible]

*Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains

**Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

Indicators for Problematic Hydric Soils:

- | | | |
|--|----------------------------------|--|
| ☐ Histosol (A1) | Polyvalue Below Surface | 2 cm Muck (A10) (LRR K, L, MLRA 149B) |
| ☐ Histic Epipedon (A2) | (S8) (LRR R, MLRA 149B) | Coast Prairie Redox (A16) (LRR K, L, R) |
| ☐ Black Histic (A3) | Thin Dark Surface (S9) | 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) |
| ☐ Hydrogen Sulphide (A4) | (LRR R, MLRA 149B) | Dark Surface (S7) (LRR K, L) |
| ☐ Stratified Layers (A5) | Loamy Mucky Mineral (F1) | Polyvalue Below Surface (S8) (LRR K, L) |
| ☐ Depleted Below Dark Surface (A11) | (LRR K, L) | Thin Dark Surface (S9) (LRR K, L) |
| ☐ Thick Dark Surface (A12) | Loamy Gleyed Matrix (F2) | Iron-Manganese Masses (F12) (LRR K, L, R) |
| ☐ Sandy Mucky Mineral (S1) | Depleted Matrix (F3) | Piedmont Floodplain Soils (F19) (MLRA 149B) |
| ☐ Sandy Gleyed Matrix (S4) | X Redox Dark Surface (F6) | Mesic Spodic (TA6) (MLRA 144A, 145, 149B) |
| ☐ Sandy Redox (S5) | Depleted Dark Surface (F7) | Red Parent Material (TF2) |
| ☐ Stripped Matrix (S6) | Redox Depressions (F8) | Very Shallow Dark Surface (TF12) |
| ☐ Dark Surface (S7) (LRR R, MLRA 149B) | | Other (Explain in Remarks) |

*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric soil present? Y

Remarks:

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WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Eveleth-Gilbert-Virginia School City/County: Eveleth/St. Louis Sampling Date: 5/15/17
Applicant/Owner: Kimley-Horn and Associates, Inc. State: Minnesota Sampling Point: 17-2u
Investigator(s): Kyle Hanson Section, Township, Range: S29, T58N, R17W
Landform (hillslope, terrace, etc.): toeslope Local relief (concave, convex, none): none
Slope (%): 3% Lat.: 47.474504 Long.: -92.521774 Datum: NAD 1983 UTM Zone 15N
Soil Map Unit Name: Eveleth-Eaglesnest-Conic complex, bouldery, 6-18% slopes, rocky NWI Classification: none
Are climatic/hydrologic conditions of the site typical for this time of the year? Yes (If no, explain in remarks)
Are vegetation , soil , or hydrology significantly disturbed? Are "normal
Are vegetation , soil , or hydrology naturally problematic? circumstances" present? Yes
(If needed, explain any answers in remarks)

SUMMARY OF FINDINGS

Hydrophytic vegetation present?	<u>N</u>	Is the sampled area within a wetland?	<u>N</u>
Hydric soil present?	<u>N</u>		
Indicators of wetland hydrology present?	<u>N</u>	If yes, optional wetland site ID: _____	
Remarks: (Explain alternative procedures here or in a separate report.)			

HYDROLOGY

Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)	
☐ Surface Water (A1)	☐ Water-Stained Leaves (B9)	☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Aquatic Fauna (B13)	☐ Drainage Patterns (B10)	
☐ Saturation (A3)	☐ Marl Deposits (B15)	☐ Moss Trim Lines (B16)	
☐ Water Marks (B1)	☐ Hydrogen Sulfide Odor (C1)	☐ Dry-Season Water Table (C2)	
☐ Sediment Deposits (B2)	☐ Oxidized Rhizospheres on Living	☐ Crayfish Burrows (C8)	
☐ Drift Deposits (B3)	☐ Roots (C3)	☐ Saturation Visible on Aerial Imagery	
☐ Algal Mat or Crust (B4)	☐ Presence of Reduced Iron (C4)	☐ (C9)	
☐ Iron Deposits (B5)	☐ Recent Iron Reduction in Tilled	☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial	☐ Soils (C6)	☐ Geomorphic Position (D2)	
☐ Imagery (B7)	☐ Thin Muck Surface (C7)	☐ Shallow Aquitard (D3)	
☐ Sparsely Vegetated Concave	☐ Other (Explain in Remarks)	☐ FAC-Neutral Test (D5)	
☐ Surface (B8)		☐ Microtopographic Relief (D4)	
Field Observations:		Indicators of wetland hydrology present? <u>N</u>	
Surface water present?	Yes <u> </u> No <u> </u> X <u> </u>	Depth (inches): <u> </u>	
Water table present?	Yes <u> </u> No <u> </u> X <u> </u>	Depth (inches): <u> </u>	
Saturation present?	Yes <u> </u> No <u> </u> X <u> </u>	Depth (inches): <u> </u>	
(includes capillary fringe)			
Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks:			

VEGETATION - Use scientific names of plants

					Sampling Point: 17-2u		
					50/20 Thresholds		
					20% 50%		
Tree Stratum					Tree Stratum		
Plot Size (30' Radius)					Sapling/Shrub Stratum		
Absolute % Cover					Herb Stratum		
Dominant Species					Woody Vine Stratum		
Indicator Status							
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
0 = Total Cover							
Sapling/Shrub Stratum					Dominance Test Worksheet		
Plot Size (15' Radius)					Number of Dominant Species that are OBL, FACW, or FAC: <u>0</u> (A)		
Absolute % Cover					Total Number of Dominant Species Across all Strata: <u>3</u> (B)		
Dominant Species					Percent of Dominant Species that are OBL, FACW, or FAC: <u>0.00%</u> (A/B)		
Indicator Status					Prevalence Index Worksheet		
1 <i>Pinus strobus</i> -- <i>Eastern White Pine</i>					Total % Cover of:		
2					OBL species <u>0</u> x 1 = <u>0</u>		
3					FACW species <u>20</u> x 2 = <u>40</u>		
4					FAC species <u>0</u> x 3 = <u>0</u>		
5					FACU species <u>50</u> x 4 = <u>200</u>		
6					UPL species <u>50</u> x 5 = <u>250</u>		
7					Column totals <u>120</u> (A) <u>490</u> (B)		
8					Prevalence Index = B/A = <u>4.08</u>		
9							
10							
5 = Total Cover					Hydrophytic Vegetation Indicators:		
Herb Stratum					<u> </u> Rapid test for hydrophytic vegetation		
Plot Size (5' Radius)					<u> </u> Dominance test is >50%		
Absolute % Cover					<u> </u> Prevalence index is ≤3.0*		
Dominant Species					<u> </u> Morphological adaptations* (provide supporting data in Remarks or on a separate sheet)		
Indicator Status					<u> </u> Problematic hydrophytic vegetation* (explain)		
1 <i>Bromus inermis</i> -- <i>Smooth Brome</i>					*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic		
2 <i>Tanacetum vulgare</i> -- <i>Common Tansy</i>					Definitions of Vegetation Strata:		
3 <i>Phalaris arundinacea</i> -- <i>Reed Canary Grass</i>					Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.		
4 <i>Eurybia macrophylla</i> -- <i>Large-Leaf Wood-Aster</i>					Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.		
5 <i>Taraxacum officinale</i> -- <i>Common Dandelion</i>					Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.		
6 <i>Fragaria virginiana</i> -- <i>Virginia Strawberry</i>					Woody vines - All woody vines greater than 3.28 ft in height.		
7							
8							
9							
10							
11							
12							
13							
14							
15							
115 = Total Cover					Hydrophytic vegetation present? <u>N</u>		
Woody Vine Stratum							
Plot Size (30' Radius)							
Absolute % Cover							
Dominant Species							
Indicator Status							
1							
2							
3							
4							
5							
0 = Total Cover							
Remarks: (Include photo numbers here or on a separate sheet)							
Note: This data sheet has been adapted to use the 2012 National Wetland Plant List:							
Robert W. Lichvar and John T. Kartesz. 2009. North American Digital Flora: National Wetland Plant List, version 2.4.0 (https://wetland.plants.usace.army.mil), U.S. Army Corps of Engineers, Engineer Research and Development Center, Cold Regions Research and Engineering Laboratory, Hanover, NH, and BONAP, Chapel Hill, NC. (2012)							

Sampling Point: 17-2u

[illegible]

**Location: PL=Pore Lining, M=Matrix

Indicators for Problematic Hydric Soils:

- *Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Hydric soil present? N

Northcentral and Northeast Region

Project/Site: Eveleth-Gilbert-Virginia School City/County: Eveleth/St. Louis Sampling Date: 5/15/17
 Applicant/Owner: Kimley-Horn and Associates, Inc. State: Minnesota Sampling Point: 17-2w
 Investigator/s: Kyle Hanson Section, Township, Range: S23, T58N, R17W
 Landform (hillslope, terrace, etc.): toeslope Local relief (concave, convex, none): concave
 Slope (%): 1% Lat.: 47.47443 Long.: -92.521763 Datum: NAD 1983 UTM Zone 15N
 Soil Map Unit Name: Eveleth-Eaglesnest-Conic complex, bouldery, 6-18% slopes, rocky NW1 Classification: none
 Are climatic/hydrologic conditions of the site typical for this time of the year? Yes (If no, explain in remarks)
 Are vegetation _____, soil _____, or hydrology _____ significantly disturbed? Are "normal circumstances" present? Yes
 Are vegetation _____, soil _____, or hydrology _____ naturally problematic?
 (If needed, explain any answers in remarks)

Hydrophytic vegetation present?	<u>Y</u>	Is the sampled area within a wetland? <u>Y</u> If yes, optional wetland site ID: <u>Wetland 17</u>
Hydric soil present?	<u>Y</u>	
Indicators of wetland hydrology present?	<u>Y</u>	
Remarks: (Explain alternative procedures here or in a separate report.)		

Primary Indicators (minimum of one is required; check all that apply)				Secondary Indicators (minimum of two required)			
☐	Surface Water (A1)	☐	Water-Stained Leaves (B9)	☐	Surface Soil Cracks (B6)	☐	
☒	High Water Table (A2)	☐	Aquatic Fauna (B13)	☐	Drainage Patterns (B10)	☐	
☒	Saturation (A3)	☐	Marl Deposits (B15)	☐	Moss Trim Lines (B16)	☐	
☐	Water Marks (B1)	☐	Hydrogen Sulfide Odor (C1)	☐	Dry-Season Water Table (C2)	☐	
☐	Sediment Deposits (B2)	☐	Oxidized Rhizospheres on Living	☐	Crayfish Burrows (C8)	☐	
☐	Drift Deposits (B3)	☐	Roots (C3)	☐	Saturation Visible on Aerial Imagery	☐	
☐	Algal Mat or Crust (B4)	☐	Presence of Reduced Iron (C4)	☐	(C9)	☐	
☐	Iron Deposits (B5)	☐	Recent Iron Reduction in Tilled	☐	Stunted or Stressed Plants (D1)	☒	
☐	Inundation Visible on Aerial	☐	Soils (C6)	☐	Geomorphic Position (D2)	☐	
☐	Imagery (B7)	☐	Thin Muck Surface (C7)	☐	Shallow Aquitard (D3)	☒	
☐	Sparsely Vegetated Concave	☐	Other (Explain in Remarks)	☒	FAC-Neutral Test (D5)	☐	
☐	Surface (B8)			☐	Microtopographic Relief (D4)		

Field Observations:				Indicators of wetland hydrology present? <u>Y</u>	
Surface water present?	Yes <u> </u>	No <u> </u>	X <u> </u>	Depth (inches):	<u> </u>
Water table present?	Yes <u> X </u>	No <u> </u>	<u> </u>	Depth (inches):	<u> 1 </u>
Saturation present?	Yes <u> X </u>	No <u> </u>	<u> </u>	Depth (inches):	<u> 0 </u>
(includes capillary fringe)					
Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:					
Remarks:					

						50/20 Thresholds		
						20%	20%	50%
Tree Stratum	Plot Size (30' Radius)		Absolute % Cover	Dominant Species	Indicator Status	Tree Stratum	0	0
1	--					Sapling/Shrub Stratum	4	10
2	--					Herb Stratum	18	45
3	--					Woody Vine Stratum	0	0
4	--							
5	--							
6	--							
7	--							
8	--							
9	--							
10	--		0	= Total Cover				
Sapling/Shrub Stratum	Plot Size (15' Radius)		Absolute % Cover	Dominant Species	Indicator Status			
1	<i>Salix interior</i> -- Sandbar Willow		10	Y	FACW			
2	<i>Alnus incana</i> -- Speckled Alder		5	Y	FACW			
3	<i>Populus balsamifera</i> -- Balsam Poplar		5	Y	FACW			
4	--							
5	--							
6	--							
7	--							
8	--							
9	--							
10	--		20	= Total Cover				
Herb Stratum	Plot Size (5' Radius)		Absolute % Cover	Dominant Species	Indicator Status			
1	<i>Calamagrostis canadensis</i> -- Bluejoint		80	Y	OBL			
2	<i>Phalaris arundinacea</i> -- Reed Canary Grass		10	N	FACW			
3	--							
4	--							
5	--							
6	--							
7	--							
8	--							
9	--							
10	--							
11	--							
12	--							
13	--							
14	--							
15	--		90	= Total Cover				
Woody Vine Stratum	Plot Size (30' Radius)		Absolute % Cover	Dominant Species	Indicator Status			
1	--							
2	--							
3	--							
4	--							
5	--							
			0	= Total Cover				
						Dominance Test Worksheet Number of Dominant Species that are OBL, FACW, or FAC: <u>4</u> (A) Total Number of Dominant Species Across all Strata: <u>4</u> (B) Percent of Dominant Species that are OBL, FACW, or FAC: <u>100.00%</u> (A/B)		
						Prevalence Index Worksheet Total % Cover of: OBL species <u>80</u> x 1 = <u>80</u> FACW species <u>30</u> x 2 = <u>60</u> FAC species <u>0</u> x 3 = <u>0</u> FACU species <u>0</u> x 4 = <u>0</u> UPL species <u>0</u> x 5 = <u>0</u> Column totals <u>110</u> (A) <u>140</u> (B) Prevalence Index = B/A = <u>1.27</u>		
						Hydrophytic Vegetation Indicators: Rapid test for hydrophytic vegetation X Dominance test is >50% X Prevalence index is >3.0* Morphological adaptations* (provide supporting data in Remarks or on a separate sheet) Problematic hydrophytic vegetation* (explain) *Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic		
						Definitions of Vegetation Strata: Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines - All woody vines greater than 3.28 ft in height.		
						Hydrophytic vegetation present? <u>Y</u>		
Remarks: (Include photo numbers here or on a separate sheet)								
Note: This data sheet has been adapted to use the 2012 National Wetland Plant List: Robert W. Lichvar and John T. Kartesz. 2009. North American Digital Flora: National Wetland Plant List, version 2.4.0 (https://wetland_plants.usace.army.mil/). U.S. Army Corps of Engineers, Engineer Research and Development Center, Cold Regions Research and Engineering Laboratory, Hanover, NH, and BONAP, Chapel Hill, NC. (2012)								

Sampling Point: 17-2w

[illegible]

**Location: PL=Pore Lining, M=Matrix

Indicators for Problematic Hydric Soils:

- *Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Hydric soil present? Y

Northcentral and Northeast Region

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: <u>Eveleth-Gilbert-Virginia School</u>		City/County: <u>Eveleth/St. Louis</u>		Sampling Date: <u>6/14/19</u>	
Applicant/Owner: <u>Kimley-Horn And Associates, Inc.</u>		State: <u>Minnesota</u>		Sampling Point: <u>17-3u</u>	
Investigator(s): <u>Rebecca Budhn</u>		Section, Township, Range: <u>S29, T58N, R17W</u>			
Landform (hillslope, terrace, etc.): <u>backslope</u>		Local relief (concave, convex, none): <u>convex</u>			
Slope (°): <u>10%</u>		Lat.: <u>47.475275</u>		Long.: <u>-92.520397</u>	
		Datum: <u>NAD 1983 UTM Zone 15N</u>			
Soil Map Unit Name: <u>Eveleth-Eaglesnest-Conic complex, bouldery, 6-18% slopes, rocky</u>		NWVI Classification: <u>none</u>			
Are climatic/hydrologic conditions of the site typical for this time of the year?				<u>Yes</u> (If no, explain in remarks)	
Are vegetation <u> </u> , soil <u> </u> , or hydrology <u> </u> significantly disturbed?		Are "normal circumstances" present? <u>Yes</u>			
Are vegetation <u> </u> , soil <u> </u> , or hydrology <u> </u> naturally problematic?					
(If needed, explain any answers in remarks)					

SUMMARY OF FINDINGS

Hydrophytic vegetation present?	<u> N </u>	Is the sampled area within a wetland? <u> N </u> If yes, optional wetland site ID: _____
Hydric soil present?	<u> N </u>	
Indicators of wetland hydrology present?	<u> N </u>	
Remarks: (Explain alternative procedures here or in a separate report.)		

HYDROLOGY

Primary Indicators (minimum of one is required; check all that apply)			Secondary Indicators (minimum of two required)		
☐ Surface Water (A1)	☐	☐ Water-Stained Leaves (B9)	☐	☐	☐ Surface Soil Cracks (B6)
☐ High Water Table (A2)	☐	☐ Aquatic Fauna (B13)	☐	☐	☐ Drainage Patterns (B10)
☐ Saturation (A3)	☐	☐ Marl Deposits (B15)	☐	☐	☐ Moss Trim Lines (B16)
☐ Water Marks (B1)	☐	☐ Hydrogen Sulfide Odor (C1)	☐	☐	☐ Dry-Season Water Table (C2)
☐ Sediment Deposits (B2)	☐	☐ Oxidized Rhizospheres on Living	☐	☐	☐ Crayfish Burrows (C8)
☐ Drift Deposits (B3)	☐	☐ Roots (C3)	☐	☐	☐ Saturation Visible on Aerial Imagery
☐ Algal Mat or Crust (B4)	☐	☐ Presence of Reduced Iron (C4)	☐	☐	☐ (C9)
☐ Iron Deposits (B5)	☐	☐ Recent Iron Reduction in Tilled	☐	☐	☐ Stunted or Stressed Plants (D1)
☐ Inundation Visible on Aerial	☐	☐ Soils (C6)	☐	☐	☐ Geomorphic Position (D2)
☐ Imagery (B7)	☐	☐ Thin Muck Surface (C7)	☐	☐	☐ Shallow Aquitard (D3)
☐ Sparsely Vegetated Concave	☐	☐ Other (Explain in Remarks)	☐	☐	☐ FAC-Neutral Test (D5)
☐ Surface (B8)	☐		☐	☐	☐ Microtopographic Relief (D4)
Field Observations:			Indicators of wetland hydrology present?		
Surface water present?	Yes ☐	No ☐ X	Depth (inches):		
Water table present?	Yes ☐	No ☐ X	Depth (inches):		
Saturation present?	Yes ☐	No ☐ X	Depth (inches):		
(includes capillary fringe)			N		
Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:					
Remarks:					

VEGETATION - Use scientific names of plants

						5020 Thresholds		20%	50%
Tree Stratum	Plot Size (30' Radius)	Absolute % Cover	Dominant Species	Indicator Status		Tree Stratum	0	0	
1	--					Sapling/Shrub Stratum	2	5	
2	--					Herb Stratum	16	40	
3	--					Woody Vine Stratum	0	0	
4	--								
5	--								
6	--								
7	--								
8	--								
9	--								
10	--								
		0 = Total Cover							
Sapling/Shrub Stratum	Plot Size (15' Radius)	Absolute % Cover	Dominant Species	Indicator Status					
1	<i>Pinus strobus</i> -- Eastern White Pine	10	Y	FACU					
2	--								
3	--								
4	--								
5	--								
6	--								
7	--								
8	--								
9	--								
10	--								
		10 = Total Cover							
Herb Stratum	Plot Size (5' Radius)	Absolute % Cover	Dominant Species	Indicator Status					
1	<i>Poa pratensis</i> -- Kentucky Blue Grass	30	Y	FACU					
2	<i>Carex gracillima</i> -- Graceful Sedge	20	Y	FACU					
3	<i>Rubus idaeus</i> -- Common Red Raspberry	15	N	FAC					
4	<i>Equisetum arvense</i> -- Field Horsetail	10	N	FAC					
5	<i>Trifolium hybridum</i> -- Alsike Clover	5	N	FACU					
6	--								
7	--								
8	--								
9	--								
10	--								
11	--								
12	--								
13	--								
14	--								
15	--								
		80 = Total Cover							
Woody Vine Stratum	Plot Size (30' Radius)	Absolute % Cover	Dominant Species	Indicator Status					
1	--								
2	--								
3	--								
4	--								
5	--								
		0 = Total Cover							
Dominance Test Worksheet									
Number of Dominant Species that are OBL,									
FACW, or FAC:						0	(A)		
Total Number of Dominant Species Across all Strata:						3	(B)		
Percent of Dominant Species that are OBL, FACW, or FAC:						0.00%	(A/B)		
Prevalence Index Worksheet									
Total % Cover of:									
OBL species						0	x 1 =	0	
FACW species						0	x 2 =	0	
FAC species						25	x 3 =	75	
FACU species						65	x 4 =	260	
UPL species						0	x 5 =	0	
Column totals						90	(A)	335 (B)	
Prevalence Index = B/A =						3.72			
Hydrophytic Vegetation Indicators:									
☐ Rapid test for hydrophytic vegetation									
☐ Dominance test is >50%									
☐ Prevalence index is <3.0*									
Morphological adaptations* (provide supporting data in Remarks or on a separate sheet)									
Problematic hydrophytic vegetation* (explain)									
*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic									
Definitions of Vegetation Strata:									
Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.									
Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.									
Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.									
Woody vines - All woody vines greater than 3.28 ft in height.									
Hydrophytic vegetation present?						N			
Remarks: (Include photo numbers here or on a separate sheet)									

SOIL Sampling Point: 17-3u

Sampling Point: 17-3u

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

[illegible]

*Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains

**Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

Indicators for Problematic Hydric Soils:

- | | | |
|---|----------------------------|--|
| ☐ Histosol (A1) | Polyvalue Below Surface | ☐ 2 cm Muck (A10) (LRR K, L, MLRA 149B |
| ☐ Histic Epipedon (A2) | (S8) (LRR R, MLRA 149B) | ☐ Coast Prairie Redox (A16) (LRR K, L, R) |
| ☐ Black Histic (A3) | Thin Dark Surface (S9) | ☐ 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) |
| ☐ Hydrogen Sulfide (A4) | (LRR R, MLRA 149B | ☐ Dark Surface (S7) (LRR K, L) |
| ☐ Stratified Layers (A5) | Loamy Mucky Mineral (F1) | ☐ Polyvalue Below Surface (S8) (LRR K, L) |
| ☐ Depleted Below Dark Surface (A11) | (LRR K, L) | ☐ Thin Dark Surface (S9) (LRR K, L) |
| ☐ Thick Dark Surface (A12) | Loamy Gleyed Matrix (F2) | ☐ Iron-Manganese Masses (F12) (LRR K, L, R) |
| ☐ Sandy Mucky Mineral (S1) | Depleted Matrix (F3) | ☐ Piedmont Floodplain Soils (F19) (MLRA 149B) |
| ☐ Sandy Gleyed Matrix (S4) | Redox Dark Surface (F6) | ☐ Mesic Spodic (Ta6) (MLRA 144A, 145, 149B) |
| ☐ Sandy Redox (S5) | Depleted Dark Surface (F7) | ☐ Red Parent Material (TF2) |
| ☐ Stripped Matrix (S6) | Redox Depressions (F8) | ☐ Very Shallow Dark Surface (TF12) |
| ☐ Dark Surface (S7) (LRR R, MLRA 149B) | | ☐ Other (Explain in Remarks) |

*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):

Type: Rock

Depth (inches): 8

Hydric soil present? N

Remarks:

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WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Eveleth-Gilbert-Virginia School City/County: Eveleth/St. Louis Sampling Date: 6/14/19
 Applicant/Owner: Kimley-Horn and Associates, Inc. State: Minnesota Sampling Point: 17-3w
 Investigator(s): Rebecca Budhn Section, Township, Range: S29, T58N, R17W
 Landform (hillslope, terrace, etc.): swale Local relief (concave, convex, none): concave
 Slope (%): 1% Lat.: 47.475286 Long.: -92.520573 Datum: NAD 1983 UTM Zone 15N
 Soil Map Unit Name: Eveleth-Eaglesnest-Conic complex, bouldery, 6-18% slopes, rocky NWI Classification: none
 Are climatic/hydrologic conditions of the site typical for this time of the year? Yes (If no, explain in remarks)
 Are vegetation , soil , or hydrology significantly disturbed? Are "normal
 Are vegetation , soil , or hydrology naturally problematic? circumstances" present? Yes
 (If needed, explain any answers in remarks)

SUMMARY OF FINDINGS

Hydrophytic vegetation present?	<u>Y</u>	Is the sampled area within a wetland?	<u>Y</u>
Hydric soil present?	<u>Y</u>		
Indicators of wetland hydrology present?	<u>Y</u>	If yes, optional wetland site ID:	<u>Wetland 17</u>
Remarks: (Explain alternative procedures here or in a separate report.)			

HYDROLOGY

Primary Indicators (minimum of one is required; check all that apply) ☐ Surface Water (A1) ☐ Water-Stained Leaves (B9) ☐ High Water Table (A2) ☐ Aquatic Fauna (B13) ☒ Saturation (A3) ☐ Marl Deposits (B15) ☐ Water Marks (B1) ☐ Hydrogen Sulfide Odor (C1) ☐ Sediment Deposits (B2) ☐ Oxidized Rhizospheres on Living ☐ Drift Deposits (B3) ☐ Roots (C3) ☐ Algal Mat or Crust (B4) ☐ Presence of Reduced Iron (C4) ☐ Iron Deposits (B5) ☐ Recent Iron Reduction in Tilled ☐ Inundation Visible on Aerial ☐ Soils (C6) ☐ Imagery (B7) ☐ Thin Muck Surface (C7) ☐ Sparsely Vegetated Concave ☐ Other (Explain in Remarks) ☐ Surface (B8)		Secondary Indicators (minimum of two required) ☐ Surface Soil Cracks (B6) ☐ Drainage Patterns (B10) ☐ Moss Trim Lines (B16) ☐ Dry-Season Water Table (C2) ☐ Crayfish Burrows (C8) ☐ Saturation Visible on Aerial Imagery ☐ (C9) ☐ Stunted or Stressed Plants (D1) ☐ Geomorphic Position (D2) ☐ Shallow Aquitard (D3) ☐ FAC-Neutral Test (D5) ☐ Microtopographic Relief (D4)
Field Observations: Surface water present? Yes <u> </u> No <u>X</u> Depth (inches): <u> </u> Water table present? Yes <u> </u> No <u>X</u> Depth (inches): <u> </u> Saturation present? Yes <u>X</u> No <u> </u> Depth (inches): <u>0</u> (includes capillary fringe)	Indicators of wetland hydrology present? <u>Y</u>	
Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

VEGETATION - Use scientific names of plants

					Sampling Point: 17-3w		
					50/20 Thresholds		
					20% 50%		
Tree Stratum Plot Size (30' Radius)					Absolute % Cover	Dominant Species	Indicator Status
1	<u>Abies balsamea</u>	<u>--</u>	<u>Balsam Fir</u>	25	Y	FAC	
2	<u> </u>	<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	
3	<u> </u>	<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	
4	<u> </u>	<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	
5	<u> </u>	<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	
6	<u> </u>	<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	
7	<u> </u>	<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	
8	<u> </u>	<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	
9	<u> </u>	<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	
10	<u> </u>	<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	
				25	=	Total Cover	
Sapling/Shrub Stratum Plot Size (15' Radius)					Absolute % Cover	Dominant Species	Indicator Status
1	<u>Alnus incana</u>	<u>--</u>	<u>Speckled Alder</u>	10	Y	FACW	
2	<u> </u>	<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	
3	<u> </u>	<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	
4	<u> </u>	<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	
5	<u> </u>	<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	
6	<u> </u>	<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	
7	<u> </u>	<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	
8	<u> </u>	<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	
9	<u> </u>	<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	
10	<u> </u>	<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	
				10	=	Total Cover	
Herb Stratum Plot Size (5' Radius)					Absolute % Cover	Dominant Species	Indicator Status
1	<u>Carex intumescens</u>	<u>--</u>	<u>Greater Bladder Sedge</u>	10	Y	FACW	
2	<u>Rubus pubescens</u>	<u>--</u>	<u>Dwarf Red Raspberry</u>	10	Y	FACW	
3	<u>Petasites frigidus</u>	<u>--</u>	<u>Arctic Sweet-Colt's-Foot</u>	5	N	FACW	
4	<u>Caltha palustris</u>	<u>--</u>	<u>Yellow Marsh-Marigold</u>	5	N	OBL	
5	<u> </u>	<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	
6	<u> </u>	<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	
7	<u> </u>	<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	
8	<u> </u>	<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	
9	<u> </u>	<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	
10	<u> </u>	<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	
11	<u> </u>	<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	
12	<u> </u>	<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	
13	<u> </u>	<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	
14	<u> </u>	<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	
15	<u> </u>	<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	
				30	=	Total Cover	
Woody Vine Stratum Plot Size (30' Radius)					Absolute % Cover	Dominant Species	Indicator Status
1	<u> </u>	<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	
2	<u> </u>	<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	
3	<u> </u>	<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	
4	<u> </u>	<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	
5	<u> </u>	<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	
				0	=	Total Cover	
Remarks: (Include photo numbers here or on a separate sheet)							
Note: This data sheet has been adapted to use the 2012 National Wetland Plant List: Robert W. Lichvar and John T. Kartesz. 2009. North American Digital Flora: National Wetland Plant List, version 2.4.0 (https://wetland.plants.usace.army.mil). U.S. Army Corps of Engineers, Engineer Research and Development Center, Cold Regions Research and Engineering Laboratory, Hanover, NH, and BONAP, Chapel Hill, NC. (2012)							

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 4 (A)
 Total Number of Dominant Species Across all Strata: 4 (B)
 Percent of Dominant Species that are OBL, FACW, or FAC: 100.00% (A/B)

Prevalence Index Worksheet

Total % Cover of:
 OBL species 5 x 1 = 5
 FACW species 35 x 2 = 70
 FAC species 25 x 3 = 75
 FACU species 0 x 4 = 0
 UPL species 0 x 5 = 0
 Column totals 65 (A) 150 (B)
 Prevalence Index = B/A = 2.31

Hydrophytic Vegetation Indicators:

 Rapid test for hydrophytic vegetation
X Dominance test is >50%
X Prevalence index is ≤3.0*
 Morphological adaptations* (provide supporting data in Remarks or on a separate sheet)
 Problematic hydrophytic vegetation* (explain)
 *Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Definitions of Vegetation Strata:

Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.
Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
Woody vines - All woody vines greater than 3.28 ft in height.

Hydrophytic vegetation present? Y

SOIL Sampling Point: 17-3w

Sampling Point: 17-3w

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

[illegible]

*Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains

**Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

Indicators for Problematic Hydric Soils:

- | | | |
|---|--|--|
| ☐ Histosol (A1) | Polyvalue Below Surface | ☐ 2 cm Muck (A10) (LRR K, L, MLRA 149B) |
| ☐ Histic Epipedon (A2) | (S8) (LRR R, MLRA 149B) | ☐ Coast Prairie Redox (A16) (LRR K, L, R) |
| ☐ Black Histic (A3) | Thin Dark Surface (S9) | ☐ 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) |
| ☐ Hydrogen Sulfide (A4) | (LRR R, MLRA 149B) | ☐ Dark Surface (S7) (LRR K, L) |
| ☐ Stratified Layers (A5) | Loamy Mucky Mineral (F1) | ☐ Polyvalue Below Surface (S8) (LRR K, L) |
| ☒ Depleted Below Dark Surface (A11) | (LRR K, L) | ☐ Thin Dark Surface (S9) (LRR K, L) |
| ☐ Thick Dark Surface (A12) | Loamy Gleyed Matrix (F2) | ☐ Iron-Manganese Masses (F12) (LRR K, L, R) |
| ☐ Sandy Mucky Mineral (S1) | ☒ Depleted Matrix (F3) | ☐ Piedmont Floodplain Soils (F19) (MLRA 149B) |
| ☐ Sandy Gleyed Matrix (S4) | Redox Dark Surface (F6) | ☐ Mesic Spodic (TA6) (MLRA 144A, 145, 149B) |
| ☐ Sandy Redox (S5) | Depleted Dark Surface (F7) | ☐ Red Parent Material (TF2) |
| ☐ Stripped Matrix (S6) | Redox Depressions (F8) | ☐ Very Shallow Dark Surface (TF12) |
| ☐ Dark Surface (S7) (LRR R, MLRA 149B) | | ☐ Other (Explain in Remarks) |

*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):

Type: Rock

Depth (inches): 12

Hydric soil present? Y

Remarks:

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WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Eveleth-Gilbert-Virginia School City/County: Eveleth/St. Louis Sampling Date: 6/17/19
Applicant/Owner: Kimley-Horn and Associates, Inc. State: Minnesota Sampling Point: 18-1u
Investigator(s): Rebecca Buduhn Section, Township, Range: S29, T58N, R17W
Landform (hillslope, terrace, etc.): footslope Local relief (concave, convex, none): none
Slope (%): 10% Lat.: 47.473576 Long.: -92.519483 Datum: NAD 1983 UTM Zone 15N
Soil Map Unit Name: Eveleth-Eaglesnest-Conic complex, bouldery 6-18% slopes, very to NWI Classification: none
Are climatic/hydrologic conditions of the site typical for this time of the year? Yes (If no, explain in remarks)
Are vegetation , soil , or hydrology significantly disturbed? Are "normal
Are vegetation , soil , or hydrology naturally problematic? circumstances" present? Yes
(If needed, explain any answers in remarks)

SUMMARY OF FINDINGS

Hydrophytic vegetation present?	<u>Y</u>	Is the sampled area within a wetland?	<u>N</u>
Hydric soil present?	<u>N</u>		
Indicators of wetland hydrology present?	<u>N</u>	If yes, optional wetland site ID: _____	
Remarks: (Explain alternative procedures here or in a separate report.)			

HYDROLOGY

Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)	
☐ Surface Water (A1)	☐ Water-Stained Leaves (B9)	☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Aquatic Fauna (B13)	☐ Drainage Patterns (B10)	
☐ Saturation (A3)	☐ Marl Deposits (B15)	☐ Moss Trim Lines (B16)	
☐ Water Marks (B1)	☐ Hydrogen Sulfide Odor (C1)	☐ Dry-Season Water Table (C2)	
☐ Sediment Deposits (B2)	☐ Oxidized Rhizospheres on Living	☐ Crayfish Burrows (C8)	
☐ Drift Deposits (B3)	☐ Roots (C3)	☐ Saturation Visible on Aerial Imagery	
☐ Algal Mat or Crust (B4)	☐ Presence of Reduced Iron (C4)	☐ (C9)	
☐ Iron Deposits (B5)	☐ Recent Iron Reduction in Tilled	☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial	☐ Soils (C6)	☐ Geomorphic Position (D2)	
☐ Imagery (B7)	☐ Thin Muck Surface (C7)	☐ Shallow Aquitard (D3)	
☐ Sparsely Vegetated Concave	☐ Other (Explain in Remarks)	☐ FAC-Neutral Test (D5)	
☐ Surface (B8)		☐ Microtopographic Relief (D4)	
Field Observations:		Indicators of wetland hydrology present? <u>N</u>	
Surface water present?	Yes <u> </u> No <u>X</u> Depth (inches): <u> </u>		
Water table present?	Yes <u> </u> No <u>X</u> Depth (inches): <u> </u>		
Saturation present?	Yes <u> </u> No <u>X</u> Depth (inches): <u> </u>		
(includes capillary fringe)			
Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks:			

VEGETATION - Use scientific names of plants

Tree Stratum					Plot Size (30' Radius)	Absolute % Cover	Dominant Species	Indicator Status	Sampling Point: 18-1u		
1	<u>Acer rubrum</u>	--	<u>Red Maple</u>			30	Y	FAC	50/20 Thresholds		
2	<u>Pinus resinosa</u>	--	<u>Red Pine</u>			15	Y	FACU	20%	50%	
3	<u>Picea glauca</u>	--	<u>White Spruce</u>			10	N	FACU	Tree Stratum	11	28
4		--							Sapling/Shrub Stratum	3	8
5		--							Herb Stratum	17	43
6		--							Woody Vine Stratum	0	0
7		--							Dominance Test Worksheet		
8		--							Number of Dominant Species that are OBL, FACW, or FAC: <u>4</u> (A)		
9		--							Total Number of Dominant Species Across all Strata: <u>6</u> (B)		
10		--				55	=	Total Cover	Percent of Dominant Species that are OBL, FACW, or FAC: <u>66.67%</u> (A/B)		
Sapling/Shrub Stratum					Plot Size (15' Radius)	Absolute % Cover	Dominant Species	Indicator Status	Prevalence Index Worksheet		
1	<u>Alnus incana</u>	--	<u>Speckled Alder</u>			15	Y	FACW	Total % Cover of: <u> </u>		
2		--							OBL species <u>0</u> x 1 = <u>0</u>		
3		--							FACW species <u>35</u> x 2 = <u>70</u>		
4		--							FAC species <u>50</u> x 3 = <u>150</u>		
5		--							FACU species <u>40</u> x 4 = <u>160</u>		
6		--							UPL species <u>30</u> x 5 = <u>150</u>		
7		--							Column totals <u>155</u> (A) <u>530</u> (B)		
8		--							Prevalence Index = B/A = <u>3.42</u>		
9		--							Hydrophytic Vegetation Indicators:		
10		--				15	=	Total Cover	<u> </u> Rapid test for hydrophytic vegetation		
Herb Stratum					Plot Size (5' Radius)	Absolute % Cover	Dominant Species	Indicator Status	<u>X</u> Dominance test is >50%		
1	<u>Eurybia macrophylla</u>	--	<u>Large-Leaf Wood-Aster</u>			30	Y	UPL	<u> </u> Prevalence index is ≤3.0*		
2	<u>Dryopteris carthusiana</u>	--	<u>Spinulose Wood Fern</u>			20	Y	FACW	Morphological adaptations* (provide supporting data in Remarks or on a separate sheet)		
3	<u>Athyrium Filix-femina</u>	--	<u>Lady Fern</u>			20	Y	FAC	<u> </u> Problematic hydrophytic vegetation* (explain)		
4	<u>Fragaria virginiana</u>	--	<u>Virginia Strawberry</u>			10	N	FACU	*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic		
5	<u>Taraxacum officinale</u>	--	<u>Common Dandelion</u>			5	N	FACU	Definitions of Vegetation Strata:		
6		--							Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.		
7		--							Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.		
8		--							Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.		
9		--							Woody vines - All woody vines greater than 3.28 ft in height.		
10		--				85	=	Total Cover	Hydrophytic vegetation present? <u>Y</u>		
Woody Vine Stratum					Plot Size (30' Radius)	Absolute % Cover	Dominant Species	Indicator Status	Remarks: (Include photo numbers here or on a separate sheet)		
1		--							Note: This data sheet has been adapted to use the 2012 National Wetland Plant List:		
2		--							Robert W. Lichvar and John T. Kartesz. 2009. North American Digital Flora: National Wetland Plant List, version 2.4.0 (https://wetland.plants.usace.army.mil), U.S. Army Corps of Engineers, Engineer Research and Development Center, Cold Regions Research and Engineering Laboratory, Hanover, NH, and BONAP, Chapel Hill, NC. (2012)		
3		--									
4		--									
5		--				0	=	Total Cover			

SOIL

Sampling Point: 18-1u

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

[illegible]

*Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains

**Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

Indicators for Problematic Hydric Soils:

- | | | |
|---|----------------------------|--|
| ☐ Histosol (A1) | Polyvalue Below Surface | ☐ 2 cm Muck (A10) (LRR K, L, MLRA 149B |
| ☐ Histic Epipedon (A2) | (S8) (LRR R, MLRA 149B) | ☐ Coast Prairie Redox (A16) (LRR K, L, R) |
| ☐ Black Histic (A3) | Thin Dark Surface (S9) | ☐ 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) |
| ☐ Hydrogen Sulfide (A4) | (LRR R, MLRA 149B | ☐ Dark Surface (S7) (LRR K, L) |
| ☐ Stratified Layers (A5) | Loamy Mucky Mineral (F1) | ☐ Polyvalue Below Surface (S8) (LRR K, L) |
| ☐ Depleted Below Dark Surface (A11) | (LRR K, L) | ☐ Thin Dark Surface (S9) (LRR K, L) |
| ☐ Thick Dark Surface (A12) | Loamy Gleyed Matrix (F2) | ☐ Iron-Manganese Masses (F12) (LRR K, L, R) |
| ☐ Sandy Mucky Mineral (S1) | Depleted Matrix (F3) | ☐ Piedmont Floodplain Soils (F19) (MLRA 149B) |
| ☐ Sandy Gleyed Matrix (S4) | Redox Dark Surface (F6) | ☐ Mesic Spodic (TA6) (MLRA 144A, 145, 149B) |
| ☐ Sandy Redox (S5) | Depleted Dark Surface (F7) | ☐ Red Parent Material (TF2) |
| ☐ Stripped Matrix (S6) | Redox Depressions (F8) | ☐ Very Shallow Dark Surface (TF12) |
| ☐ Dark Surface (S7) (LRR R, MLRA 149B) | | ☐ Other (Explain in Remarks) |

*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):

Type: Rock

Depth (inches): 4

Hydric soil present? N

Remarks:

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Project/Site:	Eveleth-Gilbert-Virginia School		City/County:	Eveleth/St. Louis	Sampling Date:	6/17/19	
Applicant/Owner:	Kirmley-Horn and Associates, Inc.		State:	Minnesota	Sampling Point:	18-1w	
Investigator/s:	Rebecca Buduhn		Section, Township, Range:	S29, T58N, R17W			
Landform (hillslope, terrace, etc.):	toeslope		Local relief (concave, convex, none):	none			
Slope (°):	0%	Lat.: 47.47352	Long.: -92.51956	Datum:	NAD 1983 UTM Zone 15N		
Soil Map Unit Name:	Eveleth-Eaglesnest-Conic complex, bouldery 6-18% slopes, very ro NWDI Classification: none						
Are climatic/hydrologic conditions of the site typical for this time of the year? Yes (If no, explain in remarks)							
Are vegetation _____, soil _____, or hydrology _____ significantly disturbed?	Are "normal circumstances" present? Yes						
(If needed, explain any answers in remarks)							

Hydrophytic vegetation present?	<u>Y</u>	Is the sampled area within a wetland? <u>Y</u> If yes, optional wetland site ID: <u>Wetland 18</u>
Hydric soil present?	<u>Y</u>	
Indicators of wetland hydrology present?	<u>Y</u>	
Remarks: (Explain alternative procedures here or in a separate report.)		

Primary Indicators (minimum of one is required; check all that apply)				Secondary Indicators (minimum of two required)	
☐	Surface Water (A1)	☐	Water-Stained Leaves (B9)	☐	Surface Soil Cracks (B6)
☒	High Water Table (A2)	☐	Aquatic Fauna (B13)	☐	Drainage Patterns (B10)
☒	Saturation (A3)	☐	Marl Deposits (B15)	☐	Moss Trim Lines (B16)
☐	Water Marks (B1)	☐	Hydrogen Sulfide Odor (C1)	☐	Dry-Season Water Table (C2)
☐	Sediment Deposits (B2)	☐	Oxidized Rhizospheres on Living	☐	Crayfish Burrows (C8)
☐	Drift Deposits (B3)	☐	Roots (C3)	☐	Saturation Visible on Aerial Imagery
☐	Algal Mat or Crust (B4)	☐	Presence of Reduced Iron (C4)	☐	(C9)
☐	Iron Deposits (B5)	☐	Recent Iron Reduction in Tilled	☐	Stunted or Stressed Plants (D1)
☐	Inundation Visible on Aerial	☐	Soils (C6)	☐	Geomorphic Position (D2)
☐	Imagery (B7)	☐	Thin Muck Surface (C7)	☐	Shallow Aquitard (D3)
☐	Sparsely Vegetated Concave	☐	Other (Explain in Remarks)	☐	FAC-Neutral Test (D5)
☐	Surface (B8)			☐	Microtopographic Relief (D4)

Field Observations:				Indicators of wetland hydrology present? <u>Y</u>	
Surface water present?	Yes	<u> </u>	No	<u>X</u>	Depth (inches): <u> </u>
Water table present?	Yes	<u>X</u>	No	<u> </u>	Depth (inches): <u> 4 </u>
Saturation present?	Yes	<u>X</u>	No	<u> </u>	Depth (inches): <u> 0 </u>
(includes capillary fringe)					
Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:					
Remarks:					

Tree Stratum				Plot Size (30' Radius)		Absolute % Cover	Dominant Species	Indicator Status	50/20 Thresholds		20%	50%
1	<i>Fraxinus nigra</i>	--	<i>Black Ash</i>	10	Y	FACW	Tree Stratum		4	10		
2	<i>Populus tremuloides</i>	--	<i>Quaking Aspen</i>	10	Y	FAC	Sapling/Shrub Stratum		5	13		
3							Herb Stratum		15	39		
4							Woody Vine Stratum		0	0		
5							Dominance Test Worksheet					
6							Number of Dominant Species that are OBL, FACW, or FAC: _____ 5 (A)					
7							Total Number of Dominant Species Across all Strata: _____ 5 (B)					
8							Percent of Dominant Species that are OBL, FACW, or FAC: _____ 100.00% (A/B)					
9												
10				20	= Total Cover							
Sapling/Shrub Stratum				Plot Size (15' Radius)		Absolute % Cover	Dominant Species	Indicator Status				
1	<i>Alnus incana</i>	--	<i>Speckled Alder</i>	25	Y	FACW	Prevalence Index Worksheet					
2							Total % Cover of:					
3							OBL species _____ 37 x 1 = _____ 37					
4							FACW species _____ 50 x 2 = _____ 100					
5							FAC species _____ 30 x 3 = _____ 90					
6							FACU species _____ 5 x 4 = _____ 20					
7							UPL species _____ 0 x 5 = _____ 0					
8							Column totals _____ 122 (A) _____ 247 (B)					
9							Prevalence Index = B/A = _____ 2.02					
10				25	= Total Cover							
Herb Stratum				Plot Size (5' Radius)		Absolute % Cover	Dominant Species	Indicator Status	Hydrophytic Vegetation Indicators:			
1	<i>Calamagrostis canadensis</i>	--	<i>Bluejoint</i>	20	Y	OBL	☒ Rapid test for hydrophytic vegetation					
2	<i>Equisetum arvense</i>	--	<i>Field Horsetail</i>	20	Y	FAC	☒ Dominance test is >50%					
3	<i>Impatiens capensis</i>	--	<i>Spotted Touch-Me-Not</i>	15	N	FACW	☒ Prevalence index is ≤3.0*					
4	<i>Carex gynandra</i>	--	<i>Nodding Sedge</i>	15	N	OBL	Morphological adaptations* (provide supporting data in Remarks or on a separate sheet)					
5	<i>Fragaria virginiana</i>	--	<i>Virginia Strawberry</i>	5	N	FACU	Problematic hydrophytic vegetation* (explain)					
6	<i>Carex stricta</i>	--	<i>Upright Sedge</i>	2	N	OBL	*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic					
7												
8												
9												
10												
11												
12												
13												
14												
15				77	= Total Cover		Definitions of Vegetation Strata:					
Woody Vine Stratum				Plot Size (30' Radius)		Absolute % Cover	Dominant Species	Indicator Status	Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.			
1							Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.					
2							Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.					
3							Woody vines - All woody vines greater than 3.28 ft in height.					
4							Hydrophytic vegetation present? _____ Y _____					
5				0	= Total Cover							
Remarks: (Include photo numbers here or on a separate sheet)												
Note: This data sheet has been adapted to use the 2012 National Wetland Plant List: Robert W. Lichvar and John T. Kartesz. 2009. North American Digital Flora: National Wetland Plant List, version 2.4.0 (https://wetland_plants.usace.army.mil/). U.S. Army Corps of Engineers, Engineer Research and Development Center, Cold Regions Research and Engineering Laboratory, Hanover, NH, and BONAP, Chapel Hill, NC. (2012)												

SOIL	Sampling Point:	18-1w
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Sampling Point: 18-1w

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

[illegible]

*Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains

**Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

Indicators for Problematic Hydric Soils:

- | | | |
|---|----------------------------------|--|
| ___ Histolol (A1) | Polyvalve Below Surface | ___ 2 cm Muck (A10) (LRR K, L, MLRA 149B) |
| ___ Histic Epipedon (A2) | (S8) (LRR R, MLRA 149B) | ___ Coast Prairie Redox (A16) (LRR K, L, R) |
| ___ Black Histic (A3) | ___ Thin Dark Surface (S9) | ___ 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) |
| ___ Hydrogen Sulfide (A4) | (LRR R, MLRA 149B) | ___ Dark Surface (S7) (LRR K, L) |
| ___ Stratified Layers (A5) | ___ Loamy Mucky Mineral (F1) | ___ Polyvalve Below Surface (S8) (LRR K, L) |
| X Depleted Below Dark Surface (A11') | (LRR K, L) | ___ Thin Dark Surface (S9) (LRR K, L) |
| ___ Thick Dark Surface (A12) | ___ Loamy Gleyed Matrix (F2) | ___ Iron-Manganese Masses (F12) (LRR K, L, R) |
| ___ Sandy Mucky Mineral (S1) | X Depleted Matrix (F3) | ___ Piedmont Floodplain Soils (F19) (MLRA 149B) |
| ___ Sandy Gleyed Matrix (S4) | ___ Redox Dark Surface (F6) | ___ Mesic Spodic (TA6) (MLRA 144A, 145, 149B) |
| ___ Sandy Redox (S5) | ___ Depleted Dark Surface (F7) | ___ Red Parent Material (TF2) |
| ___ Stripped Matrix (S6) | ___ Redox Depressions (F8) | ___ Very Shallow Dark Surface (TF12) |
| ___ Dark Surface (S7) (LRR R, MLRA 149B) | ___ | ___ Other (Explain in Remarks) |

*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):

Type: Rock

Depth (inches): 12

Hydric soil present? Y

Remarks:

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WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Eveleth-Gilbert-Virginia School City/County: Eveleth/St. Louis Sampling Date: 6/17/19
Applicant/Owner: Kimley-Horn and Associates, Inc. State: Minnesota Sampling Point: 19-1u
Investigator(s): Rebecca Buduhn Section, Township, Range: S29, T58N, R17W
Landform (hillslope, terrace, etc.): backslope Local relief (concave, convex, none): none
Slope (%): 4% Lat.: 47.472946 Long.: -92.523359 Datum: NAD 1983 UTM Zone 15N
Soil Map Unit Name: Eveleth-Eaglesnest-Conic complex, bouldery, 6-18% slopes, very r NWI Classification: none
Are climatic/hydrologic conditions of the site typical for this time of the year? Yes (If no, explain in remarks)
Are vegetation , soil , or hydrology significantly disturbed? Are "normal
Are vegetation , soil , or hydrology naturally problematic? circumstances" present? Yes
(If needed, explain any answers in remarks)

SUMMARY OF FINDINGS

Hydrophytic vegetation present?	<u>N</u>	Is the sampled area within a wetland?	<u>N</u>
Hydric soil present?	<u>N</u>		
Indicators of wetland hydrology present?	<u>N</u>	If yes, optional wetland site ID: _____	
Remarks: (Explain alternative procedures here or in a separate report.)			

HYDROLOGY

Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)	
☐ Surface Water (A1)	☐ Water-Stained Leaves (B9)	☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Aquatic Fauna (B13)	☐ Drainage Patterns (B10)	
☐ Saturation (A3)	☐ Marl Deposits (B15)	☐ Moss Trim Lines (B16)	
☐ Water Marks (B1)	☐ Hydrogen Sulfide Odor (C1)	☐ Dry-Season Water Table (C2)	
☐ Sediment Deposits (B2)	☐ Oxidized Rhizospheres on Living	☐ Crayfish Burrows (C8)	
☐ Drift Deposits (B3)	☐ Roots (C3)	☐ Saturation Visible on Aerial Imagery	
☐ Algal Mat or Crust (B4)	☐ Presence of Reduced Iron (C4)	☐ (C9)	
☐ Iron Deposits (B5)	☐ Recent Iron Reduction in Tilled	☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial	☐ Soils (C6)	☐ Geomorphic Position (D2)	
☐ Imagery (B7)	☐ Thin Muck Surface (C7)	☐ Shallow Aquitard (D3)	
☐ Sparsely Vegetated Concave	☐ Other (Explain in Remarks)	☐ FAC-Neutral Test (D5)	
☐ Surface (B8)		☐ Microtopographic Relief (D4)	
Field Observations:		Indicators of wetland hydrology present? <u>N</u>	
Surface water present?	Yes <u> </u> No <u>X</u>	Depth (inches): <u> </u>	
Water table present?	Yes <u> </u> No <u>X</u>	Depth (inches): <u> </u>	
Saturation present?	Yes <u> </u> No <u>X</u>	Depth (inches): <u> </u>	
(includes capillary fringe)			
Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks:			

VEGETATION - Use scientific names of plants

Tree Stratum					Plot Size (30' Radius)	Absolute % Cover	Dominant Species	Indicator Status	Sampling Point: 19-1u				
1					<u>Picea glauca</u>	<u>--</u>	<u>White Spruce</u>	<u>10</u>	<u>Y</u>	<u>FACU</u>	50/20 Thresholds		
2					<u>Thuja occidentalis</u>	<u>--</u>	<u>Eastern Arborvitae</u>	<u>10</u>	<u>Y</u>	<u>FACW</u>	20% 50%		
3					<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	Tree Stratum 4 10		
4					<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	Sapling/Shrub Stratum 0 0		
5					<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	Herb Stratum 9 24		
6					<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	Woody Vine Stratum 0 0		
7					<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	Dominance Test Worksheet		
8					<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	Number of Dominant Species that are OBL, FACW, or FAC: <u>2</u> (A)		
9					<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	Total Number of Dominant Species Across all Strata: <u>5</u> (B)		
10					<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	Percent of Dominant Species that are OBL, FACW, or FAC: <u>40.00%</u> (A/B)		
						<u>20</u>	=	Total Cover			Prevalence Index Worksheet		
Sapling/Shrub Stratum					Plot Size (15' Radius)	Absolute % Cover	Dominant Species	Indicator Status	Total % Cover of:				
1					<u> </u>	<u> </u>	<u> </u>	<u> </u>	OBL species <u>0</u> x 1 = <u>0</u>				
2					<u> </u>	<u> </u>	<u> </u>	<u> </u>	FACW species <u>10</u> x 2 = <u>20</u>				
3					<u> </u>	<u> </u>	<u> </u>	<u> </u>	FAC species <u>10</u> x 3 = <u>30</u>				
4					<u> </u>	<u> </u>	<u> </u>	<u> </u>	FACU species <u>45</u> x 4 = <u>180</u>				
5					<u> </u>	<u> </u>	<u> </u>	<u> </u>	UPL species <u>2</u> x 5 = <u>10</u>				
6					<u> </u>	<u> </u>	<u> </u>	<u> </u>	Column totals <u>67</u> (A) <u>240</u> (B)				
7					<u> </u>	<u> </u>	<u> </u>	<u> </u>	Prevalence Index = B/A = <u>3.58</u>				
8					<u> </u>	<u> </u>	<u> </u>	<u> </u>	Hydrophytic Vegetation Indicators:				
9					<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u> Rapid test for hydrophytic vegetation				
10					<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u> Dominance test is >50%				
						<u>0</u>	=	Total Cover	<u> </u> Prevalence index is ≤3.0*				
Herb Stratum					Plot Size (5' Radius)	Absolute % Cover	Dominant Species	Indicator Status	Morphological adaptations* (provide supporting data in Remarks or on a separate sheet)				
1					<u>Dryopteris marginalis</u>	<u>--</u>	<u>Marginal Wood Fern</u>	<u>15</u>	<u>Y</u>	<u>FACU</u>	<u> </u> Problematic hydrophytic vegetation* (explain)		
2					<u>Maianthemum racemosum</u>	<u>--</u>	<u>Feathery False Solomon's-Ses</u>	<u>10</u>	<u>Y</u>	<u>FACU</u>	*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic		
3					<u>Athyrium Filix-femina</u>	<u>--</u>	<u>Lady Fern</u>	<u>10</u>	<u>Y</u>	<u>FAC</u>	Definitions of Vegetation Strata:		
4					<u>Fragaria virginiana</u>	<u>--</u>	<u>Virginia Strawberry</u>	<u>5</u>	<u>N</u>	<u>FACU</u>	Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.		
5					<u>Aralia nudicaulis</u>	<u>--</u>	<u>Wild Sarsaparilla</u>	<u>5</u>	<u>N</u>	<u>FACU</u>	Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.		
6					<u>Eurybia macrophylla</u>	<u>--</u>	<u>Large-Leaf Wood-Aster</u>	<u>2</u>	<u>N</u>	<u>UPL</u>	Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.		
7					<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	Woody vines - All woody vines greater than 3.28 ft in height.		
8					<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	Hydrophytic vegetation present? <u>N</u>		
9					<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	Remarks: (Include photo numbers here or on a separate sheet)		
10					<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	Note: This data sheet has been adapted to use the 2012 National Wetland Plant List:		
						<u>47</u>	=	Total Cover	Robert W. Lichvar and John T. Kartesz. 2009. North American Digital Flora: National Wetland Plant List, version 2.4.0 (https://wetland.plants.usace.army.mil), U.S. Army Corps of Engineers, Engineer Research and Development Center, Cold Regions Research and Engineering Laboratory, Hanover, NH, and BONAP, Chapel Hill, NC. (2012)				

SOIL	Sampling Point:	19-1u
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Sampling Point: 19-1u

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

[illegible]

*Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains

**Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

Indicators for Problematic Hydric Soils:

- | | | |
|---|----------------------------------|--|
| ___ Histosol (A1) | Polyvalue Below Surface | 2 cm Muck (A10) (LRR K, L, MLRA 149B) |
| ___ Histic Epipedon (A2) | (S8) (LRR R, MLRA 149B) | Coast Prairie Redox (A16) (LRR K, L, R) |
| ___ Black Histic (A3) | Thin Dark Surface (S9) | 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) |
| ___ Hydrogen Sulphide (A4) | (LRR R, MLRA 149B) | Dark Surface (S7) (LRR K, L) |
| ___ Stratified Layers (A5) | Loamy Mucky Mineral (F1) | Polyvalue Below Surface (S8) (LRR K, L) |
| ___ Depleted Below Dark Surface (A11') | (LRR K, L) | Thin Dark Surface (S9) (LRR K, L) |
| ___ Thick Dark Surface (A12) | Loamy Gleyed Matrix (F2) | Iron-Manganese Masses (F12) (LRR K, L, R) |
| ___ Sandy Mucky Mineral (S1) | Depleted Matrix (F3) | Piedmont Floodplain Soils (F19) (MLRA 149B) |
| ___ Sandy Gleyed Matrix (S4) | Redox Dark Surface (F6) | Mesic Podzol (TA6) (MLRA 144A, 145, 149B) |
| ___ Sandy Redox (S5) | Depleted Dark Surface (F7) | Red Parent Material (TF2) |
| ___ Stripped Matrix (S6) | Redox Depressions (F8) | Very Shallow Dark Surface (TF12) |
| ___ Dark Surface (S7) (LRR R, MLRA 149B) | | ___ Other (Explain in Remarks) |

*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):

Type: Rock

Depth (inches): 4

Hydric soil present? N

Remarks:

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Project/Site: Eveleth-Gilbert-Virginia School City/County: Eveleth/St. Louis Sampling Date: 6/17/19
 Applicant/Owner: Kimley-Horn and Associates, Inc. State: Minnesota Sampling Point: 19-1w
 Investigator/s: Rebecca Buduhn Section, Township, Range: S29, T58N, R17W
 Landform (hillslope, terrace, etc.): foothlope Local relief (concave, convex, none): none
 Slope (%): 0% Lat.: 47.472977 Long.: -92.523579 Datum: NAD 1983 UTM Zone 15N
 Soil Map Unit Name: Eveleth-Eaglesnest-Conic complex, bouldery, 6-18% slopes, very r NW1 Classification: none
 Are climatic/hydrologic conditions of the site typical for this time of the year? Yes (If no, explain in remarks)
 Are vegetation _____, soil _____, or hydrology _____ significantly disturbed? Are "normal
 Are vegetation _____, soil _____, or hydrology _____ naturally problematic? circumstances" present? Yes
 (If needed, explain any answers in remarks)

Hydrophytic vegetation present?	<u>Y</u>	Is the sampled area within a wetland? <u>Y</u>
Hydric soil present?	<u>Y</u>	
Indicators of wetland hydrology present?	<u>Y</u>	
Remarks: (Explain alternative procedures here or in a separate report.)		If yes, optional wetland site ID: <u>Wetland 19</u>

Primary Indicators (minimum of one is required; check all that apply)				Secondary Indicators (minimum of two required)	
☐	Surface Water (A1)	☐	Water-Stained Leaves (B9)	☐	Surface Soil Cracks (B6)
☒	High Water Table (A2)	☐	Aquatic Fauna (B13)	☐	Drainage Patterns (B10)
☒	Saturation (A3)	☐	Marl Deposits (B15)	☐	Moss Trim Lines (B16)
☐	Water Marks (B1)	☒	Hydrogen Sulfide Odor (C1)	☐	Dry-Season Water Table (C2)
☐	Sediment Deposits (B2)	☐	Oxidized Rhizospheres on Living	☐	Crayfish Burrows (C8)
☐	Drift Deposits (B3)	☐	Roots (C3)	☐	Saturation Visible on Aerial Imagery
☒	Algal Mat or Crust (B4)	☐	Presence of Reduced Iron (C4)	☐	(C9)
☐	Iron Deposits (B5)	☐	Recent Iron Reduction in Tilled	☐	Stunted or Stressed Plants (D1)
☐	Inundation Visible on Aerial	☐	Soils (C6)	☐	Geomorphic Position (D2)
☐	Imagery (B7)	☐	Thin Muck Surface (C7)	☐	Shallow Aquitard (D3)
☐	Sparsely Vegetated Concave	☐	Other (Explain in Remarks)	☐	FAC-Neutral Test (D5)
☐	Surface (B8)	☐		☐	Microtopographic Relief (D4)
Field Observations: Surface water present? Yes ☐ No ☒ Depth (inches): <u> </u> Water table present? Yes ☒ No ☐ Depth (inches): <u>5</u> Saturation present? Yes ☒ No ☐ Depth (inches): <u>2</u> (includes capillary fringe)				Indicators of wetland hydrology present? <u>Y</u>	
Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:					
Remarks:					

						50/20 Thresholds		20%	50%
Tree Stratum		Plot Size (30' Radius)	Absolute % Cover	Dominant Species	Indicator Status				
1	<i>Fraxinus nigra</i>	-- Black Ash	20	Y	FACW			8	20
2	<i>Populus tremuloides</i>	-- Quaking Aspen	20	Y	FAC			9	23
3								17	43
4								0	0
5									
6									
7									
8									
9									
10									
			40 = Total Cover						
Sapling/Shrub Stratum		Plot Size (15' Radius)	Absolute % Cover	Dominant Species	Indicator Status				
1	<i>Alnus incana</i>	-- Speckled Alder	25	Y	FACW				
2	<i>Acer negundo</i>	-- Ash-Leaf Maple	20	Y	FAC				
3									
4									
5									
6									
7									
8									
9									
10									
			45 = Total Cover						
Herb Stratum		Plot Size (5' Radius)	Absolute % Cover	Dominant Species	Indicator Status				
1	<i>Caltha palustris</i>	-- Yellow Marsh-Marigold	20	Y	OBL				
2	<i>Dryopteris carthusiana</i>	-- Spinulose Wood Fern	15	Y	FACW				
3	<i>Athyrium filix-femina</i>	-- Lady Fern	15	Y	FAC				
4	<i>Fragaria virginiana</i>	-- Virginia Strawberry	10	N	FACU				
5	<i>Equisetum arvense</i>	-- Field Horsetail	10	N	FAC				
6	<i>Rhamnus cathartica</i>	-- European Buckthorn	10	N	FAC				
7	<i>Carex intumescens</i>	-- Greater Bladder Sedge	5	N	FACW				
8									
9									
10									
11									
12									
13									
14									
15									
			85 = Total Cover						
Woody Vine Stratum		Plot Size (30' Radius)	Absolute % Cover	Dominant Species	Indicator Status				
1									
2									
3									
4									
5									
			0 = Total Cover						
Dominance Test Worksheet									
Number of Dominant Species that are OBL,									
FACW, or FAC:						7	(A)		
Total Number of Dominant Species Across all Strata:						7	(B)		
Percent of Dominant Species that are OBL, FACW, or FAC:						100.00%	(A/B)		
Prevalence Index Worksheet									
Total % Cover of:									
OBL species						20	x 1 =	20	
FACW species						65	x 2 =	130	
FAC species						75	x 3 =	225	
FACU species						10	x 4 =	40	
UPL species						0	x 5 =	0	
Column totals						170	(A)	415	(B)
Prevalence Index = B/A =								2.44	
Hydrophytic Vegetation Indicators:									
Rapid test for hydrophytic vegetation									
☒ Dominance test is >50%									

Sampling Point: 19-1w

[illegible]

**Location: PL=Pore Lining, M=Matrix

Indicators for Problematic Hydric Soils:

- *Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Hydric soil present? Y

Soil sample was very shallow because of the presence of rock/bedrock at 7 inches. Soils were saturated to the surface and hydrophytic vegetation was present. Based on the observations our professional judgement is that soils should be considered hydric.

Northcentral and Northeast Region

Project/Site:	Eveleth-Gilbert-Virginia School		City/County:	Eveleth/St. Louis	Sampling Date:	6/17/19	
Applicant/Owner:	Kirmley-Horn and Associates, Inc.		State:	Minnesota	Sampling Point:	19-2u	
Investigator/s:	Rebecca Buduhn		Section, Township, Range:	S29, T58N, R17W			
Landform (hillslope, terrace, etc.):	backslope		Local relief (concave, convex, none):	none			
Slope (°):	6%	Lat.: 47.470582	Long.: -92.523086	Datum:	NAD 1983 UTM Zone 15N		
Soil Map Unit Name:	Eveleth-Eaglesnest-Comix-conic, bouldery, 6-18% slopes, very rNWI Classification: none						
Are climatic/hydrologic conditions of the site typical for this time of the year? Yes (If no, explain in remarks)							
Are vegetation _____, soil _____, or hydrology _____ significantly disturbed?	Are "normal circumstances" present? Yes						
(If needed, explain any answers in remarks)							

Hydrophytic vegetation present?	<u>Y</u>	Is the sampled area within a wetland?	<u>N</u>
Hydric soil present?	<u>N</u>		
Indicators of wetland hydrology present?	<u>N</u>		If yes, optional wetland site ID: _____
Remarks: (Explain alternative procedures here or in a separate report.)			

Primary Indicators (minimum of one is required; check all that apply): ☐ Surface Water (A1) ☐ Water-Stained Leaves (B9) ☐ High Water Table (A2) ☐ Aquatic Fauna (B13) ☐ Saturation (A3) ☐ Marl Deposits (B15) ☐ Water Marks (B1) ☐ Hydrogen Sulfide Odor (C1) ☐ Sediment Deposits (B2) ☐ Oxidized Rhizospheres on Living ☐ Drift Deposits (B3) ☐ Roots (C3) ☐ Algal Mat or Crust (B4) ☐ Presence of Reduced Iron (C4) ☐ Iron Deposits (B5) ☐ Recent Iron Reduction in Tilled ☐ Inundation Visible on Aerial ☐ Soils (C6) Imagery (B7) ☐ Thin Muck Surface (C7) ☐ Sparsely Vegetated Concave ☐ Other (Explain in Remarks) Surface (B8)			Secondary Indicators (minimum of two required): ☐ Surface Soil Cracks (B6) ☐ Drainage Patterns (B10) ☐ Moss Trim Lines (B16) ☐ Dry-Season Water Table (C2) ☐ Crayfish Burrows (C8) ☐ Saturation Visible on Aerial Imagery (C9) ☐ Stunted or Stressed Plants (D1) ☐ Geomorphic Position (D2) ☐ Shallow Aquitard (D3) ☐ FAC-Neutral Test (D5) ☐ Microtopographic Relief (D4)		
Field Observations: Surface water present? Yes ☐ No ☒ Depth (inches): Water table present? Yes ☐ No ☒ Depth (inches): Saturation present? Yes ☐ No ☒ Depth (inches): (includes capillary fringe)			Indicators of wetland hydrology present? <u> N </u>		
Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:					
Remarks:					

50/20 Thresholds				20%	50%
Tree Stratum	Plot Size (30' Radius)	Absolute % Cover	Dominant Species	Indicator Status	
1	<i>Picea glauca</i> -- <i>White Spruce</i>	10	Y	FACU	
2	<i>Populus tremuloides</i> -- <i>Quaking Aspen</i>	10	Y	FAC	
3	<i>Thuja occidentalis</i> -- <i>Eastern Arborvitae</i>	5	Y	FACW	
4	--				
5	--				
6	--				
7	--				
8	--				
9	--				
10	--				
		25	= Total Cover		
Sapling/Shrub Stratum	Plot Size (15' Radius)	Absolute % Cover	Dominant Species	Indicator Status	
1	<i>Alnus incana</i> -- <i>Speckled Alder</i>	5	Y	FACW	
2	--				
3	--				
4	--				
5	--				
6	--				
7	--				
8	--				
9	--				
10	--				
		5	= Total Cover		
Herb Stratum	Plot Size (5' Radius)	Absolute % Cover	Dominant Species	Indicator Status	
1	<i>Dryopteris carthusiana</i> -- <i>Spinulose Wood Fern</i>	30	Y	FACW	
2	<i>Aralia nudicaulis</i> -- <i>Wild Sarsaparilla</i>	15	Y	FACU	
3	<i>Athyrium Filix-femina</i> -- <i>Lady Fern</i>	10	N	FAC	
4	<i>Fragaria virginiana</i> -- <i>Virginia Strawberry</i>	5	N	FACU	
5	--				
6	--				
7	--				
8	--				
9	--				
10	--				
11	--				
12	--				
13	--				
14	--				
15	--				
		60	= Total Cover		
Woody Vine Stratum	Plot Size (30' Radius)	Absolute % Cover	Dominant Species	Indicator Status	
1	--				
2	--				
3	--				
4	--				
5	--				
		0	= Total Cover		

20% 50%

Tree Stratum 5 13

Sapling/Shrub Stratum 1 3

Herb Stratum 12 30

Woody Vine Stratum 0 0

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across all Strata: 6 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 66.67% (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species 0 x 1 = 0

FACW species 40 x 2 = 80

FAC species 20 x 3 = 60

FACU species 30 x 4 = 120

UPL species 0 x 5 = 0

Column totals 90 (A) 260 (B)

Prevalence Index = B/A = 2.89

Hydrophytic Vegetation Indicators:

☒ Rapid test for hydrophytic vegetation

☒ Dominance test is >50%

☒ Prevalence index is ≤3.0*

Morphological adaptations* (provide supporting data in Remarks or on a separate sheet)

Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Definitions of Vegetation Strata:

Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines - All woody vines greater than 3.28 ft in height.

Hydrophytic vegetation present? Y

Remarks: (Include photo numbers here or on a separate sheet)

Note: This data sheet has been adapted to use the 2012 National Wetland Plant List:

Robert W. Lichvar and John T. Kartesz. 2009. North American Digital Flora: National Wetland Plant List, version 2.4.0 (https://wetland_plants.usace.army.mil). U.S. Army Corps of Engineers, Engineer Research and Development Center, Cold Regions Research and Engineering Laboratory, Hanover, NH, and BONAP, Chapel Hill, NC. (2012)

SOIL	Sampling Point:	19-2u
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Sampling Point: 19-2u

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

[illegible]

*Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains

**Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

Indicators for Problematic Hydric Soils:

- | | | |
|---|----------------------------------|--|
| ___ Histol (A1) | Polyvalve Below Surface | ___ 2 cm Muck (A10) (LRR K, L, MLRA 149B) |
| ___ Histic Epipedon (A2) | (S8) (LRR R, MLRA 149B) | ___ Coast Prairie Redox (A16) (LRR K, L, R) |
| ___ Black Histic (A3) | ___ Thin Dark Surface (S9) | ___ 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) |
| ___ Hydrogen Sulphide (A4) | (LRR R, MLRA 149B) | ___ Dark Surface (S7) (LRR K, L) |
| ___ Stratified Layers (A5) | ___ Loamy Mucky Mineral (F1) | ___ Polyvalve Below Surface (S8) (LRR K, L) |
| ___ Depleted Below Dark Surface (A11') | (LRR K, L) | ___ Thin Dark Surface (S9) (LRR K, L) |
| ___ Thick Dark Surface (A12) | ___ Loamy Gleyed Matrix (F2) | ___ Iron-Manganese Masses (F12) (LRR K, L, R) |
| ___ Sandy Mucky Mineral (S1) | ___ Depleted Matrix (F3) | ___ Piedmont Floodplain Soils (F19) (MLRA 149B) |
| ___ Sandy Gleyed Matrix (S4) | ___ Depleted Dark Surface (F6) | ___ Mesic Spodic (Ta6) (MLRA 144A, 145, 149B) |
| ___ Sandy Redox (S5) | ___ Depleted Dark Surface (F7) | ___ Red Parent Material (TF2) |
| ___ Stripped Matrix (S6) | ___ Redox Depressions (F8) | ___ Very Shallow Dark Surface (TF12) |
| ___ Dark Surface (S7) (LRR R, MLRA 149B) | ___ | ___ Other (Explain in Remarks) |

*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):

Type: Rock

Depth (inches): 6

Hydric soil present? N

Remarks:

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WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Eveleth-Gilbert-Virginia School City/County: Eveleth/St. Louis Sampling Date: 6/17/19
 Applicant/Owner: Kimley-Horn and Associates, Inc. State: Minnesota Sampling Point: 19-2w
 Investigator(s): Rebecca Buduhn Section, Township, Range: S29, T58N, R17W
 Landform (hillslope, terrace, etc.): footslope Local relief (concave, convex, none): none
 Slope (%): 0% Lat.: 47.470663 Long.: -92.523093 Datum: NAD 1983 UTM Zone 15N
 Soil Map Unit Name: Eveleth-Eaglesnest-Conic complex, bouldery, 6-18% slopes, very r NWI Classification: none
 Are climatic/hydrologic conditions of the site typical for this time of the year? Yes (If no, explain in remarks)
 Are vegetation, soil, or hydrology significantly disturbed? Are "normal
 Are vegetation, soil, or hydrology naturally problematic? circumstances" present? Yes
 (If needed, explain any answers in remarks)

SUMMARY OF FINDINGS

Hydrophytic vegetation present?	<u>Y</u>	Is the sampled area within a wetland?	<u>Y</u>
Hydric soil present?	<u>Y</u>		
Indicators of wetland hydrology present?	<u>Y</u>	If yes, optional wetland site ID:	<u>Wetland 19</u>
Remarks: (Explain alternative procedures here or in a separate report.)			

HYDROLOGY

Primary Indicators (minimum of one is required; check all that apply) ☒ Surface Water (A1) ☐ Water-Stained Leaves (B9) ☒ High Water Table (A2) ☐ Aquatic Fauna (B13) ☒ Saturation (A3) ☐ Marl Deposits (B15) ☐ Water Marks (B1) ☐ Hydrogen Sulfide Odor (C1) ☐ Sediment Deposits (B2) ☐ Oxidized Rhizospheres on Living ☐ Drift Deposits (B3) ☐ Roots (C3) ☐ Algal Mat or Crust (B4) ☐ Presence of Reduced Iron (C4) ☐ Iron Deposits (B5) ☐ Recent Iron Reduction in Tilled ☐ Inundation Visible on Aerial Imagery (B7) ☐ Soils (C6) ☐ Sparsely Vegetated Concave Surface (B8) ☐ Thin Muck Surface (C7) ☐ Other (Explain in Remarks) ☐ FAC-Neutral Test (D5) ☐ Microtopographic Relief (D4)		Secondary Indicators (minimum of two required) ☐ Surface Soil Cracks (B6) ☐ Drainage Patterns (B10) ☐ Moss Trim Lines (B16) ☐ Dry-Season Water Table (C2) ☐ Crayfish Burrows (C8) ☐ Saturation Visible on Aerial Imagery (C9) ☐ Stunted or Stressed Plants (D1) ☐ Geomorphic Position (D2) ☐ Shallow Aquitard (D3) ☐ FAC-Neutral Test (D5) ☐ Microtopographic Relief (D4)
Field Observations: Surface water present? Yes <u>X</u> No <u>1</u> Depth (inches): <u>1</u> Water table present? Yes <u>X</u> No <u>0</u> Depth (inches): <u>0</u> Saturation present? Yes <u>X</u> No <u>0</u> Depth (inches): <u>0</u> (includes capillary fringe)	Indicators of wetland hydrology present? <u>Y</u>	
Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

VEGETATION - Use scientific names of plants

					Sampling Point: 19-2w		
					50/20 Thresholds		
Tree Stratum	Plot Size (30' Radius)	Absolute % Cover	Dominant Species	Indicator Status	Tree Stratum	20%	50%
1	<i>Fraxinus nigra</i> -- Black Ash	10	Y	FACW	Sapling/Shrub Stratum	2	5
2	--				Herb Stratum	9	23
3	--				Woody Vine Stratum	0	0
4	--						
5	--						
6	--						
7	--						
8	--						
9	--						
10	--						
		10	=	Total Cover			
Sapling/Shrub Stratum	Plot Size (15' Radius)	Absolute % Cover	Dominant Species	Indicator Status	Dominance Test Worksheet		
1	<i>Alnus incana</i> -- Speckled Alder	45	Y	FACW	Number of Dominant Species that are OBL, FACW, or FAC: <u>4</u> (A)		
2	--				Total Number of Dominant Species Across all Strata: <u>4</u> (B)		
3	--				Percent of Dominant Species that are OBL, FACW, or FAC: <u>100.00%</u> (A/B)		
4	--						
5	--						
6	--						
7	--						
8	--						
9	--						
10	--						
		45	=	Total Cover			
Herb Stratum	Plot Size (5' Radius)	Absolute % Cover	Dominant Species	Indicator Status	Prevalence Index Worksheet		
1	<i>Athyrium Filix-femina</i> -- Lady Fern	25	Y	FAC	Total % Cover of: <u>15</u> x 1 = <u>15</u>		
2	<i>Equisetum arvense</i> -- Field Horsetail	15	Y	FAC	OBL species <u>55</u> x 2 = <u>110</u>		
3	<i>Carex intumescens</i> -- Greater Bladder Sedge	10	N	FAC	FACW species <u>50</u> x 3 = <u>150</u>		
4	<i>Carex gynandra</i> -- Nodding Sedge	10	N	OBL	FACU species <u>0</u> x 4 = <u>0</u>		
5	<i>Caltha palustris</i> -- Yellow Marsh-Marigold	5	N	OBL	UPL species <u>0</u> x 5 = <u>0</u>		
6	--				Column totals <u>120</u> (A) <u>275</u> (B)		
7	--				Prevalence Index = B/A = <u>2.29</u>		
8	--						
9	--						
10	--						
11	--						
12	--						
13	--						
14	--						
15	--						
		65	=	Total Cover			
Woody Vine Stratum	Plot Size (30' Radius)	Absolute % Cover	Dominant Species	Indicator Status	Hydrophytic Vegetation Indicators:		
1	--				<u> </u> Rapid test for hydrophytic vegetation		
2	--				<u>X</u> Dominance test is >50%		
3	--				<u>X</u> Prevalence index is ≤3.0*		
4	--				Morphological adaptations* (provide supporting data in Remarks or on a separate sheet)		
5	--				<u> </u> Problematic hydrophytic vegetation* (explain)		
		0	=	Total Cover	*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic		
Definitions of Vegetation Strata:							
Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.							
Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.							
Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.							
Woody vines - All woody vines greater than 3.28 ft in height.							
Hydrophytic vegetation present? <u>Y</u>							
Remarks: (Include photo numbers here or on a separate sheet)							
Note: This data sheet has been adapted to use the 2012 National Wetland Plant List: Robert W. Lichvar and John T. Kartesz. 2009. North American Digital Flora: National Wetland Plant List, version 2.4.0 (https://wetland.plants.usace.army.mil), U.S. Army Corps of Engineers, Engineer Research and Development Center, Cold Regions Research and Engineering Laboratory, Hanover, NH, and BONAP, Chapel Hill, NC. (2012)							

Sampling Point: 19-2w

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

[illegible]

*Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains

**Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

Indicators for Problematic Hydric Soils:

☐ Histosol (A1)	Polyvalue Below Surface	☐ 2 cm Muck (A10) (LRR K, L, MLRA 149B
☐ Histic Epipedon (A2)	(S8) (LRR R, MLRA 149B)	☐ Coast Prairie Redox (A16) (LRR K, L, R)
☐ Black Histic (A3)	Thin Dark Surface (S9)	☐ 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
☐ Hydrogen Sulfide (A4)	(LRR R, MLRA 149B	☐ Dark Surface (S7) (LRR K, L)
☐ Stratified Layers (A5)	Loamy Mucky Mineral (F1)	☐ Polyvalue Below Surface (S8) (LRR K, L)
☐ Depleted Below Dark Surface (A11)	(LRR K, L)	☐ Thin Dark Surface (S9) (LRR K, L)
☐ Thick Dark Surface (A12)	Loamy Gleyed Matrix (F2)	☐ Iron-Manganese Masses (F12) (LRR K, L, R)
☐ Sandy Mucky Mineral (S1)	Depleted Matrix (F3)	☐ Piedmont Floodplain Soils (F19) (MLRA 149B)
☐ Sandy Gleyed Matrix (S4)	Redox Dark Surface (F6)	☐ Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
☐ Sandy Redox (S5)	Depleted Dark Surface (F7)	☐ Red Parent Material (TF2)
☐ Stripped Matrix (S6)	Redox Depressions (F8)	☒ Very Shallow Dark Surface (TF12)
☐ Dark Surface (S7) (LRR R, MLRA 149B)		☐ Other (Explain in Remarks)

*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):

Type: Rock

Depth (inches): 8

Hydric soil present? Y

Remarks:

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Project/Site: <u>Eveleth-Gilbert-Virginia School</u>	City/County: <u>Eveleth/St. Louis</u>	Sampling Date: <u>6/14/19</u>
Applicant/Owner: <u>Kimley-Horn and Associates, Inc.</u>	State: <u>Minnesota</u>	Sampling Point: <u>19-3u</u>
Investigator/s: <u>Rebecca Budhn</u>	Section, Township, Range: <u>S29, T58N, R17W</u>	
Landform (hill/slope, terrace, etc.): <u>toeslope</u>	Local relief (concave, convex, none): <u>none</u>	
Slope (%): <u>3%</u>	Lat.: <u>47.469614</u>	Long.: <u>-92.522528</u>
	Date: <u>NAD 1983 UTM Zone 15N</u>	
Soil Map Unit Name: <u>Conic, very bumpy-insula, very bumpy, 20-70% slopes</u>	NWI Classification: <u>none</u>	
Are climatic/hydrologic conditions of the site typical for this time of the year? <u>Yes</u>	(If no, explain in remarks)	
Are vegetation <u> </u> , soil <u> </u> , or hydrology <u> </u> significantly disturbed?	Are "normal circumstances" present? <u>Yes</u>	
Are vegetation <u> </u> , soil <u> </u> , or hydrology <u> </u> naturally problematic?		
(If needed, explain any answers in remarks)		

Hydrophytic vegetation present?	<u> N </u>	Is the sampled area within a wetland? <u> N </u> If yes, optional wetland site ID: _____
Hydric soil present?	<u> N </u>	
Indicators of wetland hydrology present?	<u> N </u>	
Remarks: (Explain alternative procedures here or in a separate report.)		

Primary Indicators (minimum of one is required; check all that apply) ☐ Surface Water (A1) ☐ Water-Stained Leaves (B9) ☐ High Water Table (A2) ☐ Aquatic Fauna (B13) ☐ Saturation (A3) ☐ Marl Deposits (B15) ☐ Water Marks (B1) ☐ Hydrogen Sulfide Odor (C1) ☐ Sediment Deposits (B2) ☐ Oxidized Rhizospheres on Living ☐ Drift Deposits (B3) ☐ Roots (C3) ☐ Algal Mat or Crust (B4) ☐ Presence of Reduced Iron (C4) ☐ Iron Deposits (B5) ☐ Recent Iron Reduction in Tilled ☐ Inundation Visible on Aerial ☐ Soils (C6) Imagery (B7) ☐ Thin Muck Surface (C7) ☐ Sparsely Vegetated Concave ☐ Other (Explain in Remarks) Surface (B8)			Secondary Indicators (minimum of two required) ☐ Surface Soil Cracks (B6) ☐ Drainage Patterns (B10) ☐ Moss Trim Lines (B16) ☐ Dry-Season Water Table (C2) ☐ Crayfish Burrows (C8) ☐ Saturation Visible on Aerial Imagery (C9) ☐ Stunted or Stressed Plants (D1) ☐ Geomorphic Position (D2) ☐ Shallow Aquitard (D3) ☐ FAC-Neutral Test (D5) ☐ Microtopographic Relief (D4)		
Field Observations: Surface water present? Yes ☐ No ☐ X ☐ Depth (inches): Water table present? Yes ☐ No ☐ X ☐ Depth (inches): Saturation present? Yes ☐ No ☐ X ☐ Depth (inches): (includes capillary fringe)			Indicators of wetland hydrology present? <u> </u> ☐ <u> </u> ☐		
Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:					
Remarks:					

					50/20 Thresholds		
					20%	50%	
Tree Stratum	Plot Size (30' Radius)		Absolute % Cover	Dominant Species	Indicator Status		
1	--					Tree Stratum	0 0
2	--					Sapling/Shrub Stratum	0 0
3	--					Herb Stratum	15 38
4	--					Woody Vine Stratum	0 0
5	--						
6	--						
7	--						
8	--						
9	--						
10	--						
			0 = Total Cover				
Sapling/Shrub Stratum	Plot Size (15' Radius)		Absolute % Cover	Dominant Species	Indicator Status		
1	--						
2	--						
3	--						
4	--						
5	--						
6	--						
7	--						
8	--						
9	--						
10	--						
			0 = Total Cover				
Herb Stratum	Plot Size (5' Radius)		Absolute % Cover	Dominant Species	Indicator Status		
1	<i>Bromus inermis</i> -- Smooth Brome		40		UPL		
2	<i>Tanacetum vulgare</i> -- Common Tansy		15		FACU		
3	<i>Phalaris arundinacea</i> -- Reed Canary Grass		10		FACW		
4	<i>Taraxacum officinale</i> -- Common Dandelion		10		FACU		
5	--						
6	--						
7	--						
8	--						
9	--						
10	--						
11	--						
12	--						
13	--						
14	--						
15	--						
			75 = Total Cover				
Woody Vine Stratum	Plot Size (30' Radius)		Absolute % Cover	Dominant Species	Indicator Status		
1	--						
2	--						
3	--						
4	--						
5	--						
			0 = Total Cover				
					Dominance Test Worksheet Number of Dominant Species that are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across all Strata: <u>0</u> (B) Percent of Dominant Species that are OBL, FACW, or FAC: <u>0.00%</u> (A/B)		
					Prevalence Index Worksheet Total % Cover of: OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>10</u> x 2 = <u>20</u> FAC species <u>0</u> x 3 = <u>0</u> FACU species <u>25</u> x 4 = <u>100</u> UPL species <u>40</u> x 5 = <u>200</u> Column totals <u>75</u> (A) <u>320</u> (B) Prevalence Index = B/A = <u>4.27</u>		
					Hydrophytic Vegetation Indicators: ___ Rapid test for hydrophytic vegetation ___ Dominance test is >50% ___ Prevalence index is >3.0* Morphological adaptations* (provide supporting data in Remarks or on a separate sheet) ___ Problematic hydrophytic vegetation* (explain) *Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic		
					Definitions of Vegetation Strata: Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines - All woody vines greater than 3.28 ft in height.		
					Hydrophytic vegetation present? <u>N</u>		
Remarks: (Include photo numbers here or on a separate sheet)							
Note: This data sheet has been adapted to use the 2012 National Wetland Plant List: Robert W. Lichvar and John T. Kartesz. 2009. North American Digital Flora: National Wetland Plant List, version 2.4.0 (https://wetland_plants.usace.army.mil/). U.S. Army Corps of Engineers, Engineer Research and Development Center, Cold Regions Research and Engineering Laboratory, Hanover, NH, and BONAP, Chapel Hill, NC. (2012)							

SOIL	Sampling Point:	19-3u
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Sampling Point: 19-3u

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

[illegible]

*Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains

**Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

Indicators for Problematic Hydric Soils:

- | | | |
|---|----------------------------------|--|
| ___ Histosol (A1) | Polyvalue Below Surface | 2 cm Muck (A10) (LRR K, L, MLRA 149B) |
| ___ Histic Epipedon (A2) | (S8) (LRR R, MLRA 149B) | Coast Prairie Redox (A16) (LRR K, L, R) |
| ___ Black Histic (A3) | Thin Dark Surface (S9) | 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) |
| ___ Hydrogen Sulfide (A4) | (LRR R, MLRA 149B) | Dark Surface (S7) (LRR K, L) |
| ___ Stratified Layers (A5) | Loamy Mucky Mineral (F1) | Polyvalue Below Surface (S8) (LRR K, L) |
| ___ Depleted Below Dark Surface (A11) | (LRR K, L) | Thin Dark Surface (S9) (LRR K, L) |
| ___ Thick Dark Surface (A12) | Loamy Gleyed Matrix (F2) | Iron-Manganese Masses (F12) (LRR K, L, R) |
| ___ Sandy Mucky Mineral (S1) | Depleted Matrix (F3) | Piedmont Floodplain Soils (F19) (MLRA 149B) |
| ___ Sandy Gleyed Matrix (S4) | Redox Dark Surface (F6) | Mesic Podzol (TA6) (MLRA 144A, 145, 149B) |
| ___ Sandy Redox (S5) | Depleted Dark Surface (F7) | Red Parent Material (TF2) |
| ___ Stripped Matrix (S6) | Redox Depressions (F8) | Very Shallow Dark Surface (TF12) |
| ___ Dark Surface (S7) (LRR R, MLRA 149B) | | Other (Explain in Remarks) |

*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):

Type: Rock

Depth (inches): 6

Hydric soil present? N

Remarks:

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WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Eveleth-Gilbert-Virginia School City/County: Eveleth/St. Louis Sampling Date: 6/14/19
Applicant/Owner: Kimley-Horn and Associates, Inc. State: Minnesota Sampling Point: 19-3w
Investigator(s): Rebecca Budhn Section, Township, Range: S29, T58N, R17W
Landform (hillslope, terrace, etc.): toeslope Local relief (concave, convex, none): concave
Slope (%): 1% Lat.: 47.469642 Long.: -92.522529 Datum: NAD 1983 UTM Zone 15N
Soil Map Unit Name: Conic, very bouldery-Insula, very bouldery, 20-70% slopes NWI Classification: none
Are climatic/hydrologic conditions of the site typical for this time of the year? Yes (If no, explain in remarks)
Are vegetation , soil , or hydrology significantly disturbed? Are "normal
Are vegetation , soil , or hydrology naturally problematic? circumstances" present? Yes
(If needed, explain any answers in remarks)

SUMMARY OF FINDINGS

Hydrophytic vegetation present?	<u>Y</u>	Is the sampled area within a wetland?	<u>Y</u>
Hydric soil present?	<u>Y</u>		
Indicators of wetland hydrology present?	<u>Y</u>	If yes, optional wetland site ID:	<u>Wetland 19</u>
Remarks: (Explain alternative procedures here or in a separate report.)			

HYDROLOGY

Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)	
☐ Surface Water (A1)	☐ Water-Stained Leaves (B9)	☐ Surface Soil Cracks (B6)	
☒ High Water Table (A2)	☐ Aquatic Fauna (B13)	☐ Drainage Patterns (B10)	
☒ Saturation (A3)	☐ Marl Deposits (B15)	☐ Moss Trim Lines (B16)	
☐ Water Marks (B1)	☐ Hydrogen Sulfide Odor (C1)	☐ Dry-Season Water Table (C2)	
☐ Sediment Deposits (B2)	☐ Oxidized Rhizospheres on Living	☐ Crayfish Burrows (C8)	
☐ Drift Deposits (B3)	☐ Roots (C3)	☐ Saturation Visible on Aerial Imagery	
☐ Algal Mat or Crust (B4)	☐ Presence of Reduced Iron (C4)	☐ (C9)	
☐ Iron Deposits (B5)	☐ Recent Iron Reduction in Tilled	☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial	☐ Soils (C6)	☐ Geomorphic Position (D2)	
☐ Imagery (B7)	☐ Thin Muck Surface (C7)	☐ Shallow Aquitard (D3)	
☐ Sparsely Vegetated Concave	☐ Other (Explain in Remarks)	☐ FAC-Neutral Test (D5)	
☐ Surface (B8)		☐ Microtopographic Relief (D4)	
Field Observations:		Indicators of wetland hydrology present? <u>Y</u>	
Surface water present?	Yes <u> </u> No <u>X</u> Depth (inches): <u> </u>		
Water table present?	Yes <u>X</u> No <u> </u> Depth (inches): <u>2</u>		
Saturation present?	Yes <u>X</u> No <u> </u> Depth (inches): <u>0</u>		
(includes capillary fringe)			
Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks:			

US Army Corps of Engineers

Northcentral and Northeast Region

VEGETATION - Use scientific names of plants

					Sampling Point: 19-3w		
					50/20 Thresholds		
Tree Stratum	Plot Size (30' Radius)	Absolute % Cover	Dominant Species	Indicator Status	Tree Stratum	20%	50%
1	--				Sapling/Shrub Stratum	0	0
2	--				Herb Stratum	2	5
3	--				Woody Vine Stratum	18	45
4	--					0	0
5	--				Dominance Test Worksheet		
6	--				Number of Dominant Species that are OBL, FACW, or FAC: <u>1</u> (A)		
7	--				Total Number of Dominant Species Across all Strata: <u>1</u> (B)		
8	--				Percent of Dominant Species that are OBL, FACW, or FAC: <u>100.00%</u> (A/B)		
9	--				Prevalence Index Worksheet		
10	--				Total % Cover of:		
					OBL species <u>20</u> x 1 = <u>20</u>		
					FACW species <u>80</u> x 2 = <u>160</u>		
					FAC species <u>0</u> x 3 = <u>0</u>		
					FACU species <u>0</u> x 4 = <u>0</u>		
					UPL species <u>0</u> x 5 = <u>0</u>		
					Column totals <u>100</u> (A) <u>180</u> (B)		
					Prevalence Index = B/A = <u>1.80</u>		
					Hydrophytic Vegetation Indicators:		
					<u> </u> Rapid test for hydrophytic vegetation		
					<u>X</u> Dominance test is >50%		
					<u>X</u> Prevalence index is ≤3.0*		
					Morphological adaptations* (provide supporting data in Remarks or on a separate sheet)		
					<u> </u> Problematic hydrophytic vegetation* (explain)		
					*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic		
					Definitions of Vegetation Strata:		
					Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.		
					Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.		
					Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.		
					Woody vines - All woody vines greater than 3.28 ft in height.		
					Hydrophytic vegetation present? <u>Y</u>		
					Remarks: (Include photo numbers here or on a separate sheet)		
					Note: This data sheet has been adapted to use the 2012 National Wetland Plant List: Robert W. Lichvar and John T. Kartesz. 2009. North American Digital Flora: National Wetland Plant List, version 2.4.0 (https://wetland.plants.usace.army.mil). U.S. Army Corps of Engineers, Engineer Research and Development Center, Cold Regions Research and Engineering Laboratory, Hanover, NH, and BONAP, Chapel Hill, NC. (2012)		

US Army Corps of Engineers

Northcentral and Northeast Region

Sampling Point: 19-3w

[illegible]

**Location: PL=Pore Lining, M=Matrix

Indicators for Problematic Hydric Soils:

- *Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Hydric soil present? Y

Northcentral and Northeast Region

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Eveleth-Gilbert-Virginia School City/County: Eveleth/St. Louis Sampling Date: 6/17/19
Applicant/Owner: Kimley-Horn and Associates, Inc. State: Minnesota Sampling Point: 20-1u
Investigator(s): Rebecca Buduhn Section, Township, Range: S29, T58N, R17W
Landform (hillslope, terrace, etc.): footslope Local relief (concave, convex, none): none
Slope (%): 10% Lat.: 47.474597 Long.: -92.51998 Datum: NAD 1983 UTM Zone 15N
Soil Map Unit Name: Eveleth-Eaglesnest-Conic complex, bouldery 6-18% slopes, very to NWI Classification: none
Are climatic/hydrologic conditions of the site typical for this time of the year? Yes (If no, explain in remarks)
Are vegetation, soil, or hydrology significantly disturbed? Are "normal
Are vegetation, soil, or hydrology naturally problematic? circumstances" present? Yes
(If needed, explain any answers in remarks)

SUMMARY OF FINDINGS

Hydrophytic vegetation present?	N	Is the sampled area within a wetland?	N
Hydric soil present?	N		
Indicators of wetland hydrology present?	N	If yes, optional wetland site ID:	
Remarks: (Explain alternative procedures here or in a separate report.)			

HYDROLOGY

Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)	
☐ Surface Water (A1)	☐ Water-Stained Leaves (B9)	☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Aquatic Fauna (B13)	☐ Drainage Patterns (B10)	
☐ Saturation (A3)	☐ Marl Deposits (B15)	☐ Moss Trim Lines (B16)	
☐ Water Marks (B1)	☐ Hydrogen Sulfide Odor (C1)	☐ Dry-Season Water Table (C2)	
☐ Sediment Deposits (B2)	☐ Oxidized Rhizospheres on Living	☐ Crayfish Burrows (C8)	
☐ Drift Deposits (B3)	☐ Roots (C3)	☐ Saturation Visible on Aerial Imagery	
☐ Algal Mat or Crust (B4)	☐ Presence of Reduced Iron (C4)	☐ (C9)	
☐ Iron Deposits (B5)	☐ Recent Iron Reduction in Tilled	☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial	☐ Soils (C6)	☐ Geomorphic Position (D2)	
☐ Imagery (B7)	☐ Thin Muck Surface (C7)	☐ Shallow Aquitard (D3)	
☐ Sparsely Vegetated Concave	☐ Other (Explain in Remarks)	☐ FAC-Neutral Test (D5)	
☐ Surface (B8)		☐ Microtopographic Relief (D4)	
Field Observations:		Indicators of wetland hydrology present? N	
Surface water present?	Yes No X Depth (inches):		
Water table present?	Yes No X Depth (inches):		
Saturation present?	Yes No X Depth (inches):		
(includes capillary fringe)			
Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks:			

VEGETATION - Use scientific names of plants

Tree Stratum Plot Size (30' Radius) Absolute % Cover Dominant Species Indicator Status					Sampling Point: 20-1u			
1	Populus tremuloides	-- Quaking Aspen	45	Y	FAC	50/20 Thresholds		
2	Picea glauca	-- White Spruce	25	Y	FACU	20%	50%	
3						Tree Stratum	14	35
4						Sapling/Shrub Stratum	0	0
5						Herb Stratum	17	43
6						Woody Vine Stratum	0	0
7						Dominance Test Worksheet		
8						Number of Dominant Species that are OBL, FACW, or FAC: 4 (A)		
9						Total Number of Dominant Species Across all Strata: 8 (B)		
10						Percent of Dominant Species that are OBL, FACW, or FAC: 50.00% (A/B)		
70 = Total Cover								
Sapling/Shrub Stratum Plot Size (15' Radius) Absolute % Cover Dominant Species Indicator Status					Prevalence Index Worksheet			
1					Total % Cover of:			
2					OBL species 0 x 1 = 0			
3					FACW species 10 x 2 = 20			
4					FAC species 70 x 3 = 210			
5					FACU species 55 x 4 = 220			
6					UPL species 20 x 5 = 100			
7					Column totals 155 (A) 550 (B)			
8					Prevalence Index = B/A = 3.55			
9								
10					0 = Total Cover			
Herb Stratum Plot Size (5' Radius) Absolute % Cover Dominant Species Indicator Status					Hydrophytic Vegetation Indicators:			
1	Eurybia macrophylla	-- Large-Leaf Wood-Aster	20	Y	UPL	Rapid test for hydrophytic vegetation		
2	Fragaria virginiana	-- Virginia Strawberry	15	Y	FACU	Dominance test is >50%		
3	Dryopteris carthusiana	-- Spinulose Wood Fern	10	Y	FACW	Prevalence index is ≤3.0*		
4	Equisetum arvense	-- Field Horsetail	10	Y	FAC	Morphological adaptations* (provide supporting data in Remarks or on a separate sheet)		
5	Rubus idaeus	-- Common Red Raspberry	10	Y	FAC	Problematic hydrophytic vegetation* (explain)		
6	Geranium maculatum	-- Spotted Crane's-Bill	10	Y	FACU	*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic		
7	Aralia nudicaulis	-- Wild Sarsaparilla	5	N	FACU	Definitions of Vegetation Strata:		
8	Cornus canadensis	-- Canadian Bunchberry	5	N	FAC	Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.		
9						Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.		
10						Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.		
11						Woody vines - All woody vines greater than 3.28 ft in height.		
12						Hydrophytic vegetation present? N		
13								
14								
15								
85 = Total Cover								
Woody Vine Stratum Plot Size (30' Radius) Absolute % Cover Dominant Species Indicator Status								
1								
2								
3								
4								
5								
0 = Total Cover								
Remarks: (Include photo numbers here or on a separate sheet)								
Note: This data sheet has been adapted to use the 2012 National Wetland Plant List: Robert W. Lichvar and John T. Kartesz. 2009. North American Digital Flora: National Wetland Plant List, version 2.4.0 (https://wetland.plants.usace.army.mil). U.S. Army Corps of Engineers, Engineer Research and Development Center, Cold Regions Research and Engineering Laboratory, Hanover, NH, and BONAP, Chapel Hill, NC. (2012)								

Sampling Point: 20-1u

[illegible]

**Location: PL=Pore Lining, M=Matrix

Indicators for Problematic Hydric Soils:

- *Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Hydric soil present? N

Northcentral and Northeast Region

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Eveleth-Gilbert-Virginia School City/County: Eveleth/St. Louis Sampling Date: 6/17/19
Applicant/Owner: Kimley-Horn and Associates, Inc. State: Minnesota Sampling Point: 20-1w
Investigator(s): Rebecca Buduhn Section, Township, Range: S29, T58N, R17W
Landform (hillslope, terrace, etc.): toeslope Local relief (concave, convex, none): none
Slope (%): 1% Lat.: 47.474665 Long.: -92.519886 Datum: NAD 1983 UTM Zone 15N
Soil Map Unit Name: Eveleth-Eaglesnest-Conic complex, bouldery 6-18% slopes, very to NWI Classification: none
Are climatic/hydrologic conditions of the site typical for this time of the year? Yes (If no, explain in remarks)
Are vegetation, soil, or hydrology significantly disturbed? Are "normal
Are vegetation, soil, or hydrology naturally problematic? circumstances" present? Yes
(If needed, explain any answers in remarks)

SUMMARY OF FINDINGS

Hydrophytic vegetation present?	Y	Is the sampled area within a wetland?	Y
Hydric soil present?	Y		
Indicators of wetland hydrology present?	Y	If yes, optional wetland site ID:	Wetland 20

Remarks: (Explain alternative procedures here or in a separate report.)

HYDROLOGY

Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)	
☐ Surface Water (A1)	☐ Water-Stained Leaves (B9)	☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Aquatic Fauna (B13)	☐ Drainage Patterns (B10)	
☒ Saturation (A3)	☐ Marl Deposits (B15)	☐ Moss Trim Lines (B16)	
☐ Water Marks (B1)	☐ Hydrogen Sulfide Odor (C1)	☐ Dry-Season Water Table (C2)	
☐ Sediment Deposits (B2)	☐ Oxidized Rhizospheres on Living	☐ Crayfish Burrows (C8)	
☐ Drift Deposits (B3)	☐ Roots (C3)	☐ Saturation Visible on Aerial Imagery	
☐ Algal Mat or Crust (B4)	☐ Presence of Reduced Iron (C4)	☐ (C9)	
☐ Iron Deposits (B5)	☐ Recent Iron Reduction in Tilled	☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial	☐ Soils (C6)	☐ Geomorphic Position (D2)	
☐ Imagery (B7)	☐ Thin Muck Surface (C7)	☐ Shallow Aquitard (D3)	
☐ Sparsely Vegetated Concave	☐ Other (Explain in Remarks)	☐ FAC-Neutral Test (D5)	
☐ Surface (B8)		☐ Microtopographic Relief (D4)	

Field Observations:				Indicators of wetland hydrology present? Y
Surface water present?	Yes	No	X Depth (inches):	
Water table present?	Yes	No	X Depth (inches):	
Saturation present?	Yes	X	No Depth (inches): 0	
(includes capillary fringe)				
Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:				
Remarks:				

VEGETATION - Use scientific names of plants

Tree Stratum					Plot Size (30' Radius)	Absolute % Cover	Dominant Species	Indicator Status	Sampling Point: 20-1w		
									50/20 Thresholds		
									20% 50%		
1 Populus tremuloides -- Quaking Aspen									Tree Stratum 8 20		
2 Fraxinus pennsylvanica -- Green Ash									Sapling/Shrub Stratum 5 13		
3 Picea glauca -- White Spruce									Herb Stratum 15 38		
4 --									Woody Vine Stratum 0 0		
5 --											
6 --											
7 --											
8 --											
9 --											
10 --											
									40 = Total Cover		
Sapling/Shrub Stratum					Plot Size (15' Radius)	Absolute % Cover	Dominant Species	Indicator Status	Dominance Test Worksheet		
1 Rhamnus cathartica -- European Buckthorn									Number of Dominant Species that are OBL, FACW, or FAC: 6 (A)		
2 Alnus incana -- Speckled Alder									Total Number of Dominant Species Across all Strata: 6 (B)		
3 --									Percent of Dominant Species that are OBL, FACW, or FAC: 100.00% (A/B)		
4 --											
5 --											
6 --											
7 --											
8 --											
9 --											
10 --											
									25 = Total Cover		
Herb Stratum					Plot Size (5' Radius)	Absolute % Cover	Dominant Species	Indicator Status	Prevalence Index Worksheet		
1 Equisetum arvense -- Field Horsetail									Total % Cover of: 15 x 1 = 15		
2 Arisaema triphyllum -- Jack-in-the-Pulpit									OBL species 35 x 2 = 70		
3 Caltha palustris -- Yellow Marsh-Marigold									FACW species 85 x 3 = 255		
4 Carex intumescens -- Greater Bladder Sedge									FACU species 5 x 4 = 20		
5 Carex gynandra -- Nodding Sedge									UPL species 0 x 5 = 0		
6 --									Column totals 140 (A) 360 (B)		
7 --									Prevalence Index = B/A = 2.57		
8 --											
9 --											
10 --											
11 --											
12 --											
13 --											
14 --											
15 --											
									75 = Total Cover		
Woody Vine Stratum					Plot Size (30' Radius)	Absolute % Cover	Dominant Species	Indicator Status	Hydrophytic Vegetation Indicators:		
1 --									Rapid test for hydrophytic vegetation		
2 --									X Dominance test is >50%		
3 --									X Prevalence index is ≤3.0*		
4 --									Morphological adaptations* (provide supporting data in Remarks or on a separate sheet)		
5 --									Problematic hydrophytic vegetation* (explain)		
									*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic		
									Definitions of Vegetation Strata:		
									Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.		
									Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.		
									Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.		
									Woody vines - All woody vines greater than 3.28 ft in height.		
									Hydrophytic vegetation present? Y		
Remarks: (Include photo numbers here or on a separate sheet)											
Note: This data sheet has been adapted to use the 2012 National Wetland Plant List: Robert W. Lichvar and John T. Kartesz. 2009. North American Digital Flora: National Wetland Plant List, version 2.4.0 (https://wetland.plants.usace.army.mil), U.S. Army Corps of Engineers, Engineer Research and Development Center, Cold Regions Research and Engineering Laboratory, Hanover, NH, and BONAP, Chapel Hill, NC. (2012)											

SOIL Sampling Point: 20-1w

Sampling Point: 20-1w

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

[illegible]

*Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains

**Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

Indicators for Problematic Hydric Soils:

- | | | |
|---|----------------------------|--|
| ☐ Histosol (A1) | Polyvalue Below Surface | ☐ 2 cm Muck (A10) (LRR K, L, MLRA 149B |
| ☐ Histic Epipedon (A2) | (S8) (LRR R, MLRA 149B) | ☐ Coast Prairie Redox (A16) (LRR K, L, R) |
| ☐ Black Histic (A3) | Thin Dark Surface (S9) | ☐ 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) |
| ☐ Hydrogen Sulfide (A4) | (LRR R, MLRA 149B | ☐ Dark Surface (S7) (LRR K, L) |
| ☐ Stratified Layers (A5) | Loamy Mucky Mineral (F1) | ☐ Polyvalue Below Surface (S8) (LRR K, L) |
| ☐ Depleted Below Dark Surface (A11) | (LRR K, L) | ☐ Thin Dark Surface (S9) (LRR K, L) |
| ☐ Thick Dark Surface (A12) | Loamy Gleyed Matrix (F2) | ☐ Iron-Manganese Masses (F12) (LRR K, L, R) |
| ☐ Sandy Mucky Mineral (S1) | Depleted Matrix (F3) | ☐ Piedmont Floodplain Soils (F19) (MLRA 149B) |
| ☐ Sandy Gleyed Matrix (S4) | Redox Dark Surface (F6) | ☐ Mesic Spodic (TA6) (MLRA 144A, 145, 149B) |
| ☐ Sandy Redox (S5) | Depleted Dark Surface (F7) | ☐ Red Parent Material (TF2) |
| ☐ Stripped Matrix (S6) | Redox Depressions (F8) | ☐ Very Shallow Dark Surface (TF12) |
| ☐ Dark Surface (S7) (LRR R, MLRA 149B) | | ☒ Other (Explain in Remarks) |

*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):

Type: Rock

Depth (inches): 2

Hydric soil present? Y

Remarks:

Hydric soil indicators were not observed based on the presence of rock / bedrock 2 inches below the soil surface. We believe hydric soils are present based on saturation to soil surface and the presence of hydrophytic vegetation.

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Project/Title: Eveleth-Gilbert-Virginia School City/County: Eveleth/St. Louis Sampling Date: 6/17/19
 Applicant/Owner: Kimley-Horn and Associates, Inc. State: Minnesota Sampling Point: 21-1u
 Investigator(s): Rebecca Buduhn Section, Township, Range: S29, T58N, R17W
 Landform (hillside, terrace, etc.): foothole Local relief (concave, convex, none): none
 Slope (s): 10% Lat.: 47.478586 Long.: -92.520338 Datum: NAD 1983 UTM Zone 15N
 Soil Map Unit Name: Eaglesnest-Wahsthen complex, 2-8% slopes, bouldery NW1 Classification: none
 Are climatic/hydrologic conditions of the site typical for this time of the year? Yes (If no, explain in remarks)
 Are vegetation _____, soil _____, or hydrology _____ significantly disturbed? Are "normal circumstances" present? Yes
 Are vegetation _____, soil _____, or hydrology _____ naturally problematic?
 (If needed, explain any answers in remarks)

Hydrophytic vegetation present? <u>Y</u> Hydric soil present? <u>N</u> Indicators of wetland hydrology present? <u>N</u>	Is the sampled area within a wetland? <u>N</u> If yes, optional wetland site ID: _____
Remarks: (Explain alternative procedures here or in a separate report.)	

Primary Indicators (minimum of one is required; check all that apply)			Secondary Indicators (minimum of two required)		
☐ Surface Water (A1)	☐ Water-Stained Leaves (B9)		☐ Surface Soil Cracks (B6)		
☐ High Water Table (A2)	☐ Aquatic Fauna (B13)		☐ Drainage Patterns (B10)		
☐ Saturation (A3)	☐ Marl Deposits (B15)		☐ Moss Trim Lines (B16)		
☐ Water Marks (B1)	☐ Hydrogen Sulfide Odor (C1)		☐ Dry-Season Water Table (C2)		
☐ Sediment Deposits (B2)	☐ Oxidized Rhizospheres on Living		☐ Crayfish Burrows (C8)		
☐ Drift Deposits (B3)	☐ Roots (C3)		☐ Saturation Visible on Aerial Imagery		
☐ Algal Mat or Crust (B4)	☐ Presence of Reduced Iron (C4)		☐ (C9)		
☐ Iron Deposits (B5)	☐ Recent Iron Reduction in Tilled		☐ Stunted or Stressed Plants (D1)		
☐ Inundation Visible on Aerial	☐ Soils (C6)		☐ Geomorphic Position (D2)		
☐ Imagery (B7)	☐ Thin Muck Surface (C7)		☐ Shallow Aquitard (D3)		
☐ Sparsely Vegetated Concave	☐ Other (Explain in Remarks)		☐ FAC-Neutral Test (D5)		
☐ Surface (B8)			☐ Microtopographic Relief (D4)		

Field Observations:			Indicators of wetland hydrology present? <u> </u> N
Surface water present?	Yes ☐	No ☐ X Depth (inches):	
Water table present?	Yes ☐	No ☐ X Depth (inches):	
Saturation present?	Yes ☐	No ☐ X Depth (inches):	
(includes capillary fringe)			
Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks:			

50/20 Thresholds				20%	50%
Tree Stratum	Plot Size (30' Radius)	Absolute % Cover	Dominant Species	Indicator Status	
1	<i>Acer rubrum</i> -- Red Maple	20	Y	FAC	
2	--				
3	--				
4	--				
5	--				
6	--				
7	--				
8	--				
9	--				
10	--				
		20	= Total Cover		
Sapling/Shrub Stratum	Plot Size (15' Radius)	Absolute % Cover	Dominant Species	Indicator Status	
1	<i>Acer rubrum</i> -- Red Maple	10	Y	FAC	
2	--				
3	--				
4	--				
5	--				
6	--				
7	--				
8	--				
9	--				
10	--				
		10	= Total Cover		
Herb Stratum	Plot Size (5' Radius)	Absolute % Cover	Dominant Species	Indicator Status	
1	<i>Eurybia macrophylla</i> -- Large-Leaf Wood-Aster	20	Y	UPL	
2	<i>Maianthemum canadense</i> -- False Lily-of-the-Valley	15	Y	FACU	
3	<i>Acer rubrum</i> -- Red Maple	10	Y	FAC	
4	<i>Dryopteris carthusiana</i> -- Spinulose Wood Fern	5	N	FACW	
5	--				
6	--				
7	--				
8	--				
9	--				
10	--				
11	--				
12	--				
13	--				
14	--				
15	--				
		50	= Total Cover		
Woody Vine Stratum	Plot Size (30' Radius)	Absolute % Cover	Dominant Species	Indicator Status	
1	--				
2	--				
3	--				
4	--				
5	--				
		0	= Total Cover		

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across all Strata: 5 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 60.00% (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species	<u>0</u> x 1 =	<u>0</u>
FACW species	<u>5</u> x 2 =	<u>10</u>
FAC species	<u>40</u> x 3 =	<u>120</u>
FACU species	<u>15</u> x 4 =	<u>60</u>
UPL species	<u>20</u> x 5 =	<u>100</u>
Column totals	<u>80</u> (A)	<u>290</u> (B)

Prevalence Index = B/A = 3.63

Hydrophytic Vegetation Indicators:

X Rapid test for hydrophytic vegetation

X Dominance test is >50%

 Prevalence index is $\geq 3.0^*$

Morphological adaptations* (provide supporting data in Remarks or on a separate sheet)

 Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Definitions of Vegetation Strata:

Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines - All woody vines greater than 3.28 ft in height.

Hydrophytic vegetation present? Y

Remarks: (Include photo numbers here or on a separate sheet)

Note: This data sheet has been adapted to use the 2012 National Wetland Plant List:

Robert W. Lichvar and John T. Kartesz. 2009. North American Digital Flora: National Wetland Plant List, version 2.4.0 (https://wetland_plants.usace.army.mil/). U.S. Army Corps of Engineers, Engineer Research and Development Center, Cold Regions Research and Engineering Laboratory, Hanover, NH, and BONAP, Chapel Hill, NC. (2012)

SOIL Sampling Point: 21-1u

Sampling Point: 21-1u

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

[illegible]

*Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains

**Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

Indicators for Problematic Hydric Soils:

- | | | |
|---|----------------------------|--|
| ☐ Histosol (A1) | Polyvalue Below Surface | ☐ 2 cm Muck (A10) (LRR K, L, MLRA 149B |
| ☐ Histic Epipedon (A2) | (S8) (LRR R, MLRA 149B) | ☐ Coast Prairie Redox (A16) (LRR K, L, R) |
| ☐ Black Histic (A3) | Thin Dark Surface (S9) | ☐ 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) |
| ☐ Hydrogen Sulfide (A4) | (LRR R, MLRA 149B | ☐ Dark Surface (S7) (LRR K, L) |
| ☐ Stratified Layers (A5) | Loamy Mucky Mineral (F1) | ☐ Polyvalue Below Surface (S8) (LRR K, L) |
| ☐ Depleted Below Dark Surface (A11) | (LRR K, L) | ☐ Thin Dark Surface (S9) (LRR K, L) |
| ☐ Thick Dark Surface (A12) | Loamy Gleyed Matrix (F2) | ☐ Iron-Manganese Masses (F12) (LRR K, L, R) |
| ☐ Sandy Mucky Mineral (S1) | Depleted Matrix (F3) | ☐ Piedmont Floodplain Soils (F19) (MLRA 149B) |
| ☐ Sandy Gleyed Matrix (S4) | Redox Dark Surface (F6) | ☐ Mesic Spodic (TA6) (MLRA 144A, 145, 149B) |
| ☐ Sandy Redox (S5) | Depleted Dark Surface (F7) | ☐ Red Parent Material (TF2) |
| ☐ Stripped Matrix (S6) | Redox Depressions (F8) | ☐ Very Shallow Dark Surface (TF12) |
| ☐ Dark Surface (S7) (LRR R, MLRA 149B) | | ☐ Other (Explain in Remarks) |

*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):

Type: Rock

Depth (inches): 3

Hydric soil present? N

Remarks:

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WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Eveleth-Gilbert-Virginia School City/County: Eveleth/St. Louis Sampling Date: 6/17/19
 Applicant/Owner: Kimley-Horn and Associates, Inc. State: Minnesota Sampling Point: 21-1w
 Investigator(s): Rebecca Buduhn Section, Township, Range: S29, T58N, R17W
 Landform (hillslope, terrace, etc.): toeslope Local relief (concave, convex, none): none
 Slope (%): 0% Lat.: 47.47864 Long.: -92.520456 Datum: NAD 1983 UTM Zone 15N
 Soil Map Unit Name: Eaglesnest-Wahlsten complex, 2-8% slopes, bouldery NWI Classification: PSS1B
 Are climatic/hydrologic conditions of the site typical for this time of the year? Yes (If no, explain in remarks)
 Are vegetation , soil , or hydrology significantly disturbed? Are "normal
 Are vegetation , soil , or hydrology naturally problematic? circumstances" present? Yes
 (If needed, explain any answers in remarks)

SUMMARY OF FINDINGS

Hydrophytic vegetation present?	<u>Y</u>	Is the sampled area within a wetland?	<u>Y</u>
Hydric soil present?	<u>Y</u>		
Indicators of wetland hydrology present?	<u>Y</u>	If yes, optional wetland site ID:	<u>Wetland 21</u>
Remarks: (Explain alternative procedures here or in a separate report.)			

HYDROLOGY

Primary Indicators (minimum of one is required; check all that apply) ☐ Surface Water (A1) ☐ Water-Stained Leaves (B9) ☐ High Water Table (A2) ☐ Aquatic Fauna (B13) ☒ Saturation (A3) ☐ Marl Deposits (B15) ☐ Water Marks (B1) ☐ Hydrogen Sulfide Odor (C1) ☐ Sediment Deposits (B2) ☐ Oxidized Rhizospheres on Living ☐ Drift Deposits (B3) ☐ Roots (C3) ☐ Algal Mat or Crust (B4) ☐ Presence of Reduced Iron (C4) ☐ Iron Deposits (B5) ☐ Recent Iron Reduction in Tilled ☐ Inundation Visible on Aerial ☐ Soils (C6) ☐ Imagery (B7) ☐ Thin Muck Surface (C7) ☐ Sparsely Vegetated Concave ☐ Other (Explain in Remarks) ☐ Surface (B8)		Secondary Indicators (minimum of two required) ☐ Surface Soil Cracks (B6) ☐ Drainage Patterns (B10) ☐ Moss Trim Lines (B16) ☐ Dry-Season Water Table (C2) ☐ Crayfish Burrows (C8) ☐ Saturation Visible on Aerial Imagery ☐ (C9) ☐ Stunted or Stressed Plants (D1) ☐ Geomorphic Position (D2) ☐ Shallow Aquitard (D3) ☐ FAC-Neutral Test (D5) ☐ Microtopographic Relief (D4)	
Field Observations: Surface water present? Yes <u> </u> No <u>X</u> Depth (inches): <u> </u> Water table present? Yes <u> </u> No <u>X</u> Depth (inches): <u> </u> Saturation present? Yes <u>X</u> No <u> </u> Depth (inches): <u>0</u> (includes capillary fringe)		Indicators of wetland hydrology present? <u>Y</u>	
Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks:			

VEGETATION - Use scientific names of plants

					Sampling Point: 21-1w		
					50/20 Thresholds		
Tree Stratum	Plot Size (30' Radius)	Absolute % Cover	Dominant Species	Indicator Status	Tree Stratum	20%	50%
1	--				Sapling/Shrub Stratum	4	10
2	--				Herb Stratum	14	35
3	--				Woody Vine Stratum	0	0
4	--						
5	--						
6	--						
7	--						
8	--						
9	--						
10	--						
		0	= Total Cover				
Sapling/Shrub Stratum	Plot Size (15' Radius)	Absolute % Cover	Dominant Species	Indicator Status	Dominance Test Worksheet		
1	<i>Alnus incana</i> -- <i>Speckled Alder</i>	10	Y	FACW	Number of Dominant Species that are OBL, FACW, or FAC: <u>4</u> (A)		
2	<i>Fraxinus pennsylvanica</i> -- <i>Green Ash</i>	10	Y	FACW	Total Number of Dominant Species Across all Strata: <u>4</u> (B)		
3	--				Percent of Dominant Species that are OBL, FACW, or FAC: <u>100.00%</u> (A/B)		
4	--						
5	--						
6	--						
7	--						
8	--						
9	--						
10	--						
		20	= Total Cover				
Herb Stratum	Plot Size (5' Radius)	Absolute % Cover	Dominant Species	Indicator Status	Prevalence Index Worksheet		
1	<i>Carex intumescens</i> -- <i>Greater Bladder Sedge</i>	20	Y	FACW	Total % Cover of:		
2	<i>Carex gynandra</i> -- <i>Nodding Sedge</i>	15	Y	OBL	OBL species <u>15</u> x 1 = <u>15</u>		
3	<i>Eurybia macrophylla</i> -- <i>Large-Leaf Wood-Aster</i>	10	N	UPL	FACW species <u>40</u> x 2 = <u>80</u>		
4	<i>Athyrium Filix-femina</i> -- <i>Lady Fern</i>	10	N	FAC	FAC species <u>20</u> x 3 = <u>60</u>		
5	<i>Equisetum arvense</i> -- <i>Field Horsetail</i>	5	N	FAC	FACU species <u>5</u> x 4 = <u>20</u>		
6	<i>Acer rubrum</i> -- <i>Red Maple</i>	5	N	FAC	UPL species <u>10</u> x 5 = <u>50</u>		
7	<i>Maianthemum racemosum</i> -- <i>Feathery False Solomon's-Seal</i>	5	N	FACU	Column totals <u>90</u> (A) <u>225</u> (B)		
8	--				Prevalence Index = B/A = <u>2.50</u>		
9	--						
10	--						
		70	= Total Cover				
Woody Vine Stratum	Plot Size (30' Radius)	Absolute % Cover	Dominant Species	Indicator Status	Hydrophytic Vegetation Indicators:		
1	--				<u> </u> Rapid test for hydrophytic vegetation		
2	--				<u>X</u> Dominance test is >50%		
3	--				<u>X</u> Prevalence index is ≤3.0*		
4	--				Morphological adaptations* (provide supporting data in Remarks or on a separate sheet)		
5	--				<u> </u> Problematic hydrophytic vegetation* (explain)		
					*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic		
					Definitions of Vegetation Strata:		
					Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.		
					Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.		
					Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.		
					Woody vines - All woody vines greater than 3.28 ft in height.		
					Hydrophytic vegetation present? <u>Y</u>		
Remarks: (Include photo numbers here or on a separate sheet)							
Note: This data sheet has been adapted to use the 2012 National Wetland Plant List: Robert W. Lichvar and John T. Kartesz. 2009. North American Digital Flora: National Wetland Plant List, version 2.4.0 (https://wetland.plants.usace.army.mil). U.S. Army Corps of Engineers, Engineer Research and Development Center, Cold Regions Research and Engineering Laboratory, Hanover, NH, and BONAP, Chapel Hill, NC. (2012)							

Sampling Point: 21-1w

[illegible]

**Location: PL=Pore Lining, M=Matrix

Indicators for Problematic Hydric Soils:

- *Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Hydric soil present? Y

Northcentral and Northeast Region

Project/Site: Eveleth-Gilbert-Virginia School City/County: Eveleth/St. Louis Sampling Date: 6/17/19
 Applicant/Owner: Kimley-Horn and Associates, Inc. State: Minnesota Sampling Point: 22-1u
 Investigator/s: Rebecca Buduhn Section, Township, Range: S29, T58N, R17W
 Landform (hillslope, terrace, etc.): footslope Local relief (concave, convex, none): none
 Slope (%): 10% Lat.: 47.476715 Long.: -92.523677 Datum: NAD 1983 UTM Zone 15N
 Soil Map Unit Name: Eveleth-Eaglesnest-Conic complex, bouldery, 6-18% slopes, very r NW1 Classification: none
 Are climatic/hydrologic conditions of the site typical for this time of the year? Yes (If no, explain in remarks)
 Are vegetation _____, soil _____, or hydrology _____ significantly disturbed? Are "normal
 Are vegetation _____, soil _____, or hydrology _____ naturally problematic? circumstances" present? Yes
 (If needed, explain any answers in remarks)

Hydrophytic vegetation present?	<u>Y</u>	Is the sampled area within a wetland? <u>N</u>
Hydric soil present?	<u>N</u>	
Indicators of wetland hydrology present?	<u>N</u>	
If yes, optional wetland site ID: _____		
Remarks: (Explain alternative procedures here or in a separate report.)		

Primary Indicators (minimum of one is required; check all that apply) ☐ Surface Water (A1) ☐ Water-Stained Leaves (B9) ☐ High Water Table (A2) ☐ Aquatic Fauna (B13) ☐ Saturation (A3) ☐ Marl Deposits (B15) ☐ Water Marks (B1) ☐ Hydrogen Sulfide Odor (C1) ☐ Sediment Deposits (B2) ☐ Oxidized Rhizospheres on Living ☐ Drift Deposits (B3) ☐ Roots (C3) ☐ Algal Mat or Crust (B4) ☐ Presence of Reduced Iron (C4) ☐ Iron Deposits (B5) ☐ Recent Iron Reduction in Tilled ☐ Inundation Visible on Aerial ☐ Soils (C6) Imagery (B7) ☐ Thin Muck Surface (C7) ☐ Sparsely Vegetated Concave ☐ Other (Explain in Remarks) Surface (B8)			Secondary Indicators (minimum of two required) ☐ Surface Soil Cracks (B6) ☐ Drainage Patterns (B10) ☐ Moss Trim Lines (B16) ☐ Dry-Season Water Table (C2) ☐ Crayfish Burrows (C8) ☐ Saturation Visible on Aerial Imagery (C9) ☐ Stunted or Stressed Plants (D1) ☐ Geomorphic Position (D2) ☐ Shallow Aquitard (D3) ☐ FAC-Neutral Test (D5) ☐ Microtopographic Relief (D4)		
Field Observations: Surface water present? Yes ☐ No ☐ X ☐ Depth (inches): Water table present? Yes ☐ No ☐ X ☐ Depth (inches): Saturation present? Yes ☐ No ☐ X ☐ Depth (inches): (includes capillary fringe)			Indicators of wetland hydrology present? <u> </u> ☐ <u> </u> ☐		
Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:					
Remarks:					

Tree Stratum				Plot Size (30' Radius)		Absolute % Cover	Dominant Species	Indicator Status
1	<i>Populus tremuloides</i>	--	<i>Quaking Aspen</i>	20	Y	FAC		
2	<i>Acer rubrum</i>	--	<i>Red Maple</i>	10	Y	FAC		
3								
4								
5								
6								
7								
8								
9								
10				30	=	Total Cover		
Sapling/Shrub Stratum				Plot Size (15' Radius)		Absolute % Cover	Dominant Species	Indicator Status
1								
2								
3								
4								
5								
6								
7								
8								
9								
10				0	=	Total Cover		
Herb Stratum				Plot Size (5' Radius)		Absolute % Cover	Dominant Species	Indicator Status
1	<i>Dryopteris carthusiana</i>	--	<i>Spinulose Wood Fern</i>	35	Y	FACW		
2	<i>Eurybia macrophylla</i>	--	<i>Large-Leaf Wood-Aster</i>	20	Y	UPL		
3	<i>Aralia nudicaulis</i>	--	<i>Wild Sarsaparilla</i>	10	N	FACU		
4								
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								
15				65	=	Total Cover		
Woody Vine Stratum				Plot Size (30' Radius)		Absolute % Cover	Dominant Species	Indicator Status
1								
2								
3								
4								
5								
				0	=	Total Cover		

50/20 Thresholds

Tree Stratum	6	15
Sapling/Shrub Stratum	0	0
Herb Stratum	13	33
Woody Vine Stratum	0	0

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across all Strata: 4 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 75.00% (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species	0	x 1 =	0
FACW species	35	x 2 =	70
FAC species	30	x 3 =	90
FACU species	10	x 4 =	40
UPL species	20	x 5 =	100
Column totals	95	(A)	300 (B)
Prevalence Index = B/A =		<u>3.16</u>	

Hydrophytic Vegetation Indicators:

☒ Rapid test for hydrophytic vegetation

☒ Dominance test is >50%

☐ Prevalence index is $\geq 3.0^*$

Morphological adaptations* (provide supporting data in Remarks or on a separate sheet)

☐ Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Definitions of Vegetation Strata:

Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines - All woody vines greater than 3.28 ft in height.

Hydrophytic vegetation present? Y

Remarks: (Include photo numbers here or on a separate sheet)

Note: This data sheet has been adapted to use the 2012 National Wetland Plant List:

Robert W. Lichvar and John T. Kartesz. 2009. North American Digital Flora: National Wetland Plant List, version 2.4.0 (https://wetland_plants.usace.army.mil/). U.S. Army Corps of Engineers, Engineer Research and Development Center, Cold Regions Research and Engineering Laboratory, Hanover, NH, and BONAP, Chapel Hill, NC. (2012)

Sampling Point: 22-1u

[illegible]

**Location: PL=Pore Lining, M=Matrix

Indicators for Problematic Hydric Soils:

- *Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Hydric soil present? N

Remarks:

Northcentral and Northeast Region

Project/Site:	<u>Eveleth-Gilbert-Virginia School</u>		City/County:	<u>Eveleth/St. Louis</u>	Sampling Date:	<u>6/17/19</u>
Applicant/Owner:	<u>Kimley-Horn and Associates, Inc.</u>		State:	<u>Minnesota</u>	Sampling Point:	<u>22-1w</u>
Investigator/s:	<u>Rebecca Buduhn</u>		Section, Township, Range:	<u>S29, T58N, R17W</u>		
Landform (hillslope, terrace, etc.):	<u>toeslope</u>	Local relief (concave, convex, none):	<u>none</u>			
Slope (°):	<u>10%</u>	Lat.: <u>47.4776766</u>	Long.: <u>-92.523794</u>	Datum:	<u>NAD 1983 UTM Zone 15N</u>	
Soil Map Unit Name:	<u>Eveleth-Eaglesnest-Conic complex, bouldery, 6-18% slopes, very rNWI Classification: none</u>					
Are climatic/hydrologic conditions of the site typical for this time of the year? <u>Yes</u> (If no, explain in remarks)						
Are vegetation <u> </u> , soil <u> </u> , or hydrology <u> </u> significantly disturbed?	Are "normal circumstances" present? <u>Yes</u>					
Are vegetation <u> </u> , soil <u> </u> , or hydrology <u> </u> naturally problematic?						
(If needed, explain any answers in remarks)						

Hydrophytic vegetation present?	<u>Y</u>	Is the sampled area within a wetland?	<u>Y</u>
Hydric soil present?	<u>Y</u>		
Indicators of wetland hydrology present?	<u>Y</u>	If yes, optional wetland site ID:	<u>Wetland 22</u>
Remarks: (Explain alternative procedures here or in a separate report.)			

Primary Indicators (minimum of one is required; check all that apply)				Secondary Indicators (minimum of two required)			
☐ Surface Water (A1)		☐ Water-Stained Leaves (B9)		☐ Surface Soil Cracks (B6)		☐ Drainage Patterns (B10)	
☐ High Water Table (A2)		☐ Aquatic Fauna (B13)		☐ Moss Trim Lines (B16)		☐ Dry-Season Water Table (C2)	
☒ Saturation (A3)		☐ Marl Deposits (B15)		☐ Crayfish Burrows (C8)		☐ Saturation Visible on Aerial Imagery (C9)	
☐ Water Marks (B1)		☐ Hydrogen Sulfide Odor (C1)		☐ Stunted or Stressed Plants (D1)		☐ Geomorphic Position (D2)	
☐ Sediment Deposits (B2)		☐ Oxidized Rhizospheres on Living Roots (C3)		☐ Shallow Aquitard (D3)		☐ FAC-Neutral Test (D5)	
☐ Drift Deposits (B3)		☐ Presence of Reduced Iron (C4)		☐ Microtopographic Relief (D4)			
☐ Algal Mat or Crust (B4)		☐ Recent Iron Reduction in Tilled Soils (C6)					
☐ Iron Deposits (B5)		☐ Thin Muck Surface (C7)					
☐ Inundation Visible on Aerial Imagery (B7)		☐ Other (Explain in Remarks)					
☐ Sparsely Vegetated Concave Surface (B8)							

Field Observations:				Indicators of wetland hydrology present? <u>Y</u>	
Surface water present?	Yes ☐	No ☒	Depth (inches): <u> </u>		
Water table present?	Yes ☐	No ☒	Depth (inches): <u> </u>		
Saturation present?	Yes ☒	No ☐	Depth (inches): <u> 0 </u>		
(includes capillary fringe)					

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	
Remarks:	

						50/20 Thresholds		
						20%	50%	
Tree Stratum	Plot Size (30' Radius)	Absolute % Cover	Dominant Species	Indicator Status		Tree Stratum	0 0	
1	--					Sapling/Shrub Stratum	6 15	
2	--					Herb Stratum	13 33	
3	--					Woody Vine Stratum	0 0	
4	--							
5	--							
6	--							
7	--							
8	--							
9	--							
10	--							
		0 = Total Cover						
Sapling/Shrub Stratum	Plot Size (15' Radius)	Absolute % Cover	Dominant Species	Indicator Status				
1	<i>Alnus incana</i> -- Speckled Alder	25	Y	FACW				
2	<i>Salix petiolaris</i> -- Meadow Willow	5	N	FACW				
3	--							
4	--							
5	--							
6	--							
7	--							
8	--							
9	--							
10	--							
		30 = Total Cover						
Herb Stratum	Plot Size (5' Radius)	Absolute % Cover	Dominant Species	Indicator Status				
1	<i>Equisetum arvense</i> -- Field Horsetail	20	Y	FAC				
2	<i>Carex lacustris</i> -- Lakebank Sedge	15	Y	OBL				
3	<i>Carex intumescens</i> -- Greater Bladder Sedge	10	N	FACW				
4	<i>Calamagrostis canadensis</i> -- Bluejoint	10	N	OBL				
5	<i>Carex gynandra</i> -- Nodding Sedge	10	N	OBL				
6	--							
7	--							
8	--							
9	--							
10	--							
11	--							
12	--							
13	--							
14	--							
15	--							
		65 = Total Cover						
Woody Vine Stratum	Plot Size (30' Radius)	Absolute % Cover	Dominant Species	Indicator Status				
1	--							
2	--							
3	--							
4	--							
5	--							
		0 = Total Cover						
						Dominance Test Worksheet Number of Dominant Species that are OBL, FACW, or FAC: <u>3</u> (A) Total Number of Dominant Species Across all Strata: <u>3</u> (B) Percent of Dominant Species that are OBL, FACW, or FAC: <u>100.00%</u> (A/B)		
						Prevalence Index Worksheet Total % Cover of: OBL species <u>35</u> x 1 = <u>35</u> FACW species <u>40</u> x 2 = <u>80</u> FAC species <u>20</u> x 3 = <u>60</u> FACU species <u>0</u> x 4 = <u>0</u> UPL species <u>0</u> x 5 = <u>0</u> Column totals <u>95</u> (A) <u>175</u> (B) Prevalence Index = B/A = <u>1.84</u>		
						Hydrophytic Vegetation Indicators: * Rapid test for hydrophytic vegetation ☒ Dominance test is >50% ☒ Prevalence index is >3.0* Morphological adaptations* (provide supporting data in Remarks or on a separate sheet) Probable hydrophytic vegetation* (explain) *Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic		
						Definitions of Vegetation Strata: Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines - All woody vines greater than 3.28 ft in height.		
						Hydrophytic vegetation present? <u>Y</u>		
Remarks: (Include photo numbers here or on a separate sheet)								
Note: This data sheet has been adapted to use the 2012 National Wetland Plant List. Robert W. Lichvar and John T. Kartesz. 2009. North American Digital Flora: National Wetland Plant List, version 2.4.0 (https://wetland_plants.usace.army.mil/). U.S. Army Corps of Engineers, Engineer Research and Development Center, Cold Regions Research and Engineering Laboratory, Hanover, NH, and BONAP, Chapel Hill, NC. (2012)								

SOIL Sampling Point: 22-1w

Sampling Point: 22-1w

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

[illegible]

*Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains

**Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

Indicators for Problematic Hydric Soils:

- | | | |
|---|----------------------------|--|
| ☐ Histosol (A1) | Polyvalue Below Surface | ☐ 2 cm Muck (A10) (LRR K, L, MLRA 149B |
| ☐ Histic Epipedon (A2) | (S8) (LRR R, MLRA 149B) | ☐ Coast Prairie Redox (A16) (LRR K, L, R) |
| ☐ Black Histic (A3) | Thin Dark Surface (S9) | ☐ 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) |
| ☐ Hydrogen Sulfide (A4) | (LRR R, MLRA 149B | ☐ Dark Surface (S7) (LRR K, L) |
| ☐ Stratified Layers (A5) | Loamy Mucky Mineral (F1) | ☐ Polyvalue Below Surface (S8) (LRR K, L) |
| ☐ Depleted Below Dark Surface (A11) | (LRR K, L) | ☐ Thin Dark Surface (S9) (LRR K, L) |
| ☐ Thick Dark Surface (A12) | Loamy Gleyed Matrix (F2) | ☐ Iron-Manganese Masses (F12) (LRR K, L, R) |
| ☐ Sandy Mucky Mineral (S1) | X Depleted Matrix (F3) | ☐ Piedmont Floodplain Soils (F19) (MLRA 149B) |
| ☐ Sandy Gleyed Matrix (S4) | Redox Dark Surface (F6) | ☐ Mesic Spodic (TA6) (MLRA 144A, 145, 149B) |
| ☐ Sandy Redox (S5) | Depleted Dark Surface (F7) | ☐ Red Parent Material (TF2) |
| ☐ Stripped Matrix (S6) | Redox Depressions (F8) | ☐ Very Shallow Dark Surface (TF12) |
| ☐ Dark Surface (S7) (LRR R, MLRA 149B) | | ☐ Other (Explain in Remarks) |

*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):

Type: Rock

Depth (inches): 8

Hydric soil present? Y

Remarks:

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Project/Site:	<u>Eveleth-Gilbert-Virginia School</u>	City/County:	<u>Eveleth/St. Louis</u>	Sampling Date:	<u>6/17/19</u>
Applicant/Owner:	<u>Kimley-Horn and Associates, Inc.</u>	State:	<u>Minnesota</u>	Sampling Point:	<u>23-1u</u>
Investigator(s):	<u>Rebecca Buduhn</u>	Section, Township, Range:	<u>S29, T58N, R17W</u>		
Landform (hillslope, terrace, etc.):	<u>footslope</u>	Local relief (concave, convex, none):	<u>none</u>		
Slope (°):	<u>10%</u>	Lat.:	<u>47.476422</u>	Long.:	<u>-92.522149</u>
		Datum:	<u>NAD 1983 UTM Zone 15N</u>		
Soil Map Unit Name:	<u>Eveleth-Eaglesnest-Conic complex, bouldery, 6-18% slopes, very r</u>				
Soil NW1 Classification:	<u>none</u>				
Are climatic/hydrologic conditions of the site typical for this time of the year? <u>Yes</u> (If no, explain in remarks)					
Are vegetation _____, soil _____, or hydrology _____ significantly disturbed?	<u>Are "normal circumstances" present?</u>				
Are vegetation _____, soil _____, or hydrology _____ naturally problematic?	<u>Yes</u>				
(If needed, explain any answers in remarks)					

Hydrophytic vegetation present?	<u>Y</u>	Is the sampled area within a wetland? <u>N</u>
Hydric soil present?	<u>N</u>	
Indicators of wetland hydrology present?	<u>N</u>	
If yes, optional wetland site ID: _____		
Remarks: (Explain alternative procedures here or in a separate report.)		

Primary Indicators (minimum of one is required; check all that apply)			Secondary Indicators (minimum of two required)		
☐ Surface Water (A1)	☐ Water-Stained Leaves (B9)		☐ Surface Soil Cracks (B6)		
☐ High Water Table (A2)	☐ Aquatic Fauna (B13)		☐ Drainage Patterns (B10)		
☐ Saturation (A3)	☐ Marl Deposits (B15)		☐ Moss Trim Lines (B16)		
☐ Water Marks (B1)	☐ Hydrogen Sulfide Odor (C1)		☐ Dry-Season Water Table (C2)		
☐ Sediment Deposits (B2)	☐ Oxidized Rhizospheres on Living		☐ Crayfish Burrows (C8)		
☐ Drift Deposits (B3)	☐ Roots (C3)		☐ Saturation Visible on Aerial Imagery		
☐ Algal Mat or Crust (B4)	☐ Presence of Reduced Iron (C4)		☐ (C9)		
☐ Iron Deposits (B5)	☐ Recent Iron Reduction in Tilled		☐ Stunted or Stressed Plants (D1)		
☐ Inundation Visible on Aerial	☐ Soils (C6)		☐ Geomorphic Position (D2)		
☐ Imagery (B7)	☐ Thin Muck Surface (C7)		☐ Shallow Aquitard (D3)		
☐ Sparsely Vegetated Concave	☐ Other (Explain in Remarks)		☐ FAC-Neutral Test (D5)		
☐ Surface (B8)			☐ Microtopographic Relief (D4)		

Field Observations:			Indicators of wetland hydrology present? <u> </u> N
Surface water present?	Yes ☐	No ☐ X Depth (inches):	
Water table present?	Yes ☐	No ☐ X Depth (inches):	
Saturation present?	Yes ☐	No ☐ X Depth (inches):	
(includes capillary fringe)			
Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks:			

					50/20 Thresholds		
			20%	50%			
Tree Stratum	Plot Size (30' Radius)	Absolute % Cover	Dominant Species	Indicator Status	Tree Stratum	0	0
1	--				Sapling/Shrub Stratum	0	0
2	--				Herb Stratum	20	50
3	--				Woody Vine Stratum	0	0
4	--						
5	--						
6	--						
7	--						
8	--						
9	--						
10	--	0 = Total Cover					
Sapling/Shrub Stratum	Plot Size (15' Radius)	Absolute % Cover	Dominant Species	Indicator Status			
1	--						
2	--						
3	--						
4	--						
5	--						
6	--						
7	--						
8	--						
9	--						
10	--	0 = Total Cover					
Herb Stratum	Plot Size (5' Radius)	Absolute % Cover	Dominant Species	Indicator Status			
1	<i>Dryopteris carthusiana</i> -- Spinulose Wood Fern	15	Y	FACW			
2	<i>Cornus canadensis</i> -- Canadian Bunchberry	10	Y	FAC			
3	<i>Athyrium filix-femina</i> -- Lady Fern	10	Y	FAC			
4	<i>Eurybia macrophylla</i> -- Large-Leaf Wood-Aster	10	Y	UPL			
5	<i>Rubus idaeus</i> -- Common Red Raspberry	10	Y	FAC			
6	<i>Fragaria virginiana</i> -- Virginia Strawberry	10	Y	FACU			
7	<i>Trientalis borealis</i> -- Maystar	10	Y	FAC			
8	<i>Osmunda claytoniana</i> -- Interrupted Fern	10	Y	FAC			
9	<i>Aralia nudicaulis</i> -- Wild Sarsaparilla	10	Y	FACU			
10	<i>Rhamnus cathartica</i> -- European Buckthorn	5	N	FAC			
11	--						
12	--						
13	--						
14	--						
15	--	100 = Total Cover					
Woody Vine Stratum	Plot Size (30' Radius)	Absolute % Cover	Dominant Species	Indicator Status			
1	--						
2	--						
3	--						
4	--						
5	--	0 = Total Cover					
Remarks: (Include photo numbers here or on a separate sheet)							
Note: This data sheet has been adapted to use the 2012 National Wetland Plant List: Robert W. Lichvar and John T. Kartez. 2009. North American Digital Flora: National Wetland Plant List, version 2.4.0 (https://wetland_plants.usace.army.mil/). U.S. Army Corps of Engineers, Engineer Research and Development Center, Cold Regions Research and Engineering Laboratory, Hanover, NH, and BONAP, Chapel Hill, NC. (2012)							

Sampling Point: 23-1u

[illegible]

**Location: PL=Pore Lining, M=Matrix

Indicators for Problematic Hydric Soils:

- *Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Hydric soil present? N

Northcentral and Northeast Region

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Eveleth-Gilbert-Virginia School City/County: Eveleth/St. Louis Sampling Date: 6/17/19
 Applicant/Owner: Kimley-Horn and Associates, Inc. State: Minnesota Sampling Point: 23-1w
 Investigator(s): Rebecca Buduhn Section, Township, Range: S29, T58N, R17W
 Landform (hillslope, terrace, etc.): toeslope Local relief (concave, convex, none): none
 Slope (%): 1% Lat.: 47.476402 Long.: -92.522067 Datum: NAD 1983 UTM Zone 15N
 Soil Map Unit Name: Eveleth-Eaglesnest-Conic complex, bouldery, 6-18% slopes, very r NWI Classification: none
 Are climatic/hydrologic conditions of the site typical for this time of the year? Yes (If no, explain in remarks)
 Are vegetation , soil , or hydrology significantly disturbed? Are "normal
 Are vegetation , soil , or hydrology naturally problematic? circumstances" present? Yes
 (If needed, explain any answers in remarks)

SUMMARY OF FINDINGS

Hydrophytic vegetation present?	<u>Y</u>	Is the sampled area within a wetland?	<u>Y</u>
Hydric soil present?	<u>Y</u>		
Indicators of wetland hydrology present?	<u>Y</u>	If yes, optional wetland site ID:	<u>Wetland 23</u>
Remarks: (Explain alternative procedures here or in a separate report.)			

HYDROLOGY

Primary Indicators (minimum of one is required; check all that apply) ☐ Surface Water (A1) ☐ Water-Stained Leaves (B9) ☐ High Water Table (A2) ☐ Aquatic Fauna (B13) ☒ Saturation (A3) ☐ Marl Deposits (B15) ☐ Water Marks (B1) ☐ Hydrogen Sulfide Odor (C1) ☐ Sediment Deposits (B2) ☐ Oxidized Rhizospheres on Living ☐ Drift Deposits (B3) ☐ Roots (C3) ☐ Algal Mat or Crust (B4) ☐ Presence of Reduced Iron (C4) ☐ Iron Deposits (B5) ☐ Recent Iron Reduction in Tilled ☐ Inundation Visible on Aerial ☐ Soils (C6) ☐ Imagery (B7) ☐ Thin Muck Surface (C7) ☐ Sparsely Vegetated Concave ☐ Other (Explain in Remarks) ☐ Surface (B8) ☐ Microtopographic Relief (D4)		Secondary Indicators (minimum of two required) ☐ Surface Soil Cracks (B6) ☐ Drainage Patterns (B10) ☐ Moss Trim Lines (B16) ☐ Dry-Season Water Table (C2) ☐ Crayfish Burrows (C8) ☐ Saturation Visible on Aerial Imagery ☐ (C9) ☐ Stunted or Stressed Plants (D1) ☐ Geomorphic Position (D2) ☐ Shallow Aquitard (D3) ☐ FAC-Neutral Test (D5) ☐ Microtopographic Relief (D4)
Field Observations: Surface water present? Yes <u> </u> No <u>X</u> Depth (inches): <u> </u> Water table present? Yes <u> </u> No <u>X</u> Depth (inches): <u> </u> Saturation present? Yes <u>X</u> No <u> </u> Depth (inches): <u>0</u> (includes capillary fringe)	Indicators of wetland hydrology present? <u>Y</u>	
Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

US Army Corps of Engineers

Northcentral and Northeast Region

VEGETATION - Use scientific names of plants

					Sampling Point: <u>23-1w</u>		
					50/20 Thresholds		
					20% 50%		
Tree Stratum					Tree Stratum		
Plot Size (30' Radius)					Sapling/Shrub Stratum		
Absolute % Cover					Herb Stratum		
Dominant Species					Woody Vine Stratum		
Indicator Status							
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
					Dominance Test Worksheet		
					Number of Dominant Species that are OBL, FACW, or FAC: <u>3</u> (A)		
					Total Number of Dominant Species Across all Strata: <u>3</u> (B)		
					Percent of Dominant Species that are OBL, FACW, or FAC: <u>100.00%</u> (A/B)		
Sapling/Shrub Stratum					Prevalence Index Worksheet		
Plot Size (15' Radius)					Total % Cover of:		
Absolute % Cover					OBL species <u>0</u> x 1 = <u>0</u>		
Dominant Species					FACW species <u>60</u> x 2 = <u>120</u>		
Indicator Status					FAC species <u>60</u> x 3 = <u>180</u>		
1	<u>Alnus incana</u>	<u>--</u>	<u>Speckled Alder</u>	<u>25</u>	<u>Y</u>	<u>FACW</u>	FACU species <u>0</u> x 4 = <u>0</u>
2	<u>Salix discolor</u>	<u>--</u>	<u>Pussy Willow</u>	<u>5</u>	<u>N</u>	<u>FACW</u>	UPL species <u>0</u> x 5 = <u>0</u>
3							Column totals <u>120</u> (A) <u>300</u> (B)
4							Prevalence Index = B/A = <u>2.50</u>
5							
6							
7							
8							
9							
10							
					Hydrophytic Vegetation Indicators:		
					<u> </u> Rapid test for hydrophytic vegetation		
					<u>X</u> Dominance test is >50%		
					<u>X</u> Prevalence index is ≤3.0*		
					Morphological adaptations* (provide supporting data in Remarks or on a separate sheet)		
					<u> </u> Problematic hydrophytic vegetation* (explain)		
					*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic		
Herb Stratum					Definitions of Vegetation Strata:		
Plot Size (5' Radius)					Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.		
Absolute % Cover					Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.		
Dominant Species					Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.		
Indicator Status					Woody vines - All woody vines greater than 3.28 ft in height.		
1	<u>Equisetum arvense</u>	<u>--</u>	<u>Field Horsetail</u>	<u>50</u>	<u>Y</u>	<u>FAC</u>	
2	<u>Onoclea sensibilis</u>	<u>--</u>	<u>Sensitive Fern</u>	<u>30</u>	<u>Y</u>	<u>FACW</u>	
3	<u>Athyrium Filix-femina</u>	<u>--</u>	<u>Lady Fern</u>	<u>10</u>	<u>N</u>	<u>FAC</u>	
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
					Hydrophytic vegetation present? <u>Y</u>		
Woody Vine Stratum							
Plot Size (30' Radius)							
Absolute % Cover							
Dominant Species							
Indicator Status							
1							
2							
3							
4							
5							
					Total Cover = <u>0</u>		
Remarks: (Include photo numbers here or on a separate sheet)							
Note: This data sheet has been adapted to use the 2012 National Wetland Plant List: Robert W. Lichvar and John T. Kartesz. 2009. North American Digital Flora: National Wetland Plant List, version 2.4.0 (https://wetland.plants.usace.army.mil), U.S. Army Corps of Engineers, Engineer Research and Development Center, Cold Regions Research and Engineering Laboratory, Hanover, NH, and BONAP, Chapel Hill, NC. (2012)							

US Army Corps of Engineers

Northcentral and Northeast Region

Sampling Point: 23-1w

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

*Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains
 **Location: PL=Pore Lining, M=Matrix

Indicators for Problematic Hydric Soils:

- | | | |
|---|----------------------------|--|
| ☐ Histosol (A1) | Polyvalue Below Surface | ☐ 2 cm Muck (A10) (LRR K, L, MLRA 149B |
| ☐ Histic Epipedon (A2) | (S8) (LRR R, MLRA 149B) | ☐ Coast Prairie Redox (A16) (LRR K, L, R) |
| ☐ Black Histic (A3) | Thin Dark Surface (S9) | ☐ 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) |
| ☐ Hydrogen Sulfide (A4) | (LRR R, MLRA 149B | ☐ Dark Surface (S7) (LRR K, L) |
| ☐ Stratified Layers (A5) | Loamy Mucky Mineral (F1) | ☐ Polyvalue Below Surface (S8) (LRR K, L) |
| ☐ Depleted Below Dark Surface (A11) | (LRR K, L) | ☐ Thin Dark Surface (S9) (LRR K, L) |
| ☐ Thick Dark Surface (A12) | Loamy Gleyed Matrix (F2) | ☐ Iron-Manganese Masses (F12) (LRR K, L, R) |
| ☐ Sandy Mucky Mineral (S1) | Depleted Matrix (F3) | ☐ Piedmont Floodplain Soils (F19) (MLRA 149B) |
| ☐ Sandy Gleyed Matrix (S4) | Redox Dark Surface (F6) | ☐ Mesic Spodic (TA6) (MLRA 144A, 145, 149B) |
| ☐ Sandy Redox (S5) | Depleted Dark Surface (F7) | ☐ Red Parent Material (TF2) |
| ☐ Stripped Matrix (S6) | Redox Depressions (F8) | ☐ Very Shallow Dark Surface (TF12) |
| ☐ Dark Surface (S7) (LRR R, MLRA 149B) | | ☒ Other (Explain in Remarks) |

*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Hydric soil present? Y

Type: Rock
Depth (inches): 8

Remarks:

Soil sample was very shallow because of the presence of rock/bedrock at 8 inches. Soils were saturated to the surface and hydrophytic vegetation was present. Based on the observations our professional judgement is that soils should be considered hydric.

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WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: <u>Eveleth-Gilbert-Virginia School</u>		City/County: <u>Eveleth/St. Louis</u>		Sampling Date: <u>6/17/19</u>	
Applicant/Owner: <u>Kimley-Horn and Associates, Inc.</u>		State: <u>Minnesota</u>		Sampling Point: <u>24-1u</u>	
Investigator(s): <u>Rebecca Buduhn</u>		Section, Township, Range: <u>S29, T58N, R17W</u>			
Landform (hill/slope, terrace, etc.): <u>foothlope</u>		Local relief (concave, convex, none): <u>none</u>			
Slope (°): <u>10%</u>		Lat.: <u>47.484357</u>		Long.: <u>-92.528051</u>	
		Datum: <u>NAD 1983 UTM Zone 15N</u>			
Soil Map Unit Name: <u>Eaglesnest stony loam, 2-8% slopes, bouldery</u>		NW1 Classification: <u>none</u>			
Are climatic/hydrologic conditions of the site typical for this time of the year?		<u>Yes</u>		(If no, explain in remarks)	
Are vegetation <u> </u> , soil <u> </u> , or hydrology <u> </u> significantly disturbed?		<u>Yes</u>		Are "normal circumstances" present?	
Are vegetation <u> </u> , soil <u> </u> , or hydrology <u> </u> naturally problematic?		<u>Yes</u>			
(If needed, explain any answers in remarks)					

SUMMARY OF FINDINGS

Hydrophytic vegetation present?	<u> N </u>	Is the sampled area within a wetland? <u> N </u> If yes, optional wetland site ID: _____
Hydric soil present?	<u> N </u>	
Indicators of wetland hydrology present?	<u> N </u>	
Remarks: (Explain alternative procedures here or in a separate report.)		

HYDROLOGY

Primary Indicators (minimum of one is required; check all that apply)			Secondary Indicators (minimum of two required)		
☐ Surface Water (A1)	☐	☐ Water-Stained Leaves (B9)	☐	☐	☐ Surface Soil Cracks (B6)
☐ High Water Table (A2)	☐	☐ Aquatic Fauna (B13)	☐	☐	☐ Drainage Patterns (B10)
☐ Saturation (A3)	☐	☐ Marl Deposits (B15)	☐	☐	☐ Moss Trim Lines (B16)
☐ Water Marks (B1)	☐	☐ Hydrogen Sulfide Odor (C1)	☐	☐	☐ Dry-Season Water Table (C2)
☐ Sediment Deposits (B2)	☐	☐ Oxidized Rhizospheres on Living	☐	☐	☐ Crayfish Burrows (C8)
☐ Drift Deposits (B3)	☐	☐ Roots (C3)	☐	☐	☐ Saturation Visible on Aerial Imagery
☐ Algal Mat or Crust (B4)	☐	☐ Presence of Reduced Iron (C4)	☐	☐	☐ (C9)
☐ Iron Deposits (B5)	☐	☐ Recent Iron Reduction in Tilled	☐	☐	☐ Stunted or Stressed Plants (D1)
☐ Inundation Visible on Aerial	☐	☐ Soils (C6)	☐	☐	☐ Geomorphic Position (D2)
☐ Imagery (B7)	☐	☐ Thin Muck Surface (C7)	☐	☐	☐ Shallow Aquitard (D3)
☐ Sparsely Vegetated Concave	☐	☐ Other (Explain in Remarks)	☐	☐	☐ FAC-Neutral Test (D5)
☐ Surface (B8)	☐		☐	☐	☐ Microtopographic Relief (D4)
Field Observations:			Indicators of wetland hydrology present?		
Surface water present?	Yes ☐	No ☐ X	Depth (inches):		
Water table present?	Yes ☐	No ☐ X	Depth (inches):		
Saturation present?	Yes ☐	No ☐ X	Depth (inches):		
(includes capillary fringe)			N		
Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:					
Remarks:					

VEGETATION - Use scientific names of plants

						50/20 Thresholds	
Tree Stratum	Plot Size (30' Radius)	Absolute % Cover	Dominant Species	Indicator Status		20%	50%
1	<i>Thuja occidentalis</i> -- Eastern Arborvitae	20	Y	FACW		8	20
2	<i>Picea glauca</i> -- White Spruce	10	Y	FACU		Sapling/Shrub Stratum	0
3	<i>Pinus resinosa</i> -- Red Pine	10	Y	FACU		Herb Stratum	19
4	--					Woody Vine Stratum	0
5	--						
6	--						
7	--						
8	--						
9	--						
10	--						
		40 = Total Cover					
Sapling/Shrub Stratum	Plot Size (15' Radius)	Absolute % Cover	Dominant Species	Indicator Status			
1	--						
2	--						
3	--						
4	--						
5	--						
6	--						
7	--						
8	--						
9	--						
10	--						
		0 = Total Cover					
Herb Stratum	Plot Size (5' Radius)	Absolute % Cover	Dominant Species	Indicator Status			
1	<i>Geranium maculatum</i> -- Spotted Crane's-Bill	15	Y	FACU			
2	<i>Cornus canadensis</i> -- Canadian Bunchberry	15	Y	FAC			
3	<i>Aralia nudicaulis</i> -- Wild Sarsaparilla	10	Y	FACU			
4	<i>Trientalis borealis</i> -- Maystar	10	Y	FAC			
5	<i>Acer rubrum</i> -- Red Maple	10	Y	FAC			
6	<i>Dryopteris carthusiana</i> -- Spinulose Wood Fern	10	Y	FACW			
7	<i>Maianthemum racemosum</i> -- Feathered False Solomon's-Seal	10	Y	FACU			
8	<i>Fragaria virginiana</i> -- Virginia Strawberry	5	N	FACU			
9	<i>Eurybia macrophylla</i> -- Large-Leaf Wood-Aster	5	N	UPL			
10	<i>Convallaria majalis</i> -- European Lily-of-the-Valley	5	N				
11	--						
12	--						
13	--						
14	--						
15	--						
		95 = Total Cover					
Woody Vine Stratum	Plot Size (30' Radius)	Absolute % Cover	Dominant Species	Indicator Status			
1	--						
2	--						
3	--						
4	--						
5	--						
		0 = Total Cover					

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: _____ 5 (A)

Total Number of Dominant Species Across all Strata: _____ 10 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: _____ 50.00% (A/B)

Prevalence Index Worksheet

Total % Cover of:

- OBL species: 0 x 1 = 0
- FACW species: 30 x 2 = 60
- FAC species: 35 x 3 = 105
- FACU species: 60 x 4 = 240
- UPL species: 5 x 5 = 25

Column totals: 130 (A) 430 (B)

Prevalence Index = B/A = 3.31

Hydrophytic Vegetation Indicators:

- ____ Rapid test for hydrophytic vegetation
- ____ Dominance test is >50%
- ____ Prevalence index is <3.0*

Morphological adaptations* (provide supporting data in Remarks or on a separate sheet)

____ Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Definitions of Vegetation Strata:

Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines - All woody vines greater than 3.28 ft in height.

Hydrophytic vegetation present? _____ N

Remarks: (Include photo numbers here or on a separate sheet)

Note: This data sheet has been adapted to use the 2012 National Wetland Plant List:
Robert W. Lichvar and John T. Kartesz. 2009. North American Digital Flora: National Wetland Plant List, version 2.4.0 (https://wetland_plants.usace.army.mil). U.S. Army Corps of Engineers, Engineer Research and Development Center, Cold Regions Research and Engineering Laboratory, Hanover, NH, and BONAP, Chapel Hill, NC. (2012)

[illegible]

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Northcentral and Northeast Region

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Eveleth-Gilbert-Virginia School City/County: Eveleth/St. Louis Sampling Date: 6/17/19
 Applicant/Owner: Kimley-Horn and Associates, Inc. State: Minnesota Sampling Point: 24-1w
 Investigator(s): Rebecca Buduhn Section, Township, Range: S29, T58N, R17W
 Landform (hillslope, terrace, etc.): toeslope Local relief (concave, convex, none): none
 Slope (%): 1% Lat.: 47.484439 Long.: -92.527869 Datum: NAD 1983 UTM Zone 15N
 Soil Map Unit Name: Eaglesnest stony loam, 2-8% slopes, bouldery NWI Classification: none
 Are climatic/hydrologic conditions of the site typical for this time of the year? Yes (If no, explain in remarks)
 Are vegetation , soil , or hydrology significantly disturbed? Are "normal
 Are vegetation , soil , or hydrology naturally problematic? circumstances" present? Yes
 (If needed, explain any answers in remarks)

SUMMARY OF FINDINGS

Hydrophytic vegetation present?	<u>Y</u>	Is the sampled area within a wetland?	<u>Y</u>
Hydric soil present?	<u>Y</u>		
Indicators of wetland hydrology present?	<u>Y</u>	If yes, optional wetland site ID:	<u>Wetland 24</u>
Remarks: (Explain alternative procedures here or in a separate report.)			

HYDROLOGY

Primary Indicators (minimum of one is required; check all that apply) ☐ Surface Water (A1) ☐ Water-Stained Leaves (B9) ☐ High Water Table (A2) ☐ Aquatic Fauna (B13) ☒ Saturation (A3) ☐ Marl Deposits (B15) ☐ Water Marks (B1) ☐ Hydrogen Sulfide Odor (C1) ☐ Sediment Deposits (B2) ☐ Oxidized Rhizospheres on Living ☐ Drift Deposits (B3) ☐ Roots (C3) ☐ Algal Mat or Crust (B4) ☐ Presence of Reduced Iron (C4) ☐ Iron Deposits (B5) ☐ Recent Iron Reduction in Tilled ☐ Inundation Visible on Aerial ☐ Soils (C6) ☐ Imagery (B7) ☐ Thin Muck Surface (C7) ☐ Sparsely Vegetated Concave ☐ Other (Explain in Remarks) ☐ Surface (B8)		Secondary Indicators (minimum of two required) ☐ Surface Soil Cracks (B6) ☐ Drainage Patterns (B10) ☐ Moss Trim Lines (B16) ☐ Dry-Season Water Table (C2) ☐ Crayfish Burrows (C8) ☐ Saturation Visible on Aerial Imagery ☐ (C9) ☐ Stunted or Stressed Plants (D1) ☐ Geomorphic Position (D2) ☐ Shallow Aquitard (D3) ☐ FAC-Neutral Test (D5) ☐ Microtopographic Relief (D4)
Field Observations: Surface water present? Yes <u> </u> No <u>X</u> Depth (inches): <u> </u> Water table present? Yes <u> </u> No <u>X</u> Depth (inches): <u> </u> Saturation present? Yes <u>X</u> No <u> </u> Depth (inches): <u>0</u> (includes capillary fringe)	Indicators of wetland hydrology present? <u>Y</u>	
Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

US Army Corps of Engineers

Northcentral and Northeast Region

VEGETATION - Use scientific names of plants

					Sampling Point: 24-1w		
					50/20 Thresholds		
Tree Stratum	Plot Size (30' Radius)	Absolute % Cover	Dominant Species	Indicator Status	20%	50%	
1	<u>Acer rubrum</u> -- <u>Red Maple</u>	<u>20</u>	<u>Y</u>	<u>FAC</u>	Tree Stratum	<u>8</u>	<u>20</u>
2	<u>Fraxinus nigra</u> -- <u>Black Ash</u>	<u>10</u>	<u>Y</u>	<u>FACW</u>	Sapling/Shrub Stratum	<u>10</u>	<u>25</u>
3	<u>Thuja occidentalis</u> -- <u>Eastern Arborvitae</u>	<u>10</u>	<u>Y</u>	<u>FACW</u>	Herb Stratum	<u>19</u>	<u>48</u>
4	<u> </u> -- <u> </u>	<u> </u>	<u> </u>	<u> </u>	Woody Vine Stratum	<u>0</u>	<u>0</u>
5	<u> </u> -- <u> </u>	<u> </u>	<u> </u>	<u> </u>			
6	<u> </u> -- <u> </u>	<u> </u>	<u> </u>	<u> </u>			
7	<u> </u> -- <u> </u>	<u> </u>	<u> </u>	<u> </u>			
8	<u> </u> -- <u> </u>	<u> </u>	<u> </u>	<u> </u>			
9	<u> </u> -- <u> </u>	<u> </u>	<u> </u>	<u> </u>			
10	<u> </u> -- <u> </u>	<u> </u>	<u> </u>	<u> </u>			
		<u>40</u>	= Total Cover				
Sapling/Shrub Stratum	Plot Size (15' Radius)	Absolute % Cover	Dominant Species	Indicator Status			
1	<u>Rhamnus cathartica</u> -- <u>European Buckthorn</u>	<u>25</u>	<u>Y</u>	<u>FAC</u>			
2	<u>Picea glauca</u> -- <u>White Spruce</u>	<u>15</u>	<u>Y</u>	<u>FACU</u>			
3	<u>Alnus incana</u> -- <u>Speckled Alder</u>	<u>10</u>	<u>Y</u>	<u>FACW</u>			
4	<u> </u> -- <u> </u>	<u> </u>	<u> </u>	<u> </u>			
5	<u> </u> -- <u> </u>	<u> </u>	<u> </u>	<u> </u>			
6	<u> </u> -- <u> </u>	<u> </u>	<u> </u>	<u> </u>			
7	<u> </u> -- <u> </u>	<u> </u>	<u> </u>	<u> </u>			
8	<u> </u> -- <u> </u>	<u> </u>	<u> </u>	<u> </u>			
9	<u> </u> -- <u> </u>	<u> </u>	<u> </u>	<u> </u>			
10	<u> </u> -- <u> </u>	<u> </u>	<u> </u>	<u> </u>			
		<u>50</u>	= Total Cover				
Herb Stratum	Plot Size (5' Radius)	Absolute % Cover	Dominant Species	Indicator Status			
1	<u>Carex gynandra</u> -- <u>Nodding Sedge</u>	<u>20</u>	<u>Y</u>	<u>OBL</u>			
2	<u>Fragaria virginiana</u> -- <u>Virginia Strawberry</u>	<u>15</u>	<u>Y</u>	<u>FACU</u>			
3	<u>Carex intumescens</u> -- <u>Greater Bladder Sedge</u>	<u>10</u>	<u>Y</u>	<u>FACW</u>			
4	<u>Equisetum arvense</u> -- <u>Field Horsetail</u>	<u>10</u>	<u>Y</u>	<u>FAC</u>			
5	<u>Geranium maculatum</u> -- <u>Spotted Crane's-Bill</u>	<u>10</u>	<u>Y</u>	<u>FACU</u>			
6	<u>Calamagrostis canadensis</u> -- <u>Bluejoint</u>	<u>5</u>	<u>N</u>	<u>OBL</u>			
7	<u>Carex stricta</u> -- <u>Upright Sedge</u>	<u>5</u>	<u>N</u>	<u>OBL</u>			
8	<u>Eurybia macrophylla</u> -- <u>Large-Leaf Wood-Aster</u>	<u>5</u>	<u>N</u>	<u>OBL</u>			
9	<u>Aralia nudicaulis</u> -- <u>Wild Sarsaparilla</u>	<u>5</u>	<u>N</u>	<u>FACU</u>			
10	<u>Acer rubrum</u> -- <u>Red Maple</u>	<u>5</u>	<u>N</u>	<u>FAC</u>			
11	<u>Thuja occidentalis</u> -- <u>Eastern Arborvitae</u>	<u>5</u>	<u>N</u>	<u>FACW</u>			
12	<u> </u> -- <u> </u>	<u> </u>	<u> </u>	<u> </u>			
13	<u> </u> -- <u> </u>	<u> </u>	<u> </u>	<u> </u>			
14	<u> </u> -- <u> </u>	<u> </u>	<u> </u>	<u> </u>			
15	<u> </u> -- <u> </u>	<u> </u>	<u> </u>	<u> </u>			
		<u>95</u>	= Total Cover				
Woody Vine Stratum	Plot Size (30' Radius)	Absolute % Cover	Dominant Species	Indicator Status			
1	<u> </u> -- <u> </u>	<u> </u>	<u> </u>	<u> </u>			
2	<u> </u> -- <u> </u>	<u> </u>	<u> </u>	<u> </u>			
3	<u> </u> -- <u> </u>	<u> </u>	<u> </u>	<u> </u>			
4	<u> </u> -- <u> </u>	<u> </u>	<u> </u>	<u> </u>			
5	<u> </u> -- <u> </u>	<u> </u>	<u> </u>	<u> </u>			
		<u>0</u>	= Total Cover				
Remarks: (Include photo numbers here or on a separate sheet)							
Note: This data sheet has been adapted to use the 2012 National Wetland Plant List: Robert W. Lichvar and John T. Kartesz. 2009. North American Digital Flora: National Wetland Plant List, version 2.4.0 (https://wetland.plants.usace.army.mil). U.S. Army Corps of Engineers, Engineer Research and Development Center, Cold Regions Research and Engineering Laboratory, Hanover, NH, and BONAP, Chapel Hill, NC. (2012)							

US Army Corps of Engineers

Northcentral and Northeast Region

Sampling Point: 24-1w

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

*Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains
 **Location: PL=Pore Lining, M=Matrix

Indicators for Problematic Hydric Soils:

- | | | |
|---|----------------------------|--|
| ☐ Histosol (A1) | Polyvalue Below Surface | ☐ 2 cm Muck (A10) (LRR K, L, MLRA 149B |
| ☐ Histic Epipedon (A2) | (S8) (LRR R, MLRA 149B) | ☐ Coast Prairie Redox (A16) (LRR K, L, R) |
| ☐ Black Histic (A3) | Thin Dark Surface (S9) | ☐ 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) |
| ☐ Hydrogen Sulfide (A4) | (LRR R, MLRA 149B | ☐ Dark Surface (S7) (LRR K, L) |
| ☐ Stratified Layers (A5) | Loamy Mucky Mineral (F1) | ☐ Polyvalue Below Surface (S8) (LRR K, L) |
| ☐ Depleted Below Dark Surface (A11) | (LRR K, L) | ☐ Thin Dark Surface (S9) (LRR K, L) |
| ☐ Thick Dark Surface (A12) | Loamy Gleyed Matrix (F2) | ☐ Iron-Manganese Masses (F12) (LRR K, L, R) |
| ☐ Sandy Mucky Mineral (S1) | Depleted Matrix (F3) | ☐ Piedmont Floodplain Soils (F19) (MLRA 149B) |
| ☐ Sandy Gleyed Matrix (S4) | Redox Dark Surface (F6) | ☐ Mesic Spodic (TA6) (MLRA 144A, 145, 149B) |
| ☐ Sandy Redox (S5) | Depleted Dark Surface (F7) | ☐ Red Parent Material (TF2) |
| ☐ Stripped Matrix (S6) | Redox Depressions (F8) | ☐ Very Shallow Dark Surface (TF12) |
| ☐ Dark Surface (S7) (LRR R, MLRA 149B) | | ☒ Other (Explain in Remarks) |

*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):

Type: Rock
Depth (inches): 6

Hydric soil present? Y

Remarks:

Soil sample was very shallow because of the presence of rock/bedrock at 6 inches. Soils were saturated to the surface and hydrophytic vegetation was present. Based on the observations our professional judgement is that soils should be considered hydric.

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WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: <u>Eveleth-Gilbert-Virginia School</u>		City/County: <u>Eveleth/St. Louis</u>	Sampling Date: <u>5-23-17</u>
Applicant/Owner: <u>Kimley-Horn and Associates, Inc.</u>		State: <u>Minnesota</u>	Sampling Point: <u>25-1u</u>
Investigator/s: <u>Kyle Hanson</u>		Section, Township, Range: <u>32, 58, 17</u>	
Landform (hillslope, terrace, etc.): <u>footslope</u>		Local relief (concave, convex, none): <u>none</u>	
Slope (°): <u>40%</u>		Lat.: <u>47.472005</u>	Long.: <u>-92.521698</u>
		Datum: <u>NAD 83, UTM 15N</u>	
Soil Map Unit Name: <u>Eveleth-Eaglesnest-Conic complex, bulldery, 6-18% slopes, rocky</u>		NW1 Classification: <u>none</u>	
Are climatic/hydrologic conditions of the site typical for this time of the year? <u>yes</u>			(If no, explain in remarks)
Are vegetation <u> </u> , soil <u> </u> , or hydrology <u> </u> significantly disturbed?		Are "normal circumstances" present? <u>Yes</u>	
Are vegetation <u> </u> , soil <u> </u> , or hydrology <u> </u> naturally problematic?			
(If needed, explain any answers in remarks)			

SUMMARY OF FINDINGS

Hydrophytic vegetation present?	<u>Y</u>	Is the sampled area within a wetland? <u>N</u> If yes, optional wetland site ID: _____
Hydric soil present?	<u>N</u>	
Indicators of wetland hydrology present?	<u>N</u>	
Remarks: (Explain alternative procedures here or in a separate report.)		

HYDROLOGY

Primary Indicators (minimum of one is required; check all that apply)			Secondary Indicators (minimum of two required)		
☐ Surface Water (A1)	☐	☐ Water-Stained Leaves (B9)	☐	☐ Surface Soil Cracks (B6)	☐
☐ High Water Table (A2)	☐	☐ Aquatic Fauna (B13)	☐	☐ Drainage Patterns (B10)	☐
☐ Saturation (A3)	☐	☐ Marl Deposits (B15)	☐	☐ Moss Trim Lines (B16)	☐
☐ Water Marks (B1)	☐	☐ Hydrogen Sulfide Odor (C1)	☐	☐ Dry-Season Water Table (C2)	☐
☐ Sediment Deposits (B2)	☐	☐ Oxidized Rhizospheres on Living	☐	☐ Crayfish Burrows (C8)	☐
☐ Drift Deposits (B3)	☐	☐ Roots (C3)	☐	☐ Saturation Visible on Aerial Imagery	☐
☐ Algal Mat or Crust (B4)	☐	☐ Presence of Reduced Iron (C4)	☐	☐ (C9)	☐
☐ Iron Deposits (B5)	☐	☐ Recent Iron Reduction in Tilled	☐	☐ Stunted or Stressed Plants (D1)	☐
☐ Inundation Visible on Aerial	☐	☐ Soils (C6)	☐	☐ Geomorphic Position (D2)	☐
☐ Imagery (B7)	☐	☐ Thin Muck Surface (C7)	☐	☐ Shallow Aquitard (D3)	☐
☐ Sparsely Vegetated Concave	☐	☐ Other (Explain in Remarks)	☐	☐ FAC-Neutral Test (D5)	☐
☐ Surface (B8)	☐		☐	☐ Microtopographic Relief (D4)	☐

Field Observations:			Indicators of wetland hydrology present? <u> N </u>
Surface water present?	Yes ☐	No ☒ Depth (inches):	
Water table present?	Yes ☐	No ☒ Depth (inches):	
Saturation present?	Yes ☐	No ☒ Depth (inches):	
(includes capillary fringe)			
Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks:			

VEGETATION - Use scientific names of plants

Tree Stratum						Plot Size (30-ft)		Absolute % Cover	Dominant Species	Indicator Status
1										
2										
3										
4										
5										
6										
7										
8										
9										
10										
							0	= Total Cover		

Sapling/Shrub Stratum						Plot Size (15-ft)		Absolute % Cover	Dominant Species	Indicator Status
1		<i>Populus tremuloides</i>	--	<i>Quaking Aspen</i>			5	Y	FAC	
2		<i>Prunus virginiana</i>	--	<i>Choke Cherry</i>			5	Y	FACU	
3			--							
4			--							
5			--							
6			--							
7			--							
8			--							
9			--							
10			--							
							10	= Total Cover		

Herb Stratum						Plot Size (5-ft)		Absolute % Cover	Dominant Species	Indicator Status
1		<i>Phalaris arundinacea</i>	--	<i>Reed Canary Grass</i>			70	X	FACW	
2		<i>Tanacetum vulgare</i>	--	<i>Common Tansy</i>			20	N	FACU	
3		<i>Fragaria virginiana</i>	--	<i>Virginia Strawberry</i>			10	N	FACU	
4		<i>Rubus idaeus</i>	--	<i>Common Red Raspberry</i>			10	N	FAC	
5		<i>Taraxacum officinale</i>	--	<i>Common Dandelion</i>			5	N	FACU	
6		<i>Hieracium aurantiacum</i>	--	<i>Orange Hawkweed</i>			5	N	UPL	
7		<i>Eurybia macrophylla</i>	--	<i>Large-Leaf Wood-Aster</i>			5	N	UPL	
8			--							
9			--							
10			--							
11			--							
12			--							
13			--							
14			--							
15			--							
							125	= Total Cover		

Woody Vine Stratum						Plot Size (30-ft)		Absolute % Cover	Dominant Species	Indicator Status
1			--							
2			--							
3			--							
4			--							
5			--							
							0	= Total Cover		

50/20 Thresholds		20%	50%
Tree Stratum		0	0
Sapling/Shrub Stratum		2	5
Herb Stratum		25	63
Woody Vine Stratum		0	0

Dominance Test Worksheet	
Number of Dominant Species that are OBL, FACW, or FAC: 2 (A)	
Total Number of Dominant Species Across all Strata: 3 (B)	
Percent of Dominant Species that are OBL, FACW, or FAC: 66.67% (A/B)	

Prevalence Index Worksheet	
Total % Cover of:	
OBL species 0 x 1 = 0	
FACW species 70 x 2 = 140	
FAC species 15 x 3 = 45	
FACU species 40 x 4 = 160	
UPL species 10 x 5 = 50	
Column totals 135 (A) 395 (B)	
Prevalence Index = B/A = 2.93	

Hydrophytic Vegetation Indicators:	
Rapid test for hydrophytic vegetation	
☒ Dominance index is >50%	
☒ Prevalence index is >3.0*	
Morphological adaptations* (provide supporting data in Remarks or on a separate sheet)	
Problematic hydrophytic vegetation* (explain)	
*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic	

Definitions of Vegetation Strata:	
Tree - Woody plants 3 in. (7	

SOIL Sampling Point: 25-1u

Sampling Point: 25-1u

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

[illegible]

*Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains

**Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

Indicators for Problematic Hydric Soils:

- | | | |
|--|----------------------------------|--|
| ☐ Histosol (A1) | Polyvalue Below Surface | 2 cm Muck (A10) (LRR K, L, MLRA 149B) |
| ☐ Histic Epipedon (A2) | (S8) (LRR R, MLRA 149B) | Coast Prairie Redox (A16) (LRR K, L, R) |
| ☐ Black Histic (A3) | Thin Dark Surface (S9) | 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) |
| ☐ Hydrogen Sulphide (A4) | (LRR R, MLRA 149B) | Dark Surface (S7) (LRR K, L) |
| ☐ Stratified Layers (A5) | Loamy Mucky Mineral (F1) | Polyvalue Below Surface (S8) (LRR K, L) |
| ☐ Depleted Below Dark Surface (A11') | (LRR K, L) | Thin Dark Surface (S9) (LRR K, L) |
| ☐ Thick Dark Surface (A12) | Loamy Gleyed Matrix (F2) | Iron-Manganese Masses (F12) (LRR K, L, R) |
| ☐ Sandy Mucky Mineral (S1) | Depleted Matrix (F3) | Piedmont Floodplain Soils (F19) (MLRA 149B) |
| ☐ Sandy Gleyed Matrix (S4) | Redox Dark Surface (F6) | Mesic Podzol (TA6) (MLRA 144A, 145, 149B) |
| ☐ Sandy Redox (S5) | Depleted Dark Surface (F7) | Red Parent Material (TF2) |
| ☐ Stripped Matrix (S6) | Redox Depressions (F8) | Very Shallow Dark Surface (TF12) |
| ☐ Dark Surface (S7) (LRR R, MLRA 149B) | | Other (Explain in Remarks) |

*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):

Type: Rock

Depth (inches): 3

Hydric soil present? N

Remarks:

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Project/Site:	<u>Evelth-Gilbert-Virginia School</u>	City/County:	<u>Evelth/St. Louis</u>	Sampling Date:	<u>5-23-17</u>
Applicant/Owner:	<u>Kimley-Horn and Associates, Inc.</u>	State:	<u>Minnesota</u>	Sampling Point:	<u>25-1w</u>
Investigator/s:	<u>Kyle Hanson</u>	Section, Township, Range:	<u>32, 58, 17</u>		
Landform (hill/slope, terrace, etc.):	<u>roadside ditch</u>	Local relief (concave, convex, none):	<u>concave</u>		
Slope (°):	<u>2%</u>	Lat.:	<u>47.472018</u>	Long.:	<u>-92.521664</u>
				Datum:	<u>NAD 83, UTM 15N</u>
Soil Map Unit Name:	<u>Evelth-Eaglesnest-Conic complex, bouldery, 6-18% slopes, rocky</u>	NWI Classification:	<u>none</u>		
Are climatic/hydrologic conditions of the site typical for this time of the year? <u>yes</u> (If no, explain in remarks)					
Are vegetation <u> </u> , soil <u> </u> , or hydrology <u> </u> significantly disturbed?					
Are vegetation <u> </u> , soil <u> </u> , or hydrology <u> </u> naturally problematic?	Are "normal circumstances" present? <u>Yes</u>				
(If needed, explain any answers in remarks)					

Hydrophytic vegetation present?	<u>Y</u>	Is the sampled area within a wetland? <u>Y</u> If yes, optional wetland site ID: <u>Wetland 25</u>
Hydric soil present?	<u>Y</u>	
Indicators of wetland hydrology present?	<u>Y</u>	
Remarks: (Explain alternative procedures here or in a separate report.)		

Primary Indicators (minimum of one is required; check all that apply)				Secondary Indicators (minimum of two required)	
☐	Surface Water (A1)	☐	Water-Stained Leaves (B9)	☐	Surface Soil Cracks (B6)
☒	High Water Table (A2)	☐	Aquatic Fauna (B13)	☐	Drainage Patterns (B10)
☒	Saturation (A3)	☐	Marl Deposits (B15)	☐	Moss Trim Lines (B16)
☐	Water Marks (B1)	☐	Hydrogen Sulfide Odor (C1)	☐	Dry-Season Water Table (C2)
☐	Sediment Deposits (B2)	☐	Oxidized Rhizospheres on Living	☐	Crayfish Burrows (C8)
☐	Drift Deposits (B3)	☐	Roots (C3)	☐	Saturation Visible on Aerial Imagery
☐	Algal Mat or Crust (B4)	☐	Presence of Reduced Iron (C4)	☐	(C9)
☐	Iron Deposits (B5)	☐	Recent Iron Reduction in Tilled	☐	Stunted or Stressed Plants (D1)
☐	Inundation Visible on Aerial	☐	Soils (C6)	☐	Geomorphic Position (D2)
☐	Imagery (B7)	☐	Thin Muck Surface (C7)	☐	Shallow Aquitard (D3)
☐	Sparsely Vegetated Concave	☐	Other (Explain in Remarks)	☐	FAC-Neutral Test (D5)
☐	Surface (B8)	☐		☐	Microtopographic Relief (D4)
Field Observations: Surface water present? Yes ☒ No ☐ Depth (inches):				Indicators of wetland hydrology present?	
Water table present? Yes ☒ No ☐ Depth (inches):					
Saturation present? Yes ☒ No ☐ Depth (inches):					
(includes capillary fringe)					
Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:					
Remarks:					

Northcentral and Northeast Region

						50/20 Thresholds		
						20%	50%	
Tree Stratum	Plot Size (30-ft)		Absolute % Cover	Dominant Species	Indicator Status			
1		--						
2		--						
3		--						
4		--						
5		--						
6		--						
7		--						
8		--						
9		--						
10		--						
				0	= Total Cover			
Sapling/Shrub Stratum	Plot Size (15-ft)		Absolute % Cover	Dominant Species	Indicator Status			
1	<i>Salix discolor</i>	-- Pussy Willow	35	Y	FACW			
2	<i>Populus balsamifera</i>	-- Balsam Poplar	15	Y	FACW			
3	<i>Alnus incana</i>	-- Speckled Alder	10	N	FACW			
4	<i>Acer rubrum</i>	-- Red Maple	5	N	FAC			
5		--						
6		--						
7		--						
8		--						
9		--						
10		--						
				65	= Total Cover			
Herb Stratum	Plot Size (5-ft)		Absolute % Cover	Dominant Species	Indicator Status			
1	<i>Phalaris arundinacea</i>	-- Reed Canary Grass	20	Y	FACW			
2	<i>Calamagrostis canadensis</i>	-- Bluejoint	15	Y	OBL			
3	<i>Equisetum sylvaticum</i>	-- Woodland Horsetail	5	N	FACW			
4	<i>Ribes triste</i>	-- Swamp Red Currant	5	N	OBL			
5	<i>Populus balsamifera</i>	-- Balsam Poplar	5	N	FACW			
6	<i>Eurybia macrophylla</i>	-- Large-Leaf Wood-Aster	5	N	UPL			
7		--						
8		--						
9		--						
10		--						
11		--						
12		--						
13		--						
14		--						
15		--						
				55	= Total Cover			
Woody Vine Stratum	Plot Size (30-ft)		Absolute % Cover	Dominant Species	Indicator Status			
1		--						
2		--						
3		--						
4		--						
5		--						
				0	= Total Cover			
Dominance Test Worksheet								
Number of Dominant Species that are OBL, FACW, or FAC:						4	(A)	
Total Number of Dominant Species Across all Strata:						4	(B)	
Percent of Dominant Species that are OBL, FACW, or FAC:						100.00%	(A/B)	
Prevalence Index Worksheet								
Total % Cover of:								
OBL species						20	x 1 =	20
FACW species						90	x 2 =	180
FAC species						5	x 3 =	15
FACU species						0	x 4 =	0
UPL species						5	x 5 =	25
Column totals						120	(A)	240
Prevalence Index = B/A =						2.00		
Hydrophytic Vegetation Indicators:								
Rapid test for hydrophytic vegetation								
☒ X Prevalence index is >50%								
☒ X Prevalence index is <3.0*								
Morphological adaptations* (provide supporting data in Remarks or on a separate sheet)								
Problematic hydrophytic vegetation* (explain)								
*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic								
Definitions of Vegetation Strata:								
Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.								
Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.								
Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.								
Woody vines - All woody vines greater than 3.28 ft in height.								
Hydrophytic vegetation present?						Y		

Remarks: (Include photo numbers here or on a separate sheet)

Note: This data sheet has been adapted to use the 2016 National Wetland Plant List:
 Lichvar, R.W., D.L. Banks, W.N. Kirchner, and N.C. Melvin. 2016. The National Wetland Plant List: 2016 wetland ratings. Phytoneuron 2016-30: 1-17. Published 28 April 2016. ISSN 2153 733X

Northcentral and Northeast Region

Sampling Point: 25-1w

[illegible]

**Location: PL=Pore Lining, M=Matrix

Indicators for Problematic Hydric Soils:

- *Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Hydric soil present? Y

Remarks:

Northcentral and Northeast Region

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Eveleth-Gilbert-Virginia School City/County: Eveleth/St. Louis Sampling Date: 6/14/19
 Applicant/Owner: Kimley-Horn and Associates, Inc. State: Minnesota Sampling Point: 26-1u
 Investigator(s): Natalie White Section, Township, Range: S29, T58N, R17W
 Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): none
 Slope (%): 10% Lat.: 47.469485 Long.: -92.519972 Datum: NAD 1983 UTM Zone 15N
 Soil Map Unit Name: Babbitt, bouldery-Wahlsten, bouldery-Aquepts, rubbly, 0-8% slopes NWI Classification: none
 Are climatic/hydrologic conditions of the site typical for this time of the year? Yes (If no, explain in remarks)
 Are vegetation , soil , or hydrology significantly disturbed? Are "normal
 Are vegetation , soil , or hydrology naturally problematic? circumstances" present? Yes
 (If needed, explain any answers in remarks)

SUMMARY OF FINDINGS

Hydrophytic vegetation present?	<u>Y</u>	Is the sampled area within a wetland?	<u>N</u>
Hydric soil present?	<u>Y</u>		
Indicators of wetland hydrology present?	<u>N</u>	If yes, optional wetland site ID: _____	
Remarks: (Explain alternative procedures here or in a separate report.)			

HYDROLOGY

Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)	
☐ Surface Water (A1)	☐ Water-Stained Leaves (B9)	☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Aquatic Fauna (B13)	☐ Drainage Patterns (B10)	
☐ Saturation (A3)	☐ Marl Deposits (B15)	☐ Moss Trim Lines (B16)	
☐ Water Marks (B1)	☐ Hydrogen Sulfide Odor (C1)	☐ Dry-Season Water Table (C2)	
☐ Sediment Deposits (B2)	☐ Oxidized Rhizospheres on Living	☐ Crayfish Burrows (C8)	
☐ Drift Deposits (B3)	☐ Roots (C3)	☐ Saturation Visible on Aerial Imagery	
☐ Algal Mat or Crust (B4)	☐ Presence of Reduced Iron (C4)	☐ (C9)	
☐ Iron Deposits (B5)	☐ Recent Iron Reduction in Tilled	☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial	☐ Soils (C6)	☐ Geomorphic Position (D2)	
☐ Imagery (B7)	☐ Thin Muck Surface (C7)	☐ Shallow Aquitard (D3)	
☐ Sparsely Vegetated Concave	☐ Other (Explain in Remarks)	☐ FAC-Neutral Test (D5)	
☐ Surface (B8)		☐ Microtopographic Relief (D4)	
Field Observations:			
Surface water present?	Yes <u> </u> No <u> </u> <u>X</u> Depth (inches): <u> </u>	Indicators of wetland hydrology present? <u>N</u>	
Water table present?	Yes <u> </u> No <u> </u> <u>X</u> Depth (inches): <u> </u>		
Saturation present?	Yes <u> </u> No <u> </u> <u>X</u> Depth (inches): <u> </u>		
(includes capillary fringe)			
Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks:			

VEGETATION - Use scientific names of plants

					Sampling Point: <u>26-1u</u>		
					50/20 Thresholds		
Tree Stratum	Plot Size (<u>30'</u> Radius)	Absolute % Cover	Dominant Species	Indicator Status	20%	50%	
1	<u>Populus tremuloides</u>	<u>--</u>	<u>Quaking Aspen</u>	<u>Y</u>	<u>FAC</u>		
2	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>		
3	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>		
4	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>		
5	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>		
6	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>		
7	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>		
8	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>		
9	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>		
10	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>		
		<u>20</u>	= Total Cover				
Sapling/Shrub Stratum	Plot Size (<u>15'</u> Radius)	Absolute % Cover	Dominant Species	Indicator Status			
1	<u>Populus balsamifera</u>	<u>--</u>	<u>Balsam Poplar</u>	<u>Y</u>	<u>FACW</u>		
2	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>		
3	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>		
4	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>		
5	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>		
6	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>		
7	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>		
8	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>		
9	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>		
10	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>		
		<u>20</u>	= Total Cover				
Herb Stratum	Plot Size (<u>5'</u> Radius)	Absolute % Cover	Dominant Species	Indicator Status			
1	<u>Eurybia macrophylla</u>	<u>--</u>	<u>Large-Leaf Wood-Aster</u>	<u>Y</u>	<u>UPL</u>		
2	<u>Equisetum sylvaticum</u>	<u>--</u>	<u>Woodland Horsetail</u>	<u>N</u>	<u>FACW</u>		
3	<u>Rubus idaeus</u>	<u>--</u>	<u>Common Red Raspberry</u>	<u>N</u>	<u>FAC</u>		
4	<u>Rhamnus cathartica</u>	<u>--</u>	<u>European Buckthorn</u>	<u>N</u>	<u>FAC</u>		
5	<u>Rosa acicularis</u>	<u>--</u>	<u>Prickly Rose</u>	<u>N</u>	<u>FACU</u>		
6	<u>Rubus hispidus</u>	<u>--</u>	<u>Bristly Dewberry</u>	<u>N</u>	<u>FACW</u>		
7	<u>Trillium cernuum</u>	<u>--</u>	<u>Whip-Poor-Will-Flower</u>	<u>N</u>	<u>FAC</u>		
8	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>		
9	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>		
10	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>		
11	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>		
12	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>		
13	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>		
14	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>		
15	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>		
		<u>96</u>	= Total Cover				
Woody Vine Stratum	Plot Size (<u>30'</u> Radius)	Absolute % Cover	Dominant Species	Indicator Status			
1	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>		
2	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>		
3	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>		
4	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>		
5	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>		
		<u>0</u>	= Total Cover				
Remarks: (Include photo numbers here or on a separate sheet)							
Note: This data sheet has been adapted to use the 2012 National Wetland Plant List: Robert W. Lichvar and John T. Kartesz. 2009. North American Digital Flora: National Wetland Plant List, version 2.4.0 (https://wetland.plants.usace.army.mil). U.S. Army Corps of Engineers, Engineer Research and Development Center, Cold Regions Research and Engineering Laboratory, Hanover, NH, and BONAP, Chapel Hill, NC. (2012)							

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 2 (A)
 Total Number of Dominant Species Across all Strata: 3 (B)
 Percent of Dominant Species that are OBL, FACW, or FAC: 66.67% (A/B)

Prevalence Index Worksheet

Total % Cover of:
 OBL species 0 x 1 = 0
 FACW species 26 x 2 = 52
 FAC species 29 x 3 = 87
 FACU species 1 x 4 = 4
 UPL species 80 x 5 = 400
 Column totals 136 (A) 543 (B)
 Prevalence Index = B/A = 3.99

Hydrophytic Vegetation Indicators:

 Rapid test for hydrophytic vegetation
X Dominance test is >50%
 Prevalence index is ≤3.0*
 Morphological adaptations* (provide supporting data in Remarks or on a separate sheet)
 Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Definitions of Vegetation Strata:

Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines - All woody vines greater than 3.28 ft in height.

Hydrophytic vegetation present? Y

SOIL Sampling Point: 26-1u

Sampling Point: 26-1u

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

[illegible]

*Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains

**Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

Indicators for Problematic Hydric Soils:

- | | | |
|--|----------------------------------|---|
| ☐ Histosol (A1) | Polyvalue Below Surface | ☐ 2 cm Muck (A10) (LRR K, L, MLRA 149B) |
| ☐ Histic Epipedon (A2) | (S8) (LRR R, MLRA 149B) | ☐ Coast Prairie Redox (A16) (LRR K, L, R) |
| ☐ Black Histic (A3) | Thin Dark Surface (S9) | ☐ 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) |
| ☐ Hydrogen Sulfide (A4) | (LRR R, MLRA 149B) | ☐ Dark Surface (S7) (LRR K, L) |
| ☐ Stratified Layers (A5) | Loamy Mucky Mineral (F1) | ☐ Polyvalue Below Surface (S8) (LRR K, L) |
| ☒ Depleted Below Dark Surface (A11') | (LRR K, L) | ☐ Thin Dark Surface (S9) (LRR K, L) |
| ☐ Thick Dark Surface (A12) | Loamy Gleyed Matrix (F2) | ☐ Iron-Manganese Masses (F12) (LRR K, L, R) |
| ☐ Sandy Mucky Mineral (S1) | Depleted Matrix (F3) | ☐ Piedmont Floodplain Soils (F19) (MLRA 149B) |
| ☐ Sandy Gleyed Matrix (S4) | Redox Dark Surface (F6) | ☐ Mesic Podzol (TA6) (MLRA 144A, 145, 149B) |
| ☐ Sandy Redox (S5) | Depleted Dark Surface (F7) | ☐ Red Parent Material (TF2) |
| ☐ Stripped Matrix (S6) | Redox Depressions (F8) | ☐ Very Shallow Dark Surface (TF12) |
| ☐ Dark Surface (S7) (LRR R, MLRA 149B) | | ☐ Other (Explain in Remarks) |

*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):

Type: Rock

Depth (inches): 10

Hydric soil present? Y

Remarks:

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WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Eveleth-Gilbert-Virginia School City/County: Eveleth/St. Louis Sampling Date: 6/14/19
Applicant/Owner: Kimley-Horn and Associates, Inc. State: Minnesota Sampling Point: 26-1w
Investigator(s): Natalie White Section, Township, Range: S29, T58N, R17W
Landform (hillslope, terrace, etc.): toeslope Local relief (concave, convex, none): concave
Slope (%): 5% Lat.: 47.469491 Long.: -92.519878 Datum: NAD 1983 UTM Zone 15N
Soil Map Unit Name: Babbitt, bouldery-Wahlsten, bouldery-Aquepts, rubbly, 0-8% slopes NWI Classification: none
Are climatic/hydrologic conditions of the site typical for this time of the year? Yes (If no, explain in remarks)
Are vegetation , soil , or hydrology significantly disturbed? Are "normal
Are vegetation , soil , or hydrology naturally problematic? circumstances" present? Yes
(If needed, explain any answers in remarks)

SUMMARY OF FINDINGS

Hydrophytic vegetation present?	<u>Y</u>	Is the sampled area within a wetland?	<u>Y</u>
Hydric soil present?	<u>Y</u>		
Indicators of wetland hydrology present?	<u>Y</u>	If yes, optional wetland site ID:	<u>Wetland 26</u>
Remarks: (Explain alternative procedures here or in a separate report.)			

HYDROLOGY

Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)	
☐ Surface Water (A1)	☐ Water-Stained Leaves (B9)	☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Aquatic Fauna (B13)	☐ Drainage Patterns (B10)	
☒ Saturation (A3)	☐ Marl Deposits (B15)	☐ Moss Trim Lines (B16)	
☐ Water Marks (B1)	☐ Hydrogen Sulfide Odor (C1)	☐ Dry-Season Water Table (C2)	
☐ Sediment Deposits (B2)	☐ Oxidized Rhizospheres on Living	☐ Crayfish Burrows (C8)	
☐ Drift Deposits (B3)	☐ Roots (C3)	☐ Saturation Visible on Aerial Imagery	
☐ Algal Mat or Crust (B4)	☐ Presence of Reduced Iron (C4)	☐ (C9)	
☐ Iron Deposits (B5)	☐ Recent Iron Reduction in Tilled	☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial	☐ Soils (C6)	☐ Geomorphic Position (D2)	
☐ Imagery (B7)	☐ Thin Muck Surface (C7)	☐ Shallow Aquitard (D3)	
☐ Sparsely Vegetated Concave	☐ Other (Explain in Remarks)	☐ FAC-Neutral Test (D5)	
☐ Surface (B8)		☐ Microtopographic Relief (D4)	
Field Observations:		Indicators of wetland hydrology present? <u>Y</u>	
Surface water present?	Yes <u> </u> No <u>X</u>	Depth (inches): <u> </u>	
Water table present?	Yes <u> </u> No <u>X</u>	Depth (inches): <u> </u>	
Saturation present?	Yes <u>X</u> No <u> </u>	Depth (inches): <u>0</u>	
(includes capillary fringe)			
Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks:			

VEGETATION - Use scientific names of plants

Tree Stratum					Plot Size (30' Radius)	Absolute % Cover	Dominant Species	Indicator Status
1	<u>Populus balsamifera</u>	<u>--</u>	<u>Balsam Poplar</u>	<u>50</u>	<u>Y</u>	<u>FACW</u>		
2	<u> </u>	<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>		
3	<u> </u>	<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>		
4	<u> </u>	<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>		
5	<u> </u>	<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>		
6	<u> </u>	<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>		
7	<u> </u>	<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>		
8	<u> </u>	<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>		
9	<u> </u>	<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>		
10	<u> </u>	<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>		
				<u>50</u>	=	Total Cover		
Sapling/Shrub Stratum					Plot Size (15' Radius)	Absolute % Cover	Dominant Species	Indicator Status
1	<u>Rhamnus cathartica</u>	<u>--</u>	<u>European Buckthorn</u>	<u>50</u>	<u>Y</u>	<u>FAC</u>		
2	<u>Alnus incana</u>	<u>--</u>	<u>Speckled Alder</u>	<u>30</u>	<u>Y</u>	<u>FACW</u>		
3	<u> </u>	<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>		
4	<u> </u>	<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>		
5	<u> </u>	<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>		
6	<u> </u>	<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>		
7	<u> </u>	<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>		
8	<u> </u>	<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>		
9	<u> </u>	<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>		
10	<u> </u>	<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>		
				<u>80</u>	=	Total Cover		
Herb Stratum					Plot Size (5' Radius)	Absolute % Cover	Dominant Species	Indicator Status
1	<u>Athyrium Filix-femina</u>	<u>--</u>	<u>Lady Fern</u>	<u>10</u>	<u>Y</u>	<u>FAC</u>		
2	<u>Equisetum sylvaticum</u>	<u>--</u>	<u>Woodland Horsetail</u>	<u>5</u>	<u>Y</u>	<u>FACW</u>		
3	<u>Rubus hispidus</u>	<u>--</u>	<u>Bristly Dewberry</u>	<u>5</u>	<u>Y</u>	<u>FACW</u>		
4	<u>Carex intumescens</u>	<u>--</u>	<u>Greater Bladder Sedge</u>	<u>5</u>	<u>Y</u>	<u>FACW</u>		
5	<u>Carex gracillima</u>	<u>--</u>	<u>Graceful Sedge</u>	<u>5</u>	<u>Y</u>	<u>FACU</u>		
6	<u>Rhamnus cathartica</u>	<u>--</u>	<u>European Buckthorn</u>	<u>3</u>	<u>N</u>	<u>FAC</u>		
7	<u>Ribes triste</u>	<u>--</u>	<u>Swamp Red Currant</u>	<u>3</u>	<u>N</u>	<u>OBL</u>		
8	<u>Impatiens capensis</u>	<u>--</u>	<u>Spotted Touch-Me-Not</u>	<u>1</u>	<u>N</u>	<u>FACW</u>		
9	<u> </u>	<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>		
10	<u> </u>	<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>		
11	<u> </u>	<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>		
12	<u> </u>	<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>		
13	<u> </u>	<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>		
14	<u> </u>	<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>		
15	<u> </u>	<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>		
				<u>37</u>	=	Total Cover		
Woody Vine Stratum					Plot Size (30' Radius)	Absolute % Cover	Dominant Species	Indicator Status
1	<u> </u>	<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>		
2	<u> </u>	<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>		
3	<u> </u>	<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>		
4	<u> </u>	<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>		
5	<u> </u>	<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>		
				<u>0</u>	=	Total Cover		
Remarks: (Include photo numbers here or on a separate sheet)								
Note: This data sheet has been adapted to use the 2012 National Wetland Plant List: Robert W. Lichvar and John T. Kartesz. 2009. North American Digital Flora: National Wetland Plant List, version 2.4.0 (https://wetland.plants.usace.army.mil), U.S. Army Corps of Engineers, Engineer Research and Development Center, Cold Regions Research and Engineering Laboratory, Hanover, NH, and BONAP, Chapel Hill, NC. (2012)								

Sampling Point: 26-1w

50/20 Thresholds		
Tree Stratum	20%	50%
Sapling/Shrub Stratum	10	25
Herb Stratum	16	40
Woody Vine Stratum	7	19
	0	0
Dominance Test Worksheet		
Number of Dominant Species that are OBL, FACW, or FAC: <u>7</u> (A)		
Total Number of Dominant Species Across all Strata: <u>8</u> (B)		
Percent of Dominant Species that are OBL, FACW, or FAC: <u>87.50%</u> (A/B)		
Prevalence Index Worksheet		
Total % Cover of:		
OBL species	<u>3</u> x 1 =	<u>3</u>
FACW species	<u>96</u> x 2 =	<u>192</u>
FAC species	<u>63</u> x 3 =	<u>189</u>
FACU species	<u>5</u> x 4 =	<u>20</u>
UPL species	<u>0</u> x 5 =	<u>0</u>
Column totals	<u>167</u> (A)	<u>404</u> (B)
Prevalence Index = B/A = <u>2.42</u>		
Hydrophytic Vegetation Indicators:		
<u> </u> Rapid test for hydrophytic vegetation		
<u>X</u> Dominance test is >50%		
<u>X</u> Prevalence index is ≤3.0*		
Morphological adaptations* (provide supporting data in Remarks or on a separate sheet)		
<u> </u> Problematic hydrophytic vegetation* (explain)		
*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic		
Definitions of Vegetation Strata:		
Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.		
Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.		
Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.		
Woody vines - All woody vines greater than 3.28 ft in height.		
Hydrophytic vegetation present? <u>Y</u>		

SOIL	Sampling Point:	26-1w
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Sampling Point: 26-1w

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

[illegible]

*Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains

**Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

Indicators for Problematic Hydric Soils:

- | | | |
|--|--|--|
| ☐ Histosol (A1) | Polyvalue Below Surface | 2 cm Muck (A10) (LRR K, L, MLRA 149B) |
| ☐ Histic Epipedon (A2) | (S8) (LRR R, MLRA 149B) | Coast Prairie Redox (A16) (LRR K, L, R) |
| ☐ Black Histic (A3) | Thin Dark Surface (S9) | 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) |
| ☐ Hydrogen Sulphide (A4) | (LRR R, MLRA 149B) | Dark Surface (S7) (LRR K, L) |
| ☐ Stratified Layers (A5) | Loamy Mucky Mineral (F1) | Polyvalue Below Surface (S8) (LRR K, L) |
| ☒ Depleted Below Dark Surface (A11') | (LRR K, L) | Thin Dark Surface (S9) (LRR K, L) |
| ☐ Thick Dark Surface (A12) | Loamy Gleyed Matrix (F2) | Iron-Manganese Masses (F12) (LRR K, L, R) |
| ☐ Sandy Mucky Mineral (S1) | ☒ Depleted Matrix (F3) | Piedmont Floodplain Soils (F19) (MLRA 149B) |
| ☐ Sandy Gleyed Matrix (S4) | Redox Dark Surface (F6) | Mesic Spodic (TA6) (MLRA 144A, 145, 149B) |
| ☐ Sandy Redox (S5) | Depleted Dark Surface (F7) | Red Parent Material (TF2) |
| ☐ Stripped Matrix (S6) | Redox Depressions (F8) | Very Shallow Dark Surface (TF12) |
| ☐ Dark Surface (S7) (LRR R, MLRA 149B) | | Other (Explain in Remarks) |

*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):

Type: Rock
Depth (inches): 12

Hydric soil present? Y

Remarks:

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Project/Site:	<u>Eveleth-Gilbert-Virginia School</u>		City/County:	<u>Eveleth, St. Louis</u>	Sampling Date:	<u>6/14/19</u>
Applicant/Owner:	<u>Kimley-Horn and Associates, Inc.</u>		State:	<u>Missouri</u>	Sampling Point:	<u>26-2u</u>
Investigator/s:	<u>Natalie White</u>		Section, Township, Range:	<u>S29, T58N, R17W</u>		
Landform (hillslope, terrace, etc.):	<u>backslope</u>		Local relief (convex, concave, none):	<u>convex</u>		
Slope (%):	<u>10%</u>	Lat.: <u>47.469708</u>	Long.: <u>-92.52</u>	Datum:	<u>NAD 1983 UTM Zone 15N</u>	
Soil Map Unit Name:	<u>Babbitt, bouldery-Wahsthen, bouldery-Aquepts, rubbly, 0-8% slopes NWI Classification: none</u>					
Are climatic/hydrologic conditions of the site typical for this time of the year?	<u>Yes</u>			(If no, explain in remarks)		
Are vegetation _____, soil _____, or hydrology _____ significantly disturbed?				Are "normal circumstances" present? <u>Yes</u>		
Are vegetation _____, soil _____, or hydrology _____ naturally problematic?						
(If needed, explain any answers in remarks)						

Hydrophytic vegetation present?	<u> N </u>	Is the sampled area within a wetland? <u> N </u> If yes, optional wetland site ID: _____
Hydric soil present?	<u> N </u>	
Indicators of wetland hydrology present?	<u> N </u>	
Remarks: (Explain alternative procedures here or in a separate report.)		

Primary Indicators (minimum of one is required; check all that apply)				Secondary Indicators (minimum of two required)			
☐ Surface Water (A1)		☐ Water-Stained Leaves (B9)		☐ Surface Soil Cracks (B6)		☐ Drainage Patterns (B10)	
☐ High Water Table (A2)		☐ Aquatic Fauna (B13)		☐ Moss Trim Lines (B16)		☐ Dry-Season Water Table (C2)	
☐ Saturation (A3)		☐ Marl Deposits (B15)		☐ Crayfish Burrows (C8)		☐ Saturation Visible on Aerial Imagery (C9)	
☐ Water Marks (B1)		☐ Hydrogen Sulfide Odor (C1)		☐ Stunted or Stressed Plants (D1)		☐ Geomorphic Position (D2)	
☐ Sediment Deposits (B2)		☐ Oxidized Rhizospheres on Living Roots (C3)		☐ Shallow Aquitard (D3)		☐ FAC-Neutral Test (D5)	
☐ Drift Deposits (B3)		☐ Presence of Reduced Iron (C4)		☐ Microtopographic Relief (D4)			
☐ Algal Mat or Crust (B4)		☐ Recent Iron Reduction in Tilled Soils (C6)					
☐ Iron Deposits (B5)		☐ Thin Muck Surface (C7)					
☐ Inundation Visible on Aerial Imagery (B7)		☐ Other (Explain in Remarks)					
☐ Sparsely Vegetated Concave Surface (B8)							

Field Observations:				Indicators of wetland hydrology present?	
Surface water present?	Yes ☐	No ☐	X ☐	Depth (inches):	
Water table present?	Yes ☐	No ☐	X ☐	Depth (inches):	
Saturation present?	Yes ☐	No ☐	X ☐	Depth (inches):	
(includes capillary fringe)				N	

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	
Remarks:	

					50/20 Thresholds		
Tree Stratum	Plot Size (30' Radius)	Absolute % Cover	Dominant Species	Indicator Status	Tree Stratum	20%	50%
1	--				Sapling/Shrub Stratum	0	0
2	--				Herb Stratum	16	40
3	--				Woody Vine Stratum	0	0
4	--				Dominance Test Worksheet		
5	--				Number of Dominant Species that are OBL, FACW, or FAC: <u>1</u> (A)		
6	--				Total Number of Dominant Species Across all Strata: <u>3</u> (B)		
7	--				Percent of Dominant Species that are OBL, FACW, or FAC: <u>33.33%</u> (A/B)		
8	--				Prevalence Index Worksheet		
9	--				Total % Cover of:		
10	--	0 = Total Cover			OBL species <u>0</u> x 1 = <u>0</u>		
					FACW species <u>0</u> x 2 = <u>0</u>		
					FAC species <u>19</u> x 3 = <u>57</u>		
					FACU species <u>56</u> x 4 = <u>224</u>		
					UPL species <u>5</u> x 5 = <u>25</u>		
					Column totals <u>80</u> (A) <u>306</u> (B)		
					Prevalence Index = B/A = <u>3.83</u>		
Sapling/Shrub Stratum	Plot Size (15' Radius)	Absolute % Cover	Dominant Species	Indicator Status	Hydrophytic Vegetation Indicators:		
1	--				<u> </u> Rapid test for hydrophytic vegetation		
2	--				<u> </u> Dominance test is >50%		
3	--				<u> </u> Prevalence index is <3.0*		
4	--				Morphological adaptations* (provide supporting data in Remarks or on a separate sheet)		
5	--				<u> </u> Problematic hydrophytic vegetation* (explain)		
6	--				*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic		
7	--				Definitions of Vegetation Strata:		
8	--				Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.		
9	--				Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.		
10	--				Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.		
11	--				Woody vines - All woody vines greater than 3.28 ft in height.		
12	--				Hydrophytic vegetation present? <u> N </u>		
13	--						
14	--						
15	--	80 = Total Cover					
Woody Vine Stratum	Plot Size (30' Radius)	Absolute % Cover	Dominant Species	Indicator Status			
1	--						
2	--						
3	--						
4	--						
5	--						
		0 = Total Cover					
Remarks: (Include photo numbers here or on a separate sheet)							
Note: This data sheet has been adapted to use the 2012 National Wetland Plant List:							
Robert W. Lichvar and John T. Kartesz. 2009. North American Digital Flora: National Wetland Plant List, version 2.4.0 (https://wetland_plants.usace.army.mil/). U.S. Army Corps of Engineers, Engineer Research and Development Center, Cold Regions Research and Engineering Laboratory, Hanover, NH, and BONAP, Chapel Hill, NC. (2012)							

SOIL **Sampling Point:** 26-2u

Sampling Point: 26-2u

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

[illegible]

*Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains

**Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

Indicators for Problematic Hydric Soils:

- | | | |
|---|----------------------------------|--|
| ___ Histosol (A1) | Polyvalue Below Surface | 2 cm Muck (A10) (LRR K, L, MLRA 149B) |
| ___ Histic Epipedon (A2) | (S8) (LRR R, MLRA 149B) | Coast Prairie Redox (A16) (LRR K, L, R) |
| ___ Black Histic (A3) | Thin Dark Surface (S9) | 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) |
| ___ Hydrogen Sulphide (A4) | (LRR R, MLRA 149B) | Dark Surface (S7) (LRR K, L) |
| ___ Stratified Layers (A5) | Loamy Mucky Mineral (F1) | Polyvalue Below Surface (S8) (LRR K, L) |
| ___ Depleted Below Dark Surface (A11') | (LRR K, L) | Thin Dark Surface (S9) (LRR K, L) |
| ___ Thick Dark Surface (A12) | Loamy Gleyed Matrix (F2) | Iron-Manganese Masses (F12) (LRR K, L, R) |
| ___ Sandy Mucky Mineral (S1) | Depleted Matrix (F3) | Piedmont Floodplain Soils (F19) (MLRA 149B) |
| ___ Sandy Gleyed Matrix (S4) | Redox Dark Surface (F6) | Mesic Spodic (TA6) (MLRA 144A, 145, 149B) |
| ___ Sandy Redox (S5) | Depleted Dark Surface (F7) | Red Parent Material (TF2) |
| ___ Stripped Matrix (S6) | Redox Depressions (F8) | Very Shallow Dark Surface (TF12) |
| ___ Dark Surface (S7) (LRR R, MLRA 149B) | | ___ Other (Explain in Remarks) |

*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):

Type: Rock

Depth (inches): 8

Hydric soil present? N

Remarks:

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WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Eveleth-Gilbert-Virginia School City/County: Eveleth/St. Louis Sampling Date: 6/14/19
Applicant/Owner: Kimley-Horn and Associates, Inc. State: Minnesota Sampling Point: 26-2w
Investigator(s): Natalie White Section, Township, Range: S29, T58N, R17W
Landform (hillslope, terrace, etc.): swale Local relief (concave, convex, none): concave
Slope (%): 5% Lat.: 47.46972 Long.: -92.519901 Datum: NAD 1983 UTM Zone 15N
Soil Map Unit Name: Babbitt, bouldery-Wahlsten, bouldery-Aquepts, rubbly, 0-8% slopes NWI Classification: none
Are climatic/hydrologic conditions of the site typical for this time of the year? Yes (If no, explain in remarks)
Are vegetation , soil , or hydrology significantly disturbed? Are "normal
Are vegetation , soil , or hydrology naturally problematic? circumstances" present? Yes
(If needed, explain any answers in remarks)

SUMMARY OF FINDINGS

Hydrophytic vegetation present?	<u>Y</u>	Is the sampled area within a wetland?	<u>Y</u>
Hydric soil present?	<u>Y</u>		
Indicators of wetland hydrology present?	<u>Y</u>	If yes, optional wetland site ID:	<u>Wetland 26</u>
Remarks: (Explain alternative procedures here or in a separate report.)			

HYDROLOGY

Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)	
☐ Surface Water (A1)	☐ Water-Stained Leaves (B9)	☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Aquatic Fauna (B13)	☐ Drainage Patterns (B10)	
☒ Saturation (A3)	☐ Marl Deposits (B15)	☐ Moss Trim Lines (B16)	
☐ Water Marks (B1)	☐ Hydrogen Sulfide Odor (C1)	☐ Dry-Season Water Table (C2)	
☐ Sediment Deposits (B2)	☐ Oxidized Rhizospheres on Living	☐ Crayfish Burrows (C8)	
☐ Drift Deposits (B3)	☐ Roots (C3)	☐ Saturation Visible on Aerial Imagery	
☐ Algal Mat or Crust (B4)	☐ Presence of Reduced Iron (C4)	☐ (C9)	
☐ Iron Deposits (B5)	☐ Recent Iron Reduction in Tilled	☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial	☐ Soils (C6)	☐ Geomorphic Position (D2)	
☐ Imagery (B7)	☐ Thin Muck Surface (C7)	☐ Shallow Aquitard (D3)	
☐ Sparsely Vegetated Concave	☐ Other (Explain in Remarks)	☐ FAC-Neutral Test (D5)	
☐ Surface (B8)		☐ Microtopographic Relief (D4)	
Field Observations:		Indicators of wetland hydrology present? <u>Y</u>	
Surface water present?	Yes <u> </u> No <u>X</u>	Depth (inches): <u> </u>	
Water table present?	Yes <u> </u> No <u>X</u>	Depth (inches): <u> </u>	
Saturation present?	Yes <u>X</u> No <u> </u>	Depth (inches): <u>0</u>	
(includes capillary fringe)			
Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks:			

VEGETATION - Use scientific names of plants

Tree Stratum					Plot Size (30' Radius)	Absolute % Cover	Dominant Species	Indicator Status
1						<u>--</u>		
2						<u>--</u>		
3						<u>--</u>		
4						<u>--</u>		
5						<u>--</u>		
6						<u>--</u>		
7						<u>--</u>		
8						<u>--</u>		
9						<u>--</u>		
10						<u>--</u>		
						<u>0</u> = Total Cover		
Sapling/Shrub Stratum					Plot Size (15' Radius)	Absolute % Cover	Dominant Species	Indicator Status
1						<u>--</u>		
2						<u>--</u>		
3						<u>--</u>		
4						<u>--</u>		
5						<u>--</u>		
6						<u>--</u>		
7						<u>--</u>		
8						<u>--</u>		
9						<u>--</u>		
10						<u>--</u>		
						<u>0</u> = Total Cover		
Herb Stratum					Plot Size (5' Radius)	Absolute % Cover	Dominant Species	Indicator Status
1	<u>Calamagrostis canadensis</u>					<u>--</u>	<u>Bluejoint</u>	<u>OBL</u>
2	<u>Scirpus cyperinus</u>					<u>20</u>	<u>Y</u>	<u>OBL</u>
3	<u>Rubus idaeus</u>					<u>3</u>	<u>N</u>	<u>FAC</u>
4	<u>Equisetum arvense</u>					<u>3</u>	<u>N</u>	<u>FAC</u>
5	<u>Caltha palustris</u>					<u>3</u>	<u>N</u>	<u>OBL</u>
6	<u>Impatiens capensis</u>					<u>3</u>	<u>N</u>	<u>FACW</u>
7	<u>Glyceria striata</u>					<u>1</u>	<u>N</u>	<u>OBL</u>
8	<u>Carex stipata</u>					<u>1</u>	<u>N</u>	<u>OBL</u>
9								
10								
11								
12								
13								
14								
15								
						<u>74</u> = Total Cover		
Woody Vine Stratum					Plot Size (30' Radius)	Absolute % Cover	Dominant Species	Indicator Status
1						<u>--</u>		
2						<u>--</u>		
3						<u>--</u>		
4						<u>--</u>		
5						<u>--</u>		
						<u>0</u> = Total Cover		
Remarks: (Include photo numbers here or on a separate sheet)								
Note: This data sheet has been adapted to use the 2012 National Wetland Plant List: Robert W. Lichvar and John T. Kartesz. 2009. North American Digital Flora: National Wetland Plant List, version 2.4.0 (https://wetland.plants.usace.army.mil), U.S. Army Corps of Engineers, Engineer Research and Development Center, Cold Regions Research and Engineering Laboratory, Hanover, NH, and BONAP, Chapel Hill, NC. (2012)								

Sampling Point: 26-2w

50/20 Thresholds		
Tree Stratum	20%	50%
Sapling/Shrub Stratum	0	0
Herb Stratum	15	37
Woody Vine Stratum	0	0
Dominance Test Worksheet		
Number of Dominant Species that are OBL, FACW, or FAC: <u>2</u> (A)		
Total Number of Dominant Species Across all Strata: <u>2</u> (B)		
Percent of Dominant Species that are OBL, FACW, or FAC: <u>100.00%</u> (A/B)		
Prevalence Index Worksheet		
Total % Cover of:		
OBL species	<u>65</u> x 1 =	<u>65</u>
FACW species	<u>3</u> x 2 =	<u>6</u>
FAC species	<u>6</u> x 3 =	<u>18</u>
FACU species	<u>0</u> x 4 =	<u>0</u>
UPL species	<u>0</u> x 5 =	<u>0</u>
Column totals	<u>74</u> (A)	<u>89</u> (B)
Prevalence Index = B/A = <u>1.20</u>		
Hydrophytic Vegetation Indicators:		
☐ Rapid test for hydrophytic vegetation		
☒ Dominance test is >50%		
☒ Prevalence index is ≤3.0*		
Morphological adaptations* (provide supporting data in Remarks or on a separate sheet)		
☐ Problematic hydrophytic vegetation* (explain)		
*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic		
Definitions of Vegetation Strata:		
Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.		
Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.		
Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.		
Woody vines - All woody vines greater than 3.28 ft in height.		
Hydrophytic vegetation present? <u>Y</u>		

SOIL Sampling Point: 26-2w

Sampling Point: 26-2w

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

[illegible]

*Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains

**Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

Indicators for Problematic Hydric Soils:

- | | | |
|---|----------------------------|---|
| ☐ Histosol (A1) | Polyvalue Below Surface | 2 cm Muck (A10) (LRR K, L, MLRA 149B |
| ☐ Histic Epipedon (A2) | (S8) (LRR R, MLRA 149B) | Coast Prairie Redox (A16) (LRR K, L, R) |
| ☐ Black Histic (A3) | Thin Dark Surface (S9) | 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) |
| ☐ Hydrogen Sulfide (A4) | (LRR R, MLRA 149B | Dark Surface (S7) (LRR K, L) |
| ☐ Stratified Layers (A5) | Loamy Mucky Mineral (F1) | Polyvalue Below Surface (S8) (LRR K, L) |
| ☒ Depleted Below Dark Surface (A11) | (LRR K, L) | Thin Dark Surface (S9) (LRR K, L) |
| ☐ Thick Dark Surface (A12) | Loamy Gleyed Matrix (F2) | Iron-Manganese Masses (F12) (LRR K, L, R) |
| ☐ Sandy Mucky Mineral (S1) | Depleted Matrix (F3) | Piedmont Floodplain Soils (F19) (MLRA 149B) |
| ☐ Sandy Gleyed Matrix (S4) | Redox Dark Surface (F6) | Mesic Spodic (Ta6) (MLRA 144A, 145, 149B) |
| ☐ Sandy Redox (S5) | Depleted Dark Surface (F7) | Red Parent Material (TF2) |
| ☐ Stripped Matrix (S6) | Redox Depressions (F8) | Very Shallow Dark Surface (TF12) |
| ☐ Dark Surface (S7) (LRR R, MLRA 149B) | | Other (Explain in Remarks) |

*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):

Type: Rock

Depth (inches): 10

Hydric soil present? Y

Remarks:

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WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site:	<u>Eveleth-Gilbert-Virginia School</u>		City/County:	<u>Eveleth/St. Louis</u>	Sampling Date:	<u>5-13-2016</u>	
Applicant/Owner:	<u>Kimley-Horn and Associates, Inc.</u>		State:	<u>MN</u>	Sampling Point:	<u>26-3u</u>	
Investigator/s:	<u>Kyle Hanson, Erin Budrow</u>		Section, Township, Range:	<u>32, 58, 17</u>			
Landform (hillslope, terrace, etc.):	<u>backslope</u>	Local relief (concave, convex, none):	<u>none</u>				
Slope (%):	<u>3%</u>	Lat.: <u>47.470016</u>	Long.:	<u>-92.51997</u>		Datum:	<u>NAD 83, UTM 15N</u>
Soil Map Unit Name:	<u>Eveleth-Eaglesnest-Conic complex, 6 to 18 percent slopes, boulder</u>		NWDI Classification:	<u>none</u>			
Are climatic/hydrologic conditions of the site typical for this time of the year?				<u>yes</u>	(If no, explain in remarks)		
Are vegetation _____, soil _____, or hydrology _____	significantly disturbed?			<u>no</u>	Are "normal circumstances" present?		
Are vegetation _____, soil _____, or hydrology _____	naturally problematic?			<u>no</u>	<u>Yes</u>		
(If needed, explain any answers in remarks)							

SUMMARY OF FINDINGS

Hydrophytic vegetation present?	<u> N </u>	Is the sampled area within a wetland? <u> N </u> If yes, optional wetland site ID: _____
Hydric soil present?	<u> Y </u>	
Indicators of wetland hydrology present?	<u> Y </u>	
Remarks: (Explain alternative procedures here or in a separate report.)		

HYDROLOGY

Primary Indicators (minimum of one is required; check all that apply)				Secondary Indicators (minimum of two required)	
☐ Surface Water (A1)	☐	☐ Water-Stained Leaves (B9)	☐	☐ Surface Soil Cracks (B6)	☐
☐ High Water Table (A2)	☐	☐ Aquatic Fauna (B13)	☐	☐ Drainage Patterns (B10)	☐
☒ Saturation (A3)	☐	☐ Marl Deposits (B15)	☐	☐ Moss Trim Lines (B16)	☐
☐ Water Marks (B1)	☐	☐ Hydrogen Sulfide Odor (C1)	☐	☐ Dry-Season Water Table (C2)	☐
☐ Sediment Deposits (B2)	☐	☐ Oxidized Rhizospheres on Living	☐	☐ Crayfish Burrows (C8)	☐
☐ Drift Deposits (B3)	☐	☐ Roots (C3)	☐	☐ Saturation Visible on Aerial Imagery	☐
☐ Algal Mat or Crust (B4)	☐	☐ Presence of Reduced Iron (C4)	☐	☐ (C9)	☐
☐ Iron Deposits (B5)	☐	☐ Recent Iron Reduction in Tilled	☐	☐ Stunted or Stressed Plants (D1)	☐
☐ Inundation Visible on Aerial	☐	☐ Soils (C6)	☐	☐ Geomorphic Position (D2)	☐
☐ Imagery (B7)	☐	☐ Thin Muck Surface (C7)	☐	☐ Shallow Aquitard (D3)	☐
☐ Sparsely Vegetated Concave	☐	☐ Other (Explain in Remarks)	☐	☐ FAC-Neutral Test (D5)	☐
☐ Surface (B8)	☐		☐	☐ Microtopographic Relief (D4)	☐
Field Observations: Surface water present? Yes ☐ No ☒ Depth (inches): Water table present? Yes ☐ No ☒ Depth (inches): Saturation present? Yes ☒ No ☐ Depth (inches): 10 (includes capillary fringe)				Indicators of wetland hydrology present? Y N	
Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:					
Remarks:					

US Army Corps of Engineers

Northcentral and Northeast Region

VEGETATION - Use scientific names of plants

Tree Stratum				Plot Size (30-ft)		Absolute % Cover	Dominant Species	Indicator Status	50/20 Thresholds:		
									20%	50%	
1	<i>Populus tremuloides</i>		--	<i>Quaking Aspen</i>		15	Y	FAC	Tree Stratum	6	15
2	<i>Acer rubrum</i>		--	<i>Red Maple</i>		15	Y	FAC	Sapling/Shrub Stratum	1	3
3			--						Herb Stratum	7	19
4			--						Woody Vine Stratum	0	0
5			--								
6			--								
7			--								
8			--								
9			--								
10			--								
						30	= Total Cover				
Sapling/Shrub Stratum				Plot Size (15-ft)		Absolute % Cover	Dominant Species	Indicator Status			
1	<i>Corylus americana</i>		--	<i>American Hazelnut</i>		5	Y	FACU			
2			--								
3			--								
4			--								
5			--								
6			--								
7			--								
8			--								
9			--								
10			--								
						5	= Total Cover				
Herb Stratum				Plot Size (5-ft)		Absolute % Cover	Dominant Species	Indicator Status			
1	<i>Poa pratensis</i>		--	<i>Kentucky Blue Grass</i>		20	Y	FACU			
2	<i>Pteridium aquilinum</i>		--	<i>Northern Bracken Fern</i>		10	Y	FACU			
3	<i>Anemone nemorosa</i>		--	<i>Wood anemone</i>		5	N	UPL			
4	<i>Equisetum pratense</i>		--	<i>Meadow Horsetail</i>		2	N	FACW			
5			--								
6			--								
7			--								
8			--								
9			--								
10			--								
11			--								
12			--								
13			--								
14			--								
15			--								
						37	= Total Cover				
Woody Vine Stratum				Plot Size (30-ft)		Absolute % Cover	Dominant Species	Indicator Status			
1			--								
2			--								
3			--								
4			--								
5			--								
						0	= Total Cover				

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across all Strata: 5 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 40.00% (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species	0	x 1 =	0
FACW species	2	x 2 =	4
FAC species	30	x 3 =	90
FACU species	35	x 4 =	140
UPL species	5	x 5 =	25
Column totals	72 (A)		259 (B)

Prevalence Index = B/A = 3.60

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Northcentral and Northeast Region

SOIL **Sampling Point:** 26-3u

Sampling Point: 26-3u

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

[illegible]

*Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains

**Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

Indicators for Problematic Hydric Soils:

- | | | |
|--|----------------------------------|--|
| ☐ Histosol (A1) | Polyvalue Below Surface | 2 cm Muck (A10) (LRR K, L, MLRA 149B) |
| ☐ Histic Epipedon (A2) | (S8) (LRR R, MLRA 149B) | Coast Prairie Redox (A16) (LRR K, L, R) |
| ☐ Black Histic (A3) | Thin Dark Surface (S9) | 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) |
| ☐ Hydrogen Sulphide (A4) | (LRR R, MLRA 149B) | Dark Surface (S7) (LRR K, L) |
| ☐ Stratified Layers (A5) | Loamy Mucky Mineral (F1) | Polyvalue Below Surface (S8) (LRR K, L) |
| ☐ Depleted Below Dark Surface (A11') | (LRR K, L) | Thin Dark Surface (S9) (LRR K, L) |
| ☐ Thick Dark Surface (A12) | Loamy Gleyed Matrix (F2) | Iron-Manganese Masses (F12) (LRR K, L, R) |
| ☐ Sandy Mucky Mineral (S1) | X Depleted Matrix (F3) | Piedmont Floodplain Soils (F19) (MLRA 149B) |
| ☐ Sandy Gleyed Matrix (S4) | Redox Dark Surface (F6) | Mesic Podzol (TA6) (MLRA 144A, 145, 149B) |
| ☐ Sandy Redox (S5) | Depleted Dark Surface (F7) | Red Parent Material (TF2) |
| ☐ Stripped Matrix (S6) | Redox Depressions (F8) | Very Shallow Dark Surface (TF12) |
| ☐ Dark Surface (S7) (LRR R, MLRA 149B) | | Other (Explain in Remarks) |

*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):

Type: hardpan

Depth (inches): 14

Hydric soil present? Y

Remarks:

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WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: <u>Evelth-Gilbert-Virginia School</u>		City/County: <u>Evelth/St. Louis</u>	Sampling Date: <u>5-13-2016</u>
Applicant/Owner: <u>Kimley-Horn and Associates, Inc.</u>		State: <u>MN</u>	Sampling Point: <u>26-3w</u>
Investigator/s: <u>Kyle Hanson, Erin Budrow</u>		Section, Township, Range: <u>32, 58, 17</u>	
Landform (hillslope, terrace, etc.): <u>toeslope</u>		Local relief (concave, convex, none): <u>concave</u>	
Slope (ft): <u>1%</u>		Lat.: <u>47.46999</u>	Long.: <u>-92.519893</u>
		Datum: <u>NAD 83, UTM 15N</u>	
Soil Map Unit Name: <u>Evelth-Eaglesnest-Conic complex, 6 to 18 percent slopes, boulder NWDI Classification: none</u>			
Are climatic/hydrologic conditions of the site typical for this time of the year? <u>yes</u> (If no, explain in remarks)			
Are vegetation <u> </u> , soil <u> </u> , or hydrology <u> </u> significantly disturbed?		Are "normal circumstances" present? <u>Yes</u>	
Are vegetation <u> </u> , soil <u> </u> , or hydrology <u> </u> naturally problematic?			
(If needed, explain any answers in remarks)			

SUMMARY OF FINDINGS

Hydrophytic vegetation present?	<u>Y</u>	Is the sampled area within a wetland? <u>Y</u>
Hydric soil present?	<u>Y</u>	
Indicators of wetland hydrology present?	<u>Y</u>	
If yes, optional wetland site ID: <u>Wetland 26</u>		
Remarks: (Explain alternative procedures here or in a separate report.)		

HYDROLOGY

Primary Indicators (minimum of one is required; check all that apply)				Secondary Indicators (minimum of two required)	
☐	Surface Water (A1)	☐	Water-Stained Leaves (B9)	☐	Surface Soil Cracks (B6)
☒	High Water Table (A2)	☐	Aquatic Fauna (B13)	☐	Drainage Patterns (B10)
☒	Saturation (A3)	☐	Marl Deposits (B15)	☐	Moss Trim Lines (B16)
☐	Water Marks (B1)	☐	Hydrogen Sulfide Odor (C1)	☐	Dry-Season Water Table (C2)
☐	Sediment Deposits (B2)	☐	Oxidized Rhizospheres on Living	☐	Crayfish Burrows (C8)
☐	Drift Deposits (B3)	☐	Roots (C3)	☐	Saturation Visible on Aerial Imagery (C9)
☐	Algal Mat or Crust (B4)	☐	Presence of Reduced Iron (C4)	☐	Stunted or Stressed Plants (D1)
☐	Iron Deposits (B5)	☐	Recent Iron Reduction in Tilled	☐	Geomorphic Position (D2)
☐	Inundation Visible on Aerial Imagery (B7)	☐	Soils (C6)	☐	Shallow Aquitard (D3)
☐	Sparsely Vegetated Concave Surface (B8)	☐	Thin Muck Surface (C7)	☐	FAC-Neutral Test (D5)
☐		☐	Other (Explain in Remarks)	☐	Microtopographic Relief (D4)
Field Observations: Surface water present? Yes ☐ No ☒ Depth (inches): Water table present? Yes ☒ No ☐ Depth (inches): 4 Saturation present? Yes ☒ No ☐ Depth (inches): 0 (includes capillary fringe)				Indicators of wetland hydrology present? ☒	
Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:					
Remarks:					

US Army Corps of Engineers

Northcentral and Northeast Region

VEGETATION - Use scientific names of plants

						50/20 Thresholds			20%	50%
Tree Stratum	Plot Size (30-ft)		Absolute % Cover	Dominant Species	Indicator Status	Tree Stratum	4	10		
1	<i>Abies balsamea</i>	-- Balsam Fir	15	Y	FAC	Sapling/Shrub Stratum	4	10		
2	<i>Fraxinus nigra</i>	-- Black Ash	5	Y	FACW	Herb Stratum	7	17		
3	--	--				Woody Vine Stratum	0	0		
4	--	--								
5	--	--								
6	--	--								
7	--	--								
8	--	--								
9	--	--								
10	--	--								
			20 = Total Cover							
Sapling/Shrub Stratum	Plot Size (15-ft)		Absolute % Cover	Dominant Species	Indicator Status					
1	<i>Abies balsamea</i>	-- Balsam Fir	20	Y	FAC					
2	--	--								
3	--	--								
4	--	--								
5	--	--								
6	--	--								
7	--	--								
8	--	--								
9	--	--								
10	--	--								
			20 = Total Cover							
Herb Stratum	Plot Size (5-ft)		Absolute % Cover	Dominant Species	Indicator Status					
1	<i>Calamagrostis canadensis</i>	-- Bluejoint	20	Y	OBL					
2	<i>Caltha palustris</i>	-- Yellow Marsh-Marigold	10	Y	OBL					
3	<i>Rubus idaeus</i>	-- Common Red Raspberry	2	N	FAC					
4	<i>Equisetum pratense</i>	-- Meadow Horsetail	2	N	FACW					
5	--	--								
6	--	--								
7	--	--								
8	--	--								
9	--	--								
10	--	--								
11	--	--								
12	--	--								
13	--	--								
14	--	--								
15	--	--								
			34 = Total Cover							
Woody Vine Stratum	Plot Size (30-ft)		Absolute % Cover	Dominant Species	Indicator Status					
1	--	--								
2	--	--								
3	--	--								
4	--	--								
5	--	--								
			0 = Total Cover							
						Dominant Species Summary: Number of Dominant Species that are OBL, FACW, or FAC: _____ Total Number of Dominant Species Across all Strata: _____ Percent of Dominant Species that are OBL, FACW, or FAC: _____				
						Prevalence Index Worksheet Total % Cover of: OBL species 30 x 1 = 30 FACW species 7 x 2 = 14 FAC species 37 x 3 = 111 FACU species 0 x 4 = 0 UPL species 0 x 5 = 0 Column totals 74 (A) 155 (B) Prevalence Index = B/A = 2.09				
						Hydrophytic Vegetation Indicators: Rapid test for hydrophytic vegetation ☒ Dominance test is >50% ☒ Prevalence index is ≥3.0* Morphological adaptations* (provide supporting data in Remarks or on a separate sheet) ☐ Problematic hydrophytic vegetation* (explain) *Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic				
						Definitions of Vegetation Strata: Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines - All woody vines greater than 3.28 ft in height.				
						Hydrophytic vegetation present? Y				
Remarks: (Include photo numbers here or on a separate sheet)										

Note: This data sheet has been adapted to use the 2016 National Wetland Plant List:

Lichvar, R.W., D.L. Banks, W.N. Kirchner, and N.C. Melvin. 2016. The National Wetland Plant List: 2016 wetland ratings. Phytoneuron 2016-30: 1-17. Published 28 April 2016. ISSN 2153 733X

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Northcentral and Northeast Region

SOIL Sampling Point: 26-3w

Sampling Point: 26-3w

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

[illegible]

*Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains

**Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

Indicators for Problematic Hydric Soils:

- | | | |
|---|----------------------------|--|
| ☐ Histosol (A1) | Polyvalue Below Surface | ☐ 2 cm Muck (A10) (LRR K, L, MLRA 149B |
| ☐ Histic Epipedon (A2) | (S8) (LRR R, MLRA 149B) | ☐ Coast Prairie Redox (A16) (LRR K, L, R) |
| ☐ Black Histic (A3) | Thin Dark Surface (S9) | ☐ 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) |
| ☐ Hydrogen Sulfide (A4) | (LRR R, MLRA 149B | ☐ Dark Surface (S7) (LRR K, L) |
| ☐ Stratified Layers (A5) | Loamy Mucky Mineral (F1) | ☐ Polyvalue Below Surface (S8) (LRR K, L) |
| ☐ Depleted Below Dark Surface (A11) | (LRR K, L) | ☐ Thin Dark Surface (S9) (LRR K, L) |
| ☐ Thick Dark Surface (A12) | Loamy Gleyed Matrix (F2) | ☐ Iron-Manganese Masses (F12) (LRR K, L, R) |
| ☐ Sandy Mucky Mineral (S1) | X Depleted Matrix (F3) | ☐ Piedmont Floodplain Soils (F19) (MLRA 149B) |
| ☐ Sandy Gleyed Matrix (S4) | Redox Dark Surface (F6) | ☐ Mesic Spodic (TA6) (MLRA 144A, 145, 149B) |
| ☐ Sandy Redox (S5) | Depleted Dark Surface (F7) | ☐ Red Parent Material (TF2) |
| ☐ Stripped Matrix (S6) | Redox Depressions (F8) | ☐ Very Shallow Dark Surface (TF12) |
| ☐ Dark Surface (S7) (LRR R, MLRA 149B) | | ☐ Other (Explain in Remarks) |

*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):

Type: _____

Depth (inches):

Hydric soil present? Y

Remarks:

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WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site:	Eveleth-Gilbert-Virginia School		City/County:	Eveleth/St. Louis	Sampling Date:	5-13-2016
Applicant/Owner:	Kimley-Horn and Associates, Inc.		State:	Minnesota	Sampling Point:	27-1u
Investigator(s):	Kyle Hanson, Erin Budrow		Section, Township, Range:	32, 58, 17		
Landform (hillslope, terrace, etc.):	footslope		Local relief (concave, convex, none):	concave		
Slope (%):	2%	Lat.: 47.46893	Long.: -92.51897	Datum:	NAD 83, UTM 15N	
Soil Map Unit Name:	Hibbing-Buhl complex 1 to 8 percent slopes		NW1 Classification: none			
Are climatic/hydrologic conditions of the site typical for this time of the year?				yes	(If no, explain in remarks)	
Are vegetation _____, soil _____, or hydrology _____		significantly disturbed?		Are "normal circumstances" present?		
Are vegetation _____, soil _____, or hydrology _____		naturally problematic?		Yes		
(If needed, explain any answers in remarks)						

SUMMARY OF FINDINGS

Hydrophytic vegetation present?	<u> N </u>	Is the sampled area within a wetland? <u> N </u> If yes, optional wetland site ID: _____
Hydric soil present?	<u> N </u>	
Indicators of wetland hydrology present?	<u> N </u>	
Remarks: (Explain alternative procedures here or in a separate report.)		

HYDROLOGY

Primary Indicators (minimum of one is required; check all that apply): ☐ Surface Water (A1) ☐ Water-Stained Leaves (B9) ☐ High Water Table (A2) ☐ Aquatic Fauna (B13) ☐ Saturation (A3) ☐ Marl Deposits (B15) ☐ Water Marks (B1) ☐ Hydrogen Sulfide Odor (C1) ☐ Sediment Deposits (B2) ☐ Oxidized Rhizospheres on Living Drift Deposits (B3) ☐ Roots (C3) ☐ Algal Mat or Crust (B4) ☐ Presence of Reduced Iron (C4) ☐ Iron Deposits (B5) ☐ Recent Iron Reduction in Tilled Inundation Visible on Aerial ☐ Soils (C6) Imagery (B7) ☐ Thin Muck Surface (C7) ☐ Sparsely Vegetated Concave ☐ Other (Explain in Remarks) Surface (B8)			Secondary Indicators (minimum of two required): ☐ Surface Soil Cracks (B6) ☐ Drainage Patterns (B10) ☐ Moss Trim Lines (B16) ☐ Dry-Season Water Table (C2) ☐ Crayfish Burrows (C8) ☐ Saturation Visible on Aerial Imagery (C9) ☐ Stunted or Stressed Plants (D1) ☐ Geomorphic Position (D2) ☐ Shallow Aquitard (D3) ☐ FAC-Neutral Test (D5) ☐ Microtopographic Relief (D4)		
Field Observations: Surface water present? Yes ☐ No ☒ Depth (inches): Water table present? Yes ☐ No ☒ Depth (inches): Saturation present? Yes ☐ No ☒ Depth (inches): (includes capillary fringe)			Indicators of wetland hydrology present? N		
Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:					
Remarks:					

VEGETATION - Use scientific names of plants

Tree Stratum		Plot Size (30-ft)	Absolute % Cover	Dominant Species	Indicator Status	50/20 Thresholds	
1	<i>Pinus strobus</i>	-- Eastern White Pine	80	Y	FACU	20%	20%
2	<i>Abies balsamea</i>	-- Balsam Fir	10	N	FAC	19	48
3	<i>Thuja occidentalis</i>	-- Eastern Arborvitae	5	N	FACW	3	8
4	--	--				7	19
5	--	--				0	0
6	--	--					
7	--	--					
8	--	--					
9	--	--					
10	--	--					
			95	= Total Cover			
Sapling/Shrub Stratum		Plot Size (15-ft)	Absolute % Cover	Dominant Species	Indicator Status	Dominance Test Worksheet	
1	<i>Abies balsamea</i>	-- Balsam Fir	10	Y	FAC	Number of Dominant Species that are OBL, FACW, or FAC: <u>2</u> (A)	
2	<i>Diervilla lonicera</i>	-- Northern bush honeysuckle	5	Y	UPL	Total Number of Dominant Species Across all Strata: <u>9</u> (B)	
3	--	--				Percent of Dominant Species that are OBL, FACW, or FAC: <u>22.22%</u> (A/B)	
4	--	--					
5	--	--					
6	--	--					
7	--	--					
8	--	--					
9	--	--					
10	--	--					
			15	= Total Cover			
Herb Stratum		Plot Size (5-ft)	Absolute % Cover	Dominant Species	Indicator Status	Prevalence Index Worksheet	
1	<i>Eurybia macrophylla</i>	-- Large-Leaf Wood-Aster	10	Y	UPL	Total % Cover of:	
2	<i>Carex pensylvanica</i>	-- Penn sedge	5	Y	UPL	OBL species <u>0</u> x 1 = <u>0</u>	
3	<i>Anemone nemorosa</i>	-- Wood anemone	5	Y	UPL	FACW species <u>10</u> x 2 = <u>20</u>	
4	<i>Equisetum pratense</i>	-- Meadow Horsetail	5	Y	FACW	FAC species <u>22</u> x 3 = <u>66</u>	
5	<i>Tussilago farfara</i>	-- Colt's-Foot	5	Y	FACU	FACU species <u>90</u> x 4 = <u>360</u>	
6	<i>Pteridium aquilinum</i>	-- Northern Bracken Fern	5	Y	FACU	UPL species <u>25</u> x 5 = <u>125</u>	
7	<i>Trillium cernuum</i>	-- Whip-Poor-Will-Flower	2	N	FAC	Column totals <u>147</u> (A) <u>571</u> (B)	
8	--	--				Prevalence Index = B/A = <u>3.88</u>	
9	--	--					
10	--	--					
11	--	--					
12	--	--					
13	--	--					
14	--	--					
15	--	--					
			37	= Total Cover			
Woody Vine Stratum		Plot Size (30-ft)	Absolute % Cover	Dominant Species	Indicator Status	Hydrophytic Vegetation Indicators:	
1	--	--				___ Rapid test for hydrophytic vegetation	
2	--	--				___ Dominance test is >50%	
3	--	--				___ Prevalence index is <3.0*	
4	--	--				Morphological adaptations* (provide supporting data in Remarks or on a separate sheet)	
5	--	--				___ Problematic hydrophytic vegetation* (explain)	
						*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic	
						Definitions of Vegetation Strata:	
						Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.	
						Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.	
						Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.	
						Woody vines - All woody vines greater than 3.28 ft in height.	
						Hydrophytic vegetation present? <u>N</u>	

Remarks: (Include photo numbers here or on a separate sheet)

Note: This data sheet has been adapted to use the 2016 National Wetland Plant List:
 Lichvar, R.W., D.L. Banks, W.N. Kirchner, and N.C. Melvin. 2016. The National Wetland Plant List: 2016 wetland ratings. Phytoneuron 2016-30: 1-17. Published 28 April 2016. ISSN 2153 733X

SOIL Sampling Point: 27-1u

Sampling Point: 27-1u

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

[illegible]

*Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains

**Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

Indicators for Problematic Hydric Soils:

- | | | |
|---|----------------------------------|--|
| ___ Histosol (A1) | Polyvalue Below Surface | 2 cm Muck (A10) (LRR K, L, MLRA 149B) |
| ___ Histic Epipedon (A2) | (S8) (LRR R, MLRA 149B) | Coast Prairie Redox (A16) (LRR K, L, R) |
| ___ Black Histic (A3) | Thin Dark Surface (S9) | 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) |
| ___ Hydrogen Sulphide (A4) | (LRR R, MLRA 149B) | Dark Surface (S7) (LRR K, L) |
| ___ Stratified Layers (A5) | Loamy Mucky Mineral (F1) | Polyvalue Below Surface (S8) (LRR K, L) |
| ___ Depleted Below Dark Surface (A11') | (LRR K, L) | Thin Dark Surface (S9) (LRR K, L) |
| ___ Thick Dark Surface (A12) | Loamy Gleyed Matrix (F2) | Iron-Manganese Masses (F12) (LRR K, L, R) |
| ___ Sandy Mucky Mineral (S1) | Depleted Matrix (F3) | Piedmont Floodplain Soils (F19) (MLRA 149B) |
| ___ Sandy Gleyed Matrix (S4) | Redox Dark Surface (F6) | Mesic Sodic (TA6) (MLRA 144A, 145, 149B) |
| ___ Sandy Redox (S5) | Depleted Dark Surface (F7) | Red Parent Material (TF2) |
| ___ Stripped Matrix (S6) | Redox Depressions (F8) | Very Shallow Dark Surface (TF12) |
| ___ Dark Surface (S7) (LRR R, MLRA 149B) | | ___ Other (Explain in Remarks) |

*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric soil present? N

Remarks:

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WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: <u>Eveleth-Gilbert-Virginia School</u>		City/County: <u>Eveleth/St. Louis</u>	Sampling Date: <u>5-13-2016</u>
Applicant/Owner: <u>Kimley-Horn and Associates, Inc.</u>		State: <u>Minnesota</u>	Sampling Point: <u>27-1w</u>
Investigator(s): <u>Kyle Hanson, Erin Burdow</u>		Section, Township, Range: <u>32, 58, 17</u>	
Landform (hill/slope, terrace, etc.): <u>footslope</u>		Local relief (concave, convex, none): <u>concave</u>	
Slope (ft): <u>2%</u>		Lat.: <u>47.46893</u>	Long.: <u>-92.51897</u>
		Datum: <u>NAD 83, UTM 15N</u>	
Soil Map Unit Name: <u>Hibbing-Buhl complex 1 to 8 percent slopes</u>		NW1 Classification: <u>none</u>	
Are climatic/hydrologic conditions of the site typical for this time of the year? <u>yes</u>		(If no, explain in remarks)	
Are vegetation <u> </u> , soil <u> </u> , or hydrology <u> </u> significantly disturbed?		Are "normal circumstances" present? <u>Yes</u>	
Are vegetation <u> </u> , soil <u> </u> , or hydrology <u> </u> naturally problematic?			
(If needed, explain any answers in remarks)			

SUMMARY OF FINDINGS

Hydrophytic vegetation present?	<u>Y</u>	Is the sampled area within a wetland? <u>Y</u>
Hydric soil present?	<u>Y</u>	
Indicators of wetland hydrology present?	<u>Y</u>	
Remarks: (Explain alternative procedures here or in a separate report.)		If yes, optional wetland site ID: <u>Wetland 27</u>

HYDROLOGY

Primary Indicators (minimum of one is required; check all that apply)			Secondary Indicators (minimum of two required)		
☐	Surface Water (A1)	☐	Water-Stained Leaves (B9)	☐	Surface Soil Cracks (B6)
☒	High Water Table (A2)	☐	Aquatic Fauna (B13)	☐	Drainage Patterns (B10)
☒	Saturation (A3)	☐	Marl Deposits (B15)	☐	Moss Trim Lines (B16)
☐	Water Marks (B1)	☐	Hydrogen Sulfide Odor (C1)	☐	Dry-Season Water Table (C2)
☐	Sediment Deposits (B2)	☐	Oxidized Rhizospheres on Living	☐	Crayfish Burrows (C8)
☐	Drift Deposits (B3)	☐	Roots (C3)	☐	Saturation Visible on Aerial Imagery
☐	Algal Mat or Crust (B4)	☐	Presence of Reduced Iron (C4)	☐	(C9)
☐	Iron Deposits (B5)	☐	Recent Iron Reduction in Tilled	☐	Stunted or Stressed Plants (D1)
☐	Inundation Visible on Aerial	☐	Soils (C6)	☐	Geomorphic Position (D2)
☐	Imagery (B7)	☐	Thin Muck Surface (C7)	☐	Shallow Aquitard (D3)
☐	Sparsely Vegetated Concave	☐	Other (Explain in Remarks)	☐	FAC-Neutral Test (D5)
☐	Surface (B8)	☐		☐	Microtopographic Relief (D4)

Field Observations:				Indicators of wetland hydrology present?
Surface water present?	Yes ☒	No ☒	Depth (inches): 5	
Water table present?	Yes ☒	No ☐	Depth (inches): 0	
Saturation present?	Yes ☒	No ☐	Depth (inches): 0	
(includes capillary fringe)				
Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:				
Remarks:				

VEGETATION - Use scientific names of plants

					50/20 Thresholds		20%	50%
Tree Stratum	Plot Size (30-ft)		Absolute % Cover	Dominant Species	Indicator Status			
1	<i>Fraxinus nigra</i>	-- Black Ash	30	Y	FACW			
2	<i>Thuja occidentalis</i>	-- Eastern Arborvitae	10	Y	FACW			
3	<i>Abies balsamea</i>	-- Balsam Fir	5	N	FAC			
4	--							
5	--							
6	--							
7	--							
8	--							
9	--							
10	--							
			45	= Total Cover				
Sapling/Shrub Stratum	Plot Size (15-ft)		Absolute % Cover	Dominant Species	Indicator Status			
1	<i>Alnus incana</i>	-- Speckled Alder	30	Y	FACW			
2	<i>Fraxinus nigra</i>	-- Black Ash	20	Y	FACW			
3	<i>Rhamnus cathartica</i>	-- European Buckthorn	5	N	FAC			
4	--							
5	--							
6	--							
7	--							
8	--							
9	--							
10	--							
			55	= Total Cover				
Herb Stratum	Plot Size (5-ft)		Absolute % Cover	Dominant Species	Indicator Status			
1	<i>Caltha palustris</i>	-- Yellow Marsh-Marigold	25	Y	OBL			
2	<i>Rubus pubescens</i>	-- Dwarf Red Raspberry	15	Y	FACW			
3	<i>Rubus idaeus</i>	-- Common Red Raspberry	10	N	FAC			
4	<i>Calamagrostis canadensis</i>	-- Bluejoint	10	N	OBL			
5	<i>Solidago gigantea</i>	-- Late Goldenrod	5	N	FACW			
6	--							
7	--							
8	--							
9	--							
10	--							
11	--							
12	--							
13	--							
14	--							
15	--							
			65	= Total Cover				
Woody Vine Stratum	Plot Size (30-ft)		Absolute % Cover	Dominant Species	Indicator Status			
1	--							
2	--							
3	--							
4	--							
5	--							
			0	= Total Cover				
Dominance Test Worksheet								
Number of Dominant Species that are OBL,								
FACW, or FAC:						6 (A)		
Total Number of Dominant Species Across all Strata:						6 (B)		
Percent of Dominant Species that are OBL, FACW, or FAC:						100.00% (A/B)		
Prevalence Index Worksheet								
Total % Cover of:								
OBL species		35	x 1 =	35				
FACW species		110	x 2 =	220				
FAC species		20	x 3 =	60				
FACU species		0	x 4 =	0				
UPL species		0	x 5 =	0				
Column totals		165	(A)	315		(B)		
Prevalence Index = B/A =						1.91		
Hydrophytic Vegetation Indicators:								
X Rapid test for hydrophytic vegetation								
X Dominance test is >50%								
X Prevalence index is >3.0*								
Morphological adaptations* (provide supporting data in Remarks or on a separate sheet)								
Problematic hydrophytic vegetation* (explain)								
*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic								
Definitions of Vegetation Strata:								
Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.								
Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.								
Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.								
Woody vines - All woody vines greater than 3.28 ft in height.								
Hydrophytic vegetation present?						Y		
Remarks: (Include photo numbers here or on a separate sheet)								

Sampling Point: 27-1w

[illegible]

**Location: PL=Pore Lining, M=Matrix

Indicators for Problematic Hydric Soils:

- *Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Hydric soil present? Y

Remarks:

Northcentral and Northeast Region

Project/Site: Eveleth-Gilbert-Virginia School City/County: Eveleth/St. Louis Sampling Date: 8-1-2019
 Applicant/Owner: Kimley-Horn and Associates, Inc. Station: MN Sampling Point: 28-1u
 Investigator(s): Erica Massa Section, Township, Range: 32, 58, 17
 Landform (hillslope, terrace, etc.): footslope Local relief (concave, convex, none): none
 Slope (%): 10% Lat.: 47.48078 Long.: -92.523877 Datum: NAD 83, UTM 15N
 Soil Map Unit Name: Eaglesnest stony loam, 2-8% slopes, bouldery NWI Classification: none
 Are climatic/hydrologic conditions of the site typical for this time of the year? Y (If no, explain in remarks)
 Are vegetation , soil , or hydrology significantly disturbed? Are "normal
 Are vegetation , soil , or hydrology naturally problematic? circumstances" present? Yes
 (If needed, explain any answers in remarks)

Hydrophytic vegetation present?	<u> N </u>	Is the sampled area within a wetland? <u> N </u> If yes, optional wetland site ID: _____
Hydric soil present?	<u> N </u>	
Indicators of wetland hydrology present?	<u> N </u>	
Remarks: (Explain alternative procedures here or in a separate report.)		

Primary Indicators (minimum of one is required; check all that apply) ☐ Surface Water (A1) ☐ Water-Stained Leaves (B9) ☐ High Water Table (A2) ☐ Aquatic Fauna (B13) ☐ Saturation (A3) ☐ Marl Deposits (B15) ☐ Water Marks (B1) ☐ Hydrogen Sulfide Odor (C1) ☐ Sediment Deposits (B2) ☐ Oxidized Rhizospheres on Living ☐ Drift Deposits (B3) ☐ Roots (C3) ☐ Algal Mat or Crust (B4) ☐ Presence of Reduced Iron (C4) ☐ Iron Deposits (B5) ☐ Recent Iron Reduction in Tilled ☐ Inundation Visible on Aerial ☐ Soils (C6) Imagery (B7) ☐ Thin Muck Surface (C7) ☐ Sparsely Vegetated Concave ☐ Other (Explain in Remarks) Surface (B8)			Secondary Indicators (minimum of two required) ☐ Surface Soil Cracks (B6) ☐ Drainage Patterns (B10) ☐ Moss Trim Lines (B16) ☐ Dry-Season Water Table (C2) ☐ Crayfish Burrows (C8) ☐ Saturation Visible on Aerial Imagery (C9) ☐ Stunted or Stressed Plants (D1) ☐ Geomorphic Position (D2) ☐ Shallow Aquitard (D3) ☐ FAC-Neutral Test (D5) ☐ Microtopographic Relief (D4)		
Field Observations: Surface water present? Yes ☐ No ☐ X Depth (inches): Water table present? Yes ☐ No ☐ X Depth (inches): Saturation present? Yes ☐ No ☐ X Depth (inches): (includes capillary fringe)			Indicators of wetland hydrology present? <u> </u> N		
Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:					
Remarks:					

Tree Stratum				Plot Size (30' Radius)		Absolute % Cover	Dominant Species	Indicator Status
1	<i>Populus tremuloides</i>	--	<i>Quaking Aspen</i>	20	Y	FAC		
2	<i>Pinus strobus</i>	--	<i>Eastern White Pine</i>	10	Y	FACU		
3	<i>Acer spicatum</i>	--	<i>Mountain Maple</i>	10	Y	FACU		
4	<i>Betula papyrifera</i>	--	<i>Paper Birch</i>	5	N	FACU		
5	--	--	--					
6	--	--	--					
7	--	--	--					
8	--	--	--					
9	--	--	--					
10	--	--	--					
				45	= Total Cover			
Sapling/Shrub Stratum				Plot Size (15' Radius)		Absolute % Cover	Dominant Species	Indicator Status
1	<i>Pinus strobus</i>	--	<i>Eastern White Pine</i>	10	Y	FACU		
2	<i>Populus tremuloides</i>	--	<i>Quaking Aspen</i>	5	Y	FAC		
3	<i>Corylus cornuta</i>	--	<i>Beaked Hazelnut</i>	5	Y	FACU		
4	--	--	--					
5	--	--	--					
6	--	--	--					
7	--	--	--					
8	--	--	--					
9	--	--	--					
10	--	--	--					
				20	= Total Cover			
Herb Stratum				Plot Size (5' Radius)		Absolute % Cover	Dominant Species	Indicator Status
1	<i>Pteridium aquilinum</i>	--	<i>Northern Bracken Fern</i>	60	Y	FACU		
2	<i>Diervilla lonicera</i>	--	<i>Bush Honeysuckle</i>	15	N	UPL		
3	<i>Eurybia macrophylla</i>	--	<i>Large-Leaf Wood-Aster</i>	10	N	UPL		
4	<i>Cornus canadensis</i>	--	<i>Canadian Bunchberry</i>	5	N	FAC		
5	<i>Maianthemum canadense</i>	--	<i>False Lily-of-the-Valley</i>	5	N	FACU		
6	<i>Hieracium aurantiacum</i>	--	<i>Orange Hawkweed</i>	2	N	UPL		
7	--	--	--					
8	--	--	--					
9	--	--	--					
10	--	--	--					
11	--	--	--					
12	--	--	--					
13	--	--	--					
14	--	--	--					
15	--	--	--					
				97	= Total Cover			
Woody Vine Stratum				Plot Size (30' Radius)		Absolute % Cover	Dominant Species	Indicator Status
1	--	--	--					
2	--	--	--					
3	--	--	--					
4	--	--	--					
5	--	--	--					
				0	= Total Cover			

50/20 Thresholds

20%

50%

Tree Stratum

9

23

Sapling/Shrub Stratum

4

10

Herb Stratum

19

49

Woody Vine Stratum

0

0

Dominance Test Worksheet

Number of Dominant Species that are OBL,

FACW, or FAC:

2

(A)

Total Number of Dominant Species Across all Strata:

7

(B)

Percent of Dominant Species that are OBL, FACW, or FAC:

28.57%

(A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species

0

x 1 =

0

FACW species

0

x 2 =

0

FAC species

30

x 3 =

90

FACU species

105

x 4 =

420

UPL species

27

x 5 =

135

Column totals

162

(A)

645

(B)

Prevalence Index = B/A =

3.98

Hydrophytic Vegetation Indicators:

☐ Rapid test for hydrophytic vegetation

☐ Dominance test is >50%

☐ Prevalence index is $\geq 3.0^*$

Morphological adaptations* (provide supporting data in Remarks or on a separate sheet)

Problematic hydrophytic vegetation* (explain)

*Indicators of hydroic soil and wetland hydrology must be present, unless disturbed or problematic

Definitions of Vegetation Strata:

Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines - All woody vines greater than 3.28 ft in height.

Hydrophytic vegetation present?

N

Remarks: (Include photo numbers here or on a separate sheet)

Note: This data sheet has been adapted to use the 2012 National Wetland Plant List:

Robert W. Lichvar and John T. Kartesz. 2009. North American Digital Flora: National Wetland Plant List, version 2.4.0 (https://wetland_plants.usace.army.mil/), U.S. Army Corps of Engineers, Engineer Research and Development Center, Cold Regions Research and Engineering Laboratory, Hanover, NH, and BONAP, Chapel Hill, NC. (2012)

SOIL Sampling Point: 28-1u

Sampling Point: 28-1u

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

[illegible]

*Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains

**Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

Indicators for Problematic Hydric Soils:

- | | | |
|---|----------------------------|--|
| ☐ Histosol (A1) | Polyvalue Below Surface | ☐ 2 cm Muck (A10) (LRR K, L, MLRA 149B |
| ☐ Histic Epipedon (A2) | (S8) (LRR R, MLRA 149B) | ☐ Coast Prairie Redox (A16) (LRR K, L, R) |
| ☐ Black Histic (A3) | Thin Dark Surface (S9) | ☐ 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) |
| ☐ Hydrogen Sulfide (A4) | (LRR R, MLRA 149B | ☐ Dark Surface (S7) (LRR K, L) |
| ☐ Stratified Layers (A5) | Loamy Mucky Mineral (F1) | ☐ Polyvalue Below Surface (S8) (LRR K, L) |
| ☐ Depleted Below Dark Surface (A11) | (LRR K, L) | ☐ Thin Dark Surface (S9) (LRR K, L) |
| ☐ Thick Dark Surface (A12) | Loamy Gleyed Matrix (F2) | ☐ Iron-Manganese Masses (F12) (LRR K, L, R) |
| ☐ Sandy Mucky Mineral (S1) | Depleted Matrix (F3) | ☐ Piedmont Floodplain Soils (F19) (MLRA 149B) |
| ☐ Sandy Gleyed Matrix (S4) | Redox Dark Surface (F6) | ☐ Mesic Spodic (TA6) (MLRA 144A, 145, 149B) |
| ☐ Sandy Redox (S5) | Depleted Dark Surface (F7) | ☐ Red Parent Material (TF2) |
| ☐ Stripped Matrix (S6) | Redox Depressions (F8) | ☐ Very Shallow Dark Surface (TF12) |
| ☐ Dark Surface (S7) (LRR R, MLRA 149B) | | ☐ Other (Explain in Remarks) |

*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):

Type: Rock

Depth (inches): 10

Hydric soil present? N

Remarks:

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WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Eveleth-Gilbert-Virginia School City/County: Eveleth/St. Louis Sampling Date: 8-1-2019
Applicant/Owner: Kimley-Horn and Associates, Inc. State: MN Sampling Point: 28-1w
Investigator(s): Ericka Massa Section, Township, Range: 32, 58, 17
Landform (hillslope, terrace, etc.): toeslope Local relief (concave, convex, none): concave
Slope (%): 2% Lat.: 47.480718 Long.: -92.5239 Datum: NAD 83, UTM 15N
Soil Map Unit Name: Eaglesnest stony loam, 2-8% slopes, bouldery NWI Classification: none
Are climatic/hydrologic conditions of the site typical for this time of the year? Y (If no, explain in remarks)
Are vegetation , soil , or hydrology significantly disturbed? Are "normal
Are vegetation , soil , or hydrology naturally problematic? circumstances" present? Yes
(If needed, explain any answers in remarks)

SUMMARY OF FINDINGS

Hydrophytic vegetation present?	<u>Y</u>	Is the sampled area within a wetland?	<u>Y</u>
Hydric soil present?	<u>Y</u>		
Indicators of wetland hydrology present?	<u>Y</u>	If yes, optional wetland site ID:	<u>Wetland 28</u>
Remarks: (Explain alternative procedures here or in a separate report.)			

HYDROLOGY

Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)	
☐ Surface Water (A1)	☐ Water-Stained Leaves (B9)	☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Aquatic Fauna (B13)	☐ Drainage Patterns (B10)	
☒ Saturation (A3)	☐ Marl Deposits (B15)	☐ Moss Trim Lines (B16)	
☐ Water Marks (B1)	☐ Hydrogen Sulfide Odor (C1)	☐ Dry-Season Water Table (C2)	
☐ Sediment Deposits (B2)	☐ Oxidized Rhizospheres on Living	☐ Crayfish Burrows (C8)	
☐ Drift Deposits (B3)	☐ Roots (C3)	☐ Saturation Visible on Aerial Imagery	
☐ Algal Mat or Crust (B4)	☐ Presence of Reduced Iron (C4)	☐ (C9)	
☐ Iron Deposits (B5)	☐ Recent Iron Reduction in Tilled	☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial	☐ Soils (C6)	☒ Geomorphic Position (D2)	
☐ Imagery (B7)	☐ Thin Muck Surface (C7)	☐ Shallow Aquitard (D3)	
☐ Sparsely Vegetated Concave	☐ Other (Explain in Remarks)	☒ FAC-Neutral Test (D5)	
☐ Surface (B8)		☐ Microtopographic Relief (D4)	
Field Observations:		Indicators of wetland hydrology present? <u>Y</u>	
Surface water present?	Yes <u> </u> No <u>X</u>	Depth (inches): <u> </u>	
Water table present?	Yes <u> </u> No <u>X</u>	Depth (inches): <u> </u>	
Saturation present?	Yes <u>X</u> No <u> </u>	Depth (inches): <u>2</u>	
(includes capillary fringe)			
Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks:			

US Army Corps of Engineers

Northcentral and Northeast Region

VEGETATION - Use scientific names of plants

Tree Stratum				Plot Size (30' Radius)	Absolute % Cover	Dominant Species	Indicator Status
1	<u>Populus tremuloides</u>	--	<u>Quaking Aspen</u>		5	Y	FAC
2	<u>Pinus strobus</u>	--	<u>Eastern White Pine</u>		2	Y	FACU
3	<u> </u>	--	<u> </u>				
4	<u> </u>	--	<u> </u>				
5	<u> </u>	--	<u> </u>				
6	<u> </u>	--	<u> </u>				
7	<u> </u>	--	<u> </u>				
8	<u> </u>	--	<u> </u>				
9	<u> </u>	--	<u> </u>				
10	<u> </u>	--	<u> </u>				
					7	=	Total Cover
Sapling/Shrub Stratum				Plot Size (15' Radius)	Absolute % Cover	Dominant Species	Indicator Status
1	<u>Alnus incana</u>	--	<u>Speckled Alder</u>		5	Y	FACW
2	<u>Salix discolor</u>	--	<u>Pussy Willow</u>		5	Y	FACW
3	<u>Acer spicatum</u>	--	<u>Mountain Maple</u>		5	Y	FACU
4	<u>Abies balsamea</u>	--	<u>Balsam Fir</u>		2	N	FAC
5	<u>Picea glauca</u>	--	<u>White Spruce</u>		2	N	FACU
6	<u> </u>	--	<u> </u>				
7	<u> </u>	--	<u> </u>				
8	<u> </u>	--	<u> </u>				
9	<u> </u>	--	<u> </u>				
10	<u> </u>	--	<u> </u>				
					19	=	Total Cover
Herb Stratum				Plot Size (5' Radius)	Absolute % Cover	Dominant Species	Indicator Status
1	<u>Calamagrostis canadensis</u>	--	<u>Bluejoint</u>		50	Y	OBL
2	<u>Scirpus cyperinus</u>	--	<u>Cottongrass Bulrush</u>		10	N	OBL
3	<u>Carex intumescens</u>	--	<u>Greater Bladder Sedge</u>		10	N	FACW
4	<u>Pteridium aquilinum</u>	--	<u>Northern Bracken Fern</u>		10	N	FACU
5	<u>Rubus pubescens</u>	--	<u>Dwarf Red Raspberry</u>		5	N	FACW
6	<u>Fraxinus nigra</u>	--	<u>Black Ash</u>		5	N	FACW
7	<u> </u>	--	<u> </u>				
8	<u> </u>	--	<u> </u>				
9	<u> </u>	--	<u> </u>				
10	<u> </u>	--	<u> </u>				
11	<u> </u>	--	<u> </u>				
12	<u> </u>	--	<u> </u>				
13	<u> </u>	--	<u> </u>				
14	<u> </u>	--	<u> </u>				
15	<u> </u>	--	<u> </u>				
					90	=	Total Cover
Woody Vine Stratum				Plot Size (30' Radius)	Absolute % Cover	Dominant Species	Indicator Status
1	<u> </u>	--	<u> </u>				
2	<u> </u>	--	<u> </u>				
3	<u> </u>	--	<u> </u>				
4	<u> </u>	--	<u> </u>				
5	<u> </u>	--	<u> </u>				
					0	=	Total Cover
Remarks: (Include photo numbers here or on a separate sheet)							
Note: This data sheet has been adapted to use the 2012 National Wetland Plant List: Robert W. Lichvar and John T. Kartesz. 2009. North American Digital Flora: National Wetland Plant List, version 2.4.0 (https://wetland.plants.usace.army.mil), U.S. Army Corps of Engineers, Engineer Research and Development Center, Cold Regions Research and Engineering Laboratory, Hanover, NH, and BONAP, Chapel Hill, NC. (2012)							

US Army Corps of Engineers

Northcentral and Northeast Region

SOIL Sampling Point: 28-1w

Sampling Point: 28-1w

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

[illegible]

*Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains

**Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

Indicators for Problematic Hydric Soils:

- | | | |
|---|--|--|
| ☐ Histosol (A1) | Polyvalue Below Surface | ☐ 2 cm Muck (A10) (LRR K, L, MLRA 149B |
| ☐ Histic Epipedon (A2) | (S8) (LRR R, MLRA 149B) | ☐ Coast Prairie Redox (A16) (LRR K, L, R) |
| ☐ Black Histic (A3) | Thin Dark Surface (S9) | ☐ 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) |
| ☐ Hydrogen Sulfide (A4) | (LRR R, MLRA 149B | ☐ Dark Surface (S7) (LRR K, L) |
| ☐ Stratified Layers (A5) | Loamy Mucky Mineral (F1) | ☐ Polyvalue Below Surface (S8) (LRR K, L) |
| ☒ Depleted Below Dark Surface (A11) | (LRR K, L) | ☐ Thin Dark Surface (S9) (LRR K, L) |
| ☐ Thick Dark Surface (A12) | Loamy Gleyed Matrix (F2) | ☐ Iron-Manganese Masses (F12) (LRR K, L, R) |
| ☐ Sandy Mucky Mineral (S1) | ☒ Depleted Matrix (F3) | ☐ Piedmont Floodplain Soils (F19) (MLRA 149B) |
| ☐ Sandy Gleyed Matrix (S4) | Redox Dark Surface (F6) | ☐ Mesic Spodic (TA6) (MLRA 144A, 145, 149B) |
| ☐ Sandy Redox (S5) | Depleted Dark Surface (F7) | ☐ Red Parent Material (TF2) |
| ☐ Stripped Matrix (S6) | Redox Depressions (F8) | ☐ Very Shallow Dark Surface (TF12) |
| ☐ Dark Surface (S7) (LRR R, MLRA 149B) | | ☐ Other (Explain in Remarks) |

*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):

Type: Rock

Depth (inches): 14

Hydric soil present? Y

Remarks:

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Project/Site:	Eveleth-Gilbert-Virginia School		City/County:	Eveleth/St. Louis	Sampling Date:	8-1-2019	
Applicant/Owner:	Kirmley-Horn and Associates, Inc.		State:	MN	Sampling Point:	29-1u	
Investigator(s):	Ericka Massa		Section, Township, Range:	32, 58, 17			
Landform (hillslope, terrace, etc.):	hillslope		Local relief (concave, convex, none):	convex			
Slope (°):	25%	Lat.: 47.48039	Long.: -92.51982	Datum:	NAD 83, UTM 15N		
Soil Map Unit Name:	Conic, V. bouldery-Insula, V. bouldery-rock outcrop, 20-70% slopes NWI Classification: none						
Are climatic/hydrologic conditions of the site typical for this time of the year? Yes (If no, explain in remarks)							
Are vegetation _____, soil _____, or hydrology _____ significantly disturbed?	Are "normal circumstances" present? Yes						
(If needed, explain any answers in remarks)							

Hydrophytic vegetation present?	<u> N </u>	Is the sampled area within a wetland? <u> N </u> If yes, optional wetland site ID: _____
Hydric soil present?	<u> N </u>	
Indicators of wetland hydrology present?	<u> N </u>	
Remarks: (Explain alternative procedures here or in a separate report.)		

Primary Indicators (minimum of one is required; check all that apply): ☐ Surface Water (A1) ☐ Water-Stained Leaves (B9) ☐ High Water Table (A2) ☐ Aquatic Fauna (B13) ☐ Saturation (A3) ☐ Marl Deposits (B15) ☐ Water Marks (B1) ☐ Hydrogen Sulfide Odor (C1) ☐ Sediment Deposits (B2) ☐ Oxidized Rhizospheres on Living ☐ Drift Deposits (B3) ☐ Roots (C3) ☐ Algal Mat or Crust (B4) ☐ Presence of Reduced Iron (C4) ☐ Iron Deposits (B5) ☐ Recent Iron Reduction in Tilled ☐ Inundation Visible on Aerial ☐ Soils (C6) Imagery (B7) ☐ Thin Muck Surface (C7) ☐ Sparsely Vegetated Concave ☐ Other (Explain in Remarks) Surface (B8)			Secondary Indicators (minimum of two required): ☐ Surface Soil Cracks (B6) ☐ Drainage Patterns (B10) ☐ Moss Trim Lines (B16) ☐ Dry-Season Water Table (C2) ☐ Crayfish Burrows (C8) ☐ Saturation Visible on Aerial Imagery (C9) ☐ Stunted or Stressed Plants (D1) ☐ Geomorphic Position (D2) ☐ Shallow Aquitard (D3) ☐ FAC-Neutral Test (D5) ☐ Microtopographic Relief (D4)		
Field Observations: Surface water present? Yes ☐ No ☒ Depth (inches): Water table present? Yes ☐ No ☒ Depth (inches): Saturation present? Yes ☐ No ☒ Depth (inches): (includes capillary fringe)			Indicators of wetland hydrology present? <u> N </u>		
Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:					
Remarks:					

50/20 Thresholds				20%	50%
Tree Stratum	Plot Size (30' Radius)	Absolute % Cover	Dominant Species	Indicator Status	Tree Stratum
1	<i>Betula papyrifera</i> -- Paper Birch	40	Y	FACU	Sapling/Shrub Stratum
2	--				Herb Stratum
3	--				Woody Vine Stratum
4	--				
5	--				
6	--				
7	--				
8	--				
9	--				
10	--				
		40	= Total Cover		
Sapling/Shrub Stratum	Plot Size (15' Radius)	Absolute % Cover	Dominant Species	Indicator Status	
1	<i>Betula papyrifera</i> -- Paper Birch	15	Y	FACU	
2	<i>Alnus incana</i> -- Speckled Alder	5	N	FACW	
3	<i>Salix discolor</i> -- Pussy Willow	5	N	FACW	
4	<i>Acer rubrum</i> -- Red Maple	5	N	FAC	
5	--				
6	--				
7	--				
8	--				
9	--				
10	--				
		30	= Total Cover		
Herb Stratum	Plot Size (5' Radius)	Absolute % Cover	Dominant Species	Indicator Status	
1	<i>Rubus idaeus</i> -- Common Red Raspberry	30	Y	FAC	
2	<i>Tanacetum vulgare</i> -- Common Tansy	20	Y	FACU	
3	<i>Fragaria virginiana</i> -- Virginia Strawberry	15	N	FACU	
4	<i>Solidago canadensis</i> -- Canadian Goldenrod	10	N	FACU	
5	<i>Calamagrostis canadensis</i> -- Bluejoint	2	N	OBL	
6	--				
7	--				
8	--				
9	--				
10	--				
11	--				
12	--				
13	--				
14	--				
15	--				
		77	= Total Cover		
Woody Vine Stratum	Plot Size (30' Radius)	Absolute % Cover	Dominant Species	Indicator Status	
1	--				
2	--				
3	--				
4	--				
5	--				
		0	= Total Cover		

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across all Strata: 4 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 25.00% (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species 2 x 1 = 2

FACW species 10 x 2 = 20

FAC species 35 x 3 = 105

FACU species 100 x 4 = 400

UPL species 0 x 5 = 0

Column totals 147 (A) 527 (B)

Prevalence Index = B/A = 3.59

Hydrophytic Vegetation Indicators:

___ Rapid test for hydrophytic vegetation

___ Dominance test is >50%

___ Prevalence index is $\geq 3.0^*$

Morphological adaptations* (provide supporting data in Remarks or on a separate sheet)

___ Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Definitions of Vegetation Strata:

Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines - All woody vines greater than 3.28 ft in height.

Hydrophytic vegetation present? N

Remarks: (Include photo numbers here or on a separate sheet)

Note: This data sheet has been adapted to use the 2012 National Wetland Plant List:

Robert W. Lichvar and John T. Kartesz. 2009. North American Digital Flora: National Wetland Plant List, version 2.4.0 (https://wetland_plants.usace.army.mil). U.S. Army Corps of Engineers, Engineer Research and Development Center, Cold Regions Research and Engineering Laboratory, Hanover, NH, and BONAP, Chapel Hill, NC. (2012)

Sampling Point: 29-1u

[illegible]

**Location: PL=Pore Lining, M=Matrix

Indicators for Problematic Hydric Soils:

- *Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Hydric soil present? N

Northcentral and Northeast Region

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Eveleth-Gilbert-Virginia School City/County: Eveleth/St. Louis Sampling Date: 8-1-2019
Applicant/Owner: Kimley-Horn and Associates, Inc. Section, Township, Range: 32, 58, 17 29-1w
Investigator(s): Ericka Massa
Landform (hillslope, terrace, etc.): toeslope of drainage ditch Local relief (concave, convex, none): concave
Slope (%): 2% Lat.: 47.480418 Long.: -92.51988 Datum: NAD 83, UTM 15N
Soil Map Unit Name: Conic, V. bouldery-Insula, V. bouldery-rock outcrop, 20-70% slopes NWI Classification: none
Are climatic/hydrologic conditions of the site typical for this time of the year? Yes (If no, explain in remarks)
Are vegetation , soil , or hydrology significantly disturbed? Are "normal
Are vegetation , soil , or hydrology naturally problematic? circumstances" present? Yes
(If needed, explain any answers in remarks)

SUMMARY OF FINDINGS

Hydrophytic vegetation present?	<u>Y</u>	Is the sampled area within a wetland?	<u>Y</u>
Hydric soil present?	<u>Y</u>		
Indicators of wetland hydrology present?	<u>Y</u>	If yes, optional wetland site ID:	<u>Wetland 28</u>
Remarks: (Explain alternative procedures here or in a separate report.)			
<u>Drainage ditch bordering East Range School.</u>			

HYDROLOGY

Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)	
☐ Surface Water (A1)	☐ Water-Stained Leaves (B9)	☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Aquatic Fauna (B13)	☐ Drainage Patterns (B10)	
☒ Saturation (A3)	☐ Marl Deposits (B15)	☐ Moss Trim Lines (B16)	
☐ Water Marks (B1)	☐ Hydrogen Sulfide Odor (C1)	☐ Dry-Season Water Table (C2)	
☐ Sediment Deposits (B2)	☐ Oxidized Rhizospheres on Living	☐ Crayfish Burrows (C8)	
☐ Drift Deposits (B3)	☐ Roots (C3)	☐ Saturation Visible on Aerial Imagery	
☐ Algal Mat or Crust (B4)	☐ Presence of Reduced Iron (C4)	☐ (C9)	
☐ Iron Deposits (B5)	☐ Recent Iron Reduction in Tilled	☐ Stunted or Stressed Plants (D1)	
☐ Inundation Visible on Aerial	☐ Soils (C6)	☒ Geomorphic Position (D2)	
☐ Imagery (B7)	☐ Thin Muck Surface (C7)	☐ Shallow Aquitard (D3)	
☐ Sparsely Vegetated Concave	☐ Other (Explain in Remarks)	☒ FAC-Neutral Test (D5)	
☐ Surface (B8)		☐ Microtopographic Relief (D4)	
Field Observations:		Indicators of wetland hydrology present? <u>Y</u>	
Surface water present?	Yes <u> </u> No <u>X</u>	Depth (inches): <u> </u>	
Water table present?	Yes <u> </u> No <u>X</u>	Depth (inches): <u> </u>	
Saturation present?	Yes <u>X</u> No <u> </u>	Depth (inches): <u>2</u>	
(includes capillary fringe)			
Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks:			

VEGETATION - Use scientific names of plants

Tree Stratum					Plot Size (30' Radius)	Absolute % Cover	Dominant Species	Indicator Status		
1						<u>--</u>	<u> </u>	<u> </u>		
2						<u>--</u>	<u> </u>	<u> </u>		
3						<u>--</u>	<u> </u>	<u> </u>		
4						<u>--</u>	<u> </u>	<u> </u>		
5						<u>--</u>	<u> </u>	<u> </u>		
6						<u>--</u>	<u> </u>	<u> </u>		
7						<u>--</u>	<u> </u>	<u> </u>		
8						<u>--</u>	<u> </u>	<u> </u>		
9						<u>--</u>	<u> </u>	<u> </u>		
10						<u>--</u>	<u> </u>	<u> </u>		
						<u>0</u>	= Total Cover			
Sapling/Shrub Stratum					Plot Size (15' Radius)	Absolute % Cover	Dominant Species	Indicator Status		
1	<u>Salix discolor</u>					<u>--</u>	<u>Pussy Willow</u>	<u>30</u>	<u>Y</u>	<u>FACW</u>
2	<u>Alnus incana</u>					<u>--</u>	<u>Speckled Alder</u>	<u>10</u>	<u>Y</u>	<u>FACW</u>
3	<u>Populus tremuloides</u>					<u>--</u>	<u>Quaking Aspen</u>	<u>5</u>	<u>N</u>	<u>FAC</u>
4						<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
5						<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
6						<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
7						<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
8						<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
9						<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
10						<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
						<u>45</u>	= Total Cover			
Herb Stratum					Plot Size (5' Radius)	Absolute % Cover	Dominant Species	Indicator Status		
1	<u>Calamagrostis canadensis</u>					<u>--</u>	<u>Bluejoint</u>	<u>25</u>	<u>Y</u>	<u>OBL</u>
2	<u>Scirpus cyperinus</u>					<u>--</u>	<u>Cottongrass Bulrush</u>	<u>20</u>	<u>Y</u>	<u>OBL</u>
3	<u>Onoclea sensibilis</u>					<u>--</u>	<u>Sensitive Fern</u>	<u>10</u>	<u>N</u>	<u>FACW</u>
4	<u>Tanacetum vulgare</u>					<u>--</u>	<u>Common Tansy</u>	<u>10</u>	<u>N</u>	<u>FACU</u>
5	<u>Solidago canadensis</u>					<u>--</u>	<u>Canadian Goldenrod</u>	<u>5</u>	<u>N</u>	<u>FACU</u>
6	<u>Salix discolor</u>					<u>--</u>	<u>Pussy Willow</u>	<u>5</u>	<u>N</u>	<u>FACW</u>
7	<u>Rubus idaeus</u>					<u>--</u>	<u>Common Red Raspberry</u>	<u>5</u>	<u>N</u>	<u>FAC</u>
8	<u>Eutrochium purpureum</u>					<u>--</u>	<u>Sweet-Scented Joe-Pye-Weec</u>	<u>2</u>	<u>N</u>	<u>FAC</u>
9						<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
10						<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
11						<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
12						<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
13						<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
14						<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
15						<u>--</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
						<u>82</u>	= Total Cover			
Woody Vine Stratum					Plot Size (30' Radius)	Absolute % Cover	Dominant Species	Indicator Status		
1						<u>--</u>	<u> </u>	<u> </u>	<u> </u>	
2						<u>--</u>	<u> </u>	<u> </u>	<u> </u>	
3						<u>--</u>	<u> </u>	<u> </u>	<u> </u>	
4						<u>--</u>	<u> </u>	<u> </u>	<u> </u>	
5						<u>--</u>	<u> </u>	<u> </u>	<u> </u>	
						<u>0</u>	= Total Cover			
Remarks: (Include photo numbers here or on a separate sheet)										
Note: This data sheet has been adapted to use the 2012 National Wetland Plant List: Robert W. Lichvar and John T. Kartesz. 2009. North American Digital Flora: National Wetland Plant List, version 2.4.0 (https://wetland.plants.usace.army.mil), U.S. Army Corps of Engineers, Engineer Research and Development Center, Cold Regions Research and Engineering Laboratory, Hanover, NH, and BONAP, Chapel Hill, NC. (2012)										

Sampling Point: 29-1w

50/20 Thresholds		
Tree Stratum	20%	50%
Sapling/Shrub Stratum	0	0
Herb Stratum	9	23
Woody Vine Stratum	16	41
	0	0
Dominance Test Worksheet		
Number of Dominant Species that are OBL, FACW, or FAC: <u>4</u> (A)		
Total Number of Dominant Species Across all Strata: <u>4</u> (B)		
Percent of Dominant Species that are OBL, FACW, or FAC: <u>100.00%</u> (A/B)		
Prevalence Index Worksheet		
Total % Cover of:		
OBL species	<u>45</u> x 1 =	<u>45</u>
FACW species	<u>55</u> x 2 =	<u>110</u>
FAC species	<u>12</u> x 3 =	<u>36</u>
FACU species	<u>15</u> x 4 =	<u>60</u>
UPL species	<u>0</u> x 5 =	<u>0</u>
Column totals	<u>127</u> (A)	<u>251</u> (B)
Prevalence Index = B/A = <u>1.98</u>		
Hydrophytic Vegetation Indicators:		
☐ Rapid test for hydrophytic vegetation		
☒ Dominance test is >50%		
☒ Prevalence index is ≤3.0*		
Morphological adaptations* (provide supporting data in Remarks or on a separate sheet)		
☐ Problematic hydrophytic vegetation* (explain)		
*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic		
Definitions of Vegetation Strata:		
Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.		
Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.		
Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.		
Woody vines - All woody vines greater than 3.28 ft in height.		
Hydrophytic vegetation present? <u>Y</u>		

SOIL Sampling Point: 29-1w

Sampling Point: 29-1w

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

[illegible]

*Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains

**Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

Indicators for Problematic Hydric Soils:

- | | | |
|---|----------------------------------|--|
| ___ Histosol (A1) | Polyvalue Below Surface | 2 cm Muck (A10) (LRR K, L, MLRA 149B) |
| ___ Histic Epipedon (A2) | (S8) (LRR R, MLRA 149B) | Coast Prairie Redox (A16) (LRR K, L, R) |
| ___ Black Histic (A3) | Thin Dark Surface (S9) | 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) |
| ___ Hydrogen Sulphide (A4) | (LRR R, MLRA 149B) | Dark Surface (S7) (LRR K, L) |
| ___ Stratified Layers (A5) | Loamy Mucky Mineral (F1) | Polyvalue Below Surface (S8) (LRR K, L) |
| ___ Depleted Below Dark Surface (A11') | (LRR K, L) | Thin Dark Surface (S9) (LRR K, L) |
| ___ Thick Dark Surface (A12) | Loamy Gleyed Matrix (F2) | Iron-Manganese Masses (F12) (LRR K, L, R) |
| ___ Sandy Mucky Mineral (S1) | X Depleted Matrix (F3) | Piedmont Floodplain Soils (F19) (MLRA 149B) |
| ___ Sandy Gleyed Matrix (S4) | Redox Dark Surface (F6) | Mesic Podzol (TA6) (MLRA 144A, 145, 149B) |
| ___ Sandy Redox (S5) | Depleted Dark Surface (F7) | Red Parent Material (TF2) |
| ___ Stripped Matrix (S6) | Redox Depressions (F8) | Very Shallow Dark Surface (TF12) |
| ___ Dark Surface (S7) (LRR R, MLRA 149B) | | ___ Other (Explain in Remarks) |

*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):

Type: Rock

Depth (inches): 16

Hydric soil present? Y

Remarks:

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Appendix B

Site Photographs



Photo 1 Photo of a typical hardwood swamp.



Photo 2 Photo of a typical sedge meadow. Shrub-carr borders in the background.



Photo 3 Photo of a typical fresh (wet) meadow. U.S. Highway 53 in the background.



Photo 4 Photo of a typical alder thicket.



Photo 5 Photo of a typical coniferous swamp – balsam fir dominant tree species.



Photo 6 Photo of a typical coniferous swamp – northern white cedar dominant tree species.



Photo 7 Photo of Mud Lake and adjacent sedge meadow community.



Photo 8 Photo of stormwater pond adjacent to East Range Academy of Science and Technology – June 13, 2019



Photo 9 Photo of stormwater pond adjacent to East Range Academy of Science and Technology – August 1, 2019.



Photo 10 Photo of shallow marsh, south of stormwater pond.

Appendix C

Climate Summary Data

WETS Table

WETS Station: EVELETH WASTE WATER PLANT, MN													
Requested years: 1981 - 2010													
Month	Avg Max Temp	Avg Min Temp	Avg Mean Temp	Avg Precip	30% chance precip less than	30% chance precip more than	Avg number days precip 0.10 or more	Avg Snowfall					
Jan	16.8	-1.7	7.6	0.71	0.49	0.87	2	-					
Feb	22.9	2.7	12.8	0.57	0.29	0.72	2	-					
Mar	34.8	14.9	24.9	1.18	0.75	1.39	3	-					
Apr	50.4	28.7	39.6	2.12	1.05	2.24	5	-					
May	63.5	40.8	52.2	2.92	2.23	3.49	7	-					
Jun	72.0	50.8	61.4	4.28	3.01	4.66	8	-					
Jul	76.5	55.5	66.0	4.15	2.62	5.07	8	-					
Aug	74.8	53.7	64.3	3.33	2.20	4.23	7	-					
Sep	64.8	44.8	54.8	3.44	2.21	3.99	6	-					
Oct	50.7	33.0	41.9	2.63	1.62	3.04	6	-					
Nov	33.9	19.4	26.7	1.36	0.86	1.71	4	-					
Dec	20.3	4.3	12.3	0.92	0.50	1.06	3	-					
Annual:					-	-							
Average	48.5	28.9	38.7	-	-	-	-	-					
Total	-	-	-	27.61			60	-					
GROWING SEASON DATES													
Years with missing data:	24 deg = 7	28 deg = 7	32 deg = 7										
Years with no occurrence:	24 deg = 0	28 deg = 0	32 deg = 0										
Data years used:	24 deg = 23	28 deg = 23	32 deg = 23										
Probability	24 F or higher	28 F or higher	32 F or higher										
50 percent *	4/20 to 10/20: 183 days	5/1 to 10/8: 160 days	5/16 to 9/28: 135 days										
70 percent *	4/16 to 10/25: 192 days	4/27 to 10/13: 169 days	5/13 to 10/2: 142 days										
* Percent chance of the growing season occurring between the Beginning and Ending dates.													
STATS TABLE - total precipitation (inches)													
Yr	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annl
1986										0.91	2.65	0.72	4.28
1987		0.50	0.93	0.46	5.91	3.46	8.55	2.00	2.65	0.61	0.62	0.42	26.11
1988	0.86	0.18	2.18	0.39	2.05	2.54	4.33	8.66	2.32	1.13	1.97	M0.93	27.54
1989	1.21	0.61	1.22	1.12	2.68	6.42	2.70	4.50	3.84	1.84	M0.46	0.37	26.97
1990	0.94	0.49	2.07	4.85	1.39	6.14	1.78	1.27	3.06	4.25	0.57	0.52	27.33
1991	0.58	0.61	1.84	2.78	3.67	3.69	5.45	1.24	6.72	1.82	2.55	0.58	31.53
1992	0.31	0.62	0.31	1.25	2.80	3.81	3.64	4.92	4.05	0.41	M1.19	1.11	24.42
1993	0.72	0.01	0.51	2.04	3.21	2.89	11.47	3.66	2.35	0.89	1.31	1.13	30.19
1994	0.79	0.41	0.74	M3.78	2.60	8.42	1.96	2.87	5.	2.	1.02	M0.	30.

									22	76	19	76	
1995	0.74	0.86	0.96	1.29	2.31	1.28	5.71	5.34	3.79	5.21	1.03	0.68	29.20
1996	1.13	1.58	0.64	1.23	1.41	3.39	5.09	2.40	2.41	3.95	2.98	1.30	27.51
1997	1.57	0.13	1.43	1.10	1.69	4.24	2.60	1.48	2.50	2.38	1.00	0.08	20.20
1998	0.48	1.57	1.17	0.92	2.80	4.05	3.80	2.58	3.99	3.73	1.40	1.02	27.51
1999	0.59	0.47	0.94	1.81	4.67	4.72	11.91	4.42	4.52	1.63	0.15	0.14	35.97
2000	0.73	0.64	1.31	1.18	2.79	4.15	2.99	6.21	1.58	3.20	2.09	0.54	27.41
2001	0.61	1.27	0.56	5.44	5.15	2.92	3.01	4.05	1.66	3.45	1.74	0.76	30.62
2002	0.21	0.19	0.98	0.83	1.40	6.13	4.99	4.24	1.98	2.24	M0.40	M0.70	24.29
2003	M0.19	M0.18	0.34	1.43	M2.55	3.86	6.17	2.65	M5.67	M1.76	M1.70	M0.45	26.95
2004	1.01	0.66	1.59	1.21	5.13	1.20	2.71	M3.17	M5.69	M2.16	0.53	1.88	26.94
2005	M2.14	0.66	0.76	1.34	3.84	4.54	1.16	M1.65	M2.49	2.60	3.02	1.33	25.53
2006	0.36	0.74	1.59	1.00	3.64	2.55	1.76	1.24	1.71	1.68	1.17	1.44	18.88
2007	0.13	0.32	M2.04	M1.86	M3.48	3.71	1.56	0.92	5.87	4.31	0.56	M1.84	26.60
2008	M0.27	0.24	0.49	4.17	2.10	4.76	1.98	1.16	4.00	2.73	1.44	1.52	24.86
2009	M0.82	0.75	3.32	2.26	1.86	3.27	2.53	4.99	0.35	3.75	1.21	1.00	26.11
2010	0.77	0.13	0.79	0.47	2.55	3.63	2.90	6.32	5.28	2.57	1.78	1.48	28.67
2011	M1.02	M0.39	M0.53	M2.17	M2.70	M3.62	M1.85	M3.06	M1.81	M1.36	M0.65	M0.44	19.60
2012	M0.51	M0.78	M1.30	M3.88	M6.25	M1.71	5.46	1.80	0.74	1.40	1.77	0.75	26.35
2013	1.79				2.69	4.30	M2.47	M0.68	1.09	M3.11	0.67	M1.29	18.09
2014	0.88	M0.51	1.13	M1.99	4.49	6.56	1.74	1.45	2.03	1.41	0.30	M0.60	23.09
2015	0.43	0.50	0.58	1.14	4.62	4.56	0.88	4.64	M6.02	2.02	3.34	M1.64	30.37
2016	M0.89	M1.42	3.08	2.21	M1.97	7.22	4.94	4.55	6.42	1.30	1.94	1.66	37.60
2017	1.15	1.68	1.27	2.73	2.71	4.80	2.19	9.72	6.71	2.53	1.31	0.78	37.58
2018	0.67	1.25	0.50	1.02	1.95	5.79	4.71	1.49	3.90	4.26	0.94	1.04	27.52
2019	0.65	1.18	1.26	2.08	2.44	M1.39							9.00

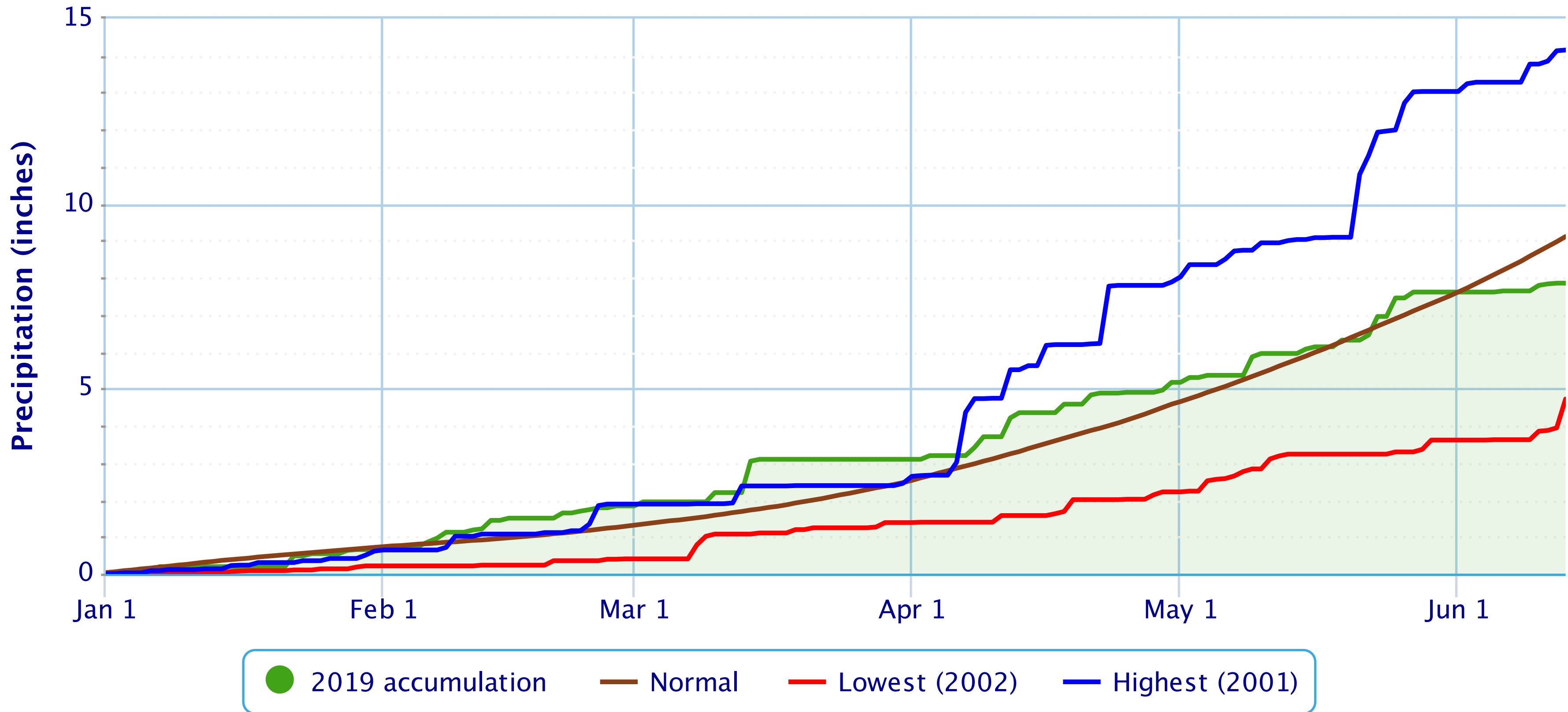
Notes: Data missing in any month have an "M" flag. A "T" indicates a trace of precipitation.

Data missing for all days in a month or year is blank.

Creation date: 2016-07-22

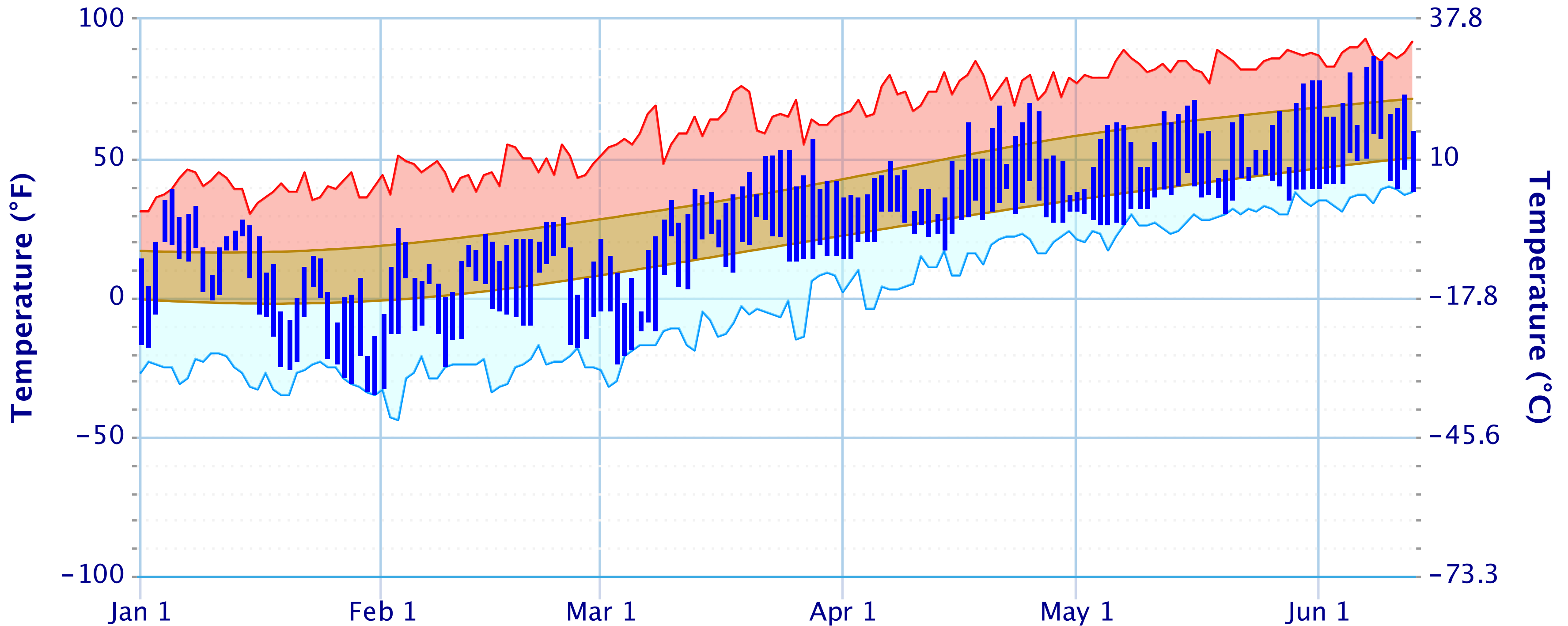
Accumulated Precipitation – EVELETH WASTE WATER PLANT, MN

Click and drag to zoom to a shorter time interval; green/black diamonds represent subsequent/missing values



Daily Temperature Data – EVELETH WASTE WATER PLANT, MN

Period of Record – 1986-10-01 to 2019-06-24. Normals period: 1981-2010. Click and drag to zoom chart.



● Observed temperature range (2019) ● Normal temperature range — Record Max — Record Min

NRCS method - Rainfall Documentation Worksheet Hydrology Tools for Wetland Determination
NRCS Engineering Field Handbook Chapter 19

Date	8/1/2019	Landowner/Project	Kimley-Horn
Weather Station	SWCD	State	Minnesota
County	St. Louis	Growing Season	
Photo/obs Date	8/1/2019	Soil Name	

shaded cells are
locked or calculated

Long-term rainfall statistics
(from WETS table or State
Climatology Office)

	Month	30% chance <	30% chance >	Precip	Condition Dry, Wet, Normal	Condition Value	Month Weight Value	Product of Previous 2 Columns
1st Prior Month*	July	2.70	4.28	2.80	N	2	3	6
2nd Prior Month*	June	3.39	4.76	3.77	N	2	2	4
3rd Prior Month*	May	2.30	3.36	2.16	D	1	1	1
Sum								11

*compared to photo/observation date

Note: If sum is

6 - 9	prior period has been drier than normal
10 - 14	prior period has been normal
15 - 18	prior period has been wetter than normal

Condition value:

Dry =1

Normal =2

Wet =3

Conclusions: prior period has been normal

Appendix D

2016 and 2017 Wetland Boundary Approvals



REPLY TO ATTENTION OF
REGULATORY BRANCH

DEPARTMENT OF THE ARMY
ST. PAUL DISTRICT, CORPS OF ENGINEERS
180 FIFTH STREET EAST, SUITE 700
ST. PAUL, MN 55101-1678

Regulatory File No. 2017-03924-ARC

February 13, 2018

Mr. Bob Manzoline
St. Louis & Lake Counties Regional Rail Authority
111 Station 44 Road
Eveleth, Minnesota 55734

Dear Mr. Manzoline:

This letter concerns your request for Department of the Army authorization to discharge dredged and fill material into 0.21 acre of shallow marsh/forested wetlands adjacent to Long Lake Creek; and the permanent conversion of 1.45 acres of forested/shrub-carr wetlands to wet meadow wetlands, for the purpose of constructing a 3.0 mile snowmobile trail connecting the Cities of Virginia and Eveleth. The first 0.66 mile of the trail will be a 13-foot wide aggregate surface and the remaining 2.33 miles of the trail will be a 10-foot wide cleared -maintained corridor. The project site is in Sections 16, 21, 28, 29, and 32, Township 58 North, Range 17 West, St. Louis County, Minnesota.

Department of the Army Regional General Permit-003-MN (RGP-003-MN) provides authorization under section 404 of the Clean Water Act for certain categories of activities involving the discharge of dredged or fill material into waters of the U.S. or activities conducted in/over/under waters covered by Section 10 of the Rivers and Harbors Act. We have determined that the described work is authorized by RGP-003-MN, provided the enclosed General Conditions and the following special conditions are followed:

1. As compensatory mitigation for the authorized discharge and conversion activities, a minimum of 0.572 wetland credits shall be debited from the Corps-approved Lake Superior EIP Wetland Mitigation Bank (BWSR Account #1609) serving Bank Service Area 1. Mitigation types and quantities shall be as follows: 0.572 credits of open bog wetland community.
 - a. Prior to undertaking the activities authorized by this permit, the permittee shall ensure that the Corps receives the "Notice of Withdrawal of Wetland Credits from the Minnesota Wetland Bank", specifying the mitigation bank used, and the amount and type of credits withdrawn.
 - b. All documentation submitted shall include the file number MVP-2017-03924-ARC, and be submitted to the U.S. Army Corps of Engineers, 600 South Lake Avenue, Suite 211, Duluth, Minnesota 55802, Attention: Andrew Chambers.

This determination covers only the project as described above. If the design, location, or purpose of the project is changed, our office should be contacted to make sure the work would not result in a violation of Federal law.

If your project will require off-site fill material that is **not** obtained from a licensed commercial facility, you must notify us at least five working days before start of work. A cultural resources survey may be required if a licensed commercial facility is not used.

This Regional General Permit expires on 2 February 2022, unless it is modified, reissued, or revoked. Activities which have commenced or are under contract to commence in reliance upon this RGP will remain authorized provided the activity is completed within twelve months of the date of the RGP's expiration, modification, or revocation unless discretionary authority has been exercised to modify, suspend, or revoke the authorization. It is the permittee's responsibility to remain informed of changes to the General Permit program. If this authorized work is not undertaken within the above time period, or the project specifications have changed, our office must be contacted to determine the need for further approval or re-verification.

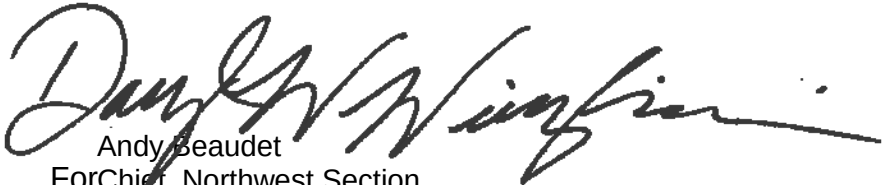
It is the permittee's responsibility to ensure that the work complies with the terms of this letter and any enclosures, and the all required state and local permits and approvals are obtained before work proceeds.

A preliminary jurisdictional determination (JD) has been prepared for the site of your project. The preliminary JD is not appealable. If you wish, you may request an approved JD (which may be appealed), by contacting the Corps representative identified in the final paragraph of this letter. You also may provide new information for further consideration by the Corps to reevaluate the JD. If this JD is acceptable, please sign and date both copies of the Preliminary Jurisdictional Determination Form and return one copy to the address below within 15 days from the date of this letter.

U.S. Army Corps of Engineers
St. Paul District
600 South Lake Avenue, Suite 211
Duluth, Minnesota 55802
Attn: Andy Chambers

If you have any questions, please contact Andy Chambers in our Duluth office at (218) 720-5291 or Andrew.R.Chambers@usace.army.mil. In any correspondence or inquiries, please refer to the Regulatory file number shown above.

Sincerely,


Andy Beaudet
For Chief, Northwest Section

Enclosures:
2017-03924-ARC Drawings 1 of 11 through 11 of 11
Preliminary Jurisdictional Determination
Category L General Conditions
401 Water Quality Certification

Regulatory Branch (File No. 2017-03924-ARC)

cc:

Natalie White, SEH, Inc., Duluth, MN

Bill Hennis, City of Virginia, Virginia, MN

Jackie Monahan-Junek, City of Eveleth, Eveleth, MN

David Demmer, BWSR, Duluth, MN

Phil Norvitch, St. Louis County SWCD, Virginia, MN

Elizabeth Flage, BWSR, St. Paul, MN

Minnesota Wetland Conservation Act

Notice of Decision

Local Government Unit (LGU) City of Virginia	Address 327 1st Street South Virginia, MN 55792
--	--

1. PROJECT INFORMATION

Applicant Name Bob Manzoline, St. Louis and Lake Counties Regional Rail Authority	Project Name Virginia to Eveleth Snowmobile Trail	Date of Application 11/08/2017	Application Number 2017-03
☒ Attach site locator map.			

Type of Decision:

☒ Wetland Boundary or Type Sequencing	☐ No-Loss	☐ Exemption	☐
☐ Replacement Plan	☐ Banking Plan		

Technical Evaluation Panel Findings and Recommendation (if any):

☒ Approve	☐ Approve with conditions	☐ Deny
Summary (or attach): Portions of the project corridor were previously reviewed and approved for other projects. Phil Norvitch made a site visit on December 7 th , 2017 to review areas of the delineated wetland boundaries that had not been previously reviewed. Although the visit was outside the growing season, the TEP is comfortable with the review and recommends approving the delineation boundary as noticed.		

2. LOCAL GOVERNMENT UNIT DECISION

Date of Decision: January 5, 2018		
☒ Approved Denied	☐ Approved with conditions (include below)	☐

LGU Findings and Conclusions (attach additional sheets as necessary):

The proposed project consists of a recreational snowmobile trail connecting the communities of Virginia and Eveleth. The trail consists of:

- Fill for an improved, 13-foot wide aggregate surface trail that may eventually also accommodate a paved pedestrian trail and ATV trail connections.
- Tree clearing in a 10-foot wide corridor to accommodate snowmobile traffic.

The City of Virginia approves the wetland boundaries and types in the project corridor within the City of Virginia, as they are identified in the report dated October 2017.

For Replacement Plans using credits from the State Wetland Bank:

Bank Account #	Bank Service Area	County	Credits Approved for Withdrawal (sq. ft. or nearest .01 acre)

Replacement Plan Approval Conditions. In addition to any conditions specified by the LGU, the approval of a Wetland Replacement Plan is conditional upon the following:

- ☐ **Financial Assurance:** For project-specific replacement that is not in-advance, a financial assurance specified by the LGU must be submitted to the LGU in accordance with MN Rule 8420.0522, Subp. 9 (List amount and type in LGU Findings).
- ☐ **Deed Recording:** For project-specific replacement, evidence must be provided to the LGU that the BWSR “Declaration of Restrictions and Covenants” and “Consent to Replacement Wetland” forms have been filed with the county recorder’s office in which the replacement wetland is located.
- ☐ **Credit Withdrawal:** For replacement consisting of wetland bank credits, confirmation that BWSR has withdrawn the credits from the state wetland bank as specified in the approved replacement plan.

Wetlands may not be impacted until all applicable conditions have been met!

LGU Authorized Signature:

Signing and mailing of this completed form to the appropriate recipients in accordance with 8420.0255, Subp. 5 provides notice that a decision was made by the LGU under the Wetland Conservation Act as specified above. If additional details on the decision exist, they have been provided to the landowner and are available from the LGU upon request.		
Name William Hennis	Title Lead Engineer	
Signature	Date	Phone Number and E-mail 218-748-7500 hennisb@virginiamn.us

THIS DECISION ONLY APPLIES TO THE MINNESOTA WETLAND CONSERVATION ACT. Additional approvals or permits from local, state, and federal agencies may be required. Check with all appropriate authorities before commencing work in or near wetlands.

Applicants proceed at their own risk if work authorized by this decision is started before the time period for appeal (30 days) has expired. If this decision is reversed or revised under appeal, the applicant may be responsible for restoring or replacing all wetland impacts.

This decision is valid for three years from the date of decision unless a longer period is advised by the TEP and specified in this notice of decision.

3. APPEAL OF THIS DECISION

Pursuant to MN Rule 8420.0905, any appeal of this decision can only be commenced by mailing a petition for appeal, including applicable fee, within thirty (30) calendar days of the date of the mailing of this Notice to the following as indicated:

Check one:

☒ Appeal of an LGU staff decision. Send petition and \$_____ fee (if applicable) to: 327 1st Street South Virginia, MN 55792	☐ Appeal of LGU governing body decision. Send petition and \$500 filing fee to: Executive Director Minnesota Board of Water and Soil Resources 520 Lafayette Road North St. Paul, MN 55155
--	---

4. LIST OF ADDRESSEES

☒ SWCD TEP member: Phil Norvitch
☒ BWSR TEP member: David Demmer
☐ LGU TEP member (if different than LGU Contact):
☒ DNR TEP member: Kim Boland
☒ DNR Regional Office (if different than DNR TEP member)
☐ WD or WMO (if applicable):
☒ Applicant and Landowner (if different)
☒ Members of the public who requested notice: City of Eveleth, Jackie Monahan-Junek
☒ Corps of Engineers Project Manager: Andy Chambers
☐ BWSR Wetland Bank Coordinator (wetland bank plan decisions only)

5. MAILING INFORMATION

➤ For a list of BWSR TEP representatives: www.bwsr.state.mn.us/aboutbwsr/workareas/WCA_areas.pdf

➤ For a list of DNR TEP representatives: www.bwsr.state.mn.us/wetlands/wca/DNR_TEP_contacts.pdf

➤ Department of Natural Resources Regional Offices:

<u>NW Region:</u>	<u>NE Region:</u>	<u>Central Region:</u>	<u>Southern Region:</u>
Reg. Env. Assess. Ecol. Div. Ecol. Resources 2115 Birchmont Beach Rd. NE Bemidji, MN 56601	Reg. Env. Assess. Ecol. Div. Ecol. Resources 1201 E. Hwy. 2 Grand Rapids, MN 55744	Reg. Env. Assess. Ecol. Div. Ecol. Resources 1200 Warner Road St. Paul, MN 55106	Reg. Env. Assess. Ecol. Div. Ecol. Resources 261 Hwy. 15 South New Ulm, MN 56073

For a map of DNR Administrative Regions, see: http://files.dnr.state.mn.us/aboutdnr/dnr_regions.pdf

➤ For a list of Corps of Project Managers: www.mvp.usace.army.mil/regulatory/default.asp?pageid=687
or send to:

US Army Corps of Engineers
St. Paul District, ATTN: OP-R
180 Fifth St. East, Suite 700
St. Paul, MN 55101-1678

- For Wetland Bank Plan applications, also send a copy of the application to:
- Minnesota Board of Water and Soil Resources
Wetland Bank Coordinator
520 Lafayette Road North
St. Paul, MN 55155
-

6. ATTACHMENTS

In addition to the site locator map, list any other attachments:

☒

Email correspondence from City of Eveleth

☒

TEP meeting minutes

☐☐☐



DEPARTMENT OF THE ARMY
ST. PAUL DISTRICT, CORPS OF ENGINEERS
180 FIFTH STREET EAST, SUITE 700
ST. PAUL MN 55101-1678

REPLY TO
ATTENTION OF

September 8, 2016

Operations
Regulatory (2016-02074-ARC)

Ms. Nancy Graham
Virginia Public Utilities Commission
618 Second Street South
Virginia, Minnesota 55792

Dear Ms. Graham:

This is in response to a permit re-verification request submitted on August 17, 2016, by Short Elliott Hendrickson Inc., on behalf of Virginia Public Utilities Commission, concerning Department of the Army (DA) Permit 2016-02074-ARC, dated July 27, 2016. The DA permit authorized the permanent discharge of dredged and fill materials into 4,014 square feet of wet meadow wetlands and the temporary discharge of dredged and fill materials into 17,183 square feet of shrub-carr and forested wetlands adjacent to Long Lake Creek for the construction of the Town Border Station and a temporary workspace. The project is located in Section 29, 32, T. 58N., R. 17W., St. Louis County, Minnesota.

We were requested to consider information in the request and determine if the permit could be re-verified to include the temporary discharge of dredged and fill materials into 736 square feet of forested wetlands for the purpose of removing underground obstructions in Wetland 12 and fusing pipes together for the installation of the natural gas pipeline. (Drawings 1 of 2 through 2 of 2).

Based on our review of the information provided, we have determined that the requested permit re-verification for Virginia Public Utilities Commission is acceptable.

Therefore, DA Permit 2016-02074-ARC is hereby re-verified to authorize the discharge of dredged and fill materials into 4,014 square feet of wet meadow wetlands adjacent to Long Lake Creek for the construction of the Town Border Station, and the temporary discharge of dredged and fill materials into 17,919 square feet of shrub-carr and forested wetlands adjacent to Long Lake Creek for a temporary workspace and the construction of 300 linear-foot segment of the 2.57-mile natural gas pipeline. (Drawings 1 of 2 through 2 of 2).

All other terms and conditions of the permit remain unchanged.

This document should be retained as part of your record.

Operations
Regulatory (2016-02074-ARC)

If you have any questions, contact Andrew Chambers in our Duluth office at (218) 720-5291. In any correspondence or inquiries, please refer to the Regulatory number shown above.

Sincerely,

A handwritten signature in black ink, appearing to read "Daryl W. Wierzbinski". The signature is fluid and cursive, with a long horizontal stroke at the end.

Daryl W. Wierzbinski
Acting Chief, Northwest Section

Enclosure:
2016-02074-ARC Drawings 1 of 2 through 2 of 2.

Copy Furnished:
Allyz Kramer, SEH, Inc.
Natalie White, SEH, Inc.
Monica Entinger, Merjent, Inc.
Jackie Monohan-Junek, City of Eveleth



DEPARTMENT OF THE ARMY
ST. PAUL DISTRICT, CORPS OF ENGINEERS
180 FIFTH STREET EAST, SUITE 700
ST. PAUL, MN 55101-1678

REPLY TO ATTENTION OF
REGULATORY BRANCH

Regulatory File No. 2016-02074-ARC

July 27, 2016

Ms. Nancy Graham
Virginia Public Utilities Commission
618 Second Street South
Virginia, Minnesota 55792

Dear Ms. Graham:

This letter concerns your request for Department of the Army authorization to directionally bore a 2.57-mile, 3-4 inch diameter, natural gas pipeline and construct a Town Border Station in wet meadow, shrub-carr, and forested wetlands adjacent to Long Lake Creek. The project will result in the permanent discharge of dredged and fill materials into 4,014 square feet of wet meadow wetlands for the construction of the Town Border Station and the temporary discharge of dredged and fill materials into 17,183 square feet of shrub-carr and forested wetlands for a temporary workspace. The project site is in Section 29 and 32, Township 58 North, Range 17 West, St. Louis County, Minnesota.

Department of the Army Regional General Permit-003-MN (RGP-003-MN) provides authorization under section 404 of the Clean Water Act for certain categories of activities involving the discharge of dredged or fill material into waters of the U.S. or activities conducted in/over/under waters covered by Section 10 of the Rivers and Harbors Act. We have determined that the described work, as shown on the enclosed drawings labeled 2016-02074-ARC, Drawings 1 of 4 through 4 of 4, is authorized by RGP-003-MN (C), provided the enclosed Standard Conditions and the following special conditions are followed:

1. Temporary fills are allowed to remain in place for up to three months. Upon request the District Engineer may extend this period, allowing temporary fills to remain in place for up to a total of 180 days, where appropriate.
 - a. At the end of the specified timeframe, temporary fills must be removed in their entirety and the affected areas returned to their preconstruction contours and elevation. The areas affected by temporary fills must be re-vegetated with native, non-invasive plant species, as appropriate.

This determination covers only the project as described above. If the design, location, or purpose of the project is changed, our office should be contacted to make sure the work would not result in a violation of Federal law.

If your project will require off-site fill material that is **not** obtained from a licensed commercial facility, you must notify us at least five working days before start of work. A cultural resources survey may be required if a licensed commercial facility is not used.

This General Permit is valid until January 31, 2017, unless modified, reissued, or revoked. The time limit for completing the work described above ends on that day. It is the permittee's responsibility to remain informed of changes to the General Permit program. If this authorized

work is not undertaken within the above time period, or the project specifications have changed, our office must be contacted to determine the need for further approval or re-verification.

It is the permittee's responsibility to ensure that the work complies with the terms of this letter and any enclosures, and the all required state and local permits and approvals are obtained before work proceeds.

A preliminary jurisdictional determination (JD) has been prepared for the site of your project. The preliminary JD is not appealable. If you wish, you may request an approved JD (which may be appealed), by contacting the Corps representative identified in the final paragraph of this letter. You also may provide new information for further consideration by the Corps to reevaluate the JD. If this JD is acceptable, please sign and date both copies of the Preliminary Jurisdictional Determination Form and return one copy to the address below within 15 days from the date of this letter.

U.S. Army Corps of Engineers
St. Paul District
600 South Lake Avenue, Suite 211
Duluth, Minnesota 55802
Attn: Andrew Chambers

If you have any questions, please contact Andrew Chambers in our Duluth office at (218) 720-5291 or Andrew.R.Chambers@usace.army.mil. In any correspondence or inquiries, please refer to the Regulatory file number shown above.

Sincerely,

A handwritten signature in black ink, appearing to read "Daryl W. Weirzbinski". The signature is fluid and cursive, with a long horizontal stroke at the end.

Daryl W. Weirzbinski
Acting Chief, Northwest Section

Enclosure(s)
2016-02074-ARC Drawings 1 of 4 through 4 of 4
RGP-003-MN Standard Conditions
Section 401 Conditions
Preliminary Jurisdictional Determination

cc:
Natalie White, SEH Inc.
Monica Entinger, Merjent, Inc.
Jackie Monahan-Junek, City of Eveleth
Lynda Peterson, BWSR
Jared Ecklund, St. Louis County SWCD

Minnesota Wetland Conservation Act

Notice of Decision

Local Government Unit (LGU) City of Eveleth	Address 413 Pierce Street Eveleth, MN 55734
---	---

1. PROJECT INFORMATION

Applicant Name Nancy Graham Virginia PUC	Project Name TH 53 Gas Main Relocation	Date of Application 6/27/2016	Application Number 16-01
☒ Attach site locator map.			

Type of Decision:

☒ Wetland Boundary or Type Sequencing	☐ No-Loss	☐ Exemption	☐
☐ Replacement Plan	☐ Banking Plan		

Technical Evaluation Panel Findings and Recommendation (if any):

☒ Approve	☐ Approve with conditions	☐ Deny
Summary (or attach): Jackie Monahan-Junek, City of Eveleth; Andy Chambers, USACE; and Kyle Henson, SEH; met at the southerly boundary of the project on June 30, 2016. The group walked the project area for the TBS and a portion of the wetland 10 boundary.		

2. LOCAL GOVERNMENT UNIT DECISION

Date of Decision: 7/26/2016		
☒ Approved Denied	☐ Approved with conditions (include below)	☐

LGU Findings and Conclusions (attach additional sheets as necessary):

The LGU concurs with the wetland delineation as provided in the Wetland Permit Application.

For Replacement Plans using credits from the State Wetland Bank:

Bank Account #	Bank Service Area	County	Credits Approved for Withdrawal (sq. ft. or nearest .01 acre)

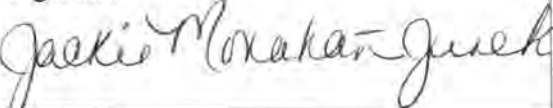
Replacement Plan Approval Conditions. In addition to any conditions specified by the LGU, the approval of a Wetland Replacement Plan is conditional upon the following:

- ☐ **Financial Assurance:** For project-specific replacement that is not in-advance, a financial assurance specified by the LGU must be submitted to the LGU in accordance with MN Rule 8420.0522, Subp. 9 (List amount and type in LGU Findings).
- ☐ **Deed Recording:** For project-specific replacement, evidence must be provided to the LGU that the BWSR "Declaration of Restrictions and Covenants" and "Consent to Replacement Wetland" forms have been filed with the county recorder's office in which the replacement wetland is located.
- ☐ **Credit Withdrawal:** For replacement consisting of wetland bank credits, confirmation that BWSR has withdrawn the credits from the state wetland bank as specified in the approved replacement plan.

Wetlands may not be impacted until all applicable conditions have been met!

LGU Authorized Signature:

Signing and mailing of this completed form to the appropriate recipients in accordance with 8420.0255, Subp. 5 provides notice that a decision was made by the LGU under the Wetland Conservation Act as specified above. If additional details on the decision exist, they have been provided to the landowner and are available from the LGU upon request.

Name Jackie Monahan-Junek	Title City Administrator	
Signature 	Date 7/26/2016	Phone Number and E-mail 218-744-7563 jackie@evelethmn.com

THIS DECISION ONLY APPLIES TO THE MINNESOTA WETLAND CONSERVATION ACT. Additional approvals or permits from local, state, and federal agencies may be required. Check with all appropriate authorities before commencing work in or near wetlands.

Applicants proceed at their own risk if work authorized by this decision is started before the time period for appeal (30 days) has expired. If this decision is reversed or revised under appeal, the applicant may be responsible for restoring or replacing all wetland impacts.

This decision is valid for three years from the date of decision unless a longer period is advised by the TEP and specified in this notice of decision.

3. APPEAL OF THIS DECISION

Pursuant to MN Rule 8420.0905, any appeal of this decision can only be commenced by mailing a petition for appeal, including applicable fee, within thirty (30) calendar days of the date of the mailing of this Notice to the following as indicated:

Check one:

☐ Appeal of an LGU staff decision. Send petition and \$_____ fee (if applicable) to:	☐ Appeal of LGU governing body decision. Send petition and \$500 filing fee to: Executive Director Minnesota Board of Water and Soil Resources 520 Lafayette Road North St. Paul, MN 55155
---	---

4. LIST OF ADDRESSEES

☒ SWCD TEP member: Jared Ecklund (jared@nslswcd.org)
☒ BWSR TEP member: Lynda.Peterson@state.mn.us
☐ LGU TEP member (if different than LGU Contact):
☒ DNR TEP member: Bryonna.Persing@state.mn.us
☐ DNR Regional Office (if different than DNR TEP member)
☐ WD or WMO (if applicable):
☒ Applicant and Landowner (if different)
☐ Members of the public who requested notice:
☒ Corps of Engineers Project Manager
☐ BWSR Wetland Bank Coordinator (wetland bank plan decisions only)

5. MAILING INFORMATION

➤ For a list of BWSR TEP representatives: www.bwsr.state.mn.us/aboutbwsr/workareas/WCA_areas.pdf

➤ For a list of DNR TEP representatives: www.bwsr.state.mn.us/wetlands/wca/DNR_TEP_contacts.pdf

➤ Department of Natural Resources Regional Offices:

NW Region:	NE Region:	Central Region:	Southern Region:
Reg. Env. Assess. Ecol. Div. Ecol. Resources 2115 Birchmont Beach Rd. NE Bemidji, MN 56601	Reg. Env. Assess. Ecol. Div. Ecol. Resources 1201 E. Hwy. 2 Grand Rapids, MN 55744	Reg. Env. Assess. Ecol. Div. Ecol. Resources 1200 Warner Road St. Paul, MN 55106	Reg. Env. Assess. Ecol. Div. Ecol. Resources 261 Hwy. 15 South New Ulm, MN 56073

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US Army Corps of Engineers
St. Paul District, ATTN: OP-R
180 Fifth St. East, Suite 700
St. Paul, MN 55101-1678

➤ For Wetland Bank Plan applications, also send a copy of the application to:
Minnesota Board of Water and Soil Resources
Wetland Bank Coordinator
520 Lafayette Road North
St. Paul, MN 55155

6. ATTACHMENTS

In addition to the site locator map, list any other attachments:

☐
☐
☐
☐
☐





Building a Better World for All of Us[®]

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We're confident in our ability to balance these requirements.

[Join Our Social Communities](#)



Minnesota Wetland Conservation Act

Notice of Decision

Local Government Unit (LGU) City of Virginia	Address 327 First Street South, Virginia MN 55792
--	---

1. PROJECT INFORMATION

Applicant Name School Districts 2154 (Eveleth-Gilbert) and 706 (Virginia)	Project Name Eveleth-Gilbert-Virginia Consolidated High School and Eveleth-Gilbert Elementary	Date of Application 08-05-2019	Application Number 2019-03
☒ Attach site locator map.			

Type of Decision:

☒ Wetland Boundary or Type	☐ No-Loss	☐ Exemption	☐ Sequencing
☐ Replacement Plan	☐ Banking Plan		

Technical Evaluation Panel Findings and Recommendation (if any):

☐ Approve	☐ Approve with conditions	☐ Deny
Summary (or attach): 		

2. LOCAL GOVERNMENT UNIT DECISION

Date of Decision: 08-28-2019		
☒ Approved	☐ Approved with conditions (include below)	☐ Denied

LGU Findings and Conclusions (attach additional sheets as necessary):

The Eveleth-Gilbert-Virginia school Districts are proposing to construct a new high school and a new elementary school. This 240+ acre site is the primary location being considered for this redevelopment. A wetland boundary delineation and type determination were conducted in July-August 2019.

A field review took place on 08-08-2019. The TEP recommended the following revisions to the delineation boundaries and report:

- Add fringe of coniferous swamp wetland type (white cedar dominated) to Wetland 6 near Seigel Blvd. Boundary location remains the same.
- Add a mosaic area (Wetland 30 in revised report) that was identified during the field review. The TEP visit identified two mosaic areas in this vicinity, but further field review found that they connect.
- Expand Wetland 12 to the east toward White Cedar Drive.
- Show available culvert locations on delineation maps.

Additional changes to the boundaries and report, not specifically requested during the TEP visit, are:

- Extended boundary of Wetland 21 to the southeast.
- Revised eastern boundary of Wetland 23.
- Extended boundary of Wetland 16 to the southeast.

The applicant revised the boundaries and report according to TEP recommendations, and re-submitted the report on 08-20-2019.

- The City (as WCA LGU) requested comments on the application no later than 08-27-2019.
- As of 8-27-2019, the City (as WCA LGU) received no additional comments or requests for more information related to the application.

The City of Virginia approves the Wetland Boundary/Type for wetlands within the City of Virginia as provided in the revised report dated 08-13-2019 and distributed to the TEP on 08-20-2019.

For Replacement Plans using credits from the State Wetland Bank:

Bank Account #	Bank Service Area	County	Credits Approved for Withdrawal (sq. ft. or nearest .01 acre)

Replacement Plan Approval Conditions. In addition to any conditions specified by the LGU, the approval of a Wetland Replacement Plan is conditional upon the following:

☐ **Financial Assurance:** For project-specific replacement that is not in-advance, a financial assurance specified by the LGU must be submitted to the LGU in accordance with MN Rule 8420.0522, Subp. 9 (List amount and type in LGU Findings).

☐ **Deed Recording:** For project-specific replacement, evidence must be provided to the LGU that the BWSR "Declaration of Restrictions and Covenants" and "Consent to Replacement Wetland" forms have been filed with the county recorder's office in which the replacement wetland is located.

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Wetlands may not be impacted until all applicable conditions have been met!

LGU Authorized Signature:

Signing and mailing of this completed form to the appropriate recipients in accordance with 8420.0255, Subp. 5 provides notice that a decision was made by the LGU under the Wetland Conservation Act as specified above. If additional details on the decision exist, they have been provided to the landowner and are available from the LGU upon request.		
Name Bill Hennis	Title Lead Engineer	
Signature 	Date 9/4/15	Phone Number and E-mail 218-748-7500 hennisb@virginiamn.us

THIS DECISION ONLY APPLIES TO THE MINNESOTA WETLAND CONSERVATION ACT. Additional approvals or permits from local, state, and federal agencies may be required. Check with all appropriate authorities before commencing work in or near wetlands.

Applicants proceed at their own risk if work authorized by this decision is started before the time period for appeal (30 days) has expired. If this decision is reversed or revised under appeal, the applicant may be responsible for restoring or replacing all wetland impacts.

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Check one:

☒ Appeal of an LGU staff decision. Send petition and \$TBD fee (if applicable) to: Virginia City Council C/O Pamela LaBine, City Clerk 327 First Street South Virginia, MN 55792	☐ Appeal of LGU governing body decision. Send petition and \$500 filing fee to: Executive Director Minnesota Board of Water and Soil Resources 520 Lafayette Road North St. Paul, MN 55155
---	---

4. LIST OF ADDRESSEES

☒ SWCD TEP member: Phil Norvitch, phil@nslswcd.org
☒ BWSR TEP member: David Demmer, david.demmer@state.mn.us
☐ LGU TEP member (if different than LGU Contact):
☐ DNR TEP member:
☐ DNR Regional Office (if different than DNR TEP member)
☐ WD or WMO (if applicable):
☒ Applicant and Landowner (if different)
☐ Members of the public who requested notice:
☒ Corps of Engineers Project Manager Andy Chambers, Andrew.R.Chambers@usace.army.mil
☐ BWSR Wetland Bank Coordinator (wetland bank plan decisions only)

5. MAILING INFORMATION

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➤ Department of Natural Resources Regional Offices:

<u>NW Region:</u> Reg. Env. Assess. Ecol. Div. Ecol. Resources 2115 Birchmont Beach Rd. NE Bemidji, MN 56601	<u>NE Region:</u> Reg. Env. Assess. Ecol. Div. Ecol. Resources 1201 E. Hwy. 2 Grand Rapids, MN 55744	<u>Central Region:</u> Reg. Env. Assess. Ecol. Div. Ecol. Resources 1200 Warner Road St. Paul, MN 55106	<u>Southern Region:</u> Reg. Env. Assess. Ecol. Div. Ecol. Resources 261 Hwy. 15 South New Ulm, MN 56073
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or send to:

US Army Corps of Engineers
St. Paul District, ATTN: OP-R
180 Fifth St. East, Suite 700
St. Paul, MN 55101-1678

➤ For Wetland Bank Plan applications, also send a copy of the application to:

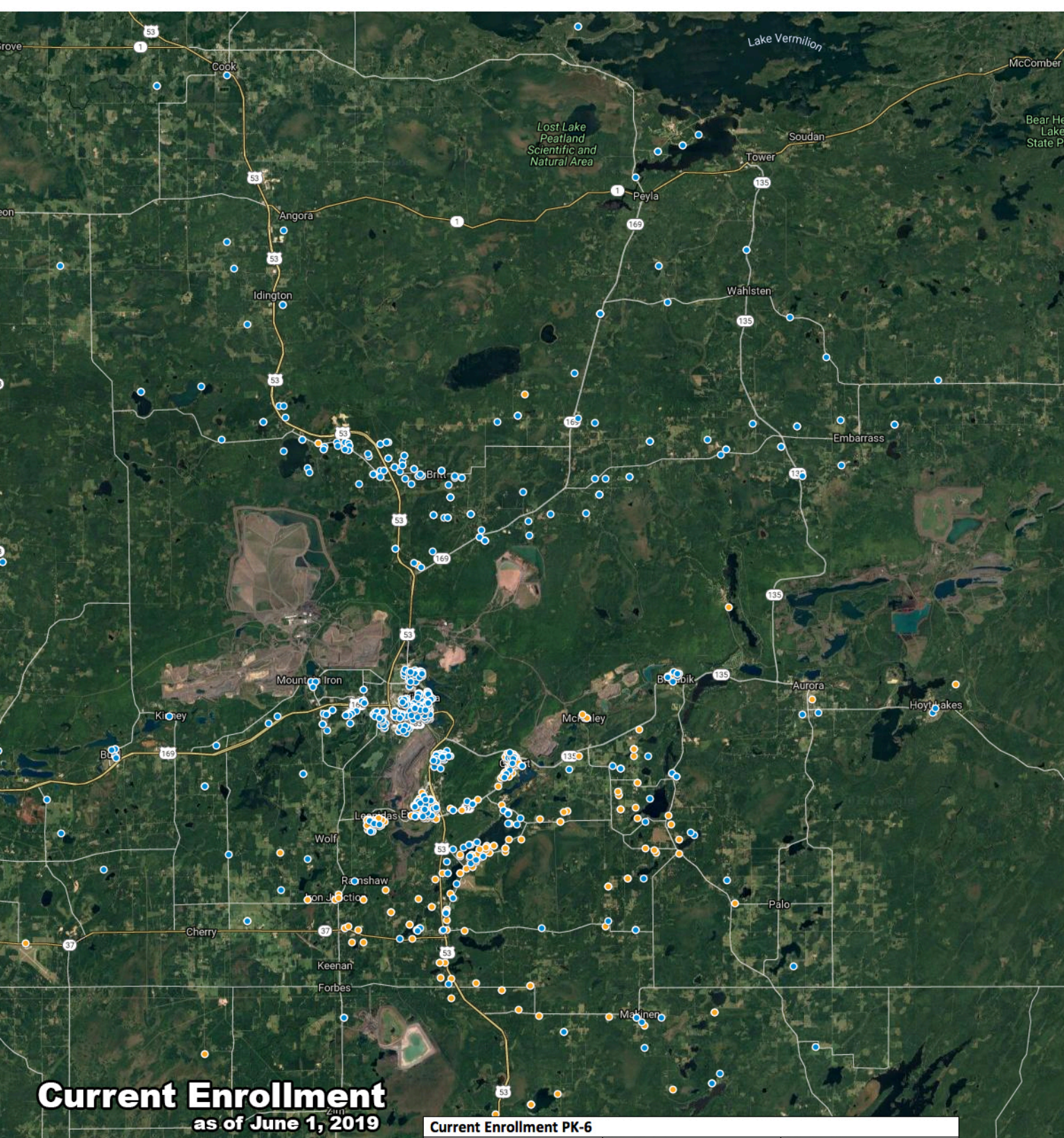
Minnesota Board of Water and Soil Resources
Wetland Bank Coordinator
520 Lafayette Road North
St. Paul, MN 55155

6. ATTACHMENTS

In addition to the site locator map, list any other attachments:

☒ **Revised Wetland Delineation Report**

☐
☐
☐
☐

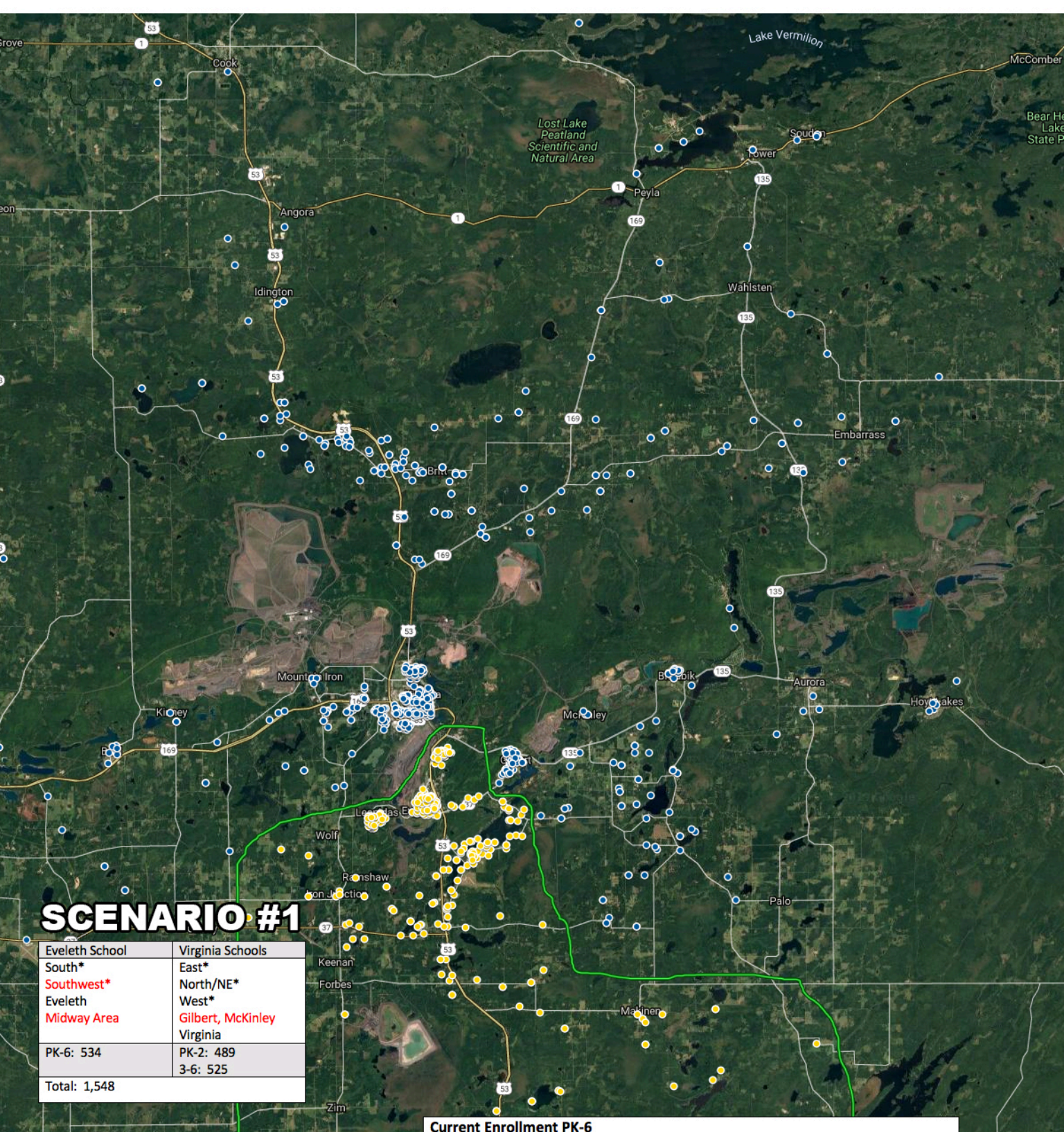


Current Enrollment
as of June 1, 2019

- *****
EAST: Aurora, Buhl, Babbitt, Hoyt Lakes
NORTH/NE: Angora, Babbitt, Britt, Cook, Embarrass, Soudan, Tower
WEST: Buhl, Chisholm, Kinney, Hibbing, Mt. Iron, Parkville
SOUTH: Cotton, Makinen, Melrude
SOUTHWEST: Forbes, Iron, Iron Junction

Current Enrollment PK-6		
Eveleth-Gilbert PK-6	Virginia PK-2	Virginia 3-6
516	502	528
Total: 1,548		

Combined Enrollment by Area and Grade Level (as of June 1, 2019)											
	PK	3	4	1	2	3	4	5	6	Total	
East	4	3	4	6	4	3	4	2		30	
North/NE	12	25	13	25	23	16	17	17		148	
West	13	18	9	14	12	6	16	16		104	
South	1	4	4	1	3	1	4	2		20	
Southwest	2	3	0	6	2	3	5	2		23	
Eveleth	61	53	52	46	53	52	63	51		431	
Gilbert, McKinley	24	19	16	22	14	20	34	19		168	
Midway	7	10	7	6	12	3	10	5		60	
Virginia	46	67	69	80	65	72	78	87		564	
	170	202	174	206	188	176	231	201		1548	



SCENARIO #1

Eveleth School	Virginia Schools
South*	East*
Southwest*	North/NE*
Eveleth	West*
Midway Area	Gilbert, McKinley
	Virginia
PK-6: 534	PK-2: 489
	3-6: 525
Total: 1,548	

Current Enrollment PK-6

Eveleth-Gilbert PK-6	Virginia PK-2	Virginia 3-6
516	502	528
Total: 1,548		

Combined Enrollment by Area and Grade Level (as of June 1, 2019)

	PK	3	4	1	2	3	4	5	6	Total
East	4	3	4	6	4	3	4	2		30
North/NE	12	25	13	25	23	16	17	17		148
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South	1	4	4	1	3	1	4	2		20
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	170	202	174	206	188	176	231	201		1548

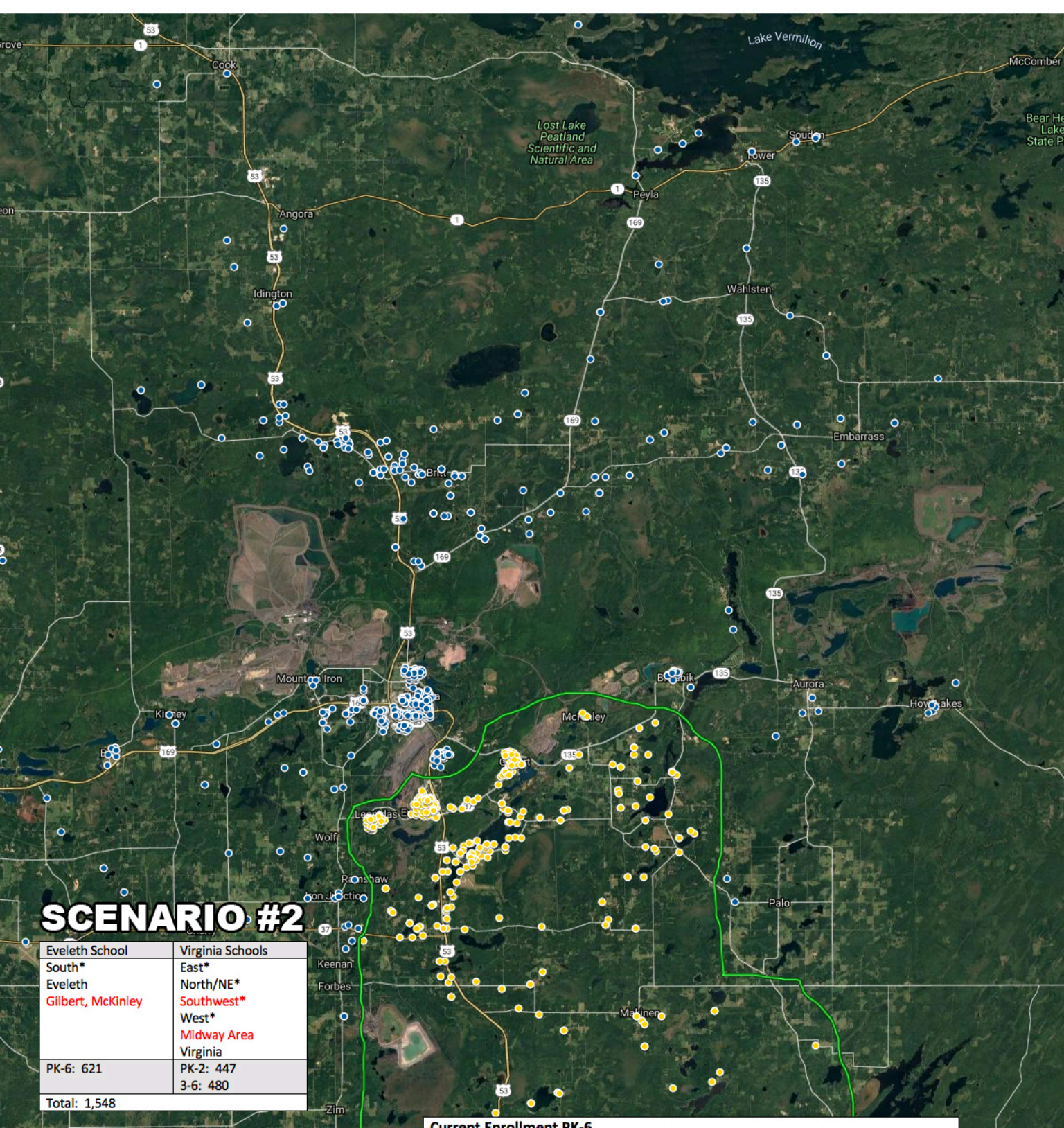
EAST: Aurora, Babbitt, Hoyt Lakes

NORTH/NE: Angora, Babbitt, Britt, Cook, Embarrass, Soudan, Tower

WEST: Buhl, Chisholm, Kinney, Hibbing, Mt. Iron, Parkville

SOUTH: Cotton, Makinen, Melrude

SOUTHWEST: Forbes, Iron, Iron Junction



SCENARIO #2

Eveleth School	Virginia Schools
South*	East*
Eveleth	North/NE*
Gilbert, McKinley	Southwest*
	West*
	Midway Area
	Virginia
PK-6: 621	PK-2: 447
	3-6: 480
Total: 1,548	

Current Enrollment PK-6		
Eveleth-Gilbert PK-6	Virginia PK-2	Virginia 3-6
516	502	528
Total: 1,548		

Combined Enrollment by Area and Grade Level (as of June 1, 2019)

	PK	3	4	1	2	3	4	5	6	Total
East	4	3	4	6	4	3	4	2		30
North/NE	12	25	13	25	23	16	17	17		148
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Southwest	2	3	0	6	2	3	5	2		23
Eveleth	61	53	52	46	53	52	63	51		431
Gilbert, McKinley	24	19	16	22	14	20	34	19		168
Midway	7	10	7	6	12	3	10	5		60
Virginia	46	67	69	80	65	72	78	87		564
	170	202	174	206	188	176	231	201		1548

EAST: Aurora, Babbitt, Hoyt Lakes

NORTH/NE: Angora, Babbitt, Britt, Cook, Embarrass, Soudan, Tower

WEST: Buhl, Chisholm, Kinney, Hibbing, Mt. Iron, Parkville

SOUTH: Cotton, Makinen, Melrude

SOUTHWEST: Forbes, Iron, Iron Junction
