

**STATE OF MINNESOTA PUBLIC UTILITIES COMMISSION**

**ROUTE PERMIT FOR CONSTRUCTION OF A HIGH  
VOLTAGE TRANSMISSION LINE AND SUBSTATIONS**

**IN HENNEPIN COUNTY**

**ISSUED TO  
NORTHERN STATES POWER COMPANY**

**PUC DOCKET No. E002/TL-09-38**

In accordance with the requirements of Minnesota Statutes Chapter 216E.03 and Minnesota Rules Chapter 7850, this route permit is hereby issued to:

**NORTHERN STATES POWER COMPANY**

Northern States Power Company (Xcel Energy) is authorized by this route permit to construct approximately 1.5 miles of 115 kilovolt (kV) double circuit high voltage transmission lines (HVTL) and construct two substations in south Minneapolis, in an area known as the Midtown District.

The transmission line and substation project shall be built within the route identified in this permit and as portrayed on the attached, official route maps, and in compliance with all other conditions specified in this permit.

Approved and adopted this 10th day of February 2012

BY ORDER OF THE COMMISSION

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Burl W. Haar,  
Executive Secretary

This document can be made available in alternative formats (i.e. large print or audio tape) by calling 651.201.2202 (voice). Persons with hearing or speech disabilities may call us through Minnesota Relay at 1.800.627.3529 or by dialing 711.

# 1 ROUTE PERMIT

The Minnesota Public Utilities Commission (Commission) hereby issues this route permit to Xcel Energy (Permittee) pursuant to Minnesota Statutes Chapter 216E.03 and Minnesota Rules Chapter 7850. This permit authorizes the Permittee to build approximately 1.5 miles of 115 kV double circuit transmission line and two substations in south Minneapolis, in an area known as the Midtown District.

# 2 PROJECT DESCRIPTION

Permittee is authorized to construct the Hiawatha 115 kV Transmission Line and associated substations as described below:

The Permittee may construct the following facilities:

- The approved route (Route D) is an approximately 1.5-mile underground route along East 28th Street. This route is designed for a double circuit 115 kV transmission line between the Hiawatha West and Midtown North substation sites.
- Hiawatha West Substation will be approximately 3 to 3.25 acres in size, including areas inside and outside the fenced substation equipment and is located on the east side of Hiawatha Avenue (Minnesota State Highway 55) slightly south of the intersection of Hiawatha Avenue and East 28th Street.
- The Midtown North Substation will be approximately 1 to 1.25 acres in size and is located on the northwest corner of Oakland Avenue South and 29th Street. The site is occupied by the old Xcel Energy Oakland Substation, a triplex (owned by Xcel Energy) and an open lot.

The approved route and substation locations are shown on the aerial photos attached to this permit and described herein.

**2.1 Route Width and Alignment.** The width of the designated route is 80 feet; the route alignment shall be developed in consultation with the city of Minneapolis, and shall be as close to the center of 28th Street as possible, with due regard for the existing infrastructure, in order to assure that the alignment is at the greatest practicable distance from the sidewalk and residential structures, and minimizes the removal or destruction of mature trees along the adjacent boulevard.

**2.2 Right-of-Way Placement.** The underground transmission lines shall be placed in a concrete duct system. The underground line will require two identical concrete duct banks, containing four 6-inch PVC conduits for transmission circuits and two 2-inch PVC conduits for ground continuity and communication needs. The duct banks could either be installed adjacent to each other in the same trench or in two separate trenches. The trench design is dependent on physical limitations discovered during preliminary design and

investigation, including existing subsurface features and available right-of-way (ROW). Manholes placed along the route would be used to pull conductors through the duct system.

An extra duct bank may be constructed with extra cable to act as a backup in the event that a fault occurs along the transmission line.

Horizontal directional drilling (HDD) may be required in some areas.

Underground cable vaults with manhole access will be required approximately every 1,500 feet and at any changes in the direction of the route. Vaults will allow for installation of the cable and access for inspection and repair. A typical vault with manhole access would be approximately 24 to 25 feet in length by 14 feet wide by 7 to 10 feet in height

**2.3 Right-of-Way Width.** Construction of the underground transmission line will require a 30-foot ROW.

### **3 GENERAL CONDITIONS**

The Permittee shall comply with the following general conditions during construction of the transmission line and associated facilities and the life of this permit.

**3.1 Plan and Profile.** At least 20 calendar days before right-of-way preparation for construction begins, the Permittee shall provide the Commission with a plan and profile of the right-of-way and the specifications and drawings for right-of-way preparation, construction, cleanup, and restoration for the transmission line.

The Permittee may not commence construction until the 20 days has expired or until the Commission has advised the Permittee in writing that it has completed its review of the documents and determined that the planned construction is consistent with this permit. If the Permittee intends to make any significant changes in its plan and profile or the specifications and drawings after submission to the Commission, the Permittee shall notify the Commission at least ten days before implementing the changes. No changes shall be made that would be in violation of any of the terms of this permit.

#### **3.2 Construction Practices.**

**3.2.1 Application.** The Permittee shall follow those specific construction practices and material specifications described in the Xcel Energy Application to the Public Utilities Commission for a Route Permit, dated May 26, 2009, and as described in the environmental impact statement and findings of fact, unless this permit establishes a different requirement, in which case this permit shall prevail.

**3.2.2 Field Representative.** At least 10 days prior to commencing construction, the Permittee shall advise the Commission in writing of the person

or persons designated to be the field representative for the Permittee with the responsibility to oversee compliance with the conditions of this permit during construction. The field representative's address, phone number, and emergency phone number shall be provided to the Commission and shall be made available to affected landowners, residents, public officials and other interested persons.

The Permittee may change the field representative at any time upon written notice to the Commission.

**3.2.3 Local Governments.** The Permittee shall cooperate with county and city road authorities to develop appropriate signage and traffic management during construction.

**3.2.4 Cleanup.** All waste and scrap that is the product of construction shall be removed from the area and properly disposed of upon completion of each task. Personal litter, including bottles, cans, and paper from construction activities shall be removed on a daily basis.

**3.2.5 Vegetation Removal in the Right-of-Way.** The Permittee shall minimize the number of trees to be removed in selecting the right-of-way and temporary work spaces. Vegetation that endanger or interfere with the safe, reliable operation of the transmission facility will need to be removed. To the extent practical, vegetation that will not pose a threat to the transmission facility or impede construction should remain in the easement area.

The permittee will notify the city of Minneapolis at least 24 hours in advance of any necessary tree removals. To the extent practicable tree removals will be avoided.

**3.2.6 Erosion Control.** The Permittee shall implement reasonable measures to minimize runoff during construction and shall promptly plant or seed, erect silt fences, and/or use erosion control blankets in non-agricultural areas that were disturbed where structures are installed. All areas disturbed during construction of the facilities will be returned to their pre-construction condition; bare soil must not be left in any disturbed areas.

**3.2.7 Temporary Work Space.** The Permittee shall limit temporary easements to special construction access needs and additional staging or lay-down areas required outside of the authorized right-of-way.

**3.2.8 Restoration.** The Permittee shall restore the right-of-way, temporary work spaces, access roads, abandoned right-of-way, and other private lands affected by construction of the transmission line. Restoration within the right-of-way must be compatible with the safe operation, maintenance, and inspection of the transmission line. Within 60 days after completion of all restoration activities, the Permittee shall advise the Commission in writing of the completion of such

activities. The Permittee shall compensate landowners for any yard/landscape, crop damage, soil compaction, or other that may occur during construction.

**3.2.9 Notice of Permit.** The Permittee shall inform all employees, contractors, and other persons involved in the transmission line construction of the terms and conditions of this permit.

**3.3 Periodic Status Reports.** The Permittee shall report to the Commission on progress regarding finalization of the alignment and design of structures. The Permittee shall submit monthly status reports to the Commission on construction of the transmission line following submission and approval of the Plan and Profile (required in 3.1).

**3.4 Complaint Procedure.** Prior to the start of construction, the Permittee shall submit to the Commission, the procedures that will be used to receive and respond to complaints. The procedures shall be in accordance with the requirements set forth in the complaint procedures attached to this permit.

**3.5 Notification to Landowners.** The Permittee shall provide all affected landowners with a copy of this permit and the complaints procedures at the time of the first contact with the landowners after issuance of this permit.

The Permittee shall contact landowners prior to entering the property or conducting maintenance along the route and avoid maintenance practices, particularly the use of fertilizer, herbicides, or pesticides, inconsistent with the landowner's or tenant's use of the land.

The Permittee shall work with landowners to locate the high voltage transmission lines to minimize the loss of agricultural land, forest, and wetlands, and to avoid homes and farmsteads.

### **3.6 Completion of Construction.**

**3.6.1 Notification to Commission.** At least three days before the line is to be placed into service, the Permittees shall notify the Commission of the date on which the line will be placed into service and the date on which construction was complete.

**3.6.2 As-Builts.** Upon request of the Commission, the Permittees shall submit copies of all the final as-built plans and specifications developed during the project.

**3.6.3 GPS Data.** Within 60 days after completion of construction, the Permittee shall submit to the Commission, in the format requested by the Commission, geo-spatial information (GIS compatible maps, GPS coordinates, etc.) for all below and above ground structures associated with the transmission lines, each switch, and each substation connected.

### **3.7 Electrical Performance Standards.**

**3.7.1 Grounding.** The Permittee shall design, construct, and operate the transmission line in a manner that the maximum induced steady-state short-circuit current shall be limited to five milliamperes, root mean square (rms) alternating current between the ground and any non-stationary object within the right-of-way, including but not limited to large motor vehicles and agricultural equipment. All fixed metallic objects on or off the right-of-way, except electric fences that parallel or cross the right-of-way, shall be grounded to the extent necessary to limit the induced short circuit current between ground and the object so as not to exceed one milliamperes rms under steady state conditions of the transmission line and to comply with the ground fault conditions specified in the National Electric Safety Code.

**3.7.2 Electric Field.** The transmission line shall be designed, constructed, and operated in such a manner that the electric field measured one meter above ground level immediately above the transmission line shall not exceed 8.0 kV/m rms.

**3.7.3 Interference with Communication Devices.** If interference with radio or television, satellite or other communication devices is caused by the presence or operation of the transmission line, the Permittee shall take whatever action is prudently feasible to restore or provide reception equivalent to reception levels in the immediate area just prior to the construction of the line.

### **3.8 Other Requirements.**

**3.8.1 Applicable Codes.** The Permittee shall comply with applicable requirements of the National Electric Safety Code including clearances to ground, clearance to crossing utilities, clearance to buildings, right-of-way widths, erecting power poles, and stringing of transmission line conductors. The transmission line facility will also meet the North American Electric Reliability Corporation's (NERC) reliability standards

**3.8.2 Other Permits.** The Permittee shall comply with all applicable state rules and statutes. The Permittee shall obtain all required local, state and federal permits for the project and comply with the conditions of these permits. A list of the required permits is included in the route permit application and the environmental impact statement. The Permittee shall submit a copy of such permits to the Commission upon request.

**3.8.3 Pre-emption.** Pursuant to Minnesota Statutes 216E.10, subdivisions 1 and 2, this route permit shall be the sole route approval required to be obtained by the Permittee and this permit shall supersede and preempt all zoning, building, or land use rules, regulations, or ordinances promulgated by regional, county, local and special purpose government.

**3.9. Delay in Construction.** If the Permittee have not commenced construction or improvement of the route within four years after the date of issuance of this permit, the Commission shall consider suspension of the permit in accordance with Minnesota Rule 7850.4700.

## **4 SPECIAL CONDITIONS.**

**4.1 Substation Design Consultation.** The substations shall be designed and constructed, to the extent practicable, in a manner that: 1) minimizes the impact of the project on the persons living, working and biking in close proximity to the substations, 2) minimizes the disruption to the current and planned Midtown Greenway bicycle/pedestrian trails, 3) minimizes the aesthetic impact, and 4) is compatible with the surrounding structures.

Within **180** days of the HVTL Route Permit being issued, the permittee shall submit preliminary substation designs to the Commission and the parties of record in these proceedings. The preliminary designs shall be based on information contained within the record.

These preliminary designs shall include, at a minimum, details concerning the placement of the substations' foot print on the approved sites, the substations' wall and access design, lighting, and landscaping.

The Applicant shall allow the Commission, the parties of record and the Phillips West Neighborhood Association a minimum of **60** days to review and provide comments on the preliminary design of the substations.

Along with the required compliance filing of the Plan and Profile (see 3.1), the Applicant shall submit to the Commission the final substation designs, including a discussion of the comments received and rational for the Applicant's final design decisions.

**4.2 Archaeological Condition.** The Permittee shall make every effort to avoid impacts to identified archaeological and historic resources when installing the high-voltage transmission line and associated substations on the approved route/sites. In the event that a resource is encountered, the State Historic Preservation Office (SHPO) shall be contacted and consulted; the nature of the resource should be identified; and a determination should be made on the eligibility for listing in the National Register of Historic Places. Where feasible, avoidance of the resource is required.

## **5 PERMIT AMENDMENT**

The permit may be amended at any time by the Commission. Any person may request an amendment of the conditions of this permit by submitting a request to the Commission in

writing describing the amendment sought and the reasons for the amendment. The Commission will mail notice of receipt of the request to the Permittee. The Commission may amend the conditions after affording the Permittee and interested persons such process as is required.

## **6 TRANSFER OF PERMIT**

The Permittee may request at any time that the Commission transfer this permit to another person or entity. The Permittee shall provide the name and description of the person or entity to whom the permit is requested to be transferred, the reasons for the transfer, a description of the facilities affected, and the proposed effective date of the transfer. The person to whom the permit is to be transferred shall provide the Commission with such information as the Commission shall require to determine whether the new Permittee can comply with the conditions of the permit. The Commission may authorize transfer of the permit after affording the Permittee, the new Permittee, and interested persons such process as is required.

## **7. REVOCATION OR SUSPENSION OF THE PERMIT**

The Commission may initiate action to revoke or suspend this permit at any time. The Commission shall act in accordance with the requirements of Minnesota Rules part 7850.5100 to revoke or suspend the permit.

**MINNESOTA PUBLIC UTILITIES COMMISSION  
COMPLIANCE FILING PROCEDURE  
FOR PERMITTED ENERGY FACILITIES**

**1. Purpose**

To establish a uniform and timely method of submitting information required by the Commission energy facility permits.

**2. Scope and Applicability**

This procedure encompasses all compliance filings required by permit.

**3. Definitions**

Compliance Filing – A sending (filing) of information to the Commission, where the information is required by a Commission site or route permit.

**4. Responsibilities**

A) The Permittees shall eFile all compliance filings with Dr. Burl Haar, Executive Secretary, Public Utilities Commission, through the Department of Commerce (DOC) eDocket system. The system is located on the DOC website: <https://www.edockets.state.mn.us/EFiling/home.jsp>

General instructions are provided on the website. Permittees must register on the website to eFile documents.

B) All filings must have a cover sheet that includes:

- 1) Date
- 2) Name of submitter / Permittees
- 3) Type of Permit (Site or Route)
- 4) Project Location
- 5) Project Docket Number
- 6) Permit Section Under Which the Filing is Made
- 7) Short Description of the Filing

Filings that are graphic intensive (e.g., maps, plan and profile) must, in addition to being eFiled, be submitted as paper copies and on CD. Copies and CDs should be sent to: 1) Dr. Burl W. Haar, Executive Secretary, Minnesota Public Utilities Commission, 121 7<sup>th</sup> Place East, Suite 350, St. Paul, MN, 55101-2147, and 2) Department of Commerce, Energy Facility Permitting, 85 7<sup>th</sup> Place East, Suite 500, St. Paul, MN, 55101-2198.

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## PERMIT COMPLIANCE FILINGS<sup>1</sup>

**PERMITTEES:** Xcel Energy  
**PERMIT TYPE:** HVTL Route Permit  
**PROJECT LOCATION:** Hennepin County  
**PUC DOCKET NUMBER:** E002/TL-09-38

<b>Filing Number</b>	<b>Permit Section</b>	<b>Description</b>	<b>Due Date</b>
<b>1</b>	Section 3.2.2	Contact information for field representative	10 days prior to construction
<b>2</b>	Section 3.1	Plan and profile of right-of-way	20 days before ROW preparation or construction
<b>3</b>	Section 3.3	Monthly status report on construction activities	Following submission and approval of Plan and Profile
<b>4</b>	Section 3.6.1	Notice of completion and date of placement in service	Three days prior to energizing
<b>5</b>	Section 3.6.2 Section 3.6.3	Provide As-built and GPS information	Within 60 days of construction
<b>6</b>	Section 4.1	Provide preliminary substation designs to Commission and parties of record.	Within 180 days of permit issue.
<b>7</b>	Section 4.1	Provide Commission staff and parties of record 60 days to review and comment on the preliminary designs.	
<b>8</b>	Section 4.1	Provide Commission with final substation designs, including discussion of comments and rationale for final design decisions	Submit along with Plan and Profile (see item 2).

<sup>1</sup> This compilation of permit compliance filings is provided for the convenience of the permittees and the PUC. However, it is not a substitute for the permit; the language of the permit controls.

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**MINNESOTA PUBLIC UTILITIES COMMISSION  
COMPLAINT HANDLING PROCEDURES FOR  
HIGH VOLTAGE TRANSMISSION LINES**

**A. Purpose:**

To establish a uniform and timely method of reporting complaints received by the Permittees concerning Permit conditions for site preparation, construction, cleanup and restoration, operation and resolution of such complaints.

**B. Scope:**

This document describes Complaint reporting procedures and frequency.

**C. Applicability:**

The procedures shall be used for all complaints received by the Permittees and all complaints received by the Commission under Minn. Rule 7829.1500 or 7829.1700 relevant to this Permit.

**D. Definitions:**

Complaint: A verbal or written statement presented to the Permittees by a person expressing dissatisfaction or concern regarding site preparation, cleanup or restoration or other HVTL and associated facilities route permit conditions. Complaints do not include requests, inquiries, questions or general comments.

Substantial Complaint: A written Complaint alleging a violation of a specific Route Permit condition that, if substantiated, could result in Permit modification or suspension pursuant to the applicable regulations.

Unresolved Complaint: A Complaint which, despite the good faith efforts of the Permittees and a person(s), remains to both or one of the parties unresolved or unsatisfactorily resolved.

Person: An individual, partnership, joint venture, private or public corporation, association, firm, public service company, cooperative, political subdivision, municipal corporation, government agency, public utility district, or any other entity, public or private, however organized.

**E. Complaint Documentation and Processing:**

1. The Permittees shall document all Complaints by maintaining a record of all applicable information concerning the Complaint, including the following:

- a. Name of complainant, address, phone number, and e-mail address.
  - b. Precise property description or parcel number.
  - c. Name of Permittees representative receiving Complaint and date of receipt.
  - d. Nature of Complaint and the applicable Route Permit conditions(s).
  - e. Activities undertaken to resolve the Complaint.
  - f. Final disposition of the Complaint.
2. The Permittees shall designate an individual to summarize Complaints for substantial to the Commission. This person's name, phone number and e-mail address shall accompany all complaint submittals.
  3. A Person presenting the Complaint should to the extent possible, include the following information in their communications:
    - a. Name, address, phone number, and e-mail address.
    - b. Date
    - c. Tract or parcel
    - d. Whether the complaint relates to (1) a Route Permit matter, (2) a HVTL and associated facility issue, or (3) a compliance issue.

**F. Reporting Requirements:**

The Permittees shall report all complaints to the Commission according to the following schedule:

**Immediate Reports:** All substantial complaints shall be reported to the Commission the same day received, or on the following working day for complaints received after working hours. Such reports are to be directed to HVTL Permit Compliance, 1-800-657-3794, or by e-mail to: [DOC.energypermitcompliance@state.mn.us](mailto:DOC.energypermitcompliance@state.mn.us), or. Voice messages are acceptable.

**Monthly Reports:** By the 15th of each month, a summary of all complaints, including substantial complaints received or resolved during the preceding month, shall be Filed to Dr. Burl W. Haar, Executive Secretary, Public Utilities Commission, using the Minnesota Department of Commerce eDocket system (see eFiling instructions attached to this permit).

If no Complaints were received during the preceding month, the Permittees shall submit (eFile) a summary indicating that no complaints were received.

**G. Complaints Received by the Commission or EFP:**

Complaints received directly by the Commission from aggrieved persons regarding site preparation, construction, cleanup, restoration, operation and maintenance shall be promptly sent to the Permittees.

**H. Commission Process for Unresolved Complaints:**

**Initial Screening:** Commission staff shall perform an initial evaluation of unresolved Complaints submitted to the Commission. Complaints raising substantial HVTL Route Permit issues shall be processed and resolved by the Commission. Staff shall notify Permittees and appropriate person(s) if it determines that the Complaint is a Substantial Complaint. With respect to such Complaints, each party shall submit a written summary of its position to the Commission no later than ten days after receipt of the Staff notification. Staff shall present Briefing Papers to the Commission, which shall resolve the Complaint within twenty days of submission of the Briefing Papers.

**I. Permittees Contacts for Complaints:**

**Mailing Address:** Complaints filed by mail shall be sent to:

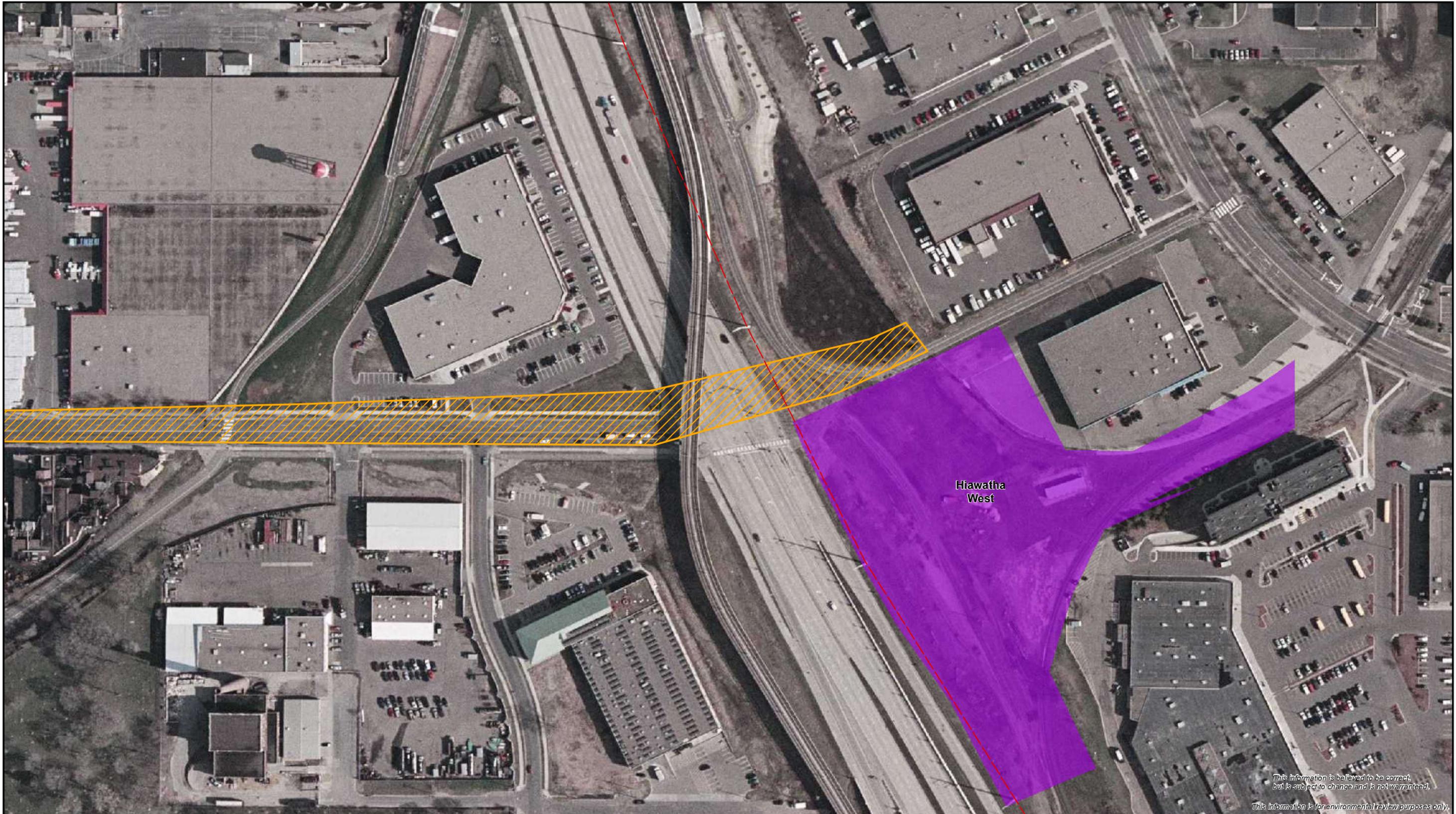
**ATTN:** Ms. RaeLynn Asah  
Permitting Analyst  
Xcel Energy  
414 Nicollet Mall, MP-8A  
Minneapolis, MN 55401

**Tel:** (612) 330-6512

**Email:** [raelynn.asah@xcelenergy.com](mailto:raelynn.asah@xcelenergy.com)

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# **ROUTE & SUBSTATION MAPS**



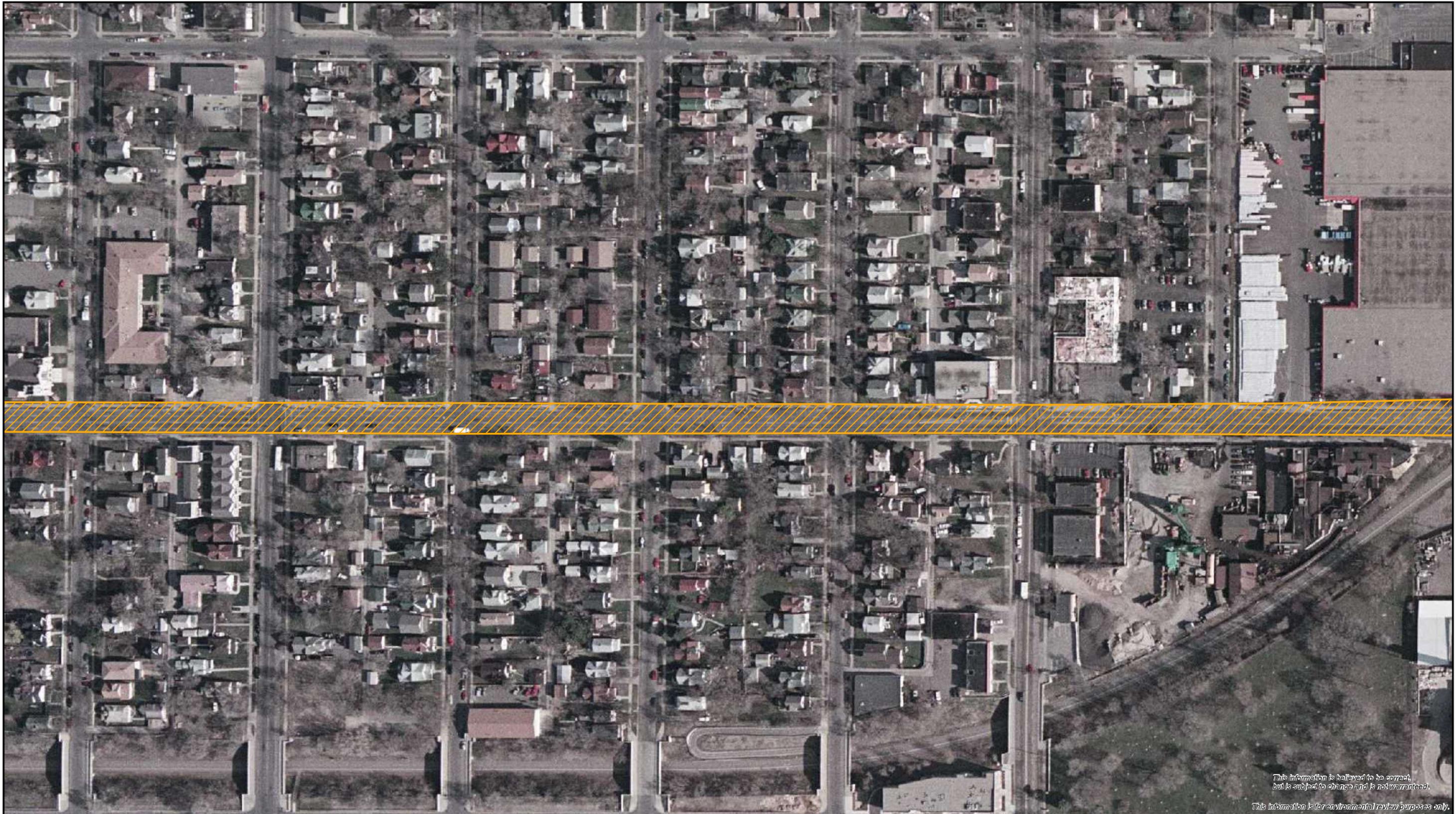
*This information is believed to be correct, but is subject to change and is not warranted.  
This information is for environmental review purposes only.*

 Route  
**Permitted Substations**  
 Hiawatha West  
 Midtown

0      100      200      300  
 Feet



**Hiawatha Project**  
**Permitted Route and Substations**  
 Xcel Energy  
 Minneapolis, MN  
 Map 1 of 4

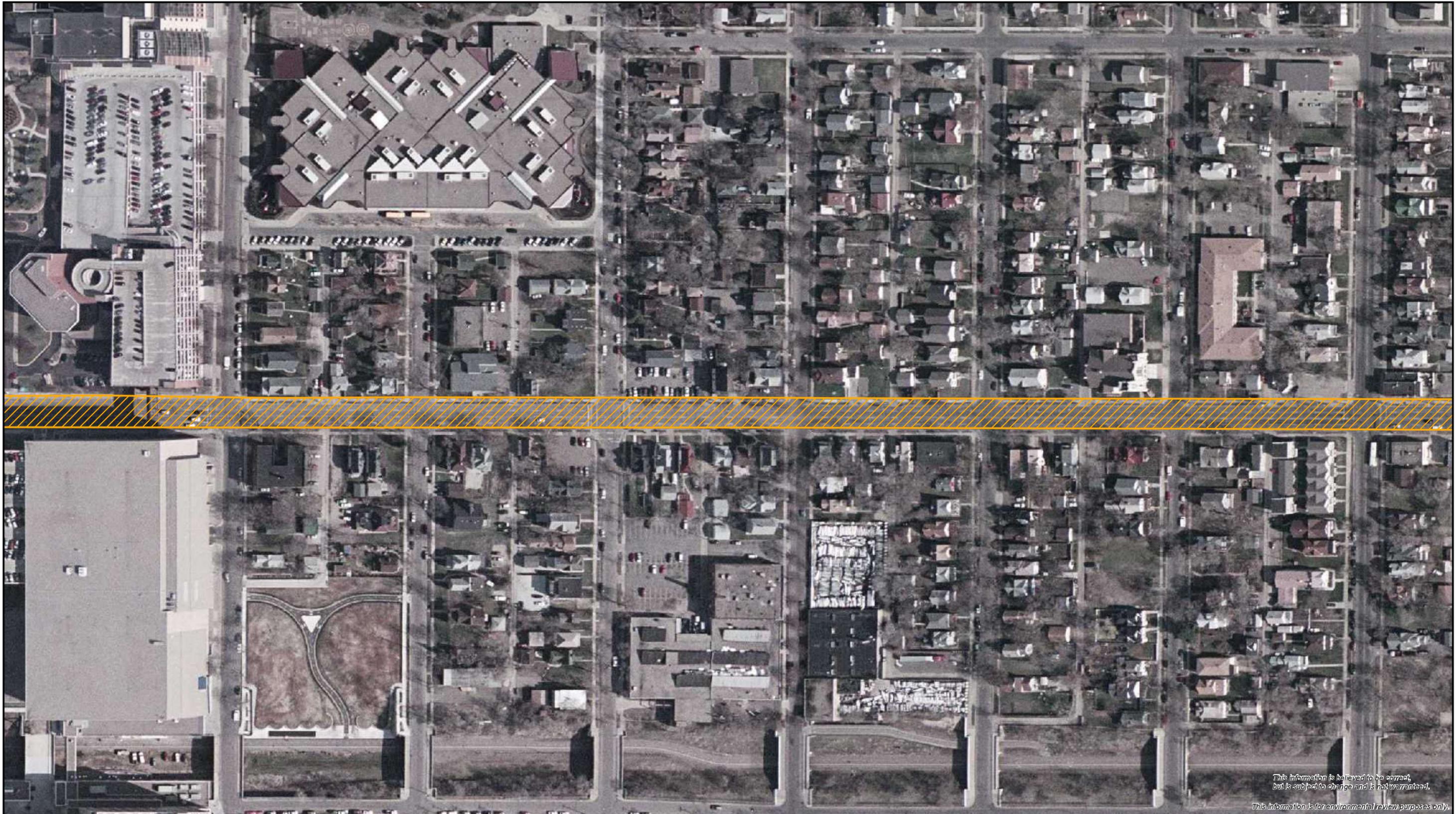


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-  Route
- Permitted Substations**
-  Hiawatha West
-  Midtown



**Hiawatha Project**  
**Permitted Route and Substations**  
Xcel Energy  
Minneapolis, MN  
Map 2 of 4



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 Route

**Permitted Substations**

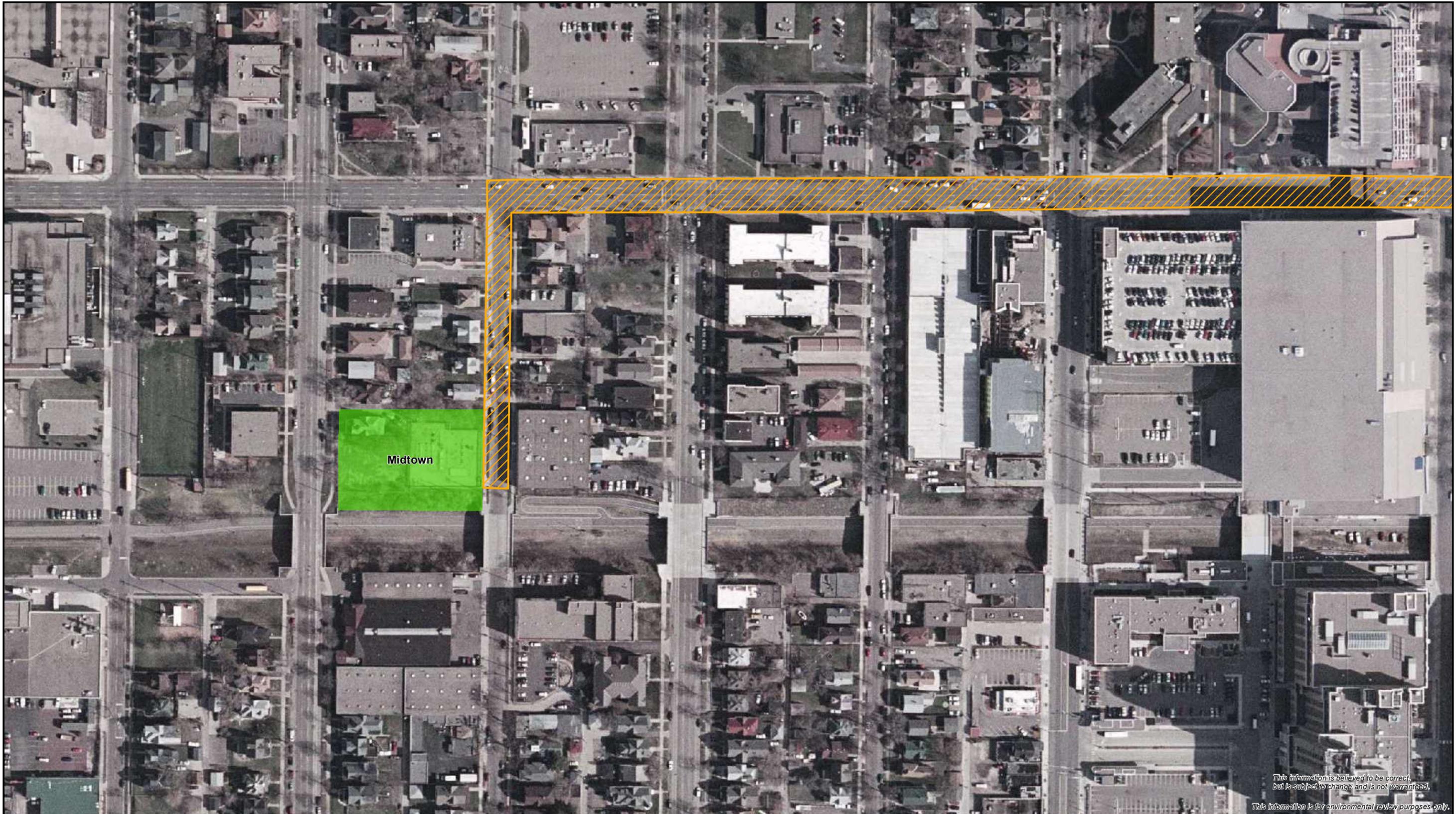
 Hiawatha West

 Midtown

0 100 200 300  
Feet



**Hiawatha Project**  
**Permitted Route and Substations**  
Xcel Energy  
Minneapolis, MN  
Map 3 of 4



*This information is believed to be correct, but is subject to change and is not warranted. This information is for environmental review purposes only.*

-  Route
- Permitted Substations**
-  Hiawatha West
-  Midtown



**Hiawatha Project**  
**Permitted Route and Substations**  
 Xcel Energy  
 Minneapolis, MN  
 Map 4 of 4