

**ENVIRONMENTAL ASSESSMENT**

**FOR THE**

**PROPOSED GREAT RIVER ENERGY  
115 KV TRANSMISSION LINE**

**BY  
NOBLES COUNTY, MINNESOTA**

**AUGUST 2013**

**ENVIRONMENTAL ASSESSMENT**  
**GREAT RIVER ENERGY**  
**PROPOSED 115 KV ELECTRIC TRANSMISSION LINE**

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# 1 PROPOSED PROJECT DETAILS

## 1.1 Project Owner

Great River Energy is a not-for-profit generation and transmission cooperative based in Maple Grove, Minnesota. Great River Energy provides electrical energy and related services to 28 member cooperatives, including Nobles Cooperative Electric. Great River Energy's distribution cooperatives, in turn, supply electricity and related services to approximately 645,000 residential, commercial and industrial customers in Minnesota and Wisconsin.

## 1.2 Project Need

Worthington Public Utilities (WPU) is adding a new 115,000 volts (115 kV) electric transmission line to their system to improve their system reliability. To provide a source to WPU's new 115 kV line, Great River Energy is planning to reconstruct and upgrade four miles of existing 69,000 volt (69 kV) overhead electric transmission line to a 115 kV transmission line.

## 1.3 Project Description

Great River Energy's line will be permitted, designed and constructed to 115 kV standards. It will continue to operate at 69 kV until the adjoining transmission systems are upgraded to 115 kV (Figures 1, 2 and 3).

Poles will be single-pole structures and will generally be 70 to 80 feet in height and will be located on the same centerline as the existing transmission line. Pole locations may shift on the same centerline, with adequate setbacks from field access roads and driveways considered in new pole placement. Guy wires and anchors may be required in some areas, although they will be minimized to the extent possible to reduce the impact on agricultural activities. All guy wires will have highly visible guy guards as standard equipment. The single circuit transmission lines will carry four wires (three energized and one non-energized for lightning protection).

## 1.4 Project Location

The proposed single circuit 115 kV transmission line corridor will be located in Sections 5, 6, 7, 8, 17, 18 and 19, T102N, R39W and Sections 13 and 24, T102N, R40W in and near Worthington, Minnesota (Figures 1 and 2).

The rebuilt transmission line will start at WPU's Substation No.2 on the south side of Highway 60, travel southeast, turn at the corner of Highway 60 and County Road 33 (Oxford Street/250<sup>th</sup> Street), continue easterly for one mile and turn north at northeast corner of Section 18 for another three miles.

## 1.5 Construction Details

Construction of the proposed transmission Project is planned to begin in early 2014, depending on when required permitting approvals are obtained and easement acquisition is completed. The proposed 115 kV transmission line would be constructed at grade elevations; therefore, no structure locations would require grading unless it is necessary to provide a level area for construction access and activities. Construction would comply with the latest industry standards regarding clearance to ground, clearance to crossing utilities, clearance to buildings, right of way widths, erecting power poles, and stringing of transmission line conductors.

The excavation for a typical structure would require disturbing a soil area that is 3 to 4 feet in diameter and 9 to 15 feet deep. Structures located in wet environments or angle-type structures may require additional foundation support, typically consisting of a concrete foundation or placement of the structure base inside a vertical, galvanized steel culvert. Best Management Practices will be used to provide erosion control to minimize runoff during all phases of construction. Great River Energy or a contractor procured by Great River Energy would perform transmission line construction in compliance with local, state, National Electrical Safety Code, and industry standards.

Poles would be delivered to either a staked location or a project storage yard. Insulators and other hardware would typically be attached while the pole was on the ground. The pole would then be lifted, placed and secured in or on the foundation by a bucket truck or crane.

Once the structures have been erected, conductors would be installed by establishing stringing setup areas. The stringing setup areas would usually be established every two miles or at locations where the line changed direction along the project route. Conductor stringing operations also require brief access to each structure to secure the conductor wire to the insulators or to install shield wire clamps once final sag is established. Temporary guard or clearance poles would be installed, as needed, over existing distribution or communication lines, streets, roads, highways, railways or other obstructions after any necessary notifications were made or permits obtained. This ensures that conductors would not obstruct traffic or contact existing energized conductors or other cables. In addition, the conductors would be protected from damage.

Great River Energy would periodically use the transmission line right of way to perform inspections, maintain equipment, and repair any damage. Great River Energy would also conduct regular route maintenance for removal of undesired vegetation that would interfere with the operation of the proposed transmission line.

During construction, limited ground disturbance at the structure sites may occur. Disturbed areas would be restored to their original condition to the maximum extent practicable as negotiated with the landowner. Post-construction reclamation activities include:

- Removing and disposing of debris,
- Removing all temporary facilities (including staging and laydown areas),
- Employing appropriate erosion control measures,
- Reseeding and mulching areas disturbed by construction activities with vegetation similar to that which was removed and,
- Restoring the areas to their original condition to the extent possible.

In cases where soil compaction has occurred, the construction crews or site restoration contractor would use various methods to alleviate the compaction as negotiated with landowners.

## 2 REGULATORY DETAILS

### 2.1 Permit Requirement

This project falls under the State of Minnesota's Power Plant Siting Act, (Minnesota Statutes § 216E.01-.18 and Minnesota Rules Chapter 7850) for transmission projects over 100 kV and requires a permit from the Minnesota Public Utilities Commission (Commission). However, for eligible projects, a utility may apply to the local unit of government that has jurisdiction over the project for approval instead of applying to the Commission (Minn. Rules 7850.5300). This proposed 115 kV project is eligible for local review.

Nobles County has agreed to act as the lead local unit of government with jurisdiction to approve the project. The County was afforded the opportunity to relinquish its jurisdiction by requesting that the Commission assume jurisdiction, but has elected to maintain jurisdiction of the project (see Appendix).

As required by Minn. Rules 7850.5300 Subp.3, a project notice will be sent by Great River Energy to the Commission and to those persons on the Power Plant Siting General Notification list indicating that Great River Energy is seeking local approval of the project. Great River Energy's notice and the Commission's confirmation of receipt of notice will be submitted to Nobles County.

### 2.2 Environmental Assessment Requirement

In accordance with Minn. Rules 7850.5300 Subp.5, an environmental assessment (EA) prepared by the local unit of government with jurisdiction over the project must be completed. The EA contains information on the human and environmental impacts of the proposed project and addresses methods to mitigate such impacts.

When the EA is complete, Nobles County must publish a notice in the Environmental Quality Board (EQB) Monitor that the EA is available for review, how a copy of the document may be reviewed, that the public may comment on the document, and the procedure for submitting comments to the County. A final decision on the project cannot be made until at least ten days after the notice appears in the EQB Monitor.

### 2.3 EA Public Input

The rules require that the public be afforded the opportunity to participate in developing the scope of the EA before it is prepared.

A survey on the project was sent by Nobles County to all landowners along the proposed corridor on July 22, 2013, to satisfy the requirement in the rules for public involvement in preparation of the EA. The survey and responses received are provided in the Appendix.

The CUP process is also open to the public as part of the respective review by the Nobles County Planning Commission at its regularly scheduled meetings. Prior to the public hearing, notices are sent out to landowners located within one-quarter mile of the project corridor or the ten closest neighbors to the project, whichever is greater. In the City of Worthington, notices will also be sent out within 350 feet of the project corridor. Public hearing notices are published in the Nobles County official newspapers.

### 3 ENVIRONMENTAL CONSIDERATIONS

#### 3.1 Air Quality

Since electric transmission lines do not produce air emissions, there will be no environmental impacts to air quality. An insignificant amount of emissions will occur during construction due to normal construction vehicles and equipment.

#### 3.2 Water Resources

The Okabena Creek is in the area; however, the current right of way avoids the resource. Final design of the project will be submitted to Nobles County to see if there are any restrictions or permitting that will be required.

#### 3.3 Wildlife and Vegetation

The US Department of the Interior Fish and Wildlife Service (FWS), the Department of Natural Resource's (DNR) Regional Assessment Ecologist was contacted regarding potential wildlife and vegetation resources in the vicinity of the project. In addition, a search of the Natural Heritage and Nongame Research Program database was conducted for the project area.

The DNR's regional assessment ecological technician (see email dated 7/9/13) indicated that they see no environmental impacts associated with the project. It was noted from the Natural Heritage and Nongame Research Program database that there is no known occurrence of rare species within the searched area of a one mile radius.

Great River Energy reviewed the FWS website on June 14, 2013, and noted the presence of three threatened or endangered species within Nobles County (Western Prairie Fringed Orchid, Topeka Shiner, and Prairie Bush Clover). The FWS stated (see email dated 7/10/13) that their records indicate there are no federally listed or proposed species and/or designated or proposed critical habitat within the action area of the proposed project.

#### 3.4 Noise

Standard levels of noise associated with heavy construction equipment operation will occur during construction. These impacts are expected to be minimal, and would be similar in nature or less than the noise levels produced by trains passing by or the normal traffic along the City's streets.

The high voltage transmission line will be operated within the Minnesota Pollution Control Agency (MPCA) Noise Pollution Control Rules, Chapter 7030.

#### 3.5 Archaeological and Historic Resources

The Minnesota Historical Society State Historic Preservation Office (SHPO) was contacted concerning the presence of historic properties in the project vicinity. SHPO recommends an archaeological survey (see letter dated July 11, 2013, in the Appendix). The Nobles County Historical

Society (NCHS) was also contacted concerning the presence of historic properties in the project vicinity. NCHS (see email dated 7/9/13 in the Appendix) indicated that they are not aware of any cultural or historical resources that will be affected by this project.

### 3.6 Soils and Geology

The project area is located within and near the City of Worthington in Nobles County. According to the DNR Ecological Classification System (ECS), the project area is located within the Coteau Moraines Subsection of the North Central Glaciated Plains section of the Prairie Parkland Province (DNR 2011). The Coteau Moraines Subsection landscape consists of rolling moraine ridges of late-Wisconsin drift mantles with loess 1 to 3 feet thick (DNR 2011).

Since the proposed 115 kV transmission line would be constructed at grade elevations, no pole locations would require grading unless it is necessary to provide a level area for construction access and activities.

### 3.7 Aesthetic and Visual Impacts

The proposed transmission line will generally be installed in the same location as the existing overhead 69 kV transmission line. A single pole design will be similar to the existing design; therefore, the aesthetic and visual impacts of the line for this portion of the route will be minimal, since an existing overhead line is being replaced with another overhead line.

Public scoping has recommended use of the diagonal portion that runs along Highway 60. After review, it was concluded that the portion of route suggested is unavailable due to it being a highly congested industrial area with encroachment issues. Additionally, the Worthington Utilities East Substation's existing 115 kV line would have to be unreasonably crossed with the new circuit.

The rebuild portion of the route north of I-90 will be in an area that is not commercially or residentially developed and is used primarily for agricultural purposes. Therefore, the aesthetic and visual impacts of the line in this area will also be minimal.

The portions of transmission line running south of I-90 to WPU's Substation No.2 will also consist of narrow profile construction to help minimize the visual impacts to the commercial and multi-use residential properties in this area.

### 3.8 Human Settlement

The proposed transmission line is to be located within either the existing transmission right of way, old railroad right of way, public road right of way, or property easements acquired from private landowners. Therefore, human settlement will not be impacted in these areas. The easements that will be requested from landowners will have transmission line poles or an overhang of the wires and apparatus on their property. The easement will provide for such things as construction and maintenance access, vegetation control and structure limitations in the easement area. The majority of the easement area will still be allowed for use by the landowner for such things as farming activities, drainage systems, underground utilities and access drives.

Public scoping has brought up concerns on elevator traffic and placement of structures and/or guying. The project should not impede traffic during any stage of construction or operation. As for structures and guying, specific issues will be negotiated with individual landowners to achieve the best practical solution.

### 3.9 Public Health and Safety

The transmission line will be constructed in accordance with the National Electric Safety Code and other relevant industry standards, to insure that adequate safety clearances and provisions are provided. Safety measures including fencing, warning signs, and equipment grounding will be provided per code requirements. All construction personnel will be required to follow Occupational Safety and Health Administration (OSHA) regulations throughout project construction.

Questions about Electric and Magnetic Fields (EMF) sometimes arise concerning electrical power lines. The following paragraphs include information provided by the Minnesota State Interagency Working Group (MSIWG). Work Group members included representatives from the Department of Commerce, the Department of Health, the Pollution Control Agency, the Commission, and the Environmental Quality Board (MSIWG 2002). In September of 2002 the MSIWG published “A White Paper on Electric and Magnetic Field (EMF) Policy and Mitigation Options.” (This paper is located at the following weblink – <http://www.capx2020.com/Images/EMFWhitePaper2002.pdf>). The following excerpts are from the summary of the aforementioned document:

*Over the last two decades concern about the health effects of electric and magnetic fields (EMF) has increased. Early scientific studies reported a weak association between increased rates of cancer and closeness to certain kinds of power lines that can cause strong electric and magnetic fields. As more electric facilities are built to meet growing demands for electricity, policy makers will increasingly be faced with questions regarding the potential health impacts of EMF. This report is the result of an interagency work group that was formed to examine these issues and provide useful, science-based information to policy makers in Minnesota.*

*Electric and magnetic fields are a basic force of nature generated by electricity from both natural and human sources. Exposure to EMF comes from high voltage transmission lines and distribution lines, wiring in buildings, and electric appliances. Electric fields are easily shielded by common objects such as trees, fences, and walls. Magnetic fields are difficult to shield; this is why magnetic fields produced by power lines can extend into people’s homes.*

*Research on the health effects of EMF has been carried out since the 1970s. Epidemiological studies have mixed results – some have shown no statistically significant association between exposure to EMF and health effects, and some have shown a weak association. More recently, laboratory studies have failed to show such an association, or to establish a biological mechanism for how magnetic fields may cause cancer. A number of scientific panels convened by national and international health agencies and the U.S. Congress have reviewed the research carried out to date. Most concluded that there is insufficient evidence to prove an association between EMF and health effects; however, many of them also concluded that there is insufficient evidence to prove that EMF exposure is safe.*

### 3.10 Transportation

Construction of the project will be performed so as to minimize any impacts to highway and road traffic. The appropriate traffic control devices will be utilized during construction, as dictated by the applicable highway authorities (MnDOT, Nobles County, etc.).

The proposed line will lie under Zone A of the Worthington Municipal Airport and is subject to the restrictions of the local Airport Zoning Ordinance. Great River Energy will work with all federal, state, and local regulatory authorities pertaining to air transportation safety and airport protection.

Preliminary discussions have taken place and will continue between Great River Energy and the Worthington Municipal Airport to insure a safe aviation environment. Great River Energy's existing transmission line has been approved with a "Determination of no hazard to air navigation" by the Federal Aviation Administration. Prior to construction, a permit modification will be applied for once the new line is designed and height and structure locations are available.

### 3.11 Rendering Facilities

The Worthington Rendering facility is located outside of the city limits. There is limited information on its construction; however, documentation shows it was constructed around 1971. The facility primarily renders poultry and discharges its pretreatment pond to the city's industrial wastewater treatment facility located north of Worthington Rendering (see Figure 4).

Construction of the project will be performed so as to minimize any impacts to the rendering facilities and industrial wastewater treatment facilities in the area. Great River Energy will work with the rendering plant and/or the city of Worthington on placement of poles.

### 3.12 Schaap Dump Site

The Schaap Dump site is located adjacent to the existing transmission line right of way. This site is known as a municipal dump site and has been evaluated during the Minnesota Pollution Control Agency's Dump Assessment Study in 2001. Construction of the project will follow MPCA's Best Management Practices for former municipal dump sites. However, prior to construction, placement of new structure locations will be evaluated and may be relocated within the right of way to avoid excavation in the dump site.

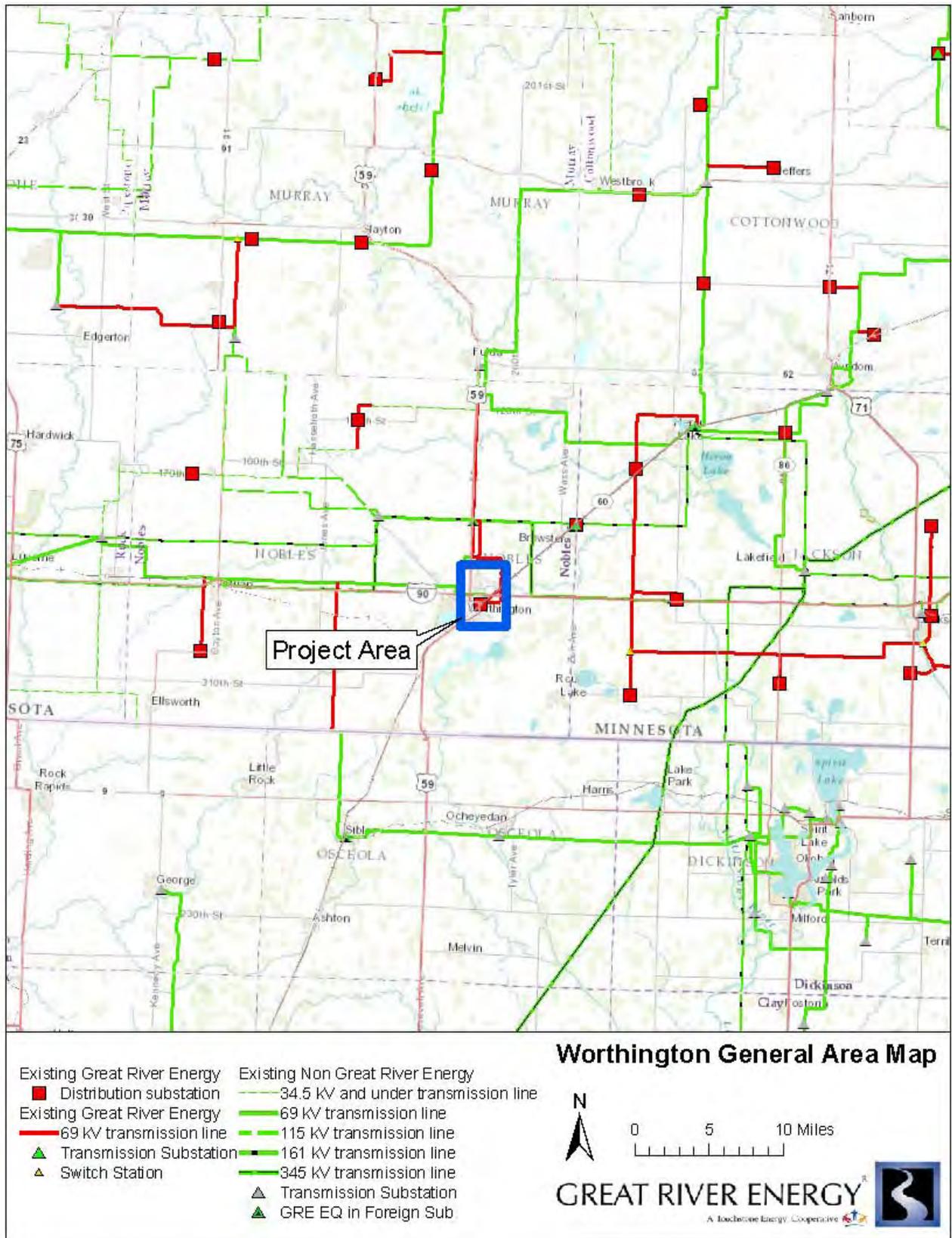
## 4 PROJECT PERMITS AND APPROVALS

### 4.1 Permits and Approvals

Following is a list of permits and approvals associated with the project, and their current status:

<b>Agency</b>	<b>Permit or Approval</b>	<b>Regulated Activity</b>	<b>Status</b>
County of Nobles	Local Review - Conditional Use Permit	Construction of 115 kV Transmission Line	Application submittal scheduled in late August/early September
County of Nobles	Utility Accommodation Permit	Permit to install structure in County right of way and/or overhang	Permits will be obtained prior to construction.
MN Dept. of Natural Resources (DNR)	Environmental Review – Threatened and Endangered Species, Wetlands, Other Resources	Review of Project Impacts	No foreseen environmental impacts – email dated 7/9/2013
MN Dept. of Natural Resources (DNR)	Minnesota Natural Heritage Database Review	Review of Project Impacts	No known occurrence of rare features (none affected by project) – email dated 7/9/2013.
Nobles County Drainage Authority	Review of potential Okabena Creek crossings	Review of Project Impacts	Final approval of the project will be given after final design is complete.
Minnesota Historical Society (SHPO)	Review of Historic Places	Historic Preservation	Letter dated 7/11/2013 states that a survey is recommended.
Nobles County Historical Society (NCHS)	Review of Historic Places	Historic Preservation	NCHS not aware of any cultural or historical resources – email dated 7/9/2013.
US Dept. of Interior Fish and Wildlife Service (FWS)	Environmental Review – Threatened and Endangered Species	Review of Project Impacts	There are no federally listed or proposed species and/or designated or proposed critical habitat in the action area of the project – email dated 7/10/13.
Minnesota Department of Transportation (MnDOT)	Highway Crossing Permits	Permits to cross Hwy’s 59 and 60, along with I-90	Permits will be obtained prior to construction.
Federal Aviation Administration (FAA)	Form 7460-1 Notice of Proposed Construction or Alteration	Notification of structures that lie within the regulated air space.	Permits and necessary approvals will be obtained prior to construction.
City of Worthington	Worthington Municipal Airport Impact Review	Review of Project Impacts	Final approval of the project will be given after final design is complete.
Minnesota Public Utilities Commission (PUC)	Local Review Notice	Acknowledgement of Local Review	Notice will be sent to both the PUC and General Notification List within 10 days of CUP submittal to Nobles County.

**Figure 1: Project Location Map**



**Figure 2: Proposed Transmission Line Routing**

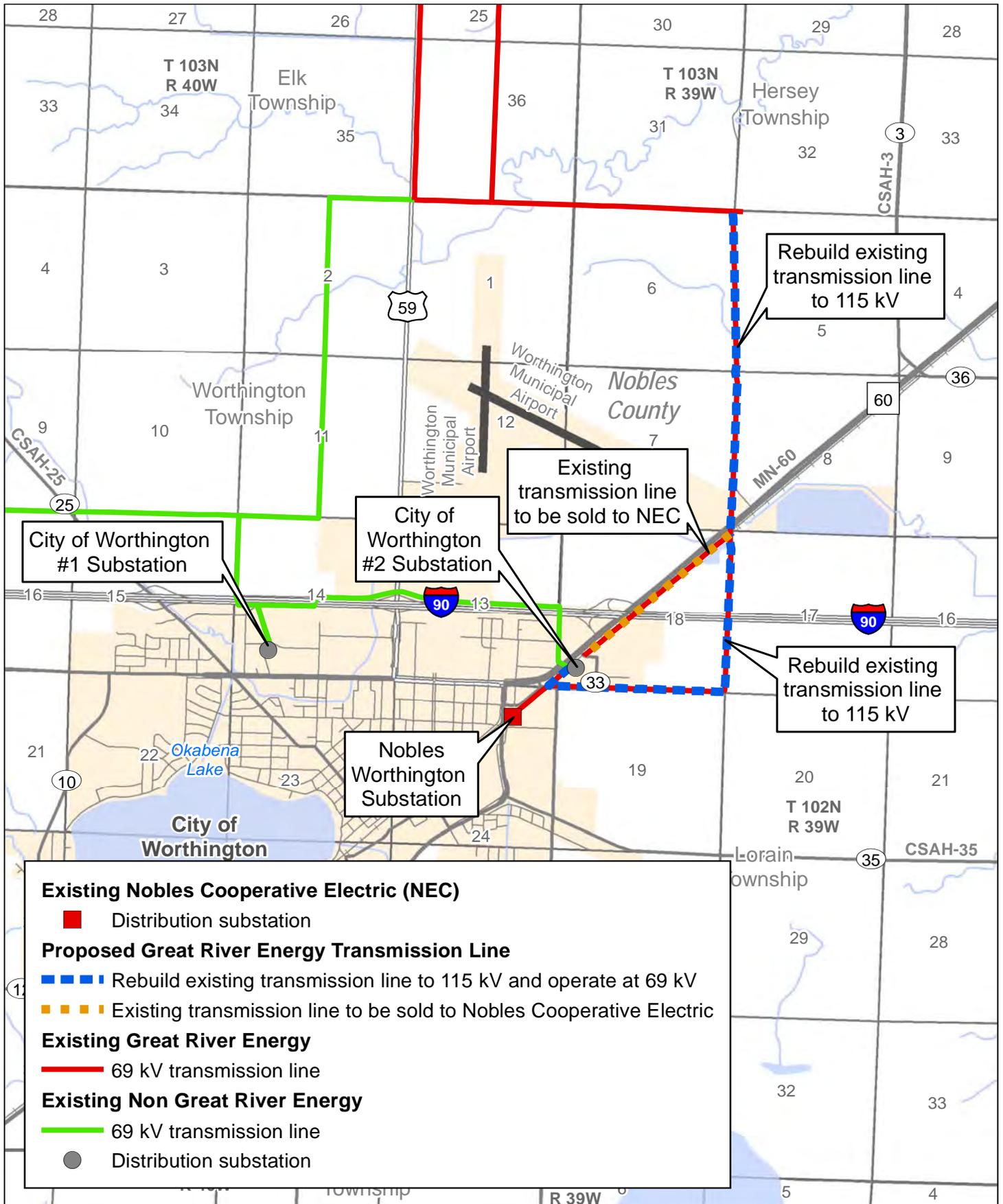
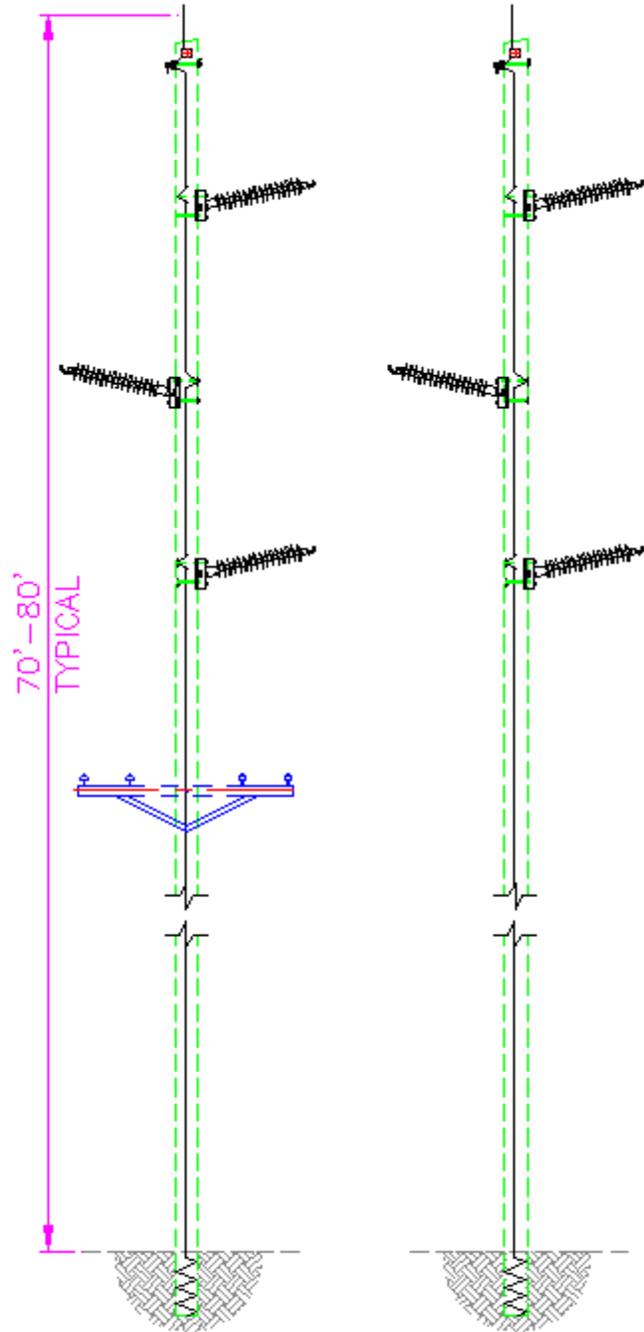


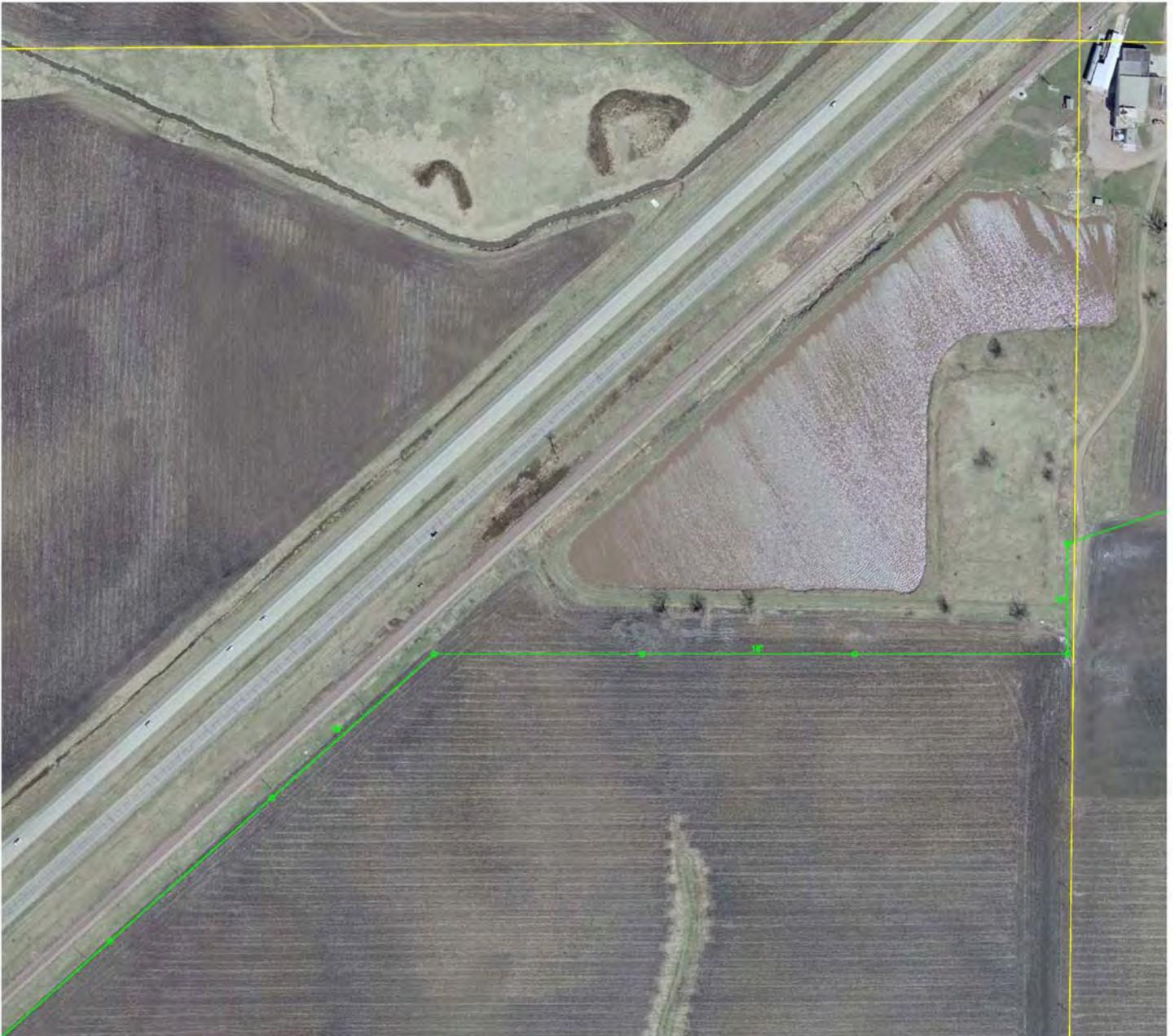
Figure 3: Typical Tangent Structures



115 kV HORIZ. POST  
W/ DIST. UNDERBUILD

115 kV HORIZ. POST  
W/O DIST. UNDERBUILD

**Figure 4: Worthington Rendering Facilities**



NW ¼ NW ¼, Section 18, T102N, R39W

**Green:** Sewer Lines to Industrial Wastewater Treatment Facility

**Yellow:** Section Lines

## **Correspondence**

RECEIVED JUL 12 2013

*Worthington*

CITY OF WORTHINGTON

303 Ninth Street # PO Box 279  
Worthington MN 56187  
Telephone: (507) 372-8640  
Fax: (507) 372-8643

July 11, 2013

Wayne Smith  
Environmental Services Director  
Nobles County  
Public Works Facility  
960 Diagonal Road PO Box 187  
Worthington, MN 56187

Marsha Parlow  
Transmission Permitting Analyst  
Great River Energy  
12300 Elm Creek Blvd  
Maple Grove, MN 55369

SUBJECT: Great River Energy 115 kV Transmission Line Rebuild

Dear Mr. Smith and Ms. Parlow:

Great River Energy is proposing to rebuild a 69 kV transmission line to 115 kV standards in Lorain Township (Sections 5, 6, 8, 17, 18 and 19, T102N, R39W) and within the city limits of Worthington, Minnesota (Sections 13, and 24, T102N, R40W).

This letter is to inform you that the City of Worthington, Minnesota is relinquishing its local permitting authority to Nobles County for the above described project. Great River Energy will need to obtain its permit for the entire project through Nobles County per Minn. Rules 7850.5300.

Sincerely,



Bradley Chapulis  
Director of Community/Economic Development

JUL 08 2013

LAND RIGHTS

**PUBLIC WORKS**

960 Diagonal Road  
PO Box 187  
Worthington, MN 56187-0187



Phone: 507-295-5322  
Fax: 507-372-8348  
PublicWorks@co.nobles.mn.us

Dale: original  
Marsha: copy

July 3, 2013

Mr. Dale Aukee  
Ms. Marsha Parlow  
Great River Energy  
12300 Elm Creek Boulevard  
Maple Grove MN 55369

RE: Local Review of Great River Energy Worthington 115KW Transmission Line Project

Dear Mr. Aukee & Ms. Parlow:

Thank you for meeting with me at my office on July 2, 2013. I was happy to hear that Great River Energy is planning to upgrade an existing 69 KV Transmission Line to 115 kV standards to better serve area residences. A Conditional Use Permit from Nobles County will need to be obtained for the construction of this project outside the city limits of Worthington.

Nobles County is aware under the Power Plant Siting Act, a permit from the Minnesota Public Utilities Commission is required for projects over 100 KV (Minn. Stat. 216E) and local review and permitting is possible for eligible projects (Minn. Stat 216E.05).

This letter is to confirm that Nobles County will serve as the lead agency for the local review of the Great River proposed 115KV Transmission Project. Nobles County has the expertise and resources to provide for the local review as outlined by the State.

Because Nobles County has served in this role for similar projects and has experience with the Environmental Assessment Review process it will waive its opportunity as a local unit of government to relinquish its permitting jurisdiction as provided in Minn. Rules 7850.5300, Subp. 4.

Nobles County looks forward to working with you on this project. Please contact me with any questions.

Sincerely,

A handwritten signature in cursive script that reads "Wayne Smith".

Wayne Smith  
Environmental Services Director

WS/kh



GREAT RIVER  
ENERGY®

12300 Elm Creek Boulevard • Maple Grove, Minnesota 55369-4718 • 763-445-5000 • Fax 763-445-5050 • [www.GreatRiverEnergy.com](http://www.GreatRiverEnergy.com)

14 June 2013

Mr. Dave Studenski  
US Army Corps of Engineers  
La Crescent Field Office  
1114 South Oak Street  
La Crescent, MN 55947-1338

RE: Proposed Worthington 115 kV Transmission Line  
Nobles County, Minnesota  
T102N, R39W, Sections 5, 6, 7, 8, 17, 18 and 19  
T102N, R40W, Sections 13 and 24

**WO# 201145**

Dear Mr. Studenski:

Great River Energy is proposing a 115 kilovolt (kV) transmission project near Worthington in Nobles County, Minnesota. The approximately four mile rebuilt transmission line will connect to a substation located in Section 18 of Lorain Township. The project is necessary to improve the area's electric reliability and meet demand.

Great River Energy is requesting information on the possible effects of the proposed project on floodplains, wetlands, and other important natural resources that occur in the project area. The transmission line will span two DNR public waters (North and South Forks of Okabena Creek). There is one wetland in the vicinity of the line (see enclosed map); although, there will be no dredging and filling. A project description and NWI map has been included for your review. The proposed line is marked in blue.

Great River Energy is requesting concurrence of its interpretation of the possible effects of the new transmission line on wetlands that occur in the project area. We would appreciate receiving any written comments from your office by Monday, 1 July 2013. If you have any questions about this proposed project, please contact me at (763) 445-5215. If you wish to respond by e-mail, my address is [mparlow@greenergy.com](mailto:mparlow@greenergy.com). Thank you for your cooperation and assistance.

Sincerely,

GREAT RIVER ENERGY

Marsha Parlow  
Transmission Permitting Analyst

Enclosures

S:\Legal Services\Environmental\Transmission\Projects\201145 Worthington\Agency Letters\Worthington ACE.doc

# Worthington 115 kV Transmission Line



GREAT RIVER  
ENERGY®  
A Touchstone Energy® Cooperative

**GREAT RIVER ENERGY**  
12300 Elm Creek Boulevard  
Maple Grove, MN 55369  
888-521-0130  
[www.greatriverenergy.com](http://www.greatriverenergy.com)



**NOBLES COOPERATIVE ELECTRIC**  
22636 US Hwy 59  
Worthington, MN 56187  
507-372-7331  
[www.noblesce.com](http://www.noblesce.com)

## Project Need

Great River Energy and Worthington Public Utilities are working together to improve the area's electric reliability and meet demand. Worthington Public Utilities, recently permitted a new transmission line to link its east and west substations and constructed it to 115,000 volts (115 kV) standards. Great River Energy, power supplier to Nobles Cooperative Electric, has an old transmission line built in 1962 that needs to be rebuilt and proposes to rebuild it to 115 kV standards. The entire transmission system will continue to operate at 69 kV until a future 115 kV connection is established.

## Transmission Line

Great River Energy will rebuild approximately four (4) miles of existing 69 kV transmission line to 115 kV standards (see map on back). The rebuild will begin at the Worthington Public Utilities East substation then run east along 250<sup>th</sup> Street/Oxford Road for one mile then turning north for three miles, ending at the intersection of 220<sup>th</sup> Street and Roberts Ave, northeast of the airport. Nobles Cooperative Electric's distribution system will continue to be underbuilt on portions of this route.

## Permitting and Easement Acquisition

Minnesota statute requires a permit for transmission lines built to and capable of operating at voltages higher than 100kV. Great River Energy will apply to Nobles County for the necessary permits. Easement acquisition, where necessary, will commence after the permitting process is complete.

## Poles and Construction

Great River Energy will reconstruct the transmission line using wood poles with horizontal post insulators. Guy wires and anchors will be used to counter angles in the line. The poles will generally be 70-80 feet above the ground with spans of 250 to 400 feet between poles. Shorter spans are needed where Nobles Cooperative Electric's distribution lines are attached to Great River Energy's poles. The distribution lines will be attached to the transmission poles on wood crossarms (see photo). Airport restrictions may require the use of specialty poles.

## Schedule

Permitting – Summer 2013

Survey/Easement Acquisition/Engineering – Fall-Winter 2013-14

Construction – 2014

**For project updates and information, visit**

**[www.greatriverenergy.com/worthington](http://www.greatriverenergy.com/worthington) or contact:**

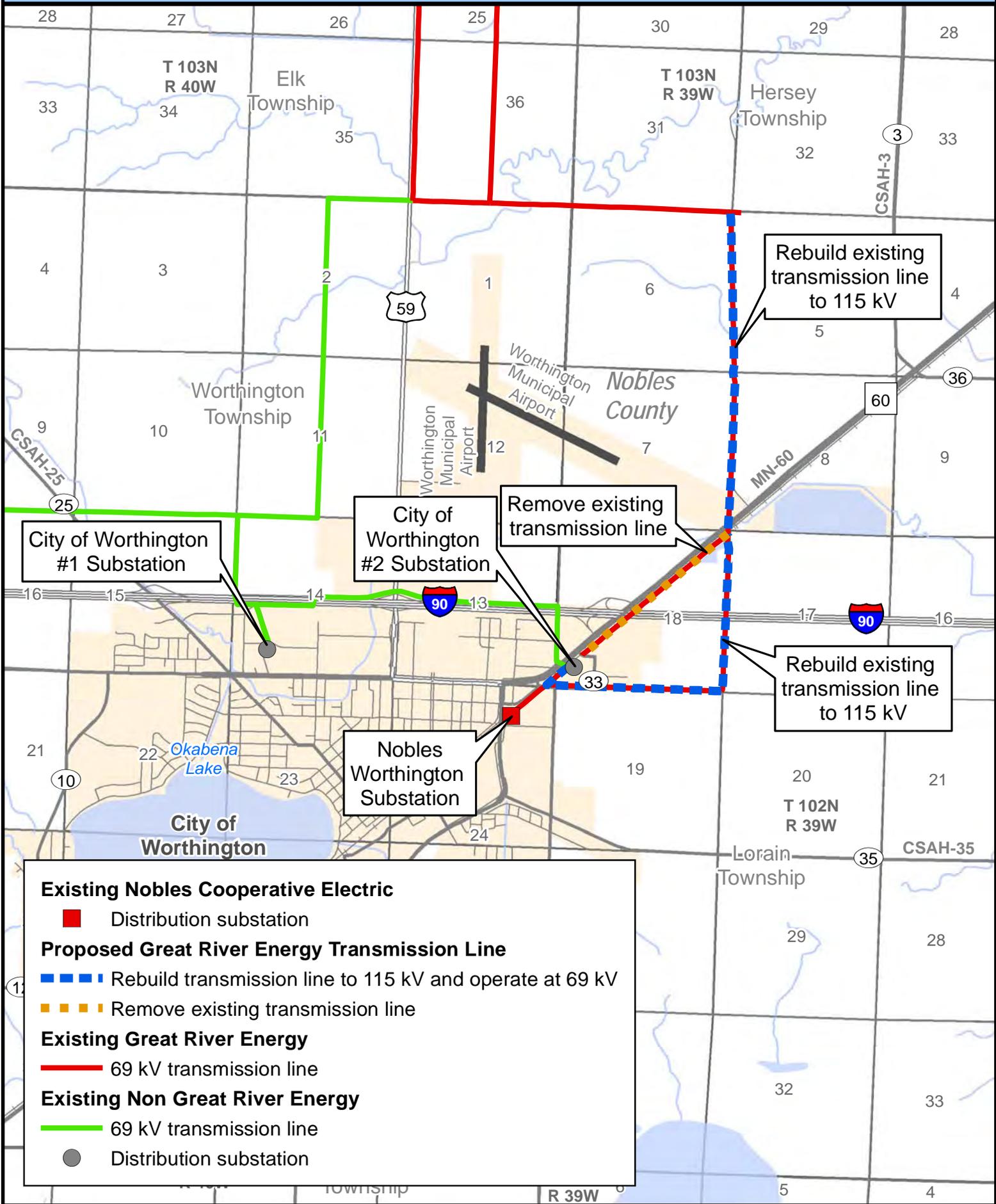
Dale Aukee, Sr. Field Representative  
Great River Energy  
12300 Elm Creek Blvd.  
Maple Grove, MN 55369  
763-445-5978 or 1-888-521-0130, ext. 5978  
[daukee@grenergy.com](mailto:daukee@grenergy.com)

Jerry Mausbach, Line Superintendent  
Nobles Cooperative Electric  
22636 US Hwy 59  
Worthington, MN 56187  
507-372-7331  
[jmausbach@noblece.com](mailto:jmausbach@noblece.com)



*Typical 115 kV  
transmission line  
with distribution  
under built*

# Proposed project



Rebuild existing transmission line to 115 kV

City of Worthington #1 Substation

City of Worthington #2 Substation

Remove existing transmission line

Rebuild existing transmission line to 115 kV

Nobles Worthington Substation



**GREAT RIVER ENERGY**

A Touchstone Energy® Cooperative

Proposed Great River Energy Transmission Line

■ Rebuild transmission line to 115 kV and operate at 69 kV

■ Remove existing transmission line

■ Proposed Distribution Substation

Proposed Great River Energy 69 kV Transmission Line

NWI Wetlands

■ Freshwater Emergent Wetland

■ Freshwater Forested/Shrub Wetland

■ Freshwater Pond

■ Lake

■ Riverine

MN Public Waters Inventory (PWI)

■ Public Water Wetland

■ Public Water Basin

■ MN Public Watercourse

■ MN MPCA Impaired Streams

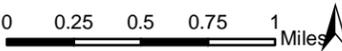
■ MN MPCA Impaired Wetland

■ MN MPCA Impaired Lakes

Updated: 6/14/2013

Data Sources Vary Between MNDOT, MNDNR, MNGEO and Great River Energy  
Rare Features Heritage data from MNDOT  
Aerial Image from ESRI Web service

Map Projection:  
UTM, NAD83, Zone15, Meters



### Worthington 69kV to 115 kV Upgrade Project

### Hydrologic Features

Source: Esri, Intel, USDA, USGS, AEX, GeoEye, Getmapping, Aerogrid, IGN, IGP, and the GIS User Community



RECEIVED JUN 27 2013

DEPARTMENT OF THE ARMY  
ST. PAUL DISTRICT, CORPS OF ENGINEERS  
180 FIFTH STREET EAST, SUITE 700  
ST. PAUL MINNESOTA 55101-1678

JUN 24 2013

REPLY TO  
ATTENTION OF  
Operations  
Regulatory (2013-02250-BGO)

Ms. Marsha Parlow  
Great River Energy  
12300 Elm Creek Blvd  
Maple Grove, MN 55369

Dear Ms. Parlow:

This letter responds to your request for comments regarding the Proposed Worthington 115 kV Transmission Line project located in Sec. 5, 6, 7, 8, 17, 18, and 19, T. 102N., R. 39W., and Sec. 13 and 24, T. 102N., R. 40W., Nobles County, Minnesota.

The placement of aerial lines that cross navigable waters of the U.S. requires authorization under Section 10 of the Rivers and Harbors Act.

Underground utility lines through waters of the U.S., including wetlands, as well as navigable waters of the U. S. are regulated under Section 404 of the Clean Water Act if there is a discharge of dredged or fill material. Any discharge would require authorization by a general permit or individual permit. A delineation of aquatic resources would be required to determine the presence of waters of the U.S.

Underground lines installed by directional bore method through waters of the U.S., including wetlands, do not involve a discharge and a permit is not required. However, if installation of entry, exit or connection points requires excavation and backfill in waters of the U.S., including wetlands, a permit would be required. Installation by plow requires a project specific evaluation to determine if a permit is required.

The placement of poles, overhead wiring, and/or buried wiring at upland locations is not within the jurisdiction of the Corps of Engineers, provided the work does not involve the placement of dredged or fill material into any waterbody or wetland.

Temporary placement of fill material into any waterbody or wetland for purposes such as bypass roads, temporary stream crossings, cofferdam construction, or storage sites may require a Department of the Army permit.

If the proposed project would involve the placement of fill material, either permanent or temporary, please notify our office.

Without detailed construction plans, we cannot provide specific comments regarding the effects that the proposed activity would have on watercourse flood stages. It has been our experience that underground and overhead utility construction has negligible effects on flood stages, provided excess construction material is removed from the floodplain and additional care is taken not to disturb its hydraulic characteristics.

You may also need city, county, or State permits for the project. You should contact the appropriate agencies for their permit requirements. If the project includes the placement of dredged or fill material in a Federal regulated waterbody, we will notify the responsible State agency for water quality (401) certification.

You should also contact the State Historical Preservation Officer (SHPO) to determine if there are any known historic or archeological sites in the area or if a cultural resource survey would be required.

If you have any questions, contact Benjamin Orne in our St. Paul office at (651) 290-5280. In any correspondence or inquiries, please refer to the Regulatory number shown above.

Sincerely,

A handwritten signature in black ink, appearing to read 'C. Konickson', written in a cursive style.

Chad Konickson  
Chief, Southwest Section



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14 June 2013

Ms. Lisa Joyal  
Minnesota Department of Natural Resources  
Natural Heritage and Nongame Research Program  
500 Lafayette Road, Box 25  
St. Paul, MN 55155

RE: Proposed Worthington 115 kV Transmission Line  
Nobles County, Minnesota  
T102N, R39W, Sections 5, 6, 7, 8, 17, 18 and 19  
T102N, R40W, Sections 13 and 24

**WO# 201145**

Dear Ms. Joyal:

Great River Energy is proposing a 115 kilovolt (kV) transmission project near Worthington in Nobles County, Minnesota. The approximately four mile rebuilt transmission line will connect to a substation located in Section 18 of Lorain Township. The project is necessary to improve the area's electric reliability and meet demand.

The DNR Public Waters Inventory (PWI) maps indicate that the new line will affect two public waterbodies (North and South Forks of Okabena Creek). The DNR Rare Features map indicates there are no features of interest in the vicinity of the project area.

Great River Energy is requesting concurrence of its interpretation of the rare features in the vicinity and the possible effects of the new transmission line and substation on wetlands, threatened and endangered species, and other important state natural resources that occur in the project area. A project description, PWI map and rare features map are enclosed for your information. The proposed line is marked in blue.

We would appreciate receiving any written comments from your office by Monday, 1 July 2013. If you have any questions about this proposed project, please contact me at (763) 445-5215. If you wish to respond by e-mail, my address is [mparlow@grenergy.com](mailto:mparlow@grenergy.com). Thank you for your cooperation and assistance.

Sincerely,

GREAT RIVER ENERGY

Marsha Parlow  
Transmission Permitting Analyst

Enclosures

S:\Legal Services\Environmental\Transmission\Projects\201145 Worthington\Agency Letters\Worthington DNR.doc





GREAT RIVER ENERGY

A Touchstone Energy Cooperative

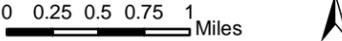


- Proposed Great River Energy Transmission Line
- Rebuild transmission line to 115 kV and operate at 69 kV
  - Remove existing transmission line
- MN Rare Natural Feature (NHIS) Protection Status
- Endangered
  - Special Concern
  - Threatened
  - Not listed
- MN Sites of Biodiversity Significance
- Biodiversity Significance
- Outstanding
  - High
  - Moderate
  - Below
- MN Prairie Railroad Survey
  - MN Native Plant Community

Updated: 6/14/2013

Data Sources Vary Between MNDOT, MNDNR, MNGEO and Great River Energy Rare Features Heritage data from MNDOT Topo scanned image maps from the United States Geological Survey (USGS)

Map Projection: UTM, NAD83, Zone15, Meters  
 "Copyright (2011), State of Minnesota, Department of Natural Resources. Rare features data included here were provided by the Division of Ecological Resources, Minnesota Department of Natural Resources (DNR), and were current as of (04-19-2011). These data are not based on an exhaustive inventory of the state. The lack of data for any geographic area shall not be construed to mean that no significant features are present."



**Worthington 69kV to 115 kV Upgrade Project**

**Rare Features**

## Parlow, Marsha GRE-MG

---

**From:** Bump, Samantha (DNR) [Samantha.Bump@state.mn.us]  
**Sent:** Tuesday, July 09, 2013 9:39 AM  
**To:** Parlow, Marsha GRE-MG  
**Subject:** FW: Worthington Shapefile

Hi Marsha,

I have reviewed your assessment of the potential for the Worthington 115 kV Transmission Line project to impact rare features, and concur with your assessment. Thank you for notifying us of this project, and for the opportunity to provide comments.

Have a great day!

Samantha Bump  
NHIS Review Technician  
(651) 259-5091  
Division of Ecological and Water Resources  
Minnesota Department of Natural Resources  
500 Lafayette Road, Box 25  
St. Paul, MN 55155

[samantha.bump@state.mn.us](mailto:samantha.bump@state.mn.us)  
[www.mndnr.gov/eco](http://www.mndnr.gov/eco)

---

**From:** Parlow, Marsha GRE-MG [<mailto:mparlow@GREnergy.com>]  
**Sent:** Monday, July 08, 2013 9:42 AM  
**To:** Joyal, Lisa (DNR)  
**Subject:** FW: Worthington Shapefile

Hi Lisa,

Please find attached a shape file of the existing route. Please contact me if you need further information.

Sincerely,

**Marsha Parlow**

Transmission Permitting Analyst  
Environmental Services  
Great River Energy  
12300 Elm Creek Boulevard  
Maple Grove, MN 55369  
Direct: 763-445-5215 | Fax: 763-445-5246 | Cell: 612-345-1212  
[WWW.GreatRiverEnergy.com](http://WWW.GreatRiverEnergy.com)

*\* Please consider the environment before you print this e-mail.*

---

**From:** Schmidt, Andrew GRE-MG  
**Sent:** Wednesday, July 03, 2013 12:43 PM  
**To:** Parlow, Marsha GRE-MG  
**Subject:** RE: Worthington Shapefile

Marsha,

Here is the route based on the existing route and not any engineering design as depicted in the factsheet.

**Andy Schmidt**

Senior GIS Technician, United Services Group

Great River Energy

12300 Elm Creek Boulevard

Maple Grove, MN 55369-4718

direct: 763.445.6026 / fax: 763.445.6826

[www.GreatRiverEnergy.com](http://www.GreatRiverEnergy.com) [www.USGweb.com](http://www.USGweb.com)

**\*\*\*PLEASE NOTE THIS IS A NEW ADDRESS AND PHONE NUMBER\*\*\***

*\* Please consider the environment before you print this e-mail.*

---

**From:** Parlow, Marsha GRE-MG

**Sent:** Wednesday, July 03, 2013 12:23 PM

**To:** Schmidt, Andrew GRE-MG

**Subject:** Worthington Shapefile

Hi Andy,

Do we have a shapefile of our proposed Worthington alignment? Could you send me one if we do?

Thanks,

**Marsha Parlow**

Transmission Permitting Analyst

Environmental Services

Great River Energy

12300 Elm Creek Boulevard

Maple Grove, MN 55369

Direct: 763-445-5215 | Fax: 763-445-5246 | Cell: 612-345-1212

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14 June 2013

Mr. Andrew Horton, Fish and Wildlife Biologist  
U.S. Fish and Wildlife Service  
Twin Cities ES Field Office  
4101 American Boulevard East  
Bloomington, MN 55425-1665

RE: Proposed Worthington 115 kV Transmission Line  
Nobles County, Minnesota  
T102N, R39W, Sections 5, 6, 7, 8, 17, 18 and 19  
T102N, R40W, Sections 13 and 24

**WO# 201145**

Dear Mr. Horton:

Great River Energy is proposing a 115 kilovolt (kV) transmission project near Worthington in Nobles County, Minnesota. The approximately four mile rebuilt transmission line will connect to a substation located in Section 18 of Lorain Township. The project is necessary to improve the area's electric reliability and meet demand.

The Fish and Wildlife Service website (<http://www.fws.gov/Midwest/Endangered/LISTS/minnesot-cty.html>) indicates that the Topeka Shiner (*Notropis topeka*), Prairie Bush Clover (*Lespedeza leptostachya*) and Western prairie fringed orchid (*Platanthera praeclara*) are listed on the threatened and endangered list in Nobles County, Minnesota. Great River Energy is requesting concurrence or information on the possible effects of the proposed project on any listed or proposed threatened or endangered species and designated or proposed critical habitat that may be present in the project area. A project description has been included for your review. The proposed line is marked in blue.

We would appreciate receiving any written comments from your office by Monday, 1 July 2013. If you have any questions about this proposed project, please contact me at (763) 445-5215. If you wish to respond by e-mail, my address is [mparlow@greenergy.com](mailto:mparlow@greenergy.com). Thank you for your cooperation and assistance.

Sincerely,

GREAT RIVER ENERGY

Marsha Parlow  
Transmission Permitting Analyst

Enclosure

S:\Legal Services\Environmental\Transmission\Projects\201145 Worthington\Agency Letters\Worthington FWS.doc

## Parlow, Marsha GRE-MG

---

**From:** Horton, Andrew [andrew\_horton@fws.gov]  
**Sent:** Wednesday, July 10, 2013 10:29 AM  
**To:** Parlow, Marsha GRE-MG  
**Subject:** Re: Worthington 69 kV Project Review

Marsha,

I have just reviewed the proposed reconstruction of an existing transmission line located NE of Worthington, Minnesota. Sorry for any delays, but we are short staffed and I have been out two weeks on paternity leave.

Our records indicate there are no federally listed or proposed species and/or designated or proposed critical habitat within the action area of the proposed project. If project plans change, additional information on listed or proposed species becomes available, or new species are listed that may be affected by the project, consultation should be reinitiated. This concludes section 7 consultation for proposed construction at the above location. Thank you for your cooperation in meeting our joint responsibilities under section 7 of the Endangered Species Act. If you have any further endangered species questions, please contact me at (612) 725-3548 x2208.

Andrew Horton  
Fish and Wildlife Biologist  
U.S. Fish and Wildlife Service  
Twin Cities ES Field Office  
4101 American Blvd East  
Bloomington, MN 55425-1665  
(612) 725-3548 ext. 2208

Andrew Horton  
Fish and Wildlife Biologist  
U.S. Fish and Wildlife Service  
Twin Cities ES Field Office  
4101 American Blvd East  
Bloomington, MN 55425-1665  
(612) 725-3548 ext. 2208

On Tue, Jul 9, 2013 at 10:36 AM, Parlow, Marsha GRE-MG <[mparlow@greenergy.com](mailto:mparlow@greenergy.com)> wrote:

Hello,

Did you have a chance to review our proposed project in the Worthington area? If you need further information please let me know.

Thank you for your attention and time on this matter.

Sincerely,

**Marsha Parlow**

**Transmission Permitting Analyst**

**Environmental Services**

**Great River Energy**

12300 Elm Creek Boulevard

Maple Grove, MN 55369

Direct: 763-445-5215 | Fax: 763-445-5246 | Cell: 612-345-1212

[WWW.GreatRiverEnergy.com](http://WWW.GreatRiverEnergy.com)

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14 June 2013

Ms. Mary Ann Heidemann  
Manager of Government Programs & Compliance  
Minnesota Historical Society  
345 Kellogg Blvd. West  
St. Paul, MN 55102-1906

RE: Proposed Worthington 115 kV Transmission Line  
Nobles County, Minnesota  
T102N, R39W, Sections 5, 6, 7, 8, 17, 18 and 19  
T102N, R40W, Sections 13 and 24

**WO# 201145**

Dear Ms. Heidemann:

Great River Energy is proposing a 115 kilovolt (kV) transmission project near Worthington in Nobles County, Minnesota. The approximately four mile rebuilt transmission line will connect to a substation located in Section 18 of Lorain Township. The project is necessary to improve the area's electric reliability and meet demand.

Westwood Professional Services conducted a background literature search (see attached) on June 12, 2013 and found that the area has low to moderate potential for cultural resources. Great River Energy is requesting information on the possible effects of the proposed project on cultural and historic properties in the project area. A project description/map is included for your review. The proposed line is marked in blue.

We would appreciate receiving any written comments from your office by Monday, 1 July 2013. If you have any questions about this project, please contact me at (763) 445-5215. If you wish to contact me by e-mail, my address is [mparlow@greenergy.com](mailto:mparlow@greenergy.com).

Sincerely,

GREAT RIVER ENERGY

Marsha Parlow  
Transmission Permitting Analyst

Enclosure

S:\Legal Services\Environmental\Transmission\Projects\201145 Worthington\Agency Letters\Worthington MHS.doc

June 12, 2013

Westwood Professional Services

7699 Anagram Drive  
Eden Prairie, MN 55344

MAIN 952-937-5150  
FAX 952-937-5822  
TOLL FREE 1-888-937-5150  
EMAIL [wps@westwoodps.com](mailto:wps@westwoodps.com)  
[www.westwoodps.com](http://www.westwoodps.com)



Ms. Marsha Parlow  
Transmission Permitting Analyst  
Great River Energy  
12300 Elm Creek Blvd.  
Maple Grove, MN 55369

**Re: Cultural Resource Literature Review for the Proposed Worthington  
115 kV Transmission Line Rebuild Project, Nobles County, Minnesota.**

Dear Ms. Parlow:

Westwood Professional Services, Inc. (Westwood) was contracted by Great River Energy to conduct an archaeological literature review of the location of a proposed rebuild of a 115 kV transmission line. The existing transmission line scheduled for rebuild is an approximately four mile line currently operating at 69 kV. The line is located in Sections 5-8 and 17-20 of Lorain Township (T 102N, R 39W), and Sections 13 and 24 of Worthington Township (T 102N, R 40W) in Nobles County, MN. The review consisted of an examination of resources including historic mapping, archaeological site files, historic structure inventories, and previous cultural resource survey reports.

On June 11, 2013 Westwood Cultural Resource Specialist Ryan P. Grohne conducted a background literature search of the proposed transmission line rebuild route and a one-mile buffer at the Office of the State Archaeologist (OSA) located at Fort Snelling in St. Paul, MN, and the Minnesota State Historic Preservation Office (SHPO) located at the Minnesota History Center in St. Paul, MN. Archaeological site files and the historic structure inventory files were examined to obtain a list of all previously recorded archaeological sites and historic structures within the proposed project area. Cultural resource reports were investigated to determine if the project area had been surveyed during previous cultural resource investigations. Other sources examined included the Andreas' Illustrated Atlas of Minnesota, 1874 and the historic Trygg maps.

No cultural resource surveys have been conducted at the location of the proposed transmission line route. No archaeological sites have been recorded within one mile of the proposed route. There is low potential that the route would have an adverse visual impact upon significant historic structures. Upon review of the archaeological sites and survey data compiled for the defined project area, Westwood concludes that the paucity of recorded archaeological sites along the proposed route are not necessarily indicative of a lack of cultural resources in the area, but instead may reflect the lack of survey. The route has a low to moderate potential for intact cultural resources. Should construction plans involve ground disturbance of

Ms. Marsha Parlow  
June 12, 2013  
Page 2



previously undisturbed areas, a Phase I Archaeological Reconnaissance Survey is recommended.

Sincerely,

WESTWOOD PROFESSIONAL SERVICES

A handwritten signature in black ink, appearing to read 'Dean T. Sather', written in a cursive style.

Dean T. Sather  
Senior Cultural Resource Specialist

July 11, 2013

Marsha Parlow  
Transmission Permitting Analyst  
Great River Energy  
12300 Elm Creek Blvd.  
Maple Grove, MN 55369-4718

RE: Proposed Worthington 115 kV Transmission Line  
Nobles County  
SHPO Number: 2013-2397

Dear Ms. Parlow:

Thank you for the opportunity to comment on the above project. It is being reviewed pursuant to the responsibilities given to the Minnesota Historical Society by the Minnesota Historic Sites Act and the Minnesota Field Archaeology Act.

Due to the nature and location of the proposed project, we recommend that an archaeological survey be completed. The survey must meet the requirements of the Secretary of the Interior's Standards for Identification and Evaluation, and should include an evaluation of National Register eligibility for any properties that are identified.

We will reconsider the need for survey if the project area can be documented as previously surveyed or disturbed. Any previous survey work must meet contemporary standards. **Note:** plowed areas and right-of-way are not automatically considered disturbed. Archaeological sites can remain intact beneath the plow zone and in undisturbed portions of the right-of-way.

Please note that this comment letter does not address the requirements of Section 106 of the National Historic Preservation Act of 1966 and 36CFR800, procedures of the Advisory Council on Historic Preservation for the protection of historic properties. If this project is considered for federal assistance, or requires a federal license or permit, it should be submitted to our office by the responsible federal agency.

If you have any questions regarding our review of this project, please contact Kelly Gragg-Johnson at (651) 259-3455.

Sincerely,



Mary Ann Heidemann  
Manager, Government Programs and Compliance

cc: Dean Sather, Westwood Professional Services



MINNESOTA HISTORICAL SOCIETY  
**State Historic Preservation Office**  
**Contract Archaeologists**  
Last Updated: 8/18/2012

This listing is comprised of individuals and firms who have expressed an interest in undertaking contract archaeology in the State of Minnesota. It is provided for informational purposes to those who may require the services of an archaeological consultant. Inclusion on the list does not constitute an endorsement of the consultant's professional qualifications or past performance. The SHPO may remove contractors from the list if no work is completed in Minnesota over a two year period. The SHPO reserves the right to reject contract reports if the principal investigator or other contract personnel do not meet certain minimal qualifications such as the Secretary of the Interior's professional qualifications standards (Federal Register 9/29/83).

It is recommended that work references be checked and multiple bids be obtained before initiating a contractual agreement. The SHPO will not recommend specific contractors, but may be able to comment on previous work reviewed pursuant to state and federal standards and guidelines. The SHPO can be contacted at the Minnesota History Center, 345 Kellogg Boulevard West, St. Paul, MN 55102, 651-259-3450.

**10,000 Lakes Archaeology, Inc.**

220 9th Avenue South  
South St. Paul, MN 55075  
612/670-6431  
grnhovd@10000lakesarchaeology.com  
www.10000lakesarchaeology.com

**The 106 Group Limited**

370 Selby Avenue  
St. Paul, MN 55102  
651/290-0977  
Fax 290-0979  
anneketz@106group.com  
www.106group.com

**AECOM Environment**

Amy Ollendorf, Ph.D.  
161 Cheshire Lane North  
Suite 500  
St. Louis Park, MN 55441  
763/852-4200  
Cell 612/599-1255  
Fax 763/473-0400  
amy.ollendorf@aecom.com  
www.aecom.com

**AMEC Earth and Environmental**

109 Woodward Avenue  
Jefferson City, MO 65109  
573/301-6084

**AMEC Earth & Environmental**

Kari Krause, RPA  
Midwest Plaza Building, Suite 1200  
800 Marquette Avenue  
Minneapolis, MN 55402-2876  
612/252-3790  
Cell 612/787-8380  
kari.krause@amec.com  
www.amec.com/divisions.earth

**Anthropology Research**

University of North Dakota  
236 Centennial Drive Stop 7094  
Dennis L. Toom  
Grand Forks, ND 58202  
701/777-2436

**ARCH3, LLC**

Daniel R. Pratt, M.A.  
1386 Idaho Avenue West  
St. Paul, MN 55108  
651/308-8749  
Fax 651/917-9291  
arch3llc@gmail.com  
www.arch3llc.com

**Archaeological Research Services**

1812 15th Avenue South  
Minneapolis, MN 55404  
612/870-9775

**Archaeology Laboratory**  
Augustana College  
2032 South Grange Avenue  
Sioux Falls, SD 57105  
605/274-5493

**Bear Creek Archaeology, Inc.**  
P. O. Box 347  
24091 Yellow Avenue  
Cresco, IA 52136  
563/547-4545 FAX 563/547-5403  
www.bearcreekarcheology.com

**Louis Berger and Associates, Inc.**  
Attn. Randall M. Withrow  
950 50th Street  
Marion, IA 52302  
319/373-3043

**Blondo Consulting, LLC**  
Steven J. Blondo  
3939 Sand Hill Road  
Kettle River, MN 55757  
218/485-1174  
steven@blondoconsulting.com  
www.blondoconsulting.com

**Bolton & Menk, Inc.**  
Dale Maul  
1224 Nicollet Avenue  
Burnsville, MN 55337-6857  
952/890-0509  
Fax 952/890-8065  
dalema@bolton-menk.com  
www.bolton-menk.com

**Commonwealth Cultural Resources**  
Kathryn C. Egan-Bruhy  
PO Box 1061  
Minocqua, WI 54548  
715/358-5686

**Consulting Archaeological Services**  
PO Box 686  
Creston, IA 50801  
515/333-4607

**Cultural Herage Consultants**  
Todd Kapler  
PO Box 3836  
Sioux City, IA 51102-3836  
Phone 712/239-9085  
Fax 712/239-9086

**Duluth Archaeology Center**  
5910 Fremont Street, Suite 1  
Duluth, MN 55807  
218/624-5489  
archcenter@aol.com  
www.dulutharchaeologycenter.com

**Florin Cultural Resource Services**  
N12902 273rd Street  
Boyceville, WI 54725  
715/643-2918

**Foth and Van Dyke, Inc.**  
Curtis M. Hudak  
Eagle Point II  
8550 Hudson Boulevard North  
Suite 100  
Lake Elmo, MN 55042  
651/288-8593  
Fax 651/288-8551  
www.foth.com

**R.C. Goodwin and Associates**  
309 Jefferson Highway, Suite A  
New Orleans, LA 70121  
504/837-1940  
neworleans@rcgoodwin.com

**HDR One Company**  
701 Xenia Avenue South  
Suite 600  
Minneapolis, MN 55416  
763/591-5423  
Fax 763/591-5413

**Historic Preservation Associates**  
Contact: Timothy Klinger  
P.O. Box 1064  
Fayetteville, AR 72702  
501/442-3779

**Jeff Kinney and Associates**  
PO Box 43  
Manvel, ND 58256  
701/696-2289

**Larson-Tibesar Assoc., Inc.**  
421 South Cedar Street  
Laramie, WY 82070  
307/742-4371 or 701/696-2236

**Leech Lake Heritage Sites Program**  
115 6<sup>th</sup> Street NW  
Suite E  
Cass Lake, MN 56633  
218/335-8095

**McFarlane Consulting, LLC**

318 Goodhue Street  
St. Paul, MN 55102  
651/699-1921

**Metcalf Archaeological Consultants**

PO Box 2154  
Bismarck, ND 58501  
701/258-1215

**Minnesota State University Moorhead**

Michael Michlovic or George Holley  
Department of Anthropology & Earth Science  
Moorhead, MN 56560  
218/477-2035 or 218/477-2680  
michlovic@mnstate.edu  
holley@mnstate.edu

**Mississippi Valley Archaeology Center**

1725 State Street  
LaCrosse, WI 54601  
608/785-8463  
boszhard.robe@uwlax.edu  
www.uwlax.edu/mnvac/contracts.htm

**Parsons Engineering Science Inc.**

400 Woods Mill Road  
Chesterfield, MO 63017  
314/576-7330

**Pathfinder CRM**

Robert Vogel  
168 West Main Street  
P.O. Box 503  
Spring Grove, MN 55974  
507/498-3810

**Quality Services**

3459 Jet Drive  
Rapid City, SD 57703  
605/388-5309 or  
605/209-0265

**Rolling Hills Consulting Services, LLC**

Chad A. Goings  
1221 East 3<sup>rd</sup> Street  
Washington, IA 52353  
319/461-7427  
cagoings@aol.com

**St. Cloud State University**

Mark P. Muñiz, Ph.D., RPA  
Assistant Professor  
Director CRM Archaeology Graduate  
Program  
Department of Sociology and Anthropology  
262 Stewart Hall

720 Fourth Avenue South  
St. Cloud, MN 56301  
320/308-4162  
Fax 320/308-1694  
mpmuniz@stcloudstate.edu

**SOILS Consulting**

PO Box 121  
Longville, MN 56655  
218/682-2110

**Southern Minnesota Archaeology Consulting, Inc.**

Ryan Howell  
125-10<sup>th</sup> Avenue SE  
Rochester, MN 55904  
507/993-9643  
sminnarch@yahoo.com

**Stemper and Associates**

24505 Hardeggers Drive  
Cleveland, MN 56017  
507/931-0823  
Fax 507/931-5356

**Summit Envirosolutions**

Andrea Vermeer  
1217 Bandana Boulevard North  
St. Paul, MN 55108  
651/644-8080

**Robert Thompson**

13367 87<sup>th</sup> Place North  
Maple Grove, MN 55369  
612/788-7412

**TRC Mariah**

605 Skyline Drive  
Laramie, WY 82070  
307/742-3843

**Trefoil Cultural & Environmental Heritage**

Richard Rothaus, PHD  
1965 W. Highview Drive  
Sauk Rapids, MN 56379  
320/761-9090  
rothaus@trefoilcultural.com

**Two Pines Resource Group**

17711 260<sup>th</sup> Street  
Shafer, MN 55074  
651/257-4766  
eterrell@twopinesresource.com  
www.twopinesresource.com

**University of South Dakota Archaeology  
Laboratory**

Contact: Richard Fox  
414 Clark Street  
Vermillion, SD 57069  
605/677-5594

**WAPSI Valley Archaeology**

PO Box 244  
Anamosa, IA 52205  
319/462-4760

**Westwood Professional Services, Inc.**

7699 Anagram Drive  
Eden Prairie, MN 55344  
952/937-5150  
Fax 952/937-5822  
[www.westwoodps.com](http://www.westwoodps.com)



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19 June 2013

Nobles County Historical Society  
407 12<sup>th</sup> Street  
Worthington, MN 56187

RE: Proposed Worthington 115 kV Transmission Line  
Nobles County, Minnesota  
T102N, R39W, Sections 5, 6, 7, 8, 17, 18 and 19  
T102N, R40W, Sections 13 and 24

**WO# 201145**

To whom it may concern:

Great River Energy is proposing a 115 kilovolt (kV) transmission project near Worthington in Nobles County, Minnesota. The approximately four mile rebuilt transmission line will connect to a substation located in Section 18 of Lorain Township. The project is necessary to improve the area's electric reliability and meet demand.

Westwood Professional Services conducted a background literature search (see attached) on June 12, 2013 and found that the area has low to moderate potential for cultural resources. Great River Energy is requesting information on the possible effects of the proposed project on cultural and historic properties in the project area. A project description/map is included for your review. The proposed line is marked in blue.

We would appreciate receiving any written comments from your office by Friday, 12 July 2013. If you have any questions about this project, please contact me at (763) 445-5215. If you wish to contact me by e-mail, my address is [mparlow@greenergy.com](mailto:mparlow@greenergy.com).

Sincerely,

GREAT RIVER ENERGY

Marsha Parlow  
Transmission Permitting Analyst

Enclosure

S:\Legal Services\Environmental\Transmission\Projects\201145 Worthington\Agency Letters\Worthington NHS.doc

June 12, 2013

**Westwood Professional Services**

7699 Anagram Drive  
Eden Prairie, MN 55344

MAIN 952-937-5150  
FAX 952-937-5822  
TOLL FREE 1-888-937-5150  
EMAIL [wps@westwoodps.com](mailto:wps@westwoodps.com)  
[www.westwoodps.com](http://www.westwoodps.com)



Ms. Marsha Parlow  
Transmission Permitting Analyst  
Great River Energy  
12300 Elm Creek Blvd.  
Maple Grove, MN 55369

**Re: Cultural Resource Literature Review for the Proposed Worthington  
115 kV Transmission Line Rebuild Project, Nobles County, Minnesota.**

Dear Ms. Parlow:

Westwood Professional Services, Inc. (Westwood) was contracted by Great River Energy to conduct an archaeological literature review of the location of a proposed rebuild of a 115 kV transmission line. The existing transmission line scheduled for rebuild is an approximately four mile line currently operating at 69 kV. The line is located in Sections 5-8 and 17-20 of Lorain Township (T 102N, R 39W), and Sections 13 and 24 of Worthington Township (T 102N, R 40W) in Nobles County, MN. The review consisted of an examination of resources including historic mapping, archaeological site files, historic structure inventories, and previous cultural resource survey reports.

On June 11, 2013 Westwood Cultural Resource Specialist Ryan P. Grohnke conducted a background literature search of the proposed transmission line rebuild route and a one-mile buffer at the Office of the State Archaeologist (OSA) located at Fort Snelling in St. Paul, MN, and the Minnesota State Historic Preservation Office (SHPO) located at the Minnesota History Center in St. Paul, MN. Archaeological site files and the historic structure inventory files were examined to obtain a list of all previously recorded archaeological sites and historic structures within the proposed project area. Cultural resource reports were investigated to determine if the project area had been surveyed during previous cultural resource investigations. Other sources examined included the Andreas' Illustrated Atlas of Minnesota, 1874 and the historic Trygg maps.

No cultural resource surveys have been conducted at the location of the proposed transmission line route. No archaeological sites have been recorded within one mile of the proposed route. There is low potential that the route would have an adverse visual impact upon significant historic structures. Upon review of the archaeological sites and survey data compiled for the defined project area, Westwood concludes that the paucity of recorded archaeological sites along the proposed route are not necessarily indicative of a lack of cultural resources in the area, but instead may reflect the lack of survey. The route has a low to moderate potential for intact cultural resources. Should construction plans involve ground disturbance of

Ms. Marsha Parlow  
June 12, 2013  
Page 2



previously undisturbed areas, a Phase I Archaeological Reconnaissance Survey is recommended.

Sincerely,

WESTWOOD PROFESSIONAL SERVICES

A handwritten signature in black ink, appearing to read 'Dean T. Sather', written over a faint horizontal line.

Dean T. Sather  
Senior Cultural Resource Specialist

## **Parlow, Marsha GRE-MG**

---

**From:** Nobles County Historical Society [n.c.h.society@gmail.com]  
**Sent:** Tuesday, July 09, 2013 8:36 AM  
**To:** Parlow, Marsha GRE-MG  
**Subject:** WO#201145, Proposed Wgtn. 115kV Transmission Line

Mr Parlow -

The Nobles County Historical Society has reviewed the proposed Worthington 115 kV transmission line project (WO# 201145) for impact on cultural and historic properties. We are not aware of any cultural or historic resources that will be affected by the project.

Patrick Demuth, Collections Manger

--

Nobles County Historical Society



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14 June 2013

Dan Boerner  
Office of Aeronautics  
Minnesota Department of Transportation  
222 E. Plato Blvd.  
St. Paul, MN 55107-1618

RE: Proposed Worthington 115 kV Transmission Line  
Nobles County, Minnesota  
T102N, R39W, Sections 5, 6, 7, 8, 17, 18 and 19  
T102N, R40W, Sections 13 and 24

**WO# 201145**

Dear Mr. Boerner:

Great River Energy is proposing a 115 kilovolt (kV) transmission project near Worthington in Nobles County, Minnesota. The approximately four mile transmission line is to support a new substation located in Section 18 of Lorain Township. The project is necessary to improve the area's electric reliability and meet demand.

The transmission line will be constructed with wood poles that will generally range between 70 to 80 feet in height. Elevations in the project area range from 1,549 feet to 1,590 feet. Great River Energy is requesting information on the possible effects of the proposed project on airports or airstrips in the project area. A project description is enclosed for your information. The proposed line is marked in blue.

From my research, I find that the closest airport to the project is the public airport, Worthington Municipal Airport (1.0 nm NW). Our land rights department has been in discussions with the airport on the project and installation of specialty poles.

We would appreciate receiving any written comments from your office by Monday, 1 July 2013. If you have any questions about this proposed project, please contact me at (763) 445-5215. If you wish to respond by e-mail, my address is [mparlow@GREnergy.com](mailto:mparlow@GREnergy.com). Thank you for your cooperation and assistance.

Sincerely,

GREAT RIVER ENERGY

Marsha Parlow  
Transmission Permitting Analyst

Enclosure

S:\Legal Services\Environmental\Transmission\Projects\201145 Worthington\Agency Letters\Worthington MNDO.doc

## **Parlow, Marsha GRE-MG**

---

**From:** Dahlseide, Darlene (DOT) [darlene.dahlseide@state.mn.us]  
**Sent:** Thursday, July 11, 2013 8:18 AM  
**To:** Parlow, Marsha GRE-MG  
**Subject:** Worthington Transmission Line  
**Attachments:** 2012\_MN TT Brochure.pdf

I have attached our Minnesota Airspace Obstruction brochure for your information.

I have been out of the office for a few weeks due to family matters.

Please review this brochure as it gives you the process for permitting tall structures close to MN airports.

If you have any questions, please contact me.

Thanks

Darlene

**darlene dahlseide**  
**mn/dot aeronautics**  
**222 plato blvd e**  
**st. paul, mn 55107**

**651-234-7248**

# Minnesota Airspace and Tall Structures

## In General

When planning to build or modify a structure in Minnesota, one of the considerations must be the impact of the structure on the national airspace system. This consideration is vitally important to Minnesota's public airports; navigational aids; and instrument approach flight procedures.

A number of federal, state, and local regulations exist to protect our airspace system. In the paragraphs below we discuss Federal Aviation



Administration (FAA) and Minnesota Regulations concerning airspace obstructions.

## FAA Notification

Federal law requires that the FAA must receive "prior notification" regarding construction or alteration of a structure, whether permanent or temporary, which meets specific criteria per 14 C.F.R. Part 77.

Whether or not the proposed structure meets these criteria depends on its location in relation to an aviation facility, navigational aid, or instrument procedure ground track. These structures may include but are not limited to highways, roads, railroads, waterways, traverse ways (parking or rest areas), bridges, overpasses, high-mast light poles, utility poles, antenna towers, buildings, signs or billboards, fences or gates, plus temporary-use construction materials or equipment, including dirt piles and cranes, as well as natural growth, vegetation, and landscaping.

For additional information to persons proposing to erect or alter an object that may affect the navigable airspace, see Advisory Circular 70/7460-2K,

"Proposed Construction or Alteration of Objects That May Affect the Navigable Airspace", on the FAA's Obstacle Evaluation/Airport Airspace Analysis (FAA OE/AAA) web site, <http://www.oaaaa.faa.gov>.

If FAA notification is required, the project sponsor must submit FAA Form 7460-1, "Notice of Proposed Construction or Alteration," electronically via FAA's OE/AAA web site or submit hard copy documents to:

Express Processing Center  
Federal Aviation Administration  
Southwest Regional Office  
Air Traffic Airspace Branch, ASW-520  
2601 Meacham Boulevard  
Fort Worth, TX 76137-0520

Submitting FAA Form 7460-1 to any other FAA address may significantly delay the OE/AAA process.

Notification must be submitted at least 30 days before the earlier of two dates: the date the proposed construction or alteration is to begin, or the date an application for a construction permit is to be filed.

## Notification to FAA for Large Projects

A large project, such as a power line or a road or maybe a bridge, includes the submittal of at least 12 or more study points. If the structure is a building, FAA will want the latitude and longitude for the corner of the building that is closest to the nearest public use runway, the latitude and longitude for all other corners, as well as the appropriate elevations, a picture and/or a diagram. In addition, file the highest height of any of the points and let the FAA build a worst case scenario.

If you are planning a large project in Minnesota, consider contacting the FAA



Southern Region Technician at 718-553-2611. He/She may provide guidance which will save you and the FAA time during the aeronautical study process. In addition, time and money spent on a professional aviation consultant may benefit you greatly.

## FAA OE/AAA Web Site

The FAA OE/AAA web site has become the single source for all OE/AAA case studies and information. You may view proposed, determined and circularized cases, as well as supplemental notices. Mn/DOT Aeronautics highly recommends all airports sign up for automatic notification of circularized cases. <http://www.oaaaa.faa.gov>

Once a username and password has been set up, submitting structures for analysis becomes very simple, especially if there are multiple structures. In addition, you may track the progress of your case studies by logging onto the OE/AAA web site. You may also submit additional materials to the FAA electronically. All OE/AAA related information and instructions are just a click away.

## FAA Supplemental Notification

If the FAA advises that supplemental notice is required, the sponsor of the notice of construction or alteration is also required to submit a supplemental notice (FAA Form 7460-2, Part 1) to the FAA Southwest Regional Office in Fort Worth, Texas within 48 hours of the start of construction. Also, within five days after the construction or alteration reaches its greatest height, the sponsor must notify the FAA Southwest Regional Office using FAA Form 7460-2, Part 2.

## FAA Emergency Notification

In the case of an emergency involving essential public services, public health, or public safety that requires immediate construction or alteration, the 30-day advance notice requirement does not apply. In such a case, the required notification may be sent by telephone (800-992-7433) or any expeditious means to the nearest FAA Flight Service Station. Within five days thereafter, the sponsor must submit a completed

copy of FAA Form 7460-1 to the FAA Southwest Regional Office in Fort Worth, Texas.

## FAA Notification for On-Airport Structures

For structures to be located on a public-use airport, the airport sponsor must notify the FAA's Airports District Office (ADO). For additional information pertaining to submitting on airport structures, please contact your Minneapolis Airports District Office representative at 612-713-4350.

## FAA Determinations

After receiving a notice of proposed construction or alteration, the FAA conducts an aeronautical study to determine the structure's potential impact on the navigable airspace. That study results in an FAA determination of "hazard" or "no hazard," and the FAA indicates whether or not the proposed construction exceeds the FAA's standards. In some cases, the FAA determination is "no hazard" even though the structure exceeds the standards. If the FAA indicates the proposed construction poses no hazard *and* does not exceed standards, then refer to Minnesota Structure Heights Regulations for permits that may be required from the state of Minnesota or from a local authority. If, however, the proposed construction *does* exceed standards (even if it poses "no hazard"), then the sponsor must apply for a permit from the state or from a local government, if a local ordinance governs the matter.



## MnDOT Aeronautics Airspace Obstruction Permit

Minnesota law protects the national airspace in Minnesota by preventing airport hazards and by preventing inappropriate uses of land near public-use airports. Minnesota law also gives Mn/DOT Aeronautics the responsibility and authority to issue an airspace obstruction permit for any proposed structure.

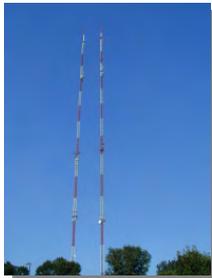
A permit from Mn/DOT Aeronautics may be required for the following wind turbines and other tall, non-transmitting structures located outside the zoned territory of any public use airports with airport zoning in place:

- that are more than 500' AGL any place in the state, or
- when the structure is more than 200' AGL or more than 200 feet above the established airport elevation, whichever gives the highest elevation, within three nautical miles of an airport and increasing by 100' for each additional mile out to six miles and 500', or
- that would increase an instrument approach minimum flight altitude or increase its flight visibility minimums, or
- that would increase the minimum obstruction clearance altitude of a federal airway, or
- that penetrates any of the following imaginary surfaces: primary, horizontal, conical, approach, or transitional surfaces.

Note: Mn/DOT Aeronautics is not authorized to issue a permit for a tower greater than 1000' with a few exceptions.

A permit from Mn/DOT Aeronautics is not required for tall structures

- that transmit, and therefore require a permit from the FCC, or
- that are within the zoned territory of any public-use airport that has airport zoning.



**Note:** A letter of "non-objection" from the FAA as a result of their airspace study does not constitute an "erection permit" nor does an "objection letter" to the tower proponent by the FAA constitute denial of an "erection permit."

It is imperative for every airport manager to understand their local airport zoning ordinance and which department is responsible for its enforcement. In addition, every airport manager should also verify that the FAA has the most current runway endpoint data (including planned runways and runway extensions). Every FAA OE/AAA aeronautical case study depends on the accuracy of this data.

### Application for Permit

To apply for this permit, the proponent should send their request by formal letter or email.

The request should contain the proponents information, a point of contact, the exact location of the structures, a diagram of its location relative to the nearest airport runway, the elevation of the structure above ground level, the ground elevation at the base of the structure, the plans for marking and lighting the structure and a GIS shapefile. If the proposed structure is a wind turbine the elevation should include the maximum height at the top of the rotating blades, and the marking and lighting should contain the plans for illuminating or marking the blades in addition to the tower. The request should also contain a copy of the Federal Aviation Administration's airspace determination.

Please direct your request to:

**Mn/DOT Aeronautics**  
**Darlene Dahlseide**  
**222 Plato Blvd. E.**  
**St. Paul, MN 55107**

Email: [darlene.dahlseide@state.mn.us](mailto:darlene.dahlseide@state.mn.us)  
or 651-234-7248, fax: 651-296-9089

### Mn/DOT Aeronautics Coordination

While the responsibility for filing notifications and permit applications or variances rests with the project sponsor, the Mn/DOT Aeronautics is available to provide additional guidance for projects that may

impact the national airspace system in Minnesota. In addition, Mn/DOT Aeronautics is also available to provide technical assistance to local governments and airports.

### Marking and Lighting Requirements

Any marking and/or lighting of a structure that is considered an airspace obstruction—and that has been recommended by the FAA in its aeronautical study in order to enhance pilot visual awareness of the structure's presence and location—is a mandatory requirement to be included on the structure by Minnesota law. All airspace obstruction permits contain provisions which require obstruction marking and lighting. Advisory Circular 70/7460-1K, "Obstruction Marking and Lighting", describes the standards for marking and lighting structures such as buildings, chimneys, antenna towers, cooling towers, storage tanks, supporting structures of overhead wires, etc. and is available on FAA's OE/AAA web site listed below.



### Airspace Regulations and Information

- FAA's OE/AAA web site is <http://www.oecaa.faa.gov>
- 14 C.F.R., Part 77, "Objects Affecting Navigable Airspace", Federal Aviation Regulations, is available at [http://www.access.gpo.gov/nara/cfr/waisidx\\_04/14cfr77\\_04.html](http://www.access.gpo.gov/nara/cfr/waisidx_04/14cfr77_04.html)
- Mn/DOT Minnesota Structure Height Regulations: <http://www.dot.state.mn.us/aero/avoffice/talltowers.html>



**Sample EA Scoping Letter**

**Input Comment Form**

## **PUBLIC WORKS**

960 Diagonal Road  
PO Box 187  
Worthington, MN 56187-0187



Phone: 507-295-5322  
Fax: 507-372-8348  
PublicWorks@co.nobles.mn.us

July 23, 2013

### **RE: Survey on Proposed 115 kilovolt (kV) Transmission Line Located in the Worthington area, Nobles County, Minnesota**

Dear Landowner:

Great River Energy is planning to rebuild approximately 4 miles of an existing 69 kV transmission line to 115 kV standards. The line is located in the City of Worthington, Sections 13 and 24, T102N, R40W and the township of Lorain, Sections 5, 6, 7, 8, 17, 18 and 19, T102N, R39W in Nobles County. The line is to connect the existing City of Worthington #2 Substation to Great River Energy's 115 kV line in Section 6, Lorain Township and will be permitted, designed and constructed to 115 kV standards (see attached fact sheet and map).

The rebuilt line will be constructed using wood poles with horizontal post insulators. When practical, Nobles Cooperative Electric will attach an upgraded distribution system on wood crossarms (see photo on fact sheet). The poles will generally be 70 to 80 feet above ground with a 250-400 foot span between poles. Shorter spans may be needed where Nobles Cooperative Electric's distribution line are attached to Great River Energy's poles. Guy wires and anchors will be used to counter angles. Airport restrictions may require the use of specialty poles.

Great River Energy is seeking approval for the project from Nobles County. As part of the permitting process, the County must prepare an Environmental Assessment (EA) on the project and afford the public an opportunity to participate in the development of the scope of the EA before it is prepared.

This survey is intended to allow the public to comment on the project and provide input on the content of the EA. A preliminary Table of Contents for the EA is attached as a starting point for what should be covered in the EA. We encourage you to provide comments on the project and additional topics you want to see addressed in the EA.

Great River Energy has requested environmental review of the project by several federal and state agencies. The status of those reviews is provided below.

**United States Corps of Engineers (Corps)** – the Corps provided a general response in a letter dated 6/27/13. If impacts to wetlands exceed the allowed threshold, Great River Energy will apply for a permit from the Corps.

**United States Fish and Wildlife Service (USFWS)** – USFWS reviewed the project and indicated in an email dated 7/10/13 that there are no federally listed or proposed species and/or designated or proposed critical habitat within the action area of the proposed project.

**Minnesota Department of Natural Resources (DNR)** – there are no known occurrences of rare features within an approximate one mile radius of the project. The DNR has concurred with that assessment in an email dated 7/9/13.

**Minnesota Historical Society (MHS)** – no cultural surveys have been conducted at the location of the proposed transmission line route. In a letter dated 7/11/13, MHS has recommended an archaeological survey.

**Minnesota Department of Transportation (MNDOT) (aviation issues)** – the proposed line will require FAA review and possibly specialty structures in the flight path of the airport. In an email date 7/11/13, MNDOT stated that permits will be required for this project.

Thank you for your input on this project. Please return your survey form in the self-addressed envelope provided by August 13, 2013.

Sincerely,

Wayne Smith  
Environmental Services Director  
Nobles County  
Enclosures

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- Figure 1: Project Location Map
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- Figure 3: Typical Tangent Structure
- Agency Correspondence
- Sample EA Input Comment Form
- Comment Form Responses from Landowners

-----

I HAVE NO COMMENTS ON THE GREAT RIVER ENERGY TRANSMISSION LINE PROJECT

-----

I HAVE THE FOLLOWING COMMENTS ON THE GREAT RIVER ENERGY TRANSMISSION LINE PROJECT:

Optional:  
Name: \_\_\_\_\_

Address: \_\_\_\_\_

Signature: \_\_\_\_\_

## **Comment Form**

### **Responses from Landowners**

I HAVE NO COMMENTS ON THE GREAT RIVER ENERGY TRANSMISSION LINE PROJECT

I HAVE THE FOLLOWING COMMENTS ON THE GREAT RIVER ENERGY TRANSMISSION LINE PROJECT:

It seems the most direct route would be to rebuild the diagonal portion of the existing line through Section 18 and remove the North-South, East-West sections bordering Section 18. This would be the shortest & most direct route.

At the very least the existing North-South line running through sections 8 and 17 of Lorain Twp. could be moved 2 or 3 feet to the West so the line is sitting on sections 7 and 18. This land is zoned Highway Business and Industrial whereas the land in sections 8 and 17 are zoned agricultural. At present the center of the poles are centered 14 inches East of the property line between sections 18 and 17 which results in Nobles Coop Elect. driving over our crops & ruining them causing crop damage multiple times over the years. We have only received payment for crop damage twice in the last 34 years but have suffered

Optional:  
Name: Mike & Elaine Ahlers (over)

Address: 35250 250<sup>th</sup> St Worthington, MN 56187

Signature: Mike Ahlers Elaine Ahlers 7/29/13



a great deal of financial crop damage in that time. Even locating the lines right on the center of the property line would be a little more fair if NCE alternated driving on the West or the East side of the poles.

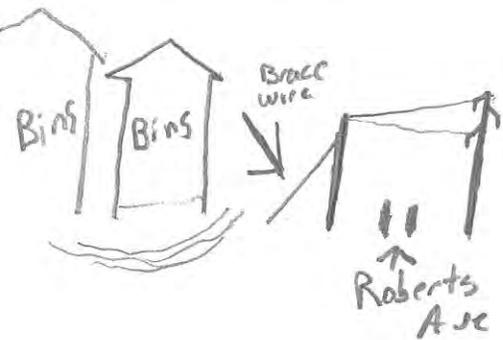
At present we have always planted along the poles trying to reduce crop damage but it must be rotated out soon.

Since the existing line needs to be removed anyway this would seem like the time to offset it onto the Business/Industrial zoned side.

I HAVE NO COMMENTS ON THE GREAT RIVER ENERGY TRANSMISSION LINE PROJECT

I HAVE THE FOLLOWING COMMENTS ON THE GREAT RIVER ENERGY TRANSMISSION LINE PROJECT:

Our place is on the corner of 230th St / Roberts  
I would like very much to some how have the pole  
and brace wire moved off our yard I guess the pole isn't  
so bad its the wire that's the problem if you see it you  
would understand, Always in the way, sits real close  
to the bins



Optional:

Name: DAVE AIBOMA

Address: 3509 230th St Brewster Ave 56119

Signature: [Signature]

RECEIVED  
AUG 05 2013  
BY: \_\_\_\_\_

---

I HAVE NO COMMENTS ON THE GREAT RIVER ENERGY TRANSMISSION LINE PROJECT

---

I HAVE THE FOLLOWING COMMENTS ON THE GREAT RIVER ENERGY TRANSMISSION LINE PROJECT:

We own the elevator at 1521 Joosten Rd adjacent to the substation. I called the project planners to get a more detailed drawing of the project because power lines may block our line of traffic to our bins at our elevator.

Optional:  
Name: Lorna Kruger for LoRu Farms

Address: P.O. Box 566 Worthington MN 56187

Signature: Lorna M Kruger



I HAVE NO COMMENTS ON THE GREAT RIVER ENERGY TRANSMISSION LINE PROJECT

---



I HAVE THE FOLLOWING COMMENTS ON THE GREAT RIVER ENERGY TRANSMISSION LINE PROJECT:

Optional:

Name: Dale Wilde - Wilde Family Living Residuary Trust

Address: Lovain 7

Signature: 





I HAVE NO COMMENTS ON THE GREAT RIVER ENERGY TRANSMISSION LINE PROJECT

---



I HAVE THE FOLLOWING COMMENTS ON THE GREAT RIVER ENERGY TRANSMISSION LINE PROJECT:

Optional:

Name:

*Marlene Masberg*

Address:

*300 5th Ave NW.*

Signature:

*Marlene Masberg*



-----

I HAVE NO COMMENTS ON THE GREAT RIVER ENERGY TRANSMISSION LINE PROJECT

-----

I HAVE THE FOLLOWING COMMENTS ON THE GREAT RIVER ENERGY TRANSMISSION LINE PROJECT:

Optional:  
Name: \_\_\_\_\_

Address: \_\_\_\_\_

Signature: Steve Powers

**RECEIVED**  
AUG 02 2013  
BY: \_\_\_\_\_

-----  
 I HAVE NO COMMENTS ON THE GREAT RIVER ENERGY TRANSMISSION LINE PROJECT  
-----

I HAVE THE FOLLOWING COMMENTS ON THE GREAT RIVER ENERGY TRANSMISSION LINE PROJECT:

Optional:  
Name: Gary L. Hibma  
Address: 35126 230<sup>th</sup> St Brewster Ma. 56119  
Signature: Gary L. Hibma

**RECEIVED**  
JUL 31 2013  
BY: \_\_\_\_\_



I HAVE NO COMMENTS ON THE GREAT RIVER ENERGY TRANSMISSION LINE PROJECT



I HAVE THE FOLLOWING COMMENTS ON THE GREAT RIVER ENERGY TRANSMISSION LINE PROJECT:

Optional:  
Name:

QRS - Mike Amundson

Address:

2626 Polar Rd Worthington MA 56187

Signature:



-----  
 I HAVE NO COMMENTS ON THE GREAT RIVER ENERGY TRANSMISSION LINE PROJECT  
-----

I HAVE THE FOLLOWING COMMENTS ON THE GREAT RIVER ENERGY TRANSMISSION LINE PROJECT:

Optional:  
Name: \_\_\_\_\_

Address: \_\_\_\_\_

Signature: \_\_\_\_\_

**RECEIVED**  
JUL 29 2013  
BY: \_\_\_\_\_



I HAVE NO COMMENTS ON THE GREAT RIVER ENERGY TRANSMISSION LINE PROJECT

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I HAVE THE FOLLOWING COMMENTS ON THE GREAT RIVER ENERGY TRANSMISSION LINE PROJECT:

Optional:

Name:

*I-90 truck wash*

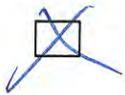
Address:

*P.O. Box 249 Worthington, mn.*

Signature:

*Phil Smith*





I HAVE NO COMMENTS ON THE GREAT RIVER ENERGY TRANSMISSION LINE PROJECT



I HAVE THE FOLLOWING COMMENTS ON THE GREAT RIVER ENERGY TRANSMISSION LINE PROJECT:

Optional:

Name:

BRIAN LARSEN Bedford Technology, LLC

Address:

2424 ABNORTH ROAD

Signature:

*[Handwritten signature]*



I HAVE NO COMMENTS ON THE GREAT RIVER ENERGY TRANSMISSION LINE PROJECT

I HAVE THE FOLLOWING COMMENTS ON THE GREAT RIVER ENERGY TRANSMISSION LINE PROJECT:

The proposed transmission line passes through Zone A of the Worthington Municipal Airport. Maps showing Zone A are attached maps. Aerial transmission lines are prohibited in this zone. As an existing nonconforming structure the power line can exist and be replaced but at no greater height than it is (assuming the alignment does not change). On each side of Zone A is a transitional airspace zone as shown on the attached which will continue to limit the height of the transmission line for some distance each side of Zone A (which overlaps the approach airspace zone). It is essential that planning and design of the transmission line conform to the Airport Zoning. It is important to note that airport zoning is different than what may be reflected in an FAA determination. The results of an FAA determination may be more or less restrictive than airport zoning.

The existing transmission line is as little as ten feet below the ultimate Runway 29 approach slope. Spherical markers on that portion of the transmission line installed above the surface of the ground lying within Safety Zone A should be installed. Such markings should conform with the most current Obstruction Marking and Lighting Advisory Circular of the Federal Aviation Administration and be in addition to any obstruction markings required by the Federal Aviation Administration.

The proposed transmission line will pass through airport property. Rebuilding the line may require the development of a lease agreement between the City and Great River Energy depending on the specific alignment and the existing rights Great River Energy may have to use airport property.

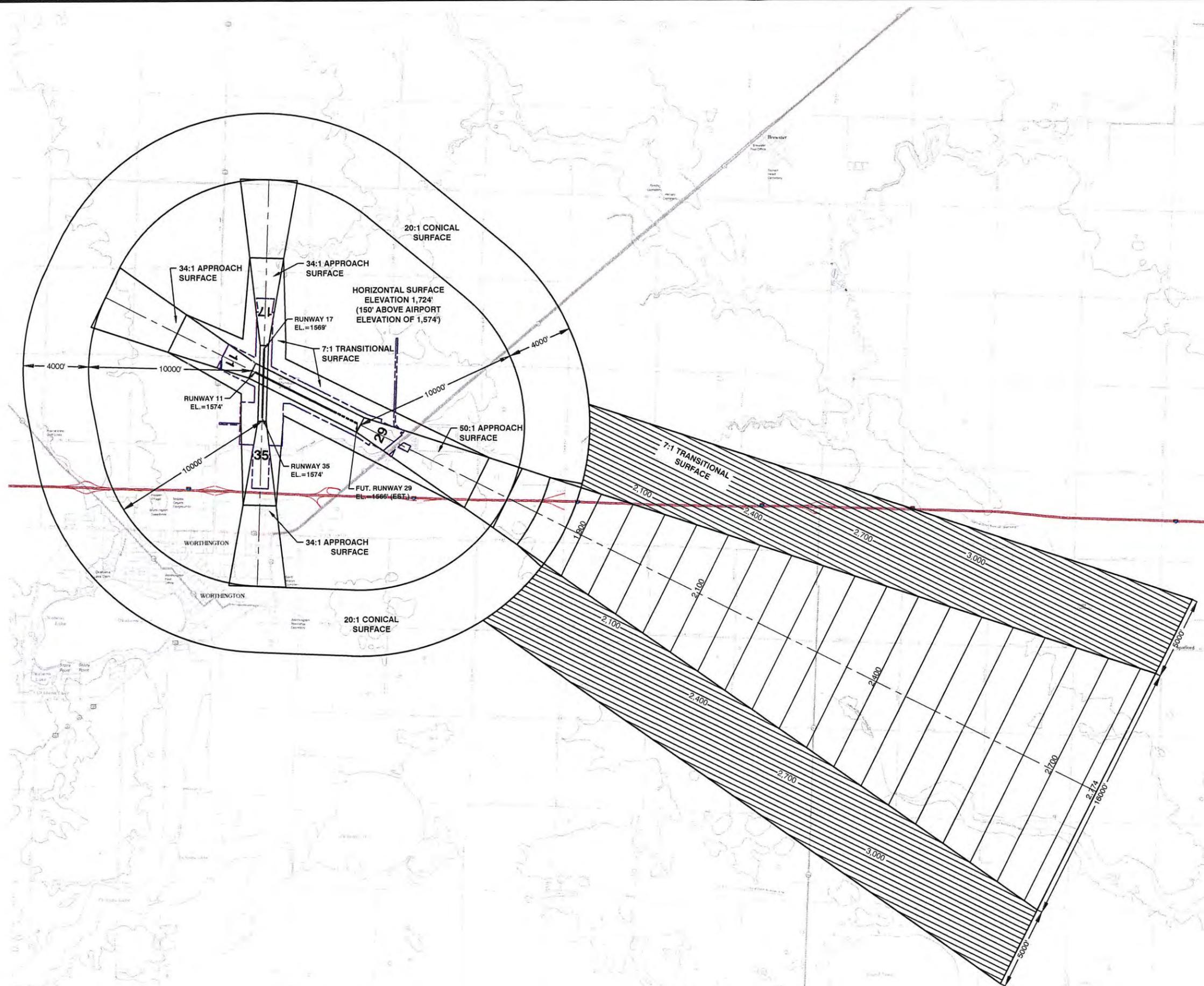
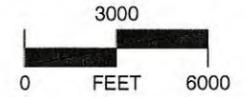
Optional:

Name: Dwayne Hatfield

Address: City of Worthington, P.O. Box 279, Wgtn MN 56187

Signature: Dwayne Hatfield

**RECEIVED**  
JUL 29 2013  
BY: \_\_\_\_\_



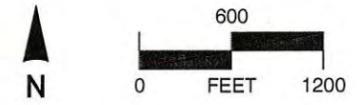
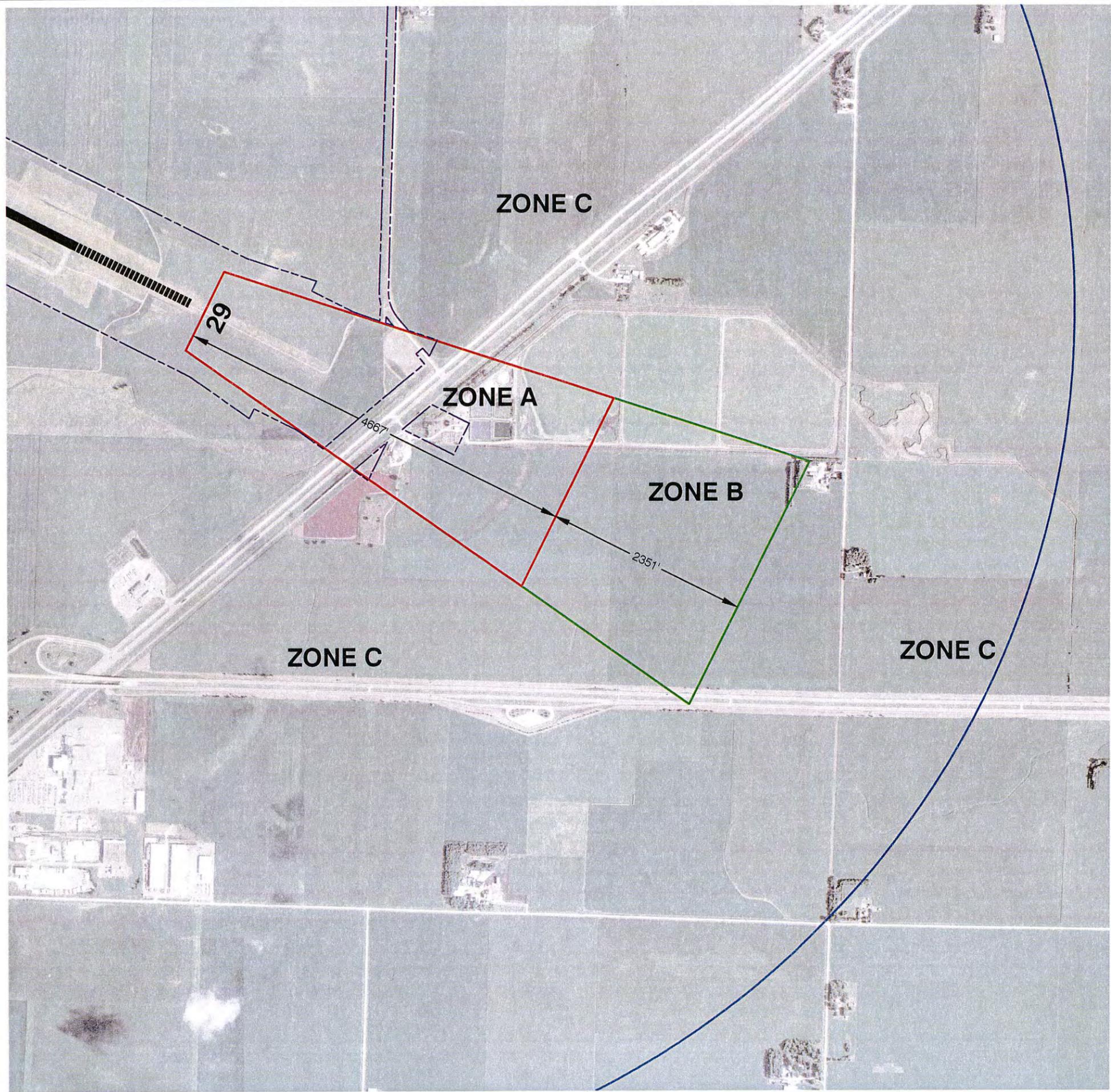
**WORTHINGTON MUNICIPAL AIRPORT  
AIRSPACE ZONING**

1700 AIRPORT ROAD NORTH  
WORTHINGTON, MN 56187

REVISION

M&H NO: 23424-00-11002  
DATE: JULY, 2012  
DESIGNED BY: BM  
DRAWN BY: TE  
CHECKED BY: BP

SHEET CONTENTS



**Mead & Hunt**  
 Mead & Hunt, Inc.  
 7900 West 78th Street  
 Suite 370  
 Minneapolis, MN 55439  
 Phone: 952-941-5619  
 www.meadhunt.com



**Safety Zone A.** All land in that portion of the approach zones of runway 11/29 as defined in Section Five, Subdivision 1 hereof, which extends outward from the end of the primary surface a distance equal to two-thirds of the planned length of the runway. These distances shall be: 4,667 feet for runway 11/29.

**Safety Zone B.** All that land in that portion of the approach zones of runway 11/29 as defined in Section Five, Subdivision 1, which extends outward from Safety Zone A, a distance equal to one-third of the planned length of the runway. This distance shall be: 2,333 feet for runway 11/29.

**Safety Zone C.** All that land which is enclosed within the perimeter of the horizontal zone as defined in Section Five, Subdivision 1 hereof, and which is not included in Zone A or Zone B.

**WORTHINGTON MUNICIPAL AIRPORT  
 RUNWAY 29 LAND USE ZONING DETAIL**

1700 AIRPORT ROAD NORTH  
 WORTHINGTON, MN 56187

REVISION

M&H NO: 23424-00-11002  
 DATE: JULY, 2012  
 DESIGNED BY: BM  
 DRAWN BY: TE  
 CHECKED BY: BP

SHEET CONTENTS





I HAVE NO COMMENTS ON THE GREAT RIVER ENERGY TRANSMISSION LINE PROJECT

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I HAVE THE FOLLOWING COMMENTS ON THE GREAT RIVER ENERGY TRANSMISSION LINE PROJECT:

Optional:

Name:

*FURVERTON BUILDING SYSTEMS*

Address:

*34620 250<sup>th</sup> ST NORTHINGTON, MN*

Signature:

*Devon Bruns* DEVON BRUNS

