

Bill Storm

September 8, 2007

Department of Commerce  
85 7th Place East, Suite 500  
St. Paul, MN 55101-2198



Attn: Sharon Ferguson/Bill Storm/Deborah Pile

Re: PUC Docket No.PL E280/GP-06-1481

ROUTE PROPOSAL

This route would splice off Great Lakes Gas in Section 13 in Blackberry Township to the East of Rice Lake. Proceeding North through Section 12 and intercept an existing HVTL right-of-way in Section 1 and would then follow the HVTL to the East and in Section 5-Feeley Township would turn in a basically Northeasterly direction up to Nashwauk. When this route reaches the Nashwauk area in Section 32, the Nashwauk Public Utilities Commission would have to "fine tune" it to be compatible with the present and future requirements.

I have attempted to find a route that avoids human settlement per Subp. 3-A and use of existing right-of-ways Subp. 3-F under MN Rules Part 4415.0100. This route also utilizes large tracts of Itasca County Tax Forfeited land which should greatly decrease the land acquisition costs. There are nine Sections of tax forfeit land through the route would pass.

In SEH No. A-NASHU0701.00 application page E-26 they outline the disadvantages of pipelines in close proximity to HVTL. This alleged problem can be easily overcome by adjusting my proposed routing away from HVTL in Sections 13,12,1,6 & 18 (see large drawing). These are entire Sections of land (640 acres each)! Any possible harmful effects can be offset by modern technology and costs will be offset by utilizing tax forfeit lands. Enbridge has a pumping station in Blackberry Township adjacent to 24293 US Hwy 2 that is practically under the HVTL and is not encountering any problems. In a phone conversation with Micah Harris (Enbridge Sr.Land&Right-of-Way Specialist) Tel 715-394-1420, Cell 218-591-3370, I asked him about electro-motive forces and he pointed out that they have hundreds of miles of pipeline in Wisconsin that run under HVTL with no problems. Expert information on this topic can be obtained by contacting John Bissell- Cathodic Expert phone 715-394-1417.

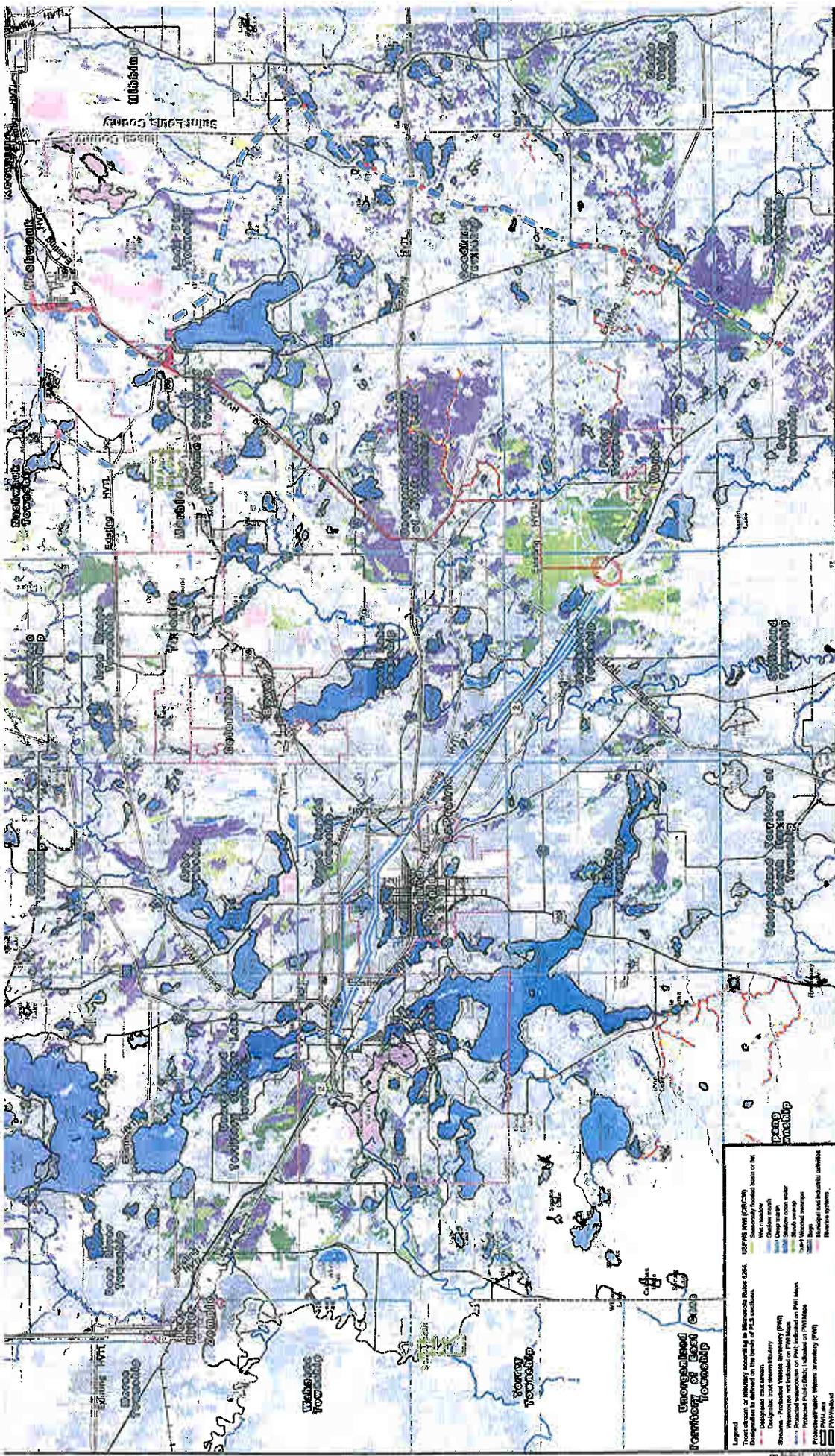
I have enclosed SEH map D-23 with my proposed route outlined in red with a red circle at the Great Lakes Gas splice. Also enclosed is a map I generated using Itasca County Plat maps. The map that I generated is not to scale and may contain some inconsistencies that can easily be corrected by SEH and was designed to generate general information about the route not precise technical data. I am not an engineer, just a concerned citizen attempting to propose the most viable route for the pipeline. Adjustments to this route will have to be made but I believe this general routing to be vastly superior to any of the other alternative (and preferred route) outlined by SEH.

If I understand the procedure-the next step in the process is to pass this proposal on to the Citizens Committee for discussion and hopefully, their approval. Thank you for your time invested in examining this proposal and hopefully your approval as well.

Sincerely.

*Michael Karna*

Michael Karna  
21205 Bluebird Drive  
Grand Rapids, MN 55744  
Phone 218-326-6061



**Nashwaug-Blackberry Pipeline Project**  
**Citizen's Alignment Alternative 07-MNPUC-P1**

3855 VADNAS CENTER DR.  
 PHONE: (857) 448-2000  
 FAX: (857) 480-2100  
 WAITS: 800-825-2865  
 www.sehinc.com

**SEH**

City of Nashwaug  
 Public Utilities  
 Commission

July 2007

2007 MNPUC Citizen's Review - Alternative P1  
 (07-MNPUC-P1)  
 Map Review Report  
 Building Cost Lines  
 Grand Lines  
 Northern Natural Gas

**Legend**  
 01. Unorganized Township Road  
 02. U.S. Trust Highway  
 03. County Statewide Highway  
 04. Municipal Statewide Street  
 05. County Road  
 06. Township Road  
 07. County Road  
 08. Township Road  
 09. Unorganized Township Road  
 10. Municipal Street  
 11. U.S. Trust Highway  
 12. County Statewide Highway  
 13. State Park Road  
 14. State Park Road  
 15. State Park Road  
 16. State Park Road  
 17. U.S. 189 Bypass  
 18. U.S. 189 Bypass

**MNDOT Roadmap**  
 Roadside Attribution  
 01. U.S. Trust Highway  
 02. County Statewide Highway  
 03. Municipal Statewide Street  
 04. County Road  
 05. Township Road

**USGS (OR SAG Pipeline)**  
 (SAG Pipeline)  
 (7.5 Top & 2003 Ortho)  
 Existing HWY Lines  
 MNDOT Abandoned Public Database (PDA)  
 SEI Improved (2007)  
 Abandoned Rail Lines  
 Existing Rail Lines

**Municipal Boundaries**  
 City Township Boundaries  
 State Park Statutory Boundary  
 Additional Lot Area

2007 MNPUC Citizen's Review - Alternative P1  
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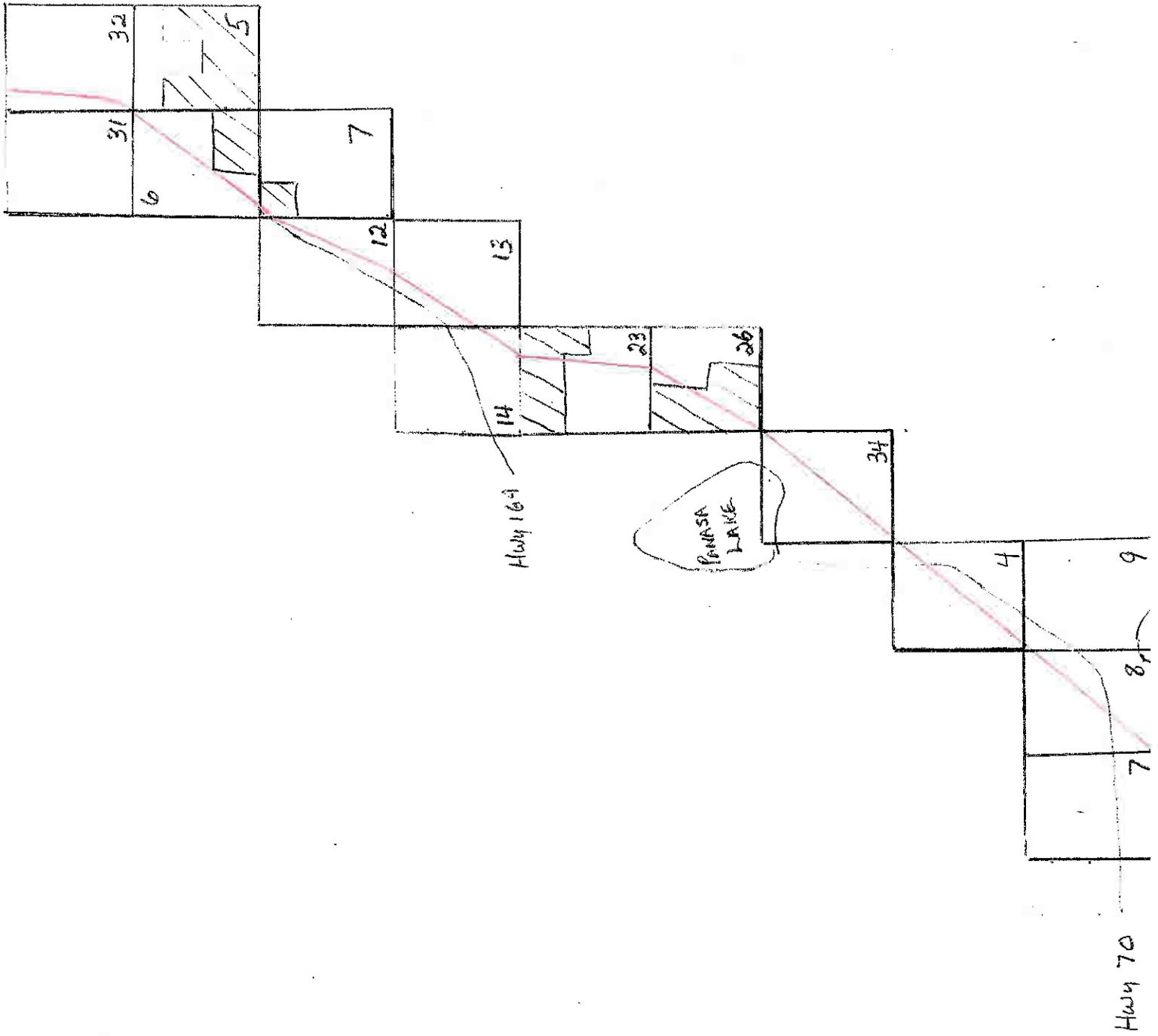
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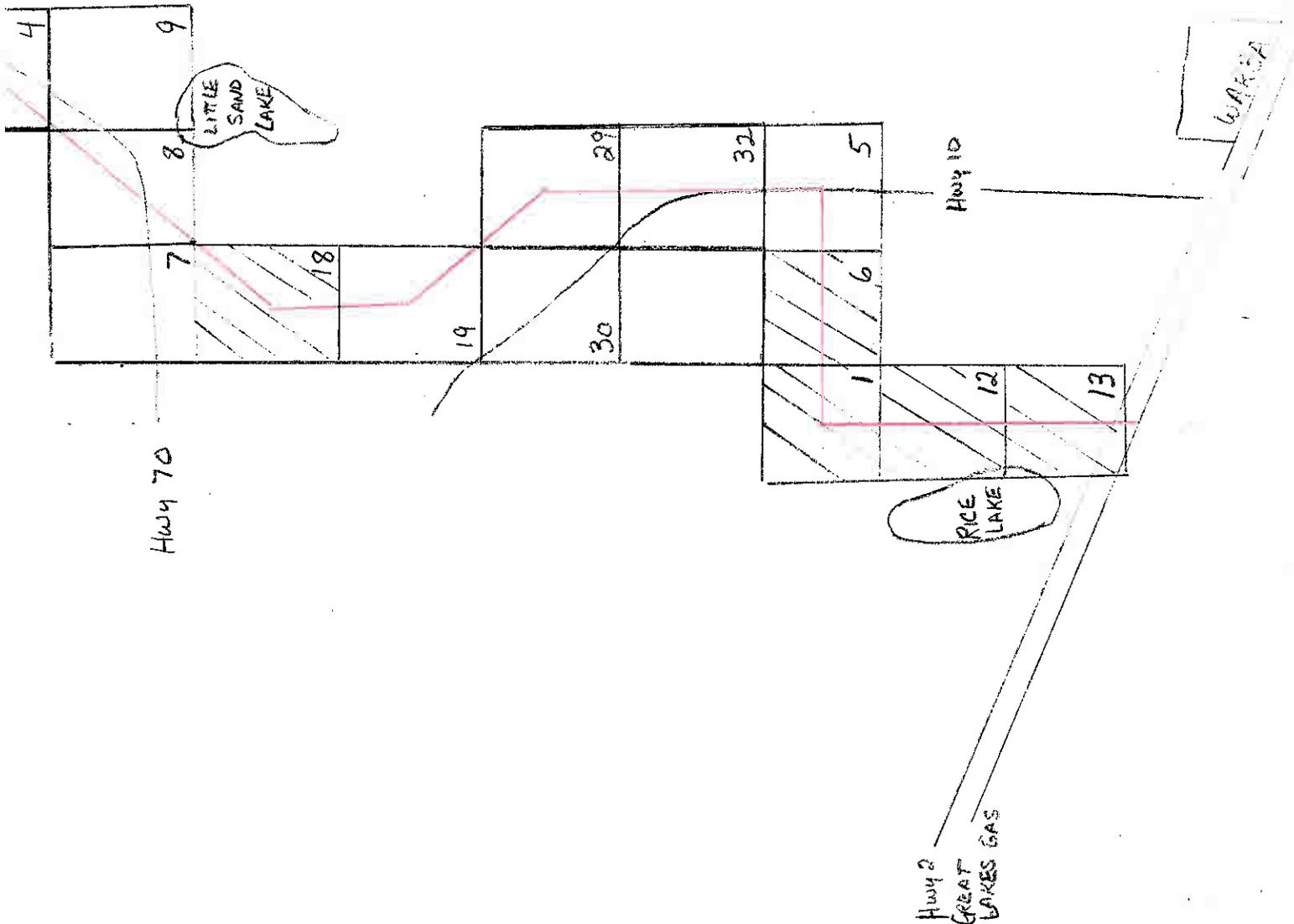
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 City Township Boundaries  
 State Park Statutory Boundary  
 Additional Lot Area

2007 MNPUC Citizen's Review - Alternative P1  
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**MNDOT Roadmap**  
 Roadside Attribution  
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NASHWAUK (E) SECTION 32

LONE PINE TOWNSHIP SECTIONS 7, 6 & 5

GREENWAY TOWNSHIP SECTIONS 34, 26, 23, 14, 13 & 12

UNORGANIZED TOWNSHIP T55N-R23W SECTIONS 32, 29, 30, 19, 7, 8, 9 & 4

FEELEY TOWNSHIP SECTIONS 6 & 5

BLACKBERRY TOWNSHIP SECTIONS 13, 12 & 1

PROPOSED ROUTE FOLLOWS HWY 2 FROM CENTER OF SECTION 1 TO THE EAST THEN NORTHERLY TO APPROX. SECTION 32

ITASCA COUNTY TAX DISTRICT



## Energy Facility Permitting

85 7<sup>th</sup> Place East, Suite 500  
St. Paul, Minnesota 55101-2198  
1.800.657.3794 / 651.296.4026  
FAX 651.297.7891 TTY 651.297.3067  
<http://energyfacilities.puc.state.mn.us>

September 17, 2007

Ms. Kathleen M. Brennan, Attorney  
McGrann Shea  
800 Nicollet Mall  
Suite 2600  
Minneapolis, Minnesota 55402-7035

RE: Information Request #2  
PUC Docket No. PL E280/GP-06-1481

Dear Ms. Brennan,

I recently received a citizen request for consideration of a potential alternative pipeline route (i.e., Karna Alternative Route). After reviewing the information I believe a “fatal flaw” analysis is warranted to determine if there are any items or issues within this route alternative that would eliminate this route from future consideration (i.e., mining deposit/activity, bedrock geology, prohibited areas, etc).

The Department EFP staff is requesting that the applicant provide a cursory review/evaluation of this potential route alternative for fatal flaws that would eliminate this route from further, detailed consideration (i.e., comparative environmental analysis and public hearing).

I am enclosing the information that was provided to the Department. In your response, please include an illustrated series (i.e., Figures D-19 through D-29) along with your text based analysis for the “Karna Alternative Route.”

The 70 day comment period for the consideration of alternative routes ends on October 15, 2007; in an effort to maintain the proposed schedule, the Department is asking that you submit your response by that date. If you have any comments or concerns, please do not hesitate to contact me.

Sincerely,

William Cole Storm, DOC-EFP

## **Information Request No. 2**

Date of Request: September 17, 2007  
Response Due: October 15, 2007  
Reference: Karna Alternative Route

Provide a cursory review/evaluation of this potential route alternative for fatal flaws that would eliminate this route from further, detailed consideration (i.e., comparative environmental analysis and public hearing). . . . Please include an illustrated series (i.e. Figures D-19 through D-29 along with your text based analysis for the "Karna Alternative Route."

**Response:** This basic route alternative was examined during the initial consideration of routes as part of the Itasca County Infrastructure project. This route was eliminated from further consideration primarily because it would require a gas pipeline to be installed through large wetland complexes found in the southern 2/3 of the route length. Revised map figures D-19-K through D-29-K, depicting the Karna Alternative Route in a dashed pink line, are enclosed.

As presented, the Karna Alternative Route includes 90-degree angle turns, which are difficult to accommodate the pipeline construction radius requirements.

This Karna Alternative Route would greatly increase the number of wetland crossings. And the water, bog, and wetland areas depicted on map figure D-28-K are deeper than the burial depth of the pipeline and present up to three feet of standing water when examined. Although in principle it may be technically possible to build through small wetland areas, gas pipeline construction through large wetland areas is more difficult and expensive than seeking higher and drier construction corridors. Future maintenance and access to the pipeline will not be practical. There are existing HVTL lines going through these areas. These lines are overhead and have the transmission structures located on islands of high ground 600 to 800 feet apart.

In addition, near the middle part of the Karna Alternative Route there are large concentrations of existing homes near the areas where the proposed route intersects highways 10, 70, 12 and 169 . Please note that it is difficult to see on the map figure D-20-K and other figures the residential homes for the Karna Alternative Route because the pink line overlaps the red dots. Please see response number four for specific house count information.

Finally, another extreme engineering problem with this route is the technical issue of bringing the pipeline where Highway 65 passes through downtown Nashwauk because of the high density of residential units. At a point just north of Nashwauk, there is a narrow isthmus of land between the current active and future mining ore reserves. A blast buffer zone of 2,000 feet from a high pressure natural gas pipeline is required by mining practices. Blast safety for iron ore mining would be compromised. Also, an existing 300 foot deep Hawkins mine pit on the western edge is not passable to the west of the City.

As a practical matter, the blast zone restriction, coupled with the narrow passage by the Hawkins mine pit, present a fatal flaw.

Response By: Clarence Kadrmas\*  
Company: Utilities Management Company  
Telephone: (952) 797-6455

\* Maps/aerial photos provided by SEH.





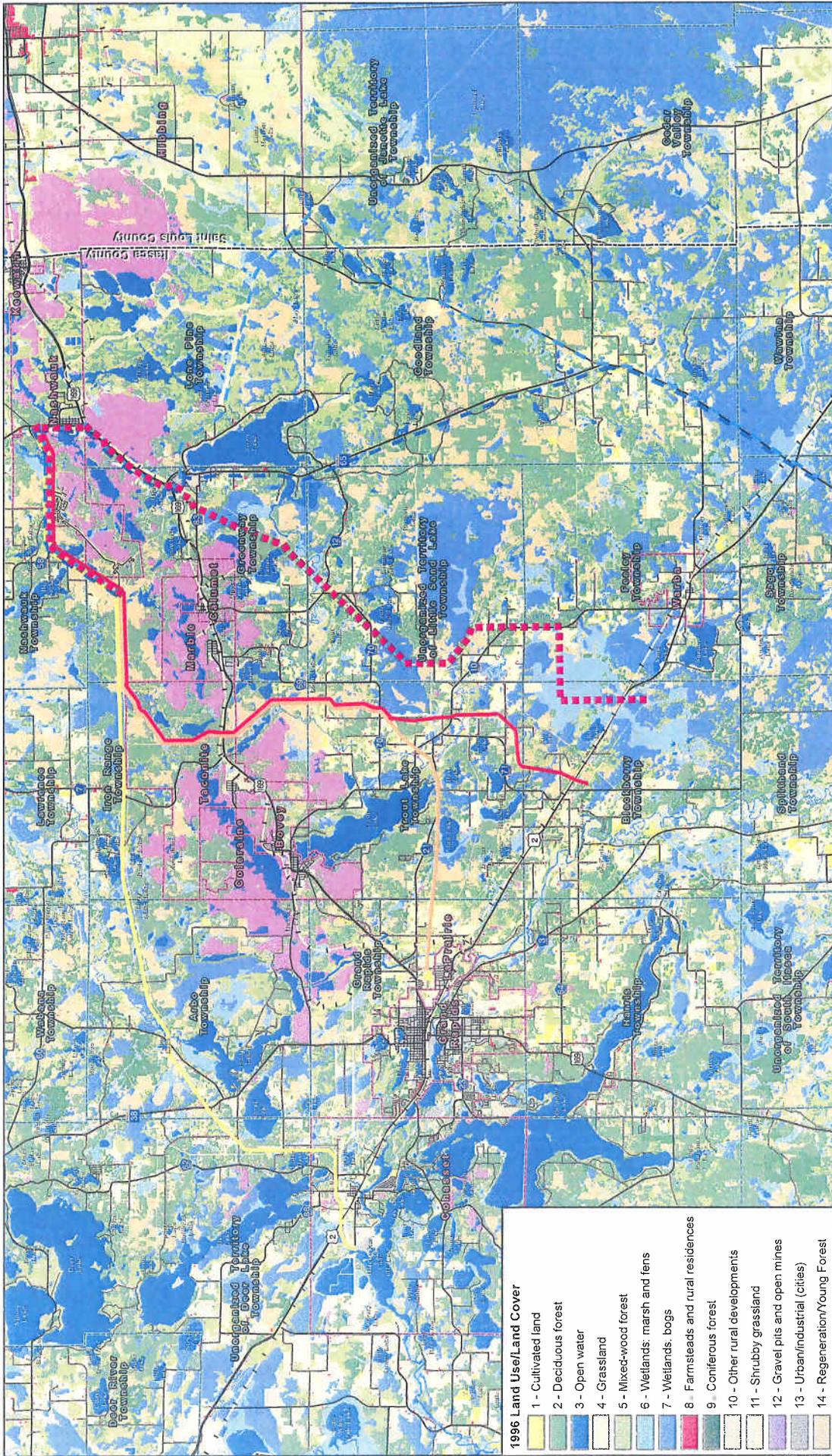












**1996 Land Use/Land Cover**

- 1 - Cultivated land
- 2 - Deciduous forest
- 3 - Open water
- 4 - Grassland
- 5 - Mixed-wood forest
- 6 - Wetlands: marsh and fens
- 7 - Wetlands, bogs
- 8 - Farmsteads and rural residences
- 9 - Coniferous forest
- 10 - Other rural developments
- 11 - Shrubby grassland
- 12 - Gravel pits and open mines
- 13 - Urban/Industrial (cities)
- 14 - Regeneration/Young Forest



3535 VANDARE CENTER DR.  
ST. PAUL, MN 55110  
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FAX (651) 895-2055  
WWW.SETHINC.COM

**City of Nashauk  
Public Utilities  
Commission**

July 2007

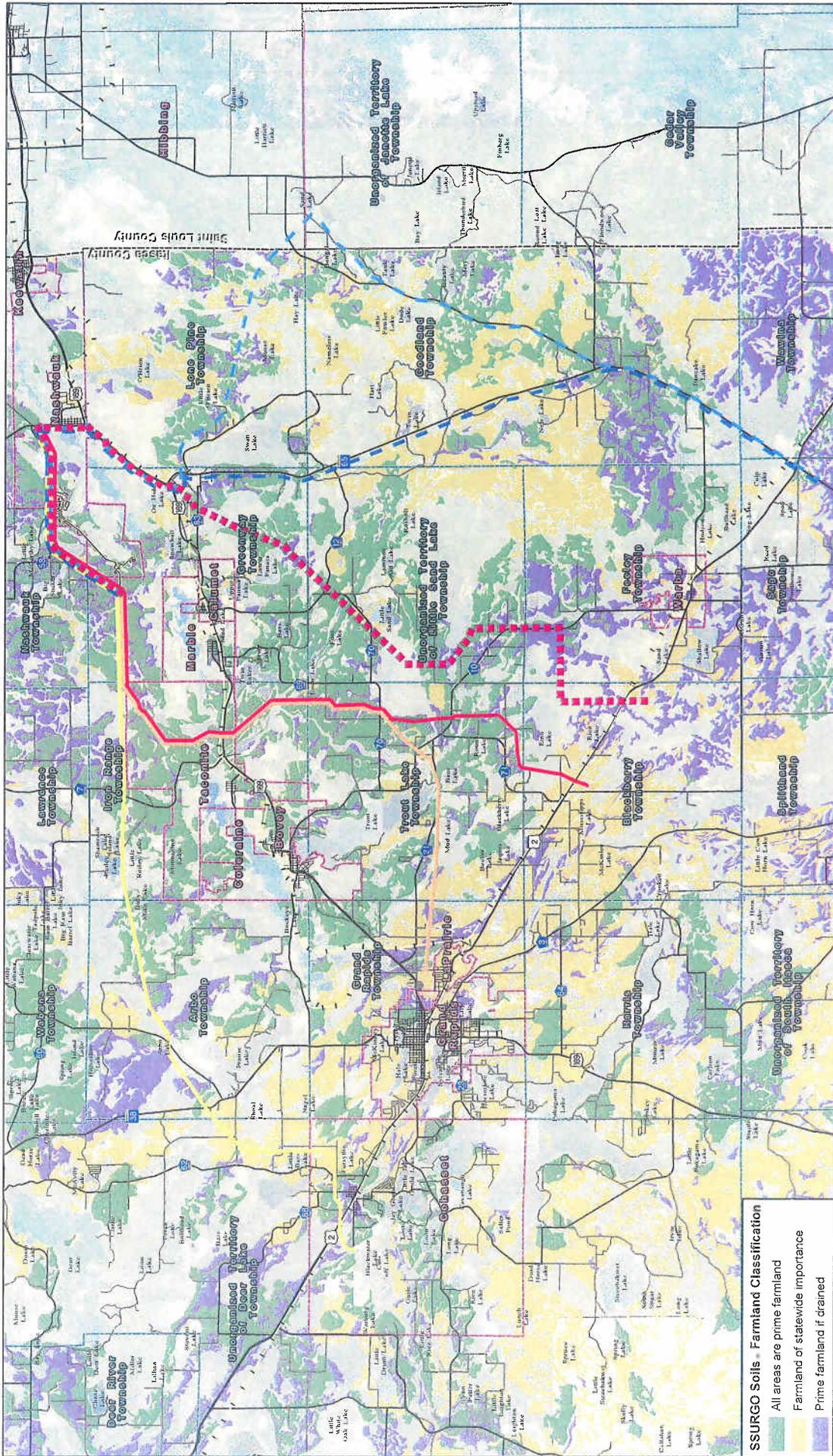
**Legend**

- 2005 Itasca County/MSI - Alternative 1 (05-ICMSI-1)
- 2005 Itasca County/MSI - Alternative 2 (05-ICMSI-2)
- 2005 Itasca County/MSI - Alternative 3 (05-ICMSI-3)
- 2007 NPLUC/MNPUC Citizen's Route - Alternative P1 (07-MNPUC-P1)
- 2007 NPLUC/MNPUC Citizen's Route - Alternative P2 (07-MNPUC-P2)
- KARNA Proposed Route Alternative (27.62 Mi.)
- MN Steel Plant Layout
- Existing Roads
- Existing Rail Lines
- Municipal Boundaries
- Civil Township Boundaries
- County Boundaries

Source: Itasca County, USGS, Minnesota Remote Sensing Center, MNDOT, Brierley, MN State, and SEH © 2007 SEH

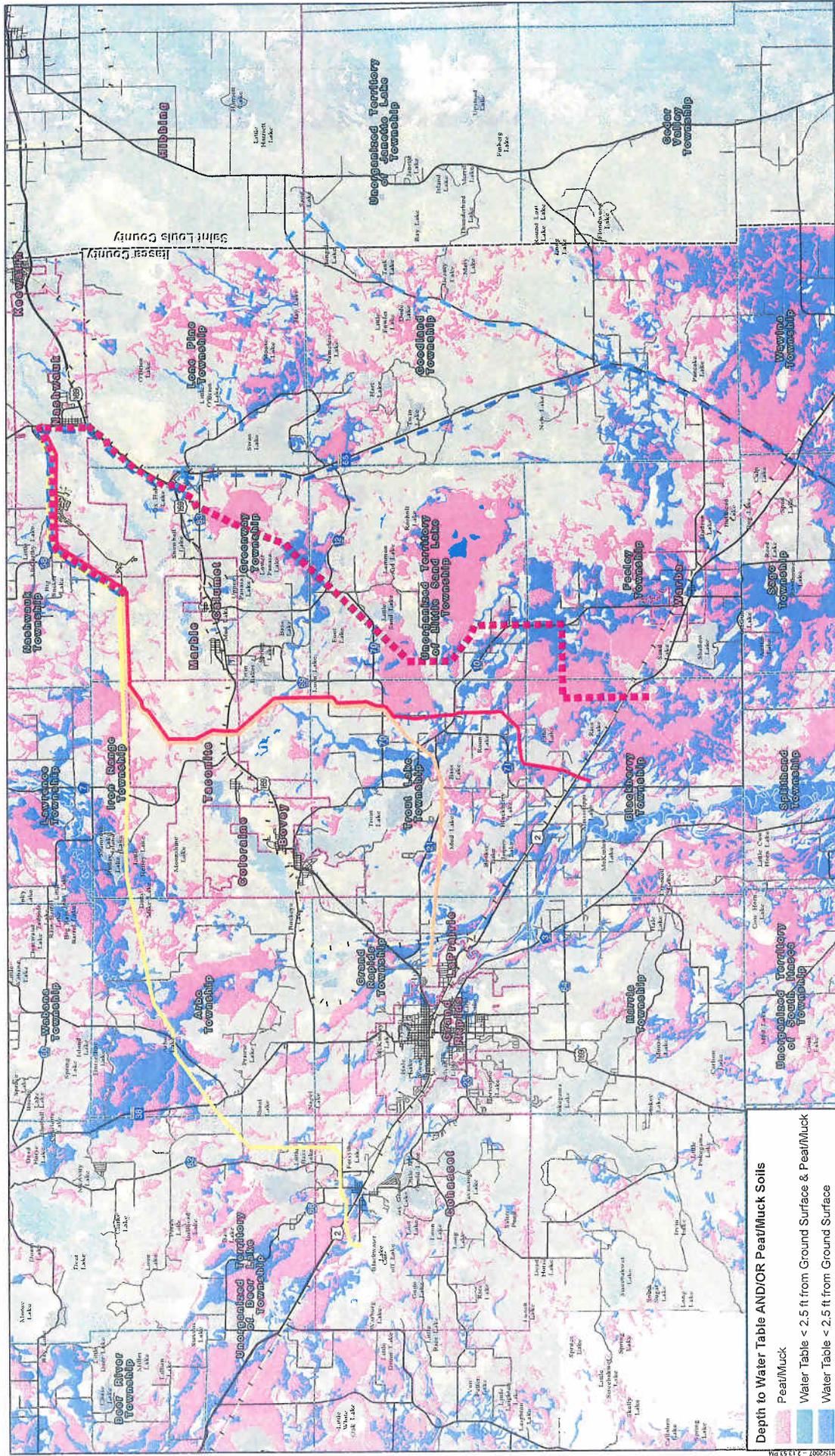
**Nashauk-Blackberry  
Pipeline Project  
1996 Landsat TM  
Land Use/Land Cover**

**D-26-K**



<p><b>SSURGO Soils - Farmland Classification</b></p> <ul style="list-style-type: none"> <li>All areas are prime farmland</li> <li>Farmland of statewide importance</li> <li>Prime farmland if drained</li> </ul>	<p><b>City of Mashwauk Public Utilities Commission</b></p> <p>July 2007</p>	<p><b>Mashwauk-Blackberry Pipeline Project</b></p> <p><b>Soils Farmland Classification</b></p>	<p>3335 VADIAN'S CENTER DR. ST. PAUL, MN 55110 PHONE 651-492-2400 FAX 651-492-2400 WATTS 651-492-2055 www.suinc.com</p>	<p><b>Legend</b></p> <ul style="list-style-type: none"> <li>2005 Itasca County/MSI - Alternative 1 (05-ICMS1-1)</li> <li>2005 Itasca County/MSI - Alternative 2 (05-ICMS1-2)</li> <li>2005 Itasca County/MSI - Alternative 3 (05-ICMS1-3)</li> <li>2007 NPLUC/MNPUC Citizen's Routes - Alternative P1 (07-MNPUC-P1)</li> <li>2007 NPLUC/MNPUC Citizen's Routes - Alternative P2 (07-MNPUC-P2)</li> <li>KARMA Proposed Route Alternative (27.62 Mi.)</li> <li>MN Steel Plant Layout</li> <li>Existing Roads</li> <li>Existing Rail Lines</li> <li>Municipal Boundaries</li> <li>Civil Township Boundaries</li> <li>County Boundaries</li> </ul>	<p>Source: MAP 2003 &amp; 2005; Itasca County, USGS, USGS-NRCS, MNDOT Bar, MN State, and SU. © 2007 SU.</p>	<p>Itasca County - South Coordinate System</p>
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D-27-K



3325 VANDERBILT CENTER DR.  
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FAX: (651) 480-2100  
WWW.SEH.COM

City of Nashwauk  
Public Utilities  
Commission  
July 2007

**Depth to Water Table AND/OR Peat/Muck Soils**  
 Peat/Muck  
 Water Table < 2.5 ft from Ground Surface & Peat/Muck  
 Water Table < 2.5 ft from Ground Surface

**Legend**  
 2005 Itasca County/MSI - Alternative 1 (05-ICNISI-1)  
 2005 Itasca County/MSI - Alternative 2 (05-ICNISI-2)  
 2005 Itasca County/MSI - Alternative 3 (05-ICNISI-3)

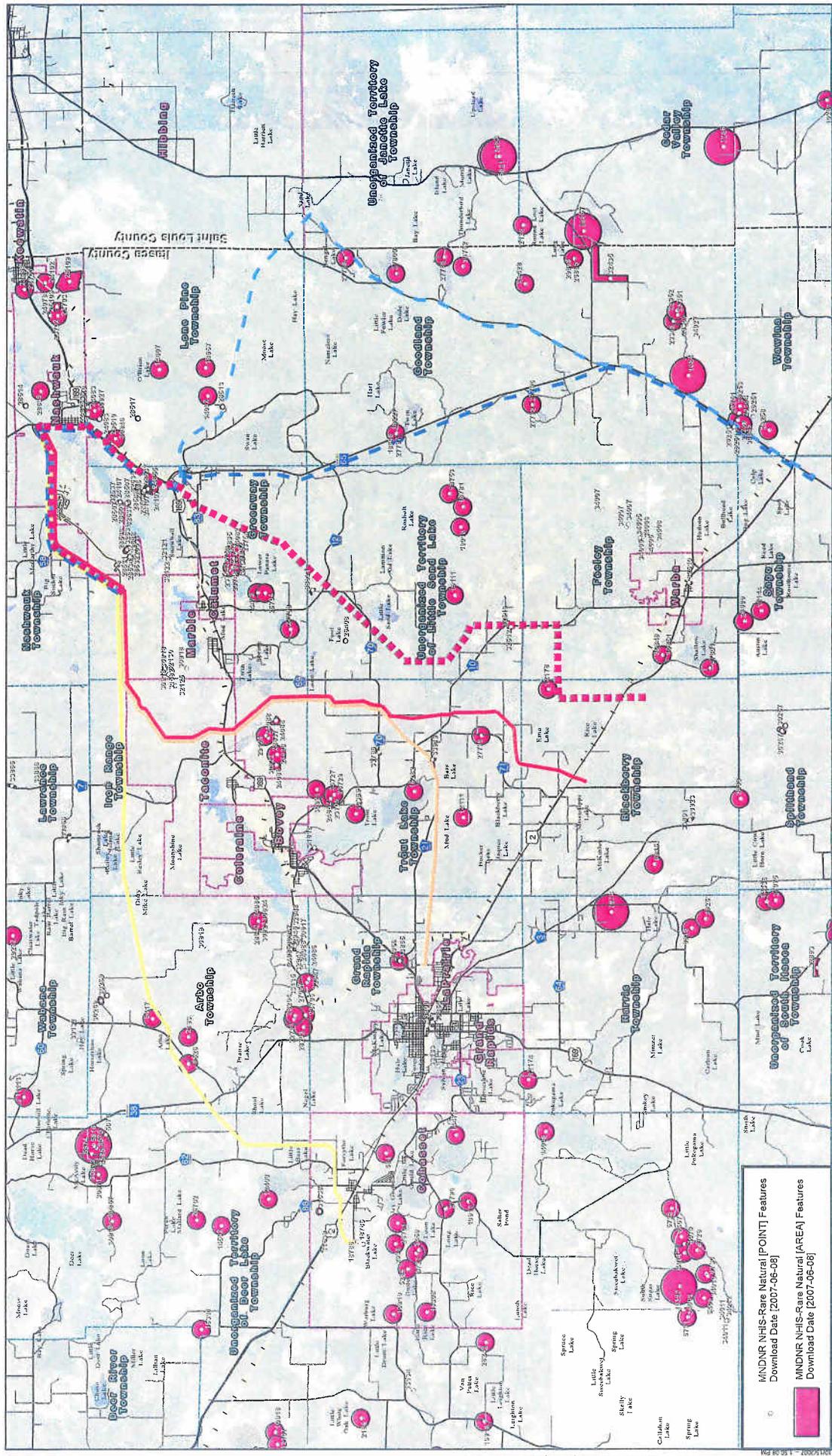
2007 NPUC/INPUC Citizen's Route - Alternative P1 (07-ANPUC-P1)  
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 KARNA Proposed Route Alternative (27.62 Mi.)

MUN Steel Plant Layout  
 Existing Roads  
 Existing Rail Lines  
 Municipal Boundaries  
 Civil Township Boundaries  
 County Boundaries

**Nashwauk-Blackberry Pipeline Project**  
**Soils and Groundwater Conditions Impacting Construction**



D-28-K



**City of Nashwauck  
Public Utilities  
Commission**

3535 MADRAS CENTER DR.  
ST. PAUL, MN 55110  
PHONE: (612) 490-2100  
FAX: (612) 490-2100  
WWW.CITYOFNASHWAUCK.COM

July 2007

**Legend**

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- 2007 NPUC/MNPUC Citizen's Route - Alternative P2 (07-MNPUC-P2)
- 2007 NPUC/MNPUC Citizen's Route - Alternative P3 (07-MNPUC-P3)
- 2005 Itasca County/MSI - Alternative 1 (05-ICMS1-1)
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**Nashwauck-Blackberry Pipeline Project**

**MNDNR-Natural Heritage Program Rare Natural Features**

MNDNR NHIS-Rare Natural [POINT] Features  
Download Date [2007-06-08]

MNDNR NHIS-Rare Natural [AREA] Features  
Download Date [2007-06-08]

Scale: NAD 83 UTM Zone 18N  
Scale: 1:50,000

Itasca County - South Coordinate System

**D-29-K**