

APPENDIX D6

Rail Traffic

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East Range

Current traffic: **12 trains/day** on the DMIR line

Mesabi Nugget (Module 1):

Product hauled away on private line, do not consider for MEP cumulative impacts
400,000 tpy western coal, 150,000 tpy limestone on DMIR line

Assume 119 tons/car and 115 cars/train, train returns empty

Added traffic: 82 trains/yr → **2 trains/day** (maximum; same for 3 modules as 1)

PolyMet:

Two 30-car trains/wk for limestone → **2 trains/day** maximum

Mesaba One and Two would need a maximum of 4 trains/day (for all cases here, a round trip is considered 2 trains/day). The maximum cumulative train traffic on this line is 20 trains/day, and it is clear from the calculations above that this is a conservative estimate.

West Range

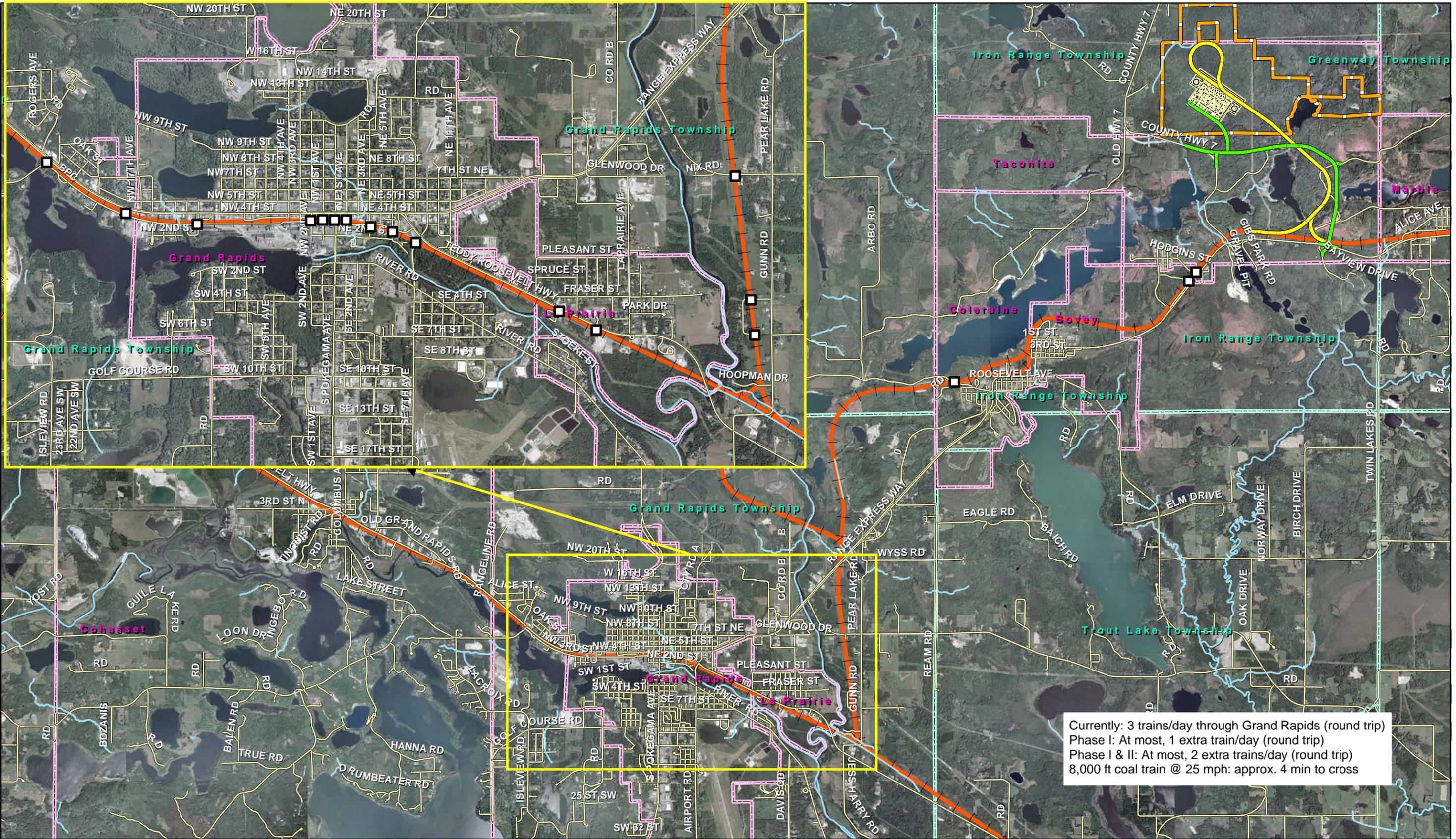
Rail traffic impacts in Grand Rapids have already been addressed in the permit applications, so I will focus on the segment of rail between Gunn, MN and the proposed site. It is currently inoperable due to rising water levels in the Canisteo Mine Pit, which have weakened the support along the section of track near Bovey, MN. Restoration of service to the line will require dropping of the water levels significantly, followed by reinforcement of the bank along which the rail travels. This has been anticipated, as the permit application describes lowering the water level before plant operation begins. Until this restoration occurs, train traffic from the west to the plant site must be routed south-east to Cloquet, then north and back west by Nashwauk to the plant site.

Current traffic: 0 trains/day now, 4 trains/day 90's-2001, much higher traffic in the 70's

MSI: The local train from Grand Rapids to Superior, WI would likely resume, with up to **4 trains/day**. This could accommodate MSI's needs of 70-90 cars per day (10 incoming, the balance outgoing).

Mesaba One and Two would need a maximum of 4 trains/day, so the maximum cumulative train traffic expected would be 8 trains/day on the segment identified above.

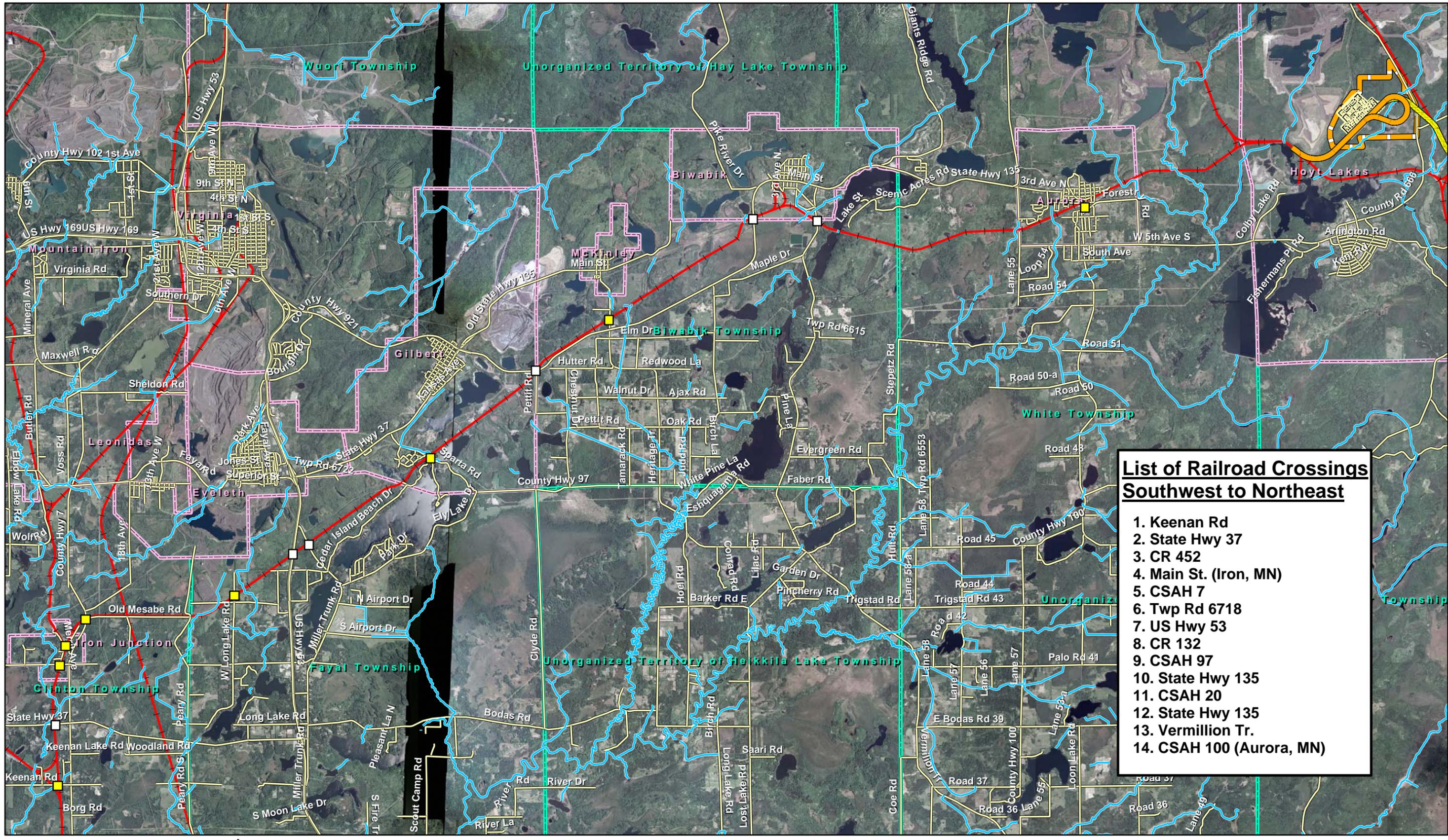
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Currently: 3 trains/day through Grand Rapids (round trip)
 Phase I: At most, 1 extra train/day (round trip)
 Phase I & II: At most, 2 extra trains/day (round trip)
 8,000 ft coal train @ 25 mph: approx. 4 min to cross

<p>Excelsior Energy Inc.</p> <hr/> <p>Mesaba Energy Project <small>Energy, Innovation, and Economic Development for Minnesota</small></p> <p>11100 Wayzata Boulevard Suite 305 Minnetonka, MN 55305 <small>Phone 952.847.2360 Fax 952.847.2373</small></p>	<p>West Range Site</p> <hr/> <p>July 2006</p>	<p>Legend</p> <table border="0"> <tr> <td> Footprint and Buffer Land</td> <td> Geographic Names</td> <td> Existing Roads</td> <td> Railroad Crossings (excludes bridges)</td> </tr> <tr> <td> Plant Layout</td> <td> Municipal Boundaries</td> <td> Existing Railroads</td> <td></td> </tr> <tr> <td> Proposed Roads</td> <td> Civil Township</td> <td> Streams</td> <td></td> </tr> <tr> <td> Rail Alt 1-A</td> <td></td> <td></td> <td></td> </tr> </table>	Footprint and Buffer Land	Geographic Names	Existing Roads	Railroad Crossings (excludes bridges)	Plant Layout	Municipal Boundaries	Existing Railroads		Proposed Roads	Civil Township	Streams		Rail Alt 1-A				<p>Railroad Crossings</p> <p>Itasca County - South Coordinate System</p> <p>0 2,000 Feet</p> <p><small>Source: Itasca County, MNDNR, Mn/DOT, USGS, Fluor, Excelsior Energy, and SEH. © 2006 SEH</small></p>
Footprint and Buffer Land	Geographic Names	Existing Roads	Railroad Crossings (excludes bridges)																
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- ### List of Railroad Crossings Southwest to Northeast
1. Keenan Rd
 2. State Hwy 37
 3. CR 452
 4. Main St. (Iron, MN)
 5. CSAH 7
 6. Twp Rd 6718
 7. US Hwy 53
 8. CR 132
 9. CSAH 97
 10. State Hwy 135
 11. CSAH 20
 12. State Hwy 135
 13. Vermillion Tr.
 14. CSAH 100 (Aurora, MN)

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East Range

September 2006

Legend

Footprint and Buffer Land	Existing Roads	Rail Alternatives	Railroad crossing with bridge
Plant Layout	Existing Railroads	Proposed Rail Alt 1	Railroad crossing at grade
Municipal Boundaries	Streams	Rail Alternatives	
Civil Township Boundaries		Proposed Rail Alt 2	

**East Range
 RR Crossings**

St. Louis County - Central
 Coordinate System

0 800
 Feet

Source: USDA 2003 DOQQs, MNDNR, Mn/DOT, USGS, Fluor, Excelsior Energy, and SEH.
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