Appendix D

Project Maps

Project Maps

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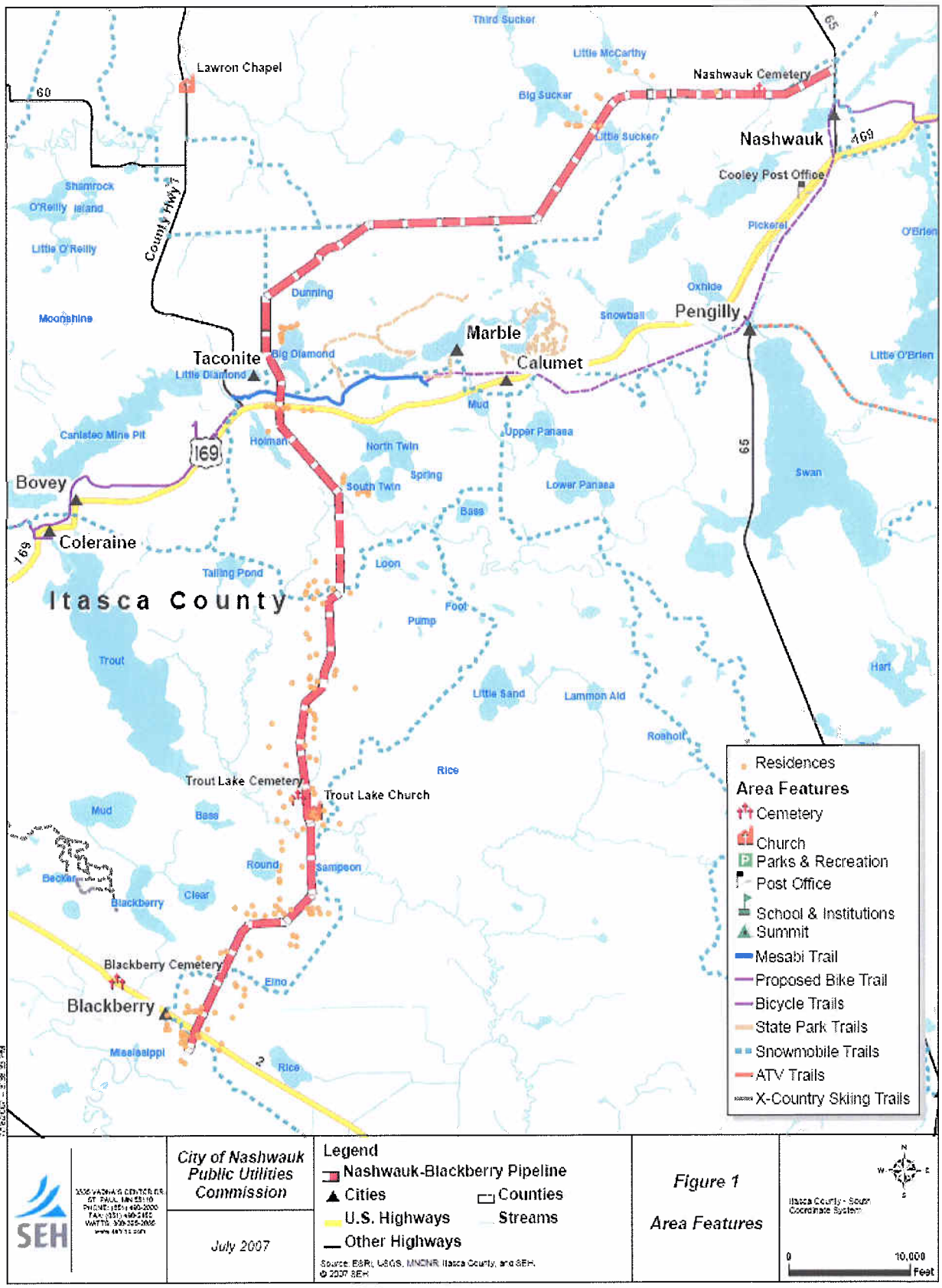

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July 2007

Legend
Nashwauk-Blackberry Pipeline
Cities
Counties
U.S. Highways
Streams
Other Highways

Source: ESRI, USGS, MNDNR, Itasca County, and SEH.
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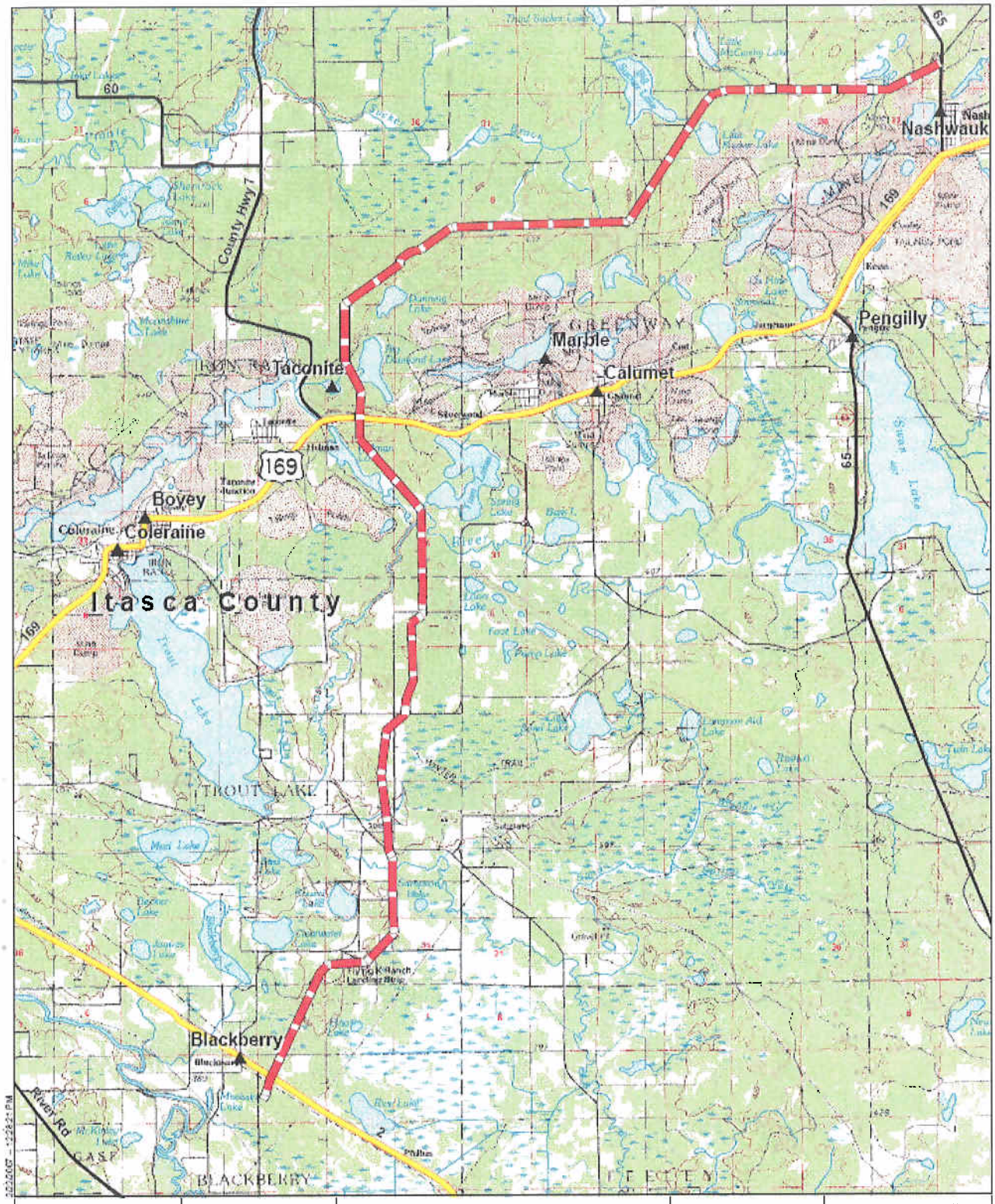
Figure 1

Area Features

Itasca County - South Coordinate System

0 10,000 Feet



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City of Nashwauk Public Utilities Commission

February 2007

Legend
- Cities
- Nashwauk-Blackberry Pipeline
- Counties
- U.S. Highways
- Other Highways

Source: ESRI, USGS, Itasca County, and SEH.
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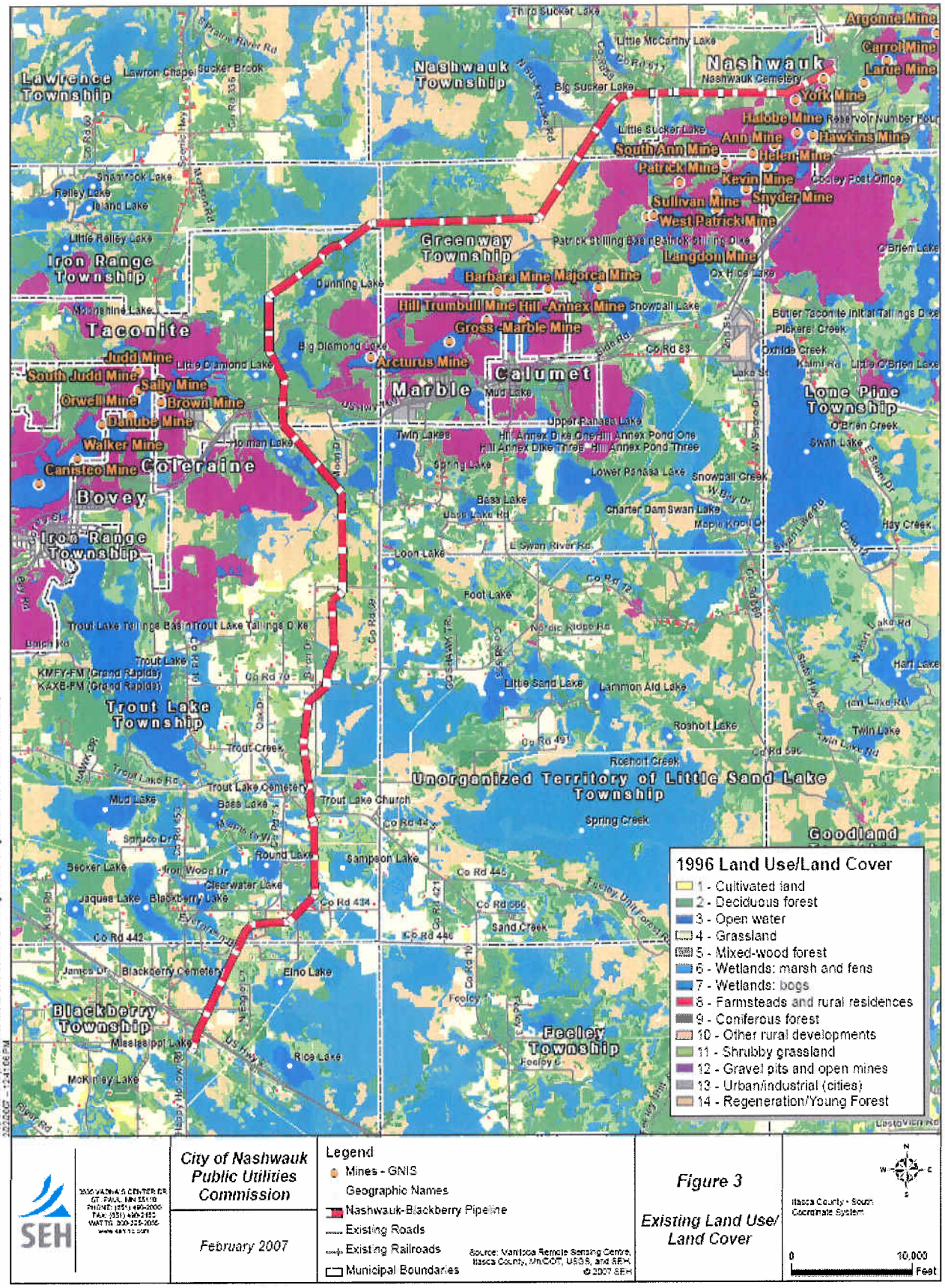
Figure 2

Project Vicinity Map

Itasca County - South
Coordinate System

0 10,000 Feet



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City of Nashwauk Public Utilities Commission

February 2007

Legend
- Mines - GNIS
- Geographic Names
- Nashwauk-Blackberry Pipeline
- Existing Roads
- Existing Railroads
- Municipal Boundaries

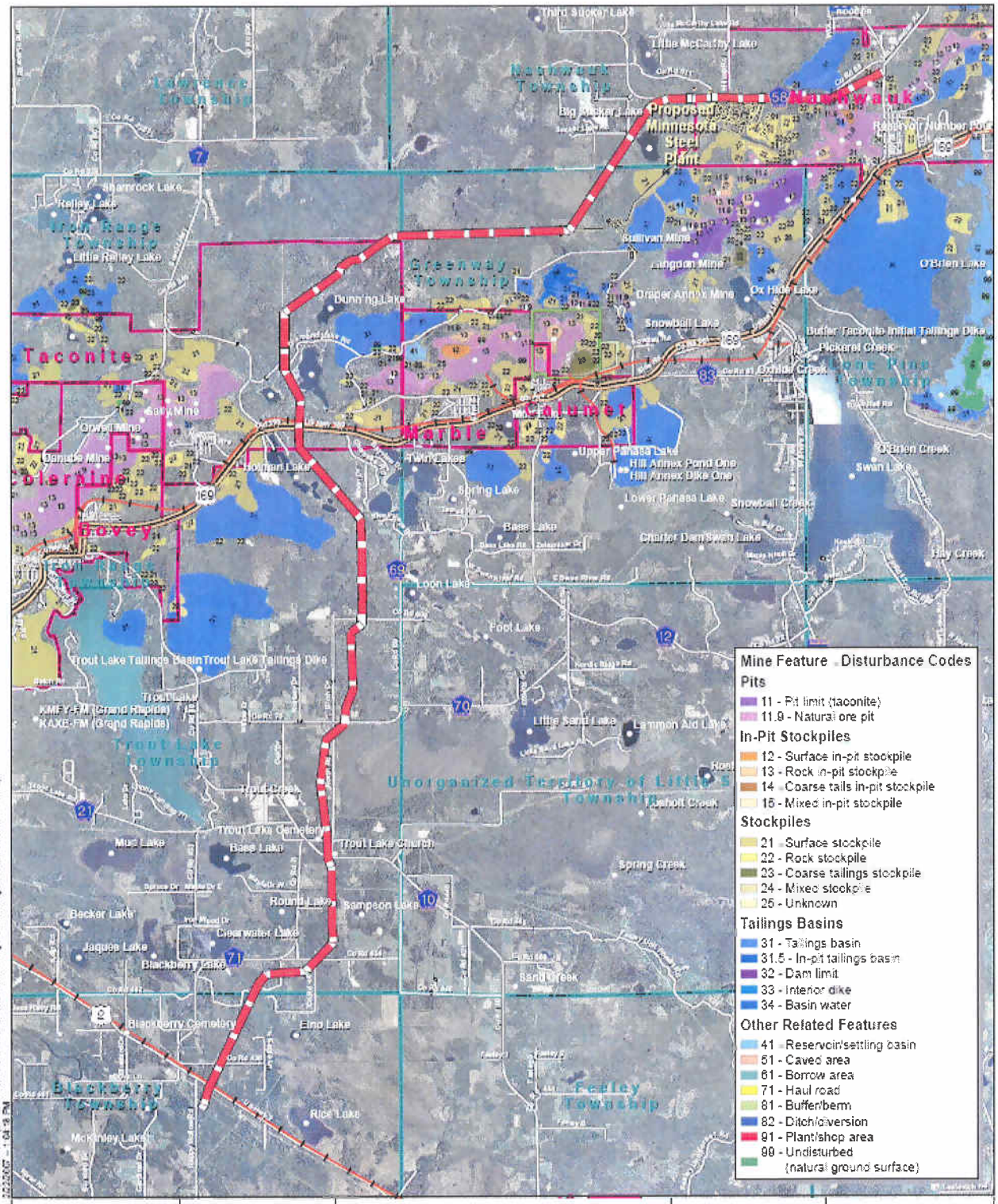
Source: Vantosa Remote Sensing Centre, Itasca County, MnDOT, USGS, and SEH.
© 2007 SEH

Figure 3

Existing Land Use/ Land Cover

Itasca County - South Coordinate System

0 10,000 Feet



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ST. PAUL, MN 55110
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FAX: (651) 490-2150
WATTS: 800-325-2065
www.sehinc.com

City of Nashwauk Public Utilities Commission

February 2007

Legend

- Nashwauk-Blackberry Pipeline
- MN Steel Plant Layout
- Municipal Boundaries
- Civil Township Boundaries
- Additional Park Lease Area
- State Park Statutory Boundary
- Geographic Names
- Existing Railroads
- U.S. 169
- Existing Roads

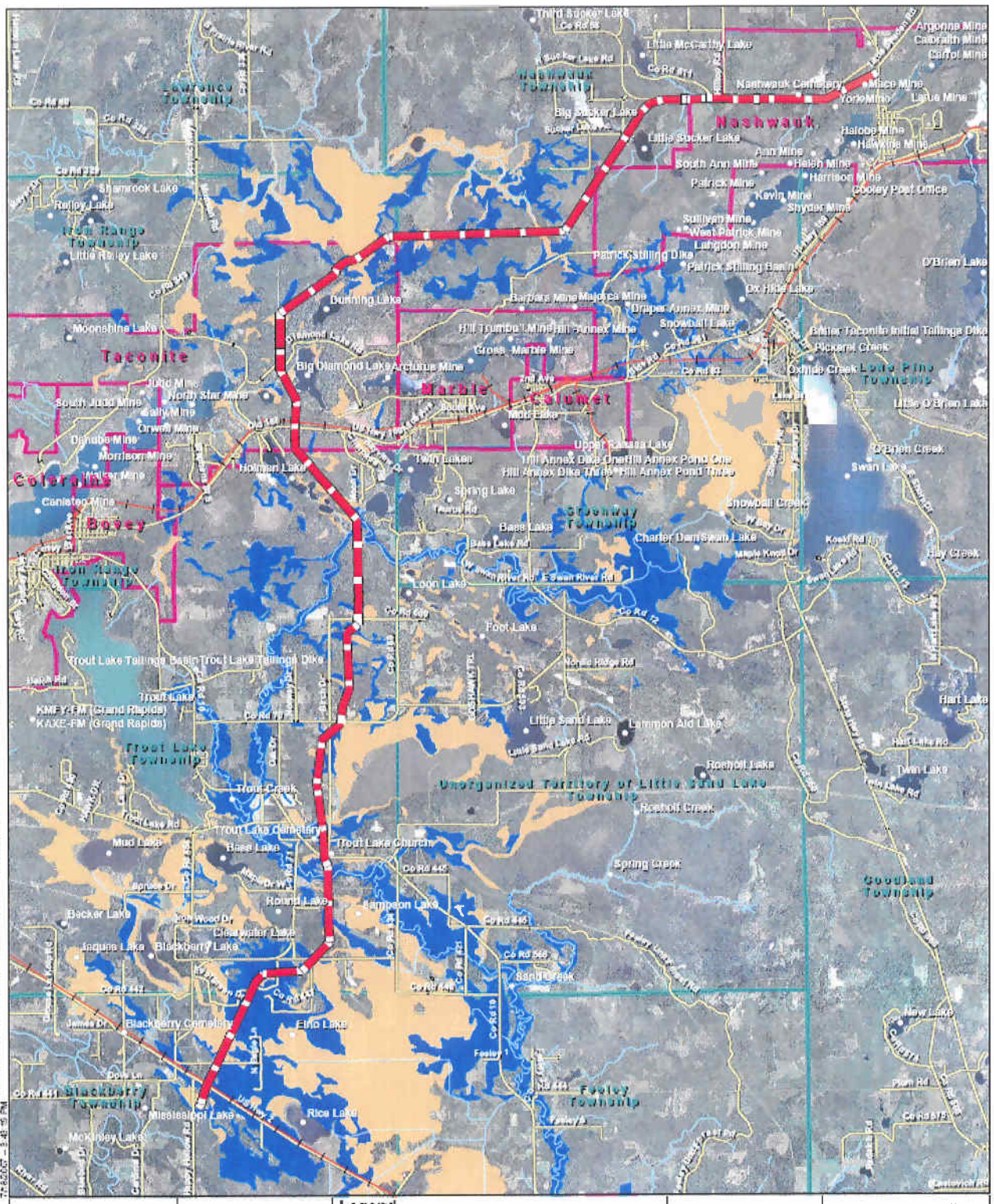
Source: USDA 2003 DOQQs, Itasca County, MN Steel, MnDOT, MNDNR, USGS, and SEH.
© 2007 SEH

Figure 4

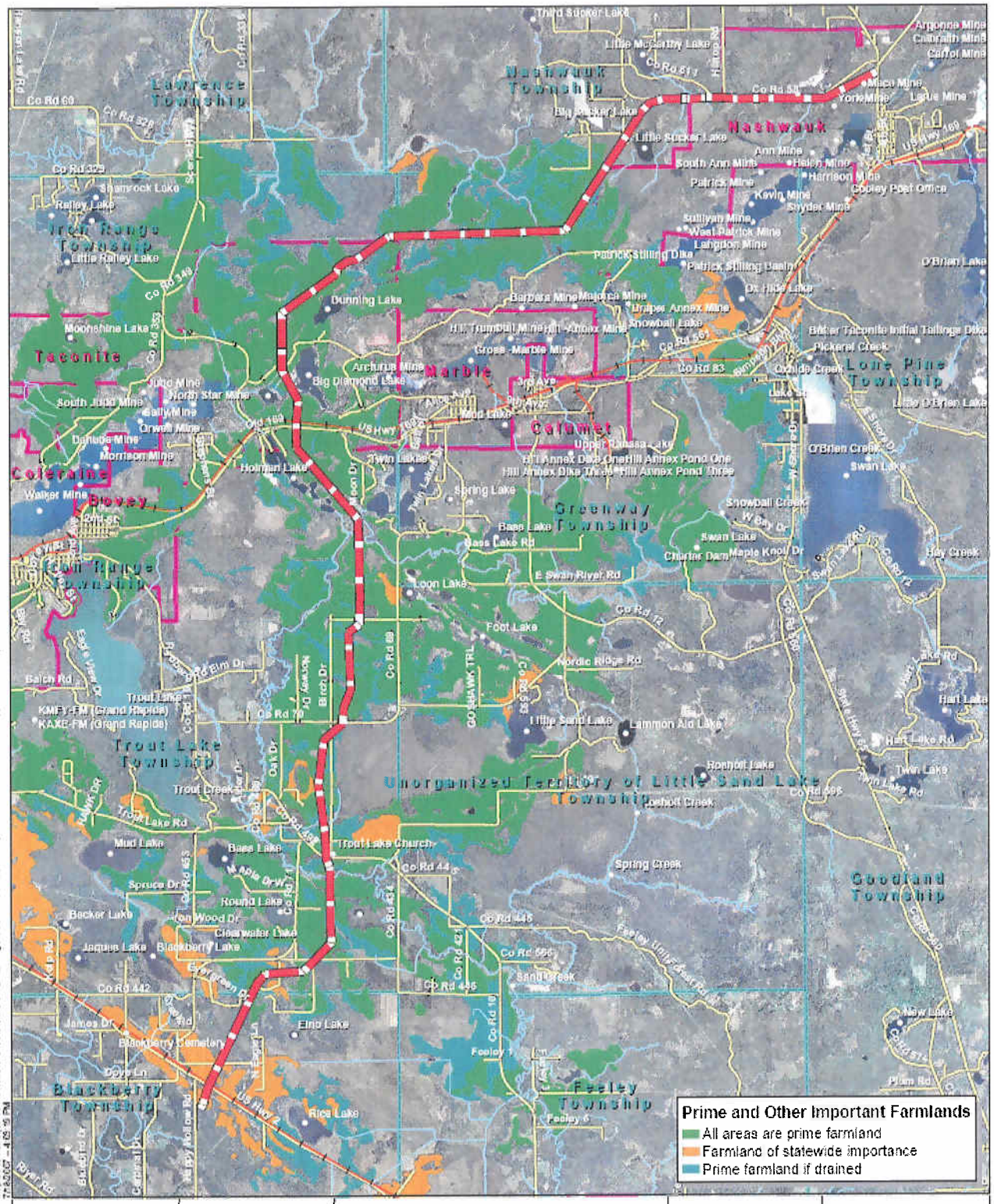
Mining Disturbance

Itasca County - South
Coordinate System

0 10,000 Feet



SEH 3535 VADNAIS CENTER DR ST. PAUL, MN 55110 PHONE: (651) 490-2000 FAX: (651) 490-2150 WATTS: 800-325-2065 www.sehinc.com	*City of Nashwauk Public Utilities Commission* *July 2007*	**Legend** Nashwauk-Blackberry Pipeline Water Table within 3ft of Ground Surface and Peat/Muck Water Table within 3ft of Ground Surface Municipal Boundaries Civil Township Boundaries Source: USDA 2003 DOQQs, MNDNR, Itasca County, NRCS, MnDOT, USGS, and SEH © 2007 SEH	*Figure 5* *Soil and Ground Water Conditions Impacting Proposed Construction*	N W E S Itasca County - South Coordinate System 0 10,000 Feet



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City of Nashwauk Public Utilities Commission

July 2007

Legend

- Nashwauk-Blackberry Pipeline
- Streams
- Existing Railroads
- Existing Roads
- Municipal Boundaries
- Civil Township Boundaries

Source: USDA 2003 CCDCS, NRCS, Itasca County, MNDNR, MNDOT, USGS, and SEH
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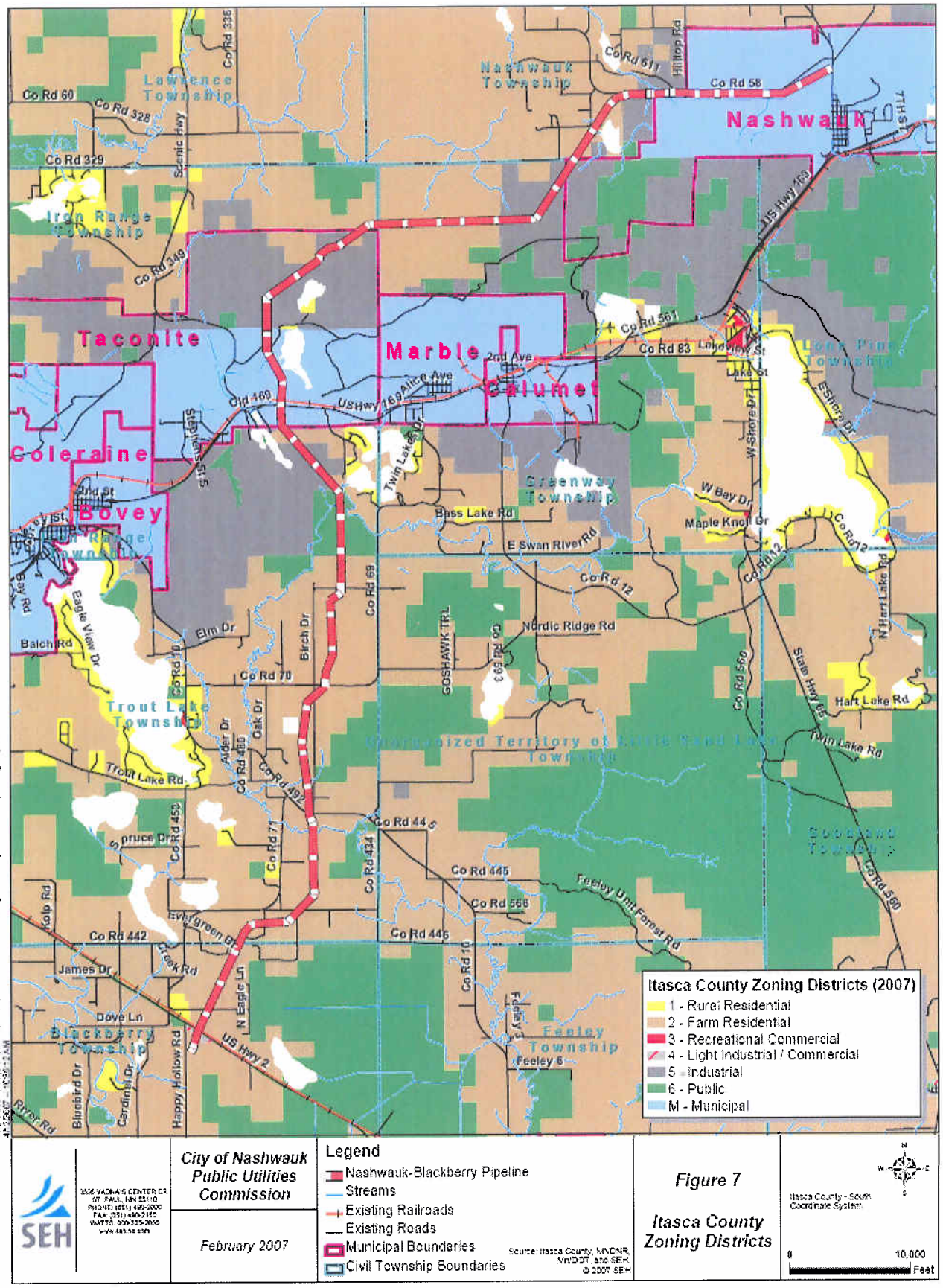
Figure 6

Prime and Other Important Farmlands

Itasca County - South Coordinate System

0 10,000 Feet



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City of Nashwauk Public Utilities Commission

February 2007

Legend
- Nashwauk-Blackberry Pipeline
- Streams
- Existing Railroads
- Existing Roads
- Municipal Boundaries
- Civil Township Boundaries

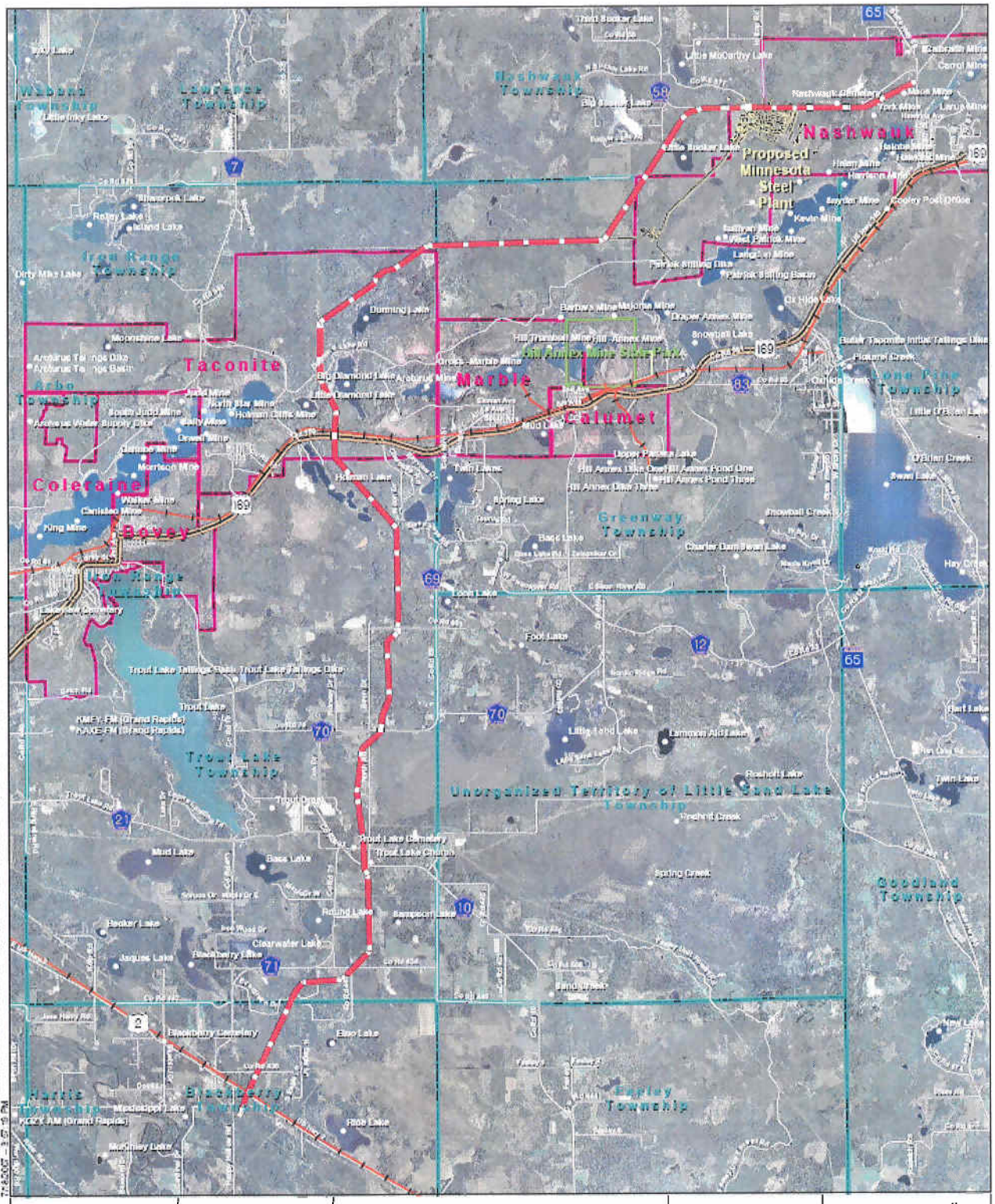
Source: Itasca County, MNDNR, MnDOT, and SEH
© 2007 SEH

Figure 7

Itasca County Zoning Districts

Itasca County - South Coordinate System

0 10,000 Feet



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Legend

- Nashwauk-Blackberry Pipeline
- State Park Statutory Boundary
- Additional Park Lease Area
- Municipal Boundaries
- Civil Township Boundaries

Source: USDA 2003 DOQQs, USGS, MnDOT, MNDNR, MN Steel, Nashwauk Public Utilities Commission, and SEH.
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Figure 8

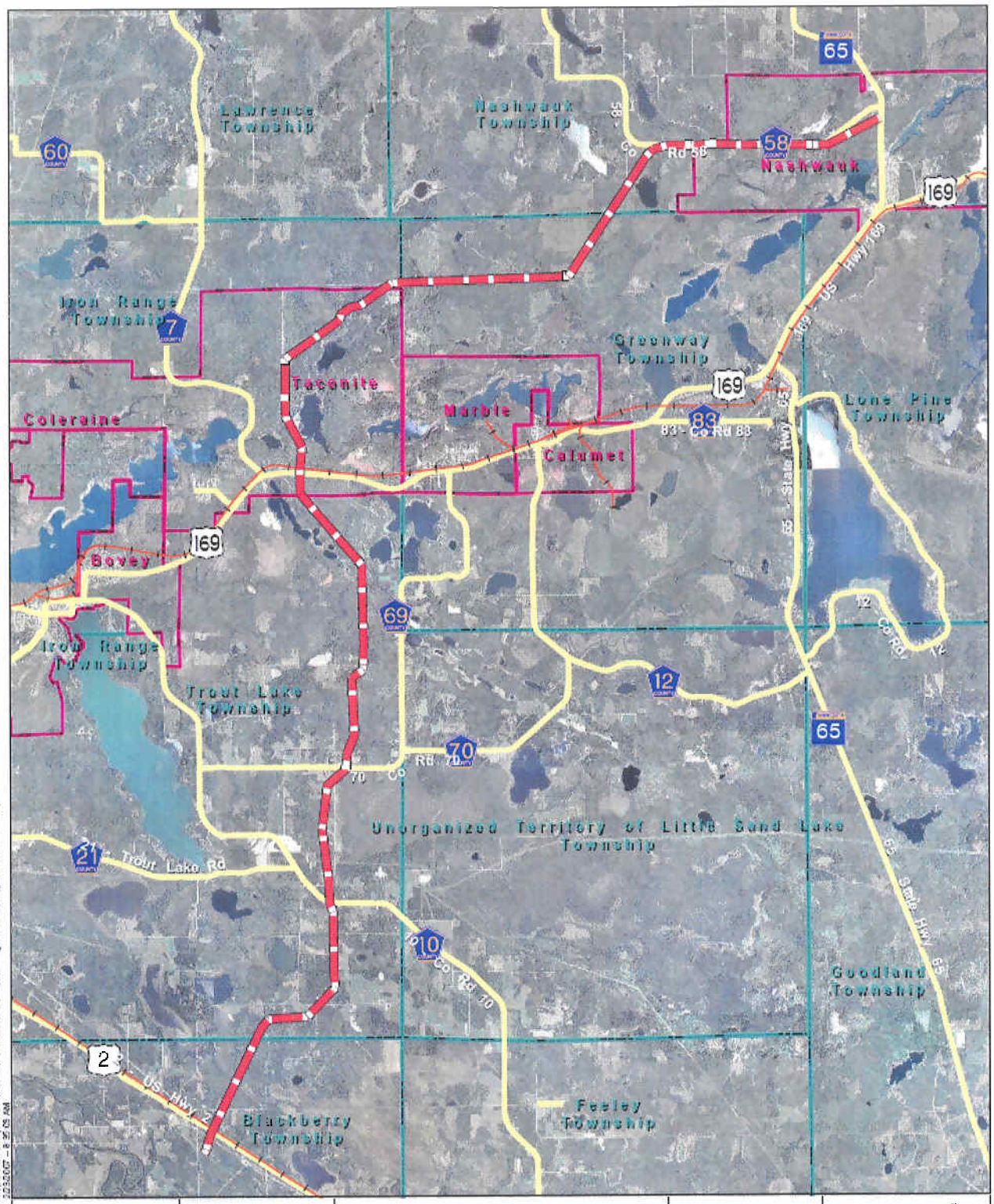
Nashwauk-Blackberry Pipeline Project

Entire Route

Itasca County - South Coordinate System

0 10,000 Feet

SEH 3535 VADNAIS CENTER DR. ST. PAUL, MN 55110 PHONE: (651) 490-2000 FAX: (651) 490-2150 WATTS: 800-326-2068 www.sehinc.com	*City of Nashwauk Public Utilities Commission* *February 2007*	**Legend** Nashwauk-Blackberry Pipeline Mileposts Nashwauk-Blackberry Pipeline Cities Counties U.S. Highways Other Highways Source: ESRI, USGS, and SEH. © 2007 SEH	***Figure 9*** ***Nashwauk-Blackberry Pipeline Project Mileposts***	N W E S Itasca County - South Coordinate System 0 10,000 Feet



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City of Nashwauk Public Utilities Commission

February 2007

Legend
- Nashwauk-Blackberry Pipeline
- Major Roads
- Existing Railroads
- Municipal Boundaries
- Civil Township

Source: USDA 2003 DOQQs, Itasca County, MnDOT, and SEH
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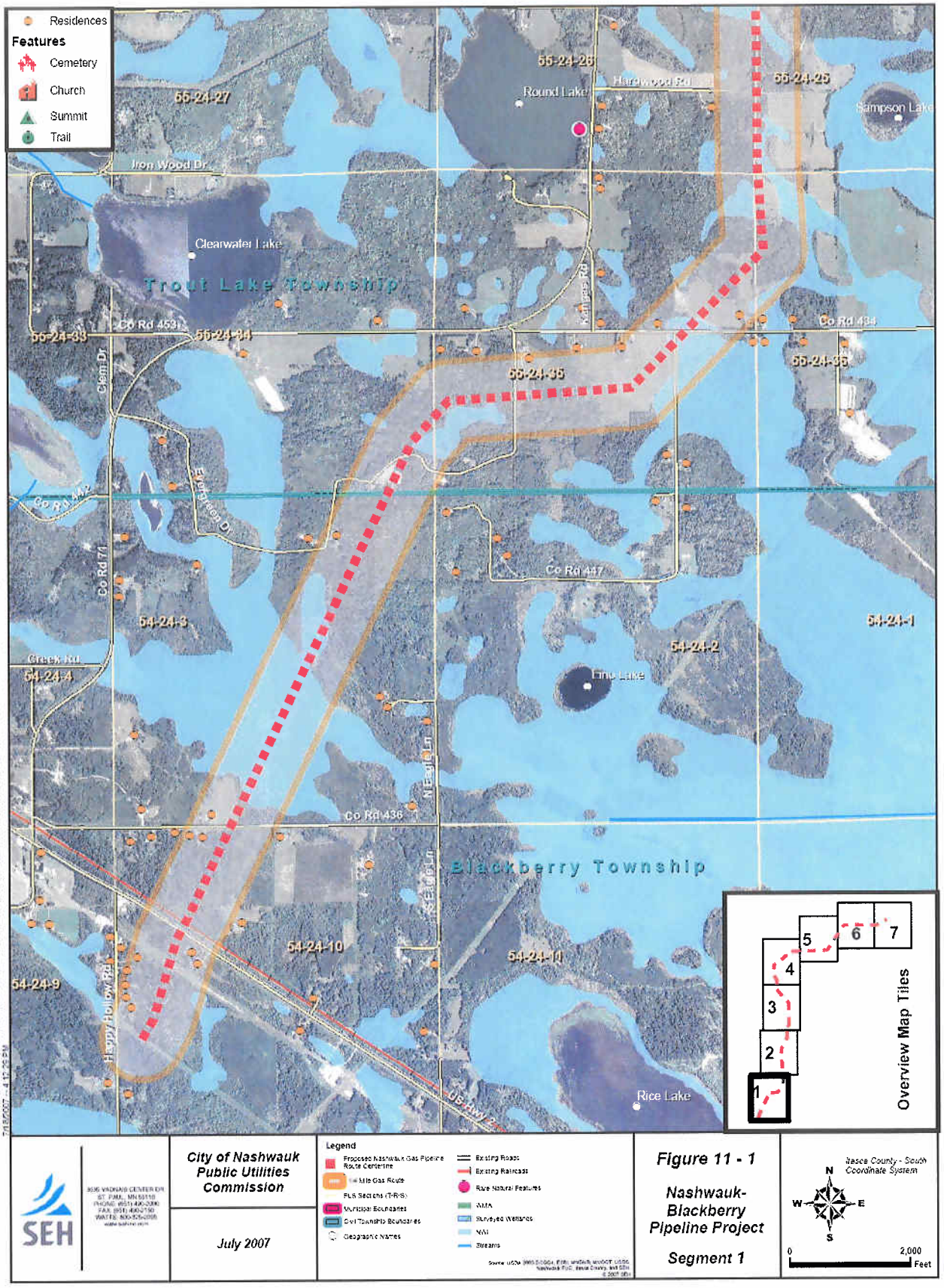
Figure 10

Major Road System

Itasca County - South Coordinate System

0 10,000 Feet


Residences
Features
Cemetery
Church
Summit
Trail
55-24-26
Round Lake
Hardwood Rd
55-24-25
Sampson Lake
55-24-27
Iron Wood Dr
Clearwater Lake
Trout Lake Township
Co Rd 453
55-24-33
55-24-34
Co Rd 434
55-24-35
55-24-36
Clem Dr
Evergreen Dr
Co Rd 442
Co Rd 71
Co Rd 447
54-24-3
54-24-1
54-24-2
Creek Rd
54-24-4
Lime Lake
N Eagle Ln
Co Rd 436
Blackberry Township
S Eagle Ln
54-24-10
54-24-11
54-24-9
Happy Hollow Rd
Rice Lake
US Hwy 2
Overview Map Tiles
1
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7
SEH
City of Nashwauk Public Utilities Commission
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Legend
Proposed Nashwauk Gas Pipeline Route Centerline
1-Mile Gas Route
PLS Sections (T-R-S)
Municipal Boundaries
Civil Township Boundaries
Geographic Names
Existing Roads
Existing Railroads
Rare Natural Features
AMA
Surveyed Wetlands
NWI
Streams
Figure 11 - 1
Nashwauk-Blackberry Pipeline Project
Segment 1
Itasca County - South Coordinate System
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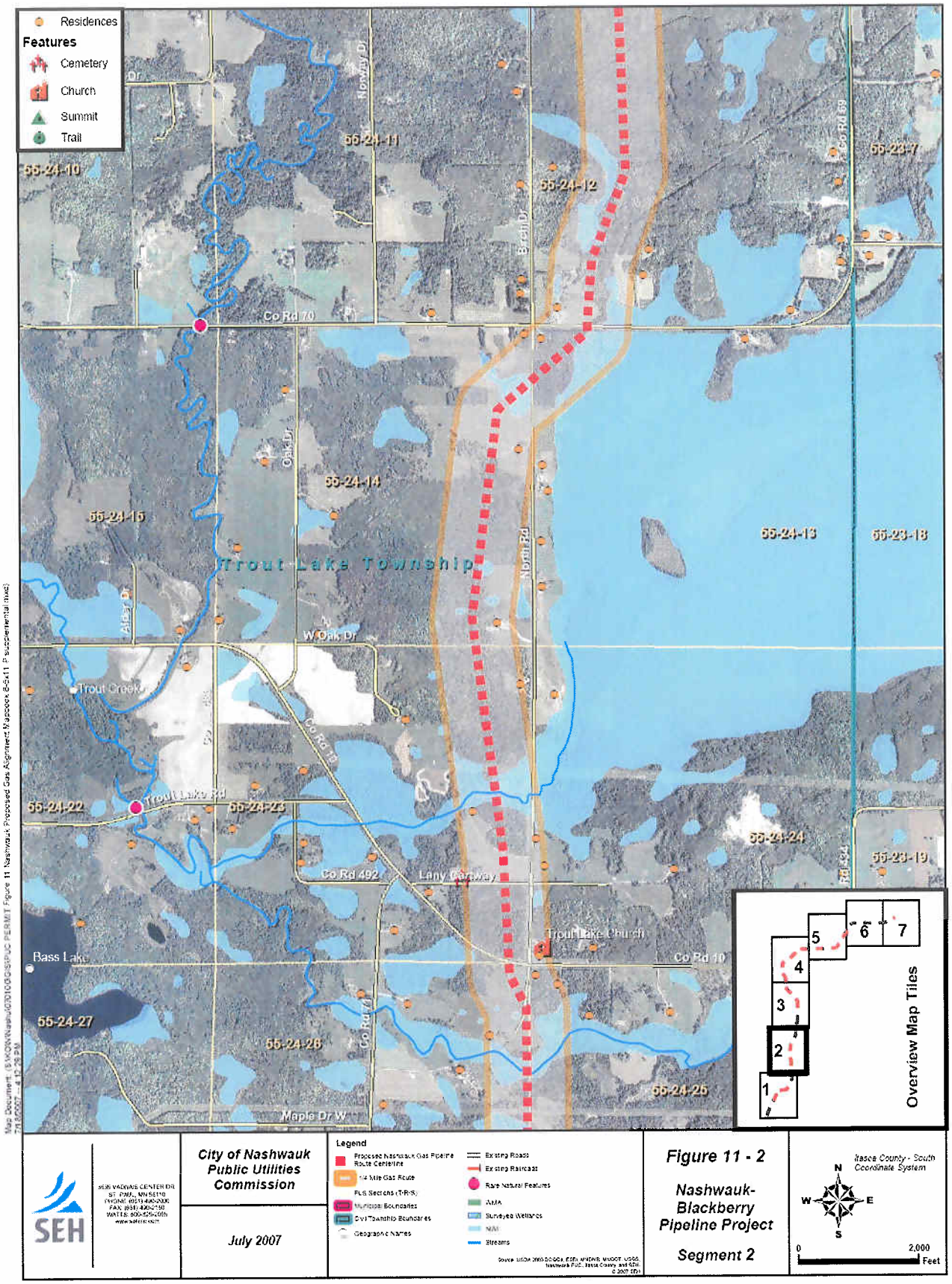
Feet


Residences
Features
Cemetery
Church
Summit
Trail
55-24-10
55-24-11
55-24-12
55-23-7
Co Rd 70
Norway Dr
Birch Dr
Co Rd 69
Oak Dr
55-24-14
55-24-15
55-24-13
55-23-18
Trout Lake Township
North Rd
Alder Dr
W Oak Dr
Trout Creek
Co Rd 73
Trout Lake Rd
55-24-22
55-24-23
55-24-24
55-23-19
Co Rd 492
Lany Caraway
Trout Lake Church
Co Rd 10
Bass Lake
55-24-27
55-24-26
55-24-25
Maple Dr W
Overview Map Tiles
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SEH
City of Nashwauk Public Utilities Commission
July 2007
Legend
Proposed Nashwauk Gas Pipeline Route Centerline
1/4 Mile Gas Route
FLS Sections (T-R-S)
Municipal Boundaries
Civil Township Boundaries
Geographic Names
Existing Roads
Existing Railroads
Rare Natural Features
AMA
Surveyed Wetlands
NWI
Streams
Figure 11 - 2
Nashwauk-Blackberry Pipeline Project
Segment 2
Itasca County - South Coordinate System
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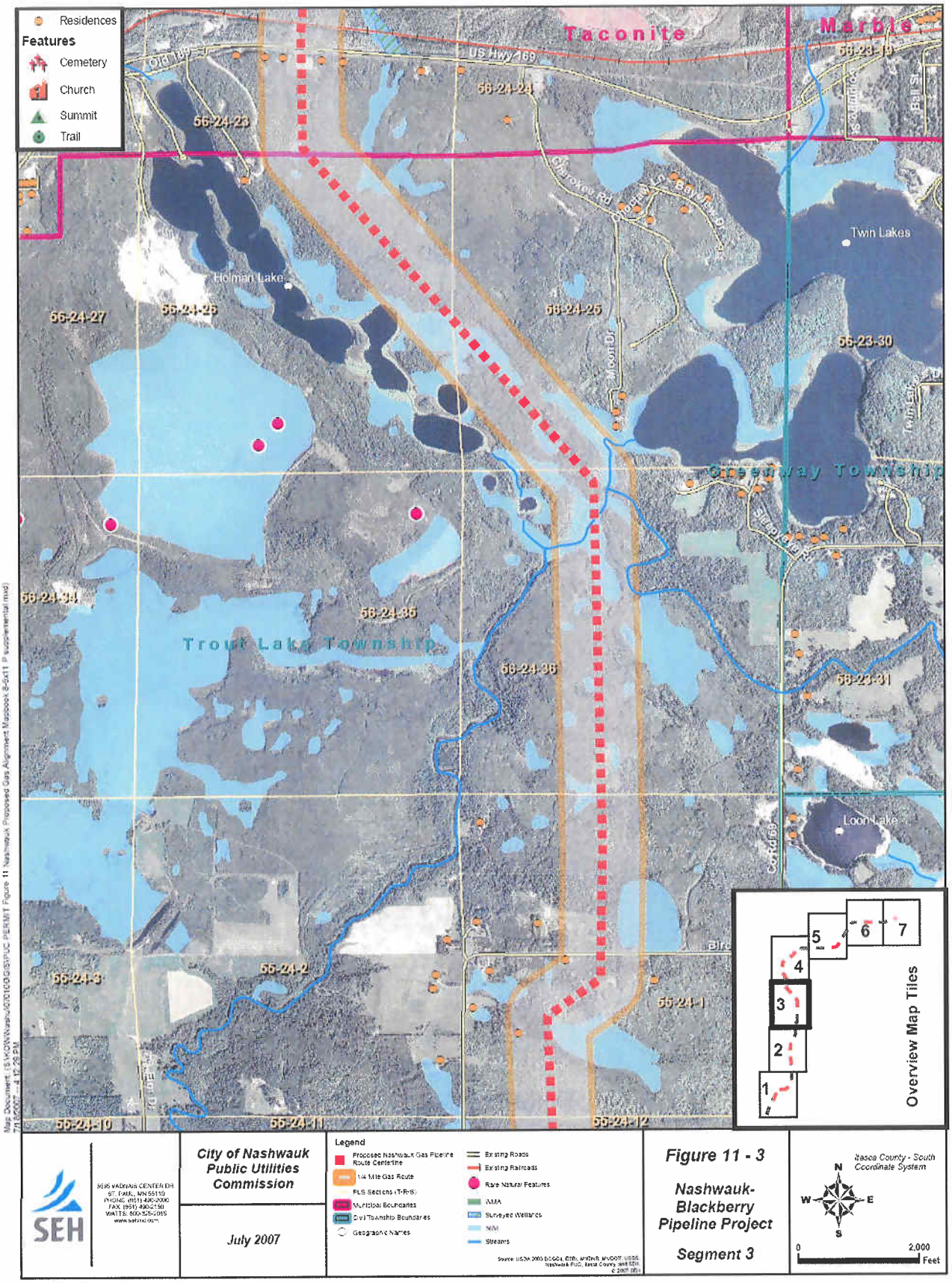
Residences
Features
Cemetery
Church
Summit
Trail
Taconite
Marble
US Hwy 169
Old 169
56-24-23
56-24-24
56-23-19
Cherokee Rd
Bayview Dr
Twin Lakes
Holman Lake
56-24-27
56-24-26
56-24-25
56-23-30
Moon Dr
Greenway Township
Sleepy Eye Rd
56-24-34
56-24-35
Trout Lake Township
56-24-36
56-23-31
Loon Lake
Co Rd 69
56-24-3
56-24-2
56-24-1
56-24-10
56-24-11
56-24-12
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Overview Map Tiles
SEH
City of Nashwauk Public Utilities Commission
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Legend
Proposed Nashwauk Gas Pipeline Route Centerline
1/4 Mile Gas Route
PLS Sections (T-R-S)
Municipal Boundaries
Civil Township Boundaries
Geographic Names
Existing Roads
Existing Railroads
Rare Natural Features
WMA
Surveyed Wetlands
NWI
Streams
Figure 11 - 3
Nashwauk-Blackberry Pipeline Project
Segment 3
Itasca County - South Coordinate System
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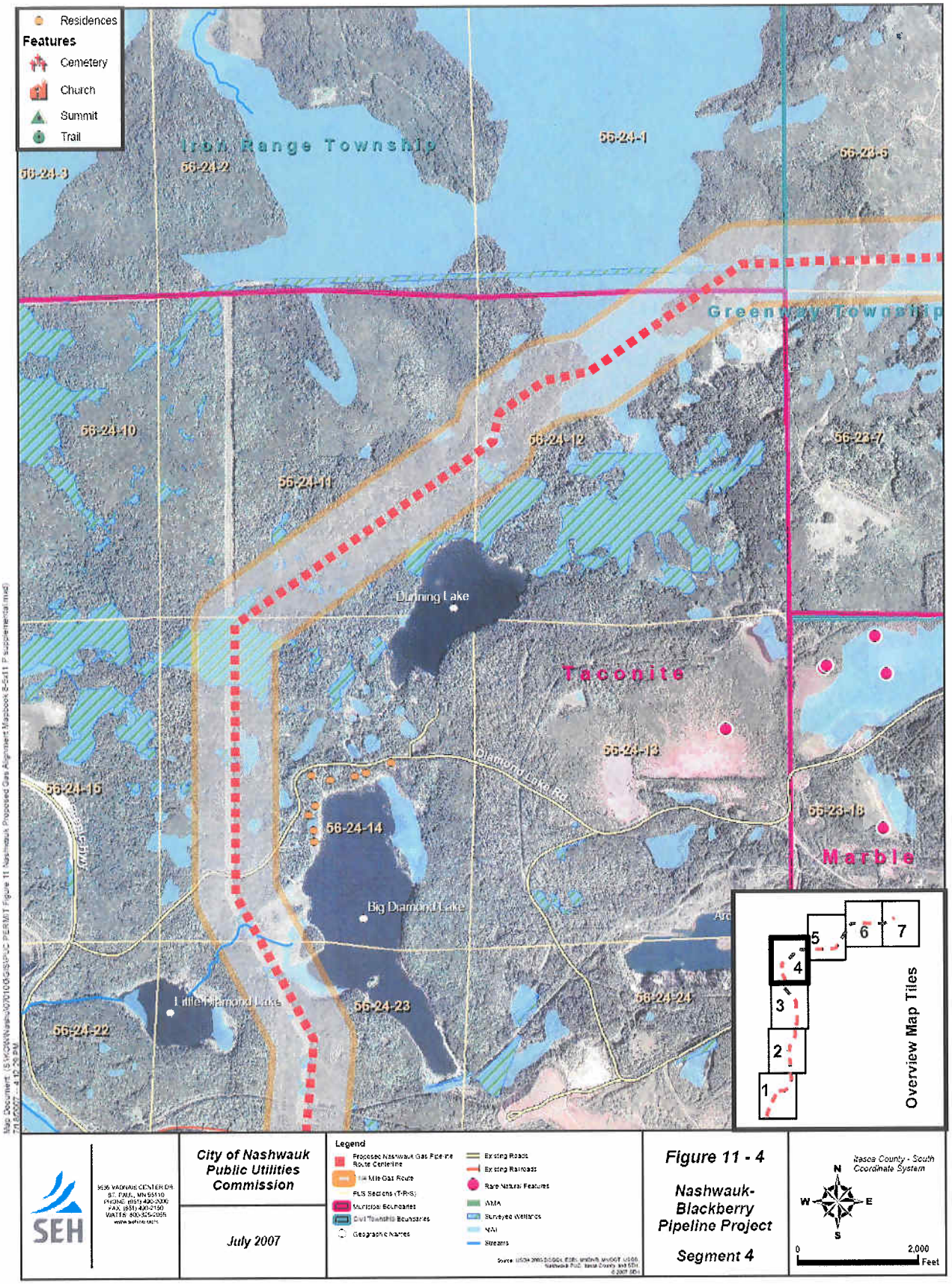
Residences
Features
Cemetery
Church
Summit
Trail
Iron Range Township
Greenway Township
Taconite
Marble
56-24-1
56-24-2
56-24-3
56-23-6
56-24-10
56-24-11
56-24-12
56-23-7
56-24-13
56-24-14
56-24-15
56-23-18
56-24-22
56-24-23
56-24-24
Dunning Lake
Big Diamond Lake
Little Diamond Lake
Diamond Lake Rd
Overview Map Tiles
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City of Nashwauk Public Utilities Commission
July 2007
Legend
Proposed Nashwauk Gas Pipeline Route Centerline
1/4 Mile Gas Route
PLS Sections (T-R-S)
Municipal Boundaries
Civil Township Boundaries
Geographic Names
Existing Roads
Existing Railroads
Rare Natural Features
WMA
Surveyed Wetlands
NWI
Streams
Figure 11 - 4
Nashwauk-Blackberry Pipeline Project
Segment 4
Itasca County - South Coordinate System
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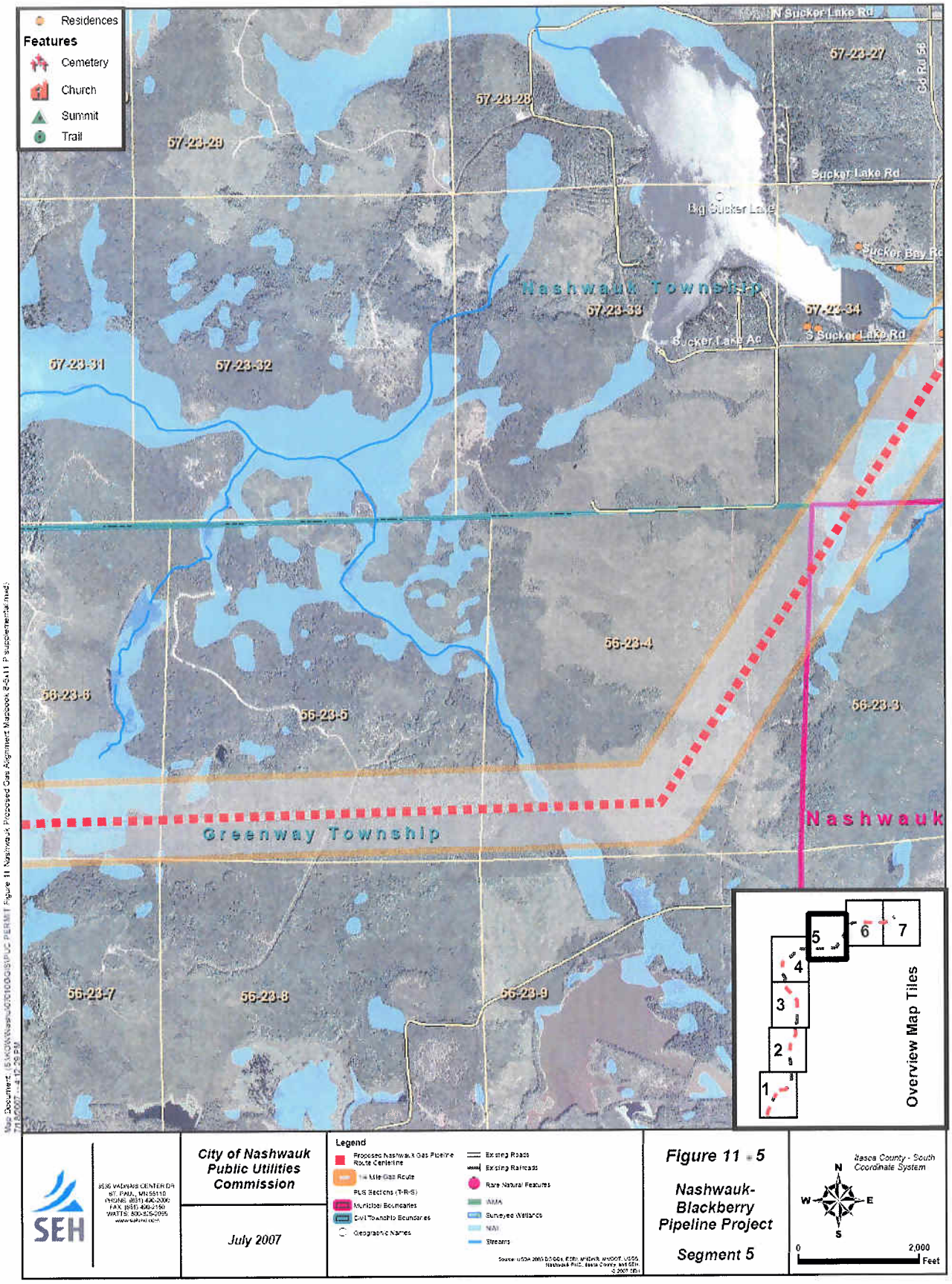
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Church
Summit
Trail
N Sucker Lake Rd
57-23-27
57-23-28
57-23-29
Sucker Lake Rd
Big Sucker Lake
Sucker Bay Rd
Nashwauk Township
57-23-33
57-23-34
S Sucker Lake Rd
Sucker Lake Ac
57-23-31
57-23-32
56-23-4
56-23-6
56-23-5
56-23-3
Greenway Township
Nashwauk
56-23-7
56-23-8
56-23-9
Overview Map Tiles
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SEH
City of Nashwauk Public Utilities Commission
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Legend
Proposed Nashwauk Gas Pipeline Route Centerline
1/4 Mile Gas Route
PLS Sections (T-R-S)
Municipal Boundaries
Civil Township Boundaries
Geographic Names
Existing Roads
Existing Railroads
Rare Natural Features
WMA
Surveyed Wetlands
NWI
Streams
Figure 11 - 5
Nashwauk-Blackberry Pipeline Project
Segment 5
Itasca County - South Coordinate System
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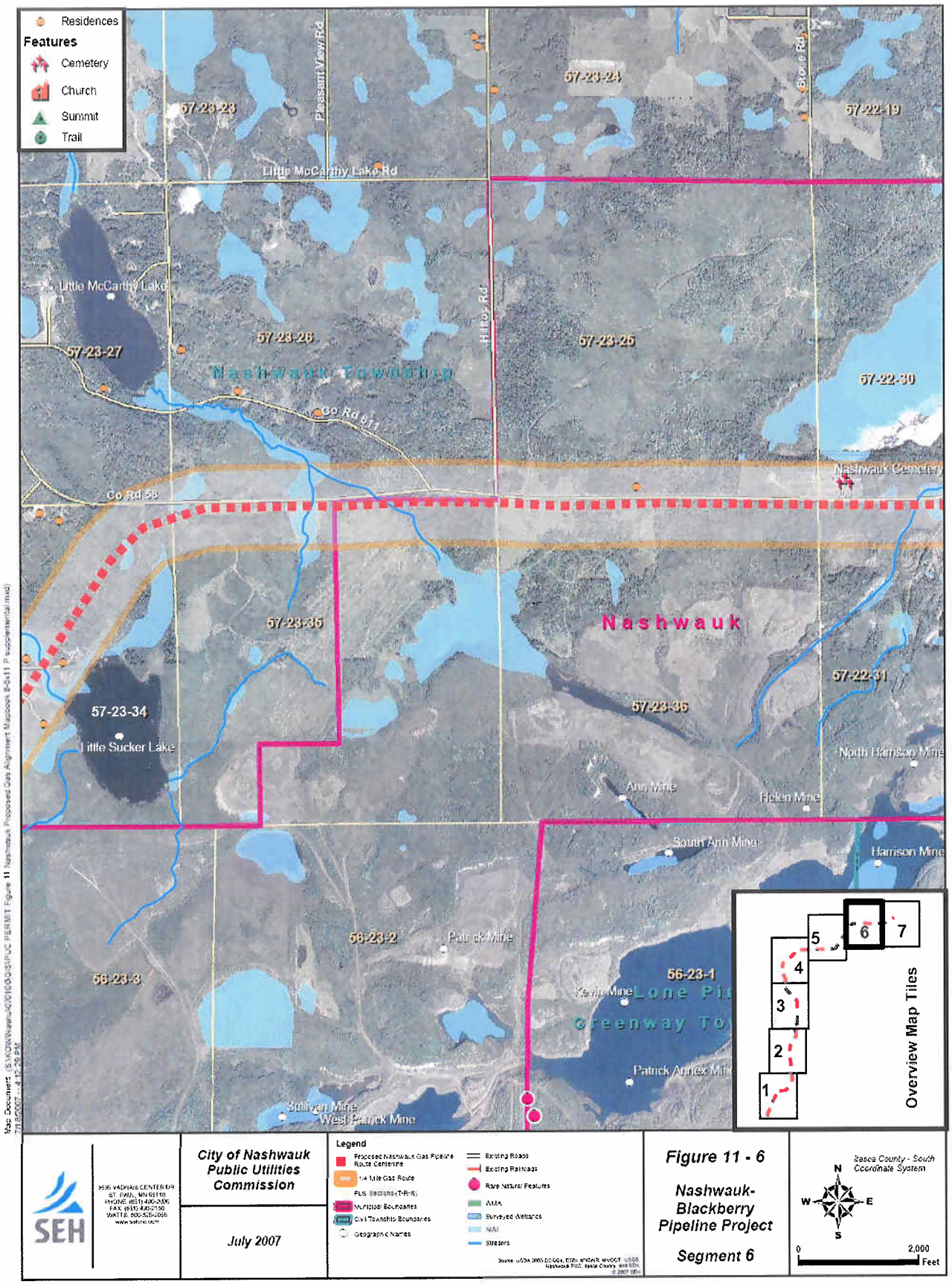

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Legend

Proposed Nashwauk Gas Pipeline Route Centerline
1/4 Mile Gas Route
PLS Sections (T-R-S)
Municipal Boundaries
Civil Township Boundaries
Geographic Names
Existing Roads
Existing Railroads
Rare Natural Features
AMA
Surveyed Wetlands
NWI
Streams

Source: USDA 2005 DOQQs, ESRI, MnDNR, MnDOT, USGS, Nashwauk PUC, Itasca County, and SEH

Figure 11 - 6

Nashwauk-Blackberry Pipeline Project

Segment 6

Itasca County - South Coordinate System

N W E S

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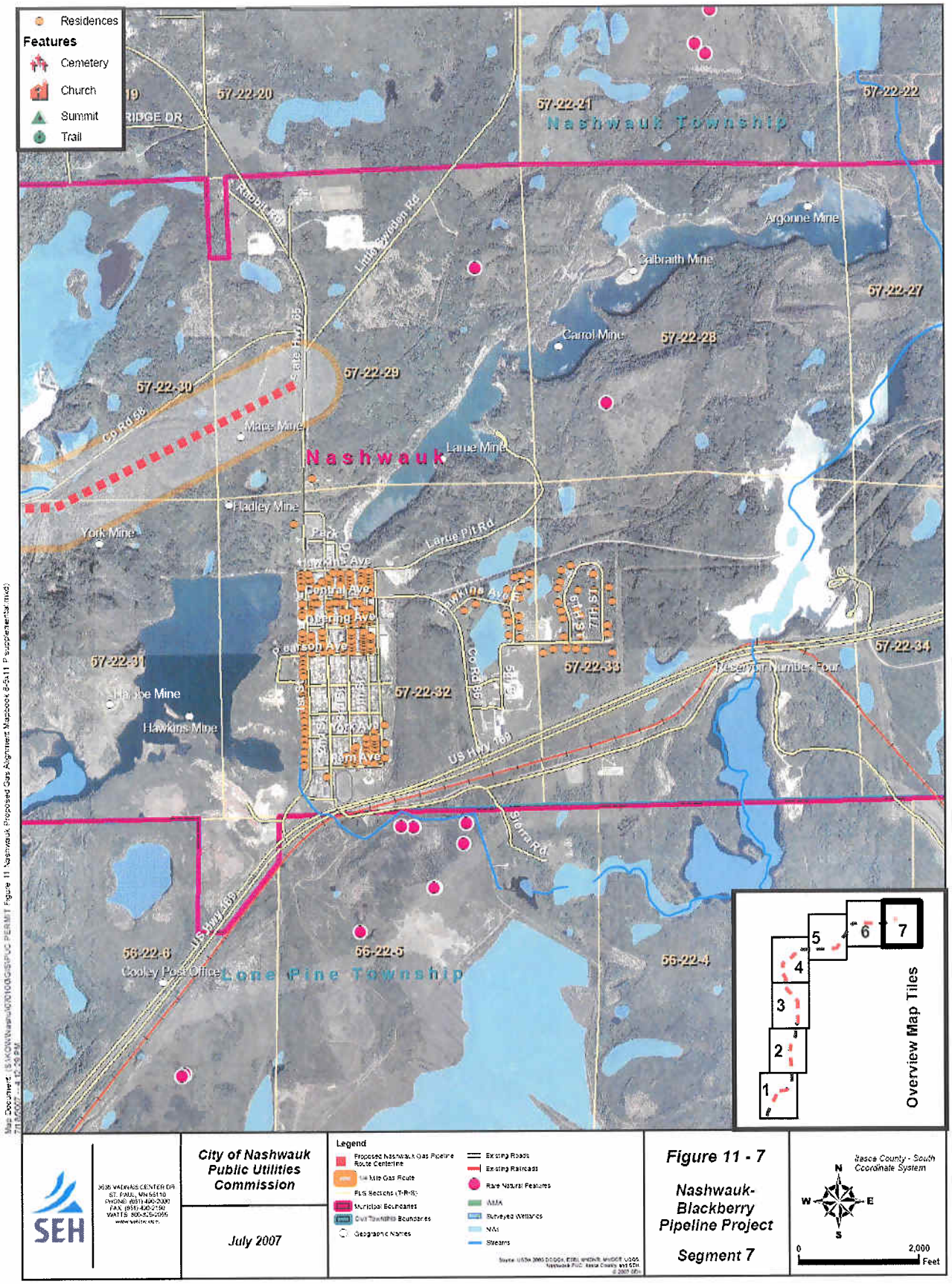
Residences
Features
Cemetery
Church
Summit
Trail
57-22-20
57-22-21
57-22-22
Nashwauk Township
Rabbit Rd
Little Sweden Rd
Argonne Mine
Calbraith Mine
57-22-27
Carrol Mine
57-22-28
57-22-29
57-22-30
State Hwy 65
Co Rd 58
Mace Mine
Nashwauk
Larue Mine
Hadley Mine
York Mine
Larue Pit Rd
Hawkins Ave
Central Ave
Pearson Ave
57-22-31
57-22-32
57-22-33
57-22-34
Reservoir Number Four
Hawkins Mine
US Hwy 169
Sierra Rd
56-22-6
56-22-5
56-22-4
Cooley Post Office
Lone Pine Township
Overview Map Tiles
1
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SEH
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Proposed Nashwauk Gas Pipeline Route Centerline
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Municipal Boundaries
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Surveyed Wetlands
Streams
Figure 11 - 7
Nashwauk-Blackberry Pipeline Project
Segment 7
Itasca County - South Coordinate System
N
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Feet

Appendix E

Environmental Analysis Supplement to the Routing Permit Application