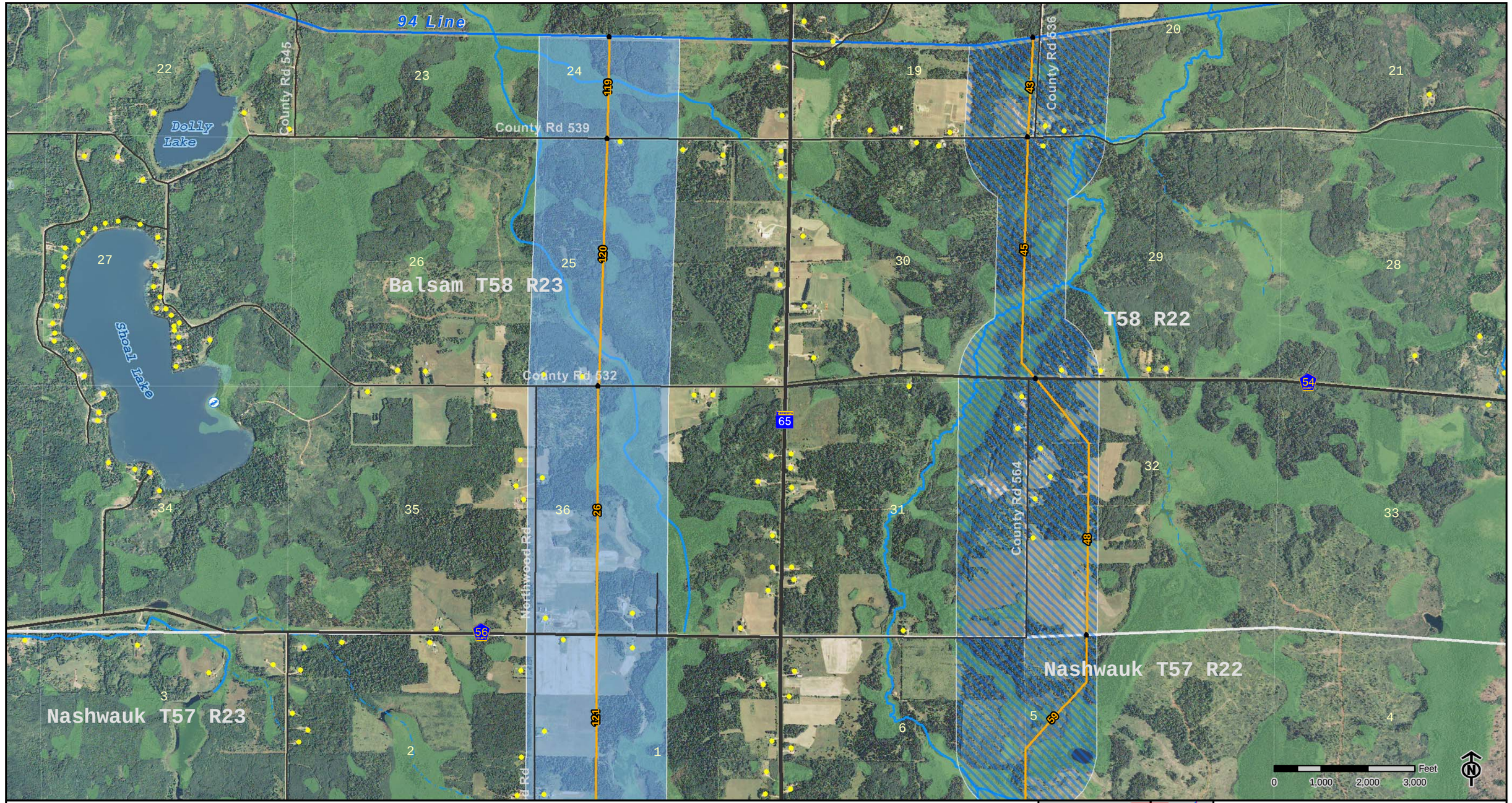
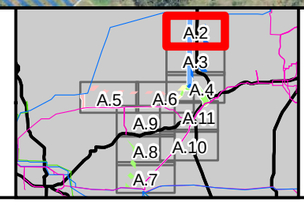
Appendix A

Detailed Route Maps



Route 1
Route 1A
Route 2
Route 2A
Route 3
Route 3A
Route 4
Route 4A
Proposed Route Centerline
Wetland
DNR Public Water
State Park
Existing 69 kV
Existing 115 kV
Existing 230 kV
Existing Pipelines
Snowmobile Trail
PWI Stream/River
PWI Trout Stream
Intermittent Stream
Home
Communication Tower
Existing Substation
Proposed Substation



Appendix A.2 - Detailed Route Maps
Nashwauk 230 kV Route Application
Nashwauk Public Utilites Commission

HDR

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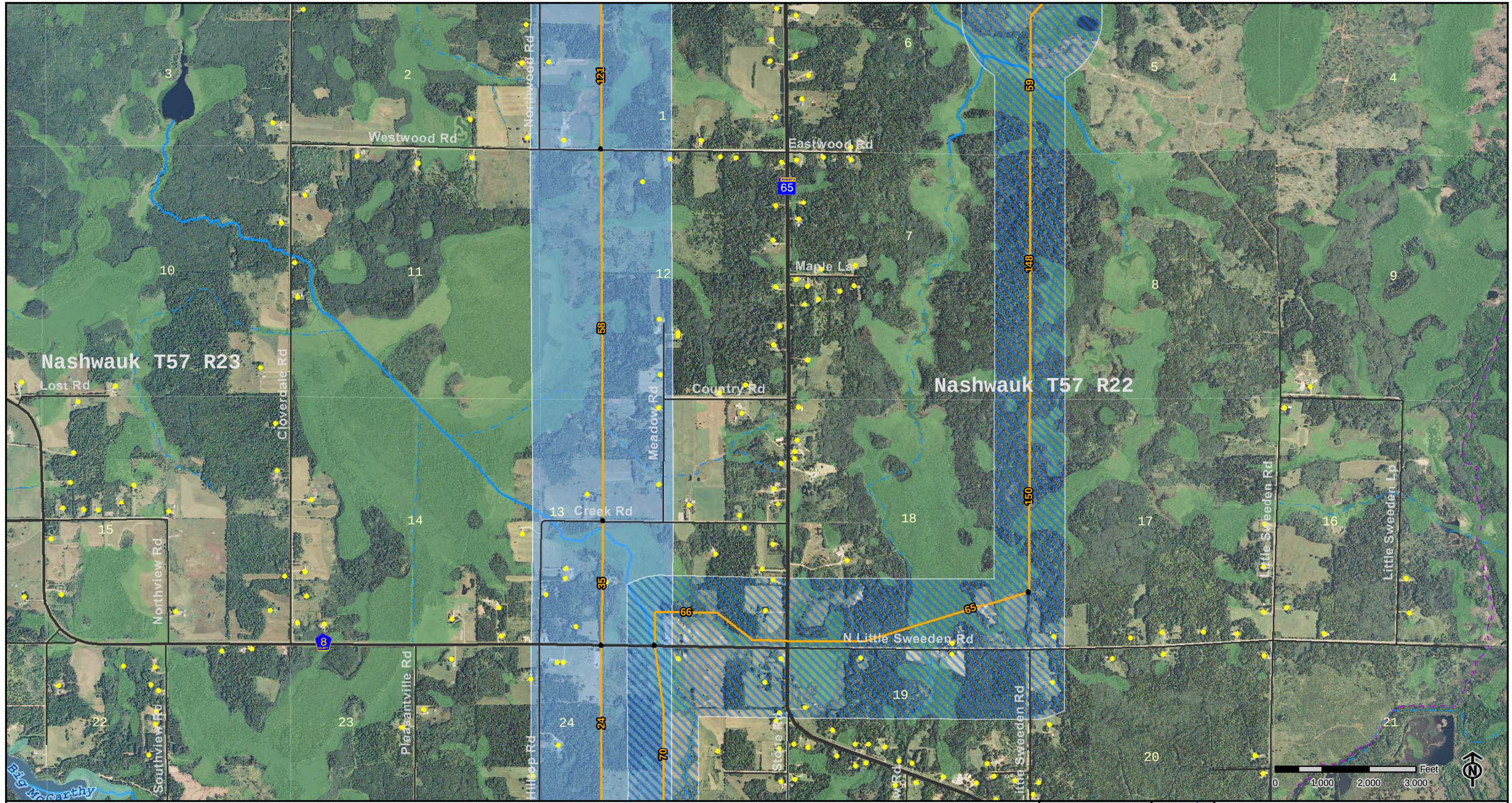

Route 1
Route 1A
Route 2
Route 2A
Route 3
Route 3A
Route 4
Route 4A
Proposed Route Centerline
Wetland
DNR Public Water
State Park
Existing 69 kV
Existing 115 kV
Existing 230 kV
Existing Pipelines
Snowmobile Trail
PWI Stream/River
PWI Trout Stream
Intermittent Stream
Home
Communication Tower
Existing Substation
Proposed Substation

Appendix A.3 - Detailed Route Maps
Nashwauk 230 kV Route Application
Nashwauk Public Utilites Commission

HDR

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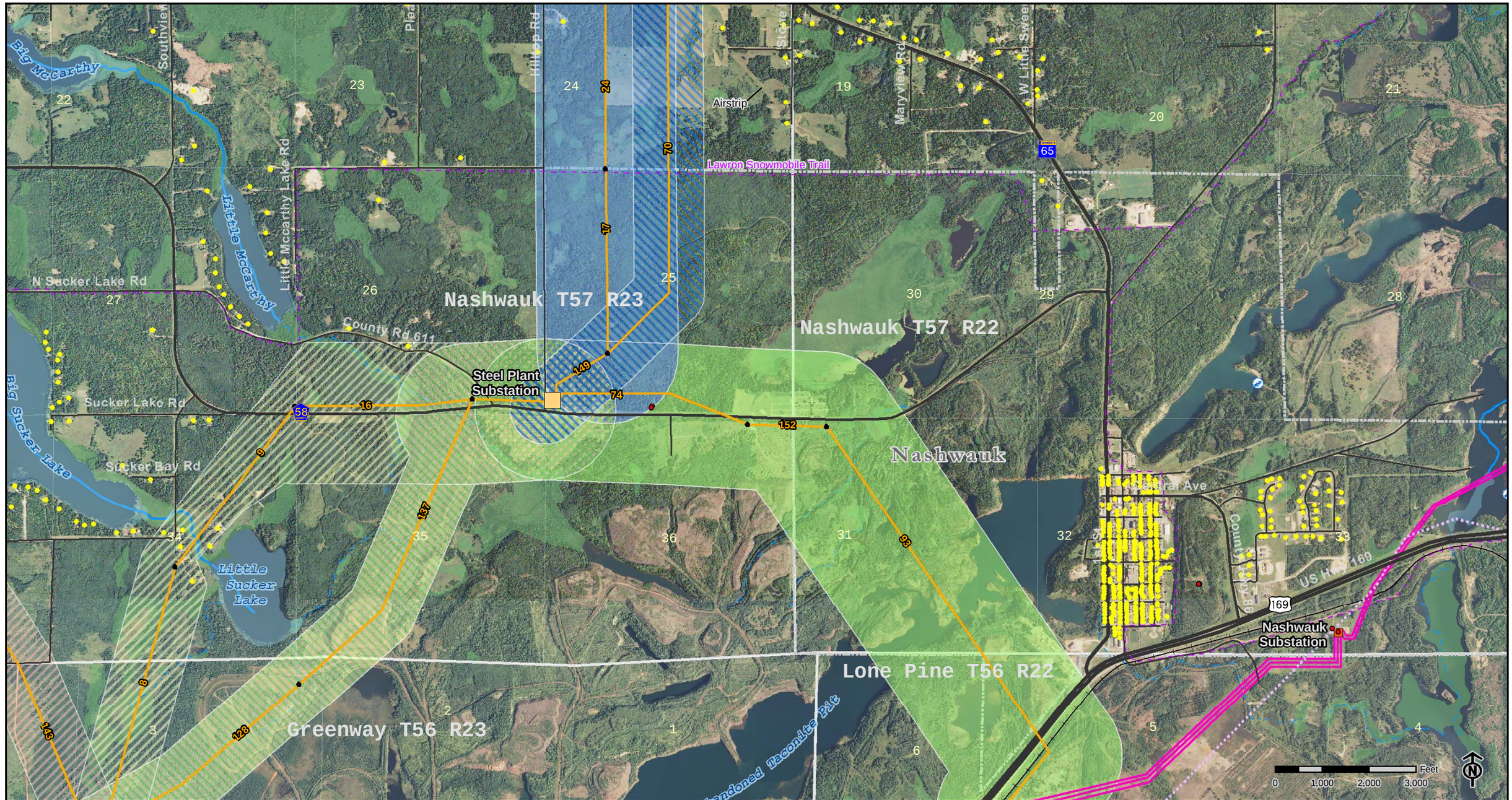
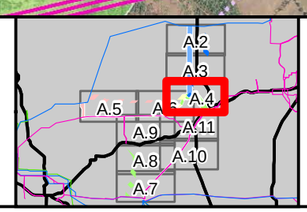


Route 1
Route 1A
Route 2
Route 2A
Route 3
Route 3A
Route 4
Route 4A
Proposed Route Centerline
Wetland
DNR Public Water
State Park
Existing 69 kV
Existing 115 kV
Existing 230 kV
Existing Pipelines
Snowmobile Trail
PWI Stream/River
PWI Trout Stream
Intermittent Stream
Home
Communication Tower
Existing Substation
Proposed Substation



Appendix A.4 - Detailed Route Maps
Nashwauk 230 kV Route Application
Nashwauk Public Utilites Commission

HDR

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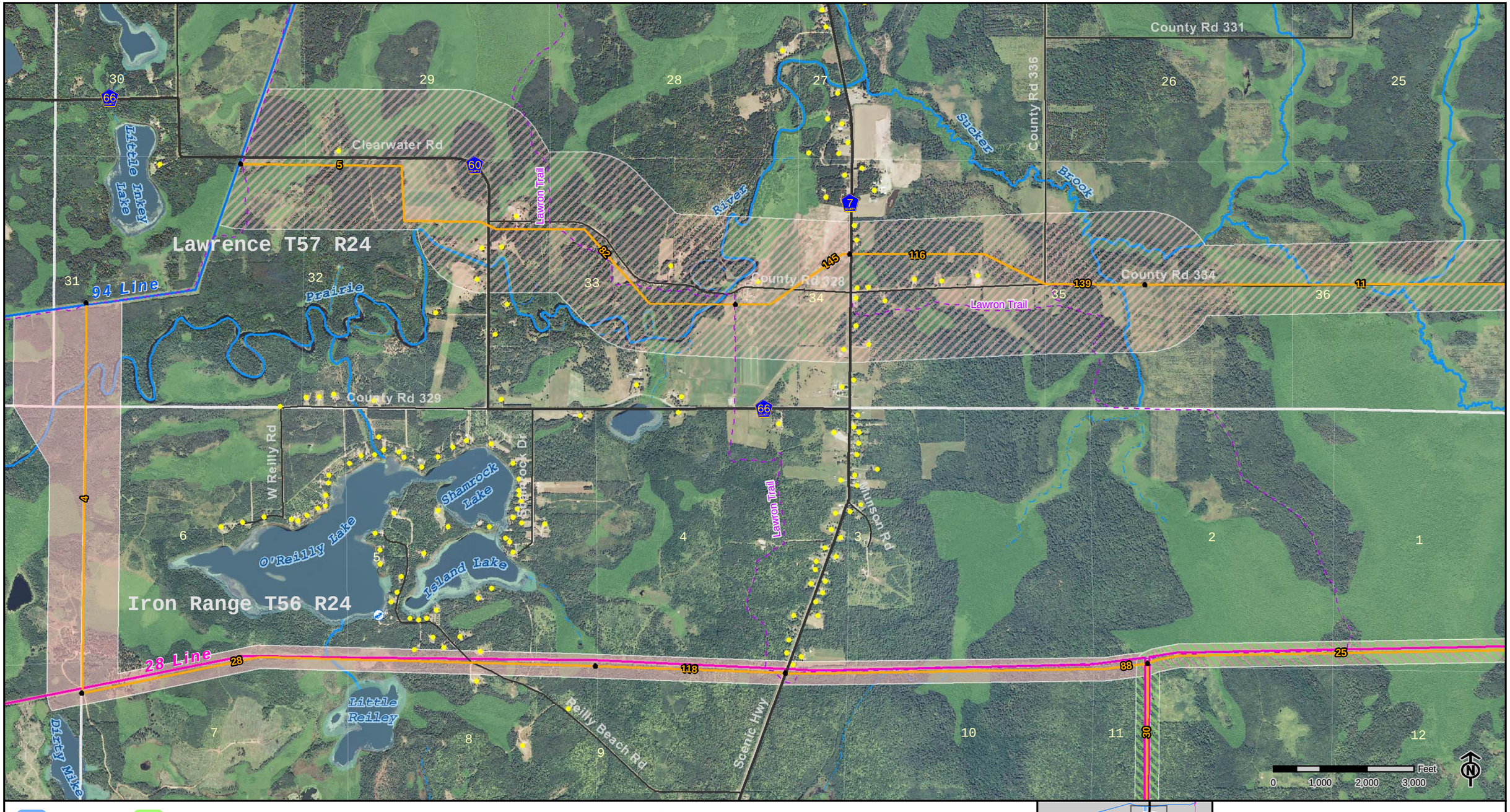

Appendix A.5 - Detailed Route Maps
Nashwauk 230 kV Route Application
Nashwauk Public Utilites Commission

HDR

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N Sucker Lake Rd
Lawron Snowmobile Trail
Big Sucker Lake
Sucker Lake Rd
Sucker Bay Rd
County Rd 611
Nashwauk
Steel Plant Substation
Nashwauk T57 R23
Sucker Brook
Little Sucker Lake
Greenway T56 R23
Mine Substation
45 Line
Abandoned Taconite Pit
Tailings Basin
Feet
0 1,000 2,000 3,000

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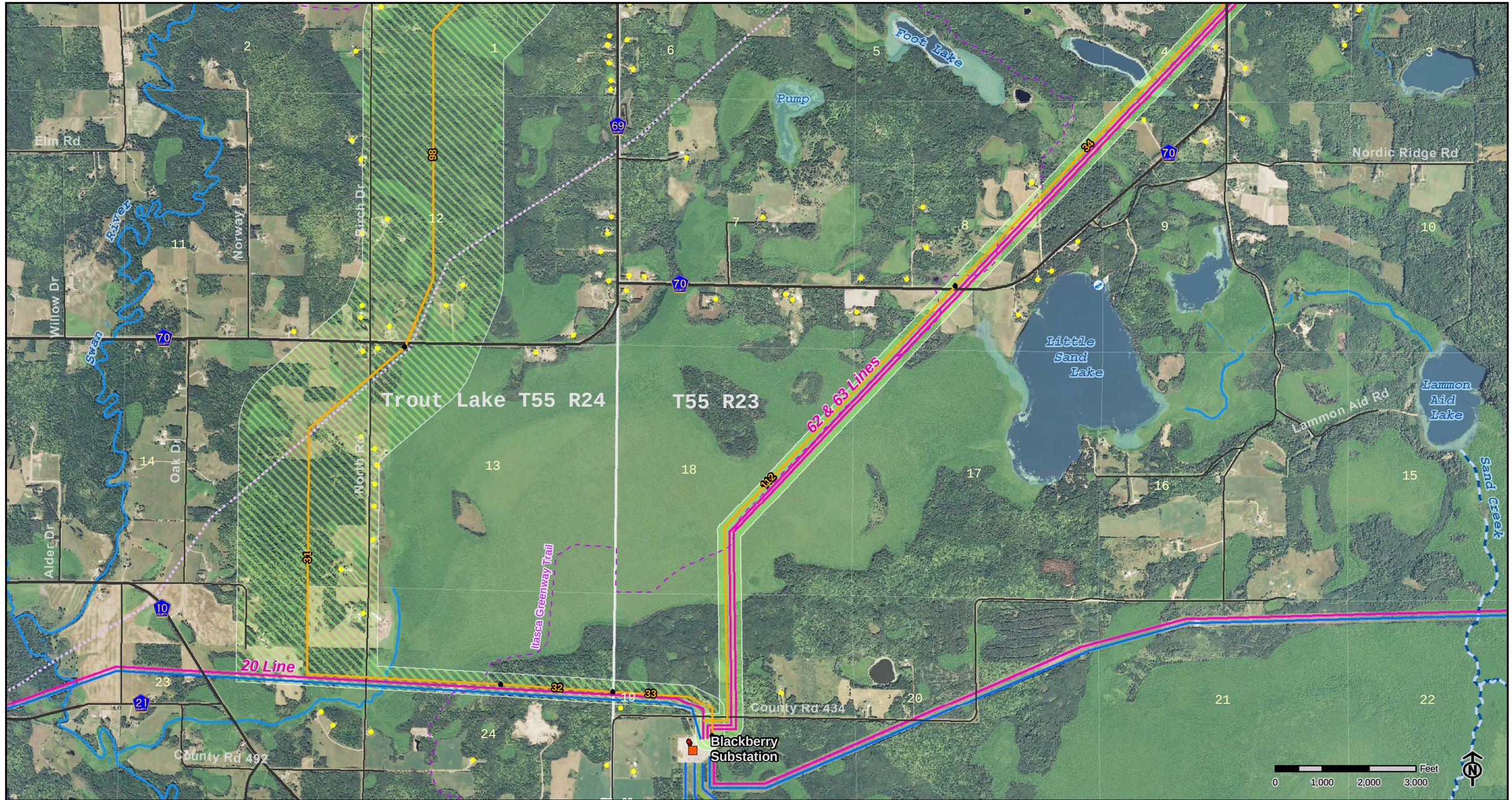
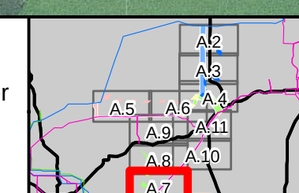
Route 1
Route 1A
Route 2
Route 2A
Route 3
Route 3A
Route 4
Route 4A
Proposed Route Centerline
Wetland
DNR Public Water
State Park
Existing 69 kV
Existing 115 kV
Existing 230 kV
Existing Pipelines
Snowmobile Trail
PWI Stream/River
PWI Trout Stream
Intermittent Stream
Home
Communication Tower
Existing Substation
Proposed Substation

A.2 A.3 A.4 A.5 A.6 A.11 A.9 A.10 A.8 A.7

Appendix A.6 - Detailed Route Maps
Nashwauk 230 kV Route Application
Nashwauk Public Utilites Commission
HDR



Route 1
Route 1A
Route 2
Route 2A
Route 3
Route 3A
Route 4
Route 4A
Proposed Route Centerline
Wetland
DNR Public Water
State Park
Existing 69 kV
Existing 115 kV
Existing 230 kV
Existing Pipelines
Snowmobile Trail
PWI Stream/River
PWI Trout Stream
Intermittent Stream
Home
Communication Tower
Existing Substation
Proposed Substation



Appendix A.7 - Detailed Route Maps
Nashwauk 230 kV Route Application
Nashwauk Public Utilites Commission

HDR

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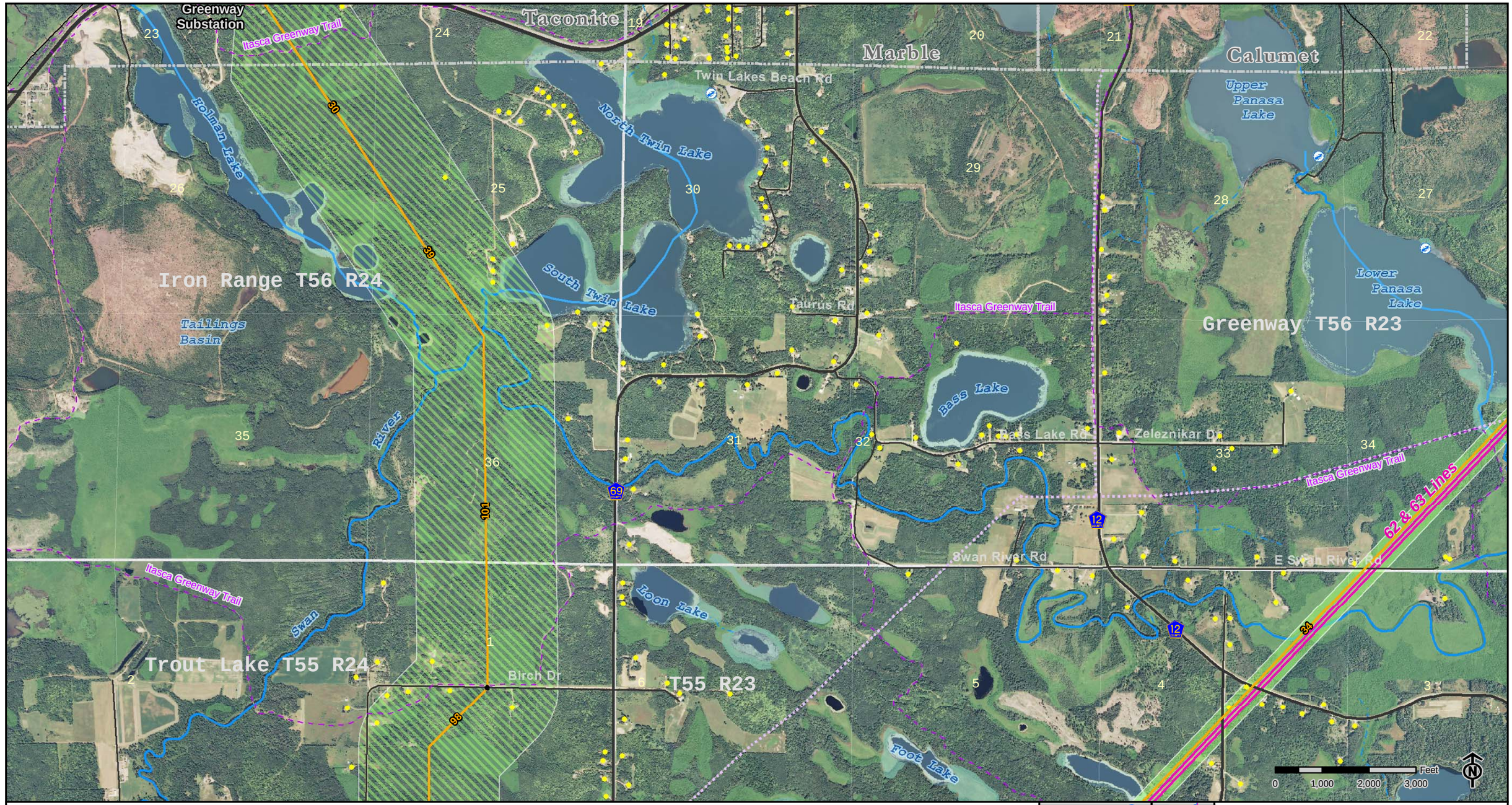
Greenway Substation
Itasca Greenway Trail
Taconite
Marble
Calumet
Twin Lakes Beach Rd
Holman Lake
North Twin Lake
Upper Panasa Lake
Lower Panasa Lake
South Twin Lake
Iron Range T56 R24
Tailings Basin
Taurus Rd
Itasca Greenway Trail
Greenway T56 R23
Bass Lake
Bass Lake Rd
Zeleznikar Dr
Itasca Greenway Trail
62 & 63 Lines
River
Swan River Rd
E Swan River Rd
Itasca Greenway Trail
Swan
Loon Lake
Trout Lake T55 R24
Birch Dr
T55 R23
Foot Lake
Feet
0
1,000
2,000
3,000
Route 1
Route 1A
Route 2
Route 2A
Route 3
Route 3A
Route 4
Route 4A
Proposed Route Centerline
Wetland
DNR Public Water
State Park
Existing 69 kV
Existing 115 kV
Existing 230 kV
Existing Pipelines
Snowmobile Trail
PWI Stream/River
PWI Trout Stream
Intermittent Stream
Home
Communication Tower
Existing Substation
Proposed Substation
A.2
A.3
A.4
A.5
A.6
A.9
A.11
A.8
A.10
A.7
Appendix A.8 - Detailed Route Maps
Nashwauk 230 kV Route Application
Nashwauk Public Utilites Commission
HDR
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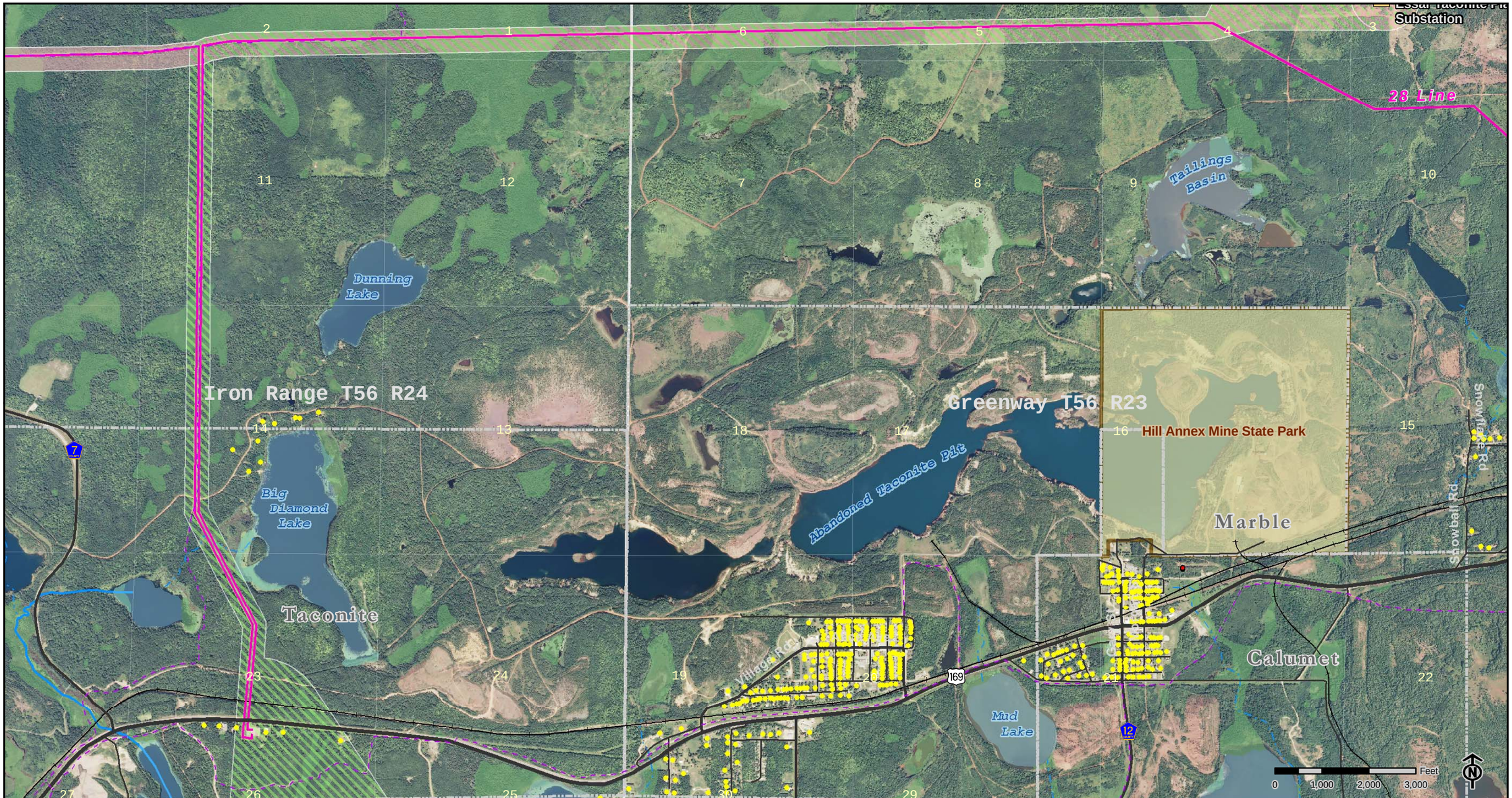
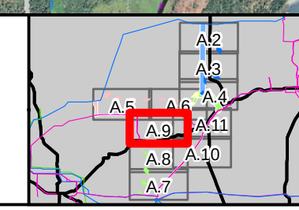


Route 1
Route 1A
Route 2
Route 2A
Route 3
Route 3A
Route 4
Route 4A
Wetland
DNR Public Water
State Park
Municipal Boundary
Existing 69 kV
Existing 115 kV
Existing 230 kV
Existing Pipelines
Snowmobile Trail
PWI Stream/River
PWI Trout Stream
Intermittent Stream
Home
Communication Tower
Existing Substation
Proposed Substation



Appendix A.9 - Detailed Route Maps
Nashwauk 230 kV Route Application
Nashwauk Public Utilites Commission

HDR

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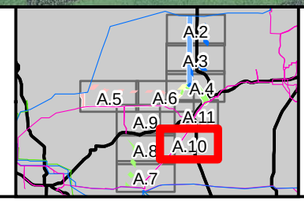
Route 1
Route 1A
Route 2
Route 2A
Route 3
Route 3A
Route 4
Route 4A
Proposed Route Centerline
Wetland
DNR Public Water
State Park
Existing 69 kV
Existing 115 kV
Existing 230 kV
Existing Pipelines
Snowmobile Trail
PWI Stream/River
PWI Trout Stream
Intermittent Stream
Home
Communication Tower
Existing Substation
Proposed Substation



Appendix A.10 - Detailed Route Maps
Nashwauk 230 kV Route Application
Nashwauk Public Utilites Commission
HDR

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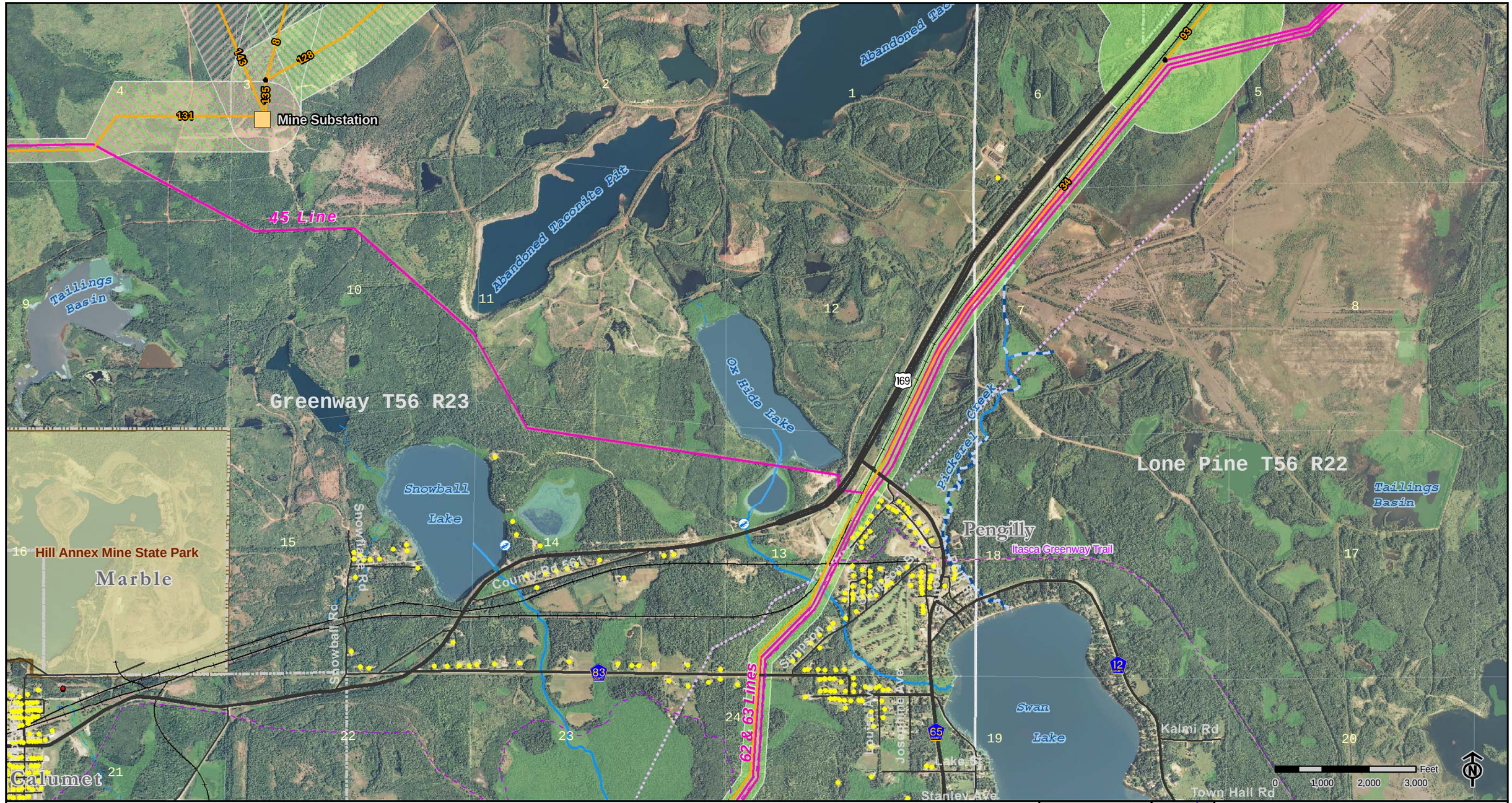
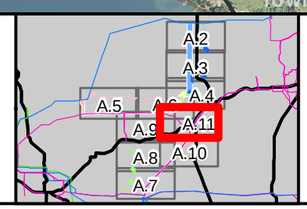


Route 1
Route 1A
Route 2
Route 2A
Route 3
Route 3A
Route 4
Route 4A
Proposed Route Centerline
Wetland
DNR Public Water
State Park
Existing 69 kV
Existing 115 kV
Existing 230 kV
Existing Pipelines
Snowmobile Trail
PWI Stream/River
PWI Trout Stream
Intermittent Stream
Home
Communication Tower
Existing Substation
Proposed Substation



Appendix A.11 - Detailed Route Maps
Nashwauk 230 kV Route Application
Nashwauk Public Utilites Commission

HDR

Map Document: (\\Mspe-gis-file\gispro)\Nashwauk\98143\map_docs\Route_Application_Figures11x17_mapbook.mxd)
6/27/2022 - 4:14:49 PM

Lawrence Lake

Essar Steel Plant Substation

Essar Taconite Plant Substation

Keewatin

Nashwauk

0 Miles 1

69kV Transmission
115kV Transmission
230kV Transmission
Pipeline

Municipal Boundary
Existing Substation

Rejected Route Segment
Alternative Route Segment
Preferred Route Segment

Route Segment End Point
Proposed Substation

Appendix A.12

Rejected Route Segments

Nashwauk 230 kV Route Application
Nashwauk PUC

HDR

Map Document: (\\Mspe-gis-file\gis\proj\Nashwauk\96143\map_docs\Route_Application_Figures\FigureXX_StudyAreas.mxd)
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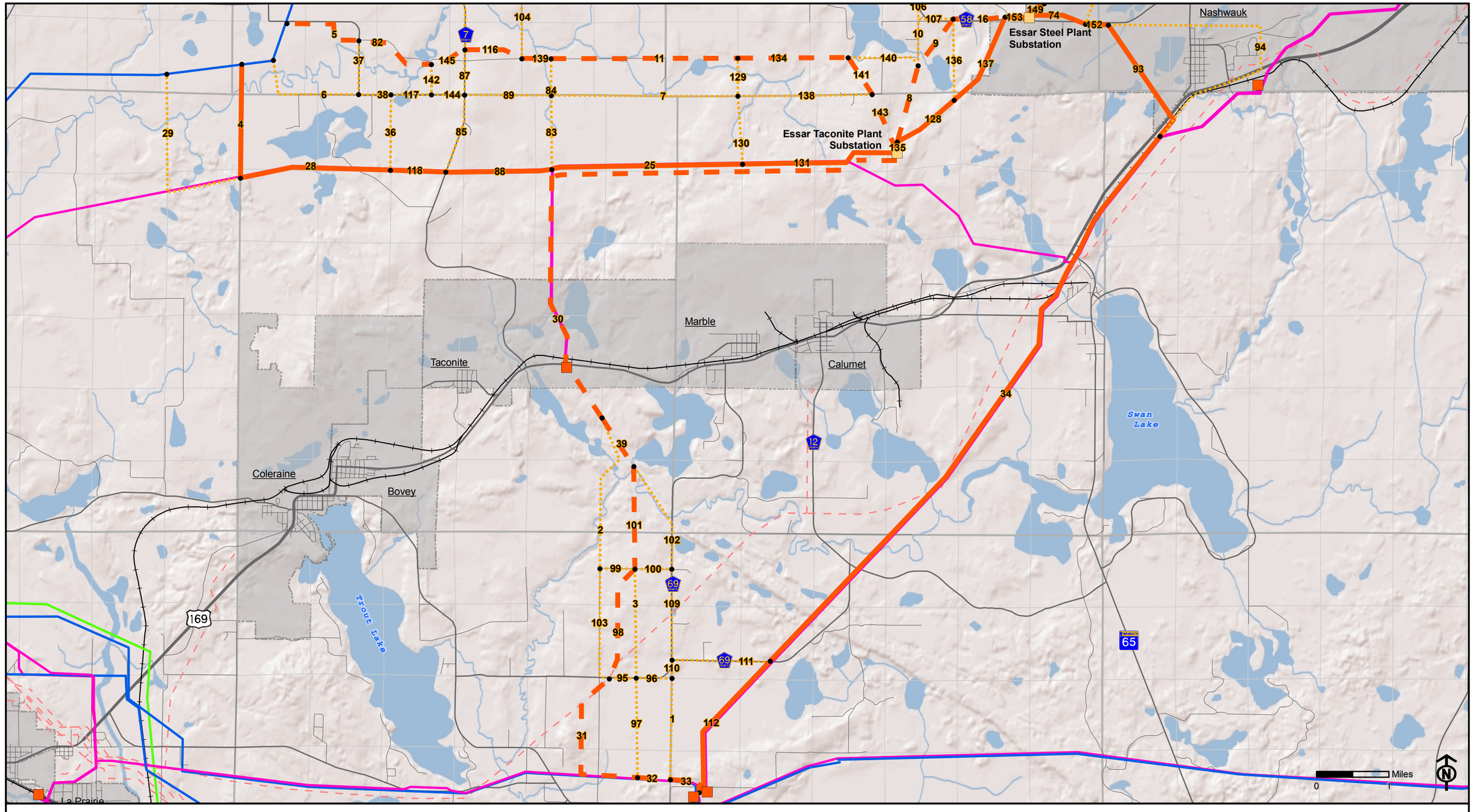

69kV Transmission
115kV Transmission
230kV Transmission
Pipeline
Municipal Boundary
Existing Substation
Rejected Route Segment
Alternative Route Segment
Preferred Route Segment
Route Segment End Point
Proposed Substation

Appendix A.13

Rejected Route Segments

Nashwauk 230 kV Route Application
Nashwauk PUC

HDR

Map Document: (\\Mspe-gis-file\gis\proj\Nashwauk\96143\map_docs\Route_Application_Figures\FigureXX_StudyAreas.mxd)
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