

APPENDIX B
Figures

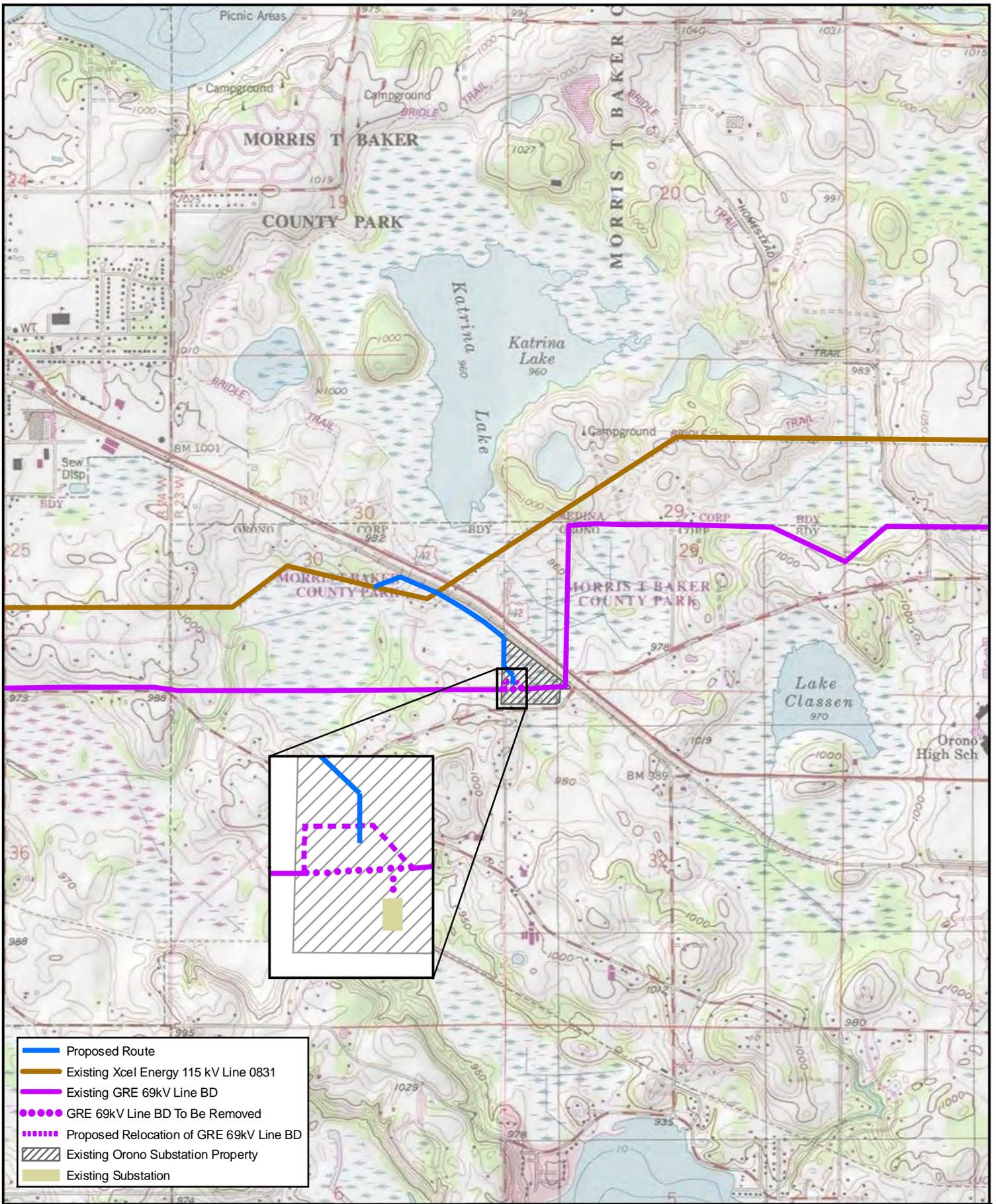


FIGURE B-1
 ORONO SUBSTATION REPLACEMENT AND NEW
 115 KV TRANSMISSION LINE PROJECT
 GENERAL VICINITY MAP
 ORONO, MINNESOTA

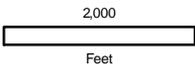


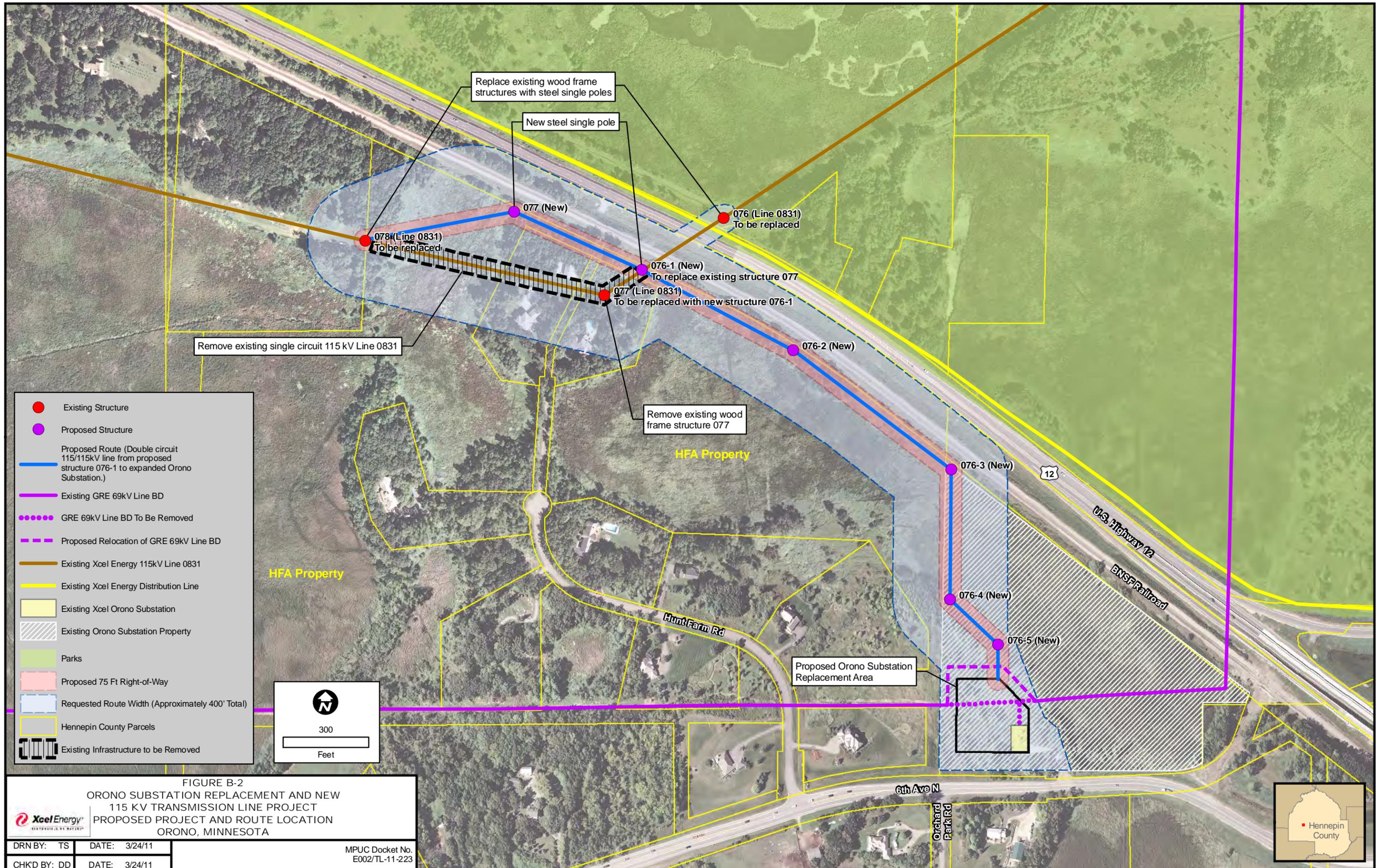
Topographic Map Source:
 USGS Excelsior, Minn.
 Quad dated 1997

DRN BY: TS
 CHK'D BY: DD

DATE: 2/17/11
 DATE: 2/17/11

MPUC Docket No.
 E002/TL-11-223





- Existing Structure
- Proposed Structure
- Proposed Route (Double circuit 115/115kV line from proposed structure 076-1 to expanded Orono Substation.)
- Existing GRE 69kV Line BD
- GRE 69kV Line BD To Be Removed
- Proposed Relocation of GRE 69kV Line BD
- Existing Xcel Energy 115kV Line 0831
- Existing Xcel Energy Distribution Line
- Existing Xcel Orono Substation
- Existing Orono Substation Property
- Parks
- Proposed 75 Ft Right-of-Way
- Requested Route Width (Approximately 400' Total)
- Hennepin County Parcels
- Existing Infrastructure to be Removed

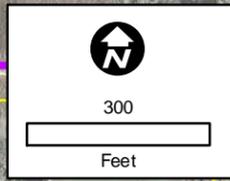
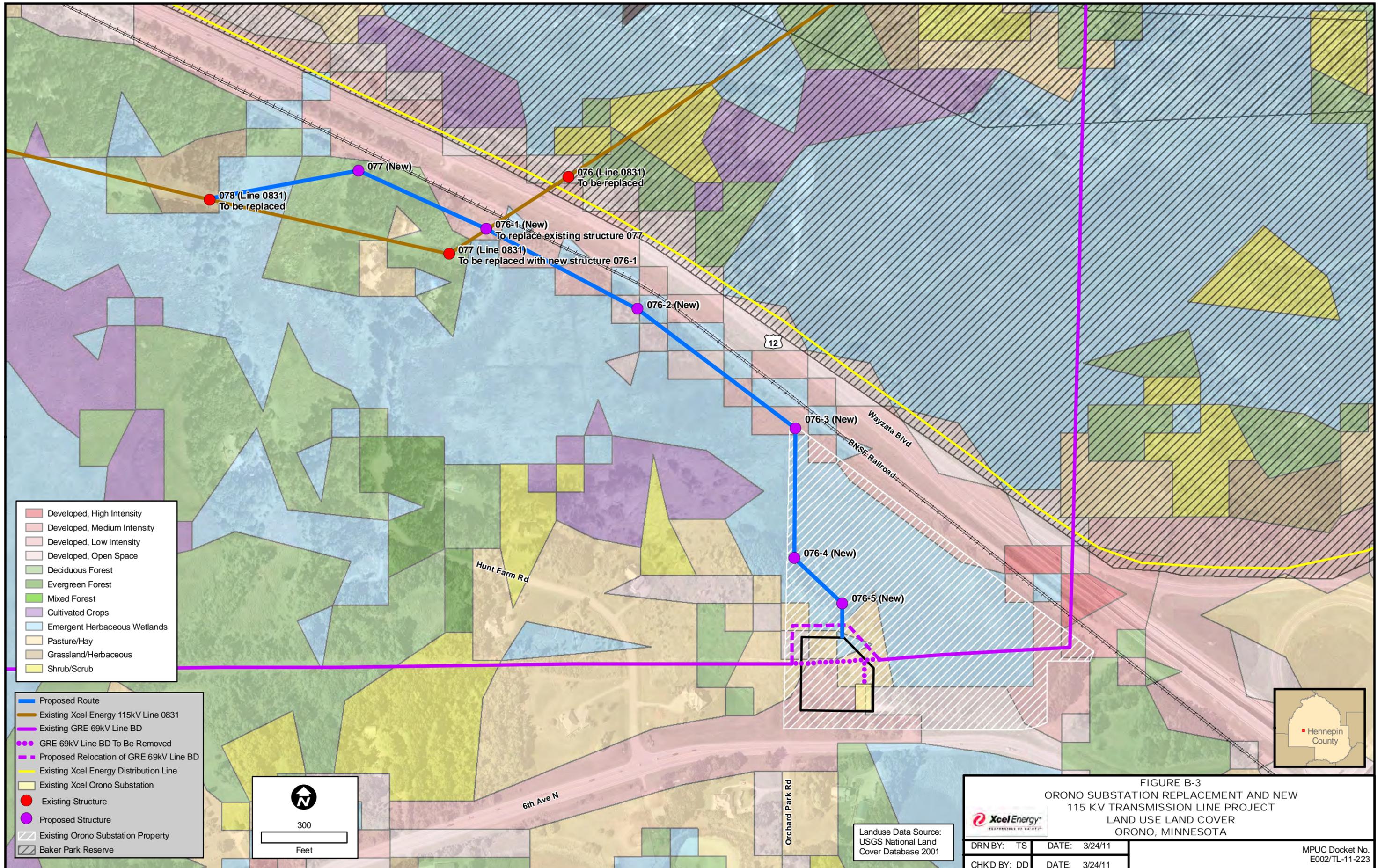


FIGURE B-2
 ORONO SUBSTATION REPLACEMENT AND NEW
 115 KV TRANSMISSION LINE PROJECT
 PROPOSED PROJECT AND ROUTE LOCATION
 ORONO, MINNESOTA

DRN BY: TS DATE: 3/24/11
 CHKD BY: DD DATE: 3/24/11

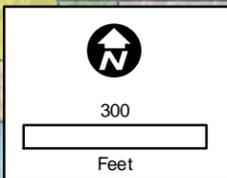
MPUC Docket No.
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- Developed, High Intensity
- Developed, Medium Intensity
- Developed, Low Intensity
- Developed, Open Space
- Deciduous Forest
- Evergreen Forest
- Mixed Forest
- Cultivated Crops
- Emergent Herbaceous Wetlands
- Pasture/Hay
- Grassland/Herbaceous
- Shrub/Scrub

- Proposed Route
- Existing Xcel Energy 115kV Line 0831
- Existing GRE 69kV Line BD
- GRE 69kV Line BD To Be Removed
- Proposed Relocation of GRE 69kV Line BD
- Existing Xcel Energy Distribution Line
- Existing Xcel Orono Substation
- Existing Structure
- Proposed Structure
- Existing Orono Substation Property
- Baker Park Reserve



Landuse Data Source:
USGS National Land
Cover Database 2001

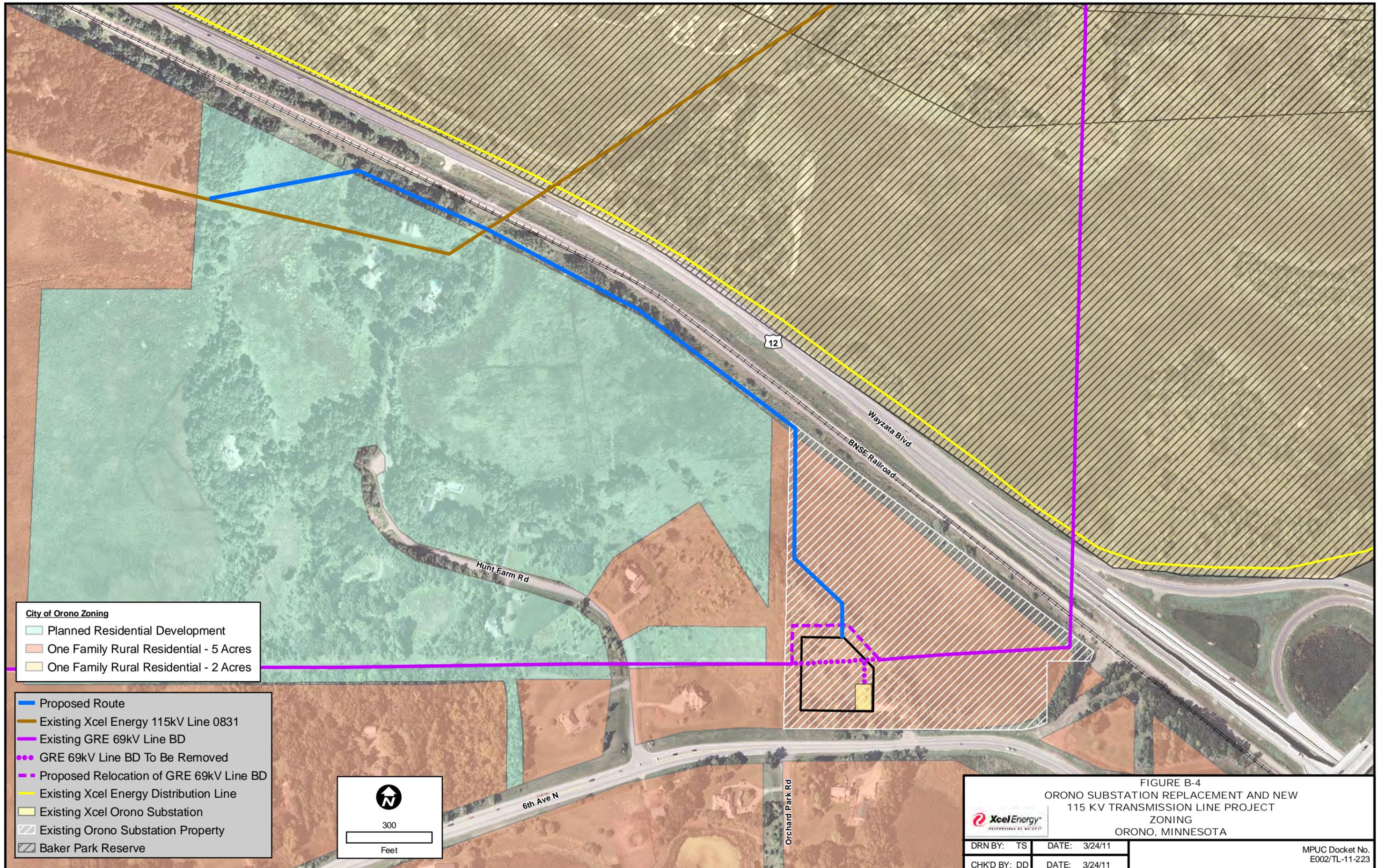


**ORONO SUBSTATION REPLACEMENT AND NEW
115 KV TRANSMISSION LINE PROJECT**
LAND USE LAND COVER
ORONO, MINNESOTA

FIGURE B-3

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- City of Orono Zoning**
- Planned Residential Development
 - One Family Rural Residential - 5 Acres
 - One Family Rural Residential - 2 Acres

- Proposed Route
- Existing Xcel Energy 115kV Line 0831
- Existing GRE 69kV Line BD
- GRE 69kV Line BD To Be Removed
- Proposed Relocation of GRE 69kV Line BD
- Existing Xcel Energy Distribution Line
- Existing Xcel Orono Substation
- Existing Orono Substation Property
- Baker Park Reserve

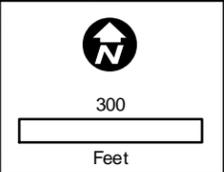
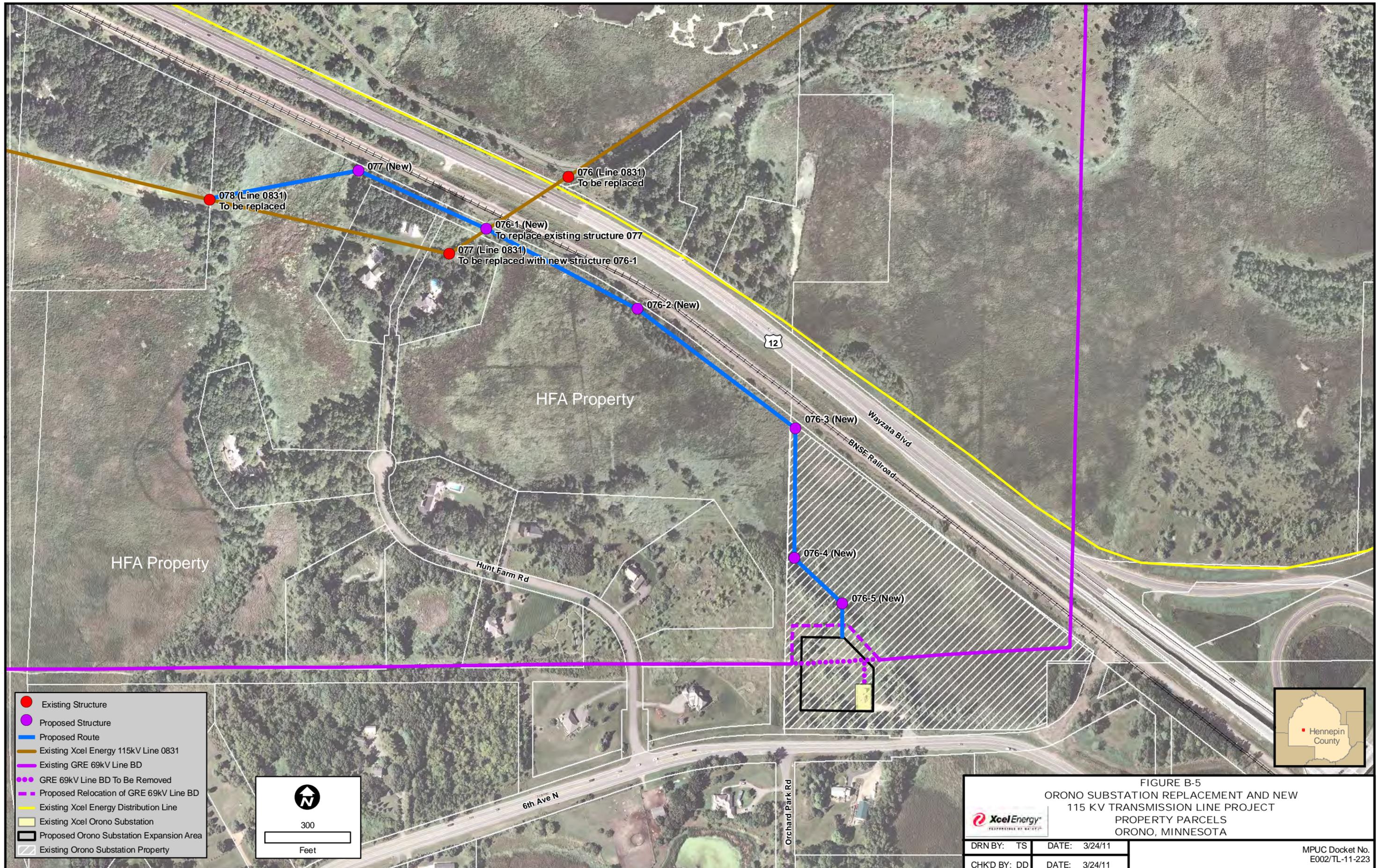
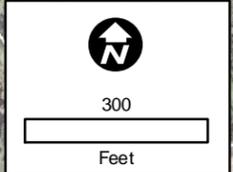


FIGURE B-4
 ORONO SUBSTATION REPLACEMENT AND NEW
 115 KV TRANSMISSION LINE PROJECT
 ZONING
 ORONO, MINNESOTA

DRN BY: TS	DATE: 3/24/11	
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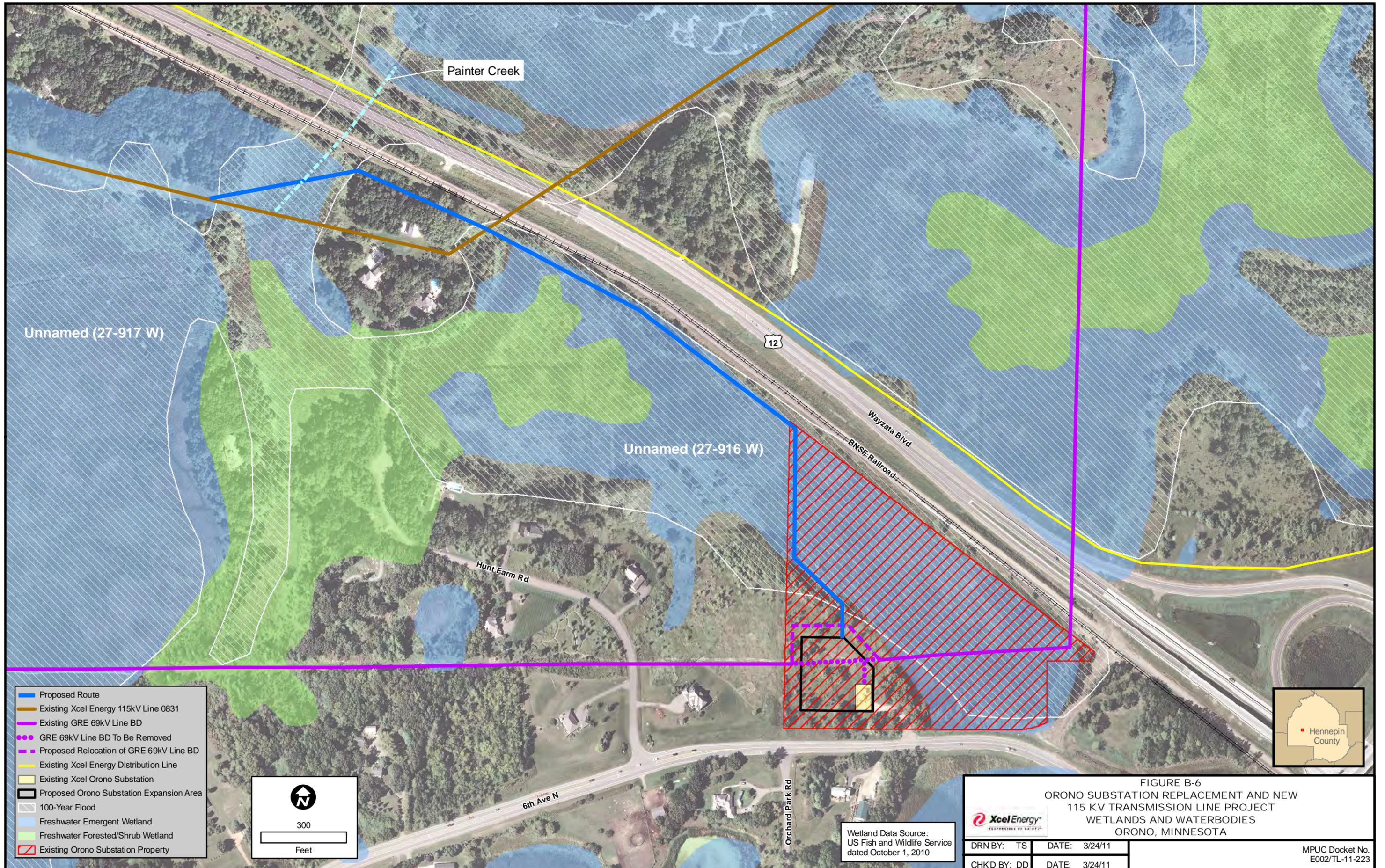


- Existing Structure
- Proposed Structure
- Proposed Route
- Existing Xcel Energy 115kV Line 0831
- Existing GRE 69kV Line BD
- ⋯ GRE 69kV Line BD To Be Removed
- Proposed Relocation of GRE 69kV Line BD
- Existing Xcel Energy Distribution Line
- Existing Xcel Orono Substation
- Proposed Orono Substation Expansion Area
- Existing Orono Substation Property



Xcel Energy <small>RESPONSIBLE BY DESIGN</small>		FIGURE B-5 ORONO SUBSTATION REPLACEMENT AND NEW 115 KV TRANSMISSION LINE PROJECT PROPERTY PARCELS ORONO, MINNESOTA		MPUC Docket No. E002/TL-11-223
DRN BY: TS	DATE: 3/24/11	CHK'D BY: DD	DATE: 3/24/11	





Painter Creek

Unnamed (27-917 W)

Unnamed (27-916 W)

12

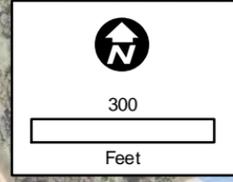
Wayzata Blvd
BNSF Railroad

Hunt Farm Rd

6th Ave N

Orchard Park Rd

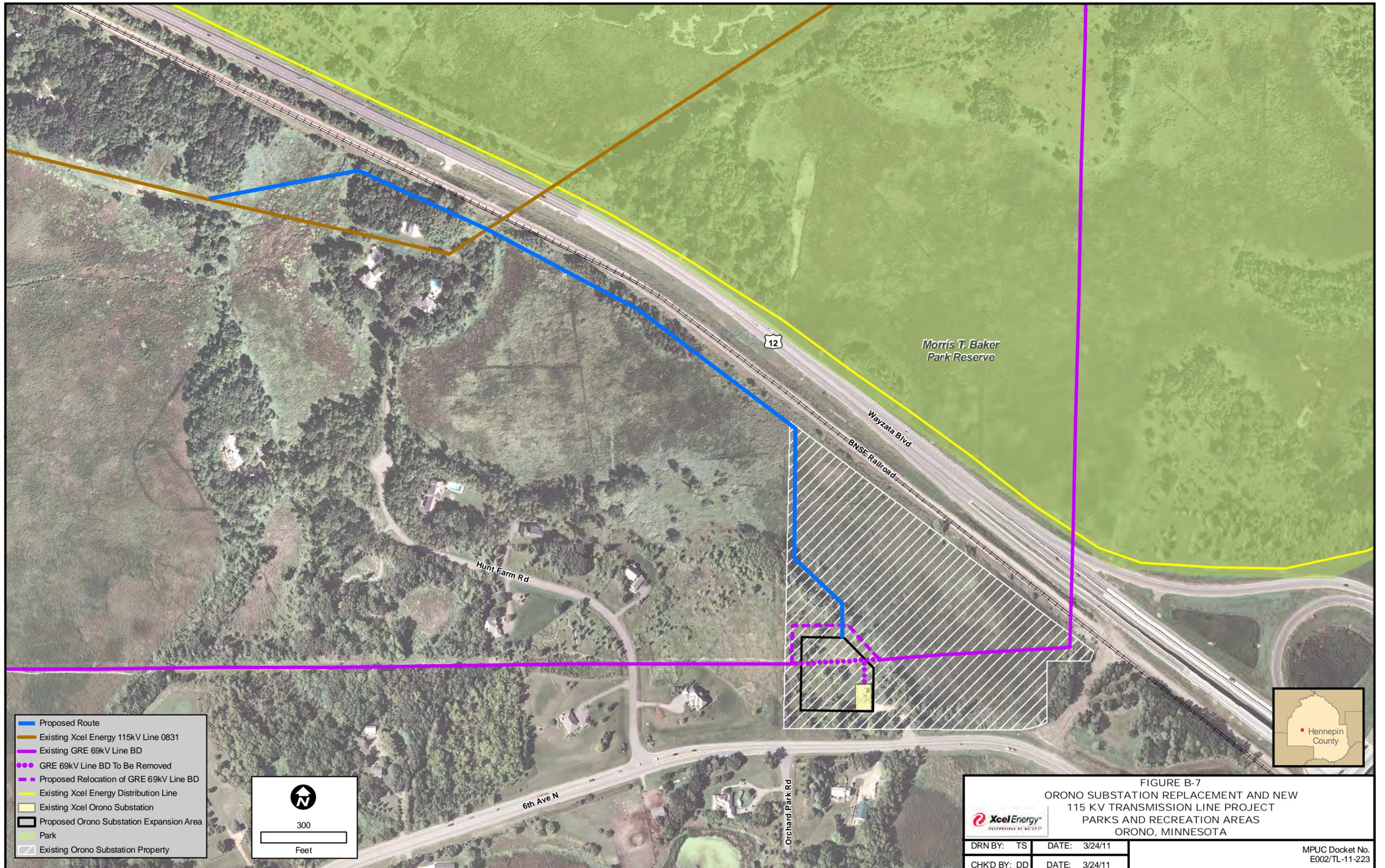
- Proposed Route
- Existing Xcel Energy 115kV Line 0831
- Existing GRE 69kV Line BD
- - - GRE 69kV Line BD To Be Removed
- - - Proposed Relocation of GRE 69kV Line BD
- Existing Xcel Energy Distribution Line
- Existing Xcel Orono Substation
- Proposed Orono Substation Expansion Area
- 100-Year Flood
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Existing Orono Substation Property



Wetland Data Source:
US Fish and Wildlife Service
dated October 1, 2010

		FIGURE B-6 ORONO SUBSTATION REPLACEMENT AND NEW 115 KV TRANSMISSION LINE PROJECT WETLANDS AND WATERBODIES ORONO, MINNESOTA	
		DRN BY: TS	DATE: 3/24/11
CHK'D BY: DD	DATE: 3/24/11		





- Proposed Route
- Existing Xcel Energy 115kV Line 0831
- Existing GRE 69kV Line BD
- ⋯ GRE 69kV Line BD To Be Removed
- - - Proposed Relocation of GRE 69kV Line BD
- Existing Xcel Energy Distribution Line
- Existing Xcel Orono Substation
- Proposed Orono Substation Expansion Area
- Park
- Existing Orono Substation Property

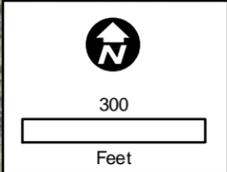
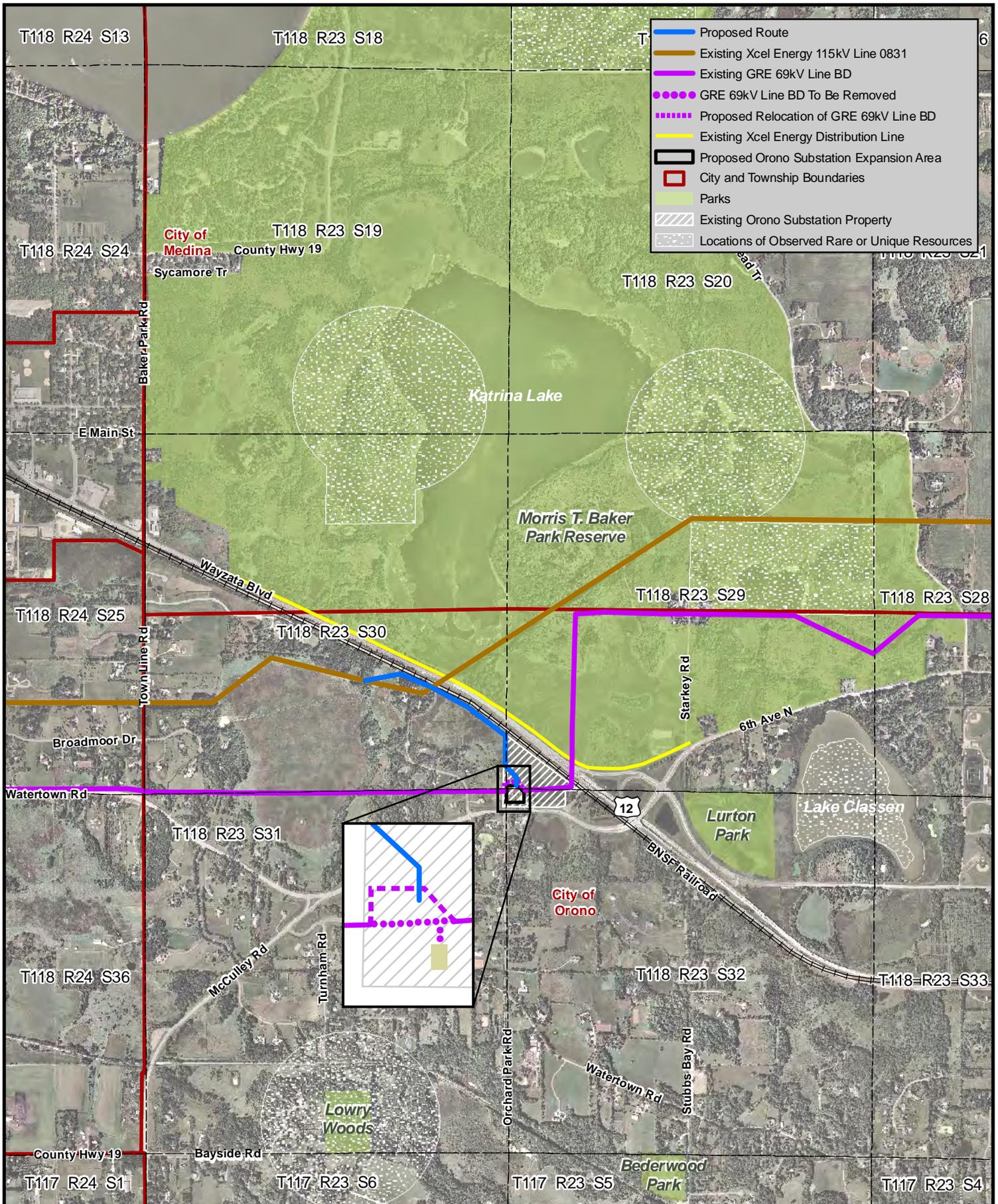


		FIGURE B-7 ORONO SUBSTATION REPLACEMENT AND NEW 115 KV TRANSMISSION LINE PROJECT PARKS AND RECREATION AREAS ORONO, MINNESOTA
DRN BY: TS	DATE: 3/24/11	MPUC Docket No. E002/TL-11-223
CHK'D BY: DD	DATE: 3/24/11	



2,000
Feet

Xcel Energy
RESPONSIBLE BY SATISFACTION

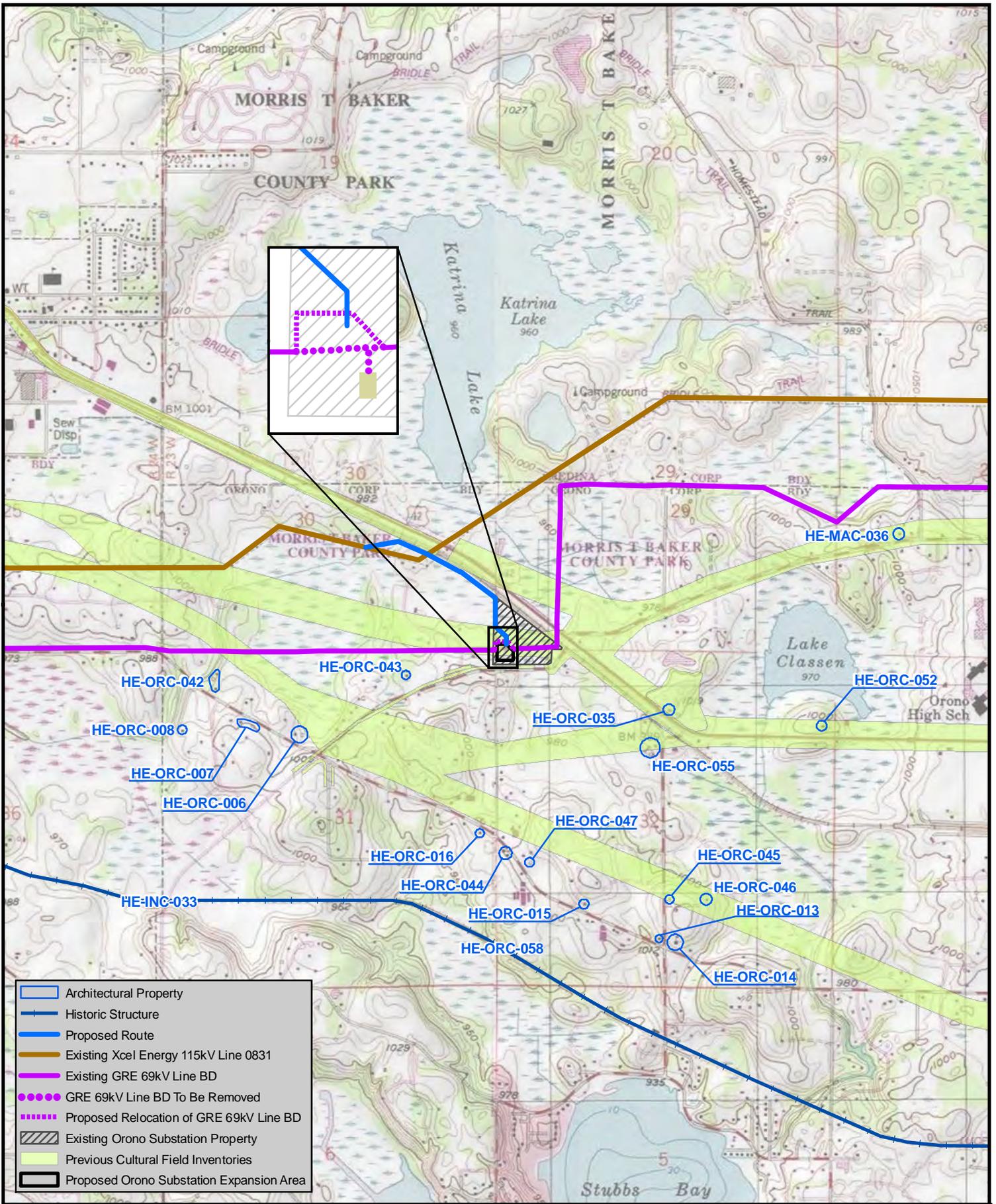
Aerial Image Source:
Aerial Express ECW Image
dated Sept. 15, 2009

Hennepin
County

FIGURE B-8
ORONO SUBSTATION REPLACEMENT AND NEW
115 KV TRANSMISSION LINE PROJECT
LOCATIONS OF KNOWN RARE AND UNIQUE RESOURCES
ORONO, MINNESOTA

DRN BY:	TS	DATE:	3/7/11
CHK'D BY:	DD	DATE:	3/7/11

MPUC Docket No.	E002/TL-11-223
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Topographic Map Source:
USGS Excelsior, Minn.
Quad dated 1997

FIGURE B-9
ORONO SUBSTATION REPLACEMENT AND NEW
115 KV TRANSMISSION LINE PROJECT
ARCHITECTURAL PROPERTIES & HISTORICAL SITES
ORONO, MINNESOTA

DRN BY: TS	DATE: 2/17/11
CHK'D BY: DD	DATE: 2/17/11

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2,000
Feet

PRELIMINARY
NOT FOR CONSTRUCTION

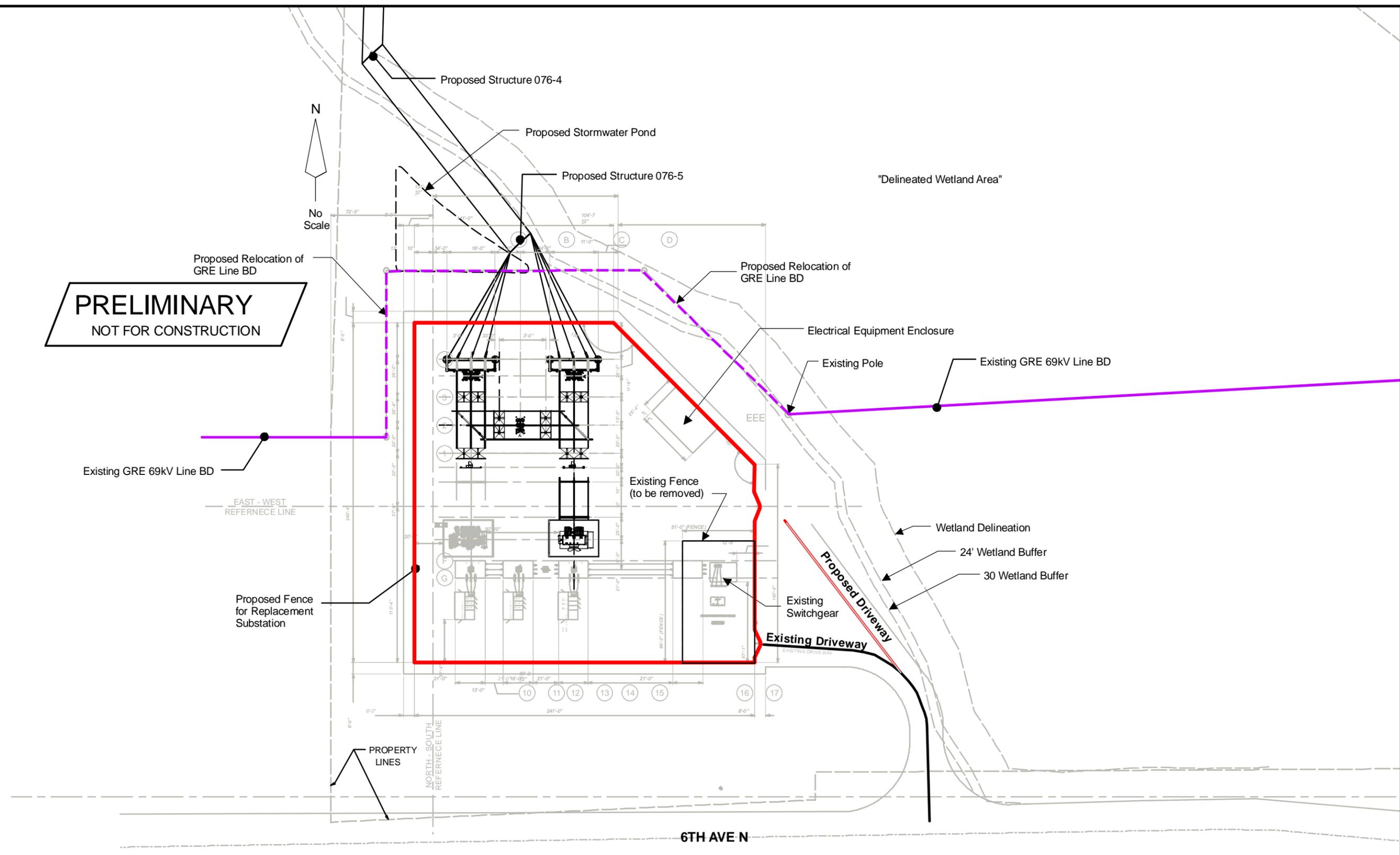


FIGURE B-10
ORONO SUBSTATION REPLACEMENT AND NEW
115 KV TRANSMISSION LINE PROJECT
ORONO SUBSTATION EXPANSION PLAN
ORONO, MINNESOTA



DRN BY: TS	DATE: 3/30/11
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