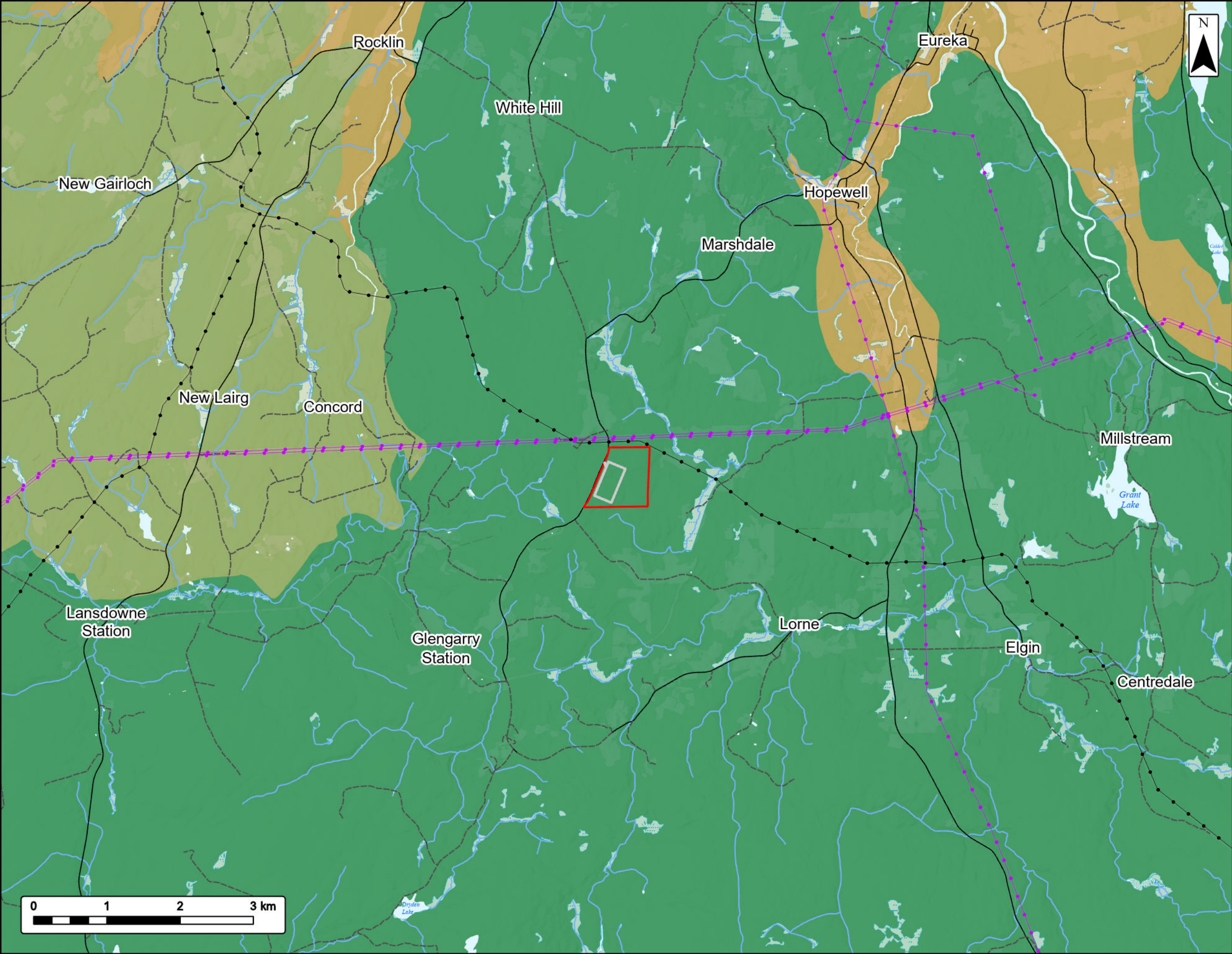




**Fast Acting Natural Gas Power
Generation Facility - Marshdale**
Ecodistricts and Ecoregions



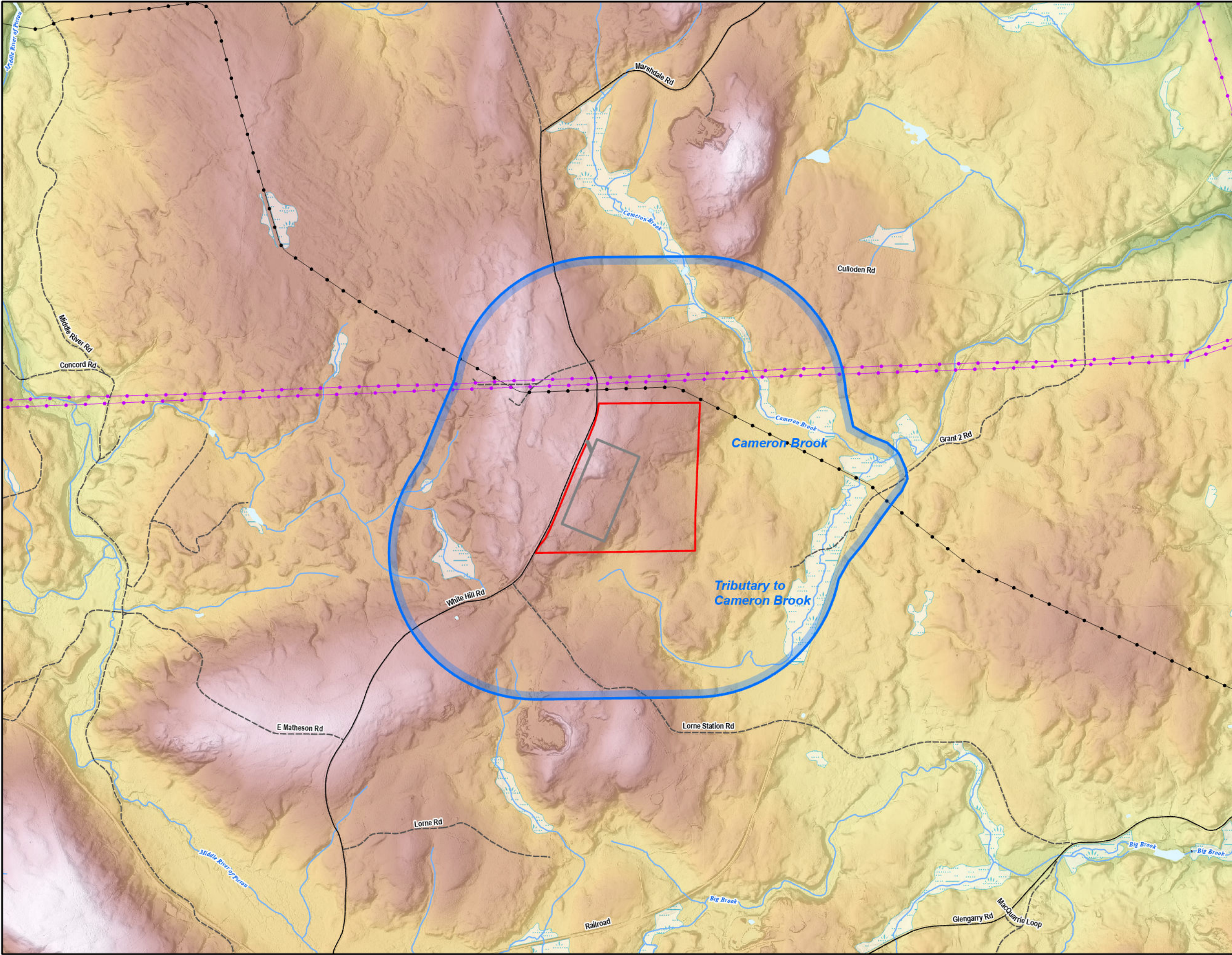
- Project Area 
- Project Footprint 
- Nova Scotia Uplands Ecoregion**
- 340 Cobequid Hills Ecodistrict 
 - 380 Central Uplands Ecodistrict 
- Northumberland/Bras D'Or Ecoregion**
- 530 Northumberland Lowlands Ecodistrict 
- Utilities (line)**
- Existing Pipeline 
 - Existing Power Transmission Lines 
- Transportation**
- Road 
 - Unpaved Road 
- Water Features**
- Mapped Watercourse 
 - Mapped Lakes and Rivers 
 - Mapped Wetland 



Coordinate System: NAD 1983 CSRS UTM Zone 20N
Sources: Esri, NASA, NGA, USGS, Service Nova Scotia, GeoNOVA, NSNRR, ACCDC, IBA Canada, CNWI, HERE, Garmin

Date:	2025-12-01	Project #:	25-12222
Scale:	1:50,000	Drawing #:	8.1
Drawn By:	K. Wallace		
Checked By:	M. Juurlink		





Fast Acting Natural Gas Power Generation Facility - Marshdale

Geomorphology

Project Area

Project Footprint

Geophysical LAA

Elevation (m)

202.90

46.72

Utilities (line)

Existing Pipeline

Existing Transmission Lines

Transportation

Road

Unpaved Road

Water Features

Mapped Watercourse

Mapped Lakes and Rivers

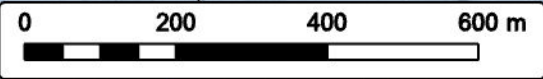
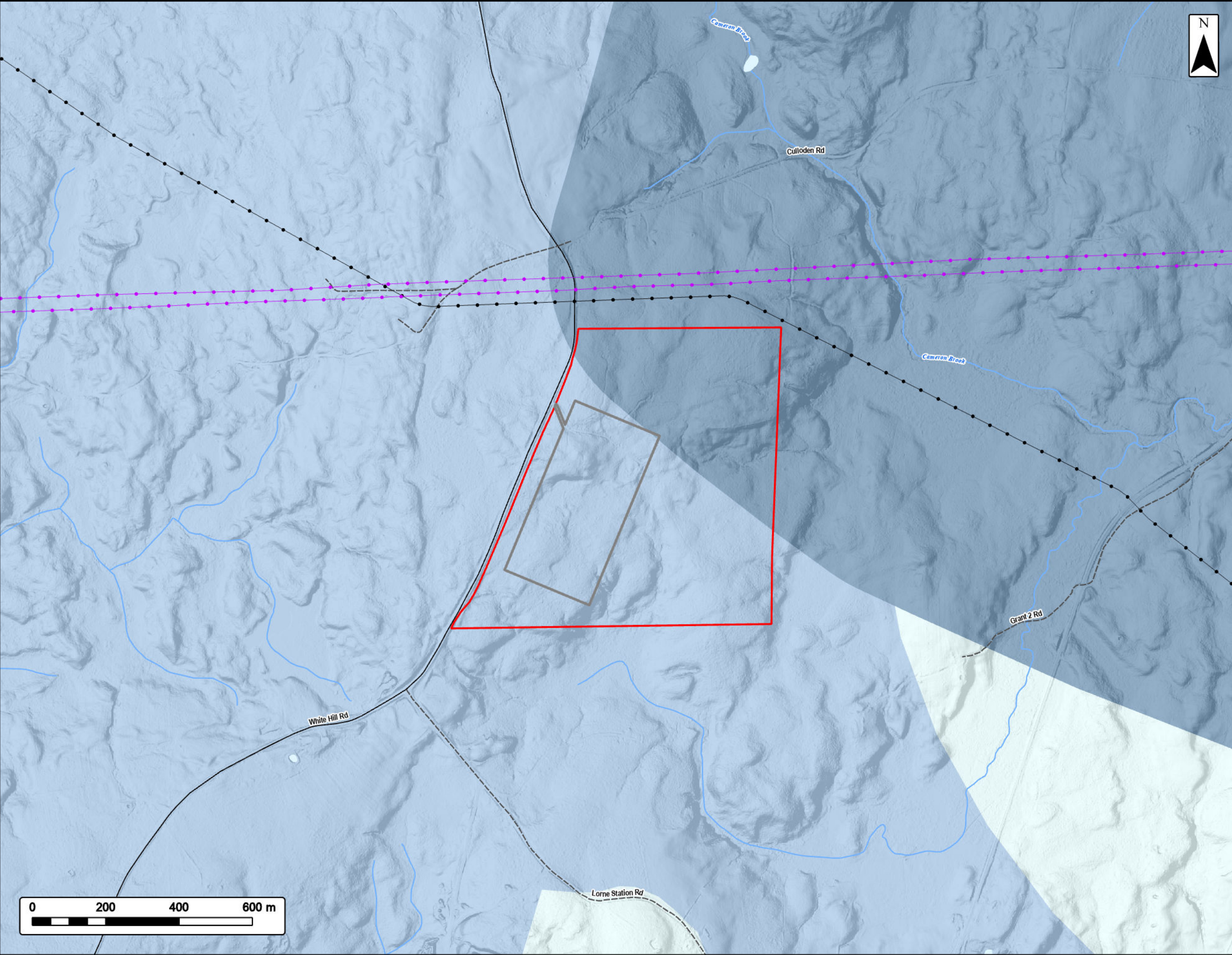
Mapped Wet Areas

0 50 100 200 km

Coordinate System: NAD 1983 CSRS UTM Zone 20N

Sources: Service Nova Scotia, GeoNOVA, NSNRR, ACCDC, IBA Canada, CNWI, HERE, Garmin

Date:	2025-12-10	Project #:	25-12222
Scale:	1:20,000	Drawing #:	8.2
Drawn By:	K. Wallace		
Checked By:	M. Juurlink		



Fast Acting Natural Gas Power Generation Facility - Marshdale

Karst Risk

Project Area

Project Footprint

Karst Risk

High Risk

Medium Risk

Low Risk

Utilities (line)

Existing Pipeline

Existing Transmission Lines

Transportation

Road

Unpaved Road

Water Features

Mapped Watercourse

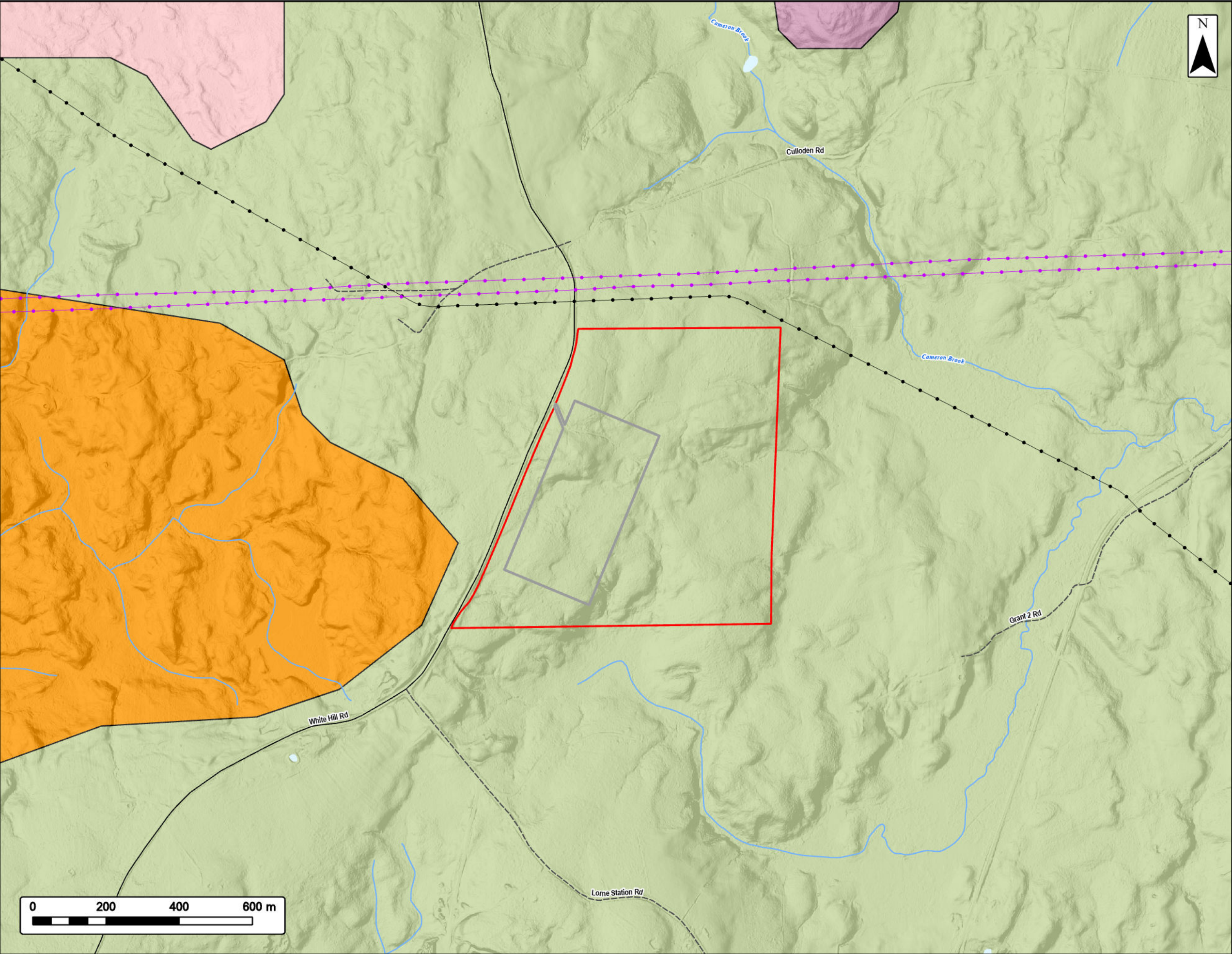
Mapped Lakes and Rivers

Coordinate System: NAD 1983 CSRS UTM Zone 20N

Sources: Service Nova Scotia, GeoNOVA, NSNRR, ACCDC, IBA Canada, CNWI, HERE, Garmin

Date:	2025-11-28	Project #:	25-12222
Scale:	1:10,000	Drawing #:	8.3
Drawn By:	K. Wallace		
Checked By:	M. Juurlink		

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Fast Acting Natural Gas Power Generation Facility - Marshdale

Surficial Geology

Project Area

Project Footprint

Surficial Geology By Unit

Bedrock

Kame Fields and Esker Systems

Residuum

Silty Till Plain

Utilities (line)

Existing Pipeline

Existing Transmission Lines

Transportation

Road

Unpaved Road

Water Features

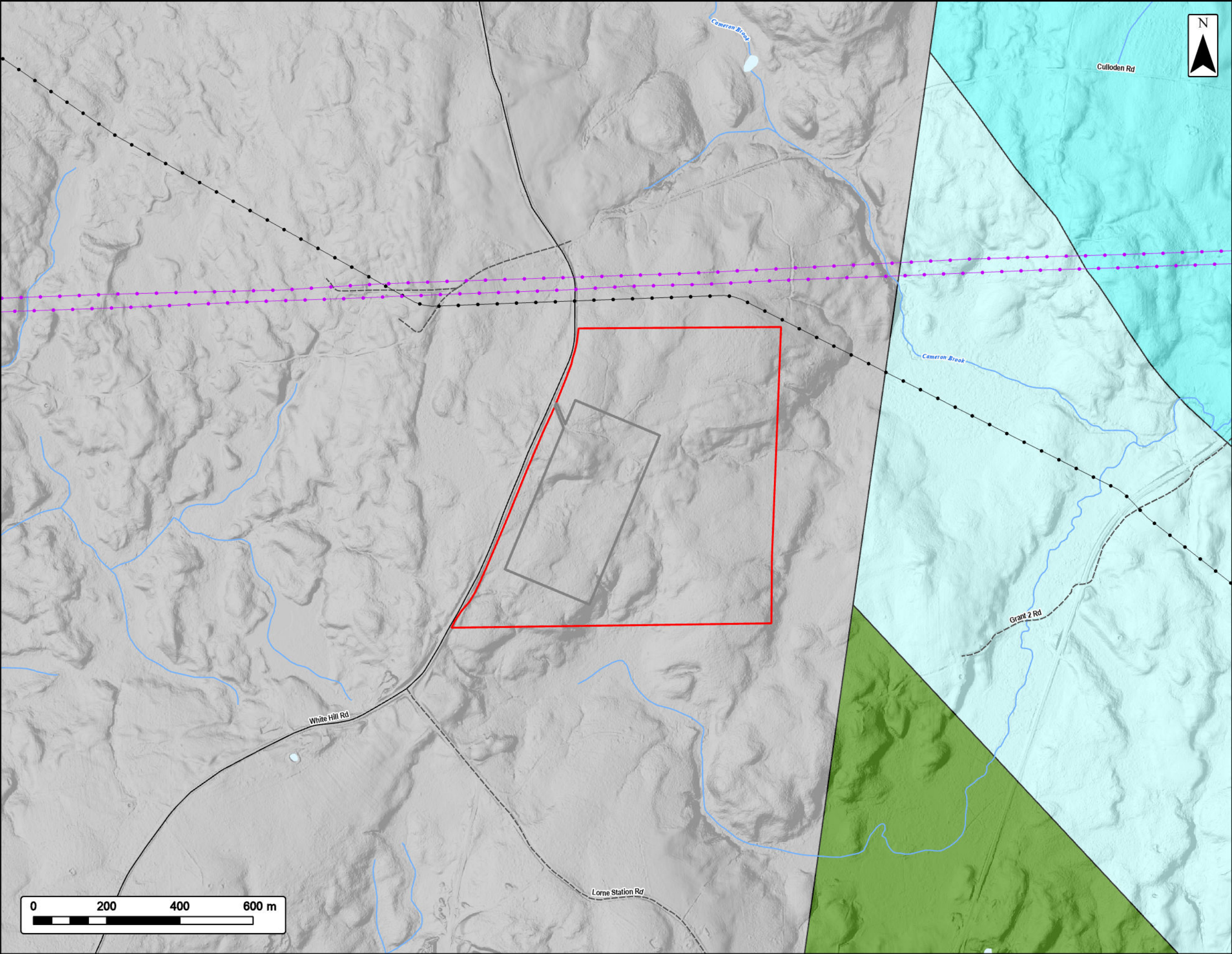
Mapped Watercourse

Mapped Lakes and Rivers

Coordinate System: NAD 1983 CSRS UTM Zone 20N

Sources: Service Nova Scotia, GeoNOVA, NSNRR, ACCDC, IBA Canada, CNWI, HERE, Garmin

Date:	2025-11-28	Project #:	25-12222
Scale:	1:10,000	Drawing #:	8.4
Drawn By:	K. Wallace		
Checked By:	M. Juurlink		



Fast Acting Natural Gas Power Generation Facility - Marshdale

Bedrock Geology

Project Area

Project Footprint

Bedrock Geology By Formation

Mabou Group

Lime-Kiln Brook, Churchville and Hood Island Formations

Pugwash Mine, Forbes Lake, Addington, Wallace Brook and Lakevale Formations

Georgeville Group

Utilities (line)

Existing Pipeline

Existing Transmission Lines

Transportation

Road

Unpaved Road

Water Features

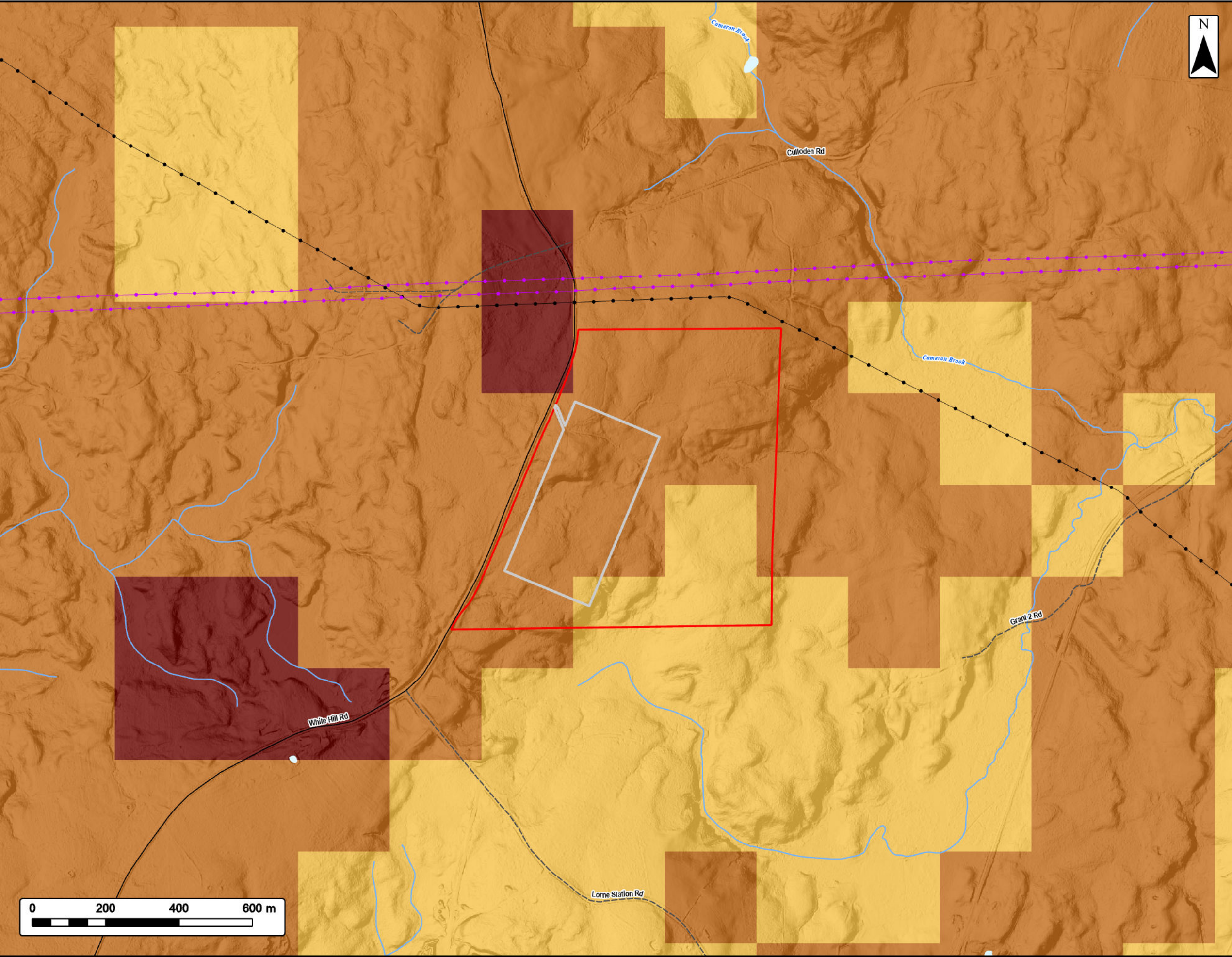
Mapped Watercourse

Mapped Lakes and Rivers

Coordinate System: NAD 1983 CSRS UTM Zone 20N

Sources: Service Nova Scotia, GeoNOVA, NSNRR, ACCDC, IBA Canada, CNWI, HERE, Garmin

Date:	2025-11-28	Project #:	25-12222
Scale:	1:10,000	Drawing #:	8.5
Drawn By:	K. Wallace		
Checked By:	M. Juurlink		



Fast Acting Natural Gas Power Generation Facility - Marshdale
Radon Potential

Project Area

Project Footprint

Radon Potential

High

Medium

Low

Utilities (line)

Existing Pipeline

Existing Transmission Lines

Transportation

Road

Unpaved Road

Water Features

Mapped Watercourse

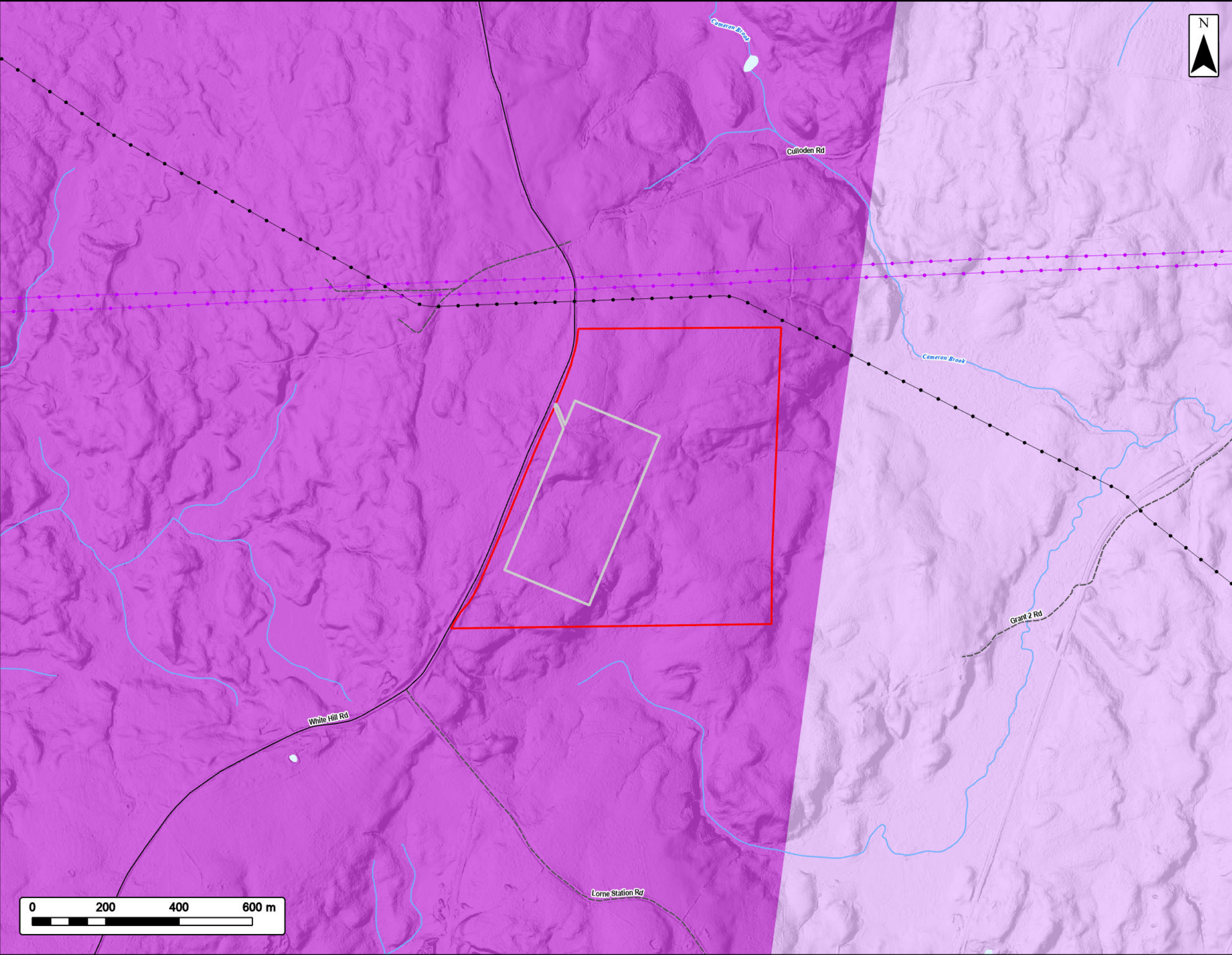
Mapped Lakes and Rivers

Coordinate System: NAD 1983 CSRS UTM Zone 20N

Sources: Service Nova Scotia, GeoNOVA, NSNRR, ACCDC, IBA Canada, CNWI, HERE, Garmin

Date:	2025-12-02	Project #:	25-12222
Scale:	1:10,000	Drawing #:	8.6
Drawn By:	K. Wallace		
Checked By:	M. Juurlink		

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Fast Acting Natural Gas Power Generation Facility - Marshdale
Arsenic Risk

Project Area

Project Footprint

Arsenic Risk

Medium Risk

Low Risk

Utilities (line)

Existing Pipeline

Existing Transmission Lines

Transportation

Road

Unpaved Road

Water Features

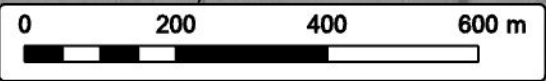
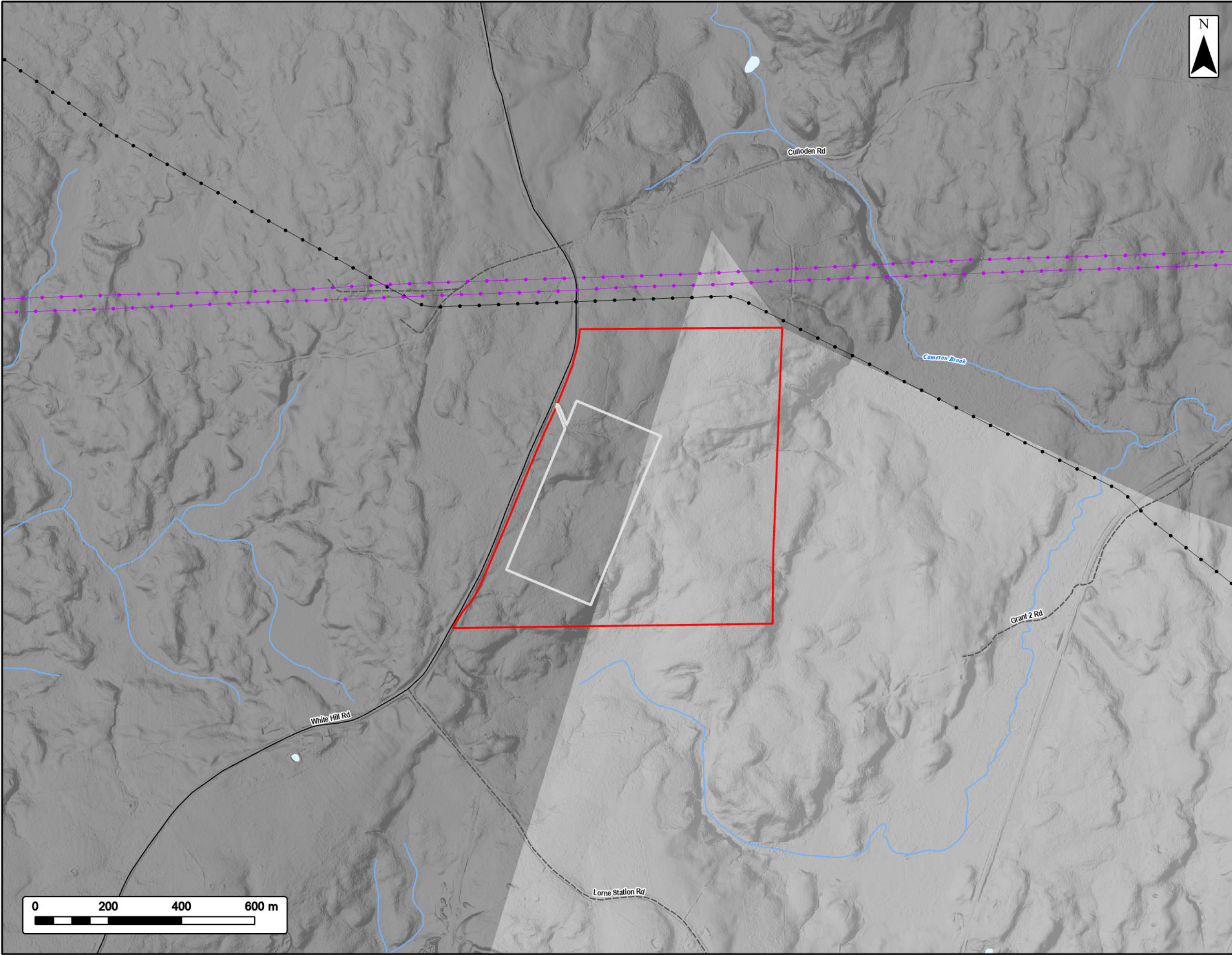
Mapped Watercourse

Mapped Lakes and Rivers

Coordinate System: NAD 1983 CSRS UTM Zone 20N

Sources: Service Nova Scotia, GeoNOVA, NSNRR, ACCDC, IBA Canada, CNWI, HERE, Garmin

Date:	2025-12-02	Project #:	25-12222
Scale:	1:10,000	Drawing #:	8.7
Drawn By:	K. Wallace		
Checked By:	M. Juurlink		



Fast Acting Natural Gas Power Generation Facility - Marshdale

Manganese Risk

Project Area

Project Footprint

Manganese Risk

High

Medium

Utilities (line)

Existing Pipeline

Existing Transmission Lines

Transportation

Road

Unpaved Road

Water Features

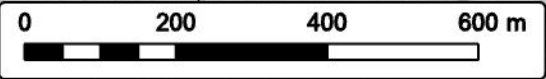
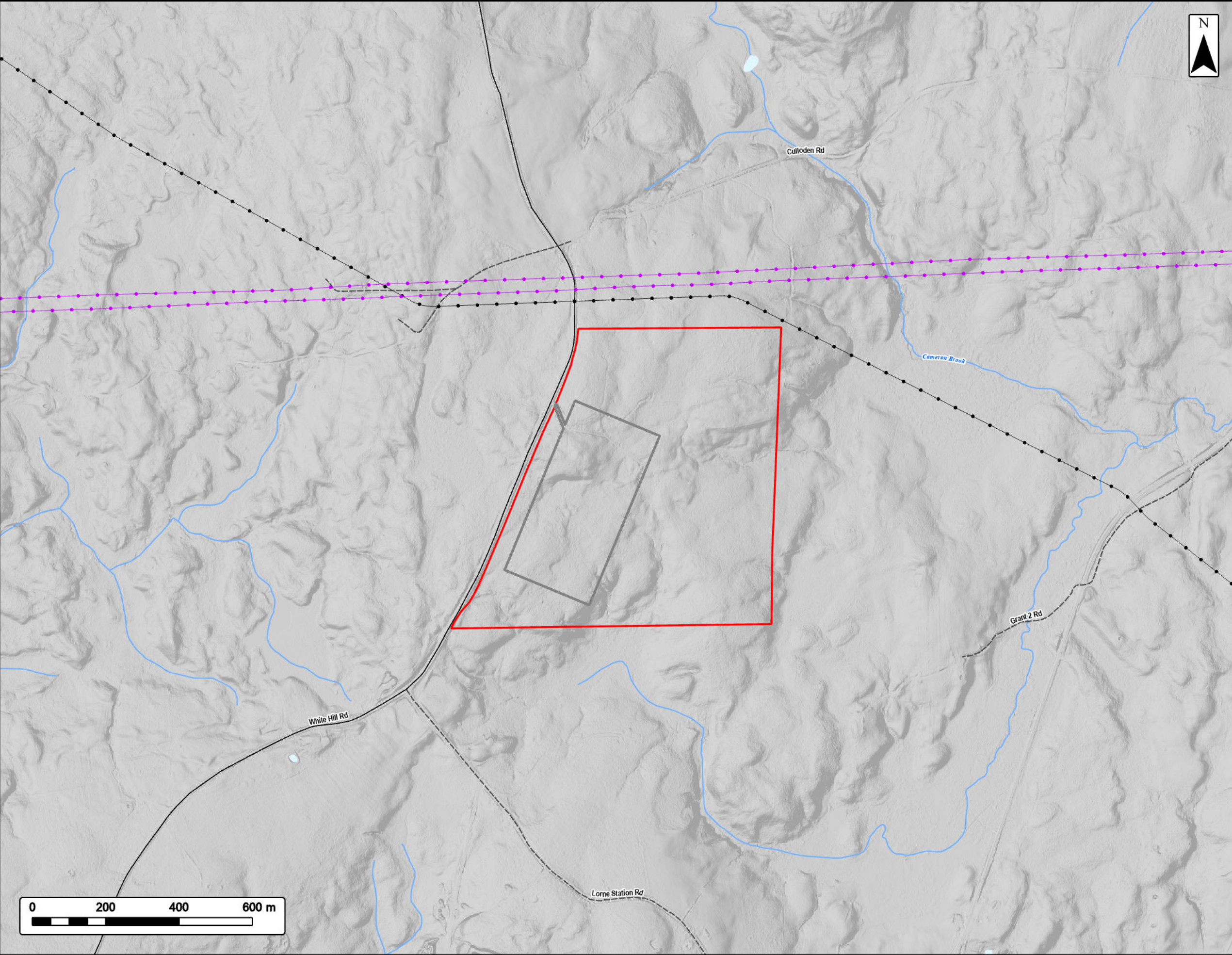
Mapped Watercourse

Mapped Lakes and Rivers

Coordinate System: NAD 1983 CSRS UTM Zone 20N

Sources: Service Nova Scotia, GeoNOVA, NSNRR, ACCDC, IBA Canada, CNWI, HERE, Garmin

Date:	2025-12-02	Project #:	25-12222
Scale:	1:10,000	Drawing #:	8.8
Drawn By:	K. Wallace		
Checked By:	M. Juurlink		



Fast Acting Natural Gas Power Generation Facility - Marshdale

Uranium Risk

Project Area

Project Footprint

Uranium Risk

Low

Utilities (line)

Existing Pipeline

Existing Transmission Lines

Transportation

Road

Unpaved Road

Water Features

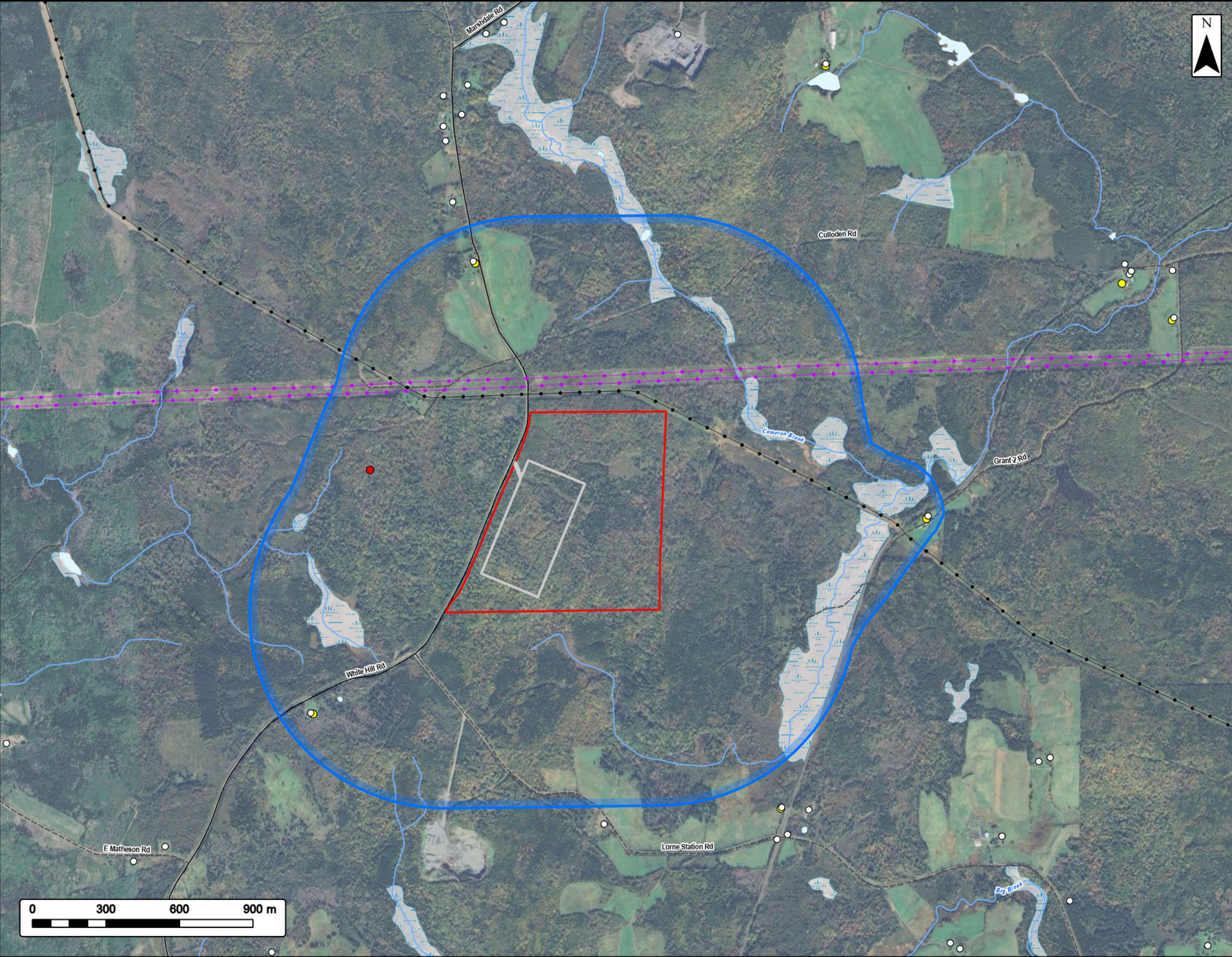
Mapped Watercourse

Mapped Lakes and Rivers

Coordinate System: NAD 1983 CSRS UTM Zone 20N

Sources: Service Nova Scotia, GeoNOVA, NSNRR, ACCDC, IBA Canada, CNWI, HERE, Garmin

Date:	2025-12-02	Project #:	25-12222
Scale:	1:10,000	Drawing #:	8.9
Drawn By:	K. Wallace		
Checked By:	M. Juurlink		



**Fast Acting Natural Gas Power
Generation Facility - Marshdale**
Groundwater Wells



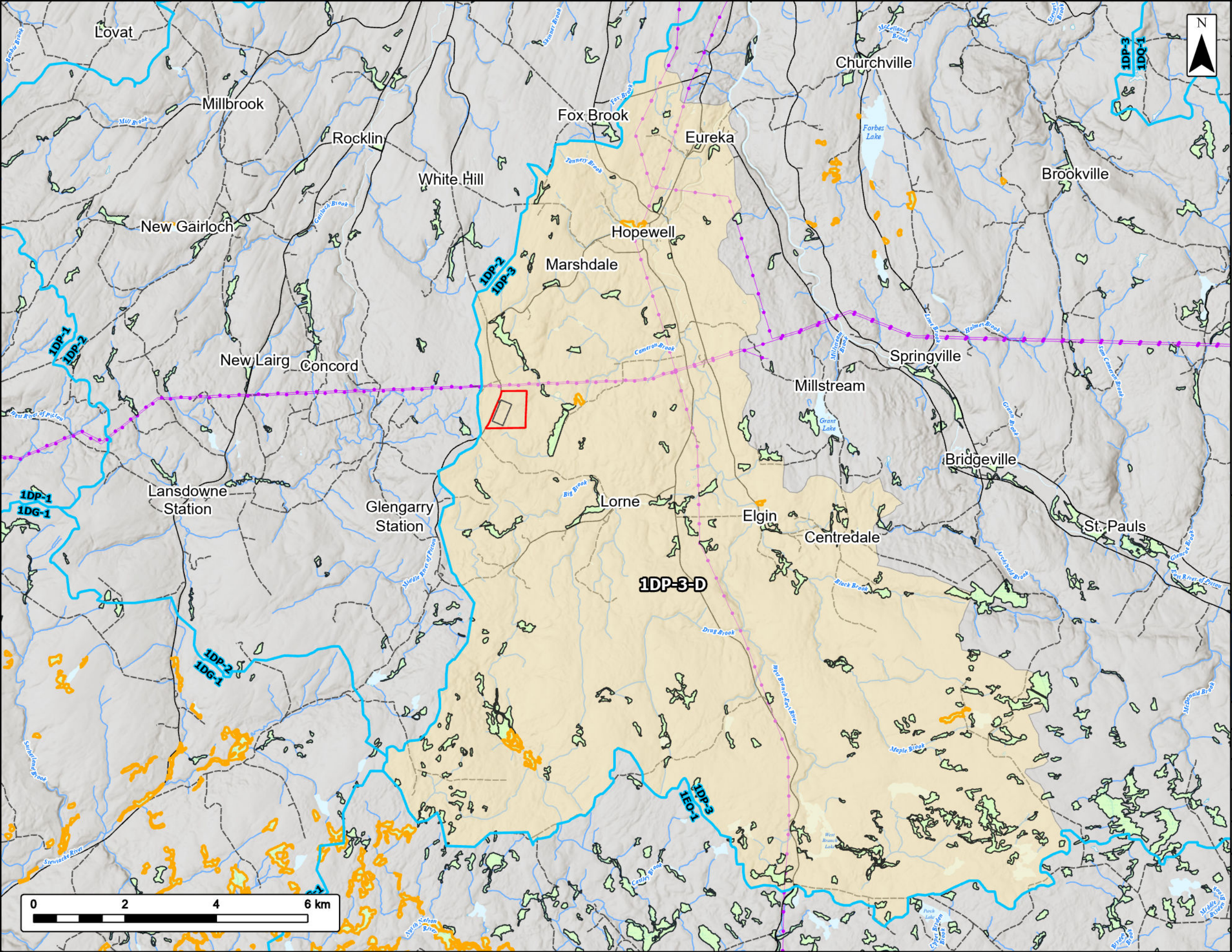
- Project Area
- Project Footprint
- Drilled Well (NS Well Logs Database)
- Potential Wells (Receptor)
- Potential Wells (Modelled Receptors)
- Geophysical LAA
- Utilities (line)**
 - Existing Pipeline
 - Existing Transmission Lines
- Transportation**
 - Road
 - Unpaved Road
- Water Features**
 - Mapped Watercourse
 - Mapped Lakes and Rivers
 - Mapped Wetland



Coordinate System: NAD 1983 CSRS UTM Zone 20N
Sources: © OpenStreetMap (and) contributors, CC-BY-SA, GeoNOVA, NSNRR, ACCDC, IBA Canada, CNWI, HERE, Garmin

Date:	2025-12-10	Project #:	25-12222
Scale:	1:15,000	Drawing #:	8.10
Drawn By:	K. Wallace		
Checked By:	M. Juurlink		





Fast Acting Natural Gas Power Generation Facility - Marshdale

Desktop Freshwater Aquatic Environment and LAA



Project Area

Project Footprint

Secondary Watershed Boundary

Tertiary Watershed (LAA)

NSNR Wetlands

Wetland of Special Significance

Utilities (line)

Existing Power Transmission Lines

Transportation

Road

Unpaved Road

Water Features

Mapped Watercourse

Mapped Lakes and Rivers

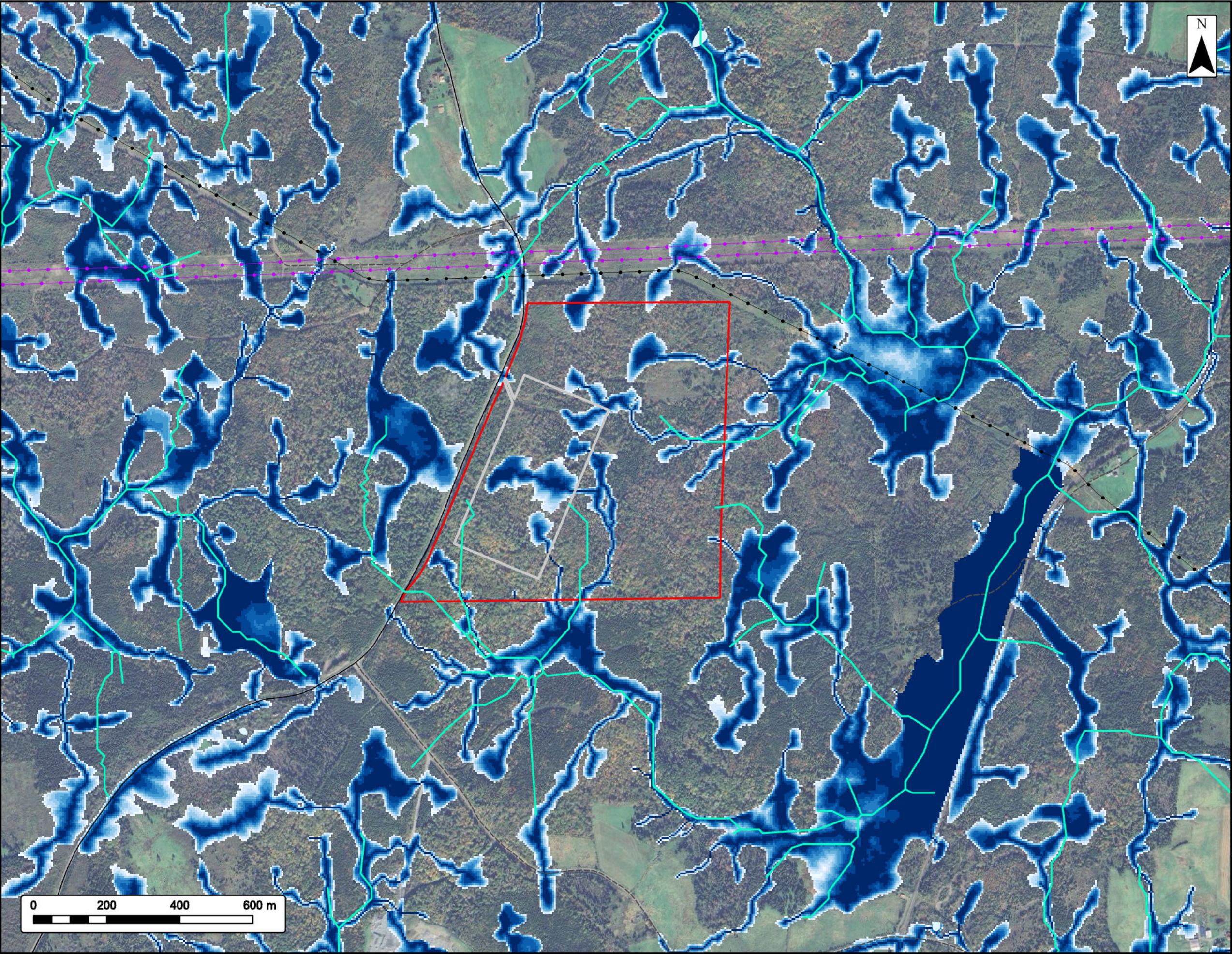
Mapped Wetland



Coordinate System: NAD 1983 CSRS UTM Zone 20N
Sources: Esri, NASA, NGA, USGS, GeoNOVA, NSNRR, ACCDC, IBA Canada, CNWI, HERE, Garmin

Date:	2025-12-02	Project #:	25-12222
Scale:	1:80,000	Drawing #:	9.1
Drawn By:	K. Wallace		
Checked By:	M. Juurlink		





**Fast Acting Natural Gas Power
Generation Facility - Marshdale**
Wet Area Mapping



Project Area		Depth to Water (cm)	
Project Footprint		0 - 10	
Flow Accumulation		10 - 20	
Mapped Lakes and Rivers		20 - 30	
Utilities (line)		30 - 40	
Existing Pipeline		40 - 50	
Existing Power Transmission Lines		50 - 60	
Transportation		60 - 70	
Road		70 - 80	
Unpaved Road		80 - 90	
		90 - 100	



Coordinate System: NAD 1983 CSRS UTM Zone 20N
Sources: © OpenStreetMap (and) contributors, CC-BY-SA, GeoNOVA, NSNRR, ACCDC, IBA Canada, CNWI, HERE, Garmin

Date:	2025-12-02	Project #:	25-12222
Scale:	1:10,000	Drawing #:	9.2
Drawn By:	K. Wallace		
Checked By:	M. Juurlink		

