# APPENDIX B – MAPS

Keewatinoow C.S.
GILLAM
THOMPSON
FLIN FLON
THE PAS
DAUPHIN
PORTAGE LA PRAIRIE
BRANDON
Riel C.S.
WINNIPEG
STEINBACH
Southern Indian Lake
Waskaiowaka Lake
Stephens Lake
Hayes River
Split Lake
NELSON RIVER
Burntwood River
Wuskwatim Lake
Paint Lake
Kississing Lake
Sipiwesk Lake
Wekusko Lake
Reed Lake
Cross Lake
Gods Lake
Cormorant Lake
Clearwater Lake
North Moose Lake
Playgreen Lake
Molson Lake
Island Lake
CEDAR LAKE
LAKE WINNIPEGOSIS
LAKE WINNIPEG
POPLAR/NANOWIN RIVERS PARK RESERVE
Red Deer Lake
Swan Lake
Dauphin Lake
LAKE MANITOBA
Lac du Bonnet
Winnipeg River
Red River
280
6
39
10
60
20
68
50
34
2
13
3
75
59
12
15

## Bipole III Transmission Project

Project Infrastructure

- Final Preferred Route
- Converter Station
- Local Study Area

Soil Resource Inventory (SRI)

- Biophysical (1:125,000)
- Detailed (1:20,000 to 1:50,000)
- Reconnaissance (1:126,720)
- Soil Landscapes of Canada (1:1,000,000)

Manitoba Hydro

Coordinate System: UTM Zone 14N NAD83
Data Source: MB Hydro, MMM, Stantec, ProvMB, NRCAN
Date Created: August 11, 2011

0 25 50 Kilometres
0 25 50 Miles

N

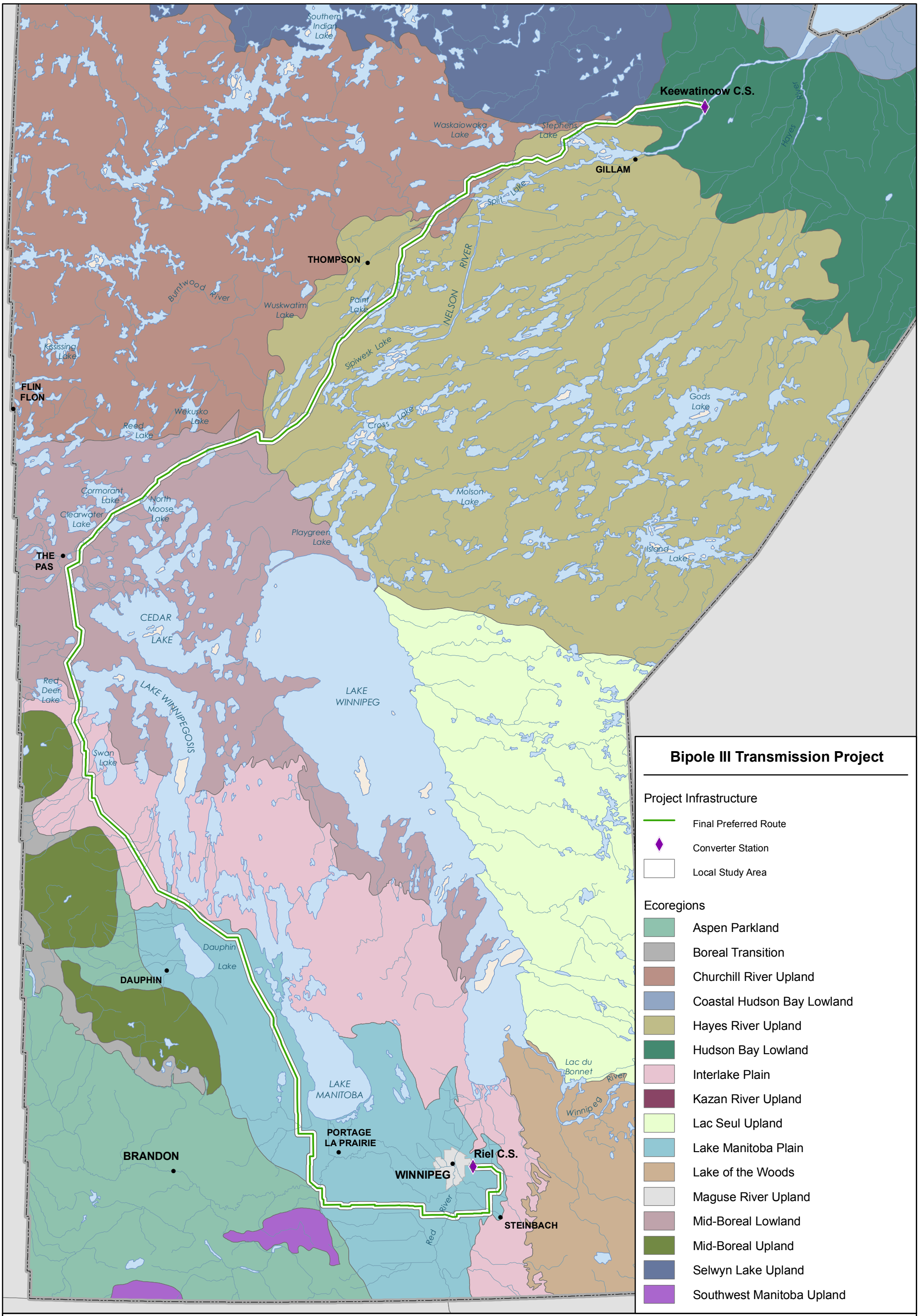
1:2,500,000

# Existing Soil Resource Inventory (SRI) in Manitoba

*Draft: For Discussion Purposes Only*

Map 1

Created By: Stantec (JS)




## Bipole III Transmission Project

### Project Infrastructure

- Final Preferred Route
- Converter Station
- Local Study Area

### Ecoregions

- Aspen Parkland
- Boreal Transition
- Churchill River Upland
- Coastal Hudson Bay Lowland
- Hayes River Upland
- Hudson Bay Lowland
- Interlake Plain
- Kazan River Upland
- Lac Seul Upland
- Lake Manitoba Plain
- Lake of the Woods
- Maguse River Upland
- Mid-Boreal Lowland
- Mid-Boreal Upland
- Selwyn Lake Upland
- Southwest Manitoba Upland

Manitoba Hydro

Coordinate System: UTM Zone 14N NAD83
Data Source: MB Hydro, MMM, Stantec, ProvMB, NRCAN
Date Created: August 11, 2011

0 25 50 Kilometres
0 25 50 Miles

N

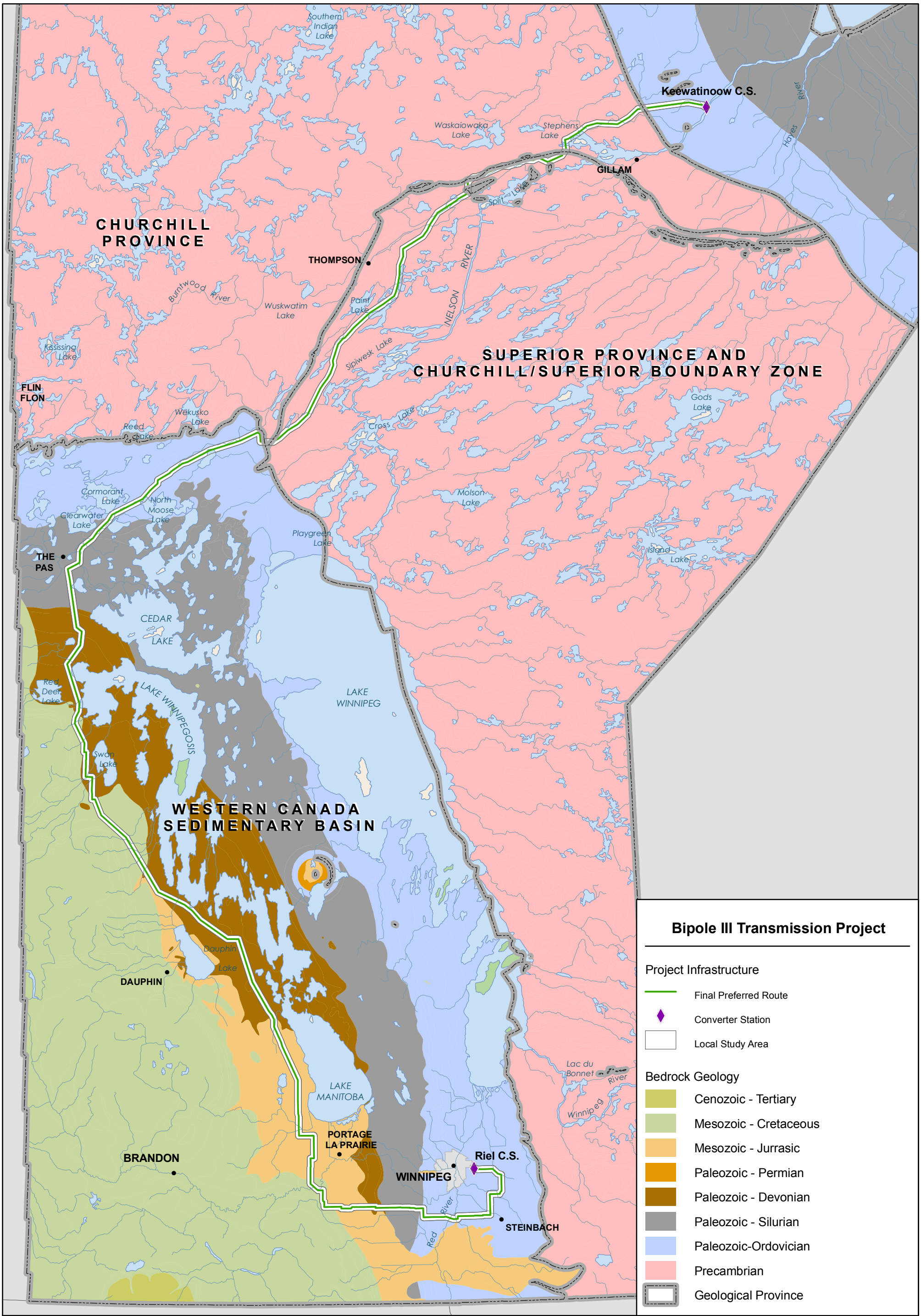
1:2,500,000

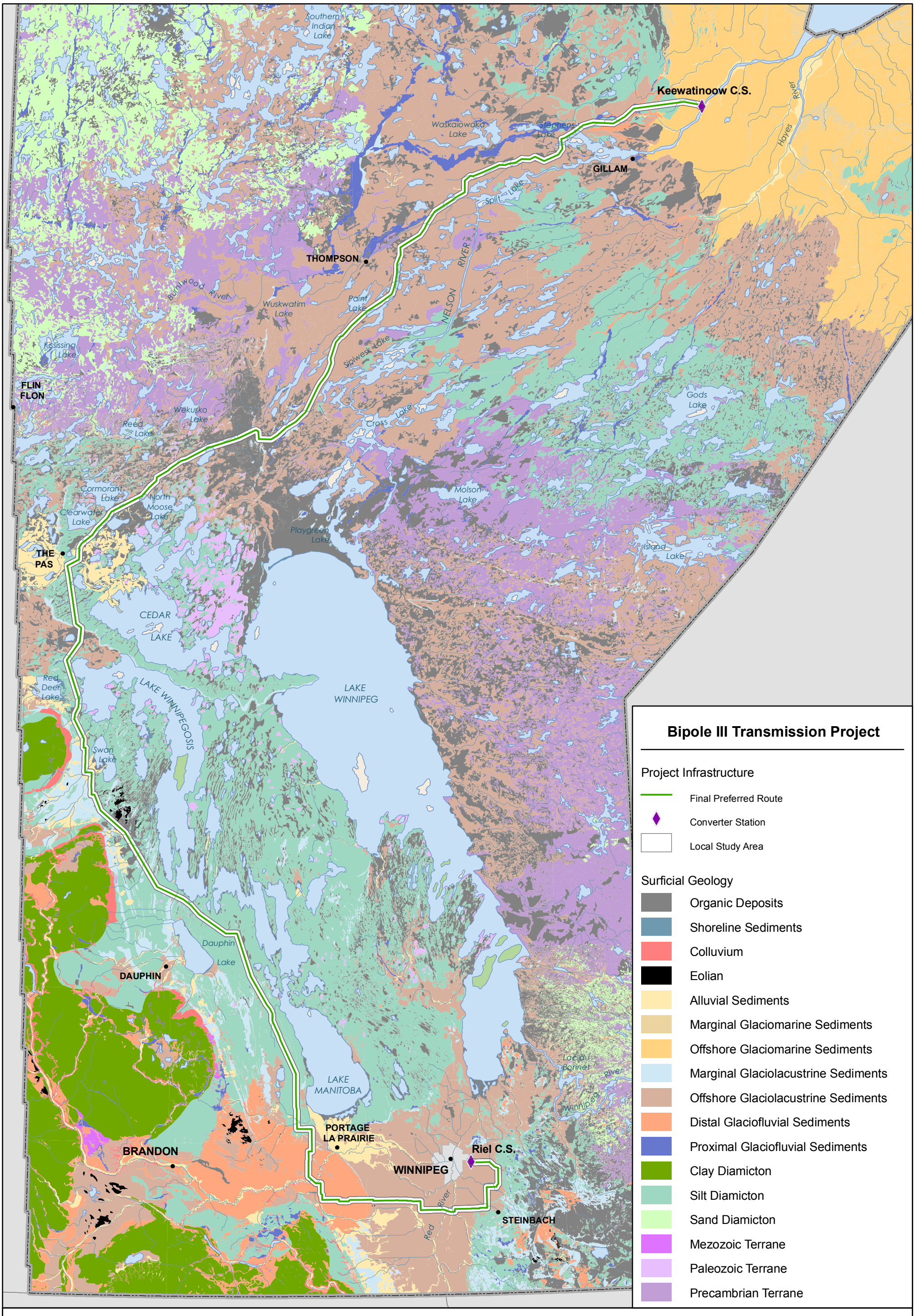
# Ecoregions of Manitoba

*Draft: For Discussion Purposes Only*

**Map 2**

**Created By: Stantec (JS)**


Southern Indian Lake
Keewatinoow C.S.
Hayes River
Waskaiowaka Lake
Stephens Lake
GILLAM
Split Lake
CHURCHILL PROVINCE
THOMPSON
Burntwood River
Wuskwatim Lake
Paint Lake
NELSON RIVER
Kissising Lake
Sipiwesk Lake
SUPERIOR PROVINCE AND CHURCHILL/SUPERIOR BOUNDARY ZONE
FLIN FLON
Wekusko Lake
Reed Lake
Gods Lake
Cross Lake
Molson Lake
Cormorant Lake
North Moose Lake
Clearwater Lake
Playgreen Lake
Island Lake
THE PAS
CEDAR LAKE
Red Deer Lake
LAKE WINNIPEGOSIS
LAKE WINNIPEG
Swan Lake
WESTERN CANADA SEDIMENTARY BASIN
Dauphin Lake
DAUPHIN
LAKE MANITOBA
Lac du Bonnet
Winnipeg River
PORTAGE LA PRAIRIE
BRANDON
Riel C.S.
WINNIPEG
Red River
STEINBACH
Bipole III Transmission Project
Project Infrastructure
Final Preferred Route
Converter Station
Local Study Area
Bedrock Geology
Cenozoic - Tertiary
Mesozoic - Cretaceous
Mesozoic - Jurrasic
Paleozoic - Permian
Paleozoic - Devonian
Paleozoic - Silurian
Paleozoic-Ordovician
Precambrian
Geological Province
Manitoba Hydro
Coordinate System: UTM Zone 14N NAD83
Data Source: MB Hydro, MMM, Stantec, ProvMB, NRCAN
Date Created: August 11, 2011
0 25 50 Kilometres
0 25 50 Miles
N
1:2,500,000
Bedrock Geology
Draft: For Discussion Purposes Only
Map 3
Created By: Stantec (JS)




## Bipole III Transmission Project

**Project Infrastructure**

- Final Preferred Route
- Converter Station
- Local Study Area

**Surficial Geology**

- Organic Deposits
- Shoreline Sediments
- Colluvium
- Eolian
- Alluvial Sediments
- Marginal Glaciomarine Sediments
- Offshore Glaciomarine Sediments
- Marginal Glaciolacustrine Sediments
- Offshore Glaciolacustrine Sediments
- Distal Glaciofluvial Sediments
- Proximal Glaciofluvial Sediments
- Clay Diamicton
- Silt Diamicton
- Sand Diamicton
- Mezozoic Terrane
- Paleozoic Terrane
- Precambrian Terrane

Manitoba Hydro

Coordinate System: UTM Zone 14N NAD83
Data Source: MB Hydro, MMM, Stantec, ProvMB, NRCAN
Date Created: August 11, 2011

0 25 50 Kilometres
0 25 50 Miles

N

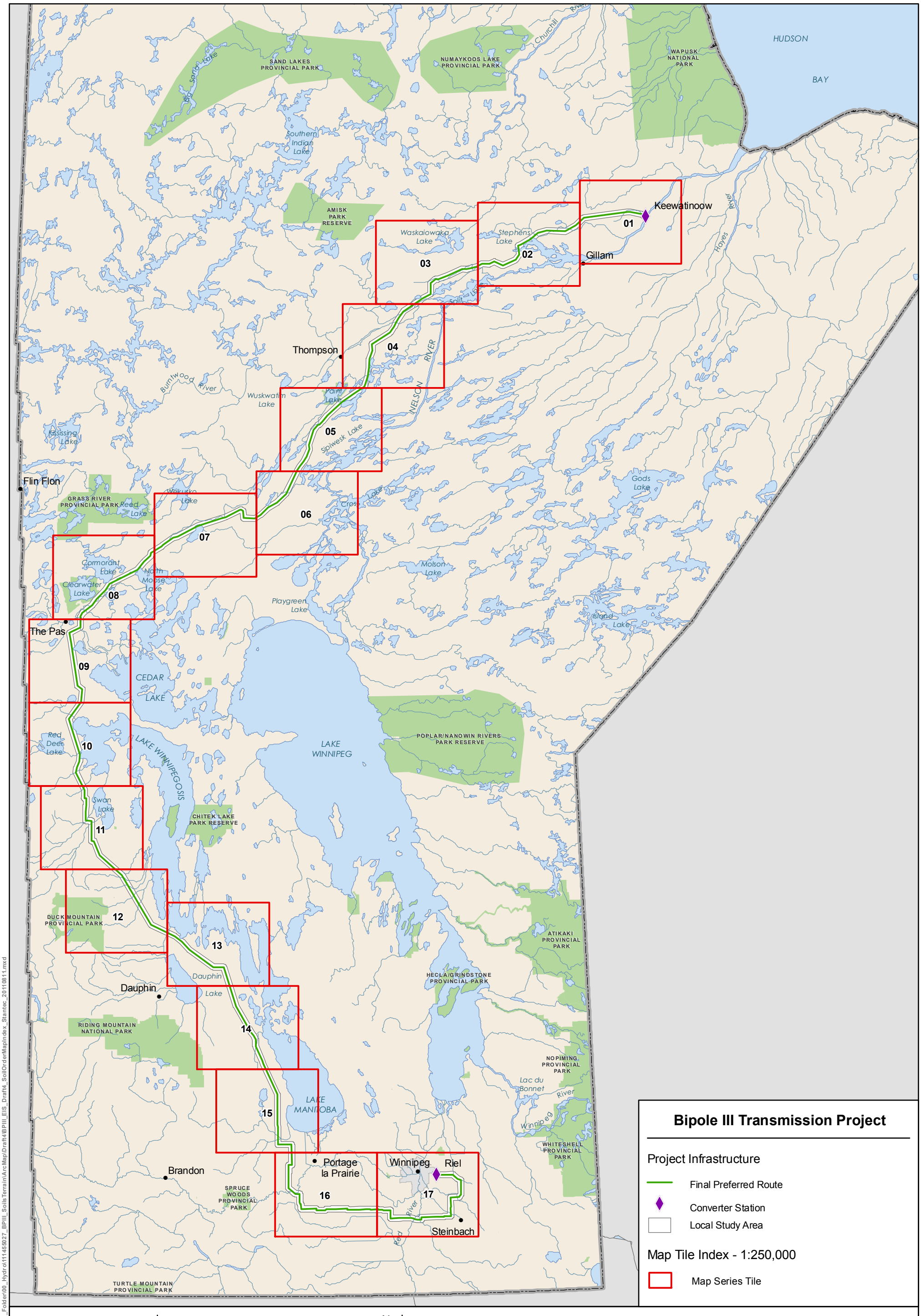
1:2,500,000

# Surficial Geology

*Draft: For Discussion Purposes Only*

**Map 4**

**Created By: Stantec (JS)**




## Bipole III Transmission Project

Project Infrastructure

- Final Preferred Route
- Converter Station
- Local Study Area

Map Tile Index - 1:250,000

- Map Series Tile

Manitoba Hydro

Coordinate System: UTM Zone 14N NAD83
Data Source: MB Hydro, MMM, ProvMB
Date Created: August 11, 2011

0 25 50 Kilometres
0 25 50 Miles

N

1:2,750,000

# Index of Map Series

## Soil Order

*Draft: For Discussion Purposes Only*

Map Series 100

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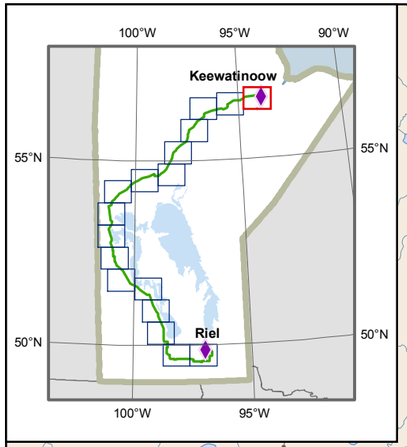


Manitoba Hydro

# Bipole III Transmission Project

## Project Infrastructure

- Final Preferred Route
- Converter Station Site
- AC Collector Line
- Ground Electrode Line
- Ground Electrode Site
- Construction Power (KN36)
- Construction Power Site
- Construction Camp Site
- Local Study Area

## Infrastructure

- Converter Station
- Generating Station
- Bipole I and II
- Transmission Line

## Soil Order

- Brunisols
- Chernozems
- Cryosols
- Gleysols
- Luvisols
- Organics
- Regosols
- Vertisols
- Non-Soil

## Landbase

- Community
- First Nation
- National/Provincial Park

**Coordinate System: UTM Zone 14N NAD83**
**Data Source: MBHydro, MMM, Stantec, ProvMB, NRCAN**
**Date Created: August 15, 2011**

N

0 5 10 Kilometres
0 3 6 Miles

1:250,000

# Soil Order

*Draft: For Discussion Purposes Only*

Map100 -1

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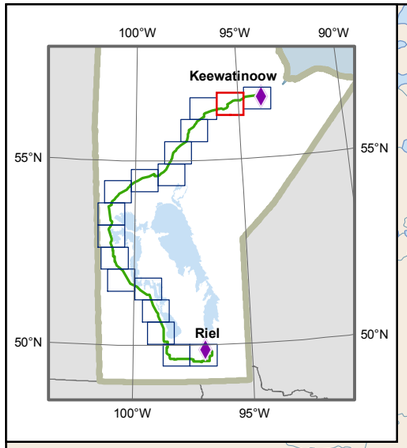


Manitoba Hydro

# Bipole III Transmission Project

## Project Infrastructure
- Final Preferred Route
- Local Study Area

## Infrastructure
- Bipole I and II
- Transmission Line

## Soil Order
- Brunisols
- Chernozems
- Cryosols
- Gleysols
- Luvisols
- Organics
- Regosols
- Vertisols
- Non-Soil

## Landbase
- Community
- First Nation
- National/Provincial Park

**Coordinate System: UTM Zone 14N NAD83**
**Data Source: MBHydro, MMM, Stantec, ProvMB, NRCAN**
**Date Created: August 15, 2011**

N

0 5 10 Kilometres
0 3 6 Miles

1:250,000

# Soil Order

*Draft: For Discussion Purposes Only*

Map 100 -2

**Created By: Stantec**

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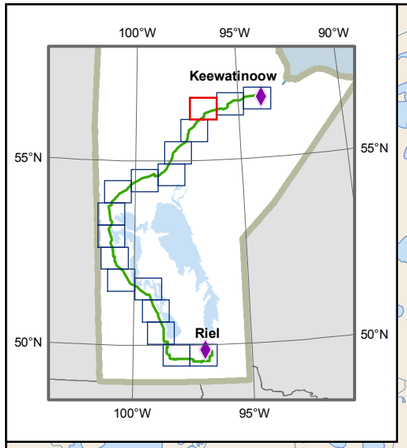


Manitoba Hydro

# Bipole III Transmission Project

## Project Infrastructure

- Final Preferred Route
- Local Study Area

## Infrastructure

- Transmission Line

## Soil Order

- Brunisols
- Chernozems
- Cryosols
- Gleysols
- Luvisols
- Organics
- Regosols
- Vertisols
- Non-Soil

## Landbase

- Community
- First Nation
- National/Provincial Park

**Coordinate System: UTM Zone 14N NAD83**
**Data Source: MBHydro, MMM, Stantec, ProvMB, NRCAN**
**Date Created: August 15, 2011**

N

0 5 10 Kilometres
0 3 6 Miles

1:250,000

# Soil Order

*Draft: For Discussion Purposes Only*

Map 100 - 3

**Created By: Stantec**

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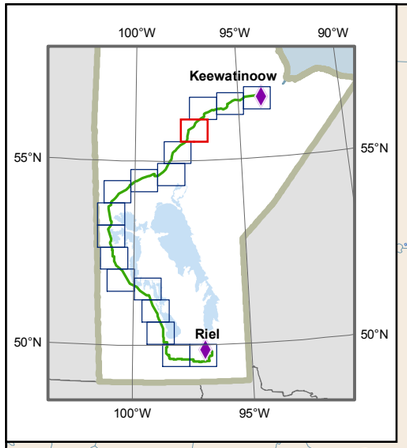


Manitoba Hydro

# Bipole III Transmission Project

## Project Infrastructure

- Final Preferred Route
- Local Study Area

## Infrastructure

- Generating Station
- Transmission Line

## Soil Order

- Brunisols
- Chernozems
- Cryosols
- Gleysols
- Luvisols
- Organics
- Regosols
- Vertisols
- Non-Soil

## Landbase

- Community
- City / Town
- First Nation
- National/Provincial Park

**Coordinate System: UTM Zone 14N NAD83**
**Data Source: MBHydro, MMM, Stantec, ProvMB, NRCAN**
**Date Created: August 15, 2011**

N

0 5 10 Kilometres
0 3 6 Miles

1:250,000

# Soil Order

*Draft: For Discussion Purposes Only*

Map100 - 4

File Location: G:_GIS_Project_Folder\00_Hydro\111455027_BPIII_SoilsTerrainArcMap\Draft4\BPIII_EIS_Draft4_SoilOrder_Stantec_20110815.mxd

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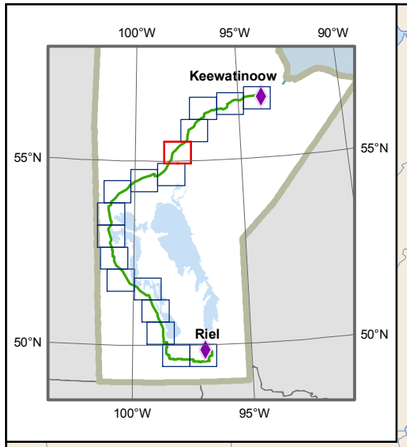


Manitoba Hydro

# Bipole III Transmission Project

## Project Infrastructure

- Final Preferred Route
- Local Study Area

## Infrastructure

- Bipole I and II
- Transmission Line

## Soil Order

- Brunisols
- Chernozems
- Cryosols
- Gleysols
- Luvisols
- Organics
- Regosols
- Vertisols
- Non-Soil

## Landbase

- Community
- First Nation
- National/Provincial Park

Coordinate System: UTM Zone 14N NAD83
Data Source: MBHydro, MMM, Stantec, ProvMB, NRCAN
Date Created: August 15, 2011

N

0 5 10 Kilometres
0 3 6 Miles

1:250,000

# Soil Order

*Draft: For Discussion Purposes Only*

Map100 - 5

File Location: G:_GIS_Project_Folder\00_Hydro\111455027_BPIII_SoilsTerrain\ArcMap\Draft4\BPIII_EIS_Draft4_SoilOrder_Stantec_20110815.mxd

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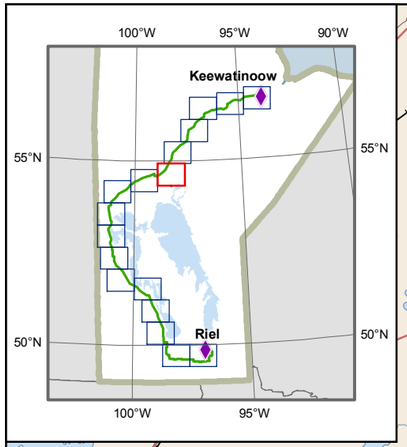



Manitoba Hydro

# Bipole III Transmission Project

## Project Infrastructure
- Final Preferred Route
- Local Study Area

## Infrastructure
- Generating Station
- Bipole I and II
- Transmission Line

## Soil Order
- Brunisols
- Chernozems
- Cryosols
- Gleysols
- Luvisols
- Organics
- Regosols
- Vertisols
- Non-Soil

## Landbase
- Community
- City / Town
- First Nation
- National/Provincial Park

**Coordinate System: UTM Zone 14N NAD83**
**Data Source: MBHydro, MMM, Stantec, ProvMB, NRCAN**
**Date Created: August 15, 2011**

N

0 5 10 Kilometres
0 3 6 Miles

1:250,000

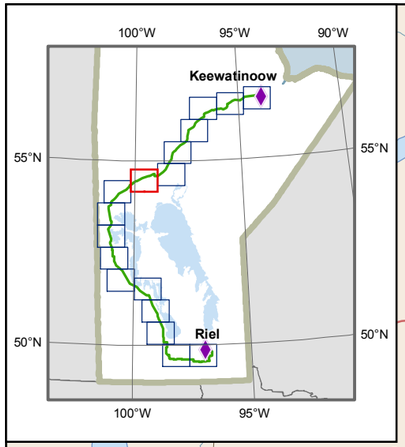
# Soil Order

*Draft: For Discussion Purposes Only*

Map100 - 6

File Location: G:_GIS_Project_Folder\00_Hydro\111455027_BPIII_SoilsTerrain\ArcMap\Draft4\BPIII_EIS_Draft4_SoilOrder_Stantec_20110815.mxd

**Created By: Stantec**




Manitoba Hydro

# Bipole III Transmission Project

## Project Infrastructure
- Final Preferred Route
- Local Study Area

## Infrastructure
- Bipole I and II
- Transmission Line

## Soil Order
- Brunisols
- Chernozems
- Cryosols
- Gleysols
- Luvisols
- Organics
- Regosols
- Vertisols
- Non-Soil

## Landbase
- Community
- City / Town
- First Nation
- National/Provincial Park

**Coordinate System: UTM Zone 14N NAD83**
**Data Source: MBHydro, MMM, Stantec, ProvMB, NRCAN**
**Date Created: August 15, 2011**

N

0 5 10 Kilometres
0 3 6 Miles

1:250,000

# Soil Order

*Draft: For Discussion Purposes Only*

Map100 - 7

File Location: G:_GIS_Project_Folder\00_Hydro\111455027_BPIII_SoilsTerrain\ArcMap\Draft4\BPIII_EIS_Draft4_SoilOrder_Stantec_20110815.mxd

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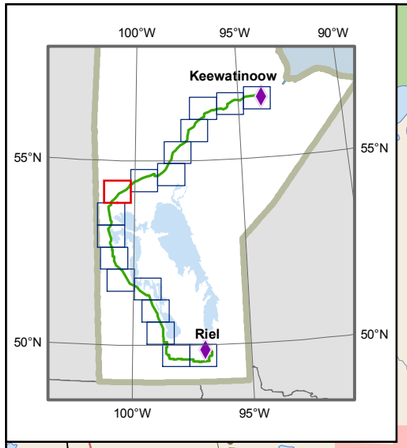


Manitoba Hydro

# Bipole III Transmission Project

## Project Infrastructure
- Final Preferred Route
- Local Study Area

## Infrastructure
- Transmission Line

## Soil Order
- Brunisols
- Chernozems
- Cryosols
- Gleysols
- Luvisols
- Organics
- Regosols
- Vertisols
- Non-Soil

## Landbase
- Community
- City / Town
- First Nation
- National/Provincial Park

Coordinate System: UTM Zone 14N NAD83
Data Source: MBHydro, MMM, Stantec, ProvMB, NRCAN
Date Created: August 15, 2011

N

0 5 10 Kilometres
0 3 6 Miles

1:250,000

## Soil Order

*Draft: For Discussion Purposes Only*

Map100 - 8

File Location: G:_GIS_Project_Folder\00_Hydro\111455027_BPIII_SoilsTerrainArcMap\Draft4\BPIII_EIS_Draft4_SoilOrder_Stantec_20110815.mxd

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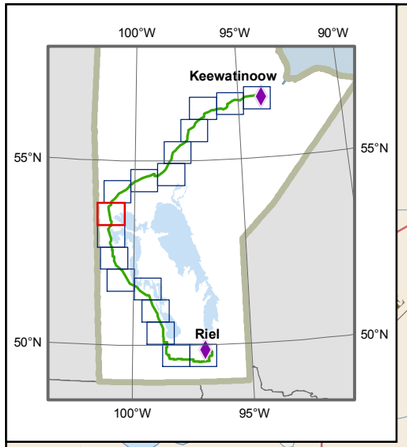


Manitoba Hydro

# Bipole III Transmission Project

## Project Infrastructure
- Final Preferred Route
- Local Study Area

## Infrastructure
- Transmission Line

## Soil Order
- Brunisols
- Chernozems
- Cryosols
- Gleysols
- Luvisols
- Organics
- Regosols
- Vertisols
- Non-Soil

## Landbase
- Community
- City / Town
- First Nation
- National/Provincial Park

**Coordinate System: UTM Zone 14N NAD83**
**Data Source: MBHydro, MMM, Stantec, ProvMB, NRCAN**
**Date Created: August 15, 2011**

N

0 5 10 Kilometres
0 3 6 Miles

1:250,000

# Soil Order

*Draft: For Discussion Purposes Only*

Map100 - 9

File Location: G:_GIS_Project_Folder\00_Hydro\111445027_BPIII_SoilsTerrain\ArcMap\Draft4\BPIII_EIS_Draft4_SoilOrder_Stantec_20110815.mxd

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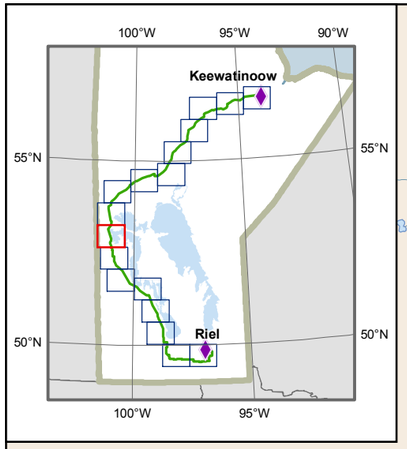



Manitoba Hydro

# Bipole III Transmission Project

## Project Infrastructure

- Final Preferred Route
- Local Study Area

## Infrastructure

- Transmission Line

## Soil Order

- Brunisols
- Chernozems
- Cryosols
- Gleysols
- Luvisols
- Organics
- Regosols
- Vertisols
- Non-Soil

## Landbase

- Community
- City / Town
- First Nation
- National/Provincial Park

**Coordinate System: UTM Zone 14N NAD83**
**Data Source: MBHydro, MMM, Stantec, ProvMB, NRCAN**
**Date Created: August 15, 2011**

N

0 5 10 Kilometres
0 3 6 Miles

1:250,000

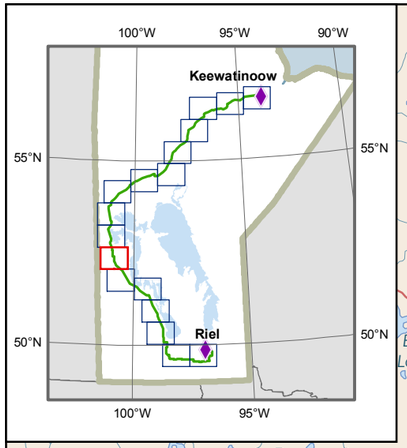
## Soil Order

*Draft: For Discussion Purposes Only*

Map100 - 10

**Created By: Stantec**

File Location: G:_GIS_Project_Folder\00_Hydro\111455027_BPIII_SoilsTerrain\ArcMap\Draft4\BPIII_EIS_Draft4_SoilOrder_Stantec_20110815.mxd




Manitoba Hydro

# Bipole III Transmission Project

## Project Infrastructure
- Final Preferred Route
- Local Study Area

## Infrastructure
- Transmission Line

## Soil Order
- Brunisols
- Chernozems
- Cryosols
- Gleysols
- Luvisols
- Organics
- Regosols
- Vertisols
- Non-Soil

## Landbase
- Community
- City / Town
- First Nation
- National/Provincial Park

Coordinate System: UTM Zone 14N NAD83
Data Source: MBHydro, MMM, Stantec, ProvMB, NRCAN
Date Created: August 15, 2011

N

0 5 10 Kilometres
0 3 6 Miles

1:250,000

## Soil Order

*Draft: For Discussion Purposes Only*

Map100 - 11

File Location: G:_GIS_Project_Folder\00_Hydro\111455027_BPIII_SoilsTerrain\ArcMap\Draft4\BPIII_EIS_Draft4_SoilOrder_Stantec_20110815.mxd

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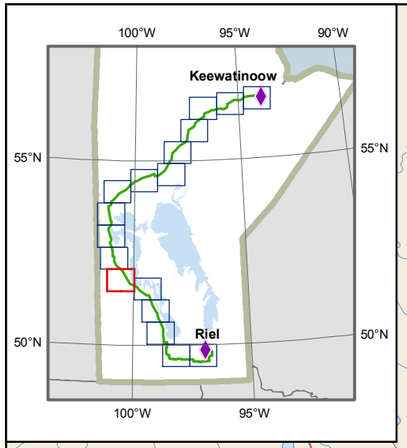


Manitoba Hydro

# Bipole III Transmission Project

## Project Infrastructure
- Final Preferred Route
- Local Study Area

## Infrastructure
- Transmission Line

## Soil Order
- Brunisols
- Chernozems
- Cryosols
- Gleysols
- Luvisols
- Organics
- Regosols
- Vertisols
- Non-Soil

## Landbase
- Community
- City / Town
- First Nation
- National/Provincial Park

Coordinate System: UTM Zone 14N NAD83
Data Source: MBHydro, MMM, Stantec, ProvMB, NRCAN
Date Created: August 15, 2011

N

0 5 10 Kilometres
0 3 6 Miles

1:250,000

## Soil Order

*Draft: For Discussion Purposes Only*

Map100 - 12

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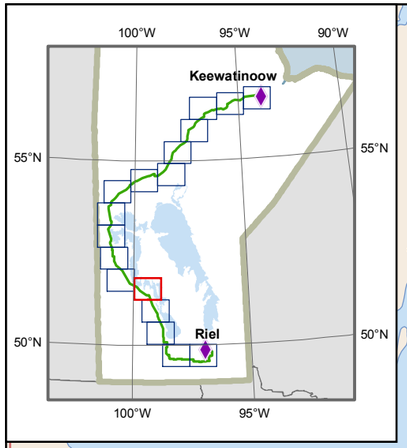


Manitoba Hydro

# Bipole III Transmission Project

## Project Infrastructure
- Final Preferred Route
- Local Study Area

## Infrastructure
- Transmission Line

## Soil Order
- Brunisols
- Chernozems
- Cryosols
- Gleysols
- Luvisols
- Organics
- Regosols
- Vertisols
- Non-Soil

## Landbase
- Community
- City / Town
- First Nation
- National/Provincial Park

Coordinate System: UTM Zone 14N NAD83
Data Source: MBHydro, MMM, Stantec, ProvMB, NRCAN
Date Created: August 15, 2011

N

0 5 10 Kilometres
0 3 6 Miles

1:250,000

## Soil Order

*Draft: For Discussion Purposes Only*

Map100 - 13

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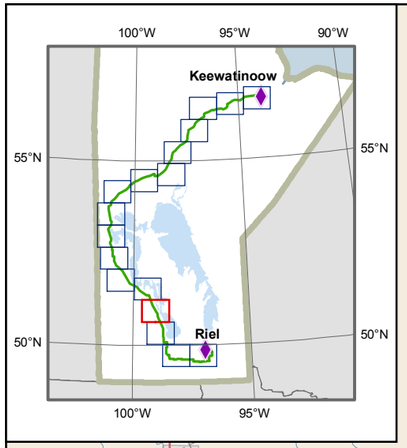
Created By: Stantec




Manitoba Hydro

# Bipole III Transmission Project

## Project Infrastructure
- Final Preferred Route
- Local Study Area

## Infrastructure
- Transmission Line

## Soil Order
- Brunisols
- Chernozems
- Cryosols
- Gleysols
- Luvisols
- Organics
- Regosols
- Vertisols
- Non-Soil

## Landbase
- Community
- City / Town
- First Nation
- National/Provincial Park

Coordinate System: UTM Zone 14N NAD83
Data Source: MBHydro, MMM, Stantec, ProvMB, NRCAN
Date Created: August 15, 2011

N

0 5 10 Kilometres
0 3 6 Miles

1:250,000

# Soil Order

*Draft: For Discussion Purposes Only*

Map100 - 14

File Location: G:_GIS_Project_Folder\00_Hydro\111455027_BPIII_SoilsTerrainArcMap\Draft4\BPIII_EIS_Draft4_SoilOrder_Stantec_20110815.mxd

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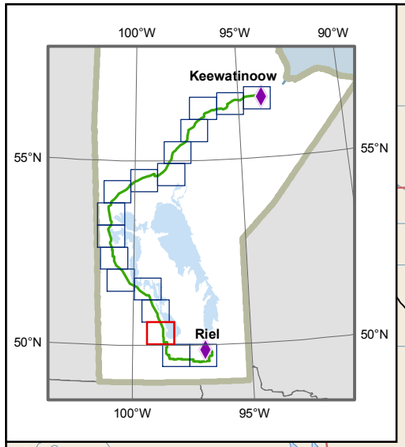


Manitoba Hydro

# Bipole III Transmission Project

## Project Infrastructure
- Final Preferred Route
- Local Study Area

## Infrastructure
- Transmission Line

## Soil Order
- Brunisols
- Chernozems
- Cryosols
- Gleysols
- Luvisols
- Organics
- Regosols
- Vertisols
- Non-Soil

## Landbase
- Community
- City / Town
- First Nation
- National/Provincial Park

Coordinate System: UTM Zone 14N NAD83
Data Source: MBHydro, MMM, Stantec, ProvMB, NRCAN
Date Created: August 15, 2011

N

0 5 10 Kilometres
0 3 6 Miles

1:250,000

# Soil Order

*Draft: For Discussion Purposes Only*

Map100 - 15

File Location: G:_GIS_Project_Folder\00_Hydro\111455027_BPIII_SoilsTerrainArcMap\Draft4\BPIII_EIS_Draft4_SoilOrder_Stantec_20110815.mxd

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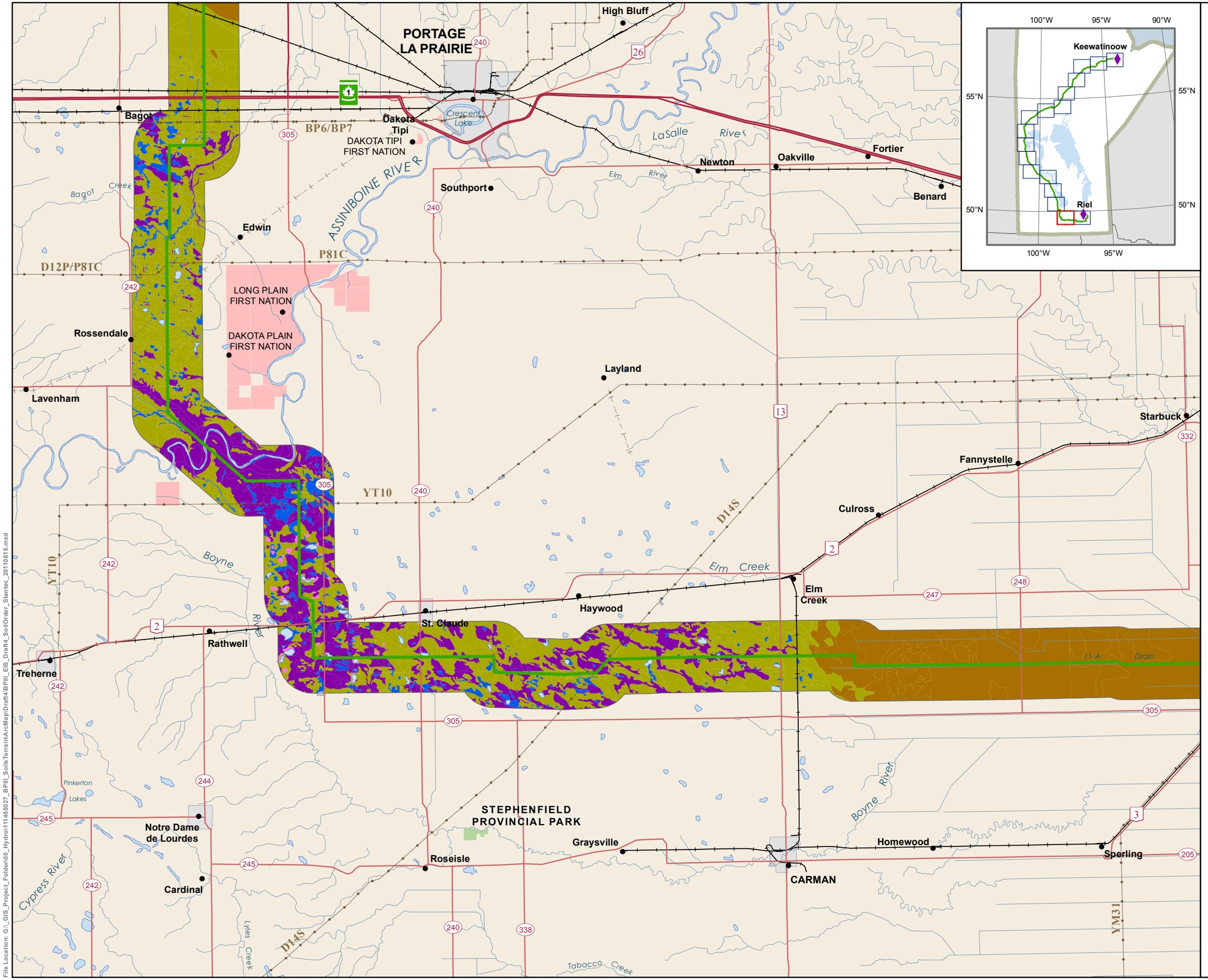


# Manitoba Hydro

## Bipole III Transmission Project

### Project Infrastructure
- Final Preferred Route
- Local Study Area

### Infrastructure
- Transmission Line

### Soil Order
- Brunisols
- Chernozems
- Cryosols
- Gleysols
- Luvisols
- Organics
- Regosols
- Vertisols
- Non-Soil

### Landbase
- Community
- City / Town
- First Nation
- National/Provincial Park

Coordinate System: UTM Zone 14N NAD83
Data Source: MBHydro, MMM, Stantec, ProvMB, NRCAN
Date Created: August 15, 2011

N

0 5 10 Kilometres
0 3 6 Miles

1:250,000

# Soil Order

*Draft: For Discussion Purposes Only*

Map100 - 16

File Location: G:_GIS_Project_Folder\00_Hydro\111455027_BPIII_SoilsTerrain\ArcMap\Draft4\BPIII_EIS_Draft4_SoilOrder_Stantec_20110915.mxd

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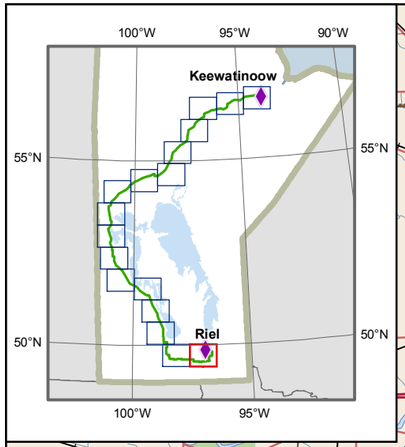


# Bipole III Transmission Project

## Project Infrastructure

- Final Preferred Route
- Converter Station Site
- Ground Electrode Site
- Local Study Area

## Infrastructure

- Transmission Line

## Soil Order

- Brunisols
- Chernozems
- Cryosols
- Gleysols
- Luvisols
- Organics
- Regosols
- Vertisols
- Non-Soil

## Landbase

- Community
- City / Town
- First Nation
- National/Provincial Park

Coordinate System: UTM Zone 14N NAD83
Data Source: MBHydro, MMM, Stantec, ProvMB, NRCAN
Date Created: August 15, 2011

N

0 5 10 Kilometres
0 3 6 Miles

1:250,000

## Soil Order

*Draft: For Discussion Purposes Only*

Map100 - 17

File Location: G:_GIS_Project_Folder\00_Hydro\111455027_BPIII_SoilsTerrain\ArcMap\Draft4\BPIII_EIS_Draft4_SoilOrder_Stantec_20110815.mxd

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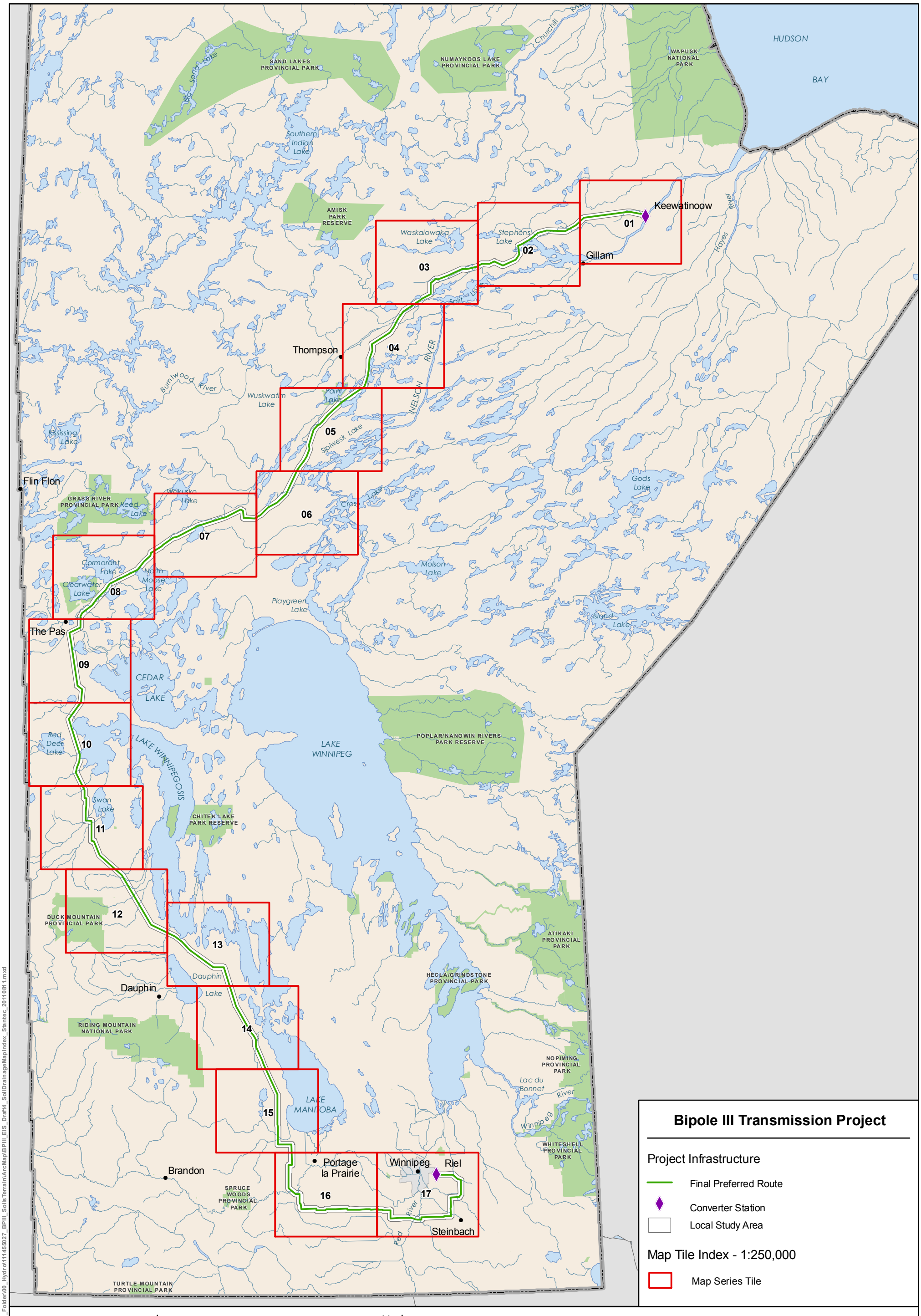


## Bipole III Transmission Project

Project Infrastructure

- Final Preferred Route
- Converter Station
- Local Study Area

Map Tile Index - 1:250,000

- Map Series Tile

Manitoba Hydro

Coordinate System: UTM Zone 14N NAD83
Data Source: MB Hydro, MMM, ProvMB
Date Created: August 11, 2011

0 25 50 Kilometres
0 25 50 Miles

N

1:2,750,000

# Index of Map Series

## Soil Drainage

*Draft: For Discussion Purposes Only*

Map Series 200

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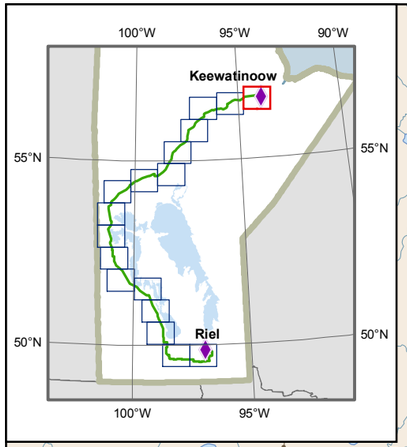



# Bipole III Transmission Project

## Project Infrastructure

- Final Preferred Route
- Converter Station Site
- AC Collector Line
- Ground Electrode Line
- Ground Electrode Site
- Construction Power (KN36)
- Construction Power Site
- Construction Camp Site
- Local Study Area

## Infrastructure

- Converter Station
- Generating Station
- Bipole I and II
- Transmission Line

## Soil Drainage

- Rapid
- Well
- Moderately Well
- Imperfect
- Poor
- Very Poor
- Non-Soil

## Landbase

- Community
- City / Town
- First Nation
- National/Provincial Park

**Coordinate System: UTM Zone 14N NAD83**
**Data Source: MBHydro, MMM, Stantec, ProvMB, NRCAN**
**Date Created: August 15, 2011**

N

0 5 10 Kilometres
0 3 6 Miles

1:250,000

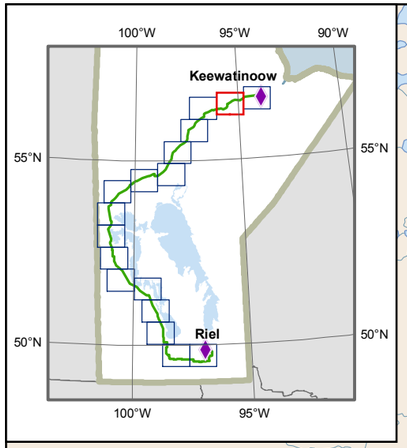
# Soil Drainage

*Draft: For Discussion Purposes Only*

Map 200 - 1

**Created By: Stantec**

File Location: G:_GIS_Project_Folder\00_Hydro\111455027_BPIII_SoilsTerrain\ArcMap\Draft4\BPIII_EIS_Draft4_SoilOrder_Stantec_20110815.mxd




Manitoba Hydro

# Bipole III Transmission Project

## Project Infrastructure
- Final Preferred Route
- Local Study Area

## Infrastructure
- Bipole I and II
- Transmission Line

## Soil Drainage
- Rapid
- Well
- Moderately Well
- Imperfect
- Poor
- Very Poor
- Non-Soil

## Landbase
- Community
- City / Town
- First Nation
- National/Provincial Park

**Coordinate System: UTM Zone 14N NAD83**
**Data Source: MBHydro, MMM, Stantec, ProvMB, NRCAN**
**Date Created: August 15, 2011**

N

0 5 10 Kilometres
0 3 6 Miles

1:250,000

# Soil Drainage

*Draft: For Discussion Purposes Only*

Map 200 - 2

**Created By: Stantec**

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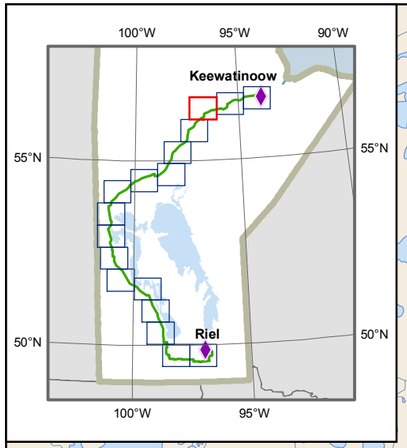


Manitoba Hydro

# Bipole III Transmission Project

## Project Infrastructure

- Final Preferred Route
- Local Study Area

## Infrastructure

- Transmission Line

## Soil Drainage

- Rapid
- Well
- Moderately Well
- Imperfect
- Poor
- Very Poor
- Non-Soil

## Landbase

- Community
- First Nation
- National/Provincial Park

**Coordinate System: UTM Zone 14N NAD83**
**Data Source: MBHydro, MMM, Stantec, ProvMB, NRCAN**
**Date Created: August 15, 2011**

N

0 5 10 Kilometres
0 3 6 Miles

1:250,000

# Soil Drainage

*Draft: For Discussion Purposes Only*

Map 200 - 3

File Location: G:_GIS_Project_Folder\00_Hydro\111455927_BPIII_SoilsTerrainArcMap\Draft4\BPIII_EIS_Draft4_SoilOrder_Stantec_20110815.mxd

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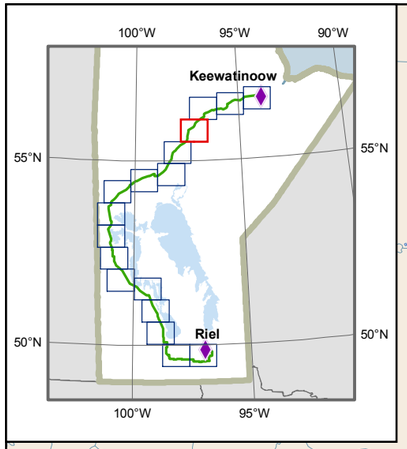


Manitoba Hydro

# Bipole III Transmission Project

## Project Infrastructure

- Final Preferred Route
- Local Study Area

## Infrastructure

- Generating Station
- Transmission Line

## Soil Drainage

- Rapid
- Well
- Moderately Well
- Imperfect
- Poor
- Very Poor
- Non-Soil

## Landbase

- Community
- City / Town
- First Nation
- National/Provincial Park

**Coordinate System: UTM Zone 14N NAD83**
**Data Source: MBHydro, MMM, Stantec, ProvMB, NRCAN**
**Date Created: August 15, 2011**

N

0 5 10 Kilometres
0 3 6 Miles

1:250,000

# Soil Drainage

*Draft: For Discussion Purposes Only*

Map 200 - 4

File Location: G:_GIS_Project_Folder\00_Hydro\111455027_BPIII_SoilsTerrainArcMap\Draft4\BPIII_EIS_Draft4_SoilOrder_Stantec_20110815.mxd

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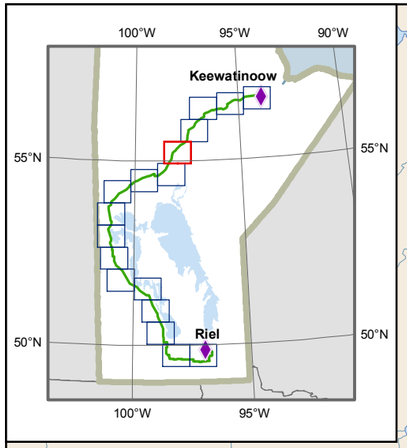


Manitoba Hydro

# Bipole III Transmission Project

## Project Infrastructure

- Final Preferred Route
- Local Study Area

## Infrastructure

- Bipole I and II
- Transmission Line

## Soil Drainage

- Rapid
- Well
- Moderately Well
- Imperfect
- Poor
- Very Poor
- Non-Soil

## Landbase

- Community
- First Nation
- National/Provincial Park

**Coordinate System: UTM Zone 14N NAD83**
**Data Source: MBHydro, MMM, Stantec, ProvMB, NRCAN**
**Date Created: August 15, 2011**

N

0 5 10 Kilometres
0 3 6 Miles

1:250,000

## Soil Drainage

*Draft: For Discussion Purposes Only*

Map 200 - 5

File Location: G:_GIS_Project_Folder\00_Hydro\111455027_BPIII_SoilsTerrain\ArcMap\Draft4\BPIII_EIS_Draft4_SoilOrder_Stantec_20110815.mxd

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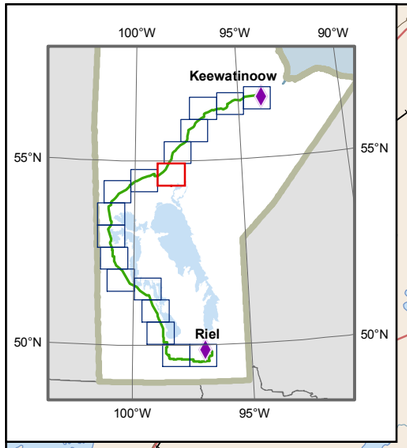


Manitoba Hydro

# Bipole III Transmission Project

## Project Infrastructure
- Final Preferred Route
- Local Study Area

## Infrastructure
- Generating Station
- Bipole I and II
- Transmission Line

## Soil Drainage
- Rapid
- Well
- Moderately Well
- Imperfect
- Poor
- Very Poor
- Non-Soil

## Landbase
- Community
- City / Town
- First Nation
- National/Provincial Park

**Coordinate System: UTM Zone 14N NAD83**
**Data Source: MBHydro, MMM, Stantec, ProvMB, NRCAN**
**Date Created: August 15, 2011**

N

0 5 10 Kilometres
0 3 6 Miles

1:250,000

# Soil Drainage

*Draft: For Discussion Purposes Only*

Map 200 - 6

File Location: G:_GIS_Project_Folder\00_Hydro\111455927_BPIII_SoilsTerrainArcMap\Draft4\BPIII_EIS_Draft4_SoilOrder_Stantec_20110815.mxd

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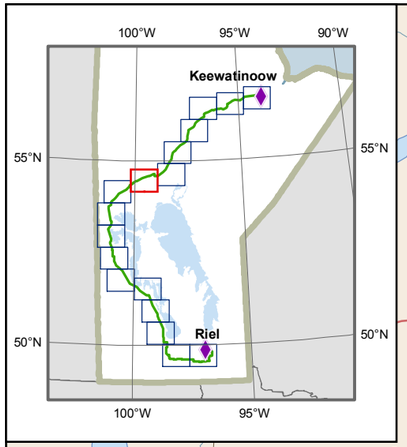


Manitoba Hydro

# Bipole III Transmission Project

## Project Infrastructure
- Final Preferred Route
- Local Study Area

## Infrastructure
- Bipole I and II
- Transmission Line

## Soil Drainage
- Rapid
- Well
- Moderately Well
- Imperfect
- Poor
- Very Poor
- Non-Soil

## Landbase
- Community
- City / Town
- First Nation
- National/Provincial Park

**Coordinate System: UTM Zone 14N NAD83**
**Data Source: MBHydro, MMM, Stantec, ProvMB, NRCAN**
**Date Created: August 15, 2011**

N

0 5 10 Kilometres
0 3 6 Miles

1:250,000

## Soil Drainage

*Draft: For Discussion Purposes Only*

Map 200 - 7

**Created By: Stantec**

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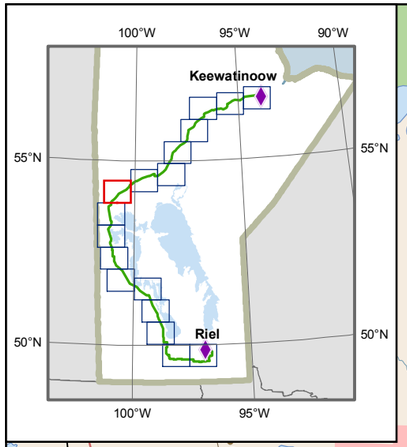



Manitoba Hydro

# Bipole III Transmission Project

## Project Infrastructure

- Final Preferred Route
- Local Study Area

## Infrastructure

- Transmission Line

## Soil Drainage

- Rapid
- Well
- Moderately Well
- Imperfect
- Poor
- Very Poor
- Non-Soil

## Landbase

- Community
- City / Town
- First Nation
- National/Provincial Park

Coordinate System: UTM Zone 14N NAD83
Data Source: MBHydro, MMM, Stantec, ProvMB, NRCAN
Date Created: August 15, 2011

N

0 5 10 Kilometres
0 3 6 Miles

1:250,000

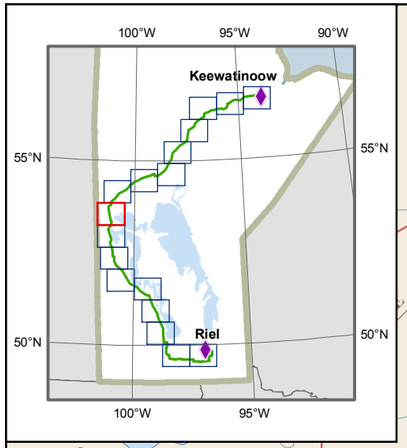
## Soil Drainage

*Draft: For Discussion Purposes Only*

Map 200 - 8

Created By: Stantec

File Location: G:_GIS_Project_Folder\00_Hydro\111455027_BPIII_SoilsTerrain\ArcMap\Draft4\BPIII_EIS_Draft4_SoilOrder_Stantec_20110815.mxd




Manitoba Hydro

# Bipole III Transmission Project

## Project Infrastructure

- Final Preferred Route
- Local Study Area

## Infrastructure

- Transmission Line

## Soil Drainage

- Rapid
- Well
- Moderately Well
- Imperfect
- Poor
- Very Poor
- Non-Soil

## Landbase

- Community
- City / Town
- First Nation
- National/Provincial Park

**Coordinate System: UTM Zone 14N NAD83**
**Data Source: MBHydro, MMM, Stantec, ProvMB, NRCAN**
**Date Created: August 15, 2011**

N

0 5 10 Kilometres
0 3 6 Miles

1:250,000

# Soil Drainage

*Draft: For Discussion Purposes Only*

Map 200 - 9

File Location: G:_GIS_Project_Folder\00_Hydro\111455027_BPIII_SoilsTerrain\ArcMap\Draft4\BPIII_EIS_Draft4_SoilOrder_Stantec_20110815.mxd

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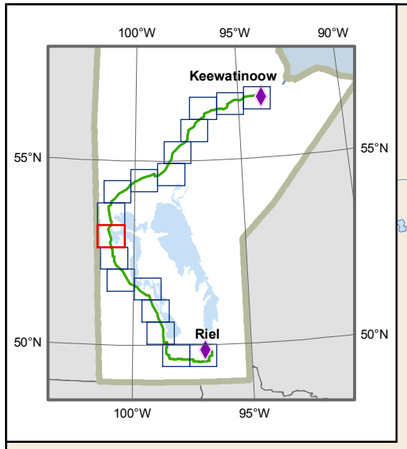



# Bipole III Transmission Project

## Project Infrastructure
- Final Preferred Route
- Local Study Area

## Infrastructure
- Transmission Line

## Soil Drainage
- Rapid
- Well
- Moderately Well
- Imperfect
- Poor
- Very Poor
- Non-Soil

## Landbase
- Community
- City / Town
- First Nation
- National/Provincial Park

**Coordinate System: UTM Zone 14N NAD83**
**Data Source: MBHydro, MMM, Stantec, ProvMB, NRCAN**
**Date Created: August 15, 2011**

N

0 5 10 Kilometres
0 3 6 Miles

1:250,000

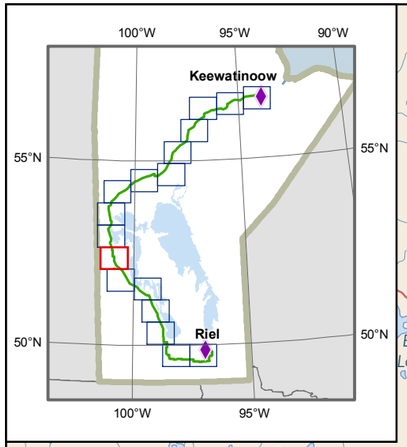
# Soil Drainage

*Draft: For Discussion Purposes Only*

Map 200 - 10

**Created By: Stantec**

File Location: G:_GIS_Project_Folder\00_Hydro\111455027_BPIII_SoilsTerrain\ArcMap\Draft4\BPIII_EIS_Draft4_SoilOrder_Stantec_20110815.mxd




Manitoba Hydro

# Bipole III Transmission Project

## Project Infrastructure
- Final Preferred Route
- Local Study Area

## Infrastructure
- Transmission Line

## Soil Drainage
- Rapid
- Well
- Moderately Well
- Imperfect
- Poor
- Very Poor
- Non-Soil

## Landbase
- Community
- City / Town
- First Nation
- National/Provincial Park

Coordinate System: UTM Zone 14N NAD83
Data Source: MBHydro, MMM, Stantec, ProvMB, NRCAN
Date Created: August 15, 2011

N

0 5 10 Kilometres
0 3 6 Miles

1:250,000

## Soil Drainage

*Draft: For Discussion Purposes Only*

Map 200 - 11

File Location: G:_GIS_Project_Folder\00_Hydro\111455027_BPIII_SoilsTerrain\ArcMap\Draft4\BPIII_EIS_Draft4_SoilOrder_Stantec_20110815.mxd

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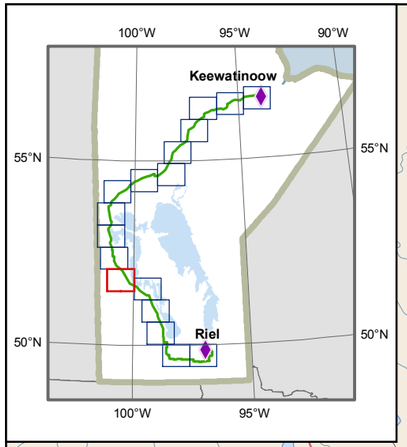



# Bipole III Transmission Project

## Project Infrastructure
- Final Preferred Route
- Local Study Area

## Infrastructure
- Transmission Line

## Soil Drainage
- Rapid
- Well
- Moderately Well
- Imperfect
- Poor
- Very Poor
- Non-Soil

## Landbase
- Community
- City / Town
- First Nation
- National/Provincial Park

Coordinate System: UTM Zone 14N NAD83
Data Source: MBHydro, MMM, Stantec, ProvMB, NRCAN
Date Created: August 15, 2011

N

0 5 10 Kilometres
0 3 6 Miles

1:250,000

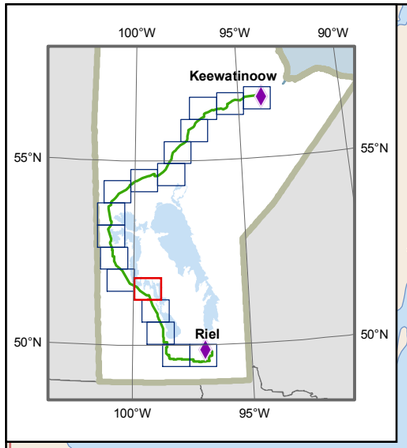
# Soil Drainage

*Draft: For Discussion Purposes Only*

Map 200 - 12

Created By: Stantec

File Location: G:_GIS_Project_Folder\00_Hydro\111455027_BPIII_SoilsTerrain\ArcMap\Draft4\BPIII_EIS_Draft4_SoilOrder_Stantec_20110815.mxd




Manitoba Hydro

# Bipole III Transmission Project

## Project Infrastructure
- Final Preferred Route
- Local Study Area

## Infrastructure
- Transmission Line

## Soil Drainage
- Rapid
- Well
- Moderately Well
- Imperfect
- Poor
- Very Poor
- Non-Soil

## Landbase
- Community
- City / Town
- First Nation
- National/Provincial Park

Coordinate System: UTM Zone 14N NAD83
Data Source: MBHydro, MMM, Stantec, ProvMB, NRCAN
Date Created: August 15, 2011

N

0 5 10 Kilometres
0 3 6 Miles
1:250,000

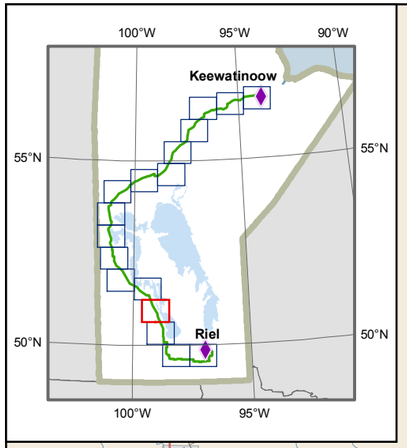
## Soil Drainage

*Draft: For Discussion Purposes Only*

Map 200 - 13

Created By: Stantec

File Location: G:_GIS_Project_Folder\00_Hydro\111455027_BPIII_SoilsTerrainArcMap\Draft4\BPIII_EIS_Draft4_SoilOrder_Stantec_20110815.mxd




Manitoba Hydro

# Bipole III Transmission Project

## Project Infrastructure

- Final Preferred Route
- Local Study Area

## Infrastructure

- Transmission Line

## Soil Drainage

- Rapid
- Well
- Moderately Well
- Imperfect
- Poor
- Very Poor
- Non-Soil

## Landbase

- Community
- City / Town
- First Nation
- National/Provincial Park

Coordinate System: UTM Zone 14N NAD83
Data Source: MBHydro, MMM, Stantec, ProvMB, NRCAN
Date Created: August 15, 2011

N

0 5 10 Kilometres
0 3 6 Miles

1:250,000

## Soil Drainage

*Draft: For Discussion Purposes Only*

Map 200 - 14

File Location: G:_GIS_Project_Folder\00_Hydro\111445027_BPIII_SoilsTerrainArcMap\Draft4\BPIII_EIS_Draft4_SoilOrder_Stantec_20110815.mxd

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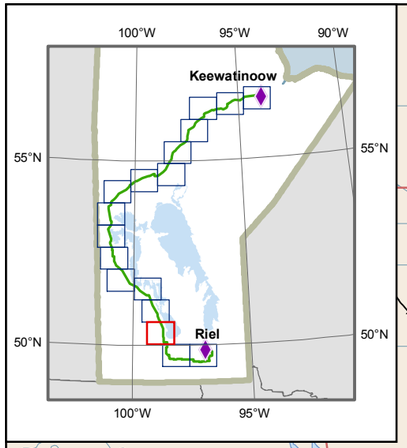



Manitoba Hydro

# Bipole III Transmission Project

## Project Infrastructure
- Final Preferred Route
- Local Study Area

## Infrastructure
- Transmission Line

## Soil Drainage
- Rapid
- Well
- Moderately Well
- Imperfect
- Poor
- Very Poor
- Non-Soil

## Landbase
- Community
- City / Town
- First Nation
- National/Provincial Park

**Coordinate System: UTM Zone 14N NAD83**
**Data Source: MBHydro, MMM, Stantec, ProvMB, NRCAN**
**Date Created: August 15, 2011**

N

0 5 10 Kilometres
0 3 6 Miles

1:250,000

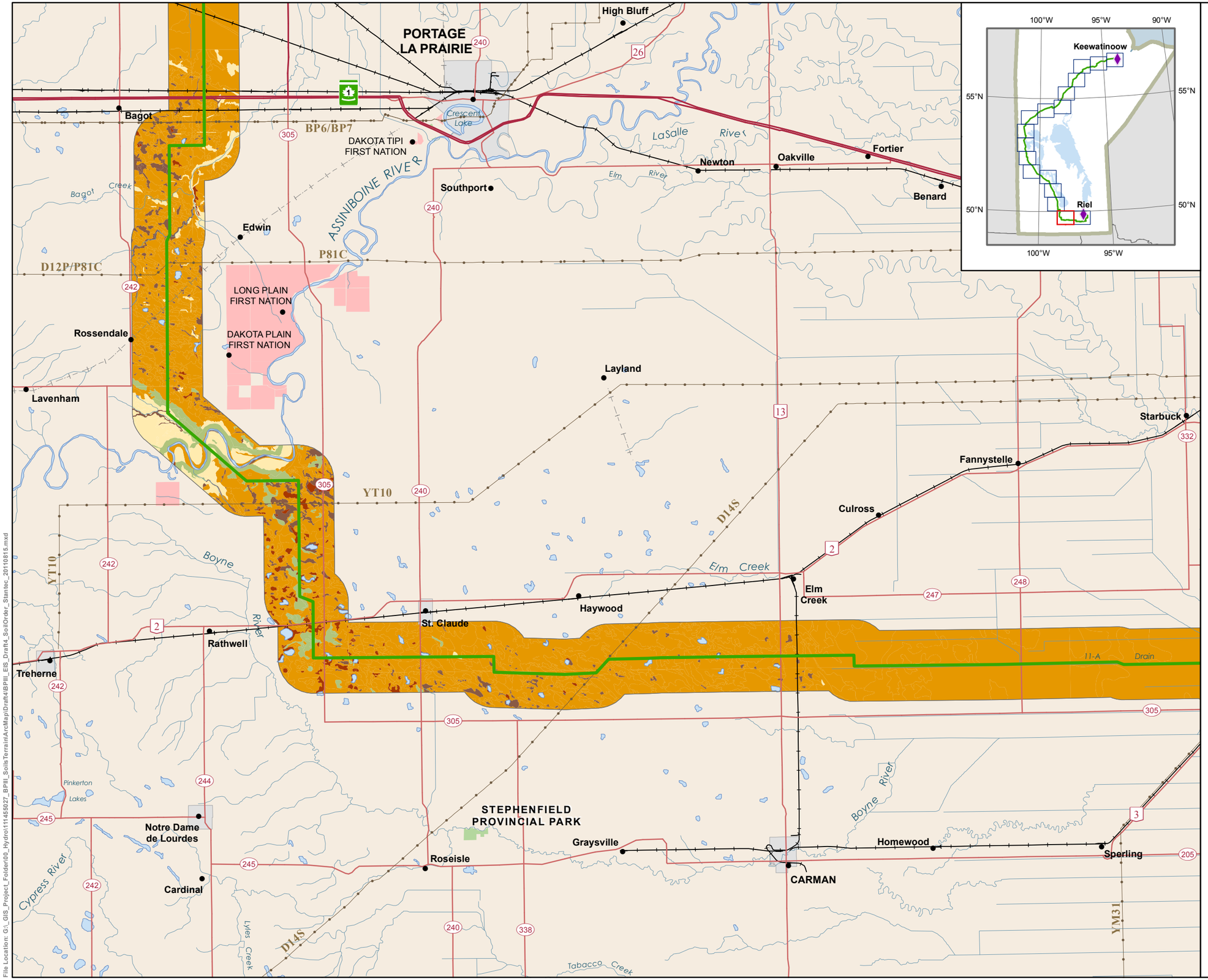
# Soil Drainage

*Draft: For Discussion Purposes Only*

Map 200 - 15

**Created By: Stantec**

File Location: G:_GIS_Project_Folder\00_Hydro\111455027_BPIII_SoilsTerrain\ArcMap\Draft4\BPIII_EIS_Draft4_SoilOrder_Stantec_20110815.mxd

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N

0 5 10 Kilometres
0 3 6 Miles

1:250,000

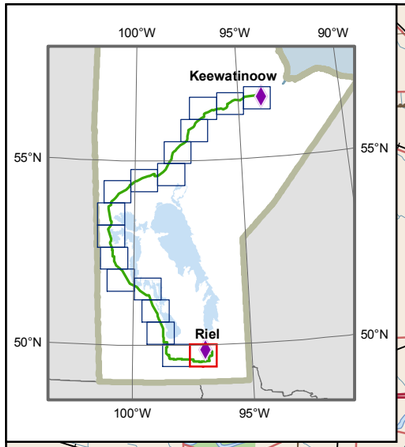
# Soil Drainage

*Draft: For Discussion Purposes Only*

Map 200 - 16

File Location: G:_GIS_Project_Folder\00_Hydro\111455027_BPIII_SoilsTerrain\ArcMap\Draft4\BPIII_EIS_Draft4_SoilOrder_Stantec_20110815.mxd

Created By: Stantec




Manitoba Hydro

# Bipole III Transmission Project

## Project Infrastructure

- Final Preferred Route
- Converter Station Site
- Ground Electrode Site
- Local Study Area

## Infrastructure

- Transmission Line

## Soil Drainage

- Rapid
- Well
- Moderately Well
- Imperfect
- Poor
- Very Poor
- Non-Soil

## Landbase

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N

0 5 10 Kilometres
0 3 6 Miles

1:250,000

# Soil Drainage

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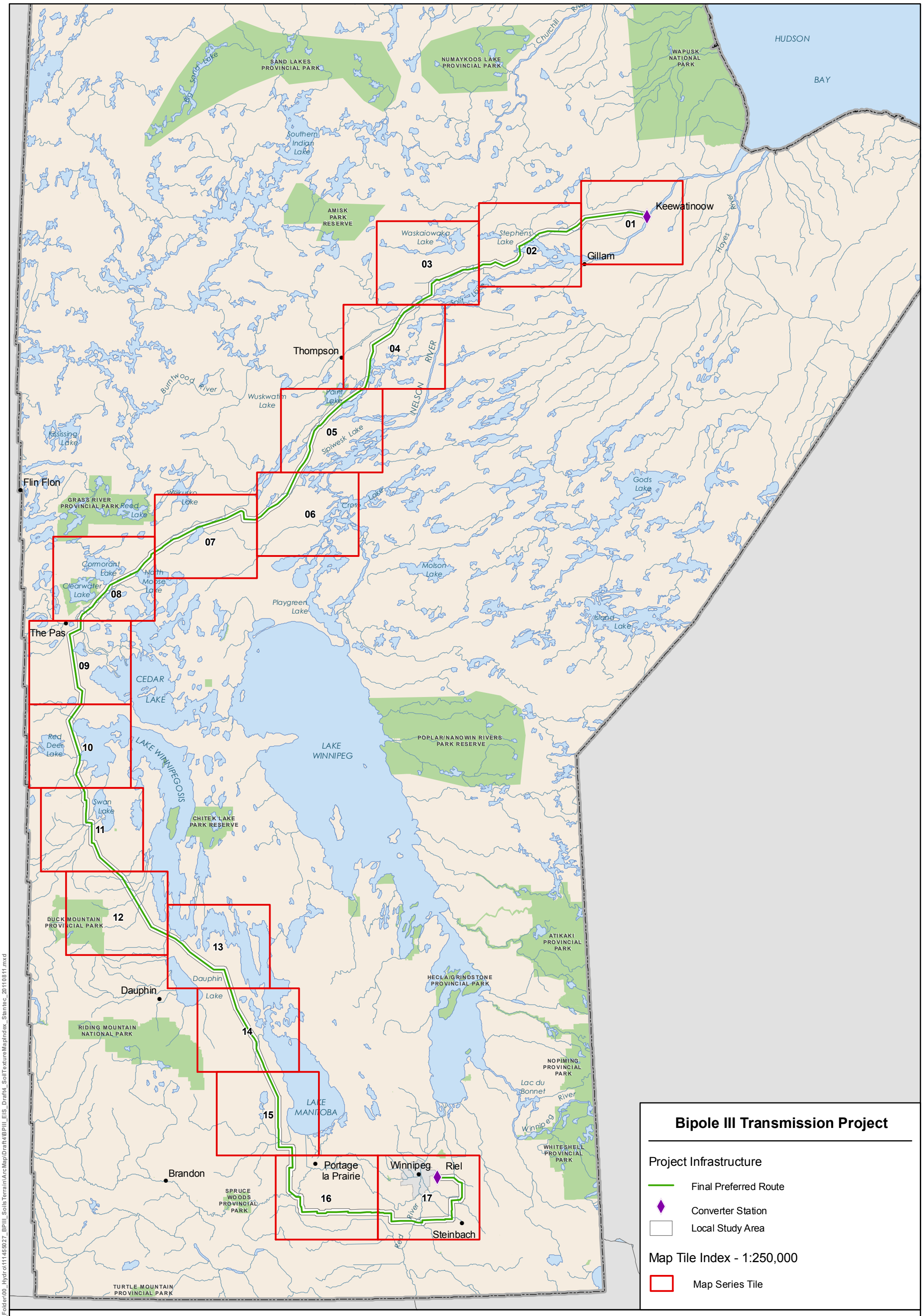
Map 200 - 17

Created By: Stantec

File Location: G:_GIS_Project_Folder\00_Hydro\111455027_BPIII_SoilsTerrain\ArcMap\Draft4\BPIII_EIS_Draft4_SoilOrder_Stantec_20110815.mxd




## Bipole III Transmission Project

Project Infrastructure

- Final Preferred Route
- Converter Station
- Local Study Area

Map Tile Index - 1:250,000

- Map Series Tile

Manitoba Hydro

Coordinate System: UTM Zone 14N NAD83
Data Source: MB Hydro, MMM, ProvMB
Date Created: August 11, 2011

0 25 50 Kilometres
0 25 50 Miles

N

1:2,750,000

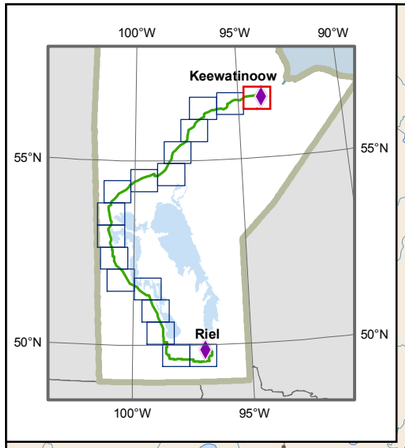
# Index of Map Series

## Soil Texture

*Draft: For Discussion Purposes Only*

Map Series 300

File Location: G:_GIS_Project_Folder\00_Hydro\111455027_BPIII_SoilsTerrain\ArcMap\Draft4\BPIII_EIS_Draft4_SoilTextureMapIndex_Stantec_20110811.mxd

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# Bipole III Transmission Project

## Project Infrastructure

- Final Preferred Route
- Converter Station Site
- AC Collector Line
- Ground Electrode Line
- Ground Electrode Site
- Construction Power (KN36)
- Construction Power Site
- Construction Camp Site
- Local Study Area

## Infrastructure

- Converter Station
- Generating Station
- Bipole I and II
- Transmission Line

## Soil Texture

- Coarse Skeletal
- Very Coarse
- Coarse
- Moderately Coarse
- Medium
- Moderately Fine
- Fine
- Very Fine
- Fibric
- Mesic
- Undifferentiated
- Non-Soil

## Landbase

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**Date Created: August 15, 2011**

N

0 5 10 Kilometres
0 3 6 Miles

1:250,000

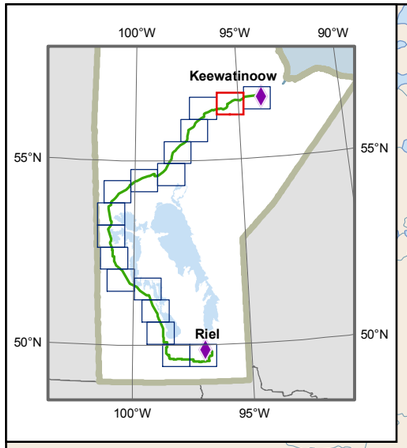
# Soil Texture

*Draft: For Discussion Purposes Only*

Map 300 - 1

File Location: G:_GIS_Project_Folder\00_Hydro\1111455027_BPIII_SoilsTerrain\ArcMap\Draft4\BPIII_EIS_Draft4_SoilTexture_Stantec_20110815.mxd

**Created By: Stantec**

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N

0 5 10 Kilometres
0 3 6 Miles

1:250,000

# Soil Texture

*Draft: For Discussion Purposes Only*

Map 300 - 2

**Created By: Stantec**

File Location: G:_GIS_Project_Folder\00_Hydro\111455027_BPIII_SoilsTerrainArcMap\Draft4\BPIII_EIS_Draft4_SoilTexture_Stantec_20110815.mxd