MARSHALL COUNTY
MINNESOTA

BELTRAMI COUNTY
MINNESOTA

POLK COUNTY
MINNESOTA

CLEARWATER COUNTY
MINNESOTA

RED LAKE COUNTY
MINNESOTA

MAHNOMEN COUNTY
MINNESOTA

PENNINGTON COUNTY
MINNESOTA

MP 855
MP 860
MP 865
MP 870

Proposed LSr Oil Pipeline

T 154 N R 45 W
NUMEDAL

T 154 N R 44 W
NORDEN

T 154 N R 43 W
NORTH

T 154 N R 42 W
SILVERTON

T 154 N R 41 W
CLOVER LEAF

T 154 N R 40 W
GOODRIDGE

T 154 N R 39 W
REINER

T 153 N R 45 W
BRAY

T 153 N R 44 W
SANDERS

T 153 N R 43 W
ROCKSBURY

T 153 N R 42 W
SMILEY

T 153 N R 41 W
KRATA

T 153 N R 40 W
HIGHLANDING

T 153 N R 39 W
STAR

T 152 N R 45 W
POLK CENTRE

T 152 N R 44 W
BLACK RIVER

T 152 N R 43 W
RIVER FALLS

T 152 N R 42 W
WYANDOTTE

T 152 N R 41 W
MAYFIELD

T 152 N R 40 W
DEER PARK

T 152 N R 39 W
HICKORY

Thief River Falls
Goodridge
St. Hilaire
Goose Lake
Goose Lake Swamp
Red Lake River
Soo Line Railroad

Legend

Proposed LSr Oil Pipeline

Milepost

0 1 2 3 4 5 Miles

Map Prepared By:
GULF INTERSTATE ENGINEERING

ENBRIDGE

LSr Pipeline - U.S./Canada Border to Clearbrook, MN

DRAWING	REVISION
Page 3 PENNINGTON	A

H:_cad\1306\arcmap\exhibits\Canada to Clearbrook\County Maps\LSR-000-PE-01.mxd 3/8/2007

T-884

WET BRUSH PRAIRIE

MESIC BRUSH PRAIRIE

WET BRUSH PRAIRIE

WET BRUSH PRAIRIE

Marshall

T-882

WET PRAIRIE (NORTHWEST)

T-884A

12

T154N, R45W

11

Pennington

852

68

T-881

This information is for environmental review purposes only.

LSr Pipeline Alignment

Milepost

PUC-Designated Route

Valve Location

Existing Enbridge Pipelines

Delineated Waterbody

NWI Wetland

Property Boundary

Area of Biological Significance

0 200 400

Feet

1:6,000

N

ENBRIDGE

Enbridge LSr Project

Pipeline Route

NATURAL RESOURCE GROUP

Sheet 49 of 98

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DRAWN BY: RSMcGREGOR

12
7
65
Prairie Rich Fen
Northwestern Dry - Mesic Oak Woodland
T-880
Pennington
T154N, R45W
T154N, R44W
18
13
T-879
60th St NW
853
Northern Mixed Cattail Marsh
T-877
This information is for environmental review purposes only

LSr Pipeline Alignment
Milepost
PUC-Designated Route
Valve Location
Existing Enbridge Pipelines
Delineated Waterbody
NWI Wetland
Property Boundary
Area of Biological Significance

0 200 400
Feet
1:6,000

N

ENBRIDGE

Enbridge LSr Project
Pipeline Route

NATURAL RESOURCE GROUP

Sheet 50 of 98

M:\Clients\D-F\EEL\SLP_ArcGIS\2008\02\ENV_Align_Sheets\EEL_SLP_LSr_Env_Alignments1_Puc.mxd

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T-877
T-878
Northern Mixed Cattail Marsh
13
18
17
60th St NW
T-876
Mesic Brush - Prairie (Northern)
Pennington
T154N, R45W
90th Ave NW
Mesic Brush - Prairie (Northern)
T154N, R44W
854
T-875
19
Northern Mixed Cattail Marsh
69
20
T-874
T-873
24
Northwestern Dry - Mesic Oak Woodland
Northwestern Mesic Aspen - Oak Woodland
T-874A
Northwestern Dry - Mesic Oak Woodland
Northern Mixed Cattail Marsh
Northwestern Dry - Mesic Oak Woodland

This information is for environmental review purposes only.

LSr Pipeline Alignment
Milepost
PUC-Designated Route
Valve Location
Existing Enbridge Pipelines
Delineated Waterbody
NWI Wetland
Property Boundary
Area of Biological Significance

0 200 400
Feet
1:6,000

N

ENBRIDGE

Enbridge LSr Project
Pipeline Route

NATURAL RESOURCE GROUP

Sheet 51 of 98

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T-874A

Northwestern Mesic Aspen - Oak Woodland

Northwestern Mesic Aspen - Oak Woodland

Northwestern Mesic Aspen - Oak Woodland

Northern Mixed Cattail Marsh

Northwestern Mesic Aspen - Oak Woodland

Northwestern Dry - Mesic Oak Woodland

20

T-871

Pennington

T154N, R44W

T-872

855

County Ditch/Black River - 855a
MP - 855.0
Proposed Crossing Method - Dam and Pump
Impaired Water - Turbidity, Dissolved Oxygen

21

19

T-870

63

70

30

69

29

28

This information is for environmental review purposes only.

LSr Pipeline Alignment
Milepost
PUC-Designated Route
Valve Location
Existing Enbridge Pipelines
Delineated Waterbody
NWI Wetland
Property Boundary
Area of Biological Significance

0 200 400
Feet
1:6,000

N

ENBRIDGE

Enbridge LSr Project
Pipeline Route

NATURAL RESOURCE GROUP

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M:\Clients\D-F\EEL\SLP_ArcGIS\2008\02\ENV_Align_Sheets\EEL_SLP_LSr_Env_Alignments1_Puc.mxd

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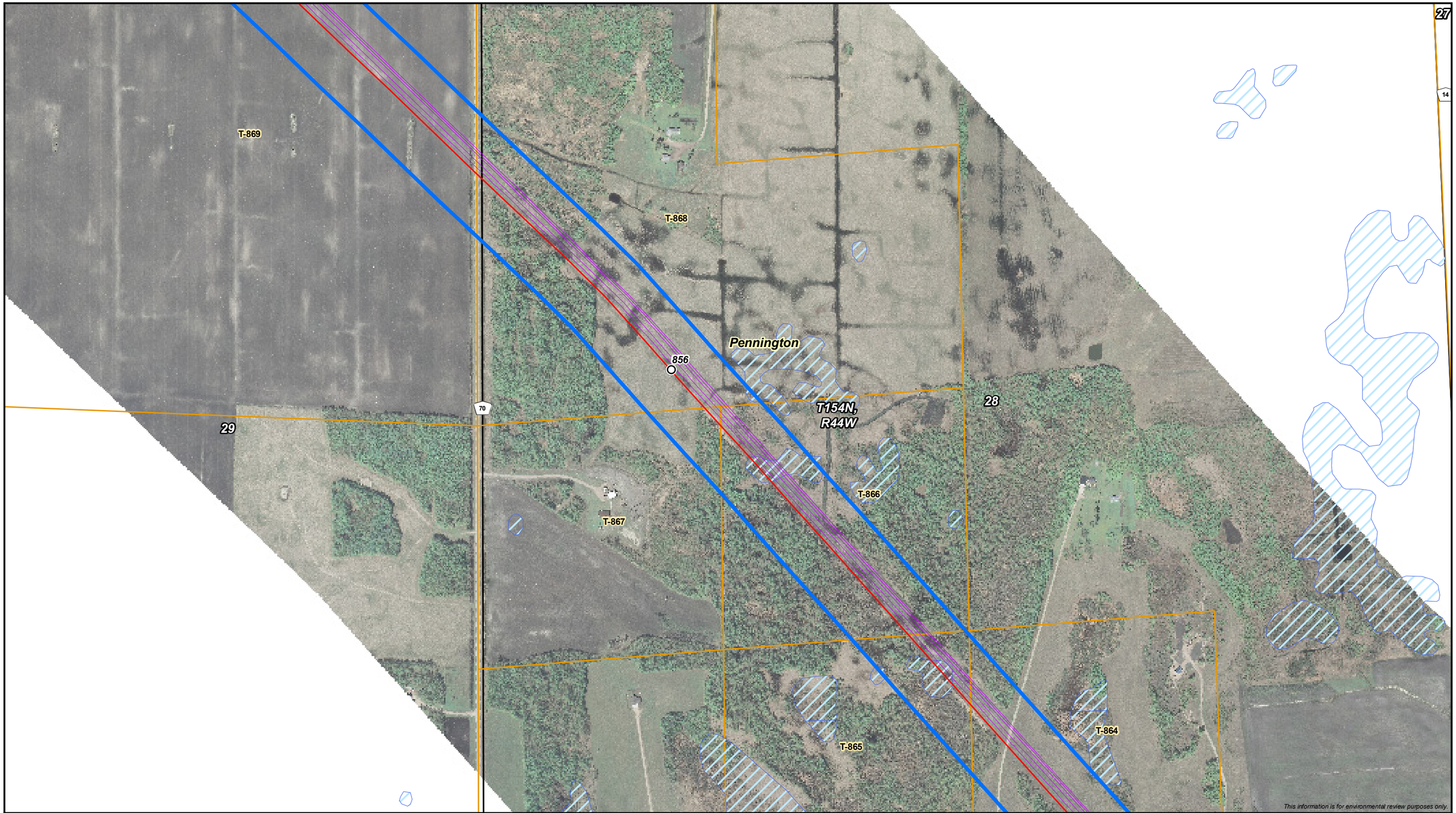

LSr Pipeline Alignment
Milepost
PUC-Designated Route
Valve Location
Existing Enbridge Pipelines
Delineated Waterbody
NWI Wetland
Property Boundary
Area of Biological Significance

0 200 400
Feet
1:6,000

N

ENBRIDGE

Enbridge LSr Project
Pipeline Route

NATURAL RESOURCE GROUP

Sheet 53 of 98

M:\Clients\D-F\EEL\SLP_ArcGIS\2008\02\ENV_Align_Sheets\EEL_SLP_LSr_Env_Alignments1_Puc.mxd

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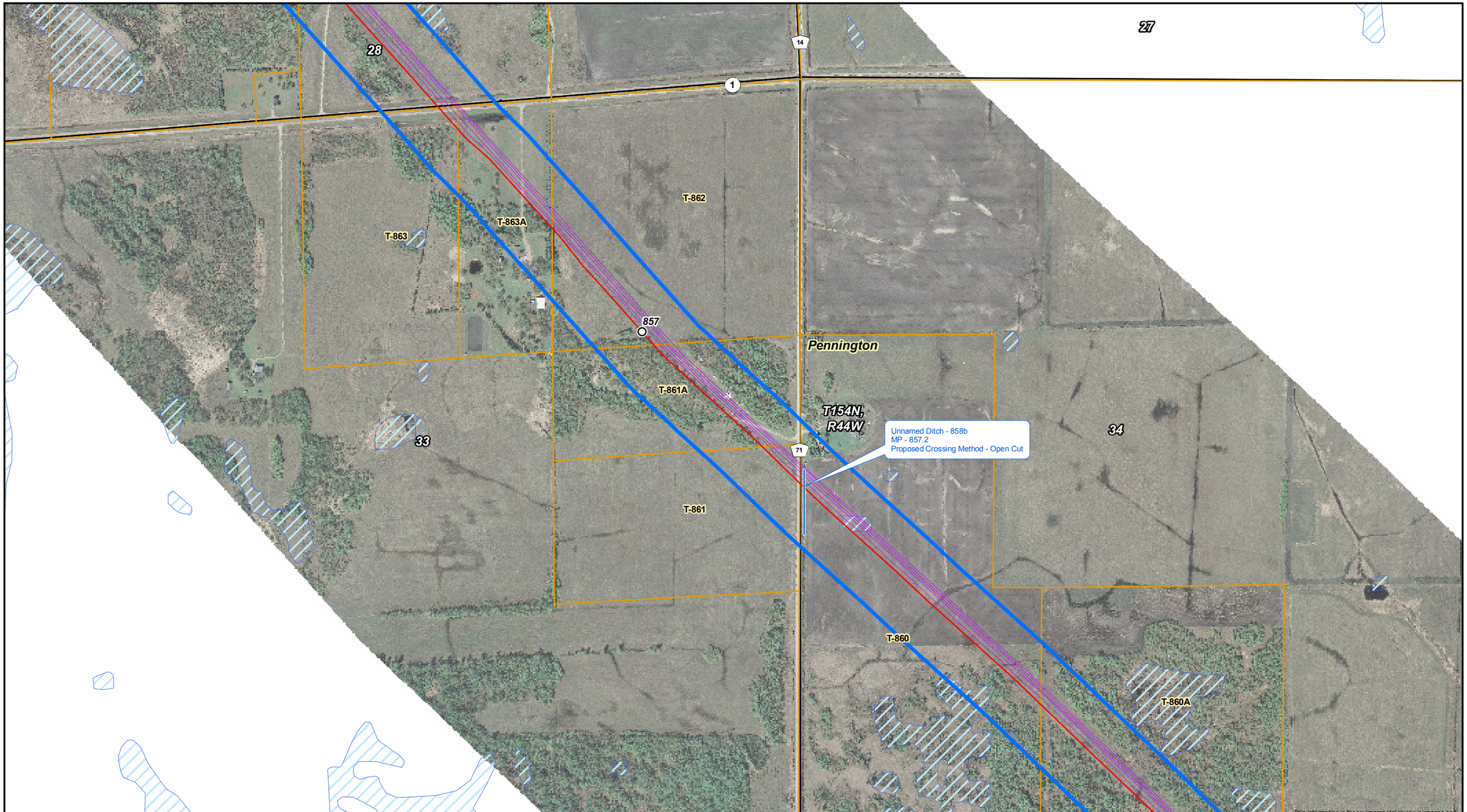

LSr Pipeline Alignment
Milepost
PUC-Designated Route
Valve Location
Existing Enbridge Pipelines
Delineated Waterbody
NWI Wetland
Property Boundary
Area of Biological Significance

0 200 400
Feet
1:6,000

N

ENBRIDGE

Enbridge LSr Project
Pipeline Route

NATURAL RESOURCE GROUP

Sheet 54 of 98

M:\Clients\D-F\EEL\SLP_ArcGIS\2008\02\ENV_Align_Sheets\EEL_SLP_LSr_Env_Alignments1_Puc.mxd

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T154N, R44W

35

34

T-858

T-859

858

33

60th Ave NW

Pennington

T-857

2

T153N, R44W

3

15

71

4

T-855B

Unnamed Ditch - 858a
MP - 858.7
Proposed Crossing Method - Open Cut

This information is for environmental review purposes only.

LSr Pipeline Alignment
Milepost
PUC-Designated Route
Valve Location
Existing Enbridge Pipelines
Delineated Waterbody
NWI Wetland
Property Boundary
Area of Biological Significance

0 200 400
Feet
1:6,000

N

ENBRIDGE

Enbridge LSr Project
Pipeline Route

NATURAL RESOURCE GROUP

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M:\Clients\D-F\EEL\SLP_ArcGIS\2008\02\ENV_Align_Sheets\EEL_SLP_LSr_Env_Alignments1_Puc.mxd

DRAWN BY: RSMcGREGOR

T-855A
3
15
T-855
859
2
T-854
Pennington
T153N,
R44W
T-853
72
1
61
T-852A
T-852OL
11
10
12
T-852
This information is for environmental review purposes only.

LSr Pipeline Alignment
Milepost
PUC-Designated Route
Valve Location
Existing Enbridge Pipelines
Delineated Waterbody
NWI Wetland
Property Boundary
Area of Biological Significance

0 200 400
Feet
1:6,000

N

ENBRIDGE

Enbridge LSr Project
Pipeline Route

NATURAL RESOURCE GROUP

Sheet 56 of 98

M:\Clients\D-F\EEL\SLP_ArcGIS\2008\02\ENV_Align_Sheets\EEL_SLP_LSr_Env_Alignments1_Puc.mxd

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T-850

T-852

860

Unnamed Ditch - 860a
MP - 860.1
Proposed Crossing Method - Open Cut

Pennington

12

T-849OL

72

11

T153N,
R44W

T-849

T-848-1

7

13

14

This information is for environmental review purposes only.

LSr Pipeline Alignment
Milepost
PUC-Designated Route
Valve Location
Existing Enbridge Pipelines
Delineated Waterbody
NWI Wetland
Property Boundary
Area of Biological Significance

0 200 400
Feet
1:6,000

N

ENBRIDGE

Enbridge LSr Project
Pipeline Route

NATURAL RESOURCE GROUP

Sheet 57 of 98

M:\Clients\D-F\EEL\SLP_ArcGIS\2008\02\ENV_Align_Sheets\EEL_SLP_LSr_Env_Alignments1_Puc.mxd

DRAWN BY: RSMcGREGOR

11
12
7
73
40th Ave NE
7
861
T-847
T-848
Pennington
T153N,
R44W
13
T153N,
R43W
18
17
72
14
T-846A
Unnamed Ditch - 861a
MP - 861.7
Proposed Crossing Method - Open Cut
T-845A
T-846

This information is for environmental review purposes only.

LSr Pipeline Alignment
Milepost
PUC-Designated Route
Valve Location
Existing Enbridge Pipelines
Delineated Waterbody
NWI Wetland
Property Boundary
Area of Biological Significance

0 200 400
Feet
1:6,000

N

ENBRIDGE

Enbridge LSr Project
Pipeline Route

NATURAL RESOURCE GROUP

Sheet 58 of 98

M:\Clients\D-F\EEL\SLP_ArcGIS\2008\02\ENV_Align_Sheets\EEL_SLP_LSr_Env_Alignments1_Puc.mxd

DRAWN BY: RSMcGREGOR

T-845A
T-846
13
18
17
17
T-845B
862
30th Ave NW
59
Pennington
T-845
T153N,
R43W
T153N,
R44W
T-844
19
20
74
24
16
T-844A

This information is for environmental review purposes only.

LSr Pipeline Alignment
Milepost
PUC-Designated Route
Valve Location
Existing Enbridge Pipelines
Delineated Waterbody
NWI Wetland
Property Boundary
Area of Biological Significance

0 200 400
Feet
1:6,000

N

ENBRIDGE

Enbridge LSr Project
Pipeline Route

NATURAL RESOURCE GROUP

Sheet 59 of 98

M:\Clients\D-F\EEL\SLP_ArcGIS\2008\02\ENV_Align_Sheets\EEL_SLP_LSr_Env_Alignments1_Puc.mxd

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863
19
T-843
74
T-842
20
Unnamed Ditch - 863a
MP - 863.3
Proposed Crossing Method - Open Cut
Pennington
T-842
Burlington Northern Railroad
T153N,
R43W
T-843A
Unnamed Ditch - 863b
MP - 863.4
Proposed Crossing Method - Open Cut
32
River Oaks Rd
County Road 58 Penn
Unnamed Ditch - 864a
MP - 863.5
Proposed Crossing Method - Open Cut
T-841
T-841
30
29
T-840A
This information is for environmental review purposes only.

LSr Pipeline Alignment
Milepost
PUC-Designated Route
Valve Location
Existing Enbridge Pipelines
Delineated Waterbody
NWI Wetland
Property Boundary
Area of Biological Significance

0 200 400
Feet
1:6,000

N

ENBRIDGE

Enbridge LSr Project
Pipeline Route

NATURAL RESOURCE GROUP

Sheet 60 of 98

M:\Clients\D-F\EEL\SLP_ArcGIS\2008\02\ENV_Align_Sheets\EEL_SLP_LSr_Env_Alignments1_Puc.mxd

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T-840A
T-840OL
T-840A
864
T-840
T-840-1
T-839A
T-839
28
29
Pennington
Red Lake River - 864b
MP - 864.3
Proposed Crossing Method - HDD
Alternative Crossind Method - Dam and Pump
Impaired Water - Mercury
Hydrostatic Test Appropriation and Discharge Point
74
75
32
T153N,
R43W
Burlington Northern Railroad
T-839A1
T-839A1-1
T-839A1-2
T-839A1-3
T-839A1-4
T-839A1-5
T-839A1-6
T-839A1-7
30
T-839A
T-839
Unnamed Ditch - 865a
MP - 864.8
Proposed Crossing Method - Open Cut
57
31
32
33

This information is for environmental review purposes only.

Minnesota
North Dakota

LSr Pipeline Alignment
Milepost
PUC-Designated Route
Valve Location
Existing Enbridge Pipelines
Delineated Waterbody
NWI Wetland
Property Boundary
Area of Biological Significance

0 200 400
Feet
1:6,000

N

ENBRIDGE

Enbridge LSr Project
Pipeline Route

NATURAL RESOURCE GROUP

Sheet 61 of 98

M:\Clients\D-F\EEL\SLP_ArcGIS\2008\02\ENV_Align_Sheets\EEL_SLP_LSr_Env_Alignments1_Puc.mxd

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865
T-838A
75
Pennington
T-838
33
T153N,
R43W
32
17
34
T-837
T-836
This information is for environmental review purposes only.

LSr Pipeline Alignment
Milepost
PUC-Designated Route
Valve Location
Existing Enbridge Pipelines
Delineated Waterbody
NWI Wetland
Property Boundary
Area of Biological Significance

0 200 400
Feet
1:6,000

N

ENBRIDGE

Enbridge LSr Project
Pipeline Route

NATURAL RESOURCE GROUP

Sheet 62 of 98

M:\Clients\D-F\EEL\SLP_ArcGIS\2008\02\ENV_Align_Sheets\EEL_SLP_LSr_Env_Alignments1_Puc.mxd

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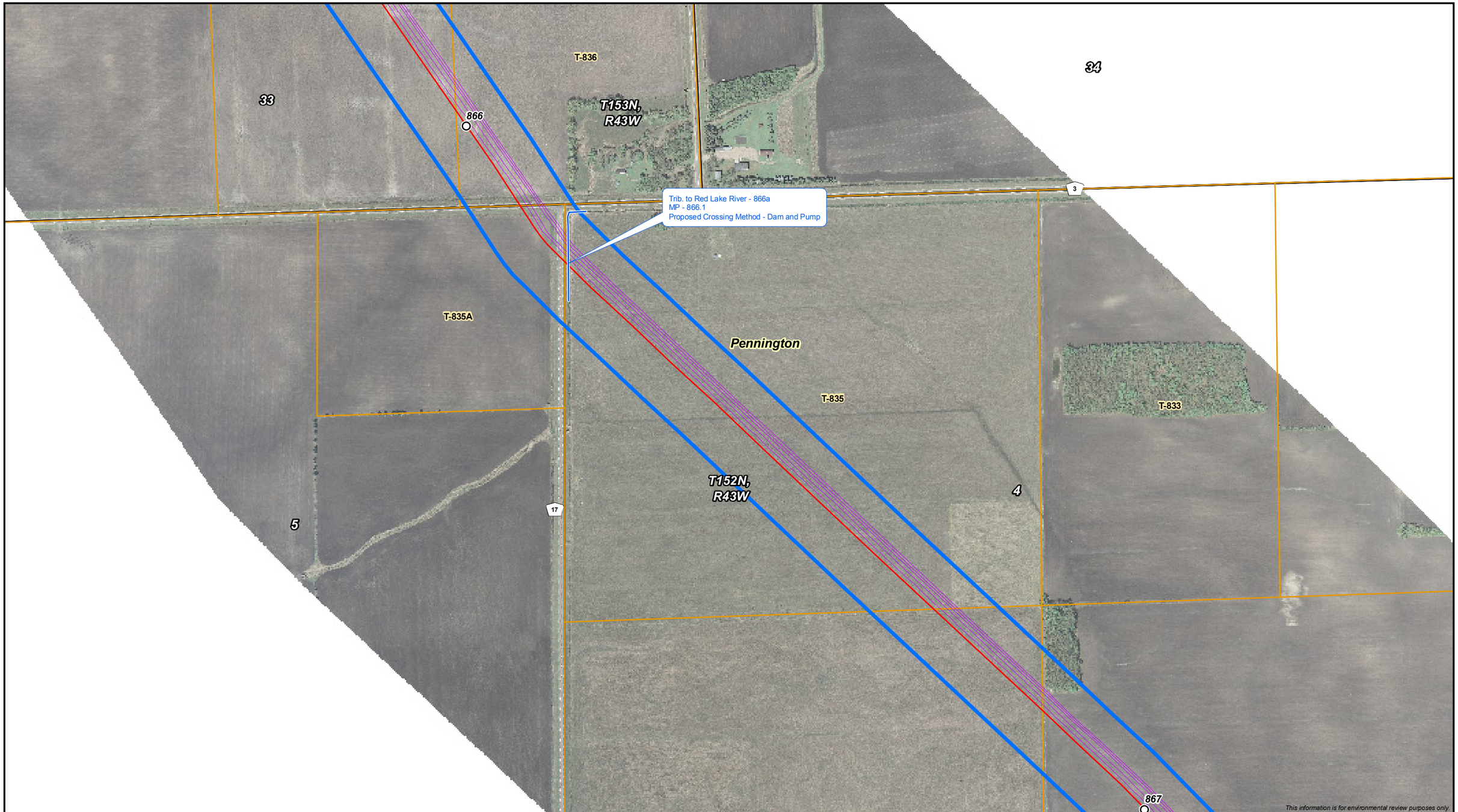

LSr Pipeline Alignment
Milepost
PUC-Designated Route
Valve Location
Existing Enbridge Pipelines
Delineated Waterbody
NWI Wetland
Property Boundary
Area of Biological Significance

0 200 400
Feet
1:6,000

N

ENBRIDGE

Enbridge LSr Project
Pipeline Route

NATURAL RESOURCE GROUP

Sheet 63 of 98

M:\Clients\D-F\EEL\SLP_ArcGIS\2008\02\ENV_Align_Sheets\EEL_SLP_LSr_Env_Alignments1_Puc.mxd

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LSr Pipeline Alignment
Milepost
PUC-Designated Route
Valve Location
Existing Enbridge Pipelines
Delineated Waterbody
NWI Wetland
Property Boundary
Area of Biological Significance

0 200 400
Feet
1:6,000

N

ENBRIDGE

Enbridge LSr Project
Pipeline Route

NATURAL RESOURCE GROUP

Sheet 64 of 98

M:\Clients\D-F\EEL\SLP_ArcGIS\2008\02\ENV_Align_Sheets\EEL_SLP_LSr_Env_Alignments1_Puc.mxd

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868

Trib. to Red Lake River - 868a
MP - 868.1
Proposed Crossing Method - Open Cut

9

10

11

Pennington

T-828

T-827A

T152N,
R43W

T-827

15

14

16

This information is for environmental review purposes only.

LSr Pipeline Alignment
Milepost
PUC-Designated Route
Valve Location
Existing Enbridge Pipelines
Delineated Waterbody
NWI Wetland
Property Boundary
Area of Biological Significance

0 200 400
Feet
1:6,000

N

ENBRIDGE

Enbridge LSr Project
Pipeline Route

NATURAL RESOURCE GROUP

Sheet 65 of 98

M:\Clients\D-F\EEL\SLP_ArcGIS\2008\02\ENV_Align_Sheets\EEL_SLP_LSr_Env_Alignments1_Puc.mxd

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T-827

869

T-827B

15

Pennington

T-825A

14

T152N,
R43W

T-826

Trib. to Red Lake River/County Ditch #62 - 869b
MP - 869.5
Proposed Crossing Method - Open Cut

Trib. to Red Lake River - 869a
MP - 869.5
Proposed Crossing Method - Open Cut

T-825D

79

T-824

T-825

T-824A

This information is for environmental review purposes only.

LSr Pipeline Alignment
Milepost
PUC-Designated Route
Valve Location
Existing Enbridge Pipelines
Delineated Waterbody
NWI Wetland
Property Boundary
Area of Biological Significance

0 200 400
Feet
1:6,000

N

ENBRIDGE

Enbridge LSr Project
Pipeline Route

NATURAL RESOURCE GROUP

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M:\Clients\D-F\EEL\SLP_ArcGIS\2008\02\ENV_Align_Sheets\EEL_SLP_LSr_Env_Alignments1_Puc.mxd

DRAWN BY: RSMcGREGOR

14
13
23
24
870
871
T-824A
T-823
T-822A
T-822
Pennington
T152N,
R43W
79
65th St SE

This information is for environmental review purposes only.

LSr Pipeline Alignment
Milepost
PUC-Designated Route
Valve Location
Existing Enbridge Pipelines
Delineated Waterbody
NWI Wetland
Property Boundary
Area of Biological Significance

0 200 400
Feet
1:6,000

N

ENBRIDGE

Enbridge LSr Project
Pipeline Route

NATURAL RESOURCE GROUP

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M:\Clients\D-F\EEL\SLP_ArcGIS\2008\02\ENV_Align_Sheets\EEL_SLP_LSr_Env_Alignments1_Puc.mxd

DRAWN BY: RSMcGREGOR

T-822
871
23
24
65th St SE
Pennington
T-821
19
Judicial Ditch #15 - 871a
MP - 871.4
Proposed Crossing Method - Open Cut
40th Ave SE
T152N,
R43W
T152N,
R42W
T-820
Red Lake
25
30
26
T-818

This information is for environmental review purposes only.

LSr Pipeline Alignment
Milepost
PUC-Designated Route
Valve Location
Existing Enbridge Pipelines
Delineated Waterbody
NWI Wetland
Property Boundary
Area of Biological Significance

0 200 400
Feet
1:6,000

N

ENBRIDGE

Enbridge LSr Project
Pipeline Route

NATURAL RESOURCE GROUP

Sheet 68 of 98

M:\Clients\D-F\EEL\SLP_ArcGIS\2008\02\ENV_Align_Sheets\EEL_SLP_LSr_Env_Alignments1_Puc.mxd

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