

Site 25

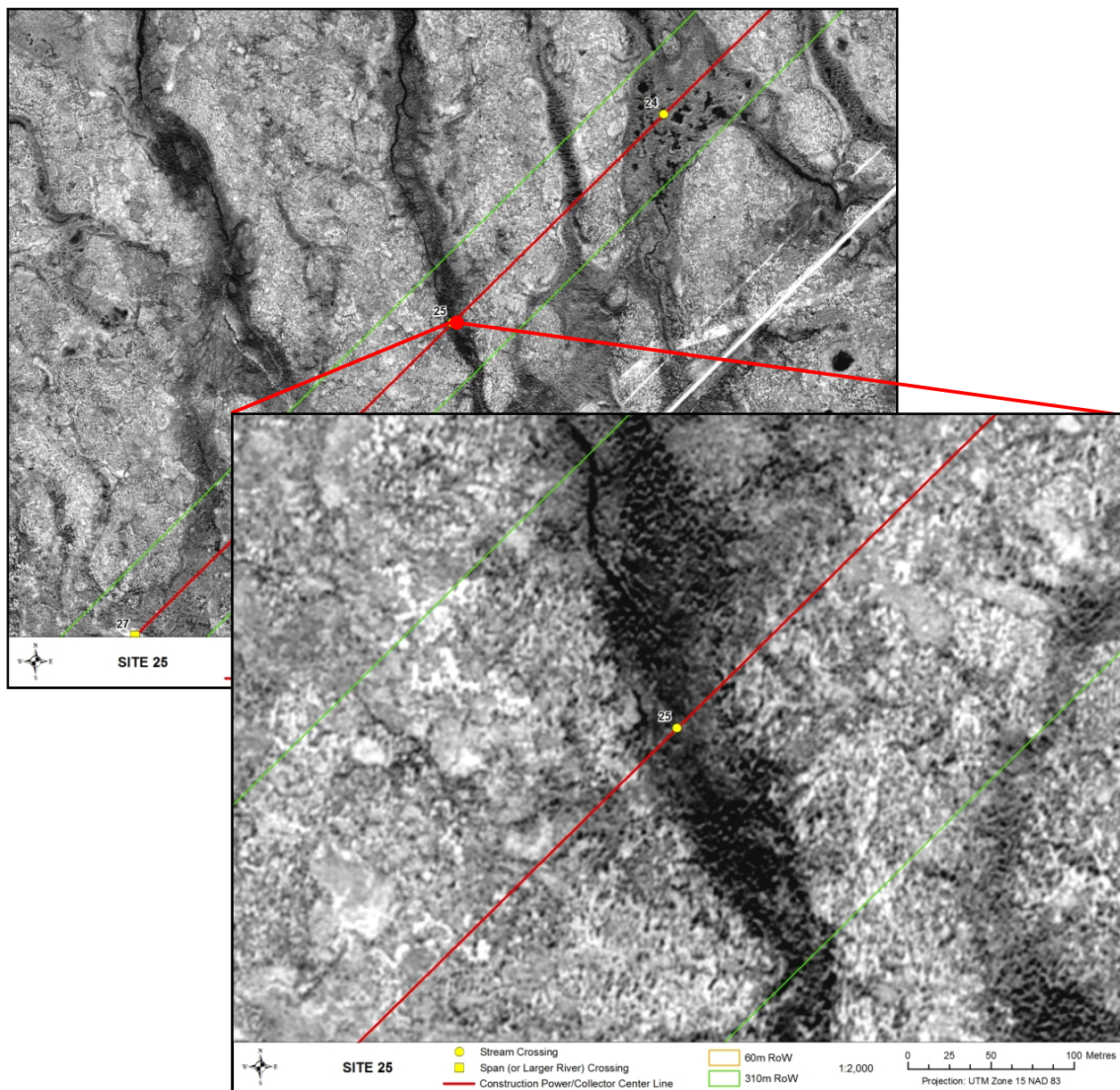
Unnamed tributary of Raindance Creek

Location

Datum: NAD 83
UTM: Zone: 14N
Easting: 799810
Northing: 6276501
Data Source: DOL.

General Morphology

Stream/Lake: Stream
Pattern: SI
Confinement: UN
Stage: Low
Flow Regime: Intermittent
Morphology: -
U/S Drainage: 6.73 km²
Distance to Receiving Water: Raindance Creek
0.52 km



Site Conditions

+ Physical Data

Channel Profile

Channel and Flow

Wetted Width (m)	2
Channel Width (m)	-

Banks (%)

Right Bank Stability	-
Left Bank Stability	-

Riparian

Floodplain Distance (m)

Right Bank	16
Left Bank	20

Riparian Distance (m)

Right Bank	23
Left Bank	31

Riparian Vegetation Type (Y/N)

None	-
Grasses/sedges	-
Shrubs	Y
Conifers	Y
Deciduous	-
Mixed Forest	-

Canopy Cover (%)

	-
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Substrate

Substrate Type (%)

Fines	-
Small Gravel	-
Large Gravel	-
Cobble	-
Boulder	-

Cover Types

Total Cover Available (%)

-

Cover Composition (% of Total)

-

Large Woody Debris	-
Overhanging Vegetation	-
Instream Vegetation	-
Pool	-
Boulder	-
Undercut Bank	-
Surface Turbulence	-
Turbidity	-

Habitat Type

Habitat Composition

Pool	-
Run	-
Flat	-
Riffle	-
Rapid	-

Fish Habitat Classification and Sensitivity

+ Fish Habitat

Fish Habitat Present

Yes

DFO Manitoba Agricultural Watershed Classification:

-

Fish Habitat Classification:

Marginal

Fish Presence: N/A

Comments:

This unnamed tributary provides marginal fish habitat. The crossing consists of bog habitat with a soft floodplain and little water. Fish use will be limited to forage fish species.

+ Habitat Sensitivity

Sensitivity Rating: Moderate

Comments:

The soft floodplain results in a moderate sensitivity rating, despite marginal fish habitat.

Site 26

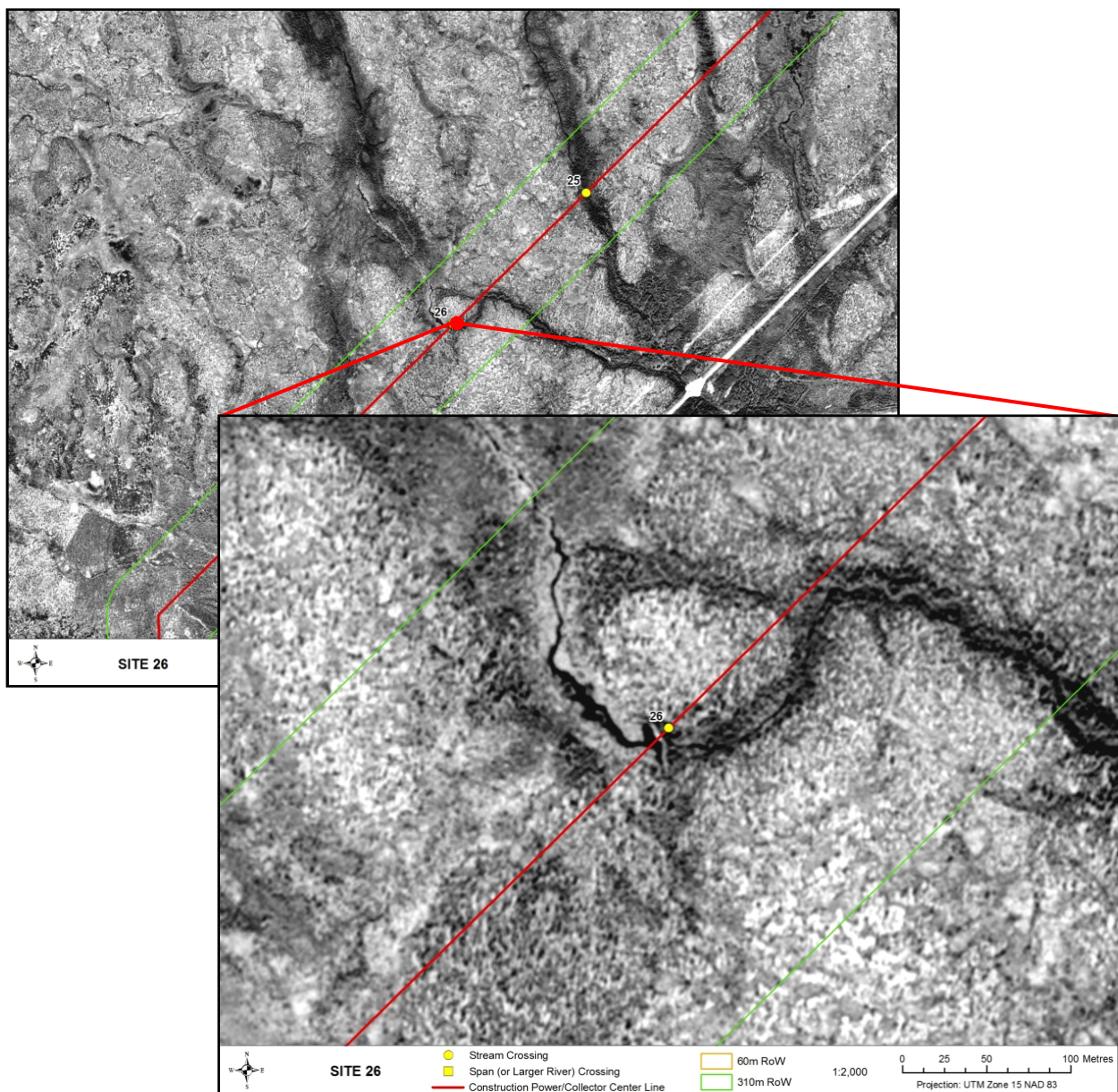
Raindance Creek

Location

Datum: NAD 83
UTM: Zone: 14N
Easting: 799446
Northing: 6276074
Data Source: DOL.

General Morphology

Stream/Lake: Stream
Pattern: IW
Confinement: UN
Stage: Moderate
Flow Regime: Perennial
Morphology: -
U/S Drainage: 9.04 km²
Distance to Receiving Water: Nelson River 1.81 km



Site Conditions

+ Physical Data

Channel Profile

Channel and Flow

Wetted Width (m)	14
Channel Width (m)	1

Banks (%)

Right Bank Stability	-
Left Bank Stability	-

Riparian

Floodplain Distance (m)

Right Bank	3
Left Bank	11

Riparian Distance (m)

Right Bank	8
Left Bank	17

Riparian Vegetation Type (Y/N)

None	-
Grasses/sedges	Y
Shrubs	-
Conifers	Y
Deciduous	-
Mixed Forest	-

Canopy Cover (%)

	-
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Substrate

Substrate Type (%)

Fines	-
Small Gravel	-
Large Gravel	-
Cobble	-
Boulder	-

Cover Types

Total Cover Available (%)

-

Cover Composition (% of Total)

-

Large Woody Debris	-
Overhanging Vegetation	-
Instream Vegetation	-
Pool	-
Boulder	-
Undercut Bank	-
Surface Turbulence	-
Turbidity	-

Habitat Type

Habitat Composition

Pool	15
Run	85
Flat	-
Riffle	-
Rapid	-

Fish Habitat Classification and Sensitivity

+ Fish Habitat

Fish Habitat Present Yes

DFO Manitoba Agricultural Watershed Classification: -

Fish Habitat Classification: Marginal

Fish Presence: Kroeker, D.S., and MacDonell, D.S., (2006) reported burbot, brook trout, brook stickleback, fathead minnow, sculpins (mottled and slimy), longnose dace, white sucker, and longnose sucker. The creek was also found to provide nursery habitat for brook trout. All sampling was conducted in the lower reaches of the creek.

Comments:

Raindance Creek likely provides only marginal fish habitat where the RoW crosses the channel, with low overwintering potential. The crossing consists of bog habitat with a soft floodplain and little water. Fish use is expected to be limited to forage fish species.

+ Habitat Sensitivity

Sensitivity Rating: Moderate

Comments:

The soft floodplain results in a moderate sensitivity rating, despite marginal fish habitat.

Site 27

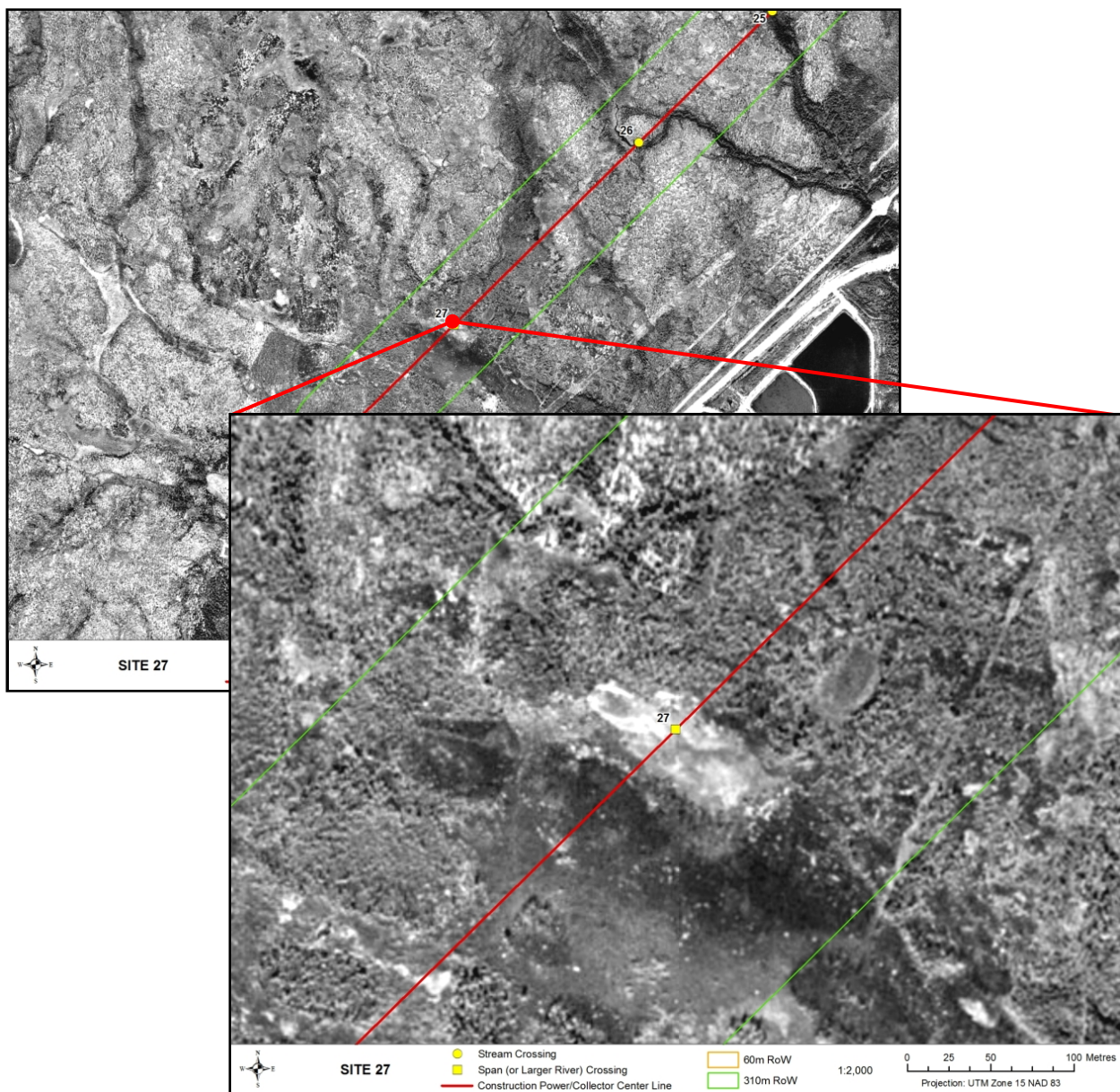
Unnamed Wetland

Location

Datum: NAD 83
UTM: Zone: 14N
Easting: 798940
Northing: 6275480
Data Source: DOL.

General Morphology

Stream/Lake: Lake
Pattern: -
Confinement: UN
Stage: Low
Flow Regime: Ephemeral
Morphology: -
U/S Drainage: -
Distance to Receiving Water: -



Site Conditions

+ Physical Data

Channel Profile

Channel and Flow

Wetted Width (m)	0
Channel Width (m)	192

Banks (%)

Right Bank Stability	-
Left Bank Stability	-

Riparian

Floodplain Distance (m)

Right Bank	-
Left Bank	-

Riparian Distance (m)

Right Bank	332 (east)
Left Bank	290 (west)

Riparian Vegetation Type (Y/N)

None	-
Grasses/sedges	-
Shrubs	Y
Conifers	Y
Deciduous	-
Mixed Forest	-

Canopy Cover (%)

0

Substrate

Substrate Type (%)

Fines	-
Small Gravel	-
Large Gravel	-
Cobble	-
Boulder	-

Cover Types

Total Cover Available (%)

-

Cover Composition (% of Total)

-

Large Woody Debris	-
Overhanging Vegetation	-
Instream Vegetation	-
Pool	-
Boulder	-
Undercut Bank	-
Surface Turbulence	-
Turbidity	-

Habitat Type

Habitat Composition

Pool	100
Run	-
Flat	-
Riffle	-
Rapid	-

Fish Habitat Classification and Sensitivity

+ Fish Habitat

Fish Habitat Present

No

DFO Manitoba Agricultural Watershed Classification:

-

Fish Habitat Classification:

No Fish Habitat

Fish Presence: N/A

Comments:

There is no water or connections to other waterbodies at this crossing. No fish are anticipated.

+ Habitat Sensitivity

Sensitivity Rating: Low

Comments:

No fish habitat results in a low sensitivity rating.

Site 28

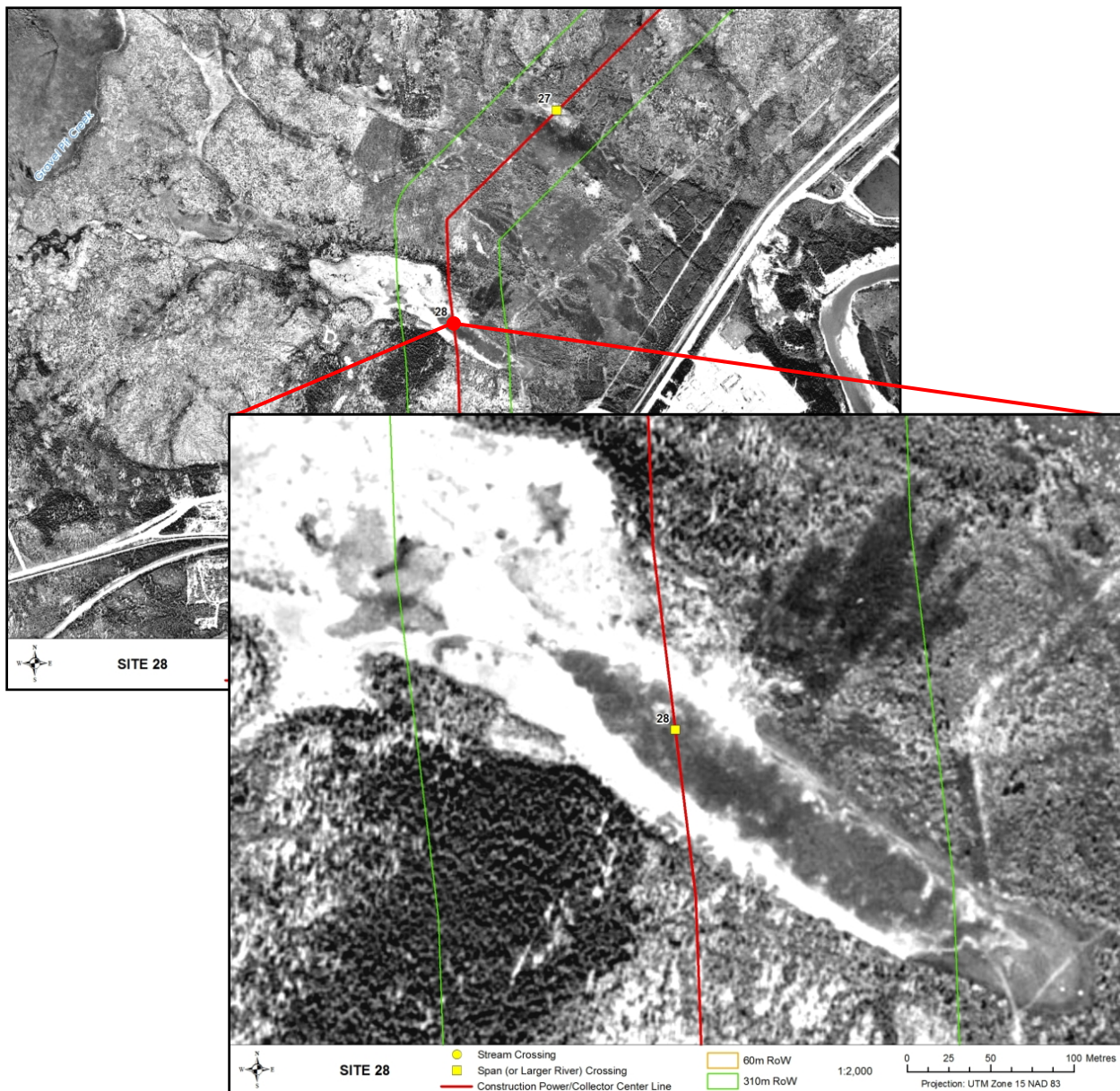
Unnamed Wetland

Location

Datum: NAD 83
UTM: Zone: 14N
Easting: 798687
Northing: 6274817
Data Source: DOL.

General Morphology

Stream/Lake: Lake (7.79 ha)
Pattern: -
Confinement: UN
Stage: Low
Flow Regime: Ephemeral
Morphology: -
U/S Drainage: -
Distance to Receiving Water: -



Site Conditions

+ Physical Data

Channel Profile

Channel and Flow

Wetted Width (m)	0
Channel Width (m)	69

Banks (%)

Right Bank Stability	-
Left Bank Stability	-

Riparian

Floodplain Distance (m)

Right Bank	-
Left Bank	-

Riparian Distance (m)

Right Bank	18 (east)
Left Bank	17 (west)

Riparian Vegetation Type (Y/N)

None	-
Grasses/sedges	-
Shrubs	Y
Conifers	-
Deciduous	Y
Mixed Forest	-

Canopy Cover (%)

0

Substrate

Substrate Type (%)

Fines	-
Small Gravel	-
Large Gravel	-
Cobble	-
Boulder	-

Cover Types

Total Cover Available (%)

-

Cover Composition (% of Total)

-

Large Woody Debris	-
Overhanging Vegetation	-
Instream Vegetation	-
Pool	-
Boulder	-
Undercut Bank	-
Surface Turbulence	-
Turbidity	-

Habitat Type

Habitat Composition

Pool	100
Run	-
Flat	-
Riffle	-
Rapid	-

Fish Habitat Classification and Sensitivity

+ Fish Habitat

Fish Habitat Present

No

DFO Manitoba Agricultural Watershed Classification:

-

Fish Habitat Classification:

No Fish Habitat

Fish Presence: N/A

Comments:

There is limited water present and no apparent connection to other waterbodies at this crossing. The RoW crosses the eastern edge of the wetland. No fish are anticipated.

+ Habitat Sensitivity

Sensitivity Rating: Low

Comments:

No fish habitat results in a low sensitivity rating.

Site 29

Limestone River

Location

Datum: NAD 83
UTM: Zone: 14N
Easting: 798868
Northing: 6273724
Data Source: DOL

General Morphology

Stream/Lake: Stream
Pattern: TM
Confinement: UN
Stage: Moderate
Flow Regime: Perennial
Morphology: LC
U/S Drainage: 3299.02 km²
Distance to Receiving Water: Nelson River 1.91 km



Site Conditions

+ Physical Data

Channel Profile

Channel and Flow

Wetted Width (m)	49
Channel Width (m)	52

Banks (%)

Right Bank Stability	20
Left Bank Stability	30

Riparian

Floodplain Distance (m)

Right Bank	-
Left Bank	-

Riparian Distance (m)

Right Bank	41
Left Bank	9

Riparian Vegetation Type (Y/N)

None	-
Grasses/sedges	Y
Shrubs	Y
Conifers	Y
Deciduous	-
Mixed Forest	-

Canopy Cover (%)

	0
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Substrate

Substrate Type (%)

Fines	-
Small Gravel	-
Large Gravel	-
Cobble	-
Boulder	-

Cover Types

Total Cover Available (%)

-

Cover Composition (% of Total)

Large Woody Debris	-
Overhanging Vegetation	-
Instream Vegetation	-
Pool	-
Boulder	-
Undercut Bank	-
Surface Turbulence	-
Turbidity	-

Habitat Type

Habitat Composition

Pool	-
Run	-
Flat	-
Riffle	-
Rapid	-

Fish Habitat Classification and Sensitivity

+ Fish Habitat

Fish Habitat Present

Yes

DFO Manitoba Agricultural Watershed Classification:

-

Fish Habitat Classification:

Important

Fish Presence: Kroeker and MacDonell (2006) reported brook trout, burbot, cisco, lake whitefish, longnose sucker, walleye, white sucker, lake whitefish, and northern pike within the lower 40km reach of the river. Lavergne and MacDonell (2010) found the stream provided spawning habitat for brook trout, with a sampling location 15km upstream of the river's mouth.

Comments:

Limestone River is known to provide important fish habitat for both indicator and forage fish, including spawning, rearing, migration and overwintering habitat. A road approach is located 253m downstream of the site within the RoW and the highway crossing is located 193m downstream of the RoW

+ Habitat Sensitivity

Sensitivity Rating: Moderate

Comments: Bare soil banks and important fish habitat result in a moderate sensitivity rating.

Site 30

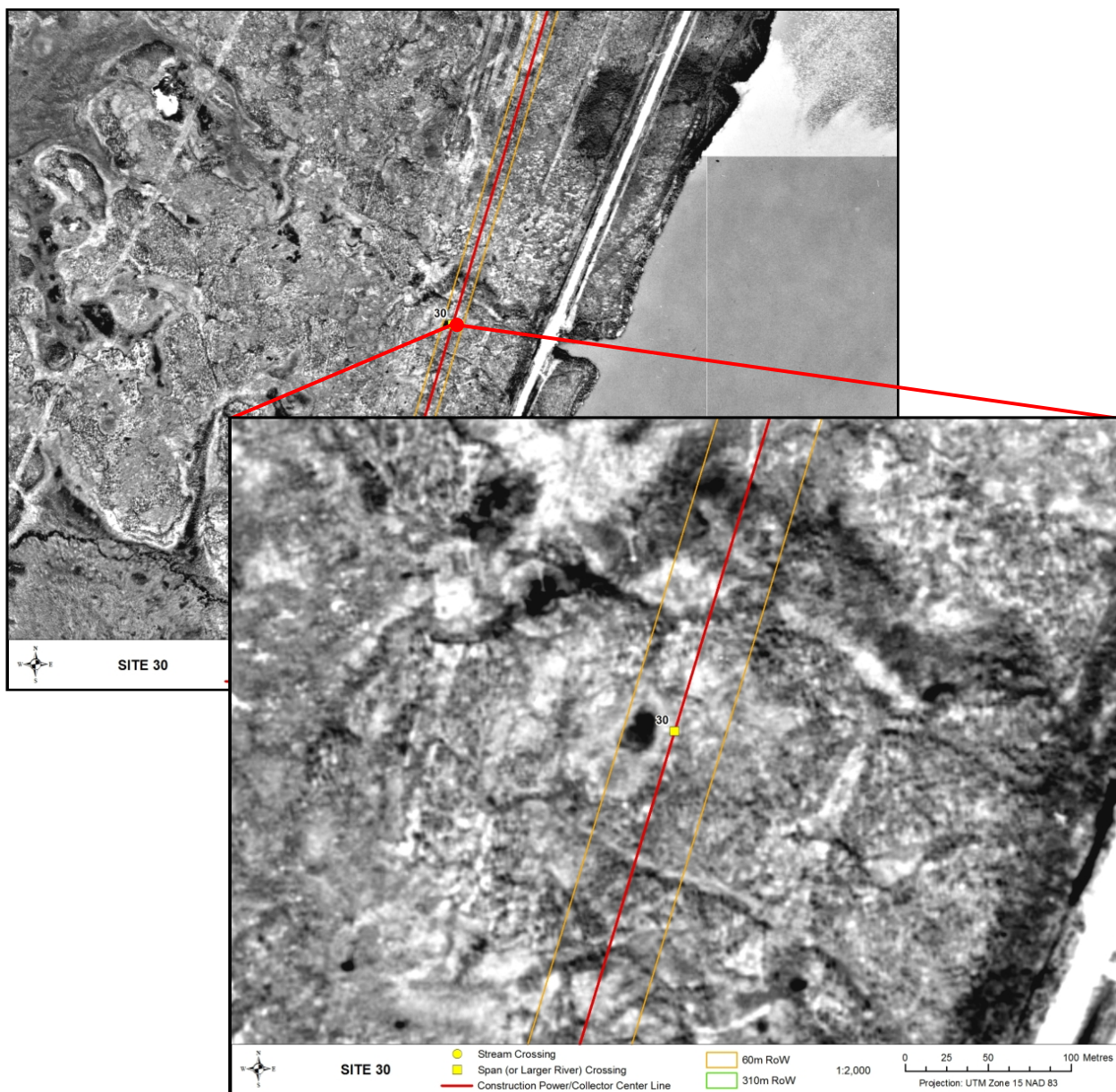
Unnamed Wetland

Location

Datum: NAD 83
UTM: Zone: 14N
Easting: 798702
Northing: 6269454
Data Source: DOL.

General Morphology

Stream/Lake: Lake (0.3 ha)
Pattern: -
Confinement: UN
Stage: Low
Flow Regime: Ephemeral
Morphology: -
U/S Drainage: -
Distance to Receiving Water: -



Site Conditions

+ Physical Data

Channel Profile

Channel and Flow

Wetted Width (m)	0
Channel Width (m)	24

Banks (%)

Right Bank Stability	-
Left Bank Stability	-

Riparian

Floodplain Distance (m)

Right Bank	-
Left Bank	-

Riparian Distance (m)

Right Bank	-
Left Bank	-

Riparian Vegetation Type (Y/N)

None	-
Grasses/sedges	Y
Shrubs	-
Conifers	Y
Deciduous	-
Mixed Forest	-

Canopy Cover (%)

	0
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Substrate

Substrate Type (%)

Fines	-
Small Gravel	-
Large Gravel	-
Cobble	-
Boulder	-

Cover Types

Total Cover Available (%)

-

Cover Composition (% of Total)

Large Woody Debris	-
Overhanging Vegetation	-
Instream Vegetation	-
Pool	-
Boulder	-
Undercut Bank	-
Surface Turbulence	-
Turbidity	-

Habitat Type

Habitat Composition

Pool	-
Run	-
Flat	-
Riffle	-
Rapid	-

Fish Habitat Classification and Sensitivity

+ Fish Habitat

Fish Habitat Present

No

DFO Manitoba Agricultural Watershed Classification:

-

Fish Habitat Classification:

No Fish Habitat

Fish Presence: N/A

Comments:

There is no connection to other waterbodies at this crossing. No fish are anticipated. Existing transmission lines are located 48m east and 21m west of the RoW.

+ Habitat Sensitivity

Sensitivity Rating: Low

Comments:

No fish habitat results in a low sensitivity rating.

Site 31

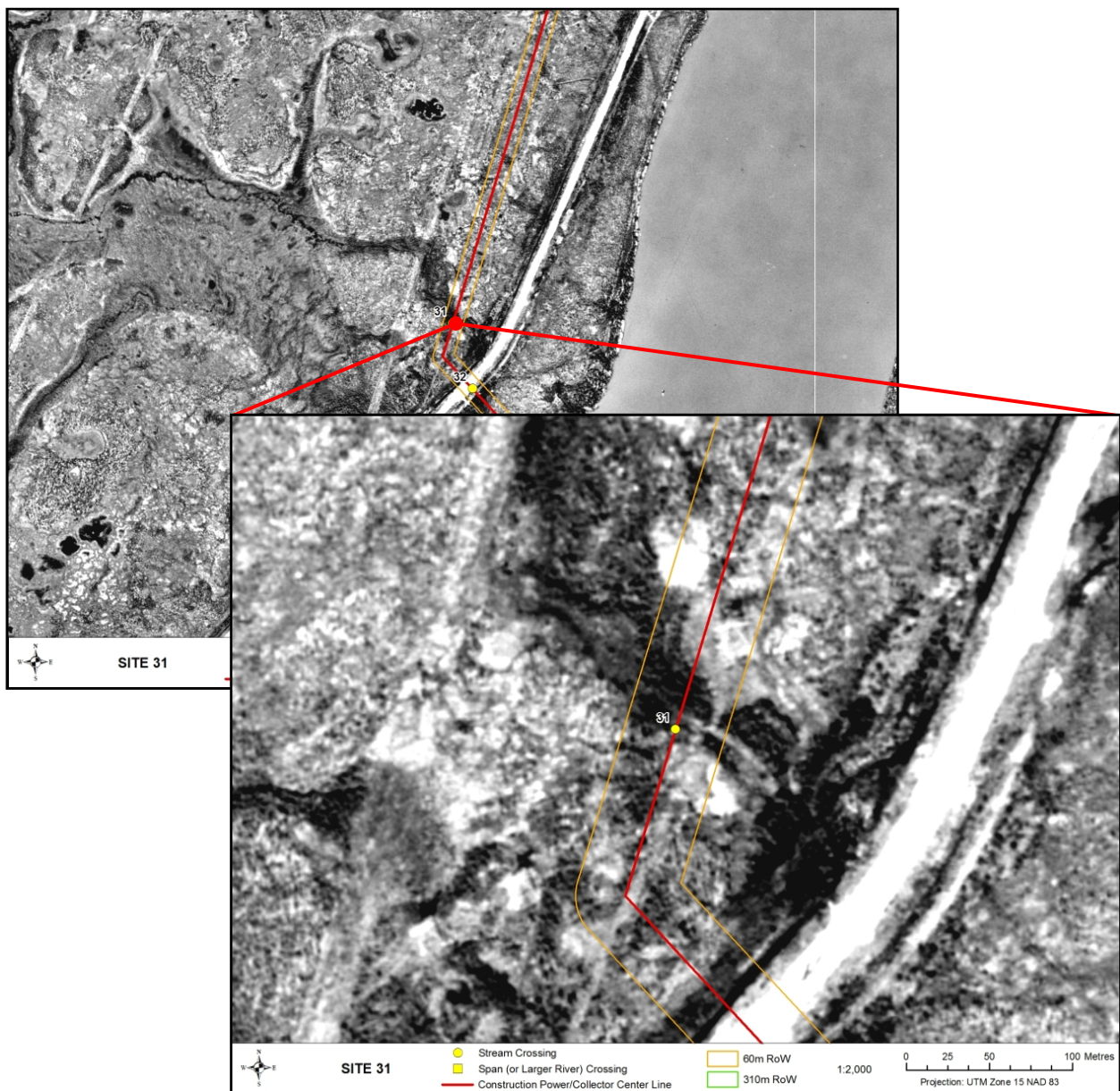
Unnamed tributary of Nelson River

Location

Datum: NAD 83
UTM: Zone: 14N
Easting: 798472
Northing: 6268354
Data Source: DOL

General Morphology

Stream/Lake: Stream
Pattern: SI
Confinement: UN
Stage: Low
Flow Regime: Ephemeral
Morphology: -
U/S Drainage: 6.03 km²
Distance to Receiving Water: Nelson River 0.45 km



Site Conditions

+ Physical Data

Channel Profile

Channel and Flow

Wetted Width (m)	0
Channel Width (m)	9

Banks (%)

Right Bank Stability	-
Left Bank Stability	-

Riparian

Floodplain Distance (m)

Right Bank	51
Left Bank	16

Riparian Distance (m)

Right Bank	56
Left Bank	24

Riparian Vegetation Type (Y/N)

None	-
Grasses/sedges	Y
Shrubs	Y
Conifers	Y
Deciduous	-
Mixed Forest	-

Canopy Cover (%)

	-
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Substrate

Substrate Type (%)

Fines	-
Small Gravel	-
Large Gravel	-
Cobble	-
Boulder	-

Cover Types

Total Cover Available (%)

Cover Composition (% of Total)

Large Woody Debris	-
Overhanging Vegetation	-
Instream Vegetation	-
Pool	-
Boulder	-
Undercut Bank	-
Surface Turbulence	-
Turbidity	-

Habitat Type

Habitat Composition

Pool	-
Run	-
Flat	-
Riffle	-
Rapid	-

Fish Habitat Classification and Sensitivity

+ Fish Habitat

Fish Habitat Present	Yes
DFO Manitoba Agricultural Watershed Classification:	-
Fish Habitat Classification:	Marginal

Fish Presence: N/A

Comments:

This unnamed tributary provides marginal fish habitat. The tributary has downstream connectivity to the Nelson River; however low flows likely limit fish use to forage fish species. Any large bodied fish use is likely restricted to high water conditions (i.e. spring freshet). The crossing has a soft floodplain. Existing transmission lines are found within the RoW.

+ Habitat Sensitivity

Sensitivity Rating: Moderate

Comments:

The soft floodplain results in a moderate sensitivity rating, despite marginal fish habitat.

Site 32

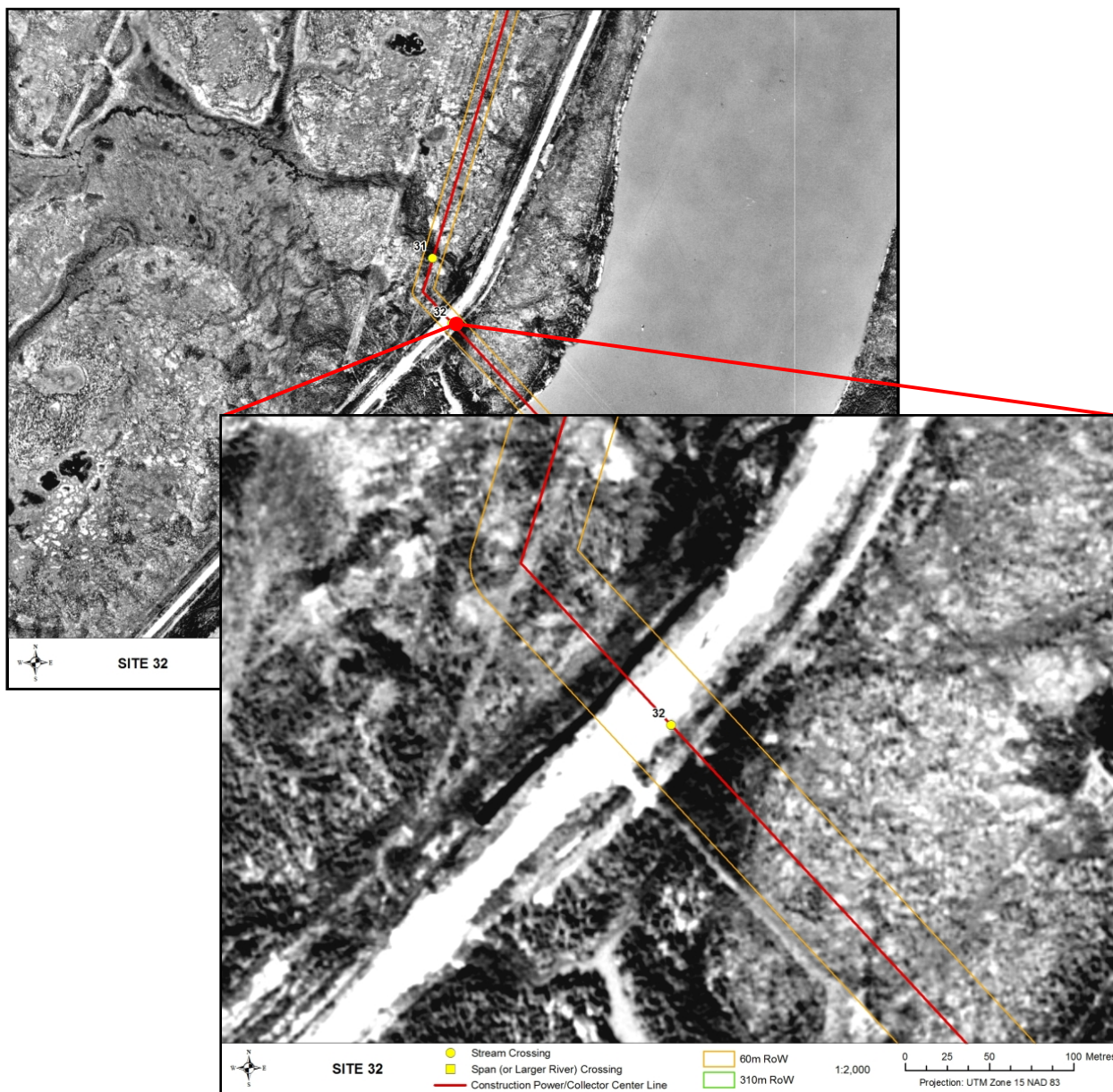
Unnamed tributary of Nelson River

Location

Datum: NAD 83
UTM: Zone: 14N
Easting: 798548
Northing: 6268164
Data Source: DOL

General Morphology

Stream/Lake: Stream
Pattern: SI
Confinement: UN
Stage: Low
Flow Regime: Ephemeral
Morphology: -
U/S Drainage: 6.28 km²
Distance to Receiving Water: Nelson River 0.52 km



Site Conditions

+ Physical Data

Channel Profile

Channel and Flow

Wetted Width (m)	5
Channel Width (m)	5

Banks (%)

Right Bank Stability	-
Left Bank Stability	-

Riparian

Floodplain Distance (m)

Right Bank	18
Left Bank	7

Riparian Distance (m)

Right Bank	32
Left Bank	7

Riparian Vegetation Type (Y/N)

None	-
Grasses/sedges	Y
Shrubs	Y
Conifers	-
Deciduous	-
Mixed Forest	-

Canopy Cover (%)

	0
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Substrate

Substrate Type (%)

Fines	-
Small Gravel	-
Large Gravel	-
Cobble	-
Boulder	-

Cover Types

Total Cover Available (%)

Cover Composition (% of Total)

Large Woody Debris	-
Overhanging Vegetation	-
Instream Vegetation	-
Pool	-
Boulder	-
Undercut Bank	-
Surface Turbulence	-
Turbidity	-

Habitat Type

Habitat Composition

Pool	-
Run	100
Flat	-
Riffle	-
Rapid	-

Fish Habitat Classification and Sensitivity

+ Fish Habitat

Fish Habitat Present	Yes
DFO Manitoba Agricultural Watershed Classification:	-
Fish Habitat Classification:	Marginal

Fish Presence: N/A

Comments:

This unnamed tributary provides marginal fish habitat. The tributary has downstream connectivity to the Nelson River; however low flows likely limit fish use to forage fish species. Any large bodied fish use is likely restricted to high water conditions (i.e. spring freshet). It is surrounded by a soft floodplain. The site has been previously disturbed by a highway located on the left bank.

+ Habitat Sensitivity

Sensitivity Rating: Moderate

Comments:

The soft floodplain results in a moderate sensitivity rating, despite marginal fish habitat.

Site 33

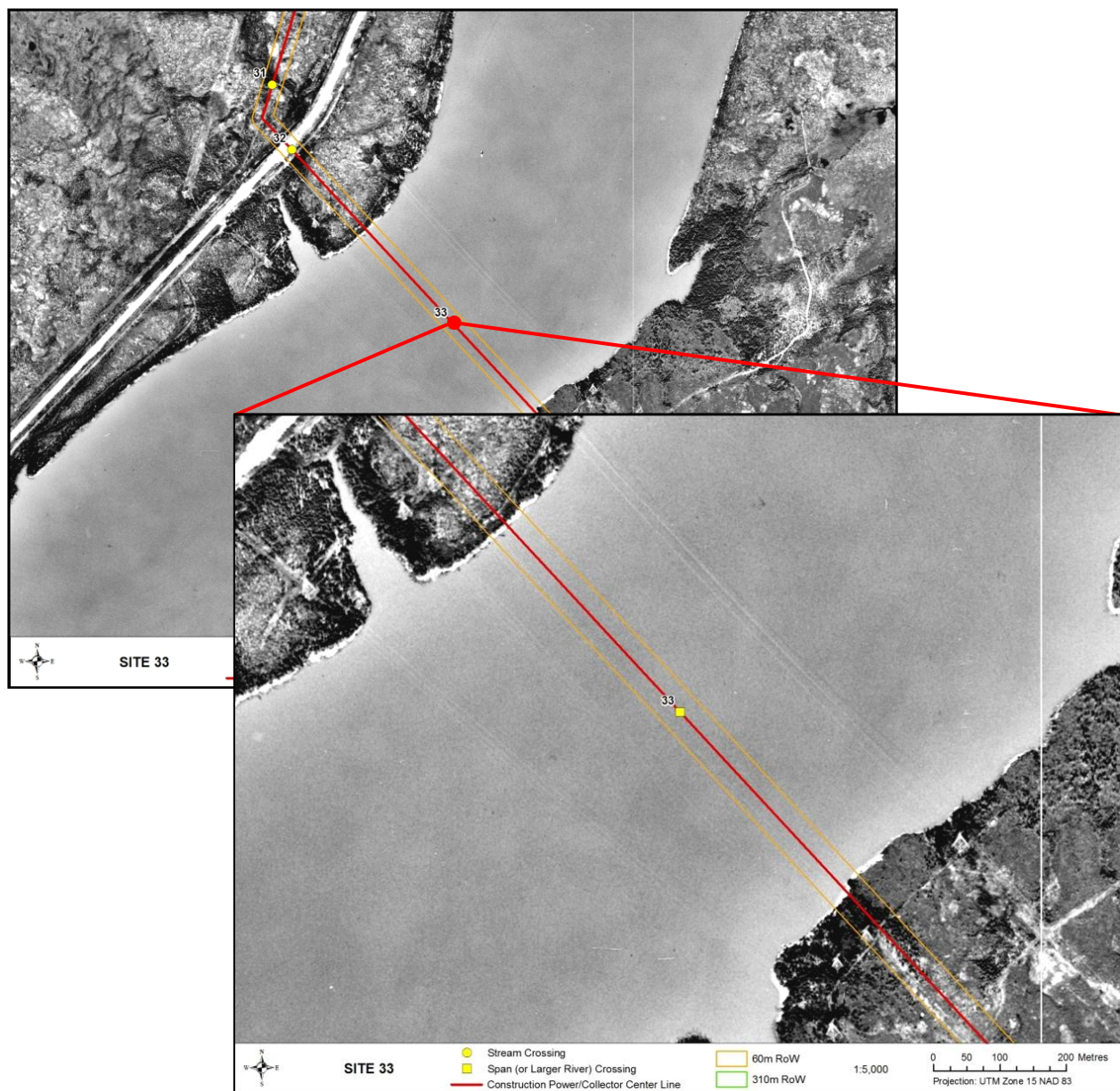
Nelson River

Location

Datum: NAD 83
UTM: Zone: 14N
Easting: 799079
Northing: 6267683
Data Source: DOL

General Morphology

Stream/Lake: Stream
Pattern: SI
Confinement: FC
Stage: Moderate
Flow Regime: Perennial
Morphology: LC
U/S Drainage: 1116804.28 km²
Distance to Receiving Water: Hudson Bay 139.7 km



Site Conditions

+ Physical Data

Channel Profile

Channel and Flow

Wetted Width (m)	731
Channel Width (m)	739

Banks (%)

Right Bank Stability	20
Left Bank Stability	40

Riparian

Floodplain Distance (m)

Right Bank	-
Left Bank	-

Riparian Distance (m)

Right Bank	22
Left Bank	5

Riparian Vegetation Type (Y/N)

None	-
Grasses/sedges	Y
Shrubs	-
Conifers	Y
Deciduous	-
Mixed Forest	-

Canopy Cover (%)

0

Substrate

Substrate Type (%)

Fines	-
Small Gravel	-
Large Gravel	-
Cobble	-
Boulder	-

Cover Types

Total Cover Available (%)

-

Cover Composition (% of Total)

Large Woody Debris	-
Overhanging Vegetation	-
Instream Vegetation	-
Pool	-
Boulder	-
Undercut Bank	-
Surface Turbulence	-
Turbidity	-

Habitat Type

Habitat Composition

Pool	-
Run	100
Flat	-
Riffle	-
Rapid	-

Fish Habitat Classification and Sensitivity

+ Fish Habitat

Fish Habitat Present

Yes

DFO Manitoba Agricultural Watershed Classification:

-

Fish Habitat Classification:

Important

Fish Presence: Bernhardt et al. (1991) reported burbot, goldeye, lake cisco, lake chub, lake sturgeon, lake whitefish, longnose sucker, mooneye, northern pike, sauger, walleye, white sucker, and yellow perch. Swanson et al. (1990) reported lake whitefish, walleye, sauger, northern pike, cisco, white sucker, longnose sucker, goldeye, lake sturgeon and burbot. Johnson and MacDonell (2004) reported brook trout, burbot, flathead chub, freshwater drum, goldeye, lake cisco, lake sturgeon, lake whitefish, longnose sucker, mooneye, northern pike (jackfish), rainbow smelt, sauger, walleye and white sucker. All sampling was conducted in the lower Nelson River mainstem.

Comments:

Nelson River is known to provide important fish habitat for both indicator and forage fish. The river supports a diverse fish community, providing spawning, rearing, feeding and overwintering habitat.

+ Habitat Sensitivity

Sensitivity Rating: Moderate

Comments: Exposed banks (bare soil) and important fish habitat result in a moderate sensitivity rating.

Site 34

Unnamed Wetland

Location

Datum: NAD 83
UTM: Zone: 14N
Easting: 799266
Northing: 6265649
Data Source: DOL

General Morphology

Stream/Lake: Lake
Pattern: -
Confinement: UN
Stage: Low
Flow Regime: Ephemeral
Morphology: -
U/S Drainage: -
Distance to Receiving Water: -



Site Conditions

+ Physical Data

Channel Profile

Channel and Flow

Wetted Width (m)	-
Channel Width (m)	76

Banks (%)

Right Bank Stability	-
Left Bank Stability	-

Riparian

Floodplain Distance (m)

Right Bank	-
Left Bank	-

Riparian Distance (m)

Right Bank	62 (NE)
Left Bank	12 (SW)

Riparian Vegetation Type (Y/N)

None	-
Grasses/sedges	Y
Shrubs	Y
Conifers	-
Deciduous	-
Mixed Forest	-

Canopy Cover (%)

0

Substrate

Substrate Type (%)

Fines	-
Small Gravel	-
Large Gravel	-
Cobble	-
Boulder	-

Cover Types

Total Cover Available (%)

-

Cover Composition (% of Total)

-

Large Woody Debris	-
Overhanging Vegetation	-
Instream Vegetation	-
Pool	-
Boulder	-
Undercut Bank	-
Surface Turbulence	-
Turbidity	-

Habitat Type

Habitat Composition

Pool	-
Run	-
Flat	-
Riffle	-
Rapid	-

Fish Habitat Classification and Sensitivity

+ Fish Habitat

Fish Habitat Present

No

DFO Manitoba Agricultural Watershed Classification:

-

Fish Habitat Classification:

No Fish Habitat

Fish Presence: N/A

Comments:

There is no connection to other waterbodies at this crossing. No fish are anticipated. There is an existing transmission line located on the west side of the RoW.

+ Habitat Sensitivity

Sensitivity Rating: Low

Comments:

No fish habitat results in a low sensitivity rating.

Site 35

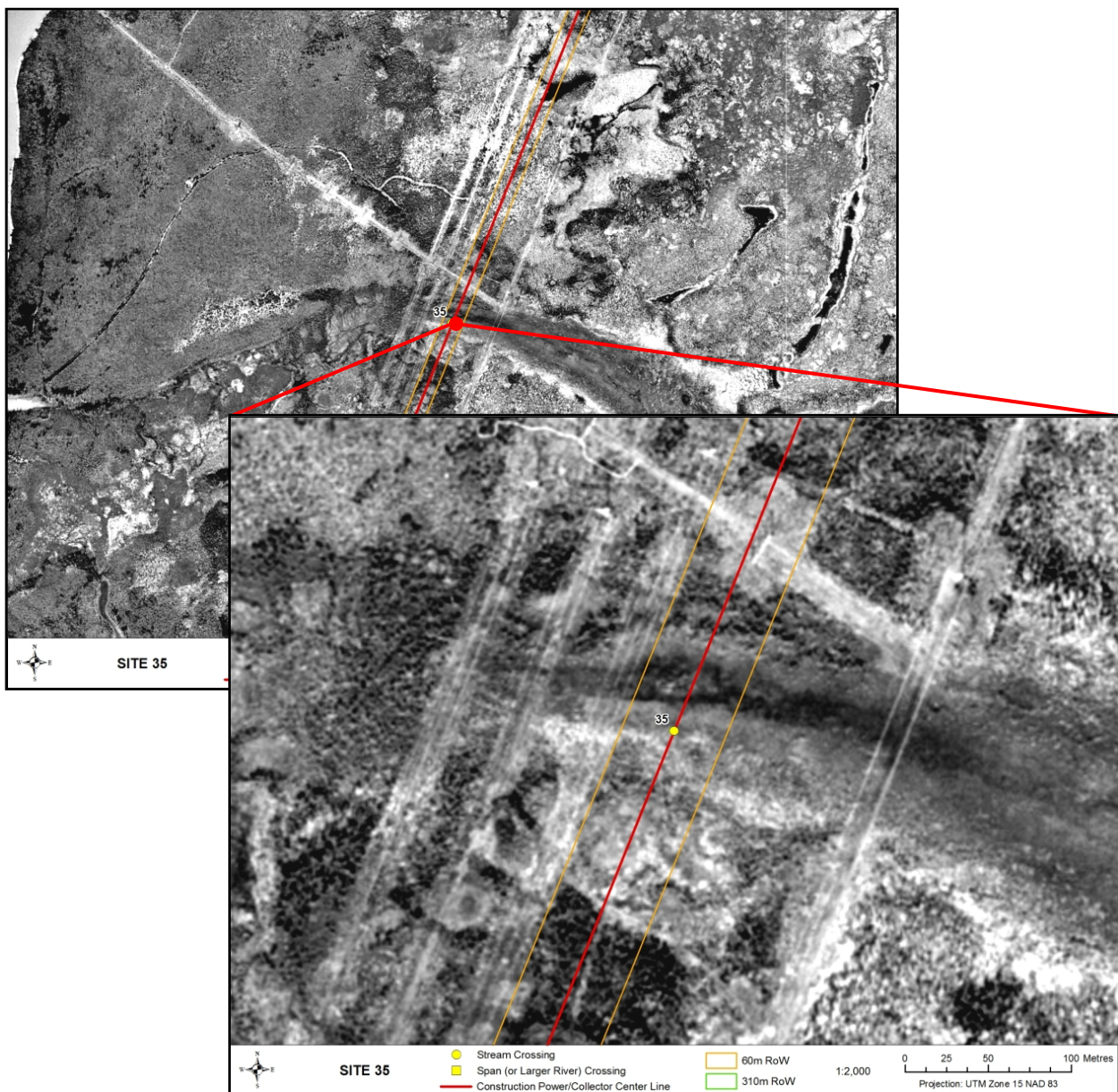
Unnamed tributary of Nelson River

Location

Datum: NAD 83
UTM: Zone: 14N
Easting: 798900
Northing: 6264452
Data Source: DOL

General Morphology

Stream/Lake: Stream
Pattern: IR
Confinement: UN
Stage: Low
Flow Regime: Intermittent
Morphology: -
U/S Drainage: 9.58 km²
Distance to Receiving Water: Nelson River 1.41 km



Site Conditions

+ Physical Data

Channel Profile

Channel and Flow

Wetted Width (m)	5
Channel Width (m)	-

Banks (%)

Right Bank Stability	-
Left Bank Stability	-

Riparian

Floodplain Distance (m)

Right Bank	20
Left Bank	21

Riparian Distance (m)

Right Bank	138
Left Bank	47

Riparian Vegetation Type (Y/N)

None	-
Grasses/sedges	Y
Shrubs	Y
Conifers	-
Deciduous	-
Mixed Forest	-

Canopy Cover (%)

	0
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Substrate

Substrate Type (%)

Fines	-
Small Gravel	-
Large Gravel	-
Cobble	-
Boulder	-

Cover Types

Total Cover Available (%)

Cover Composition (% of Total)

Large Woody Debris	-
Overhanging Vegetation	-
Instream Vegetation	-
Pool	-
Boulder	-
Undercut Bank	-
Surface Turbulence	-
Turbidity	-

Habitat Type

Habitat Composition

Pool	-
Run	-
Flat	-
Riffle	-
Rapid	-

Fish Habitat Classification and Sensitivity

+ Fish Habitat

Fish Habitat Present	Yes
DFO Manitoba Agricultural Watershed Classification:	-
Fish Habitat Classification:	Marginal

Fish Presence: N/A

Comments:

This unnamed tributary likely does not provide habitat for forage or indicator fish species. At the crossing it consists of bog habitat with a soft floodplain. There is no direct channel connection to the Nelson River. Existing transmission lines are located directly downstream and 58m upstream of the RoW.

+ Habitat Sensitivity

Sensitivity Rating: Moderate

Comments:

Soft floodplain results in a moderate sensitivity rating, despite marginal fish habitat.

Site 36

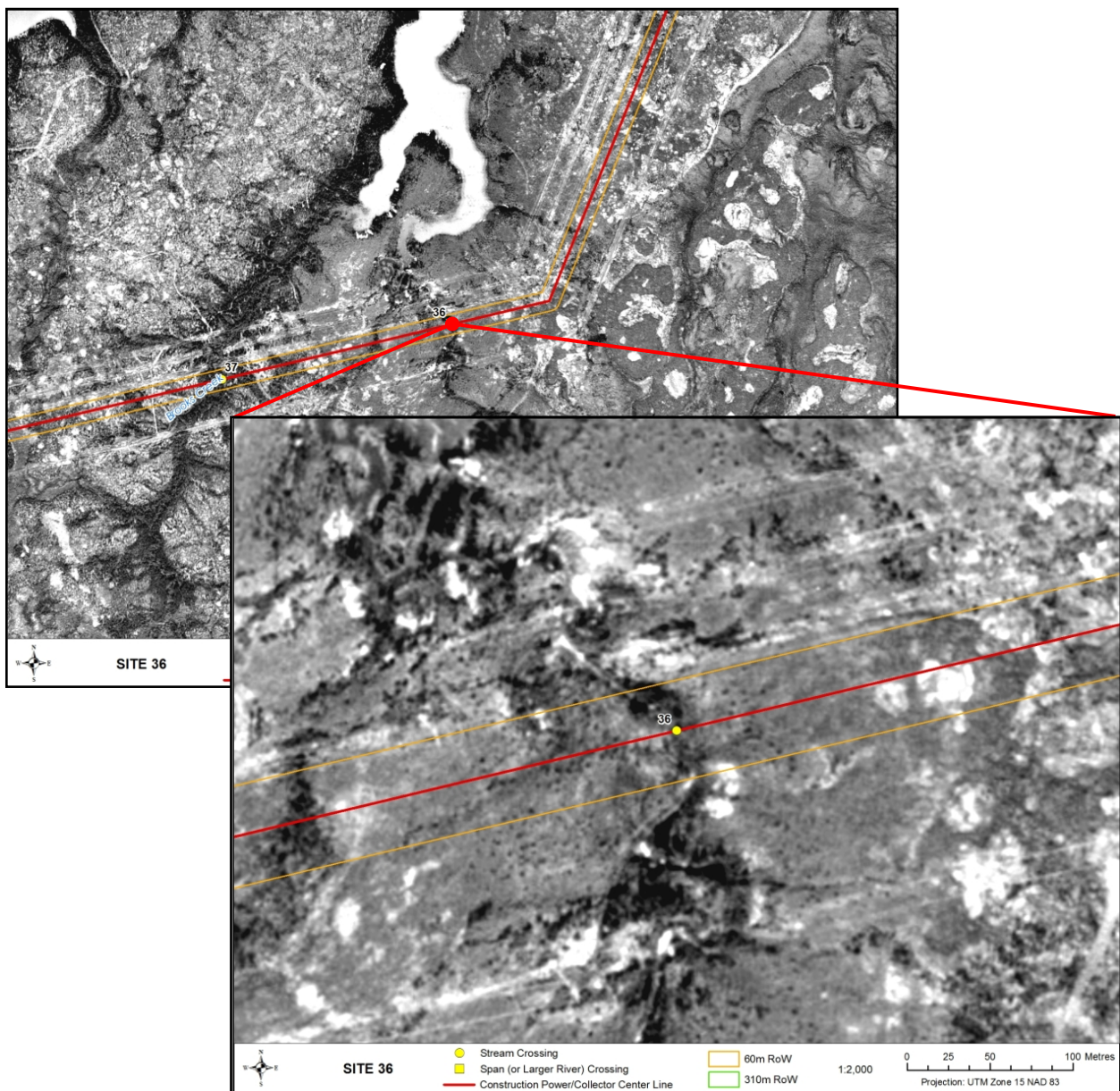
Unnamed tributary of Nelson River

Location

Datum: NAD 83
UTM: Zone: 14N
Easting: 797843
Northing: 6261837
Data Source: DOL

General Morphology

Stream/Lake: Stream
Pattern: IM
Confinement: UN
Stage: Moderate
Flow Regime: Intermittent
Morphology: LC
U/S Drainage: 29.43 km²
Distance to Receiving Water: Nelson River 1.87 km



Site Conditions

+ Physical Data

Channel Profile

Channel and Flow

Wetted Width (m)	2
Channel Width (m)	2

Banks (%)

Right Bank Stability	-
Left Bank Stability	-

Riparian

Floodplain Distance (m)

Right Bank	-
Left Bank	-

Riparian Distance (m)

Right Bank	5
Left Bank	6

Riparian Vegetation Type (Y/N)

None	-
Grasses/sedges	-
Shrubs	Y
Conifers	-
Deciduous	Y
Mixed Forest	-

Canopy Cover (%)

0

Substrate

Substrate Type (%)

Fines	-
Small Gravel	-
Large Gravel	-
Cobble	-
Boulder	-

Cover Types

Total Cover Available (%)

-

Cover Composition (% of Total)

-

Large Woody Debris	-
Overhanging Vegetation	-
Instream Vegetation	-
Pool	-
Boulder	-
Undercut Bank	-
Surface Turbulence	-
Turbidity	-

Habitat Type

Habitat Composition

Pool	-
Run	-
Flat	-
Riffle	-
Rapid	-

Fish Habitat Classification and Sensitivity

+ Fish Habitat

Fish Habitat Present

Yes

DFO Manitoba Agricultural Watershed Classification:

-

Fish Habitat Classification:

Important

Fish Presence: N/A

Comments:

This unnamed tributary of the Nelson River likely provides important fish habitat for forage and indicator fish species. The crossing consists of a defined channel with unknown bank conditions. The tributary likely provides low overwintering potential. Existing transmission lines are located 17 m downstream and 106 m upstream of the RoW.

+ Habitat Sensitivity

Sensitivity Rating: Moderate

Comments:

Unknown bank conditions and important fish habitat results in a moderate sensitivity rating.

Site 37

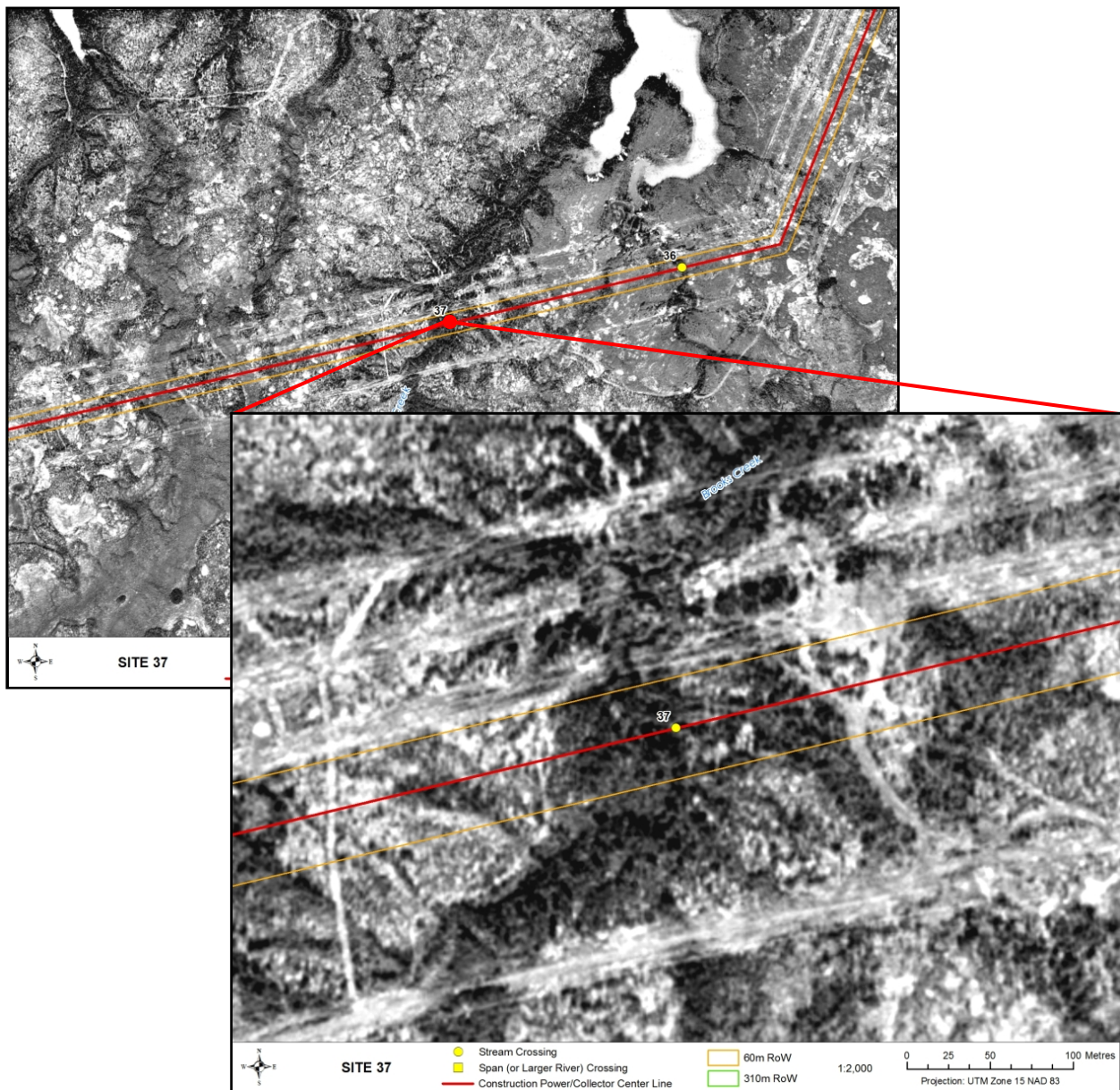
Brooks Creek

Location

Datum: NAD 83
UTM: Zone: 14N
Easting: 797169
Northing: 6261612
Data Source: DOL

General Morphology

Stream/Lake: Stream
Pattern: IM
Confinement: UN
Stage: Moderate
Flow Regime: Intermittent
Morphology: LC
U/S Drainage: 71.06 km²
Distance to Receiving Water: Nelson River 2.25 km



Site Conditions

+ Physical Data

Channel Profile

Channel and Flow

Wetted Width (m)	6
Channel Width (m)	-

Banks (%)

Right Bank Stability	-
Left Bank Stability	-

Riparian

Floodplain Distance (m)

Right Bank	-
Left Bank	-

Riparian Distance (m)

Right Bank	32 (total)
Left Bank	-

Riparian Vegetation Type (Y/N)

None	-
Grasses/sedges	-
Shrubs	Y
Conifers	-
Deciduous	Y
Mixed Forest	-

Canopy Cover (%)

80

Substrate

Substrate Type (%)

Fines	-
Small Gravel	-
Large Gravel	-
Cobble	-
Boulder	-

Cover Types

Total Cover Available (%)

-

Cover Composition (% of Total)

Large Woody Debris	-
Overhanging Vegetation	-
Instream Vegetation	-
Pool	-
Boulder	-
Undercut Bank	-
Surface Turbulence	-
Turbidity	-

Habitat Type

Habitat Composition

Pool	-
Run	-
Flat	-
Riffle	-
Rapid	-

Fish Habitat Classification and Sensitivity

+ Fish Habitat

Fish Habitat Present

Yes

DFO Manitoba Agricultural Watershed Classification:

-

Fish Habitat Classification:

Important

Fish Presence:

N/A

Comments:

Brooks Creek likely provides important fish habitat for forage and indicator fish species. At the crossing it consists of a defined channel with unknown bank stability. The tributary likely provides low overwintering potential. Existing transmission lines are located directly downstream and 153m upstream of the RoW.

+ Habitat Sensitivity

Sensitivity Rating: Moderate

Comments: Unknown bank stability and important fish habitat result in a moderate sensitivity rating.

Site 38

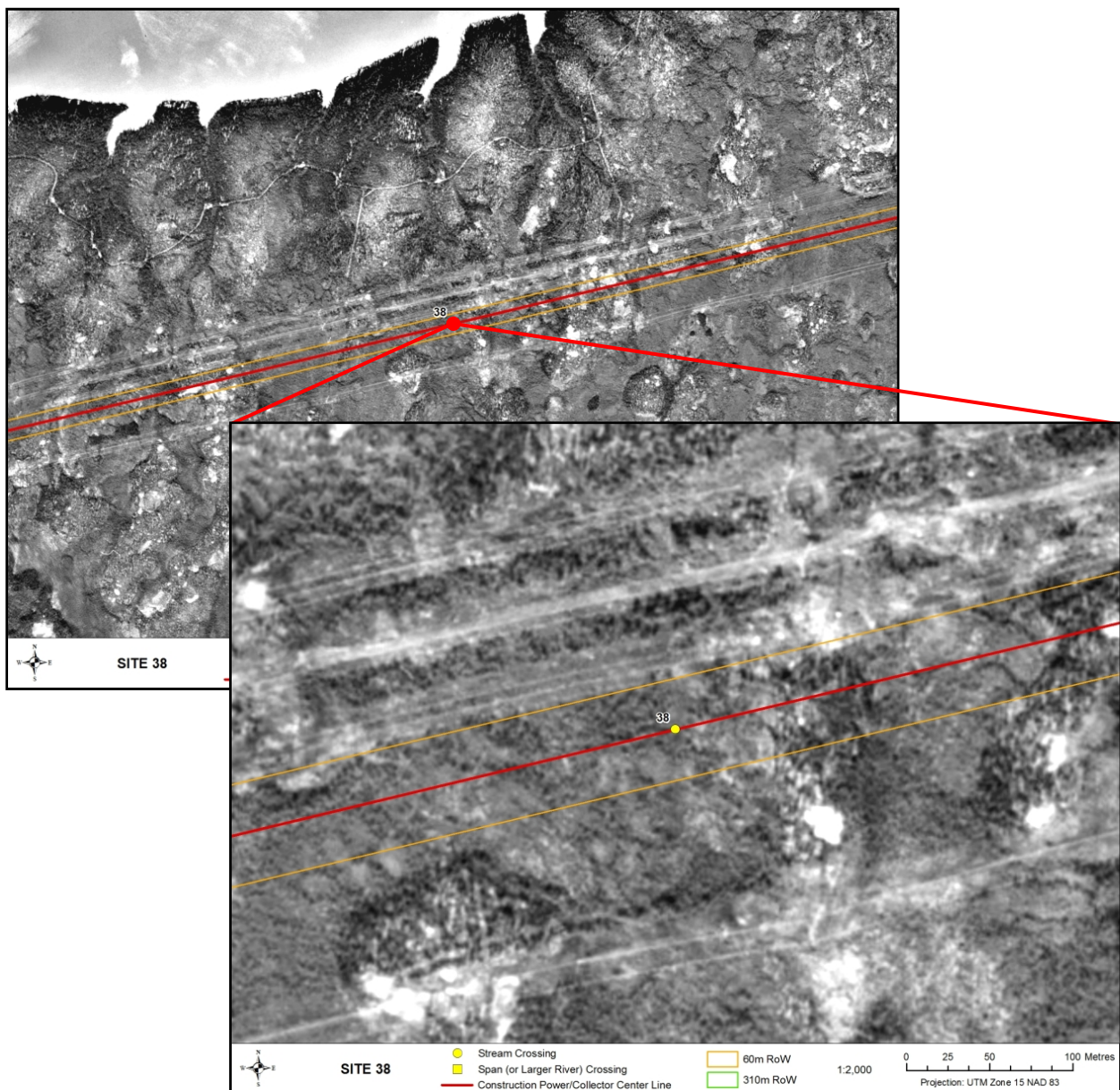
Unnamed tributary of Nelson River

Location

Datum: NAD 83
UTM: Zone: 14N
Easting: 793709
Northing: 6260455
Data Source: DOL.

General Morphology

Stream/Lake: Stream
Pattern: SI
Confinement: UN
Stage: Low
Flow Regime: Ephemeral
Morphology: -
U/S Drainage: 12.37 km²
Distance to Receiving Water: Nelson River 0.67 km



Site Conditions

+ Physical Data

Channel Profile

Channel and Flow

Wetted Width (m)	0
Channel Width (m)	-

Banks (%)

Right Bank Stability	-
Left Bank Stability	-

Riparian

Floodplain Distance (m)

Right Bank	-
Left Bank	-

Riparian Distance (m)

Right Bank	-
Left Bank	-

Riparian Vegetation Type (Y/N)

None	-
Grasses/sedges	-
Shrubs	-
Conifers	Y
Deciduous	-
Mixed Forest	-

Canopy Cover (%)

	-
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Substrate

Substrate Type (%)

Fines	-
Small Gravel	-
Large Gravel	-
Cobble	-
Boulder	-

Cover Types

Total Cover Available (%)

Cover Composition (% of Total)

Large Woody Debris	-
Overhanging Vegetation	-
Instream Vegetation	-
Pool	-
Boulder	-
Undercut Bank	-
Surface Turbulence	-
Turbidity	-

Habitat Type

Habitat Composition

Pool	-
Run	-
Flat	-
Riffle	-
Rapid	-

Fish Habitat Classification and Sensitivity

+ Fish Habitat

Fish Habitat Present	Yes
DFO Manitoba Agricultural Watershed Classification:	-
Fish Habitat Classification:	Marginal

Fish Presence: N/A

Comments:

This unnamed tributary of the Nelson River likely provides marginal fish habitat for forage fish species at higher water levels. At the crossing the tributary has very low water levels, with marginal habitat quality and no defined channel visible. The tributary likely provides no overwintering potential and bank stability is unknown. Existing transmission lines are located directly downstream and 45m upstream of the RoW.

+ Habitat Sensitivity

Sensitivity Rating: Low

Comments:

Despite unknown bank conditions, marginal habitat result in a low sensitivity rating.

Site 39

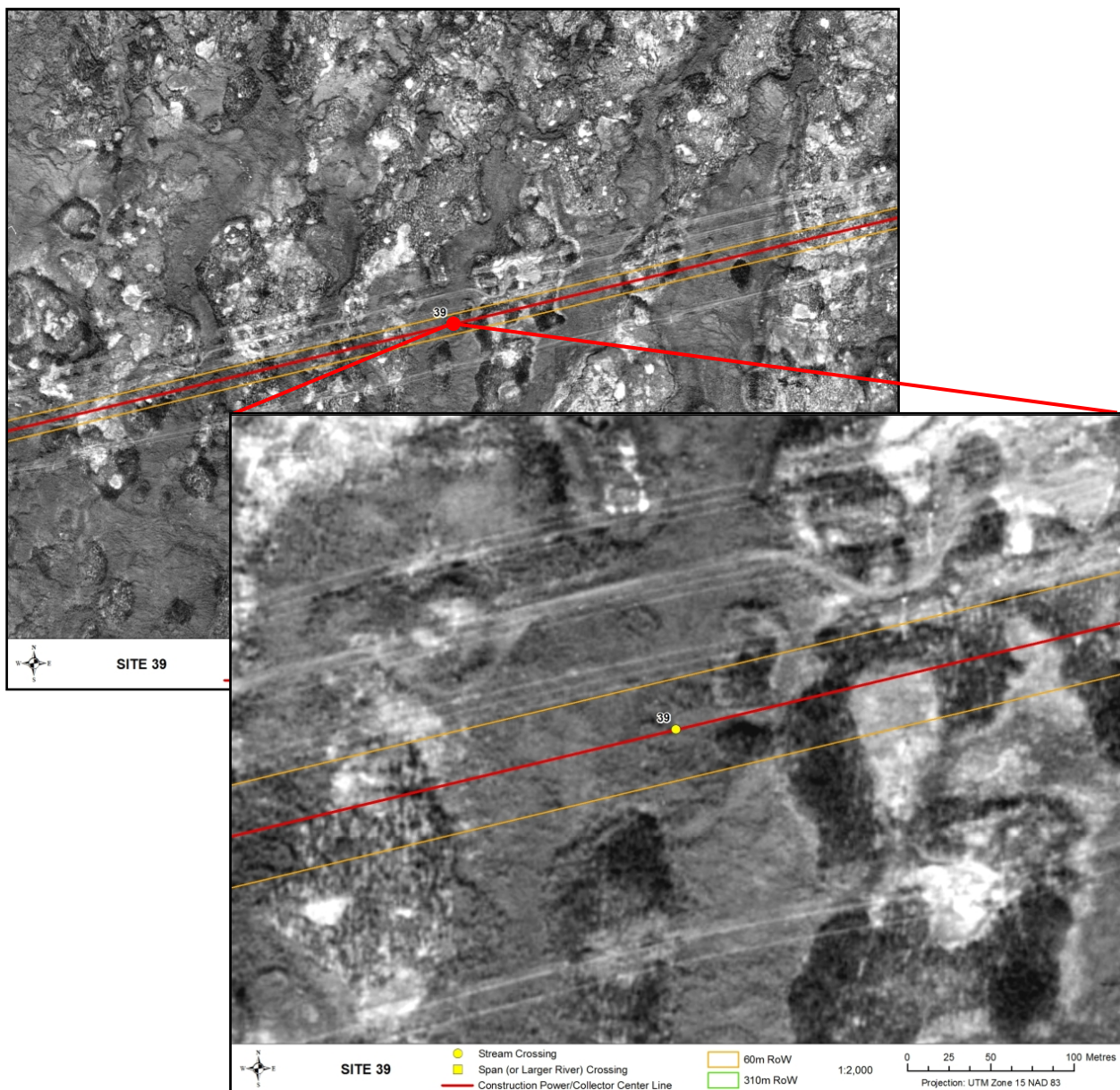
Unnamed tributary of Nelson River

Location

Datum: NAD 83
UTM: Zone: 14N
Easting: 790009
Northing: 6259218
Data Source: DOL

General Morphology

Stream/Lake: Stream
Pattern: IR
Confinement: UN
Stage: Low
Flow Regime: Intermittent
Morphology: -
U/S Drainage: 5.42 km²
Distance to Receiving Water: Nelson River 1.66 km



Site Conditions

+ Physical Data

Channel Profile

Channel and Flow

Wetted Width (m)	-
Channel Width (m)	-

Banks (%)

Right Bank Stability	-
Left Bank Stability	-

Riparian

Floodplain Distance (m)

Right Bank	200 (total)
Left Bank	-

Riparian Distance (m)

Right Bank	213 (total)
Left Bank	-

Riparian Vegetation Type (Y/N)

None	-
Grasses/sedges	Y
Shrubs	Y
Conifers	Y
Deciduous	-
Mixed Forest	-

Canopy Cover (%)

	-
--	---

Substrate

Substrate Type (%)

Fines	-
Small Gravel	-
Large Gravel	-
Cobble	-
Boulder	-

Cover Types

Total Cover Available (%)

Cover Composition (% of Total)

Large Woody Debris	-
Overhanging Vegetation	-
Instream Vegetation	-
Pool	-
Boulder	-
Undercut Bank	-
Surface Turbulence	-
Turbidity	-

Habitat Type

Habitat Composition

Pool	-
Run	-
Flat	-
Riffle	-
Rapid	-

Fish Habitat Classification and Sensitivity

+ Fish Habitat

Fish Habitat Present	Yes
DFO Manitoba Agricultural Watershed Classification:	-
Fish Habitat Classification:	Marginal

Fish Presence: N/A

Comments:

This unnamed tributary of Nelson River likely provides marginal fish habitat for forage fish species only. At the crossing it consists of bog habitat, with no defined channel and a soft floodplain. The tributary likely provides no overwintering potential. Existing transmission lines exist directly downstream and 81 m upstream of the RoW.

+ Habitat Sensitivity

Sensitivity Rating: Moderate

Comments:

Soft floodplain results in a moderate sensitivity rating, despite marginal fish habitat.

Site 40

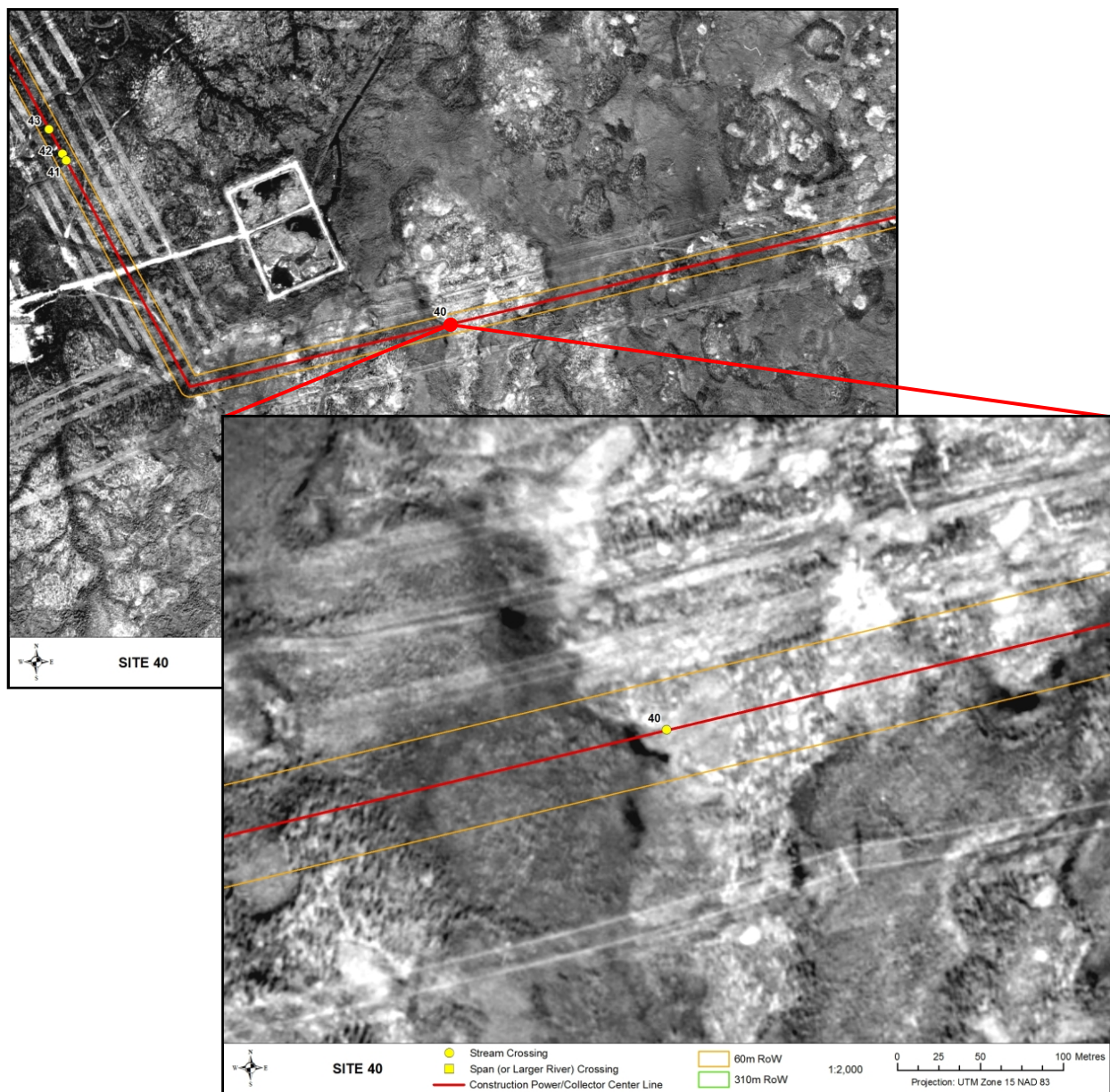
Unnamed tributary of Nelson River

Location

Datum: NAD 83
UTM: Zone: 14N
Easting: 787824
Northing: 6258488
Data Source: DOL

General Morphology

Stream/Lake: Stream
Pattern: IM
Confinement: UN
Stage: Moderate
Flow Regime: Intermittent
Morphology: -
U/S Drainage: 8.25 km²
Distance to Receiving Water: Nelson River 2.02 km



Site Conditions

+ Physical Data

Channel Profile

Channel and Flow

Wetted Width (m)	-
Channel Width (m)	-

Banks (%)

Right Bank Stability	-
Left Bank Stability	-

Riparian

Floodplain Distance (m)

Right Bank	13 (total)
Left Bank	-

Riparian Distance (m)

Right Bank	217(total)
Left Bank	-

Riparian Vegetation Type (Y/N)

None	-
Grasses/sedges	Y
Shrubs	Y
Conifers	-
Deciduous	Y
Mixed Forest	-

Canopy Cover (%)

	-
--	---

Substrate

Substrate Type (%)

Fines	-
Small Gravel	-
Large Gravel	-
Cobble	-
Boulder	-

Cover Types

Total Cover Available (%)

Cover Composition (% of Total)

Large Woody Debris	-
Overhanging Vegetation	-
Instream Vegetation	-
Pool	-
Boulder	-
Undercut Bank	-
Surface Turbulence	-
Turbidity	-

Habitat Type

Habitat Composition

Pool	-
Run	-
Flat	-
Riffle	-
Rapid	-

Fish Habitat Classification and Sensitivity

+ Fish Habitat

Fish Habitat Present	Yes
DFO Manitoba Agricultural Watershed Classification:	-
Fish Habitat Classification:	Marginal

Fish Presence: N/A

Comments:

This unnamed tributary of the Nelson River likely provides marginal fish habitat for forage fish species only. At the crossing there is a poorly developed channel with little water, surrounded by a soft floodplain. The tributary likely provides no overwintering potential. It becomes a ditch of Lagoon Road 534m downstream of the RoW. Existing transmission lines are located directly downstream and 50m upstream of the proposed RoW.

+ Habitat Sensitivity

Sensitivity Rating: Moderate

Comments:

Soft floodplain results in a moderate sensitivity rating, despite marginal fish habitat.

Site 41

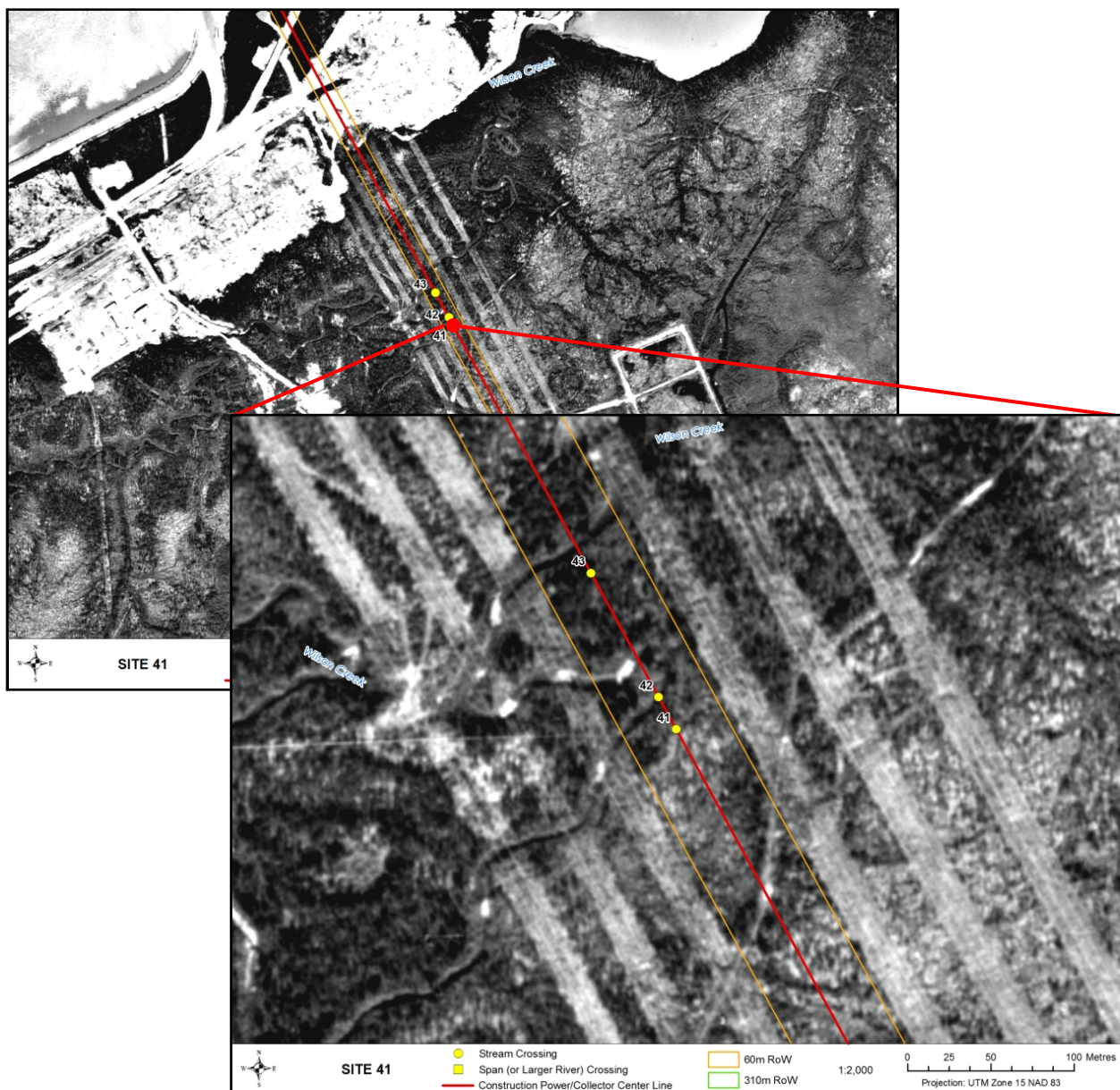
Wilson Creek

Location

Datum: NAD 83
UTM: Zone: 14N
Easting: 786619
Northing: 6258876
Data Source: DOL

General Morphology

Stream/Lake: Stream
Pattern: TM
Confinement: UN
Stage: Moderate
Flow Regime: Perennial
Morphology: LC
U/S Drainage: 266.65 km²
Distance to Receiving Water: Nelson River 1.81 km



Site Conditions

+ Physical Data

Channel Profile

Channel and Flow

Wetted Width (m)	4
Channel Width (m)	4

Banks (%)

Right Bank Stability	-
Left Bank Stability	-

Riparian

Floodplain Distance (m)

Right Bank	10
Left Bank	0

Riparian Distance (m)

Right Bank	10
Left Bank	1

Riparian Vegetation Type (Y/N)

None	-
Grasses/sedges	-
Shrubs	Y
Conifers	Y
Deciduous	-
Mixed Forest	-

Canopy Cover (%)

Trace

Substrate

Substrate Type (%)

Fines	-
Small Gravel	-
Large Gravel	-
Cobble	-
Boulder	-

Cover Types

Total Cover Available (%)

-

Cover Composition (% of Total)

-

Large Woody Debris	-
Overhanging Vegetation	-
Instream Vegetation	-
Pool	-
Boulder	-
Undercut Bank	-
Surface Turbulence	-
Turbidity	-

Habitat Type

Habitat Composition

Pool	-
Run	-
Flat	-
Riffle	-
Rapid	-

Fish Habitat Classification and Sensitivity

+ Fish Habitat

Fish Habitat Present

Yes

DFO Manitoba Agricultural Watershed Classification:

-

Fish Habitat Classification:

Important

Fish Presence: Bernhardt and MacDonell (1992) and MacDonell (1991) described brook trout, northern pike, white sucker and longnose sucker within the lower reaches of the creek. Furthermore, Kroeker (1991) and Gaboury (1978) respectively noted brook trout larva and a brook trout spawning area in the stream approximately 10km US.

Comments:

Wilson Creek is known to provide important fish habitat including spawning and rearing habitat for brook trout. Where the RoW crosses the channel both indicator and forage fish are expected. The creek likely provides moderate overwintering potential. At the crossing there is a well-defined channel with unknown bank stability, surrounded by a soft shrub floodplain. Existing transmission lines are located directly upstream and downstream of the RoW.

+ Habitat Sensitivity

Sensitivity Rating: Moderate

Comments: Unknown bank stability and important fish habitat result in a moderate sensitivity rating.

Site 42

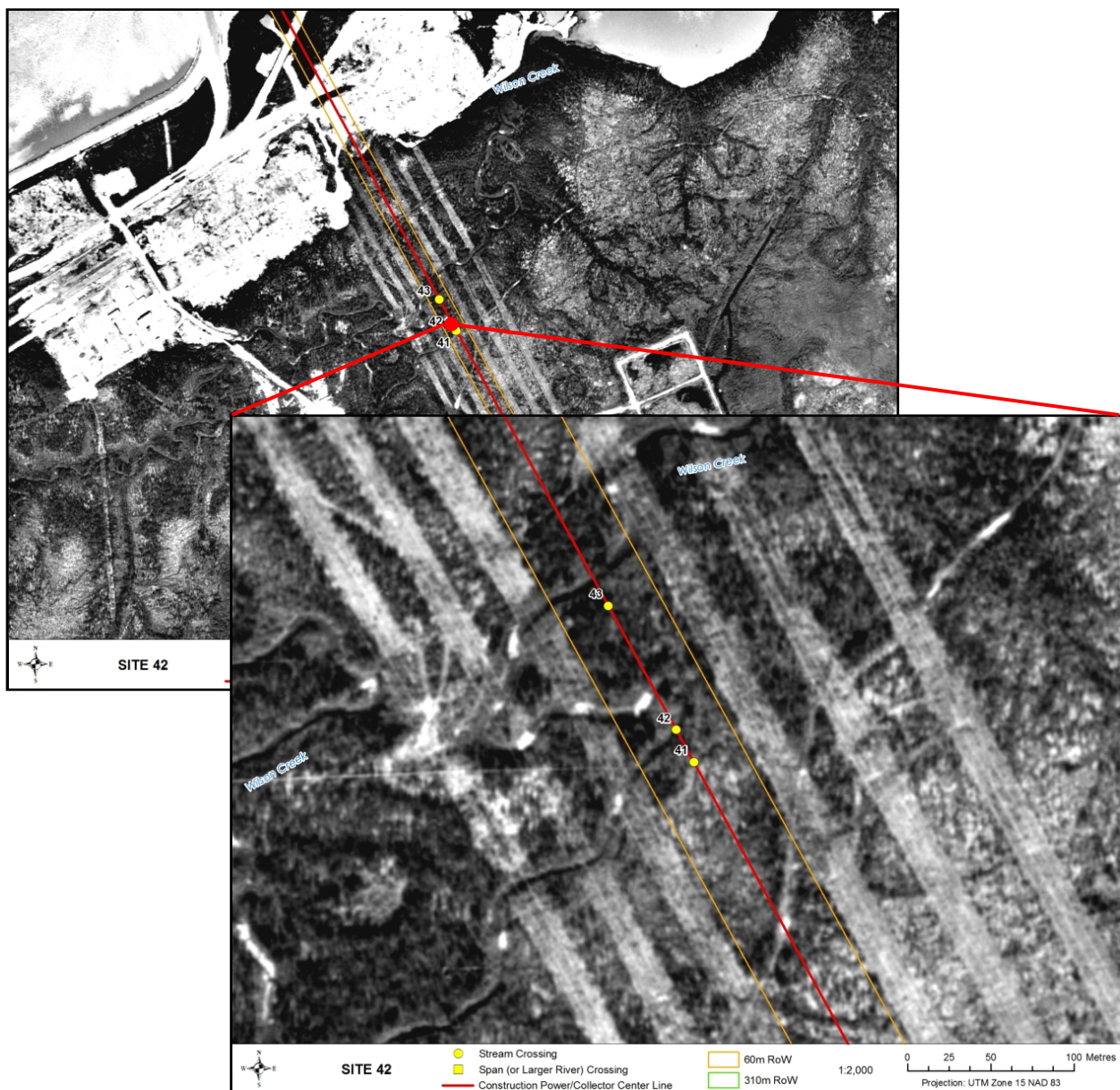
Wilson Creek

Location

Datum: NAD 83
UTM: Zone: 14N
Easting: 786607
Northing: 6258895
Data Source: DOL

General Morphology

Stream/Lake: Stream
Pattern: TM
Confinement: UN
Stage: Moderate
Flow Regime: Perennial
Morphology: LC
U/S Drainage: 266.72 km²
Distance to Receiving Water: Nelson River 1.75 km



Site Conditions

+ Physical Data

Channel Profile

Channel and Flow

Wetted Width (m)	5
Channel Width (m)	5

Banks (%)

Right Bank Stability	-
Left Bank Stability	-

Riparian

Floodplain Distance (m)

Right Bank	8
Left Bank	5

Riparian Distance (m)

Right Bank	8
Left Bank	9

Riparian Vegetation Type (Y/N)

None	-
Grasses/sedges	-
Shrubs	Y
Conifers	Y
Deciduous	-
Mixed Forest	-

Canopy Cover (%)

Trace

Substrate

Substrate Type (%)

Fines	-
Small Gravel	-
Large Gravel	-
Cobble	-
Boulder	-

Cover Types

Total Cover Available (%)

-

Cover Composition (% of Total)

-

Large Woody Debris	-
Overhanging Vegetation	-
Instream Vegetation	-
Pool	-
Boulder	-
Undercut Bank	-
Surface Turbulence	-
Turbidity	-

Habitat Type

Habitat Composition

Pool	-
Run	-
Flat	-
Riffle	-
Rapid	-

Fish Habitat Classification and Sensitivity

+ Fish Habitat

Fish Habitat Present

Yes

DFO Manitoba Agricultural Watershed Classification:

-

Fish Habitat Classification:

Important

Fish Presence: Bernhardt and MacDonell (1992) and MacDonell (1991) described brook trout, northern pike, white sucker and longnose sucker within the lower reaches of the creek. Furthermore, Kroeker (1991) and Gaboury (1978) respectively noted brook trout larva and a brook trout spawning area in the stream approximately 10km US.

Comments:

Wilson Creek is known to provide important fish habitat including spawning and rearing habitat for brook trout. Where the RoW crosses the channel both indicator and forage fish are expected. The creek likely provides only moderate overwintering potential. At the crossing there is a well-defined channel with unknown bank stability, surrounded by a soft shrub floodplain. Existing transmission lines are located directly upstream and downstream of the RoW.

+ Habitat Sensitivity

Sensitivity Rating: Moderate

Comments: Unknown bank stability and important fish habitat result in a moderate sensitivity rating.

Site 43

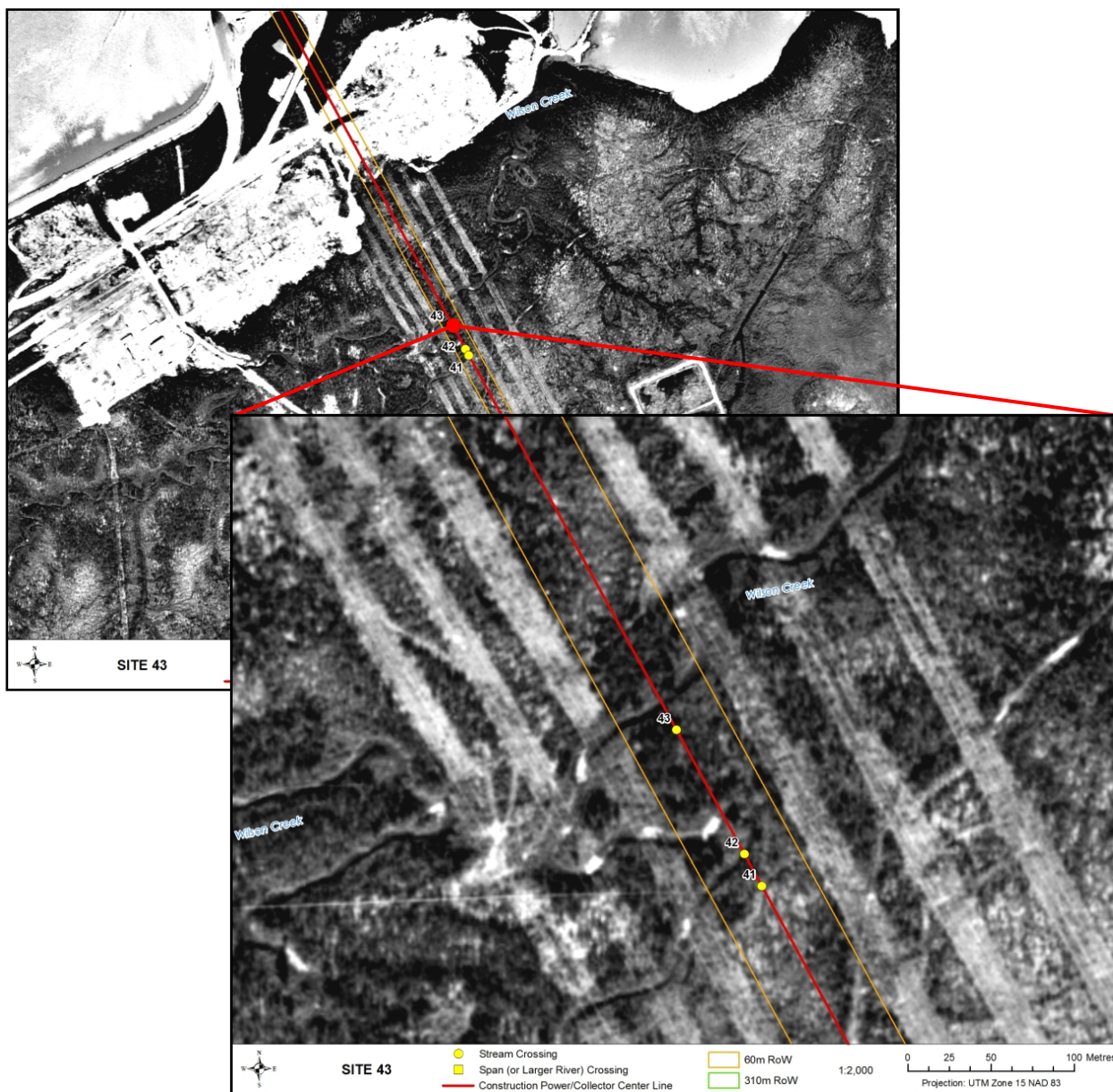
Wilson Creek

Location

Datum: NAD 83
UTM: Zone: 14N
Easting: 786559
Northing: 6258966
Data Source: DOL.

General Morphology

Stream/Lake: Stream
Pattern: TM
Confinement: UN
Stage: Moderate
Flow Regime: Perennial
Morphology: LC
U/S Drainage: 266.72 km²
Distance to Receiving Water: Nelson River 1.52 km



Site Conditions

+ Physical Data

Channel Profile

Channel and Flow

Wetted Width (m)	5
Channel Width (m)	5

Banks (%)

Right Bank Stability	-
Left Bank Stability	-

Riparian

Floodplain Distance (m)

Right Bank	3
Left Bank	4

Riparian Distance (m)

Right Bank	11
Left Bank	11

Riparian Vegetation Type (Y/N)

None	-
Grasses/sedges	-
Shrubs	Y
Conifers	Y
Deciduous	-
Mixed Forest	-

Canopy Cover (%)

Trace

Substrate

Substrate Type (%)

Fines	-
Small Gravel	-
Large Gravel	-
Cobble	-
Boulder	-

Cover Types

Total Cover Available (%)

-

Cover Composition (% of Total)

-

Large Woody Debris	-
Overhanging Vegetation	-
Instream Vegetation	-
Pool	-
Boulder	-
Undercut Bank	-
Surface Turbulence	-
Turbidity	-

Habitat Type

Habitat Composition

Pool	-
Run	-
Flat	-
Riffle	-
Rapid	-

Fish Habitat Classification and Sensitivity

+ Fish Habitat

Fish Habitat Present

Yes

DFO Manitoba Agricultural Watershed Classification:

-

Fish Habitat Classification:

Important

Fish Presence: Bernhardt and MacDonell (1992) and MacDonell (1991) described brook trout, northern pike, white sucker and longnose sucker within the lower reaches of the creek. Furthermore, Kroeker (1991) and Gaboury (1978) respectively noted brook trout larva and a brook trout spawning area in the stream approximately 10km US.

Comments:

Wilson Creek is known to provide important fish habitat, including rearing and spawning habitat for brook trout. Where the RoW crosses the channel both indicator and forage fish are expected. The creek likely provides only moderate overwintering potential. At the crossing there is a well-defined channel with unknown bank stability, surrounded by a soft shrub floodplain. Existing transmission lines are located directly upstream and downstream of the RoW.

+ Habitat Sensitivity

Sensitivity Rating: Moderate

Comments: Unknown bank stability and important fish habitat result in a moderate sensitivity rating.