



Stantec

Project Number: 160950269

Date: 03 Jul, 2012

Project Name: NRWC ELC

Field Personnel: A. Ducharme

Weather Conditions:

TEMP (°C):

25

WIND:

light

CLOUD:

Def 1

PPT:

.....

PPT (in last 24 hrs):

1111 (in last 24 hrs).

POLYGON DESCRIPTION

ELC COMMUNITY DESCRIPTION & CLASSIFICATION	POLYGON:	TOPOGRAPHIC FEATURE		HISTORY
	START TIME:	☐ LACUSTRINE ☐ RIVERINE ☐ BOTTOMLAND ☐ TERRACE ☐ VALLEY SLOPE ☒ TABLELAND ☐ ROLL UPLAND ☐ CLIFF	☐ TALUS ☐ CREVICE / CAVE ☐ ALVAR ☐ ROCKLAND ☐ BEACH / BAR ☐ SAND DUNE ☐ BLUFF	☒ NATURAL ☐ CULTURAL

STAND DESCRIPTION:

LAYER		HT	CVR	SPECIES IN ORDER OF DECREASING DOMINANCE (>>MUCH GREATER THAN; >GREATER THAN; = ABOUT EQUAL TO)
1	CANOPY	2	1	FRAGRAN
2	SUB-CANOPY	3	1	FRAGRAN
3	UNDERSTOREY	4-5	4	GRASS > SOLICANA > DIPFULL
4	GRD. LAYER	6-7	4	GRASS > SOLICANA > DIPFULL

HT CODES: 1= $>25m$ 2= $10<HT\leq 25m$ 3= $2<HT\leq 10m$ 4= $1<HT\leq 2m$ 5= $0.5<HT\leq 1m$ 6= $0.2<HT\leq 0.5m$ 7= $HT\leq 0.2m$

CVR CODES: 0=NONE 1=0%<CVR≤10% 2=10<CVR≤25% 3=25<CVR≤60% 4=CVR>60% N/O=not observed

STANDING SNAGS:	R	<10	N	10 - 24	N	25 - 50	N	>50
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ABUNDANCE CODES: N=NONE R=RARE O=OCCASIONAL A=ABUNDANT N/O=Not observed

STAND MATURITY:	PIONEER	☒ YOUNG	☒ MID-AGE	MATURE	OLD GROWTH
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VEGETATION TYPE:	Mineral Cultural Meadow Hedgerow	CODE:	H01/CUM1
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COMPLEX	CODE:
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Evidence of Disturbance / Notes:

LAYERS: 1=CANOPY >10m 2=SUB-CANOPY 3=UNDERSTOREY 4=GROUND (GRD.) LAYER
ABUNDANCE CODES: N=NONE R=RARE O=OCCASIONAL A=ABUNDANT D=DOMINANT N/O=Not observed

[illegible]

Signature:

(Field Personnel)

Quality Control: This form is complete ☒ & legible ☒.

Signature:

(Project Manager)

ELC Polygon: # 19-6 Assessment Type: ☒ Visual; no access / ☐ Walk through featureExtent of Physical Investigation of Feature: ☐ Entire / ☐ Partial, walk through polygon (indicate on map)

Reptile / Bat Hibernacula Features: Contains potential reptile hibernacula features?
☐-Y* / ☒-N / ☐-Unknown, no access (**if yes, describe in table below*)
 [i.e. features that would provide a route underground, including buried concrete or rock (e.g. foundations, bridge abutments or culverts with cracks/entry points, exposed rock crevices or inactive animal burrows)]
 Contains potential bat hibernacula features?
☐-Y* / ☒-N / ☐-Unknown, no access (**if yes, describe in table below*)
 [i.e. karst topography, abandoned mines or caves]

POTENTIAL HIBERNACULA FEATURE(S) IDENTIFIED

UTM	Feature Description	Photo No.	Spp. Observed Using Feature

Bat Roosting Features: Contains potential bat roosting features?
☐-Y* / ☒-N / ☐-Unknown, no access (**if yes, describe in table below*)
 [i.e. tall trees with open surroundings, DBH >25cm, side-facing cavities ~10m high in tree]

POTENTIAL BAT ROOSTING FEATURE(S) IDENTIFIED

UTM	Tree ID	Tree Spp.	DBH	Photo No.	Decay Class (1-5)	No. of Cavities	Height and Type of Cavities

Stick Nests: Contains large stick nests?
☐-Y* / ☒-N / ☐-Unknown, no access (**if yes, describe in table below*)

STICK NEST(S) IDENTIFIED

UTM	Tree ID	Tree Spp.	Nest Size	Photo No.	Spp. Observed Using Feature

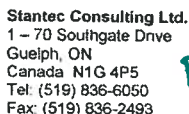
Seeps/Springs/Vernal Pools: Contains seeps/springs/vernal pools?
☐-Y* / ☒-N / ☐-Unknown, no access (**if yes, describe in table below*)

SEEP / SPRING / VERNAL POOL FEATURE(S) IDENTIFIED

UTM	Feature No. & Type	Feature Size (Diameter)	Water Depth	Photo No.	Sub/Emergent Veg. Spp. Present?	Shrubs/ Logs at Edge Present?

SPECIES & HABITAT OBSERVATIONS (list species and type of observation & indicate on map)

CA=carcass; DP=distinctive parts; FE=feeding evidence; FY=eggs/nest; HO=house/den; OB=observed; SC=seat; SI=other sign; TK=track; VO=vocalization



d. Coll. Tile 19; Roadside ELC,
Poly 19-7 Woodland & Wildlife Habitat
Assessment Form

Stantec

Project Number: 160950269 Project Name: NRWC FLC

Date: 03 July 2012 Field Personnel: A. Ducharme

Weather Conditions:	TEMP (°C): 25	WIND: light	CLOUD: part	PPT: —	PPT (in last 24 hrs): < 1 mm
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POLYGON DESCRIPTION

ELC COMMUNITY DESCRIPTION & CLASSIFICATION	POLYGON:		TOPOGRAPHIC FEATURE		HISTORY
		19-7	☐ LACUSTRINE	☐ TALUS	☒ NATURAL
			☐ RIVERINE	☐ CREVICE / CAVE	
			☐ BOTTOMLAND	☐ ALVAR	☐ CULTURAL
	START TIME:	16:50	☐ TERRACE	☐ ROCKLAND	
	END TIME:	17:00	☐ VALLEY SLOPE	☐ BEACH / BAR	
			☐ TABLELAND	☐ SAND DUNE	
			☐ ROLL UPLAND	☐ BLUFF	
			☐ CLIFF		

STAND DESCRIPTION:

LAYER		HT	CVR	SPECIES IN ORDER OF DECREASING DOMINANCE (>>MUCH GREATER THAN; >GREATER THAN; = ABOUT EQUAL TO)
1	CANOPY	—	—	
2	SUB-CANOPY	3	4	SALNIGR / FAGGRAN
3	UNDERSTOREY	4.5	4	COFFEE > GRASS sp.
4	GRD. LAYER	0.7	4	GRASS sp.

HT CODES: 1=>25m 2=10<HT≤25m 3=2<HT≤10m 4=1<HT≤2m 5=0.5<HT≤1m 6=0.2<HT≤0.5m 7=HT<0.2m

CVR CODES: 0=NONE 1=0%<CVR≤10% 2=10<CVR≤25% 3=25<CVR≤60% 4=CVR>60% N/O=not observed

STANDING SNAGS:	R	<10	N	10-24	N	25-50	N	>50
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ABUNDANCE CODES: N=NONE R=RARE O=OCCASIONAL A=ABUNDANT N/O=Not observed

STAND MATURITY:	PIONEER	YOUNG	MID-AGE	☒ MATURE	OLD GROWTH
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VEGETATION TYPE:	Fresh-Moist Willow Lowland Decid. Forest	CODE:	FOD 7-3
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	COMPLEX	CODE:
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Evidence of Disturbance / Notes:

LAYERS: 1=CANOPY >10m 2=SUB-CANOPY 3=UNDERSTOREY 4=GROUND (GRD.) LAYER
ABUNDANCE CODES: N=NONE R=RARE O=OCCASIONAL A=ABUNDANT D=DOMINANT N/O=Not observed

[illegible]

Signature:

Signature: AJR
(Field Personnel)

Quality Control: This form is complete ☐ & legible ☒.

Signature:

Signature: _____
(Project Manager)

ELC Polygon: #19-7 Assessment Type: ☒ Visual; no access / ☐ Walk through featureExtent of Physical Investigation of Feature: ☐ Entire / ☐ Partial, walk through polygon (indicate on map)

Reptile / Bat Hibernacula Features: Contains potential reptile hibernacula features?
☐ -Y* / ☒ -N / ☐ -Unknown, no access (*if yes, describe in table below)
 [i.e. features that would provide a route underground, including buried concrete or rock (e.g. foundations, bridge abutments or culverts with cracks/entry points, exposed rock crevices or inactive animal burrows)]
 Contains potential bat hibernacula features?
☐ -Y* / ☒ -N / ☐ -Unknown, no access (*if yes, describe in table below)
 [i.e. karst topography, abandoned mines or caves]

POTENTIAL HIBERNACULA FEATURE(S) IDENTIFIED

UTM	Feature Description	Photo No.	Spp. Observed Using Feature

Bat Roosting Features: Contains potential bat roosting features?
☐ -Y* / ☒ -N / ☐ -Unknown, no access (*if yes, describe in table below)
 [i.e. tall trees with open surroundings, DBH >25cm, side-facing cavities ~10m high in tree]

POTENTIAL BAT ROOSTING FEATURE(S) IDENTIFIED

UTM	Tree ID	Tree Spp.	DBH	Photo No.	Decay Class (1-5)	No. of Cavities	Height and Type of Cavities

Stick Nests: Contains large stick nests?
☐ -Y* / ☒ -N / ☐ -Unknown, no access (*if yes, describe in table below)

STICK NEST(S) IDENTIFIED

UTM	Tree ID	Tree Spp.	Nest Size	Photo No.	Spp. Observed Using Feature

Seeps/Springs/Vernal Pools: Contains seeps/springs/vernal pools?
☐ -Y* / ☒ -N / ☐ -Unknown, no access (*if yes, describe in table below)

SEEP / SPRING / VERNAL POOL FEATURE(S) IDENTIFIED

UTM	Feature No. & Type	Feature Size (Diameter)	Water Depth	Photo No.	Sub/Emergent Veg. Spp. Present?	Shrubs/ Logs at Edge Present?

SPECIES & HABITAT OBSERVATIONS (list species and type of observation & indicate on map)

Empty space for observations

CA=carcass; DP=distinctive parts; FE=feeding evidence; FY=eggs/nest; HO=house/den; OB=observed; SC=seat; SI=other sign; TK=track; VO=vocalization



Coll. Tile 19, Roadside ELC,
Poly 19-8 Woodland & Wildlife Habitat
Assessment Form

Stantec

Project Number: 160950269

Project Name: N RWC ELC

Date: 03 July 2012

Field Personnel: A. Ducharme

Weather Conditions:

TEMP (°C):

25

WIND:

light

CLOUD

Def +

PPT:

Groupings

PPT (in last 24 hrs):

PP1 (In last 24 hrs):
 1

POLYGON DESCRIPTION

ELC COMMUNITY DESCRIPTION & CLASSIFICATION	POLYGON:	TOPOGRAPHIC FEATURE		HISTORY
	START TIME:	☐ LACUSTRINE ☐ RIVERINE ☐ BOTTOMLAND ☐ TERRACE ☐ VALLEY SLOPE ☒ TABLELAND ☐ ROLL UPLAND ☐ CLIFF	☐ TALUS ☐ CREVICE / CAVE ☐ ALVAR ☐ ROCKLAND ☐ BEACH / BAR ☐ SAND DUNE ☐ BLUFF	☒ NATURAL ☐ CULTURAL

STAND DESCRIPTION:

LAYER		HT	CVR	SPECIES IN ORDER OF DECREASING DOMINANCE (>>MUCH GREATER THAN; >GREATER THAN; = ABOUT EQUAL TO)
1	CANOPY	—	—	
2	SUB-CANOPY	—	—	
3	UNDERSTOREY	4-5	4	7 TPLATI > GRASS sp.
4	GRD. LAYER	6-7	4	GRASS sp. > TPLATI

HT CODES: 1=>25m 2=10<HT≤25m 3=2<HT≤10m 4=1<HT≤2m 5=0.5<HT≤1m 6=0.2<HT≤0.5m 7=HT<0.2m

CVR CODES: 0=NONE 1=0%<CVR≤10% 2=10<CVR≤25% 3=25<CVR≤60% 4=CVR>60% N/O=not observed

STANDING SNAGS:	N	<10	N	10 - 24	N	25 - 50	N	>50
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ABUNDANCE CODES: N=NONE R=RARE O=OCCASIONAL A=ABUNDANT N/O=Not observed

STAND MATURITY:	PIONEER	YOUNG	MID-AGE	☒ MATURE	OLD GROWTH
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VEGETATION TYPE:	Cattail Shallow Marsh	CODE:	MAS
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	COMPLEX		CODE:
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Evidence of Disturbance / Notes:

LAYERS: 1=CANOPY >10m 2=SUB-CANOPY 3=UNDERSTOREY 4=GROUND (GRD.) LAYER
ABUNDANCE CODES: N=NONE R=RARE O=OCCASIONAL A=ABUNDANT D=DOMINANT N/O=Not observed

[illegible]

Signature:

$$: A_5 \mathbb{Z}$$

(Field Personnel)

Quality Control: This form is ~~complete~~ ☒ & legible ☒.

Signature

(Project)

(Project Manager)

ELC Polygon: # 19-8 Assessment Type: ☒ Visual; no access / ☐ Walk through featureExtent of Physical Investigation of Feature: ☐ Entire / ☐ Partial, walk through polygon (indicate on map)

Reptile / Bat Hibernacula Features: Contains potential reptile hibernacula features?
☐-Y* / ☒-N / ☐-Unknown, no access (*if yes, describe in table below)
 [i.e. features that would provide a route underground, including buried concrete or rock (e.g. foundations, bridge abutments or culverts with cracks/entry points, exposed rock crevices or inactive animal burrows)]
 Contains potential bat hibernacula features?
☐-Y* / ☒-N / ☐-Unknown, no access (*if yes, describe in table below)
 [i.e. karst topography, abandoned mines or caves]

POTENTIAL HIBERNACULA FEATURE(S) IDENTIFIED

UTM	Feature Description	Photo No.	Spp. Observed Using Feature

Bat Roosting Features: Contains potential bat roosting features?
☐-Y* / ☒-N / ☐-Unknown, no access (*if yes, describe in table below)
 [i.e. tall trees with open surroundings, DBH >25cm, side-facing cavities ~10m high in tree]

POTENTIAL BAT ROOSTING FEATURE(S) IDENTIFIED

UTM	Tree ID	Tree Spp.	DBH	Photo No.	Decay Class (1-5)	No. of Cavities	Height and Type of Cavities

Stick Nests: Contains large stick nests?
☐-Y* / ☒-N / ☐-Unknown, no access (*if yes, describe in table below)

STICK NEST(S) IDENTIFIED

UTM	Tree ID	Tree Spp.	Nest Size	Photo No.	Spp. Observed Using Feature

Seeps/Springs/Vernal Pools: Contains seeps/springs/vernal pools?
☐-Y* / ☒-N / ☐-Unknown, no access (*if yes, describe in table below)

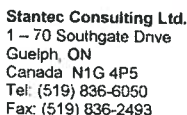
SEEP / SPRING / VERNAL POOL FEATURE(S) IDENTIFIED

UTM	Feature No. & Type	Feature Size (Diameter)	Water Depth	Photo No.	Sub/Emergent Veg. Spp. Present?	Shrubs/ Logs at Edge Present?

SPECIES & HABITAT OBSERVATIONS (list species and type of observation & indicate on map)

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CA=carcass; DP=distinctive parts; FE=feeding evidence; FY=eggs/nest; HO=house/den; OB=observed; SC=scat; SI=other sign; TK=track; VO=vocalization



Coll. Tile 19; Roadside ELC,
Poly 19-9 Woodland & Wildlife Habitat
Assessment Form

Stantec

Project Number: 160950269

Project Name: NRWC ELC

Date: 03 July 2017

Field Personnel: A. Ducharme

Weather Conditions:

TEMP (°C):

25

WIND®

light

CLOUD

Dec 1

PPT:

FFI.

PPT (in last 24 hrs):

PPI (in last 24 hrs):

POLYGON DESCRIPTION

ELC COMMUNITY DESCRIPTION & CLASSIFICATION	POLYGON:	19-9	TOPOGRAPHIC FEATURE		HISTORY
	START TIME:	17:10	☐ LACUSTRINE ☐ RIVERINE ☐ BOTTOMLAND ☐ TERRACE ☐ VALLEY SLOPE ☒ TABLELAND ☐ ROLL. UPLAND ☐ CLIFF	☐ TALUS ☐ CREVICE / CAVE ☐ ALVAR ☐ ROCKLAND ☐ BEACH / BAR ☐ SAND DUNE ☐ BLUFF	☒ NATURAL ☐ CULTURAL
	END TIME:	17:15			

STAND DESCRIPTION:

LAYER		HT	CVR	SPECIES IN ORDER OF DECREASING DOMINANCE (>>MUCH GREATER THAN; >GREATER THAN; = ABOUT EQUAL TO)
1	CANOPY	2	1	SALALBA J. vitellina
2	SUB-CANOPY	3	3	SALALBA J. vit. > Sugilob / ACEHUGU
3	UNDERSTOREY	4-5	4	GRASS, 8-17 / PANGU
4	GRD. LAYER	6-7	1	GRASS s. > TYPANGU.

HT CODES: 1=>25m 2=10<HT≤25m 3=2<HT≤10m 4=1<HT≤2m 5=0.5<HT≤1m 6=0.2<HT≤0.5m 7=HT<0.2m

CVR CODES: 0=NONE 1=0%<CVR≤10% 2=10<CVR≤25% 3=25<CVR≤60% 4=CVR>60% N/O=not observed

STANDING SNAGS:	☐	<10	☒	10 - 24	☐	25 - 50	☐	>50
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ABUNDANCE CODES: N=NONE R=RARE O=OCCASIONAL A=ABUNDANT N/O=Not observed

STAND MATURITY:	PIONEER	YOUNG	☒ MID-AGE	MATURE	OLD GROWTH
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VEGETATION TYPE:		Cultural Savannah Hedgerow		CODE:	HOD/Cus
COMPLEX				CODE:	

Evidence of Disturbance / Notes:

LAYERS: 1=CANOPY >10m 2=SUB-CANOPY 3=UNDERSTOREY 4=GROUND (GRD.) LAYER
ABUNDANCE CODES: N=NONE R=RARE O=OCCASIONAL A=ABUNDANT D=DOMINANT N/O=Not observed

[illegible]

Signature:

(Field Personnel)

Quality Control: This form is complete ☐ & legible ☒.

Signature:

(Project Manager)

ELC Polygon: # 19-9 Assessment Type: ☒ Visual; no access / ☐ Walk through featureExtent of Physical Investigation of Feature: ☐ Entire / ☐ Partial, walk through polygon (indicate on map)

Reptile / Bat Hibernacula Features: Contains potential reptile hibernacula features?
☐-Y* / ☒-N / ☐-Unknown, no access (*if yes, describe in table below)
 [i.e. features that would provide a route underground, including buried concrete or rock (e.g. foundations, bridge abutments or culverts with cracks/entry points, exposed rock crevices or inactive animal burrows)]

Contains potential bat hibernacula features?
☐-Y* / ☒-N / ☐-Unknown, no access (*if yes, describe in table below)
 [i.e. karst topography, abandoned mines or caves]

POTENTIAL HIBERNACULA FEATURE(S) IDENTIFIED

UTM	Feature Description	Photo No.	Spp. Observed Using Feature

Bat Roosting Features: Contains potential bat roosting features?
☐-Y* / ☒-N / ☐-Unknown, no access (*if yes, describe in table below)
 [i.e. tall trees with open surroundings, DBH >25cm, side-facing cavities ~10m high in tree]

POTENTIAL BAT ROOSTING FEATURE(S) IDENTIFIED

UTM	Tree ID	Tree Spp.	DBH	Photo No.	Decay Class (1-5)	No. of Cavities	Height and Type of Cavities

Stick Nests: Contains large stick nests?
☐-Y* / ☒-N / ☐-Unknown, no access (*if yes, describe in table below)

STICK NEST(S) IDENTIFIED

UTM	Tree ID	Tree Spp.	Nest Size	Photo No.	Spp. Observed Using Feature

Seeps/Springs/Vernal Pools: Contains seeps/springs/vernal pools?
☐-Y* / ☒-N / ☐-Unknown, no access (*if yes, describe in table below)

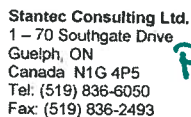
SEEP / SPRING / VERNAL POOL FEATURE(S) IDENTIFIED

UTM	Feature No. & Type	Feature Size (Diameter)	Water Depth	Photo No.	Sub/Emergent Veg. Spp. Present?	Shrubs/ Logs at Edge Present?

SPECIES & HABITAT OBSERVATIONS (list species and type of observation & indicate on map)

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CA=carcass; DP=distinctive parts; FE=feeding evidence; FY=eggs/nest; HO=house/den; OB=observed; SC=scat; SI=other sign; TK=track; VO=vocalization



Coll. Title 19;
ply 19-10 Wood

Roadside ELC, Land & Wildlife Habitat Assessment Form

Stantec

Project Number: 160950269

Project Name: NEUT ELC

Date: 03 July 2012

Field Personnel: A. Ducharme

Weather Conditions:

TEMP (°C):

25

WIND:

Licht

CLOUD

Part +

PPT.

1111.

PDT

FFI (in last 24 hrs):

POLYGON DESCRIPTION

ELC COMMUNITY DESCRIPTION & CLASSIFICATION	POLYGON:	TOPOGRAPHIC FEATURE		HISTORY
	START TIME:	☐ LACUSTRINE ☐ RIVERINE ☐ BOTTOMLAND ☐ TERRACE ☐ VALLEY SLOPE ☒ TABLELAND ☐ ROLL UPLAND ☐ CLIFF	☐ TALUS ☐ CREVICE / CAVE ☐ ALVAR ☐ ROCKLAND ☐ BEACH / BAR ☐ SAND DUNE ☐ BLUFF	☒ NATURAL ☐ CULTURAL
	END TIME:			

STAND DESCRIPTION:

LAYER		HT	CVR	SPECIES IN ORDER OF DECREASING DOMINANCE (>>MUCH GREATER THAN; >GREATER THAN; = ABOUT EQUAL TO)
1	CANOPY	2	2	QUEMACR > FAGGRAN > ACENEGU
2	SUB-CANOPY	3	3	QUEMACR > FAGGICAN > CORRACE
3	UNDERSTOREY	4	4	CORRACE > CALCANA > GRASS sp.
4	GRD. LAYER	6	4	SOLCANA > CALCANA = GRASS sp.

HT CODES: 1=>25m 2=10<HT≤25m 3=2<HT≤10m 4=1<HT≤2m 5=0.5<HT≤1m 6=0.2<HT≤0.5m 7=HT≤0.2m

CVR CODES: 0=NONE 1=0%<CVR≤10% 2=10<CVR≤25% 3=25<CVR≤60% 4=CVR>60% N/A=not observed

STANDING SNAGS:	A	<10		10 - 24	N	25 - 50	N	>50
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ABUNDANCE CODES: N=NONE R=RARE O=OCCASIONAL A=ABUNDANT N/O=Not observed

STAND MATURITY:	PIONEER	YOUNG	☒ MID-AGE	MATURE	OLD GROWTH
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VEGETATION TYPE: Cultural Savannah Hedgerow CODE: HOD/cys

COMPLEX	CODE:
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Evidence of Disturbance / Notes:

LAYERS: 1=CANOPY >10m 2=SUB-CANOPY 3=UNDERSTOREY 4=GROUND (GRD.) LAYER
ABUNDANCE CODES: N=NONE R=RARE O=OCCASIONAL A=ABUNDANT D=DOMINANT N/O=Not observed

[illegible]

Signature:

(Field Personnel)

Quality Control: This form is complete ☒ & legible ☐

Signature:

(Project Manager)

ELC Polygon: # 1910 Assessment Type: ☒ Visual; no access / ☐ Walk through featureExtent of Physical Investigation of Feature: ☐ Entire / ☐ Partial, walk through polygon (indicate on map)

Reptile / Bat Hibernacula Features: Contains potential reptile hibernacula features?
☐-Y* / ☒-N / ☐-Unknown, no access (*if yes, describe in table below)
 [i.e. features that would provide a route underground, including buried concrete or rock (e.g. foundations, bridge abutments or culverts with cracks/entry points, exposed rock crevices or inactive animal burrows)]

Contains potential bat hibernacula features?
☐-Y* / ☒-N / ☐-Unknown, no access (*if yes, describe in table below)
 [i.e. karst topography, abandoned mines or caves]

POTENTIAL HIBERNACULA FEATURE(S) IDENTIFIED

UTM	Feature Description	Photo No.	Spp. Observed Using Feature

Bat Roosting Features: Contains potential bat roosting features?
☐-Y* / ☒-N / ☐-Unknown, no access (*if yes, describe in table below)
 [i.e. tall trees with open surroundings, DBH >25cm, side-facing cavities ~10m high in tree]

POTENTIAL BAT ROOSTING FEATURE(S) IDENTIFIED

UTM	Tree ID	Tree Spp.	DBH	Photo No.	Decay Class (1-5)	No. of Cavities	Height and Type of Cavities

Stick Nests: Contains large stick nests?
☐-Y* / ☒-N / ☐-Unknown, no access (*if yes, describe in table below)

STICK NEST(S) IDENTIFIED

UTM	Tree ID	Tree Spp.	Nest Size	Photo No.	Spp. Observed Using Feature

Seeps/Springs/Vernal Pools: Contains seeps/springs/vernal pools?
☐-Y* / ☒-N / ☐-Unknown, no access (*if yes, describe in table below)

SEEP / SPRING / VERNAL POOL FEATURE(S) IDENTIFIED

UTM	Feature No. & Type	Feature Size (Diameter)	Water Depth	Photo No.	Sub/Emergent Veg. Spp. Present?	Shrubs/ Logs at Edge Present?

SPECIES & HABITAT OBSERVATIONS (list species and type of observation & indicate on map)

CA=carcass; DP=distinctive parts; FE=feeding evidence; FY=eggs/nest; HO=house/den; OB=observed; SC=seat; SI=other sign; TK=track; VO=vocalization



Coll. Title 19;
Poly 19-11 Wood

Roadside ELC, Woodland & Wildlife Habitat Assessment Form

Stantec

Project Number: 160950269

Project Name: NRWC ELC

Date: 03 July 2012

Field Personnel: A. Ducharme

Weather Conditions:

TEMP (°C):

25

WIND®

light

CLOUD:

part

PDT:

PPT:

DPT (in 1994)

PPI (in last 24 hrs): <1 mm

POLYGON DESCRIPTION

ELC COMMUNITY DESCRIPTION & CLASSIFICATION	POLYGON:	TOPOGRAPHIC FEATURE		HISTORY
	START TIME:	☐ LACUSTRINE ☐ RIVERINE ☐ BOTTOMLAND ☐ TERRACE ☐ VALLEY SLOPE ☐ TABLELAND ☐ ROLL UPLAND ☐ CLIFF	☐ TALUS ☐ CREVICE / CAVE ☐ ALVAR ☐ ROCKLAND ☐ BEACH / BAR ☐ SAND DUNE ☐ BLUFF	☐ NATURAL ☐ CULTURAL

STAND DESCRIPTION:

LAYER		HT	CVR	SPECIES IN ORDER OF DECREASING DOMINANCE (>>MUCH GREATER THAN; >GREATER THAN; = ABOUT EQUAL TO)
1	CANOPY	—	—	—
2	SUB-CANOPY	—	—	—
3	UNDERSTOREY	4-5	4	GRASS sp. > TYPLOPLAT
4	GRD. LAYER	6-7	4	GRASS sp. > TYPLOPLAT

HT CODES: 1=>25m 2=10<HT≤25m 3=2<HT≤10m 4=1<HT≤2m 5=0.5<HT≤1m 6=0.2<HT≤0.5m 7=HT≤0.2m

CVR CODES: 0=NONE 1=0%<CVR≤10% 2=10<CVR≤25% 3=25<CVR≤60% 4=CVR>60% N/Q=not observed

STANDING SNAGS:	N	<10	N	10 - 24	N	25 - 50	N	>50
-----------------	---	-----	---	---------	---	---------	---	-----

ABUNDANCE CODES: N=NONE R=RARE O=OCCASIONAL A=ABUNDANT N/O=Not observed

STAND MATURITY:	PIONEER	YOUNG	☒ MID-AGE	MATURE	OLD GROWTH
-----------------	---------	-------	---	--------	------------

VEGETATION TYPE: <i>Shallow Marsh</i>		CODE: <i>MAS</i>
☐	COMPLEX	CODE:

Evidence of Disturbance / Notes:

LAYERS: 1=CANOPY >10m 2=SUB-CANOPY 3=UNDERSTOREY 4=GROUND (GRD.) LAYER
ABUNDANCE CODES: N=NONE R=RARE O=OCCASIONAL A=ABUNDANT D=DOMINANT N/O=Not observed

[illegible]

Signature:

Air

(Field Personnel)

Quality Control: This form is complete ☒ & legible ☒

Signature:

Signature: M (Project Manager)

ELC Polygon: # 19-11 Assessment Type: ☒ Visual; no access / ☐ Walk through featureExtent of Physical Investigation of Feature: ☐ Entire / ☐ Partial, walk through polygon (indicate on map)

Reptile / Bat Hibernacula Features: Contains potential reptile hibernacula features?
☐-Y* / ☒-N / ☐-Unknown, no access (*if yes, describe in table below)
 [i.e. features that would provide a route underground, including buried concrete or rock (e.g. foundations, bridge abutments or culverts with cracks/entry points, exposed rock crevices or inactive animal burrows)]
 Contains potential bat hibernacula features?
☐-Y* / ☒-N / ☐-Unknown, no access (*if yes, describe in table below)
 [i.e. karst topography, abandoned mines or caves]

POTENTIAL HIBERNACULA FEATURE(S) IDENTIFIED

UTM	Feature Description	Photo No.	Spp. Observed Using Feature

Bat Roosting Features: Contains potential bat roosting features?
☐-Y* / ☒-N / ☐-Unknown, no access (*if yes, describe in table below)
 [i.e. tall trees with open surroundings, DBH >25cm, side-facing cavities ~10m high in tree]

POTENTIAL BAT ROOSTING FEATURE(S) IDENTIFIED

UTM	Tree ID	Tree Spp.	DBH	Photo No.	Decay Class (1-5)	No. of Cavities	Height and Type of Cavities

Stick Nests: Contains large stick nests?
☐-Y* / ☒-N / ☐-Unknown, no access (*if yes, describe in table below)

STICK NEST(S) IDENTIFIED

UTM	Tree ID	Tree Spp.	Nest Size	Photo No.	Spp. Observed Using Feature

Seeps/Springs/Vernal Pools: Contains seeps/springs/vernal pools?
☐-Y* / ☒-N / ☐-Unknown, no access (*if yes, describe in table below)

SEEP / SPRING / VERNAL POOL FEATURE(S) IDENTIFIED

UTM	Feature No. & Type	Feature Size (Diameter)	Water Depth	Photo No.	Sub/Emergent Veg. Spp. Present?	Shrubs/ Logs at Edge Present?

SPECIES & HABITAT OBSERVATIONS (list species and type of observation & indicate on map)

--	--

CA=carcass; DP=distinctive parts; FE=feeding evidence; FY=eggs/nest; HO=house/den; OB=observed; SC=scat; SI=other sign; TK=track; VO=vocalization

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1 - 70 Southgate Drive
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Tel: (519) 836-6050
Fax: (519) 836-2493

Stantec

Project Number: 160950269

Project Name: NRWC ELC

Date: 03 July 2012

Field Personnel:

Weather Conditions:	TEMP (°C): 25	WIND: light	CLOUD: part	PPT: —	PPT (in last 24 hrs): < 1 mm
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POLYGON DESCRIPTION

ELC COMMUNITY DESCRIPTION & CLASSIFICATION	POLYGON:	TOPOGRAPHIC FEATURE		HISTORY
	START TIME:	☐ LACUSTRINE ☐ RIVERINE ☐ BOTTOMLAND ☐ TERRACE ☐ VALLEY SLOPE ☒ TABLELAND ☐ ROLL UPLAND ☐ CLIFF	☐ TALUS ☐ CREVICE / CAVE ☐ ALVAR ☐ ROCKLAND ☐ BEACH / BAR ☐ SAND DUNE ☐ BLUFF	☒ NATURAL ☐ CULTURAL

STAND DESCRIPTION:

LAYER		HT	CVR	SPECIES IN ORDER OF DECREASING DOMINANCE (>>MUCH GREATER THAN; >GREATER THAN; = ABOUT EQUAL TO)
1	CANOPY	2	1	FAGGRAN
2	SUB-CANOPY	3	2	FAGGRAN > CORRACE
3	UNDERSTOREY	4.5	4	GRASS > SOLCANA > CORP F
4	GRD. LAYER	6.7	4	GRASS > SOLCANA > DIPT

HT CODES: 1=>25m 2=10<HT≤25m 3=2<HT≤10m 4=1<HT≤2m 5=0.5<HT≤1m 6=0.2<HT≤0.5m 7=HT<0.2m

CVR CODES: 0=NONE 1=0%<CVR≤10% 2=10<CVR≤25% 3=25<CVR≤60% 4=CVR>60% N/O=not observed

STANDING SNAGS:	<u>0</u>	<10	<u>N</u>	10 - 24	<u>N</u>	25 - 50	<u>N</u>	>50
-----------------	----------	-----	----------	---------	----------	---------	----------	-----

ABUNDANCE CODES: N=NONE R=RARE O=OCCASIONAL A=ABUNDANT N/O=Not observed

STAND MATURITY:	PIONEER	YOUNG	☒ MID-AGE	MATURE	OLD GROWTH
-----------------	---------	-------	---	--------	------------

VEGETATION TYPE:	Cultural Meadow Hedgerow	CODE:	HOD/CUM
------------------	--------------------------	-------	---------

COMPLEX	CODE:
---------	-------

Evidence of Disturbance / Notes:

LAYERS: 1=CANOPY >10m 2=SUB-CANOPY 3=UNDERSTOREY 4=GROUND (GRD.) LAYER
ABUNDANCE CODES: N=NONE R=RARE O=OCCASIONAL A=ABUNDANT D=DOMINANT N/O=Not observed

[illegible]

Signature:

(Field Personnel)

Quality Control: This form is complete ☒ & legible ☒.

Signature:

(Project Manager)

ELC Polygon: # 19-12 Assessment Type: ☒-Visual; no access / ☐-Walk through featureExtent of Physical Investigation of Feature: ☐-Entire / ☐-Partial, walk through polygon (indicate on map)

Reptile / Bat Hibernacula Features: Contains potential reptile hibernacula features?
☐-Y* / ☒-N / ☐-Unknown, no access (*if yes, describe in table below)
 [i.e. features that would provide a route underground, including buried concrete or rock (e.g. foundations, bridge abutments or culverts with cracks/entry points, exposed rock crevices or inactive animal burrows)]
 Contains potential bat hibernacula features?
☐-Y* / ☒-N / ☐-Unknown, no access (*if yes, describe in table below)
 [i.e. karst topography, abandoned mines or caves]

POTENTIAL HIBERNACULA FEATURE(S) IDENTIFIED			
UTM	Feature Description	Photo No.	Spp. Observed Using Feature

Bat Roosting Features: Contains potential bat roosting features?
☐-Y* / ☒-N / ☐-Unknown, no access (*if yes, describe in table below)
 [i.e. tall trees with open surroundings, DBH >25cm, side-facing cavities ~10m high in tree]

POTENTIAL BAT ROOSTING FEATURE(S) IDENTIFIED							
UTM	Tree ID	Tree Spp.	DBH	Photo No.	Decay Class (1-5)	No. of Cavities	Height and Type of Cavities

Stick Nests: Contains large stick nests?
☐-Y* / ☒-N / ☐-Unknown, no access (*if yes, describe in table below)

STICK NEST(S) IDENTIFIED						
UTM	Tree ID	Tree Spp.	Nest Size	Photo No.	Spp. Observed Using Feature	

Seeps/Springs/Vernal Pools: Contains seeps/springs/vernal pools?
☐-Y* / ☒-N / ☐-Unknown, no access (*if yes, describe in table below)

SEEP / SPRING / VERNAL POOL FEATURE(S) IDENTIFIED						
UTM	Feature No. & Type	Feature Size (Diameter)	Water Depth	Photo No.	Sub/Emergent Veg. Spp. Present?	Shrubs/ Logs at Edge Present?

SPECIES & HABITAT OBSERVATIONS (list species and type of observation & indicate on map)

Empty space for species and habitat observations
--

CA=carcass; DP=distinctive parts; FE=feeding evidence; FY=eggs/nest; HO=house/den; OB=observed; SC=scat; SI=other sign; TK=track; VO=vocalization

ELC Polygon: # 19-13 Assessment Type: ☒-Visual; no access / ☐-Walk through featureExtent of Physical Investigation of Feature: ☐-Entire / ☐-Partial, walk through polygon (indicate on map)

Reptile / Bat Hibernacula Features: Contains potential reptile hibernacula features?
☐-Y* / ☒-N / ☐-Unknown, no access (*if yes, describe in table below)
 [i.e. features that would provide a route underground, including buried concrete or rock (e.g. foundations, bridge abutments or culverts with cracks/entry points, exposed rock crevices or inactive animal burrows)]
 Contains potential bat hibernacula features?
☐-Y* / ☒-N / ☐-Unknown, no access (*if yes, describe in table below)
 [i.e. karst topography, abandoned mines or caves]

POTENTIAL HIBERNACULA FEATURE(S) IDENTIFIED

UTM	Feature Description	Photo No.	Spp. Observed Using Feature

Bat Roosting Features: Contains potential bat roosting features?
☐-Y* / ☒-N / ☐-Unknown, no access (*if yes, describe in table below)
 [i.e. tall trees with open surroundings, DBH >25cm, side-facing cavities ~10m high in tree]

POTENTIAL BAT ROOSTING FEATURE(S) IDENTIFIED

UTM	Tree ID	Tree Spp.	DBH	Photo No.	Decay Class (1-5)	No. of Cavities	Height and Type of Cavities

Stick Nests: Contains large stick nests?
☐-Y* / ☒-N / ☐-Unknown, no access (*if yes, describe in table below)

STICK NEST(S) IDENTIFIED

UTM	Tree ID	Tree Spp.	Nest Size	Photo No.	Spp. Observed Using Feature

Seeps/Springs/Vernal Pools: Contains seeps/springs/vernal pools?
☐-Y* / ☒-N / ☐-Unknown, no access (*if yes, describe in table below)

SEEP / SPRING / VERNAL POOL FEATURE(S) IDENTIFIED

UTM	Feature No. & Type	Feature Size (Diameter)	Water Depth	Photo No.	Sub/Emergent Veg. Spp. Present?	Shrubs/ Logs at Edge Present?

SPECIES & HABITAT OBSERVATIONS (list species and type of observation & indicate on map)

Empty space for species and habitat observations
--

CA=carcass; DP=distinctive parts; FE=feeding evidence; FY=eggs/nest; HO=house/den; OB=observed; SC=scat; SI=other sign; TK=track; VO=vocalization



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Fax: (519) 836-2493

Stantec

Project Number: 160950269

Project Name: NRVC ELC

Date: 03 July 2012

Field Personnel: A. Ducharme

Weather Conditions:

TEMP (°C):

25

WIND

light

CLOUD

CLOUD:
part

PPT:

PPT:

PPT (in last 24 hrs):

PPT (in last 24 hrs):
4 mm

POLYGON DESCRIPTION

ELC COMMUNITY DESCRIPTION & CLASSIFICATION	POLYGON:	TOPOGRAPHIC FEATURE		HISTORY
	START TIME:	☐ LACUSTRINE ☐ RIVERINE ☐ BOTTOMLAND ☐ TERRACE ☐ VALLEY SLOPE ☐ TABLELAND ☐ ROLL UPLAND ☐ CLIFF	☐ TALUS ☐ CREVICE / CAVE ☐ ALVAR ☐ ROCKLAND ☐ BEACH / BAR ☐ SAND DUNE ☐ BLUFF	☒ NATURAL ☐ CULTURAL

STAND DESCRIPTION:

LAYER		HT	CVR	SPECIES IN ORDER OF DECREASING DOMINANCE (>>MUCH GREATER THAN; >GREATER THAN; = ABOUT EQUAL TO)
1	CANOPY	—	—	
2	SUB-CANOPY	—	—	
3	UNDERSTOREY	4.5	4	T. PLANT > GRASS
4	GRD. LAYER	6.7	4	T. PLANT > GRASS

HT CODES: 1= $\geq 25m$ 2= $10 < HT \leq 25m$ 3= $2 < HT \leq 10m$ 4= $1 < HT \leq 2m$ 5= $0.5 < HT \leq 1m$ 6= $0.2 < HT \leq 0.5m$ 7= $HT < 0.2m$

CVR CODES: 0=NONE 1=0%<CVR≤10% 2=10<CVR≤25% 3=25<CVR≤50% 4=CVR>50% N/A

STANDING SNAGS:	☒ <u>2</u>	<10	☒ <u>1</u>	10 - 24	☒ <u>1</u>	25 - 50	☒ <u>1</u>	>50
-----------------	--	-----	--	---------	--	---------	--	-----

ABUNDANCE CODES: N=NONE R=RARE O=OCCASIONAL A=ABUNDANT N/O=Not observed

STAND MATURITY:	PIONEER	YOUNG	☒ MID-AGE	☒ MATURE	OLD GROWTH
-----------------	---------	-------	---	--	------------

VEGETATION TYPE:		CODE:	
Cattail Shallow Marsh		MAS	
COMPLEX		CODE:	

Evidence of Disturbance / Notes:

LAYERS: 1=CANOPY >10m 2=SUB-CANOPY 3=UNDERSTOREY 4=GROUND (GRD.) LAYER
ABUNDANCE CODES: N=NONE R=RARE O=OCCASIONAL A=ABUNDANT D=DOMINANT N/O=Not observed

[illegible]

Signature:

(Field Personnel)

Quality Control: This form is complete ☒ & legible ☒.

Signature:

re: 
(Project Manager)

ELC Polygon: # 9-14 Assessment Type: ☒ Visual; no access / ☐ Walk through featureExtent of Physical Investigation of Feature: ☐ Entire / ☐ Partial, walk through polygon (indicate on map)**Reptile / Bat Hibernacula Features:**

Contains potential reptile hibernacula features?

☐-Y* / ☒-N / ☐-Unknown, no access (*if yes, describe in table below)

[i.e. features that would provide a route underground, including buried concrete or rock (e.g. foundations, bridge abutments or culverts with cracks/entry points, exposed rock crevices or inactive animal burrows)]

Contains potential bat hibernacula features?

☐-Y* / ☒-N / ☐-Unknown, no access (*if yes, describe in table below)

[i.e. karst topography, abandoned mines or caves]

POTENTIAL HIBERNACULA FEATURE(S) IDENTIFIED

UTM	Feature Description	Photo No.	Spp. Observed Using Feature

Bat Roosting Features:

Contains potential bat roosting features?

☐-Y* / ☒-N / ☐-Unknown, no access (*if yes, describe in table below)

[i.e. tall trees with open surroundings, DBH >25cm, side-facing cavities ~10m high in tree]

POTENTIAL BAT ROOSTING FEATURE(S) IDENTIFIED

UTM	Tree ID	Tree Spp.	DBH	Photo No.	Decay Class (1-5)	No. of Cavities	Height and Type of Cavities

Stick Nests:

Contains large stick nests?

☐-Y* / ☒-N / ☐-Unknown, no access (*if yes, describe in table below)**STICK NEST(S) IDENTIFIED**

UTM	Tree ID	Tree Spp.	Nest Size	Photo No.	Spp. Observed Using Feature

Seeps/Springs/Vernal Pools:

Contains seeps/springs/vernal pools?

☐-Y* / ☒-N / ☐-Unknown, no access (*if yes, describe in table below)**SEEP / SPRING / VERNAL POOL FEATURE(S) IDENTIFIED**

UTM	Feature No. & Type	Feature Size (Diameter)	Water Depth	Photo No.	Sub/Emergent Veg. Spp. Present?	Shrubs/ Logs at Edge Present?

SPECIES & HABITAT OBSERVATIONS (list species and type of observation & indicate on map)

Empty space for species and habitat observations
--

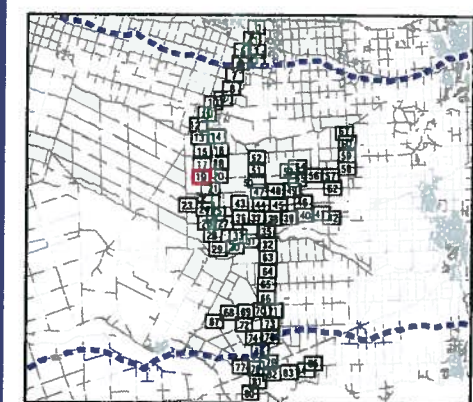
CA=carcass; DP=distinctive parts; FE=feeding evidence; FY=eggs/nest; HO=house/den; OB=observed; SC=seat; SI=other sign; TK=track; VO=vocalization

V:\01609\Active\160950269\planning\drawing\160950269_Release_17_ELC_Collector_Map_Book_20120613.mxd
Revised: 2012-06-14 By: bowyer



Legend

- Proposed T Line Route
- Proposed Collector 120m Buffer
- Turbines in Signed Lands
 - Standard Turbine (105 dBA)
 - Potential Turbine Locations
- Turbines in Unsigned Lands
 - Standard Turbine (105 dBA)
 - 51 m Turbine Setback
- Proposed Collector Cable
- Alternate Collector Cable Route
- Preliminary Study Area
- Signed Property
- Signed Property - Outside Study Area
- Potential Signed Property
- Potential Signed Property - Outside Study Area
- ELC Boundary
- Provincially Significant Wetland
- Other/Locally Significant Wetland
- Property Boundary
- ELC DONE



- ### Notes
- Coordinate System: NAD 1983 UTM Zone 17N.
 - Base features produced under license with the Ontario Ministry of Natural Resources © Queen's Printer for Ontario, 2012.

June, 2012
160950269

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Niagara Region Wind Corporation
Amphibian Field Maps

Figure No.
19

Title
Proposed Collector Route
Map 19

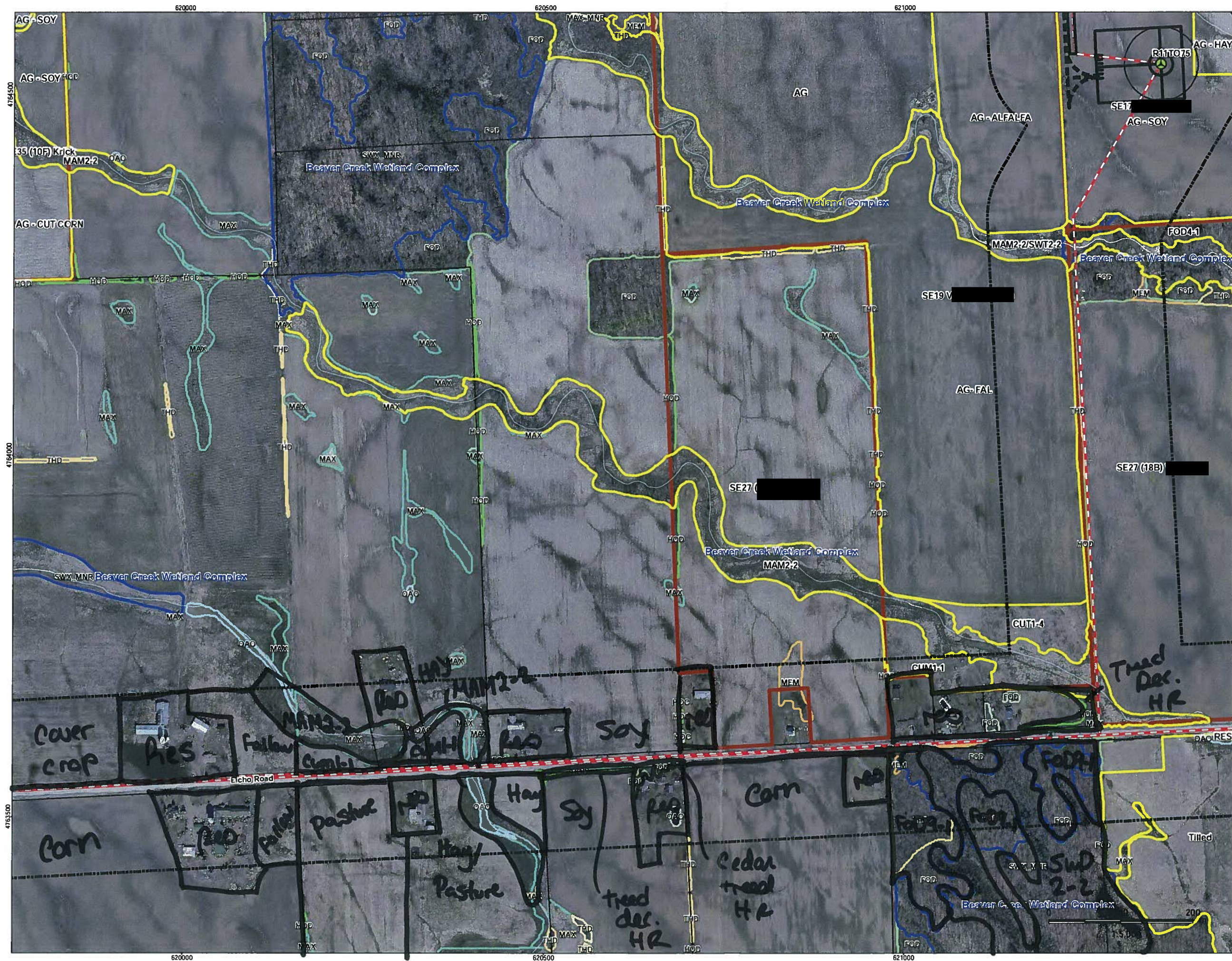
Markups
19

NRWC roadside ELC

Figures 13-17, 19

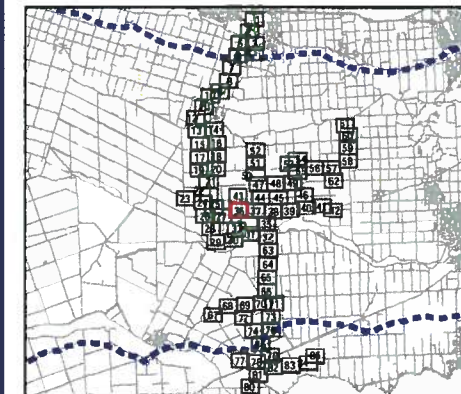
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Revised: 2012-06-14 By: boomper



Legend

- Proposed T Line Route
- Proposed Collector 120m Buffer
- Turbines in Signed Lands
 - Standard Turbine (105 dBA)
 - Potential Turbine Locations
- Turbines in Unsigned Lands
 - Standard Turbine (105 dBA)
 - 51 m Turbine Setback
- Proposed Collector Cable
- Alternate Collector Cable Route
- Preliminary Study Area
- Signed Property
- Signed Property - Outside Study Area
- Potential Signed Property
- Potential Signed Property - Outside Study Area
- ELC Boundary
- Provincially Significant Wetland
- Other/Locally Significant Wetland
- Property Boundary



Notes

- Coordinate System: NAD 1983 UTM Zone 17N.
- Base features produced under license with the Ontario Ministry of Natural Resources © Queen's Printer for Ontario, 2012.



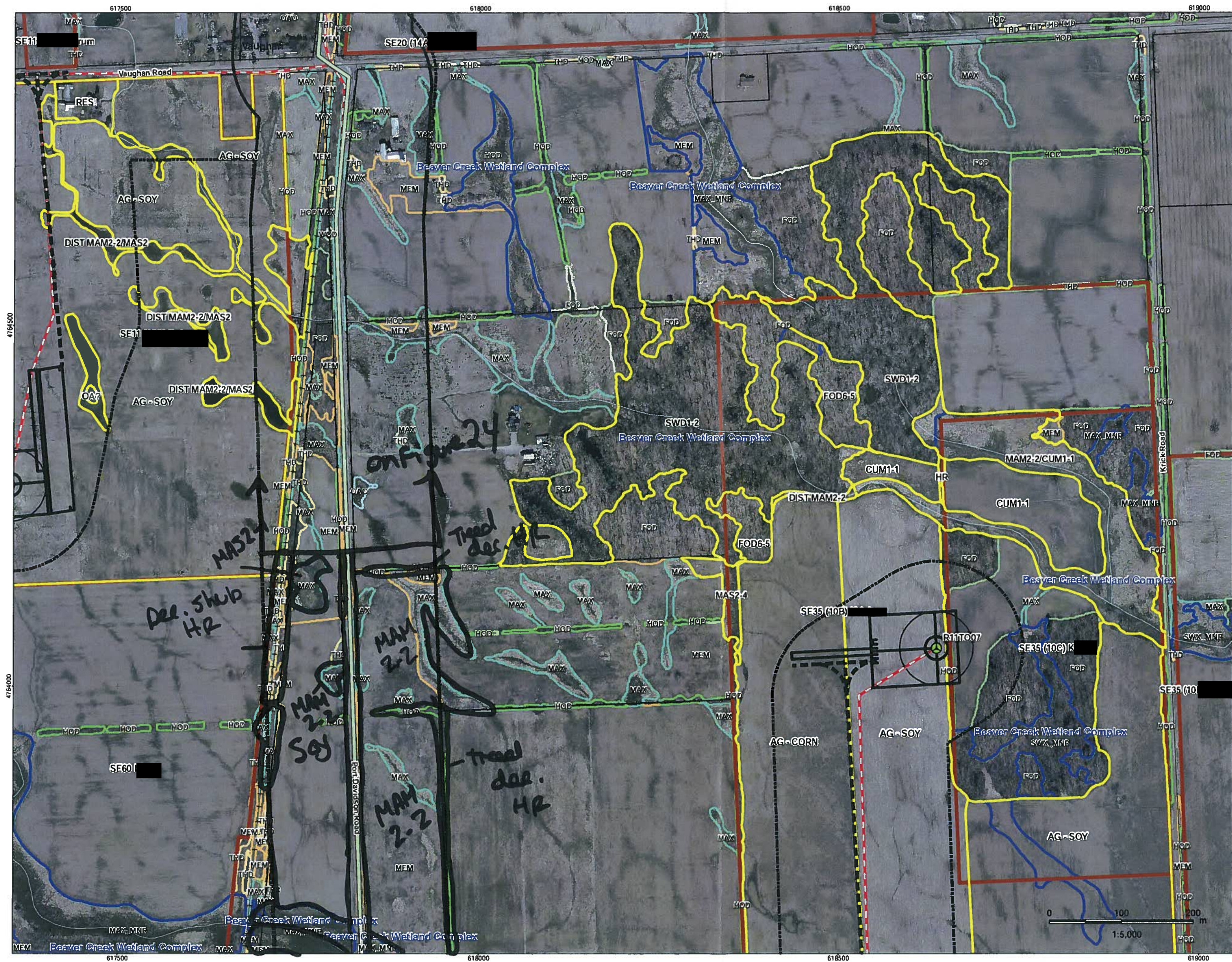
Stantec

June, 2012
160950269

Client/Project
Niagara Region Wind Corporation
Amphibian Field Maps

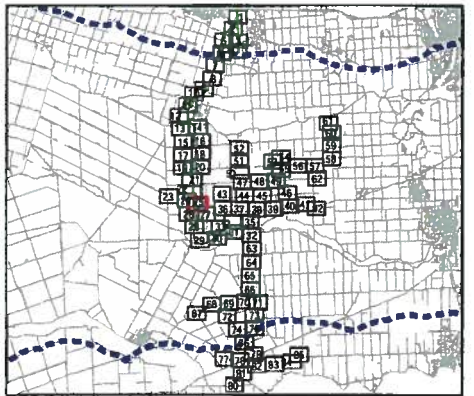
Figure No.
36

Title
Proposed Collector Route
Map 36



Legend

- Proposed T Line Route
- Proposed Collector 120m Buffer
- Turbines in Signed Lands
 - Standard Turbine (105 dBA)
 - Potential Turbine Locations
- Turbines in Unsigned Lands
 - Standard Turbine (105 dBA)
 - 51 m Turbine Setback
- Proposed Collector Cable
- Alternate Collector Cable Route
- Preliminary Study Area
- Signed Property
- Signed Property - Outside Study Area
- Potential Signed Property
- Potential Signed Property - Outside Study Area
- ELC Boundary
- Provincially Significant Wetland
- Other/Locally Significant Wetland
- Property Boundary



Notes

- Coordinate System: NAD 1983 UTM Zone 17N.
- Base features produced under license with the Ontario Ministry of Natural Resources © Queen's Printer for Ontario, 2012.



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June, 2012
160950269

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Niagara Region Wind Corporation
Amphibian Field Maps

Figure No.
25

Title
Proposed Collector Route
Map 25

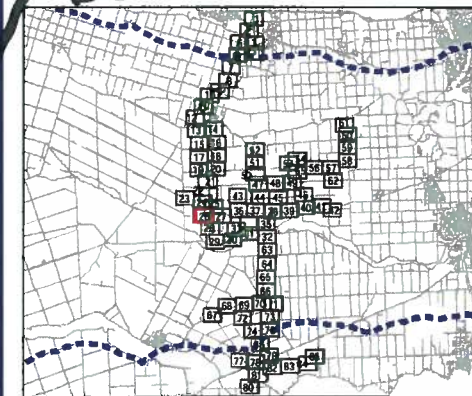
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1:5,000

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Revised: 2012-06-14 By: bcowper



Legend

- Proposed T Line Route
- Proposed Collector 120m Buffer
- Turbines in Signed Lands
 - Standard Turbine (105 dBA)
 - Potential Turbine Locations
- Turbines in Unsigned Lands
 - Standard Turbine (105 dBA)
 - 51 m Turbine Setback
- Proposed Collector Cable
- Alternate Collector Cable Route
- Preliminary Study Area
- Signed Property
- Signed Property - Outside Study Area
- Potential Signed Property
- Potential Signed Property - Outside Study Area
- ELC Boundary
- Provincially Significant Wetland
- Other/Locally Significant Wetland
- Property Boundary



Notes

- Coordinate System: NAD 1983 UTM Zone 17N.
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Client/Project

Niagara Region Wind Corporation
Amphibian Field Maps

Figure No.
26

Title

Proposed Collector Route
Map 26

June, 2012
160950269



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1 - 70 Southgate Drive
Guelph, ON
Canada N1G 4P5
Tel: (519) 836-6050
Fax: (519) 836-2493

Roadside ELC, Woodland & Wildlife Habitat Assessment Form

Project Number: 160950269
Date: June 28, 2012

Project Name: NRWC
Field Personnel: C. Payette

Weather Conditions:	TEMP (°C): 27	WIND 3	CLOUD: 70%	PPT: none	PPT (in last 24 hrs): none
---------------------	------------------	-----------	---------------	--------------	-------------------------------

POLYGON DESCRIPTION

ELC COMMUNITY DESCRIPTION & CLASSIFICATION	POLYGON:		TOPOGRAPHIC FEATURE		HISTORY
	25-1		☐ LACUSTRINE ☐ RIVERINE ☐ BOTTOMLAND ☐ TERRACE ☐ VALLEY SLOPE ☐ TABLELAND ☐ ROLL. UPLAND ☐ CLIFF	☐ TALUS ☐ CREVICE / CAVE ☐ ALVAR ☐ ROCKLAND ☐ BEACH / BAR ☐ SAND DUNE ☐ BLUFF	☒ NATURAL ☐ CULTURAL
	START TIME:				
	11:05				
	END TIME:				

STAND DESCRIPTION:

STAND DESCRIPTION:			
LAYER	HT	CVR	SPECIES IN ORDER OF DECREASING DOMINANCE (>>MUCH GREATER THAN; >GREATER THAN; = ABOUT EQUAL TO)
1 CANOPY	3	1	green ash
2 SUB-CANOPY			
3 UNDERSTOREY			
4 GRD. LAYER	4-7	4	Cotton

HT CODES: 1= $\geq 25\text{m}$ 2= $10 < \text{HT} \leq 25\text{m}$ 3= $2 < \text{HT} \leq 10\text{m}$ 4= $1 < \text{HT} \leq 2\text{m}$ 5= $0.5 < \text{HT} \leq 1\text{m}$ 6= $0.2 < \text{HT} \leq 0.5\text{m}$ 7= $\text{HT} < 0.2\text{m}$

VR CODES: 0=NONE 1=0%<CVR≤10% 2=10<CVR≤25% 3=25<CVR≤60% 4=CVR>60% N/O=not observed

STANDING SNAGS:	<10	10 - 24	25 - 50	>50
-----------------	-----	---------	---------	-----

ABUNDANCE CODES: N=NONE R=RARE O=OCCASIONAL A=ABUNDANT N/O=Not observed

STAND MATURITY:	PIONEER	YOUNG	MID-AGE	MATURE	OLD GROWTH
-----------------	---------	-------	---------	--------	------------

VEGETATION TYPE:		CODE:
Cattail / Shallow marsh		MAS2-1
COMPLEX	CODE:	

Evidence of Disturbance / Notes:

photo 62

LAYERS: 1=CANOPY >10m 2=SUB-CANOPY 3=UNDERSTOREY 4=GROUND (GRD.) LAYER
ABUNDANCE CODES: N=NONE R=RARE O=OCCASIONAL A=ABUNDANT D=DOMINANT N/O=Not observed

[illegible]

Quality Control: This form is complete ☐ & legible ☐.

Signature:

(Field Personnel)

Signature:

(Project Manager)

ELC Polygon: #25-1 Assessment Type: ☒ Visual; no access / ☐ Walk through featureExtent of Physical Investigation of Feature: ☐ Entire / ☐ Partial, walk through polygon (indicate on map)

Reptile / Bat Hibernacula Features: Contains potential reptile hibernacula features?
☐-Y* / ☒-N / ☐-Unknown, no access (*if yes, describe in table below)
 [i.e. features that would provide a route underground, including buried concrete or rock (e.g. foundations, bridge abutments or culverts with cracks/entry points, exposed rock crevices or inactive animal burrows)]

Contains potential bat hibernacula features?
☐-Y* / ☒-N / ☐-Unknown, no access (*if yes, describe in table below)
 [i.e. karst topography, abandoned mines or caves]

POTENTIAL HIBERNACULA FEATURE(S) IDENTIFIED

UTM	Feature Description	Photo No.	Spp. Observed Using Feature

Bat Roosting Features: Contains potential bat roosting features?
☐-Y* / ☒-N / ☐-Unknown, no access (*if yes, describe in table below)
 [i.e. tall trees with open surroundings, DBH >25cm, side-facing cavities ~10m high in tree]

POTENTIAL BAT ROOSTING FEATURE(S) IDENTIFIED

UTM	Tree ID	Tree Spp.	DBH	Photo No.	Decay Class (1-5)	No. of Cavities	Height and Type of Cavities

Stick Nests: Contains large stick nests?
☐-Y* / ☒-N / ☐-Unknown, no access (*if yes, describe in table below)

STICK NEST(S) IDENTIFIED

UTM	Tree ID	Tree Spp.	Nest Size	Photo No.	Spp. Observed Using Feature

Seeps/Springs/Vernal Pools: Contains seeps/springs/vernal pools?
☐-Y* / ☒-N / ☐-Unknown, no access (*if yes, describe in table below)

SEEP / SPRING / VERNAL POOL FEATURE(S) IDENTIFIED

UTM	Feature No. & Type	Feature Size (Diameter)	Water Depth	Photo No.	Sub/Emergent Veg. Spp. Present?	Shrubs/ Logs at Edge Present?

SPECIES & HABITAT OBSERVATIONS (list species and type of observation & indicate on map)

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CA=carcass; DP=distinctive parts; FE=feeding evidence; FY=eggs/nest; HO=house/den; OB=observed; SC=seal; SF=other sign; TK=track; VO=vocalization



Roadside ELC, Woodland & Wildlife Habitat Assessment Form

Project Name: NRWC

Field Personnel: C. Paschke

Weather Conditions:	TEMP (°C): 27	WIND: 3	CLOUD: 70%	PPT: none	PPT (in last 24 hrs): none
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POLYGON DESCRIPTION

ELC COMMUNITY DESCRIPTION & CLASSIFICATION		TOPOGRAPHIC FEATURE		HISTORY
		☐ LACUSTRINE ☐ RIVERINE ☐ BOTTOMLAND ☐ TERRACE ☐ VALLEY SLOPE ☐ TABLELAND ☐ ROLL. UPLAND ☐ CLIFF	☐ TALUS ☐ CREVICE / CAVE ☐ ALVAR ☐ ROCKLAND ☐ BEACH / BAR ☐ SAND DUNE ☐ BLUFF	☒ NATURAL ☒ CULTURAL
POLYGON: 25-2				
START TIME: 11:10				
END TIME:				

STAND DESCRIPTION:

STAND DESCRIPTION			
LAYER	HT	CVR	SPECIES IN ORDER OF DECREASING DOMINANCE (>>MUCH GREATER THAN; >GREATER THAN; = ABOUT EQUAL TO)
1 CANOPY	2	1	white elm
2 SUB-CANOPY			
3 UNDERSTOREY	3-4	2	gray dogwood
4 GRD. LAYER	5-7	4	Red Coward grass S. goldenrods Common milkweed

IT CODES: 1= $\geq 25m$ 2= $10 < HT \leq 25m$ 3= $2 < HT \leq 10m$ 4= $1 < HT \leq 2m$ 5= $0.5 < HT \leq 1m$ 6= $0.2 < HT \leq 0.5m$ 7= $HT < 0.2m$

CVR CODES: 0=NONE 1=0%<CVR≤10% 2=10<CVR≤25% 3=25<CVR≤60% 4=CVR>60% N/O=not observed

STANDING SNAGS:	<10	10 - 24	25 - 50	>50
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ABUNDANCE CODES: N=NONE R=RARE O=OCCASIONAL A=ABUNDANT N/O=Not observed

STAND MATURITY:	PIONEER	YOUNG	MID-AGE	MATURE	OLD GROWTH
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VEGETATION TYPE: ^ ^ CODE: 1601-32

Vegetation type:	Reed canopy meadow marsh	MAM 2/2
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COMPL. BY: [Signature]	CODE: 6011/51
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COMPLEX	Cultural Meadows	CODE: COM-1
1	1	1

* inclusion (attenuated shell) mass

Evidence of Disturbance / Notes:

photo 63.

LAYERS: 1=CANOPY >10m 2=SUB-CANOPY 3=UNDERSTOREY 4=GROUND (GRD.) LAYER
ABUNDANCE CODES: N=NONE R=RARE O=OCCASIONAL A=ABUNDANT D=DOMINANT N/O=Not observed

[illegible]

Quality Control: This form is complete ☐ & legible ☐.

Signature: _____
(Field Personnel)

Signature: _____
(Project Manager)

ELC Polygon: # 25-2 Assessment Type: ☒ Visual; no access / ☐ Walk through featureExtent of Physical Investigation of Feature: ☐ Entire / ☐ Partial, walk through polygon (indicate on map)

Reptile / Bat Hibernacula Features: Contains potential reptile hibernacula features?
☐-Y* / ☐-N / ☒-Unknown, no access (*if yes, describe in table below)
 [i.e. features that would provide a route underground, including buried concrete or rock (e.g. foundations, bridge abutments or culverts with cracks/entry points, exposed rock crevices or inactive animal burrows)]

Contains potential bat hibernacula features?
☐-Y* / ☐-N / ☒-Unknown, no access (*if yes, describe in table below)
 [i.e. karst topography, abandoned mines or caves]

POTENTIAL HIBERNACULA FEATURE(S) IDENTIFIED

UTM	Feature Description	Photo No.	Spp. Observed Using Feature

Bat Roosting Features: Contains potential bat roosting features?
☐-Y* / ☐-N / ☒-Unknown, no access (*if yes, describe in table below)
 [i.e. tall trees with open surroundings, DBH >25cm, side-facing cavities ~10m high in tree]

POTENTIAL BAT ROOSTING FEATURE(S) IDENTIFIED

UTM	Tree ID	Tree Spp.	DBH	Photo No.	Decay Class (1-5)	No. of Cavities	Height and Type of Cavities

Stick Nests: Contains large stick nests?
☐-Y* / ☐-N / ☒-Unknown, no access (*if yes, describe in table below)

STICK NEST(S) IDENTIFIED

UTM	Tree ID	Tree Spp.	Nest Size	Photo No.	Spp. Observed Using Feature

Seeps/Springs/Vernal Pools: Contains seeps/springs/vernal pools?
☐-Y* / ☐-N / ☒-Unknown, no access (*if yes, describe in table below)

SEEP / SPRING / VERNAL POOL FEATURE(S) IDENTIFIED

UTM	Feature No. & Type	Feature Size (Diameter)	Water Depth	Photo No.	Sub/Emergent Veg. Spp. Present?	Shrubs/ Logs at Edge Present?

SPECIES & HABITAT OBSERVATIONS (list species and type of observation & indicate on map)

Content for Species & Habitat Observations
--

CA=carcass; DP=distinctive parts; FE=feeding evidence; FY=eggs/nest; HO=house/den; OB=observed; SC=seat; SI=other sign; TK=track; VO=vocalization

Extent of Physical Investigation of Feature: ☐-Entire / ☐-Partial, walk through polygon (indicate on map)

Contains potential reptile hibernacula features?

[i.e. features that would provide a route underground, including buried concrete or rock (e.g. foundations, bridge abutments or culverts with cracks/entry points, exposed rock crevices or inactive animal burrows)]

☐-Y* / ☐-N / ☒-Unknown, no access (*if yes, describe in table below)

[i.e. karst topography, abandoned mines or caves]

UTM	Feature Description	Photo No.	Spp. Observed Using Feature

Contains potential bat roosting features?

(i.e. tall trees with open surroundings, DBH >25cm, side-facing cavities ~10m high in tree)

UTM	Tree ID	Tree Spp.	DBH	Photo No.	Decay Class (1-5)	No. of Cavities	Height and Type of Cavities

Contains large stick nests?

☐-Y* / ☐-N / ☒-Unknown, no access (*if yes, describe in table below)

UTM	Tree ID	Tree Spp.	Nest Size	Photo No.	Spp. Observed Using Feature

Contains seeps/springs/vernal pools?

☐-Y* / ☐-N / ☒-Unknown, no access (*if yes, describe in table below)

UTM	Feature No. & Type	Feature Size (Diameter)	Water Depth	Photo No.	Sub/Emergent Veg. Spp. Present?	Shrubs/ Logs at Edge Present?

[illegible]

CA=carcass; DP=distinctive parts; FE=feeding evidence; FY=eggs/nest; HO=house/den; OB=observed; SC=scat; SI=other sign; TK=track; VO=vocalization

ELC Polygon: #26-4 Assessment Type: ☒ Visual; no access / ☐ Walk through featureExtent of Physical Investigation of Feature: ☐ Entire / ☐ Partial, walk through polygon (indicate on map)**Reptile / Bat Hibernacula Features:**

Contains potential reptile hibernacula features?

☐-Y* / ☐-N / ☒-Unknown, no access (*if yes, describe in table below)

[i.e. features that would provide a route underground, including buried concrete or rock (e.g. foundations, bridge abutments or culverts with cracks/entry points, exposed rock crevices or inactive animal burrows)]

Contains potential bat hibernacula features?

☐-Y* / ☐-N / ☒-Unknown, no access (*if yes, describe in table below)

[i.e. karst topography, abandoned mines or caves]

POTENTIAL HIBERNACULA FEATURE(S) IDENTIFIED

UTM	Feature Description	Photo No.	Spp. Observed Using Feature

Bat Roosting Features:

Contains potential bat roosting features?

☐-Y* / ☐-N / ☒-Unknown, no access (*if yes, describe in table below)

[i.e. tall trees with open surroundings, DBH >25cm, side-facing cavities ~10m high in tree]

POTENTIAL BAT ROOSTING FEATURE(S) IDENTIFIED

UTM	Tree ID	Tree Spp.	DBH	Photo No.	Decay Class (1-5)	No. of Cavities	Height and Type of Cavities

Stick Nests:

Contains large stick nests?

☐-Y* / ☐-N / ☒-Unknown, no access (*if yes, describe in table below)**STICK NEST(S) IDENTIFIED**

UTM	Tree ID	Tree Spp.	Nest Size	Photo No.	Spp. Observed Using Feature

Seeps/Springs/Vernal Pools:

Contains seeps/springs/vernal pools?

☐-Y* / ☐-N / ☒-Unknown, no access (*if yes, describe in table below)**SEEP / SPRING / VERNAL POOL FEATURE(S) IDENTIFIED**

UTM	Feature No. & Type	Feature Size (Diameter)	Water Depth	Photo No.	Sub/Emergent Veg. Spp. Present?	Shrubs/ Logs at Edge Present?

SPECIES & HABITAT OBSERVATIONS (list species and type of observation & indicate on map)

Empty space for observations

CA=carcass; DP=distinctive parts; FE=feeding evidence; FY=eggs/nest; HO=house/den; OB=observed; SC=seal; SI=other sign; TK=track; VO=vocalization

ELC Polygon: # 27-S Assessment Type: ☒ Visual; no access / ☐ Walk through featureExtent of Physical Investigation of Feature: ☐ Entire / ☐ Partial, walk through polygon (indicate on map)**Reptile / Bat Hibernacula Features:**

Contains potential reptile hibernacula features?

☐ -Y* / ☐ -N / ☒ Unknown, no access (*if yes, describe in table below)

[i.e. features that would provide a route underground, including buried concrete or rock (e.g. foundations, bridge abutments or culverts with cracks/entry points, exposed rock crevices or inactive animal burrows)]

Contains potential bat hibernacula features?

☐ -Y* / ☐ -N / ☒ Unknown, no access (*if yes, describe in table below)

[i.e. karst topography, abandoned mines or caves]

POTENTIAL HIBERNACULA FEATURE(S) IDENTIFIED

UTM	Feature Description	Photo No.	Spp. Observed Using Feature

Bat Roosting Features:

Contains potential bat roosting features?

☐ -Y* / ☐ -N / ☒ Unknown, no access (*if yes, describe in table below)

[i.e. tall trees with open surroundings, DBH >25cm, side-facing cavities ~10m high in tree]

POTENTIAL BAT ROOSTING FEATURE(S) IDENTIFIED

UTM	Tree ID	Tree Spp.	DBH	Photo No.	Decay Class (1-5)	No. of Cavities	Height and Type of Cavities

Stick Nests:

Contains large stick nests?

☐ -Y* / ☐ -N / ☒ Unknown, no access (*if yes, describe in table below)**STICK NEST(S) IDENTIFIED**

UTM	Tree ID	Tree Spp.	Nest Size	Photo No.	Spp. Observed Using Feature

Seeps/Springs/Vernal Pools:

Contains seeps/springs/vernal pools?

☐ -Y* / ☐ -N / ☒ Unknown, no access (*if yes, describe in table below)**SEEP / SPRING / VERNAL POOL FEATURE(S) IDENTIFIED**

UTM	Feature No. & Type	Feature Size (Diameter)	Water Depth	Photo No.	Sub/Emergent Veg. Spp. Present?	Shrubs/ Logs at Edge Present?

SPECIES & HABITAT OBSERVATIONS (list species and type of observation & indicate on map)

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CA=carcass; DP=distinctive parts; FE=feeding evidence; FY=eggs/nest; HO=house/den; OB=observed; SC=scat; SI=other sign; TK=track; VO=vocalization

ELC Polygon: # 28-1 Assessment Type: ☒-Visual; no access / ☐-Walk through featureExtent of Physical Investigation of Feature: ☐-Entire / ☐-Partial, walk through polygon (indicate on map)**Reptile / Bat Hibernacula Features:**

Contains potential reptile hibernacula features?

☐-Y* / ☒-N / ☐-Unknown, no access (*if yes, describe in table below)

[i.e. features that would provide a route underground, including buried concrete or rock (e.g. foundations, bridge abutments or culverts with cracks/entry points, exposed rock crevices or inactive animal burrows)]

Contains potential bat hibernacula features?

☐-Y* / ☒-N / ☐-Unknown, no access (*if yes, describe in table below)

[i.e. karst topography, abandoned mines or caves]

POTENTIAL HIBERNACULA FEATURE(S) IDENTIFIED

UTM	Feature Description	Photo No.	Spp. Observed Using Feature

Bat Roosting Features:

Contains potential bat roosting features?

☐-Y* / ☒-N / ☐-Unknown, no access (*if yes, describe in table below)

[i.e. tall trees with open surroundings, DBH >25cm, side-facing cavities ~10m high in tree]

POTENTIAL BAT ROOSTING FEATURE(S) IDENTIFIED

UTM	Tree ID	Tree Spp.	DBH	Photo No.	Decay Class (1-5)	No. of Cavities	Height and Type of Cavities

Stick Nests:

Contains large stick nests?

☐-Y* / ☒-N / ☐-Unknown, no access (*if yes, describe in table below)**STICK NEST(S) IDENTIFIED**

UTM	Tree ID	Tree Spp.	Nest Size	Photo No.	Spp. Observed Using Feature

Seeps/Springs/Vernal Pools:

Contains seeps/springs/vernal pools?

☐-Y* / ☒-N / ☐-Unknown, no access (*if yes, describe in table below)**SEEP / SPRING / VERNAL POOL FEATURE(S) IDENTIFIED**

UTM	Feature No. & Type	Feature Size (Diameter)	Water Depth	Photo No.	Sub/Emergent Veg. Spp. Present?	Shrubs/ Logs at Edge Present?

SPECIES & HABITAT OBSERVATIONS (list species and type of observation & indicate on map)

--	--

CA=carcass; DP=distinctive parts; FE=feeding evidence; FY=eggs/nest; HO=house/den; OB=observed; SC=scat; SI=other sign; TK=track; VO=vocalization



Coll. Tile 28; Roadside ELC,
Poly 2 Woodland & Wildlife Habitat
Assessment Form

Field Personnel: N. Charlton, H. Hughes



ELC

11:00

TOPOGRAPHIC FEATURE

CULTURAL

HT

HT

HT

SPECIES IN ORDER OF DECREASING DOMINANCE
(>>MUCH GREATER THAN; >GREATER THAN; = ABOUT EQUAL TO)

4	GRD. LAYE
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CVR CODES: 0=NONE 1=0%<CVR≤10% 2=10<CVR≤25% 3=25<CVR≤60% 4=CVR>60% N/O=not observed

STANDING SNAGS:	<10	10 - 24	25 - 50	>50
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ABUNDANCE CODES: N=NONE R=RARE O=OCCASIONAL A=ABUNDANT N/O=Not observed

STAND MATURITY:	PIONEER	YOUNG	MID-AGE	MATURE	OLD GROWTH
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VEGETATION TYPE: Dry-moist old field meadow

CODE: CHM 1-1

COMPLEX

CODE:

Evidence of Disturbance / Notes:

pic 2

LAYERS: 1=CANOPY >10m 2=SUB-CANOPY 3=UNDERSTOREY 4=GROUND (GRD.) LAYER
ABUNDANCE CODES: N=NONE R=RARE O=OCCASIONAL A=ABUNDANT D=DOMINANT N/O=Not observed

SPECIES CODE

LAYER

1

2

63

4

DISTANCE FROM RD.

 ≤ 5 m

Y

COLL.

TREES:

SHRUBS:

GROUND:

GRASS SP
BROINER
PHAARUN
ASCYRI
SYMNOVA
VICCRAC
SOLDAGN

Signature:

(Field Personnel)

Quality Control: This form is complete ☒ & legible ☒.

Signature:

(Project Manager)

ELC Polygon: # _____ Assessment Type: ☒-Visual; no access / ☐-Walk through featureExtent of Physical Investigation of Feature: ☐-Entire / ☐-Partial, walk through polygon (indicate on map)

Reptile / Bat Hibernacula Features: Contains potential reptile hibernacula features?
☐-Y* / ☒-N / ☐-Unknown, no access (*if yes, describe in table below)
 [i.e. features that would provide a route underground, including buried concrete or rock (e.g. foundations, bridge abutments or culverts with cracks/entry points, exposed rock crevices or inactive animal burrows)]

Contains potential bat hibernacula features?
☐-Y* / ☒-N / ☐-Unknown, no access (*if yes, describe in table below)
 [i.e. karst topography, abandoned mines or caves]

POTENTIAL HIBERNACULA FEATURE(S) IDENTIFIED

UTM	Feature Description	Photo No.	Spp. Observed Using Feature

Bat Roosting Features: Contains potential bat roosting features?
☐-Y* / ☒-N / ☐-Unknown, no access (*if yes, describe in table below)
 [i.e. tall trees with open surroundings, DBH >25cm, side-facing cavities ~10m high in tree]

POTENTIAL BAT ROOSTING FEATURE(S) IDENTIFIED

UTM	Tree ID	Tree Spp.	DBH	Photo No.	Decay Class (1-5)	No. of Cavities	Height and Type of Cavities

Stick Nests: Contains large stick nests?
☐-Y* / ☒-N / ☐-Unknown, no access (*if yes, describe in table below)

STICK NEST(S) IDENTIFIED

UTM	Tree ID	Tree Spp.	Nest Size	Photo No.	Spp. Observed Using Feature

Seeps/Springs/Vernal Pools: Contains seeps/springs/vernal pools?
☐-Y* / ☒-N / ☐-Unknown, no access (*if yes, describe in table below)

SEEP / SPRING / VERNAL POOL FEATURE(S) IDENTIFIED

UTM	Feature No. & Type	Feature Size (Diameter)	Water Depth	Photo No.	Sub/Emergent Veg. Spp. Present?	Shrubs/ Logs at Edge Present?

SPECIES & HABITAT OBSERVATIONS (list species and type of observation & indicate on map)

CA=carcass; DP=distinctive parts; FE=feeding evidence; FY=eggs/nest; HO=house/den; OB=observed; SC=scat; SI=other sign; TK=track; VO=vocalization



Coll. Tile 28; Roadside ELC,
Poly 3 Woodland & Wildlife Habitat
Assessment Form

Field Personnel: N. Charlton

Weather Conditions:	TEMP (°C): 22	WIND: 2-3	CLOUD: 90%	PPT: —	PPT (in last 24 hrs): —
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TOPOGRAPHIC FEATURE		HISTORY
☐ LACUSTRINE	☐ TALUS	☐ NATURAL
☐ RIVERINE	☐ CREVICE / CAVE	☒ CULTURAL
☐ BOTTOMLAND	☐ ALVAR	
☐ TERRACE	☐ ROCKLAND	
☐ VALLEY SLOPE	☐ BEACH / BAR	
☐ TABLELAND	☐ SAND DUNE	
☒ ROLL UPLAND	☐ BLUFF	
☐ CLIFF		

LAYER		HT	CVR	SPECIES IN ORDER OF DECREASING DOMINANCE (>>MUCH GREATER THAN; >GREATER THAN; = ABOUT EQUAL TO)
1	CANOPY			
2	SUB-CANOPY			
3	UNDERSTOREY			
4	GRD. LAYER	5-7	4	GRASS (> SOLIDAGO) > A. TER

CVR CODES: 0=NONE 1=0%<CVR≤10% 2=10<CVR≤25% 3=25<CVR≤60% 4=CVR>60% N/O=not observed

STANDING SNAGS:	<10	10 - 24	25 - 50	>50
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ABUNDANCE CODES: N=NONE R=RARE O=OCCASIONAL A=ABUNDANT N/O=Not observed

STAND MATURITY:	PIONEER	YOUNG	MID-AGE	MATURE	OLD GROWTH
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VEGETATION TYPE: <i>Pasture</i>		CODE: <i>Pasture</i>
COMPLEX		CODE:

Evidence of Disturbance / Notes:

- Fenced pasture or hay field
- pic 3

LAYERS: 1=CANOPY >10m 2=SUB-CANOPY 3=UNDERSTOREY 4=GROUND (GRD.) LAYER
ABUNDANCE CODES: N=NONE R=RARE O=OCCASIONAL A=ABUNDANT D=DOMINANT N/O=Not observed

[illegible]

Signature:

(Field Personnel)

Quality Control: This form is complete ☒ & legible ☒

Signature:

(Project Manager)

ELC Polygon: # 28-3 Assessment Type: ☒-Visual; no access / ☐-Walk through featureExtent of Physical Investigation of Feature: ☐-Entire / ☐-Partial, walk through polygon (indicate on map)

Reptile / Bat Hibernacula Features: Contains potential reptile hibernacula features?
☐-Y* / ☒-N / ☐-Unknown, no access (*if yes, describe in table below)
 [i.e. features that would provide a route underground, including buried concrete or rock (e.g. foundations, bridge abutments or culverts with cracks/entry points, exposed rock crevices or inactive animal burrows)]
 Contains potential bat hibernacula features?
☐-Y* / ☒-N / ☐-Unknown, no access (*if yes, describe in table below)
 [i.e. karst topography, abandoned mines or caves]

POTENTIAL HIBERNACULA FEATURE(S) IDENTIFIED

UTM	Feature Description	Photo No.	Spp. Observed Using Feature

Bat Roosting Features: Contains potential bat roosting features?
☐-Y* / ☒-N / ☐-Unknown, no access (*if yes, describe in table below)
 [i.e. tall trees with open surroundings, DBH >25cm, side-facing cavities ~10m high in tree]

POTENTIAL BAT ROOSTING FEATURE(S) IDENTIFIED

UTM	Tree ID	Tree Spp.	DBH	Photo No.	Decay Class (1-5)	No. of Cavities	Height and Type of Cavities

Stick Nests: Contains large stick nests?
☐-Y* / ☒-N / ☐-Unknown, no access (*if yes, describe in table below)

STICK NEST(S) IDENTIFIED

UTM	Tree ID	Tree Spp.	Nest Size	Photo No.	Spp. Observed Using Feature

Seeps/Springs/Vernal Pools: Contains seeps/springs/vernal pools?
☐-Y* / ☒-N / ☐-Unknown, no access (*if yes, describe in table below)

SEEP / SPRING / VERNAL POOL FEATURE(S) IDENTIFIED

UTM	Feature No. & Type	Feature Size (Diameter)	Water Depth	Photo No.	Sub/Emergent Veg. Spp. Present?	Shrubs/ Logs at Edge Present?

SPECIES & HABITAT OBSERVATIONS (list species and type of observation & indicate on map)

--

CA=carcass; DP=distinctive parts; FE=feeding evidence; FY=eggs/nest; HO=house/den; OB=observed; SC=scat; SI=other sign; TK=track; VO=vocalization



Coll. Title 28; Roadside ELC,
Poly 4 Woodland & Wildlife Habitat
Assessment Form

Project Name: NRWC

Field Personnel: N. Charlton

Weather Conditions:	TEMP (°C): 22	WIND: 2-3	CLOUD: 90%	PPT: —	PPT (in last 24 hrs): —
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TOPOGRAPHIC FEATURE	HISTORY
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ELC

COMMUNITY DESCRIPTION & CLASSIFICATION

POLYGON:	4 (28)
START TIME:	11:05
END TIME:	11:10

☐ LACUSTRINE	☐ TALUS	☒ NATURAL
☐ RIVERINE	☐ CREVICE / CAVE	☐ CULTURAL
☒ BOTTOMLAND	☐ ALVAR	
☐ TERRACE	☐ ROCKLAND	
☐ VALLEY SLOPE	☐ BEACH / BAR	
☐ TABLELAND	☐ SAND DUNE	
☒ ROLL. UPLAND	☐ BLUFF	
☐ CLIFF		

STAND DESCRIPTION:

LAYER		HT	CVR	SPECIES IN ORDER OF DECREASING DOMINANCE (>>MUCH GREATER THAN; >GREATER THAN; = ABOUT EQUAL TO)
1	CANOPY			
2	SUB-CANOPY			
3	UNDERSTOREY			
4	GRD. LAYER	5-7	4	PIAAARUN >> TVPANGU

HT CODES: 1= $\geq 25m$ 2= $10 < HT \leq 25m$ 3= $2 < HT \leq 10m$ 4= $1 < HT \leq 2m$ 5= $0.5 < HT \leq 1m$ 6= $0.2 < HT \leq 0.5m$ 7= $HT < 0.2m$

CVR CODES: 0=NONE 1=0%<CVR≤10% 2=10<CVR≤25% 3=25<CVR≤60% 4=CVR>60% N/O=not observed

STANDING SNAGS:	<u>W</u>	<10	<u>R</u>	10 - 24	<u>A</u>	25 - 50	<u>A</u>	>50
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ABUNDANCE CODES: N=NONE R=RARE O=OCCASIONAL A=ABUNDANT N/O=Not observed

STAND MATURITY:	PIONEER	YOUNG	MID-AGE	MATURE	OLD GROWTH
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VEGETATION TYPE: <i>reed canary grass mineral meadow north</i>		CODE: <i>MAU 2-2</i>
COMPLEX		CODE:

Evidence of Disturbance / Notes:

- no water $\rightarrow$ ditch is below ^{the communities'} ground level

LAYERS: 1=CANOPY >10m 2=SUB-CANOPY 3=UNDERSTOREY 4=GROUND (GRD.) LAYER
ABUNDANCE CODES: N=NONE R=RARE O=OCCASIONAL A=ABUNDANT D=DOMINANT N/O=Not observed

[illegible]

Signature:

Signature: Wesley Chen
(Field Personnel)

Quality Control: This form is complete ☒ & legible ☒.

Signature:

Quality Control: This form is complete ☒ & legible ☒.

Signature: V. Lataheera
(Project Manager)

ELC Polygon: # _____ Assessment Type: ☒-Visual; no access / ☐-Walk through featureExtent of Physical Investigation of Feature: ☐-Entire / ☐-Partial, walk through polygon (indicate on map)

Reptile / Bat Hibernacula Features: Contains potential reptile hibernacula features?
☐-Y* / ☒-N / ☐-Unknown, no access (*if yes, describe in table below)
 [i.e. features that would provide a route underground, including buried concrete or rock (e.g. foundations, bridge abutments or culverts with cracks/entry points, exposed rock crevices or inactive animal burrows)]
 Contains potential bat hibernacula features?
☐-Y* / ☒-N / ☐-Unknown, no access (*if yes, describe in table below)
 [i.e. karst topography, abandoned mines or caves]

POTENTIAL HIBERNACULA FEATURE(S) IDENTIFIED

UTM	Feature Description	Photo No.	Spp. Observed Using Feature

Bat Roosting Features: Contains potential bat roosting features?
☐-Y* / ☒-N / ☐-Unknown, no access (*if yes, describe in table below)
 [i.e. tall trees with open surroundings, DBH >25cm, side-facing cavities ~10m high in tree]

POTENTIAL BAT ROOSTING FEATURE(S) IDENTIFIED

UTM	Tree ID	Tree Spp.	DBH	Photo No.	Decay Class (1-5)	No. of Cavities	Height and Type of Cavities

Stick Nests: Contains large stick nests?
☐-Y* / ☒-N / ☐-Unknown, no access (*if yes, describe in table below)

STICK NEST(S) IDENTIFIED

UTM	Tree ID	Tree Spp.	Nest Size	Photo No.	Spp. Observed Using Feature

Seeps/Springs/Vernal Pools: Contains seeps/springs/vernal pools?
☐-Y* / ☒-N / ☐-Unknown, no access (*if yes, describe in table below)

SEEP / SPRING / VERNAL POOL FEATURE(S) IDENTIFIED

UTM	Feature No. & Type	Feature Size (Diameter)	Water Depth	Photo No.	Sub/Emergent Veg. Spp. Present?	Shrubs/ Logs at Edge Present?

SPECIES & HABITAT OBSERVATIONS (list species and type of observation & indicate on map)

(Left side of observation table)	(Right side of observation table)
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CA=carcass; DP=distinctive parts; FE=feeding evidence; FY=eggs/nest; HO=house/den; OB=observed; SC=scat; SI=other sign; TK=track; VO=vocalization



Stantec Consulting Ltd.
1 - 70 Southgate Drive
Guelph, ON
Canada N1G 4P5
Tel: (519) 836-6050
Fax: (519) 836-2493

Stantec

Project Number: 160950269

Project Name: NRWC

Date: June 27

Field Personnel: N.C., H.H.

Weather Conditions: TEMP (°C): 22 WIND: 2-3 CLOUD: 90% PPT: — PPT (in last 24 hrs): —

POLYGON DESCRIPTION

ELC COMMUNITY DESCRIPTION & CLASSIFICATION	POLYGON: <u>28-5</u>	☐ LACUSTRINE	☐ TALUS	☒ NATURAL
	START TIME: <u>11:10</u>	☐ RIVERINE	☐ CREVICE / CAVE	☐ CULTURAL
	END TIME:	☐ BOTTOMLAND	☐ ALVAR	
		☐ TERRACE	☐ ROCKLAND	
		☐ VALLEY SLOPE	☐ BEACH / BAR	
		☐ TABLELAND	☐ SAND DUNE	
		☐ ROLL UPLAND	☐ BLUFF	
		☐ CLIFF		

STAND DESCRIPTION:

LAYER	HT	CVR	SPECIES IN ORDER OF DECREASING DOMINANCE (>>MUCH GREATER THAN; >GREATER THAN; = ABOUT EQUAL TO)
1 CANOPY	<u>2</u>	<u>3</u>	<u>QUERUBR > TILAMER > ACESASA</u>
2 SUB-CANOPY	<u>3</u>	<u>3</u>	<u>ACESASA</u>
3 UNDERSTOREY	<u>4</u>	<u>3</u>	<u>CORNUS</u>
4 GRD. LAYER	<u>5-7</u>	<u>4</u>	<u>SOLIDAGO > GRASS > AVENS</u>

HT CODES: 1=>25m 2=10<HT≤25m 3=2<HT≤10m 4=1<HT≤2m 5=0.5<HT≤1m 6=0.2<HT≤0.5m 7=HT<0.2m

CVR CODES: 0=NONE 1=0%<CVR≤10% 2=10<CVR≤25% 3=25<CVR≤60% 4=CVR>60% N/O=not observed

STANDING SNAGS: 0 <10 0 10-24 2 25-50 N >50

ABUNDANCE CODES: N=NONE R=RARE O=OCCASIONAL A=ABUNDANT N/O=Not observed

STAND MATURITY: PIONEER YOUNG MID-AGE MATURE OLD GROWTH

VEGETATION TYPE: F-11 Sugar maple-hardwood deciduous forest CODE: FOD6-5
COMPLEX CODE: SWD

Evidence of Disturbance / Notes:

- can see many snags inside
- SWD likely follows dark areas on map
- FOD lighter areas

LAYERS: 1=CANOPY >10m 2=SUB-CANOPY 3=UNDERSTOREY 4=GROUND (GRD.) LAYER
ABUNDANCE CODES: N=NONE R=RARE O=OCCASIONAL A=ABUNDANT D=DOMINANT N/O=Not observed

SPECIES CODE	LAYER				DISTANCE FROM RD.		COLL.
	1	2	3	4	≤5 m	>5 m	
TREES:							
TILAMER	A				✓	✓	
ULMAMER	O				✓	✓	
PINSTRQ	O					✓	
ACESASA	O	O				✓	
QUERUBR	A					✓	
FRAXSP	O					✓	
QUENACR	O					✓	
QUERICO	O					✓	
ACEFREE	O	O				✓	
CARQUAT	O				✓	✓	
OSTVIKG		R				✓	
SHRUBS:							
CORNUS (GRAY)					✓	✓	
GROUND:							
SOLIDAGO			A		✓		
AVENS			O			✓	
GRASS			A			✓	

Signature: [Signature]

(Field Personnel)

Quality Control: This form is complete ☒ legible ☒

Signature: [Signature]

(Project Manager)

ELC Polygon: #28-5 Assessment Type: ☒-Visual; no access / ☐-Walk through featureExtent of Physical Investigation of Feature: ☐-Entire / ☐-Partial, walk through polygon (indicate on map)

Reptile / Bat Hibernacula Features: Contains potential reptile hibernacula features?
☐-Y* / ☐-N / ☒-Unknown, no access (*if yes, describe in table below)
 [i.e. features that would provide a route underground, including buried concrete or rock (e.g. foundations, bridge abutments or culverts with cracks/entry points, exposed rock crevices or inactive animal burrows)]
 Contains potential bat hibernacula features?
☐-Y* / ☒-N / ☐-Unknown, no access (*if yes, describe in table below)
 [i.e. karst topography, abandoned mines or caves]

POTENTIAL HIBERNACULA FEATURE(S) IDENTIFIED			
UTM	Feature Description	Photo No.	Spp. Observed Using Feature

Bat Roosting Features: Contains potential bat roosting features?
☐-Y* / ☐-N / ☒-Unknown, no access (*if yes, describe in table below)
 [i.e. tall trees with open surroundings, DBH >25cm, side-facing cavities ~10m high in tree]

POTENTIAL BAT ROOSTING FEATURE(S) IDENTIFIED							
UTM	Tree ID	Tree Spp.	DBH	Photo No.	Decay Class (1-5)	No. of Cavities	Height and Type of Cavities

Stick Nests: Contains large stick nests?
☐-Y* / ☐-N / ☒-Unknown, no access (*if yes, describe in table below)

STICK NEST(S) IDENTIFIED					
UTM	Tree ID	Tree Spp.	Nest Size	Photo No.	Spp. Observed Using Feature

Seeps/Springs/Vernal Pools: Contains seeps/springs/vernal pools?
☐-Y* / ☐-N / ☒-Unknown, no access (*if yes, describe in table below)

SEEP / SPRING / VERNAL POOL FEATURE(S) IDENTIFIED						
UTM	Feature No. & Type	Feature Size (Diameter)	Water Depth	Photo No.	Sub/Emergent Veg. Spp. Present?	Shrubs/ Logs at Edge Present?

SPECIES & HABITAT OBSERVATIONS (list species and type of observation & indicate on map)

--

CA=carcass; DP=distinctive parts; FE=feeding evidence; FY=eggs/nest; HO=house/den; OB=observed; SC=seal; SI=other sign; TK=track; VO=vocalization



Coll. Tile 28;
Poly 6. Wood

**26, Roadside ELC,
Woodland & Wildlife Habitat
Assessment Form**

Project Name: X/DJNC

Field Personnel: N. Charlton

Weather Conditions:	TEMP (°C): 22	WIND: 2-3	CLOUD: 90%	PPT: —	PPT (in last 24 hrs): —
---------------------	------------------	--------------	---------------	-----------	----------------------------

POLYGON DESCRIPTION

POLYGRAPHIC DATA		TOPOGRAPHIC FEATURE		HISTORY	
ELC COMMUNITY DESCRIPTION & CLASSIFICATION	POLYGON:	28-6	☐ LACUSTRINE ☐ RIVERINE ☐ BOTTOMLAND ☐ TERRACE ☐ VALLEY SLOPE ☐ TABLELAND ☐ ROLL UPLAND ☐ CLIFF	☐ TALUS ☐ CREVICE / CAVE ☐ ALVAR ☐ ROCKLAND ☐ BEACH / BAR ☐ SAND DUNE ☐ BLUFF	☐ NATURAL ☒ CULTURAL
	START TIME:	11:15			
	END TIME:	11:20			

STAND DESCRIPTION:

LAYER		HT	CVR	SPECIES IN ORDER OF DECREASING DOMINANCE (>>MUCH GREATER THAN; >GREATER THAN; = ABOUT EQUAL TO)
1	CANOPY			
2	SUB-CANOPY			
3	UNDERSTOREY			
4	GRD. LAYER	6-7	4	DHLPPAT > TRIFOLIUM > ALEALFN

HT CODES: 1=>25m 2=10<HT≤25m 3=2<HT≤10m 4=1<HT≤2m 5=0.5<HT≤1m 6=0.2<HT≤0.5m 7=HT<0.2m

CVR CODES: 0=NONE 1=0%<CVR≤10% 2=10<CVR≤25% 3=25<CVR≤60% 4=CVR>60% N/O=not observed

STANDING SNAGS:	<10	10 - 24	25 - 50	>50
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ABUNDANCE CODES: N=NONE R=RARE O=OCCASIONAL A=ABUNDANT N/O=Not observed

STAND MATURITY:	PIONEER	YOUNG	MID-AGE	MATURE	OLD GROWTH
-----------------	---------	-------	---------	--------	------------

VEGETATION TYPE: <i>Hay</i>		CODE: <i>N/A - A9</i>
COMPLEX		CODE:

Evidence of Disturbance / Notes:

- looks like it was cut in early spring
- hayfield

LAYERS: 1=CANOPY >10m 2=SUB-CANOPY 3=UNDERSTOREY 4=GROUND (GRD.) LAYER
ABUNDANCE CODES: N=NONE R=RARE O=OCCASIONAL A=ABUNDANT D=DOMINANT N/O=Not observed

[illegible]

Signature:

(Field Personnel)

Quality Control: This form is complete ☐ & legible ☒

Signature:

(Project Manager)

ELC Polygon: # 28-6 Assessment Type: ☒-Visual; no access / ☐-Walk through featureExtent of Physical Investigation of Feature: ☐-Entire / ☐-Partial, walk through polygon (indicate on map)

Reptile / Bat Hibernacula Features: Contains potential reptile hibernacula features?
☐-Y* / ☒-N / ☐-Unknown, no access (*if yes, describe in table below)
 [i.e. features that would provide a route underground, including buried concrete or rock (e.g. foundations, bridge abutments or culverts with cracks/entry points, exposed rock crevices or inactive animal burrows)]

Contains potential bat hibernacula features?
☐-Y* / ☒-N / ☐-Unknown, no access (*if yes, describe in table below)
 [i.e. karst topography, abandoned mines or caves]

POTENTIAL HIBERNACULA FEATURE(S) IDENTIFIED

UTM	Feature Description	Photo No.	Spp. Observed Using Feature

Bat Roosting Features: Contains potential bat roosting features?
☐-Y* / ☒-N / ☐-Unknown, no access (*if yes, describe in table below)
 [i.e. tall trees with open surroundings, DBH >25cm, side-facing cavities ~10m high in tree]

POTENTIAL BAT ROOSTING FEATURE(S) IDENTIFIED

UTM	Tree ID	Tree Spp.	DBH	Photo No.	Decay Class (1-5)	No. of Cavities	Height and Type of Cavities

Stick Nests: Contains large stick nests?
☐-Y* / ☒-N / ☐-Unknown, no access (*if yes, describe in table below)

STICK NEST(S) IDENTIFIED

UTM	Tree ID	Tree Spp.	Nest Size	Photo No.	Spp. Observed Using Feature

Seeps/Springs/Vernal Pools: Contains seeps/springs/vernal pools?
☐-Y* / ☒-N / ☐-Unknown, no access (*if yes, describe in table below)

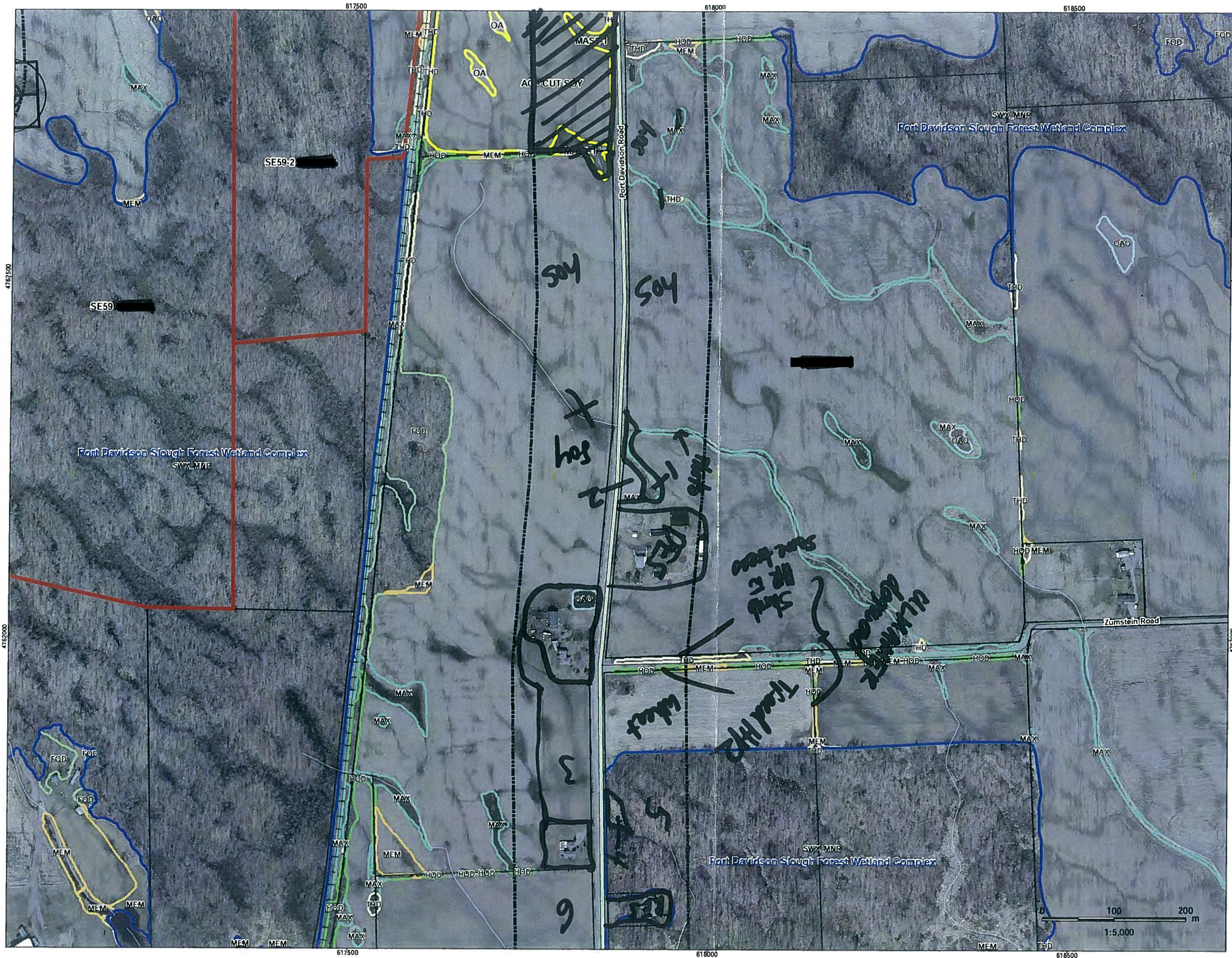
SEEP / SPRING / VERNAL POOL FEATURE(S) IDENTIFIED

UTM	Feature No. & Type	Feature Size (Diameter)	Water Depth	Photo No.	Sub/Emergent Veg. Spp. Present?	Shrubs/ Logs at Edge Present?

SPECIES & HABITAT OBSERVATIONS (list species and type of observation & indicate on map)

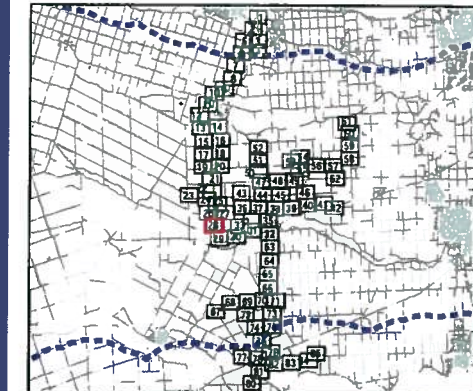
Empty space for species and habitat observations
--

CA=carcass; DP=distinctive parts; FE=feeding evidence; FY=eggs/nest; HO=house/den; OB=observed; SC=seat; SI=other sign; TK=track; VO=vocalization



- ### Legend
- Proposed T Line Route
 - Proposed Collector 120m Buffer
 - Turbines in Signed Lands
 - Standard Turbine (105 dBA)
 - Potential Turbine Locations
 - Turbines in Unsigned Lands
 - Standard Turbine (105 dBA)
 - 51 m Turbine Setback
 - Proposed Collector Cable
 - Alternate Collector Cable Route
 - Preliminary Study Area
 - Signed Property
 - Signed Property - Outside Study Area
 - Potential Signed Property
 - Potential Signed Property - Outside Study Area
 - ELC Boundary
 - Provincially Significant Wetland
 - Other/Locally Significant Wetland
 - Property Boundary

ELC done



- ### Notes
- Coordinate System: NAD 1983 UTM Zone 17N.
 - Base features produced under license with the Ontario Ministry of Natural Resources © Queen's Printer for Ontario, 2012.

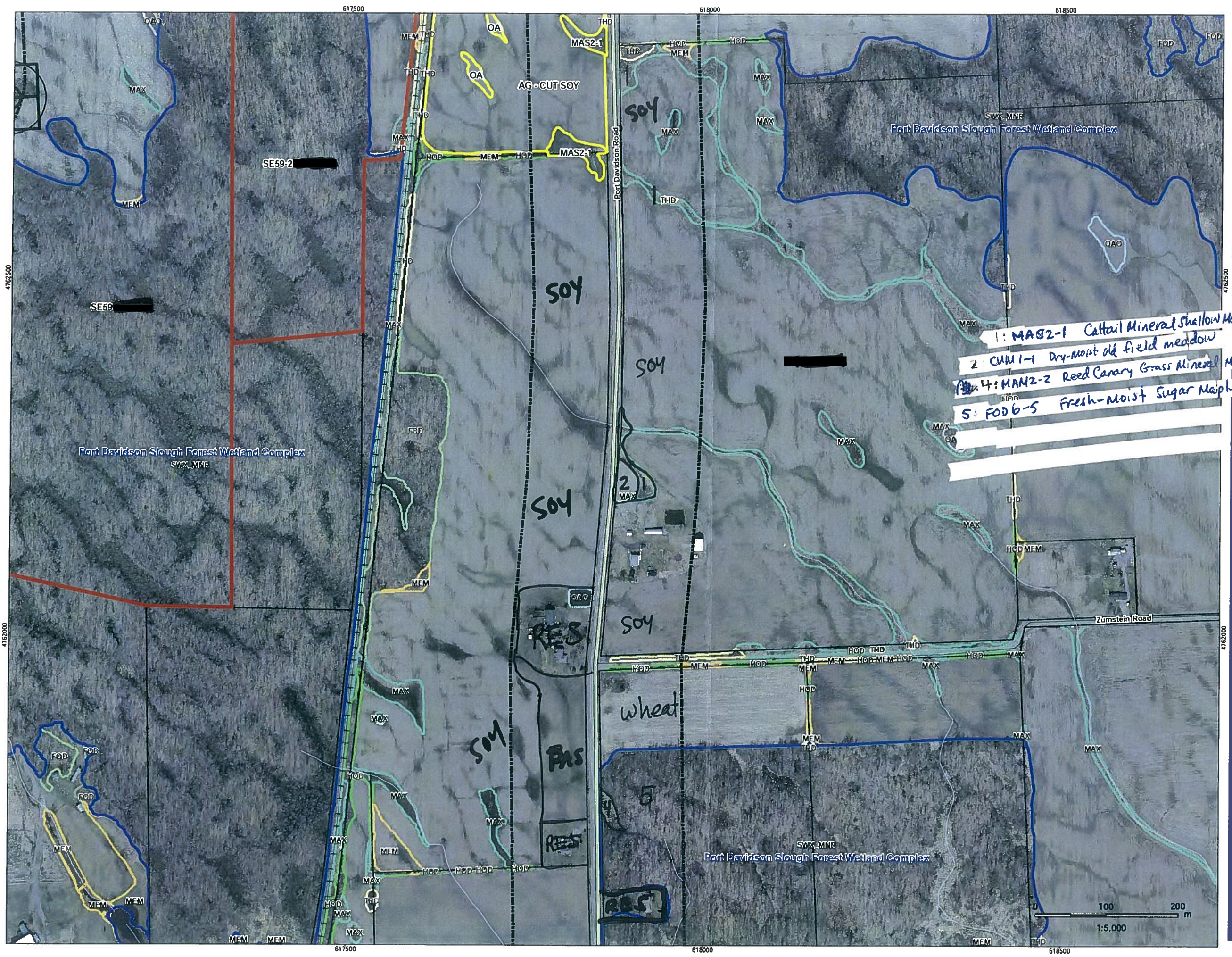


15. 10. 19

16. 10. 19

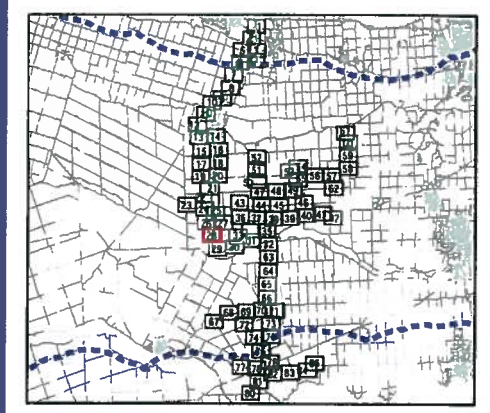
17. 10. 19

V:\01609\Active\160950269\planning\drawing\mxd\20120423_NHA_Fieldmap\160950269_Release_17_ELC_Collector_Map_Book_20120613.mxd
Revised: 2012-06-14 By: bcomper



Legend

- Proposed T Line Route
- Proposed Collector 120m Buffer
- Turbines in Signed Lands
 - Standard Turbine (105 dBA)
 - Potential Turbine Locations
- Turbines in Unsigned Lands
 - Standard Turbine (105 dBA)
 - 51 m Turbine Setback
- Proposed Collector Cable
- Alternate Collector Cable Route
- Preliminary Study Area
- Signed Property
- Signed Property - Outside Study Area
- Potential Signed Property
- Potential Signed Property - Outside Study Area
- ELC Boundary
- Provincially Significant Wetland
- Other/Locally Significant Wetland



Notes

- Coordinate System: NAD 1983 UTM Zone 17N.
- Base features produced under license with the Ontario Ministry of Natural Resources © Queen's Printer for Ontario, 2012.



Stantec

June, 2012
160950269

Client/Project
Niagara Region Wind Corporation
Amphibian Field Maps

Figure No.
28

Title
Proposed Collector Route
Map 28



100

100

100

ELC Polygon: #29-1 Assessment Type: ☒-Visual; no access / ☐-Walk through featureExtent of Physical Investigation of Feature: ☐-Entire / ☐-Partial, walk through polygon (indicate on map)

Reptile / Bat Hibernacula Features: Contains/potential reptile hibernacula features?
☐-Y* / ☐-N / ☐-Unknown, no access (*if yes, describe in table below)
 [i.e. features that would provide a route underground, including buried concrete or rock (e.g. foundations, bridge abutments or culverts with cracks/entry points, exposed rock crevices or inactive animal burrows)]

Contains/potential bat hibernacula features?
☐-Y* / ☐-N / ☐-Unknown, no access (*if yes, describe in table below)
 [i.e. karst topography, abandoned mines or caves]

POTENTIAL HIBERNACULA FEATURE(S) IDENTIFIED

UTM	Feature Description	Photo No.	Spp. Observed Using Feature

Bat Roosting Features: Contains/potential bat roosting features?
☐-Y* / ☐-N / ☐-Unknown, no access (*if yes, describe in table below)
 [i.e. tall trees with open surroundings, DBH >25cm, side-facing cavities ~10m high in tree]

POTENTIAL BAT ROOSTING FEATURE(S) IDENTIFIED

UTM	Tree ID	Tree Spp.	DBH	Photo No.	Decay Class (1-5)	No. of Cavities	Height and Type of Cavities

Stick Nests: Contains/potential large stick nests?
☐-Y* / ☒-N / ☐-Unknown, no access (*if yes, describe in table below)

STICK NEST(S) IDENTIFIED

UTM	Tree ID	Tree Spp.	Nest Size	Photo No.	Spp. Observed Using Feature

Seeps/Springs/Vernal Pools: Contains seeps/springs/vernal pools?
☐-Y* / ☐-N / ☒-Unknown, no access (*if yes, describe in table below)

SEEP / SPRING / VERNAL POOL FEATURE(S) IDENTIFIED

UTM	Feature No. & Type	Feature Size (Diameter)	Water Depth	Photo No.	Sub/Emergent Veg. Spp. Present?	Shrubs/ Logs at Edge Present?

SPECIES & HABITAT OBSERVATIONS (list species and type of observation & indicate on map)

(Left side of observation area)	(Right side of observation area)
---------------------------------	----------------------------------

CA=carcass; DP=distinctive parts; FE=feeding evidence; FY=eggs/nest; HO=house/den; OB=observed; SC=scat; SI=other sign; TK=track; VO=vocalization

ELC Polygon: # _____ Assessment Type: ☒-Visual; no access / ☐-Walk through featureExtent of Physical Investigation of Feature: ☐-Entire / ☐-Partial, walk through polygon (indicate on map)

Reptile / Bat Hibernacula Features: Contains potential reptile hibernacula features?
☐-Y* / ☐-N / ☐-Unknown, no access (*if yes, describe in table below)
 [i.e. features that would provide a route underground, including buried concrete or rock (e.g. foundations, bridge abutments or culverts with cracks/entry points, exposed rock crevices or inactive animal burrows)]

Contains potential bat hibernacula features?
☐-Y* / ☐-N / ☐-Unknown, no access (*if yes, describe in table below)
 [i.e. karst topography, abandoned mines or caves]

POTENTIAL HIBERNACULA FEATURE(S) IDENTIFIED

UTM	Feature Description	Photo No.	Spp. Observed Using Feature

Bat Roosting Features: Contains potential bat roosting features?
☐-Y* / ☐-N / ☐-Unknown, no access (*if yes, describe in table below)
 [i.e. tall trees with open surroundings, DBH >25cm, side-facing cavities ~10m high in tree]

POTENTIAL BAT ROOSTING FEATURE(S) IDENTIFIED

UTM	Tree ID	Tree Spp.	DBH	Photo No.	Decay Class (1-5)	No. of Cavities	Height and Type of Cavities

Stick Nests: Contains large stick nests?
☐-Y* / ☐-N / ☐-Unknown, no access (*if yes, describe in table below)

STICK NEST(S) IDENTIFIED

UTM	Tree ID	Tree Spp.	Nest Size	Photo No.	Spp. Observed Using Feature

Seeps/Springs/Vernal Pools: Contains seeps/springs/vernal pools?
☐-Y* / ☐-N / ☐-Unknown, no access (*if yes, describe in table below)

SEEP / SPRING / VERNAL POOL FEATURE(S) IDENTIFIED

UTM	Feature No. & Type	Feature Size (Diameter)	Water Depth	Photo No.	Sub/Emergent Veg. Spp. Present?	Shrubs/ Logs at Edge Present?

SPECIES & HABITAT OBSERVATIONS (list species and type of observation & indicate on map)

--	--

CA=carcass; DP=distinctive parts; FE=feeding evidence; FY=eggs/nest; HO=house/den; OB=observed; SC=scat; SI=other sign; TK=track; VO=vocalization



1. Coll. Tile 29; Roadside ELC,
Poly 3 Woodland & Wildlife Habitat
Assessment Form

Field Personnel: N. Charlton

Weather Conditions:	TEMP (°C): 22	WIND: 2-3	CLOUD: 90	PPT: —	PPT (in last 24 hrs): —
---------------------	------------------	--------------	--------------	-----------	----------------------------

ELC

COMMUNITY DESCRIPTION & CLASSIFICATION

29-3

11:40

TOPOGRAPHIC FEATURE**STAND DESCRIPTION:**

LAYER		HT	CVR	SPECIES IN ORDER OF DECREASING DOMINANCE (>>MUCH GREATER THAN; >GREATER THAN; = ABOUT EQUAL TO)
1	CANOPY			
2	SUB-CANOPY			
3	UNDERSTOREY			
4	GRD. LAYER	6-7	4	PHARRUN > cut grass > ASCSYRI > PAUCARO

HT CODES: 1= $\geq 25m$ 2= $10 < HT \leq 25m$ 3= $2 < HT \leq 10m$ 4= $1 < HT \leq 2m$ 5= $0.5 < HT \leq 1m$ 6= $0.2 < HT \leq 0.5m$ 7= $HT < 0.2m$

CVR CODES: 0=NONE 1=0%<CVR≤10% 2=10<CVR≤25% 3=25<CVR≤60% 4=CVR>60% N/O=not observed

STANDING SNAGS:	<10	10 - 24	25 - 50	>50
-----------------	-----	---------	---------	-----

ABUNDANCE CODES: N=NONE R=RARE O=OCCASIONAL A=ABUNDANT N/O=Not observed

STAND MATURITY:	PIONEER	YOUNG	MID-AGE	MATURE	OLD GROWTH
-----------------	---------	-------	---------	--------	------------

VEGETATION TYPE: 1 1 1 C 1 1 CODE: 00000

Dry-mast old field meadow	Cum 1-
---------------------------	--------

	COMPLEX	CODE:
--	---------	-------

Evidence of Disturbance / Notes:

Canal w narrow strip of
dry marsh

photo 5

LAYERS: 1=CANOPY >10m 2=SUB-CANOPY 3=UNDERSTOREY 4=GROUND (GRD.) LAYER
ABUNDANCE CODES: N=NONE R=RARE O=OCCASIONAL A=ABUNDANT D=DOMINANT N/O=Not observed

[illegible]

Signature:

: Wan Chan
(Field Personnel)

Quality Control: This form is complete ☒ & legible ☐

Signature:

This form is complete ☒ & legible ☒.

Nataheara
(Project Manager)

ELC Polygon: #29-3 Assessment Type: ☒-Visual; no access / ☐-Walk through featureExtent of Physical Investigation of Feature: ☐-Entire / ☐-Partial, walk through polygon (indicate on map)

Reptile / Bat Hibernacula Features: Contains potential reptile hibernacula features?
☐-Y* / ☒-N / ☐-Unknown, no access (*if yes, describe in table below)
 [i.e. features that would provide a route underground, including buried concrete or rock (e.g. foundations, bridge abutments or culverts with cracks/entry points, exposed rock crevices or inactive animal burrows)]
 Contains potential bat hibernacula features?
☐-Y* / ☒-N / ☐-Unknown, no access (*if yes, describe in table below)
 [i.e. karst topography, abandoned mines or caves]

POTENTIAL HIBERNACULA FEATURE(S) IDENTIFIED

UTM	Feature Description	Photo No.	Spp. Observed Using Feature

Bat Roosting Features: Contains potential bat roosting features?
☐-Y* / ☒-N / ☐-Unknown, no access (*if yes, describe in table below)
 [i.e. tall trees with open surroundings, DBH >25cm, side-facing cavities ~10m high in tree]

POTENTIAL BAT ROOSTING FEATURE(S) IDENTIFIED

UTM	Tree ID	Tree Spp.	DBH	Photo No.	Decay Class (1-5)	No. of Cavities	Height and Type of Cavities

Stick Nests: Contains large stick nests?
☐-Y* / ☒-N / ☐-Unknown, no access (*if yes, describe in table below)

STICK NEST(S) IDENTIFIED

UTM	Tree ID	Tree Spp.	Nest Size	Photo No.	Spp. Observed Using Feature

Seeps/Springs/Vernal Pools: Contains seeps/springs/vernal pools?
☐-Y* / ☐-N / ☒-Unknown, no access (*if yes, describe in table below)

SEEP / SPRING / VERNAL POOL FEATURE(S) IDENTIFIED

UTM	Feature No. & Type	Feature Size (Diameter)	Water Depth	Photo No.	Sub/Emergent Veg. Spp. Present?	Shrubs/ Logs at Edge Present?

SPECIES & HABITAT OBSERVATIONS (list species and type of observation & indicate on map)

Empty space for species and habitat observations
--

CA=carcass; DP=distinctive parts; FE=feeding evidence; FY=eggs/nest; HO=house/den; OB=observed; SC=seal; SI=other sign; TK=track; VO=vocalization

ELC Polygon: # _____ Assessment Type: ☒ Visual; no access / ☐ Walk through featureExtent of Physical Investigation of Feature: ☐ Entire / ☐ Partial, walk through polygon (indicate on map)

Reptile / Bat Hibernacula Features: Contains potential reptile hibernacula features?
☐-Y* / ☐-N / ☐-Unknown, no access (*if yes, describe in table below)
 [i.e. features that would provide a route underground, including buried concrete or rock (e.g. foundations, bridge abutments or culverts with cracks/entry points, exposed rock crevices or inactive animal burrows)]
 Contains potential bat hibernacula features?
☐-Y* / ☐-N / ☐-Unknown, no access (*if yes, describe in table below)
 [i.e. karst topography, abandoned mines or caves]

POTENTIAL HIBERNACULA FEATURE(S) IDENTIFIED			
UTM	Feature Description	Photo No.	Spp. Observed Using Feature

Bat Roosting Features: Contains potential bat roosting features?
☐-Y* / ☐-N / ☐-Unknown, no access (*if yes, describe in table below)
 [i.e. tall trees with open surroundings, DBH >25cm, side-facing cavities ~10m high in tree]

POTENTIAL BAT ROOSTING FEATURE(S) IDENTIFIED							
UTM	Tree ID	Tree Spp.	DBH	Photo No.	Decay Class (1-5)	No. of Cavities	Height and Type of Cavities

Stick Nests: Contains large stick nests?
☐-Y* / ☐-N / ☐-Unknown, no access (*if yes, describe in table below)

STICK NEST(S) IDENTIFIED						
UTM	Tree ID	Tree Spp.	Nest Size	Photo No.	Spp. Observed Using Feature	

Seeps/Springs/Vernal Pools: Contains seeps/springs/vernal pools?
☐-Y* / ☐-N / ☐-Unknown, no access (*if yes, describe in table below)

SEEP / SPRING / VERNAL POOL FEATURE(S) IDENTIFIED						
UTM	Feature No. & Type	Feature Size (Diameter)	Water Depth	Photo No.	Sub/Emergent Veg. Spp. Present?	Shrubs/ Logs at Edge Present?

SPECIES & HABITAT OBSERVATIONS (list species and type of observation & indicate on map)

CA=carcass; DP=distinctive parts; FE=feeding evidence; FY=eggs/nest; HO=house/den; OB=observed; SC=scat; SI=other sign; TK=track; VO=vocalization



d. Coll. Tile 29;
Poly S W

Roadside ELC, Woodland & Wildlife Habitat Assessment Form

Project Number: 160950769

Project Name: NRWC

Date: June 27, 2012

Field Personnel: N. Charlton

Weather Conditions:	TEMP (°C): 22	WIND: 2-3	CLOUD: 10	PPT: —	PPT (in last 24 hrs): —
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POLYGON DESCRIPTION

ELC COMMUNITY DESCRIPTION & CLASSIFICATION	POLYGON:	TOPOGRAPHIC FEATURE		HISTORY
	START TIME:	☐ LACUSTRINE ☐ RIVERINE ☐ BOTTOMLAND ☐ TERRACE ☐ VALLEY SLOPE ☐ TABLELAND ☐ ROLL UPLAND ☐ CLIFF	☐ TALUS ☐ CREVICE / CAVE ☐ ALVAR ☐ ROCKLAND ☐ BEACH / BAR ☐ SAND DUNE ☐ BLUFF	☐ NATURAL ☐ CULTURAL

STAND DESCRIPTION:

LAYER		HT	CVR	SPECIES IN ORDER OF DECREASING DOMINANCE (>>MUCH GREATER THAN; >GREATER THAN; = ABOUT EQUAL TO)
1	CANOPY			
2	SUB-CANOPY			
3	UNDERSTOREY			
4	GRD. LAYER	5-7	4	GRASS

HT CODES: 1=>25m 2=10<HT≤25m 3=2<HT≤10m 4=1<HT≤2m 5=0.5<HT≤1m 6=0.2<HT≤0.5m 7=HT<0.2m

CVR CODES: 0=NONE 1=0%<CVR≤10% 2=10<CVR≤25% 3=25<CVR≤60% 4=CVR>60% N/O=not observed

STANDING SNAGS:	<10	10 - 24	25 - 50	>50

ABUNDANCE CODES: N=NONE R=RARE O=OCCASIONAL A=ABUNDANT N/O=Not observed

STAND MATURITY:	PIONEER	YOUNG	MID-AGE	MATURE	OLD GROWTH
-----------------	---------	------------------	---------	--------	------------

VEGETATION TYPE: <i>Agriculture - field</i>		CODE: <i>N/A - AG</i>
COMPLEX		CODE:

Evidence of Disturbance / Notes:

grass/grain field
pic #6

LAYERS: 1=CANOPY >10m 2=SUB-CANOPY 3=UNDERSTOREY 4=GROUND (GRD.) LAYER
ABUNDANCE CODES: N=NONE R=RARE O=OCCASIONAL A=ABUNDANT D=DOMINANT N/O=Not observed

[illegible]

Signature:

Signature: Karl Brock
(Field Personnel)

Quality Control: This form is complete ☒ & legible ☒

Signature:

Quality Control: This form is complete ☐ & legible ☒.

Signature: *W. A. Herrera*
(Project Manager)

ELC Polygon: # _____ Assessment Type: ☒ Visual; no access / ☐ Walk through featureExtent of Physical Investigation of Feature: ☐ Entire / ☐ Partial, walk through polygon (indicate on map)

Reptile / Bat Hibernacula Features: Contains potential reptile hibernacula features?
☐-Y* / ☐-N / ☐-Unknown, no access (*if yes, describe in table below)
 [i.e. features that would provide a route underground, including buried concrete or rock (e.g. foundations, bridge abutments or culverts with cracks/entry points, exposed rock crevices or inactive animal burrows)]
 Contains potential bat hibernacula features?
☐-Y* / ☐-N / ☐-Unknown, no access (*if yes, describe in table below)
 [i.e. karst topography, abandoned mines or caves]

POTENTIAL HIBERNACULA FEATURE(S) IDENTIFIED

UTM	Feature Description	Photo No.	Spp. Observed Using Feature

Bat Roosting Features: Contains potential bat roosting features?
☐-Y* / ☐-N / ☐-Unknown, no access (*if yes, describe in table below)
 [i.e. tall trees with open surroundings, DBH >25cm, side-facing cavities ~10m high in tree]

POTENTIAL BAT ROOSTING FEATURE(S) IDENTIFIED

UTM	Tree ID	Tree Spp.	DBH	Photo No.	Decay Class (1-5)	No. of Cavities	Height and Type of Cavities

Stick Nests: Contains large stick nests?
☐-Y* / ☐-N / ☐-Unknown, no access (*if yes, describe in table below)

STICK NEST(S) IDENTIFIED

UTM	Tree ID	Tree Spp.	Nest Size	Photo No.	Spp. Observed Using Feature

Seeps/Springs/Vernal Pools: Contains seeps/springs/vernal pools?
☐-Y* / ☐-N / ☐-Unknown, no access (*if yes, describe in table below)

SEEP / SPRING / VERNAL POOL FEATURE(S) IDENTIFIED

UTM	Feature No. & Type	Feature Size (Diameter)	Water Depth	Photo No.	Sub/Emergent Veg. Spp. Present?	Shrubs/ Logs at Edge Present?

SPECIES & HABITAT OBSERVATIONS (list species and type of observation & indicate on map)

(Faint handwritten notes and a small sketch of a tree with a nest are visible in the background of this section.)	(Faint handwritten notes and a small sketch of a tree with a nest are visible in the background of this section.)
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CA=carcass; DP=distinctive parts; FE=feeding evidence; FY=eggs/nest; HO=house/den; OB=observed; SC=seat; SI=other sign; TK=track; VO=vocalization

Stantec Consulting Ltd.
1 - 70 Southgate Drive
Guelph, ON
Canada N1G 4P5
Tel. (519) 836-6050
Fax: (519) 836-2493

Stantec

Project Number: 160950269

**Roadside ELC,
Woodland & Wildlife Habitat
Assessment Form**

Date: June 27, 2012

Project Name: NRWC
Field Personnel: N. Charth

Weather Conditions:	TEMP (°C): 22	WIND: 2-3	CLOUD: 90	PPT: —	PPT (in last 24 hrs): —
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POLYGON DESCRIPTION

ELC COMMUNITY DESCRIPTION & CLASSIFICATION	POLYGON:	TOPOGRAPHIC FEATURE		HISTORY
	START TIME:	☐ LACUSTRINE ☐ RIVERINE ☒ BOTTOMLAND ☐ TERRACE ☐ VALLEY SLOPE ☐ TABLELAND ☐ ROLL UPLAND ☐ CLIFF	☐ TALUS ☐ CREVICE / CAVE ☐ ALVAR ☐ ROCKLAND ☐ BEACH / BAR ☐ SAND DUNE ☐ BLUFF	☒ NATURAL ☐ CULTURAL

STAND DESCRIPTION:

	LAYER	HT	CVR	SPECIES IN ORDER OF DECREASING DOMINANCE (>>MUCH GREATER THAN; >GREATER THAN; = ABOUT EQUAL TO)
1	CANOPY			
2	SUB-CANOPY			
3	UNDERSTOREY			
4	GRD. LAYER	5-7	4	TYPANGU >> PHAARUN > VITRIPA

HT CODES: 1= $\geq 25m$ 2= $10 < HT \leq 25m$ 3= $2 < HT \leq 10m$ 4= $1 < HT \leq 2m$ 5= $0.5 < HT \leq 1m$ 6= $0.2 < HT \leq 0.5m$ 7= $HT < 0.2m$

CVR CODES: 0=NONE 1=0%<CVR≤10% 2=10<CVR≤25% 3=25<CVR≤60% 4=CVR>60% N/O=not observed

STANDING SNAGS:	<10	10 - 24	25 - 50	>50
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ABUNDANCE CODES: N=NONE R=RARE O=OCCASIONAL A=ABUNDANT N/O=Not observed

STAND MATURITY:	PIONEER	YOUNG	MID-AGE	MATURE	OLD GROWTH
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VEGETATION TYPE: <i>Cattail/mixed shallow marsh</i>		CODE: <i>HASZ-1</i>
COMPLEX		CODE:

Evidence of Disturbance / Notes:

cattail MAS

RWB
Moda

LAYERS: 1=CANOPY >10m 2=SUB-CANOPY 3=UNDERSTOREY 4=GROUND (GRD.) LAYER
ABUNDANCE CODES: N=NONE R=RARE O=OCCASIONAL A=ABUNDANT D=DOMINANT N/O=Not observed

[illegible]

Signature:

(Field Personnel)

Quality Control: This form is complete ☒ & legible ☒

Signature:

(Project Manager)

ELC Polygon: # _____ Assessment Type: ☒-Visual; no access / ☐-Walk through featureExtent of Physical Investigation of Feature: ☐-Entire / ☐-Partial, walk through polygon (indicate on map)

Reptile / Bat Hibernacula Features: Contains potential reptile hibernacula features?
☐-Y* / ☒-N / ☐-Unknown, no access (*if yes, describe in table below)
 [i.e. features that would provide a route underground, including buried concrete or rock (e.g. foundations, bridge abutments or culverts with cracks/entry points, exposed rock crevices or inactive animal burrows)]
 Contains potential bat hibernacula features?
☐-Y* / ☒-N / ☐-Unknown, no access (*if yes, describe in table below)
 [i.e. karst topography, abandoned mines or caves]

POTENTIAL HIBERNACULA FEATURE(S) IDENTIFIED

UTM	Feature Description	Photo No.	Spp. Observed Using Feature

Bat Roosting Features: Contains potential bat roosting features?
☐-Y* / ☒-N / ☐-Unknown, no access (*if yes, describe in table below)
 [i.e. tall trees with open surroundings, DBH >25cm, side-facing cavities ~10m high in tree]

POTENTIAL BAT ROOSTING FEATURE(S) IDENTIFIED

UTM	Tree ID	Tree Spp.	DBH	Photo No.	Decay Class (1-5)	No. of Cavities	Height and Type of Cavities

Stick Nests: Contains large stick nests?
☐-Y* / ☒-N / ☐-Unknown, no access (*if yes, describe in table below)

STICK NEST(S) IDENTIFIED

UTM	Tree ID	Tree Spp.	Nest Size	Photo No.	Spp. Observed Using Feature

Seeps/Springs/Vernal Pools: Contains seeps/springs/vernal pools?
☐-Y* / ☐-N / ☒-Unknown, no access (*if yes, describe in table below)

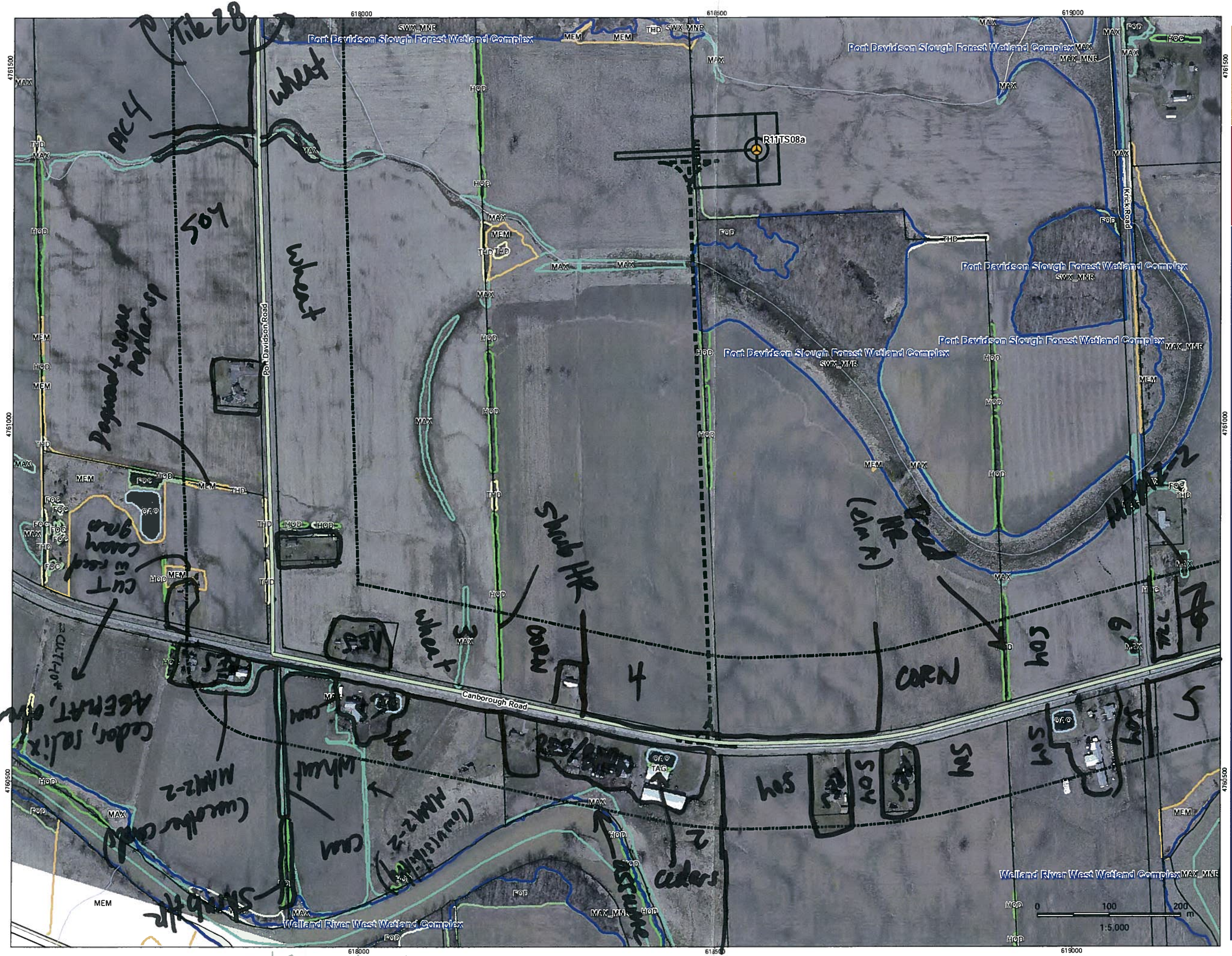
SEEP / SPRING / VERNAL POOL FEATURE(S) IDENTIFIED

UTM	Feature No. & Type	Feature Size (Diameter)	Water Depth	Photo No.	Sub/Emergent Veg. Spp. Present?	Shrubs/ Logs at Edge Present?

SPECIES & HABITAT OBSERVATIONS (list species and type of observation & indicate on map)

CA=carcass; DP=distinctive parts; FE=feeding evidence; FY=eggs/nest; HO=house/den; OB=observed; SC=seal; SI=other sign; TK=track; VO=vocalization

V:\01609\Activat\160950269\planning\drawing\20120423_NHA_Fieldmaps\160950269_Release_17_ELC_Collector_Map_Book_20120613.mxd
Revised: 2012-06-14 By: bcomper



Legend

Proposed T Line Route

Proposed Collector 120m Buffer

Turbines in Signed Lands

Standard Turbine (105 dBA)

Potential Turbine Locations

Turbines in Unsigned Lands

Standard Turbine (105 dBA)

51 m Turbine Setback

Proposed Collector Cable

Alternate Collector Cable Route

Preliminary Study Area

Signed Property

Signed Property - Outside Study Area

Potential Signed Property

Potential Signed Property - Outside Study Area

ELC Boundary

Provincially Significant Wetland

Other/Locally Significant Wetland

Property Boundary

Notes

1. Coordinate System: NAD 1983 UTM Zone 17N.

2. Base features produced under license with the Ontario Ministry of Natural Resources © Queen's Printer for Ontario, 2012.

June, 2012
160950269

Client/Project

Niagara Region Wind Corporation
Amphibian Field Maps

Figure No.

29

Title

Proposed Collector Route
Map 29

7. cut hay



Coll. Tile 30; Roadside ELC,
Poly I Woodland & Wildlife Habitat
Assessment Form

Stantec

Project Number: 160950269

Project Name: NRWC

Date: June 27

Field Personnel: N. Charlton

Weather Conditions:	TEMP (°C): 22	WIND: 2-3	CLOUD: 90	PPT: -	PPT (in last 24 hrs): -
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POLYGON DESCRIPTION

ELC COMMUNITY DESCRIPTION & CLASSIFICATION	POLYGON:	TOPOGRAPHIC FEATURE		HISTORY
	START TIME:	☐ LACUSTRINE ☐ RIVERINE ☐ BOTTOMLAND ☐ TERRACE ☐ VALLEY SLOPE ☐ TABLELAND ☒ ROLL UPLAND ☐ CLIFF	☐ TALUS ☐ CREVICE / CAVE ☐ ALVAR ☐ ROCKLAND ☐ BEACH / BAR ☐ SAND DUNE ☐ BLUFF	☐ NATURAL ☒ CULTURAL

STAND DESCRIPTION:

LAYER		HT	CVR	SPECIES IN ORDER OF DECREASING DOMINANCE (>>MUCH GREATER THAN; >GREATER THAN; = ABOUT EQUAL TO)
1	CANOPY			
2	SUB-CANOPY			
3	UNDERSTOREY			
4	GRD. LAYER	5-7	4	Grass

HT CODES: 1= $\geq 25\text{m}$ 2= $10 < \text{HT} \leq 25\text{m}$ 3= $2 < \text{HT} \leq 10\text{m}$ 4= $1 < \text{HT} \leq 2\text{m}$ 5= $0.5 < \text{HT} \leq 1\text{m}$ 6= $0.2 < \text{HT} \leq 0.5\text{m}$ 7= $\text{HT} < 0.2\text{m}$

CVR CODES: 0=NONE 1=0%<CVR≤10% 2=10<CVR≤25% 3=25<CVR≤60% 4=CVR>60% N/O=not observed

STANDING SNAGS:	<10	10 - 24	25 - 50	>50
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ABUNDANCE CODES: N=NONE R=RARE O=OCCASIONAL A=ABUNDANT N/O=Not observed

STAND MATURITY:	PIONEER	YOUNG	MID-AGE	MATURE	OLD GROWTH
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VEGETATION TYPE: <i>Pasture</i>		CODE: <i>N/A - A2</i>
COMPLEX		CODE:

Evidence of Disturbance / Notes:

Fenced grasses - pasture/hay
pic # 7

LAYERS: 1=CANOPY >10m 2=SUB-CANOPY 3=UNDERSTOREY 4=GROUND (GRD.) LAYER
ABUNDANCE CODES: N=NONE R=RARE O=OCCASIONAL A=ABUNDANT D=DOMINANT N/O=Not observed

[illegible]

Signature:

: Wally Brown
(Field Personnel)

Quality Control This form is complete ☒ & legible ☐

Signature:

of This form is complete ☒ & legible ☒

Signature: Nataheara
(Project Manager)

ELC Polygon: # _____ Assessment Type: ☒-Visual; no access / ☐-Walk through featureExtent of Physical Investigation of Feature: ☐-Entire / ☐-Partial, walk through polygon (indicate on map)

Reptile / Bat Hibernacula Features: Contains potential reptile hibernacula features?
☐-Y* / ☐-N / ☐-Unknown, no access (*if yes, describe in table below)
 [i.e. features that would provide a route underground, including buried concrete or rock (e.g. foundations, bridge abutments or culverts with cracks/entry points, exposed rock crevices or inactive animal burrows)]

Contains potential bat hibernacula features?
☐-Y* / ☐-N / ☐-Unknown, no access (*if yes, describe in table below)
 [i.e. karst topography, abandoned mines or caves]

POTENTIAL HIBERNACULA FEATURE(S) IDENTIFIED			
UTM	Feature Description	Photo No.	Spp. Observed Using Feature

Bat Roosting Features: Contains potential bat roosting features?
☐-Y* / ☐-N / ☐-Unknown, no access (*if yes, describe in table below)
 [i.e. tall trees with open surroundings, DBH > 25cm, side-facing cavities ~10m high in tree]

POTENTIAL BAT ROOSTING FEATURE(S) IDENTIFIED							
UTM	Tree ID	Tree Spp.	DBH	Photo No.	Decay Class (1-5)	No. of Cavities	Height and Type of Cavities

Stick Nests: Contains large stick nests?
☐-Y* / ☐-N / ☐-Unknown, no access (*if yes, describe in table below)

STICK NEST(S) IDENTIFIED						
UTM	Tree ID	Tree Spp.	Nest Size	Photo No.	Spp. Observed Using Feature	

Seeps/Springs/Vernal Pools: Contains seeps/springs/vernal pools?
☐-Y* / ☐-N / ☐-Unknown, no access (*if yes, describe in table below)

SEEP / SPRING / VERNAL POOL FEATURE(S) IDENTIFIED						
UTM	Feature No. & Type	Feature Size (Diameter)	Water Depth	Photo No.	Sub/Emergent Veg. Spp. Present?	Shrubs/ Logs at Edge Present?

SPECIES & HABITAT OBSERVATIONS (list species and type of observation & indicate on map)

CA=carcass; DP=distinctive parts; FE=feeding evidence; FY=eggs/nest; HO=house/den; OB=observed; SC=scat; SI=other sign; TK=track; VO=vocalization



Coll. Title 30, Roadside ELC,
Poly 3 Woodland & Wildlife Habitat
Assessment Form

Project Name: NBWC

Field Personnel: N. Charlton

Weather Conditions:	TEMP (°C): 22	WIND: 2-3	CLOUD: 90	PPT: —	PPT (in last 24 hrs): —
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TOPOGRAPHIC FEATURE		HISTORY
☐ LACUSTRINE	☐ TALUS	☒ NATURAL
☒ RIVERINE	☐ CREVICE / CAVE	
☐ BOTTOMLAND	☐ ALVAR	☐ CULTURAL
☐ TERRACE	☐ ROCKLAND	
☐ VALLEY SLOPE	☐ BEACH / BAR	
☐ TABLELAND	☐ SAND DUNE	
☐ ROLL. UPLAND	☐ BLUFF	
☐ CLIFF		

ELC

COMMUNITY DESCRIPTION & CLASSIFICATION

STAND DESCRIPTION:

LAYER		HT	CVR	SPECIES IN ORDER OF DECREASING DOMINANCE (>>MUCH GREATER THAN; >GREATER THAN; = ABOUT EQUAL TO)
1	CANOPY	2	1	FRAX
2	SUB-CANOPY			
3	UNDERSTOREY	4	1	CORNUS > SAMBUCUS
4	GRD. LAYER	5-7	4	PITAEARN

HT CODES: 1= $>25m$ 2= $10 < HT \leq 25m$ 3= $2 < HT \leq 10m$ 4= $1 < HT \leq 2m$ 5= $0.5 < HT \leq 1m$ 6= $0.2 < HT \leq 0.5m$ 7= $HT < 0.2m$

CVR CODES: 0=NONE 1=0%<CVR≤10% 2=10<CVR≤25% 3=25<CVR≤60% 4=CVR>60% N/O=not observed

STANDING SNAGS:	<10	10 - 24	25 - 50	>50
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ABUNDANCE CODES: N=NONE R=RARE O=OCCASIONAL A=ABUNDANT N/O=Not observed

STAND MATURITY:	PIONEER	YOUNG	MID-AGE	MATURE	OLD GROWTH
-----------------	---------	-------	---------	--------	------------

VEGETATION TYPE:		CODE:
reed canary mineral meadow marsh		MAM 2-2
COMPLEX		CODE:

Evidence of Disturbance / Notes:

PHC #10

LAYERS: 1=CANOPY >10m 2=SUB-CANOPY 3=UNDERSTOREY 4=GROUND (GRD.) LAYER
ABUNDANCE CODES: N=NONE R=RARE O=OCCASIONAL A=ABUNDANT D=DOMINANT N/O=Not observed

[illegible]

Signature:

(Field Personnel)

Quality Control: This form is complete ☒ & legible ☒.

Signature:

(Project Manager)

ELC Polygon: # _____ Assessment Type: ☒-Visual; no access / ☐-Walk through featureExtent of Physical Investigation of Feature: ☐-Entire / ☐-Partial, walk through polygon (indicate on map)

Reptile / Bat Hibernacula Features: Contains potential reptile hibernacula features?
☐-Y* / ☒-N / ☐-Unknown, no access (*if yes, describe in table below)
 [i.e. features that would provide a route underground, including buried concrete or rock (e.g. foundations, bridge abutments or culverts with cracks/entry points, exposed rock crevices or inactive animal burrows)]

Contains potential bat hibernacula features?
☐-Y* / ☒-N / ☐-Unknown, no access (*if yes, describe in table below)
 [i.e. karst topography, abandoned mines or caves]

POTENTIAL HIBERNACULA FEATURE(S) IDENTIFIED			
UTM	Feature Description	Photo No.	Spp. Observed Using Feature

Bat Roosting Features: Contains potential bat roosting features?
☐-Y* / ☒-N / ☐-Unknown, no access (*if yes, describe in table below)
 [i.e. tall trees with open surroundings, DBH >25cm, side-facing cavities ~10m high in tree]

POTENTIAL BAT ROOSTING FEATURE(S) IDENTIFIED							
UTM	Tree ID	Tree Spp.	DBH	Photo No.	Decay Class (1-5)	No. of Cavities	Height and Type of Cavities

Stick Nests: Contains large stick nests?
☐-Y* / ☒-N / ☐-Unknown, no access (*if yes, describe in table below)

STICK NEST(S) IDENTIFIED					
UTM	Tree ID	Tree Spp.	Nest Size	Photo No.	Spp. Observed Using Feature

Seeps/Springs/Vernal Pools: Contains seeps/springs/vernal pools?
☐-Y* / ☐-N / ☒-Unknown, no access (*if yes, describe in table below)

SEEP / SPRING / VERNAL POOL FEATURE(S) IDENTIFIED						
UTM	Feature No. & Type	Feature Size (Diameter)	Water Depth	Photo No.	Sub/Emergent Veg. Spp. Present?	Shrubs/ Logs at Edge Present?

SPECIES & HABITAT OBSERVATIONS (list species and type of observation & indicate on map)

--

CA=carcass; DP=distinctive parts; FE=feeding evidence; FY=eggs/nest; HO=house/den; OB=observed; SC=scat; SI=other sign; TK=track; VO=vocalization



Coll. Tile 30, Roadside ELC,
Poly 4 Woodland & Wildlife Habitat
Assessment Form

Project Name: NRWL

Field Personnel: N. Charlton

Weather Conditions:	TEMP (°C): 22	WIND 2-3	CLOUD: 90	PPT: —	PPT (in last 24 hrs): —
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HISTORY

ELC

COMMUNITY DESCRIPTION & CLASSIFICATION

POLYGON:

30-4

START TIME:

1:30

END TIME:

☐ LACUSTRINE
☐ RIVERINE
☐ BOTTOMLAND
☐ TERRACE
☐ VALLEY SLOP
☐ TABLELAND
☐ ROLL. UPLAND
☐ CLIFF

☐ TALUS
☐ CREVICE / CAVE
☐ ALVAR
☐ ROCKLAND
☐ BEACH / BAR
☐ SAND DUNE
☐ BLUFF

☐ NATURAL
☐ CULTURAL

CANOPY

SPECIES IN ORDER OF DECREASING DOMINANCE
(**> GREATER THAN; >GREATER THAN; = ABOUT EQUAL TO)**

1	CANOPY			
2	SUB-CANOPY			
3	UNDERSTOREY			
4	GRD. LAYER	5-7	4	PHARRUN, TYPANG, SOLIDAGO, BROINER

HT CODES: 1=>25m 2=10<HT≤25m 3=2<HT≤10m 4=1<HT≤2m 5=0.5<HT≤1m 6=0.2<HT≤0.5m 7=HT<0.2m

CVR CODES: 0=NONE 1=0%<CVR≤10% 2=10<CVR≤25% 3=25<CVR≤60% 4=CVR>60% N/O=not observed

STANDING SNAGS:	☒ <10	☒ 10 - 24	☒ 25 - 50	☒ >50
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ABUNDANCE CODES: N=NONE R=RARE O=OCCASIONAL A=ABUNDANT N/O=Not observed

STAND MATURITY:	PIONEER	YOUNG	MID-AGE	MATURE	OLD GROWTH
-----------------	---------	-------	---------	--------	------------

VEGETATION TYPE: <i>reed-canary grass mineral meadow marsh</i>		CODE: <i>MAM2-2</i>
COMPLEX		CODE:

Evidence of Disturbance / Notes:

LAYERS: 1=CANOPY >10m 2=SUB-CANOPY 3=UNDERSTOREY 4=GROUND (GRD.) LAYER
ABUNDANCE CODES: N=NONE R=RARE O=OCCASIONAL A=ABUNDANT D=DOMINANT N/O=Not observed

[illegible]

Signature:

Signature: Wah Chee
(Field Personnel)

Quality Control: This form is complete ☒ & legible ☐.

Signature:

This form is complete ☒ & legible ☒.

: Nataheara
(Project Manager)

ELC Polygon: #30-4 Assessment Type: ☒-Visual; no access / ☐-Walk through featureExtent of Physical Investigation of Feature: ☐-Entire / ☐-Partial, walk through polygon (indicate on map)

Reptile / Bat Hibernacula Features: Contains/potential reptile hibernacula features?
☐-Y* / ☒-N / ☐-Unknown, no access (*if yes, describe in table below)
 [i.e. features that would provide a route underground, including buried concrete or rock (e.g. foundations, bridge abutments or culverts with cracks/entry points, exposed rock crevices or inactive animal burrows)]
 Contains/potential bat hibernacula features?
☐-Y* / ☒-N / ☐-Unknown, no access (*if yes, describe in table below)
 [i.e. karst topography, abandoned mines or caves]

POTENTIAL HIBERNACULA FEATURE(S) IDENTIFIED

UTM	Feature Description	Photo No.	Spp. Observed Using Feature

Bat Roosting Features: Contains/potential bat roosting features?
☐-Y* / ☒-N / ☐-Unknown, no access (*if yes, describe in table below)
 [i.e. tall trees with open surroundings, DBH >25cm, side-facing cavities ~10m high in tree]

POTENTIAL BAT ROOSTING FEATURE(S) IDENTIFIED

UTM	Tree ID	Tree Spp.	DBH	Photo No.	Decay Class (1-5)	No. of Cavities	Height and Type of Cavities

Stick Nests: Contains/potential large stick nests?
☐-Y* / ☒-N / ☐-Unknown, no access (*if yes, describe in table below)

STICK NEST(S) IDENTIFIED

UTM	Tree ID	Tree Spp.	Nest Size	Photo No.	Spp. Observed Using Feature

Seeps/Springs/Vernal Pools: Contains seeps/springs/vernal pools?
☐-Y* / ☐-N / ☐-Unknown, no access (*if yes, describe in table below)

SEEP / SPRING / VERNAL POOL FEATURE(S) IDENTIFIED

UTM	Feature No. & Type	Feature Size (Diameter)	Water Depth	Photo No.	Sub/Emergent Veg. Spp. Present?	Shrubs/ Logs at Edge Present?

SPECIES & HABITAT OBSERVATIONS (list species and type of observation & indicate on map)

(Left side of observation table)	(Right side of observation table)
----------------------------------	-----------------------------------

CA=carcass; DP=distinctive parts; FE=feeding evidence; FY=eggs/nest; HO=house/den; OB=observed; SC=scat; SI=other sign; TK=track; VO=vocalization



Coll. Tile 30;
Poly 5 Wood

3. Roadside ELC, Woodland & Wildlife Habitat Assessment Form

Project Name: NRWC

Field Personnel: N. Charlton

PPT (in last 24 hrs):

POLYGON DESCRIPTION

ELC

COMMUNITY DESCRIPTION & CLASSIFICATION

POLYGON: 24-5

START TIME:

END TIME:

TOPOGRAPHIC FEATURE

HISTORY

☐ LACUSTRINE
☐ RIVERINE
☒ BOTTOMLAND
☐ TERRACE
☐ VALLEY SLOPE
☐ TABLELAND
☐ ROLL. UPLAND
☐ CLIFF

☐ TALUS
☐ CREVICE / CAVE
☐ ALVAR
☐ ROCKLAND
☐ BEACH / BAR
☐ SAND DUNE
☐ BLUFF

☒ NATURAL
☐ CULTURAL**STAND DESCRIPTION:**

LAYER		HT	CVR	SPECIES IN ORDER OF DECREASING DOMINANCE (>>MUCH GREATER THAN; >GREATER THAN; = ABOUT EQUAL TO)
1	CANOPY	2	1	FRAX SP
2	SUB-CANOPY			
3	UNDERSTOREY	4	2	CORNUS > SAMBUCUS
4	GRD. LAYER	5-7	4	PHALARIS > ALOPECURUS > SOLIDA

HT CODES: 1=>25m 2=10<HT≤25m 3=2<HT≤10m 4=1<HT≤2m 5=0.5<HT≤1m 6=0.2<HT≤0.5m 7=HT<0.2m

CVR CODES: 0=NONE 1=0%<CVR≤10% 2=10<CVR≤25% 3=25<CVR≤60% 4=CVR>60% N/O=not observed

STANDING SNAGS:	<10	10 - 24	25 - 50	>50
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ABUNDANCE CODES: N=NONE R=RARE O=OCCASIONAL A=ABUNDANT N/O=Not observed

STAND MATURITY:	PIONEER	YOUNG	MID-AGE	MATURE	OLD GROWTH
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VEGETATION TYPE:	Shrubland	CODE:	1531
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gray dogwood swamp thicket	SWT 2-9
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	COMPLEX		CODE:
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Evidence of Disturbance / Notes:

(conifer plantation at back, can't tell sp.)

→ Shrubs ~ 35%

→ could be water in center but no access

LAYERS: 1=CANOPY >10m 2=SUB-CANOPY 3=UNDERSTOREY 4=GROUND (GRD.) LAYER

ABUNDANCE CODES: N=NONE R=RARE O=OCCASIONAL A=ABUNDANT D=DOMINANT N/O=Not observed

SPECIES CODE	LAYER				DISTANCE FROM RD.		COLL
	1	2	3	4	≤5 m	>5 m	
TREES:							
FRAX							
SALIX							
SHRUBS:							
SAMBUCUS			A-0		✓	✓	
CORNUS			A		✓	✓	
GROUND:							
ASCYRI				O	✓		
PHALARIS				A	✓		
Centaurea sp				A-0	✓		
VITRPA				R	✓		
SOLIDAGO				O	✓		
PHLEBAT				O		✓	
DIPFULL				R-0		✓	

Signature:

Signature: [Signature]
(Field Personnel)

Quality Control: This form is complete ☒ & legible ☒

Signature:

Quality Control: This form is complete ☒ & legible ☐.

Signature: Natahearon
(Project Manager)

ELC Polygon: #30-5 Assessment Type: ☒ Visual; no access / ☐ Walk through featureExtent of Physical Investigation of Feature: ☐ Entire / ☐ Partial, walk through polygon (indicate on map)

Reptile / Bat Hibernacula Features: Contains potential reptile hibernacula features?
☐ -Y* / ☒ -N / ☐ -Unknown, no access (*if yes, describe in table below)
 [i.e. features that would provide a route underground, including buried concrete or rock (e.g. foundations, bridge abutments or culverts with cracks/entry points, exposed rock crevices or inactive animal burrows)]
 Contains potential bat hibernacula features?
☐ -Y* / ☒ -N / ☐ -Unknown, no access (*if yes, describe in table below)
 [i.e. karst topography, abandoned mines or caves]

POTENTIAL HIBERNACULA FEATURE(S) IDENTIFIED			
UTM	Feature Description	Photo No.	Spp. Observed Using Feature

Bat Roosting Features: Contains potential bat roosting features?
☐ -Y* / ☒ -N / ☐ -Unknown, no access (*if yes, describe in table below)
 [i.e. tall trees with open surroundings, DBH >25cm, side-facing cavities ~10m high in tree]

POTENTIAL BAT ROOSTING FEATURE(S) IDENTIFIED							
UTM	Tree ID	Tree Spp.	DBH	Photo No.	Decay Class (1-5)	No. of Cavities	Height and Type of Cavities

Stick Nests: Contains large stick nests?
☐ -Y* / ☒ -N / ☐ -Unknown, no access (*if yes, describe in table below)

STICK NEST(S) IDENTIFIED					
UTM	Tree ID	Tree Spp.	Nest Size	Photo No.	Spp. Observed Using Feature

Seeps/Springs/Vernal Pools: Contains seeps/springs/vernal pools?
☐ -Y* / ☐ -N / ☒ -Unknown, no access (*if yes, describe in table below)

SEEP / SPRING / VERNAL POOL FEATURE(S) IDENTIFIED						
UTM	Feature No. & Type	Feature Size (Diameter)	Water Depth	Photo No.	Sub/Emergent Veg. Spp. Present?	Shrubs/ Logs at Edge Present?

SPECIES & HABITAT OBSERVATIONS (list species and type of observation & indicate on map)

--

CA=carcass; DP=distinctive parts; FE=feeding evidence; FY=eggs/nest; HO=house/den; OB=observed; SC=scat; SI=other sign; TK=track; VO=vocalization



Coll. Title 30; Roadside ELC,
Poly 6 Woodland & Wildlife Habitat
Assessment Form

Field Personnel: N. Carlton

TEMP (°C):	WIND:	CLOUD:	PPT:	PPT (in last 24 hrs):
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ELC

COMMUNITY DESCRIPTION & CLASSIFICATION

7:00

TOPOGRAPHIC FEATURE	HISTORY
---------------------	---------

☐ LACUSTRINE	☐ TALUS	☐ NATURAL
☐ RIVERINE	☐ CREVICE / CAVE	☒ CULTURAL
☐ BOTTOMLAND	☐ ALVAR	
☐ TERRACE	☐ ROCKLAND	
☐ VALLEY SLOPE	☐ BEACH / BAR	
☐ TABLELAND	☐ SAND DUNE	
☒ ROLL. UPLAND	☐ BLUFF	
☐ CLIFF		

SPECIES IN ORDER OF DECREASING DOMINANCE
(>>MUCH GREATER THAN; >GREATER THAN; = ABOUT EQUAL TO)

4	GRD. LAYER			
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VEGETATION TYPE:	Pine cultural plantation	CODE:	CU3
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	COMPLEX	CODE:
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Disturbance / Notes:

- can't determine species from road
- height $\sim 10-15\text{m}$

[illegible]

: Nathaniel
(Field Personnel)

1: This form is complete ☒ & legible ☒.

2: Nataheena
(Project Manager)

ELC Polygon: #30-6 Assessment Type: ☒-Visual; no access / ☐-Walk through featureExtent of Physical Investigation of Feature: ☐-Entire / ☐-Partial, walk through polygon (indicate on map)

Reptile / Bat Hibernacula Features: Contains potential reptile hibernacula features?
☐-Y* / ☒-N / ☐-Unknown, no access (*if yes, describe in table below)
 [i.e. features that would provide a route underground, including buried concrete or rock (e.g. foundations, bridge abutments or culverts with cracks/entry points, exposed rock crevices or inactive animal burrows)]
 Contains potential bat hibernacula features?
☐-Y* / ☒-N / ☐-Unknown, no access (*if yes, describe in table below)
 [i.e. karst topography, abandoned mines or caves]

POTENTIAL HIBERNACULA FEATURE(S) IDENTIFIED			
UTM	Feature Description	Photo No.	Spp. Observed Using Feature

Bat Roosting Features: Contains potential bat roosting features?
☐-Y* / ☐-N / ☒-Unknown, no access (*if yes, describe in table below)
 [i.e. tall trees with open surroundings, DBH >25cm, side-facing cavities ~10m high in tree]

POTENTIAL BAT ROOSTING FEATURE(S) IDENTIFIED							
UTM	Tree ID	Tree Spp.	DBH	Photo No.	Decay Class (1-5)	No. of Cavities	Height and Type of Cavities

Stick Nests: Contains large stick nests?
☐-Y* / ☐-N / ☒-Unknown, no access (*if yes, describe in table below)

STICK NEST(S) IDENTIFIED					
UTM	Tree ID	Tree Spp.	Nest Size	Photo No.	Spp. Observed Using Feature

Seeps/Springs/Vernal Pools: Contains seeps/springs/vernal pools?
☐-Y* / ☐-N / ☒-Unknown, no access (*if yes, describe in table below)

SEEP / SPRING / VERNAL POOL FEATURE(S) IDENTIFIED						
UTM	Feature No. & Type	Feature Size (Diameter)	Water Depth	Photo No.	Sub/Emergent Veg. Spp. Present?	Shrubs/ Logs at Edge Present?

SPECIES & HABITAT OBSERVATIONS (list species and type of observation & indicate on map)

CA=carcass; DP=distinctive parts; FE=feeding evidence; FY=eggs/nest; HO=house/den; OB=observed; SC=seal; SI=other sign; TK=track; VO=vocalization REV: 2012-01-03



Coll. Tile 30; Roadside ELC,
Poly 7. Woodland & Wildlife Habitat
Assessment Form

Field Personnel: N. Charlton

Weather Conditions:	TEMP (°C): 22	WIND: 2-3	CLOUD: 90	PPT: —	PPT (in last 24 hrs): —
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TOPOGRAPHIC/FEATURE		HISTORY
☐ LACUSTRINE	☐ TALUS	☐ NATURAL
☐ RIVERINE	☐ CREVICE / CAVE	☒ CULTURAL
☐ BOTTOMLAND	☐ ALVAR	
☐ TERRACE	☐ ROCKLAND	
☐ VALLEY SLOPE	☐ BEACH / BAR	
☐ TABLELAND	☐ SAND DUNE	
☐ ROLL. UPLAND	☐ BLUFF	
☐ CLIFF		

ELC

COMMUNITY DESCRIPTION & CLASSIFICATION

STAND DESCRIPTION:

LAYER		HT	CVR	SPECIES IN ORDER OF DECREASING DOMINANCE (>>MUCH GREATER THAN; >GREATER THAN; = ABOUT EQUAL TO)
1	CANOPY	3	2	Fraxinus > ALEPREE
2	SUB-CANOPY			
3	UNDERSTOREY	4	3	Cornus (gray dogwood) > SAMRACUS SP
4	GRD. LAYER	5-7	4	Grasses > DIPFULL = PHARRUN

HT CODES: 1= $\geq 25m$ 2= $10 < HT \leq 25m$ 3= $2 < HT \leq 10m$ 4= $1 < HT \leq 2m$ 5= $0.5 < HT \leq 1m$ 6= $0.2 < HT \leq 0.5m$ 7= $HT < 0.2m$

CVR CODES: 0=NONE 1=0%<CVR≤10% 2=10<CVR≤25% 3=25<CVR≤60% 4=CVR>60% N/O=not observed

STANDING SNAGS:	N	<10	N	10 - 24	N	25 - 50	N	>50
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ABUNDANCE CODES: N=NONE R=RARE O=OCCASIONAL A=ABUNDANT N/O=Not observed

STAND MATURITY:	PIONEER	☒ YOUNG	MID-AGE	MATURE	OLD GROWTH
-----------------	---------	---	---------	--------	------------

VEGETATION TYPE: <i>gray dogwood cultural thicket</i>		CODE: <i>CUT1-4</i>
COMPLEX		CODE:

Evidence of Disturbance / Notes:

can't see much as it is on downslope
behind soy

LAYERS: 1=CANOPY >10m 2=SUB-CANOPY 3=UNDERSTOREY 4=GROUND (GRD.) LAYER
ABUNDANCE CODES: N=NONE R=RARE O=OCCASIONAL A=ABUNDANT D=DOMINANT N/O=Not observed

[illegible]

Signature:

Signature: Wm. Lee H.
(Field Personnel)

Quality Control: This form is complete ☒ & legible ☒

Signature:

is complete ☒ & legible ☒.

Palakhears
(Project Manager)

ELC Polygon: # 30-7 Assessment Type: ☒-Visual; no access / ☐-Walk through featureExtent of Physical Investigation of Feature: ☐-Entire / ☐-Partial, walk through polygon (indicate on map)

Reptile / Bat Hibernacula Features: Contains potential reptile hibernacula features?
☐-Y* / ☐-N / ☒-Unknown, no access (*if yes, describe in table below)
 [i.e. features that would provide a route underground, including buried concrete or rock (e.g. foundations, bridge abutments or culverts with cracks/entry points, exposed rock crevices or inactive animal burrows)]
 Contains potential bat hibernacula features?
☐-Y* / ☒-N / ☐-Unknown, no access (*if yes, describe in table below)
 [i.e. karst topography, abandoned mines or caves]

POTENTIAL HIBERNACULA FEATURE(S) IDENTIFIED

UTM	Feature Description	Photo No.	Spp. Observed Using Feature

Bat Roosting Features: Contains potential bat roosting features?
☐-Y* / ☒-N / ☐-Unknown, no access (*if yes, describe in table below)
 [i.e. tall trees with open surroundings, DBH >25cm, side-facing cavities ~10m high in tree]

POTENTIAL BAT ROOSTING FEATURE(S) IDENTIFIED

UTM	Tree ID	Tree Spp.	DBH	Photo No.	Decay Class (1-5)	No. of Cavities	Height and Type of Cavities

Stick Nests: Contains large stick nests?
☐-Y* / ☒-N / ☐-Unknown, no access (*if yes, describe in table below)

STICK NEST(S) IDENTIFIED

UTM	Tree ID	Tree Spp.	Nest Size	Photo No.	Spp. Observed Using Feature

Seeps/Springs/Vernal Pools: Contains seeps/springs/vernal pools?
☐-Y* / ☐-N / ☒-Unknown, no access (*if yes, describe in table below)

SEEP / SPRING / VERNAL POOL FEATURE(S) IDENTIFIED

UTM	Feature No. & Type	Feature Size (Diameter)	Water Depth	Photo No.	Sub/Emergent Veg. Spp. Present?	Shrubs/ Logs at Edge Present?

SPECIES & HABITAT OBSERVATIONS (list species and type of observation & indicate on map)

Empty space for species and habitat observations
--

CA=carcass; DP=distinctive parts; FE=feeding evidence; FY=eggs/nest; HO=house/den; OB=observed; SC=scat; SI=other sign; TK=track; VO=vocalization

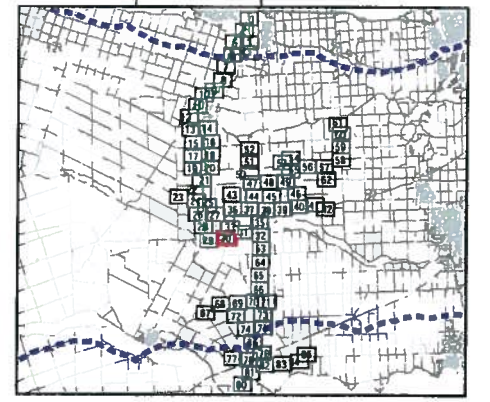
V:\01609\Active\160950269\planning\drawing\map\120423_NHA_Fields\160950269_Release_17_ELC_Collector_Map_Book_20120613.mxd
Revised: 2012-06-14 By: bawper



Legend

- Proposed T Line Route
- Proposed Collector 120m Buffer
- Turbines in Signed Lands
 - Standard Turbine (105 dBA)
 - Potential Turbine Locations
- Turbines in Unsigned Lands
 - Standard Turbine (105 dBA)
 - 51 m Turbine Setback
- Proposed Collector Cable
- Alternate Collector Cable Route
- Preliminary Study Area
- Signed Property
- Signed Property - Outside Study Area
- Potential Signed Property
- Potential Signed Property - Outside Study Area
- ELC Boundary
- Provincially Significant Wetland
- Other/Locally Significant Wetland
- Property Boundary

RES A: residence with planted silver maple + is some pine + spruce



Notes

- Coordinate System: NAD 1983 UTM Zone 17N.
- Base features produced under license with the Ontario Ministry of Natural Resources © Queen's Printer for Ontario, 2012.



Stantec

June, 2012
160950269

Client/Project
Niagara Region Wind Corporation
Amphibian Field Maps

Figure No.
30

Title
Proposed Collector Route
Map 30



Stantec Consulting Ltd.
1 – 70 Southgate Drive
Guelph, ON
Canada N1G 4P5
Tel: (519) 836-6050
Fax: (519) 836-2493

Coll. Tile 31; Roadside ELC,
Poly I Woodland & Wildlife Habitat
Assessment Form

Project Number: 160950269

Project Name: NRWL

Date: June 27

Field Personnel: N. Charlton

Weather Conditions:	TEMP (°C): 20	WIND: 2-3	CLOUD: 90	PPT: —	PPT (in last 24 hrs): —
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POLYGON DESCRIPTION

		TOPOGRAPHIC FEATURE		HISTORY	
ELC COMMUNITY DESCRIPTION & CLASSIFICATION	POLYGON:	31-1	☐ LACUSTRINE	☐ TALUS	☐ NATURAL
	START TIME:	2:30	☐ RIVERINE	☐ CREVICE / CAVE	☐ CULTURAL
	END TIME:		☐ BOTTOMLAND	☐ ALVAR	
			☐ TERRACE	☐ ROCKLAND	
			☐ VALLEY SLOPE	☐ BEACH / BAR	
			☐ TABLELAND	☐ SAND DUNE	
			☒ ROLL. UPLAND	☐ BLUFF	
		☐ CLIFF			

STAND DESCRIPTION:

LAYER		HT	CVR	SPECIES IN ORDER OF DECREASING DOMINANCE (>>>MUCH GREATER THAN; >GREATER THAN; = ABOUT EQUAL TO)
1	CANOPY			
2	SUB-CANOPY	3	2	FRAPENN > CORNUS
3	UNDERSTOREY			
4	GRD. LAYER	5-7	4	PHAEKUN > SOLIDAGO > ASCSYRI > PIPFULL

HT CODES: 1=>25m 2=10<HT≤25m 3=2<HT≤10m 4=1<HT≤2m 5=0.5<HT≤1m 6=0.2<HT≤0.5m 7=HT<0.2m

CVR CODES: 0=NONE 1=0%<CVR≤10% 2=10<CVR≤25% 3=25<CVR≤60% 4=CVR>60% N/O=not observed

STANDING SNAGS:	<10	10 - 24	25 - 50	>50
-----------------	-----	---------	---------	-----

ABUNDANCE CODES: N=NONE R=RARE O=OCCASIONAL A=ABUNDANT N/O=Not observed

STAND MATURITY:	PIONEER	YOUNG	MID-AGE	MATURE	OLD GROWTH
-----------------	---------	-------	---------	--------	------------

VEGETATION TYPE: <i>dry moist old field meadow</i>		CODE: <i>CHM1-1</i>
COMPLEX		CODE:

Evidence of Disturbance / Notes:

LAYERS: 1=CANOPY >10m 2=SUB-CANOPY 3=UNDERSTOREY 4=GROUND (GRD.) LAYER
ABUNDANCE CODES: N=NONE R=RARE O=OCCASIONAL A=ABUNDANT D=DOMINANT N/O=Not observed

[illegible]

Signature:

(Field Personnel)

Quality Control: This form is complete ☒ & legible ☒

Signature

(Project Manager)

ELC Polygon: #31-1 Assessment Type: ☒-Visual; no access / ☐-Walk through featureExtent of Physical Investigation of Feature: ☐-Entire / ☐-Partial, walk through polygon (indicate on map)**Reptile / Bat Hibernacula Features:**

Contains potential reptile hibernacula features?

☐-Y* / ☒-N / ☐-Unknown, no access (*if yes, describe in table below)

[i.e. features that would provide a route underground, including buried concrete or rock (e.g. foundations, bridge abutments or culverts with cracks/entry points, exposed rock crevices or inactive animal burrows)]

Contains potential bat hibernacula features?

☐-Y* / ☒-N / ☐-Unknown, no access (*if yes, describe in table below)

[i.e. karst topography, abandoned mines or caves]

POTENTIAL HIBERNACULA FEATURE(S) IDENTIFIED

UTM	Feature Description	Photo No.	Spp. Observed Using Feature

Bat Roosting Features:

Contains potential bat roosting features?

☐-Y* / ☒-N / ☐-Unknown, no access (*if yes, describe in table below)

[i.e. tall trees with open surroundings, DBH >25cm, side-facing cavities ~10m high in tree]

POTENTIAL BAT ROOSTING FEATURE(S) IDENTIFIED

UTM	Tree ID	Tree Spp.	DBH	Photo No.	Decay Class (1-5)	No. of Cavities	Height and Type of Cavities

Stick Nests:

Contains large stick nests?

☐-Y* / ☒-N / ☐-Unknown, no access (*if yes, describe in table below)**STICK NEST(S) IDENTIFIED**

UTM	Tree ID	Tree Spp.	Nest Size	Photo No.	Spp. Observed Using Feature

Seeps/Springs/Vernal Pools:

Contains seeps/springs/vernal pools?

☐-Y* / ☐-N / ☒-Unknown, no access (*if yes, describe in table below)**SEEP / SPRING / VERNAL POOL FEATURE(S) IDENTIFIED**

UTM	Feature No. & Type	Feature Size (Diameter)	Water Depth	Photo No.	Sub/Emergent Veg. Spp. Present?	Shrubs/ Logs at Edge Present?

SPECIES & HABITAT OBSERVATIONS (list species and type of observation & indicate on map)

--	--

CA=carcass; DP=distinctive parts; FE=feeding evidence; FY=eggs/nest; HO=house/den; OB=observed; SC=seat; SI=other sign; TK=track; VO=vocalization



Stantec Consulting Ltd.
1 - 70 Southgate Drive
Guelph, ON
Canada N1G 4P5
Tel: (519) 836-6050
Fax: (519) 836-2493

d. Coll. Title 31; Roadside ELC,
Poly 2 Woodland & Wildlife Habitat
Assessment Form

Project Number: 1604 80269

Project Name: NRWC

Date: June 27

Field Personnel: N. Charleston

Weather Conditions:	TEMP (°C): 22	WIND: 2-3	CLOUD: 90	PPT: —	PPT (in last 24 hrs): —
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POLYGON DESCRIPTION

ELC COMMUNITY DESCRIPTION & CLASSIFICATION	POLYGON:	TOPOGRAPHIC FEATURE		HISTORY
	33-2	☐ LACUSTRINE	☐ TALUS	☐ NATURAL
	START TIME:	☐ RIVERINE	☐ CREVICE / CAVE	☒ CULTURAL
	2:45	☐ BOTTOMLAND	☐ ALVAR	
	END TIME:	☐ TERRACE	☐ ROCKLAND	
		☐ VALLEY SLOPE	☐ BEACH / BAR	
		☒ TABLELAND	☐ SAND DUNE	
		☐ ROLL. UPLAND	☐ BLUFF	
	☐ CLIFF			

STAND DESCRIPTION:

LAYER		HT	CVR	SPECIES IN ORDER OF DECREASING DOMINANCE (>>>MUCH GREATER THAN; >GREATER THAN; = ABOUT EQUAL TO)
1	CANOPY	2-3		FRAPENN >> SALIX
2	SUB-CANOPY	3		FRAPENN > QUEMACR
3	UNDERSTOREY			
4	GRD. LAYER	5-7	4	PHALARIS > SOLIDAGO > TYPHANGU > CYPERALEAE

HT CODES: 1=>25m 2=10<HT≤25m 3=2<HT≤10m 4=1<HT≤2m 5=0.5<HT≤1m 6=0.2<HT≤0.5m 7=HT<0.2m

CVR CODES: 0=NONE 1=0%<CVR≤10% 2=10<CVR≤25% 3=25<CVR≤60% 4=CVR>60% N/O=not observed

STANDING SNAGS:	<10	10 - 24	25 - 50	>50
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ABUNDANCE CODES: N=NONE R=RARE O=OCCASIONAL A=ABUNDANT N/O=Not observed

STAND MATURITY:	PIONEER	YOUNG	MID-AGE	MATURE	OLD GROWTH
------------------------	---------	-------	---------	--------	------------

VEGETATION TYPE: <i>green ash cultural savannah</i>		CODE: <i>CUS1-4*</i>
COMPLEX		CODE:

Evidence of Disturbance / Notes:

- height $\sim 15\text{m}$

- very moist community, with typha surrounding "or" inclusion

- mostly CUM with woody cover primarily at edges at about 35% cover

- pic 13

LAYERS: 1=CANOPY >10m 2=SUB-CANOPY 3=UNDERSTOREY 4=GROUND (GRD.) LAYER
ABUNDANCE CODES: N=NONE R=RARE O=OCCASIONAL A=ABUNDANT D=DOMINANT N/O=Not observed

[illegible]

Signature:

Nah Chaff
(Field Personnel)

Quality Control: This form is complete ☒ & legible ☐

Signature:

This form is complete ☒ & legible ☐.

Natcheara
(Project Manager)

Extent of Physical Investigation of Feature: ☐-Entire / ☐-Partial, walk through polygon (*indicate on map*)

Contains/potential reptile hibernacula features?

[i.e. features that would provide a route underground, including buried concrete or rock (e.g. foundations, bridge abutments or culverts with cracks/entry points, exposed rock crevices or inactive animal burrows)]

☐-Y* / ☒-N / ☐-Unknown, no access (*if yes, describe in table below)

UTM	Feature Description	Photo No.	Spp. Observed Using Feature

[i.e. tall trees with open surroundings, DBH >25cm, side-facing cavities ~10m high in tree]

UTM	Tree ID	Tree Spp.	DBH	Photo No.	Decay Class (1-5)	No. of Cavities	Height and Type of Cavities

☐-Y* / ☒-N / ☐-Unknown, no access (*if yes, describe in table below)

UTM	Tree ID	Tree Spp.	Nest Size	Photo No.	Spp. Observed Using Feature

☐-Y* / ☐-N / ☒-Unknown, no access (*if yes, describe in table below)

UTM	Feature No. & Type	Feature Size (Diameter)	Water Depth	Photo No.	Sub/Emergent Veg. Spp. Present?	Shrubs/ Logs at Edge Present?

REV: 2012-01-03



d. Coll. Tile 31; Roadside ELC,
Poly 3 Woodland & Wildlife Habitat
Assessment Form

Field Personnel: N. Charlton

Weather Conditions:	TEMP (°C): 20	WIND: 2-3	CLOUD: 100%	PPT: —	PPT (in last 24 hrs): —
---------------------	------------------	--------------	----------------	-----------	----------------------------

☐ LACUSTRINE	☐ TALUS
☐ RIVERINE	☐ CREVICE / CAVE
☐ BOTTOMLAND	☐ ALVAR
☐ TERRACE	☐ ROCKLAND
☐ VALLEY SLOPE	☐ BEACH / BAR
☐ TABLELAND	☐ SAND DUNE
☐ ROLL. UPLAND	☐ BLUFF
☐ CLIFF	

☐ NATURAL
☐ CULTURAL

POLYGON:	31-3
START TIME:	3:00
END TIME:	3:05

LAYER	HT	CVR	SPECIES IN ORDER OF DECREASING DOMINANCE
			(>>MUCH GREATER THAN; >GREATER THAN; = ABOUT EQUAL TO)
1	10	10	1. <i>Pinus strobus</i> 2. <i>Pinus resinosa</i> 3. <i>Pinus milleriana</i> 4. <i>Pinus rigida</i> 5. <i>Pinus taeda</i> 6. <i>Pinus strobus</i> 7. <i>Pinus resinosa</i> 8. <i>Pinus milleriana</i> 9. <i>Pinus rigida</i> 10. <i>Pinus taeda</i>
2	10	10	1. <i>Pinus strobus</i> 2. <i>Pinus resinosa</i> 3. <i>Pinus milleriana</i> 4. <i>Pinus rigida</i> 5. <i>Pinus taeda</i> 6. <i>Pinus strobus</i> 7. <i>Pinus resinosa</i> 8. <i>Pinus milleriana</i> 9. <i>Pinus rigida</i> 10. <i>Pinus taeda</i>
3	10	10	1. <i>Pinus strobus</i> 2. <i>Pinus resinosa</i> 3. <i>Pinus milleriana</i> 4. <i>Pinus rigida</i> 5. <i>Pinus taeda</i> 6. <i>Pinus strobus</i> 7. <i>Pinus resinosa</i> 8. <i>Pinus milleriana</i> 9. <i>Pinus rigida</i> 10. <i>Pinus taeda</i>
4	10	10	1. <i>Pinus strobus</i> 2. <i>Pinus resinosa</i> 3. <i>Pinus milleriana</i> 4. <i>Pinus rigida</i> 5. <i>Pinus taeda</i> 6. <i>Pinus strobus</i> 7. <i>Pinus resinosa</i> 8. <i>Pinus milleriana</i> 9. <i>Pinus rigida</i> 10. <i>Pinus taeda</i>
5	10	10	1. <i>Pinus strobus</i> 2. <i>Pinus resinosa</i> 3. <i>Pinus milleriana</i> 4. <i>Pinus rigida</i> 5. <i>Pinus taeda</i> 6. <i>Pinus strobus</i> 7. <i>Pinus resinosa</i> 8. <i>Pinus milleriana</i> 9. <i>Pinus rigida</i> 10. <i>Pinus taeda</i>
6	10	10	1. <i>Pinus strobus</i> 2. <i>Pinus resinosa</i> 3. <i>Pinus milleriana</i> 4. <i>Pinus rigida</i> 5. <i>Pinus taeda</i> 6. <i>Pinus strobus</i> 7. <i>Pinus resinosa</i> 8. <i>Pinus milleriana</i> 9. <i>Pinus rigida</i> 10. <i>Pinus taeda</i>
7	10	10	1. <i>Pinus strobus</i> 2. <i>Pinus resinosa</i> 3. <i>Pinus milleriana</i> 4. <i>Pinus rigida</i> 5. <i>Pinus taeda</i> 6. <i>Pinus strobus</i> 7. <i>Pinus resinosa</i> 8. <i>Pinus milleriana</i> 9. <i>Pinus rigida</i> 10. <i>Pinus taeda</i>
8	10	10	1. <i>Pinus strobus</i> 2. <i>Pinus resinosa</i> 3. <i>Pinus milleriana</i> 4. <i>Pinus rigida</i> 5. <i>Pinus taeda</i> 6. <i>Pinus strobus</i> 7. <i>Pinus resinosa</i> 8. <i>Pinus milleriana</i> 9. <i>Pinus rigida</i> 10. <i>Pinus taeda</i>
9	10	10	1. <i>Pinus strobus</i> 2. <i>Pinus resinosa</i> 3. <i>Pinus milleriana</i> 4. <i>Pinus rigida</i> 5. <i>Pinus taeda</i> 6. <i>Pinus strobus</i> 7. <i>Pinus resinosa</i> 8. <i>Pinus milleriana</i> 9. <i>Pinus rigida</i> 10. <i>Pinus taeda</i>
10	10	10	1. <i>Pinus strobus</i> 2. <i>Pinus resinosa</i> 3. <i>Pinus milleriana</i> 4. <i>Pinus rigida</i> 5. <i>Pinus taeda</i> 6. <i>Pinus strobus</i> 7. <i>Pinus resinosa</i> 8. <i>Pinus milleriana</i> 9. <i>Pinus rigida</i> 10. <i>Pinus taeda</i>

T CODES: 1=>25m 2=10<HT≤25m 3=2<HT≤10m 4=1<HT≤2m 5=0.5<HT≤1m 6=0.2<HT≤0.5m 7=HT<0.2m
VR CODES: 0=NONE 1=0%<CVR≤10% 2=10<CVR≤25% 3=25<CVR≤60% 4=CVR>60% N/O=not observed

TANDING SNAGS:	<10	10 - 24	25 - 50	>50
----------------	-----	---------	---------	-----

BUNDANCE CODES: N=NONE R=RARE O=OCCASIONAL A=ABUNDANT N/O=Not observed

TAND MATURITY:	PIONEER	YOUNG	MID-AGE	MATURE	OLD GROWTH
----------------	---------	-------	---------	--------	------------

VEGETATION TYPE: 215T-25/110.1 CODE: 111A 1.5

COMPLEX	CODE:
---------	-------

evidence of Disturbance / Notes:

- pasture/hay
- blocked by treed HR
- ↳ ACEFREE, FRAPENN, PINSYLV

pic 14

LAYERS: 1=CANOPY >10m 2=SUB-CANOPY 3=UNDERSTOREY 4=GROUND (GRD.) LAYER
ABUNDANCE CODES: N=NONE R=RARE O=OCCASIONAL A=ABUNDANT D=DOMINANT N/O=Not observed

[illegible]

Signature:

(Field Personnel)

Quality Control: This form is complete ☒ & legible ☐

Signature:

(Project Manager)

Extent of Physical Investigation of Feature: ☐-Entire / ☐-Partial, walk through polygon (*indicate on map*)

Reptile / Bat Hibernacula Features:	Contains potential reptile hibernacula features? ☐ -Y* / ☐ -N / ☐ -Unknown, no access (<i>*if yes, describe in table below</i>) [i.e. features that would provide a route underground, including buried concrete or rock (e.g. foundations, bridge abutments or culverts with cracks/entry points, exposed rock crevices or inactive animal burrows)]
	Contains potential bat hibernacula features? ☐ -Y* / ☐ -N / ☐ -Unknown, no access (<i>*if yes, describe in table below</i>) [i.e. karst topography, abandoned mines or caves]

UTM	Feature Description	Photo No.	Spp. Observed Using Feature

Bat Roosting Features:	Contains potential bat roosting features? ☐ -Y* / ☐ -N / ☐ -Unknown, no access <i>(*if yes, describe in table below)</i> <i>[i.e. tall trees with open surroundings, DBH >25cm, side-facing cavities ~10m high in tree]</i>
-------------------------------	---

UTM	Tree ID	Tree Spp.	DBH	Photo No.	Decay Class (1-5)	No. of Cavities	Height and Type of Cavities

Stick Nests: Contains large stick nests?
☐-Y* / ☐-N / ☐-Unknown, no access (*if yes, describe in table below)

UTM	Tree ID	Tree Sp.	Nest Size	Photo No.	Spp. Observed Using Feature

Seeps/Springs/Vernal Pools: Contains seeps/springs/vernal pools?
☐-Y* / ☐-N / ☐-Unknown, no access (*if yes, describe in table below)

UTM	Feature No. & Type	Feature Size (Diameter)	Water Depth	Photo No.	Sub/Emergent Veg. Spp. Present?	Shrubs/ Logs at Edge Present?

REV. 2012 01 02



Coll. Tile 31 ; Roadside ELC,
Poly 4 Woodland & Wildlife Habitat
Assessment Form

Project Name: NRWC

Field Personnel: N. Charlton

leather Conditions:	TEMP (°C): 20	WIND: 2-3	CLOUD 100%	PPT: —	PPT (in last 24 hrs) —
---------------------	------------------	--------------	---------------	-----------	---------------------------

POLYGON DESCRIPTION

ELC COMMUNITY DESCRIPTION & CLASSIFICATION	TOPOGRAPHIC FEATURE		HISTORY
	POLYGON: 31-4	☐ LACUSTRINE ☐ RIVERINE ☐ BOTTOMLAND ☐ TERRACE ☐ VALLEY SLOPE ☐ TABLELAND ☒ ROLL. UPLAND ☐ CLIFF	☐ TALUS ☐ CREVICE / CAVE ☐ ALVAR ☐ ROCKLAND ☐ BEACH / BAR ☐ SAND DUNE ☐ BLUFF
	START TIME: 3:05		☐ NATURAL ☒ CULTURAL
	END TIME: 3:10		

TAND DESCRIPTION:

LAYER		HT	CVR	SPECIES IN ORDER OF DECREASING DOMINANCE (>>MUCH GREATER THAN; >GREATER THAN; = ABOUT EQUAL TO)
1	CANOPY			
2	SUB-CANOPY			
3	UNDERSTOREY			
4	GRD. LAYER	5-7	4	<i>Banksia</i> > <i>Centropogon</i> >> <i>Asplenium</i>

T CODES: 1=>25m 2=10<HT≤25m 3=2<HT≤10m 4=1<HT≤2m 5=0.5<HT≤1m 6=0.2<HT≤0.5m 7=HT<0.2m

VR CODES: 0=NONE 1=0%<CVR≤10% 2=10<CVR≤25% 3=25<CVR≤60% 4=CVR>60% N/O=not observed

TANDING SNAGS:	<10	10 - 24	25 - 50	>50
----------------	-----	---------	---------	-----

ABUNDANCE CODES: N=NONE R=RARE O=OCCASIONAL A=ABUNDANT N/O=Not observed

TAND MATURITY:	PIONEER	YOUNG	MID-AGE	MATURE	OLD GROWTH
----------------	---------	-------	---------	--------	------------

VEGETATION TYPE: PASTURE / HAY CODE: N/A - 44

COMPLEX	CODE:
---------	-------

Evidence of Disturbance / Notes:

pasture/hay

pic 15

LAYERS: 1=CANOPY >10m 2=SUB-CANOPY 3=UNDERSTOREY 4=GROUND (GRD.) LAYER
ABUNDANCE CODES: N=NONE R=RARE O=OCCASIONAL A=ABUNDANT D=DOMINANT N/O=Not observed

[illegible]

Signature:

(Field Personnel)

Quality Control: This form is complete ☒ & legible ☒

Signature:

(Project Manager)

ELC Polygon: # _____ Assessment Type: ☒-Visual; no access / ☐-Walk through featureExtent of Physical Investigation of Feature: ☐-Entire / ☐-Partial, walk through polygon (indicate on map)

Reptile / Bat Hibernacula Features: Contains potential reptile hibernacula features?
☐-Y* / ☐-N / ☐-Unknown, no access (**if yes, describe in table below*)
 [i.e. features that would provide a route underground, including buried concrete or rock (e.g. foundations, bridge abutments or culverts with cracks/entry points, exposed rock crevices or inactive animal burrows)]

Contains potential bat hibernacula features?
☐-Y* / ☐-N / ☐-Unknown, no access (**if yes, describe in table below*)
 [i.e. karst topography, abandoned mines or caves]

POTENTIAL HIBERNACULA FEATURE(S) IDENTIFIED			
UTM	Feature Description	Photo No.	Spp. Observed Using Feature

Bat Roosting Features: Contains potential bat roosting features?
☐-Y* / ☐-N / ☐-Unknown, no access (**if yes, describe in table below*)
 [i.e. tall trees with open surroundings, DBH >25cm, side-facing cavities ~10m high in tree]

POTENTIAL BAT ROOSTING FEATURE(S) IDENTIFIED							
UTM	Tree ID	Tree Spp.	DBH	Photo No.	Decay Class (1-5)	No. of Cavities	Height and Type of Cavities

Stick Nests: Contains large stick nests?
☐-Y* / ☐-N / ☐-Unknown, no access (**if yes, describe in table below*)

STICK NEST(S) IDENTIFIED						
UTM	Tree ID	Tree Spp.	Nest Size	Photo No.	Spp. Observed Using Feature	

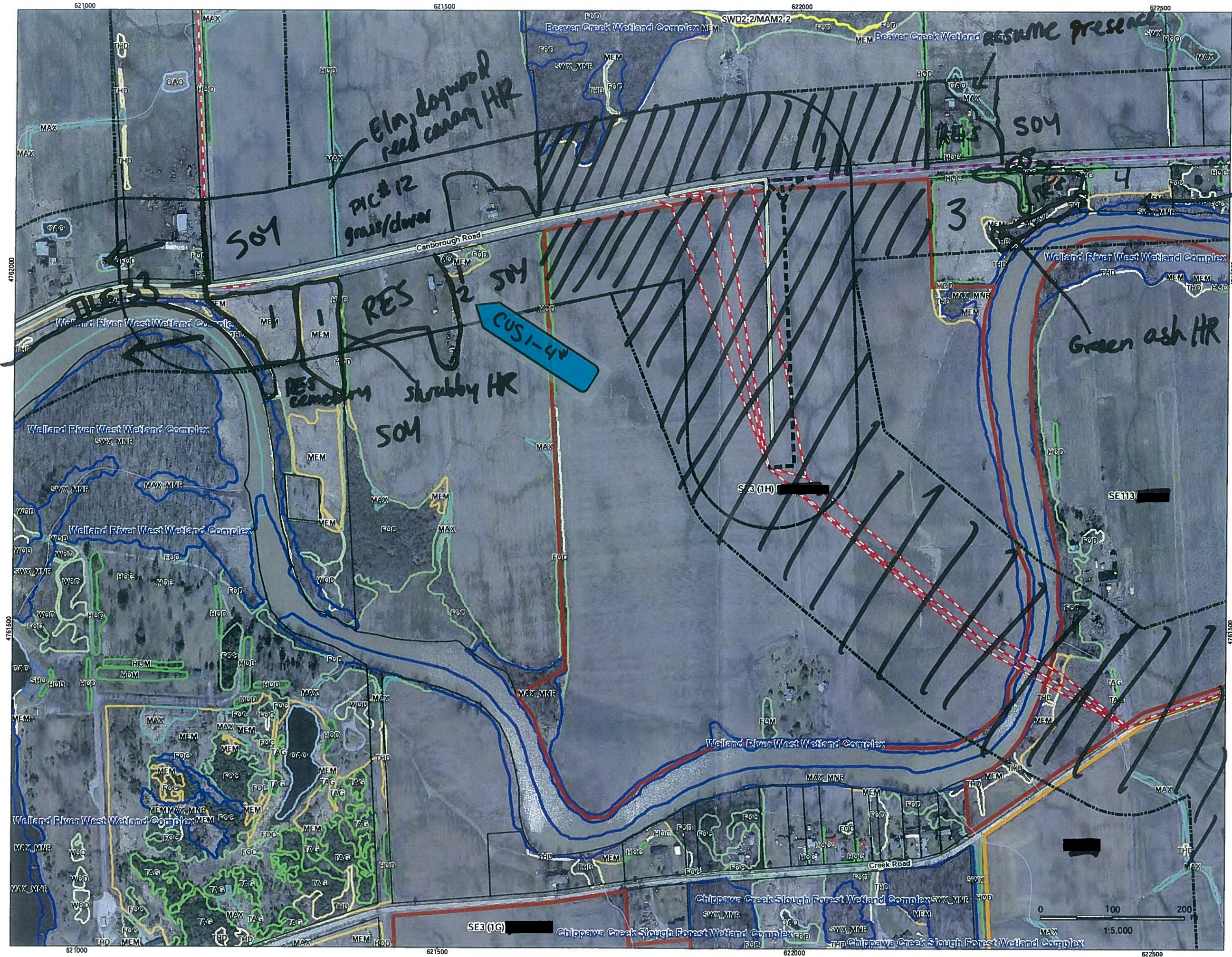
Seeps/Springs/Vernal Pools: Contains seeps/springs/vernal pools?
☐-Y* / ☐-N / ☐-Unknown, no access (**if yes, describe in table below*)

SEEP / SPRING / VERNAL POOL FEATURE(S) IDENTIFIED						
UTM	Feature No. & Type	Feature Size (Diameter)	Water Depth	Photo No.	Sub/Emergent Veg. Spp. Present?	Shrubs/ Logs at Edge Present?

SPECIES & HABITAT OBSERVATIONS (list species and type of observation & indicate on map)


--

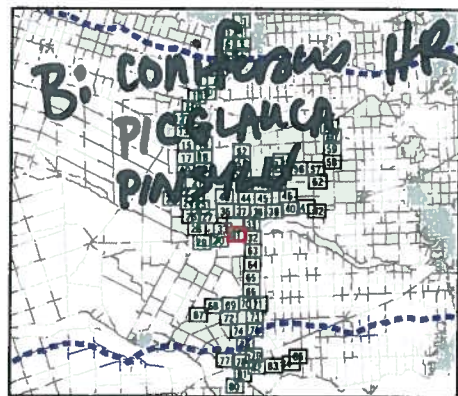
CA=carcass; DP=distinctive parts; FE=feeding evidence; FY=eggs/nest; HO=house/den; OB=observed; SC=scat; SI=other sign; TK=track; VO=vocalization



Legend

- Proposed T Line Route
- Proposed Collector 120m Buffer
- Turbines in Signed Lands
 - Standard Turbine (105 dBA)
 - Potential Turbine Locations
- Turbines in Unsigned Lands
 - Standard Turbine (105 dBA)
 - 51 m Turbine Setback
- Proposed Collector Cable
- Alternate Collector Cable Route
- Preliminary Study Area
- Signed Property
- Signed Property - Outside Study Area
- Potential Signed Property
- Potential Signed Property - Outside Study Area
- ELC Boundary
- Provincially Significant Wetland
- Other/Locally Significant Wetland
- Property Boundary

ELC done



Notes

- Coordinate System: NAD 1983 UTM Zone 17N.
- Base features produced under license with the Ontario Ministry of Natural Resources © Queen's Printer for Ontario, 2012.



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June, 2012
160950269

Client/Project
Niagara Region Wind Corporation
Amphibian Field Maps

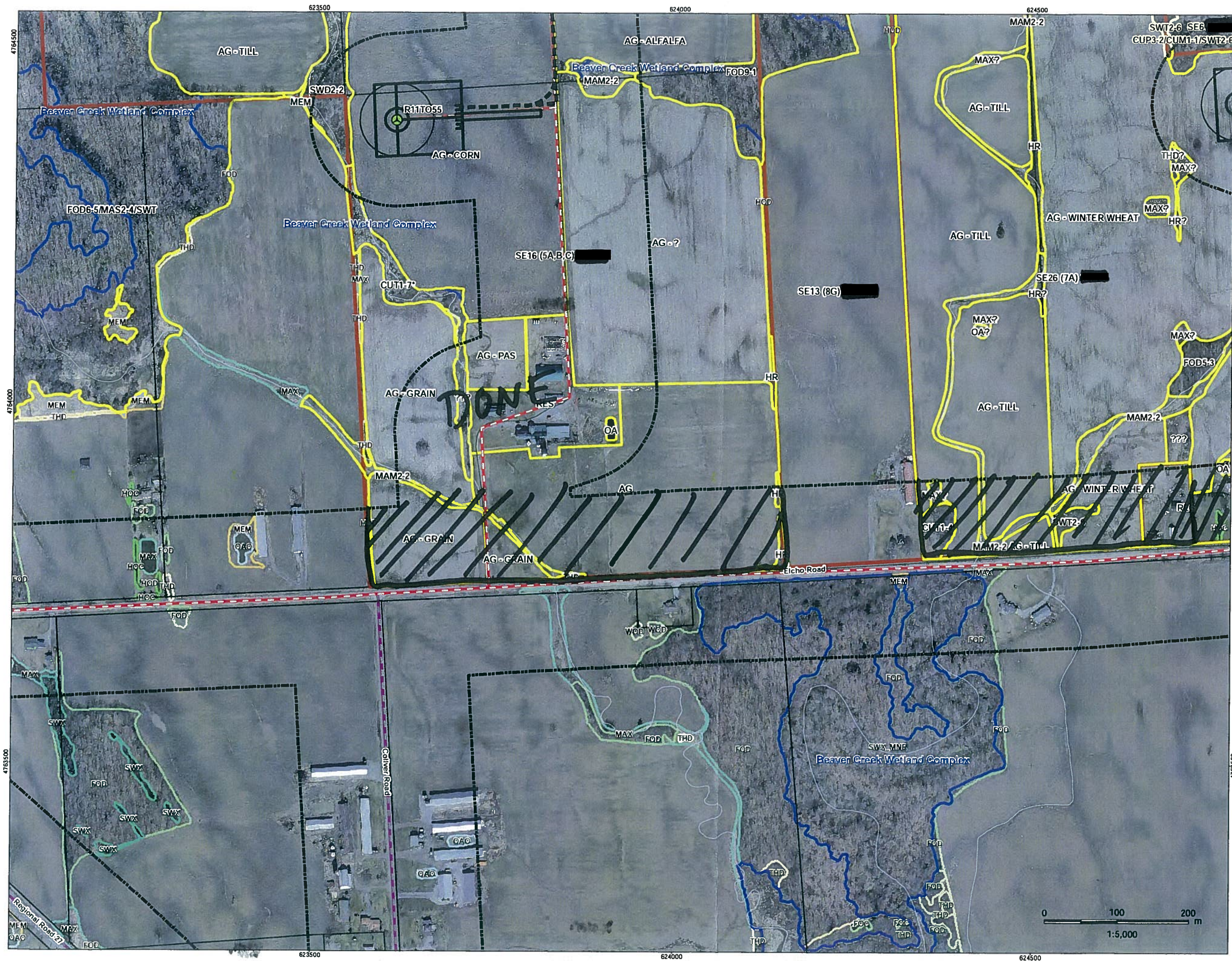
Figure No.

31

Title

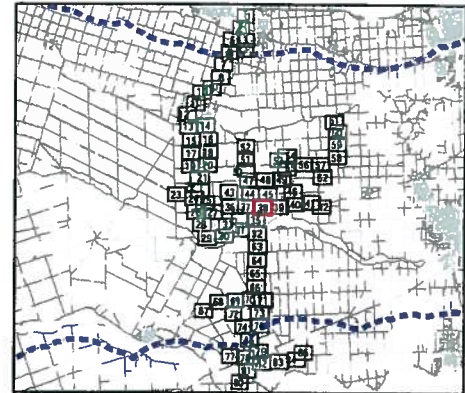
Proposed Collector Route
Map 31

V:\01009\Active\160950269\Planning\drawing\mxd\20120423_NHA_Fieldmaps\160950269_Release_17_ELC_Collector_Map_Book_20120613.mxd
Revised: 2012-06-14 By: bcwper



Legend

- Proposed T Line Route
- Proposed Collector 120m Buffer
- Turbines in Signed Lands
 - Standard Turbine (105 dBA)
 - Potential Turbine Locations
- Turbines in Unsigned Lands
 - Standard Turbine (105 dBA)
- 51 m Turbine Setback
- Proposed Collector Cable
- Alternate Collector Cable Route
- Preliminary Study Area
- Signed Property
- Signed Property - Outside Study Area
- Potential Signed Property
- Potential Signed Property - Outside Study Area
- ELC Boundary
- Provincially Significant Wetland
- Other/Locally Significant Wetland
- Property Boundary



Notes

- Coordinate System: NAD 1983 UTM Zone 17N.
- Base features produced under license with the Ontario Ministry of Natural Resources © Queen's Printer for Ontario, 2012.



Stantec

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Client/Project

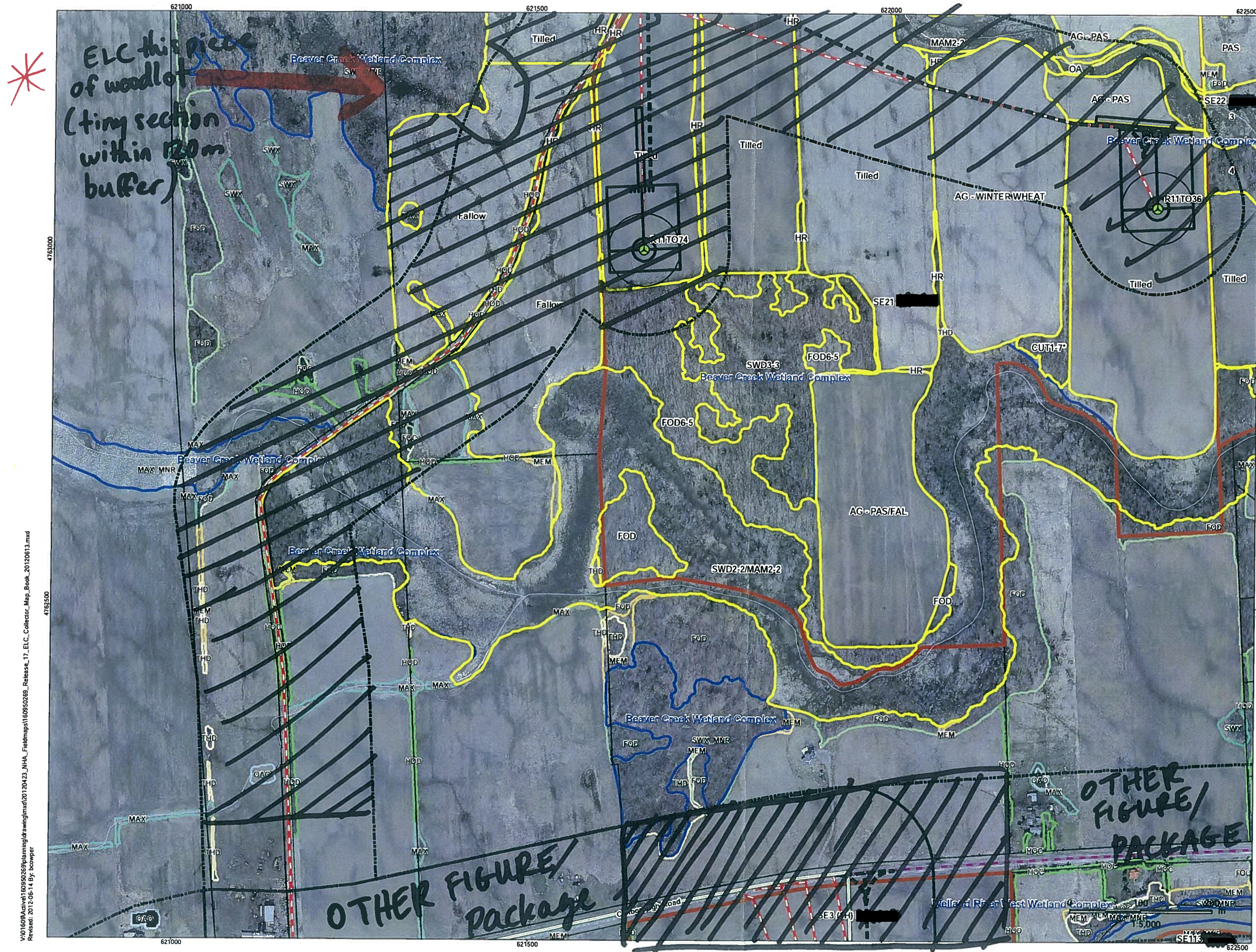
Niagara Region Wind Corporation
Amphibian Field Maps

Figure No.

38

Title

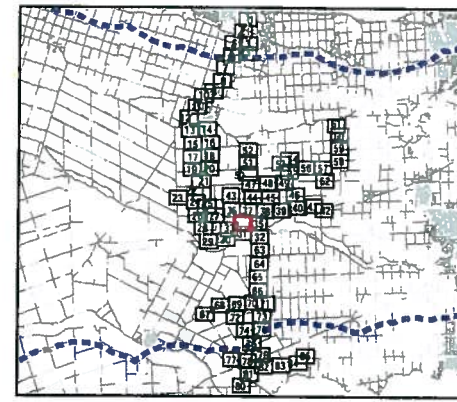
Proposed Collector Route
Map 38



Legend

- Proposed T Line Route
- Proposed Collector 120m Buffer
- Turbines in Signed Lands
 - Standard Turbine (105 dBA)
 - Potential Turbine Locations
- Turbines in Unsigned Lands
 - Standard Turbine (105 dBA)
 - 51 m Turbine Setback
- Proposed Collector Cable
- Alternate Collector Cable Route
- Preliminary Study Area
- Signed Property
- Signed Property - Outside Study Area
- Potential Signed Property
- Potential Signed Property - Outside Study Area
- ELC Boundary
- Provincially Significant Wetland
- Other/Locally Significant Wetland
- Property Boundary

ELC done



- ### Notes
- Coordinate System: NAD 1983 UTM Zone 17N.
 - Base features produced under license with the Ontario Ministry of Natural Resources © Queen's Printer for Ontario, 2012.

June, 2012
160950269

Client/Project
Niagara Region Wind Corporation
Amphibian Field Maps

Figure No.
34

Title
Proposed Collector Route
Map 34

V:\0160950269\amphibian\drawing\drawing.mxd 2012-06-14 By: bawpwr
Revised: 2012-06-14 By: bawpwr

V:\01609\active\160950269\planning\drawing\map\20120423_NHA_Fieldmaps\160950269_Release_17_ELC_Collector_Map_Book_20120613.mxd
Revised: 2012-06-14 By: bawper



Legend

- Proposed T Line Route
- Proposed Collector 120m Buffer
- Turbines in Signed Lands
 - Standard Turbine (105 dBA)
 - Potential Turbine Locations
- Turbines in Unsigned Lands
 - Standard Turbine (105 dBA)
 - 51 m Turbine Setback
- Proposed Collector Cable
- Alternate Collector Cable Route
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- Signed Property
- Signed Property - Outside Study Area
- Potential Signed Property
- Potential Signed Property - Outside Study Area
- ELC Boundary
- Provincially Significant Wetland
- Other/Locally Significant Wetland
- Property Boundary

ONLY
Wellandport Rd
South of Creek Rd
TO BE ELC'd
(THIS TILE)

Notes

- Coordinate System: NAD 1983 UTM Zone 17N.
- Base features produced under license with the Ontario Ministry of Natural Resources © Queen's Printer for Ontario, 2012.

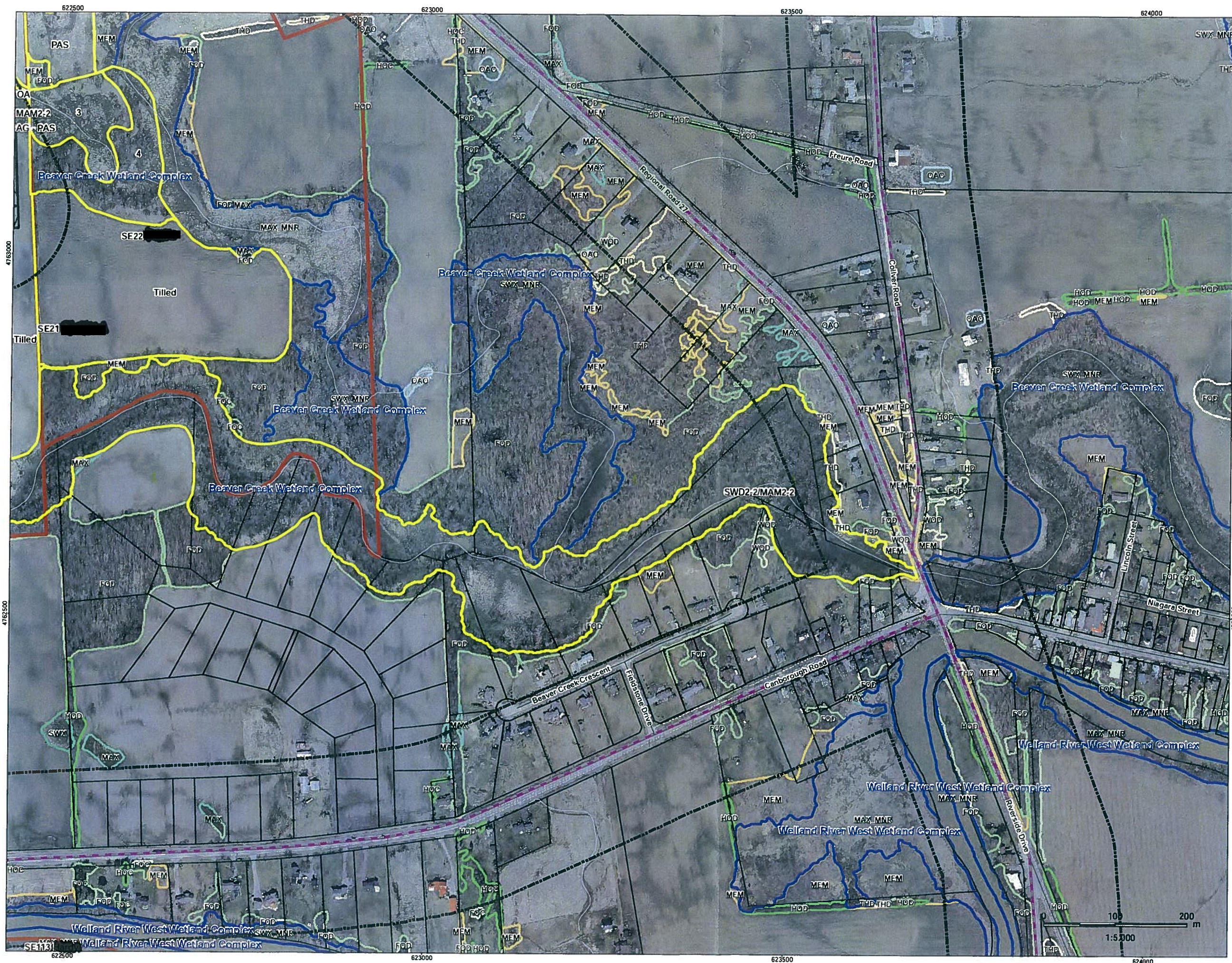
June, 2012
160950269

Client/Project
Niagara Region Wind Corporation
Amphibian Field Maps

Figure No.
32

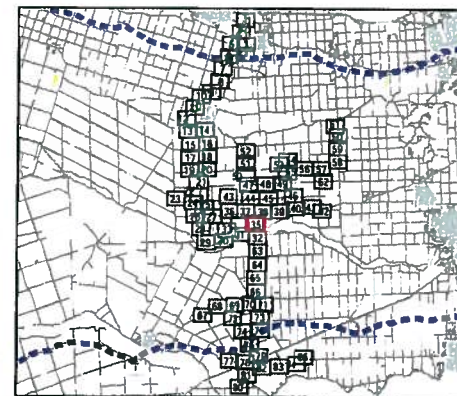
Title
Proposed Collector Route
Map 32

V:\01609\Activat\160950269\Planning\Drawing\mxd\20120423_NHA_Fieldmap\160950269_Release_17_ELC_Collector_Map_Book_20120613.mxd
Revised: 2012-06-14 By: bower



Legend

- Proposed T Line Route
- Proposed Collector 120m Buffer
- Turbines in Signed Lands
 - Standard Turbine (105 dBA)
 - Potential Turbine Locations
- Turbines in Unsigned Lands
 - Standard Turbine (105 dBA)
 - 51 m Turbine Setback
- Proposed Collector Cable
- Alternate Collector Cable Route
- Preliminary Study Area
- Signed Property
- Signed Property - Outside Study Area
- Potential Signed Property
- Potential Signed Property - Outside Study Area
- ELC Boundary
- Provincially Significant Wetland
- Other/Locally Significant Wetland
- Property Boundary



Notes

- Coordinate System: NAD 1983 UTM Zone 17N.
- Base features produced under license with the Ontario Ministry of Natural Resources © Queen's University for Ontario, 2012.



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June, 2012
160950269

Client/Project

Niagara Region Wind Corporation
Amphibian Field Maps

Figure No.

35

Title

Proposed Collector Route
Map 35

10 200 m
1:5,000



Stantec Consulting Ltd.
1 - 70 Southgate Drive
Guelph, ON
Canada N1G 4P5
Tel: (519) 836-6050
Fax: (519) 836-2493

td. Coll. Title 32; Roadside ELC,
Poly 32-1 Woodland & Wildlife Habitat
Assessment Form

Project Number: 160950269 Project Name: NRWC
Date: July 12/12 Field Personnel: M. Ross

TEMP (°C)	WIND	CLOUD	PPT	PPT (in last 24 hrs)
<u>23</u>	<u>2</u>	<u>5</u>	<u>None</u>	<u>None</u>

POLYGON DESCRIPTION

ELC COMMUNITY DESCRIPTION & CLASSIFICATION	TOPOGRAPHIC FEATURE		HISTORY	
	POLYGON: 32-1	☐ LACUSTRINE ☐ RIVERINE ☐ BOTTOMLAND ☐ TERRACE ☐ VALLEY SLOPE ☒ TABLELAND ☐ ROLL. UPLAND ☐ CLIFF	☐ TALUS ☐ CREVICE / CAVE ☐ ALVAR ☐ ROCKLAND ☐ BEACH / BAR ☐ SAND DUNE ☐ BLUFF	☒ NATURAL ☐ CULTURAL
	START TIME: 10:25			
	END TIME: 10:35			

STAND DESCRIPTION:

LAYER		HT	CVR	SPECIES IN ORDER OF DECREASING DOMINANCE (>>MUCH GREATER THAN; >GREATER THAN; = ABOUT EQUAL TO)	
1	CANOPY	2	4	QUERUBR = FRAPENN > ULMAMOR = QUERUBR	
2	SUB-CANOPY	3	3	FRAPENN > ULMAMOR = QUERUBR > ACERUBR	
3	UNDERSTOREY	4	3	Ligustrum = Gray Daywood > Smal	
4	GRD. LAYER	4-7	3	FRAPENN > Phragmites = Sol. daisy > TYPAN6U	
IT CODES:		1=>25m 2=10<HT≤25m 3=2<HT≤10m 4=1<HT≤2m 5=0.5<HT≤1m 6=0.2<HT≤0.5m 7=HT<0.2m			
CVR CODES:		0=NONE 1=0<CVR≤10% 2=10<CVR≤25% 3=25<CVR≤50% 4=CVR>60% N/O=Not observed			
STANDING SNAGS:		N/A <10 R 10-24 N 25-50 N/A >50			
ABUNDANCE CODES:		N=NONE R=RARE O=OCCASIONAL A=ABUNDANT N/O=Not observed			
STAND MATURITY:		PIONEER YOUNG MID-AGE MATURE OLD GROWTH			
VEGETATION TYPE:		F-M Oak-Maple Dec Forest		CODE: FOD 9-2	
COMPLEX:		Ash lowland Dec Forest		CODE: FOD 7-2	

Evidence of Disturbance / Notes:

Am 60
WAVI

LAYERS: 1=CANOPY >10m 2=SUB-CANOPY 3=UNDERSTOREY 4=GROUND (GRD.) LAYER
ABUNDANCE CODES: N=NONE R=RARE O=OCCASIONAL A=ABUNDANT D=DOMINANT N/O=Not observed

[illegible]

Signature:

(Field Personnel)

Quality Control: This form is complete ☒ & legible ☒.

Signature:

(Project Manager)

ELC Polygon: #32-1 Assessment Type: ☒-Visual; no access / ☐-Walk through featureExtent of Physical Investigation of Feature: ☐-Entire / ☐-Partial, walk through polygon (indicate on map)

Reptile / Bat Hibernacula Features: Contains potential reptile hibernacula features?
☐-Y* / ☐-N / ☒-Unknown, no access (*if yes, describe in table below)
 [i.e. features that would provide a route underground, including buried concrete or rock (e.g. foundations, bridge abutments or culverts with cracks/entry points, exposed rock crevices or inactive animal burrows)]
 Contains potential bat hibernacula features?
☐-Y* / ☐-N / ☒-Unknown, no access (*if yes, describe in table below)
 [i.e. karst topography, abandoned mines or caves]

POTENTIAL HIBERNACULA FEATURE(S) IDENTIFIED

UTM	Feature Description	Photo No.	Spp. Observed Using Feature

Bat Roosting Features: Contains potential bat roosting features?
☐-Y* / ☐-N / ☒-Unknown, no access (*if yes, describe in table below)
 [i.e. tall trees with open surroundings, DBH >25cm, side-facing cavities ~10m high in tree]

POTENTIAL BAT ROOSTING FEATURE(S) IDENTIFIED

UTM	Tree ID	Tree Spp.	DBH	Photo No.	Decay Class (1-5)	No. of Cavities	Height and Type of Cavities

Stick Nests: Contains large stick nests?
☐-Y* / ☐-N / ☒-Unknown, no access (*if yes, describe in table below)

STICK NEST(S) IDENTIFIED

UTM	Tree ID	Tree Spp.	Nest Size	Photo No.	Spp. Observed Using Feature

Seeps/Springs/Vernal Pools: Contains seeps/springs/vernal pools?
☐-Y* / ☐-N / ☒-Unknown, no access (*if yes, describe in table below)

SEEP / SPRING / VERNAL POOL FEATURE(S) IDENTIFIED

UTM	Feature No. & Type	Feature Size (Diameter)	Water Depth	Photo No.	Sub/Emergent Veg. Spp. Present?	Shrubs/ Logs at Edge Present?

SPECIES & HABITAT OBSERVATIONS (list species and type of observation & indicate on map)

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CA=carcass; DP=distinctive parts; FE=feeding evidence; FY=eggs/nest; HO=house/den; OB=observed; SC=seat; SI=other sign; TK=track; VO=vocalization



Stantec Consulting Ltd.
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Tel: (519) 836-6050
Fax: (519) 836-2493

Coll. Title 32; Roadside ELC,
Poly 1 Woodland & Wildlife Habitat
Assessment Form

Project Number: 160950769

Project Name: NRWC

Date: June 27

Field Personnel: *N. Charton*

Weather Conditions:

TEMP (°C):

22

WIND:

2-3

CLOUD:

90%

PPT:

PPT (in last 24 hrs):

—

POLYGON DESCRIPTION

ELC COMMUNITY DESCRIPTION & CLASSIFICATION	POLYGON: 32-1		TOPOGRAPHIC FEATURE		HISTORY
	START TIME: 3:10		☐ LACUSTRINE ☐ RIVERINE ☐ BOTTOMLAND ☐ TERRACE ☐ VALLEY SLOPE ☐ TABLELAND ☒ ROLL. UPLAND ☐ CLIFF	☐ TALUS ☐ CREVICE / CAVE ☐ ALVAR ☐ ROCKLAND ☐ BEACH / BAR ☐ SAND DUNE ☐ BLUFF	☐ NATURAL ☒ CULTURAL
	END TIME: 3:20				

STAND DESCRIPTION:

LAYER		HT	CVR	SPECIES IN ORDER OF DECREASING DOMINANCE (>>MUCH GREATER THAN; >GREATER THAN; = ABOUT EQUAL TO)
1	CANOPY	2	3	FRAPENN >> ULMAMER
2	SUB-CANOPY	3	3	FRAPENN > ULMAMER
3	UNDERSTOREY	4	3	Cornus > FRAPENN
4	GRD. LAYER	5-7	4	Comptarceae > JUNCUS SP > ASCSYRI = GRASS

IT CODES: 1= $\geq 25\text{m}$ 2= $10 < \text{HT} \leq 25\text{m}$ 3= $2 < \text{HT} \leq 10\text{m}$ 4= $1 < \text{HT} \leq 2\text{m}$ 5= $0.5 < \text{HT} \leq 1\text{m}$ 6= $0.2 < \text{HT} \leq 0.5\text{m}$ 7= $\text{HT} < 0.2\text{m}$

CVR CODES: 0=NONE 1=0%<CVR≤10% 2=10<CVR≤25% 3=25<CVR≤60% 4=CVR>60% N/O=not observed

STANDING SNAGS:	N/A	<10	10 - 24	25 - 50	>50
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ABUNDANCE CODES: N=NONE R=RARE O=OCCASIONAL A=ABUNDANT N/O=Not observed

STAND MATURITY:	PIONEER	☒ YOUNG	☒ MID-AGE	MATURE	OLD GROWTH
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VEGETATION TYPE: 1 1 1 1 1 CODE: 2 1 1 1 1

COMPLEX	CODE:
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Evidence of Disturbance / Notes:

swampy (i.e. wet) CW/HR

LAYERS: 1=CANOPY >10m 2=SUB-CANOPY 3=UNDERSTOREY 4=GROUND (GRD.) LAYER
ABUNDANCE CODES: N=NONE R=RARE O=OCCASIONAL A=ABUNDANT D=DOMINANT N/O=Not observed

SPECIES CODE	LAYER				DISTANCE FROM RD.		COLL.
	1	2	3	4	≤5 m	>5 m	
TREES:							
FRAPENN	A	A	O		✓	✓	
NLMAMER	R	O			✓	✓	
SHRUBS:							
Gray dogwood			A		✓		
GROUND:							
ASCYRI				O			
HYPERF				R			
GALLIUM				R-O			
Juncus				A-O			
PHL PRAT				R			
GRASS				O	✓	✓	
DIPFULL				O		✓	
Centaurea				A	✓	✓	
Carex sp				R		✓	
VICCRAC				R	✓		
SOLIDAGO				O-R		✓	

Signature:

(Field Personnel)

Quality Control: This form is complete ☒ & legible ☒

Signature:

(Project Manager)

ELC Polygon: # 32-1 Assessment Type: ☒-Visual; no access / ☐-Walk through featureExtent of Physical Investigation of Feature: ☐-Entire / ☐-Partial, walk through polygon (*indicate on map*)

Reptile / Bat Hibernacula Features: Contains/potential reptile hibernacula features?
☐-Y* / ☒-N / ☐-Unknown, no access (**if yes, describe in table below*)
 [i.e. features that would provide a route underground, including buried concrete or rock (e.g. foundations, bridge abutments or culverts with cracks/entry points, exposed rock crevices or inactive animal burrows)]

Contains/potential bat hibernacula features?
☐-Y* / ☒-N / ☐-Unknown, no access (**if yes, describe in table below*)
 [i.e. karst topography, abandoned mines or caves]

POTENTIAL HIBERNACULA FEATURE(S) IDENTIFIED

UTM	Feature Description	Photo No.	Spp. Observed Using Feature

Bat Roosting Features: Contains potential bat roosting features?
☐-Y* / ☐-N / ☒-Unknown, no access (**if yes, describe in table below*)
 [i.e. tall trees with open surroundings, DBH >25cm, side-facing cavities ~10m high in tree]

POTENTIAL BAT ROOSTING FEATURE(S) IDENTIFIED

UTM	Tree ID	Tree Spp.	DBH	Photo No.	Decay Class (1-5)	No. of Cavities	Height and Type of Cavities

Stick Nests: Contains large stick nests?
☐-Y* / ☐-N / ☒-Unknown, no access (**if yes, describe in table below*)

STICK NEST(S) IDENTIFIED

UTM	Tree ID	Tree Spp.	Nest Size	Photo No.	Spp. Observed Using Feature

Seeps/Springs/Vernal Pools: Contains seeps/springs/vernal pools?
☐-Y* / ☐-N / ☒-Unknown, no access (**if yes, describe in table below*)

SEEP / SPRING / VERNAL POOL FEATURE(S) IDENTIFIED

UTM	Feature No. & Type	Feature Size (Diameter)	Water Depth	Photo No.	Sub/Emergent Veg. Spp. Present?	Shrubs/ Logs at Edge Present?

SPECIES & HABITAT OBSERVATIONS (list species and type of observation & indicate on map)

--

CA=carcass; DP=distinctive parts; FE=feeding evidence; FY=eggs/nest; HO=house/den; OB=observed; SC=seat; SI=other sign; TK=track; VO=vocalization



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Coll. Tile 32; Roadside ELC,
Poly 2 Woodland & Wildlife Habitat
Assessment Form

Project Number: 160950269
Date: June 27

Project Name: NRWC
Field Personnel: N. Charlton

Weather Conditions:	TEMP (°C): 22	WIND: 2-3	CLOUD: 90%	PPT: —	PPT (in last 24 hrs): —
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POLYGON DESCRIPTION

ELC COMMUNITY DESCRIPTION & CLASSIFICATION	POLYGON:	TOPOGRAPHIC FEATURE		HISTORY
	32-2	☐ LACUSTRINE	☐ TALUS	☒ NATURAL
	START TIME:	☐ RIVERINE	☐ CREVICE / CAVE	☒ CULTURAL
	3:20	☐ BOTTOMLAND	☐ ALVAR	
	END TIME:	☐ TERRACE	☐ ROCKLAND	
		☐ VALLEY SLOPE	☐ BEACH / BAR	
		☐ TABLELAND	☐ SAND DUNE	
	☒ ROLL. UPLAND	☐ BLUFF		
		☐ CLIFF		

STAND DESCRIPTION:

LAYER		HT	CVR	SPECIES IN ORDER OF DECREASING DOMINANCE (>>MUCH GREATER THAN; >GREATER THAN; = ABOUT EQUAL TO)
1	CANOPY			
2	SUB-CANOPY			
3	UNDERSTOREY			
4	GRD. LAYER	5-7	4	PHACELIA >> IMPATIENS SP

IT CODES: 1= $\geq 25\text{m}$ 2= $10 < \text{HT} \leq 25\text{m}$ 3= $2 < \text{HT} \leq 10\text{m}$ 4= $1 < \text{HT} \leq 2\text{m}$ 5= $0.5 < \text{HT} \leq 1\text{m}$ 6= $0.2 < \text{HT} \leq 0.5\text{m}$ 7= $\text{HT} < 0.2\text{m}$

CVR CODES: 0=NONE 1=0%<CVR≤10% 2=10<CVR≤25% 3=25<CVR≤60% 4=CVR>60% N/O=not observed

STANDING SNAGS:	<10	10 - 24	25 - 50	>50
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ABUNDANCE CODES: N=NONE R=RARE O=OCCASIONAL A=ABUNDANT N/O=Not observed

STAND MATURITY:	PIONEER	YOUNG	MID-AGE	MATURE	OLD GROWTH
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VEGETATION TYPE: reed canary grass mineral meadow marsh	CODE: MAM 2-2
COMPLEX inclusion	CODE: CUM 1-1

Evidence of Disturbance / Notes:

MAW confined to channel,
about 7m wide
CUM on either side
pic 16

LAYERS: 1=CANOPY >10m 2=SUB-CANOPY 3=UNDERSTOREY 4=GROUND (GRD.) LAYER
ABUNDANCE CODES: N=NONE R=RARE O=OCCASIONAL A=ABUNDANT D=DOMINANT N/O=Not observed

[illegible]

Signature:

(Field Personnel)

Quality Control: This form is complete ☒ & legible ☒.

Signature

(Project Manager)

Extent of Physical Investigation of Feature: ☐-Entire / ☐-Partial, walk through polygon (*indicate on map*)

Reptile / Bat Hibernacula Features: Contains potential reptile hibernacula features?
☐-Y* / ☒-N / ☐-Unknown, no access (**if yes, describe in table below*)
 [i.e. features that would provide a route underground, including buried concrete or rock (e.g. foundations, bridge abutments or culverts with cracks/entry points, exposed rock crevices or inactive animal burrows)]
 Contains potential bat hibernacula features?
☐-Y* / ☒-N / ☐-Unknown, no access (**if yes, describe in table below*)
 [i.e. karst topography, abandoned mines or caves]

UTM	Feature Description	Photo No.	Spp. Observed Using Feature

Bat Roosting Features: Contains potential bat roosting features?
☐ Y* / ☒ N / ☐ Unknown, no access (**if yes, describe in table below*)
 [i.e. tall trees with open surroundings, DBH >25cm, side-facing cavities ~10m high in tree]

UTM	Tree ID	Tree Spp.	DBH	Photo No.	Decay Class (1-5)	No. of Cavities	Height and Type of Cavities

Stick Nests: Contains large stick nests?
☐-Y* / ☒-N / ☐-Unknown, no access (*if yes, describe in table below)

UTM	Tree ID	Tree Spp.	Nest Size	Photo No.	Spp. Observed Using Feature

Seeps/Springs/Vernal Pools: Contains seeps/springs/vernal pools?
☐-Y* / ☐-N / ☒-Unknown, no access (*if yes, describe in table below)

UTM	Feature No. & Type	Feature Size (Diameter)	Water Depth	Photo No.	Sub/Emergent Veg. Spp. Present?	Shrubs/ Logs at Edge Present?

[illegible]

REV: 2012-01-03



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Fax: (519) 836-2493

td. Coll. Tile 32;
Poly 3 Wood

32. Roadside ELC, Woodland & Wildlife Habitat Assessment Form

Project Number: 160950269

Project Name: NRWC

Date: June 27

Field Personnel: N. Charbon

Weather Conditions:

TEMP (°C):

22

WIND:

2-3

CLOUD:

90%.

PPT:

PPT (in last 24 hrs):

POLYGON DESCRIPTION

ELC COMMUNITY DESCRIPTION & CLASSIFICATION	POLYGON: 32-3		TOPOGRAPHIC FEATURE		HISTORY	
	START TIME: 3:30		☐ LACUSTRINE	☐ TALUS	☐ NATURAL	
			☐ RIVERINE	☐ CREVICE / CAVE		
			☐ BOTTOMLAND	☐ ALVAR	☐ CULTURAL	
		☐ TERRACE	☐ ROCKLAND			
		☐ VALLEY SLOPE	☐ BEACH / BAR			
		☐ TABLELAND	☐ SAND DUNE			
		☐ ROLL UPLAND	☐ BLUFF			
		☐ CLIFF				

STAND DESCRIPTION:

	LAYER	HT	CVR	SPECIES IN ORDER OF DECREASING DOMINANCE (>>MUCH GREATER THAN; >GREATER THAN; =-ABOUT EQUAL TO)
1	CANOPY			
2	SUB-CANOPY			
3	UNDERSTOREY			
4	GRD. LAYER			

IT CODES: 1= $\geq 25m$ 2= $10 < HT \leq 25m$ 3= $2 < HT \leq 10m$ 4= $1 < HT \leq 2m$ 5= $0.5 < HT \leq 1m$ 6= $0.2 < HT \leq 0.5m$ 7= $HT < 0.2m$

SVR CODES: 0=NONE 1=0%<CVR≤10% 2=10<CVR≤25% 3=25<CVR≤60% 4=CVR>60% N/O=not observed

STANDING SNAGS:	0	<10	10 - 24	25 - 50	>50
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ABUNDANCE CODES: N=NONE R=RARE O=OCCASIONAL A=ABUNDANT N/O=Not observed

STAND MATURITY:	PIONEER	YOUNG	MID-AGE	MATURE	OLD GROWTH
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VEGETATION TYPE: <i>200/100/11</i>	CODE: <i>1111</i>
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COMPLEX	CODE:
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Evidence of Disturbance / Notes:

Disturbance / Notes:

same grass + clover mix with patches
of a mustard species (canola?)

Hay / pasture

LAYERS: 1=CANOPY >10m 2=SUB-CANOPY 3=UNDERSTOREY 4=GROUND (GRD.) LAYER
ABUNDANCE CODES: N=NONE R=RARE O=OCCASIONAL A=ABUNDANT D=DOMINANT N/O=Not observed

[illegible]

Signature:

(Field Personnel)

Quality Control: This form is complete ☒ & legible ☒.

Signature

(Project Manager)

ELC Polygon: # 32-3 Assessment Type: ☒-Visual; no access / ☐-Walk through featureExtent of Physical Investigation of Feature: ☐-Entire / ☐-Partial, walk through polygon (*indicate on map*)**Reptile / Bat Hibernacula Features:**

Contains potential reptile hibernacula features?

☐-Y* / ☐-N / ☐-Unknown, no access (**if yes, describe in table below*)

[i.e. features that would provide a route underground, including buried concrete or rock (e.g. foundations, bridge abutments or culverts with cracks/entry points, exposed rock crevices or inactive animal burrows)]

Contains potential bat hibernacula features?

☐-Y* / ☐-N / ☐-Unknown, no access (**if yes, describe in table below*)

[i.e. karst topography, abandoned mines or caves]

POTENTIAL HIBERNACULA FEATURE(S) IDENTIFIED

UTM	Feature Description	Photo No.	Spp. Observed Using Feature

Bat Roosting Features:

Contains potential bat roosting features?

☐-Y* / ☐-N / ☐-Unknown, no access (**if yes, describe in table below*)

[i.e. tall trees with open surroundings, DBH >25cm, side-facing cavities ~10m high in tree]

POTENTIAL BAT ROOSTING FEATURE(S) IDENTIFIED

UTM	Tree ID	Tree Spp.	DBH	Photo No.	Decay Class (1-5)	No. of Cavities	Height and Type of Cavities

Stick Nests:

Contains large stick nests?

☐-Y* / ☐-N / ☐-Unknown, no access (**if yes, describe in table below*)**STICK NEST(S) IDENTIFIED**

UTM	Tree ID	Tree Spp.	Nest Size	Photo No.	Spp. Observed Using Feature

Seeps/Springs/Vernal Pools:

Contains seeps/springs/vernal pools?

☐-Y* / ☐-N / ☐-Unknown, no access (**if yes, describe in table below*)**SEEP / SPRING / VERNAL POOL FEATURE(S) IDENTIFIED**

UTM	Feature No. & Type	Feature Size (Diameter)	Water Depth	Photo No.	Sub/Emergent Veg. Spp. Present?	Shrubs/ Logs at Edge Present?

SPECIES & HABITAT OBSERVATIONS (list species and type of observation & indicate on map)

--

CA=carcass; DP=distinctive parts; FE=feeding evidence; FY=eggs/nest; HO=house/den; OB=observed; SC=seat; SI=other sign; TK=truck; VO=vocalization



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Coll. Tile 32; Roadside ELC,
Poly 4 Woodland & Wildlife Habitat
Assessment Form

Project Number: 160950269

Project Name: N/RWC

Date: June 27

Field Personnel: N. Charlton

Weather Conditions:	TEMP (°C): 20	WIND: 2-3	CLOUD: 90%	PPT: brief rain	PPT (in last 24 hrs): —
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POLYGON DESCRIPTION

ELC COMMUNITY DESCRIPTION & CLASSIFICATION	POLYGON: 32-4	TOPOGRAPHIC FEATURE		HISTORY
		START TIME: 3:30	END TIME:	
		☐ LACUSTRINE ☐ RIVERINE ☐ BOTTOMLAND ☐ TERRACE ☐ VALLEY SLOPE ☐ TABLELAND ☒ ROLL UPLAND ☐ CLIFF	☐ TALUS ☐ CREVICE / CAVE ☐ ALVAR ☐ ROCKLAND ☐ BEACH / BAR ☐ SAND DUNE ☐ BLUFF	☐ NATURAL ☒ CULTURAL

STAND DESCRIPTION:

LAYER		HT	CVR	SPECIES IN ORDER OF DECREASING DOMINANCE (>>MUCH GREATER THAN; >GREATER THAN; = ABOUT EQUAL TO)
1	CANOPY			
2	SUB-CANOPY	3	3	Hawthorn > Malus
3	UNDERSTOREY	4	3	Cornus > Hawthorn > LONTAR +
4	GRD. LAYER	5-7	4	GRASS > Galium = A. SCYR

IT CODES: 1=>25m 2=10<HT≤25m 3=2<HT≤10m 4=1<HT≤2m 5=0.5<HT≤1m 6=0.2<HT≤0.5m 7=HT<0.2m

CVR CODES: 0=NONE 1=0%<CVR≤10% 2=10<CVR≤25% 3=25<CVR≤60% 4=CVR>60% N/O=not observed

STANDING SNAGS:	<10	10 - 24	25 - 50	>50
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ABUNDANCE CODES: N=NONE R=RARE O=OCCASIONAL A=ABUNDANT N/O=Not observed

STAND MATURITY:	PIONEER	YOUNG	MID-AGE	MATURE	OLD GROWTH
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VEGETATION TYPE: Hawthorn cultural thicket		CODE: CUT1-8*
COMPLEX		CODE:

Evidence of Disturbance / Notes:

LAYERS: 1=CANOPY >10m 2=SUB-CANOPY 3=UNDERSTOREY 4=GROUND (GRD.) LAYER
ABUNDANCE CODES: N=NONE R=RARE O=OCCASIONAL A=ABUNDANT D=DOMINANT N/O=Not observed

SPECIES CODE	LAYER				DISTANCE FROM RD.		COLL.
	1	2	3	4	≤5 m	>5 m	
TREES:							
MALUS SP		O			✓		
ACE SAJA	R	MA			✓		
CRATAEGUS		A			✓		
SHRUBS:							
LON TART			R		✓		
CORNUS			A		✓		
GROUND:							
ASC SYRI				O	✓	✓	
GALIUM				OA	✓	✓	
GRASS				A	✓	✓	
MEL ALBA				R	✓	✓	
VIC CRAC				R	✓	✓	
HYPPERF				R	-	✓	
CIRSIIUM ARVENSE				R	.	✓	

Signature:

(Field Personnel)

Quality Control: This form is complete ☒ & legible ☒

Signature

(Project Manager)