NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Renewable Energy Water Body Site Investigation

Office Use Only

Project (No. & Name): 16k N. Kent **Field Staff:** RE B

Survey Date: 17 APR 15 **Weather Conditions**
Time Started: 0955 Temp (°C), Wind, Cloud Cover (%), Precipitation: 15°, 3 NW, Ø, Ø
Time Finished: 1010 *Precipitation in Prior 48hrs (mm):* 5.0 mm

Site Code: LSCT 103 **GPS Location** **Estimated Length Assessed**
Feature Name: Unnamed Dr Easting: 0402262 Upstream: 10
Drainage System: Lake St Clair Northing: 4703 [illegible] Downstream: 8
Location in System: at Darrell Ln *Water Body No.* NWB-221

Channel Characteristics and Morphology ☐ Lake ☐ Pond ☐ Man-made pond Online/Offline
☑ Straight ☐ Meandering (H/M/L Sinuosity): ☐ Defined ☑ Poorly Defined
☑ Standing Water ☐ Low Flow / Baseflow ☐ Moderate Flow ☐ High / Flood Flow
☑ Freshet Flow
Avg. Wetted Width (m): Avg. Water Depth (m): Max Pool Depth (m):
Avg. Bankfull Width (m): Avg. Bankfull Depth (m):
Substrate Composition (%) Boulder: Cobble: Gravel: Fines: 100
Bed Morphology (%) Flat: Riffle: Run: Pool: 100
Bank Slope & Stability: High slope High stability Feature Gradient (H/M/L):
Other Comments:
Channelized Dr Beginning at Darrell Ln

Instream Aquatic Habitat
Features (e.g. woody debris, undercut banks): Very dense woody debris along length
Vegetation (with % dominant): D. Shrubs (Cat Tail)
Surface Water Quality
Temp (°C): 9 Turbidity (L/M/H): Colour: Green Comments:

Riparian Habitat
Vegetation: D. Shrubs / D. Trees
Canopy Cover (% and species): 70% D. Trees
Adjacent Land Use: AG

General Comments (Fish observed, unusual conditions, culvert/bridge description, groundwater indicators and description)
No Fish obs
abundant over hanging T. Veg
no sign of continuous flow

Photographs	**No.**	**Direction**	**Description**		**No.**	**Direction**	**Description**
Upstream:	217	SE		Other:			
Downstream:							
Feature Bed:	218						
Culvert / Bridge:							
Vegetation:	219						
Landscape Photo:	220	SE					

Additional Characteristics
Describe Bed Material and Soil Conditions in and around Feature:
Not visible
Describe Sediment Deposits in Feature and on Floodplain - Recent / Historic:
Old side slope slumps deposited sed at edges of drain bed, now vegetated w/ dense shrubs.
Presence of Hydric Soils:
No
Describe Debris and / or Leaf Litter in Feature (type,amount, location):
very dense fallen trees through out
Seepage Areas / Springs / Evidence of High Water Table in or near Feature:
None
Attached Algae, Clam or Mussel Shells, Crayfish Chimneys or Exoskeltons, or Aquatic Insect Larvae in or near Feature
(Circle any present) None

Water Body Determination Water Body? ☐ Yes ☑ No ☐ Additional evidence required
Flow Regime: ☐ Permanent ☐ Intermittent ☑ Ephemeral
Evidence of Water Body Status:
T. Veg in main drain bed suggests long periods of no flow

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Project (No. & Name): 16 12 N. Kent **Field Staff:** BEB

Survey Date: 17 APR 16
Time Started: 10h
Time Finished: 1030

Weather Conditions
Temp (°C), Wind, Cloud Cover (%), Precipitation: 15°, 3 NW, Ø, Ø
Precipitation in Prior 48hrs (mm): 5.0 mm

Site Code: LSG 104
Feature Name: Mills Dr
Drainage System: Lake St Clair
Location in System: u/s Darrell Ln

GPS Location
Easting: 0401611
Northing: 4702395
Water Body No. NWB-222

Estimated Length Assessed
Upstream: 10
Downstream: 50

Channel Characteristics and Morphology N/A ☐ Lake ☐ Pond ☐ Man-made pond Online/Offline
☑ Straight ☐ Meandering (H/M/L Sinuosity): ☐ Defined ☑ Poorly Defined
☐ Standing Water ☐ Low Flow / Baseflow ☐ Moderate Flow ☐ High / Flood Flow
☑ Freshet Flow

Avg. Wetted Width (m): 6.0 Avg. Water Depth (m): 0.20 Max Pool Depth (m): 0.25
Avg. Bankfull Width (m): 2.0 Avg. Bankfull Depth (m): 0.55
Substrate Composition (%) Boulder: – Cobble: – Gravel: – Fines: 100
Bed Morphology (%) Flat: 100 Riffle: – Run: – Pool: –
Bank Slope & Stability: High slope moderate stability Feature Gradient (H/M/L):
Other Comments:
Channelized Dr

Instream Aquatic Habitat
Features (e.g. woody debris, undercut banks): over hanging Bank veg
Vegetation (with % dominant):

Surface Water Quality
Temp (°C): 8 Turbidity (L/M/H): Colour: Brn Comments: –

Riparian Habitat
Vegetation: T. Grasses
Canopy Cover (% and species): Ø
Adjacent Land Use: Ag

General Comments (Fish observed, unusual conditions, culvert/bridge description, groundwater indicators and description)
No Fish Obs.
Channelized dr
no sign of sub satur Trace deposits of wood debris
1.7 m sag in concrete bridge

Photographs	No.	Direction	Description		No.	Direction	Description
Upstream:	221	NE	–	Other:	–	–	–
Downstream:	222	SW	–				
Feature Bed:	223	–	–				
Culvert / Bridge:	224	–	–				
Vegetation:	225	–	–				
Landscape Photo:	226	SW	–				

Additional Characteristics
Describe Bed Material and Soil Conditions in and around Feature:
Similar to surrounding Ag. fields
Describe Sediment Deposits in Feature and on Floodplain - Recent / Historic:
Fine sed deposits in thin layer on drain bed @ d/s end, None u/s.
Presence of Hydric Soils:
No.
Describe Debris and / or Leaf Litter in Feature (type,amount, location):
Trees along Length
Seepage Areas / Springs / Evidence of High Water Table in or near Feature:
No.
Attached Algae, Clam or Mussel Shells, Crayfish Chimneys or Exoskeltons, or Aquatic Insect Larvae in or near Feature
(Circle any present) None u/s Algae d/s

Water Body Determination Water Body? ☐ Yes ☐ No ☐ Additional evidence required
Flow Regime: ☐ Permanent ☐ Intermittent ☑ Ephemeral } u/s
Evidence of Water Body Status:
Poor channel definition no sign of containing flow – u/s
D/S – intermittent + a water body due to lack of veg on bed of drain in low flow, beginnings of bank development

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Project (No. & Name): **Field Staff:** BEP

Survey Date: 22 APR 15 **Weather Conditions**
Time Started: 1310 Temp (°C), Wind, Cloud Cover (%), Precipitation: 4.9°, 4WNW, 100%, Snow
Time Finished: 1320 *Precipitation in Prior 48hrs (mm):* No data

Site Code: LSCT161 **GPS Location** **Estimated Length Assessed**
Feature Name: Johnson Dr Easting: 0400044 Upstream: 10
Drainage System: Lake St Clair Northing: 4702939 Downstream: 150
Location in System: along Eberts Ln *Water Body No.* NWB-223

Channel Characteristics and Morphology N/A ☐ Lake ☐ Pond ☐ Man-made pond Online/Offline
☑ Straight ☐ Meandering (H/M/L Sinuosity): ☐ Defined ☑ Poorly Defined
☑ Standing Water ☐ Low Flow / Baseflow ☐ Moderate Flow ☐ High / Flood Flow
☑ Freshet Flow
Avg. Wetted Width (m): 0.10 Avg. Water Depth (m): 0.03 Max Pool Depth (m): 0.05
Avg. Bankfull Width (m): 0.70 Avg. Bankfull Depth (m): 0.40
Substrate Composition (%) Boulder: – Cobble: – Gravel: – Fines: 100
Bed Morphology (%) Flat: – Riffle: – Run: – Pool: 100
Bank Slope & Stability: High slope high stability Feature Gradient (H/M/L):
Other Comments:
Channelized ditch

Instream Aquatic Habitat
Features (e.g. woody debris, undercut banks): T. Grasses Debris
Vegetation (with % dominant): T. Grasses along stream bed
Surface Water Quality
Temp (°C): 6 Turbidity (L/M/H): Colour: clear Comments: –

Riparian Habitat
Vegetation: T. Grasses
Canopy Cover (% and species): 0
Adjacent Land Use: AG

General Comments (Fish observed, unusual conditions, culvert/bridge description, groundwater indicators and description)
No Fish obs
poorly defined channel w/ T. veg along stream bed

Photographs	**No.**	**Direction**	**Description**		**No.**	**Direction**	**Description**
Upstream:	550	NE	–	Other:	–	–	–
Downstream:	551	SW	–				
Feature Bed:	552	–	–				
Culvert / Bridge:	–	–	–				
Vegetation:	553	–	–				
Landscape Photo:	554	SW	–				

Additional Characteristics
Describe Bed Material and Soil Conditions in and around Feature:
Same as adjacent Ag. field
Describe Sediment Deposits in Feature and on Floodplain - Recent / Historic:
None
Presence of Hydric Soils:
No
Describe Debris and / or Leaf Litter in Feature (type,amount, location):
Dense T. Grasses debris Throughout
Seepage Areas / Springs / Evidence of High Water Table in or near Feature:
None
Attached Algae, Clam or Mussel Shells, Crayfish Chimneys or Exoskeltons, or Aquatic Insect Larvae in or near Feature
(Circle any present) None

Water Body Determination Water Body? ☐ Yes ☑ No ☐ Additional evidence required
Flow Regime: ☐ Permanent ☐ Intermittent ☑ Ephemeral
Evidence of Water Body Status:
Based on T. Grasses along stream bed / poor channel definition

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Project (No. & Name): 1612 N. Kent **Field Staff:** BEB

Survey Date: 22 APR 15 **Weather Conditions**
Time Started: 1105 Temp (°C), Wind, Cloud Cover (%), Precipitation: 3°, 4 WNW, 100%, Rain
Time Finished: 1115 *Precipitation in Prior 48hrs (mm):* No data

Site Code: LSCT154 **GPS Location** **Estimated Length Assessed**
Feature Name: Dyer Dr Easting: 0394263 Upstream: 0
Drainage System: Lake St Clair Northing: 4703520 Downstream: 50
Location in System: along country rm 6 *Water Body No.* NWB-224

Channel Characteristics and Morphology N/A ☐ Lake ☐ Pond ☐ Man-made pond Online/Offline
☑ Straight ☐ Meandering (H/M/L Sinuosity): ☐ Defined ☑ Poorly Defined
☐ Standing Water ☐ Low Flow / Baseflow ☐ Moderate Flow ☐ High / Flood Flow
☑ Freshet Flow Channelized Dr
Avg. Wetted Width (m): 0.35 Avg. Water Depth (m): 0.05 Max Pool Depth (m): 0.05
Avg. Bankfull Width (m): 0.75 Avg. Bankfull Depth (m): 0.60
Substrate Composition (%) Boulder: — Cobble: — Gravel: — Fines: 100
Bed Morphology (%) Flat: 100 Riffle: — Run: — Pool: —
Bank Slope & Stability: High slope moderate stability Feature Gradient (H/M/L):
Other Comments: Channelized Dr

Instream Aquatic Habitat
Features (e.g. woody debris, undercut banks): Over hanging T. Grasses
Vegetation (with % dominant): T. Grasses
Surface Water Quality
Temp (°C): 9 Turbidity (L/M/H): Colour: Clear Comments: —

Riparian Habitat
Vegetation: T. Grass
Canopy Cover (% and species): Ø
Adjacent Land Use: AG

General Comments (Fish observed, unusual conditions, culvert/bridge description, groundwater indicators and description)
No Fish obs
poorly defined channel w/ T. Veg along stream bed
no U/S channel
0.35m CSP at Road side

Photographs	**No.**	**Direction**	**Description**		**No.**	**Direction**	**Description**
Upstream:	514	SE	–	Other:	–	–	–
Downstream:	515	NW	–				
Feature Bed:	516	–	–				
Culvert / Bridge:	517	–	–				
Vegetation:		–	–				
Landscape Photo:	518	NW	–				

Additional Characteristics
Describe Bed Material and Soil Conditions in and around Feature:
Sandy deposits on bed, ~~remained~~ remainder is same as surrounding fields
Describe Sediment Deposits in Feature and on Floodplain - Recent / Historic:
Thin deposits of fine sediment in lowest area of drain + in culvert
Presence of Hydric Soils:
No.
Describe Debris and / or Leaf Litter in Feature (type,amount, location):
Dense T. Grasses along edges of stream bed
Seepage Areas / Springs / Evidence of High Water Table in or near Feature:
None
Attached Algae, Clam or Mussel Shells, Crayfish Chimneys or Exoskeltons, or Aquatic Insect Larvae in or near Feature
(Circle any present) None

Water Body Determination Water Body? ☐ Yes ☑ No ☐ Additional evidence required
Flow Regime: ☐ Permanent ☐ Intermittent ☑ Ephemeral
Evidence of Water Body Status:
Poor channel definition and T. Grasses within drain bed
Suggests long dry periods, no feature d/s of road

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Project (No. & Name): 1612 N Kent **Field Staff:** KEA

Survey Date: 21 APR 15 **Weather Conditions**
Time Started: 0850 Temp (°C), Wind, Cloud Cover (%), Precipitation: 8.5°, 6 SW, 100%, Ø
Time Finished: 0900 *Precipitation in Prior 48hrs (mm):* No data

Site Code: LSCT 12.5 **GPS Location** **Estimated Length Assessed**
Feature Name: Unnamed Dr Easting: 0391044 Upstream: 100
Drainage System: Lake St Clair Northing: 4705745 Downstream: 100
Location in System: along Bottom RO *Water Body No.* NWB-225

Channel Characteristics and Morphology NIN ☐ Lake ☐ Pond ☐ Man-made pond Online/Offline
☑ Straight ☐ Meandering (H/M/L Sinuosity): ☐ Defined ☑ Poorly Defined
☐ Standing Water ☐ Low Flow / Baseflow ☐ Moderate Flow ☐ High / Flood Flow
☑ Freshet Flow Channelized Dr
Avg. Wetted Width (m): 0.75 Avg. Water Depth (m): 0.1 Max Pool Depth (m): 0.1
Avg. Bankfull Width (m): 1.5 Avg. Bankfull Depth (m): 0.35
Substrate Composition (%) Boulder: – Cobble: – Gravel: – Fines: 100
Bed Morphology (%) Flat: 100 Riffle: – Run: – Pool: –
Bank Slope & Stability: high slope moderate stability Feature Gradient (H/M/L): L
Other Comments:
Channelized Dr

Instream Aquatic Habitat
Features (e.g. woody debris, undercut banks): dense T. Grass debris
Vegetation (with % dominant): T. Grasses along stream bed (100%)
Surface Water Quality
Temp (°C): 11 Turbidity (L/M/H): L Colour: Brown Comments: —

Riparian Habitat
Vegetation: T. Grasses
Canopy Cover (% and species): Ø
Adjacent Land Use: AG

General Comments (Fish observed, unusual conditions, culvert/bridge description, groundwater indicators and description)
No Fish obs
Channelized dr / w T. Grasses along stream bed

Photographs	**No.**	**Direction**	**Description**		**No.**	**Direction**	**Description**
Upstream:	344	SE	–	Other:	–	–	–
Downstream:	345	NW	–				
Feature Bed:	346	–	–				
Culvert / Bridge:		–	–				
Vegetation:	347	–	–				
Landscape Photo:	348	NW	–				

Additional Characteristics
Describe Bed Material and Soil Conditions in and around Feature:
Same as adjacent Ag. field.
Describe Sediment Deposits in Feature and on Floodplain - Recent / Historic:
None
Presence of Hydric Soils:
No.
Describe Debris and / or Leaf Litter in Feature (type,amount, location):
Dense T. Grass debris along stream bed
Seepage Areas / Springs / Evidence of High Water Table in or near Feature:
None
Attached Algae, Clam or Mussel Shells, Crayfish Chimneys or Exoskeltons, or Aquatic Insect Larvae in or near Feature
(Circle any present) None

Water Body Determination Water Body? ☐ Yes ☑ No ☐ Additional evidence required
Flow Regime: ☐ Permanent ☐ Intermittent ☑ Ephemeral
Evidence of Water Body Status:
T. Grasses along stream bed w Dense Leaf litter suggests long dry periods

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Project (No. & Name): 1612 N. Kent **Field Staff:** BEB

Survey Date: 20 APR 15 **Weather Conditions**
Time Started: 1420 Temp (°C), Wind, Cloud Cover (%), Precipitation: 14.1°, 5 SW, 100%, RAIN
Time Finished: 1435 *Precipitation in Prior 48hrs (mm):* No data

Site Code: LSCT116 **GPS Location** **Estimated Length Assessed**
Feature Name: Baldoon Dr Easting: 0390780 Upstream: 100
Drainage System: Lake St Clair Northing: 4706060 Downstream: 100
Location in System: at Baldoon RD / Green Valley Ln *Water Body No.* NWB-226

Channel Characteristics and Morphology N/A ☐ Lake ☐ Pond ☐ Man-made pond Online/Offline
☑ Straight ☐ Meandering (H/M/L Sinuosity): ☐ Defined ☑ Poorly Defined
☐ Standing Water ☐ Low Flow / Baseflow ☐ Moderate Flow ☐ High / Flood Flow
☑ Freshet Flow Channelized Dr
Avg. Wetted Width (m): 3.5 Avg. Water Depth (m): 0.15 Max Pool Depth (m): 0.2
Avg. Bankfull Width (m): 4.5 Avg. Bankfull Depth (m): 0.5
Substrate Composition (%) Boulder: — Cobble: — Gravel: — Fines: 100
Bed Morphology (%) Flat: 100 Riffle: — Run: — Pool: —
Bank Slope & Stability: High slope Feature Gradient (H/M/L):
Other Comments:
Channelized dr

Instream Aquatic Habitat
Features (e.g. woody debris, undercut banks): deposits of T. veg debris
Vegetation (with % dominant): T. Grasses (100%)
Surface Water Quality
Temp (°C): 11 Turbidity (L/M/H): Colour: Green Comments: —

Riparian Habitat
Vegetation: T. Grasses
Canopy Cover (% and species): 0
Adjacent Land Use: AG

General Comments (Fish observed, unusual conditions, culvert/bridge description, groundwater indicators and description)
No Fish obs
Channelized dr w T. Veg along Stream bed
0.8 m Csp in broken concrete embankments

Photographs	**No.**	**Direction**	**Description**		**No.**	**Direction**	**Description**
Upstream:	286	SE	—	Other:	—	—	—
Downstream:	285	N	—				
Feature Bed:	286	—	—				
Culvert / Bridge:	287	—	—				
Vegetation:	288	—	—				
Landscape Photo:	289	SE	—				

Additional Characteristics
Describe Bed Material and Soil Conditions in and around Feature:
Same as surrounding Ag fields
Describe Sediment Deposits in Feature and on Floodplain - Recent / Historic:
Thin layer of fine sed deposited on drain bed
Presence of Hydric Soils:
No
Describe Debris and / or Leaf Litter in Feature (type,amount, location):
patches of T. Veg debris along edges
Seepage Areas / Springs / Evidence of High Water Table in or near Feature:
None
Attached Algae, Clam or Mussel Shells, Crayfish Chimneys or Exoskeltons, or Aquatic Insect Larvae in or near Feature
(Circle any present)

Water Body Determination Water Body? ☐ Yes ☑ No ☐ Additional evidence required
Flow Regime: ☐ Permanent ☐ Intermittent ☑ Ephemeral
Evidence of Water Body Status:
T. Grasses along stream bed and lack of Aquatic Veg suggests long dry periods.

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Project (No. & Name): 1612 Nokent **Field Staff:** BER

Survey Date: 20 APR 15 **Weather Conditions**
Time Started: 1405 Temp (°C), Wind, Cloud Cover (%), Precipitation: 14.1°, 5 SW, 100%, RAIN
Time Finished: 1415 *Precipitation in Prior 48hrs (mm):* No data

Site Code: LSCT 114 **GPS Location** **Estimated Length Assessed**
Feature Name: Baldoon Dr Easting: 0390417 Upstream: 100
Drainage System: Lake St Clair Northing: 4706431 Downstream: 100
Location in System: along Baldoon RD *Water Body No.* NWB-227

Channel Characteristics and Morphology N/A ☐ Lake ☐ Pond ☐ Man-made pond Online/Offline
☑ Straight ☐ Meandering (H/M/L Sinuosity): ☐ Defined ☑ Poorly Defined
☐ Standing Water ☐ Low Flow / Baseflow ☐ Moderate Flow ☐ High / Flood Flow
☑ Freshet Flow
Avg. Wetted Width (m): 3.5 Avg. Water Depth (m): 0.15 Max Pool Depth (m): 0.2
Avg. Bankfull Width (m): 3.5 Avg. Bankfull Depth (m): 0.25
Substrate Composition (%) Boulder: – Cobble: – Gravel: – Fines: 100
Bed Morphology (%) Flat: 100 Riffle: – Run: – Pool: –
Bank Slope & Stability: High slope high stability Feature Gradient (H/M/L):
Other Comments:
Channelized Dr

Instream Aquatic Habitat
Features (e.g. woody debris, undercut banks): T. Veg within stream bed
Vegetation (with % dominant): T. Grasses (100%)
Surface Water Quality
Temp (°C): 11 Turbidity (L/M/H): Colour: Green Comments: –

Riparian Habitat
Vegetation: T. Grasses
Canopy Cover (% and species): Ø
Adjacent Land Use: Ag

General Comments (Fish observed, unusual conditions, culvert/bridge description, groundwater indicators and description)
No Fish obs
Channelized Dr w/ T. Grasses along stream bed
no indication of sub/sort

Photographs	**No.**	**Direction**	**Description**		**No.**	**Direction**	**Description**
Upstream:	279	SE	–	Other:	–	–	–
Downstream:	280	NW	–				
Feature Bed:	281	–	–				
Culvert / Bridge:			–				
Vegetation:	282	–	–				
Landscape Photo:	283	NW	–				

Additional Characteristics
Describe Bed Material and Soil Conditions in and around Feature:
Same as surrounding Ag fields
Describe Sediment Deposits in Feature and on Floodplain - Recent / Historic:
None
Presence of Hydric Soils:
No
Describe Debris and / or Leaf Litter in Feature (type,amount, location):
Sparse deposits of Leaf Litter / T. Grasses throughout
Seepage Areas / Springs / Evidence of High Water Table in or near Feature:
None
Attached Algae, Clam or Mussel Shells, Crayfish Chimneys or Exoskeltons, or Aquatic Insect Larvae in or near Feature
(Circle any present)

Water Body Determination Water Body? ☐ Yes ☑ No ☐ Additional evidence required
Flow Regime: ☐ Permanent ☐ Intermittent ☑ Ephemeral
Evidence of Water Body Status:
Presence of T. Grasses along drain bed suggests long dry periods
No substrate sorting, poor definition

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Project (No. & Name): **Field Staff:** BCS

Survey Date: 20 APR 15 **Weather Conditions**
Time Started: 1645 Temp (°C), Wind, Cloud Cover (%), Precipitation: 12.9°, 6 WSW, 100%, 0
Time Finished: 1700 *Precipitation in Prior 48hrs (mm):* No data

Site Code: LSCI 122 **GPS Location** **Estimated Length Assessed**
Feature Name: HYATT FRYER Dr Easting: 0390042 Upstream: 0
Drainage System: Lake St Clair Northing: 4704538 Downstream: 150
Location in System: along Bear Ln *Water Body No.* NWH 228

Channel Characteristics and Morphology N/A ☐ Lake ☐ Pond ☐ Man-made pond Online/Offline
☑ Straight ☐ Meandering (H/M/L Sinuosity): ☐ Defined ☑ Poorly Defined
☐ Standing Water ☐ Low Flow / Baseflow ☐ Moderate Flow ☐ High / Flood Flow
☑ Freshet Flow Channelized Dr
Avg. Wetted Width (m): 2.5 Avg. Water Depth (m): 0.07 Max Pool Depth (m): 0.1
Avg. Bankfull Width (m): 3.5 Avg. Bankfull Depth (m): 0.4
Substrate Composition (%) Boulder: – Cobble: – Gravel: – Fines: 100
Bed Morphology (%) Flat: 100 Riffle: – Run: – Pool: –
Bank Slope & Stability: high slope low stability Feature Gradient (H/M/L):
Other Comments: Channelized Dr
no above ground channel V/S

Instream Aquatic Habitat
Features (e.g. woody debris, undercut banks): T. Grasses w encrusting algae
Vegetation (with % dominant): T. Grasses (100%)
Surface Water Quality
Temp (°C): 11 Turbidity (L/M/H): Colour: Clear Comments: –

Riparian Habitat
Vegetation: T Grasses / Phrag
Canopy Cover (% and species): 0
Adjacent Land Use: AG

General Comments (Fish observed, unusual conditions, culvert/bridge description, groundwater indicators and description)
No Fish obs
poorly defined channelized dr w T. veg along stream bed
0.25 m CSP in concrete blocks

Photographs	**No.**	**Direction**	**Description**		**No.**	**Direction**	**Description**
Upstream:	325	SE	–	Other:	–	–	–
Downstream:	326	N	–				
Feature Bed:	327	–	–				
Culvert / Bridge:	328	–	–				
Vegetation:	326	–	–				
Landscape Photo:	329	NW	–				

Additional Characteristics
Describe Bed Material and Soil Conditions in and around Feature:
Same as surrounding Ag field + residential lot.
Describe Sediment Deposits in Feature and on Floodplain - Recent / Historic:
None
Presence of Hydric Soils:
No
Describe Debris and / or Leaf Litter in Feature (type,amount, location):
T. grass + leaf litter on bed of drain
Seepage Areas / Springs / Evidence of High Water Table in or near Feature:
None
Attached Algae, Clam or Mussel Shells, Crayfish Chimneys or Exoskeltons, or Aquatic Insect Larvae in or near Feature
(Circle any present)

Water Body Determination Water Body? ☐ Yes ☑ No ☐ Additional evidence required
Flow Regime: ☐ Permanent ☐ Intermittent ☑ Ephemeral
Evidence of Water Body Status:
T. Veg along drain bed suggests long dry periods
no substrate sorting

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Renewable Energy Water Body Site Investigation

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Project (No. & Name): 1612 N. Road **Field Staff:** REB

Survey Date: 20 APR 15 **Weather Conditions**

Time Started: 1625 Temp (°C), Wind, Cloud Cover (%), Precipitation: 14.3°, 6 WSW, 100%, Ø

Time Finished: 1640 *Precipitation in Prior 48hrs (mm):* No data

Site Code: LSCT 121 **GPS Location** **Estimated Length Assessed**

Feature Name: HYATT FRYER Dr Easting: 0389605 Upstream: 100

Drainage System: Lake St Clair Northing: 4705042 Downstream: 100

Location in System: at Green valley Ln *Water Body No.* NWB 229

Channel Characteristics and Morphology N/A ☐ Lake ☐ Pond ☐ Man-made pond Online/Offline

☑ Straight ☐ Meandering (H/M/L Sinuosity): ☐ Defined ☑ Poorly Defined

☐ Standing Water ☐ Low Flow / Baseflow ☐ Moderate Flow ☐ High / Flood Flow

☑ Freshet Flow Channelized Dr

Avg. Wetted Width (m): 3.5 Avg. Water Depth (m): 0.1 Max Pool Depth (m): 0.1

Avg. Bankfull Width (m): 5.0 Avg. Bankfull Depth (m): 0.5

Substrate Composition (%) Boulder: — Cobble: — Gravel: — Fines: 100

Bed Morphology (%) Flat: 100 Riffle: — Run: — Pool: —

Bank Slope & Stability: High Slope High Stability Feature Gradient (H/M/L): —

Other Comments:

Channelized Dr w/ signs of recent clean out

Instream Aquatic Habitat

Features (e.g. woody debris, undercut banks): Over hanging Bank veg

Vegetation (with % dominant): T. Grasses (100%)

Surface Water Quality

Temp (°C): 9 Turbidity (L/M/H): Colour: Brown Comments: —

Riparian Habitat

Vegetation: Phrag / T. Grasses

Canopy Cover (% and species): Ø

Adjacent Land Use: AG

General Comments (Fish observed, unusual conditions, culvert/bridge description, groundwater indicators and description)

No Fish obs

channelized dr w/ T. Grasses along stream bed

poor channel definition w/ no sign of sub section

0.8m CSP in concrete blocks at Road side

Photographs	**No.**	**Direction**	**Description**		**No.**	**Direction**	**Description**
Upstream:	318	SE	—	Other:	—	—	—
Downstream:	319	NW	—				
Feature Bed:	320	—	—				
Culvert / Bridge:	322	—	—				
Vegetation:	321	—	—				
Landscape Photo:	323	SE	—				

Additional Characteristics

Describe Bed Material and Soil Conditions in and around Feature:

Same as adjacent Ag. field

Describe Sediment Deposits in Feature and on Floodplain - Recent / Historic:

None

Presence of Hydric Soils:

No.

Describe Debris and / or Leaf Litter in Feature (type, amount, location):

T. Grasses Through out bed of drain

Seepage Areas / Springs / Evidence of High Water Table in or near Feature:

None

Attached Algae, Clam or Mussel Shells, Crayfish Chimneys or Exoskeltons, or Aquatic Insect Larvae in or near Feature

(Circle any present) None

Water Body Determination Water Body? ☐ Yes ☑ No ☐ Additional evidence required

Flow Regime: ☐ Permanent ☐ Intermittent ☑ Ephemeral

Evidence of Water Body Status:

poor channel definition w/ T. Grasses suggest Long Dry periods

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Renewable Energy Water Body Site Investigation

Office Use Only

Project (No. & Name): 161 N. Kent **Field Staff:** BEP

Survey Date: 20 APR 15 **Weather Conditions**

Time Started: 1610 Temp (°C), Wind, Cloud Cover (%), Precipitation: 14.3°, 6 WSW, 100%, Ø

Time Finished: 1620 *Precipitation in Prior 48hrs (mm):* No data

Site Code: LSCT 120 **GPS Location** **Estimated Length Assessed**

Feature Name: Porter Dr. Easting: 0302983 Upstream: 0

Drainage System: Lake St Clair Northing: 4705651 Downstream: 10

Location in System: at Green Valley Ln *Water Body No.* NWB-230

Channel Characteristics and Morphology N/A ☐ Lake ☐ Pond ☐ Man-made pond Online/Offline

☑ Straight ☐ Meandering (H/M/L Sinuosity): ☐ Defined ☑ Poorly Defined

☐ Standing Water ☐ Low Flow / Baseflow ☐ Moderate Flow ☐ High / Flood Flow

☑ Freshet Flow Channelized Dr.

Avg. Wetted Width (m): 1.25 Avg. Water Depth (m): 0.15 Max Pool Depth (m): 0.18

Avg. Bankfull Width (m): 2 Avg. Bankfull Depth (m): 0.6

Substrate Composition (%) Boulder: — Cobble: — Gravel: — Fines: 100

Bed Morphology (%) Flat: 100 Riffle: — Run: — Pool: —

Bank Slope & Stability: High slope moderate stability Feature Gradient (H/M/L): —

Other Comments:

Channelized Dr. w/ no channel V/S

Instream Aquatic Habitat

Features (e.g. woody debris, undercut banks): dense T. veg and Leafy debris Through out

Vegetation (with % dominant): no instream veg

Surface Water Quality

Temp (°C): 8 Turbidity (L/M/H): Colour: clear Comments: —

Riparian Habitat

Vegetation: T. Grasses

Canopy Cover (% and species): Ø

Adjacent Land Use: AG

General Comments (Fish observed, unusual conditions, culvert/bridge description, groundwater indicators and description)

No Fish obs

No Channel V/S

Dense Leaf litter through out

0.3m plastic CSP at road side

Photographs	**No.**	**Direction**	**Description**		**No.**	**Direction**	**Description**
Upstream:	312	SE	— NO WB	Other:	—	—	—
Downstream:	313	N	—				
Feature Bed:	314	—	—				
Culvert / Bridge:	317	—	—				
Vegetation:	315	—	—				
Landscape Photo:	316	N	—				

Additional Characteristics

Describe Bed Material and Soil Conditions in and around Feature:

Same as Surrounding Ag. Fields

Describe Sediment Deposits in Feature and on Floodplain - Recent / Historic:

~~Sar~~ None.

Presence of Hydric Soils:

No.

Describe Debris and / or Leaf Litter in Feature (type,amount, location):

Dense Leaf litter through out

Seepage Areas / Springs / Evidence of High Water Table in or near Feature:

None

Attached Algae, Clam or Mussel Shells, Crayfish Chimneys or Exoskeltons, or Aquatic Insect Larvae in or near Feature

(Circle any present) No

Water Body Determination Water Body? ☐ Yes ☑ No ☐ Additional evidence required

Flow Regime: ☐ Permanent ☐ Intermittent ☑ Ephemeral

Evidence of Water Body Status:

Based on poor channel definition and lack of aquatic veg no permanent water present

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Renewable Energy Water Body Site Investigation
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Project (No. & Name): 1612 N. Kent **Field Staff:** BER

Survey Date: 13-APR-15
Time Started: 1355
Time Finished: 1410

Weather Conditions
Temp (°C), Wind, Cloud Cover (%), Precipitation: 19°C, 4/SW, 70%, Ø
Precipitation in Prior 48hrs (mm): No data

Site Code: LSCT-005
Feature Name: Unnamed Dr
Drainage System: Lake St Clair
Location in System: along Oldfield Ln

GPS Location
Easting: 0394157
Northing: 4712789
Water Body No. NWS-231

Estimated Length Assessed
Upstream: 100
Downstream: 100

Channel Characteristics and Morphology Channelized Dr ☐ Lake ☐ Pond ☐ Man-made pond Online/Offline
☑ Straight ☐ Meandering (H/M/L Sinuosity): ☐ Defined ☑ Poorly Defined
☐ Standing Water ☐ Low Flow / Baseflow ☐ Moderate Flow ☐ High / Flood Flow
☑ Freshet Flow

Avg. Wetted Width (m): 0.75 Avg. Water Depth (m): 0.12 Max Pool Depth (m): –
Avg. Bankfull Width (m): 1.2 Avg. Bankfull Depth (m): 0.25
Substrate Composition (%) Boulder: – Cobble: – Gravel: – Fines: 100
Bed Morphology (%) Flat: 100 Riffle: – Run: – Pool: –
Bank Slope & Stability: moderate slope High stability Feature Gradient (H/M/L): Low
Other Comments:
Unnamed channelized Drainage Ditch North side of Oldfield Ln

Instream Aquatic Habitat
Features (e.g. woody debris, undercut banks): none
Vegetation (with % dominant): 100% T. Grasses

Surface Water Quality
Temp (°C): 10 Turbidity (L/M/H): MEDIUM Colour: Brown Comments: –

Riparian Habitat
Vegetation: T. Grasses
Canopy Cover (% and species): Ø
Adjacent Land Use: AG

General Comments (Fish observed, unusual conditions, culvert/bridge description, groundwater indicators and description)
Channelized drain, man made
no indication of permanence
Start / End of Channel visible

Photographs	No.	Direction	Description		No.	Direction	Description
Upstream:	30	NE	–	Other:	–	–	–
Downstream:	32	SW	–				
Feature Bed:	33	–	–				
Culvert / Bridge:	–	–	–				
Vegetation:	–	–	–				
Landscape Photo:	34	SW	–				

Additional Characteristics
Describe Bed Material and Soil Conditions in and around Feature:
Same as surrounding soil
Describe Sediment Deposits in Feature and on Floodplain - Recent / Historic:
no high water marks
Presence of Hydric Soils:
No
Describe Debris and / or Leaf Litter in Feature (type,amount, location):
none
Seepage Areas / Springs / Evidence of High Water Table in or near Feature:
None.
Attached Algae, Clam or Mussel Shells, Crayfish Chimneys or Exoskeltons, or Aquatic Insect Larvae in or near Feature
(Circle any present) None

Water Body Determination Water Body? ☐ Yes ☑ No ☐ Additional evidence required
Flow Regime: ☐ Permanent ☐ Intermittent ☑ Ephemeral
Evidence of Water Body Status: None waterbody
no evidence of water permanence
T. Grasses along Channel

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Renewable Energy Water Body Site Investigation
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Project (No. & Name): **Field Staff:** NGC, SGB

Survey Date: June 16, 2015
Time Started: 15:12
Time Finished: 15:26

Weather Conditions
Temp (°C), Wind, Cloud Cover (%), Precipitation: 26, 4, 40, 0
Precipitation in Prior 48hrs (mm): 2.5mm - sig. more rain fell than recorded by Environ Canada

Site Code: LSCT-208
Feature Name: unnamed pond
Drainage System: Lake St. Clair
Location in System: Caledonia & Ebenezer

GPS Location
Easting: 0401675
Northing: 4704385
Water Body No. NWB-232

Estimated Length Assessed
Upstream: NA
Downstream: NA

Channel Characteristics and Morphology ☐ Lake ☐ Pond ☒ Man-made pond Online/Offline
☐ Straight ☐ Meandering (H/M/L Sinuosity): ☒ Defined ☐ Poorly Defined
☐ Standing Water ☐ Low Flow / Baseflow ☐ Moderate Flow ☐ High / Flood Flow
☐ Freshet Flow

Avg. Wetted Width (m): 15m Avg. Water Depth (m): <1m Max Pool Depth (m): –
Avg. Bankfull Width (m): Avg. Bankfull Depth (m):
Substrate Composition (%) Boulder: – Cobble: – Gravel: – Fines: 60%
Bed Morphology (%) Flat: – Riffle: – Run: – Pool:
Bank Slope & Stability: High slope, highly stable Feature Gradient (H/M/L): N/A
Other Comments: Lots of algae

Instream Aquatic Habitat
Features (e.g. woody debris, undercut banks): None
Vegetation (with % dominant): Duckweed, cattails around pond edge
Surface Water Quality
Temp (°C): 29% Turbidity (L/M/H): N/A Colour: Clear Comments: –

Riparian Habitat
Vegetation: d. trees, (aspen, poplar, willow) shrubs, cattails, t. grasses, clover
Canopy Cover (% and species): 5% Aspen, poplar, willow
Adjacent Land Use: Ebenezer line & meadow & corn field

General Comments (Fish observed, unusual conditions, culvert/bridge description, groundwater indicators and description)
Green Frogs heard (?) No culverts
No fish
dense aquatic veg at surface of water cattails throughout
No gw indicators

Photographs	**No.**	**Direction**	**Description**		**No.**	**Direction**	**Description**
Upstream:	–	–	–	Other:	2134		condition of pond
Downstream:	–	–	–		2135		
Feature Bed:	–	–	–				
Culvert / Bridge:	–	–	–				
Vegetation:	–	–	–				
Landscape Photo:	–	–	–				

Additional Characteristics
Describe Bed Material and Soil Conditions in and around Feature:
N/A not visible
Describe Sediment Deposits in Feature and on Floodplain - Recent / Historic:
N/A pond
Presence of Hydric Soils:
Unknown, but likely
Describe Debris and / or Leaf Litter in Feature (type, amount, location):
Not visible
Seepage Areas / Springs / Evidence of High Water Table in or near Feature:
No evidence
Attached Algae, Clam or Mussel Shells, Crayfish Chimneys or Exoskeltons, or Aquatic Insect Larvae in or near Feature
(Circle any present)

Water Body Determination Water Body? ☐ Yes ☒ No ☐ Additional evidence required
Flow Regime: N/A ☐ Permanent ☐ Intermittent ☐ Ephemeral Does not flow
Evidence of Water Body Status:
Man-made pond, dug, not a recently created feature

North kent WP.
1612.

June 16, 2015
NGC, SGB

Weather
Air Temp: 27°C Wind: 4, CC: 40%
Precip: None.

Start Time: 15:01 End Time 15:06
Unnamed pond L. St. Clair drainage system
L St. Clair Road near Eberts/St. Andrews Line
LSC7-209
Man-made dugout pond, barely visible from road.
Permanently holds water, does not flow
Photo 2133.
UTM 0397964 4700505
Not a WB.

Water body No. NWB-~~029~~ 233

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Renewable Energy Water Body Site Investigation
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Project (No. & Name): 1612 N. Kent **Field Staff:** BEB

Survey Date: 15-APR-16 **Weather Conditions**
Time Started: 0845 Temp (°C), Wind, Cloud Cover (%), Precipitation: 11°C, 2/E, 30%, 0
Time Finished: 0855 *Precipitation in Prior 48hrs (mm):* 2.8 mm

Site Code: LSCT-037 **GPS Location** **Estimated Length Assessed**
Feature Name: Mccallum Drain Easting: 0394352 Upstream: 50
Drainage System: Lake St Clair Northing: 4710130 Downstream: 0
Location in System: off Prince Albert Rd *Water Body No.* NWB 234

Channel Characteristics and Morphology N/A ☐ Lake ☐ Pond ☐ Man-made pond Online/Offline
☑ Straight ☐ Meandering (H/M/L Sinuosity): ☐ Defined ☑ Poorly Defined
☐ Standing Water ☐ Low Flow / Baseflow ☐ Moderate Flow ☐ High / Flood Flow
☑ Freshet Flow Channelized
Avg. Wetted Width (m): 3.5 Avg. Water Depth (m): 0.15 Max Pool Depth (m): 0.2
Avg. Bankfull Width (m): 5.0 Avg. Bankfull Depth (m): 0.5
Substrate Composition (%) Boulder: – Cobble: – Gravel: – Fines: 100
Bed Morphology (%) Flat: 100 Riffle: – Run: – Pool: –
Bank Slope & Stability: Steep slopes / moderate stability Feature Gradient (H/M/L): –
Other Comments:
Recently cleaned
Channelized Dr.

Instream Aquatic Habitat
Features (e.g. woody debris, undercut banks): Dense patches of Dry grasses
Vegetation (with % dominant): – none Recently cleaned
Surface Water Quality
Temp (°C): 9 Turbidity (L/M/H): LOW Colour: Brown Comments: –

Riparian Habitat
Vegetation: T. Grasses
Canopy Cover (% and species): 0
Adjacent Land Use: AG

General Comments (Fish observed, unusual conditions, culvert/bridge description, groundwater indicators and description)
No fish obs
channelized drain
Dense patches of dry grasses
no signs of permanence

Photographs	**No.**	**Direction**	**Description**		**No.**	**Direction**	**Description**
Upstream:	0849	NE	–	Other:	–	–	–
Downstream:	0850	–	–				
Feature Bed:	0851	–	–				
Culvert / Bridge:	—		–				
Vegetation:	0852	–	–				
Landscape Photo:	0853	NE	–				

Additional Characteristics
Describe Bed Material and Soil Conditions in and around Feature:
Dense dry grasses, similar to surrounding Ag. fields
Describe Sediment Deposits in Feature and on Floodplain - Recent / Historic:
general sed. deposits on bed, recent channel clean out
Presence of Hydric Soils:
NO
Describe Debris and / or Leaf Litter in Feature (type, amount, location):
N/A recent clean out
Seepage Areas / Springs / Evidence of High Water Table in or near Feature:
None
Attached Algae, Clam or Mussel Shells, Crayfish Chimneys or Exoskeltons, or Aquatic Insect Larvae in or near Feature
(Circle any present) N/A

Water Body Determination Water Body? ☐ Yes ☑ No ☐ Additional evidence required
Flow Regime: ☐ Permanent ☐ Intermittent ☑ Ephemeral
Evidence of Water Body Status:
Though recently cleaned no evidence of permanence or aquatic was observed.

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Renewable Energy Water Body Site Investigation

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Project (No. & Name): 1672 N. Kent **Field Staff:** BEB

Survey Date: 13-APR-15 **Weather Conditions**
Time Started: 1505 Temp (°C), Wind, Cloud Cover (%), Precipitation: 17°C, S/SW, 100%, Light rain
Time Finished: 1520 *Precipitation in Prior 48hrs (mm):* No data

Site Code: LST-009 **GPS Location** **Estimated Length Assessed**
Feature Name: Unnamed Dr Easting: 0392489 Upstream: 250
Drainage System: Lake St. Clair Tribs. Northing: 4711321 Downstream: 100
Location in System: Electric Line SW of Prince Albert *Water Body No.* NWB-235

Channel Characteristics and Morphology N/A ☐ Lake ☐ Pond ☐ Man-made pond Online/Offline
☑ Straight ☐ Meandering (H/M/L Sinuosity): ☐ Defined ☑ Poorly Defined
☐ Standing Water ☐ Low Flow / Baseflow ☐ Moderate Flow ☐ High / Flood Flow
☑ Freshet Flow
Avg. Wetted Width (m): 0.6 Avg. Water Depth (m): 0.12 Max Pool Depth (m): 0.25
Avg. Bankfull Width (m): 0.75 Avg. Bankfull Depth (m): 0.25
Substrate Composition (%) Boulder: – Cobble: – Gravel: – Fines: 100
Bed Morphology (%) Flat: 100 Riffle: – Run: – Pool: –
Bank Slope & Stability: moderate slope High stability Feature Gradient (H/M/L): Low
Other Comments:
Channelized Roadside drain
fully vegetated w/ T. Grasses

Instream Aquatic Habitat
Features (e.g. woody debris, undercut banks): –
Vegetation (with % dominant): 100% T. Grasses
Surface Water Quality
Temp (°C): 10 Turbidity (L/M/H): Low Colour: clear Comments: –

Riparian Habitat
Vegetation: 100% T. Grasses
Canopy Cover (% and species): Q
Adjacent Land Use: AG

General Comments (Fish observed, unusual conditions, culvert/bridge description, groundwater indicators and description)
No Fish
Channelized Dr on N.

Photographs	No.	Direction	Description		No.	Direction	Description
Upstream:	51	NE	–	Other:	–	–	–
Downstream:	52	SW	–				
Feature Bed:	54	–	–				
Culvert / Bridge:	–	–	–				
Vegetation:	–	–	–				
Landscape Photo:	53	E	–				

Additional Characteristics
Describe Bed Material and Soil Conditions in and around Feature:
Same as surrounding fields
Describe Sediment Deposits in Feature and on Floodplain - Recent / Historic:
none
Presence of Hydric Soils:
No
Describe Debris and / or Leaf Litter in Feature (type,amount, location):
Deposits of Leaf Litter within channel
Seepage Areas / Springs / Evidence of High Water Table in or near Feature:
none
Attached Algae, Clam or Mussel Shells, Crayfish Chimneys or Exoskeltons, or Aquatic Insect Larvae in or near Feature
(Circle any present) None

Water Body Determination Water Body? ☐ Yes ☑ No ☐ Additional evidence required
Flow Regime: ☐ Permanent ☐ Intermittent ☑ Ephemeral
Evidence of Water Body Status:
Bed on in channel T. veg not in LB

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Project (No. & Name): 1612 N. Kent **Field Staff:** BEB

Survey Date: 13-APR-15 **Weather Conditions**
Time Started: 1640 Temp (°C), Wind, Cloud Cover (%), Precipitation: 18°C, S/SW, 100%, Light rain ending.
Time Finished: 1555 *Precipitation in Prior 48hrs (mm):* No data

Site Code: LSCT-010 **GPS Location** **Estimated Length Assessed**
Feature Name: unnamed Dr Easting: 0391456 Upstream: 100
Drainage System: Lake St Clair Northing: 4710392 Downstream: 100
Location in System: Electric Line *Water Body No.* NWR 236

Channel Characteristics and Morphology N/A ☐ Lake ☐ Pond ☐ Man-made pond Online/Offline
☑ Straight ☐ Meandering (H/M/L Sinuosity): ☐ Defined ☑ Poorly Defined
☑ Standing Water ☐ Low Flow / Baseflow ☐ Moderate Flow ☐ High / Flood Flow
☑ Freshet Flow

Avg. Wetted Width (m): 1.2 Avg. Water Depth (m): 0.20 Max Pool Depth (m): 0.2
Avg. Bankfull Width (m): 1.4 Avg. Bankfull Depth (m): 0.35
Substrate Composition (%) Boulder: – Cobble: – Gravel: – Fines: 100
Bed Morphology (%) Flat: 100 Riffle: – Run: – Pool: –
Bank Slope & Stability: moderate slope moderate stability Feature Gradient (H/M/L): Low
Other Comments:
Channelized Dr along road side
Evidence of clearing

Instream Aquatic Habitat
Features (e.g. woody debris, undercut banks): None T. veg
Vegetation (with % dominant): 100% T. Grasses

Surface Water Quality
Temp (°C): 10 Turbidity (L/M/H): Low Colour: Clear Comments: –

Riparian Habitat
Vegetation: T. Grasses
Canopy Cover (% and species): 0
Adjacent Land Use: Ag

General Comments (Fish observed, unusual conditions, culvert/bridge description, groundwater indicators and description)
No fish obs
Channelized road side drainage ditch
no sign of water permanence

Photographs	No.	Direction	Description		No.	Direction	Description
Upstream:	61	SW	–	Other:	–	–	–
Downstream:	62	NE	–				
Feature Bed:	63	–	–				
Culvert / Bridge:	–	–	–				
Vegetation:	64	–	–				
Landscape Photo:	65	E	–				

Additional Characteristics
Describe Bed Material and Soil Conditions in and around Feature:
Conditions similar to adjacent soil
Describe Sediment Deposits in Feature and on Floodplain - Recent / Historic:
none
Presence of Hydric Soils:
No
Describe Debris and / or Leaf Litter in Feature (type,amount, location):
Patches of Leaf Litter Throughout
Seepage Areas / Springs / Evidence of High Water Table in or near Feature:
none
Attached Algae, Clam or Mussel Shells, Crayfish Chimneys or Exoskeltons, or Aquatic Insect Larvae in or near Feature
(Circle any present) None

Water Body Determination Water Body? ☐ Yes ☑ No ☐ Additional evidence required
Flow Regime: ☐ Permanent ☐ Intermittent ☑ Ephemeral
Evidence of Water Body Status:
no indication of WB permanence
T. veg suggests WB not permanent.

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Project (No. & Name): 162 Nkent **Field Staff:** BEB

Survey Date: 16 APR 15
Time Started: 1025
Time Finished: 1040

Weather Conditions
Temp (°C), Wind, Cloud Cover (%), Precipitation: 10°C, 4/SE, 40%, Ø
Precipitation in Prior 48hrs (mm): 0.0 mm

Site Code: LSCT075
Feature Name: unnamed dr
Drainage System: Lake St Clair
Location in System: Cedar Header / CTR SR

GPS Location
Easting: 0399520
Northing: 4710030
Water Body No. NWB-237

Estimated Length Assessed
Upstream: 50
Downstream: 50

Channel Characteristics and Morphology N/A ☐ Lake ☐ Pond ☐ Man-made pond Online/Offline
☑ Straight ☐ Meandering (H/M/L Sinuosity): ☐ Defined ☑ Poorly Defined
☐ Standing Water ☐ Low Flow / Baseflow ☐ Moderate Flow ☐ High / Flood Flow
☑ Freshet Flow Channelized Dr
Avg. Wetted Width (m): 1.5 Avg. Water Depth (m): 0.28 Max Pool Depth (m): 0.35
Avg. Bankfull Width (m): 2.0 Avg. Bankfull Depth (m): 0.60
Substrate Composition (%) Boulder: – Cobble: – Gravel: – Fines: 100
Bed Morphology (%) Flat: – Riffle: – Run: – Pool: 100
Bank Slope & Stability: High slope / High stability Feature Gradient (H/M/Ø): LOW
Other Comments:
Poorly defined channel w no indication of permanence

Instream Aquatic Habitat
Features (e.g. woody debris, undercut banks): Traces of dry grasses along edges, over hanging Banks veg
Vegetation (with % dominant): Traces of duck weed (100%)
Surface Water Quality
Temp (°C): 9 Turbidity (L/M/H): MEDIUM Colour: Green Comments: –

Riparian Habitat
Vegetation: T. Grasses / Phrag
Canopy Cover (% and species): Ø
Adjacent Land Use: AG

General Comments (Fish observed, unusual conditions, culvert/bridge description, groundwater indicators and description)
No Fish obs, Traces of duckweed suggest permanence
poorly defined channel
162m csp at CTR SR

Photographs	No.	Direction	Description		No.	Direction	Description
Upstream:	52	NE	–	Other:	–	–	–
Downstream:	53	SW	–				
Feature Bed:	54	–	–				
Culvert / Bridge:	55	–	–				
Vegetation:	56	–	–				
Landscape Photo:	57	NE	–				

Additional Characteristics
Describe Bed Material and Soil Conditions in and around Feature:
Same as surrounding Ag fields.
Describe Sediment Deposits in Feature and on Floodplain - Recent / Historic:
Thin layer of fine sediment on drain bed.
Presence of Hydric Soils:
No
Describe Debris and / or Leaf Litter in Feature (type, amount, location):
Traces of dry grasses over hanging from banks
Seepage Areas / Springs / Evidence of High Water Table in or near Feature:
None
Attached Algae, Clam or Mussel Shells, Crayfish Chimneys or Exoskeltons, or Aquatic Insect Larvae in or near Feature
(Circle any present)

Water Body Determination Water Body? ☐ Yes ☑ No ☐ Additional evidence required
Flow Regime: ☐ Permanent ☐ Intermittent ☑ Ephemeral
Evidence of Water Body Status:
Poor Channel definition and lack of instream veg suggests no continuous water flow

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Project (No. & Name): 1612 N Kent **Field Staff:** BEB

Survey Date: 29 APR 16 **Weather Conditions**
Time Started: 0750 Temp (°C), Wind, Cloud Cover (%), Precipitation: 11° Q Q Q
Time Finished: 840 *Precipitation in Prior 48hrs (mm):* No data

Site Code: LSCT183 **GPS Location** **Estimated Length Assessed**
Feature Name: Kennedy Dr Easting: 393839 Upstream: 10
Drainage System: Lake St Clair Northing: 4705945 Downstream: 100
Location in System: Near T16 *Water Body No.* NWB-238

Channel Characteristics and Morphology N/A. ☐ Lake ☐ Pond ☐ Man-made pond Online/Offline
☑ Straight ☐ Meandering (H/M/L Sinuosity): ☐ Defined ☑ Poorly Defined
☑ Standing Water ☐ Low Flow / Baseflow ☐ Moderate Flow ☐ High / Flood Flow
☑ Freshet Flow No water
Avg. Wetted Width (m): Dry Avg. Water Depth (m): Dry Max Pool Depth (m): Dry
Avg. Bankfull Width (m): 1.25 Avg. Bankfull Depth (m): 0.25
Substrate Composition (%) Boulder: – Cobble: – Gravel: – Fines: 100
Bed Morphology (%) ~~Flat:~~ ~~Riffle:~~ ~~Run:~~ ~~Pool:~~
Bank Slope & Stability: Low slope High stability Feature Gradient (H/M/L):
Other Comments:
Dry Channel

Instream Aquatic Habitat
Features (e.g. woody debris, undercut banks): Dense Phrag along banks
Vegetation (with % dominant): Phrag (100%)
Surface Water Quality
Temp (°C): Dry Turbidity (L/M/H): Dry Colour: Dry Comments: –

Riparian Habitat
Vegetation: Phrag
Canopy Cover (% and species): Q
Adjacent Land Use: AG

General Comments (Fish observed, unusual conditions, culvert/bridge description, groundwater indicators and description)
Dry Channel w no sign of permanence

Photographs	**No.**	**Direction**	**Description**		**No.**	**Direction**	**Description**
Upstream:	869	SE	–	Other:	–	–	–
Downstream:	870	NW	–				
Feature Bed:	871	–	–				
Culvert / Bridge:	—	–	–				
Vegetation:	872	–	–				
Landscape Photo:	873	NW	–				

Additional Characteristics
Describe Bed Material and Soil Conditions in and around Feature:
Same as surrounding Ag. fields
Describe Sediment Deposits in Feature and on Floodplain - Recent / Historic:
None
Presence of Hydric Soils:
No.
Describe Debris and / or Leaf Litter in Feature (type,amount, location):
dense T.veg on bed of drain + side slopes.
Seepage Areas / Springs / Evidence of High Water Table in or near Feature:
None
Attached Algae, Clam or Mussel Shells, Crayfish Chimneys or Exoskeltons, or Aquatic Insect Larvae in or near Feature
(Circle any present) NO.

Water Body Determination Water Body? ☐ Yes ☑ No ☐ Additional evidence required
Flow Regime: ☐ Permanent ☐ Intermittent ☑ Ephemeral
Evidence of Water Body Status:
Dry feature w no sign of permanence dense T.veg in drain

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Renewable Energy Water Body Site Investigation
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Project (No. & Name): 1612 N. Road **Field Staff:** BSB

Survey Date: 07 May 15 **Weather Conditions**
Time Started: 1350 Temp (°C), Wind, Cloud Cover (%), Precipitation: 22.4°, 3 SSE, 5, 0
Time Finished: 1420 *Precipitation in Prior 48hrs (mm):* 11.0 mm

Site Code: LSCT 186 **GPS Location** **Estimated Length Assessed**
Feature Name: DYER Dr Easting: 0393942 Upstream: 100
Drainage System: Lake St. Clair Northing: 4783902 Downstream: 100
Location in System: new country view Ln *Water Body No.* NWB 239

Channel Characteristics and Morphology N/A ☐ Lake ☐ Pond ☐ Man-made pond Online/Offline
☑ Straight ☐ Meandering (H/M/L Sinuosity): ☐ Defined ☑ Poorly Defined
☐ Standing Water ☑ Low Flow / Baseflow ☐ Moderate Flow ☐ High / Flood Flow
☐ Freshet Flow Channelized Dr
Avg. Wetted Width (m): 0.6 Avg. Water Depth (m): 0.07 Max Pool Depth (m): 0.07
Avg. Bankfull Width (m): 1.0 Avg. Bankfull Depth (m): 0.5
Substrate Composition (%) Boulder: – Cobble: – Gravel: – Fines: 100
Bed Morphology (%) Flat: 100 Riffle: – Run: – Pool: –
Bank Slope & Stability: M. Slope L. Stability Feature Gradient (H/M/L):
Other Comments:
Channelized Dr

Instream Aquatic Habitat
Features (e.g. woody debris, undercut banks): – Recently Cleaned
Vegetation (with % dominant): none
Surface Water Quality
Temp (°C): 15 Turbidity (L/M/H): L Colour: Brn Comments: –

Riparian Habitat
Vegetation: T. Grasses
Canopy Cover (% and species): none
Adjacent Land Use: Ag

General Comments (Fish observed, unusual conditions, culvert/bridge description, groundwater indicators and description)
No Fish obs
Poorly defined Channelized Dr – Signs of recent clean out

Photographs	**No.**	**Direction**	**Description**		**No.**	**Direction**	**Description**
Upstream:	895	SE	–	Other:	–	–	–
Downstream:	896	NW	–				
Feature Bed:	897	–	–				
Culvert / Bridge:			–				
Vegetation:	898	–	–				
Landscape Photo:	899	NW	–				

Additional Characteristics
Describe Bed Material and Soil Conditions in and around Feature:
Same as Ag. fields surrounding
Describe Sediment Deposits in Feature and on Floodplain - Recent / Historic:
None
Presence of Hydric Soils:
No.
Describe Debris and / or Leaf Litter in Feature (type,amount, location):
Recently cleaned
Seepage Areas / Springs / Evidence of High Water Table in or near Feature:
None
Attached Algae, Clam or Mussel Shells, Crayfish Chimneys or Exoskeltons, or Aquatic Insect Larvae in or near Feature
(Circle any present) No.

Water Body Determination Water Body? ☐ Yes ☑ No ☐ Additional evidence required
Flow Regime: ☐ Permanent ☐ Intermittent ☑ Ephemeral
Evidence of Water Body Status:
No aquatic veg obs Poorly defined channel w/ signs of clean out

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Project (No. & Name): 1612 N. Kent **Field Staff:** BEB

Survey Date: 7 May 15 **Weather Conditions**
Time Started: 1425 Temp (°C), Wind, Cloud Cover (%), Precipitation: 22.2°, 35, 5, 0
Time Finished: 1450 *Precipitation in Prior 48hrs (mm):* 11.0 mm

Site Code: LSCT187 **GPS Location** **Estimated Length Assessed**
Feature Name: DYER D. Easting: 0388 09 Upstream: 150
Drainage System: Lake St Clair Northing: 4704034 Downstream: 150
Location in System: near County line *Water Body No.* NWB 240

Channel Characteristics and Morphology N/A ☐ Lake ☐ Pond ☐ Man-made pond Online/Offline
☑ Straight ☐ Meandering (H/M/L Sinuosity): ☐ Defined ☑ Poorly Defined
☑ Standing Water ☐ Low Flow / Baseflow ☐ Moderate Flow ☐ High / Flood Flow
☐ Freshet Flow Channelized Dr
Avg. Wetted Width (m): 0.4 Avg. Water Depth (m): 0.07 Max Pool Depth (m): 0.7
Avg. Bankfull Width (m): 0.80 Avg. Bankfull Depth (m): 0.5
Substrate Composition (%) Boulder: – Cobble: – Gravel: – Fines: 100
Bed Morphology (%) Flat: – Riffle: – Run: – Pool: 100
Bank Slope & Stability: H. Slope L. Stability Feature Gradient (H/M/L):
Other Comments:
Channelized Dr

Instream Aquatic Habitat
Features (e.g. woody debris, undercut banks): Recently cleaned dr.
Vegetation (with % dominant): None
Surface Water Quality
Temp (°C): 15 Turbidity (L/M/H): L Colour: Green Comments: –

Riparian Habitat
Vegetation: T. Grasses
Canopy Cover (% and species): 0
Adjacent Land Use: AG

General Comments (Fish observed, unusual conditions, culvert/bridge description, groundwater indicators and description)
No Fish obs
Poorly defined channel – some algae build up

Photographs	**No.**	**Direction**	**Description**		**No.**	**Direction**	**Description**
Upstream:	SE	900	–	Other:	–	–	–
Downstream:	NW	901	–				
Feature Bed:	–	902	–				
Culvert / Bridge:	–	—	–				
Vegetation:	–	903	–				
Landscape Photo:	SE	904	–				

Additional Characteristics
Describe Bed Material and Soil Conditions in and around Feature:
Same as surrounding Ag. fields
Describe Sediment Deposits in Feature and on Floodplain - Recent / Historic:
Signs of historic erosion
Presence of Hydric Soils:
No.
Describe Debris and / or Leaf Litter in Feature (type,amount, location):
None
Seepage Areas / Springs / Evidence of High Water Table in or near Feature:
None
Attached Algae, Clam or Mussel Shells, Crayfish Chimneys or Exoskeltons, or Aquatic Insect Larvae in or near Feature
(Circle any present) Dense algae

Water Body Determination Water Body? ☐ Yes ☑ No ☐ Additional evidence required
Flow Regime: ☐ Permanent ☐ Intermittent ☑ Ephemeral
Evidence of Water Body Status:
Poorly defined channel w no sign of continuous flow, no aq. veg along bed of drain

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Project (No. & Name): 16 N. Ken **Field Staff:** [illegible]

Survey Date: 07 May 16 **Weather Conditions**
Time Started: 1130 Temp (°C), Wind, Cloud Cover (%), Precipitation: 22.9°, 3 SSE, 5, 0
Time Finished: 1715 *Precipitation in Prior 48hrs (mm):* 11.0 mm

Site Code: LSCT 128 **GPS Location** **Estimated Length Assessed**
Feature Name: Glasglen DL Easting: 0394990 Upstream: 100
Drainage System: Lake St Clair Northing: 4719431 Downstream: 10
Location in System: New T 20 *Water Body No.* NWB 241

Channel Characteristics and Morphology N/A ☐ Lake ☐ Pond ☐ Man-made pond Online/Offline
☐ Straight ☑ Meandering (H/M/L Sinuosity): ☐ Defined ☑ Poorly Defined
☑ Standing Water ☐ Low Flow / Baseflow ☐ Moderate Flow ☐ High / Flood Flow
☐ Freshet Flow Channel 20
Avg. Wetted Width (m): 0.7 Avg. Water Depth (m): 0.07 Max Pool Depth (m): 0.07
Avg. Bankfull Width (m): 1.2k Avg. Bankfull Depth (m): 0.5
Substrate Composition (%) Boulder: Cobble: Gravel: Fines: 100
Bed Morphology (%) Flat: Riffle: Run: Pool: 100
Bank Slope & Stability: H Slope H. Stability Feature Gradient (H/M/L):
Other Comments:

Instream Aquatic Habitat
Features (e.g. woody debris, undercut banks): Dense Grasses Tree line
Vegetation (with % dominant): T Grass
Surface Water Quality
Temp (°C): 15 Turbidity (L/M/H): Colour: Q Comments: —

Riparian Habitat
Vegetation: T. Grass
Canopy Cover (% and species): Q
Adjacent Land Use: AG

General Comments (Fish observed, unusual conditions, culvert/bridge description, groundwater indicators and description)
No Fish obs
Poorly defined channel
T. Grasses along stream bed

Photographs	**No.**	**Direction**	**Description**		**No.**	**Direction**	**Description**
Upstream:	E	921	–	Other:	–	–	–
Downstream:	W	922	–				
Feature Bed:	–	923	–				
Culvert / Bridge:	–	–	–				
Vegetation:		924	–				
Landscape Photo:	E	925	–				

Additional Characteristics
Describe Bed Material and Soil Conditions in and around Feature:
Same as surrounding Ag. Fields
Describe Sediment Deposits in Feature and on Floodplain - Recent / Historic:
Historic side slope slumping - densely vegetated
Presence of Hydric Soils:
No.
Describe Debris and / or Leaf Litter in Feature (type, amount, location):
Dense T. Grass / Plants Organics
Seepage Areas / Springs / Evidence of High Water Table in or near Feature:
None
Attached Algae, Clam or Mussel Shells, Crayfish Chimneys or Exoskeltons, or Aquatic Insect Larvae in or near Feature
(Circle any present) None

Water Body Determination Water Body? ☐ Yes ☑ No ☐ Additional evidence required
Flow Regime: ☐ Permanent ☐ Intermittent ☑ Ephemeral
Evidence of Water Body Status:
T. Grasses along stream bed, poor definition,

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Project (No. & Name): 1614 N. Kent **Field Staff:** [illegible]

Survey Date: 07 MAY 15 **Weather Conditions**
Time Started: 1830 Temp (°C), Wind, Cloud Cover (%), Precipitation: 22.3°, 3SE, 5, 0
Time Finished: 1850 *Precipitation in Prior 48hrs (mm):* 11.0 mm

Site Code: LSC 194 **GPS Location** **Estimated Length Assessed**
Feature Name: unnamed Dr. Easting: 0396863 Upstream: 100
Drainage System: Lake St Clair Northing: 4709207 Downstream: 50
Location in System: Northeast of Union Line *Water Body No.* NWB242

Channel Characteristics and Morphology N/A ☐ Lake ☐ Pond ☐ Man-made pond Online/Offline
☑ Straight ☐ Meandering (H/M/L Sinuosity): ☐ Defined ☑ Poorly Defined
☐ Standing Water ☐ Low Flow / Baseflow ☐ Moderate Flow ☐ High / Flood Flow
☐ Freshet Flow Channelized
Avg. Wetted Width (m): Dry Avg. Water Depth (m): Dry Max Pool Depth (m): Dry
Avg. Bankfull Width (m): 1.6 Avg. Bankfull Depth (m): 0.2
Substrate Composition (%) Boulder: – Cobble: – Gravel: – Fines: 100
Bed Morphology (%) Flat: Riffle: Run: Pool:
Bank Slope & Stability: Low Slope, Hi Stability Feature Gradient (H/M/L):
Other Comments:
Dry Channel no sign of water flow

Instream Aquatic Habitat
Features (e.g. woody debris, undercut banks): Dense T. Grasses
Vegetation (with % dominant): T. Grasses (100)
Surface Water Quality Dry
Temp (°C): Turbidity (L/M/H): Colour: Comments:

Riparian Habitat
Vegetation: T. Grasses
Canopy Cover (% and species): 0
Adjacent Land Use: AG

General Comments (Fish observed, unusual conditions, culvert/bridge description, groundwater indicators and description)
Dry Channel No indication of water flow

Photographs	**No.**	**Direction**	**Description**		**No.**	**Direction**	**Description**
Upstream:	936	SE	–	Other:	–	–	–
Downstream:	937	NW	–				
Feature Bed:	938	–	–				
Culvert / Bridge:		–	–				
Vegetation:	939	–	–				
Landscape Photo:	940	SE	–				

Additional Characteristics
Describe Bed Material and Soil Conditions in and around Feature:
Same as surrounding Ag. field
Describe Sediment Deposits in Feature and on Floodplain - Recent / Historic:
None
Presence of Hydric Soils:
No.
Describe Debris and / or Leaf Litter in Feature (type,amount, location):
No litter or debris but dense veg on side slopes + bed.
Seepage Areas / Springs / Evidence of High Water Table in or near Feature:
No
Attached Algae, Clam or Mussel Shells, Crayfish Chimneys or Exoskeltons, or Aquatic Insect Larvae in or near Feature
(Circle any present) None

Water Body Determination Water Body? ☐ Yes ☑ No ☐ Additional evidence required
Flow Regime: ☐ Permanent ☐ Intermittent ☑ Ephemeral
Evidence of Water Body Status:
Dry channel – no sign of water flow Dense T. grasses + shrubs on bed + side slopes of drain

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Project (No. & Name): [illegible] / N Kent **Field Staff:** [illegible]

Survey Date: 07 May 15 **Weather Conditions**
Time Started: 1020 Temp (°C), Wind, Cloud Cover (%), Precipitation: 18.7°, 3SE, 5, 0
Time Finished: 1040 *Precipitation in Prior 48hrs (mm):* 11.0 mm

Site Code: LSCT 196 **GPS Location** **Estimated Length Assessed**
Feature Name: Common Dr Easting: 0397336 Upstream: 100
Drainage System: Lake St Clair Northing: 4709025 Downstream: 100
Location in System: Near T17 *Water Body No.* NWB 243

Channel Characteristics and Morphology N/A ☐ Lake ☐ Pond ☐ Man-made pond Online/Offline
☑ Straight ☐ Meandering (H/M/L Sinuosity): ☐ Defined ☑ Poorly Defined
☑ Standing Water ☐ Low Flow / Baseflow ☐ Moderate Flow ☐ High / Flood Flow
☐ Freshet Flow Channelized Dr
Avg. Wetted Width (m): 0.90 Avg. Water Depth (m): 0.05 Max Pool Depth (m): 0.05
Avg. Bankfull Width (m): 1.2 Avg. Bankfull Depth (m): 0.4
Substrate Composition (%) Boulder: – Cobble: – Gravel: – Fines: 100
Bed Morphology (%) Flat: – Riffle: – Run: – Pool: 100
Bank Slope & Stability: M slope M. Stability Feature Gradient (H/M/L):
Other Comments:
Channelized Dr
No sign of flow

Instream Aquatic Habitat
Features (e.g. woody debris, undercut banks): Dense T. Grasses throughout
Vegetation (with % dominant): T. Grasses
Surface Water Quality
Temp (°C): 14 Turbidity (L/M/H): Colour: Brown Comments: –

Riparian Habitat
Vegetation: T. Grasses
Canopy Cover (% and species): 0
Adjacent Land Use: AG

General Comments (Fish observed, unusual conditions, culvert/bridge description, groundwater indicators and description)
No Fish obs
No sign of flow
Poorly defined channel

Photographs	**No.**	**Direction**	**Description**		**No.**	**Direction**	**Description**
Upstream:	E	0951	–	Other:	–	–	–
Downstream:	W	0952	–				
Feature Bed:	–	0953	–				
Culvert / Bridge:	–	—	–				
Vegetation:	–	0954	–				
Landscape Photo:	W	0955	–				

Additional Characteristics
Describe Bed Material and Soil Conditions in and around Feature:
Same as surrounding Ag. Fields.
Describe Sediment Deposits in Feature and on Floodplain - Recent / Historic:
Historic deposits on bottom of drain - densely vegetated.
Presence of Hydric Soils:
No.
Describe Debris and / or Leaf Litter in Feature (type,amount, location):
Dense T. Grasses
Seepage Areas / Springs / Evidence of High Water Table in or near Feature:
None
Attached Algae, Clam or Mussel Shells, Crayfish Chimneys or Exoskeltons, or Aquatic Insect Larvae in or near Feature
(Circle any present) NO

Water Body Determination Water Body? ☐ Yes ☑ No ☐ Additional evidence required
Flow Regime: ☐ Permanent ☐ Intermittent ☑ Ephemeral
Evidence of Water Body Status:
T. Grasses Throughout drain bed

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Project (No. & Name): 182 N. Kent **Field Staff:** BEB

Survey Date: 07 May 15 **Weather Conditions**
Time Started: 1855 Temp (°C), Wind, Cloud Cover (%), Precipitation: 22 3°, 3SE, 5, 0
Time Finished: 1915 *Precipitation in Prior 48hrs (mm):* 11.0 mm

Site Code: LSCT195 **GPS Location** **Estimated Length Assessed**
Feature Name: Common Dr. Easting: 0397160 Upstream: 100
Drainage System: Lake St Clair Northing: 4708870 Downstream: 100
Location in System: Between T16 & T17 *Water Body No.* NWB244

Channel Characteristics and Morphology N/A ☐ Lake ☐ Pond ☐ Man-made pond Online/Offline
☑ Straight ☐ Meandering (H/M/L Sinuosity): ☐ Defined ☑ Poorly Defined
☑ Standing Water ☐ Low Flow / Baseflow ☐ Moderate Flow ☐ High / Flood Flow
☐ Freshet Flow Channelized Dr.
Avg. Wetted Width (m): 0.6 Avg. Water Depth (m): 0.05 Max Pool Depth (m): 0.05
Avg. Bankfull Width (m): 0.5 Avg. Bankfull Depth (m): 0.4
Substrate Composition (%) Boulder: – Cobble: – Gravel: – Fines: 100
Bed Morphology (%) Flat: – Riffle: – Run: – Pool: 100
Bank Slope & Stability: M slope H stability Feature Gradient (H/M/L):
Other Comments:
Channelized Dr

Instream Aquatic Habitat
Features (e.g. woody debris, undercut banks): Drain T. Grasses
Vegetation (with % dominant): T. Grasses (100%)
Surface Water Quality
Temp (°C): 18 Turbidity (L/M/H): L Colour: Clear Comments: –

Riparian Habitat
Vegetation: T. Grasses
Canopy Cover (% and species): Ag
Adjacent Land Use:

General Comments (Fish observed, unusual conditions, culvert/bridge description, groundwater indicators and description)
No Fish poorly defined channel – T. Veg along stream bed

Photographs	**No.**	**Direction**	**Description**		**No.**	**Direction**	**Description**
Upstream:	N	941	–	Other:	–	–	–
Downstream:	S	942	–				
Feature Bed:	–	943	–				
Culvert / Bridge:	–		–				
Vegetation:	–	944	–				
Landscape Photo:	N	945	–				

Additional Characteristics
Describe Bed Material and Soil Conditions in and around Feature:
Same as surrounding Ag. field
Describe Sediment Deposits in Feature and on Floodplain - Recent / Historic:
Not visible
Presence of Hydric Soils:
No
Describe Debris and / or Leaf Litter in Feature (type,amount, location):
dense T. grasses overhanging + on drain bed
Seepage Areas / Springs / Evidence of High Water Table in or near Feature:
No
Attached Algae, Clam or Mussel Shells, Crayfish Chimneys or Exoskeltons, or Aquatic Insect Larvae in or near Feature
(Circle any present) None

Water Body Determination Water Body? ☐ Yes ☑ No ☐ Additional evidence required
Flow Regime: ☐ Permanent ☐ Intermittent ☑ Ephemeral
Evidence of Water Body Status:
T. Grasses along drain bed poor defin.

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Project (No. & Name): 1612 N. Kent **Field Staff:** BEB

Survey Date: 07 May 15 **Weather Conditions**
Time Started: 1930 Temp (°C), Wind, Cloud Cover (%), Precipitation: 18.7°, 3SE, 5, 0
Time Finished: 2020 *Precipitation in Prior 48hrs (mm):* 11.0 mm

Site Code: LSCT 197 **GPS Location** **Estimated Length Assessed**
Feature Name: Cameron Dr Easting: 0396988 Upstream: 100
Drainage System: Lake St Clair Northing: 4708720 Downstream: 100
Location in System: Near T 16 *Water Body No.* NWB245

Channel Characteristics and Morphology N/A ☐ Lake ☐ Pond ☐ Man-made pond Online/Offline
☑ Straight ☐ Meandering (H/M/L Sinuosity): ☐ Defined ☑ Poorly Defined
☑ Standing Water ☐ Low Flow / Baseflow ☐ Moderate Flow ☐ High / Flood Flow
☐ Freshet Flow Channelized Dr
Avg. Wetted Width (m): 0.20 Avg. Water Depth (m): 0.05 Max Pool Depth (m): 0.05
Avg. Bankfull Width (m): 0.85 Avg. Bankfull Depth (m): 0.4
Substrate Composition (%) Boulder: – Cobble: – Gravel: – Fines: 100
Bed Morphology (%) Flat: – Riffle: – Run: – Pool: 100
Bank Slope & Stability: H. Slope H. Stability Feature Gradient (H/M/L):
Other Comments:
Channelized
No indication of flow

Instream Aquatic Habitat
Features (e.g. woody debris, undercut banks): Dense T. Grasses
Vegetation (with % dominant): T. Grasses (100%)
Surface Water Quality
Temp (°C): 14 Turbidity (L/M/H): L Colour: Clear Comments: –

Riparian Habitat
Vegetation: T. Grasses
Canopy Cover (% and species): 0
Adjacent Land Use: AG

General Comments (Fish observed, unusual conditions, culvert/bridge description, groundwater indicators and description)
No Fish obs
poorly defined drain w/ T. Grasses throughout

Photographs	**No.**	**Direction**	**Description**		**No.**	**Direction**	**Description**
Upstream:	0946	E	–	Other:	–	–	–
Downstream:	0947	W	–				
Feature Bed:	0948	–	–				
Culvert / Bridge:	~~0948~~	–	–				
Vegetation:	0949	–	–				
Landscape Photo:	0950	E	–				

Additional Characteristics
Describe Bed Material and Soil Conditions in and around Feature:
Same as surrounding Ag fields
Describe Sediment Deposits in Feature and on Floodplain - Recent / Historic:
None
Presence of Hydric Soils:
No.
Describe Debris and / or Leaf Litter in Feature (type,amount, location):
Dense T. Grasses
Seepage Areas / Springs / Evidence of High Water Table in or near Feature:
None
Attached Algae, Clam or Mussel Shells, Crayfish Chimneys or Exoskeltons, or Aquatic Insect Larvae in or near Feature
(Circle any present) None

Water Body Determination Water Body? ☐ Yes ☑ No ☐ Additional evidence required
Flow Regime: ☐ Permanent ☐ Intermittent ☑ Ephemeral
Evidence of Water Body Status:
T. Grasses throughout drain bed, poor defin

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Project (No. & Name): 1610 Nr. Kent **Field Staff:** KER

Survey Date: 8 May 13
Time Started: 0830
Time Finished: 0850

Weather Conditions
Temp (°C), Wind, Cloud Cover (%), Precipitation: 20.3°, 25SW, 40%, 0
Precipitation in Prior 48hrs (mm): 0.0 mm

Site Code: LSCT199
Feature Name: Lafferty Dr
Drainage System: Lake St Clair
Location in System: S/S of Countryview Line near T32

GPS Location
Easting: 0397906
Northing: 4707178
Water Body No. NWB 246

Estimated Length Assessed
Upstream: 150
Downstream: 150

Channel Characteristics and Morphology N/A ☐ Lake ☐ Pond ☐ Man-made pond Online/Offline
☑ Straight ☐ Meandering (H/M/L Sinuosity): ☐ Defined ☑ Poorly Defined
☐ Standing Water ☑ Low Flow / Baseflow ☐ Moderate Flow ☐ High / Flood Flow
☐ Freshet Flow Channelized dr
Avg. Wetted Width (m): 0.3 Avg. Water Depth (m): 0.09 Max Pool Depth (m): 0.03
Avg. Bankfull Width (m): 0.80 Avg. Bankfull Depth (m): 0.6
Substrate Composition (%) Boulder: — Cobble: — Gravel: — Fines: 100
Bed Morphology (%) Flat: 100 Riffle: — Run: — Pool: —
Bank Slope & Stability: H slope L stability Feature Gradient (H/M/L):
Other Comments:
Channelized Dr signs of recent clean out.

Instream Aquatic Habitat
Features (e.g. woody debris, undercut banks): - Recently cleaned Dr
Vegetation (with % dominant): none
Surface Water Quality
Temp (°C): 14 Turbidity (L/M/H): Colour: Clear Comments: —

Riparian Habitat
Vegetation: Grasses
Canopy Cover (% and species): 0
Adjacent Land Use: AG

General Comments (Fish observed, unusual conditions, culvert/bridge description, groundwater indicators and description)
No Fish obs
Poorly defined Dr Exposed soil/ algae throughout

Photographs	**No.**	**Direction**	**Description**		**No.**	**Direction**	**Description**
Upstream:	961	S	—	Other:	—	—	—
Downstream:	962	N	—				
Feature Bed:	963	—	—				
Culvert / Bridge:	—	—	—				
Vegetation:	964	—	—				
Landscape Photo:	965	W	—				

Additional Characteristics
Describe Bed Material and Soil Conditions in and around Feature:
Same as Adjacent Ag. Field
Describe Sediment Deposits in Feature and on Floodplain - Recent / Historic:
None recent clean out.
Presence of Hydric Soils:
No.
Describe Debris and / or Leaf Litter in Feature (type,amount, location):
None Recent Clean out.
Seepage Areas / Springs / Evidence of High Water Table in or near Feature:
None.
Attached Algae, Clam or Mussel Shells, Crayfish Chimneys or Exoskeltons, or Aquatic Insect Larvae in or near Feature
(Circle any present)

Water Body Determination Water Body? ☐ Yes ☑ No ☐ Additional evidence required
Flow Regime: ☐ Permanent ☐ Intermittent ☑ Ephemeral
Evidence of Water Body Status:
Lack of aquatic veg poor channel definition

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Aquatic, Terrestrial and Wetland Biologists

Renewable Energy Water Body Site Investigation
Office Use Only

Project (No. & Name): 1612 N.Kent **Field Staff:** BEB

Survey Date: 8 May 15 **Weather Conditions**
Time Started: 0850 Temp (°C), Wind, Cloud Cover (%), Precipitation: 20.3°, 2 SSW, 40%, 0
Time Finished: 0925 *Precipitation in Prior 48hrs (mm):* 0.0 mm

Site Code: LSCT 200 **GPS Location** **Estimated Length Assessed**
Feature Name: Lafferty Dr Easting: 0397415 Upstream: 150
Drainage System: Into st clair Northing: 4707734 Downstream: 150
Location in System: NE of Cedar Hedge Line near T32 *Water Body No.* NWB 247

Channel Characteristics and Morphology N/A ☐ Lake ☐ Pond ☐ Man-made pond Online/Offline
☑ Straight ☐ Meandering (H/M/L Sinuosity): ☐ Defined ☑ Poorly Defined
☐ Standing Water ☐ Low Flow / Baseflow ☑ Moderate Flow ☐ High / Flood Flow
☐ Freshet Flow Channelized Dr
Avg. Wetted Width (m): 0.3 Avg. Water Depth (m): 0.05 Max Pool Depth (m): 0.05
Avg. Bankfull Width (m): 0.85 Avg. Bankfull Depth (m): 0.6
Substrate Composition (%) Boulder: – Cobble: – Gravel: – Fines: 100
Bed Morphology (%) Flat: 100 Riffle: – Run: – Pool: –
Bank Slope & Stability: H Slope L Stability Feature Gradient (H/M/L):
Other Comments:
Channelized dr signs of recent clean out

Instream Aquatic Habitat
Features (e.g. woody debris, undercut banks): - Recently cleaned
Vegetation (with % dominant): none
Surface Water Quality
Temp (°C): 11 Turbidity (L/M/H): Colour: Brown Comments: –

Riparian Habitat
Vegetation: T. Grasses
Canopy Cover (% and species): 0
Adjacent Land Use: AG

General Comments (Fish observed, unusual conditions, culvert/bridge description, groundwater indicators and description)
No Fish obs
poorly defined ir no sign of continuous flow

Photographs	**No.**	**Direction**	**Description**		**No.**	**Direction**	**Description**
Upstream:	966	S	–	Other:	–	–	–
Downstream:	967	N	–				
Feature Bed:	968	–	–				
Culvert / Bridge:			–				
Vegetation:	969	–	–				
Landscape Photo:	970	N	–				

Additional Characteristics
Describe Bed Material and Soil Conditions in and around Feature:
Same as Ag Adjacent Ag field
Describe Sediment Deposits in Feature and on Floodplain - Recent / Historic:
None - recent clean out.
Presence of Hydric Soils:
No.
Describe Debris and / or Leaf Litter in Feature (type,amount, location):
None - recent clean out
Seepage Areas / Springs / Evidence of High Water Table in or near Feature:
None
Attached Algae, Clam or Mussel Shells, Crayfish Chimneys or Exoskeltons, or Aquatic Insect Larvae in or near Feature
(Circle any present) None

Water Body Determination Water Body? ☐ Yes ☑ No ☐ Additional evidence required
Flow Regime: ☐ Permanent ☐ Intermittent ☑ Ephemeral
Evidence of Water Body Status:
No aquatic veg / no signs of continuous flow

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Renewable Energy Water Body Site Investigation

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Project (No. & Name): 168 11 Kent **Field Staff:** BEB

Survey Date: 8 May 15 **Weather Conditions**
Time Started: 1105 Temp (°C), Wind, Cloud Cover (%), Precipitation: 27°, 3SSW, 40%, Ø
Time Finished: 1130 *Precipitation in Prior 48hrs (mm):* 0.0 mm

Site Code: LSC 203 **GPS Location** **Estimated Length Assessed**
Feature Name: McKay Dr. Easting: 400429 Upstream: 150
Drainage System: Little St Clair Northing: 4704100 Downstream: 150
Location in System: New Lowdown drain *Water Body No.* N1003248

Channel Characteristics and Morphology N/A ☐ Lake ☐ Pond ☐ Man-made pond Online/Offline
☑ Straight ☐ Meandering (H/M/L Sinuosity): ☐ Defined ☑ Poorly Defined
☑ Standing Water ☐ Low Flow / Baseflow ☐ Moderate Flow ☐ High / Flood Flow
☐ Freshet Flow Channelized Dr.
Avg. Wetted Width (m): 0.10 Avg. Water Depth (m): 0.05 Max Pool Depth (m): 0.05
Avg. Bankfull Width (m): 0.75 Avg. Bankfull Depth (m): 0.3
Substrate Composition (%) Boulder: – Cobble: – Gravel: – Fines: 100
Bed Morphology (%) Flat: – Riffle: – Run: – Pool: 100
Bank Slope & Stability: M. Slope H stability Feature Gradient (H/M/L)
Other Comments:
Channelized Dr.

Instream Aquatic Habitat
Features (e.g. woody debris, undercut banks): Dense T. Grasses
Vegetation (with % dominant): T. Grasses <100%
Surface Water Quality
Temp (°C): 18 Turbidity (L/M/H): Colour: clear Comments: –

Riparian Habitat
Vegetation: T. Grasses D. Shrubs
Canopy Cover (% and species): 30% D. Shrubs
Adjacent Land Use: AG

General Comments (Fish observed, unusual conditions, culvert/bridge description, groundwater indicators and description)
No Fish obs
Poorly defined Dr. w/ T. Grasses along stream bed

Photographs	**No.**	**Direction**	**Description**		**No.**	**Direction**	**Description**
Upstream:	0081	S	–	Other:	–	–	–
Downstream:	0082	N	–				
Feature Bed:	0083	–	–				
Culvert / Bridge:	–	–	–				
Vegetation:	0084	–	–				
Landscape Photo:	0085	N	–				

Additional Characteristics
Describe Bed Material and Soil Conditions in and around Feature:
Same as surrounding Ag. fields
Describe Sediment Deposits in Feature and on Floodplain - Recent / Historic:
Historic deposits on bed of drain, now densely vegetated
Presence of Hydric Soils:
No
Describe Debris and / or Leaf Litter in Feature (type,amount, location):
Dense T. Veg along stream bed
Seepage Areas / Springs / Evidence of High Water Table in or near Feature:
None
Attached Algae, Clam or Mussel Shells, Crayfish Chimneys or Exoskeltons, or Aquatic Insect Larvae in or near Feature
(Circle any present) None

Water Body Determination Water Body? ☐ Yes ☑ No ☐ Additional evidence required
Flow Regime: ☐ Permanent ☐ Intermittent ☑ Ephemeral
Evidence of Water Body Status:
dense T. Grasses along drain and poor def'n

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Renewable Energy Water Body Site Investigation

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Project (No. & Name): 1612 N. Kent **Field Staff:** BEB

Survey Date: 23APR14 **Weather Conditions**
Time Started: 1625 Temp (°C), Wind, Cloud Cover (%), Precipitation: 22°, 4NW, 100%, Ø
Time Finished: 1630 Precipitation in Prior 48hrs (mm): No data

Site Code: SWLT036 **GPS Location** **Estimated Length Assessed**
Feature Name: Unnamed Dr Easting: 0396012 Upstream: 150
Drainage System: South West Lower Thames Northing: 4780133 Downstream: 150
Location in System: along Baldoon RD Water Body No. NWB-[redacted]249

Channel Characteristics and Morphology N/A ☐ Lake ☐ Pond ☐ Man-made pond Online/Offline
☑ Straight ☐ Meandering (H/M/L Sinuosity): ☐ Defined ☑ Poorly Defined
☑ Standing Water ☐ Low Flow / Baseflow ☐ Moderate Flow ☐ High / Flood Flow
☑ Freshet Flow Channelized Dr
Avg. Wetted Width (m): 0.5 Avg. Water Depth (m): 0.05 Max Pool Depth (m): 0.35
Avg. Bankfull Width (m): 0.75 Avg. Bankfull Depth (m): 0.35
Substrate Composition (%) Boulder: – Cobble: – Gravel: – Fines: 100
Bed Morphology (%) Flat: – Riffle: – Run: – Pool: 100
Bank Slope & Stability: moderate Slope High stability Feature Gradient (H/M/L): LOW
Other Comments: Channelized Dr
no U/S channel

Instream Aquatic Habitat
Features (e.g. woody debris, undercut banks): Dense dry grasses
Vegetation (with % dominant): No Instream veg
Surface Water Quality
Temp (°C): 3 Turbidity (L/M/H): LOW Colour: clear Comments: –

Riparian Habitat
Vegetation: T.Grasses
Canopy Cover (% and species): Ø
Adjacent Land Use: AG

General Comments (Fish observed, unusual conditions, culvert/bridge description, groundwater indicators and description)
No Fish obs
No Instream veg
poorly defined channel

Photographs	No.	Direction	Description		No.	Direction	Description
Upstream:	035	NW	–	Other:	–	–	–
Downstream:	036	SE	–				
Feature Bed:	037	–	–				
Culvert / Bridge:	–	–	–				
Vegetation:	–	–	–				
Landscape Photo:	038	NW	–				

Additional Characteristics
Describe Bed Material and Soil Conditions in and around Feature:
same as ~~surrounding~~ adjacent ag. field
Describe Sediment Deposits in Feature and on Floodplain - Recent / Historic:
None
Presence of Hydric Soils:
No
Describe Debris and / or Leaf Litter in Feature (type,amount, location):
Over hanging bank veg
Seepage Areas / Springs / Evidence of High Water Table in or near Feature:
None
Attached Algae Clam or Mussel Shells, Crayfish Chimneys or Exoskeltons, or Aquatic Insect Larvae in or near Feature
(Circle any present) None

Water Body Determination Water Body? ☐ Yes ☑ No ☐ Additional evidence required
Flow Regime: ☐ Permanent ☐ Intermittent ☑ Ephemeral
Evidence of Water Body Status:
NO instream veg Dry ditch u/s
No sign of substrate sorting

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Project (No. & Name): 1612 N Kent **Field Staff:** BER

Survey Date: 23 APR 15 **Weather Conditions**
Time Started: 1610 Temp (°C), Wind, Cloud Cover (%), Precipitation: 2.2°, 4 NW, 100%, 0
Time Finished: 1620 Precipitation in Prior 48hrs (mm): No data

Site Code: SWT 035 **GPS Location** **Estimated Length Assessed**
Feature Name: Unnamed Dr Easting: 0395723 Upstream: 150
Drainage System: South west Lower Thames Northing: 0700390 250 Downstream: 150
Location in System: along Baldock RD Water Body No. [illegible]

Channel Characteristics and Morphology N/A ☐ Lake ☐ Pond ☐ Man-made pond Online/Offline
☑ Straight ☐ Meandering (H/M/L Sinuosity): ☐ Defined ☑ Poorly Defined
☐ Standing Water ☐ Low Flow / Baseflow ☐ Moderate Flow ☐ High / Flood Flow
☑ Freshet Flow Channelized Dr
Avg. Wetted Width (m): 2.5 Avg. Water Depth (m): 0.15 Max Pool Depth (m): 0.15
Avg. Bankfull Width (m): 3.0 Avg. Bankfull Depth (m): 0.50
Substrate Composition (%) Boulder: — Cobble: — Gravel: — Fines: 100
Bed Morphology (%) Flat: 100 Riffle: — Run: — Pool: —
Bank Slope & Stability: High slope Low Stability Feature Gradient (H/M/L): Low
Other Comments:
Channelized Dr, Signs of recent clean out

Instream Aquatic Habitat
Features (e.g. woody debris, undercut banks): over hanging bank veg
Vegetation (with % dominant): none
Surface Water Quality
Temp (°C): 6 Turbidity (L/M/H): Low Colour: clear Comments: —

Riparian Habitat
Vegetation: T. Grasses
Canopy Cover (% and species): 0
Adjacent Land Use: AG

General Comments (Fish observed, unusual conditions, culvert/bridge description, groundwater indicators and description)
No Fish obs
poor channel definition w/ signs of recent clean out
no instream veg

Photographs	No.	Direction	Description		No.	Direction	Description
Upstream:	30	NW	—	Other:	—	—	—
Downstream:	31	SE	—				
Feature Bed:	32	—	—				
Culvert / Bridge:	—		—				
Vegetation:	33	—	—				
Landscape Photo:	34	SE	—				

Additional Characteristics
Describe Bed Material and Soil Conditions in and around Feature:
Same as adjacent Ag field
Describe Sediment Deposits in Feature and on Floodplain - Recent / Historic:
thin layer of fine sediment deposited on bed of drain
Presence of Hydric Soils:
No.
Describe Debris and / or Leaf Litter in Feature (type,amount, location):
Overhanging bank veg along drain bed
Seepage Areas / Springs / Evidence of High Water Table in or near Feature:
None
Attached Algae, Clam or Mussel Shells, Crayfish Chimneys or Exoskeltons, or Aquatic Insect Larvae in or near Feature
(Circle any present)

Water Body Determination Water Body? ☐ Yes ☑ No ☐ Additional evidence required
Flow Regime: ☐ Permanent ☐ Intermittent ☑ Ephemeral
Evidence of Water Body Status:
No substrate sorting, no aquatic veg

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Project (No. & Name): 1612 N-Kent **Field Staff:** BEB

Survey Date: 23 APR 15 **Weather Conditions**
Time Started: 1425 Temp (°C), Wind, Cloud Cover (%), Precipitation: 1.6°, 4 WNW, 100%, Ø
Time Finished: 1440 *Precipitation in Prior 48hrs (mm):* No data

Site Code: SWLT 030 **GPS Location** **Estimated Length Assessed**
Feature Name: unnamed Dr Easting: 0393802 Upstream: 10
Drainage System: South West Lower Thames Northing: 4701218 251 Downstream: 100
Location in System: along Claymore Dr *Water Body No.* NW13 [redacted]

Channel Characteristics and Morphology N/A ☐ Lake ☐ Pond ☐ Man-made pond Online/Offline
☑ Straight ☐ Meandering (H/M/L Sinuosity): ☐ Defined ☑ Poorly Defined
☐ Standing Water ☐ Low Flow / Baseflow ☐ Moderate Flow ☐ High / Flood Flow
☑ Freshet Flow Channelized Dr
Avg. Wetted Width (m): 0.2 Avg. Water Depth (m): 0.05 Max Pool Depth (m): 0.05
Avg. Bankfull Width (m): 0.75 Avg. Bankfull Depth (m): 0.5
Substrate Composition (%) Boulder: — Cobble: — Gravel: 40 Fines: 60
Bed Morphology (%) Flat: 40 Riffle: 30 Run: 30 Pool: —
Bank Slope & Stability: High Slope Low Stability Feature Gradient (H/M/L): Low
Other Comments: Channelized Dr

Instream Aquatic Habitat
Features (e.g. woody debris, undercut banks): over hanging bank veg
Vegetation (with % dominant): no instream veg
Surface Water Quality
Temp (°C): 3 Turbidity (L/M/H): Low Colour: Brown Comments: —

Riparian Habitat
Vegetation: T. Grasses
Canopy Cover (% and species): D. Trees (20%) - U/S
Adjacent Land Use: AG

General Comments (Fish observed, unusual conditions, culvert/bridge description, groundwater indicators and description)
No Fish obs
No instream veg

Photographs	**No.**	**Direction**	**Description**		**No.**	**Direction**	**Description**
Upstream:	003	—	—	Other:	—	—	—
Downstream:	004	—	—				
Feature Bed:	005	—	—				
Culvert / Bridge:	—	—	—				
Vegetation:	—	—	—				
Landscape Photo:	006	—	—				

Additional Characteristics
Describe Bed Material and Soil Conditions in and around Feature:
Same as adjacent Ag. field
Describe Sediment Deposits in Feature and on Floodplain - Recent / Historic:
Fine deposits on u/s side of culvert filling nearly half the culvert
Presence of Hydric Soils:
No
Describe Debris and / or Leaf Litter in Feature (type,amount, location):
Intermittent deposits of leaf litter and Dry grasses
Seepage Areas / Springs / Evidence of High Water Table in or near Feature:
None
Attached Algae, Clam or Mussel Shells, Crayfish Chimneys or Exoskeltons, or Aquatic Insect Larvae in or near Feature
(Circle any present) None

Water Body Determination Water Body? ☐ Yes ☑ No ☐ Additional evidence required
Flow Regime: ☐ Permanent ☐ Intermittent ☑ Ephemeral
Evidence of Water Body Status:
no aquatic veg and poorly defined channel

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Project (No. & Name): 1612 N-Kent **Field Staff:** BEB

Survey Date: 23 APR 15 **Weather Conditions**
Time Started: 1445 Temp (°C), Wind, Cloud Cover (%), Precipitation: 1.6°, 4 W.NW, 100%, Ø
Time Finished: 1500 *Precipitation in Prior 48hrs (mm):* No data

Site Code: SWLT031 **GPS Location** **Estimated Length Assessed**
Feature Name: unnamed Dr Easting: 0393339 Upstream: 150
Drainage System: South west Lower Thames Northing: 4700828 Downstream: 150
Location in System: off Bear Ln / Claymore Ln *Water Body No.* NWR[redacted]

Channel Characteristics and Morphology N/A ☐ Lake ☐ Pond ☐ Man-made pond Online/Offline
☑ Straight ☐ Meandering (H/M/L Sinuosity): ☐ Defined ☑ Poorly Defined
☐ Standing Water ☐ Low Flow / Baseflow ☐ Moderate Flow ☐ High / Flood Flow
☑ Freshet Flow Channelized Dr
Avg. Wetted Width (m): 0.25 Avg. Water Depth (m): 0.20 Max Pool Depth (m): 0.2
Avg. Bankfull Width (m): 2.5 Avg. Bankfull Depth (m): 0.45
Substrate Composition (%) Boulder: – Cobble: – Gravel: – Fines: 100
Bed Morphology (%) Flat: 60 Riffle: 20 Run: 20 Pool: –
Bank Slope & Stability: High Slope Low Stability Feature Gradient (H/M/L) LOW
Other Comments: Channelized Dr Recently cleaned

Instream Aquatic Habitat
Features (e.g. woody debris, undercut banks): none - Recently cleaned
Vegetation (with % dominant): no in stream veg
Surface Water Quality
Temp (°C): 3 Turbidity (L/M/H): MEDIUM Colour: Brown Comments: –

Riparian Habitat
Vegetation: T.Grasses
Canopy Cover (% and species): Ø
Adjacent Land Use: AG

General Comments (Fish observed, unusual conditions, culvert/bridge description, groundwater indicators and description)
No Fish obs
poorly defined Channel w no sign of sub sorting
0.25 m CSP in concrete blocks

Photographs	**No.**	**Direction**	**Description**		**No.**	**Direction**	**Description**
Upstream:	008	SE	—	Other:	007	NE	U/S Claymore Ln
Downstream:	009	NW	—				
Feature Bed:	010	—	—				
Culvert / Bridge:	011	—	—				
Vegetation:			—				
Landscape Photo:	012	NW	—				

Additional Characteristics
Describe Bed Material and Soil Conditions in and around Feature:
Similar to surrounding Ag. fields.
Describe Sediment Deposits in Feature and on Floodplain - Recent / Historic:
None - recent clean out
Presence of Hydric Soils:
No
Describe Debris and / or Leaf Litter in Feature (type,amount, location):
Sparse patches of leaf litter and dry grass - Recently cleaned
Seepage Areas / Springs / Evidence of High Water Table in or near Feature:
None
Attached Algae, Clam or Mussel Shells, Crayfish Chimneys or Exoskeltons, or Aquatic Insect Larvae in or near Feature
(Circle any present) None

Water Body Determination Water Body? ☐ Yes ☑ No ☐ Additional evidence required
Flow Regime: ☐ Permanent ☐ Intermittent ☑ Ephemeral
Evidence of Water Body Status:
No sign of aquatic veg or algae
no sub sorting

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Project (No. & Name): 1612 N. Kent **Field Staff:** BEO

Survey Date: 23 APR 15 **Weather Conditions**
Time Started: 1555 Temp (°C), Wind, Cloud Cover (%), Precipitation: 1.9°, 4 WNW, 100%, Ø
Time Finished: 1605 *Precipitation in Prior 48hrs (mm):* No data

Site Code: SWLT034 **GPS Location** **Estimated Length Assessed**
Feature Name: Unnamed Dr Easting: 0395308 Upstream: 150
Drainage System: South West Lower Thames Northing: 4700560 253 Downstream: 150
Location in System: along Brook Ln *Water Body No.* NWCR [redacted]

Channel Characteristics and Morphology N/A ☐ Lake ☐ Pond ☐ Man-made pond Online/Offline
☑ Straight ☐ Meandering (H/M/L Sinuosity): ☐ Defined ☑ Poorly Defined
☐ Standing Water ☐ Low Flow / Baseflow ☐ Moderate Flow ☐ High / Flood Flow
☑ Freshet Flow
Avg. Wetted Width (m): 2.5 Avg. Water Depth (m): 0.15 Max Pool Depth (m): 0.15
Avg. Bankfull Width (m): 3 Avg. Bankfull Depth (m): 0.70
Substrate Composition (%) Boulder: – Cobble: – Gravel: – Fines: 100
Bed Morphology (%) Flat: – Riffle: – Run: – Pool: 100
Bank Slope & Stability: High slope High stability Feature Gradient (H/M/L): LOW
Other Comments: Channelized Dr

Instream Aquatic Habitat
Features (e.g. woody debris, undercut banks): over hanging bank veg
Vegetation (with % dominant): T. Grasses (100%)
Surface Water Quality
Temp (°C): 6 Turbidity (L/M/H): LOW Colour: Brown Comments: –

Riparian Habitat
Vegetation: T. Grasses
Canopy Cover (% and species): Ø
Adjacent Land Use: AG

General Comments (Fish observed, unusual conditions, culvert/bridge description, groundwater indicators and description)
No Fish obs
poorly defined channel w/ T. Grasses along stream bed

Photographs	**No.**	**Direction**	**Description**		**No.**	**Direction**	**Description**
Upstream:	025	NE	–	Other:	–	–	–
Downstream:	026	SW	–				
Feature Bed:	027	–	–				
Culvert / Bridge:	–	–	–				
Vegetation:	028	–	–				
Landscape Photo:	029	SW	–				

Additional Characteristics
Describe Bed Material and Soil Conditions in and around Feature:
- same as surrounding Ag fields
Describe Sediment Deposits in Feature and on Floodplain - Recent / Historic:
None
Presence of Hydric Soils:
No.
Describe Debris and / or Leaf Litter in Feature (type,amount, location):
T. Grasses along stream bed
Seepage Areas / Springs / Evidence of High Water Table in or near Feature:
None
Attached Algae, Clam or Mussel Shells, Crayfish Chimneys or Exoskeltons, or Aquatic Insect Larvae in or near Feature
(Circle any present) None

Water Body Determination Water Body? ☐ Yes ☑ No ☐ Additional evidence required
Flow Regime: ☐ Permanent ☐ Intermittent ☑ Ephemeral
Evidence of Water Body Status:
T. Grasses along drain bed no development of banks, no substrate sorting

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Project (No. & Name): 1612 N. Kent **Field Staff:** BEB

Survey Date: 23 APR 15 **Weather Conditions**
Time Started: 1540 Temp (°C), Wind, Cloud Cover (%), Precipitation: 1.9°, 4 WNW, 100%, Ø
Time Finished: 1550 *Precipitation in Prior 48hrs (mm):* No data

Site Code: SVLT033 **GPS Location** **Estimated Length Assessed**
Feature Name: Unnamed Dr Easting: 0394655 Upstream: 150
Drainage System: South West Lower Thames Northing: 4700088.54 Downstream: 150
Location in System: along Brook Ln *Water Body No.* NWB [redacted]

Channel Characteristics and Morphology N/A ☐ Lake ☐ Pond ☐ Man-made pond Online/Offline
☑ Straight ☐ Meandering (H/M/L Sinuosity): ☐ Defined ☑ Poorly Defined
☐ Standing Water ☐ Low Flow / Baseflow ☐ Moderate Flow ☐ High / Flood Flow
☑ Freshet Flow Channelized Dr
Avg. Wetted Width (m): 2.5 Avg. Water Depth (m): 0.10 Max Pool Depth (m): 01
Avg. Bankfull Width (m): 4.0 Avg. Bankfull Depth (m): 0.50
Substrate Composition (%) Boulder: — Cobble: — Gravel: — Fines: 100
Bed Morphology (%) Flat: — Riffle: — Run: — Pool: 100
Bank Slope & Stability: High Slope moderate stability Feature Gradient (H/M/L): LOW
Other Comments:
Channelized Dr

Instream Aquatic Habitat
Features (e.g. woody debris, undercut banks): Dense T. Grasses within channel
Vegetation (with % dominant): T. Grasses (100%)
Surface Water Quality
Temp (°C): 6 Turbidity (L/M/H): LOW Colour: clear Comments: —

Riparian Habitat
Vegetation: T. Grasses
Canopy Cover (% and species): 0
Adjacent Land Use: AG

General Comments (Fish observed, unusual conditions, culvert/bridge description, groundwater indicators and description)
No Fish obs
T. Grasses along entire stream bed
no visible flow

Photographs	**No.**	**Direction**	**Description**		**No.**	**Direction**	**Description**
Upstream:	020	NE	—	Other:	—	—	—
Downstream:	021	SW	—				
Feature Bed:	022	—	—				
Culvert / Bridge:			—				
Vegetation:	023	—	—				
Landscape Photo:	024	NE	—				

Additional Characteristics
Describe Bed Material and Soil Conditions in and around Feature:
Same as adjacent Ag. Field
Describe Sediment Deposits in Feature and on Floodplain - Recent / Historic:
None
Presence of Hydric Soils:
No
Describe Debris and / or Leaf Litter in Feature (type,amount, location):
Sparse patches of leaf litter throughout
Seepage Areas / Springs / Evidence of High Water Table in or near Feature:
None
Attached Algae, Clam or Mussel Shells, Crayfish Chimneys or Exoskeltons, or Aquatic Insect Larvae in or near Feature
(Circle any present) None

Water Body Determination Water Body? ☐ Yes ☑ No ☐ Additional evidence required
Flow Regime: ☐ Permanent ☐ Intermittent ☑ Ephemeral
Evidence of Water Body Status:
Presence of T. Grasses (dense) along drain bed, no bank formation, no substrate sorting

22 Apr. 15

1612 North Kent. BEB

LSCT-210 NWB

Faubert Drain

Feature Does Not Exist.

Appendix II
Site Investigation Photographs

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