

Appendix B

Photographic Record

Northern Drainage



Photo 1 Station 3 – upstream view from Front Road showing surficial drainage through pasture.



Photo 2 Station 3 – downstream view from Front Road showing channel overview.



Photo 3 Station 1 – upstream view of main channel from Front Road showing channel overview.



Photo 4 Station 1 – incised drainage channel flowing south through agricultural fields and connecting with main channel approximately 50 m upstream



Photo 5 Station 1 – channel branching to the west, consisting of diffuse surficial drainage from an on-line pond



Photo 6 Station 1 – channel branching to the southwest, consisting of diffuse surficial drainage



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APPENDIX

B

TITLE

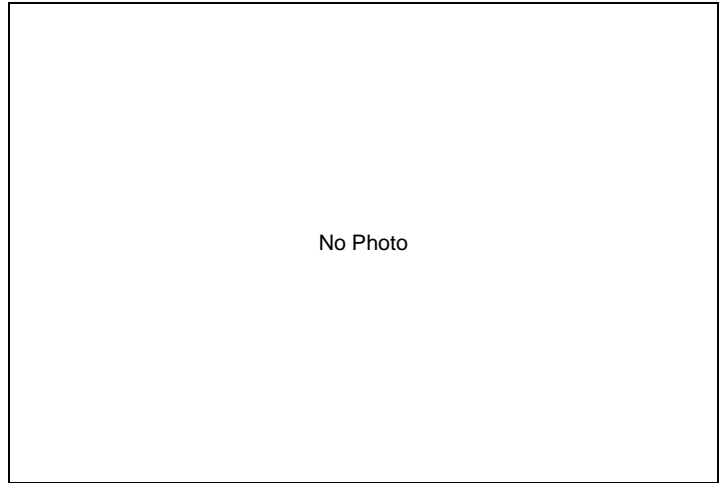
Photolog

PAGE

1 of 4



Photo 7 Station 1 – downstream view from Front Road towards Lake Ontario



No Photo



Photo 8 Station 31 – upstream view of mapped watercourse, no evidence of a channel or drainage



Photo 9 Station 31 – downstream view of mapped watercourse, no evidence of a channel or drainage



Photo 10 Station 32 – upstream view of mapped watercourse, no evidence of a channel or drainage



Photo 11 Station 32 – downstream view of mapped watercourse, no evidence of a channel or drainage



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APPENDIX

B

TITLE

Photolog

PAGE

2 of 4



Photo 12 Station 33 - upstream view of mapped watercourse, no evidence of a channel or drainage



Photo 13 Station 33 - downstream view of mapped watercourse, no evidence of a channel, just some diffuse surficial drainage



Photo 14 Station 56 – upstream view from Stella 40 Foot Road showing surficial drainage through field.



Photo 15 Station 56 – downstream view from Stella 40 Foot Road showing surficial drainage through field.



Photo 16 Station 55 – downstream view from Front Road showing channel overview.



Photo 17 Station 55 – downstream overview showing channel and foot bridge.



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APPENDIX
B
TITLE
Photolog
PAGE



Photo 18 Station 55 – upstream view from Front Road showing channel overview.



Photo 19 Station 57 – facing upstream from Front Road showing channel overview

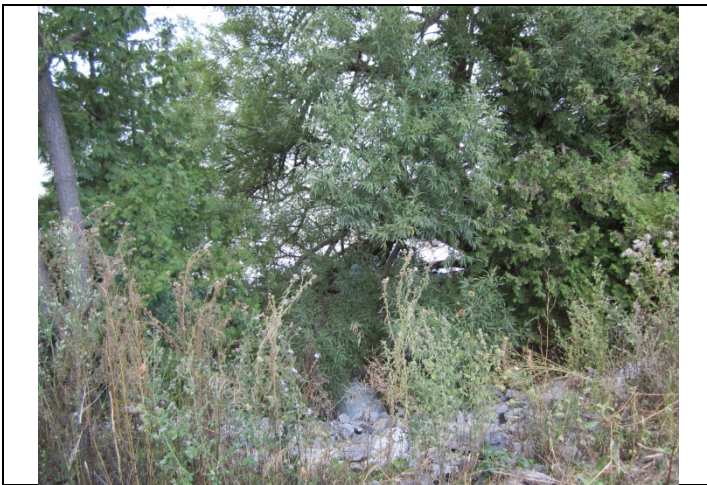


Photo 20 Station 57 – facing downstream from Front Road towards Lake Ontario



Photo 21 Station 21 – upstream view of surficial drainage through adjacent pasture



Photo 22 Station 21 – upstream of Front Road, downstream view towards road of channel



Photo 23 Station 21 – downstream view from Front Road



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APPENDIX

B

TITLE

Photolog

PAGE

4 of 4

Eastern Drainage



Photo 1 Station 30 – upstream view from Front Road of surficial drainage through field



Photo 2 Station 30 – downstream view of braided flow through grasses situated between Front Road and driveway access road



Photo 3 Station 58 – downstream view from Front Road showing dry channel through Reed Canary Grass floodplain.



Photo 4 Station 58 – Close-up of culvert and dry channel.



Photo 5 Station 29 – upstream view from farm crossing of surficial drainage. Some erosion was noted and is a result of an under-sized culvert at the access road



Photo 6 Station 29 – downstream view from farm crossing of surficial drainage through low-lying area in field



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APPENDIX

B

TITLE

Eastern Drainage
Photolog

PAGE



Photo 7 Station 9 – upstream view from Lower 40 Foot Road through adjacent agricultural field



Photo 8 Station 9 – downstream view from Lower 40 Foot Road, extremely sinuous channel flowing toward Lake Ontario



Photo 9 Station 28 – upstream view from farm crossing of ponded area resulting from previous rainfall



Photo 10 Station 28 – downstream view from farm crossing of surficial drainage through field



Photo 11 Station 8 – upstream view from Lower 40 Foot Road through adjacent woodlot



Photo 12 Station 8 – downstream view from Lower 40 Foot Road through pasture



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APPENDIX
B
 TITLE
**Eastern Drainage
 Photolog**
 PAGE



Photo 13 Station 11 – upstream view of diffuse surficial drainage through agricultural field



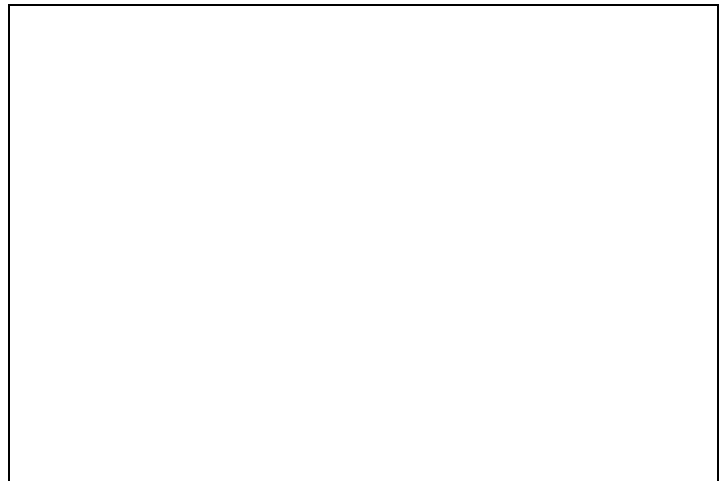
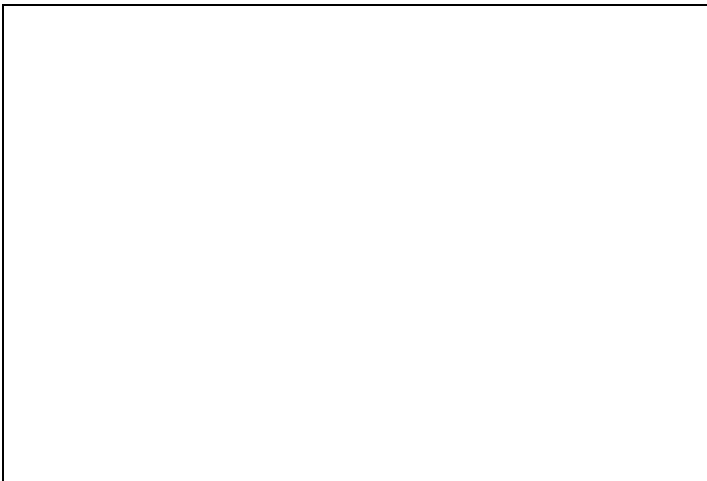
Photo 14 Station 11 – downstream view of diffuse surficial drainage through agricultural field



Photo 15 Station 7 – upstream view from Lower 40 Foot Road, diffuse surficial drainage through pasture



Photo 16 Station 7 – downstream view from Lower 40 Foot Road, sinuous and eroded channel through pasture



Southern Drainage



Photo 1 Station 10 – upstream view from South Shore Road, diffuse surficial drainage through pasture



Photo 2 Station 10 – downstream view from South Shore Road, perched culvert outletting to limestone bedrock along Lake Ontario shoreline



Photo 3 Station 12 – upstream view from South Shore Road of surficial drainage through agricultural field



Photo 4 Station 12 – downstream view from South Shore Road, perched culvert outletting to limestone bedrock along Lake Ontario shoreline

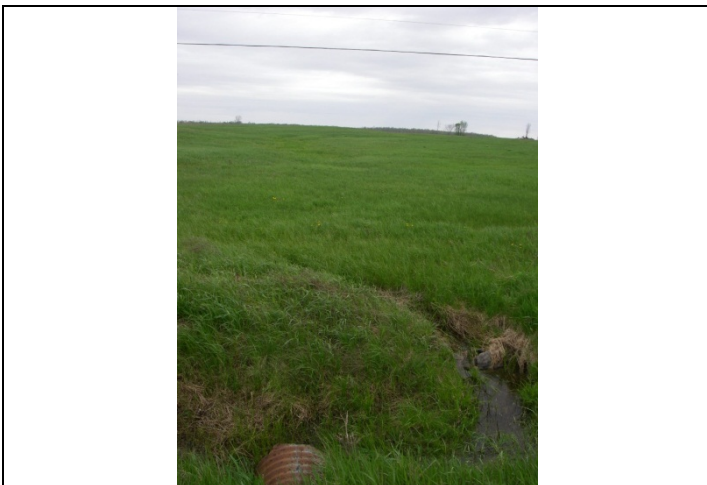


Photo 5 Station 13 – upstream view from South Shore Road of surficial drainage through agricultural field



Photo 6 Station 13 – downstream view from South Shore Road, perched culvert outletting to limestone bedrock along Lake Ontario shoreline



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APPENDIX

B

TITLE

**Southern Drainage
Photolog**

PAGE



Photo 7 Station 14 – upstream view of surficial drainage through agricultural field



Photo 8 Station 14 – downstream view of surficial drainage through agricultural field



Photo 9 Station 18 – upstream view of diffuse surficial drainage through agricultural field



Photo 10 Station 18 – upstream view from farm crossing of flooded wooded area



Photo 11 Station 18 – flooded farm crossing, Brook Stickleback captured in pool at this location



Photo 12 Station 18 – downstream view from flooded farm crossing



Photo 13 Station 19 – upstream from Stella 40 Foot Road



Photo 14 Station 19 – downstream from Stella 40 Foot Road



Photo 15 Station 52 – upstream view along 2nd Concession showing channel overview.



Photo 16 Station 52 – downstream view along 2nd Concession showing channel and riparian vegetation.



Photo 17 Station 36 – upstream view from Second Concession Road



Photo 18 Station 36 - downstream view from Second Concession Road



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APPENDIX

B

TITLE

Southern Drainage
Photolog

PAGE



Photo 19 Station 38 - upstream view through pasture



Photo 20 Station 38 - downstream view of confluence with larger watercourse



Photo 21 Station 34 – upstream view from inside woodlot, near proposed crossing



Photo 22 Station 34 - downstream view from inside woodlot, near proposed crossing



Photo 23 Station 35 – upstream view from Third Concession Road



Photo 24 Station 35 – downstream view from Third Concession Road



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APPENDIX

B

TITLE

Southern Drainage
Photolog

PAGE



Photo 25 Station 53 – Upstream view from 2nd Concession showing channel overview.



Photo 26 Station 20 – upstream from Second Concession Road, view along north side of the road



Photo 27 Station 20 – downstream from Second Concession Road, view along south side of the road



Photo 28 Station 60 – Facing south from 2nd Concession showing riparian area associated with short channel between Station 20 and Station 37.



Western Drainage



Photo 1 Station 41 – upstream view from station showing ill-defined grassy swale.



Photo 2 Station 41 – downstream view from station showing ill-defined grassy swale.



Photo 3 Station 27 – upstream through agricultural field, view looking northeast at eroded bend



Photo 4 Station 27 – downstream view through agricultural field of



Photo 5 Station 51 – upstream view from 2nd Concession showing channel flowing along the east side of a wooded area.



Photo 6 Station 51 – downstream view from 2nd Concession showing channel overview along treeline.



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APPENDIX

B

TITLE

Western Drainage
Photolog

PAGE



Photo 7 Station 40 – upstream view showing lack of channel through pasture.



Photo 8 Station 40 – downstream view showing lack of channel definition through pasture.



Photo 9 Station 26 – upstream from Emerald 40 Foot Road of surficial drainage through field



Photo 10 Station 26 – downstream from Emerald 40 Foot Road of surficial drainage through field and minor ponding due to previous rain



Photo 11 Station 6 – downstream view from Art McGinnis Road



Photo 12 Station 7 – upstream view from Lower 40 Foot Road, diffuse surficial drainage through pasture



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APPENDIX

B

TITLE

Western Drainage
Photolog

PAGE



Photo 13 Station 25 – upstream view from Second Concession Road



Photo 14 Station 25 – downstream view from Second Concession Road through adjacent pasture



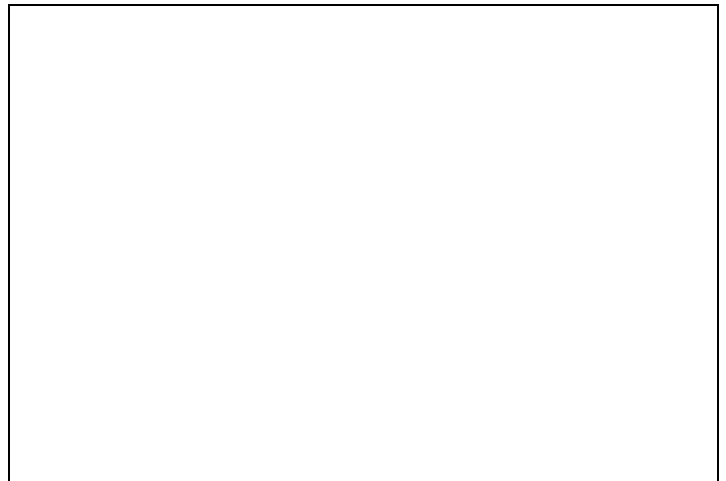
Photo 15 Station 54 – upstream view from 2nd Concession showing surficial drainage through wooded area and pasture.



Photo 16 Station 50 – upstream view from Art McGinns Road showing lack of channel definition.



Photo 17 Station 50 – downstream view from Art McGinns Road showing surficial drainage through agricultural fields.



Mainland Drainage



Photo 1 M1 – Facing upstream from Bath Road, showing channel overview.



Photo 2 M1 – Facing downstream from Bath Road showing channel and Lake Ontario.



Photo 3 Tributary of M1 facing west from east end (from Invista access road)



Photo 4 M2 – Facing upstream showing cattail lined channel.



Photo 5 M2 – Facing downstream showing culvert and direct connection to Lake Ontario.



Photo 6 M6 – Facing upstream showing surficial drainage



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APPENDIX

B

TITLE
Mainland Photolog

PAGE

1 of 4



Photo 7 M3 – Facing upstream from Jim Snow Drive



Photo 8 M3 – Facing downstream from Jim Snow Drive



Photo 9 M4 – Facing upstream from Taylor Kidd Boulevard showing lack of channel.



Photo 10 M4 – Facing downstream along Taylor Kidd Boulevard showing shallow channel.



Photo 11 M9 – Facing upstream along Taylor Kidd Boulevard showing cattail lined channel.



Photo 12 M9 – Facing downstream along Taylor Kidd Boulevard showing channel overview.



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SITE:
Amherst Island

APPENDIX

B

TITLE
Mainland Photolog

PAGE

2 of 4



Photo 13 M5 – Facing downstream from Taylor Kidd Boulevard showing channel overview



Photo 14 M5 – Facing upstream from Taylor Kidd Boulevard showing channel overview.



Photo 15 M7 – Facing upstream showing channel overview.



Photo 16 M7 – Facing downstream showing channel and vegetation.



Photo 17 M10 – Facing upstream showing channel overview and possible patch of watercress.



Photo 18 M10 – facing downstream showing diffuse, surficial flow into cattail wetland.



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Amherst Island

APPENDIX

B

TITLE
Mainland Photolog

PAGE

3 of 4



Photo 19 M11 – Facing upstream showing lack of channel.



Photo 20 M11 – Facing north showing tractor path through low-lying wet area with no defined channel.



Photo 21 M11 – Facing downstream showing low-lying wet area with no defined channel.

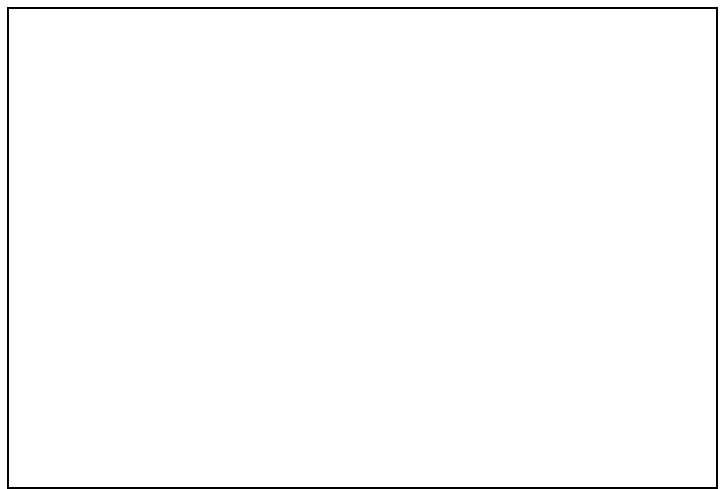


Photo 22

Island Dock



Photo 1 Shoreline near the proposed island dock/cable landing location (Stantec, 2011)



Photo 2 Substrate in the nearshore area at island dock/cable landing location (Stantec, 2011).



Photo 3 Facing west along the shoreline at the proposed island dock/cable landing location (2012)



Photo 4 Facing east along the shoreline at the proposed island dock/cable landing location (2012)



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APPENDIX

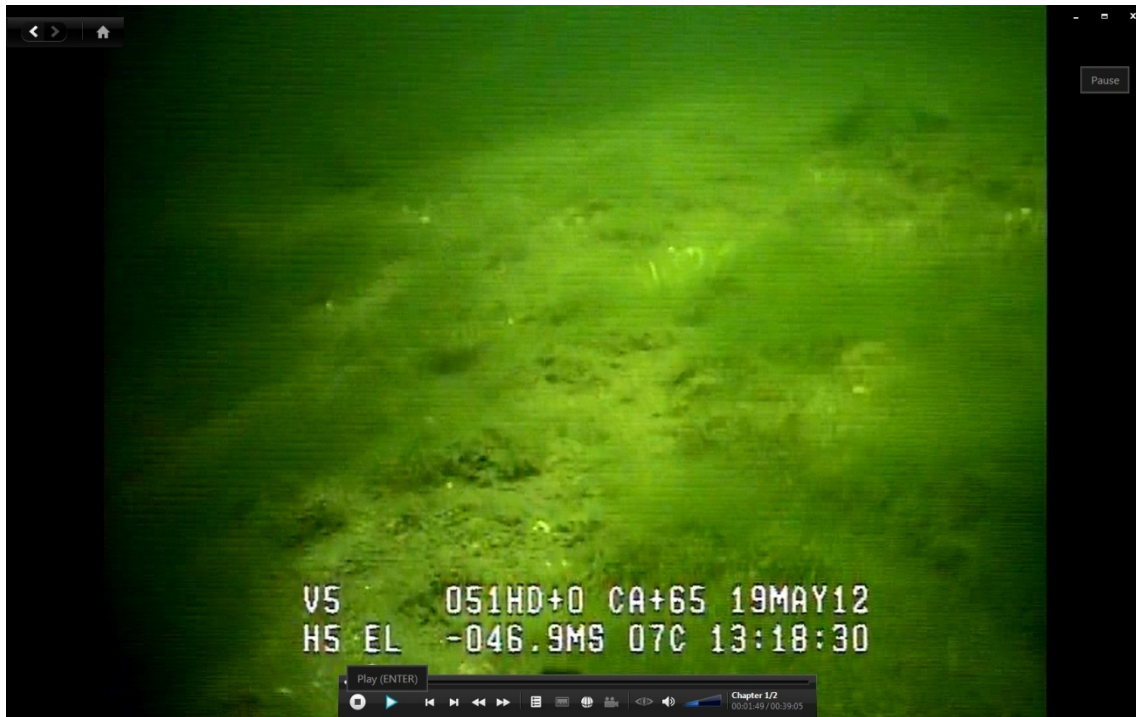
B

TITLE
Island Dock and
Cable Landing

PAGE

1 of 1

Underwater images of island side shoreline (ASI 2012)

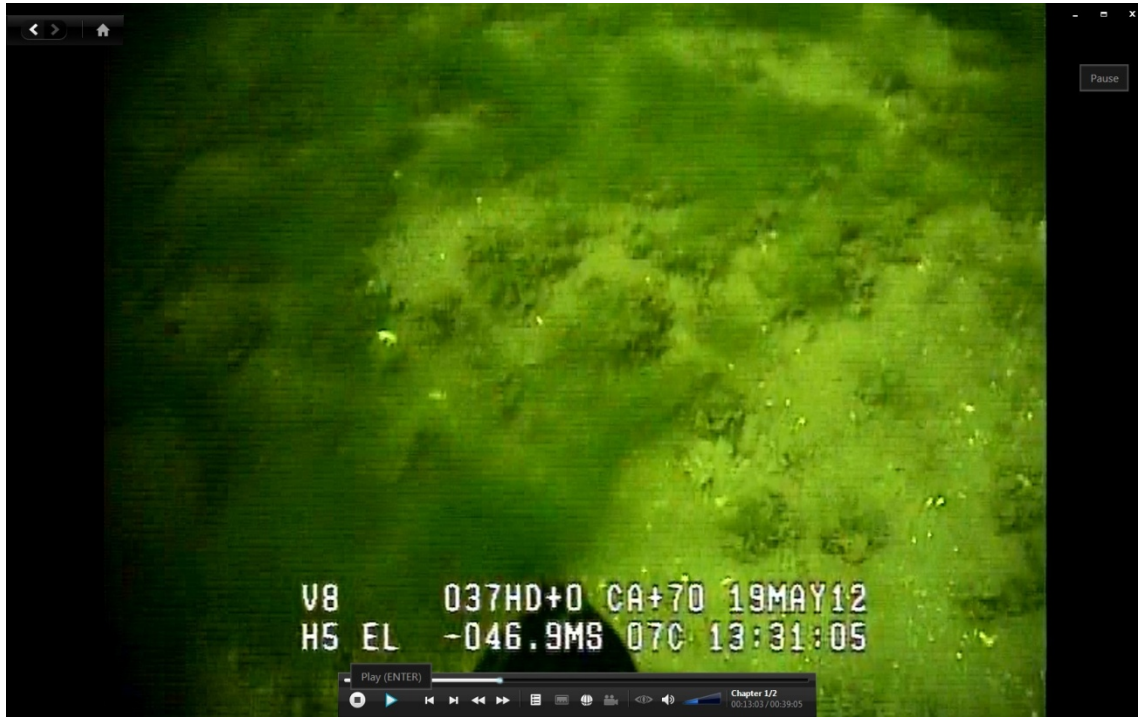


TR1



TR1

Underwater images of island side shoreline (ASI 2012)

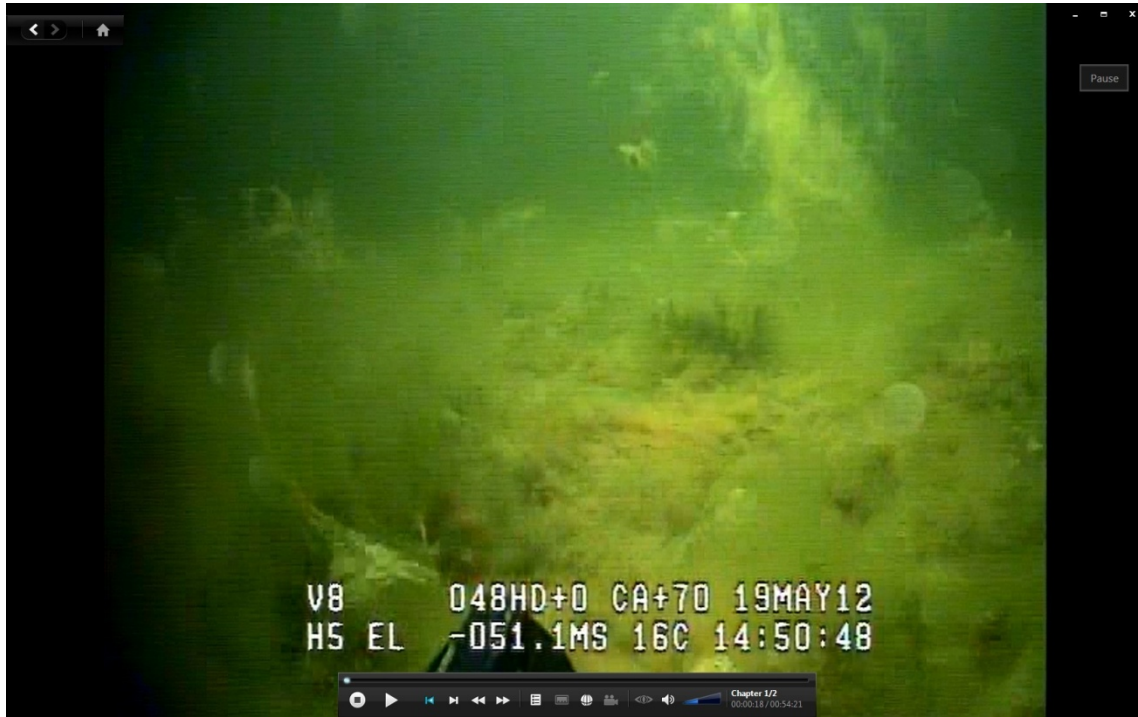


TR1



TR1

Underwater images of island side shoreline (ASI 2012)



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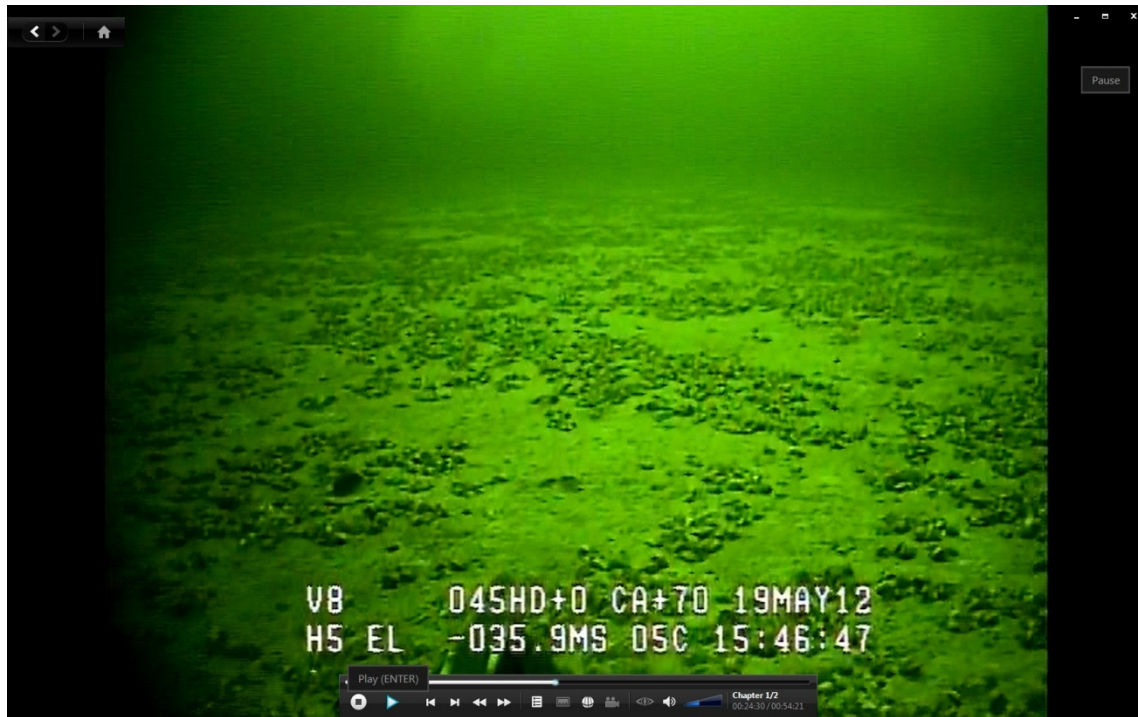
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TR2

Underwater images of island side shoreline (ASI 2012)



TR2

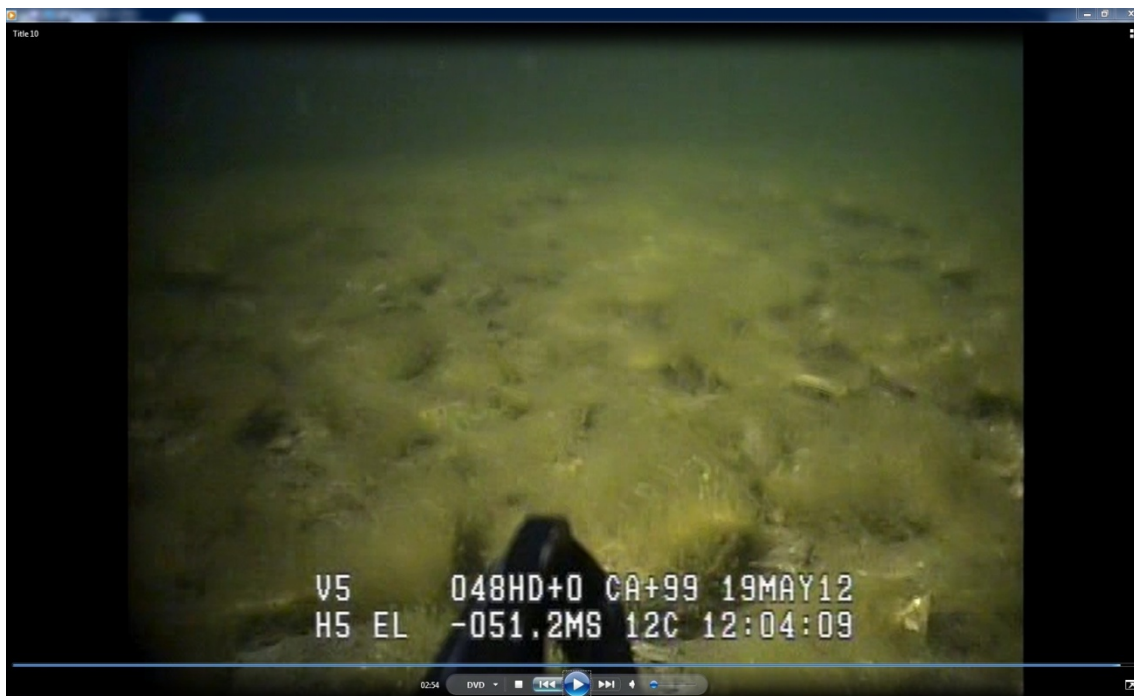


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Underwater images of island side shoreline (ASI 2012)

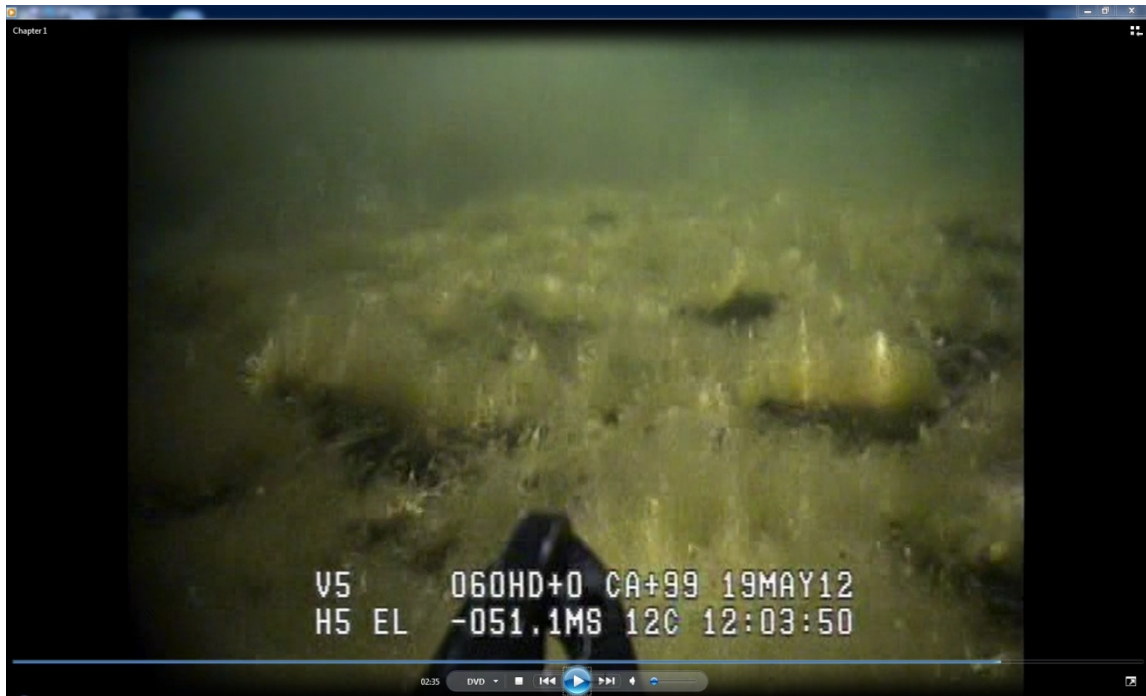


Sediment Sampling Station CR 20

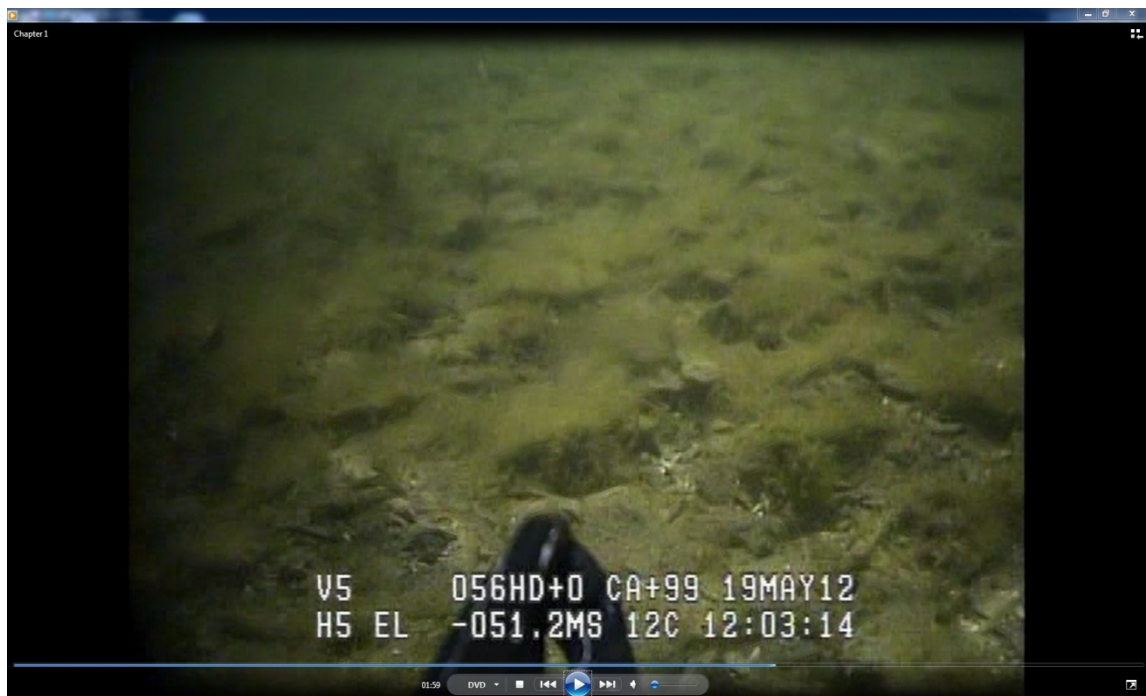


Sediment Sampling Station CR 20

Underwater images of island side shoreline (ASI 2012)

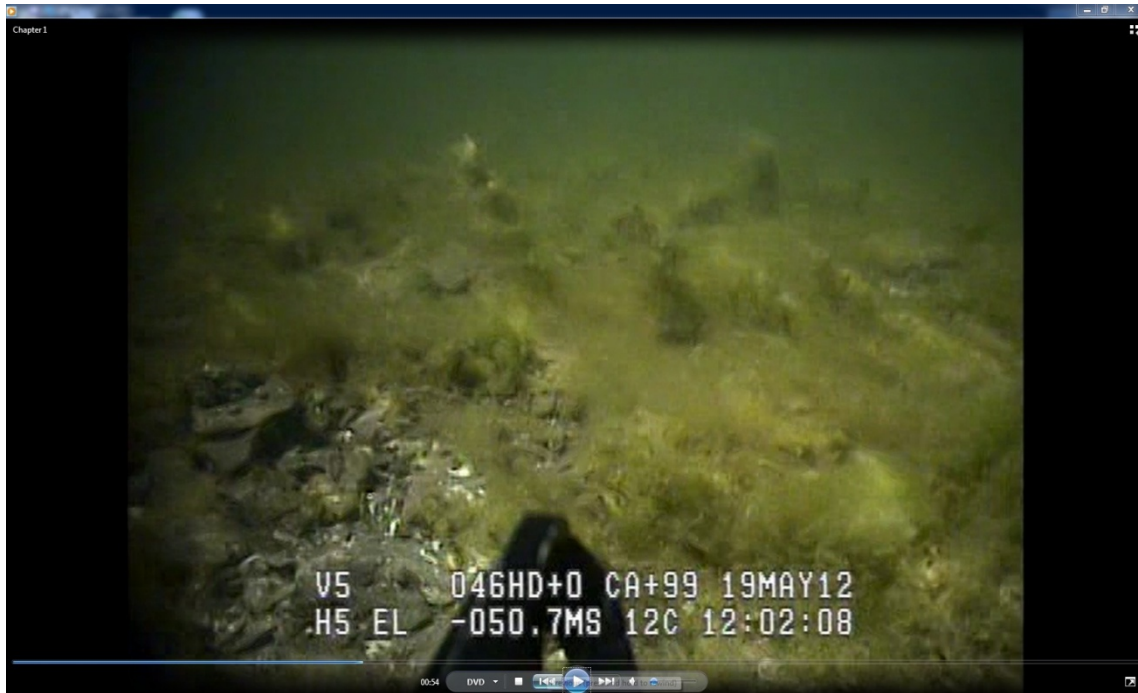


Sediment Sampling Station CR 20



Sediment Sampling Station CR 20

Underwater images of island side shoreline (ASI 2012)



Sediment Sampling Station CR 20

Mainland Dock (3 Options)

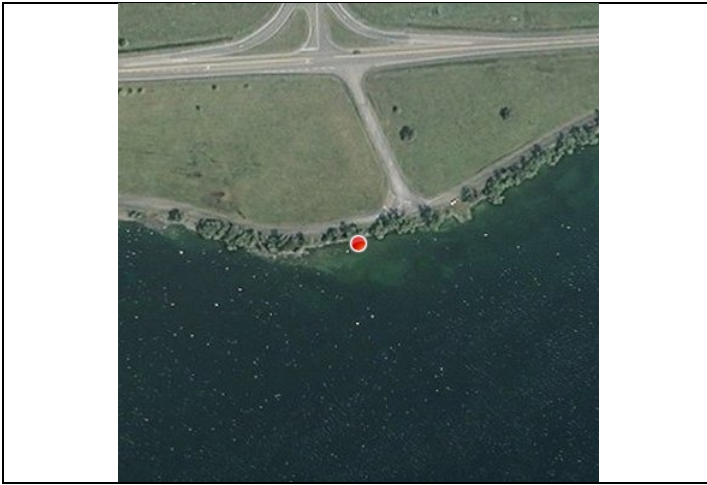


Photo 1 West Dock Option - Location of Photos 2 to 4



Photo 2 Facing east from location in Photo 1



Photo 3 Facing west from location in Photo 1



Photo 4 Shoreline at Photo 1.

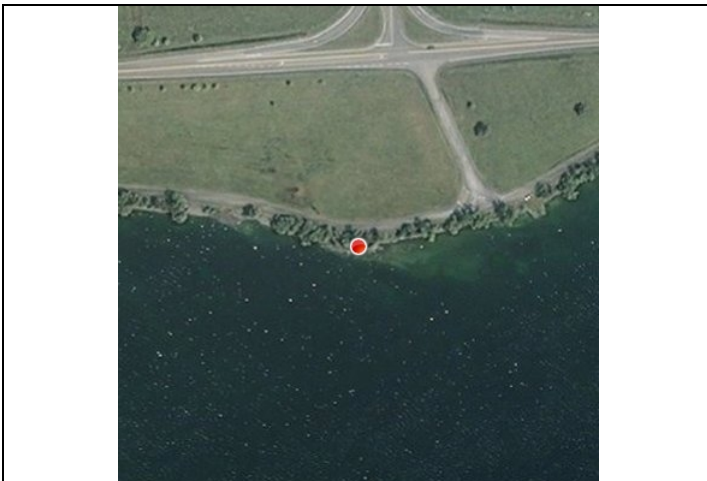


Photo 5 West Dock Option – location of Photo 6



Photo 6 Facing east from location in Photo 5



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APPENDIX

B

TITLE
West Dock and Cable
Landing Area

PAGE

1 of 2

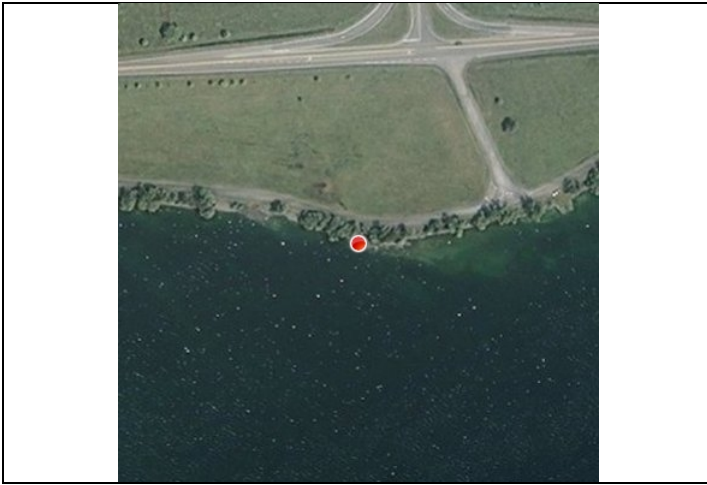


Photo 7 West Dock Option – location of Photo 8



Photo 8 Facing west from location in Photo 7



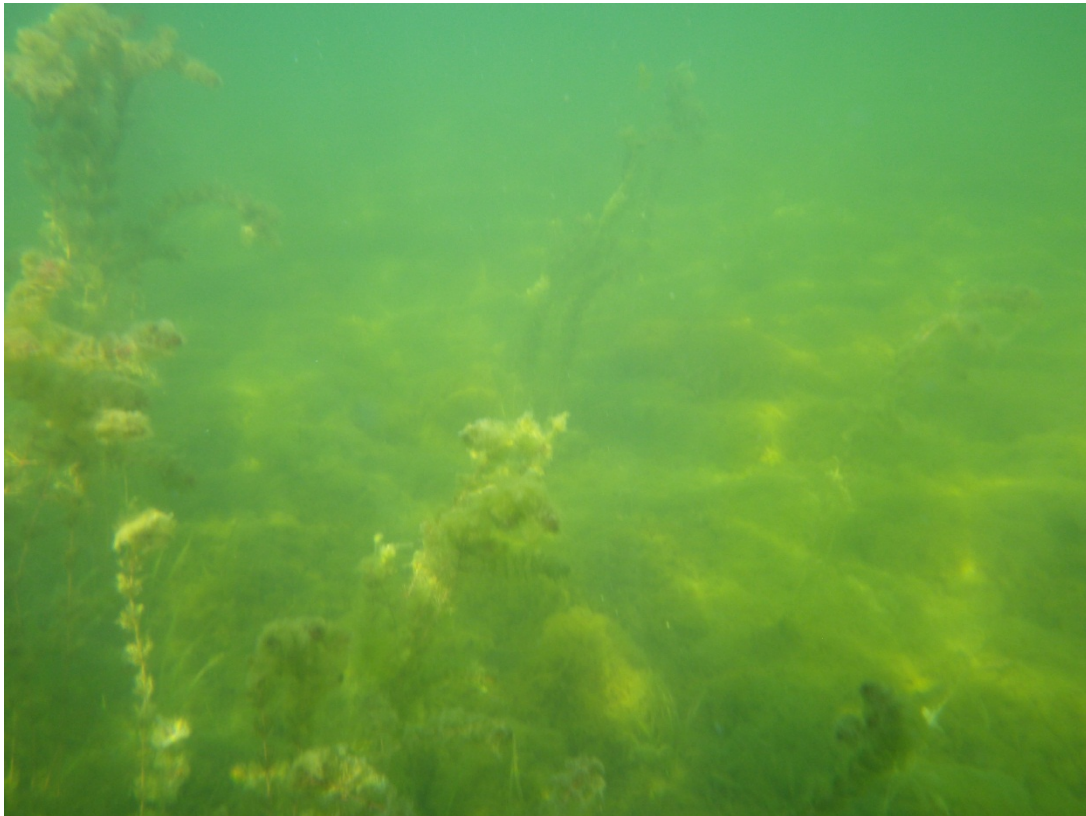
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APPENDIX
B

TITLE
West Dock and Cable
Landing Area

PAGE
2 of 2



Aquatic Vegetation at West Dock Option, Stantec, 2011

Underwater images of Mainland shoreline West Option (ASI 2012)

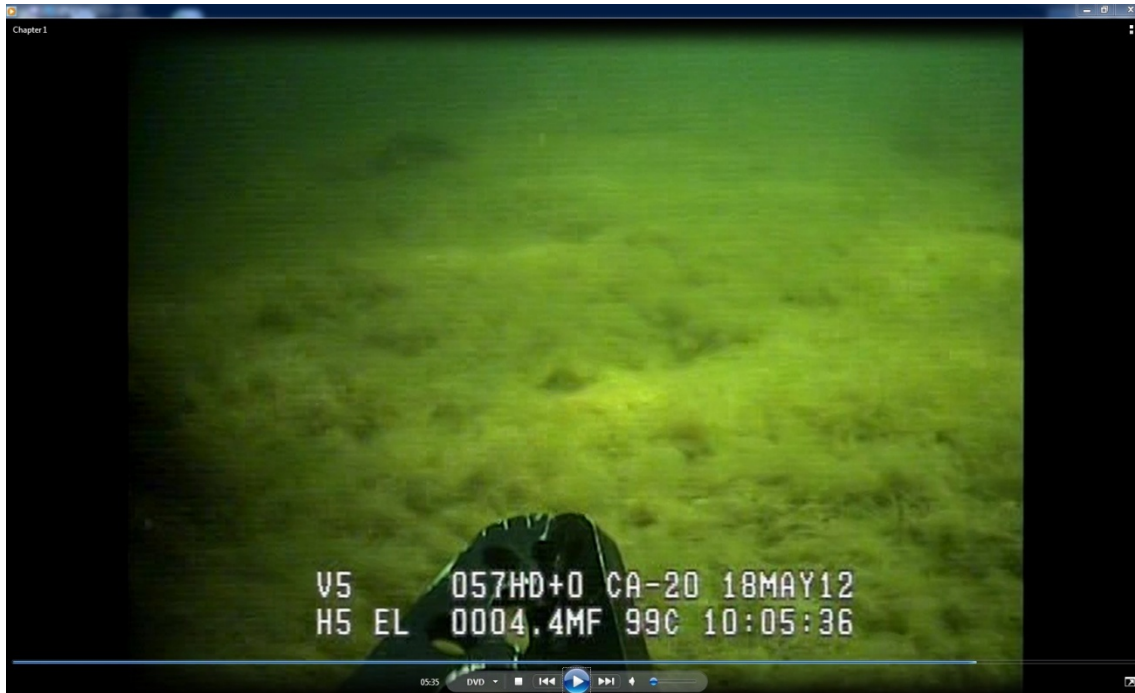


ASI Sediment Station NS 19



ASI Sediment Station NS 19

Underwater images of Mainland shoreline West Option(ASI 2012)



ASI Sediment Station NS 19

Underwater images of east of Mainland shoreline West Option (ASI 2012)



ASI Sediment Station NS 9

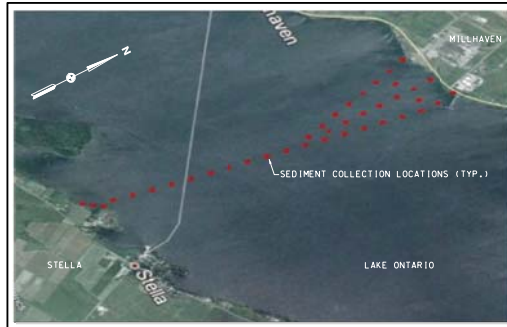


ASI Sediment Station NS 9

Underwater images of east of Mainland shoreline West Option (ASI 2012)

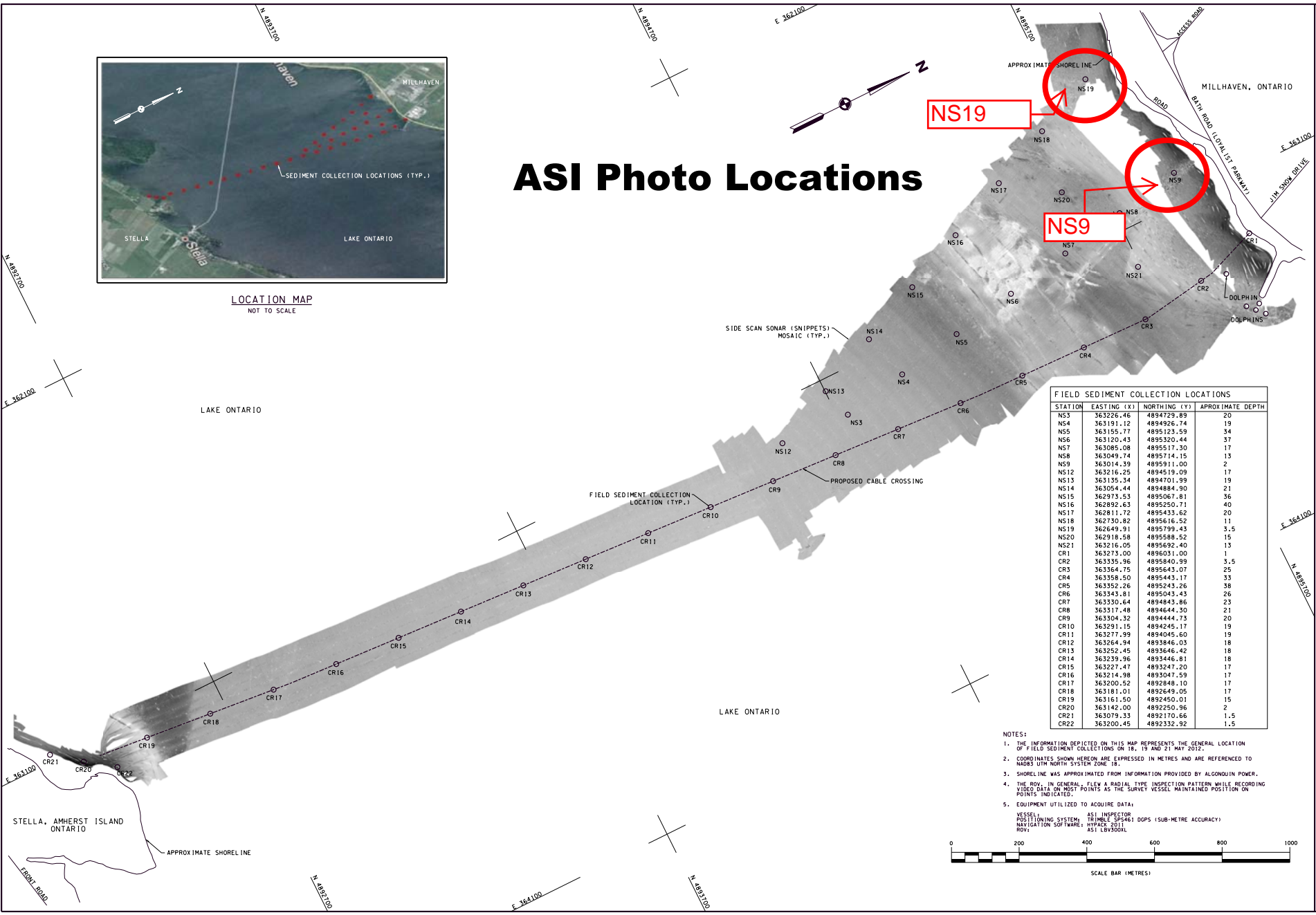


ASI Sediment Station NS 9



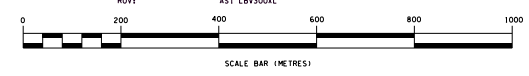
LOCATION MAP
NOT TO SCALE

ASI Photo Locations



FIELD SEDIMENT COLLECTION LOCATIONS			
STATION	EASTING (X)	NORTHING (Y)	APPROXIMATE DEPTH
NS3	363226.46	4894729.89	20
NS4	363191.12	4894826.74	19
NS5	363155.77	4895123.59	3.4
NS6	363120.43	4895320.44	37
NS7	363085.08	4895517.30	17
NS8	363049.74	4895714.15	13
NS9	363014.39	4895911.00	2
NS12	363216.25	4894519.09	17
NS13	363135.34	4894701.99	19
NS14	363054.44	4894884.90	21
NS15	362973.53	4895067.81	36
NS16	362892.63	4895250.71	40
NS17	362811.72	4895433.62	20
NS18	362730.82	4895616.52	11
NS19	362649.91	4895799.43	3.5
NS20	362918.58	4895588.52	15
NS21	363216.05	4895592.40	13
CR1	363273.00	4896031.00	1
CR2	363335.96	4895840.99	3.5
CR3	363354.75	4895643.07	25
CR4	363358.50	4895443.17	33
CR5	363352.26	4895243.26	38
CR6	363343.81	4895043.43	26
CR7	363330.64	4894843.86	23
CR8	363317.48	4894644.50	21
CR9	363304.32	4894444.73	20
CR10	363291.15	4894245.17	19
CR11	363277.99	4894045.60	19
CR12	363264.94	4893846.03	18
CR13	363252.45	4893646.42	18
CR14	363239.96	4893446.81	18
CR15	363227.47	4893247.20	17
CR16	363214.98	4893047.59	17
CR17	363200.52	4892848.10	17
CR18	363181.01	4892649.05	17
CR19	363161.50	4892450.01	15
CR20	363142.00	4892250.96	2
CR21	363079.33	4892170.66	1.5
CR22	363200.45	4892332.92	1.5

- NOTES:
1. THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE GENERAL LOCATION OF FIELD SEDIMENT COLLECTIONS ON 18, 19 AND 21 MAY 2012.
 2. COORDINATES SHOWN HEREON ARE EXPRESSED IN METRES AND ARE REFERENCED TO NAD83 UTM NORTH SYSTEM ZONE 18.
 3. SHORELINE WAS APPROXIMATED FROM INFORMATION PROVIDED BY ALGONQUIN POWER.
 4. THE ROV, IN GENERAL, FLEW A RADIAL TYPE INSPECTION PATTERN WHILE RECORDING VIDEO DATA ON MOST POINTS AS THE SURVEY VESSEL MAINTAINED POSITION ON POINTS INDICATED.
 5. EQUIPMENT UTILIZED TO ACQUIRE DATA:
VESSEL: ASI INSPECTOR
POSITIONING SYSTEM: TRIMBLE SP-441 DGPS (SUB-METRE ACCURACY)
ROV: ALGONQUIN POWER
LOCATION SOFTWARE: HYPERTRAC ASI LOGBOOK



NO.	DESCRIPTION	DATE	STATUS

ASI Group

SURVEYED BY: FIELD BOOKS: DATES OF SURVEY: 18, 19 & 21 MAY 2012
 D. COUSINEAU
 DRAWN BY: PLOT SCALE: ASI GROUP JOB NO.: GH12-2008
 S. WHITE 1:500
 CHECKED BY: PLOT DATE: DRAWING FILE NAME:
 D. KEYES 15 JUNE 2012 SED_SAMP_SIT_1.DGN

APPROVED: _____ DATE: _____
 APPROVED: _____
 APPROVED: _____
 APPROVED: _____

ALGONQUIN
Power & Utilities Corp.

BATHYMETRIC SERVICES
 AMHERST ISLAND WIND FARM PROJECT
 NEAR MILLHAVEN, ONTARIO
 PROPOSED CABLE ROUTE
 SEDIMENT COLLECTION POINTS
 ROV VIDEO COLLECTION POINTS
 SHEET MAP

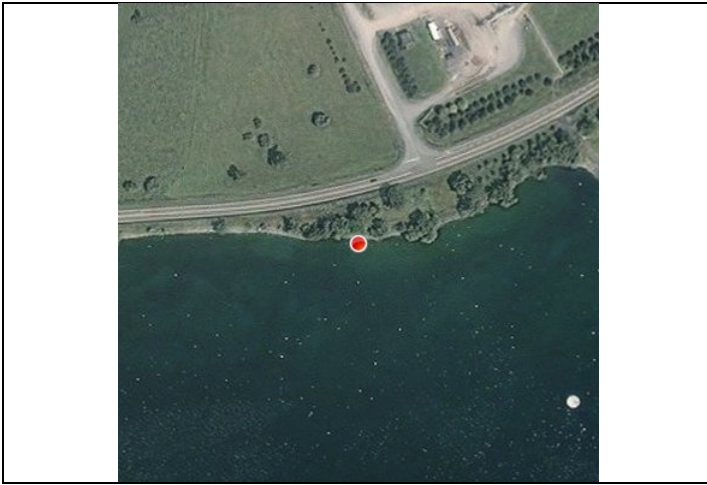


Photo 1 Centre Dock Option – location of Photo 2



Photo 2 Facing east from location in Photo 1

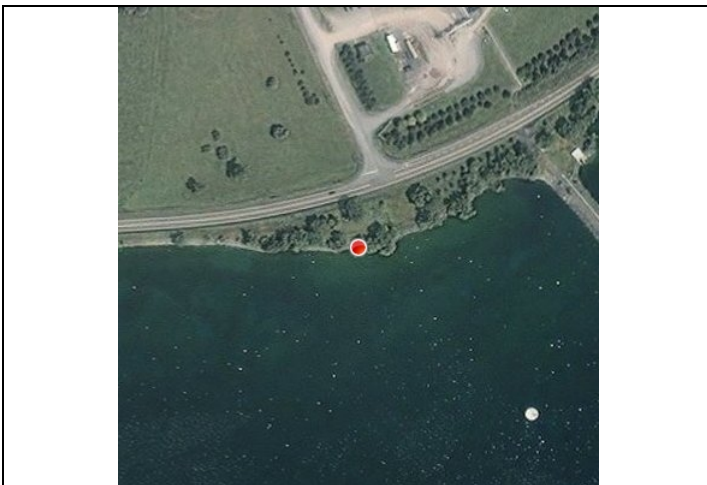


Photo 3 Centre Dock Option – location of Photo 4.



Photo 4 Facing west from location in Photo 3.

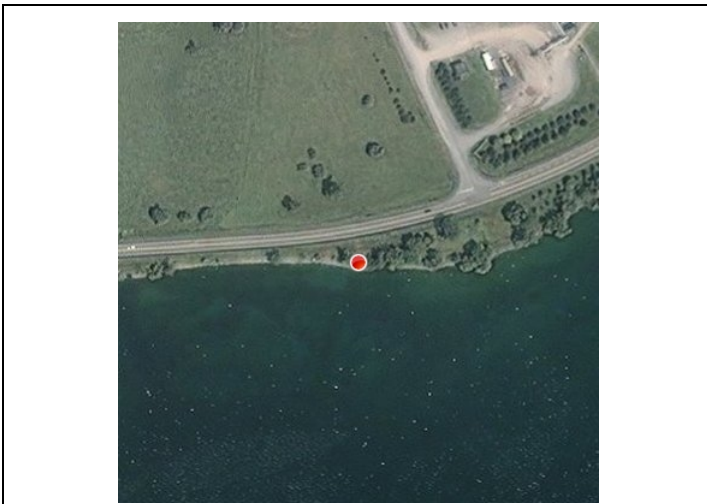


Photo 5 Centre Dock Option – location of Photo 6



Photo 6 Facing east from location in Photo 5



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APPENDIX
B

TITLE
Centre Dock and
Cable Landing Area

PAGE

1 of 1



Aquatic Vegetation at Centre Dock Option, Stantec, 2011

Underwater images of Mainland shoreline Centre Option (ASI 2012)



ASI Sediment Sampling Station CR1 (May 2012)



ASI Sediment Sampling Station CR1 (May 2012)

Underwater images of Mainland shoreline Centre Option (ASI 2012)



ASI Sediment Sampling Station CR1 (May 2012)



ASI Sediment Sampling Station CR1 (May 2012)

Underwater images of Mainland shoreline Centre Option (ASI 2012)



ASI Sediment Sampling Station CR02



ASI Sediment Sampling Station CR02

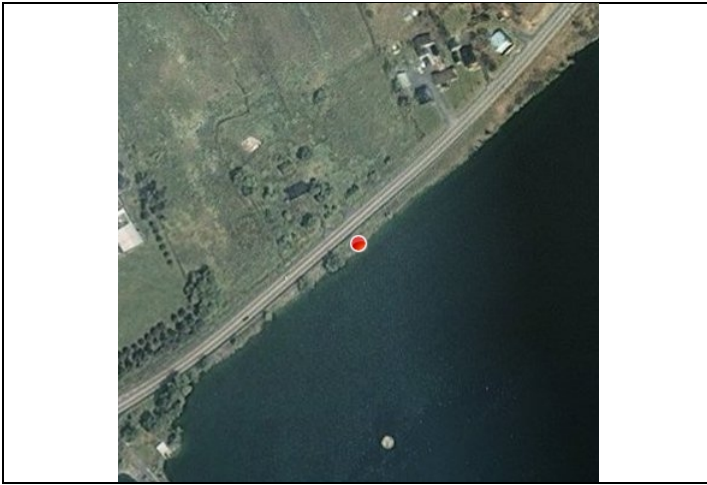


Photo 1 East Dock Option – location of Photo 2



Photo 2 Facing south from location in Photo 1

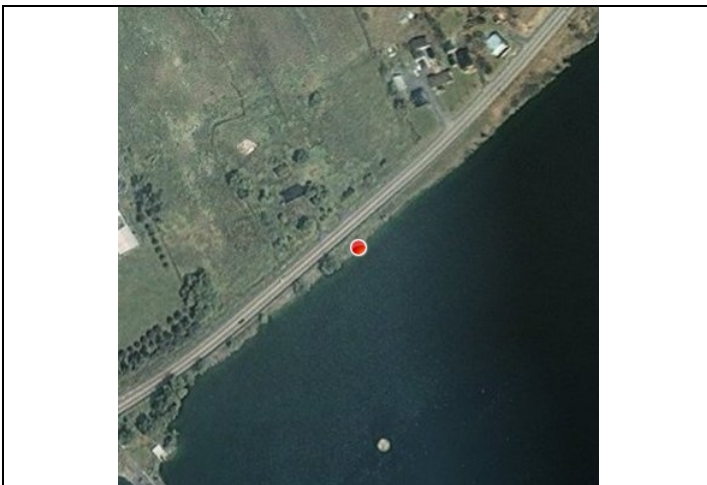


Photo 3 East Dock Option – location of Photo 4



Photo 4 Facing east from location in Photo 3.

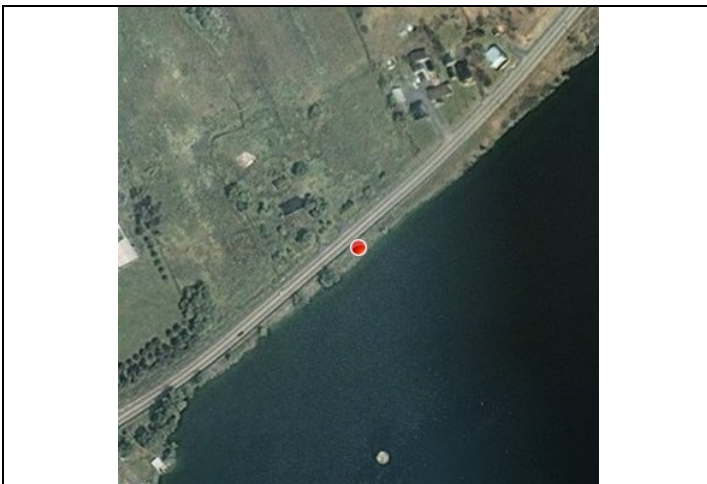


Photo 5 East Dock Option – location of Photo 6

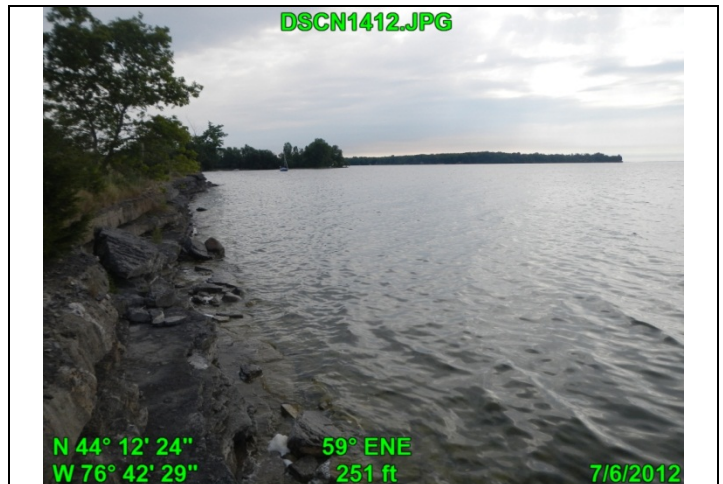


Photo 6 Facing east from location in Photo 5



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APPENDIX

B

TITLE
East Dock and Cable
Landing Area

PAGE

1 of 2

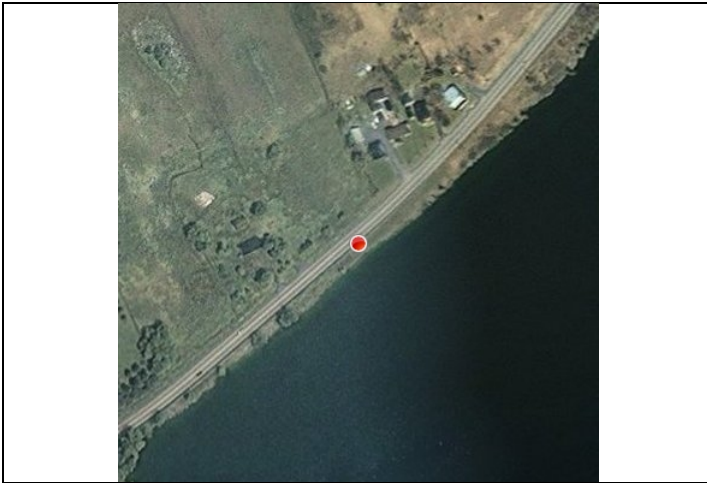


Photo 7 East Dock Option – location of Photo 8



Photo 8 Facing east from location in Photo 7



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SITE:
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APPENDIX

B

TITLE
East Dock and Cable
Landing Area

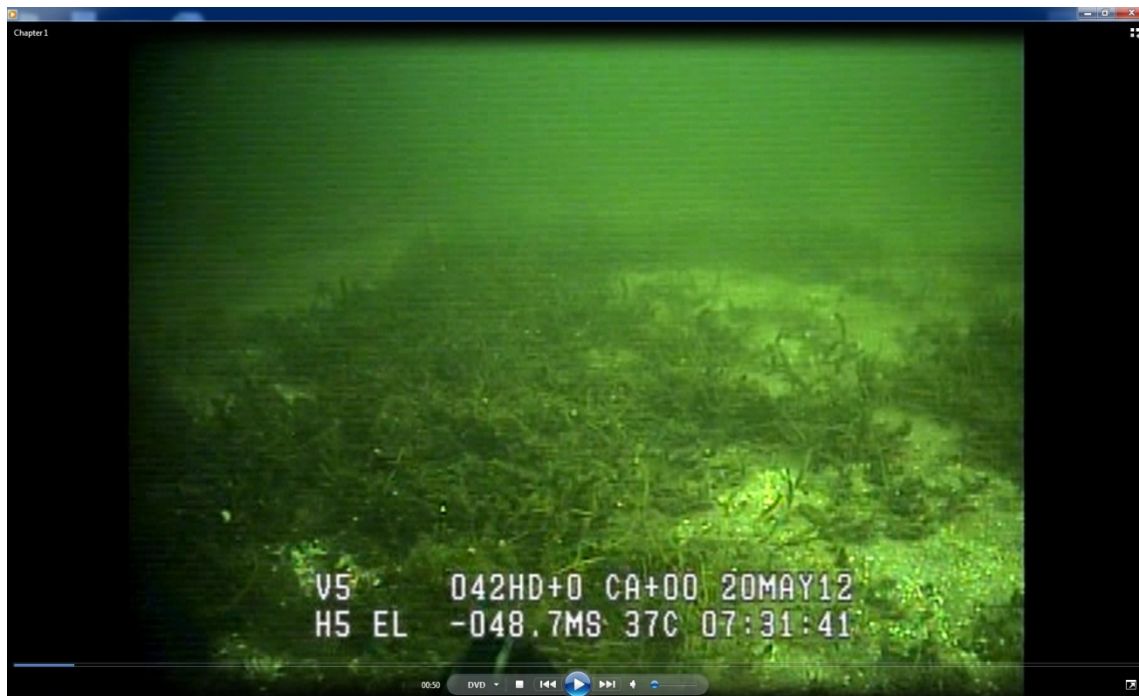
PAGE

2 of 2



Aquatic Vegetation at Dock East Option, Stantec, 2011

Underwater images of Mainland shoreline East Option (ASI 2012)



ROV RAD INSP_8 (RR8)

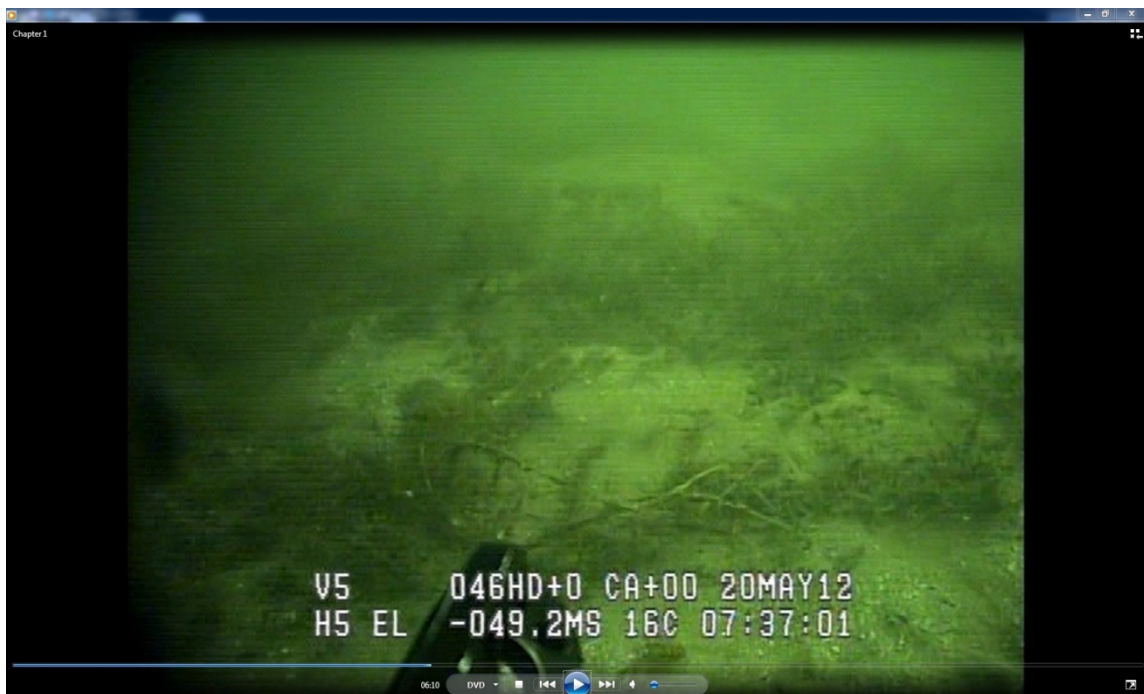


RR8

Underwater images of Mainland shoreline East Option (ASI 2012)



RR8



RR8

Underwater images of Mainland shoreline East Option (ASI 2012)

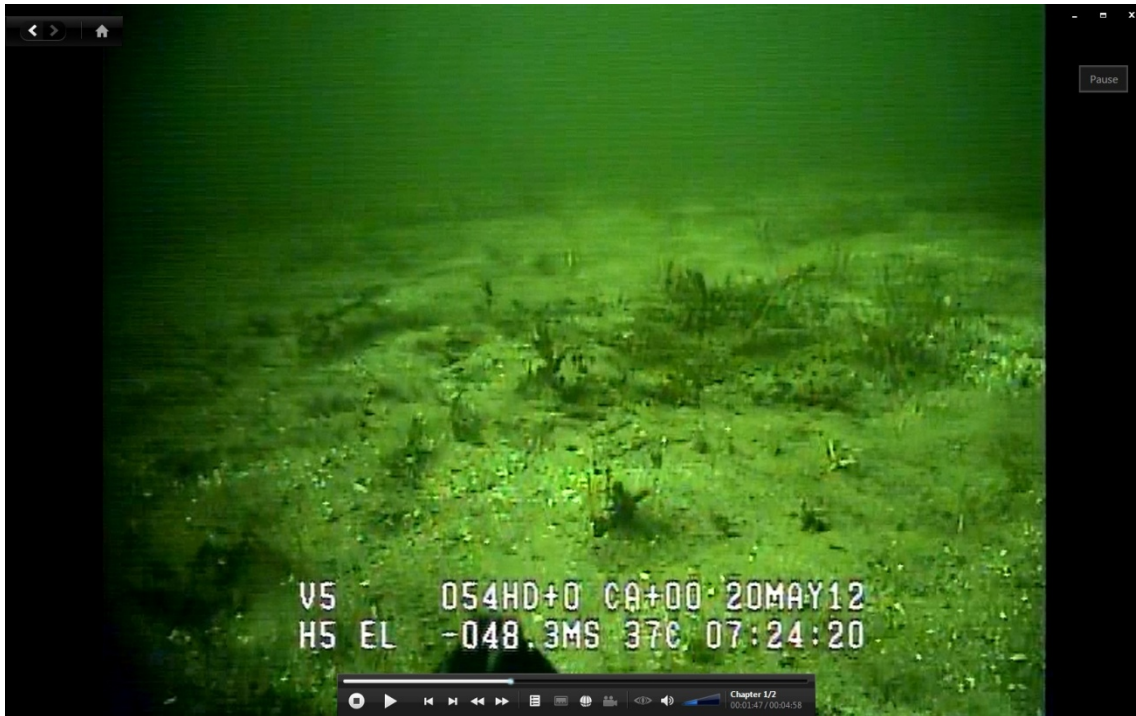


RR8



ROV RAD INSP_9 (RR9)

Underwater images of Mainland shoreline East Option (ASI 2012)



RR9

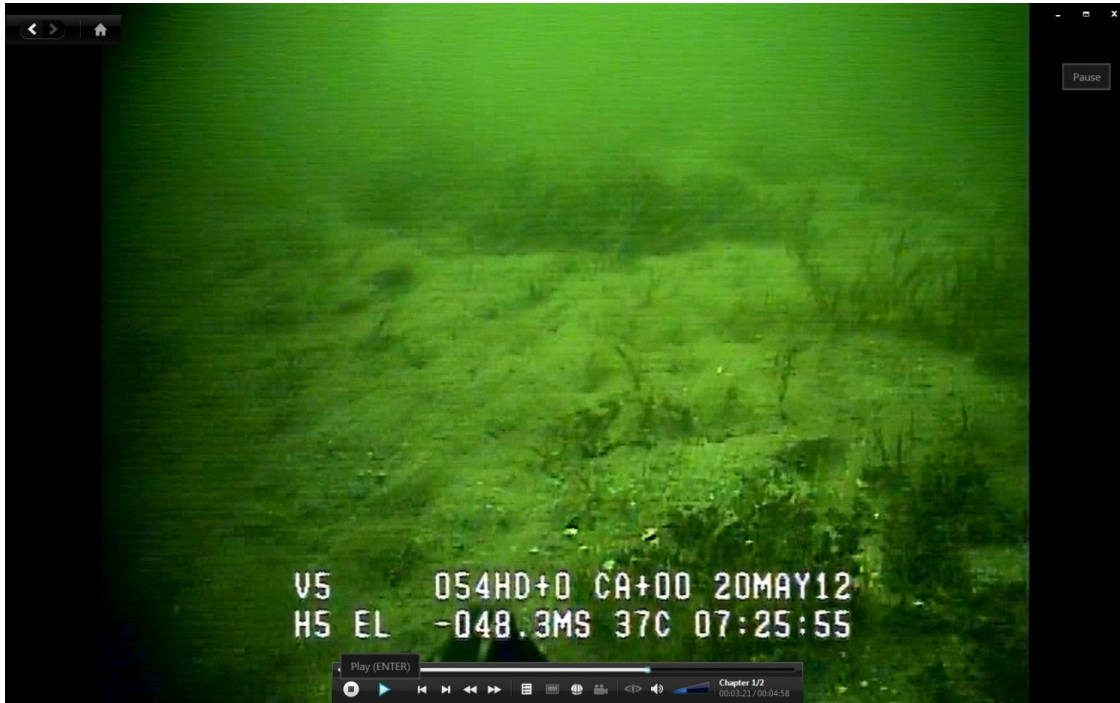


RR9

Underwater images of Mainland shoreline East Option (ASI 2012)



RR9

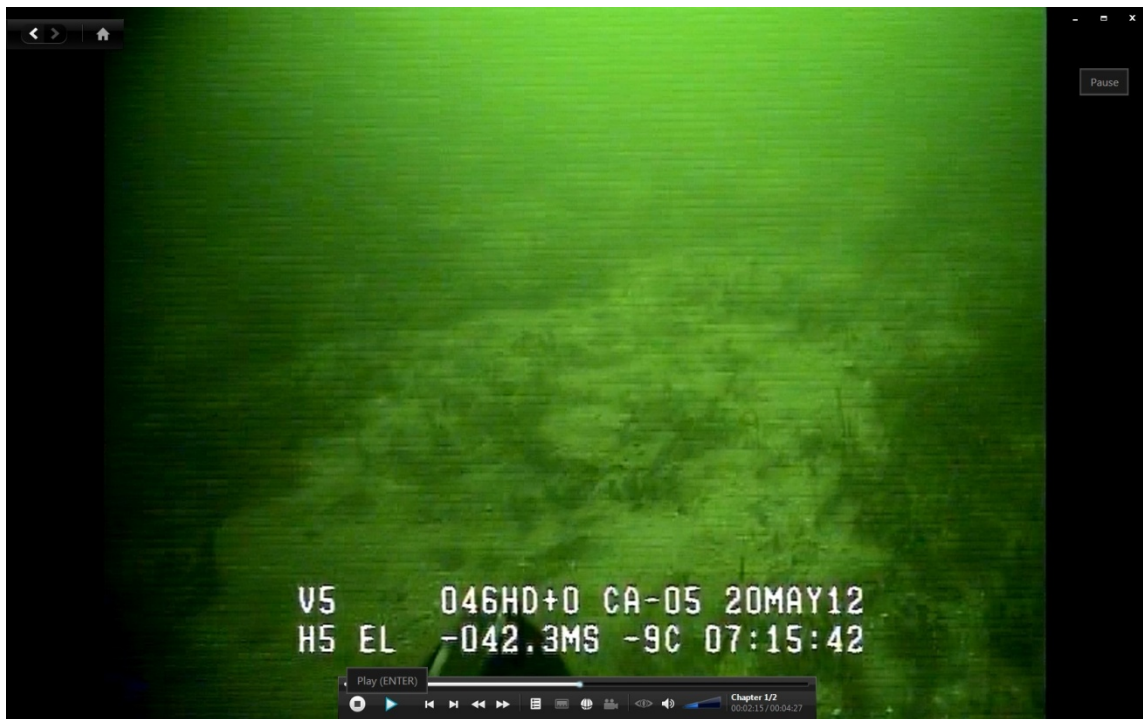


RR9

Underwater images of Mainland shoreline Easts Option (ASI 2012)

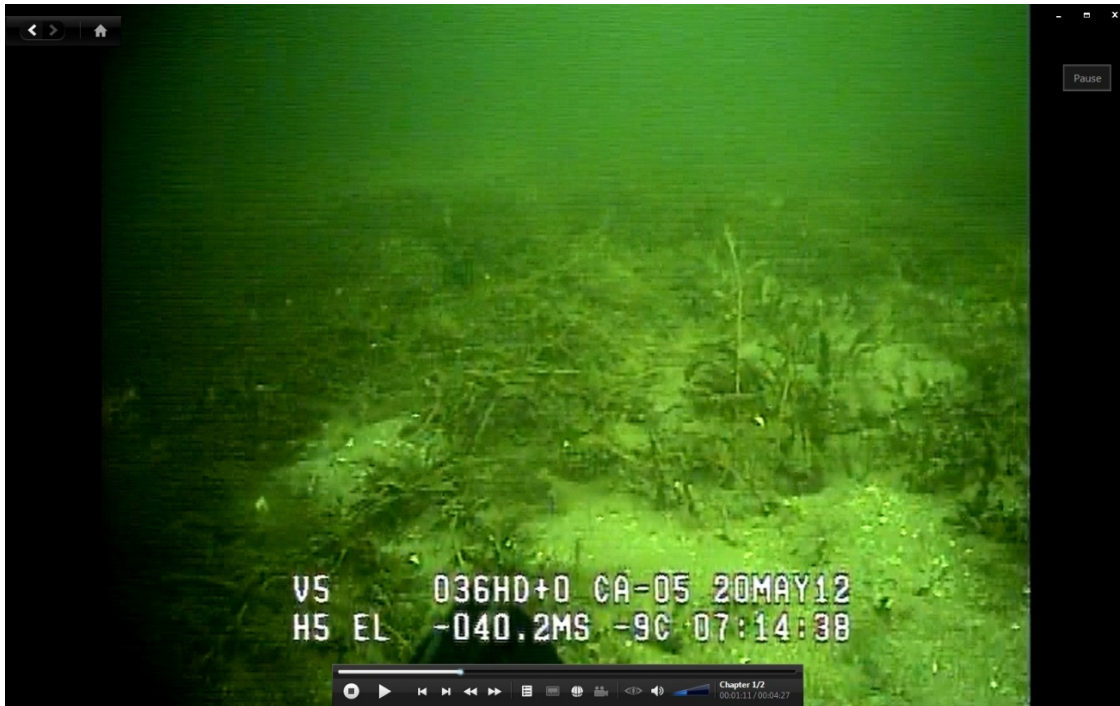


ROV RAD INSP_10 (RR10)



RR10

Underwater images of Mainland shoreline East Option (ASI 2012)



RR10



RR10

Underwater images of Mainland shoreline East Option (ASI 2012)



RR10

Optional Cable Landing Area



Photo 1 Facing west along shoreline at Optional Cable Landing location

Photo 2 Facing west along shoreline at Optional Cable Landing location



PREPARED FOR:
Windlectric Inc.

SITE:
Amherst Island

APPENDIX

B

TITLE
Optional Cable
Landing Area

PAGE

1 of 1