Pond Inspection Results

1.0 General

| a) | Pond Name | Crossroads #2 |
|----|--------------------|---------------------------------|
| b) | Pond ID | 8-4 |
| c) | Pond Address | 1041 Corrie Street |
| d) | Name of Inspector | Renata Sadowska & Sabina Martyn |
| e) | Date of Inspection | May 11, 2012 |
| f) | Weather | Sunny |

2.0 Surrounding Area

- Table land
- Access:
 - o 2 access points, not gated. Main access and asphalt overland flow path from Corrie St.
 - o Gravel path along perimeter of pond
 - Mowed along west end of pond, and mowed only along maintenance path on south end of pond. Trails from west end and south end of pond into woodlot
 - No trespassing signs, signs have street name and pond ID
 - Pond can be accessed via the emergency spillway for maintenance. Could be possibility for improvement
- Guardrail at pond inlet and at culverts downstream of outlet. No guardrail at pond outlet
- Woodlot (creek) at south end of pond, low-density residential along all other sides
- Empty easement across the street on north side of Leslie Drive
- Vegetation
 - Woodlot to the south and grass around perimeter of pond
 - O Within crest, there are small trees, shrubs, bulrushes
- Wildlife: small fish in forebay, goldfinches, blackbirds
- Grassed spillway off the south end of pond towards creek. Shrubs growing in spillway.
- Space available for expansion/regrading at east, north and west ends.
- Possibility for sediment storage in the middle of peninsula at northwest side of pond

3.0 Pond Conditions:

- Wet pond or wetland → verify with design
- Offline facility
- Deep pool in forebay but no difference in water levels between forebay and pond
- Forebay earth berm not visible, overflow from deep pool into pond (possibly washed out, or pond filled with sediment)
- No visible low-flow channel might be filled with sediment
- Shallow water along west side of pond after forebay, algae growth
- Bypass structure to be confirmed there is a second concrete pipe to Leslie Street at the east end of pond.
- Cleanup of some trash debris required
- Flow path along inside (north edge) of pool. Possible minor adjustments can be made, including addition of baffles to increase flow path to outside edge

Innisfil Pond Inspections – May 11, 2012 □

- Unidentified PVC pipe (?) submerged in plunge pool at north end of pond near outlet.
- Algae growth in plunge pool near outlet

4.0 Inlet Structure:

Inlet ID: 8-4-I1

- 41" Concrete pipe, not submerged
- No erosion
- Broken/unlocked grate
- Concrete interlocking Terrafix chute blocks (approx. 5cm height)
- Concrete headwall with guardrail, stone wingwalls
- Small deep pool area at forebay, no visibile forebay berm
- Small fish
- Debris at end of forebay
- Murky forebay water (SS)

5.0 Outlet Structure:

Outlet ID: 8-4-01

Influent to outlet:

- Concrete chamber with overflow grate on top 74" wide, 86" long, 7" thick concrete slab
- Inside of concrete chamber has a defined low-flow path benching
- Partially submerged low-flow orifice (concrete, 10" diameter opening to chamber at WL)
- Wooden debris trapped at orifice
- Weir above orifice (not submerged), 31.5" height by 12" width
- 3 x 2-bar grates. Top one locked, two are open.
- Large stone headwalls on both sides of chamber
- Possibility to improve outlet structure must be assessed

Outfluent from outlet:

- Outlet of pipe leaving concrete chamber is located further east. 32" diameter concrete pipe with closed bar grate (no lock), bucket lodged inside pipe, standing/slow moving water
- At that location there is also another 41" concrete pipe with a locked grate that extends under easement towards Leslie Drive

Pond Inspection Results

1.0 General

| a) | Pond Name | Crossroads |
|----|--------------------|---------------------------------|
| b) | Pond ID | 8-3 |
| c) | Pond Address | 2163 Jans Boulevard |
| d) | Name of Inspector | Renata Sadowska & Sabina Martyn |
| e) | Date of Inspection | May 11, 2012 |
| f) | Weather | Sunny |

2.0 Surrounding Area

- Table land
- Access:
 - Pedestrian access from Jans Boulevard easement, asphalt overland flow path, no gate, no signs. Pond can be accessed this way for maintenance
 - o Defined perimeter berm width indicates use for maintenance access.
 - o Fenced off from inlet at Ashley Court, sign that says no trespassing.
- Low-density residential around half of pond, rest is woodlot
- Vegetation
 - Sparse young trees around perimeter of the pond
 - o Small shrubs on inside of embankment
- Wildlife: turtles, ducks, geese, sparrows, goldfinch. Probably fish in pond because there are seagulls
- Dumping near access from Jans Blvd.
- Emergency spillway from Jans with interlocking stones on top of berm near Inlet 2. External embankment downstream riprap protection
- Another spillway at northeast corner of pond, leading to marsh. Concrete blocks on embankment. Low-flow culvert (250mm?) partially submerged, and concrete headwall.
- Space available for expansion/regrading to the north and east (woodlot).
- Cattails growing on berm west of Inlet 1 forebay. Saw the nearby house dumping from their backyard pool.

3.0 Pond Conditions:

- Wet pond or wetland → verify with design
- Offline facility
- Subermerged earth berm visible at end of forebay for I2. Sag in the middle. Lifted pipe just upstream of earth berm.
- Berm slopes are slightly eroded in this area. Animal habitat in berm (burrows).
- No visible low-flow channel might be filled with sediment

4.0 Inlet Structure:

Inlet ID: 8-3-I1

Innisfil Pond Inspections – May 11, 2012 □

- Grassed overland flow path from Ashley Court, and double catchbasins in cul-de-sac. Fenced off from residential area + cedar hedge along fence.
- 10.5" PVC pipe, not submerged, grate tightly closed, not locked
- Guardrail
- Sediment in pipe
- Toe of headwall reinforced with filter sock and riprap at base of inlet
- Forebay with visible earth berm. Cattails at edges of forebay
- 37" height concrete headwall
- Two 2" PVC drains from headwall

Inlet ID: 8-3-12

- From Jans minor system flow route
- 29-30" concrete pipe. 45" to top of headwall, 15 degree concrete wingwalls
- Stilling blocks 15" height and 10" long
- Unlocked bar grate
- Guardrails
- No difference in water level between forebay and pond
- Forebay filled with sediment (as designed?). Very shallow.
- LRiprap protection immediately downstream of inlet headwall, 21" step height of slab at base of headwall. Exposed filter cloth.
- Sediment deposition bar visible above water surface

Inlet ID: 8-3-I3

- Emergency bypass from Jans Blvd riprap lined
- 55" concrete pipe with 31" height bar grate (locked)
- Concrete headwall and wingwalls
- Evidence of seepage within concrete structure at wingwall
- Filter sock trapped in grate
- Evidence of human access (graffiti)
- 6" x 10" stilling blocks, some eroded
- 10" height step from slab at base of headwall
- Riprap downstream
- Heavy algae growth downstream

5.0 Outlet Structure:

Outlet ID: 8-3-01

Influent to outlet:

- Concrete chamber with guardrail
- Overflow weir 12" high and 48" wide, with steel bars (2" spacing)

Outfluent from outlet:

Innisfil Pond Inspections – May 11, 2012 □

- Downstream of outlet pipe, the 26" concrete pipe outlets into a marshy area to the north east of the pond. Concrete headwall with wingwalls, 46" height. Stilling blocks 8" high by 12" wide. Sediment at bottom 1" and algae growth. Locked grate.
- Evidence of animal habitat downstream of outlet in southwest direction dam outside of the marsh.

Pond Inspection Results

1.0 General

| a) | Pond Name | BMP4C2 |
|----|--------------------|---------------------------------|
| b) | Pond ID | 7-9 |
| c) | Pond Address | |
| d) | Name of Inspector | Renata Sadowska & Sabina Martyn |
| e) | Date of Inspection | May 11, 2012 |
| f) | Weather | Sunny |

BMP4C2 is a very large facility with several small pond cell inlets. Observations at these pond cells as well as through the main channel of BMP4C2 are listed below.

Main Channel:

2.0 **Surrounding Area**

- Located at a lower elevation than surrounding development, pond cells, etc.
- Roads to the north (Corm Street at west end, Innisfil Beach Road at east end, Jans Boulevard passes through it). Commercial land use also to the north (Plaza with Sobeys, Shoppers Drug Mart, etc.) Low-density residential to the south and construction along Mary Lou Street. "Woodland Park Wetlands" upstream (southwest) of the beginning of the wetland (more natural) and bridge. Retaining wall north of wetland south of west of bridge indicates that the houses were built too close to it.
- Flow from natural wetland disappears under the bridge, and seeps out at the 4th basin downstream of the bridge (potentially from a partially submerged pipe at the bottom of the large steps). Large basins/steps are covered in riverstone downstream of bridge.
- Remaining old silt fences along main channel of wetland
- Ongoing residential construction on the south side of the wetland, open space on the north side.
 (no sediment controls, broken fence)
- Concrete pedestrian access and overland spillway from Mary Lou Drive which has new construction and no sediment controls in place. -
- Is development too close to wetland? (Is there supposed to be a 30m setback?)
- Access:
 - Access from Swan Street: Easement to gravel path on top of berm and along south edge of wetland, pedestrian bridge at end of wetland near Swan Street. Exposed geotextile near entrance to bridge from Swan Street.
 - Maintenance access via easement from Mary Lou Street (also pedestrian access)
 - o Gravel path, maintenance access across wetland across from Pond 7-7.
 - o Gravel path crossing the wetland, near Pond 7-7.
 - Pedestrian and maintenance from Gina Street at north end of wetland. Maintenance area north of Pond 6-6 and pedestrian gravel path along south end of wetland.
 - Signs indicating that it is a stormwater management facility
- Wildlife: Blackbirds, geese, ducks
- Possible dumping near Swan Street (garbage bag).
- Garbage near inlet of outlet of wetland near Innisfil Beach Road

- Vegetation:
 - o At southern half, long grasses to wetland top of bank, sparse new trees along bank.
 - At northern half, large rocks on embankment on north side across from Pond 7-7. There
 is also a maintenance access grassed path here and overland flow path (grassed swale
 and riverstone). Shrubs within crest at gravel path south of wetland. New trees on south
 side of gravel path, outside of crest, as part of trail. Tree lined on residential side, long
 grasses and small shrubs on wetland side.

3.0 Pond Conditions:

- Wetland? Looks like a wet pond in some areas.
- Inline facility
- Riverstone berm located in the middle of wetland downstream of Cell #1. Surrounded by debris and cattails.
- Wetland connection from north side of pedestrian gravel berm to south side is an 18" concrete pipe, with concrete wingwalls and 36" high headwall and closed grate. Stilling blocks are 3.5" high, 12" wide and 8" long.
- Cattails and algae growth between two rocks berms in section of facility between Gina Street entrance and Jans Boulevard.

4.0 Inlet Structure:

Inlet ID: 7-9-I1

Outlet from Cell #1 – described below

Inlet ID: 7-9-12

• Outlet from Cell #2 – described below

Inlet ID: 7-9-13

- Downstream of riverstone berm, west of Pond 7-7
- 21" concrete pipe with concrete headwall, no guardrails for overland flow from Mary Lou?
- Rocks in pipe
- Deep pool formation immediately downstream of pipe, evidence of erosion downstream of pipe
- Cattails and sediment downstream in forebay.
- Riverstone on either side of inlet

Inlet ID: 7-9-14

Outlet from Cell #4 – described below

Inlet ID: 7-9-15

- From the direction of the north end of Pond 7-7, not sure where it drains from
- Concrete box culvert 37" high, 61" wide, 67" tall. Concrete headwall and wingwalls, guardrail.
- Sediment deposition at inlet
- 4" high stilling blocks that are covered in sediment
- Debris deposition

Inlet ID: 7-9-16

- From pipe running under Gina Street easement
- Large boulders to dissipate energy, large boulders for headwall
- 33" pipe with 47" concrete headwall, locked grate, guardrail
- Stone berms downstream of inlet
- Sediment deposition and overgrown cattails, murky water,
- Outlet channel with stone berms

Inlet ID: 7-9-17

• Some slope erosion from outlet from Shoppers Drug Mart Parking lot

Inlet ID: 7-9-18

• From Sobeys parking lot to the middle of the berm

5.0 Outlet Structure:

Outlet ID: 7-9-01

Influent to outlet:

- Watercress near outlet, sparse pine trees and long grasses on pond banks
- Concrete box culvert 50" high and 72" wide, width of headwall is 67"
- Guardrail
- Parking lot (no fence) at north end of wetland

Cell #1:

- Located northwest of the west end of wetland, off Swan Street.
- Overland flow path (curb cut) from Swan Street
- Berm with gravel path on top separates it from the wetland. Riverstone protection on berm.
- Overflow spillway to main channel of wetland, reinforced with interlocking stones.
- Forebay berm is reinforced with riprap stones
- New vegetation on the inside perimeter of pond (shrubs and small trees)
- Cattails in the forebay and pond
- No visible low-flow pipe

Inlet:

- 33" concrete pipe, grate removed from hinges, 50.5" concrete headwall and concrete wingwalls
- Stilling blocks 8" height by 12" length by 7" width.
- Step from concrete pad is 14" high
- Riprap downstream
- Invert of inlet pipe is much lower than spillway –flow could back up into storm sewer

Outlet:

Influent to outlet:

• Concrete box with two chambers in the berm

- Overflow grate
- Concrete pipe into first chamber from pond is approximately 1000mm(?). Connected to a perforated riser pipe. Conveyance through a 450-500" PVC pipe for low flows to the second chamber. There is a weir in the dividing concrete slab between the two chambers.

Outfluent from outlet:

- Pipe out of the second chamber is 18" concrete.
- At downstream connection to wetland, there is a 56" long headwall with a grate.
- Deep pool with cattails and riverstone berm protection
- Some floating debris

Cell #2

- Located southwest of wetland
- Perimeter fence, houses are very close to pond, manicured lawns and new vegetation up to the fence
- Pedestrian access from Lowrie Street easement, or via the pedestrian bridge from Swan Street
- Overland flow from Lowrie Street
- For 1/3 the length of the pond, starting from the forebay, there is a maintenance access road to the pond reinforced with interlocking stones. Interlocking stones are eroding and road is covered in grit.
- In main pond: dead turtle, lots of algae
- At forebay berm: bicycle, shopping cart, artificial plants
- Sediment forebay filled with sediment
- Shrubs and long grasses inside crest, cattails along perimeter

Inlet:

- 29" concrete pipe with headwalls, wingwalls and locked grate.
- Stilling blocks 12" long, and 8" high.
- Shrubs blocking the inlet, trapped debris.
- Sediment deposition to the left of the pipe, facing downstream.

Outlet:

- Connected to main channel through control structure similar to Cell #1.
- Overflow grate located in centre of asphalt trail. Top of weir eroding in the chamber.
- Inclined overflow grate near northern corner of cell, but no visible pipe. Sealed? Or filled with sediment?

<u>Cell #4</u>

- Across the wetland from Pond 7-7 (north of wetland, south of Sobeys parking lot, south of Corm Street)
- Riprap berm separating forebay from main cell
- Cattail growth along perimeter of pond along forebay berm
- Long grasses and small shrubs, a few pine trees
- No suspended solids

Inlet:

- Concrete 18" pipe, concrete headwall with grate
- No guardrails, just dense shrubs around inlet.
- Slight erosion, sediment deposition in front of inlet

Outlet:

Influent to outlet:

- Concrete chamber 65" long with an overflow grate, standing water inside
- Weir inside chamber cut out of concrete slab (30" high, 4" wide)
- 12" PVC pipe leaving the concrete chamber, no flow through it, pipe filled with sediment
- Riprap upstream of outlet

Outfluent from outlet to wetland:

- 35" pipe, closed grate, no guardrails. 26" step height
- Grassy vegetation at outlet point into wetland
- Eroded concrete seal between headwall and pipe

<u>Cell #5</u>

- Located at north side of Corm Street, west of Sobeys. Likely private property, and services the nearby commercial area.
- Pond is fenced, dirty.
- Cells #4 and #5 flow to the same outlet into the wetland.

Pond Inspection Results

1.0 General

| a) | Pond Name | Green Acres |
|----|--------------------|---------------------------------|
| b) | Pond ID | 7-7 |
| c) | Pond Address | 2050 Jans Boulevard |
| d) | Name of Inspector | Renata Sadowska & Sabina Martyn |
| e) | Date of Inspection | May 11, 2012 |
| f) | Weather | Sunny |

2.0 Surrounding Area

- Table land
- Access:
 - Pedestrian and maintenance access along west side of pond between pond and wetland
 BMP4C2. Gravel path.
- Low density residential to the south and east, wetland to the north and west.
- No room for expansion.
- Vegetation
 - o Grass outside of pond crest, a couple of trees
 - Within crest, grass and cattails, dogwood. Cattails around perimeter and in the middle of pond, along berms
- Overflow spillway on west side of pond, around outlet.

3.0 Pond Conditions:

- Wet pond or wetland
- Offline facility
- Algae growth in main part of pond
- Main area of pond: Meant to be shallow or is it filled with sediment?
- Beaver dam in the middle of main pond

4.0 Inlet Structure:

Inlet ID: 7-7-I1

- Concrete headwalls, grate, no guardrails, shrubs around inlet
- Boulders around inlet for velocity protection
- Bank erosion on right side of inlet
- Partially submerged 11" concrete pipe
- Rip-rap lined forebay berm
- Suspended solids in forebay, murky water

Inlet ID: 7-7-12

• Partially submerged concrete pipe, grate, concrete headwall

- Not open future pipe connection?
- Forebay is much cleaner, with some cattails near berm
- Forebay berm at surface
- Riprap

5.0 Outlet Structure:

Outlet ID: 7-7-01

Influent to outlet:

- No lock on cover (met Innisfil engineering co-op students at 2pm, who put a lock on it. Also told them about sediment from construction site, and they documented it)
- Filter fabric and pea gravel
- 44" CSP pipe
- Inside, there is a 11" diameter, 44" height PVC perforated rise, and pea gravel and sediment

Outfluent from outlet:

- 9.5" diameter PVC pipe to wetland
- Exposed geotextile, small forebay with riverstone lining
- Cattails after the deep pool area
- Grate closed
- Sediment deposition from the pond outlet outlet should be protected with filter cloth.

Pond Inspection Results

1.0 General

| a) | Pond Name | Innisbrook Developments (Innisbrook Heights) |
|----|--------------------|--|
| b) | Pond ID | 7-6 |
| c) | Pond Address | 1295 Gina Street |
| d) | Name of Inspector | Renata Sadowska & Sabina Martyn |
| e) | Date of Inspection | May 11, 2012 |
| f) | Weather | Sunny |

2.0 Surrounding Area

- Table land
- Access:
 - o 1 access point from easement from Gina Street, gated but open.
 - o Concrete overland path from Gina Street easement goes into Wetland BMP4C2.
 - o Circular maintenance area at north end of pond, interlocking stones
 - Asphalt path (part of trail system) along berm at western edge of pond, between pond and wetland.
- Low-density residential to the east and south, Innisfil Beach Road to the north, Sobeys parking lot and wetland BMP4C2 to the west.
- Sediment fence along southern edge should be removed
- Wildlife: beaver dam in pond
- Vegetation
 - o Grass and small trees shrubs around perimeter of pond
 - Within crest, bulrushes around perimeter and in the middle of pond.

3.0 Pond Conditions:

- Wet pond
- Offline facility
- Mildew and chemical smell, possible evidence of fertilizer/pesticides
- Brown floating organics, no suspended solids
- Mattress in forebay
- Evidence of dumping cleanup required
- Rip-rap lined spillway to wetland on west side of pond, exposed geotextile in the riprap

4.0 Inlet Structure:

Inlet ID: 7-6-I1

- 36" concrete pipe with concrete headwall of 118" width
- No guardrail

5.0 Outlet Structure:

Outlet ID: 7-6-01

Influent to outlet:

- Submerged pipe, concrete headwall
- Looks like pipe might be clogged because of backflow of sediment back into pond
- Inclined overflow grate with concrete chamber. Top 60" width by 38". Concrete width is 6".
- Riser in the chamber is approximately 8" in diameter, perforated PVC, partially submerged.
- Water level in chamber is higher than in the pond

Outfluent from outlet:

- Towards creek running to Innisfil Beach Road.
- 12" PVC pipe with concrete headwall 73" long and 42" wide.
- Debris and sediment deposition, overgrown vegetation is shifting the channel towards the road embankment.
- Signs of sediment load in main channel
- Ongoing road construction to the north, silt fence in place
- Watercress → sign of groundwater seepage?
- Shrubs around outlet
- Riprap in an undefined path

Pond Inspection Results

1.0 General

| a) | Pond Name | Wallace Mills #2 |
|----|--------------------|---------------------------------|
| b) | Pond ID | 7-3 |
| c) | Pond Address | 1896 Webster Boulevard |
| d) | Name of Inspector | Renata Sadowska & Sabina Martyn |
| e) | Date of Inspection | May 11, 2012 |
| f) | Weather | Sunny |

2.0 Surrounding Area

- Table land
- Access:
 - Perimeter fencing around entire pond.
 - 2 access points, one from the south near woodlot/creek, and one from the west through easement from Emerald Court. Both gated and locked. Keys did not work on west gate, but worked on south gate. Difficult to access pond from the west side because path is overgrown.
 - Vehicle access from south.
 - Pedestrian walkway along south end of pond outside of the fence, from Webster Blvd to Emerald Ct.
 - o "Use at own risk" signs, sign with Pond ID and street name, sign explaining SWM facility
- Guardrail at Inlet 1 but no guardrails at Inlets 2 and 3.
- Woodlot (creek) at south end of pond, low-density residential at north and west, road along east.
- Open spaces on east side of Webster Road on either side of Jans Bouleard.
- Some open space west of pond, but expansion is unlikely because existing vegetation is dense and mature.
- Vegetation
 - Woodlot to the south
 - Internal slope is well vegetated. Dense mature trees, shrubs and long grasses within crest of pond. Dense bulrushes near the water.
- Wildlife: did not see wildlife, but evidence of animal burrows in pond slope.
- Spillway off the south end of pond towards creek. Covered in concrete mat.

3.0 Pond Conditions:

- Wet pond
- Offline facility
- Murky water and algae growth

4.0 <u>Inlet Structure:</u>

Inlet ID: 7-3-I1

• From Emerald Court

- 48" Concrete pipe with concrete headwall and wingwalls and grate
- Stilling blocks, 5" high by 9" long by 13" wide
- Riprap downstream of inlet
- Shallow water, sediment deposition
- Partially submerged

Inlet ID: 7-3-12

- At northeast corner
- 22" concrete pipe with concrete headwall 152" in length.
- Riprap at inlet
- Clear, still water, no SS
- Partially submerged

Inlet ID: 7-3-I3

- From east, under Webster Blvd.
- 12" concrete pipe, concrete headwall 78" long, with grate
- Riprap downstream of inlet
- Lots of algae
- Partially submerged

5.0 Outlet Structure:

Outlet ID: 7-3-01

 Hickenbottom manhole on berm at south end near spillway, but could not see it. Outlet into pond probably submerged (could not see it on pond slope).

Pond Inspection Results

1.0 General

| a) | Pond Name | Wallace Mills #1 |
|----|--------------------|---------------------------------|
| b) | Pond ID | 7-2 |
| c) | Pond Address | 1218 Forest Street |
| d) | Name of Inspector | Renata Sadowska & Sabina Martyn |
| e) | Date of Inspection | May 11, 2012 |
| f) | Weather | Sunny |

2.0 Surrounding Area

- Table land
- Access:
 - Perimeter fence
 - Locked, gated access from Webster Blvd. Vehicle access from Webster Blvd to northeast corner of pond
 - o Grassed Pedestrian access along west side of pond outside of fence, from Forest Street
 - o "Use at own risk" signs, sign with Pond ID and street name, sign explaining SWM facility
- Vegetation
 - Woodlot to the south
 - o Internal slope is well vegetated. Dense mature trees, shrubs and long grasses within crest of pond. Dense bulrushes near the water.
- No space for expansion, vegetation is dense and mature.
- Spillway at north end of pond towards woodlot (creek). Asphalt and concrete mat on spillway, but it is overgrown with vegetation.
- Creek is partially blocked by wood & debris

3.0 Pond Conditions:

- Wet pond
- Offline facility
- Perimeter dense vegetation, but there is not much algae growth or suspended solids.

4.0 Inlet Structure:

Inlet ID: 7-2-I1

• Dense vegetation (cedar and other trees) near inlet – difficult to assess

5.0 Outlet Structure:

Outlet ID: 7-2-01

Inaccessible, not assessed

Pond Inspection Results

1.0 General

| a) | Pond Name | Orsi (Bayshore Estates) |
|----|--------------------|---------------------------------|
| b) | Pond ID | 7-8 |
| c) | Pond Address | West of 1097 Anna Maria Avenue |
| d) | Name of Inspector | Renata Sadowska & Sabina Martyn |
| e) | Date of Inspection | May 11, 2012 |
| f) | Weather | Sunny |

2.0 Surrounding Area

- Table land
- Access:
 - Gravel trail through proposed subdivision (pedestrian and vehicle access)
 - o Pond is fenced, but gate is open/broken
 - No signs
 - Berm also along west side of pond for access maintenance access road from nearby subdivision to the west of pond.
- Guardrail at pond inlet(?) at northwest end of pond.
- Currently land is still a woodlot, wetland area. Road to the south (7th Line).
- Vegetation
 - Woodlot and wetland around perimeter of pond
 - Within crest, cattails and long grasses, sparse very young trees
- Wildlife: turtle, beaver dam at east end of pond, small fish near inlet
- Spillway at south end of pond towards 7th line, covered in concrete mat
- Space available for expansion to the west, north, east.
- Gravel trail is a woodlot/marsh on one side, and a wet channel/creek/swale? on the other side.
 Unsure of where the outlet of the channel is into pond? Or away from pond? Standing water.
 End of creek near high school on Anna Maria has an inlet (?) structure with a grate, concrete headwall and guardrails filmy water, high sediment load.
- Entry point of this creek/swale to the pond has a spillway with concrete mat, and goes under the fence. Debris trapped under fence.
- Evidence of interfering with natural drainage paths, because there is significant seepage across the trail in several areas.

3.0 Pond Conditions:

- Wet pond
- Offline facility
- Bank erosion (rill) south of inlet (from wetland to pond). Pond slope could be regraded or could plant vegetation to stabilize the slopes.

4.0 Inlet Structure:

Inlet ID: 7-8-I1 (not sure if this is inlet – drainage to and from pond needs to be confirmed)

- Erosion on left side of inlet (facing downstream into pond)
- Concrete headwalls and wingwalls
- Bicycle submerged at inlet
- Partially submerged 53" concrete pipe
- 41" Concrete pipe, not submerged
- Guardrail
- Grate fallen in
- Goes to wetland? Comes from wetland?

5.0 Outlet Structure:

Outlet ID: 7-8-01

Influent to outlet:

- 10-11" PVC pipe, sediment deposition in pipe.
- Not submerged in the middle of berm, a lot higher than water level
- Surrounded by long grasses, cattails upstream of pipe.

Outfluent from pipe:

• Downstream outlet of pipe to creek running parallel to 7th line. 300mm pipe? Concrete headwall, grate. Illegal dumping nearby.

Pond Inspection Results

1.0 General

| a) | Pond Name | Royal Alcona |
|----|--------------------|---------------------------------|
| b) | Pond ID | 7-1 |
| c) | Pond Address | 971 Garden Avenue |
| d) | Name of Inspector | Renata Sadowska & Sabina Martyn |
| e) | Date of Inspection | May 11, 2012 |
| f) | Weather | Sunny |

2.0 Surrounding Area

- Houses on slope at higher elevation on west side of pond, houses on slope at lower elevation on east side of pond
- Access:
 - o Chainlink fence around perimeter of facility
 - 3 asphalt access points, not gated. One along easement from Anna Maria Avenue, one along easement from MacLean Street, and one along easement from Garden Avenue.
 Grassed overland flow path from Garden Ave.
 - Gravel path between forebays and pond connecting all access points pedestrian and maintenance.
 - Gravel maintenance access to outlet structure from pond
- Beginning of a wooded area at south end, surrounded by low-density residential on all other sides
- Vegetation
 - Woodlot to the south and grass and small shrubs around perimeter of pond. Established trees and dense brush on east side of facility, on slope.
 - Within crest, there are small trees, shrubs, a lot of bulrushes
- Emergency spillway south of I4 lined with riprap along both slopes of berm and concrete plath on top of berm.
- Very little space available for expansion, residential units back directly onto facility.
- Two large overflow grates with depressed curb upstream of easement from Maclean Street.

3.0 Pond Conditions:

- Wet pond or wetland → verify with design
- Inline facility?
- Three forebays
- Forebay for I3 has some bank erosion there is some space available for regarding. Spillway from forebay for I3 is overgrown with cattails, as is the area it spills to before outletting into main pond. Outlet to main pond is twin 23" CSP culverts with riprap at inlet
- A lot of algae growth and cattails in area between forebay for I1 and the outlet
- Forebay for I4 has a riprap-lined berm, flowing
- Water at outlet is filmy at surface (possible presence of gasoline, oil)

4.0 Inlet Structure:

Inlet ID: 7-1-I1

- Inlet from MacLean
- 40" Concrete pipe, with concrete headwall and grate
- Partially submerged
- Riprap downstream
- Guardrail

Inlet ID: 7-1-I2

- Influent to inlet from woodlot (intermittent stream?)
- Not submerged, some sediment in pipe
- 16" CSP culvert
- Grassed swale upstream, lots of cattail growth

Inlet ID: 7-1-I3

- Inlet from Anna Maria
- Partially submerged, 32" concrete pipe with concrete headwall and grate
- Some sediment and organic matter
- Riprap downstream
- Guardrail

Inlet ID: 7-1-I4

- Concrete elliptical pipe with concrete headwall and wingwalls.
- Guardrail
- Gabion retaining walls downstream of inlet on south side
- Rip rap protection downstream

5.0 Outlet Structure:

Outlet ID: 7-1-01

Influent to outlet:

- 50" peforated CSP with riser pipe
- Concrete chamber with steel-plated weir and inclined overflow grate
- Gabion basket wingwalls
- Fenced in with locked maintenance gate.

Outfluent from outlet:

- Concrete pipe with headwalls and wingwalls with grate
- Debris inside pipe (tire, etc.)
- Stilling blocks
- Discharge to creek/open channel.
- Fenced on both sides of outlet.

Pond Inspection Results

1.0 General

| a) | Pond Name | Previn Court |
|----|--------------------|---------------------------------|
| b) | Pond ID | 6-1 |
| c) | Pond Address | 1006 Quarry Drive |
| d) | Name of Inspector | Renata Sadowska & Sabina Martyn |
| e) | Date of Inspection | May 11, 2012 |
| f) | Weather | Sunny |

2.0 Surrounding Area

- Table land
- Access:
 - Fence around entire facility. 2 access points, not gated. Asphalt overland flow path from Booth Avenue to end of forebay is also a maintenance and pedestrian access.
 Maintenance and pedestrian access from Quarry Road, gravel road.
 - o Gravel path around pond at the top of perimeter berm
- Inlet and quantity control (second in-line) outlet are fenced
- Surrounded by low-density residential
- Open channel flow along south end of pond, flowing west to east. Possibly serves as a conveyance for re-directed creek. Channel covered in cattails. Inlet is fenced. Flows to quantity control outlet.
- Vegetation
 - Shrubs and small trees outside crest, a lot of cattails in swale along south end of pond.
 - Shrubs and small trees inside crest, and cattails near water surface
- Spillway at east end of pond, covered in concrete mat at top of berm. Cattails growing in dry basin downstream of spillway towards quality control (second in-line) outlet. Another spillway covered in concrete mat around second outlet.

3.0 Pond Conditions:

- Wet pond
- Offline facility? Pond runs parallel to open channel which could be the creek that was diverted when the subdivision was constructed.
- Forebay is murky, suspended solids
- Berm separating forebay from main pond is submerged.
- Low-flow channel/pools not visible

4.0 Inlet Structure:

Inlet ID: 6-1-I1

- Concrete box with concrete headwalls and wingwalls
- Fenced
- Murky water in forebay

5.0 Outlet Structure:

Outlet ID: 6-1-01

Influent to outlet:

• 72" diameter concrete perforated riser pipe. Filter stones around it.

Outfluent from outlet:

• Flows through ditch – rerouted creek.

Influent to quantity control (second in-line) outlet

- Concrete pipe with concrete head walls and wingwalls (fenced). Cattails upstream.
- Two overflow grates downstream two concrete chambers 60" by 36" grates, concrete width 6.5"
- Emergency spillway covered in concrete mat around overflow grates.

Outfluent from quantity control (second in-line) outlet:

• Outflow pipe inside chamber.

Innisfil Pond Inspections – May 11, 2012 □

Pond Inspection Results □

1.0 General

| a) Pond Name | | Tepco North |
|-----------------|---------|---------------------------------|
| b) Pond ID | | 6-2 |
| c) Pond Addre | SS | East of 930 Booth Avenue |
| d) Name of Ins | spector | Renata Sadowska & Sabina Martyn |
| e) Date of Insp | ection | May 11, 2012 |
| f) Weather | | Sunny |

2.0 Surrounding Area

- Table land, valley with creek to the north
- Low-density residential on three sides, woodlot to the north
- Access:
 - Perimeter fence around facility but no gate. Pedestrian and maintenance access through asphalt easement from Booth Ave. This is also the overland flow path. There is a spillway into the pond, lined with riprap. Recommend that grit in asphalt easement be replaced with sod.
 - o Another pedestrian walkway from 7th Line through woodlot to pond, gravel trail.
 - o Gravel/grassed path along perimeter of pond
- Vegetation
 - o Woodlot/marsh to the north, small shrubs and trees around facility.
 - Cattails and brush within crest
- Spillway near outlet is covered in down the slope into the valley/woodlot. Interlocking stones at the top of the berm.
- Some evidence of dumping
- Broken, old silt fence still exists along chainlink fence at north end of facility. Steel bars should be removed.

3.0 Pond Conditions:

- Wet pond
- Offline facility

4.0 Inlet Structure:

Inlet ID: 6-2-I1

- Concrete 24" pipe with concrete headwalls and grate
- Earth berm from forebay is not visibile, covered in cattails

5.0 Outlet Structure: □

Outlet ID: 6-2-01 -

Influent to outlet:

- Quantity control structure
- DICB (48" wide by 36" long) drains to PVC Pipe into concrete chamber

Outfluent from outlet:

- Overflow grate (2 chamber concrete box)
- Rectangular weir cut into concrete wall between the chambers. Concrete is 10" thick, weir is 38" in height, 11" in width.
- PVC pipe from quality control outlet (O2) drains into second chamber.
- Twin concrete pipes outlet from the concrete chamber to the creek/marsh

Outlet ID: 6-2-02

Influent to outlet:

- Quality control structure
- Submerged outlet
- Concrete headwall
- Gravel pad around it

Pond Inspection Results

1.0 General

| a) | Pond Name | Forest Valley |
|----|--------------------|----------------------------|
| b) | Pond ID | 7-4 |
| c) | Pond Address | 1891 Forest Valley Drive |
| d) | Name of Inspector | Paul Marsh & Sabina Martyn |
| e) | Date of Inspection | May 18, 2012 |
| f) | Weather | Overcast |

2.0 Surrounding Area

- Forest to the north, south and east sides of the pond. Low density residential to the south-west.
- It is believe that a berm was built around the pond to create it, rather than excavation. Woodlot
 east of the pond has a lower elevation, and there is a higher elevation to the west closer to the
 road.
- Access:
 - Perimeter fence with locked gate
 - Paved access from the road becomes a grassed (or gravel covered in vegetation)access path inside the perimeter fence
- Vegetation:
 - Within pond crest: yellow birch, Manitoba maple. Middle of pond is completely overgrown with unknown long grasses
 - Outside pond crest: Ferns, horsetails, sumach. Mixed hardwoods outside the fence (70% cedar)
- Wildlife: Animal path on slope around outfluent of 300mm pipe.
- Inflow to pond is conveyed via concrete mat channel. Concrete mat has some vegetation growing between the squares.
- Overflow spillway near the outlet to the stream. Concrete mat with riprap at base
- Room for expansion around the outlet ditch and downstream of the outlet ditch, but should avoid the mature cedar on east side of the channel.
- A lot of algae growth and small plants around outfluent point of Outlet 1. Riprap around outlet and shallow pool.
- Unidentified contribution from nearby home into outlet channel near Outlet 1. Could explain the growth there that is not found upstream.
- Roadside ditch located parallel to access road, outside fence. Ditch has some small trees and vegetation growing in it. 200mm PVC culvert outlets from roadside ditch to channel near outfluent point of Outlet 2.

3.0 Pond Conditions:

- Wet pond with no permanent pool
- Water in main pond is not visible because of growth of long grasses, but can hear water flowing
- Inline facility
- No visible forebay

4.0 Inlet Structure:

Inlet ID: 7-4-I1

- 600mm CSP under Forest Valley Drive, shovel and leaves lodged inside pipe
- Wooden headwall, no guardrail
- Discharge to concrete mat channel that conveys towards the pond. The mat is surrounded by riprap. Low flow travel under the concrete mat.

Inlet ID: 7-4-12

- 400mm CSP culvert with wooden headwall under access road from south, leaves inside, wooden headwall
- Discharge to concrete mat channel that conveys towards the pond. The mat is surrounded by riprap. Low flow travel under the concrete mat.

5.0 Outlet Structure:

Outlet ID: 7-4-01

Influent to outlet:

- 100 mm circular orifice plate on outlet in a CSP riser with overflow grate (partially submerged)
 Outfluent from outlet:
 - 230 mm CSP outlets into ditch
 - Partially submerged
 - There is a fallen tree in the middle of the ditch

Outlet ID: 7-4-02

Influent to outlet:

- 300mm PVC
- Manitoba maple growing directly in front of outlet

Outfluent from outlet:

• Outlet is just outside of perimeter fence, into ditch. Outfluent point is relatively flat and covered with leaves. Growth of small trees, brush at outfluent point.

Pond Inspection Results

1.0 General

| a) | Pond Name | Innisbrook Estates |
|----|--------------------|-----------------------------|
| b) | Pond ID | 7-5 |
| c) | Pond Address | East of 1949 Innisbrook St. |
| d) | Name of Inspector | Paul Marsh & Sabina Martyn |
| e) | Date of Inspection | May 18, 2012 |
| f) | Weather | Overcast |

2.0 Surrounding Area

- Sign with Pond Name and ID, No Trespassing sign, and sign explaining purpose of Stormwater Facility
- Access:
 - o Perimeter fence, gated, locked
 - o Gravel maintenance access road around perimeter of facility
- Large residential lots to the north and west. Woodlot to the south and east.
- Pond built up higher than surrounding area
- Vegetation:
 - Within crest: cattails, small trees, shrubs (sumach, dogwood)
 - Outside crest: White pine plantings, spruce. Plantings of unknown small shrubs.
- Wildlife: red-winged blackbird, frogs, animal slide near the forebay
- Room for expansion to the west of forebay

3.0 Pond Conditions:

- Wet pond
- Inline facility
- Overflow spillway (riprap) near twin outlet pipes
- Very murky water, algae
- A lot of algae in the forebay
- Algae especially in southwest corner of forebay probably an anoxic zone, stagnant water, not part of flow path.
- Dense cattail growth through upstream half of forebay.
- Forebay has same water level as main pond
- Forebay connection to main pond:
 - Riprap spillway
 - o Influent from forebay: submerged pipe, concrete headwall, guardrail, grate closed
 - Outfluent to pond: submerged pipe, concrete headwall, guardrail
- In forebay: submerged pipe, concrete headwall with guardrail Is there another inlet from the adjoining lot? Drawing shows a ditch inlet.

4.0 Inlet Structure:

Inlet ID: 7-5-I1

- 600mm CSP, partially submerged, lots of growth around it.
- Steady flow from Innisbrook Street, flows out of culvert through space under fence. Plants bend downstream (evidence of high flow from culvert).
- Upstream there is a lot of growth in the nearby ditches.
- Riprap in ditch outside of fence. Room for pretreatment (grit chamber) here.
- Riprap downstream of inlet. Grass and algae established on top of rocks.

5.0 Outlet Structure:

Outlet ID: 7-5-01

Influent to outlet:

- Algae growth
- Hickenbottom outlet, surrounded by riprap. Where do the holes start? Assume at the same level as the bottom of the twin pipes

Outfluent from outlet:

250mm corrugated PE pipe

Outlet ID: 7-5-02

Influent to outlet:

- Twin 450mm PE pipes with smooth inside walls, partially submerged
- Concrete headwall, grate and guardrails

Outfluent from outlet:

- Southern pipe is filled with debris
- All outlets drain to common ponding area east of pond.

Pond Inspection Results

1.0 General

| a) | Pond Name | Industrial |
|----|--------------------|----------------------------|
| b) | Pond ID | 8-1 |
| c) | Pond Address | 3277 Clifford Court |
| d) | Name of Inspector | Paul Marsh & Sabina Martyn |
| e) | Date of Inspection | May 18, 2012 |
| f) | Weather | Overcast |

2.0 Surrounding Area

- Tableland
- Access:
 - Perimeter fence, gated, locked
 - o Maintenance access along berm along perimeter of site.
 - Sign with Pond Name and ID, No Trespassing sign
- Industrial area surrounding the pond. Road to the north. Connection to creek at east side. Neighbouring property has Port-a-Pottys.
- Vegetation:
 - Within crest: cattail growth in the middle of pond. Mostly grass vegetation
 - Outside crest: grass and a few sparse trees
- Wildlife: snakes near the outlet, around where cattails are located. Saw a rabbit

3.0 Pond Conditions:

- Dry pond
- Inline facility
- Gabion basket spillway into pond. Grass grows along flow path.
- Lots of sediment deposition along flow path, especially between inlet and wetter spot in the middle.
- Low flow swale is not well defined except for the vegetation that grows along it.

4.0 Inlet Structure:

Inlet ID: 8-1-I1

- 500mm CSP under Clifford Court
- Riprap at outlet of pipe, flow over gabion basket spillway, overland conveyance through lowflow swale

Inlet ID: 8-1-I2

- Inlet from industrial property to the south.
- Adjoining property has a 50m x 50 m dry pond which outlets to a smaller area (10 mm X 10m) enclosed by a rock berm. There is a CB in the middle with a 50mm perforated pipe that outlets to a 375mm PVC pipe leading to Pond 8-1. 375mm PVC surrounded by riprap down the berm slope into pond.

Innisfil Pond Inspections – May 18, 2012 □

5.0 Outlet Structure:

Outlet ID: 8-1-01

Influent to outlet:

- Filter fabric around the outlet pipe (diameter?), riprap and grass on top.
- Opening at the top of berm with gabion basket spillway. Geotextile exposed at the bottom of the berm.

Pond Inspection Results

1.0 General

| a) | Pond Name | Doral Business Park |
|----|--------------------|-----------------------------|
| b) | Pond ID | 9-4 |
| c) | Pond Address | North of 2521 Bowman Street |
| d) | Name of Inspector | Paul Marsh & Sabina Martyn |
| e) | Date of Inspection | May 18, 2012 |
| f) | Weather | Overcast |

2.0 Surrounding Area

- Tableland
- Access:
 - Perimeter fence, gated, locked
 - Sign with Pond Name and ID, No Trespassing sign, and sign with explanation of stormwater facility
 - Grassed access path around pond.
- Industrial land to the south, north and west. Woodlot to the east.
- Vegetation: Some evergreens growing outside the pond crest. Short grasses and poor condition young oaks/maples within the pond crest.
- Wildlife: Animal burrows within crest, snakes, raccoons, deer, geese, toads, snails, swallows
- Riprap overflow spillway at outlet
- Small ditch along east side of pond, inside perimeter fence

3.0 Pond Conditions:

- Wet pond
- Offline facility?
- Well-established pond edge
- Pond bottom membrane exposed in some places
- Lily pads in main pond downstream of western forebay
- No cattails in western forebay and only a little algae upstream of the riprap berm at the downstream end of the forebay
- Small defined flow path on north division between eastern forebay and main pond.
- Forebay water levels lower than in the main pond.
- Need to control all the B-gravel at the inlets. Recommend a vortex chamber.

4.0 Inlet Structure:

Inlet ID: 9-4-I1

- Influent to western inlet: 1 m CSP in roadside ditch, no sediment deposition inside
- There is also a CSP under the pond access road, that drains into the same ditch. This CSP is half filled with sediment, and there is bank erosion beside it.
- A lot of sediment deposition out of the inlet into the western forebay.

Inlet ID: 9-4-12

- Eastern inlet: concrete pipe, concrete headwall, closed grate, high sediment deposition. Riprap on either side of the pipe, long grasses along the flow path.
- Dense cattail growth at the end of open channel from I2.
- Evidence of erosion in this open channel, downstream of the rock check dam.

5.0 Outlet Structure:

Outlet ID: 9-4-01

Influent to outlet:

- 300mm PVC with 230mm orifice steel plate flowing into 600 mm long by 750 mm wide concrete chamber with inclined overflow grate.
- Water in the chamber is lower than the pond
- Inside the chamber, 450mm PVC pipe with 450mm steel plate orifice.

Outfluent from outlet:

• 500mm PVC with concrete headwall with grate and guardrail.

Pond Inspection Results

1.0 General

| a) | Pond Name | Doral Business Park |
|----|--------------------|----------------------------|
| b) | Pond ID | 9-5 |
| c) | Pond Address | Doral Drive |
| d) | Name of Inspector | Paul Marsh & Sabina Martyn |
| e) | Date of Inspection | May 18, 2012 |
| f) | Weather | Overcast |

2.0 Surrounding Area

- Table land
- Access:
 - Perimeter fence, gated, locked
 - Access from Doral Rd.
 - Sign with Pond Name and ID, No Trespassing sign, and sign providing explanation of stormwater facility
- Industrial land all around, Highway 400 to the west
- Vegetation: long grasses along wide ditch leading to eastern inlet same vegetation in ditch as
 found on the parallel pedestrian path. Cattail growth along perimeter of forebays. Dying trees
 facing the highway.
- Rock check dams along the ditch are intact
- Wildlife: Geese, ducks, muskrats, dead toad.
- Overflow spillway (riprap) at outlet
- Some space available for facility expansion

3.0 Pond Conditions:

- Wet pond
- Offline facility
- Pond lining exposed near eastern forebay
- Riprap berms between western and eastern forebays and the main pond. Grass growing on western berm.
- Difficult to tell whether forebay water level is higher than main pond looks lower??

4.0 Inlet Structure:

Inlet ID: 9-5-I1

- Eastern inlet
- Corrugated PE pipe surrounded by riprap (diameter?)

Inlet ID: 9-5-12

Western inlet

- 900mm CSP, riprap downstream, some sediment deposition inside
- Rock check dams visible upstream of inlet

5.0 Outlet Structure:

Outlet ID: 9-5-01

Influent to outlet:

- Low flow outlet
- Inclined overflow grate to concrete chamber
- Inside chamber, there is a steel orifice on a PVC pipe, submerged to the invert of the pipe

Outfluent from outlet:

• Flows to O2 concrete chamber.

Outlet ID: 9-5-02

Influent to outlet:

- High flow outlet
- Inclined overflow grate to concrete chamber
- Inside chamber, outflow through a 150mm steel orifice on a PVC pipe, submerged to the invert of the pipe. Larvae in pipe

Outfluent from outlet:

- PVC pipe, concrete headwall with guardrail
- Riprap downstream to fence, then ditch beyond

Pond Inspection Results

1.0 General

| a) | Pond Name | Southview |
|----|--------------------|----------------------------|
| b) | Pond ID | 9-2 |
| c) | Pond Address | 7883 Yonge Street |
| d) | Name of Inspector | Paul Marsh & Sabina Martyn |
| e) | Date of Inspection | May 18, 2012 |
| f) | Weather | Sunny |

2.0 Surrounding Area

- Table land
- Residential on south and east sides. Open space to the north, parks and recreation (arena, library) to the west. Evidence of recreational use (bikes).
- Access:
 - Perimeter fencing but no gate/locks.
 - Signs prohibiting use of motorbikes and skidoos.
 - From Gordon: Pedestrian paved easement with mowed grass on the sides. Wooden planks at the end of the easement. Double catchbasin and depressed curb at road
 - From Chantler: Pedestrian paved easement, double catchbasin and depressed curb at road
- Vegetation: Bulrushes around the perimeter of the site, trees and a stream through the middle just south of the Chantler easement
- Wildlife: Leopard frog
- Partway down the easement from Gordon, there is a small backyard drain discharging onto the path from property to the west. Erosion at discharge point.
- Recommendation: reshape the linear perimeter conveyance channels into smaller disconnected ponds, and make the area into mountain bike park (there is a skateboard park to the west)
- Recommendation: Grit chamber at Gordon.

3.0 Pond Conditions:

- Dry pond
- Offline facility?
- No forebays, just a wet channel around perimeter of the site and through the middle.
- Mowed path extending west from Chandler easement to the west.
- Bullrushes in the centre of the field north of Chantler easement

4.0 Inlet Structure:

Inlet ID: 9-2-I1

- Inlet from Gordon
- Concrete pipe with concrete headwall with grate, partially submerged
- Lots of sediment, algae

• Opportunity for renaturalization east of this point.

Inlet ID: 9-2-12

- Inlet from Chantler
- 600mm concrete pipe with concrete headwall with grate, clogged with debris, partially submerged -
- There is also a 450mm CSP that extends under the easement and outlets at the same place as I2.

5.0 Outlet Structure:

Outlet ID: 9-2-01

- Near the southwest corner.
- 250mm influent pipe into concrete chamber with inclined overflow grate. 700mm outfluent pipe (no sediment deposition) from concrete chamber.
- Standing water and lots of algae growth directly upstream (east) of outlet. 350mm concrete pipe out of standing water pool. Sediment deposition in front of this pipe.
- Swale with long grasses between the outlet grate and the standing water pool.

Innisfil Pond Inspections - May 18, 2012

Pond Inspection Results

1.0 General

| a) | Pond Name | Brandy Lane |
|----|--------------------|----------------------------|
| b) | Pond ID | 10-1 |
| c) | Pond Address | 2706 Dempster Avenue |
| d) | Name of Inspector | Paul Marsh & Sabina Martyn |
| e) | Date of Inspection | May 18, 2012 |
| f) | Weather | Sunny |

2.0 Surrounding Area

- Table land
- Access:
 - Perimeter fence (located on the pond crest)
 - o Locked, gated access from Dempster Avenue
 - Sign with Pond Name and ID, No Trespassing sign
- Vegetation:
 - Within crest: long grasses, choke cherry, some horsetails growing in shade of fence, peas, duckweed, pond completely overgrown with bulrushes, big tree in the middle of pond (willow?)
- Wildlife: Blackbirds, bullfrog, rabbit, dead fish
- No room for expansion
- Roads on the south and east, residential on the north and west.

3.0 Pond Conditions:

- Wet pond
- Offline facility
- Riprap upstream of outlet
- Can't tell if there is a low-flow channel
- Drainage from the first lot on the north east corner has resulted in an eroded channel formation towards the pond
- Water level in western forebay is slightly higher than in the main pond
- Berm between pond and western forebay has been breached in several areas by animals.

4.0 Inlet Structure:

Inlet ID: 10-1-I1

- East side of pond
- No guardrail (one is recommended)
- Partially submerged, with grate.
- Lots of bird droppings near inlet.
- Deep pool, lots of sediment deposition

Inlet ID: 10-1-I2

- West side of pond, from Fire Station
- A-gravel path down the pond slope towards outlet

Inlet ID: 10-1-I3

- Western forebay inlet
- Completely submerged, concrete headwall with grate.
- Algae, green and murky, with cattails around perimeter of forebay.

Inlet ID: 10-1-I4

- Ditch from someone's backyard at the north end of the pond very small contribution
- 6m east of northwest corner of fence

5.0 Outlet Structure:

Outlet ID: 10-1-01

- 850mm concrete pipe into concrete chamber with inclined overflow grate. Chamber also has a pre-cast opening of 250mm but this probably because it is a reused piece from something else.
- Hickenbottom riser located just south of forebay inlet (in forebay). Surrounded by dense vegetation and cattails. Likely connected to the outlet somehow.

Pond Inspection Results

1.0 General

| a) | Pond Name | Village North |
|----|--------------------|----------------------------|
| b) | Pond ID | 10-2 |
| c) | Pond Address | 2856 Dempster Avenue |
| d) | Name of Inspector | Paul Marsh & Sabina Martyn |
| e) | Date of Inspection | May 18, 2012 |
| f) | Weather | Sunny |

2.0 Surrounding Area

- Valley land former quarry?
- Farms to the west and south, open space valley lands to the east and north. Evidence of recreational use (ATVs)
- Access:
 - Sign with Pond Name and ID
 - o Perimeter fence, gated, locked
 - o Mowed easement from residential area, then B-gravel pathway near pond
 - o ATV path at southeast corner
 - Maintenance access path along south end, from top of berm to bottom
 - Gravel path and open gate from farm to the west.
- Overland riprap spillway at the southeast corner
- Emergency gabion basket spillway around outlet structure
- Vegetation:
 - Outside of crest ash, birch, poplar, sumach, one American elm
 - o Inside crest mostly grass, one tree near influent of outlet willow? Poplar?. Cattails in the low-flow channel
- Wildlife: Deer, chipmunk, monarch butterfly

3.0 Pond Conditions:

- Wet pond
- Offline facility
- Low-flow channel evident, wet, cattails
- Debris in the middle of pond
- Propose planting along the low-flow channel to prevent ATVs from disrupting the flow.

4.0 Inlet Structure:

Inlet ID: 10-2-I1

- 1200mm concrete, concrete headwall, grate
- Sediment in the bottom of pipe

5.0 Outlet Structure:

Outlet ID: 10-2-01

Influent to outlet:

- Low flow outlet
- 300mm CSP with entrance collar

Outfluent from pipe:

• Pipes go under gravel path (used by ATVs?). Gabion baskets downstream on north side of gravel path

Outlet ID: 10-2-02

Influent to outlet:

- High flow outlet
- Twin 500mm CSP pipes

Outfluent from pipe:

• Pipes go under gravel path (used by ATVs?). Gabion baskets downstream on north side of gravel path

Innisfil Pond Inspections - May 18, 2012

Pond Inspection Results

1.0 General

| a) | Pond Name | Monrepos (Bay Point Estates) |
|----|--------------------|------------------------------|
| b) | Pond ID | 13-1 |
| c) | Pond Address | 1720 Wilkinson Street |
| d) | Name of Inspector | Paul Marsh & Sabina Martyn |
| e) | Date of Inspection | May 18, 2012 |
| f) | Weather | Sunny |

2.0 Surrounding Area

- Access:
 - o Barbed wire fence, locked gate
 - o Grassed maintenance access path on berm around pond
 - o Sign with Pond Name and ID, sign with explanation of stormwater facility
 - There is a well established path from forest on the north side of pond, the fence is cut down at that spot
- Crest of pond is higher than surrounding land indication it was built up?
- Road on north and south sides, low density residential to the east and west
- Vegetation:
 - Within crest: horsetails, cattails
 - Outside of crest: milkweed, grass, aspen?, mixed hardwood
- Wildlife: fish (perch and another species), dragonflies, abandoned homes of burrowing animals, monarchs, frogs, lots of tadpoles, skull of a small animal

3.0 Pond Conditions:

- Pond is not as shown in drawing
- Wet pond
- Connects to creek. In-line facility
- Pond is very shallow around perimeter, but middle looks deep
- Water level dropping? Burrows visible
- Algae downstream of outlet
- Riprap overflow spillway at pond outlet with concrete square weir on top

4.0 Inlet Structure:

Inlet ID: 13-1-I1

- Southeast inlet
- 900mm concrete pipe, concrete headwall, grate. Sediment deposition in 1/3 of the pipe.
- Riprap on either side of inlet
- Some debris near the inlet
- Oily sheen in the water and brown scum in cattails
- Inlet 1 forebay is functioning well as a pretreatment method lots of sediment

Inlet ID: 13-1-I2

400mm CSP culvert on east side of Inlet 1, draining from southern road

Inlet ID: 13-1-I3

• 400mm CSP culvert on west side of Inlet 1, draining from southern road

Inlet ID: 13-1-I4

- Southwest inlet drains from roadside ditch over riprap into pond
- 600mm corrugated PE pipe goes under the southern road, services ditch across the road (wet, algae and vegetation in the ditch)
- Inlet 4 forebay is covered with algae. Trickles into main pond from higher elevation.

5.0 Outlet Structure:

Outlet ID: 13-1-01

- High flow outlet
- 600mm CSP from pond (not submerged on either end)

Outlet ID: 13-1-02

Influent to outlet:

- Low flow outlet
- Assume a submerged pipe from pond to manhole on top of berm

Outfluent from outlet:

- 300mm PVC from manhole to downstream creek
- Half submerged at outfluent point

Pond Inspection Results

1.0 General

| a) | Pond Name | Monrepos (Bay Point Estates) |
|----|--------------------|------------------------------|
| b) | Pond ID | 13-2 |
| c) | Pond Address | W of 1708, Wilkinson Street |
| d) | Name of Inspector | Paul Marsh & Sabina Martyn |
| e) | Date of Inspection | May 18, 2012 |
| f) | Weather | Sunny |

2.0 Surrounding Area

- Access:
 - Locked, barbed wire perimeter fence
 - o Access via easement from Wilkinson gravel path
 - o Fence around easement is torn for snowmobile trail
 - o Gate into actual facility is broken
 - Vehicle access around perimeter of pond
- A lot of room for expansion
- Forest surrounding pond on all sides, some low-density residential land use further away. Some evidence of recreational use.
- Vegetation:
 - o Within crest: cattails, long grasses, small trees
 - Outside crest: mature hardwoods (maple, oak, etc.) To the east, iris & Solomon's seal (planted?), maple, ash, oak
- Wildlife: monarch butterfly, raccoon

3.0 Pond Conditions:

- Wet pond
- Inline facility
- 2/3 of pond is bulrushes, 1/3 is tall grass
- Cattails and algae and murky water downstream of outlet
- Overflow spillway (riprap) on top and around outlet

4.0 Inlet Structure:

Inlet ID: 13-2-I1

- Channel inlet? Can't see a pipe
- Geotextile exposed
- Channel is not a stable bank (evidence of erosion)
- Riprap downstream is covered in vegetation.

5.0 Outlet Structure:

Outlet ID: 13-2-01

• Western pipe: 525mm CSP

- Influent point is inline with pond
- Partially submerged with some sediment deposition at outfluent point

• No control on outlet

Outlet ID: 13-2-02

Influent to outlet:

• Eastern pipe: 750mm CSP

- Influent point is at northeast corner of pond
- Not submerged at influent point but partially submerged with some sediment deposition at outfluent point
- No control on outlet

Innisfil Pond Inspections - May 18, 2012

Pond Inspection Results

6.0 General

| g) | Pond Name | South Shore Woods |
|----|--------------------|---------------------------------|
| h) | Pond ID | 13-3 |
| i) | Pond Address | East of Dalkab, Shoreview Drive |
| j) | Name of Inspector | Paul Marsh & Sabina Martyn |
| k) | Date of Inspection | May 18, 2012 |
| I) | Weather | Sunny |

7.0 Surrounding Area

- Access:
 - o Perimeter chainlink fence along road only, gated, locked.
 - Sign explaining purpose of stormwater facility
- Road to the north, woodlot on all other sides
- Vegetation:
 - Within crest: sparse cedars and shrubs
 - Outside crest: woodlot
- Wildlife: frogs, blackbirds, ducks, newt, leech, dragonflies

8.0 Pond Conditions:

- Wet pond
- Inline facility
- Possible groundwater entrance into westernmost corner of western forebay (sand buildup around it).
- Western forebay has cattail growth at water level. Lots of brown algae at western-most quarter of forebay. Visible forebay riprap berm with cattails on the main pond side.
- Main pond has some algae on western side and a lot less algae on eastern side. Lilypads on eastern side.
- Eastern forebay has brown algae? on western side. Cattails on western side of forebay.
- Riprap spillways near Inlet 1 and Inlet 2

9.0 Inlet Structure:

Inlet ID: 13-3-I1

- Eastern inlet
- Influent into inlet pipe is 900mm CSP with grate, concrete headwall, guardrail, fed by roadside ditch
- Outfluent into pond has enlarged opening (1.15m diameter), grate bars on top, lots of sediment deposition, riprap on both sides.

Inlet ID: 13-3-I2

Innisfil Pond Inspections – May 18, 2012

- Western inlet
- Influent into inlet pipe is 1m CSP with grate, concrete headwall, guardrail, fed by roadside ditch. Some vines growing over the grate.
- Outfluent into pond: 900mm pipe expands to 1.15m enlarged opening. Grate bars on top of enlarged opening, riprap on both sides.

10.0 Outlet Structure:

Outlet ID: 13-3-01

- Influent: Outlet riser pipe in the middle of wet pond inaccessible. Surrounded by riverstone. Conveyance to the manhole east of Outlet 2 headwall.
- Outfluent: Outlets through 250mm pipe (with concrete headwall and guardrail) into channel on the other side of the street and goes north to the Lake. Riprap on both sides of headwall and downstream. Almost entire surface is covered with algae. Riprap spillway on east side of headwall.

Outlet ID: 13-3-02

- Influent: 450mm stainless steel orifice place, concrete headwall with guardrail
- Outfluent: 600mm pipe filled with debris and cattails because it is the surface outlet from the
 pond. Pipe is in the same concrete headwall (with guardrail) as Outlet 1. Outlets into channel on
 the other side of the street and goes north to the Lake. Riprap on both sides of headwall and
 downstream. Almost entire surface is covered with algae. Riprap spillway on east side of
 headwall.

Innisfil Pond Inspections - May 25, 2012

Pond Inspection Results

1.0 General

| a) | Pond Name | McKee |
|----|--------------------|---------------------------------|
| b) | Pond ID | 10-3 |
| c) | Pond Address | 2877 Ireton Street |
| d) | Name of Inspector | Renata Sadowska & Sabina Martyn |
| e) | Date of Inspection | May 25, 2012 |
| f) | Weather | Sunny |

2.0 Surrounding Area

- Table land
- Low density residential to the south, woodlot on all other sides. Marshy land to the northwest
- Creek running parallel to pond, between southern pond berm and houses
- Access:
 - o Maintenance access from Ireton, gravel path from road
 - o Sign with Pond ID and name, SWM facility explanation sign
 - o No pedestrian access: "No Trespassing" sign, perimeter fence, gated, locked
- Grass berm around perimeter of pond covered in long grasses
- Wildlife: Fish, frogs, droppings from an larger animal
- Vegetation:
 - o Small evergreens on south end of pond, and cedar, willow within crest.
 - Algae and foamy vegetation in forebay
 - Cattails in forebay perimeter
- Possible overflow spillway channel on top of berm west of outlet structure (unconfirmed, not well defined, but there is different vegetation there).
- Signs of organic dumping in easement outside of western perimeter fence
- Manhole connection from street, located outside fence upstream of inlet
- Western outlet to creek: 45" concrete pipe with grate.
- Downstream creek (to the west) is sandy and filled with algae

3.0 Pond Conditions:

- Offline, wet pond
- Visible sediment in forebay, localized shallow areas
- Gentle pond slopes
- No visible forebay berm
- Algae around perimeter of main pond, cattails

4.0 Inlet Structure:

Inlet ID: 10-3-I1

• 33" concrete pipe, half submerged

• Concrete headwall, stone wingwalls, grate

5.0 Outlet Structure:

Outlet ID: 10-3-01

Influent to outlet:

• 62" perforated CSP riser surrounded by stone, secured by wire

Outfluent from outlet:

- Discharge to southern creek: submerged pipe and grate, partially filled with sediment or vegetation. 9" from the top of sediment to the top of the grate.
- Concrete headwall and stone retaining walls.
- Bank erosion downstream of outlet (to the west) in the stream
- Perimeter fence goes across the creek at the east end
- Creek has standing water with algae, watercress and other submerged vegetation

Innisfil Pond Inspections - May 25, 2012

Pond Inspection Results

1.0 General

| a) | Pond Name | Alcona Woods |
|----|--------------------|---------------------------------|
| b) | Pond ID | 9-1 |
| c) | Pond Address | 698 Trinity Street |
| d) | Name of Inspector | Renata Sadowska & Sabina Martyn |
| e) | Date of Inspection | May 25, 2012 |
| f) | Weather | Sunny |

2.0 Surrounding Area

- Table land
- Access:
 - Maintenance access to east side of pond via Kildare gravel access road
 - Locked perimeter fence, no pedestrian access
 - Sign with Pond ID, name, address
 - Maintenance access to west side of pond through backyard of 745 Calderas, which is fenced. What is the access agreement between the Town and the homeowner?
 - Difficult to get around the perimeter of pond very thick vegetation
- Easement access to the west side has a lot of items piled in the swale. Resident indicated that this is temporary storage and owner has ordered a bin for disposal.
- Wildlife: frogs, minnows in channels on Kildare (but fish don't go in the pond)
- Vegetation: Birch trees, various mature trees within the crest of pond, long grasses, cattails, horsetails, lots of mosquitoes
- Wet ditches on both sides of Kildare, contains sandy soil with minnows. Western ditch is conveyed under road to the creek on the east side via twin 28" CSP culverts. On the east side, the CSPs are partially buried (14" from top of sediment to top of pipe)
- Shading in the ditches is beneficial for the fish habitat
- CSPs drain to a 50" wide swale (top measurement) on the east side of the pond
- Roadside ditches along Trinity Street likely contribute sediment

3.0 Pond Conditions:

- Wet pond (wetland?)
- Low-flow channel not visible
- Offline facility

4.0 Inlet Structure:

Inlet ID: 9-1-I1

- Resident said the inlet gets cleaned out every year
- Submerged grate, standing water, surrounded by leaves. Concrete headwall
- 12" pipe, distance of 4" from surface of water to top of grate, rest is filled with sediment.
- Evidence of dumping of leaves

5.0 Outlet Structure:

Outlet ID: 9-1-01

Influent to outlet:

• 6" collapsed pipe – gabion collapsed on top.

Outfluent from outlet:

• Outlet pipe from the pond is below emergency spillway. 7" height x 9" width CSP pipe partially submerged and partially (10%) filled with sediment.

Outlet ID: 9-1-02

• Gabion basket spillway – sinking in places, riprap on top

Innisfil Pond Inspections - May 25, 2012

Pond Inspection Results

1.0 General

| a) | Pond Name | Skivereen |
|----|--------------------|---------------------------------|
| b) | Pond ID | 8-5 |
| c) | Pond Address | 2324 Jack Crescent |
| d) | Name of Inspector | Renata Sadowska & Sabina Martyn |
| e) | Date of Inspection | May 25, 2012 |
| f) | Weather | Sunny |

2.0 Surrounding Area

- Access:
 - o Fenced, locked
 - Signs explaining purpose of pond, Pond ID and address
 - o No pedestrian access, except gate from some of the backyards of houses to the south.
- Wooded areas to the north and west, street to the east, residential to the south
- Wildlife: frogs, animal burrows, blackbirds, butterflies
- Vegetation:
 - o Inside crest: Cattail growth, mature trees and diverse vegetation
 - Outside crest: Mature trees and diverse vegetation, arrowheads
- Berm around perimeter of pond, vegetated.
- Tree growth in ditch between woodlot and berm
- Berm is mowed in one area in front of the second from the street. Drain from the first house beside the road, and the third house has a buried French drain with a grate. There is a depression between the berm and the backyard of those houses.
- Open area north of pond can be used for expansion or sediment storage. Suggest filling in eastern end of pond to reduce pond slope, move the spillway to the west end of the pond, and excavate more at the west end to increase the flow path.

3.0 Pond Conditions:

- Wet pond, inline?
- Forebay is circular, well-vegetated with trees and grasses
- Some algae growth in forebay, and standing water near west end of forebay
- Forebay berm is covered in soil and vegetated with small trees
- Spillway over forebay berm flowing
- Some debris in pond
- Oily sheen in water near outlet
- No algae, except some brown surficial vegetation near the outlet

4.0 Inlet Structure:

Inlet ID: 8-5-I1

- 26.5" concrete pipe, concrete headwall and wingwalls, guardrail
- Stilling blocks 4" high, 12" long, 8" wide
- Layer of sediment and algae growth between wingwalls

- Water flowing through pipe
- Signs of algae within pipe
- Downstream of inlet there is a short apron with concrete link
- Lots of sediment deposition on the left and right of inlet

5.0 Outlet Structure:

Outlet ID: 8-5-01

- Outlet: Double CB overflow grate
- Overflow PVC pipe out not submerged, clear of sediment, 19"
- Standing water below
- Emergency spillway reinforced with concrete mat vegetation growing on it
- Erosion on pond bank is right across from spillway
- Outlet pipe from pond is either submerged or under debris
- Outlet downstream one headwall, concrete with guardrail, grates over both pipes.
- Concrete mat downstream of headwall outlets to creek
- Low flow some water flowing, clean, 12" PVC

Outlet ID: 8-5-02

High flow pipe – empty, PVC 21"

Pond Inspection Results

1.0 General

| a) | Pond Name | Taylorwoods |
|----|--------------------|---------------------------------|
| b) | Pond ID | 8-2 |
| c) | Pond Address | 2259 Taylorwoods Blvd. |
| d) | Name of Inspector | Renata Sadowska & Sabina Martyn |
| e) | Date of Inspection | May 25, 2012 |
| f) | Weather | Sunny |

2.0 General Observations

- Pond is scheduled to be cleaned out. Is there a retrofit study?
- Access: Fenced, locked, with "No Trespassing" sign, Sign with Pond ID and Name
- Pedestrian walkway in easement outside of pond fence
- On Roberts Road, there is rust coloured water and different vegetation in roadside ditch just west of pedestrian walkway (#682). Source of iron? Discharge is clean on the east side of the easement (#674).

Innisfil Pond Inspections - May 25, 2012

Pond Inspection Results

1.0 General

| a) | Pond Name | Victoria Green |
|----|--------------------|---------------------------------|
| b) | Pond ID | 9-3 |
| c) | Pond Address | 2600 Lawrence Avenue |
| d) | Name of Inspector | Renata Sadowska & Sabina Martyn |
| e) | Date of Inspection | May 25, 2012 |
| f) | Weather | Sunny |

2.0 Surrounding Area

- Access from Lawrence Ave, behind houses
- Boat storage in the middle of swale (un-fenced easement) behind one of the houses
- Open space with new tree plantings to the north and east. Agricultural use (farmland) to the west. Creek to the south.
- Grassed maintenance access berm along all sides except the farm side.
- Berm at the south end has been re-shaped with mud.
- Ditch north of pond near residential area is filled with debris. Water in ditch, cattails along edge, evidence of animal burrows and deer tracks along the N-S ditch
- Wildlife: lots of animal burrows around pond, killdeer, snake, giant beaver dam, small animal skull, bits of fur around beaver dam, butterflies
- Vegetation: thick layer of algae on top of mud in pond, cattails and some small trees in the middle of the pond. Tree stumps around the pond show evidence of beaver presence

3.0 Pond Conditions:

- Wet pond
- In-line facility
- Strong odour
- Evidence that water level was quite high, near the top of the berm. Has since been dewatered by the Town by a few feet, due to the presence of beavers.
- Asphalt spillway at south end at outlet

4.0 Inlet Structure:

Inlet ID: 9-3-I1

- Influent to inlet at Lawrence Ave. is a 24" CSP culvert under the road that feeds to a 23" concrete pipe with grate, concrete headwall and wingwalls. Concrete pipe is not submerged (<1 cm flow), has a lot of leaves collected at the inlet.
- Open-channel (ditch) conveyance from south of the Lawrence Ave houses to the north west corner of the pond.

5.0 Outlet Structure:

Outlet ID: 9-3-01

Influent to outlet:

• Inflow to the outlet CSP is all torn up

Outfluent from outlet:

- 24" CSP, gabion baskets around it, step down into stream
- Evidence of iron (groundwater inflow?) on the stream bank
- Fallen birch over the outfluent of the outlet

Pond Inspection Results

1.0 General

| a) Pond Name | Tepco South |
|-----------------------|---------------------------------|
| b) Pond ID | 6-3 |
| c) Pond Address | West of 965 Nantyr Drive |
| d) Name of Inspector | Renata Sadowska & Sabina Martyn |
| e) Date of Inspection | May 25, 2012 |
| f) Weather | Sunny |

2.0 Surrounding Area

- Access:
 - No perimeter fence
 - Sign explaining purpose of facility, "Danger, water level may fluctuate" sign, "Do not enter" sign
- Low density residential to the north, east and west. Woodlot to the south.
- Construction to the north. Double catchbasin with filter cloth on one catchbasin (clogged) and no protection on the other catchbasin
- Wildlife: Turtles, minnows, tadpoles, frogs, blue dragonflies. Frog and a dead fish in the concrete outlet chamber
- Vegetation:
 - Outside crest: mowed lawn and street tree planting
 - o Small trees, young cedars, maples, shrubs, long grasses, cattails along perimeter of pond

3.0 Pond Conditions:

- Wet pond
- Offline Facility
- Interlocking brick spillway from road to pond
- Rock reinforced forebay berm is completely submerged
- Silt bar very evident outside inlet 5m, above forebay berm

4.0 Inlet Structure:

Inlet ID: 6-3-I1

- Concrete 19" pipe, concrete headwall and grate (locked)
- Thin layer of sediment in pipe, partially submerged (5" water)

5.0 Outlet Structure:

Outlet ID: 6-3-01

Influent to outlet:

• Inlet protection: riser, rip rap on top is washed away, filter cloth exposed

Innisfil Pond Inspections - May 25, 2012 □

- Downstream there is a little pooling area for the outlet which is filled with algae and cattails
- Concrete chamber (2 chambers) with overflow grate.
- Weir in concrete chamber is 5" wide and 46" high. Bar on the weir but debris on top of weir. Suggest protection on top
- Gate valve to close the outlet from the pond
- Perforated PVC riser in concrete chamber
- Concrete pipes into and out of chamber
- PVC pipe between two cells of chamber

Outlet ID: 6-3-02

• Emergency overflow of interlocking bricks

Pond Inspection Results

1.0 General

| a) | Pond Name | Coralwoods |
|----|--------------------|---------------------------------|
| b) | Pond ID | 4-2 |
| c) | Pond Address | 2304 Meadowland Street |
| d) | Name of Inspector | Renata Sadowska & Sabina Martyn |
| e) | Date of Inspection | May 25, 2012 |
| f) | Weather | Sunny |

2.0 Surrounding Area

- Low-density residential to the east and south, estate residential to the west, woodlot/agricultural? to the north.
- Vegetation:
 - o New trees within outer edge of crest, more mature trees closer to the water
 - Long grasses, horsetails within the crest.
 - o Low flow channel is well-shaded with mature trees. Dense cattails.
 - Trees mainly on the east side and not on the west.
- Access:
 - Gated and locked at south end, perimeter fence
 - o Maintenance gate at north end
 - Signs with "No Trespassing", pond ID and address
- Recommend perimeter shading, trail access
- Evidence of dumping near I1.

3.0 Pond Conditions:

- Dry pond with low-flow channel and ponding area at outlet
- Recommend a deeper channel, splitting flow wetland?
- Steep slopes on pond bank
- Recommend terracing the berm?

4.0 Inlet Structure:

Inlet ID: 4-2-I1

- Overland flow open channel from the west becomes gabion basket spillway downstream of fence. *Gabion baskets could be a human tripping/slipping hazard
- Space under the fence between fence and gabion spillway is covered by more fence, but it is broken. Suggest a grate for the space under the fence.
- Lots of vegetation at the bottom of I1, dry.

Inlet ID: 4-2-12

• South end of pond: 33" concrete pipe with concrete headwall and wingwalls, closed grate

- Utility wire passing in front of I2.
- Stilling blocks 5" high, 12" wide and 10" long. Partially submerged inlet with some sediment.
- Should have a guardrail (steep drop)
- White foam in water (organics?)

Inlet ID: 4-2-I3

- Inlet from adjoining property at north-east.
- Swale near the top is barely visible.
- Can't find inlet to pipe
- Outlet into pond is 18" CSP

5.0 Outlet Structure:

Outlet ID: 4-2-01

- Rock berm in front of outlet (protective pool), filter fabric exposed
- 18" CSP is built into gabion basket. Gabion rocks act as obstruction to flow
- Wires for the baskets are hazards

Outlet ID: 4-2-02

• Gabion basket outflow spillway – shrubs growing out of it.

Pond Inspection Results

1.0 General

| a) | Pond Name | Valleyview |
|----|--------------------|---------------------------------|
| b) | Pond ID | 4-1 |
| c) | Pond Address | 2380 4 th Line |
| d) | Name of Inspector | Renata Sadowska & Sabina Martyn |
| e) | Date of Inspection | May 25, 2012 |
| f) | Weather | Sunny |

2.0 Surrounding Area

- Access:
 - Fenced along the pond crest, gated, locked
 - o Difficult to access for maintenance, because of vegetation growth
- Vegetation:
 - o Lots of mature vegetation around the pond, within crest, and throughout main channel.
 - o Mature trees shading the pond are on private property
 - o Pond area is like a wetland, covered in cattails
- Estate properties on all sides, road to the south

3.0 Pond Conditions:

- Wet pond / wetland?
- Offline facility

4.0 Inlet Structure:

Inlet ID: 4-1-I1

- 21" concrete pipe, concrete headwalls and wingwalls.
- Pipe partially submerged (7" of standing water)
- Stilling blocks 2.5" high, 12" long, 7-8" wide.
- Riprap protection around inlet
- Thin layer of sediment and some sort of grease (organic?)
- Small pond in front of inlet

5.0 Outlet Structure:

Outlet ID: 4-1-01

- 18" Concrete pipe
- Rock protection at influent point, sediment buildup

Outlet ID: 4-1-02

Rock-protected spillway

Pond Inspection Results

1.0 General

| a) | Pond Name | Goldcrest |
|----|--------------------|---------------------------------|
| b) | Pond ID | 15-1 |
| c) | Pond Address | 2098 Fennel Drive |
| d) | Name of Inspector | Renata Sadowska & Sabina Martyn |
| e) | Date of Inspection | May 18, 2012 |
| f) | Weather | Sunny |

2.0 Surrounding Area

- Access:
 - o Perimeter fence is along the crest of pond, gated, locked
 - o Trees right in front of the gate
 - No trespassing sign, Pond name and ID
 - Steep pond slopes 3:1 or greater
 - No safe access to inlet suggest terracing of slopes?
- Vegetation:
 - Tree in the middle of pond, cattails throughout the middle of pond, horsetails, long grasses and some trees on the pond slope.
 - Watercress near outlet evidence of cool groundwater?
- Wildlife: goldfinches
- Enbridge utility on north side of fence along Shore Acres Drive
- No room for expansion

3.0 Pond Conditions:

- Wet pond / wetland?
- Offline
- Pond does not seem to have a permanent pool but there is water at the bottom
- Flowing water
- Concrete mat slope protection at south west corner.
- Seems to have a defined low-flow channel

4.0 Inlet Structure:

Inlet ID: 15-1-I1

- Inlet spillway channel from Fennel Drive (southeast) vegetated, works well
- Conveyance under the fence, but the space under the fence is blocked by leaves. Recommend that there should be a gap under the fence.
- Low flow channel from inlet to main pond

Inlet ID: 15-1-I2

- 21"concrete pipe from southwest, vertical bar grates (screwed on), concrete headwall and wingwalls
- Rock protection downstream but it is not distributed properly so it is acting as an obstruction to flow

Inlet ID: 15-1-I3

- 15" CSP from swale that goes along private property to the south. 11" high, the rest is buried and filled with rocks. Surrounded by asphalt (cracked, broken, eroded)
- Broken fence, 2 small trees in front of the inlet
- Dry

5.0 Outlet Structure:

Outlet ID: 15-1-01

- 15" concrete pipe with concrete headwall, with grate, but no wingwalls or guardrail.
- Partially submerged (only 4" of pipe is above water).
- Lots of organic matter and sediment deposition. About 3" of water, the rest is sediment.
- Stagnant water at the outlet like a wetland
- Receiving channel is the roadside channel along Shore Acres Drive

Outlet ID: 15-1-02

• Emergency spillway - rock riprap with asphalt poured on top