Reach WHSL6

Location: Church Street, Lloydtown	**Watershed**: Humber River	**Type of Assessment:** Roadside
Valley Type: Unconfined	**Land use**: Residential	**Riparian Coverage**: Fragmented trees and grasses
Bankfull Width (m): 5.75	**Bankfull Depth (m)**: 1.08	**Bed Substrate**: Clay, silt, and sand
RGA Score: N/A	**RGA Condition**: N/A	**RGA Dominant Process**: N/A
RSAT Score: N/A	**RSAT Condition**: N/A	**RSAT Limiting Feature**: N/A
Down's Channel Evolution: N/A	**Notes**: Roadside assessment at Church Street and Centre Street. Soft sediment accumulation from downstream pond. No erosion concerns visible from either road crossing.	

Downstream of Church Street. No riffles were at the downstream extent of the reach.

Upstream of Church Street there was a weir structure adjacent to a residential home.

Photograph taken facing downstream from Centre Street. Channel was narrower with a few riffles present compared to Church Street.

Photograph taken facing upstream towards 3 m CSP at Centre Street. No erosion concerns upstream or downstream of the crossing.

Reach WHSL7

Location: Centre Street, Lloydtown	**Watershed**: West Holland River	**Type of Assessment**: Roadside
Valley Type: Unconfined	**Land use**: Residential	**Riparian Coverage**: Fragmented trees and grasses
Bankfull Width (m): 5.40	**Bankfull Depth (m)**: 0.80	**Bed Substrate**: Sand, gravel, and cobble
RGA Score: N/A	**RGA Condition**: N/A	**RGA Dominant Process**: N/A
RSAT Score: N/A	**RSAT Condition**: N/A	**RSAT Limiting Feature**: N/A
Down's Channel Evolution: N/A	**Notes**: Roadside assessment at Centre Street and Rebellion Road. Weir structure causing sedimentation and pooling upstream of Rebellion Road.	

Undercutting visible from crossing upstream of Centre Street.

The CSP upstream of Centre Street was misaligned with channel creating a possible concern.

Downstream of Rebellion Way, a cobble stone weir structure was causing sedimentation and pooling upstream.

Sedimentation and pooling upstream of the crossing that was caused by the weir structure downstream of Rebellion Way.

Reach WHSL8

Location: 19th Sideroad, Lloydtown	**Watershed**: West Holland River	**Type of Assessment**: Roadside
Valley Type: Unconfined	**Land use**: Residential	**Riparian Coverage**: Fragmented trees and grasses
Bankfull Width (m): 3.80	**Bankfull Depth (m)**: 0.75	**Bed Substrate**: Sand, gravel, and boulders
RGA Score: N/A	**RGA Condition**: N/A	**RGA Dominant Process**: N/A
RSAT Score: N/A	**RSAT Condition**: N/A	**RSAT Limiting Feature**: N/A
Down's Channel Evolution: N/A	**Notes**: Roadside assessment at 19th Sideroad. Woody debris jam and leaning downstream of 19th Sideroad. Manicured lawns upstream of 19th Sideroad.	

Woody debris present in channel and along cutbank upstream of 19th Sideroad.

Photograph taken facing downstream towards crossing at 19th Sideroad.

Photograph taken facing upstream towards medial bar upstream of crossing.

Lawns were manicured to the top of bank upstream of 19th Sideroad.

Nobleton

Reach HN1

Location: King Vaughan Road, Nobleton	**Watershed**: Humber River	**Type of Assessment**: Roadside
Valley Type: Unconfined	**Land use**: Forest	**Riparian Coverage**: Fragmented trees and grasses
Bankfull Width (m): 9.50	**Bankfull Depth (m)**: 1.00	**Bed Substrate**: Sand, gravel, and cobble
RGA Score: N/A	**RGA Condition**: N/A	**RGA Dominant Process**: N/A
RSAT Score: N/A	**RSAT Condition**: N/A	**RSAT Limiting Feature**: N/A
Down's Channel Evolution: N/A	**Notes**: Roadside assessment at King Vaughan Road. Bridge has undergone recent restoration.	

Photograph looking downstream of the bridge at a riffle sequence. Riffles consisted of sand, gravel, and cobble.

Photograph looking upstream at a vegetated bank where a slump had previously occurred.

Newly renovated bridge crossing at King Vaughan Road. Photograph is looking upstream.

Upstream extent of the bridge crossing. Riparian vegetation consisted of fragmented grasses and trees.

Reach HN1-3

Location: King Vaughan Road, Nobleton	**Watershed**: Humber River	**Type of Assessment**: Roadside
Valley Type: Partially confined	**Land use**: Forest	**Riparian Coverage**: Continuous trees
Bankfull Width (m): N/A	**Bankfull Depth (m)**: N/A	**Bed Substrate**: N/A
RGA Score: N/A	**RGA Condition**: N/A	**RGA Dominant Process**: N/A
RSAT Score: N/A	**RSAT Condition**: N/A	**RSAT Limiting Feature**: N/A
Down's Channel Evolution: N/A	**Notes**: Roadside assessment at King Vaughan Road. Not safe to park, only pictures were taken.	

	
Photograph facing upstream of King Vaughan Road. No water was present at the time of the assessment.	Photograph facing downstream of King Vaughan Road. There was a concrete culvert located at the road crossing.

Reach HN1-4

Location: King Vaughan Road and HWY 27, Nobleton	**Watershed**: Humber River	**Type of Assessment**: Roadside
Valley Type: Unconfined	**Land use**: Agricultural	**Riparian Coverage**: Continuous grasses
Bankfull Width (m): 1.7*	**Bankfull Depth (m)**: 0.2*	**Bed Substrate**: Clay and silt
RGA Score: N/A	**RGA Condition**: N/A	**RGA Dominant Process**: N/A
RSAT Score: N/A	**RSAT Condition**: N/A	**RSAT Limiting Feature**: N/A
Down's Channel Evolution: 'S' - stable	**Notes**: Roadside assessment at King Vaughan Road and HWY 27. *A channel was defined between the two road crossings within the forested section.	

Downstream King Vaughan Road consisted of a swale feature encroached with cattails.

Upstream King Vaughan Road. Feature was forested for this small section of the reach between the two crossings.

Downstream HWY 27 the channel was defined within the small section between the two crossings.

Upstream HWY27 consisted of a swale feature encroached with cattails.

Reach HN1-5

Location: Diana Drive, Nobleton	**Watershed**: Humber River	**Type of Assessment**: Roadside
Valley Type: Unconfined	**Land use**: Agricultural and residential	**Riparian Coverage**: Fragmented trees and grasses
Bankfull Width (m): 3.20	**Bankfull Depth (m)**: 0.40	**Bed Substrate**: Silt
RGA Score: N/A	**RGA Condition**: N/A	**RGA Dominant Process**: N/A
RSAT Score: N/A	**RSAT Condition**: N/A	**RSAT Limiting Feature**: N/A
Down's Channel Evolution: 'S' – stable	**Notes**: Roadside assessment at Diana Drive. Channel dry at time of assessment. A new driveway was placed at the downstream extent of the crossing.	

Newly built driveway at the downstream extent of the crossing.

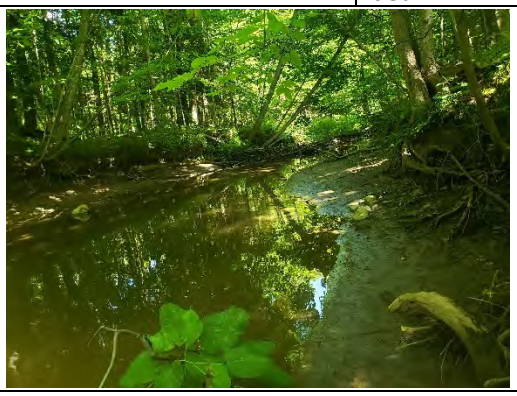
Pipe located under the new driveway at the downstream extent. The pipe outlets parallel to the road into a roadside ditch.

Double concrete steel pipes at the upstream extent of the crossing. The channel was dry at the time of the assessment.

Photograph looking upstream at the dry channel. Grasses were growing in the channel.

Reach HN2

Location: 8th Concession, Nobleton	**Watershed**: Humber River	**Type of Assessment**: Roadside
Valley Type: Partially confined	**Land use**: Forest	**Riparian Coverage**: Continuous trees
Bankfull Width (m): 8.30	**Bankfull Depth (m)**: 1.20	**Bed Substrate**: Silt, sand, and cobble
RGA Score: N/A	**RGA Condition**: N/A	**RGA Dominant Process**: N/A
RSAT Score: N/A	**RSAT Condition**: N/A	**RSAT Limiting Feature**: N/A
Down's Channel Evolution: N/A	**Notes**: Roadside assessment at 8th Concession. Erosion of the channel banks noted by j-trunk trees, undercuts, and exposed roots. There was also aggradation of the channel bed.	



Photograph looking downstream of reach **HN2**. Note the leaning trees and the exposed roots.

Exposed roots, j-trunk trees, leaning trees, and undercutting present downstream of the crossing.

Culvert at the downstream extent of 8th Concession.

Photograph taken upstream of the crossing at 8th Concession. Upstream was narrower with sedimentation within the channel bed.

Reach HN2-1

Location: Bluff Trail, Nobleton	**Watershed**: Humber River	**Type of Assessment**: Partial Reach
Valley Type: Confined	**Land use**: Forest and residential	**Riparian Coverage**: Continuous trees and grasses
Bankfull Width (m): 2.00	**Bankfull Depth (m)**: 0.48	**Bed Substrate**: Silt and sand
RGA Score: 0.0	**RGA Condition**: In Regime	**RGA Dominant Process**: None
RSAT Score: 29	**RSAT Condition:** Good	**RSAT Limiting Feature**: Physical Instream Habitat
Down's Channel Evolution: 'S' - Stable	**Notes**: No riffle-pool development. Channel was dry at the upstream extent. No erosion concerns.	

The reach was covered in floating algae at the downstream extent. There was no flow.

Photograph taken near the change from wet to dry conditions along the reach.

Dry channel bed with vegetation growing along the bed. Bed substrates consisted of silt and sand.

Reach break with a fully vegetated channel bed. The channel was not well defined.

Reach HN2-2

Location: Bluff Trail, Nobleton	**Watershed**: Humber River	**Type of Assessment**: Full Reach
Valley Type: Confined	**Land use**: Residential and agricultural	**Riparian Coverage**: Continuous grasses
Bankfull Width (m): N/A	**Bankfull Depth (m)**: N/A	**Bed Substrate**: Silt
RGA Score: N/A	**RGA Condition**: N/A	**RGA Dominant Process**: N/A
RSAT Score: N/A	**RSAT Condition:** N/A	**RSAT Limiting Feature**: N/A
Down's Channel Evolution: 'S' - Stable	**Notes**: The channel had no defined bed or banks and was dry at the time of assessment	

The riparian vegetation consisted of mainly grasses.

There was no defined channel bed or banks.

Reach HN2-3

Location: Wedgeport Crescent, Nobleton	**Watershed**: Humber River	**Type of Assessment**: Full reach
Valley Type: Confined	**Land use**: Forest and residential	**Riparian Coverage**: Continuous trees
Bankfull Width (m): 4.47	**Bankfull Depth (m)**: 0.40	**Bed Substrate**: Clay, silt, sand, gravel, cobble, and boulders
RGA Score: 0.12	**RGA Condition**: In regime	**RGA Dominant Process**: Evidence of Widening
RSAT Score: N/A	**RSAT Condition**: N/A	**RSAT Limiting Feature**: N/A
Down's Channel Evolution: 'm' – Lateral Migration	**Notes**: The channel became defined again in the forest. Minimal bank erosion was observed. Channel dry, therefore the RSAT was not applicable.	

Leaning and j-trunk trees that were present along the reach. Note the exposed roots.

Exposed till located along the channel bank.

Cobbles and boulders were present within the channel. Note the woody debris located along the banks.

Upstream extent of the reach which became narrower, and heavily vegetated with grasses.

Reach HN2-3a

Location: 15th Sideroad, Nobleton	**Watershed**: Humber River	**Type of Assessment**: Roadside/Partial reach
Valley Type: Unconfined	**Land use**: Agricultural	**Riparian Coverage**: Fragmented trees and grasses
Bankfull Width (m): N/A	**Bankfull Depth (m)**: N/A	**Bed Substrate**: Silt
RGA Score: N/A	**RGA Condition**: N/A	**RGA Dominant Process**: N/A
RSAT Score: N/A	**RSAT Condition**: N/A	**RSAT Limiting Feature**: N/A
Down's Channel Evolution: N/A	**Notes**: Roadside assessment along 15th Sideroad. Reach consisted of a swale within a roadside ditch.	

Photograph taken facing downstream along 15th Sideroad.

The reach was heavily encroached with cattails and grasses.

Reach HN2-3b and Reach HN2-3b-1

Location: 15th Sideroad, Nobleton	**Watershed**: Humber River	**Type of Assessment**: Roadside
Valley Type: Unconfined	**Land use**: Residential	**Riparian Coverage**: Continuous trees and grasses
Bankfull Width (m): N/A	**Bankfull Depth (m)**: N/A	**Bed Substrate**: Silt
RGA Score: N/A	**RGA Condition**: N/A	**RGA Dominant Process**: N/A
RSAT Score: N/A	**RSAT Condition**: N/A	**RSAT Limiting Feature**: N/A
Down's Channel Evolution: N/A	**Notes**: Roadside assessment at 15th Sideroad. Reach **HN2-3b** downstream of 15th Sideroad. Reach consisted of a poorly defined swale feature. Reach **HN2-3b-1** upstream of 15th Sideroad. A pond feature was present shortly upstream.	

Reach **HN2-3b** downstream of 15th Sideroad. Poorly defined swale feature.

Reach **HN2-3b-1** upstream of 15th Sideroad. Pond was observed upstream of berm (circle).

Reach HN2-3c and Reach HN2-3c-1

Location: 15th Sideroad, Nobleton	**Watershed**: Humber River	**Type of Assessment**: Roadside
Valley Type: Unconfined	**Land use**: Residential	**Riparian Coverage**: Continuous trees
Bankfull Width (m): 2.40	**Bankfull Depth (m)**: 0.35	**Bed Substrate**: Sand, gravel, cobble, and boulders
RGA Score: N/A	**RGA Condition**: N/A	**RGA Dominant Process**: N/A
RSAT Score: N/A	**RSAT Condition**: N/A	**RSAT Limiting Feature**: N/A
Down's Channel Evolution: N/A	**Notes**: Roadside assessment at 15th Sideroad. Reach **HN2-3c** downstream of 15th Sideroad. Reach consisted of a defined channel. Reach **HN2-3c-1** upstream of 15th Sideroad. A pond was present upstream of 15th Sideroad.	

Reach **HN2-3c** downstream of 15th Sideroad. The bed was comprised of sand, gravel, cobble, and boulders.

Photograph of the downstream culvert. There CSP at the downstream extent was degraded.

Reach **HN2-3c-1** upstream of 15th Sideroad. There was a small channel between the pond and the CSP.

Photograph of the pond upstream of 15th Sideroad. The pond was covered in floating algae.

Reach HN2-3d

Location: Paradise Valley Trail, Nobleton	**Watershed**: Humber River	**Type of Assessment**: Partial reach
Valley Type: Confined	**Land use**: Forest and residential	**Riparian Coverage**: Continuous grasses and trees
Bankfull Width (m): 1.02	**Bankfull Depth (m)**: 0.36	**Bed Substrate**: Sand, cobble, and boulders
RGA Score: 0.07	**RGA Condition**: In regime	**RGA Dominant Process**: Evidence of Widening
RSAT Score: N/A	**RSAT Condition**: N/A	**RSAT Limiting Feature**: N/A
Down's Channel Evolution: 'M' – lateral migration	**Notes**: Downstream extent was forested with canopy cover and upstream extent was in a meadow and moderately encroached. Channel was dry, therefore RSAT was not applicable.	

Downstream extent of the reach with cobbles and boulders present in channel. Note the vegetation growing within the channel.

Woody debris present within the channel.

Portion of the reach directly upstream of the forested section. The channel became encroached and narrower with smaller grain sizes along the bed.

Upstream extent of the reach. The channel was still dry, narrow, moderately encroached with vegetation.

Reach HN2-3e

Location: Paradise Valley Trail, Nobleton	**Watershed**: Humber River	**Type of Assessment**: Roadside
Valley Type: Unconfined	**Land use**: Agricultural and residential	**Riparian Coverage**: No riparian coverage
Bankfull Width (m): N/A	**Bankfull Depth (m)**: N/A	**Bed Substrate**: N/A
RGA Score: N/A	**RGA Condition**: N/A	**RGA Dominant Process**: N/A
RSAT Score: N/A	**RSAT Condition**: N/A	**RSAT Limiting Feature**: N/A
Down's Channel Evolution: 'S' – stable	**Notes**: Roadside assessment at 15th Sideroad. Poorly defined swale feature was observed on both sides of the crossing. Feature was possibly tile drained based on aerials of the downstream reach break.	

Downstream of 15th Sideroad. Feature was dry at the time of assessment

Downstream of 15th Sideroad was a poorly defined swale feature through an active agricultural field.

Upstream of 15th Sideroad was a poorly defined swale feature through a manicured lawn.

Reach HN3

Location: Woodhill Avenue, Nobleton	**Watershed**: Humber River	**Type of Assessment**: Partial reach
Valley Type: Unconfined	**Land use**: Forest and residential	**Riparian Coverage**: Continuous trees and grasses
Bankfull Width (m): 4.65	**Bankfull Depth (m)**: 0.54	**Bed Substrate**: Silt, sand, gravel, cobble, boulder, and exposed till
RGA Score: 0.37	**RGA Condition**: In Transition/Stress	**RGA Dominant Process**: Evidence of Aggradation
RSAT Score: 26	**RSAT Condition**: Good	**RSAT Limiting Feature**: Channel Stability
Down's Channel Evolution: 'C' – compound	**Notes**: Aggradation of the channel bed and erosion of the channel banks. Medial and lobate bars, streak marks, undercutting, exposed roots, and leaning trees. Watercress was present in the channel indicating groundwater inputs.	

Medial bar present at the upstream extent of the reach.

Riffle sequence at the upstream extent. Note the boulders and the woody debris within the channel.

Photograph looking downstream at sand deposits within the channel.

Riffle sequence at the downstream extent of the reach.

Reach HN3-1

Location: King Road, Nobleton	**Watershed**: Humber River	**Type of Assessment**: Roadside
Valley Type: Partially confined	**Land use**: Residential and Commercial	**Riparian Coverage**: Continuous trees and grasses
Bankfull Width (m): 1.8	**Bankfull Depth (m)**: 0.45	**Bed Substrate**: Sand, gravel, and cobble
RGA Score: N/A	**RGA Condition**: N/A	**RGA Dominant Process**: N/A
RSAT Score: N/A	**RSAT Condition**: N/A	**RSAT Limiting Feature**: N/A
Down's Channel Evolution: N/A	**Notes**: Roadside assessment at King Road. Reach **HN3-1** downstream of King Road. Box culvert was elevated, however, no scour pool. Based on aerials, channel meandering.	

Photograph facing upstream at the downstream extent of the road crossing. Channel bed was lower than the box culvert.

Riffle sequence downstream of the crossing. Riffle substrate consisted of sand, gravel, and cobble.

Photograph taken facing upstream. Bank undercutting measured to 0.05 m.

Reach HN3-2

Location: King Road and Hill Farm Road, Nobleton	**Watershed**: Humber River	**Type of Assessment**: Roadside
Valley Type: Partially confined	**Land use**: Residential and Commercial	**Riparian Coverage:** Fragmented trees and grasses
Bankfull Width (m): 2.3	**Bankfull Depth (m)**: 0.43	**Bed Substrate**: Sand, gravel, and cobbles
RGA Score: N/A	**RGA Condition**: N/A	**RGA Dominant Process**: N/A
RSAT Score: N/A	**RSAT Condition**: N/A	**RSAT Limiting Feature**: N/A
Down's Channel Evolution: N/A	**Notes**: Roadside assessment at King Road and Hill Farm Road and partially assessed at upstream reach break. Reach appeared to have been straightened for housing.	

Photograph taken facing upstream from King Road.

Minor undercutting was noted at the downstream extent.

Reach became more encroached with grasses at the upstream extent of the reach.

Photograph taken facing downstream towards a large woody debris jam.

Reach HN3-3

Location: Fairmont Ridge Trail and Parkheights Trail, Nobleton	**Watershed**: Humber River	**Type of Assessment**: Partial Reach
Valley Type: Partially confined	**Land use**: Residential	**Riparian Coverage**: Fragmented grasses and trees
Bankfull Width (m): 4.85	**Bankfull Depth (m)**: 0.43	**Bed Substrate**: Sand, gravel, and cobble
RGA Score: 0.08	**RGA Condition**: In Regime	**RGA Dominant Process**: Evidence of Widening
RSAT Score: 33	**RSAT Condition**: Good	**RSAT Limiting Feature**: Riparian Habitat Conditions
Down's Channel Evolution: 'S' – stable	**Notes**: Channel not well defined. Possibly a natural channel design. Heavily encroached with grasses and cattails.	

Photograph upstream of Parkheights Trail. Presence of rounded cobble indicate a possible natural channel design.

Photograph taken upstream of Parkheights Trail. Reach heavily encroached with grasses.

Photograph showing cattails and vegetation growing in channel upstream of Fairmont Ridge Trail.

Photograph taken near pond outlet. The channel was not well defined.

Reach HN3-4

Location: Highway 27, Nobleton	**Watershed**: Humber River	**Type of Assessment**: Roadside
Valley Type: Unconfined	**Land use**: Residential	**Riparian Coverage**: Continuous grasses and shrubs
Bankfull Width (m): N/A	**Bankfull Depth (m)**: N/A	**Bed Substrate**: Clay and silt
RGA Score: N/A	**RGA Condition**: N/A	**RGA Dominant Process**: N/A
RSAT Score: N/A	**RSAT Condition**: N/A	**RSAT Limiting Feature**: N/A
Down's Channel Evolution: N/A	**Notes**: Crossing assessment downstream of Highway 27. Wetland feature.	

Downstream extent of pond.

Downstream of Highway 27. Wetland was present upstream of the pond.

Reach HN3-5

Location: Highway 27, Nobleton	**Watershed**: Humber River	**Type of Assessment**: Roadside
Valley Type: Unconfined	**Land use**: Agricultural and residential	**Riparian Coverage**: Continuous grasses and shrubs
Bankfull Width (m): N/A	**Bankfull Depth (m)**: N/A	**Bed Substrate**: Clay and silt
RGA Score: N/A	**RGA Condition**: N/A	**RGA Dominant Process**: N/A
RSAT Score: N/A	**RSAT Condition**: N/A	**RSAT Limiting Feature**: N/A
Down's Channel Evolution: N/A	**Notes**: Roadside assessment upstream of Highway 27. Wetland feature.	

Photograph looking upstream at the wetland feature.

Concrete culvert with water under Highway 27.

Reach HN4

Location: Woodhill Avenue, Nobleton	**Watershed**: Humber River	**Type of Assessment**: Partial reach
Valley Type: Partially confined	**Land use**: Forest and residential	**Riparian Coverage**: Fragmented trees and grasses
Bankfull Width (m): 1.47	**Bankfull Depth (m)**: 0.54	**Bed Substrate**: Silt, sand, gravel, cobble, and boulder
RGA Score: 0.07	**RGA Condition**: In Regime	**RGA Dominant Process**: Evidence of Aggradation and Evidence of Widening
RSAT Score: 30	**RSAT Condition**: Good	**RSAT Limiting Feature**: Riparian Habitat Conditions
Down's Channel Evolution: 'M' – lateral migration	**Notes**: Downstream extent of the reach assessed. Undercutting and slumps were observed but not common. Aggradation noted upstream of Woodhill Avenue.	

Boulder and large cobbles located within a riffle at the downstream extent of the reach.

The downstream extent of the reach was overgrown with vegetation.

Culvert under Woodhill Avenue. Substrates consisted of cobble, gravel and sand.

Pool upstream of Woodhill Ave. Pool wetted depth was 0.30 m and pool bankfull depth was 0.65 m.

Reach HN4-2

Location: King Road, Nobleton	**Watershed**: Humber River	**Type of Assessment**: Roadside
Valley Type: Partially confined	**Land use**: Residential	**Riparian Coverage**: Fragmented trees and grasses
Bankfull Width (m): N/A	**Bankfull Depth (m)**: N/A	**Bed Substrate**: Silt and sand
RGA Score: N/A	**RGA Condition**: N/A	**RGA Dominant Process**: N/A
RSAT Score: N/A	**RSAT Condition**: N/A	**RSAT Limiting Feature**: N/A
Down's Channel Evolution: 'S' – stable	**Notes**: Roadside at King Road. Channel dry at time of assessment.	

Downstream of culvert at King Road. Channel was not well defined.

Photograph taken facing upstream through box culvert under King Road.

The culvert upstream of King Road was located within a residential property.

Upstream of King Road the culvert changed from a concrete culvert to a CSP.

Reach HN4-4

Location: Sheardown Drive, Nobleton	**Watershed**: Humber River	**Type of Assessment**: Partial reach
Valley Type: Confined	**Land use**: Residential	**Riparian Coverage**: Continuous grasses and shrubs
Bankfull Width (m): 2.90	**Bankfull Depth (m)**: 0.50	**Bed Substrate**: Clay and silt under river stone
RGA Score: N/A	**RGA Condition**: N/A	**RGA Dominant Process**: N/A
RSAT Score: N/A	**RSAT Condition**: N/A	**RSAT Limiting Feature**: N/A
Down's Channel Evolution: 'S' – stable	**Notes**: Reach consisted of a straightened swale with rounded river stone along the bed. Reach **HN4-3** is piped from upstream of Sheardown Drive to downstream of HWY 27.	

	
Reach **HN4-4** flowed into a catch basin. Reach **HN4-3** is piped to downstream of HWY 27.	Photograph taken facing downstream. Reach was moderately encroached. The bed consisted of rounded river stone.
	
Photograph facing upstream towards reach **HN4-5**.	CSP at upstream extent of reach **HN4-4**. Note the degradation of the pipe.

Reach HN4-5

Location: Sheardown Drive, Nobleton	**Watershed**: Humber River	**Type of Assessment**: Partial reach
Valley Type: Confined	**Land use**: Residential	**Riparian Coverage**: Fragmented trees, shrubs, herbaceous vegetation, and grasses
Bankfull Width (m): N/A	**Bankfull Depth (m)**: N/A	**Bed Substrate**: N/A
RGA Score: N/A	**RGA Condition**: N/A	**RGA Dominant Process**: N/A
RSAT Score: N/A	**RSAT Condition**: N/A	**RSAT Limiting Feature**: N/A
Down's Channel Evolution: N/A	**Notes**: Wetland feature with no defined channel.	

	
The wetland feature was surrounded by residential properties with manicured lawns.	Vegetation within the wetland feature consisted of trees, shrubs, herbaceous vegetation, grasses, and cattails.

Reach HN5

Location: Highway 27, Nobleton	**Watershed**: Humber River	**Type of Assessment**: Roadside
Valley Type: Unconfined	**Land use**: Agricultural and residential	**Riparian Coverage**: Fragmented grasses
Bankfull Width (m): N/A	**Bankfull Depth (m)**: N/A	**Bed Substrate**: Silt
RGA Score: N/A	**RGA Condition**: N/A	**RGA Dominant Process**: N/A
RSAT Score: N/A	**RSAT Condition**: N/A	**RSAT Limiting Feature**: N/A
Down's Channel Evolution: N/A	**Notes**: Roadside assessment at Highway 27. Swale feature downstream of Highway 27 through manicured lawn of a farm property.	

	
Photograph taken facing upstream towards Highway 27.	Cattails present in swale feature downstream of Highway 27.

Reach HN5-2

Location: HWY 27, Nobleton	**Watershed**: Humber River	**Type of Assessment**: Roadside
Valley Type: Unconfined	**Land use**: Residential	**Riparian Coverage**: Continuous grasses and herbaceous vegetation with scattered trees
Bankfull Width (m): 0.6 (feature)	**Bankfull Depth (m)**: 0.1 (feature)	**Bed Substrate**: N/A
RGA Score: N/A	**RGA Condition**: N/A	**RGA Dominant Process**: N/A
RSAT Score: N/A	**RSAT Condition**: N/A	**RSAT Limiting Feature**: N/A
Down's Channel Evolution: 'S' – stable	**Notes**: Roadside assessment at HWY 27. A poorly defined and narrow swale feature with moderate vegetation encroachment. River stone was present within the vicinity of the crossing indicating recent channel works.	

Photograph taken facing upstream from HWY 27. Wide riparian zone with mixed vegetation was observed.

A narrow swale feature was present with poor bank definition.

Reach HN5-3

Location: Wilkie Avenue and Robinson Road, Nobleton	**Watershed**: Humber River	**Type of Assessment**: Roadside
Valley Type: Partially confined	**Land use**: Residential	**Riparian Coverage**: Fragmented trees and grasses
Bankfull Width (m): 1.77	**Bankfull Depth (m)**: 0.31	**Bed Substrate**: Silt
RGA Score: N/A	**RGA Condition**: N/A	**RGA Dominant Process**: N/A
RSAT Score: N/A	**RSAT Condition**: N/A	**RSAT Limiting Feature**: N/A
Down's Channel Evolution: N/A	**Notes**: Roadside assessment at Wilkie Avenue and Robinson Road. The crossing at Robinson Road had a faint petroleum odour.	

Double concrete culvert downstream of Robinson Road.

Channel upstream of Robinson Road. The channel was heavily vegetated with grasses and cattails.

Downstream of Wilkie Avenue the channel was heavily vegetated with cattails.

Double concrete culvert upstream of Wilkie Avenue.

Reach HN6

Location: Highway 27, Nobleton	**Watershed**: Humber River	**Type of Assessment**: Roadside
Valley Type: Unconfined	**Land use**: Residential	**Riparian Coverage**: Fragmented grasses
Bankfull Width (m): N/A	**Bankfull Depth (m)**: N/A	**Bed Substrate**: Silt and cobble
RGA Score: N/A	**RGA Condition**: N/A	**RGA Dominant Process**: N/A
RSAT Score: N/A	**RSAT Condition**: N/A	**RSAT Limiting Feature**: N/A
Down's Channel Evolution: N/A	**Notes**: Roadside assessment at Highway 27. Channel not defined between pond outlet to crossing at Highway 27. Standing water was noted.	

	
Photograph facing downstream at the pond which flows towards Highway 27.	Upstream of Highway 27. There was no flow between the outlet from the pond towards the culvert under Highway 27.

Reach HN7

Location: Oliver Emerson Avenue and Starrett Street, Nobleton	**Watershed**: Humber River	**Type of Assessment**: Roadside
Valley Type: Confined	**Land use**: Residential	**Riparian Coverage**: Continuous grasses and herbaceous species
Bankfull Width (m): 3.40	**Bankfull Depth (m)**: 0.28	**Bed Substrate**: Silt
RGA Score: N/A	**RGA Condition**: N/A	**RGA Dominant Process**: N/A
RSAT Score: N/A	**RSAT Condition**: N/A	**RSAT Limiting Feature**: N/A
Down's Channel Evolution: N/A	**Notes**: Roadside assessment at Oliver Emerson Avenue and Starrett Street. Standing water. The reach had ~0.20 m of soft sediment on the channel bed.	

Reach **HN7** flows into a pond, reach **HN6**, downstream of Oliver Emerson Avenue.

Photograph taken upstream of the crossing at Oliver Emerson Avenue. Standing water and soft sediment was present within the channel.

Photograph taken downstream of Starrett Street. Cattails were present throughout the reach.

Photograph taken facing upstream of Starrett Street.

Reach HN8

Location: 10th Concession, Nobleton	**Watershed**: Humber River	**Type of Assessment**: Roadside
Valley Type: Unconfined	**Land use**: Agricultural	**Riparian Coverage**: Continuous grasses
Bankfull Width (m): N/A	**Bankfull Depth (m)**: N/A	**Bed Substrate**: Silt
RGA Score: N/A	**RGA Condition**: N/A	**RGA Dominant Process**: N/A
RSAT Score: N/A	**RSAT Condition**: N/A	**RSAT Limiting Feature**: N/A
Down's Channel Evolution: 'S' – stable	**Notes**: Roadside assessment at 10th Concession. Channel dry and not well defined.	

Pipe downstream of 10th Concession. Pipe and roadside were dry.

Undefined channel upstream of 10th Concession.

Reach HN10

Location: 10th Concession	**Watershed**: Humber River	**Type of Assessment**: Roadside
Valley Type: Unconfined	**Land use**: Agricultural	**Riparian Coverage**: Continuous grasses
Bankfull Width (m): N/A	**Bankfull Depth (m)**: N/A	**Bed Substrate**: Silt, sand, and gravel
RGA Score: N/A	**RGA Condition**: N/A	**RGA Dominant Process**: N/A
RSAT Score: N/A	**RSAT Condition**: N/A	**RSAT Limiting Feature**: N/A
Down's Channel Evolution: 'S' – stable	**Notes**: Crossing assessment at 10th Concession. Reach consisted a roadside ditch. Dry at the time of assessment.	

CSP under 10th Concession. Channel was dry and vegetated with cattails.

Roadside ditch both upstream and downstream of the road crossing.

Reach HN11

Location: 10th Concession, Nobleton	**Watershed**: Humber River	**Type of Assessment**: Roadside
Valley Type: Unconfined	**Land use**: Agricultural	**Riparian Coverage**: Continuous grasses
Bankfull Width (m): N/A	**Bankfull Depth (m)**: N/A	**Bed Substrate**: Clay and silt
RGA Score: N/A	**RGA Condition**: N/A	**RGA Dominant Process**: N/A
RSAT Score: N/A	**RSAT Condition**: N/A	**RSAT Limiting Feature**: N/A
Down's Channel Evolution: 'S' – stable	**Notes**: Roadside assessment at 10th Concession. Channel dry and not defined.	

Pipe upstream of road crossing. The channel was dry at the time of assessment.

Undefined channel downstream of road crossing. Channel was overgrown with grasses.

Reach HN12

Location: 10th Concession, Nobleton	**Watershed**: Humber River	**Type of Assessment**: Roadside
Valley Type: Unconfined	**Land use**: Agricultural	**Riparian Coverage**: Continuous grasses
Bankfull Width (m): N/A	**Bankfull Depth (m)**: N/A	**Bed Substrate**: Clay and silt
RGA Score: N/A	**RGA Condition**: N/A	**RGA Dominant Process**: N/A
RSAT Score: N/A	**RSAT Condition**: N/A	**RSAT Limiting Feature**: N/A
Down's Channel Evolution: N/A	**Notes**: Roadside assessment at 10th Concession. Channel not well defined. Could not access downstream of crossing as there was a fence and woody debris.	

Upstream of 10th Concession. Heavily vegetated swale feature.

CSP under 10th Concession. The channel was dry but there was some water inside the pipe.

Reach HN13

Location: 8th Concession, Nobleton	**Watershed**: Humber River	**Type of Assessment**: Roadside
Valley Type: Unconfined	**Land use**: Agricultural	**Riparian Coverage**: Fragmented trees and grasses
Bankfull Width (m): N/A	**Bankfull Depth (m)**: N/A	**Bed Substrate**: Clay and silt
RGA Score: N/A	**RGA Condition**: N/A	**RGA Dominant Process**: N/A
RSAT Score: N/A	**RSAT Condition**: N/A	**RSAT Limiting Feature**: N/A
Down's Channel Evolution: 'S' – stable	**Notes**: Crossing assessment at 8th Concession. Channel dry and not well-defined, wetland feature.	

CSP downstream of 8th Concession. The channel was dry at the time of assessment.

Photograph facing upstream of 8th Concession. The reach had cattails growing in the poorly defined channel.

Pottageville

Reach WHP0

Location: Lloydtown/Aurora Road, Pottageville	**Watershed**: West Holland River	**Type of Assessment**: Roadside
Valley Type: Unconfined	**Land use**: Forest	**Riparian Coverage**: Continuous grasses
Bankfull Width (m): 3.0	**Bankfull Depth (m)**: 0.6	**Bed Substrate**: Clay, silt, sand, and gravel
RGA Score: N/A	**RGA Condition**: N/A	**RGA Dominant Process**: N/A
RSAT Score: N/A	**RSAT Condition**: N/A	**RSAT Limiting Feature**: N/A
Down's Channel Evolution: N/A	**Notes**: Roadside assessment along Lloydtown/Aurora Road. The reach consisted of a defined channel. No riffle-pool formation was observed from the road.	

Photograph taken facing downstream of Lloydtown/Aurora Road. The confluence (circle) with a larger tributary was approximately 10 m downstream of the CSP.

Photograph taken facing downstream of Lloydtown/Aurora Road. Minor bank erosion was noted on both sides of the channel to the confluence.

Photograph taken facing upstream from Lloydtown/Aurora Road. The riparian buffer zone was wide.

Photograph of the upstream CSP. Erosion was noted surrounding the CSP indicating the crossing may be undersized.

Reach WHP1a

Location: 18th Sideroad, Pottageville	**Watershed**: West Holland River	**Type of Assessment**: Roadside
Valley Type: Unconfined	**Land use**: Agriculture	**Riparian Coverage**: Continuous grasses
Bankfull Width (m): 2.00	**Bankfull Depth (m)**: 0.40	**Bed Substrate**: Silt
RGA Score: N/A	**RGA Condition**: N/A	**RGA Dominant Process**: N/A
RSAT Score: N/A	**RSAT Condition**: N/A	**RSAT Limiting Feature**: N/A
Down's Channel Evolution: 'S' – stable	**Notes**: Roadside assessment at 18th Sideroad. Undefined channel upstream.	

	
Damage CSP at road crossing. The channel was dry at the time of assessment.	The channel was heavily encroached with grasses, offering little bank definition.

Reach WHP1-1 and Reach WHP1-2

Location: 18th Sideroad, Pottageville	**Watershed**: West Holland River	**Type of Assessment**: Roadside
Valley Type: Unconfined	**Land use**: Agricultural	**Riparian Coverage**: Continuous herbaceous vegetation
Bankfull Width (m): N/A	**Bankfull Depth (m)**: N/A	**Bed Substrate**: Silt, sand, and gravel
RGA Score: N/A	**RGA Condition**: N/A	**RGA Dominant Process**: N/A
RSAT Score: N/A	**RSAT Condition**: N/A	**RSAT Limiting Feature**: N/A
Down's Channel Evolution: 'S' – stable	**Notes**: Roadside assessment at 18th Sideroad. Reach **WHP1-1** was upstream of the crossing and reach **WHP1-2** was downstream. Channel was dry at time of assessment and undefined both upstream and downstream of crossing.	

Reach **WH1-1** downstream of 18th Sideroad. Feature was also undefined. Recent excavation of the roadside ditch.

Reach **WHP1-2** upstream of 18th Sideroad. The reach consisted of an undefined channel which passed through an agricultural field.

Reach WHP2 and Reach WHP2-1

Location: Bird Lane, Pottageville	**Watershed**: West Holland River	**Type of Assessment**: Roadside
Valley Type: Unconfined	**Land use**: Residential	**Riparian Coverage**: Continuous grasses
Bankfull Width (m): N/A	**Bankfull Depth (m)**: N/A	**Bed Substrate**: Clay and silt
RGA Score: N/A	**RGA Condition**: N/A	**RGA Dominant Process**: N/A
RSAT Score: N/A	**RSAT Condition**: N/A	**RSAT Limiting Feature**: N/A
Down's Channel Evolution: 'S' – stable	**Notes**: Roadside assessment at Birds Lane. Reach **WHP2** was downstream of the crossing and reach **WHP2-1** was upstream. Reach **WHP2** consisted of a swale feature and reach **WHP2-1** consisted of a pond feature.	

Reach **WH2** downstream of Birds Lane consisted of a swale feature. The swale was dry, vegetated with cattails, and moderately entrenched. Manicured lawns were noted to the top of bank.

Reach **WHP2-1** upstream of Birds Lane consisted of a pond. The water levels in the pond where much lower than the CSP crossing the road.

Reach WHP3a

Location: 19th Sideroad, Pottageville	**Watershed**: West Holland River	**Type of Assessment**: Roadside
Valley Type: Unconfined	**Land use**: Forest and residential	**Riparian Coverage**: Continuous trees, shrubs, grasses and herbaceous
Bankfull Width (m): 1.08	**Bankfull Depth (m)**: 0.16	**Bed Substrate**: Silt and gravel
RGA Score: N/A	**RGA Condition**: N/A	**RGA Dominant Process**: N/A
RSAT Score: N/A	**RSAT Condition**: N/A	**RSAT Limiting Feature**: N/A
Down's Channel Evolution: N/A	**Notes**: Roadside assessment at 19th Sideroad. The reach consisted of a defined channel flowing through a wetland.	

Photograph taken upstream of the crossing. The channel had cattails growing on the bed and grasses on the banks.

Downstream of the crossing. Both upstream and downstream the reach resembled a wetland feature.

Reach WHP3

Location: 7th Concession	**Watershed**: West Holland River	**Type of Assessment**: Roadside
Valley Type: Unconfined	**Land use**: Forest and residential	**Riparian Coverage**: Continuous trees, shrubs, grasses, and herbaceous vegetation
Bankfull Width (m): 3.0	**Bankfull Depth (m)**: 0.4	**Bed Substrate**: Sand and gravel
RGA Score: N/A	**RGA Condition**: N/A	**RGA Dominant Process**: N/A
RSAT Score: N/A	**RSAT Condition**: N/A	**RSAT Limiting Feature**: N/A
Down's Channel Evolution: 'S' - stable	**Notes**: Roadside assessment along 7th Concession. The reach consisted of a roadside ditch, no riffle-pool development, and approximately 20 cm of soft sediment within the bed.	

Photograph facing upstream of the reach. The reach was confined in a ditch beside 7th Concession.

Bed substrates consisted of sand and gravel. The reach was uniform in width along the road.

Reach WHP3-1

Location: Lloydtown/Aurora Road, Pottageville	**Watershed**: West Holland River	**Type of Assessment**: Roadside
Valley Type: Confined	**Land use**: Residential and commercial	**Riparian Coverage**: Fragmented trees
Bankfull Width (m): 3.25	**Bankfull Depth (m)**: 0.55	**Bed Substrate**: Silt, sand, gravel, cobble, and boulder
RGA Score: N/A	**RGA Condition**: N/A	**RGA Dominant Process**: N/A
RSAT Score: N/A	**RSAT Condition**: N/A	**RSAT Limiting Feature**: N/A
Down's Channel Evolution: N/A	**Notes**: Crossing assessments at Lloydtown/Aurora Road and 7th Concession. Fence at downstream crossing of Lloydtown/Aurora Road.	

Concrete box culvert upstream of Lloydtown/Aurora Road. No access downstream of crossing.

CSP under 7th Concession.

Downstream of 7th Concession. The channel had a dense canopy cover of hedges and trees.

Upstream of 7th Concession. The channel was less urbanized, with low bank angles.

Reach WHP3-2

Location: Cook Drive, Pottageville	**Watershed**: West Holland River	**Type of Assessment**: Partial reach
Valley Type: Confined	**Land use**: Forest and park	**Riparian Coverage**: Continuous trees, grasses and herbaceous species
Bankfull Width (m): 3.60	**Bankfull Depth (m)**: 0.61	**Bed Substrate**: Silt, sand, gravel, cobble, and boulder
RGA Score: 0.52	**RGA Condition**: In Adjustment	**RGA Dominant Process**: Evidence of Widening
RSAT Score: 27.5	**RSAT Condition**: Good	**RSAT Limiting Feature**: Physical Instream Habitat
Down's Channel Evolution: 'U' – undercutting	**Notes**: Large undercuts, overbank sand deposits, cut-off channel, j-trunk and leaning trees, and cut face on point bars.	

Photograph facing downstream (downstream of Cook Drive). Note leaning trees.

Exposed rootlets and till in an eroded bank.

Abandoned channel (oxbow) that has been filled in with sand.

Photograph facing downstream approaching 18th Sideroad. There was a moderate density of woody debris in the channel.

Reach WHP3-3

Location: 18th Sideroad, Pottageville	**Watershed**: West Holland River	**Type of Assessment**: Roadside
Valley Type: Unconfined	**Land use**: Forest and residential	**Riparian Coverage**: Continuous trees
Bankfull Width (m): 3.1	**Bankfull Depth (m)**: 0.5	**Bed Substrate**: Sand, gravel, and cobble
RGA Score: N/A	**RGA Condition**: N/A	**RGA Dominant Process**: N/A
RSAT Score: N/A	**RSAT Condition**: N/A	**RSAT Limiting Feature**: N/A
Down's Channel Evolution: N/A	**Notes**: Roadside assessment upstream of 18th Sideroad. The reach consisted of a defined channel with sandy streak marks and overbank sand deposits.	

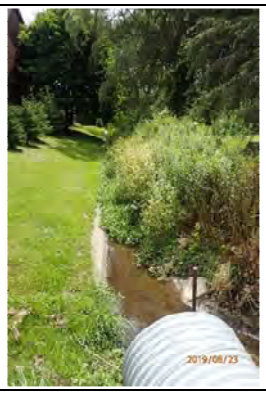
Photograph taken facing downstream towards CSP. Note sandy streak marks in bed indicating aggradation.

Photograph taken facing upstream from crossing. Leaning trees and minor bank erosion were observed.

Reach WHP4-2

Location: Lloydtown/Aurora Road Pottageville	**Watershed**: West Holland River	**Type of Assessment**: Roadside
Valley Type: Unconfined	**Land use**: Residential	**Riparian Coverage**: Agricultural
Bankfull Width (m): 1.50	**Bankfull Depth (m)**: 0.48	**Bed Substrate**: Silt, sand, gravel and cobble
RGA Score: N/A	**RGA Condition**: N/A	**RGA Dominant Process**: N/A
RSAT Score: N/A	**RSAT Condition**: N/A	**RSAT Limiting Feature**: N/A
Down's Channel Evolution: 'S' – stable	**Notes**: Roadside assessment at Lloydtown/Aurora Road and downstream of Archibald Road. Channel was lined with concrete bed and banks between Archibald Road to Lloydtown/Aurora Road.	

The reach was a concrete channel downstream of Archibald Road.



Photograph taken upstream of Lloydtown/Aurora Road.

Downstream of Lloydtown/Aurora Road. The channel flowed through roadside ditch which passed under driveways.

An abandoned box culvert was observed east of the current CSP crossing.

Reach WHP4-3

Location: Cook Drive, Cutting Crescent, Archibald Road, Pottageville	**Watershed**: West Holland River	**Type of Assessment**: Roadside
Valley Type: Unconfined	**Land use**: Residential	**Riparian Coverage**: Fragmented trees and grasses
Bankfull Width (m): 0.95	**Bankfull Depth (m)**: 0.20	**Bed Substrate**: Silt, sand, and gravel
RGA Score: N/A	**RGA Condition**: N/A	**RGA Dominant Process**: N/A
RSAT Score: N/A	**RSAT Condition**: N/A	**RSAT Limiting Feature**: N/A
Down's Channel Evolution: N/A	**Notes**: Roadside assessment at Cook Drive, Cutting Crescent, and Archibald Road. The reach had been heavily modified and flowed between residential houses.	

Photograph looking upstream at Cook Drive. The channel had poor bank definition.

Reach channelized upstream of Cutting Crescent.

Downstream Cutting Crescent. Poorly defined swale feature which was heavily encroached with grasses. Note cattails further downstream.

Upstream of Archibald Road. The swale continued to be poorly defined and heavily encroached with grasses.

Reach WHP6-2

Location: Lloydtown/Aurora Road, Pottageville	**Watershed**: West Holland River	**Type of Assessment**: Roadside
Valley Type: Unconfined	**Land use**: Residential	**Riparian Coverage**: Fragmented grasses
Bankfull Width (m): 3.0	**Bankfull Depth (m)**: 0.75	**Bed Substrate**: Silt and sand
RGA Score: N/A	**RGA Condition**: N/A	**RGA Dominant Process**: N/A
RSAT Score: N/A	**RSAT Condition**: N/A	**RSAT Limiting Feature**: N/A
Down's Channel Evolution: 'S' – stable	**Notes**: Roadside assessment along Lloydtown/Aurora Road. Reach consisted of a roadside ditch. Reach was dry and heavily encroached with cattails.	

The channel was dry and poorly defined.

View of the channel from the road. Note the large quantity of cattails growing within the channel.

Reach WHP7-2, Reach WHP7-3, and Reach WHP7-3a

Location: Lloydtown/Aurora Road, Pottageville	**Watershed**: West Holland River	**Type of Assessment:** Roadside
Valley Type: Confined	**Land use**: Forest and residential	**Riparian Coverage**: Continuous trees, shrubs, grasses, and herbaceous vegetation
Bankfull Width (m): WHP7-3a = 0.8 m WHP7-3 = 0.9 m WHP7-2 = 1.1 m	**Bankfull Depth (m)**: WHP7-3a = 0.35 m WHP7-3 = 0.35 m WHP7-2 = 0.30 m	**Bed Substrate**: Silt, sand, gravel and cobble
RGA Score: N/A	**RGA Condition**: N/A	**RGA Dominant Process**: N/A
RSAT Score: N/A	**RSAT Condition**: N/A	**RSAT Limiting Feature**: N/A
Down's Channel Evolution: N/A	**Notes**: Roadside assessment at Lloydtown/Aurora Road. The confluence between reaches **WHP7-3** and **WHP7-3a** was immediately upstream of the box culvert.	

Upstream Lloydtown/Aurora Road. Confluence of both **WHP7-3** and **WHP7-a**.

Upstream Lloydtown/Aurora Road - Reach **WHP7-3**.

Upstream Lloydtown/Aurora Road - Reach **WHP7-3a**.

Downstream Lloydtown/Aurora Road – Reach **WHP7-2**.

Schomberg

Reach WHSL1

Location: Highway 9, Schomberg	**Watershed**: West Holland River	**Type of Assessment**: Full reach
Valley Type: Partially confined	**Land use**: Park	**Riparian Coverage**: Fragmented trees, shrubs, and grasses
Bankfull Width (m): 5.20	**Bankfull Depth (m)**: 0.68	**Bed Substrate**: Sand, gravel, cobble, and till
RGA Score: 0.15	**RGA Condition**: In Regime	**RGA Dominant Process**: Evidence of Widening
RSAT Score: 28.5	**RSAT Condition**: Good	**RSAT Limiting Feature**: Riparian Habitat Conditions
Down's Channel Evolution: 'e' – enlarging	**Notes**: Observations include siltation in pools, fallen and leaning trees, exposed roots, and exposed till.	

Photograph facing downstream at the downstream extent of the reach towards the crossing at Highway 9.

Leaning trees and exposed roots along the bank. Note the woody debris present along the banks and in the channel.

Exposed till located along the channel bank on the outside of a meander bend. There was also till located in pools.

Downstream of the pedestrian bridge crossing. The banks were heavily vegetated with shrubs.

Reach WHSL1-1

Location: Highway 9, Schomberg	**Watershed**: West Holland River	**Type of Assessment**: Full reach
Valley Type: Unconfined	**Land use**: Park	**Riparian Coverage**: Continuous grasses
Bankfull Width (m): 1.62	**Bankfull Depth (m)**: 0.55	**Bed Substrate**: Silt, sand, and gravel
RGA Score: 0.21	**RGA Condition**: In Transition/Stress	**RGA Dominant Process**: Evidence of Degradation
RSAT Score: 24.5	**RSAT Condition**: Fair	**RSAT Limiting Feature**: Riparian Habitat Conditions
Down's Channel Evolution: 'c' – compound	**Notes**: The downstream extent of the reach had soft sediment. Cut face on bar forms, exposed tree roots, till exposed, poor longitudinal sorting of bed materials and cut-off channel present	

Downstream extent of reach at confluence with reach S5 at Highway 9. Note large amount of sediment deposits at confluence.

The reach flowed through an unconfined valley and was heavily encroached with grasses.

Fence at top of slope. The banks were vegetated and approximately 90 degrees.

The reach had poor riffle-pool formation.

Reach WHSL2

Location: Main Street, Schomberg	**Watershed**: West Holland River	**Type of Assessment**: Partial reach
Valley Type: Confined	**Land use**: Residential and commercial	**Riparian Coverage**: Fragmented trees
Bankfull Width (m): 5.60	**Bankfull Depth (m)**: 0.70	**Bed Substrate**: Sand, gravel, and cobble
RGA Score: 0.24	**RGA Condition**: In Transition/Stress	**RGA Dominant Process**: Evidence of Widening
RSAT Score: 27.5	**RSAT Condition**: Good	**RSAT Limiting Feature**: Physical Instream Habitat
Down's Channel Evolution: 'e' – enlarging	**Notes**: Previously straightened channel. Gabion walls immediately upstream and downstream of Main Street. The reach is in close proximity to many buildings within the downtown core. This poses as an area of concern.	

Exposed roots and j-trunk trees along an eroded bank.

Exposed building foundation. Multiple buildings were located close or at top of banks posing as an area of concern.

Photograph facing downstream at small medial bar.

Undercutting, exposed till, and exposed tree were observed throughout reach.

Reach WHSL2-1

Location: Main Street, Schomberg	**Watershed**: West Holland River	**Type of Assessment**: Partial reach
Valley Type: Partially confined	**Land use**: Park and residential	**Riparian Coverage**: Continuous trees, grasses, and herbaceous vegetation
Bankfull Width (m): 3.20	**Bankfull Depth (m)**: 0.30	**Bed Substrate**: Sand, gravel, cobble, boulder, and exposed till
RGA Score: N/A	**RGA Condition**: N/A	**RGA Dominant Process**: N/A
RSAT Score: N/A	**RSAT Condition**: N/A	**RSAT Limiting Feature**: N/A
Down's Channel Evolution: 'E' – enlarging	**Notes**: Part of reach was assessed upstream of Main Street. Eroded right bank downstream of Main Street. Suspended armour layer, fractured lines at top of bank, and slumping.	

Eroded bank downstream of Main Street near residential house. Lawn manicured to the top of bank.

Closed bottom culvert under Main Street.

A slump occurred in front of a headwall, partially blocking the outlet.

Riffle sequence with substrates consisting of sand, gravel, cobble, and exposed till.

Reach WHSL2-2

Location: Roselena Drive, Schomberg	**Watershed**: West Holland River	**Type of Assessment**: Partial reach
Valley Type: Unconfined	**Land use**: Park and residential	**Riparian Coverage**: Continuous trees, grasses, and herbaceous vegetation
Bankfull Width (m): 1.20	**Bankfull Depth (m)**: 0.25	**Bed Substrate**: Clay, silt and rootlets
RGA Score: N/A	**RGA Condition**: N/A	**RGA Dominant Process**: N/A
RSAT Score: N/A	**RSAT Condition**: N/A	**RSAT Limiting Feature**: N/A
Down's Channel Evolution: 'S' – stable	**Notes**: Poor bank definition downstream and no bank definition upstream, no riffle-pool sequences, no meanders.	

Photograph facing upstream. The reach had poor bank definition and was moderately encroached.

Photograph taken facing upstream. There was no riffle-pool development and no meanders.

Photograph taken facing upstream towards crossing at Roselena Drive.

Reach was dry and less defined upstream of Roselena Drive.

Reach WHSL3

Location: Main Street, Schomberg	**Watershed**: West Holland River	**Type of Assessment**: Partial reach
Valley Type: Partially confined	**Land use**: Park and agricultural	**Riparian Coverage**: Continuous trees
Bankfull Width (m): 6.75	**Bankfull Depth (m)**: 0.80	**Bed Substrate**: Clay, silt, sand, gravel, and cobble
RGA Score: 0.30	**RGA Condition**: In Transition/Stress	**RGA Dominant Process**: Evidence of Widening
RSAT Score: 26.5	**RSAT Condition**: Good	**RSAT Limiting Feature**: Physical Instream Habitat
Down's Channel Evolution: 'e' – enlarging	**Notes**: Observations include cut off channel, thalweg out of alignment, cut face on bar forms, frequent woody debris jams, exposed till, leaning and fallen trees, and exposed roots.	

Photograph taken facing downstream from Main Street crossing. There was riprap on both banks.

Eroded bank causing leaning and fallen trees.

Photograph taken facing downstream towards a woody debris jam.

Photograph taken facing downstream of an abandoned channel – evidence of planform adjustment.

Reach WHSL9

Location: 8th Concession, Schomberg	**Watershed**: West Holland River	**Type of Assessment**: Roadside
Valley Type: Unconfined	**Land use**: Agricultural and Pasture	**Riparian Coverage**: Continuous grasses
Bankfull Width (m): N/A	**Bankfull Depth (m)**: N/A	**Bed Substrate**: Clay and silt
RGA Score: N/A	**RGA Condition**: N/A	**RGA Dominant Process**: N/A
RSAT Score: N/A	**RSAT Condition**: N/A	**RSAT Limiting Feature**: N/A
Down's Channel Evolution: 'S' – stable	**Notes**: Roadside assessment completed at 8th Concession. Swale feature was observed upstream and downstream of the crossing.	

Downstream of 8th Concession. The riparian zone was narrower downstream.

Downstream of 8th Concession. The reach was heavily encroached with grasses.

Upstream of 8th Concession. A swale feature with a wider riparian zone was observed.

Upstream of 8th Concession. Recent excavation for only 10 m upstream of the crossing was noted.

Reach WHSL12 and Reach WHSL13

Location: 8th Concession, Schomberg	**Watershed**: West Holland River	**Type of Assessment**: Roadside
Valley Type: Unconfined	**Land use**: Agricultural and Pasture	**Riparian Coverage**: Continuous grasses
Bankfull Width (m): N/A	**Bankfull Depth (m)**: N/A	**Bed Substrate**: Clay and silt
RGA Score: N/A	**RGA Condition**: N/A	**RGA Dominant Process**: N/A
RSAT Score: N/A	**RSAT Condition**: N/A	**RSAT Limiting Feature**: N/A
Down's Channel Evolution: 'S' – stable	**Notes**: Roadside assessment completed at HWY 27. Swale feature was observed upstream and downstream of the crossing.	

Photograph taken facing downstream of HWY 27. A narrow swale feature with manicured lawns to the top of bank was observed.

Photograph taken facing upstream of HWY 27. A swale feature with a wider riparian zone was observed.

Upstream of HWY 27. Water was only present within the box culvert. No erosion concerns were noted.

Upstream of HWY 27. No defined channel or depression was observed upstream of the crossing.

Snowball

Reach EHS1

Location: Wellington Street West, Snowball	**Watershed**: East Holland River	**Type of Assessment**: Roadside
Valley Type: Unconfined	**Land use**: Forest	**Riparian Coverage**: Continuous trees and grasses
Bankfull Width (m): N/A	**Bankfull Depth (m)**: N/A	**Bed Substrate**: N/A
RGA Score: N/A	**RGA Condition**: N/A	**RGA Dominant Process**: N/A
RSAT Score: N/A	**RSAT Condition**: N/A	**RSAT Limiting Feature:** N/A
Down's Channel Evolution: N/A	**Notes**: Roadside assessment at Wellington Street West. No defined channel. Wetland feature fully encroached with cattails.	

	
Wetland feature downstream of Wellington Street West.	Wetland feature upstream of Wellington Street West. There were fewer cattails but still no channel definition.

Reach EHS2-3

Location: Dufferin Street, Snowball	**Watershed**: East Holland River	**Type of Assessment**: Roadside
Valley Type: Unconfined	**Land use**: Residential and commercial	**Riparian Coverage**: Continuous trees and grasses
Bankfull Width (m): N/A	**Bankfull Depth (m)**: N/A	**Bed Substrate**: N/A
RGA Score: N/A	**RGA Condition**: N/A	**RGA Dominant Process:** N/A
RSAT Score: N/A	**RSAT Condition**: N/A	**RSAT Limiting Feature**: N/A
Down's Channel Evolution: N/A	**Notes**: Roadside assessment at Dufferin Street. No defined channel. Wetland feature fully encroached with cattails.	

	
Wetland feature downstream of Dufferin Street.	Wetland feature upstream of Dufferin Street. There was a box culvert passing under Dufferin Street.