

Environmental and Ecological Planning Advisory Committee

Report

9th Meeting of the Environmental and Ecological Planning Advisory Committee
August 16, 2018
Committee Rooms #1 and #2

Attendance PRESENT: S. Levin (Chair), A. Boyer, C. Dyck, P. Ferguson, S. Hall, B. Krichker, S. Madhavji, K. Moser, N. St. Amour, R. Trudeau and I. Whiteside and H. Lysynski (Secretary)

ALSO PRESENT: C. Creighton, P. Kavcic, T. Koza and S. Shannon

REGRETS: E. Arellano, E. Dusenge, C. Evans and S. Sivakumar and C. Therrien

The meeting was called to order at 5:00 PM

1. Call to Order

1.1 Disclosures of Pecuniary Interest

That it BE NOTED that no pecuniary interests were disclosed.

2. Scheduled Items

2.1 Southdale Road Environmental Assessment from Pine Valley Drive to Colonel Talbot Road, including Bostwick Road north of Pack Road

That a Working Group BE ESTABLISHED, consisting of S. Levin (lead), C. Dyck, P. Ferguson and R. Trudeau, to review the Southdale Road Environmental Assessment, from Pine Valley Drive to Colonel Talbot Road, including Bostwick Road, north of Pack Road; it being noted that the Environmental and Ecological Planning Advisory Committee (EEPAC) received the attached presentation from S. Shannon, Technologist II and S. Muscat, AECOM, with respect to this matter.

2.2 Municipal Class Environmental Assessment - Clarke Road Widening from the future Veterans Memorial Parkway extension to Fanshawe Park Road East

That a Working Group BE ESTABLISHED, consisting of S. Hall, B. Krichker and K. Moser, to review the Municipal Class Environmental Assessment for the Clarke Road widening from the future Veterans Memorial Parkway extension to Fanshawe Park Road East and to report back at the October 18, 2018 Environmental and Ecological Planning Advisory Committee meeting; it being noted that the EEPAC heard a presentation from I. Bartlett and S. Spisani, Stantec, with respect to this matter.

3. Consent

3.1 8th Report of the Environmental and Ecological Planning Advisory Committee

That it BE NOTED that the 8th Report of the Environmental and Ecological Planning Advisory Committee, from its meeting held on July 19, 2018, was received.

3.2 Notice of Application - Draft Plan of Subdivision - 1877 Sandy Somerville Lane

That C. Smith, Senior Planner, BE ADVISED of the following comments with respect to the application by Sifton Properties Limited, relating to the property located at 1877 Sandy Somerville Lane:

- a) the block be fenced with no gates;
- b) signage be posted, with a positive message, advising why the area is environmentally significant; and,
- c) a trail map be included on the above-noted signage.

3.3 Letter of Resignation - C. Kushnir

That it BE NOTED that the Environmental and Ecological Planning Advisory Committee (EEPAC) reviewed and received the communication dated July 30, 2018, from C. Kushnir, with respect to her resignation from the EEPAC.

4. Sub-Committees and Working Groups

None.

5. Items for Discussion

5.1 Pending Class Environmental Assessment Completion - East London Sanitary Servicing Study

That K. Oudekerk, Environmental Services Engineer, BE ADVISED that S. Hall, S. Levin and R. Trudeau, are the Environmental and Ecological Planning Advisory Committee (EEPAC) representatives on the draft Project File for the East London Sanitary Servicing Study; it being noted that the EEPAC reviewed and received a communication dated August 2, 2018, from K. Oudekerk, with respect to this matter.

6. Deferred Matters/Additional Business

6.1 (ADDED) Notice of Study Commencement - Adelaide Street North Municipal Class Environmental Assessment Study

That it BE NOTED that the Notice of Study Commencement for the Adelaide Street North Municipal Class Environmental Assessment Study from H. Huotari, Project Manager, Parsons Inc. and M. Davenport, Project Manager, City of London, was received.

6.2 (ADDED) W5 Farms/York Developments - 3700 Colonel Talbot Road and 3645 Bostwick Road

That the attached Working Group comments with respect to the Environmental Impact Statement and exp Hydrogeology report relating to the W3 Farms/York Developments application, relating to the properties located at 3700 Colonel Talbot Road and 3645 Bostwick Road BE FORWARDED to N. Pasato, Senior Planner, for consideration.

6.3 (ADDED) 3080 Bostwick Road

That S. Wise, Planner II, BE REQUESTED to provide copies of the Hydrogeological study and the Environmental Impact Statement for the property located at 3080 Bostwick Road to the Environmental and Ecological Planning Advisory Committee (EEPAC); it being noted that the EEPAC established a Working Group, consisting of S. Levin to review the Environmental Impact Study and a Working Group, consisting of B. Krichker and I. Whiteside, to review the Hydrogeological study, with respect to this matter.

7. Adjournment

The meeting adjourned at 7:05 PM.

Southdale Road West Improvements – Pine Valley to Colonel Talbot Road

Municipal Class EA

Environmental and Ecological Planning Advisory Committee



Shari Muscat, Environmental Planner

August 16, 2018

Summary

- Municipal Class Environmental Assessment
- Study Area
- Existing Environmental Conditions
- Natural Heritage Features and Functions
- Species at Risk Assessment
- Significant Wildlife Habitat Assessment
- Tree Inventory
- Preferred Alternative
- Impact Assessment
- Mitigation Measures
- Recommendations
- Conclusions

Southdale Road West Improvements – Pine Valley to Colonel Talbot Road
Environmental and Ecological Planning Advisory Committee

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Municipal Class Environmental Assessment

Study Area

The Study Area for this EIS is comprised of the Southdale Road West Corridor extending from Pine Valley Boulevard to Colonel Talbot Road and includes a section of Bostwick Road

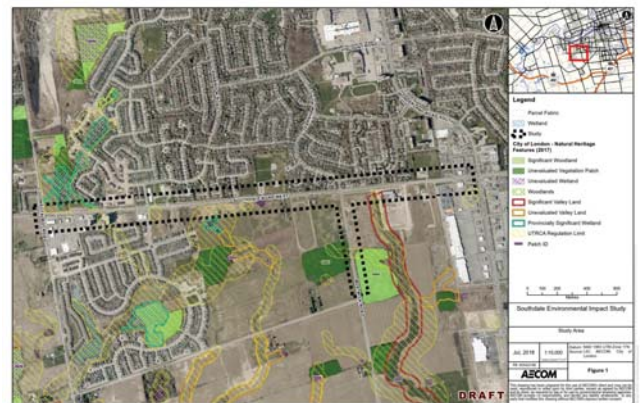
Problem/Opportunity:

This widening project was identified as a priority in the City of London's 2030 Transportation Master Plan and was identified as part of the 2014 Development Charges Background Study, including phasing. The City of London is considering widening of this corridor from Colonel Talbot Road to Pine Valley Boulevard, from 2 to 4 lanes, to be staged for construction from Pine Valley Boulevard to Farnham Road in 2022 and from Farnham Road to Colonel Talbot Road in 2026.

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Study Area



Southdale Road West Improvements – Pine Valley to Colonel Talbot Road
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Existing Environmental Conditions

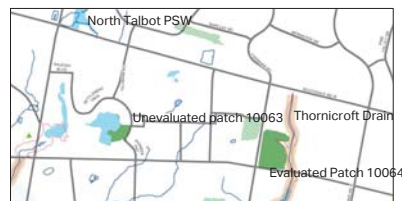
City of London OP Map Schedule B1 and the London Plan Natural Heritage Features Map 7 and Figure 5

- Provincially Significant Wetland (PSW; North Talbot) at Southdale Road West and Colonel Talbot Road,
- Unevaluated Vegetation Patch (Patch No. 10063) located west of Bostwick Road,
- A Significant Woodland Patch (Patch No. 10064) located on the east side of Bostwick Road, and
- A Significant Valley (associated with Thornicroft Drain).

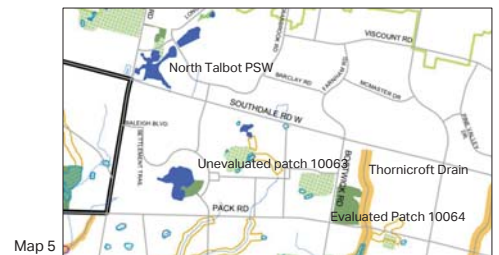
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Official Plan Schedules and Maps



Schedule B1



Map 5

Natural Heritage Features and Functions

Field Investigations

- Aquatic habitat assessment conducted August 15th, 2017
- Ecological Land Classification and floral inventory completed on June 9th, 19th, July 7th and July 11th, 2017
- Tree Inventory and assessments completed July 28th, 2017 and August 15th, 2017
- Breeding Bird Surveys completed on June 19th and July 7th, 2017
- Anuran call surveys were completed on April 26th, May 26th, and June 27th 2017
- Grassland Breeding Bird Surveys completed on June 12th, 22nd and July 6th, 2018

Natural Heritage Features and Functions

Aquatic Ecosystems

Six aquatic features were identified within the Study area and include from east to west:

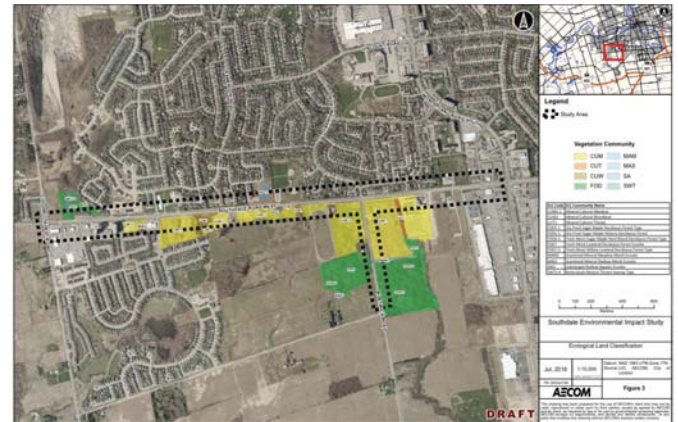
- Thornicroft Drain
- Tributary to Thornicroft Drain on Bostwick Road
- Pond / Wetland within the woodland west of Bostwick Road
- Small wetland on the south side of Southdale Road West
- Storm Water Management Facility (SWMF) within Southwest Optimist Park; and
- North Talbot PSW

Natural Heritage Features and Functions

Terrestrial

- The Study Area is located along Southdale Road mainly in an urbanized setting comprised of a mix of commercial and residential land uses.
- Naturally occurring vegetation communities are limited to four (4) locations along Southdale Road.
- Within these four locations, a total of eight (8) natural vegetation communities were delineated within the Study Area
 - three cultural (CUM, CUT, CUW)
 - two forest (FOD),
 - one swamp (SWT)
 - two Shallow Aquatic (SA) communities.
- Three (3) additional vegetation communities were delineated not associated with any natural heritage features.
 - Two cultural (CUM, CUT)
 - One shallow aquatic (SA) community

Vegetation Communities

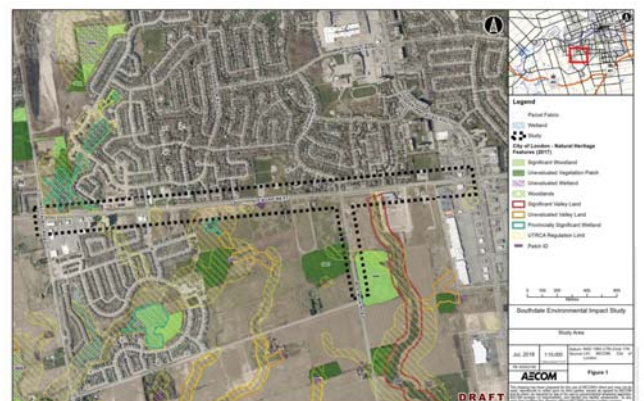


Natural Heritage Features and Functions

Terrestrial

- North Talbot Provincially Significant Wetland Patch No. 10059
 - Patch No. 10059 is located at the intersection of Southdale Road and Colonel Talbot. The patch is approximately 14 ha in size and contains two individual ELC communities. This patch is considered part of the North Talbot PSW.
- Bostwick Road West Woodland Patch No. 10063
 - This woodland is approximately 6.4 ha in size and is located on the west side of Bostwick Road. It is recognized in the London Plan as an unevaluated vegetation patch.
- Bostwick Road East Woodland Patch No. 10064
 - Patch No. 10064 is approximately 9.7 ha in size and is found on the east side of Bostwick Road. According to the London Plan this patch is considered a Significant Woodland.
- Small Wetland Feature along Southdale
 - This small feature is approximately 0.14 ha in size and is located on the south side of Southdale Road adjacent to Southwest Optimist Park.

Natural Heritage Features and Functions



Natural Heritage Features and Functions

Terrestrial

Wetlands

Wetland communities within the Study Area are divided into two separate wetland patches.

- The larger of the two, found within the Study Area, is 14.03 ha in size and is recognized as part of the North Talbot PSW. The portion of this PSW that falls within the Study Area is approximately 1.8 ha in size with both swamp and marsh wetland types observed
- The second wetland patch is approximately 0.18 ha in size and is located directly south of Southdale road across from Southwest Optimist Park. A culvert is present connecting this small patch to a small channel on the north side of Southdale Road within Southwest Optimist Park.

Woodlands

- The two woodland Patches: No. 10063 & No. 10064 have been identified as significant woodland patches

Species at Risk Assessment

- A review of background information identified seventy-six (76) SAR that may potentially occur within the Study Area.
- Of these, thirty-seven (37) species are listed as END, eighteen (18) species are listed as THR, and twenty-one (21) species are listed as SC
- Upon completion of field surveys within the Study Area, potentially suitable habitat for twenty-seven (27) species was identified, however, only four (4) of the species were observed. These include Barn Swallow (*Hirundo rustica*), Eastern Meadowlark (*Sturnella magna*), Bobolink (*Dolichonyx oryzivorus*) and Eastern Wood-pewee (*Contopus virens*). Although suitable habitat was not identified, Monarch (*Danaus plexippus*) and Bank Swallow (*Riparia riparia*) were observed during field investigations.
- Although the species themselves were not observed, suitable habitat conditions exists within the two woodlands located along Bostwick Road for Eastern Small-footed Myotis (*Myotis leibii*), Northern Myotis (*Myotis septentrionalis*), Little Brown Myotis (*Myotis lucifugus*), and Tri-colored Bat (*Perimyotis subflavus*).
- Additionally, Candidate Habitat for Barn Swallow and the four (4) bat species listed above may potentially be found within the barn structure located at the corner of Southdale Road and Bostwick Road.

Species at Risk Assessment

Provincially Recognized Features & Species

Common Name	Scientific Name	Candidate Habitat	Confirmed Habitat
Barn Swallow	<i>Hirundo rustica</i>		X
Bobolink	<i>Dolichonyx oryzivorus</i>		X
Chimney Swift	<i>Chaetura pelagica</i>	X	
Common Nighthawk	<i>Chordeiles minor</i>	X	
Eastern Meadowlark	<i>Sturnella magna</i>		X
Eastern Wood-pewee	<i>Contopus virens</i>		X
King Rail	<i>Rallus elegans</i>	X	
Northern Bobwhite	<i>Colinus virginianus</i>	X	
Wood Thrush	<i>Hylocichla mustelina</i>	X	
American Bitter	<i>Taxidea taxus jacksoni</i>	X	
Little Brown Myotis	<i>Myotis lucifugus</i>	X	
Eastern Small-footed Myotis	<i>Myotis leibii</i>	X	
Northern Myotis	<i>Myotis septentrionalis</i>	X	
Tri-colored Bat	<i>Perimyotis subflavus</i>	X	
Spoon-leaved Moss	<i>Bryoandersonia illecebra</i>	X	
Blue Ash	<i>Fraxinus quadrangulata</i>	X	
Broad Beech Fern	<i>Phegopteris hexagonoptera</i>	X	
Climbing Prickly Rose	<i>Rosa setigera</i>	X	
Crooked-stem Aster	<i>Symphoricarpon prenanthoides</i>	X	
Drooping Trillium	<i>Trillium flexipes</i>	X	
Eastern Flowering Dogwood	<i>Cornus florida</i>	X	
False Rue-anemone	<i>Enemion biternatum</i>	X	
Green Dragon	<i>Arisaema dracontium</i>	X	
Heart-leaved Plantain	<i>Plantago cordata</i>	X	
Kentucky Coffee Tree	<i>Gymnocladus dioica</i>	X	
Willowleaf Aster	<i>Symphoricarpon praetium</i>	X	
Wood-poppy	<i>Stylophorum diphyllum</i>	X	

Species at Risk

Grassland Breeding Birds

- Based on the results of breeding bird surveys conducted in by AECOM in 2017 that identified the presence of Eastern Meadowlark within the Study Area, it was determined that species specific surveys were required to identify grassland habitat use within the Study Area by Bobolink and Eastern Meadowlark
- A linear transect was set up traversing the grassland habitat within the Study Area with point count stations located along the transect at approximately 250m intervals. Three visits were conducted by qualified AECOM biologists on June 12th, 22nd and July 6th, 2018
- Both Bobolink and Eastern Meadowlark were identified during the surveys, as well as other SAR bird species.

Species at Risk

Grassland Breeding Birds

- Bobolink were observed at three stations and Eastern Meadowlark were observed at two.
- Bank Swallow was observed foraging over the fields at two stations although no nesting habitat was identified within the study area.
- Barn Swallow was also observed foraging over the fields at three stations. Barn structures are located approximately 80 m to the south east of one station GR-02 and at the north end of the pasture approximately 60m from station GR-03. Barn Swallows were observed entering and exiting the barn at station GR-03 during the surveys. It is likely that Barn Swallows are nesting within this structure, although access to both barn structures was not obtained to determine the presence of nests. No Bobolink, Eastern Meadowlark or other SAR bird species were observed at station GR-04.
- Within the Study Area there is a total of 1.35 ha of habitat for Bobolink and Eastern Meadowlark

Significant Wildlife Habitat Assessment

During the background screening exercise a total of twenty (20) candidate Significant Wildlife habitats were identified:

- Seasonal Concentration Areas – six (6) Candidate Habitats
- Rare Vegetation Communities or Specialized Habitats for Wildlife – nine (9) Candidate Habitats
- Habitats of Species of Conservation Concern – four (4) Candidate Habitats
- Animal Movement Corridors – one (1) Candidate Habitat

Of the twenty (20) candidate habitats identified, eighteen (18) were ruled out, leaving two (2) candidate habitats as present within the study area.

Significant Wildlife Habitat Assessment

Candidate Significant Wildlife Habitat	Confirmed Significant Wildlife Habitat
Bat Maternity Colonies	Special Concern and Rare Wildlife Species <ul style="list-style-type: none"> two (2) species were observed within the Study Area during 2017 field investigations - Monarch and Eastern Wood-pewee

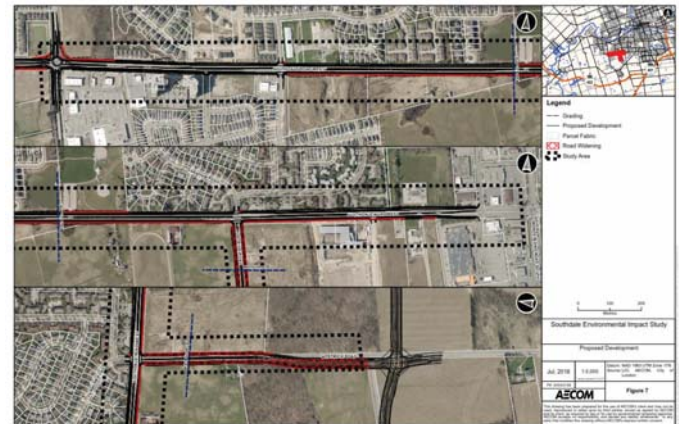
Tree Inventory

- A tree inventory was completed in accordance with the City of London Tree Protection By-law (2016) and using accepted arboricultural techniques as outlined in the Tree and Landscape Appraiser's Guide for Plant Appraisal, 9th Edition, (2000).
- Two hundred and fourteen (214) trees greater than 10 cm DBH were inventoried and assessed within the Study Area of Southdale Road West.
- Additionally, two hundred and sixty-two (262) trees less than 10 cm DBH were tallied within the Study Area and within 6 m of the Study Area.
- A total of 810 trees were tallied within the Bostwick Rd East and West Woodlands within 6 m. Patch 10063 contained 323 trees and Patch 10064 contained 487 trees (within the Study Area).
- A full tree inventory and preservation plan will be completed and submitted once the details of the design have been finalized.

Preferred Alternative

The preferred road cross section will include two lanes of traffic in each direction, complete with left turn lanes and centre medians where applicable. Sidewalks and bike lanes will be accommodated within the boulevards. Additionally, improvements to Bostwick Road, south from Southdale Road West to just north of Pack Road will include upgrading to an urban cross section with the addition of bike lanes in each direction.

Preferred Alternative



Impact Assessment

Short Term Impacts

- Disturbance and damage of vegetation along Southdale and Bostwick
- Removal of trees to widen Southdale and Bostwick Road
- Damage to tree rooting zones
- Fill and sediment deposition within watercourses
- Disturbance of fish habitat
- Disturbance of birds and other wildlife
- Short term, isolated dewatering impacts

Impact Assessment

Long Term Impacts

- Loss or Potential Disturbance to Vegetation - Vegetation will be cleared to accommodate the widening of Southdale and Bostwick Road. This includes the removal of 0.03 ha of wetland habitat found along Southdale Road associated with the small wetland feature.
- Introduction of Non-Native Species
- Potential Disruption to Resident Wildlife through Noise
- Potential Disruption to Wildlife through Lighting
- Potential Increase of Wildlife Road Mortality
- Potential Disturbance to Significant Identified Woodlands – Vegetation within the identified Significant Woodlands and the North Talbot PSW may be removed in some locations to accommodate the widening of Southdale and Bostwick Road
- Potential loss of 1.35 ha of habitat for Eastern Meadowlark and Bobolink

Mitigation Measures

- Construction Sequencing Plan
- Sediment and Erosion Control Fencing
- Construction Mitigation – Fisheries Timing Windows
- Peripheral Vegetation Protection
- Dust Suppressant Treatment
- Controlled Construction Vehicle Access
- Construction Vehicle Re-fueling Stations
- Damage to Rooting Zones during removals
 - To avoid compaction of soils, root zones around trees within natural heritage features will need to be fenced
- Wildlife Habitat Protection and Mitigation Measures
 - Avoidance through scheduling of construction periods
 - Wildlife observation protocol
- Breeding Birds and Vegetation Removals
 - Construction is restricted to periods before and after breeding period (no works April 1st to August 31st)
- Construction Mitigation – Noise Disturbance to Resident Wildlife
 - Construction is restricted to periods before and after breeding period (no works April 1st to August 31st)
 - Limit construction activity to a period after 7 am and before 7 pm daily
- Wildlife Protection and Handling
 - SCC surveys and relocation
 - Transplant and Relocation Plan
- Disturbance to fish species
 - Fish relocation for in-water works prior to construction
 - Scientific License to Collect Fish required from MNRF for relocation

Southdale Road West Improvements – Pine Valley to Colonel Talbot Road
Environmental and Ecological Planning Advisory Committee

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Recommendations

- A detailed Tree Inventory and Preservation Plan should be conducted once the final design is completed;
- An Erosion and Sediment Control Plan should be prepared during Detailed Design
- A detailed Construction Sequencing Plan should be prepared;
- A detailed SAR and Wildlife Handling Protocol should be developed prior to the initiation of construction;
- A Notice of Activity is to be prepared with the associated Habitat Management Plan for Bobolink and Eastern Meadowlark at Detailed Design
- Any in-water-works will require a plan to relocate fish encountered within the construction footprint. This should be prepared during detailed design.
- Wherever possible, habitat for SAR should be compensated for and/or enhanced;
- An edge management plan shall be prepared once construction has been completed along Bostwick Road for Patch No 10063; and
- A detailed restoration plan utilizing native plantings and native seed mixes following City specifications should be developed and followed.
- Consultation with EEPAC during the Detailed Design and Construction Phase

Southdale Road West Improvements – Pine Valley to Colonel Talbot Road
Environmental and Ecological Planning Advisory Committee

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Conclusions

Permits and Approvals

- Potential habitat for 27 terrestrial SAR species has been identified within the study area. Further consultation at the Detailed Design Stage is required to determine next steps on further species specific field investigations and permitting.
- Permit from the UTRCA will be required under Ontario Regulation 157/06
- As the proposed road work will potentially result in the removal of 1.35 ha of habitat for Bobolink and Eastern Meadowlark, a Notice of Activity (NOA) and a Habitat Management Plan will need to be prepared for the MNRF prior to commencing development in accordance with Ontario Regulation 242/08

Southdale Road West Improvements – Pine Valley to Colonel Talbot Road
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Conclusions

Timing Restrictions

- Removal of vegetation within the study areas can occur between the months of September to April, which is outside of the typical breeding bird period (April 1st to August 31st) within southern Ontario to avoid contravening the Migratory Birds Convention Act.
- The watercourses within the Study Area are classified as warmwater. The restricted activity timing window for the spring spawning period is from March 15th to July 15th.

Southdale Road West Improvements – Pine Valley to Colonel Talbot Road
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Review of EIS Update by Biologic, dated May 8, 2018 and exp Hydrogeology report dated April 2018.

Both received at EEPAC's July 2018 meeting

Reviewed by S. Levin, R. Trudeau and I. Whiteside

The key concern for the working group remains the surface flows from Patch 10066 (identified now as a Significant Woodland) to Patch 10069 (also Significant). Both the EIS and the hydrogeological report agree that maintaining this seasonal flow is important to maintain the features and functions of Patch 10069. What is missing from both reports is how this can be accomplished, particularly without the completion of the Dingman Creek Subwatershed Study update currently underway.

RECOMMENDATIONS

1. A holding provision be applied to require approval of the City Engineer or designate and the UTRCA of the design of the system proposed to maintain the seasonal surface flows to Patch 10069, both in terms quantity and quality (e.g. page 34, Recommendation 1, page 36, etc). EEPAC further recommends that this system remain in public ownership so that maintenance remains a municipal responsibility rather than future individual home owners. The design must include the areas to the southwest that are part of the flow regime to the P9 SWM facility as well as Phase 2 of the Sifton development to the north and the remaining part of the York property, particularly as no aquatic habitat site investigations relative to the flow channel under and west of Colonel Talbot Road were carried out (see page 16).
2. EEPAC strongly opposes the suggestion that the compensation for the small wetland at the southwest corner of the property be within Patch 10069. EEPAC recommends the area be where the City has proposed it (adjacent to Patch 10069) or created on the boundary between this property and the property to the north where other wetland replacement is being proposed. In this way, a larger, more functional wetland would be possible.
3. The working group is also concerned about access to Patch 10069 prior to development of the lands to the south. Although there will be fencing of backyards in the W3 Farms development, the southern part of this patch will remain accessible. The working group recommends the City gain ownership of this woodland earlier rather than later so that a sustainable trail system can be created (preferably outside the woodland) prior to the people creating their own, harming the wet features and the endangered butternut tree which is to be retained and requires protection.
4. EEPAC recommends education signage be installed at appropriate points (e.g. Recommendation 29, page 42) near the ecological features as a constant reminder of the significance of the features. EEPAC does not believe the one time owner education

packages are effective. EEPAC supports Recommendation 27 on page 41 for sign plaques on the fences within individual lots.

5. EEPAC recommends the environmental monitoring strategy mentioned on page 42 be a condition of development that requires approval of a City Ecologist. EEPAC also recommends that any monitoring program start with the first year of construction and not end until the third year after substantial completion of the subdivision.

ADDITIONAL COMMENTS

There were a number of inconsistencies (e.g. p. 13, 26) in the EIS update such as whether or not Patch 10066 had been studied and who did the site work. However, EEPAC is in agreement that this patch meets one High criterion from the woodland evaluation guideline document and is therefore a Significant Woodland to be retained (Table A, page 27).

The field sheet includes notations about raptors and ribbon snake (Special Concern Species) habitat, however there is no discussion of these findings and their significance in the report.

With respect to storm water management, the report notes that storm water from Areas 2 and 3 are "tributaries" to the SWMF P9, which presumably means storm water from these areas will drain to that SWMF. However, Area 1, which drains to the east (presumably to Thornincroft Drain) "private permanent treatment" is proposed for storm water. Additionally, run-off from Area 1 is expected to increase 171% without mitigation measures. We have two concerns:

- a. No details on the private treatment system were provided, specifically with respect to water treatment/quality parameters and flow volumes.
- b. The report presents these as annual average increases in run-off, but does not indicate what will happen during major and minor flows. As run-off from the subdivision will mostly occur during storm events, and the report does not evaluate the impact of elevated storm water run-off on Thornincroft Drain (and ultimately Dingman Creek) as a result of these storm events.

We recommend that the report further evaluate the impact from increase in surface water flow from the site to Thornincroft Drain and Dingman Creek during major and minor flow events. If the evaluation fails to demonstrate that overall water quality will be improved or at minimum maintained to pre-development conditions, additional mitigation measures should be considered.

The report also mentions the implementation of LID measures to promote post development infiltration to a target of 80% of the predevelopment infiltration; LID measures may presumably also form part of the storm water management system for the site by acting to retain storm water. We recommend that LID measures, particularly LID measures that form part of any storm water management system be placed on public property, as the eventual homeowner may lack the desire or skill in maintain the LID measures and run-off may consequently increase over time as the efficacy of the LID measures wane.