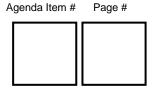


то:	CHAIR AND MEMBERS PLANNING AND ENVIRONMENT COMMITTEE
FROM:	GEORGE KOTSIFAS, P. ENG. MANAGING DIRECTOR, DEVELOPMENT & COMPLIANCE SERVICES AND CHIEF BUILDING OFFICIAL
SUBJECT:	APPLICATION BY: DEVELOPRO LAND SERVICES ON BEHALF OF WEST KAINS LAND CORP. AND LIAHN FARMS LTD. EAGLE RIDGE SUBDIVISION - PHASE 2 810, 1055, & 1079 WESTDEL BOURNE 1959 & 1997 OXFORD STREET WEST APPLICATION FOR APPROVAL OF DRAFT PLAN OF SUBDIVISION AND ZONING BY-LAW AMENDMENTS PUBLIC PARTICIPATION MEETING ON JULY 17, 2017

RECOMMENDATION

- That, on the recommendation of the Senior Planner, Development Services, the following actions be taken with respect to the application of Craig Linton, Developro Land Services Inc. on behalf of West Kains Land Corp. and Liahn Farms Ltd. relating to the lands located at 810 Westdel Bourne, portion of 1055 Westdel Bourne, 1079 Westdel Bourne, 1959 and 1997 Oxford Street West:
 - a) the Approval Authority BE ADVISED of the issues, if any, raised at the public meeting with respect to the application for Draft Plan of Subdivision submitted by Craig Linton, Developro Land Services Inc. on behalf of West Kains Land Corp. and Liahn Farms Ltd. relating to the lands located at 810 Westdel Bourne, a portion of 1055 Westdel Bourne, 1079 Westdel Bourne, 1959 and 1997 Oxford Street West;
 - b) the Approval Authority **BE ADVISED** that Municipal Council supports issuing draft approval of the proposed plan of subdivision as submitted by Craig Linton, Developro Land Services Inc. on behalf of West Kains Land Corp. and Liahn Farms Ltd., prepared by RICOR Engineering Ltd. and certified by P. R. Levac, Ontario Land Surveyor (Project No. 1047-1, dated June 21, 2016), as red line revised which shows eighty-nine (89) single detached residential dwelling lots, one (1) medium density residential block, two (2) open space blocks, three (3) park blocks, seven (7) part blocks for future development, five (5) reserve blocks, and one (1) road widening block, **SUBJECT TO** the conditions contained in the <u>attached</u> Appendix "C";
 - c) the proposed by-law <u>attached</u> hereto as Appendix "A" **BE INTRODUCED** at the Municipal Council meeting on July 25, 2017 to amend Zoning By-law No. Z.-1, in conformity with the Official Plan, to change the zoning of the subject lands **FROM** an Urban Reserve (UR1 and UR3) Zone, a Residential R1 (R1-14) Zone, and an Open Space OS4 Zone **TO**:
 - i) a Holding Residential R1 (h•R1-4) Zone, a Holding Residential R1 (h•h-82•R1-4) Zone, and a Holding Residential R1 (h•h-_•R1-4) Zone to permit single detached dwellings on lots with a minimum lot frontage of 12 metres and minimum lot area of 360 square metres;
 - ii) a Holding Residential R1 (h•R1-8) Zone to permit single detached dwellings on lots with a minimum lot frontage of 15 metres and minimum lot area of 600 square metres;
 - iii) a Holding Residential R6 (h•h-54•h-71•R6-5) Zone to permit various forms of cluster housing including single detached, semi-detached, duplex, triplex, fourplex, townhouse, stacked townhouse, and apartment buildings up to a maximum density of 35 units per hectare and maximum height of 12 metres;
 - iv) an Open Space (OS1) Zone to permit conservation lands, conservation works, golf courses, public and private parks;



v) an Open Space (OS5) Zone to permit conservation lands, conservation works, passive recreation uses which include hiking trails and multi-use pathways, and managed woodlots; and to amend Section 4.21 Road Allowance Requirements - Specific Roads to By-law No. Z.-1 by adding Kains Road from the north limit of the proposed draft plan of subdivision to Oxford Street West as a Secondary Collector Road;

it being noted that the following holding provisions have also been applied:

- (h) to ensure orderly development and adequate provision of municipal services, the "h" symbol shall not be deleted until the required security is provided and that the conditions of draft plan approval will ensure the execution of a subdivision agreement prior to development;
- (h-54) to ensure completion of noise assessment reports and implementation of mitigation measures for development adjacent arterial roads (Block 1);
- (h-71) to encourage street oriented development the Owner shall prepare a building orientation plan to be incorporated into the approved site plan and development agreement (Block 1);
- (h-82) to ensure consistent lotting pattern and that any part blocks are consolidated with adjacent lands (Future Development Blocks 7 to 13).
- (h-_) to ensure orderly development of lands, the holding provision shall not be deleted until the interim SWM facility adjacent the south and southeast perimeter of SWM Facility 'A' is decommissioned (Lots 8 to 24).
- d) the applicant **BE ADVISED** that the Director of Development Finance has summarized the estimated costs and revenues information as attached in Appendix "D".
- 2. That, on the recommendation of the Senior Planner, Development Services, the proposed by-law <u>attached</u> hereto as Appendix "B" **BE INTRODUCED** at the Municipal Council meeting on July 25, 2017 to amend Zoning By-law No. Z.-1, in conformity with the Official Plan, to change the zoning of lands immediately adjacent the proposed draft plan of subdivision identified and as future stormwater management facility (SWMF 'A'), and described as Parts 1 and 2 Plan 33R-19671, **FROM** an Urban Reserve (UR1 and UR3) Zone and an Open Space OS4 Zone **TO** an Open Space (OS1) Zone to permit conservation lands, conservation works, golf courses, public and private parks.

PREVIOUS REPORTS PERTINENT TO THIS MATTER

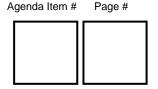
December 3, 2012 – Report to Civic Works Committee on Tributary 'C' Storm/Drainage & Stormwater Management Transportation and Sanitary Trunk Servicing Environmental Study Report modifications (Agenda Item #14).

July 17, 2012 — Report to Civic Works Committee with respect to the Municipal Class Environmental Assessment (EA) Study Schedule "C" for Tributary 'C' Storm/Drainage and Stormwater Management (SWM), Transportation and Sanitary Trunk Servicing Works located within the Downstream Thames River Subwatershed Area (Agenda Item #12).

July 17, 2006 – Report to Planning Committee with respect to an application for approval of draft plan of subdivision, Official Plan and Zoning By-law Amendments submitted by West Kains Land Corp. for part of 810 Westdel Bourne and Part of 2029 Oxford Street West (Agenda Item #29).

PURPOSE AND EFFECT OF RECOMMENDED ACTION

The purpose and effect is to recommend that the Approval Authority for the City of London issue draft approval of the proposed plan of subdivision, subject to conditions and red line revisions; and Municipal Council approve the recommended Zoning By-law amendments.



RATIONALE

The rationale for approval of the recommended Zoning By-law amendments and support for the redlined draft plan of subdivision is as follows:

- i) The recommended draft plan and Zoning amendment conforms to the policies of the Official Plan, and are consistent with the Provincial Policy Statement:
- ii) The proposed subdivision draft plan is in keeping with the Riverbend Community Plan;
- iii) The subject lands are located within the urban growth boundary where full municipal services are currently in place or are being constructed to service new development;
- iv) The proposal is compatible with surrounding land uses; provides good connectivity and access to Thames Valley Parkway pathway system, and appropriate protection and enhancement of natural heritage resources.

BACKGROUND

Date Application Accepted: January 12, 2017 | Agent: n/a

REQUESTED ACTIONS:

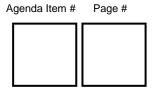
Draft Plan of Subdivision

Approval of a draft plan of subdivision consisting of 94 single detached residential lots (Lots 1 - 94), one (1) medium density residential block (Block 1), three (3) park blocks (Blocks 3 - 5), one (1) open space block (Block 2), seven (7) future development blocks (Blocks 7 - 13), one (1) road widening block (Block 6), two (2) reserve blocks, one (1) secondary collector road (Kains Road), and two (2) local streets (The Linkway and Gatenby Street).

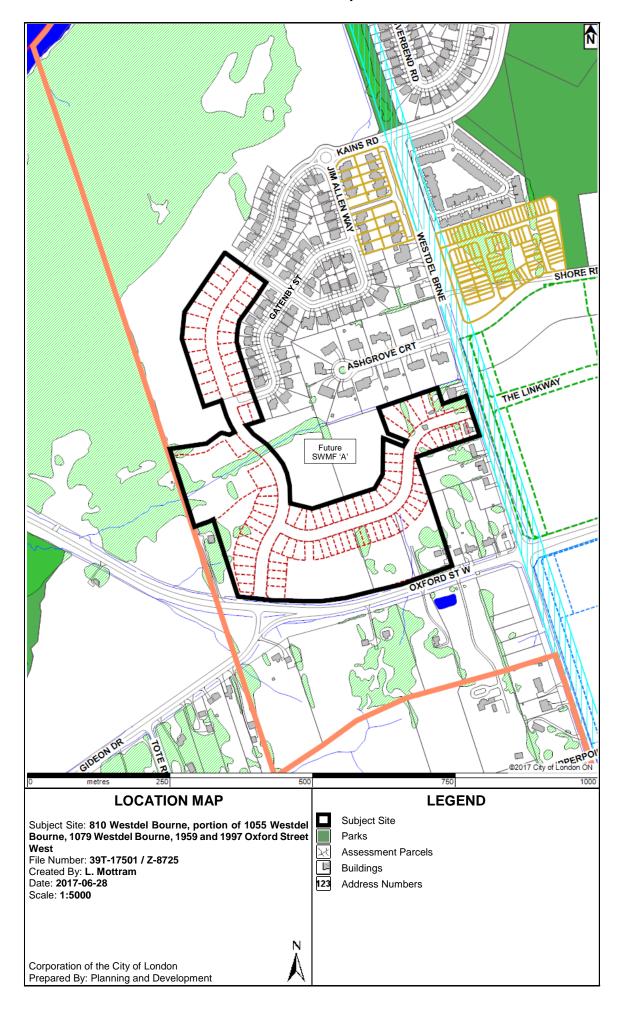
Zoning By-law Amendment

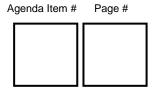
Amendment to Zoning By-law Z.-1 to change the zoning from an Urban Reserve (UR1 and UR3) Zone, a Residential R1 (R1-14) Zone, and an Open Space OS4 Zone to the following zones:

- 1. Residential R1 (R1-4) to permit single detached dwellings on lots with a minimum lot frontage of 12 metres and minimum lot area of 360 square metres.
- 2. <u>Residential R1 (R1-8)</u> to permit single detached dwellings on lots with a minimum lot frontage of 15 metres and minimum lot area of 600 square metres.
- 3. <u>Residential R6 (R6-5)</u> to permit various forms of cluster housing including single detached, semi-detached, duplex, triplex, fourplex, townhouse, stacked townhouse, and apartment buildings up to a maximum density of 35 units per hectare and maximum height of 12 metres.
- 4. <u>Open Space (OS1)</u> to permit such uses as conservation lands, conservation works, golf courses, public and private parks.
- 5. <u>Open Space (OS5)</u> to permit such uses as conservation lands, conservation works, passive recreation uses which include hiking trails and multi-use pathways, and managed woodlots.



Location Map





SITE CHARACTERISTICS:

- **Current Land Use** vacant agricultural (cash crops), residential single detached dwellings, and open space
- Frontage Approx. 382 metres (1,253 ft.) on Oxford Street West, and 73 metres (240 ft.) on Westdel Bourne
- **Depth** Approx. 630 metres (2,067 ft.)
- **Area** 12.9 hectares (31.9 acres)
- Shape Irregular

SURROUNDING LAND USES:

- North agriculture (cash crops) and residential
- South agriculture
- East residential
- West open space, private recreational, and residential

OFFICIAL PLAN DESIGNATIONS: (refer to map page 7)

"Low Density Residential" and "Multi-family, Medium Density Residential"

EXISTING ZONING: (refer to map page 8)

Urban Reserve (UR1 and UR3), Residential R1 (R1-14) and Open Space (OS4)

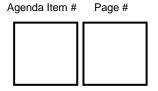
PLANNING HISTORY

Riverbend Community Plan

The Riverbend Community Plan was initiated as a developer-led community planning process in November of 1996. During 1997, the landowners' consultants prepared background studies and conducted a number of open houses and public participation workshops, and on June 22nd, 1998, City Council adopted Official Plan Amendments which implemented the land use concepts and guidelines from the community plan process.

As a result of appeals that were received from several landowners within the area, modifications to the Official Plan designations and policies for the Riverbend area were recommended by City Council and these modifications were approved by the Ontario Municipal Board in June 2000. Further modifications to the land use designations and road network were endorsed by City Council in June of 2001 and were subsequently endorsed by an Order of the Ontario Municipal Board issued on November 29, 2001. In April 2004, Council approved further amendments to the proposed land uses in order to accommodate boundary adjustments for the district park, relocation of a public elementary school site, and removal of the secondary school site.

More recently within the Riverbend Planning Area, in December 2015 Council adopted an amendment to the Official Plan to add a specific area policy for the Sifton West Five development lands located east of Westdel Bourne, and north of Oxford Street West. At the same time, a block subdivision plan was draft-approved creating the Riverbend Road connection between Shore Road and Oxford Street West, and "The Linkway" between Westdel Bourne and Kains Road. The Linkway will eventually extend west of Westdel Bourne through the proposed Eagle Ridge Phase II draft plan of subdivision.



Eagle Ridge Phase I

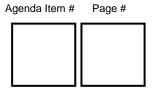
In December 2005, an application was received from West Kains Land Corp. for approval of Draft Plan of Subdivision, Official Plan and Zoning By-law Amendments to permit a proposed residential subdivision on lands to the north, being part of 810 Westdel Bourne and part of 2029 Oxford Street West, known today as Eagle Ridge Phase I (File No. 39T-05514). In July 2006, Municipal Council adopted the recommended Official Plan and Zoning amendments and requested the Approval Authority to approve the Draft Plan of Subdivision consisting of 73 single detached lots and one (1) multi-family, medium density residential block, served by the extension of Kains Road and two (2) new streets (Gatenby Street and Jim Allen Way). Schedule "C" – Transportation Corridors of the Official Plan was amended to add a secondary collector road alignment linking Kains Road to Oxford Street West. Zoning by-law amendments applied Residential R1-7, R1-8 and R1-9 Zone variations for the single detached lots, and R6-4 zoning for the multi-family block.

An appeal was made to the Ontario Municipal Board in September 2006 by a neighbouring property owner relating to the Official Plan Amendment and Draft Plan of Subdivision. As a result of a settlement being reached by the parties, the Board issued draft approval subject to revised conditions on July 12, 2007. The plan of subdivision consisting of 69 single detached lots and one (1) multi-family block was registered on September 12, 2008 as Plan 33M-596. Four (4) lots were left out of the final plan to be registered. These lots were subject to a condition of draft plan approval requiring a scoped EIS be completed within 30 metres of an Environmentally Significant Area (Kains Woods ESA).

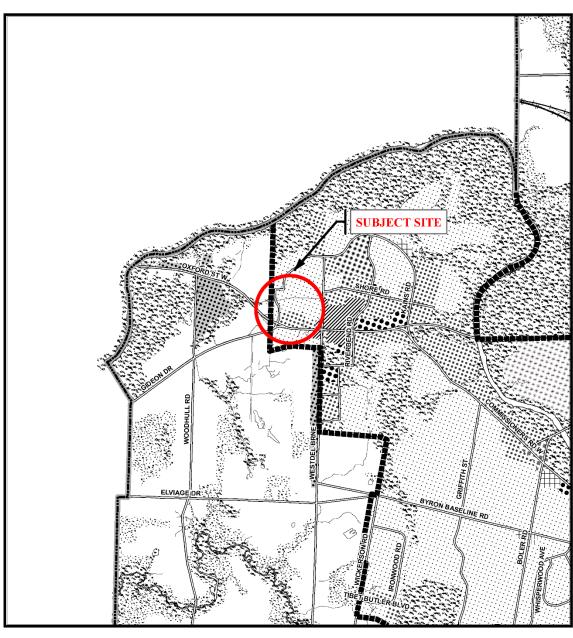
Tributary "C" Class EA

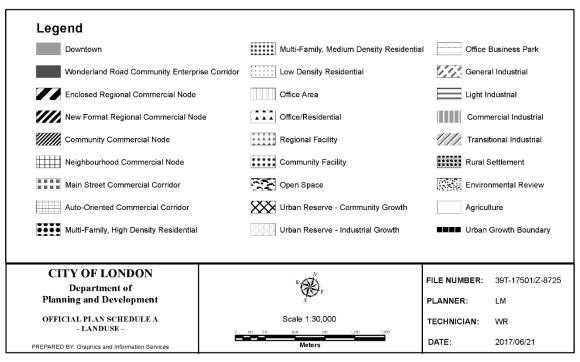
The Tributary "C" Municipal Class Environmental Assessment was completed by the City and approved in the later part of 2013. The purpose of the Municipal Class EA was to determine municipal infrastructure requirements including storm/drainage and stormwater management, transportation and sanitary trunk servicing works to service future undeveloped lands in the Riverbend area. The EA process focused on minimizing the impacts on the cold water tributary in the selection of the preferred alternative solution for stormwater management. Lands were recently acquired by the City from land owners in the area for construction of the facilities.

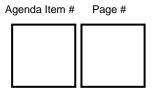
The main SWM pond (SWMF 'A') is located immediately adjacent to the proposed Eagle Ridge Phase II plan of subdivision. It is described in the Functional Design final report (Matrix Solutions Inc. August 2015) as a dry pond with a subsurface infiltration gallery providing water balance, infiltration storage and extended detention storage for quality and erosion control, and aboveground storage for peak flow control. Within the limits of the subdivision between SWMF 'A' and the north side of The Linkway, an interim SWMF is proposed to treat stormwater during construction activities before discharging into the ultimate SWMF 'A'. This facility will temporarily occupy lands within the draft plan and ultimately will become future residential development lots (Lots 8 - 24). The City of London is currently constructing the Tributary 'C' storm drainage and stormwater management servicing works.



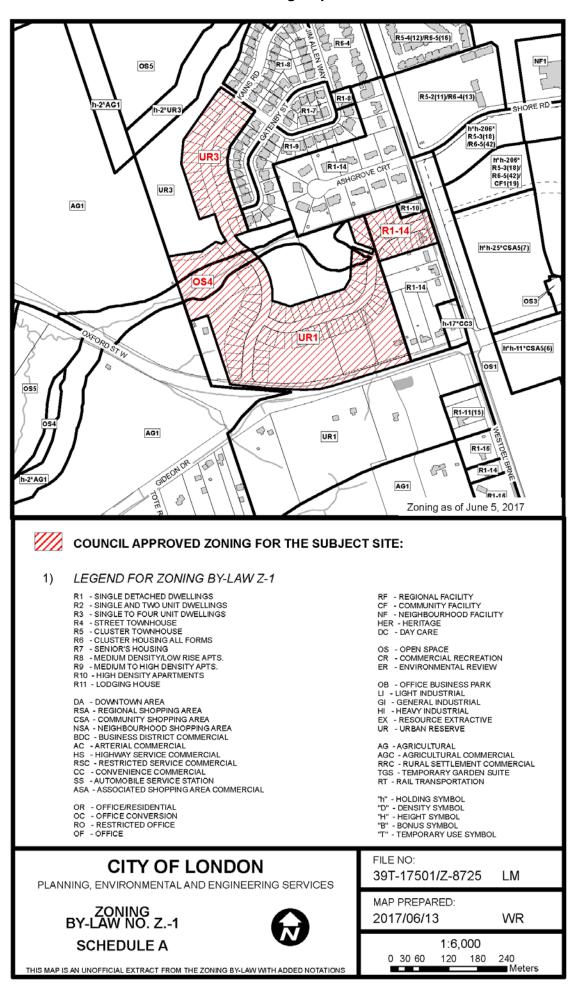
Official Plan Map

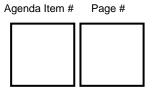




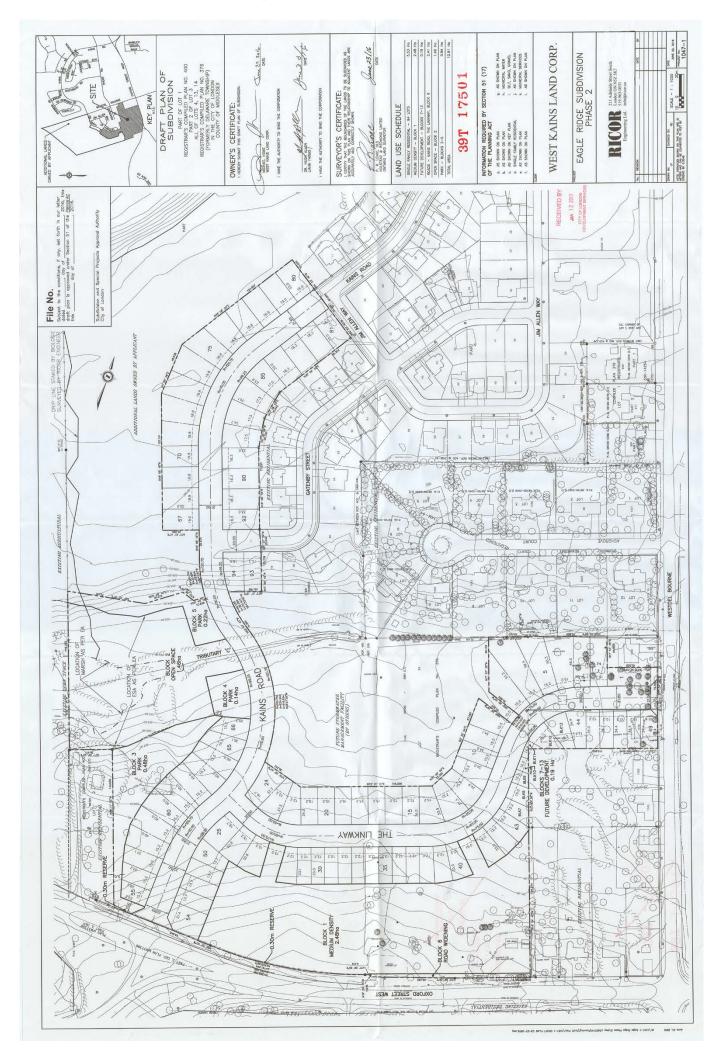


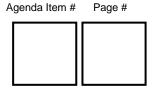
Zoning Map





Proposed Draft Plan of Subdivision





SIGNIFICANT DEPARMENT/AGENCY COMMENTS

Upper Thames River Conservation Authority (UTRCA)

The UTRCA has reviewed the following submissions:

- 1. West Kains Land Corporation Eagle Ridge Subdivision Phase II Scoped Environmental Impact Study prepared by AECOM dated June 1, 2016
- 2. Eagle Ridge Phase 2 Environmental Impact Study Addendum Response to Agency Comments prepared by AECOM dated May 8, 2017

The UTRCA has reviewed the Scoped EIS as well as the May 9, 2017 Response Letter to Agency Comments prepared by AECOM and are satisfied that the majority of our interests have been addressed. We request clarification of the following items which can be addressed through our Section 28 Permit process:

Comment / Response 5 & 13 - Please ensure that all areas of watercress are protected as these are indicators of locations of SWH for seeps / springs. Point 7 in Figure 5, Attachment C appears to lie outside of the ESA boundary shown on Figure 5, Attachment B.

Comment / Response 6 and 9 - There appears to still be some confusion in the text about the number of vegetation communities found within the study area. Response 6 states 4, while response 9 correctly states 10. We recognize that all of the communities, with the exception of CUW1 and a portion of CUW1-1, will be within the ESA, so are simply requesting clarification.

Comment / Response 18 - Not addressed. Please advise when the barn foundation will be removed and whether a tree removal inventory will be conducted.

Recommendation

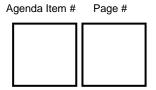
The UTRCA is generally satisfied with the proposed subdivision configuration and offers the following condition of draft plan approval:

That the necessary Section 28 approvals be obtained from the UTRCA prior to undertaking any site alteration or development within the regulated area. As indicated, the outstanding items related to the EIS can be addressed though the Conservation Authority's Section 28 permit process.

Staff response: The conditions of draft approval have captured the above recommendation (Conditions #73 & #97).

Environmental and Ecological Planning Advisory Committee (EEPAC)

The comments received from EEPAC to the circulation of the Eagle Ridge Phase II Scoped EIS are attached to this report at **Appendix** "E". Staff responses to EEPAC recommendations and reference to specific draft plan conditions are provided. The ecological consultant for West Kains Land Corp. (AECOM Canada Ltd.) has also provided a written response to the EEPAC comments/concerns found at **Appendix** "F".



PUBLIC LIAISON: On February 6, 2017, a Notice of Application for approval of Draft Plan of Subdivision and Zoning By-law Amendment was sent to 212 surrounding property owners. Notice was published in "The Londoner" on February 16, 2017.

12 replies received

Nature of Liaison: see "Requested Action" section.

Responses: Five telephone calls and seven written responses were received by Development Services. Individual responses to the public liaison letter and publication in "The Londoner" are summarized at the end of this report.

The main issues are:

Groundwater - Impact on the acquifer and private wells of neighbouring properties as a result of construction or dewatering activities.

Construction Access – Residents of existing Eagle Ridge neighourhood (Phase 1) want assurances construction vehicles and equipment will not enter or exit the site via Westdel Bourne, Kains Road and Gatenby Street.

Lot Size - Lots are proposed to be significantly smaller than those in the existing Eagle Ridge development. Lot sizes, house size and design should be in keeping with the character of the existing neighbourhood.

ANALYSIS

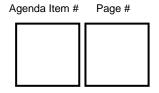
Existing Conditions

This Draft Plan of Subdivision comprises a total area of 12.9 hectares with approximately 382 metres of frontage along the north side of Oxford Street West, and 73 metres of frontage on the west side of Westdel Bourne. It currently consists of open fields in agricultural use (cash crops), and two existing residential dwellings fronting Oxford Street West and Westdel Bourne. The area is bisected by a tributary to the Thames River, referred to in the subwatershed studies as Tributary 'C'. This area was the subject of a comprehensive Municipal Class Environmental Assessment (EA) which established the preferred solution for storm drainage and stormwater management facilities, the alignment of Kains Road, and routing of sanitary trunk sewers.

The topography of the site slopes gently downwards from Oxford Street West and then rises to the north forming a valley on either side of the tributary channel. Elevations range from approximately 268 metres at the southeast corner of the site along Oxford Street West, approximately 252 metres along the tributary, and rising to approximately 260 metres on the agricultural tablelands to the north.

The subdivision south of Tributary 'C' is bounded by an existing residential property to the west (known as 2085 Oxford Street West), Oxford Street West to the south, and on the east by several residential dwellings fronting Oxford Street and Westdel Bourne that were built prior to annexation in 1993. Additionally, the site is partially bounded by several residential homes located on Ashgrove Court which were also developed prior to annexation. The area north of Tributary 'C' is bounded to the west and north by existing agricultural fields, and to the east of the first phase of the Eagle Ridge subdivision which is now built out. The SWMF 'A' stormwater management pond being constructed by the City is outside the limits of the proposed subdivision plan. The SWM pond will be integrated with the subdivision design providing access to open space, opportunities for multi-use pathways along maintenance access routes, and pedestrian linkages.

Further to the west beyond the City's Urban Growth Boundary is the Woodeden Easter Seals Camp. These lands are composed of significant vegetation cover consisting of a large unevaluated coniferous plantation. During the Tributary 'C' EA process, a detailed Environmental Impact Study was completed which identified a variety of Ecological Land Classifications (ELC's), including various meadows, marshes and swamps immediately adjacent



Tributary 'C' on the westerly portion of the subject lands. Additional environmental work was required to be undertaken, and a scoped EIS has been completed and submitted as part of this application for Draft Plan Approval.

Riverbend Community Plan

The subject lands are located within the Riverbend Planning District, and within the Riverbend Area Plan prepared by the Planning and Development Department in April 1998, and updated in June 2001. As part of that Area Plan these lands were identified for future residential development and designated "Low Density Residential", "Medium Density Residential", "Stormwater Management" and "Park". The proposed residential, park and open space uses contemplated for the Eagle Ridge Phase 2 draft plan of subdivision are consistent with the Riverbend Area Plan.

Official Plan

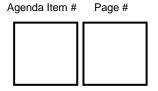
Under Schedule 'A' - Land Use, the subject lands are designated as "Low Density Residential" and "Multi-family, Medium Density Residential". The Low Density Residential designation primarily permits single, semi-detached and duplex forms of housing up to 30 units per hectare. The Multi-family, Medium Density designation is primarily intended for various forms of housing including row and cluster housing, low rise apartment buildings, rooming and boarding houses, small scale nursing homes, rest homes and homes for the aged up to a density of 75 units per hectare. This designation also permits single detached, semi-detached and duplex housing.

The application proposes development by way of plan of subdivision creating 94 single detached lots fronting public roads at an approximate net density of 17 units per hectare. One (1) multi-family, medium density residential block is proposed along the Oxford Street West frontage, consistent with the designation on Schedule 'A' in the Official Plan. Based on the requested zoning for this block, a range of residential dwelling types would be permitted including cluster single detached, townhouse and low rise apartments at a maximum density of 35 units per hectare with a maximum building height of 12 metres.

The only natural heritage feature within the subject lands as identified on Schedule B-1 of the Official Plan is an unevaluated wetland. This wetland did undergo evaluation as part of the Tributary 'C' Class Environmental Assessment and Environmental Impact Study, and as a result of that process was identified as a Provincially Significant Wetland (PSW) and an Environmentally Significant Area (ESA). As a follow-up to the detailed work undertaken as part of the Class EA EIS, a scoped EIS was completed and submitted for the Eagle Ridge Phase II development application to confirm ESA boundaries, appropriate buffers from the ESA, and to recommend any mitigation or compensation requirements.

The subject lands are also located within a groundwater recharge area. The Final Proposal Report submitted with this application noted that extensive groundwater studies were previously undertaken as part of the Class EA on the subject property and surrounding lands, and indicated no adverse impacts from development on the groundwater regime were anticipated. It was also noted that the proposed stormwater management facility includes infiltration galleries designed to facilitate and enhance groundwater recharge for the larger area. As part of this application, staff have recommended a number of conditions of draft plan approval with respect to the potential impacts on groundwater and appropriate mitigation measures. Further hydrogeological investigation work will be required to determine the effects of the construction associated with this subdivision on the existing ground water elevations and domestic or farm wells in the area, and to assess the impact on water balance.

Schedule B-2 – Natural Resources and Natural Hazards mapping identifies a Conservation Authority Regulation Limit and Regulatory Floodline following the Tributary 'C', and an Aggregate Resource Area delineation over a small area on the easterly extremity of the subject lands. The UTRCA's response to the circulation of this subdivision application is summarized in this report. The Conservation Authority indicated that they were generally satisfied with the proposed subdivision configuration noting that there are a few outstanding items requiring clarification that can be addressed through their Section 28 Permit process (DP Condition # 97). Commercial aggregate resource extraction is unlikely to be permitted due to existing adjacent residential development.



Schedule 'C' – Transportation Corridors mapping identifies the extension of Kains Road to Oxford Street West as a "Proposed Secondary Collector". The secondary collector was added at the time the Eagle Ridge Phase I draft plan of subdivision was being considered as there was no collector road identified within the lands west of Wesdel Bourne through the community planning process. The conceptual alignment originally recommended showed a 90 degree bend in the configuration of the future collector road as shown on Schedule 'C'. Through the Municipal Class EA - Environmental Study Report, the recommended preferred option for the alignment of the secondary collector road and crossing indicated that: "The extension of Kains Road shall include a curvilinear alignment to the east to provide as much clearance from the environmentally sensitive area as possible." The proposed Phase II draft plan of subdivision reflects the alignment established through the EA process.

The land use pattern and secondary collector road alignment in the proposed plan of subdivision generally reflect the designations and transportation corridors identified on Schedule "A" (Land Use) and Schedule "C" (Transportation Corridors) of the Official Plan. The proposed plan of subdivision (as red-line revised) together with the conditions of draft approval and recommended zoning, are in conformity with the Official Plan. Specific matters relating to the zoning, servicing and subdivision design are addressed in further detail below.

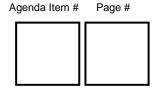
With respect to *The London Plan*, which has been adopted by City Council but is not yet in force and effect, the subject lands are within the "Neighbourhoods" Place Type permitting a range of uses such as single detached, semi-detached, duplex, triplex, and townhouse dwellings, and small-scale community facilities; and the "Green Space" Place Type. Uses within the Green Space place type are dependent upon the natural heritage features and areas contained on the subject lands, the hazards that are present, and the presence of natural resources which are to be protected. Various type of public parks are permitted including district, city-wide, and regional parks, and some neighbourhood parks; private green space uses such as cemeteries and private golf courses; agriculture, woodlot management, horticulture and urban gardens; conservation; essential public utilities and municipal services, storm water management, and recreational and community facilities.

Servicing / Infrastructure

The sanitary sewers to service this plan are the existing 750 mm diameter sanitary sewer outlet located on Kains Road, and the 200 mm diameter sanitary sewer located on Gatenby Street. Conditions of draft plan approval will require the Owner to construct the remainder of the trunk sanitary sewer on the proposed Kains Road extension. It is noted that the City of London Stormwater Engineering Division, through the Tributary 'C' detailed design and construction of the Tributary 'C' SWM Facility 'A', will design and construct the portion of the sanitary trunk sewer that is required to traverse the Tributary 'C' water course within the SWMF 'A' block. The Stormwater Engineering Division will provide, through the installation of the above-noted sanitary sewer, a connection point at the south and at the north of the water course (Tributary 'C') to facilitate the connection and continuation of the Owner-built trunk sanitary sewer. As part of the first submission of engineering drawings, an overall sanitary drainage area plan including external areas to be serviced will be required. Provision must also be made for oversizing of the internal sanitary sewers to accommodate flows from the upstream lands external to this plan.

Municipal water is available to service this development. The proposed subdivision will be required to connect to existing watermains located on Kains Road (300 mm), Gatenby Street (150 mm), Westdel Bourne (600 mm) and Oxford Street West (300 mm). As part of the conditions of Draft Plan Approval, a full water servicing report will be required to be submitted to the City for approval, including water distribution system analysis and modeling.

Storm sewers to serve this plan are the existing 525 mm diameter storm sewer located on Kains Road which will ultimately outlet to the proposed SWM Facility 'A' (to be constructed by the City) via the internal storm sewer servicing for this plan of subdivision. Oversizing and deepening of the internal storm sewers to accommodate flows from upstream lands external to this plan will be required.



Prior to issuance of any Certificates of Conditional Approval, all storm/drainage and SWM related works, including the Tributary 'C' SWM Facility 'A' and interim SWM Facility 'A' to serve this plan must be constructed and operational in accordance with the Municipal Class Environmental Study Report, approved design criteria and accepted drawings. (DP Condition # 18)

Conditions of draft plan approval will require the Owner to submit, as part of the Design Studies process, a Transportation Impact Assessment (TIA) to determine the impact of this development on the abutting arterial roads, including design criteria for left turn and right turn lanes on Oxford Street West at Kains Road and on Westdel Bourne at The Linkway. The TIA will also focus on sight line analysis and future traffic control requirements. (DP Condition # 39)

Traffic calming measures recommended by the City's Transportation Division include a raised intersection on Kains Road at Gatenby Street, and speed cushions on The Linkway between Lots 14 and 15, and on Kains Road on the property line between Lots 64 and 65, or as otherwise determined by the City. Should the overland flow route be affected by the raised intersection, the owner will be required to construct alternative traffic calming measures on Kains Road, to the satisfaction of the City.

Sidewalks will be required along both sides of Kains Road, the north side of The Linkway and the south side of Gatenby Street. Opportunities for enhanced pedestrian linkages between Kains Roads and Westdel Bourne via the SWMF 'A' access from The Linkway will be considered as part of the Design Studies and detailed engineering design. The extension of the Thames Valley Parkway (TVP) is proposed to cross Tributary 'C' at Kains Road within the right of way and then routed through the park blocks (Blocks 3, 4 & 5) located on either side of the ESA. The TVP crossing was provided for as part of the Municipal Class EA process. A concept plan on the following page illustrates the proposed pathway alignment at the crossing of the tributary, through the park blocks and connecting with Oxford Street West at Kains Road. As a condition of draft approval, Parks Planning staff request the applicant provide a conceptual pathway plan for the TVP from the existing pathway at Westdel Bourne and Kains Road to Oxford Street West, with consideration given to locating the pathway along the west side of the applicant's lands adjacent to/or within the Woodeden Camp woods. (DP Condition # 95)

Recommended Zoning

The following provides a synopsis of the recommended zones, permitted uses, regulations, and holding provisions to be applied to lots and blocks within the draft plan. Reference should be made to the zoning amendment map found on Page 27 of this report.

Holding Residential R1 (h•R1-4) Zone: Permits single detached dwellings on lots with a minimum lot frontage of 12 metres and minimum lot area of 360 square metres. This zone would be applied to the single detached lots fronting on portions of The Linkway and lots fronting the west side of Kains Road, south of Park Block 4 (Lots 1-7, Lots 25-43, Lots 44-49 and Lots 55-66 as shown on the submitted draft plan).

Holding Residential R1 (h•h-82•R1-4) Zone: This zone would be applied to the part block fronting The Linkway (Future Development Blocks 7 to 13 as shown on the submitted draft plan).

Holding Residential R1 (h•h-_•R1-4) Zone: This zone would be applied to lots on the north side of The Linkway adjacent SWMF 'A' (Lots 8-24 as shown on the submitted draft plan).

Holding Residential R1 (h•R1-8) Zone: Permits single detached dwellings on lots with a minimum lot frontage of 15 metres and minimum lot area of 600 square metres. This zone would be applied to the single detached lots fronting Kains Road north of Gatenby Street, and two lots fronting the south side of Gatenby Street (Lots 67-94 as shown on submitted draft plan).

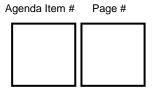
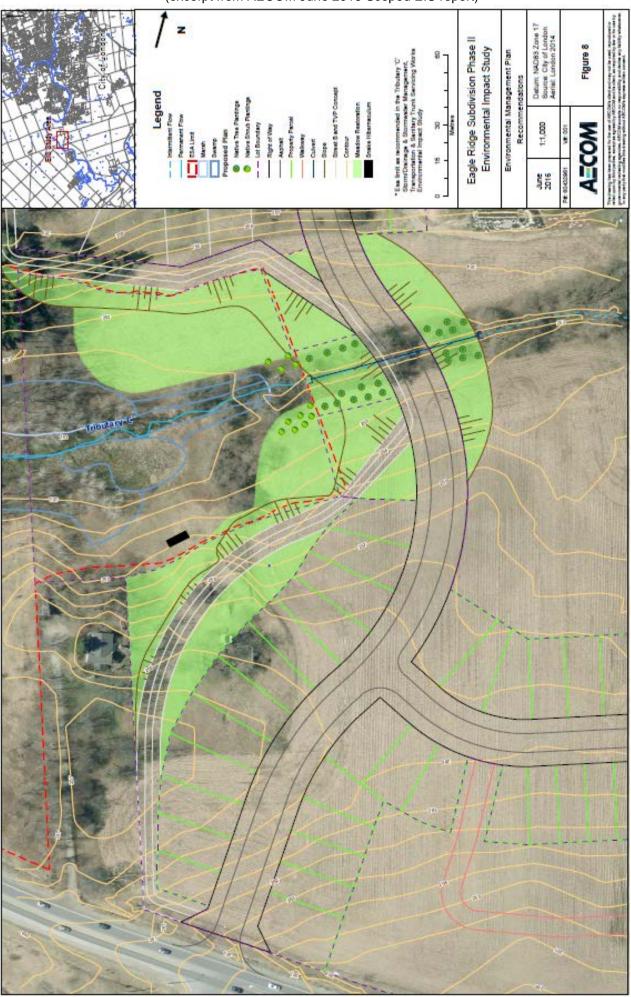
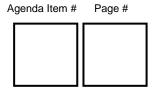


Figure 8 - Environmental Management Plan (excerpt from AECOM June 2016 Scoped EIS report)





Holding Residential R6 (h•h-54•h-71•R6-5) Zone permits various forms of cluster housing including single detached, semi-detached, duplex, triplex, fourplex, townhouse, stacked townhouse, and apartment buildings up to a maximum density of 35 units per hectare and maximum height of 12 metres. This zone would be applied to Medium Density Block 1, and the red-line revised lots on the east side of Kains Road north of Oxford Street West (Lots 50-54) to be consolidated with Block 1.

Open Space (OS1) Zone to permit such uses as conservation lands, conservation works, public and private parks. This zone would be applied to the Park Blocks (Blocks 3, 4, & 5).

Open Space (OS5) Zone to permit conservation lands, conservation works, passive recreation uses which include hiking trails and multi-use pathways, and managed woodlots. This zone would be applied to the Open Space Block (Block 2)

Holding Provisions

It is recommended that the standard holding (h) provision be applied to all proposed residential lots and blocks. The "h" provision is applied in almost all subdivision approvals for the purpose of ensuring adequate provision of municipal services, that the required security has been provided, and that a subdivision agreement or development agreement is entered into.

A holding (h-54) provision for the completion of a noise assessment report and implementation of noise attenuation measures for residential development adjacent an arterial road is recommended for the medium density block fronting Oxford Street West (Block 1). The h-54 symbol would be deleted from the zoning upon the owner agreeing to implement all noise attenuation measures, acceptable to the City of London. A holding (h-71) provision to encourage street oriented development and requiring the Owner to prepare a building orientation plan to be incorporated into the approved site plan and development agreement is also required for Block 1.

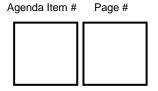
A holding (h-82) provision to ensure consistent lotting pattern and that any part blocks are consolidated with adjacent lands (Future Development Blocks 7 to 13 as shown on the submitted draft plan) is recommended.

A new site-specific holding (h-_) provision is recommended to ensure lots along the north side of the The Linkway adjacent SWM Facility 'A' are held out of development until the interim SWM Facility in this area has been decommissioned (Lots 8 to 24):

Purpose: To ensure orderly development of lands, the holding provision shall not be deleted until the interim SWM facility adjacent the south and southeast perimeter of SWM Facility 'A' is decommissioned to the satisfaction of the City of London, prior to the removal of the h-__symbol.

City-Initiated Zoning Review

A separate City-initiated Zoning amendment is recommended to change the zoning of lands, immediately adjacent to this plan identified as future stormwater management facility (SWMF 'A'), and described as Parts 1 and 2 Plan 33R-19671, from an Urban Reserve (UR1 and UR3) Zone and an Open Space OS4 Zone to an Open Space (OS1) Zone to permit conservation lands, conservation works, golf courses, public and private parks. This amendment is to address the use of the SWM facility lands concurrently with the review of this development application. The zoning amendment map is found on Page 29 of this report.



Evaluation of the Draft Plan of Subdivision Design

The road pattern and arrangement of corresponding lots and blocks has largely been influenced by the Class EA (and subsequent City-led functional design) which established the SWMF size and location, along with the alignment of Kains Road. The Linkway is required to serve as an east-west road connection between Kains Road and Westdel Bourne, and is aligned at the intersection of Westdel Bourne with The Linkway in the Sifton "West Five" draft plan to the east.

The northerly section of Kains Road north of Tributary 'C' consists of single detached dwelling lots fronting both sides with lot frontages of +18 metres. It continues the established lot pattern and is generally consistent with lot sizes in the existing Eagle Ridge Phase 1 development. A gap on the west side of Kains Road, opposite Gatenby Street, provides for public or private road access for future development phases. Both sides of Kains Road further south will be exposed to open space lands on either side of Tributary 'C' crossing resulting in the creation of a "window" street. This provides interesting vistas from Kains Road looking east and west and an important visual link to the park and open space areas.

On the south side of Tributary 'C' the single detached lots fronting Kains Road have lot frontages of +15 metres. The lot depth varies from approximately 25 to 40 metres. These lots will all back onto public parkland (Block 3) and the TVP trail. The interface of rear yards and park space provides a transition and buffer to the existing rural residential property adjacent the westerly limit of the draft plan.

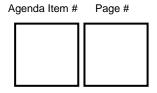
Lots sizes of single detached lots fronting on The Linkway will range from approximately 15 metres to 18 metres. These lots will be slightly smaller than the lot sizes to the north along Kains Road and within the Phase I development. However, the lot sizes are considered appropriate as the land use designation transitions from Low Density Residential to Multi-family, Medium Density Residential as you move towards Oxford Street West. Medium density block (Block 1) will be served by two accesses on the The Linkway. This block has extensive frontage and exposure along Oxford Street. As this represents a gateway to the City from the west, it is important that future multi-family development have a strong orientation to Oxford Street West as well as Kains Road. Holding provisions have been recommended for this block to address both road noise issues and to encourage street oriented development. At such time in the future as this block is developed, the holding provision will trigger the requirement for orientation plans to be prepared and incorporated into the approved site plan(s) and development agreement(s).

With respect to the blocks identified as Future Development Blocks (Blocks 7 to 13), it is recognized that additional lands outside the limits of the subdivision are required in order to create finished building lots. It is also desirable to maintain the ability to continue the residential lot pattern along The Linkway. Surplus lands at the rear of the deep lots fronting on the west side of Westdel Bourne provide future development opportunities that could be integrated within this subdivision with potential access and servicing from The Linkway.

Natural Heritage

A scoped EIS in conjunction with this application has been prepared by AECOM and accepted by the City. The findings of the EIS indicate the proposed Eagle Ridge Phase II development results in no net environmental impacts to the features and functions within and adjacent to the proposed development lands. The "no net impact" is based on the following excerpt from the AECOM June 2016 report:

- Direct impacts to natural heritage features have been avoided. The proposed development plan has maintained residential lots, the Kains Road crossing of Tributary "C" and the Thames Valley Parkway trail to areas outside of the Tributary "C" Provincially Significant Wetland (PSW) and Environmentally Significant Area (ESA).
- Loss of any vegetation has been limited to cultural vegetation, and is minimal in area.
- Loss of potential snake habitat and treed vegetation along Tributary "C" will be compensated for.



• Potential impacts to Tributary "C" at the Kains Road crossing will be minimal with the installation of an open bottom culvert and with the installation of servicing along Kains Road above Tributary "C".

In order to protect natural heritage feature and functions, an Environmental Management Plan has been prepared for Eagle Ridge Phase II that includes the following:

- 1. Natural Heritage Features Recommended for Protection where development is not permitted,
- 2. Buffer Recommendations designed to protect identified features and their functions on lands adjacent to the development area,
- 3. Development Mitigation Recommendations intended to protect identified features and functions.
- 4. Construction Mitigation and Monitoring Recommendations to prevent and mitigate any potential impacts resulting from the construction phase of the project.

With the implementation of these recommendations no net negative impacts are anticipated for the Tributary C Provincially Significant Wetland, the resident brook trout cold-water fishery, and the Environmentally Significant Area as a result of the proposed development.

Parks

The total area of parkland and open space is 0.89 hectares, slightly more than the required 5% dedication of 0.57 hectares. Two small park blocks (Blocks 4 and 5) are located on the west side of Kains Road, directly opposite SWMF 'A'. These blocks could provide an attractive neighbourhood amenity with landscaping and seating areas along with the TVP. Both blocks provide additional buffer to the open space block. Draft plan conditions require the owner to provide a conceptual park plan delineating the alignment of the multi-use pathway through Blocks 3, 4, & 5 and amenities to be included will be determined in consultation with City's Environmental and Parks Planning staff (DP Condition # 96).

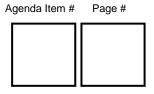
An additional park block (Block 3) is intended to accommodate the TVP and provide a buffer between new development and the existing residence at 2085 Oxford Street West.

Red Line Revisions

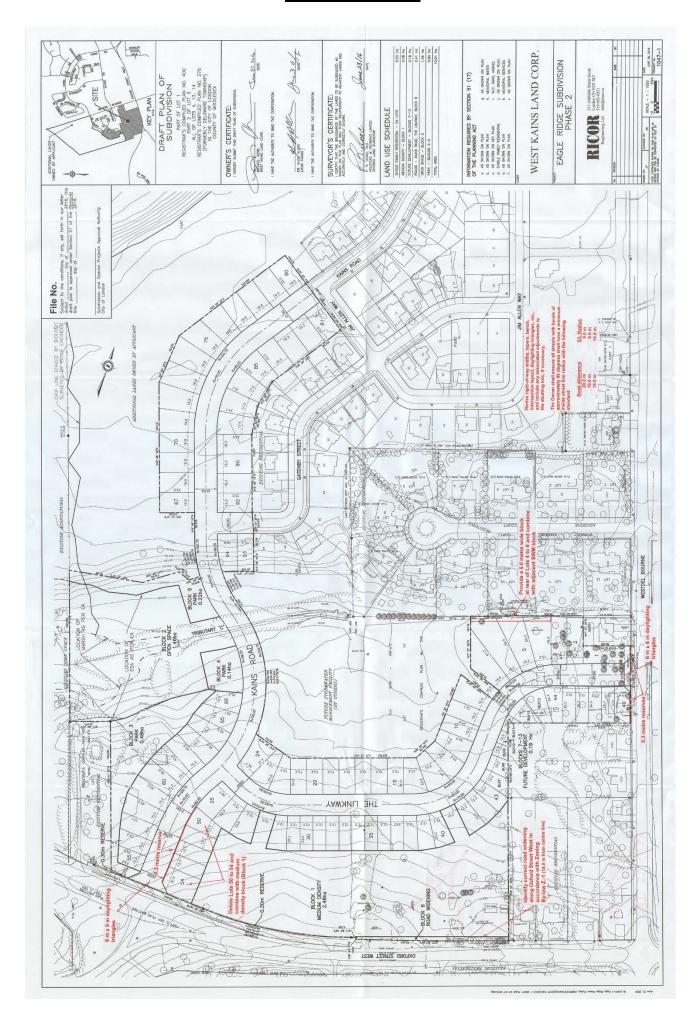
Several technical revisions are being recommended through red line revisions to the draft plan as outlined below. These are based on feedback received from Development Services Engineering Review Staff and the various Environmental and Engineering Services Divisions of the City of London.

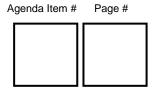
Recommended draft plan red line revisions are as follows:

- Provide a 5.0 metre wide block at rear of Lots 4 to 6 combined with adjacent SWM block in order to provide an access for future sanitary and storm sewer servicing of external lands on Ashgrove Court.
- Delete Lots 50 to 54 and combine this area with medium density block (Block 1) in order to accommodate a possible future roundabout at the Oxford/Gideon/Kains intersection, and to avoid individual entrances on Kains Road as entrances close to the roundabout, particularly on the leaving leg are undesirable.
- Provide a 0.3 metre reserve along the Kains Road frontage of red line revised Block 1 and along the lots fronting/flanking Westdel Bourne.
- Identify correct road widening along Oxford Street West in accordance with Zoning Bylaw Z.-1 (18.0 m from centre line).
- 6 m x 6 m daylighting triangles at intersection of The Linkway and Westdel Bourne.
- 9 m x 9 m daylighting triangles at the intersection of Kains Road and Oxford Street West.



Red Line Revisions





Response to Public Comments

Groundwater – Concerns were expressed by the resident at 2085 Oxford Street West regarding impact on the aquifer and the quality and quantity of potable water from private wells of neighbouring properties as a result of construction or dewatering activities.

A number of conditions of draft plan approval with respect to the potential impacts on groundwater and mitigation measures are recommended to address this issue. Further hydrogeological investigation work will be required to determine the effects of the construction associated with this subdivision on the ground water resources and existing private wells in the area, as well as implementation of a groundwater monitoring program, and short term and long term contingency plans. (DP Conditions No. 22, 23 & 24)

Construction Access – Concerns were expressed by residents within the Eagle Ridge Phase 1 neighbourhood about traffic and children's safety. Residents want assurances construction vehicles and equipment will not enter or exit the site via Westdel Bourne through Kains Road and Gatenby Street.

The designated access for construction traffic is from Westdel Bourne at the proposed intersection with The Linkway, with a possible secondary access provided from Oxford Street West. (DP Condition No. 51)

Lot Sizes – Concern was expressed regarding the proposed lots and future homes being smaller, and not fitting in with the character of the existing Eagle Ridge development.

The proposed lot pattern is considered to be well integrated with the existing developed phase. Lots along the northerly extension of Kains Road and backing onto Gatenby Street have similar lot size (frontage and depth). As can be seen on the zoning amendment map (in Appendix 'A') the recommended Residential R1-8 zone is consistent with the zoning already in place along Kains Road and portion of Gatenby Street. It is also recognized that there are more 12-15 metre lots within the proposed R1-4 zone further to the south along Kains Road and The Linkway. The transition to smaller lot frontages is interrupted by park blocks and open spaces provided by the future SWM facility lands. The recommended zoning and proposed lot sizes along The Linkway in proximity to the medium density block and Oxford Street West is considered appropriate.

Parks & Playground Space – Concern was expressed that the plan does not provide adequate parks and open space.

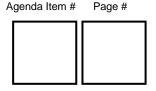
The park blocks proposed within Phase II are expected to provide passive recreation and amenity space, as well as accommodate the TVP. The active public park serving this area of the City is Riverbend District Park to the east of Westdel Bourne. This park is 6.5 hectares (16 acres) in size consisting of playground equipment and sports fields. The park is within 485 metres walking distance of the northerly limit, and 380 metres walking distance from the easterly limit of the proposed draft plan.

Provincial Policy Statement

The recommended red line revised draft plan and the recommended Zoning By-law amendments are consistent with the Provincial Policy Statement 2014, as summarized as follows:

Building Strong Healthy Communities

The subject lands are located within the City's Urban Growth Boundary, and part of the Riverbend Community Planning area. The proposed development meets objectives of creating healthy, liveable, safe, and sustainable communities by promoting efficient and resilient development patterns, and accommodating an appropriate range and mix of low and medium density residential, passive recreational, and open space uses to meet long-term needs. These lands are adjacent to existing built-up areas to the north and east. Development will utilize full municipal services which are currently available or are under construction. The proposed development will include a multi-use trail, which



promotes cycling and pedestrian movement, and opportunities for pedestrian/cycling linkages outside the proposed subdivision around an adjacent SWM Facility will enhance neighbourhood connectivity.

2. Wise Use and Management of Resources

A Scoped Environmental Impact Study has been prepared in conjunction with the Eagle Ridge Phase 2 subdivision plan to demonstrate no negative impact to the natural features or their ecological functions. Measures for protecting/preserving the natural heritage features will be implemented in the Phase II draft plan, including fencing, construction mitigation, homeowner's education package, creation of snake habitat, renaturalization and restoration. The proposed development will apply appropriate stormwater management practices to protect water resources by utilizing a new SWM facility which has been approved in accordance with the Tributary 'C' Class Environmental Assessment. There are no identified concerns for protection of agricultural, mineral aggregates, or cultural heritage and archaeological resources. An Archaeological Assessment (Stages 1 to 3) was previously undertaken in 2009, and a more recent assessment (Stages 1 & 2) was completed in 2014.

3. Protecting Public Health and Safety

These lands are located within a Conservation Authority regulated area and a Section 28 permit is required prior to development or site alteration activity. There are no known human-made hazards.

CONCLUSION

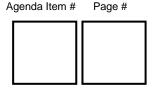
Based on Staff's review, the proposed Eagle Ridge Phase II Draft Plan of Subdivision and Zoning By-law amendments are consistent with the PPS, the City's Official Plan, and the Riverbend Community Plan. The recommended red-lined draft plan and conditions of draft approval will create a residential subdivision compatible with adjacent lands, provide good connectivity, and appropriate protection and enhancement of natural heritage resources. The proposed plan represents good land use planning and is an appropriate form of development.

PREPARED AND RECOMMENDED BY:	REVIEWED BY:
LARRY MOTTRAM, MCIP, RPP SENIOR PLANNER – DEVELOPMENT SERVICES	ALLISTER MACLEAN, MCIP, RPP MANAGER, DEVELOPMENT PLANNING
REVIEWED BY:	SUBMITTED BY:
PAUL YEOMAN, RPP, PLE DIRECTOR, DEVELOPMENT SERVICES	GEORGE KOTSIFAS, P. ENG. MANAGING DIRECTOR, DEVELOPMENT & COMPLIANCE SERVICES AND CHIEF BUILDING OFFICIAL

July 10, 2017

GK/PY/AM/LM/Im "Attach."

 $Y:\Shared\DEVELOPMENT\ SERVICES\4 - Subdivisions\2017\39T-17501 - 810\ Westdel\ Bourne\ (LM)\Draft\ Approval\PEC\ Report.docx$



Responses to Public Liaison Letter and Publication in "The Londoner"

Telephone

Greg Woodworth 2445 Gatenby Street

- Inquiry
- Concerned about the small minimum lot sizes proposed

Jennifer Neilson 2458 Gatenby Street

- Concern about the style and value of homes to be built behind her home, type of fencing, and matching of grades
- Appears to be squeezing in more lots
- Concern about playground facilities
- Feels proposed plan does not provide adequate area for parks and open space
- Impact on natural environment and wildlife habitat

Brian Richards 2473 Gatenby Street

- Concern about construction traffic and access during development
- Must not use Kains Road for construction access

Howard Botten Woodeden Camp 3311 Oxford Street West

- Add to notification list

Phylis Matthews 2233 Jack Nash Drive

- Inquiry as to status of application

Written

Andrew Fediw 2437 Gatenby Street

- Proposed lots are significantly smaller
- Lot sizes, house size and design should be in keeping with the character of the existing Eagle Ridge development

Greg Woodworth 2445 Gatenby Street

- Concern about smaller lot sizes proposed
- Existing homeowners were required to sign a covenant to build minimum size home and meet design criteria to maintain integrity of overall neighbourhood
- Current proposal is unfair to existing homeowners
- Developer should be required to maintain the existing lots sizes, or create two subdivisions dead-ending at Gatenby Street.

Brian Richards 2473 Gatenby Street

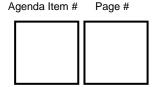
- Inquiry about construction activity on the

Cathy Jones 2492 Gatenby Street

- So many additional units will contribute to traffic congestion and there are very few public transit options
- Want assurances construction vehicles will not access site using existing Kains Road from Westdel Bourne or Gatenby Street
- Safety concern for children
- More people including families means more demand for a community centre for the area

Dr. Iris Gutmanis 2085 Oxford Street West

- Owner of property immediately adjacent the proposed subdivision
- Very concerned about the impact on quality and quantity of groundwater from construction activity and dewatering, and impact on potable well water
- Request developer conduct monthly water testing during construction and for five years following construction, and to be provided with the test reports
- Request written contingency plans from the developer in the event the well is damaged by construction



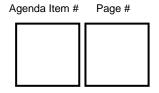
- Should water quality/quantity be impacted, wants assurances a mitigation strategy will be put in place, that developer will cover all costs and expenses, the timeline for the work, and input into the selection of the company managing the proposed mitigation strategy
- Concerns about impact on privacy, trespassing, increased traffic, impact on coldwater fishery, loss of surrounding farmland and wildlife habitat

Lino Prelazzi and Jennifer Cross 1968 Riverbend Road

- Request 3-Way Stop signs at intersection of Kains Road and The Linkway to slow and calm traffic entering the subdivision from Gideon Drive

Rolf Dawson 2445 Kains Road

- During development access to the site should only be from Oxford Street at the intersection with future extension of Kains Road at Gideon Drive, or from Westdel Bourne at its future intersection with the Linkway
- Under no circumstances should development access be granted from the existing Kains Road which is a relatively narrow street running through a built-up residential neighbourhood with many young families
- There is concern for the safety of children, and impact of construction from noise, dust and disruption
- Access must be strictly enforced during course of construction (signage, contractor briefings, police and by-law enforcement)
- Enforce requirements for mud mats and other measures designed to minimize mud/dirt/dust outside the construction area



Bibliography

Request for Approval:

Final Proposal Report – Eagle Ridge Phase 2, submitted by Craig Linton - Developro Land Services Inc., prepared by West Kains Land Corp., December 16, 2016

Eagle Ridge Subdivision Phase II Scoped Environmental Impact Study, prepared by AECOM for West Kains Land Corp., June 1, 2016

City of London Subdivision Application Form, completed by Craig Linton - Developro Land Services Inc., dated June 30, 2016

Draft Plan of Subdivision prepared by RICOR Engineering Ltd., dated June 20, 2016

City of London Zoning By-law Amendment Application Form, completed by Craig Linton - Developro Land Services Inc., dated June 30, 2016

Reference Documents:

City of London Official Plan, June 19, 1989, as amended

City of London, Zoning By-law No. Z.-1, May 21, 1991, as amended

Ontario Ministry of Municipal Affairs and Housing, *Planning Act, R.S.O. 1990, CHAPTER P. 13*, as amended

Ontario Ministry of Municipal Affairs and Housing, Provincial Policy Statement, April 30, 2014

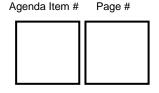
Riverbend Community Plan prepared by City of London Department of Planning and Development, dated April 22, 1998 and updated June 18, 2001

Municipal Class Environmental Study Report – Schedule 'C', Storm/Drainage & Stormwater Management, Transportation & Sanitary Trunk Servicing Works for Tributary 'C', Downstream Thames Subwatershed Report (Final) prepared by AECOM, dated December 2013

Final Report – Functional Design of the Tributary 'C' Storm Drainage and Stormwater Management Servicing Works Downstream Thames River Subwatershed City of London, Ontario, prepared by Matrix Solutions Inc., August 2015

<u>Correspondence: (located in City of London File No. 39T-17501 / Z-8725 unless otherwise stated)</u>

Various hard copy and e-mail correspondences



APPENDIX "A" Zoning By-law Amendment

Bill No. (number to be inserted by Clerk's Office) 2017	
By-law No. Z1	

A by-law to amend By-law No. Z.-1 to rezone lands located at 810 Westdel Bourne, portion of 1055 Westdel Bourne, 1079 Westdel Bourne, 1959 and 1997 Oxford Street West.

WHEREAS Craig Linton, Developro Land Services Inc. on behalf of West Kains Land Corp. and Liahn Farms Ltd. has applied to rezone lands located at 810 Westdel Bourne, portion of 1055 Westdel Bourne, 1079 Westdel Bourne, 1959 and 1997 Oxford Street West, as shown on the map attached to this by-law, as set out below;

AND WHEREAS this rezoning conforms with the Official Plan;

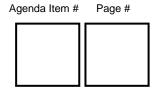
NOW THEREFORE the Municipal Council of The Corporation of the City of London enacts as follows:

- 1. Schedule "A" to By-law No. Z.-1 is amended by changing the zoning applicable to lands located at 810 Westdel Bourne, portion of 1055 Westdel Bourne, 1079 Westdel Bourne, 1959 and 1997 Oxford Street West, as shown on the attached map, **from** an Urban Reserve (UR1 and UR3) Zone, a Residential R1 (R1-14) Zone, and an Open Space OS4 Zone **to** a Holding Residential R1 (h•R1-4) Zone, a Holding Residential R1 (h•h-82•R1-4) Zone, a Holding Residential R1 (h•h-_•R1-4) Zone, a Holding Residential R1 (h•h-54•h-71•R6-5) Zone, an Open Space (OS1) Zone, and an Open Space (OS5) Zone.
- 2. Section 3.8 of the Holding (h) Zones to By-law No. Z.-1 is amended by adding the following Holding Provision:

h-(___)

Purpose: To ensure orderly development of lands, the holding provision shall not be deleted until the interim SWM facility adjacent the south and southeast perimeter of SWM Facility 'A' is decommissioned to the satisfaction of the City of London, prior to the removal of the h-___ symbol.

Permitted Interim Uses: Existing Uses



3. Section Number 4.21 Road Allowance Requirements - Specific Roads to By-law No. Z.-1 is amended by adding the following road:

Street From To Street Limit of Road
Classification Allowance
Measured from

Allowance
Measured from
Centreline

10.75 m (35.3 ft.)

Kains Road North limit Oxford Secondary (39T-17501) of Plan Street West Collector

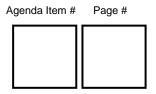
This By-law shall come into force and be deemed to come into force in accordance with subsection 34(21) of the *Planning Act, R.S.O. 1990, c. P.13*, either upon the date of the passage of this by-law or as otherwise provided by the said subsection.

PASSED in Open Council on July 25, 2017.

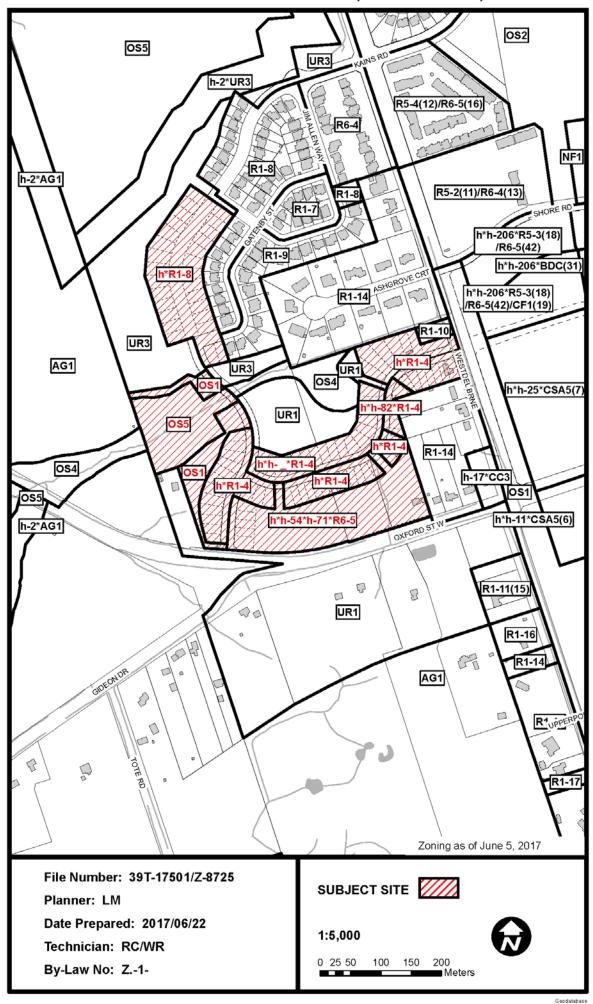
Matt Brown Mayor

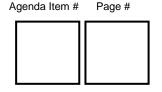
Catharine Saunders City Clerk

First Reading – July 25, 2017 Second Reading – July 25, 2017 Third Reading – July 25, 2017



AMENDMENT TO SCHEDULE "A" (BY-LAW NO. Z.-1)





APPENDIX "B" Zoning By-law Amendment

Bill No. (number to be inserted by Clerk's Office) 2017

By-law No. Z.-1-_____

A by-law to amend By-law No. Z.-1 to rezone lands identified for a stormwater management facility (SWMF 'A') located immediately adjacent a proposed draft plan of subdivision (Application File No. 39T-17501), and described as Parts 1 and 2 Plan 33R-19671.

WHEREAS the Corporation of the City of London has initiated a review of the zoning of lands identified for a stormwater management facility (SWMF 'A') located immediately adjacent a proposed draft plan of subdivision (Application File No. 39T-17501), and described as Parts 1 and 2 Plan 33R-19671, as shown on the map <u>attached</u> to this by-law, as set out below:

AND WHEREAS this rezoning conforms with the Official Plan;

NOW THEREFORE the Municipal Council of The Corporation of the City of London enacts as follows:

4. Schedule "A" to By-law No. Z.-1 is amended by changing the zoning applicable to lands identified for a stormwater management facility (SWMF 'A') located immediately adjacent a proposed draft plan of subdivision (Application File No. 39T-17501), and described as Parts 1 and 2 Plan 33R-19671, as shown on the <u>attached</u> map, **from** an Urban Reserve (UR1 and UR3) Zone and an Open Space OS4 Zone **to** an Open Space (OS1) Zone.

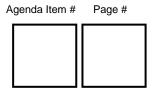
This By-law shall come into force and be deemed to come into force in accordance with subsection 34(21) of the *Planning Act, R.S.O. 1990, c. P.13*, either upon the date of the passage of this by-law or as otherwise provided by the said subsection.

PASSED in Open Council on July 25, 2017.

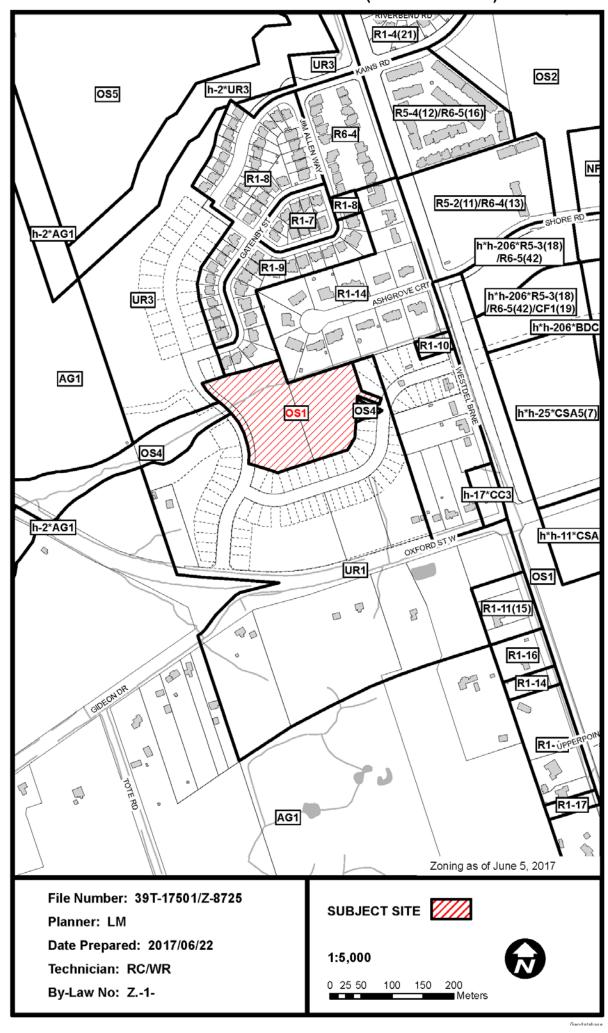
Matt Brown Mayor

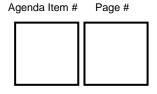
Catharine Saunders City Clerk

First Reading – July 25, 2017 Second Reading – July 25, 2017 Third Reading – July 25, 2017



AMENDMENT TO SCHEDULE "A" (BY-LAW NO. Z.-1)





APPENDIX "C" (Conditions to be included for draft plan approval)

THE CORPORATION OF THE CITY OF LONDON'S CONDITIONS AND AMENDMENTS TO FINAL APPROVAL FOR THE REGISTRATION OF THIS SUBDIVISION, FILE NUMBER 39T-17501 ARE AS FOLLOWS:

NO. CONDITIONS

- 1. This draft approval applies to the draft plan as submitted by RICOR Engineering Ltd. (File No. 39T-17501), prepared by Holstead & Redmond Limited and certified by P. R. Levac, Ontario Land Surveyor dated June 20, 2016 (Project No. 1047-1), as red-lined revised, which shows 89 single detached residential dwelling lots, 1 medium density residential block, 2 open space blocks, 3 park blocks, 7 part blocks for future development, 5 reserve blocks, and 1 road widening block.
- 2. This approval applies for three years, and if final approval is not given by that date, the draft approval shall lapse, except in the case where an extension has been granted by the Approval Authority.
- 3. The road allowances included in this draft plan shall be shown on the face of the plan and dedicated as public highways.
- 4. The Owner shall request that street(s) be named to the satisfaction of the City.
- 5. The Owner shall request that the municipal addresses be assigned to the satisfaction of the City.
- 6. Prior to final approval, the Owner shall submit to the City a digital file of the plan to be registered in a format compiled to the satisfaction of the City of London and referenced to NAD83UTM horizon control network for the City of London mapping program.
- 7. The Owner shall enter into the City's standard subdivision agreement (including any added special provisions) which shall be registered against the lands to which it applies. Prior to final approval the Owner shall pay in full all municipal financial obligations/encumbrances on the said lands, including property taxes and local improvement charges.
- 8. In conjunction with registration of the Plan, the Owner shall provide to the appropriate authorities such easements and/or land dedications as may be required for all municipal works and services associated with the development of the subject lands, such as road, utility, drainage or stormwater management (SWM) purposes, to the satisfaction of the City, at no cost to the City.
- 9. Prior to final approval, for the purposes of satisfying any of the conditions of draft approval herein contained, the Owner shall file with the City a complete submission consisting of all required clearances, fees, and final plans, and to advise the City in writing how each of the conditions of draft approval has been, or will be, satisfied. The Owner acknowledges that, in the event that the final approval package does not include the complete information required by the City, such submission will be returned to the Owner without detailed review by the City.
- 10. Prior to final approval, for the purpose of satisfying any of the conditions of draft approval herein contained, the Owner shall file with the City complete submissions consisting of all required studies, reports, data, information or detailed engineering drawings, all to the satisfaction of the City. The Owner acknowledges that, in the event that a submission does not include the complete information required, such submission will be returned to the Owner without detailed review by the City.

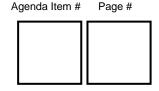
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SEWERS & WATERMAINS

Sanitary:

11. In conjunction with the first submission of engineering drawings, the Owner shall provide an overall sanitary drainage area plan, including the external areas to be serviced, and recommend any inflow and infiltration mitigation measures to meet allowable inflow and infiltration level as identified by OPSS 407 and OPSS 410 as well as any additional measures recommended in the hydrogeological report, to the satisfaction of the City.

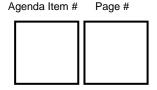
- 12. In accordance with City standards or as otherwise required by the City Engineer, the Owner shall complete the following for the provision of sanitary services for this draft plan of subdivision:
 - Construct sanitary sewers to serve this Plan and connect them to the existing municipal sewer system, namely, the 750 mm diameter sanitary sewer located on Kains Road and 200 mm diameter sanitary sewer located on Gatenby Street;
 - ii) Construct the remainder of the trunk sanitary sewer on the proposed Kains Road extension, all to the satisfaction of the City Engineer. It is noted that the City of London Stormwater Engineering Division through the Tributary 'C' detailed design and construction of the Tributary 'C' SWM Facility 'A' will design and construct the portion of the sanitary trunk sewer that is required to traverse the Tributary 'C' water course within the Stormwater management Block (33R-19671). The Stormwater Engineering Division will provide through the installation of the above-noted sanitary sewer, a connection point at the south and at the north of the water course (Tributary 'C') to facilitate the connection and continuation of the Owner built trunk sanitary sewer.
 - iii) Make provisions for oversizing of the internal sanitary sewers in this draft plan to accommodate flows from the upstream lands external to this plan, all to the satisfaction of the City. This sewer must be extended to the limits of this plan and/or property line to service the upstream external lands; and
 - iv) Where trunk sewers are greater than 8 metres in depth and are located within the municipal roadway, the Owner shall construct a local sanitary sewer to provide servicing outlets for private drain connections, to the satisfaction of the City. The local sanitary sewer will be at the sole cost of the Owner. Any exception will require the approval of the City Engineer.
- 13. In order to prevent any inflow and infiltration from being introduced to the sanitary sewer system, the Owner shall, throughout the duration of construction within this plan, undertake measures within this draft plan to control and prevent any inflow and infiltration and silt from being introduced to the sanitary sewer system during and after construction, satisfactory to the City, at no cost to the City, including but not limited to the following:
 - i) Not allowing any weeping tile connections into the sanitary sewers within this Plan;
 - ii) Permitting the City to undertake smoke testing or other testing of connections to the sanitary sewer to ensure that there are no connections which would permit inflow and infiltration into the sanitary sewer.
 - iii) Installing Parson Manhole Inserts (or approved alternative satisfactory to the City Engineer) in all sanitary sewer maintenance holes at the time the maintenance hole(s) are installed within the proposed draft plan of subdivision. The Owner shall not remove the inserts until sodding of the boulevard and the top lift of asphalt is complete, all to the satisfaction of the City Engineer.
 - iv) Having his consulting engineer confirm that the sanitary sewers meet allowable inflow and infiltration levels as per OPSS 410 and OPSS 407; and
 - v) Implementing any additional measures recommended through the Design Studies stage.
- 14. Prior to registration of this Plan, the Owner shall obtain consent from the City Engineer to reserve capacity at the Oxford Pollution Control Plant for this subdivision. This treatment capacity shall be reserved by the City Engineer subject to capacity being available, on the condition that registration of the subdivision agreement and the plan of subdivision occur within one (1) year of the date specified in the subdivision agreement.



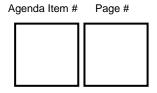
Failure to register the Plan within the specified time may result in the Owner forfeiting the allotted treatment capacity and, also, the loss of his right to connect into the outlet sanitary sewer, as determined by the City Engineer. In the event of the capacity being forfeited, the Owner must reapply to the City to have reserved sewage treatment capacity reassigned to the subdivision.

Storm and Stormwater Management (SWM)

- 15. In conjunction with the first submission of detailed engineering drawings, the Owner shall have his consulting engineer prepare and submit a Functional Storm/Drainage and SWM Servicing Letter or Report to address the following:
 - i) Identifying the storm/drainage and SWM servicing works for the subject and external lands and how the interim drainage from external lands will be handled, all to the satisfaction of the City;
 - ii) Identify winter maintenance operations protocol for all proposed road infrastructures within this plan that have the potential to directly impact the Tributary 'C' environmentally sensitive area(s), all to the specifications and satisfaction of the City Engineer;
 - iii) Provide preliminary calculations to show the impact to the MEWS SWM Facility from the increased flows and also preliminary calculations showing the surcharging in the existing sewer system. Should surcharging be occurring, provide hydraulic grade line calculations;
 - iv) Developing an enhanced erosion/sediment control plan that will identify all erosion and sediment control measures for the subject lands in accordance with City of London and Ministry of the Environment standards and requirements, all to the satisfaction of the City. This plan is to include measures to be used during all phases on construction;
 - v) Ensure the post-development discharge flow from the subject site does not exceed capacity of the stormwater conveyance system. In an event where the condition cannot be met, the Owner shall provide SWM on-site controls that comply to the accepted Design Requirements for permanent Private Stormwater Systems.
 - vi) Ensure that all existing upstream external flows traversing this plan of subdivision are accommodated within the overall minor and major storm conveyance servicing system(s) design, all to the specifications and satisfaction of the City Engineer.
 - vii) Implementing SWM soft measure Best Management Practices (BMP's) within the Plan, where possible, to the satisfaction of the City. The acceptance of these measures by the City will be subject to the presence of adequate geotechnical conditions within this Plan and the approval of the City Engineer.
- 16. The above-noted Functional Storm/Drainage and SWM Letter or Report, prepared by the Owner's consulting professional engineer, shall be in accordance with the recommendations and requirements of the following:
 - i) The SWM criteria and environmental targets for the Downstream Thames Subwatershed Study and any addendums/amendments;
 - ii) The Municipal Class Environmental Study Report Schedule 'C' Storm/Drainage and Stormwater Management, Transportation and Sanitary Trunk Servicing Works for Tributary 'C', Downstream Thames Subwatershed (AECOM, Dec. 2013) and any addendums/amendments;
 - iii) The Functional Design of the Tributary 'C' Storm Drainage and Stormwater Management Servicing Works Downstream Thames River Subwatershed Report (Matrix Solutions Inc., Aug 2015) and any addendums/amendments;
 - iv) The City's Design Requirements for Permanent Private Stormwater Systems approved by City Council and effective as of January 1, 2012. The stormwater requirements for PPS for all medium/high density residential, institutional, commercial and industrial development sites are contained in this document, which may include but not be limited to quantity/quality control, erosion, stream morphology, etc.;
 - v) The City of London Environmental and Engineering Services Department Design Specifications and Requirements, as revised;



- vi) The City's Waste Discharge and Drainage By-laws, lot grading standards, Policies, requirements and practices;
- vii) The Ministry of the Environment and Climate Change (MOECC) SWM Practices Planning and Design Manual, as revised; and
- viii) Applicable Acts, Policies, Guidelines, Standards and Requirements of all required approval agencies.
- 17. In accordance with City standards or as otherwise required by the City Engineer, the Owner shall complete the following for the provision of stormwater management (SWM) and stormwater services for this draft plan of subdivision:
 - i) Construct storm sewers to serve this plan, located within the Downstream Thames Subwatershed, and connect them to the existing municipal storm sewer system, namely, the 525 mm diameter storm sewer located on Kains Road and outletting to the proposed SWM Facility 'A' within the Tributary 'C' Functional design area (to be constructed by the City) via the internal storm sewer servicing for this plan of subdivision;
 - ii) Make provisions to oversize and deepen the internal storm sewers in this plan to accommodate flows from upstream lands external to this plan;
 - iii) Grade and drain the boundary of any Lots adjacent to the abutting SWM Facility to blend in with the abutting SWM Facility, at no cost to the City;
 - iv) Construct and implement erosion and sediment control measures as accepted in the Functional Storm/Drainage and SWM Letter or Report for these lands and the Owner shall correct any deficiencies of the erosion and sediment control measures forthwith; and
 - v) Address forthwith any deficiencies of the stormwater works and/or monitoring program.
- 18. Prior to the issuance of any Certificates of Conditional Approval for any lots and blocks in this plan or as otherwise approved by the City Engineer, the following shall be completed and operational:
 - i) All storm/drainage and SWM related works, including the Regional Tribtuary 'C' SWM Facility 'A' and interim SWM Facility 'A' to serve this plan must be constructed and operational in accordance with the Municipal Class Environmental Study Report Schedule 'C' Storm/Drainage and Stormwater Management, Transportation and Sanitary Trunk Servicing Works for Tributary 'C', Downstream Thames Subwatershed (AECOM, Dec. 2013) and the approved design criteria and accepted drawings, all to the satisfaction of the City;
 - ii) The major and minor storm flow routes for the subject lands, to the satisfaction of the City;
 - iii) Implement all geotechnical/slope stability recommendations made by the geotechnical report accepted by the City;
- 19. The Owner shall provide the winter maintenance operations protocol for all proposed road infrastructures within this plan that have the potential to directly impact the Tributary 'C' environmentally sensitive area(s), as per the accepted Design Studies, all to the specifications and satisfaction of the City Engineer
- 20. Prior to the acceptance of engineering drawings, the Owner's professional engineer shall certify the subdivision has been designed such that increased and accelerated stormwater runoff from this subdivision will not cause damage to downstream lands, properties or structures beyond the limits of this subdivision. Notwithstanding any requirements of, or any approval given by the City, the Owner shall indemnify the City against any damage or claim for damages arising out of or alleged to have arisen out of such increased or accelerated stormwater runoff from this subdivision.
- 21. In conjunction with the first submission of detailed engineering drawings, the Owner shall provide an update to the existing geotechnical report recommendations, for review and acceptance by the City, to address all geotechnical issues with respect to the development of this plan, including, but not limited to, the following:
 - i) Identifying all required mitigation measures including the implementation of Low Impact Development (LIDs) solutions;



ii) Addressing all issues with respect to construction and any necessary setbacks related to erosion, maintenance and structural setbacks related to slope stability for lands within this plan, if necessary, to the satisfaction and specifications of the City. The Owner shall provide written acceptance from the Upper Thames River Conservation Authority for the final setback.

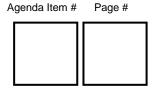
and any other requirements as needed by the City, all to the satisfaction of the City. The Owner shall implement all geotechnical recommendations to the satisfaction of the City.

- 22. In conjunction with the Design Studies submission, the Owner shall have a report prepared by a qualified consultant, and if necessary, a detailed hydro geological investigation carried out by a qualified consultant, to determine, including but not limited to, the following:
 - i) the effects of the construction associated with this subdivision on the existing ground water elevations and domestic or farm wells in the area
 - ii) identify any abandoned wells in this plan
 - iii) assess the impact on water balance in the plan
 - iv) any fill required in the plan
 - v) provide recommendations for foundation design should high groundwater be encountered
 - vi) identify all required mitigation measures including the design and implementation of Low Impact Development (LIDs) solutions
 - vii) address any contamination impacts that may be anticipated or experienced as a result of the said construction
 - ix) provide recommendations regarding soil conditions and fill needs in the location of any existing watercourses or bodies of water on the site.
 - x) To meet allowable inflow and infiltration levels as identified by OPSS 410 and OPSS 407, include an analysis to establish the water table level of lands within the subdivision with respect to the depth of the sanitary sewers and recommend additional measures, if any, which need to be undertaken

all to the satisfaction of the City.

- 23. Prior to the issuance of any Certificate of Conditional Approval, based on advice from the Owner's professional engineer, the Owner shall undertake all necessary mitigation measures, at their cost, to ensure that effects of the proposed construction and post development conditions on the subject lands will not adversely impact on the adjacent properties and the existing private water wells. The Owner's professional engineer shall certify that any remedial or other works as recommended in the accepted hydro geological report are implemented by the Owner, to the satisfaction of the City, at no cost to the City.
- 24. In conjunction with Design Studies submission, the Owner shall have a qualified professional develop and undertake the following works, to the satisfaction of the City and at no cost to the City:
 - i) a groundwater monitoring program including groundwater monitoring wells and private water supply wells in the area. The groundwater monitoring shall be undertaken from the commencement of construction until no earlier than 2 years following 90% build out of the subject subdivision.
 - ii) a short term and long term contingency plan for private water supply wells in the area. The Owner shall undertake the contingency plan if groundwater interference is confirmed by the qualified professional, to the satisfaction of the City.

The contingency plan shall recognize that Easter Seals Ontario Woodeden Camp (2265, 2311 Oxford Street West) daily water taking requirements are significantly higher than other groundwater users in the area. In the event of suspected well interference, a temporary pipe municipal water supply capable of meeting typical daily camp requirements shall be promptly provided and maintenance by the

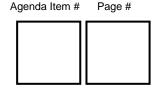


Owner until the well has fully recovered or a mutually agreeable permanent solution has been reached, to the satisfaction of the City, at no cost to the City.

25. In conjunction with Design Studies submission, the Owner shall provide an addendum to the Environmental Impact Study which addresses the impacts of constructing the watermain, trunk sanitary sewer and crossing on the Kains Road extension in accordance with the Tributary 'C' EAs, functional designs and all background studies, all to the specifications and satisfaction of the City Engineer.

Watermains

- 26. In conjunction with the first submission of detailed engineering drawings, the Owner shall have their consulting engineer prepare and submit a water servicing report including the following design information, all to the satisfaction of the City Engineer:
 - a) Water distribution system analysis & modeling and hydraulic calculations for the Plan of Subdivision confirming system design requirements are being met;
 - b) Identify domestic and fire flows for the potential ICI/medium/high density Blocks from the low-level (high-level) water distribution system;
 - c) Address water quality and identify measures to maintain water quality from zero build-out through full build-out of the subdivision;
 - d) Include modeling for two fire flow scenarios as follows:
 - Max Day + Fire confirming velocities and pressures within the system at the design fire flows, and
 - ii) Max Day + Fire confirming the available fire flows at fire hydrants at 20 PSI residual. Identify fire flows available from each proposed hydrant to be constructed and determine the appropriate colour hydrant markers (identifying hydrant rated capacity);
 - e) Include a phasing report as applicable which addresses the requirement to maintain interim water quality;
 - f) Develop a looping strategy to the satisfaction of the City Engineer when development is proposed to proceed beyond 80 units;
 - g) Include a water servicing strategy acceptable to the City Engineer for servicing to Medium Density Block 1 and the Future Development Blocks 7 to 13;
 - h) Identify any water servicing requirements necessary to provide water servicing to external lands, incorporating existing area plans as applicable;
 - i) Identify any need for the construction of or improvement to external works necessary to provide water servicing to this Plan of Subdivision;
 - j) Identify any required watermain oversizing, if necessary, and any cost sharing agreements;
 - k) Identify the effect of development on existing water infrastructure identify potential conflicts;
 - Include full-sized water distribution and area plan(s);
 - m) Identify on the water distribution plan the location of valves, hydrants, and the type and location of water quality measures to be implemented (including automatic flushing devices), the fire hydrant rated capacity and marker colour and the design fire flow applied to development Blocks;
- 27. Prior to the issuance of any Certificates of Conditional Approval the Owner shall install and commission the accepted water quality measures required to maintain water quality within the water distribution system during build-out, all to the satisfaction of the City Engineer, at no cost to the City. The measures which are necessary to meet water quality requirements, including their respective flow settings, etc shall be shown clearly on the engineering drawings.



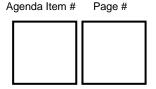
- 28. The Owner shall ensure that implemented water quality measures shall remain in place until there is sufficient occupancy demand to maintain water quality within the Plan of Subdivision without their use. The Owner is responsible to meter and pay the billed costs associated with any automatic flushing devices including water discharged from any device from the time of their installation until removal. Any incidental and/or ongoing maintenance of the automatic flushing devices is/are the responsibility of the Owner.
- 29. The Owner shall ensure that the limits of any request for Conditional Approval shall conform to the phasing plan as set out in the accepted water servicing design study and shall include the implementation of the interim water quality measures. In the event the requested Conditional Approval limits differ from the phasing as set out in the accepted design study, the Owner would be required to submit revised plans and hydraulic modeling as necessary to address water quality.
- 30. Prior to the issuance of any Certificates of Conditional Approval, and in accordance with City standards, or as otherwise required by the City Engineer, the Owner shall complete the following for the provision of water service to this draft Plan of Subdivision:
 - i. Construct watermains to serve this Plan and connect them to the existing low-level municipal system, namely the existing 150 mm diameter watermain on Gatenby Street, the 600 mm diameter watermain on Westdel Bourse, the 300 mm diameter watermain on Oxford Street West, the 300 mm diameter watermain on Kains Road.
 - ii. Deliver confirmation that the watermain system has been looped to the satisfaction of the City Engineer when development is proposed to proceed beyond 80 units;
 - iii. Indicate the available fire flow and appropriate hydrant colour code marker (in accordance with the City of London Design Criteria) on the engineering drawings; the coloured fire hydrant markers will be installed by the City of London at the time of Conditional Approval; and
 - iv. Confirm that the watermain system has been constructed, is operational, and is looped from the watermain on Kains Road through this Plan to Oxford Street West, Gatenby Street and Westdel Bourne.
- 31. With respect to the proposed blocks, the Owner shall include in all agreements of purchase and sale, and/or lease of Blocks in this plan, a warning clause advising the purchaser/transferee that should these develop as a Vacant Land Condominium or in a form that may create a regulated drinking water system under O.Reg. 170/03, the Owner shall be responsible for meeting the requirements of the legislation.

If deemed a regulated system, there is potential the City of London could be ordered to operate this system in the future. As such, the system would be required to be constructed to City standards and requirements.

STREETS, TRANSPORATION & SURVEYS

Roadworks

- 32. All through intersections and connections with existing streets and internal to this subdivision shall align with the opposing streets based on the centrelines of the street aligning through their intersections thereby having these streets centred with each other, unless otherwise approved by the City Engineer.
- 33. At 'tee' intersection, the projected road centreline of the intersecting street shall intersect the through street at 90 degrees with a minimum 6 metre tangent being required along the street lines of the intersecting road, to the satisfaction of the City.
- 34. The Owner shall have it's professional engineer design and construct the roadworks in accordance with the following road widths:
 - Kains Road has a minimum road pavement with (excluding gutters) of 9.5 metres (31.2') with a minimum road allowance of 21.5 metres (70') to secondary collector standards.



- ii) The Linkway and Gatenby Street have a minimum road pavement width (excluding gutters) of 8.0 metres (26.2') with a minimum road allowance of 20 metres (66').
- iii) Kains Road from Oxford Street West to 45 metres **north** has a minimum road pavement width (excluding gutters) of 11.0 metres (36.1') with a minimum road allowance of 22.5 metres (75'). The widened road on Kains Road shall be equally aligned from the centreline of the road and tapered back to the 9.5 metres (31.2') of road pavement width (excluding gutters) and 21.5 metres (70') of road allowance width for this street with 30 metre (100') long tapers on both street lines.
- iv) The Linkway from Westdel Bourne to 30 metres (100') <u>west</u> has a minimum road pavement width (excluding gutters) of 10.0 metres (32.8') with a minimum road allowance of 21.5 metres (70'). The widened road on The Linkway shall be equally aligned from the centreline of the road and tapered back to the 8.0 metres (26.2') of road pavement width (excluding gutters) and 20.0 metres (66') of road allowance width for this street with 30 metre (100') long tapers on both street lines.
- 35. The Owner shall install enhanced landscape boulevards on Kains Road at Oxford Street West and on The Linkway at Westdel Bourne, to the satisfaction of the City.

Sidewalks

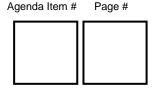
- 36. The Owner shall construct a 1.5 metre (5') sidewalk on both sides of the following streets:
 - i) Kains Road
- 37. The Owner shall construct a 1.5 (5') sidewalk on one side of the following streets:
 - i) Gatenby Street south boulevard
 - ii) The Linkway north boulevard

Street Lights

38. Within one year of registration of the plan, the Owner shall install street lighting on all streets and walkways in this plan to the satisfaction of the City, at no cost to the City. Where an Owner is required to install street lights in accordance with this draft plan of subdivision and where a street from an abutting developed or developing area is being extended, the Owner shall install street light poles and luminaires, along the street being extended, which match the style of street light already existing or approved along the developed portion of the street, to the satisfaction of the London Hydro for the City of London.

Boundary Road Works

- 39. In conjunction with the Design Studies submission, the Owner shall submit a Transportation Impact Assessment in accordance with the Transportation Impact Study Guideline to determine the impact of this development on the abutting arterial roads, including design criteria for the left turn and right turn lanes on Oxford Street West at Kains Road and on Westdel Bourne at The Linkway, to the satisfaction of the City. Prior to undertaking this study, the Owner shall contact the Transportation Planning and Design Division regarding the scope and requirements of this study. The Owner shall undertake any recommendations of the study, to the satisfaction of the City and at no cost to the City.
- 40. The Owner shall implement all recommendations outlined in the approved Transportation Impact Assessment to the satisfaction of the City Engineer.



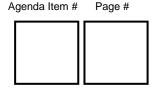
- 41. In conjunction with first submission of engineering drawings, the Owner shall provide a pavement marking plan, to include all turn lanes, etc., to the satisfaction of the City Engineer.
- 42. The Owner shall be required to make minor boulevard improvements on Westdel Bourne and Oxford Street West adjacent to this Plan, to the specifications of the City and at no cost to the City, consisting of clean-up, grading and sodding as necessary.
- 43. In conjunction with the Design Studies submission, the Owner shall verify the adequacy of the decision sight distance on Oxford Street West at Kains Road. If the sight lines are not adequate, road work shall be undertaken to establish adequate decision sight distance at this intersection, to the specifications and satisfaction of the City Engineer, at no cost to the City.
- 44. Prior to the issuance of any Certificate of Conditional Approval, or as otherwise directed by the City, the Owner shall complete the required road works to address the sight line requirements, to the satisfaction of the City Engineer, at no cost to the City.
- 45. Prior to the issuance of any Certificate of Conditional Approval, the Owner shall install temporary street lighting at the intersection of Oxford Street West and Kains Road and on Westdel Bourne at The Linkway, to the specifications of the City, at no cost to the City.
- 46. Prior to the issuance of any Certificate of Conditional Approval, the Owner shall construct left and right turn lanes on Oxford Street West at Kains Road, and on Westdel Bourne at The Linkway, to the satisfaction of the City Engineer, at no cost to the City.
- 47. The Owner shall reconstruct or relocate any surface or subsurface works or vegetation necessary to connect The Linkway to Westdel Bourne and Kains Road to Oxford Street West, to the satisfaction of the City and at no cost to the City.

Vehicular Access

48. The Owner shall ensure that no vehicular access will be permitted to any lots/blocks from Oxford Street West and Westdel Bourne. All vehicular access is to be via the internal subdivision streets.

Traffic Calming

- 49. In conjunction with the first submission of detailed engineering drawings, the Owner shall have it's professional engineer provide the following with respect to traffic calming measures, to the satisfaction of the City, at no cost to the City;
 - i) Confirm the location of the raised intersection on Kains Road at Gatenby Street and the locations of speed cushions on The Linkway opposite Between Lots 14 and 15 and on Kains Road on the property line between Lots 64 and 65;
 - ii) Determine if the raised intersection on Kains Road at Gatenby Street will affect the major overland flow route. Should it be determined the raised intersection will affect the overland flow route, the Owner shall construct alternative traffic calming measures on Kains Road;
 - iii) Identify a parking bay on Kains Road;
 - iv) Provide any additional recommended measures, to the satisfaction of the City.
- 50. Prior to the issuance of any Certificate of Conditional Approval or as otherwise directed by the City, the Owner shall construct the following traffic calming measures, to the satisfaction of the City Engineer, at no cost to the City:
 - i) raised intersections on Kains Road at Gatenby Street
 - ii) speed cushions on The Linkway opposite Between Lots 14 and 15 and on Kains Road on the property line between Lots 64 and 65, or as otherwise determined by the City
 - iii) parking bay on Kains Road



Construction Access/Temporary/Second Access Roads

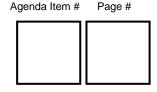
51. The Owner shall direct all construction traffic associated with this draft plan of subdivision to utilize Westdel Bourne or other routes as designated by the City.

- 52. Should an emergency access be required to accommodate development, the Owner shall locate, construct, maintain and close the access to the satisfaction of the City Engineer. Should it be necessary to locate this access onto Oxford Street West, the Owner shall ensure it will be restricted to emergency vehicle use only.
- 53. The Owner shall ensure any emergency access required is satisfactory to the City with respect to all technical aspects, including adequacy of site lines, provisions of channelization, adequacy of road geometries and structural design, etc.
- 54. Should a temporary/emergency access be required, the Owner shall provide sufficient security for the future removal of this temporary/emergency access and all restoration costs associated with the removal once a second access for this subdivision is available.
- 55. In the event any work is undertaken on an existing street, the Owner shall establish and maintain a Traffic Management Plan (TMP) in conformance with City guidelines and to the satisfaction of the City for any construction activity that will occur on existing public roadways. The Owner shall have it's contractor(s) undertake the work within the prescribed operational constraints of the TMP. The TMP will be submitted in conjunction with the subdivision servicing drawings for this plan of subdivision.
- 56. The Owner shall remove the temporary turning circle on Gatenby Street and adjacent lands, in Plan 33M-596 to the east of this Plan, and complete the construction of Gatenby Street in this location as a fully serviced road, including restoration of adjacent lands, to the specifications of the City.

If funds have been provided to the City by the Owner of Plan 33M-596 for the removal of the temporary turning circle and the construction of this section of Gatenby Street and all associated works, the City shall reimburse the Owner for the substantiated cost of completing these works, up to a maximum value that the City has received for this work.

KAINS ROAD – MUNICIPAL RIGHT-OF-WAY CROSSING

- 57. In conjunction with the first submission of engineering drawings, the Owner shall provide preliminary design and supporting calculations for the municipal right-of-way crossing on Kains Road, including but not limited to, the following, all in accordance with all Tributary 'C' EA functional design parameters and design studies, to the specifications and satisfaction of the City:
 - i) Provide details of the municipal right-of-way crossing for Kains Road to the south to Oxford Street West, including culvert design/calculations, etc, including the watermain crossing;
 - ii) A design acceptable to the City Engineer for any proposed watermain crossing the Tributary 'C' watercourse. Considerations could include utilization of a specific product(s), joint restraint systems, casing pipe, strategic valve placement and insulation
 - iii) Provide a cross-section of the Kains Road road crossing of Tributary 'C' which shall include but not be limited to, two urban travel lanes, complete with sidewalk on the east side as well as a multi-use path on the west side as identified in the EA;
 - iv) Provide details of co-ordination/construction of infrastructure (eg. all servicing, pathways, etc.) and roadways within Tributary "C' study area;
- 58. Prior to the issuance of any Certificate of Conditional Approval or as otherwise directed by the City, the Owner shall construct the following works, all in accordance with all Tributary 'C' EA functional design parameters and design studies, to the specifications and satisfaction of the City and at no cost to the City:



i) Construct a municipal right-of-way crossing, including a culvert, watermain and all associated works on Kains Road extension southerly to Oxford Street West, in accordance with accepted design studies and engineering drawings;

GENERAL CONDITIONS

- 59. The Owner shall comply with all City of London standards, guidelines and requirements in the design of this draft plan and all required engineering drawings, to the satisfaction of the City. Any deviations from the City's standards, guidelines or requirements shall be satisfactory to the City.
- 60. Prior to the issuance of a Certificate of Conditional Approval for each construction stage of this subdivision, all servicing works for the stage and downstream works must be completed and operational, in accordance with the approved design criteria and accepted drawings, all to the specification and satisfaction of the City.
- 61. Prior to final approval, the Owner shall make arrangements with the affected property owner(s) for the construction of any portions of services or grading situated on private lands outside this plan, and shall provide satisfactory easements over these works, as necessary, all to the specifications and satisfaction of the City, at no cost to the City.
- 62. Once construction of any private services, ie: water storm or sanitary, to service the lots and blocks in this plan is completed and any proposed relotting of the plan is undertaken, the Owner shall reconstruct all previously installed services in standard location, in accordance with the approved final lotting and approved revised servicing drawings all to the specification of the City Engineer and at no cost to the City.
- 63. The Owner shall connect to all existing services and extend all services to the limits of the draft plan of subdivision, at no cost to the City, all to the specifications and satisfaction of the City Engineer.
- 64. The Owner shall have the common property line of Oxford Street West and Westdel Bourne graded in accordance with the City of London Standards, to the satisfaction of the City, at no cost to the City.

Further, the grades to be taken as the centreline line grades on Oxford Street West and Westdel Bourne are the future ultimate centreline of road grades as determined by the Owner's professional engineer, satisfactory to the City. From these, the Owner's professional engineer is to determine the ultimate elevations along the common property line which will blend with the ultimate reconstructed road, all to the satisfaction of the City.

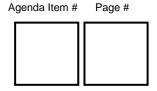
65. The Owner shall advise the City in writing at least two weeks prior to connecting, either directly or indirectly, into any unassumed services constructed by a third party, and to save the City harmless from any damages that may be caused as a result of the connection of the services from this subdivision into any unassumed services.

Prior to connection being made to an unassumed service, the following will apply:

- i) In the event discharge is to unassumed services, the unassumed services must be completed and conditionally accepted by the City;
- ii) The Owner must provide a video inspection on all affected unassumed sewers;

Any damages caused by the connection to unassumed services shall be the responsibility of the Owner.

66. The Owner shall pay a proportional share of the operational, maintenance and/or monitoring costs of any affected unassumed sewers or SWM facilities (if applicable) to third parties that have constructed the services and/or facilities to which the Owner is connecting. The above-noted proportional share of the cost shall be based on design flows, to the satisfaction of the City, for sewers or on storage volume in the case of a SWM facility. The Owner's payments to third parties shall:



- i) commence upon completion of the Owner's service work, connections to the existing unassumed services; and
- ii) continue until the time of assumption of the affected services by the City.
- 67. With respect to any services and/or facilities constructed in conjunction with this Plan, the Owner shall permit the connection into and use of the subject services and/or facilities by outside owners whose lands are served by the said services and/or facilities, prior to the said services and/or facilities being assumed by the City.

The connection into and use of the subject services by an outside Owner will be conditional upon the outside Owner satisfying any requirements set out by the City, and agreement by the outside Owner to pay a proportional share of the operational maintenance and/or monitoring costs of any affected unassumed services and/or facilities.

68. If, during the building or constructing of all buildings or works and services within this subdivision, any deposits of organic materials or refuse are encountered, the Owner shall report these deposits to the City Engineer and Chief Building Official immediately, and if required by the City Engineer and Chief Building Official, the Owner shall, at his own expense, retain a professional engineer competent in the field of methane gas to investigate these deposits and submit a full report on them to the City Engineer and Chief Building Official. Should the report indicate the presence of methane gas then all of the recommendations of the engineer contained in any such report submitted to the City Engineer and Chief Building Official shall be implemented and carried out under the supervision of the professional engineer, to the satisfaction of the City Engineer and Chief Building Official and at the expense of the Owner, before any construction progresses in such an instance. The report shall include provision for an ongoing methane gas monitoring program, if required, subject to the approval of the City engineer and review for the duration of the approval program.

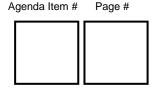
If a permanent venting system or facility is recommended in the report, the Owner shall register a covenant on the title of each affected lot and block to the effect that the Owner of the subject lots and blocks must have the required system or facility designed, constructed and monitored to the specifications of the City Engineer, and that the Owners must maintain the installed system or facilities in perpetuity at no cost to the City. The report shall also include measures to control the migration of any methane gas to abutting lands outside the Plan.

69. Should any contamination or anything suspected as such, be encountered during construction, the Owner shall report the matter to the City Engineer and the Owner shall hire a geotechnical engineer to provide, in accordance with the Ministry of the Environment "Guidelines for Use at Contaminated Sites in Ontario", "Schedule A – Record of Site Condition", as amended, including "Affidavit of Consultant" which summarizes the site assessment and restoration activities carried out at a contaminated site, in accordance with the requirements of latest Ministry of Environment and Climate Change "Guidelines for Use at Contaminated Sites in Ontario" and file appropriate documents to the Ministry in this regard with copies provided to the City. The City may require a copy of the report should there be City property adjacent to the contamination.

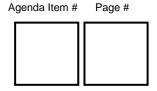
Should any contaminants be encountered within this Plan, the Owner shall implement the recommendations of the geotechnical engineer to remediate, removal and/or disposals of any contaminates within the proposed Streets, Lot and Blocks in this Plan forthwith under the supervision of the geotechnical engineer to the satisfaction of the City at no cost to the City.

In the event no evidence of contamination is encountered on the site, the geotechnical engineer shall provide certification to this effect to the City.

70. The Owner's professional engineer shall provide inspection services during construction for all work to be assumed by the City, and shall supply the City with a Certification of Completion of Works upon completion, in accordance with the plans accepted by the City Engineer.



- 71. In conjunction with the Design Studies submission, the Owner shall have it's professional engineer provide an opinion for the need for an Environmental Assessment under the Class EA requirements for the provision of any services related to this Plan. All class EA's must be completed prior to the submission of engineering drawings.
- 72. The Owner shall have it's professional engineer notify existing property owners in writing, regarding the sewer and/or road works proposed to be constructed on existing City streets in conjunction with this subdivision, all in accordance with Council policy for "Guidelines for Notification to Public for Major Construction Projects".
- 73. The Owner shall not commence construction or installations of any services (eg. clearing or servicing of land) involved with this Plan prior to obtaining all necessary permits, approvals and/or certificates that need to be issued in conjunction with the development of the subdivision, unless otherwise approved by the City in writing (eg. Ministry of the Environment Certificates, City/Ministry/Government permits: Approved Works, water connection, water-taking, crown land, navigable waterways, approvals: Upper Thames River Conservation Authority, Ministry of Natural Resources, Ministry of the Environment, City, etc.)
- 74. Prior to any work on the site, the Owner shall decommission and permanently cap any abandoned wells located in this Plan, in accordance with current provincial legislation, regulations and standards. In the event that an existing well in this Plan is to be kept in service, the Owner shall protect the well and the underlying aquifer from any development activity.
- 75. In conjunction with the Design Studies submission, in the event the Owner wishes to phase this plan of subdivision, the Owner shall submit a phasing plan identifying all required temporary measures, including temporary emergency access and watermain looping, if necessary, and identify land and/or easements required for the routing of services which are necessary to service upstream lands outside this draft plan to the limit of the plan to be provided at the time of registration of each phase, all to the specifications and satisfaction of the City.
- 76. If any temporary measures are required to support the interim conditions in conjunction with the phasing, the Owner shall construct temporary measures, including temporary emergency access and watermain looping, if necessary, and provide all necessary land and/or easements, to the specifications and satisfaction of the City Engineer, at no cost to the City.
- 77. The Owner shall remove any temporary works when no longer required and restore the land, at no cost to the City, to the specifications and satisfaction of the City.
- 78. The Owner shall decommission any abandoned infrastructure, at no cost to the City, including cutting the water service and capping it at the watermain, all to the specifications and satisfaction of the City.
- 79. The Owner shall remove all existing accesses and restore all affected areas, all to the satisfaction of the City, at no cost to the City.
- 80. All costs related to the plan of subdivision shall be at the expense of the Owner, unless specifically stated otherwise in this approval.
- 81. Prior to the acceptance of engineering drawings, the Owner shall submit confirmation that they have complied with any requirements of Union Gas with regards to the pipeline located on Westdel Bourne adjacent to this plan of subdivision.
- 82. The Owner shall co-ordinate the work associated with this Plan of Subdivision with the City's proposed construction of the SWM Facility and sanitary trunk sewer adjacent to this plan, to the satisfaction of the City, at no cost to the City.



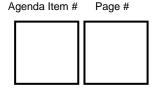
83. Prior to Final Approval, the Owner shall make all necessary arrangements with any required owner(s) to have any existing easement(s) in this plan quit claimed to the satisfaction of the City and at no cost to the City. The Owner shall protect any existing municipal or private services in the said easement(s) until such time as they are removed and replaced with appropriate municipal and/or private services at no cost to the City.

Following the removal of any existing municipal or private services from the said easement and the appropriate municipal services and/or private services are installed and operational, the Owner shall make all necessary arrangement to have any section(s) of easement(s) in this plan quit claimed to the satisfaction of the City, at no cost to the City.

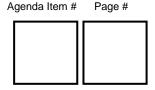
- 84. In conjunction with Design Studies submission, the Owner shall submit a preliminary Engineering Estimate of Eligible Works to identify, including but not limited to, costs for pre-design, estimates for the cost for design of the works and construction in this plan, estimate of eligible works, construction and administration, the scope of work for design activities including specific identification of phasing works, required and routing options, any anticipated site conditions and/or any other site or design challenges, all to the satisfaction of the City Engineer.
- 85. In conjunction with engineering drawing submission, the Owner shall submit a Development Charge work plan outlining the costs associated with the design and construction of the DC eligible works. The work plan must be approved by the City Engineer and City Treasurer (as outlined in the most current DC By-law) prior to advancing a report to Planning and Environment Committee recommending approval of the special provisions for the subdivision agreement.
- 86. Prior to the issuance of any Certificate of Conditional Approval, the Owner shall construct new services and/or make adjustments to the existing works and services on Oxford Street West and Westdel Bourne, adjacent to this plan to accommodate the proposed works and services on this street to accommodate the lots in this plan fronting this street (eg. private services, street light poles, traffic calming, etc.) in accordance with the approved design criteria and accepted drawings, all to the satisfaction of the City Engineer, at no cost to the City.
- 87. In conjunction with the first submission of detailed engineering drawings, provide a concept plan of Lot 1 fronting Westdel Bourne, to the satisfaction of the City.

<u>Planning</u>

- 88. In conjunction with the Design Studies submission, the owner shall prepare and submit a tree preservation report and plan for lands within the proposed draft plan of subdivision. The tree preservation report and plan shall be focused on the preservation of trees within lots and blocks. The tree preservation report and plan shall be completed in accordance with current approved City of London guidelines for the preparation of tree preservation reports and tree preservation plans, to the satisfaction of the City Planner. Tree preservation shall be established first and grading/servicing design shall be developed to accommodate maximum tree preservation as per the Council approved Tree Preservation Guidelines.
- 89. The Owner shall construct a 1.5m high chain link fencing without gates in accordance with current City park standards (SPO 4.8) or approved alternate, along the property limit interface of all existing and proposed private lots adjacent to existing and/or future Park and Open Space blocks. Fencing shall be completed to the satisfaction of the City Planner, within one (1) year of the registration of the plan.
- 90. Where lots or blocks abut an open space area, all grading of the developing lots or blocks at the interface with the open space areas are to match grades to maintain existing slopes, topography and vegetation. In instances where this is not practical or desirable, any grading into the open space shall be to the satisfaction of the Manager of Environmental and Parks Planning and City Engineer.



- 91. The Owner shall develop and deliver to all purchasers and transferees of the lots in this plan, a homeowner guide/education package as approved by the Manager of Parks Planning and Design that explains the stewardship of natural areas and the value of existing tree cover, as well as indirect suburban effects on natural areas. The Owner shall submit the homeowner guide/education package for review and acceptance, in conjunction with the Design Studies submission.
- 92. The Owner shall dedicate Open Space Block 2 and Park Blocks 3, 4, & 5 as fulfillment of the required parkland dedication for the proposed Plan of Subdivision.
- 93. In conjunction with the Design Studies submission, the Owner shall provide naturalization and restoration plans for Blocks 2, 3, 4, & 5 consistent with the recommendations of the Eagle Ridge Subdivision Phase II Scoped Environmental Impact Study, to the satisfaction of the Manager of Environmental and Parks Planning.
- 94. The Owner shall implement the recommendations of the Eagle Ridge Subdivision Phase II Scoped Environmental Impact Study prepared by AECOM Canada Ltd. dated June 1, 2016, to the satisfaction of the City. In conjunction with the Design Studies submission, the Owner shall provide a schedule indicating how each of the approved Eagle Ridge Phase II Scoped Environmental Impact Study recommendations will be implemented and satisfied as part of the subdivision approval process.
- 95. In conjunction with the Design Studies submission, the Owner shall provide a conceptual pathway plan for the Thames Valley Parkway from the existing pathway at Westdel Bourne and Kains Road to Oxford Street West. The pathway alignment shall be located along the west side of the site adjacent to/or within the Woodeden Camp woods and will cross Tributary 'C' at the proposed culvert/bridge crossing. The alignment shall be to the satisfaction of the Manager of Environmental and Parks Planning.
- 96. In conjunction with the Design Studies submission, the Owner shall provide a conceptual park plan delineating the alignment of the multi-use pathway through Blocks 3, 4 & 5, to the satisfaction of the Manager of Environmental and Parks Planning. Amenities to be included in the park blocks (Blocks 3, 4 & 5) will be determined in consultation with City's Environmental and Parks Planning staff. In addition, the Owner shall submit with the standard engineering servicing drawings submission, full design and construction plans to the satisfaction of the City.
- 97. Prior to undertaking any works or site alteration including filling, grading, construction or alteration to a watercourse in a Conservation Regulated Area, the Owner shall obtain a permit or receive clearance from the Upper Thames River Conservation Authority.
- 98. In conjunction with the Design Studies submission, the Owner shall have a qualified acoustical consultant prepare a noise study concerning the impact of traffic noise on future residential uses adjacent arterial roads. The noise study shall be prepared in accordance with the Ministry of the Environment Guidelines and the City of London policies and guidelines. Any recommended noise attenuation measures are to be reviewed and accepted by the City. The final accepted recommendations shall be constructed or installed by the Owner, or may be incorporated into the subdivision agreement.



APPENDIX "D" Related Estimated Costs and Revenues

810 and 1079 Westdel Bourne - West kains Land Corp. and Liahn Farms Ltd.

Draft Plan
39T-17501

Related Estimated Costs and Revenues

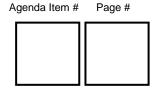
Estimated DC Funded Servicing Costs ^(Note 1)	Estimated Cost (excludes HST)
Claims for developer led construction from CSRF	moest W.
 Watermain-oversizing subsidy (DC14-WD01001) 	\$39,600
 Roadworks - channelization (DC14-RS00067) 	\$71,500
 Roadworks - engineering fees for channelization (DC14-RS00067) 	\$10,500
- Roadworks - internal widening (DC14-RS00068)	\$7,000
 Roadworks - engineering fees (DC14-RS00068) 	\$1,050
- Sanitary Trunk Sewer RB1B (DC14-WW00002)	\$1,485,000
 Sanitary Trunk Sewer RB1B - Engineering fees (DC14-WW00002) 	\$223,800
- Thames Valley Parkway (DC14-PR00097)	\$40,000
Total	\$1,878,450
Estimated Total DC Revenues (Note 2) (2017 Rates)	Estimated Revenue
CSRF	\$3,558,173
UWRF	\$320,342
TOTAL	\$3,878,515

- 1 Estimated Costs are based on approximations provided by the applicant and include engineering, construction and contingency costs without HST. Final claims will be determined based on actual costs incurred in conjunction with the terms of the final subdivision agreement and the applicable By-law.
- 2 Estimated Revenues are calculated using 2017 DC rates and may take many years to recover. The revenue estimates includes DC cost recovery for "soft services" (fire, police, parks and recreation facilities, library, growth studies). There is no comparative cost allocation in the Estimated Cost section of the report, so the reader should use caution in comparing the Cost with the Revenue section.
- 3 The revenues and costs in the table above are not directly comparable. The City employs a "citywide" approach to recovery of costs of growth any conclusions based on the summary of Estimated Costs and Revenues (above table) should be used cautiously.
- 4 The developer led construction work above will require a work plan to be provided and approved by the City. The work plan shall include summary of work completed to date as well as estimated costs of all Engineering and construction of the eligible subdivision works.
- 5 Oversizing costs identified are based on preliminary estimates through draft plan phase. The extent of roadworks and the various pipe sizes and length of oversized sewers and watermain will be finalized through the detailed design process which may change the values noted.

Reviewed by:

Date

Matt Feldberg
Manager, Development Finance



APPENDIX "E"

Environmental and Ecological Planning Advisory Committee (EEPAC)

The following summarizes comments and recommendations from EEPAC with respect to the Eagle Ridge Phase II Scoped Environmental Impact Study:

THEME # 1: Ground Water Dynamics and Ecological Function

A potential concern would be the influence of development on ground water dynamics. Brook trout are dependent on areas of ground water upwelling for thermal refuge and to spawn. Any heavy draws on the ground water supply or reduction in infiltration could negatively impact the populations. Furthermore, any water draining from storm water ponds into thermal refuge areas could negatively impact the population.

The Functional Design for the Storm Water Management (SWM) system indicates that the infiltration rate of the developed area will be maintained post development by the SWM system. However, the location of upwelling water from the SWM system is also important for the maintenance of the natural heritage features and the remnant brook trout population. The overland flow and area of infiltration will be different post development relative to predevelopment (i.e. infiltration is restricted to the SWM pond post-development).

EEPAC wonders if the current location of upwelling sites and/or the hydraulic pressure of the upwelling sites will change after development? Brook trout not only require upwelling for thermal refuge in the summer, but they also require strong upwelling for successful spawning. If the location or hydraulic pressure of the upwelling sites change, the brook trout population may have poor spawning success or experience thermal stress during the summer. The post development monitoring plan recommends monitoring the snake hibernacula and meadow restoration, but not the ground water functioning.

There are two main points to consider with respect to dewatering and temperature:

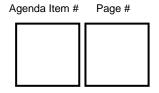
Water temperature and geochemistry can be altered by dewatering. Construction is usually done in the summer months, so water pumped from the ground will generally be cooler than the ambient temperature. As a general rule of thumb, deeper water will be less susceptible to seasonal temperature variations than water that is close to, or at the surface. Obviously the longer the water spends at the surface, the warmer it will get as well (assuming, of course, that the surface is warmer than the groundwater). For example, ambient groundwater could be ~11°C, the surface temperature could be ~25°C (or warmer in the direct sunlight), so any water abstracted would be warmed up after it got to the surface. Furthermore, dewatering could also alter the geochemistry of the groundwater (change in pH or oxygen levels).

Dewatering activities may also influence groundwater infiltration into the cold water stream (i.e. reduce the amount of groundwater entering the stream). For example, if they were dewatering adjacent to the stream, they could reduce the amount of water that naturally flows to the stream, or even end up taking water from the stream depending on the scale of dewatering. Reducing (or eliminating) groundwater inflow into the stream could increase the water temperature of the stream as the cooler groundwater probably keeps the stream cool.

Recommendation 1: Confirmation of no negative impact on the location or hydraulic pressure of the upwelling site due to construction or dewatering is required before any site work or dewatering is carried out.

Recommendation 2: EEPAC recommends the post development monitoring of the ESA area to ensure the functioning of the ground water upwelling areas is not impacted by the development.

Staff response: See AECOM response Appendix "F", and recommended conditions of draft approval (Conditions #22, #23, #24, #25 & #94).



Theme #2 - Restoration Plan and Monitoring

The consultant recommends meadow restoration as a compensation measure. However, a restoration plan including more forested area would better support the functioning of the ESA. The root systems of trees help to increase ground water recharge (development is in a recharge area), which is essential for the year round functioning of ground water upwelling areas. More trees would also help protect the edges of the marsh and swamp areas, while also providing shade to these wetland areas (tree plantings restricted to area along Tributary "C" east of the ESA).

For the tributary, the best vegetation to plant on the stream banks would depend on the width of the watercourse, but you would ideally want something that is relatively fast growing and could provide adequate shading to protect the tributary from solar radiation. A good mix of grasses, shrubs, and trees would help to provide shade, run-off control, and habitat for invertebrates. Brook trout are reliant on invertebrates that are derived from both stream and terrestrial sources for food.

Recommendation 3: Plant more trees along Tributary C when restoring the agricultural areas to help support the functioning of the ESA.

<u>Environmental Management Plan (EMP) Recommendation 14: Meadow Restoration - The planting list</u>

EEPAC has the following comments solicited from the restoration ecologists listed at the beginning of this report:

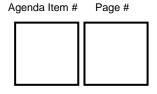
Species like Canada Wild Rye in the mix will certainly help as they establish quickly. It could be worth adding in swamp milkweed – it doesn't necessarily need it wet. In any lower areas, native Joe Pye Weed could be a nice addition too. In addition, close enough to those wet habitats some Marsh Marigold and possibly some native Iris.

Ideally, the seeds would be sown directly after a final harvest of corn or soy, meaning that weed control needs should be minimal. If not currently in active agricultural production, then good site preparation, including several round of spraying and possibly tilling, would be prudent prior to sowing seeds. You need to really ensure that you let the current seed base come up and then spray it - hopefully twice so that you get the vast majority of existing seed bank.

If the field is not currently in agriculture then doing extensive site prep is a must to ensure success of the planted native species. Another thing to consider is using a cover crop such as white millet. Many seeds don't germinate in the first year and leave the field quite open to influx of non-native seed.

Regarding planting timing, on Pelee Island, the Nature Conservancy has always planted in the fall simply because we collect the seeds, don't have a place to store them, so we "store" them by planting them right away. This seems to work perfectly well. Our staff ran out of time to plant this past fall, so we have stored the seeds and will plant this spring, so we will see if it makes any difference. The key thing is that the seeds are stored by someone with some seed-storing expertise and facilities – some species will only germinate after they have been exposed to something resembling "winter" – i.e. need to be "cold – moist stratified". St Williams Nursery and Ecology Centre can do this, for example. In Norfolk, we have planted both in spring and fall, and I don't think we have noticed any obvious differences. I like the idea of fall planting as it most closely mimics what happens in nature – plants produce seeds, they fall out, sit for the winter, then grow. Logistical challenges of weather/ soil moisture can dictate when planting ends up happening – heavy, clay soils can take a while to dry out, so mechanised spring planting can be more challenging on these sites – but can also be impossible if we have a wet fall.

Mowing in the fall is not ideal, as it can remove flowers and slow seed production of the desirable, native plants, and may also damage habitat for overwintering insects. This method is employed at some sites, but not at those undertaken by the Nature Conservancy. Depending on the size, some judicious spot-spraying of patches of problematic species such as white sweet-clover could happen in early spring, before the native species emerge. Woody invasives



might need to be dealt with too over time – buckthorn, autumn olive and European alder can sneak in quite quickly and should be treated before they get too big/ dominant.

Recommendation 4: The planting plan be adjusted based on the comments above and revisions made where appropriate and included in the conditions of development.

Recommendation 5: Consideration be given to contacting Dr. McFarlane to advise on the timing and follow up to the restoration plan

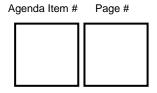
In the Environmental Management Plan, recommendation 16 relates to the monitoring of the restoration planting.

Recommendation 6: Monitoring of the restoration planting should follow the regime suggested below from the Nature Conservancy, noting that the suggested two year time frame included in the EMP is likely insufficient:

In the first summer, expect a range of non-native, common agricultural weeds, often annuals. In year two, expect to see these give way to the planted, native species. The objectives of restoration are first and foremost to establish as many native plant species as possible, and to not allow the establishment of non-native invasive species. Monitoring should focus on this. For example, look for autumn olive, buckthorn, quack grass and Canada thistle, common reed, and conduct monitoring to deal with them upon sight whenever possible. Looking for these species can be easier later on in the fall, as they remain green for longer than the native plants.

- We simply wander around a write down every species we come across; it might be useful to append some sort of abundance code, but again, a focus on what you need to know is important
- We need to know if we need to come back with a chainsaw or just loppers, and what sort
 of volume of glyphosate we might need, so we're not going to bother counting lamb's
 quarters, for example. For native species, we compare our list of observed species with
 our planting list.
- We are able to "get away with" a fairly low key monitoring approach like this because we do actually have a much more detailed system on one key restored site we have 170 2 x 2 m plots set up, and have been collecting % cover for each species for 10 years now. We collect these data in the 3rd week of July (Norfolk County). We miss flowering season for asters and goldenrods, and similarly miss really early season stuff, but we do our best. This is fine, but does take a lot of time and our ongoing objectives with this work are something we are constantly trying to clarify. I don't necessarily recommend that every site needs such a detailed system again, thinking hard about what you need to know is paramount.
- Some species do take a while to establish in an easily identifiable way. One example we have found of this is butterfly weed it seems to take a few years to really show up. If you really need to know if every species you planted establishes, then you might consider checking in on the site for longer than just 2 years 3 or even 4 years.
- If you are trying to create habitat for a specific species, via planting native plants, I would still recommend a focus on native vs non-native plants, especially early on, but you would also want to add in a check for your species of interest, and perhaps other components of its habitat e.g. structure, specific species composition, etc. This sort of data collecting might need to happen over several months i.e. breeding bird season, fall, even winter.
- Photos are always good! Collect some actual data too, but take some pics from a few standardised angles each year.
- On a somewhat related note, I would also recommend that restoration sites are maintained with regards to invasives many years down the line. I appreciate how unrealistic this may be or seem, but restored areas are prone to invasive species for a long time, and I have seen several which had a lot of restoration money poured into them for 1 2 years, but then have been ignored and have turned into an autumn olive or buckthorn mess, which is of very limited value to anything.

Recommendation 7: There is a similar project undertaken in the Grand River Watershed at Bauman Creek. Funding has been obtained from the Loblaw Water Fund. Consideration



should be given to working with the UTRCA to find funding that could be used to enhance the work being done by the proponent.

Staff response: See AECOM response Appendix "F", and recommended conditions of draft approval (Conditions #93 & #94).

Theme #3: Remainder of Environmental Management Plan

EEPAC is generally supportive of the recommendations except as follows:

Recommendation 9 re subdivision by laws. EEPAC is not aware of such by laws and doubts that they are enforceable by anyone. They should be included as part of the bylaws of a condominium corporation if one is formed. EEPAC believes a homeowner package followed up near to assumption by a mailing of "Living with Natural Areas" along with signage would be more effective.

Recommendation 8: Signage be installed at various points (such as the active park adjacent to the wetland. The signage include information on why this wetland is unique (e.g., the SWM4-1 mixed swamp is very usual in London) and why it is important to protect it. Advice from Environment and Parks Planning and / or EEPAC should be sought as to wording and placement. EEPAC does not recommend including information about the brook trout.

Recommendation 9: Residents receive the standard home owner package along with a follow up mailing of "Living With Natural Areas" when the subdivision is assumed.

Staff response: See AECOM response Appendix "F", and recommended conditions of draft approval (Conditions #91 & #96).

Installation of interpretive signage as part of the amenities to be included in the park blocks (Block 3, 4 & 5) will be considered in consultation with the City's Environmental and Parks Planning staff prior to acceptance of the detailed engineering servicing drawings and construction plans. The homeowner guide/education package, and any supplementary educational materials, can be included as a condition of the Subdivision Agreement. As with other conditions related to the provision of public parks and open space management (ie. provision for fencing), this condition is typically required to be satisfied by the developer within one year of registration of the subdivision plan, although consideration can be given to extending the period beyond one year if necessary.

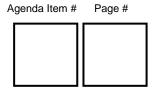
THEME #4 - Thames Valley Parkway location

EEPAC does not support the location of the TVP close to either the Woodeden woodland nor the wetland. It also appears from p. 15 of Ricor's June 2016 Final Engineering Report for the proponent, that the pathway is to be 10 m wide in total, 3 m for the pathway and a 3.5 m grassed buffers on either side. The buffers appears to be "extra wide" compare to other areas, particularly if this width cuts into the ESA (it is difficult to tell from materials supplied to EEPAC. It appears that filling to provide a more gradual slope to Kain's Woods is unnecessary if the TVP were to locate either along the Union Gas line on the east side of Westdel Bourne, or if it used the Linkway or even the stormwater management pond path. These would provide more level and direct routes for users at a lower cost and require less reseeding and monitoring of the seed bank.

There is also unauthorized access to the Woodeden property that leads across private lands to the stormwater pond outlet below Tigerlily Road. By bringing bike users close to this access point, there is a risk of greater bicycle use in the nearby Kain's Woods ESA, where such use is prohibited.

Recommendation 10: In consultation with the proponent, the TVP be relocated as per one of the above options.

Staff response: See AECOM response Appendix "F", and recommended conditions of draft approval (Conditions #95 & #96).



APPENDIX "F"

Excerpt from AECOM Response Letter

May 9, 2017 – Response to the comments from Upper Thames River Conservation Authority and the comments from City of London Ecological and Environmental Planning Advisory Committee (EEPAC)

Attachment 'A' - Table of Comments & Responses

(Complete copy of response letter available on request from Development Services)

AECOM

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519 650 5313 tel 519 650 3424 fax

May 9, 2017

Craig Linton
West Kains Land Corporation
100 Wellington Street N, Suite 301
London, Ontario
N6B 2K6

VIA EMAIL

Project No: 60432961

Regarding: Eagle Ridge Phase 2 Environmental Impact Study Addendum

Response to Agency Comments

Dear Mr. Linton,

Further to your request, we are providing the following responses to comments received from the Upper Thames River Conservation Authority (UTRCA, March 22, 2017) and the City of London's Environmental and Ecological Planning Advisory Committee (EPPAC March 16, 2017) regarding AECOM's report entitled "Eagle Ridge Subdivision Phase II Scoped Environmental Impact Study".

The following letter addresses several topics requiring clarification. Specific responses to individual comments are addressed in **Attachment A**.

1. Upper Thames River Conservation Authority Comments

1.1 Study Area and Development Area

We acknowledge the confusing references in the EIS report with respect to study area and development area.

The study area is as delineated on **Figure 1 (Attachment B1)** of the report. The development area for the Eagleridge Phase 2 Plan of Subdivision is shown on **Figure 6 (Attachment B2)** as the lotting plan and is further detailed on Figure 8 for the areas adjacent to the ESA and PSW.

The Eagle Ridge study area, as shown on **Figure 4 (Attachment B3),** consists mainly of agricultural lands, a small abandoned barn, and portions of three previously identified ELC communities completed as part of the Tributary C EIS.

The intent of the Eagle Ridge EIS is for it to be a Scoped EIS, as a very thorough EIS was previously completed for the Tributary C lands found within and adjacent to the current study area. As such, field

investigations were only conducted for a small portion of the Eagle Ridge study area to supplement field work already conducted for the Tributary C EIS.

1.2 Vegetation Community Delineation

Vegetation community delineation within the study area focused on the identification of additional ELC communities beyond those already delineated as part of the Tributary C EIS. As such, only one additional ELC community was delineated during the 2015 surveys (CUM1-1). However, three previously identified communities are located within the Eagle Ridge Study area and include: MAM3, SWD3-4, and SWD4.

1.3 Significant Wildlife Habitat

The Significant Wildlife Habitat Screening was reassessed to include the ELC communities previously delineated as part of the Tributary C EIS (**Attachment E**). Candidate Significant Wildlife habitat located within the study area includes:

- Snake Hibernaculum potentially located within the old foundation found within the study area.
- Seeps and Springs located within stream Section D-J. This habitat is contained within the ESA and is being protected.
- Amphibian Breeding (Woodland) located within the wetland communities within and adjacent to study area. Communities are contained within the ESA and are being protected.

1.4 Environmentally Significant Area Evaluation & Delineation

The evaluation and delineation of the Environmentally Significant Area (ESA) and the Provincially Significant Wetland (PSW), and all supporting field work was completed as part of the Tributary C EIS. **Figure 5 (Attachment B4)** in the EIS report provides the ESA and Provincially Significant Wetland (PSW) delineation. Appendix B **(Attachment B5)** of the EIS report provides the ESA delineation with the City of London's ESA Boundary Delineation Guidelines (1997) application identified.

1.5 Ecological Buffers

The ESA boundary within the subject lands was delineated based on the application of Boundary Delineation Guideline 4: Watercourses, where the recommended 50m on either side of a coldwater stream was applied as a buffer to protect water quality. This along with the 30 m buffer allocated to the PSW will provide sufficient protection to the protected features. Additionally, with the proposed areas of restoration as outlined on **Figure 8 (Attachment B6)** of the EIS, further protection in the form of vegetation restoration plantings is being provided. Consequently, no additional buffer was deemed to be required to protect the significant features and functions within the ESA.

2. **EEPAC Comments**

EEPAC comments have been addressed in the table in Attachment A.



If you have any questions or concerns, please do not hesitate to contact me at 519-650-8693 (office).

AECOM Canada Ltd.

Gary A. Epp, M.Sc., Ph.D. Practice Lead, Water & Natural Resources

Environment

GAE:jp Encl.

C. Creighton

UTRCA

T.Tchir

UTRCA

J.McKay

City of London

Attachment A. Table of comments/response

Attachment B. Figures

Attachment C Excerpt from Tributary C EIS

Attachment D Bird Surveys

Attachment E Significant Wildlife Habitat Assessment

AECOM

Attachment



Table of Comments & Responses



UTRCA Comments

Memorandum from Tara Tchir, dated March 22, 2017 – May 19, 2016 Scoped EIS for Eagleridge Subdivision Phase II in London,
Ontario

Comment 1:

I have reviewed the May 19, 2016 Scoped EIS for Eagle Ridge Subdivision Phase II in London Ontario prepared by AECOM. One of the main areas of confusion is the lack of a definition as to what is delineated as:

- i) subject lands,
- ii) study area,
- iii) proposed phase 2 development plan area,
- iv) approved development area, etc.

My comments are based on the assumption that the EIS should be determining the limit of development on the subject lands (as is normally the case), not just determining the impact of the "approved development area" shown in Figure 6. If the latter is the case, then this must be stated up front, with discussion about the fate of the remainder of the lands in the EIS Study Area Phase 2 boundary (shown in Figures 1-4), how the limit of the approved development area was determined to be where it is, and the fate of the remainder of the study area lands not in the "approved development area"

Response 1: Clarification of the distinction between the study area and development envelope is provided in the attached letter.

Comment 2:

Section 1.1 (PG 1):

 States that wetland identified as PSW and ESA by Trib C Class EA and EIS is the only natural heritage feature found on the subject lands, yet Section 1.2 states that the ESA is found on lands immediately adjacent to the subject lands, Please clarify.

Response 2: Portions of the ESA and PSW do fall within the study area and are shown on Figure 5 (see Attachment B) of the Environmental Impact Study report. The statement in Section 1.2 should read "As part of the Tributary "C" Storm\Drainage & Stormwater Management, Transportation & Sanitary Trunk Servicing Works Environmental Impact Study a portion of the lands within the study area and the lands immediately adjacent to the subject lands were identified as an Environmentally Significant Area (ESA) and Provincially Significant Wetland (PSW).

Comment 3:

Section 1.6 (PG 10):

- Why was the UTRCA not part of the scoping meeting on October 1, 2015?
- According to the scoping meeting the EIS is to address the interface between development and all adjacent natural areas, and address the impacts of the watermain, sewer and bridge crossing of Trib C on natural features and functions.

Response 3: UTRCA was invited to and participated in the October 1, 2015 Scoping Meeting.

The EIS did address the interface between the development and the natural areas, but it did not address the watermain, sewer and bridge as these components were part of, and addressed in, the City of London's Tributary "C" Storm\Drainage & Stormwater Management, Transportation & Sanitary Trunk Servicing Works Environmental Assessment.

Comment 4:

Section 2.1 (PGS 11-14)

This section provides some details from the 2009 study, but these details refer to a broader site and therefore it is difficult to
determine what is specific to the current study area.



Response 4: Section 2.1 is intended to be a summary of the Tributary "C" Storm\Drainage & Stormwater Management, Transportation & Sanitary Trunk Servicing Works Environmental Impact Study. As the EIS was intended to be "scoped" the information in Section 2 is in addition to that provided in the Tributary C EIS report. The report should have stated this more clearly and provided more of the detail from the Tributary C EIS.

Comment 5:

Section 2.1.2 (PG 12):

• Include the map from the Tributary C EIS to show the different stream sections (A-J) referred to in this section.

Response 5: Attachment C provides an excerpt from the Tributary C EIS report with the relevant mapping.

Comment 6:

Section 2.1.3, Table 2 (PGS 12 + 13):

- Several ELC communities observed in 2009 are listed in this section. Note that these communities are not acknowledged in Appendix J under "candidate habitat present within the study area" nor in Appendix I under "potential sultable habitat identified during background review". Please clarify which of these are present on the subject lands.
- Where was the provincially rare Pycnanthemum tenuifolium found?

Response 6: ELC communities present within the study area include: CUM1-1, MAM3, SWD3-4, and SWD4. The last three communities are contained within the ESA/PSW. These communities have been included in a revised Significant Wildlife Habitat Assessment. The provincially rare species was found within the MAM3 near Oxford Street, typically the location of rare species is not shown on any mapping.

Comment 7:

Section 2,1.5 (PG13):

Provide the list of 18 bird species recorded by AECOM in 2009 and a comparison of these to Appendix H.

Response 7: A table comparing breeding bird data from the two survey dates is presented in Attachment D.

Comment 8:

Section 2.3 (PG15):

States that there are no aquatic ecosystems within the subject lands, yet Figures 1 and 2 show Tributary C located in the
middle of the subject lands;

Response 8: A portion of Tributary C does traverse the Eagle Ridge study area. The statements in Section 2.3 are erroneous in reference to the study area; the intent was to state that there are no watercourses that overlap with the proposed development area.

Comment 9:

Section 2.1.1.2 (PG 18 + 19):

- States that only one vegetation community was delineated within the subject lands, yet Figure 4 shows several vegetation communities, many of them wetlands.
- Did OMNRF sign off on the butternut assessment?

Response 9: That is correct. There are ten (10) vegetation communities that are partially or wholly contained within the study area, as shown of Figure 4. The one community referred to in Section 2.1.1.2 is the additional community type (CUM1-1: Dry-moist Oldfield Meadow Type) not previously surveyed. This section should also include CUW1: Mineral Cultural Woodland Type.

We did not receive confirmation from MNRF regarding the butternut assessment.



Comment 10:

Section 2.1.2.3 (PG 20):

Please confirm that the column entitled BMB-001 contains the 18 bird species identified on site in 2015. How do these relate
to the 18 bird species recorded in 2009? What do the letters in this column refer to?

Response 10: Eighteen (18) species of birds were recorded in both 2009 and 2015, however differed slightly in species composition. All species observed during both survey years are considered common and widespread in southern Ontario. The subtle differences in species composition, between the two years, are not considered significant.

The codes in the BMB-001 (station #) refer to breeding activity; the code definitions are provided in Attachment D.

Comment 11:

Section 2.1.3.2 (PG 23):

States that no wetland communities are identified within the Eagle Ridge subdivision phase II subject lands, and yet Figure 4
(where the amphibian monitoring station was located) shows Tributary C, SWD3-4, MAM3, SWM4-1, MAM3-5 and SWD4
within the subject lands, not adjacent to them.

Response 11: Three wetland communities SWD3-4, SWD4 and MAM3 fall within the study area, which were previously identified within the Tributary C EIS. All of which are part of the ESA/PSW and being protected.

Comment 12

Section 2.1.3.3 (PGS23 + 24):

 In addition to the two indicator species for Amphibian Breeding Habitat (Woodland), two indicator species for Amphibian Breeding Habitat (Wetland) were also recorded within the subject lands. The EIS must discuss Amphibian Breeding Habitat for woodlands and wetlands, as well as SWH for amphibian movement corridors.

Response 12: Amphibian Breeding Habitat (woodland) remains as candidate habitat as several of the indicator species were heard during amphibian surveys however, only spring peepers were confirmed as having a full chorus and potentially having at least 20 individuals. Other indicator species did not achieve full chorus during investigations however it could be inferred they are present.

Amphibian Breeding (Wetland) is not present within the study area as this relates to wetlands greater than 120 meters away from woodland habitat. As such, no amphibian movement corridors are present within the study area.

Comment 13

Section 2.3.3 (PG 28);

In addition to snake hibernaculum SWH, the following 4 SWH must be addressed:

i) Seeps and springs: There is mention of active groundwater upwellings within stream section D-J in Section 2.1.2 (PG 12), as well as the presence of watercress and flow in the winter throughout the patch in Sections 2.1.3 (PG 13) and 2.1.4 (PG 13), yet there is no mention of these sites under seeps and springs in Appendix J. Show on a map where these areas of groundwater seeps occur to determine if SWH should be considered.

ii) Amphiblan Breeding Habitat (woodland): contrary to Appendix J, Section 2.1.3.3 states that two indicator species confirms the presence of Amphiblan Breeding Habitat (woodland) within the wetland communities.

lii) <u>Amphiblan Breeding Habitat (wetland):</u> Section 2.1.3.3 lists two indicator species for Amphiblan Breeding Habitat (wetland) within the wetland communities

iv) Amphibian Movement Corridors: Given the presence of wetland and woodland Amphibian Breeding Habitat.

Response 13: SWH was reassessed to include the ELC communities previously identified within the Tributary C EIS. Please see Attachment E for details. Candidate Significant Wildlife habitat located within the study area includes:

- Snake Hibernaculum potentially located within the old foundation found within the study area.
- Seeps and Springs located within stream Section D-J. This habitat is contained within the ESA and is being protected.



 Amphibian Breeding (Woodland) – located within the wetland communities within and adjacent to study area. Communities are contained within the ESA and are being protected

Comment 14:

Section 3.2 (PG 33):

States there are no provincially ranked species present within the subject lands, with the exception of one butternut tree, yet
Section 2.1.3, (PG13) states that the provincially rare Pycnanthemum tenuifolium was found in the 2009 surveys. Please show
the location of this species on a map.

Response 14: The provincially rare species was found within the MAM3 near Oxford Street, approximately 200m west of the study area. Typically the location of rare species is not shown on mapping.

Comment 15:

Section 3.4 (PG 34):

• Provide a summary table showing the rationale for each ESA criteria when applied to the vegetation patch.

Response 15: The evaluation of the patch as an Environmentally Significant Area was conducted as part of the Tributary C EIS and is not part of the Scope of work for the Eagle Ridge EIS. For details please refer to Section 3.4.1 of the Tributary C Storm/Drainage & Stormwater Management Transportation & Sanitary Trunk Servicing Works Environmental Impact Study prepared by AECOM dated March 4. 2013.

Comment 16:

Section 4.1 (PG 36)

 Demonstrate how flow quality, quantity and timing of both surface and groundwater to the PSW, ESA and coldwater stream will be maintained to ensure these features and functions remain in perpetuity.

Response 16: The potential impacts of stormwater flow, quality and quantity was part of the Tributary C EA and EIS. For details please refer to the Tributary C Storm/Drainage & Stormwater Management Transportation & Sanitary Trunk Servicing Works Environmental Impact Study prepared by AECOM dated March 4, 2013. All Stormwater flows from the proposed development are to be directed to the Tributary C stormwater management facility.

Comment 17:

Section 4.2 (PG 38).

 Show the location of all the development components listed on page 8 (residential, SWM facility, TVP trail and road upgrades) on Figure 6.

Response 17: All the relevant components of the Eagleridge Phase II development are shown on Figures 6 & 8. Details regarding the SWM facility and road crossing are part of the Tributary C EA and EIS.

Comment 18:

Section 5.3.1 (PG 41)

- Show the area of "restriction of development within proximity of the ESA boundary"
- We recommend that the remnant barn foundation be removed outside of overwintering and nursery seasons to avoid impact to
 potential snake habitat
- We recommend a tree removal inventory be conducted that includes species and size (dbh).

Response 18: The proposed development was to be restricted to areas outside of the ESA boundary. No additional buffer was deemed to be required outside of the ESA boundary due to the fact that the ESA boundary delineation is based on a buffer of 50m to the coldwater stream (application of Guideline 1, City of London's Guideline Document for Environmentally Significant Areas Identification,

Attachment A: Comments/Response Table



Evaluation and Delineation).

Comment 19:

Section 5.3.2 (PG42)

We recommend that a homeowner guide be developed that is attached to the property and provides information on restrictions
around green waste, garbage disposal, pool drainage and human intrusion.

Response 19: Noted

Comment 20:

Section 5.5 Table 5

Include buffers under 1.2 (Damage to rooting zones), timing of activities under 2.2 (Loss of Potential snake Habitat), and tree
removal inventory under 2.3 (loss of vegetation).

Response 20: Noted

Comment 21:

Sections 6.1 and 6.2 (PGS 47 - 49)

• We cannot determine if a buffer of 30 m from the wetland boundary will adequately protect the ESA and the tributary. Instead, to determine the final buffer boundary to protect the natural features, each feature must be delineated, a buffer applied to that delineated boundary (with rationale), and then the greater of the buffers becomes the final boundary. For this area, three separate buffers (with rationale) need to be established: one from the tributary, one from the PSW and one from the ESA. These features and their buffers should be shown on a map. The final buffer is the greatest of the three. The development limit should be the limit of the natural features AND their buffers, not just the PSW and ESA boundaries.

Response 21: Please refer to Section 5 in the letter.

Comment 22:

Section 6.6 (PG 53)

How will non-native invasives be addressed in the restoration, planting and monitoring.

Response 22: Non-native, invasive plants can be addressed in a restoration planting plan. Non-native invasive plants can be controlled by repeated herbicide application alternating with tillage and then followed by seeding as soon as possible.

Comment 23:

Figure 6

Please put the ESA boundary on this Figure.

Response 23: The ESA boundary is shown on Figures 5, 7 and 8. Typically the City of London required that the development layout be overlaid with ELC community boundaries. The ESA delineation was not included in Figure 6 as it would confuse the mapping.

Comment 24:

Figure 9

 Why does the ESA boundary only include a portion of the coldwater tributary and not the entire tributary? Provide some discussion as to why the ESA only includes the western half of Tributary C and not the eastern half.

Response 24: Rationale for ESA delineation is provided in the Tributary C EIS. For details please refer to the Tributary C Storm/Drainage & Stormwater Management Transportation & Sanitary Trunk Servicing Works Environmental Impact Study prepared by AECOM dated



March 4, 2013. The primary reason for not including the upper area of Tributary C was that this section is almost permanently dry and only conveys stormwater flows during high rainfall events.

Comment 25:

Appendix A:

Show location of the subject area

Note: there is no resume for Joe de Laronde in Appendix E

Note: the numbering for the sections does not follow numerical order.

Note: Scott Gillingwater should be consulted in the construction and placement of the hibernaculum and in developing wildlife observation protocols.

Response 25: Noted.

The resume for Joe deLaronde was not provided as he only participated as a field "buddy" for one amphibian monitoring event.

EPPAC Comments

Eagle Ridge Phase 2 EIS

Theme #1: Ground Water Dynamics and Ecological Function

Recommendation 1: Confirmation of no negative impact on the location or hydraulic pressure of the up-welling site due to construction or dewatering is required before any site work or dewatering is carried out.

Recommendation 2: EEPAC recommends the post development monitoring of the ESA area to ensure the functioning of the ground water upwelling areas is not impacted by the development.

Response 1: The Tributary C Storm/Drainage & Stormwater Management Transportation & Sanitary Trunk Servicing Works
Environmental Impact Study prepared by AECOM dated March 4, 2013 assessed the potential impacts to the coldwater stream, which
includes the upwelling. No impacts are anticipated with the implementation of the stormwater management facility that includes infiltration
galleries to facilitate and enhance groundwater recharge. The proposed residential development's Stormwater flows will be directed to the
Tributary C SWM facility. Furthermore, the subject lands where the development is proposed is an area of high infiltration, therefore, we
do not anticipate any impacts to the upwellings as a result of the proposed residential development.

Response 2: The Tributary C Storm/Drainage & Stormwater Management Transportation & Sanitary Trunk Servicing Works
Environmental Impact Study (prepared by AECOM dated March 4, 2013) proposed an Environmental Monitoring Program that includes
monitoring of the tributary and upwelling areas. This monitoring program was initiated in 2016 for baseline data collection, and continues
this year for during construction monitoring and then for two (2) years following construction.

Theme #2: Restoration Plan and Monitoring

Recommendation 3: Plant more trees along Tributary C when restoring the agricultural areas to help support the functioning of the ESA.

Recommendation 4: The planting plan be adjusted based on comments above and revisions be made where appropriate and included in the conditions of development.

Recommendation 5: Consideration be given to contacting Dr. McFarlane to advise on the timing and follow up to the restoration plan.

Recommendation 6: Monitoring of the restoration plantings should follow the regime suggested below from the Nature Conservancy, noting that the suggested two year timeframe included in the EMP is likely insufficient: ... (see EEPAC comments for further detail).

Recommendation 7: There is a similar project undertaken in the Grand River Watershed at Bauman Creek. Funding has been obtained from the Loblaw Fund. Consideration should be given to working with the UTRCA to find funding that could be used to enhance the work being done by the proponent.

Attachment A: Comments/Response Table



Response 3: We will consider the planting of additional trees along the riparian zone of the tributary, where feasible.

Response 4: Noted. Consideration will be given to the recommendations provided. Thank you.

Response 5: Noted. We will consider.

Response 6: Noted. We will consider. This is a similar approach to what we (AECOM) have used in the past.

Response 7: Noted.

Theme #3: Remainder of the Environmental Management Plan

Recommendation 8: Signage be installed at various points (such as the active park adjacent to the wetland). ...

Response 8: Noted

Theme #4: Thames Valley Parkway Location

Recommendation 10: In consultation with the proponent, the TVP be relocated as per one of the above options.

Response 10: The location of the Thames Valley Parkway trail within the subject lands was done in consultation with the City of London Environment and Parks Planning staff. The TVP trail is located exclusively outside of the ESA limits, and generally contained within a 10 metre wide block to accommodate a 3 metre wide paved path, plus 3.5m on either side as per trail standards. This is shown fairly well on Figure 8. There was concern regarding the grading, which is done to accommodate the trail itself. The grading is required to ensure the trail is able to be constructed in general accordance with trail standards (maximum cross fall, and also maximum of 8% gradient while traveling on the path itself). All of the grading proposed is within the farm fields, with the exception of the very north west area of the ESA. Figure 8 does show some grading in what appears to be an area which is treed, but it is mostly conifers and are fairly well spaced. When we walked this area with Parks Planning, it was generally thought the grading would be minimized to ensure the loss of existing vegetation would be minimized as well. Please note this is not a detailed design - refinements will be made at a later stage.