

PUBLIC INFORMATION CENTRE #2



WELCOME TO THE KING CITY EAST JOINT CLASS 'C' ENVIRONMENTAL ASSESSMENT PUBLIC INFORMATION CENTRE (PIC#2).

Please sign-in on the sheet provided, view display boards and ask questions. There will be no presentation.

The purpose of the second Public Information Centre (PIC) is to present the evaluation of the selected alternative designs and present a recommended design for review by agencies and the public.

The main themes presented are:

- **Result of Preliminary Screening of Alternatives**
- **Detailed Analysis of Selected Alternatives**
- **Selection of the Recommended Design Alternative**

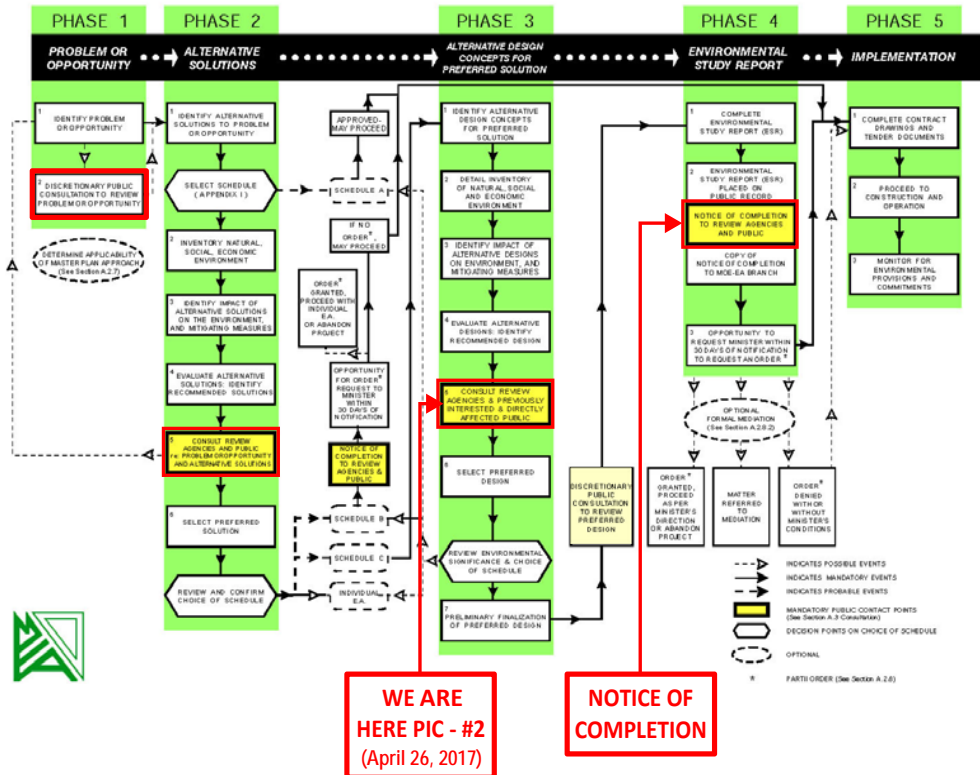
The Project Team wants to hear from you. Provide comments and ask questions. We will be pleased to discuss any aspect of the project with you.

Comment sheets are available tonight or to take home and send to the Project Team within 30 days (May 26, 2017).

Panels are available to view on the Town's website at www.king.ca

ENVIRONMENTAL ASSESSMENT PROCESS

NOTE: This flow chart is to be read in conjunction with Part A of the Municipal Class EA



Problem Statement:

The findings of the Township's Transportation Master Plan and the Council approved Functional Servicing Study (2007) identified the need to create a transportation network within the King East community that provides internal connectivity for residents while minimizing intrusions into the Natural Heritage System.

Project History:

This EA process will build on previous and ongoing studies.

King's Official Plan Review establishes seven policy directions that will inform the preparation of the new Official Plan. These will be considered through the EA process.

The Township's Transportation Master Plan (TMP) was completed in 2014 and provides a conceptual road network for the King City East lands. The road network set by the TMP has been used as a basis for determining crossing locations for the EA process.

A Functional Servicing and Development Area Study (FS/DAS) for the King City East lands was prepared in 2006 for the undeveloped lands in the two quadrants of King City east of Keele Street. This study provided guidance for the location of key infrastructure, parks, trails and an elementary school. The FS/DAS will be updated concurrent with the EA process.

The King City East Landowners Group is undertaking an integrated approach with the Planning Act for an Environmental Assessment (EA) to determine if a watercourse road crossing is required in the King City East area. The material presented at this PIC will address Phase 1 and 2 (Schedule 'C') of the Planning and Design process as outlined in the Municipal Engineers Association Class Environmental Assessment document (October 2000, as amended in 2007 & 2011).

FS/DAS PROCESS

Concurrent with the Environmental Assessment, a Functional Servicing Development Area Study (FS/DAS) update is being carried in support of the development plan and will provide supporting information and details for the EA process.

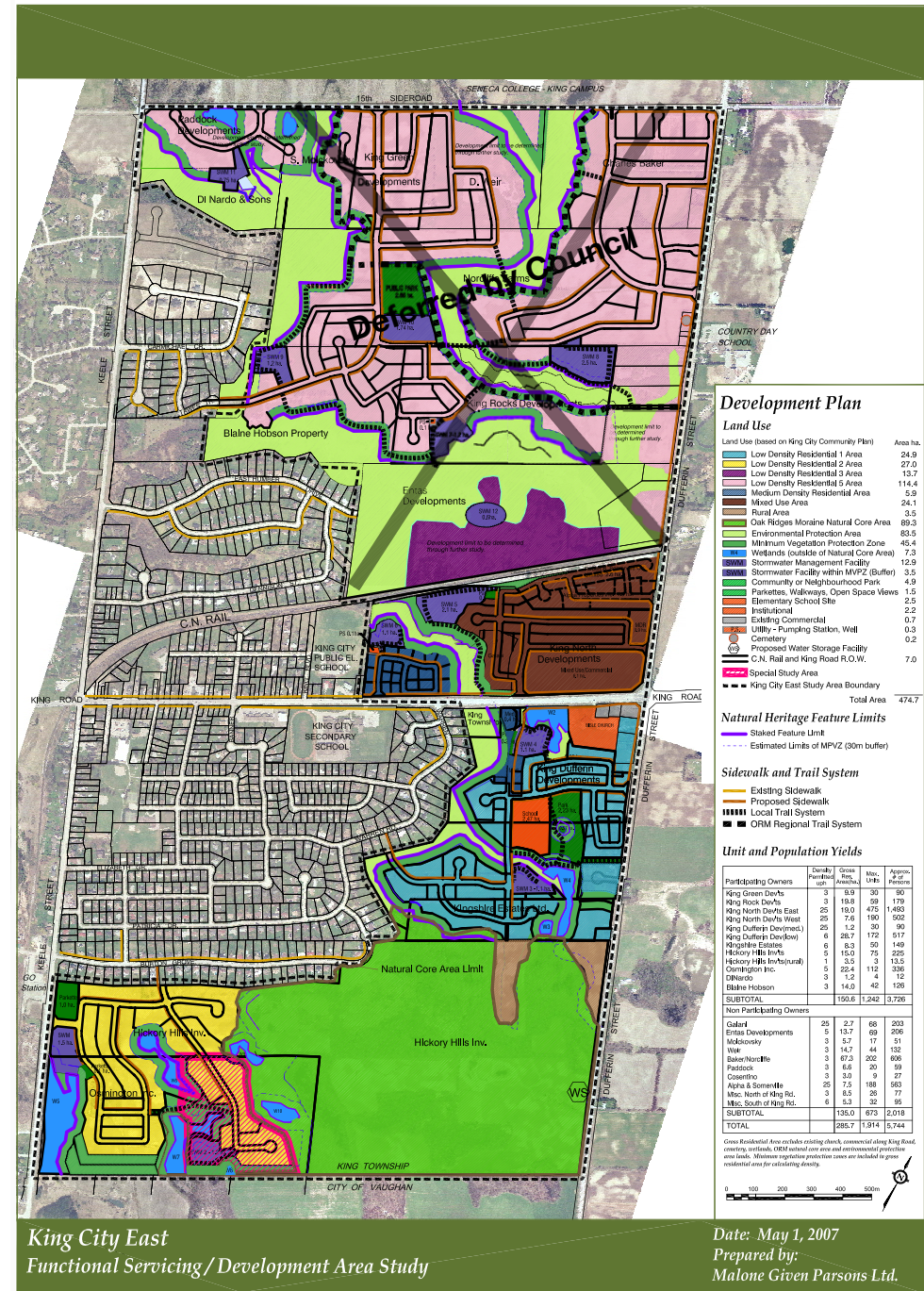
An FS/DAS for the King City East lands was prepared in 2006 for the undeveloped lands in the two quadrants of King City east of Keele Street.

The study provided guidance for the location of key infrastructure, parks, trails and an elementary school. At that time, provision was made for one or two crossings of the valleys.

Council approved the FS/DAS in 2007 for the lands south of the rail and deferred the approval of the northern lands.

The EA and FS/DAS process will inform each other to help to determine if a valley crossing is required and where a potential crossing will be located.

The results of the EA will be incorporated into the final FS/DAS.



TRANSPORTATION MASTER PLAN

The Township's Transportation Master Plan process (completed in 2014), was undertaken to “guide the development of the Township's long-term transportation vision for the next twenty years and will be undertaken in accordance with the applicable planning policy framework at the provincial, regional, and local levels, including the Provincial Policy Statement.”

The study was carried out through an open public process in accordance with the requirements of Phases 1 and 2 of the Municipal Class Environmental Assessment (EA) process.

Key objectives of the Transportation Master Plan

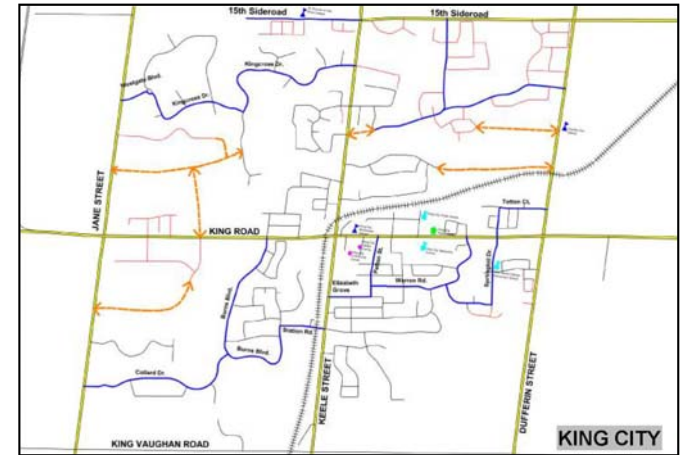
Design urban transportation infrastructure that accommodates all citizens (ages 8 to 80)

Offer alternative modes of transportation to the automobile

Create complete streets designed to enable safe access for all users (pedestrians, bicyclists, motorists, and transit riders) to contribute to sustainable and livable communities

Promote Active Transportation oriented development and alternatives to the automobile

Provide a rational road classification to guide future planning and capital works

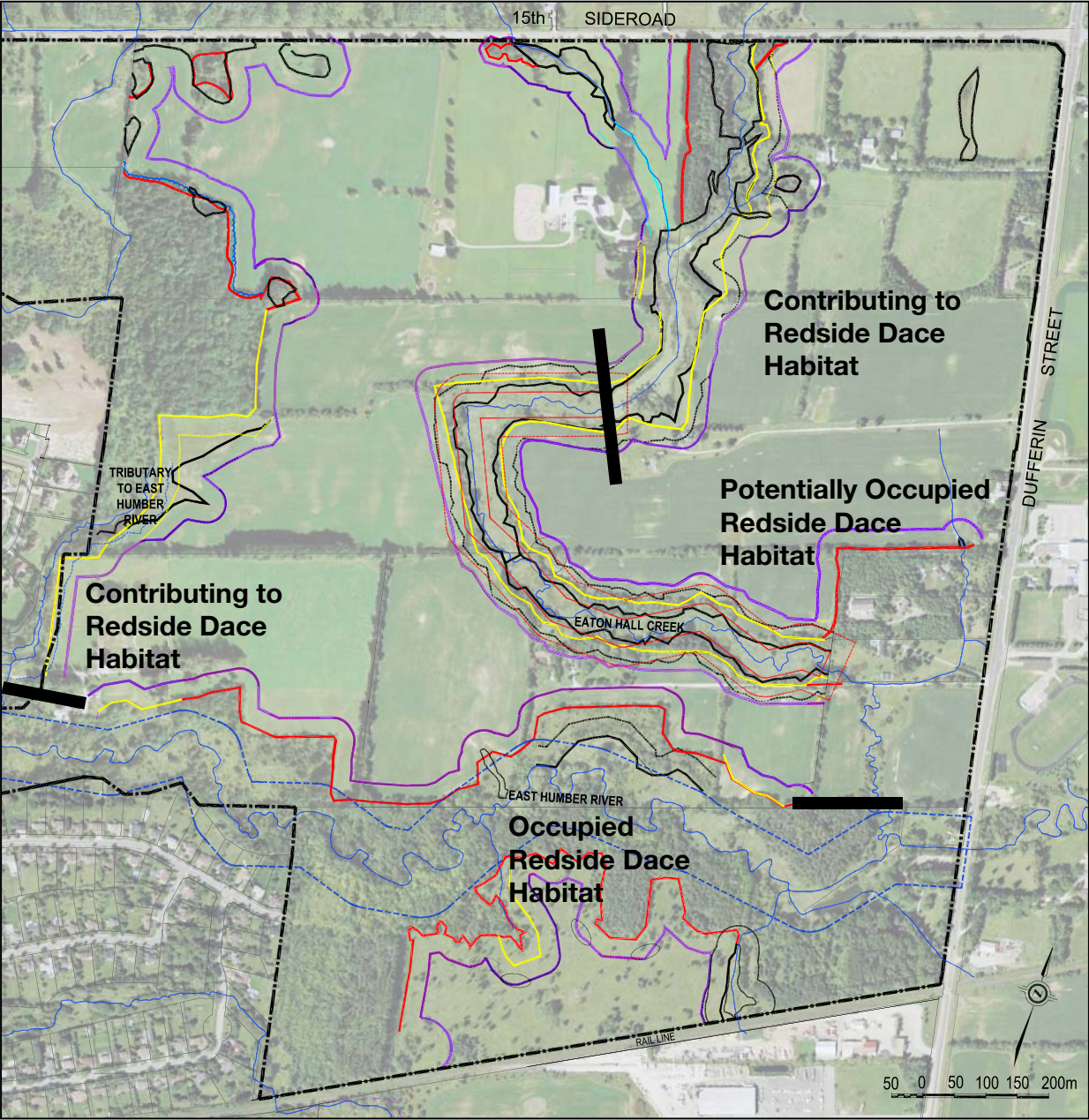


King TMP: Proposed Road Network



King TMP: Proposed Cycling Network Improvements

STUDY AREA AND NATURAL HERITAGE SYSTEM



- DEVELOPMENT LIMIT (30m buffers *except where noted)
- MNR STAKED WETLAND LIMIT
- - - 30m MINIMUM VEGETATION PROTECTION ZONE
- TRCA STAKED TOP OF SLOPE
- - - 30m MINIMUM VEGETATION PROTECTION ZONE
- TRCA STAKED VEGETATION LIMIT
- - - 30m MINIMUM VEGETATION PROTECTION ZONE
- CENTRE LINE OF CREEK
- - - 30m FROM CENTRE LINE OF CREEK
- - - MEANDER BELT
- · - · - STUDY AREA BOUNDARY

PRELIMINARY SCREENING CRITERIA

Internal Connectivity (schools, bussing, sidewalks)

The community planned for the King City East area north of the railway line is expected to yield approximately 1,000 homes. It includes several parks and an elementary school site. Providing a valley crossing would allow residents to more easily access the school and park sites by walking, bussing, cycling and driving.

The Secondary Plan Community Design Strategy states that “the street pattern and trail system shall provide connectivity between the different areas of the community, but, crossings of natural areas shall be kept to a minimum (Section 9.2.3.2.v).

Internal connectivity also creates benefits for community security and emergency access to the planned community.

The Secondary Plan states that the “safety and security of residents should be a key factor in the design of all development. (Section 9.2.7.1)”

Minimizes Impacts on the Natural Heritage System (# of crossings)

The natural heritage system (NHS) within the study area is comprised of the East Humber River and tributaries and associated valley corridors, Provincially Significant Wetlands, other wetlands, woodlands and terrestrial and aquatic wildlife habitat.

These features have been identified and delineated in the field with the agencies and provide a connected system within the study area.

- If an alternative does not cross the NHS it “meets Criteria”.
- If the alternative crosses the NHS one time it has been identified as “Moderate”.
- If an alternative has more than one crossing of the NHS it has been ranked as “Not meeting the Criteria”.



Source: GraphicStock



Source: Google Earth



Source: Township of King



Source: Ministry of Natural Resources

Consistent with Policy

The Transportation Master Plan (TMP) process undertaken by the Township of King incorporated local, regional and provincial policies including the Places to Grow Plan, the York Region Transportation Master Plan and the Regional Growth Strategy.

The proposed road network from the TMP provides a number of options for creating a connected community in the King East Development area including linkages from Dufferin Street to 15th Sideroad and to Keele Street.

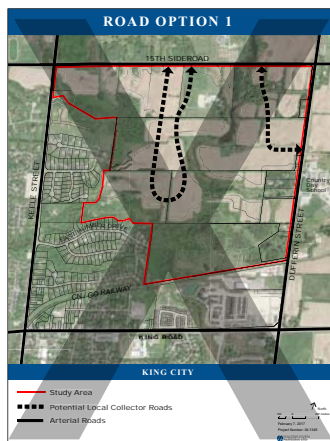
Avoids Impact on Redside Dace Habitat-Endangered Species

The watercourses on the subject property provide either Occupied and Contributing Habitat for the Provincially Endangered fish species, Redside Dace.

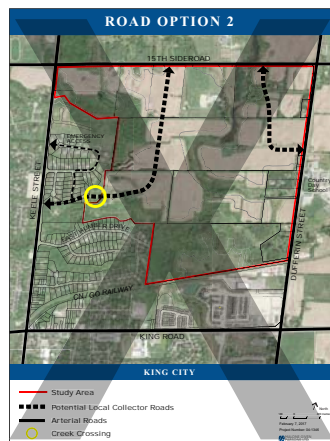
- If an alternative avoids any impact on both contributing or occupied habitat it “Meets Criteria”.
- If an alternative crosses contributing habitat it has ranked “Moderate”.
- If an alternative requires work within occupied Redside Dace habitat it has been identified as “Does Not Meet Criteria”.

PRE-SCREENING OF ROAD NETWORK AND CROSSING ALTERNATIVES

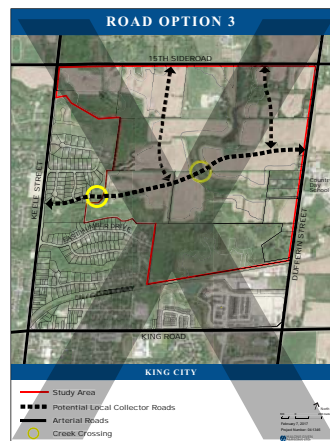
ASSESSMENT CRITERIA	Road Option 1 No Valley Crossings	Road Option 2 Connection to Tawes Trail, No Central Crossing	Road Option 3 Connection to Tawes Trail and Central Valley Crossing	Road Option 4 Central Valley Crossing	Road Option 5 Valley Crossing Near Dufferin	Road Option 6 Multiple Valley Crossings	Road Option 7 Northern Crossing of Central Valley
Internal Connectivity (schools, bussing, sidewalks)	No internal connectivity is created between the two planned neighbourhoods or the existing neighbourhoods. Access to the potential school site and planned community park is provided via arterial roads for the western and eastern neighbourhoods.	No internal connectivity is created between the two planned neighbourhoods. Access to the potential school site and planned community park is provided via arterial roads for the western and eastern neighbourhoods. Connectivity to Keele Street and existing residential is provided via a connection to Tawes Trail.	Internal connectivity is created between the planned and existing neighbourhoods and is consistent with the TMP. Access to the future school site and community park is provided by collector road connections.	Internal connectivity is created between the planned neighbourhoods and is provided by a pedestrian crossing at Tawes Trail to the existing neighbourhood. Access to the future school site and community park is provided by collector road connections for the new residential neighbourhoods.	No internal connectivity is created between the planned or existing neighbourhoods. Access to the potential school site and planned community park is provided only by arterial roads for the eastern neighbourhood.	Internal connectivity is created between the two planned neighbourhoods and the existing and planned neighbourhoods to the south and builds upon the road connections within the TMP. Access to the future school site and community park is provided by local road connections.	Less direct internal connectivity is created between the two planned neighbourhoods and is partially consistent with the TMP. Access to the future school site and community park is provided by local road connections but portions of the community remain isolated.
Number of Watercourse Crossings	0	1	2	1	1	3	1
Consistent with Policy	Not consistent with the Transportation Master Plan.	Not consistent with the Transportation Master Plan.	Road network shown is consistent with the Transportation Master Plan.	The combined pedestrian and road network shown is consistent with the Transportation Master Plan.	Road network shown is consistent with some elements of the Transportation Master Plan.	Road network shown is consistent with the Transportation Master Plan.	The combined pedestrian and road network shown is consistent with the Transportation Master Plan.
Impact to Redside Dace Habitat	There are no crossing locations and therefore no impact to Redside Dace contributing or occupied habitats.	The single crossing location crosses Redside Dace "contributing" habitat.	The western crossing location crosses Redside Dace "contributing" habitat while the central crossing location crosses Redside Dace "occupied" habitat.	The central crossing location crosses Redside Dace "occupied" habitat.	The south/eastern crossing location crosses Redside Dace "occupied" habitat.	All crossings shown cross Redside Dace "occupied" habitat including habitat in the East Humber River.	The crossing location crosses Redside Dace "contributing" habitat.
Public Comment	No public comment received with respect to Option 1.	Public comment was received in opposition to any road connection to Tawes Trail.	Public comment was received in opposition to any road connection to Tawes Trail.	No public comment received with respect to Option 4.	No public comment received with respect to Option 5.	No public comment received with respect to Option 6.	No public comment received with respect to Option 7.
Option Carried Forward	Not carried forward.	Not carried forward.	Not carried forward.	Carried forward to detailed design and analysis.	Not carried forward.	Not carried forward.	Carried forward to detailed design and analysis.



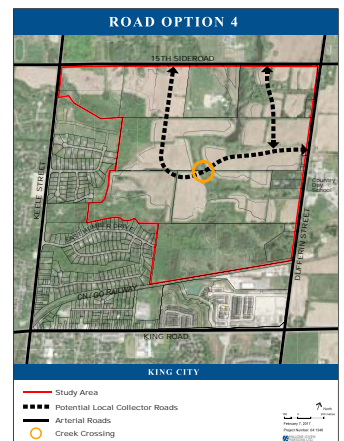
- Internal Connectivity (schools, bussing, sidewalks)
- Number of Crossings
- Consistent with Policy
- Impact to Redside Dace Habitat



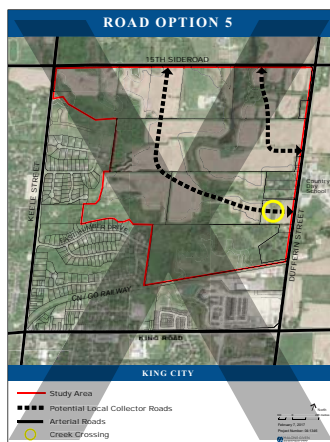
- Internal Connectivity (schools, bussing, sidewalks)
- Number of Crossings
- Consistent with Policy
- Impact to Redside Dace Habitat



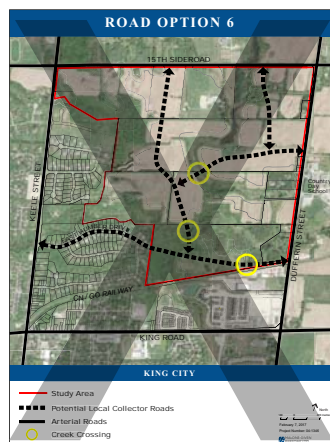
- Internal Connectivity (schools, bussing, sidewalks)
- Number of Crossings
- Consistent with Policy
- Impact to Redside Dace Habitat



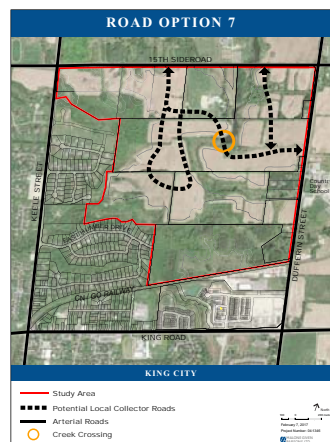
- Internal Connectivity (schools, bussing, sidewalks)
- Number of Crossings
- Consistent with Policy
- Impact to Redside Dace Habitat



- Internal Connectivity (schools, bussing, sidewalks)
- Number of Crossings
- Consistent with Policy
- Impact to Redside Dace Habitat



- Internal Connectivity (schools, bussing, sidewalks)
- Number of Crossings
- Consistent with Policy
- Impact to Redside Dace Habitat



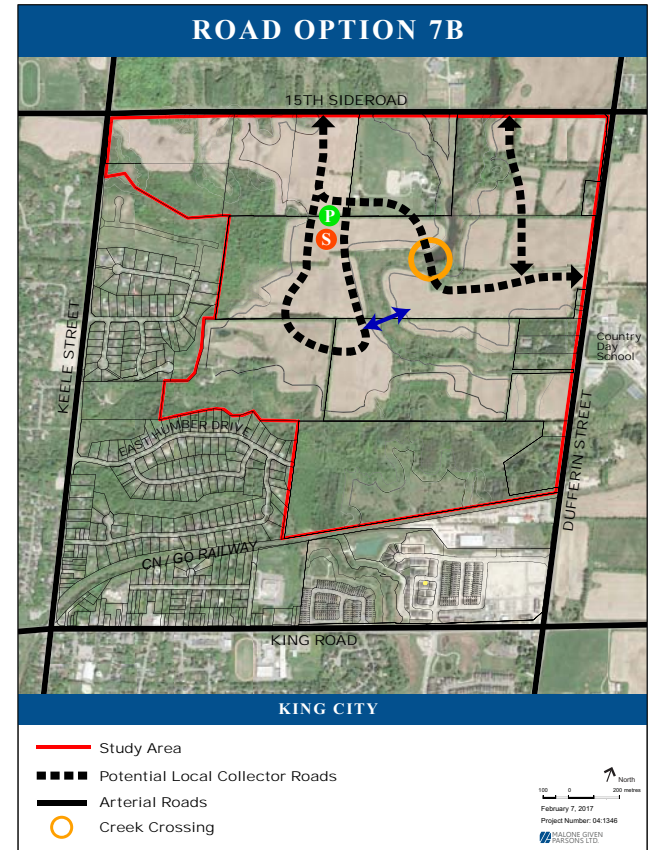
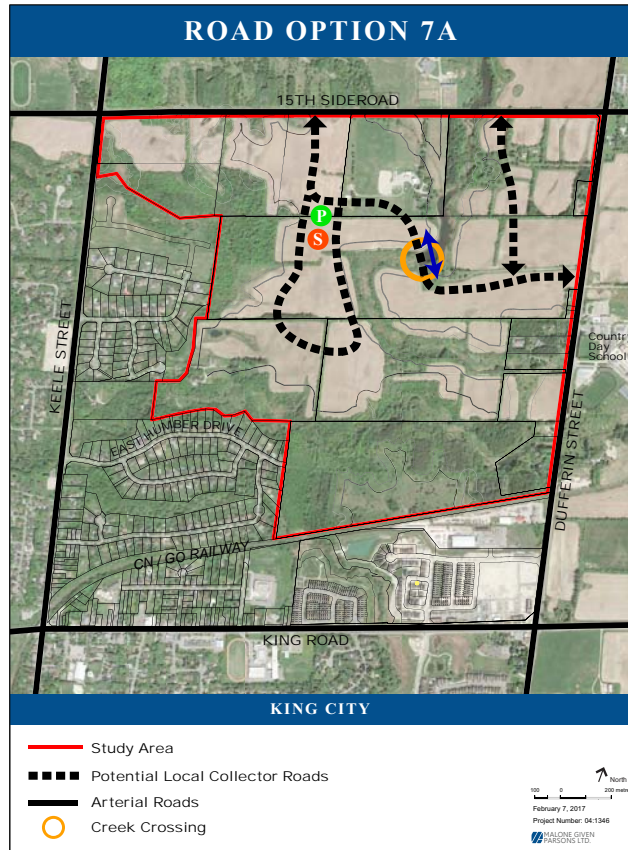
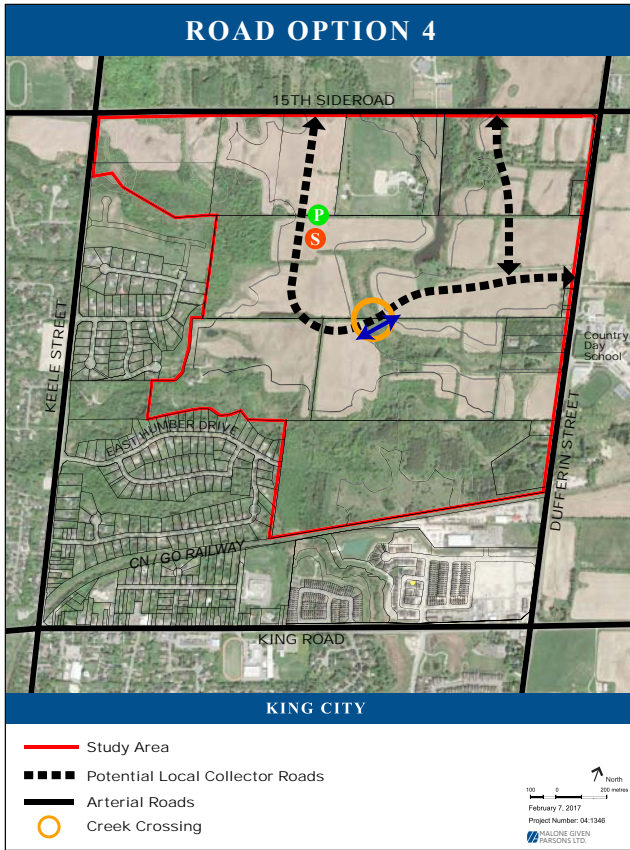
- Internal Connectivity (schools, bussing, sidewalks)
- Number of Crossings
- Consistent with Policy
- Impact to Redside Dace Habitat

Problem Statement:

The findings of the Township's Transportation Master Plan and the Council approved Functional Servicing Study (2007) identified the need to create a transportation network within the King East community that provides internal connectivity for residents while minimizing intrusions into the Natural Heritage System.

- Meets criteria
- Moderate
- Does not meet

ROAD NETWORK AND CROSSING ALTERNATIVES



- Internal Connectivity (schools, bussing, sidewalks)
- Number of Crossings
- Consistent with Policy
- Impact to Redside Dace Habitat

- Internal Connectivity (schools, bussing, sidewalks)
- Number of Crossings
- Consistent with Policy
- Impact to Redside Dace Habitat

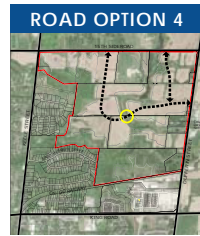
- Internal Connectivity (schools, bussing, sidewalks)
- Number of Crossings
- Consistent with Policy
- Impact to Redside Dace Habitat

Meets criteria	Moderate	Does not meet
Community Park	Elementary School	Servicing Crossing

POTENTIAL BRIDGE CROSSING - OPTION 4

DESCRIPTION:

- Central crossing location
- Occupied Redside Dace habitat
- Span required to cross Eaton Hall Creek
- Area identified as a Provincially Significant Wetland
- Valley and woodland crossing



KEY MAP



VIEW FROM NORTHEAST TO SOUTHWEST



VIEW FROM SOUTHWEST TO NORTHEAST

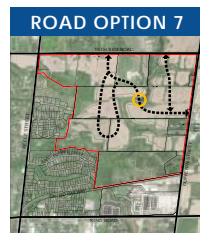


VIEW FROM SOUTH

POTENTIAL BRIDGE CROSSING - OPTION 7A & 7B

DESCRIPTION:

- Existing Dam crossing
- Contributing to Redside Dace habitat
- Span required to cross Eaton Hall Creek
- Area identified as a Provincially Significant Wetland
- Valley and wetland crossing



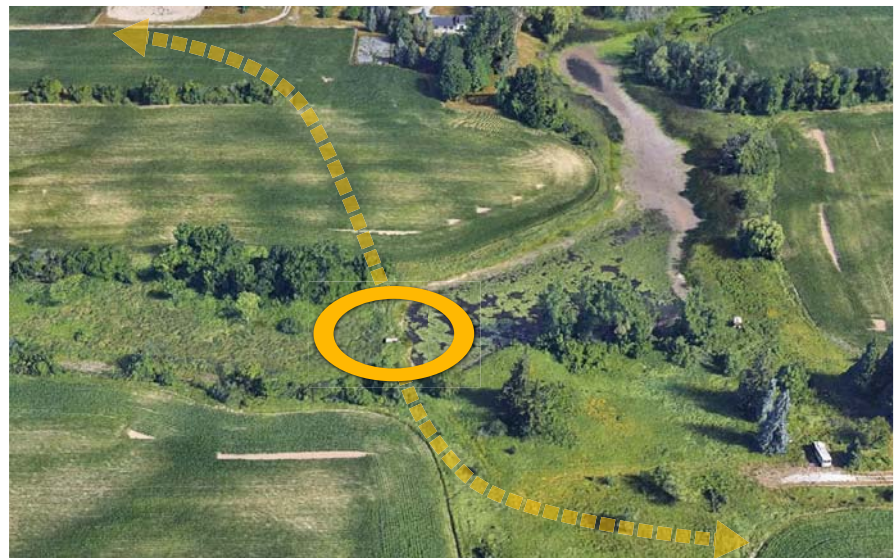
KEY MAP



VIEW FROM WEST TO EAST

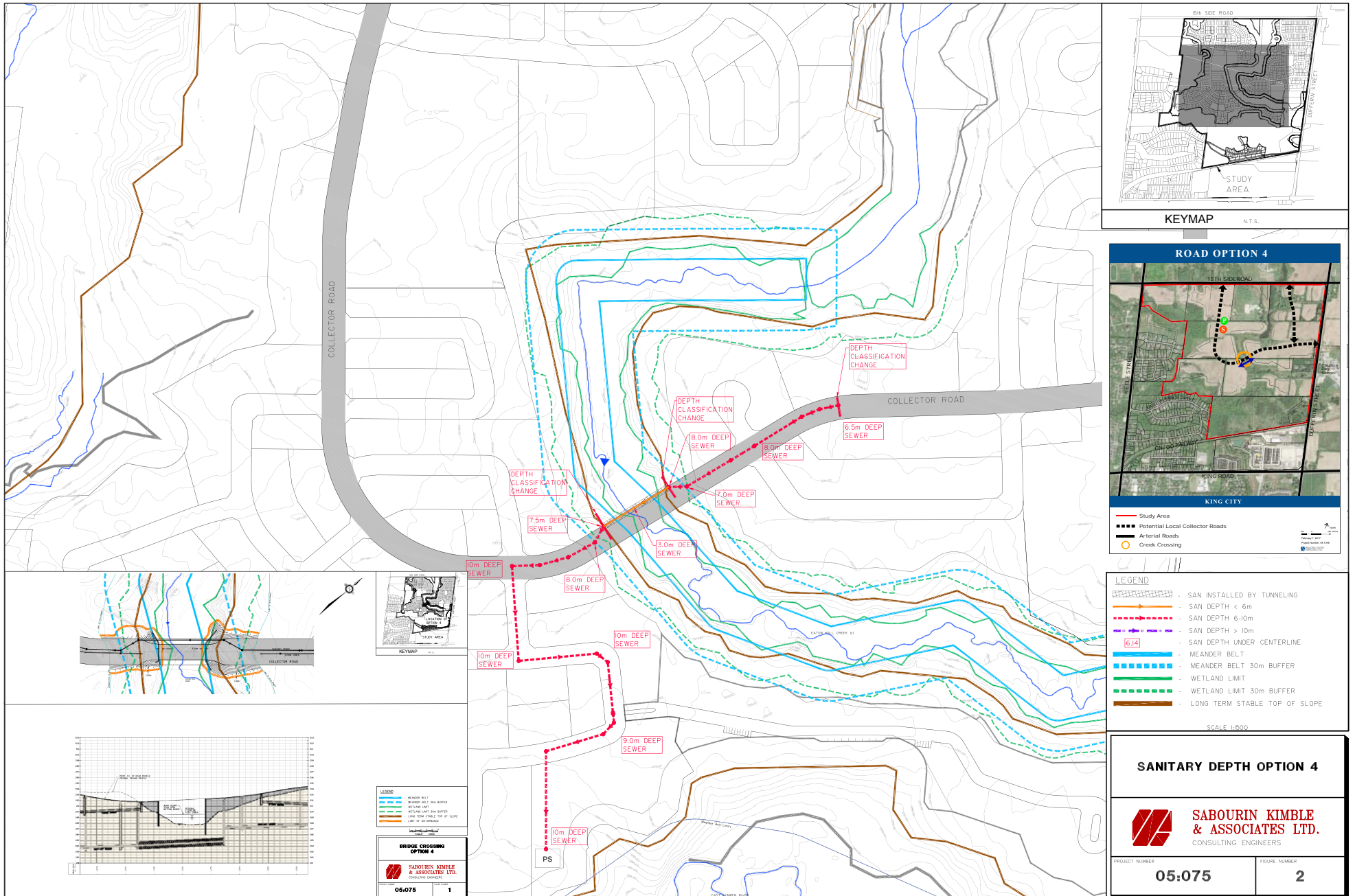


VIEW FROM NORTHEAST TO SOUTHWEST

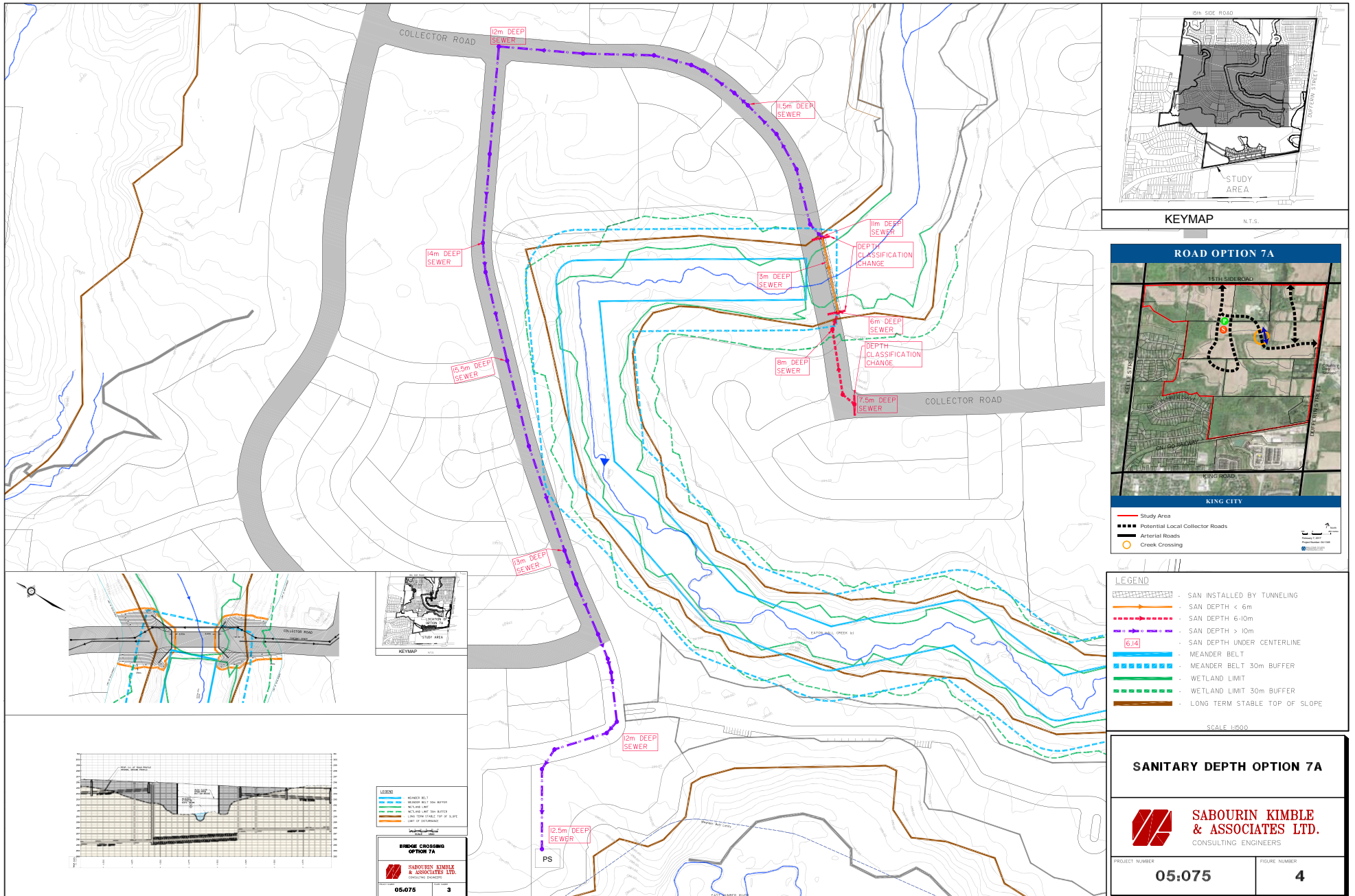


VIEW FROM SOUTH

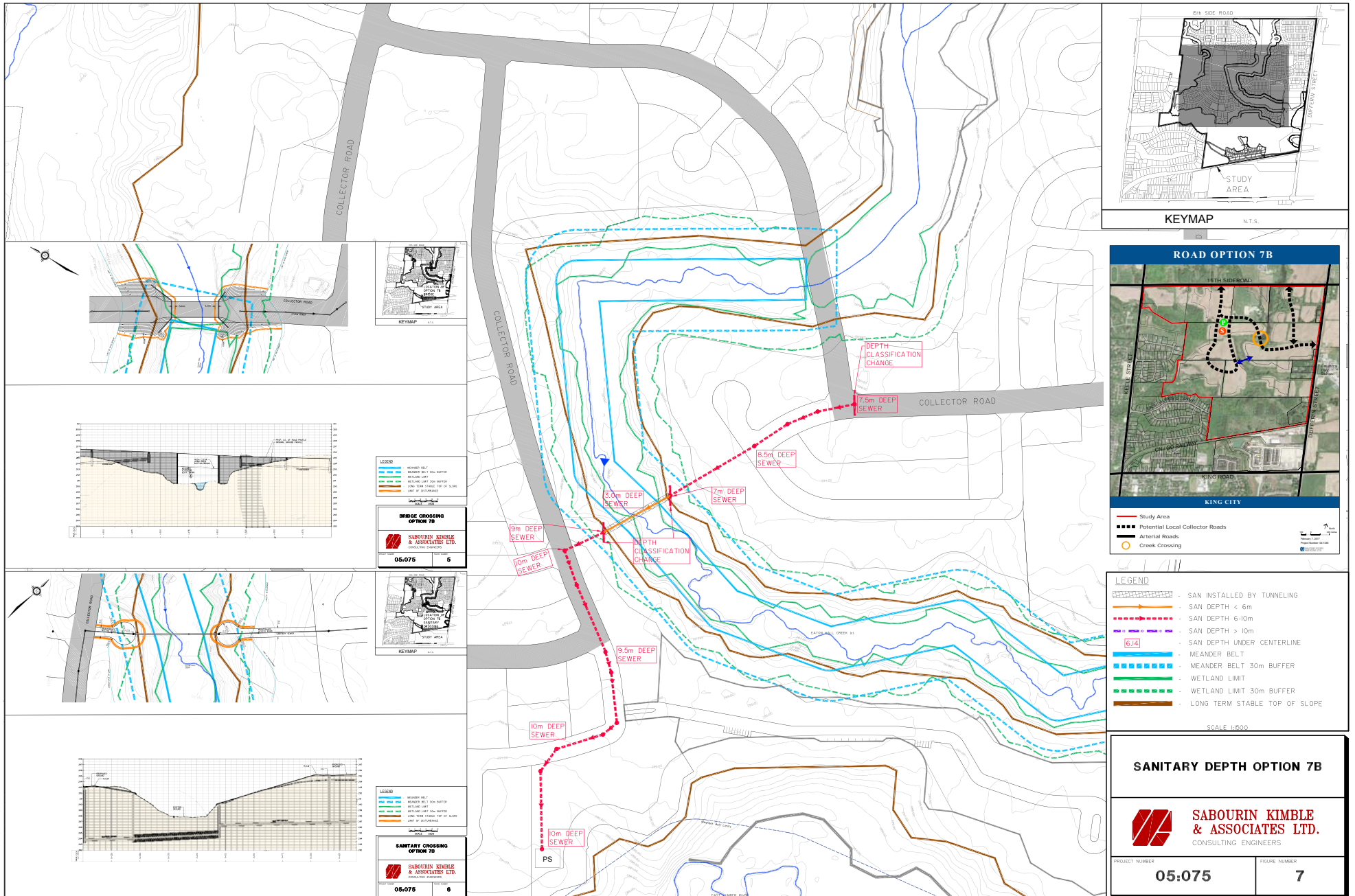
SANITARY DEPTH AND BRIDGE CROSSING - OPTION 4



SANITARY DEPTH AND BRIDGE CROSSING - OPTION 7A



SANITARY DEPTH AND BRIDGE CROSSING - OPTION 7B



SCHEDULE 'C' CLASS ENVIRONMENTAL ASSESSMENT

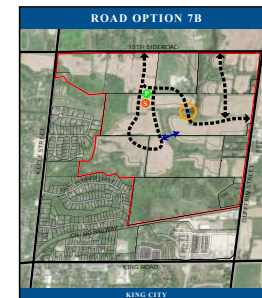
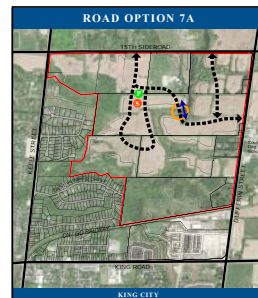
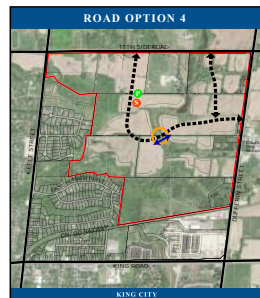
THE KING CITY EAST LANDOWNERS' GROUP		SCHEDULE 'C' CLASS ENVIRONMENTAL ASSESSMENT					
ASSESSMENT CRITERIA		CONSULTANT	OPTION 4: CENTRAL CROSSING	OPTION 7A: DAM CROSSING	OPTION 7B: DAM CROSSING - SEPARATE SERVICING LOCATION		
			<i>One south-central valley crossing at narrowest point.</i>	<i>One north-central valley crossing above existing dam location. Servicing crossing within roadway.</i>	<i>One north-central valley crossing at existing dam location. Servicing crossing under valley lands south of dam location.</i>		
Transportation	Ability to support long term Township goals (TMP)	Poulos and Chung	3 <i>The central crossing location was contemplated in the Transportation Master Plan and provides for an internally connected community. Both east and west neighbourhood areas are connected.</i>	1 <i>The Dam crossing location notionally satisfies the Transportation Master Plan for a mid-block connection but does not create an efficient road network. The southwest portion of the Block Plan remains isolated.</i>	1 <i>Transportation considerations do not change from Option 7A.</i>		
	Network connectivity/function and road capacity		3 <i>Most logical/natural route to connect new neighbourhoods. Efficient collector road system. Continuous spine system links community. Best connection between the planned east and west neighbourhoods.</i>	1 <i>Road structure is awkward with no defined collector road system. Additional Collector roadway length required to connect neighbourhoods. Connection between the planned east and west neighbourhoods is indirect and does not facilitate neighbourhood interaction.</i>	1 <i>Transportation considerations do not change from Option 7A.</i>		
	Supports Transit		3 <i>The central crossing location has the potential to be transit supportive.</i>	1 <i>A large portion of the western community area remains isolated and could present a challenge for transit access.</i>	1 <i>Transportation considerations do not change from Option 7A.</i>		
	Supports Pedestrian Movement		3 <i>Pedestrian access to the school and park area is provided for the east and west neighbourhood.</i>	2 <i>Less direct pedestrian access to the school and park area is provided for the east and west neighbourhood.</i>	2 <i>Transportation considerations do not change from Option 7A.</i>		
	Supports Bicycle Movement		3 <i>The collector road can accommodate bikes and replicates the TMP continuous bicycle route. It crosses the valley on the bridge.</i>	2 <i>The more 'local' road system can provide a signed, indirect bicycle route using local roads and is less consistent with TMP. A potential pedestrian/bike crossing in addition to the bridge would be required within the valley for consistency with the TMP.</i>	2 <i>Transportation considerations do not change from Option 7A.</i>		
	Compatibility and connectivity with adjacent community		NA <i>Pedestrian and Bicycle only connections to the adjacent residential area are provided.</i>	NA <i>Pedestrian and Bicycle only connections to the adjacent residential area are provided.</i>	NA <i>Transportation considerations do not change from Option 7A.</i>		
Summary Score Average			3.0	1.4	1.4		
Technical	Capital construction cost	Sabourin Kimble & Assoc.	3 <i>Crossing located at the narrowest PSW limit. The grading footprint is minimized but the span remains the same for all crossing options. Minimizes the amount of supporting local collector road.</i>	1 <i>Crossing located at the limit of occupied and contributing Redside Dace habitat. The grading footprint is larger but the span remains the same for all crossing options. Results in extended sanitary sewer depths in excess of 10 metres deep. Results in additional 580 m of local collector road length.</i>	2 <i>Crossing located at the limit of occupied and contributing Redside Dace habitat. The grading footprint is larger but the span remains the same for all crossing options. Results in extended sanitary sewer depths in excess of 10 metres deep. Results in additional 580 m of local collector road length.</i>		
	Operating and maintenance implications		3 <i>Shortest and most efficient sanitary sewer crossing and resultant depths. Minimizes local collector road length.</i>	1 <i>Results in overly deep sanitary sewer over an extended length and additional 580 m of local collector road length.</i>	2 <i>Shortest and most efficient sanitary sewer crossing and additional 580 m of local collector road length.</i>		
	Staging/early implementation opportunities		3 <i>Provides connectivity and opportunities for early implementation of all areas of the plan.</i>	2 <i>Sanitary crossing results in more limited early implementation opportunities.</i>	3 <i>Provides connectivity and opportunities for early implementation of all areas of the plan.</i>		
	Bridge spans the meander belt		3 <i>Yes.</i>	3 <i>Yes.</i>	3 <i>Yes.</i>		
Summary Score Average			3.0	1.8	2.5		
Social, Economic and Cultural Environment	King City Community Plan (OPA 540) Planning Principles						
	<u>Principle One: Environment First</u> Any development activity which is to take place in King City must be undertaken in a manner which recognizes its location on the Oak Ridges Moraine and preserves the integrity of the natural environment and natural systems.		NA <i>Addressed in Environmental Section.</i>	NA <i>Addressed in Environmental Section.</i>	NA <i>Addressed in Environmental Section.</i>		
	<u>Principle Two: Distinctive Community Identity</u> Any development activity which is to take place in King City must maintain the distinctive character of the community and set the community apart from the adjacent more urban municipalities.		3 <i>This option sets the new neighbourhoods apart from the existing community but connects two new neighbourhoods to each other.</i>	2 <i>This option creates a poorly organized road system with a lack of structure.</i>	2 <i>Social, Economic and Cultural considerations do not change from Option 7A.</i>		
	<u>Principle Three: Healthy Community</u> Any decisions made with respect to the future of King City will be directed at creating a healthy King City community which is environmentally and economically sustainable.		3 <i>This option is more supportive of bike and pedestrian travel. A logical connection point is made for cyclists and pedestrians through the community.</i>	2 <i>An additional pedestrian crossing at the central crossing location would be required to create an efficient bicycle and pedestrian network.</i>	2 <i>Social, Economic and Cultural considerations do not change from Option 7A.</i>		
	<u>Principle Four: Financial Feasibility</u> Any development which is to take place in King City must be financially feasible from the standpoint of capital costs and operating and maintenance costs.		3 <i>Most cost efficient.</i>	1 <i>Most expensive from servicing construction and maintenance perspective due to overly deep sanitary sewers.</i>	2 <i>Avoids overly deep sewers and associated cost for maintenance however, a second maintenance access to servicing in the valley is required as well as another potential crossing for pedestrian and bicycle access.</i>		
	<u>Transit Oriented Design</u> The Township shall ensure that collector and arterial roads are designed to accommodate transit facilities, and subdivisions shall be designed to permit effective pedestrian access to transit routes.		3 <i>In the event that the Region allocates transit to this community, the potential for future transit connections between new neighbourhoods is provided.</i>	1 <i>In the event that the Region allocates transit to this community, potential for future transit connections between new neighbourhoods is provided but would service a smaller area than Option 4.</i>	1 <i>Social, Economic and Cultural considerations do not change from Option 7A.</i>		
	<u>Design Principle One: Environmental Integration</u> 9.2.3.2 Design Policies v) The street pattern and trail system shall provide connectivity between the different areas of the community, but, crossings of natural areas shall be kept to a minimum.		3 <i>Connectivity between different areas is provided. One crossing of a natural area is required at the optimal location for connecting different areas of the new community.</i>	2 <i>Some connectivity between different areas is provided. One crossing of a natural area is required.</i>	2 <i>Social, Economic and Cultural considerations do not change from Option 7A.</i>		
	9.2.7 Design Principle Five: Safety and Security Safety and security of residents should be a key factor in the design of all development.		3 <i>Direct emergency access to most of the lands would be provided from Dufferin and 15th Sideroad.</i>	1 <i>Direct emergency access to lands east of the valley would be provided from Dufferin and 15th Sideroad while a large portion of the lands west of the valley would require more time to access. If a pedestrian bridge is constructed to address connectivity, there could be a security concern.</i>	1 <i>Social, Economic and Cultural considerations do not change from Option 7A.</i>		
	Other Planning Considerations						
	Reserved Elementary School Site		2 <i>Better location of an access to school site. Primary reason for crossing the valley is to access the school from the east without traveling on an Arterial road. Less interruption from collector road system allows for camping of the school site and community park.</i>	2 <i>School site is located on two properties and is less central to the neighbourhood. Primary reason for crossing the valley is the access the school from the east without traveling on an Arterial road.</i>	2 <i>Social, Economic and Cultural considerations do not change from Option 7A.</i>		
Community Park		2 <i>Community park is campused with school site and adjacent to valley trails and SWM block. Primary reason for crossing the valley is to access the community park from the east without traveling on an arterial road.</i>	2 <i>Community park separated by roads from school, valley and trails. Park depth is constrained by natural features and need for second road access to SE lands.</i>	2 <i>Social, Economic and Cultural considerations do not change from Option 7A.</i>			
King Township Sustainability Plan Make King's villages more walkable and improve connectivity between subdivisions, parks, schools, businesses and other amenities		3 <i>The central crossing creates a community that is closely linked to the Townships Sustainability Plan. The design promotes connectivity between subdivisions, the reserved elementary school site, the community park and the future recreation centre.</i>	2 <i>The dam crossing location partially achieves the Townships Sustainability Plan. The design provides connectivity between subdivisions that is less direct and requires a pedestrian crossing to efficiently provide access to the reserved elementary school site and the community park.</i>	2 <i>Social, Economic and Cultural considerations do not change from Option 7A.</i>			
Summary Score Average			2.8	1.7	1.8		

SCHEDULE 'C' CLASS ENVIRONMENTAL ASSESSMENT

THE KING CITY EAST LANDOWNERS' GROUP		SCHEDULE 'C' CLASS ENVIRONMENTAL ASSESSMENT					
ASSESSMENT CRITERIA		CONSULTANT	OPTION 4: CENTRAL CROSSING	OPTION 7A: DAM CROSSING	OPTION 7B: DAM CROSSING - SEPARATE SERVICING LOCATION		
			One south-central valley crossing at narrowest point.	One north-central valley crossing above existing dam location. Servicing crossing within roadway.	One north-central valley crossing at existing dam location. Servicing crossing under valley lands south of dam location.		
Natural Environment	Encroachment into Natural Feature Limits						
	Encroachment into corridor protection area	3	Total area of disturbance (i.e., area of development & bridge span including sanitary) includes approximately 4,551.8 m ² . To compensate for the encroachment the removal of the dam north of the crossing and stream rehabilitation is proposed.	2	Total area of disturbance (i.e., area of development & bridge span including sanitary) includes approximately 5,226.6 m ² plus potential bike crossing. To compensate for the encroachment the removal of the dam north of the crossing and stream rehabilitation is proposed.	1	Total area of disturbance (i.e., area of development & bridge span & sanitary) includes approximately 6,459 m ² plus potential bike crossing. To compensate for the encroachment the removal of the dam north of the crossing and stream rehabilitation is proposed.
	Provincially Significant Wetland (PSW)	3	Disturbance area includes: - Wetland (PSW) + 30 m buffer total of 3,309 m ² - Bridge span: 617 m ² - Bridge infrastructure/footings: 2,491 m ² There are minimal impacts to the large, wide complex riparian wetland meadow marsh units. Buffers to natural feature limits will be reduced.	2	Disturbance area includes: - Wetland (PSW) + 30 m buffer total of 4,437 m ² - Bridge span: 677 m ² - Bridge infrastructure/footings: 3,559 m ² Area of impact from potential bike crossing to be determined.	1	Disturbance area includes: - Wetland (PSW) + 30 m buffer total of 4,382 m ² - Bridge span: 822 m ² - Bridge infrastructure/footings: 3,559 m ² Proposed sanitary at central location total area of disturbance is about 944 m ² . Total encroachment into Natural Feature Limits includes: - Wetland (PSW) + 30 m buffer total of 685 m ² Buffers to natural feature limits will be reduced. Area of impact from potential bike crossing to be determined.
	Woodlands (staked)	1	No encroachment into significant woodlands	1	No encroachment into significant woodlands	1	No encroachment into significant woodlands
	Valleylands	3	Encroachment to valleylands total area of 1,206 m ² (top of bank)	2	Encroachment to valleylands total area of 1,391 m ² (top of bank) plus bike crossing. Area of impact from potential bike crossing to be determined.	1	Encroachment to valleylands total area of 1,391 m ² (top of bank) The installation of sanitary at central location total area of encroachment to valleylands is 81.1 m ² plus potential bike crossing. Area of impact from potential bike crossing to be determined.
Natural Environment	Impact to Surface Water Resources and Aquatic Habitat						
	Number of watercourse crossings	3	Single watercourse crossing, proposed as a span of the watercourse and fish habitat.	2	Removal of dam replaced with single watercourse crossing, proposed as a span of the watercourse and fish habitat plus potential bike crossing at central location (Option 4).	1	Removal of dam replaced with single watercourse crossing proposed as a span of the watercourse and fish habitat plus potential bike crossing at central location (Option 4). Installation of sanitary in the central crossing (Option 4)
	Aquatic Habitat	1	Low potential effects to aquatic species and habitat through sedimentation during construction which will be addressed through implementation of Best Management Practices identified at detail design as part of mitigation. (occupied reach - optimum fish habitat) Potential changes to watercourse may include increased shade from bridge crossing	3	Low potential effects to aquatic species and habitat through sedimentation during construction which will be addressed through implementation of Best Management Practices identified at detail design as part of mitigation. (primarily contributing reach) Potential changes to watercourse may include increased shade from bridge crossing. This option provides the greatest amount of shade input to the pond. Low potential effects to aquatic species and habitat through installation of a potential bike crossing at central location.	2	Low potential effects to aquatic species and habitat through sedimentation during construction which will be addressed through implementation of Best Management Practices identified at detail design as part of mitigation. (primarily contributing reach) Potential changes to watercourse may include increased shade from bridge crossing Low potential effects to aquatic species and habitat through installation of sanitary and potential bike crossing at central location which will be addressed using the most appropriate method (i.e., trenchless techniques)
	Tree Removal	1	Tree removals required - hedgerows and cultural thickets. During detail design the mitigation of potential construction impacts on the vegetation will be considered when developing the erosion and sediment control plans. Riparian planting will compensate for any disturbance	2	Minimal tree removals required - hedgerows and cultural thickets. During detail design the mitigation of potential construction impacts on the vegetation will be considered when developing the erosion and sediment control plans. Riparian planting will compensate for any disturbance	2	Minimal tree removals required - hedgerows and cultural thickets. During detail design the mitigation of potential construction impacts on the vegetation will be considered when developing the erosion and sediment control plans. Riparian planting will compensate for any disturbance
Natural Environment	Species At Risk (SAR)						
	Redside Dace (RSD)	1	<u>Regulated Redside Dace Habitat - Occupied</u> Area of disturbance: Regulated Redside Dace Habitat total of 3479 m ² - Bridge span: 817 m ² - Bridge infrastructure/footings: 2,661 m ² This option requires the crossing of a watercourse and wetland that are occupied habitat for Redside Dace. The proposed structure will span the watercourse. Low impacts to Redside Dace due to potential shading impacts on vegetation and exacerbated channel erosion rates caused by structure High temporary impacts to riparian vegetation (Regulated Redside Dace habitat) due to construction access, and grading High permanent impacts to Regulated Redside Dace habitat within the wetland due to infrastructure footprint requirements	3	<u>Regulated Redside Dace Habitat - Occupied (river dam)</u> Area of disturbance: Regulated Redside Dace Habitat total of 738 m ² - Bridge span: 76 m ² - Bridge infrastructure/footings: 662 m ² <u>Redside Dace Habitat - Contributing (northeast of dam)</u> Wetland total of 1274 m ² This option requires the crossing of a small area of occupied habitat for Redside Dace and a larger area habitat contributing Redside Dace. The proposed structure will span the watercourse and pond area. Low impacts to Redside Dace due to potential shading impacts on vegetation and exacerbated channel erosion rates caused by structure Moderate permanent impacts to Redside Dace habitat (contributing) within the wetland due to infrastructure footprint requirements Area of impact from potential bike crossing to be determined.	2	<u>Regulated Redside Dace Habitat - Occupied (river dam)</u> Area of disturbance: Regulated Redside Dace Habitat total of 738 m ² - Bridge span: 76 m ² - Bridge infrastructure/footings: 662 m ² Sanitary: Regulated Redside Dace Habitat total of 824.3 m ² Total Regulated Redside Dace Impacted (Crossing + Sanitary): 1,662.3 m ² <u>Redside Dace Habitat - Contributing (northeast of dam)</u> Wetland total of 1145 m ² This option requires the crossing of a small area of occupied habitat for Redside Dace and a larger area habitat contributing Redside Dace. The proposed structure will span the watercourse and pond area. Low impacts to Redside Dace due to potential shading impacts on vegetation and exacerbated channel erosion rates caused by structure Moderate permanent impacts to Redside Dace habitat (contributing) within the wetland due to infrastructure footprint requirements This option requires additional crossing at the central location (at Option 4) for sanitary purposes. The proposed method of installation (i.e. directional drilling) would result in low temporary impact to riparian vegetation (occupied Redside dace habitat) Area of impact from potential bike crossing to be determined.
	Barn Swallow	2	New Barn Swallow structure installed as per ESA is not in proximity to roads of this option.	1	New Barn Swallow structure installed as per ESA is in proximity to roads of this option.	1	New Barn Swallow structure installed as per ESA is in proximity to roads of this option.
	Butternut	1	Potential interaction with Butternut and Butternut habitat in the northeast quadrant of the property.	1	Potential interaction with Butternut and Butternut habitat in the northeast quadrant of the property.	1	Potential interaction with Butternut and Butternut habitat in the northeast quadrant of the property.
	Bats	2	Moderate potential Bat habitat within the Hedgerows and Cultural Thicket communities. Hedgerows composed of: American Elm (<i>Ulmus Americana</i>), Manitoba Maple (<i>Acer negundo</i>), Buckthorn (<i>Rhamnus cathartica</i>) and Hawthorn (<i>Crataegus</i> spp.) (dominated), as well as a small patch of Trembling Aspen (<i>Populus tremuloides</i>). Cultural Thickets include: Sugar Maple (<i>Acer saccharum</i>), Red Oak (<i>Quercus rubra</i>) and American Basswood (<i>Tilia americana</i>) *Studies to be completed in 2017	3	Low potential Bat habitat within the Cultural Woodland communities at the dam location. *Studies to be completed in 2017	1	Low potential Bat habitat within the Cultural Woodland communities at the dam and sanitary locations (Option 4) Permanent access road to the sanitary location has moderate potential Bat habitat within the Hedgerows and Cultural Thicket communities. *Studies to be completed in 2017
Natural Environment	Landscape connectivity and Wildlife Corridor Functions						
	Terrestrial (Wetland, Valley, Woodlands)	1	Potential effects on wildlife habitat within the valley corridor due to increased light and noise effects from valley crossing; potential road mortality. Existing wildlife corridors associated with the Eaton Hall Creek and the East Humber River will be maintained for both terrestrial and aquatic species.	1	Potential effects on wildlife habitat within the valley corridor due to increased light and noise effects from valley crossing; potential road mortality. Existing wildlife corridors associated with the Eaton Hall Creek and the East Humber River will be maintained for both terrestrial and aquatic species.	1	Potential effects on wildlife habitat within the valley corridor due to increased light and noise effects from valley crossing; potential road mortality. Existing wildlife corridors associated with the Eaton Hall Creek and the East Humber River will be maintained for both terrestrial and aquatic species.
	Aquatic (Watercourse)	3	Proposed span structure will not impede watercourse, wetland or valleyland functions with respect to north-south landscape connectivity. Reduced buffers at the crossing location.	2	Proposed span structure will not impede watercourse, wetland or valleyland functions with respect to north-east landscape connectivity. Reduced buffers at the bridge and potential bike crossing locations.	1	Proposed span structure will not impede watercourse, wetland or valleyland functions with respect to north-east or north-south landscape connectivity. Reduced buffers to natural features will be required at the bridge and potential bike crossing locations. Reduced buffers to natural features at the central crossing for the sanitary.
Summary Score Average		1.9		1.9		1.2	

SCHEDULE 'C' CLASS ENVIRONMENTAL ASSESSMENT

THE KING CITY EAST LANDOWNERS' GROUP	SCHEDULE 'C' CLASS ENVIRONMENTAL ASSESSMENT					
	CONSULTANT	OPTION 4: CENTRAL CROSSING	OPTION 7A: DAM CROSSING	OPTION 7B: DAM CROSSING - SEPARATE SERVICING LOCATION		
ASSESSMENT CRITERIA		One south-central valley crossing at narrowest point.	One north-central valley crossing above existing dam location. Servicing crossing within roadway.			One north-central valley crossing at existing dam location. Servicing crossing under valley lands south of dam location.
Discipline Summary						
Transportation	3.0	Most efficient and logical collector road system that will connect new neighbourhoods and will provide direct bicycle and trail routes within the new neighbourhoods in accordance with the TMP. The collector road system would best suit transit routing should it occur.	1.4	Convoluted and lengthy collector road system requires off-road pedestrian and bicycle connections to meet TMP. Not as supportive of future transit should it occur.	1.4	Convoluted and lengthy collector road system requires off-road pedestrian and bicycle connections to meet TMP. Not as supportive of future transit should it occur.
Technical	3.0	Shortest and most efficient servicing and collector road layout.	1.8	Excessively deep servicing does not meet Township standards and has less direct and lengthier collector roads.	2.5	Separate valley crossings for bridge and servicing provides efficient servicing but less direct and lengthier collector roads.
Environmental	1.9	One crossing of redbird dace occupied habitat with a bridge outside of the meander belt will not impede watercourse, wetland or valley functions and north-south connectivity.	1.9	One crossing north of redbird dace occupied habitat with a bridge outside of the meander belt will not impede watercourse, wetland or valley functions and north-south connectivity however it is likely a second crossing for the trail/bike system within redbird dace occupied habitat may be required to meet the objectives of the TMP and could have an additional impact on the valley system.	1.2	One crossing north of redbird dace occupied habitat with a bridge outside of the meander belt will not impede watercourse, wetland or valley functions and north-south connectivity however intrusion into the valley for the servicing maintenance access and the likely use of the access road for a trail/bike system within redbird dace occupied habitat may be required to meet the objectives of the TMP and could have an additional impact on the valley system.
Social, Economic and Cultural	2.8	Central crossing will provide direct connections between the new development on either side of the valley system in an efficient and logical manner while providing pedestrian and cycling connections to the existing neighbourhood to the west in the same location. It will provide logical connections to the community park and potential school site and will provide for the best access to the southwest portion of the new community for emergency access purposes.	1.7	The northern crossing will provide less direct road connections between the new development on either side of the valley system and pedestrian and cycling connections to the existing neighbourhood to the west. It will provide less direct connections to the community park and potential school site than Option 4. Access to the southwest portion of the new community for emergency purposes is less direct than Option 4. Servicing costs are high due to deep sewers that would result in higher construction and maintenance costs.	1.8	The northern crossing will provide less direct road connections between the new development on either side of the valley system and pedestrian and cycling connections to the existing neighbourhood to the west. It will provide less direct connections to the community park and potential school site than Option 4. Access to the southwest portion of the new community for emergency purposes is less direct than Option 4. Servicing is more cost effective than Option 7a as the second crossing location allows sewer depths to meet Township standards.
Overall Average Score	2.7	RECOMMENDED ALTERNATIVE	1.7		1.7	



NEXT STEPS

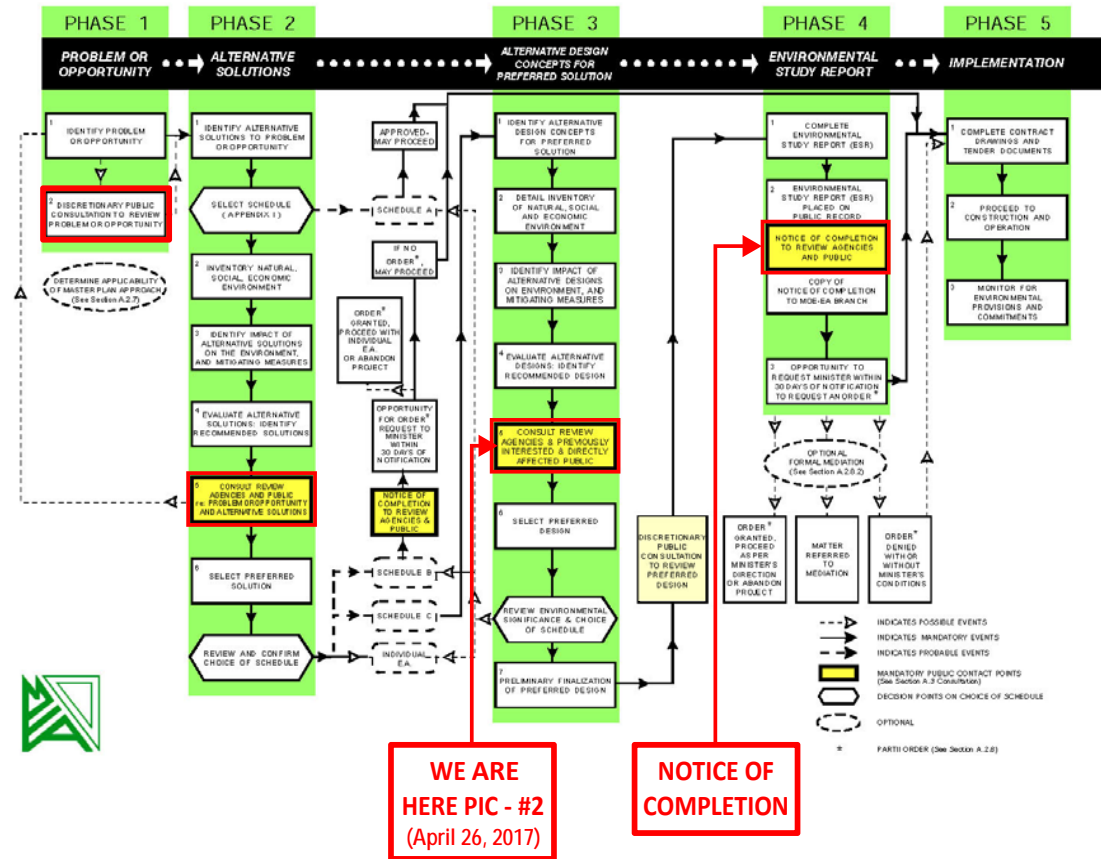
The project team will summarize stakeholder and agency comments and input to assist in selecting the Preferred Alternative. Detailed engineering will proceed with the selected Preferred Alternative.

Following the selection of the Preferred Alternative the project team and Township will;

- Host an optional public open house to review the Preferred Design if required
- Submit the Environmental Study Report to the Ministry of the Environment and Climate Change (MOECC)
- Provide a Notice of Completion to review agencies and the public
- Provide the final detailed design and Environmental Study Report for review by agencies and the public at the King City municipal office and public library

Following the submission of the Environmental Study Report there will be a 30 day period where an order (appeal) to the MOECC can be requested.

NOTE: This flow chart is to be read in conjunction with Part A of the Municipal Class EA



Questions and comments?
Please contact

Mr. Mike Cole

Engineering Department
King Township, 2075 King Road, King City, Ontario, L7B 1A1
Telephone: (905) 833-5321 or at mcole@king.ca

Ms. Joan MacIntyre

Planning - Malone Given Parsons Ltd.
140 Renfrew Drive, Suite 201, Markham, Ontario, L3R 6B3
Telephone: (905) 513-0170 or at JMacIntyre@mgp.ca