

# GTA West Transportation Corridor Planning and EA Study – Stage 2

Introductory Greenbelt Transportation  
Advisory Group Meeting  
October 29, 2014



## AGENDA

- Opening Remarks and Introductions
- About the Greenbelt Transportation Advisory Group (GTAG)
- Study Overview and Status Update
- Greenbelt Design Guideline
- Feedback on the Preliminary Short List of Route Alternatives Within the Greenbelt
- Upcoming Public Information Centre: Anticipating Public and Stakeholder Reaction
- Next Steps
- Open Forum
- Closing Remarks



## GREENBELT TRANSPORTATION ADVISORY GROUP

- The Greenbelt Transportation Advisory Group (GTAG) comprises members from environmental agencies, interest groups and individuals with a specific interest in the Greenbelt
- The GTAG is a volunteer group that provides advice to the GTA West Project Team
- The GTAG will:
  - **Share information regarding key environmental and agricultural features**
  - **Discuss potential impacts to sensitive features within the Greenbelt**
  - **Discuss and generate mitigation strategies to be used in the Greenbelt**
  - **Update the Greenbelt Guideline, if required**



## GETTING AND GIVING THE MOST

- It's OUR meeting...participate enthusiastically
- Focus on the future
- Terminology expertise is secondary
- There is such a thing as a bad idea!
- Build, don't duplicate
- Respect (for each other and the process)
- Consensus on no consensus
- Informal style, structured approach
- No dissertations (rather, 'rap and roll')



## GTAG ROLES AND RESPONSIBILITIES

- Membership in the GTAG is for the duration of the Stage 2 Study
- Members should try to attend all meetings to ensure consistency in discussions
- Members must be prepared to accept differences of opinions within the GTAG
- Help the GTAG operate effectively by offering suggestions and alternatives to issues
- Members should prepare for meetings in advance and consult with members' organizations if possible
- Declare a conflict of interest in a matter under consideration







## DESIGN CONSIDERATIONS IN THE GREENBELT

- A *Guideline for Planning and Design of the GTA West Corridor Through the Greenbelt* (the Guideline) was drafted in Stage 1 with input from the Greenbelt Transportation Advisory Group (GTAG)
- MTO will consider the Guideline during this stage of the study
- The Guideline contains key planning and design principles, and recommendations for mitigation measures for placing the GTA West transportation corridor within areas of the Greenbelt (when impacts to Greenbelt areas are unavoidable)
- Key elements include:
  - **Impact avoidance, where possible**
  - **Community sensitive design**
  - **Consideration of impacts to road ecology and wildlife**
  - **Consideration of impacts to agriculture**
  - **Stormwater management**
  - **Flexibility with geometric and bridge design to avoid or reduce impacts**



## WE ARE USING THE GUIDELINE FOR DESIGN IN THE GREENBELT

- The Guideline planning and design principles have been used to develop and screen the long list of route alternatives:
  - Avoided the Greenbelt where possible
  - Avoided sensitive features where possible and minimized habitat fragmentation
  - Crossed valleys at appropriate angles
  - Considered topography when identifying potential valley crossing locations
- The Guideline will be referenced when evaluating route alternatives, developing the preliminary design & mitigation measures for the preferred route, & during implementation:
  - Develop a Community Value Plan focused on the Greenbelt
  - Implement a highway vegetation plan, consider funnel-fencing and wildlife crossings
  - Consider tightening road curves, where possible, to avoid sensitive features and Class 1-3 soils
  - Consider using a reduced cross-section and minimize the number of interchanges in the Greenbelt, consider using open and long span bridge structures





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## COMMUNITY VALUE PLAN FOR THE GREENBELT

- A Community Value Plan (CVP) will be developed for the Greenbelt in consultation with stakeholders (following PIC #2) during preliminary design
- The approach will be collaborative and interdisciplinary, and will consider the scenic, aesthetic, historic, cultural and environmental settings of the study area while maintaining mobility and safety
- Principles for designing a CVP include:
  - Meets or exceeds the expectations of both designers and stakeholders and achieves a level of excellence in peoples' minds (i.e. enhances the driving experience)
  - Involves efficient and effective use of resources (time, budget, community) of all involved parties
  - Designed and built with minimal disruption to the community
  - Seen as having added lasting value to the community
  - Respect for all stakeholders
  - A safe facility for both the user and the community
  - Is in harmony with the community, and aims to preserve environmental, scenic, aesthetic, historic, and natural resource values as identified by stakeholders



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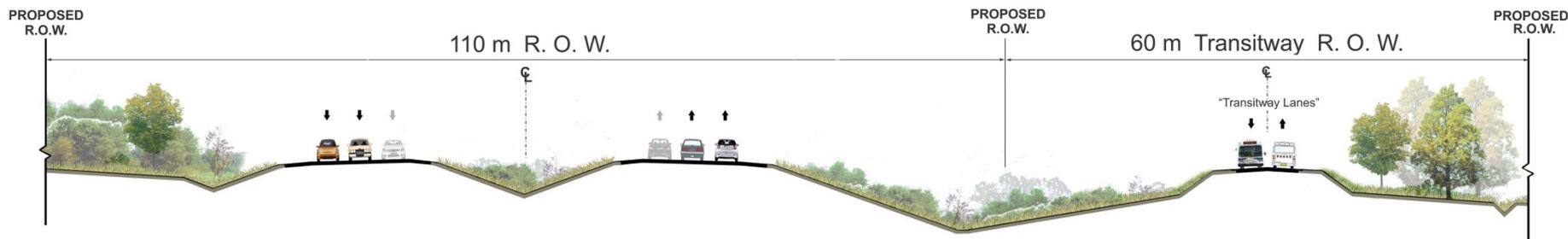
## STAGE 2 PLANNING PROCESS

- The planning process has two parallel, connected streams:
  - The Route Planning Alternatives Stream determines the preferred route for the new highway and transitway
  - The Crossing Road Alternatives Stream determines which crossing roads will have interchanges, flyovers, or closures
- The two streams will be combined to create a complete transportation corridor



## THE NEW CORRIDOR

- The new corridor is anticipated to be a 4- to 6-lane controlled-access highway with a separate adjacent transitway
  - **Transitway stations will be located at key interchanges and connection points**



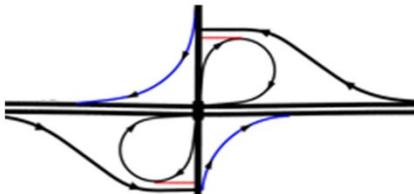
Note: the project team is currently updating the transportation systems forecasting to confirm the number of lanes required

## POTENTIAL INTERCHANGES AND CROSSING ROAD TREATMENTS

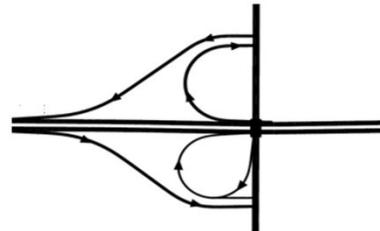
- Interchanges will be required at existing/planned freeways (e.g. Highway 401, 410, 427, and 400) and at some arterial crossing roads
- Initially all existing/planned crossing roads and provincial freeways were considered as potential interchange locations
- The potential interchange locations were then screened based on the following principles:
  - Minimize impacts to significant natural features, functions, systems and communities
  - Minimize impacts to existing and planned (approved under Official Plans) population and employment areas
  - Efficient and direct and address the transportation problems and opportunities including transitway and active transportation
- Crossing roads not identified for interchanges will be either overpasses, underpasses, or truncated at the corridor, based on transportation benefits and impacts to natural, socio-economic (land use) and cultural features

Common interchange types:

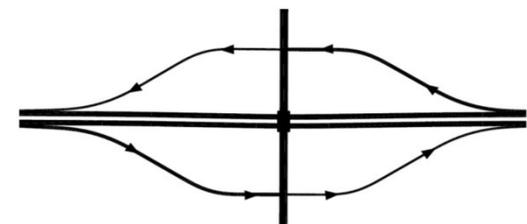
Partial Clover (Parclo) A-4 or A-2



Parclo AB



Diamond



## GOODS MOVEMENT PRIORITY FEATURES

- Stage 1 identified the need for improved goods movement (connections and reliability)
- The following goods movement priority features are being considered:
  - **Truck only lanes**
  - **Combined truck/transit lanes**
  - **Truck use of potential HOV lanes during off-peak hours**
  - **Intelligent Transportation Systems (ITS) features, such as variable message signs and real time traveler information**
  - **Longer speed change lanes**
  - **Enhanced design to accommodate Longer Combination Vehicles**
  - **Truck only interchange ramps, where warranted by truck volumes**
  - **Truck parking facilities**
  - **Enforcement features (weigh and inspection stations), including automated weigh stations**



*Truck Only Lane – I-15, California*

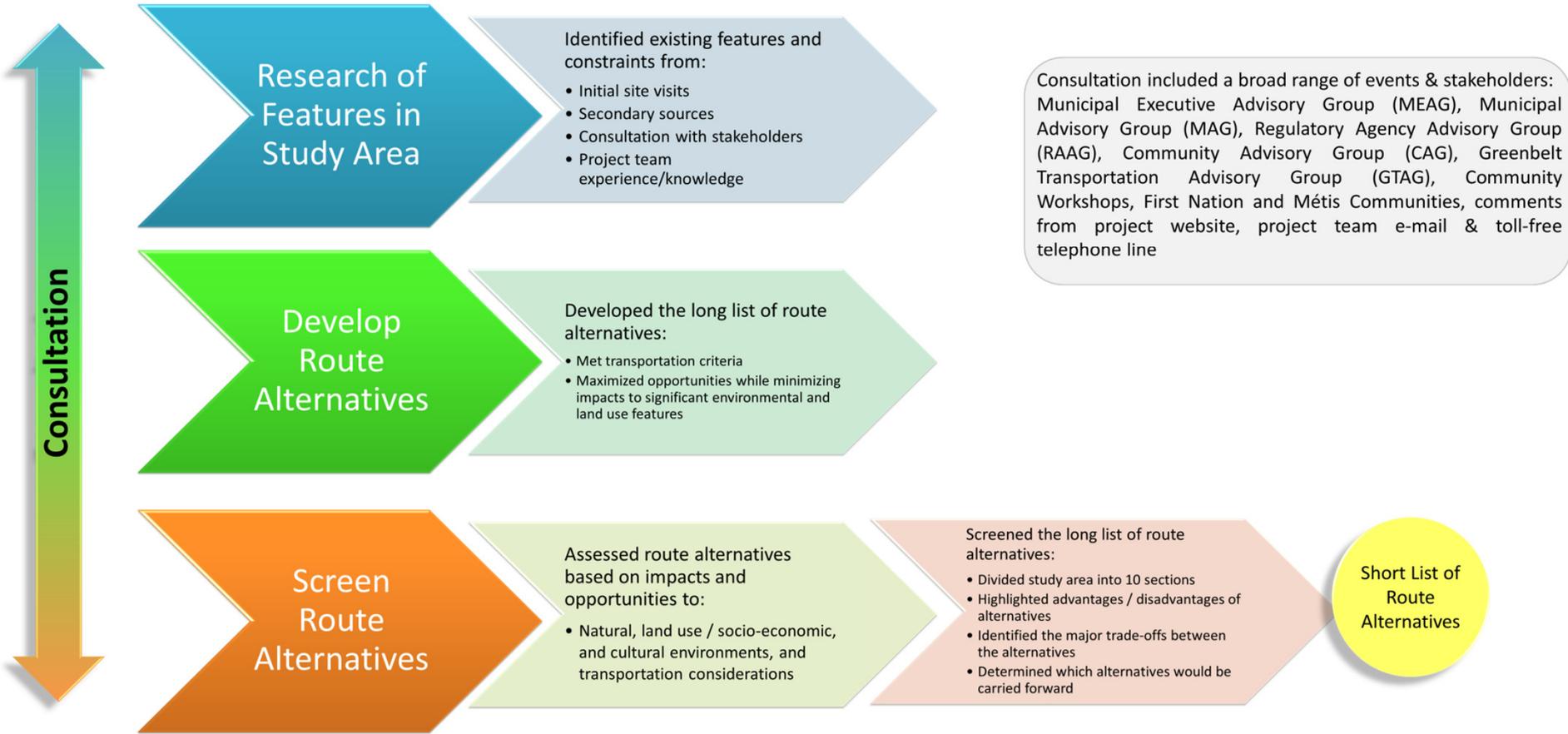


*Longer Combination Vehicle*



*Truck Parking Facility*

## ROUTE ALTERNATIVES DEVELOPMENT PROCESS



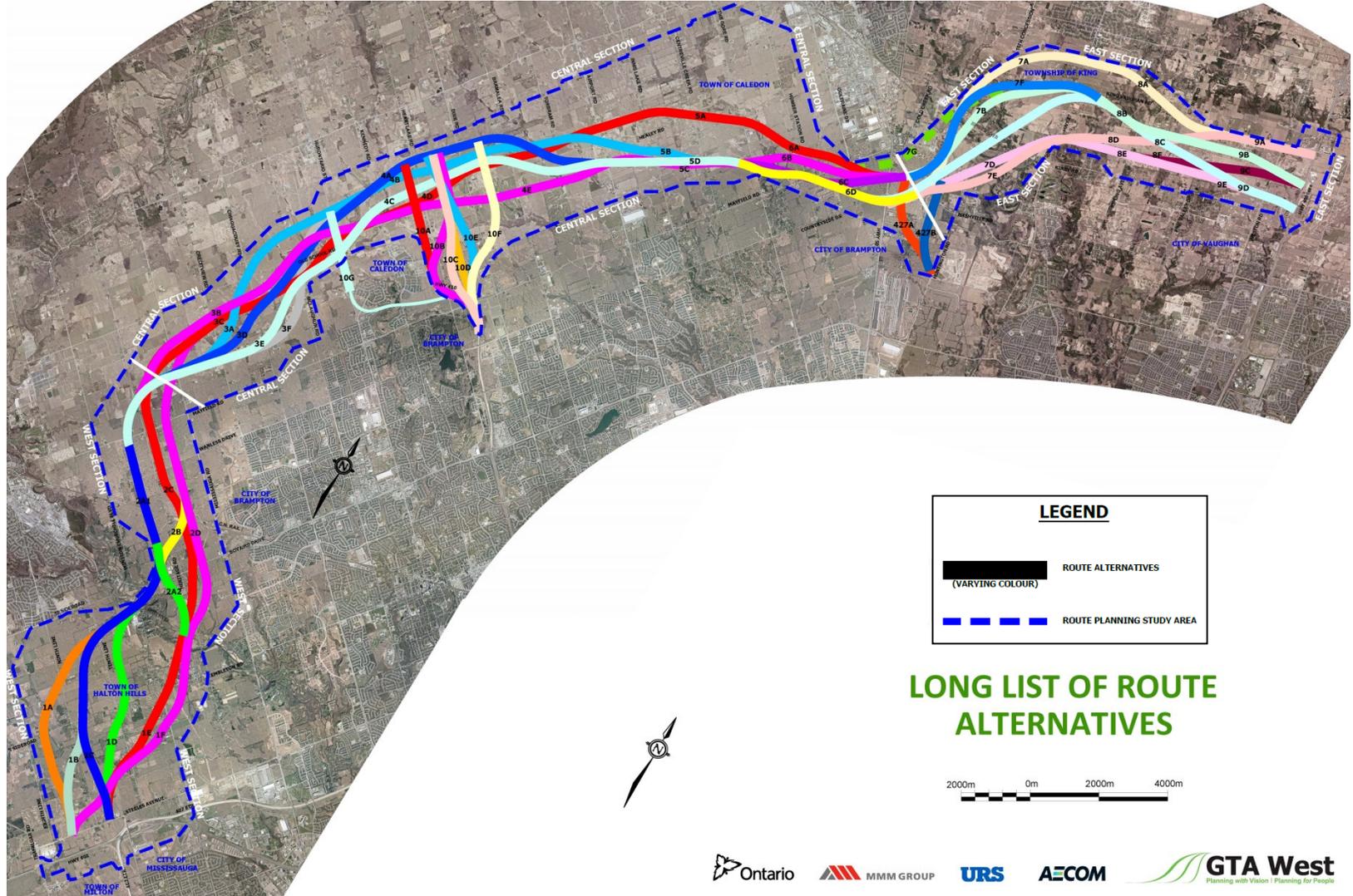
## SCREENING CRITERIA – LONG LIST OF ROUTE ALTERNATIVES

FACTOR	CRITERIA
<b>NATURAL ENVIRONMENT</b>	
Fisheries & Aquatic Ecosystems	<ul style="list-style-type: none"> <li>Number of sensitive watercourse crossings (watercourses with Species at Risk, coldwater crossings, critical/specialized habitat)</li> <li>Siting considerations (meandering crossing, complex valley crossing)</li> </ul>
Terrestrial Ecosystems	<ul style="list-style-type: none"> <li>Area of wetlands impacted (provincially and locally significant, non-significant)</li> </ul>
Woodlands / Vegetation	<ul style="list-style-type: none"> <li>Area of woodlands impacted (significant woodlands, intact habitat blocks, wildlife habitat)</li> </ul>
Designated / Special / Natural Areas	<ul style="list-style-type: none"> <li>Numbers of areas impacted (Greenbelt, Environmentally Sensitive Areas, Areas of Natural &amp; Scientific Interest)</li> </ul>
<b>TRANSPORTATION</b>	
Network Compatibility	<ul style="list-style-type: none"> <li>Compatibility with municipal/regional existing/planned key transportation corridors and potential interchange locations</li> <li>Compatibility and proximity to municipal/regional existing/planned transit initiatives</li> </ul>
Constructability	<ul style="list-style-type: none"> <li>Route length</li> <li>Number/length of bridges</li> <li>Crossing of/proximity to utilities</li> </ul>
Compliance with Design Criteria	<ul style="list-style-type: none"> <li>Ability of route to meet the geometric design standards</li> </ul>

FACTOR	CRITERIA
<b>LAND USE / SOCIO-ECONOMIC ENVIRONMENT</b>	
Land Use Planning Policies, Goals, & Objectives	<ul style="list-style-type: none"> <li>Compatibility with municipal land use planning policies, goals, &amp; objectives</li> </ul>
Land Use – Community	<ul style="list-style-type: none"> <li>Number of residential properties impacted</li> <li>Number of commercial/industrial properties impacted</li> <li>Number of tourist areas &amp; attractions impacted</li> <li>Number of community facilities/institutions impacted</li> <li>Number of municipal infrastructure and public service facilities impacted</li> </ul>
Noise Sensitive Areas (NSAs)	<ul style="list-style-type: none"> <li>Number of existing and future planned residences within 600 m of route alternatives</li> </ul>
Land Use – Resources	<ul style="list-style-type: none"> <li>Area of Class 1-3 soils impacted</li> <li>Number of Future Prime Agricultural Areas Impacted</li> <li>Number of existing and future aggregate resource areas impacted</li> </ul>
<b>CULTURAL ENVIRONMENT</b>	
Built Heritage and Cultural Heritage Landscapes	<ul style="list-style-type: none"> <li>Number of built heritage properties impacted</li> <li>Number of cemeteries impacted</li> <li>Number of First Nation burial sites impacted</li> </ul>
Archaeology	<ul style="list-style-type: none"> <li>Number of known archaeological sites impacted</li> </ul>

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**LEGEND**

- ROUTE ALTERNATIVES (VARYING COLOUR)
- ROUTE PLANNING STUDY AREA

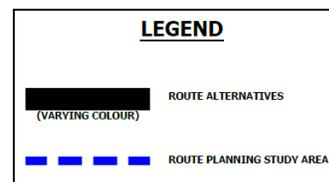
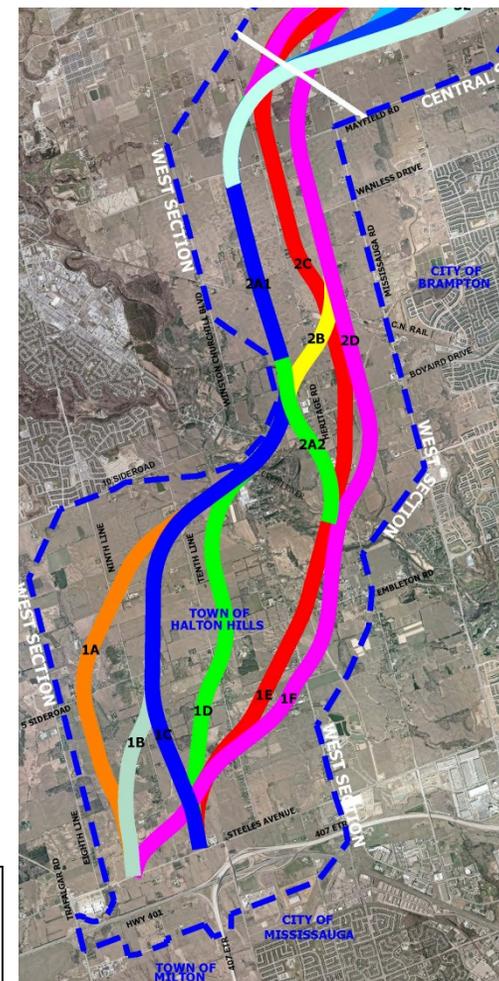
## LONG LIST OF ROUTE ALTERNATIVES





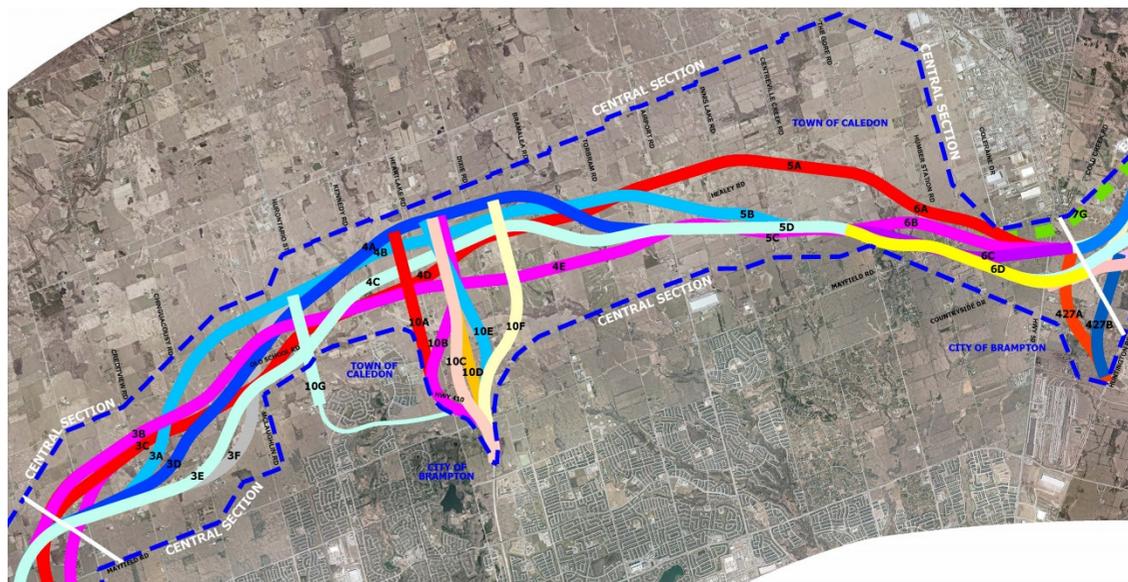
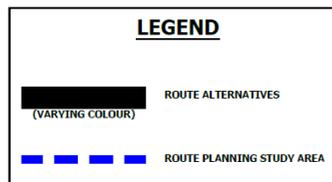
# SCREENING OF THE LONG LIST OF ROUTE ALTERNATIVES – WEST SECTION

- Key reasons alternatives were screened out:
  - Large impacts to Species at Risk habitat
  - Complex crossings of Sixteen Mile Creek
  - Large impacts to Class 1-3 soils
  - Large impacts to commercial/industrial features
  - Large impacts to existing and future noise sensitive areas
  - Impacts St. Stephens Anglican Church and cemeteries
  - Impacts to significant built heritage resources/cultural heritage landscapes
  - Multiple pipeline crossings





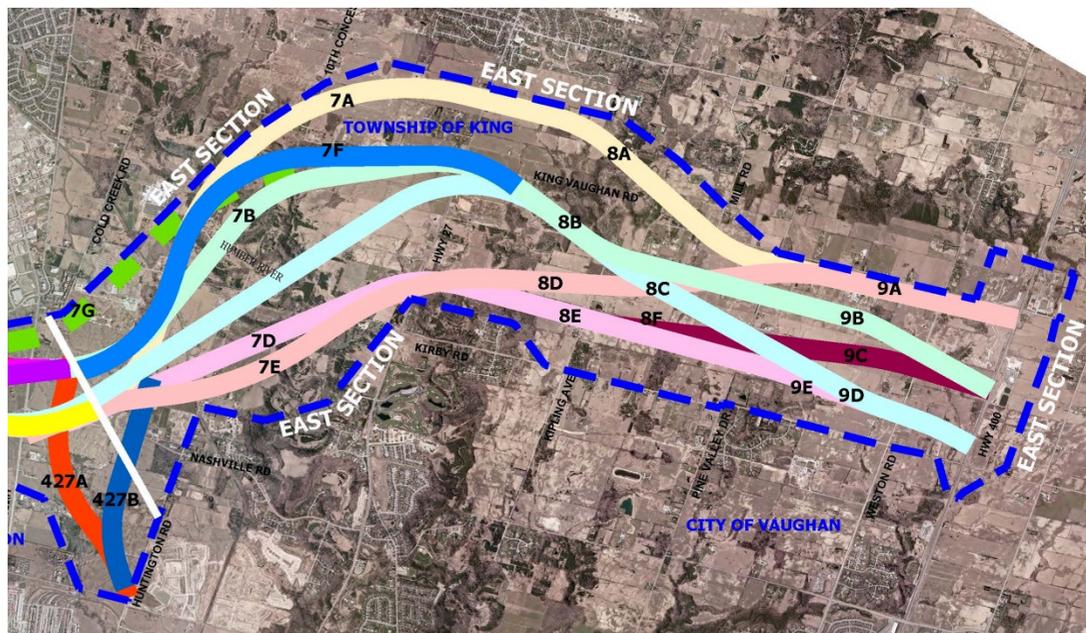
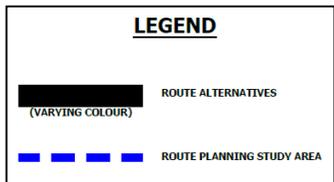
# SCREENING OF THE LONG LIST OF ROUTE ALTERNATIVES – CENTRAL SECTION



- Key reasons alternatives were screened out:
  - Large impacts to Species at Risk habitat
  - Significant environmental impacts
  - Large impacts to Class 1-3 soils
  - Excessive fragmentation of agricultural properties
  - Large impacts to commercial/industrial properties
  - Large impacts to residential properties
  - Large impacts to existing and future noise sensitive areas (in Mayfield West)
  - Impacts to Brentwood Academy, Banty’s Roost Golf and County Club, Brampton Fairgrounds, Mayfield United Church
  - Impacts to significant built heritage resources/cultural heritage landscapes
  - Very constrained (does not allow for design modification in future planning stages)
  - Inability to provide an interchange at Highway 427
  - Impacts to other roads
  - Impacts to a Hydro One facility



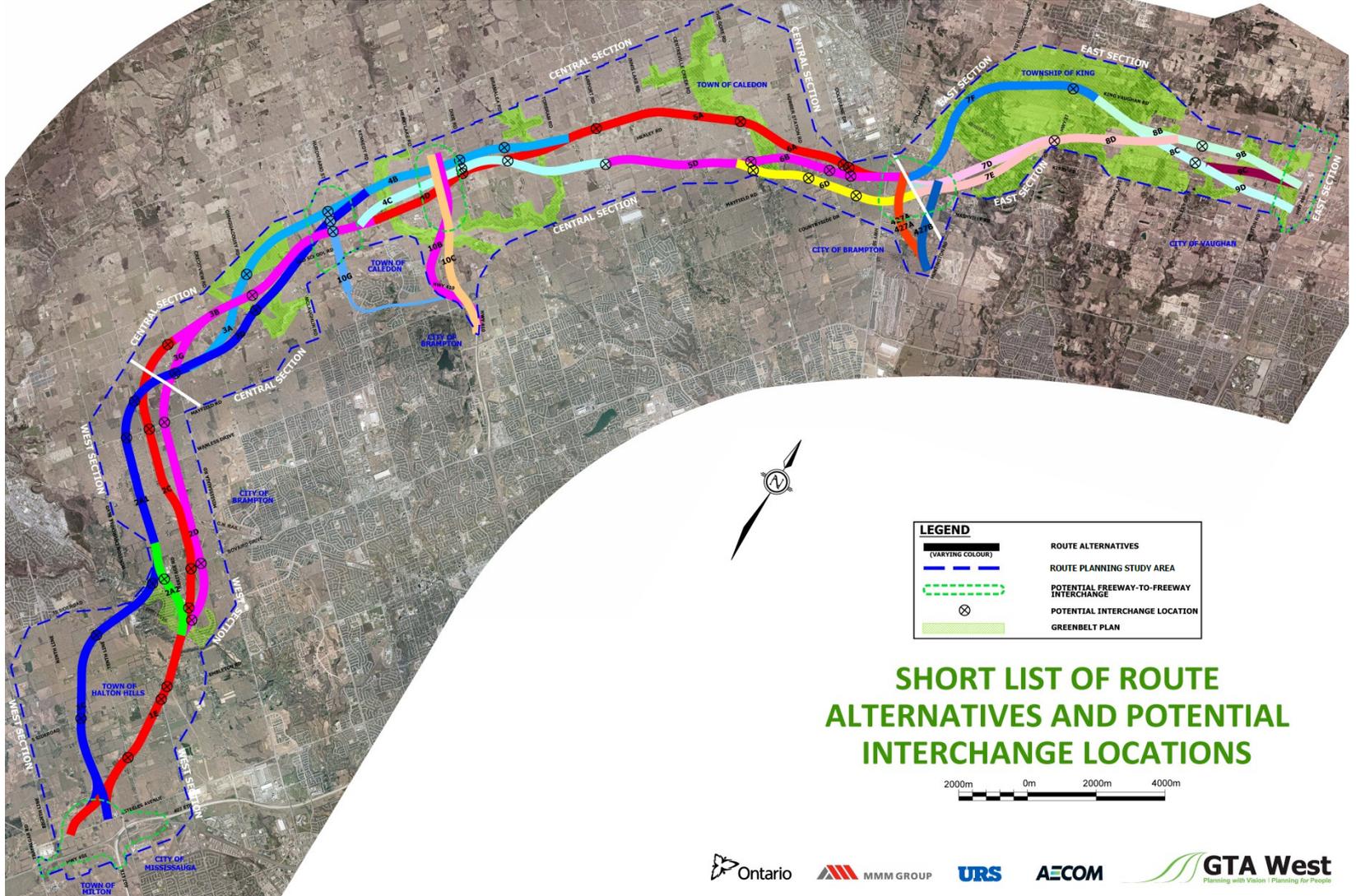
# SCREENING OF THE LONG LIST OF ROUTE ALTERNATIVES – EAST SECTION



- Key reasons alternatives were screened out:
  - Large impacts to Species at Risk habitat and a heronry
  - Significant environmental impacts
  - Large impacts to Class 1-3 soils
  - Large impacts to residential properties
  - Large impacts to commercial/industrial properties
  - Impacts to Burlington Outdoor Recreation Facility
  - Impacts to significant built heritage resources/cultural heritage landscapes
  - Large impacts to existing noise sensitive areas
  - Impacts to hydro lines and a Hydro One substation
  - Impacts to future land use
  - Inability to provide a connection between the GTA West transportation corridor and King-Vaughan Road

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## SHORT LIST OF ROUTE ALTERNATIVES AND POTENTIAL INTERCHANGE LOCATIONS



## P.O.W.E.R. EXERCISE WITHIN THE GREENBELT

**P** – Positives

**O** – Objections

**W** – What Else Do You Want To Share?

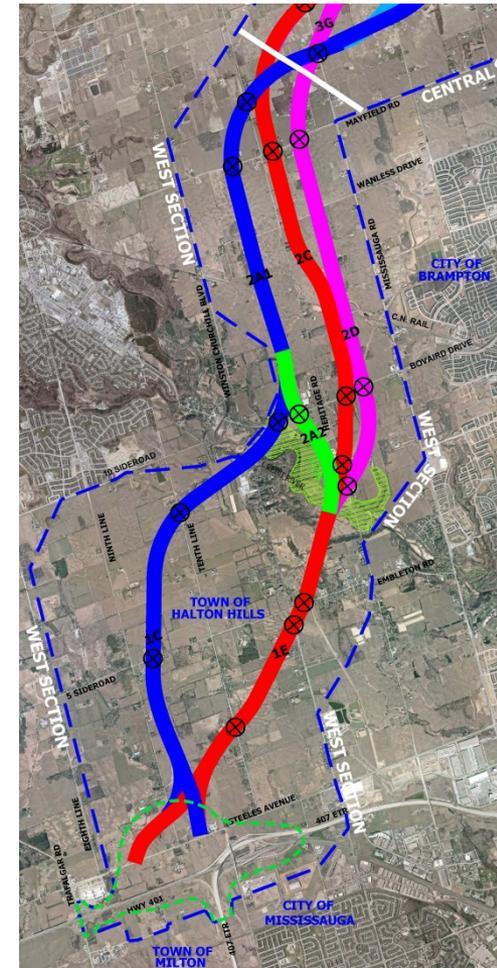
**E** – Enhancements

**R** – Remedies

## P.O.W.E.R. ON THE SHORT LIST OF ROUTE AND INTERCHANGE ALTERNATIVES WITHIN THE GREENBELT – WEST SECTION

- P – Positives
- O – Objections
- W – What Else Do You Want To Share?
- E – Enhancements
- R – Remedies

LEGEND	
	ROUTE ALTERNATIVES
	ROUTE PLANNING STUDY AREA
	POTENTIAL FREEWAY-TO-FREEWAY INTERCHANGE
	POTENTIAL INTERCHANGE LOCATION
	GREENBELT PLAN





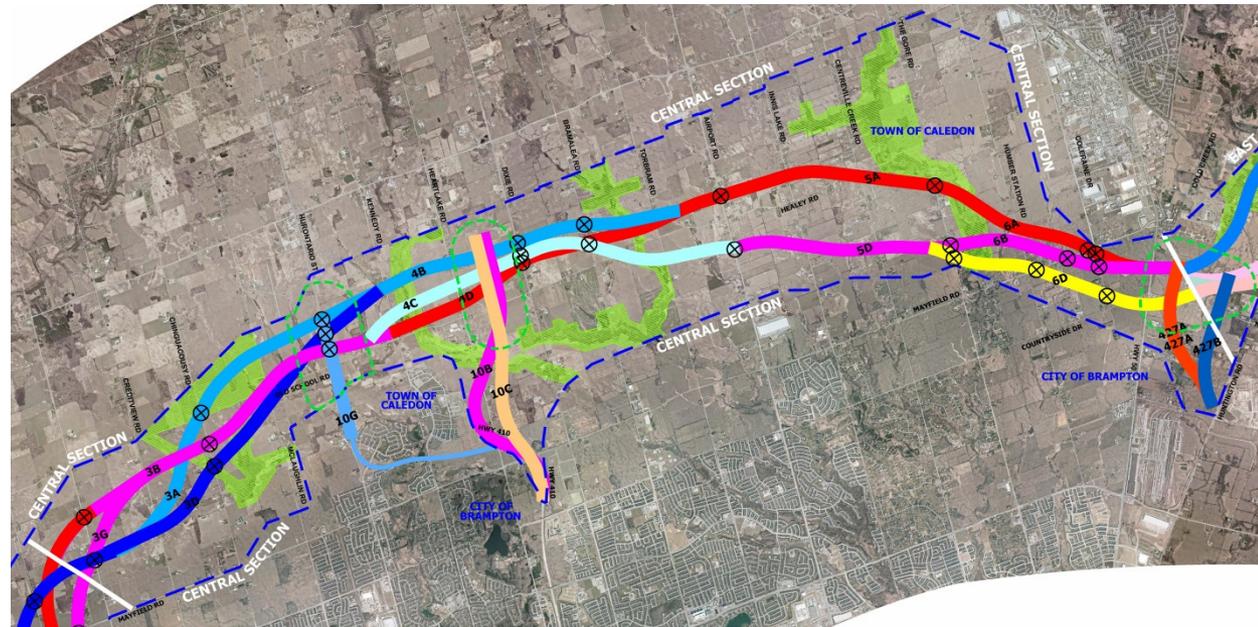
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## P.O.W.E.R. ON THE SHORT LIST OF ROUTE AND INTERCHANGE ALTERNATIVES WITHIN THE GREENBELT – CENTRAL SECTION

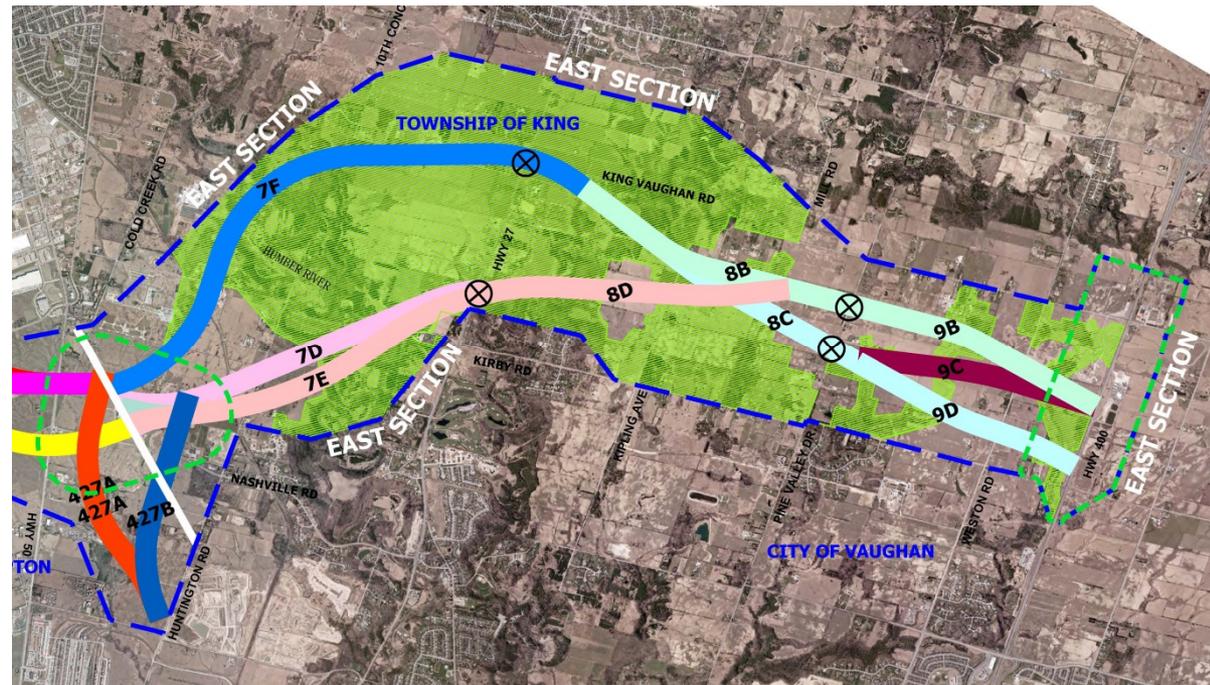
- P – Positives
- O – Objections
- W – What Else Do You Want To Share?
- E – Enhancements
- R – Remedies

LEGEND	
	ROUTE ALTERNATIVES
	ROUTE PLANNING STUDY AREA
	POTENTIAL FREEWAY-TO-FREWAY INTERCHANGE
	POTENTIAL INTERCHANGE LOCATION
	GREENBELT PLAN



## P.O.W.E.R. ON THE SHORT LIST OF ROUTE AND INTERCHANGE ALTERNATIVES WITHIN THE GREENBELT – EAST SECTION

- P – Positives
- O – Objections
- W – What Else Do You Want To Share?
- E – Enhancements
- R – Remedies





## UPCOMING PUBLIC INFORMATION CENTRE - ANTICIPATING PUBLIC & STAKEHOLDER REACTION

- How will stakeholders react to the short list of route alternatives and interchange locations presented at Public Information Centre #1?
- Are there “hot spots” or “hot topics” you foresee?
- What strategies/responses can we provide to address the “hot spots” or “hot topics”?



## NEXT STEPS

- Refine the screening of the long list and the identification of the short list of route alternatives
- Meet with the Municipal Advisory Group, and the Regulatory Agency Advisory Group
- Hold Public Information Centre #1 (PIC #1)
  - Review and respond to comments received about the information presented at PIC #1 and incorporate input into the study as required
- Evaluate the short list of route alternatives
  - Community Workshop #2 (Spring 2015)
  - Meetings with Advisory Groups (Fall/Winter 2015)
  - Present the preferred route at PIC #2 (Fall/Winter 2015)



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## ~ Open Forum ~



# ~ Closing Remarks ~