

Substandard Right-of-Way Study

City of Cambridge

Public Information Centre No.1

January 17, 2012 – Preston
January 18, 2012 – Galt
January 19, 2012 – Hespeler



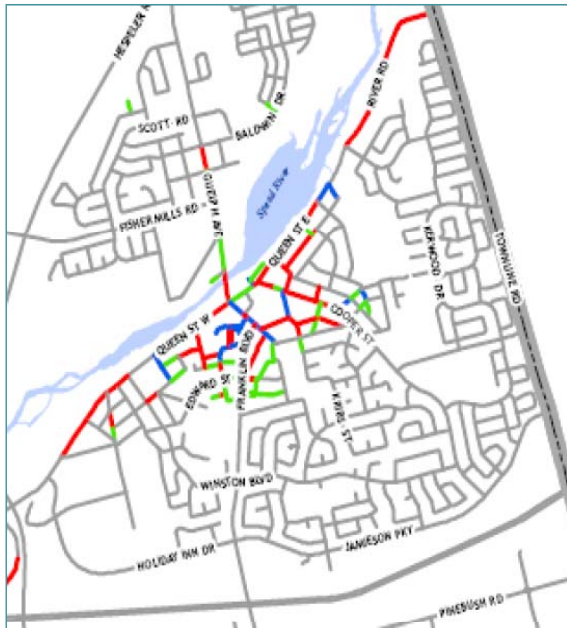
Study Purpose

- The goal of this study is to produce design standards that provide for safe, efficient, effective and environmentally sustainable transportation corridors within limited spaces.
- The objective is to incorporate road design requirements for various competing right-of-way elements such as sidewalks, on-street parking, streetscaping, utility corridors and underground infrastructure.
- A number of potential safety and/or operational issues are being assessed in relation to road users (vehicles, pedestrians, and cyclists), driveway access, heavy vehicle movement (i.e. for snow storage, removal and garbage collection), transit operations and emergency access.

Study Background

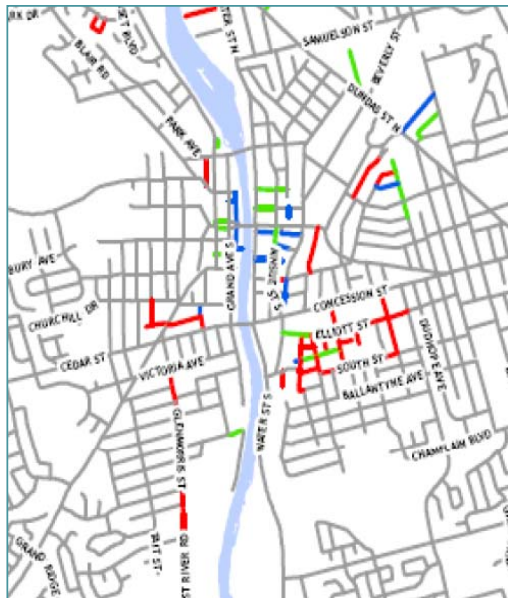
- The City has approximately 167 road sections with Right-of-Way widths less than 16 metres.
- Over the next several years, many of these road sections are scheduled for rehabilitation.
- Given the Substandard Right-of-Way, the existing City Design standards do not meet the Public expectations.
- The City is taking a pro-active approach to resolve this through the preparation of standard cross sections for these roads.

Typical Substandard Right-of-Ways



Right -of-Way Width (in metres)		
Less than 11.99	12.00 to 13.99	14.00 – 15.99

Typical Substandard Right-of-Ways



Right -of-Way Width (in metres)		
Less than 11.99	12.00 to 13.99	14.00 – 15.99

Roadway



Parking allowance	Minimum Recommended Pavement width*
No parking	6.0 metres
One side	8.40 metres
Both sides	10.80 metres



Emergency Vehicles

- Access for a standard fire truck requires at least 3.6 metres of roadway
- Section 3.2.5.6 of the Ontario Building Code (OBC) mandates that an access route for fire department shall have a clear width not less than 6 metres



Waste Management

- Access for a garbage truck requires at least 2.9 metres of roadway



Snow Storage and Removal

- Access for a snow plough requires at least 3.7 metres of roadway
- The extent of pavement lost on each side of the road after a winter storm is typically 0.5 metres



Parking

- In roadways narrower than 6.0 metres, a parked vehicle could obstruct the movement of larger vehicles
- Every lane of parking reduces the available right-of-way by 2.4 metres



Required right-of-way (access)

3.6 metres

2.9 metres

3.7 metres

2.4 metres

*TAC Design Guide for Canadian Roads

Sidewalks



Roadway Element	Minimum Recommended width
Sidewalk <ul style="list-style-type: none"> AODA Suggest City Standard 	1.8 metres 1.5 metres
Boulevard	0.5 metres



Utilities

- Reduce space allocated for boulevard
- Safety and Accessibility Issues are of consideration
- Location regulated by Offset and Setback standards
- Legal issues (i.e. easement)



Waste Management

- Reduce space allocated for boulevard
- Use of Private and Public Property
- Conflict with snow storage



Snow Storage

- Reduce space allocated for boulevard
- City Policy requires curb face sidewalks to be plowed
- Use of Private and Public Property
- Conflict with waste management



Parking

- Increase the perceived safety of pedestrians
- Provides support to commercial areas
- Every lane of parking reduces the available right-of-way by 2.4 metres



Required right-of-way by roadway element

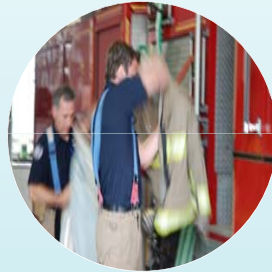
At least 0.5 metres

2.4 to 4.8 metres

Parking



Parking allowance	Minimum Recommended width*
One side	2.4 metres
Both sides	4.8 metres



Emergency Vehicles

- Operation of emergency vehicles are affected by parked vehicles
- Lateral clearance distance need to set up and operate equipment is approximately 6.0 metres



Waste Management

- Garbage collection could be obstructed by parked vehicles
- Operation of a garbage truck requires at least 3.7 metres of roadway



Snow Storage and Removal

- Snow storages could reduce space allocated for parking
- Major winter events requires the implementation of on-street parking restrictions
- Public Works delays snow clearing when parking prevents access



Sidewalks and Boulevards

- Reduce space allocated for parking
- A sidewalk in one side of the road requires at least 1.5 metres of the available right-of-way



Required right-of-way (operation)

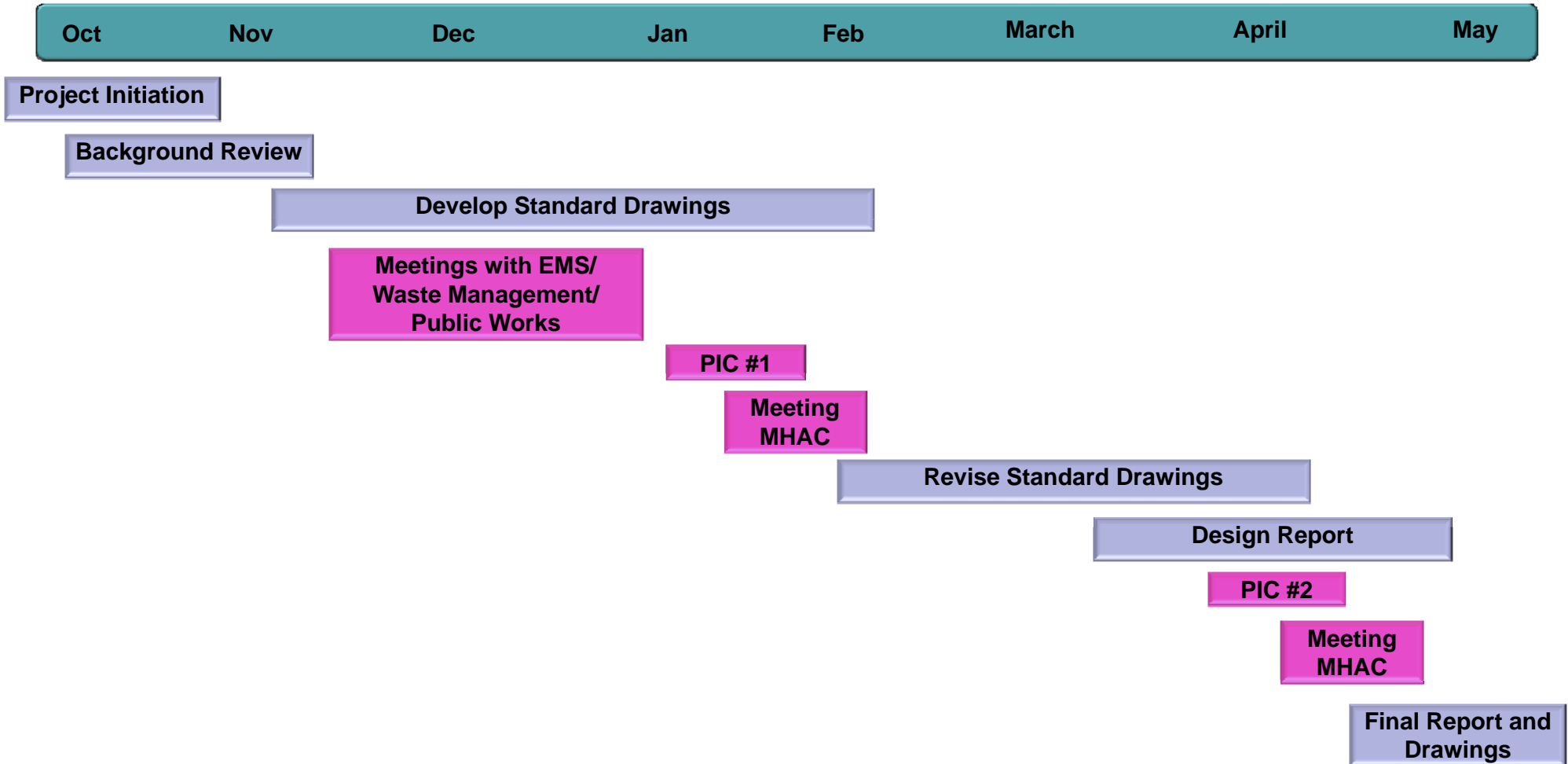
6.0 metres

3.7 metres

min. 3.0 metres

*TAC Design Guide for Canadian Roads

Schedule



Next Steps

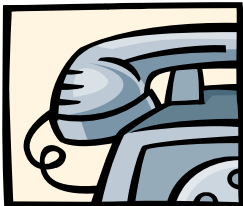
- Receive public comments by February 6, 2012;
- Project team to review standard drawings in light of comments received from the public;
- Produce final standard drawings and final design report that will be presented to the public;
- Host PIC No.2 in early April 2012, and
- Finalize standard drawings and design report and submit to the City in late May 2012.

Thank you for attending and please fill out a comment sheet if you have any questions or wish to be added to the project mailing list.

How to Provide Your Comments



Complete a comment sheet and send to one of the following:



Paul Hilker, CET
Project Manager
Transportation and Public Works
City of Cambridge
50 Dickson Street, 3rd Floor
P.O. Box 669
Cambridge, ON N1R 5W8
Tel.: 519.621.0740, ext. 4542
Fax: 519.740.7729
Email: HilkerP@cambridge.ca

Paul Smeltzer, P. Eng.
Consultant Project Manager
AMEC Environment & Infrastructure
3215 North Service Road
Burlington, ON L7N 3G2
Tel.: 905.335.2353
Fax: 905.335.1414
Toll Free: 1.866.751.2353
Email: Paul.Smeltzer@amec.com



**Please submit comments no later than
February 6, 2012**

Thank you for your Participation!