



Warden Avenue

Road Improvements

16th Avenue to Major Mackenzie Drive

Project Update

Town of Markham
June 1, 2010

Agenda

- ❑ Project Background
- ❑ Town of Markham Council Resolution
- ❑ Road Design
- ❑ Streetscaping
- ❑ Construction Phasing
- ❑ Public Consultation
- ❑ Schedule
- ❑ Questions/Discussion

Project Background

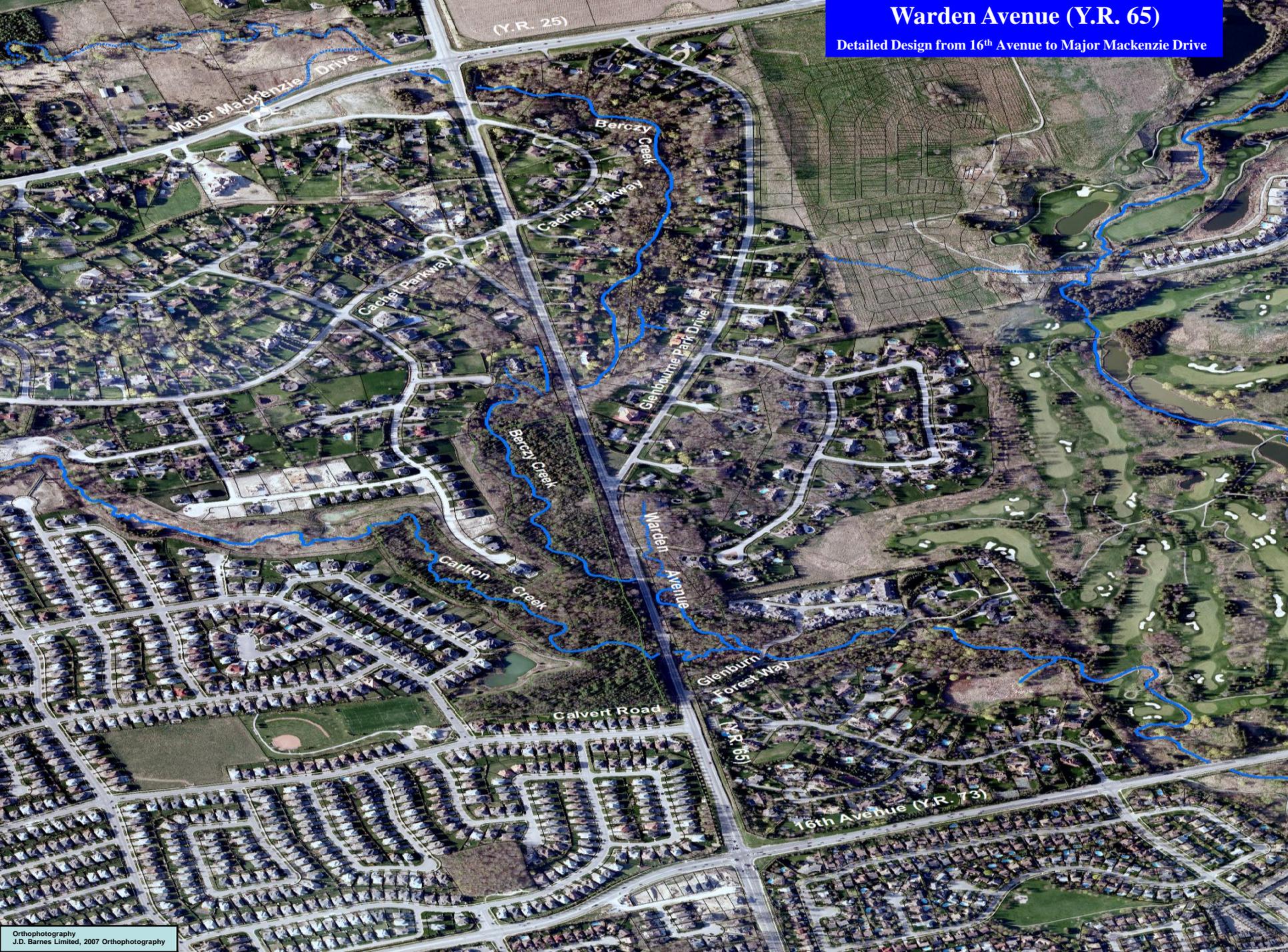
- ❑ June 1999: Environmental Assessment Study - Steeles Avenue to Major Mackenzie
- ❑ May 2001: Environmental Study Report - Recommended improvements to address traffic demands.
- ❑ April 2002: Ministry of Environment clearance for construction.
- ❑ August 2005: Construction - Highway 407 to Apple Creek
- ❑ May 2006: Construction – McPherson to Highway 407
- ❑ Section 16th Avenue to Major Mackenzie – Last Phase

Markham Resolution

- ❑ Council endorsed EA June 26, 2001
- ❑ Review continuous centre left turn lane
- ❑ Minimize impact on woodlot and creeks
- ❑ Enhanced landscaping
- ❑ Sidewalks
- ❑ Town review plans
- ❑ Public meetings

Warden Avenue (Y.R. 65)

Detailed Design from 16th Avenue to Major Mackenzie Drive



Major Mackenzie Drive

(Y.R. 25)

Berozy Creek

Cachet Parkway

Cachet Parkway

Glenburnie Park Drive

Berozy Creek

Carlton Creek

Warden Avenue

Calvert Road

Glenburnie Forest Way

(Y.R. 65)

16th Avenue (Y.R. 73)

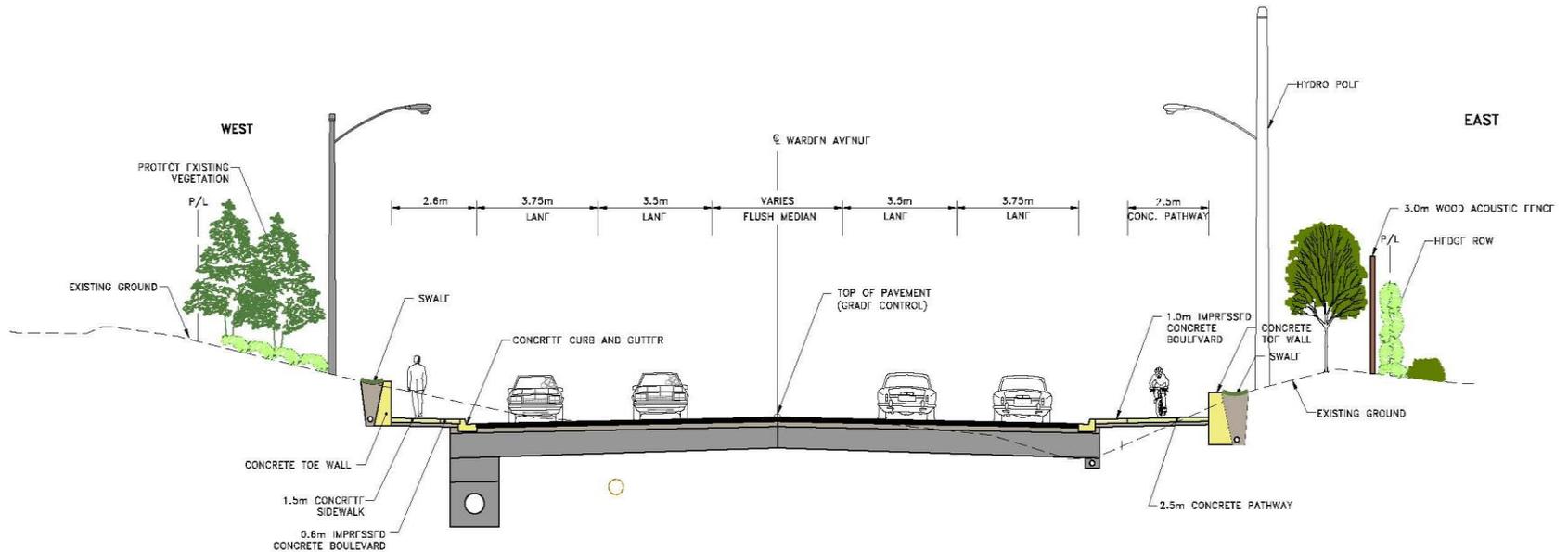
New Road Design Elements

- ❑ Added lanes with curbs on both sides of road
- ❑ Realignment of Glenbourne Park Drive Intersection
- ❑ Storm sewers
- ❑ 3 new bridges
- ❑ Sidewalks and Multi-Use Paths (east side)
- ❑ Noise Barriers (determined locations)
- ❑ Streetlighting
- ❑ Provisions for future traffic or pedestrian control signals
- ❑ Streetscaping (Municipal Streetscape Partnership)

Road Design Does Not Include

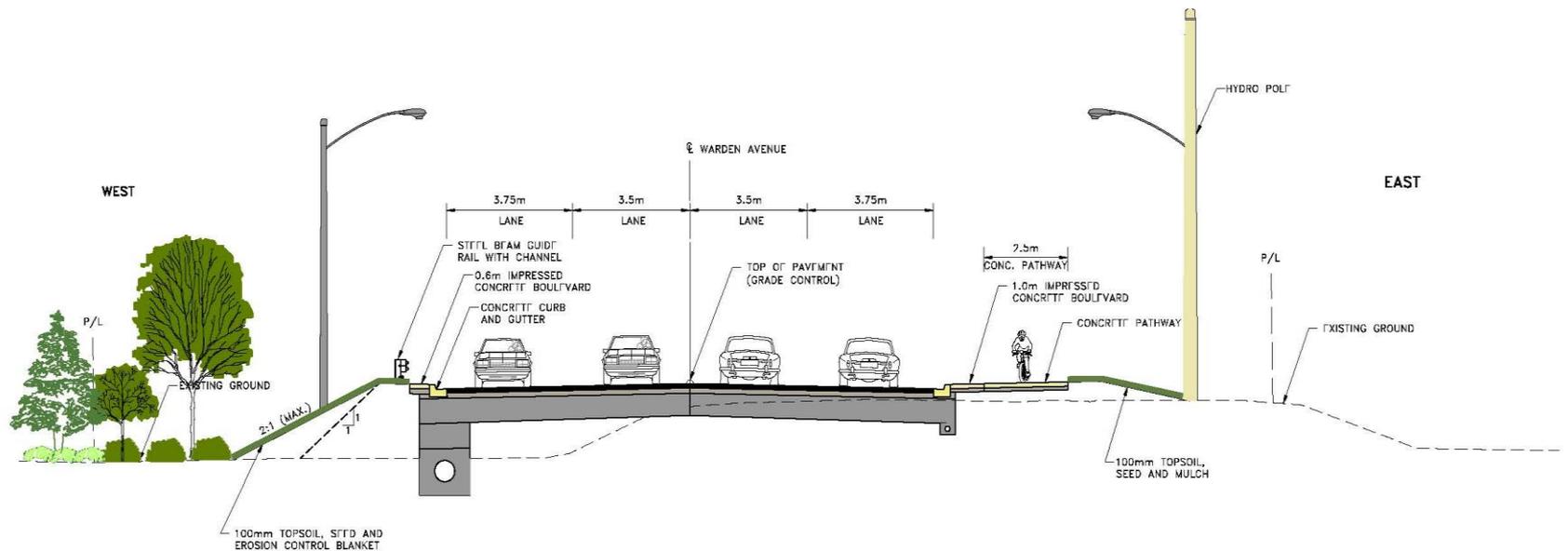
- ❑ Sidewalk on the west side (Calvert Road to Cachet Parkway)
- ❑ Continuous Centre Turn Lane
- ❑ Any work at the 16th Avenue Intersection
- ❑ Any work at the Major Mackenzie Drive Intersection

Five Lane Section



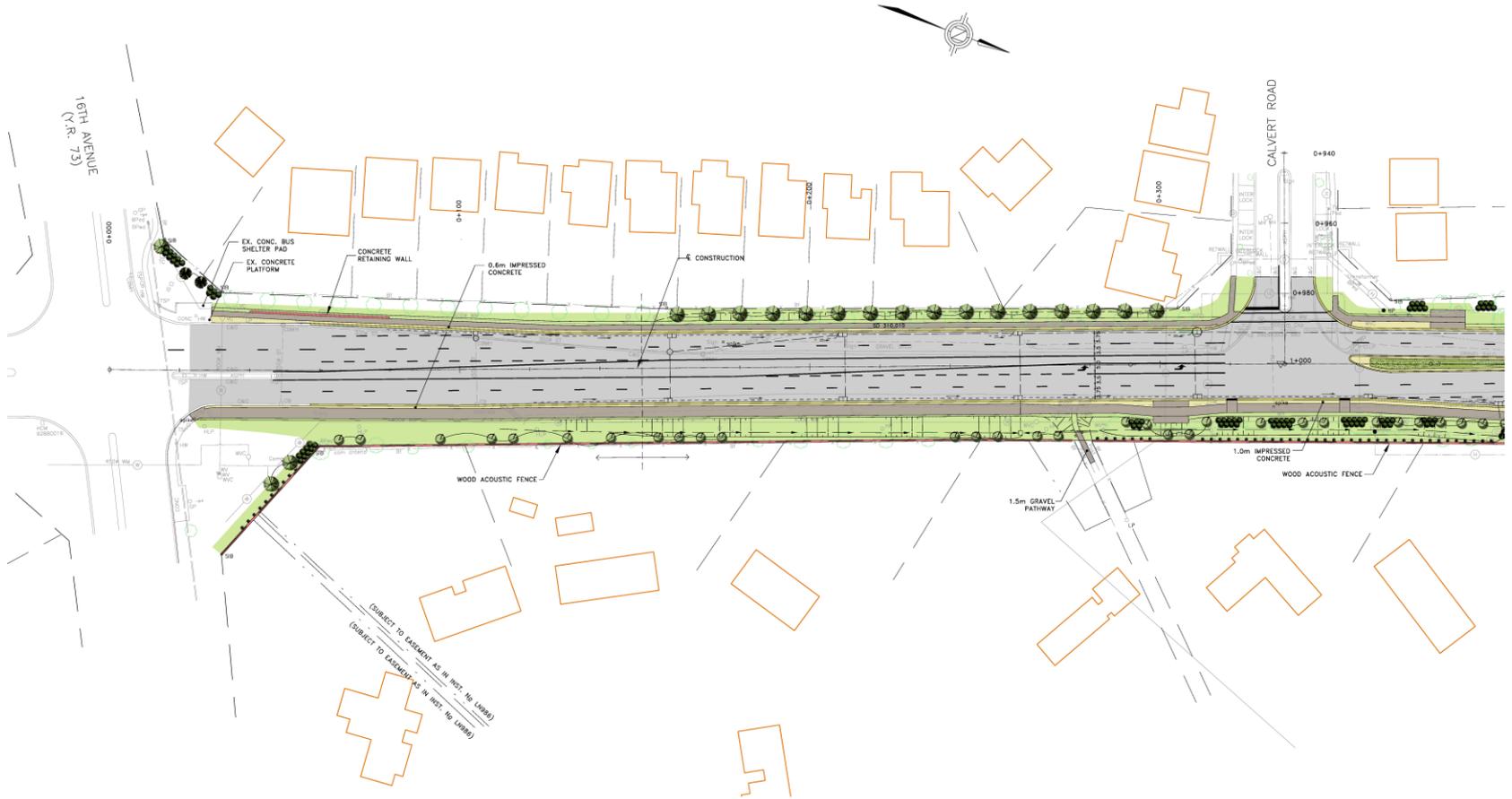
5 LANE SECTION

Four Lane Section

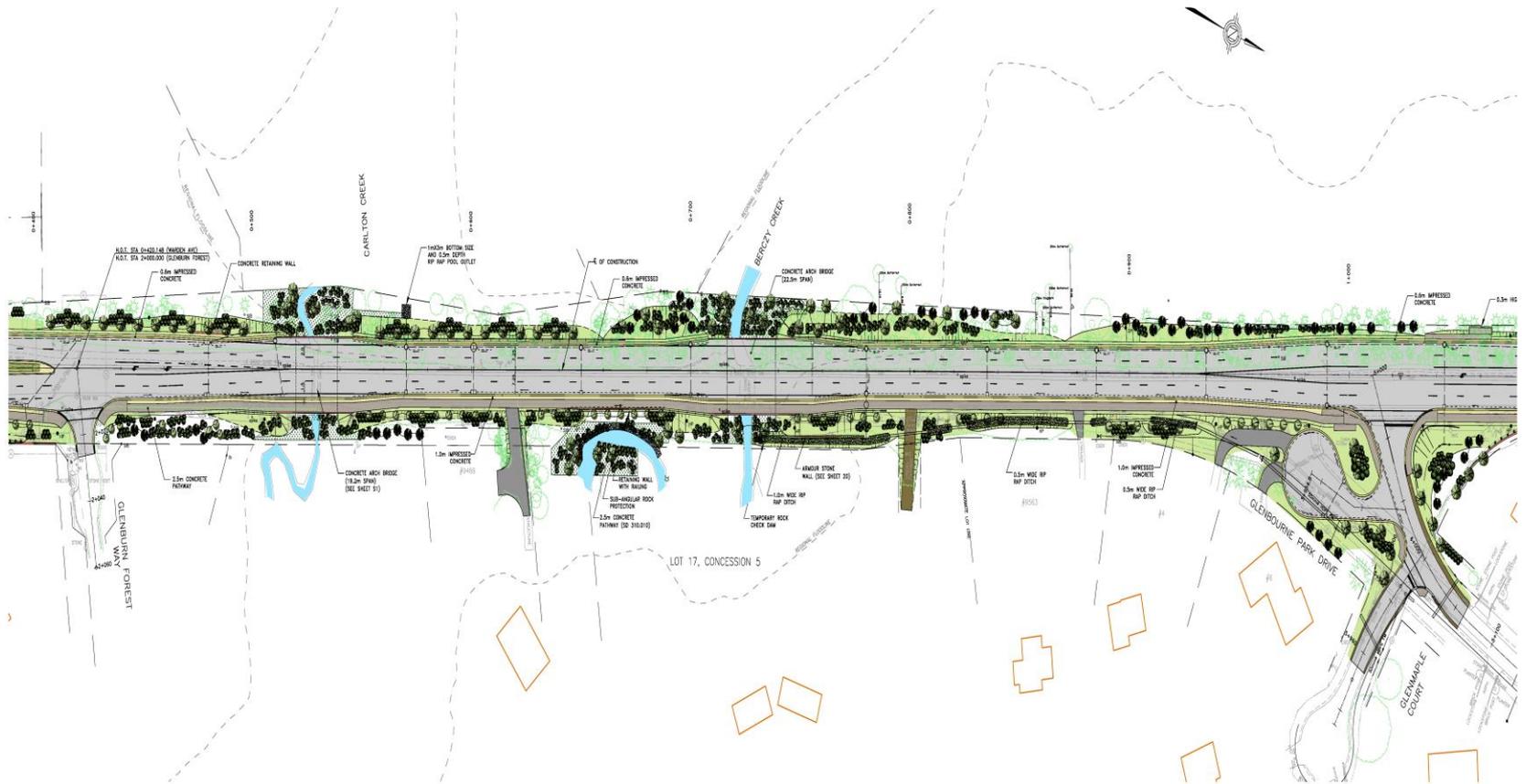


4 LANE SECTION

Roadway – 16th Avenue to Calvert



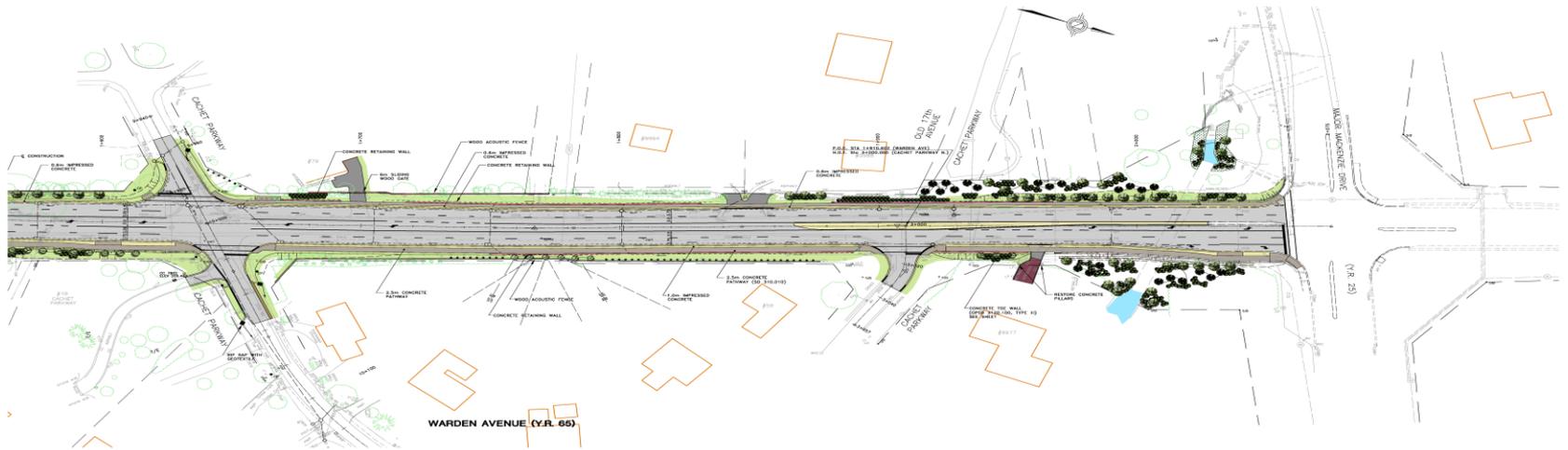
Roadway – Calvert to Glenbourne



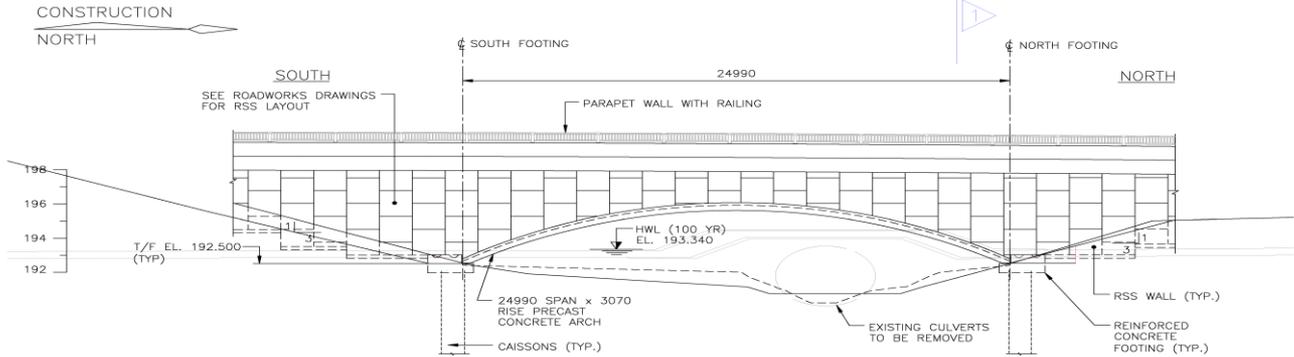
Roadway – Glenbourne to Cachet



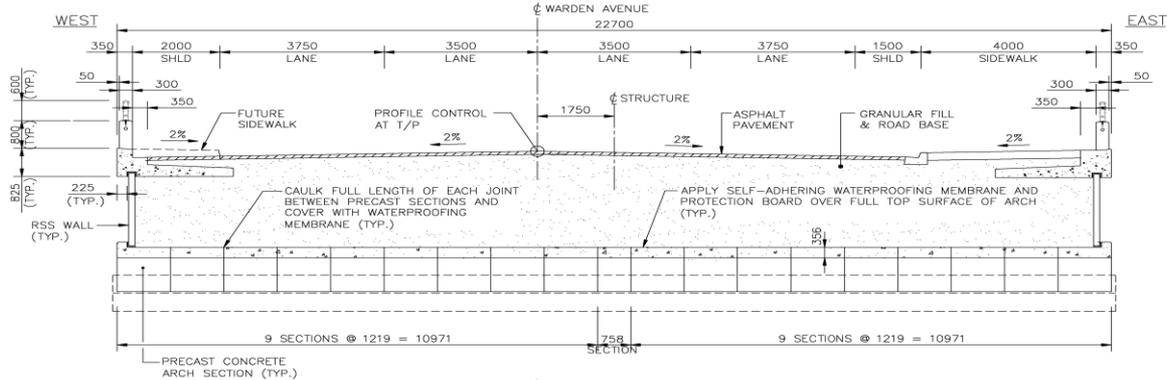
Roadway – Cachet to Major Mac.



Typical Bridge Arrangement



ELEVATION VIEW



SECTION VIEW

Noise Barriers

- ❑ Traffic Noise assessment completed in November 2008
- ❑ Noise barriers recommended in 5 general locations
- ❑ Mitigation for about 20 homes
- ❑ Barrier heights up to 3.0m in special cases
- ❑ Installed along property line & owned and maintained by Region

Noise Barrier – 16th Ave to Glenbourne



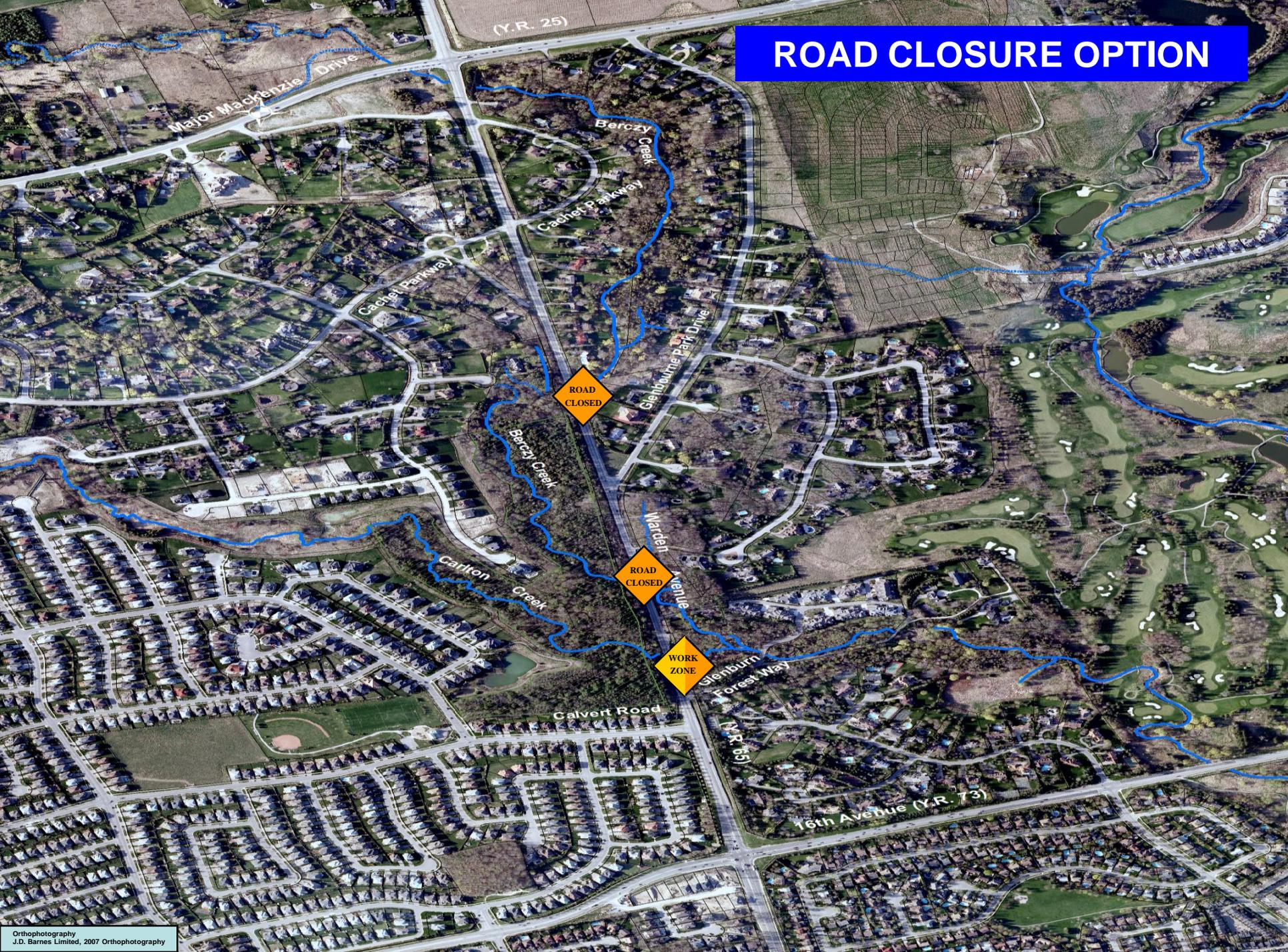
Noise Barrier—Glenbourne to Major Mac



Construction Phasing

1. Clearing and removals
2. Start with road work on the west side of Warden
3. Bridge work (May to November 2011)
4. Complete west side road work
5. Commence road work on the east side of Warden
6. Complete east side road work
7. Streetscape work

ROAD CLOSURE OPTION



ROAD
CLOSED

ROAD
CLOSED

WORK
ZONE

Public Impact

- ❑ Traffic management plan
- ❑ Region considering temporary road closure option
- ❑ Local access during any temporary road closure
- ❑ Emergency vehicle access at all times
- ❑ Resident contact maintained

Project Schedule

- ❑ Property Acquisition - March 2009
- ❑ Public Meeting - March 2009
- ❑ Relocate Utilities - July 2010 to Fall 2010
- ❑ TRCA Permit - July 2010
- ❑ MNR Permit - Fall 2010
- ❑ Tender - Late Fall 2010
- ❑ Construction Start – Late Fall 2010 or Spring 2011
- ❑ Anticipated Completion – Fall 2012 or Fall 2013 (without road closures)

Questions?

Thank you