

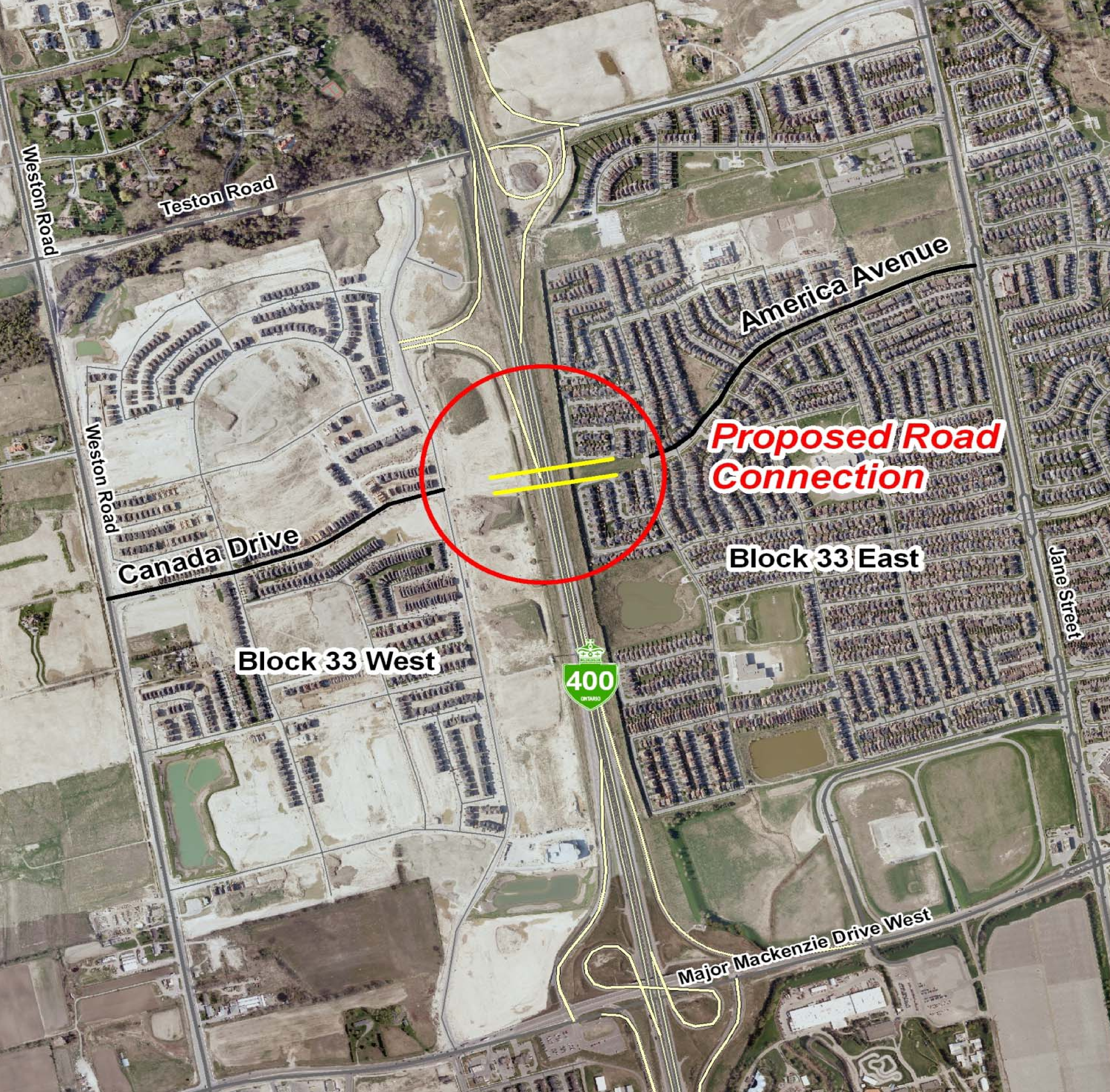
Welcome to the North Maple Community Bridge Public Information Forum #2

- ❑ Please sign-in on the sheet provided. Then feel free to walk around and view the displays
- ❑ The Presentation will begin at 8:00 P.M.
- ❑ If you have any questions, the Project Team will be pleased to discuss the study with you.
- ❑ Project Team members will be writing your questions/ comments for further discussion.
- ❑ Comment sheets are also provided for those who wish to provide additional comments. Please place your completed sheets in the Comment Box or take them with you and mail/fax to one of the Project Managers.

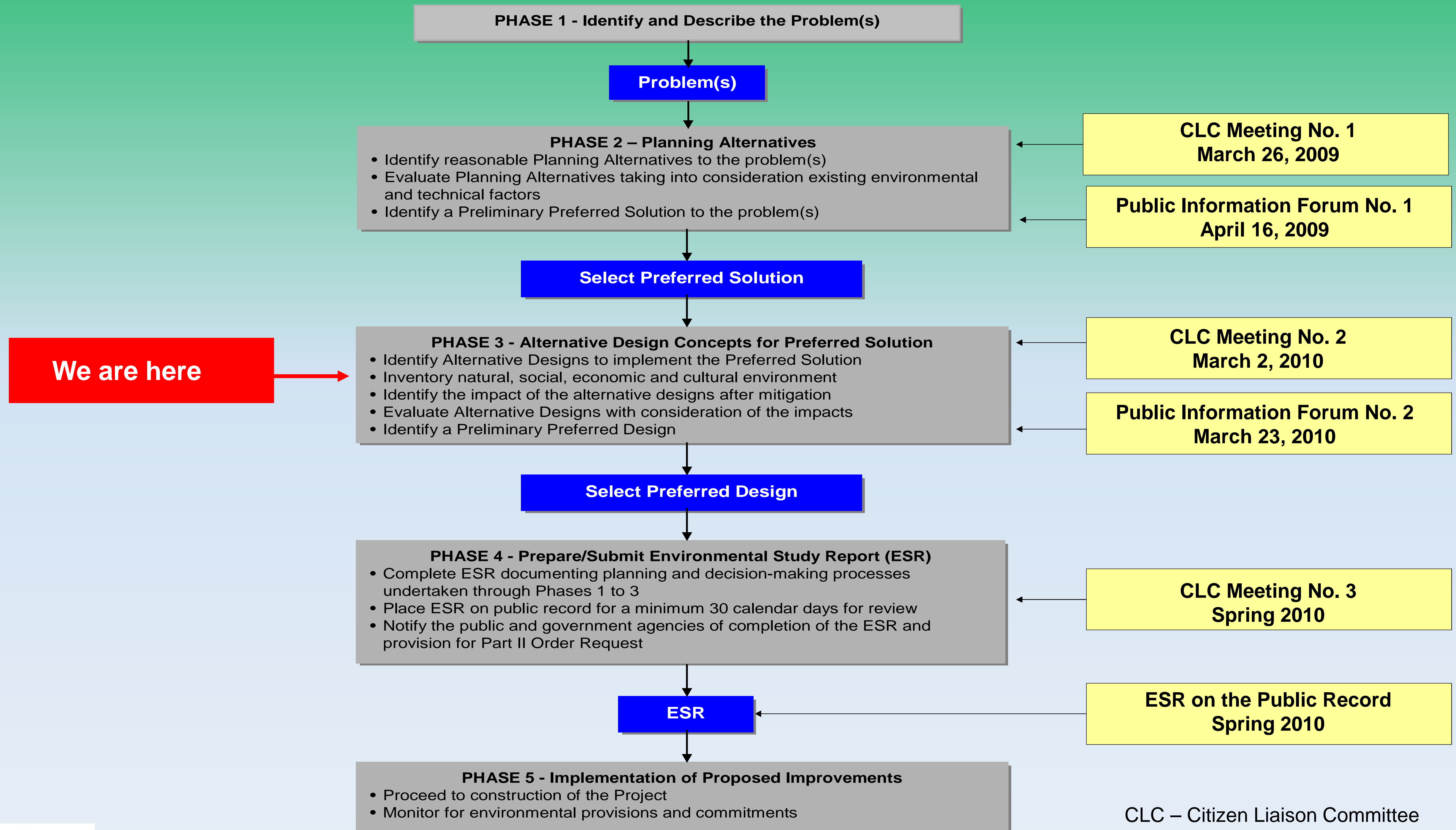
Study Area

The Study Area is bound by:

- Teston Road to the North;
- Jane Street to the East;
- Major Mackenzie to the South;
- Weston Road to the West;
- Highway 400 bisecting the overall Study Area.



Class EA Process



Class EA Process

- ❑ The Class EA process is an evaluation process designed to predict the environmental effects of proposed undertakings before they are carried out.
- ❑ The EA process ensures that environmental problems or opportunities associated with the project are considered along with alternatives, and their effects are investigated and mitigated through the planning process, before implementation (i.e. construction) takes place.
- ❑ Prior to placing the ESR on public record, it will be presented to Council for approval/Resolution at a Council meeting open to the public
- ❑ If Council agrees with the ESR and findings, the ESR will be available for members of the public to review
- ❑ If issues remained unresolved, any person may submit a request to the Minister of Environment for a Part II Order under the *Ontario Environmental Assessment Act*

Study Background – Phase 1

- The need for a primary crossing of Highway 400 has been established and identified at the planning level through various policies and studies (i.e. Vaughan Official Plan 400 & 600, Transportation Studies, etc)
- This road connection is a key component of the Block 33 multi-modal transportation system for:
 - Personal vehicles;
 - Cyclists;
 - Pedestrians;
 - Transit;
 - Community Connectivity;
 - Emergency Services; and,
 - Other Public Services

Phase 1 Recap – Define the Problem/ Opportunity

- ❑ Continued development throughout the City and the Region will constrain the existing Block 33 transportation network.
- ❑ The City is proactively proceeding with the need to implement the goals and objectives of OPA 400 and 600, and the recommendations of all related Transportation Master Plans/ Studies.
- ❑ Currently, residents must utilize major arterials to move from one side of Highway 400 to the other (i.e. Jane, Teston, Major Mackenzie, Weston), resulting in poor transportation efficiency and connectivity for the area.
- ❑ There is a need to implement an identified infrastructure component of the City's Official Plan

Phase 1 Recap – Problem/ Opportunity Statement

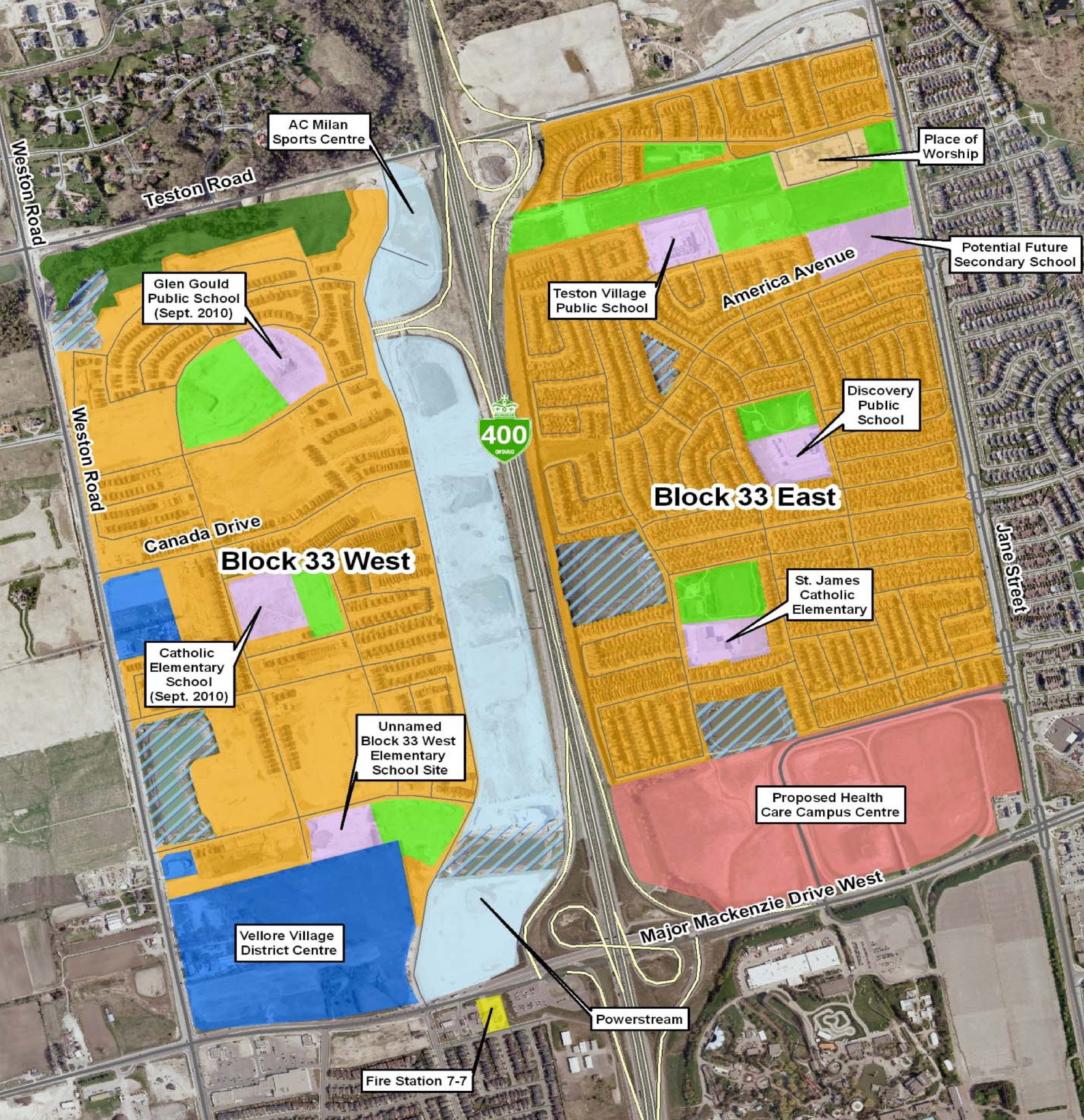
“In accordance with the infrastructure components identified within its Official Plan, the City is now proceeding to complete the approved transportation network for Block 33 in order to achieve connectivity between the east and west sides of Highway 400. Currently, residents must utilize major arterial roads to move from one side of Highway 400 to the other (i.e. Jane, Teston, Major Mackenzie, Weston), resulting in poor transportation efficiency. As a result, the surrounding arterial roads are reaching capacity, and according to various traffic studies, this is predicted to increase in severity over the next 20 years.

An opportunity exists to improve the transportation efficiency of Block 33 by providing a continuous local road network between Blocks, shortening travel times, improving emergency services response times, providing additional pedestrian facilities and offering access to enhanced transit systems and bicycle networks. Further, this opportunity allows for the implementation of an identified component of the City’s Official Plan, and promotes sustainable multi-modal transportation options contributing to the reduction of gas emissions.”

Phase 2 Recap – Study Area Existing Conditions

- A number of documents were reviewed in determining the Study Area's existing environmental conditions:
 - Traffic studies/counts
 - York Region Transportation Master Plan
 - Vaughan Pedestrian and Bicycle Master Plan
 - Vaughan Vision 2020 Strategic Plan
 - Land Use Policy including:
 - York Region Official Plan
 - City of Vaughan Official Plan
 - Vaughan OPA 400/600 and associated Transportation Studies
 - Block 33 Development Plan Supporting Studies:
 - Planning Basis Report and Transportation Studies
 - Natural Environment Inventory
 - Noise/Acoustics studies, Archaeology/Cultural Heritage studies, etc
 - Planned and Approved development applications within the Study Area

Existing Conditions



Phase 2 Recap – Identify Alternative Solutions

- 1. Do Nothing** - No changes or improvements to Block 33 transportation network
- 2. Reduce Auto Demand** – Improve public transit, cycling and Travel Demand Management initiatives within and around the Study Area
- 3. Upgrade/ Improve Other Roadways** - Improvements to other local roadways within the study area in conjunction with the ongoing Western Vaughan Transportation Improvements Individual EA.
- 4. Build Hwy 400 Overpass** - mid-block connection over Highway 400 between America Avenue and Canada Drive

** Combinations of the above were also reviewed.*

Phase 2 Recap – Recommended Alternative Solution

- A combination of Alternative #2 and #4 (Reduce Auto Demand and Build Hwy 400 Overpass) is Recommended for the following reasons:
 - Combined, these alternatives are expected to address the Problem/Opportunity Statement. They offer the best opportunity to deal with the identified operational efficiency concerns for personal vehicles and emergency services, and they will fully implement and complete the planned road network as identified in the City's Official Plan
 - Implementing these Alternatives will also provide a local road connection within Block 33, which will allow for the sustainable movement of multi-modal services, including buses, cyclists and pedestrians and therefore improves ease of access to a variety of uses in the area.

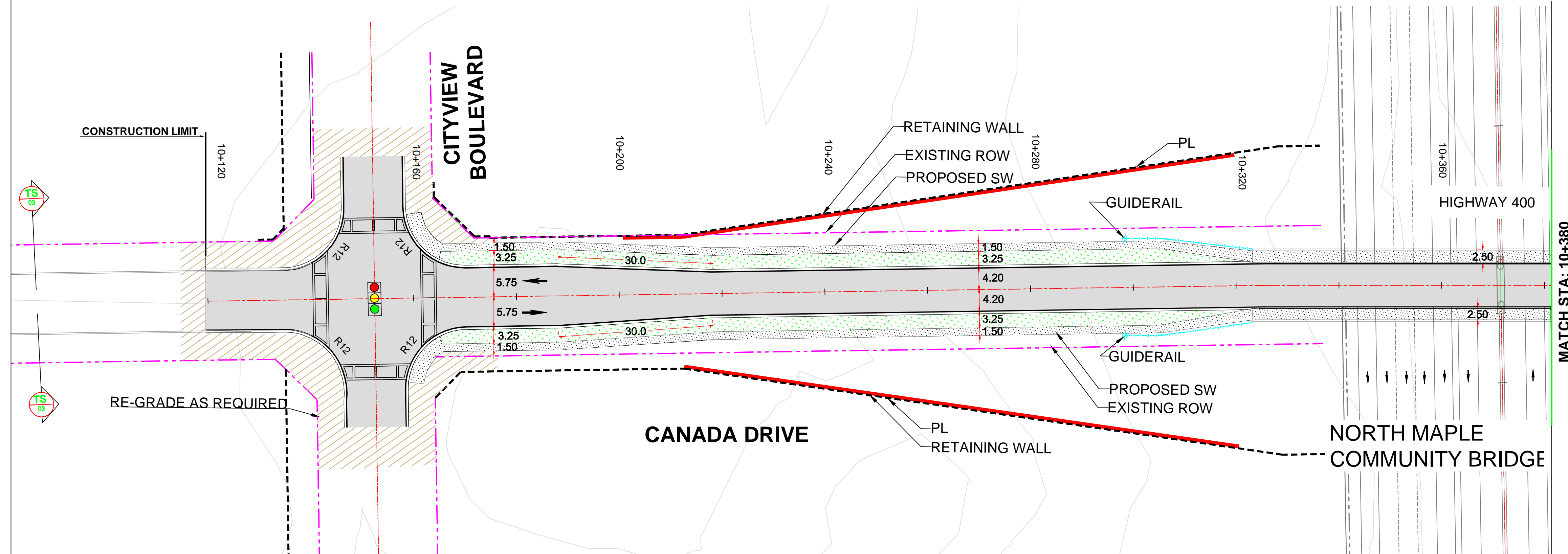
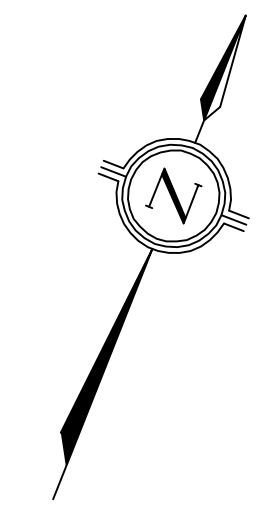
Phase 3 - Alternative Design Concepts

- Design Constraints
 - Existing alignment with available property.
 - Elevation at John Diesman Blvd
 - Elevation at Canada Drive
 - Bridge Span - Highway 400 Cross-section: Future ultimate configuration
 - Minimum clearance over Highway 400: 5m
 - Two span structure with a central pier over Hwy 400
 - MTO design requirements

Identify Alternative Design Concepts

- Based on the constraints we identified the following design concepts:
 - Option 1- Vertical Alignment with 6% approaches and Horizontal alignment centered in the existing Right of Way (ROW)
 - Option 2A- Vertical Alignment with 7.5% approaches and Horizontal alignment centered in the existing Right of Way (ROW)
 - Option 2B- Vertical Alignment with 7.5% approaches and Horizontal Alignment shifted to the south
 - Option 3A- Bridge with 2.0m sidewalk, Provision for 1.5m Bicycle lanes and 3.5m vehicular lanes
 - Option 3B- Bridge with 2.5m sidewalk, and 4.2m vehicular lanes shared with Bicycles

PRELIMINARY



TITLE:
**NORTH MAPLE COMMUNITY BRIDGE
 CLASS EA
 HIGHWAY 400 OVERPASS
 OPTION 1(WEST)**

VERTICAL ALIGNMENT
 WITH 6.0% APPROACH SLOPES
 HORIZONTAL ALIGNMENT
 CENTERED IN THE ROW

- LEGEND:**
- PROPOSED SIDEWALK
 - GRASS/BOULEVARD
 - GRADING
 - EX. RIGHT OF WAY (ROW)
 - PROPERTY LINE (PL)
 - RETAINING WALL
 - STEEL BEAM GUIDERAIL(SBGR)

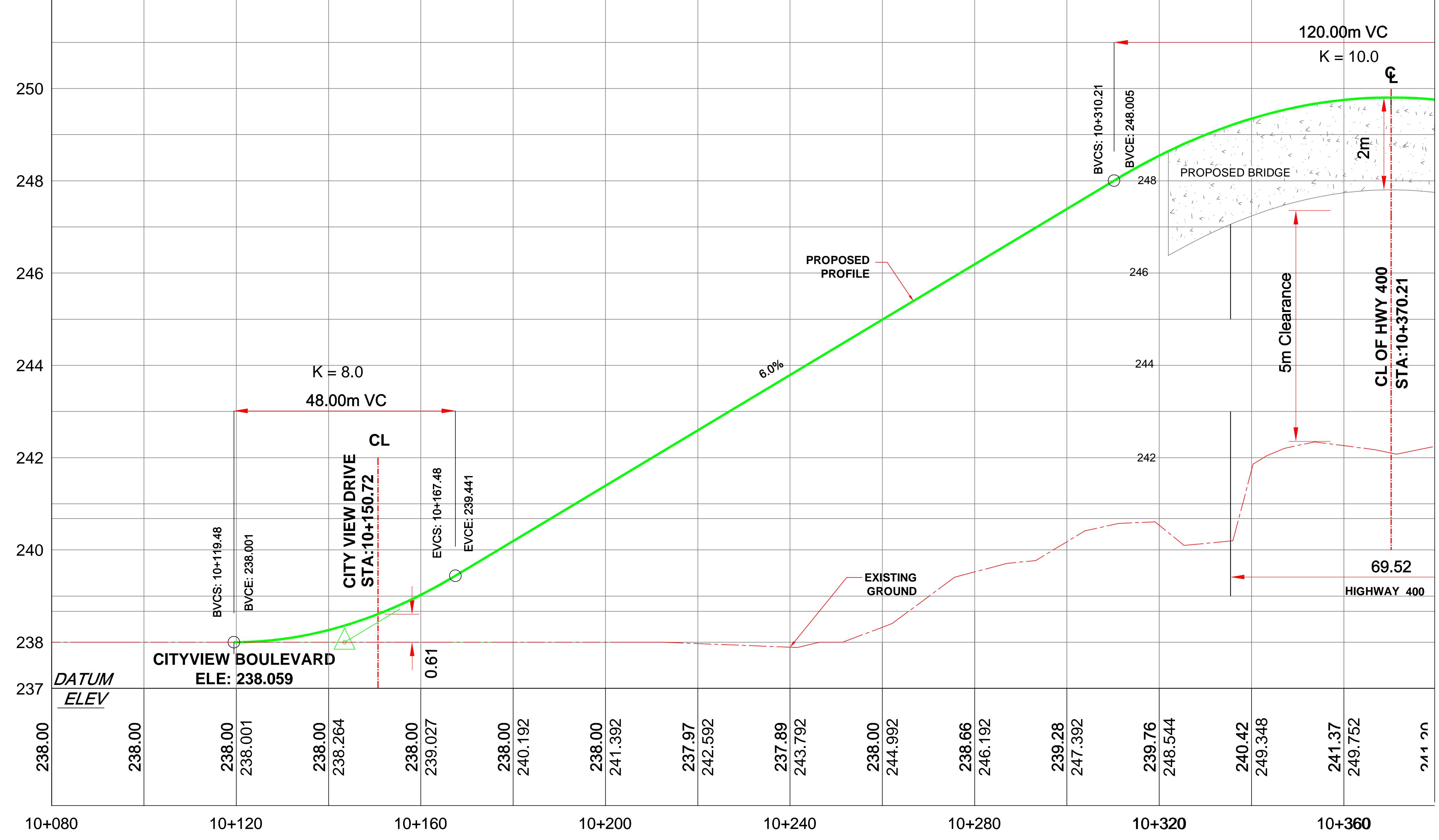


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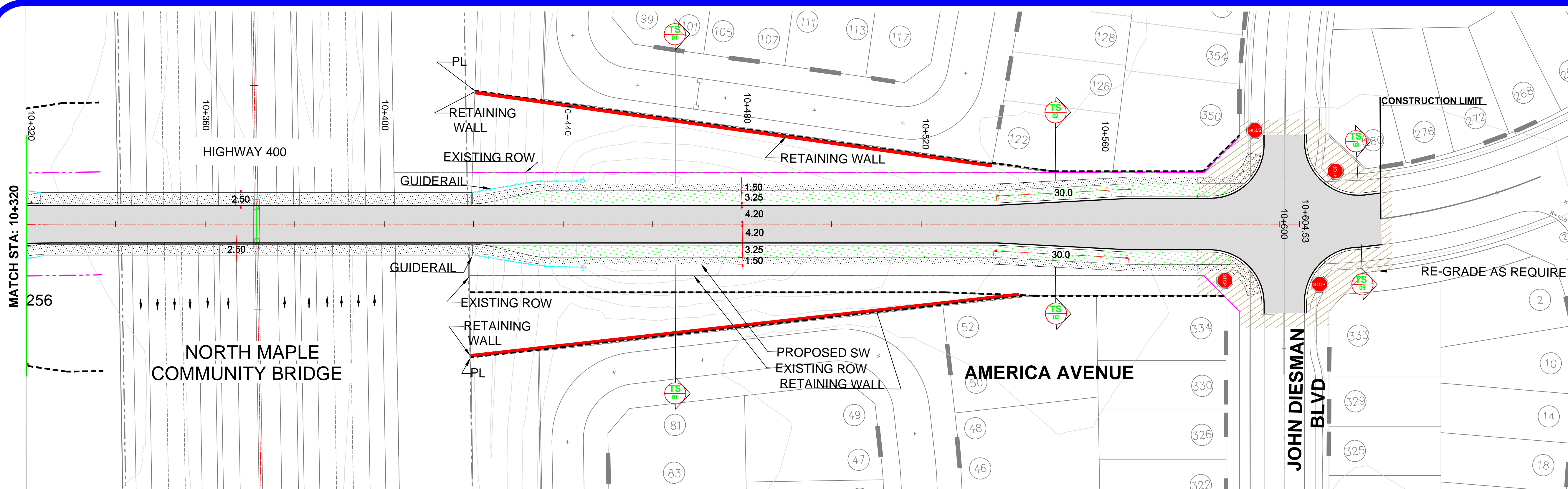
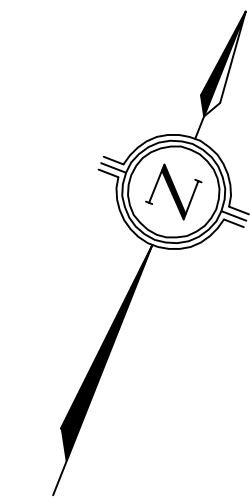
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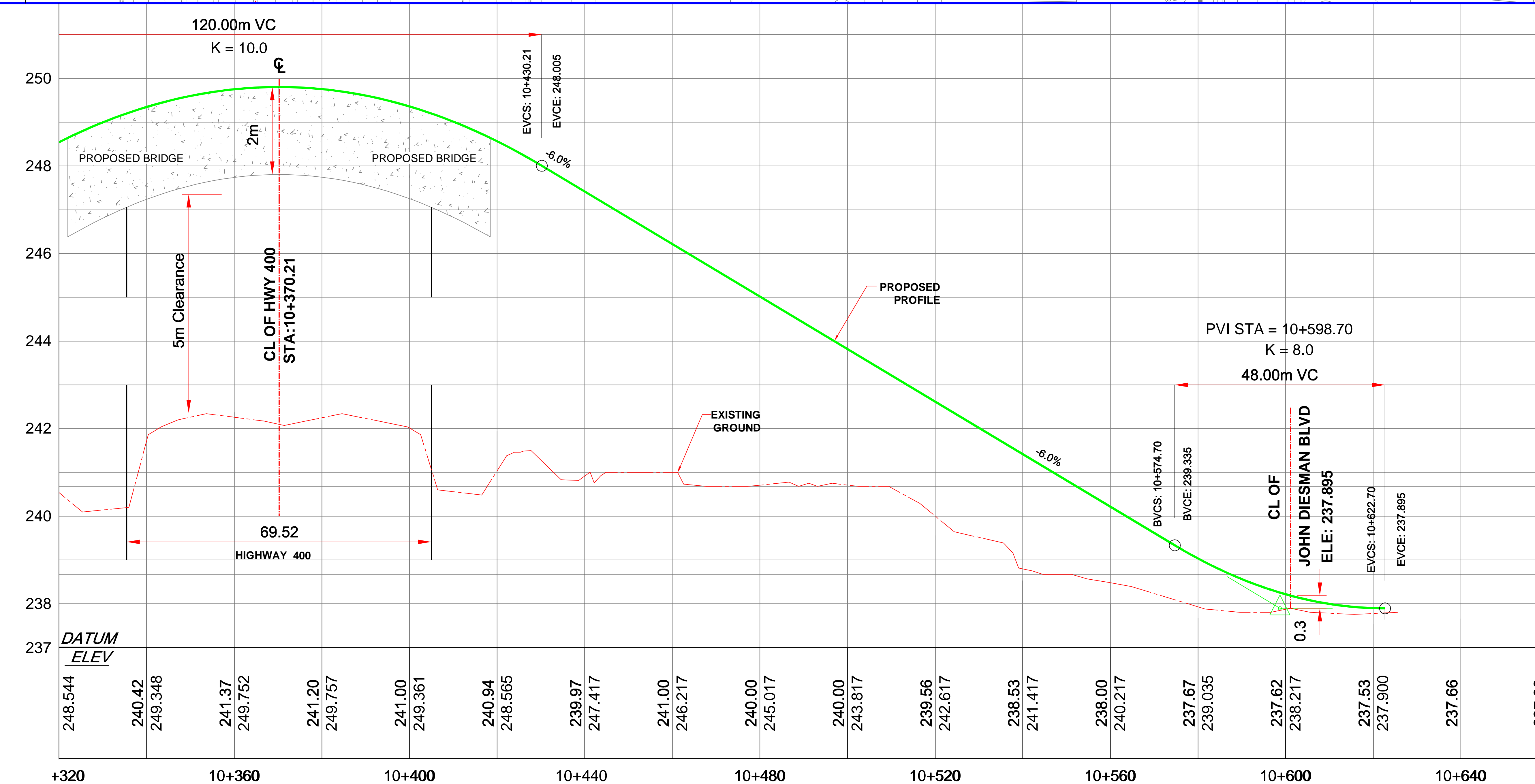


PRELIMINARY



TITLE:
**NORTH MAPLE COMMUNITY BRIDGE
 CLASS EA
 HIGHWAY 400 OVERPASS
 OPTION 1(EAST)**

VERTICAL ALIGNMENT
 WITH 6.0% APPROACH SLOPES
 HORIZONTAL ALIGNMENT
 CENTERED IN THE ROW



- LEGEND:**
- PROPOSED SIDEWALK
 - GRASS/BOULEVARD
 - GRADING
 - EX. RIGHT OF WAY (ROW)
 - PROPERTY LINE (PL)
 - RETAINING WALL
 - STEEL BEAM GUIDERAIL(SBGR)



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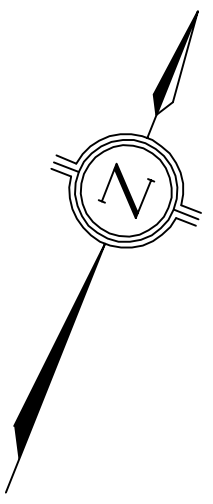


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PRELIMINARY



TITLE:
**NORTH MAPLE COMMUNITY BRIDGE
 CLASS EA
 HIGHWAY 400 OVERPASS
 OPTION -2B (WEST)**

**VERTICAL ALIGNMENT
 WITH 7.5% APPROACH SLOPES
 HORIZONTAL ALIGNMENT
 SHIFTED TO THE SOUTH**

- LEGEND:**
- PROPOSED SIDEWALK
 - GRASS/BOULEVARD
 - GRADING
 - EX. RIGHT OF WAY (ROW)
 - PROPERTY LINE (PL)
 - RETAINING WALL
 - STEEL BEAM GUIDERAIL(SBGR)

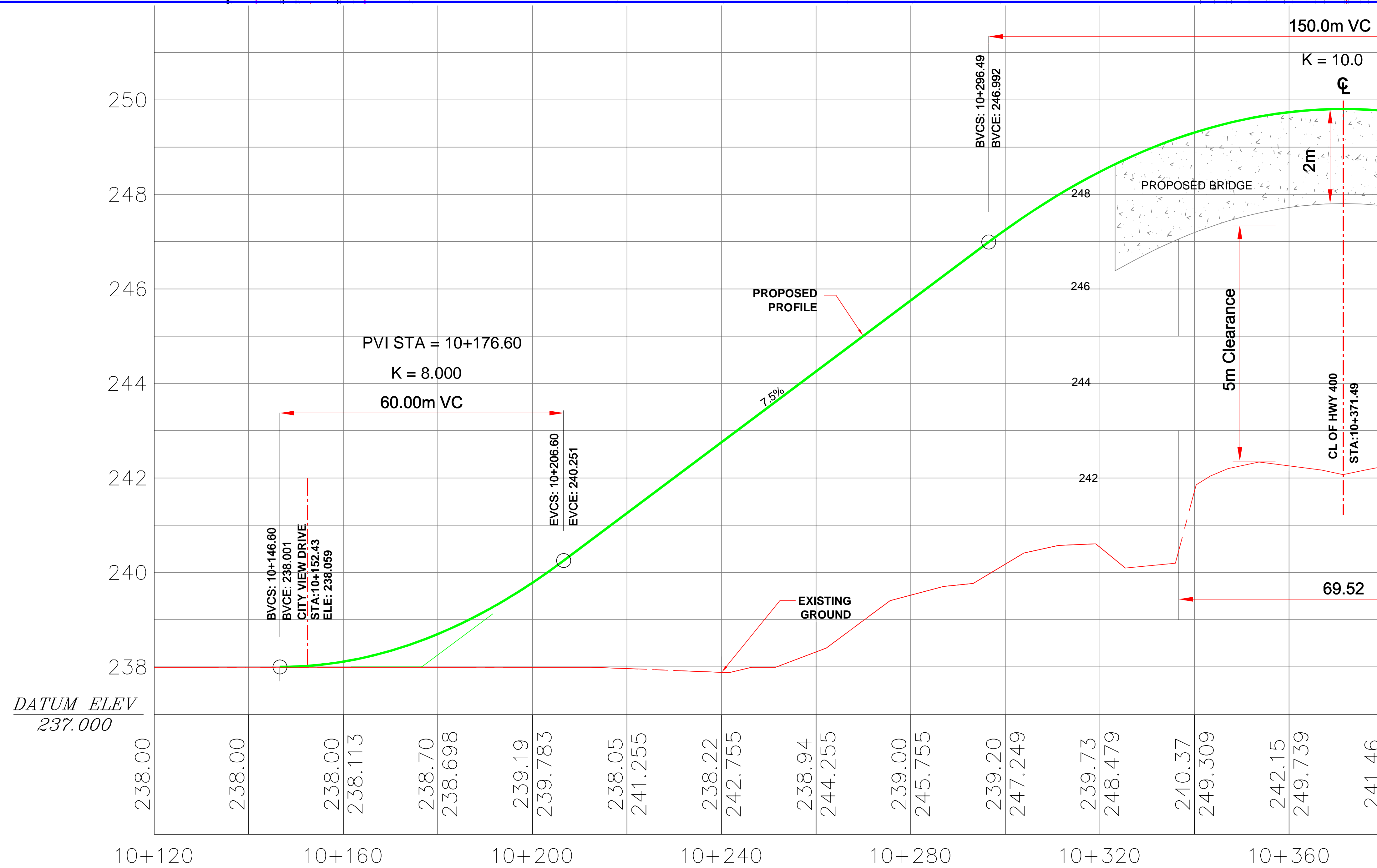
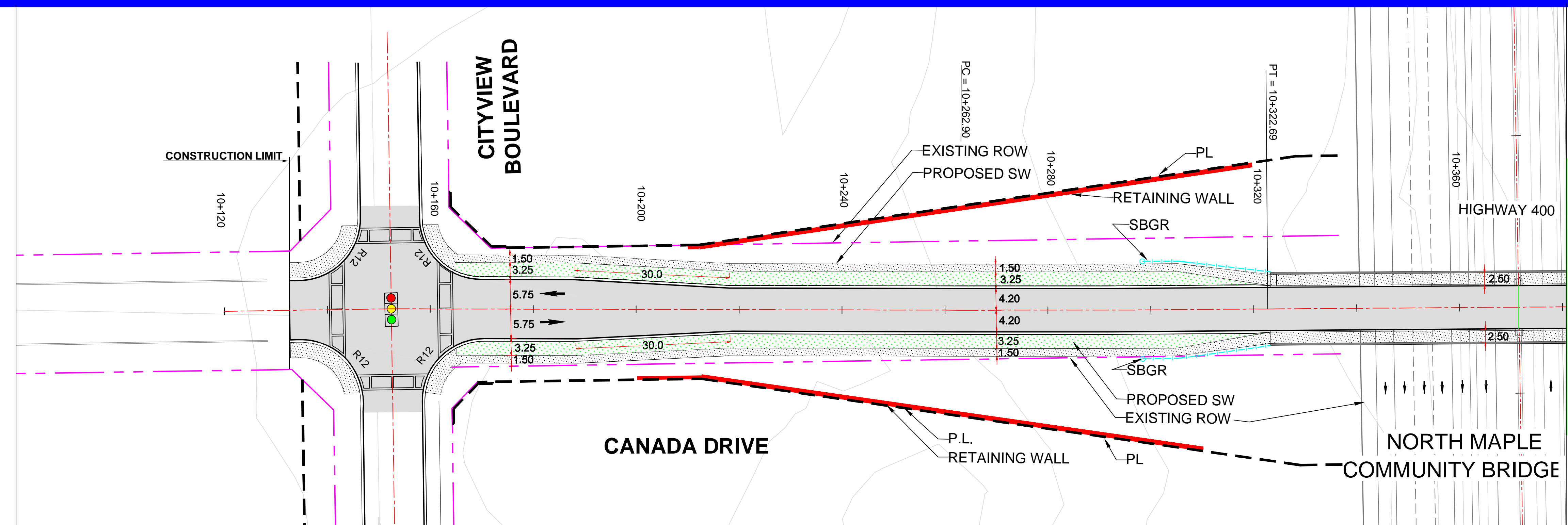


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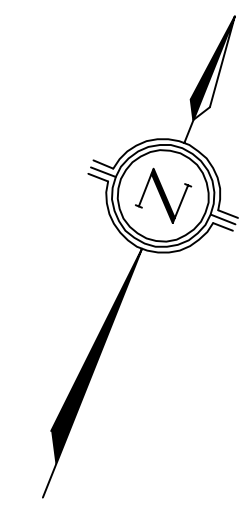
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PRELIMINARY



TITLE:
**NORTH MAPLE COMMUNITY BRIDGE
 CLASS EA
 HIGHWAY 400 OVERPASS
 OPTION -2B (WEST)**

**VERTICAL ALIGNMENT
 WITH 7.5% APPROACH SLOPES
 HORIZONTAL ALIGNMENT
 SHIFTED TO THE SOUTH**

- LEGEND:**
- PROPOSED SIDEWALK
 - GRASS/BOULEVARD
 - GRADING
 - EX. RIGHT OF WAY (ROW)
 - PROPERTY LINE (PL)
 - RETAINING WALL
 - STEEL BEAM GUIDERAIL(SBGR)

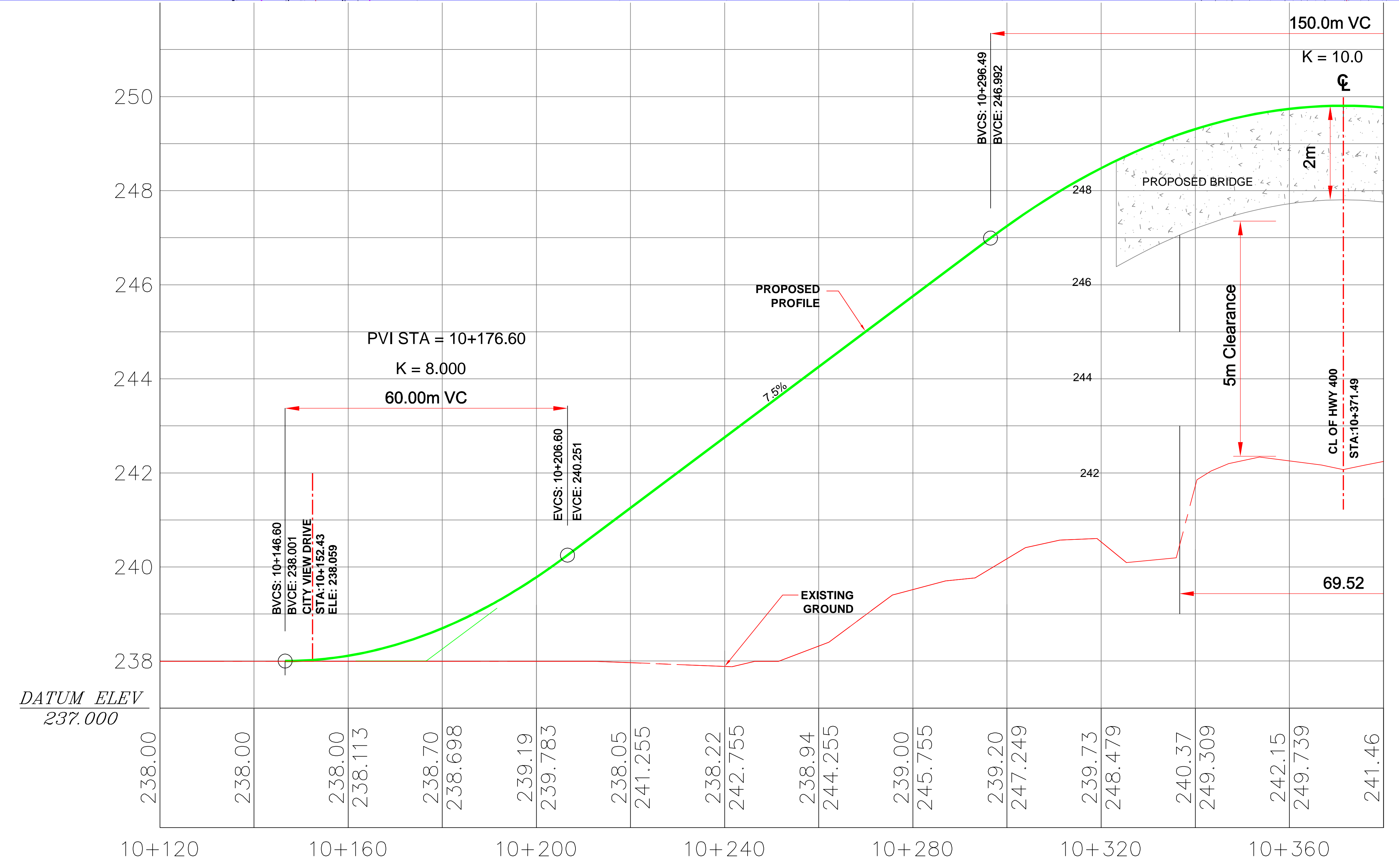
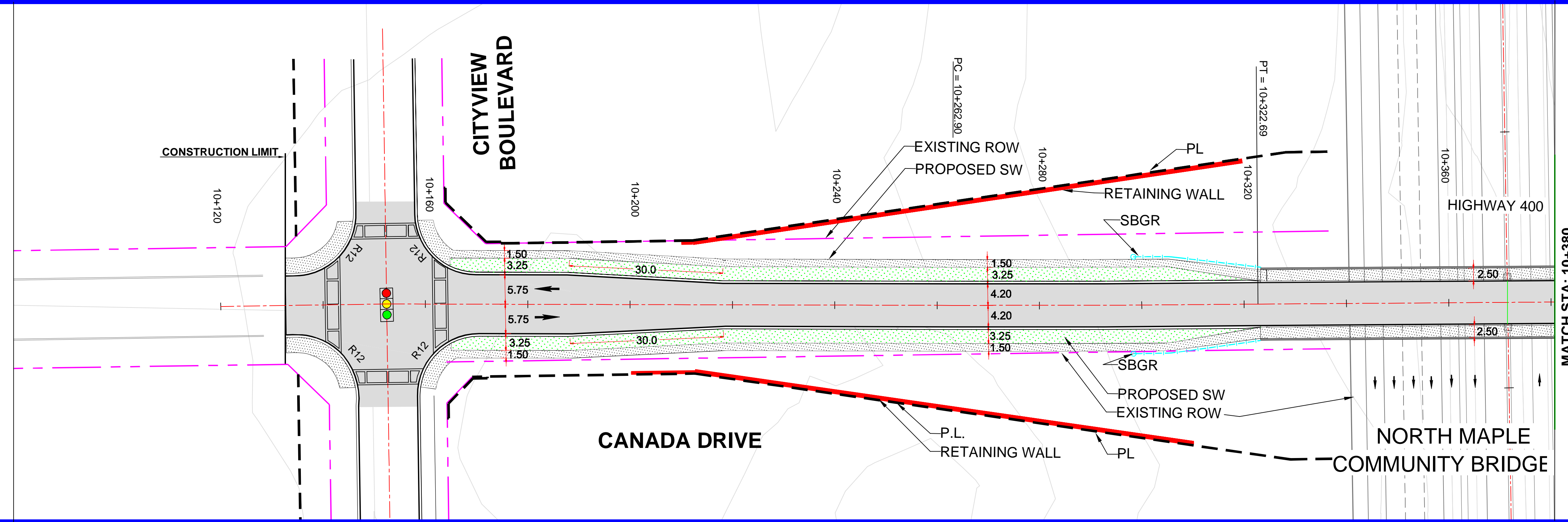


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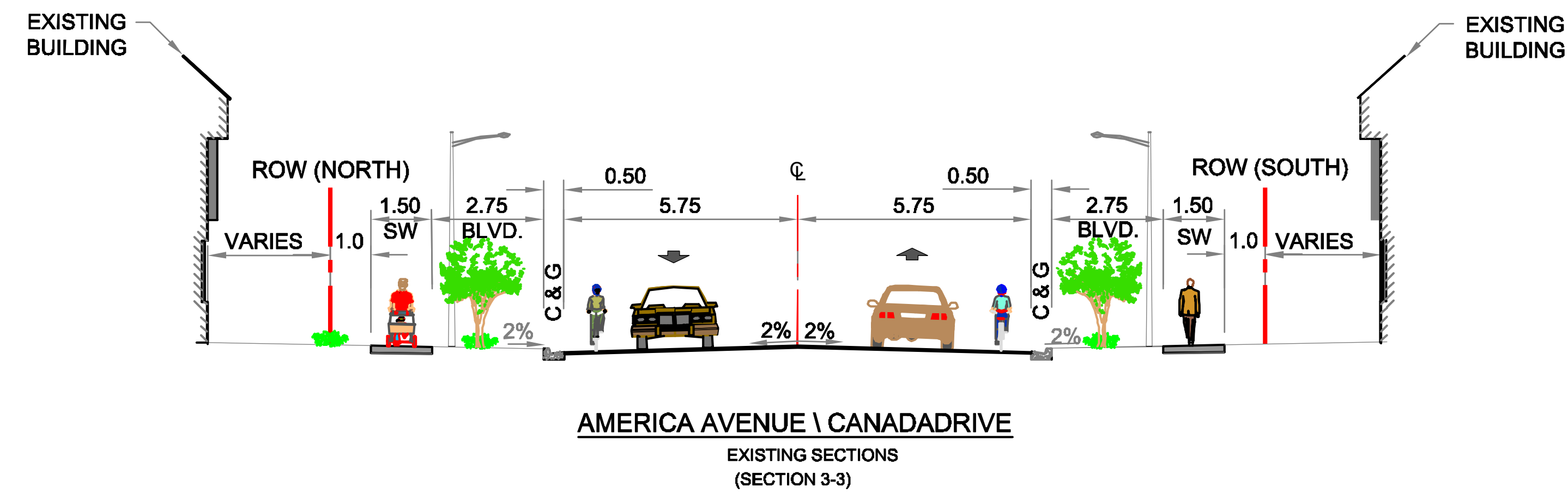
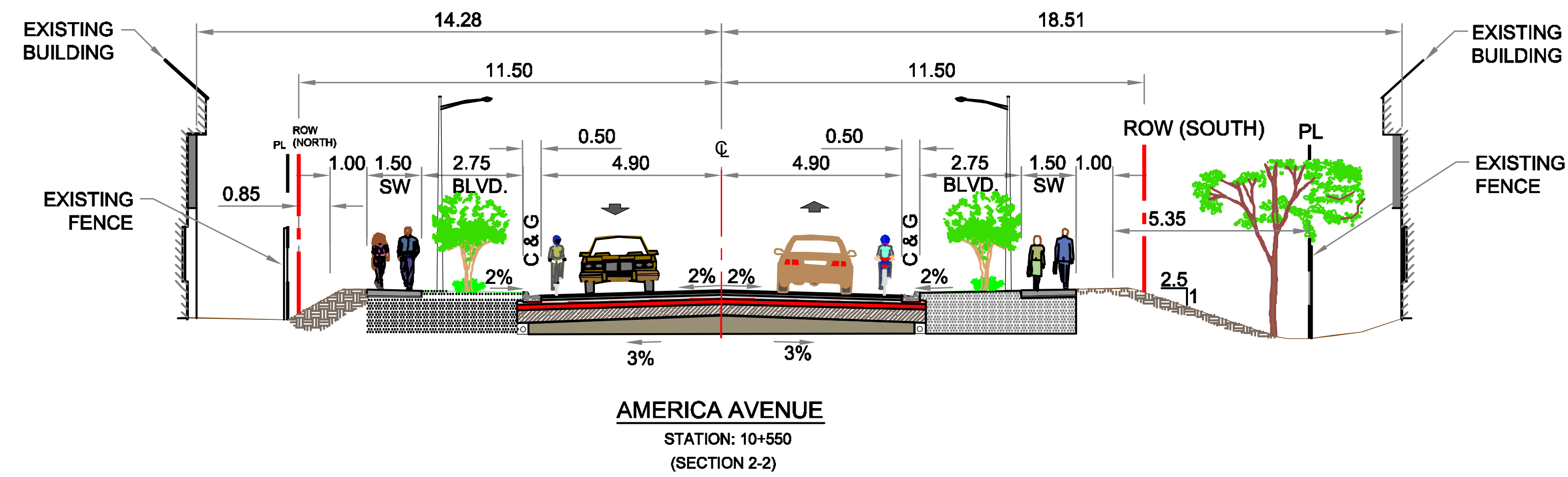
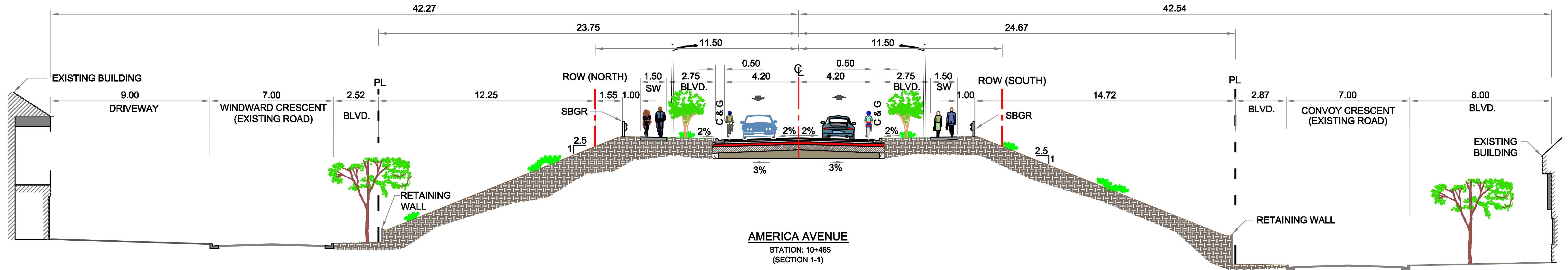
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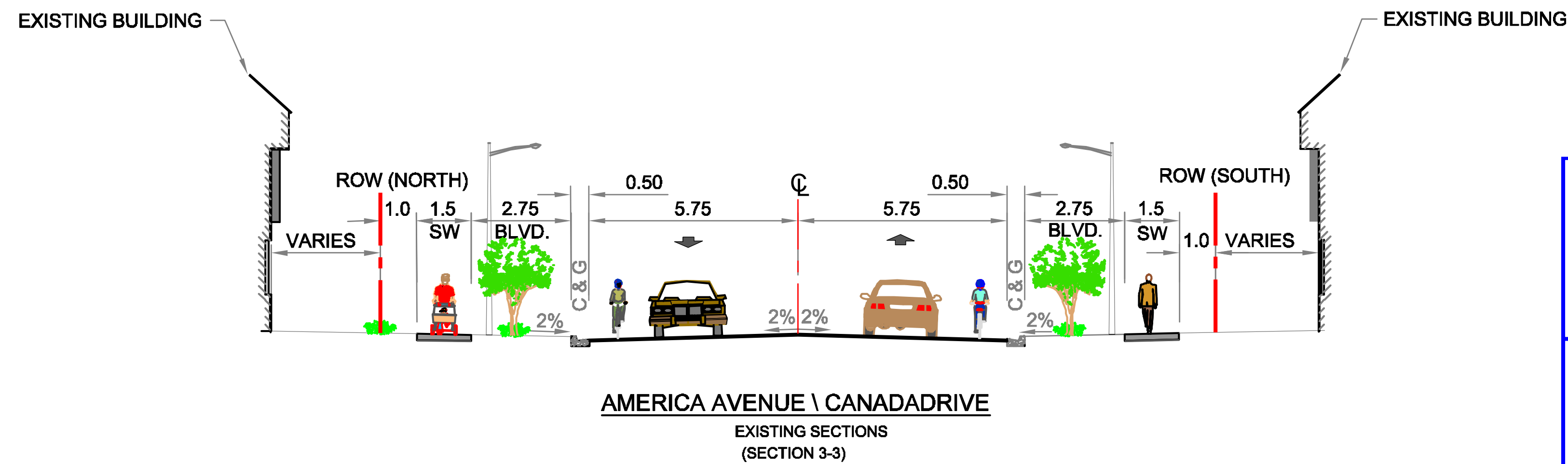
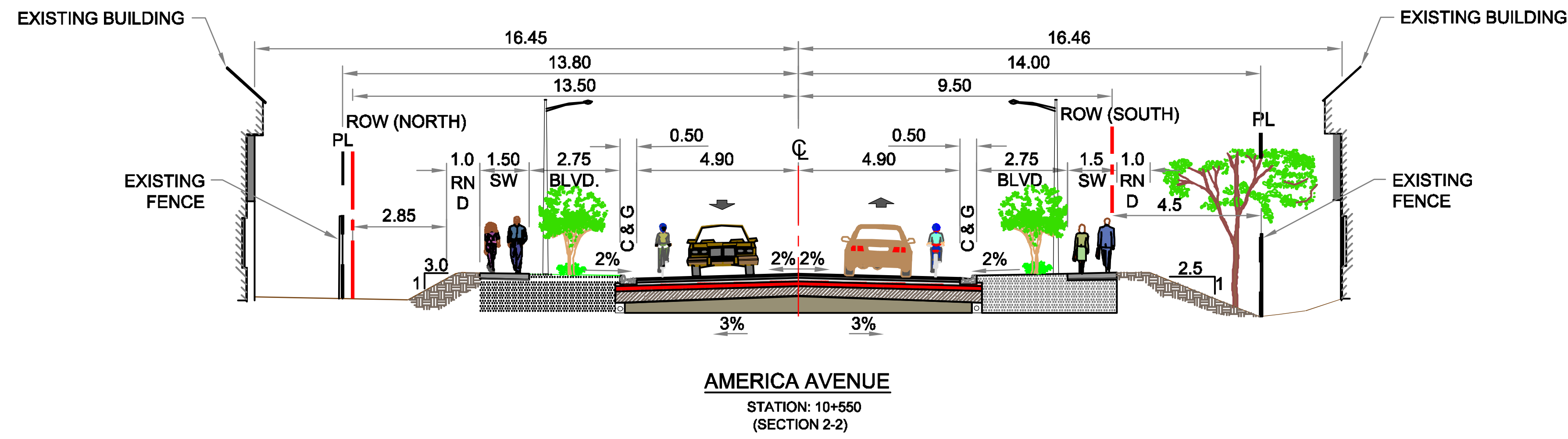
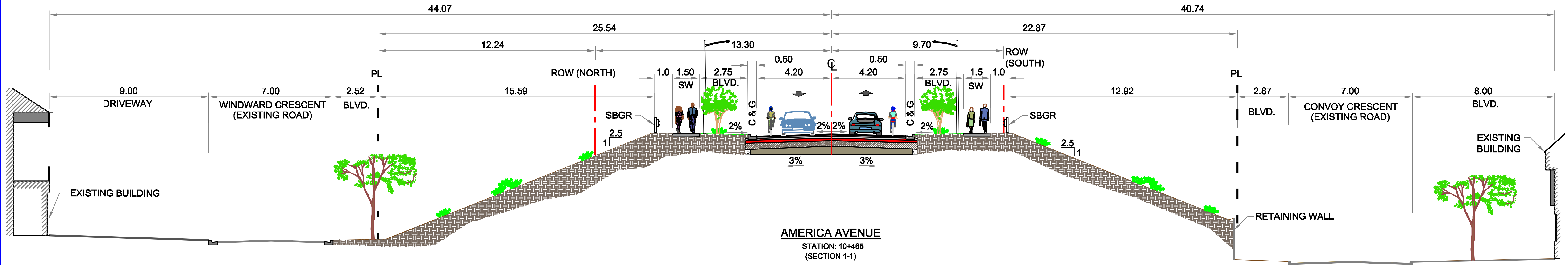




**NORTH MAPLE COMMUNITY BRIDGE CLASS EA
HIGHWAY 400 OVERPASS
(TYPICAL SECTIONS)**



	TITLE: NORTH MAPLE COMMUNITY BRIDGE CLASS EA HIGHWAY 400 OVERPASS (OPTION 2A) ALIGNMENT CENTERED ON THE EXISTING ROW WITH 7.5% SLOPE	
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**NORTH MAPLE COMMUNITY BRIDGE CLASS EA
HIGHWAY 400 OVERPASS
(TYPICAL SECTIONS)**



	TITLE: NORTH MAPLE COMMUNITY BRIDGE CLASS EA HIGHWAY 400 OVERPASS (OPTION 2B) ALIGNMENT SHIFTED TO THE SOUTH WITH 7.5% SLOPE	
	CONSULTANT FILE NO.	SCALE: N.T.S.
	DRAWN BY: S.M. CHECKED BY: J.V.	DRAWING NO.
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Comparison of Alternative Design Options – Vertical & Horizontal

Comparative Evaluation Summary of Alternative Design Concepts – Vertical Approaches

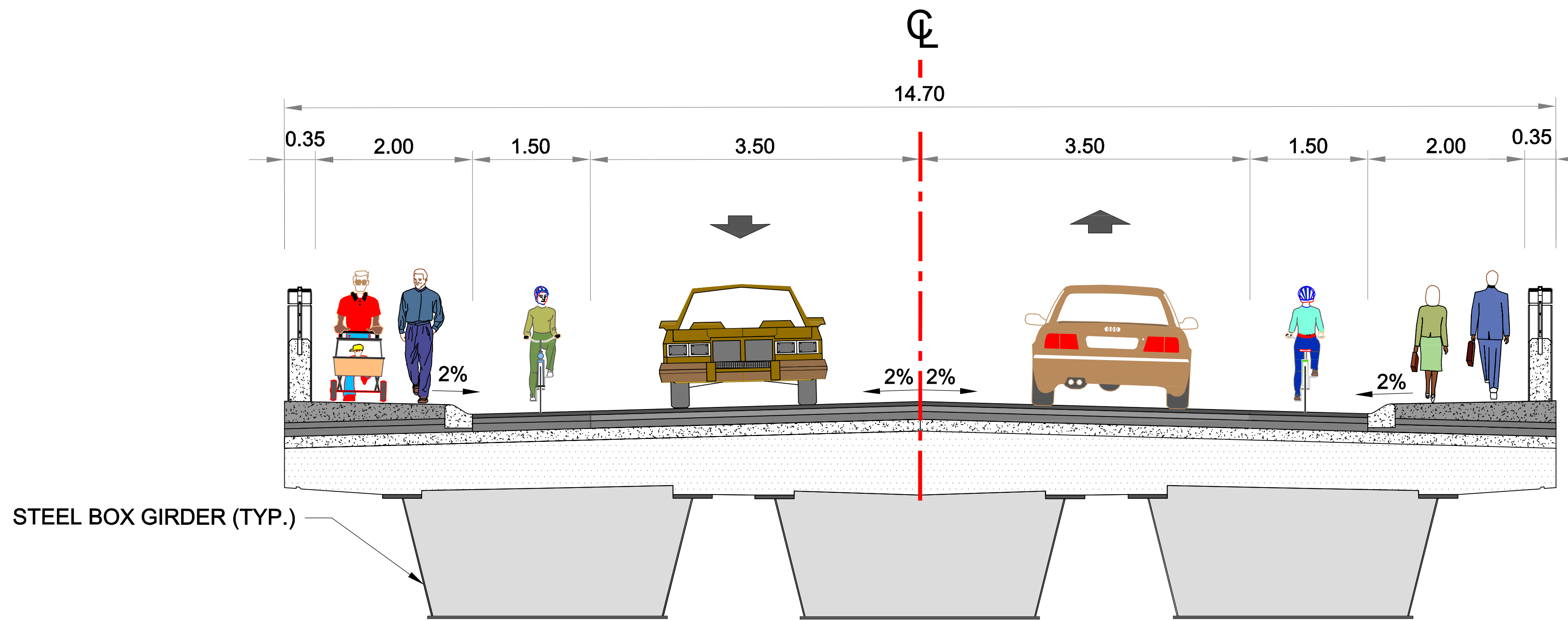
Option 1 – Vertical Alignment with 6% Approaches		Option 2A – Vertical Alignment with 7.5% Approaches	
PROS	CONS	PROS	CONS
<ul style="list-style-type: none"> • Design has a gentler slope 	<ul style="list-style-type: none"> • Longer retaining walls required 	<ul style="list-style-type: none"> • Shorter retaining walls required 	<ul style="list-style-type: none"> • Vertical design slope results in less desirable operational conditions for vehicles
<ul style="list-style-type: none"> • Lower future winter maintenance costs 	<ul style="list-style-type: none"> • Private property is required – at intersections with John Deisman Blvd and Cityview Blvd 	<ul style="list-style-type: none"> • No impacts on private property 	<ul style="list-style-type: none"> • Higher future winter maintenance costs
	<ul style="list-style-type: none"> • Higher capital costs for re-grading intersections 	<ul style="list-style-type: none"> • No need to re-grade intersections, lower capital costs 	
	<ul style="list-style-type: none"> • Permanent impact to the front yards of properties abutting the intersections 	<ul style="list-style-type: none"> • No impact to front yards of properties abutting intersections 	
<p><i>Therefore, given the above listed pros and cons associated with this Option in comparison to Option 2A, Option 1 is not recommended to be carried forward for implementation.</i></p>		<p><i>Therefore, given the above listed pros and cons associated with this Option in comparison to Option 1, Option 2A option is recommended to be carried forward for implementation.</i></p>	

Comparative Evaluation Summary of Alternative Design Concepts – Horizontal Approaches

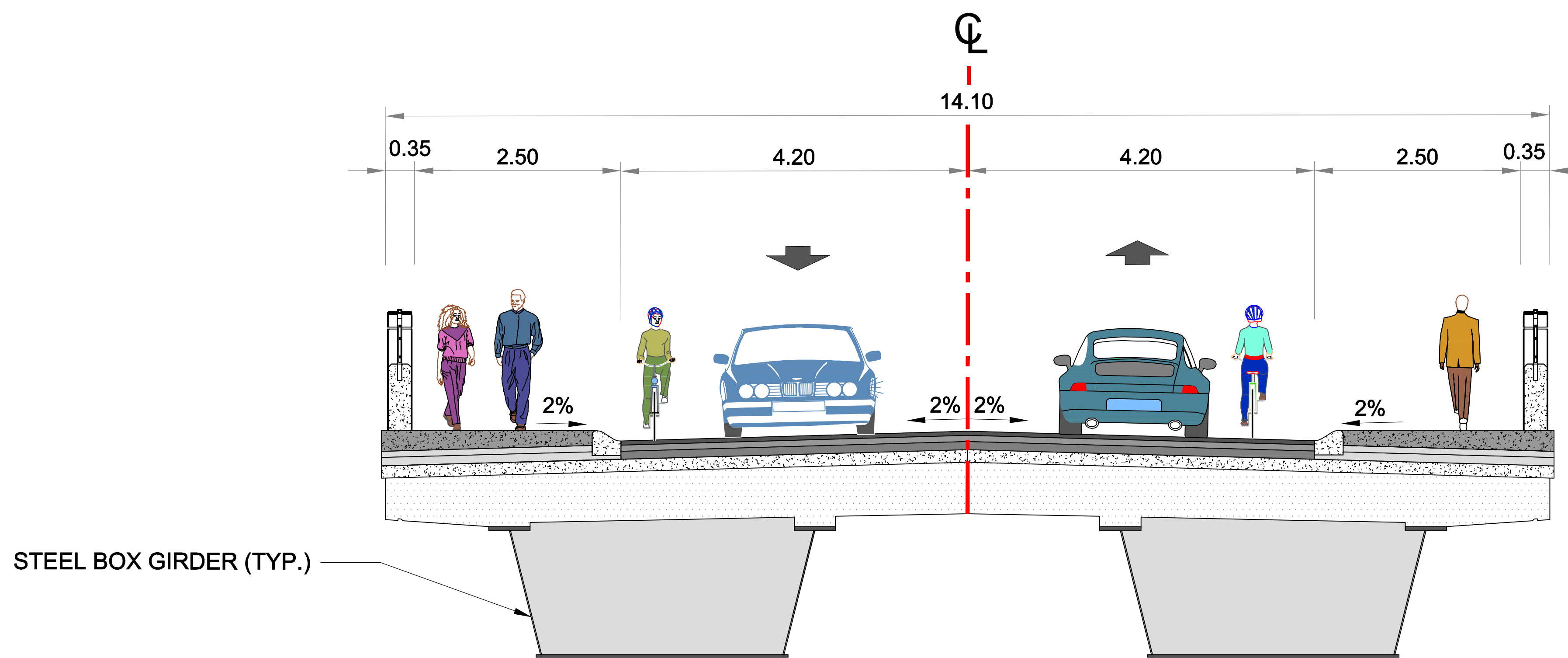
Option 2A – Horizontal Alignment centered in the existing Right-of-Way		Option 2B – Horizontal Alignment shifted to the south	
PROS	CONS	PROS	CONS
<ul style="list-style-type: none"> • No impact on private property 	<ul style="list-style-type: none"> • Longer retaining walls required 	<ul style="list-style-type: none"> • Shorter retaining walls required 	<ul style="list-style-type: none"> • Marginal additional costs resulting from minor adjustments to America Ave/ John Deisman Blvd intersection configuration
<ul style="list-style-type: none"> • No need to re-grade existing intersections at John Deisman Blvd and Cityview Blvd resulting in less capital costs 	<ul style="list-style-type: none"> • No improvement to America Ave/ John Deisman Blvd intersection (existing intersection not exactly perpendicular) 	<ul style="list-style-type: none"> • No impact on private property 	
	<ul style="list-style-type: none"> • Unbalanced visual effect for properties on the east approach of the bridge 	<ul style="list-style-type: none"> • Improvement to America Ave/ John Deisman Blvd intersection (becomes perpendicular) 	
		<ul style="list-style-type: none"> • Balanced visual effect for properties on the east approach of the bridge 	
<ul style="list-style-type: none"> • Future maintenance requirements are comparable to Horizontal Alignment Option 2B 		<ul style="list-style-type: none"> • Future maintenance requirements are comparable to Horizontal Alignment Option 2B 	
<p><i>Therefore, given the above listed pros and cons associated with this Option in comparison to Option 2B, Option 2A is not recommended to be carried forward for implementation.</i></p>		<p><i>Therefore, given the above listed pros and cons associated with this Option in comparison to Option 2A, Option 2B is recommended to be carried forward for implementation.</i></p>	

NORTH MAPLE COMMUNITY BRIDGE CLASS EA HIGHWAY 400 OVERPASS

PRELIMINARY



NORTH MAPLE COMMUNITY BRIDGE
BRIDGE WITH SIDEWALKS 2.00m, 1.50m BIKE LANES AND 3.50m VEHICLE LANES
(OPTION 3A)



NORTH MAPLE COMMUNITY BRIDGE
BRIDGE WITH SIDEWALK 2.50m AND 4.20m SHARED BIKEWAY
(OPTION 3B)

TYPICAL SECTIONS

AECOM

TITLE:
**NORTH MAPLE COMMUNITY BRIDGE CLASS EA
HIGHWAY 400 OVERPASS
(OPTION 3A&3B)**

**City of
Vaughan**
The City Above Toronto

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Comparison of Alternative Design Options – Sidewalk, Bike & Vehicular Lanes

Comparative Evaluation Summary of Alternative Design Concepts – Bike Lanes

Option 3A – Bridge with 2m sidewalk, 1.5m bike lane and 3.5m vehicular lane		Option 3B – Bridge with 2.5m sidewalk and 4.2m vehicular lane shared with bike lane	
PROS	CONS	PROS	CONS
<ul style="list-style-type: none"> • Conforms with Metrolinx vision of the The Big Move by enhancing and expanding active transportation by promoting designated bike lanes 	<ul style="list-style-type: none"> • Wider bridge cross-section would require higher capital costs 	<ul style="list-style-type: none"> • More narrow bridge cross-section, resulting in lower capital costs 	<ul style="list-style-type: none"> • Less desirable operational conditions for cyclists, as they will need to share the lane with vehicles
<ul style="list-style-type: none"> • Improves safety for cyclists by providing more space and a designated painted bike lane 	<ul style="list-style-type: none"> • Less available space for pedestrians 	<ul style="list-style-type: none"> • More available space for pedestrians 	<ul style="list-style-type: none"> • Not consistent with Metrolinx vision to enhance and expand active transportation by providing designated bike lanes
<ul style="list-style-type: none"> • Future maintenance requirements are comparable to Option 3B 		<ul style="list-style-type: none"> • Future maintenance requirements are comparable to Option 3A 	
<ul style="list-style-type: none"> • Conformance with York Region Transportation Master Plan, comparable to Option 3B 		<ul style="list-style-type: none"> • Conformance with York Region Transportation Master Plan, comparable to Option 3A 	
<p><i>Therefore, given the above listed pros and cons associated with this Option in comparison to Option 3B, Option 3A is recommended to be carried forward for implementation.</i></p>		<p><i>Therefore, given the above listed pros and cons associated with this Option in comparison to Option 3A, Option 3B is not recommended to be carried forward for implementation.</i></p>	

Preliminary Recommended Alternative Design Concept

Based on the detailed technical evaluation completed, it is recommended that a combination of the following alternative design concepts be advanced as the preferred solution:

- Option 2B- Vertical Alignment with 7.5% approaches and Horizontal Alignment shifted to the south
- Option 3A- Bridge with 2.0m sidewalks, provision for 1.5m bicycle lanes and 3.5m vehicular lanes
- Extension of the provision for 1.5m bike lanes through both approaches to the bridge

Next Steps

- CLC Meeting #3 – Late Spring 2010
 - Present the findings to be included in the Environmental Study Report (ESR)
- Undertake Phase 4 – Summarize the planning and decision-making processes undertaken through Phases 1-3 and document in the ESR
- Submit Draft ESR to City of Vaughan Council for Resolution
- If Council agrees with the findings of ESR, it will be posted on the Public Record for 30 Calendar Day Review – Late Spring 2010
- Public will have the opportunity to comment directly to Project Team
- If issues remained unresolved, any person may submit a request to the Minister of Environment for a Part II Order under the *Ontario Environmental Assessment Act*

Project Contacts

Thank you for your involvement in this project

For additional information and to submit comments, please visit the project's website www.northmaplebridge.ca or contact one of the following:

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