



AGENDA

Environmental Assessments for Transit Projects in the Eastern Waterfront

Technical Advisory Committee Meeting 4

**2:00 – 4:30 pm Thursday, September 27, 2007
20 Bay Street, Suite 1310 (Main Boardroom)**

2:00 pm

1. Overview of Project Status

B. Dawson

2:15 pm

2. West Don Lands Transit EA

S. Thorburn

- a. Discussion on the Preferred Design Alternative

3:45 pm

3. East Bayfront Transit EA Progress Update

D. Callan

4. Other Business



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MEETING NOTES

PROJECT: TTC-TWRC
Waterfront Transit Environmental Assessment Studies
East Bayfront & West Don Lands

MEETING NO: 4

FILE NO.: 6377

DATE: September 27, 2007 **TIME:** 2:00 p.m.

PLACE: Waterfront Toronto Boardroom, Suite 1310, 20 Bay Street

PRESENT: **Technical Advisory Committee (TAC)**
Girma Tewolde Toronto Hydro
Mike Carriere Toronto Hydro
Dan Francey GO Transit

Project Team (PT)
Bill Dawson TTC Service Planning
James Roche Waterfront Toronto
Dennis Callan McCormick Rankin Corporation (MRC)
Hank Wang McCormick Rankin Corporation (MRC)
Scott Thorburn URS Canada Inc.

PURPOSE: TAC Meeting

PROCEEDINGS:

ACTION BY:

1. Overview of Project Status

- a) B. Dawson provided an overview of the latest status of the West Don Lands Transit EA and the East Bayfront Transit EA. For the West Don Lands, a Preferred Design Alternative for Cherry Street has been identified. Final Public Information Centre of the EA study will take place on October 11, 2007. For the East Bayfront, the Project Team is currently undertaking a detail analysis of the Bay Street and Queens Quay tunnel portal options. A number of TTC projects have been initiated or announced recently. All of these projects can create major impacts to Toronto Hydro's utilities. Toronto Hydro would like to be consulted with early on during the course of a project.
- b) Toronto Hydro commented that there have been a number of TTC projects initiated or announced recently. All of these projects can create major impacts to Toronto Hydro's utilities. Toronto Hydro would like to be

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ACTION BY:

consulted with early on during the course of a project.

2. West Don Lands Transit EA – Discussion on the Preferred Alternative

- a) S. Thorburn provided an overview of items discussed at the June 15 TAC meeting:
 - Long-list of design alternatives
 - Screening of long-list of alternatives
 - Short-list of design alternatives (east side of Cherry Street, middle of Cherry Street, curb-side of Cherry Street)
- b) An informal drop-in centre was held on July 26, 2007 where the 3 short-list design alternatives were presented to the public for comments.
- c) S. Thorburn provided a general description of the functional feature of each of the 3 short-list alternatives:
 - Streetcar on both sides
 - Streetcar in the middle
 - Streetcar on the east side
- d) The short-list alternatives were subjected to a detail assessment and evaluation. All 3 are functionally similar to one another and are easily defensible. However, each alternative has its own strengths and weaknesses.
- e) Streetcar on both sides (Not carried forward):
 - Strength: presents unique urban design opportunities
 - Weakness: impacts to properties and access points on both sides of the street
- f) Streetcar in the middle (Not carried forward):
 - Strengths: (1) effective for transit operations; (2) standard vehicle operations
 - Weakness: quality of public realm for transit passengers and pedestrians
- g) Streetcar on the east side (**Carried forward**):
 - Strengths: (1) flexible for transit and roadway elements; (2) expanded public realm
 - Weakness: some access issues at the north end of Cherry Street
- h) Design refinements on “Streetcar on the east side”:
 - **Flexible roadway elements** – desirable to provide a uniform roadway design cross-section to allow for flexibility
 - **Streetscape/urban design elements** – urban design treatment to the transit ROW and the pedestrian realm
 - **South end connection opportunities** – extension of streetcar tracks on Cherry Street south of the rail bridge and connection with the future Queens Quay East streetcar (East Bayfront Transit EA)
 - **North end** – impact to local access points and properties along Cherry Street between Eastern Avenue and Front Street
- i) Short-term south end connection opportunity – a temporary loop to the

PROCEEDINGS:

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north of the rail tracks on the east side of Cherry Street

- j) Long-term south end connection opportunities – due to limited space inside the existing rail bridge portals, not all users (streetcars, cars, pedestrians, and cyclists) can be adequately accommodated within the existing structure. Two south end connection concepts have been proposed:

- Accommodate streetcars, cars, and pedestrians inside the existing rail bridge portals. Cyclists would have to be accommodated by way of a new portal (cyclists/pedestrians-only) constructed at the east side of the existing rail bridge portals
- Accommodate cars, pedestrians, and cyclists inside the existing rail bridge portals. Construct a new transit-only tunnel at the east side of the existing portals to accommodate streetcars

- l) It was noted that the existing rail bridge has a 4 m clearance. The required clearance for streetcar is 4.7 m measured from top of rail. In order to fit streetcars under the rail bridge, the road's vertical profile at the bridge would have to be lowered.

- m) It was asked whether or not the Project Team has approached CN's signals program with regards to the signals house (a designated heritage building) situated at the northeast quadrant of the Cherry/rail bridge crossing. The Project Team has not approached CN about the signals house yet but will initiate contact soon.

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- n) Due to the fact that the preferred design concept for the Cherry/Lake Shore/Queens Quay intersection is still to be determined by the soon-to-be-initiated Lower Don Lands Master Plan EA, the preferred south end connection with East Bayfront and the Port Lands would have to be determined through the Lower Don Lands Master Plan process. The Lower Don Lands Master Plan EA process would have to develop and examine feasible options for the Cherry/Lake Shore/Queens Quay intersection in conjunction with dedicated transit ROW on Cherry Street.

- o) North end design considerations – impact to property and access along Cherry Street between Eastern Avenue and King Street
- Inglenook School (west side of Cherry Street, north of Eastern Avenue)
 - Streetcar Development (southeast corner of the Cherry/King intersection)
 - Private access points on the east side of Cherry Street

- p) The Project Team will explore three options to refine the north end design of Cherry Street:
- Option 1 – push the ROW line further west (requires property from the Inglenook School)
 - Option 2 – shift the ROW eastward (reduces the property needed from the Inglenook School but impacts the Olympic Auto-Centre at the northeast corner of the Cherry/Eastern intersection)
 - Option 3 – reduce the median that separates the transit ROW

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and traffic lanes (reduces the property needed from the Inglenook School but eliminates the median at the south leg of the intersection)

- q) Other design issues:
 - Streetscaping/urban design plan
 - Noise and vibration assessment
 - Public issues/ideas
- r) The Project Team will hold a walking tour on Saturday, September 29 for local residents living near the north end of Cherry Street. The purpose of the walking tour is to provide an overview of the Project Team's recommendation for Cherry Street and respond to issues and concerns from residents who will be directly or indirectly impacted by the future streetcar service.
- s) Project schedule:
 - West Don Lands Transit EA Final PIC – October 11
 - Finalize EA report – after October 11
 - Present EA to the TTC – November 2007 (tentative)
 - Present EA to City Council – December 2007 (tentative)
- t) Toronto Hydro noted that they have existing underground infrastructure located underneath Cherry Street. The more utilities lines are installed underground, the more expensive it would be to relocate them later on. Toronto Hydro would prefer to keep the number of utility relocations to a minimal. B. Dawson noted that Cherry Street will be rebuilt in one construction.
- u) Toronto Hydro commented that they require time and money to make preparation for relocation of utilities. It would typically take 2 years from the time Toronto Hydro receives funding for relocating utilities to the time construction starts, and it would take another 6 months from the start of construction to the time shovels are in the ground. Therefore, Toronto Hydro needs to be consulted early on during the EA process in order to develop proper schedule and work program for relocating utilities. Toronto Hydro should be consulted with whenever alteration of the a roadway's profile (horizontal or vertical) is involved.
- v) Typically, it requires Toronto Hydro one year to plan and design for utility relocation, one year to implement civil work/construction, and one year to install electrical components.
- w) It was noted that Waterfront Toronto has recently retained a contractor to carry out construction work in the West Don Lands. The scope of work is currently being developed. A project kick-off meeting will take place in a few weeks. As the West Don Lands Transit EA nearing its completion and the project moving towards the design/construction stage, input from Toronto Hydro would be crucial.
- x) The Project Team asked Toronto Hydro whether there is any information that the EA team can provide to Toronto Hydro to assist the development of

PROCEEDINGS:

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their work plans and schedule well ahead of time. As an early input, Toronto Hydro needs to know whether or not the existing overhead utilities on Cherry Street, which were installed about 5 years ago, need to be buried. Burying utilities is a major undertaking because of the far-reaching impact to customers outside of the Cherry Street corridor who are connected to utilities on Cherry Street. It was also noted that Toronto Hydro's underground structure on Cherry Street is under the east side of the existing Cherry Street ROW, roughly below the existing sidewalk.

- y) Toronto Hydro noted that street lights fall within the jurisdiction of Toronto Hydro Energy Services (Street Lighting), not Toronto Hydro Electricity Services.

3. East Bayfront Transit EA – Progress Update

- a) D. Callan provided an overview of the following:
 - Study Area
 - Progress to date
 - Tunnel portals carried forward for detailed analysis (Bay Street options and Queens Quay options)
- b) Bay Street options – key implications
 - High volume of at-grade streetcar turning movements at Bay/Queens Quay
 - Bay Street between Harbour and Queens Quay restricted to transit and EMS vehicles only
 - Option B1 (portal on Bay Street between Lake Shore Blvd. and Harbour Street) requires relocation of a 1.2 m diameter storm sewer which sits atop the roof of the existing tunnel under Bay Street
 - Southbound traffic heading for the waterfront would be diverted to York Street and Yonge Street
- c) Queens Quay options – key implications
 - Potential impact to private access points on the south side of Queens Quay (Westin Harbour Hotel, future Pier 27 condominium, Redpath Sugar)
 - For portal options east of Yonge Street, the location at which the tunnel comes to grade is affected by an existing storm sewer culvert under Yonge Street. The culvert is approximately 2.3 m wide and 2 m deep and buried roughly 5 m underground (invert elevation)
 - The further east the portal, the longer the new tunnel construction required, the higher the cost
- d) **TAC:** Is there an option to keep the Queens Quay/Bay streetcar turning movements underground? **D. Callan:** If the preferred portal option were on Bay Street, the streetcar turning movements would be at-grade. If the preferred portal option were on Queens Quay, the turning movements would be underground.
- e) **TAC:** Does the design of Queens Quay east of Bay Street fall within the scope of the East Bayfront Transit EA? **D. Callan:** The East Bayfront EA will determine the location of the transit facility within the Queens Quay

PROCEEDINGS:

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ROW and develop functional designs for the roadway in conjunction with the preferred portal location.

- f) **TAC:** Does the recommendation to place streetcar in the middle or on the south side of Queens Quay rests with the East Bayfront EA or another EA? **D. Callan:** The East Bayfront EA will assess and evaluate middle and south-side options in concert with the recently-initiated Central Waterfront EA.
- g) **TAC:** What is the timeline for choosing the preferred streetcar alignment on Queens Quay? **Project Team:** Pina Mallozzi, Waterfront Toronto's Project Manager for the East Bayfront EA, would have to answer that question. The portal is a key factor that dictates that design of the roadway. It is anticipated that a preferred portal option would be selected by early next year.
- h) **TAC:** With regards to Transit Priority Signal, will transit vehicles receive their own signal? **B. Dawson:** There will be a separate signal head for transit vehicles, but transit and traffic phases will be part of the same signal timing plan.
- i) **TAC:** Who is responsible for coordinating Transit Signal Priority? Is it the TTC? **B. Dawson:** It is planned and implemented jointly by the City's Transportation Services Department and the TTC.
- j) **TAC:** What are the chances of realigning Queens Quay and Lake Shore Boulevard east of Parliament Street? **D. Callan:** It will be determined through the Lower Don Lands EA Master Plan.
- k) Toronto Hydro noted that they have overhead utilities on the north side of Queens Quay and underground utilities under the south side. The underground structure supplies Redpath Sugar.
- l) **TAC:** What is the latest status on the Union Station Loop expansion? **D. Callan:** Detail analysis will be undertaken at a later stage. It is part of the scope of the East Bayfront Transit EA.

4. Other Business

- a) URS will provide Toronto Hydro with a copy of the preferred Cherry Street design alternative in MicroStation format. PDF version will be distributed to Toronto Hydro and GO Transit. **URS**

The foregoing represents the writer's understanding of the major items of discussion and the decisions reached and/or future actions required. If the above does not accurately represent the understanding of all parties attending, please notify the undersigned within 48 hours of receiving these meeting notes at 905-823-8500.

Notes prepared by,
McCormick Rankin Corporation
Hank Wang

TTC –Waterfront Toronto Transit Environmental Assessments

Technical Advisory Meeting #4

East Bayfront Transit EA Status Update

September 27, 2007



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TTC-TWRC East Bayfront
Environmental Assessment



Study Area



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TTC-TWRC East Bayfront
Environmental Assessment



Progress To Date

- Terms of Reference developed, March 2006 to July 2006
 - Reviewed with TAC
- Terms of Reference approved by MOE – January 24, 2007
- Initiated Individual EA studies, Sept 2006 to date
- TAC Meeting – March 07
 - Selected Queens Quay as Corridor
 - Bus or Streetcar in Dedicated ROW
- PIC #1 - March 07
 - Recommended Queens Quay as Corridor
 - Technology to be either Bus or Streetcar in a Dedicated ROW



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TTC-TWRC East Bayfront
Environmental Assessment



Progress To Date (cont'd)

- TAC Meeting – June 07
 - Selected Streetcar as preferred technology
 - Screened numerous portal locations and selected 2 portals on Bay and 3 on Queens Quay East for more detailed analysis
- PIC #2 - June 2007
 - Recommended streetcar as selected technology and portal options to be carried forward
 - General Public agreement with recommendations



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Environmental Assessment



Developing Analysis of Portal Alternatives



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Existing Queens Quay Portal

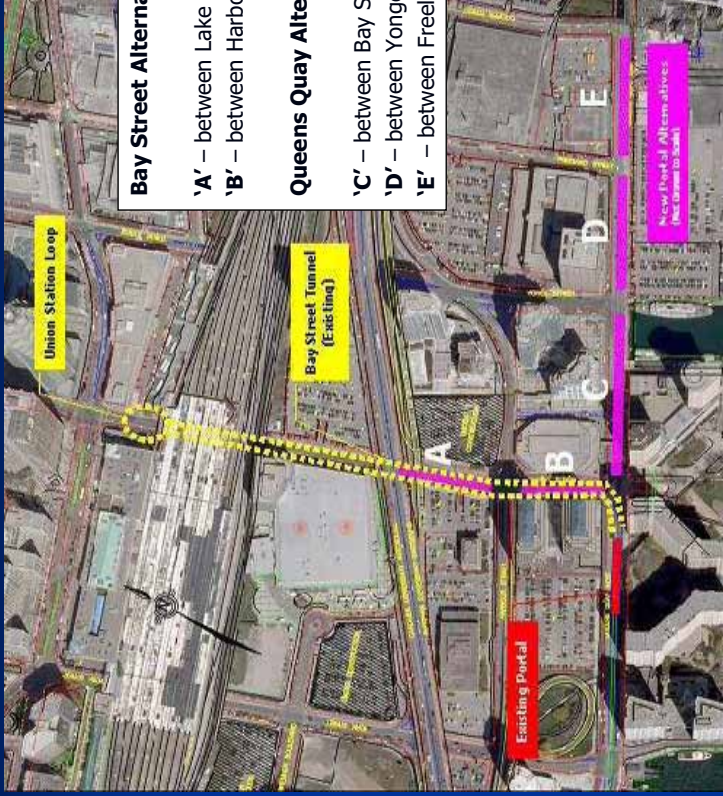


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Overview of Portals Carried Forward



Bay Street Alternatives:

- 'A' – between Lake Shore Boulevard and Harbour Street
- 'B' – between Harbour Street and Queens Quay Boulevard

Queens Quay Alternatives:

- 'C' – between Bay Street and Yonge Street
- 'D' – between Yonge Street and Freeland Street
- 'E' – between Freeland Street and Cooper Street



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TTC-TWRC East Bayfront
Environmental Assessment



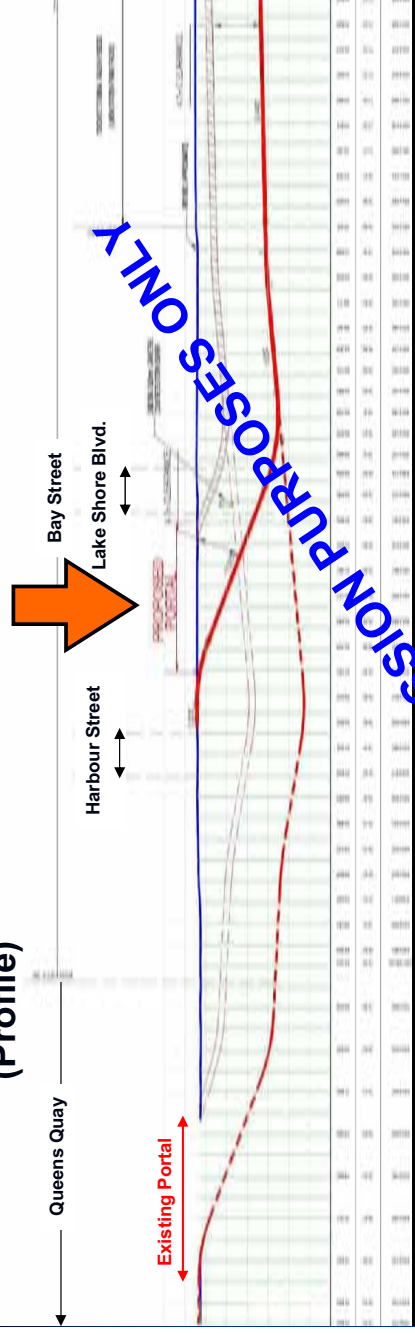
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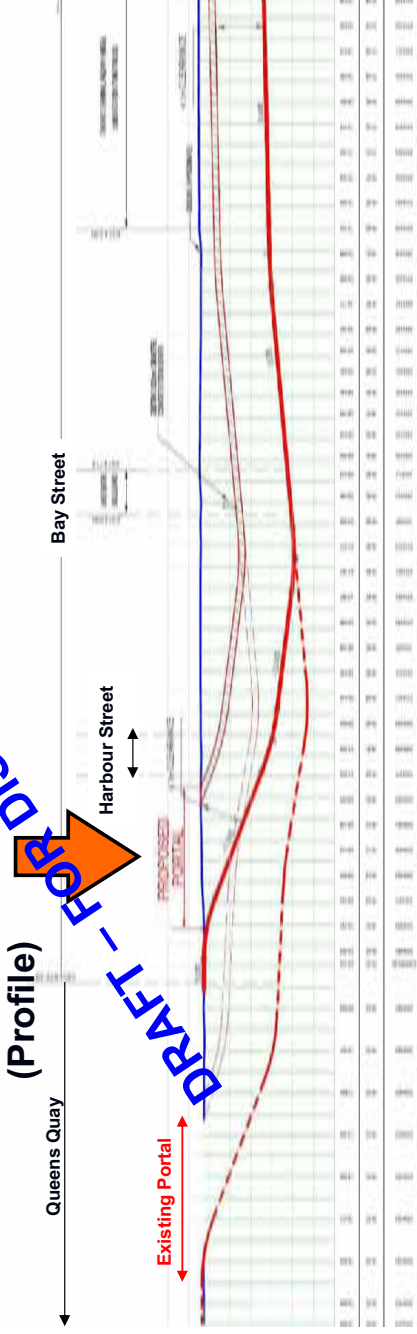


Bay Street Portal Options

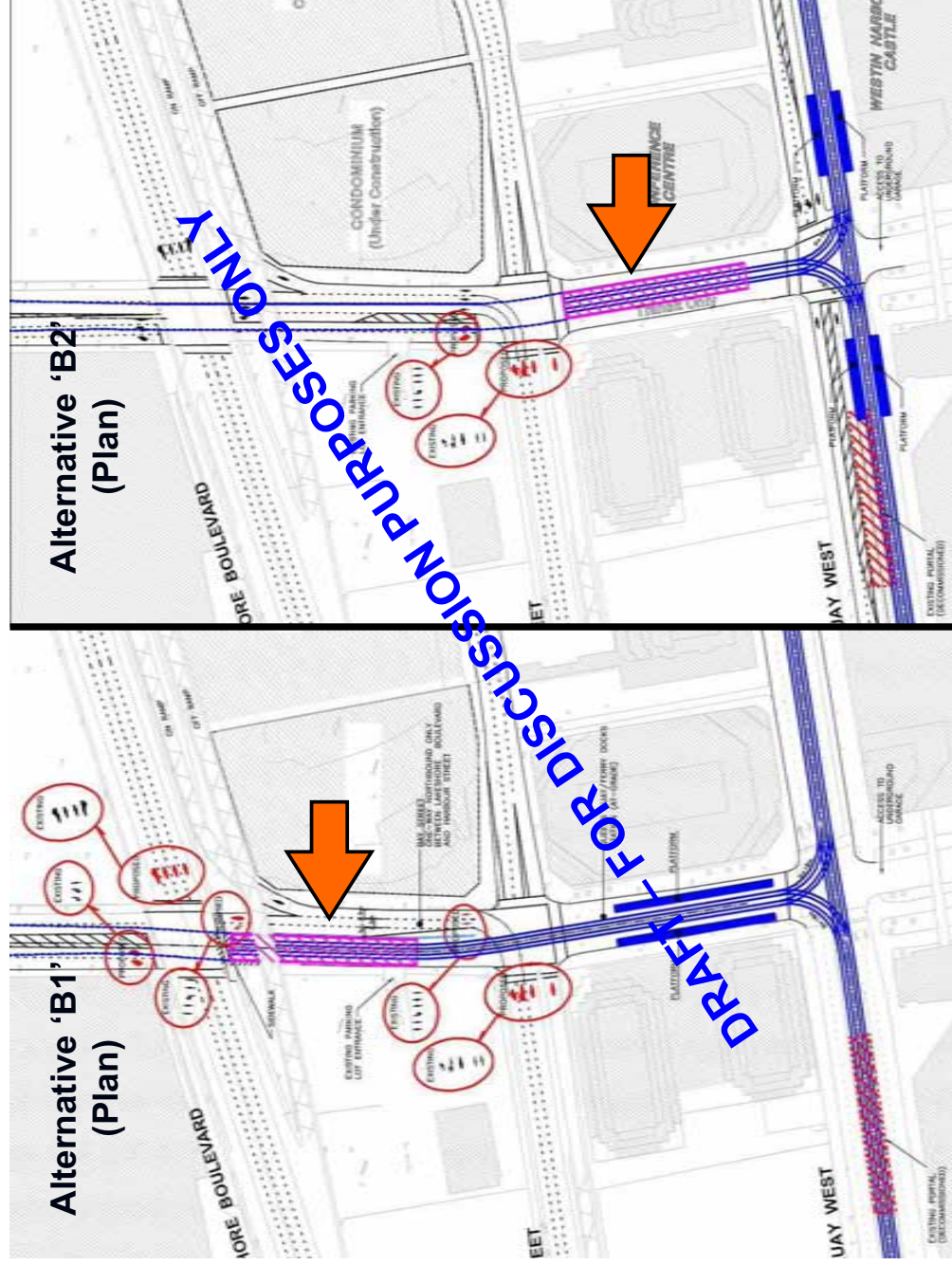
Alternative 'B1' (Profile)



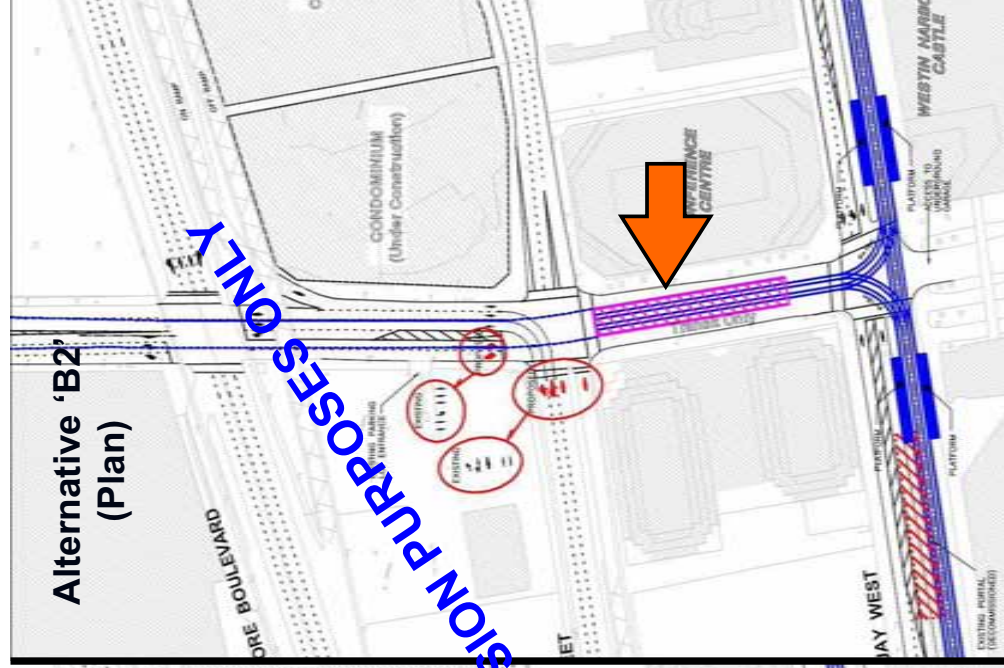
Alternative 'B2' (Profile)



Alternative 'B1' (Plan)



Alternative 'B2' (Plan)



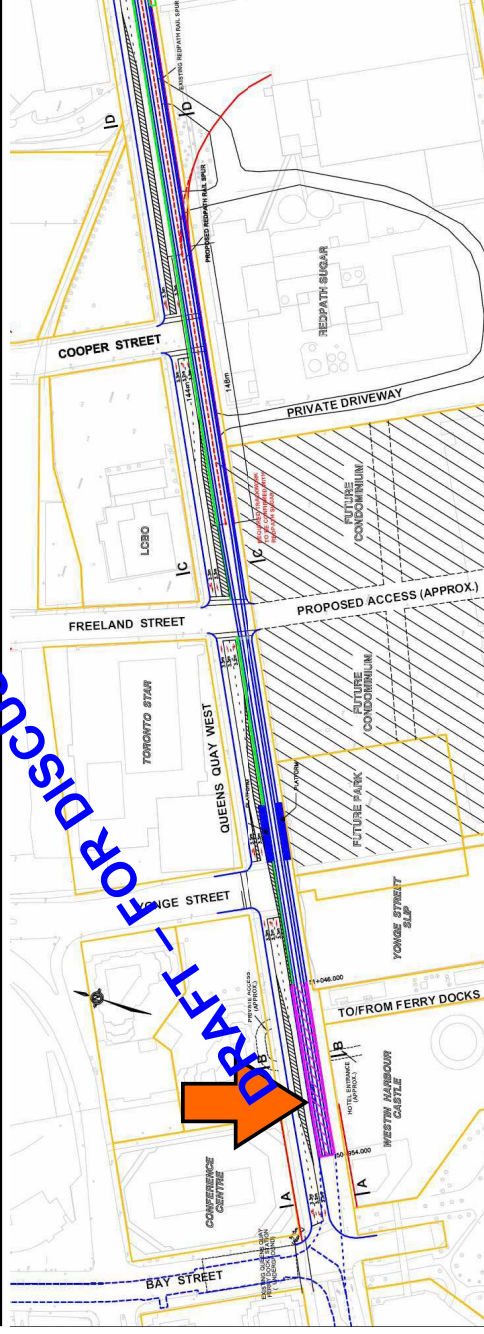
Queens Quay Portal Options



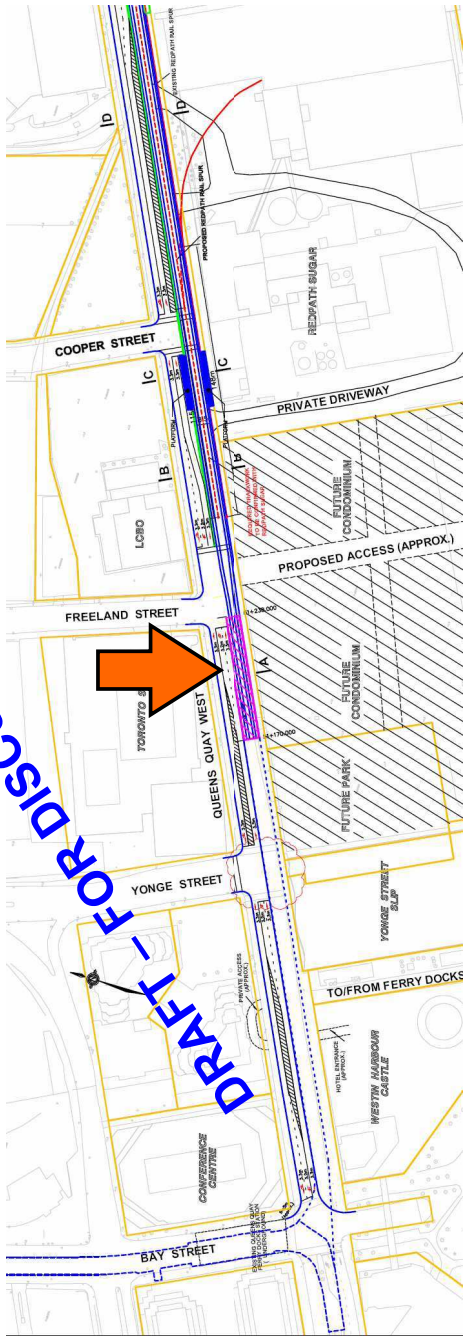
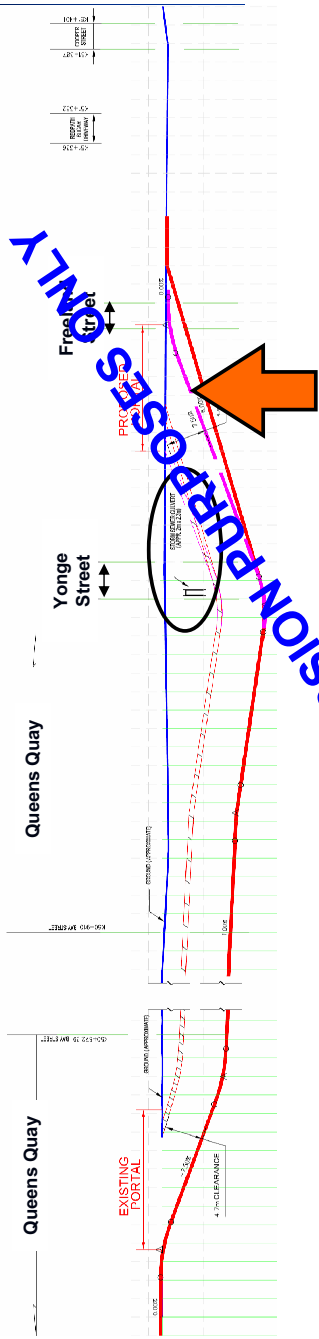
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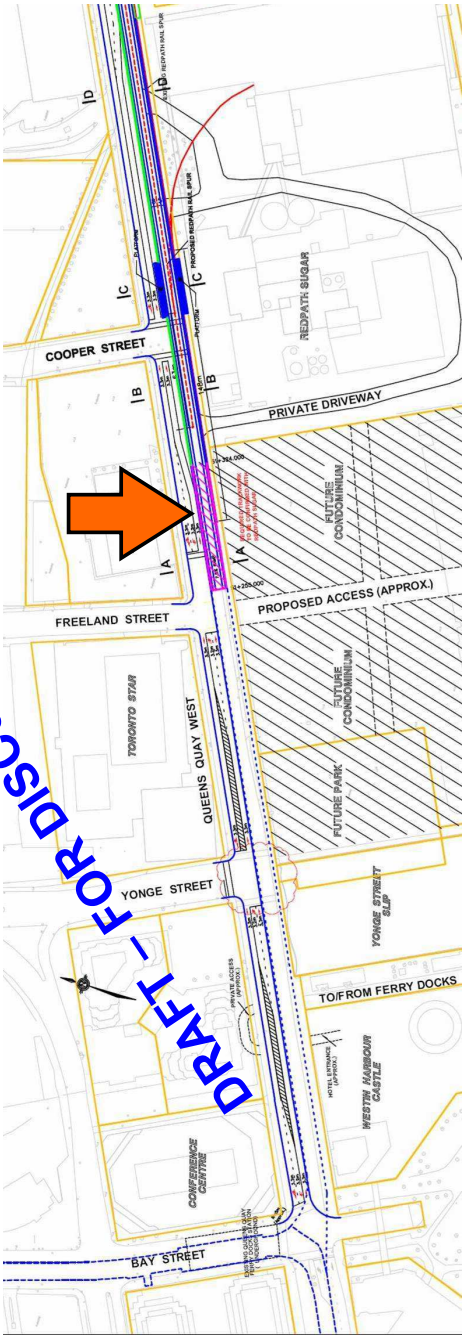
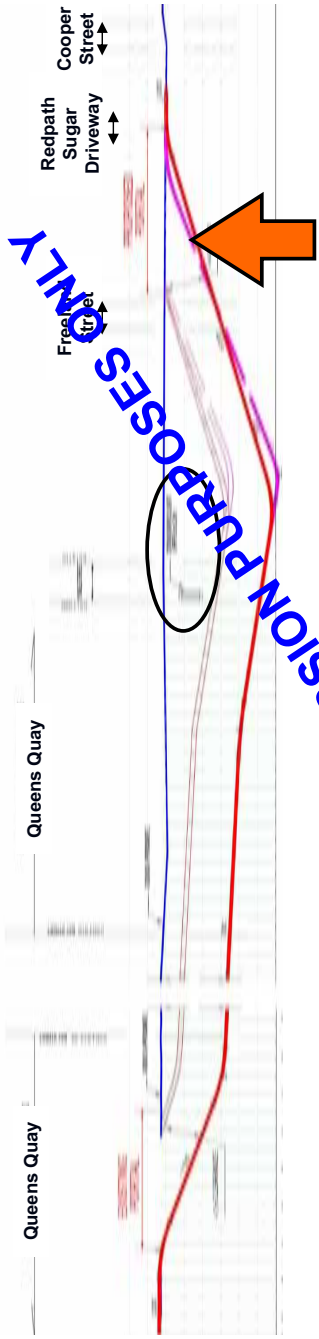
Alternative 'QQ1' (Plan & Profile)



Alternative 'QQ2' (Plan & Profile)



Alternative 'QQ3' (Plan & Profile)



Next Steps

- Complete traffic analysis on Bay/QQ intersection and investigation of feasibility of Yonge Street culvert relocation
- Assess, evaluate, and select a preferred portal alternative and develop functional road plans based on the preferred portal location
- Present recommendation on the preferred portal at the next TAC meeting
- Hold a third Public Information Centre workshop this Fall to present the selected portal option



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