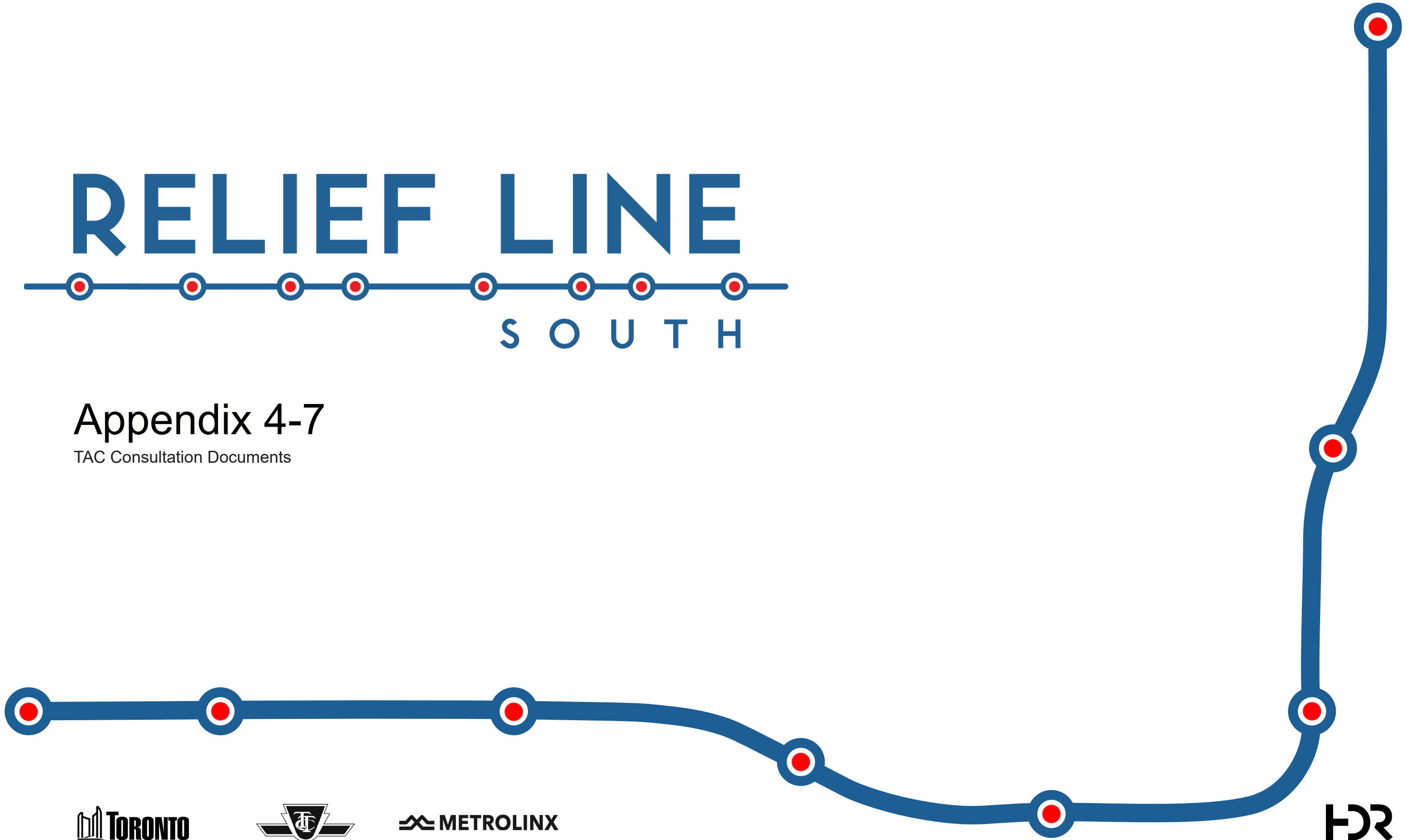


RELIEF LINE



Appendix 4-7

TAC Consultation Documents



Meeting Minutes



Meeting Minutes



Project:	Relief Line Project Assessment	
Subject:	TAC Meeting #1	
Date:	Wednesday, October 08, 2014	
Location:	55 John Street	
Attendees:	Gregg Lintern	City Planning, Community Planning
	David Cooper	City Planning, Transportation
	Matthew Davis	City Planning, Transportation
	Nigel Tahair	City Planning, Transportation
	Tim Laspa	City Planning, Transportation
	Nhat-Anh Nguyen	Engineering & Construction, Development Engineering
	Karen Freund	HDR
	Andrew O'Connor	HDR
	Sheldon Frankel	HDR
	Tyrone Gan	HDR
	Scott Mitchell	MCIC
	Eric Stadnyk	Parks, Forestry & Recreation, Capital Projects
	Mike Logan	Public Consultation Unit
	Tim Park	Real Estate Services
	Grace Tesa	Toronto Water, Water Infrastructure Management
	Judy Tse	Toronto Water, Water Infrastructure Management
	Mike Jacobs	Toronto Water, Water Infrastructure Management
	David Kuperman	Transportation Services, Infrastructure Planning
	Beth Williston	TRCA
	Paul Millett	TTC
	Melanie Hare	Urban Strategies
Minutes by:	Andrew O'Connor, HDR	

	<ul style="list-style-type: none"> o TAC members are encouraged to provide feedback promptly to allow for the study to proceed on schedule
2.	Presentation 1: Work Done to Date
	<ul style="list-style-type: none"> ▪ Modelling has been undertaken using a "2031 Reference Network" that includes planned network improvements such as the Eglinton Crosstown LRT and increased GO service. ▪ Modelling used the City's 2031 employment numbers (which exceed those in the Provincial Growth Plan) ▪ Key modelling results: <ul style="list-style-type: none"> o Yonge subway and some GO Lines over-capacity in 2031 o Objective is to reduce demand on the Yonge subway and number of transfers at Bloor/Yonge Station ▪ Analysis has been undertaken to select the recommended transit technology. Subway technology has been identified as the preferred option, as it is best able to meet forecast 2051 ridership demands (AM peak hour demand of 20,100 passengers) ▪ Multiple alternatives were tested: <ul style="list-style-type: none"> o Relief Line east leg o Relief Line east and north legs o Relief Line east and west legs o Relief Line full (north, east and west legs) o Increased service along the Lakeshore GO Rail corridor ▪ Relief Line subway alternatives more effective than increased GO service at reducing demand on Yonge subway and transfers at Yonge/Bloor
3.	Presentation 2: Initial Alignment and Station Options
	<ul style="list-style-type: none"> ▪ Memo has been drafted to explain the evaluation process in greater detail. The evaluation process consists of the following 4 steps: <ul style="list-style-type: none"> o Step 1: Identify long-list of stations o Step 2: Assess Downtown and Bloor/Danforth Station Options o Step 3: Evaluate Long List of Station and Alignment Combinations o Step 4: Evaluate Short List of Station and Alignment Combinations ▪ Stations and alignments will be evaluated by multiple criteria, organized into 8 "families" of criteria: <ul style="list-style-type: none"> o Travel Experience o Travel Options o Fairness o Shaping the City o Healthy Neighbourhoods o Environmentally Friendly o Affordable o Supports Growth ▪ Criteria such as social equity, natural heritage, policy context, planning framework, connectivity, sites for future redevelopment and the ability to connect to Greenwood Yard are included ▪ Evaluation includes assessment of how stations can 'fit' into existing neighbourhoods ▪ In the downtown area, all stations will have excellent proximity to major attractions and destinations; therefore, technical constructability considerations are expected to dominate the decision-making process ▪ Key focus on Relief Line as City-Building project ▪ TAC is encouraged to review and provide input on the evaluation process and the screening criteria

Item	
1.	Introductions and Overview
	<ul style="list-style-type: none"> ▪ Introductions ▪ City of Toronto provides an overview of the Relief Line Project Assessment: <ul style="list-style-type: none"> o Study is co-ordinated with Metrolinx's Yonge Relief Network Study (YRNS) o Studies are complementary: <ul style="list-style-type: none"> ▪ YRNS is looking at Regional objectives and potential improvements over the short-term, medium-term and long-term ▪ Relief Line study is looking at a longer-term solution, with a greater focus on local objectives o Goal of the Relief Line study is relieving congestion on the Yonge subway line and the broader transit network o City of Toronto views this project as a priority and has approved the Terms of Reference and the Public Consultation Plan o The study area extends from the financial district to Danforth east of the Don Valley o Next round of public consultation will take place in early 2015



4. Feedback and Discussion	
TAC Questions and Comments	Project Team Response
Study Objectives	
<ul style="list-style-type: none"> “Relief to Yonge” is prominent in project messaging. This focus is too narrow: must develop messages of “city-building” and “community building” and focus on the role the Relief Line can have in supporting existing streetcar lines and improving east/west transit connectivity in downtown Toronto and the shoulder areas 	<ul style="list-style-type: none"> These priorities are embedded within the evaluation framework. Project team to review opportunities to emphasize these priorities more explicitly within project messaging
<ul style="list-style-type: none"> Will you consider the relief to the King and Queen streetcar? This could be a very important benefit resulting from the RL. 	<ul style="list-style-type: none"> We will focus on relief to the King and Queen streetcar (provided that the primary objective of relieving the Yonge subway is not compromised). Existing and future land use is another key consideration
<ul style="list-style-type: none"> This study must include consideration of future phases (western extension and northern extension) 	<ul style="list-style-type: none"> Provision for the future western and northern extensions is an important part of the evaluation process
Evaluation Criteria and Process	
<ul style="list-style-type: none"> Screening criteria should focus on the concept of “connecting”. This will help emphasize local benefits to potentially affected communities. 	<ul style="list-style-type: none"> This concept is embedded within the evaluation framework and we will review opportunities to emphasize
<ul style="list-style-type: none"> Consider role of RL in relieving the DVP and the Gardiner 	<ul style="list-style-type: none"> This is captured within the broad policy objectives of the study
<ul style="list-style-type: none"> Consider under-served communities as part of the evaluation 	<ul style="list-style-type: none"> “Social equity” is included as part of the evaluation process
<ul style="list-style-type: none"> Is the identification of construction funding part of this project? 	<ul style="list-style-type: none"> Metrolinx lists this project as a potential “Next Wave” project
<ul style="list-style-type: none"> You may have some “high benefit, high cost” options, that offer maximal benefits but at a prohibitive cost. How will this be addressed? 	<ul style="list-style-type: none"> Cost and affordability are included as part of the evaluation framework. Project costs will be weighed against the benefits
<ul style="list-style-type: none"> Can you quantify the financial benefit of the alternatives to support decision making 	<ul style="list-style-type: none"> Metrolinx prepares Business Case Analyses for potential projects. Project team to review potential for using benefit/cost analysis to distinguish between alternatives
Environmental Impacts	
<ul style="list-style-type: none"> Environmental impacts such as terrestrial impacts in valley corridors and flooding in the Don Valley must be considered 	<ul style="list-style-type: none"> Environmental impacts are part of our evaluation process
<ul style="list-style-type: none"> The public has already identified concerns regarding potential noise and vibration impacts. How will this be addressed? 	<ul style="list-style-type: none"> We are preparing noise and vibration reports as part of this study. Impacts will also be considered as part of the evaluation of alternatives



Land Use, Property and Re-Development Opportunities	
<ul style="list-style-type: none"> Direction regarding the area south of Eastern Avenue will be provided shortly 	<ul style="list-style-type: none"> Comment noted; this will be incorporated into the evaluation process
<ul style="list-style-type: none"> Will stations be considered from a policy framework perspective? 	<ul style="list-style-type: none"> Yes. An assessment for each potential station location has already been completed
<ul style="list-style-type: none"> Major employment density in downtown Toronto is expected to “pull” the alignment to the south 	<ul style="list-style-type: none"> Ability of the RL to attract ridership is a key evaluation criteria
<ul style="list-style-type: none"> Modest amounts of redevelopment and “City-Building” are expected to the east of the Don Valley. The number of stations in this area should reflect this. 	<ul style="list-style-type: none"> The evaluation will reflect existing density, existing ridership potential, redevelopment opportunities and potential future ridership
<ul style="list-style-type: none"> Are you considering the Unilever Site or the CNE Grounds? 	<ul style="list-style-type: none"> The study boundaries are not firmly fixed, and we will consider connectivity to these sites
<ul style="list-style-type: none"> Maximize opportunities to put facilities within City-owned property to reduce property acquisition / expropriation costs. Consider acquiring property before station locations are publically announced, to avoid paying for the price increases associated with land speculation 	<ul style="list-style-type: none"> Property acquisition needs and costs are part of the evaluation process.
Co-ordination with Other Projects	
<ul style="list-style-type: none"> You must consider existing and planned underground infrastructure (electrical facilities, water and sewer infrastructure, etc.), as it will have a major impact on the cost and constructability of the project. For example, major infrastructure will be installed near the Unilever site and the Coxwell Sewer project is proceeding 	<ul style="list-style-type: none"> We are collecting information on existing infrastructure and will solicit TAC members for any information on planned future infrastructure
<ul style="list-style-type: none"> Metrolinx is engaging in long-term planning work to avoid flooding of their rail tracks – you should co-ordinate with them 	<ul style="list-style-type: none"> Comment noted
<ul style="list-style-type: none"> If the Relief Line goes “over” the Don Valley, consider opportunities to include improved active transportation (walking and cycling connections) 	<ul style="list-style-type: none"> Will be considered during evaluation
General	
<ul style="list-style-type: none"> Is the TPAP for the recommended option, or all options? 	<ul style="list-style-type: none"> The TPAP is for the recommended/preferred option
<ul style="list-style-type: none"> Is 2031 a realistic timeline for the first phase of the RL to open? 	<ul style="list-style-type: none"> The City has prepared an approach that shows how completion can occur before 2031; however, it is based on some assumptions



**Technical Advisory Committee
Meeting #2**

Monday, March 30, 2015
9:30 – 11:30 a.m.
23rd Floor Boardroom, East Tower, City Hall
100 Queen Street West

Minutes

Attendees

Gregg Lintern	City Planning, Community Planning
Mary MacDonald	City Planning, Heritage Preservation Services
Stella Gustavson	City Planning, Transportation Planning
David Cooper	City Planning, Transportation Planning
Mike Logan	City Planning, Transportation Planning
Hans Riekkö	City Planning, Transportation Planning
Charissa Iogna	City Planning, Transportation Planning
Greg Horgan	Engineering & Construction Services, Development Engineering
Sheldon Frankel	HDR
Andrew O'Connor	HDR
Marcus Bowman	Metrolinx, Policy & Planning
David Phalp	Metrolinx, Policy & Planning
Alex Shevchuk	Parks, Forestry & Recreation
Kate Kusiak	Public Consultation Unit
Renee Afoom-Boateng	Toronto and Region Conservation Authority
Rehana Rajabali	Toronto and Region Conservation Authority
Mario Angelucci	Toronto Building
Sam Sarkhosh	Toronto Building
Paul Millett	Toronto Transit Commission
Grace Tesa	Toronto Water
Edward Presta	Transportation Services, Infrastructure Planning
David Kuperman	Transportation Services, Transit Projects
Craig Lametti	Urban Strategies
Leigh McGrath	Urban Strategies
Erik Cunningham	Waterfront Toronto

	<ul style="list-style-type: none"> Is the technology (subway, LRT, streetcar, bus, etc.) open for discussion 	<ul style="list-style-type: none"> No. The Relief Line study is based on subway technology.
	<ul style="list-style-type: none"> Would additional tracks along the existing Yonge subway alignment to support an express service be considered? 	<ul style="list-style-type: none"> Metrolinx considered this as part of their long-list of options; however, it was screened out as a result of its cost and constructability challenges
	<ul style="list-style-type: none"> What is an acceptable V/C ratio? 	<ul style="list-style-type: none"> Once the V/C ratio exceeds 0.85, congestion starts to occur. Subway capacity is based on the TTC's loading standards; it is possible to exceed the capacity, but this results in over-crowding and delays, which in turn lead to a degradation of service and further reductions in capacity (i.e. a downward spiral).
5.	Action Items and Next Steps	
	<ul style="list-style-type: none"> Project Team to circulate information packages to TAC members, including assessment of stations completed to date Project Team to follow-up with TAC Members for individual meetings during the week of October 27th, 2014 to discuss input and feedback on project material 	

Item	Description
1.0	<p>Introductions</p> <ul style="list-style-type: none"> ▪ SG welcomed TAC members to Meeting #2 ▪ Purpose of meeting is to provide an update on work to date, and get TAC feedback on potential station areas, the evaluation criteria and preliminary screening of potential station areas ▪ Round the table introductions were made
2.0	<p>Study Background</p> <ul style="list-style-type: none"> ▪ DC gave a presentation on the study background, noting the following: <ul style="list-style-type: none"> ○ Official Plan policies are the context for studying the Relief Line ○ History of Relief Line study approvals dates from 2008 to 2014 ○ We are currently in Phase 1B/2 of the Relief Line study process ○ Relief Line is being studied in the context of the overall transit network ○ One of 25 projects being considered in "Feeling Congested?" OP Review ○ Relief Line, SmartTrack and Scarborough Subway Extension studies are interrelated and being coordinated by City Planning ○ Timing of reporting on transit projects to council will be coordinated ○ Other transportation projects being considered in the study area include the Gardiner Expressway EA, Broadview Extension, East Bayfront LRT, and higher-capacity streetcars serving the downtown network ▪ DC provided an overview of the challenges facing the Yonge subway line <ul style="list-style-type: none"> ○ Ridership on the Yonge subway today exceeds the capacity of 26,000 passengers in the peak hour; crowding will get worse by 2031 ○ Even with planned improvements to the Yonge subway line to increase capacity to 33-38,000 passengers per hour, the extension to Richmond Hill will make the subway over capacity again ○ Relief Line can reduce transfers at Yonge-Bloor Station by 30%, and riders on Yonge subway line by 12% ○ Relief Line can also reduce congestion on the downtown streetcar network, diverting up to 35% of streetcar riders on King and Queen ○ The initial phase of the Relief Line would be the third-busiest transit route on the system ○ Subway technology has been determined to be the preferred technology for the Relief Line <p>Q&A and Discussion</p> <ul style="list-style-type: none"> ▪ Q: Why is the western portion from the Downtown Rapid Transit Expansion Study (DRTES) not included as part of the current study? ▪ A: The greatest gains for solving the congestion on the Yonge line and at Bloor

	<p>Yonge station are with the eastern portion.</p> <ul style="list-style-type: none"> ▪ Q: What is the difference between Phase 2 in the DRTES and Phase 2 in the Relief Line Project Assessment? ▪ A: Phase 2 discussed in DRTES is to determine the alignment and station locations for the Relief Line, which is the purpose of the Relief Line Project Assessment
3.0	<p>Potential Station Areas</p> <ul style="list-style-type: none"> ▪ SG gave a presentation on the potential station areas, noting the following: <ul style="list-style-type: none"> ○ Potential station areas were developed based on the Official Plan policy framework, planning framework, making transit connections, providing access to key destinations, areas with opportunities for change and transit-oriented development ○ Potential station areas are grouped into three areas of focus: Downtown station options, Danforth station options, and key activity centres between the Danforth and Downtown <p>Q&A and Discussion</p> <ul style="list-style-type: none"> ▪ Q: What is the ridership market for the Relief Line and for SmartTrack? ▪ A: Ridership estimates will be determined in the coming months for these projects and the Scarborough Subway Extension. Key factors in determining the ridership markets for these lines will be station locations, areas of change in population and employment, diversion from Bloor-Yonge Station and local versus city-wide/regional trips. City Planning is doing an integrated assessment of these projects and will be reporting on key findings such as the ridership estimates when information becomes available. ▪ Q: What are the anticipated changes to the streetcar network with the introduction of the Relief Line? ▪ A: The streetcar network is assumed to remain the same. Service levels on some routes may be reduced, depending on demand. This would be determined at a later date. ▪ Q: How important are the connections to existing and planned transit in the station evaluation? ▪ A: Connections to existing and planned transit routes is included in the evaluation criteria under the Choice category. ▪ Comment: Heritage building mapping is now available on the City's open data website and is updated quarterly.
4.0	<p>Evaluation Process and Criteria</p> <ul style="list-style-type: none"> ▪ SG provided an overview of the evaluation criteria, noting the following: <ul style="list-style-type: none"> ○ The evaluation criteria follow the "Feeling Congested?" principles of Serving People, Strengthening Places, and Supporting Prosperity. ▪ SG provided some examples of the specific measures under each of the "Feeling Congested?" evaluation criteria of Choice, Experience, Social Equity, Shaping the City, Healthy Neighbourhoods, Public Health and Environment,

	<p>Supports Growth and Affordability (see presentation for details)</p> <p>Q&A and Discussion</p> <ul style="list-style-type: none"> ▪ Q: Are you assigning weighting to the evaluation criteria? ▪ A: We are not assigning weights to the evaluation criteria, but rather are using a reasoned argument approach. There will still be careful consideration placed on fatal flaws associated with constructability issues, such as concerns with crossing the Don River. ▪ Q: Are the evaluation criteria fixed? Are there opportunities to add additional criteria that we think may be missing? ▪ A: The evaluation criteria have not been finalized. The project team is encouraging feedback from the TAC to finalize the evaluation criteria. ▪ Q: Did you consider comments and suggested revisions for the evaluation criteria following the previous TAC meeting? ▪ A: Yes, comments received from TAC following the October 8th meeting have been incorporated into the draft evaluation criteria. In the next TAC meeting the project team will highlight and discuss specifically the comments from TAC that have been incorporated into the evaluation criteria.
5.0	<p>Public and Stakeholder Consultation</p> <ul style="list-style-type: none"> ▪ SG provided an overview of the public and stakeholder consultations that had taken place during the past month, noting the following: <ul style="list-style-type: none"> ○ Over 400 people attended the four public meetings from March 3-12. ○ A stakeholder advisory group meeting occurred on March 24. ○ Over 2,200 comments have been provided on MetroQuest so far. ▪ Some comments heard from the public meetings include the following: <ul style="list-style-type: none"> ○ Support for stations at Gerrard/Pape, Queen/Carlaw, Queen/Pape, and a desire to serve Regent Park and Moss Park. ○ Consider stations at Jarvis, Parliament and River Streets. ○ Connect to downtown subway lines north of Union Station. ○ Protect for extensions to the north and west. ○ Strongest support for evaluation criteria categories of Choice, Supporting Growth and Shaping the City based on dot exercise. <p>Q&A and Discussion</p> <ul style="list-style-type: none"> ▪ Q: How are you considering input from people outside of the study area, so that the consultation does not bias the evaluation? ▪ A: Public comments are only one input into the planning process to avoid the introduction of bias into the evaluation. The project team also solicited city-wide input in a number of ways. The composition of the Stakeholder Advisory Group has membership of various agencies and groups that represent city-wide interests. A "city-wide" public meeting was held in the Yonge-St. Clair area as a part of the public consultation program. Also the project team placed ads on the

	<p>entire TTC subway system to promote "city-wide" feedback on the project.</p>
6.0	<p>Preliminary Screening of Potential Station Areas</p> <ul style="list-style-type: none"> ▪ AO provided an overview of the preliminary screening of potential station areas, noting the following: <ul style="list-style-type: none"> ○ In the Downtown, potential stations along the Bay Street corridor perform the best. ○ West of the Don River, potential stations along Sherbourne Street perform well, as does Regent Park. ○ East of the Don River, the potential station at Pape/Gerrard performs the best. ○ Along the Danforth, potential stations at Broadview and Pape perform the best. <p>Q&A and Discussion</p> <ul style="list-style-type: none"> ▪ Q: How many transfers will occur at the Downtown station? How much time will it take to transfer between the two subway lines? ▪ A: The number of transfers is not known at this time. Ridership modelling will be done later in the process, considering SmartTrack and the Scarborough Subway Extension. The design of interchange stations has not yet been finalized. The transfer time between the two subway lines will depend on whether there is a direct connection between the two platforms, and whether the platforms are located below the existing subway or adjacent to each other. ▪ Q: Has cost been indirectly factored into the evaluation? ▪ A: No, cost has not been considered yet, but any known constructability challenges associated with each station have been considered. ▪ Q: With Bay Street seen as having the most potential on many of the east-west corridors, does this mean that the project team is only looking at one station versus two in the Downtown based on constructability? ▪ A: No. One of the reasons Bay Street has been identified as having the most potential is because Bay Street is closer to more concentrated employment. Having a station at Bay Street does not necessarily mean that the station box will be oriented right at the intersection. The station box could be placed in between Bay and Yonge Streets to facilitate access to employment on Bay Street in addition to being an interchange station with the Yonge Subway Line. There may be some benefits in terms of constructability with placing a station box adjacent to the Yonge Subway Line instead of right under the existing station box and subway tunnels. ▪ Comment: The project team should be aware of conflicting infrastructure when determining station locations and alignments. There is planned Toronto Water infrastructure identified in the Waterfront Sanitary Master Plan Update in the Lake Shore Boulevard area. There is a 3-metre diameter sewer line that runs east-west along Gerrard Street in the vicinity of Gerrard Square. The project team should note the location of other significant Toronto Water infrastructure in the study area such as the Coxwell Bypass and inner harbor east and west tunnels (confirm). Has considerations such as the need to build a bypass for

some Toronto Water infrastructure been considered under constructability?

- Q: Would we connect through poorly-performing stations to connect to some well-performing stations?
- A: There is a possibility that some well-performing corridors may have lower-performing stations along them. Factors such as reasonable station spacing need to be considered when determining station locations, as well as the need to provide an emergency exit for passengers.
- Q: What development areas in the study area would change with the addition of a subway?
- A: There are various key potential development areas in the study area such as Moss Park, Cherry Street (there is current investment ongoing in the area with the expansion of George Brown College, new YMCA and the Aboriginal Cultural Centre) and others. Future employment areas in the Port Lands and at the Unilever site are also key potential development areas.
- Q: What is the cost perspective with crossing the Don River with a bridge or tunnel structure?
- A: The costs of a bridge compared to a tunnel have not yet been evaluated, but it can be expected that crossing the Don River south of Queen Street will cost more than north of Queen Street due to soil conditions. The constructability of a bridge is also an issue, especially if the subway tunnel is deep (there may not be enough distance to come to the surface due to maximum subway grades).
- Q: Would stations along the rail corridor be located at or below grade?
- A: Most likely they would be below grade.
- Q: Are you using 500 or 800 metres as a typical walking distance for stations in your analysis?
- A: The project team is using approximately 400 metres when looking at the impact of the potential station location on local communities and with development. Some station locations will likely shift with the development of alignments. In the Downtown core we are using 200 metres as a walking distance with the close proximity of employment and key destinations to the potential station locations
- Comment: Crossing the Don River is a significant challenge. Is this a major consideration?
- A: Yes, the project team has met with key stakeholders to discuss the Don River crossing for the Relief Line. Discussions will be ongoing. The project team is aware of geotechnical conditions and work done on key pieces of flood protection in this area. A geotechnical assessment will be completed as a component of the Relief Line study.



**Technical Advisory Committee
Meeting #3**

Wednesday, July 29, 2015
1:30 – 3:30 p.m.
Meeting Room C, 2nd Floor, City Hall
100 Queen Street West

Minutes

Attendees

Kyle Knoeck	City Planning, Community Planning
Mary MacDonald	City Planning, Heritage Preservation Services
Stella Gustavson	City Planning, Transportation Planning
Hans Riekko	City Planning, Transportation Planning
Charissa Iogna	City Planning, Transportation Planning
Sheldon Frankel	HDR
Andrew O'Connor	HDR
Nick Shaw	HDR
Graham Rempe	Legal Services
Marcus Bowman	Metrolinx, Policy & Planning
David Phalp	Metrolinx, Policy & Planning
Alex Shevchuk	Parks, Forestry & Recreation
Eric Stadnyk	Parks, Forestry & Recreation
Norman DeFraeye	Parks, Forestry & Recreation, Urban Forestry
Renee Afoom-Boateng	Toronto and Region Conservation Authority
Rehana Rajabali (via teleconference)	Toronto and Region Conservation Authority
Ken Dion	Toronto and Region Conservation Authority
Sam Sarkhosh	Toronto Building
Sean Fuller	Toronto Transit Commission
Lou Di Gironimo	Toronto Water
Arthur Sinclair	Toronto Water
Edward Presta	Transportation Services, Infrastructure Planning
David Kuperman	Transportation Services, Transit Projects
Dan Clement	Transportation Services, Traffic Operations
Josh Neubauer	Urban Strategies
Erik Cunningham	Waterfront Toronto

Item	Description
1.0	<p>Introductions</p> <ul style="list-style-type: none"> ▪ SG welcomed TAC members to Meeting #3 ▪ Purpose of meeting is to provide an update on the study status, present the results of the finalized station area evaluation, introduce the corridors being considered and the preliminary corridor evaluation, and discuss public and stakeholder feedback received ▪ SG noted the presence of City project team staff, TTC staff, the consultant team, and TAC members at the meeting, and introductions were made
2.0	<p>Approval of TAC #2 Meeting Minutes</p> <ul style="list-style-type: none"> ▪ Minutes of Meeting #2 were distributed following the previous meeting, and were also made available in hard copy at the meeting ▪ No concerns were raised with the Minutes; the Minutes were approved ▪ TAC members should contact the City project team should any concerns arise from the Minutes
3.0	<p>Presentation & Discussion</p>
3.0 a	<p>Study Status</p> <ul style="list-style-type: none"> ▪ SG provided an update on the study status and activities since the last TAC meeting, noting the following: <ul style="list-style-type: none"> ○ Completed work includes finalization of the evaluation process/criteria and evaluation of potential station areas ○ TAC feedback from the previous meeting was considered in revising the evaluation process/criteria (particularly with respect to construction costs and impacts) and potential station area evaluation ○ Separate meetings were held with Community Planning staff to get detailed feedback on potential station areas ○ The study team identified four potential corridors for evaluation based on the evaluation of potential station areas, making logical connections of higher-performing station locations ○ Public and stakeholder consultations were held in June 2015, presenting the station evaluation and introducing the four corridors for comment; coordinated consultation process with TTC and Metrolinx that also involved SmartTrack and Scarborough Subway Extension ○ Transportation Planning is working with the University of Toronto to develop a new transportation model that will be used to evaluate ridership forecasts and travel times on transit lines currently under study ○ Results from the new transportation model will be available shortly and incorporated into the evaluation of corridors ○ Metrolinx has recently completed a related study, the Yonge Relief Network Study (YRNS), that supported the conclusion that the Relief Line is required

3.0 b	<p>Results of Potential Station Areas Evaluation</p> <ul style="list-style-type: none"> ▪ SG provided an overview of the results of the potential station area evaluation: <ul style="list-style-type: none"> ○ 45 potential station areas were evaluated in three sub-areas: Downtown connection, Danforth connection, and key activity areas in between ○ Potential stations in each area were ranked according to their performance, and displayed on maps using colour-coded dots ○ The higher- and lower-performing stations in each sub-area were noted ▪ SG provided an overview of the key messages received from the public and stakeholder consultation <ul style="list-style-type: none"> ○ It was noted that the public and stakeholders were generally in agreement with the technical evaluation of potential station areas undertaken by the study team <p>Q&A and Discussion</p> <ul style="list-style-type: none"> ▪ Q: What analysis resulted in the determination that Broadview and Pape were the highest-scoring connection points on the Danforth? Was it based on the number of transit riders that could be intercepted at each station? ▪ A: The evaluation looked at both ridership potential and surface connections, among other criteria contained in the Evaluation Process and Criteria document. Pape scores better than Broadview overall based on several factors: catchment areas for stations on Broadview corridors include valley land with no population or employment; Broadview corridors can't connect to SmartTrack stations; future extension north on Broadview requires longer crossing of the Don River valley; and Broadview connection requires longer connection to Greenwood Yard. ▪ Comment: Public opposition to a station at Queen and Degrassi is not just about resistance to change in stable residential areas, it is also a valid point about such change not meeting the objectives of the Official Plan.
3.0 c	<p>Potential Corridors</p> <ul style="list-style-type: none"> ▪ SG provided an overview of the four potential corridors that are being considered, noting the following: <ul style="list-style-type: none"> ○ Potential corridors connect the highest-performing station areas in the Danforth (Broadview and Pape) and the Downtown (Queen/Richmond and King/Wellington) ○ Each corridor includes various high-performing key activity areas in between the Danforth and Downtown, although no single corridor is able to connect to all high-performing key activity areas ○ At consultations, the public and stakeholders were generally more supportive of corridors that connected at Pape, while the difference in support for potential Downtown connecting stations was less clear <p>Q&A and Discussion</p> <ul style="list-style-type: none"> ▪ Q: Corridors B and D will have challenges crossing the Don River due to poor soil conditions and disturbing the flood protection landform. The challenges include alignments crossing at Queen and further south. Can we consider a hybrid using Corridor A that has the crossing of the Don River north of Queen combined with

	<p>parts of Corridors B or D to reach Pape?</p> <ul style="list-style-type: none"> ▪ A: The evaluation needs to balance the environmental challenges of crossing the Don River south of Queen with the benefit of serving new development areas, which are also mostly south of Queen. Extending Corridor A further east will miss Pape & Gerrard due to the minimum curve radius that is required. ▪ Q: Have we considered a surface crossing of the Don River to avoid disturbing the flood protection landform? We could consider widening the existing rail bridge to accommodate Relief Line tracks. ▪ A: A surface crossing would require portals on each side of the river, which would make stations near the river problematic. Due to physical limitations, there may not be enough length of track available to transition from tunnel to surface with consideration of maximum grades for trains. We are considering tunneling in the bedrock seam to avoid impacts to the flood protection landform.
3.0 e	<p>Preliminary Corridor Evaluation</p> <ul style="list-style-type: none"> ▪ AO provided an overview of the preliminary corridor evaluation, noting the following: <ul style="list-style-type: none"> ○ The project's evaluation criteria on based on the "Feeling Congested?" principles of Serving People, Strengthening Places, and Supporting Prosperity ○ The evaluation criteria are not quantitatively weighted; a reasoned argument approach is being used in the evaluation ○ The evaluation is based on the ability for each option to fulfill the project objectives and problem statement ▪ The preliminary results show that Corridors B and D are emerging as preferred. ▪ AO also provided preliminary information on four alignments within Corridors B and D. <p>Q&A and Discussion</p> <ul style="list-style-type: none"> ▪ Q: Would the future crossing of the Don River valley in the northern extension be underground or above ground (bridge)? ▪ A: This would have to be determined during a future study. A bridge would require a longer crossing of the valley than a tunnel, but the depth required for a tunnel is unknown without further investigation. ▪ Q: Can a future northern extension of a Broadview corridor turn onto O'Connor right-of-way for a shorter crossing of the Don River valley? ▪ A: Broadview makes a 90-degree turn onto O'Connor; curve radius limitations would require such a corridor to use significantly more private property. ▪ Q: Can the Leaside Bridge be used to cross the Don River valley from an alignment on Broadview? ▪ A: The outside traffic lanes have already been cantilevered from the structure of the Leaside Bridge. The further structural ability to support a subway deck would have to be verified but is questionable. The Leaside Bridge is easier to access from Pape than Broadview.

	<ul style="list-style-type: none"> ▪ Q: Would a subway along Queen Street supplement or replace the Queen streetcar? ▪ A: The Relief Line is not meant to replace streetcar service, whether on Queen or King. The wider stop spacing proposed for the Relief Line does not provide adequate local transit service. Streetcar service with fine-grained spacing of stops must still be provided to fulfill the local transit function. ▪ Q: Will the evaluation criteria be weighted? ▪ A: The evaluation criteria will not be weighted using a mathematical formula. A reasoned argument approach will be used in the evaluation, which allows for important criteria to be emphasized over criteria considered less important. ▪ Q: Are expropriation costs taken into account? ▪ A: It is too early to understand the impact to private property. We don't know the location of the alignment, stations, entrances, vent shafts, substations and other supporting infrastructure at this time. As alignments are developed in more detail, the number and location of private properties impacted can be identified. To the extent possible, alignments will attempt to follow public rights-of-way to minimize impacts to private property and expropriation costs. ▪ Q: Can Corridor A be extended further east to connect with Gerrard Square and Pape Station? ▪ A: This has been examined previously and not carried forward. A corridor from Gerrard to Pape would need to make a 90-degree turn. Due to the maximum curve radius for subways, the alignment would begin to curve north well before Pape miss Gerrard Square by several hundred metres. Or, the alignment would have to go east past Pape and then curve back west to Pape before heading north. This would lengthen the tunnel and impact additional private property. ▪ Q: Other EAs have not always accounted for conflicts/interference with underground utilities, which has resulted in significant unanticipated costs during construction. Will this EA carefully examine underground conflicts to avoid this type of situation? ▪ A: The study team has started looking at constraints Downtown. This is one of the reasons that a corridor along Queen is rising to the top; there are fewer underground conflicts than along King. We will be looking at underground constraints more closely once a preferred alignment has been chosen. ▪ Comment: A station at Queen and Broadview would be very close to the floodplain. Need to consider need and impact of access shafts within the floodplain. Even vibration impacts to the flood protection landform are undesirable and should be examined more closely.
4.0	<p>Next Steps</p> <ul style="list-style-type: none"> ▪ SG outlined the next steps in the study process are as follows: <ul style="list-style-type: none"> ○ Finalize evaluation of corridors, including integration of modeling results once available ○ Hold public meetings in September for input on Corridor evaluation results ○ Report to Council in the Fall on emerging directions (together with

SmartTrack and Scarborough Subway Extension)

- Hold further public meetings on preferred alignment (November)
- Report to Council in early 2016 on preferred alignment and permission to issue Notice of Commencement for TPAP
- Future TAC meetings will be arranged at key milestones

Q&A and Discussion

- Q: What does TPAP mean?
- A: TPAP means the Transit Project Assessment Process, the regulation for transit projects in the Environmental Assessment Act.
- Q: Would the use of the GO corridor be at or below grade?
- A: Use of the GO corridor for the alignment would be below grade. Use of the GO corridor for a connecting track to Greenwood Yard may be above grade.
- Q: Does the number of stations on the Relief Line affect the capacity of the line to relieve the Yonge subway line?
- A: Yes, the number of stations affects the travel time of riders, which may affect the choices riders make about transferring to the Relief Line.
- Comment: Heritage Conservation District study along Queen Street may also limit the development potential in that area.
- Q: What public comments were received about a station at Queen and Pape?
- A: Comments were generally positive about this location.
- Q: To assist with the coordination of other capital works, what is the rough timing of construction for the Relief?
- A: The Relief Line is currently not funded. For study purposes, we are assuming that the line will be in operation by 2031.
- Q: When is the deadline for feedback on the material presented at this meeting?
- A: The study team will finalize the evaluation of corridors and distribute this to TAC members for feedback later. Other comments can be submitted to the study team at any time.



**Technical Advisory Committee
Meeting #4**

Thursday, April 7, 2016
2:30 – 4:30 p.m.
Meeting Room C, 2nd Floor, City Hall
100 Queen Street West

Minutes

Attendees

Stella Gustavson	City of Toronto, Transportation Planning
Hans Riecko	City of Toronto, Transportation Planning
Charissa Iogna	City of Toronto, Transportation Planning
Kristen Olson	City of Toronto, Transportation Planning
Paul Millett	Toronto Transit Commission
Tyrone Gan	HDR
Sheldon Frankel	HDR
Nick Shaw	HDR
Melanie Hare	Urban Strategies
Greg Horgan	City of Toronto, Engineering
Norman DeFraeye	City of Toronto, Urban Forestry
Alex Shevchuk	City of Toronto, PFR PDD
Erik Cunninton	Waterfront Toronto
Patricia Palmieri	City of Toronto, Real Estate
Arthur Sinclair	Toronto Water
Graham Harding	Toronto Water
Leah Ross	City of Toronto, SDFA
Mike Major	City of Toronto, EDC BIA
John Alderdice	City of Toronto, EDC Business Growth
Mary MacDonald	City of Toronto, Heritage
Gregg Lintern	City of Toronto, City Planning
Marcus Bowman	Metrolinx
Martin Keen	Metrolinx
David Kuperman	City of Toronto, Transportation Services
Renee Afoom-Boateng	TRCA

Item	Description
1.0	<p>Introductions</p> <ul style="list-style-type: none"> ▪ SG welcomed TAC members to Meeting #4 ▪ Purpose of meeting is to provide an update on the study status, present the results of the corridor evaluation, introduce the alignments being considered and the preliminary thinking on the alignment evaluation ▪ SG noted the presence of City project team staff, TTC staff, the consultant team, and TAC members at the meeting, and round table introductions were made
2.0	<p>Approval of TAC #3 Meeting Minutes</p> <ul style="list-style-type: none"> ▪ Minutes of Meeting #3 were distributed following the previous meeting, and were also made available in hard copy at the meeting ▪ No concerns were raised with the Minutes; the Minutes were approved ▪ TAC members should contact the City project team should any concerns arise from the Minutes
3.0	<p>Presentation</p>
3.0 a	<p>Study Status</p> <ul style="list-style-type: none"> ▪ SG provided an update on the study status and activities since the last TAC meeting, noting the following: <ul style="list-style-type: none"> ○ Corridor evaluation completed with the recommended preferred corridor being a connection from Pape Station to Downtown via Queen/Richmond (Corridor B1) ○ Public and stakeholder consultations were held in February and March 2016 in conjunction with Metrolinx, presenting the results of the corridor evaluation and gathering feedback. The community demonstrated broad support for the recommended corridor ○ Recommendation was approved by City Council at its meeting of March 31-April 1, 2016) http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2016.EX13.3
3.0 b	<p>Results of the Corridor Evaluation</p> <ul style="list-style-type: none"> ▪ HR provided an overview of the key findings of the corridor evaluation <ul style="list-style-type: none"> ○ Since the last TAC meeting, Corridors B and D were split into two (B1, B2, D1, and D2) to better capture the advantages and disadvantages of these subsets, specifically how they connect with Unilever. In addition to Corridors A and C (Broadview to Queen and King), a total of six corridors were evaluated ○ Each of the six corridors achieve the main project objectives equally well: <ul style="list-style-type: none"> ▪ Reduce crowding on Yonge Subway south of Bloor ▪ Reduce crowding at Bloor-Yonge Station ○ The individual strengths and weaknesses of each of the six corridors were presented (see attached presentation)

	<ul style="list-style-type: none"> ○ The highlights of the approved corridor were outlined
3.0 c	<p>Preliminary Comments on the Alignment Evaluation</p> <ul style="list-style-type: none"> ▪ SF (HDR) provided an overview of some of the preliminary work completed on the alignment evaluation <ul style="list-style-type: none"> ○ Six alignments to be studied further are a combination of: <ul style="list-style-type: none"> ▪ Three routing options east of the Don River (via Eastern [E], via the GO Corridor [G], and via a curve from Pape to Queen [A]) ▪ Two downtown routing options west of the Don River (via Queen [Q] and via Richmond [R]) ○ <i>Notes on the Downtown Variations:</i> <ul style="list-style-type: none"> ▪ Queen Options: <ul style="list-style-type: none"> • Queen street allows for a traditional station configuration downtown • Fewer conflicts with large diameter steam pipes • Straight ROW with fewer speed limitations • Queen alignment would conflict with multiple streetcar lines should an open-cut station construction method be chosen (TBD during EA) • Queen alignment options would allow for a station at Queen/Sumach (King/Sumach on Eastern Variations), providing a connection to the Cherry Streetcar. ▪ Richmond Options: <ul style="list-style-type: none"> • More constrained downtown and will require alternative station design • Greater conflicts with large diameter steam pipes • A number of reverse curves required to arrive to Richmond from Queen or Eastern and into downtown – longer travel times • Able to employ an open-cut station construction method without impacting the streetcar network significantly • Richmond alignments preclude a direct connection to Cherry/Sumach for the GO Corridor (G) and Pape to Queen (A) options; however, Eastern alignments (E) would permit a connection. ○ <i>Notes on Variations East of the Don</i> <ul style="list-style-type: none"> ▪ Pape to Queen Curve option (A): <ul style="list-style-type: none"> • Fastest, cheapest option • No station possible at Pape/Queen; station could be at Queen/Broadview instead • Along with (G), shortest crossing of the Don River (reduced

	<p>soil stabilization costs)</p> <ul style="list-style-type: none"> ▪ GO Rail corridor option (G): <ul style="list-style-type: none"> • Make use of an existing transportation corridor, potentially fewer private property impacts • No station possible at Pape/Queen; station could be at Queen/Broadview instead • Along with (A), shortest crossing of the Don River (reduced soil stabilization costs) ▪ Eastern option (E): <ul style="list-style-type: none"> • Station possible at the northern boundary of the Unilever site connecting to Broadview streetcar extension • TRCA is undertaking an EA to address flood risk issues • An additional station at Pape/Queen is required to capture Queen streetcar transfers (and reduce congestion) • Opportunity to serve Corktown very well at King/Sumach, connecting directly to the Cherry and King streetcars • Need for additional soil stabilization crossing under the Don River • Potentially greater tunnel/station depths due to deeper bedrock ○ <i>Soil Stabilization and the Don Crossing:</i> <ul style="list-style-type: none"> ▪ Don crossing would be underground ▪ When crossing the softer soils within the bedrock valley at the Don Valley, the TBM would have to leave and re-enter the bedrock. These soils would have to be stabilized before tunnelling. ▪ Further south along the Don Valley, the bedrock valley is much wider (and more so if crossing at an angle), increasing the length of soil stabilization required. Also, if soil conditions are different, costs could increase. Additional investigation is required. ▪ Northward along Pape, alignments exit bedrock into softer soils in the vicinity of Dundas Street. ○ <i>Wet Weather Flow Vortex:</i> <ul style="list-style-type: none"> ▪ Project team is cognizant of the Wet Weather Flow Vortex infrastructure and will work with City Water to confirm that none of the alignments being evaluated are in conflict
4.0	<p>Next Steps</p> <ul style="list-style-type: none"> ▪ SG outlined the next steps in the study process are as follows: <ul style="list-style-type: none"> ○ Preliminary station placement for the purposes of the alignment evaluation ○ Full evaluation of the six alignments and their associated station locations ○ Hold public meetings in late spring 2016 to gather public and stakeholder feedback on the recommended preferred alignment and station locations ○ Next TAC meeting to be scheduled late spring

	<ul style="list-style-type: none"> ○ Report to Executive Committee in June/Council July ○ Develop conceptual design and initiate formal TPAP process later in 2016
5.0	<p>Discussion</p> <p>Q: Six potential alignments. Are you going to develop potential station locations for each of them? A: On a high level, we're going to develop station locations based on rough fit. We currently have notional station locations. The project team will be in contact with City Planning as we drill deeper on this front.</p> <p>Q: How about the downtown stations? Will there be extensive acquisitions? A: These are going to be refined as we go forward. That being said, we're not planning on building bus infrastructure at the downtown stations, minimizing need for dedicated stations downtown. Space constraints around station areas will determine what kind of station we build. Generally, for the station areas within a tighter urban fabric, we'll be trying to integrate them with existing and future development.</p> <p>Q: Will the stations be accessed by multiple bus routes? A: Yes, depending on the station location.</p> <p>Q: Follow up: May or may not be an issue but where will the bus laybys be located? Concerned about the effect of bus laybys on the streetscape. A: No laybys anticipated. We may re-configure stops so they are near a particular entrance, but there are no new laybys planned. Generally, stations will be served by the existing bus and streetcar network.</p> <p>Q: Follow up: What about the Bay Street bus? A: We're looking to make the Yonge station fit so that it could have an entrance at Bay, where you'd have an excellent connection to that route. Project team will be in touch when we get to this level of detail.</p> <p>Q: What are the main constraints downtown? A: Only 20 m of width to work with on both Richmond and Queen. Queen has open space on the north side of Queen (Nathan Phillips Square, Old Courthouse, etc.) that allows us to shift the track a few metres north. There are still issues with building foundations to the east and west.</p> <p>Q: How far apart are those station boxes downtown? A: The distance is greater than the distance between the existing Queen and Dundas stations. These stations will likely be built to also improve underground connectivity in the downtown core, specifically improving the PATH network.</p> <p>Q: What is the impact to City Hall? A: Entrance would be far south of the City Hall structure. Entrances would be along Queen.</p> <p>Comment: Very tight downtown. You would need to find sites downtown. Response: Yes. Downtown there just isn't space. You can have entrances in existing open space along Queen. But if you want to integrate station entrances right at Queen</p>

	<p>and Yonge, for example, we'll need to have discussions with building owners.</p> <p>Q: What would be the approach to entrances downtown? A: These conversations are just beginning and we've brought in a number of new people to the TAC to involve them in the station placement and entrances discussions.</p> <p>Q: How is the Relief Line going to be built? A: How this is going to be delivered has yet to be decided.</p> <p>Q: What are your assumptions related to the cost-benefit of additional stations along the alignment? What is the travel time "dis-benefit" of an additional station? A: Dwell plus time lost during deceleration and acceleration. We have the travel time savings calculated for each line. There is going to be a travel time savings impact, which will impact the number of riders this attracts from the BD line. There is an opportunity to do a sensitivity analysis later on, taking the top scoring alignments and tweaking the number of stations. This would make cost-benefits more clear.</p> <p>Q: Could you speak a little more to the future western extension? A: Could continue on Queen or swing down to King between Spadina and Bathurst. We need to keep both potential extension routes on our radar and protect for either. But the point is that our work to date does not preclude a King option serving Liberty Village.</p> <p>Q: Would you protect with an OP amendment? A: That's one option. That was done for the Sheppard Subway.</p> <p>Q: Is this beyond your scope of work? A: That's what we're discussing now. We recognize that if we don't pay attention to this now, we may lose the opportunity to extend to King if that's desired.</p> <p>Q: Can we have a copy of the presentation? A: Yes. Copy will be included with the minutes.</p> <p>Discussion on the contaminated soils near the former Coal Gasification Plant and the potential impact on the alignments. Comment: The contamination is all throughout the area and "it moves." The condo on Mill Street at Trinity, for example, has its parking located above grade because of the coal tar. So it is a consideration in the area.</p> <p>Q: Development potential of the corridors. King seems to have more development potential than Queen. A: King is currently more developed. Queen has more future potential. But development potential is just one of a number of criteria within the comprehensive evaluation framework (based on "Feeling Congested?"). We are seeing an increase in development interest along Queen Street, for example near Sherbourne Street and Ontario Street</p> <p>Q: Have you touched based with the Waterfront Design Team? A: Yes, we've met and have shared information and data.</p> <p>Q: When would you expect the next TAC meeting to take place? A: Based on schedule now, the next TAC meeting will likely be in June.</p>
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	<p>Q: Where in the process will you be developing a more precise cost estimate? A: We're in the process of developing business cases for all of the City's transit projects. Still early days on that. That will likely be around June/July.</p> <p>Q: How much time/effort will you spend evaluating the Don River crossing components? A: That next level of detail is after we've selected a preferred alignment. Having said that, in developing a cost estimate of the alignments, the length and depth of soil stabilization will be accounted for in the high-level cost estimates.</p>
6.0	<p>Summary of Action Items</p> <ul style="list-style-type: none"> - Project Team to set up a meeting with Community Planning and Heritage Preservation to have further discussion on station locations - Project Team to review social equity evaluation criteria with SDFA - HDR to consult with environmental sub-consultants to gather more information on the former coal gasification lands to understand impact of contamination on alignments being considered

RELIEF LINE



Technical Advisory Committee Meeting #5

Friday, June 17, 2016
9:30 – 11:00 a.m.
Boardroom 12E, City Hall
100 Queen Street West

Minutes

Attendees

Stella Gustavson	City of Toronto, Transportation Planning
Hans Riekkö	City of Toronto, Transportation Planning
Maria Doyle	City of Toronto, Transportation Planning
Andrea Old	City of Toronto, Transportation Planning
Tyrone Gan	HDR
Sheldon Frankel	HDR
Nick Shaw	HDR
Paul Millett	Toronto Transit Commission
Laurence Lui	Toronto Transit Commission
Gregg Lintern	City of Toronto, City Planning
Cassidy Ritz	City of Toronto, City Planning
Graham Rempe	City of Toronto, Legal Services
Allan Abrogena	City of Toronto, Transportation Services
Eric Stadnyk	City of Toronto, Parks Forestry and Recreation
Loretta Ramadhin	City of Toronto, Real Estate Services
Leah Ross	City of Toronto, Social Development, Finance and Administration
Arthur Sinclair	Toronto Water
Graham Harding	Toronto Water
Marcus Bowman	Metrolinx
Chris Glaisek	Waterfront Toronto
Ken Dion	TRCA
Renee Afoom-Boateng	TRCA
Amy Winterhalt	TRCA

Item	Description
1.0	<p>Welcome and Introductions</p> <ul style="list-style-type: none"> SG welcomed TAC members to Meeting #5 Purpose of meeting is to provide an update on the study status, present the results of the corridor evaluation, introduce the alignments being considered and the preliminary thinking on the alignment evaluation SG noted the presence of City project team staff, TTC staff, the consultant team, and TAC members at the meeting, and round table introductions were made
2.0	<p>Approval of TAC #4 Meeting Minutes</p> <ul style="list-style-type: none"> Minutes of Meeting #4 were distributed following the previous meeting, and were also made available in hard copy at the meeting No concerns were raised with the Minutes; the Minutes were approved TAC members should contact the City project team should any concerns arise from the Minutes
3.0 a	<p>Project Updates</p> <p>Presentations by Stella Gustavson, Sheldon Frankel and Nick Shaw</p> <ul style="list-style-type: none"> SG – Presented an overview of work done on the Relief Line to date and study status – showing the progress from last TAC meeting where the corridor had been determined, to the Emerging Preferred Alignment which will be included in the Council Report to be released next week. SF – Discussed the different alignment alternatives and how they were evaluated using the Feeling Congested? framework NS – Reviewed each identified alignment to highlight the strengths and limitations as well as review the preliminary station areas assessments to demonstrate the rationale
3.0 b	<p>Discussion</p> <p>The following comments and questions were discussed during the presentation by Nick Shaw and relate to specific alignments or station areas as indicated:</p> <p><u>EQ alignment</u></p> <ul style="list-style-type: none"> <u>Pape from Gerrard to Queen</u> noted as contentious due to the neighbourhood profile and narrow ROW width. Area is currently a narrow treed-lined street with homes directly abutting the ROW Residents are concerned about the construction impacts as well as how it will affect/change the personality of the street. PM – Noted that there is an EMS station at Queen that will be moved and may offset the impacts to the street GL – Complexion of street will still change due to increased pedestrian traffic and access to station Concerns may exist that there will be additional development pressures and lot consolidation in the area, also affecting the character, which should be addressed in the EPR <p><u>Pape-Queen Station</u></p>

<ul style="list-style-type: none"> ▪ Many of the impacts to the area can be mitigated with good station design – orient station so main entrances are at Queen – use secondary access as emergency/exit only access. <p><u>Eastern-Broadview Station</u></p> <ul style="list-style-type: none"> ▪ KD – Need to show that the site is currently located in a floodplain ▪ Concern is that if this is not identified at this stage it may be 'forgotten' – feels that it is risky to assume flood protection is in place ▪ Station area may require consideration for elevated structures/entrances to overcome flooding issues ▪ SG – Staff have been directed to assume flood protection will be in place – but this will be addressed as part of the EPR ▪ Noted that this is a concern raised today and will incorporate in the report if possible ▪ CR – Additional underground infrastructure exists that may also pose a problem when developing station area – including the Low-level Interceptor (LLI) ▪ There may be a consideration for putting the Broadview streetcar interchange underground to facilitate transfers between streetcar and subway ▪ This area may require an integrated planning study to address the issues due to the complications that it presents. i.e. LLI, Don Roadway, floodplain, rail line, etc. <p><u>King/Sumach Station</u></p> <ul style="list-style-type: none"> ▪ PM – challenging as we may have to temporarily remove portions of Richmond/Adelaide ramps to construct the station <p><u>Gerrard/Pape Station</u></p> <ul style="list-style-type: none"> ▪ GL – Station area need to be planned as a whole – a complete planning rethink – to consider all public infrastructure such as parks, public realm, schools etc. in relationship to the station and new development ▪ SG – Metrolinx has suggested that they want to move the SmartTrack/GO-RER station to Carlaw – to avoid the need for development at Gerrard Square – but city hopes to continue conversation with Metrolinx to find the best option for station location ▪ GL – This area should be considered an area that integrates urban mobility, and community with transit-oriented development – more than just a 'hub' ▪ AO – Does the area require and 'H'? – No, the area would require rezoning for redevelopment <p><u>Pape/Danforth Station</u></p> <ul style="list-style-type: none"> ▪ The Pape station location offers the best interchange with the Bloor-Danforth line for several reasons ▪ Optimum location if the line is extended north ▪ Allows turn back of trains with no need for a yard for current line ▪ Station can be located adjacent B/D station with minimal surface impacts ▪ Drawings show that underground tunnel would impact several properties – have these been identified to the property owners yet? – A. Not yet, but this will happen as we move in the EPR <p><u>AR Alignment</u></p>

<ul style="list-style-type: none"> ▪ Why was there no consideration for a station at Sumach? ▪ The need for several curves in the alignment would preclude a straight section of track that would be needed to accommodate a station <p><u>Richmond Alignments</u></p> <ul style="list-style-type: none"> ▪ Richmond street would avoid impacts for the streetcar route but due to underground infrastructure typical station boxes would not be possible <p><u>General comments</u></p> <ul style="list-style-type: none"> ▪ <u>Riverdale Heritage Conservation District</u> ▪ GL – Can we confirm this is an approved HCD? ▪ HR – It was established in 2008 and includes the properties on First Avenue east of DeGrassi Street, and on West and Tiverton Avenues ▪ <u>P3 Potential</u> ▪ CR – Why is Unilever identified as the only site with potential? Are there other sites that could/should be noted? ▪ SG – Unilever is the only site where discussion with potential partners are under way, however there are several other sites – common to most of the options – that have partnership potential, such as Gerrard Square, Broadview and King, etc. They should also be noted on the materials ▪ CR – Have there been discussions with BMW/Talisker about the potential for redevelopment or partnership? – Not yet ▪ HR – Moss Park – there has been a request for the station entrance requirements from the architects to identify requirements to integrate potential development – TTC will be included in these conversation as we respond ▪ <u>Surface Transit interface</u> ▪ LL – As the study proceeds, consideration should be given to how surface routes can be developed/altered to interface with the proposed line e.g. – extension of Dundas car to meet Pape. ▪ NS – Interfaces will be urban style and low profile – with no projected bus stations or major transfer points. ▪ This to be noted as a point for future discussion as we move forward in the study. ▪ <u>Travel Time</u> ▪ Can you tell us what the estimated travel time would be for this line? ▪ SF – The estimate travel time saving from the base case – Pape to Queen via BD/Yonge lines – would be about 30-50% ▪ Travel time along the RL route range about 2 minutes between options ▪ The models used are sensitive to travel time and travel choices and still need to be refined to determine actual travel times ▪ <u>Expropriation</u> ▪ GR – Heard on news that Chief Planner has said that there will be no expropriations, is this true?
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	<ul style="list-style-type: none"> ▪ SG – There was a statement released that clarifies that there will be property acquisition – but that we have not yet identified what those will be at this time ▪ <u>Provincial Interest</u> ▪ GR – This line was identified as a way to relieve Yonge Line congestion. If modelling does not meet the ridership objective the TPAP could potentially be challenged as it may be an issue for the province due to the 'lack' of relief ▪ NS – The modelling does support that the line offers 'relief' – and brings in more net-new riders than other options ▪ <u>Underground or Other Infrastructure</u> ▪ CR – Have all barriers been identified? Don ramps, steam pipes, LLI, CBS, etc.? ▪ SF – Still early in the assessment but there has been a high-level look at current infrastructure in the area. Are just now collecting information on the substructures from buildings along the alignment. The alignment touches 2 developments in WDL. We have information for one and one site does not yet have their application in. ▪ <u>Soil Conditions</u> ▪ What are the soil conditions for the tunnel? ▪ SF – The tunnel is in bedrock except across the Don River and north of Gerrard toward Danforth Avenue
4.0	<p>Next steps</p> <ul style="list-style-type: none"> ▪ The Emerging Preferred Alignment will be presented in the report to Council that will be released publicly early next week. ▪ The report will be tabled the Executive Committee meeting on June 28-29, 2016. ▪ The report will again be tabled at City Council meeting on July 12-14, 2016. ▪ Pending approval, the project team will prepare the Environmental Project Report and move into the TPAP process.



**Technical Advisory Committee
Meeting #6**

Monday, December 19, 2016
2:00 – 3:30 p.m.
Boardroom 12E, City Hall
100 Queen Street West

Minutes

Attendees

Gregg Lintern	City of Toronto, City Planning
Kelly Jones	City of Toronto, City Planning
Norman DeFraeye	City of Toronto, Parks Forestry and Recreation
Dan Rosen	City of Toronto, Economic Development and Culture
Larissa Deneau	City of Toronto, Economic Development and Culture
Ed Presta	City of Toronto, Transportation Services
Patricia Palmieri	City of Toronto, Real Estate Services
Arthur Sinclair	Toronto Water
Graham Harding	Toronto Water
Renee Afoom-Boateng	TRCA
Ken Dion	TRCA
Devon Horne	Metrolinx
Greg Pereira	Metrolinx
Paul Millett	Toronto Transit Commission
Scott Haskill	Toronto Transit Commission
Stella Gustavson	City of Toronto, Transportation Planning
Hans Riekko	City of Toronto, Transportation Planning
Charissa Iogna	City of Toronto, Transportation Planning
Kristin Olson	City of Toronto, Transportation Planning
Tyrone Gan	HDR
Nick Shaw	HDR
Jeff Spence	HDR
Josh Neubauer	USi

Item	Description
1	<p>Welcome and Introductions</p> <ul style="list-style-type: none"> • SG welcomed TAC members to Meeting #6 and facilitated round table introductions • Purpose of the meeting is to provide an update on recent progress on the Relief Line Project Assessment and to solicit feedback on the preliminary findings
2	<p>Approval of TAC #5 Meeting Minutes</p> <ul style="list-style-type: none"> • Minutes of Meeting #5 were distributed following the previous meeting, in the TAC#6 invite, and in hard copy at the meeting • No concerns were raised with the Minutes and they were approved
3	<p>Project Update</p> <p>Presentations by Stella Gustavson and Tyrone Gan</p> <ul style="list-style-type: none"> • SG provided an update on status of project <ul style="list-style-type: none"> ○ Council approved recommended "EQ" alignment in July – Pape-Eastern-Queen. ○ Council also directed evaluation of an alternate alignment within a "local segment" generally between Gerrard and Queen. ○ A Carlaw alignment has been evaluated for this segment in comparison to the original Pape alignment. • TG provided an overview of the evaluation of these two options: <ul style="list-style-type: none"> ○ Both alignments perform well against the evaluation criteria; however, the Carlaw option is emerging as preferred based on the preliminary results. ○ Key advantages of the Carlaw alignment are as follows: <ul style="list-style-type: none"> ▪ Less potential for impacts to the residential area along Pape ▪ Capitalizes on emerging growth areas along Carlaw ▪ Preliminary Real Estate Study findings also support Carlaw option ▪ Would address local opposition to a Pape alignment ○ Key tradeoffs/challenges: <ul style="list-style-type: none"> ▪ Deep stations – Unlike Pape, a Carlaw alignment would require deep stations (~40m) at Gerrard to avoid 3000mm Mid-Toronto Interceptor ▪ Major utility relocation – Queen-Carlaw station would likely require a complete relocation of the 1800mm sanitary sewer running on Carlaw between Gerrard and Eastern – tentatively to Logan
5	<p>Discussion</p> <p><u>Community Planning:</u></p> <ul style="list-style-type: none"> • GL: Update nomenclature to be consistent with language in SASP 154 • KJ: Station at Gerrard-Carlaw may have the effect of encouraging more employment uses on soft sites around Dundas-Carlaw (instead of residential)

	<p><u>Gerrard SmartTrack/RL Station:</u></p> <ul style="list-style-type: none"> • GP: Have you looked at the additional costs expected for lost revenue at the Riverdale Shopping Centre? <ul style="list-style-type: none"> ○ SG: At this point no. Still preliminary conceptual phase of this project and costing has not entered into that level of detail. ○ PM: Traditionally we budget a percentage of the total project cost as contingency to account for additional items such as this ○ GP: Scale of expropriation could justify a separate line item in budget • GL: Expect some soil remediation work may be required below gas station at Riverdale Shopping Centre • GP: Have discussions been initiated with Riverdale Shopping Centre? <ul style="list-style-type: none"> ○ KJ: Initial conversation with Gerrard Square, but not yet with Riverdale Shopping Centre • HR: Would development potential be limited over the Riverdale Shopping Centre should a tunnel or station be built beneath? <ul style="list-style-type: none"> ○ NS: Deep station (~40m) would be mostly in bedrock so impact would be limited, but would need to be confirmed when the final profile is approved ○ KJ: Densities at this location may not be extreme given the low-rise residential surrounding context. • GL: Would you need property north of the Riverdale Shopping Centre? <ul style="list-style-type: none"> ○ SG: Our conceptual level station planning and track design show that no takings would be required north of the Riverdale Shopping Centre property. • GP: Plans are in place to add a fourth track– in this segment expansion would be to the south of the existing rail corridor. The Carlaw bridge would also be widened to accommodate this (timing: 2022-2025). <p><u>Toronto Water:</u></p> <ul style="list-style-type: none"> • GH: Do not underestimate the risk associated with the MTI and LLI – these are the workhorses of the system and they cannot be compromised <ul style="list-style-type: none"> ○ SG: We recognize that in order to go forward we will require complete confidence that the project will not impact TW operations • AS: Relocation of the Carlaw sanitary sewer will require tunneling, which requires launch and extraction shafts. You will need to account for the space for construction, which could be a large piece of real estate that may or may not be available without impacts to the community.
4	<p>Next Steps</p> <ul style="list-style-type: none"> • Q1 2017 <ul style="list-style-type: none"> ○ Follow up with Toronto Water regarding utility conflicts ○ Follow up with Community Planning regarding SASP and station planning ○ Complete technical work and evaluation of local segment alignment options

- Hold public and stakeholder consultation on evaluation results
- Report to Executive Committee and Council on recommended preferred alignment and station locations within the local segment.
- Q2 2017
 - Refine station locations and prepare station concept plans
 - Develop conceptual design for preferred alignment
 - Determine potential impacts and mitigation measures
 - Prepare Environmental Project Report (EPR)
- Q3 2017
 - Initiate Transit Project Assessment Process

RELIEF LINE



Technical Advisory Committee Meeting #7

Friday, September 22nd, 2017
9:30 – 11:59 a.m.
Metro Hall, Room #3

Minutes

Attendees

Jane Weninger	City of Toronto, SIPA
Christine Oldnall	City of Toronto, Forestry
Suzanne Hajdu	City of Toronto, Parks
Patricia Palmieri	City of Toronto, Real Estate Services
Kelly Jones	City of Toronto, Community Planning
Kyle Knoeck	City of Toronto, Community Planning
Nick Samonas	City of Toronto, Toronto Building
William Martin	City of Toronto, Legal Services
Angela Li	Waterfront Toronto
Michael Wolfe	Waterfront Toronto
Sonja Vangjeli	Waterfront Toronto
Arthur Sinclair	Toronto Water
Graham Harding	Toronto Water
Carlo Bonanni	Build Toronto
Renee Afoom-Boateng	TRCA
Violetta Savage	TRCA
Robert Chan	TRCA
Devin Horne	Metrolinx
Jacqueline Darwood	TTC
Scott Haskill	TTC
Malcom MacKay	TTC
Paul Millett	TTC
Stella Gustavson	City of Toronto, Transportation Planning
Hussain Tamimi	City of Toronto, Transportation Planning
Tyrone Gan	HDR
Nick Shaw	HDR
James Huang	HDR

Item	Description
1	<p>Welcome and Introductions</p> <ul style="list-style-type: none"> Self-introductions were made by those present. Purpose of the meeting was described as providing an update on recent progress on the Relief Line Project Assessment and to solicit feedback on the work completed to date, including draft alignment and station drawings.
2	<p>Approval of TAC #6 Meeting Minutes</p> <ul style="list-style-type: none"> Minutes of Meeting #6 were distributed following the previous meeting No concerns were raised with the Minutes and they were approved without comment
3	<p>Project Update</p> <ul style="list-style-type: none"> Stella Gustavson provided an overview presentation on the project status, including City Council approval of the Relief Line (South) alignment in July 2016 and May 2017
4	<p>Alignment Elements</p> <ul style="list-style-type: none"> Tyrone Gan provided an overview of the alignment drawings, starting from Queen/University Avenue. A question was raised regarding coordination of property acquisition. It was stated that property impacts are being identified as part of the EPR, based on conceptual design, however the property acquisition process will not commence until a later stage in the process when fully funded. A question as raised on construction methods and assumptions. It was stated that for the purposes of developing the EPR, current TTC design standards and construction methods are being assumed, including twin tunnels, centre platforms for stations, and cut and cover stations. This approach may be refined during future stages of design. With regard to the alignment along Queen Street, a question was asked if the old streetcar station box is being used for the Relief Line project. TTC advised that the old station is not available nor suitable for use for the Relief Line, as it is currently used in part for the Queen Station and it was designed for streetcar vehicles rather than subway trains. With regards to the alignment just west of the Don River, Emergency Exit Building #5 (EEB#5) will/may need to be moved. TRCA indicated that the location of EEB#5 should not impact the FPL footprint. On Oct 10, 2017 -TRCA provided the drawings of the FPL to be used to relocate the EEB #5s A question was raised concerning elevation and grading assumptions east of the Don River. It was stated that TRCA is currently undertaking a flood protection EA. This work will/may need to be coordinated and/or completed prior to completion of the Relief Line. At Eastern Avenue and Logan Avenue, a question was raised regarding EEB#6. Community Planning advised that a site plan approved is just being completed. Information to be provided to the project team. The EEB location is somewhat flexible so it's location can be optimized. The location of EEB # 6 should be based

	<p>on the result of the TRCA EA for flood protection at this location.</p> <ul style="list-style-type: none"> A follow up question was asked on spacing of emergency exits. Approx. 700 meters, based on the Design Standards for Tunnels. Two Wye-connections are being proposed to connect the Relief Line and Line 2. This will require a significant amount of tunneling under private property. It was stated that this approach was identified as having fewer potential impacts, but will still require easements.
5	<p>Stations</p> <ul style="list-style-type: none"> Tyrone Gan provided an overview of the station drawings, starting from the station at Pape and Danforth. <p><u>Pape Station</u></p> <ul style="list-style-type: none"> A question was raised on the depth of Pape Station. It was stated it will be approx. 28 meters below grade. The station will have a separate entrance from Line 2, with a different elevator. A question was raised on the possibility using the same existing entrance for Line 2 to service the Relief Line. It was stated that heavy demand will limit circulation in the existing station, thus it will not be able to accommodate the new demand from the Relief Line. A question was asked on how transfers between the 2 subway lines will be conducted. It was clarified that transfers between the two lines can happen underground at the concourse level. TTC stated that the existing Pape Station does not have good people circulation, especially with transfers to surface transit routes. It was also stated that 1 bus bay was removed to introduce bike racks. Warning that additional bus bay takings may not be advisable from a service planning perspective. Bus services at Pape station are operating at near capacity, and this might be a good opportunity to improve existing and future operations with the introduction of the relief line There will be sensitivity from the local community about further modifications to Pape Station given station construction in the recent past. <p><u>Gerrard Station</u></p> <ul style="list-style-type: none"> With regards to the Gerrard/Carlaw station, it was stated that this is being planned as an interchange with the SmartTrack Station. A question was raised if work is being done to integrate the Relief Line with some land use planning and higher density. It was stated that City Planning is developing an approach for station area planning. A question was raised on the required off-set of the alignment from underground parking. It was stated as a general rule of thumb, a 3 metre offset is recommended. However, this can be dealt on a case-by-case basis. It was stated that the off-street bus terminal is missing from the design drawings. This will be considered as part of the work on the SmartTrack station. A follow up



**Technical Advisory Committee
Meeting #8**

Wednesday, May 23rd, 2018
1:30 p.m. – 3:30 p.m.
South Bond Building
Ryerson University

Minutes

Attendees

Jane Weninger	City Planning, SIPA
Navi Tathgar	Traffic Operations
Carlo Bonanni	CreateTO
M.Baumeister	CreateTO
Kate Bassil	Toronto Public Health
Lindsay McCallum	Toronto Public Health
William Martin	Legal Services
Sherry Goldstein	City Planning, SIPA
Tabassum Rafique	Traffic Planning
Arthur Sinclair	Toronto Water
John Lam	Engineering and Construction
Dan Rosen	Economic Development
Alka Lukatela	City Planning, Urban Design
Andrew Pickett	City of Toronto, Forestry
Robert Chan	TRCA
Devin Horne	Metrolinx
Scott Haskill	TTC
Malcom MacKay	TTC
Stella Gustavson	City of Toronto, Transportation Planning
Nish Bala	City of Toronto, Transportation Planning
Tyrone Gan	HDR
Nick Shaw	HDR
Jeff Spence	HDR

	<p>meeting with both project teams will be arranged.</p> <ul style="list-style-type: none"> • ACTION: City to schedule meeting. <p><u>Queen/Carlaw Station</u></p> <ul style="list-style-type: none"> • It was noted that the drawing shows a very large sanitary sewer going through the station box. This was noted as a mistake and will be revised. It was confirmed that the station box will be located above the pipe. • It was stated that there are several bus connections that need to be protected. It was agreed that this will be discussed further within TTC. <p><u>Eastern/Broadview Station</u></p> <ul style="list-style-type: none"> • This station, together with the East Harbour SmartTrack Station and the Broadview streetcar extension, will be part of the mobility hub being planned to serve the major development being planned for the Unilever lands. The transit projects are integrated with the Unilever Precinct Planning Study. Same comment applies – please ensure that the location of the station entrances and vents should be coordinated with the TRCA flood protection EA. <p><u>Sumach Station</u></p> <ul style="list-style-type: none"> • Are all the proposed entrances (3) fully accessible? It was stated that only 2 will be accessible. AODA requirements only mandate 1 accessible entrance. • A question was raised on how the entrance locations were decided? And why 3 entrances? It was stated that this was decided based on existing road geometry and transit connections. It was agreed that better context needs to be provided on the plates, and connection to surface transit routes and stops needs to be illustrated and provided. Revision will be made to reflect this. • ACTION: HDR to revise station plates to illustrate key transit connections. <p><u>Sherbourne Station</u></p> <ul style="list-style-type: none"> • Location of station entrances have been considered as part of the Moss Park development and an application to redevelop the former Honda site (where knock out panels are being considered). <p><u>Queen/University Station</u></p> <ul style="list-style-type: none"> • The proposed design protects for a future western extension of the Relief Line. • A question was asked on the required buffer from the alignment. It was stated that a 3 meter buffer is required. • There was general discussion regarding easements vs. purchasing property outright.
6	<p>Next Steps</p> <ul style="list-style-type: none"> • <u>ACTION: TAC comments on the alignment and station drawings requested by October 6</u>

Item	Description
1	<p>Welcome and Introductions</p> <ul style="list-style-type: none"> Self-introductions were made by those present. Purpose of the meeting was described as providing an update on Transit Project Assessment Process (TPAP) progress on the Relief Line South(RLS) and to solicit feedback on the draft Environmental Project Report (EPR).
2	<p>Approval of TAC #7 Meeting Minutes</p> <ul style="list-style-type: none"> Minutes of Meeting #7 were distributed following the previous meeting No concerns were raised with the Minutes and they were approved without comment
3	<p>Study Update</p> <ul style="list-style-type: none"> Stella Gustavson provided an overview presentation on the project status, including City Council approval of the Relief Line South alignment in July 2016 and May 2017. The City, TTC and Metrolinx are working together to undertake the TPAP under Ontario Regulation 231/08 to assess the potential environmental effects of the Relief Line South.
4	<p>Project Overview</p> <ul style="list-style-type: none"> Malcom Mackay provided an overview of the project including alignment, stations and facilities. In addition, Malcom highlighted the next steps for the project as well as discussed the RLS consultant procurement. Nick Shaw provided an overview of the EPR impacts, proposed mitigation and monitoring.
5	<p>Discussion</p> <ul style="list-style-type: none"> It was stated that a traffic management plan will be developed to manage traffic and is included as future commitment in Chapter 13 of the April 16 draft EPR. Does the EPR address potential surface material contaminants? In particular in South Riverdale along Eastern Avenue lead contamination from industry was once an issue. A future soil management plan will address this, if applicable and this will be highlighted as a future commitment. <ul style="list-style-type: none"> ACTION: Toronto Public Health will provide the Project Team with a contact to follow-up. ACTION: Project team to confirm these areas were addressed in EPR environmental studies Impacts, mitigation, and future commitments related to the urban forest within the TPAP study area are included in the EPR <ul style="list-style-type: none"> ACTION: Project Team to add specific commitment to a tree inventory to Chapter 13 – Future Commitments ACTION: CreateTO, project team and Real Estate to create a working group to explore transit oriented development around station areas. Scope of noise and vibration impact study discussed. Additional studies will be

	<p>undertaken prior to construction during preliminary and detailed design.</p> <ul style="list-style-type: none"> ACTION: Project Team to follow up with TAC on when airborne noise study will be undertaken and for which activities it will cover. The BMW site flood protection concerns are being addressed at the executive level. The project team is advised to assume that flood mitigation plan will be in place at the time of construction. ACTION: City and TTC, in coordination with HDR, to provide details on how the design of stations will mitigate flooding from rainfall/runoff. Next TAC will include a contact from the Environment and Energy Office. ACTION: Project Team to include specific language in Chapter 13 Future Commitments to engage City Planning during preliminary design in integrating cycling and pedestrian connectivity Toronto Public Health will provide comments on airborne noise and vibration in relations to sensitive receptors such as schools and hospitals. It was raised that the public realm improvements and Nation Phillip Square are complete and may not affect the station entrance at the Southeast corner. <ul style="list-style-type: none"> ACTION: Urban Design to provide the contact for the project lead. ACTION: TTC to provide to TAC a list of the consultant's award the contracts for the geotechnical, tunnel design, stations design and systems engineering.
6	<p>Next Steps</p> <ul style="list-style-type: none"> <u>ACTION: TAC comments on the EPR requested by May 28, 2018</u>

Review Comments Spreadsheet - Technical Advisory Committee

Rapid Transit Implementation

Document Name: Relief Line South Environmental Project Report
Revision Date: 14-Aug-18

*** Actions:**

- 1 = Will comply
- 2 = Discuss, clarification required
- 3 = Not applicable because

**** Status:**

- O = Open, not resolved
- P = Pending incorporation in design
- C = Closed, implementation complete

Item No.	EPR April 16 Chapter Reference	Discipline	Reviewer Name	Dwg. #/ Spec Section/ Page #	EPR July 9 / Aug 14 Chapter Reference	Review Comment (Metrolinx, Third Party Reviewers)	Response & Details (Designer)	Action 1 / 2 / 3* (Designer)	Status O / P / C** (Reviewer)
Comments of April 16, 2018 Draft									
1	3.5	ECS - TPR	Joanna Yu	Page 51	7 (commitments to future work)	Utility Relocations Ensure the utilities relocations are prepared in accordance with the requirements of the City's Design Criteria for Sewers & Watermains, and the Municipal Consent Requirements (MCR).	Language added to future commitments	1	C
2	3.5.1	ECS - TPR	Congming Ren	Page 52-53	5.5.1	Trunk Sewers Identify all the trunk sewers within the proposed relief line study areas.	Revised as noted	1	C
3	3.5.2	ECS - TPR	Congming Ren	Page 53-54	5.5.1	Transmission Watermains Identify all the transmission watermains within the proposed relief line study areas.	Revised as noted	1	C
4	6	TPH	Kate Bassil	Evaluation	7 (commitments to future work)	The Project Assessment Evaluation includes health directly and indirectly through key principles and objectives including: social equity; healthy neighbourhoods; and public health and environment. Toronto Public Health supports the use of these health-related indicators to evaluate project impacts and promotes consideration of these aspects throughout the detailed design phase.	This will be addressed in preliminary and detailed design.	1	C
5	8.4	ECS - TPR	Congming Ren	Page 100	n/a	West Don Lands The proposed relief line alignment passes through West Don Lands. Based on the experience in West Don lands, the soil condition there are quite weak. It is recommended to shift the alignment to avoid this area. If not, identify the measurements to mitigate the weak soil conditions and ensure the project costs cover the mitigation measures.	Hybrid TBM would be capable of both open faced drilling in the bed-rock, as well as earth-pressure-balanced drilling in the soft soil conditions.	3	C
6	8.6.8	ECS - TPR	Joanna Yu	Page 106	7 (commitments to future work)	Discharge of Groundwater Reports and plans to show how groundwater discharge will be addressed are required.	This will be addressed in preliminary and detailed design.	1	C
7	8.6.10	ECS - TPR	Joanna Yu	Page 107	n/a	Permanent Utility Relocation Requirements a) All relocation and replacement of the City infrastructure must be designed to convey at least the same capacity of the flow as the existing system. If additional flows are introduced to the new system, the new system must be designed in accordance with the City's design requirements to convey the total flow without surcharging the system. b) The City's Wet Weather Flow Management Guidelines and the Toronto Municipal Code Chapter 681 need to be considered as part of the analysis for stormwater management and storm runoff discharge associated with the projects.	Text added to EPR section.	1	C
8	8.6.10.5	ECS - TPR	Joanna Yu	Page 110	7 (commitments to future work), 6.4.6	Support and Protect in Place Demonstrate that the pipe is both durable and the conditions are safe to support in place. Submit supporting drawings showing the proposed supports.	This will be addressed in preliminary and detailed design.	1	C
9	8.6.10.3-4	ECS - TPR	Congming Ren	Page 108 -109	5.5.2	Watermain Relocation There is no watermain relocation listed in this section. Identify any watermain relocations with sizes greater than 600mm.	Section 5 speaks to existing conditions. Proposed mitigation strategies (relocate, support during construction, temporary bypass systems, etc.) are described in Sections 3 and 6.	3	C
10	8.6.8	ECS - TPR	Congming Ren	Page 106	see updated design plans (Appendix 3-1)	Pumping Stations The report indicated three pumping stations are proposed. Please clarify the sizes and capacity of the pumping stations.	To be developed during preliminary/ detailed design	1	C
11	10	ECS - TPR	Congming Ren	Page 124	7 (commitments to future work)	Easements for Relocated Sewers and Watermains In Tier 3 of Table 10.1 and Exhibit 10-1, permanent easement should include the easements required for relocated sewers and watermains if they are relocated outside of Municipal Right-of-Way. Easement width requirements are identified in the City's Design Criteria for Sewers and Watermains.	Addressed in future commitments - Utilities	1	C

Review Comments Spreadsheet - Technical Advisory Committee

Rapid Transit Implementation

Document Name: Relief Line South Environmental Project Report
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**** Status:**

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Item No.	EPR April 16 Chapter Reference	Discipline	Reviewer Name	Dwg. #/ Spec Section/ Page #	EPR July 9 / Aug 14 Chapter Reference	Review Comment (Metrolinx, Third Party Reviewers)	Response & Details (Designer)	Action 1 / 2 / 3* (Designer)	Status O / P / C** (Reviewer)
12	10.3.1	ECS - TPR	Joanna Yu	Page 127	7 (commitments to future work)	Settlement Risk a) Provide a detailed plan for the monitoring of settlement and it's impact on City's infrastructure. b) Provide a mitigation strategy in case of settlement.	Addressed in future commitments	1	C
13	12.2.1	ECS - TPR	Congming Ren	Page 132	7 (commitments to future work), 6.2	System Wide Stormwater Management Because of the local site constraints, some stations cannot meet the stormwater management requirements. A system-wide stormwater management and drainage strategies for the entire project infrastructure shall be developed, such that the stormwater management requirements from the above mentioned guidelines can be met for the overall project. Please revise Table 12.2, the note "Not Required" in Column "Quantity Control" to "system-wide stormwater quantity control measures will be provided".	Addressed in future commitments. Table 12-2 to be revised.	1	C
14	12.2.1	ECS - TPR	Congming Ren	Page 132	7 (commitments to future work)	Groundwater This section indicated that all the underground tunnel and station box will be designed as "water-tight" and there will be no permanent groundwater discharge required. Please confirm this statement with structural engineers who design the structures, and clarify if the total project cost cover the costs associated with water-tight structures. If groundwater is to be discharged to the City's sewer system, Hydrogeology Reports are required to identify the groundwater quantity and quality.	This will be addressed in preliminary and detailed design.	1	C
15	12.2.1	ECS - TPR	Joanna Yu	Page 133	7 (commitments to future work)	Toronto Green Streets Guideline In addition to the City of Toronto's Wet Weather Flow Management Guideline, consider Toronto Green Streets Guideline for low impact development strategies for stormwater management.	Addressed	1	C
16	12.2.3	ECS - TPR	Joanna Yu	Page 128	7 (commitments to future work)	Site Plan Control (SPC) Application Reports The Site Plan Control Application requires the following reports to be submitted in support of the SPC Application: a) Stormwater Management Report b) Hydrogeology Report for Groundwater Discharge c) Site Servicing Report	Language to be added to future commitments	1	C
17	12.2.6	ECS - TPR	Congming Ren	Page 129	7 (commitments to future work)	The 3000mm Interceptor Clarify the depth, cover and material of the existing 3000mm mid Toronto interceptor sanitary sewer. Identify the impacts to this interceptor. If it will remain in place, clarify what protection system will be provided to this interceptor.	Addressed in future commitments (to be assessed during design)	1	C
18	12.2.6	ECS - TPR	Congming Ren	Page 129	n/a	Watermain Impacted Identify all the major transmission watermain conflicts and proposed solutions in Table 12-5.	Watermain under the size of 600mm will not be considered as major transmission watermain. At this level of design, the report mainly focused on major utilities and greater than 600mm below grade. Detailed utility mitigations will be identified in the next phases of design.	3	C

Review Comments Spreadsheet - Technical Advisory Committee						* Actions:	** Status:		
Rapid Transit Implementation						1 = Will comply	O = Open, not resolved		
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19	12.2.6	ECS - TPR	Congming Ren	Page 130	7 (commitments to future work)	Trunk Sewer/Transmission Watermain Relocation The report indicated that the utility impacts and relocation strategies will be determined at detailed design stage. This statement is unacceptable. The major trunk sewer and transmission watermain relocation have huge property and cost impact to the project. Major utility impacts and relocation should be identified in the report.	Included as a future commitment (as agreed). Major utility impacts have been identified based on information available, to be confirmed in detailed design phase,	1	C
20	12	TPH	Kate Bassil		appendix 6-1	The EPR identified 73 high-risk contaminated properties within the study area and states that further investigation is required to confirm and quantify potential risks. Toronto Public Health is supportive of undertaking additional work (e.g., environmental sampling, analysis, and/or risk assessment) to establish and quantify potential risks to human health associated with construction activities at the 73 high-risk sites. Additional consideration of potential risks from the moderate-risk and low-risk sites should also be considered from the perspective of potential human health impacts.	Number of moderate-risk and low-rise sites included in Conceptual Geotechnical Design Report. Language added to future commitments (Soil and Groundwater Management Strategy) speaking to the consideration of low- and moderate-risk sites.	1	C
21	12	Urban Design	Alka Lukatela		7 (commitments to future work)	Locations of stations, exits and other related structures need to be carefully integrated into the existing context	MX/TTC/City to work together to resolve urban design requirements during the design process. This is included as a future commitment as a general statement.	1	C
22	12	Urban Design	Alka Lukatela		7 (commitments to future work)	Streetscapes impacted by the project need to be improved: that work should be planned, designed and funded as part of it	MX/TTC/City to work together to resolve urban design requirements during the design process. This is included as a future commitment as a general statement.	1	C
23	12	Urban Design	Alka Lukatela		7 (commitments to future work)	Proposed designs should come to DRP early enough to be able to benefit from the Panel's advice	MX/TTC/City to work together to resolve urban design requirements during the design process. This is included as a future commitment as a general statement.	1	C
24	12	Urban Design	Alka Lukatela		7 (commitments to future work)	Technical working group should also draw on the expertise of ECS and their work on pedestrian tunnel (North West Path)	MX/TTC/City to work together to resolve urban design requirements during the design process. This is included as a future commitment as a general statement.	1	C
25	12	Urban Design	Alka Lukatela		7 (commitments to future work)	Station proposed at Nathan Phillips Square needs to be assessed in light of the Revitalization project (Facilities were the lead: Plant Architects consultant)	MX/TTC/City to work together to resolve urban design requirements during the design process. This is included as a future commitment as a general statement.	1	C
26	13	TAC			7 (commitments to future work)	A tree inventory should be itemized for a future commitment.	Language added to future commitments	1	C

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27	Appendix 3-1	TPH	Kate Bassil		7 (commitments to future work)	The EPR points to potential localized impacts to pedestrians and cyclists due to construction and it is noted that a more detailed traffic assessment will be conducted. Additionally, the report states that "pedestrian and cyclist amenities will be included at the stations providing an equal or better level of service" and that "implementing additional cycling facilities leading to the stations may also be considered to enhance cycling and transit connectivity". Toronto Public Health supports consideration of potential health impacts in this detailed traffic study, and promotes enhanced cycling and transit connectivity be considered in the detailed design phase and integrated as part of the RLS project.	Acknowledged. Included as future commitment	3	C
28	Appendix 3-3	TPH	Kate Bassil		7 (commitments to future work)	The EPR identifies several areas that may be impacted by surface structures associated with the RLS, including parks, playgrounds and greenspace (e.g., Moss Park, Sackville Playground and Morse Street Jr Public School, among others). Since urban greenspaces, including parks and playgrounds, promote physical activity as well as overall health and wellbeing, Toronto Public Health supports the future commitment to coordinate with City of Toronto Parks, Forestry & Recreation division, to mitigate impacts to these areas. Where mitigation is not possible, opportunities to ensure equal or greater access to these spaces that could be considered during detailed design include (i) localized improvements; (ii) addition of greenspace elsewhere; and (iii) relocating and/or enhancing children's play areas.	Language added to future commitments	1	C
29	Appendix 8-1 (Plan/Profile Plates)	ECS - TPR	Joanna Yu	P&P 1-13	7 (commitments to future work)	Groundwater Levels Show borehole locations on Plan and Profile drawings. Show groundwater levels on Profile.	To be addressed during preliminary design.	1	C
30	Appendix 8-1 (Plan/Profile Plates)	ECS - TPR	Joanna Yu	P&P 1-13	7 (commitments to future work)	Vertical and Horizontal Clearances Show the proposed relocated underground utilities, indicate the minimum depth of cover and the vertical and horizontal clearances from the existing and proposed City infrastructure. The minimum clearance and separation shall be in accordance with Appendix O of the MCR. Please refer to the following link for further information: https://www.toronto.ca/wp-content/uploads/2017/11/91f1-ecs-specs-mcr-Appendix_O_Dec_16_2016.pdf	No proposed utility relocations at this stage. Included in commitments to future work.	1	C
31	Appendix 8-1 (Plan/Profile Plates)	ECS - TPR	Joanna Yu	P&P 1-13	appendix 3-1, 3-4	TRCA Regulated Area Clearly show the limits of the TRCA (Toronto and Regional Conservation Authority) Regulated Area, on the Plans. A sign off is required from the TRCA prior to commencement of any work if any proposed works is within TRCA limits.	TRCA limit added.	1	C

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32	Appendix 8-1 (Plan/Profile Plates)	ECS - TPR	Congming Ren	P&P 1-13	appendix 3-1, 3-4	Pumping Stations Show the proposed pumping stations in the plans.	To be addressed	1	C
33	Appendix 8-1 (Plan/Profile Plates)	ECS - TPR	Joanna Yu	P&P 1-13	appendix 3-1, 3-4	City's Right-of-Way (ROW) Show on the Plan the limits of the City's ROW.	Property limits now included on alignment plates (see Appendix 3-1 and 3-4)	1	C
34	Appendix 8-1 (Plan/Profile Plates)	ECS - TPR	Joanna Yu	P&P 1-13	appendix 3-1, 3-4	Existing Utilities on Plan Show on the Plan, the existing City's sewers and watermain. Clearly indicate which utilities are to be relocated, or protected and supported.	Major utility impacts are noted in the report. Most utilities are well above the tunnel structure. This will be addressed in preliminary and detailed stages of design.	1	C
35	Appendix 8-1 (Plan/Profile Plates)	ECS - TPR	Joanna Yu	P&P 1-13	appendix 3-1, 3-4	Existing Utilities on Profile Show on the Profile, the City's utilities that run along the proposed tunnel alignment, particularly utilities in the vicinity of the proposed stations. Comments 31- 37 include but not limited to the missing utilities on the Profile in the vicinity of the proposed stations, according to the City's DMOG records.	Acknowledged. Will address comments below.	1	C
36	Appendix 8-1 (Plan/Profile Plates)	ECS - TPR	Joanna Yu	P&P 1	appendix 3-1, 3-4	Missing Utilities for Proposed University Station a) Along the north side of Queen St W: 975mm R.C.P. comb sewer, 300mm watermain b) Along the south side of Queen St W: 300mm watermain, 600x900mm E.S.Br. combined sewer	Addressed	1	C
37	Appendix 8-1 (Plan/Profile Plates)	ECS - TPR	Joanna Yu	P&P 2	appendix 3-1, 3-4	Missing Utilities for Proposed Yonge Station a) Along the north side of Queen St W: 300mm watermain,600x900mm E.S.Br. combined sewer. b) Along the south side of Queen St W: 300mm watermain	Addressed	1	C
38	Appendix 8-1 (Plan/Profile Plates)	ECS - TPR	Joanna Yu	P&P 3	appendix 3-1, 3-4	Missing Utilities for Proposed Sherbourne Station a) Along the north side of Queen St: 300mm watermain b) Along the south side of Queen St: 750x1125mm E.S.Br. comb sewer, 150mm watermain	Addressed	1	C
39	Appendix 8-1 (Plan/Profile Plates)	ECS - TPR	Joanna Yu	P&P 4	appendix 3-1, 3-4	Missing Utilities for Proposed Sumach Station a) Along King St E: 300mm watermain	Addressed	1	C
40	Appendix 8-1 (Plan/Profile Plates)	ECS - TPR	Joanna Yu	P&P 6	appendix 3-1, 3-4	Missing Utilities for Proposed Broadview Station a) Along the north side of Eastern Ave: 300mm watermain, 300mm V.P. san sewer b) Along the south side of Eastern Ave: 600x900mm E.S.Br. combined sewer	Addressed	1	C
41	Appendix 8-1 (Plan/Profile Plates)	ECS - TPR	Joanna Yu	P&P 7	appendix 3-1, 3-4	Missing Utilities for Proposed Carlaw Station a) On the west side along Carlaw Avenue: 150mm watermain, 600x900mm E.S.Br. Comb sewer b) On the east side along Carlaw Avenue: 300mm watermain	Addressed	1	C
42	Appendix 8-1 (Plan/Profile Plates)	ECS - TPR	Joanna Yu	P&P 10	appendix 3-1, 3-4	Missing Utilities for Proposed Pape Station a) Along the west side of Pape Ave: 150mm watermain b) Along the east side of Pape Ave: 600mm watermain	Addressed	1	C

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43	Appendix 8-2 (Station Plates)	PF&R	Casey Morris	Osgoode Interchange Station_SK_01	7 (commitments to future work)	Queen St. & University - On May 1, 2018 the Planning and Growth Management Committee adopted the Downtown Parks and Public Realm Plan. This plan will be considered by Council on May 22, 2018. The plan proposes to realign University Avenue at Queen Street West to make a new linear park along the east side of University Avenue, by shifting the centre boulevard to the east and provide 6 lanes for vehicles on the west side. The proposed HVAC relief and intake in the central boulevard must be coordinated with future realignment plans.	Language added to future commitments	1	C
44	Appendix 8-2 (Station Plates)	PF&R	Casey Morris	Queen Interchange Station_SK_01	7 (commitments to future work)	Queen St. & Bay St. - The south-east corner of Nathan Phillips Square will be affected by the Station entrance and ventilation shaft. There exists six (6) concrete chess tables and three (3) mature Gleditsia triacanthos (Honey Locust) trees. Further coordination should be made with City of Toronto Urban Forestry and formal comments will be made by Facilities Management.	Language added to future commitments	1	C
45	Appendix 8-2 (Station Plates)	PF&R	Casey Morris	Sherbourne Station_SK_01	7 (commitments to future work)	Sherbourne St. & Queen St. - the south-east corner of Moss Park will be affected. As noted in the October 6, 2017 comments, station entrances are being considered as part of the redevelopment of Moss Park. The main entrance should be integrated within any new community development. This is a well-used park with adjoining arena and community centre. Location of station entrance and ventilation shaft in this park must be coordinated with future park improvements.	Addressed in future commitments	1	C
46	Appendix 8-2 (Station Plates)	PF&R	Casey Morris	Sumach Street Station Entrance	n/a	Sumach Station - a large portion of the north-east edge of the new Sackville Playground will be affected. As per the October 6, 2017 comments, it was questioned as to the need of 3 station entrances. Is the station entrance located in the park necessary? If located within the park a number of mature trees will be impacted, including park pathways, new playground and splash pad. The proposed location also creates small vulnerable spaces between the station and Adelaide. If station is located in the park locate as close to Adelaide Street East to maintain as much consistent usable park space. Is there any possibility to reconstruct a segment of Adelaide to accommodate a station below the elevated road?	Will be investigated further as part of the preliminary station design	3	C
47	Appendix 8-2 (Station Plates)	PF&R	Casey Morris	Substation #3 at Eastern Ave and Eastern Ave Diversion	n/a	Sumach Station - Sub-Station #3 layby area - there appears to be impacts to the western corner of Underpass Park along Eastern Ave and Eastern Avenue Diversion. This location has new trees and pathways. Will there be any permanent structures in this location?	No permanent structure in underpass park. Sub-station located in green space between Eastern and Richmond.	3	C

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48	Appendix 8-2 (Station Plates)	PF&R	Casey Morris	WYE Track	n/a	Pape and Danforth "Y" – at Logan Avenue Parkette, potential impacts to the existing parkette were identified. Any impacts to the parkette must be restored to the satisfaction of the Parks General Supervisor. Please confirm if there are any proposed permanent structures in this area and identify the impacts to the park as they may not be completely identified on the plans.	No permanent structures will be located in Logan Avenue Parkette. All temporarily impacted sites will be restored in consultation with relevant authorities during detailed design and construction.	3	C
49	Appendix 12-3 Noise and Vibration Assessment	TPH	Kate Bassil		7 (commitments to future work)	While the EPR looked at impacts from ground-borne vibration, and found that modelled values did not exceed the MOECC/TTC limit of 0.1 mm/s, the report did note that assessment of airborne noise has not yet been completed due to the lack of design details. Toronto Public Health supports a thorough assessment of noise and vibration as part of the detailed design process. This could include surface noise modelling at sensitive receptors locations (e.g., schools, daycares, hospitals) to ensure that sound levels are within acceptable limits for protection of health during both construction and operations.	Addressed in future commitments	1	C
50	General	Transportation Services	Niki Siabanis		n/a	The City Hall station placement (at the southeast corner of Nathan Phillips Square) likely require the removal of the right turn channel currently at this location in order to accommodate pedestrian volumes.	Acknowledged. TS will be engaged in TAC through design and construction.	3	C
51	General	Transportation Services	Niki Siabanis		n/a	The parking garage exit near the SW corner of Bay/Queen does not appear to be used. Check with Facilities to see if this garage ramp is required. Otherwise, it may serve as an opportunity to extend the sidewalks and public realm along the west side of Bay north of Queen.	Acknowledged. TS will be engaged in TAC through design and construction.	3	C
52	General	Transportation Services	Niki Siabanis		n/a	It will be helpful to see interior and exterior station pedestrian circulation in the next stage.	Acknowledged. TS will be engaged in TAC through design and construction.	3	C
53	General	Transportation Services	Niki Siabanis		n/a	For the CH Station, has the consultant considered using existing underground accesses in lieu of providing a new station entrance building? These two accesses/structures in Nathan Phillips Square (circled in red) stick out as obvious candidates to me, and would reduce the impact to public space, and potentially even the overall cost depending on how much underground work is needed to connect to the station platforms.	Assuming CH refers to Yonge-Queen, the station utilizes existing entrances as well as a new PATH access; however, a direct surface connection is required on the west side of the platform per TTC design standards. TS will be engaged in TAC through design and construction.	3	C
54	General	ECS - TPR	Congming Ren	General	n/a	Bridges Impacted Clarify if there are any bridges or structures impacted by the projects. Identify the impacts and mitigation measures.	No impacts to bridge structures anticipated. To be confirmed during design.	3	C

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55	General	City Planning	Jane Weninger		7 (commitments to future work)	Does the EPR address potential surface material contaminants? In particular in South Riverdale along Eastern Avenue lead contamination from industry was once an issue. A future soil management plan should address this, if applicable and this should be highlighted as a future commitment. HDR should check on their data to find out if the geography of the area of concern overlaps with the RLS.	Language added to future commitments	3	C
56	General	City Planning	Jane Weninger		n/a	How has the potential for flooding from rainfall/runoff been considered and have the stations been designed for a particular rain event and frequency? Also the EPR should identify the low point on the alignment and how the drainage will work for these low points.	All sites are required to be designed to City storm event standards for permit approvals. This will be addressed in preliminary and detailed design phases of the project. The low point in the conceptual design is the Don River crossing; this challenge will be resolved during subsequent design phases as well.	3	C
57		TDSB			7 (commitments to future work)	Based upon construction projects being undertaken across the city in close proximity to school sites, the mitigation measures will likely include, but not be limited to the following: a) Paid duty officers to be in place during morning, lunch time and end of the school day dismissal for crossing streets/crosswalks during the construction and/or borehole activities. All existing entrances to the Schools to remain clean and clear from debris. Construction safety officers and flag persons to be available to provide safe pedestrian passage to and from the school building; b) 12 foot hoarding to be installed around any construction close to the school sites. All gates to be monitored and closed at all times; c) A traffic management plan to be reviewed and approved by the TDSB; d) A regular communication plan to be approved by the TDSB that outlines on-going construction and addresses school community issues, including school public meetings on a regular basis and separate meetings on tunnelling and discussion of any future impacts (noise, vibration) upon completion. An environmental compliance manager and community liaison officer to be in place who shall ensure that the TDSB is notified immediately with respect to all communications 3 of 4 related to reported accidents and emergencies and shall provide the TDSB with a communications plan for all public notices; e) The TDSB to be provided with: a pre-construction survey before the commencement of any construction and a post-construction survey after the construction is completed; fire and safety plans; evacuation plans; geotechnical investigation protocols; noise, vibration, air quality, soil quality and ground condition reports; dust management plans; and	Added to future commitments	1	C

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58		TDSB			n/a	Based on our discussion at the meeting on June 8th, the TDSB and the TLC have identified some additional impacts on the Schools: (a) The Project proposes tunnelling under the school buildings at Pape Avenue Junior Public School and Morse Street Junior Public School. In both cases, a permanent underground fee and 3m lateral easement will likely be required. As a result, the TDSB will be seeking additional compensation for potential costs that would be allocated to a reconstruction on both sites as mitigation. While the construction for a new school is not approved at this time, a new school 4 of 4 or an addition would result in additional costs (reports, engineering, etc.) to the TDSB due to the easement. (b) For Inglenook Community High School, the construction appears to be located away from the school building in the school's parking lot. Any loss of parking during the Project will need to be compensated by the TTC at its sole cost and expense.	The TDSB will be contacted by the proponent during later design should the property be required. A standard process will be followed regarding compensation.	3	C
59		TDSB			n/a	We understand that the TTC is in the process of completing advance monitoring at sites for the proposed line. Please be advised that the execution of all the necessary legal documents and agreements will be required prior to accessing TDSB lands or commencing any construction in a close proximity to the Schools. Please note that access to TDSB lands for a period exceeding three (3) months will require TDSB Committee and Board approvals.	Acknowledged.	3	C
Comments of July 9, 2018 Draft									
60	7 (commitments to future work)	TPH	Kate Bassil	NA	7 (commitments to future work)	In the "Review Comment Spreadsheet" (item #20) the review comment is described as "How many moderate-risk and low-risk sites have been identified in the study area?" However, our original comment was based on requesting clarification regarding the procedures and methods that are going to be used to assess the potential for human health risks from exposure to soil contaminants, especially from high-risk sites. Additionally, due to the criteria that were used to classify high-, medium- and low-risk sites within the study area, TPH also raised the issue of how these medium- and low-risk sites would be characterized and whether environmental sampling and/or human health risk assessments would be undertaken. This suggestion should be reflected in the "Review Comment Spreadsheet".	Commitments updated to reflect suggestion.	1	C

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61	7 (commitments to future work)	TPH	Kate Bassil	NA	7 (commitments to future work)	We note and support the inclusion in future commitments to: "Develop a Noise and Vibration Management Plan. Conduct additional noise and vibration studies for construction sites located adjacent to sensitive uses identified in the Noise and Vibration Report." In addition to this, TPH suggests that surface noise modelling at sensitive receptor locations (e.g. schools, daycares, hospitals) be undertaken as part of the future commitments to ensure that sound levels are within acceptable limits for protection of health during both construction and operations. This should also be reflected in the "Review Comment Spreadsheet" (item #49) to ensure consistency with our original comment.	Commitments updated to reflect suggestion.	1	C
62		TTC	Elham Ramandi		ES (Table 2: Concordance Table) 1.6 (Table 1-3)	Include CEAA (federal) requirements section in Section 7. Does the project trigger a federal EA? Future commitment to monitor for CEAA triggers?	Wording from concordance table taken directly from MOECP TPAP guide. There is existing language in the monitoring section (7.3) that speaks to monitoring to ensure compliance with Federal regulations. Wording added to specify CEAA triggers.	1	C
63		TTC	Elham Ramandi		ES - Existing and Future Conditions	Include in text reference of full reports in Appendices for each discipline.	Added to ES text.	1	C
64		TTC	Elham Ramandi		ES - Existing and Future Conditions	Consideration to combine Section 5 and 6 into one section in Executive summary. The environmental effects of the proposed RLS Project were assessed in terms of impacts to municipal transportation and transit services and networks, utilities infrastructure, and the natural, socio-economic and cultural environments, including: - Road Network; - Transit Network; - Cycling Networks; - Surface and Subsurface Utilities; - Urban Structure and Land Use Policy; - Existing and Forecast Land Use and Employment; - Socio-economic Environment; - Noise and Vibration; - Air Quality; - Aquatic Ecosystems; - Terrestrial Ecosystems; - Hydrogeology; - Contaminated Property; - Built Heritage Resources and Cultural Landscapes; and - Archaeology.	Report was re-structured following the April draft EPR in consultation with the MOECP, Metrolinx, City and TTC. Further changes are not being considered at this time.	3	C
65		TTC	Elham Ramandi		ES Exhibit 7: Socio Economic Focus Areas	Can the RLS alignment/stations be added to the figure?	This figure was developed for the purposes of the RLPA (pre-planning). Alignment and stations were not known at this point.	3	C

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66		TTC	Elham Ramandi		ES - Existing and Future Conditions: Natural Environment	Sections missing in existing conditions: Noise and Vibration, Surface waters, Aquatic Ecosystems, Terrestrial Ecosystems, Contaminated Properties and Air Quality.	Most of these disciplines are summarized the ES text but without specific headings in order to condense the section. The exception is N&V, air quality, and contaminated properties which are not included in Chapter 5; however information is included in Chapter 6 and related studies in the appendix (N&V report; air quality report; and Conceptual Geotechnical Design Report).	3	C
67		TTC	Elham Ramandi		ES - Existing and Future Conditions: Cultural Environment	This section is related to construction impacts and mitigation rather than existing conditions. It is also repeated later.		1	C
68		TTC	Elham Ramandi		ES - Permanent Impacts to Existing Features	Any SAR permits required?	No SAR permits are required, as the only SAR with potential to be adversely affected by the Project are designated special concern. Special concern species do not receive individual or habitat protection under the Endangered Species Act.	3	C
69		TTC	Elham Ramandi		ES - Temporary Construction Impacts: Built Heritage Resources and Cultural Heritage Landscape	Repetitive from previous section, can be summarized to include only specific temporary construction impacts.		1	C
70		TTC	Elham Ramandi		1.1.2 Planning Context	Identify Special Policy Areas in RLS study area and impacts/mitigation measures?	There is one special policy area around the Don River mouth; however, this was based on the flood plain at the time of the Official Plan's coming into force and is therefore dated based on the since-constructed flood protection landform in the West Don Lands. We believe the limits are best described in the Natural Heritage sections and future commitments around the Don River.	3	C
71		TTC	Elham Ramandi		5.2.1 Land Use	any Special Policy Areas?	Yes, around the Don Valley river mouth (see comment #71)	3	C
72		TTC	Elham Ramandi		Exhibit 5-27 City of Toronto OP Land Use Designations	Add proposed alignment to map	Study Area added in most recent version (consistent with other maps in this section)	1	C
73		TTC	Elham Ramandi		5.3.5 Aquatic Resources	Fish Species and Fish Habitat not shown on Natural Environment Mapping (Exhibit 5-31)	Figure revised	1	C
74		TTC	Elham Ramandi		5.3.6 Species at Risk	[SAR with potential to be impacted] Not shown on existing conditions Natural Environment Mapping	Figure revised	1	C
75		TTC	Elham Ramandi		6.2.1 Natural Environment: Vegetation, Wildlife, and Terrestrial Habitat	do you know what percentage of vegetation will be cleared as a result of the project? % based on ELC?	The majority of the study area is urbanized and consists of landscaped boulevards. ELC was completed only for the natural areas along the Don River. Based on existing information, approximately 7% of the cultural meadow (CUM) in Corktown Commons will be cleared during construction. Text in 6.2.1 updated.	1	C
76		TTC	Elham Ramandi		6.2.1 Natural Environment: SAR	SAR permits required? Bat surveys and monitoring requirements?	No SAR permits are required, as the only SAR with potential to be adversely affected by the Project are designated special concern. Special concern species do not receive individual or habitat protection under the Endangered Species Act.	3	C

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77		TTC	Elham Ramandi		6.2.1 Natural Environment: SAR	any SAR permits required?	Bats were identified as having low potential to occur in the Study Area and no impacts are expected. Therefore, monitoring and/or additional surveys are not considered necessary. Prior to removal of any large trees, they should be inspected for cavities.	3	C
78		TTC	Elham Ramandi		6.2.1 Natural Environment: Contaminated Properties	Is this report finalized?	The report is final. Text updated throughout to remove the word "Draft".	1	C
79		TTC	Elham Ramandi		6.3.1 Natural Environment	will this be part of TRCA permitting process or is it Navigable water permit requirement?	This will be separate from the TRCA permitting process. This is referring to the self-assessment and project review process under the federal Fisheries Act to determine if an Authorization under the Act is required for project works in/near the Don River. An Authorization is required if the proponent is unable to avoid or mitigate serious harm to fish.	3	C
80		TTC	Elham Ramandi		6.3.4 Cultural Environment	Metrolinx Interim Heritage Protocol required for heritage properties listed?	The MX Interim Heritage Protocol has been superseded by the MTC Standards and Guidelines. No change. /HC	3	C
81		TTC	Elham Ramandi		6.3.4 Cultural Environment	Executive summary stated 101 properties. Review final report and EPR in text for consistency.	S5.4 and ES updated to be consistent with CHAR and S6.	1	C
82		TTC	Elham Ramandi		7 Future Commitments: Soils, Stormwater, and Groundwater	ECA from MOECP for new or relocated sewers and stormwater management required?	yes- reflected in future commitments	2	C
83		TTC	Elham Ramandi		7 Future Commitments: Drainage and Hydrology	SPA identified as Second Plan Area in acronyms listed. Show official plan of Special Policy Area map?	See comment 71, 72	3	C
84		TTC	Elham Ramandi		7 Future Commitments: Drainage and Hydrology	may? Work with TRCA in detail design phase	Request from City to remove "may" from the commitments.	3	C
85		TTC	Elham Ramandi		7 Future Commitments: Utilities	Who will undertake EA?	The proponent is unknown at this point.	3	C
86		TTC	Elham Ramandi		7 Future Commitments: Flood Protection	Who would undertake the Class EA for the Flood Protection project? Is TRCA already undertaking this EA for Flood Protection solutions at Lower Don River? TRCA to undertake or RLS proponent? Commitment maybe to coordinate and consult on designs for stations and tunnels with EA Proponent during detailed design?	EA proponent is the TRCA. Specified in text.	1	C
87		TTC	Elham Ramandi		7 Future Commitments: Flood Protection	Any TRCA requirements for Flood Protection and Permits required in Regulated Areas? If so which areas specifically are in the TRCA regulated areas requiring TRCA permits?	The Transit Project assumes that protection would be in place for all surface facilities. Currently the location of Broadview station is not protected, but that is included as a future commitment in Section 7	3	C
88		TTC	Elham Ramandi		7.1 Permits and Approvals	Identify if Municipal, Provincial and Federal?	Permit issuing agency added to all entries where known.	1	C
89		TTC	Elham Ramandi		7.1 Permits and Approvals	Any SAR permits and registrations?	No SAR permits are required, as the only SAR with potential to be adversely affected by the Project are designated special concern. Special concern species do not receive individual or habitat protection under the Endangered Species Act.	3	C

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90		TTC	Elham Ramandi		7.1 Permits and Approvals	How many TRCA permits are required and at which specific project areas?	To be determined during detailed design and construction.	3	C
89		TTC	Elham Ramandi		7.1 Permits and Approvals	*Obtain MOECP Environmental Compliance Approvals for all relevant stationary noise sources such as Heating Ventilation and Air Conditioning equipment, ventilation shafts and transformers." Can be started in D and C phases.	Updated	1	C
89		TTC	Elham Ramandi		7.2 Impact Monitoring	State whether the RLS project subject to a federal environmental assessment under the Canadian Environmental Assessment Act, 2012 (i.e., it is not a "designated project" under CEAA). As design progresses, the project proponents will continue to monitor the RL project for potential CEAA requirements. If required, the project proponents will prepare a Project Description for review by the Canadian Environmental Assessment Agency. any other Federal requirements (ie Railway Safety Act.	Consistent with comment #62. Updated in future commitments.	1	C
90		Toronto Fire Services	Thuy Nguyen		3.4.2.1 & 3.5.7	As it relates to NFPA 130 (2017), if other issues arises (e.g., the need to adopt/borrow NFPA 130 definitions, provide solutions outlined in NFPA 130 but not provincial legislations, etc.), is it the intent that only the 2017 Edition of NFPA 130 will be referenced, or would the Project Co. revert to the 2010 Edition of NFPA 130, which is the Edition referenced by the Building Code? Background: there is a concern that should the 2017 Edition be more restrictive than the 2010 Edition, or vice versa, in one or multiple areas of design requirements, the designer/project co. would pick the Edition that provides the less restrictive criteria, with the result of having both Editions used, rather than a single Edition.	text changed to read "In accordance with NFPA-130 (2010),..."	1	C
91		Toronto Fire Services	Thuy Nguyen		3.4.2.1	For the Eglinton Crosstown Light Rail Transit project, each Interchange or Mobility Hub Station required either two (2) firefighter access hatches (FFAHs), two (2) Emergency Exit Buildings (EEBs), or one (1) FFAH and one (1) EEB. It is our understanding that this criteria was based on existing TTC design requirements. We do not see that criteria being applied for the Downtown Relief Line South. Also, while we understanding that an EEB can be used in lieu of a FFAH, we also do not see any reference to FFAH being a potential solution. Please provide clarifications for both issues.	The Firefighter's Access (FFA) is based on TTC DDM-0102-02 Fire Life Safety and will be addressed during the next phase of preliminary design.	3	C
95	5.5	ECS - TPR	Marco Bertoia	Page 88	5.5	Size of Impacted Utilities The report indicates that underground utilities with diameters greater than 1000mm are noted on the plan & profile drawings. In the responses, the designer has indicated that "at this level of design, the report mainly focused on major utilities and greater than 600mm below grade." Please confirm the size of the impacted utilities to be reviewed at this stage.	>600mm has been the rule of thumb. Updated in text.	1	C

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96	6.2	ECS - TPR	Marco Bertoia	Page 102	6.2	Overland Flow Route Ensure the existing overland flow route is maintained.	This will be addressed in preliminary and detailed design.	3	C
97	6.2	ECS - TPR	Marco Bertoia	Page 102	6.2	Quality Control The report specifies that quality control is not required, but then speaks to proposed quality control. Please clarify.	Discrepancy updated. Suggest quality control measures be considered.	1	C
98	6.2	ECS - TPR	Marco Bertoia	Page 103	6.2	Quantity Control What system-wide stormwater quantity control measures will be provided? Confirm that the proposed lot level control and bio-retention measures are sufficient to meet the quantity control objectives outlined in the WWFM guidelines.	This cannot be known at the concept design level. To be addressed in detailed design.	3	C
99	6.2	ECS - TPR	Marco Bertoia	Page 102	6.2	WWFM Guideline SWM proposal for stations to meet WWFM guideline will be evaluated as part of the detailed design	Text added to EPR section.	1	C
100	6.3	ECS - TPR	Marco Bertoia	Page 114	6.3 7	Settlement Impacts During Construction Provide confirmation that the introduced settlement during construction (dewatering activities) will not cause any negative impact to the municipal infrastructure.	This will be addressed in the settlement monitoring plan to be developed during design and construction, as stated in S6.3 and S7. Cannot be known at the concept design level.	3	C
101	6.3	ECS - TPR	Marco Bertoia	Page 114	6.2.1	Erosion Analysis Report If a new station discharges directly and/or in proximity (within 100 m) of natural watercourses, the proponents are required to complete an Erosion Analysis Report to determine the erosion control criteria for the sites (see Appendix E.2 (WWF Guidelines for the Terms of Reference for such study analysis – or obtain the latest edition from TRCA).	Text updated.	1	C
102	6.3	ECS - TPR	Marco Bertoia	Page 128	7.2	Groundwater Strategy Provide the groundwater strategy for both short term (construction dewatering) and long term for tunnels and stations. Also, identify any proposal to discharge GW into a municipal sewer.	To be addressed in detailed design. This will be addressed when obtaining Discharge Permits during construction and operations, as required	3	C
103	7.1	ECS - TPR	Marco Bertoia	Page 147	7.1	Dewatering During Operation Is groundwater discharge expected during operations? In the report (on page 101), it was stated that "all underground tunneled and box structures will be designed as water-tight structures and that no permanent dewatering systems will be required. Therefore, no permanent impacts on the groundwater regime are anticipated as a result of the project." Please confirm.	Confirmed.	3	C
104	Appendix 3-1	ECS - TPR	Marco Bertoia	P&P 1-13	Appendix 3-1	Launch Shafts Show the proposed location of the three launch shafts on the Plan & Profile drawings.	Plan of three launch shafts shown in Appendix 3-4 (construction plan). Profile to be developed in later design.	3	C

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104	6.2.1	ECS - TPR	Congming Ren	Page 102	6.2.1	Stormwater Management Criteria The stormwater management strategies shall conform to the City of Toronto Wet Weather Flow Management Guidelines, City of Toronto Design Criteria for Sewers and Watermains and Toronto and Region Conservation Authority (TRCA) guidelines, Ministry of Environmental and Climate Change (MOECC) Stormwater Management Planning and Design Manual (2003), and the Low Impact Development Stormwater Management Planning and Design Guide(2010) by TRCA, etc.	Text added to EPR section.	1	C
105	6.2.1	ECS - TPR	Joanna Yu	Page 102	6.2.1	No Additional Drainage to Residential Properties There should be no additional drainage towards the residential properties as a result of the proposed works associated with the entrance and Traction Power Substation (TPSS) structures. (pending, not addressed) Note: Why has the comment has not been included with the Draft #1 Responses? Ensure the entrance and TPSS structures should not cause any negative impact to the existing residential properties.	Text added to EPR section.	1	C
106	3	Toronto Water	Arthur Sinclair	3.5.1		please make reference to the Don and Central Waterfront Coxwell Bypass though the Don Valley. I was not able to find any reference to it in the report. I believe this should be in section 3. Existing and Future Conditions, 3.5.1 Municipal Sewer. We discussed this 3 m tunneled sewer in 2015	We will add a short paragraph to Section 5.5.1 (Municipal Sewers), under the subheading of Combined and Sanitary Sewers, to describe the Don River & Central Waterfront wet weather flow project including the Coxwell Bypass Tunnel.	1	C
107		PF&R	Andrew Pickett			All trees on the City Street Allowance, all trees in City Parkland, Ravine and Natural Feature Protection Areas and trees 30cm diameter (at 1.4m above grade) and larger on all other types of land are protected by City Bylaws and require permits for their removal and injury. All protected trees for which removal or injury has not been permitted must be fully protected throughout construction in accordance with the City's Tree Protection Policy and Specifications for Construction Near Trees. Metrolinx/TTC will be required to make application for and acquire City permits to allow the removal or injury of all trees protected by the City's tree bylaws. Urban Forestry's replacement tree planting compensation ratios for trees approved for removal are 1:1 for City owned trees and 3:1 for privately owned trees.	We will replace the current language in Section 7.1, Permits and Approvals, with the text you have provided. We will add the tree replacement ratios to the future commitment with respect to revegetation.	1	C
108	Executive Summary	Economic Development and Culture	Dan Rosen	Executive Summary		On page ii in the Executive Summary 'Problem Statement' – it is not just a large increase in GO Rail passengers from outside Toronto to downtown, but also important to note that the amount of office space and employment downtown has increased very significantly over the past decade.	We will add text to the Problem Statement about growth in employment and office space based on existing research available from our Research & Information section.	1	C

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109		Economic Development and Culture	Dan Rosen	page 68		In the Socio-Economic section starting on page 68, there is a lot of helpful Census/NHS data about local residents. But it would also be useful to profile the (daytime) labour force along the corridor, including eg. analysis of current travel patterns to and from surrounding neighbourhoods. Also, the Toronto Employment Survey could provide a profile of businesses and the (daytime) labour force in the study area.	I agree this would be nice to have; however, we will not be able to respond to this suggestion. There is simply not enough time to undertake new data analysis at this time since we are down to the wire for the August 14 Notice of Completion for the EPR.	1	C
110		Economic Development and Culture	Dan Rosen	page 104		In the 'Detailed Assessment of Impacts Section' starting on page 104, it is not just property acquisition that can impact local businesses. Construction of the line can have a significant impact on businesses that remain open and mitigation measures beyond acquisition could be considered.	1) Temporary construction impacts to businesses are addressed on Page 118 of the EPR. Mitigation measures includes contractors minimizing inconvenience, informing businesses of work, working with BIAs, etc. 2) A construction plan will be prepared prior to construction (included as a Future Commitment in section 7). 3) Does Economic Development have, or have plans on developing, strategies/programs to assist local businesses experiencing disruption or economic effects from major/long-lasting construction projects? If so, we can include this information in the mitigation section of the EPR. I am aware that Metrolinx has implemented some measures along Eglinton such as contributions towards marketing and signage.	1	C
111	Executive Summary	Strategic Initiatives, Policy and Analysis	Jane Weninger	Page ii) last sentence		Are the study areas outlined in ES Table 2 or ES Table 1?	The study areas for various technical studies undertaken for different disciplines are outlined in ES Table 1, and illustrated in ES Exhibits 2 and 3.	1	C
112	Executive Summary	Strategic Initiatives, Policy and Analysis	Jane Weninger	ES Table 1		Is Relief Line TPAP Study Area the same as Relief Line South Study Area?	The Relief Line South TPAP study area is general the area immediately surrounding around the preferred alignment. The Relief Line Project Assessment (RLPA) study area was used during the pre-planning (pre-TPAP) work. ES table 1 identifies which study areas are used for each EA discipline.	1	C

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113	5	Strategic Initiatives, Policy and Analysis	Jane Weninger	Exhibit 5-17 and related text		"Green Space" should be relabeled "Parkland" (as per OP Map 8A) "Environmentally Sensitive Area" should be replaced with "Environmentally Significant Areas" which are approved in the Official Plan (Map 12 as amended). "Terrestrial Natural Heritage System" should be replaced with "Natural Heritage System" approved in the Official Plan (Map 9) These changes are consistent with the information shown on Exhibit 5-31	Text added to EPR section.	1	C
114	5	Strategic Initiatives, Policy and Analysis	Jane Weninger	Exhibit 5-31		The ESA information in the Don Valley is incomplete (see ESA layer on Toronto Maps). Not clear what is meant by "Revised Don Target System" or relevance.	Text added to clarify the term "Revised Don Target System". ESA information not available for download on Toronto maps. Data could not be obtained in time for publishing.	1	C
115	6	Strategic Initiatives, Policy and Analysis	Jane Weninger	Section 6 Permits		Requested text change: Permits required from Toronto and Region Conservation Authority (TRCA) for activities within TRCA regulated area	Text added to EPR section.	1	C
116	5	Strategic Initiatives, Policy and Analysis	Sherry Goldstein	Pages 69 – 71		It appears information from the Ward Profiles were included in the report. The data appears to be 2016, however the text on page 69 includes a note about the 2011 National Household Survey. This may have been left over from the original draft that had the 2011 Ward Profiles.	We have requested clarification from our consultants regarding the 2011 NHS data.	1	C
117	5	Strategic Initiatives, Policy and Analysis	Sherry Goldstein	Page 78: Exhibit 5-25		The title is not correct. This does not include applications which were built prior to January 1, 2013. Please cite the source as Pipeline Q4 2017. The Pipeline Q4 2017 includes all projects received in the 5 year period from January 1, 2013 and December 31, 2017, as well as proposals received prior to that time which had development activity during that period. Also, included are projects received within the first 6 months of 2018. Pipeline development projects January 1, 2013 to December 31, 2017* *Includes projects received between January 1, 2018 and June 30, 2018	We have asked our consultants to edit the map to reflect your comments.	1	C

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118	5	Strategic Initiatives, Policy and Analysis	Sherry Goldstein	Page 78: Exhibit 5-25		The stage of development should not be mapped. The Pipeline Status field should have been mapped - the first column in the spreadsheet / shapefile, which contains "Under Review", "Active", or "Built" statuses. The standard explanation for Pipeline Status is as follows. Projects under review have not yet been approved or refused, or are under appeal. Active projects are those which have received their first Planning approval, for which Building Permits have been applied for or have been issued, and those which are under construction. Built projects are those which became ready for occupancy and/or were completed. Source: City of Toronto, City Planning: Land Use Information System II	We have asked our consultants to edit the map to reflect your comments.	1	C
119	5	Strategic Initiatives, Policy and Analysis	Sherry Goldstein	Exhibit 5-26		There is no source. Were soft sites identified by community planners?	The soft sites were identified by USI and included input from Community Planning. We have asked consultants to confirm the source and to label it on the map.	1	C
120	5	Strategic Initiatives, Policy and Analysis	Sherry Goldstein	Pages 80-81 Exhibit 5-28 and 5-29		Please clarify the source for this map. Is the source the SRRA projections prepared for SmartTrack reported to Exec?	We have asked our consultants to confirm the source and to label it on the map.	1	C
121	General	Legal Services	William Martin			the draft EPR does not systematically address monitoring or verification of the effectiveness of mitigation measures. The requirement, in Regulation 231/08 (Transit Projects and Metrolinx Undertakings, s. 9(2)(8)), is: (2) The environmental project report shall contain the following: [...] 8. if mitigation measures are proposed under paragraph 7, a description of the means the proponent proposes to use to monitor or verify their effectiveness. For some mitigation measures, the draft EPR does address monitoring/verification, but in others no monitoring/verification is discussed. The EPR could be open to challenge as it arguably falls short of the above requirement.	You are correct that the EPR does not systematically address specific monitoring programs where specific mitigation measures have been proposed for impacts. Chapter 7 (Commitments to Future Work) does, however, address monitoring in a more general sense. Sections 7.2 to 7.4 describe the intent to prepare monitoring plans prior to starting construction to measure the impact of the project and effectiveness of environmental protection measures, construction compliance, and operational compliance. This includes monitoring by the TTC under its existing Compliance Monitoring Program. In addition to this, several of the future commitments identified in Chapter 7 make reference to monitoring impacts of various kinds, and the preamble refers to reading these in conjunction with the impacts and mitigation measures identified in Chapter 6.	1	C

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122		Transportation Services	Niki Siabanis			Proposed location of Queen Interchange Station (at NW corner of Queen/Bay) not ideal in existing conditions. A reconfiguration of the southbound lanes along Bay and the intersection of Bay/Queen should be investigated in order to better accommodate pedestrian crowding safely. One consideration may be to prohibit SBR movements.	To be considered as part of the Preliminary Design and Engineering work.	1	C
123		Transportation Services	Niki Siabanis			This comment may not be appropriately timed, but James Street can be significantly narrowed, and the intersection of James/Queen further reduced with a generous curb extension. This would likely allow for a secondary entrance to the station that is closer to the Eaton Centre and would help distribute pedestrian volumes.	To be considered as part of the Preliminary Design and Engineering work.	1	C
124		Transportation Services	Niki Siabanis			What is the methodology for determining which stations have multiple accessible entrances? Some stations (eg. Osgoode, Sherbourne, Carlaw, Gerrard) only provide accessible access for 1 of 2 entrances. While it appears that alternative accessible routes may be available for Osgoode, this does not appear to be the case for other stations that are not connected through the Path network. If the only elevator is out of service, what is the alternative means for transit users with reduced mobility? For some more vulnerable areas (eg. Sherbourne/Queen) this is particularly concerning.	To be considered as part of the Preliminary Design and Engineering work.	1	C
125		Transportation Services	Niki Siabanis			The distance between pedestrian crossings north of Danforth is significant for an urban environment. A new crossing (north of Danforth) should be considered as part of the relief line work going forward.	To be considered as part of the Preliminary Design and Engineering work.	1	C
126		TTC	Scott Haskill			Scott to approve: Transportation A transit service planning review will be undertaken for the area bounded by Danforth Avenue, Greenwood Avenue, Lake Shore Boulevard, and the Don River to determine surface transit routes that should connect and/or terminate at Gerrard Station. A terminus operations assessment will also be undertaken to develop and evaluate options and select a preferred option for exchanging passengers from surface transit routes to the Relief Line South at Gerrard Station. The assessment will be coordinated with the station area planning for the Gerrard Station area, which will consider the preferred streets and blocks network for the station area. It will undertake conceptual design of required facilities, and identify any implications for the design of the station.	TTC to confirm wording for Gerrard Station	1	C

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127	3	Community Planning	Carly Bowman	Page 18, Ex. 3-4		The access to the station south of the rail embankment is now likely to be underneath a First Gulf building. While I've protected for a direct connection from East Harbour to the Relief Line in the approval documents, I wonder if the higher value connection would be directly to the SmartTrack station (as is noted on p. 38, Section 3.6.2.5, second paragraph, although I gather that's an error?).	The EPR is based on conceptual design which will be refined and revised as needed as part of preliminary design which is now underway. We won't be changing the station design for the purposes of the EPR documentation. We definitely need to look more closely at this connection.	1	C
128	3	Community Planning	Carly Bowman	Page 28, Section 3.6.2.5		Acquisition of the Talisker lands is a big deal. What is the status of sharing this intention?	Impacted property owners all received letters in April, including Talisker.	1	C
129	3	Community Planning	Carly Bowman	Page 32, Section 3.6.1.		A bit more detail on the process of flood protecting the Talisker lands is warranted. The Broadview and Eastern EA is still in initial phases and said flood protection doesn't have an approved design or funding	The assumption for RLS has always been that the flood protection would be in place before the RLS is open. TRCA has reviewed, etc.	1	C
130	3	Community Planning	Carly Bowman	Page 32, Section 3.6.1.1.		First line, typo in Easter"n". Discussion of access via DVP and Lake Shore Boulevard is a bit breezy: the traffic management situation for all the construction in this area will be really complex. Reference to coordinating with other infrastructure and private construction in the Lower Don is warranted.	Traffic Management Plan is part of Future Commitments, as are many other important aspects. Lots of work still needs to be done to make this all work.	1	C