Recommended Plan – Confederation Line West Functional Design Report (Tunney's Pasture to Baseline Station and Bayshore Station)

Background:

On 17 June 2009, Transit Committee approved the Statement of Work for the Western Light Rail Transit Corridor Planning and Environmental Assessment Study. The original purpose of the study was to identify the best possible alignment for the conversion of bus rapid transit to LRT west from Bayview to Lincoln Fields and Baseline Stations including the removal of 45,000 yearly buses from the Sir John A Macdonald Parkway. The planning study was underway in early 2010. The Committee report can be found at: <u>ACS2009-ICS-PGM-0050</u>

On 17 July 2013 Council approved the "Richmond Underground" (R12) alignment after extensive review and consultation on 12 alternative alignments. The "Richmond Underground" included a shallow buried tunnel and open trench segment between Dominion and Cleary Stations, on National Capital Commission (NCC) lands along the Sir John A. Macdonald Parkway corridor, then it continued under Richmond Road to the follow the existing Transitway in the Pinecrest Creek corridor. Council directed staff to complete the functional design and environmental assessment; include consideration of all mitigation measures in the staff report as well as concerns raised by the NCC Board of Directors. The 17 July 2013 City Council report can be found at this link: <u>ACS2013-PAI-PGM-0158</u>.

As recommended by the Transportation Committee, on 17 July 2013, Council passed the following direction:

- Approve the Richmond Underground corridor as the preferred corridor to extend Light Rail Transit westerly from Bayview Station to Baseline Station, as described in this report;
- Direct staff to complete the functional design for the Richmond Underground corridor and that the staff ensure that the work plan for the functional detailed design include consideration of all mitigation measures detailed in the staff report as well as the concerns raised by the community and by the public delegations heard at the Special Transportation Committee meeting of July 10, 2013; and
- Direct staff to complete the Environmental Assessment process and documentation based on the functional design and file the Environmental Study Report in accordance with the Ontario Transit Regulation 231/08.

- Approve that the Richmond Underground be included in the 2013 TMP refresh scheduled for completion this year and that the notice of completion of the environmental project report be posted in Q1 2014; and
- Direct staff to continue to work with the NCC during the functional and detailed design stages of the WLRT project to address the concerns raised by the NCC Board of Directors; and
- Inform the NCC Board of Directors Chair, in writing, the outcome of this direction.

Transportation Master Plan

On 26 November 2013, Council approved the 2013 Transportation Master Plan (TMP) that identifies the "Stage 2" proposal to extend the Light Rail Transit Project (LRT) further west to Baseline and Bayshore Stations as part of the Affordable Network, Rapid Transit and Transit Priority (RTTP) Network, 2031 (<u>ACS2013-PIA-PGM-0193</u>). As a result, the extension to Bayshore Station from the junction with the future Western Light Rail Transit in the Pinecrest Creek Corridor, just south of Lincoln Fields, would be implemented as light rail transit (LRT) rather than bus rapid transit (BRT)

Western Extension from Lincoln Fields to Bayshore

On 5 Feb 2014, Transportation Committee approved the Statement-of-Work for the West Light Rail Transit Extension (Lincoln Fields Station to Bayshore Station) Planning and Environmental Assessment Study. The study for this segment of the LRT was added to the current scope of work for the Planning and Environmental Assessment Study for the Western Light Rail Transit (Tunney's Pasture to Baseline Station) that was already underway, such that one Environmental Project Report will be prepared in fulfillment of the provincial environmental assessment process. West Light Rail Transit Extension (Lincoln Fields Station to Bayshore Station) Planning and Environmental Assessment Study – Statement of Work can be found at this link: <u>ACS2014-PAI-PGM-0039</u>

An EA was completed for the West Transitway Extension for bus rapid transit (BRT) from Lincoln Fields to Bayshore in the early 1990's. The purpose of this western extension to the Confederation Line study was to address the technology change from BRT to LRT. The study was initiated and public consultation events for the Lincoln Fields to Bayshore segment, as required as part of the provincial Environmental Assessment process, occurred in June 2014 and April 2015.

The following map is an excerpt from the Transportation Master Plan and highlights the study area for Western Extension of the Confederation Line LRT.



Figure 1: Confederation Line LRT Western Extension Study Area (Tunney's Pasture to Baseline and Bayshore Stations)

100-Day Working Group

On 21 November 2014, the Board of the National Capital Commission (NCC) announced that it had concluded that the partially buried "Richmond Underground" option in the Sir John A. Macdonald Parkway, put forward by the City for the environmental assessment study, could not meet the two conditions set by the NCC's Board of Directors:

- unimpeded continuous access to the corridor lands and Ottawa River shorelines, and
- minimal visual impact on the corridor landscape quality and the user experience of this corridor.

On 27 November 2014, Mayor Watson and then Minister responsible for the NCC, John Baird, met and directed that a mutually acceptable solution for the future Confederation Line west extension alignment between Dominion and Cleary stations be identified within 100 days. A Working Group was struck composed of NCC Board Members, City Councillors and executive staff from both organizations.

On 6 March 2015, the 100-Day Working Group announced an agreement-in-principle for a solution that is outlined in a Memorandum of Understanding. The 100-Day Solution recommends running a portion of the Confederation Line West extension under rebuilt and realigned lanes of the Sir John A. Macdonald Parkway between Dominion and Cleary stations. The resulting solution and Memorandum of Understanding was posted, for public information, to the NCC and City web pages. It is attached as a separate document to this report. A background and analysis summary of the 100-Day Working Group review is also attached as a separate document to this report.

On 30 March 2015, the City of Ottawa followed up the announcement of the 100-Day Solution with a Public Open House, at City Hall. At the Open House the public had the opportunity to review and provide feedback on the preferred solution between Dominion and Cleary Stations

On 22 April 2015, the NCC Board approved the Memorandum of Understanding approving the jointly developed solution for the portion of the alignment between Dominion and Cleary Stations.

On 29 April 2015, a final Public Open House was held providing an overview of the recommendations for the 13 kilometre Confederation Line West LRT Extension study from Tunney's Pasture to Baseline and Bayshore Stations, as well as the functional design recommendations for the segment from Lincoln Fields Station to Bayshore Station.

A summary of the consultation and notification follows at the end of this document.

Recommended Functional Design: Overview of Alignment, Stations, Connectivity and Operations



Figure 2: The general alignment and stations along the Western Extension of the Confederation Line between Tunney's Pasture and Baseline and Bayshore stations.

Design Overview - Alignment

- The Confederation Line West Extension will comprise approximately 13 km of LRT alignment.
- Approximately 9 km involves repurposing the existing Transitway bus rapid transit corridor in the following segments:
- Tunney's Pasture Station to Dominion Station
- North of Lincoln Fields Station to Baseline Station
- Just west of Pinecrest Road to Bayshore Station
- Approximately 4 km will require a new corridor to be constructed in the following segments.
- Dominion Station to north of Lincoln Fields Station
- Pinecrest Creek Junction to just west of Pinecrest Road
- A fully exclusive LRT right-of-way is required to provide for a fast and reliable transit service providing sufficient capacity which cannot be delayed by other vehicles.
- Pedestrian and cyclist crossings and connections are being planned to ensure access to and from local communities.

Design Elements – Stations

The LRT project will include 10 rapid transit stations, of which:

- 7 are existing Transitway stations to be rebuilt to accommodate LRT;
- 3 are new stations to serve existing communities and expand access to rapid transit;
- One existing station (Queensway) will be decommissioned as part of the project, a new station at Queensview Drive and existing station at Iris St. will provide alternate access to rapid transit for the local community;

Station designs will:

Carry common look and feel elements to those being built for the Confederation Line;

- Provide for safe, efficient and accessible access to rapid transit;
- Have convenient pedestrian and cycling connections to and from surrounding communities;
- Integrate with the character of existing residential and green space areas.

• Fulfill AODA, Building Code and City of Ottawa Accessibility design standards including the implementation of redundant elevators.

Design Elements – Connectivity

Station connectivity to surrounding communities is a key consideration in project planning.

- The main priority for station access is pedestrian and cycling activity;
- New/improved links to be identified;
- Parallel pathway facilities to be provided via a combination of existing and new linkages;
- Bus connection activity at stations;
- Bus terminals will be provided at major stations, where large volumes of passengers will be transferring and local services begin/end;
- On-street bus stops for local routes will support easy access to Cleary, New Orchard, Iris and Pinecrest stations (location and scale will match OC Transpo needs and the community context);
- Pick-up and Drop-off Activity;
- Formal facilities will be provided at major stations to serve broader needs; and,
- Informal (limited) facilities will be considered at other stations to serve more local needs and to spread activity.

Design Elements – Transit Operations

- LRT service will operate as an extension of the Confederation Line.
- On the core part of the network (between Blair and Lincoln Fields Stations) trains will initially operate approximately every 3 minutes (in each direction) during morning and afternoon peak periods.
- The design of the line will support the potential operation of trains as frequent as every 1.5 minutes in each direction through the downtown, to provide an ultimate capacity of 24,000 persons per hour per direction during (pphpd) peak hours.
- Train frequencies in off-peaks and on weekends will range from 5 to 15 minutes.
- At Lincoln Fields service will split, with half of trains serving Baseline and half serving Bayshore.
- Bus (rapid transit and local routes) will connect with the LRT at key locations to facilitate passenger transfers and provide a seamless network serving the City.
- Bus Rapid Transit services from Kanata and Barrhaven will connect to LRT at Bayshore and Baseline Stations, respectively.
- Local buses will connect to LRT stations where routes intersect.

- Some local routes may be extended/reorganized to provide connections to LRT and improve neighbourhood connectivity.
- Night bus service will be provided when the LRT is closed overnight for maintenance (currently, Routes 95 and 97 run 24 hours a day).

Recommended Functional Design: Detailed Segment-by-Segment Description:

Alignment: Tunney's Pasture Station to Dominion Station

Between Tunney's Pasture and Dominion Station, the LRT alignment makes use of the existing West Transitway corridor, which is a below-grade (trench) facility located north of Scott Street. A new bridge structure at Goldenrod over the WLRT will be constructed to permit local bus access to Tunney's Pasture and improve access for pedestrians, cyclists and vehicles to PWGSC's Tunney's Pasture campus. Existing structures at other locations will be retained, and rebuilt if necessary to maintain adequate vertical clearances over the LRT.



Figure 3: Alignment from Tunney's Pasture Station – Dominion Station

Tunney's Pasture Station

Tunney's Pasture Station is being constructed as part of the first stage of the Confederation Line LRT project which is expected to open in 2018. The second stage alignment will tie-in to the end of track, located approximately 100 m west of the station platforms. No modifications are proposed to the lower level (LRT platforms) of the station as a part of the Confederation Line West Light Rail Transit extension, other than any updates to wayfinding signage and system integration within the station.

As part of first stage of the Confederation Line project, temporary bus terminal and bus staging areas are being constructed on the upper level, on lands owned by the City of Ottawa and PWGSC. These facilities will no longer be required once LRT is extended. They will be decommissioned to permit redevelopment, in accordance with PWGSC's approved redevelopment plan for their lands. Local bus connections at the upper level will be required to accommodate buses which serve routes on Scott Street, Holland Avenue, and the Tunney's Pasture campus. The design in and around the station will be compatible with the approved Scott Street Community Design Plan (2014) and the Tunney's Pasture Master Plan (2014).



Figure 4 Artist illustration of Tunney's Pasture Station on the Confederation Line web site (<u>link</u>).

Westboro Station

Westboro Station is located on the north side of Scott Street, between Athlone and Tweedsmuir Avenues. It is an existing Transitway Station, which will be rebuilt within the existing Transitway trench with open air LRT platforms on lower level, and local bus platforms at street level. The existing bus loop will also be maintained to facilitate local transfers.

To improve accessibility and implement a fare control zone, the existing overhead bridge structure will be decommissioned and a new, wider structure will be constructed to accommodate a new station entrance along the west side of the existing upper level bus loop. The existing bus loop with also be maintained to facilitate local transfers.

As part of the station conversion, it is proposed that the southern portion of the bus loop which currently separates the station from Scott Street be eliminated to create a larger plaza and an on-road bus lay-by. This will maintain the east-west multi-use pathway to continue through the station area similar to what occurs at Tunney's Pasture. Relocation of existing hydro poles in this area will also be required.

Other station features include:

- Signalized crossings at both Athlone and Tweedsmuir to maintain pedestrian access from Scott Street and the adjacent community;
- Expanded area for bicycle parking- typical of all stations;
- Improved east-west pedestrian and cycling linkages on Scott Street and to the multi-use pathway along the linear park; and,
- Improved passenger pick-up and drop-off area along Scott Street.

Westboro Station currently has local transit connections to OC Transpo routes that run along Richmond Road, Churchill Avenue and Scott Street and can easily be maintained once the Transitway is converted to LRT.



Figure 5: Plan view of Westboro Station



Figure 6: Bird's-eye view of Westboro station looking northeast.

Dominion Station

Dominion Station is an existing Transitway station located northwest of Dominion Avenue with basic open-air platforms and shelters adjacent to where the Transitway trench rises to meet the Sir John A Macdonald Parkway. Currently pathways proved access from Dominion and Berkley Avenues to the south and Workman Avenue to the north.

The LRT station will be located in the existing Transitway trench to take advantage of the higher land with open air LRT platforms below grade in the existing Transitway

trench on City property. A compact, one-storey station house will provide fully accessible direct access from Berkley Avenue at street level on south side of station. From the north side, passengers will be able to access the station via Parkway level pathways and ramped pathways down from Workman Avenue. Neighbourhood sensitivity, as well as the protection of green space and river views will inform the final station house location, size and design.

Other stations features include:

- Improved unimpeded access to the waterfront from the station and the community by maintaining existing pathways and providing a new multi-use pathway crossing under the Sir John A MacDonald Parkway.
- A new multi-use pathway bridge over the LRT connecting pathways and communities on the south side to pathway on the north side.
- Reduced impact on the existing landscape by shifting the alignment to the north
- Improvements to reorganize and contain the existing informal passenger pick-up and drop-off to better serve and fit into the community.



• Improved pathway and sidewalk neighbourhood connections.

Figure 7: Plan view of Dominion Station



Figure 8: View of Dominion Station looking northeast from Berkley



Figure 9: View of Dominion Station and community context looking southeast

Alignment: Dominion Station to the West Portal at Pinecrest Creek

From west of Dominion Station, this segment of the LRT is extensively in a tunnel below grade and covered. Immediately west of Dominion Station, LRT alignment curves and enters into a tunnel running along south side of Sir John A Macdonald Parkway, and then under the relocated eastbound lanes of the Parkway. A 30 metre landscape buffer along the southern edge of the parkway corridor will be respected. The alignment will run in an open cut for approximately 270 m along the north side of Rochester Field descending down to enter the tunnel which will carry the alignment along the parkway corridor for approximately a 1.0 km distance under the realigned Parkway lanes to Cleary Avenue to a fully underground Cleary Station also in the Parkway corridor. This

approach of bundling transportation infrastructure into one corridor route allows the tunnel to be approximately one metre below the grade of the parkway above – and based on preliminary geotechnical advice, this significantly reduces the potential cost for tunnel construction. This also creates opportunities for more consolidated space for landscape planting that will be part of the NCC's efforts to establish a "linear park" as part of the Sir John A. Macdonald Parkway. This segment reflects the approach recommended for the 100-Day Solution that was endorsed by the NCC Board of Directors with the approval of the March 6, 2015 Memorandum of Understanding. Part of the coordinated renewal and enhancement of the Parkway landscape will include pathway improvements to segregate cyclists from pedestrians along the shoreline of this section of the corridor, and two new grade separated pathway underpasses (one near Dominion Station, one near Cleary). Finally, existing views from open spaces and private lands abutting the south edge of the parkway corridor will be maintained.

West of Cleary Station, the LRT alignment remains below grade and crosses under Cleary Avenue and through lands held by the First Unitarian Church and under a large water main. The alignment follows an abandoned rail corridor and crosses under existing parking areas, internal driveways, outdoor storage areas and landscaped areas on the Unitarian campus. It would be approximately 4 to 6 metres below grade and approximately 18 metres from the Unitarian House and River Parkway Children's Centre. Then the LRT underground alignment curves south to run under Richmond Road requiring two properties of existing private businesses fronting onto Richmond Road to be acquired to permit construction.

The LRT tunnel would continue under Richmond Road, passing over the Nepean West Sanitary Collector in the vicinity of Lockhart Avenue and under the Woodroffe Avenue intersection. West of Woodroffe Avenue, the alignment shifts under the Byron Linear Park to arrive at the New Orchard Station

West of New Orchard Station, the underground LRT alignment curves north to re-enter the Richmond Road right-of-way. To set up the curve south into the NCC Parkway/Pinecrest Creek Corridor, the LRT alignment continues on a long curve under McEwen Park. The alignment impacts a small commercial property in this area. The tunnelled segment will end at the west portal in the Pinecrest Creek corridor and the LRT will return to grade in the Pinecrest Creek corridor just south of the Richmond Road overpass over the Parkway.



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Figure 10: Alignment from Dominion Station to West Portal at Pinecrest Creek

The tunnel will be in three segments:

- East Portal in Rochester Field to Cleary Station approximately 1000 metres long
- Cleary Station to New Orchard Station 1050 metres long
- New Orchard to the West Portal at Pinecrest Creek 610 metres

There are a number of ancillary structures and equipment that are required for LRT operation that must be located along the route.

- Two Emergency Exit Buildings (EEB), large enough to house stairs, a landing and an exit door, will be needed along the underground segments of the LRT. Based on the length of the tunnel segments and safety standards, preliminary locations have been identified – one with direct access to Skead Avenue and the other within the Byron Linear Park near Lockhart.
- Mechanical ventilation areas have also been identified. At the eastern edge of Sir John A Macdonald Parkway corridor, in the vicinity of Cleary Station; in the vicinity of New Orchard Station, and at the West Portal. The requirement for mechanical ventilation for the Connaught Tunnel will be determined at a more detailed design phase. While the LRT tunnel is served by passive ventilation for daily service, mechanical ventilation is used for emergency purposes such a fire and smoke.
- Electrical Power Sub-Stations will be needed along the alignment. Potential locations have been identified in the vicinity of: Westboro Station; Cleary Station; Lincoln Fields Station; Iris Station; Baseline Station; Queensview Station, and Bayshore Station.

In general, the most likely method of construction for the tunnel segments of the western extension of the Confederation Line will be a "cut and cover" technique where the surface is opened up, the trench excavated, the tunnel constructed and then backfilled and covered. The restoration of the surface lands after construction creates the opportunity to renew the landscape or streetscape under which the LRT travels. As such, Richmond Road will be reconstructed as a "complete street" providing improvements such as wider sidewalks or new cycling lanes, and landscaping to enhance more sustainable travel choices and community benefits. Areas of the Byron Linear Park that will be impacted will also be reinstated with enhancements such as renewed pathways, trees, benches, and landscaping.

Concerns have been expressed regarding potential impacts of sound and vibration from the construction and operation of the LRT in the vicinity of residential and institutional

uses such as a church, daycare and seniors residence. The objective is to minimize the potential impacts of noise and vibration and keep them within provincial and municipal thresholds.

The environmental assessment documentation will include modelling of noise and vibration and make recommendations for mitigation. Both noise and vibration levels will be monitored before, during and after the facility is in operation to ensure effects are mitigated.

Best practices as well as construction and design techniques being refined for the Confederation Line will also be used for this stage, such as:

- The electric LRT trains will be travelling underground in a concrete tunnel designed to minimize the effects of noise and vibrations.
- The City will use continuously-welded rail to eliminate the "clickety-clack" of older railways.
- Isolation systems in the tunnel will be used where noise and vibration transmission exceeds allowable thresholds while tie and ballast will be reserved for open-air track away from noise sensitive land uses.
- The vehicles themselves use noise attenuating insulation near the wheels and electric motors to further reduce noise.
- Noise and vibration generated during construction will be managed to be within appropriate provincially and municipally established thresholds.

Cleary Station

Cleary Station is a new station, located to serve the McKellar Park community. It is within the Sir John A Macdonald Parkway Corridor adjacent to the east side of Cleary Avenue where the City right of way ends at the private entrance to the Unitarian Church grounds. With the exception of a station house to provide accessible at-grade access from Cleary as well as the Parkway pathways, the station will be fully buried with a "green roof" to blend into the surrounding landscape and topography. The design is a result of the 100-day solution and responds to NCC and local community concerns. It has such features as:

- Final station house location, size and design will fit into the open space and community context;
- Existing pathway continuity will be maintained and enhanced with a new multiuse pathway crossing under the Parkway providing access to the waterfront from the station and the community;

- Direct pedestrian access to station from Richmond Road via a broad walkway integrated into the streetscape; and,
- Provision of limited and well defined passenger pick-up and drop-off opportunities along Richmond Road and Byron Avenue and will be discouraged and regulated on Cleary.



Figure 11: Plan view illustration of Cleary Station



Figure 12: Bird's eye view illustration of Cleary Station looking southwest



Figure 13: Bird's eye view illustration of Cleary Station from Richmond and Cleary

New Orchard Station

New Orchard Station will be a new LRT station serving adjacent existing communities Woodroffe North and Woodpark. While the LRT will be in a tunnel under the Byron Linear Park, the station will be below grade and open to the air in the Byron Linear Park between New Orchard and Harcourt Avenues. A compact, one-storey station house will provide pedestrian access from grade level from sidewalks and pathways on Richmond Road, Byron Avenue and within the linear park. The station design house will minimize the area it occupies in the linear park and facilitate continuity of pathways.

Other station features include:

- Provision of better cycling and pedestrian access to the station through the reconstruction of Richmond Road to provide a "complete street" with dedicated cycling facilities and improved pedestrian amenities;
- Renewal of pathways, trees and landscape amenities when Byron Linear Park is restored after construction;
- Improved crosswalks at Richmond and New Orchard; and,
- Limited and well defined passenger pick-up and drop-off opportunities along Richmond Road and/or Byron Avenue.



Figure 14: Plan view illustration of New Orchard Station



Figure 15: Perspective illustration of New Orchard Station looking across the Richmond-New Orchard intersection

Alignment: From the West Tunnel Portal to Baseline via the Pinecrest Creek Corridor

When the LRT leaves the West Tunnel Portal it will be in the open air and at-grade. The alignment then turns south and runs parallel to the Sir John A. Macdonald Parkway before entering Lincoln Fields Station. A double track crossover north of Lincoln Fields Station allows for a diversity of service options including supplemental service to ensure good travel times between Lincoln Fields and Baseline Station as well as Lincoln Fields to Bayshore Station.

South of Lincoln Fields the alignment will be at-grade and generally follow the existing Southwest Transitway to Baseline Station. The alignment will pass through a junction at Pinecrest, and continue along the creek corridor through a rebuilt Iris Station, and into the previously constructed underground tunnel structure south of Baseline Road, where it will terminate at Baseline Station. The existing Transitway along the Pinecrest Creek Corridor will be decommissioned, the asphalt road surface removed and converted to electric LRT as part of the extension of the Confederation Line. Bus ramps from the Southwest Transitway up to Highway 417 will also be eliminated and the area restored to a natural landscape that will be designed to contribute to storm water management improvements.



Figure 16: Alignment from West Portal to Baseline Station

Lincoln Fields Station

The existing Transitway station at Lincoln Fields is away from the nearby public roads and is served by pathways and pedestrian bridges. The station consists of BRT platforms adjacent and parallel to the Sir John A. Macdonald Parkway and local bus platforms running east-west adjacent to the north side of Carling Avenue.

The LRT station at Lincoln Fields will be constructed south of the existing BRT station underneath the existing Carling Avenue Bridge over the Parkway. This compact station design will have a centre platform configuration that allows for direct pedestrian access from street level on Carling Avenue to the LRT platforms below.

Lincoln Fields Station will act as a significant transfer station to accommodate direct transfer from on-street buses to LRT below (Carling is designated as a Transit Priority Corridor in the 2013 Transportation Master Plan Affordable Network).

Other stations features include:

- Improved connections to adjacent neighbourhoods and pathways in the Pinecrest Creek Corridor;
- Decommissioning of significant portions of existing Transitway infrastructure; and,
- Maintaining of existing passenger pick-up and drop-off area to the northeast of the station and the OC Transpo retail opportunities.



Figure 17: Plan view illustration of Lincoln Fields Station



Figure 18: Bird's eye view illustration of Lincoln Fields Station under Carling Avenue looking southwest.

Pinecrest Junction

The Pinecrest LRT junction will be located immediately south of Lincoln Fields Station and is the point at which trains running to/from the east to Tunney's Pasture Station will join/split with tracks running south to Baseline Station and tracks running west to Bayshore Station. To support high frequency train operations (expected to be ultimately in the range of 1.5 minutes on the common section, or 3 minutes on each branch) a grade-separated rail junction is required to provide for safe and reliable train operations through the junction, avoiding the need for trains to wait for conflicting movements to clear the junction before proceeding.

To create the junction, the tracks to and from Bayshore will separate at a switch from the tracks to Baseline. The southbound track to Baseline Station will then rise up on a single track bridge and cross over the east bound track originating from Bayshore and the Westbound to Bayshore before returning to grade where it will be parallel to the northbound track in the Pinecrest Creek corridor from Baseline.

While the design permits staging with potential construction of an at-grade rail junction accommodated in the interim, the potential disruption to LRT service and the impacts to landscape of the Pinecrest Creek Corridor to implement the flyover junction, while maintaining LRT service, is potentially significant. For these reasons, a temporary at-grade rail junction is not being recommended.

Pinecrest Creek Corridor

The existing Transitway and future LRT runs through the Pinecrest Creek Corridor on NCC lands. Work with the NCC to address potential areas of concern with respect to construction and operation through the Pinecrest Creek Corridor remains ongoing and the outcomes can be summarised under the following three key areas of interest: pathway connectivity; visual impacts and landscape quality, and creek environmental quality and storm water management.

Pathway Connectivity

- The continuity of existing Capital Pathway in the corridor and pathway links to communities will be maintained. Further work with NCC to refine future pathways will ensure they are easy to follow and connect to the Capital Pathway Network and near-by community destinations.
- To create sufficient clearance over the junction overpass, the Sackville Avenue multi-use pathway bridge over the present day Transitway /future LRT route will have to be relocated. The relocated bridge will continue to serve the same destination such as the high school and other community destinations.
- The existing westbound on-ramp to Highway 417 will be decommissioned (including the at-grade pathway crossing).
- The continuity of the Capital Pathway along the creek will be maintained since the extension to Bayshore will bridge over the creek and the pathway.
- The planned Iris Street bridge structure is designed to serve many modes and would maintain the continuity of community cycling on Iris Street as well as the Capital Pathway and community pathway links along the creek valley.
- The at-grade pathway crossing of the Transitway just north of Baseline Avenue will have to be closed and connectivity between community destinations, including Baseline Station and Algonquin College, and the Capital Pathway, can be maintained in the creek corridor by an extension of the pathway south, along the east side of the LRT, under the Baseline overpass to Navaho Drive.

Visual Impact and Landscape Quality

 Landscaping elements and visual impacts will continue to be assessed in cooperation with the NCC, with berms and vegetation strategically located to reduce the visual presence of elements such as the Pinecrest Junction and Iris Street Station and bridge.

- Ecological design principles will be used to restore the creek corridor landscape, including naturalistic landscape forms, vegetation groupings and native plant materials.
- The NCC is reviewing its Parkway Policy and exploring opportunities to enhance the park landscape character of the parkway corridor, including opportunities to create a renewed "gateway" to the parkway by reorganising the intersection of the Sir John A Macdonald Parkway route with the streets of the urban area. The functional design for the LRT has flexibility and opportunity to coordinate and be compatible with options that may be developed by the NCC as they continue to explore this aspect of capital planning and design.

Creek Environmental Quality and Storm Water Management

For many years Pinecrest Creek has been showing indications of environmental stress. Incremental modifications to the creek and valley, upstream urban development, and major pipe and transportation infrastructure have contributed to a deteriorated creek corridor. As part of the construction of the Western LRT, there are many opportunities to implement recommendations in existing City and NCC studies for the Pinecrest Creek. The environmental assessment will identify a range of opportunities to address storm water management issues and implement environmental design measures to address water quality and quantity at the detail design stage.

Among the recommendations in these environmental reports, a number of measures can be implemented in concert with LRT design and construction to improve environmental quality of the creek corridor and create storm water storage and detention capacity. They include:

- Creating additional natural creek channels by relocating the major pipe inlet, shortening the piped segment, and "daylighting" more creek with naturalised banks;
- Restoring creek valley lands by re-grading disturbed and open landscape lands to create a new food plain;
- Creating spillways and other measures to diffuse storm flow energies and interim storm water storage and detention capacity; and,
- Following environmental engineering best practices to restore naturalised creek banks.

Addressing the impacts of major storm events that sweep down the creek valley will require specific measures. The Pinecrest Creek is entombed in pipes and storm sewers from Carling Avenue north to the Ottawa River. The existing pipes do not have the capacity to handle a major 100-year storm event. This causes the back up of flood

waters (including onto the Parkway and Transitway routes) and damage to the creek banks and valley.

An important objective is to have the LRT operate during a 100-year storm event. Therefore the LRT track and tunnel portals must be protected from the flood waters. Preliminary solutions, that can be refined at the detail design stage, include:

- Continuing to use the Parkway roadway as part of an overland flow corridor to the Ottawa River;
- Protecting the LRT tracks by elevating them above the flood level or by creating a flood wall barrier or a combination of the two; and,
- Ensuring the opening of the west tunnel portal would be above the 100-year flood level.

The City is initiating a study to address environmental assessment requirements for a proposed retrofit storm water management pond to be located on NCC property at the northeast corner of Baseline Road and Woodroffe Avenue. The study will also include an assessment of the cumulative impacts on Pinecrest Creek of the retrofit pond and a number of other City projects and will recommend mitigating measures. With an anticipated completion date of late 2016, the study will not be completed in time to inform the environmental assessment for the Western LRT. However, the study scope will include the assessment of, and recommended measures, to mitigate the cumulative impacts of all anticipated City projects, including the Western LRT. Should the study identify additional mitigating measures beyond those identified in the Western LRT EA documentation, such measures can be incorporated at a later design stage in coordination with the City's work with the NCC.



Figure 19: Plan noting landscape improvements along Pinecrest Creek between Lincoln Fields Station and Hwy 417



Figure 20: Plan noting landscape improvements along Pinecrest Creek between Hwy 417 and Baseline Road

Queensway Station Decommissioning

Queensway Station is an existing station on the Southwest Transitway, located where the Southwest Transitway crosses under Highway 417. It is a two level station, with Transitway services on the lower level and the cross-town bus service, such as route 101, on the upper level. Limits in track curve design and geometry, the challenge to provide a long straight segment for the LRT platforms, as well as the proximity to Iris Station (approximately 380 metres away) mean that the lower level platforms at Queensway Station will be decommissioned as part of this project. The upper level bus platforms will be retained with existing elevators and stairs providing access from the creek side pathways up to the Queensway bus platforms and permitting pedestrians to use them to cross the LRT corridor at this location. Although Queensway Station would be closed, the LRT Iris Station on the extension to Baseline and the new Queensview Station on the extension to Bayshore will be located to continue to provide LRT service to the local communities.



Figure 21: A 600 metre circle around the Lincoln Fields, Queensview and Iris LRT stations illustrates the community areas served within a reasonable walking distance from a future LRT station.

Iris Station

Iris Station is an existing Transitway station with basic platforms and shelters to the south (southbound) and north (northbound) of Iris Street between Parkway Drive and Adirondak Drive. The Southwest Transitway currently crosses Iris Street at grade. At-grade intersections with LRT service will be eliminated as part of the Confederation Line extensions. The station will be completely replaced in conjunction with a new Iris Street overpass as part of the plan to provide grade separation between the LRT and Iris Street. The station and bridge design makes use of the natural terrain and elevations, creating a low impact design that fits into the natural and community context. The bridge design features make use of a "half-up/half-down" configuration with open air platforms in the creek valley slightly below street level and a new Iris Street bridge passing over the LRT. Ramps, following the natural slopes of the creek valley, will provide access the station rather than elevators to minimize the station's visual impact, as well as construction and on-going operating costs.

Other features include:

- Side platform configuration, with station entrances on both sides of the LRT alignment, connected to Iris Street via ramps and stairs;
- Reduced overall footprint for the bridge design, with no property acquisition requirements;
- Bridge structure that will serve many modes and maintain pedestrian and cycling continuity along Iris Street, and provide access to the Capital Pathway, and community links along the creek valley;
- Better definition of existing informal passenger pick-up and drop-off areas along Iris Street;
- Provision of local bus interchange with LRT at on-street stops at the east and west ends of the bridge; and,
- Re-alignment and relocation of Pinecrest Creek to create a longer length of open and naturalized creek channel that will flow along the east side of the LRT corridor before passing under the LRT track. The creek is currently entombed in a long pipe under where Iris Street and the Transitway intersect.



Figure 22: Plan view illustration of Iris Street bridge and LRT Station



Figure 23: Perspective view illustration of Iris Street bridge and LRT Station looking northwest

Baseline Station

Baseline Station is the southwest terminus of Stage 2's Confederation Line West extension and is adjacent to the Algonquin College Campus in the Centrepointe

neighbourhood. As the northern terminus of the Southwest Transitway from Barrhaven, the station will operate as a major BRT/LRT transfer terminus.

A central LRT platform will be located below-grade in the existing tunnel structure between Navaho Drive and College Avenue, underneath the open plaza situated immediately west of the Algonquin College Centre for Construction Excellence Building. An upper level bus terminal for the Southwest Transitway BRT/LRT transfer terminus will be constructed on the south side of College Avenue, and will provide access to the lower level LRT platforms via stairs, escalators and elevators.

Based on the Rapid Transit Network identified in the City's 2008 Transportation Master Plan (TMP), the existing below-grade tunnel structure was designed and constructed to ultimately incorporate both BRT and LRT operations. An early outcome of the Western LRT EA was removal of the need to accommodate BRT operations in the below-grade tunnel in the long term. However, given that the then expected timeframe to extend LRT to Baseline Station was far off in the future, an interim plan to operate buses within the tunnel was developed for consideration, thereby taking advantage of the City's recent investment in its construction. However, with this accelerated Stage 2 LRT program any interim bus solution was recognized to have had a limited lifespan, and was therefore not advanced beyond the functional planning stage.

In order to facilitate the construction of the Baseline Station Transit Tunnel in 2009, the existing Transitway station was relocated westerly to a temporary location where it was expected to stay until such time as the LRT was extended to Baseline. Accordingly, the existing temporary Transitway platforms can continue to be used during the construction of the LRT and Southwest Transitway bus terminus. This would allow for smooth staging of the LRT station and the Transitway bus terminal while reducing the potential disruption to existing service. To improve service and enhance the existing temporary transit station and platforms, OC Transpo is evaluating measures such as mid-block pedestrian crossings, improved shelters and client service amenities.

Other key station features include:

- A new pathway connection along the east side of the LRT alignment north of Navaho Drive and under the Baseline Road overpass that will provide access between open spaces and mixed use development areas.
- Public washroom facilities.
- Creation of a new bus loop to facilitate bus connections to LRT. Buses will enter the bus loop from College Avenue and move in a clockwise direction at grade

level. From this loop, passengers can take the stairs/escalators/elevators to the train platforms located below-grade in the Baseline Station tunnel.

- As part of a much larger urban intensification area, Baseline Station will support the Mixed-Use Centre designation and opportunities to create Transit-Oriented Development.
- The underground structure has the capacity to not only serve as an LRT station but as a vehicle storage and staging area. This could allow for storage of several LRT vehicles in a covered facility so they can be ready for early service start up during the morning and afternoon peak periods.



Figure 24: Plan view illustration Baseline LRT Station



Figure 25: Perspective view illustration of Baseline LRT Station looking northeast showing the plaza pavilion and Transitway bus terminal, as well as potential land development parcels based on area development plans

Alignment: Pinecrest Junction to Bayshore Station

The LRT alignment follows the approved rapid transit route in the 1996 West Transitway Extension Environmental Assessment (that was reviewed and reconfirmed in 2012). Many years ago, several residential properties were purchased near the intersection of Connaught Avenue and Hanlon Avenue to implement this approved route. No further acquisitions are anticipated in this residential area.

Immediately west of the rail junction described in the section above, the LRT alignment crosses over Pinecrest Creek (and the NCC's Capital Pathway that parallels it) on new bridge structures. The alignment skirts the existing Hanlon sports field as it starts to descend and enters into a new tunnel portal as it leaves the Pinecrest Creek Corridor. The LRT passes approximately 3 to 4 metres below grade at Connaught Avenue in a tunnel that is approximately 300 metres long and emerges south of the existing OC Transpo Queensview bus garage before rising up at a new Queensview Station. The alignment then runs parallel to the north side of Highway 417 where it slowly descends to pass under Pinecrest Road and the Highway 417 ramps. West of Pinecrest Road will be a relocated transit station and the alignment will make use of the existing West Transitway corridor, which will be converted to permit LRT operations between Pinecrest Station and Bayshore Station. Modifications to the intersection of the westbound highway on-ramps with Pinecrest Road will be required to accommodate the new station location and to facilitate bus stops on Pinecrest Road that provide good connections for riders down to the LRT station platforms below.



Figure 26: Alignment from Connaught Ave to Bayshore Station
Queensview Station

Queensview Station is a new LRT station to serve adjacent communities and businesses on the north and south sides of Highway 417. The station will include an open-air centre platform with access provided at grade level via new pathway connections to Queensview Drive and Connaught Avenue.

Other features of this station include:

- A new multi-use pathway bridge crossing of Highway 417 to Baxter Road will provide access to the LRT station and between community and business destinations;
- Provision of access ramps, stairs and elevators from the station platform level to the pathway overpass; and,
- Provision of passenger pick-up and drop-off along Queensview Drive and Baxter Road.

Some narrow widths of lands will be required from adjacent commercial properties along Queensview Drive that back onto Highway 417 to accommodate the LRT alignment, the station area and pathways. Property requirements in this area have been identified in previous environmental assessment studies (1996 West Transitway Extension Environmental Assessment: Woodroffe to Bayshore). On the south side, the land requirements for the pathway overpass and access along Baxter Road can be accommodated within the right-of-way.



Figure 27: Plan view illustration of Queensview Station showing pathway bridge over Highway 417 to Baxter Road



Figure 28: Bird's eye view illustration of Queensview Station looking southwest showing pathway bridge over Highway 417 to Baxter Rd.



Figure 29: Illustration of Queensview Station looking Southwest showing ramped pathway to bridge over Highway 417 and access to LRT Station

Pinecrest Station

The existing Transitway platforms will be decommissioned and a new LRT station with an open-air centre platform will be constructed in a cut below grade adjacent to Highway 417 west of Pinecrest Road. From east of the station, access will be provided via pathways from the Pinecrest Road street level sidewalks and bus stops– the east side pathway curving down and passing under Pinecrest Road along the LRT corridor. To the north and west, pathway connections directly to and from the Foster Farm community will provide access.

Other station characteristics include:

- Enhanced pedestrian and cycling connections in the boulevard along both sides of Pinecrest Road south from Dumaurier Avenue. and Queensview Drive will contribute to good connections to the Pinecrest Station;
- Improved pedestrian/cycling linkage over Highway 417 can be incorporated into the future replacement of the Pinecrest Road bridge when undertaken by MTO; and,
- Informal passenger pick-up and drop-off areas can be accommodated at curbside spots on Dumaurier Avenue and in a small turn around accessed from Pinecrest Road.

The City will look for opportunities to coordinate works with MTO plans for widening and renewal of Highway 417. A small area of the provincially owned highway interchange lands will be required for the LRT station and alignment facilitating potential other long term land uses adjacent to the station. During construction, there may be an opportunity to create an interim bus terminal area to serve Transitway needs. In addition, the realignment of the intersection of the westbound highway on ramps at Pinecrest will be required to facilitate bus stops on Pinecrest to provide good connections for riders to the LRT station platforms.



Figure 30: Plan view illustration of Pinecrest Station north of Hwy 417 and west of Pinecrest Road.



Figure 31: Bird's eye view illustration of Pinecrest Station looking southeast showing how it passes under north of Pinecrest Road.



Figure 32: Perspective view illustration of Pinecrest Station looking southwest showing a small station house and below grade platform.

Bayshore Station

Bayshore Station, located at the existing Bayshore Transitway Station, will be the western terminus of the Confederation Line West extension. It will also be the eastern terminus of the West Transitway, a new BRT corridor extending along Highway 417 west of Bayshore to Moodie, and operate as a major transfer point between LRT and BRT.

The existing Bayshore Station is one of the newest stations along the existing Transitway. It originally opened in 2000 and was renewed in 2009 when the West Transitway Extension (Pinecrest-Bayshore) was constructed. The station currently includes separate platform areas for local buses which begin/end service at this station and Transitway buses, which are travelling through the station.

The recommended design developed for the WLRT project re-uses much of the existing station infrastructure including buildings, platforms and paved areas and occupies generally the same land area as the existing station, contributing to significant cost savings, while providing for efficient passenger movement, connections and services. Existing Transitway roadway and platforms will be converted to accommodate LRT, while the local bus platforms will be reconfigured to serve rapid transit buses and allow for efficient and convenient cross-platform transfers. Station design and layout will be compatible with the new West Transitway Extension (Bayshore to Moodie) and will allow for future conversion to LRT. Local buses will continue to access the station via Woodridge Crescent, with direct pedestrian access to the station from this street.

The northerly station building will be expanded to accommodate a fare-paid control zone where the existing overhead pedestrian walkway from Bayshore Shopping Centre connects into the station. Based on future mall plans, the overhead walkway may also be modified.

Additional station features include:

- An improved pedestrian/cycle link to Holly Acres Road and to Woodridge Crescent;
- Public washroom facilities; and,
- A bus staging area to the west of the station to facilitate short-term staging and layover of buses.

A bus staging area will be created to the west of the station (between the bus platforms and Holly Acres Road) to facilitate short-term layover of buses, particularly in the afternoon peak period when high numbers of westbound transit riders will be transferring from the LRT to buses. A retaining wall along the north side of Highway 417 would be required to create an additional amount of level land for the recommended bus staging area.

Station design remains flexible such that it can be integrated into future development of adjacent commercial and residential lands.

Other than a small triangular piece of land internal to the station in the vicinity of the bus platforms, no additional lands beyond those previously identified as part of the West Transitway Extension EA will be required.

To accommodate the bus staging area at the west end of Bayshore Station, the gradeseparated Transitway overpass across Holly Acres Road, recommended as part of the previous West Transitway Extension (Bayshore to Moodie) EA, would be deferred. Instead, the existing at-grade Holly Acres Road/Bayshore intersection will be maintained, with modifications to permit two-way (east/west) bus traffic and to accommodate the Highway 417 westbound on-ramp from Holly Acres Road and improve cycling and pedestrian movements across this intersection.

It should be noted that the approved EA study for the Transitway section to the east (West Transitway Extension (Woodroffe to Bayshore)) recommended an at-grade connection at Holly Acres Road. The grade separation would only be needed when the Transitway was extended further west of Holly Acres Road towards Kanata. Given the latest review of transit service, an at-grade crossing of Holly Acres is still viable and the grade-separation solution can be deferred. This represents a modification to the existing West Transitway Extension (Holly Acres to Moodie) and will be documented in the Environmental Project Report for the Confederation Line Western Extension.

The sound attenuation walls that were identified by the Ministry of Transportation to be implemented as part of the West Transitway Extension (Holly Acres to Moodie) project to address highway noise remain part of the current project.



Figure 33: Plan view illustration of Bayshore Station showing LRT and bus platforms and reuse of existing structures



Figure 34: Bird's eye view illustration of Bayshore Station, looking northwest showing LRT and bus platforms and reuse of existing structures



Figure 35: Diagrammatic plan view of Bayshore Station showing LRT platforms, bus platforms, bus staging area and Holly Acres Road intersection to West Transitway Extension

Potential Construction Segments and Detours

Construction of the Confederation Line West Extension is likely to follow a similar process as the current Confederation Line, with a private sector partner responsible for the final design, construction, and maintenance of the project, and OC Transpo operating the service. The "Mobility Impacts and Construction Staging" section of the main report contains a discussion of the approaches and considerations that will inform the construction of the entire Stage 2 LRT Project. The following illustrations depict some of the preliminary work to identify segments that, for the purpose of construction,

may assist in work to minimize any impact on rapid transit service, local bus service, area traffic and properties, as well as reduce the severity and duration of detours.

Segment 1: Dominion to south of Lincoln Fields

- Can be constructed without major impacts to existing rapid transit service
- Construction will require localized detours for both transit service and general traffic
- Pathway connectivity maintained for pedestrians and cyclists



Figure 36: Segment 1 - Dominion to south of Lincoln Fields

Segment 2: Tunney's Pasture to Dominion

Affects Transitway Service

- Transitway closed east of Dominion Station all services rerouted and course to be determined
- Local bus service along Richmond/Scott

Some local impacts along route

- More immediate and temporary impacts associated with station construction
- Some local property access may be restricted or altered but emergency access will always be maintained

Supplemental transit service opportunities include:

- Carling/Woodroffe/Richmond/Churchill/Scott
- Sir John A Macdonald Parkway
- Carling/Holland

Other transit diversions could include:

- Bus rapid transit (BRT) lanes on Baseline Road
- Use of Highway 417 for peak period bus service
- Buses from Barrhaven via Riverside South to the Trillium Line and Southeast Transitway



Figure 37: Tunney's Pasture to Dominion

Segment 3: Pinecrest to Bayshore

LRT open to Lincoln Fields

Possible temporary bus terminal expansion could accommodate transfers

Affects Transitway service

 West Transitway between Pinecrest Station and Bayshore closed to permit conversion to LRT

Transitway service diversions could include:

• Highway 417/Pinecrest/Richmond/Carling

Some local construction impacts along route including

- Temporary detours for traffic, transit, cyclist and pedestrians during construction
- Alterations to highway ramps from Pinecrest to Highway 417 ramps and construction of new road structures over LRT will impact all modes



Figure 38: Segment 3 – Pinecrest to Bayshore

Segment 4: Lincoln Fields to Baseline

LRT open to Lincoln Fields

• Possible temporary bus terminal expansion could accommodate transfers

Affects Transitway Service

• Southwest Transitway between Lincoln Fields and Baseline Stations closed to permit conversion to LRT

Transitway diversions could include:

- Woodroffe/Carling
- Buses from Barrhaven via Riverside South to the Trillium Line and Southeast Transitway
- Buses to/from Kanata and Bayshore continue to divert via Highway 417/Pinecrest/Carling

Some local impacts along route

- Closure of Iris Street to construct new bridge will require temporary detours for all travel modes.
- Pathways within Pinecrest Creek corridor will need to be closed or diverted to permit construction of new structures



Figure 39: Segment 4 – Lincoln Fields to Baseline

Segment 5: Pinecrest Creek to Pinecrest Road

- Can start anytime
- Can finish any time before opening

No impact to transit service

Some local impacts along route

- Tunnel under Connaught Avenue will require temporary roadway detours but access will always be maintained
- Diversion of Capital Pathway around new LRT alignment
- More immediate and temporary impacts associated with station construction



Figure 40: Segment 5 – Pinecrest Creek to Pinecrest Road

Summary of Consultation and Notification:

The study is being undertaken in accordance with the transit project assessment process (TPAP) as prescribed in Ontario Regulation 231/08, Transit Projects. It is a two phase process that includes a Project Planning Phase and a Project Environmental Assessment Phase. The study is nearing the completion of the first phase and features a community consultation program in the preparation of the selection of the preferred transit design. In general, the consultation program is designed to include interested persons such as adjacent property owners, regulatory agencies, municipal representatives, aboriginal communities and members of the public.

Since the Council meeting on 17 July 2013, where the the Richmond Underground corridor was approved, consultation has continued on the Western Extension of the Confederation Line between Tunney's Pasture and Baseline Stations, as well as on the additional extension from Lincoln Fields to Bayshore Station.

Western Extension (Lincoln Fields to Bayshore); Study Initiation Consultation, 19 June 2014

When this segment was added to the existing Planning and Environmental Assessment Study for the Western LRT, consultation sessions were held to initiate the study. Agency, Business and Public Consultation Group meetings preceded the initial Open House for this segment on 19 June 2015 at the Foster Farm Community Centre. 23 people signed the registry at the open house.

The following is a summary of the comments:

- Footbridge over Highway 417 is very important to success of LRT project, and should be directly connected to Queensview Station, and should provide linkages to residential areas south of the Queensway;
- Seek opportunities to improve accessibility of pedestrians and cyclists to stations;
- Include area from Bayshore Station to Moodie Drive into study area;
- Make the tunnel in the vicinity of Connaught Ave as long as possible to have minimal impact on residents of Queensway Terrace North;
- Minimize disruption to neighbourhood during construction, and operating trains should not be felt inside homes;
- Address impact of greater number of transfers at Bayshore and possible need to increase loading bays; and,
- Address interim bus travel from the Sir John A. Macdonald Parkway to west Ottawa, while LRT is being built.

Public Open House notification included: announcements in all the EMC community newspapers and in LeDroit and on the City web pages; e-mailed letters to identified First Nations groups; a flyer drop to residents and business abutting the corridor, as well as e-notices forwarded by the community associations.

Joint announcement by the NCC and City of Ottawa regarding the 100-Day Working Group recommended solution,6 March 2015

On 6 March 2015, the City of Ottawa and the NCC hosted a public announcement on the outcomes and recommendations following the 100-Day Working Group review.

Communications in support of the 6 March 2015 joint announcement by the NCC and City of Ottawa regarding the 100-Day Working Group preferred solution included:

- Updates to both the NCC and City web pages with documentation from the 100-Day Working Group, including a Memorandum of Understanding.
- E-mails to directly affected landowners in the vicinity of Cleary and Dominion Stations; Community Association in the study area and key provincial and federal contacts selected from the Confederation Line Stage 1 process.
- Small group meetings with community associations and interest groups, directly affected private and institutional landowners, and individuals invited by the Ward

Councillors where elected official on the100-day Working Group, City senior management and the Ward Councillors attended.

Public Open House on the 100-Day Working Group preferred solution, 30 March 2015

Following the joint announcement between the City of Ottawa and the National Capital Commission's (NCC) 100-Day Working Group, an Open House was held on 30 March 2015 in Jean Pigott Place at Ottawa City Hall to provide the public the opportunity review and provide feedback on the proposed alignment between Dominion and Cleary Stations. The open house included display panels, a presentation and a question and answer session. 210 people signed the registry and Council Chambers was full. City representative from the 100-Day Working Group and senior staff from the NCC (Stephen Willis) and the City (Nancy Schepers) and the study team were available to answer questions.

A common response provided on the comment sheets and follow-up e-mails was one of support for the compromise on the alignment and burying a portion of the LRT. Other responses included:

- Support for the plan that was put forward;
- Concerns for adverse impacts (noise, vibration, lighting, construction) of Cleary station on the Unitarian Church, Unitarian House and the River Parkway Children's Centre;
- Bury more or all of the remaining exposed tracks at Dominion Station;
- Concerns over capacity to handle pedestrians, motorists and passenger drop-off at Cleary Station;
- Consider Rochester Park as a station instead of Dominion Station;
- Lack of support for the location/design/requirement of Dominion and Cleary Station;
- Concerns in the vicinity of Dominion Station: traffic, passenger drop-offs, inadequate sidewalks; and,
- Support for and desire to see improvements to pathways along the south side of John A. MacDonald Parkway.

28 comment sheets were prepared at the open house and a similar number correspondences were received by e-mail and post afterwards. While concerns still exist over station location, design, and impact on their surroundings, the number of comment sheets have declined significantly compared to the June 2013 Open House

Notification for the Public Open House on the 100-Day Solution; 30 March 2015; Ottawa City Hall included:

- Advertisements in all the EMC community newspapers and in LeDroit;
- Announcement on the City web page;
- E-mail letters to identified First Nations representatives (4 groups);
- E-mail notification to Agency, business, and public consultation groups;
- Over 4,100 flyers dropped to the door of residences and business in the vicinity of the study area;
- E-newsletter to over 1000 subscribers (770 English and almost 400 French)
- Public Service Announcements (PSA); and,
- Open House display boards were posted to the City web pages after the event.

On-going consultation with the National Capital Commission (NCC)

Throughout the study, consultation and communications with the National Capital Commission (NCC) has been an on-going component of the consultation process. Since July 2013 consultation has continued, including:

- 22 January 2014 Senior City staff provided an update on the Western LRT Study to the NCC Board of Directors;
- 22 April 2015 the NCC Board of Directors approved the NCC-City of Ottawa Memorandum of Understanding for the Use of the Sir John A. Macdonald Parkway for the Western Expansion of Light Rail;
- 23 April 2015 the 100-Day Working Group met and was briefed on the progress in the planning and environmental assessment and the functional design for the Pinecrest Creek Corridor; and,
- Between February 2014 and April 2015 there have been 10 staff level City-NCC meetings and work sessions addressing various detailed aspects of the planning and environmental assessment study and the recommended plan.

Confederation Line West LRT Extension Study from Tunney's Pasture to Baseline and Bayshore Stations Public Open House, 29 April 2015

On 29 April 2015, a final Open House was held in Jean Pigott Hall, Ottawa City Hall to allow the public to review and provide feedback on the recommendations for the Confederation Line West LRT Extension study from Tunney's Pasture to Baseline and Bayshore Stations. The open house included display panels, a presentation and a question and answer session. Agency, Business and Public Consultation Group meetings preceded this final open house. A total of 85 people signed in over the course of the evening. 11 questionnaires were completed at the open house and five e-mails were received afterwards. The most common response was one of support for the plan being put forward and general commentary on station design and implementation. While

concerns still exist over station location, design, and impact on the surrounding community, the number of comment sheets have declined significantly. The following are the other most frequently discussed issues or concerns in the comment-questionnaires:

- Concern over station design and impacts on immediate neighbourhood and properties;
- Support the plan that was put forward;
- Request that direct and uninterrupted multi-use pathways be provided;
- Enjoyed the style of the consultation and presentation;

Notification of the Open House included:

- Advertisements in all the EMC community newspapers and in LeDroit;
- Notice on the City of Ottawa's study consultation web pages;
- E-newsletter (to over 1000 subscribers);
- Web postings, e-mails or "Tweets" by community associations and local area Councillors;
- E-mail notification to agency, business, and public consultation groups;
- A Public Service Announcement (PSA); and,
- E-mail to identified First Nations representatives (4 groups).

The following First Nations groups were notified during each of the rounds of consultation.

- Algonquins of Ontario Consultation Office
- Algonquins of Pikwakangan
- Kitigan Zibi Anishinabeg First Nation
- Métis Nation of Ontario