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COMMENTS:

As requested.
FYI - Notice of Commencement Nov 28/04; CR commented Jan 5/04
- Pics 1st Round March 8, 9, 10
Ross.

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PROJECT OVERVIEW

1.0 RAIL SERVICE CONSIDERATIONS

1.1 Georgetown / Weston Subdivision Service Expansion

GO Transit commuter rail service on the Georgetown line is currently limited to 4 rush hour trains in the peak direction. To accommodate increasing transportation demand for such service in the corridor, GO Transit proposes to construct additional rail infrastructure (track, signals, switches, etc.) in the CN Rail Weston Subdivision corridor and run additional trains in the peak periods, as well as introducing trains in the off-peak periods throughout the day. This additional rail infrastructure is also intended to provide sufficient capacity to accommodate the proposed Union-Pearson Air Rail Link Project.

1.2 Union - Pearson Air Rail Link

The Union-Pearson Air Rail Link is a separate associated project that is not part of the GO Transit Weston Subdivision Service Expansion, but will operate on the CN Rail Weston Subdivision. It comprises two major elements:

1) Design and construction of a new rail Spur Line between the Canadian National Railway (CN Rail) Weston Subdivision line and Toronto's international airport; and,

2) Operation of a new rail service (independent of GO Transit) on the aforementioned Spur Line and the CN Rail Weston Subdivision line between the international airport and Union Station that will make it an attractive alternative means of transportation between these two destinations, vis-à-vis the use of existing road corridors.

2.0 LOCATION AND MAJOR PROJECT ELEMENTS

The projects are centrally located in the Greater Toronto Area (GTA) of Ontario and are referred to as:

- the **Georgetown / Weston Subdivision**, since consideration is limited to the 25.5 km section of the Georgetown line on the CN Rail Weston Subdivision; and

- the **Air Rail Link** from Lester B. Pearson International Airport ("the Airport" or "LBPIA") to Union Station, known as the "**Blue22**" service. The length of the proposed service corridor is approximately 24.8 km.

The accompanying Key Map illustrates the location of the two project elements in the Greater Toronto Area context.

2.1 Georgetown / Weston Subdivision

The required physical works for the Georgetown / Weston Subdivision project are located in the CN Rail corridor between Bathurst Street in the downtown portion of the City of Toronto and the junction between the Weston Subdivision and the CN Rail Halton Subdivision (the Halwest Junction) in the City of Mississauga to the northwest. The physical works can be constructed almost exclusively within the existing CN Rail right-of-way and would allow GO to run 40-50 trains per day in the peak and off-peak periods.

The improvements will involve various elements related to railbed, track, switches, signals, station facilities, and the West Toronto Diamond rail/rail grade separation (undertaken as a separate project). These improvements would be required for GO service whether or not the Air Rail Link project is implemented.

It is anticipated that track improvements for the Georgetown / Weston Subdivision project will essentially involve the addition of a mainline track from Union Station to the Halwest Junction near the Bramalea GO Station (intersection of Weston Subdivision and Halton Subdivision). The scope of track improvements will be finalized following completion of the current detailed corridor capacity simulation analysis being conducted by CN Rail in cooperation with GO Transit.

The major track improvement elements, from east to west, include:

- from the Union Station Rail Corridor (USRC) limits near Bathurst Street, the continuation of two tracks at the Queen Street Bridge structure, including a new bridge deck on the east side;
- a second mainline track added to the single track between St. Clair Avenue and Islington Avenue;
- relocation of a service track to the Facelle factory near Jane Street;
- from just north of King Street (in Weston) to the single track section over the Humber River, realign the existing track and add a new mainline track;
- west of this existing single track gauntlet at the Humber River, upgrade an existing service track located on the north side of the existing mainline track (from Islington Avenue to the limits of the Halton Subdivision-Bramalea Station) to mainline status and reinstate the service track on the north side of the new mainline track in this segment; and
- a new pocket track for the Malton Station, located to the north side of the new north platforms.

Between the USRC limits and the Halwest Subdivision, the following road and watercourse grade separation structures will require widening:

Roadway	Crossing Type - Requirement	Road Authority
Queen Street	Grade separation (over) - bridge deck widening	City of Toronto
Black Creek Drive	Grade separation (over) - bridge deck widening	City of Toronto
Ray Avenue	Grade separation (over) - bridge deck widening	City of Toronto
Lawrence Avenue West	Grade separation (over) - bridge deck widening	City of Toronto
Weston Road	Grade separation (over) - bridge deck widening	City of Toronto
Kipling Avenue	Grade separation (over) - bridge deck widening; pedestrian tunnel and stairs for the new Etobicoke North GO Station platform	City of Toronto
Martin Grove Road	Grade separation (over) - bridge deck widening	City of Toronto
Goreway Drive	Grade separation (over) - bridge deck widening	City of Mississauga
Torbram Road	Future grade separation - bridge deck widening	City of Mississauga

Watercourse	Crossing Type	Conservation Authority
Black Creek	High level bridge – widening as part of Black Creek Drive structure	TRCA
Humber River	High level bridge - twinning of structure	TRCA
Mimico Creek	High level bridge - new single track structure over creek	TRCA

Station improvements include a new pedestrian tunnel link between the TTC Dundas West Station and the GO Transit Bloor Station., and a centre platform (or additional side platform) and tunnel link with elevators at the GO Transit Weston, Etobicoke North and Malton stations.

2.2 Air Rail Link

The Air Rail Link service will operate, in part, in the existing CN Rail Weston Subdivision corridor between Union Station in downtown Toronto to just west of Highway 427 (21.5 km), where it will share in the use of the CN Weston Subdivision in a coordinated manner with GO Transit and CN rail operations. A new Spur Line dedicated to the Blue22 service will be constructed and operated by the Union Pearson Air Group (UPAG) as a separate project between the CN Rail Weston Subdivision line and the Airport (3.3 km). It will interface with the Terminal 1 (T1) New Station and the Airport People Mover (APM) system operated by the Greater Toronto Airport Authority (GTAA).

The Air Rail Link Blue22 service will provide direct rail service between the Airport and Union Station operating at a frequency of 3-4 trips per hour (15-20 minute headways), 20 hours per day). The trip between Union Station and the Airport is expected to take 22 minutes; hence, the service name Blue22.

In addition, with the implementation of the Blue22 rail service it may be necessary to close or grade separate the following six (6) existing level crossings within the City of Toronto (refer to Key Map):

- Strachan Avenue (City of Toronto)
- Denison Road East (Weston area, former City of North York)
- John Street (Weston area, former City of North York)
- King Street (Weston area, former City of North York)
- Church Street (Weston area, former City of North York)
- Carlingview Drive (former City of Etobicoke)

The need for grade separation or closure will be assessed through evaluation of the rail-exposure index (exposure of road to rail traffic); impacts to traffic operations on local roads; maintenance of emergency services; and community connectivity. The approach to the treatment of crossings (e.g., closure, road/rail grade separation, pedestrian crossing only) that must be modified will include consultation with affected municipalities, agencies and public stakeholders.

The proposed new Spur Line between the CN Rail Weston Subdivision line and the Airport will be an elevated structure with average spans of 30 m and an average guideway height of approximately 15 m. The Spur Line will be a single-track guideway, except at the T1 New Station, where it will be dual track in the station. The Spur Line will cross the following municipal roads that would be retained in their current configuration, except as noted.

Roadway	Crossing Type	Road Authority
Goreway Drive	Grade separation (over)	City of Mississauga
Zahavy Way	Grade separation (over)	City of Mississauga
New Access Road	Grade separation (over)	GTAA
Viscount Road	Grade separation (over)	GTAA
Airport Road	Grade separation (over)	Region of Peel
Airport Road Access Ramps	Grade separation (over)	GTAA
Highway 409/427 Ramps	Grade separation (over)	GTAA

The Spur Line also has the potential to affect the following utilities:

- Region of Peel – trunk watermains and sanitary sewers;
- City of Mississauga – storm/sanitary sewers, water, hydro, IT cable;
- GTAA/MTO – hydro;
- GTAA/MTO/CNN – communications, signals;
- Rogers/AT&T – cable; and
- Bell – cable, aerial.

3.0 RELATIONSHIP OF PROJECTS

3.1 Georgetown / Weston Subdivision and Air Rail Link

Within the CN Rail corridor, the Air Rail Link service will use track and other rail infrastructure constructed as part of the GO Transit Georgetown / Weston Subdivision project and is, therefore, dependent upon this project component. Further, in relation to cumulative effects, because of shared use of the existing rail corridor, the Air Rail Link undertaking will include/account for, most immediately, planned improvements in the corridor by GO Transit to enhance the Georgetown commuter rail service.

Potential impacts associated with future planned improvements to the GO Transit Milton and Bradford commuter rail services will be addressed since they will also use the CN Weston Subdivision . Although the Air Rail Link service is not dependent upon any additional infrastructure improvements associated with these future GO service expansions, it will operate in the same corridor south of the West Toronto Diamond. In addition, CN Rail and CP Rail freight and VIA Rail operations will be included in the assessment of cumulative effects due to the shared use of the rail corridor and potential impacts to similar adjacent environmentally sensitive uses/receivers.

3.2 West Toronto Diamond Rail/Rail Grade Separation

It should be noted that GO Transit is also conducting an EA for the Rail/Rail Grade Separation of the West Toronto Diamond (WTD) on the segment of the CN Weston Subdivision between St. Clair Avenue and Dupont Street. The WTD project is a stand-alone undertaking being implemented to remove conflicts with CP Rail freight and improve GO Transit's on-time service required to meet travel demand from the growing Brampton/Bramalea area to the northwest. The EA for the WTD project under the Ontario *Environmental Assessment Act* is being conducted as a Group B undertaking in accordance with GO Transit's Environmental Assessment Document (2003) and has proceeded to the point where preliminary design has been completed and a public information centre was held on September 28, 2004 to present the technically preferred alternative.

3.3 Air Rail Link Spur Line

Construction of the Spur Line portion of the Air Rail Link between the CN Rail Weston Subdivision and the Airport is also dependent on the Georgetown / Weston Subdivision and West Toronto Diamond components because the Spur Line would not be built without the certainty of optimal service provided by the improvements to GO Transit infrastructure in the mainline corridor and removal of the rail/rail conflict at the WTD.

The Spur Line is required only for the Blue22 service. Neither the Georgetown / Weston Subdivision nor the West Toronto Diamond are dependent upon (require) implementation of the Air Rail Link service or the Spur Line.

KEY MAP
Study Area
N
UNION STATION
BLOOR ST.
BLOOR GO STATION
ST. CLAIR AVE. WEST
BATHURST ST.
EGLINTON AVE. WEST
LAWRENCE AVE. WEST
HIGHWAY 401
HIGHWAY 400
WESTON GO STATION
JANE ST.
HUMBER
RIVER
KIPLING AVE.
ETOBICOKE NORTH GO STATION
HIGHWAY 409
MIMICO
CREEK
HIGHWAY 427
HIGHWAY 27
HIGHWAY 427
AIR RAIL LINK
Connection
LESTER B. PEARSON INTERNATIONAL AIRPORT
HIGHWAY 401
MALTON GO STATION
AIRPORT RD.
CREEK
HIGHWAY 407
HIGHWAY 410
BRAMALEA GO STATION
ETOBICOKE