

CI-0305

# **TAB 3: BUS INFRASTRUCTURE**

Park and Ride and Car Pool Lots

# **OVERVIEW**

Park & Ride lots are intermodal transfer facilities. They provide a location for travelers to transfer between the auto mode and transit or between the single occupant vehicle (SOV) and other higher occupancy vehicle (HOV or carpool) modes. Other modes potentially supported by a park-and-ride facility can include: pedestrian, bicycle, paratransit, carpool and vanpool, intercity bus transit, airport service, intercity rail, and other modes, based on the location, surrounding community and opportunities available.

Park & Ride Lots are typically on MTO property and operated by GO Transit. The lots are serviced by GO transit and may be used by other local and regional carriers. When designing a Park & Ride Lot GO standards will govern, along with the consideration of any higher third party standards or requirements for enforcement.

Carpool Lots are owned by the regions or MTO and may be serviced by GO Transit and other transit agencies. When designing a Carpool Lot MTO standards govern, with consideration to GO standards and requirements such as lighting levels.

Each Park & Ride Lot shall be designed to best suit the particular site, and to maximize the number of parking spaces within the available area.

Typical site components and features for those facilities are:

- > Site Access: Bus access and parking access
- > Bus loop
- > Passenger platform
- > Heated shelter
- > Vehicle parking lot, pavement markings
- > Kiss & Ride
- > Static signage, pylon sign, information display case, trail blazing and temporary signs
- > Electronic signage
- > Fences and railings
- > Landscaping
- > Bicycle shelter or rack



# TAB 3: BUS INFRASTRUCTURE

CI-0305 Park and Ride and Car Pool Lots

- Pay phone
  Fare Equipment if required
- > Public art if required
- > Bear proof waste containers required in rural locations

# **BASIS OF CRITERIA**

Various Park & Ride may have to accommodate local transit or other carriers, which may have their own specific design requirements.

The bus access and bus loop shall be designed to meet movement and turning radius performance requirements and ensure safe and smooth vehicle movements with minimal restrictions.

# **DESIGN REQUIREMENTS**

## **BUS LOOP**

The factors affecting the layout of areas for bus loops are the "turning space" and

"turning radius". Park-and-ride lots are intermodal transfer facilities and these factors are of prime importance to operating efficiency and safety.

Where the buses turn and stop the pavement shall be concrete with final texturing meeting OPSS 350 recommendations to achieve desired skid resistant surface.

Bus driving roads and lanes should be heavy asphalt as a minimum as per Tab 3 of this manual. Concrete may be considered for bus driving roads and lanes, the pavement design should be based on geotechnical information.

## VEHICLE PARKING LOT

For parking lot design guidelines and criteria including kiss and ride (if applicable) refer to Parking Infrastructure, Tab 2 of this manual.

## PASSENGER PLATFORM

Passenger platform shall be located and designed to minimize passenger path of travel and ideally to avoid passengers crossing any vehicular roads or bus loop. Platform configuration shall be dictated by the number of bus bays.

Passenger safety shall be given consideration when locating the passenger platform to minimize danger from overhead ice accumulation which may occur on hydro cables and support structures.



# CI-0305

# TAB 3: BUS INFRASTRUCTURE

Park and Ride and Car Pool Lots

Grading shall be flat and allow space for bus barrier free lift deployment. Platform shall be hard, level material that is resistant to slipping and capable of clearing during the winter months by motorized equipment.

## HEATED PASSENGER SHELTER

The passenger shelter shall be one of the GO typical heated shelters. The size of the shelter is determined by usage (number of customers).

shelter rain water leaders shall discharge into subgrade where available to avoid slippery conditions on platforms.

#### SITE SERVICES

Electrical and communications service shall be brought into separately locked compartments of a power / communications cabinet.

Payphone shall be an accessible unit with illuminated telephone directory and illuminated signage (phone symbol minimum), located in proximity to the bus stop/shelter.

#### **ILLUMINATION**

Refer to Design Requirements Manual – Tab 7 – Electrical.

#### COMMUNICATIONS

A telephone pedestal shall be provided by the shelter.

If requested by GO, provision shall be made for CCTV, PA systems, TVM, electronic signage and related infrastructure including ducting and handholes where applicable.

Communications equipment shall be housed in the communications compartment.

Each compartment separately locked.

Combination cabinets are to be considered, containing electrical and communication equipment but physical separation is required.

#### LANDSCAPING

Landscaping for all surfaces involves planting trees and plants, providing good quality soil and generous landscaped areas, enhancing pedestrian and cycling infrastructure, managing storm-water on-site, reducing the urban heat island effect, and using sustainable materials and technologies.

Landscaping design should reflect the following objectives:



# **TAB 3: BUS INFRASTRUCTURE**

CI-0305 Park and Ride and Car Pool Lots

- Respect the existing or planned context
- Enhance the safety and attractiveness of the public realm
- Create direct, comfortable and safe pedestrian routes
- Provide shade and high-quality landscaping
- Mitigate the urban heat island effect
- Manage storm-water quality and quantity on site
- Incorporate sustainable materials and technologies

Design details for Landscaping are part of the Tab 2 Section of this manual.

# **SIGNS**

Signs serve four primary functions:

- > Identify
- > Direct
- > Inform
- > Regulate

Design criteria for static signs include best practices and compliance with OBC (Ontario Building Code), AODA (Accessibility for Ontarians with Disabilities Act), FLSA (French Language Services Act) and corporate branding standards.

Refer to Static Signage Catalogue.

#### **BUS LOOP/PLATFORM**

For bus loop and platform guidelines and criteria refer to Bus Infrastructure, TAB 3 of this manual.

## PARKING LOT

For parking lot design guidelines and criteria refer to Parking Infrastructure, TAB 2 of this manual.

## PASSENGER WAITING SHELTER

Passenger waiting shelter shall be one of GO typical heated shelters, refer to TAB 7 of this manual.

## SERVICES

Page | 183



# TAB 3: BUS INFRASTRUCTURE

CI-0305 Park and Ride and Car Pool Lots

Existing services shall be protected as required. New services required are electrical and telephone.

## **ILLUMINATION**

Refer to Electrical section of this manual for illumination requirements in conjunction with IESNA.

## COMMUNICATIONS

A telephone line for pay telephone shall be provided.

Provision shall be made for CCTV and PA systems if required.

Communications equipment shall be housed in the communications compartment of the shelter or the electrical service cabinet. Physical separation from the electrical compartment is required. Refer to TAB 7 of this manual.



# CI-0305 TAB 3: BUS INFRASTRUCTURE Park and Ride and Car Pool Lots

## FIGURE: TYPICAL PARK AND RIDE AND CAR POOL LOT CONFIGURATION

