E.1 Station Buildings

The interior planning and design of the station building shall be integrated with the site environment to facilitate safe and convenient intermodal transfer, based on intuitive wayfinding and the customer journey. Intuitive wayfinding is based on the concept of aspect and prospect views.

Aspect can be described as a facade design that is open and welcoming on the customer approach to the station building, with clear sight lines into the station interior.

Prospect is about setting up clear sight and panoramic views from key customer journey activity points, with privileged views from the Service and Waiting areas of the station out to the Kiss N Ride and bus loop.

The customer journey, which is the way a customer circulates through GO sites, shall be the primary placement strategy used when laying out the interior programs. The customer journey can be broken down into four key types of activities:

Decision Space

Purpose: prioritizing passenger decisions, key customer orientation points Characteristics: clear sight lines, wayfinding and signage, free of visual clutter

Circulation Space

Purpose: prioritizing clear connections to program areas that are unobstructed Characteristics: unobstructed lines of movement respecting customer desire lines

Opportunity Space

Purpose: emphasis on passenger comfort and amenities Characteristics: welcoming, comforting, safe, clear sight lines

Support Space

Purpose: key point of customer interface and service Characteristics: welcoming, open, pleasant

Figure E-2: Customer Journey Key Activities

These activities are points along the customer journey and are the tools in framing the critical adjacencies within the station building between program areas. They shall be arranged to suit specific site constraints, while maintaining the appropriate adjacencies required.

Along with the concept of aspect and prospect views, the customer journey and intuitive wayfinding contribute to a holistic approach to the design of stations, making the site and station experience comfortable and easy.

The interior design shall establish visual relationships to particular site features and promote the following:

- Establish sight lines to adjacent transit modes
- Establish sight lines to key station building amenities
- Promote customer safety and comfort

- Promote natural daylighting

Key Sustainability Accommodations

- Apply passive means of reducing energy where it does not conflict with other customer service and operational design requirements
- Maximize the use of natural light coupled with photocells, motion sensors and controls to activate lighting when necessary
- Reduce energy consumption and emissions at all buildings. Use heat recovery to conserve energy for heating and cooling
- Design sites using Crime Prevention Through Environmental Design (CPTED) principles to provide natural surveillance and safe travel through the site for all. This includes safe routes for pedestrians and cyclists. Provide thermal comfort for staff and customers with protection from weather via canopies and shelters

Station Program Areas and Building Sizing

Building Type	Size "A" (large)	Size "B" (medium)	Size "C" (small)
Building Size	>500m2	300-500m2	< 300m2
Average Customer Weekday Traffic	**>8000 persons**	**2000-8000 persons**	**up to 2000 persons**
Program Area	% of Total Size	% of Total Size	% of Total Size
I. Platform Access Area	***40%***	***20%***	***30%***
Circulation			
Self-Service Area			
II. Waiting Area	***10%***	***10%***	***10%***
Dedicated Seating			
III. Service Area (1)	***5%***	***10%***	***10%***
Customer Service			
Staff Back-of-house			
Staff W/C			
IV. Public Washrooms	***10%***	***5%***	***15%***
Women W/C			
Mens W/C			
Universal W/C			
V. Retail/ Concession	***10%***	***10%***	***10%***
including storage			
VI. Ancillary	***15%***	***25%***	***25%***
Mechanical (min 45m2)			
Electrical (min 15m2)			
Communication (min 10m2)			
Maintenance Rm (min 7m2)			

Station buildings with additional facilities such as Retail, GO Staff Room with universal washroom(s), Bus Driver Room with universal washroom(s), Bus Dispatcher Room, and Transit Security Room will be in addition to the station building size determined above.

[2]Small buildings do not require multi-use washrooms. Provide two universal washrooms, which can be used by either sex.

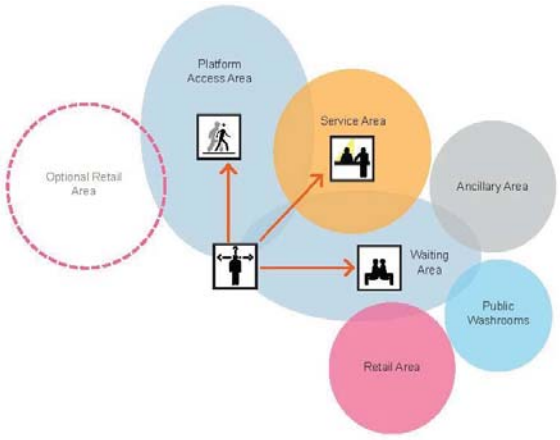

Figure E-3: Station Building Program Areas

Station Building Interior Design: Program Areas

Platform Access Area

Figure E-4: Rendering of Platform Access Area

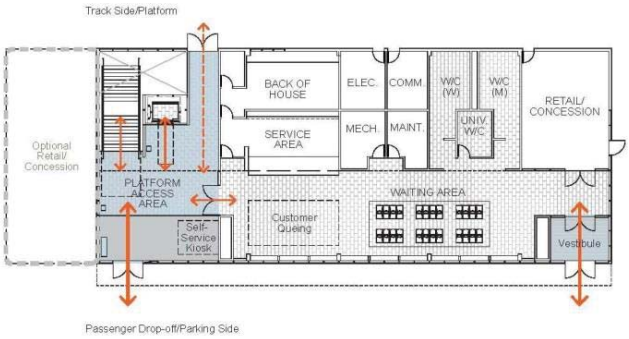

Figure E-5: Schematic of Platform Access Area

Feature Elements

- Linear light fixtures in varying lengths, suspended from the ceiling, positioned lengthwise in the direction of travel.
- Floor Finish: light grey ceramic tile
- Ceiling Finish: suspended metal pan ceiling
- Wayfinding Band placed perpendicular to direction of travel
- Self-Service Kiosk which includes fare devices, digital signage, and marketing communications
- Refer the Fixtures and Furnishings section of the DRM for details on Digital Signage.

Key Fixtures and Furnishings

- Fare devices
- Seating
- Recessed walk-off mats at all exterior doors
- Waste receptacles
- Third party advertising

Lighting Strategy

- Shall be illuminated by a downlight linear suspended LED fixtures
- Fixtures must to be suspended at a consistent height, just above the wayfinding
- Provide a mix of 1220mm long and 2440mm long fixtures suspended in a random pattern, suspended from the ceiling with stems.
- Fixtures are not to be located over stairs except at landings

Waiting Area

Figure E-5: Rendering of Waiting Area

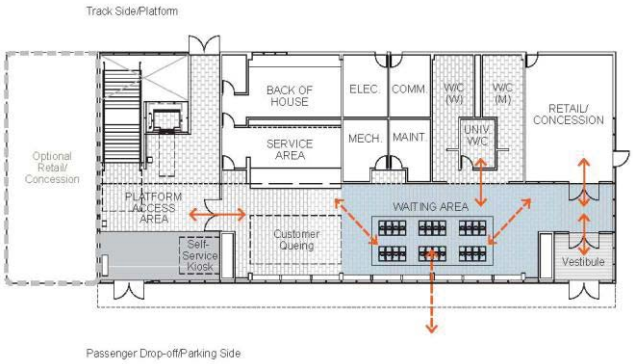

Figure E-6: Schematic of Waiting Area

Design Requirements

- Finish ceiling height shall be between 3600 to 4000 mm maximum
- Do not combine a circulation path within a seating zone
- Ensure accessibility seating requirements are met by providing a clear area designated for wheeled mobility aids (WMAs), outside of the circulation path

Feature Elements

- Linear light fixture in waiting area outside of the delineated seating zone
- Drum light fixture, suspended from coffered ceiling over the delineated seating zone
- Floor Finish: Light grey ceramic field tile; dark grey ceramic tile at dedicated seating zone
- Ceiling Finish: Suspended modular wood grille ceiling system

- Wayfinding Band placed parallel with circulation path
- Self-Service Kiosk (at stations where deemed necessary, such as hub stations)
- Refer the Fixtures and Furnishings section of the DRM for details on Digital Signage.

Other Elements: Fixtures and Furnishings

- Fare devices
- Digital signage (service information, infotainment, 3rd party advertising)
- Refer the Fixtures and Furnishings section of the DRM for details on Digital Signage.
- Static information signs
- Seating (both integrated and free standing)
- Charging stations (power receptacles with USB plug-in)
- Waste receptacles
- Recessed walk-off mats at all exterior doors
- Pay phone
- Retail (where applicable): fixtures and furnishings as per retail strategy guidelines

Lighting Strategy

- Provide linear light fixtures between the suspended modular wood grill ceiling system, outside of the delineated seating zone
- Provide a custom drum-shaped suspended light fixture over the delineated seating zone
    - The drum fixture is to be equipped with multiple light sources
- The number of drum fixtures depends on the size of the seating zone

Service Area

Figure E-7: Rendering of Service Area

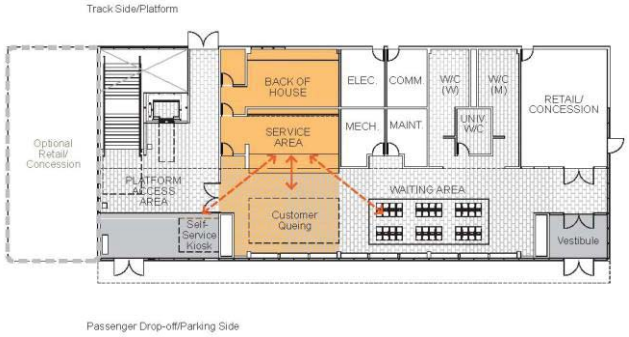

Figure E-8: Schematic of Service Area

Design Requirements

- Service Counters and Self-Service Kiosks shall be designed to be barrier-free. Queuing areas shall be wide enough for people using mobility aids including electric wheelchairs and scooters
- Minimum clear space in front of Service Counter shall be 5-7 customers per attendant, which includes barrier-free accommodation
- Minimum clear space in front of Self-Service Kiosk shall be 2-3 customers per kiosk, which includes barrier-free accommodation
- Refer GO Standard Guideline Specifications and Drawings for detailed requirements.

Feature Elements

- Service Counter

- Refer the Fixtures and Furnishings section of the DRM for details on Digital Signage.

Lighting Strategy

- Semi-recessed slot lighting system around the perimeter of the finish ceiling system to be used to create a soft front illumination on the fascia and customer side of the counter, and lengthwise along the walls of the adjacent spaces
- Adjustable recessed pot lights to be provided on the customer side in the bulkhead of the Service Counter
- Task eyeball lights provided at ceiling level on either side of the station attendant work area, with light direction concentrated at the centre of the attendant work surface, minimizing glare off desk surface
- Puck light at underside of station attendant counter for servicing with built in on/off controls
- 200mm cube pendant light above each station attendant service position to be individually programmed to indicate whether service position is open (ON), or closed (OFF)
    - This is an ambient light, not a task light. Consider placement of CCTV cameras to avoid conflict with pendant lights

Public Washrooms

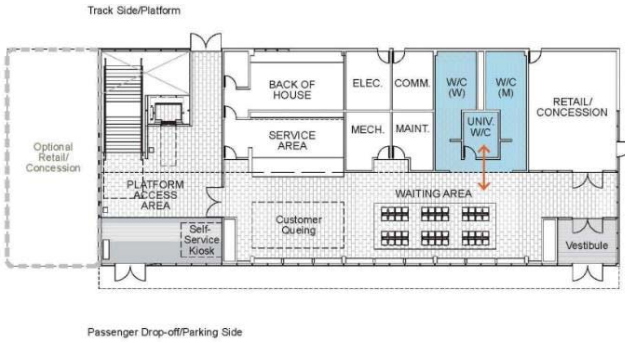

Figure E-9: Schematic of Public Washrooms

Design Requirements (In addition to all code requirements)

- Entrances into multi-use washrooms (i.e. female/male) shall be door-less
- All plumbing fixtures to be located on interior walls
- One standard infant change table/unit shall be provided in each washroom
- Floor drains shall not be in pedestrian or wheelchair paths
- The door swing into the universal washroom shall screen and partially obstruct the line of vision to the lavatory
    - It shall be equipped with a power operator
    - The door hardware shall be a lever handle passage set, with a latch operable from the interior, to display “vacant” or “occupied”
- An emergency two-way call system shall be provided and follow the same call flow as the two-way intercoms outside elevators (i.e. call directed to Station Attendant first, then Transit Safety, etc.)

Feature Elements

- Feature wall tile at Washroom entry to be different in colour from the general station wall finish
    - Use of smaller format tile with distinct patter is supported
- Refer to Materials + Finishes Performance Specifications for additional information

Other Elements: Fixtures and Furnishings

- Partitions
- Lavatories (toilets/urinals), wall hung, lever handle faucets, wrist-blade type
- Sinks, wall-hung (barrier-free)
- Tilt mirrors, stainless steel frames (barrier-free)
- Electric Hand Dryers

- Toilet Paper Dispenser, surface mounted, multi-roll vertical type, lockable, commercial grade
- Waste Receptacles, wall-mounted, stainless steel, vertical type with a capacity of 20L minimum, commercial grade
- Soap dispensers, wall-mounted, commercial grade , room deodorizers, feminine Napkin Disposal Bin, free-standing (supplied by GO)
- Coat Hooks, two: one at standard height, one at barrier-free height

Lighting Strategy

- Use linear LED lighting in the ceiling cove at back wall of washroom stalls to create a soft uniform glow in the space
- Use recessed LED fixtures for the rest of the washroom area
- Provide a perimeter ceiling cove and linear lighting along the wall within the female/male washroom stalls

Retail/Concession

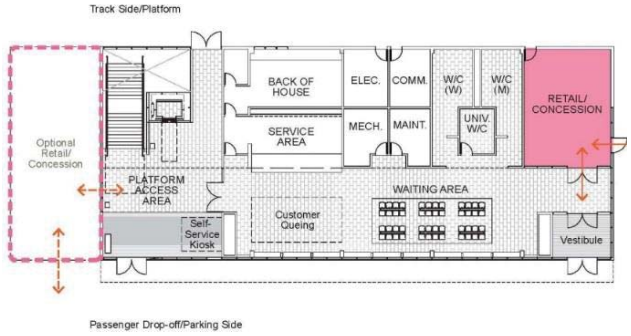

Figure E-10: Schematic of Retail/Concession

Design Requirements

- Provide Retail/Concession area to be located in close proximity to the Public Washrooms
- Provide direct access from building exterior for after-hour access, when possible
- Provide mechanical, electrical, plumbing, and communication rough-ins to accommodate retail functions
- Detailed retail typology allocations, service offerings, footprint selection, building access and mechanical/electrical service requirements can be found in the GO Standard Retail base building requirements.

Lighting Strategy

- Base building fit-out as per retail strategy guidelines

Feature Elements

- None

Other Elements: Fixtures and Furnishings

- Base building fit-out as per retail strategy guidelines

Ancillary Spaces

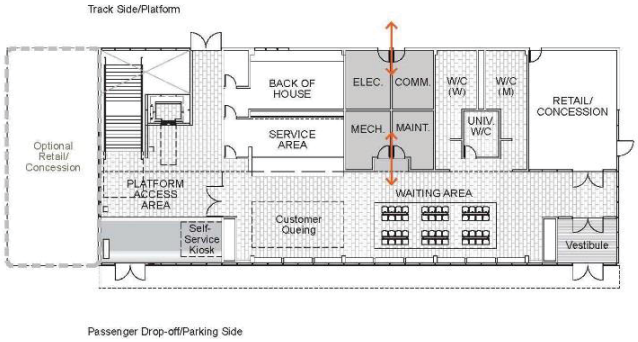

Figure E-11: Schematic of Ancillary Spaces

Design Requirements

- Ancillary area includes Maintenance Room, Mechanical Room, Electrical Room, and Communications Room
- Service structures to house boilers, garbage bins, or generators, shall be consolidated where possible to reduce the amount of structures obstructing wayfinding and sightlines on site
- Provide direct access to the Maintenance Rooms from the building interior
- Ensure the Maintenance Room is adjacent to the Public Washrooms, and no meters, water tanks, or other intrusions are placed in this room.
    - It shall be dedicated for maintenance equipment and storage only
- Ensure the Maintenance Room door is an in-swinging door. It shall be an extra wide

heavy duty hollow metal double door with a single 34” leaf and a second 12” latching section, for a total opening of 46”

- Provide a minimum of four (4) butt hinges per door

- If required, provide roof access hatch with a wall mounted ladder in the Maintenance Room for rooftop mechanical equipment access
- Provide direct access to the Electrical and Communication Rooms from building exterior for after-hour access
- Ensure spare wall space for future equipment due to additions or renovations is provided in the Electrical Room
- Ensure the Communications Room is located adjacent to Service Counter and near the Electrical Room, when possible

Lighting Strategy

- Base building fit-out
- Refer to Lighting Performance Specifications for additional information

Feature Elements

- None

Other Elements: Fixtures and Furnishings

- (Refer to Electrical and Mechanical sections of DRM for technical requirements and specifications)
- In Maintenance Room:
  - 4-6 power receptacles with 208V and 110v supply and 60-amp service.
  - Floor mounted slop sink with easy access clean out for slop sink P trap
  - Faucets and floor drains
  - Exhaust fan
  - Open shelving and mop hooks
  - Mop and broom hangers, floor sweepers
  - Four (4) staff lockers, full height with vented louvers at base
  - Metal storage cabinet, lockable
  - Desk and chair
  - Key fob access
- In Mechanical Room:
  - Power receptacles
  - Floor drains
  - Spare and additional filters, etc.
  - Storage shelves and/or cabinets

Feature Elements at Station Building

Feature Elements are key infrastructure pieces that are designed to be the same at every station–in application, form, function, and finish. The intent is that these feature elements portray a consistent presence and brand at our stations, making the customer experience intuitive, familiar, and comfortable. There are four feature elements that are intended to ensure the GO Brand and identity is strong and immediately identifiable across all applications. These are identified in the example station layout below, along with the specified ceiling material finish:

- Service Counter
- Self-Serve Kiosk
- Delineated Seating Area
- Wayfinding Band

These four feature elements can be adapted withe ease at different locations across the network as an integral part of the overall interior design language. Based on the station plan and design, the location of the feature elements may differ from the Example Station shown. The feature elements shall be not be placed based off a previous station building design, but be assessed based on the customer journey and strategically placed using the guidelines outlined in this section. The following diagrams use existing station buildings and illustrate where feature elements would be placed at different locations based on the customer

journey.

Figure E-12: Feature Elements

Feature Element: Self Service Kiosk

Figure E-13: Self Service Kiosk Rendering

Figure E-14: Info Wall in Station Waiting area Rendering

Purpose

To create a self-serve area for fare dispensing and service information, clustering essential amenities needed to use the GO service.

Requirements

The kiosk shall be designed with three distinct sections:

- Section 1: GO ticketing (fare dispensing interface)
- Section 2: GO marketing and information (static interface)
- Section 3: GO Schedules and trip planning (customer interactive interface)

Each section can be multiplied as many times as needed to meet service demands, or it can be deleted if deemed not required. It is meant to be flexible and scalable for its location and projected use. Note that Sections 1 and 3 are located at the ends to encourage “interactive” use, while Section 2 is centered between to encourage a more “static” viewing-only use, creating a buffer between the interactive interfaces.

The kiosk shall, be integrated with the architecture of the building as much as possible, creating an uncluttered and organized environment resulting in an easier and intuitive way of using the service and improved the customer experience.

The shell of the kiosk shall be white, referencing the “system” wall used at the Customer Service Counter, making it distinguishable both in brand and amenity type.

The material finish shall have a high gloss finish, be resilient, durable, and vandal resistant.

Access shall be provided from the front using flip maintenance doors, as much as possible. Where station conditions permit, access from the back is acceptable.

All Platform Access Program Areas shall be equipped with at least one Self Service Kiosk. It shall be placed just off the main circulation path. Ensure a minimum clear space for 2-3 customers in front of kiosk is provided, which includes barrier-free accommodation.

At exterior platform access points where the entrance is not enclosed, a kiosk shall be placed by the entrance just off the circulation path,

protected against the elements by a canopy or shelter.

Where deemed required, waiting areas can also be accommodated with a Self Service Kiosk, in addition to the platform access points. These additional locations shall be based on the station size, ridership demand, limited service stations, or where a Service Counter is not provided.

Refer the Fixtures and Furnishings section of the DRM for details on Digital Signage.

Feature Element: Delineated Seating Area

Purpose

To provide a comfortable delineated touchdown area for customers with added amenities such as charging stations

Requirements

Integrated seating shall be designed as an architectural element of the station, typically located along the length of a wall (not fixed in the middle of the space). It shall be provided throughout the station where designed for.

When additional seating is provided, it shall be delineated as a distinct zone, reinforced and highlighted by a darker floor tile finish and coffered ceiling above featuring a pendant drum light fixture, giving the space a more intimate, comfortable human scale. This delineated seating zone shall be within the waiting area, away from but adjacent to the circulation path, and in close proximity to GO information and retail, when these amenities are provided. The seating provided shall consist of stand-alone benches and other non-fixed furnishings.

Figure E-15: Rendering of Delineated Seating Zone

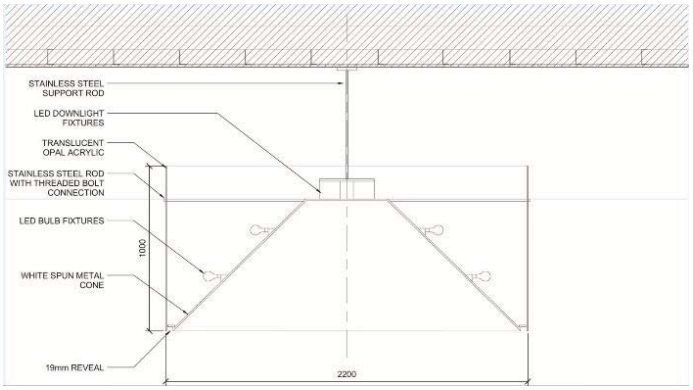

Figure E-16: Lighting Configuration of Delineated Seating Zone

Feature Element: Wayfinding Band

Purpose

To provide wayfinding information in stations, improving navigation by identifying services and amenities.

Requirements

The information on the wayfinding band shall be of program areas (such as Service Counter, Public Washrooms, etc.), excluding ancillary spaces. For information on the graphics and icons, refer to the Signage Catalogue.

The wayfinding band shall be continuous in application, extending wall to wall where it is placed. The placement of the wayfinding band shall be assessed station-by-station, working with the circulation and decisions spaces of each station. The band shall typically be seen on approach, perpendicular with the decision point

along the customer journey, informing customers where they need to go. As such, the band will not always be in the same location at every station (i.e. above the Customer Service Counter)–it shall be designed and placed according to the customer journey.

Figure E-17: Wayfinding Band

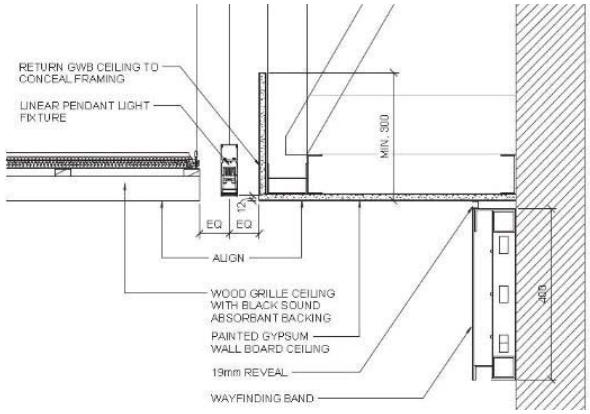

Figure E-18: Wayfinding Band Conceptual Details

E.2 Bus Terminals

Building Program for Terminals follows the Station Building requirements with the exception of the following areas provided in addition:

Dispatcher Room

The bus dispatcher room, where required, shall be elevated to permit the dispatcher in a seated position to have sight lines of all buses. It shall be located strategically for visibility of bus bays, particularly of arriving buses, where possible. The usual location is on an external wall, but it may also be located within the waiting room. Generally, it shall be adjacent to the driver room and shall have access from the driver room.

Both rooms may also be adjacent to the station attendant room, in which case a staff room may be provided in common for the dispatcher, drivers, and station attendants, with shared washroom and kitchenette facilities. Depending on the size of the facility, separate male and female staff/driver washrooms may be required.

The floor shall be elevated a minimum of 570 mm above the waiting room floor level and platform level, equivalent to a minimum 3-riser stair requirement. The seated dispatcher's eye level will then be approximately 1.69 m above platform level, over the heads of most passengers. Other design requirements include:

- Desk-height counter with insulated glazing above, knee-space below
- Side and/or back counters to be typical counter height with task lighting from wall-hung cabinets
- Wall hung cabinets with adjustable shelves and lockable doors
- Non-glare recessed LED luminaries with 12 x 12 x 12 mm parabolic egg-crate lenses; if the room is on an exterior wall, insulating glass shall be fully tempered tinted low-E glass
- Interior locations to have fully tempered 10 mm clear glazing
- Where a dispatcher room is adjacent to a driver room, but has a separate entrance, a pass-through sliding-glass window shall be provided between them, operable by the dispatcher, for receiving driver reports and direct communications
- Where a dispatcher room is in a waiting room, the pass-through window may be required into the waiting room