Signage Manual

Bus Network Infrastructure

April 2023

translink

Queensland Government

Contents

Introduction

A bus station is an important node within many journeys. Commuters change their form of transportation at this node and expect to do so with minimal difficulty. The essence of a bus station and supporting infrastructure is the circulation patterns of commuters in transit. Therefore, the design of a successful bus facility (new or upgraded) must begin with circulation design/analysis.

A perfect circulation design is “legible” – easy for all to comprehend; totally self-explanatory – but this is unlikely to be achieved within the complex interactions of site, function and urban and social context that govern station design. So a clear “wayfinding” strategy is required to “make sense of” the circulation pattern. Signage is a key element to assist commuters in the station environment.

This manual is intended to provide guidance to those who are preparing tender documents for the provision of signs at bus infrastructure within the TransLink network. It contains:
- Procedural information
- Technical details of typical sign types

Before the content of this manual can be applied effectively, however, the design of the context of the signs (wayfinding and thus circulation) must be finalised. There can be no engineering formula for the location of signs. Effective signage is the product of circulation design by a person skilled in the manipulation of the contextual perception of all commuters. This involves not only the placing of the most appropriate sign in the best location, but also, the minimisation of the number of signs to reduce clutter and improve comprehension. Creative amalgamation of “signs” is desirable – some examples occur in the “manufactured environments” section of this manual.

The issues within the previous paragraph indicate that it is desirable to introduce a stage of work that precedes the development of the signage “brief”. For new stations or station upgrades, this preparation of signage layout and selection of type is best incorporated into the work of the station designer. For existing sites a preliminary work stage (probably by a specialist) is indicated.

Introduction
It is assumed that each signage installation project will be under the control of a Project Officer appointed by the relevant stakeholders. The following Stages apply to each project to the degree appropriate to the particular project.

Stage 1 – by Project Officer
1. Consult with TransLink (or nominated representative) and prepare a brief on the signage requirements for the station in question. The brief will contain:
• Required extent of signage
• Priorities for signage – eg Rank entries in order of importance/ demand
• Relevant issues arising out of the local context – eg High usage by persons with particular disabilities
• Restrictions on platform access, working hours, etc
• Extent of signage contractor's work in relation to electrical (and comms) supply to illuminated signs
• Any impacts the proposed signs may have on other components, such as security camera positions.
• Where the proposed signage is associated with a new station or a major station upgrade, the brief may also include a preliminary signage concept prepared by the station designer.
2. Select/appoint a signage contractor via an approved process.

Stage 2 – by Signage Contractor
Prepare a preliminary signage layout for the station and all other facilities required to be identified in accordance with the brief generated in stage 1 of the process.

The signage plan is to identify the following site features –
• Public and private roadways associated with the site.
• Paths of travel to the site and within the site, including footpaths and crossing points.
• Pedestrian and vehicle entry points into the station grounds.
• Location of car parks, passenger drop-off bays, taxi ranks and the like associated with the station and within a general radius agreed to in Stage 1.
• The general layout of the station including, but not limited to, access paths, buildings, structures, footbridges, facilities and platforms.

The signage plan is to identify the following information specific to signage –
• Locations and type of signs in accordance with the signage requirements brief.
• The specific location of each sign, describing its orientation, height, distance from any paths of travel and the like.
• The message content of each sign / sign face, including text, pictograms, Braille, and arrows.
• Installation details where connections, footings etc differ from the design intent in the manual.

The signage plan is to be accompanied by –
• Clear statements of design/location rationale.
• Structural Engineer's certification that the proposed fixing locations for the signage provide adequate support.

Stage 3 – by Signage Contractor & Project Officer
Submit signage layout plans to TransLink (or nominated representative) for review.

Stage 4a – by Signage Contractor
On issue of the reviewed plans from TransLink address all comments provided with the plans and prepare a final Signage Layout Plan.

Stage 4b – by Project Officer
Determine what, if any, lighting upgrade is required for the signs and determine who is to design and/or install the lights. In conjunction with the signage layout Plan, prepare a lighting diagram that indicates compliance with the required lux levels at the face of each sign.

Stage 5a – by Signage Contractor & Project Officer
Submit signage layout plans to TransLink for final review.

Stage 5b – by Project Officer
Submit required lighting / lux level plans to TransLink for final review.

Note: The balance of the work includes electrical (and possibly lighting) only to the extent stated in the Brief and/or instructed by the Project Officer.

Stage 6 – by Signage Contractor
On issue of the reviewed plans from TransLink address all comments provided and issue a final Signage Plan for approval by TransLink.

Stage 7 – by Signage Contractor
On approval of the plans fabricate signage in accordance with the TransLink Bus Network Infrastructure Signage Manual.

Stage 8 – by Signage Contractor
Prior to the installation of the fabricated signs on site prepare a work method Statement and Risk Management plan and submit these documents to TransLink.

TransLink will provide advice on whether any further approvals are required to undertake the installation work.

Stage 9 – by Signage Contractor
Install signage on site in accordance with the agreed Work Method Statement, Risk Management Plan and any other requirements stipulated by TransLink (or Nominated Representative).

Section

1

Principles for bus network infrastructure signage

Principles for bus network infrastructure signage
Sign summary

1.1

The overall approach is to provide an easily accessible bus station environment through information and identification of facilities.

Sign types are categorised as 4 types -

Directional Signs (DS)
Facility Identification (FI)
Information System (IS)
Primary Identification (PI)

A summary of sign types are as follows:

1. ‘Main’ facility PI signs identify the entry points to the site / station and are located at the main approaches.

2. ‘Secondary’ facility PI signs are located in key locations to support the ‘Main’ PI signs where applicable to draw commuters towards the station access points to platforms. Note that the secondary PI signs feature less information than the main PI signs.

3. If a Park ‘n’ ride facility exists, then it is identified at the main entrance, on the main PI sign.

4. Information signs display a locality map and incorporate other general information relating to the zone boundaries and fares. NOTE: TransLink to provide maps and other printed material.

5. Each Platform is identified and incorporates timetable and route information.

6. Kiss ‘n’ ride and Taxi zones are signed. NOTE: These are for pedestrian identification only and are not enforceable.

7. Staff facility areas (eg toilets) are signed as “Staff Only”.

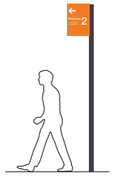
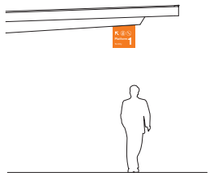
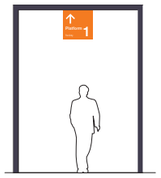
8. Public facilities are identified.

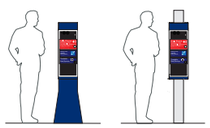
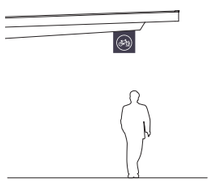
9. Identify accessible facilities. Accessible signs are to supplement high level signage.

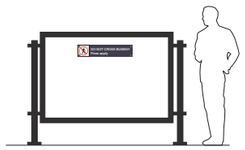
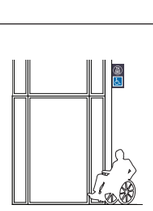
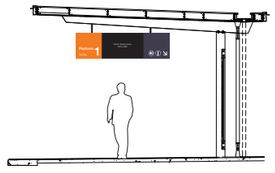
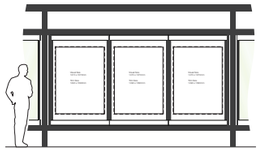
10. Regulatory information can be incorporated within existing sign types.

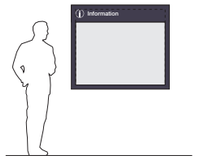
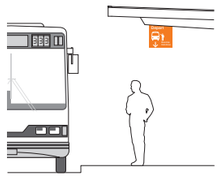
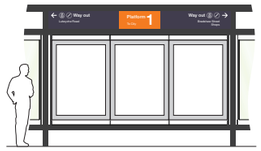
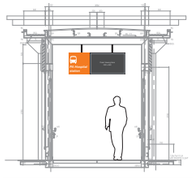
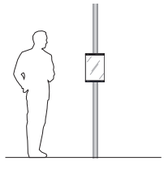
11. Directional signs direct to station facilities, other public transport and to any local shopping centres and community facilities.

12. Signs are to be located perpendicular to the flow of traffic (either vehicular or pedestrian).

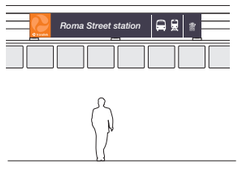
SCHEMATICS	SIGN TYPE		LOCATION	PAGE
	**DS-1**	Directional Sign - Pole Mount	At minor decision points - freestanding	4.1
	**DS-2**	Directional Sign - Under Awning	At minor decision points - under awning	4.2
	**DS-3**	Minor Directional Sign - Suspended	At minor decision points - suspended	4.3
	**DS-4**	Major Directional Sign - Suspended	At decision points - suspended	4.4
	**DS-4a**	Illuminated Directional Sign	Suspended or mounted to bulkhead	4.5
	**DS-6a**	Directional Sign - Wall Mounted (Braille & Tactile)	At specific decision points - wall mounted	4.6
	**DS-6b**	Directional Sign - Freestanding (Braille & Tactile)	At specific decision points - freestanding	4.7

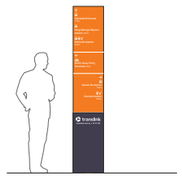
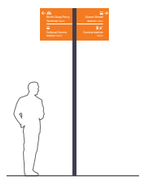
SCHEMATICS	SIGN TYPE		LOCATION	PAGE
	**DS-7**	Directional Sign - Wall/Column Mounted	At decision points - wall mounted	4.8
	**DS-8**	Directional Sign - Freestanding	At decision points - freestanding	4.9
	**FI-1a**	Room Identification Sign	On door	4.10
	**FI-1b**	Room Identification Sign (Braille & Tactile)	On wall next to door	4.11
	**FI-1g**	Help Phone Identification Sign	On help phones	4.12
	**FI-2**	Facility Identification Sign - Under Awning	Under awning	4.13
	**FI-3a**	Kiss ‘n’ Ride Identification Sign	At head of Kiss ‘n’ Ride zone	4.14

SCHEMATICS	SIGN TYPE		LOCATION	PAGE
	**FI-3b**	Taxi Identification Sign	At head of Taxi zone	4.15
	**FI-5**	Facility Sign	Wall / fence / pole mounted - as required	4.16
	**FI-6a**	Facility Identification Sign - Wall Mounted	Wall mounted above facility	4.17
	**FI-6b**	Facility Identification Sign - Projecting	Projecting above facility	4.18
	**IS-4**	Real Time Information Sign - Platform	On casing, either side of information screen	4.19
	**IS-5**	Information Cabinet	As required	4.20
	**IS-6c**	Information/Map Sign - Freestanding	As required NOTE: Only used at Bus Stations	4.21

SCHEMATICS	SIGN TYPE		LOCATION	PAGE
	**IS-6d**	Information/Map Sign - Wall mounted	As required NOTE: Only used at Bus Stations	4.22
	**IS-7**	Bus Stop Sign - Under Awning	Mounted under awning at lead stop	4.23
	**IS-8**	Information Sign	Wall mounted above cabinets on platform and concourse	4.24
	**IS-9c**	Real Time Information Sign - Non Platform	On casing, nect to information screen	4.25
	**IS-10a**	Bus Stop Blade Sign	At bus stop Located at the boarding point of the bus stop NOTE: Not used at Busway	4.26
	**IS-10b**	Bus Stop - J Pole Sign (Translink)	At bus stop Located at the boarding point of the bus stop	4.27
	**IS-10e**	A3 Timetable Case	Located at the boarding point of the bus stop	4.28

SCHEMATICS	SIGN TYPE	LOCATION	PAGE
	**IS-11a** Parking Conditions Sign - Freestanding	Parking Conditions Sign - Freestanding	4.29
	**IS-11b** Parking Conditions Sign - Wall mounted	At entrance to car park	4.30
	**IS-13** Lift Directory	Next to lift doors	4.31
	**PI-1** Pylon Identification Sign - Large	Main sign to identify site / station from major approaches	4.32
	**PI-2** Pylon Identification Sign	Main sign to identify site / station from major approaches	4.33
	**PI-3a** Flagpole Identification Sign - Support sign only	Secondary sign to identify station as a support to the main identification sign	4.34
	**PI-3b** Flagpole Identification Sign	Main sign to identify site / station from major approaches	4.35

SCHEMATICS	SIGN TYPE	LOCATION	PAGE
	**PI-3c** Projecting Identification Sign	Main sign to identify site / station from major approaches - fixed to building structure	4.36
	**PI-4** Banner Sign - Support sign only	Secondary sign to identify station as a support to the main identification sign - fixed to building structure	4.37
	**PI-5** Entry Identification Sign - Support sign only	Secondary sign to identify station entry as a support to the main identification sign	4.38
	**PI-6a** Station Identification Sign	On platform in every second shelter bay. Alternate sign panel as required.	4.39
	**PI-6b** Government Logo Sign	On platform as required.	4.40
	**PI-12d** Suspended Identification Sign	Main sign to identify site / station from major approaches	4.41
	**PI-15a** Minor Station Identification (Non illuminated)	Main sign to identify site / station from major approaches	4.42

SCHEMATICS	SIGN TYPE		LOCATION	PAGE
	**RP**	Rendevous Point Sign	As required	4.43
	**ST-1**	Standard Door Sign - Panel	On door	4.44
	**ST-2**	Statutory Sign - Vinyl	On door	4.45
	**EX-1**	Precinct - Information Sign	At specific decision points - freestanding (external precinct sign)	4.46
	**EX-2**	Precinct - Major Directional Sign	At specific decision points - freestanding (external precinct sign)	4.47
	**EX-3**	Precinct - Minor Directional Sign	At specific decision points - freestanding (external precinct sign)	4.48

SCHEMATICS	SIGN TYPE	LOCATION	PAGE

Principles for bus network infrastructure signage
Identifying circulation paths

1.3.1

The following circulation paths are used to identify where signage is required based upon decision points along paths. When used in conjuction with the sign type description of typical purpose, location it is possible to determine the sign type requirement for identification, information, and direction purposes.

These example stations are shown:
- busway station
- bus station

Principles for bus network infrastructure signage

Busway station external arrival (plan 1 of 3)

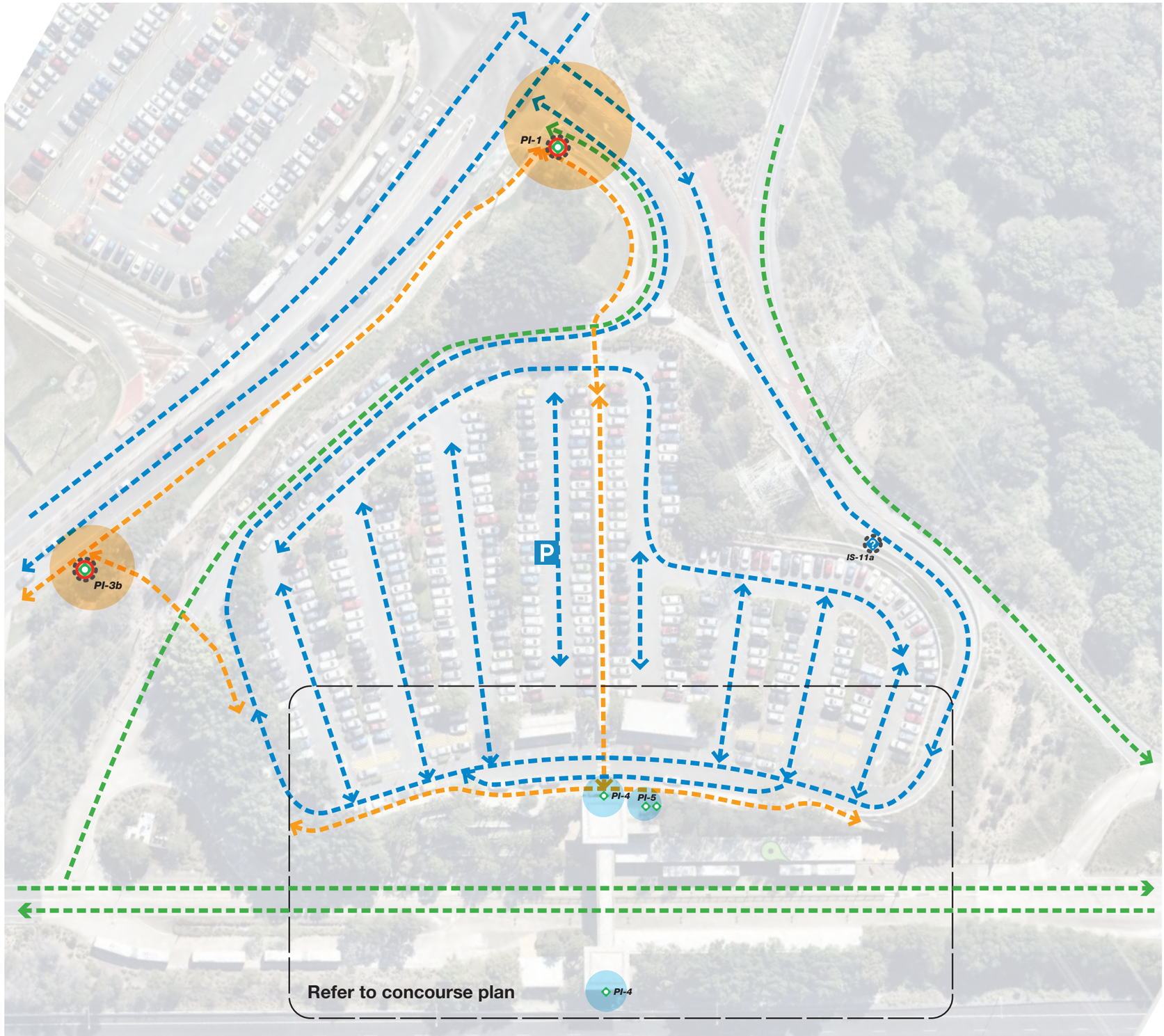
1.3.2

legend

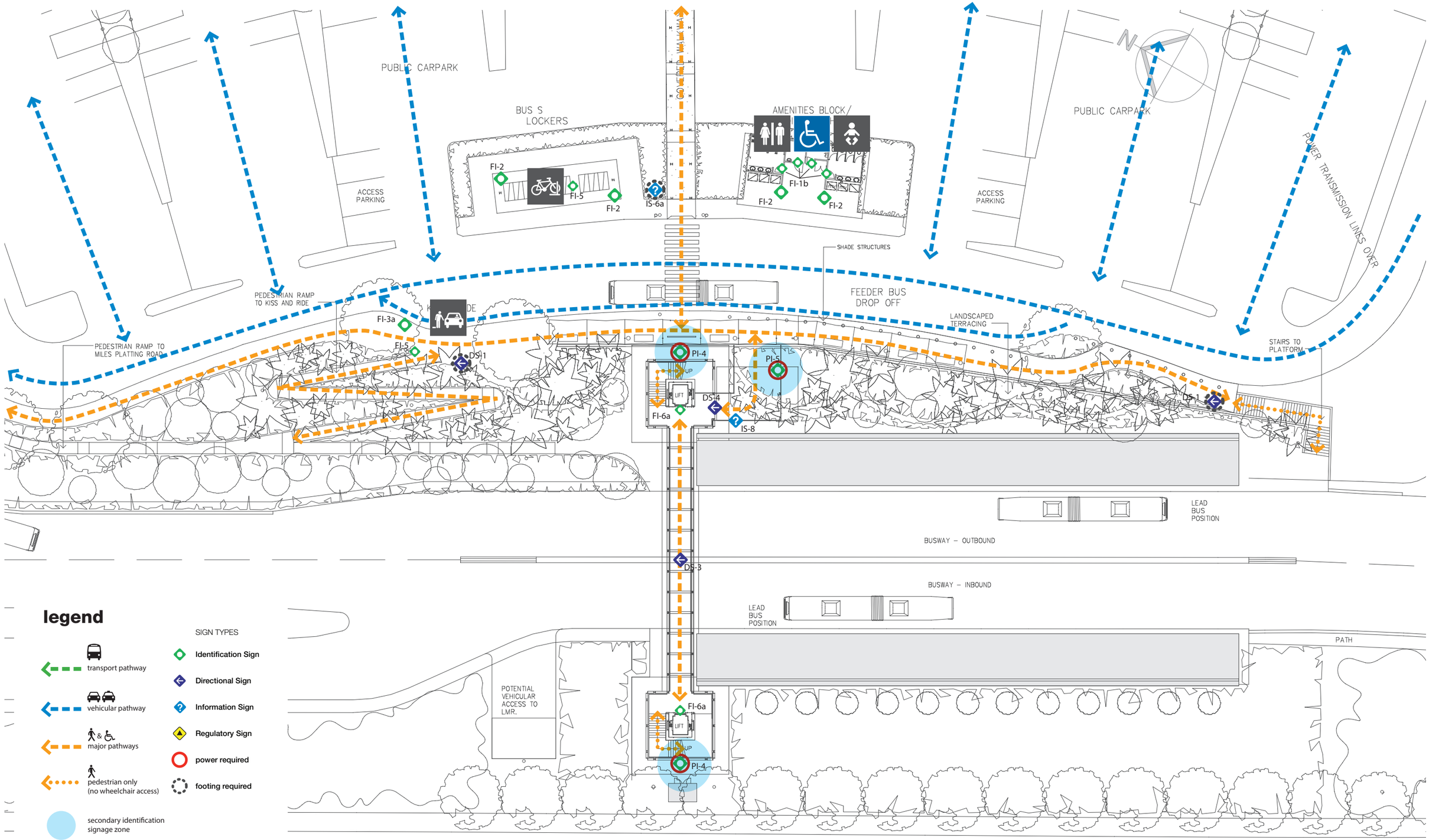
- transport pathway
- vehicular pathway
- major pathways
- pedestrian only (no wheelchair access)
- main identification signage zone
- secondary identification signage zone

SIGN TYPES

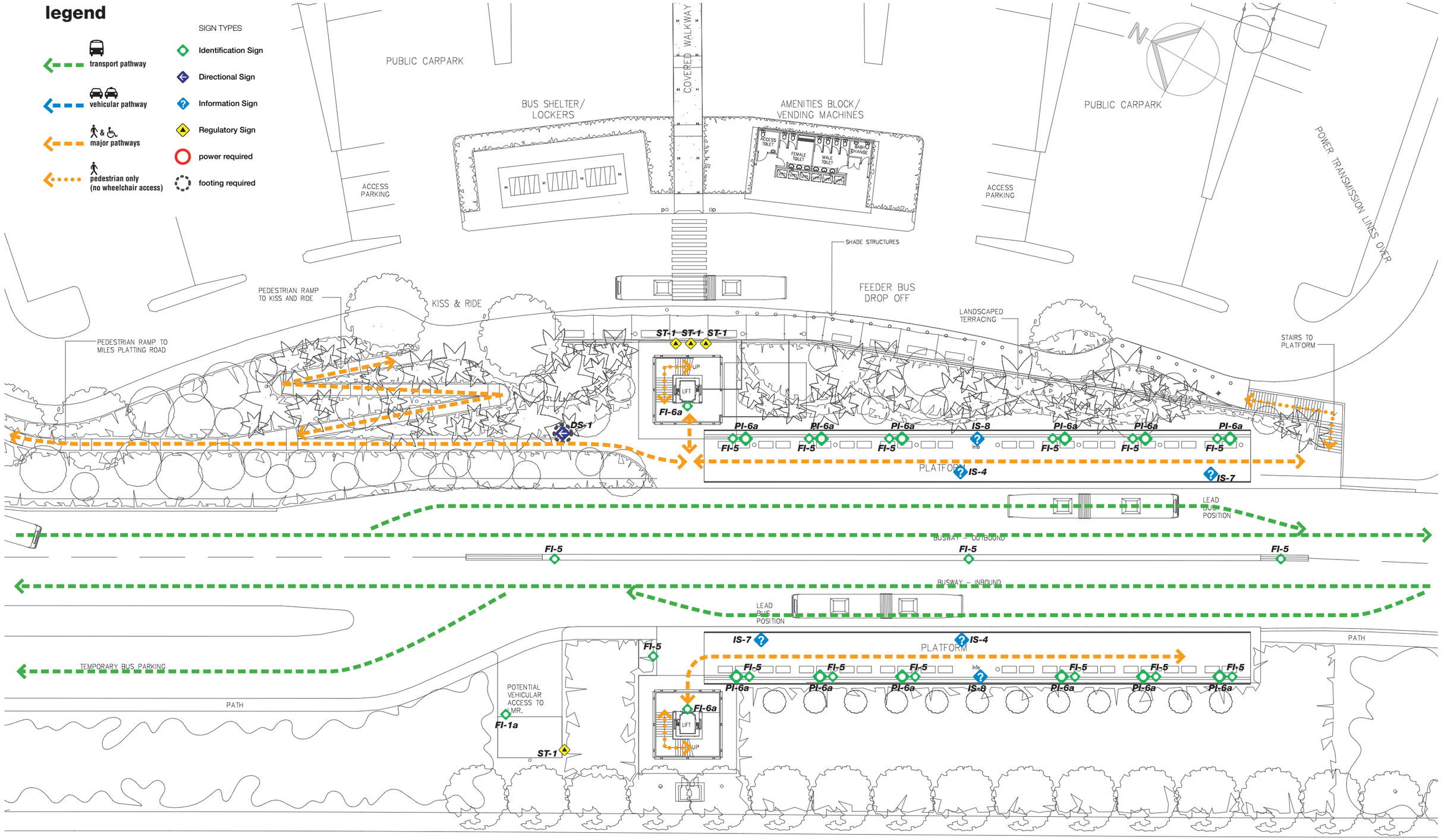
- Identification Sign
- Directional Sign
- Information Sign
- Regulatory Sign
- power required
- footing required



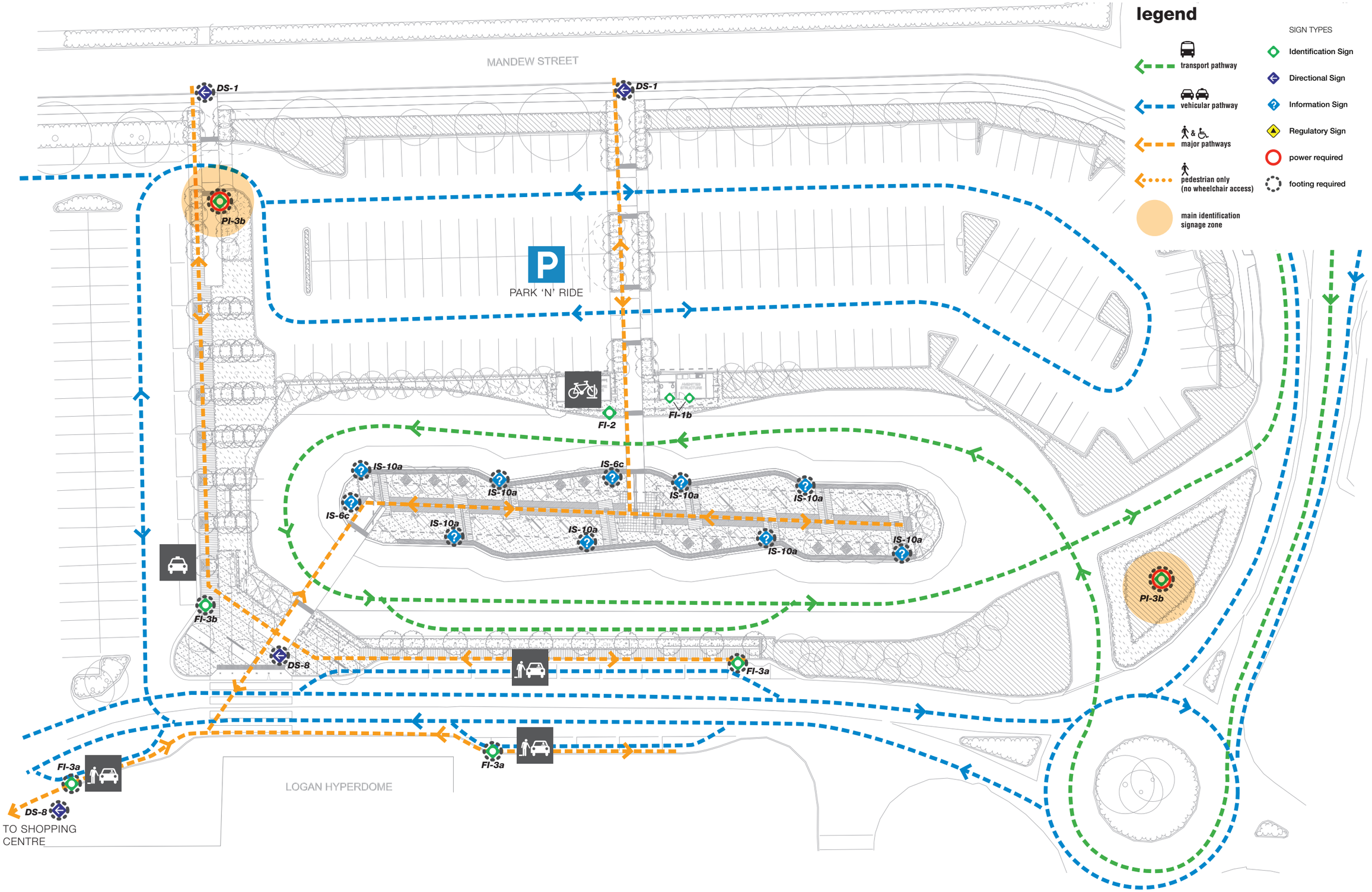
Typical Sign Location Plan



Typical Sign Location Plan



Typical Sign Location Plan



Typical Sign Location Plan

Section

Graphic elements

Helvetica Neue 76 Bold Italic

ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz
1234567890

Helvetica Neue 75 Bold *

ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz
1234567890

Helvetica Neue 65 Medium *

ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz
1234567890

Helvetica Neue 66 Medium Italic

ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz
1234567890

Helvetica Neue 55 Roman *

ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz
1234567890

Helvetica Neue 56 Italic

ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz
1234567890

Helvetica Neue 46 Light Italic

ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz
1234567890

The font Helvetica as shown below is to be used for all wayfinding messages, including both visual and Braille and tactile wayfinding signs to align with AS1428.4.2(2018), which is considered current best practice to assist orientation and wayfinding for people who are blind or who have low vision.

Other sign type fonts proposed for compliance with specific existing Australian Standards or Codes (such as Arial) may be used but will be subject to endorsement by the relevant authority / asset owner.

* Note: Use non-italicised font for tactile signs. Ensure minimum 2mm stroke thickness for lettering (max 7 mm). Ensure a minimum of 2 mm space between characters.

	Orange PAINT Resene ‘Trinidad’ O61-167-048	VINYL Translucent Background = Arlon Orange 44	Opaque Background = Arlon Bright Orange 83
	Light Orange	VINYL Translucent logo = Arlon Tangerine 84	Opaque Logo = Arlon Light Orange 97
	Grey PAINT Resene ‘Jon’ N38-007-359 Sign structure shadow lines = Resene ‘Jon’ N38-007-359	VINYL Arlon Dark Grey 52	
	White PAINT Satin White	VINYL Arlon White 02	
	Off White PAINT Resene Rice Cake G94-010-092		
	Black PAINT Satin Black	VINYL Arlon Matt Black 40 or Arlon Black 03 as noted on sign type drawings.	
	Green	VINYL Arlon Brilliant Green 106	
	Blue (accessible signage) PAINT To match AS2700 B21 Ultramarine Blue / Pantone 2945	VINYL Arlon Blue 05	
	Red (regulatory signs) PAINT To match AS2700 Signal Red / Pantone 032C	VINYL Arlon Perfect Match Red 220	
	Yellow (regulatory signs) PAINT To match Pantone 109	VINYL Arlon Primrose Yellow 67	

Generic Standards for TransLink Stations
Signage and Wayfinding

The colour selection guide illustrates the identity of TransLink infrastructure in the urban environment in Queensland. The aim of the colour selection guide is to provide the opportunity for design professionals to consider the TransLink identity and station within the wider context built environment around the station location. The following describes the principles of colour selection for TransLink public transport infrastructure facilities.

Signage colour strategy
• Resene ‘Trinidad’ or approved equivalent is used as the primary background colour for signs directing to and identifying public transport. These signs direct to platforms, subway, concourse, bus interchanges/bus stops form one platform to another.
• Resene ‘Jon’ or approved equivalent is the secondary background colour used for all other messages. These signs will:
- direct to other facilities away from the station.
- direct to or identify facilities on platform/concourse/surrounding areas. e.g. help phone, toilet, shops.

Signage maintenance
The specific choices made from the colour selection guide must be clearly identified and recorded on a station and stop asset register. Importantly, the background colour for the signage will be based on the primary colour selected for the station. The recording of each station component, and part and the specific material, finish and colour will ensure the station and signage can be easily maintained by the relevant organisation should repair or replacement be required.

The colours illustrated are the standard colours used on all TransLink station infrastructure unless noted otherwise.

Queensland Government logo
Logo applied to dark background = White
Logo applied to light background = Black

TransLink logo
Logo applied to orange background = White
Logo applied to grey background = White

The following pictograms are to be used with all TransLink signage.
Contact TransLink for complete pictogram reference.


Bus


Train


Ferry


Light rail


Hail Bus


No Entry


No Bicycles


No Inline skates


No Scooters


No Skateboards


CCTV


No Smoking


Parents Room


Male Toilet


Female Toilet


Unisex Toilet


Lift


Stairs


Escalator


Information


Help Phone


Bike Racks


Secure Bike Enclosure


Taxi


Drop Off (Kiss ‘n’ ride)


Fares/Tickets


Male ambulant


Female ambulant


Accessible


Accessible Ramp


Hearing Loop


Park ‘n’ ride


Stadium


Hospital


University / TAFE


School


Shopping Centre

Section

5

Accessible signage guidelines

Accessible signage and incorporation into overall design

Why do we need accessible signage?

Accessible signs are used to assist people with mobility and sensory impairments to negotiate their way from entry points to a station to the boarding points of a platform. They allow people to determine their location, work out paths between parts of the station and identify facilities along the way. While accessible signage must cater for people with all types of disability, it benefits most those who have low vision or who are blind.

What is accessible signage?

Accessible signs are those that provide people with a disability direction to and from the station and identify the location of its facilities. Sign content is in Braille, raised text, symbols, pictograms and arrows. Signs are located in places and at heights that people with vision impairments, wheelchair users and people with assistance animals (e.g. guide dogs) can easily view and feel them. Refer to current AS 1428.2, AS 1428.4.2 and NCC requirements.

How are accessible signs located?

The sign designer ‘walks’ through the station (either virtually or physically) and carefully notes where key directions are needed and where the essential facilities are positioned. Directional signage is located at station entrances, changes of direction and where choices of destinations are required.

Orientation or wayfinding cues are often needed by people who are vision impaired to let them know when they have reached the destination shown on an accessible sign and when they need to look and feel for the next accessible sign. These cues are particularly important on open sections of a platform where there are few structures. Common wayfinding cues include walls, kerbs, TGSI’s, and handrails.

Wherever possible, accessible signs should be incorporated into existing general signage. Also the number of static signs can be reduced if audible signs are available on a platform. Audible signs include electronic ‘talking signs’, lift messages and bus service Information location beeps.

The draft accessible signage design should be consulted on, along with other facility accessible way-finding components, by people with disabilities and subject matter experts to ensure components provided are as meaningful and seamless as possible. The design will be inadequate if the users have difficulty in locating and reading each sign and finding their way to essential station facilities.

Incorporating accessible signage

Significant difficulties occur in the placement of accessible signs if adequate space to access the signs is not included in the architectural and engineering designs of a new or refurbished bus facility. Areas that need particular consideration are:

- station entrances
- approaches to stairs, ramps and lifts
- lift entrances
- assisted boarding points
- at or around station fixtures such as Help Phone/Service Information console, fare machines, priority seating and electronic ticketing equipment.
- where directions are needed from stairs, ramps and lifts to the assisted boarding point
- where directions are needed from stairs, ramps and lifts to a station exit and accessible car parking bays
- where directions are needed from a station exit to other modes.

There are a number of design elements that restrict the space needed by people in wheelchairs and people with a vision impairment to read accessible signs. They include station entrances less than 2m wide; placing columns, light masts, drinking fountains, rubbish bins and seats at major decision points; clearance to overhead obstructions less than 2m;
installing station equipment within high passenger traffic areas; locating assisted boarding points adjacent to stairs; installing lifts that exit within 2.5m of an obstruction; installing doors that cover signs when opened; and placing controls less than 500mm from corners.

Station design should also include structural features that provide fixing points for accessible signs. Columns, posts, walls and fences can be sized so that they are wide enough to attach Braille and tactile signs. Ceiling and soffit heights should be in a height range that permits suspended signs within the viewing zone of people in wheelchairs. The design of station floor surfaces where accessible signs are to be located should comply with the gradients, cross falls and slip resistance required under the current AS 1428.1 and the NCC.

Lighting should be designed so that people with low vision can easily read the text of accessible signs without glare. A minimum of 30% luminance contrast is required at all times for walls, columns, poles and equipment pedestals that are used as a fixing background for accessible Braille signs. Suitable colours are those that have an obvious contrast with Ultramarine Blue, Resene Jon and Trinidad.

Viewing Distances

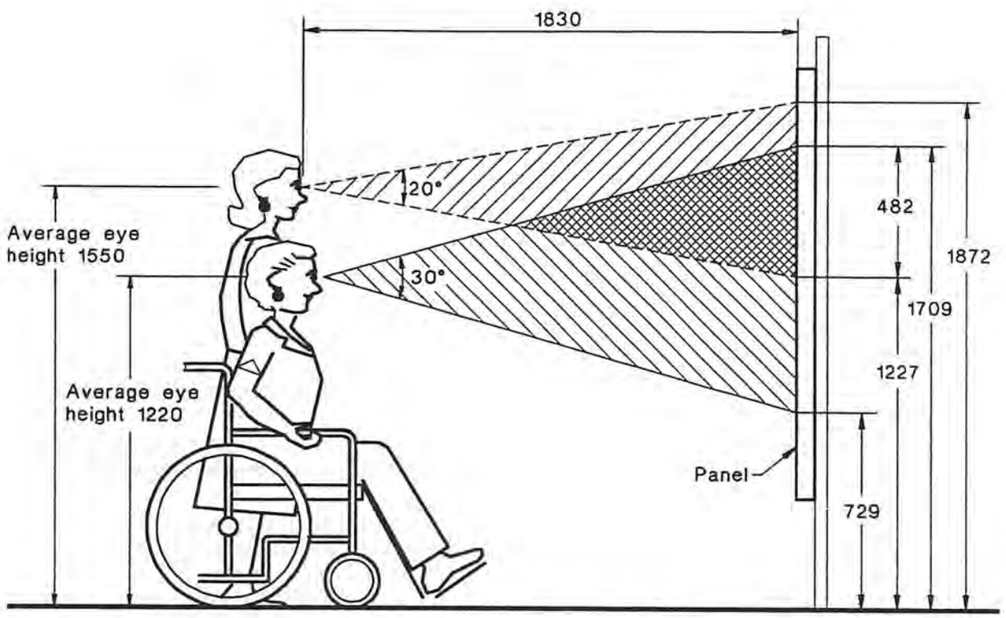
Figure 30 is an extract from AS1428.2 and provides data to calculate sign height and viewing distance. It identifies common zones for viewing and reading signs by a person in a wheelchair or an able bodied person.

Table 2 provides a reference to calculate text heights to suit viewing distances.

Text and Pictogram signs should be located with reference to common viewing zones and placed within a zone at a height not less than 1400mm and not more than 1600mm above the plane of the finished floor.

Where space in this zone is not available, the zone for placement of signs may be extended downward to not less than 1000mm.

Where a sign can be temporarily obscured e.g. in a crowd, the sign should be placed at a height of not less than 2000mm above the plane of the finished floor (AS1428.2).



Total comfortable viewing zone = 482 mm

Source: National Endowment for the Arts, Needs Assessment Survey Instrument, produced by National Access Centre, USA

DIMENSIONS IN MILLIMETRES

FIGURE 30 ZONES FOR VIEWING AND FOR COMMON VIEWING

Height of lettering for varying viewing distances

viewing distance	x height
2m	6mm
4m	12mm
6m	20mm
8m	25mm
12m	40mm
15m	50mm
25m	80mm
35m	100mm
40m	130mm
50m	150mm

Table 2
Extracted from AS1428.2

Circulation requirements for people using wheelchairs (text and pictograms)

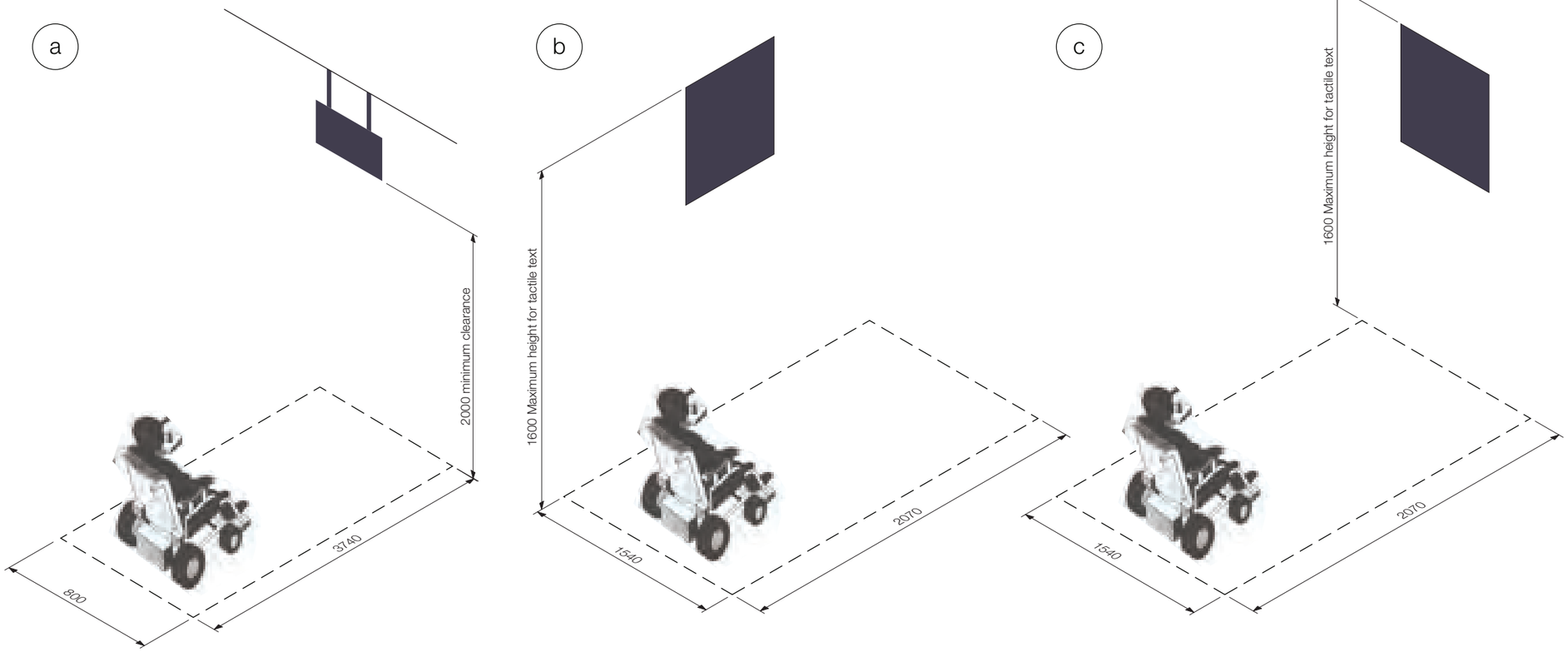
A three dimensional space is required for a person in a wheelchair to approach a sign, read the information then move their wheelchair away. The 3D dimensions are comprised of:
- The unobstructed viewing to a sign (refer to 3.2 Viewing Distances).
- The height of the sign. (requirements are provided in AS1428.2)
- The circulation space needed to enter and leave the viewing area where the sign is located. Refer to AS 1428.2 for circulation requirements.
- Minimum height below overhead obstructions or where a sign can be temporarily obscured (2000mm as provided in AS 1428.2))

The 3D solution involves determining the signs location in relation to an access path and then overlaying the four requirements listed above. As shown, three examples of measurement solutions are:

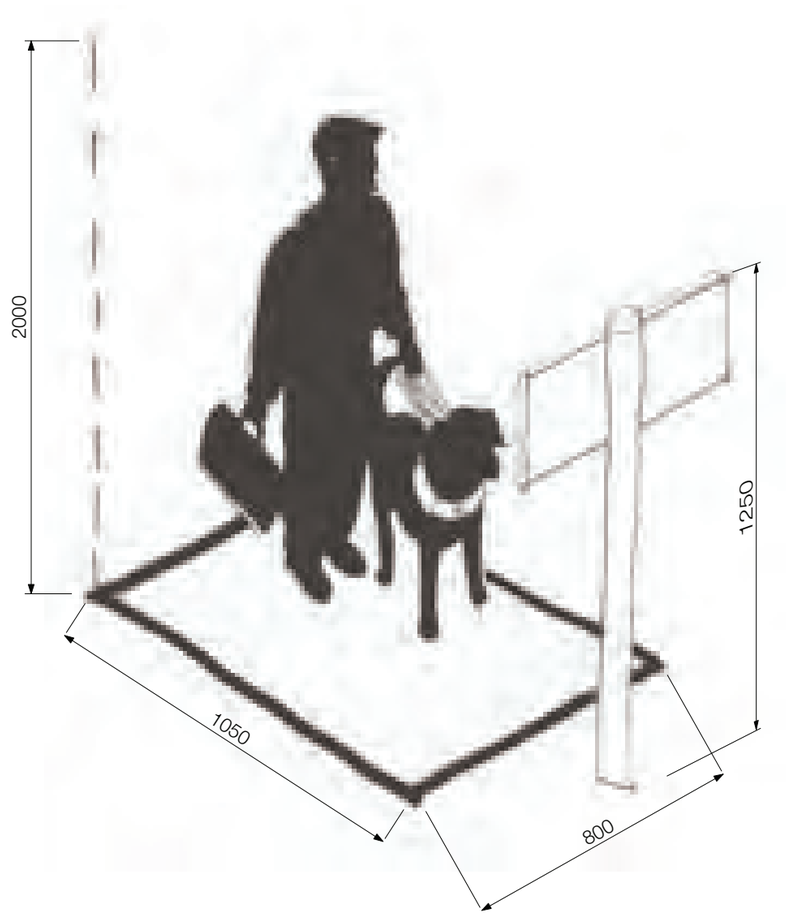
(a) Overhead sign
The sign is suspended directly in front of the person on the access path. The minimum measurements required are 3740mm viewing distance x 800mm width x 2000mm height as provided in AS 1428.2. Note: TransLink minimum height from finished floor level to underside of sign is 2300m. Preferred height 2500mm.

(b) Wall mounted sign located parallel to circulation
The sign is located at right angles to the person along the access path. The person will need to do a 90º wheelchair turn towards the sign, off the path of travel and then back again. The minimum measurements required are 2070mm in the direction of travel x 1540mm width. (AS 1428.2)

(c) Wall mounted sign located perpendicular to circulation
In this case the sign is the person's destination or is a point of interest, for example, a timetable information board. The person will need to move forward to read the sign then turn around 90 – 180º to move along a path of travel. The minimum measurements required are 2070mm viewing distance x 1540mm width. (AS 1428.2)



Space required to access signs - people with low vision



Requirements of people with low vision (Braille and tactile signs)
Braille and raised text signs should be located with reference to ‘useability’ in addition to viewing distances for people who are sighted or have low vision. A person who is blind or has low vision will read Braille or raised text through touch and feeling which requires signage to be within easy reach and at a suitable height.

The 3D space required for a person using a white cane or guide dog to use a Braille and tactile sign is comprised of:
- The length of the person and their guide dog (800mm)
- The reach range from the person’s body to the sign (250mm)
- Width of the person with their guide dog at their side (800mm)
- Height of the sign (refer to AS1428.2)
- Minimum height below overhead obstructions (2000mm).

The 3D solution to approaching and feeling a sign involves overlaying these pieces of data.

Assuming there are no overhead obstructions the dimensions required to use a Braille and tactile sign are 1050mm long (800mm + 250mm) x 800mm wide x 1600mm maximum height.

Note: *Signs with single lines of characters must have the line of tactile characters not less than 1250mm and not higher than1350mm above finished floor level. Where more then a single line is used Braille and tactile components must be located not less than 1200mm and not higher than 1600mm above finished floor level.*

Section

4

Sign types

4.1.1

Sign Type
DS-1
Directional Sign - Pole Mount

Purpose
- To direct to general public destinations or station facilities and platforms
- For pedestrian use

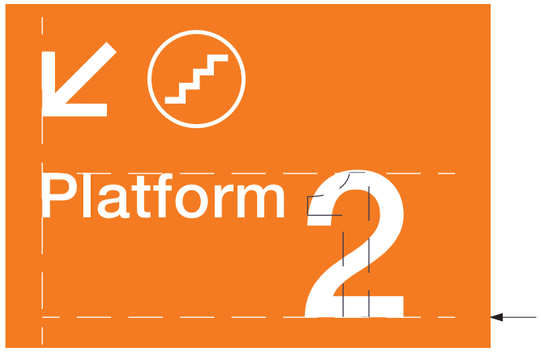
Typical location
- Located at minor decision points generally outside the platform environment
- Located on either TransLink or Other's property depending on site constraints
- Sign to be oriented typically with the sign face perpendicular to the main path of travel
- Sign to be located outside required pedestrian paths of travel.
- Proximity of sign locations to suit site specific requirements

Indicative message
- Station
- Accessible pathways
- Community facilities (eg. pool)
- Shops
- Taxi rank
- Kiss 'n' ride

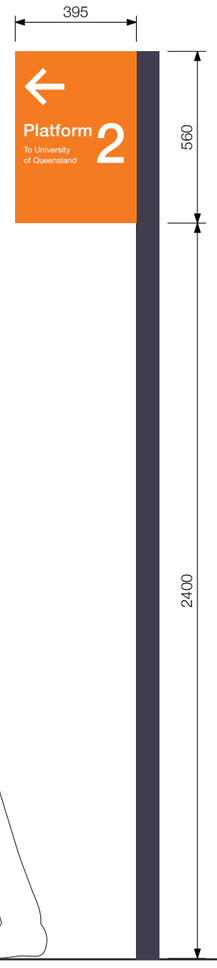
Graphics Detail
FONT
Station name = Helvetica Neue 66 Medium Italic
Other text = Helvetica Neue 65 Medium

SIZE
Major Text = 40mm cap X height
Support Text = 25mm cap X height
Platform Support Text = 23mm cap X height
'To...' = 26mm cap X height
Arrow = 130mm high
Pictogram large = 130mm high
Pictogram small = 80mm high

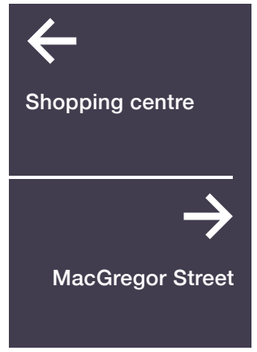
COLOUR
Post = Resene 'Jon' N38-007-359
Transport panel = Resene 'Trinidad' O61-167-048
Other panel = Resene 'Jon' N38-007-359
Divider line = white
Arrow = white
Bus pictogram = white
Access pictogram = white figure on AS2700 B21 Ultramarine blue background
Text = white

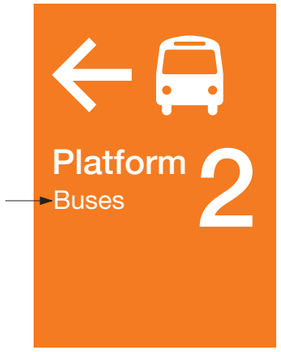


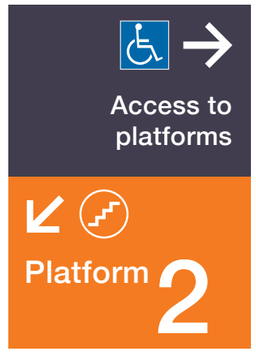
Platform Device - Reference
Scale 1:5

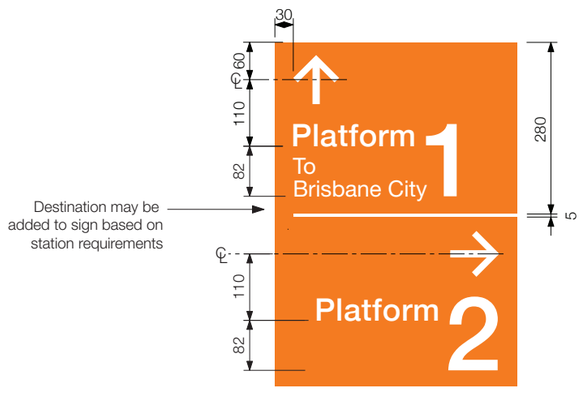


Typical Location
Scale 1:20









Typical Graphic Layouts
Scale 1:10

4.1.2

Sign Type

DS-1

Directional Sign - Pole Mount

Construction Details

1. 75 x 50 x 4mm RHS galvanised steel pole. Base plate and gussets welded to end.

2. 18 x 18 x 4mm galvanised steel tabs welded to inside of pole. 2 off M6 nuts welded to tabs.

3. Cut out slot allowing 5mm sign panel to slide into pole. (Clearance fit)

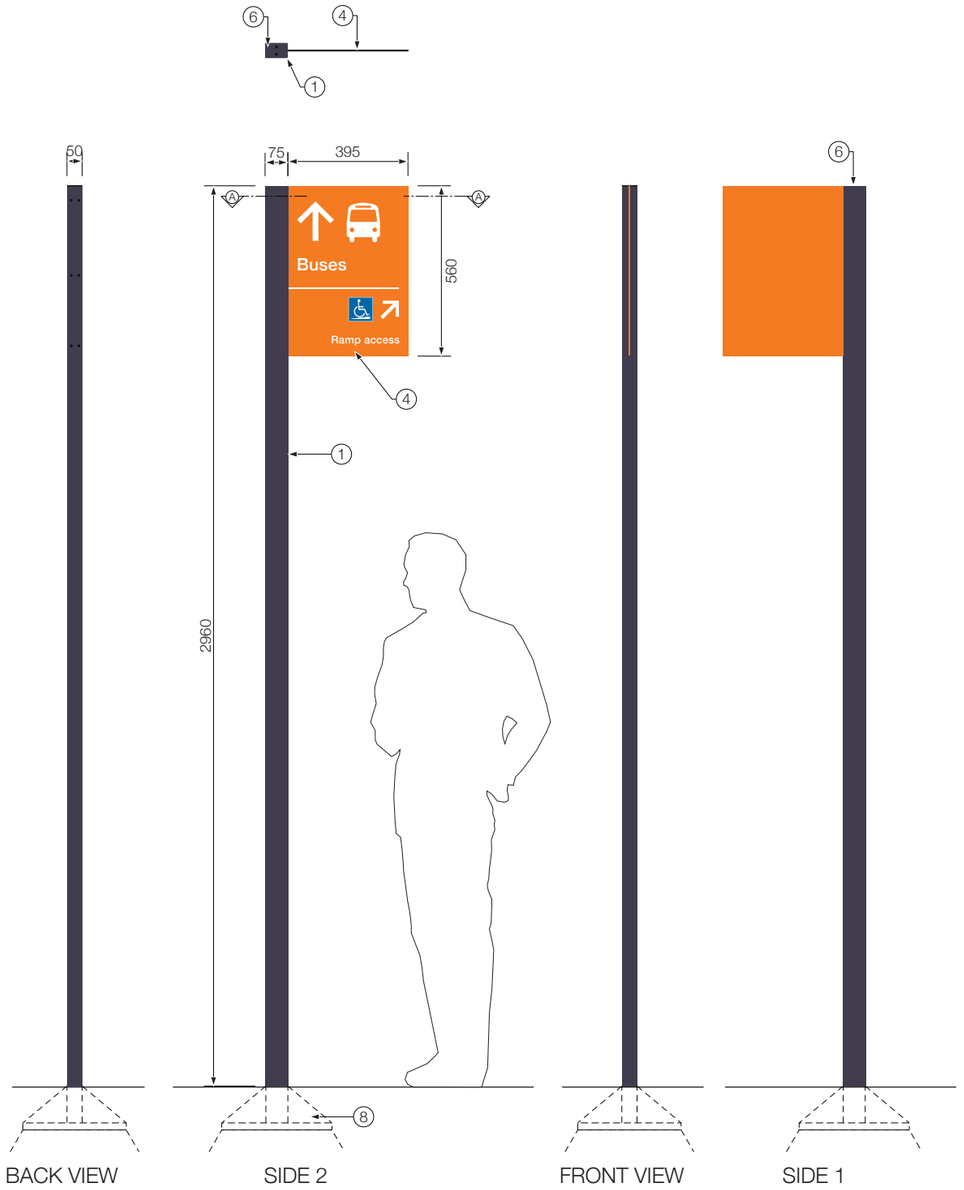
4. 5mm thick aluminium sign panel. 557 x 50 x 5mm fixing plate welded to one edge. Front applied vinyl graphics with clear anti-graffiti spray coat over.

5. M6 stainless steel (316) phillip head self tapping c'sunk screw fixings through post into fixing plate

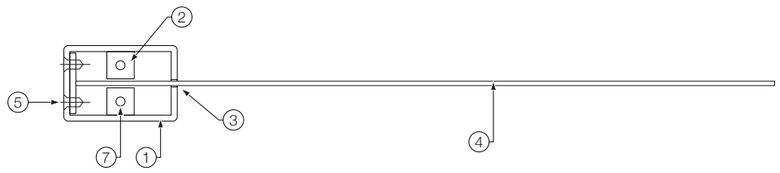
6. 2mm thick galvanised steel capping to top of post.

7. M6 stainless steel (316) phillip head self tapping c'sunk screw, fixes capping to tabs.

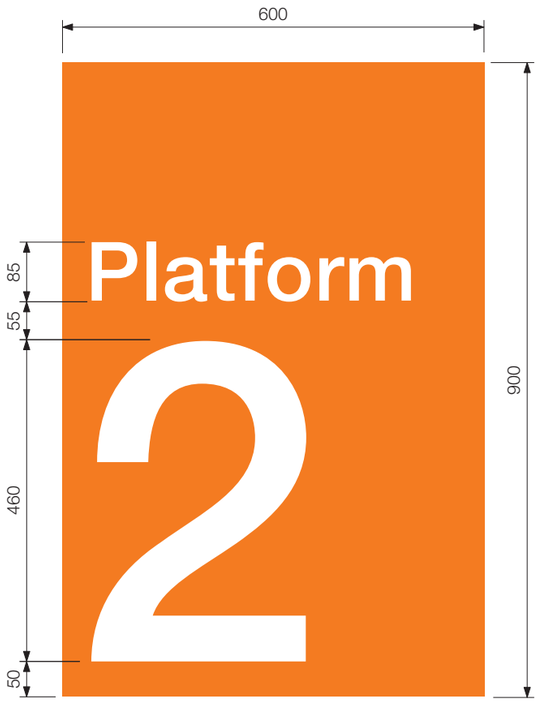
8. Structural framework and footing details to be confirmed by sign maker's engineer. Sign maker to co-ordinate installation with Managing Contractor / TransLink Representative.



Elevations
Scale 1:20

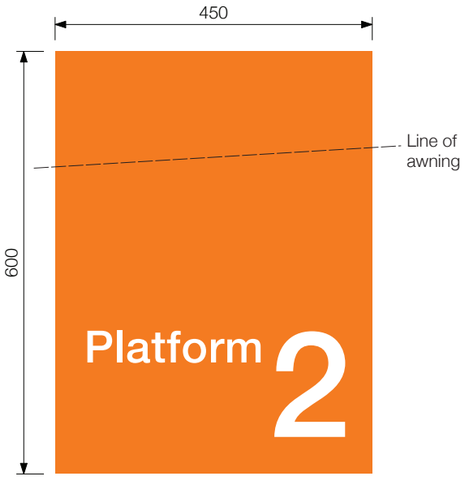


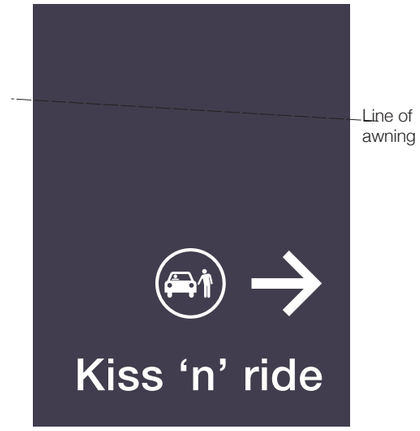
Section A-A
Scale 1:2



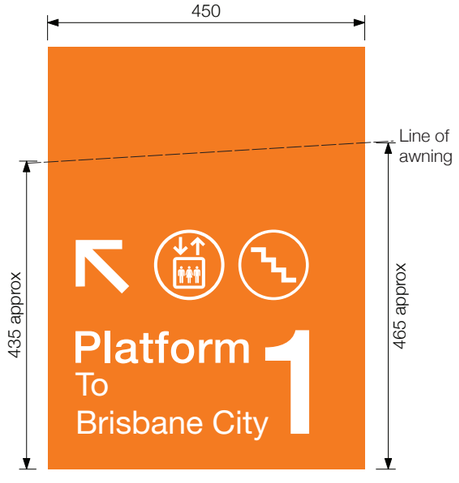
Graphic Layout – Large scale option
Scale 1:10

Typical Location
Scale 1:50





Opposite side to directional message



Typical Graphic Layouts
Scale 1:10

Sign Type
DS-2
Directional Sign - Under Awning

Purpose
- To direct to platforms and facilities
- For pedestrian use

Typical location
- Located at decision points within the station property boundaries
- Fixed to underside of awning structure
- Typically used for single destinations
- The underside of the sign shall be a minimum of 2300mm above floor level. Preferred 2500mm above finished floor level.
- Sign to be oriented typically with the sign face perpendicular to the main path of travel

Indicative message
- Platform
- Accessible pathways
- Community facilities (eg. pool)
- Shops

Graphics Detail
FONT
‘To...’ = Helvetica Neue 55 Roman
All other text = Helvetica Neue 65 Medium

SIZE
‘Platform‘ = 45mm cap X height
‘Kiss ‘n’ ride’ = 45mm cap X height
Platform number = 150mm cap X height
‘To...’ = 33mm cap X height
Arrow = 100mm high
Pictogram = 100mm x 100mm

Large Scale Option
‘Platform’ = 85 mm cap X height
Platform number = 457mm cap X height

COLOUR
Transport panel = Resene ‘Trinidad’ O61-167-048
Other panels = Resene ‘Jon’ N38-007-359
Arrow = Arlon White 02
Text = Arlon White 02

Sign Type

DS-2

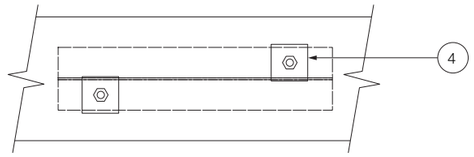
Directional Sign - Under Awning

Construction Details
1. Station shelter beam.

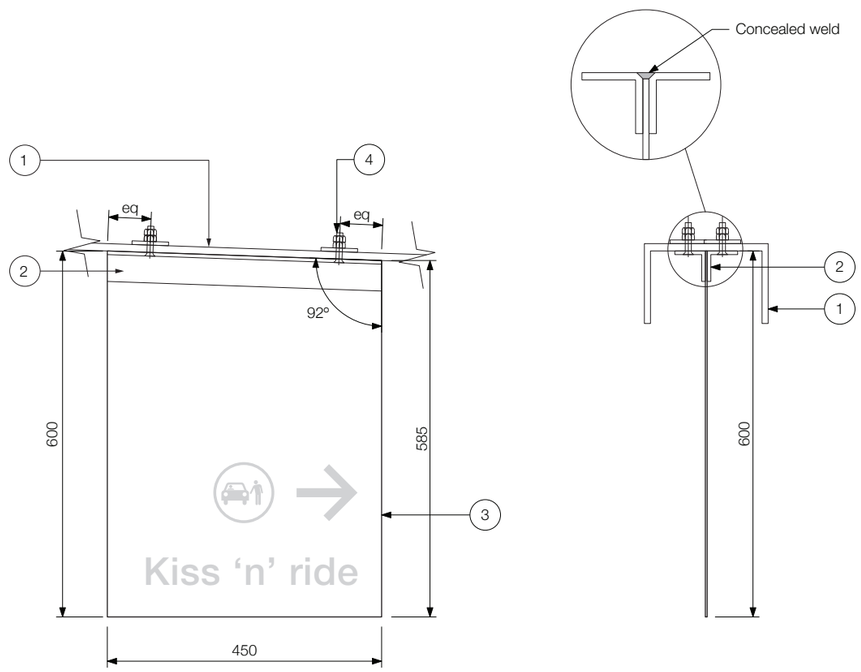
2. 50 x 50 x 6mm aluminium angle.

3. 5mm thick aluminium panel, concealed bead welded to aluminium angle. Welds to be dressed, regular and spaced evenly. Front applied vinyl graphics with clear anti-graffiti spray coat over.

FIXING METHOD
4. Fixings to be designed and approved by signmaker's engineer. Signmaker to coordinate fixing requirements with Managing Contractor / TransLink Representative.



TOP VIEW



FRONT VIEW SIDE VIEW

Elevations
Scale 1:10

4.3.1

Sign Type

DS-3

Minor Directional Sign - Suspended

Purpose
- To direct to platforms and facilities
- For pedestrian use

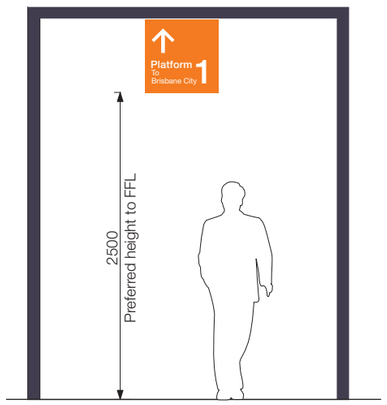
Typical location
- Typically located on pedestrian overpass between platforms
- Fixed to underside of awning structure
- Typically used for single destinations
- The underside of the sign shall be a minimum of 2300mm above floor level. Preferred 2500mm above finished floor level.
- Sign to be oriented typically with the sign face perpendicular to the main path of travel

Indicative message
- Platform
- Accessible pathways
- Community facilities (eg. pool)
- Shops

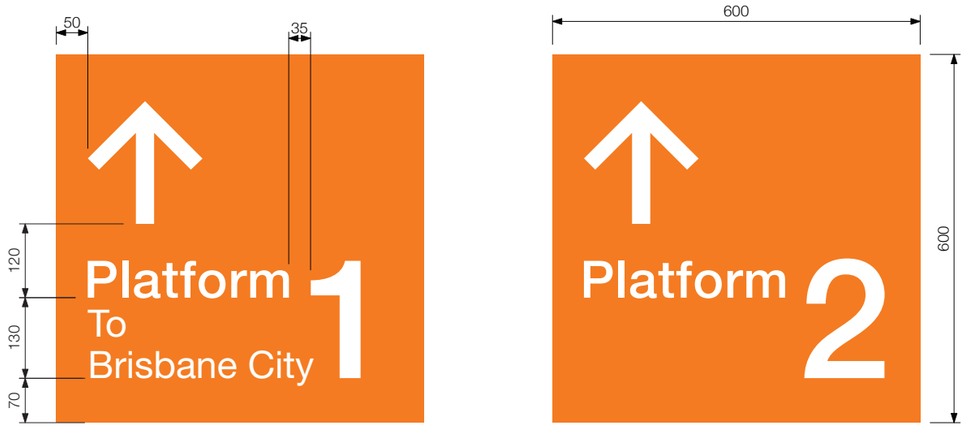
Graphics Detail
FONT
'To...' = Helvetica Neue 55 Roman
All other messages = Helvetica Neue 65 Medium

SIZE
'Platform' = 60mm cap X height
Platform number = 195mm cap X height
'To City' = 45mm cap X height
Arrow = 200mm high

COLOUR
Panel = Resene 'Trinidad' O61-167-048
Arrow = Arlon White 02
Text = Arlon White 02



Typical Location
Scale 1:50



Typical Graphic Layout
Scale 1:10

4.3.2

Sign Type

DS-3

Minor Directional Sign - Suspended

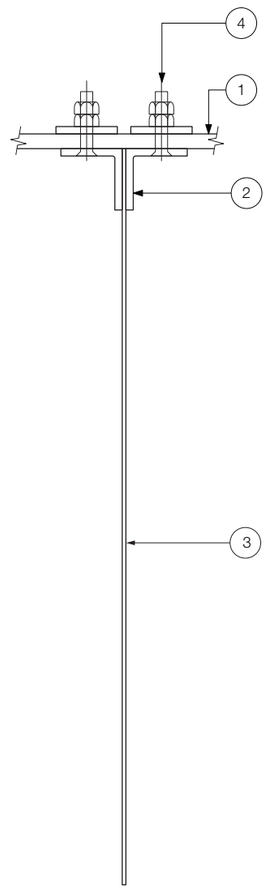
Construction Details
1. Station structure.

2. 50 x 50 x 6mm aluminium angle.

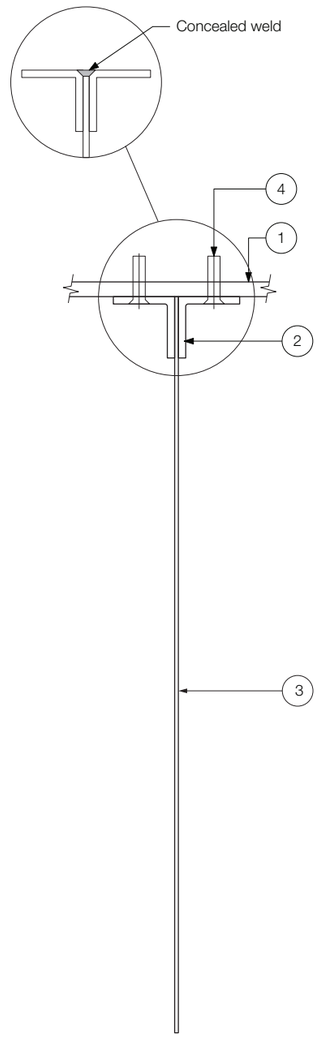
3. 5mm thick aluminium panel, concealed bead welded to aluminium angle. Welds to be dressed, regular and spaced evenly. Front applied vinyl graphics with clear anti-graffiti spray coat over.

FIXING METHOD
4. Fixings to be designed and approved by signmaker's engineer. Signmaker to coordinate fixing requirements with Managing Contractor / TransLink Representative.

Front Elevation
Scale 1:5



Side Elevation
Scale 1:5



Optional Fixing Method
Scale 1:5

4.4.1

Sign Type

DS-4

Major Directional Sign - Suspended

Purpose
- To direct to platforms and facilities
- For pedestrian use

Typical location
- At decision points
- Suspended sign
- Located at decision points within the station property boundaries.
- Fixed to the underside of ceilings / structure.
- Where signs suspend from walls or ceilings, the underside of the sign shall be a minimum of 2300mm above floor level. Preferred 2500mm above finished floor level.
- Sign to be oriented typically with the sign face perpendicular to the main path of travel.

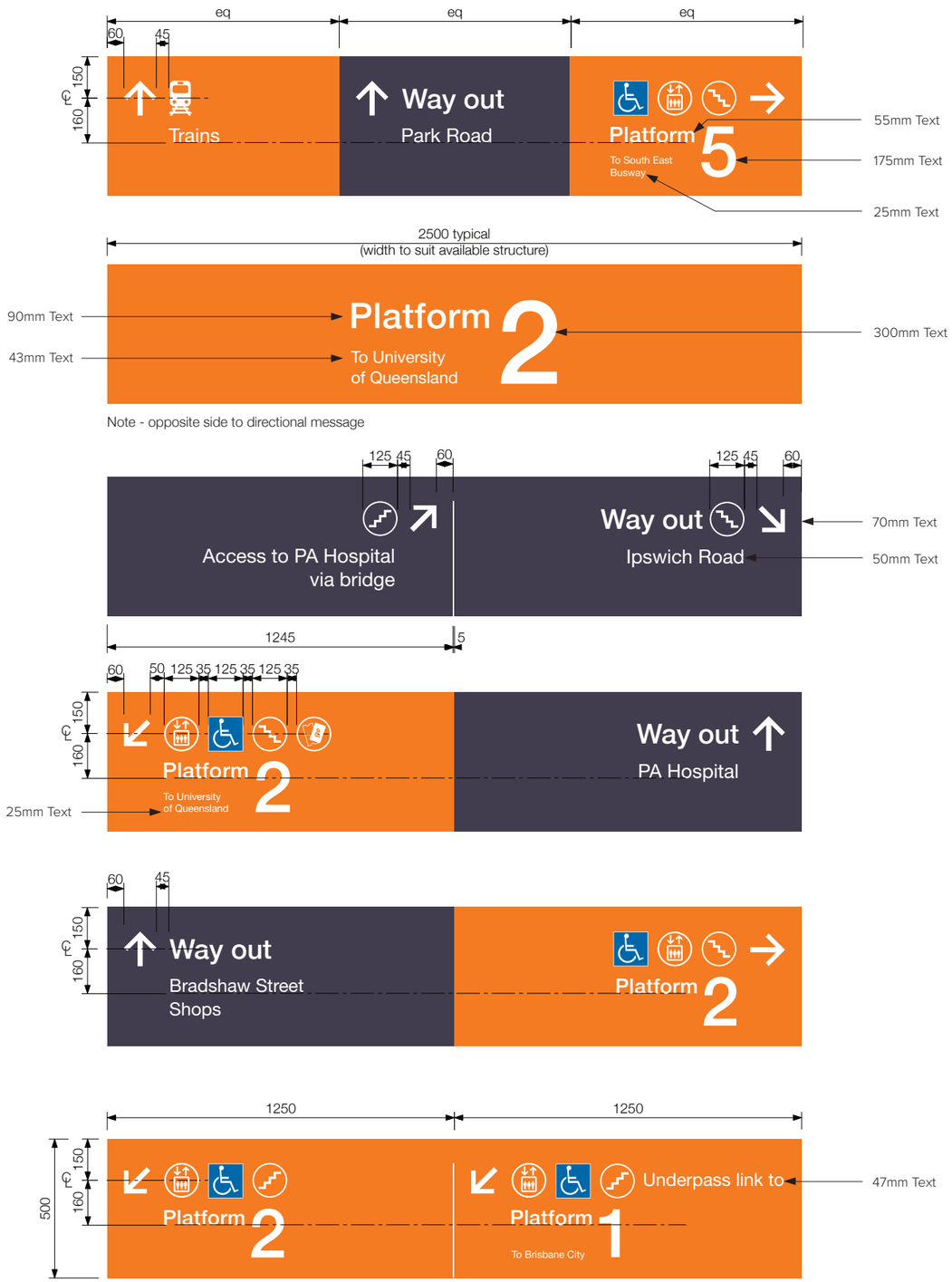
Indicative message
- Platform
- Accessible pathways
- Community facilities (eg. pool)
- Shops

Graphics Detail
FONT
'To...' = Helvetica Neue 55 Roman
Sub-message = Helvetica Neue 55 Roman
All other text = Helvetica Neue 65 Medium

SIZE
Arrow = 125mm high
Pictogram = 125mm x 125mm
Other elements = As noted

COLOUR
Transport panel = Resene 'Trinidad' O61-167-048
Other panel = Resene 'Jon' N38-007-359
Arrow = Arlon White 02
Text = Arlon White 02
Pictogram = Arlon White 02

Typical Location
Scale 1:100



Typical Graphic Layouts
Scale 1:20

4.4.2

Sign Type

DS-4

Major Directional Sign - Suspended

Construction Details

1. Station structure.

2. 50 x 50 x 6mm aluminium angle bead welded to aluminium sign panel. All visible welds to be dressed, regular and evenly spaced.

3. 5mm thick aluminium sign panel. Front applied vinyl graphics with clear anti-graffiti spray coat over.

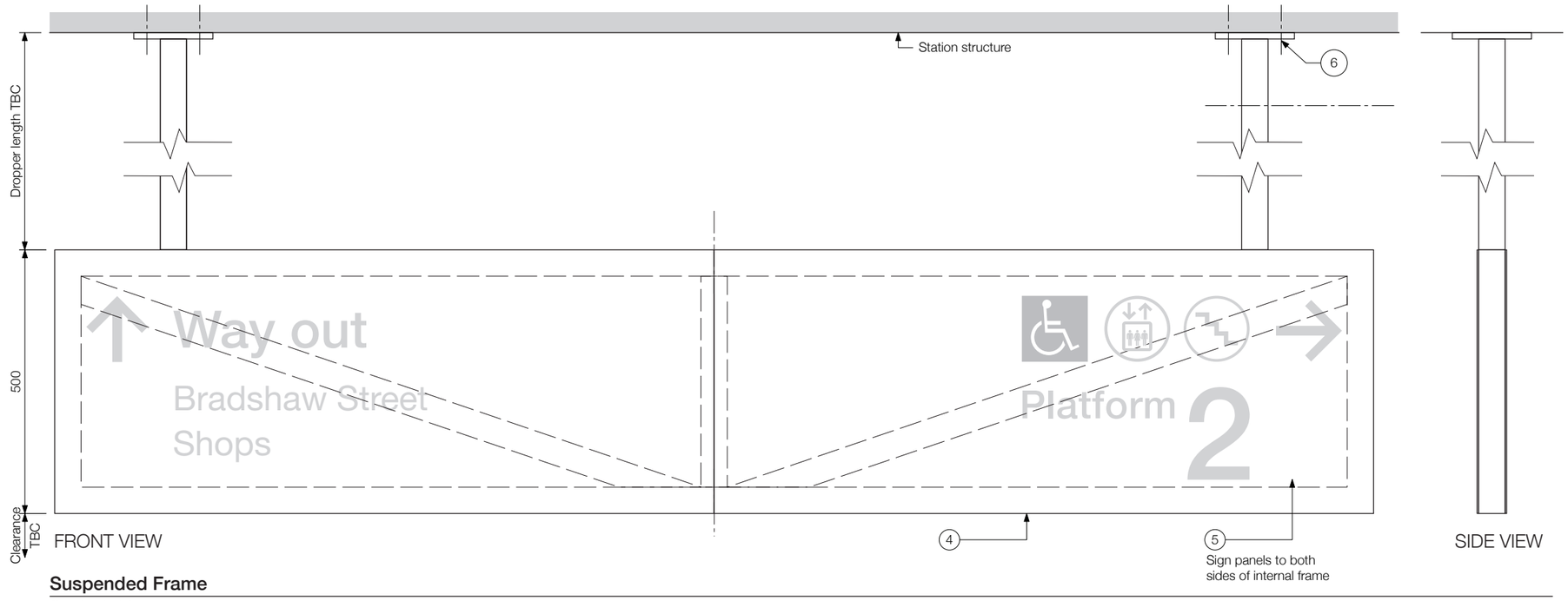
SUSPENDED FRAME

4. 50 x 50 x 6mm aluminium SHS internal frame. Suitable support plate welded to internal frame. All visible welds to be dressed, regular and evenly spaced.

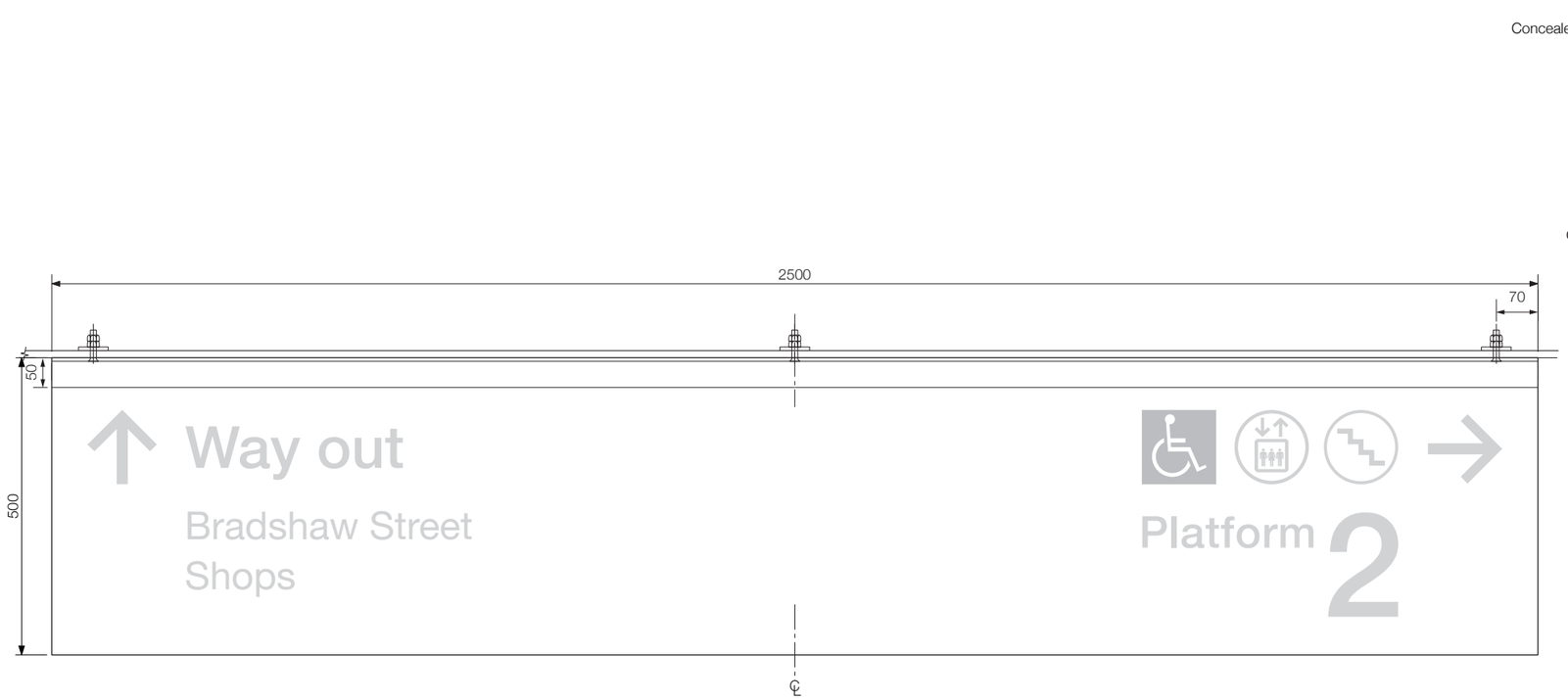
5. 3mm thick aluminium sign face to both sides. Front applied vinyl graphics with clear anti-graffiti spray coat over. Conceal fix panels to sign frame.

FIXING METHOD

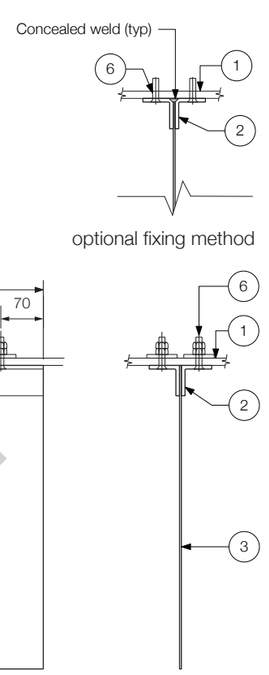
6. Fixings to be designed and approved by signmaker's engineer. Signmaker to coordinate fixing requirements with Managing Contractor / TransLink Representative.



Suspended Frame
Scale 1:10



Front View
Scale 1:10



Side View
Scale 1:10

4.5.1

Sign Type

DS-4a

Illuminated Directional Sign

Purpose
- To direct to platforms and facilities
- For pedestrian use

Typical location
- At decision points
- Suspended sign (double sided)
- Wall mounted (single sided)
- Located at decision points within the station property boundaries.
- Fixed to the underside of ceilings / structure.
- Where signs suspend from walls or ceilings, the underside of the sign shall be a minimum of 2300mm above floor level. Preferred 2500mm above finished floor level.
- Sign to be oriented typically with the sign face perpendicular to the main path of travel.

Indicative message
- Platform
- Accessible pathways
- Community facilities (eg. pool)
- Shops

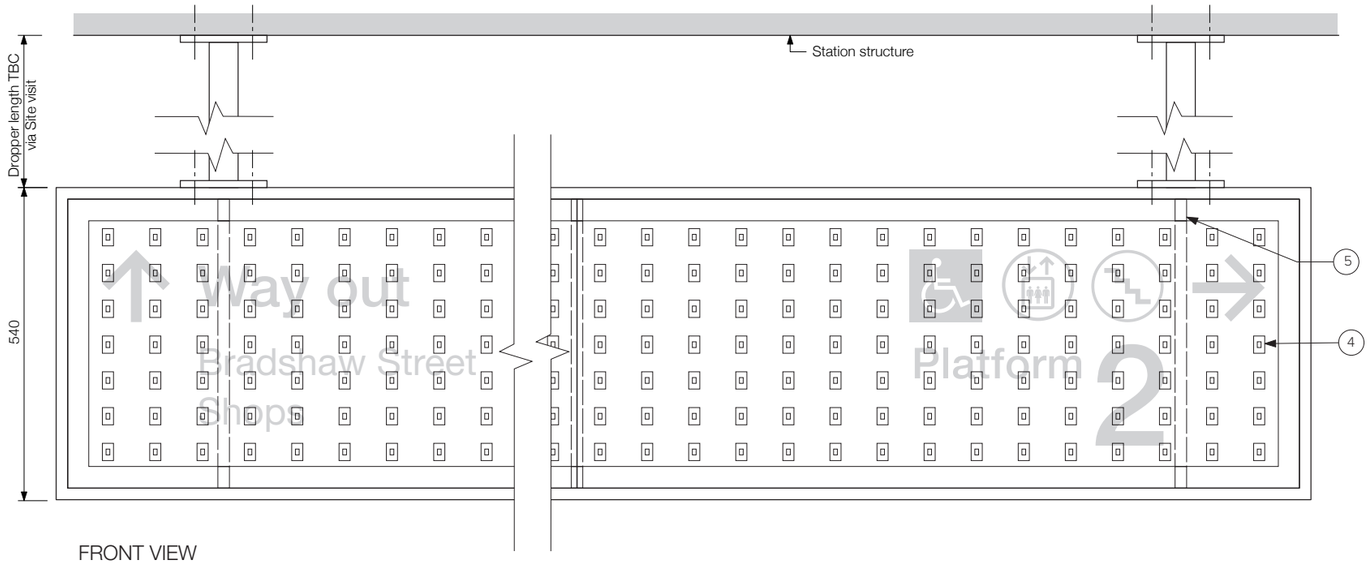
Graphics Detail
FONT
Sub message (‘Roma Street’) = Helvetica Neue 55 Roman
All other text = Helvetica Neue 65 Medium

SIZE
Arrow = 125mm high
Pictogram = 125mm x 125mm
Other elements = As noted

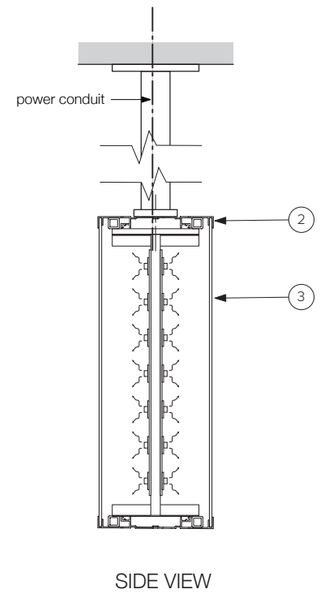
COLOUR
Transport background = Arlon Orange 44 translucent vinyl
Lightbox = Resene ‘Jon’ N38-007-359
Arrow = White for illumination
Text = White for illumination
Pictogram = White for illumination

Typical Location
Scale 1:50

Typical Graphic Layouts
Scale 1:20



Suspended Frame
Scale 1:10



Sign Type

DS-4a

Illuminated Directional Sign

Construction Details

1. Station structure. Sign maker to visit site to confirm fixing requirements prior to manufacture.

2. 200mm deep aluminium sign box extrusion with internal support frame to suit suspended or wall mounted application. Ensure side of sign is removable to permit installation and maintenance.

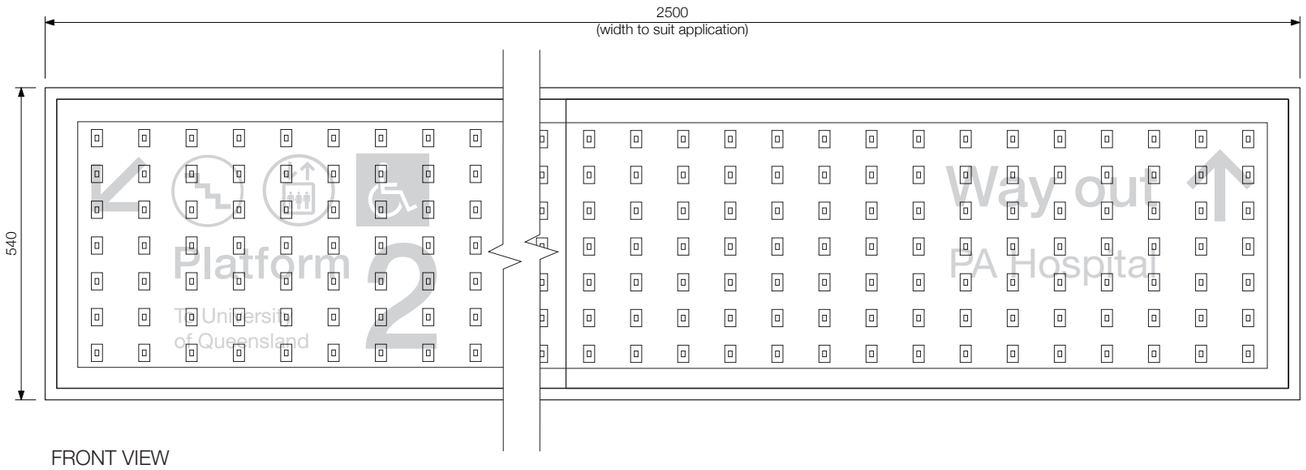
3. 4.5mm thick clear polycarbonate sign face with reverse applied vinyl graphics. Backspray white to suit internal illumination.

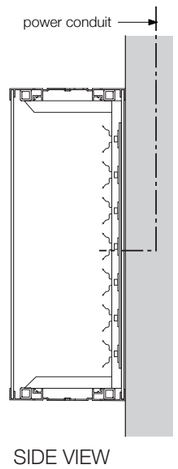
4. Internally illuminated by LED backlight modules mounted to backing panel. LED layout indicative only. Signmaker to provide control gear. Sign to be illuminated during all hours of station operation. Refer to specification for LED requirements.

5. 20 x 20 x 3mm SHS aluminium light supports welded to frame. Power conduit to be contained within SHS dropper (suspended) or through back of sign box (wall mounted).

FIXING METHOD

6. Fixings to be designed and approved by signmaker's engineer. Signmaker to coordinate fixing requirements with Managing Contractor / TransLink Representative.





Front View
Scale 1:10

Sign Type
DS-6a
Directional Sign - Braille & Tactile Wall Mounted

Purpose
- To direct to platforms and facilities
- For pedestrian use

Typical location
- At decision points
- Wall mounted sign
- Located at entry and decision points within the station property boundaries
- Refer to sign placement note

Indicative message
- Platform number
- Facility
- Way out
- Braille message

Graphics Detail
FONT
All text = Helvetica Neue 65 Medium

SIZE
Station name = 45mm cap X height
All other text = 20mm cap X height
Arrow = 32mm high (tip to tail)
Pictogram = 55mm high

NOTE - Messages have 50% tracking (letter spacing)

COLOUR
Transport panel = Resene 'Trinidad' O61-167-048
Other panel = Resene 'Jon' N38-007-359
Arrow = White
Text = White
Pictogram = White
Access Pictogram = white figure on AS2700 B21 Ultramarine Blue background

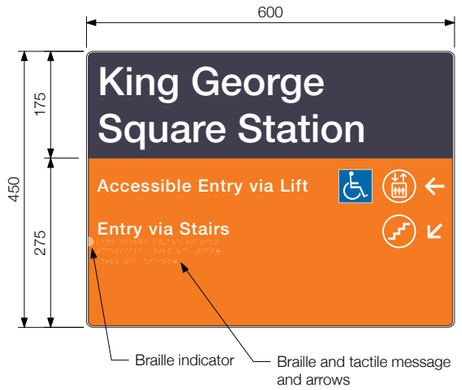
Construction Details
1. 1.6mm acrylic sign panel with Braille and tactile graphics. Use approved raised tactile pictograms / text and grade 1 Braille (uncontracted) to Australian Braille Authority and AS1428.4.2(2018) requirements. Top of Braille to be offset 8mm below letters. Braille locator notch left of first line of Braille.

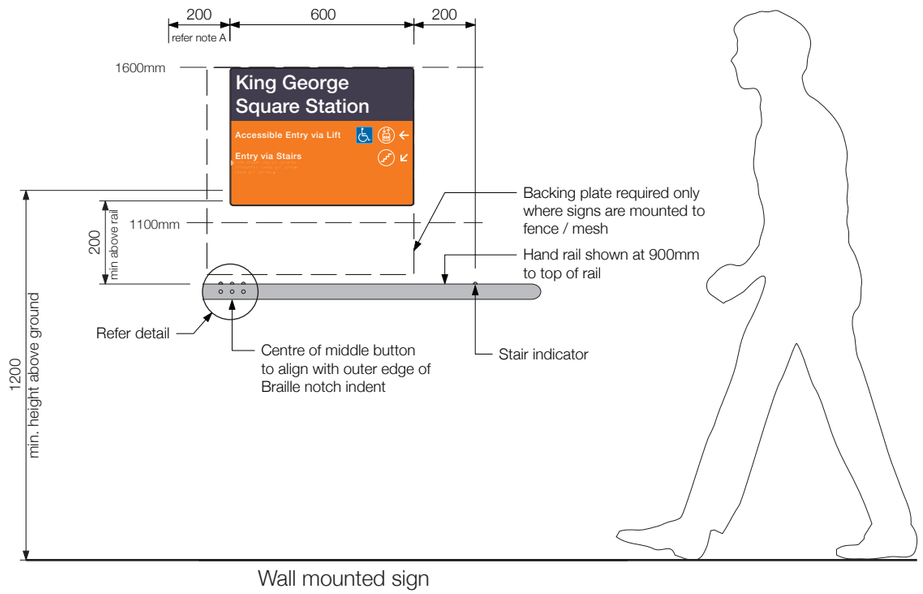
2. Border and Braille notch / locator may be formed by machining through top layer of panel. Tactile components to be provided to ensure construction method is suitable so that all raised tactile components are robust and cannot be easily dislodged or worn down due to picking or use'.

NOTE - Signmaker to have all Braille signs proof read by a reputable proofreader prior to manufacture and installation.

3. Fixed to wall with VHB double sided tape and silicone.

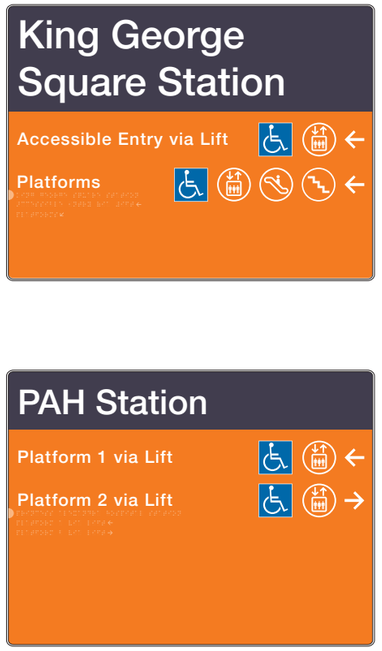
SIGN PLACEMENT NOTE - The Braille and tactile sign panel must be located between 1200mm and 1600mm above finished ground level. When the sign panel has only a single line of tactile characters, these characters must be located between 1250mm and 1350mm above finished ground level



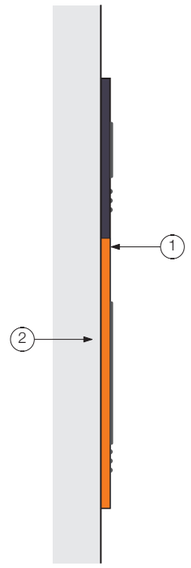


Wall mounted sign

Typical Location
Scale 1:20



Typical Graphic Layout
Scale 1:10

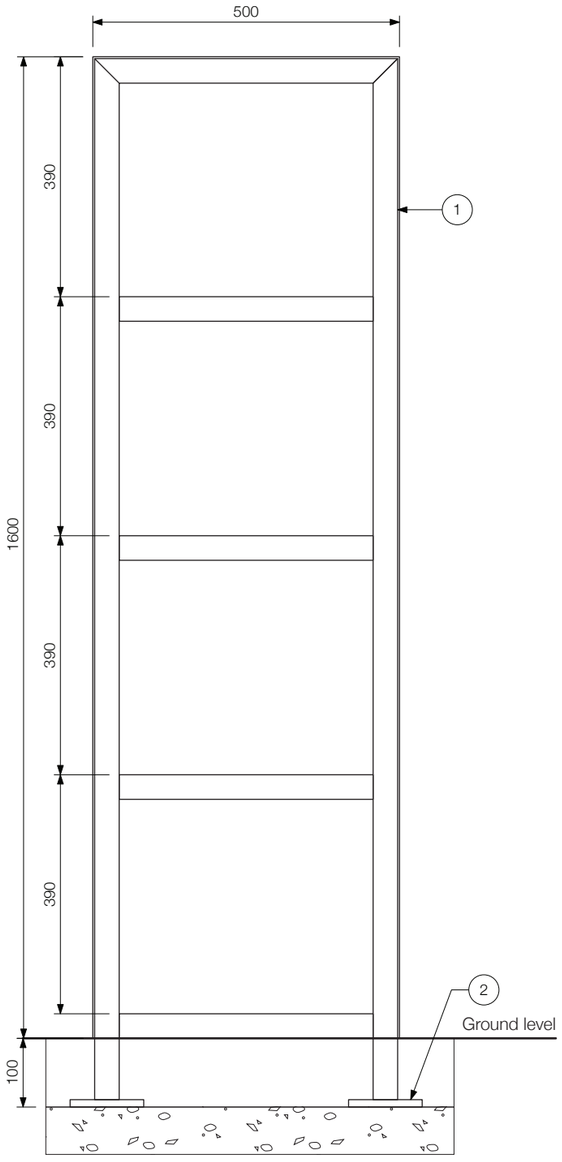


SIDE VIEW

Braille & Tactile Panel Detail
Not to Scale

DS-6b

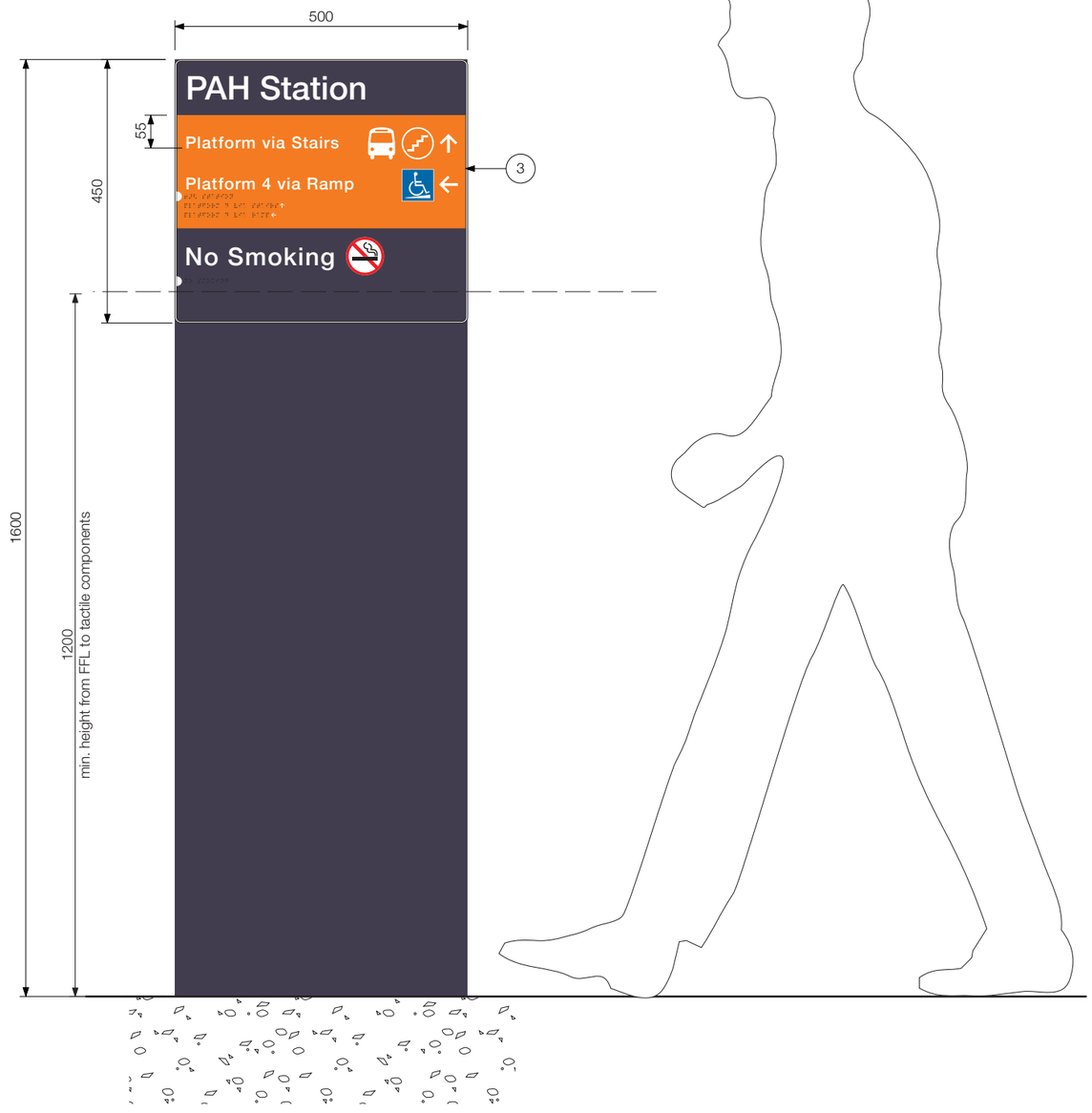
Directional Sign - Braille & Tactile Freestanding



FRONT VIEW

Construction

Scale 1:10



FRONT VIEW

Typical Location

Scale 1:10

Purpose
- To direct to platforms and facilities
- For pedestrian use

Typical location
- At decision points.
- Freestanding sign
- Located at entry and decision points within the station property boundaries.

Indicative message
- Station name
- Platform number
- Facility
- Way out
- Braille message

Graphics Detail

FONT
All text = Helvetica Neue 65 Medium

SIZE
Station name = 45mm cap X height
All other text = 20mm cap X height
Arrow = 32mm high (tip to tail)
Pictogram = 55mm high
NOTE - Messages have 50% tracking (letter spacing)

COLOUR
Transport panel = Resene ‘Trinidad’ O61-167-048
Other panel = Resene ‘Jon’ N38-007-359
Arrow = White
Text = White
Pictogram = White
‘No entry’, ‘No smoking’ & CCTV pictograms = black figure on white background with AS2700 Signal Red circle and slash
Access Pictogram = white figure on AS2700 B21 Ultramarine Blue background

Construction Details

1. 50 x 50 x 3 SHS fully welded internal frame with suitable base plate. 3mm thick painted aluminium cladding with 25mm wide folded returns. Ensure adequate internal support for panel. Countersunk rivet fix cladding to internal frame. Paint out fixing heads to match cladding.

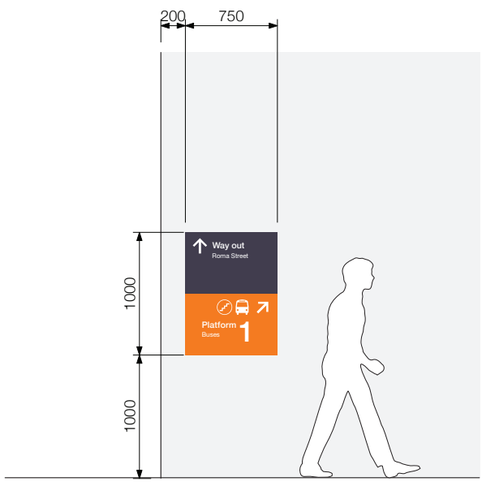
2. Chemset anchor to existing slab or reinforced concrete pad/pier footing to engineers specification. All fixings shall be below ground level to reduce trip hazards. Re-instate / make good paving or pavement, with no changes of level greater than 3mm and no gradients steeper than 1:40.

3. 1.6mm acrylic sign panel with Braille and tactile graphics. Use approved raised tactile pictograms / text and grade 1 Braille (uncontracted) to Australian Braille Authority and AS1428.4.2(2018) requirements. Top of Braille to be offset 8mm below letters. Braille locator notch left of first line of Braille.

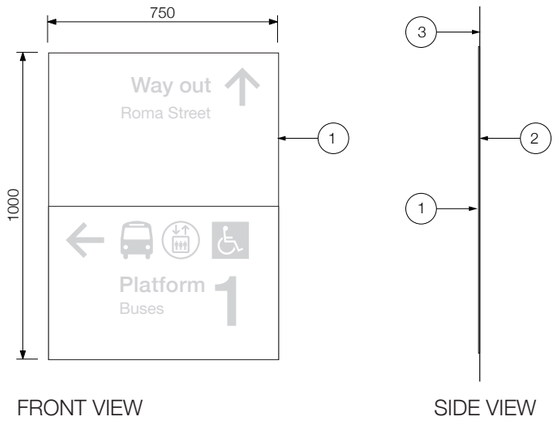
4. Border and Braille notch / locator may be formed by machining through top layer of panel. Tactile components to be provided to ensure construction method is suitable so that all raised tactile components are robust and cannot be easily dislodged or worn down due to picking or use’.

5. Fix Braille sign panel to cladding with VHB double sided tape and silicone.

Note
Structural framework and footing details to be confirmed by sign maker’s engineer. Sign maker to co-ordinate installation with Managing Contractor / TransLink Representative.



Typical Location - DS-7
Scale 1:50



Construction Layout - DS-7
Scale 1:20

DS-7
Directional Sign - Wall/Column Mounted

Purpose
- To direct to platforms and facilities
- For pedestrian use

Typical location
- At decision points.
- Wall mounted sign
- Located at decision points within the station property boundaries.

Indicative message
- Platform number
- Facility
- Way out

Graphics Detail
FONT
All text = Helvetica Neue 65 Medium

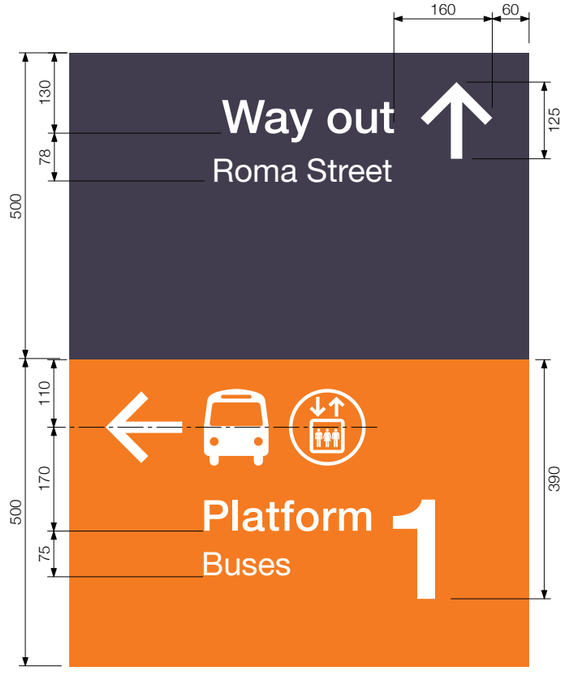
SIZE
Platform number = 165mm cap X height
'Way out' = 54mm cap X height
'Platform' = 50mm cap X height
'Trains/Buses/Roma Street' = 37mm cap X height
Circle pictograms = 125mm x 125mm
Bus/Train pictogram = 125mm height (proportional width)
Arrow = 125mm high
Others = As noted

COLOUR
Transport panel = Resene 'Trinidad' O61-167-048
Other panels = Resene 'Jon' N38-007-359
Text = Arlon White 02
Pictogram = Arlon White 02

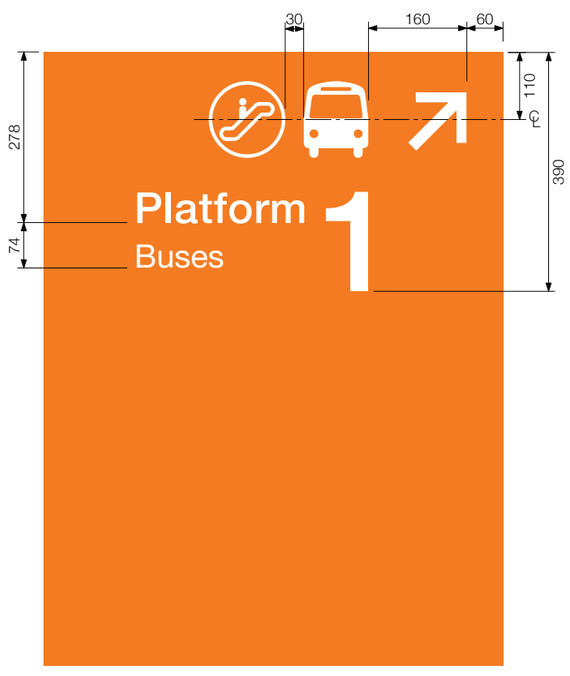
Construction Details
1. 2mm thick aluminium sign panel with front applied vinyl graphics. Protective clear anti-graffiti spray coat over.

2. Panel fixed to wall/column with 3M VHB double sided tape and silicone. Alternatively, mechanically fix panel to wall. Paint screw heads to match panel colour at fixing locations.

3. Wall/column.



DS-7 Two direction example



DS-7 Single direction example

DS-7 Two direction example

Typical Graphic Layouts - DS-7
Scale 1:10

DS-8

Directional Sign - Freestanding

Purpose
- To direct to major destinations, facilities, within and outside bus station
- For pedestrian use

Typical location
- Only used at bus stations
- Located at decision points both within and outside the station property boundaries.
- Sign to be oriented typically with the sign face perpendicular to the main path of travel.
- Sign to be located outside required pedestrian paths of travel.

Indicative message
- Station name
- Telephone
- Taxi Rank
- Kiss ‘n’ ride
- Park ‘n’ ride
- Shopping Centre
- Toilets
- Platforms
- Public transport

Graphics Detail
FONT
Station name = Helvetica Neue 66 Medium Italic
All other text = Helvetica Neue 65 Medium

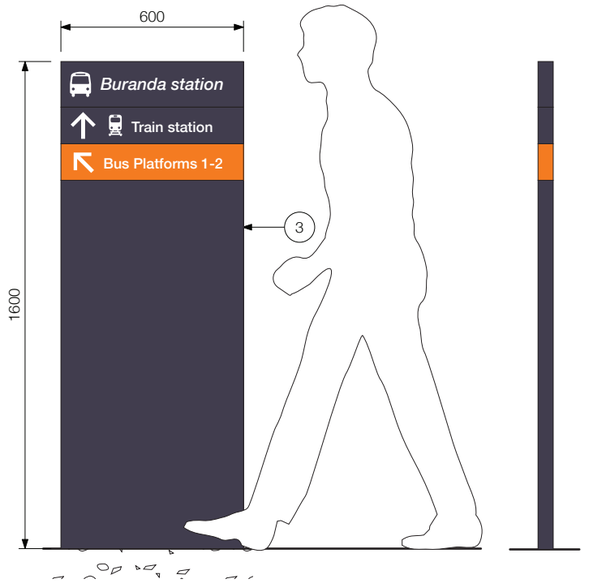
SIZE
Station name = 40mm cap X height
All other text = 34mm cap X height
Arrows = 88mm high
Pictograms = 88mm high

COLOUR
Transport panel background = Resene ‘Trinidad’ O61-167-048
Sign structure and other panel backgrounds = Resene ‘Jon’ N38-007-359
All text = Arlon White 02
Arrows = Arlon White 02
Pictograms = Arlon White 02

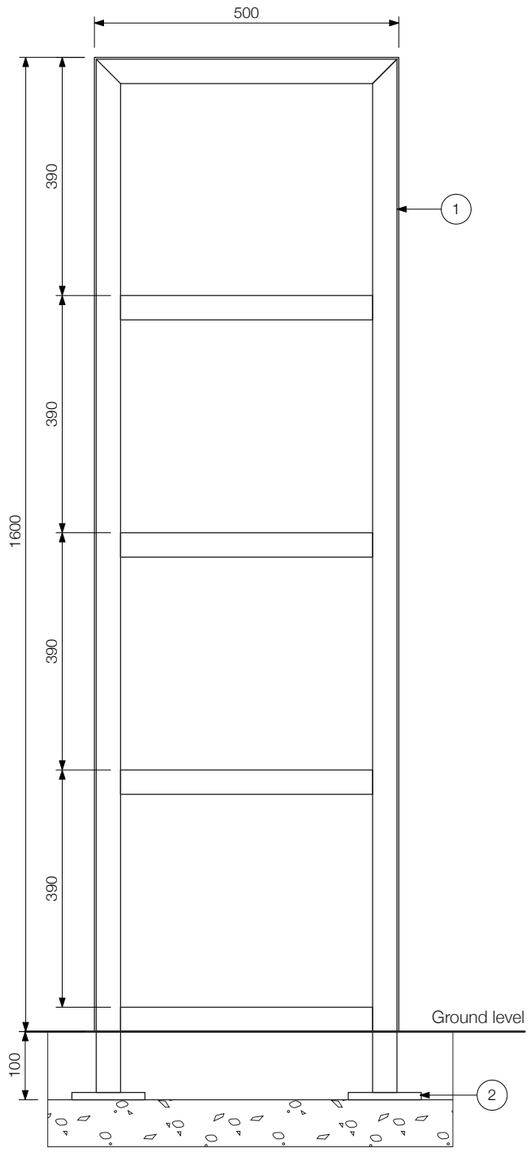
Construction Details
1. 50 x 50 x 3 SHS fully welded internal frame with suitable base plate. 3mm thick painted aluminium cladding with 25mm wide folded returns. Ensure adequate internal support for panel. Countersunk rivet fix cladding to internal frame. Paint out fixing heads to match cladding.

2. Chemset anchor to existing slab or reinforced concrete pad/ pier footing to engineers specification. All fixings shall be below ground level to reduce trip hazards. Re-instate / make good paving or pavement, with no changes of level greater than 3mm and no gradients steeper than 1:40.

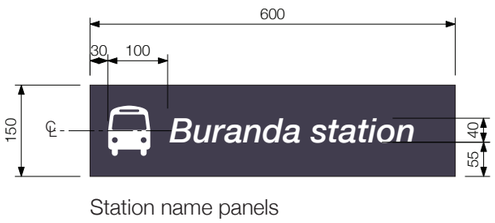
Note
Structural framework and footing details to be confirmed by sign maker’s engineer. Sign maker to co-ordinate installation with Managing Contractor / TransLink Representative.



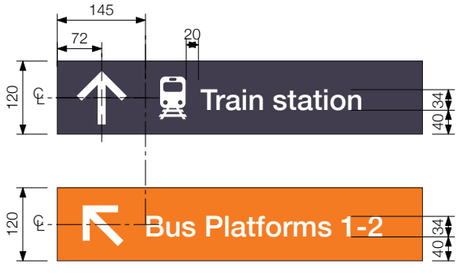
Typical Location
Scale 1:20



Construction
Scale 1:10



Station name panels



Direction panels

Graphic Layouts
Scale 1:10

FI-1a

Room Identification Sign

Purpose
- To identify staff facility
- For staff use

Typical location
- Next to facility door.
- Height to CL of sign - 1500mm
- First preferred sign location is on the wall next to the door on the same side as the door handle.
- Second preferred location (only if the first location is unavailable) is on the wall next to the door on the hinge side.
- Third preferred location (only if the first and second locations are unavailable) is centred on the door.

Indicative message
- Staff only
- Office

Graphics Detail
FONT
All text = Helvetica Neue 65 Medium

SIZE
All text = 20mm cap X height

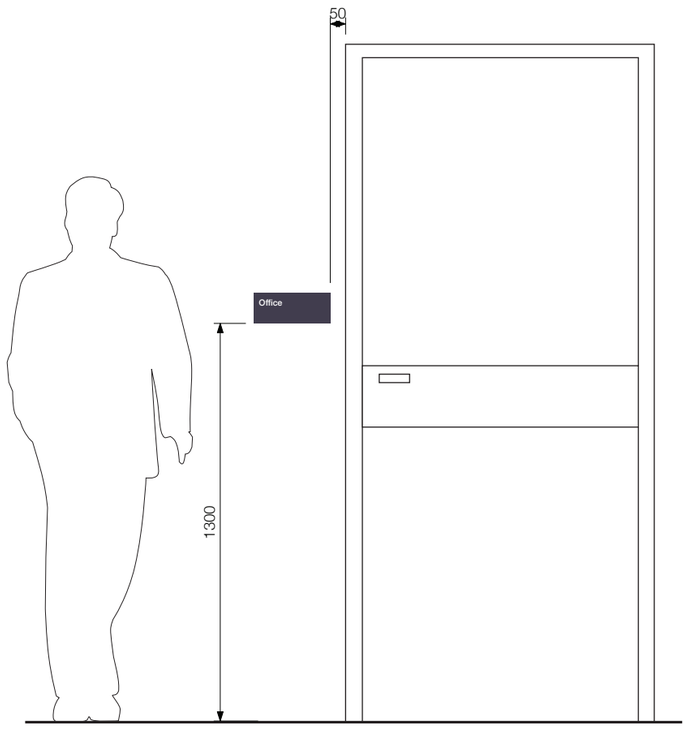
COLOUR
Panel = Resene 'Jon' N38-007-359
Text = Arlon White 02

Construction Details
1. 2mm aluminium panel with front applied vinyl graphics. Protective clear coat over.

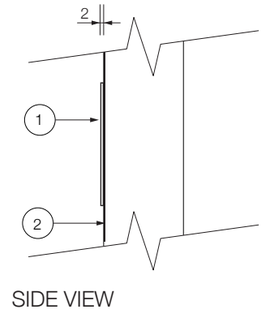
2. Fixed to door with 3M VHB double sided tape and silicone.

3. Where signs are located in reach of a person, all exposed corners are to have 10mm radius for safety.

4. Mounting surface. Prepare surface free from dust, dirt, oil & grease prior to fixing.



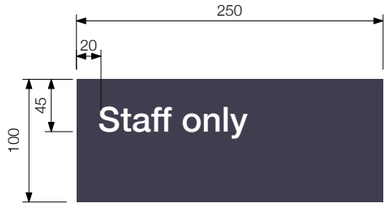
Typical Location
Scale 1:20

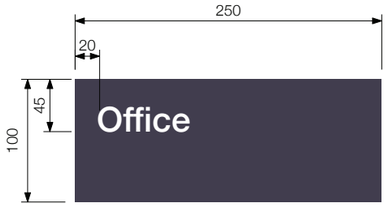


SIDE VIEW

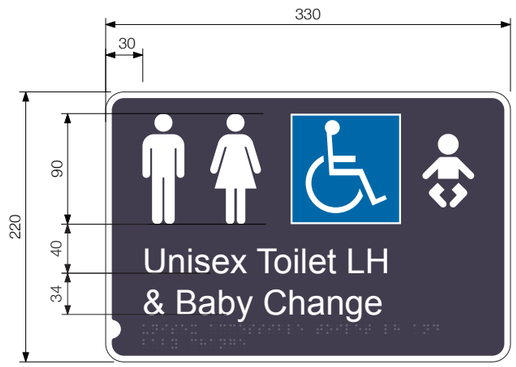
FRONT VIEW

Construction Layout
Scale 1:5

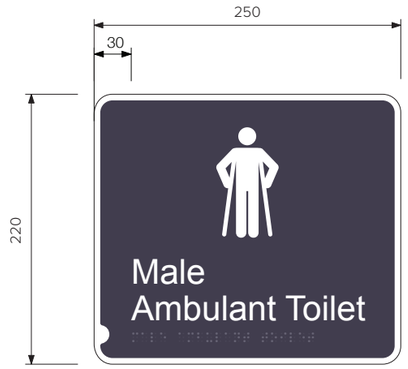




Graphic Layouts
Scale 1:5



Sign ref FI-1b.1
braille = unisex accessible toilet lh and baby change
NOTE – Handing of toilet to be identified as per AS 1428.1

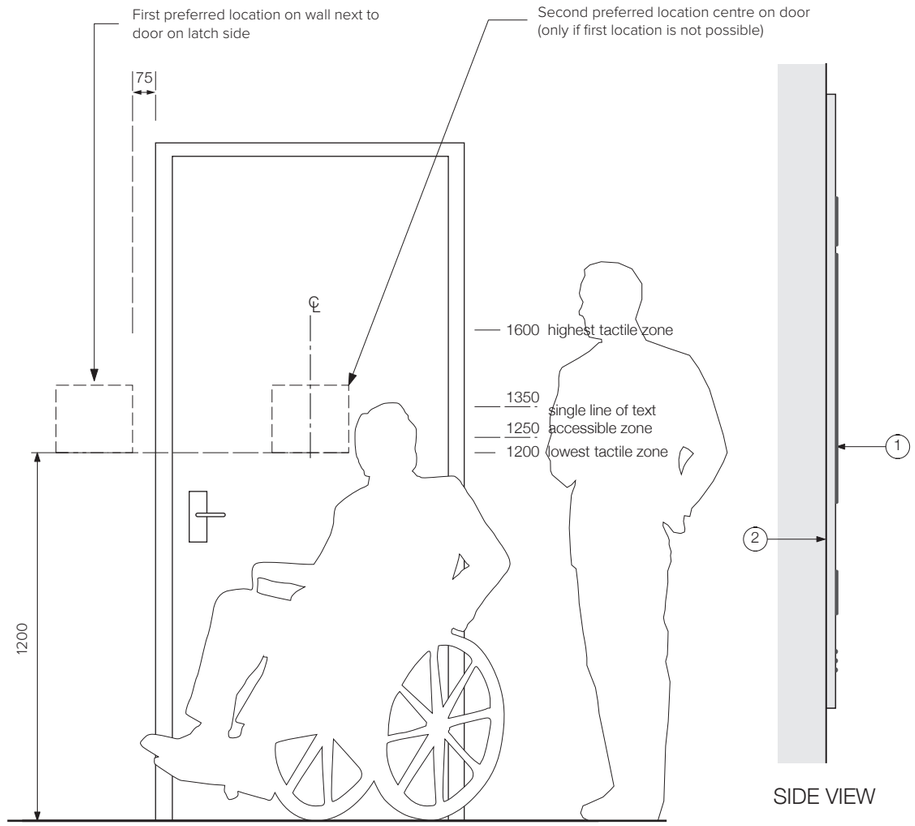


Sign ref FI-1b.2
Male Ambulant Toilet
braille = male ambulant toilet

Sign ref FI-1b.3
Female Ambulant Toilet
braille = female ambulant toilet

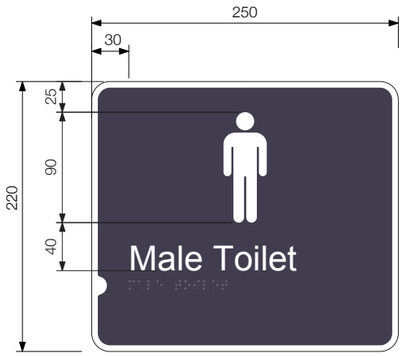
Graphic Layouts

Scale 1:5

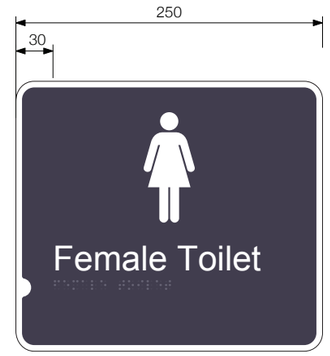


Typical Location
Scale 1:20

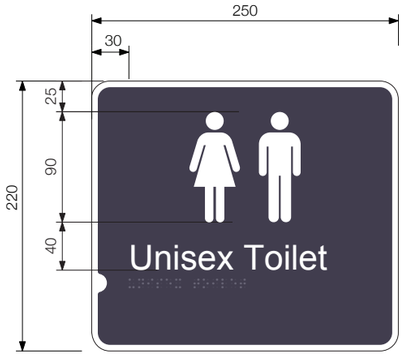
Braille & Tactile Panel
Scale 1:2



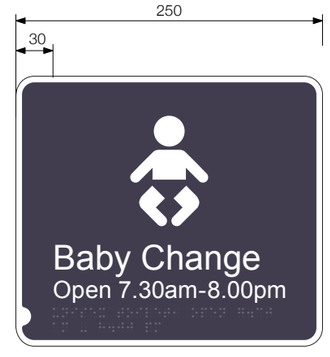
Sign ref FI-1b.4
Braille translation = male toilet



Sign ref FI-1b.5
Braille translation = female toilet



Sign ref FI-1b.6
Braille translation = unisex toilet



Sign ref FI-1b.7
Braille translation = baby change
open 7.30am-8.00pm

NOTE - Hours of operation are to suit facility

Graphic Layouts
Scale 1:5

FI-1b

Room Identification Sign (Braille & Tactile)

Purpose
- To identify all facilities

Typical location
- Mounted next to facility entrance door
- First preferred sign location is on the wall next to the door on the same side as the door handle.
- Second preferred location (only if the first location is unavailable) is centred on door.

Indicative message
- Male Toilet, Female Toilet, Unisex Toilet
- Relevant pictogram
- Braille message

Graphics Detail
FONT
All text = Arial Regular

SIZE
Main text = 20mm cap X height
'Open...' = 15mm cap X height
Pictogram = 90mm O/A height

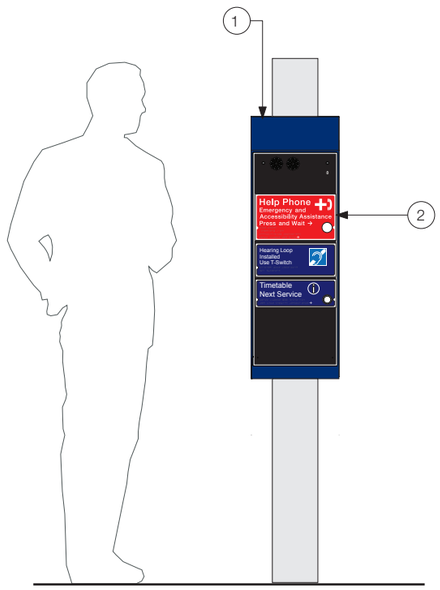
COLOUR
Panel = Resene 'Jon' N38-007-359
Text = white
Pictogram = white
Access Pictogram = white figure on AS2700 B21 Ultramarine Blue background

Construction Details
1. 1.6mm acrylic sign panel with Braille and tactile graphics. Use approved raised tactile pictograms and text and grade 1 Braille (uncontracted) to Australian Braille Authority, NCC and AS1428.4.2(2018) requirements. Top of Braille to be offset 8mm below letters. Braille locator notch left of first line of Braille.

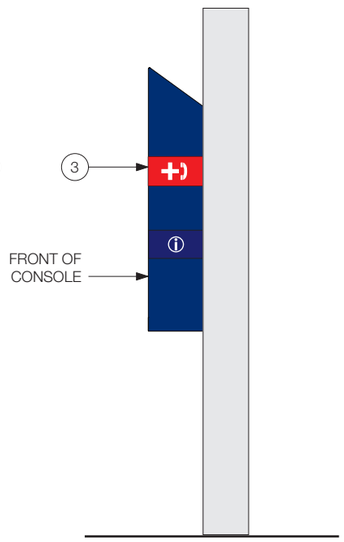
2. Border and Braille notch / locator may be formed by machining through top layer of panel. Tactile components to be provided to ensure construction method is suitable so that all raised tactile components are robust and cannot be easily dislodged or worn down due to picking or use'.

3. Mounting surface. Prepare surface free from dust, dirt, oil & grease prior to fixing. Sign panel adhered to wall/door with 3M VHB double sided tape & silicone.

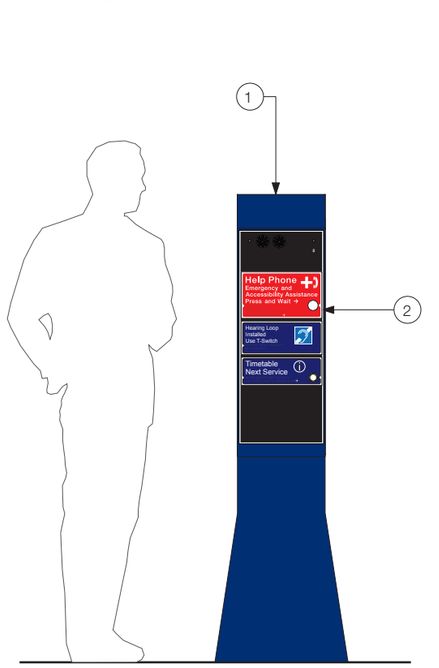
SIGN PLACEMENT NOTE - The Braille and tactile sign panel must be located between 1200mm and 1600mm above finished ground level. When the sign panel has only a single line of tactile characters, these characters must be located between 1250mm and 1350mm above finished ground level



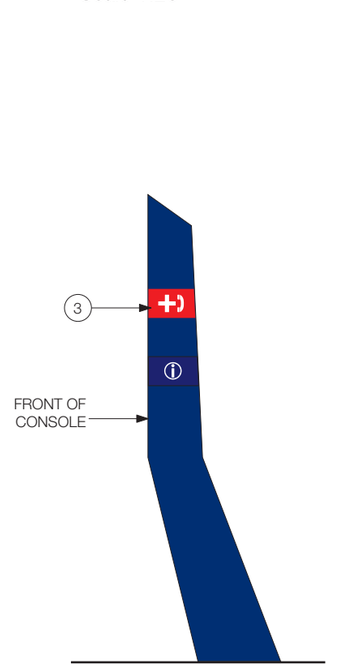
Post Mounted Help Phone - Front View
Scale 1:20



Post Mounted Help Phone - Side View
Scale 1:20

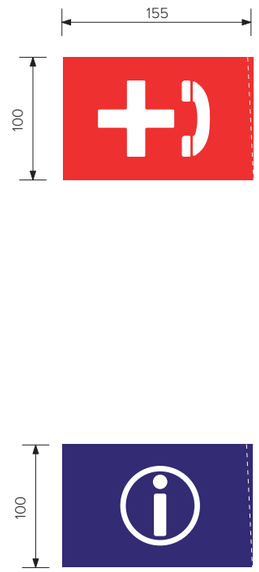


Pedastal Help Phone - Front View
Scale 1:20



Pedastal Help Phone - Side View
Scale 1:20

Braille and Tactile Panels



Side Panels
NOTE: Tapered edge to sign where required to suit console design

Typical Graphic Layouts
Scale 1:5

NOTE:
FINAL DETAILS TO BE PROVIDED BY TRANSLINK PRIOR TO MANUFACTURE AND INSTALLATION

Construction Details
1. Help phone console to Translink Standards.

2. Braille and tactile sign panels, 1.6mm thick aluminium sign panels. Use approved raised tactile pictograms and text and grade 1 Braille (uncontracted) to Australian Braille Authority, NCC and AS1428.4.2(2018) requirements. Top of Braille to be offset 8mm below letters. Braille locator notch left of first line of Braille.

3. Side graphic panels, 1.6mm thick aluminium panels with front applied graphics and protective satin clear coat.

4. All panels fixed to cabinet with 3M 468 double sided adhesive tape.

FI-1g
Help Phone Identification Signs

Purpose
To identify and provide information on the Help Phone.

Typical location
Mounted to post or onto freestanding console.

Indicative message
- Help phone
- Hearing Loop

Optional:
- Electronic Timetable

Graphics Details
HELP PHONE
FONT
All text = Helvetica Neue 65 Medium

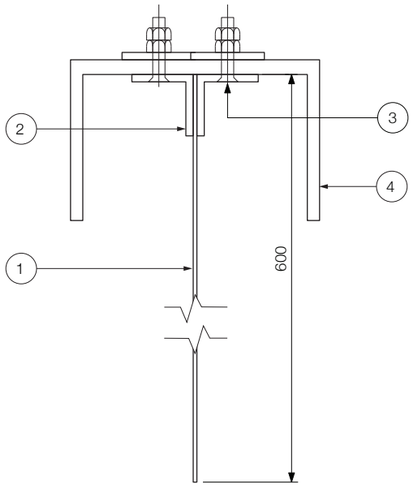
SIZE
Sign Border = 5mm typical
Braille notch = 10mm wide x 6mm deep
Help Phone text = 25mm high.
Emergency Assistance text = 15mm high.
Press and Wait text = 15mm high.
Pictogram = 40mm high.
Braille text = As per Australian Standards
Side Panel Pictograms = 60mm high.

COLOUR
Panel = To match Pantone 032 C
Outside border = White.
Screen border = White.
Text and Graphic = White.
Symbols = White.

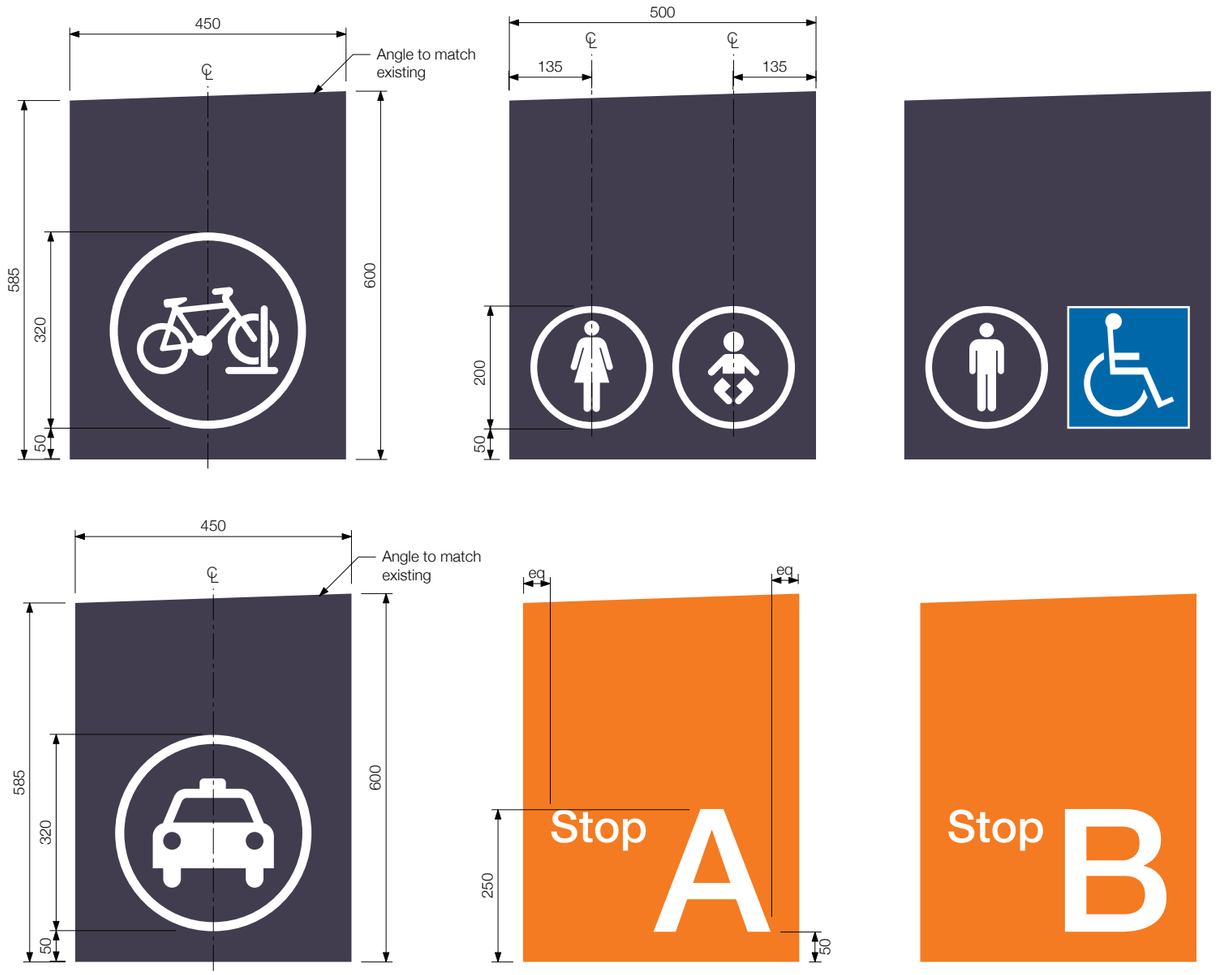
TIMETABLE / HEARING LOOP
FONT
All text = Helvetica Neue 65 Medium

SIZE
Braille notch = 10mm wide x 6mm deep
Hearing Loop text = 15mm high.
Timetable next service text = 20mm high.
Hearing Loop Symbol = 60mm wide x 60mm high.
Pictogram = 40mm high.
Braille panel text = As per Australian Standards
Side Panel Pictograms = 60mm high.

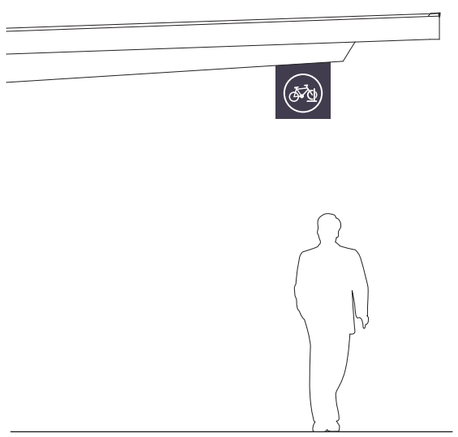
COLOUR
Panel = To match Pantone 288C
Outside border = White.
Text and Graphic = White.
Hearing Loop = To match AS2700 B21 Ultramarine Blue
Symbols = White.



Detail
Scale 1:10



Typical Graphic Layouts
Scale 1:10



Typical Location
Scale 1:50

Sign Type
FI-2
Facility Identification Sign - Under Awning

Purpose
- To identify facility
- For pedestrian use

Typical location
- Located on facility structure
- Fixed to underside of awning structure
- The bottom of the sign must not project below 2.2m above the finished floor level
- Sign to be oriented typically with the sign face perpendicular to the main path of travel

Indicative message
- Bicycle racks
- Toilets

Graphics Detail
FONT
All text = Helvetica Neue 65 Medium

SIZE
Large pictogram = 320mm high
Small pictogram = 200mm high
'Stop' = 55mm cap X height
Letter = 200mm cap X height

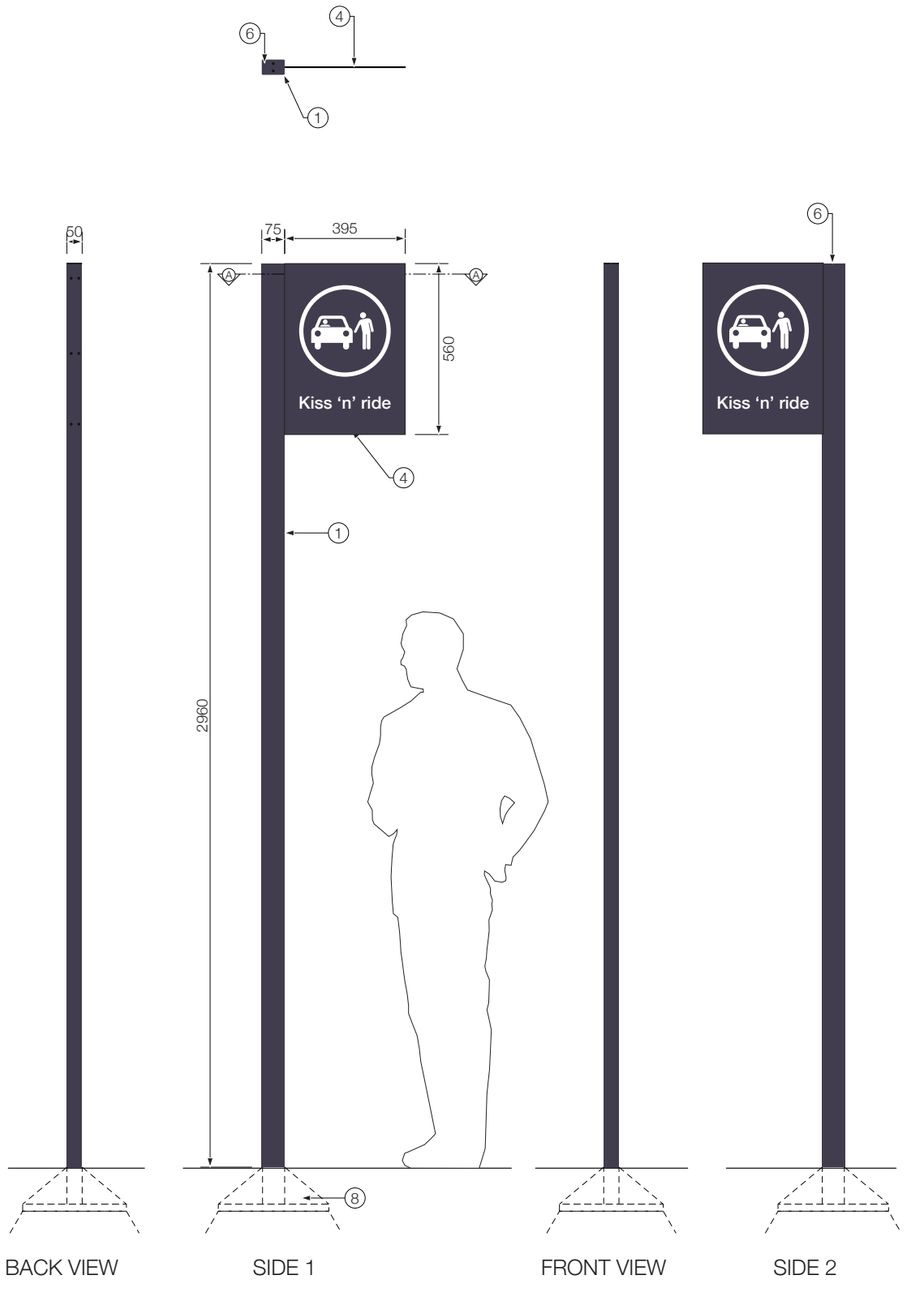
COLOUR
Transport panel background = Resene 'Trinidad' O61-167-048
Other panel background = Resene 'Jon' N38-007-359
Text = Arlon White 02
Pictogram = Arlon White 02
Access Pictogram = white figure on AS2700 B21 Ultramarine Blue background

Construction Detail
1. 5mm thick aluminium painted sign panel with welded fixing angles and mounting holes drilled and tapped to match existing. Front applied vinyl graphics with clear anti-graffiti spray coat over.

2. 50 x 50 x 6mm aluminium angle welded to 5mm thick plate.

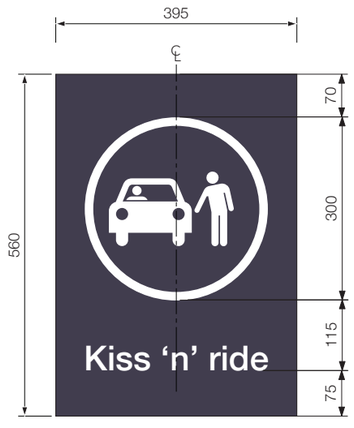
FIXING METHOD
3. Fixings to be designed and approved by signmaker's engineer. Signmaker to coordinate fixing requirements with Managing Contractor / TransLink Representative.

4. Shelter structure.



Elevations
Scale 1:20

Section A-A
Scale 1:2



SIDE 1

Typical Graphic Layout
Scale 1:10

Sign Type
FI-3a
Kiss ‘n’ Ride Identification Sign

Purpose
- To identify pick up and drop off zone
- For pedestrian use

Typical location
- Located at head of Kiss ‘n’ ride set down zone.
- Located in either TransLink or local council property depending on site layout and location of facility. Note:- If located outside Translink property, local council to be consulted on final location.
- Sign to be oriented typically with the sign faces perpendicular to the kerb line, in order that the sign faces are clearly visible from road approaches. Sign to point away from road.
- Sign post to be located outside required pedestrian paths of travel.

Indicative message
- Kiss ‘n’ ride
- pictogram

Graphics Detail
FONT
All text = Helvetica Neue 65 Medium

SIZE
‘Kiss n ride’ = 40mm cap X height
Pictogram = 300mm

COLOUR
Pole = Resene ‘Jon’ N38-007-359
Panel background = Resene ‘Jon’ N38-007-359
Pictogram = Arlon White 02
Text = Arlon White 02

Construction Details
1. 75 x 50 x 4mm RHS galvanised steel pole. Base plate and gussets welded to end.

2. 18 x 18 x 4mm galvanised steel tabs welded to inside of pole. 2 off M6 nuts welded to tabs.

3. Cut out slot allowing 5mm sign panel to slide into pole. (Clearance fit)

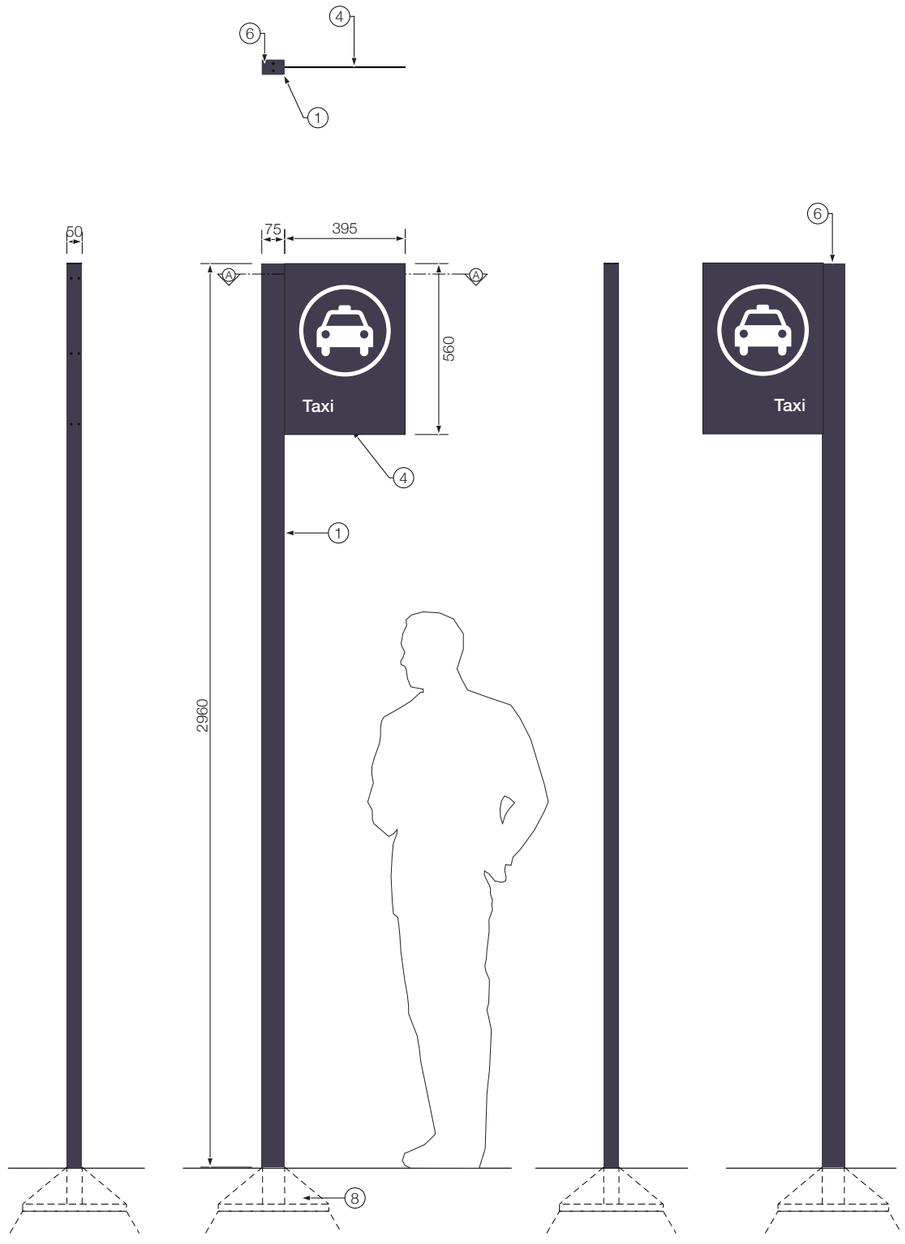
4. 5mm thick aluminium sign panel. 557 x 50 x 5mm fixing plate welded to one edge.

5. M6 stainless steel (316) phillip head self tapping c’sunk screw fixings through post into fixing plate

6. 2mm thick galvanised steel capping to top of post.

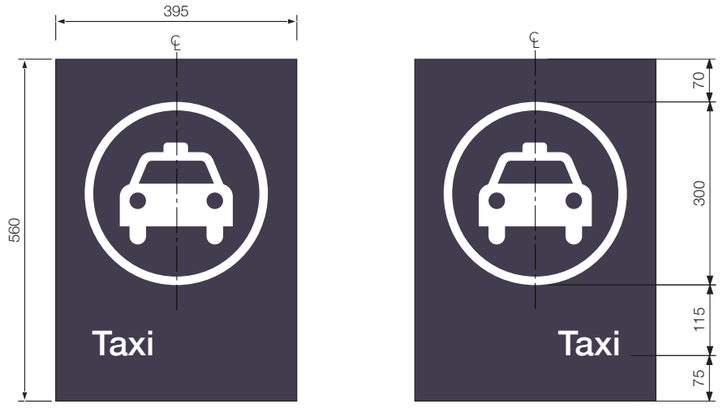
7. M6 stainless steel (316) phillip head self tapping c’sunk screw, fixes capping to tabs.

8. Structural framework and footing details to be confirmed by sign maker’s engineer. Sign maker to co-ordinate installation with Managing Contractor / TransLink Representative.



Elevations
Scale 1:20

Section A-A
Scale 1:2



Typical Graphic Layout
Scale 1:10

Sign Type
FI-3b
Taxi Identification Sign

Purpose
- To identify Taxi zone
- For pedestrian use

Typical location
- Located at head of taxi zone.
- Located in either TransLink or local council property depending on site layout and location of zone. Note:- If located outside TransLink property, local council to be consulted on final location.
- Sign to be oriented typically with the sign faces perpendicular to the kerb line, in order that the sign faces are clearly visible from road approaches. Sign to point away from road.
- Sign post to be located outside required pedestrian paths of travel.

Indicative message
- Taxi and pictogram

Graphics Detail
FONT
All text = Helvetica Neue 65 Medium

SIZE
'Kiss n ride' = 40mm cap X height
Pictogram = 300mm

COLOUR
Pole = Resene 'Jon' N38-007-359
Panel background = Resene 'Jon' N38-007-359
Pictogram = Arlon White 02
Text = Arlon White 02

Construction Details
1. 75 x 50 x 4mm RHS galvanised steel pole. Base plate and gussets welded to end.

2. 18 x 18 x 4mm galvanised steel tabs welded to inside of pole. 2 off M6 nuts welded to tabs.

3. Cut out slot allowing 5mm sign panel to slide into pole. (Clearance fit)

4. 5mm thick aluminium sign panel. 557 x 50 x 5mm fixing plate welded to one edge.

5. M6 stainless steel (316) phillip head self tapping c'sunk screw fixings through post into fixing plate

6. 2mm thick galvanised steel capping to top of post.

7. M6 stainless steel (316) phillip head self tapping c'sunk screw, fixes capping to tabs.

8. Structural framework and footing details to be confirmed by sign maker's engineer. Sign maker to co-ordinate installation with Managing Contractor / TransLink Representative.

4.16.1

Sign Type
FI-5
Facility Sign

Purpose
- To identify restricted areas, passenger responsibilities and regulatory requirements

Typical location
- Mounted at restricted areas
- Wall mounted signs located along main pathways and waiting areas

Indicative message
- Prohibited activities eg. smoking, crossing lines.
- Passenger responsibilities
- CCTV surveillance

Refer to page 4.16.2 for Graphic details.

Construction Details
1. 2mm thick painted aluminium panel with front applied vinyl graphics. Protective anti-graffiti clear coat over.

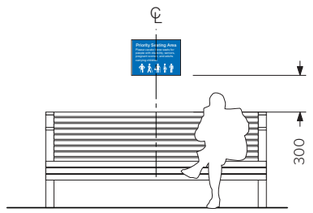
2. “Demon” fasteners painted to match sign face.

3. Where signs are located in reach of a person, all exposed corners are to have 10mm radius for safety.

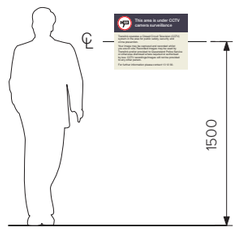
4. Barrier fence. Fix sign panel to perforated metal screen fence. Fixings to coordinate with pattern and border.

5. Mounting surface. Prepare surface free from dust, dirt, oil & grease prior to fixing. Panel adhered to surface with 3M VHB double sided tape (to be confirmed).

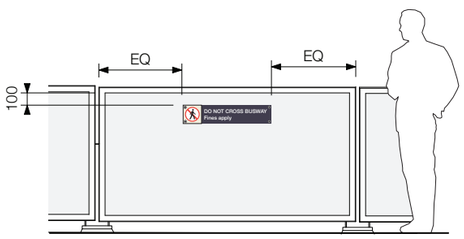
6. Structural framework and footing details to be confirmed by sign maker’s engineer. Sign maker to co-ordinate installation with Managing Contractor / TransLink Representative.



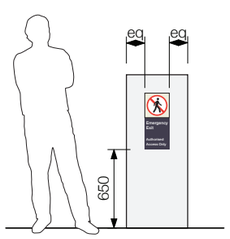
MOUNTED ABOVE SEATING



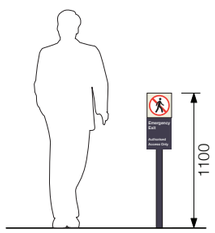
WALL MOUNTED



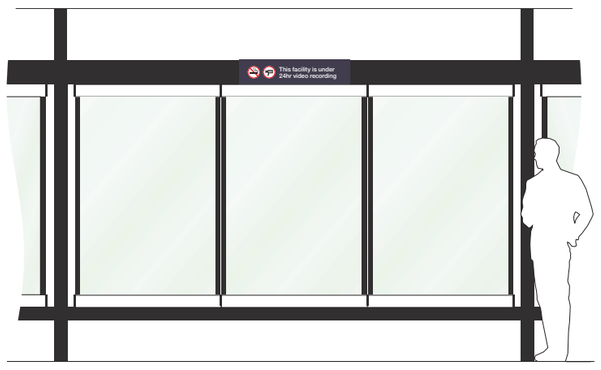
MESH MOUNTED



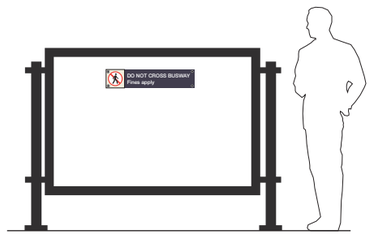
COLUMN MOUNTED



FREESTANDING



STATION STRUCTURE MOUNTED

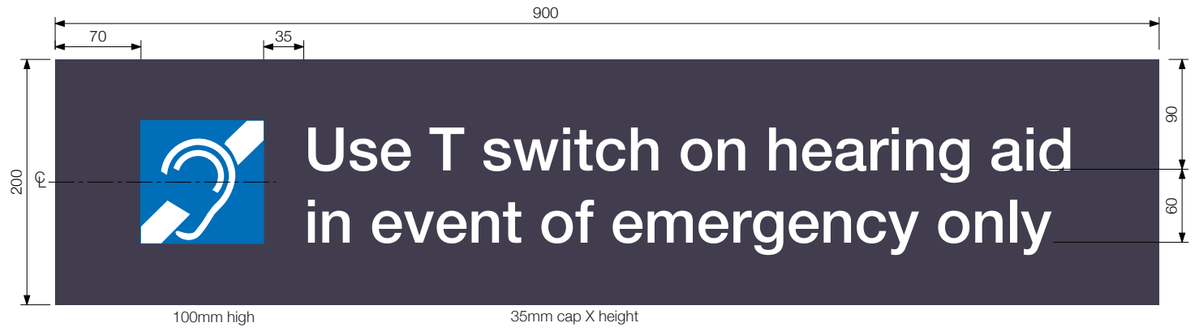


SCREEN MOUNTED

BARRIER WALL MOUNTED

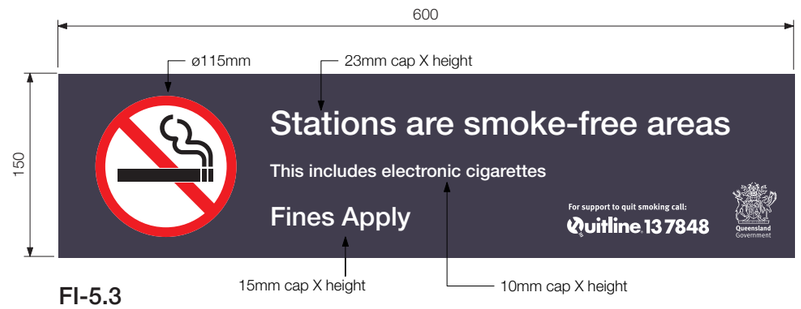
Typical Locations
Scale 1:50

NOTE:
CONTENT AND INFORMATION ON SIGNS TO MATCH FACILITY REQUIREMENTS

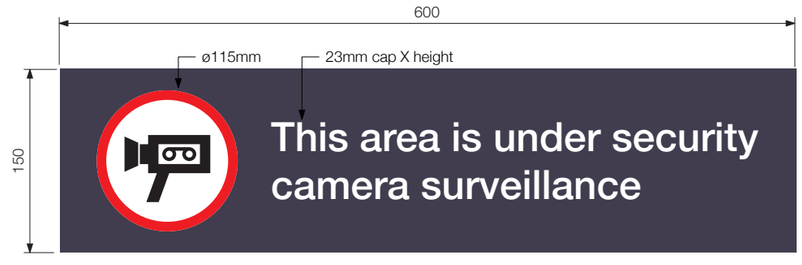


FI-5.1

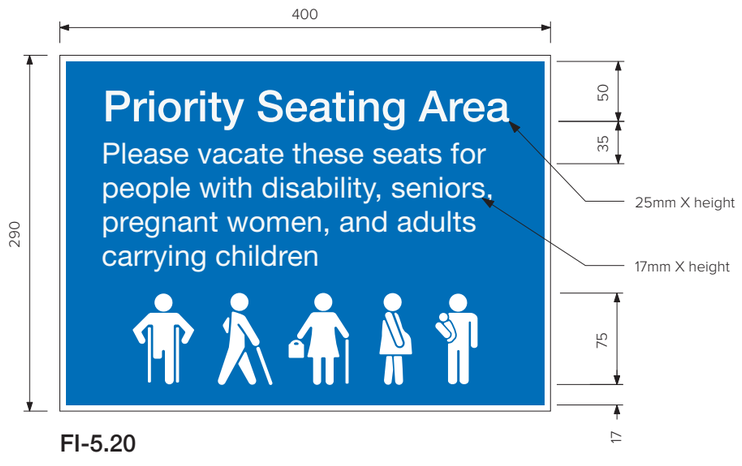
FI-5.2



FI-5.3



FI-5.4



FI-5.20

Sign Type
FI-5
Facility Sign

Graphics Detail
FONT
All text = Helvetica Neue 65 Medium

SIZE
as shown

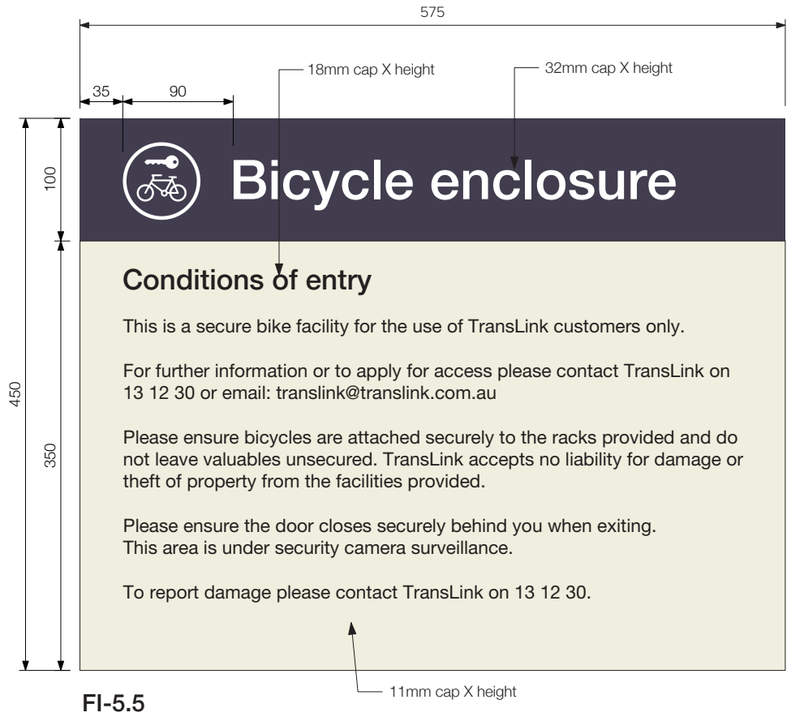
COLOUR
Panel = Resene ‘Jon’ N38-007-359
Panel (off-white) = Resene ‘Rice Cake’ G94-010-092
Post = Resene ‘Jon’ N38-007-359
Text = Arlon White 02
‘No entry’, ‘No smoking’ & CCTV pictograms = black figure on white background with AS2700 Signal Red circle and slash
‘Hearing’ pictogram = white graphic on AS2700 B21 Ultramarine Blue background
Yellow line = Arlon Primrose Yellow 67

Refer to page 4.16.1 for Construction details.

Graphic Layouts
Scale 1:5

Sign Type
FI-5
Facility Sign

Refer to page 4.16.1 for Construction details.



FI-5.5

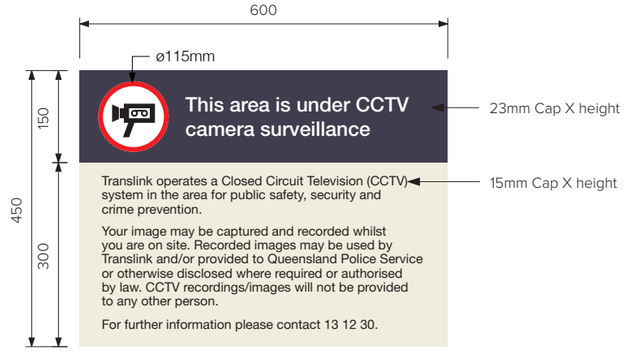
FI-5.6

FI-5.7

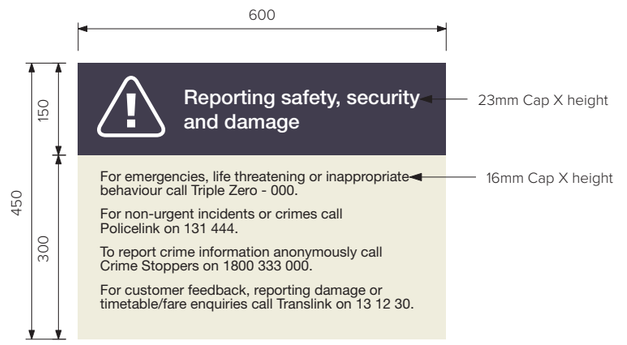
FI-5.8

FI-5.9

FI-5.10



FI-5.21 (For facility entrances and main waiting areas)



FI-5.22 (For facility entrances and main waiting areas)

Typical Graphic Layouts
Scale 1:5

Graphic Layouts
Scale 1:10

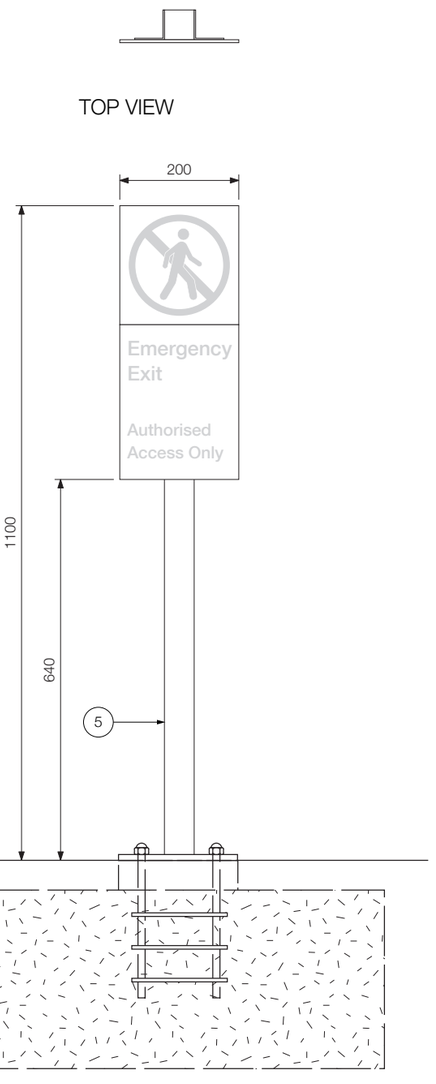
Sign Type
FI-5
Facility Sign

Refer to page 4.16.1 for Construction details.

Refer to page 4.16.2 & 4.16.3 for Graphic details.

Construction Detail – Wall mounted
Scale 1:5

Construction Detail – Mesh fence mounted
Scale 1:5



Construction Detail – Freestanding
Scale 1:10

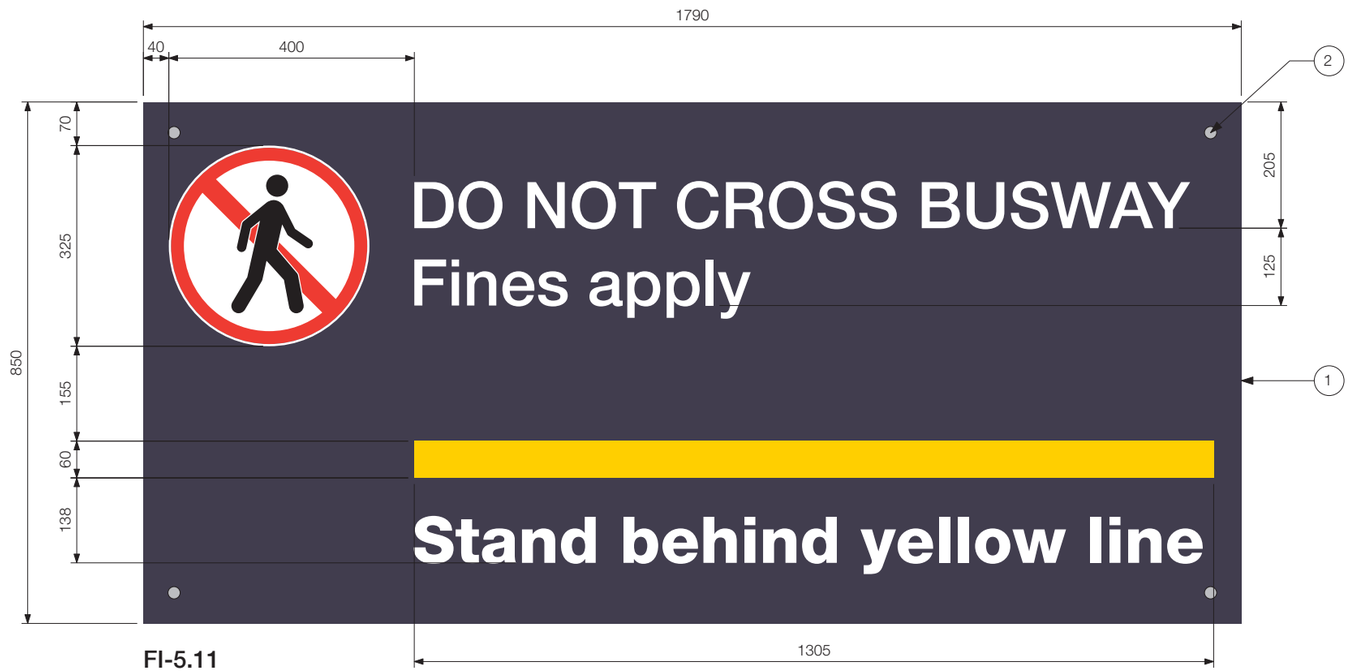
Sign Type
FI-5
Facility Sign

Refer to page 4.16.2 for Graphic details.

Construction Details
1. 2mm thick painted aluminium panel with front applied vinyl graphics. Protective anti-graffiti clear coat over. Fix panel to both sides of barrier fence as required to suit site conditions.

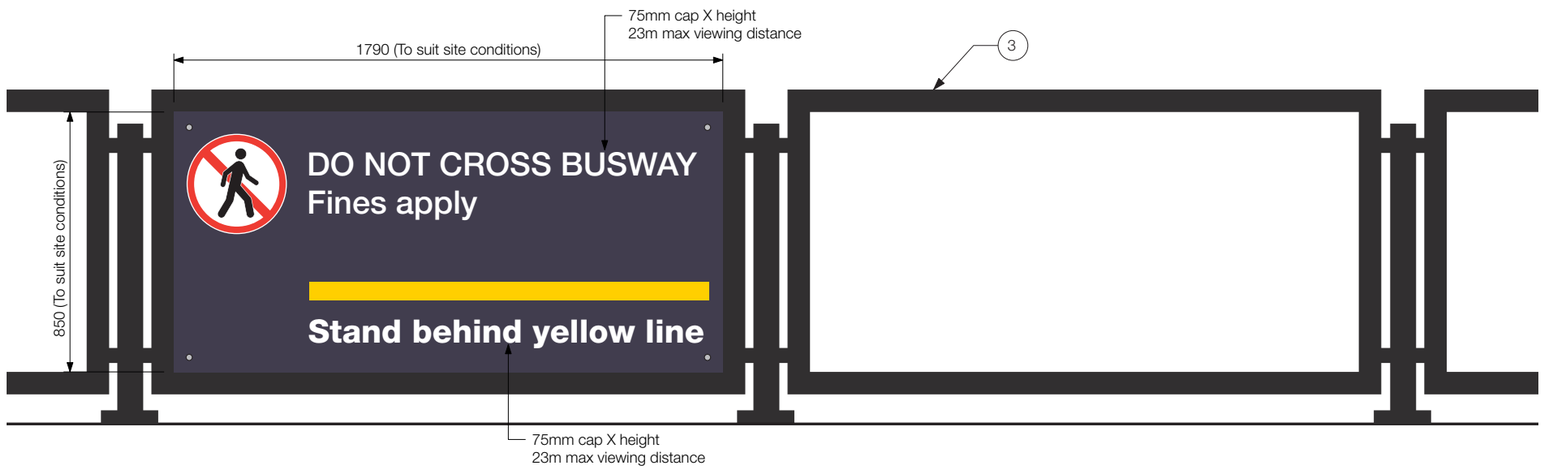
2. “Demon” fasteners painted to match sign face.

3. Barrier fence. Fix sign panel to perforated metal screen fence. Fixings to coordinate with pattern and border.

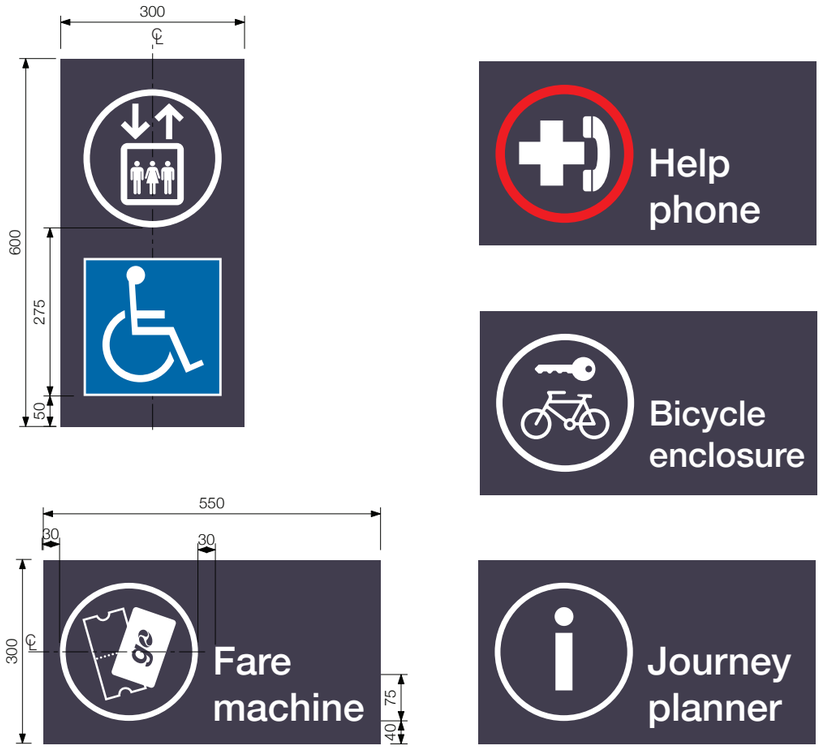


FI-5.11

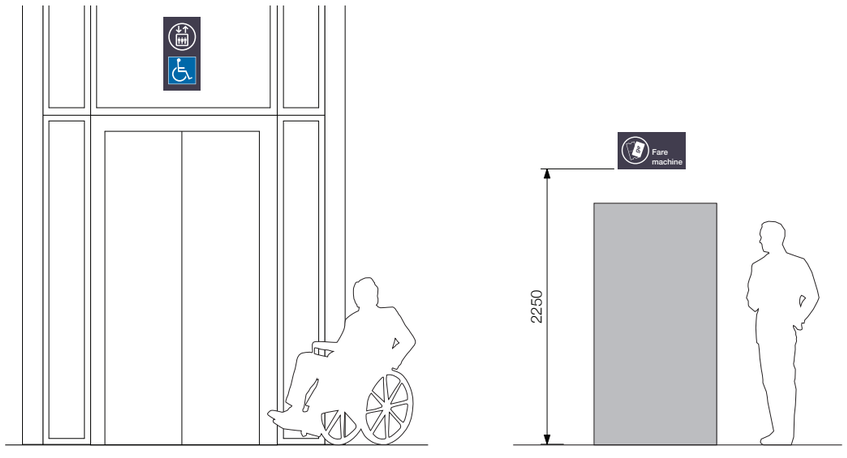
Graphic Detail
Scale 1:10



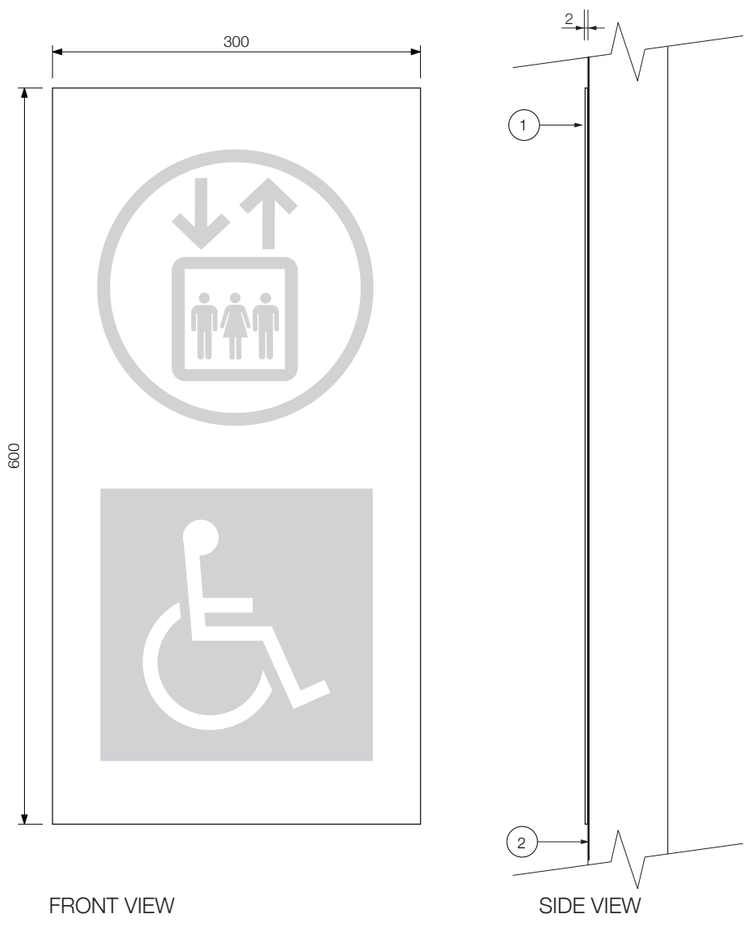
Typical Elevation
Scale 1:20



Graphic Layouts
Scale 1:10



Typical Location
Scale 1:50



FRONT VIEW SIDE VIEW

Elevations
Scale 1:5

Sign Type
FI-6a
Facility Identification Sign - Wall Mounted

Purpose
- To identify the facility

Typical location
- Mounted above facility

Indicative message
- Pictograms
- Lift
- Journey planner
- Fare machine
- Bike enclosure

Graphics Detail
FONT
All text = Helvetica Neue 65 Medium

SIZE
Text = 45mm cap X height
(Note: 40mm cap X height where required to 'Bicycle enclosure')
Pictogram = 225mm x 225mm

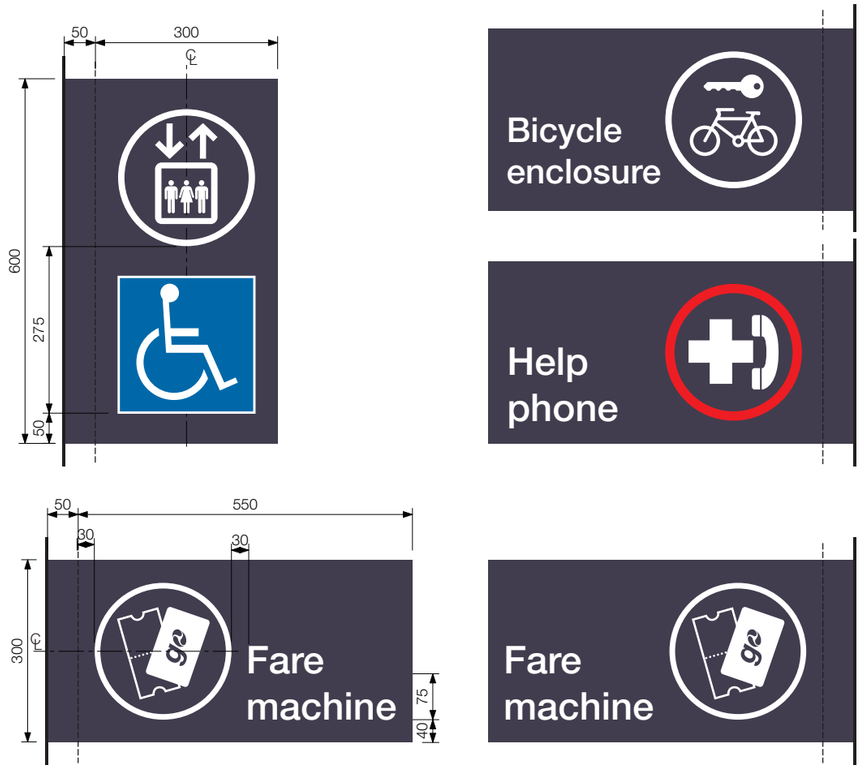
COLOUR
Panel = Resene 'Jon' N38-007-359
Text = Arlon White 02
Pictogram = Arlon White 02
Access Pictogram = white figure on AS2700 B21 Ultramarine Blue background

Construction Details
1. 2mm painted aluminium panel with front applied vinyl graphics. Protective anti-graffiti clear coat over. Adhered above door with 3M VHB double sided tape and silicone.

2. Mounting surface. Prepare surface free from dust, dirt, oil & grease prior to fixing.

3. Where signs are located in reach of a person, all exposed corners are to have 10mm radius for safety.

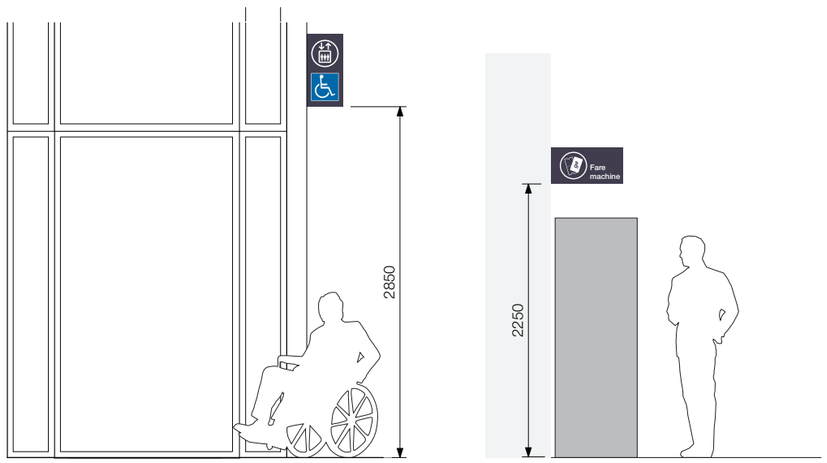
NOTE: Sign size may vary depending on location and required viewing distance.



FRONT VIEW BACK VIEW

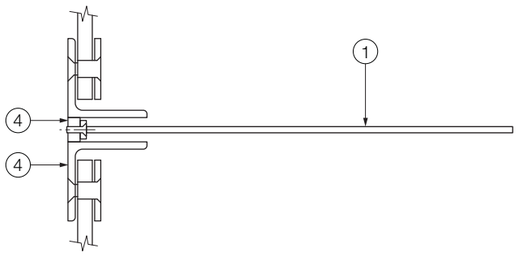
Graphic Layouts

Scale 1:10

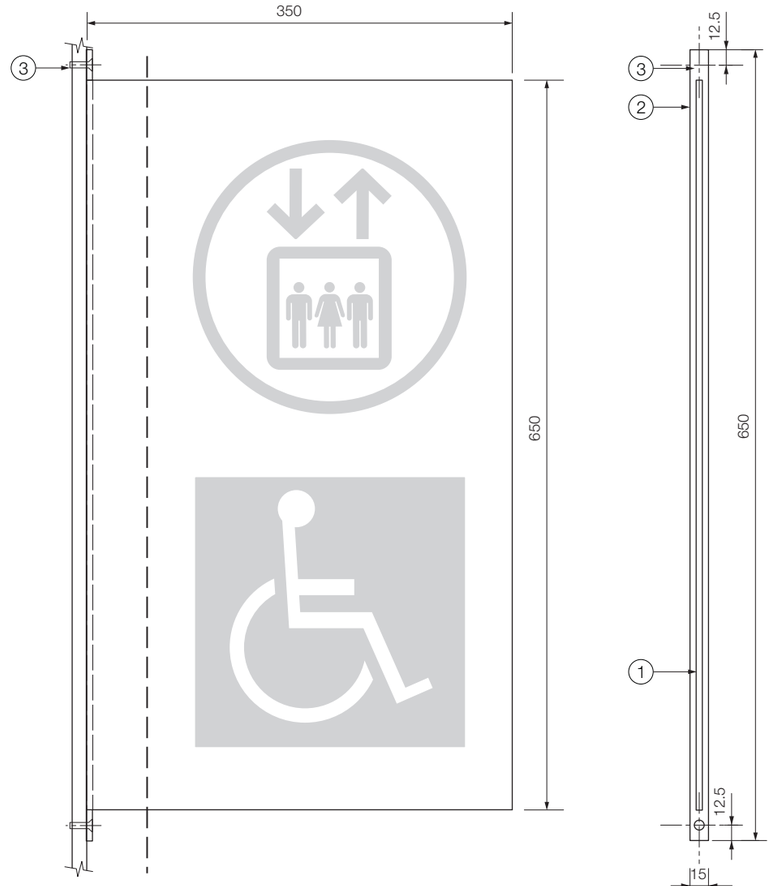


Typical Locations

Scale 1:50



TOP VIEW



FRONT VIEW SIDE VIEW

Construction Detail

Scale 1:5

Sign Type

FI-6b

Facility Identification Sign - Projecting

Purpose
- To identify the facility

Typical location
- Projecting above facility

Indicative message
- Pictograms
- Lift
- Journey planner
- Fare machine
- Bike enclosure

Graphics Detail
FONT
All text = Helvetica Neue 65 Medium

SIZE
Text = 45mm cap X height
(Note: 40mm cap X height where required to 'Bicycle enclosure')
Pictogram = 225mm x 225mm

COLOUR
Panel = Resene 'Jon' N38-007-359
Text = Arlon White 02
Pictogram = Arlon White 02
Access Pictogram = white figure on AS2700 B21 Ultramarine Blue background

Construction Details
1. 5mm thick painted aluminium sign panel with front applied vinyl graphics. Protective anti-graffiti spray clear coat over.

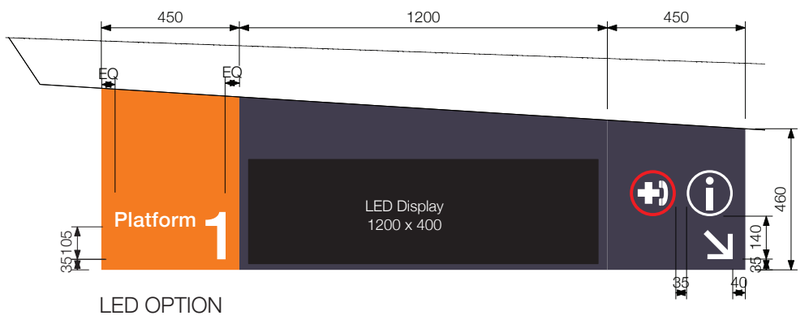
2. 5mm aluminium mounting plate welded to sign panel. All welds to be concealed, regular and evenly spaced.

FIXING METHOD
3. Fixings to be designed and approved by signmaker's engineer. Signmaker to coordinate fixing requirements with Managing Contractor / TransLink Representative.

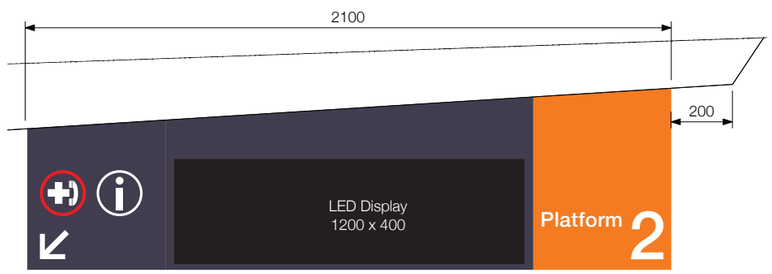
4. Station structure.

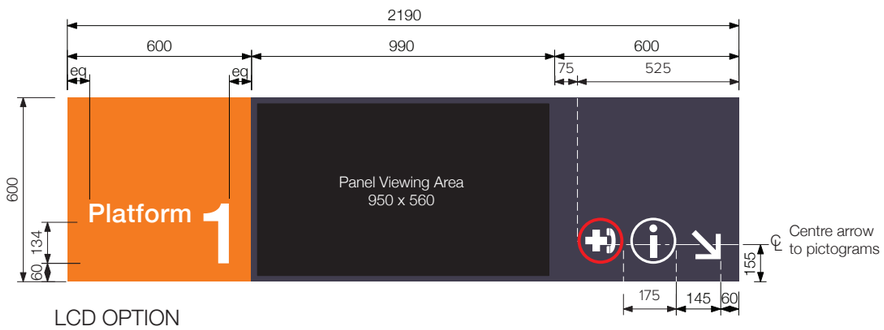
5. Where signs are located in reach of a person, all exposed corners are to have 10mm radius for safety.

NOTE: Sign size may vary depending on location and required viewing distance.



LED OPTION

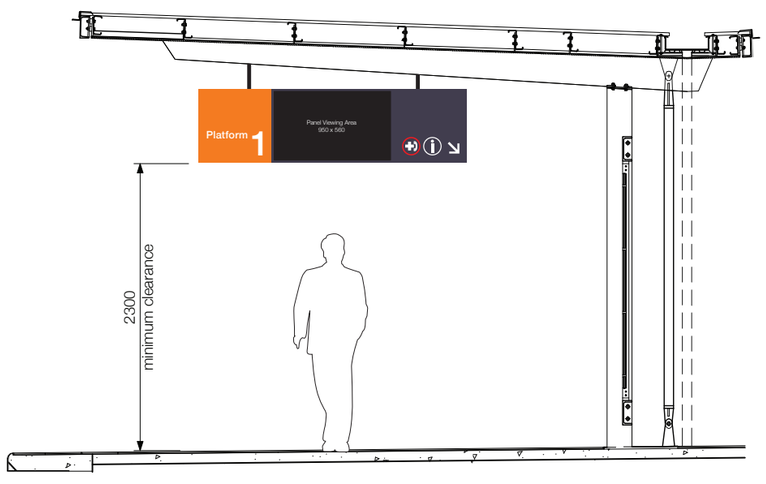




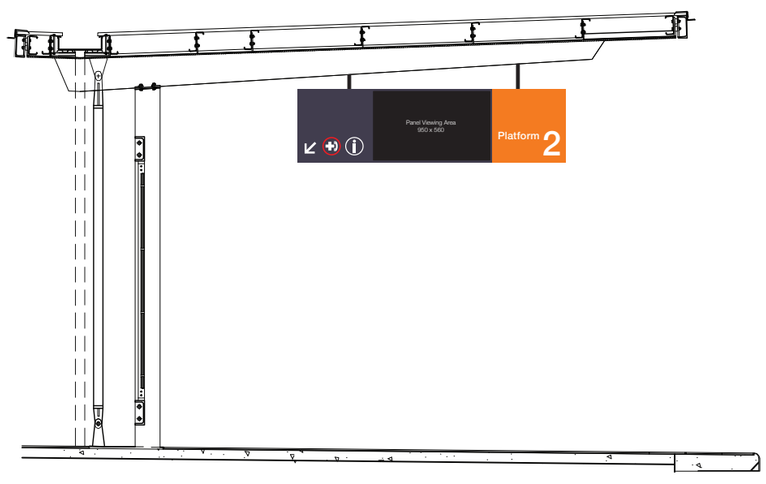
LCD OPTION

Graphic Layout

Scale 1:20



FRONT VIEW - LCD OPTION



BACK VIEW - LCD OPTION

Typical Location

Scale 1:50

Sign Type

IS-4

Real Time Information Sign - Platform

Purpose
- To provide identification and information on platform
- Pedestrian use

Typical location
- On real time sign on platform

Indicative message
- Platform
- Pictograms

Graphics Detail
FONT
'To...' = Helvetica Neue 55 Roman
All other text = Helvetica Neue 65 Medium

SIZE - LCD OPTION
'Platform' = 60mm cap X height
Number = 200mm cap X height
Pictograms = 145mm x 145mm
Arrows = 125mm high

SIZE - LED OPTION
'Platform' = 43mm cap X height
Number = 157mm cap X height
Pictograms = 145mm x 145mm
Arrows = 125mm high

COLOUR
Platform background = Resene 'Trinidad' O61-167-048
All other backgrounds = Resene 'Jon' N38-007-359
All text = Arlon White 02
Pictograms = Arlon White 02
Arrows = Arlon White 02

Construction Details
1. Passenger Information Display (PID) frame to house electronic PID & Cabinet.

2. 3mm painted aluminium panel with front applied vinyl graphics. Protective anti-graffiti clear coat over.

Note - Samples of colour and finish must be provided by display supplier for approval prior to manufacturer

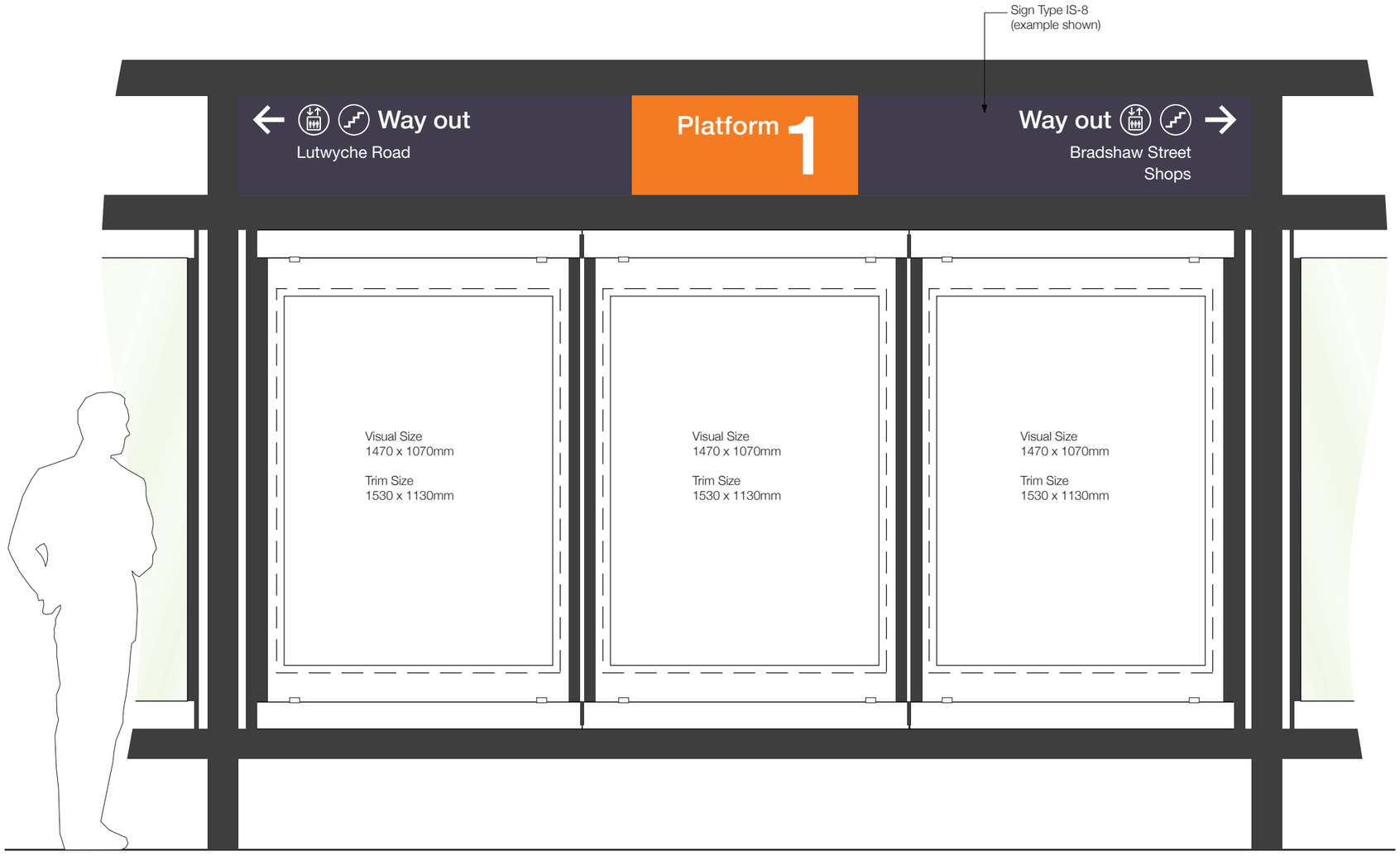
4.20

Sign Type
IS-5
Information Cabinet

Purpose
- To lockable external cabinets for TransLink information
- Pedestrian use

Typical location
- As required

Indicative message
- All timetables, maps, messages, printed material, etc to be provided by TransLink



Typical Location
Scale 1:20

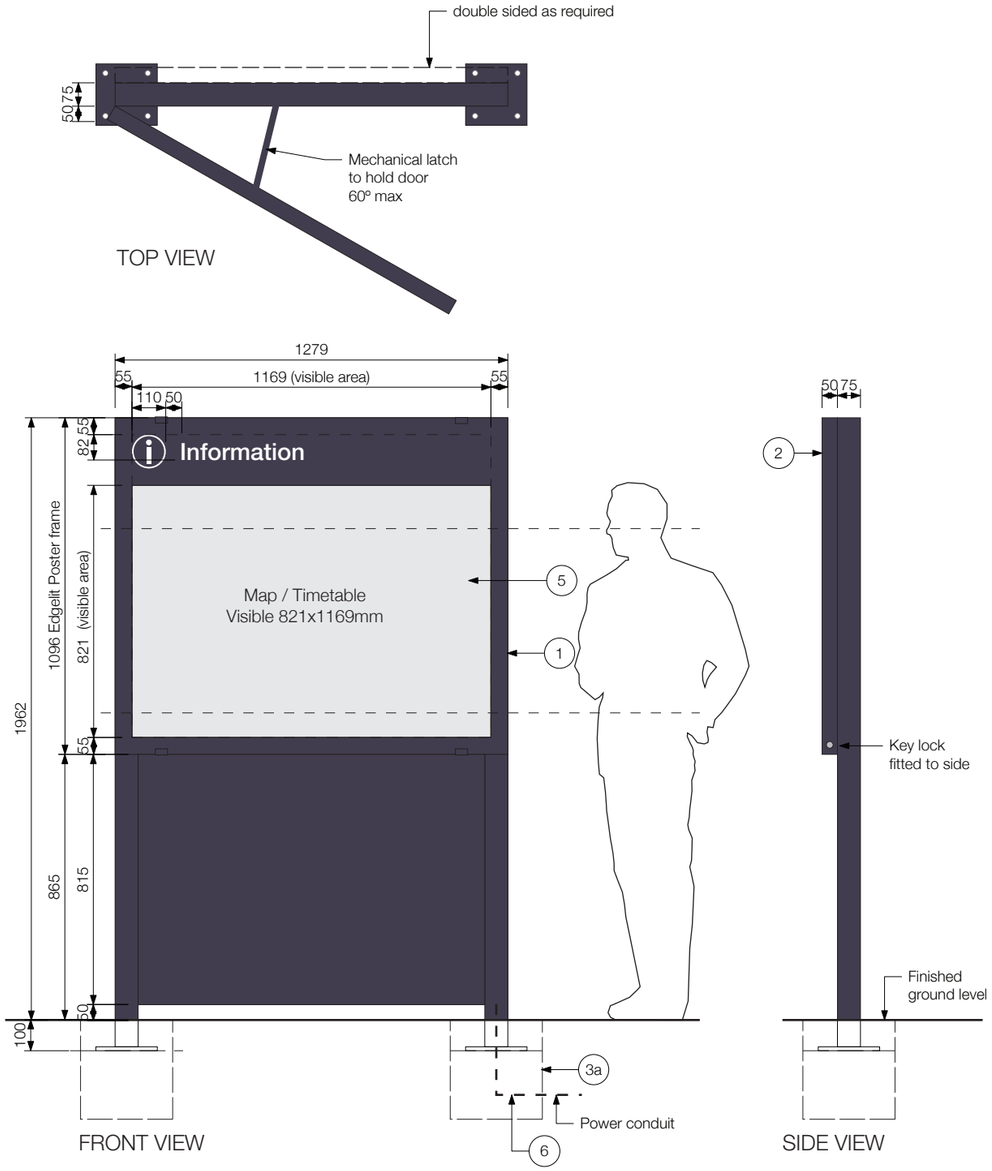
Graphics Detail
COLOUR
Cabinet and front border = Resene 'Jon' N38-007-359

Construction Details
1. Proprietary single sided edge lit illuminated sign case 'X-Position' XP05 (or approved equivalent). Powder coat finish to frame. 5mm toughened glass with reverse painted poster masking.
– Internal illumination via 'Cool White' LED
– Front applied security Gatgard graffiti film over glass.
– Gas strut to hold door open 60º max. (100 Newtons, 235mm Pivot distance)
– keyed alike camlock latch to TransLink specifications
– Hinged and weatherproof cabinet
– Supplier to provide fixing details
– Magnetic poster holder concealed behind masking
– Overall sign case size 1251 x 1750mm
– Glass retention brackets to top and bottom of panel, colour matched to sign structure

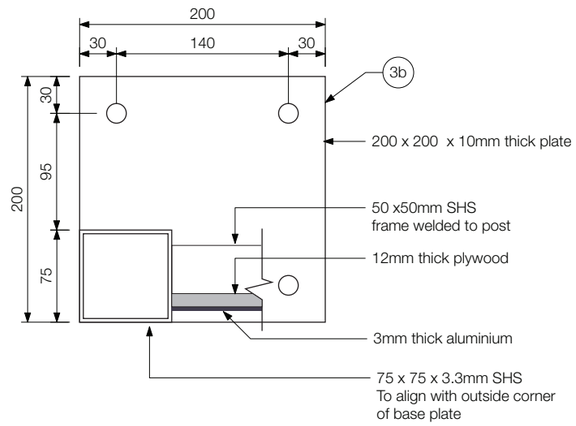
2. Timetables/information poster to be supplied by Translink.

3. Power feed to back of cabinet to run inside support structure and conduit.

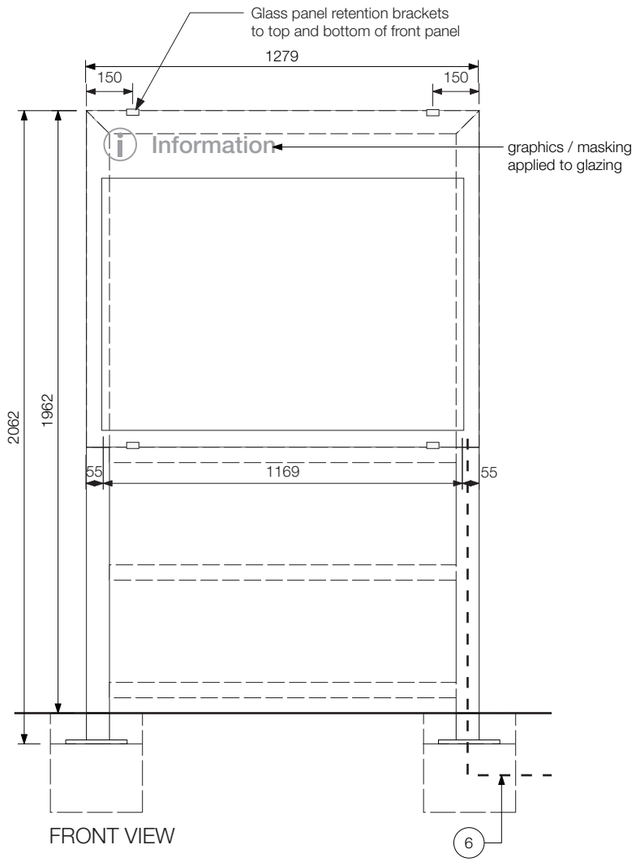
NOTE: All dimensions approximate and are to be confirmed. Internal information sign requires isolation switch and circuit breaker / fuse within light box. Sign should operate during all hours of station operation.



Typical Elevation
Scale 1:20



Base Plate Detail - To suit Above ground installation
Scale 1:5



Construction Details - New Footing
Scale 1:20

Sign Type
IS-6c
Map/Information Sign - Freestanding

Purpose
- To provide a map and information (if required) at major decision points
- Pedestrian use

Typical location
- Only used at bus stations
- Located at the principal pedestrian entry point/s of the station.
- Located in either TransLink or Other's property depending on site constraints. - Sign to be located outside required pedestrian paths of travel.

Indicative message
- All timetables, messages, printed material, etc to be provided by TransLink
- Regulatory information/pictograms (if required)

Graphics Detail
FONT
All text = Helvetica Neue 65 Medium

SIZE
All text = 55mm cap X height
Information Pictogram = 110mm high

COLOUR
Sign structure and panel backgrounds = Resene 'Jon' N38-007-359
Glazing masking = Resene 'Jon' N38-007-359
All text = Arlon White 02
Information pictogram = Arlon White 02

Construction Details
1. 75 x 75 x 3mm posts with mitred corners. Post to have 5mm min radius corners. Allow provision for power conduit. Prime and paint/ powder coat finish. Satin finish (60% Gloss level).

2. Proprietary system 'X-Position' XP05 (or approved equivalent) single sided edge lit light box. Powder coat finish to frame. 5mm toughened glass with reverse painted poster masking and 'Information' graphics.
- Internal illumination via 'Cool White' LED
- Front applied security Gatgard graffiti film
- Mechanical latch in lieu of gas strut
- Glass retention brackets to top and bottom of panel, colour matched to sign structure

NOTE - Contact TransLink for preferred display unit supply

3a. New footing (option a)
Reinforced concrete pad/pier footing to sign makers' specification. All fixings shall be below ground level to reduce trip hazards. Re-instate / make good paving or pavement, with no changes of level greater than 3mm and no gradients steeper than 1:40.

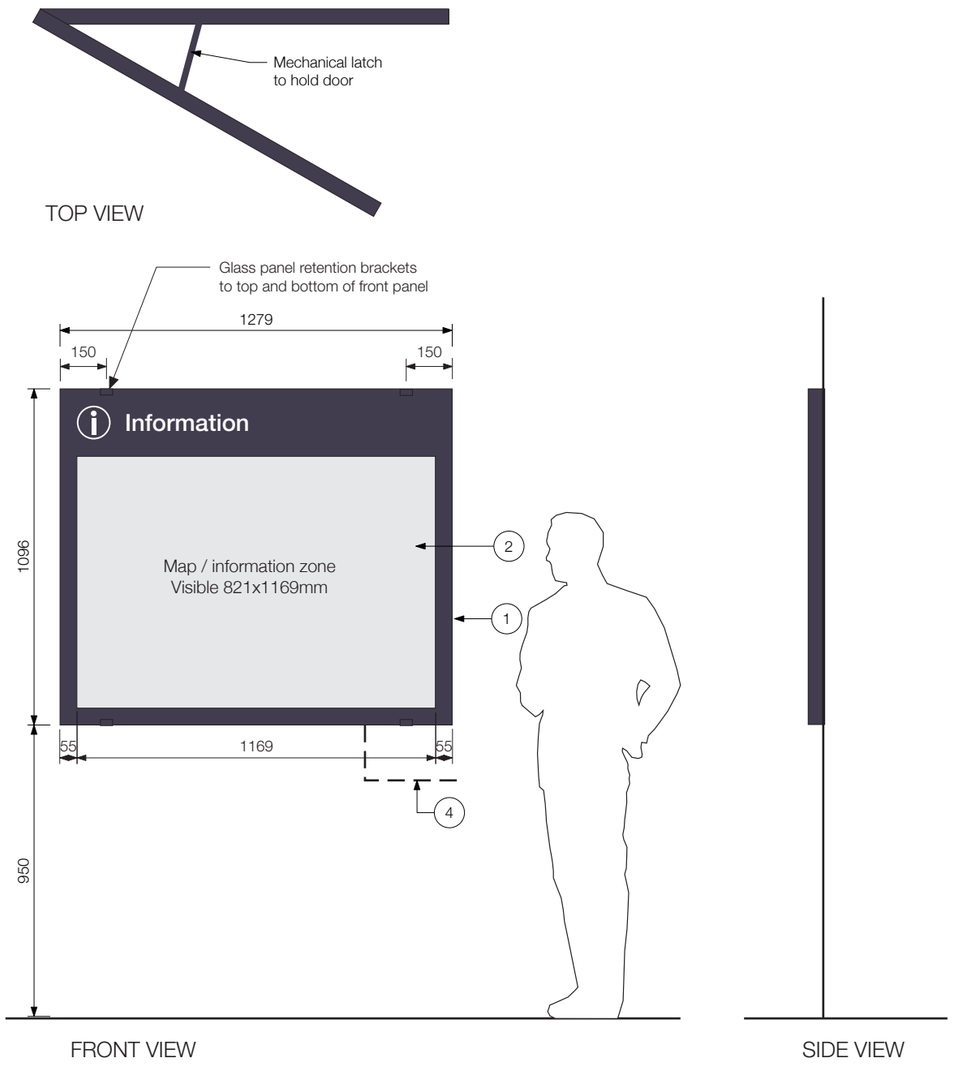
3b. Fixing to slab (option b)
Base plate fixed to chemset sleeves in existing concrete slab via galvanised set screws. 2 pack paint finish to fixing heads.

NOTE: Fixings and footing to be designed and approved by signmaker's engineer. Signmaker to coordinate fixing requirements with Managing Contractor / TransLink Representative

4. 3mm thick painted aluminium infill. 50 x 50 SHS horizontal support. Countersunk rivet fix infill panel to horizontal supports. Provide 12mm thick plywood stiffening. Infill required both sides only where visible.

5. Printed insert supplied by TransLink. To suit A0 size (visible area = 821 x 1169mm).

6. Power supply. Internal illuminated sign requires isolation switch and circuit breaker / fuse within light box. Sign should operate during all hours of station operation.



Typical Elevation
Scale 1:20

Sign Type
IS-6d
Map/Information Sign - Wall mounted

Purpose
- To provide a map and information (if required) at major decision points
- Pedestrian use

Typical location
- Only used at bus stations
- Located at the principal pedestrian entry point/s of the station.
- Located in either TransLink or Other's property depending on site constraints. - Sign to be located outside required pedestrian paths of travel.

Indicative message
- All timetables, messages, printed material, etc to be provided by TransLink
- Regulatory information/pictograms (if required)

Graphics Detail
FONT
All text = Helvetica Neue 65 Medium

SIZE
All text = 55mm cap X height
Information Pictogram = 110mm high

COLOUR
Sign structure and panel backgrounds = Resene 'Jon' N38-007-359
Glazing masking = Resene 'Jon' N38-007-359
All text = Arlon White 02
Information pictogram = Arlon White 02

Construction Details
1. Proprietary system 'X-Position' XP05 (or approved equivalent) single sided edge lit light box. Powder coat finish to frame.
5mm toughened glass with reverse painted poster masking and 'Information' graphics.
- Internal illumination via 'Cool White' LED
- Front applied security Gatgard graffiti film
- Mechanical latch in lieu of gas strut
- Glass retention brackets to top and bottom of panel, colour matched to sign structure

NOTE - Contact TransLink for preferred display unit supply

2. Printed insert supplied by TransLink. To suit A0 size (visible area = 821 x 1169mm).

3. Fixings to be designed and approved by signmaker's engineer. Signmaker to coordinate fixing requirements with TransLink.

4. Power supply from wall cavity.

NOTE
Internal illuminated sign requires isolation switch and circuit breaker / fuse within light box. Sign should operate during all hours of station operation.

Sign Type
IS-7
Bus Stop Sign - Under Awning

Purpose
- To identify lead stop
- For pedestrian and vehicular (bus operator) use

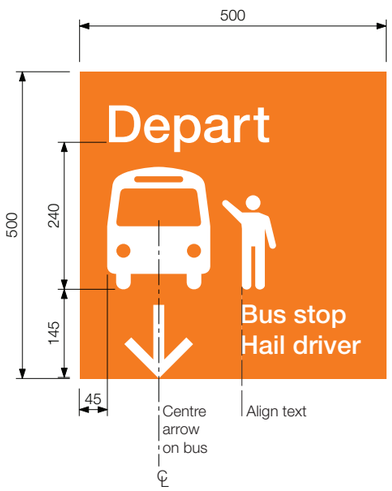
Typical location
- At lead stop end of platform

Indicative message
- Bus stop Hail driver
- Pictogram
- Zone number

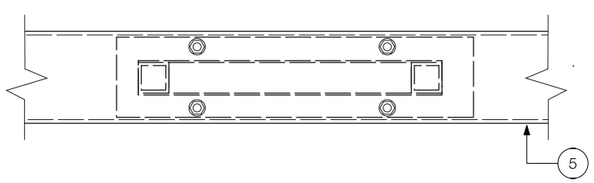
Graphics Detail
FONT
All text = Helvetica Neue 65 Medium

SIZE
'Depart' = 60mm cap X height
All other text = 30mm cap X height
Pictogram = 200mm high (proportional width)
Arrow = 120mm high (proportional width)

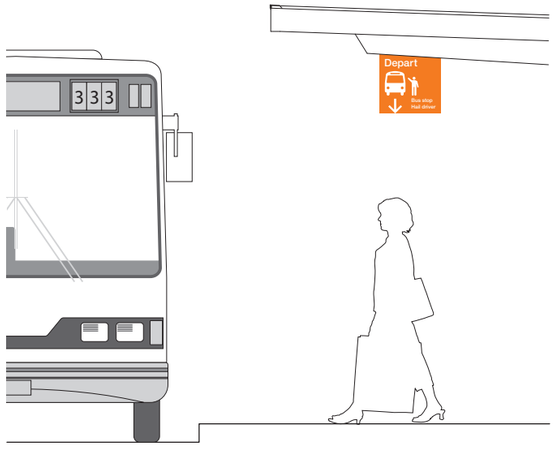
COLOUR
Panel background = Resene 'Trinidad' O61-167-048
All text = Arlon White 02
Pictogram = Arlon White 02



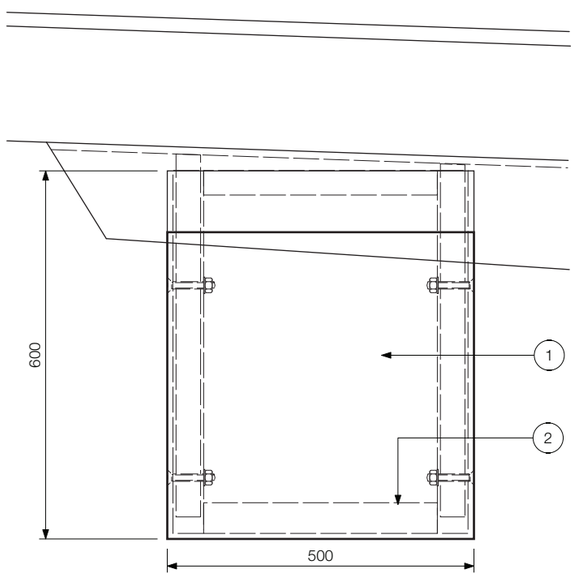
Graphic Layout
Scale 1:10



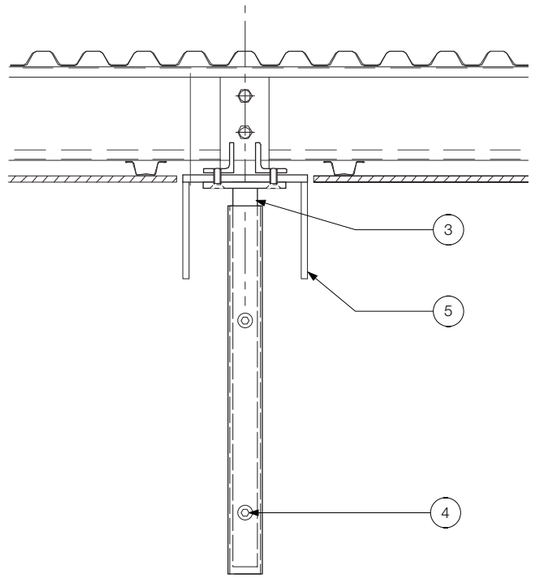
TOP VIEW



Typical Location
Scale 1:50



FRONT VIEW



SIDE VIEW

Construction Details
Scale 1:10

Construction Details
1. Fabricated sign panel from 3mm thick aluminium. Double sided VHB tape fixed to sign frame. Front applied vinyl graphics with anti-graffiti spray clear coat over.

2. Internal frame constructed from 50 x 50 x 3mm aluminium SHS. To take 40 x 40 SHS sleeve support.

3. 40 x 40mm aluminium SHS sign support sleeve with 6mm thick base plate fixed to roof beam. Structural framework and fixing details to be confirmed by sign maker's engineer. Sign maker to co-ordinate installation with Managing Contractor / TransLink Representative.

NOTE
Location to be coordinated with roof structure.

4. M8 S/Steel countersunk bolt fixing through internal frame.

5. Station structure.

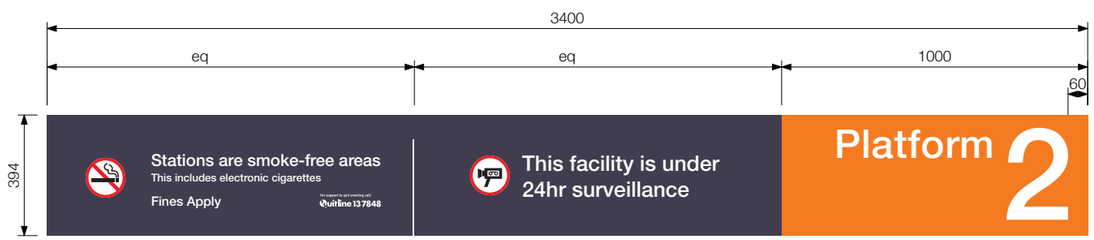
4.24.1

Sign Type
IS-8
Information Sign

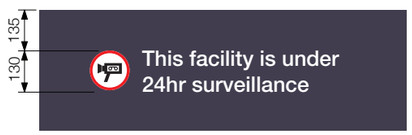
Purpose
- To provide information at concourse and platform
- Pedestrian use

Typical location
- Located on station structure, typically above information cabinets

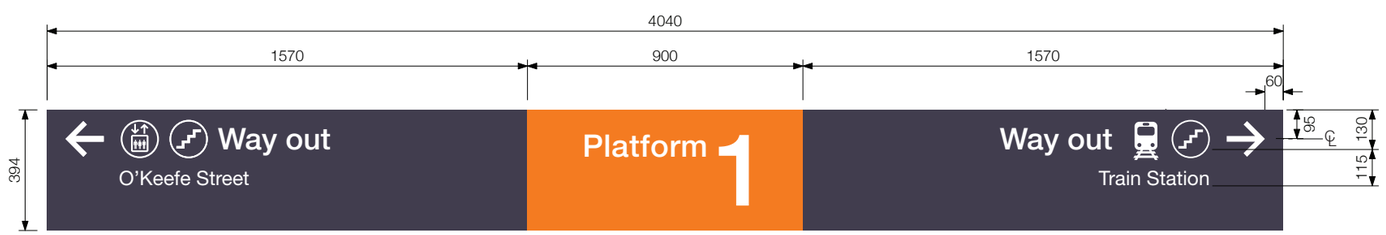
Indicative message
- Platform information
- Regulatory information/pictograms
- Way out information



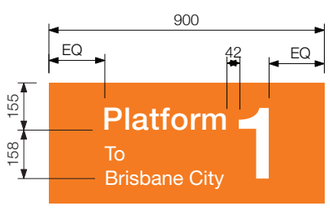
CONCOURSE



Panel layout



PLATFORM

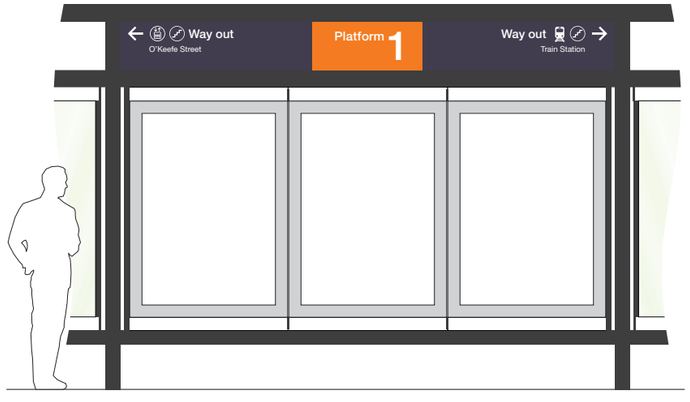


Middle panel layout

Graphic Layouts

Scale 1:20

CONCOURSE



PLATFORM

Typical Location

Scale 1:50

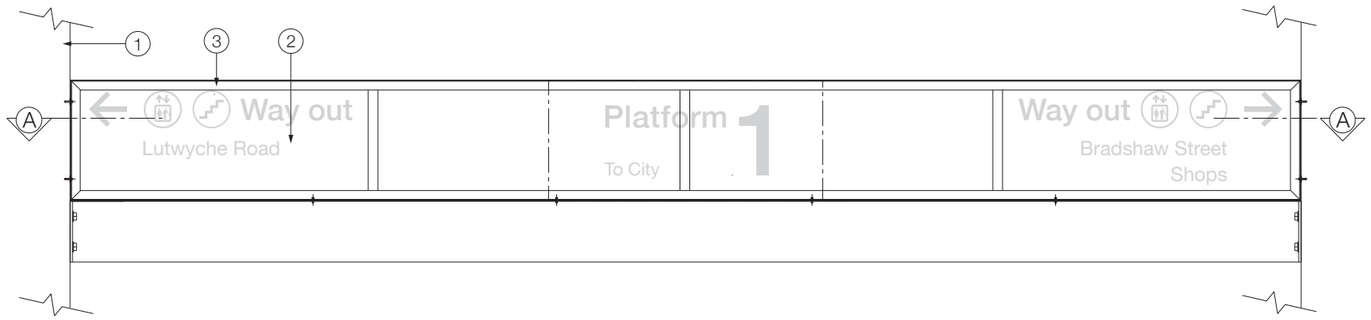
Graphics Detail

FONT
'To..' = Helvetica Neue 55 Roman
Sub-messages = Helvetica Neue 55 Roman
All other text = Helvetica Neue 65 Medium

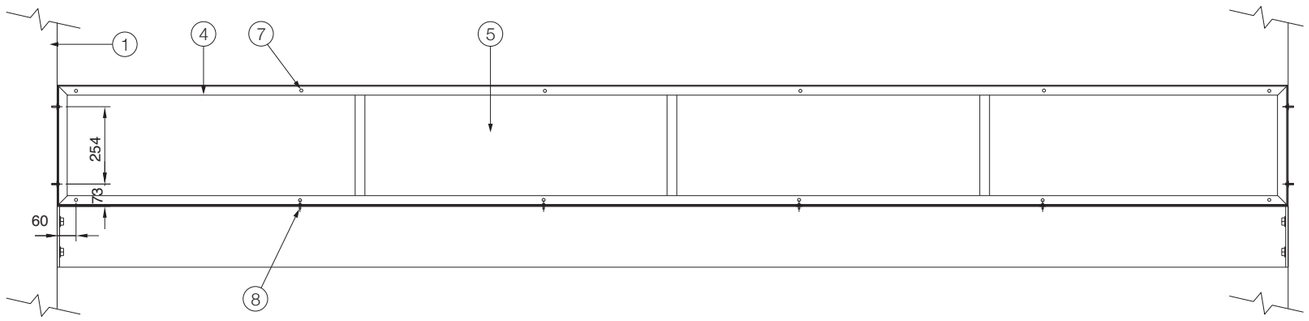
SIZE
Concourse Layout
'Platform' = 92mm cap X height
Platform number = 300mm cap X height
'To City/From City' = 63mm cap X height
All other text = 50mm cap X height
Pictogram = 130mm x 130mm

Platform Layout
'Platform' = 72mm cap X height
Platform number = 235mm cap X height
'To City/From City' = 42mm cap X height
All other text = 46mm cap X height
Circle pictograms = 125mm x 125mm
Train pictogram = 70mm height (proportional width)
Arrow = 125mm

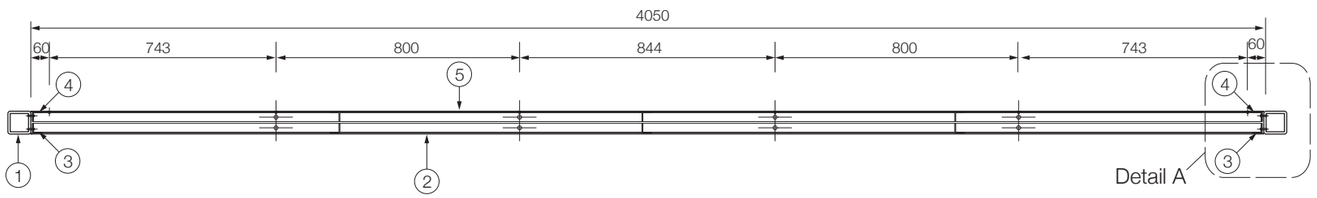
COLOUR
Transport panel = Resene 'Trinidad' O61-167-04
Other panels = Resene 'Jon' N38-007-359
Text = Arlon White 02
'No Smoking' & CCTV pictograms = Black figure on white background with AS2700 Signal Red circle and slash
All other pictograms = Arlon White 02



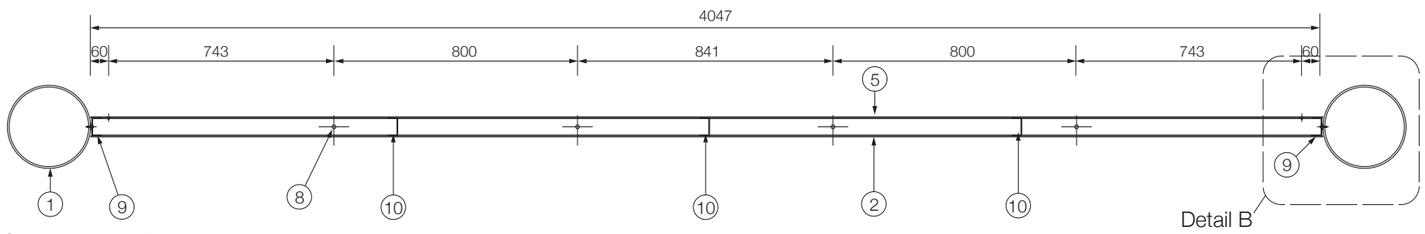
Header - Front Elevation
Scale 1:20



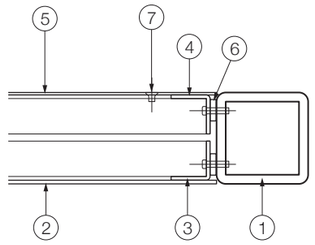
Header - Rear Elevation
Scale 1:20



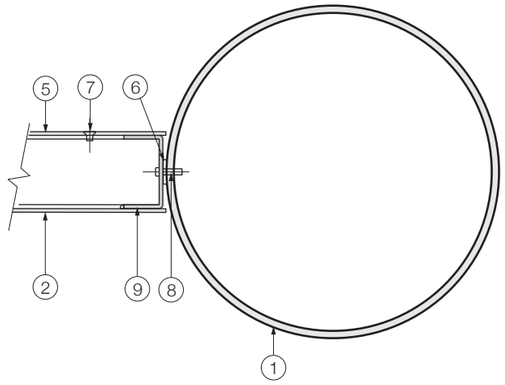
Section A-A -Entry Plaza
Scale 1:20



Section A-A - Platform
Scale 1:20



Detail A - Entry Plaza Structure
Scale 1:5



Detail B - Platform Structure
Scale 1:5

Sign Type
IS-8
Information Sign

Construction Details
HEADER SIGN PANEL
1. Station structure.

2. 3mm aluminium front sign panel (4047 x 395mm). Front applied vinyl graphics with anti-graffiti spray clear coat over. Signmaker to confirm final size with Managing Contractor / TransLink Representative.

3. 35 x 35 x 3mm aluminium angle sign frame, welded to back of front sign panel. Angle fastened to station entry plaza structure from behind. No visible fixings.

4. 35 x 35 x 3mm aluminium angle rear panel frame fastened to station entry plaza structure.

5. 3mm aluminium rear panel (4047 x 395mm) fastened to rear panel frame. Signmaker to confirm final size with Managing Contractor / TransLink Representative.

6. Stainless steel spacer.

7. M8 stainless steel counter-sunk socket machine screw (into pre-drilled and tapped aluminium rear panel frame).

8. M8 stainless steel machine screw (into pre-drilled and tapped station structure).

9. 60 x 32 x 3mm aluminium channel sign frame (for CHS Platform Structure only), welded to back of front sign panel. Channel fastened to station platform structure. No visible fixings.

10. 60 x 32 x 3mm aluminium channel vertical supports welded to frame (for CHS Platform Structure only).

Sign Type

IS-9c

Real Time Information Sign - Non Platform

Purpose
- To provide identification and information with real time display
- Pedestrian use

Typical location
- On real time sign (not on platform)

Indicative message
- Platform
- Pictograms

Graphics Detail
FONT
All text = Helvetica Neue 66 Medium Italic

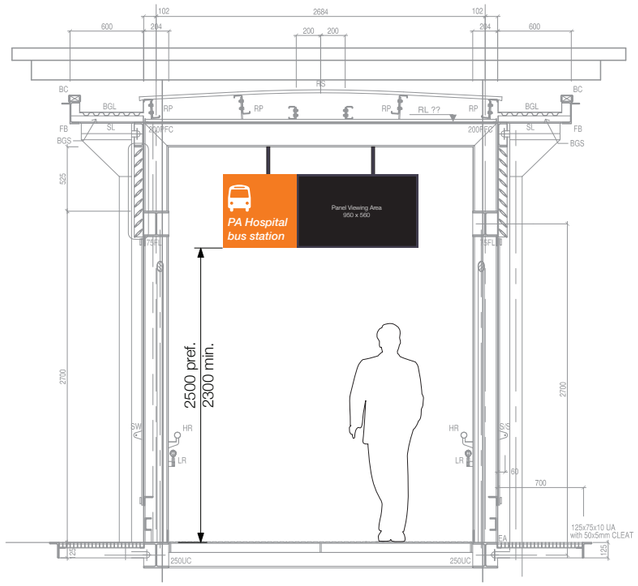
SIZE
All text = 65mm cap X height
Pictogram = 220mm high

COLOUR
Platform background = Resene ‘Trinidad’ O61-167-048
All other backgrounds = Resene ‘Jon’ N38-007-359
All text = Arlon White 02
Pictogram = Arlon White 02

Construction Details
1. Passenger Information Display (PID) frame to house electronic PID & Cabinet.

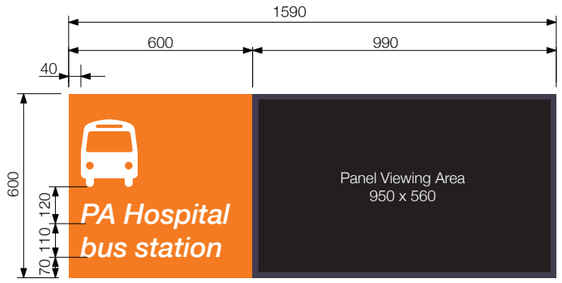
2. 3mm painted aluminium panel with front applied vinyl graphics. Protective anti-graffiti clear coat over.

Note - Samples of colour and finish must be provided by display supplier for approval prior to manufacturer

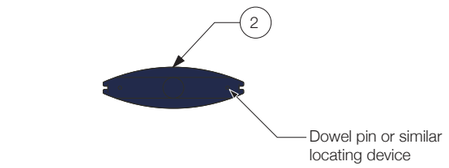


FRONT VIEW

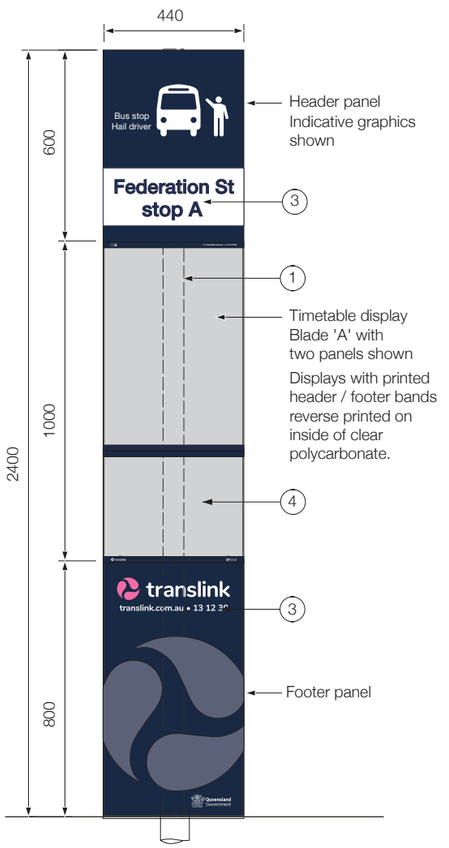
Typical Location
Scale 1:50



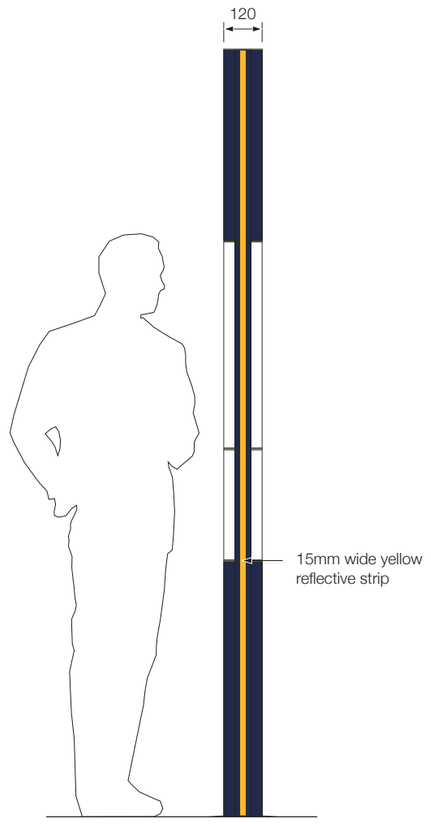
Graphic Layout
Scale 1:20



TOP VIEW

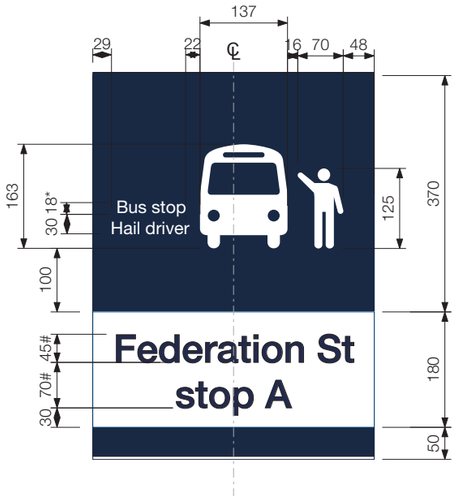


FRONT VIEW

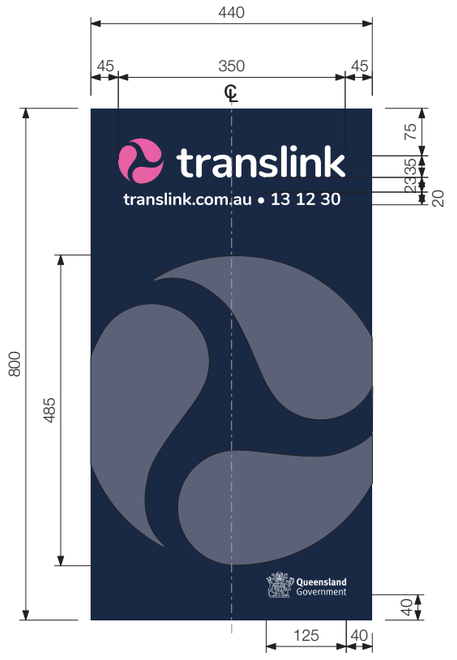


SIDE VIEW

Typical Location
Scale 1:20



Header Panel



Footer Panel

Graphic Layout
Scale 1:10

Sign Type
IS-10a
Bus Stop Blade Sign

Purpose
- To identify bus stop (typically 'premium' stops and at stations)
- For pedestrian and vehicular use

Typical location
- At departure end of bus bay zone
- Not used at busway stations

Indicative message
- Stop name
- Bus route details

Graphics Detail
FONT
All text = Helvetica Neue 55 Roman
Translink logo, website and phone number to brand guidelines

SIZE
All text = as shown for cap X height

COLOUR
Blue background = To match Pantone 533C printed over white Class 2 Reflective sheeting
Blue logo tint = To match Pantone 533C with 70% tint printed over white Class 2 Reflective sheeting
Pink = Logo symbol to match Pantone 2038 C printed over white Class 2 Reflective sheeting
White = White Class 2 Reflective sheeting
Yellow = Yellow Class 2 Reflective vinyl

General Note
Unless otherwise noted all dimensions in millimetres. Use figured dimensions in preference to scaling. Contractor to confirm all dimensions and details on site for all sign types prior to manufacture.

Construction Details
1. Post
65 NB steel post, C 350 grade, 3.2mm wall thickness, hot dip galvanised, deform base to prevent rotation.

2. Curved display extrusion - CIVIQ or approved equivalent.

3. Header and Footer panels
Sign to be on a 1.0mm thick aluminium plate, single sided. Applied to both sides of sign. Class 2 reflective vinyl with applied graphics applied to both sides of sign.

4. Timetable Display options
Blade "A"
440 x 2400 (with two central panels 650mm high x 440mm wide above and 350mm high x 440mm wide below)

Blade "B"
440 x 2400 (with one central panel 1000mm high x 440mm wide).

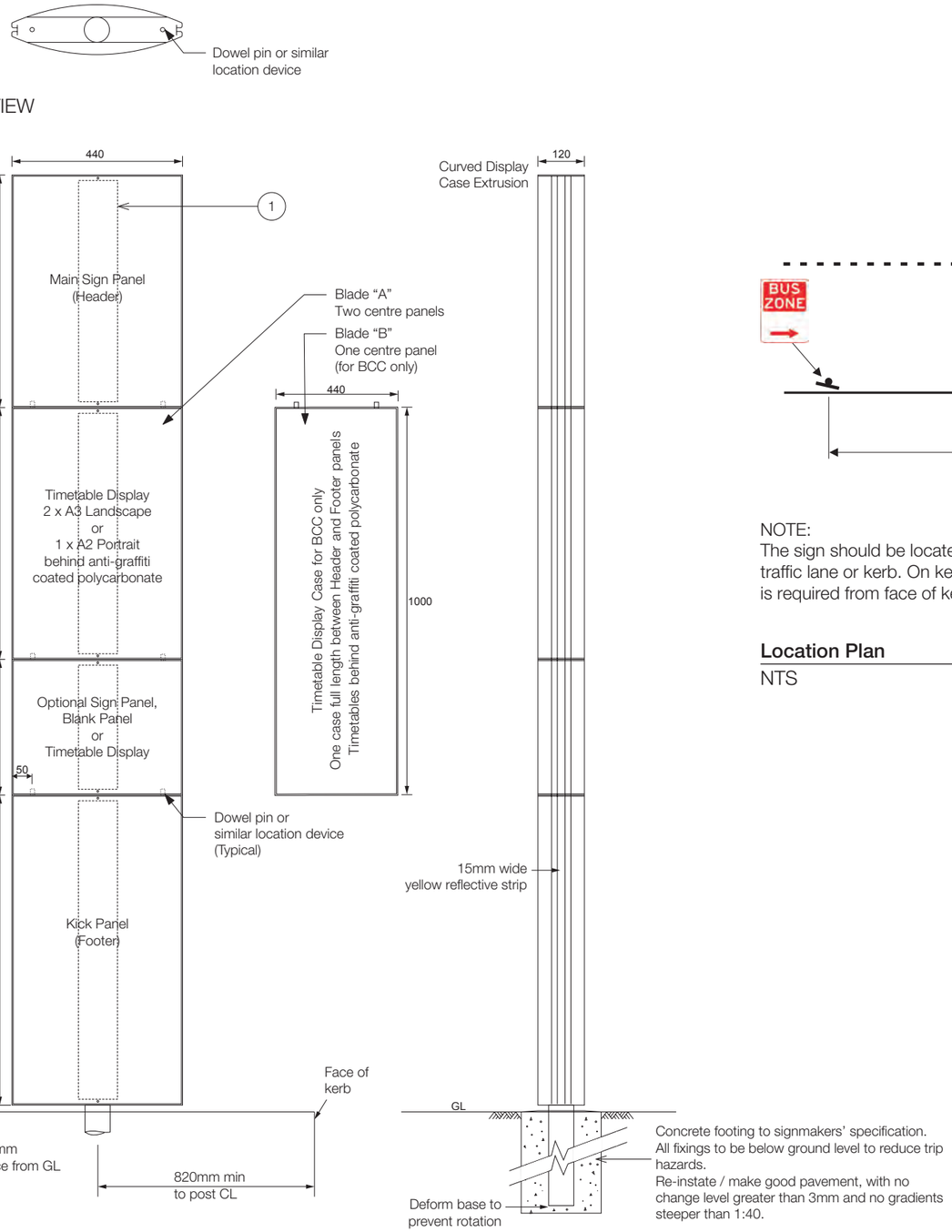
5. Sign maker to co-ordinate installation with Managing Contractor / TransLink Representative.

6. Refer to 4.26.2 for installation details.

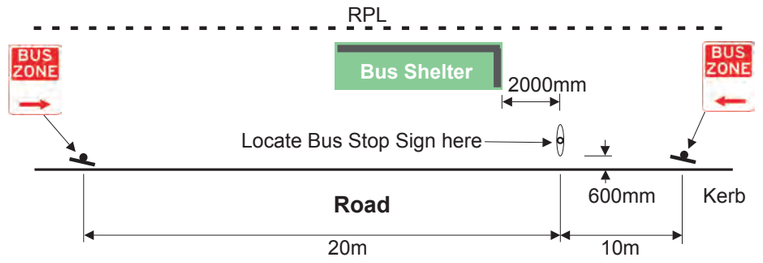
NOTE - Graphics shown indicative only.

Sign Type
IS-10a
Bus Stop - Blade Sign

NOTE
Refer to page 4.26.1 for Construction and Graphic details.



Typical Elevation
Scale 1:20



NOTE:
The sign should be located at the departure end of the bus stop and perpendicular to the traffic lane or kerb. On kerbed roads, a clearance of 600mm minimum (820mm to post CL) is required from face of kerb to sign.

Location Plan
NTS

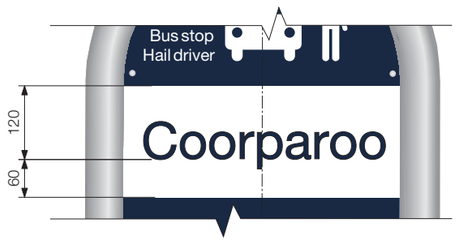
4.27.1

Sign Type

IS-10b

Bus Stop - J Pole Sign (Translink)

Graphic Layout - Scale 1:5



Variable Elements - single line

Purpose
- To identify bus stop (typically 'intermediate' stops)
- For pedestrian and vehicular use

Typical location
- The sign should be located at the departure end of the bus stop and perpendicular to the traffic lane.
- The post should be closest to the road and the sign away from the road ie. point away from the road.

Indicative message
- Stop name
- Service provider logo

Graphics Detail
FONT
All text = Helvetica Neue 55 Roman
Translink logo, website and phone number to brand guidelines

SIZE
All text = as shown for cap X height
'bus stop hail driver' = 20 mm - white text on blue

'stop name and number'
60 mm = blue text on white (where applicable the words 'bus stop' all lower case)

COLOUR
Blue background = To match Pantone 533C printed over white Class 2 Reflective sheeting
Pink = Logo symbol to match Pantone 2038 C printed over white Class 2 Reflective sheeting
White = White Class 2 Reflective (3M Scotchlite)

Graphic Details
1. The logo symbol should appear in colour as per above with remaining text in single colour (white) with the background of predominately blue.

2. The Stop Name and Number must be centered between the left and right hand sides of the sign face. Where there is an existing stop number, the number should be displayed in the same typeface and height at the end of the stop name with a space dash space between name and number. Text typeface to be 'Helvetica 55 Roman' with a cap height of 60mm, for long text compress spacing. In certain circumstances the cap height may be reduced to fit a long stop name. Where there is no stop name, the words bus stop in all lower case should be used.

Sign Type
IS-10b
Bus Stop - J Pole Sign (Translink)

General Notes
Unless otherwise noted all dimensions in millimetres. Use figured dimensions in preference to scaling. Contractor to confirm all dimensions and details on site for all sign types prior to manufacture.

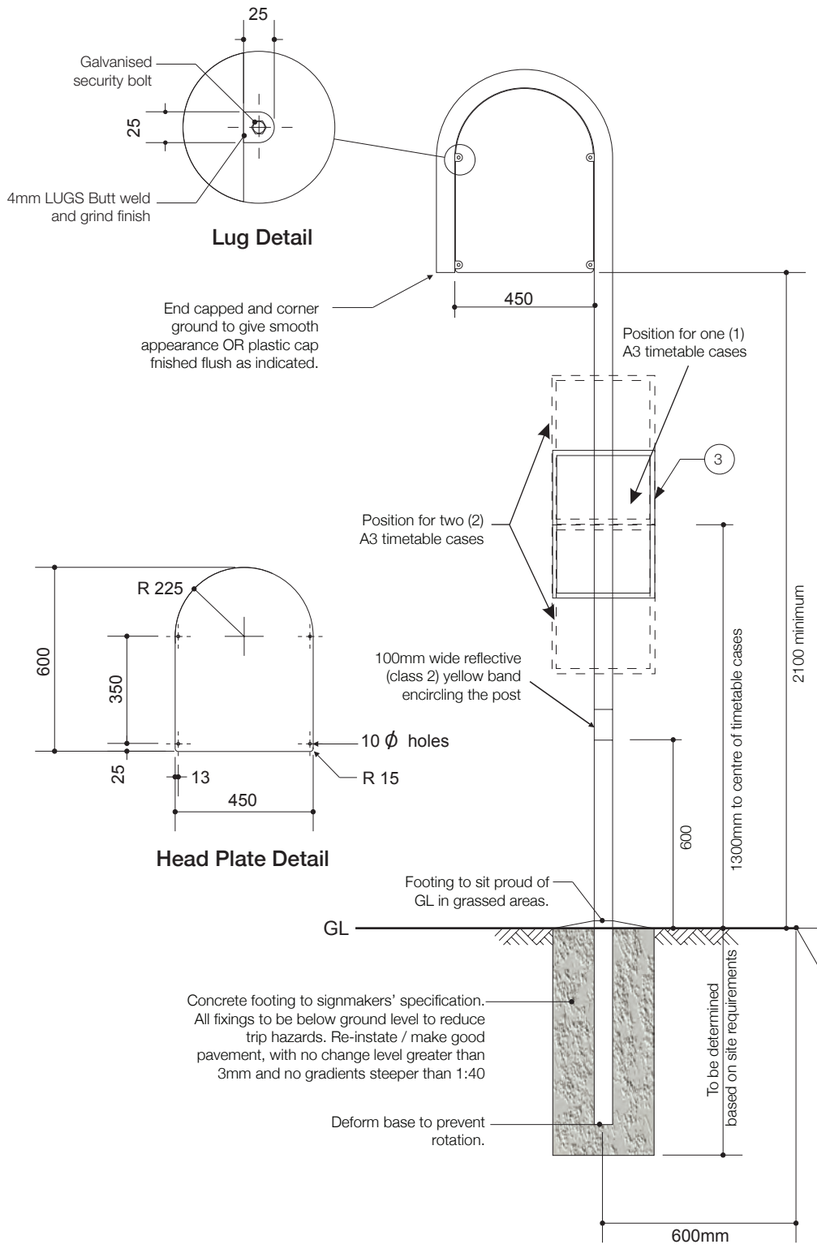
Note: Colours on this page may differ in appearance from those selected in artwork for final output.

Refer to page 4.27.1 for graphic details notes.

Construction Details
1. Post:
Materials: 50NB steel post, C350 grade, 2.9mm wall thickness, deformed base to prevent rotation. Spot weld 4 steel lugs to inside edge of curve to support head plate.
Finishes: Post hot dip galvanised and powder-coated in white (PMS White). It should have a 100mm wide yellow engineers grade vinyl band to encircle the post 600mm from GL.

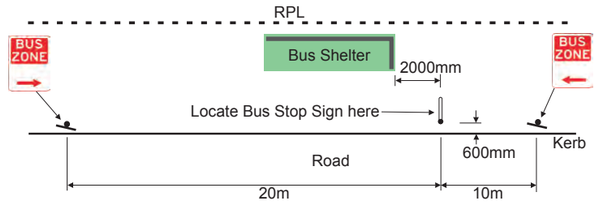
2. Sign Plate:
Materials: The head plate should be made from 1.6mm aluminium.
Finishes: The head plate should be double sided and made of reflective material to a Class 2 standard. All bus stop signage and graphics to be printed on Class 2 reflective material with UV stable (non-yellowing) long life anti-graffiti capabilities, and to match the nominated signage manual reflective colours. All graphics to be printed on reflective stock (pre-cut material is not acceptable).
An over coat of anti-graffiti (film or finish) is to be applied to seal sign.

3. Refer to A3 timetable cases for details.



Elevation

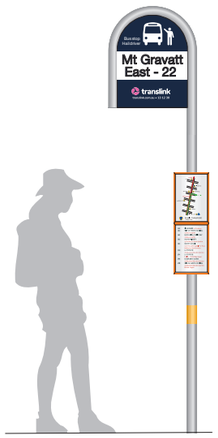
NOTE:
– The sign should be located at the departure end of the bus stop and perpendicular to the traffic lane.
– The post should be closest to the road and the sign away from the road.
– On kerbed roads, sign should be located 600mm back from the face of the kerb. Where mountable or semi mountable kerbs are used, the clearance should be 600mm from top of kerb. On unkerbed roads, signs should be 600mm clear of the outer edge of the shoulder.



Location Plan
NTS

Primary Version: has a blue head plate (A) with white behind stop name. It should be used for bus stops located outside Brisbane City Council that are part of the TransLink network

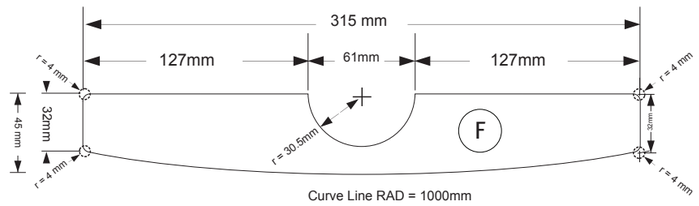
Primary Version
NTS

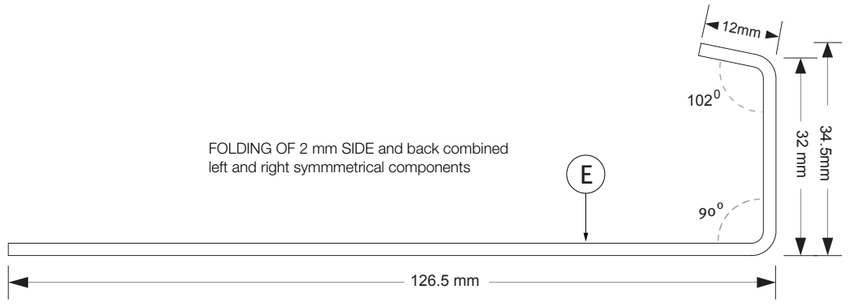


Typical Elevation
nts

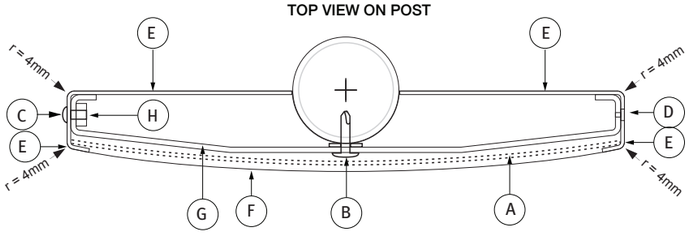
Sign Type
IS-10e
A3 Timetable Case

TOP AND CAP PLATE / BOTTOM END CAP PLATE PROFILE





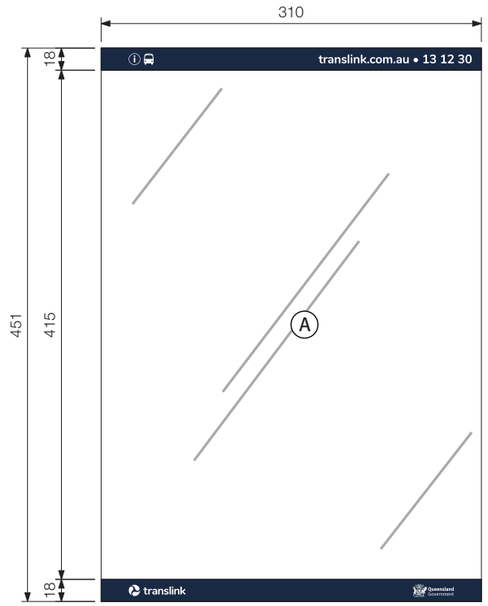
TOP VIEW ON POST



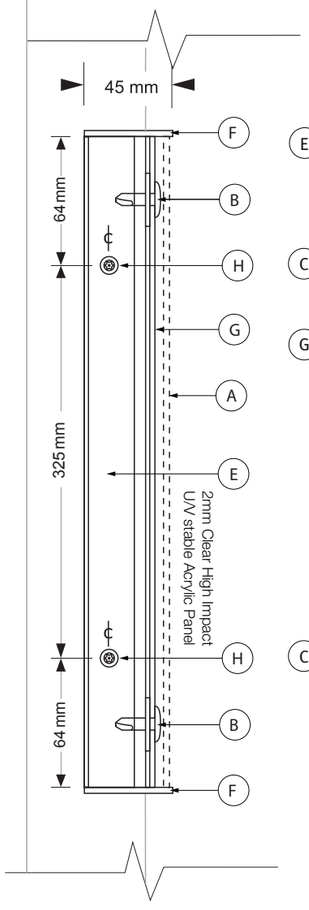
Component fixing detail:

- G–F End plates to Main panel, stitch welded 10mm on reverse side spaced at 25mm as required.
- E–G Back plate and fixed Side Panel, Pit welded and ground and sanded to finish flush to outer surface of the folded rear flange.
- E–G Side retaining Panel (removable) retained by 2, S/S Hex Secura Head Fixings M5 at 10 mm long into Stainless Steel Threaded Insert installed into aluminium.

2mm CLEAR POLYCARBONATE COVER - with 2 Colour Printed Header And Footer

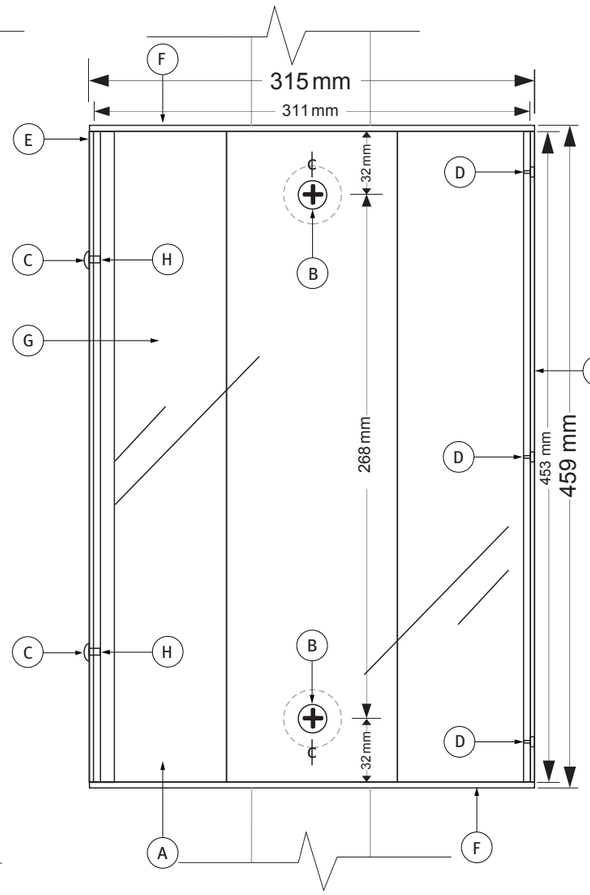


SIDE VIEW ON POST



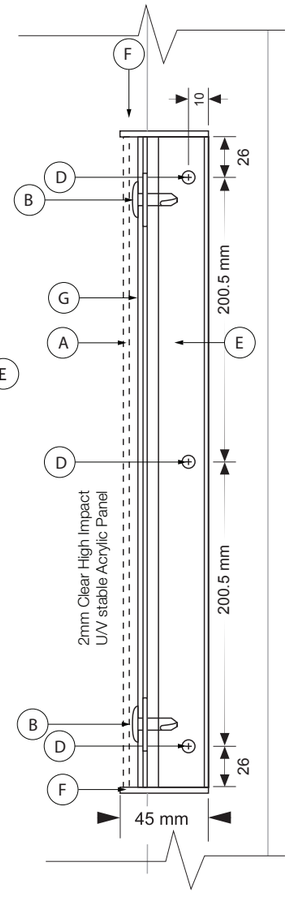
POST to ground

FRONT VIEW ON POST

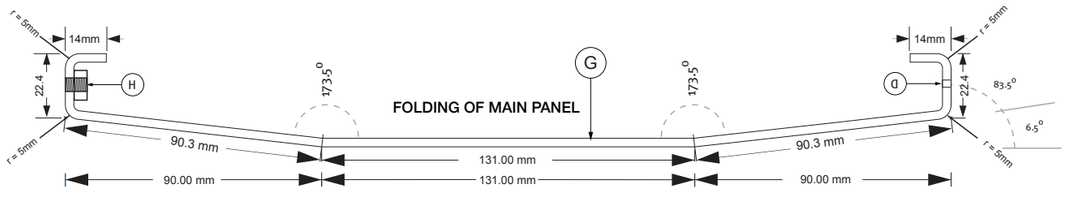


POST to ground

SIDE VIEW ON POST



POST to ground



Construction Details

1. Fabricated 3mm / 2mm thick aluminium powder coated panels with stainless steel fasteners where applicable.

2. Designed to be mounted to a 60mm O/D HD galvanised post.

3. Colour of powder coat to match Resene 'Trinidad' O61-167-048.

4. Security fixings in stainless steel used for folded retaining strips.

5. Clear outer cover installs using the vertical edge capture flanges.

6. Outer clear cover is 2mm U/V stabilised polycarbonate with screen printed Header and Footer reverse printed, on clear PMS 533C (dark blue), and white text and graphics.

Construction Schedule

A. 2mm clear polycarbonate cover with reverse printed Header and Footer.

B. 8mm screw holes x 2 for wafer head attachments - galvanised self tapper.

C. 16mm M6 S/S MT socket button post torx - HEC Security / A2 screw into M6 insert coil thread holes

D. 3mm drilled pit weld holes, weld and grind and sand to smooth flush finish.

E. Folded 2mm aluminum trim retainer and back cover combined panel.

F. 3mm top / bottom end cap piece.

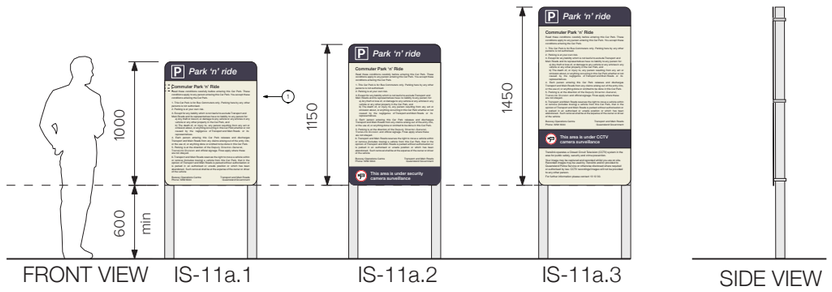
G. 3mm folded main face plate panel.

H. M6 S/Steel coil thread Inserts to suit thread and pitch of security screws.

NOTE:
When installing the timetable case to the bus stop post ensure the access screws are on the side located away from the kerb side.

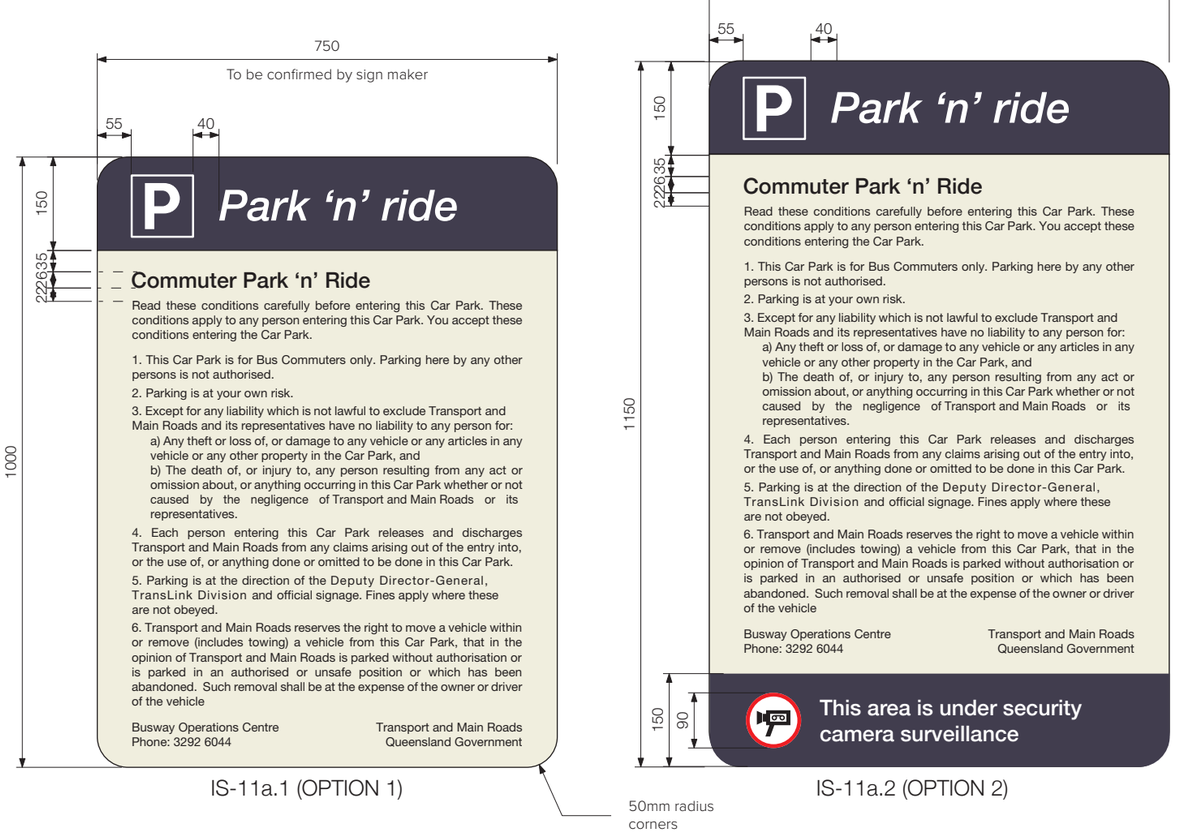
ALTERNATIVE TIMETABLE CASE

AS AN ALTERNATIVE A3 TIMETABLE CASE IMPLEMENTATION OPTION PLEASE CONTACT TRANSLINK FOR DETAILS OF INJECTION MOULDED PC/PBT A3 TIMETABLE CASES



Typical Elevations

Scale 1:50



Graphic Layouts

Scale 1:10

Sign Type

IS-11a

Parking Conditions Sign - Freestanding

Purpose
- To identify and provide conditions of parking information
- Vehicular use

Typical location
- At entrance of car park
- Freestanding or wall/fence mounted
- Located away from pathway, eg garden bed.

Indicative message
- Conditions of parking information/pictograms (if required)

Graphic Details
FONT
Main text = Helvetica Neue 66 Medium Italic
"Commuter Park 'n' Ride" = Helvetica Neue 65 Medium
"Conditions" text = Helvetica Neue 55 Roman

SIZE
Major text = 50mm cap X height
"Commuter Park 'n' Ride" = 25mm cap X height
"Conditions" text = 15mm cap X height
Pictogram = 100mm high

COLOUR
Header panel = Resene Jon N38-007-359
Park n' ride = Arlon White 02
Text background = Resene Rice Cake G94-010-092
Text = Arlon Black 03

Construction details
1. 3mm thick aluminium painted sign panel with front applied external grade vinyl graphics. Anti-graffiti clear coat over. Suitable clamp fixings to galvanised post.

Freestanding
2. Galvanised post to sign maker's engineer specification.

3. Reinforced concrete pad/pier footing to sign makers' engineer specification. All fixings shall be below ground level to reduce trip hazards. Re-instate / make good paving or pavement, with no changes of level greater than 3mm and no gradients steeper than 1:40.

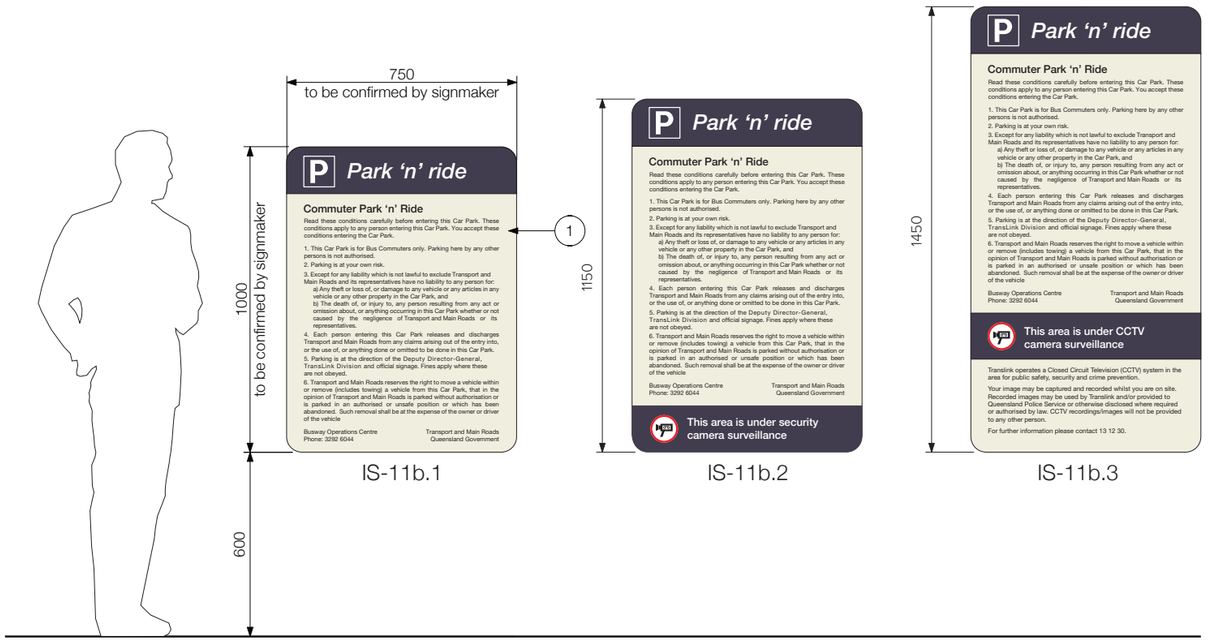
Note: Signmaker to confirm information content with TransLink prior to manufacture.

Sign Type
IS-11b
Parking Conditions Sign - Wall mounted

Purpose
- To identify and provide conditions of parking information
- Vehicular use

Typical location
- At entrance of car park
- Freestanding or wall/fence mounted
- Located away from pathway, eg garden bed.

Indicative message
- Conditions of parking information/pictograms (if required)



IS-11b.1 IS-11b.2 IS-11b.3

Typical Elevation
Scale 1:20

FRONT VIEW

Graphic Details
FONT
Main text = Helvetica Neue 66 Medium Italic
"Commuter Park 'n' Ride" = Helvetica Neue 65 Medium
"Conditions" text = Helvetica Neue 55 Roman

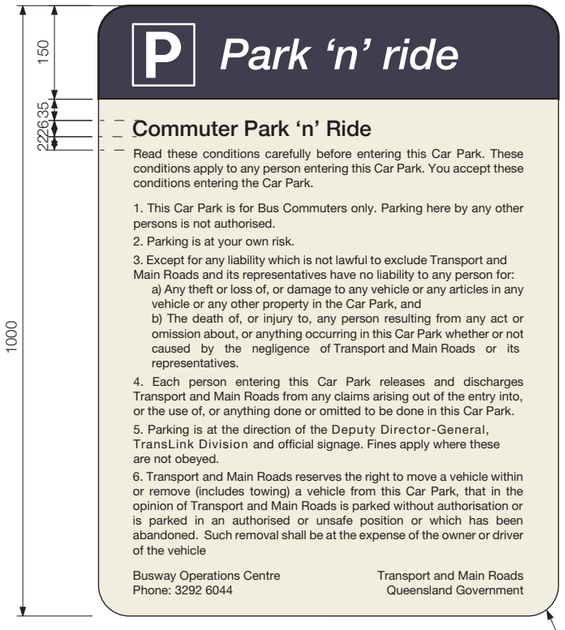
SIZE
Major text = 50mm cap X height
"Commuter Park 'n' Ride" = 25mm cap X height
"Conditions" text = 15mm cap X height
Pictogram = 100mm high

COLOUR
Header panel = Resene Jon N38-007-359
Park n' ride = Arlon White 02
Text background = Resene Rice Cake G94-010-092
Text = Arlon Black 03

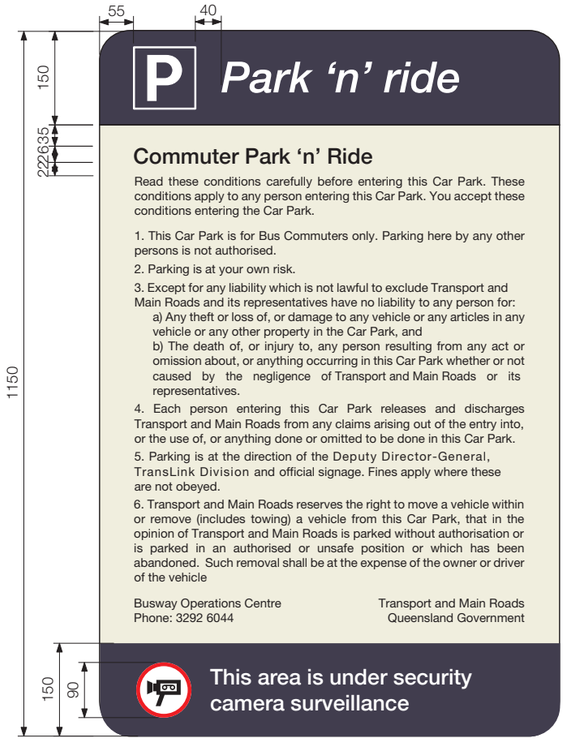
Construction details
1. 3mm thick aluminium painted sign panel with front applied external grade vinyl graphics. Anti-graffiti clear coat over. Suitable clamp fixings to galvanised post.

Wall mounted
2. Panel fixed to wall / chain wire fence with suitable fixings.

Note: Signmaker to confirm information content with TransLink prior to manufacture.

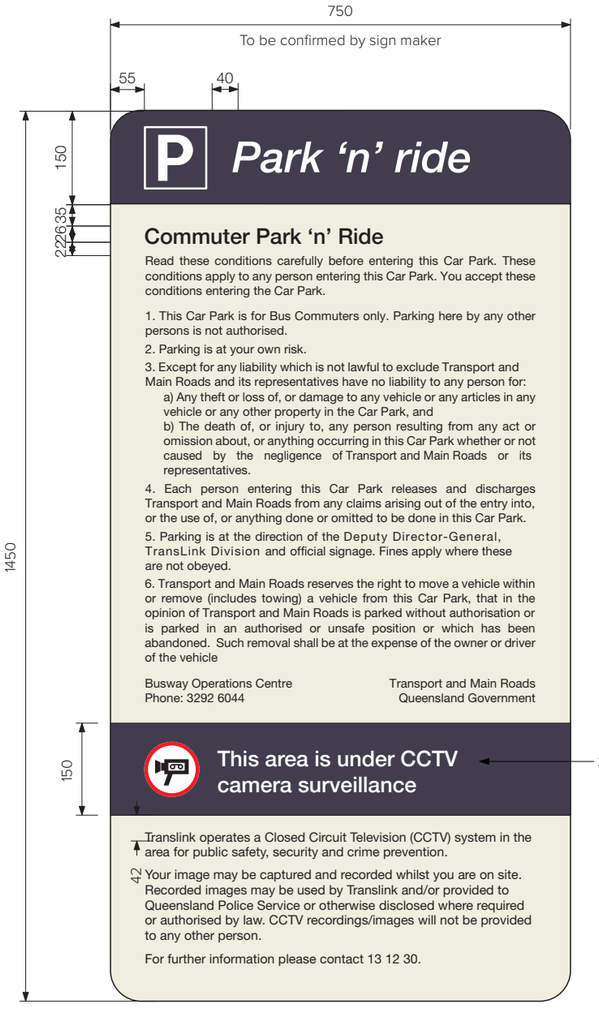


IS-11b.1 (OPTION 1)



50mm radius corners

IS-11b.2 (OPTION 2)



25mm cap X-height

IS-11b.3 (OPTION 3)

Graphic Layout
Scale 1:10

4.31

Sign Type
IS-13
Lift Directory

Purpose
- To identify station levels (typically only at multi level stations)
- For pedestrian use

Typical location
- Next to lift doors

Indicative message
- Levels (Platform / Concourse / Plaza / Underpass)
- Level information
- Where required, additional sign panel with Braille to be installed

Graphics Detail
FONT
'To...' = Helvetica Neue 55 Roman
Sub-messages = Helvetica Neue 55 Roman
All other text = Helvetica Neue 65 Medium

SIZE
All text = as shown

COLOUR
Transport panel = Resene 'Trinidad' O61-167-048
All other panels = Resene 'Jon' N38-007-359
Text = White

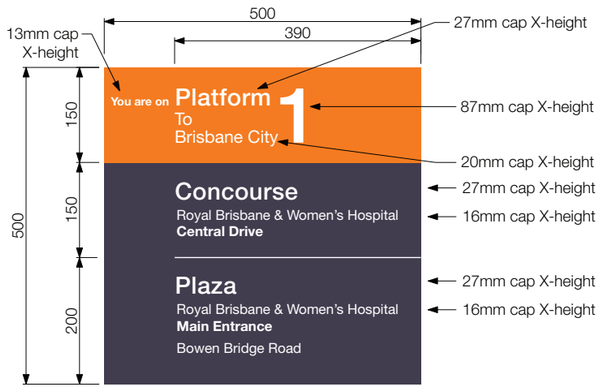
Construction Details
1. 2mm aluminium sign panel with applied graphic options below:

OPTION 1 - Single Sign
Visual lift directory sign panel which may be developed to include Braille and tactile content.

OPTION 2 - Double Sign
Visual panels to have front applied graphics and protective satin clear coat over. Supporting smaller Braille and tactile sign panel describes lift operation located below.

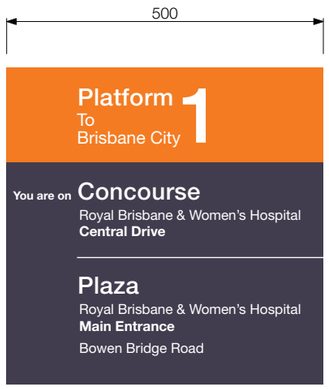
2. Sign panel fixed to lift wall next to call button with 3M VHB double sided tape and tamper proof fixings. Prepare surface free from dust, dirt, oil & grease prior to fixing.

3. Use approved raised tactile pictograms and text and grade 1 Braille (uncontracted) to Australian Braille Authority, NCC and AS1428.4.2(2018) requirements. Top of Braille to be offset 8mm below letters. Braille locator notch left of first line of Braille. Sign face substrate must be UV stablised and vandal resistant.

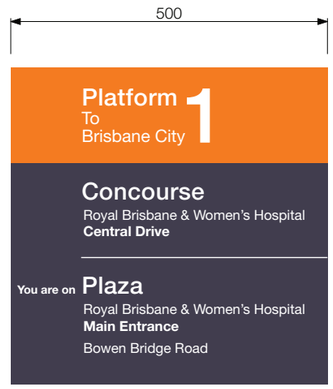


PLATFORM LEVEL

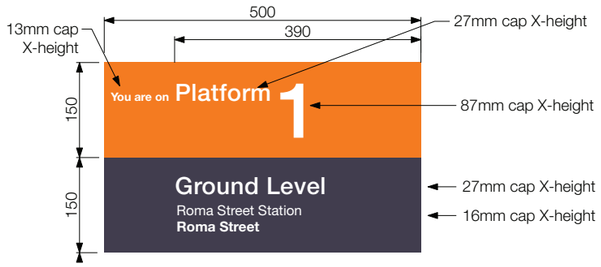
3 LEVELS



CONCOURSE LEVEL

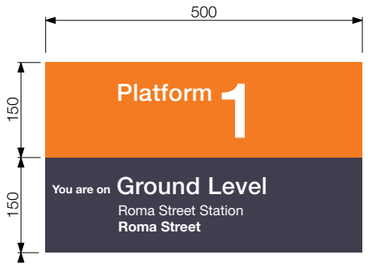


PLAZA LEVEL

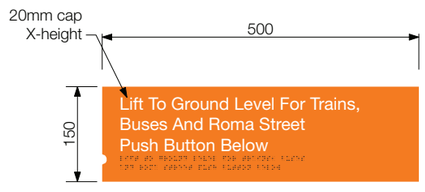


PLATFORM LEVEL

2 LEVELS

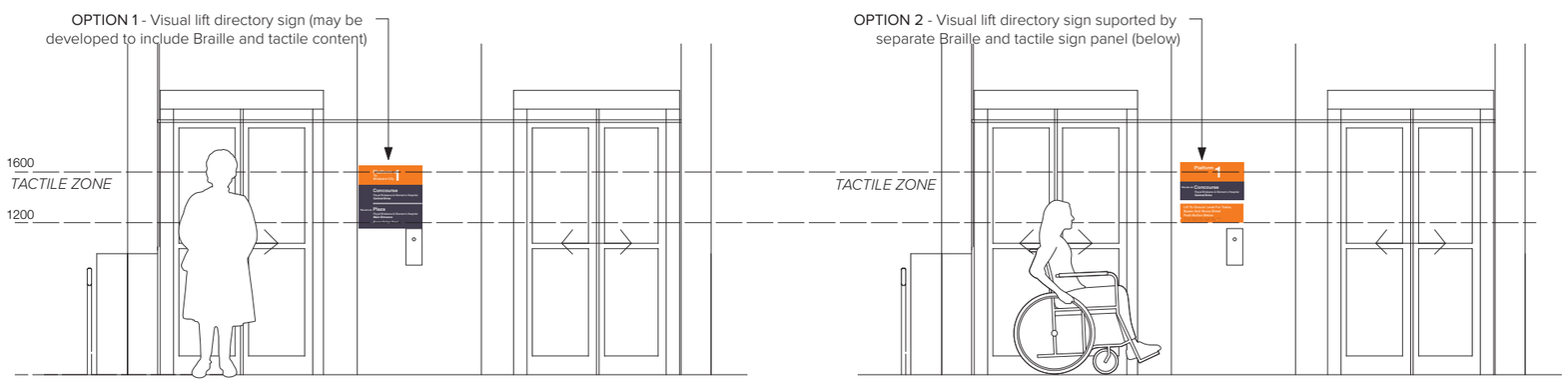


GROUND LEVEL

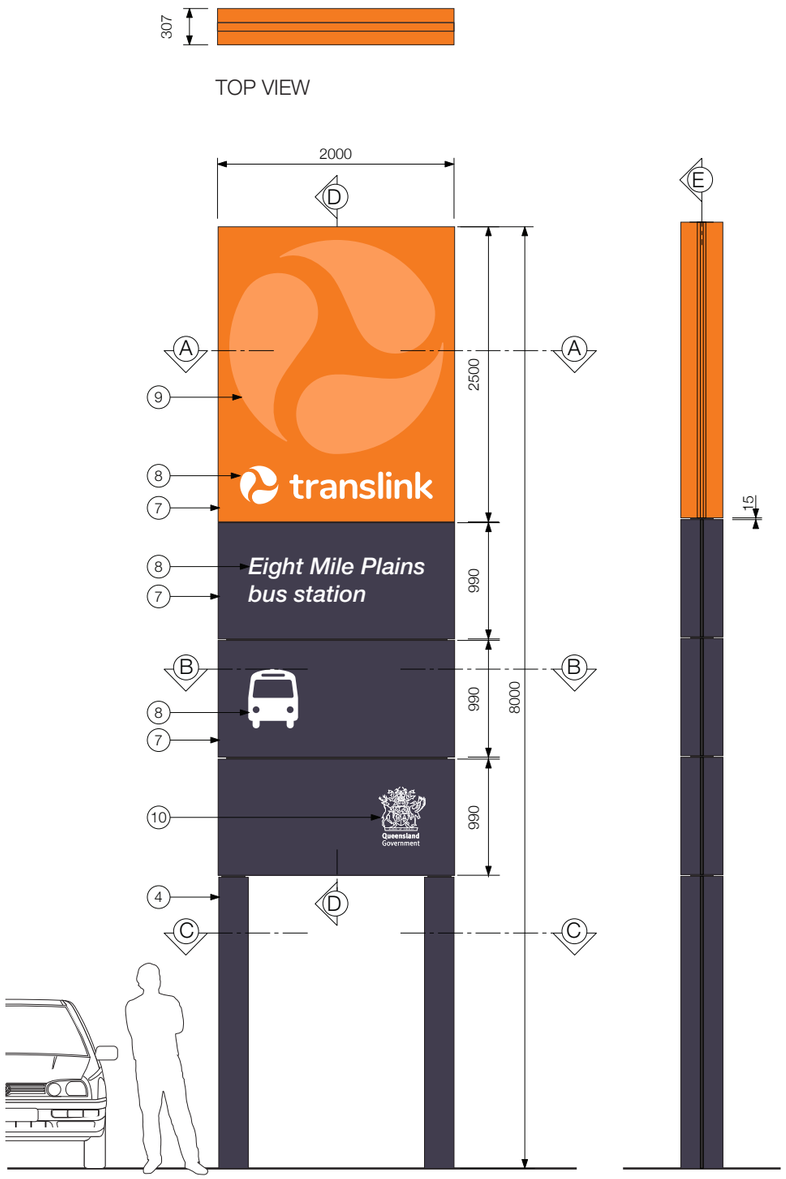


SUPPORT PANEL
BRAILLE AND TACTILE GRAPHICS
OPTION 2 ONLY

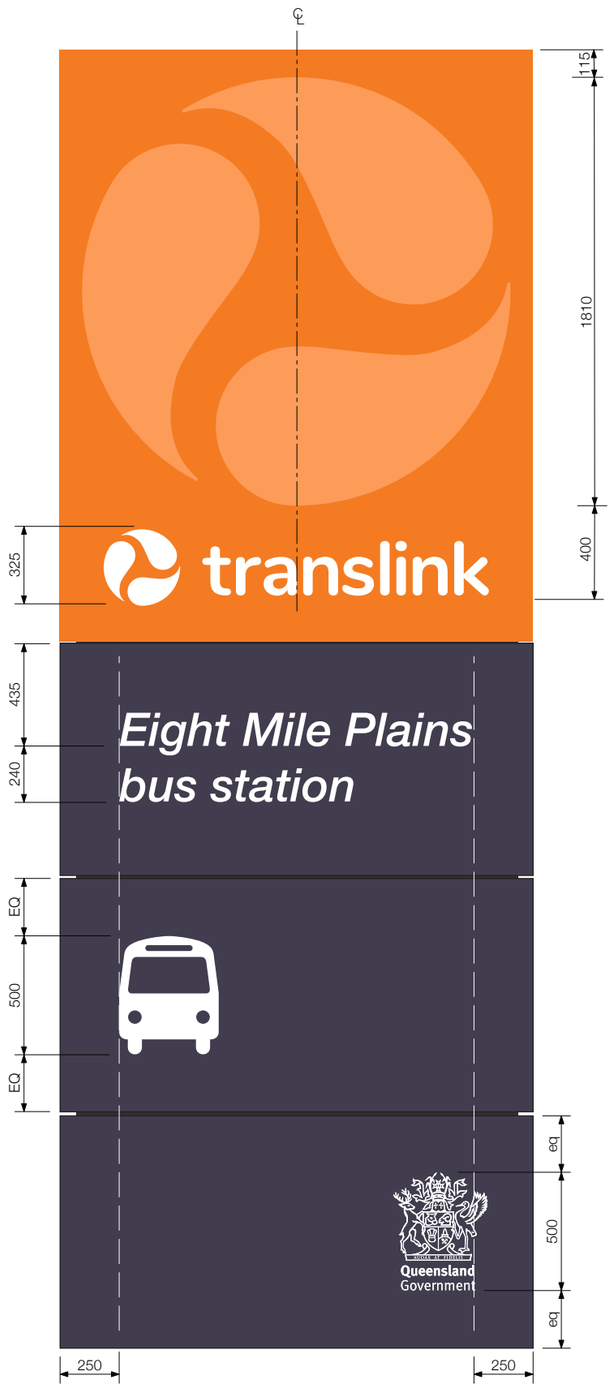
Typical Graphic Layouts
Scale 1:10



Typical Locations
Scale 1:50



Typical Location
Scale 1:50



Graphic Layout
Scale 1:25

Sign Type
PI-1
Pylon Identification Sign - Large

Purpose
- Main sign to identify site / station from major approaches
- For pedestrian and vehicular use

Typical location
- Located on the principal road frontage/s of the station in proximity to the principal road / pedestrian entry to the station.
Where the station is located on a side road off a main road there may be a need to provide additional Major Identification sign/s at the intersection/s of the main road.
- Located in either TMR or Others property depending on site constraints.
Note:- If located outside TMR property, Owner to be consulted on final location.
- Sign to be oriented typically with the sign faces perpendicular to the kerb line, in order that the sign faces are clearly visible from road approaches.
- Sign post to be located outside required pedestrian paths of travel. Obtain advice from TransLink and the property owner prior to finalising locations.

Indicative message
- Name of station, pictogram and service operator

Graphics Detail
FONT
Station name = Helvetica Neue 66 Medium Italic

SIZE
Translink graphic = 1810mm high (proportional width)
Translink logo = 325mm high (proportional width)
Short station name = 155mm cap X height
Long station name = 140mm cap X height
Transport pictogram = 500mm x 500mm
Qld Govt logo = 500mm high (proportional width)

COLOUR
Panel Backgrounds
TransLink background = Dulux (MTO) Intensity Orange Gloss powdercoat (900-4008G)
Other background = Resene ‘Jon’ N38-007-359

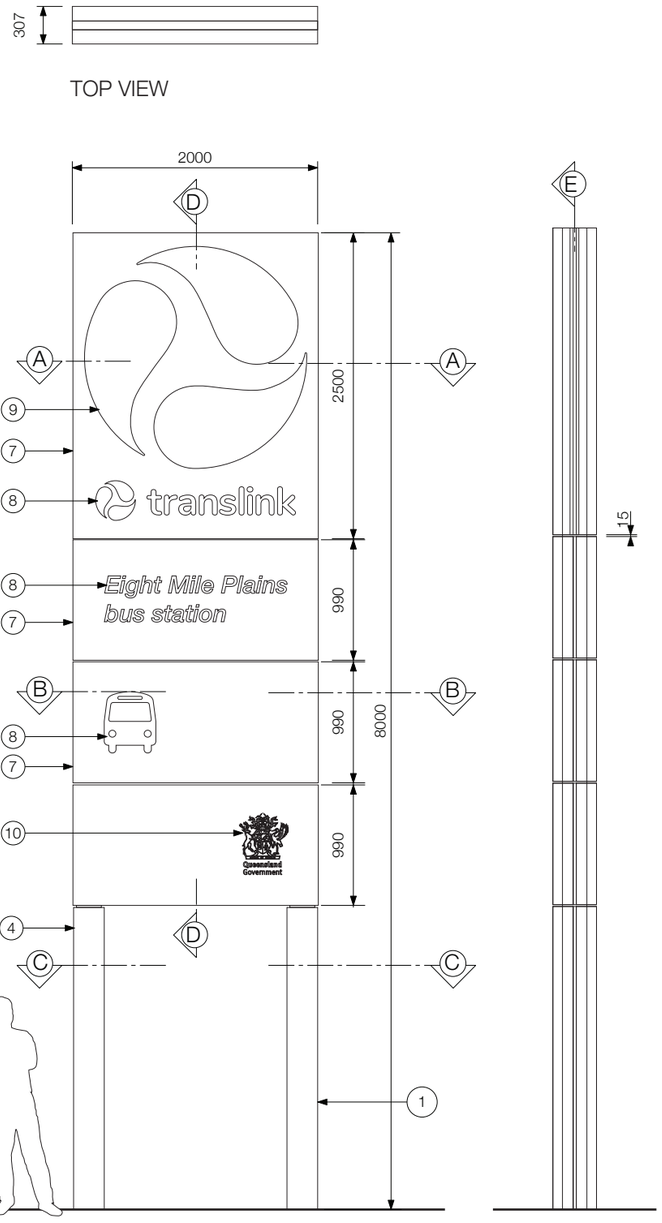
Sign Structure
Sign structure = Resene ‘Jon’ N38-007-359
Sign structure shadowlines = Resene ‘Jon’ N38-007-359

Illuminated graphics
TransLink logo tint = Arlon Tangerine 84 translucent vinyl
TransLink logo = Opal
Station name = Opal
Pictograms = Opal

Non-illuminated graphics
Qld Govt logo = Vinyl Arlon White

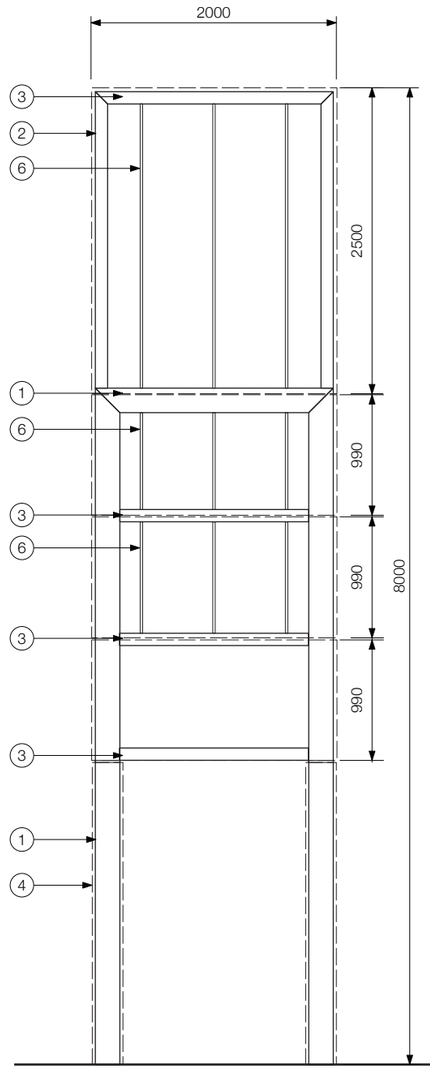
Construction Details
Refer 4.32.2 for details.

NOTE:
- Allow to connect to existing electrical supply including all electrical conduits.
- Provide timer or photo electric switch to regulate illumination. Client to confirm hours of operation.



Construction Elevation

Scale 1:50



Internal Framing

Scale 1:50

Sign Type

PI-1

Pylon Identification Sign - Large

Construction Detail

1. 200 x 200 x 6mm SHS galvanised steel poles with horizontal top member suitable for lifting lugs.

2. 100 x 200 x 6mm RHS galvanised steel vertical members welded to top of galvanised steel poles.

3. 100 x 200 x 6mm RHS galvanised steel horizontal members welded to inside of galvanised steel poles.

4. 2mm folded aluminium cladding fixed to outside of pole. 5mm minimum radius corners.

5. Internally illuminated by LED backlight modules mounted to backing panel on both sides. LED layout indicative only. Signmaker to provide control gear. Refer to specification for LED requirements. Sign should be illuminated during all hours of operation.

6. 25 x 25 x 3mm SHS galvanised steel light supports welded to horizontal members to hold LED backing panels.

7. Fabricated 3mm thick double sided aluminium sign box. Cut through logo and graphics on both sides of face. Internal channel frame welded inside box to align with horizontal members. Provide adequate drainage / ventilation to prevent condensation.

8. Intracut 3mm thick opal acrylic letters and logo clear glued to translucent backing panel to sit flush with sign face. All glued to back of sign box with 3M Scotch-Weld Metal Bonder acrylic adhesive. Note: all joins between aluminium and acrylic to be sealed against weather.

9. Intracut 3mm thick opal acrylic tear drop shapes clear glued to translucent backing panel to sit flush with sign face. Arlon Tangerine 84 translucent vinyl applied to face of tear drop shapes to align with cut outs, provide 10mm extra bleed to allow for shrinkage. Backing panel glued to back of sign box with 3M Scotch-Weld Metal Bonder acrylic adhesive. Note: all joins between aluminium and acrylic to be sealed against weather.

10. Fabricated 3mm thick double sided aluminium sign box, non-illuminated with cut vinyl graphics applied to faces on both sides.

11. Stainless steel bolts and screws to engineers specification. Provide flashing and spacers as required. Security screw heads to be used where visible, paint out to match background colour.

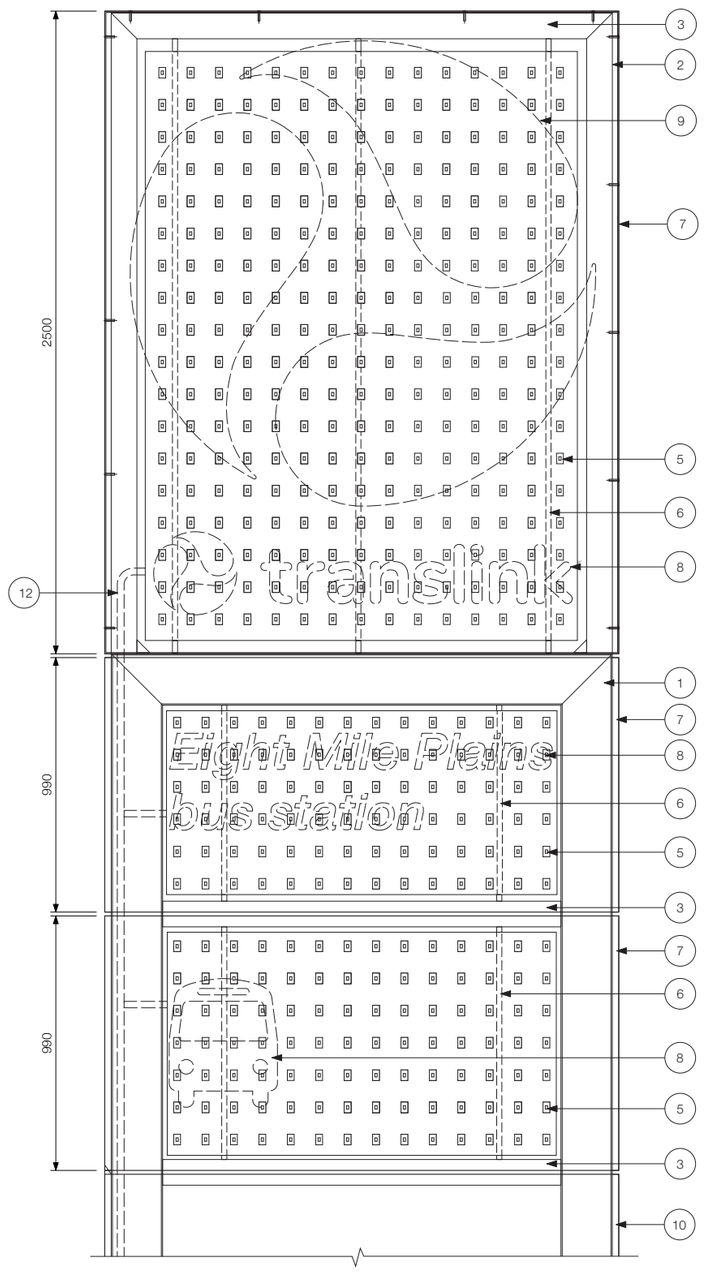
12. Power conduits to be concealed within structure. Isolators and control gear to be located in a secure accessible location for service.

13. Signmaker's engineer to specify base plate, footing and structural details. Signmaker to co-ordinate installation with Managing Contractor / TMR Representative. Finish of footing to be coordinated with paving.

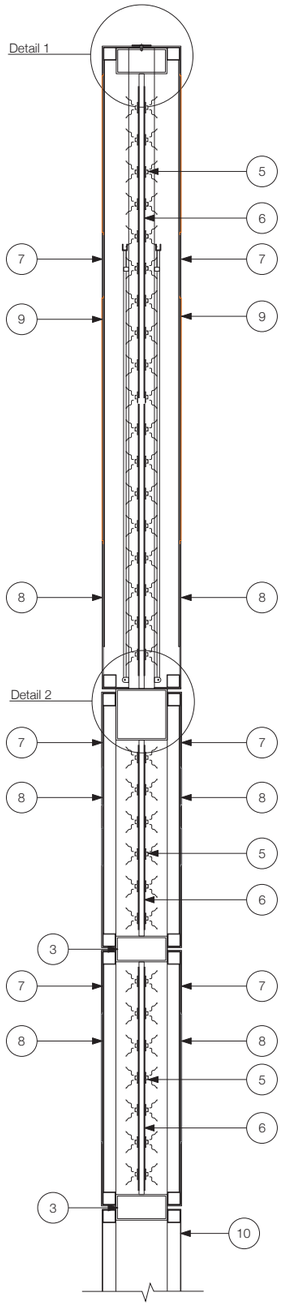
NOTE:
- Allow to connect to existing electrical supply including all electrical conduits. (TMR to inform power source.)
- All joins between aluminium and acrylic to be sealed against weather.
- Provide timer or photo electric switch to regulate illumination. TMR to confirm hours of operation.

Sign Type
PI-1
Pylon Identification Sign - Large

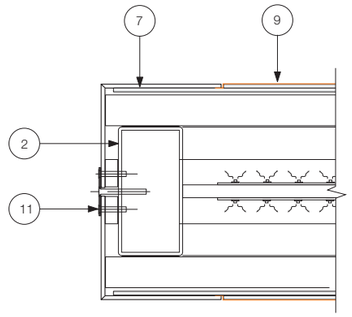
Construction Details
Refer 4.32.2 for details.



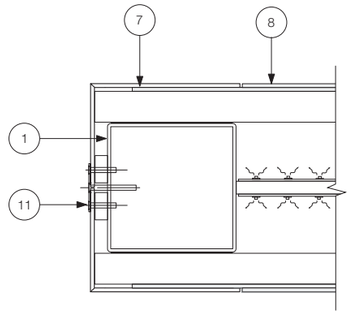
Section E-E
Scale 1:20



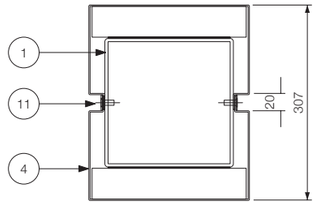
Section D-D
Scale 1:20



Section A-A
NTS



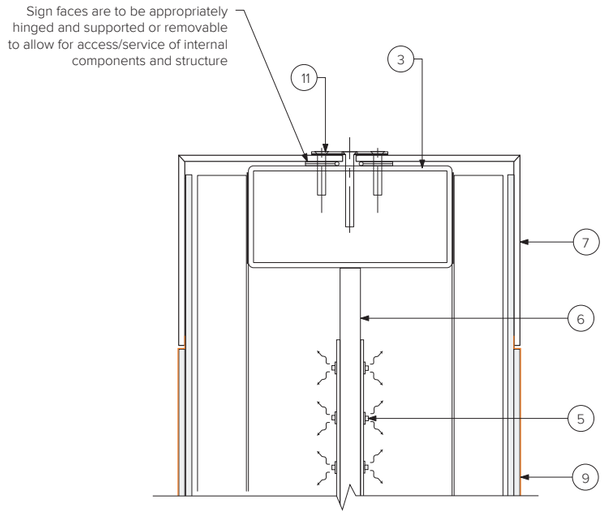
Section B-B
NTS



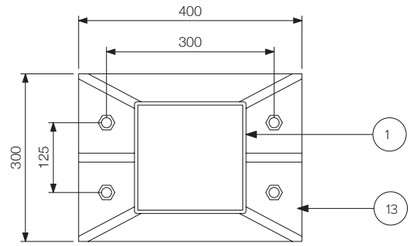
Section C-C
NTS

Sign Type
PI-1
Pylon Identification Sign - Large

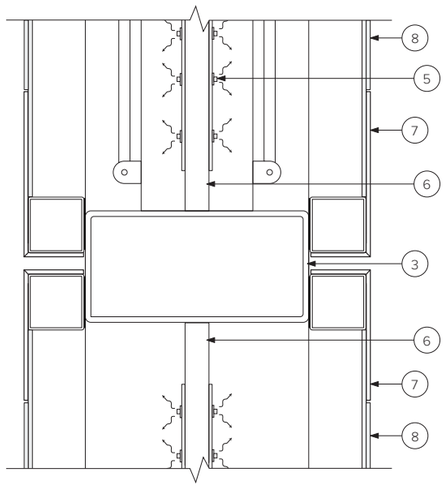
Construction Details
Refer 4.32.2 for details.



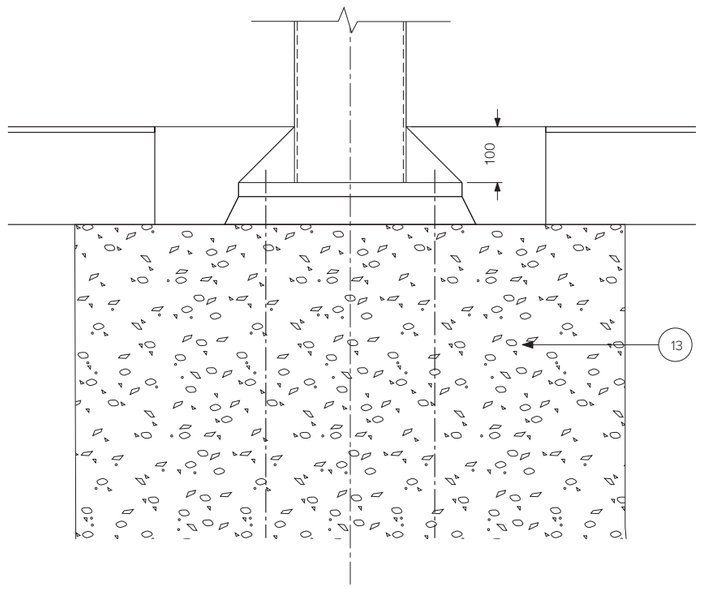
Detail 1
Scale 1:5



Base Plate - Top Elevation
Scale 1:10



Detail 2
Scale 1:5



Base Plate - Front Elevation
Scale 1:10

4.33.1

Sign Type

PI-2

Pylon Identification Sign

Purpose
- Main sign to identify site / station from major approaches
- For pedestrian and vehicular use

Typical location
- Located on the principal road frontage/s of the station in proximity to the principal road / pedestrian entry to the station.
Where the station is located on a side road off a main road there may be a need to provide additional Major Identification sign/s at the intersection/s of the main road.
- Located in either TMR or Other's property depending on site constraints.
Note:- If located outside TMR property, owner to be consulted on final location.
- Sign to be oriented typically with the sign faces perpendicular to the kerb line, in order that the sign faces are clearly visible from road approaches.
- Sign post to be located outside required pedestrian paths of travel.
Obtain advice from TransLink and the property owner prior to finalising locations.

Indicative message
- Name of station, pictogram and service operator

Graphics Detail
FONT
Station name = Helvetica Neue 66 Medium Italic

SIZE
Translink graphic = 1450mm high (proportional width)
Translink logo = 260mm high (proportional width)
Station name = 145mm cap X height
Transport pictogram = 400mm x 400mm
Qld Govt logo = 400mm high (proportional width)

COLOUR
Panel Backgrounds
TransLink background = Dulux (MTO) Intensity Orange Gloss powdercoat (900-4008G)
Other background = Resene 'Jon' N38-007-359

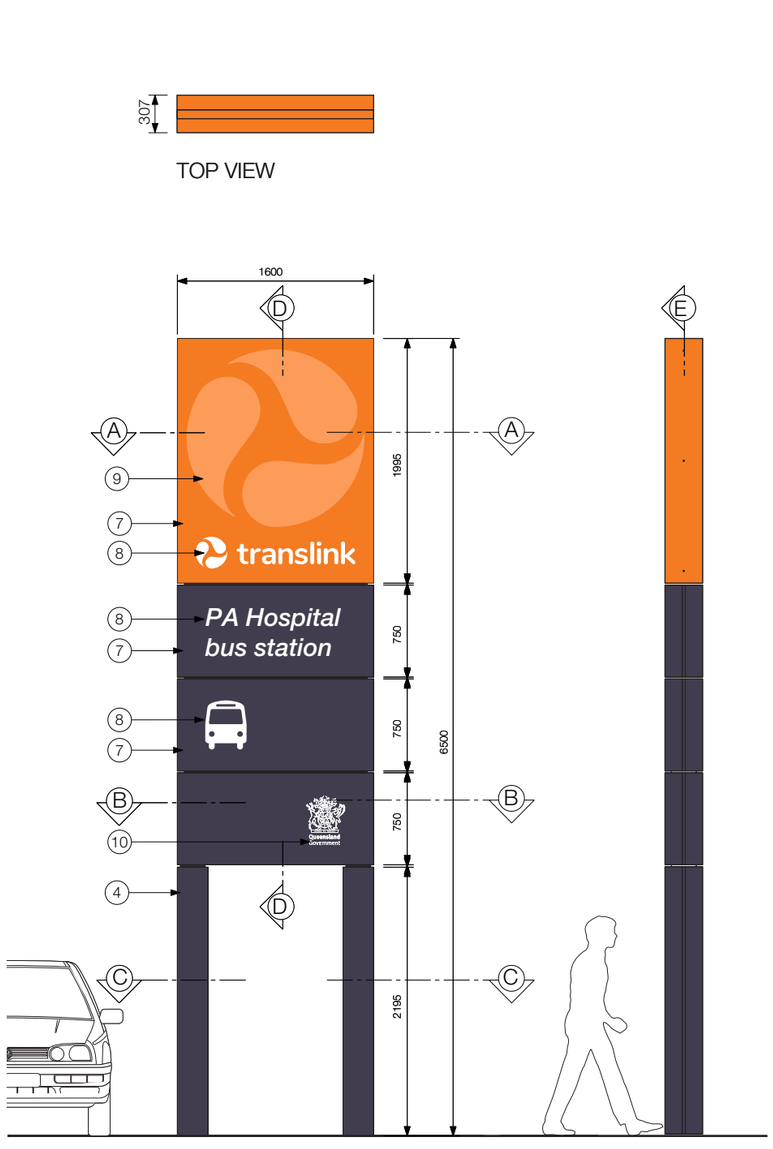
Sign Structure
Sign structure = Resene 'Jon' N38-007-359
Sign structure shadowlines = Resene 'Jon' N38-007-359

Illuminated graphics
TransLink logo tint = Arlon Tangerine 84 translucent vinyl
TransLink logo = Opal
Station name = Opal
Pictograms = Opal

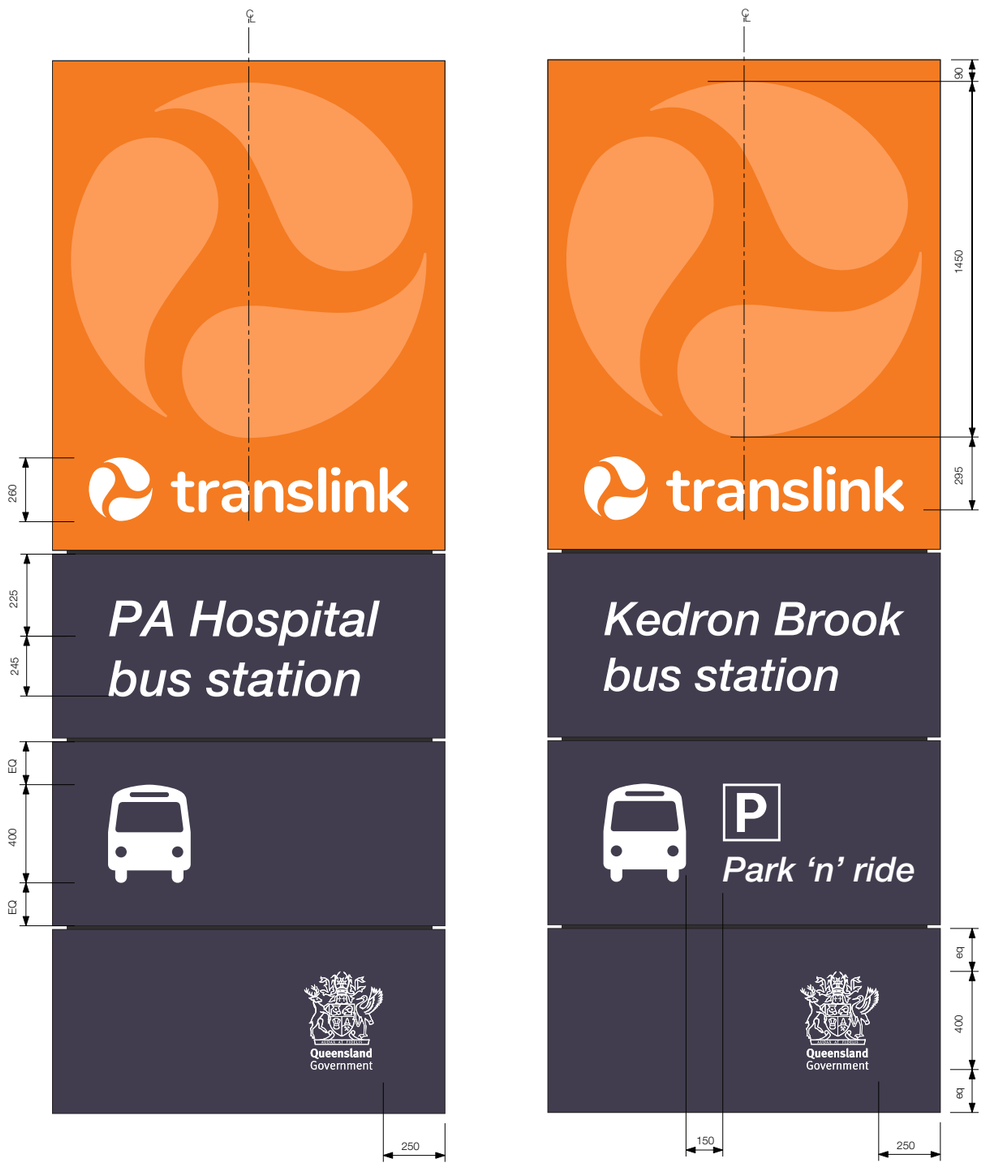
Non-illuminated graphics
Qld Govt logo = Vinyl Arlon White

Construction Details
Refer 4.33.2 for details.

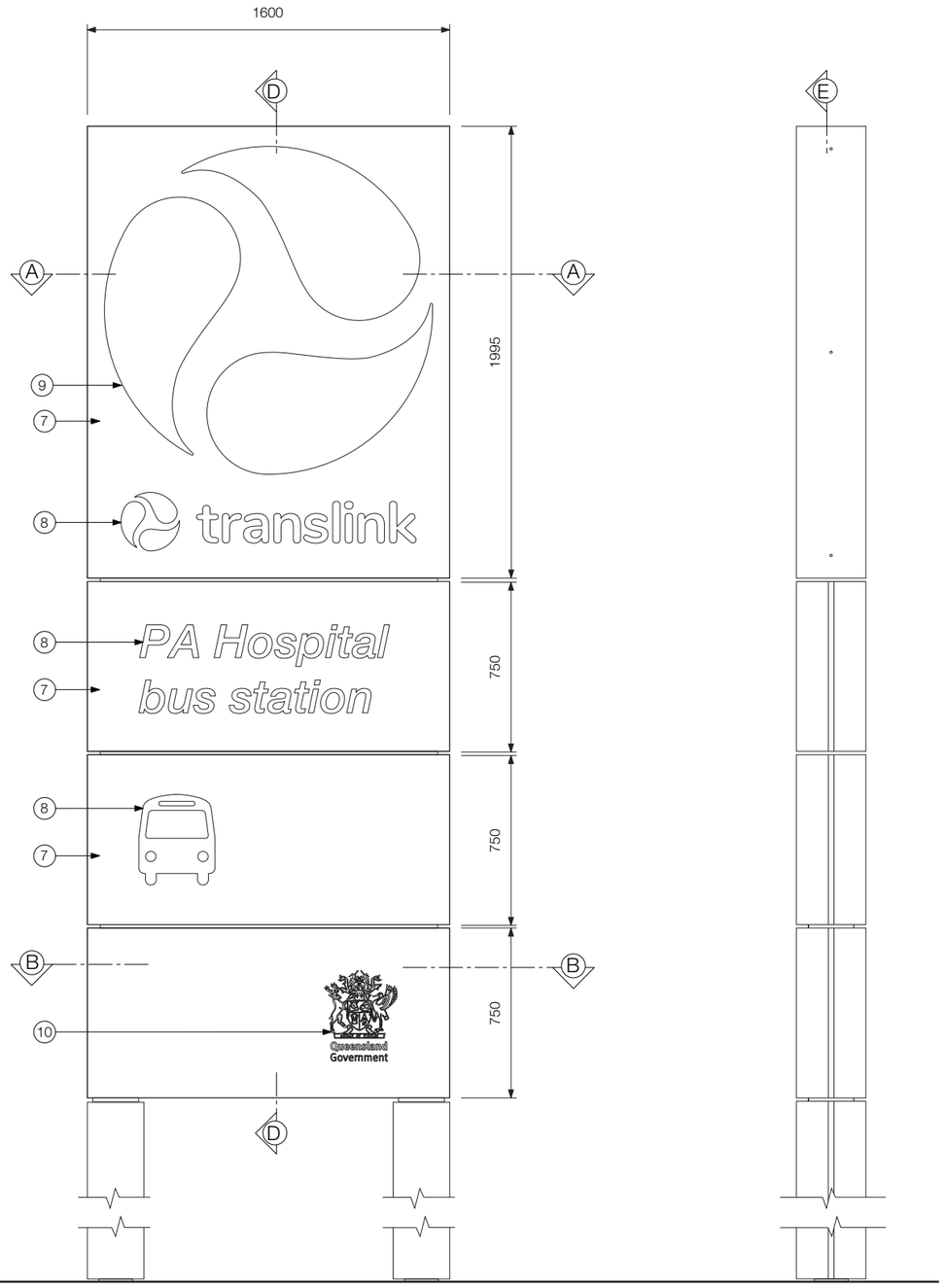
NOTE:
- Allow to connect to existing electrical supply including all electrical conduits.
- Provide timer or photo electric switch to regulate illumination.
Client to confirm hours of operation.



Typical Location
Scale 1:50

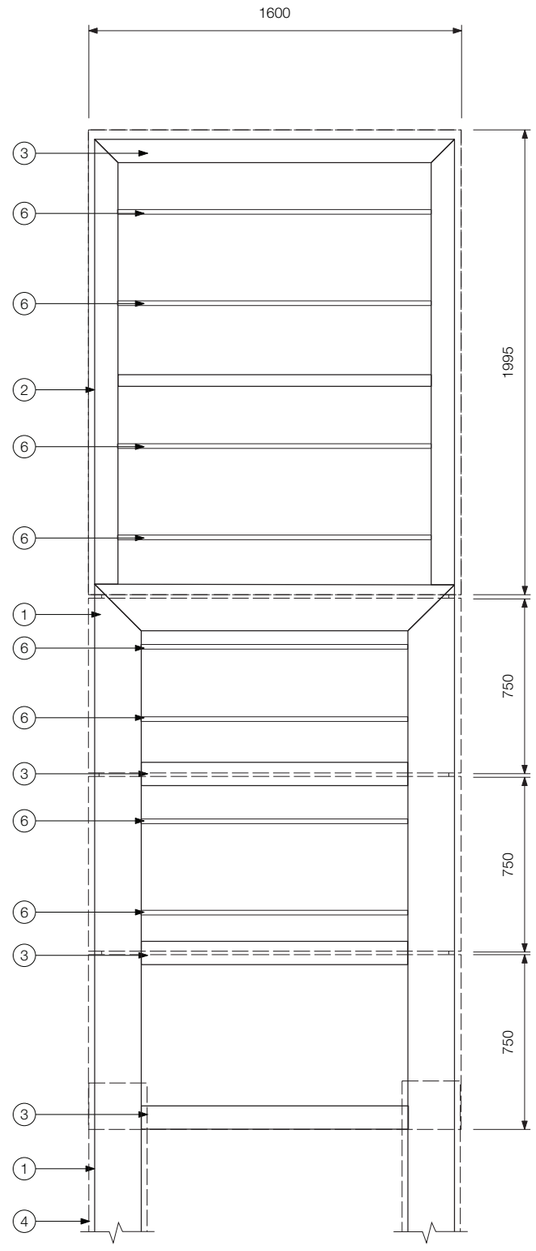


Graphic Layout
Scale 1:50



Construction Elevations

Scale 1:25



Internal Framing

Scale 1:25

Sign Type

PI-2

Pylon Identification Sign

Construction Detail

1. 200 x 200 x 6mm SHS galvanised steel poles with horizontal top member suitable for lifting lugs.

2. 100 x 200 x 6mm RHS galvanised steel vertical members welded to top of galvanised steel poles.

3. 100 x 200 x 6mm RHS galvanised steel horizontal members welded to inside of galvanised steel poles.

4. 2mm folded aluminium cladding fixed to outside of pole. 5mm minimum radius corners.

5. Internally illuminated by LED backlight modules mounted to backing panel on both sides. LED layout indicative only. Signmaker to provide control gear. Refer to specification for LED requirements. Sign should be illuminated during all hours of operation.

6. 20 x 20 x 3mm SHS galvanised steel light supports welded to horizontal members to hold LED backing panels.

7. Fabricated 3mm thick double sided aluminium sign box. Cut through logo and graphics on both sides of face. Internal channel frame welded inside box as required. Provide adequate drainage / ventilation to prevent condensation.

8. Intracut 3mm thick opal acrylic letters and logo clear glued to translucent backing panel to sit flush with sign face. All glued to back of sign box with 3M Scotch-Weld Metal Bonder acrylic adhesive. Note: all joins between aluminium and acrylic to be sealed against weather.

9. Intracut 3mm thick opal acrylic tear drop shapes clear glued to translucent backing panel to sit flush with sign face. Arlon Tangerine 84 translucent vinyl applied to face of tear drop shapes to align with cut outs, provide 10mm extra bleed to allow for shrinkage. Backing panel glued to back of sign box with 3M Scotch-Weld Metal Bonder acrylic adhesive. Note: all joins between aluminium and acrylic to be sealed against weather.

10. 3mm aluminium sign box, non-illuminated with cut vinyl graphics applied to faces on both sides.

11. Stainless steel bolts and screws to engineers specification. Provide flashing and spacers as required. Security screw heads to be used where visible, paint out to match background colour.

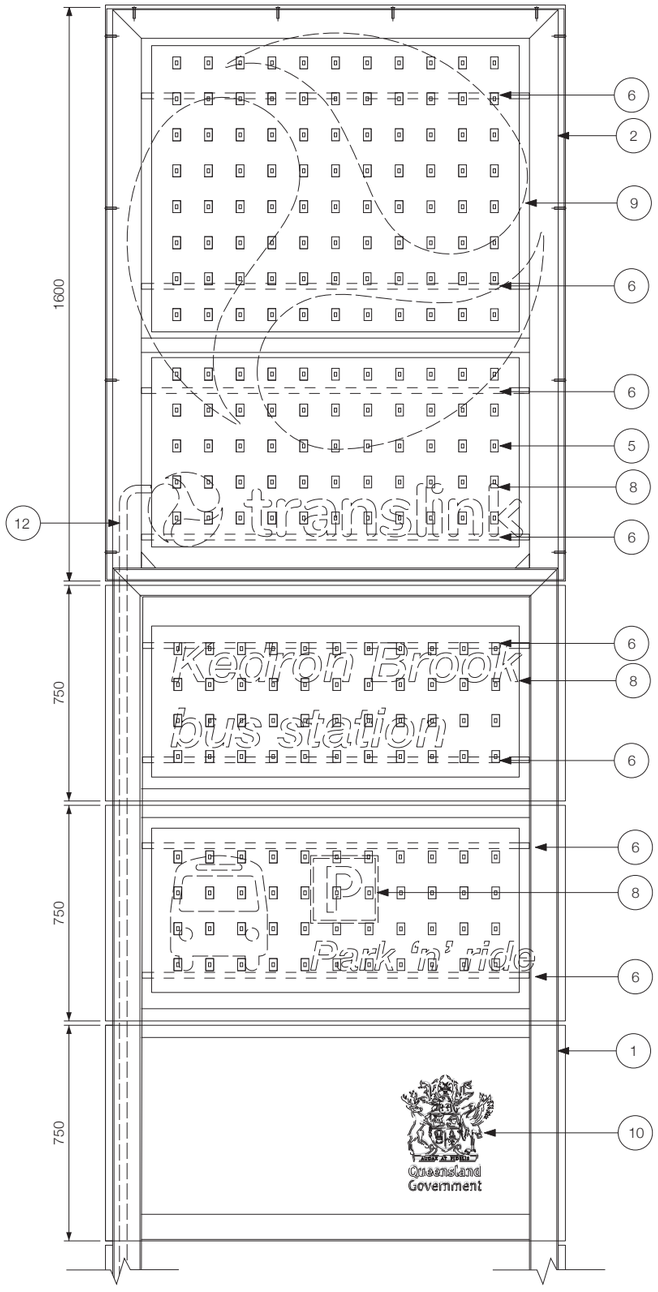
12. Power conduits to be concealed within structure. Isolators and control gear to be located in a secure accessible location for service.

13. Signmaker's engineer to specify base plate, footing and structural details. Signmaker to co-ordinate installation with Managing Contractor / TMR Representative. Finish of footing to be coordinated with paving.

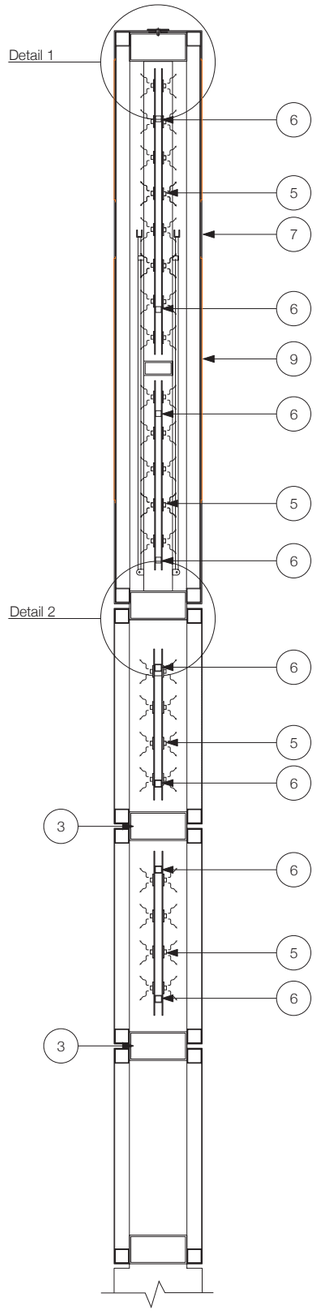
NOTE:
- Allow to connect to existing electrical supply including all electrical conduits.(TMR to inform power source.)
- All joins between aluminium and acrylic to be sealed against weather.
- Provide timer or photo electric switch to regulate illumination. TMR to confirm hours of operation.

Sign Type
PI-2
Pylon Identification Sign

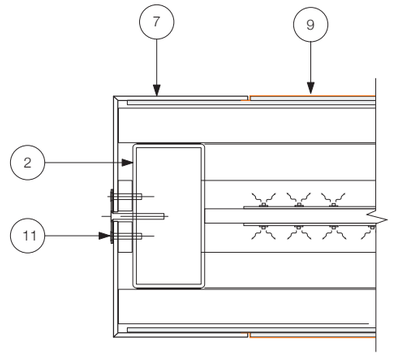
Construction Details
Refer 4.33.2 for details.



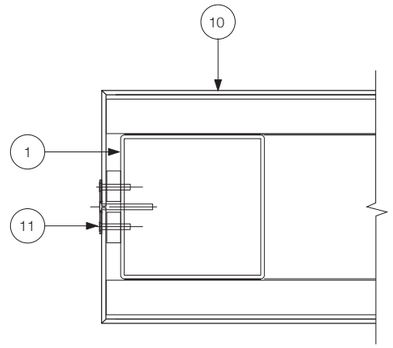
Section E-E
Scale 1:20



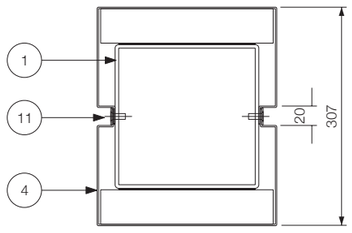
Section D-D
Scale 1:20



Section A-A
NTS



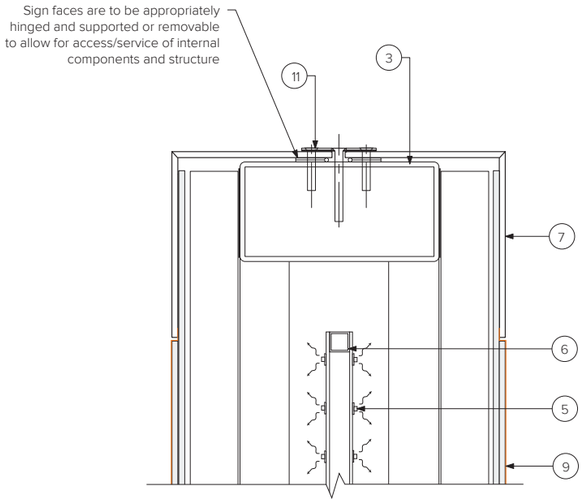
Section B-B
NTS



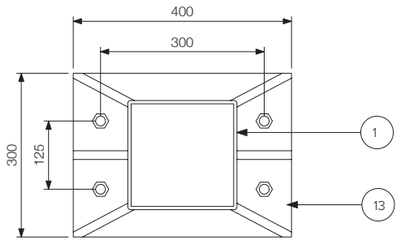
Section C-C
NTS

Sign Type
PI-2
Pylon Identification Sign

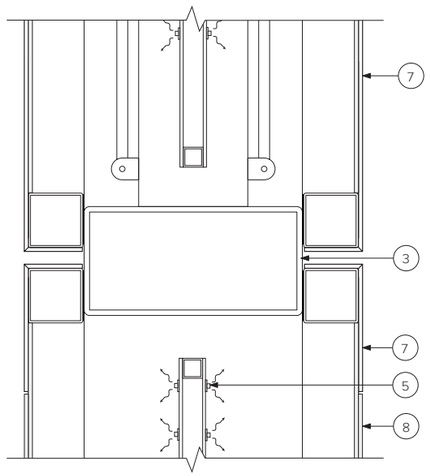
Construction Details
Refer 4.33.2 for details



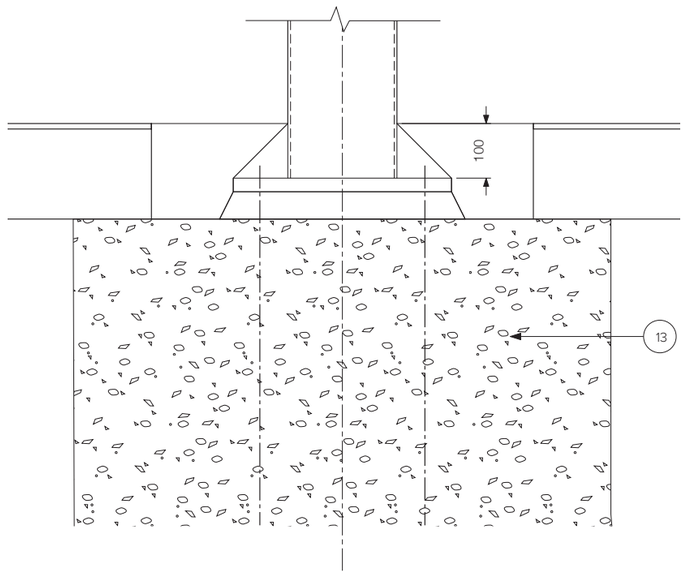
Detail 1
Scale 1:5



Base Plate - Top Elevation
Scale 1:10

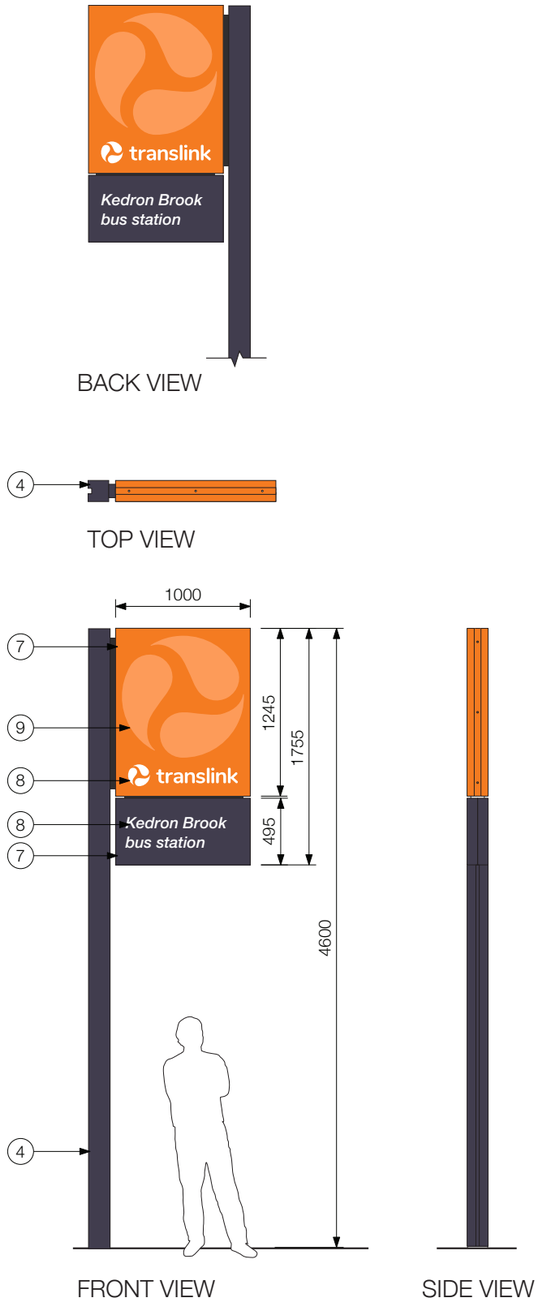


Detail 2
Scale 1:5



Base Plate - Front Elevation
Scale 1:10

4.34.1



Typical Elevation
Scale 1:50

Graphic Layout
Scale 1:10

Sign Type

PI-3a

Flagpole Identification Sign - Support sign only

Purpose
- Secondary sign to identify site / station from major approaches
- For pedestrian and vehicular use
- Note this sign is only to be used as a secondary sign to support main identification sign.

Typical location
- Located on the principal road frontage/s of the station in proximity to the principal road / pedestrian entry to the station.
Where the station is located on a side road off a main road there may be a need to provide additional Major Identification sign/s at the intersection/s of the main road.
- Located in either TMR or Other's property depending on site constraints.
Note:- If located outside TMR property, owner to be consulted on final location.
- Sign to be oriented typically with the sign faces perpendicular to the kerb line, in order that the sign faces are clearly visible from road approaches.
- Sign post to be located outside required pedestrian paths of travel. Obtain advice from TransLink and the property owner prior to finalising locations.

Indicative message
- Name of station

Graphics Detail
FONT
Station name = Helvetica Neue 66 Medium Italic

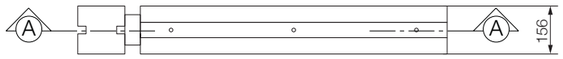
SIZE
Translink graphic = 905mm high (proportional width)
Translink logo = 160mm high (proportional width)
Station name = 85mm cap X height

COLOUR
Panel Backgrounds
TransLink background = Dulux (MTO) Intensity Orange Gloss powdercoat (900-4008G)
Other background = Resene 'Jon' N38-007-359

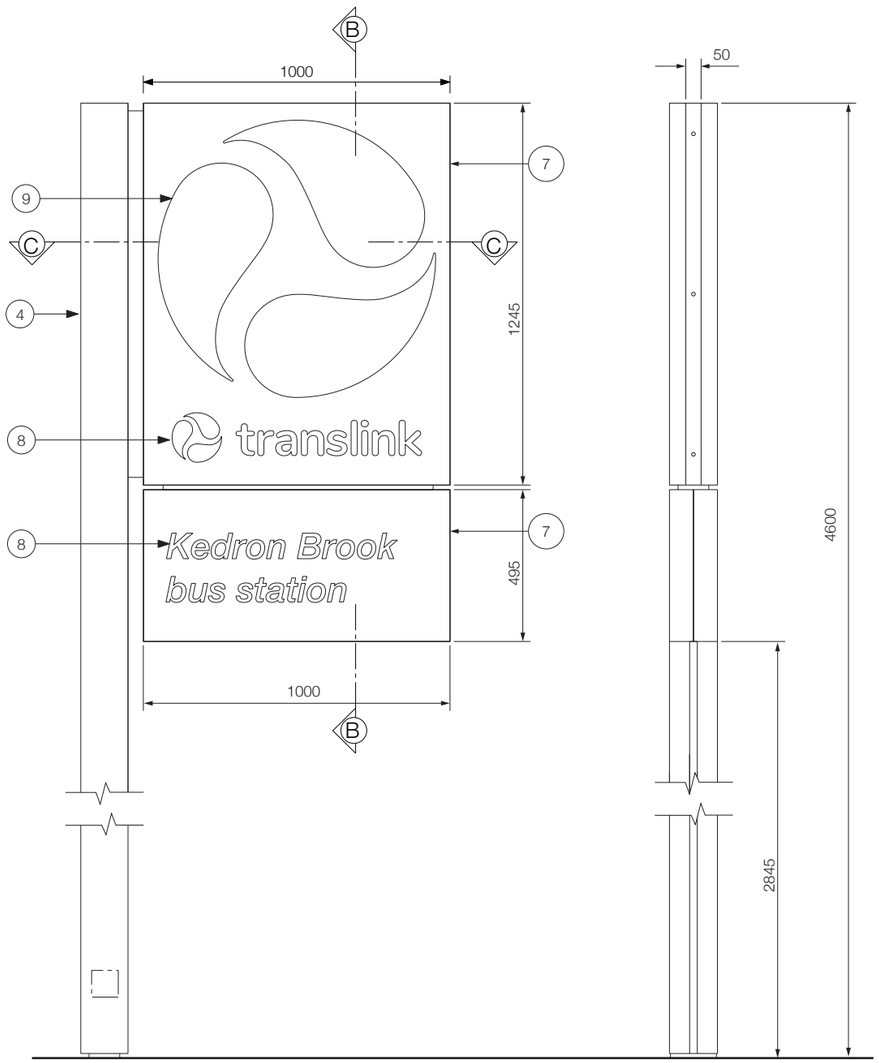
Sign Structure
Sign structure = Resene 'Jon' N38-007-359
Sign structure shadowlines = Resene 'Jon' N38-007-359

Illuminated graphics
TransLink logo tint = Arlon Tangerine 84 translucent vinyl
TransLink logo = Opal
Station name = Opal
Pictograms = Opal

Construction Details
Refer 4.34.2 for details.
NOTE:
- Allow to connect to existing electrical supply including all electrical conduits.
- Provide timer or photo electric switch to regulate illumination. TMR to confirm hours of operation.

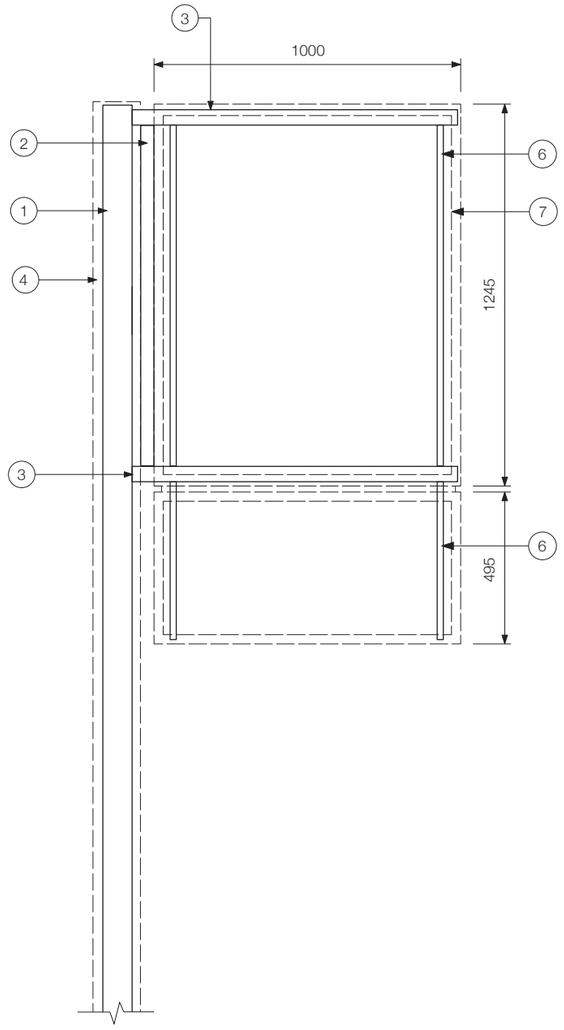


TOP VIEW



FRONT VIEW SIDE VIEW

Construction Details
Scale 1:20



FRONT VIEW

Flagpole Framing
Scale 1:20

Sign Type
PI-3a
Flagpole Identification Sign - Support sign only

Construction Details
1. 150 x 100 x 6mm RHS galvanised steel pole with welded capping suitable for lifting lugs.

2. 100 x 50 x 3mm RHS aluminium spacer with 2mm aluminium capping welded & dressed top & bottom.

3. 50 x 50 x 6mm SHS galvanised steel horizontal members welded to pole.

4. 2mm folded aluminium cladding fixed to outside of pole. 5mm minimum radius corners.

5. Internally illuminated by LED backlight modules mounted to backing panel on both sides. LED layout indicative only. Signmaker to provide control gear. Refer to specification for LED requirements. Sign should be illuminated during all hours of operation.

6. 20 x 20 x 3mm SHS galvanised steel light supports welded to horizontal members to hold LED backing panels.

7. Fabricated 3mm thick double sided aluminium sign box. Cut through logo and graphics on both sides of face. Internal channel frame welded inside box to align with horizontal members. Provide adequate drainage / ventilation to prevent condensation.

8. Intracut 3mm thick opal acrylic letters and logo clear glued to translucent backing panel to sit flush with sign face. All glued to back of sign box with 3M Scotch-Weld Metal Bonder acrylic adhesive. Note: all joins between aluminium and acrylic to be sealed against weather.

9. Intracut 3mm thick opal acrylic tear drop shapes clear glued to translucent backing panel to sit flush with sign face. Arlon Tangerine 84 translucent vinyl applied to face of tear drop shapes to align with cut outs, provide 10mm extra bleed to allow for shrinkage. Backing panel glued to back of sign box with 3M Scotch-Weld Metal Bonder acrylic adhesive. Note: all joins between aluminium and acrylic to be sealed against weather.

10. Stainless steel bolts and screws to engineers specification. Provide flashing and spacers as required. Security screw heads to be used where visible, paint out to match background colour.

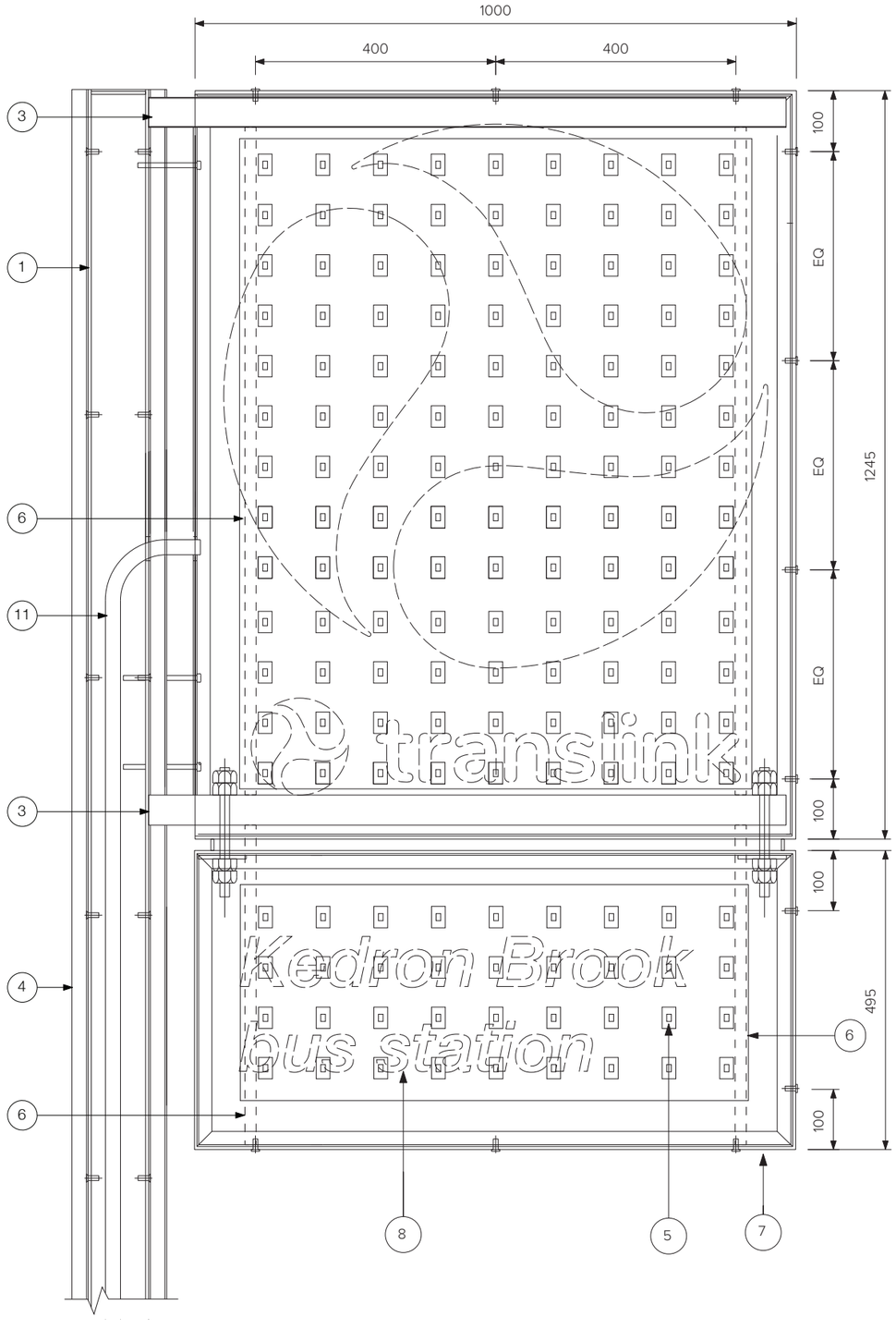
11. Power conduits to be concealed within structure. Isolators and control gear to be located in a secure accessible location for service.

12. Signmaker's engineer to specify base plate, footing and structural details. Signmaker to co-ordinate installation with Managing Contractor / TMR Representative. Finish of footing to be coordinated with paving.

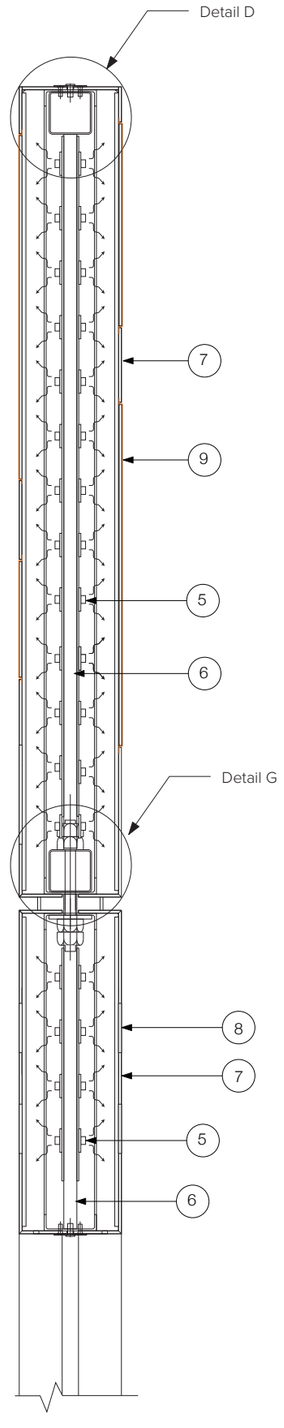
NOTE:
- Allow to connect to existing electrical supply including all electrical conduits.(TMR to inform power source.)
- All joins between aluminium and acrylic to be sealed against weather.
- Provide timer or photo electric switch to regulate illumination. TMR to confirm hours of operation.

Sign Type
PI-3a
Flagpole Identification Sign - Support sign only

Construction Details
Refer 4.34.2 for details.



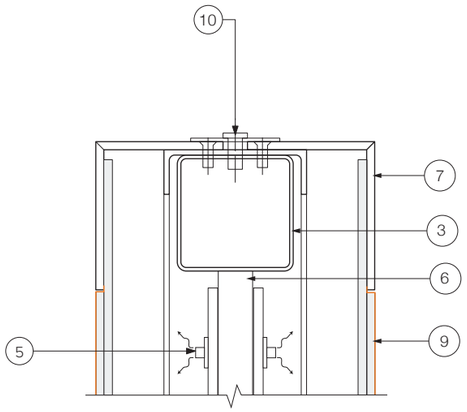
Section A-A
Scale 1:10



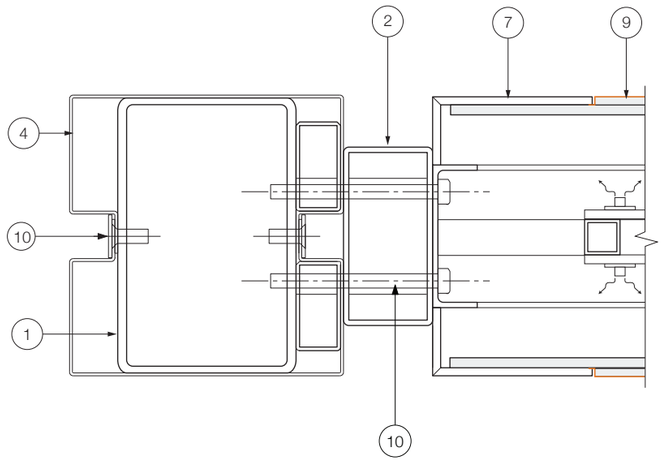
Section B-B
Scale 1:10

Sign Type
PI-3a
Flagpole Identification Sign - Support sign only

Construction Details
Refer 4.34.2 for details.

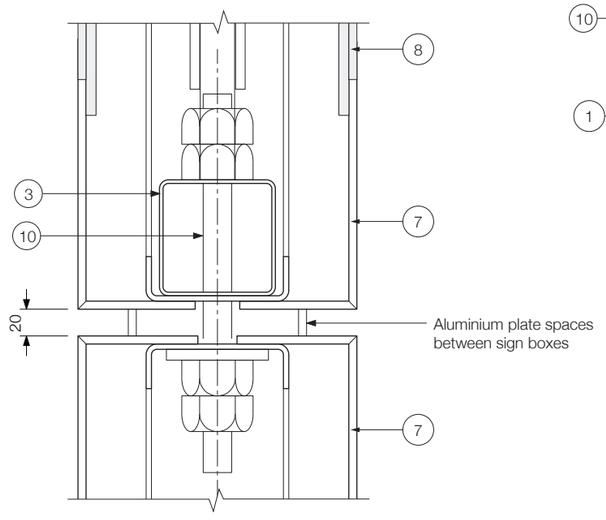


Detail D
NTS

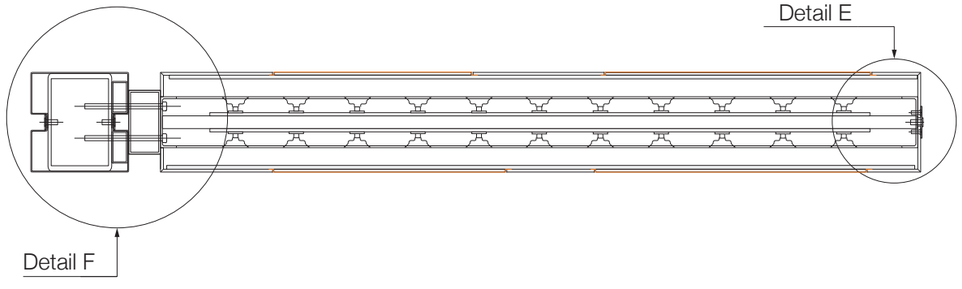


Detail F
NTS

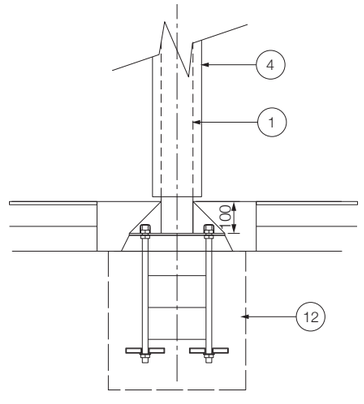
Detail E
NTS



Detail G
NTS



Section C-C
Scale 1:10

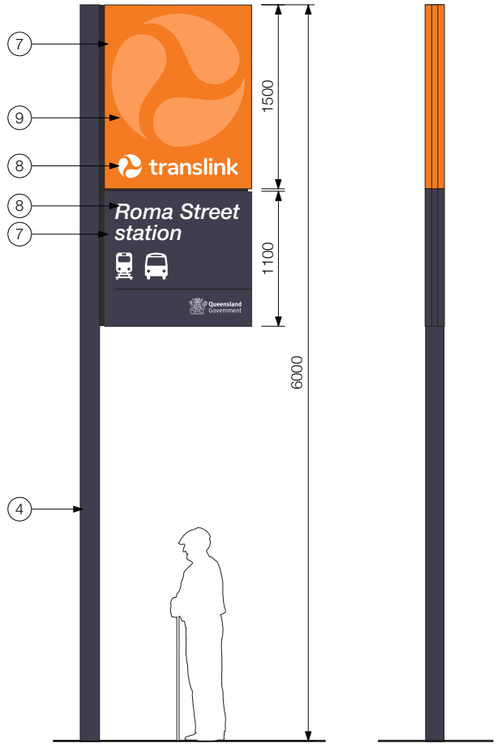


Base Plate Front Elevation
NTS

PI-3b
Flagpole Identification Sign

BACK VIEW

TOP VIEW



FRONT VIEW

SIDE VIEW

Typical Elevations
Scale 1:50

Graphic Layout - Bus station only
Scale 1:50

Graphic Layout
Scale 1:20

Purpose
- Main sign to identify site / station / park ‘n’ ride from major approaches
- For pedestrian and vehicular use

Typical location
- Located on the principal road frontage/s of the station in proximity to the principal road / pedestrian entry to the station.
Where the station is located on a side road off a main road there may be a need to provide additional Major Identification signs at the intersection of the main road.
- Located in either TMR or Other’s property depending on site constraints.
Note:- If located outside TMR property, owner to be consulted on final location.
- Sign to be oriented typically with the sign faces perpendicular to the kerb line, in order that the sign faces are clearly visible from road approaches.
- Sign post to be located outside required pedestrian paths of travel. Obtain advice from TransLink and the property owner prior to finalising locations.

Indicative message
- Name of station, pictogram and service operator

Station naming strategy
- If signs are located at rail and bus station together use ‘station’ only.
- If signs are located at bus station only use ‘bus station’.

Graphics Detail
FONT
All text = Helvetica Neue 66 Medium Italic

SIZE
Translink graphic = 1080mm high (proportional width)
Translink logo = 195mm high (proportional width)
Station name = 125mm cap X height
Transport pictograms = 220mm high
Logos = 140mm high (proportional width)

COLOUR
Panel Backgrounds
TransLink background = Dulux (MTO) Intensity Orange Gloss powdercoat (900-4008G)
Other background = Resene ‘Jon’ N38-007-359

Sign Structure
Sign structure = Resene ‘Jon’ N38-007-359
Sign structure shadowlines = Resene ‘Jon’ N38-007-359

Illuminated graphics
TransLink logo tint = Arlon Tangerine 84 translucent vinyl
TransLink logo = Opal
Station name = Opal
Pictograms = Opal

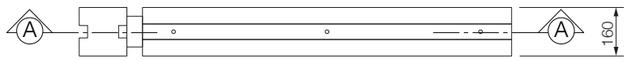
Non-illuminated graphics
Qld Govt logo = Vinyl Arlon White
Dividing line = Arlon Matt Black 40

4.35.2

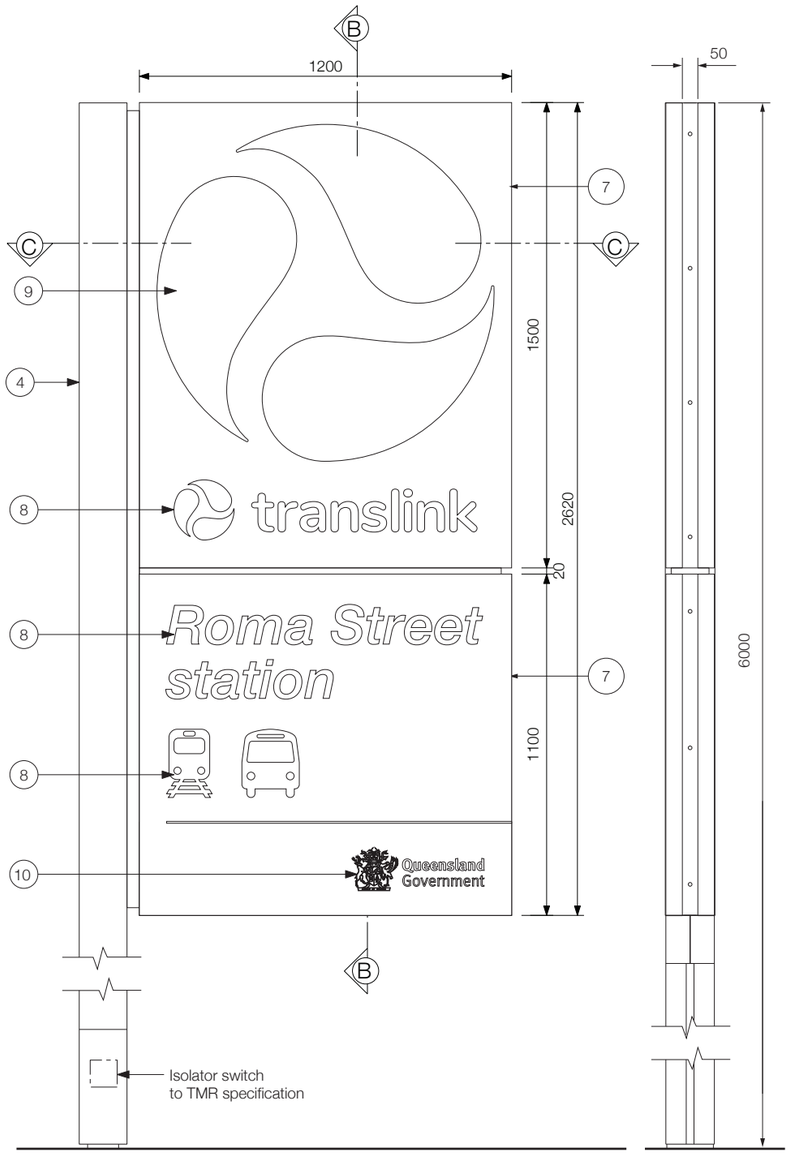
Sign Type

PI-3b

Flagpole Identification Sign



TOP VIEW

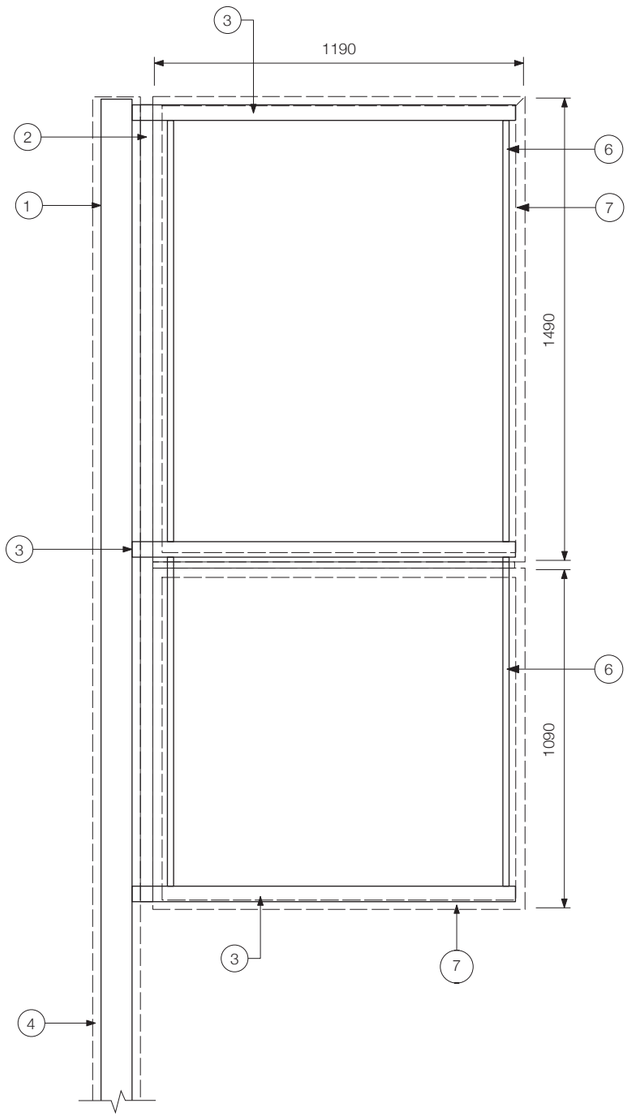


FRONT VIEW

LEFT SIDE VIEW

Construction Elevations

Scale 1:20



FRONT VIEW

Flagpole Framing

Scale 1:20

Construction Details

1. 150 x 100 x 6mm RHS galvanised steel pole with welded capping suitable for lifting lugs.

2. 100 x 50 x 3mm RHS aluminium spacer with 2mm aluminium capping welded & dressed top & bottom.

3. 50 x 50 x 6mm SHS galvanised steel horizontal members welded to pole.

4. 2mm folded aluminium cladding fixed to outside of pole. 5mm minimum radius corners.

5. Internally illuminated by LED backlight modules mounted to backing panel on both sides. LED layout indicative only. Signmaker to provide control gear. Refer to specification for LED requirements. Sign should be illuminated during all hours of operation.

6. 20 x 20 x 3mm SHS galvanised steel light supports welded to horizontal members to hold LED backing panels.

7. Fabricated 3mm thick double sided aluminium sign box. Cut through logo and graphics on both sides of face. Internal channel frame welded inside box to align with horizontal members. Provide adequate drainage / ventilation to prevent condensation.

8. Intracut 3mm thick opal acrylic letters and logo clear glued to translucent backing panel to sit flush with sign face. All glued to back of sign box with 3M Scotch-Weld Metal Bonder acrylic adhesive. Note: all joins between aluminium and acrylic to be sealed against weather.

9. Intracut 3mm thick opal acrylic tear drop shapes clear glued to translucent backing panel to sit flush with sign face. Arlon Tangerine 84 translucent vinyl applied to face of tear drop shapes to align with cut outs, provide 10mm extra bleed to allow for shrinkage. Backing panel glued to back of sign box with 3M Scotch-Weld Metal Bonder acrylic adhesive. Note: all joins between aluminium and acrylic to be sealed against weather.

10. Non illuminated front applied vinyl key line and QLD Government logo applied to both sides of sign face.

11. Stainless steel bolts and screws to engineers specification. Provide flashing and spacers as required. Security screw heads to be used where visible, paint out to match background colour.

12. Power conduits to be concealed within structure. Isolators and control gear to be located in a secure accessible location for service.

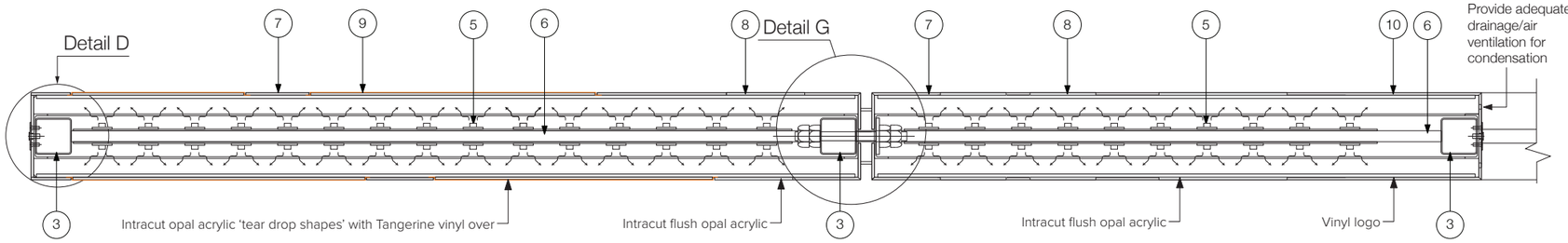
13. Signmaker's engineer to specify base plate, footing and structural details. Signmaker to co-ordinate installation with Managing Contractor / TMR Representative. Finish of footing to be coordinated with paving.

NOTE:
- Allow to connect to existing electrical supply including all electrical conduits.(TMR to inform power source.)
- All joins between aluminium and acrylic to be sealed against weather.
- Provide timer or photo electric switch to regulate illumination. TMR to confirm hours of operation.

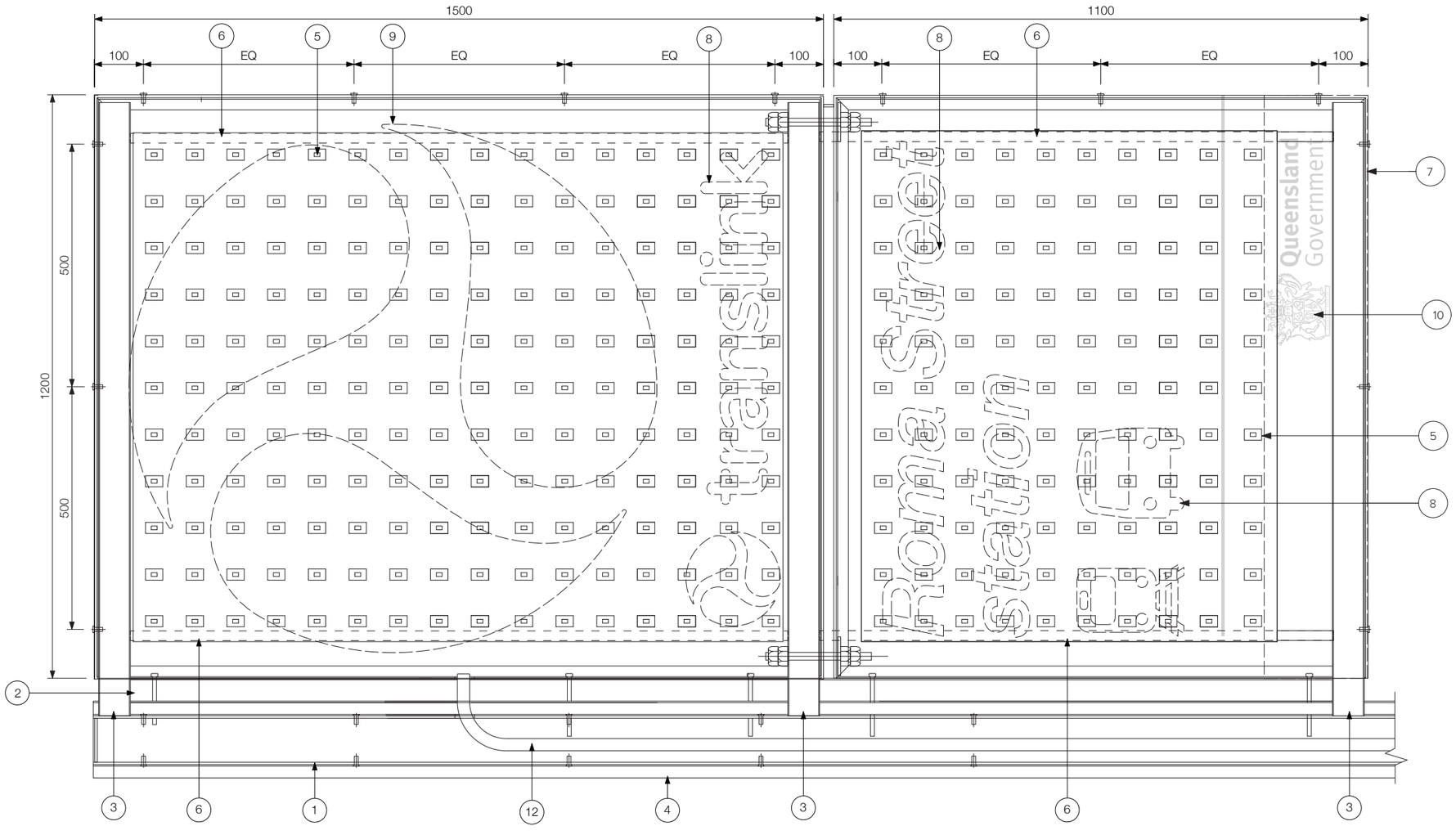
Sign Type
PI-3b
Flagpole Identification Sign

Construction Details
Refer 4.35.2 for details.

Note: Drawing has been rotated to fit on page.



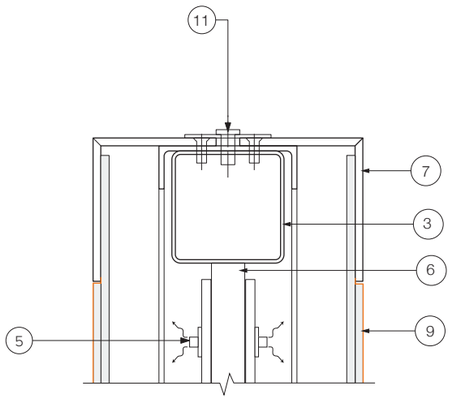
Section B-B
Scale 1:10



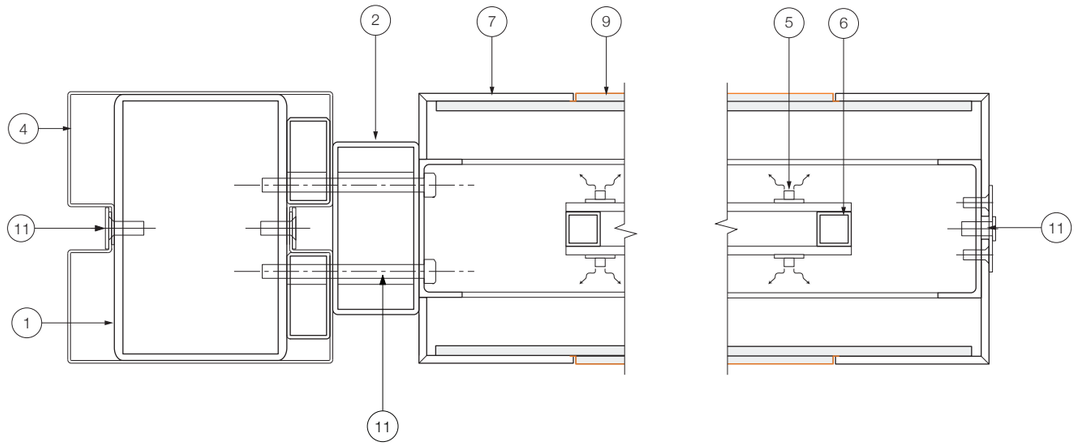
Section A-A
Scale 1:10

Sign Type
PI-3b
Flagpole Identification Sign

Construction Details
Refer 4.35.2 for details.

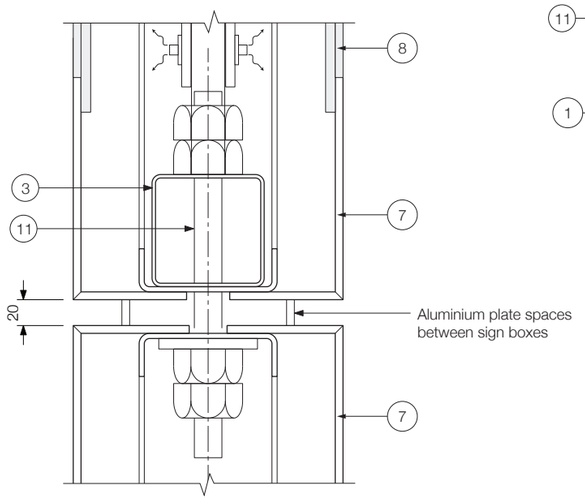


Detail D
NTS

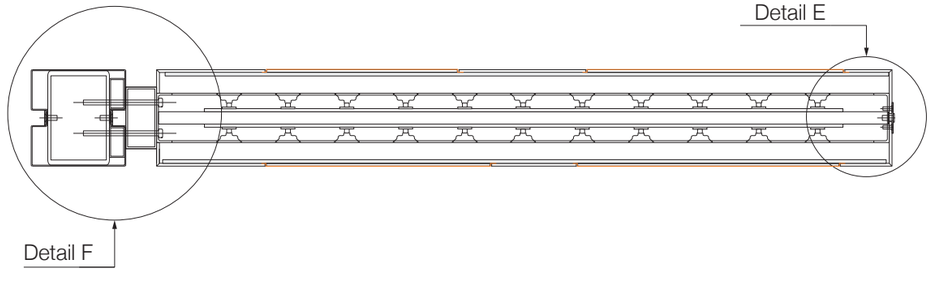


Detail F
NTS

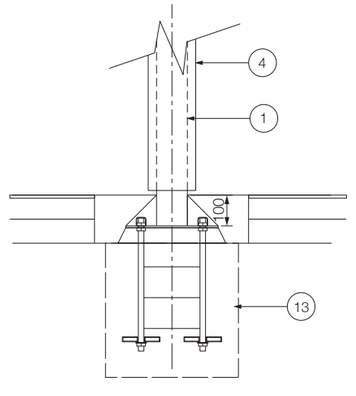
Detail E
NTS



Detail G
NTS



Section C-C
Scale 1:10



Base Plate Front Elevation
NTS

4.36.1

Sign Type

PI-3c

Projecting Identification Sign

Purpose
- Main sign to identify site / station from major approaches
- For pedestrian and vehicular use

Typical location
- Fixed to building structure.
- Located on the principal road frontage/s of the station in proximity to the principal road / pedestrian entry to the station.
- Sign to be oriented typically with the sign faces perpendicular to the kerb line, in order that the sign faces are clearly visible from road approaches.

Indicative message
- Name of station, pictogram and service operator

Graphics Detail
FONT
Station name = Helvetica Medium 66 Italic

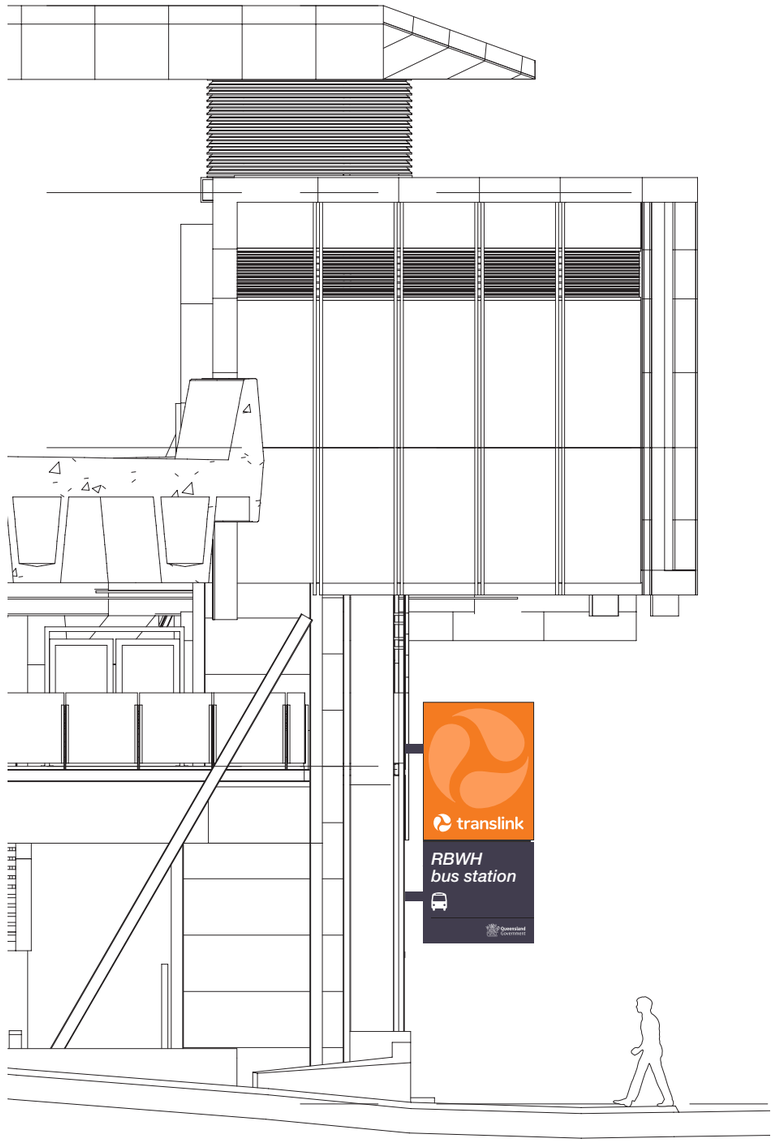
SIZE
Station Name = 196mm cap X height
Bus pictogram = 300mm high
Qld Govt logo = 210mm high (proportional width)

COLOUR
Panel Backgrounds
TransLink background = Dulux (MTO) Intensity Orange Gloss powdercoat (900-4008G)
Other background = Resene 'Jon' N38-007-359

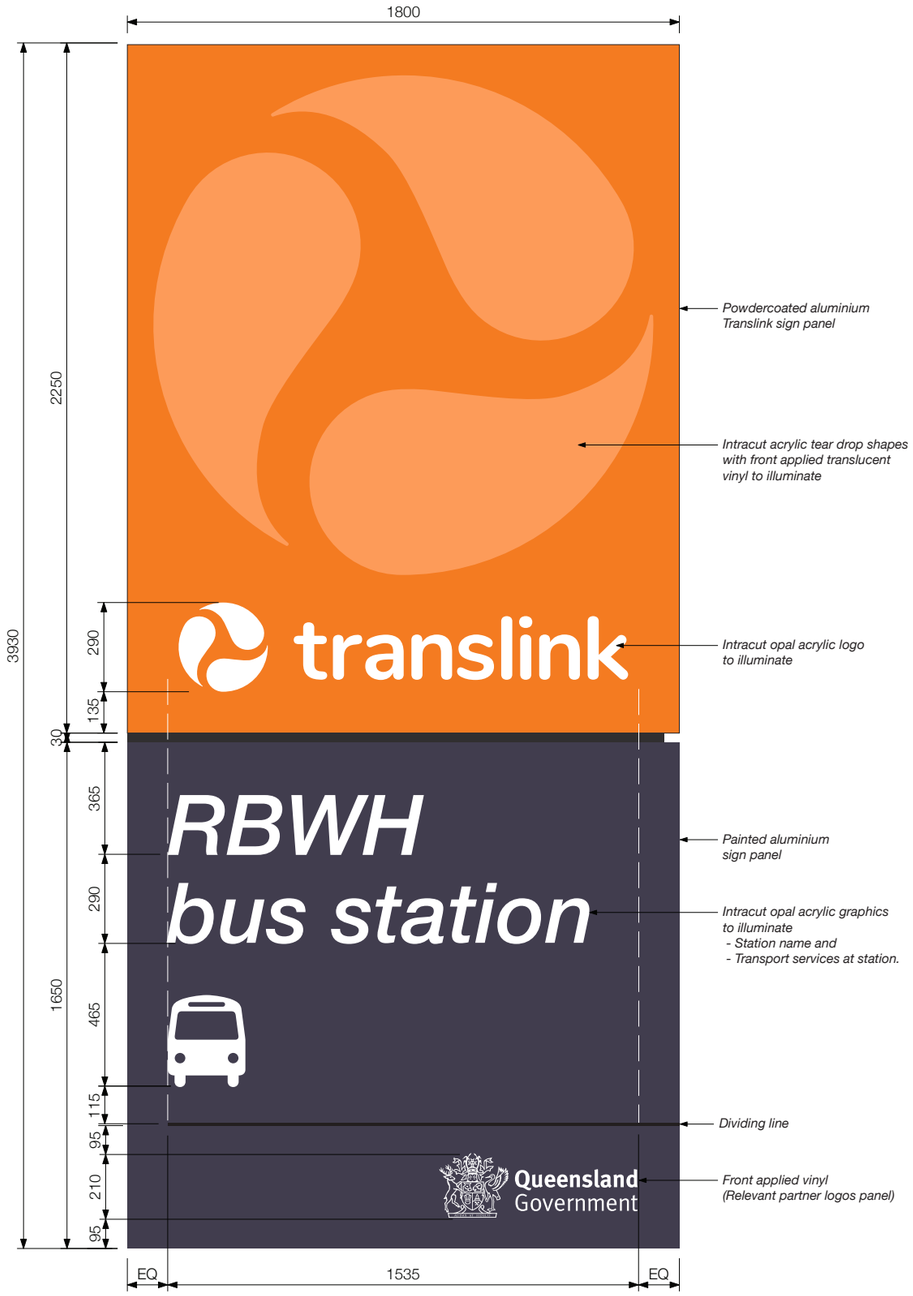
Sign Structure
Sign structure = Resene 'Jon' N38-007-359
Sign structure shadowlines = Resene 'Jon' N38-007-359

Illuminated graphics
TransLink logo tint = Arlon Tangerine 84 translucent vinyl
TransLink logo = Opal
Station name = Opal
Pictograms = Opal

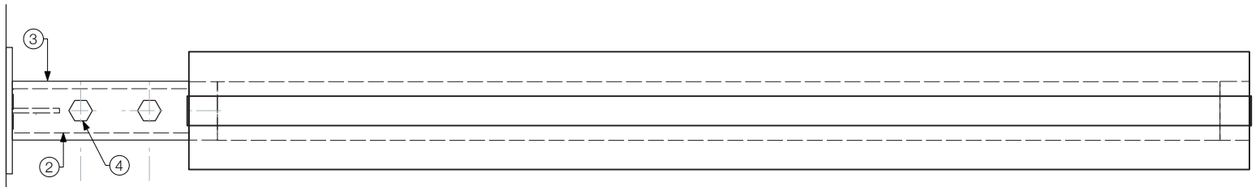
Non-illuminated graphics
Qld Govt logo = Vinyl Arlon White
Dividing line = Arlon Matt Black 40



Typical Location
Scale 1:100



Graphic Layout
Scale 1:20



Top View
Scale 1:10

Sign Elevations
Scale 1:20

Sign Type

PI-3c

Projecting Identification Sign

Construction Details

1. Fabricated 3mm thick double sided aluminium sign box. Cut through logo and graphics on both sides of face. Internal channel frame welded inside box as required. Provide adequate drainage / ventilation to prevent condensation.

2. 75 x 75 (nominal) SHS steel support welded/bolted to station structure (to be co-ordinated with structural steel work). Welded gussets and fixing plates to suit.

3. 100 x 100 (nominal) SHS aluminium mounting sleaves with pre-drilled holes and cut out slot for gusset. Cut out slot to be clearance fit.

4. M16 S.S. 316 bolts & lock nuts to fix mounting sleaves to steel support.

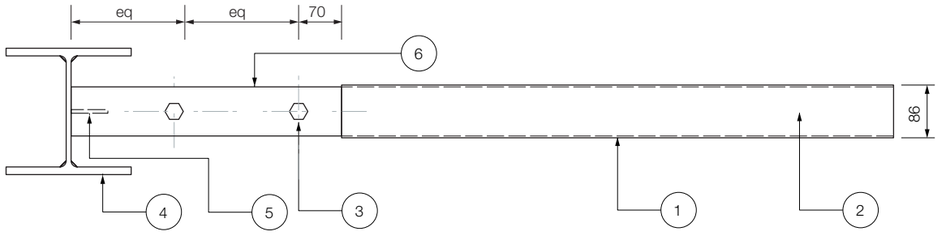
5. Intracut 3mm thick opal acrylic letters and logo clear glued to translucent backing panel to sit flush with sign face. All glued to back of sign box with 3M Scotch-Weld Metal Bonder acrylic adhesive. Note: all joins between aluminium and acrylic to be sealed against weather.

6. Intracut 3mm thick opal acrylic tear drop shapes clear glued to translucent backing panel to sit flush with sign face. Arlon Tangerine 84 translucent vinyl applied to face of tear drop shapes to align with cut outs, provide 10mm extra bleed to allow for shrinkage. Backing panel glued to back of sign box with 3M Scotch-Weld Metal Bonder acrylic adhesive. Note: all joins between aluminium and acrylic to be sealed against weather.

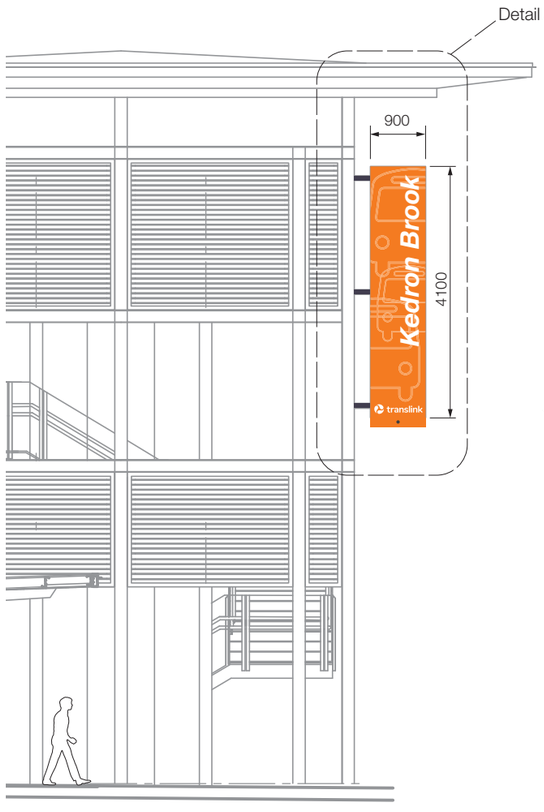
7. Internally illuminated by LED backlight modules mounted to backing panel. Signmaker to provide control gear. Sign to be illuminated during all hours of station operation. Refer to specification for LED requirements. Not shown on drawing.

8. Non illuminated front applied vinyl line and Queensland Government/partner logo on both sides.

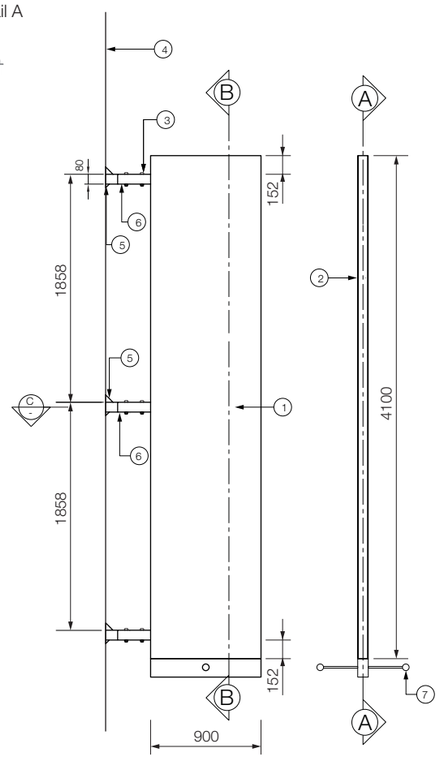
9. 2mm thick aluminium capping. M8 SS 316 security socket head machine screws fixing aluminium plate to internal frame.



Top View
Scale 1:10

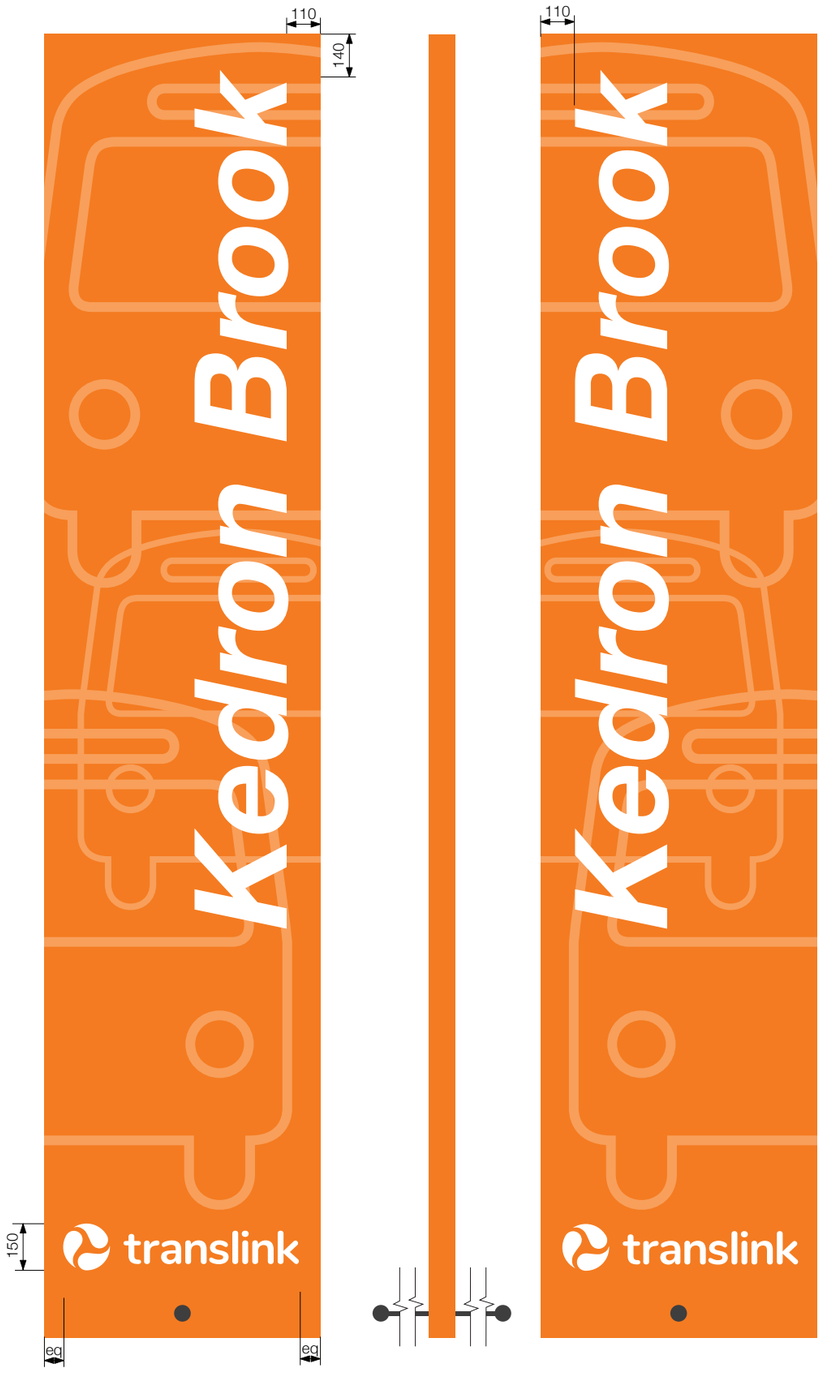


Typical Location
Scale 1:100



FRONT VIEW SIDE VIEW

Detail A
Scale 1:50



FRONT VIEW SIDE VIEW BACK VIEW

Graphic Layout
Scale 1:20

Sign Type
PI-4
Banner Sign - Support sign only

Purpose
- Secondary sign to identify station from major approaches
- To be used as a support to the main identification sign
- For pedestrian and vehicular use

Typical location
- Fixed to building structure
- Sign to be located to outside face of arrival structure

Indicative message
- Name of station (and graphic treatment)

Graphics Detail
FONT
Station name = Helvetica Neue 76 Bold Italic

SIZE
Translink logo = 145mm high (proportional width)
Station name = 300mm cap X height

COLOUR
Panel background = to match Arlon ‘Orange’ 44
Translink logo = Arlon White 02
Station name = Arlon White 02

Bus graphic linework
Top & bottom bus = Avery ‘Morning Orange’ 937
Middle bus = Avery ‘Sweet Orange’ 938
Fixing Frame (outriggers) = Resene “Jon”

Construction Details
1. 3mm thick aluminium sign panel welded to frame. Prime and paint finished with front applied vinyl graphics. Protective anti-graffiti spray clear coat over.

2. Frame welded from 80 x 80 x 6mm SHS aluminium.

3. M16 stainless steel 316 bolt fix sign to station structure.

4. Station structure.

5. 6mm gusset welded above and below 65 x 65 x 3mm SHS Durgal support.

6. 80 x 80 x 6mm SHS aluminium mounting support with pre-drilled holes and cutout slot for gusset. Cutout slot to be clearance fit.

Sign Type
PI-4
Banner Sign - Support sign only

Construction Details

1. Frame welded from 80 x 80 x 6mm SHS aluminium.

2. 65 x 65 x 3mm SHS Duragal support welded to station structure.

3. 80 x 80 x 6mm SHS aluminium mounting support with pre-drilled holes and cutout slot for gusset. Cutout slot to be clearance fit.

4. 80 x 80 x 6mm SHS aluminium bracing.

5. Station structure.

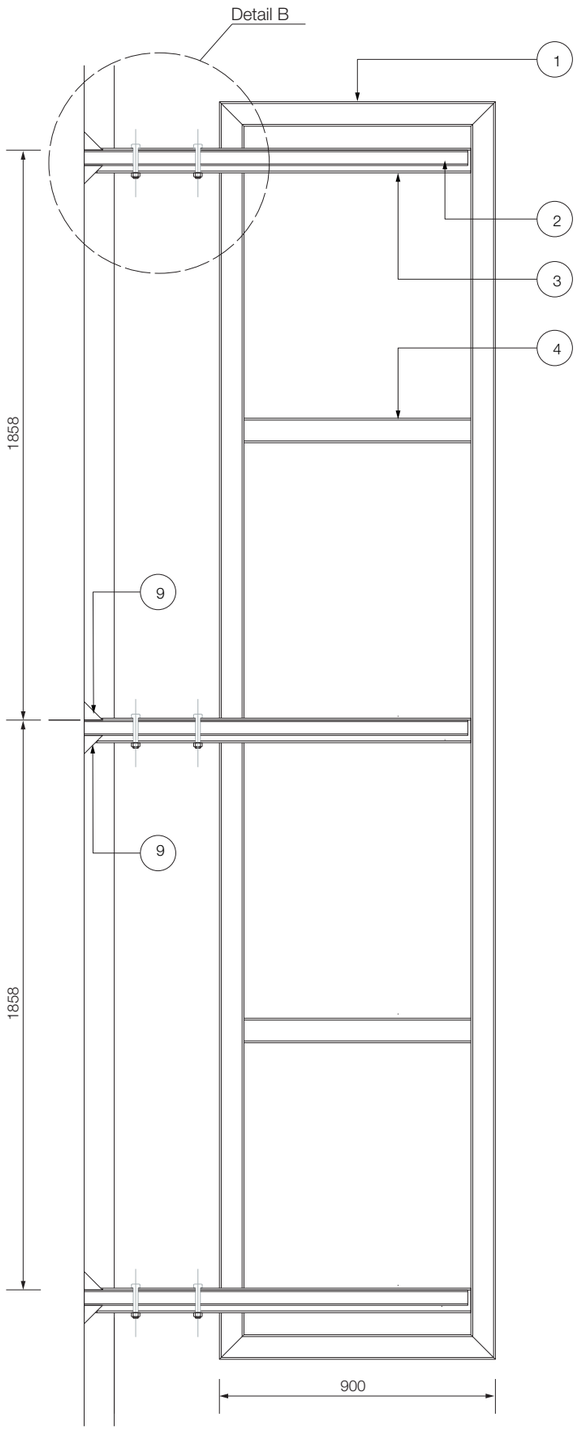
6. M16 S.S. 316 bolt & lock nut fixing frame to 50 x 50 x 6mm SHS galvanised steel support.

7. 3mm aluminium panel welded to aluminium frame. All visible welds to be dressed. Primed and paint finished with front applied vinyl graphics. Protective anti-graffiti spray clear coat over.

8. CFW (Continuous Fillet Weld).

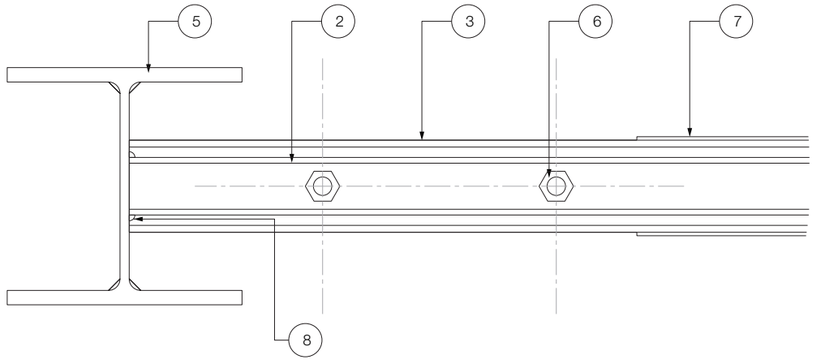
9. 8mm gusset welded above and below 65 x 65 x 5mm SHS Durgal support.

10. Uplights to both sides of banner sign. Lighting should provide even wash over entire face. Consult Alliance lighting engineer.

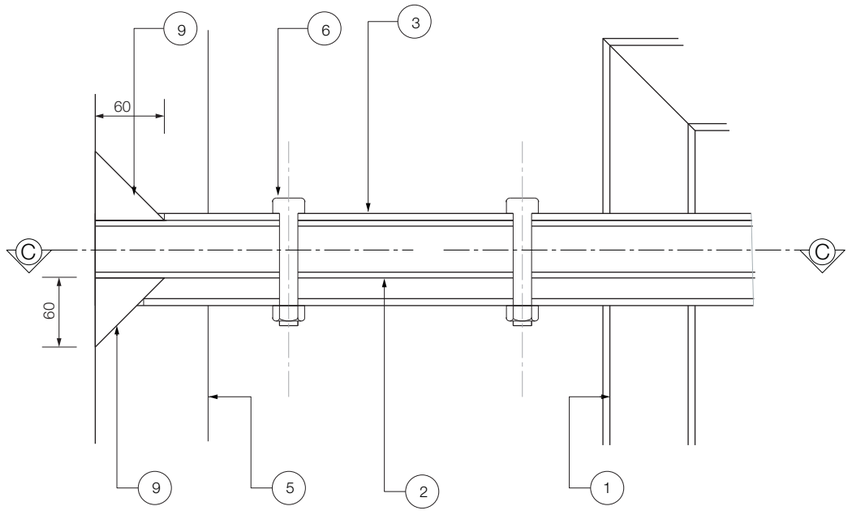


Section A-A
Scale 1:20

Section B-B
Scale 1:20

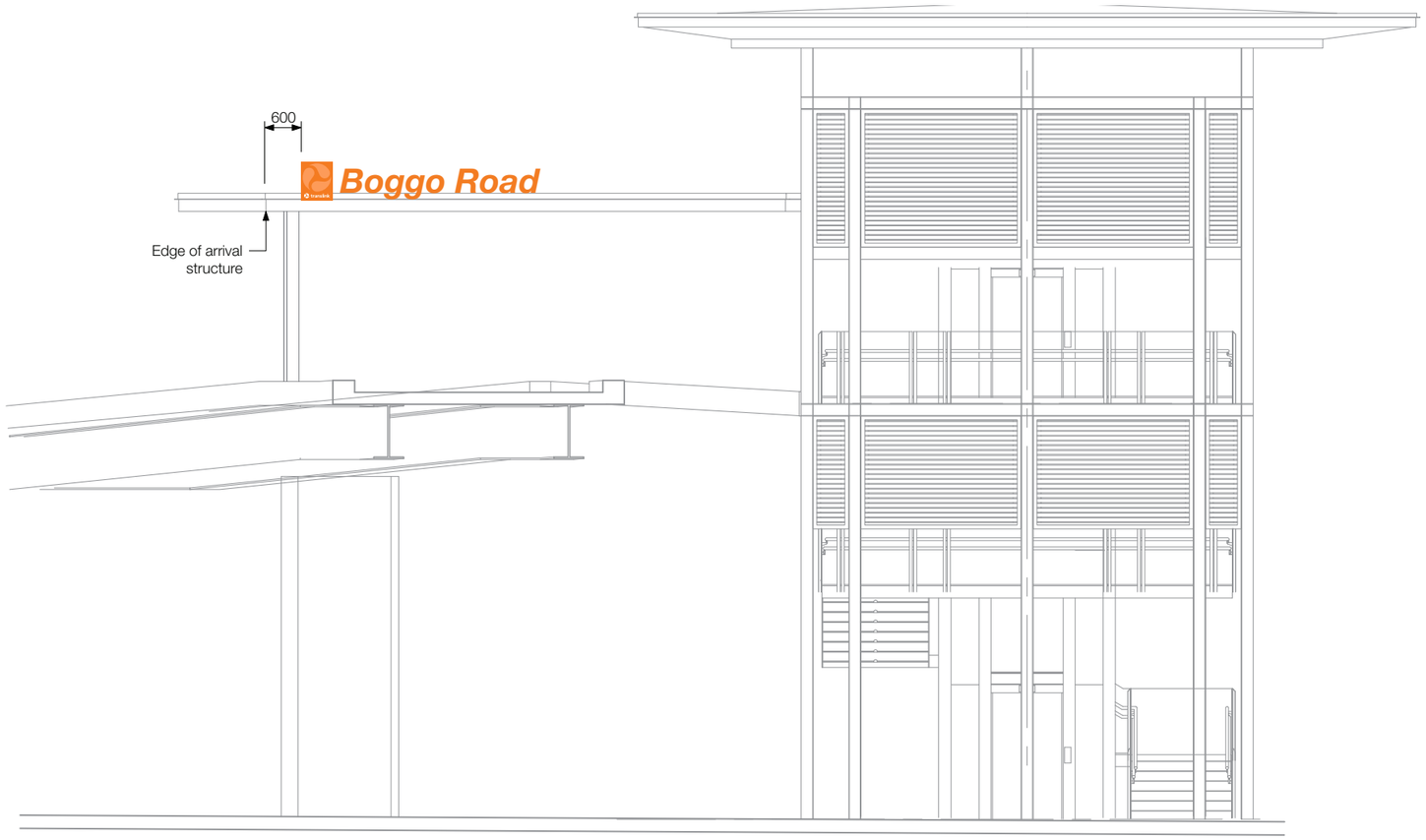


Section C-C
Scale 1:5



Detail B
Scale 1:5

4.38.1



Typical Location
Scale 1:100

Graphic Layout
Scale 1:20

Sign Type

PI-5

Entry Identification Sign (Support sign only)

Purpose
- Secondary sign to identify station from major approaches
- To be used as a support to the main identification sign
- For pedestrian and vehicle use

Typical location
- Located above main entry awning/structure near the central station area access
- Sign to face approaching pedestrians and/or vehicles from footpaths/setdown points or roadways as approriate.

Indicative message
- TransLink logo
- Name of station

NOTE
- ‘station’ may be added to the PI-5 sign name where the facility is underground or hidden from view within the general precinct however this should be a site specific assessment with the relevant authorities’.
- ‘station’ may also be added to differentiate the public transport building with and adjacent facility such as a hospital (Eg. RBWH station)’.

Graphics Detail
FONT
Station name = Helvetica Neue 76 Bold Italic

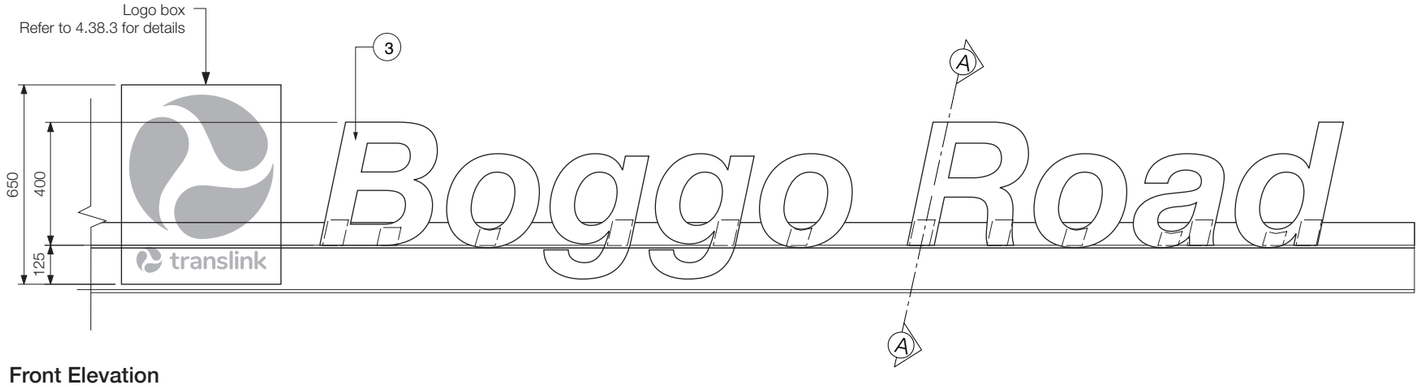
SIZE
Station name = 400mm cap X height
TransLink graphic = 460mm high (proportional width)
TransLink logo = 85mm high (proportional width)

COLOUR
Station name letters
Station name = Perspex® Spectrum LED Orange 3TL1
Letter returns = Stainless steel No. 4 linish finish

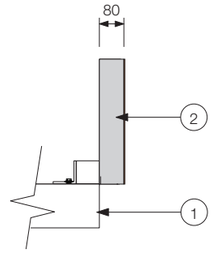
Logo light box
Logo background = Dulux (MTO) Intensity Orange Gloss powdercoat (900-4008G)
TransLink logo tint = Arlon Tangerine 84 translucent vinyl
TransLink logo = Opal

4.38.2

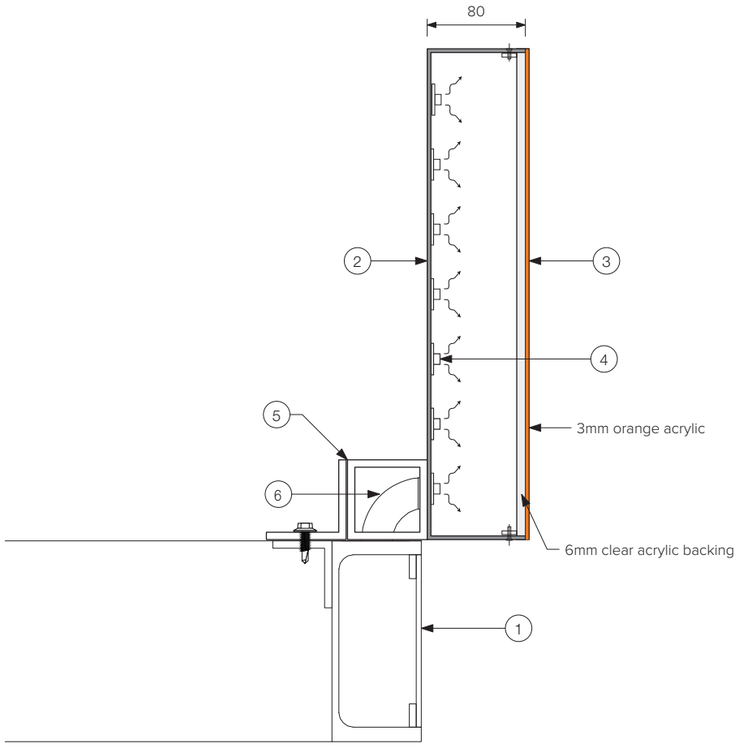
Sign Type
PI-5
Entry Identification Sign (Support sign only)



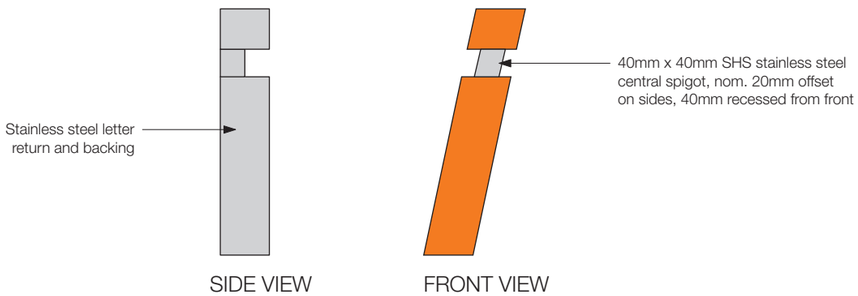
Front Elevation
Scale 1:20



SIDE VIEW
(letter shown)



Section A-A – Typical Letter
Scale 1:5



Letter Detail for 'i' (Where required)
Scale 1:10

Construction Details

1. Station structure, confirm all details on site prior to manufacture.

2. Fabricated stainless steel letters. 1.2mm thick backs with 1.0mm thick x 80mm wide folded returns welded to perimeter.

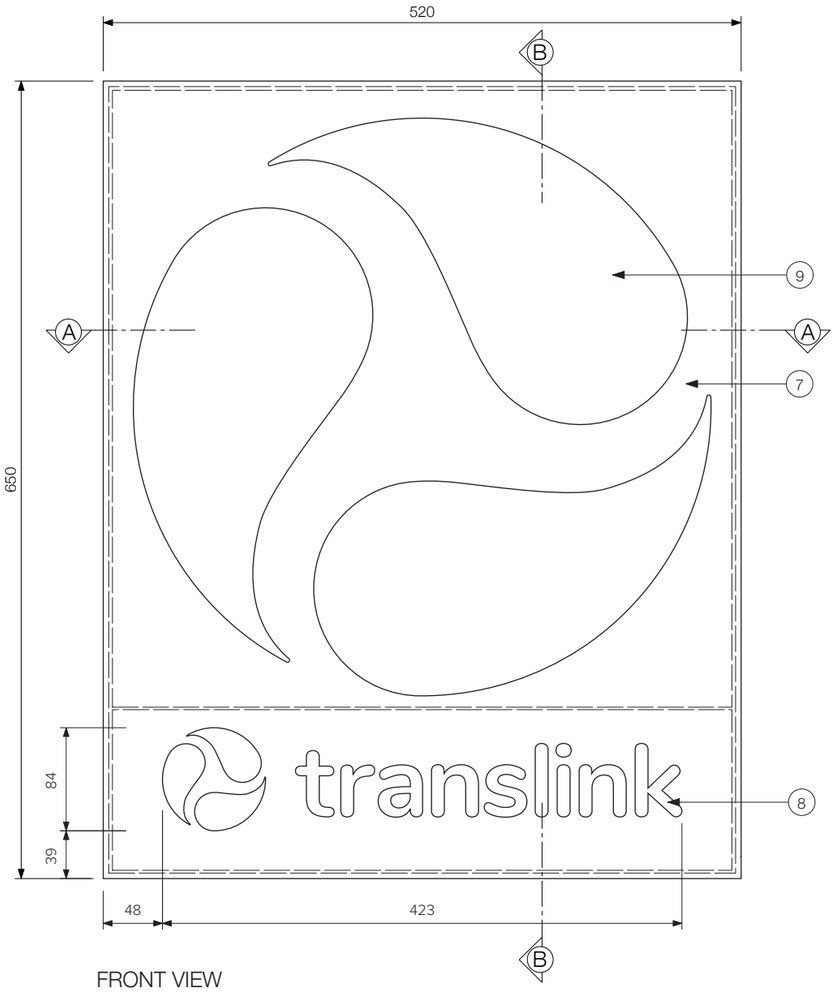
3. 3mm thick Perspex® Spectrum LED Orange 3TL1 faces, with 6mm clear acrylic backing cut to fit inside of letter glued to back. Fixed to face of fabricated letter with concealed M4 SS 316 pan head screws through returns.

4. Internally illuminated with Cool White LED backlights mounted to back of letters. Refer to specification for details.

5. 65mm x 65mm x 3mm SHS fixing rail behind letters to conceal power. Typical 65mm x 65mm x 6mm angle bracket to fix to station structure. Suitable mechanical fixings to secure sign to roof structure. Rail and angle to be painted out to match station structure.

Note: Where applicable, new stainless steel letters that replace existing neon lit letters are to be fixed onto existing site frame/rail.

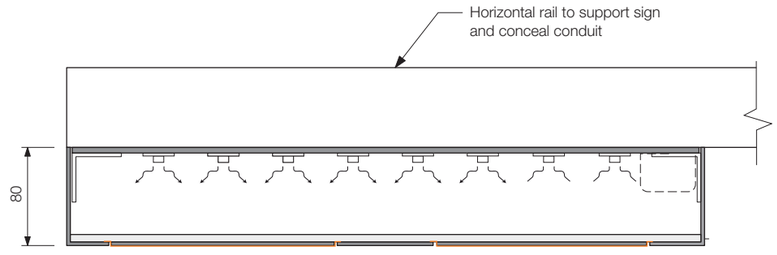
6. Power cable connecting LED to transformer to be concealed within / behind structure. All cabling to be tied back neatly to structure. Seal any penetrations through structure. Transformer location to be coordinated with the Construction Representative. Signmaker to provide circuit breaker / fuse within light box. Sign should operate during evening hours of station operation.



FRONT VIEW

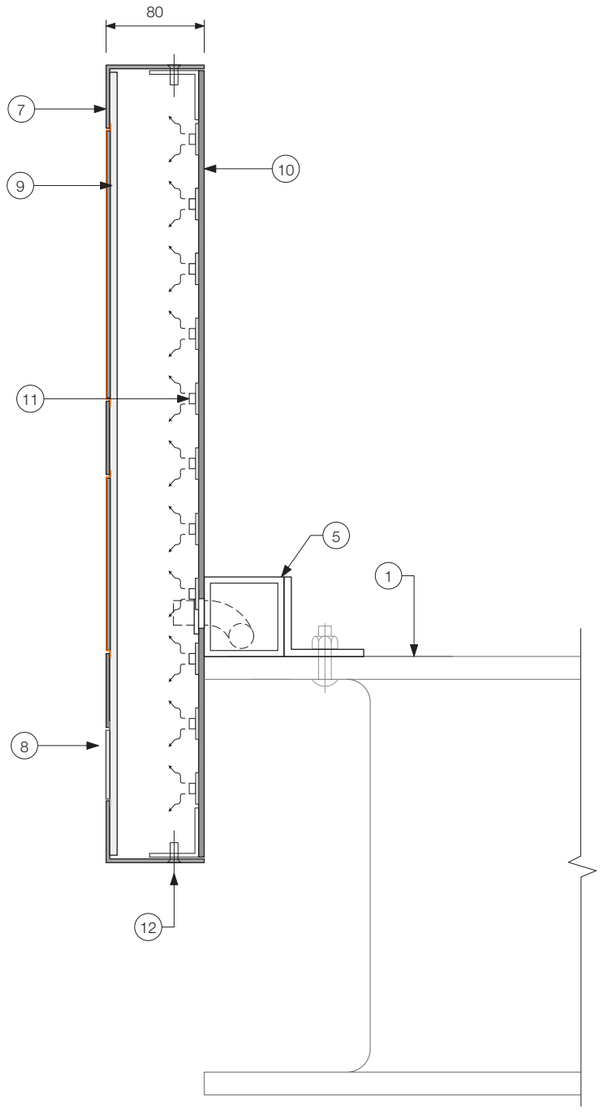
Typical Elevation

Scale 1:5



Section A-A

Scale 1:5



Typical Section B-B

Scale 1:5

Sign Type

PI-5

Entry Identification Sign - Logo Box

Construction Details

7. Fabricated 3mm thick aluminium sign box. Cut through logo and graphics on face. Provide adequate drainage / ventilation to avoid condensation.

8. Intracut 3mm thick opal acrylic letters and logo clear glued to translucent backing panel to sit flush with sign face. All glued to back of sign box with 3M Scotch-Weld Metal Bonder acrylic adhesive. Note: all joins between aluminium and acrylic to be sealed against weather.

9. Intracut 3mm thick opal acrylic tear drop shapes clear glued to translucent backing panel to sit flush with sign face. Arlon Tangerine 84 translucent vinyl applied to face of tear drop shapes to align with cut outs, provide 10mm extra bleed to allow for shrinkage. Backing panel glued to back of sign box with 3M Scotch-Weld Metal Bonder acrylic adhesive. Note: all joins between aluminium and acrylic to be sealed against weather.

10. 6mm thick aluminium backing plate with 50mm x 50mm x 3mm aluminium angle returns. Fit nutserts to take M8 fixings. Outside to be 2 pack paint finish silver to match letter returns.

11. Internally illuminated with Cool White LED backlights mounted to backing plate. Refer to specification for details.

12. 4 off M8 S.S. 316 counter sunk screws to fix sign box to backing plate angles.

All cabling to be concealed and tied back neatly to structure. Seal any penetrations through structure. Transformer location to be coordinated with the Construction Representative. Signmaker to provide circuit breaker / fuse within light box. Sign should operate during evening hours of station operation.

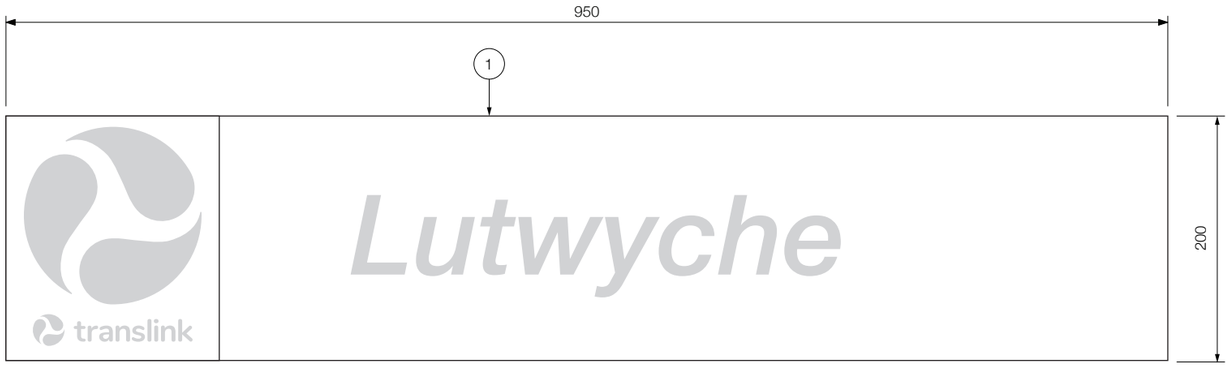
NOTE
- Signmaker to co-ordinate fixing with Managing Contractor / TMR representative.

Sign Type
PI-6a
Station Identification Sign - Platform

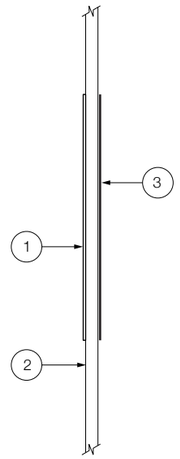
Purpose
- To provide station identification on platform
- For pedestrian use

Typical location
- Located on back wall of station structure, typically on glass panel
- Located in every second bay

Indicative message
- Name of station
- Logo



FRONT VIEW



SIDE VIEW

Graphics Detail
FONT
Station name = Helvetica Neue 66 Medium Italic

SIZE
Translink graphic = 145mm high (proportional width)
Translink logo = 25mm high (proportional width)
Station name = 65mm cap X height

COLOUR
Panel Backgrounds
Translink = Resene 'Trinidad' O61-167-048
Translink logo tint = Arlon Light Orange 97
All other backgrounds = Resene 'Jon' N38-007-359
Translink logo = Arlon White 02
Station name = Arlon White 02

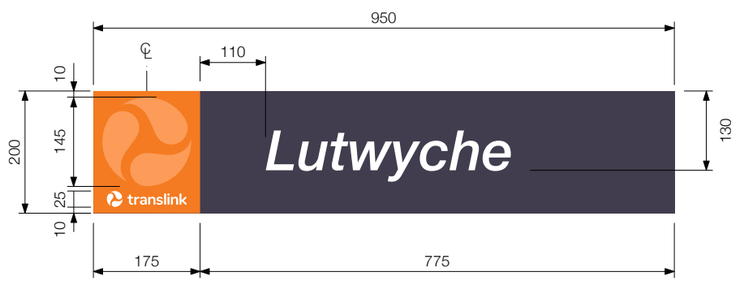
Construction Details
1. 950 x 200 x 2mm aluminium sign panel adhered to glass panel with 3M VHB double sided tape.

2. Glass panel

3. Fix 2mm acrylic panel (painted Resene 'Jon' N38-007-359) to back of glass behind sign panel to conceal fixings. Required only where fixings are visible from behind.

Elevations
Scale 1:5

Typical Location
Scale 1:50



Graphic Layout
Scale 1:10

4.40

Sign Type

PI-6b

Government Logo Sign

Purpose
- To provide government identification on platform
- For pedestrian use

Typical location
- Located on back wall of station (wall / column)

Indicative message
- Logo

Graphics Detail
SIZE
Horizontal Government logo = 140 x 645mm
Vertical Government logo = 215 x 200mm

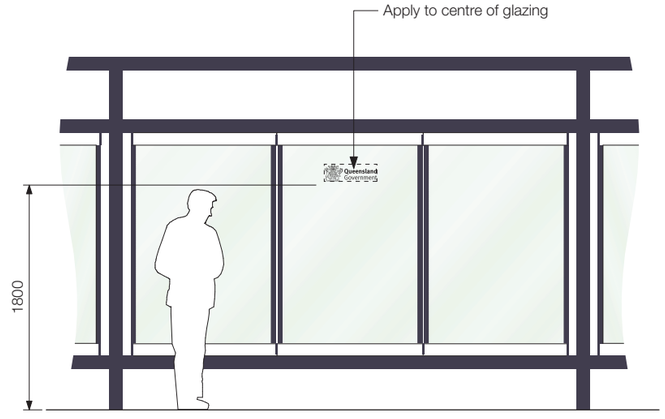
COLOUR
Government Crest= Black

Construction Details
1. Front applied vinyl graphics to glazing or column as required.

2. Digitally printed graphic to clear vinyl with clear overlaminate.

3. Finished graphic to be cut out with a 2mm thick clear offset border.

Portrait format



Typical Location
Scale 1:50

Landscape format

Graphic Layout
Scale 1:5

4.41.1

Sign Type
PI-12d
Suspended Identification Sign - Landscape

Purpose
- Main sign to identify station from major approaches
- For pedestrian use

Typical location
- Suspended from building structure/fixed to bulkhead
- Located perpendicular to direction of travel
- The underside of the sign shall be a minimum of 2300mm above floor level. Preferred 2500mm above finished floor level.

Indicative message
- Station name, pictograms and service provider

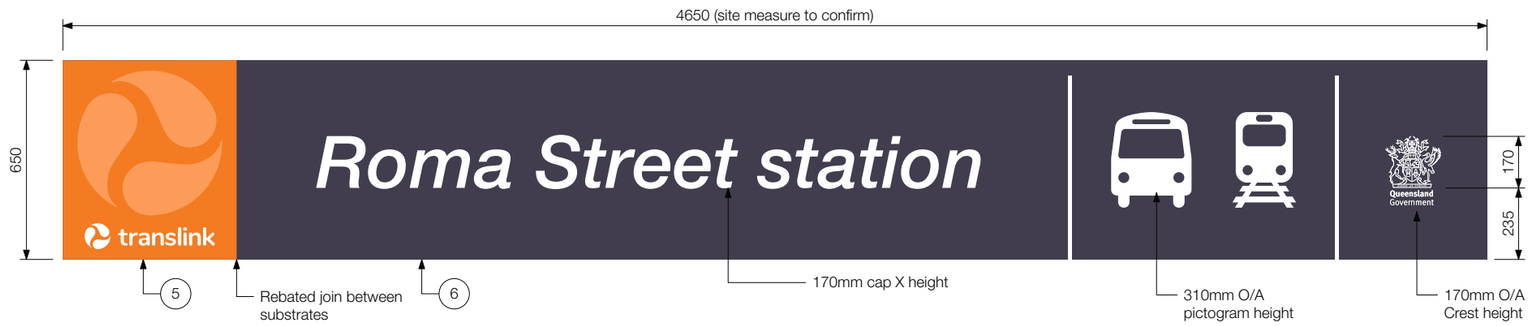
Graphics Detail
FONT
Station name = Helvetica Neue 66 Medium Italic

SIZE
Translink graphic = 470mm high (proportional width)
Station name = 170mm cap X height

COLOUR
Panel Backgrounds
TransLink background = Arlon Orange 44 translucent vinyl
TransLink logo tint = Arlon Tangerine 84 translucent vinyl
Text background = Resene 'Jon' N38-007-359

Station name = Opal Acrylic (intracut)
Pictograms = Opal Acrylic (intracut)
Logos = White vinyl

Construction Details
Refer to sheet 2 for details



Graphic Layout
Scale 1:20

Typical Location
Scale 1:50

4.41.2

Sign Type

PI-12d

Suspended Identification Sign

Construction Details

1. Welded frame from 80 x 25 x 3mm aluminium channel. 2mm thick painted aluminium backing counter sunk rivet fixed to internal frame

2. Threaded rod suspended via suitable anchors to ceiling. Provide 30mm CHS tube sleeve. Secure sign box with suitable nuts and washers.

3. M5 SS 316 pan head socket screws fixing sign face to frame.

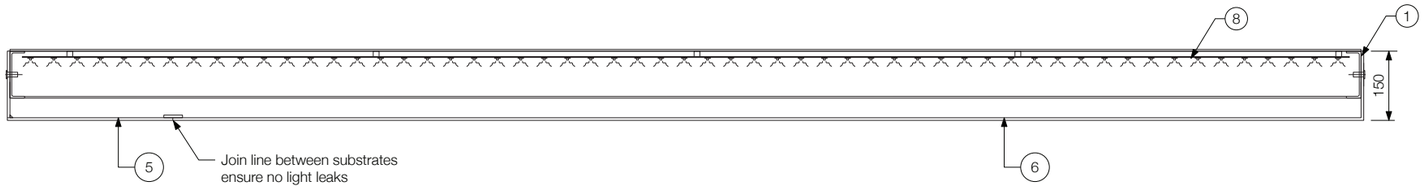
4. 20 x 20 x 3mm SHS aluminium bracing welded to frame.

5. 4.5mm fabricated opal polycarbonate sign face with rebated edge to fix to adjacent 3mm aluminium face. Polycarbonate face to be flush with aluminium face.

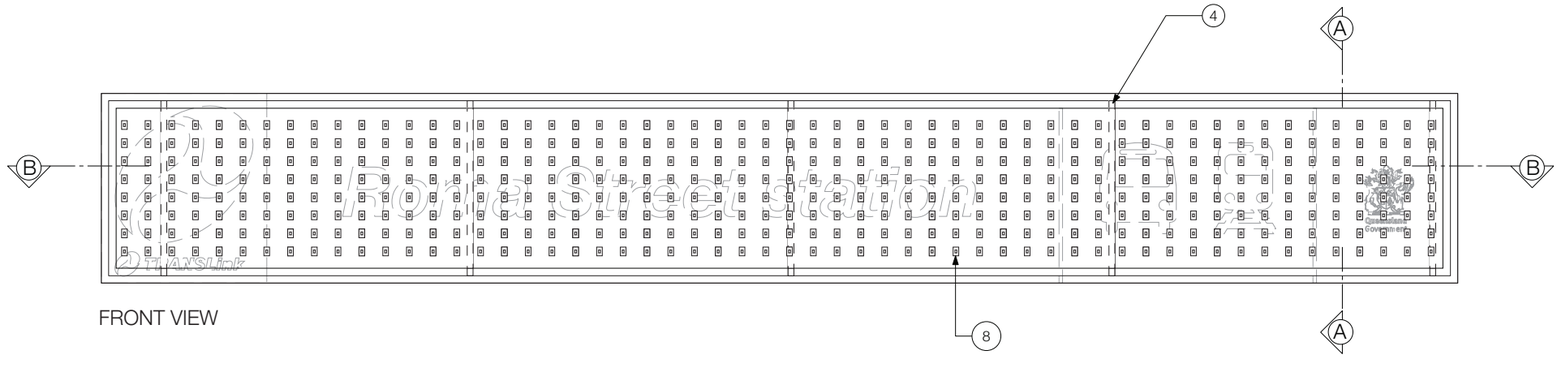
6. 3mm thick painted fabricated aluminium sign panel with intracut letters and graphic. 3mm thick opal letters finishing flush with panel and 3mm thick opal backing. Non illuminated front applied vinyl logos.

7. Power conduit through 30mm CHS sleeve.

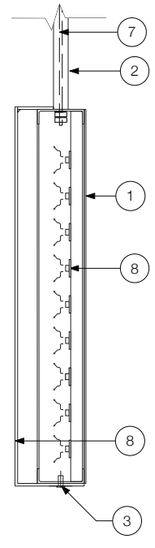
8. Internally illuminated by LED backlight modules mounted to backing panel. LED layout indicative only. Signmaker to provide control gear. Refer to specification for LED requirements. Sign should be illuminated during all hours of operation.



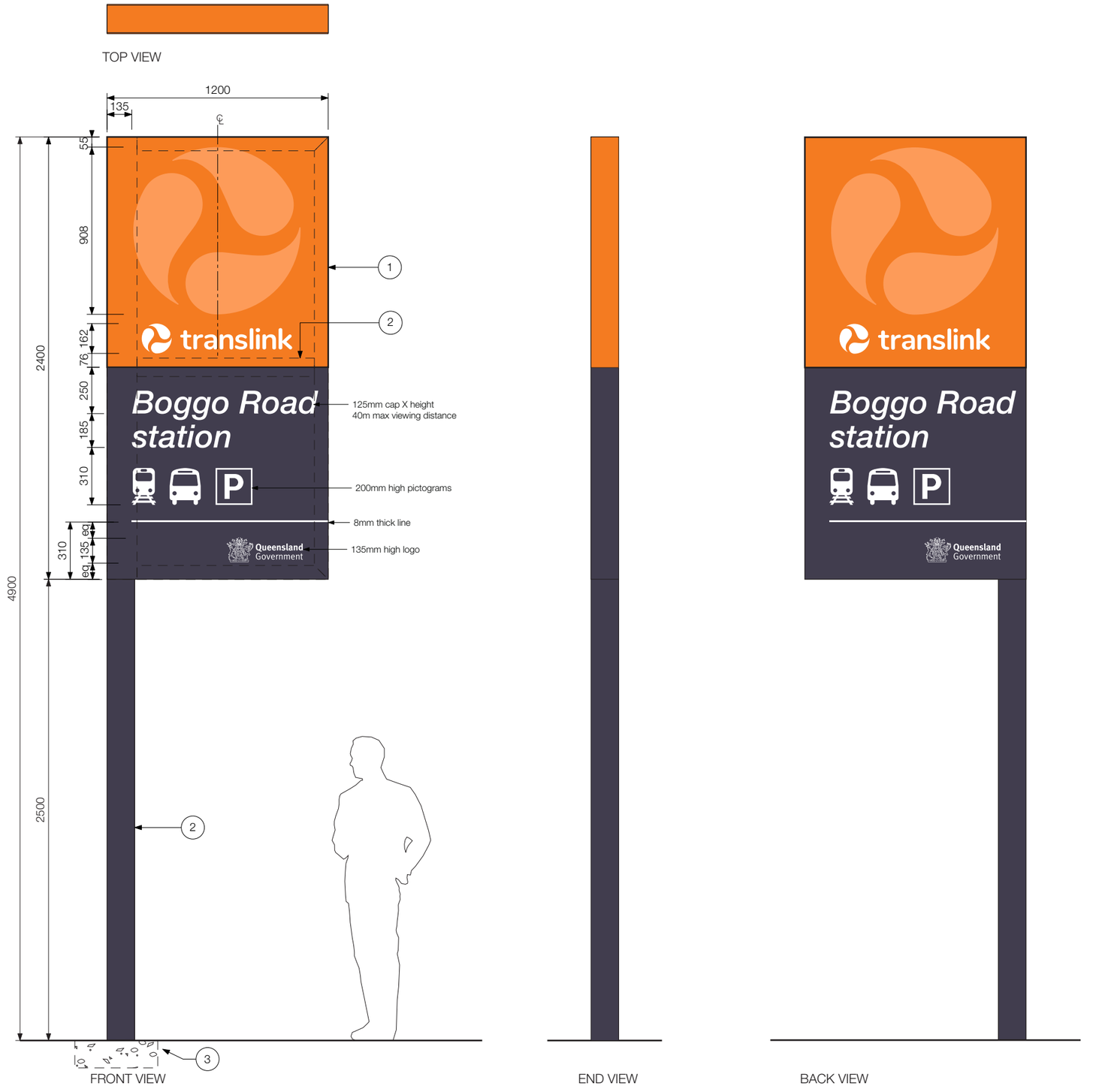
Section B-B



Typical Elevation
Scale 1:20



Section A-A
Scale 1:10



Typical Elevation

Sign Type

PI-15a

Minor Station Identification Sign - Non-illuminated

Purpose
- Main sign to identify site / station / park 'n' ride from major approaches
- Used for smaller stations or where power for illumination is not available.
- For pedestrian and vehicular use

Typical location
- Located on the principal road frontage/s of the station in proximity to the principal road / pedestrian entry to the station.
- Located in either TMR or Other's property depending on site constraints. Note:- If located outside TMR property, Owner to be consulted on final location.
- Sign to be oriented typically with the sign faces perpendicular to the kerb line, in order that the sign faces are clearly visible from road approaches.
- Sign post to be located outside required pedestrian paths of travel. Obtain advice from TransLink and the property owner prior to finalising locations.
- Minimum clearance above finished floor level to be 2.5m

Indicative message
- Station name, pictograms and service provider

Graphic Details
FONT
Station Name = Helvetica Neue 66 Medium Italic

SIZE
Station name = 125mm cap X height
Pictogram = 200mm o/all height
Qld Government = 135mm o/all height

COLOUR
Logo background = Resene 'Trinidad' O61-167-048
Logo swirl = Arlon Light Orange 97
TransLink logo = Reflective Class 2 white vinyl

Grey background = Resene 'Jon' N38-007-359
Text & pictograms = Reflective Class 2 white vinyl
Station name = Reflective Class 2 white vinyl
Line = Reflective Class 2 white vinyl
Qld Government logo = White Vinyl

Posts = Resene Jon N38-007-359

Construction Details
1. 2mm thick painted aluminium sign panel with front applied vinyl graphics. Anti-graffiti spray clear over. Rivet fixed to internal frame. Paint out heads to match panel colour. Apply 5mm radius to corners.

2. 150 x150 SHS mild steel post with 150mm 'C' section purlin internal frame clad with aluminium panels.

3. Reinforced concrete pad/pier footing to signmakers' specification. All fixings shall be below ground level to reduce trip hazards. Re-instate / make good paving or pavement, with no changes of level greater than 3mm and no gradients steeper than 1:40.

4.43

Sign Type
RP
Rendezvous Point Sign

Purpose
- To identify rendezvous point for emergency services
- For pedestrian and vehicular use

Typical location
- Located on wall

Indicative message
- Name and location

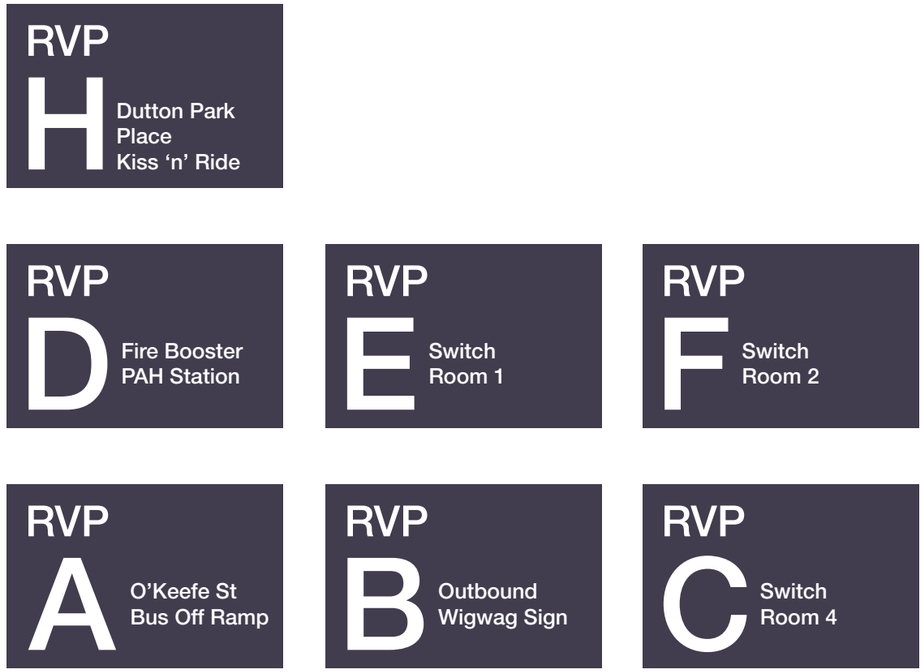
Graphics Detail
FONT
All text = Helvetica Neue 65 Medium

SIZE
'RVP' = 100mm cap X height
Letter = 300mm cap X height
Other text = 50mm cap X height

COLOUR
Background = Resene 'Jon' N38-007-359
All text = Arlon White 02

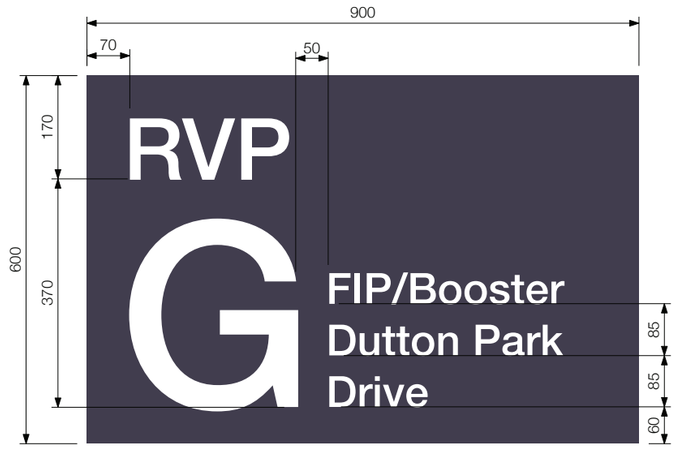
Construction Details
1. 3mm thick aluminium sign panel with front applied vinyl graphics. Protective clear anti-graffiti clear coat over.

2. Sign panel fixed to wall with VHB double sided tape and silicone. Signmaker to confirm fixings on site.



Additional Graphic Layouts
Scale 1:20

Typical Location
Scale 1:50



Graphic Layout
Scale 1:10

4.44

Sign Type
ST-1
Standard Door Sign - Panel

Purpose
- To identify statutory / “back-of-house” areas
- For pedestrian use

Typical location
- Located on door

Indicative message
- Communications cupboard, Electrical Room, Switchroom, etc

Graphics Detail
FONT
All text = Helvetica Neue 65 Medium

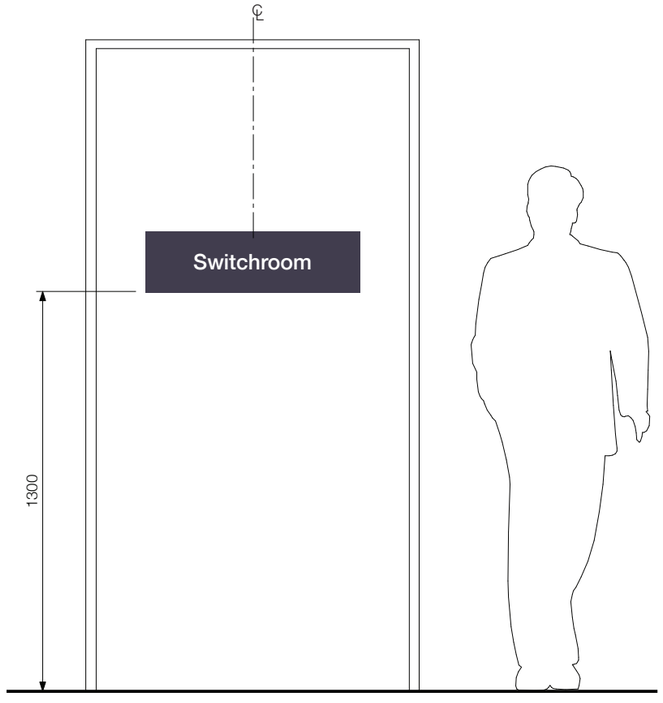
SIZE
All text = 50mm cap X height

COLOUR
Panel background = Resene ‘Jon’ N38-007-359
All text = Arlon White 02

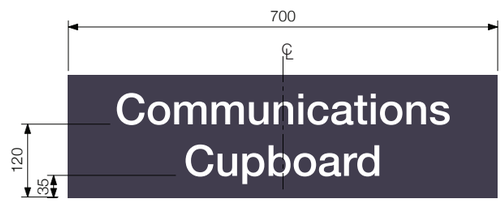
Construction Detail
1. 3mm aluminium sign panel with front applied vinyl graphics. Protective anti graffiti clear coat over.

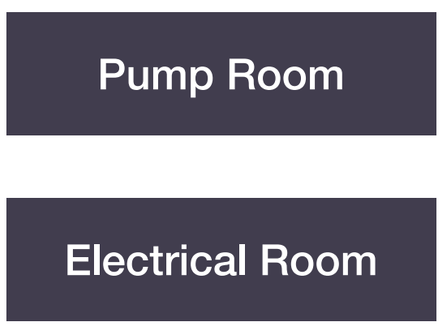
2. Where signs are located in reach of a person, all exposed corners are to have 10mm radius for safety.

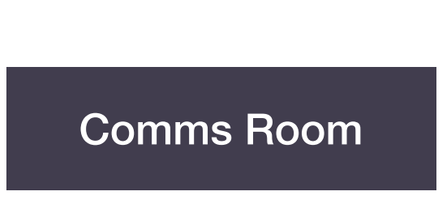
3. Silicon and VHB tape fixed to wall/doors. Sign maker to ensure adequate preparation of surfaces prior to fixing.

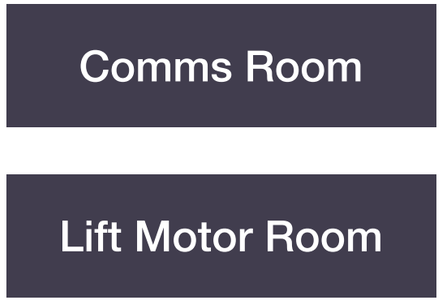


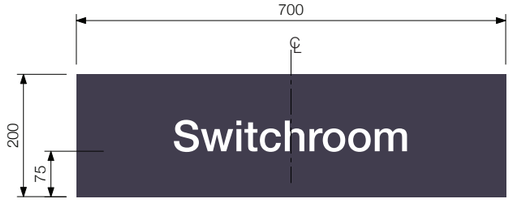
Typical Location
Scale 1:20











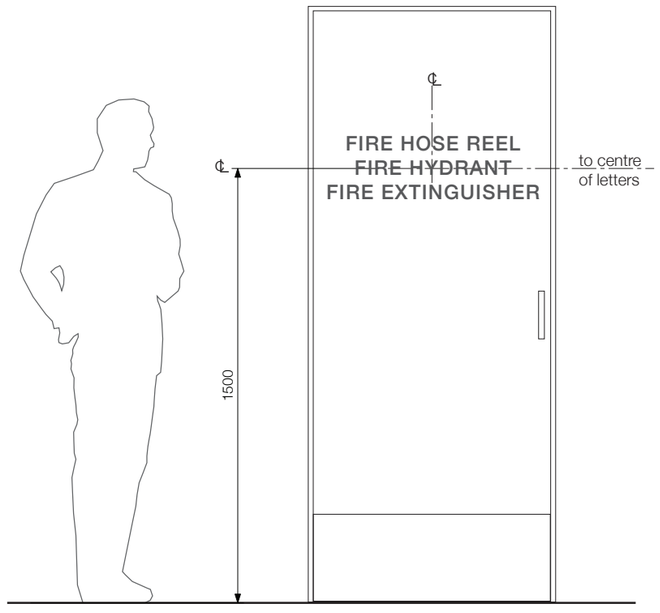
Typical Graphic Layouts
Scale 1:10

TYPE A - HELD SHUT

TYPE B - HELD OPEN

Typical Graphic Layouts - Emergency Egress – 20mm TEXT

Scale 1:5



Typical Location

Scale 1:20

FIRE HOSE REEL
FIRE HYDRANT
FIRE EXTINGUISHER

3 LINES

FIRE HOSE REEL
FIRE HYDRANT

2 LINES

FIRE HOSE REEL

FIRE PANEL

FIRE CONTROL ROOM

1 LINE

Typical Graphic Layouts - Fire Hose Reel Doors/Booster Cupboards – 50mm TEXT

Scale 1:5

Sign Type

ST-2

Statutory Sign - Vinyl

Purpose
- To identify statutory doors
- For pedestrian use

Typical location
- Located on door

Indicative message
- Fire safety door
- Fire Hose Reel, Fire Extinguisher, Fire Hydrant
- As required by BCA or relevant Australian Standard

Graphics Detail
FONT
All text = Helvetica Neue 65 Medium

SIZE
As shown

COLOUR
All text = Arlon Dark Grey 52 (confirm minimum 30% contrast to door prior to production)

Construction Details
1. Front applied vinyl graphics to door.

EGRESS DOOR SIGN MESSAGES
All statutory signs for fire doors to comply with BCA Volume 1 section D2.23 'Signs on doors'.

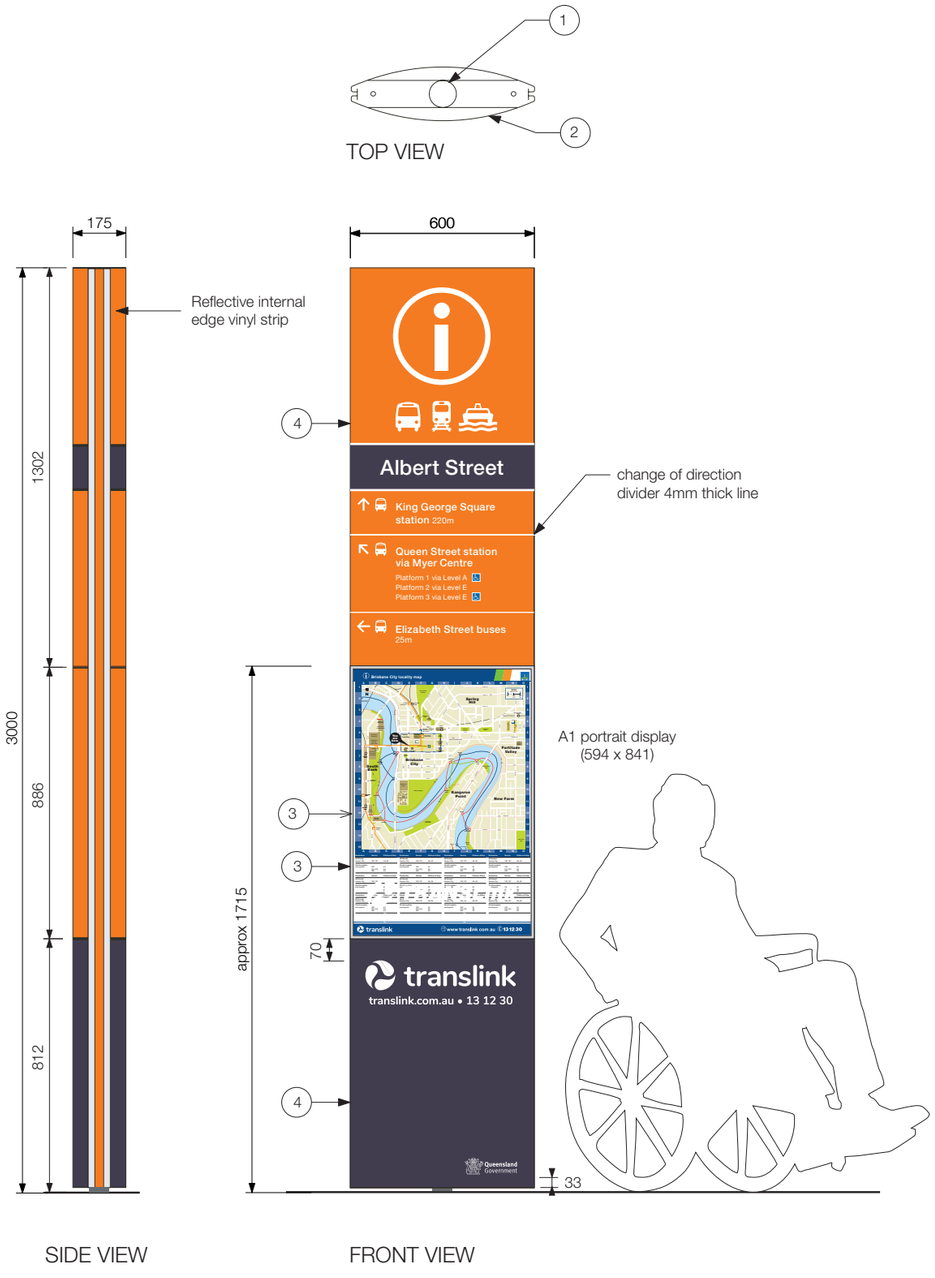
Signage to be in capitals not less than 20mm high in a colour contrasting with the background and state:

(i) for an automatic fire door held open by an automatic hold open device -
FIRE SAFETY DOOR
DO NOT OBSTRUCT

(ii) For a self closing fire door -
FIRE SAFETY DOOR
DO NOT OBSTRUCT
DO NOT KEEP OPEN

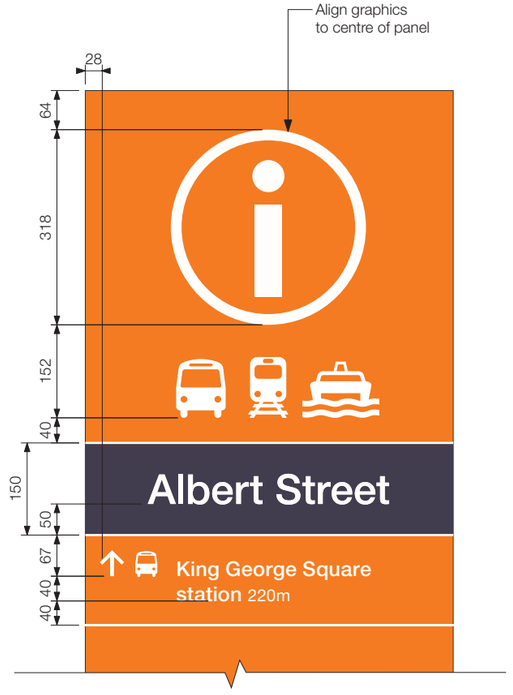
(iii) for a door discharging from a fire isolated exit -
FIRE SAFETY DOOR
DO NOT OBSTRUCT

NOTE: Ensure that vinyl colour has 30% contrast to paintwork.



Elevations

Scale 1:20



Graphic Detail

Scale 1:10

Sign Type

EX-1

Precinct Information Sign (External to Station)

Purpose
- To direct to precinct wide transport options

Typical location
- At critical decision points
- External to station environment

Indicative message and content
- Street or area name
- Station name and distance
- Accessible entrances
- Precinct map

Graphics Detail
FONT
Primary Text = Helvetica Neue 65 Medium
Secondary Text = Helvetica Neue 55 Roman

SIZE
Primary Street Name = 48mm cap X height
Primary Destination = 24mm cap X height
Secondary Destination = 17mm cap X height
Distance = 20mm cap X height
Arrow = 42mm tip to tail
Pictogram = 42 overall height

COLOUR
Primary background = Arlon Orange 44
Secondary background = Arlon Dark Grey 52
Text and graphics = Arlon White 02
Access Symbol = white figure on AS2700 ‘Ultramarine’ background

Construction Details
1. 65mm NB steel post, C350 grade, 3.2mm wall thickness hot dip galvanised. Deform base to prevent rotation in direct embed footing.

2. Curved display extrusion - CIVIQ or approved equivalent.

3. Polycarbonate sheet cover over central display section.

4. 1mm aluminium sign panel with vinyl graphics front applied (for header and footer section). Anti-graffiti spray applied over all front applied vinyl graphics sections.

5. Existing paving surfaces to be removed during installation and replaced over footing and made good.

All steelwork to be hot dipped galvanised.

Samples are to be provided prior to manufacture.

Sign Type
EX-2
Precinct Major Directional Sign (Typically External to Station)

Purpose
- To direct to precinct wide transport options

Typical location
- At critical decision points

Indicative message and content
- Street or area name
- Station name and distance
- Accessible entrances

Graphics Detail
FONT
Primary Text = Helvetica Neue 65 Medium
Secondary Text = Helvetica Neue 55 Roman

SIZE
Primary Destination = 26mm cap X height
Distance = 20mm cap X height
Arrow = 44 x 41mm (tip to tail)
Pictogram = 44mm overall height

COLOUR
Primary background = Arlon Orange 44
Secondary background = Arlon Dark Grey 52
Text and graphics = Arlon White 02
Access Symbol = white figure on AS2700 'Ultramarine' background

Construction Details
1. 65mm NB steel post, C350 grade, 3.2mm wall thickness hot dip galvanised. Deform base to prevent rotation in direct embed footing.

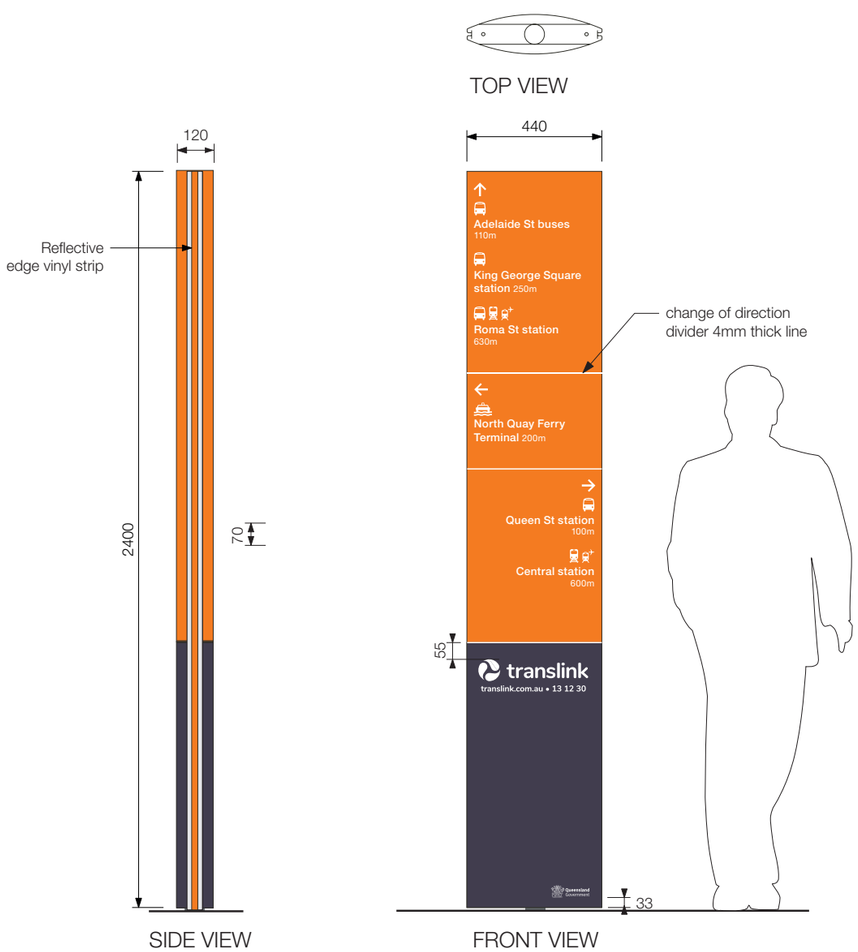
2. Curved display extrusion - CIVIQ or approved equivalent.

3. 1mm aluminium sign panel with vinyl graphics front applied. Anti-graffiti spray applied over all front applied vinyl graphics sections.

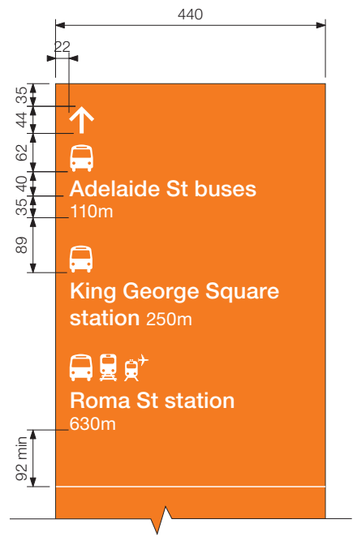
4. Existing paving surfaces to be removed during installation and replaced over footing and made good.

All steelwork to be hot dipped galvanised.

Samples are to be provided prior to manufacture.



Elevations
Scale 1:20



Graphic Detail
Scale 1:10

4.48

Sign Type
EX-3
Precinct Minor Directional Sign (Typically External to Station)

Purpose
- To direct to precinct wide transport options

Typical location
- At critical decision points

Indicative message
- Street or area name
- Station name and distance
- Accessible entrances

Graphics Detail
FONT
Main text = Helvetica Neue 65 Medium
Minor text = Helvetica Neue 55 Roman

SIZE
Main text = 40mm cap
Distance text = 28mm cap
Pictogram = 70mm high
Arrow = 70mm (tip to tail)

COLOUR
Transport panel background = Resene 'Trinidad' O61-167-048
Sign structure & facility panel backgrounds = Resene 'Jon' N38-007-359
Typical text & pictograms = Arlon White 02
Access Pictogram = White figure on AS2700 'Ultramarine' background

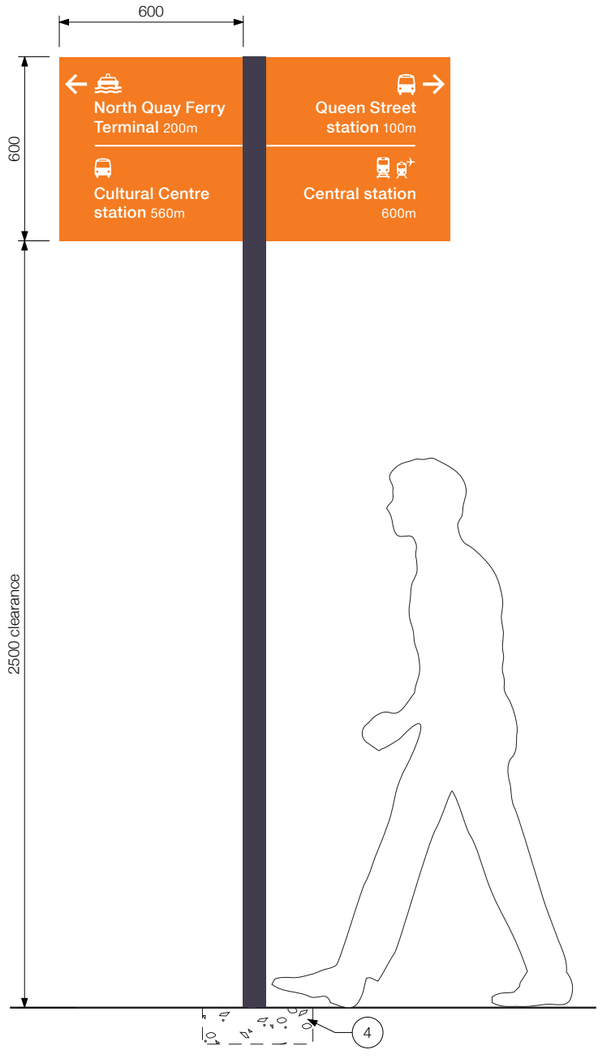
Construction Details
1. 80 x 80 x 3mm galvanised steel post with 16mm thick fully welded base plate. 2 pack painted finish.

2. 50 x 25mm aluminium angle welded to 3 mm thick aluminium sign panel. 2 pack painted finish with front applied vinyl graphics.

3. Post hexagon socket button head stainless steel machine screw fixings. Paint out fixing heads to match sign panel.

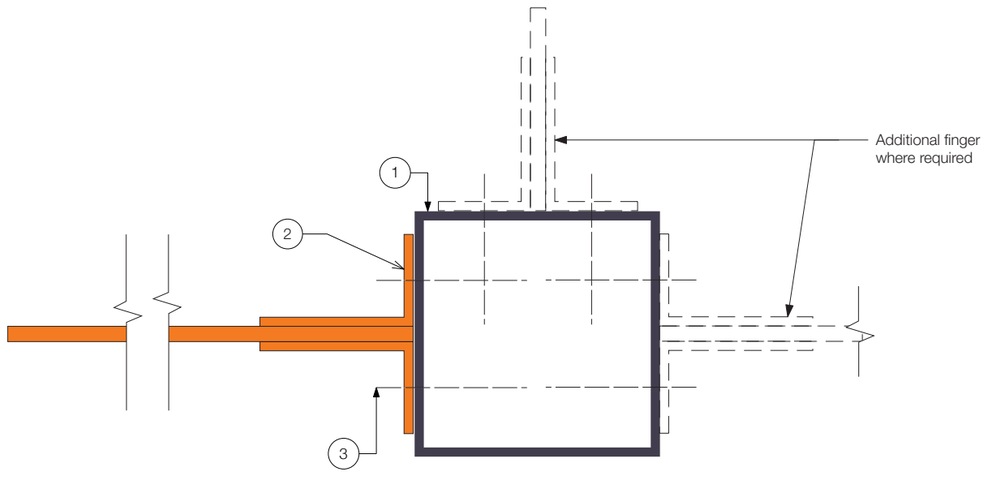
4. Footing details to designed by Signmakers engineer to suit site conditions.

NOTE
Provide samples for approval prior to production.



Elevations
Scale 1:20

Graphics Detail
Scale 1:10



Fixing Detail
Scale 1:2

Section

Technical specifications for manufacture

1.0 • PRELIMINARIES

1.1 • Scope of Work

The Contractor shall carry out all work necessary to supply and install all signs as shown in the following documents:

- Sign Schedule
- Sign Location Plans
- Sign Type Drawings
- Sign Graphic Standards

This specification is to be read in conjunction with these documents.
Without limiting the generality of the foregoing, the Contractor shall:

- Visit sites prior to submitting price to inform installation & manufacture. This must be coordinated with the Superintendent and facility owner.
- Design supply, manufacture, store, deliver, install, commission and test as appropriate all components of the Works as may be necessary to complete the Works in accordance with the Contract;
- Provide all materials, labour, supervision, plant (including hoisting), equipment (including scaffold and temporary lighting), fixings and all other incidental items which may be necessary to satisfactorily complete the Works in accordance with the Contract;
- Provide all specified and all other necessary support structures, frames, brackets or mouldings to support, build and install all signs included in the Works;
- Allow for all requirements relating to site/safety inductions, work method statements and provision of traffic control and safe working areas. Contact the Superintendent for contact details for coordination with relevant facility owners including Busway and QR. All relevant statutory and facility owner regulations to be adhered to during installation and related works.
- Verify and be responsible for all dimensions and conditions on the job prior to manufacture, including structural, location, engineering and footing details and the strength and suitability of materials specified for each sign. Where additional load is placed on existing structures, the signmakers engineer is to provide suitable certification.
- Consult facility owners to coordinate new footings, or wall mounted sign locations. Obtain information on underground pipes and services prior to digging.

The Contractor shall notify the Superintendent of any variations from the dimensions and conditions shown by these and any subsequent drawings. If changes are requested they should be submitted as drawings for approval prior to production;

- Provide any alterations required to fix signs to existing structure such as removal of ceiling tiles, plasterboard ceilings or wall sheeting required to install adequate structural fixings for signage. This includes repainting or refurbishing existing panelling, ground surfaces, wall surfaces or electrical fittings where damaged by the Contractor during the construction or installation of a sign;
- Allow for protection of all signs during transport and installation and protection to all areas of adjacent work during installation, especially protection of tiled surfaces where access equipment is used (e.g., plywood or plastic covering for protection)
- Provide all samples and prototypes specified as per item ‘1.6 Samples, Prototypes and Engineering Certification’ established with the Superintendent.

1.2 • Standard provisions, Codes and Standards

All work and materials shall comply with the Building Code of Australia, the Workplace Health and Safety Act, and, except where otherwise noted in this Specification, comply with the latest editions of all relevant Australian codes or standards (current issue) including but not limited to:

Quality Management

AS/NZS ISO 9001	Quality systems for design/ development, production, installation and servicing

Metalwork

AS 1170.2-2002	Minimum design loads on structures – wind loads
AS 3678	Structural steel – hot-rolled plates, floor-plates and slabs
AS 1397	Steel sheet and strip – hot-dipped zinc-coated or aluminium/zinc-coated
AS 1444	Wrought alloy steels – standard and hardenability (H) series
AS 1449	Wrought alloy steels – stainless and heat-resisting steel plate,sheet and strip
AS 1554	Structural steel welding
AS 1627	Metal finishing – preparation and pre-treatment of surfaces
	Part 1 – cleaning using liquid solvents and alkaline solutions
	Part 2 – power tool cleaning
	Part 4 – abrasive blast cleaning
	Part 7 – hand tool cleaning of metal surfaces
	Part 9 – pictorial surface preparation standards for painting steel surfaces
AS/NZS 4680	Hot-dip galvanised (zinc) coatings on fabricated ferrous articles
AS 1734	Aluminium and aluminium alloys, flat sheet, coiled sheet and plate
AS 3569	Steel wire ropes

Concrete

AS 3610	Formwork for Concrete

Fasteners

AS 1214	Hot dip galvanised coatings on threaded fasteners
AS 1420	ISO metric hexagon socket head cap screws
AS 1421	ISO metric hexagon socket set screws
AS 1427	ISO metric machine screws

Timber Products

AS 2458	Hardwood
AS 2270	Plywood and blockboard for interior use
AS 2754	Adhesive for timber and timber products

Sealants

AS 1527	Two-part polysulphide based sealing compounds for the building industry
AS 001543a	Sealing compound silicone rubber base (US specification)

Paints and coatings

AS 1231	Aluminium and aluminium alloys – anodised coatings for architectural applications
AS 2039	Methods for testing anodic oxidation coatings on aluminium and aluminium alloys
AS 2310	Glossary of paint and painting terms
AS 2311	The painting of buildings
AS 2312	Guide to the protection of iron and steel against exterior atmospheric corrosion
AS 2700	Colour standards for general purposes
ASTM 03363	Test method for film hardness by pencil

Electrical equipment and luminaires

AS 3000	Electrical installations – building, structures and premises
AS 3145	Approval and test specification for transformers for cold-cathode electric discharge lamps and lighting systems
AS 2053	Conduits and fittings for electrical installation
AS 3008	Electrical installation selection of cables
AS 2052	Metallic conduits and fittings
AS 3127	Luminaires (Light fittings)

Design for Access and Mobility

AS 1428.1	General requirements for access - New building work
AS 1428.2	Enhanced and additional requirements - Buildings and facilities
AS 1428.4	Tactile indicators

1.3 • The Intent of the Sign Type Drawings and Specification

The intent of the Schedules and Specifications set out herein is to describe the dimensions, materials and finishes of the signs and graphics to be consistent with the Principal’s requirements and design intent for the network.
Construction details not exposed to view may be refined or modified provided that approval of such refinement of modification is requested of the Superintendent and the proposal is presented in ample time prior to the formal submission of Shop Drawings for the request to be considered. Approval may be granted at the discretion of the Superintendent but only on the basis that amongst other considerations, such refinements or modifications do not compromise the design intent, extra costs will not be incurred and the warranties and responsibilities under this contract are not reduced or voided in any way whatsoever.
In all cases the Contractor shall be responsible for ensuring that the finished product is structurally sufficient for the service conditions which would be reasonably expected. This shall include any structural computations as required.
Items where refinements or modifications will not be considered are:

- The text and graphic layout to be incorporated for each sign
- The colours and graphic application
- The overall size of each sign
- The materials and nominated finishes of each sign

1.4 • Other Trades

The Contractor shall coordinate other trades as necessary or appropriate. All signs shall be manufactured, supplied and fixed by one approved specialist employing only licensed tradespeople skilled in the required class of work shall be employed.

1.5 • Proprietary Products

Where proprietary products are used the manufacturer’s instructions and specifications shall be strictly adhered to.

1.6 • Samples, Prototypes and Engineering Certification

Prototypes shall be provided for all work associated with the signing trade. Where additional load is placed on existing structures the signmakers engineer is to provide certification.
All such prototypes shall be submitted to the Superintendent for approval in sufficient time (minimum 2 weeks) to permit proper evaluation and, where necessary, resubmission in order to allow production to proceed in accordance with the program (refer item 1.14). Approval time to be confirmed with Superintendent. All prototypes are submitted as an example of material, finish, colour and workmanship. Approval samples and prototypes shall become the standard against which work will be accepted. An approved sign, if suitably located, may be permitted to be incorporated into the Works. Otherwise identify, protect, retain and store upon completion of the Works.
The required material, finish and colour samples are:

- Minimum 100 x 100mm section of each nominated vinyl
- Minimum 400 x 400mm panel of each spray painted colour and finish

The required prototypes shall be provided that are representative of the four (4) sign groups. The sign groups are:

- PI - Primary identification
- FI – Facility identification
- DS – Directional Signs
- IS – Information System

Prototype signs to be provided include:
- Entry Station Identification including Pylon, Flag pole Banner and badge sign
- Platform Identification including Lead Stop Sign, Station name
- Directional signs including under awning types
- Information system signs including complete internally illuminated poster display cabinet
- Wall and Under Awning Information
- Platform Information
- Door Plate

1.7 • Inspections
Give the notice specified in '1.14 - Production Program and Review Periods' so that the Superintendent may inspect materials and workmanship at the manufacturing workshop.

1.8 • Protection of Works Under the Contract
Protect all materials and workmanship against scratching, marking and other damage at all stages of fabrication, handling, delivery and installation until Practical Completion.
Wrap finished metal surfaces and faces with applied graphics in polythene or similar and apply heavy duty polystyrene, timber and similar packing as appropriate to all faces and edges, liable to damage during storage, transport or installation.

1.9 • Protection of Station Environment
Adjacent building structures shall be protected from possible damage during the erection of signs. All surfaces shall be protected including walls, floor, windows, doors, hardware, skirting, handrails and steps in areas in which work is progressing or through which materials are brought.

1.10 • Making Good
All work under the Contract damaged during installation through welding, setting, drilling, site handling or any other cause will be the responsibility of the Contractor and made good in accordance with this Specification.
Any damage caused to the Station environment in the course of installation through any cause will be the responsibility of the Contractor and shall be made good to the satisfaction of the Superintendent.
Where signs are removed permanently, repair/make good wall and footing finishes. Confirm requirements with Superintendent prior to work.

1.11 • Cleaning Up
Debris and waste material associated with signs shall be regularly removed during installation and the complete area cleaned on completion.
Before handing over the work, all signs, carrier supports and other surfaces shall be cleaned using a soft cloth and an approved cleaning fluid.
Any area requiring installation over a period of days will be cleaned regularly during the day and at the end of each day in order to remove any hazards to persons.

1.12 • Quality of Work
The Contractor shall provide QA methodology and implement quality assurance procedures as set out in the Contract.

1.13 • Format of Pricing
Prices are to be provided for:
- supply & installation as a lump sum total and broken up per sign type to allow for additions and deletions if required. Refer to provided Bill of Quantities to facilitate price format.

1.14 • Production Program & Review Periods
Production Program
The Contractor must submit with their price a written production program detailing the time frame as detailed in the Review Period for:
- shop drawings (sign faces, sign supports, footings, engineering certification)
- sampling (colours and material, prototypes and fittings)
- manufacture / production inspections
- installation

Review Periods
The contractor to allow Superintendent review periods in their program as follows:
- critical path matters - 5 working days
- non-critical path matters - 10 working days
- alternate materials / products approval - 10 working days
- approval of shop drawings, samples etc - 10 working days

1.15 • Contractors Access to Site
As noted in item 1.1 Scope of Work. Contractor to allow for:
- Site specific inductions as required by facility manager/owners eg QR and Busway.
- Coordinating works with Facility manager/owner for approvals and permits for performing the works.
- Supply work method statements on sign erection and removal, post installation, on-site painting of posts etc.
- Requirements on separation of the area of works from public.

1.16 • Removal and Disposal of Redundant Signs
Existing signs to be removed and destroyed OR removed and returned to Principal (responsibility of the contractor). Confirm requirement with Superintendent.
Extent of Works include:
- Removal of redundant signs, sign frames, boxes, fixings and supports as per schedules and specifications. Contractor to make good any areas where signs/supports etc are removed.

2.0 • FABRICATION, FINISH AND INSTALLATION
Materials shall be generally as follows:
In conformity with the current applicable Australian Standard Code. All materials shall be new, the best of their respective kind and suitable for their purposes. Materials are to be free from corrosion, prime painted and compatible with the final finish, where applicable. Provide all screws, bolts, rivets, pop rivets, plain and countersunk fastenings and washers of a type and material suitable, sufficient and matching in finish and appearance to the components fastened.
Unless otherwise specified, comply with the following where applicable -
Properties: Allow for expansion/contraction of materials, and
Electrolysis: Provide insulation between dissimilar metals to prevent electrolysis.

2.1 • Concrete
Concrete for footings shall be of structural quality and free of defect and constructed to Australian Standard Codes for Concrete Reinforcement and Form work. Neat & uniform surrounds where visible.

2.2 • Metalwork
All work shall be of a high standard accurately and neatly constructed and securely fitted and fixed.
Prefabricate and pre-assemble items in the workshop to the maximum size practicable in consideration of delivery limitations, site conditions and site access.
Similar fabrication techniques and detailing shall be used in all associated fabrications and items to ensure continuity of finished appearance.

2.3 • Welding
All welding shall be carried out in accordance with AS 1554.
Welded, brazed or soldered joints on exposed surfaces shall be ground, buffed or polished as applicable to the material and specified finish.
There shall be no buckling or visible surface colour variations in exposed material metal finishes.

2.4 • Aluminium
All welding shall be carried out in accordance with AS 1665 using techniques to avoid buckling and discolouration. Alloy/temper to AS1865 Aluminium sheet & extruded sections where specified to be used. Single full sheets are to be used for each sign face, there are to be no joints in sheet unless otherwise shown on drawings.

2.5 • Mild Steel
All mild steel work to be hot dipped galvanised.

2.6 • Polymers
Acrylic sheet to be of UV stabilised quality cast or extruded high impact Mitsubishi 'Shinkolite', Degussa 'Plexiglas' or equivalent approved by Superintendent to suit the application. Polycarbonate sheet where nominated to be used in all high impact applications.

2.7 • Finishes Generally
Edges and surfaces should be clean, neat and free from burrs and indentations. Remove sharp edges to a fine pencil round without excessive radiusing. All visible joints in materials shall be even, hairline joints unless noted otherwise and approved on shop drawings for specific functional or visual requirements.
Match colour of sheets, extrusions and heads of fastening in colour finished work.
Unless otherwise noted on the drawings or in this specification all exposed screw heads shall be stainless steel countersunk socket head screws finishing flush with surface.

2.8 • Paint finishes
Carry out painting in accordance with manufacturer's recommendations for spray, roller or brush application.
Generic or unbranded products shall not be used. Use only branded premium quality lines from Resene/Altex, or an equivalent alternative to be approved by the Superintendent prior to use.
All material required for the application of each finish must be manufactured by one approved manufacturer and used in conjunction with priming and undercoats produced by that manufacturer as a total coating system.

2.9 • Pre-treatment
The Contractor shall ensure that all surfaces are properly prepared and in suitable condition to receive the coating system prior to the first application as follows:
• Un-primed or damage primed steelwork shall be abrasive blasted, or power tool cleaned to near white metal, immediately prior to priming or spot priming
• Primed steelwork shall be brushed down and degreased using white spirit
• Galvanised steelwork scheduled to be paint finished shall be degreased using white spirit, and washed with water
• Concrete and masonry surfaces shall be cleaned of all oil, grease and loose foreign matter, including efflorescence and dirt, prior to the application of any paint finishes
• Aluminium should be lightly abraded using fine emery cloth and mineral turpentine as a lubricant. Surfaces should be cleaned with mineral turpentine, washed thoroughly and dried. As soon as surfaces are thoroughly dry, apply self-etching primer to all surfaces. Fine sanding and painting should follow immediately thereafter.

2.10 • Mixing and Blending
All paints shall be mixed in accordance with manufacturer's recommendations.
Chemically cured coatings shall be blended in exact quantities either by weight or by the use of volume matched containers. Accurate and properly calibrated equipment is required capable of weighing to an accuracy of 5g. The whole contents of volume matched containers shall be blended at once. On no account shall part only of volume matched containers be blended.
Each container shall be thoroughly and separately mixed using clean mixing equipment that has not been in contact with the other containers.
Blended material shall be poured from mixing container; care being taken not to scrape out materials left adhering to the container.
Application shall be carried out within 1 hour of mixing.
Thinning shall only be permitted for spray applications or sealing coats and then only with thinners supplied by the finish manufacturer for this purpose.

2.11 • Protection of Other Surfaces
All necessary protection and masking shall be provided to protect adjacent surfaces as finishing proceeds and to ensure accurate cutting in.
Care shall be taken to select masking materials that are compatible with the surface to which they are being applied and that any residue of adhesive can be easily removed.
Hardware shall be removed prior to finishing and subsequently refixed and adjusted.
All materials subject to corrosion shall be suitably primed or otherwise treated with permanent protection. Undercoats shall be evenly applied to concealed frames and supports prior to assembly. Non corrosive materials are to be preferred in all cases.

2.12 • Paint Application - Aluminium
Apply paint finishes according to the background material as follows:
For aluminium surfaces, etch priming pre-treatment, should be fine sanded and 3 coats of 2-pack polyurethane Altex E-Line 239 Clear shall be applied to colour specified in the colour specifications on Drawings. This surface should be lightly baked prior to application of vinyl or mask and spray painted graphics. Finally apply a clear coat 2-pack polyurethane with UV stabilisers Resene Altex Uracryl 402 (satin clear). Clear and lightly bake. All as per manufacturers details and specifications. No visible rounding off on the edges shall occur or surface build-ups generally at any stage of the coating procedure. Gloss level = Satin finish.

2.13 • Adhesives
Adhesives must be suitable for their application and applied as per manufacturers instructions.
Double sided adhesive tape is to be 3M brand 4016 or equivalent approved by Superintendent.
Silicone adhesive is to be acid free Dow Corning 7932, Sikaflex or equivalent approved by Superintendent.

2.14 • Vinyl Graphics
Type
Exterior grade cast vinyl & Exterior Grade Retro-reflective Vinyl to the relevant Australian Standard for Traffic devices. Ensure only one brand of vinyl is used where multiple layer graphics are required.
Application of vinyl and preparation of surfaces must meet requirements of manufacturer to maintain warranty. Consult manufacturer for application manual for signmaker's guide to usage of products.
Technical Performance Specifications
Cast vinyl colours and performance are to specifically match / equal all colours specified on each sign type drawing, including:
Illuminated vinyl:
Arlon (Calon) Orange 44 translucent
Arlon (Calon) Tangerine 84 translucent
Opaque vinyl:
Arlon (Calon) Light Orange
Arlon (Calon) Dark Grey 52
Arlon (Calon) Perfect Match Red 220
Thickness: 0.08mm to 0.10mm thickness range.
Cut from self adhesive vinyl by computer operated flat bed knife cutter or other accurate technique.
Alternative vinyl samples may be submitted for review. Alternatives will need to strictly adhere to the above criteria and be approved by the Superintendent prior to use.

2.15 • Protective Anti-graffiti Finishes to Cover All Applicable Signs
All faces subject to graffiti to have a clear anti-graffiti coat (non-yellowing and UV stable) sprayed over the graphics and sign face, satin finish (not gloss).

2.16 • Warranty
The signmaker shall warrant all sign faces and associated works from manufacture defects (including graphics and paint), for a period of at least 10 years. This warranty shall take precedence over any other warranty stated. An alternative warranty period specified by the signmaker and within industry standards may be approved by the Superintendent.

2.17 • Fixings
All fixings are to be stainless steel grade 316 with anti-theft heads as shown on drawings. Tek-screw type fixings are not permitted where visible.

2.18 • Electrical Installations
General
In general, all illuminated signs shall be electrically powered. New signs requiring electrical power supply to the signs from the switchboard to be connected using only qualified personnel. Signmaker to provide circuit breaker / fuse within light box. Coordinate power requirements ie isolation / connection with the Superintendent.

New Materials
All materials and equipment relating to electrical works shall be new unless otherwise specified.

Materials, workmanship and samples
Supply and install all necessary fittings, materials and accessories to complete the works whether or not individually specified on the Drawing(s) or in this Specification.
Written approval from the Superintendent shall be obtained to vary any of the above items and samples may be required to obtain approval.
Install all items in accordance with manufacturers' instructions.
Use only material, fittings, accessories and apparatus complying with the relevant Australian Standard(s) or in the absence of such specification, with the appropriate British Standards(s).
Failure to comply with these provisions may result in the rejection by the Superintendent of such items after installation.

Tests and inspections
Provide all labour, plant, equipment and instruments necessary to carry out all the tests necessary to ensure the correct operation of the new sign system. Where required the tests shall be carried out in the presence of the Superintendent.

A "Maximum Demand Indication (MDI) Report" shall be submitted (in duplicate) with the "Notification of Electrical Work" to the Superintendent. The report is to include the printed name, signature and license number of the electrician actually carrying out the test and the printed name, signature and license number of the Contractor's electrical supervisor. The test must be carried out by a qualified electrician.
An "acceptable" MDI Report and duly completed "Notification of Electrical Work (NOEW)" certificate for all Works are to be submitted to and accepted by the Superintendent prior to the issue of the Certificate of Practical Completion.

Radio television and electrical interference
Electrical equipment shall be so designed that it will not cause interference with radio, television or other electrical equipment in the same locality. In the event of the inherent characteristics of equipment being such that interference is possible, such equipment shall be provided with effective interference suppressors to eliminate the interference.
Radio and television interference level shall be within the limits as set out in AS 1044. Electrical disturbances shall be within the limits set out in AS 2279.

2.19 • Illumination
Generally: Achieve optimum illumination on all illuminated signs, utilising LED backlights. LEDs are to be spaced as specified by product and manufacturing requirements to achieve an even level of illumination across the full face of the sign. Sign type drawings show indicative LED layout only. All joins to be suitably sealed to prevent light leaks.

Provide internal illumination via LED controlled by transformers /control gear. Protect within by minimum 5A circuit Breaker that switches both active and neutral conductors. Should be wired with minimum V105 rated cabling within signs - all internal cabling within supported.

LED systems
The LED system shall be GE Lumination Tetra or approved equivalent, based on the following criteria:
• LEDs to be fully enclosed, with enclosure to have a minimum IP66 rating. Exposed printed circuit board LED systems with protective or conformal coating will not be accepted.
• LED temperature should be equivalent to Cool White or approximately between 4000 - 5500 kelvins.
• Lumen maintenance of the LEDs must be at least 70% after 50,000 hours of operation.
• LED system must come with a minimum 4 year warranty on the LED system and a 5 year warranty on the power supplies.

3.0 • CONSTRUCTION

Generally - Form graphics items accurately to the specified shapes and surfaces with clean, well defined edges or arises, free from blemishes. The Contractor shall be responsible for the quality of all materials and workmanship required to manufacture the signs including the materials and workmanship of any firms or individuals who act on behalf of the Contractor and/or suppliers.

3.1 • Construction Standards

Construction is to be of the highest of industry standards. Where connection or suspensions are made, plates, bolts, angles and screws are to be concealed as much as possible from view unless otherwise detailed. Box frames or tube shall be extruded and prefinished. Spaces, drilled holes and fixings shall be consistent from one sign to another. Screws, adhesives and silicones shall be concealed and or made flush with the surface. Fit components with care. Graphic standards are to be carefully adhered to.

3.2 • Structural Support

Structural support of signs shall be independent of the existing structure except where specifically fixed to walls, floors or ceilings. For all signs, the Contractor is to be responsible for strength and suitability of the structural support and connection of all signs. Where visible plinths are shown on the sign drawings, match details as shown. Internal structure may be amended to suit relevant structural requirements.
- Provide engineering certification that structural supports are adequate for their intended use. Contact facility owners for structural requirements where additional information is required.
- drawings / certification required to be submitted to the Superintendent and facility owner/manager (refer '1.14 - Production Program and Review Periods') prior to manufacture, construction and erection on site.

3.3 • Shop Drawings

Requirement
The Contractor shall submit shops drawings of all sign types for review prior to manufacture to the Superintendent. Refer production program.
Inclusions
Drawings shall include the following details and information where applicable:
1. Large scale (full size if practical) lettering layouts/spacing templates.
2. Sections and Details of proposed fabrication.
3. Anchorages and Fixings, locations and types.
4. Engineer's Certification on all new structural work and where additional load is place on existing structures. Design wind loading appropriate for the site.
5. Type faces, Colours and Finishes.

3.4 • Final Copy

Sign messages are to be created from electronic artwork to faithfully reproduce the shapes and typefaces specified. The graphic layouts shall follow the guidelines outlined in the signage and graphic design standards drawings.
The graphics shown in the signage and graphic design standards specification drawings as Adobe Illustrator .ai or .eps files in Macintosh format can be supplied by the Superintendent. These will be provided on CD-ROM for pick up by the signmaker or sent via e-mail upon request to the Superintendent.
It is the responsibility of the signmaker to ensure that all electronic files are accurately converted and match the graphic specification drawings provided in form, size & colour. Hard copy drawings provided are to be used as the primary reference.
If the Contractor finds any text messages or graphics that are not catered for in the graphic specification drawings, the Contractor shall prepare a layout of the message of all signs at a minimum 1:10 scale and submit the layout for approval prior to production.
Braille and Tactile Graphics
Tactile and Braille signs must comply with the BCA Specification D3.6. Use approved raised tactile pictograms and text and grade 1 Braille(uncontracted) to Australian Braille Authority, NCC and AS1428.4.2(2018) requirements. It is the responsibility of the Contractor to ensure that all Braille is accurately translated and formatted. Consult with Vision Australia where required for guidance and evaluation of messages and signs.

4.0 • GRAPHIC STANDARDS

The following rules of graphic quality apply:
1. All lettering shall be true to its letter form in face weight and construction.
2. All graphics are to be electronically, photographically or mechanically reproduced.
3. All colours are as specified in Pantone colour reference system or other specified colour.

4.1 • Typeface

The font families shown on the sign type drawings are to be used for all messages, text and numerals except where specifically stated otherwise. No other versions of typefaces will be accepted. It is the responsibility of the signmaker to purchase the font(s) as specified.

4.2 • Pictograms and Arrows

Only the symbols as shown on the sign type drawings are to be used. No other versions will be accepted.

5.0 • INSTALLATION STANDARDS

Site inspections are to be carried out by the Superintendent and Contractor prior to installation to verify locations, confirm all architectural details, mounting conditions and dimensions.
All installations to be plumb and level, at the heights indicated, securely mounted with theft-resistant fixings. Locate all signs in the correct position and orientation as per sign location plan.
Work shall be complete with all bolts, rivets and other fittings and adequately transmit the loads and stresses imposed. Where bolting of metal work to concrete is specified, fixings to be into approved masonry anchors of the required size. Proper edge clearances should be observed so there is no risk of possible damage to concrete or structural framing. Packing of fixings is permitted to approved tolerances to level and square installations.

6.0 • MAINTENANCE MANUAL

The Contractor is to provide three copies of a maintenance manual containing a description of the supplied items, instructions on how to correctly replace panels, parts or letters as required and details on cleaning and maintenance of the signs.
The Contractor is to provide a comprehensive maintenance manual. 2 copies of this manual is to be provided hardbound and an electronic version (PDF format) to be provided on CD Rom. This manual is to contain all information for every aspect of the project and shall include, but not limited to:-
• All working and as-built drawings for all aspects of the works, ie footing details, artwork, individual sign design, bolt cage assemblies, glazing and other details, thus enabling any component to be easily remanufactured if and when required;
• Comprehensive parts list;
• Site plan detailing each sign location, type and artwork details;
• Contractors and suppliers contact list detailing all works performed and materials supplied, for example installation and footing contractor, metal, glass, Braille, paint, adhesive, sealant, vinyl, glazing and fixing suppliers;
• All associated certification documents;
• Sign Installation and removal details;
• Artwork and glass panel replacement instructions;
• All digital photos of the project;
• Replacement procedures for each individual section or replaceable panel of the signage system;
• Cleaning and maintenance instructions;
• Graffiti removal instructions;
• Spare parts list to enable a quick reordering of components including supply time frames.body text here body text here