

GIS Data Hub

Data Collection Specification - Part 2

16 Data Specification

The details of the data to be submitted are as follows:

16.1 Arrow Marking (Point)

Description: A point representation of an arrow painted on the road surface to advice motorists on the direction of traffic flow.

Attribute Format:

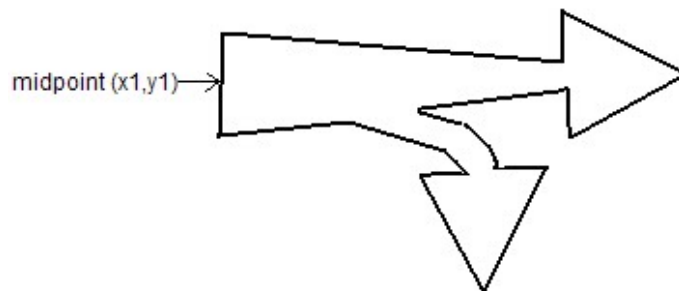
Field Name	Data Type	Size	Precision	Scale	Allow Null	Value	Description
TYP_CD	String	4	0	0	No	A, B, C, D, E, F, G, H, I, J, K, L, M, N, O	Please see Note 3
BEARG_NUM	Double	8	38	8	No	Bearing. Please see Note 2	
LVL_NUM	Short	2	4	0	No	Level of road where feature exists	
						2	At-grade (ground level)
						8	1st level depressed road
						9	1st level elevated road
						7	2nd level depressed road
						10	2nd level elevated road
RD_CD	Text	6	0	0	No	Refer to list	Road Code (assigned to the Road Name) where feature exists

Notes:

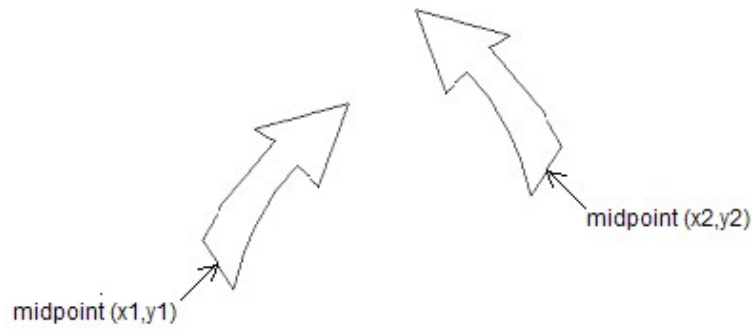
- 1) Arrow Marking co-ordinate is the midpoint at the base of the arrow in the direction of the traffic flow.

For example,

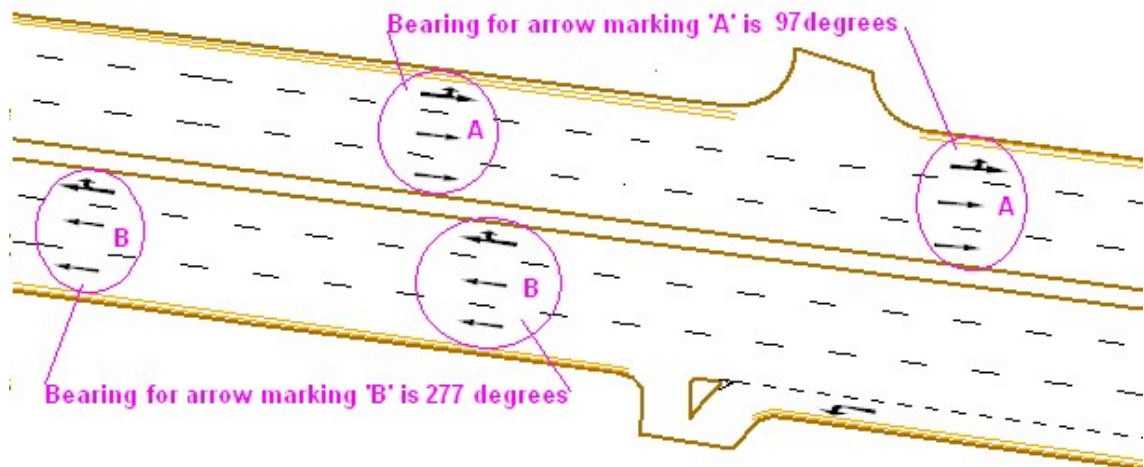
- a) Type C (straight / right turn shared arrow): one arrow only, hence only one point (x1, y1) required.



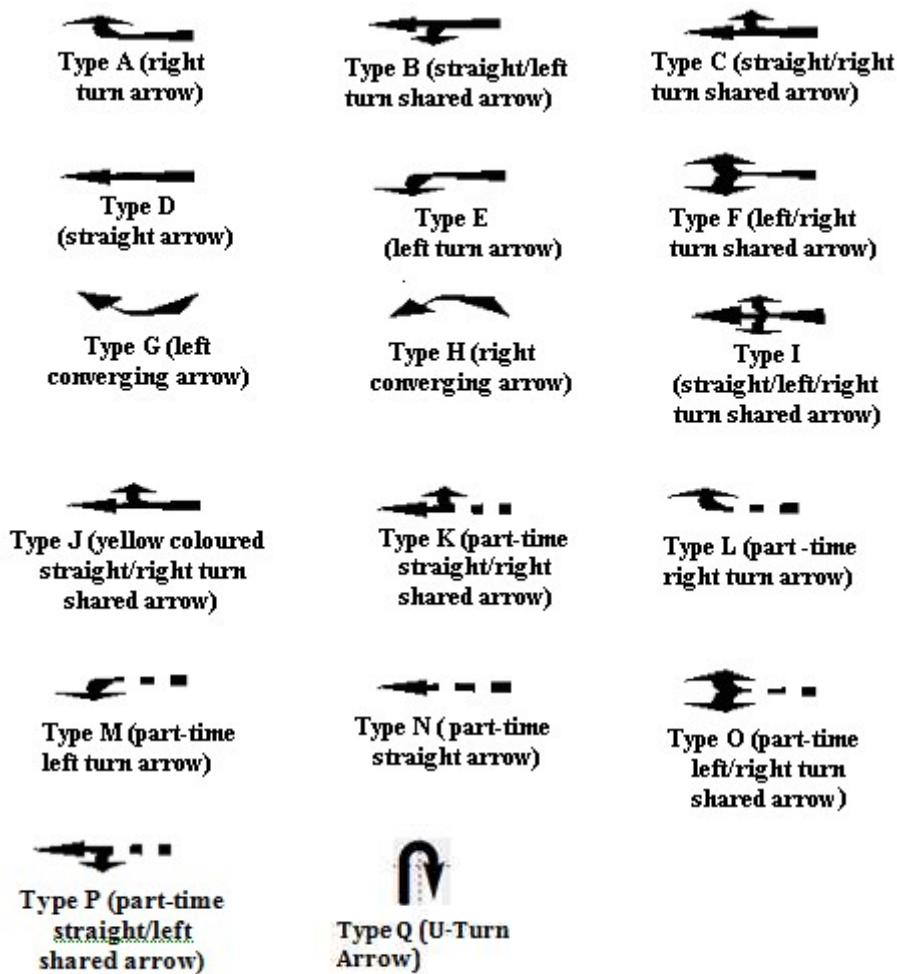
- b) Types G (left converging arrow) & H (right converging arrow): two arrows, hence two points (x1, y1) and (x2, y2) are required.



- 2) The bearing should correspond with the bearing of each individual road. For example, if the bearing of the road is 97 degrees, then the bearing of arrow markings A is 97 degrees and the bearing of arrow markings B is 277 degrees respectively.



3) List of TYP_CD:



16.2 Bicycle Rack (Point)

Description: A point representation of a stationary fixture to which a bicycle can be securely attached to prevent theft & for parking purposes.

Attribute Format:

Field Name	Data Type	Size	Precision	Scale	Allow Null	Value	Description
RACK_CNT	Short	2	0	0	No	No of racks	
TYP_CD	String	6	0	0	No	Type of tier	
						D	Double
						S	Single
SHLTR_IND	String	1	0	0	Yes	Field to indicate whether Bicycle Rack is sheltered or not.	
						Y	Yes
						N	No
RACK_DIM	String	25	0	0	Yes	Height and Width of the Rack	
AGENCY_IMPL	String	6	0	0	No	Implementing Agency	
AGENCY_MAINT	String	6	0	0	No	Maintenance Agency	
BLDG_NAM	String	66	0	0	Yes	Building Name	
LOCATION	String	500	0	0	Yes	Location of bicycle rack	
POSTAL_CD	String	6	0	0	Yes	A unique six-digit numeric code assigned to each property address.	

Notes:

- List of TYP_CD:

TYP_CD	Description	
D	Double	

16.3 Bollard (Point)

Description: A point representation of a strong thick post erected on streets to deter vehicles from passing through. It is also used as markers on road divider or as safety barriers along bus bay or side of roads.

Split arrow bollard is to be captured under 'TRAFFIC SIGN'.





Attribute Format:




Field Name	Data Type	Size	Precision	Scale	Allow Null	Value	Description
TYP_CD	String	4	0	0	No	Please see Note 3, 4	
						C	Concrete
						D	Flexible Delineator Post
						F	Fibre Glass
						FP	Flexible Pole
						O	Others
						S	Steel
						SL	Spring Loaded Post
LVL_NUM	Short	2	4	0	No	Level of road where feature exists	
						2	At-grade (ground level)
						8	1st level depressed road
						9	1st level elevated road
						7	2nd level depressed road
						10	2nd level elevated road
RD_CD	Text	6	0	0	No	Refer to list	Road Code (assigned to the Road Name) where feature exists

Notes:

1. The co-ordinate shall be the centre point of the Bollards.
2. Bollards in a row are to be recorded individually.
3. If TYP_CD is not in the list, assign type 'O' (Others), and attach the photographs.
4. List of TYP_CD:

TYP_CD	Description	
C	Concrete	

TYP_CD	Description	
D	Flexible Delineator Post	
F	Fibre Glass	
FP	Flexible Post (look very similar to Spring Loaded bollard except it is made of flexible material)	 <p>Flexible posts</p> <p>Close-up</p> 

TYP_CD	Description	
S	Steel	
SL	Spring Loaded Post (Post is made of PVC material)	
T	Safety	

16.4 Bus Shelter (Line)

Description: A line representation of a shelter for bus commuters.

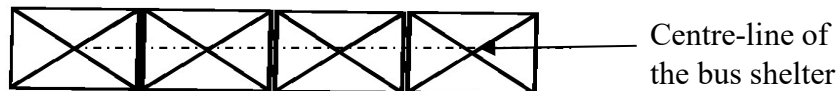
Attribute Format:

Field Name	Data Type	Size	Precision	Scale	Allow Null	Value	Description
TYP_CD	String	4	0	0	No	Please see Note 7	
						A	Type A
						AC	Type AC
						AF	Type AF
						AP	Type AP
						B	Type B
						C	Type C
						CA	Type CA
						CB	Type CB
						CE	Type CE
						CO	Type CO
						CR	Type CR
						FR	Type FR
						O	Others
						OO	Type OO
						RM	Type RM
						RS	Type RS
BAY_IND	String	1	0	0	No	N	No bus bay
						F	Flexible (premixed) bus bay
						R	Rigid (concreted) bus bay
BUS_STOP_NUM	String	65	0	0	No	Please see Note 2	
UNIT_CNT	Short	2	1	0	No	Number of units of the bus shelter. Please see Note 6	
BUS_ROOF_NUM	String	10	0	0	No	Please see Note 3	
STATUS	String	20	0	0	No	OP	OPERATIONAL
						NOP	NON-OPERATIONAL
SERVICE_TYPE	String	20	0	0	No	BA	BASIC (DAY)
						NB	NON BASIC (NIGHT)
						BO	BOTH (DAY&NIGHT)
						BT	BUS TERMINAL
						BI	BUS INTERCHANGE
						BD	BUS DEPOT
LVL_NUM	Short	2	4	0	No	NA	NIL
						Level of road where feature exists	
						2	At-grade (ground level)
						8	1st level depressed road
						9	1st level elevated road
						7	2nd level depressed road
						10	2nd level elevated road

Field Name	Data Type	Size	Precision	Scale	Allow Null	Value	Description
RD_CD	Text	6	0	0	No	Refer to list	Road Code (assigned to the Road Name) where feature exists
LOC_DESC	Text	255	0	0	No		Location Description as shown on the bus stop pole

Notes:

- The centre-line of the bus shelter along its length should be recorded.



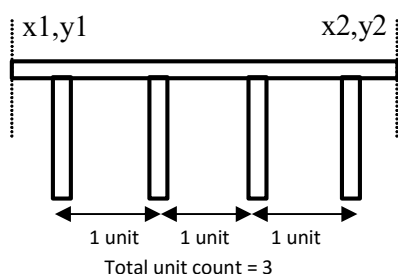
- BUS_STOP_NUM - The five digit bus stop identification number that is displayed on the bus stop pole e.g. 50071. To record A as 1, Z as 9, B as 2, Y as 8 etc if the identification number contains alphabets.



- BUS_ROOF_NUM - B-Series number showed on the side of bus shelter roof e.g. B01.



- If TYP_CD is not in the list, assign type 'O' (Others), and attach the photographs.
- The length of the BUS SHELTER is to be recorded as from (x1, y1) to (x2, y2) i.e. the length of the roof. The number of units (UNIT_CNT) is illustrated below. If the no of units is not very obvious, the no of units should be derived by dividing the whole length of the bus shelter by 3 and rounding the result to the nearest whole no.



6. List of TYP_CD:



Type A



Type AC



Type AF



Type AP



Type B



Type C



Type CA



Type CB



Type CE



Type CO



Type CR



Type FR



Type OO



Type RM



Type RS



Type 1C



Type 1F



Type IH



Type 1P



Type 1S

16.5 Bus Stop Pole (Point)

Description: A point representation of a pole to display the bus service numbers calling at the bus-stop.

Attribute Format:

Field Name	Data Type	Size	Precision	Scale	Allow Null	Value	Description
BUS_STOP_NUM	String	65	0	0	No		Please see Note 2
BUS_ROOF_NUM	String	10	0	0	No		Please see Note 3
STATUS	String	20	0	0	No	OP	OPERATIONAL
						NOP	NON-OPERATIONAL
SERVICE_TYPE	String	20	0	0	No	BA	BASIC (DAY)
						NB	NON BASIC (NIGHT)
						BO	BOTH (DAY&NIGHT)
						BT	BUS TERMINAL
						BI	BUS INTERCHANGE
						BD	BUS DEPOT
						NA	NIL
LVL_NUM	Short	2	4	0	No		Level of road where feature exists
						2	At-grade (ground level)
						8	1st level depressed road
						9	1st level elevated road
						7	2nd level depressed road
						10	2nd level elevated road
RD_CD	Text	6	0	0	No	Refer to list	Road Code (assigned to the Road Name) where feature exists
LOC_DESC	Text	255	0	0	No		Location Description as shown on the bus stop pole

Notes:

- Record the co-ordinate of the BUS STOP POLE.



2. **BUS_STOP_NUM** - The five digit bus stop identification number that is displayed on the bus stop pole eg.50071 or 27301 as shown on new design. To record A as 1, Z as 9, B as 2, Y as 8 etc if the identification number contains alphabets.



3. **BUS_ROOF_NUM** - B-Series Number showed on the side of bus shelter roof e.g. B01.



4. **SERVICE_TYPE**

- a) **BASIC (Day)**

This type of bus stop caters to services provided from 5.00am to 12.00midnight



- b) **NON BASIC (Night)**

This type of bus stop caters to services provided from 12.00 midnight to 4.30am



- c) **BOTH (Day & Night)**

This type of bus stop caters to both day and night bus services



16.6 Control Box (Point)

Description: A point representation of a box containing electronic device to control traffic lights or street lighting. The Traffic Signal CONTROL BOX is found near signalised traffic junctions. Each traffic signal junction can have only ONE traffic signal control box. The collection of data covers only signalised junction, road crossing and street lighting control boxes. (Please refer to Note 1)

Attribute Format:

Field Name	Data Type	Size	Precision	Scale	Allow Null	Value	Description
TYP_CD	String	6	0	0	No	Please see Note 1	
						ERP	Electronic Road Pricing
						J-EYES	J-Eyes Junction
						LB	Lighting Box
						OG	Over ground
						TS	Traffic Signal
CNTL_BOX_NUM	String	20	0	0	No	Control box number	
LVL_NUM	Short	2	4	0	No	Level of road where feature exists	
						2	At-grade (ground level)
						8	1st level depressed road
						9	1st level elevated road
						7	2nd level depressed road
						10	2nd level elevated road
RD_CD	Text	6	0	0	No	Refer to list	Road Code (assigned to the Road Name) where feature exists




Notes:

- Only the control boxes that have LTA logo need to be captured.



2. List of TYP_CD:

TYP_CD	Description	
ERP	Electronic Road Pricing	
J-EYES	J-Eyes Junction	

TYP_CD	Description	
LB	Street Lighting	
OG	Over ground	
TS	Traffic Signal	

16.7 Convex Mirror (Point)

Description: A point representation of a mirror placed at street locations where visibility is poor.

Attribute Format:

Field Name	Data Type	Size	Precision	Scale	Allow Null	Value	Description
BEARG_NUM	Double	8	38	8	No		Bearing. Please see Note 2
LVL_NUM	Short	2	4	0	No		Level of road where feature exists
						2	At-grade (ground level)
						8	1st level depressed road
						9	1st level elevated road
						7	2nd level depressed road
						10	2nd level elevated road
RD_CD	Text	6	0	0	No	Refer to list	Road Code (assigned to the Road Name) where feature exists

Notes:

- Record the co-ordinate of the pole on which the CONVEX MIRROR is mounted.



- Bearing of convex mirror



16.8 Covered Linkway (Polygon)

Description: A polygon representation of a covered passage designated for pedestrian use to link up with other commuters facilities.

Attribute Format:

Field Name	Data Type	Size	Precision	Scale	Allow Null	Value	Description
DESIGN_TYP	String	6	0	0	No	Please Note 2	
						1PF	Single Pole Flat Roof (Mono pitch)
						2PF	Double Pole Flat Roof (Mono pitch)
						1PP	Single Pole Double Pitch Roof
						2PP	Double Pole Double Pitch Roof
						1PC	Single Pole Curve Roof
						2PC	Double Pole Curve Roof
ROOF MATERIAL	String	4	0	0	No	Type of Roof material	
						A	Aluminium
						P	Polycarbonate
						T	Tiles
						X	Others
WDT_CATG_CD	Short	2	4	0	No	Indicates width of linkway roof	
						1	< 2.4m
						2	2.4m
						3	>2.4m
HEIGHT	String	2	0	0	No	Indicates linkway height	
						H	High > 4.5m
						L	Low < 4.5m
LVL_NUM	Short	2	4	0	No	Level of road where feature exists	
						2	At-grade (ground level)
						8	1st level depressed road
						9	1st level elevated road
						7	2nd level depressed road
RD_CD	Text	6	0	0	No	10	2nd level elevated road
						Refer to list	Road Code (assigned to the Road Name) where feature exists

Notes:

- a) The COVERED LINKWAY shall be represented by a polygon outlining the structure as seen from aerial view. The outline shall correspond to the outer edge of the roof of the covered linkway, as shown on example below by points 1, 2, 3, 4, 5, 6, 7, 8 & 9.



- b) List of TYP_CD



Type 1PF - Single pole flat roof



Type 2PF - Double pole flat roof



Type 1PP - Single pole double pitch roof



Type 2PP - Double pole double pitch roof



Type 1PC - Single pole curve roof



Type 2PC - Double pole curve roof

16.9 Cycling Marking (Point)

Description: A point representation a layer structure which will store both cycling path and bicycle crossing marking information; to differentiate which markings belongs to which category (i.e. Cycling Path Marking or Bicycle Crossing Marking).

Attribute Format:

Field Name	Data Type	Size	Precision	Scale	Allow Null	Value	Description
CYL_PATH_CD	String	6	0	0	No		The Cycle path code that uniquely identifies the Cycling path name.
RD_CD	String	6	0	0	No		The road code that uniquely identifies the road name. The road name is a unique name assigned for each road segment by the Street and Building Names Board.
LVL_NUM	Short	4	0	0	No		Level of road where feature exists
						2	At-grade (ground level)
						8	1st level depressed road
						9	1st level elevated road
						7	2nd level depressed road
						10	2nd level elevated road
CATG_CD	String	1	0	0	No		Category of Cycling Marks
						BYC	Bicycle Crossing Markings
						CYC	Cycling Path Markings
TYP_CD	String	25	0	0	No	ARRW	Arrows
						BL	Bicycle Logo
						BLPM	Bicycle Logo Pavement Marker
						FL	Footprint Logo
						LW	LOOK Word
						SL	STOP Line
						STS	Strips
						SW	STOP Word
BEARG_NUM	Double	38	0	0	No		The bearing of the feature in relation to true north





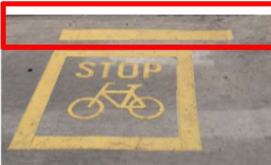

Notes:

- List of CATG_CD:

TYP_CD	Description	
BYC	Bicycle Crossing Marking	

TYP_CD	Description	
CYC	Cycling Path Markings	

2. List of TYP_CD:

TYP_CD	Description	
BL	Bicycle Logo	
BLPM	Bicycle Pavement Marker	
FL	Footprint Logo	
LW	LOOK Word	
SL	Stop Line	
STS	Strips	

TYP_CD	Description	
SW	STOP Word	

16.10 Cycling Path (Line)

Description: A line representation of the paths which will facilitate intra-town cycling connecting cyclists from their homes to key public transport hubs (such as MRT stations and bus interchanges), amenities (such as neighbourhood centres, markets, school) and Park Connector Network that run through other towns.

Attribute Format:

Field Name	Data Type	Size	Precision	Scale	Allow Null	Value	Description
CYL_PATH_CD	String	6	0	0	No		The Cycle path code that uniquely identifies the Cycling path name.
RD_CD	String	6	0	0	No		The road code that uniquely identifies the road name. The road name is a unique name assigned for each road segment by the Street and Building Names Board.
LVL_NUM	Short	4	0	0	No		Level of road where feature exists
						2	At-grade (ground level)
						8	1st level depressed road
						9	1st level elevated road
						7	2nd level depressed road
						10	2nd level elevated road
AGENCY_IMPL	String	6	0	0	No		Implementing agencies.
AGENCY_MAINT	String	6	0	0	No		Maintenance agencies.
WIDTH	Double	8	0	0	Yes		Width of Cycle Path(m).
TYPE_MATERIAL	String	6	0	0	Yes		Type of Material.
						FRPCC	Fibre Re-enforced Polymer Concrete Coating
						None	None
SPEED	Double	2	0	0	Yes		Speed Limit (KM/Hour)
FT_MINUTES	Double	4	0	0	Yes		FROM TO Minutes
TF_MINUTES	Double	4	0	0	Yes		TO FROM Minutes
ONEWAY	String	2	0	0	Yes		Cycle path direction.
						FT	FROM-TO Direction
						TF	TO- FROM Direction
						N	Closed

16.11 Cycling Path (Under Planning) (Line)

Description: A line representation of the paths under planning stage which will facilitate intra-town cycling connecting cyclists from their homes to key public transport hubs (such as MRT stations and bus interchanges), amenities (such as neighbourhood centres, markets, school) and Park Connector Network that run through other towns.

Attribute Format:

Field Name	Data Type	Size	Precision	Scale	Allow Null	Value	Description
CYL_PATH_CD	String	6	0	0	No		The Cycle path code that uniquely identifies the Cycling path name.
RD_CD	String	6	0	0	No		The road code that uniquely identifies the road name. The road name is a unique name assigned for each road segment by the Street and Building Names Board.
LVL_NUM	Short	4	0	0	No		Level of road where feature exists
						2	At-grade (ground level)
						8	1st level depressed road
						9	1st level elevated road
						7	2nd level depressed road
						10	2nd level elevated road
AGENCY_IMPL	String	6	0	0	No		Implementing agencies.
AGENCY_MAINT	String	6	0	0	No		Maintenance agencies.
WIDTH	Double	8	0	0	Yes		Width of Cycle Path(m).
TYPE_MATERIAL	String	6	0	0	Yes		Type of Material.
						FRPCC	Fibre Re-enforced Polymer Concrete Coating
						None	None
SPEED	Double	2	0	0	Yes		Speed Limit (KM/Hour)
FT_MINUTES	Double	4	0	0	Yes		FROM TO Minutes
TF_MINUTES	Double	4	0	0	Yes		TO FROM Minutes
ONEWAY	String	2	0	0	Yes		Cycle path direction.
						FT	FROM-TO Direction
						TF	TO- FROM Direction
						N	Closed

16.12 Cycling Path Lighting Poles (Point)

Description: A point representation of a pole for mounting cycling path lighting.

Attribute Format:

Field Name	Data Type	Size	Precision	Scale	Allow Null	Value	Description
CYL_PATH_CD	String	6	0	0	No		The Cycle path code that uniquely identifies the Cycling path name.
RD_CD	String	6	0	0	No		The road code that uniquely identifies the road name. The road name is a unique name assigned for each road segment by the Street and Building Names Board.
LVL_NUM	Short	4	0	0	No		Level of road where feature exists
						2	At-grade (ground level)
						8	1st level depressed road
						9	1st level elevated road
						7	2nd level depressed road
						10	2nd level elevated road
POLE_NUM	String	20	0	0	Yes		Pole Number
DIST_POLE	Number	4	0	0	Yes		Distance between two poles(m)
BRIGHTNESS	Double	8	0	0	Yes		Brightness of the light

16.13 Cycling Signs (Point)

Description: A point representation of the cycling sign (i.e. Cycling Path Signs, Bicycle Crossing Signs) that help to regulate, warn, guide or inform all cycling path users.

Attribute Format:

Field Name	Data Type	Size	Precision	Scale	Allow Null	Value	Description
CYL_PATH_CD	String	6	0	0	No		The Cycle path code that uniquely identifies the Cycling path name.
RD_CD	String	6	0	0	No		The road code that uniquely identifies the road name. The road name is a unique name assigned for each road segment by the Street and Building Names Board.
LVL_NUM	Short	4	0	0	No		Level of road where feature exists
						2	At-grade (ground level)
						8	1st level depressed road
						9	1st level elevated road
						7	2nd level depressed road
						10	2nd level elevated road
CATG_CD	String	1	0	0	No		Category of Cycling Signs
						BYC	Bicycle Crossing Signs
						CYC	Cycling Path Signs
TYP_CD	String	25	0	0	No		Please refer to Section 18 for the Type code
BEARG_NUM	Double	38	0	0	No		Bearing of Cycling Sign
MOUNT_MTD_CD	String	1	0	0	Yes		The method used to mount the feature
						B	Bridge
						G	Gantry
						L	Lamp Post
						P	1-Pole
						Q	2-Pole
						S	Traffic Signal
						W	Wall
						X	Others

16.14 Detector Loop (Polygon)

Description: A polygon representation of an electronic loop on the road surface at strategic locations to detect traffic movements for traffic control purposes.

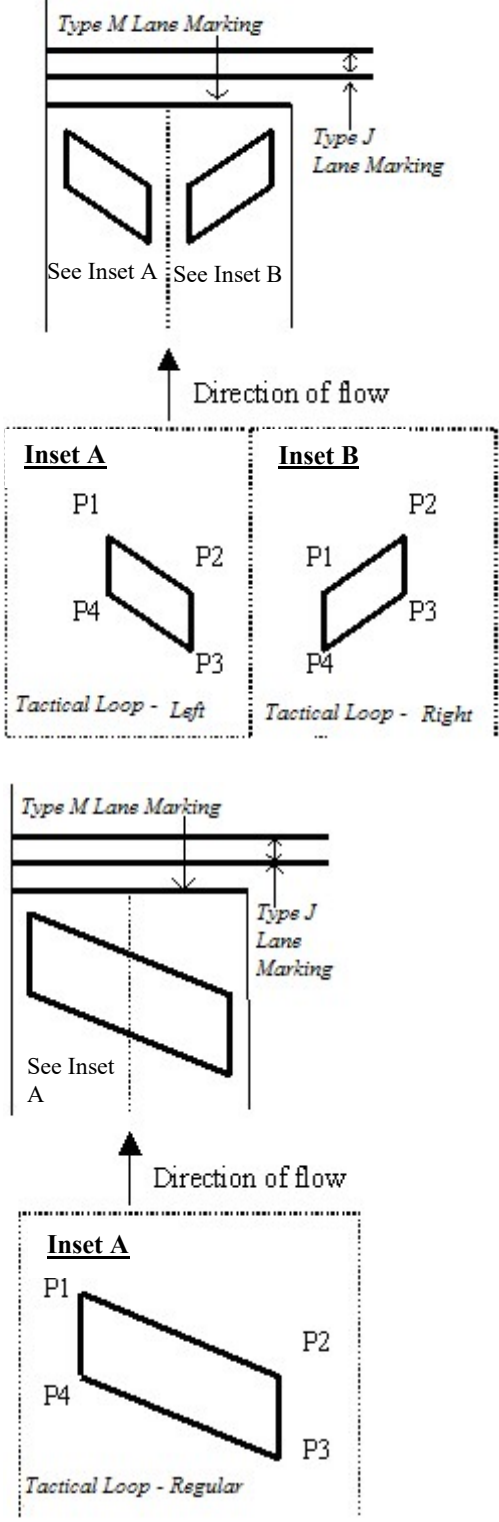
Attribute Format:

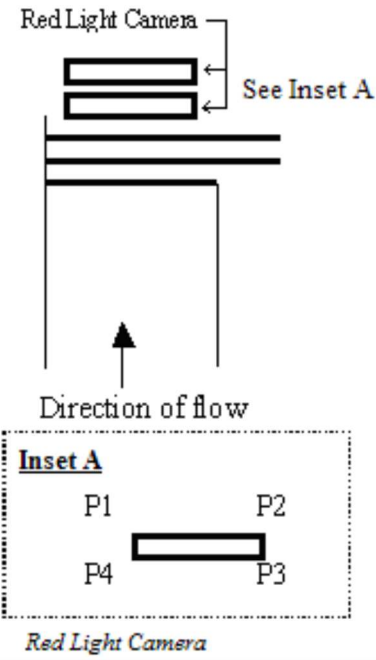
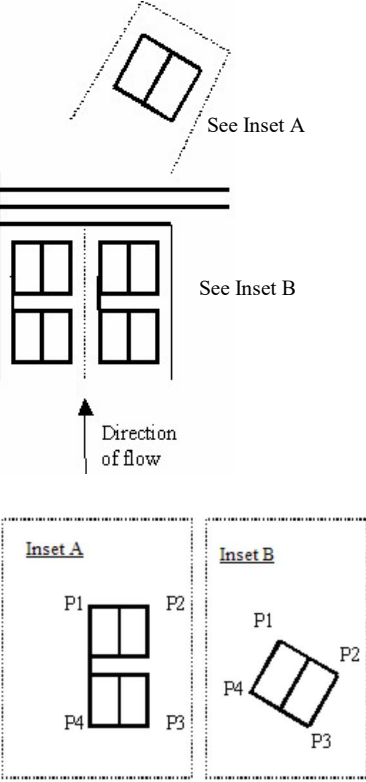
Field Name	Data Type	Size	Precision	Scale	Allow Null	Value	Description
TYP_CD	String	4	0	0	No	Please see Note 1	
						B	Bus Detector
						I	Tactical Loop – RIGHT
						L	Tactical Loop – LEFT
						R	Red Light Camera
						S	Strategic Loop
						T	Tactical Loop – REGULAR
LVL_NUM	Short	2	4	0	No	Level of road where feature exists	
						2	At-grade (ground level)
						8	1st level depressed road
						9	1st level elevated road
						7	2nd level depressed road
						10	2nd level elevated road
RD_CD	Text	6	0	0	No	Refer to list	Road Code (assigned to the Road Name) where feature exists

Notes:

- List of TYP_CD:

TYP_CD	Description
B	Bus Detector Loop For detecting buses along bus lanes. They are always 10m in length. Collection rules are the same as that for Strategic Loop.

TYP_CD	Description
L, I & T	<p>Tactical Loop For detecting existence of traffic at junction approaches. It is a trapezoid that slants at 45° to the stop line, and spans two or three lanes. It can also be a regular rectangle that spans two or three lanes. Tactical Loops always occur before the stop line.</p> <p>Tactical Loop – Left , Right & Regular are to be recorded, as shown in their respective insets, where coordinates of points P1, P2, P3 and P4 are to be recorded as vertices of the polygon.</p>  <p>The diagram illustrates three types of Tactical Loops: Left, Right, and Regular. Each type is shown in a main diagram and a corresponding inset.</p> <ul style="list-style-type: none"> Tactical Loop - Left: The main diagram shows a trapezoid slanted at 45° to the stop line, spanning two lanes. The inset shows a trapezoid with vertices P1, P2, P3, and P4. The label 'Tactical Loop - Left' is present. Tactical Loop - Right: The main diagram shows a trapezoid slanted at 45° to the stop line, spanning two lanes. The inset shows a trapezoid with vertices P1, P2, P3, and P4. The label 'Tactical Loop - Right' is present. Tactical Loop - Regular: The main diagram shows a regular rectangle spanning two lanes. The inset shows a rectangle with vertices P1, P2, P3, and P4. The label 'Tactical Loop - Regular' is present. <p>Common labels in the diagrams include 'Type M Lane Marking', 'Type J Lane Marking', 'See Inset A', 'See Inset B', and 'Direction of flow'.</p>

TYP_CD	Description
R	<p>Light Camera</p> <p>For each of the detector loop rectangles shown below, coordinates of points P1, P2, P3 and P4 are to be recorded as vertices of the polygon.</p> 
S	<p>Strategic Loop</p> <p>For monitoring speed and number of vehicles passing within a lane. The illustration below depicts two types of strategic loop. Each type is to be recorded as shown in the inset, where coordinates of points P1, P2, P3 and P4 are to be recorded as the vertices of the polygon.</p> 

16.15 Emergency Gate (Point)

Description: A point representation of a gate found along an expressway to be used during an emergency. The co-ordinate of EMERGENCY GATE is to be recorded at the centre point of the Gate.

Attribute Format:

Field Name	Data Type	Size	Precision	Scale	Allow Null	Value	Description
LVL_NUM	Short	2	4	0	No	Level of road where feature exists	
						2	At-grade (ground level)
						8	1st level depressed road
						9	1st level elevated road
						7	2nd level depressed road
						10	2nd level elevated road
RD_CD	Text	6	0	0	No	Refer to list	Road Code (assigned to the Road Name) where feature exists

Notes:

1. An emergency gate.



16.16 Footpath (Line)

Description: A line representation of a path designated for pedestrian use. It is usually associated with bus shelter, passenger pick-up bay or taxi shelter.






Attribute Format:

Field Name	Data Type	Size	Precision	Scale	Allow Null	Value	Description
TYP_CD	String	4	0	0	No	Please Note 2	
						B	Bricks
						C	Concrete
						G	Granolithic
						O	Others
						S	Slabbed
						T	Tile
WDT_CATG_CD	Short	2	4	0	No	Width Category	
						1	<=1.2m width
						2	>1.2 & <2m width
						3	>=2m width
GRNT_IND	String	1	0	0	No	Drain grating indicator	
						Y	Yes
						N	No
LVL_NUM	Short	2	4	0	No	Level of road where feature exists	
						2	At-grade (ground level)
						8	1st level depressed road
						9	1st level elevated road
						7	2nd level depressed road
						10	2nd level elevated road
RD_CD	Text	6	0	0	No	Refer to list	Road Code (assigned to the Road Name) where feature exists

Notes:

1. The centre line of the FOOTPATH is to be captured.
2. List of TYP_CD:

TYP_CD	Description	Remarks
B	Bricks	

TYP_CD	Description	Remarks
C	Concrete	
G	Granolithic	 
S	Slabbed	
T	Tile	

16.17 Gantry (Line)

Description: A line representation of a raised metallic structure spanning across a carriageway to support signage or electronic equipment.

Attribute Format:

Field Name	Data Type	Size	Precision	Scale	Allow Null	Value	Description
TYP_CD	String	4	0	0	No	Please see Note 2	
						D	Directional
						E	EMAS
						H	Height Limit
						P	ERP
GENTRY_NUM	String	10	0	0	Yes	The number on the gantry	
MIN_HT_NUM	Double	8	38	8	No	Lowest of three readings, $\pm 0.1\text{m}$ accuracy. Please see Note 1.	
LVL_NUM	Short	2	4	0	No	Level of road where feature exists	
						2	At-grade (ground level)
						8	1st level depressed road
						9	1st level elevated road
						7	2nd level depressed road
						10	2nd level elevated road
RD_CD	Text	6	0	0	No	Refer to list	Road Code (assigned to the Road Name) where feature exists

Notes:

- Three readings of relative height between the bottom of the GANTRY and road surface at three different locations are required. The lowest reading shall be recorded in MIN_HT_NUM field.
- List of TYP_CD:

TYP_CD	Description	
D	Directional	

TYP_CD	Description	
E	EMAS	
H	Height Limit	
P	ERP	

16.18 Guardrail (Line)

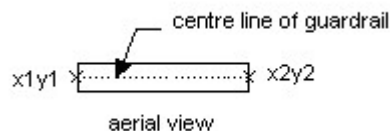
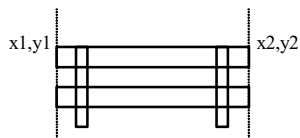
Description: A line representation of a safety barrier to prevent vehicles from going off the road carriageway.

Attribute Format:





Field Name	Data Type	Size	Precision	Scale	Allow Null	Value	Description
TYP_CD	String	4	0	0	No	Please see Note 1, 3	
						CC	Crash Cushion
						SD	Steel P, Double layer
						SS	Steel P, Single layer
						ST	Steel P, Triple layer
						TB	Thrie Beam
						TD	Timber P, Double layer
						TS	Timber P, Single layer
LVL_NUM	Short	2	4	0	No	Level of road where feature exists	
						2	At-grade (ground level)
						8	1st level depressed road
						9	1st level elevated road
						7	2nd level depressed road
						10	2nd level elevated road
RD_CD	Text	6	0	0	No	Refer to list	Road Code (assigned to the Road Name) where feature exists

Notes:

1. The TYP_CD field, i.e. 'Steel' or 'Timber' refers to the make of the pole of the GUARDRAIL.
2. The length of the GUARDRAIL is the two end-most points.

**3. List of TYP_CD:**

TYP_CD	Description	
CC	Crash Cushion	

TYP_CD	Description	
SD	Steel P, Double layer	
SS	Steel P, Single layer	
ST	Steel P, Triple layer	
TB	Thrie Beam	

TYP_CD	Description	
TS	Timber P, Single layer	

16.19 Kerblane (Line)

Description: A line representation of the edges of carriageway used for vehicular traffic.

Attribute Format:

Field Name	Data Type	Size	Precision	Scale	Allow Null	Value	Description
LVL_NUM	Short	2	4	0	No		Level of road where feature exists
						2	At-grade (ground level)
						8	1st level depressed road
						9	1st level elevated road
						7	2nd level depressed road
						10	2nd level elevated road
						16	temporary

Notes:

1. KERBLINES for both edges of the carriageway, central dividers and islands are to be captured.

16.20 Kerb Side Parking (Line)

Description: A line representation of parking facility for vehicles along the side of road.
The span record shall be per TYPE OF PARKING LOTS.

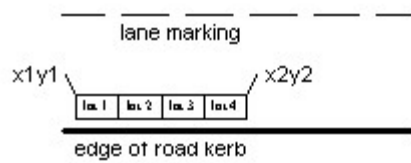
Attribute Format:

Field Name	Data Type	Size	Precision	Scale	Allow Null	Value	Description
TYP_CD	String	4	0	0	No		Please see Note 3
						B	Bus
						C	Car
						CL	Car\Lorry
						H	Heavy Vehicle
						M	Motorcycle
						T	Taxi
LOTS_CNT	Long	4	10	0	No		Number of parking lots
LVL_NUM	Short	2	4	0	No		Level of road where feature exists
						2	At-grade (ground level)
						8	1st level depressed road
						9	1st level elevated road
						7	2nd level depressed road
						10	2nd level elevated road
RD_CD	Text	6	0	0	No	Refer to list	Road Code (assigned to the Road Name) where feature exists




Notes:





1. If there are parking lots for both Motorcycles and Cars along the same location, two separate records for Motorcycle lots and Car lots are to be captured respectively.

2. The length of KERB SIDE PARKING is the two end-most points of parking boundary.



3. List of TYP_CD:

TYP_CD	Description	
B	Bus	
C	Car	
CL	Car\Lorry	

TYP_CD	Description	
H	Heavy Vehicle	
M	Motorcycle	
T	Taxi	
CL	Car\Lorry	

16.21 Lamp Post (Point)

Description: A point representation of a pole for mounting street lighting. Lamp posts on pedestrian overhead bridges and pedestrian underpasses need not be captured.
Each lamp post and its number as displayed on its pole are to be recorded separately.

Attribute Format:

Field Name	Data Type	Size	Precision	Scale	Allow Null	Value	Description
LAMPPOST_NUM	String	20	0	0			The number that is displayed on the lamp post. Please see Note 1.
LVL_NUM	Short	2	4	0	No		Level of road where feature exists
						2	At-grade (ground level)
						8	1st level depressed road
						9	1st level elevated road
						7	2nd level depressed road
						10	2nd level elevated road
RD_CD	Text	6	0	0	No	Refer to list	Road Code (assigned to the Road Name) where feature exists

Note:

1. A lamp post with its lamp post number 27.



16.22 Lane Marking (Line)

Description: A line representation painted on the road surface to guide motorists along the carriageway.

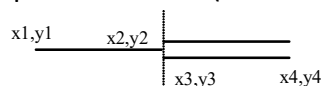
Attribute Format:

Field Name	Data Type	Size	Precision	Scale	Allow Null	Value	Description
TYP_CD	String	4	0	0	No	Please see Note 5	
						A	1m,int 1m,0.1m white
						A1	1m,int 1m,0.1m Yellow
						A2	1m,int 1m,0.2m White
						A3	1m,int 1m,0.3m yellow
						A4	Broken white lines at signalised pedestrian crossing
						A5	Broken white line used to guide motorists across a wide/skewed junction
						A6	Broken white lines at bicycle crossing
						B	2m,int 4m,0.1m white
						B1	2m,int 10m ,0.1m White
						C	4m,int 2m,0.1m white
						C1	4m,int 2m,0.2m white
						D	1m,int 1m,0.1m dbl white
						D1	0.5m,int 0.5m,0.1m dbl white
						E	2.75m,int 2.75m,0.15m white
						F	Centre line,0.15 m white
						G	G - Side Line,0.15 yellow
						H	Continuous Double White Line
						I	Continuous Double Yellow Line
						J	White Line-Ped Crossing
						K	Zig Zag Line
						L	Yellow Line - bus lane
						M	White Line-stop line
						N	Yellow Box Line
						O	Single yellow zig-zag
						P	Double yellow zig-zag
						Q	Multi-headed arrow marking
						R	Bus zone
						S	Continuous red line for full day bus lane
						SZ1	Rumble Strip for Silver Zone
						S1	Dotted red line for full day bus lane
						T	Turning pocket

Field Name	Data Type	Size	Precision	Scale	Allow Null	Value	Description
						U	Pedestrian Ahead marking
						V	Vibraline
						W	Corrugated Reflective Sheeting (waveline)
						X	Traffic calming marking
						Y	Mandatory give way to buses exiting yellow box
LVL_NUM	Short	2	4	0	No		Level of road where feature exists
						2	At-grade (ground level)
						8	1st level depressed road
						9	1st level elevated road
						7	2nd level depressed road
						10	2nd level elevated road
RD_CD	Text	6	0	0	No	Refer to list	Road Code (assigned to the Road Name) where feature exists

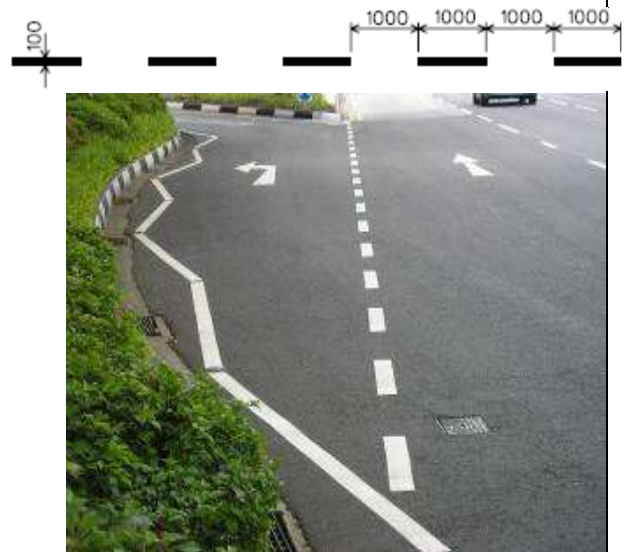
Notes:

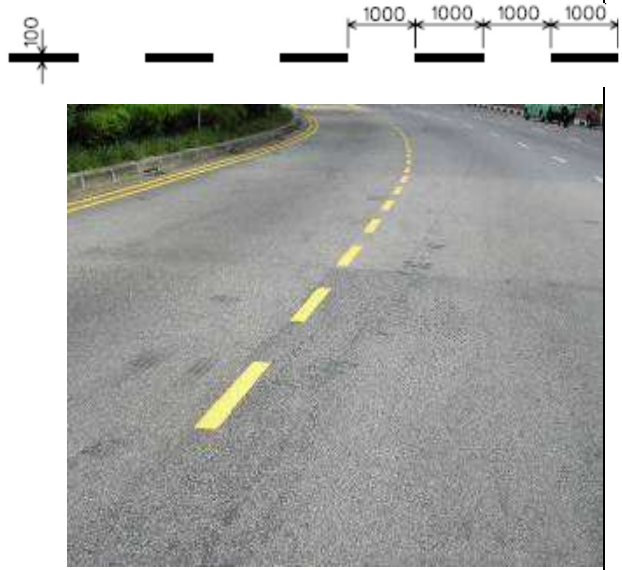

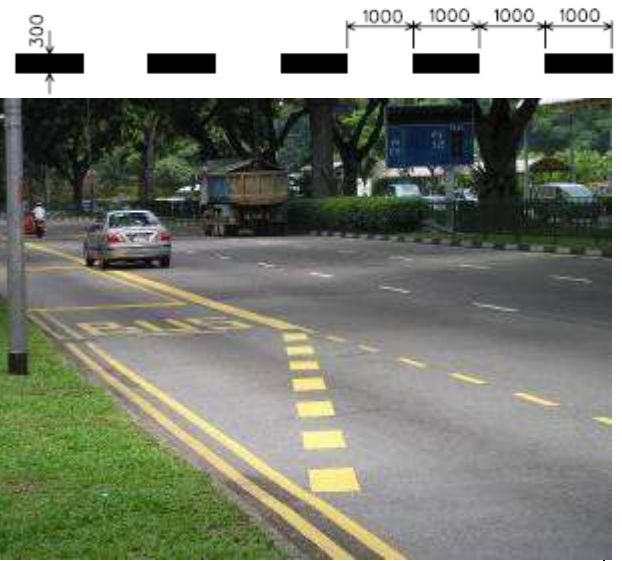
1. LANE MARKINGS within all Road are required to be collected and identified accordingly.
2. All coordinates captured shall be based on the centre of the lines.
3. If part of LANE MARKING is a single line and the other part is a double line, record as two separate records (see example below).



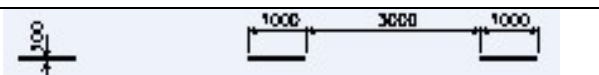





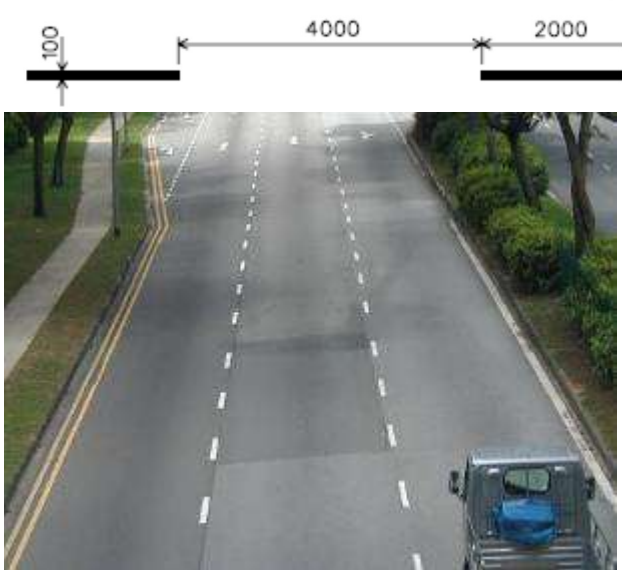
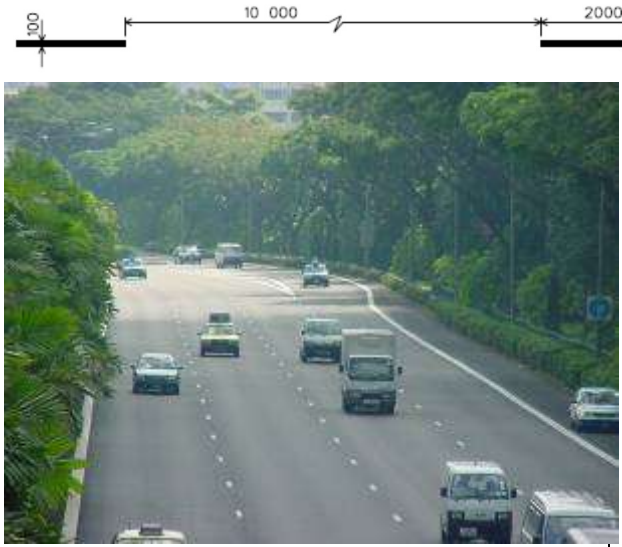

4. For Yellow Box Junction, bus zone and turning pocket capture all the vertices forming the out lines.
5. List of TYP_CD:

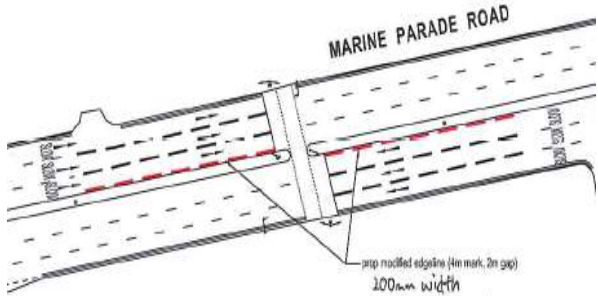
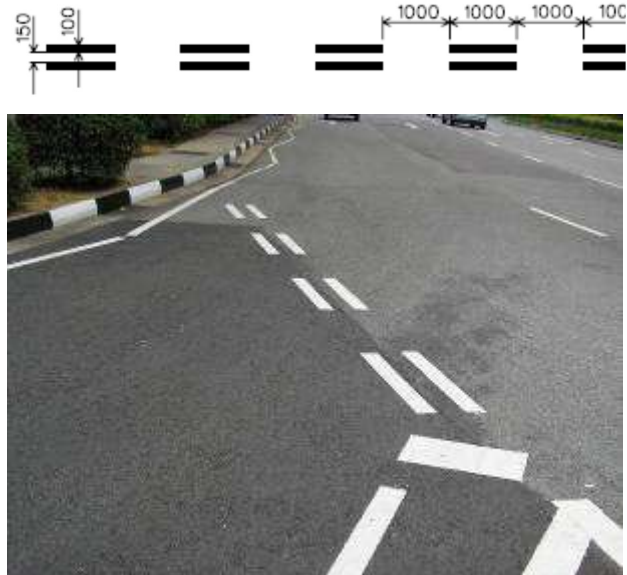

TYP_CD	Colour	Description
A	White	These white lines are used to indicate the edge of the carriageway adjacent to auxiliary lanes e. g. Exclusive right / left turn lanes at junctions, lay-bys, bus bay etc.

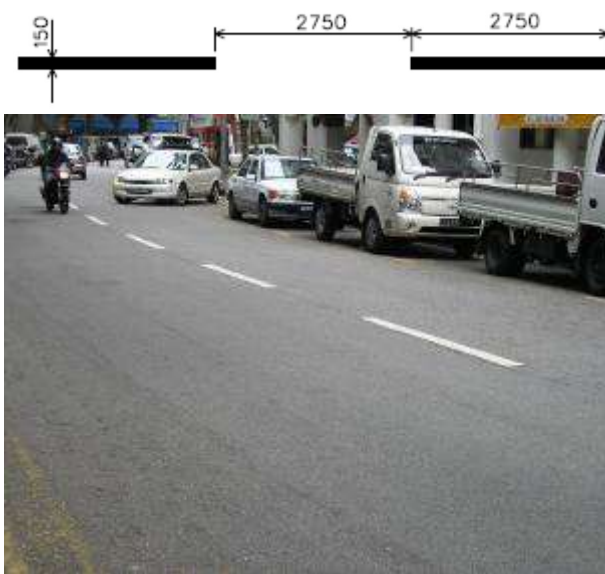
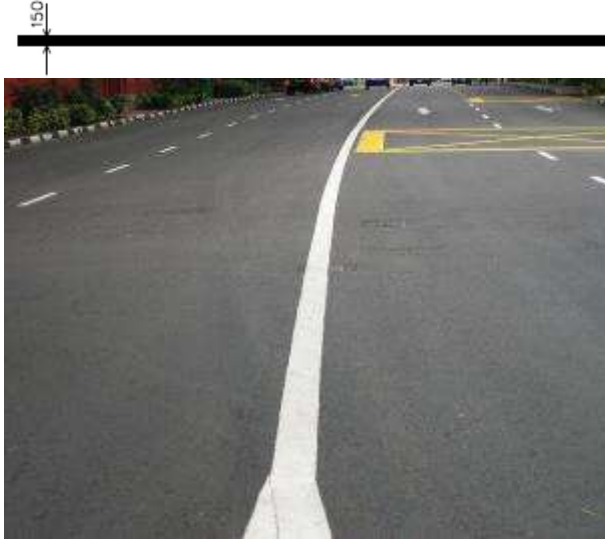



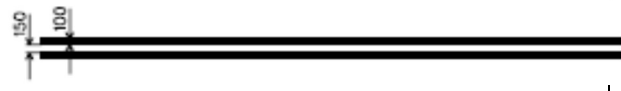

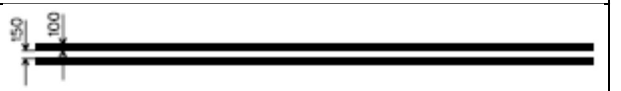



TYP_CD	Colour	Description		
A1	Yellow	These yellow lines are used along bus lanes to indicate a break for use by other turning vehicles	1 m x 1 m x 0.1 m	
A2	White	These white lines are used to indicate the edge of the carriageway adjacent to auxiliary lanes e.g. Exclusive right/left turn lanes at acceleration/deceleration lanes along expressways. It is also known as speed change lane marking	1 m x 1 m x 0.2 m	
A3	Yellow	These broken yellow lines are used along bus lane at junction with side road	1 m x 1 m x 0.3 m	

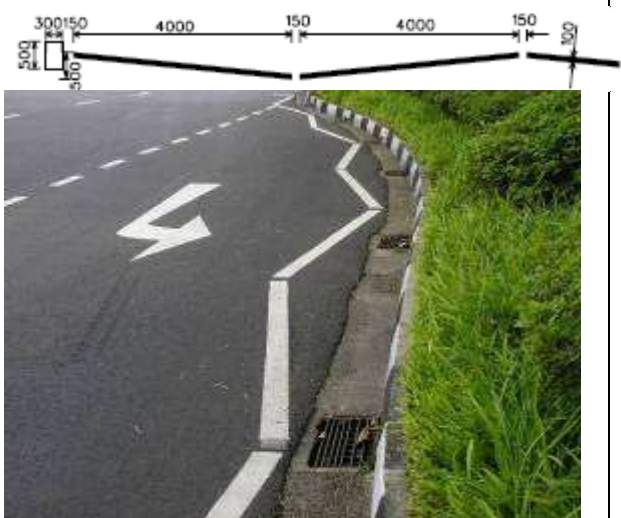

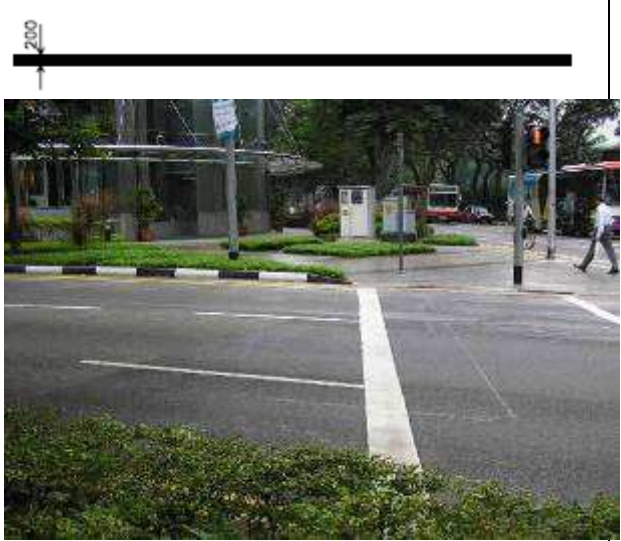
TYP_CD	Colour	Description		
A4	White	These broken white lines are used to demarcate signalised pedestrian crossing lines	0.2mx 0.3mx0.2m	 
A5	White	These broken white lines are used for guiding motorist across a wide/skewed junction	1m x 3m x 0.1m	 
A6	White	These broken white lines are used to demarcate bicycle crossing lines		 

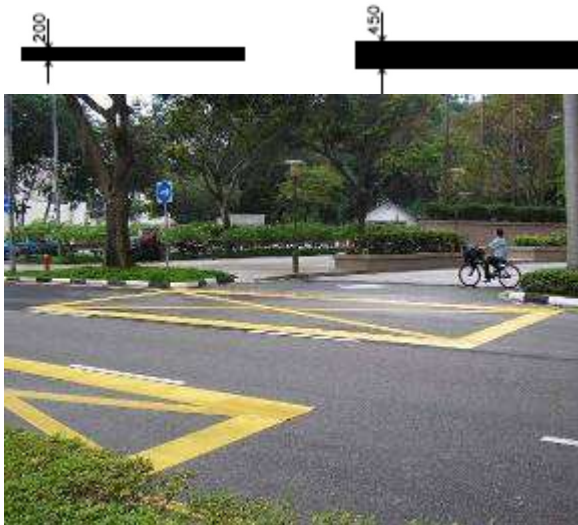
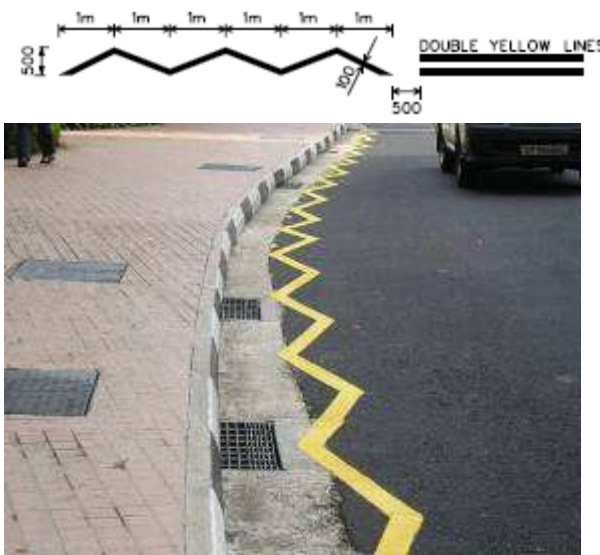
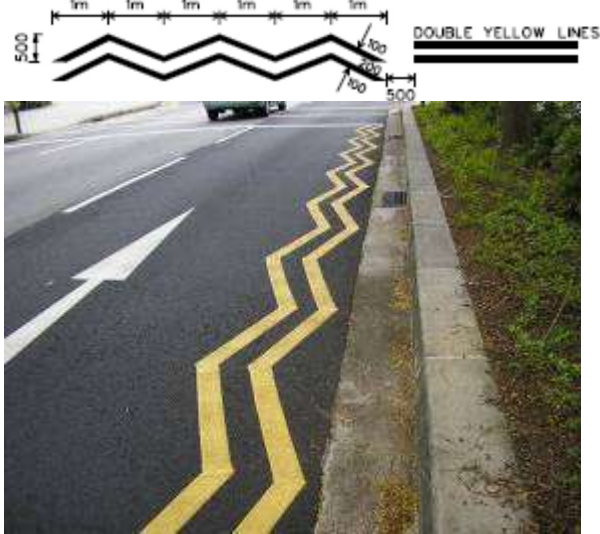
TYP_CD	Colour	Description		
B	White	These white lines are used as lane marking between lanes	2 m x 4 m x 0.1 m	 <p>The diagram shows a cross-section of a road with a 100m wide lane, a 4000m wide section, and a 2000m wide section. The photo shows a road with white dashed lane markings and a truck driving on it.</p>
B1	White	These white lines are used as lane marking between lanes on expressway only	2 m x 10 m x 0.1 m	 <p>The diagram shows a cross-section of a road with a 100m wide lane, a 10 000m wide section, and a 2000m wide section. The photo shows a multi-lane expressway with white dashed lane markings and several cars driving on it.</p>
C	White	These white lines are used as lane markings at light controlled intersection and along the approaches at/before the stop line. (Generally 7 to 10 marks are painted)	4 m x 2 m x 0.1 m	 <p>The diagram shows a cross-section of a road with a 100m wide lane, a 2000m wide section, and a 4000m wide section. The photo shows a road intersection with white lane markings and a stop line.</p>

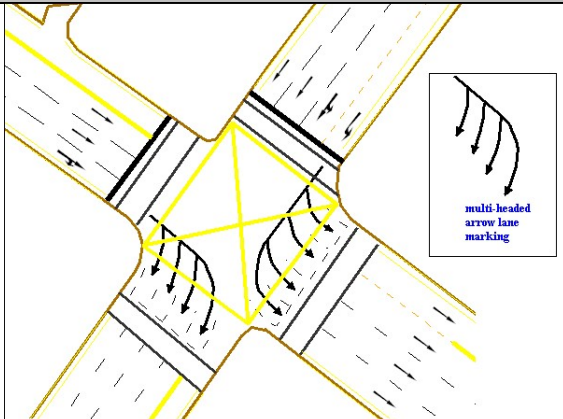



TYP_CD	Colour	Description		
C1	White	These white lines are used as lane markings to serve as edgeline to guide vehicles away from the kerb (generally 7 to 10 marks are painted).	4 m x 2 m (int) x 0.2 m	
D	White-Double	Two parallel white lines indicate that traffic approaching these lines is to give way to oncoming traffic either on the left or right	1 m x 1 m x 0.1 m	
D1	White-Double	Two parallel white lines to indicate lane marking for GWTB (Give Way To Buses) Give Way lines.	0.5 m x 0.5 m (int) x 0.1 m	




TYP_CD	Colour	Description		
E	White	These white lines are used as centre lines on a two-way carriageway	2.75 m x 2.75 m x 0.15 m	
F	White	This continuous white line is used as a centre line on a two-way carriageway and also indicates no parking on both sides	Continuous x 0.15 m	
G	Yellow	This continuous yellow line by the side of the carriageway indicates no parking from 7.00a.m. to 7.00p.m on that side of the carriageway except Sundays and public holidays	Continuous x 0.15 m	

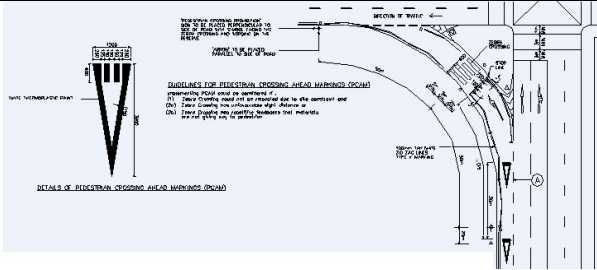


TYP_CD	Colour	Description	
H	White-Double	Two parallel continuous white lines used as centre line on a two-way carriageway or between lanes to indicate no crossing of the lines	Continuous x 0.10 m  
I	Yellow-Double	Two parallel continuous yellow lines by the side of the carriageway indicate no parking at all times on that side of the carriageway	Continuous x 0.10 m  
J	White	This continuous white line is used along expressway adjacent to paved shoulder to indicate the presence of shoulder or adjacent to centre divider to indicate edge line. These are also painted at road crossings to indicate the area where pedestrians/cyclist can cross.	Continuous x 0.30 m  


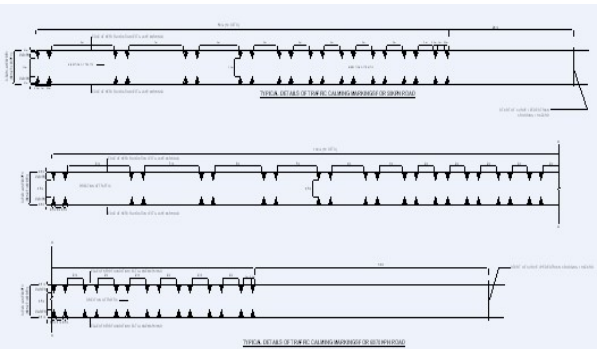

TYP_CD	Colour	Description		
K	White	These zig zag white line are used to indicate approaching zebra crossing. They also indicate no crossing and no parking at area where these lines are painted	Zig Zag x 0.1m	
L	Yellow	This continuous yellow line is used as bus lane marking	Continuous x 0.30 m	
M	White	This continuous white line is used as stop lines & edge lines painted next to the centre divider kerbs. These are also painted along dual 3-lane (and above) roads where street lightings are not provided along the centre divider.	Continuous x 0.20 m	

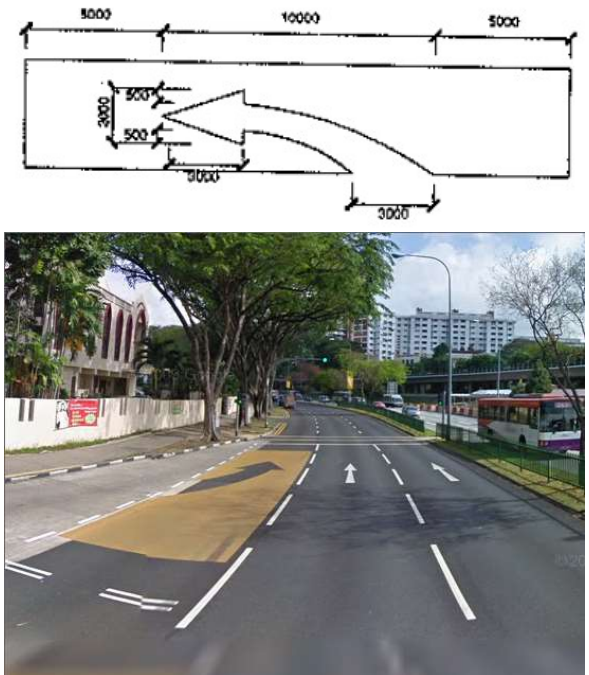
TYP_CD	Colour	Description		
N	Yellow	These continuous yellow lines are used for yellow box junction. 200mm for the diagonals and 455mm for the sides	Continuous	
O	Yellow	Single zig zag yellow line at the edge of a road prohibiting parking at all times	Zig Zag x 0.1m	
P	Yellow-Double	Double zig zag yellow line at the edge of a road prohibiting stopping of vehicles at all times unless the vehicle is prevented from proceeding due to traffic conditions	Zig Zag x 0.1m	

TYP_CD	Colour	Description		
Q	White	Type Q is for multi-headed arrows LANE MARKING	Continuous	 
R	Yellow	Type R is for Bus Zone marking	Continuous	
S	Red	This line is used as a full day bus lane marking.	Continuous	

TYP_CD	Colour	Description		
SZ1	Yellow	SZ1 – width 0.6m, int 0.2m rumble strip for Silver Zone	As shown	 <p>The diagram shows a plan view of a road marking with a '40' speed limit sign. It details a yellow rumble strip with a width of 0.6m and an interval of 0.2m. Below the diagram is a photograph of a road intersection with yellow rumble strips installed across the lanes.</p>
S1	Red	These lines are used along bus lanes to indicate a break for use by other turning vehicles.	Dash	 <p>The photograph shows a road with a red dashed line marking, used to indicate a break in a bus lane for turning vehicles.</p>
T	White	Type T is for Turning Pocket marking	Dash	 <p>The photograph shows a road intersection with white dashed lines marking a turning pocket for vehicles.</p>

TYP_CD	Colour	Description		
U	White	Road crossing ahead marking (PCAM)	As shown	 
V	White	Type V is for Vibraline marking	Continuous	

TYP_CD	Colour	Description		
W	Yellow back-ground with black arrow marking	Corrugated Reflective Sheeting (waveline) used for delineation of bend along the wall/kerb.	Continuous	
X	White	Traffic marking calming	As shown	 

TYP_CD	Colour	Description	
Y	Yellow	Mandatory give way to buses exiting yellow box	

16.23 Miscellaneous Point (Point)




Description: A point representation of a miscellaneous inventory item. The centre of every miscellaneous inventory item is to be captured and recorded separately.

Attribute Format:

Field Name	Data Type	Size	Precision	Scale	Allow Null	Value	Description
TYP_CD	String	4	10	0	No	Please see Note 1	
						IRS	Intelligent Road Stud
						OD	Orange Disc
						P	Pavement marker
LVL_NUM	Short	2	4	0	No	Level of road where feature exists	
						2	At-grade (ground level)
						8	1st level depressed road
						9	1st level elevated road
						7	2nd level depressed road
						10	2nd level elevated road
RD_CD	Text	6	0	0	No	Refer to list	Road Code (assigned to the Road Name) where feature exists

Notes:

1. List of TYP_CD:

TYP_CD	Description	
IRS	Intelligent Road Stud	
P	Pavement Marker	
OD	Orange Disc	

16.24 Passenger Pickup Bay (Line)

Description: A line representation of the area along the side of road for vehicles to pick up or drop off passengers. PICKUP BAY is normally found at MRT/LRT stations and commercial sites, where its shelter may be an extension of an adjoining TAXI SHELTER.

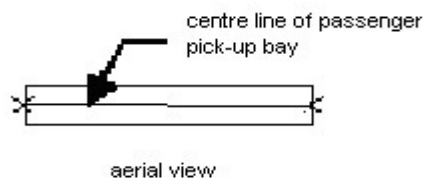
Slab over drains at the centre median should not be considered as footpath.

Attribute Format:

Field Name	Data Type	Size	Precision	Scale	Allow Null	Value	Description
BAY_CNT	Short	2	4	0	No		Number of continuous bays provided along the kerb for passenger pickup or drop off
LVL_NUM	Short	2	4	0	No		Level of road where feature exists
						2	At-grade (ground level)
						8	1st level depressed road
						9	1st level elevated road
						7	2nd level depressed road
						10	2nd level elevated road
RD_CD	Text	6	0	0	No	Refer to list	Road Code (assigned to the Road Name) where feature exists

Notes:

- The span of PICKUP BAY shall be the two end-most points of the bays.



16.25 Pedestrian Overhead Bridge/Underpass (Polygon)

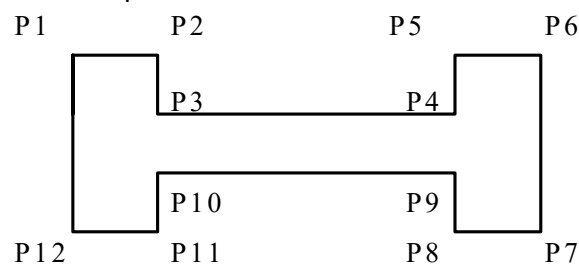
Description: A polygon representation of a raised or underground structure to be used by pedestrians to cross a road or canal.

Attribute Format:

Field Name	Data Type	Size	Precision	Scale	Allow Null	Value	Description
TYP_CD	String	4	0	0	No	Please see Note 1	
						BW	Broad Walk
						EB	Eco Bridge
						FB	Foot Bridge
						PB	Pedestrian Bridge
						PO	Pedestrian Overhead Bridge
						PU	Pedestrian Underpass
BRDG_NUM	String	20	0	0	No	The number on the bridge or underpass. Please see Note 4.	
MIN_HT_NUM	Double	8	38	8	No	Lowest of 3 readings, $\pm 0.1\text{m}$ accuracy. Please see Note 2. Minimum Height for Pedestrian Underpass is not required.	
SHLTR_IND	String	1	0	0	No	Please see Note 3	
						Y	Yes
						N	No
LVL_NUM	Short	2	4	0	No	Level of road where feature exists	
						2	At-grade (ground level)
						8	1st level depressed road
						9	1st level elevated road
						7	2nd level depressed road
						10	2nd level elevated road
RD_CD	Text	6	0	0	No	Refer to list	Road Code (assigned to the Road Name) where feature exists
BCYL_WHL_RAMP	String	1	0	0	Yes	Bicycle Wheeling Ramp	

Notes:

- The PEDESTRIAN OVERHEAD BRIDGE/UNDERPASS shall be represented by a polygon outlining the structure as seen from aerial view. The outline shall correspond to the outer edge of the bridge railing and the base of the staircases at either end of the bridge. Points P1 to P12 need to be captured.







Aerial view of a Pedestrian Overhead Bridge with staircases at both ends

2. Three readings of relative height between the bottom of PEDESTRIAN OVERHEAD BRIDGE and the road surface at three different locations are required. The lowest reading shall be recorded in MIN_HT_NUM field.
3. If the PEDESTRIAN OVERHEAD BRIDGE is sheltered, SHLTR_IND = 'Y' otherwise SHLTR_IND = 'N'.
4. Examples of the Bridge ID of the PEDESTRIAN OVERHEAD BRIDGE/UNDERPASS.

Type	Description	
PO	Pedestrian Overhead Bridge	
PU	Pedestrian Underpass	

5. List of TYP_CD:

TYP_CD	Description	
BW	Broad Walk	

TYP_CD	Description	
EB	Eco Bridge	
FB	Foot Bridge	
PB	Pedestrian Bridge	
PO	Pedestrian Overhead Bridge	

TYP_CD	Description	
PU	Pedestrian Underpass	

6. By default “Bicycle Wheeling Ramp” field values will be updated to “No”, user allowed to amend the same.

16.26 Railing (Line)

Description: A line representation of a metallic barrier to separate two areas; example, between two road carriageways, along edges of road or embankment etc.

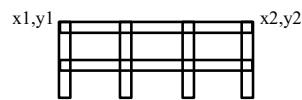
Attribute Format:

Field Name	Data Type	Size	Precision	Scale	Allow Null	Value	Description
TYP_CD	String	4	0	0	No	Please see Note 3	
						A	Type A Mild Steel
						B	Type B Mild Steel
						C	Type C Mild Steel
						D	Type D Mild Steel
						E	Type E Mild Steel
						G	Type G Mild Steel
						LA	Type A Aluminium
						LB	Type B Aluminium
						LB1	Type B1 Aluminium (spacing bet top two horizontal bars increase to 300mm)
						LC	Type C Aluminium
						LD	Type D Aluminium
						O	Others
LVL_NUM	Short	2	4	0	No	Level of road where feature exists	
						2	At-grade (ground level)
						8	1st level depressed road
						9	1st level elevated road
						7	2nd level depressed road

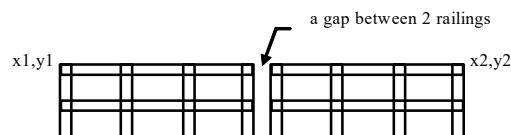
Field Name	Data Type	Size	Precision	Scale	Allow Null	Value	Description
						10	2nd level elevated road
RD_CD	Text	6	0	0	No	Refer to list	Road Code (assigned to the Road Name) where feature exists

Notes:



- The length of the RAILING is the two end-most points, i.e.










- The standard gap between two RAILING panels shall be IGNORED and the two railings panels treated as one continuous span.

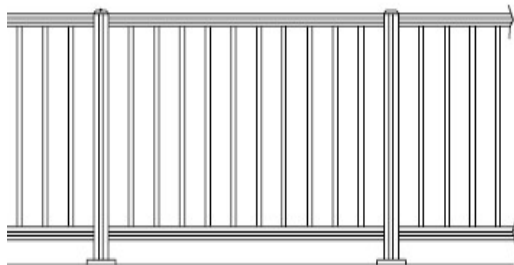









- List of TYP_CD:

TYP_CD	Description	Remark
A	Type A Mild Steel	<p>Installed along drain and footpath adjoining carriageway</p>  <p>Along drain</p>  <p>Footpath adjoining carriageway</p>

TYP_CD	Description	Remark
B	Type B Mild Steel	Installed along drain, carriageway and footpath adjoining carriageway
		 <p>Along drain</p>  <p>Along carriageway</p>  <p>Footpath adjoining carriageway</p>

TYP_CD	Description	Remark
D	Type D Mild Steel	Installed along central dividers, carriageway and footpath adjoining carriageway
		 <p>Along central divider</p>  <p>Along carriageway</p>
E	Type E Mild Steel	Installed along carriageway or at bus shelters
		 <p>Along carriageway</p>
G	Type G Mild Steel	Installed along central dividers and footpath adjoining carriageway usually located at road junctions and road crossings to ensure visibility and line of sight for drivers and pedestrians is not impaired
		 <p>Along central divider</p>

TYP_CD	Description	Remark	
LA	Type A Aluminium	Installed on retaining walls	
LB	Type B Aluminium	Installed along drain, carriageway and footpath adjoining carriageway	 <p>Footpath adjoining carriageway</p>
LB1	Type B1 Aluminium	Installed along drain, carriageway and footpath adjoining carriageway with the spacing between top two horizontal bars increase to 300mm	
LC	Type C Aluminium	Installed along central dividers and footpath adjoining carriageway usually located at road junctions and road crossings to ensure visibility and line of sight for drivers and pedestrians/cyclist is not impaired	 <p>Along central divider</p>

TYP_CD	Description	Remark	
LD	Type D Aluminium	Installed along central dividers, carriageway and footpath adjoining carriageway	 <p>Along central dividers</p>  <p>Along carriageway</p>
P	Type P	Installed on parapet wall	
PP	Type P with Plant Trough	Installed on parapet wall with plant trough	

16.27 Retaining Wall (Line)

Description: A line representation of a wall that supports the adjacent soil from erosion or landslide.




Attribute Format:

Field Name	Data Type	Size	Precision	Scale	Allow Null	Value	Description
TYP_CD	String	4	0	0	No	Please see Note 3	
						BW	Brick Wall
						CA	Crib Wall
						RC	Reinforced Concrete Wall
						RW	Rubble Wall
HT_NUM	Double	8	38	8	Yes	Height of retaining wall. In cases where there is an irregular shape retaining wall, the highest height is to be taken as the height of the RETAINING WALL.	
LVL_NUM	Short	2	4	0	No	Level of road where feature exists	
						2	At-grade (ground level)
						8	1st level depressed road
						9	1st level elevated road
						7	2nd level depressed road
						10	2nd level elevated road
RD_CD	Text	6	0	0	No	Refer to list	Road Code (assigned to the Road Name) where feature exists

Notes:

1. The length of the RETAINING WALL is to be measured along its base.
2. In cases where there is an irregular shape retaining wall, the highest height is to be taken as the height of the RETAINING WALL.
3. List of TYP_CD:

TYP_CD	Description	
BW	Brick Wall	

TYP_CD	Description	
CA	Crib Wall	
RC	Reinforced Concrete Wall	
RW	Rubble Wall	

16.28 Road Crossing (Line)

Description: A line representation of a designated location for pedestrians/cyclists to cross the road. Any associated control box is to be captured separately under 'CONTROL BOX'. Traffic Signal Aspect associated with a signalised crossing are to be captured separately under 'TRAFFIC SIGNAL ASPECT'.

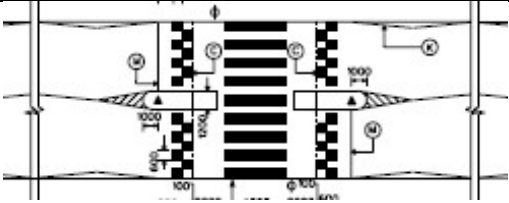

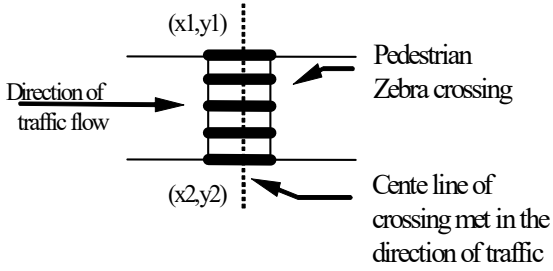

Attribute Format:

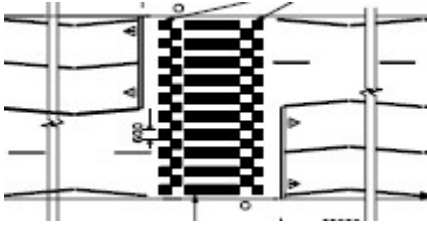

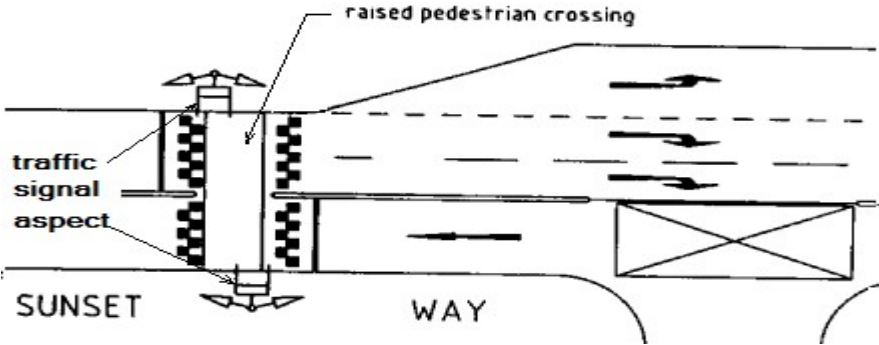

Field Name	Data Type	Size	Precision	Scale	Allow Null	Value	Description
TYP_CD	String	4	0	0	No		Please see Note 1
						BC	Bicycle Crossing
						H	Hump cum zebra crossing
						L	Zebra Crossing
						R	Raised Zebra Crossing
						RS	Raised Signalised
						S	Signalised
LVL_NUM	Short	2	4	0	No		Level of road where feature exists
						2	At-grade (ground level)
						8	1st level depressed road
						9	1st level elevated road
						7	2nd level depressed road
						10	2nd level elevated road
RD_CD	Text	6	0	0	No	Refer to list	Road Code (assigned to the Road Name) where feature exists

Notes:

1. List of TYP_CD:

TYP_CD	Description	
BC	Bicycle Crossing	 <p>A6</p>

TYP_CD	Description	
H	Hump cum Zebra Crossing	 
L	Zebra Crossing	 

TYP_CD	Description	
R	Raised Zebra Crossing	 
RS	Raised signalised crossing	 

TYP_CD	Description	
S	Signalised. Crossing is made up of two straight parallel lines. Its location is determined by taking the centre line	<p>Pedestrian Crossing at junction</p> <p>Pedestrian Crossing at other than junction</p>

16.29 Road Hump (Line)

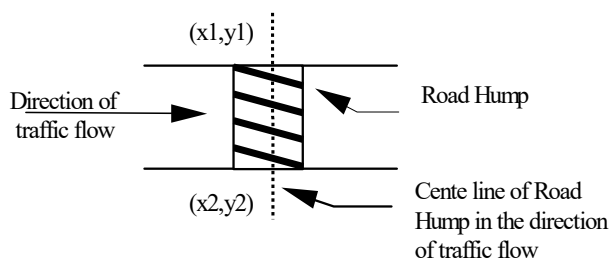
Description: A line representation of a raised section across a road to reduce the speed of vehicles. ROAD HUMPS are painted over with distinctive diagonal alternate black and yellow strips. It is usually preceded by a “HUMP AHEAD” marking on the road in the direction of the traffic flow (the “HUMP AHEAD” marking is to be recorded separately under WORD MARKING).

Attribute Format:

Field Name	Data Type	Size	Precision	Scale	Allow Null	Value	Description
TYP_CD	String	4	0	0	No	Please see Note 2	
						B	Bus friendly hump
						R	Road hump
LVL_NUM	Short	2	4	0	No	Level of road where feature exists	
						2	At-grade (ground level)
						8	1st level depressed road
						9	1st level elevated road
						7	2nd level depressed road
						10	2nd level elevated road
RD_CD	Text	6	0	0	No	Refer to list	Road Code (assigned to the Road Name) where feature exists

Notes:

1. The Road Hump span is to be recorded at the centre line of the hump.



2. List of TYP_CD:

TYP_CD	Description	
B	Bus Friendly Hump	
R	Road Hump	

16.30 RTS Line (Line)

Description: A line representation of the centre line of the track used by Mass Rapid Transit (MRT) and Light Rapid Transit (LRT) Trains.

Attribute Format:

Field Name	Data Type	Size	Precision	Scale	Allow Null	Value	Description
TYP_CD	Short	2	4	0	No	35	Mass Rapid Transit
						36	Light Rapid Transit
RTS_LVL_NUM	Short	2	4	0	No	Level of track	
						1	Underground
						2	At-grade (ground level)
						3	Elevated
LIN_NAM	String	75	0	0	No	Line Name	
						BLE	BOON LAY EXTENSION LINE
						CCL	CIRCLE LINE
						EWL	EAST WEST LINE
						NEL	NORTH EAST LINE
						NSL	NORTH SOUTH LINE
						BPLRT	BUKIT PANJANG LIGHT RAPID TRANSIT LINE
						PLRT	PUNGGOL LIGHT RAPID TRANSIT LINE
						SLRT	SENGKANG LIGHT RAPID TRANSIT LINE
						CA	CHANGI AIRPORT LINE
						INT	INTERCHANGE

16.31 RTS Station (Polygon)

Description: A polygon representation of a raised or underground structure used by passengers for boarding/alighting from the Mass Rapid Transit (MRT) and Light Rapid Transit (LRT) Trains.

Attribute Format:

Field Name	Data Type	Size	Precision	Scale	Allow Null	Value	Description
TYP_CD	Short	2	4	0	No	33	Light Rapid Transit
						34	Mass Rapid Transit
STN_NAM	String	256	0	0	No	Name of the Station	
RTS_LVL_NUM						Level of station	
						1	Underground
						2	At-grade (ground level)
						3	Elevated
LIN_NAM	String	75	0	0	No	Line Name	
						BLE	BOON LAY EXTENSION LINE
						CCL	CIRCLE LINE
						EWL	EAST WEST LINE
						NEL	NORTH EAST LINE

Field Name	Data Type	Size	Precision	Scale	Allow Null	Value	Description
						NSL	NORTH SOUTH LINE
						BPLRT	BUKIT PANJANG LIGHT RAPID TRANSIT LINE
						PLRT	PUNGGOL LIGHT RAPID TRANSIT LINE
						SLRT	SENGKANG LIGHT RAPID TRANSIT LINE
						CA	CHANGI AIRPORT LINE
						INT	INTERCHANGE

Notes:

- The outline of the RTS STATION shall be represented by a polygon outlining the station structure as seen from aerial view.

16.32 Seat (Point)

Description: A point representation of a resting facility along footpath for pedestrians.

Attribute Format:

Field Name	Data Type	Size	Precision	Scale	Allow Null	Value	Description
LVL_NUM	Short	2	4	0	No	Level of road where feature exists	
						2	At-grade (ground level)
						8	1st level depressed road
						9	1st level elevated road
						7	2nd level depressed road
RD_CD	Text	6	0	0	No	10	2nd level elevated road
						Refer to list	Road Code (assigned to the Road Name) where feature exists

Notes:

- Record the centre point of each SEAT.
- Examples of seats.



16.33 Speed Regulating Strip (Line)

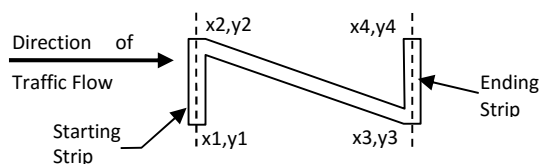
Description: A line representation of a strip across a road to reduce the speed of vehicles.

Attribute Format:

Field Name	Data Type	Size	Precision	Scale	Allow Null	Value	Description
LVL_NUM	Short	2	4	0	No		Level of road where feature exists
						2	At-grade (ground level)
						8	1st level depressed road
						9	1st level elevated road
						7	2nd level depressed road
						10	2nd level elevated road
RD_CD	Text	6	0	0	No	Refer to list	Road Code (assigned to the Road Name) where feature exists

Notes:

- Record the centre line of the strip.
- For a series of SPEED REGULATING STRIPS found on the road, record only the two end-most STRIPS and join up the two strips with a diagonal line as shown:-



16.34 Street Paint (Polygon)

Description: A polygon representation of a section of the road paved in red to warn motorists that they are entering a zone where school children may be crossing the road.

Attribute Format:

Field Name	Data Type	Size	Precision	Scale	Allow Null	Value	Description
TYP_CD	String	6	0	0	No	RED	Red surface
LVL_NUM	Short	2	4	0	No		Level of road where feature exists
						2	At-grade (ground level)
						8	1st level depressed road
						9	1st level elevated road
						7	2nd level depressed road
						10	2nd level elevated road
RD_CD	Text	6	0	0	No	Refer to list	Road Code (assigned to the Road Name) where feature exists

Notes:

1. Capture all corners of the polygon depicting the STREET PAINT section.



16.35 Taxi Shelter (Line)

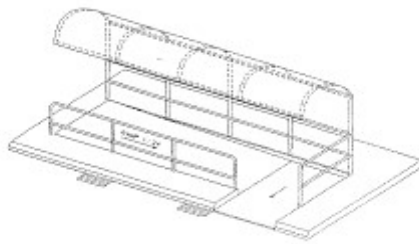
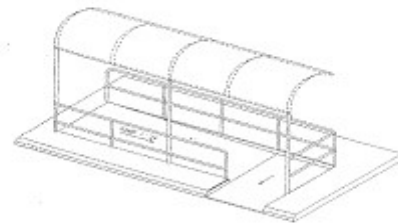
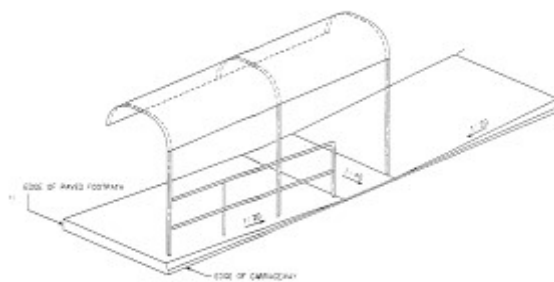
Description: A line representation of a shelter for taxi commuters.

Attribute Format:

Field Name	Data Type	Size	Precision	Scale	Allow Null	Value	Description
TYP_CD	String	4	0	0	No	Please see Note 2	
						A	Type A
						B	Type B
						C	Type C
						O	Others
LVL_NUM	Short	2	4	0	No	RM	Type RM
						Level of road where feature exists	
						2	At-grade (ground level)
						8	1st level depressed road
						9	1st level elevated road
RD_CD	Text	6	0	0	No	7	2nd level depressed road
						10	2nd level elevated road
						Refer to list	Road Code (assigned to the Road Name) where feature exists

Notes:

- 1 List of TYP_CD:

**TYPE A****TYPE B****TYPE C****TYPE RM**

16.36 Taxi Stop Pole (Point)

Description: A point representation of a pole to indicate the position where taxi should stop to pick up or drop off passengers.

Attribute Format:

Field Name	Data Type	Size	Precision	Scale	Allow Null	Value	Description
TYP_CD	String	10	0	0	No	TSTOP	Taxi Stop
						TPD	Taxi Pick up/Drop off
						TSTAND	Taxi Stand
NO_LOTS	Long	4	5	0	No	No of taxi parking lots	
LVL_NUM	Short	2	4	0	No	Level of road where feature exists	
						2	At-grade (ground level)
						8	1st level depressed road
						9	1st level elevated road
						7	2nd level depressed road
						10	2nd level elevated road
RD_CD	Text	6	0	0	No	Refer to list	Road Code (assigned to the Road Name) where feature exists




Notes:

- Record the co-ordinate of the TAXI STOP POLE



- Pick up the type and no of taxi parking lots at each location

3. List of TYP_CD:

TYP_CD	Description	
TSTOP	Taxi Stop - Taxi stop only allows taxis to perform immediate pick-up and drop-off of passengers, and no waiting at all times.	
TPD	Taxi Pick-up/Drop Off - Pick-up/Drop-off point allows taxis including private vehicles to perform immediate pick-up and drop-off of passengers.	
TSTAND	Taxi Stand - Taxi stand allows taxis to wait at the facility up to the maximum number of allocated bays reflected on site.	

16.37 Traffic Sign (Point)

Description: A point representation of the traffic sign that help to regulate, warn, guide or inform all road users.

Split arrow BOLLARD is to be captured under TRAFFIC SIGN.

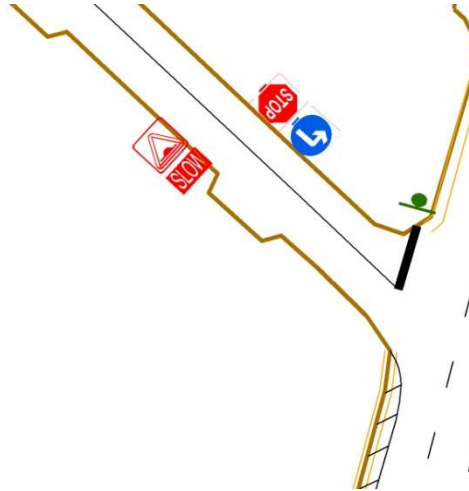
Attribute Format:

Field Name	Data Type	Size	Precision	Scale	Allow Null	Value	Description
TYP_CD	String	4	0	0	No		Please refer to Section 17 for the Type code
BEARG_NUM	Double	8	38	8	No		Bearing of the traffic sign. Please see Note 4.
SGNBD_HT_NUM	Double	8	8	3	Yes		Sign board height Required for non- standard Signs only.
SGNBD_WDT_NUM	Double	8	8	3	Yes		Sign board width Required for non- standard Signs only.
MOUNT_MTD_CD	String	1	0	0	No	P	Traffic sign mounted on 1 pole
						Q	Traffic sign mounted on 2 poles
						B	Bridge
						G	Gantry
						W	Wall
						L	Lamp Post
						S	Traffic Signal
						X	Others
SGN_CNT	Short	2	4	0	No		Number of traffic signs mounted together on the same pole, wall
LVL_NUM	Short	2	4	0	No		Level of road where feature exists
						2	At-grade (ground level)
						8	1st level depressed road
						9	1st level elevated road
						7	2nd level depressed road
						10	2nd level elevated road
RD_CD	Text	6	0	0	No	Refer to list	Road Code (assigned to the Road Name) where feature exists
CATG_CD	Long	4	10	0	no		Category of Traffic Signs, Please see Note 6 below

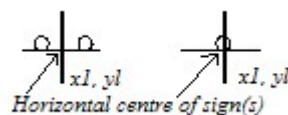
Notes:

1. If traffic sign description does not match any sign in the list, enter 'O###', where ### is a running serial number that uniquely identifies a particular non-standard traffic sign within the survey. Attach a photograph of the traffic sign.

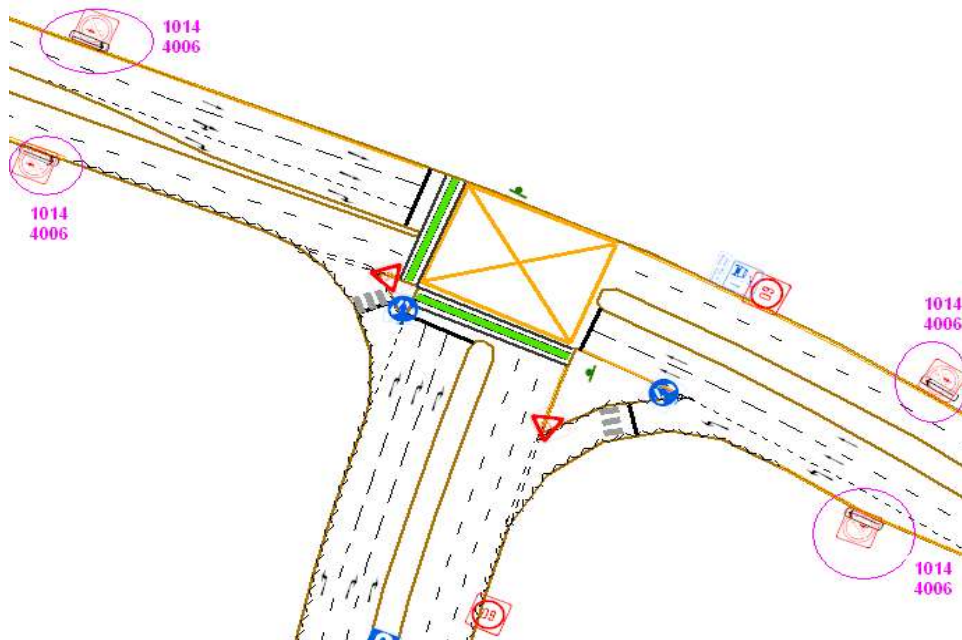
2. If multiple TRAFFIC SIGNS exist on the same pole, record each sign separately and place each sign vertically along the direction of the flow of traffic to avoid overlapping of signs when traffic sign symbols are applied at a reference scale of 1:1000. Please see picture shown below.



3. The co-ordinate of TRAFFIC SIGN should be captured at the horizontal centre of the sign(s).



4. The bearing should follow the flow of traffic except for pedestrian crossing prohibition (1014) and directional arrow (4006) signs. Their orientation are as shown in diagram below:



5. The words on the reverse of the pedestrian crossing prohibition need not be captured. Please see illustration below:



1014 Pedestrian crossing prohibition
4028 Directional arrow (double headed)



1014 Pedestrian crossing prohibition
4006 Directional arrow (single headed)



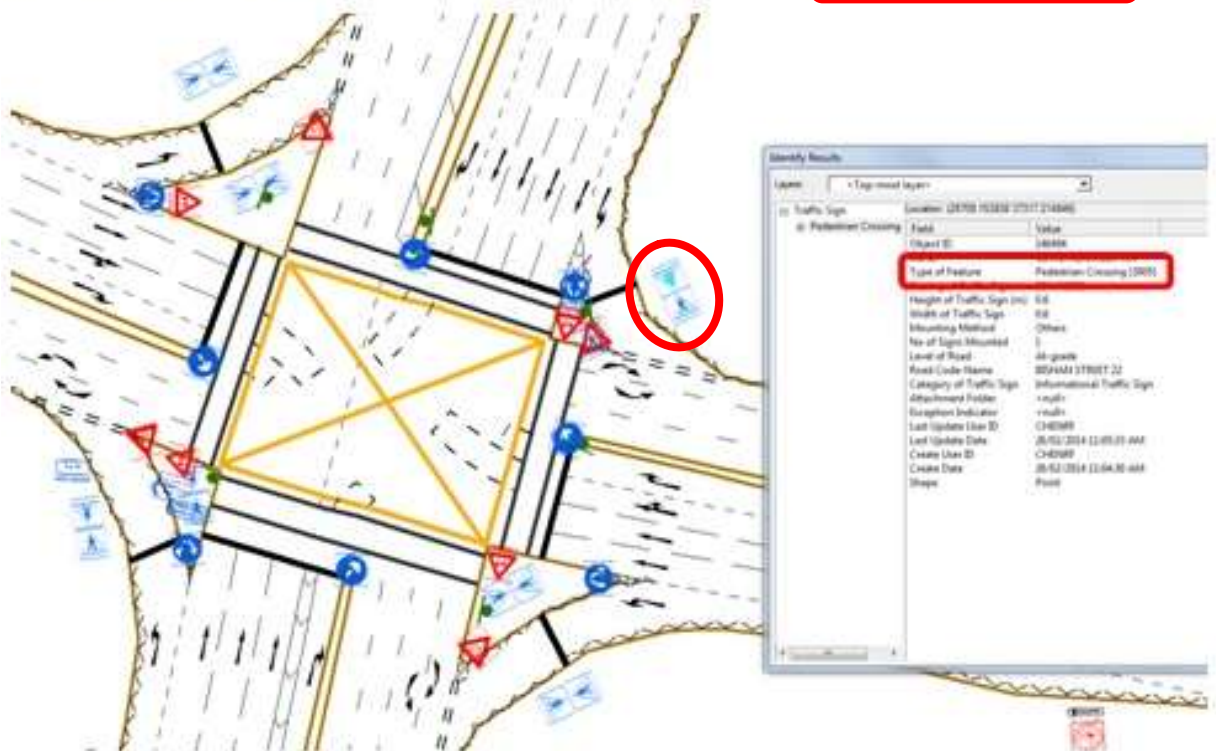
wording on reversed side
no need to be captured

6. Category of Traffic Signs.
- 1001 to 1999 - Prohibitory Traffic Sign
 - 2001 to 2999 - Warning Traffic Sign
 - 3001 to 3999 - Information Traffic Sign
 - 4001 to 4999 - Supplementary Traffic Sign
 - 5001 to 5999 - Mandatory Traffic Sign
 - 6001 to 6999 - Street Traffic Sign
 - 9001 to 9299 - Flyover Traffic Sign
 - 9300 to 9399 - Tunnel Traffic Sign
 - 9400 to 9499 - Underpass Traffic Sign
 - 9500 to 9599 - Viaduct Traffic Sign

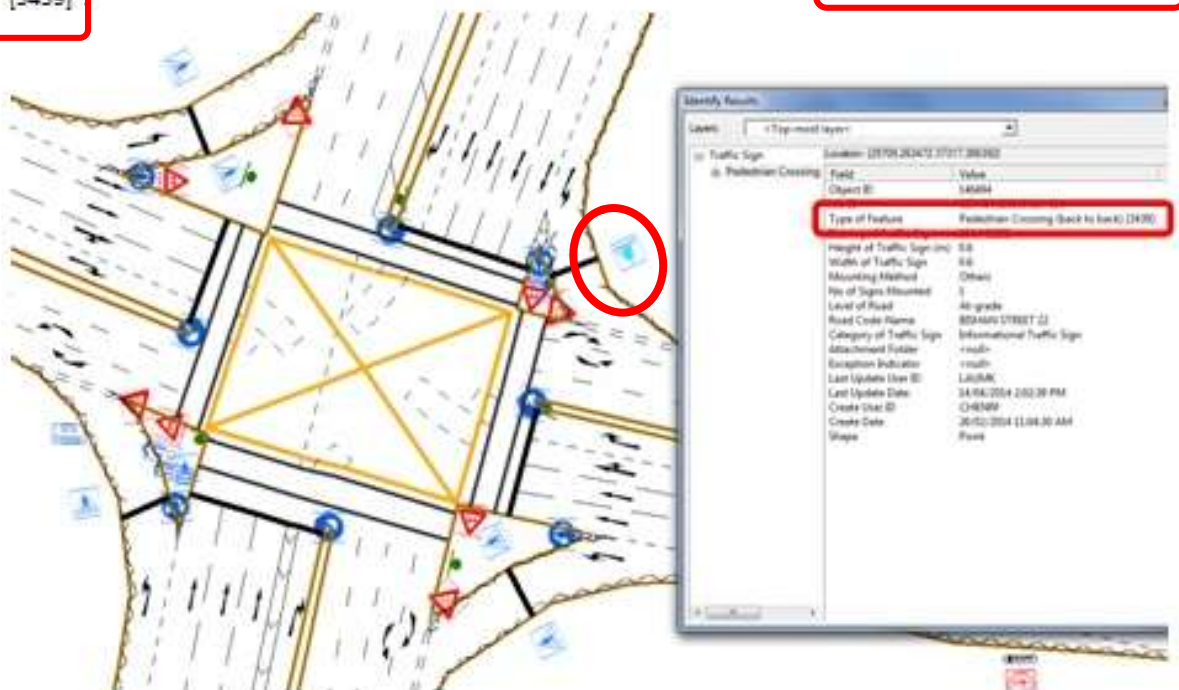
7. Pedestrian Crossing back to back sign:
- Before: User will need to update **2 numbers of single sided "Pedestrian Crossing [3005]"** traffic sign back to back.
- After: User will only need to update **1 number of double sided (back to back) "Pedestrian Crossing (back to back) [3439]"** traffic sign. The new "Pedestrian Crossing (back to back) [3439]" help to ease the congestion in the plan layout.

BEFORE

Updating of 2 numbers of pedestrian crossing sign mounted back to back using "Pedestrian Crossing [3005]":

**AFTER**

Updating of 2 numbers of pedestrian crossing sign mounted back to back using "Pedestrian Crossing (back to back) [3439]":



16.38 Traffic Signal Aspect (Point)

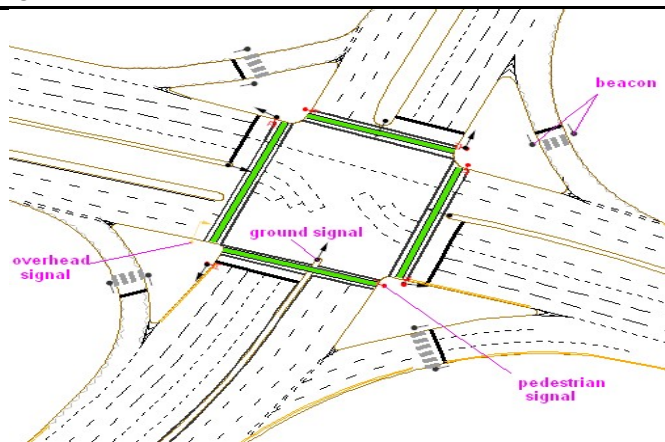
Description: A point representation of lights consisting of signal aspects to control traffic flow. If multiple TRAFFIC SIGNAL LIGHTS occur on the same pole, record each set of traffic signal lights separately.

Attribute Format:



Field Name	Data Type	Size	Precision	Scale	Allow Null	Value	Description
TYP_CD	String	4	0	0	No	Please see Note 2	
						A	Advance Warning Light
						B	B-Signal for buses
						BCS	Bicycle Crossing
						C	Overhead Signal on Centre Median
						F	Green Filter Arrow
						FL	Floodlight
						G	Ground Signal
						G+	Ground Signal (with Green Man +)
						H	Overhead Signal
						J	Jumping Amber Light
						M	Miniature Ground Signal
						N	Beacon
						P	Pedestrian Signal
						PC	Pedestrian Signal with Integrated Count Down Timer
BEARG_NUM	Double	8	38	8	No	Bearing of traffic signal aspect	
						Please see Note 1	
LVL_NUM	Short	2	4	0	No	Level of road where feature exists	
						2	At-grade (ground level)
						8	1st level depressed road
						9	1st level elevated road
						7	2nd level depressed road
						10	2nd level elevated road
RD_CD	Text	6	0	0	No	Refer to list	Road Code (assigned to the Road Name) where feature exists




Notes:



1. The bearing of the traffic signal is required and should be within $\pm 3^\circ$ tolerance.









2. List of TYP_CD:


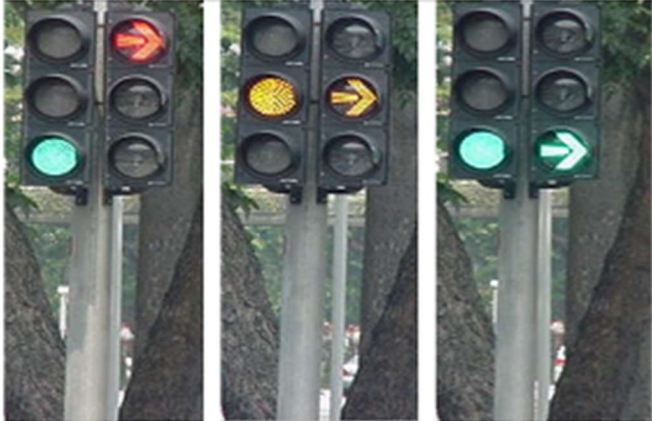
TYP_CD	Description	
A	Advance Warning Light	
B	B-Signal for buses	



TYP_CD	Description	
BCS	Bicycle Crossing	
C	Overhead Signal on Centre Median	
F	Green Filter Arrow	

TYP_CD	Description	
FL	Flood light	
G	Ground Signal (red, amber and green lights)	

TYP_CD	Description	
G+	Ground Signal (red, amber and green lights) (with Green Man +)	
H	Overhead Signal on side of road	
J	Jumping Light Amber Light	

TYP_CD	Description	
M	Miniature Ground Signal	
N	Beacon	
P	Pedestrian Signal (Red/green Man)	

TYP_CD	Description
PC	<p data-bbox="392 228 608 315">Pedestrian Signal with Integrated Count Down Timer</p> 
RAG	<p data-bbox="392 871 600 927">Red/Amber/Green arrow</p> <div data-bbox="651 869 1305 1326">  <div data-bbox="699 1294 810 1326">R (Red)</div> <div data-bbox="890 1294 1002 1326">A (Amber)</div> <div data-bbox="1114 1294 1225 1326">G (Green)</div> </div>

TYP_CD	Description	
SZ	School Zone	
T	Count Down Timer for Pedestrian	

16.39 Vehicular Bridge/Flyover/Underpass (Polygon)

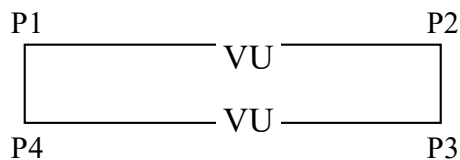
Description: A polygon representation of a raised road structure across a waterway / road for vehicular traffics or an underground passage for vehicular traffics.

Attribute Format:

Field Name	Data Type	Size	Precision	Scale	Allow Null	Value	Description
TYP_CD	String	4	0	0	No	Please see Note 3	
						BC	Culvert
						FL	Flyover
						VB	Vehicular Bridge
						VT	Vehicular Tunnel
						VU	Vehicular Underpass
BRDG_NUM	String	20	0	0	No	The number on the bridge, flyover or underpass	
MIN_HT_NUM	Double	8	8	3	No	Lowest of the 3 readings, $\pm 0.1\text{m}$ accuracy. Please see Note 1	
RD_CD	Text	6	0	0	No	Refer to list Road Code (assigned to the Road Name) where feature exists	

Notes:





- Three readings of relative height at three different locations are required between the top and bottom of VEHICLE UNDERPASS at the entrance. The lowest reading shall be recorded in MIN_HT_NUM field.
- The VEHICLE BRIDGE, VEHICLE UNDERPASS AND FLYOVER shall be represented by a polygon outlining the structure as seen from aerial view. The outline shall correspond to the base of the inner wall in the bridge/underpass/flyover.



Aerial view of a Vehicular Bridge

- List of TYP_CD:

TYP_CD	Description	
BC	Culvert	

TYP_CD	Description	
FL	Flyover	
VB	Vehicular Bridge	
VT	Vehicular Tunnel	
VU	Vehicular Underpass	

TYP_CD	Description		
VT	Vehicular Tunnel		

16.40 Word Marking (Point)

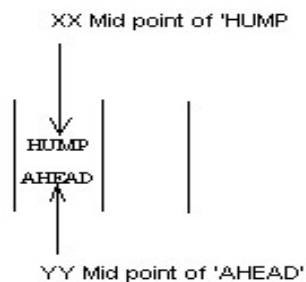
Description: A point representation of a word painted on the road surface to give motorists advance information on approaching facilities or traffic related devices. WORD MARKING within all Roads is to be captured.

Attribute Format:

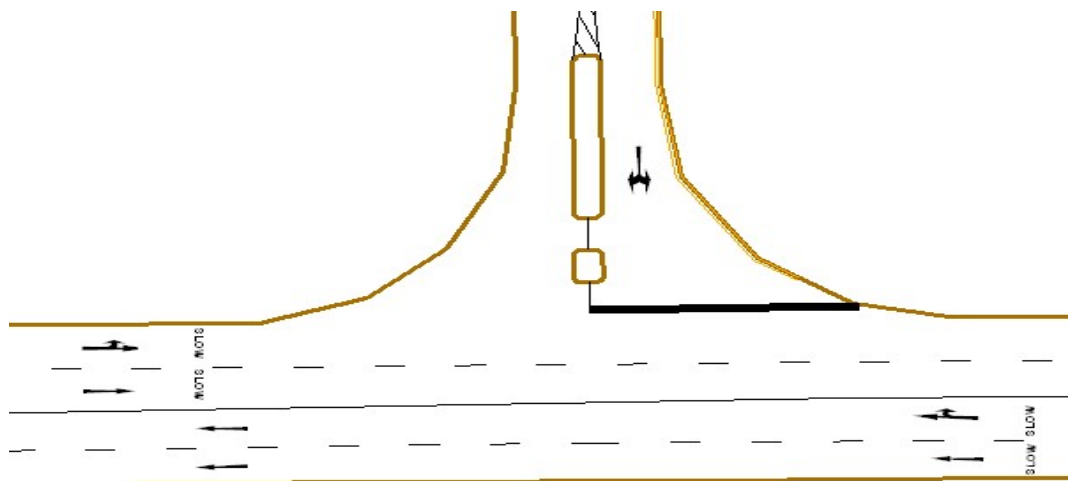
Field Name	Data Type	Size	Precision	Scale	Allow Null	Value	Description
DESC_TXT	String	15	0	0	No		Record the word (text) of the marking in the description field. Please see Note 2
BEARG_NUM	Double	8	38	8	No		Bearing. Please see Note 2
LVL_NUM	Short	2	4	0	No		Level of road where feature exists
						2	At-grade (ground level)
						8	1st level depressed road
						9	1st level elevated road
						7	2nd level depressed road
						10	2nd level elevated road
RD_CD	Text	6	0	0	No	Refer to list	Road Code (assigned to the Road Name) where feature exists

Notes:

- Word Marking location is the mid-point of the word marked. E.g. HUMP AHEAD, two separate POINT records, xx and yy are to be captured.

















- The bearing of the word marking is required.


































17 Appendix















17.1 List of Traffic Signs






17.1.1 Prohibitory Traffic Signs

No	TYP_CD	Description of Prohibitory Traffic Signs	Symbol
1	1001	No Right Turn	
2	1002	No Left Turn	
3	1003	No Entry	
4	1004	Maximum Speed Limit 50	
5	1005	Width Limit	
6	1006	Weight Limit	
7	1007	Height Limit - 4.5m	
8	1008	No Waiting	
9	1009	No Stopping (Clearway)	
10	1010	No Overtaking	
11	1011	Restriction on Lorry	
12	1012	Restriction Of Movement Of Vehicles With 3 Or More Axles	
13	1014	Pedestrian Crossing Prohibition (Graphics & Message On Reverse)	
14	1015	Hazardous Loads Prohibition	

No	TYP_CD	Description of Prohibitory Traffic Signs	Symbol
15	1016	No Horning	
16	1017	Maximum Speed Limit 60	
17	1018	Maximum Speed Limit 90	
18	1019	Maximum Speed Limit 70	
19	1021	Maximum Speed Limit 80	
20	1023	No Parking	
21	1029	Maximum Speed Limit 40	
22	1031	Height Limit - 4.3m	
23	1033	Height Limit - 2.5m	
24	1034	Height Limit - 2.8m	
25	1035	Height Limit - 3.8m	
26	1036	Restriction on Lorry/Bus/Coach	
27	1037	Maximum Speed Limit 15	
28	1038	Restriction of Movement of Heavy Vehicles (With Message)	
29	1044	Height Limit - 3.3m	
30	1045	Restriction on Motorcycle	

















No	TYP_CD	Description of Prohibitory Traffic Signs	Symbol
31	1046	Restriction on Bus	
32	1047	Height Limit - 3.2m	
33	1048	No Waiting of Buses/Lorries	
34	1049	Maximum Speed Limit 30	
35	1050	Height Limit - 2.1m	
36	1051	No Smoking (Graphic)	
37	1052	Restriction Of Movement on Pedestrian and Slow Moving Vehicles	
38	1053	Height Limit - 2.2 m	
39	1054	No Riding (graphics only)	
40	1055	No Riding (graphics & words)	
41	1056	Maximum Speed Limit 20	
42	1057	No Motorised Bicycle (graphic)	
43	1058	Height Limit - 5.4m	
44	1059	No Waiting Within Bay	
45	1060	Pedestrian & Bicycle Crossing Prohibition (graphic)	
















No	TYP_CD	Description of Prohibitory Traffic Signs	Symbol
46	1061	Maximum Speed Limit '25'	
47	1062	Height Limit - 3.9m	
48	1063	Maximum Speed Limit '10'	
49	1064	Restriction on Vehicles Exceeding 1500 kg in unladen weight	
50	1065	No Stopping with arrow pointing to the Left (graphic)	
51	1066	No Stopping with arrow pointing to the Left/Right (graphic)	
52	1067	No Stopping with arrow pointing to the Right (graphic)	
53	1068	NO PEDESTRIAN ENTRY EXCEPT AUTHORISED PERSONNEL	
54	1069	MAX LADEN WEIGHT 30 TONNES	
55	1070	No Bicycle (in graphics)	
56	1071	Height Limit – 3.0 m	
57	1072	No Waiting with arrow pointing to the Right (graphic)	
58	1073	No Waiting with arrow pointing to both Left/Right (graphic)	
59	1074	No Waiting with arrow point to the Left (graphic)	

No	TYP_CD	Description of Prohibitory Traffic Signs	Symbol
60	1075	Restriction on Trailer with Container	
61	1076	Height Limit - X.Xm	
62	1077	No Motorcycle (in graphics)	
63	1078	No Waiting (with words below)	
64	1079	Pedestrian & Cyclists Crossing Prohibition	
















17.1.2 Warning Traffic Signs




No	TYP_CD	Description of Warning Traffic Signs	Symbol
1	2001	Two Way Traffic Ahead	
2	2002	Two Way Traffic Across A One Way Carriageway Ahead	
3	2003	Road Narrows On Both Sides Ahead	
4	2004	Road Narrows On Right Ahead	
5	2005	Road Narrows On Left Ahead	
6	2006	Bend To The Right Ahead	
7	2007	Bend To The Left Ahead	
8	2008	Double Bend Ahead, First To The Right	
9	2009	Double Bend Ahead, First To The Left	
10	2010	Series Of Bends First To The Right Ahead	
11	2011	Series Of Bends First To The Left Ahead	
12	2012	Side Road To The Left Ahead	
13	2013	Side Road To The Right Ahead	
14	2014	Staggered Junction, Left Turn First Ahead	
15	2015	Staggered Junction, Right Turn First Ahead	
16	2016	Cross Road Ahead	

No	TYP_CD	Description of Warning Traffic Signs	Symbol
17	2017	Traffic Merges From Left Ahead	
18	2018	Traffic Merges From Right Ahead	
19	2019	Merging Into Traffic On Right Ahead	
20	2020	Merging Into Traffic On Left Ahead	
21	2021	T-Junction Ahead	
22	2022	Dual Carriageway Ends Ahead	
23	2023	Roundabout Ahead	
24	2024	Traffic Signals Ahead	
25	2025	Pedestrian Crossing Ahead	
26	2026	Children Ahead	
27	2027	Steep Hill Upwards Ahead	
28	2028	Steep Hill Downwards Ahead	
29	2029	Slippery Road Ahead	
30	2030	Uneven Road Ahead	
31	2031	Height Limit Ahead - 4.5m	
32	2032	Level Crossing With Gate Or Barrier Ahead	

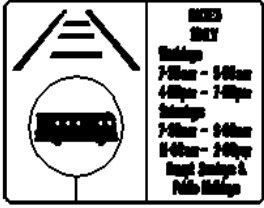











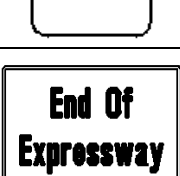
No	TYP_CD	Description of Warning Traffic Signs	Symbol
33	2033	Level Crossing Without Gate Or Barrier Ahead	
34	2034	Horses Or Ponies Ahead	
35	2035	Reduce Speed Now	
36	2036	Road Hump Ahead	
37	2037	Narrow Bridge Ahead	
38	2038	Quayside Or River Bank Ahead	
39	2039	Accident Area Ahead	
40	2040	Expressway Ahead	
41	2041	Restricted Zone Ahead	
42	2042	Elderly Or Handicapped Pedestrians Ahead	
43	2043	Slow	
44	2044	Low Flying Aircraft Ahead	
45	2045	Diversion To Another Carriageway To The Right Ahead	
46	2046	Diversion To Another Carriageway To The Left Ahead	
47	2047	Danger Ahead	

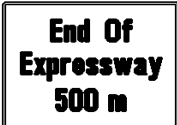












No	TYP_CD	Description of Warning Traffic Signs	Symbol
48	2048	Merge Ahead	
49	2049	U -Turn Ahead	
50	2050	U -Turn Ahead (From Opposite Direction)	
51	2051	Pedestrian In Road Ahead	
52	2052	Road Pricing Ahead	
53	2053	Raised Zebra Crossing Ahead	
54	2054	ERP Ahead	
55	2056	Sharp Deviation	
56	2058	Caution	
57	2070	Height Limit Ahead - 1.9m	
58	2071	Height Limit Ahead - 2.2m	
59	2072	Height Limit Ahead - 2.4m	
60	2073	Height Limit Ahead - 4.3m	
61	2074	Height Limit Ahead - 3.3m	
62	2075	Low Bridge Ahead	









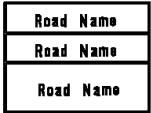




No	TYP_CD	Description of Warning Traffic Signs	Symbol
63	2076	Height Limit Ahead - 3.9m	
64	2077	Height Limit Ahead - 2.0m	
65	2078	Underpass Ahead	
66	2079	Cross Ahead – Major Road Ahead	
67	2080	Cross Ahead – Minor Road Ahead	
68	2081	Merge After Turn	
69	2082	SLOW DOWN	
70	2083	Tunnel Ahead	
71	2084	Height Limit Ahead – 4.0m	
72	2085	KEEP CLEAR	
73	2086	Blind People Ahead	
74	2087	FIRE ENGINE ACCESS KEEP CLEAR	
75	2088	Other Danger Ahead	
76	2089	Silver Zone loving senior couple logo	
77	2090	Children Ahead logo - School Zone	




No	TYP_CD	Description of Warning Traffic Signs	Symbol
78	2091	Weight Limit (XX) Tonnes	
79	2092	Look Out for Cyclist	
80	2093	Keep A Safe Distance	










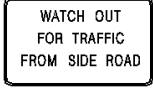
17.1.3 Informational Traffic Signs


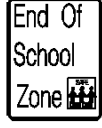
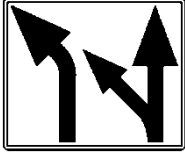





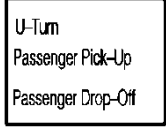
No	TYP_CD	Description of Informational Traffic Signs	Symbol
1	3001	Bus Lane	
2	3002	No Through Road	
3	3003	No Through Road On Side Road To Right	
4	3004	No Through Road On Side Road To Left	
5	3005	Pedestrian Crossing	
6	3006	One Way Street - Left	
7	3007	One Way Traffic	
8	3008	U –Turn	
9	3009	Taxi Stop	
10	3010	Taxi Stand	
11	3011	Passenger Pick-Up Point	
12	3012	Parking Places	
13	3013	End Of Expressway Type I (Words)	













No	TYP_CD	Description of Informational Traffic Signs	Symbol
14	3014	End Of Expressway 500m (Words)	
15	3015	Start Of Expressway Type II (Graphic)	
16	3016	End Of Expressway Type II (Graphic)	
17	3017	Start Of Expressway (This Sign Use With Type II)	
18	3018	End Of Expressway (This Sign Use With Type II)	
19	3019	Dual Carriageway Ahead	
20	3020	Overpass (To The Left)	
21	3021	Underpass (To The Left)	
22	3022	Taxis Drop-Off Point	
23	3023	Queue Here For Taxi – arrow left	
24	3024	Red Light Camera	
25	3025	Keep Left, Unless Overtaking	
26	3026	End Of Restricted Zone	




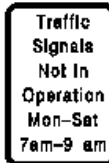
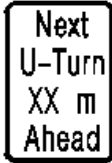


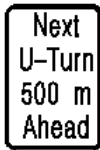

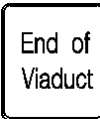
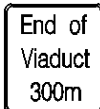
No	TYP_CD	Description of Informational Traffic Signs	Symbol
27	3027	Speed Regulating Strips Ahead	
28	3028	Expressway Kilometer	
29	3029	U -Turning Vehicles, Keep Right	
30	3030	Concealed Exit Ahead	
31	3031	Community Centre/Club	
32	3032	Police Post	
33	3033	Direction Of Temporary Pedestrian Route	
34	3034	Taxi Fare Information	
35	3035	Advance Directional Sign (Multiple Signs With Directional Arrows)	
36	3036	Speed Check Area	
37	3037	Bicycles Stand	
38	3038	No Parking Of Bicycles	
39	3039	Rain Shelter (Left)	


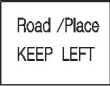
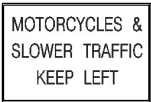
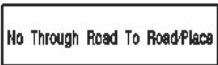
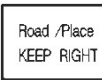



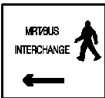



No	TYP_CD	Description of Informational Traffic Signs	Symbol
40	3040	Speed Camera Ahead (Words)	
41	3041	To Stay Within Restricted Zone	
42	3042	Right Turn Lane Ahead	
43	3043	Lane Indication Ahead (3 Lanes)	
44	3044	Cycling Trail	
45	3045	Mountain Biking Trial	
46	3046	B-Signal For Buses On Bus Bay Only	
47	3047	B-Signal For Buses On Left Most Lane Only	
48	3048	Keep A Safe Distance From Vehicle In Front	
49	3049	Do Not Drive On Road Shoulder	
50	3050	Speed Camera Ahead (Graphic)	




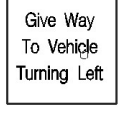
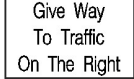







No	TYP_CD	Description of Informational Traffic Signs	Symbol
51	3052	Speed Camera Ahead (Words & Graphic)	
52	3053	Right Turn Lanes Ahead	
53	3054	Watch Out For Vehicles Turning Ahead	
54	3055	Wheel Clamp Zone	
55	3056	Lane Indication Ahead (Waiting Lanes)	
56	3057	Left Turn On Red	
57	3058	Stop Before Turning	
58	3059	Stop and Give Way To Pedestrians And Main Road Traffic	
59	3060	Beware Of Turning Vehicles	
60	3061	Watch Out For Traffic From Side Road	







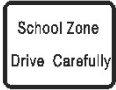

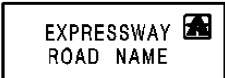
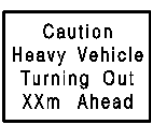



No	TYP_CD	Description of Informational Traffic Signs	Symbol
61	3063	School Zone, Drive Carefully Slow Down & Time Plate	
62	3064	End Of School Zone	
63	3065	Lane Indication For Expressway	
64	3066	Left Turn Green Arrow Ahead	
65	3067	Scramble Walk	
66	3068	Please Push Your Bicycle Across The Overpass	
67	3069	Please Push Your Bicycle Across The Underpass	
68	3070	School Zone	
69	3071	U-Turn. Passenger Pick-Up/Drop-Off Point	











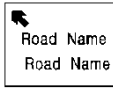
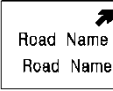

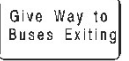

No	TYP_CD	Description of Informational Traffic Signs	Symbol
70	3072	Exit	
71	3073	Change In Traffic Light Timing	
72	3074	No Right Turn With Time Restriction	
73	3075	Do Not Cross, Please Use Overpass	
74	3076	Taxi Stop (With Directional Arrow)	
75	3077	Overpass (To The Right)	
76	3078	Underpass (To The Right)	
77	3080	One Way Street - Right	
78	3081	Rain shelter - Right	
79	3082	U -Turn 200 m Ahead	
80	3085	U -Turn 150 m Ahead	
81	3086	U -Turn 180 m Ahead	










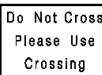
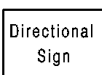

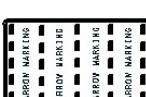
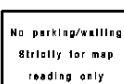

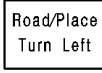
No	TYP_CD	Description of Informational Traffic Signs	Symbol
82	3087	Watch Out For U-turning Vehicles	
83	3088	Area Under Camera Surveillance	
84	3089	No Cycling	
85	3095	Traffic Signals Not In Operation (With Time Restriction)	
86	3096	Next U-Turn (With Distance)	
87	3097	Next U-Turn With Destination	
88	3099	U-Turn 300m Ahead	
89	3100	Next U -Turn 500m Ahead	
90	3101	Watch Out For Traffic From The Right	
91	3102	End of Viaduct	
92	3103	End of Viaduct 300m	












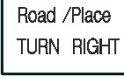



No	TYP_CD	Description of Informational Traffic Signs	Symbol
93	3104	End of Viaduct 600m	
94	3105	Road/Place KEEP LEFT	
95	3106	Motorcycles & Slower Traffic Keep Left	
96	3107	No Through Road To Road/Place	
97	3108	Road/Place KEEP RIGHT	
98	3109	Confirmation Sign (Place)-Right	
99	3110	Confirmation Sign (Road Name) - Left	
100	3111	Advance Directional Sign (Map)	
101	3112	MRT/Bus Interchange(To The Left)	
102	3113	Curve Alignment Marker	
103	3114	Object Marker	
104	3115	Object Marker - Left	


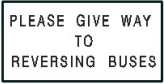
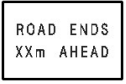

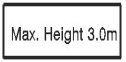
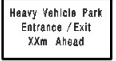










No	TYP_CD	Description of Informational Traffic Signs	Symbol
105	3116	Object Marker - Right	
106	3117	Congestion Expected Ahead	
107	3118	Give Way To Vehicle Turning Right	
108	3119	Give Way To Vehicle Turning Left	
109	3120	Give Way To Traffic On The Right	
110	3121	No Parking Except Authorised Vehicles	
111	3122	No Parking From 7.00 Am To 7.00pm	
112	3123	No Parking with Time Restriction	
113	3124	No Entry Except Authorised Vehicles	
114	3125	Beware of Fire Engine	
115	3126	Caution Heavy Vehicles Parking Ahead	
116	3127	Watch Out For Traffic To Cross Safely	


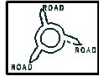




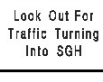

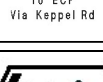







No	TYP_CD	Description of Informational Traffic Signs	Symbol
117	3128	No Reversing	
118	3129	No U -Turn (In Words)	
119	3130	Prepare To Stop	
120	3131	MRT/Bus Interchange (To The Right)	
121	3132	Maximum Height Limit - 2.5m	
122	3133	Maximum Height Limit - 3.7m	
123	3134	School Zone Drive Carefully	
124	3135	Singapore Cars Please Top Up To 3/4 Tank	
125	3138	Expressway/Road (With Expressway Graphics)	
126	3139	Caution Heavy Vehicle Turning Out XX m Ahead	
127	3142	Park & Ride (Graphics) -Left	
128	3143	Park & Ride Confirmation Sign-Left	
129	3144	Carpark Confirmation Sign (Left)	


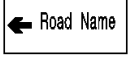
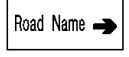

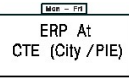

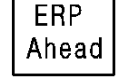
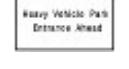




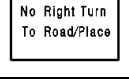
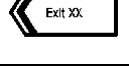
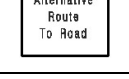
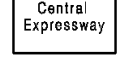
No	TYP_CD	Description of Informational Traffic Signs	Symbol
130	3145	Traffic Signals In Operation (With Time Restriction)	
131	3146	Carpark Keep Left	
132	3147	Beware of Vehicles Turning Left	
133	3148	Caution Heavy Vehicles Turning Ahead	
134	3149	U-Turn Use (Road/Place/Carpark)	
135	3150	End of Road XX m Ahead	
136	3151	Directional Sign(To Place/Road Use Road)	
137	3152	Cross Safely Use Pedestrian Crossing	
138	3153	Road/Place U-Turn Ahead	
139	3154	U-Turn to Road/Place	
140	3155	Advance Directional sign (45 Degree Arrow Left)	
141	3156	Advance Directional sign (45 Degree Arrow Right)	
142	3157	Give Way to Buses Exiting (Graphic)	
143	3158	Give Way to Buses Exiting (Words)	
144	3159	Place of Interest (Confirmation Sign)- Right	

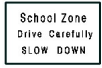










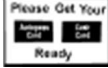
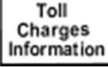



No	TYP_CD	Description of Informational Traffic Signs	Symbol
145	3160	Malaysian Lorries Keep Left	
146	3161	Motorcyclists To Woodlands Checkpoint Use BKE	
147	3162	HDB Town (With Distance)	
148	3163	Place (With Directional Arrow)	
149	3164	Singapore Cars \$500 Fine	
150	3165	Please Top-Up Autopass Card or Cashcard	
151	3166	Give Way to Buses	
152	3167	Caution Heavy Vehicles Crossing Ahead	
153	3168	No Through Road Ahead And Side Road On The Left	
154	3169	Do Not Cross, Please Use Crossing	
155	3170	Directional Sign	
156	3171	Lane Indication Ahead -2 Lanes (Arrow Markings Shall Tally With Site Condition)	
157	3172	Lane Indication Ahead - 4 Lanes (Arrow Markings Shall Tally With Site Condition)	
158	3173	No Parking/Waiting Strictly For Map Reading Only	
159	3174	Rental of ERP In-Vehicle Units	
160	3175	Road/Place Turn Left	





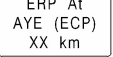


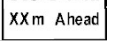



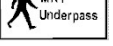

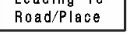
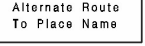

No	TYP_CD	Description of Informational Traffic Signs	Symbol
161	3176	Vehicles Parking Ahead	
162	3177	No Access to Road/Place	
163	3178	Confirmation Sign (Place) - Left	
164	3179	Confirmation Sign (Road/Street) - Right	
165	3180	Place of Interest (Confirmation Sign) - Left	
166	3181	Watch Out For Traffic Before Turning	
167	3182	Autopass Card/Cash Card Top Up	
168	3183	End Of Restricted Zone Ahead	
169	3184	End Of Restricted Zone (Arrow Left)	
170	3185	End Of Restricted Zone (Arrow Right)	
171	3186	U-Turn to Road/Place XX m Ahead	
172	3187	Road/Place TURN RIGHT	
173	3188	U-Turn KEEP RIGHT	
174	3189	Alternate U-Turn at Paterson Hill/Grange Road	
175	3190	Tow Away Zone	




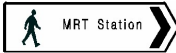




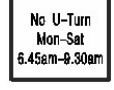
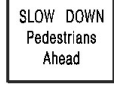
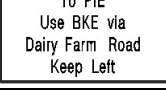
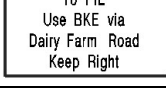

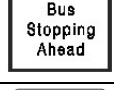


No	TYP_CD	Description of Informational Traffic Signs	Symbol
176	3191	Stop And Give Way To Main Road Traffic	
177	3192	Please Give Way To Reversing Buses	
178	3193	Road Ends XX m Ahead	
179	3194	Watch Out For Vehicles On The Left	
180	3195	Max Height Limit 3.0m	
181	3196	Heavy Vehicle Park Entrance/Exit XX m Ahead	
182	3197	No Through Road Ahead and On Side Road To The Right	
183	3198	Expressway (Confirmation sign) -Left	
184	3199	Expressway (Confirmation sign) - Right	
185	3200	Please Use Underpass At	
186	3201	Community Centre/Club (Left)	
187	3202	Police Post (Left)	
188	3203	HDB Neighbourhood Map	
189	3204	Cars & Motorcyclists KEEP RIGHT	
190	3205	To Tuas Checkpoint To City	
191	3206	Alternative Route To BKE	


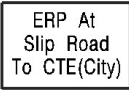


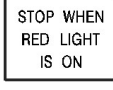



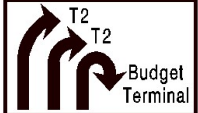
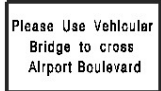




No	TYP_CD	Description of Informational Traffic Signs	Symbol
192	3207	Look Out For U-Turn Vehicles	
193	3208	Roundabout	
194	3209	Airport	
195	3210	Public Carpark Ahead	
196	3211	Switch Off Engine While Waiting	
197	3212	Overpass - confirmation sign (Right)	
198	3213	Look Out For Traffic Turning Into SGH	
199	3214	Wheelchair (Handicap Sign)	
200	3215	Alternative Route To ECP Via Keppel Rd	
201	3216	Overpass - Confirmation Sign (right)	
202	3217	Alternative Right Turn Access Ahead	
203	3218	East Camp (Ahead arrow)	
204	3219	East Camp (Left arrow)	
205	3220	East Camp (Right arrow)	
206	3221	IN (Arrow To The Left)	
207	3222	IN (Arrow To The Right)	

No	TYP_CD	Description of Informational Traffic Signs	Symbol
208	3223	Advance Directional sign - Road Name (Arrow Ahead)	
209	3224	Advance Directional sign - Road Name (Arrow Left)	
210	3225	Advance Directional sign -Road Name (Arrow Right)	
211	3226	Give Way To Pedestrians And Main Road Traffic	
212	3227	ERP At CTE (City/PIE)	
213	3228	Carpark – Confirmation sign- Right	
214	3229	ERP Ahead	
215	3230	Heavy Vehicle Park Entrance Ahead	
216	3231	Heavy Vehicle Park Exit Ahead	
217	3232	Flashing Aviation Lights Ahead	
218	3233	Bus Lane (Full Day)	
219	3234	Lane Indication Ahead (Five Lanes)	
220	3235	No Right Turn To Road/Place	
221	3236	Exit (Confirmation Sign) -Left	
222	3237	Alternative Route To Road	
223	3238	Central Expressway	









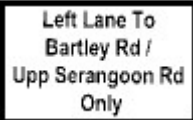






No	TYP_CD	Description of Informational Traffic Signs	Symbol
224	3239	School Zone Drive Carefully SLOW DOWN	
225	3240	More Car Parking Lots At Place Name	
226	3241	Give Way To Pedestrians	
227	3242	Lane Indication For Expressway (With Single Left Turn Arrow)	
228	3243	Lane Indication For Expressway (With Double Left Turn Arrows)	
229	3244	No Parking On Turf	
230	3245	Orchard Road	
231	3246	Motorcycle (Graphic)	
232	3247	Motorcycle Keep Left	
233	3248	Motor Car Keep Right	
234	3249	Lane Indication For Motor Cycle/ Motor Car	
235	3250	Please Get Your Autopass / Cashcard Ready	
236	3251	Toll Charges Information	
237	3252	Please Switch-Off Your Engine	
238	3253	Singapore Cars with 3/4 tank graphic	
239	3254	Woodlands Crossing	

No	TYP_CD	Description of Informational Traffic Signs	Symbol
240	3255	Cars KEEP LEFT	
241	3256	Lorries & Buses KEEP RIGHT	
242	3257	Underpass - Confirmation Sign (Right)	
243	3258	Underpass - Confirmation Sign (Left)	
244	3259	ERP At AYE(ECP) 6km	
245	3260	Camera Zone	
246	3261	U-Turn At (Road/Place Name)	
247	3262	Use U-Turn 100 m Ahead	
248	3263	No Right Turn To (Road Name) with Time Restriction	
249	3264	URA Carpark Only	
250	3265	End Of Restricted Zone After Canning Walk	
251	3266	MRT Underpass (With Directional Arrow)	
252	3267	U-Turn 500m Ahead	
253	3268	Leading To Road/Place	
254	3269	Alternative Route To Place Name	
255	3270	Park & Ride (graphics) - Right	




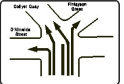





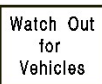






No	TYP_CD	Description of Informational Traffic Signs	Symbol
256	3271	Park & Ride Confirmation Sign- Right	
257	3272	Watch Out For Vehicles From Access Road	
258	3273	MRT Station (Confirmation Sign) - Left	
259	3274	MRT Station (Confirmation Sign) - Left	
260	3275	Road XX m Ahead	
261	3276	Motorcyclist To Woodlands Checkpoint Use BKE Via SLE	
262	3277	Left Turn Only To ECP (Changi Airport)	
263	3278	Please Push Your Bicycle Across The Underpass	
264	3279	No U-Turn with time restriction	
265	3280	SLOW DOWN Pedestrians Ahead	
266	3281	To PIE Use BKE via Dairy Farm Road Keep Left	
267	3282	To PIE Use BKE via Dairy Farm Road Keep Right	
268	3283	More Parking Lots	
269	3284	Bus Stopping Ahead	
270	3285	Lane Indication Ahead (1 lane)	
271	3286	Caution Look Out For U-Turning Vehicles	



No	TYP_CD	Description of Informational Traffic Signs	Symbol
272	3287	EXIT with Turn Right Ahead arrow	
273	3288	ERP At Slip Road To CTE (City)	
274	3289	ERP after Tunnel with Time plate	
275	3290	CAUTION GIVE WAY To Pedestrians	
276	3291	Stop When Red Light Is On	
277	3292	Please Use Pedestrian Crossing at Traffic Light Junction	
278	3293	Place Name XXm	
279	3294	Road Name XXm	
280	3295	Directional sign at Changi Airport	
281	3296	Please Use Vehicular Bridge to cross Airport Boulevard	
282	3297	No Parking Except For SCDF Vehicles	
283	3298	Caution Buses Reserving Ahead	
284	3299	U -Turn to CTE	
285	3300	Look Out For Oncoming Traffic	








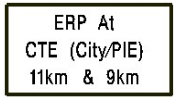







No	TYP_CD	Description of Informational Traffic Signs	Symbol
286	3301	Bus Lane (operating time)	
287	3302	Reverse Traffic	
288	3303	Switch On Headlights	
289	3304	No Through Road To Mount Faber	
290	3305	No Walking Within Bus Park	
291	3306	Alternative Route To TPE	
292	3307	Vehicles with 3 or more axles to Jurong Island KEEP LEFT	
293	3308	No Entry Except Public Buses	
294	3309	No Through Road on Road to the right	
295	3310	Pedestrian Use Steps (graphic)	
296	3311	Ave 12 (Part) Closed	
297	3312	LED Lane use indicator (on tunnel roof)	
298	3313	Advance directional sign (EXIT)	
299	3314	Directional Arrow Down	

No	TYP_CD	Description of Informational Traffic Signs	Symbol
300	3315	Watch Out For Pedestrians	
301	3316	ECP (CHANGI) 45 degrees arrow left	
302	3317	ECP (CITY) 45 degrees arrow right	
303	3318	To Tunnel	
304	3319	Lane Indication Ahead (6 lanes)	
305	3320	Narrow Lanes Ahead	
306	3321	Confirmation sign - KPE (PIE) - left	
307	3322	Advance Directional Sign KPE (electronic sign)	
308	3323	Left Lane To Bartley Rd/Upp Serangoon Rd Only	
309	3324	Please Push Bicycle Across	
310	3325	Safety Reminder	
311	3326	Advance Directional Sign - Places of Interest (Left Arrow)	
312	3327	Advance Directional Sign - Places of Interest (Right Arrow)	
313	3328	Advance Directional Sign - Places of Interest (Ahead Arrow)	
314	3329	No Parking On Turf (graphic)	





No	TYP_CD	Description of Informational Traffic Signs	Symbol
315	3330	Advance Directional Sign - Places (Left arrow)	
316	3331	Advance Directional Sign - Places (Right arrow)	
317	3332	Advance Directional Sign - Places (Ahead arrow)	
318	3333	Underpass (graphic)	
319	3334	Cyclists Ahead	
320	3335	No Riding Of Bicycle & Motorcycle	
321	3336	BEWARE OF TRAFFIC	
322	3337	BARRIER	
323	3338	ERP At ECP(City)/AYE	
324	3339	Give Way To Fire Engine	
325	3340	Concealed Entrance And Exit Ahead	
326	3341	Alternative U-Turn Ahead	
327	3342	Place Ahead	
328	3343	ERP at Crawford St (Republic Ave)	
329	3344	ERP At Entry To ECP(CITY/AYE)	
330	3345	Lane Indication Ahead (waiting lanes) - Left	


No	TYP_CD	Description of Informational Traffic Signs	Symbol
331	3346	Watch Out For Vehicle Exiting Ahead	
332	3347	OUT (with left/right arrow)	
333	3348	SCHOOL CHILDREN CROSSING AHEAD	
334	3349	Roads Junction - Directional sign	
335	3350	Queue Here For Taxi (arrow right)	
336	3351	No Parking of Lorry	
337	3352	U-Turn Ahead To Public Carpark	
338	3353	U-turn & To Car Park KEEP RIGHT	
339	3354	Concealed Exit/Entrance Ahead	
340	3355	Watch out for Vehicles	
341	3356	No Access To Kg Java Rd Via Hampshire Rd On Sundays Between 6pm-11.00pm	
342	3357	Condominiums/Side Roads KEEP LEFT	
343	3358	Taxi Stand at Bus Stop	
344	3359	Verdun Rd (arrow left)	
345	3360	Verdun Rd (arrow right)	
346	3361	Verdun Rd Use Desker Rd (arrow Left)	

No	TYP_CD	Description of Informational Traffic Signs	Symbol
347	3362	Verdun Rd Use Desker Rd (arrow Right)	
348	3363	Verdun Rd Use Desker Rd (arrow Ahead)	
349	3364	Exit to Sungei Rd (arrow Right)	
350	3365	Exit to Sungei Rd (arrow Ahead)	
351	3366	Alternative Route to Balestier Rd Use Race Course Rd (arrow Left)	
352	3367	Alternative Route to Balestier Rd Use Race Course Rd (arrow Ahead)	
353	3368	Alternative Route to Kitchener Rd Use Clive St (arrow Ahead)	
354	3369	Alternative Route to Kitchener Rd Use Clive St via Sungei Rd (arrow Right)	
355	3370	Alternative Route to Kitchener Rd Use Clive St via Sungei Rd (arrow Ahead)	
356	3371	Alternative Route to Kitchener Rd Use Clive St via Sungei Rd (U-Turn)	
357	3372	Direction Of Temporary Pedestrian Route (arrow to right)	
358	3373	NO RIGHT TURN FOR SAF VEHICLES	
359	3374	Alternative Route - Farrer Rd (Adam Rd)	
360	3375	Modified Lane Indication (4 lanes)	
361	3376	Bus Lane AHEAD	
362	3377	Left Turn/Right Turn Only	





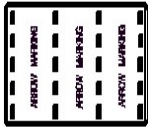




No	TYP_CD	Description of Informational Traffic Signs	Symbol
363	3378	Confirmation Sign - SLE (BKE) - Right	
364	3379	Carpark Confirmation Sign - Right	
365	3380	Please Push Your Bicycle Across The Overpass	
366	3381	Cycling Prohibited	
367	3382	Watch Out For Buses On Right	
368	3383	Alternative Route To Balestier Rd Use Shan Rd	
369	3384	Dismount & Push Bicycle	
370	3385	ERP At CTE (City/PIE) 11km & 9km	
371	3386	Give Way to Buses Exiting (word & graphic)	
372	3387	EXIT No (with 45 degree arrow left)	
373	3388	Brickland Rd (KJE) Use U-turn 650m AHEAD	
374	3389	Directional sign to Tampines Rd/KPE/ECP	
375	3390	Directional sign to Upp Paya Lebar Rd/Hougang Ave 3/ Tampines Ave 10/Bedok North Rd	
376	3391	1 Taxi Only	
377	3392	2 Taxis Only	


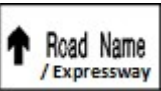










No	TYP_CD	Description of Informational Traffic Signs	Symbol
378	3393	3 Taxis Only	
379	3394	4 Taxis Only	
380	3395	5 Taxis Only	
381	3396	Advance directional sign - Road, Exit XX with 45 degree arrow Left	
382	3397	Advance directional sign - Road, Exit XX with down arrow	
383	3398	No Cycling In The Bicycle Park, Please Dismount & Push Your Bicycle	
384	3399	Bicycle Park	
385	3400	QUEUE HERE FOR TAXI	
386	3401	SPEEDING KILLS Drive Safely	
387	3402	Nanyang Polytechnic Use EXIT 12B	
388	3403	HDB Blocks Directional sign	
389	3404	Taxi Stand Confirmation sign - Right	
390	3405	XX m Ahead Confirmation sign - Right	
391	3406	No U -Turn (graphics)	

No	TYP_CD	Description of Informational Traffic Signs	Symbol
392	3407	Rain Shelter	
393	3408	300m	
394	3409	U-Turns 150m & 350m AHEAD	
395	3410	Robin Road 100m Ahead	
396	3411	Directional Sign -Road Names with Down arrows	
397	3412	GIVE WAY TO PEDESTRIAN	
398	3413	Directional sign -Road Name - arrow down	
399	3414	Max Height Limit 2.0m	
400	3415	Car Parks - with directional arrows	
401	3416	Taxi Stand Confirmation sign - Left	
402	3417	To Stay Within Restricted Zone (Arrow Right)	
403	3418	Please Push Your Bicycle Across Overhead Bridge	
404	3419	ERP At PIE (Tuas/CTE) Near Kallang Bahru	
405	3420	Alternative Right Turn At Ubi Ave 3 400m Ahead	
406	3421	Drop-Off/Pick-Up Point Opposite	








No	TYP_CD	Description of Informational Traffic Signs	Symbol
407	3422	Confirmation Sign - Road/Expressway - Left	
408	3423	Motorcycle Parking Place	
409	3424	Area Under Camera Surveillance	
410	3425	Confirmation sign - Fort Canning Park	
411	3426	Look Out For Traffic From Left	
412	3427	Adam Rd Use Centre Lane	
413	3428	Cyclists Ahead (in words)	
414	3429	Electric Vehicle Quick Charger	
415	3430	To cross Paterson Rd please use the Underpass via ION-Paterson Link @ B2 (words) - Entrance to Underpass (graphic)	
416	3432	Animals Ahead Next XXkm	
417	3433	U-Turn XXm Ahead	
418	3434	Alternative U-Turn XXm Ahead	
419	3435	Lane indication with destination(s)/road name(s)	

No	TYP_CD	Description of Informational Traffic Signs	Symbol
420	3436	Bus Lane on the Right XXm Ahead	
421	3437	Bus Lane on the Right Indication	
422	3438	Give Way to Pedestrians with Indication	
423	3439	Pedestrian Crossing (back to back)	
424	3440	Watch Out For Vehicles From Kg Bahru Rd	
425	3441	Give Way TO Vehicles From Duke-NUS	
426	3463	CAUTION Bus Stopping Ahead	
427	3464	Trailers with Containers (graphic) Keep Right to <Road/Expressway> to <Road/Expressway> (words)	
428	3465	Trailers with Containers (graphic) Keep Left to <Road/Expressway> to <Road/Expressway> (words)	-
429	3466	Trailers with Containers (graphic) Keep Right to <Road/Expressway> (words)	
430	3467	Trailers with Containers (graphic) Keep Left to <Road/Expressway> (words)	-
431	3468	Trailers with Containers (graphic) Turn Right Arrow (graphic) Turn Right to <Road/Expressway> (words)	

















No	TYP_CD	Description of Informational Traffic Signs	Symbol
432	3469	Trailers with Containers (graphic) Turn Left Arrow (graphic) Turn Right to <Road/Expressway> (words)	-
433	3470	Trailers with Containers (graphic) Turn Left Arrow (graphic) Turn Right to <Road/Expressway> (words)	
434	3471	Trailers with Containers (graphic) Turn Right Arrow (graphic) Turn Right to <Road/Expressway> (words)	-
435	3472	To Stay Within Restricted Zone (words) Left Arrow (graphic)	
436	3473	To Stay Within Restricted Zone (words) Right Arrow (graphic)	-
437	3474	TPE (PIE-Changi) (words) Aeroplane (graphic) KPE Keep Right (words)	
438	3475	Traffic Police Camera Zone	
439	3476	Lane Indication (XX Lanes) (arrow markings shall tally with site condition)	
440	3477	Lane Indication for Expressway	
441	3478	Silver Zone Slow Down	
442	3479	End of Silver Zone	
443	3480	Look Out for Turning Buses	

















No	TYP_CD	Description of Informational Traffic Signs	Symbol
444	3481	Advance Directional Sign - Road Names / Expressway (multiple signs with directional arrows)	
445	3482	Advance Directional sign - Road Name / Expressway (arrow Ahead)	
446	3483	No U-Turn - Reminder	
447	3484	Parking Enforcement Camera	
448	3485	Taxi Stand (with directional arrow)	
449	3486	Watch Out For Pedestrians Crossing	
450	3487	Overpass (Facility) with left arrow	
451	3488	Overpass (Facility) with right arrow	
452	3489	Overpass (Facility) with straight arrow	
453	3490	Pedestrian wayfinding (Facility) with left arrow	
454	3491	Pedestrian wayfinding (Facility) with right arrow	
455	3492	Pedestrian wayfinding (Facility) with straight arrow	







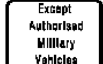



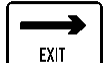
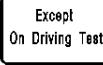

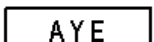


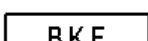
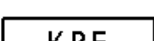
No	TYP_CD	Description of Informational Traffic Signs	Symbol
456	3493	Underpass (Xm) (Facility) with left arrow	
457	3494	Underpass (Xm) (Facility) with right arrow	
458	3495	Underpass (Xm) (Facility) with straight arrow	
459	3496	New Pedestrian Crossing (right arrow)	
460	3497	PIE (TUAS) Keep Right	
461	3498	Underpass (Facility) with straight arrow	
462	3499	Watch Out For Traffic	
463	3500	Cyclist Crossing Ahead	
464	3501	Please Push Your Bicycle Across The Ramp	
465	3502	Confirmation sign - Clementi Ave 6 - AYE - Right	
466	3503	To NUS Use Left Most Lane	
467	3504	Bus Lane (full day) 0730 to 2300	








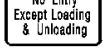

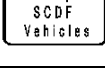






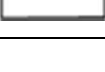
No	TYP_CD	Description of Informational Traffic Signs	Symbol
468	3505	Bus Only Lane	
469	3506	Slower Vehicles KEEP LEFT	
470	3507	Taxi Stand X Taxis Only	
471	3508	Your Speed Sign	
472	3509	U-Turn at Traffic Light Junction	
473	3515	Lane Begins	
474	3516	Lane Ends	












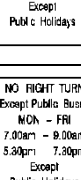





17.1.4 Supplementary Traffic Signs



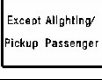






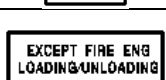
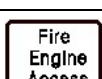






No	TYP_CD	Description of Supplementary Traffic Signs	Symbol
1	4001	Except School Buses	
2	4002	Exceeding 2500kg In Unladen Weight	
3	4003	School Zone For 400m	
4	4004	Except Authorised Vehicles	
5	4005	Except SBS Buses	
6	4006	Directional Arrows (Single Headed)	
7	4007	Vehicles Not Exceeding 2500 Kg In Unladen Weight	
8	4008	Except Ambulance And Police Vehicles	
9	4009	Way Out (Right)	
10	4010	Except Loading / Unloading	
11	4011	Vehicles Not Exceeding 1500 Kg In Unladen Weight	
12	4012	Distance Ahead	
13	4013	Exceeding 1500kg In Unladen Weight	
14	4014	Except Cars, SBS Buses & School Buses	
15	4016	School Zone For 300m	
16	4017	School Zone For 200m	

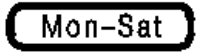
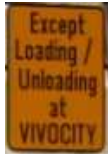



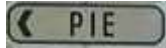









No	TYP_CD	Description of Supplementary Traffic Signs	Symbol
17	4018	Except Buses & Authorised Vehicles	
18	4019	School Zone For 250 m	
19	4020	School Zone for 500 m	
20	4021	Except Buses	
21	4022	Except Refuse Trucks	
22	4023	School Zone For 150m	
23	4024	School Zone For 350m	
24	4025	Time Plate (For School Days)	
25	4026	Way Out (Left)	
26	4027	Way Out (Ahead)	
27	4028	Directional Arrows (Double Headed)	
28	4029	Except Coaches	
29	4030	Time Plate (General)	
30	4031	Distance to MRT Station (Left)	
31	4032	Except Fire Engine	
32	4033	School Zone For 600 m	















No	TYP_CD	Description of Supplementary Traffic Signs	Symbol
33	4034	Except Heavy Vehicle Only	
34	4035	School	
35	4036	Except Public Buses	
36	4037	NParks Vehicles Only	
37	4038	CTE	
38	4039	Except Taxi	
39	4040	Except Authorised Military Vehicles	
40	4041	Except Buses Only	
41	4042	No Entry Except Taxis	
42	4043	Except SMRT Buses	
43	4044	Exit With Arrow To Right	
44	4045	Except On Driving Test	
45	4046	PIE	
46	4047	AYE	
47	4048	SLE	
48	4049	ECP	
49	4050	BKE	
50	4051	KPE	





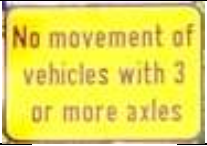



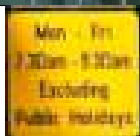
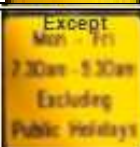
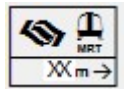


No	TYP_CD	Description of Supplementary Traffic Signs	Symbol
51	4052	KJE	
52	4053	TPE	
53	4054	No walking (With Directional Arrow)	
54	4055	Distance to MRT Station (Right)	
55	4056	To HDB Carpark Only	
56	4057	Heavy Vehicle Turning Ahead XX m	
57	4058	Except Fire Engine & Authorised Vehicles	
58	4059	No Entry Except Loading & Unloading	
59	4060	No Parking On Grass Verge And Pedestrian Footpath	
60	4061	Except SCDF Vehicles	
61	4062	School Zone For 450 m	
62	4063	Exit Only	
63	4064	Except NParks Vehicles	
64	4065	Public Car Park	
65	4066	Except Cars, Lorries & Buses	
66	4067	Except Taxi & Authorised Vehicles	
67	4068	Except Vehicles With Parking Labels	

No	TYP_CD	Description of Supplementary Traffic Signs	Symbol
68	4069	On CTE	
69	4070	MRT Station	
70	4071	Bus Stop	
71	4072	Taxi	
72	4073	Except Police Vehicle	
73	4074	Except Tour Buses	
74	4075	School Zone For 550m	
75	4076	Except Coaches & Handicapped Driven Vehicles Only	
76	4077	Taxi Stand (With Directional Arrow)	
77	4078	For Taxi Only	
78	4079	Within Bay Except Authorised Vehicles	
79	4080	Except Public Buses Time Restriction	
80	4081	No Right Turn Except Public Buses Time Restriction	
81	4082	School Zone For 270m	
82	4083	Mon - Fri	
83	4084	Time plate - ERP	
84	4085	Reminder	








No	TYP_CD	Description of Supplementary Traffic Signs	Symbol
85	4086	Motorcycles Parking	
86	4087	Exit with arrow to left	
87	4088	Except Alighting/Pickup Passenger	
88	4089	School Zone For 100m	
89	4090	Reserved For Handicap	
90	4091	Except Residents & Authorised Vehicles	
91	4092	Except TAS Postal Vehicles	
92	4093	Except SBS Buses 7am - 7pm	
93	4094	Except For Scheme A Buses	
94	4095	EXCEPT FIRE ENG, LOADING / UNLOADING	
95	4096	Fire Engine Access	
96	4097	Except Emergency Vehicles	
97	4098	Sundays 6.00pm-11.00pm	
98	4099	Authorised Vehicles Only	
99	4100	Time Restriction for No Stopping	
100	4101	CD Bomb Shelter XXm Ahead	
101	4102	EXCEPT AUTHORISED VEHICLES ONLY	

No	TYP_CD	Description of Supplementary Traffic Signs	Symbol
102	4103	Mon - Sat	
103	4104	Except Loading/Unloading at VIVOCITY	
104	4105	RESERVED - Handicap Parking Lot	
105	4106	Mon - Fri 7.00am -9.00am Except SBS Buses	
106	4107	MRT Station with distance and directional arrow right	
107	4108	PIE (arrow Left)	
108	4109	MRT Station with distance and directional arrow Left	
109	4110	MRT Station with distance and directional arrow Ahead	
110	4111	EXCEPT FOR AUTHORISED VEHICLES	
111	4112	House No	
112	4113	80m Ahead	
113	4114	Distance with directional arrow Left	
114	4115	Distance with directional arrow Right	
115	4116	Distance with directional arrow Ahead	
116	4117	Bt Batok Town	












No	TYP_CD	Description of Supplementary Traffic Signs	Symbol
117	4118	Taxi 40m - Arrow Left	
118	4119	Taxi 40m - Arrow Right	
119	4120	Taxi 90m - Arrow Left	
120	4121	Lift access to MRT Via SMU - Arrow Left	
121	4122	Orchard	
122	4123	MRT Station 75m Ahead	
123	4124	MRT Station 75m to the Right	
124	4125	MRT Station 100m to the Right	
125	4126	MRT Station 175m Ahead	
126	4127	MRT Station 300m Ahead	
127	4128	MRT Station 325m Ahead	
128	4129	MRT Station 325m to the Right	
129	4130	MRT Station 325m to the Left	
130	4131	MRT Station 350m Ahead	

No	TYP_CD	Description of Supplementary Traffic Signs	Symbol
131	4132	MRT Station 400m Ahead	
132	4133	300m	
133	4134	NO PARKING	
134	4135	Bicycle Park-Notice	
135	4136	No movement of vehicles with 3 or more axles	
136	4137	Alternative Crossings A - POB to the Right, Traffic Crossing to the Left	
137	4138	Alternative Crossings B - POB to the Left, Traffic Crossing to the Right	
138	4139	Taxi Pick-up	
139	4140	Mon - Fri 7.30am to 8.30am Excluding Public Holidays	
140	4141	Except Mon - Fri 7.30am to 8.30am Excluding Public Holidays	
141	4142	MRT Station XXm to the Right	
142	4143	MRT Station XXm to the Left	
143	4144	MRT Station XXm Ahead	









No	TYP_CD	Description of Supplementary Traffic Signs	Symbol
144	4145	No Movement of Trailers with Containers	
145	4146	Mon - Fri: 7.30am to 8.00pm Except Public Holiday	
146	4147	Mon - Fri 6.30am to 7.20am	
147	4148	No Riding Fine : \$1000	
148	4149	Mon – Fri 7.00am – 7.30am	
149	4150	When Lights Flash (accompanied by a pair of amber LED lights)	
150	4151	Fine up to \$XXX & X Demerit points	
151	4152	XXXm	
152	4153	Transit Logo	
153	4154	Drop off	
154	4155	Mon - Sat 7.30am - 11am Except Sunday and Public Holidays	
155	4156	Mon - Fri 6.30am - 7.30am	
156	4157	Exceeding 2000kg In Unladen Weight	
157	4158	Mon – Fri 6.45am – 7.45am Excluding Public Holiday	
158	4159	Except School Days Mon – Fri 6.30am – 7.45am	

No	TYP_CD	Description of Supplementary Traffic Signs	Symbol
159	4160	MON – FRI 7.30am – 9.30am 5.30pm – 7.30pm EXCEPT PUBLIC HOLIDAY	
160	4161	12mn -5am Thu, Sat – Sun & Public Holidays	
161	4162	6.30am – 7.30am Except Sat, Sun & Public Holidays	
162	4163	X.XXam to X.XXam	
163	4164	Except For Public Buses Only On Left Lane	
164	4165	Except LTA & NParks Vehicles	
165	4166	Mon - Fri 6.45am - 7.45am 1.30pm - 3.00pm	

17.1.5 Mandatory Traffic Signs

No	TYP_CD	Description of Mandatory Traffic Signs	Symbol
1	5001	Stop	
2	5002	Give Way	
3	5003	Stop Children	
4	5004	Ahead Only	
5	5005	Turn Left	
6	5006	Turn Right	
7	5007	Keep Left	
8	5008	Keep Right	
9	5009	Turn Left Ahead	
10	5010	Turn Right Ahead	
11	5011	Pass Either Side	

17.1.6 Street, Flyover, Tunnel, Underpass and Viaduct Traffic Signs

No	TYP_CD	Description of Street, Flyover, Tunnel, Underpass and Viaduct Traffic Signs	Symbol
1	6001	Street Name (Single-Sided, in English only)	
2	6002	Street Name (Double-Sided, in English only)	
3	6003	Street Name (Single-Sided, in English and other languages)	
4	6004	Street Name (Double-Sided, in English and other languages)	
5	9000	Flyover	
6	9300	Tunnel	
7	9400	Underpass	
8	9500	Viaduct	

17.2 List of Flyover, Tunnel, Underpass and Viaduct Names

No	TYP_CD	Name of Flyover
1	9001	Aljunied Flyover
2	9002	Anak Bukit Flyover
3	9003	Ang Mo Kio South Flyover
4	9004	Ang Mo Kio Central Flyover
5	9005	Ang Mo Kio North Flyover
6	9006	Api Api Flyover
7	9007	Bahar Flyover
8	9008	Bedok North Flyover
9	9009	Bedok Reservoir Flyover
10	9010	Benjamin Sheares Bridge
11	9011	Benoi Flyover
12	9012	Bishan Flyover
13	9013	Braddell Flyover
14	9014	Bukit Batok Flyover
15	9015	Bukit Merah Flyover
16	9016	Buona Vista Flyover
17	9017	Changi Airport Aircraft Flyover
18	9018	Changi Flyover
19	9019	Chantek Flyover
20	9020	Choa Chu Kang East Flyover
21	9021	Choa Chu Kang West Flyover
22	9022	Clementi Flyover
23	9023	Clementi North Flyover
24	9024	Corporation Flyover
25	9025	Dairy Farm Flyover
26	9026	Eng Neo Flyover
27	9027	Eunos Flyover
28	9028	Farrer Flyover
29	9029	Gall Batu Flyover
30	9030	Gillman Flyover
31	9031	Henderson Flyover
32	9032	Holland Flyover
33	9033	Hong Kah Flyover
34	9034	Jalan Kayu Flyover
35	9035	Jurong East Flyover
36	9036	Jurong Hill Flyover
37	9037	Kampong Bahru Flyover
38	9038	Kampong Java Flyover
39	9039	Kim Keat Flyover
40	9040	Laguna Flyover
41	9041	Lam San Flyover
42	9042	Lentor Flyover
43	9043	Lower Delta Flyover
44	9044	Loyang Flyover

No	TYP_CD	Name of Flyover
45	9045	Mandai Flyover
46	9046	Mandal Lake Flyover
47	9047	Marine Parade Flyover
48	9048	Marsiling Flyover
49	9049	Marymount Flyover
50	9050	Moulmein Flyover
51	9051	Mount Pleasant Flyover
52	9052	Nanyang Flyover
53	9053	Nee Soon Flyover
54	9054	Newton Flyover
55	9055	Ophir Flyover
56	9056	Outram Flyover
57	9057	Oxley Flyover
58	9058	Pandan Flyover
59	9059	Pasir Laba Flyover
60	9060	Pasir Ris Flyover
61	9061	Paya Lebar Flyover
62	9062	Pioneer Flyover
63	9063	Punggol Flyover
64	9064	Radin Mas Flyover
65	9065	Rifle Range Flyover
66	9066	Rochor Flyover
67	9067	Seletar Flyover (CTE)
68	9068	Sembawang Flyover
69	9069	Tampines Flyover
70	9070	Tampines South Flyover
71	9071	Tanah Merah Flyover
72	9072	Tanjong Katong Flyover
73	9073	Tanjong Rhu Flyover
74	9074	Teban Flyover
75	9075	Telok Ayer Flyover
76	9076	Tengah Flyover
77	9077	Thomson Flyover
78	9078	Toa Payoh North Flyover
79	9079	Toa Payoh South Flyover
80	9080	Toh Tuck Flyover
81	9081	Tuas Flyover
82	9082	Turf Club Flyover
83	9083	Ulu Sembawang Flyover
84	9084	University Flyover
85	9085	Upper Changi Flyover
86	9086	Upper Seletar Flyover
87	9087	Upper Thomson Flyover
88	9088	Wayang Satu (Whitley) Flyover
89	9089	Whampoa Flyover

No	TYP_CD	Name of Flyover
90	9090	Woodlands Flyover
91	9091	Woodlands South Flyover
92	9092	Woodsville Flyover
93	9093	Yew Tee Flyover
94	9094	Yio Chu Kang Flyover
95	9095	Zhenghua Flyover
96	9096	Adam Flyover
97	9097	Merdeka Bridge
98	9098	Punggol East Flyover
99	9099	Punggol West Flyover
100	9100	Bukit Timah Seven Mile Flyover
101	9101	Buangkok Flyover
102	9102	Toh Guan Flyover
103	9103	West Coast Flyover
104	9104	Penjuru Flyover
105	9105	Aljunied West Flyover
106	9106	Kallang Way Flyover
107	9107	Defu Flyover
108	9108	Jurong Pier Flyover
109	9109	Jurong Port Flyover
110	9110	Keppel Flyover
111	9111	Portsdown Flyover
112	9112	Queenstown Flyover
113	9113	Simei Flyover
114	9114	Utown Flyover
115	9115	Seletar Aerospace Flyover
116	9116	Bukit Panjang Flyover
117	9117	Hillview Flyover











No	TYP_CD	Name of Tunnel
1	9300	Chin Swee Tunnel
2	9301	Kampong Java Tunnel
3	9302	Woodsville Tunnel
4	9303	Fort Canning Tunnel
5	9304	KPE Tunnel

No	TYP_CD	Name of Underpass
1	9400	Ang Mo Kio Underpass
2	9401	Bartley Underpass
3	9402	Bukit Timah Underpass
4	9403	Dunearn Underpass
5	9404	Tuas Underpass
6	9405	Tuas West Underpass
7	9406	Queensway Underpass
8	9407	Braddell Underpass

No	TYP_CD	Name of Underpass
9	9408	Clementi Avenue 6 Underpass
10	9409	Anak Bukit Underpass
11	9410	Farrer Underpass
12	9411	Upper Paya Lebar Underpass

No	TYP_CD	Name of Viaduct
1	9500	Keppel Viaduct
2	9501	Macritchie Viaduct
3	9502	Telok Blangah Viaduct
4	9503	Tuas Checkpoint Viaduct
5	9504	Upper Serangoon Viaduct
6	9505	Serangoon Viaduct
7	9506	Lornie Viaduct
8	9507	Bartley Viaduct
9	9508	West Coast Highway Viaduct




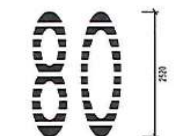
17.3 List of Cycling Signs

No	TYP_CD	Description of Cycling Signs	Symbol
1	7001	Dismount & Push (Graphics & Words)	
2	7002	Arrow-Right	
3	7003	Arrow-Left	
4	7004	Arrow-Ahead	
5	7005	Shared Path (graphic)	
6	7006	Stay on Path - Pedestrian-Right, Cyclist-Left (graphic & words)	
7	7007	Stay on Path - Cyclist-Right, Pedestrian-Left (graphic & words)	
8	7008	Give Way to Pedestrians (graphic & words)	
9	7009	Beware of Vehicles (graphic & words)	
10	7010	Cycling Path across road - Right	

No	TYP_CD	Description of Cycling Signs	Symbol
11	7011	Cycling Path across road - Left	
12	7012	Cycling Path XXX m - Right	
13	7013	Cycling Path XXX m - Left	
14	7014	Cycling Path XXX m - Ahead	
15	7015	Cycling Path across road (graphic & words) - Right	
16	7016	Cycling Path across road (graphic & words) - Left	
17	7017	Cycling Path XXX m (graphic & words) - Right	
18	7018	Cycling Path XXX m (graphic & words) - Left	
19	7019	Cycling Path XXX m (graphic & words) - Ahead	
20	7020	Pedestrians - Right	
21	7021	Pedestrians - Left	
22	7022	Dismount	

No	TYP_CD	Description of Cycling Signs	Symbol
23	7023	Stay On Path (Cyclist Left)	
24	7024	Stay On Path (Cyclist Right)	
25	7025	Shared Track Keep Left	
26	7026	Give Way To Pedestrians	
27	7027	Watch Out For Vehicles	
28	7028	Slow	
29	7029	Shared Path Keep Left	

17.4 List of Word Marking

No	Value	Symbol	Description
1	1	1	1
2	2	2	2
3	3	3	3
4	4	4	4
5	5	5	5
6	6	6	6
7	7	7	7
8	8	8	8
9	9	9	9
10	20	20	20
11	25	25	25
12	40	40	40
13	50	50	50
14	60	60	60
15	70	70	70
16	80	80	80
17	90	90	90
18	07:30 - 20:00		07:30 - 20:00 (Bus Lane Operating Hours Marking)
19	23:00	23:00	23:00
20	50M	50M	50M
21	50s		'50' KPH Speed Marking (with stripe - anti skid)
22	70s		'70' KPH Speed Marking (with stripe - anti skid)
23	80s		'80' KPH Speed Marking (with stripe - anti skid)
24	(AYE)	(AYE)	(AYE)
25	(ECP)	(ECP)	(ECP)
26	(KPE)	(KPE)	(KPE)
27	(MCE)	(MCE)	(MCE)
28	(SLE)	(SLE)	(SLE)
29	AHEAD	AHEAD	AHEAD
30	AIRPORT	AIRPORT	AIRPORT
31	AMK	AMK	ANG MO KIO
32	AND	AND	AND
33	A'PORT	A'PORT	AIRPORT

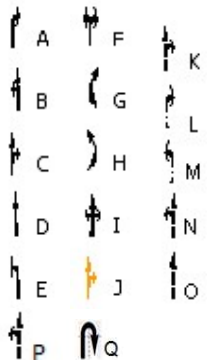





No	Value	Symbol	Description
34	A'PT	A'PT	AIRPORT
35	ARRIVAL	ARRIVAL	ARRIVAL
36	ARROW		ARROW (GRAPHIC)
37	AVE	AVE	AVENUE
38	AVE 1	AVE 1	AVENUE 1
39	AVE 6	AVE 6	AVENUE 6
40	AYE	AYE	AYER RAJAH EXPRESSWAY
41	B	B	B
42	B'DELL	B'DELL	BRADDELL
43	BAY	BAY	BAY
44	BEDOK	BEDOK	BEDOK
45	BISHAN	BISHAN	BISHAN
46	BKE	BKE	BUKIT TIMAH EXPRESSWAY
47	BRANI	BRANI	BRANI
48	BT	BT	BUDGET TERMINAL
49	BUS	BUS	BUS
50	BUSES	BUSES	BUSES
51	C	C	C
52	CAMLOGO		CAMERA LOGO (GRAPHIC)
53	CAR	CAR	CAR
54	CHANGI	CHANGI	CHANGI
55	CITY	CITY	CITY
56	CLEMENTI	CLEMENTI	CLEMENTI
57	CROSSING	CROSSING	CROSSING
58	CTE	CTE	CENTRAL EXPRESSWAY
59	CYCLE	CYCLE	CYCLE
60	CYCLE LOGO		CYCLE LOGO (GRAPHIC)
61	CYCLING LANE		CYCLING LANE (GRAPHIC)
62	D'FARM	D'FARM	DAIRY FARM
63	DOWN	DOWN	DOWN
64	DRIVE	DRIVE	DRIVE
65	D'TURE	D'TURE	DEPARTURE
66	EAST	EAST	EAST
67	ECP	ECP	EAST COAST PARKWAY
68	EXIT	EXIT	EXIT
69	FOOTPRINTS		FOOTPRINTS (GRAPHIC)
70	FORT	FORT	FORT


No	Value	Symbol	Description
71	GATE	GATE	GATE
72	HALUS	HALUS	HALUS
73	HANDICAP		HANDICAP (GRAPHIC)
74	HUMP	HUMP	HUMP
75	HUMPS	HUMPS	HUMPS
76	H'VIEW	H'VIEW	HILLVIEW
77	IN	IN	IN
78	J'RONG	J'RONG	JURONG
79	JURONG	JURONG	JURONG
80	KEEP	KEEP	KEEP
81	KJE	KJE	KRANJI EXPRESSWAY
82	K'LANG	K'LANG	KALLANG
83	KM	KM	KM
84	KM/H	KM/H	KM/H
85	KPE	KPE	KALLANG PAYA LEBAR EXPRESSWAY
86	LANE	LANE	LANE
87	LEFT	LEFT	LEFT
88	LOADING	LOADING	LOADING
89	LOOK		LOOK (GRAPHIC)
90	LOOK L/R ARROW		LOOK LEFT RIGHT ARROW (GRAPHIC)
91	LOOK LEFT/RIGHT		LOOK LEFT/RIGHT (GRAPHIC)
92	LOOKLEFT		LOOK LEFT (GRAPHIC)
93	LOOKRIGHT		LOOK RIGHT (GRAPHIC)
94	LOR	LOR	LORONG
95	LORNIE	LORNIE	LORNIE
96	LORRY	LORRY	LORRY
97	M\CYCLE	M\CYCLE	MOTORCYCLE
98	MCE	MCE	MARINA COASTAL EXPRESSWAY
99	MOTOR	MOTOR	MOTOR
100	MOTORCYCLE	MOTORCYCLE	MOTORCYCLE
101	NO	NO	NO
102	ONLY	ONLY	ONLY
103	OPERATOR	OPERATOR	OPERATOR
104	OUT	OUT	OUT
105	PARK	PARK	PARK




No	Value	Symbol	Description
106	PARKING	PARKING	PARKING
107	PAYOH	PAYOH	PAYOH
108	P'GGOL	P'GGOL	PUNGGOL
109	PICK	PICK	PICK
110	PICK-UP	PICK-UP	PICK-UP
111	PIE	PIE	PAN ISLAND EXPRESSWAY
112	PYRAMIDSTRIPS		PYRAMID STRIPS (GRAPHIC)
113	RD	RD	ROAD
114	RESIDENT	RESIDENT	RESIDENT
115	ROAD	ROAD	ROAD
116	ROCHOR	ROCHOR	ROCHOR
117	S	SH	SHOULDER (vertical)
118	SBST	SBST	SINGAPORE BUS SERVICE TRANSIT
119	SCHOOL	SCHOOL	SCHOOL
120	SENTOSA	SENTOSA	SENTOSA
121	S'GOON	S'GOON	SERANGOON
122	SH	SH	SHOULDER (horizontal)
123	SIMS	SIMS	SIMS
124	SLE	SLE	SELETAR EXPRESSWAY
125	SLOW	SLOW	SLOW
126	SLOWLY	SLOWLY	SLOWLY
127	STAND	STAND	STAND
128	STOP	STOP	STOP
129	STRIP	STRIP	STRIP
130	STRIPS	STRIPS	STRIPS
131	T1	T1	T1
132	T2	T2	T2
133	TAXI	TAXI	TAXI
134	TAXIS	TAXIS	TAXIS
135	TO	TO	TO
136	TOA	TOA	TOA
137	TPE	TPE	TAMPINES EXPRESSWAY
138	TRIANGLE		TRIANGLE (GRAPHIC)
139	TUAS	TUAS	TUAS
140	UNLOADING	UNLOADING	UNLOADING
141	UP	UP	UP
142	UPP	UPP	UPPER
143	UPPER	UPPER	UPPER
144	USE UNDERPASS	USE UNDERPASS	USE UNDERPASS
145	VAN	VAN	VAN
146	VISITORS	VISITORS	VISITORS
147	WAY	WAY	WAY

No	Value	Symbol	Description
148	WM	WM	WM
149	X-ING	X-ING	CROSSING
150	X-INGS	X-INGS	CROSSINGS
151	YCK	YCK	YIO CHU KANG

18 Inventory Items and Symbol Representation

<p>16.1-Arrow Marking</p>  <p>16.2-Bicycle Rack</p> <ul style="list-style-type: none"> Bicycle Rack 	<p>16.3-Bollard</p> <ul style="list-style-type: none"> Concrete Fibre Glass Flexible Pole Flexible delineator post Others Safety Spring Loaded Post Steel <p>16.4-Bus Shelter</p>  <p>16.5-Bus Stop Pole</p> 	<p>16.6-Control Box</p> <ul style="list-style-type: none"> Traffic Signal J- Eyes Junction Electronic Road Pricing Lighting Box Over Ground <p>16.7-Convex Mirror</p>  <p>16.8-Covered Linkway</p> <ul style="list-style-type: none"> Others Double Pole Double Pitch Roof Double Pole Flat Roof (Mono pitch) Double Pole Curve Roof Single Pole Double Pitch Roof Single Pole Flat Roof (Mono pitch) Single Pole Curve Roof
<p>16.9-Cycling Marking</p> <ul style="list-style-type: none"> Cycling Marking <p>16.10-Cycling Path</p> <p>Maintenance Agency</p> <ul style="list-style-type: none"> Community Improvement Projects Committee Housing Development Board Immigration Checkpoints Authority Jurong Town Corporation Land Transport Authority National Environment Agency National Parks Board Public Utilities Board SBS Transit Limited Singapore Land Authority Singapore Mass Rapid Transit Sport Singapore Town Council Urban Redevelopment Authority <p>16.11-Cycling Path (Under Planning)</p> <p>— Cycling Path Under Planning</p> <p>16.12-Cycling Path Lighting Poles</p> <ul style="list-style-type: none"> Cycling Path Lighting Pole <p>16.13-Cycling Signs</p> <p>Please refer to Section 18 for the various type</p> <p>16.14-Detector Loop</p>	<p>16.18-Guardrail</p> <ul style="list-style-type: none"> SS Steel P, Single Layer ST Steel P, Triple Layer TB Thrie-beam SD Steel P, Double Layer TS Timber P, Single Layer TD Timber P, Double Layer CC Crash Cushion <p>16.19-Kerbline</p> <ul style="list-style-type: none"> At-grade 2nd level depressed 1st level depressed 1st level elevated 2nd level elevated temporary <p>16.20-Kerb Side Parking</p> <ul style="list-style-type: none"> Bus Car Car/Lorry Heavy Vehicle Motorcycle Taxi <p>16.21-Lamp Post</p>  <p>16.22-Lane Marking</p>	<p>16.24-Passenger Pickup Bay</p>  <p>16.25-Pedestrian Overhead Bridge / Underpass</p> <ul style="list-style-type: none"> Broad Walk Eco Bridge Footbridge Pedestrian Bridge Pedestrian Overhead Bridge Pedestrian Underpass <p>16.26-Railing</p> <ul style="list-style-type: none"> Type A Type B1 Aluminium (spacing bet top two horizontal bars increase to 300mm) Parapet w/ Plant Trough Stainless Steel Others Type B Type C Type D Type E Type G Type A Aluminium Type B Aluminium Type C Aluminium Type D Aluminium Parapet <p>16.27-Retaining Wall</p> <ul style="list-style-type: none"> Brick Wall Crib Wall Contiguous Bored Piles Wall Reinforced Concrete Rubble Wall

<p>Detector Loop</p> <ul style="list-style-type: none"> Strategic Loop Tactical Loop - LEFT Tactical Loop - RIGHT Tactical Loop - REGULAR Bus Detector Red Light Camera <p>16.15-Emergency Gate</p>  <p>16.16-Footpath</p> <ul style="list-style-type: none"> Bricks Concrete Granolithic Others Slabbed Tile <p>16.17-Gantry</p> <ul style="list-style-type: none"> Directional Height limit ERP EMAS 	<ul style="list-style-type: none"> A - 1m,int 1m,0.1m white A1-1m,int 1m,0.1m Yellow A2 -1m,int 1m,0.2m White A3 -1m,int 1m,0.3m yellow A4 - broken white lines at signalised pedestrian crossing A5 - guiding line across a wide/skewed junction B - 2m,int 4m,0.1m white B1 - 2m,int 10m,0.1m White C - 4m,int 2m,0.1m white D - 1m,int 1m,0.1m dbl white E -2.75m,int 2.75m,0.15m white F - Centre line,0.15 m white G - Side Line,0.15 yellow H - continuous Double White Line I - continuous Double Yellow Line J - White Line-Ped Crossing K - Zig Zag Line L - Yellow Line - bus lane M - White Line-stop line N - Yellow Box Line O - Single Yellow zig-zag P - Double Yellow zig-zag Q - Multi-arrow R - Bus Zone S - continuous red line for full day bus lane S1 - Dotted red line for full day bus lane T-Turning Pocket U - Pedestrian crossing ahead marking V - Vibraline X - Traffic Calming marking Y - Yellow box for buses exiting C1 - 4m,int 2m,0.2m white W - Waveline for delineation of bend (wall) D1 - 0.5m,int 0.5m,0.1m dbl white SZ1 - Rumble strip for Silver Zone <p>16.23-Miscellaneous Point</p> <ul style="list-style-type: none"> Intelligent Road Stud Orange Disc Pavement Marker 	<p>16.28-Road crossing</p> <ul style="list-style-type: none"> Signalised crossing Raised Signalised crossing Hump cum Zebra Crossing Zebra crossing Raised zebra crossing <p>16.29-Road Hump</p> <ul style="list-style-type: none"> Bus Friendly Hump Road Hump <p>16.30-RTS Line</p> <ul style="list-style-type: none"> Light Rail Transit Line Mass Rapid Transit Line
---	---	--

<p>16.31-RTS Station</p> <ul style="list-style-type: none"> LRT MRT <p>16.32-Seat</p>  <p>16.33-Speed Regulating Strip</p>  <p>16.34-Street Paint</p> <ul style="list-style-type: none"> Others Type A Type B Type C Type RM <p>16.35-Taxi Shelter</p> <ul style="list-style-type: none"> Others Type A Type B Type C Type RM <p>16.36-Taxi Stop Pole</p> 	<p>16.37-Traffic Sign</p> <p>Please refer to Section 17 for the various type</p> <p>16.38-Traffic Signal Aspect</p> <ul style="list-style-type: none"> A Advanced Warning Light B B-Signal BCS Bicycle Crossing Signal C Overhead Signal Centre Median F Green Filter Arrow Signal FL Floodlight G Ground Signal G+ Ground Signal (with Green Man +) H Overhead Signal J Jumping Amber Light M Miniature Ground Signal N Beacon P Pedestrian Signal PC Pedestrian Signal with Intergrated Count Down Timer R RAG SZ SCH ZONE T Count Down Timer for Pedestrian 	<p>16.39-Vehicular Bridge / Flyover / Underpass</p> <ul style="list-style-type: none"> Culvert Flyover Vehicular Bridge Vehicular Tunnel Vehicular Underpass <p>16.40-Word Marking</p> <p>Please refer to Section 19 for the list of Word Marking</p>
---	---	--