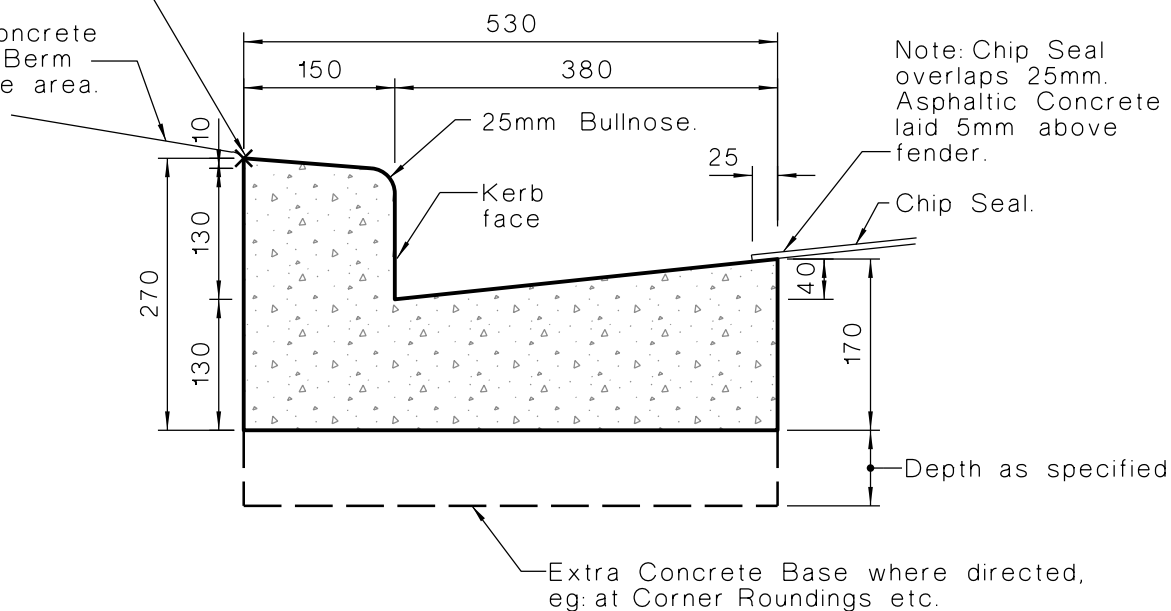


Top of Kerb sloped 10mm.
Kerb Levels on Plan given
to this Point

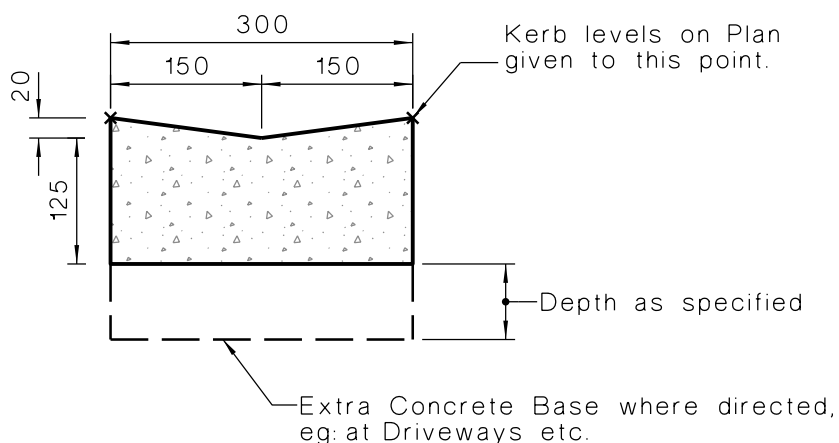
Asphaltic Concrete
Path, Grass Berm
or Landscape area.



KERB AND FLAT CHANNEL

NOTES:

1. Concrete strength to be 20MPa at 28 days.
2. Concrete Finish to conform with Class U3 of NZS3114.
3. Limits of excavation to be sawcut if path and/or carriageway is not to be reconstructed.



BACK OF PATH AND INTERPATH CHANNEL

Top of Kerb Level

25mm Bull Nose

150

200

70

250

270

Kerb face

The diagram illustrates a standard kerb cross-section. It features a trapezoidal shape with a flat top and a sloped bottom. The top surface is labeled 'Top of Kerb Level' and has a '25mm Bull Nose' radius. The top width is 150 units. The total height from the base to the top level is 270 units. The height of the main vertical section is 200 units, and the height of the sloped bottom section is 70 units. The bottom width is 250 units. The right vertical edge is labeled 'Kerb face'. The interior of the kerb is filled with a stippled pattern of small triangles.

Kerb levels on Plan given to this point.

Top of Kerb Sloped 10mm

225

150

75

25mm Bull Nose

Kerb face

270

95

10

Road Surface

5

160

260

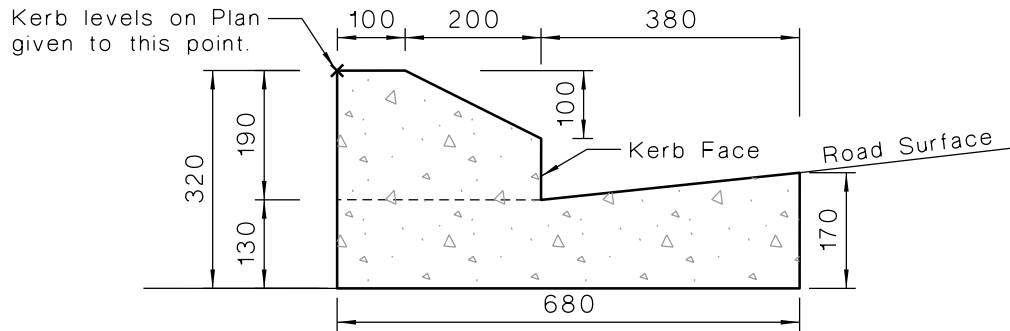
Christchurch
City Council

LOW PROFILE KERB & FLAT
CHANNEL, KERB ONLY AND
KERB & NIB

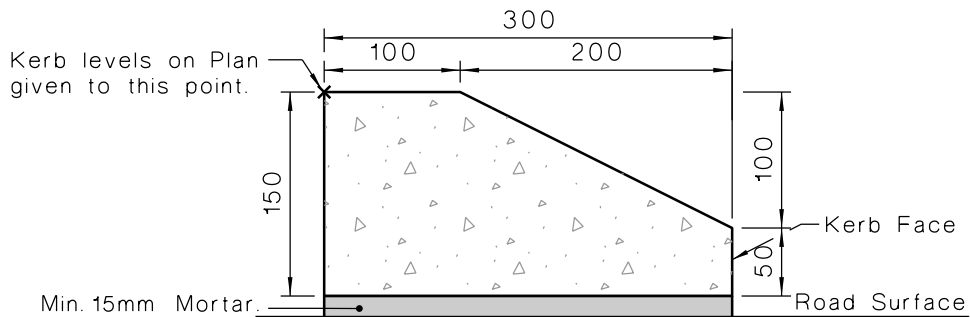
ISSUE DATE	FEB 2002
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SD602

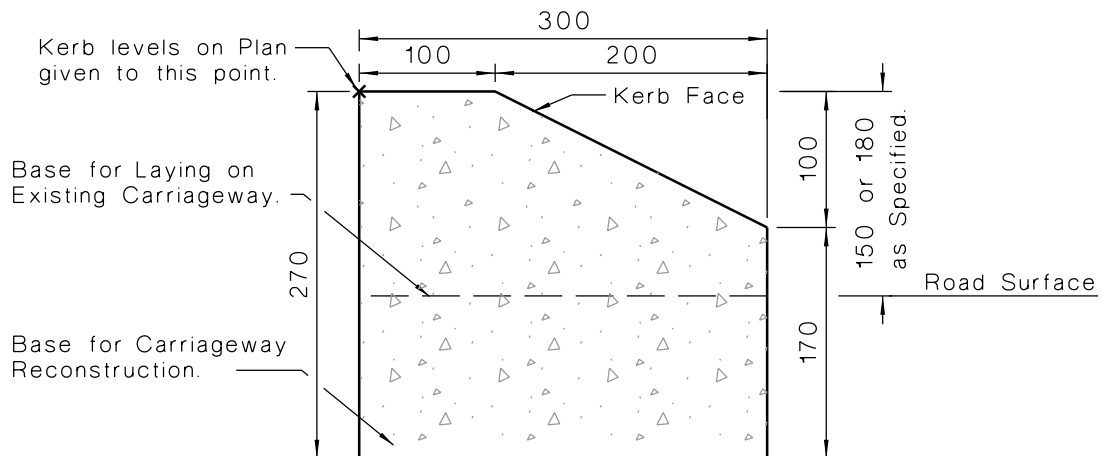
SHEET 1



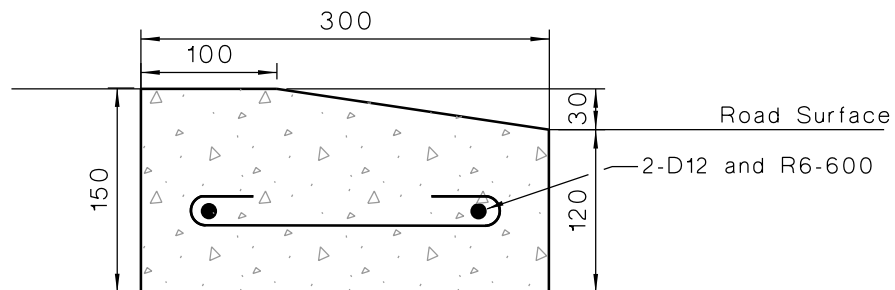
MOUNTABLE MEDIAN KERB AND FLAT CHANNEL



PRECAST MOUNTABLE MEDIAN KERB BLOCKS



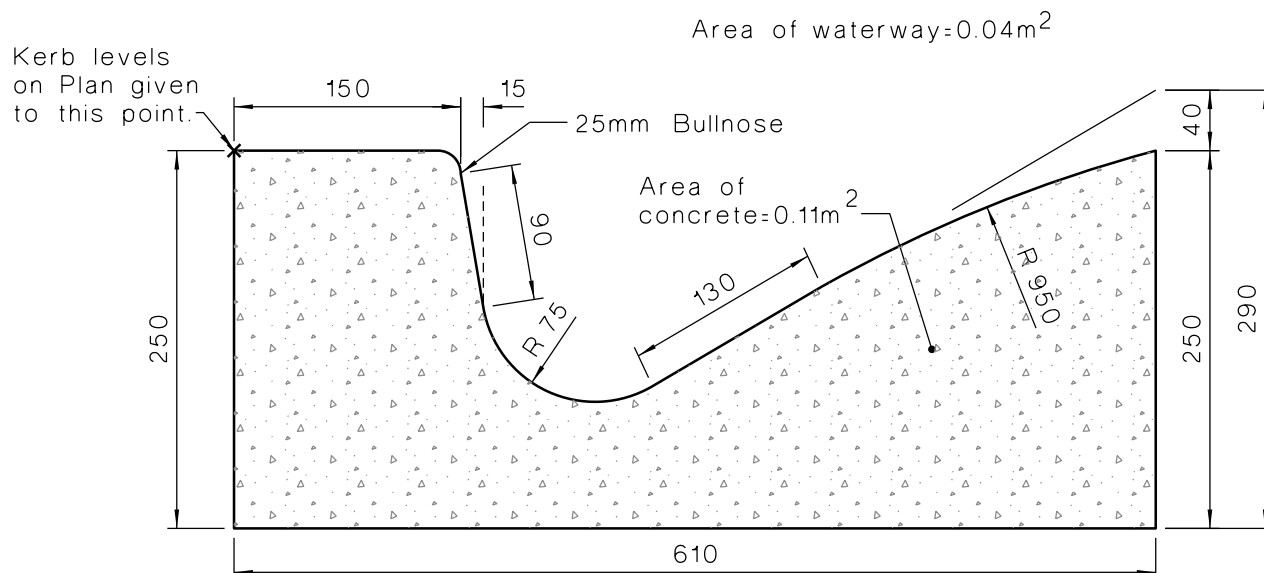
IN SITU MOUNTABLE MEDIAN KERB



LOW MOUNTABLE KERB

NOTES:

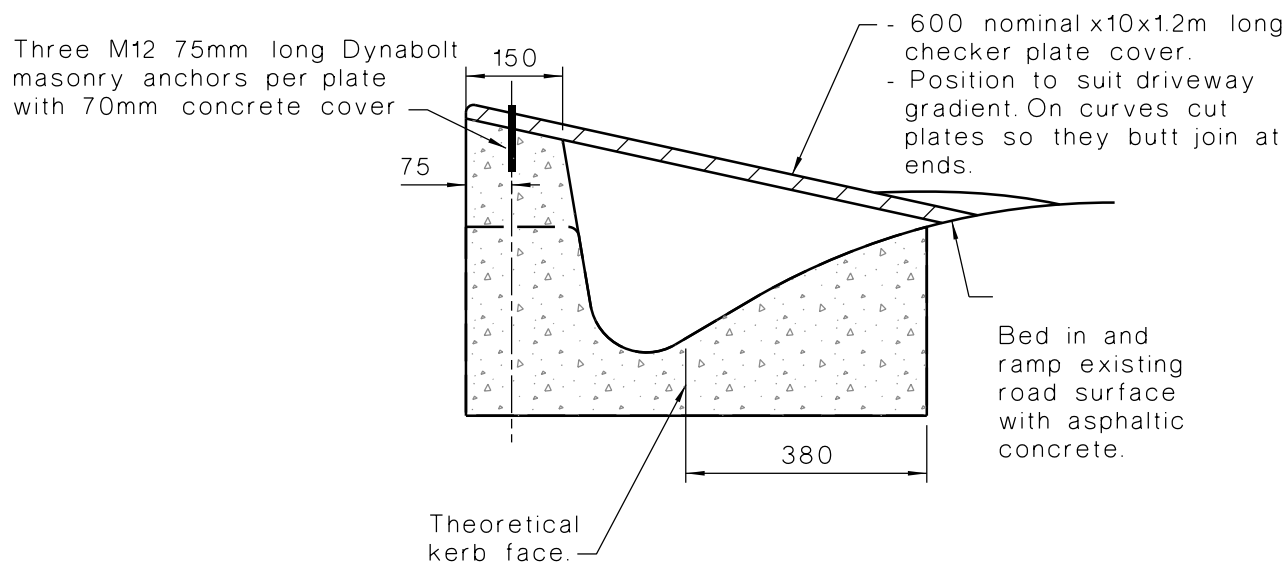
1. Concrete Strength to be 20MPa at 28 days.
2. Concrete Finish to Conform with Class U3 of NZS3114.
3. Length of Precast Block 600mm.



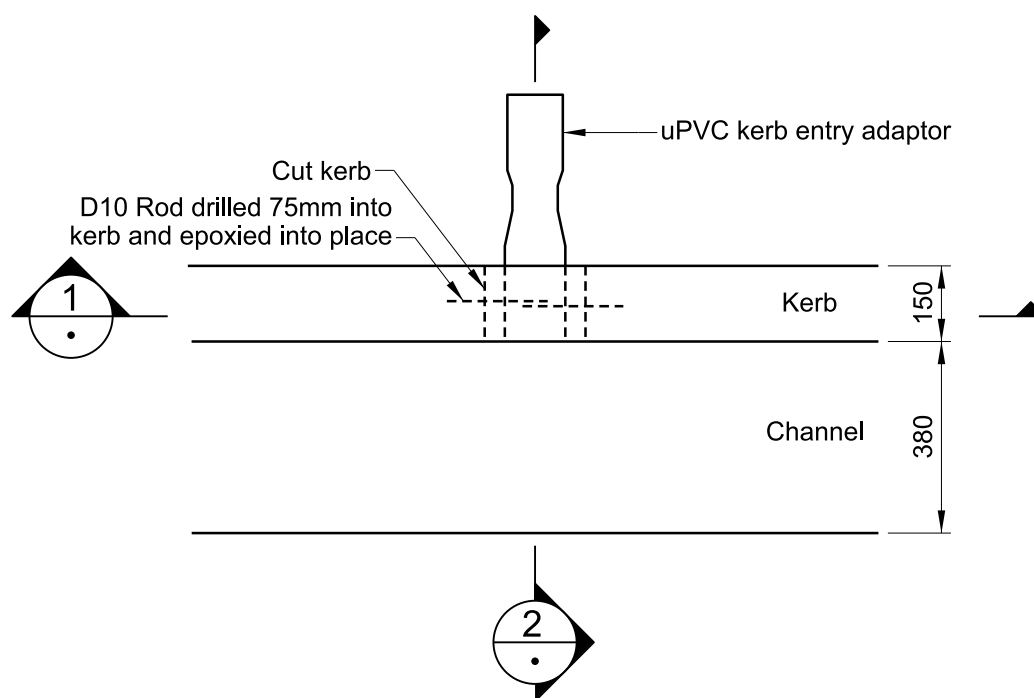
HILLSIDE CHANNEL

NOTES:

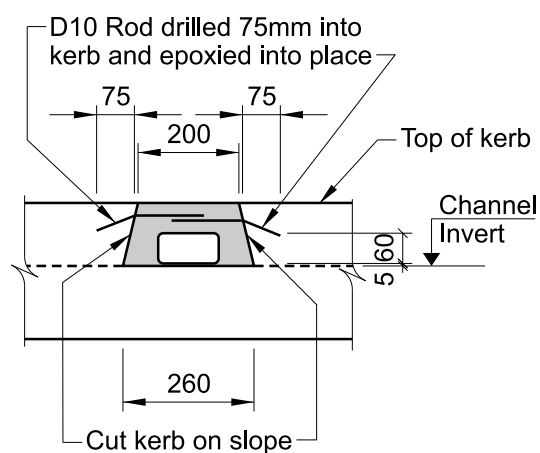
1. Concrete strength to be 20MPa at 28 days.
2. Concrete Finish to conform with Class U3 of NZS3114.



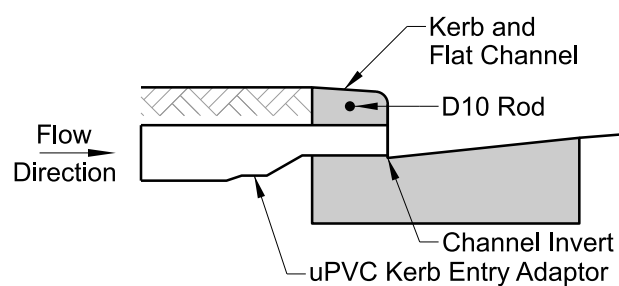
VEHICLE CROSSING FOR HILLSIDE CHANNEL



PLAN



DETAIL 1

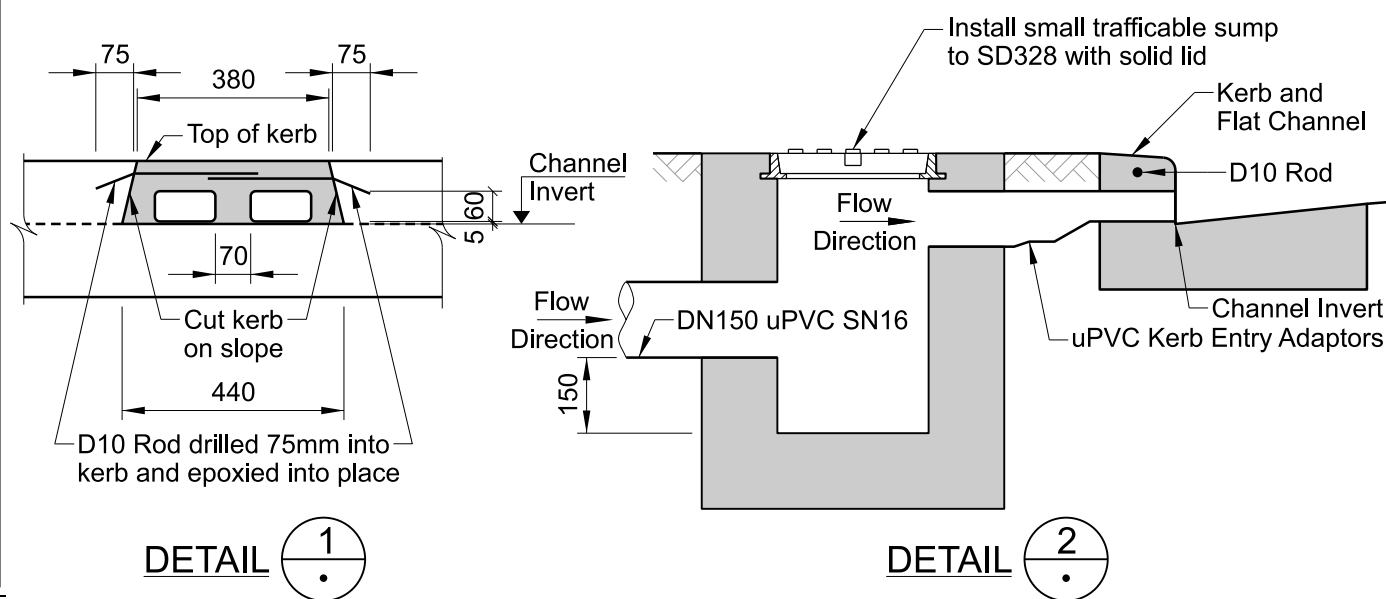
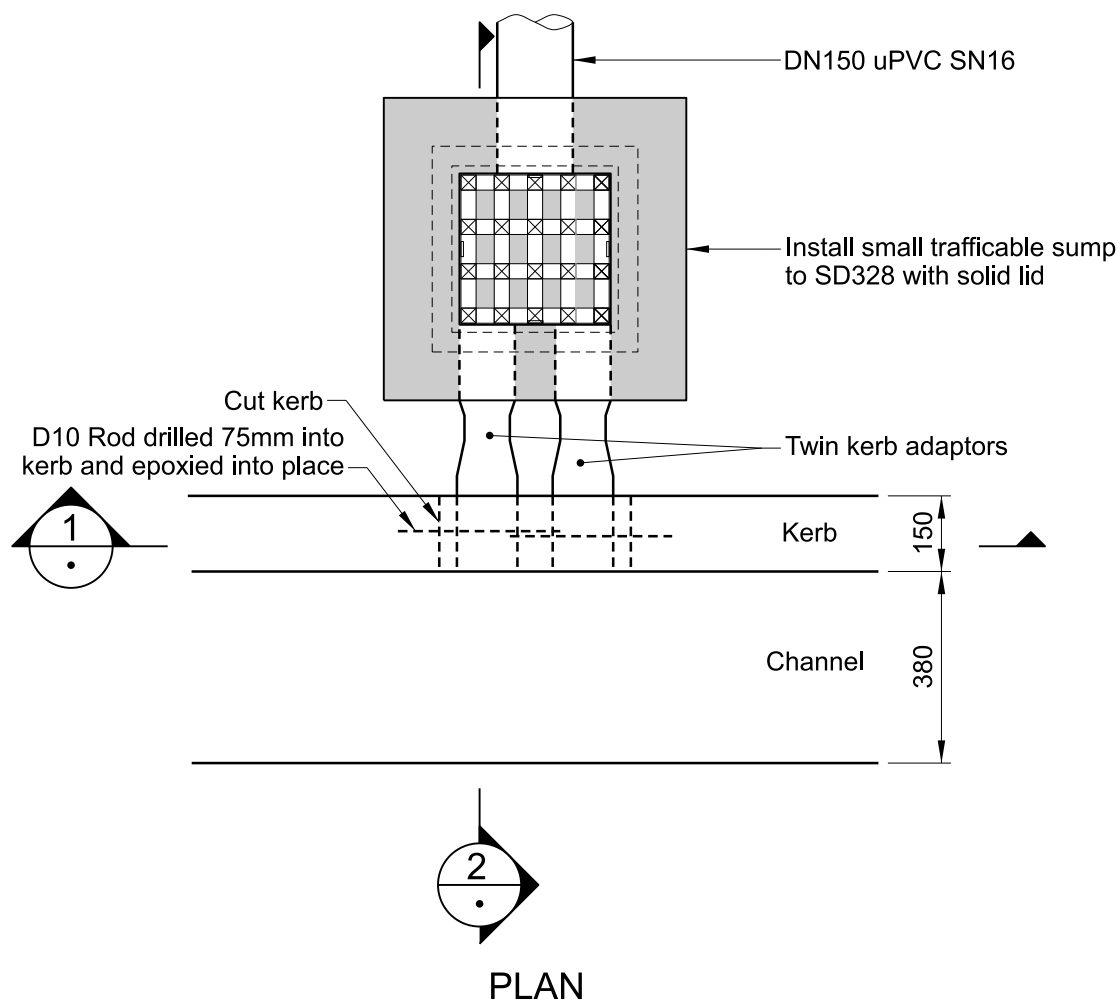


DETAIL 2

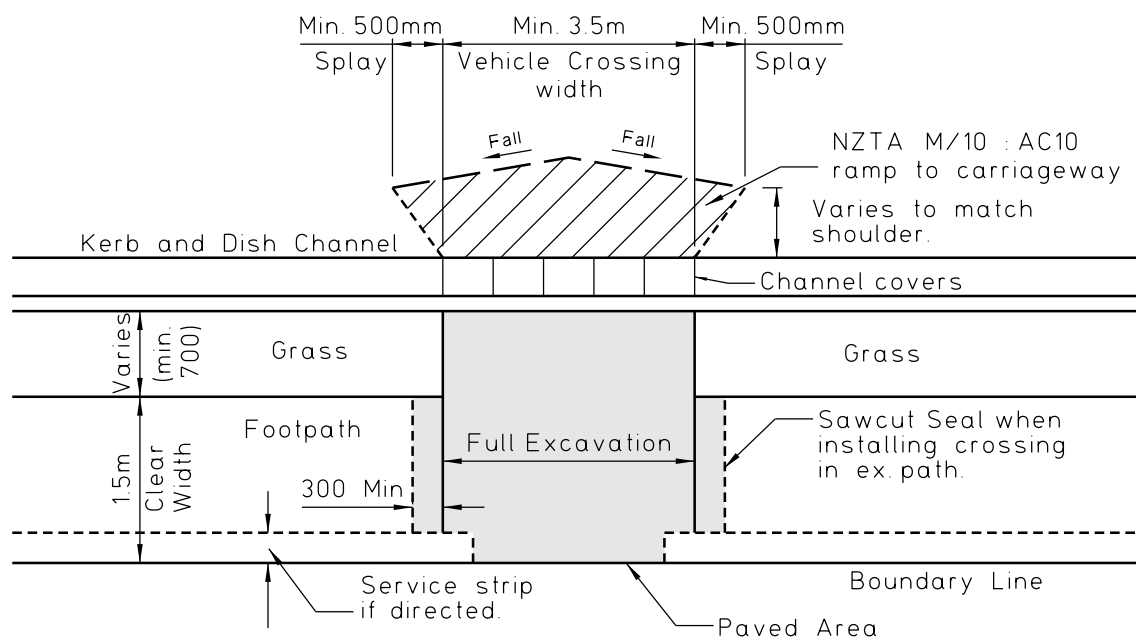
KERB ENTRY

NOTES:

1. Stormwater Outlets in kerbs to be at 200mm centres minimum.
2. Kerb entry adaptor to be installed in conjunction with the pouring of the kerb and channel.
3. If kerb entry adaptor is installed after concrete has hardened then kerb is to be cut on slope as shown in detail 1 above.

**NOTES:**

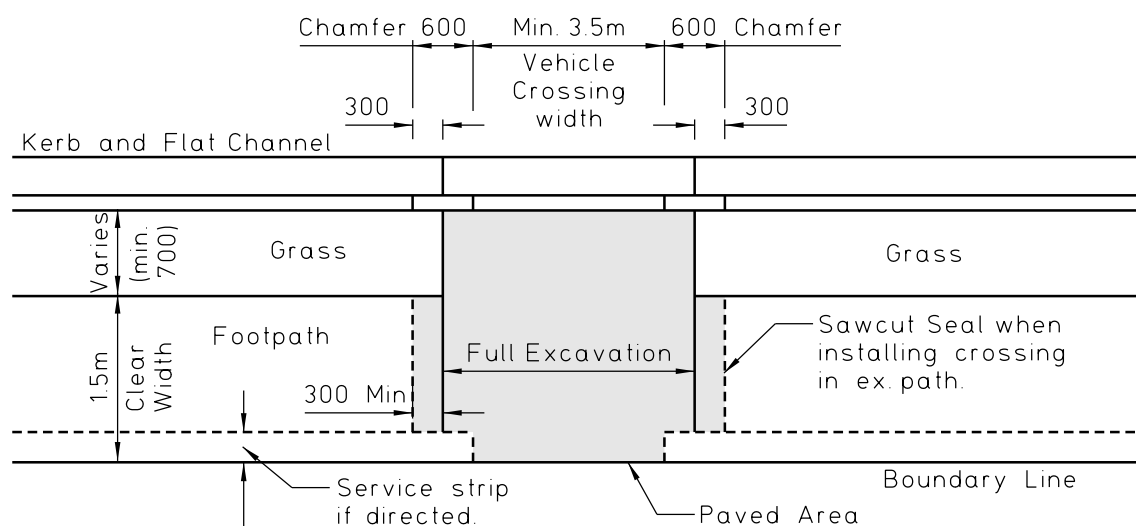
1. If kerb entry adaptor is installed after concrete has hardened then kerb is to be cut on slope as shown in detail 1 above.
2. To be used in conjunction with a 150mm uPVC outlet lateral and Small Trafficable Sump to SD328 with solid lid.



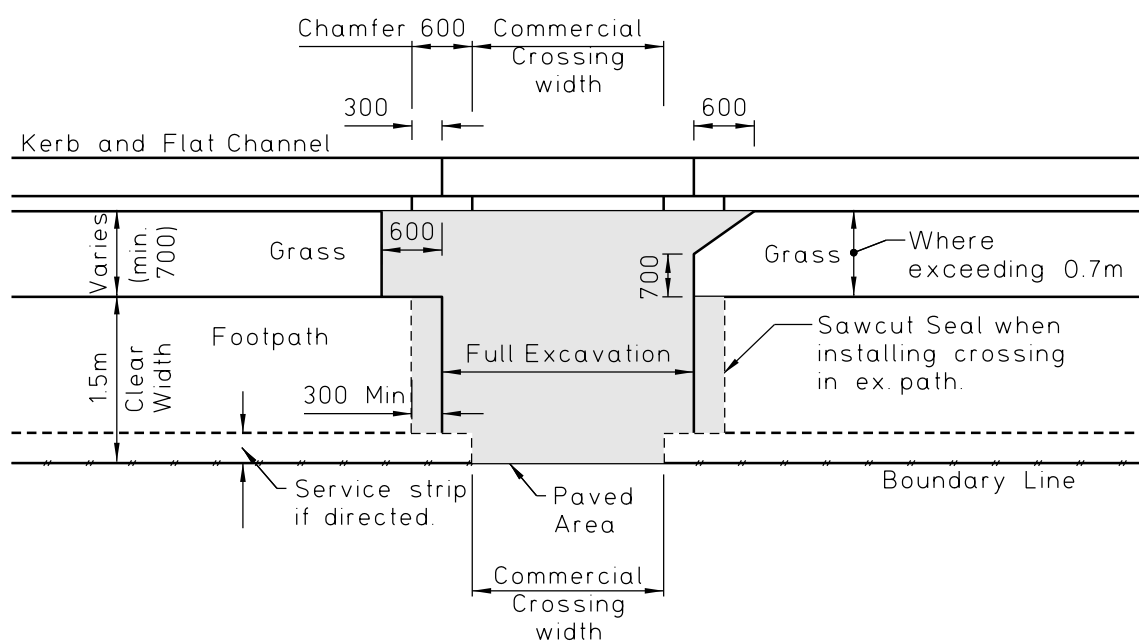
KERB AND DISH CHANNEL

NOTES:

1. Crossing locations and widths to comply with current District Plan.
2. Where two crossings in Kerb & Dish Channel are within 1m of each other they shall be joined to form one continuous crossing and a cleaning opening shall be installed centrally to the crossing.
3. Where two crossings in Kerb & Flat channel are separated by up to 1m of full height kerb, they shall be joined to form one continuous crossing.
4. Minimum residential Vehicle Crossing width to be 3.5m
5. Batten to be laid to top of chamfer when residential crossing is adjacent to landscaping or cobblestones.
6. Kerb entries to be installed no closer than 1.0m from top of chamfer.



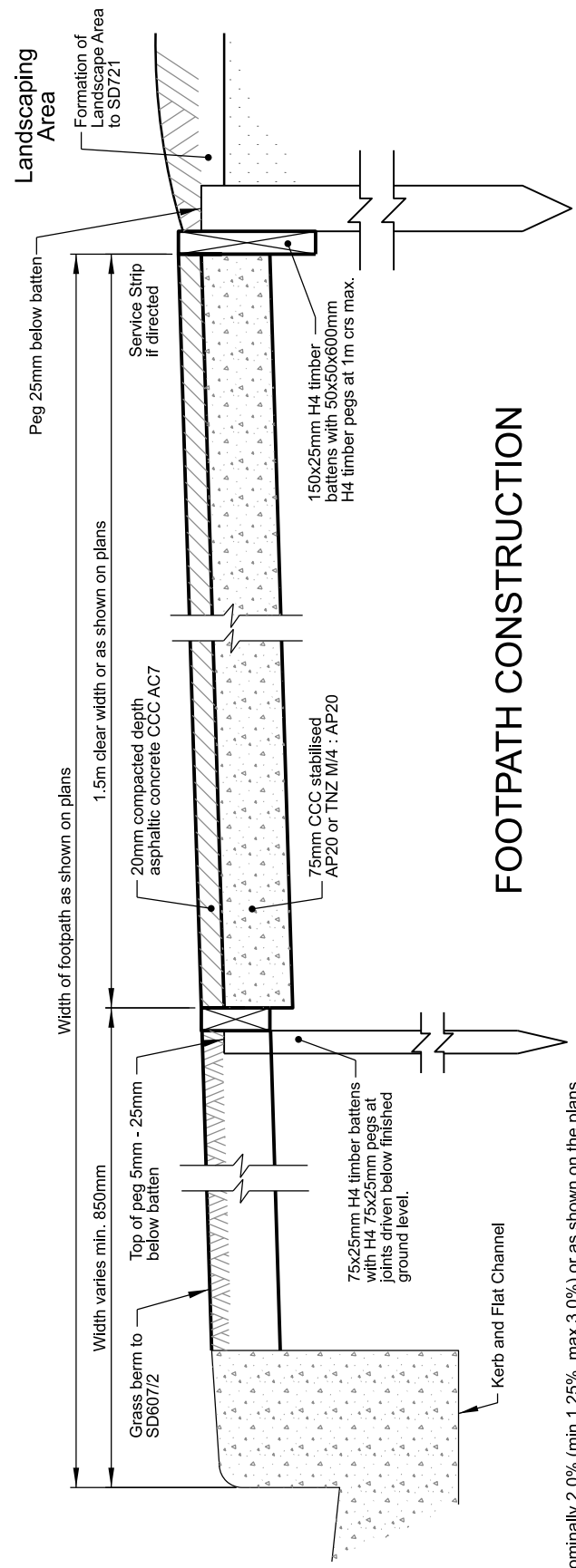
KERB AND FLAT CHANNEL



NOTES:

1. Maximum width of commercial crossing to be 9.0m

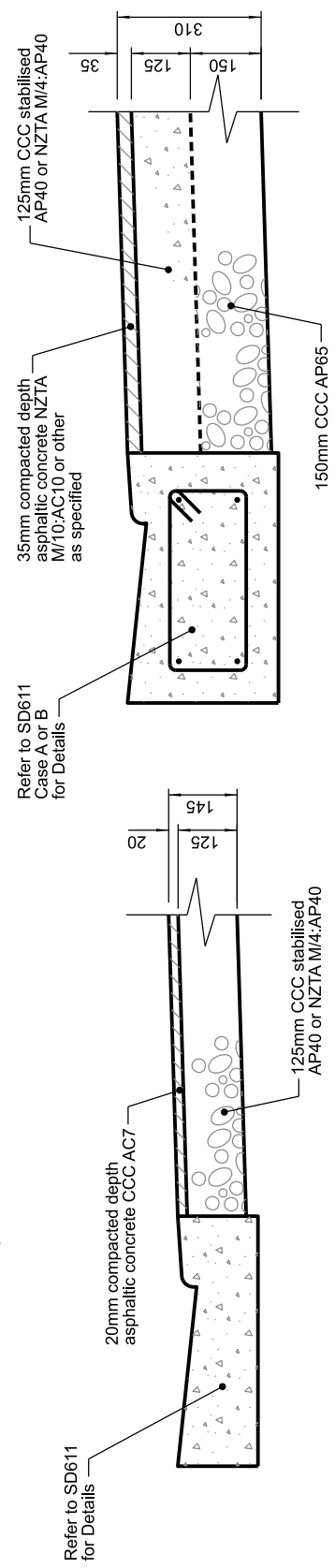




FOOTPATH CONSTRUCTION

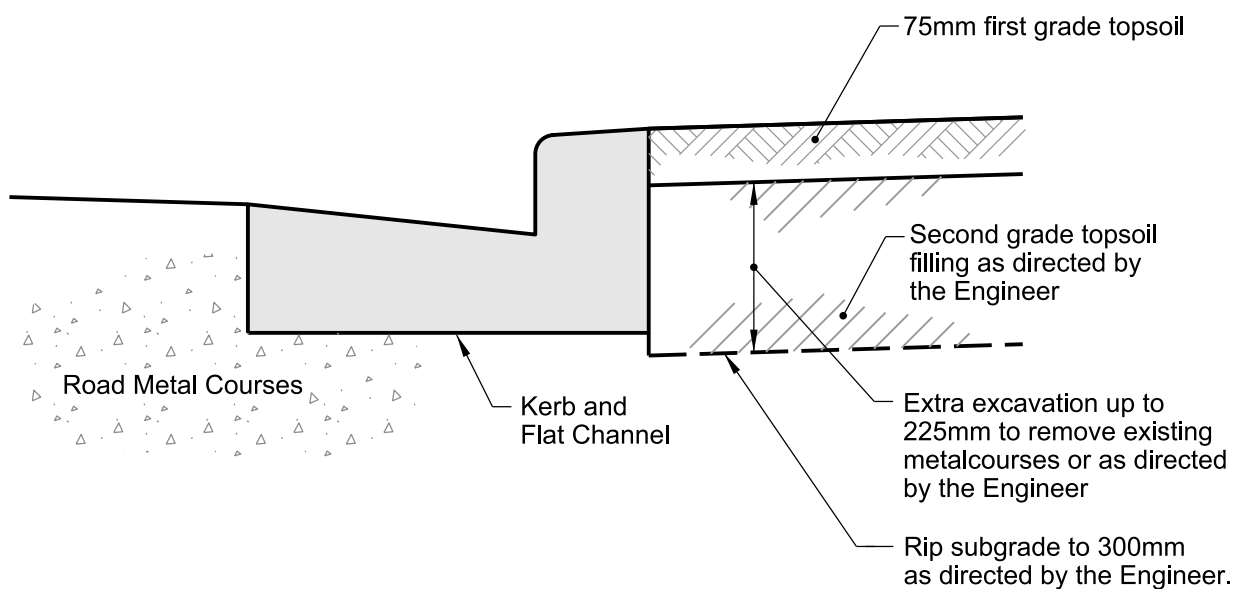
NOTES:

1. Crossfall to be nominally 2.0% (min 1.25%, max 3.0%) or as shown on the plans.
2. Battens not required where metalcourse contained by concrete kerbs or concrete foundations.
3. Battens retaining rights of way and commercial crossings to be 90 x 40mm H4 timber battens with H4 90 x 40mm pegs.
4. Subgrade and metal course to be treated with soil sterilant.
5. Existing sealed paths and drives to be sawcut at limits of new paths.
6. Crossings that provide access to 10 or more residential units / dwellings shall be constructed as a commercial crossing.



RESIDENTIAL CROSSING

COMMERCIAL CROSSING

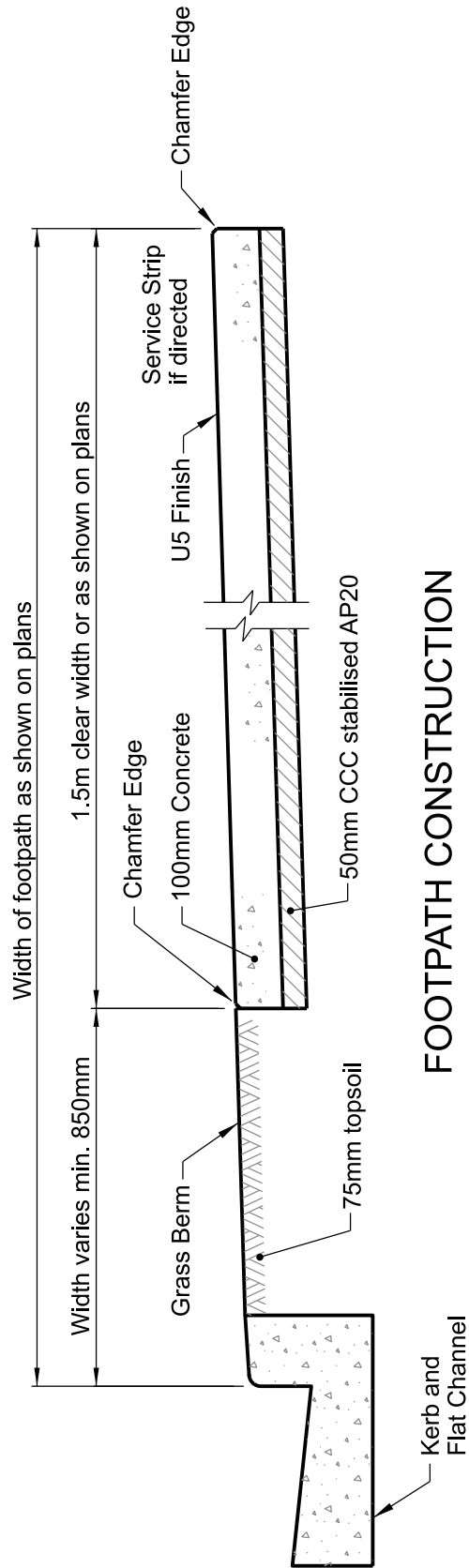


NOTES:

1. If existing metalcourses are still present below the berm subgrade inform the Engineer.
2. See Part 7 Clause 13 for sowing, berm establishment etc.



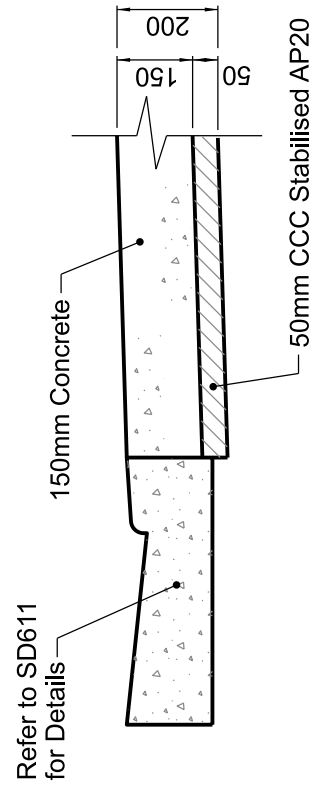
CONCRETE FOOTPATH AND VEHICLE CROSSING CONSTRUCTION



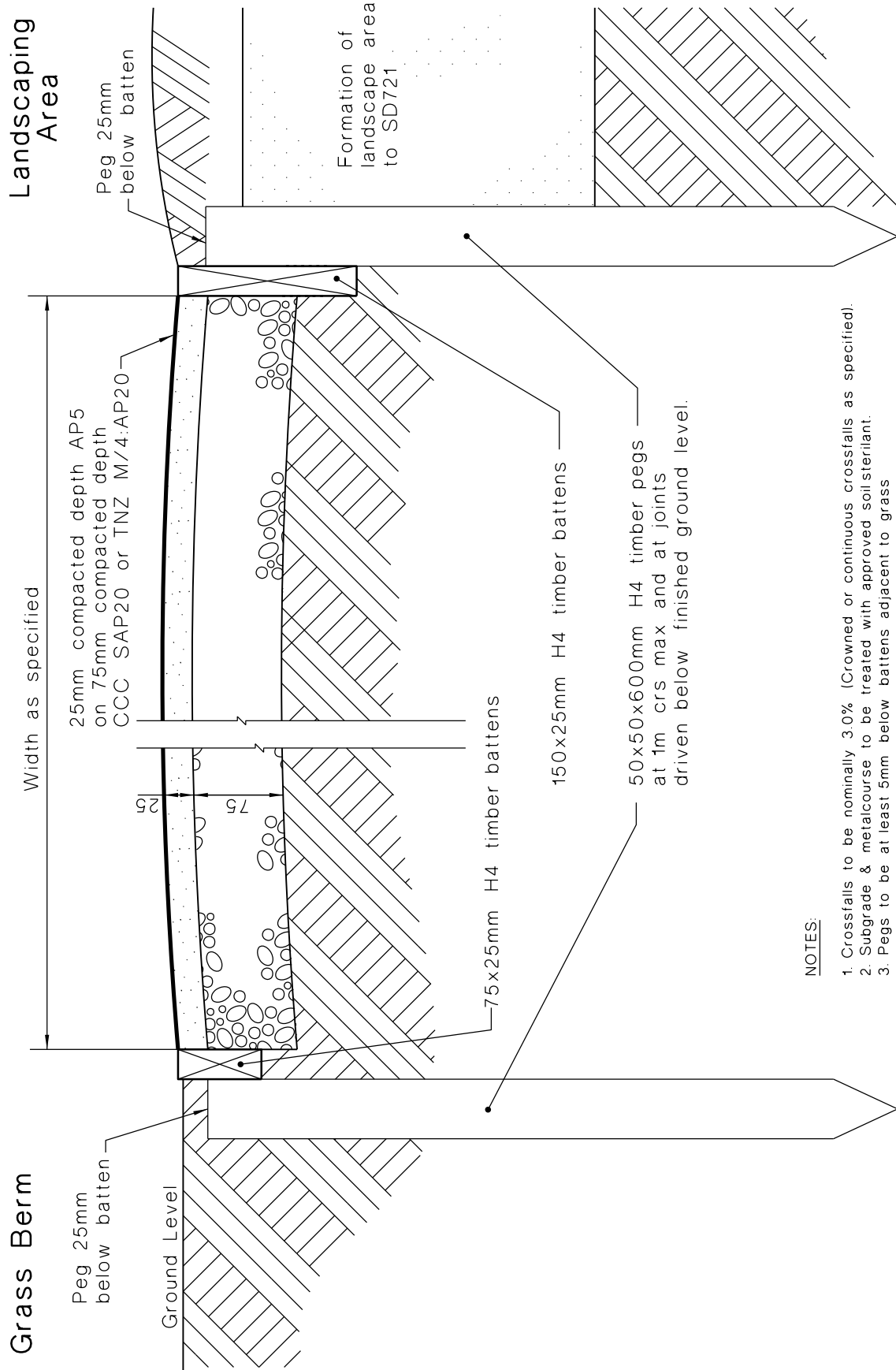
FOOTPATH CONSTRUCTION

NOTES:

1. Crossfall to be nominally 2.0% (min 1.25%, max 3.0%) or as shown on the plans.
2. Existing sealed paths and drives to be sawcut at limits of new paths.
3. Construction Joints to be formed at maximum 3.0m centres.
4. All formwork to be removed.
5. Commercial crossings require site specific engineering design provided for approval.
6. Crossings for industrial premises with regular truck movements will not be classed as commercial crossing and will require a site specific engineering design provided for approval.
7. See SD607 sheet 2 for Grass Berm Construction details.

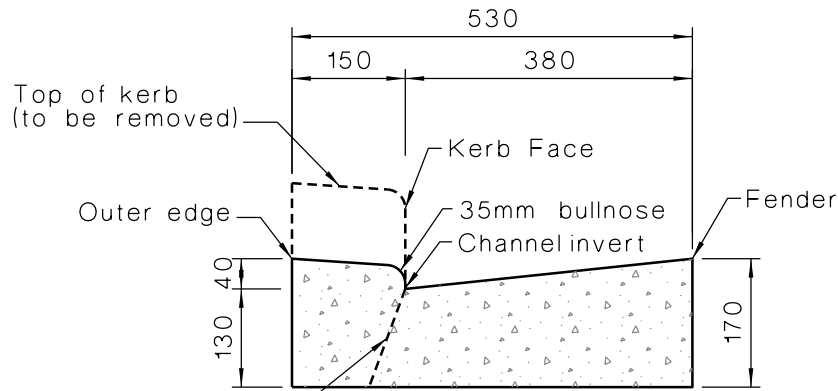


RESIDENTIAL CROSSING



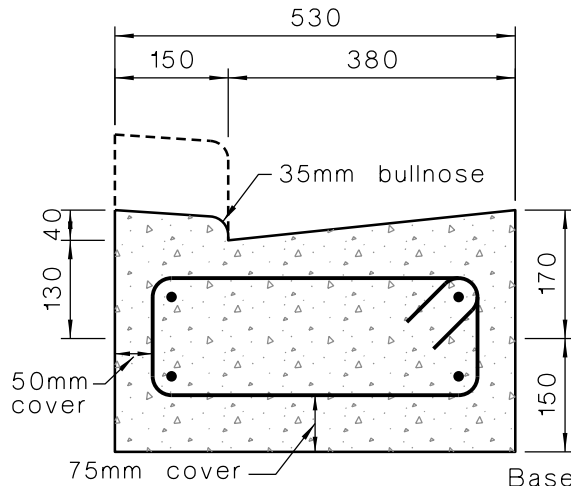
NOTES:

1. Crossfalls to be nominally 3.0% (Crowned or continuous crossfalls as specified).
2. Subgrade & metalcourse to be treated with approved soilsterilant.
3. Pegs to be at least 5mm below battens adjacent to grass and 25mm below battens adjacent to landscape areas.

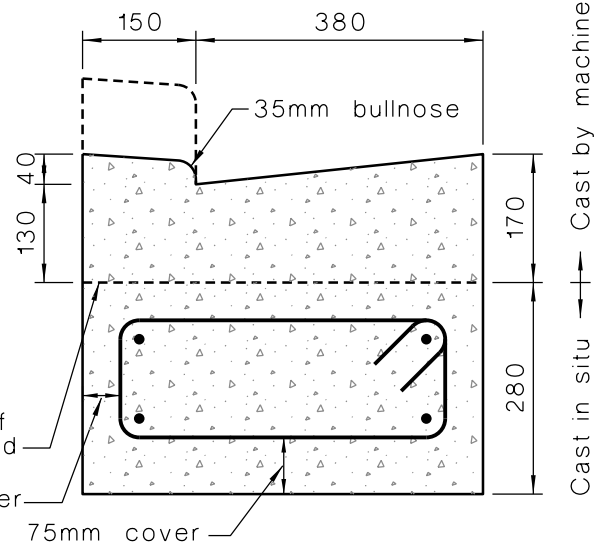


Line of cut to form cut down in existing Kerb and Channel or when reinstating full height kerb

RESIDENTIAL



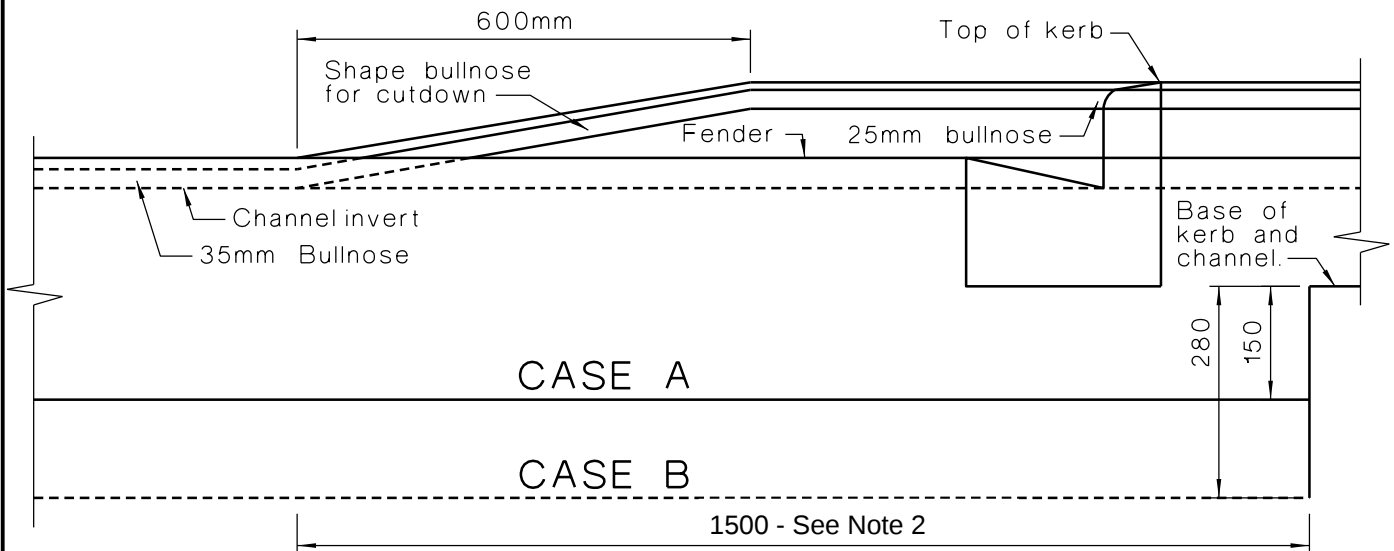
CASE A
for cast in situ channel
COMMERCIAL



CASE B
for extrusion machine type channel
COMMERCIAL

NOTES:

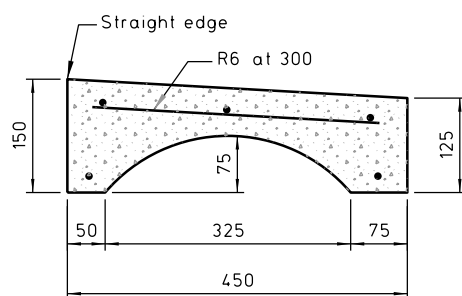
1. Reinforcement 4-D12 and R6-300
2. Reinforcement beam to extend 1.5m from base of cutdown at each end.
3. Concrete to be 20MPa at 28 days.
4. Concrete finish on exposed faces to conform with Class U3 of NZS3114
5. Access ways to 6 or more residential units / dwellings shall be treated as a commercial crossing.
6. Refer to SD607 for path and driveway construction details.



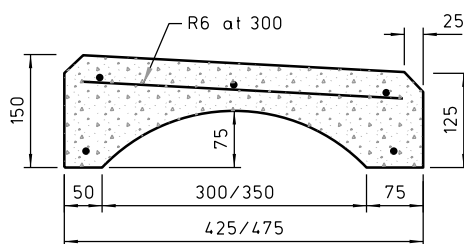
CASE A

CASE B

1500 - See Note 2



TYPE A



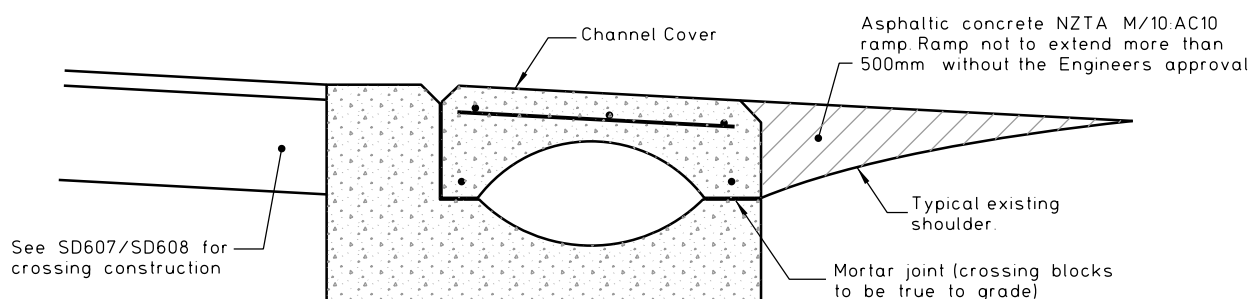
TYPE B

NOTES:

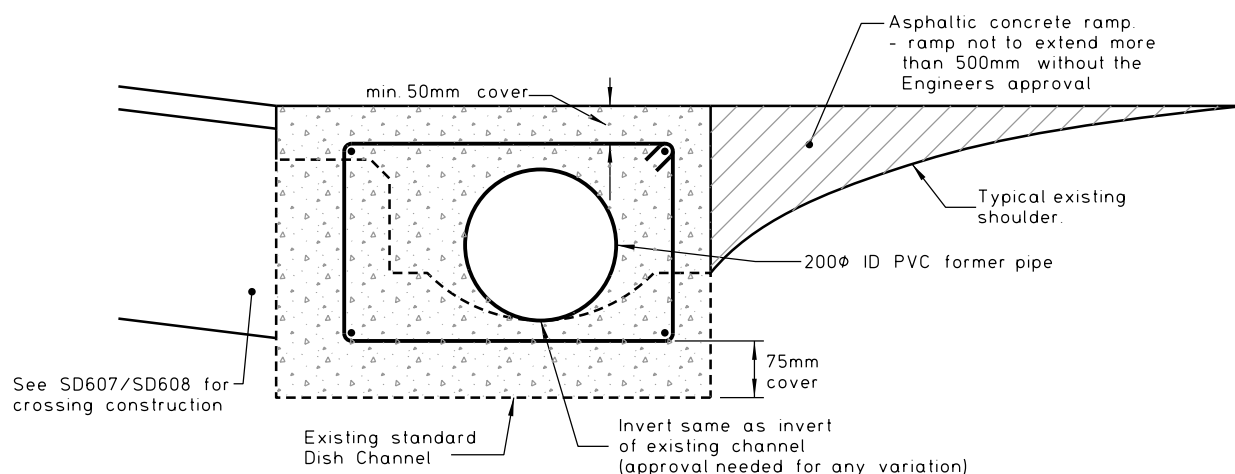
1. All concrete 35 MPa.
2. 5-D12 reinforcing bars and 2-R6 at 300.

STANDARD PRECAST CHANNEL COVERS

475mm x 500mm, 450mm x 500mm & 425mm x 500mm



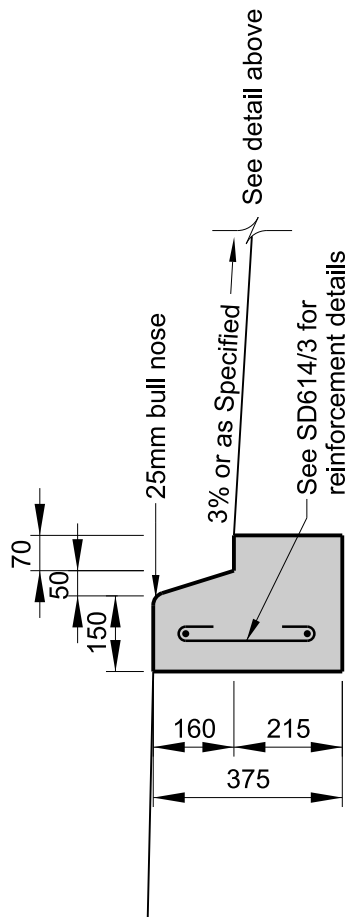
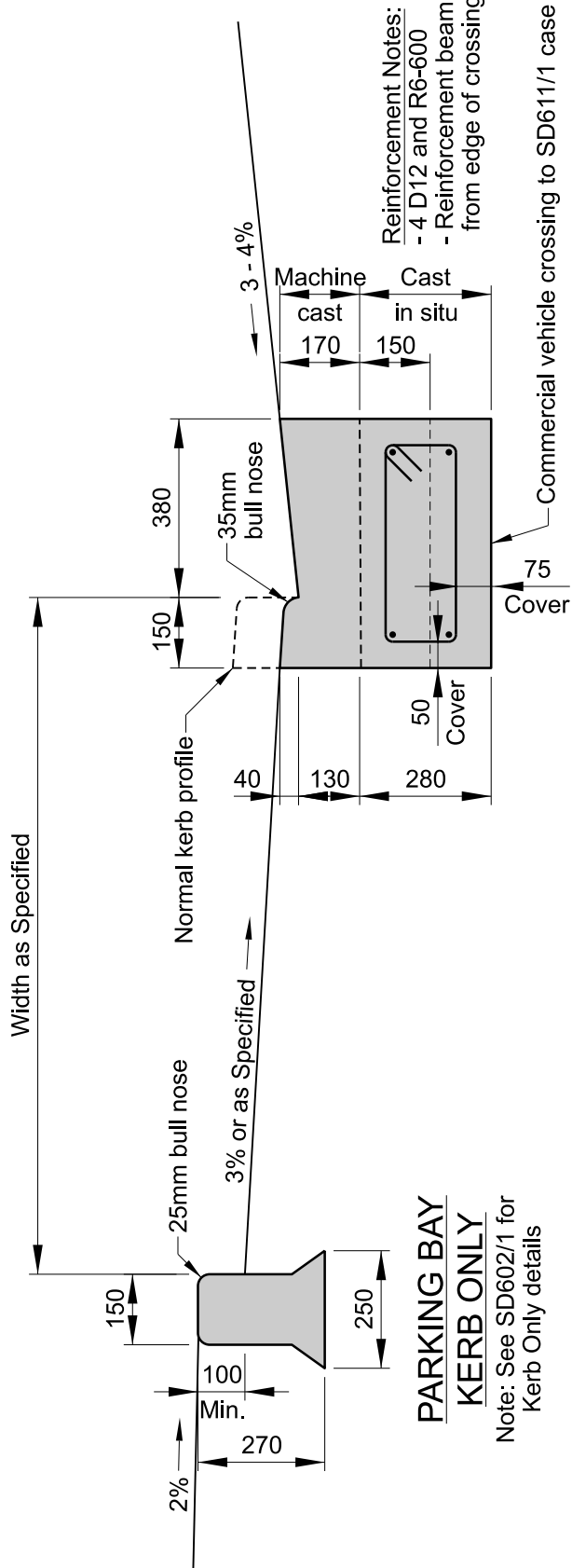
RESIDENTIAL

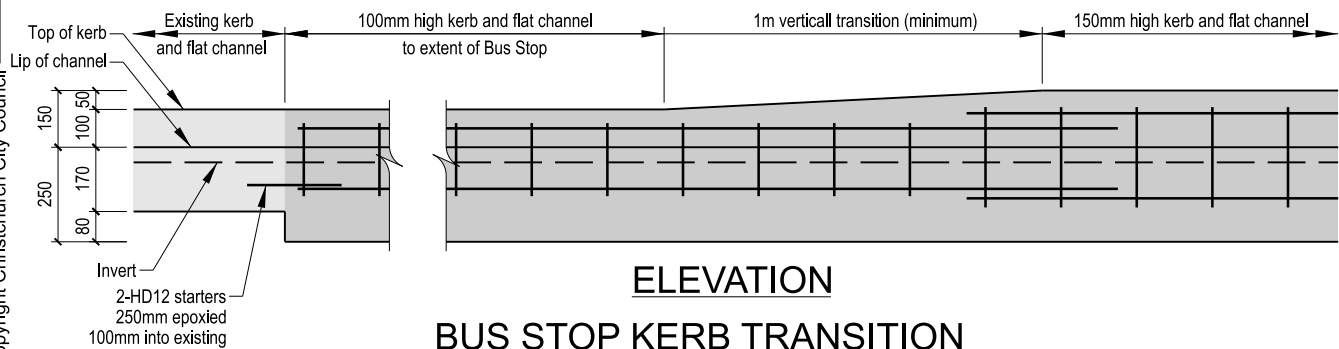
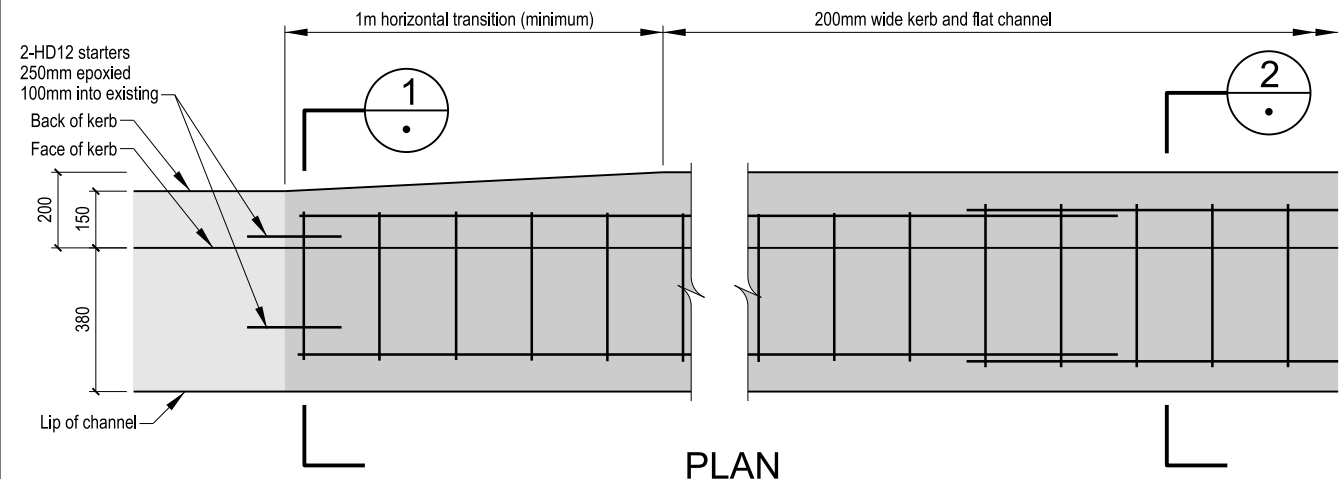
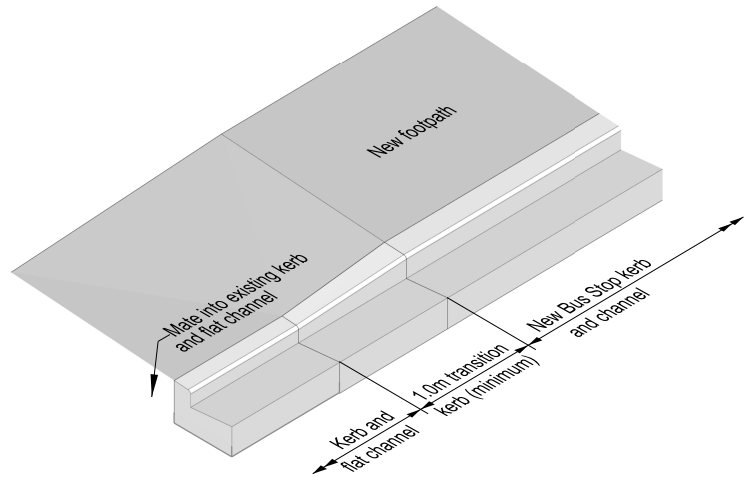
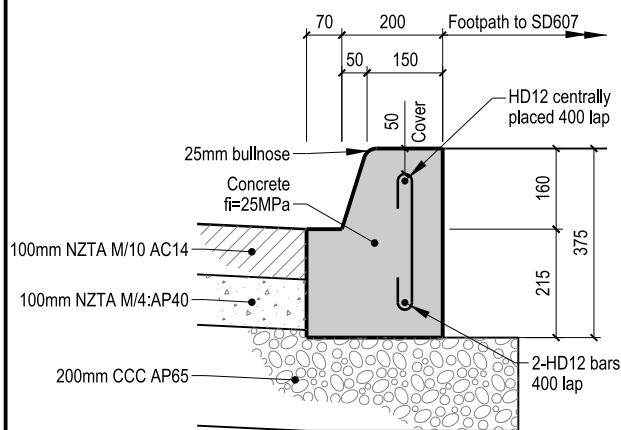
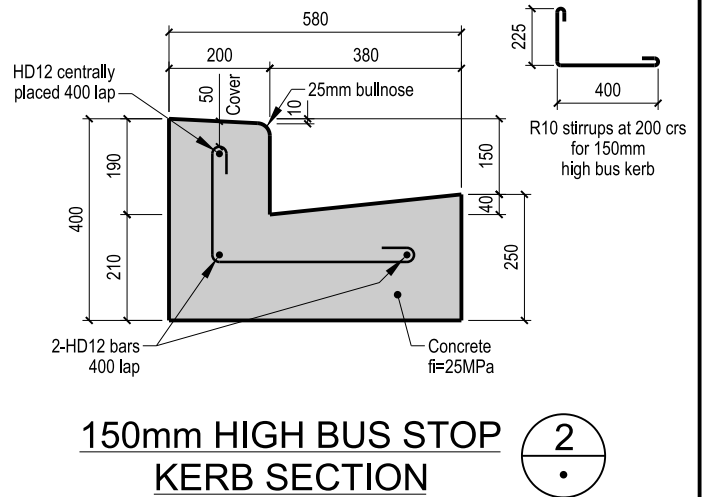
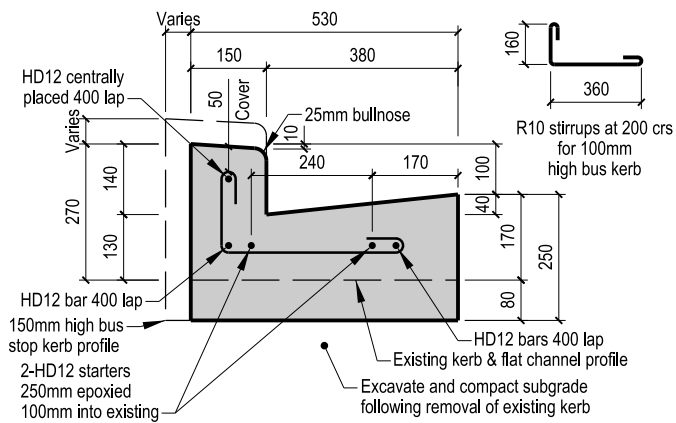


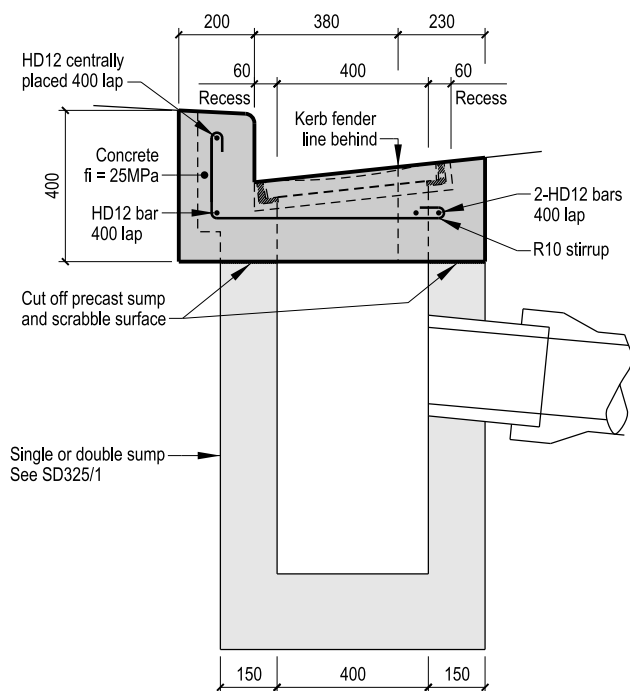
NOTES:

1. All concrete 20 MPa at 28 days.
2. Reinforcement 4-D12 R6-600
3. NZTA M/10:AC10 is an acceptable alternative surfacing for the vehicle crossing.
4. Refer to SD606 for ramp dimensions.

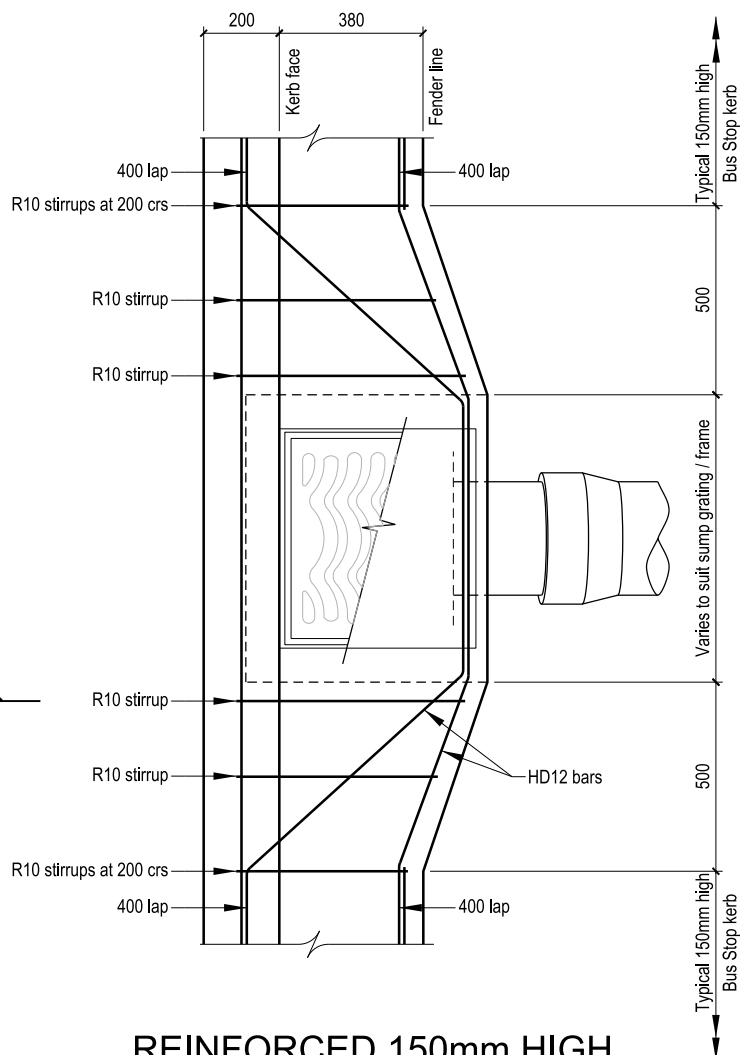
COMMERCIAL





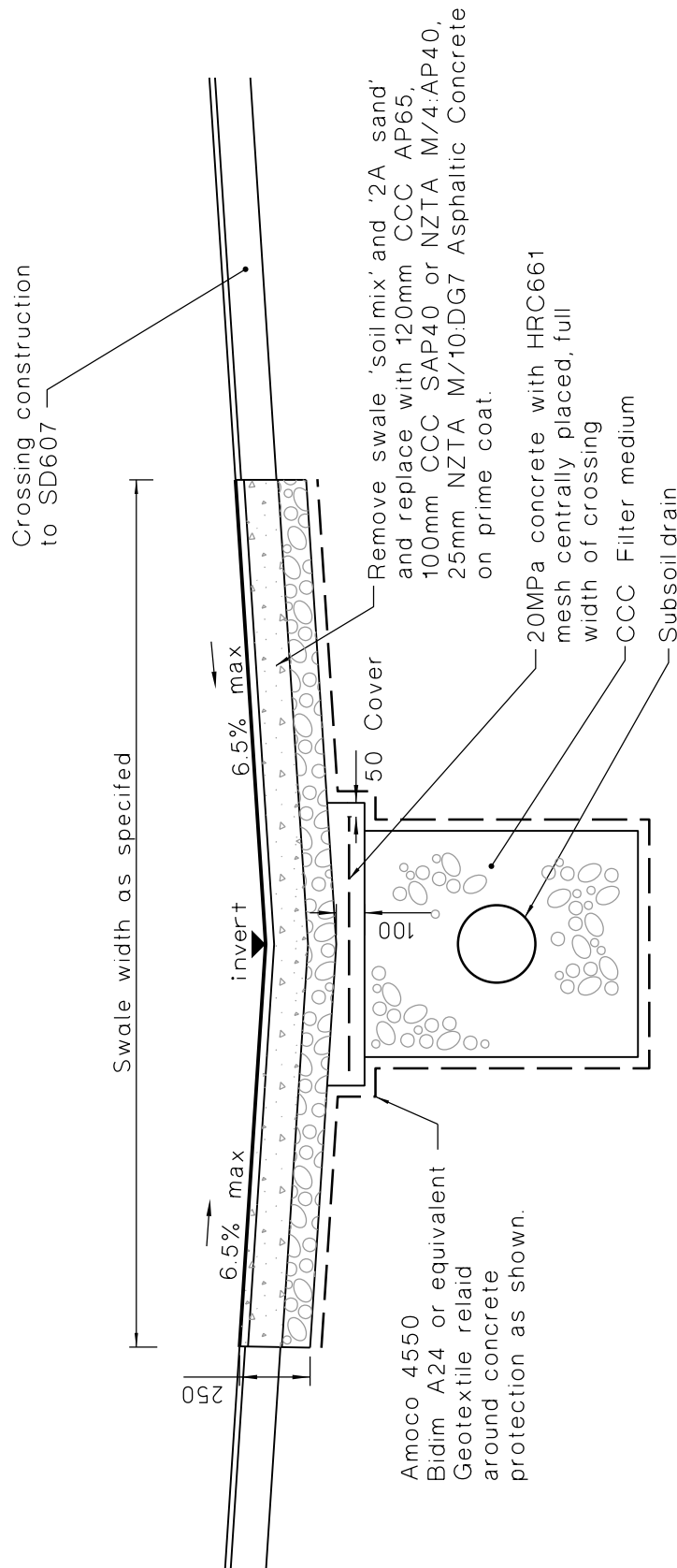


SECTION 1

REINFORCED 150mm HIGH
KERB AND CHANNEL AT SUMPS

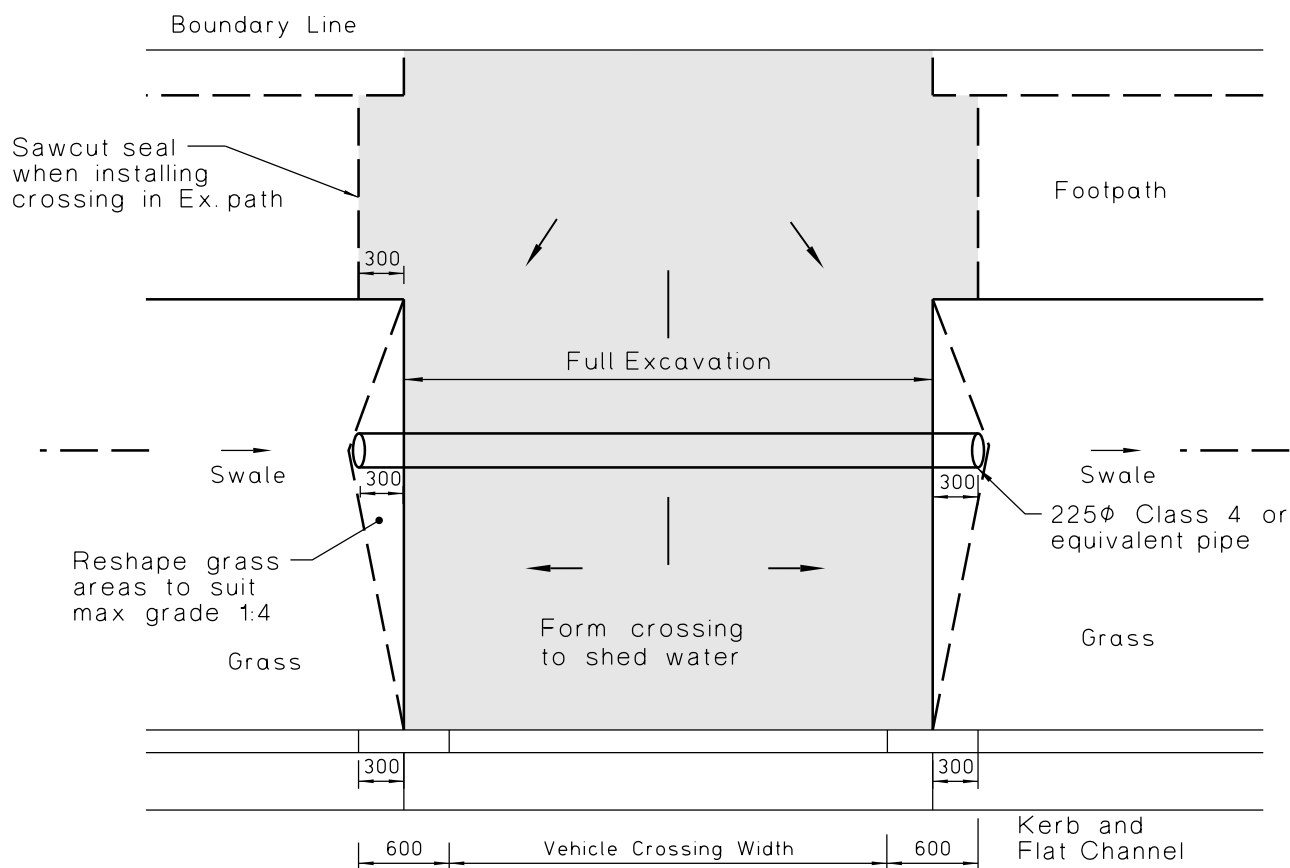
NOTES:

- 1) See SD614/2 for 150mm high kerb details.



NOTES:

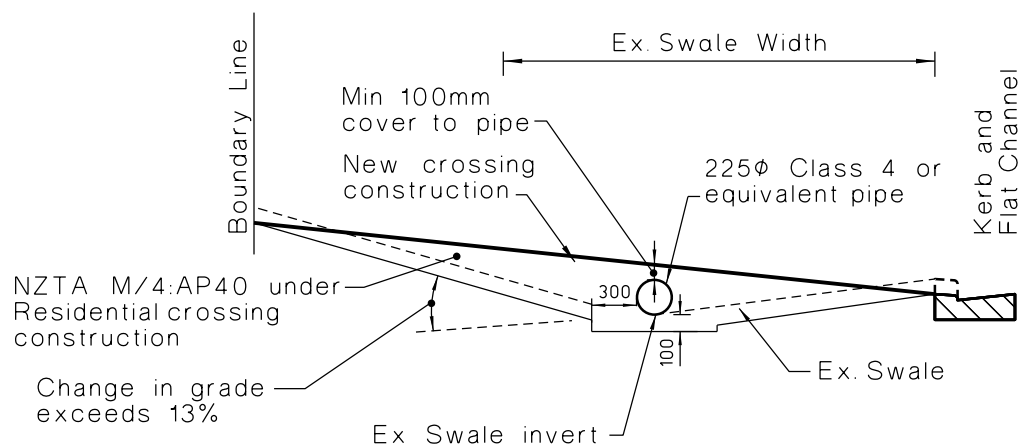
1. Cross sectional area of swale crossing to equal specified area of swale.
2. Invert of swale must not change from specified.



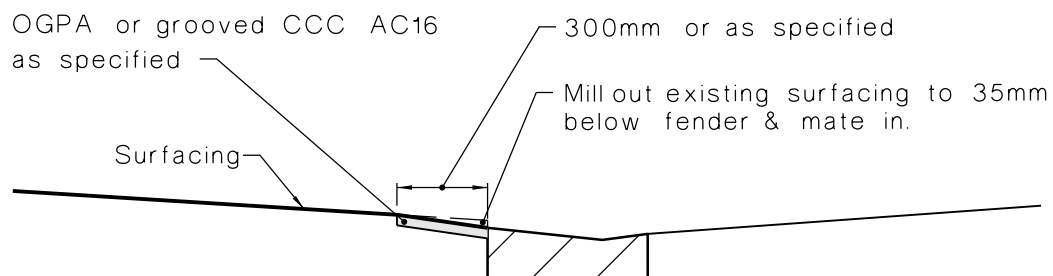
PLAN

NOTES:

1. Crossing locations and widths to comply with current District Plan.
2. Where two crossings are within 1m of each other they shall be joined to form one continuous crossing.
3. Vehicle Crossing Width to be minimum 3.5m.



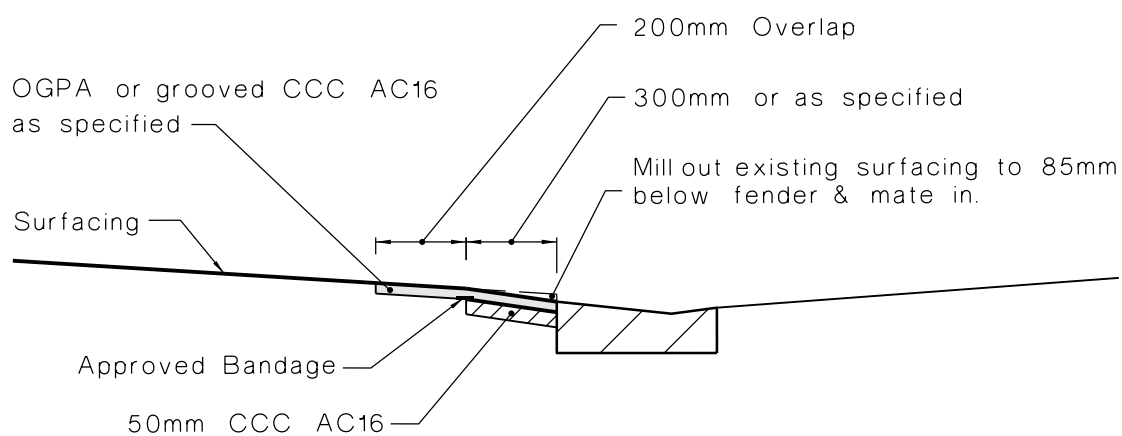
CROSS SECTION



TYPE A

Note:

1. Where the existing underlying material is not granular.

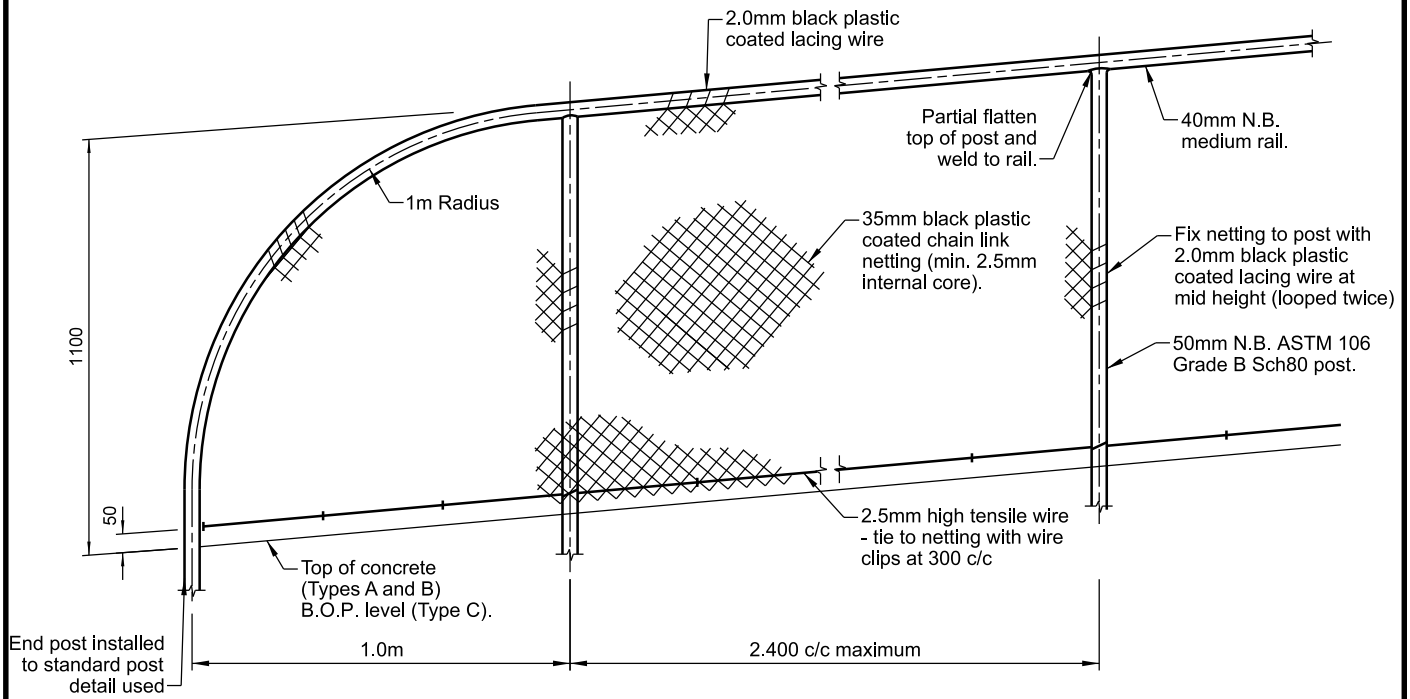


TYPE B

Note:

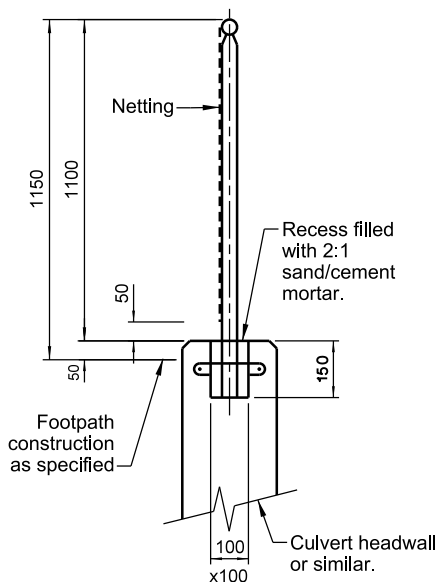
1. Where the existing underlying material is granular.



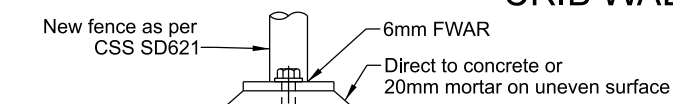
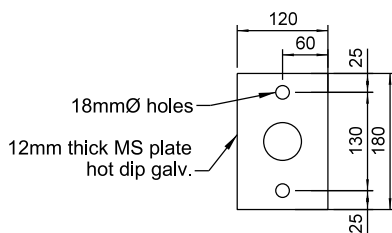


TYPICAL ELEVATION

NOT TO SCALE

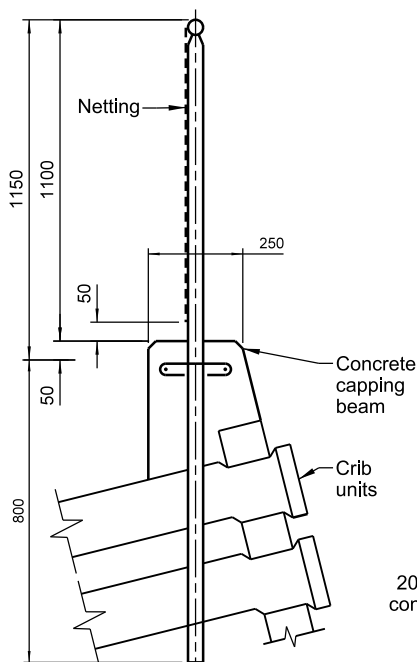


TYPE A RECESSED

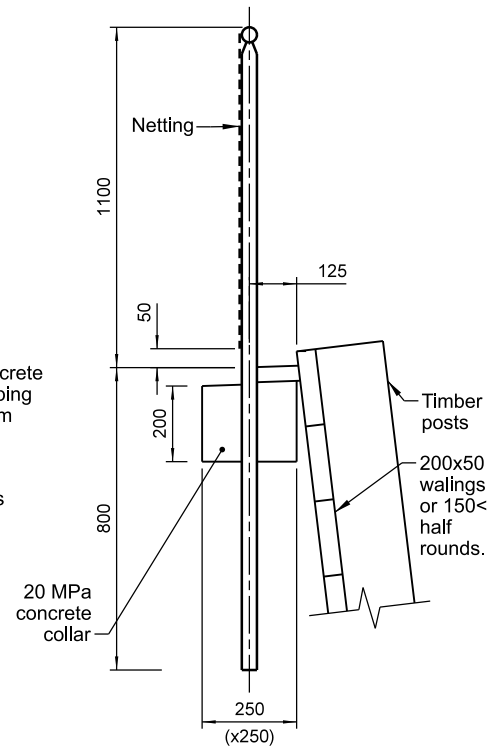


Hilti M16 HSA anchor stud
120mm embedment

BASE PLATE DETAIL



TYPE B CRIB WALL



TYPE C TIMBER WALL

NOTES:

1. All steel work to be galvanised to AS/NZS 4680 after fabrication.
2. Reinforcing details in concrete beam or headwall require specific design in all cases.

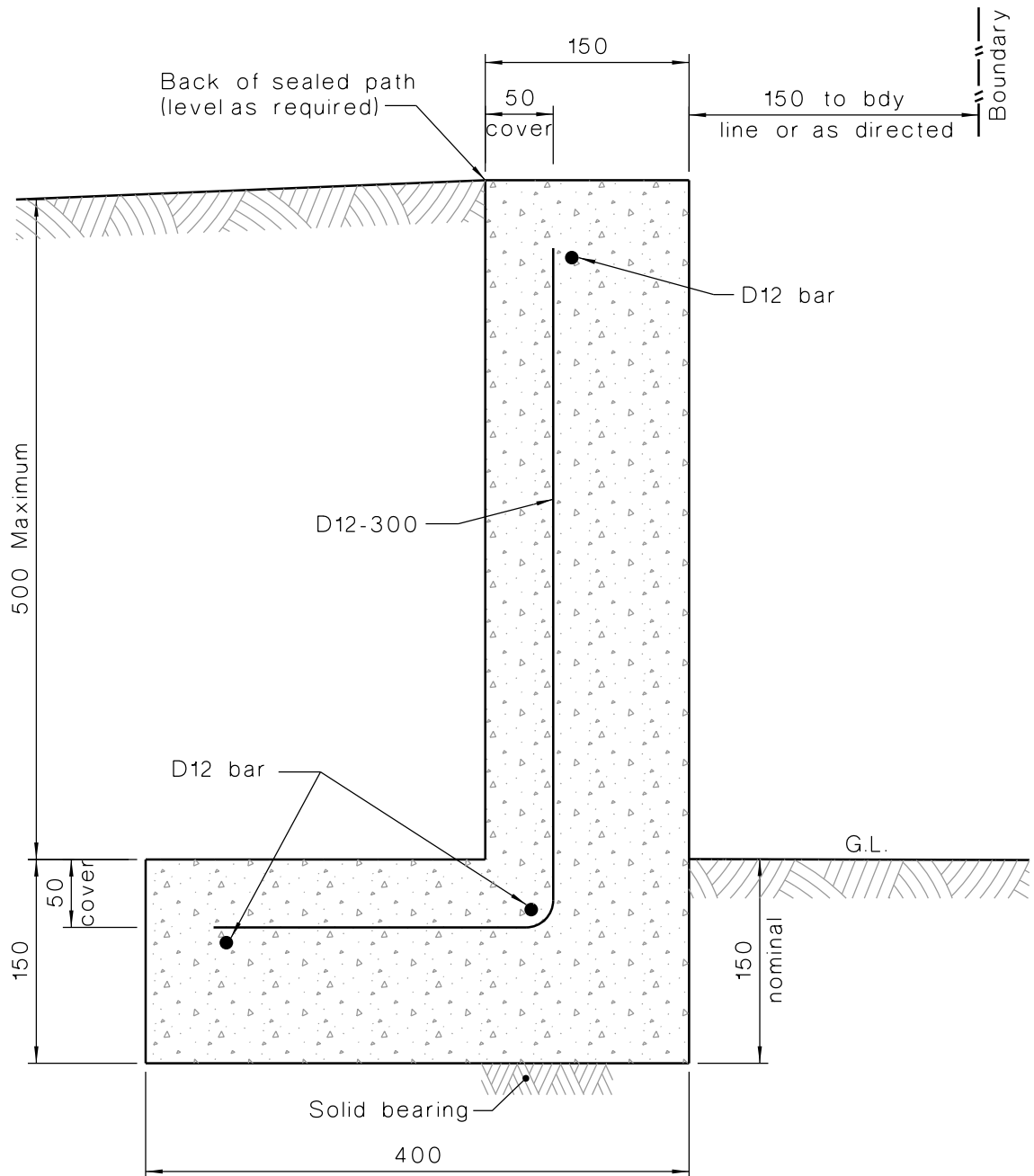
PEDESTRIAN SAFETY FENCE

ISSUE DATE

SEP 2025

SD621

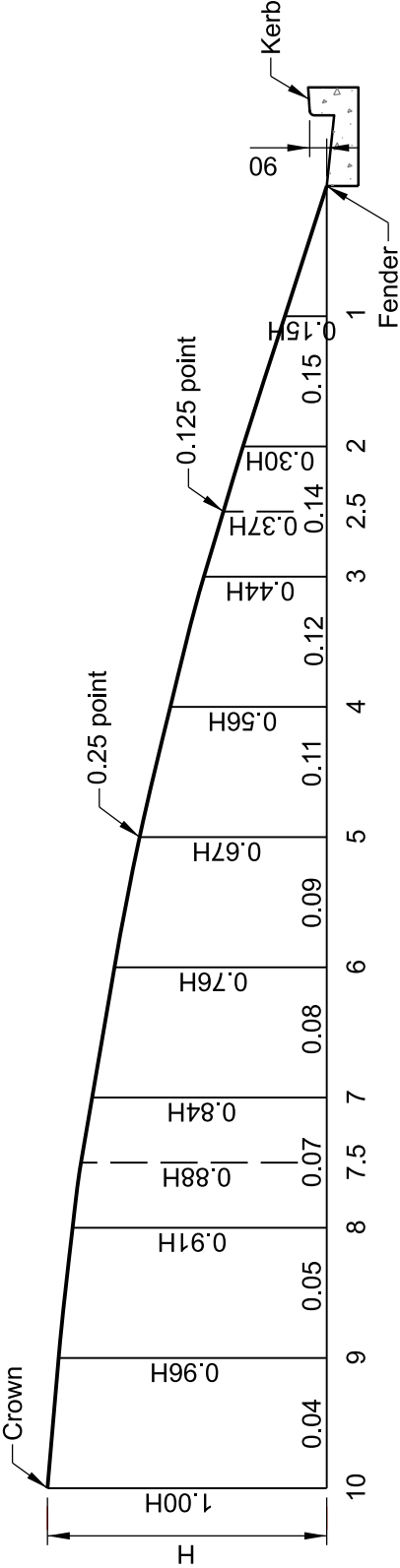
SHEET 1 OF 1



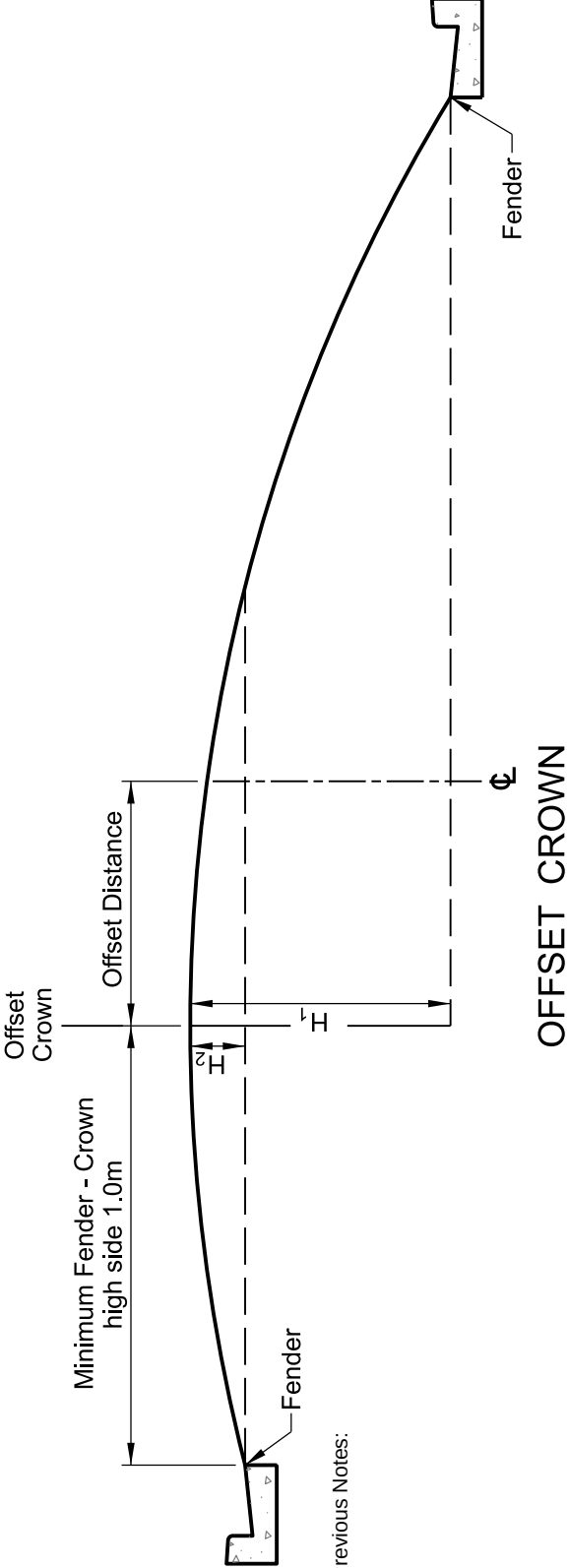
NOTE:

1. Concrete Strength to be 20 MPa at 28 days

Crossfall for roadway 3% - 4%



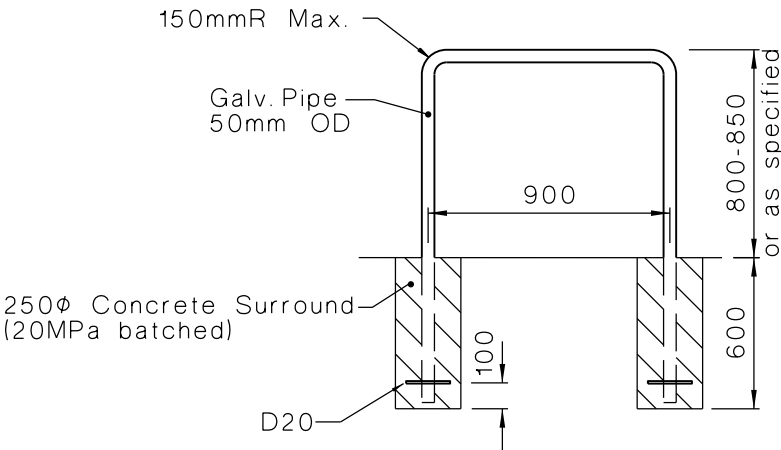
CAMBER TABLE



Previous Notes:

NOTES:

1. This camber table is to be applied to roads 9.0m or more from kerb face to kerb face.
2. Where the road width is between 6-9m, design with a (central) peak and straight grades falling to the fender.
3. Carriageway camber on either side of offset crown should be balanced in terms of the above camber tables.

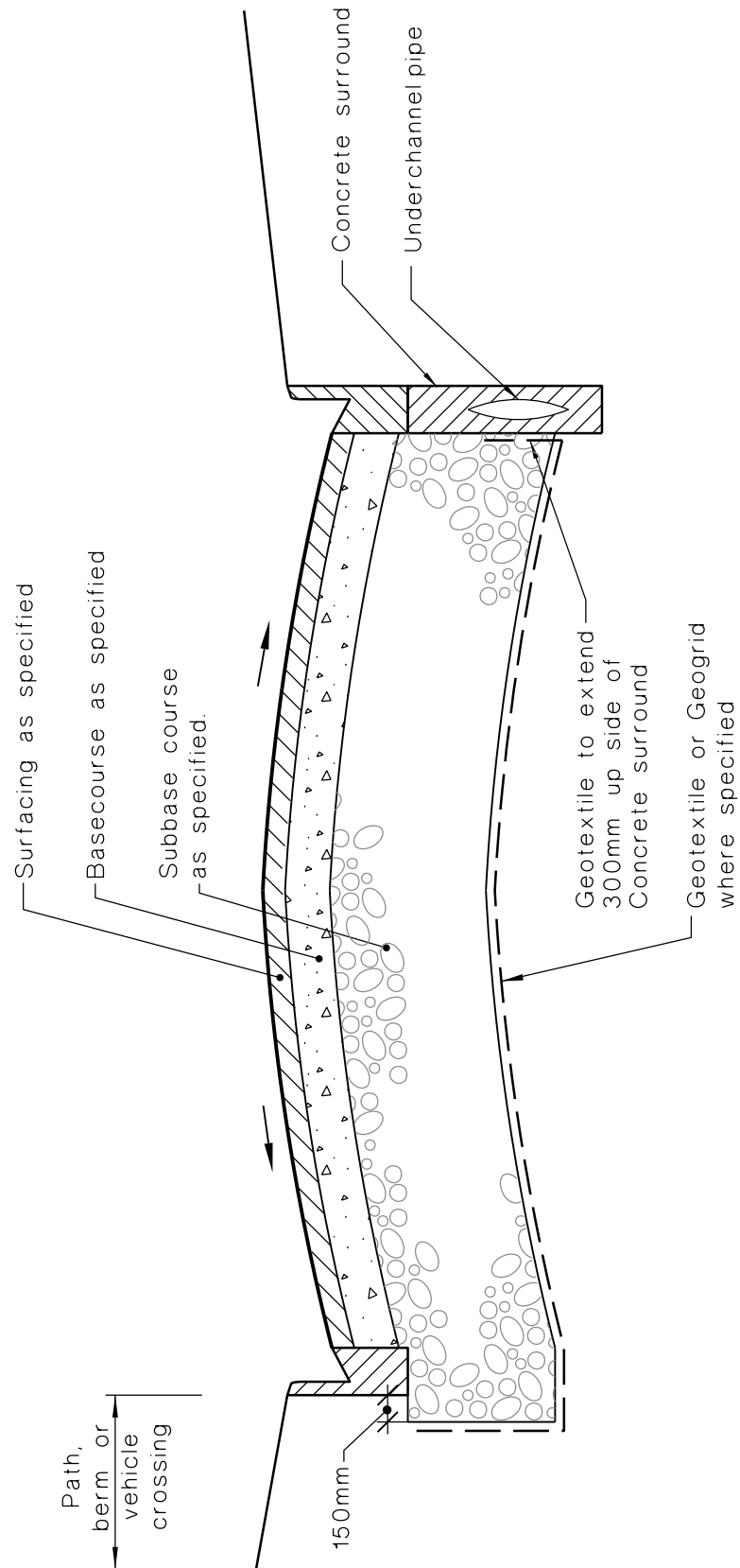


CYCLE STAND DETAIL - TYPE A





1. All components to be constructed from grade 316 stainless steel.
2. All welding to be full strength butt welds.
3. All surfaces to have 'BA' surface finish.
4. All fixings to be stainless steel.
5. Sample to be provided including cover plates.
6. Ensure cycle stand is vertical and level after fabrication and when installed.
7. Cycle stand spacing to be 1.1m centres minimum.



Technical drawing of a beam-to-column joint. The drawing shows a cross-section of a beam (width 300 mm, height 125 mm) connected to a column (width 300 mm, height 400 mm). The joint is reinforced with 300x300x400 20MPa (batched) concrete anchor blocks. Dimensions are indicated: 250 mm for the beam width, 1500 mm for the column height, 250 mm for the column width, and 400 mm for the joint height. A label points to the concrete anchor blocks: "300x300x400 20MPa (batched) concrete anchor blocks."

500mm M12 H.D.G. bolt with 50x50x3mm washer under nut (burr thread after placement of nut) recess flush with top of timber

150mm

5-10mm chamfer

150x100mm H4 treated timber wheel stop

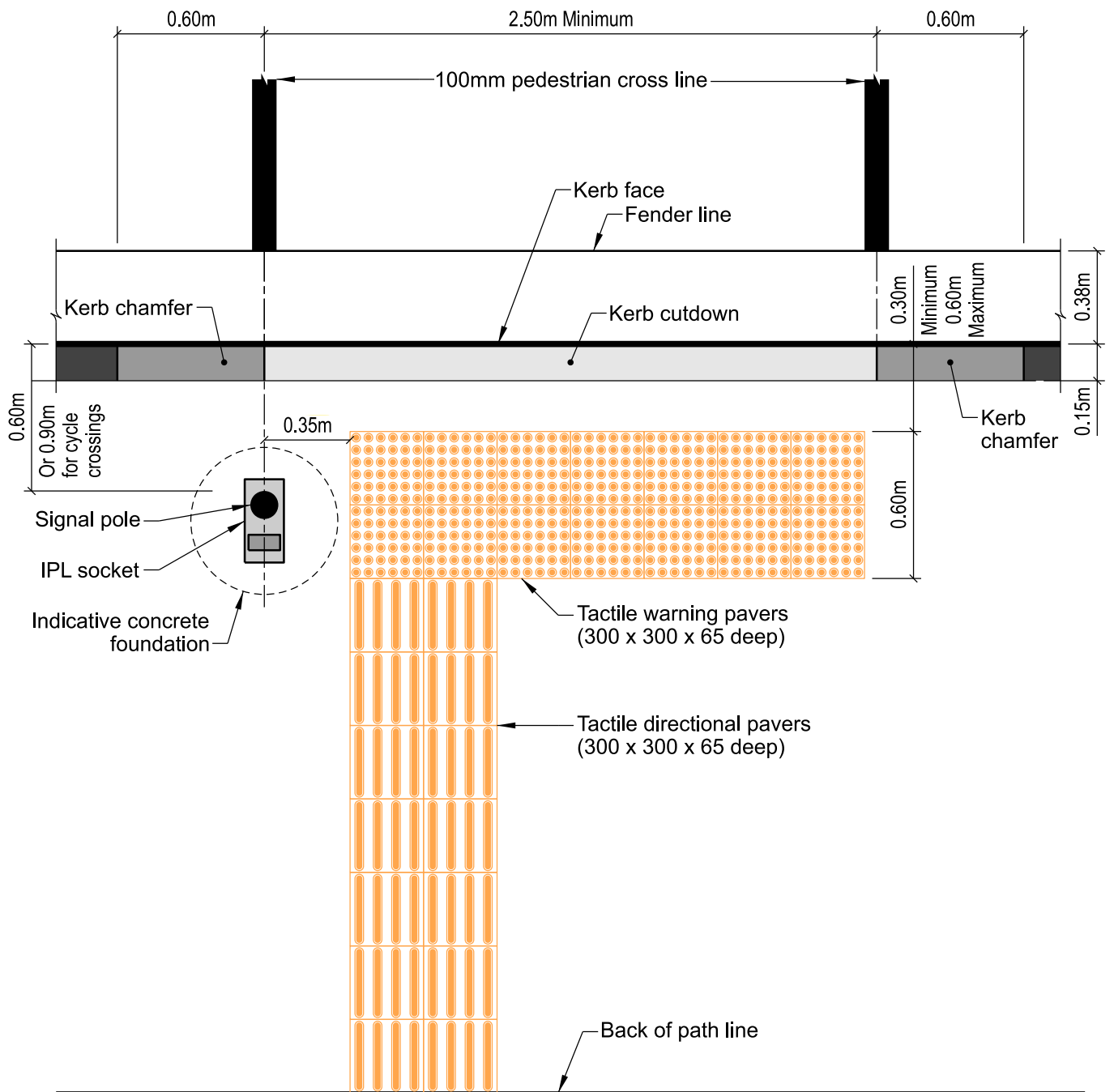
150x300x25mm thick H4 treated timber spacer at each anchor block

M12 Bolt

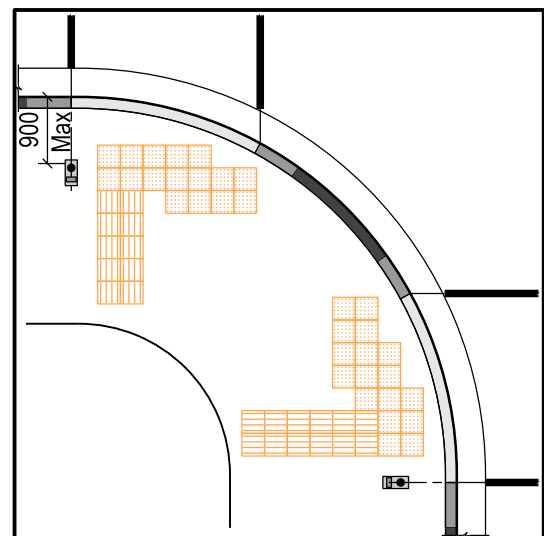
Concrete top to be squared off with a flat troweled surface & 5mm chamfer to edges

300mm

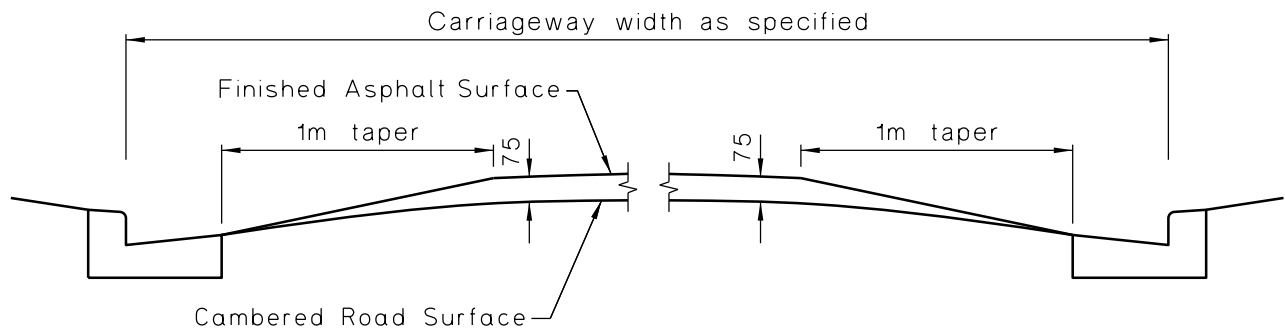
300x300x400mm deep 20MPa (batched) concrete anchor block at 1.4m or 2.0m centres.



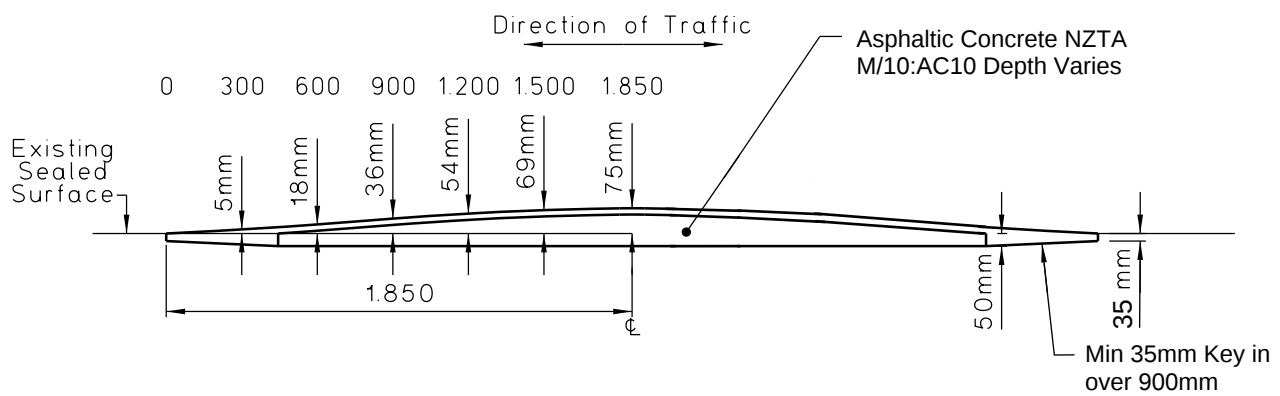
NOTE:
Tactile installations where there is no traffic signal pole are to be to RTS 14.



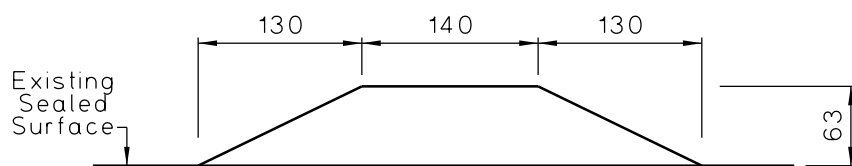
Corner Rounding Detail



ROAD HUMP CROSS SECTION



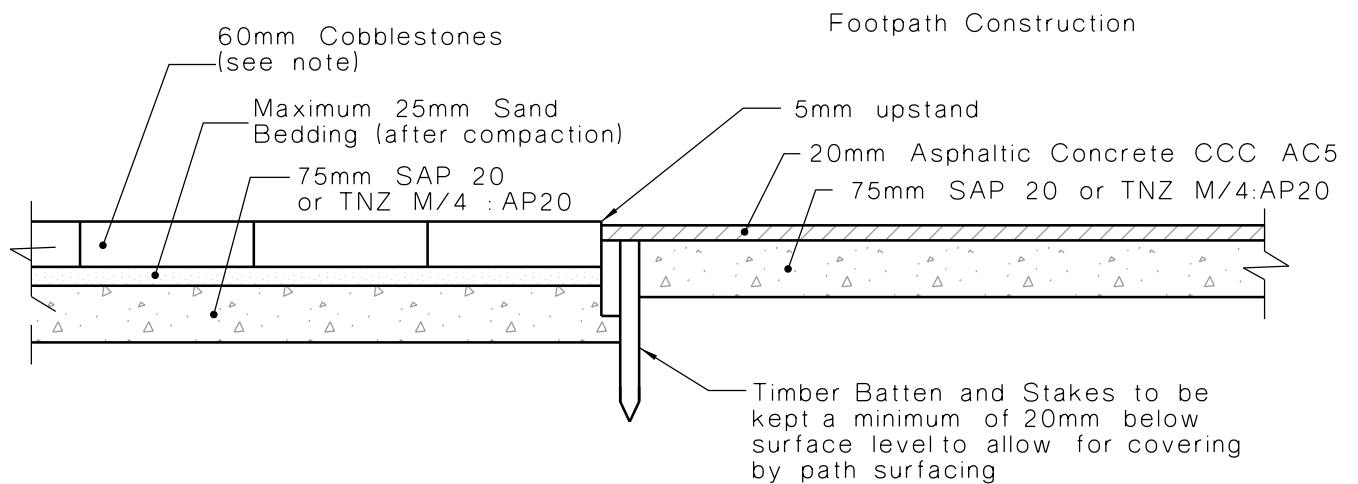
ROAD HUMP PROFILE
(3.70m WIDE)



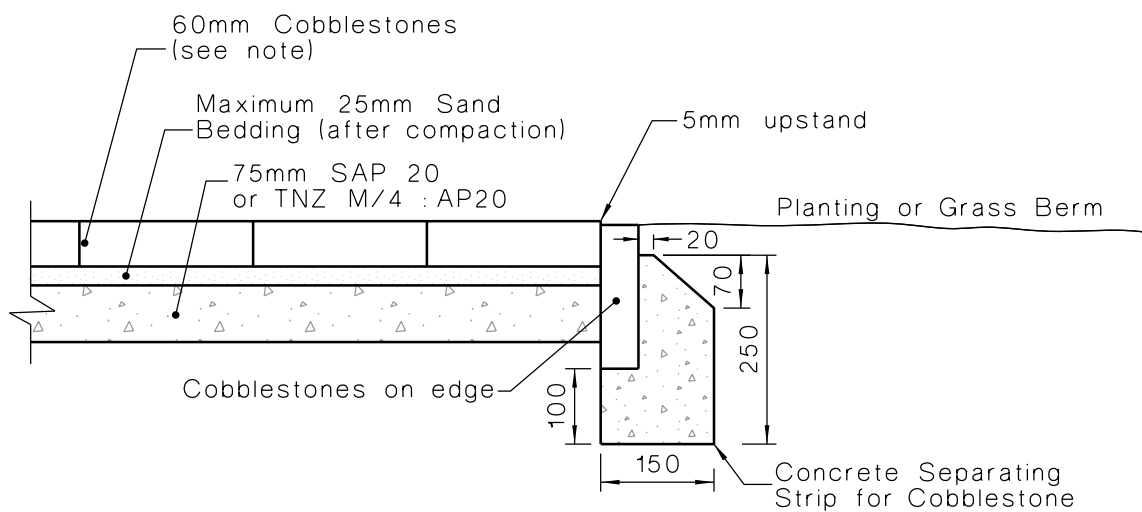
SMALL ROAD HUMP PROFILE

Note:

1. The Surface of the Compacted Asphalt shall at no point vary more than 5mm from the Standard Profile laid Longitudinally over the Road Hump.
2. Refer to SD641 for road marking details.



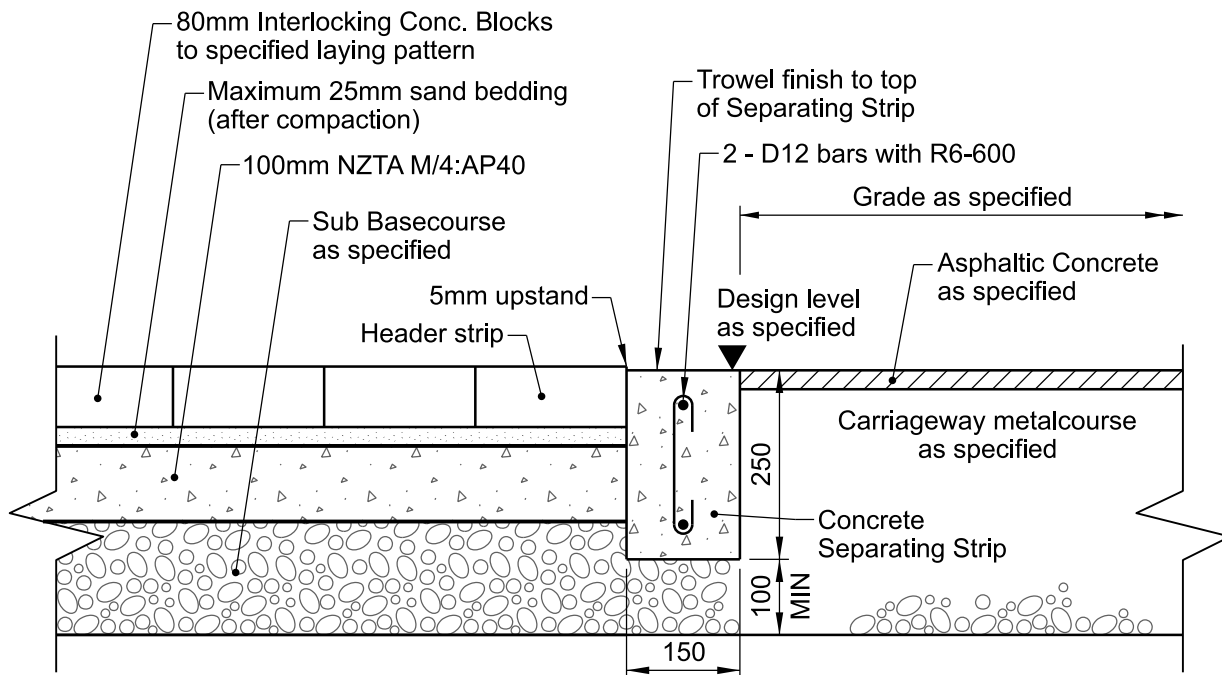
COBBLESTONES ADJACENT TO FOOTPATH



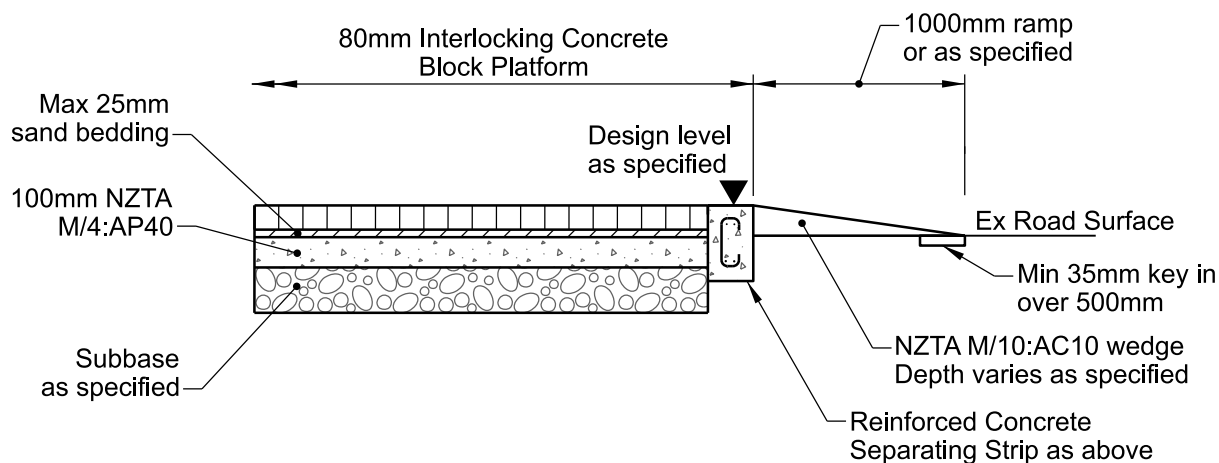
COBBLESTONES ADJACENT TO PLANTING/BERM

NOTES:

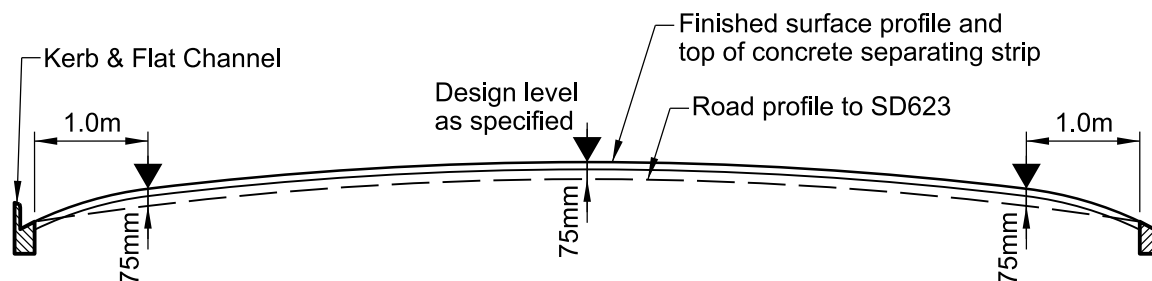
1. Colour of cobblestones to be as specified.
2. See SD 607 for footpath construction details.
3. Concrete Strength to be 20MPa at 28 days.



**CARRIAGEWAY THRESHOLD
(LONGITUDINAL SECTION)**



PLATFORM RAMP DETAILS

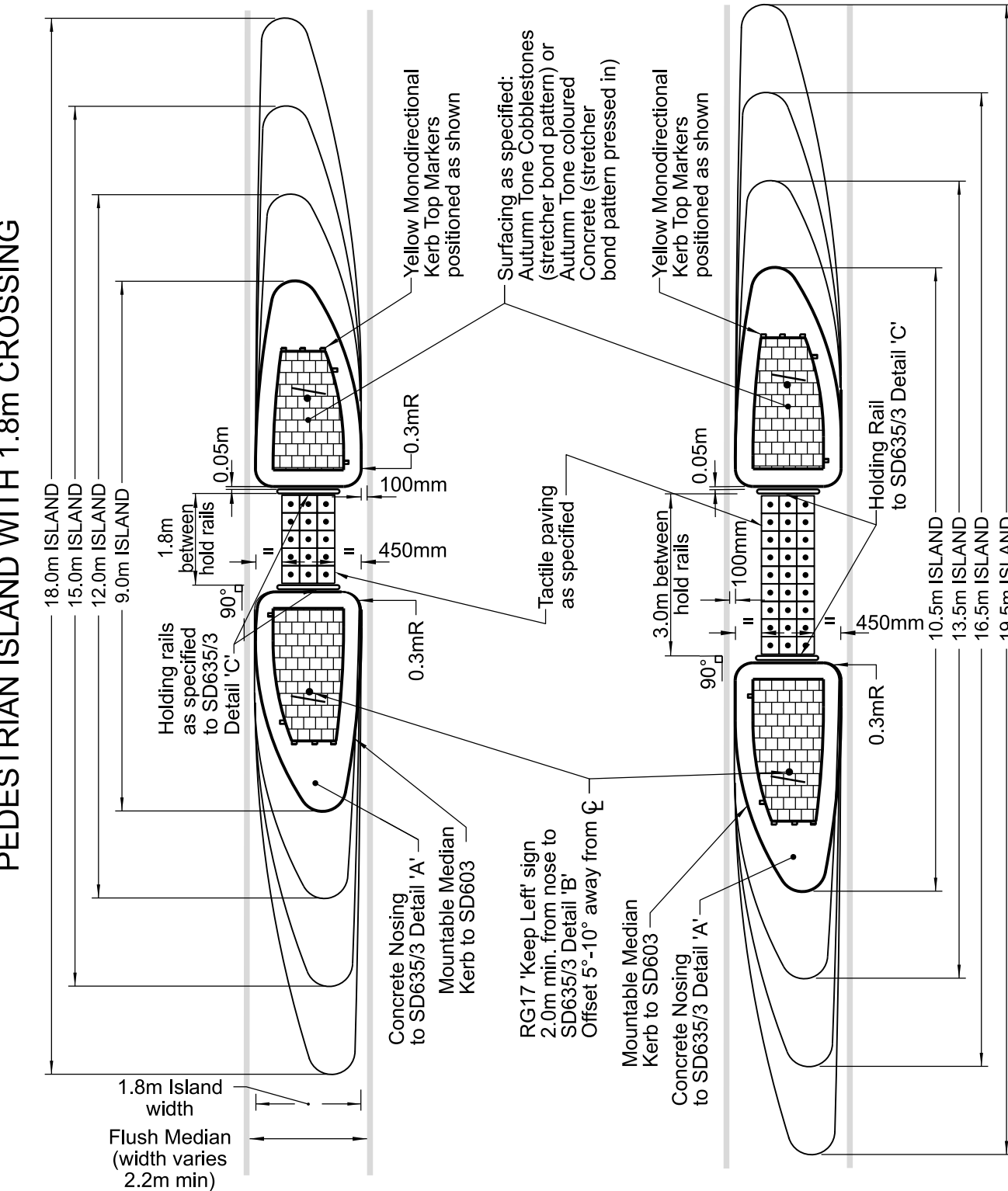


PLATFORM RAMP BEAM SECTION

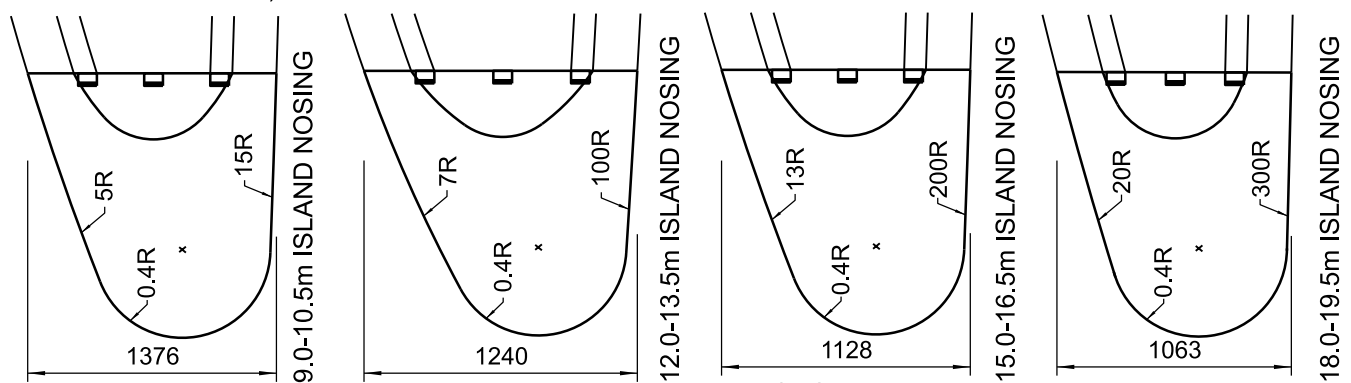
NOTES:

1. Colour of Interlocking Conc. Blocks to be as specified.
2. Concrete strength to be 20MPa at 28 days.
3. Exposed concrete finish to conform with class U3 NZS 3114.
4. Refer to SD641 for road marking details.

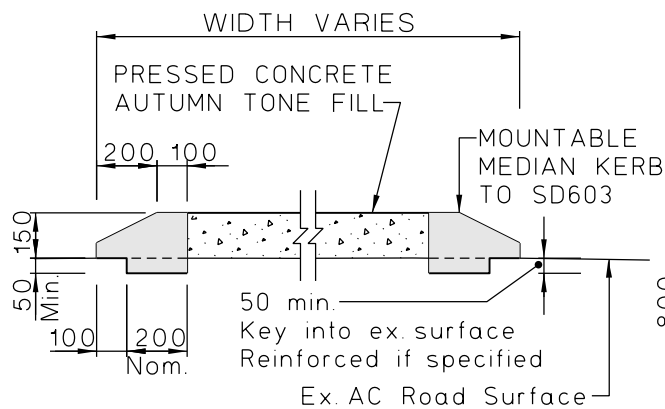
PEDESTRIAN ISLAND WITH 1.8m CROSSING



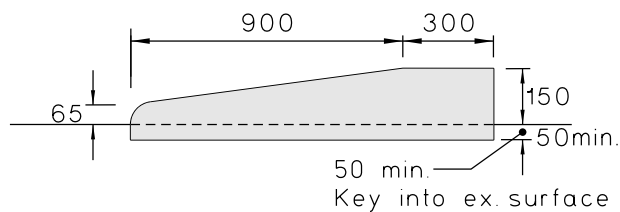
PEDESTRIAN ISLAND WITH 3.0m CROSSING



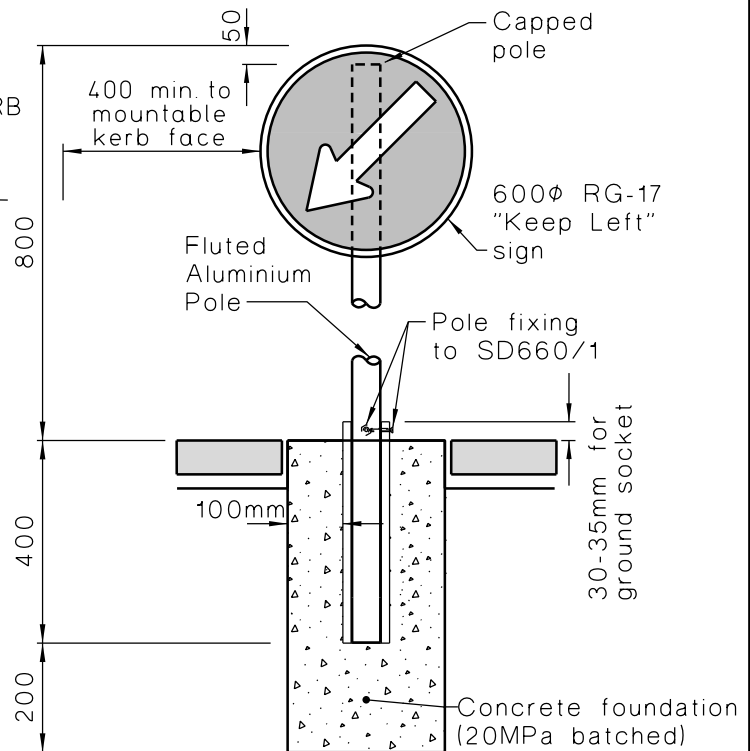
- NOTES:
1. Concrete strength to be 20MPa at 28 days.
 2. Concrete finish to conform with Class U3 of NZS3114.



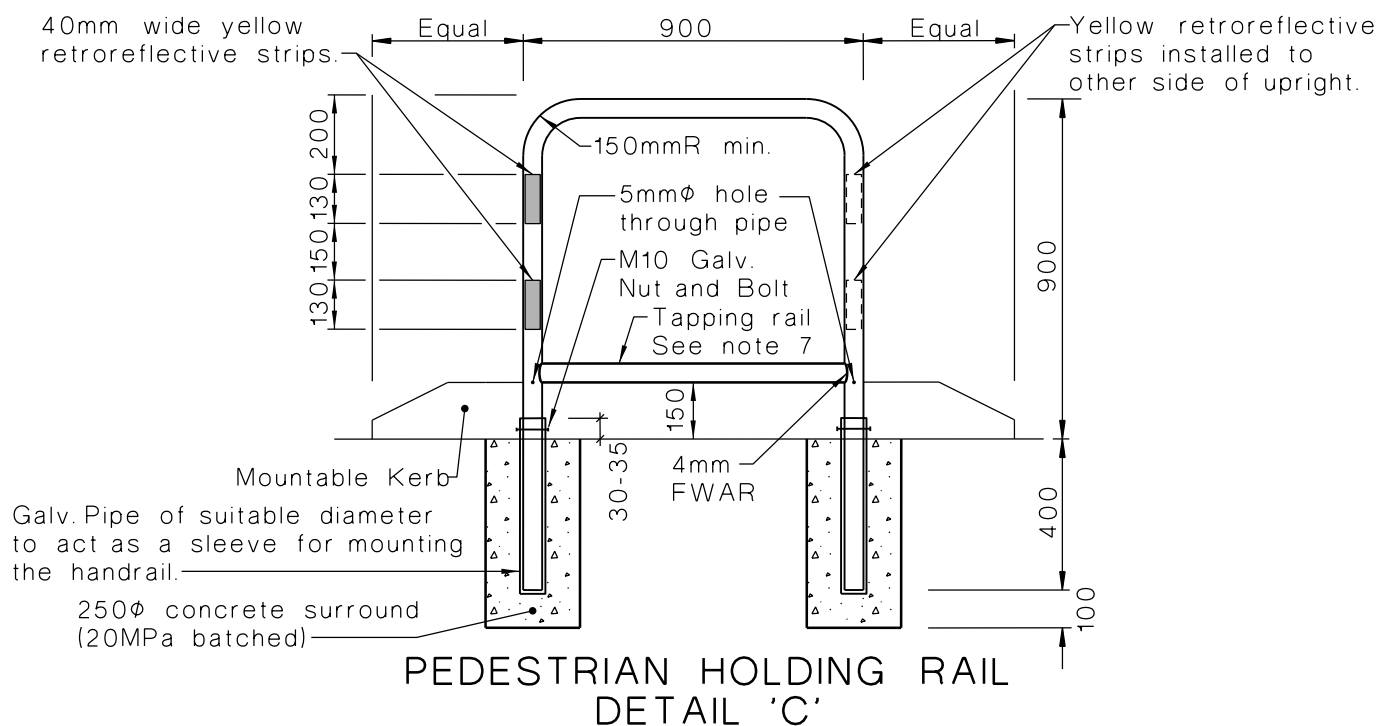
PEDESTRIAN ISLAND
TYPICAL SECTION



PEDESTRIAN ISLAND
NOSING ELEVATION
DETAIL 'A'



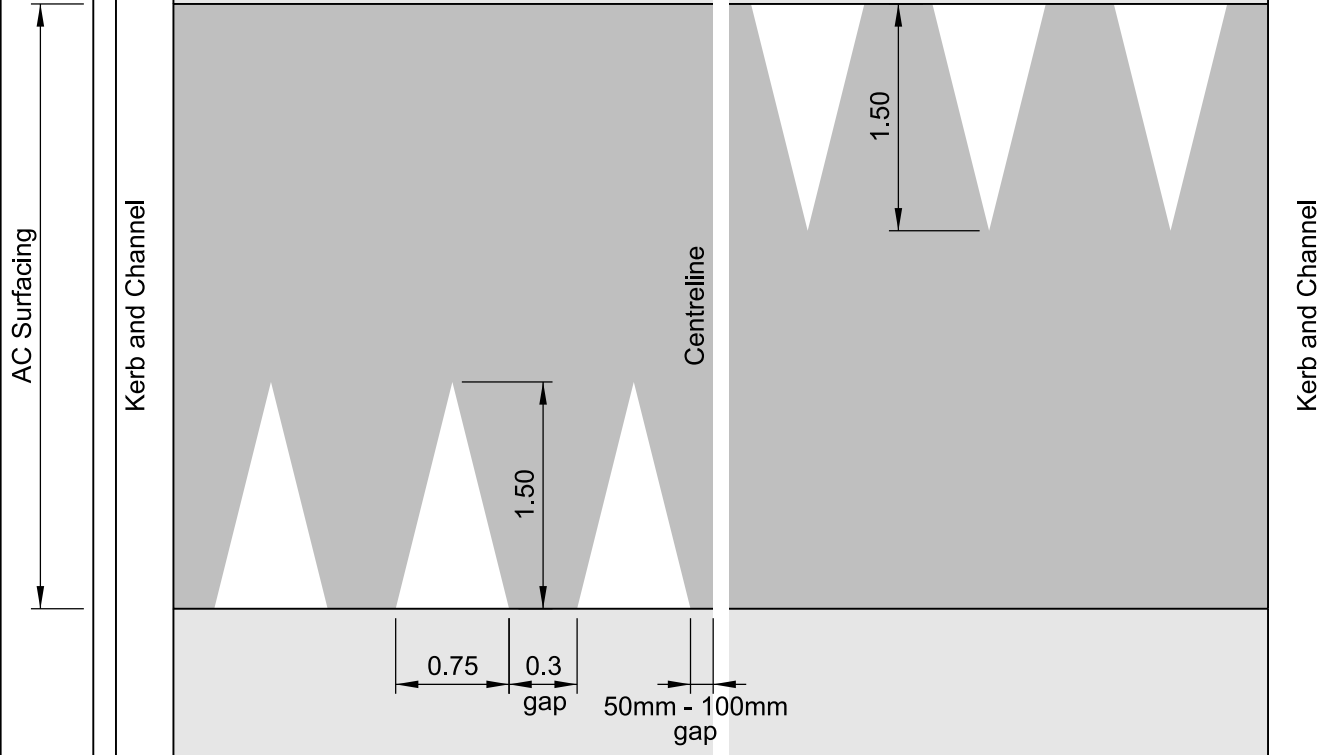
RG.17 SIGN
DETAIL 'B'



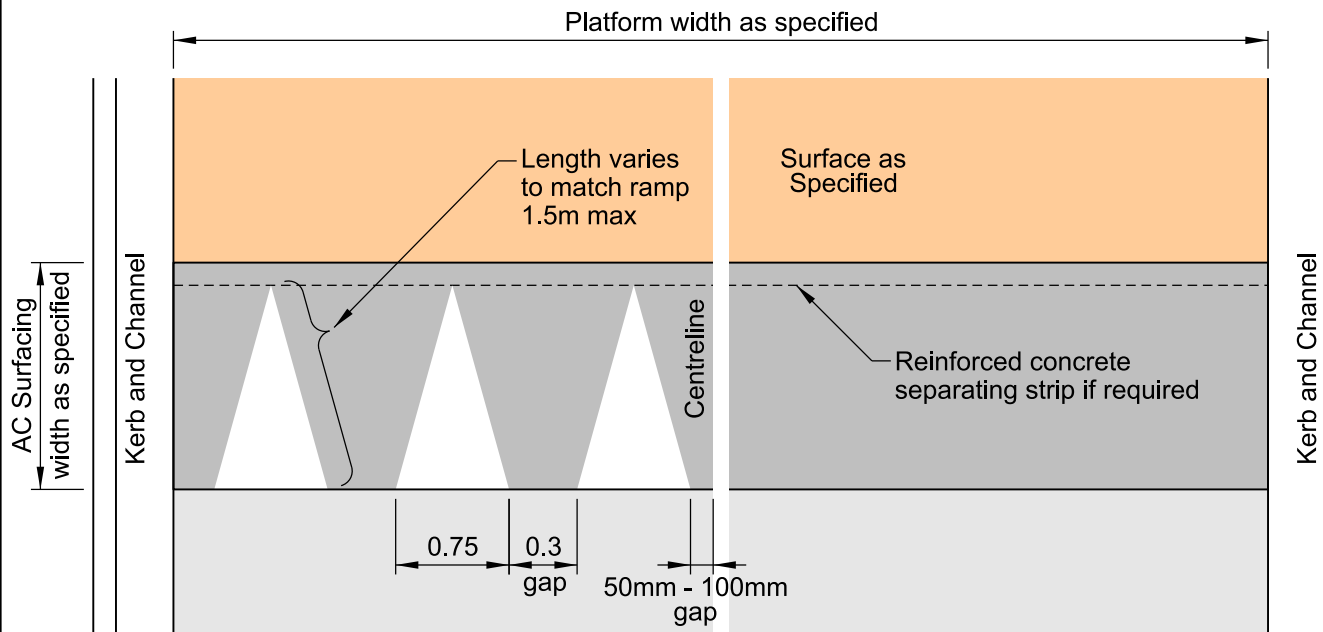
PEDESTRIAN HOLDING RAIL
DETAIL 'C'

NOTES

1. Where sign is installed in landscape areas, the concrete foundation depth shall be increased by 300mm.
2. Holding Rail and tapping rail to be made from 40 NB medium Galv. Pipe then powder coated with Orica 288 96905, Clough Safety Yellow.
3. Holding and tapping rail galvanising to be carried out after welding.
4. Yellow retroreflective strips required on holding rails within pedestrian islands only.
5. Yellow retroreflective strip to TNZ M/14 to be applied to holding rail on side closest to oncoming traffic.
6. Where holding rail installed in pairs, retroreflective strips are required on outside faces only.
7. Tapping rail not required at signalised crossings.



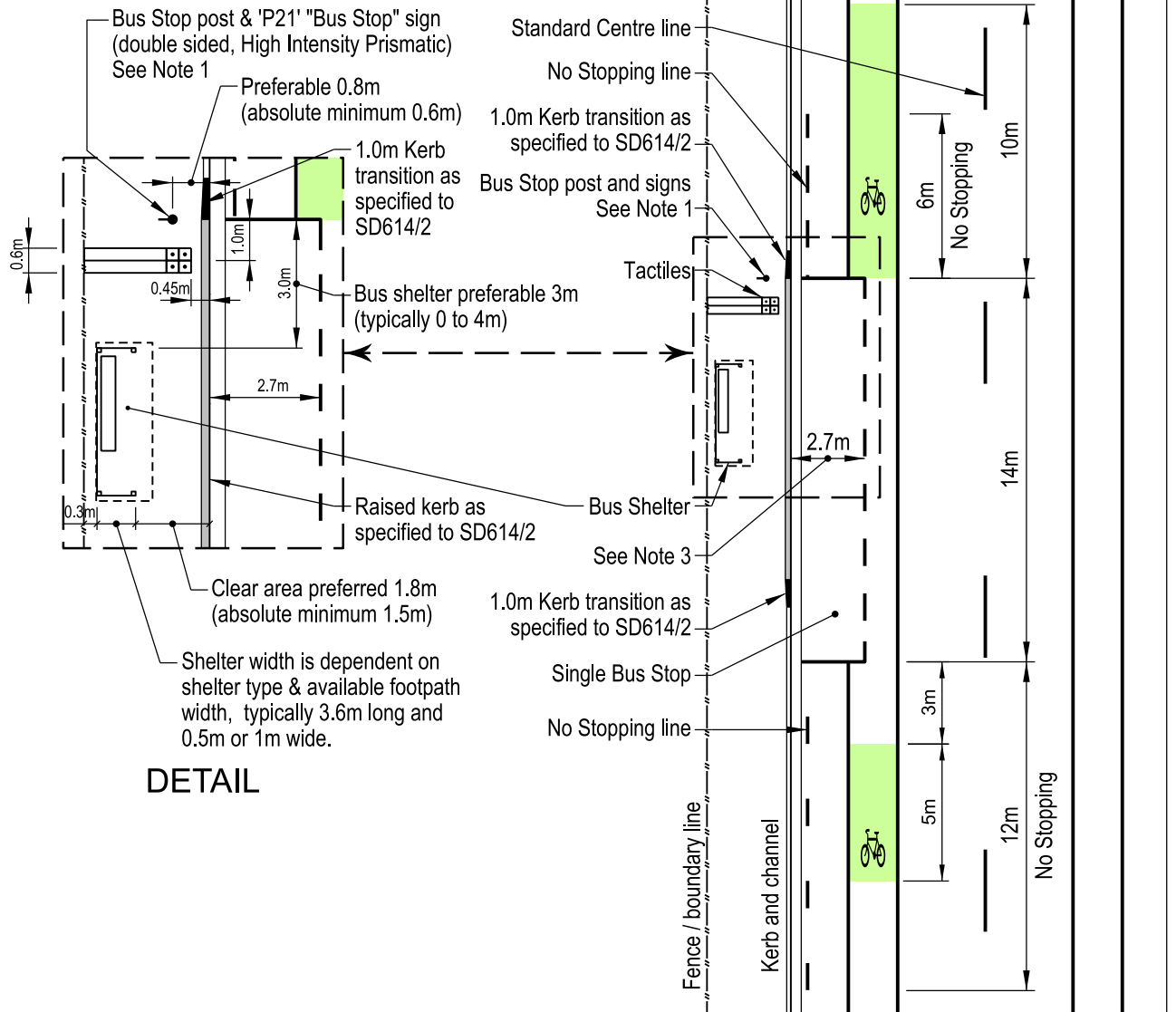
ROAD HUMPH



PLATFORM

NOTES:

1. Road hump / platform marking spacing to Traffic Control Devices Manual Part 5, Table 14-2.
2. Centreline to be marked only where specified.
3. Road marking product as specified.
4. Refer to SD631 for road hump construction details.
5. Refer to SD634 for platform construction details.

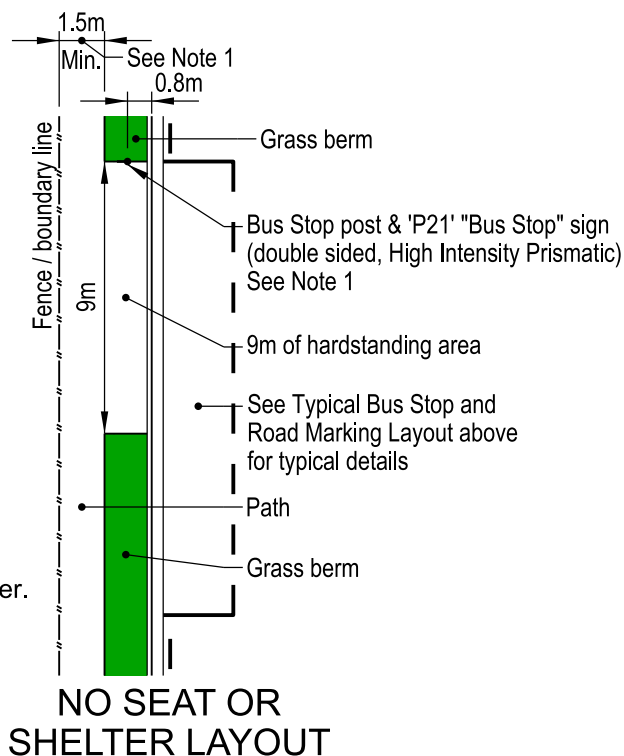


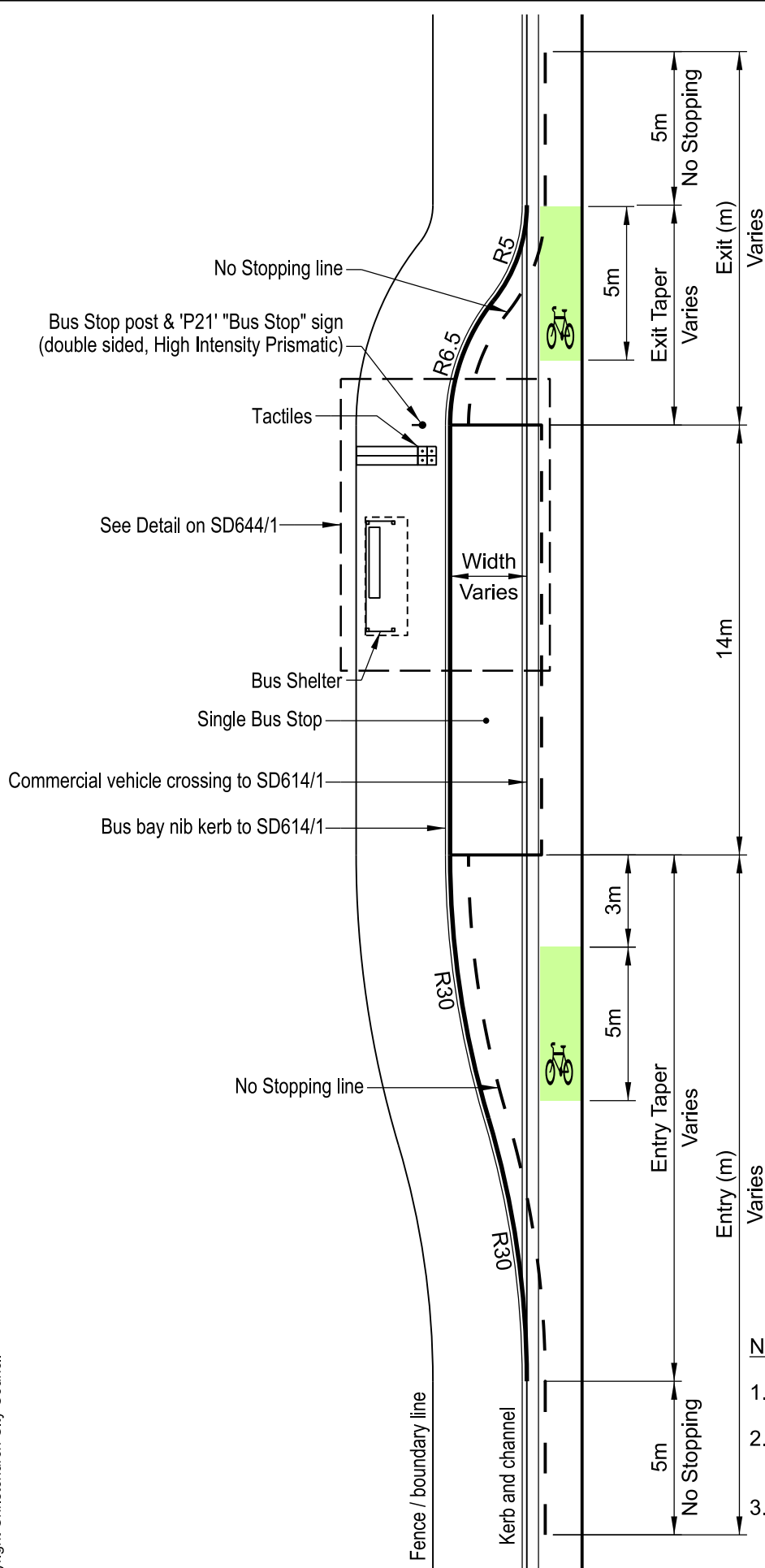
DETAIL

TYPICAL BUS STOP AND ROAD MARKING LAYOUT

NOTES:

1. The Bus Stop sign post is preferably aligned with the front line of the bus box. Ensure a minimum footpath width of 1.5m is maintained next to the bus stop sign. Otherwise install the bus stop sign at the back of the footpath or attached to the side of the shelter.
2. Refer to SD614 sheets 1 to 3 for kerb construction details.
3. A minimum cycle lane width of 1.2m should be maintained along side the bus box. This may be achieved by reducing the bus box width to 2.5m. In the case that a 1.2m width can not be achieved the bus box should be extended out to the cycle lane edge line.
4. The bus stop pole and sign is to be installed in line with the front of bus box. This design layout is to be used for the installation of all bus stops with or without seats or bus shelter.
5. If the back of the bus box coincides with a driveway, extend the bus box the full width of the driveway.

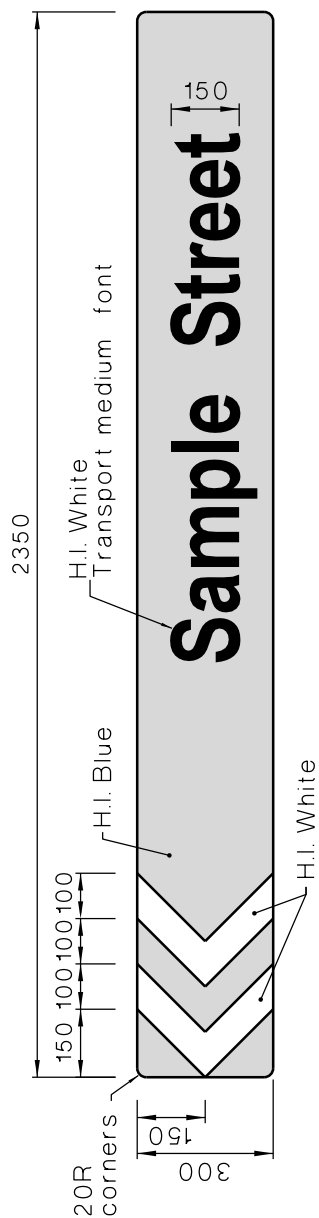




Indented Bus Bay		
Width (m)	Entry (m)	Exit (m)
0.0		
1.0	16.0	10.0
1.5	18.5	11.0
2.0	20.5	11.5
2.5	22.0	12.0

NOTES:

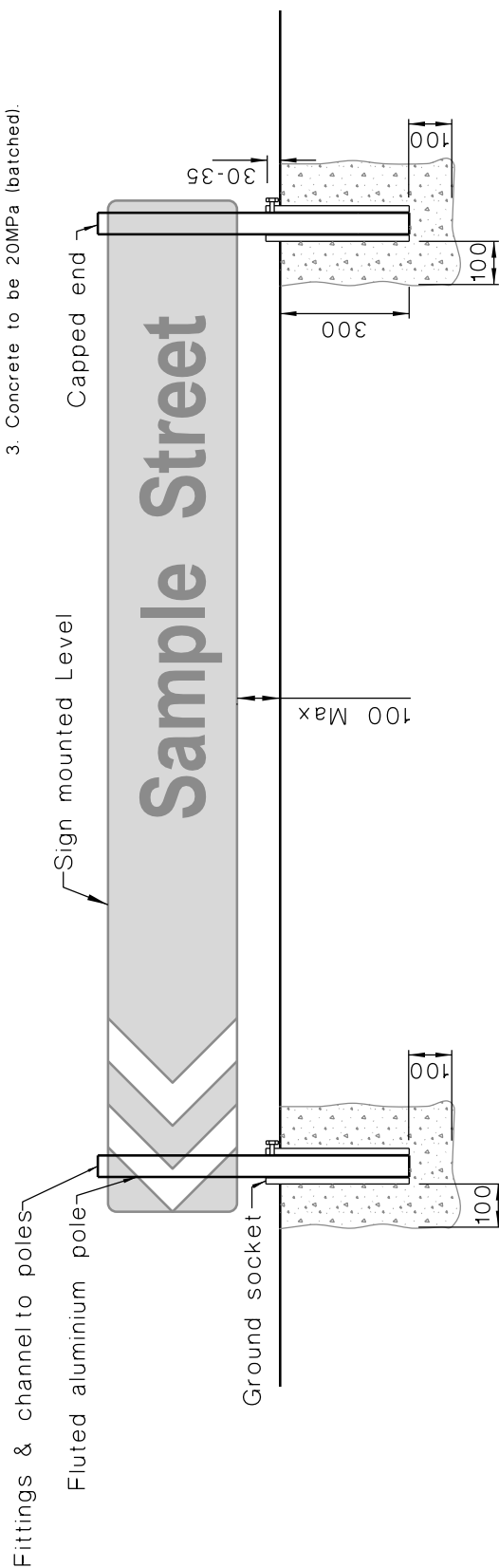
1. See SD644/1 for notes and details.
2. See SD614/1 for kerb and cross fall requirements.
3. Green paint and cycle marking is planned to improve visibility on entry / exit from stop.



STANDARD CCC ROUNDABOUT CHEVRON / NAME BOARD

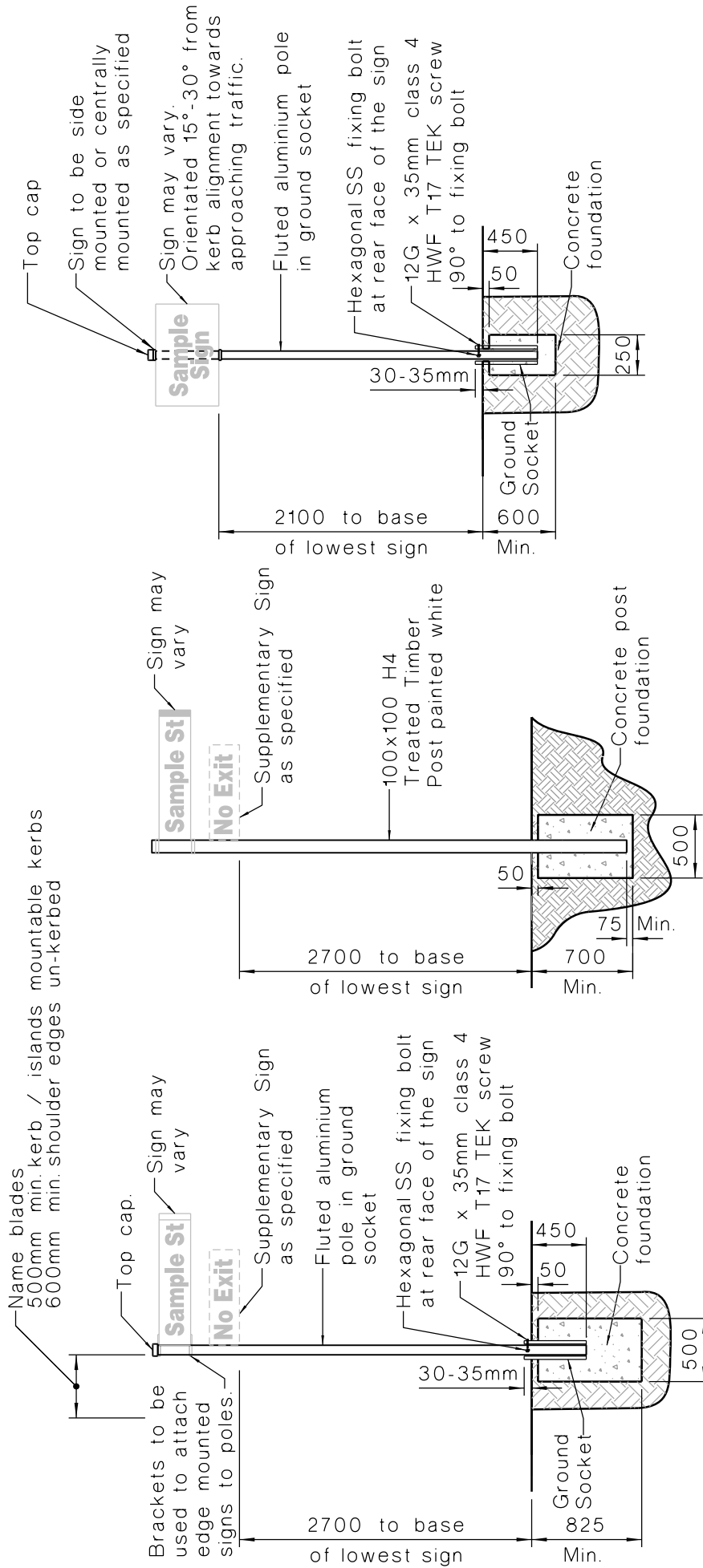
NOTE:

1. All dimensions are in millimetres (mm) unless otherwise stated.
2. No obstructions or landscaping in front of signs.
3. Concrete to be 20MPa (batched).



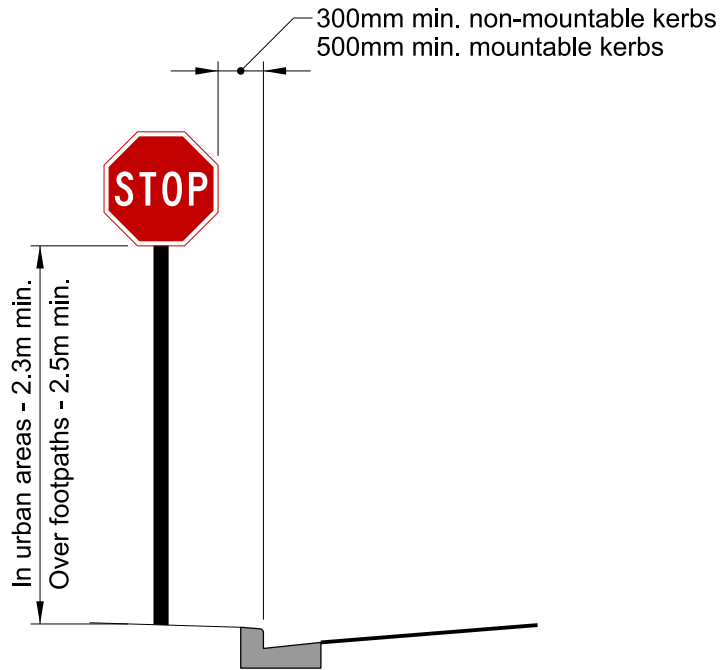
INSTALLATION DETAIL

DETAIL DELETED 2025

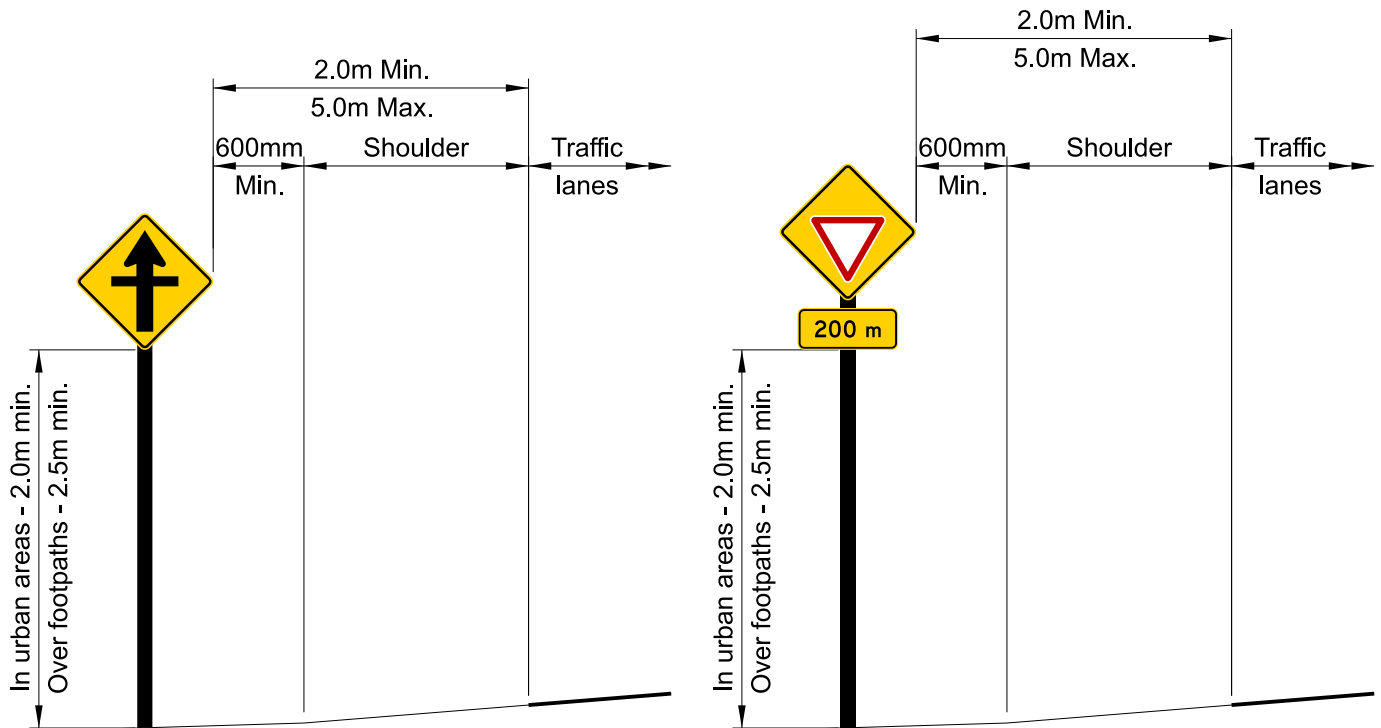


NOTE:

1. All dimensions are to underside of lowest sign unless otherwise stated.
2. Where parking signs exceed 450mm width increase height as specified.
3. Footings are only suitable for signage types shown.
4. Concrete to be 20MPa (batched).

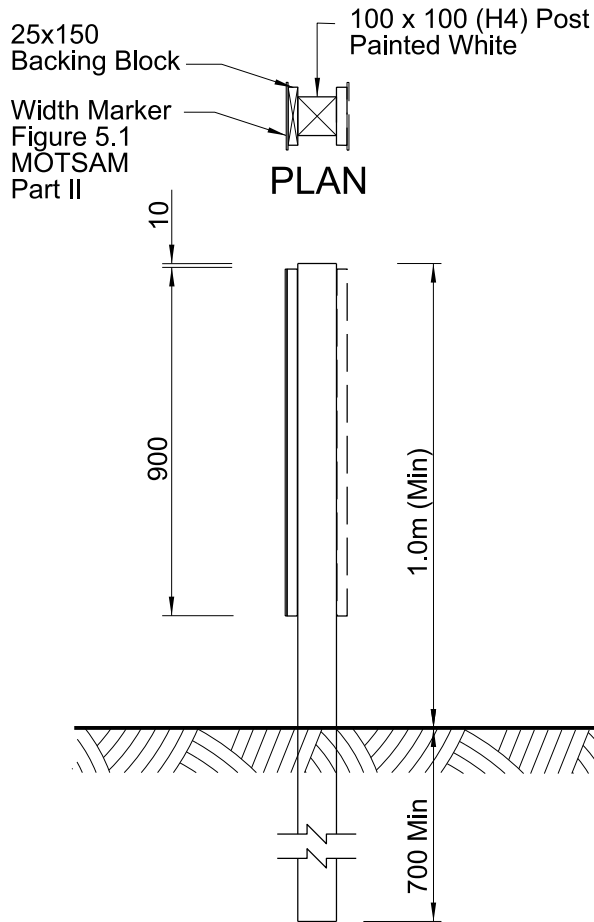


REGULATORY & WARNING SIGN CLEARANCES IN KERBED ROADWAYS



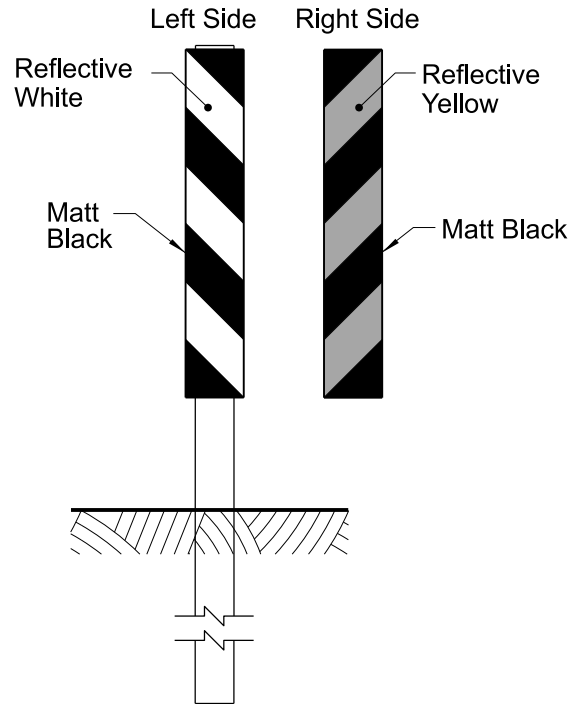
REGULATORY & WARNING SIGN CLEARANCES IN UN-KERBED ROADWAYS

DETAIL DELETED 2025

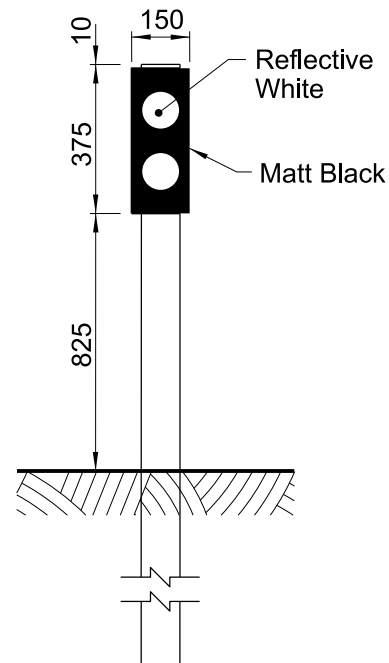
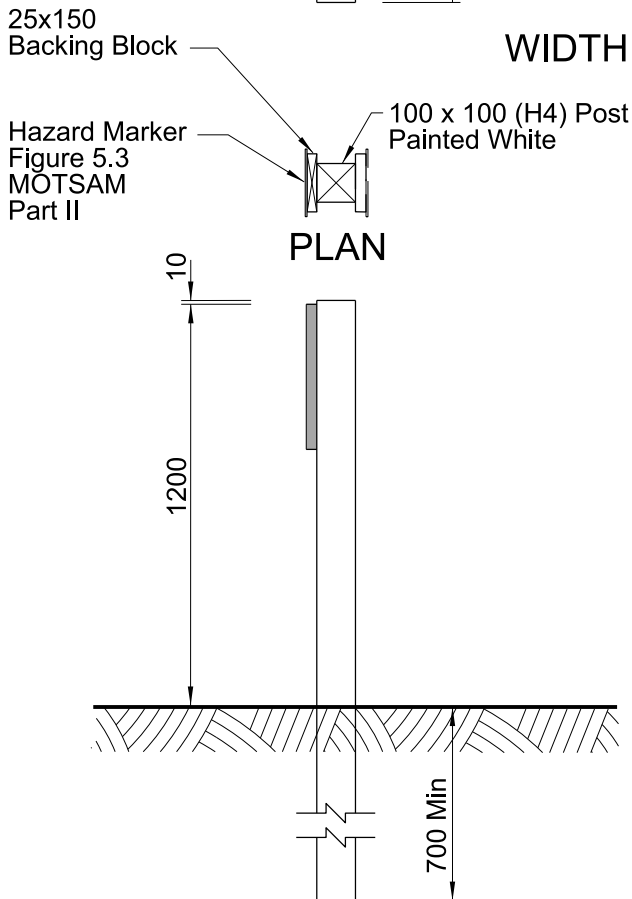


NOTES:

1. To be white on approach left hand side, and yellow on approach right hand side.
2. Ensure post is founded in solid bearing.
3. To be mounted back-to-back where specified.



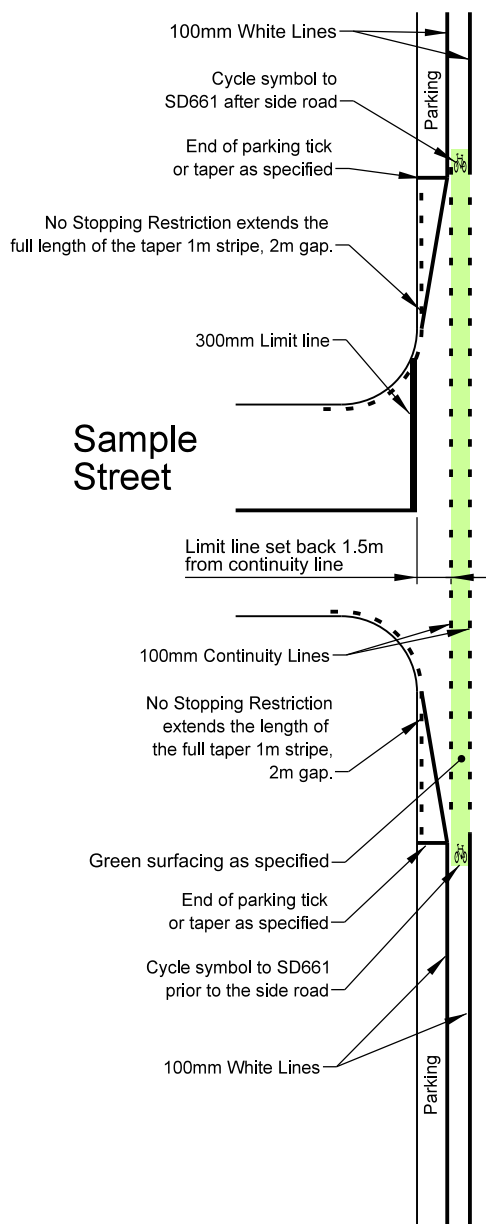
WIDTH MARKER



NOTES:

1. Ensure post is founded in solid bearing.
2. Width markers can be attached to WN2 - 'Vertical alignment hump' sign poles at kerb buildouts with speed humps if visibility and proximity allows.

HAZARD MARKER



NOTES:

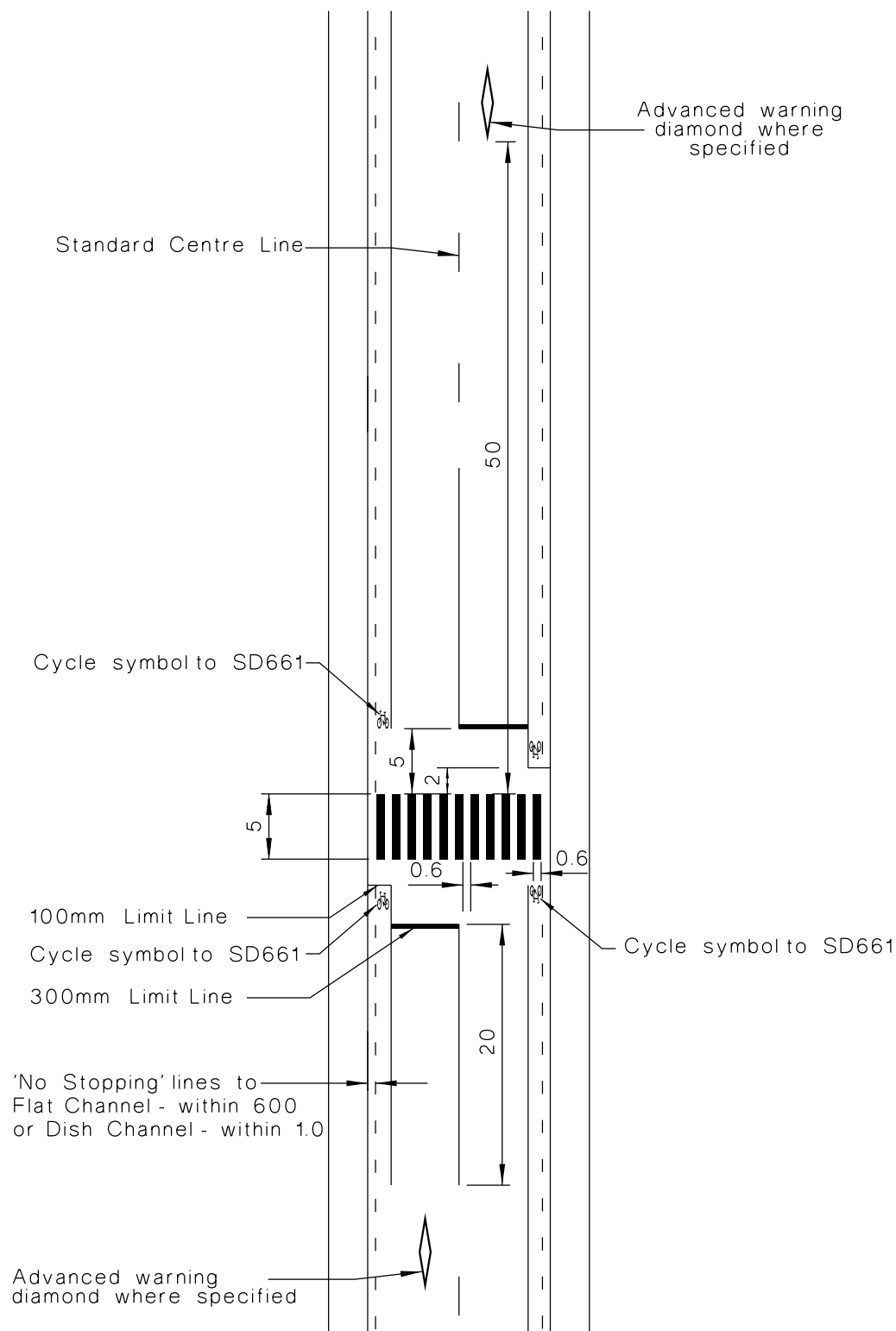
1. Absolute minimum of 1.7m for cycle lane next to parking lane. Desired minimum width 1.8m. (For 50 km/hr Speed Limit)
2. Cycle Logos to SD661 in locations as shown. All other mid-block cycle logos evenly spaced with maximum spacing of 100m.

CYCLE LANE AT INTERSECTION WITH EDGE LINES

ISSUE DATE | AUG 2025

SD650

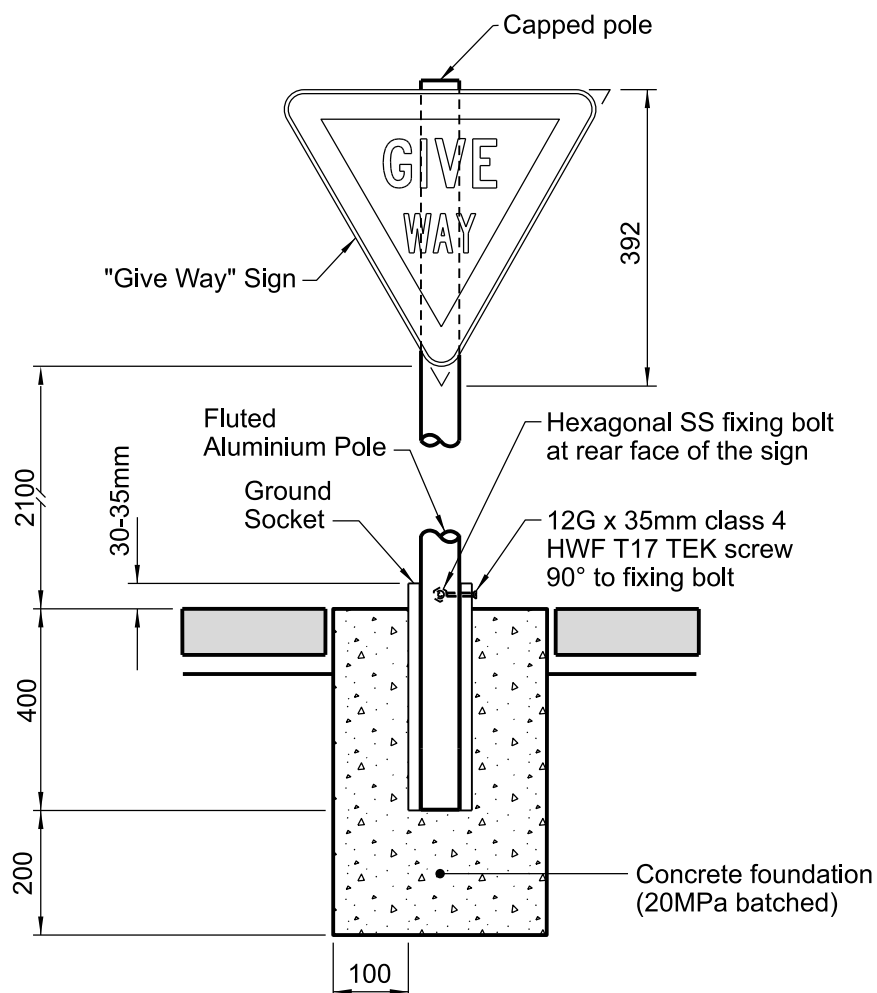
SHEET 1



NOTES:

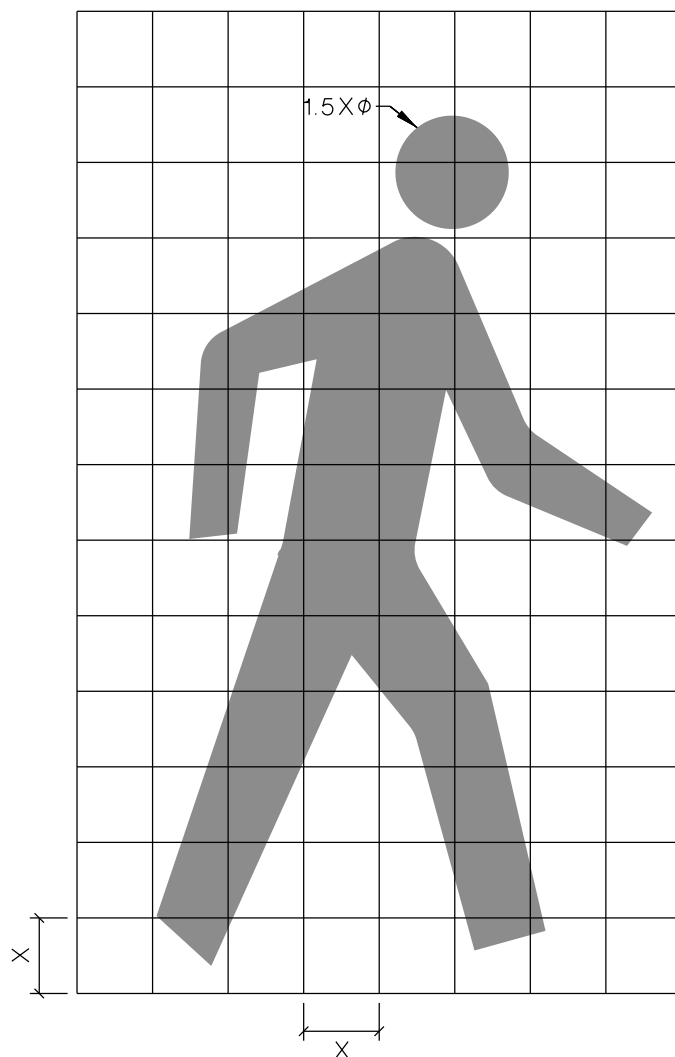
1. Without kerb build-outs, the minimum length of broken yellow "No Stopping" lines on the approaches to pedestrian crossings is 15m.
2. Christchurch City Council line dimension amendments to the 'Manual of Traffic Signs & Markings' issued by the NZTA.
3. Broken yellow No Stopping line stripes at 2.0 centres, 1.0 x 0.1 wide for lengths over 15m. Pedestrian crossing stripes at 1200 centres 5.0 x 0.6 wide



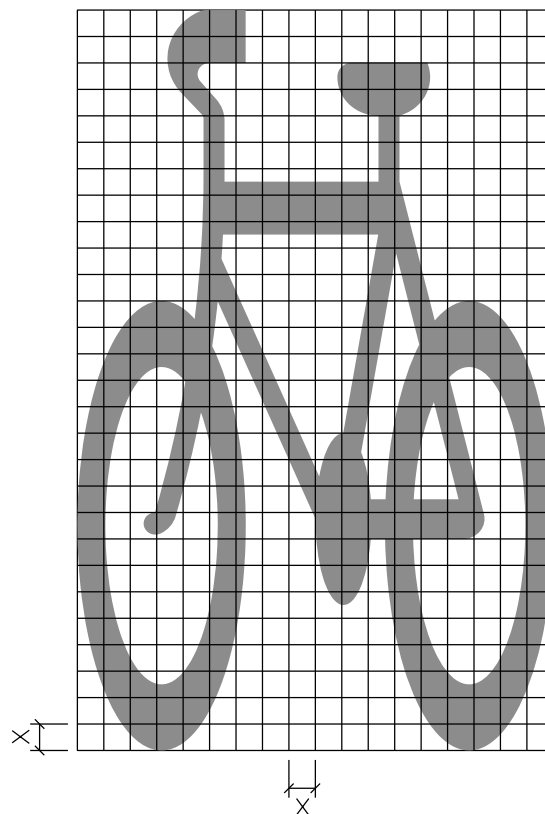


NOTES:

1. Cycle Give Way sign to be installed in conjunction with cycleway Give Way pavement marking as per SD663.



PEDESTRIAN SYMBOL



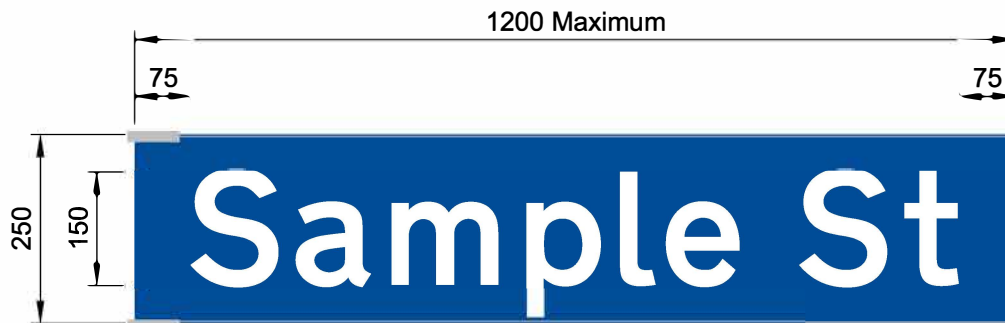
CYCLE SYMBOL

Spacing	
Intersections	As specified
Midblock - Typical	50m
Midblock - Low Conflict	100m

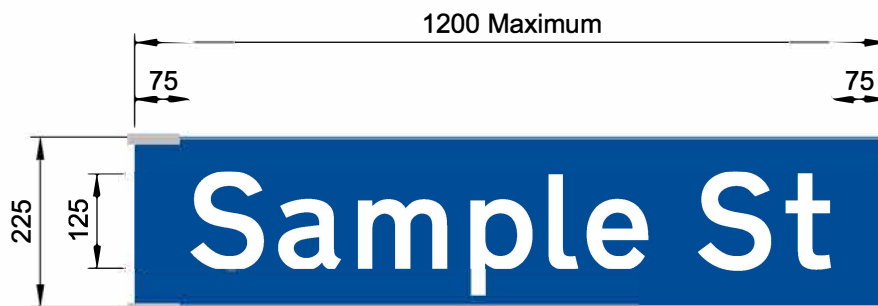
NOTE:

1. Road markings to be reflectorised white.
2. This is the Traffic Control Devices Manual Cycle Symbol.
On shared paths use a scale factor of $X=20\text{mm}$, resulting in a cycle logo 360mm wide & 560mm high.
On cycleways use a scale factor of $X=35\text{mm}$, resulting in a cycle logo 630mm wide & 980mm high.
On roads use a scale factor of $X=50\text{mm}$, resulting in a cycle logo 900mm wide & 1400mm high.

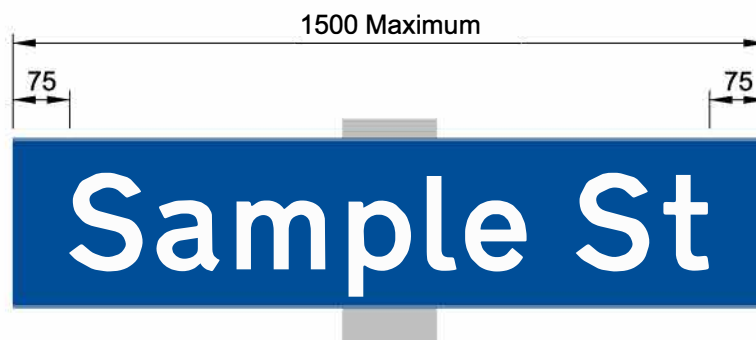




MAJOR ARTERIAL ROADS
(End Mounted)



OTHER SIGNS
(End Mounted)



(Central Mounted)

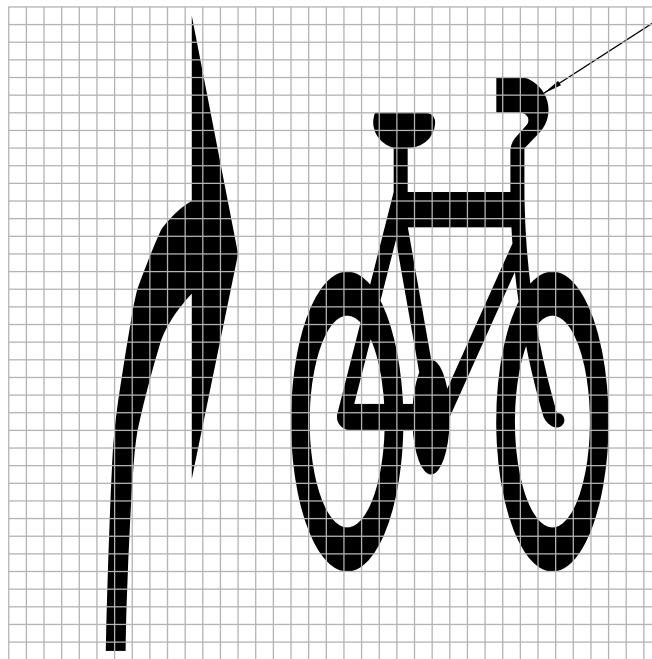


SUPPLEMENTARY SIGNS
(End Mounted)

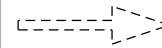
NOTES:

1. Refer to CSS Part 6 clause 25.4 Street Name Signs.
2. Font for signage lettering to be 'Modified Series E'.

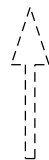




Standard path
size symbol
Refer to SD661

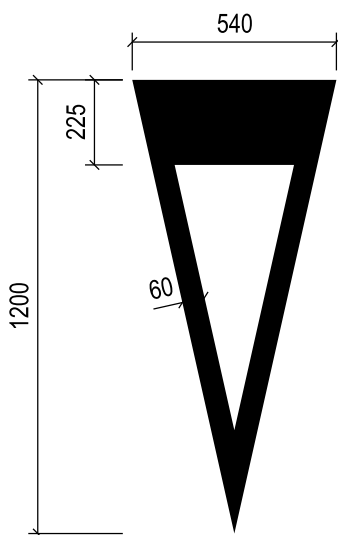


Direction of cyclists
leaving hook turn box

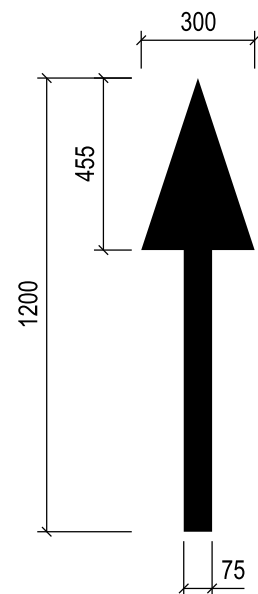


Direction of cyclists
approaching hook turn box

HOOK TURN DETAIL



CYCLEWAY
GIVE WAY



CYCLEWAY
ARROW

NOTES:

1. Hook turn box sides to be at least 1.5m long.
2. Hook turn stencil to MOTSAM fig. 3.35a with 'x'=35mm



Minimum of four Kerb top markers spread evenly over kerb displacement with a maximum 1.0m spacing.