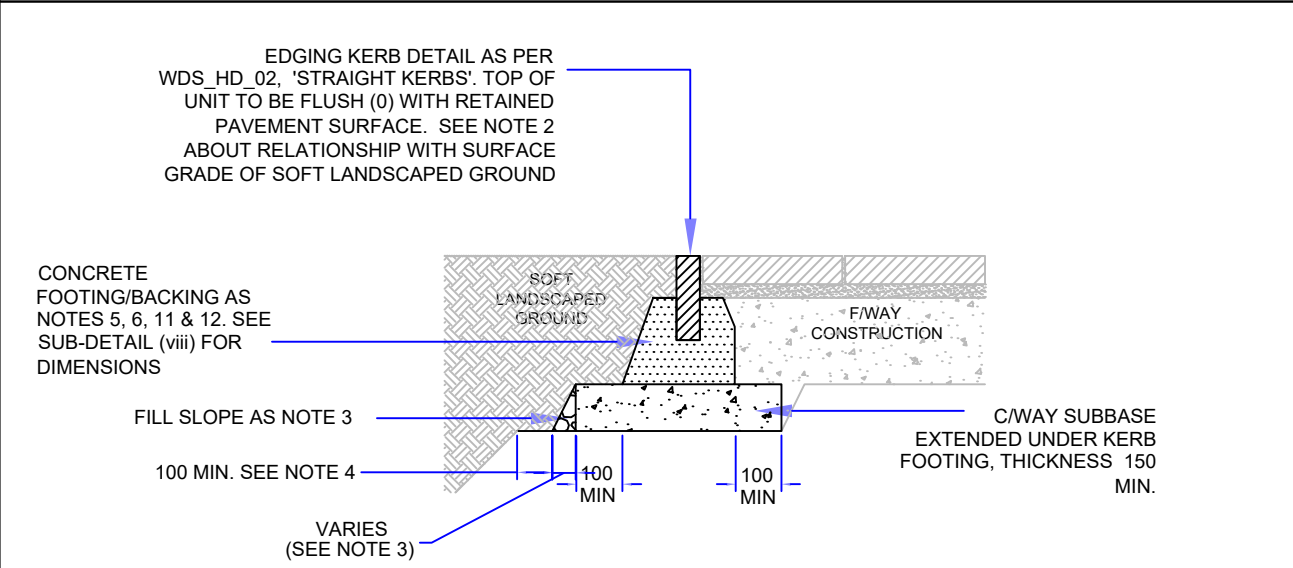
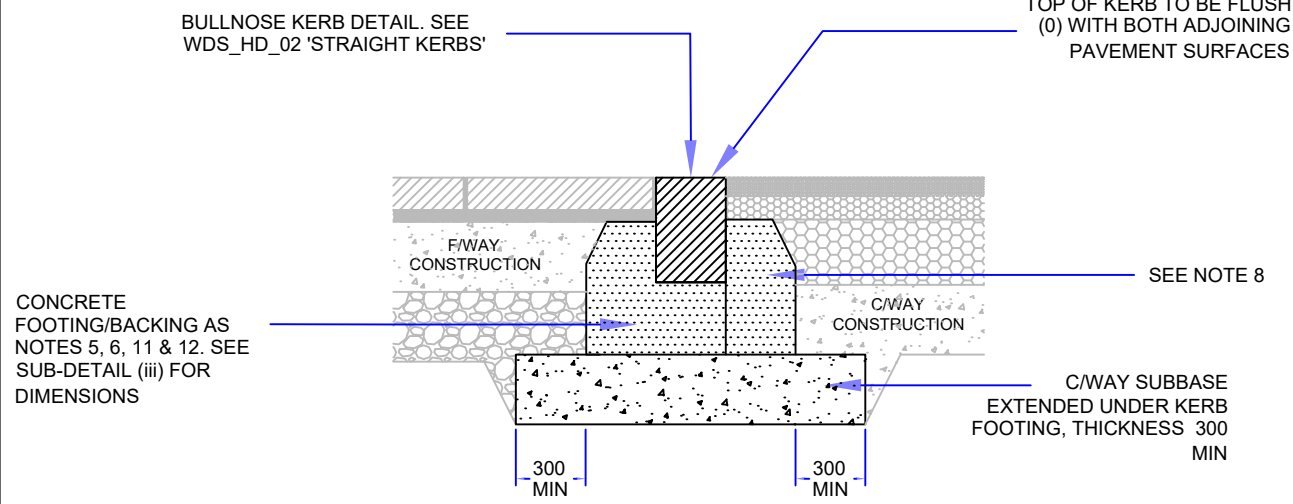


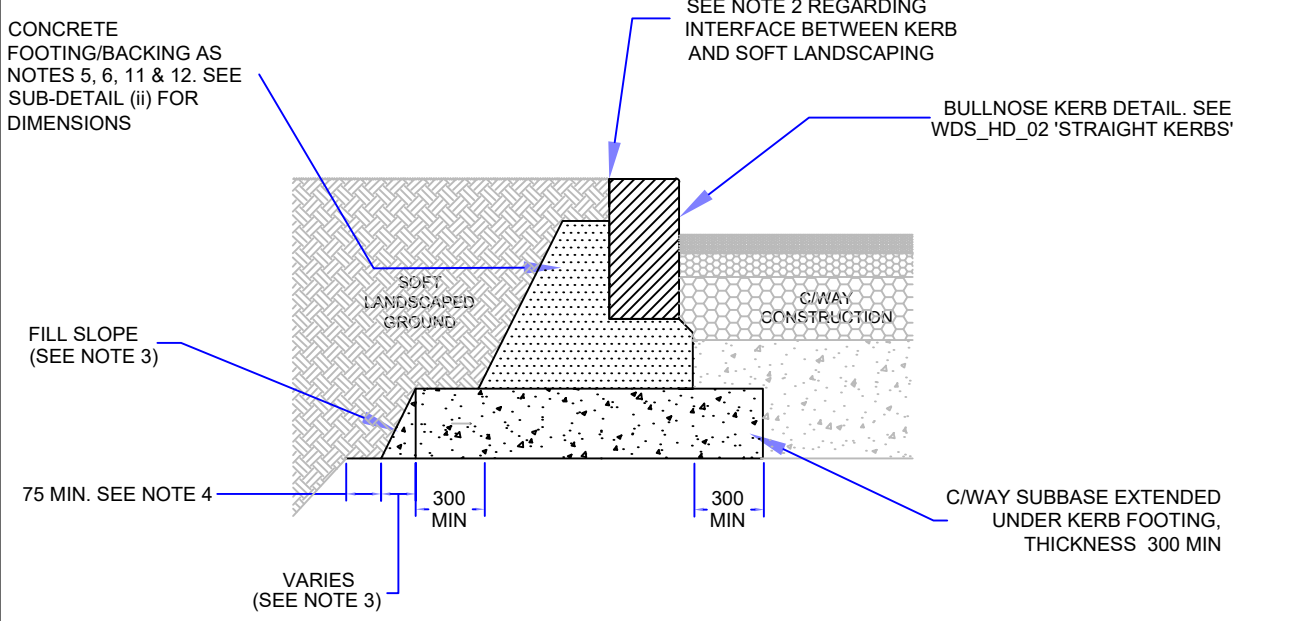
A1
ORIGINAL
PLOT SIZE

NOTES:

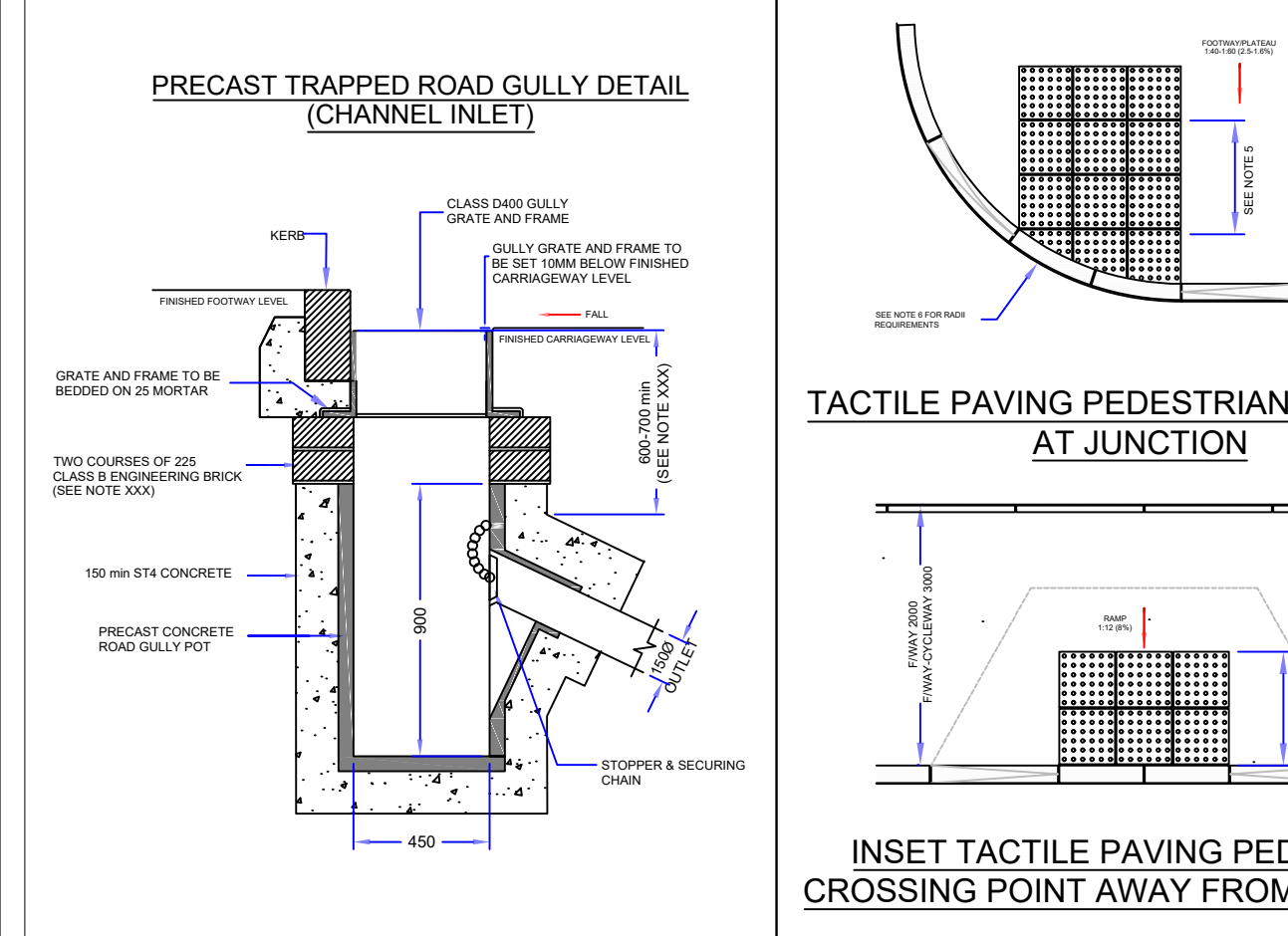
1. In all instances, the depth of footings/backings shall be sufficient to be placed directly on top of the sub-base.
2. The surface grade of the soft landscaped area at the interface with the kerb will vary. Typically:
 - If the soft landscaped area is grass surfaced then it should be 25mm above the top of the kerb, sloping down if be flush with it within the final 150mm.
 - If the soft landscaped surface is mulch surfaced then the final mulch surface grade should be 25mm below the top of the kerb to prevent the mulch from spreading.
 - If the soft landscaped area is self binding gravel surfaced then the final gravel surface grade should be flush (0-6mm) with the top of the kerb.
 - If the carriageway pavement is pervious then the surface grade of the soft landscaped area should be 40mm min beneath the top of the kerb to prevent sediment from it being carried onto the carriageway surface with runoff.
3. The sub-base beneath the footing shall be terminated with a fill slope. The gradient of that slope shall be 2:1 (height:width) where the sub-base is composed of an unbound granular mixture and vertical if it is composed of a concrete or hydraulically bound mixture.
4. Minimum 75 terrace between base of sub-base fill slope and any further subgrade cut slope.
5. All in situ concrete footing and backing to be C20 (ST4).
6. If kerbs and footing/backing cannot be laid in one operation then standard details shall be adopted as per one of the reinforced options under 'General layouts for Adaptation' to securely bed kerb/link backing to pre-cured footings.
7. Reinforcement dowel bars may be required with standard kerbs in circumstances where the kerbs are more vulnerable.



AT INTERFACE BETWEEN FOOTWAY/CYCLEWAY AND SOFT LANDSCAPED AREA



AT INTERFACE WITH SOFT LANDSCAPED AREA

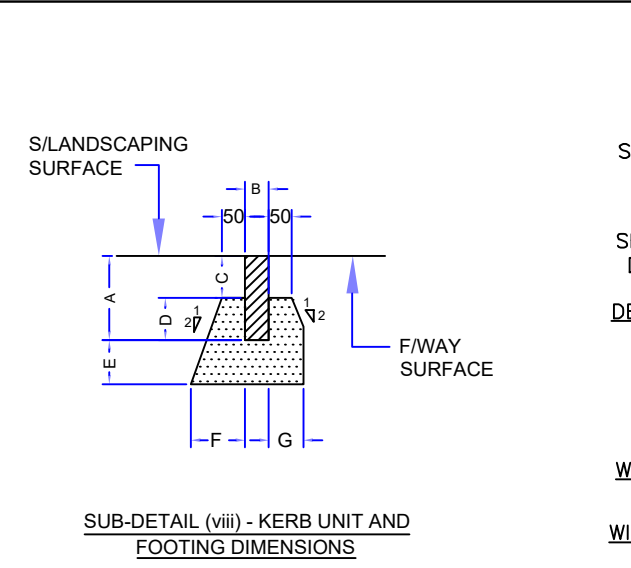
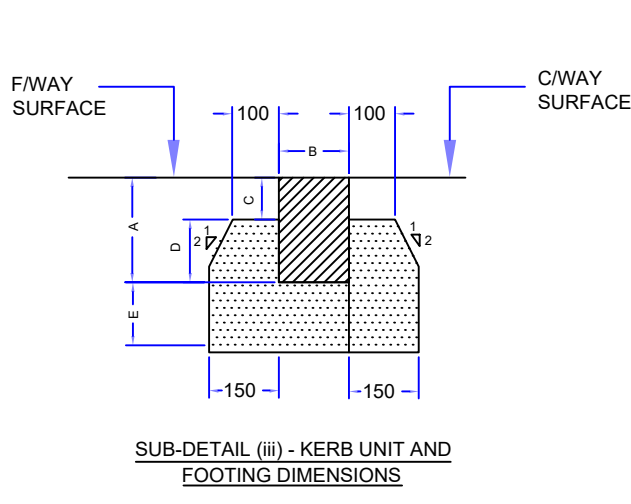


- NOTES:
1. Double yellow line restrictions will be required along the carriageway edge between parking bays within roads governed by Restricted Parking Zones. They shall run through and for 1000 either side of ramps prior to the kerbs transition. Roads elsewhere can be controlled with optional H-bar white lines to the same specification.
 2. Ramp width to be minimum necessary value of 3600 and a maximum of 4500. This may be increased to 7200 and a maximum of 9000 for crossings leading to double drives. Maximum values subject to if the private hard standing provides space for two vehicles to wait side by side and a sufficient turning area for both vehicles to emerge onto the Highway in forward gear.
 3. See WDS_HD_01 for details on surface materials. Where footway material differs that of the carriageway ramp and transition, the two surface shall be delineated using edging kerb.
 4. At the interface between a private hard standing and the rear limit of the Highway at a Vehicle Crossing, vehicle users emerging from the latter should be provided with a clear visibility splay in both directions that is unimpeded by any significant obstructions. Obstructions are to be applied to the vertical plan within the splay between 600-2000 above surface level. This is so that they can see pedestrians who may be passing along the footway.
 5. Tactiles to be a minimum of 3 blister paving slabs behind rear kerb face if pedestrian crossing point is within path of pedestrian travel. Shall be minimum of 2 behind rear kerb face in other circumstances.
 6. See Highways Design Guide Table A1 'Junction Radii' for requirements pending road priority.

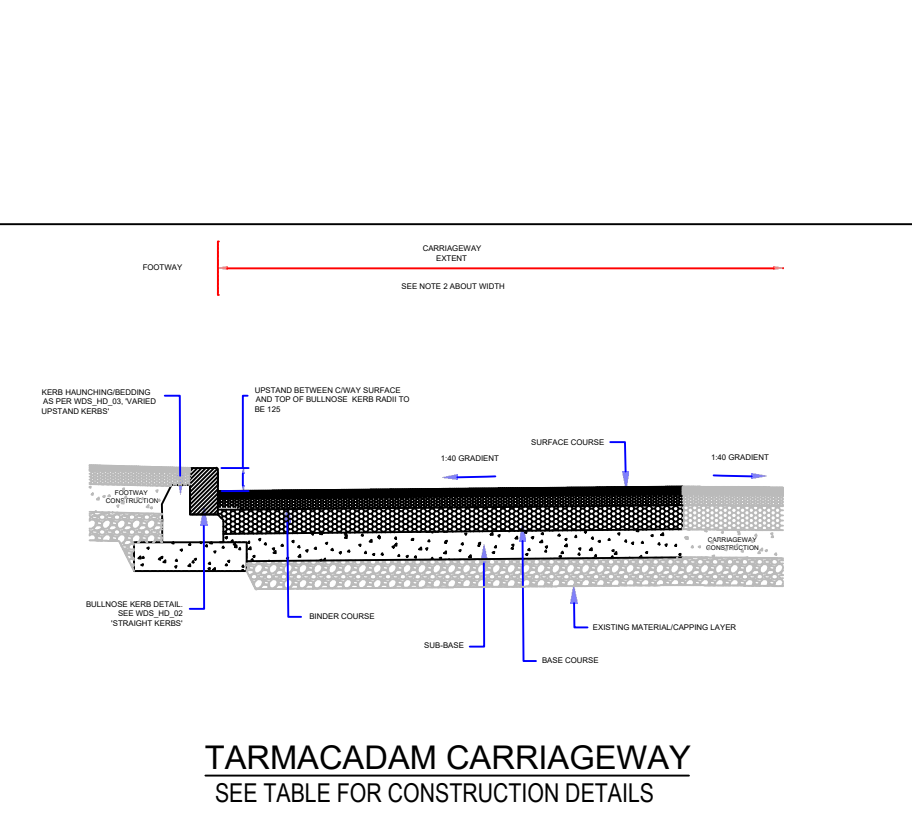
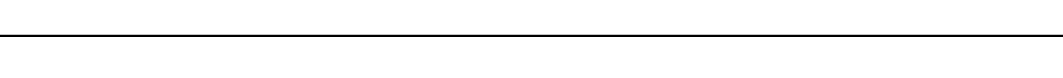
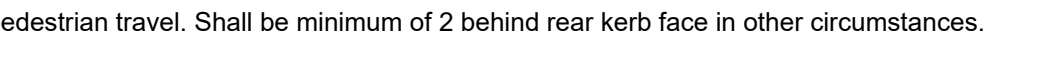
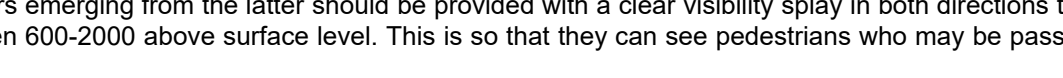
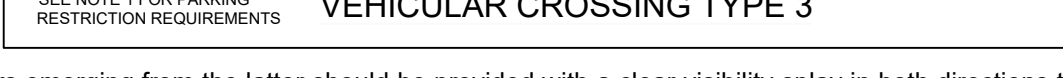
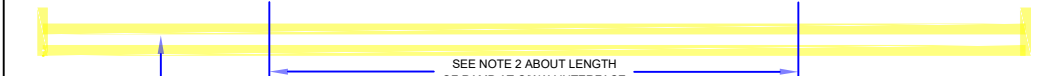
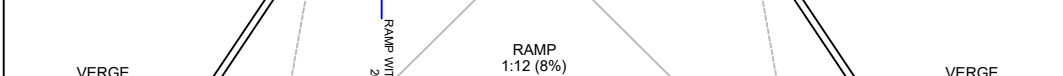
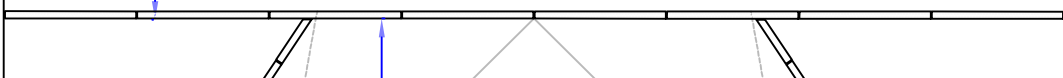
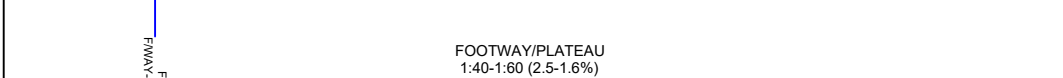
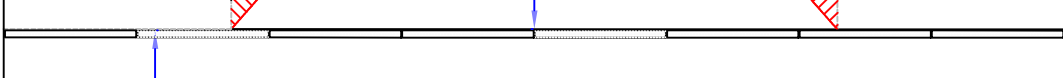
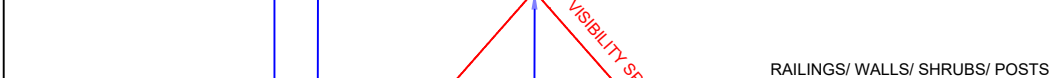
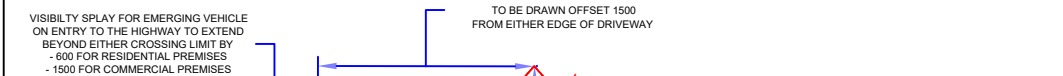
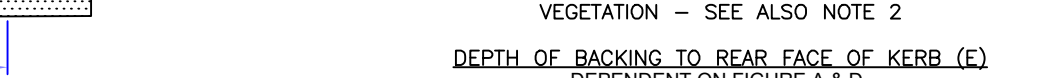
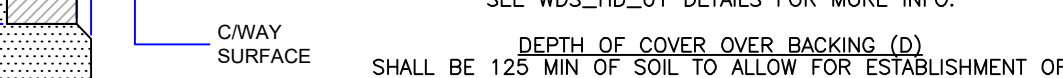
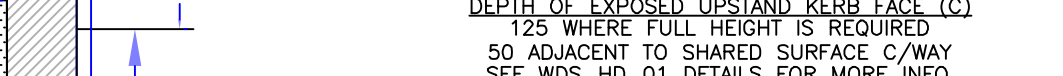
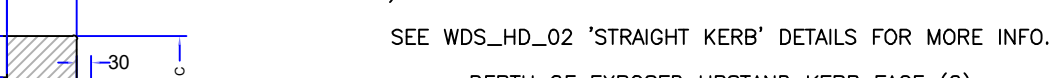
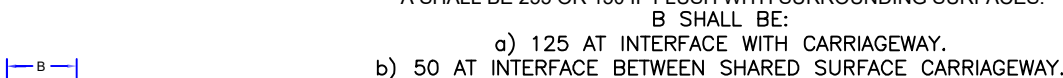
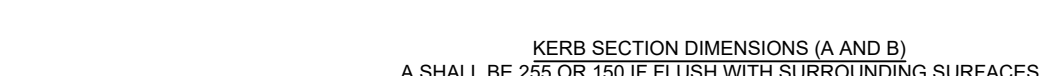


INDICATIVE

8. If an edge channel is required then the section of footing beyond the front face of the kerb is to be omitted.
9. If kerbs used back to the edges of Traffic Islands then their footings shall be steel dowel or fabric reinforced as per one of the reinforced options under 'General layout for Adaptation'.
10. Kerbs shall be laid with dry joints and closely butted to adjacent kerbs and channels.
11. In all instances, the depth of footings/beams shall be sufficient to allow them to be placed directly on top of the sub-base.
12. Movement joints shall be provided through footings/beams/backing.
13. Root deflectors shall be ≥ 440 high.
14. The top of root deflectors shall be flush (0-6mm) with the modular unit kerb trim. The base of root deflectors shall rest on the footway/carriageway sub-base extension which shall be extended upwards where necessary.
15. Root barriers may be required or justified include to protect:
 - major underground utility lines.
 - vulnerable basement structures.
16. Stud material to be stainless steel.
17. Studs to be set in resin at depths specified by manufacturer.



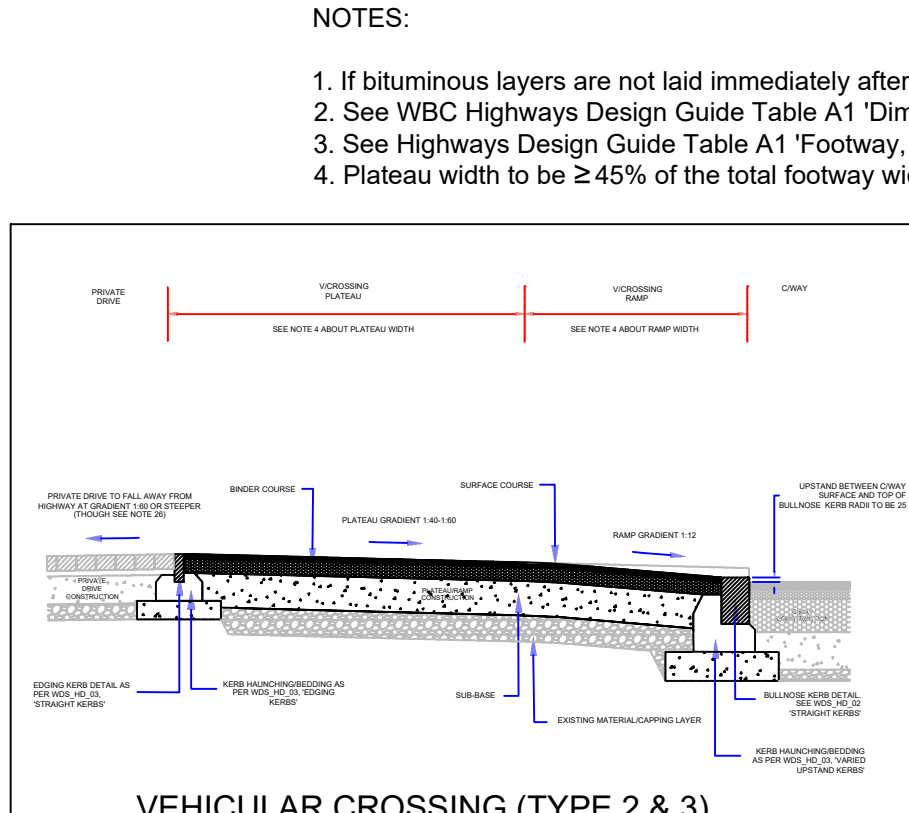
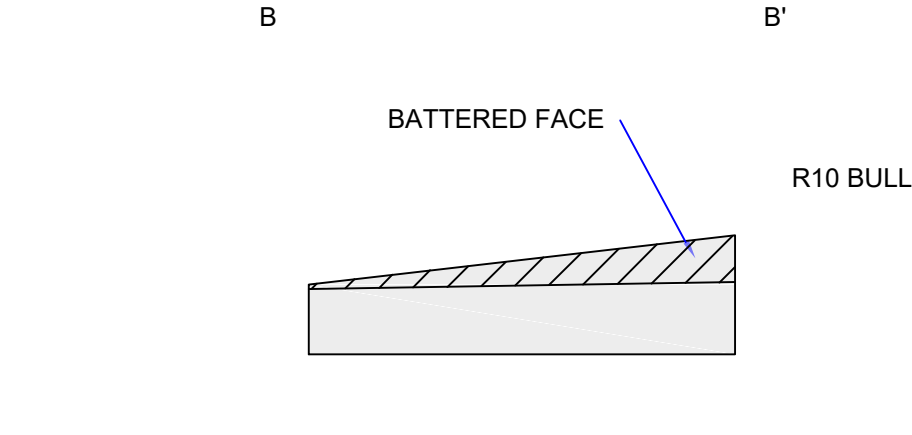
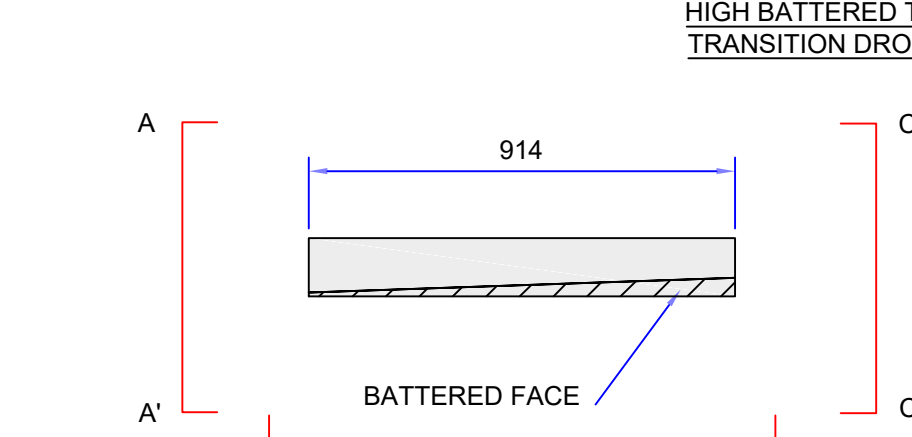
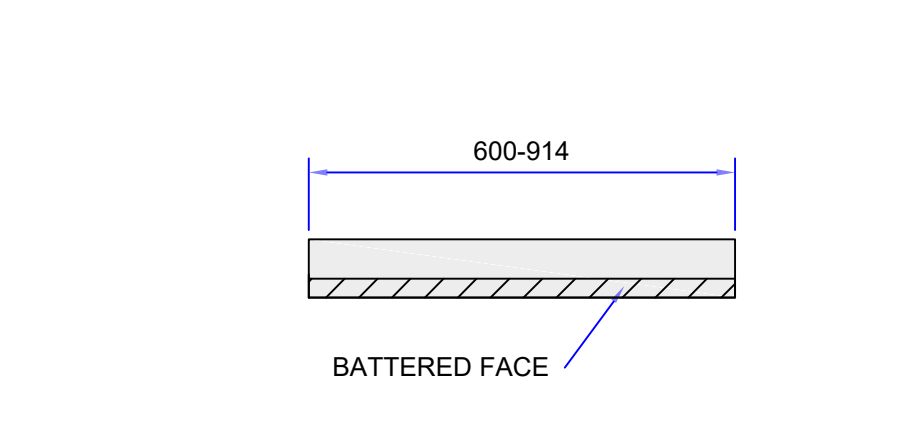
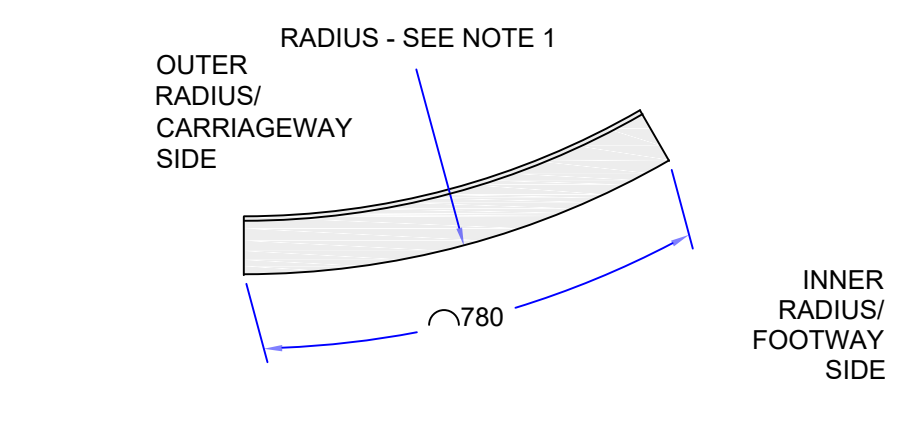
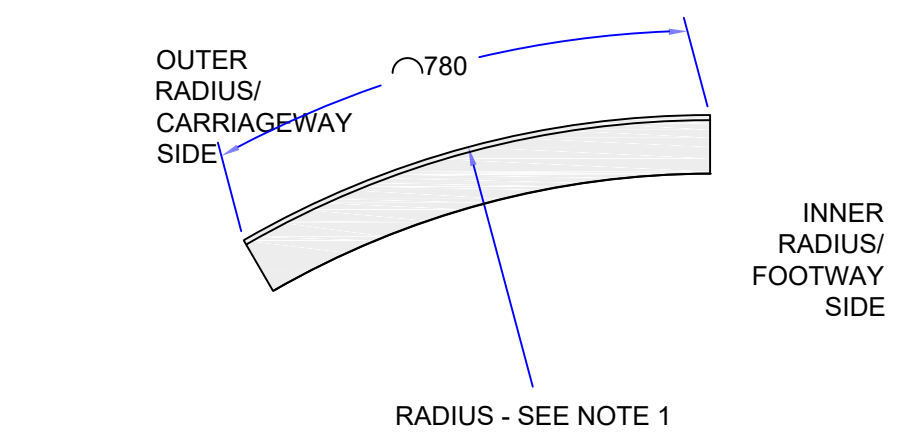
VEHICULAR CROSSING TYPE 3



TARMACADAM CARRIAGEWAY		
COURSE	SPECIFICATION	THICKNESS
SURFACE	HOT ROLLED ASPHALT, 30/14F + PCC 14/20, PEN 40/60, MIN PSV 63, MAX AAV 14	40
BINDER	CLOSE GRADED AC10, PEN 100/150, MIN PSV 60, MAX AAV 14	40
BASE	CLOSE GRADED AC32, PEN 40/60	130
SUB-BASE	DT TYPE 1	SEE TABLE NOTE 1
CAPPING	CLASS 6F1 OR 6F2 GRANULAR CAPPING MATERIAL	SEE TABLE NOTE 4

- TABLE NOTES
1. SEE NOTE 1 FOR DETAILS ON BOND COATS BETWEEN LAYERS.
 2. SUB-BASE REQUIREMENTS TO BE DETERMINED BY CBR TEST.
 3. CARRIAGEWAY CAPPING REQUIREMENTS TO BE DETERMINED BY CBR TEST.
 4. CBR TEST TO BE CARRIED OUT BY THE CONTRACTOR AT 20-30m INTERVALS AND RESULTS REPORTED TO THE HIGHWAY AUTHORITY/ENGINEER.

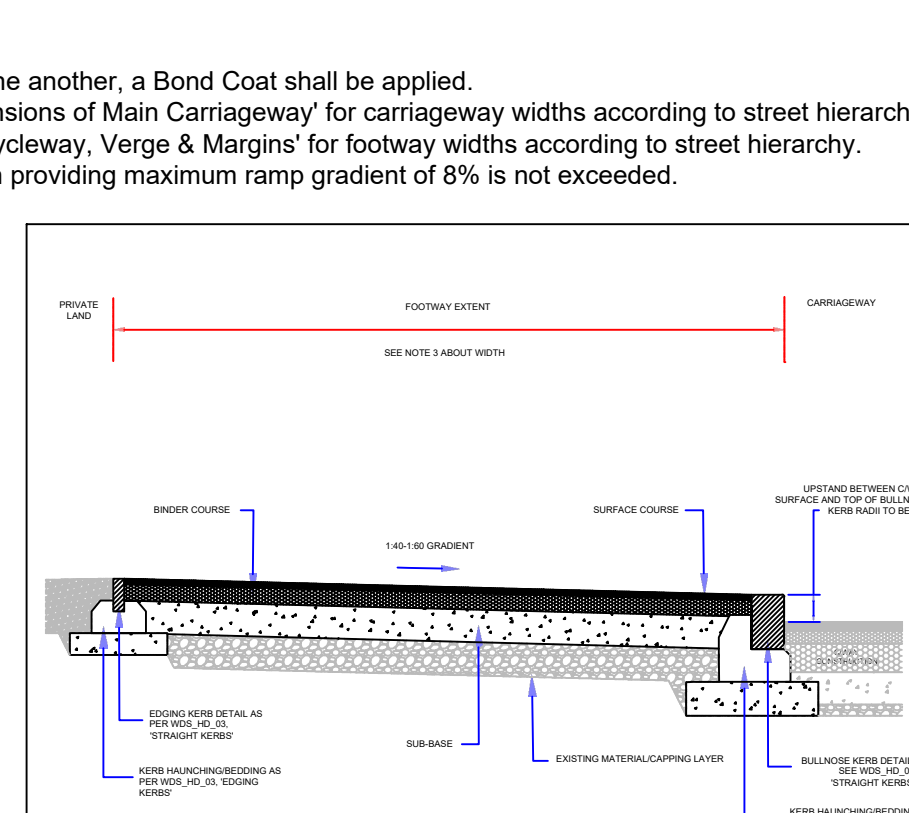
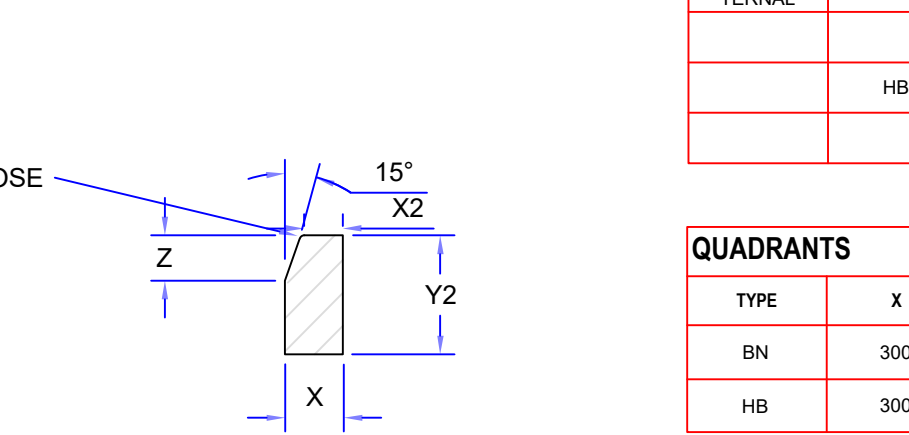
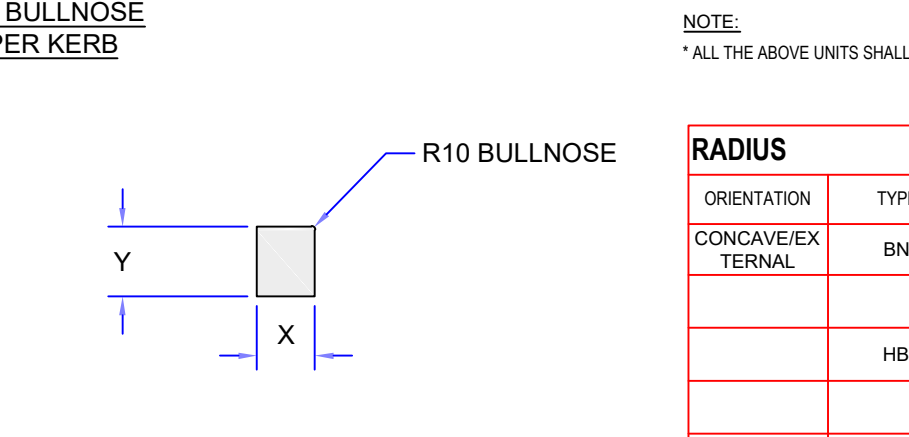
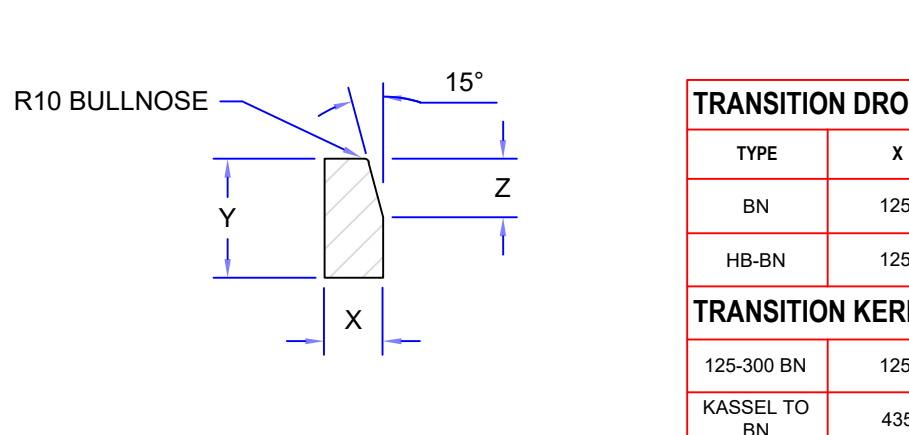
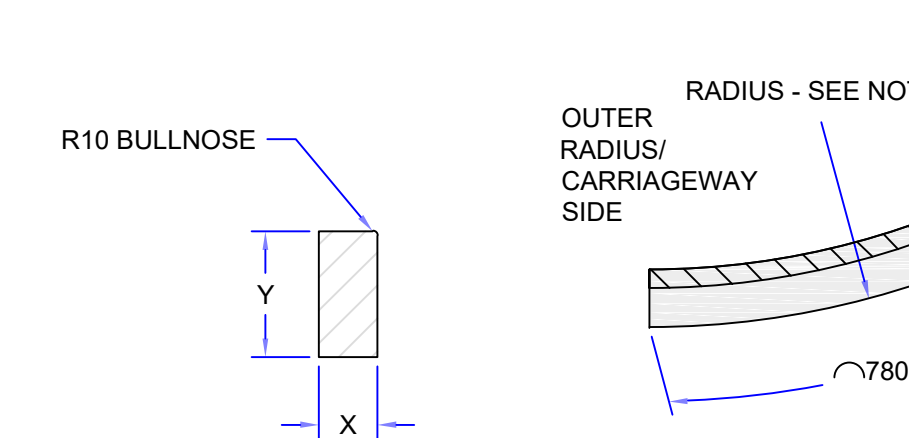
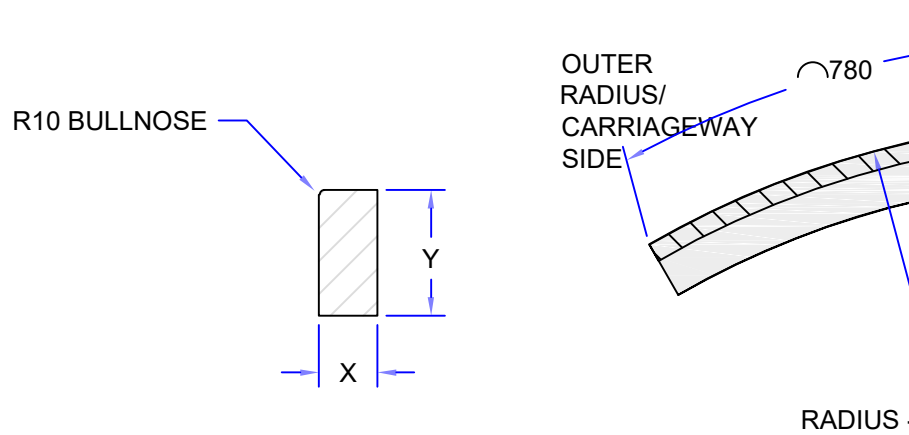
- NOTES:
1. See Highways Design Guide Table A1 'Junction Radii' for requirements pending road priority.



VEHICULAR CROSSOVERS		
COURSE	SPECIFICATION	THICKNESS
SURFACE	CLOSE GRADED AC6, PEN 100/150	25
BINDER	CLOSE GRADED AC20, PEN 40/60	75
SUB-BASE	DT TYPE 1	SEE TABLE NOTE 2

- TABLE NOTES
1. SEE NOTE 1 FOR DETAILS ON BOND COATS BETWEEN LAYERS.
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- NOTES:
1. See Highways Design Guide Table A1 'Junction Radii' for requirements pending road priority.



TARMACADAM (FLEXIBLE) FOOTWAY/CYCLEWAY		
COURSE	SPECIFICATION	THICKNESS
SURFACE	CLOSE GRADED AC6, PEN 100/150	25
BINDER	CLOSE GRADED AC20, PEN 40/60	75
SUB-BASE	DT TYPE 1	SEE TABLE NOTE 2

- TABLE NOTES
1. SEE NOTE 1 FOR DETAILS ON BOND COATS BETWEEN LAYERS.
 2. SUB-BASE REQUIREMENTS TO BE DETERMINED BY CBR TEST.
 3. CARRIAGEWAY CAPPING REQUIREMENTS TO BE DETERMINED BY CBR TEST.
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- NOTES:
1. See Highways Design Guide Table A1 'Junction Radii' for requirements pending road priority.

