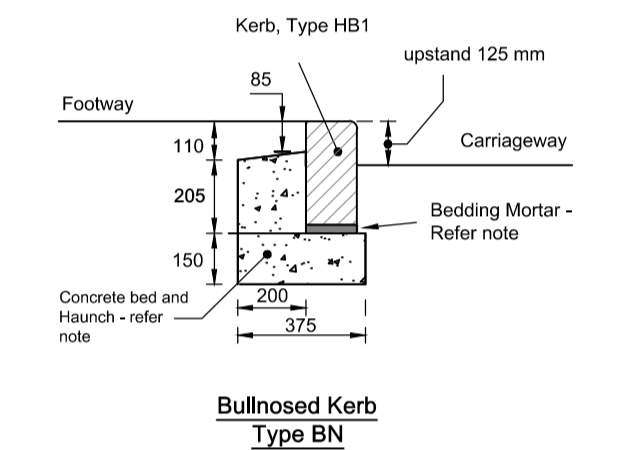
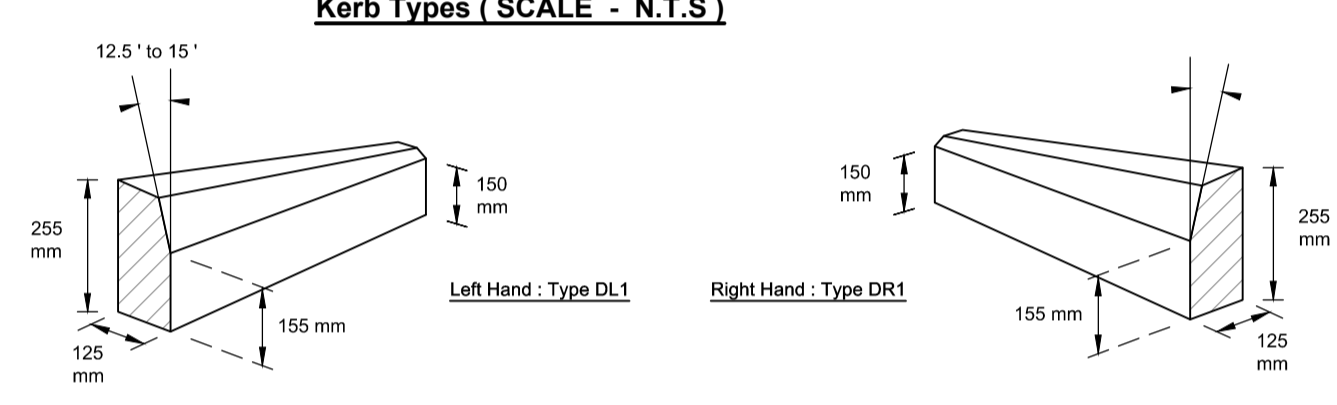
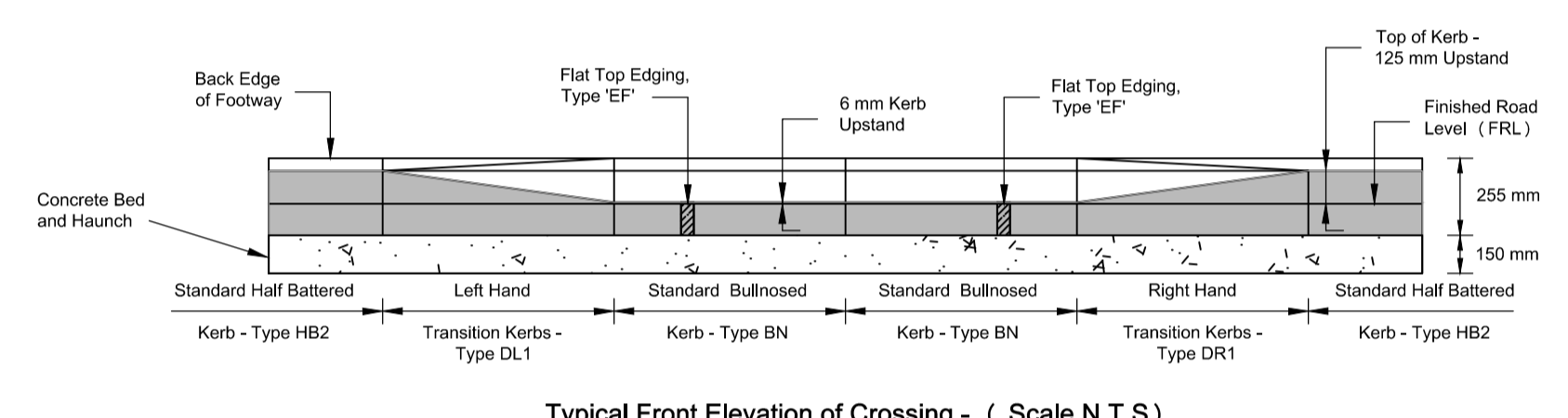
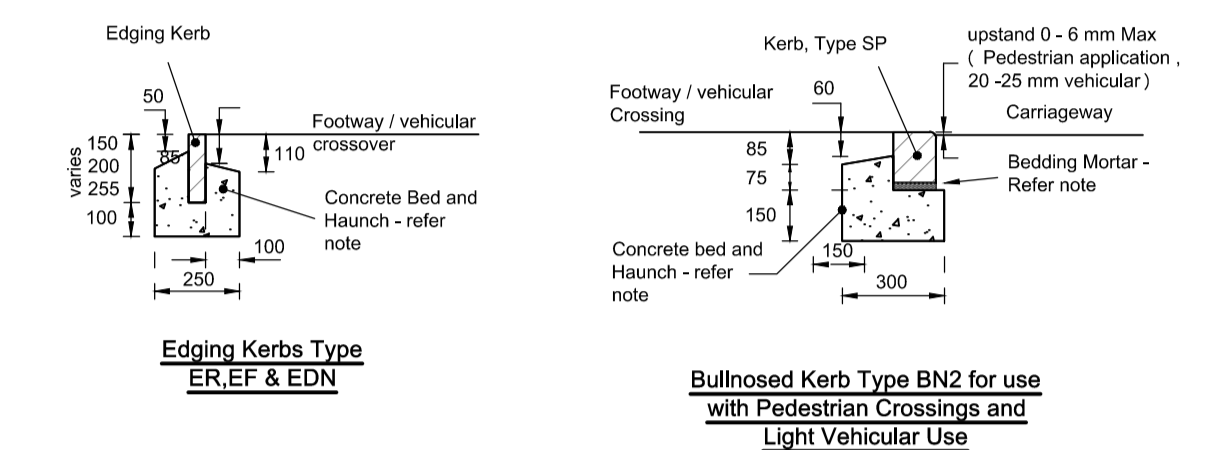
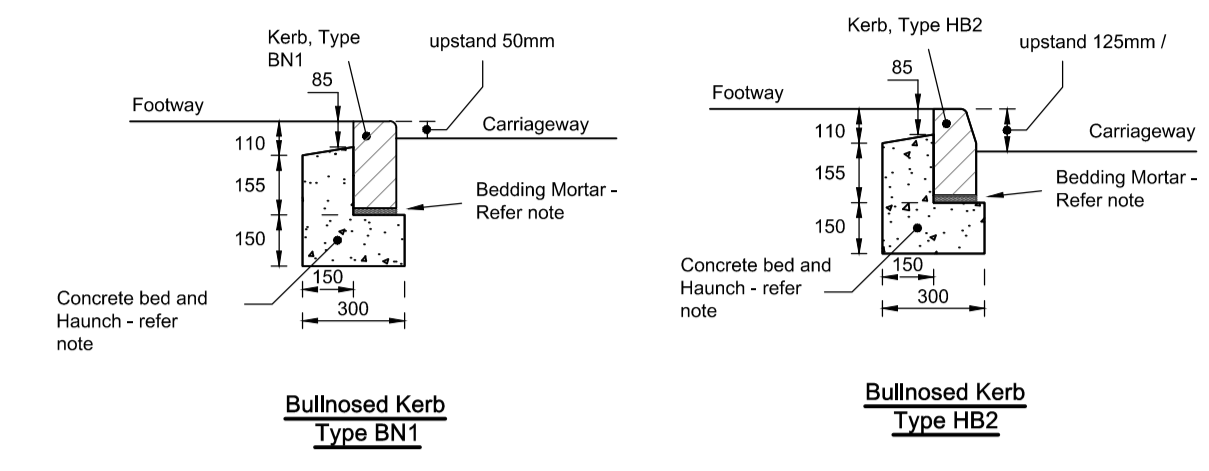
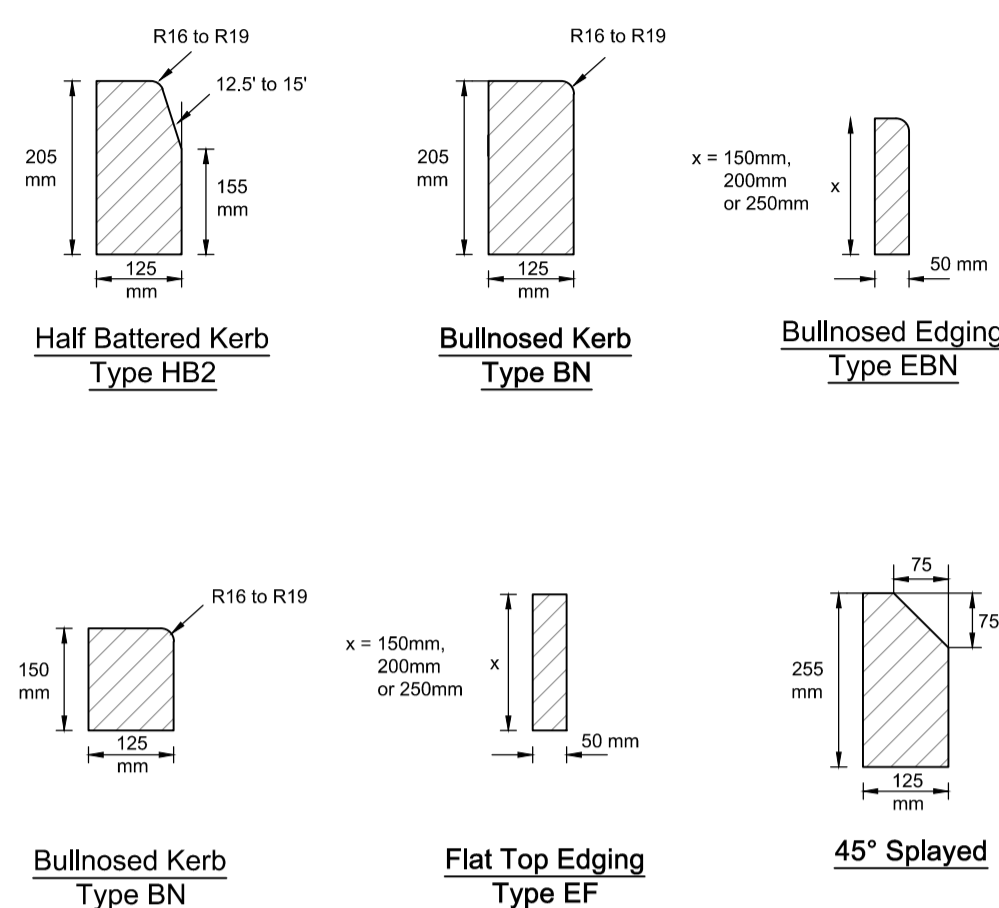
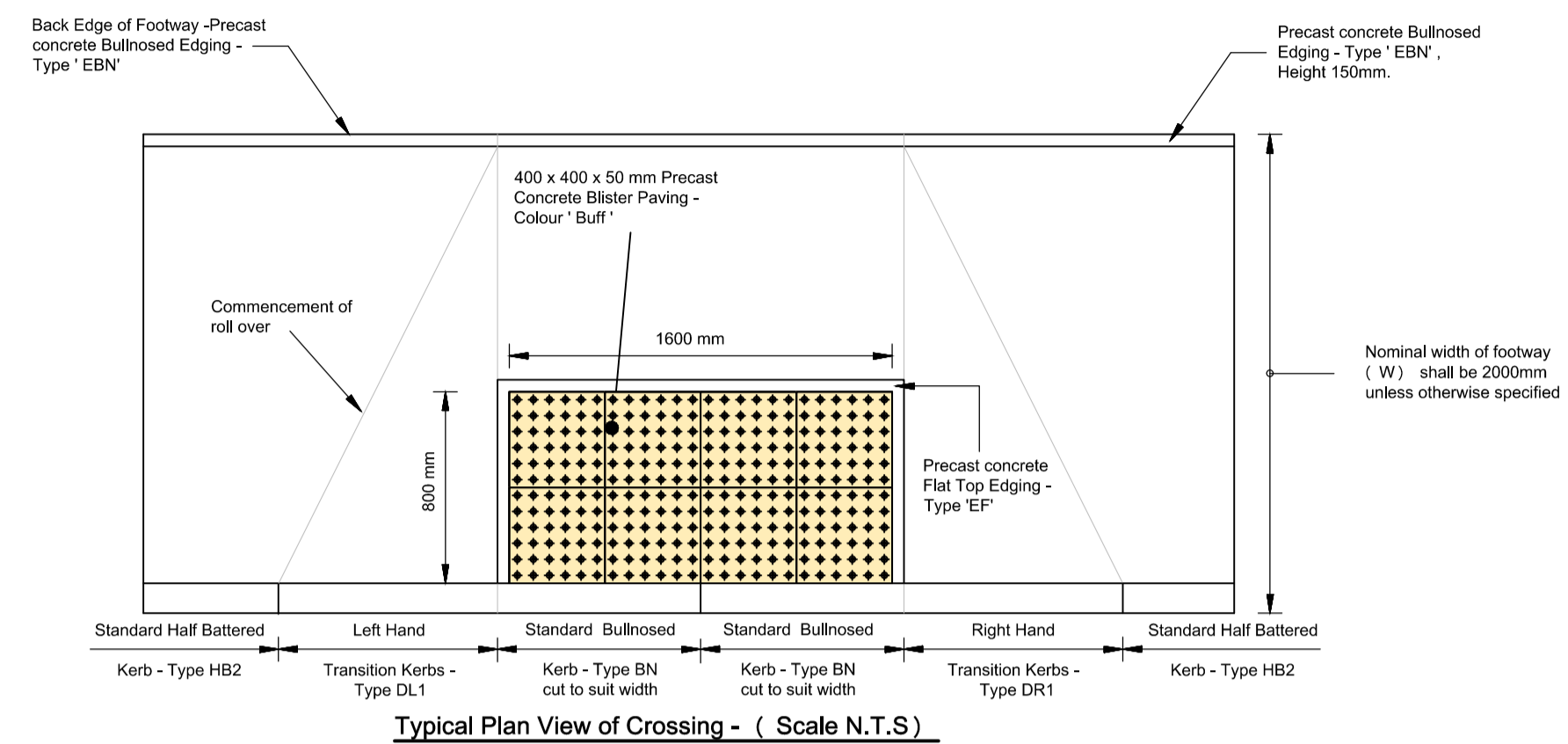
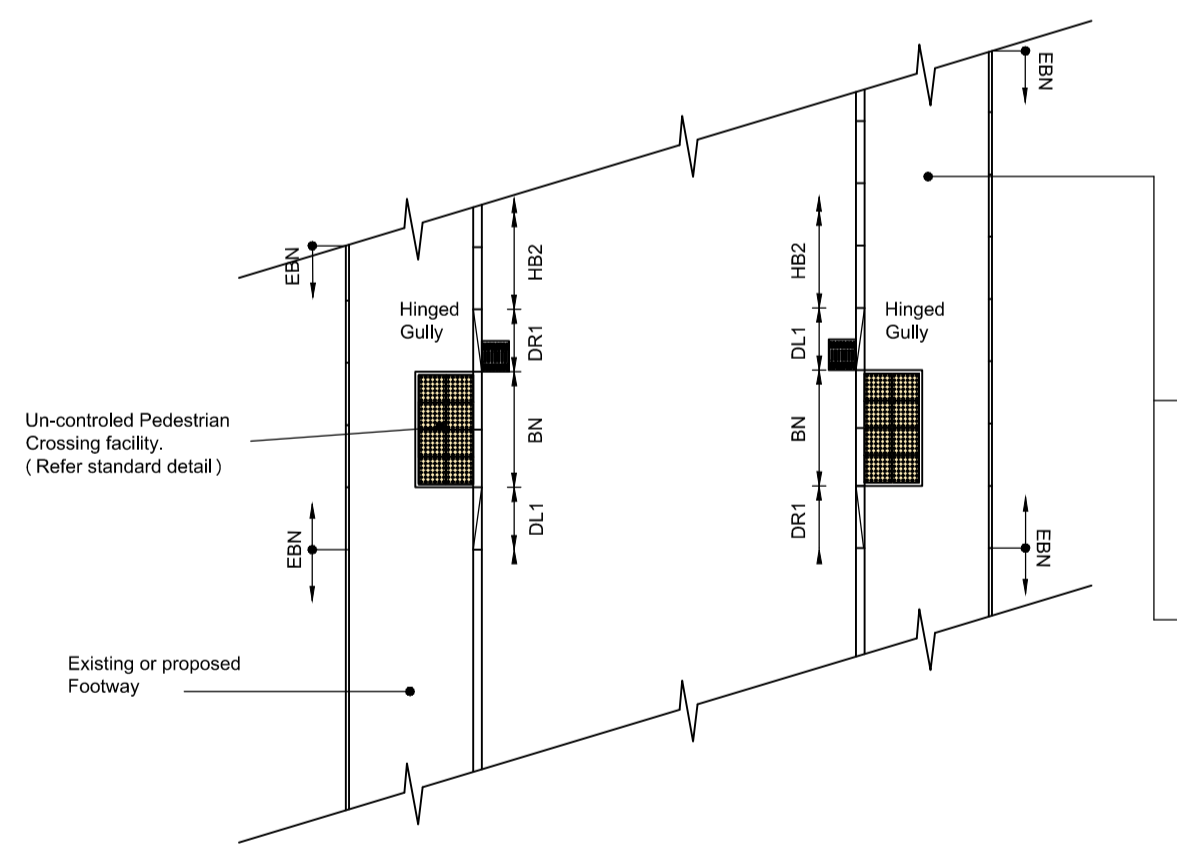


NOTES :-

- All dimensions are to be checked prior to construction or manufacturing. Any discrepancy must be reported to the Engineer or his representative immediately.
- Do not scale this drawing, work to figured dimensions only.
- This drawing should be read in conjunction with all other relevant Engineering, Architectural, landscaping details, drawings and specifications and all relevant Vale of Glamorgan Council Standard Engineering Details.
- Surfacing**
The minimum carriageway thickness shall be 450mm. However greater construction depth may be required (capping layers) depending on individual CBR values. (Refer table within drawing)
- CBR values are to be obtained at road formation levels.
- All Bituminous surfacing works shall be machined laid unless other agreed in writing with the Local Highway Authority.
- No wearing course shall contain Limestone or Slag aggregate.
- The specifications for Type 1 unbound granular material shall conform to BS EN 13285 : 2003 and Clause 802 of the Specification for Highway Works amended November 2004.
- The specifications for Type 1 unbound granular material shall conform to BS EN 13285 : 2003 and Clause 802 of the Specification for Highway Works amended November 2004.
- All bituminous material specifications for Asphalt Concrete shall conform to BS EN 13108 - 1 : 2006 and Clause 909 of the Specification for Highway Works amended November 2008.
- All bituminous material specifications for Stone Mastic Asphalt (SMA) shall conform to BS EN 13108 - 5 : 2006 and Series 900 of the Specification for Highway Works amended August 2008.
- The Testing for bituminous mixtures, material specifications shall conform to BS EN 13108 - 20 : 2008.
- The specifications for Transporting, laying & compacting and type testing protocols for asphalt for roads and other paved areas shall conform to BS EN 4987 : 2007
- Where gradients are steeper than 1 in 12, grit stone aggregate must be used.
- Where it is envisaged that the Binder or Base Course materials within both the carriageway and footways areas are to be trafficked for more than 4 weeks before the application of the Surface Course, then a grit stone aggregate shall be used within the Binder content of 5.7 +/- 0.6% (Slag aggregate will not be permitted)
- In situations where the Binder or Base Course materials are not covered immediately with the Surface or Binder Course respectively the Binder and Base Courses shall be sprayed with a hot sealing tack coat of bituminous spray in accordance with Clause 920 of the Specification for Highway Works amended November 2007 prior to laying of the Surface or Binder courses.
- Kerbing and Edging**
All precast concrete kerbing, channels, edgings and quadrants shall comply with BS EN 1340 : 2003 and their dimensions unless otherwise stated.
- All precast concrete kerbing, channels, edgings and quadrants shall be laid in accordance with BS 7533 Part 6 : 1999 unless otherwise instructed by the Highway Authority's representative.
- All in situ concrete for foundations & haunch shall be grade C6 / 8 or ST1 concrete in accordance with BS EN 206 - 1 & BS 8500 - 2 : 2006.
- The foundation thickness shall be increased as necessary to rest on the carriageway sub-base.
- Concrete edge beams shall have a minimum depth of 150mm & sufficient width to accommodate the unit & the concrete haunch.
- Where precast concrete kerbs are to be laid on existing concrete edge beam, a hardened concrete foundation / haunch or existing carriageway base. Units shall be bedded down in accordance with BS 522 - 6 : 1999 in a layer of 12 - 40 mm thick of 1 : 3 cement and sand mortar (by Volume) and backed with C6 / 8 or ST1 concrete haunch.
- Tactile Paving**
All Precast Concrete Tactile Paving shall comply with DD-CEN / TS 15209 : 2008.
- All controlled and un-controlled pedestrian crossing facilities incorporating tactile paving shall comply with The Department of the Environment, Transport and the Regions & The Scottish Office, DETR, London, 1988 - Guidance on the Use of Tactile Paving Surfaces, The Department for Transport Inclusive Mobility - A Guide to Best Practice on Access to Pedestrian and Transport Infrastructure and BSI British Standard BS 8300:2009 - Design of Buildings & their approaches to meet the needs of disabled People - Code of Practice where applicable.
- All Blister Paving for uncontrolled pedestrian crossings shall be ' Buff ' in Colour.
- All Blister Paving should be at right angles to the direction of the crossing. Where the back edge is not parallel to the kerb line (i.e the crossing itself is not at right angles to the kerb) the tactile surface should not be less than the minimum depth at any point.

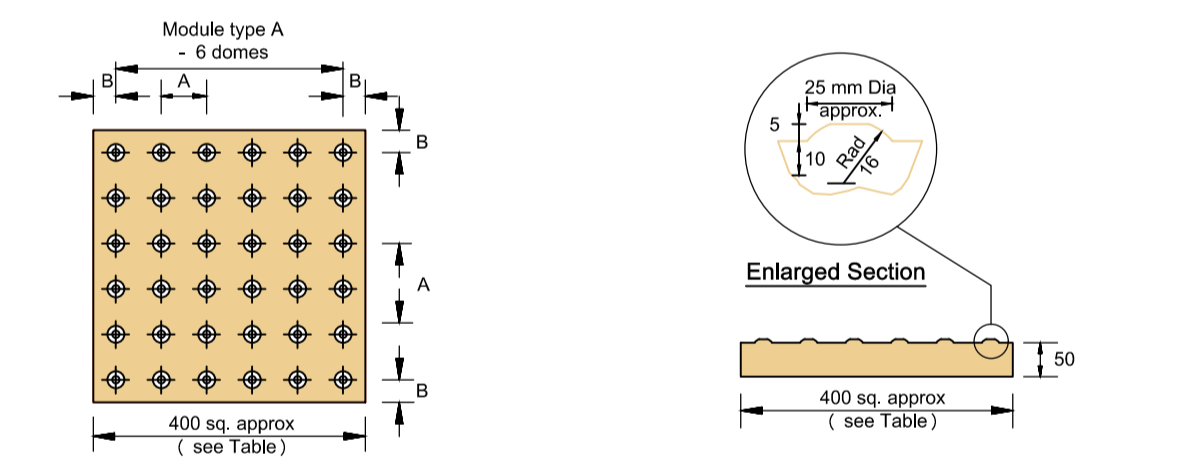


Kerb Bedding Details (SCALE - N.T.S)

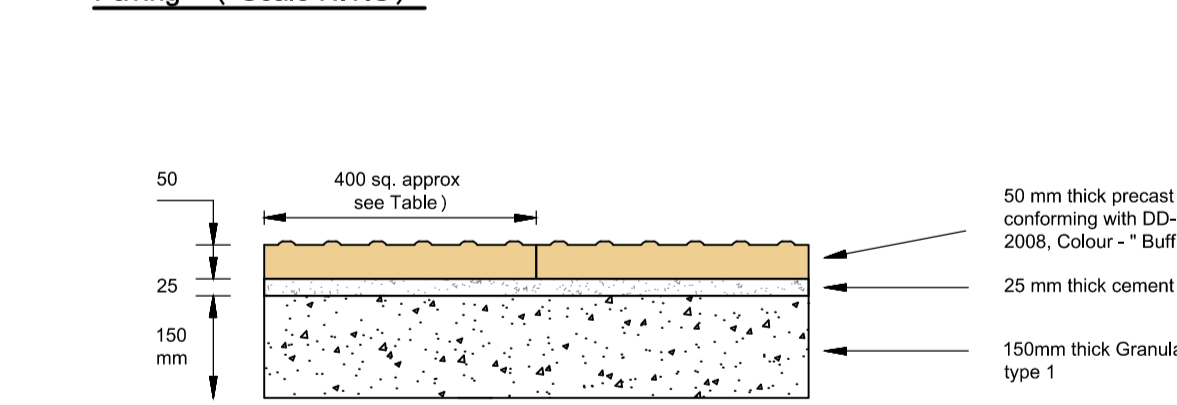


Specifications for new footway
Surface Course - 25mm thickness of 6mm dense asphalt concrete surface course conforming to BS EN 13108-1 and clause 909 of the S.H.W. - amendment November 2008 with a minimum aggregate PSV value of 65 and a maximum AAV of 14. (AC6 dense surf 100/150 - PSV 65, AAV 14) - N.B. Limestone aggregate will not be permitted in any surface course.
Binder Course - 60mm thickness of 20mm dense base and binder course asphalt concrete (recipe mixtures) conforming to BS EN 13108-1 and clause 906 of the S.H.W. - amendment November 2008 with a minimum aggregate PSV value of 65 and a maximum AAV of 14. (AC20 dense bin 160/220 rec - PSV 65, AAV 14)
Sub Base - 150mm thickness of type 1 unbound mixture granular materials conforming to BS EN 13285 : 2003 and clause 803 of the S.H.W. - amendment November 2007 and transported, laid, compacted and trafficked in accordance with clause 802 of the S.H.W. - amendment November 2004.

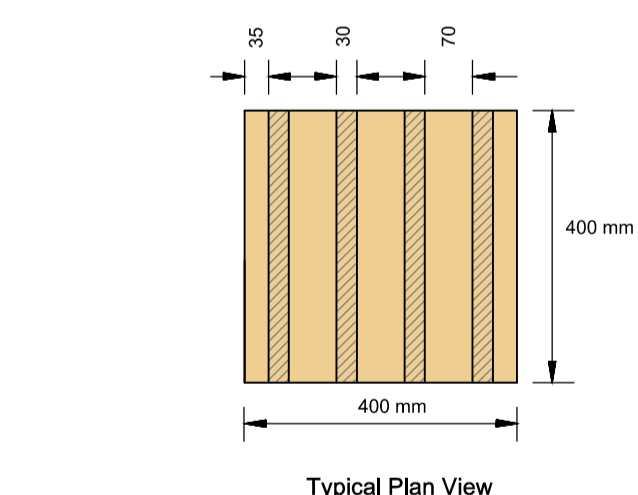
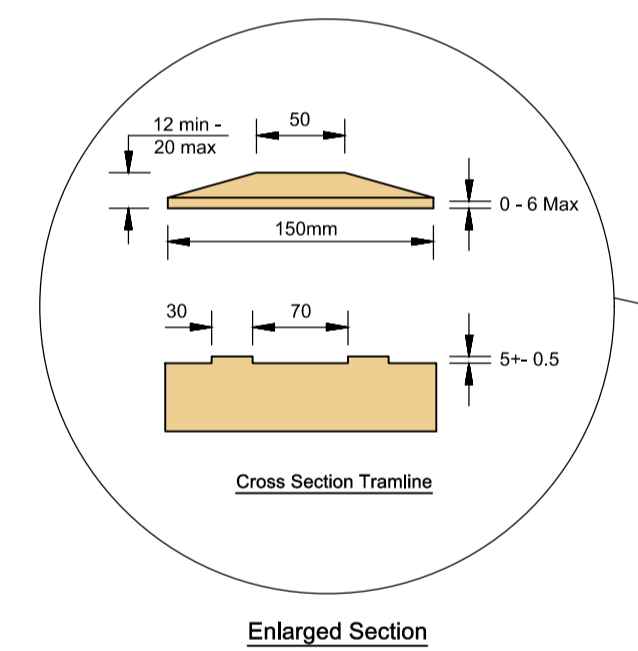
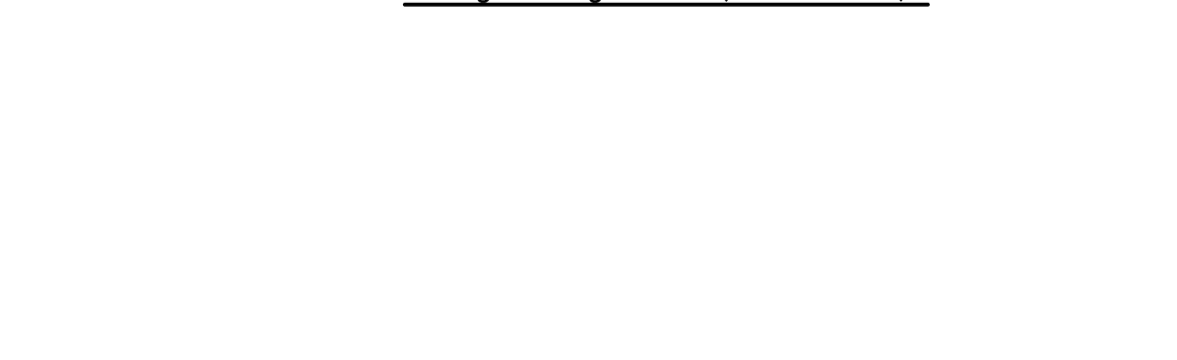
Construction Detail of Uncontrolled Crossing - Scale N.T.S



Typical End View of Tactile Blister Paving - (Scale N.T.S)



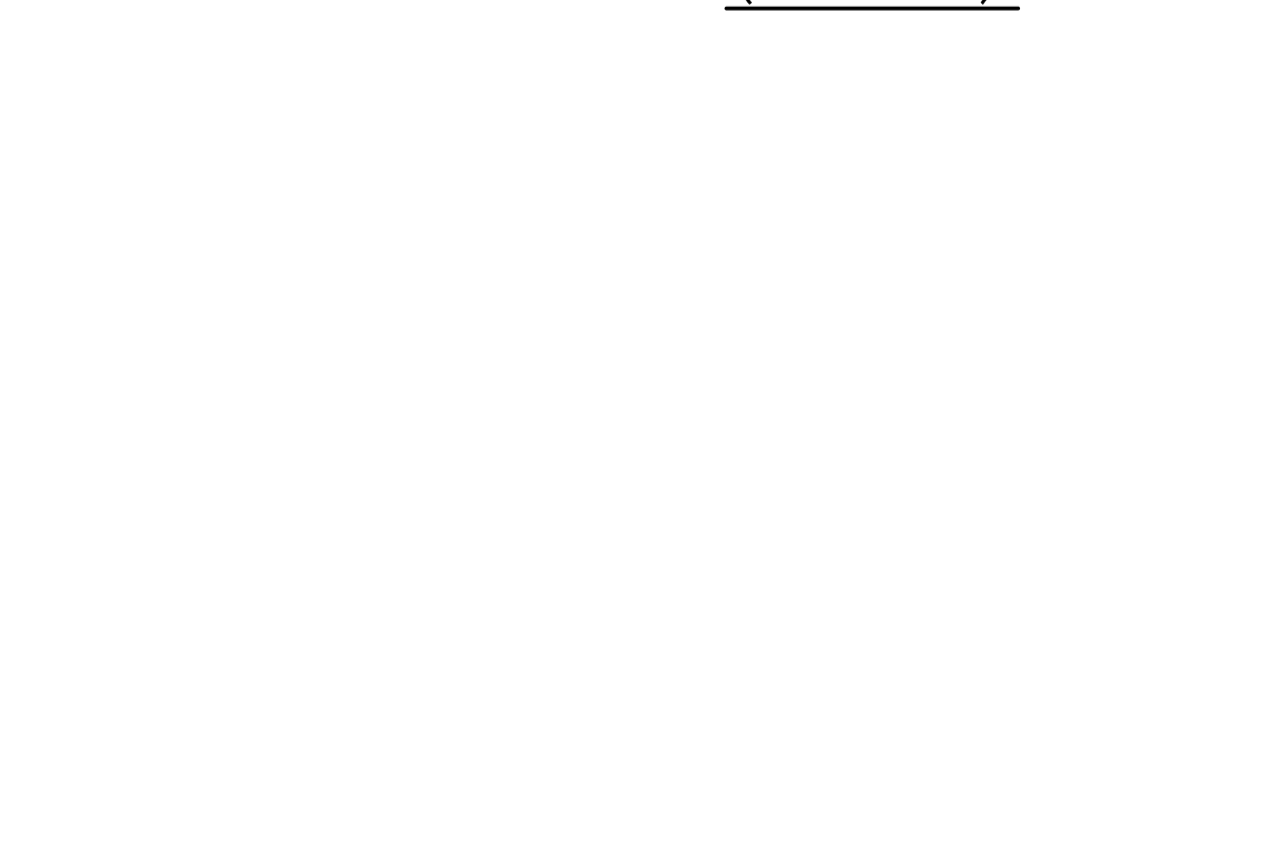
Typical Section Through Tactile Blister Paving Bedding Detail - (Scale N.T.S)



Tactile Paving associated with " Start " & " End " of Combined Cycle / Pedestrian Area



Typical Plan View of Uncontrolled Pedestrian Crossing Facility Away from Junction - (Scale N.T.S)



CONSTRUCTION

PLEASE NOTE THAT ALL ALIGNMENTS, CONSTRUCTION DETAILS AND TRAFFIC CALMING FEATURES ARE SUBJECT TO APPROVAL BY VALE OF GLAMORGAN COUNCIL, AND MAY BE SUBJECT TO CHANGE.

Rev	Date	Description	By
		Dimensions to be verified on site. This drawing should not be scaled. Use figured dimensions only. Any discrepancies should be referred to the Engineer prior to work being put in hand. This drawing is copyright.	
<p>QuadConsult Limited Columbus House, Village Way Greenmeadow Business Park Cardiff CF15 7NE 029 2077 9844 contactus@quadconsult.co.uk www.quadconsult.co.uk</p> <p>QuadConsult ENGINEERS IN PARTNERSHIP Consulting Civil & Structural Engineers</p>			
<p>Client</p> <p>BARRATT HOMES find the one</p>			
<p>Project</p> <p>Land North of B4265, Boverton</p> <p>Task</p> <p>HIGHWAY CONSTRUCTION DETAILS SHEET 2 OF 3</p>			
<p>Drawing Status</p> <p>CONSTRUCTION</p>			
Designed by	Drawn by	Checked by	Date
MP	MP	RWP	Nov'16
Project No		Drawing No	Revision
14009		C-202-2	0

File name: \\SBS\2016\14009\14009_C-202-2.dwg