

General

All materials and workmanship shall be in accordance with the National Assembly for Wales Specification for Highway Works (SHW) and amendments current at the time of design, subject to any qualifications or restrictions detailed in this document.

All materials to be approved by Denbighshire Council Highway Engineer

Road Construction

- Roads shall consist of a foundation and a pavement.
- The foundation shall comprise subgrade (original or stabilised ground), 6F2 capping layer where necessary and sub-base.
- The pavement shall comprise bituminous roadbase and surfacing.
- Minimum total construction (foundation plus pavement) where the subgrade is frost-susceptible shall be 450 mm for industrial estate roads and 400 mm for residential roads.

California Bearing Ratio and Frost Susceptibility Testing

- The thickness of the foundation shall depend upon the strength of the subgrade, as measured by the California bearing ratio test, subject to certain limitations dependent upon the frost susceptibility of the subgrade.
- Tests shall be carried out in accordance with the requirements of BS 1377: Part 9, or in the laboratory BS 1377: Part 4.
- In-situ tests and samples for laboratory determination shall be taken below any desiccated layers and at least 0.6m below the ground level prevailing at the time of the testing/sampling.
- Compaction in the laboratory shall be using the 2.5kg rammer, in three layers with 62 blows per layer for cohesive soils or using the vibratory hammer method for granular soils.
- Frost susceptibility testing of either sub-base or granular subgrades should be to BS 812: Part 124: 1989 as amended by Clause 705 SHW.
- Granular subgrades can be taken as non frost susceptible if the percentage of material passing the 63 micron BS test sieve is less than 10 per cent, when tested in accordance with BS 1377: Part 2.
- In the case of cohesive subgrades the thickness of construction would normally be such that frost susceptibility would not be an issue.

Density and Air Voids

- All areas of dense bitumen macadam and binder course shall have compaction tested by the percentage refusal density test (SHW Clause 1.19 and 92.7.1). The final area, however, is not necessary if the percentage of air voids value, with cores cut and tested to the requirements of BS 598: Part 100: 1987 and BS 598: Part 104:1989. Air voids values to be achieved shall be as follows:
Close graded bitumen macadam surface course 6 ± 4%
30% and 35% stone content HRA wearing course 4 ± 2%

Testing

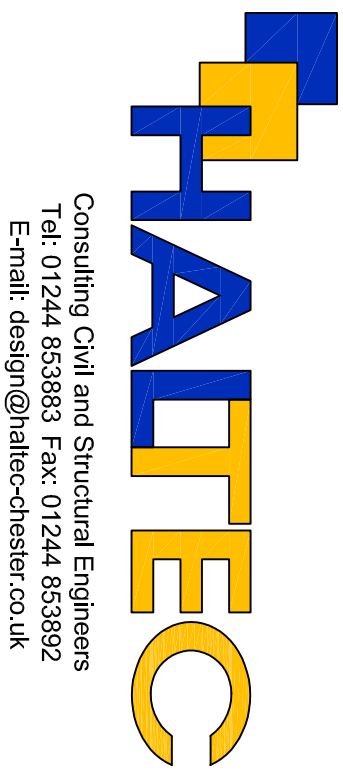
- The Contractor shall provide appropriate sampling and testing certificates of approval from a NAMAS accredited laboratory of all material laid as and when required by a representative of the Head of Transport and Infrastructure
- Sand patch testing to be carried out as detailed in the National Assembly for Wales Specification for Highway Works (SHW)

P2	22.11.18	DRB	JDH	Tender Drawing Issue
rev	date	dwn	chk	details

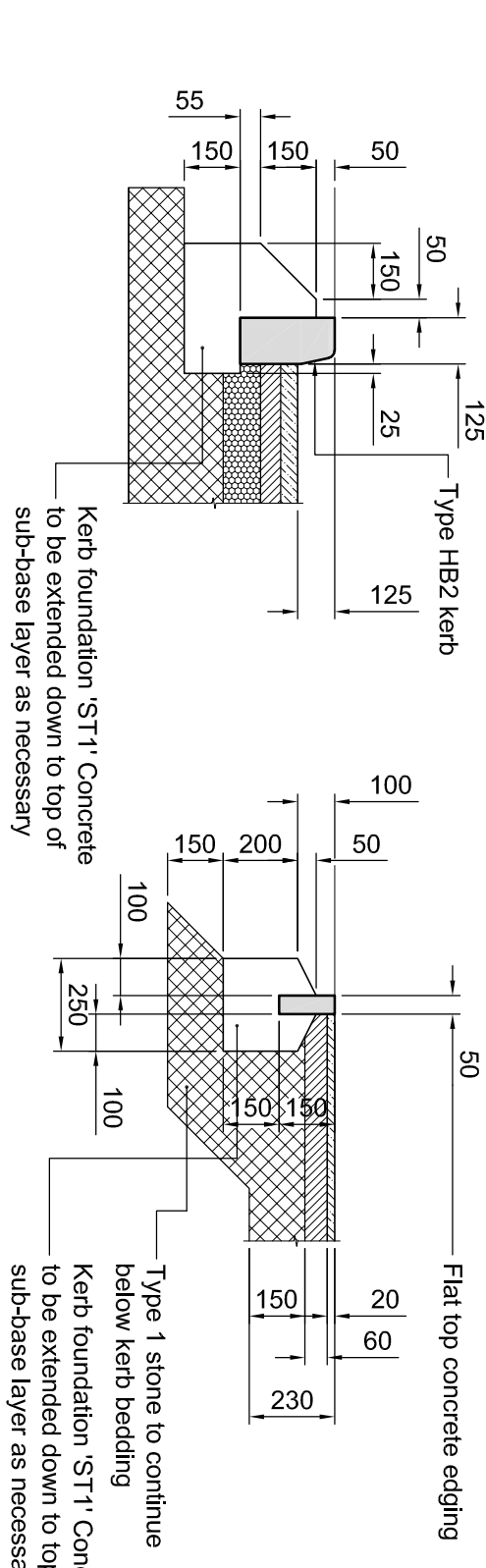
Wynne Construction

Yale Campus Redevelopment

External Works - Standard Details

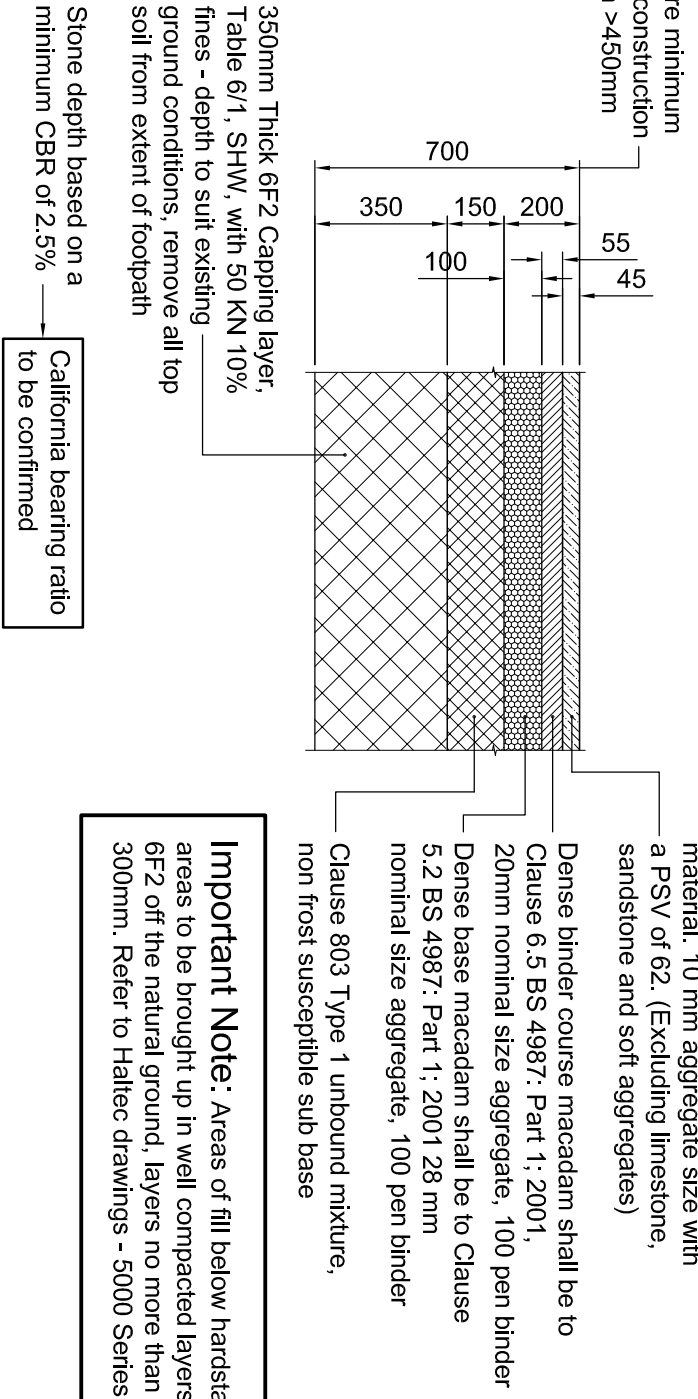


drawn	scale	date	checked
DRB	As Shown @ A1	Aug '18	JDH
purpose of issue			
Tender			D2
dwg no.			revision
YCR-HAL-XX-XX-DR-C-3000			P2



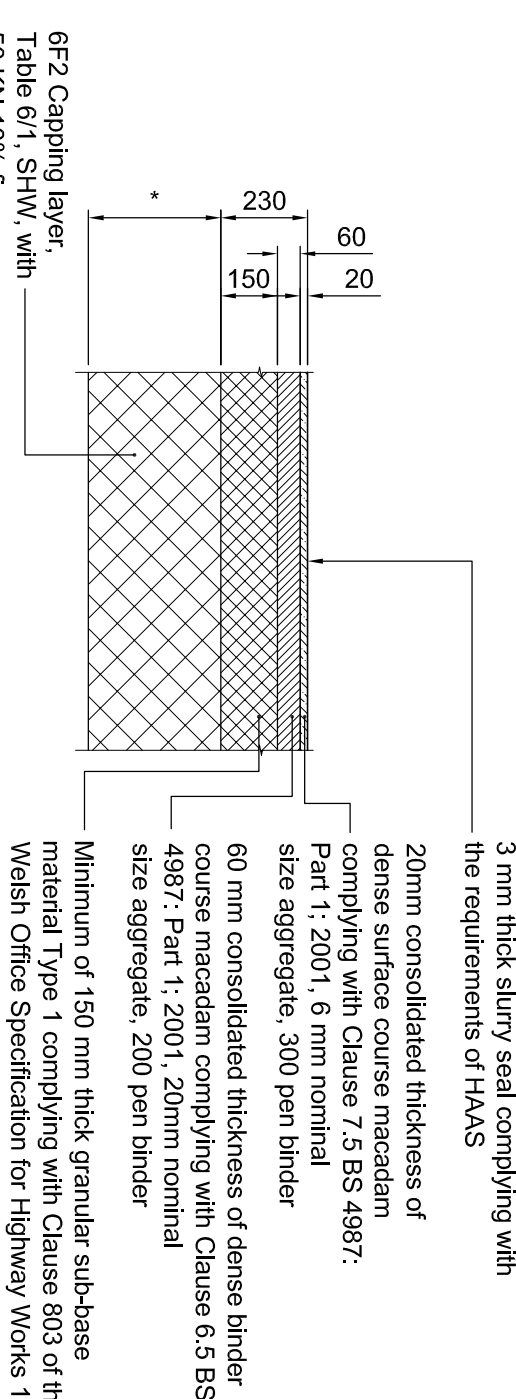
Kerb Detail
(Scale 1:20)

Footpath Edge Detail
(Scale 1:20)

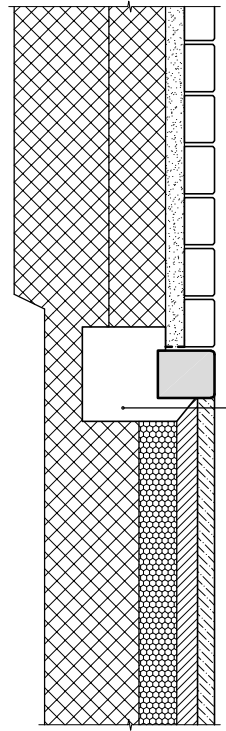


Car Park - Tarmac Areas
(Scale 1:20)

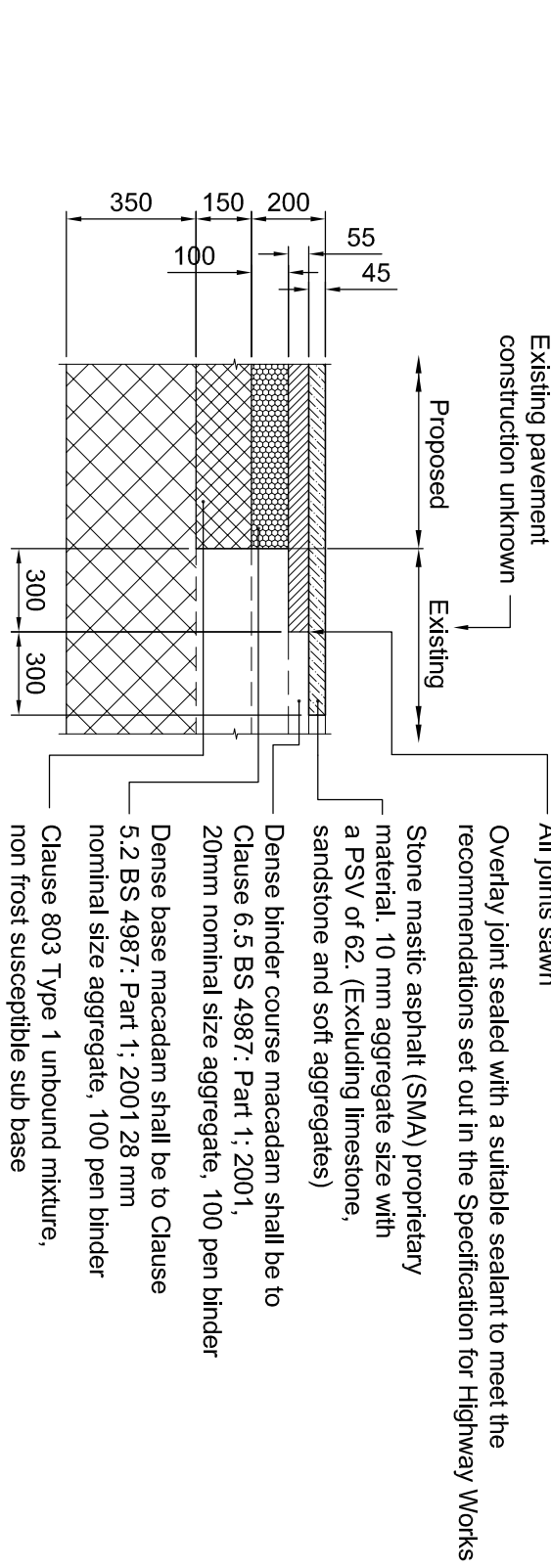
Important Note: Areas of fill below handstanding areas to be brought up in well compacted layers of 6F2 off the natural ground, layers no more than 300mm. Refer to Halcic drawings - 5000 Series



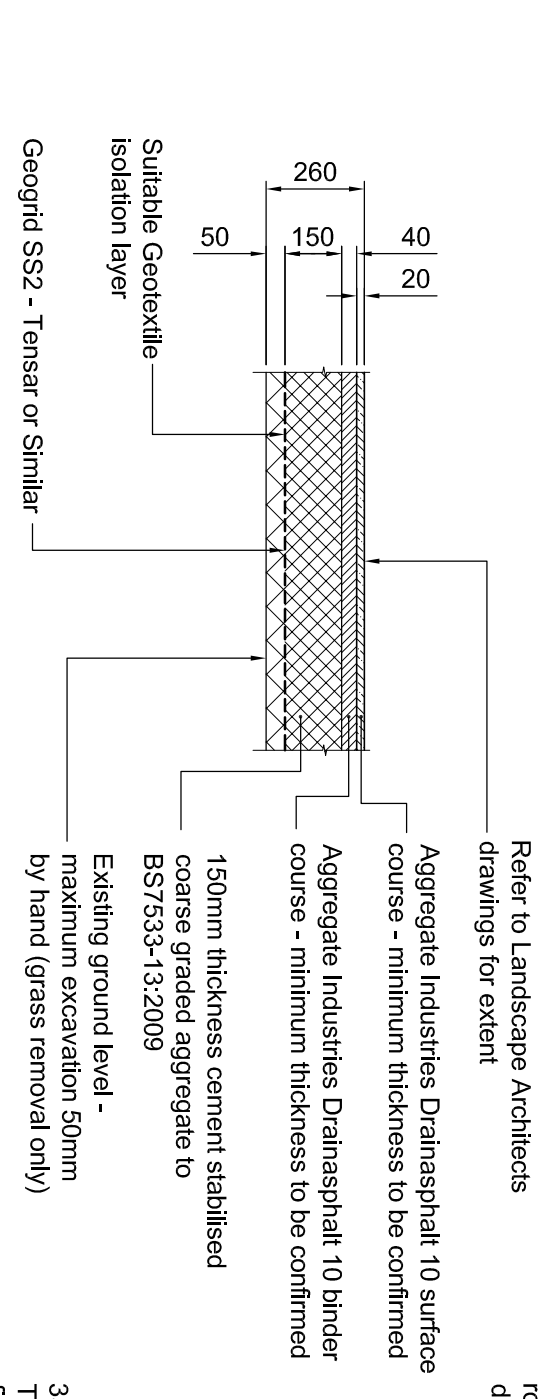
Footpath - Block/Flag Paving Construction
(Scale 1:20)



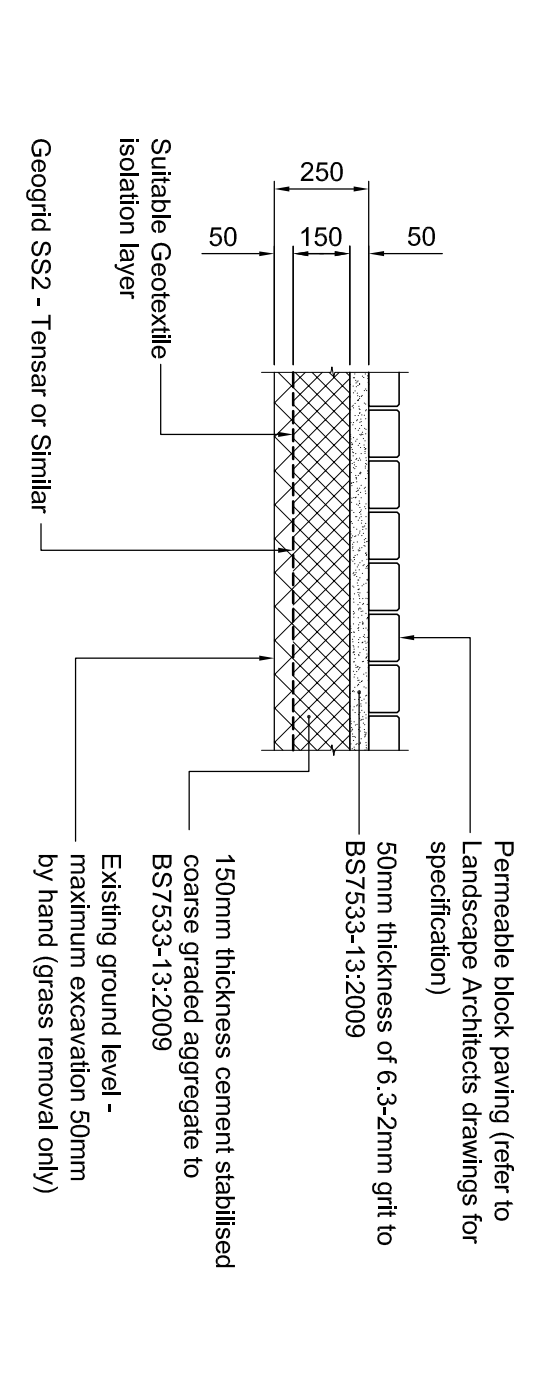
Car Park Bays - Block Paving and Tarmac Intersection
Refer to adjacent details for construction build ups
(Scale 1:20)



Car Park - Intersection of Proposed and Existing
(Scale 1:20)



Footpath - Permeable Tarmac Construction
Root Protection Area of Existing Trees - Existing Soil Landscaped Areas
(Scale 1:20)



Footpath - Block Paving Construction
Root Protection Area of Existing Trees - Existing Soil Landscaped Areas
(Scale 1:20)

Refer to Architects general arrangement drawings for locations of each road, car park and pavement build up