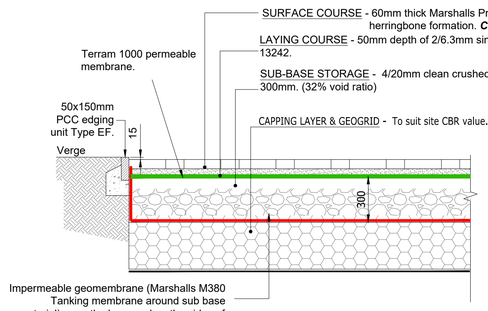


Typical Section Through Light Duty Permeable Block Paving Showing

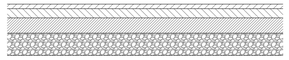
Typical Particle Size Distribution Limits for Laying Course Material

Sieve Size	% Passing
14mm	100
10mm	98-100
6.3mm	80-99
2.0mm	0-20
1.0mm	0-5

Typical Particle Size Distribution Limits for Type 4/12 Coarse Graded Materials

Sieve Size	% Passing
40mm	100
31.5mm	98-100
20mm	90-99
10mm	25-70
4mm	0-15
2mm	0-5

Specification for sub-base and laying course:- the crushed stone must possess well defined edges and have a minimum 10% fines value of 150kN when tested in accordance with BS812 Part iii.



CONSTRUCTION SPECIFICATION FOR PRIVATE ACCESS ROAD

(NHBC 2022 Table 2a: Private road having frequent use by commercial vehicles)

SURFACE COURSE
30mm thickness of 10mm Stone Mastic Asphalt SMA to BS EN 13108-5 and PD 6691 utilising aggregate to BS EN 13043 and PD 6682-2.

BINDER COURSE
60mm thickness Asphalt concrete AC20 dense binder 100/150 des to BS EN 13108-1 and PD 6682-2.

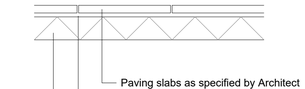
BASE
100mm thickness Asphalt Concrete AC32 dense base 100/150 des to BS EN 13108-1 and PD 6682-2

SUB-BASE
Type 1 granular material to Clause 803 table 8/2 MCHW Volume 1 Series 800. Thickness to suit CBR value (refer to table 1).

GEOTEXTILE
Optional

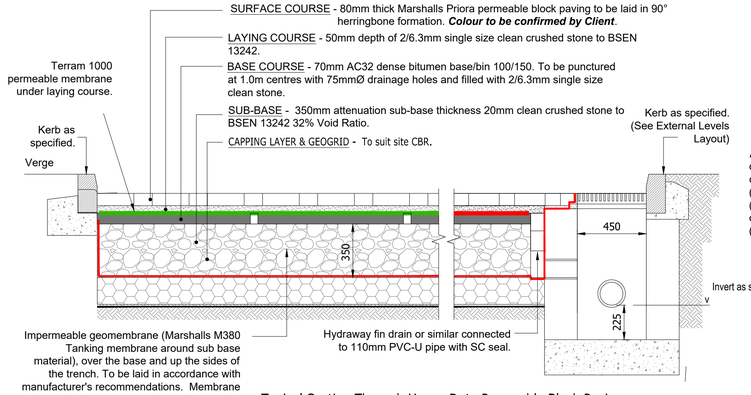
Table 1: Minimum sub-base thickness for paved areas (NHBC Table 3)

CBR Value	Minimum thickness (mm) of sub-base Consolidated in accordance with MCHW volume 1 clause 801, table 8/4
Less than 2%	Subgrade requires improvement
2-3%	325
3-5%	250
5-7%	150
7-20%	100

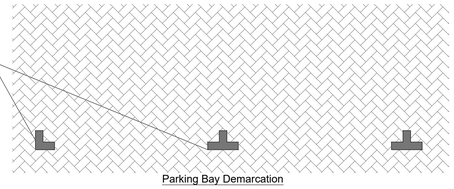


Paths and Patio Areas

In private pedestrian areas only.

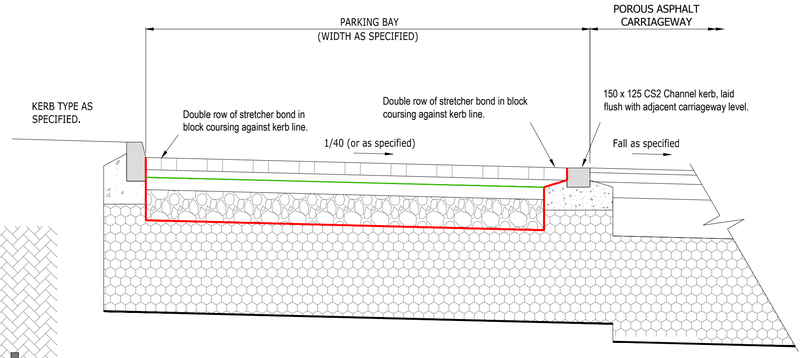


Typical Section Through Heavy Duty Permeable Block Paving Showing Road Sump Gully



All parking spaces within communal areas to be delineated by a 'I' (intermediate bays) or 'I' (end bays) using contrasting colour blocks (as indicated above).

Parking Bay Demarcation

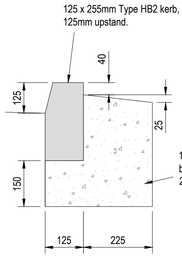


Typical Cross Section Through Permeable Block Paved Parking Bay Adjacent Tarmac Construction

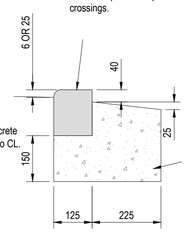
(1:20)

Marshalls Table & Capping Layer Thickness

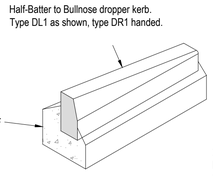
Subgrade CBR Value	Capping Layer Thickness Type C Systems (mm)			
	Open Graded Crushed Rock or MOT Type 1		Capping Material	
	Without M15 Grid	With M15 Grid	Without M15 Grid	With M15 Grid
5%	--	--	--	--
4%	100	--	150	--
3%	125	100	225	150
2%	175	125	350	225
1%	300	175	600	350



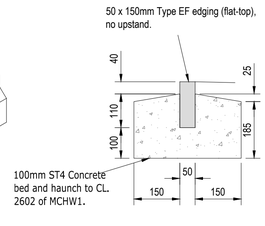
Kerb Detal-Type HB2



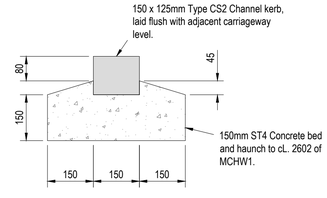
Kerb Detail-Type BN (Dropped)



Dropper Kerb
Type DL1 (& DR1 handed)
(N.T.S.)



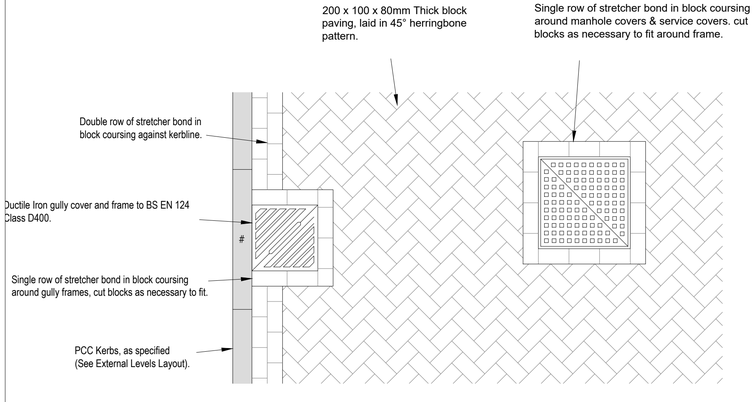
Edging Type EF



Channel Kerb Detail-Type CS2

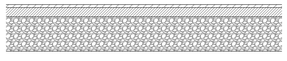
KERB & EDGING DETAILS

(1:10)



TYPICAL ARRANGEMENT OF BLOCK PAVING AROUND GULLIES & MANHOLES (SERVICE COVERS)

(1:20)

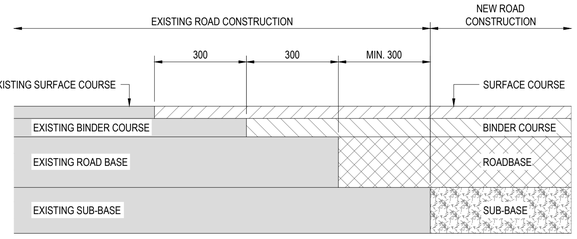


CONSTRUCTION SPECIFICATION FOR BITUMINOUS ACCESS PATHS

SURFACE COURSE
20mm of AC 6 Dense Surf 100/150 Rec to BS EN 13108-1 Asphalt Concrete

BINDER COURSE
60mm of AC 20 Dense Bin 100/150 Rec to BS EN 13108-1 Asphalt Concrete

SUB-BASE
225mm Min. of Type 1 Granular Material to clause 803 MCHW1



EXISTING ROAD CONSTRUCTION ABOVE SUB-BASE TO BE CUT OUT IN 300mm STEPS AS SHOWN AND REPLACED WITH NEW FLEXIBLE MATERIAL WITH STAGGERED LAPS BEYOND TIE-IN.

TYPICAL TIE-IN DETAIL

(1:10)

REFER TO NOTE 15 REGARDING BOND COATS BETWEEN BITUMINOUS MATERIALS.

The Contractor is to check and verify in conjunction with the Architects details all setting out points, building and site dimensions, levels and sewer invert levels at connection points and ensure that they are fully conversant with the contents and of requirements the site investigation report before work starts.
The Contractor is to comply in all respects with current building legislation, British Standard Specifications, Building Regulations etc.,whether or not specifically stated on this drawing.

This drawing is not intended to show details of ground conditions or ground contaminants. Each area of ground relied upon to support any structure depicted (including drainage) must be investigated by the Contractor any areas of formation for said structures which do not accord with the anticipated conditions as described in the site investigation report are to be immediately notified to the Engineer, where applicable. Any suspect fluid ground or ground contaminants on or within the ground should be further investigated by a suitable expert. Any earthworks shown indicate typical slopes for guidance only and should be investigated further by a suitable geotechnical expert.

Where existing trees are shown to be retained they should be subject to a full Arboricultural inspection for safety. All trees are to be planted so as to ensure they are a minimum of 5 metres from buildings and 3 metres from drainage and services, where applicable. A foundation is to be provided to accommodate the proposed tree planting, where applicable.

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NOTES:

1. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH THE RELEVANT SPECIFICATION AND ALL OTHER RELATED DRAWINGS ISSUED BY THE ENGINEER.
2. DO NOT SCALE FROM THIS DRAWING. WORK FROM FIGURED DIMENSIONS ONLY.
3. ALL DIMENSIONS SHOWN ON THIS DRAWING ARE IN MILLIMETRES UNLESS OTHERWISE STATED.
4. ALL DIMENSIONS, LEVELS AND SURVEY GRID CO-ORDINATES ARE TO BE CHECKED ON SITE AND THE ENGINEER NOTIFIED IMMEDIATELY OF ANY DISCREPANCIES PRIOR TO THE COMMENCEMENT OF THE WORKS.
5. NO DEVIATION FROM THE DETAILS SHOWN ON THIS DRAWING IS PERMITTED WITHOUT PRIOR PERMISSION FROM THE ENGINEER.
6. ALL MATERIALS AND WORKMANSHIP SHALL COMPLY FULLY WITH THE MANUAL OF CONTRACT DOCUMENTS FOR HIGHWAY WORKS, VOLUME ONE, (MCHW1) SPECIFICATION FOR HIGHWAY WORKS AND KENT COUNTY COUNCIL.
7. THE CONTRACTOR SHALL UNDERTAKE SUCH MATERIALS TESTING AS INDICATED IN THE SPECIFICATIONS AND SHALL INCLUDE THE COST OF TESTING IN THE TENDER.
8. WHERE NECESSARY, ALL EXCAVATED MATERIAL SHALL BE DISPOSED OF AT AN APPROVED TIP OFF-SITE.

KERB NOTES:

1. ALL KERBS TO BE IN ACCORDANCE WITH BS7263. PART 1: 2001.
2. ALL INSITU CONCRETE TO FOUNDATION AND HAUNCH TO BE CLASS ST1 TO CL. 2602 OF SHW.
3. KERB FOUNDATION TO BE LAID ON ROLLED SUB-BASE OF MINIMUM THICKNESS 150mm.
4. THE KERB BED AND BACKING SHALL NORMALLY BE LAID IN ONE OPERATION.
5. WHERE THE BED IS LAID IN ADVANCE OF THE KERBS A 200x20mm DIA. MILD STEEL DOWEL BARS WILL BE REQUIRED IN BACKING AT 600mm CENTRES AND KERBS WILL BE BEDDED ON 10mm THICK MORTAR TO DESIGNATION (i) OF CL. 2404 OF SHW.
6. KERBS SHALL BE LAID WITH DRY JOINTS AND CLOSELY BUTTED LEAVING A 2-3mm GAP AT EACH JOINT FOR EXPANSION.
7. TRANSITION KERBS SHALL BE USED AT ALL CHANGES IN KERB FACE.
8. FOR KERB AND CHANNEL RADII OF 12m OR LESS, THE APPROPRIATE RADIUS SHALL BE USED.
9. FOR RADII OF BETWEEN 12m AND 18m STRAIGHT KERBS 600mm LONG SHALL BE USED.
10. CUTTING KERBS AND CHANNELS SHALL BE OF AN APPROVED MECHANICAL MEANS.
11. THE LENGTH OF ANY KERB OR CHANNEL SHALL NOT BE LESS THAN 300mm.

CONSTRUCTION NOTES:

1. ALL SOFT SPOTS AND VOIDS SHALL BE REMOVED BEFORE CONSTRUCTION AND REPLACED WITH SUITABLE FILL MATERIAL.
2. ROAD FORMATION TO BE IN ACCORDANCE WITH CLAUSE 616 AND COMPACTED IN ACCORDANCE WITH TABLE THE REQUIREMENTS OF 6/4 OF THE SPECIFCATION FOR HIGHWAY WORKS - SERIES 600 EARTHWORKS.
3. THE CONTRACTOR MUST VERIFY CBR VALUES ALONG EACH ACCESS ROAD AT FORMATION LEVEL AT APPROX 30m INTERVALS. THE RESULTS OF WHICH MUST BE SENT TO THE ENGINEER & HIGHWAYS INSPECTOR FOR CONFIRMATION OF THE CARRIAGEWAY CONSTRUCTION SHOWN ON THIS DRAWING, PRIOR TO COMMENCING THE WORKS.
4. A RESIDUAL TRANSLOCATED TOTAL HERBICIDE WITH SOME CONTACT EFFECT, BUT NON-POISONOUS TO HUMAN BEINGS, ANIMALS AND INSECTS SHALL BE SPRAY APPLIED TO ALL FORMATIONS. THE PROPOSED HERBICIDE TO BE USED BY THE CONTRACTOR MUST FIRST OBTAIN ITS APPROVAL BY THE HIGHWAY AUTHORITY.
5. ALL CONCRETE AND CEMENT MORTAR MUST BE SULPHATE RESISTING TO BS4021.
6. ALL CARRIAGEWAY MATERIALS SHALL BE SUPPLIED AND LAID IN ACCORDANCE WITH BS EN 13108
7. ALL MATERIALS IN CARRIAGEWAY & FOOTWAY TO BE LAID BY MACHINE.
8. NO SURFACE WORKS ARE PERMITTED WITHIN THE ADOPTABLE HIGHWAY.
11. THE AVERAGE TEXTURE DEPTH FOR BITUMINOUS SURFACING SHALL BE EQUAL TO OR MORE THAN 1mm AND NOT MORE THAN 1.2mm.
12. FOR ALL BITUMINOUS MATERIALS, TRANSPORTATION, LAYING, COMPACTION AND TYPE TESTING PROTOCOLS SHALL CONFORM TO BS 594987: 2010.
13. WHERE AGREED IN WRITING WITH THE HIGHWAY AUTHORITY, RECLAIMED ASPHALT MAY BE USED IN ACCORDANCE WITH BS EN 13108 AND CLAUSES 902 & 948 OF MCHW1. FOR ADDITIONAL GUIDANCE REFER TO PD 6691: 2007.
14. WHERE THE SURFACE FINISH VARIES WITHIN THE WORKS, E.G. ASPHALT, CONCRETE, BLOCK PAVERS ETC THE SPECIFICATION OF MATERIALS USED SHALL REMAIN CONSISTANT THROUGHOUT.
15. BOND COATS SHALL BE APPLIED BETWEEN BOUND LAYERS OF BITUMINOUS MATERIALS BY METERED MECHANICAL SPRAYING EQUIPMENT, SPRAY TANKER OR SPRAYING DEVICE INTEGRAL WITH THE PAVING MACHINE. BOND COATS SHALL HAVE BBA CERTIFICATION AND COMPLY WITH CLAUSE 920 OF MCHW1.

CDM NOTES:

1. THE ATTENTION OF THE CLIENT AND THE PRINCIPAL CONTRACTOR IS DRAWN TO THE FOLLOWING POTENTIAL RISKS IN CONJUNCTION WITH THE PROPOSED ON-SITE AND OFF-SITE WORKS AS DESIGNED FOR THIS PROJECT.
2. WORKS IN THE VICINITY OF LIVE SERVICES INCLUDING GAS, ELECTRICITY AND BT MAY BE NECESSARY AND THE ADVICE OF ALL STATUTORY SERVICE COMPANIES MUST BE SOUGHT BEFORE ANY WORKS COMMENCE.
3. WORKS WITHIN AND ABUTTING THE EXISTING HIGHWAY WILL ENTAIL TRAFFIC HAZARDS AND ALL APPROPRIATE SAFETY MEASURES INCLUDING BARRIERS, SIGNS AND LIGHTING MUST BE UNDERTAKEN TO THE APPROVAL OF THE LOCAL AUTHORITY, THE HIGHWAY AUTHORITY AND THE POLICE DEPARTMENT.
4. HAZARDOUS MATERIALS INCLUDING CEMENT AND BITUMINOUS MATERIALS ARE SPECIFIED AND THE MANUFACTURERS ADVICE ON SAFE HANDLING PROCEDURES MUST BE OBTAINED AND MADE CLEAR TO ALL OPERATIVES.
5. THE CONTRACTOR WILL BE RESPONSIBLE FOR LOCATING ALL EXISTING SERVICES WITHIN THE VICINITY OF THE WORKS HAND DUG AND ENSURE THESE ARE PROTECTED THROUGHOUT THE DURATION OF THE WORKS. ALL UTILITY PLANT SHOULD BE CLEARLY MARKED ON THE GROUND PRIOR TO COMMENCEMENT OF THE WORKS.
6. THE CONTRACTOR MUST ENSURE ALL WORKING AREAS ARE FULLY SECURE.

PRELIMINARY DRAWING
NOT FOR CONSTRUCTION
PENDING APPROVAL

Rev.	Description	Drn	Ckd	Date
B	Similar approved products note ommited following LLFA comments	JH	TL	11.08.22
A	Bituminous path construction added	JH	TL	13.03.22

Client: HHD Hamilton Homes & Developments www.hhad.co.uk

Project: Land adjacent Sefter School, House, Sefter Road

Title: Pavement Construction Details

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Scale	As shown @ A1	Drawn	MD
Date	March 2022	Checked	TL
File	PR21-023-Civils-dwgs-360	Drawing No	21-023-360
			Rev B