

Surface Course
40mm HRA35/14F Surf 40/60 to BS EN 13108-4

Binder Course
50mm AC20 dense bin 40/60 to BS EN 13108-1

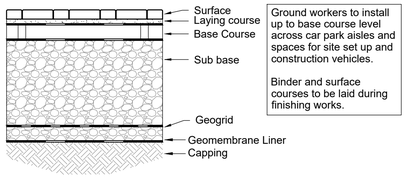
Base Course
110mm AC32 dense base 40/60 to BS EN 13108-1

Sub-base
600mm min granular sub-base lined open graded 10mm - 63mm clean angular crushed stone to clause 803 of highway agency specification, rolled and consolidated in accordance with clause 802 of Highway England's specification. Thickness based on minimum requirements for hydraulic design, refer to drainage layout and landscaper level drawings. Provide 600mm wide Triax TX 160 centered over perforated pipes in pipe locations. Geomembrane Liner below sub base.

Capping
6F2 material to be laid on top of existing site levels based on values in table to CBR plate testing. Detail to be read in conjunction with highway specification notes, existing site level plan K43058-ATCN-90-00-DR-C-2002-C7-Levels Design Plan Sheet 2 of 6 and K43058-ATCN-90-00-DR-C-2003-C8-Levels Design Plan Sheet 3 of 6 supplied by ATCN Consulting Engineers and Leaf Landscape GA plan SO-2870-05-LA-MCS759.

Impermeable Asphalt Parking Bay Aisle

(1:20)



Ground workers to install up to base course level across car park aisles and spaces for site set up and construction vehicles.

Binder and surface courses to be laid during finishing works.

Paving Course
200 x 100 x 60mm Concrete paving blocks to Architects details.

Laying Course
30mm thickness of well compacted sharp sand (maximum 3% silt and clay by weight, not more than 10% retained on 5mm sieve) to BS 882. Provide Treetex T300 Geotextile separation fabric below laying course.

Base Course
110mm AC32 dense base 40/60 to BS EN 13108-1
100/150 Pen paving grade bitumen Inbitex
Geotextile separation fabric above running course. 20Ø cored holes @800mm crs filled with laying course material

Sub-base
600mm min granular sub-base lined open graded 10mm - 63mm clean angular crushed stone to clause 803 of highway agency specification, rolled and consolidated in accordance with clause 802 of Highway England's specification. Thickness based on minimum requirements for hydraulic design, refer to drainage layout and landscaper level drawings. Provide 600mm wide Triax TX 160 centered over perforated pipes in pipe locations. Geomembrane Liner below sub base.

Capping
6F2 material to be laid on top of existing site levels based on values in table to CBR plate testing. Detail to be read in conjunction with highway specification notes, existing site level plan K43058-ATCN-90-00-DR-C-2002-C7-Levels Design Plan Sheet 2 of 6 and K43058-ATCN-90-00-DR-C-2003-C8-Levels Design Plan Sheet 3 of 6 supplied by ATCN Consulting Engineers and Leaf Landscape GA plan SO-2870-05-LA-MCS759.

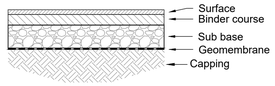
Permeable Block paved parking bays and pedestrian areas

(1:20)

Capping depth to be confirmed on site prior to commencement of works by ground workers undertaking CBR value tests.

CAPPING THICKNESS (mm) IN RELATION TO CBR				
≤2%	3%	4%	5%	≥6%
300	250	175	150	150

Capping Thickness (Private)



Surface Course
20mm AC6 dense surf 100/150 to BS EN 13108-1

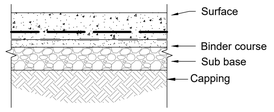
Binder/ Base Course
50mm AC20 dense bin 100/150 to BS EN 13108-1.
At vehicle crossovers increase thickness to100mm.

Sub-base
150mm min granular sub-base type 1 to clause 803 of National Highways specification, rolled and consolidated in accordance with clause 802 of National Highways' specification. Provide Terram Geotextile T1000 below subbase.

Capping
6F2 material to be laid on top of existing site levels based on values in table to CBR plate testing. Detail to be read in conjunction with highway specification notes, existing site level plan K43058-ATCN-90-00-DR-C-2002-C7-Levels Design Plan Sheet 2 of 6 and K43058-ATCN-90-00-DR-C-2003-C8-Levels Design Plan Sheet 3 of 6 supplied by ATCN Consulting Engineers and Leaf Landscape GA plan SO-2870-05-LA-MCS759.

Footpath construction

(1:20)



Surface Course
200mm pav 2 concrete slab with A193 mesh in bottom with 50mm cover with brushed steel finish on 1200 gauge visqueenslip material polythene sheet.

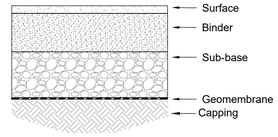
Binder Course
50mm sharp sand

Sub-Base
225mm min. granular sub-base type 1 material to clause 803 of highway specification.

Capping
6F2 material to be laid on top of existing site levels based on values in table to CBR plate testing. Detail to be read in conjunction with highway specification notes, existing site level plan K43058-ATCN-90-00-DR-C-2002-C7-Levels Design Plan Sheet 2 of 6 and K43058-ATCN-90-00-DR-C-2003-C8-Levels Design Plan Sheet 3 of 6 supplied by ATCN Consulting Engineers and Leaf Landscape GA plan SO-2870-05-LA-MCS759.

Concrete Slab Construction Detail

(1:20)



Surface Course
50mm Turf to landscape architects specification.

Binder Course
Min 250mm Topsoil to landscape architects specification.

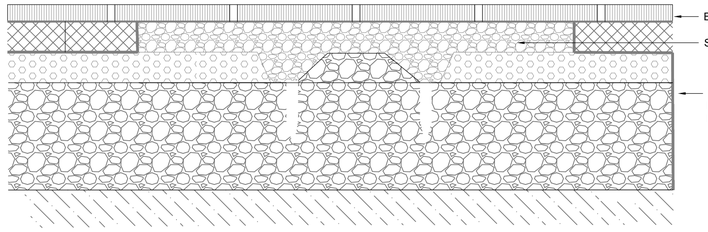
Sub-base
Min 300mm sub-soil depth landscape architects specification to existing site levels.

Provide Terram Geotextile T1000 below subbase.

Capping
6F2 material to be laid on top of existing site levels based on values in table to CBR plate testing. Detail to be read in conjunction with highway specification notes, existing site level plan K43058-ATCN-90-00-DR-C-2002-C7-Levels Design Plan Sheet 2 of 6 and K43058-ATCN-90-00-DR-C-2003-C8-Levels Design Plan Sheet 3 of 6 supplied by ATCN Consulting Engineers and Leaf Landscape GA plan SO-2870-05-LA-MCS759.

Turfed Landscape areas construction

(1:20)

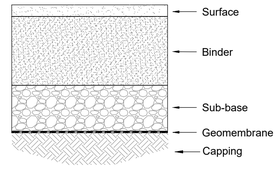


Temporary Base Course
110mm AC32 dense base 40/60 to BS EN 13108-1
100/150 Pen paving grade bitumen Inbitex
Geotextile separation fabric above running course. 20Ø cored holes @800mm crs filled with laying course material

Temporary Sub-base
Granular sub-base lined open graded 10mm - 63mm clean angular crushed stone to clause 803 of highway agency specification, rolled and consolidated in accordance with clause 802 of Highway England's specification. Thickness based on minimum requirements for hydraulic design, refer to drainage layout and landscaper level drawings. Provide 600mm wide Triax TX 160 centered over perforated pipes in pipe locations. Geomembrane Liner below sub base.

Temporary Permeable Construction Surface Within Tree Pit Areas in Car Park

(1:20)



Surface Course
75mm Mulch to landscape architects specification.

Binder Course
Min 450mm Topsoil to landscape architects specification.

Sub-base
Min 300mm sub-soil depth landscape architects specification to existing site levels.

Provide Terram Geotextile T1000 below subbase.

Capping
6F2 material to be laid on top of existing site levels based on values in table to CBR plate testing. Detail to be read in conjunction with highway specification notes, existing site level plan K43058-ATCN-90-00-DR-C-2002-C7-Levels Design Plan Sheet 2 of 6 and K43058-ATCN-90-00-DR-C-2003-C8-Levels Design Plan Sheet 3 of 6 supplied by ATCN Consulting Engineers and Leaf Landscape GA plan SO-2870-05-LA-MCS759.

Planted Landscape areas construction

(1:20)

Notes

GENERAL

- This drawing is to be read in conjunction with all relevant Engineers and Architects drawings and with the Specification.
- For setting out refer to Architects drawings.
- All dimensions are in millimetres and levels are in metres unless noted otherwise.
- Contractor to take all relevant dimensions on site. Any discrepancies to be advised to the Engineer.
- Contractor to check/scan for services prior to construction to avoid any damage during works.

HIGHWAYS

- All highway works to be in accordance with the National Highways Design Manual for Roads and Bridges and Specification for Highway Works.
- The formation level is to be prepared in accordance with clauses 616 and 617 of the National Highways Specification for Highway Works. The formation level shall receive a sufficient number of passes of the designated roller to minimise any subsequent settlement. Soft spots to be removed and backfilled with specified granular sub-base material and compacted. The formation level must be treated with a granular weed killer of the pre-emergent type.
- The formation level is not be exposed to wet weather longer than 8 hours without a protective layer.
- Additional material required to make up levels in fill areas shall be type 6F2 material placed and compacted in accordance with table 6/1 and clauses 612, 613.3, 613.8, 613.9, 613.10 and 613.13 of the National Highways Specification for Highway Works.
- Additional material required to make up levels in fill areas shall be of a well compacted granular material with a compacted CBR of 15% or greater and shall be laid and compacted in accordance with BS6031:2009 (Code of Practice for Earthworks). An increase in width of 200mm beyond the kerb haunching will be required to facilitate adequate compaction at the edges.
- Frost susceptible material, as defined in the National Highways Specification for Highway Works clause 801.8, shall not be used within 450mm of the designed final surface.
- Granular sub-base to be type 1 unbound mixture in accordance with National Highways Specification for Highway Works clause 801.
- Sub-base to be spread and compacted in layers in accordance with the National Highways Specification for Highway Works, clause 802.
- All construction materials shall be laid and compacted in accordance with their respective British Standard.
  Macadams BS EN 13108
  Granular Materials HA Specification for Highway Works series 800.
  Kerbs BS EN 1340
- If base-course is to be left as running surface then it shall be sealed with coated grit to BS EN 13108 immediately on compaction of base-course.
- A tack coat of K1-40 or A1-40 shall be applied to each layer prior to the next course being laid if the course is not to be covered immediately by the next layer. The rate of application shall be 0.4 l/m² and should be weed treated.
- Surface course, binder and road base areas exceeding 200m² shall be machine laid and compacted using a smooth wheeled roller 6-12tonne dead weight. Area less than 200m² shall be hand laid.



Surface Course
32mm paving slabs to landscape architect specification

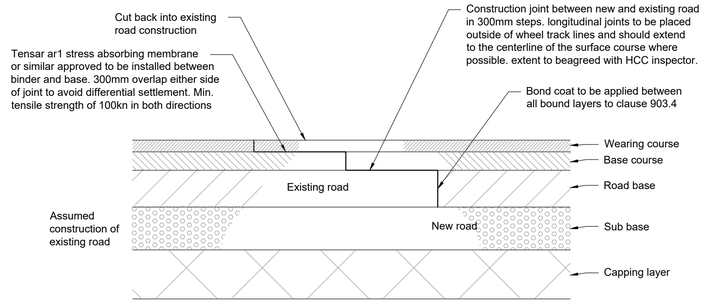
Binder/ Base Course
30mm thick 1:3 sand / mortar mix
on Treetex T300 geotextile separation fabric

Sub-base
150mm Type 1 granular material to clause 805 of DTP specification, with Geotextile filter fabric to BS 7533 part 13 separation fabric

Impermeable Textured Non-slip Paving Slabs (Private Areas)

Paving slabs to be installed with nominal fall towards soft landscaping.

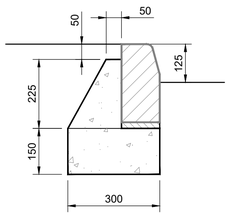
(1:20)



Joint between new full depth and existing macadam road construction

(REFER TO IMPERMEABLE ASPHALT ACCESS ROAD ABOVE)

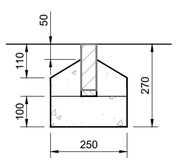
(NTS)



125mm x 255mm half batter precast concrete kerb (type HB2 to BS EN 1340) bedded on 20mm 1:3 cement/sand mortar. Concrete bed and haunch Grade GEN3 (ST.4)

Half Battered Kerb Type HB2

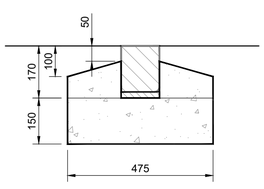
(1:10)



50mm x 150mm flat top edging precast concrete kerb (type EF to BS EN 1340) bedded on 20mm 1:3 cement/sand mortar. Concrete bed and haunch Grade GEN3 (ST.4)

Edging Kerb Type EF

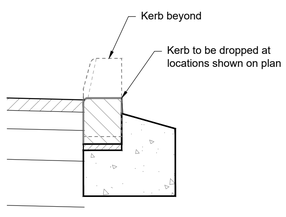
(1:10)



125mm x 150mm bullnosed precast concrete kerb (type BN to BS EN 1340) bedded upside-down on 20mm 1:3 cement/sand mortar. Concrete bed and haunch Grade GEN1 (ST.2)

Delineation Kerb Type BN

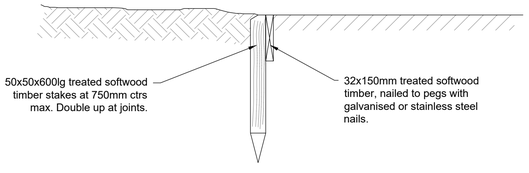
(1:10)



125mm x 150mm bullnosed precast concrete kerb (type BN to BS EN 1340) bedded on 20mm 1:3 cement/sand mortar. Concrete bed and haunch Grade GEN1 (ST.1)

Drop Kerb Detail

(1:10)



Treatment to all timber: Tanalised Timber - Vacuum pressure impregnated timber treated with TANALITH® Extra preservative to comply with the Treatment Code TE/HD Following treatment, any areas of timber revealed by cross cuts, holes, notches etc., shall be brushed with ENSELE® end grain preservative. Timber which is rip sawn, equalised, planed or heavily sanded must be returned to the treatment plant for retreatment. On no account are posts to be pointed after treatment. The shortening of posts should be avoided. In any event cross cutting must be restricted to the top of the post.

Timber Kerb Detail

(1:10)

CONSTRUCTION ISSUE

Rev.	Amendment	Drn.	Chkd.	Appd.	Date
C02	Construction Stage 5 Issue - Landscape drawing reference updated.	TK	TK	TK	22.03.24
C01	Construction Stage 5 Issue	TK	TK	TK	08.03.24
T05	Tender Stage 4 Issue - Temporary surfacing detail for car park tree pit protection during construction added.	TK	TK	TK	06.03.24
T04	Tender Stage 4 Issue - Soft landscaping and paving details updated.	TK	TK	TK	01.03.24
T03	Tender Stage 4 Issue - Soft landscaping details and specification notes added showing earthworks build up	TK	TK	TK	01.03.24
T02	Tender Stage 4 Issue - Sub-base material updated, permeable block paved pedestrian areas detail omitted.	TK	TK	TK	08.01.24
T01	Tender Stage 4 Issue	RD	TK	TK	14.12.23

Project

Former HRMC Site, Durrington-on-sea

Drawing

External Works Construction Details

Client

McCARTHY STONE
Life, well lived

Scott White and Hookins
Structural Engineering | Civil Engineering | Sustainability and BREEAM | CDM Consultancy

Harman House, Andover Road, Winchester, Hampshire SO23 7BS
T: +44 (0)1962 844855 W: www.swh.co.uk E: info@swh.co.uk

Scale at A1 - 1:10, 1:20

SWH Project Number: 303941

SO-2870-05-CE-0610-C02