

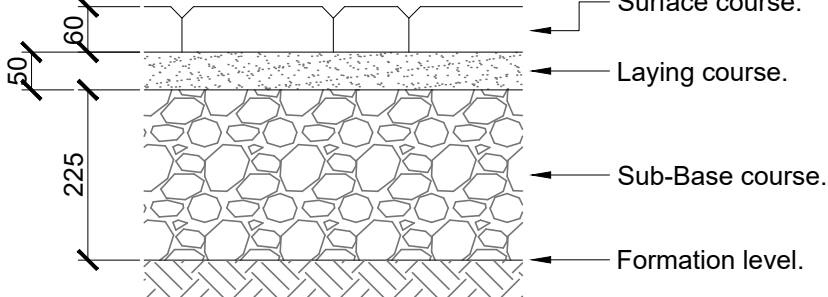


corresponding surface reference:

Id up relates to the following "paving types" as referenced 's' drawings:
OOB-ZZ-00-DR-L-00101 - General Arrangement 'ks Sheet 1'.
'OORD-OOB-ZZ-00-DR-L-00102 - General Arrangement Hardworks Sheet 2'.
'OORD-OOB-ZZ-00-DR-L-00103 - General Arrangement Hardworks Sheet 3'.

- Paving Type P7 (*only where no traffic expected*)
- Paving Type P8

Typical Section:



CONCRETE SETTS/BLOCKS BUILD UP - FOOTPATH - NON TRAFFICKED

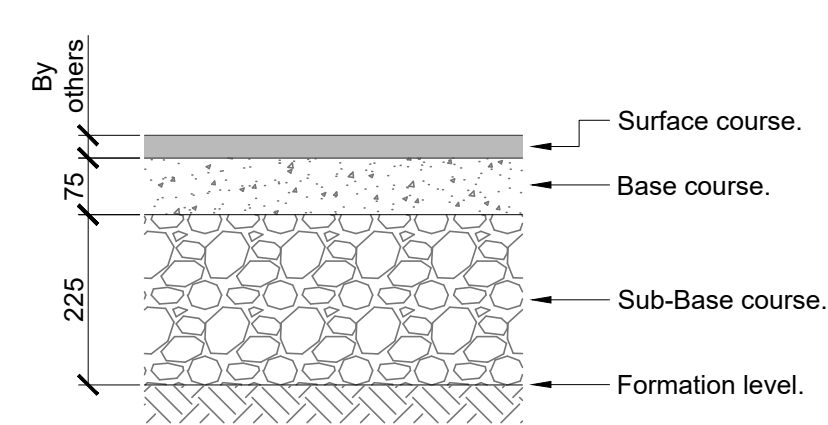
SCALE 1:10

'oobe' corresponding surface reference:

This build up relates to the following "paving types" as referenced on 'oobe' drawings:
'OORD-OOB-ZZ-00-DR-L-00101 - General Arrangement Hardworks Sheet 1'.
'OORD-OOB-ZZ-00-DR-L-00102 - General Arrangement Hardworks Sheet 2'.
'OORD-OOB-ZZ-00-DR-L-00103 - General Arrangement Hardworks Sheet 3'.

- Paving Type P2
- Paving Type P3
- Paving Type P6

Typical Section:



RESIN/RUBBER BOUND SURFACE BUILD UP - FOOTPATH - NON TRAFFICKED

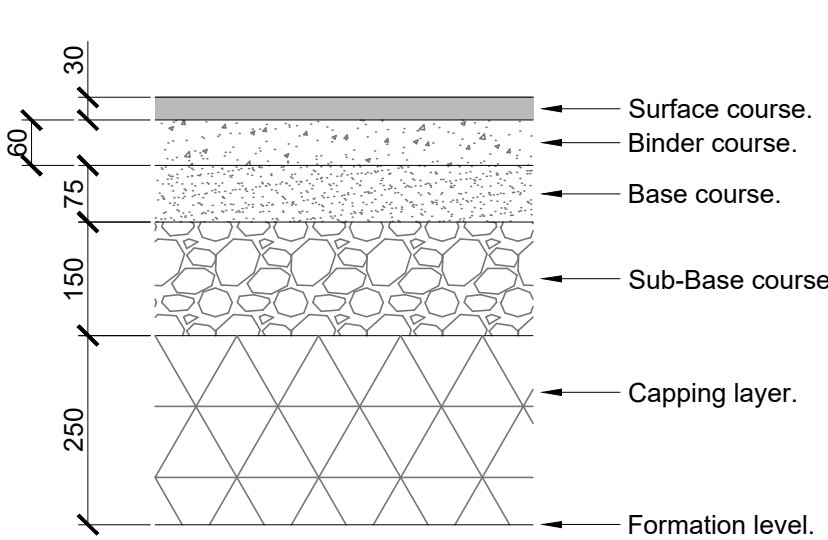
SCALE 1:10

'oobe' corresponding surface reference:

This build up relates to the following "paving types" as referenced on 'oobe' drawings:
'OORD-OOB-ZZ-00-DR-L-00101 - General Arrangement Hardworks Sheet 1'.
'OORD-OOB-ZZ-00-DR-L-00102 - General Arrangement Hardworks Sheet 2'.
'OORD-OOB-ZZ-00-DR-L-00103 - General Arrangement Hardworks Sheet 3'.

- Paving Type P10
- Paving Type P11

Typical Section:



MACADAM BUILD UP - ADOPTED CARRIAGEWAY & COURTYARD PARKING

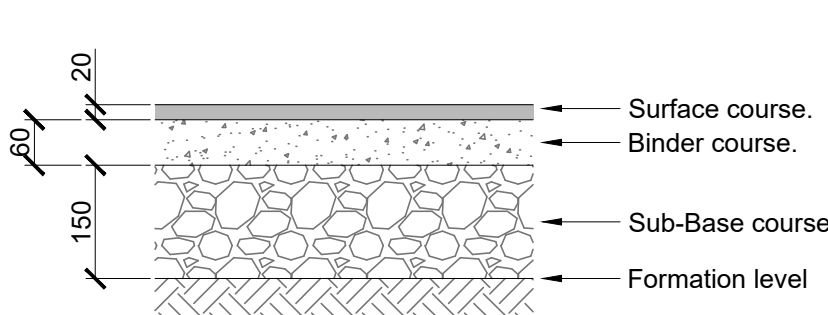
SCALE 1:10

'oobe' corresponding surface reference:

This build up relates to the following "paving types" as referenced on 'oobe' drawings:
'OORD-OOB-ZZ-00-DR-L-00101 - General Arrangement Hardworks Sheet 1'.
'OORD-OOB-ZZ-00-DR-L-00102 - General Arrangement Hardworks Sheet 2'.
'OORD-OOB-ZZ-00-DR-L-00103 - General Arrangement Hardworks Sheet 3'.

- Paving Type P10

Typical Section:



MACADAM - FOOTPATH - NON-TRAFFICKED

SCALE 1:10

Surface course:

60mm thick block paving/setts. Quality, colour, module sizes and finishes as specified by Landscape Architect in agreement with Rochdale Metropolitan Borough Council. Paving to be in accordance with BS594987:2010 and PD6691 Annex D, or produced under the BBA HAPAS scheme.

Joints to be filled with Silica Sand (nominal width of joint to be 3mm).

Laying course:

In accordance with BS 7533: Part 3: 1977. Blocks shall be laid on a 50mm thick sand bed in accordance with Table D.2. In accordance with table D.3. fines to be 1.5% passing the 0.063mm sieve in line with category II from table D.1.

Sub-Base course:

225mm Type 1 granular material in accordance with Specification for Highway Works. Sub-Base to be graded and compacted in accordance with Specification for Highway Works. The material passing the 425micron sieve shall have a liquid limit of not greater than 25 and a plasticity index of not greater than 6 when tested in accordance with BS1377).

Sub base to be blinded and finished to falls.

Footway does not normally require a capping layer and the above specification assumes formation CBR at or greater than 5%. If less than this contact the Engineer.

Surface course:

Resin bonded gravel by specialist manufacturer as specified by Landscape Architect in agreement with Rochdale Metropolitan Borough Council. Design by others.

Specialist gym safety surface by specialist design. Design by others.

Base course:

Nominal Thickness (mm)	Material	Binder Grade
75	AC 32 dense bin	100 / 150

AC to be in accordance with BS 594987:2015 & PD 6691:2022 Annex B.

Sub-Base course:

225mm Type 1 granular material in accordance with Specification for Highway Works. Sub-Base to be graded and compacted in accordance with Specification for Highway Works. The material passing the 425micron sieve shall have a liquid limit of not greater than 25 and a plasticity index of not greater than 6 when tested in accordance with BS1377).

Sub base to be blinded and finished to falls.

Footway does not normally require a capping layer and the above specification assumes formation CBR at or greater than 5%. If less than this contact the Engineer.

Surface course:

Nominal Thickness (mm)	Material	Binder Grade
30	SMA 10 Surf	40/60 or PMB

SMA to be in accordance with BS 594987:2015 & PD 6691:2022 Annex D, or produced under the BBA HAPAS scheme.

Binder course:

Nominal Thickness (mm)	Material	Binder Grade
60	AC 20 dense bin	100 / 150

AC to be in accordance with BS 594987:2015 & PD 6691:2022 Annex B.

Base course:

Nominal Thickness (mm)	Material	Binder Grade
75	AC 32 dense bin	100 / 150

AC to be in accordance with BS 594987:2015 & PD 6691:2022 Annex B.

Surface course:

Nominal Thickness (mm)	Material	Binder Grade
20	SMA 10 Surf	40/60 or PMB

SMA to be in accordance with BS 594987:2015 & PD 6691:2022 Annex D, or produced under the BBA HAPAS scheme.

Binder course:

Nominal Thickness (mm)	Material	Binder Grade
60	AC 20 dense bin	100 / 150

AC to be in accordance with BS 594987:2015 & PD 6691:2022 Annex B.

Sub-Base course:

150mm Type 1 granular material in accordance with Specification for Highway Works. Sub-Base to be graded and compacted in accordance with Specification for Highway Works. The material passing the 425micron sieve shall have a liquid limit of not greater than 25 and a plasticity index of not greater than 6 when tested in accordance with BS1377).

Sub base to be blinded and finished to falls.

Capping layer:

Assumed 5% CBR at formation level. Requires 250mm 6F2 capping layer in accordance "Sub-Base & Capping Layer Notes".

Where additional fill is required to bring up levels, 6F2 fill should be placed and compacted in accordance with the Specification for Highway Works.

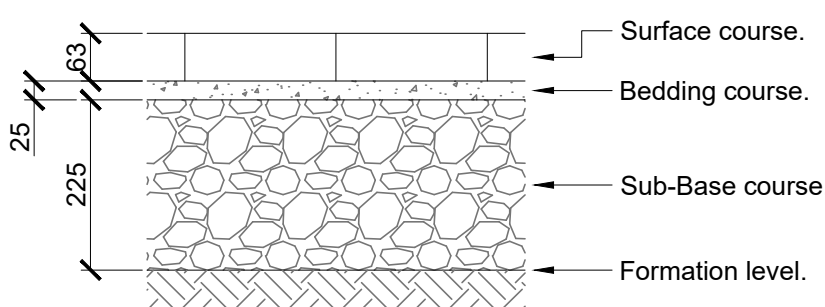
Note:
Build-up part of the public realm, and subject to Section 228. Rochdale Borough Council to confirm suitability, and tying-in details to existing footway

'oobe' corresponding surface reference:

This build up relates to the following "paving types" as referenced on 'oobe' drawings:
'OORD-OOB-ZZ-00-DR-L-00101 - General Arrangement Hardworks Sheet 1'.
'OORD-OOB-ZZ-00-DR-L-00102 - General Arrangement Hardworks Sheet 2'.
'OORD-OOB-ZZ-00-DR-L-00103 - General Arrangement Hardworks Sheet 3'.

- Paving Type P1
- Paving Type P4
- Paving Type P5
- Paving Type P9
- Paving Type P13

Typical Section:



CONCRETE FLAGS BUILD UP - FOOTPATH - NON TRAFFICKED

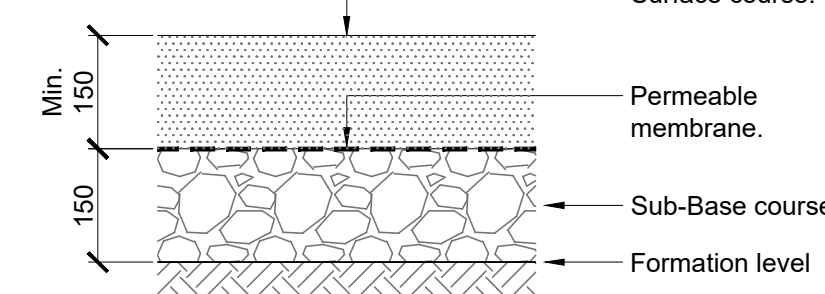
SCALE 1:10

'oobe' corresponding surface reference:

This build up relates to the following "paving types" as referenced on 'oobe' drawings:
'OORD-OOB-ZZ-00-DR-L-00101 - General Arrangement Hardworks Sheet 1'.
'OORD-OOB-ZZ-00-DR-L-00102 - General Arrangement Hardworks Sheet 2'.
'OORD-OOB-ZZ-00-DR-L-00103 - General Arrangement Hardworks Sheet 3'.

- Paving Type P16
- Paving Type P17

Typical Section:



ENGINEERED SOFT LANDSCAPING

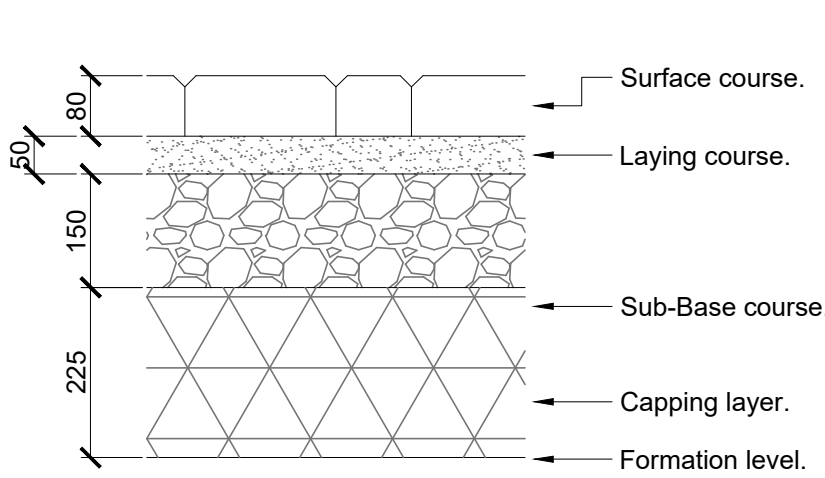
SCALE 1:10

'oobe' corresponding surface reference:

This build up relates to the following "paving types" as referenced on 'oobe' drawings:
'OORD-OOB-ZZ-00-DR-L-00101 - General Arrangement Hardworks Sheet 1'.
'OORD-OOB-ZZ-00-DR-L-00102 - General Arrangement Hardworks Sheet 2'.
'OORD-OOB-ZZ-00-DR-L-00103 - General Arrangement Hardworks Sheet 3'.

- Paving Type P7 (*only where traffic expected*)
- Paving Type P12
- Paving Type P14

Typical Section:



BLOCK PAVING BUILD UP - CARRIAGEWAY

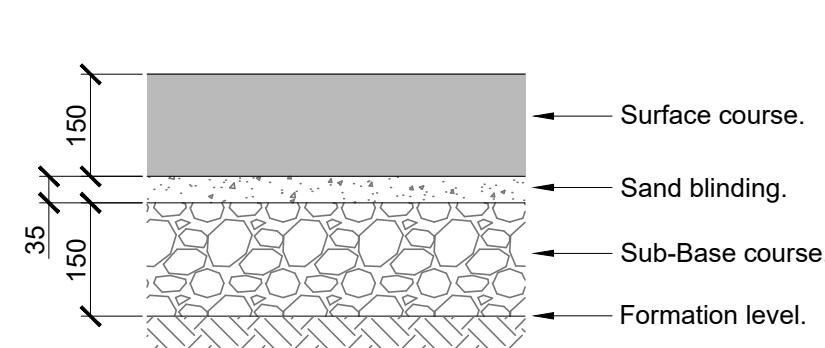
SCALE 1:10

'oobe' corresponding surface reference:

This build up relates to the following "paving types" as referenced on 'oobe' drawings:
'OORD-OOB-ZZ-00-DR-L-00101 - General Arrangement Hardworks Sheet 1'.
'OORD-OOB-ZZ-00-DR-L-00102 - General Arrangement Hardworks Sheet 2'.
'OORD-OOB-ZZ-00-DR-L-00103 - General Arrangement Hardworks Sheet 3'.

- Paving Type P15

Typical Section:



GRASSCRETE SURFACE BUILD UP - TRAFFICKED

SCALE 1:10

Surface course:

63mm thick concrete flagging. Quality, colour, module sizes and finishes as specified by Landscape Architect in agreement with Rochdale Metropolitan Borough Council. Paving to be in accordance with BS594987:2010 and PD6691 Annex D, or produced under the BBA HAPAS scheme.

Joints to be filled with Sand to BS EN 12620 (nominal width of joint to be 3mm).

Bedding course:

25mm bedding course 3:1 full sand: cement mortar bed. Bedding course to be in accordance with BS 594987:2015.

Sub-Base course:

225mm Type 1 granular material in accordance with Specification for Highway Works. Sub-Base to be graded and compacted in accordance with Specification for Highway Works. The material passing the 425micron sieve shall have a liquid limit of not greater than 25 and a plasticity index of not greater than 6 when tested in accordance with BS1377).

Sub base to be blinded and finished to falls.

Footway does not normally require a capping layer and the above specification assumes formation CBR at or greater than 5%. If less than this contact the Engineer.

Surface course:

Min. 150mm Mulch or gravel finish to landscape architect's specification.

Sub-Base course:

150mm Type 1 granular material in accordance with Specification for Highway Works. Surface course to be graded and compacted in accordance with Specification for Highway Works. The material passing the 425micron sieve shall have a liquid limit of not greater than 25 and a plasticity index of not greater than 6 when tested in accordance with BS1377).

Permeable membrane:

Permeable geotextile membrane to allow for surface drainage but prevent the washing of fines.

Capping layer:

Footway does not normally require a capping layer and the above specification assumes formation CBR at or greater than 5%. If less than this contact the Engineer.

Surface course:

80mm thick block paving/setts. Quality, colour, module sizes and finishes as specified by Landscape Architect in agreement with Rochdale Metropolitan Borough Council. Paving to be in accordance with BS594987:2010 and PD6691 Annex D, or produced under the BBA HAPAS scheme.

Joints to be filled with Silica Sand (nominal width of joint to be 3mm).

Laying course:

In accordance with BS 7533: Part 3: 1977. Blocks shall be laid on a 50mm thick sand bed in accordance with Table D.2. In accordance with table D.3. fines to be 1.5% passing the 0.063mm sieve in line with category II from table D.1.

Sub-Base course:

150mm Type 1 granular material in accordance with Specification for Highway Works. Sub-Base to be graded and compacted in accordance with Specification for Highway Works. The material passing the 425micron sieve shall have a liquid limit of not greater than 25 and a plasticity index of not greater than 6 when tested in accordance with BS1377).

Sub base to be blinded and finished to falls.

Capping layer:

Assumed 5% CBR at formation level. Requires 250mm 6F2 capping layer in accordance "Sub-Base & Capping Layer Notes".

Where additional fill is required to bring up levels, 6F2 fill should be placed and compacted in accordance with the Specification for Highway Works.

Surface course:

Allow for GC2 Grasscrete, 150mm depth, unsuitable for emergency vehicle loading

Sand Blinding:

35mm sand binding for leveling

Sub-Base course:

150mm Type 1 granular material in accordance with Specification for Highway Works. Sub-Base to be graded and compacted in accordance with Specification for Highway Works. The material passing the 425micron sieve shall have a liquid limit of not greater than 25 and a plasticity index of not greater than 6 when tested in accordance with BS1377).

Sub base to be blinded and finished to falls.

Grasscrete does not normally require a capping layer and the above specification assumes formation CBR at or greater than 5% and that typical load of traffic to be less than 30 tonnes. If these assumptions are not satisfied, contact the Engineer.

NOTES

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- This drawing is to be read in conjunction with all relevant contractual documents.
- Anyone using this drawing must be aware of their legal duties under the CDM Regulations 2015, refer to the HSE website for further information. BKPL are not Principal Designers.
- All dimensions shown on this drawing are in millimeters unless noted otherwise.
- If the Contractor consider that they do not have sufficient information to safely complete the works detailed on this drawing, they should contact the Engineer.
- All works are to be carried out in accordance with the Building Regulations (as amended) and to the approval of Building Standards.
- Refer to drawing numbers ORRD-BKP-ZZ-XX-DR-C-00742 & 743 for proposed formation levels to suit these build-ups.

SUB BASE & CAPPING LAYER NOTES:

CBR's must be taken at formation level to confirm sub-base and capping thickness. Any CBR value below 1% must be brought to the attention of the Engineer prior to laying the sub-base material. Soft spots must be excavated and replaced with clean, inert 6F2 placed in compacted layers in accordance with Specification for Highway Works until the target CBR is achieved. Any locations with poor sub grade or perhaps a cohesive sub-grade where a 15% target CBR is not possible will require a granular capping layer. Alternatively Geotextile Autoway 150 geotextile layer could be considered. For specific details of capping and sub-base thickness refer to table below.

SUB-BASE AND CAPPING LAYER THICKNESS TABLE		
Sub Grade CBR	Sub-base (mm)	Capping (mm)
<1%	150	600 Contact Engineer geotextile may be required
2%	150	600
3%	150	350
4%	150	300
5%	150	250
8%	150	225
10%-14%	150	200
>15%	150	0

NOTE:

All surface finishes assumed to be non-porous.

P05	15.08.25	Stage 4 Issued to reflect Phased Masterplan	JDE
P04	01.05.25	Stage 3 - Issued for Information	JDE
P03	20.01.23	Notation and descriptions amended for clarity	MS
P02	11.01.23	Build up specifications updated & corresponding reference added relating to 'oobe' site plan	JDE
P01	21.06.22	First issue	PA
REV.	DATE	REVISION DETAILS	INITIALS

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PROJECT:
**Oldham Road,
Rochdale Development**

TITLE:
**External Works - Typical Surface
Build Up Details**

SCALE @ A1:	DRAWN:	DATE:	REVISION:	STATUS:
As noted	PA	21.06.22	P05	S3

DRAWING No:
ORRD-BKP-00-XX-DR-C-00703