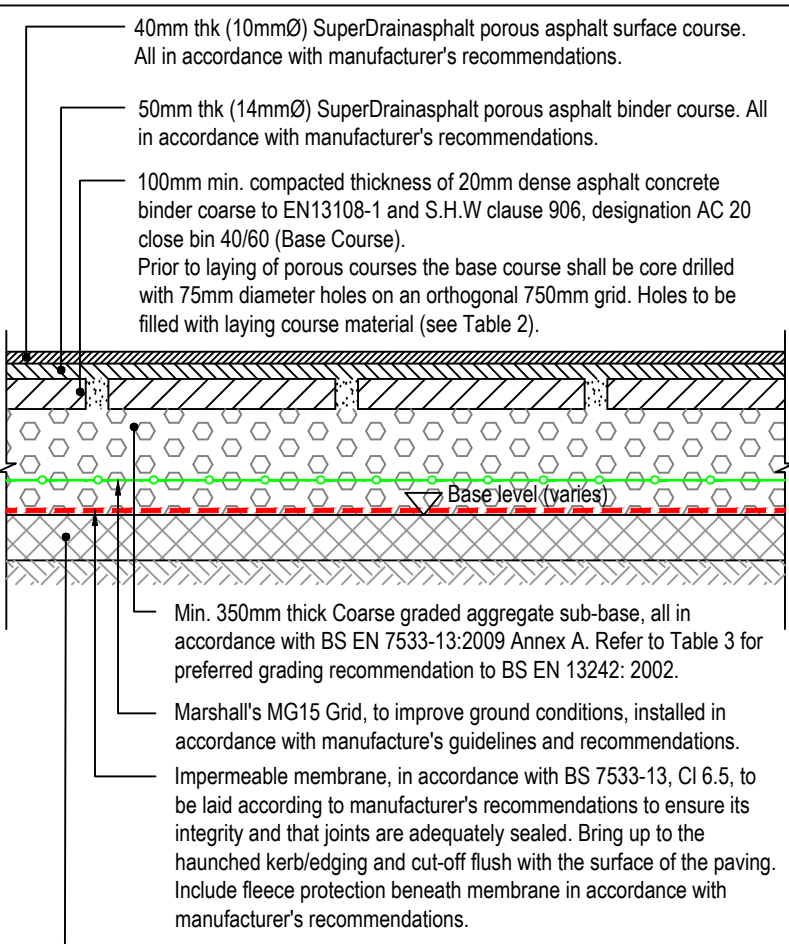


Note: If the impermeable asphalt course is used as a temporary running surface for construction traffic, any areas of resulting surface damage must be made good prior to the cleaning, piercing and overlying of the porous course. (NB: The likelihood of such damage occurring can be significantly reduced by the liberal application of a sealing grit to the finished impermeable asphalt concrete base course immediately after installation).



Min. 350mm thick Coarse graded aggregate sub-base, all in accordance with BS EN 7533-13:2009 Annex A. Refer to Table 3 for preferred grading recommendation to BS EN 13242: 2002.

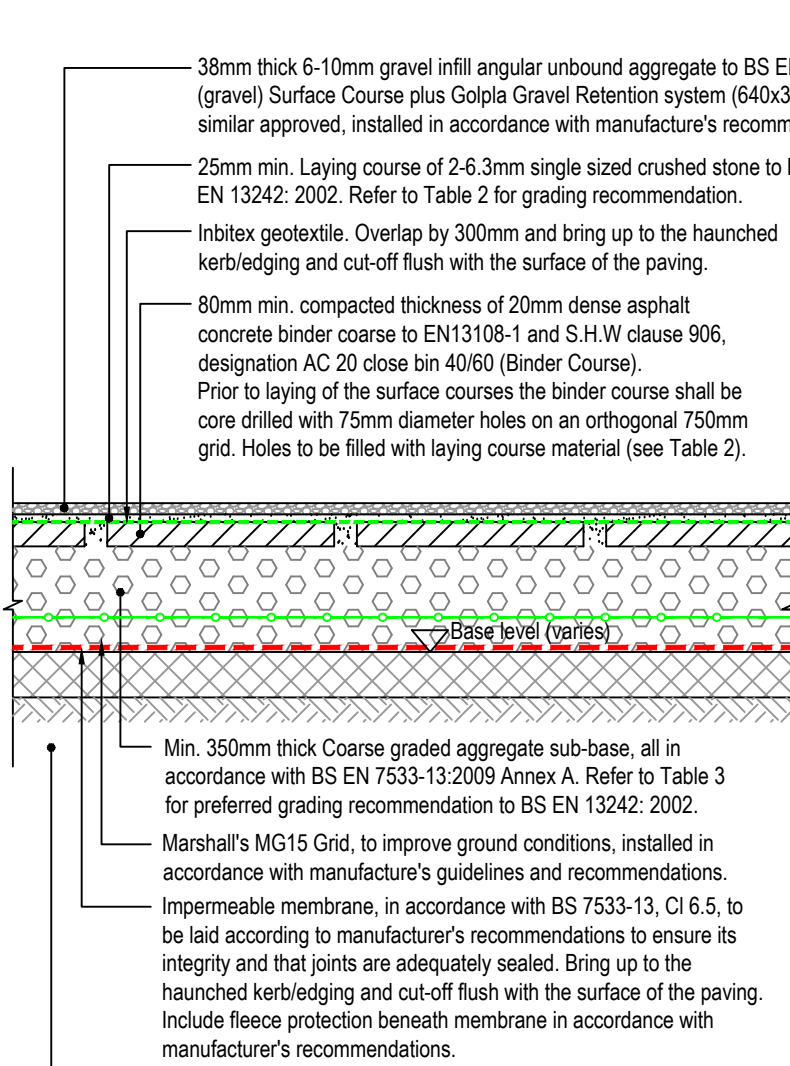
Marshall's MG15 Grd, to improve ground conditions, installed in accordance with manufacturer's guidelines and recommendations.

Impermeable membrane, in accordance with BS 7533-13, Cl 6.5, to be laid according to manufacturer's recommendations to ensure its integrity and that joints are adequately sealed. Bring up to the haunched kerbleading and cut-off flush with the surface of the paving. Include fleece protection beneath membrane in accordance with manufacturer's recommendations.

Capping should not required based on the above detail if a CBR value of 3% or greater is present. If during site works lower CBR values are encountered then consult with BEAL Consulting Engineers Ltd. Where fill has been placed it is assumed that the material is clean acceptable engineering material for use under pavement construction such as class 6F1/6F2 capping material to S.H.W. clause 613, and has been appropriately compacted. Surface level tolerance shall be +20mm and -30mm from the design levels.

Final construction depth and capping requirement dependent on on-site CBR tests undertaken during works. Prior to placement of the sub-base or capping the formation shall be trimmed and rolled to S.H.W. clause 616. Any soft spots shall be brought to the attention of the Engineer for selection of appropriate remedial measures (also see Pavement Notes). If subgrade deemed to be frost susceptible sufficient construction (min 450mm) to be provided to ensure that the construction will not be affected by frost heave.

Porous Asphalt Access Road & Turning (tanked) Detail
(Scale 1:25)



Min. 350mm thick Coarse graded aggregate sub-base, all in accordance with BS EN 7533-13:2009 Annex A. Refer to Table 3 for preferred grading recommendation to BS EN 13242: 2002.

Marshall's MG15 Grd, to improve ground conditions, installed in accordance with manufacturer's guidelines and recommendations.

Impermeable membrane, in accordance with BS 7533-13, Cl 6.5, to be laid according to manufacturer's recommendations to ensure its integrity and that joints are adequately sealed. Bring up to the haunched kerbleading and cut-off flush with the surface of the paving. Include fleece protection beneath membrane in accordance with manufacturer's recommendations.

Capping should not required based on the above detail if a CBR value of 3% or greater is present. If during site works lower CBR values are encountered then consult with BEAL Consulting Engineers Ltd. Where fill has been placed it is assumed that the material is clean acceptable engineering material for use under pavement construction such as class 6F1/6F2 capping material to S.H.W. clause 613, and has been appropriately compacted. Surface level tolerance shall be +20mm and -30mm from the design levels.

Final construction depth and capping requirement dependent on on-site CBR tests undertaken during works. Prior to placement of the sub-base or capping the formation shall be trimmed and rolled to S.H.W. clause 616. Any soft spots shall be brought to the attention of the Engineer for selection of appropriate remedial measures (also see Pavement Notes). If subgrade deemed to be frost susceptible sufficient construction (min 450mm) to be provided to ensure that the construction will not be affected by frost heave.

Typical Gravel Driveway Construction (tanked) Detail
(Scale 1:25)

Table 2
Laying course & jointing grading in accordance with BS EN 13242:2002

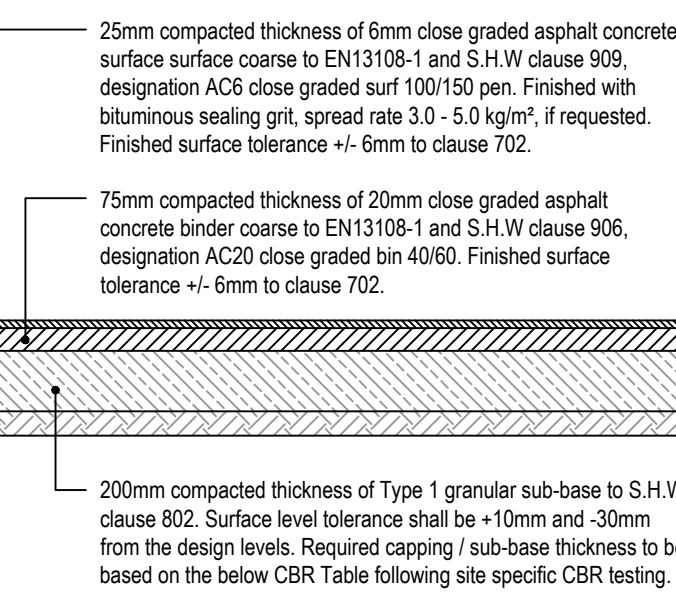
Grading Requirements	
Aggregate Size (mm)	2/6.3
Grading/Tolerance Category	Gc 80/20
Grading Details	
Sieve Size (mm)	Percentage by mass passing ISO 565 Sieve
14	100
10	98 - 100
6.3	90 - 99
2	0 - 20
1	0 - 5
0.063	0 - 2

Table 3
Course graded sub-base grading in accordance with BS EN 13242:2002. (with min. 30% void ratio)

Grading Requirements	
Aggregate Size (mm)	4/20
Grading/Tolerance Category	Gc 80/20 GTC 20/15
Grading Details	
Sieve Size (mm)	Percentage by mass passing ISO 565 Sieve
40	100
31.5	98 - 100
20	90 - 99
10	25 - 70
4	0 - 15
2	0 - 5

Pavement Notes

- Where topsoil is encountered this should be completely removed down to a suitable natural founding strata.
- Final construction depth and capping requirements dependent on on-site CBR tests undertaken during works. Prior to placement of the sub-base or capping the formation shall be trimmed and rolled to S.H.W. clause 616. Any soft spots to be removed and filled with sub base material. If sub-grade deemed frost susceptible sufficient construction depth (min 450mm) to be provided to ensure that the construction will not be affected by frost heave.
- Where pavements are to be constructed in the vicinity of trees or tree stumps the sub-grade shall be inspected to determine if desiccation has occurred. If so pavements shall be constructed below the desiccated zone.
- Depth of existing services below proposed works must be determined prior to works commencing. Any services which would be within the proposed construction layers must be lowered to be below the sub-base and protection works agreed with the respective Statutory Undertaker.



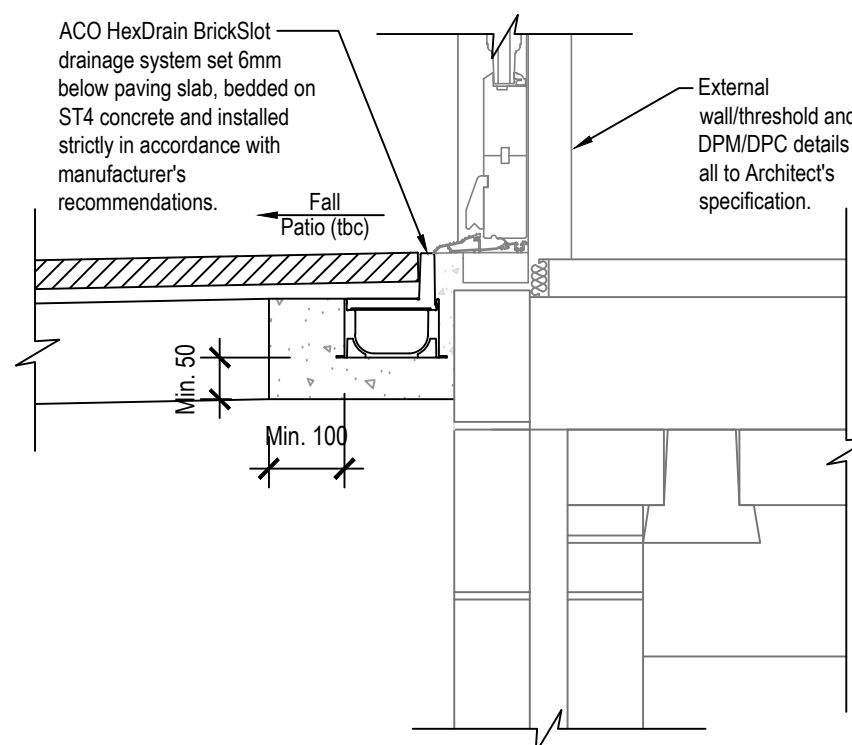
Tarmacadam Footway Construction
(Scale 1:25)

CBR TABLE

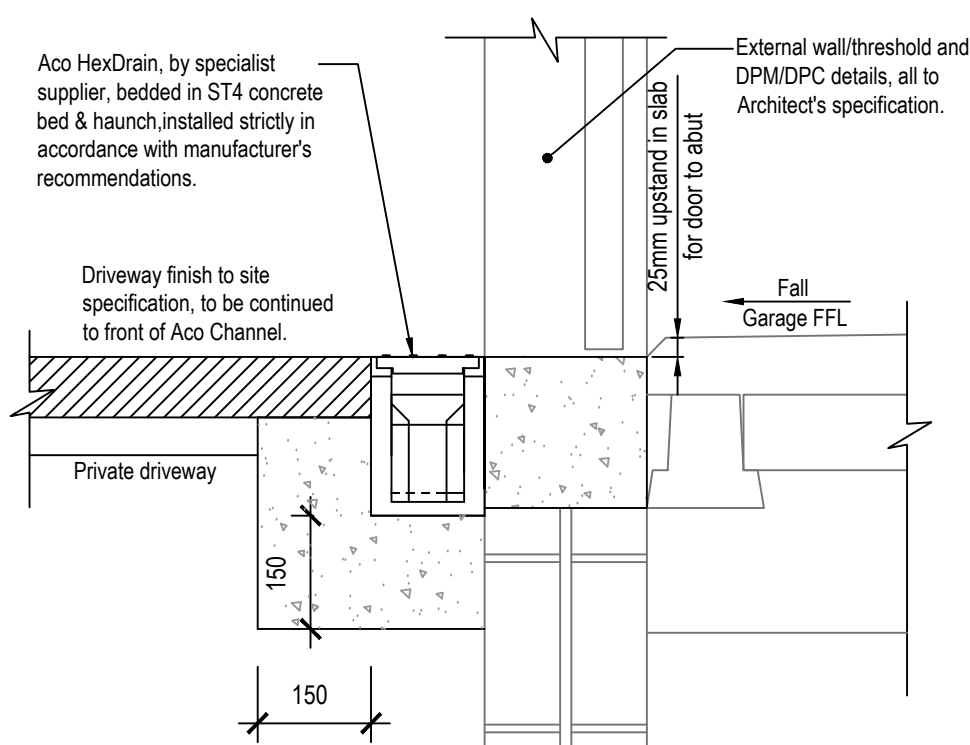
CBR (%)	Subbase on Capping (mm)		Subbase only (mm)
	Subbase	Capping	
≤2.5	Ground Stabilisation		Ground Stabilisation
2.6 - 2.9	350	250	450
3.0 - 3.9	320	240	400
4.0 - 4.9	270	220	360
5.0 - 5.09	240	210	320
6.0 - 7.9	210	200	300
8.0 - 9.9	200	190	270
10 - 11.9	180	180	250
12.0 - 14.9	170	160	230
15.0≥	150	150	200

Notes:

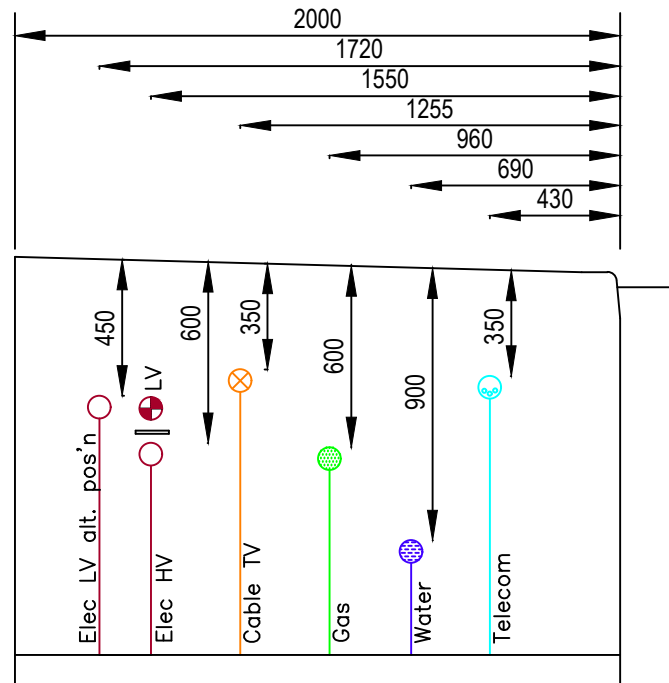
- All subbase is to be Type 1 in compliance with MCHW1 803.
- All capping is to be 6F1 or 6F2 in compliance with MCHW1 613.
- Grading certificates for all granular fill are to be provided for every 500 tonnes.
- Foundations on cohesive soils are to use subbase on capping foundation type.
- Where sub-grade is frost susceptible a minimum total construction depth of 450mm non-frost susceptible material is to be provided.



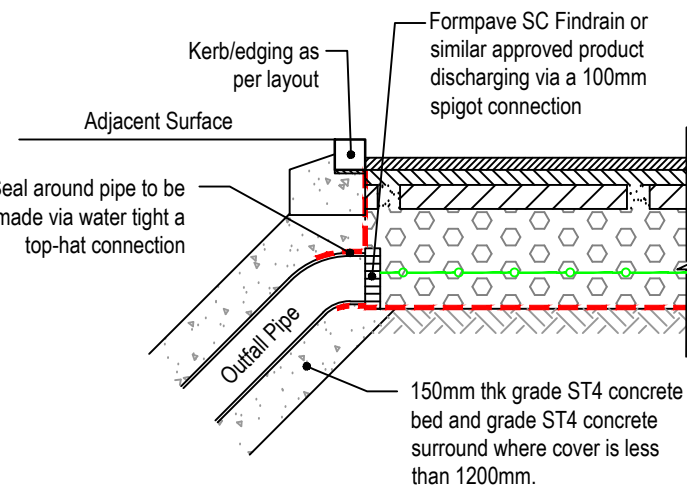
Slot Drain Detail Adjacent to Level Threshold Doors
Scale (1:10)
Refer to BEAL Drainage Layout drawing for positions of slot drains.



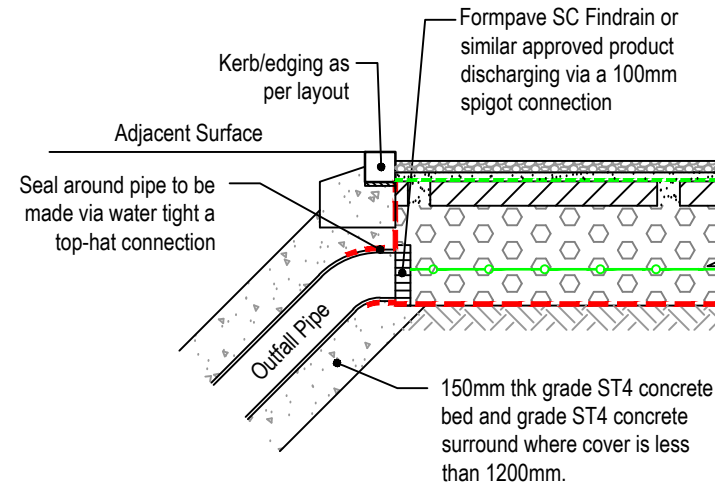
Detail Through Garage Threshold
Scale (1:10)
Refer to BEAL Drainage Layout drawing for positions of Aco drains.



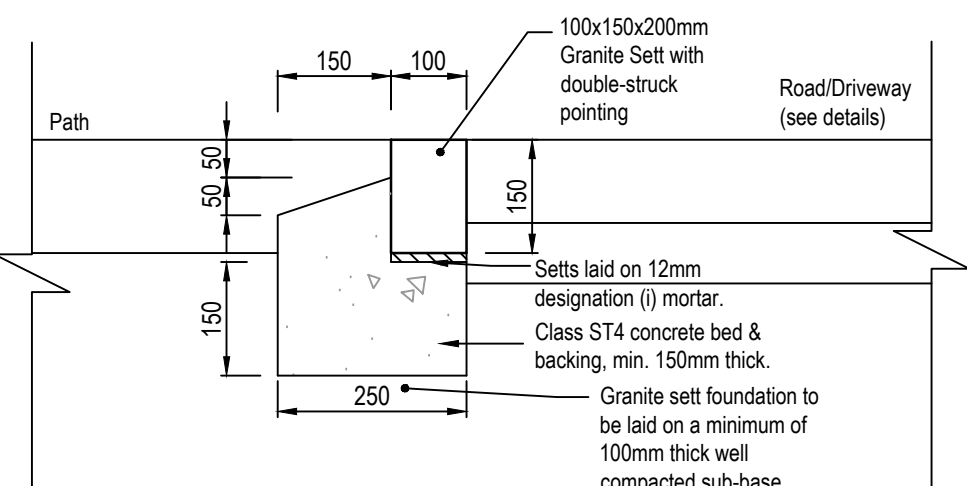
Typical Position of underground pipes & cables in 2m footpath
(As per NUJG7 - Scale NTS)
(Dimensions in mm)



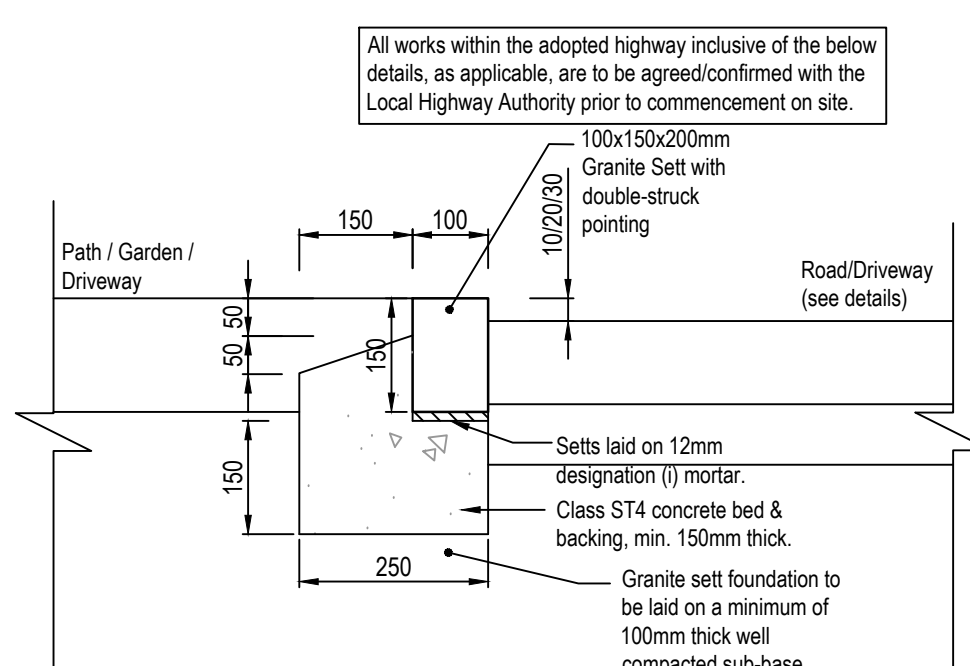
Typical Section through Fin Drain discharge point (Road)
(Scale 1:25)



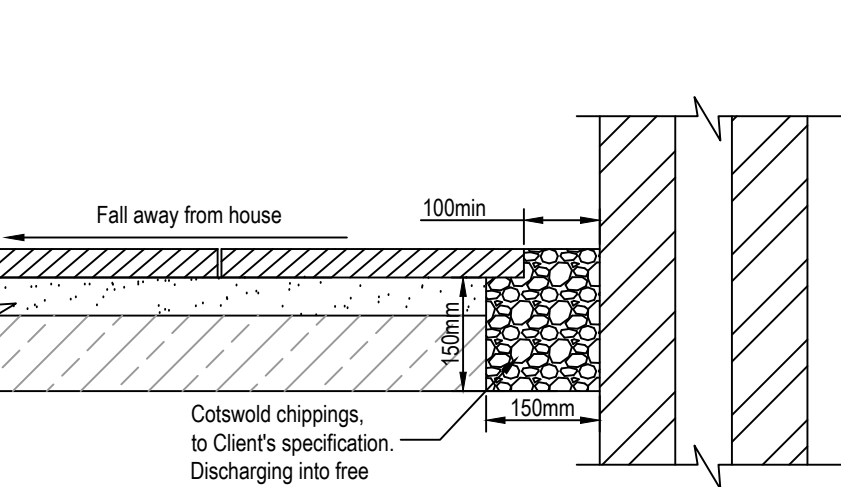
Typical Section through Fin Drain discharge point (Driveway)
(Scale 1:25)



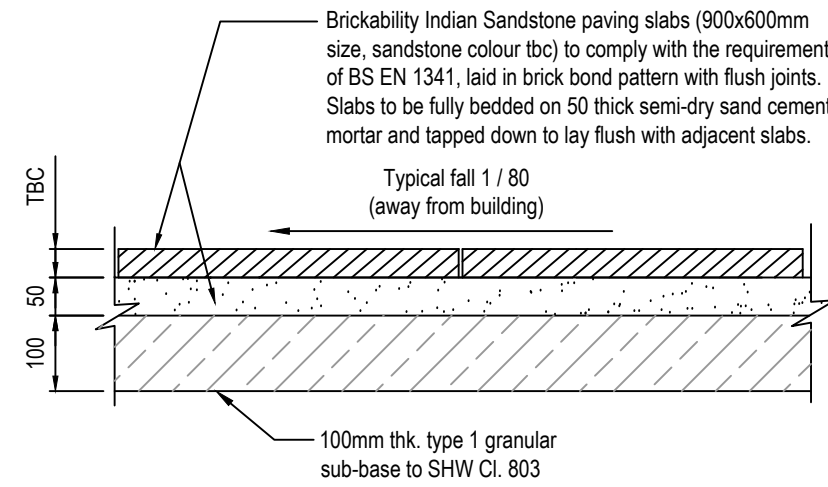
Granite Sett Detail - 0mm face (GS[0])
(Scale 1:10)



Granite Sett Detail - 10, 20 or 30mm face (GS [10] or GS [20] or GS [30])
(Scale 1:10)

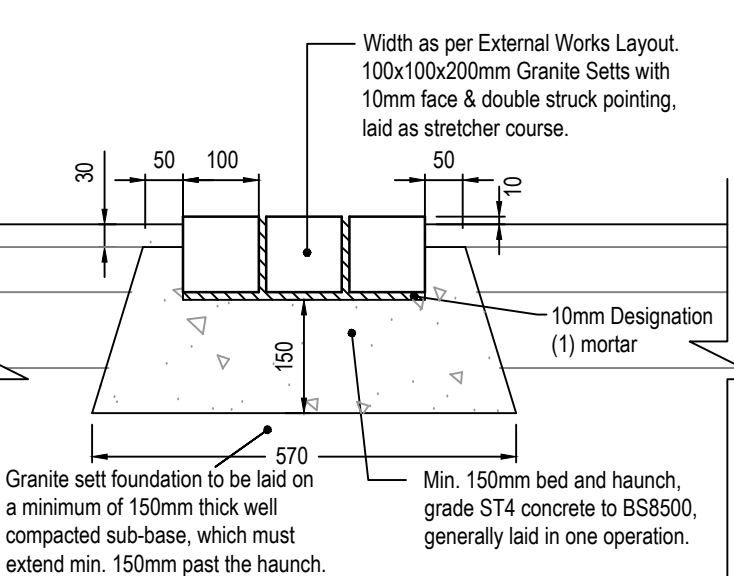


Paving Detail adjacent to external wall of houses
Scale (1:10)

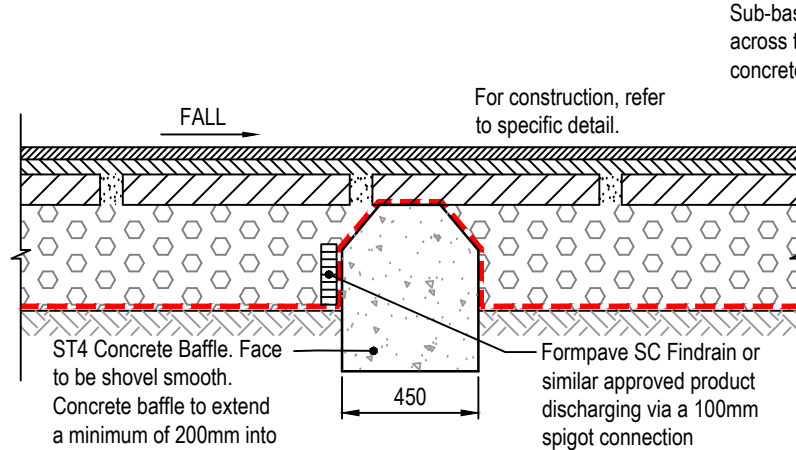


Private Path Construction Section
Scale (1:10)

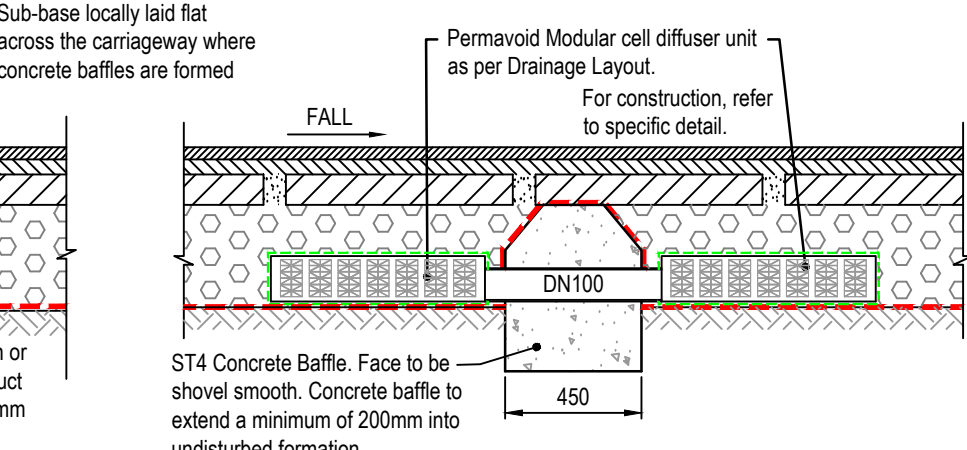
Note:- Open joints shall be 8 to 10mm wide with class II mortar packed down to fully fill void. All joints are to be double struck to form a neat dense finish. Excess mortar shall be swept off the slabs with a soft brush and joints shall be re-striked if required. Poorly jointed slabs resulting in staining to the surface will not be acceptable. If close joints are required they shall be 1 to 3mm wide and sand filled.



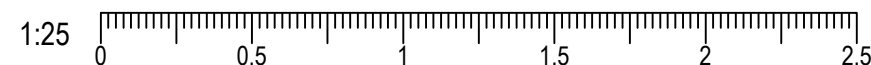
Granite Sett Rumble Strip (RS [10]) RS 10mm face
(Scale 1:10)



Section through Concrete Baffle (Fin Drain)
(Scale 1:25)



Hydraulic link of sub-base
(Scale 1:25)



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NOTES:

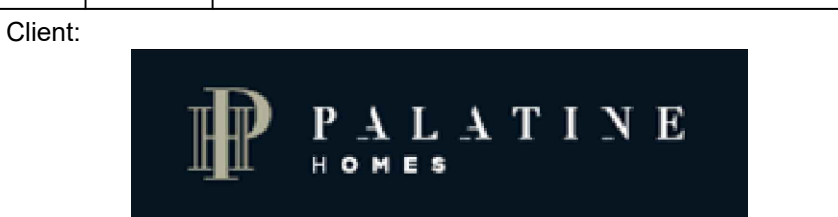
- Do not scale from this drawing. This drawing shall be read in conjunction with all other relevant Architect's and Engineer's drawings.
- Any discrepancies, ambiguities, or anomalies in the information provided on this or any of the engineering drawings package must be reported prior to work proceeding.
- All accommodation work deemed necessary to facilitate a satisfactory link between the new works and the existing to be undertaken by the developer.
- It is the contractor's responsibility to locate all existing services and verify their level & location prior to commencing any works. Should they be affected by the works then the respective statutory undertaker should be contacted and any special protection requirements agreed.
- All highway works shall be undertaken in accordance with the Local Highway Authorities Design Guide and Specification and strictly in accordance with the 'Specification for Highway Works'. All drainage works shall be undertaken in accordance with the 'Design & Construction Guidance', and any other Regional Water company requirements. All works to be supervised/inspected as required by the relevant Inspector.
- All works must comply with current Health and Safety guidance & standards. All temporary signing to comply with Traffic Signs Manual - Chapter 8.
- All products are to be installed and maintained strictly in accordance with manufacturer's recommendations & guidelines.

Note

The proposals as shown are all subject to the prior approval of the Local Planning Authority, Local Highway Authority and Local Water Authority. No works to the adopted highway or drainage network must be undertaken until technical approval has been granted for the respective element.

PRELIMINARY

Rev:	Date:	Description:
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Project:
Johnson Drive,
Finchampstead

Drawing Title:
External Construction
Details

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Designed: ----	Drawn: SRC	Checked: ----
Scale: As shown @A1	Date: Oct 2024	Approved: ----
Drawing Number: 629:003	Revision:	-