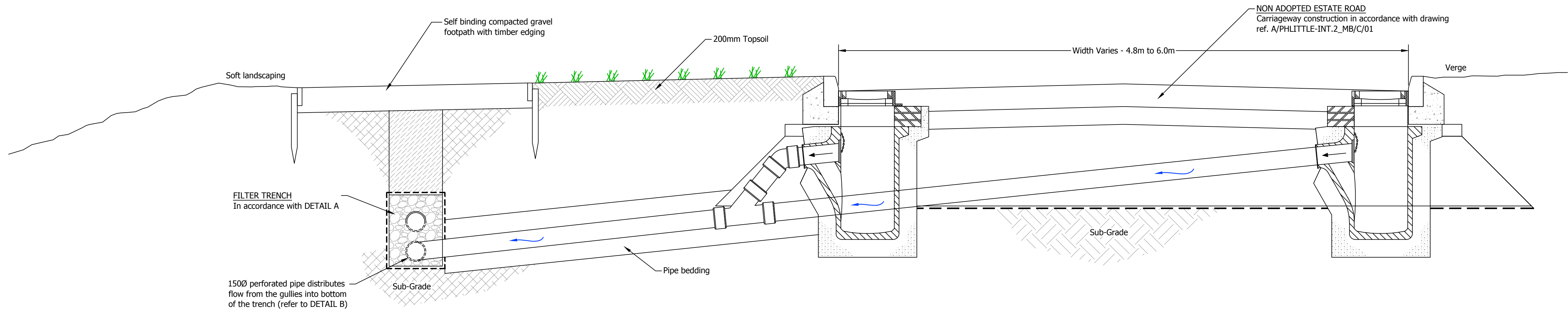




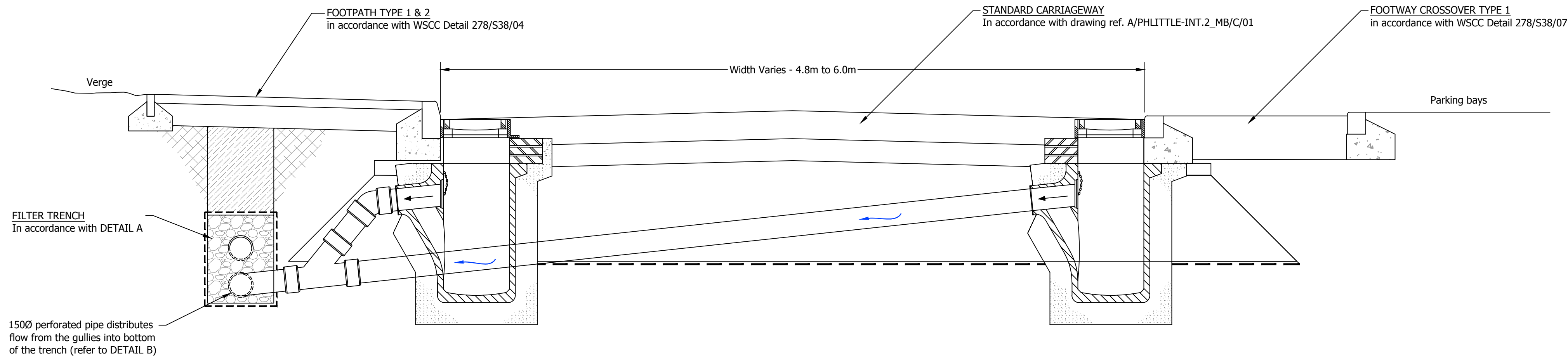
## **APPENDIX J: Permeable Sub-base Road & Filter Trenches**

NOTES

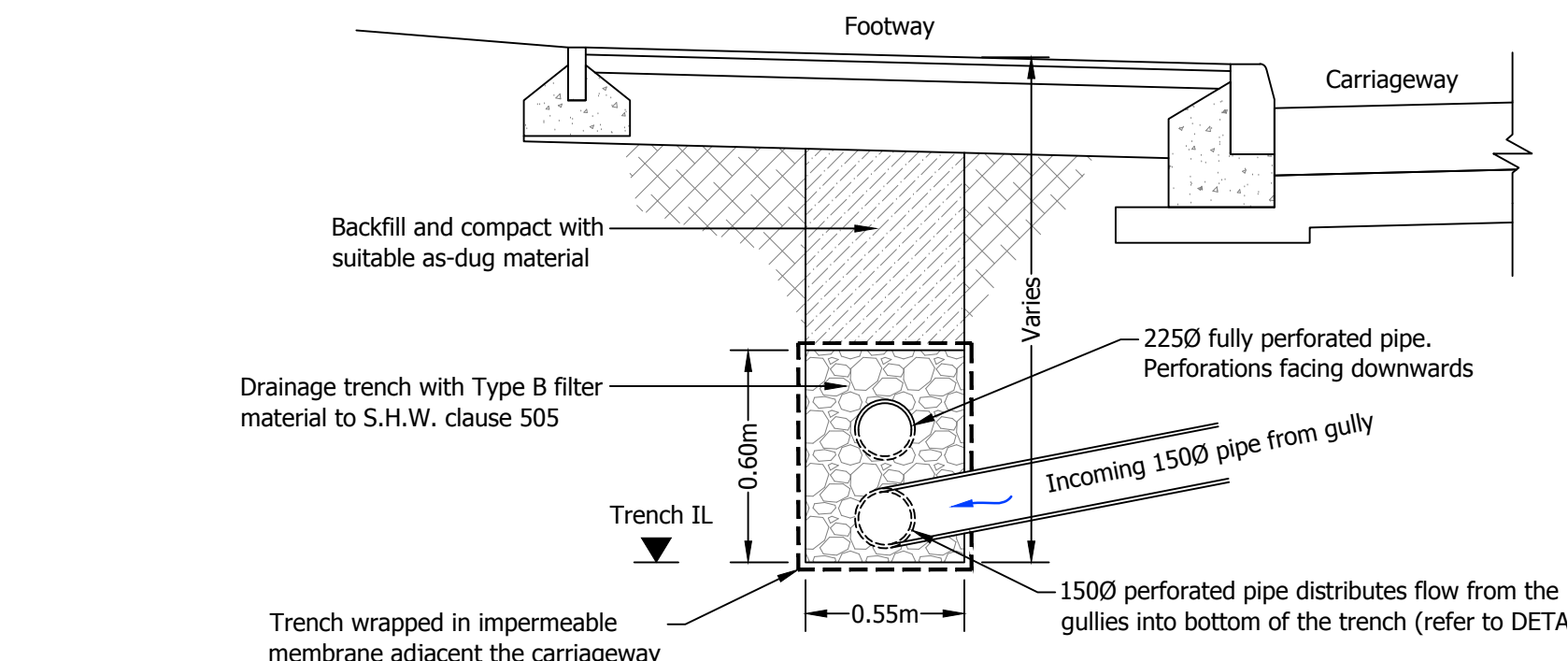
- This drawing is not to be scaled.
- To be read in conjunction with:  
Drainage General Arrangement drawing reference  
A/PHLITTLE-INT.1/112-1, -/2;  
Construction Treatments drawing reference  
A/PHLITTLE-INT.1/111-1, -/2;  
Adopted & Non Adopted Roads Construction Details drawing  
reference A/PHLITTLE-INT.2\_MB/C/01.



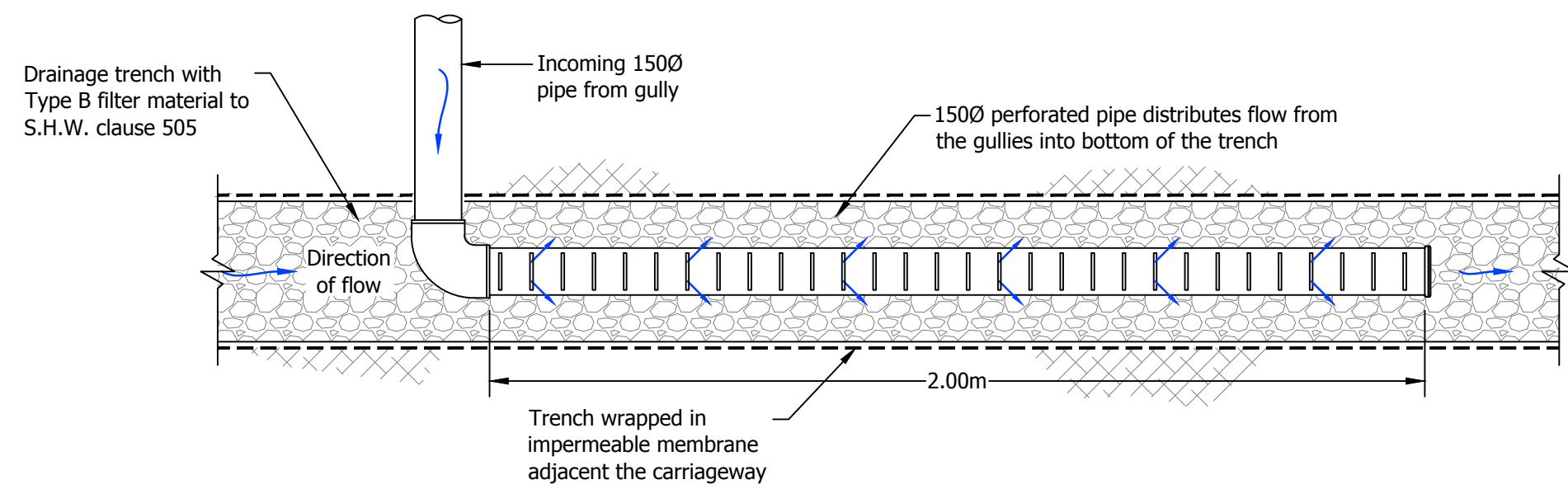
TYPICAL CROSS SECTION THROUGH FILTER TRENCH AND ESTATE ROAD



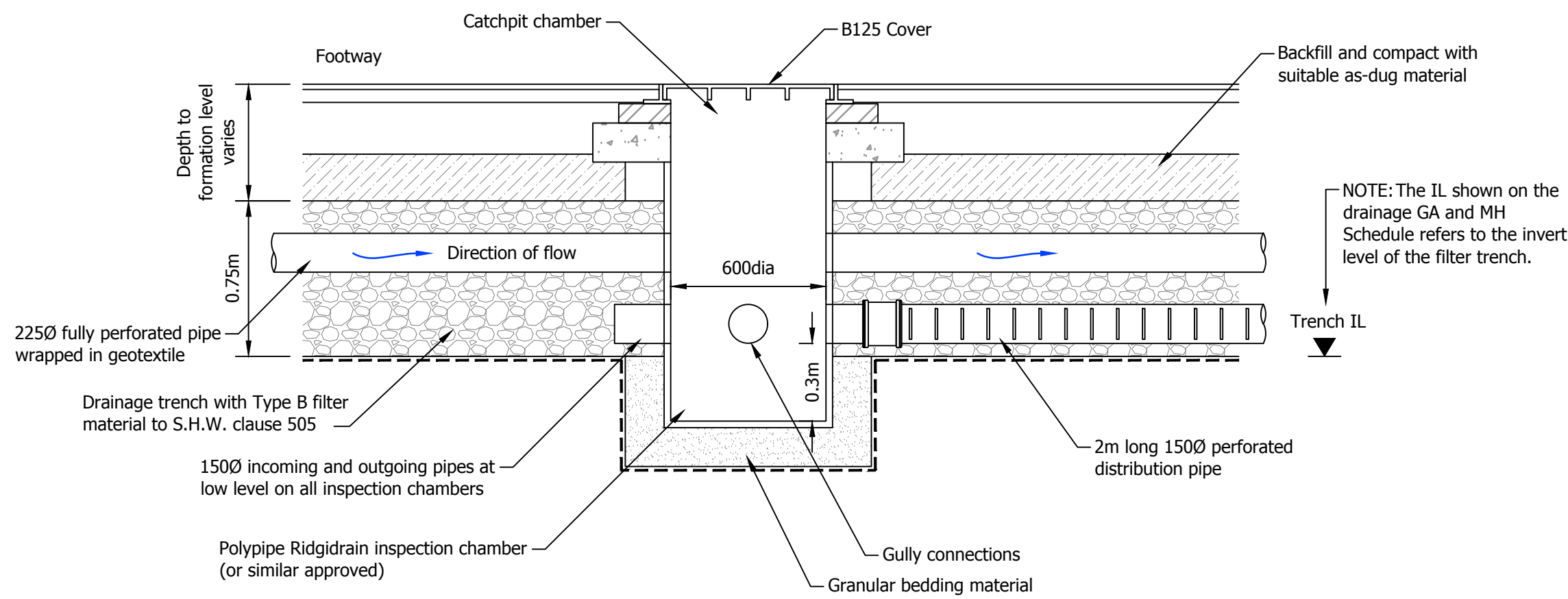
TYPICAL CROSS SECTION THROUGH FILTER TRENCH AND ROAD 6



DETAIL A: FILTER TRENCH CROSS SECTION



DETAIL B: DISTRIBUTION PIPE PLAN VIEW



DETAIL C: LONG SECTION THROUGH FILTER TRENCH AND INSPECTION CHAMBER

FOR CONSTRUCTION

|    |                                  |    |            |
|----|----------------------------------|----|------------|
| C1 | Initial construction issue. (IC) | SF | 20/02/2018 |
|----|----------------------------------|----|------------|

| rev. | amendment | checked | date |
|------|-----------|---------|------|
|------|-----------|---------|------|

**mb**  
mayer brown

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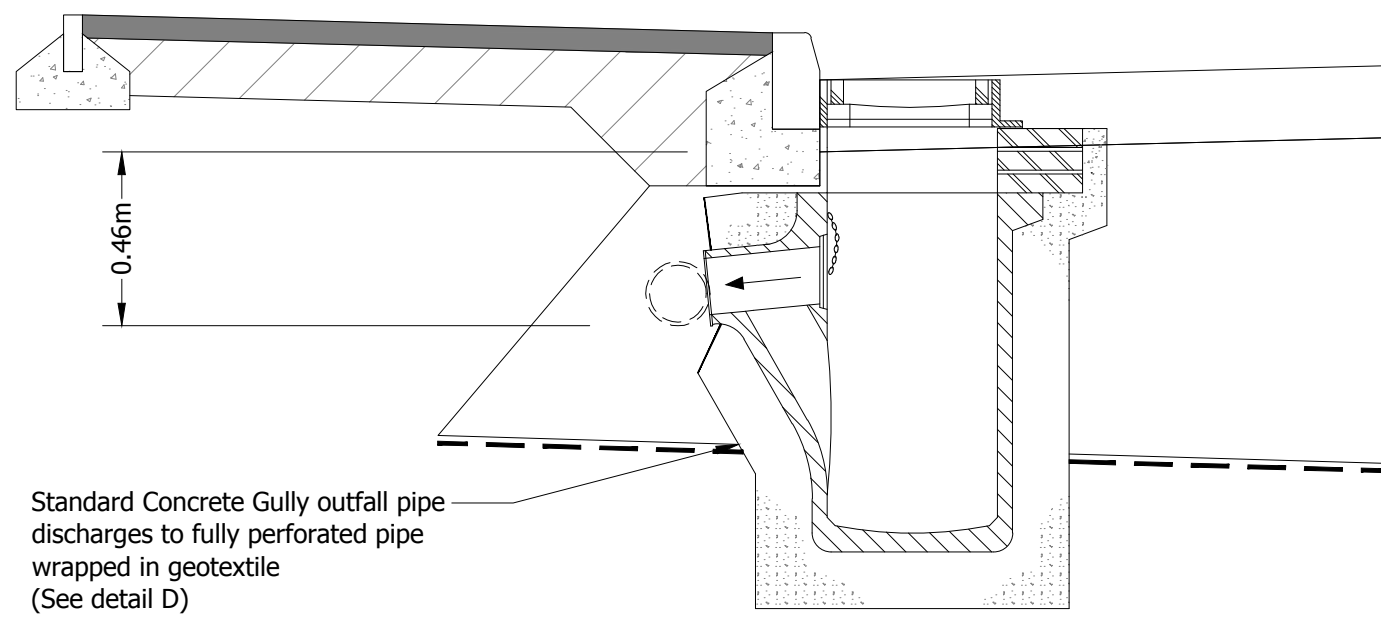
|                |                                                                         |          |                  |
|----------------|-------------------------------------------------------------------------|----------|------------------|
| client         | PERSIMMON HOMES THAMES VALLEY                                           |          |                  |
| project        | NORTH LITTLEHAMPTON PHASE 2<br>PARCEL C1 AND PART PARCELS B2, B4 AND C2 |          |                  |
| scale          | 1:20                                                                    | drawn by | IC checked by SF |
| date           | FEBRUARY 2018                                                           | cad file | MBC01.DWG        |
| title          | FILTER TRENCH CONSTRUCTION DETAIL                                       |          |                  |
| drawing number | A/PHLITTLE-INT.2_MB/F/03                                                |          | rev. C1          |

## A1 ORIGINAL

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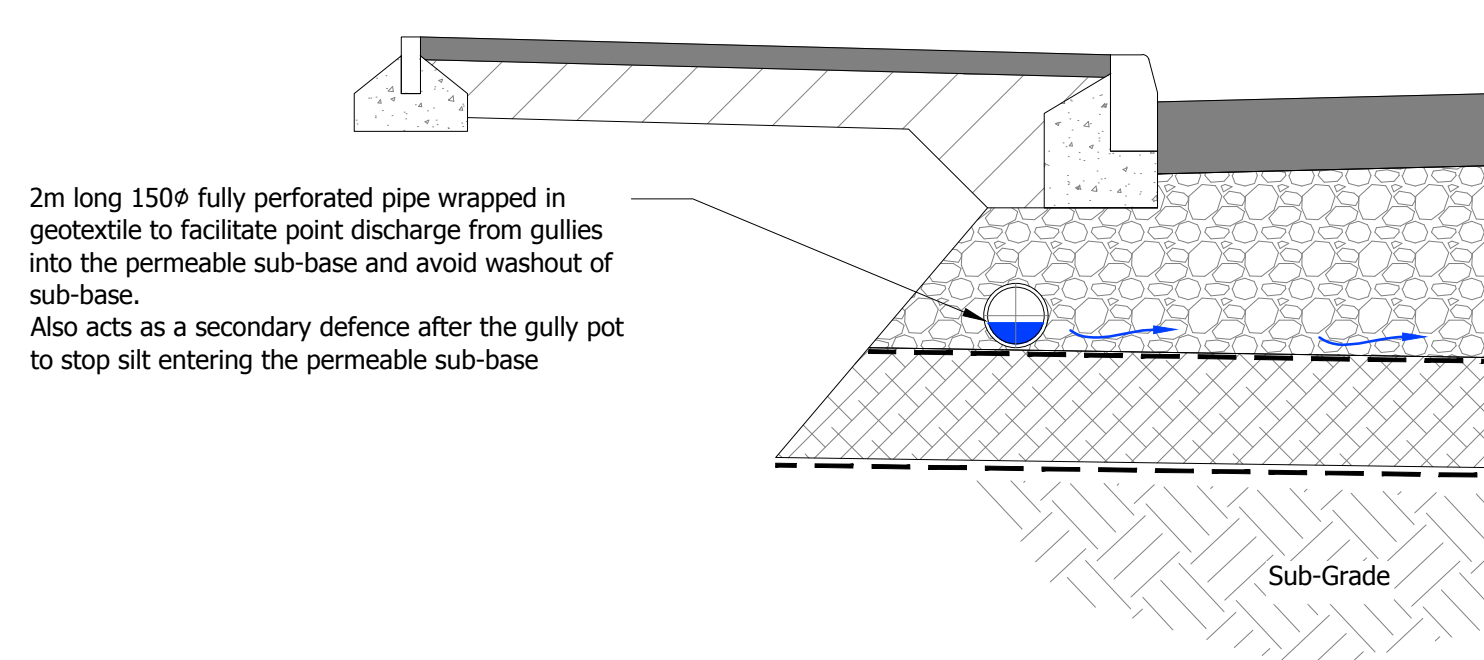
## NOTES

1. Carriageway sub-base and capping layer thicknesses are to be determined in accordance with the WSCC detail numbered S278/38/21, unless otherwise agreed.
2. The CBR of the subgrade has been assumed to be 2%. The Contractor is responsible for determining the subgrade CBR values prior to commencement of the works via long term laboratory testing. The CBR test locations, values and hence the road foundation thicknesses shall be agreed in writing with the Highway Authority prior to constructing these elements.
3. No material within 450mm of the carriageway surface shall be frost susceptible.
4. Where directed by the Engineer the Contractor shall carry out additional testing in order to prove the CBR value of the sub-grade material.
5. All works and materials shall comply with the Highways Agency Manual of Contract Documents for Highway Works (MCHW) and West Sussex County Council Standard details.

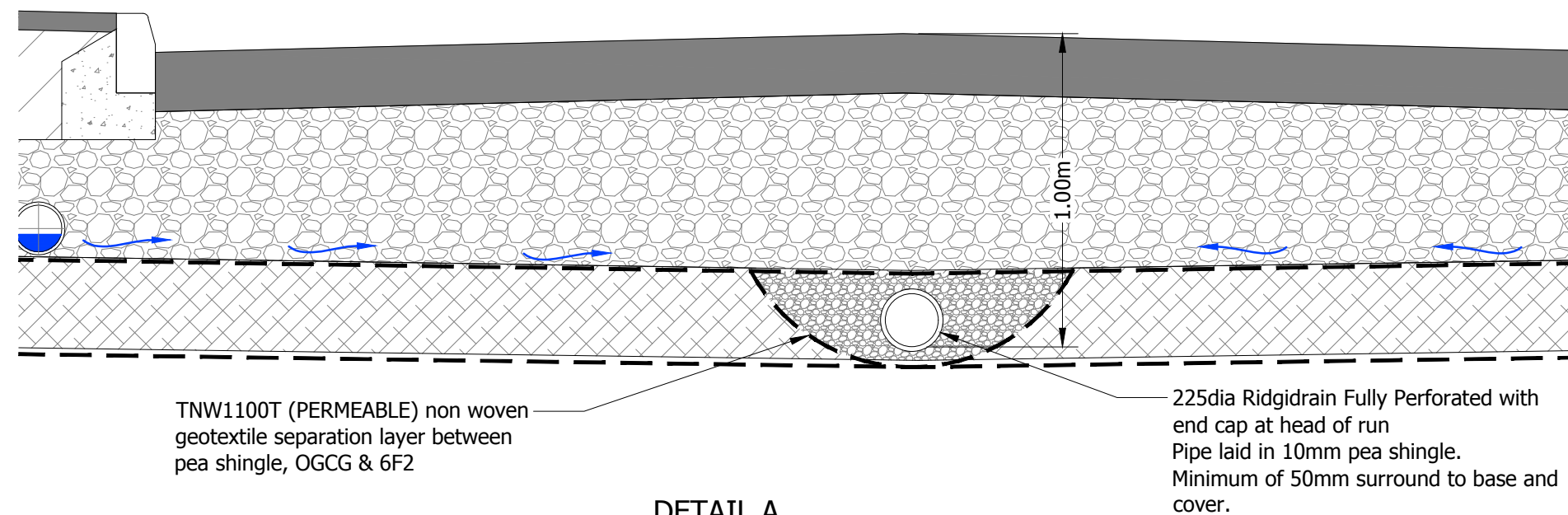


### DETAIL C

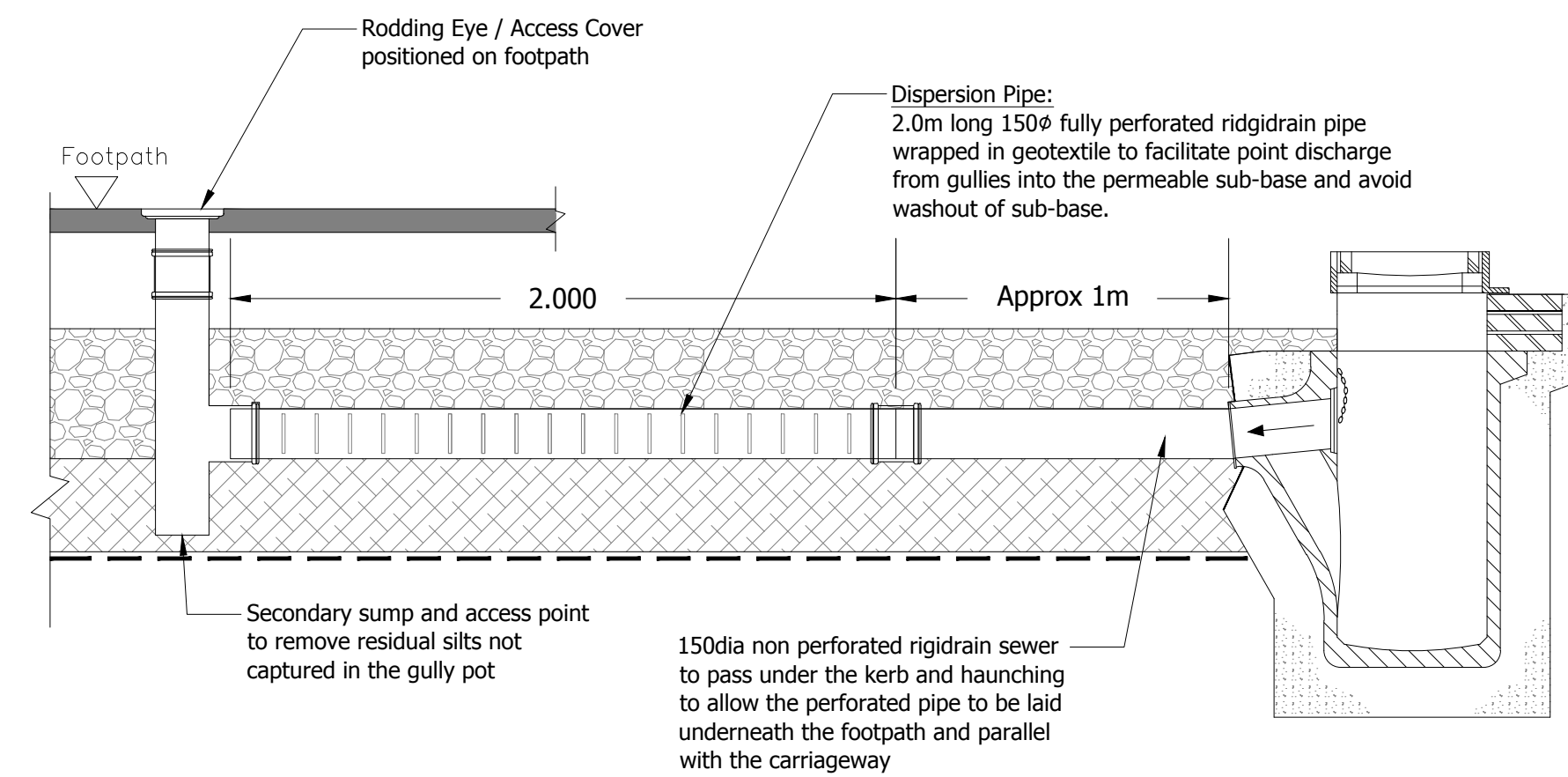
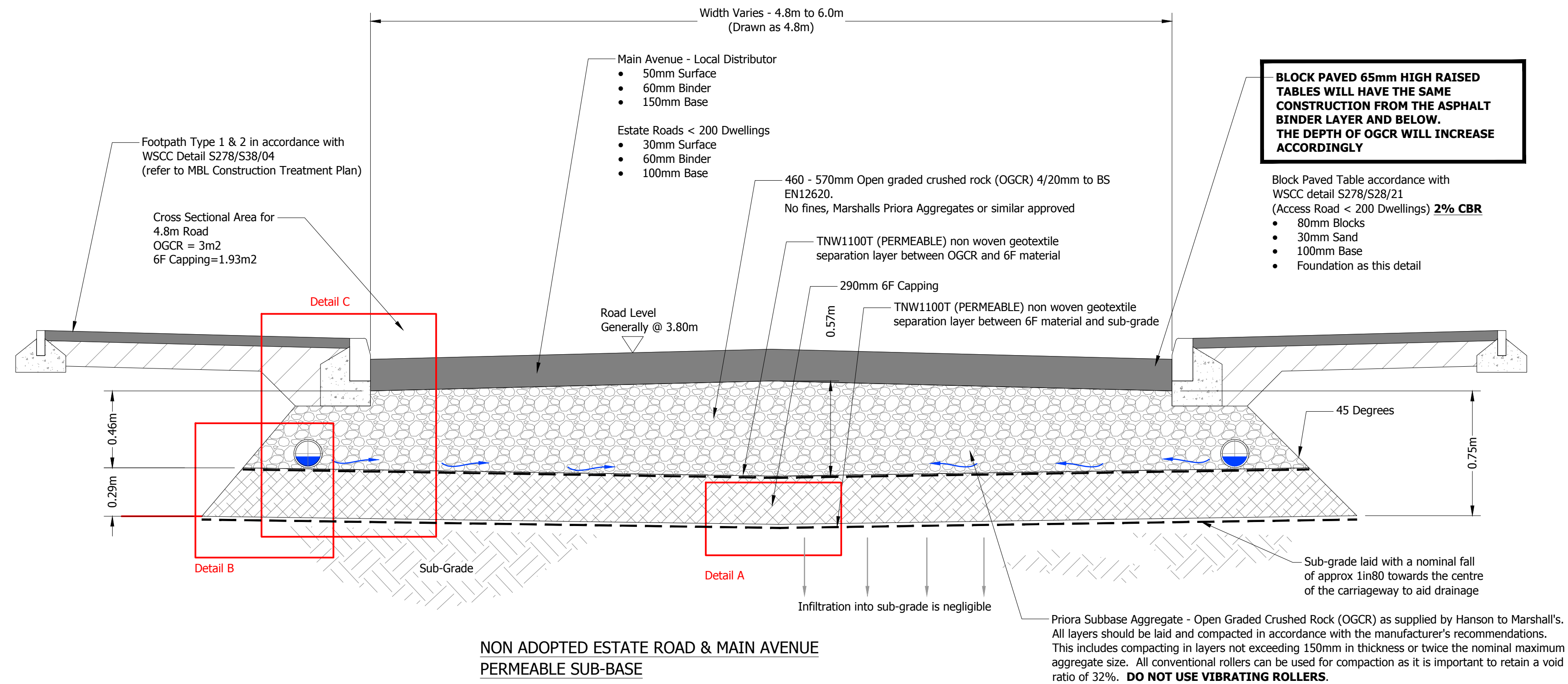
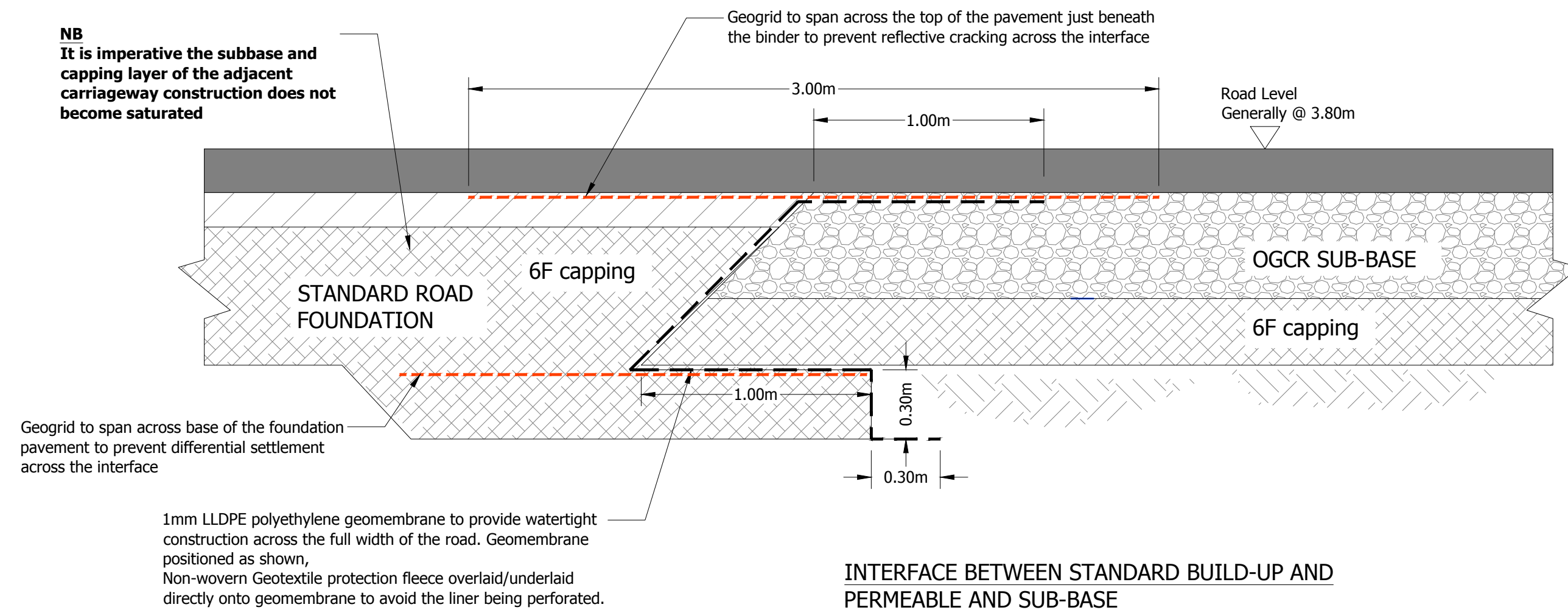
GULLY CONNECTION INTO PERMEABLE SUB-BASE



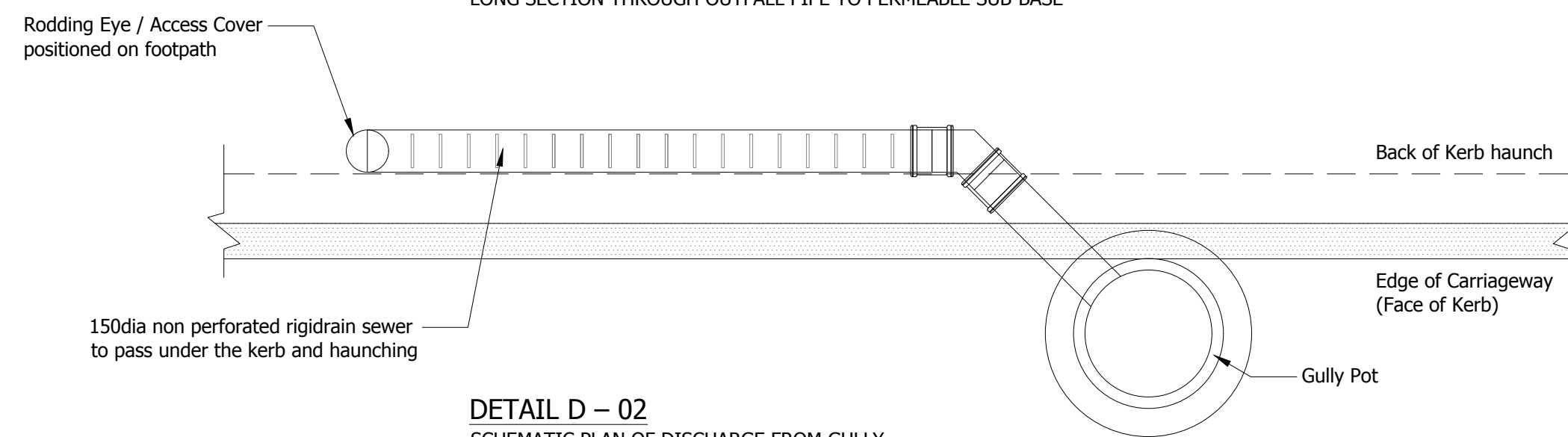
**DETAIL B**  
PERFORATED DISPERSION PIPE WITHIN SUB-BASE



**DETAIL A**  
COLLECTION PIPE TO DISCHARGE INTO SEWERS  
FALLING IN OPPOSITE DIRECTION TO CARRIAGEWAY



**DETAIL D - 01**  
LONG SECTION THROUGH OUTFALL PIPE TO PERMEABLE SUB-BASE



**DETAIL D – 02**  
SCHEMATIC PLAN OF DISCHARGE FROM GULLY

(FOR CONSTRUCTION)

|    |                                                                       |    |            |
|----|-----------------------------------------------------------------------|----|------------|
| C2 | References to flood levels on permeable sub-base roads removed. (OJN) | SF | 10/01/2019 |
| C1 | Construction issue. (OJN)                                             | SF | 09/02/18   |
| T1 | Initial issue. (SF)                                                   | SF | 08/02/18   |

|      |           |         |      |
|------|-----------|---------|------|
| rev. | amendment | checked | date |
|------|-----------|---------|------|



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client

PERSIMMON HOMES THAMES VALLEY

project

NORTH LITTLEHAMPTON PHASE 2  
PARCEL C1 AND PART PARCEL B2, B4 AND C2

|       |      |          |    |            |    |
|-------|------|----------|----|------------|----|
| scale | 1:20 | drawn by | SF | checked by | SF |
|-------|------|----------|----|------------|----|

|      |               |          |           |
|------|---------------|----------|-----------|
| date | FEBRUARY 2018 | cad file | MBC01.DWG |
|------|---------------|----------|-----------|

title

PERMEABLE SUB-BASE ROAD  
CONSTRUCTION DETAILS

|                          |      |
|--------------------------|------|
| drawing number           | rev. |
| A/PHLITTLE-INT.2_MB/F/02 | C2   |

## **APPENDIX K: Free Discharge Rates from Phase 2 Sub-Catchment**

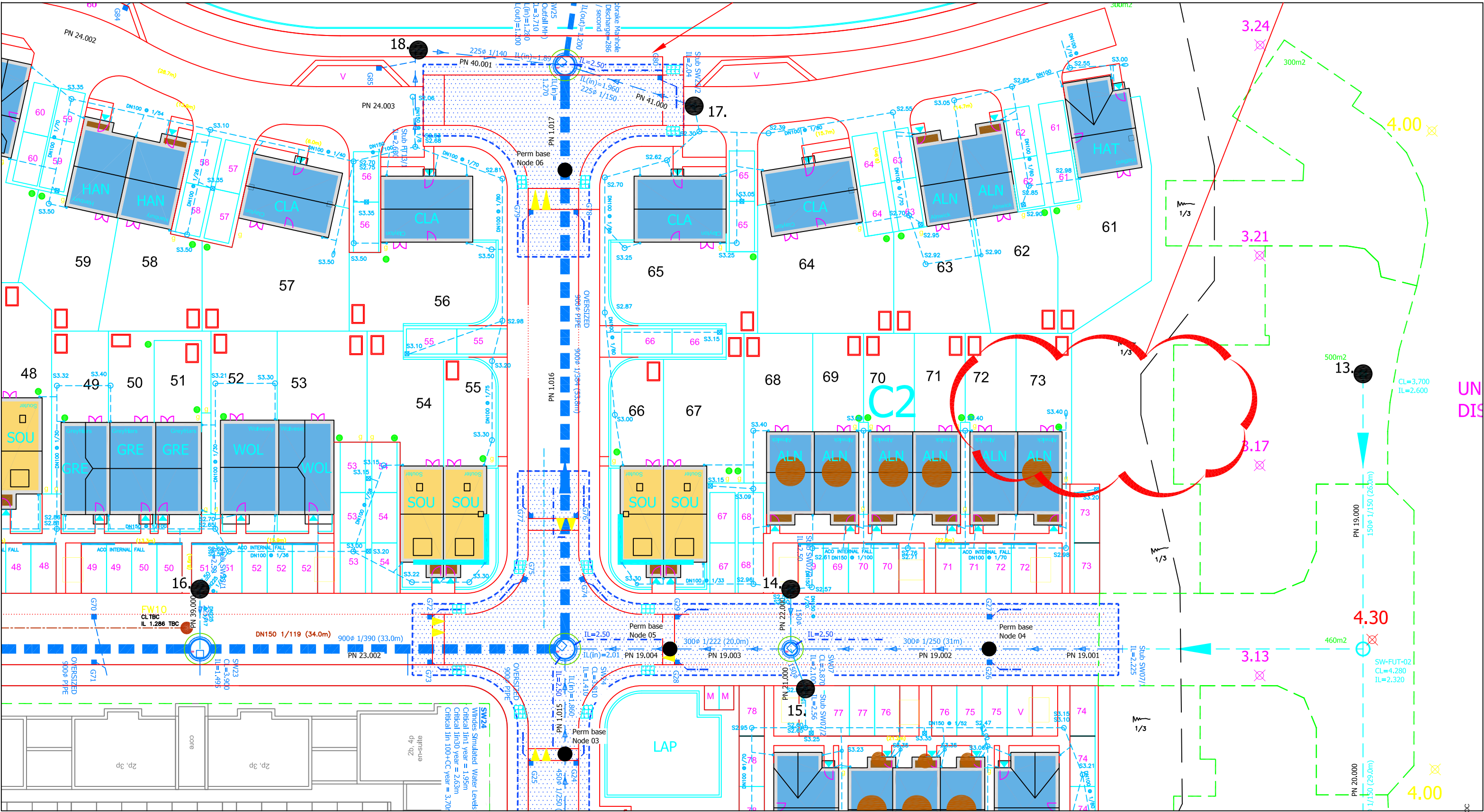
Land North of Toddington Lane, Drainage Strategy, West of Wetlands

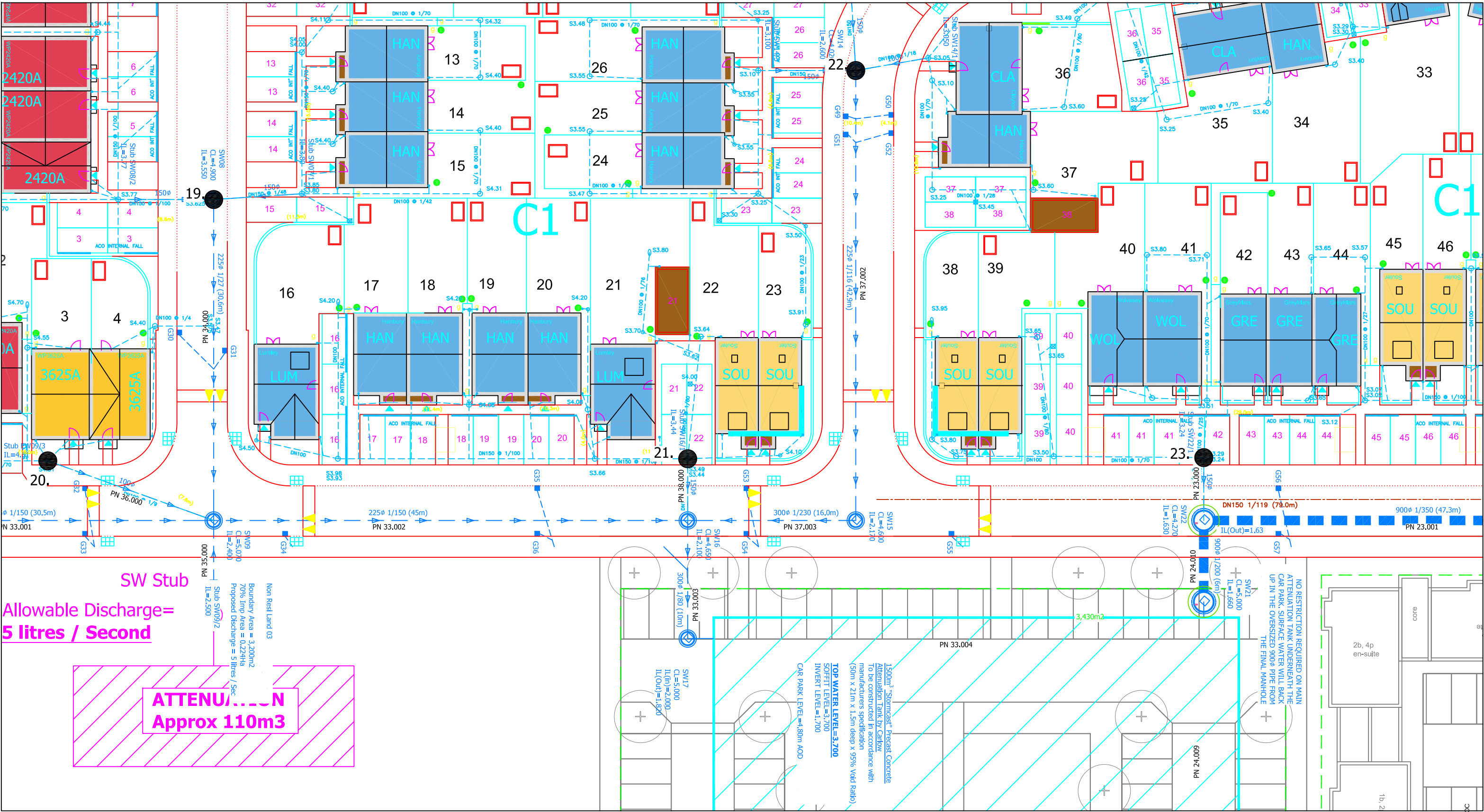
Parcels B2, B4 Partial, C1, C2 & C4

| Sub Catchment Locations | Windes Pipe Number | Critical Storm (1in100yr event) | Peaks Discharge Rates Litres / Sec (Critical Storm) |         |              | Flood volume for 1in100yr+CC |
|-------------------------|--------------------|---------------------------------|-----------------------------------------------------|---------|--------------|------------------------------|
|                         |                    |                                 | 1in1yr                                              | 1in30yr | 1in100yr +CC |                              |
| 1                       | 8.000              | 15min                           | 3.6                                                 | 11.2    | 19.8         | 0.45                         |
| 2                       | 9.000              | 15min                           | 5.1                                                 | 16.1    | 33.1         | 0                            |
| 3                       | 10.001             | 15min                           | 9.3                                                 | 31.6    | 41           | 16.8                         |
| 4                       | 11.000             | 15min                           | 12.5                                                | 40.6    | 56.5         | 5.1                          |
| 5                       | 13.000             | 30min                           | 5.7                                                 | 17.7    | 32.4         | 0                            |
| 6                       | 15.000             | 15min                           | 8.4                                                 | 23.2    | 23.3         | 12.4                         |
| 7                       | 14.000             | 15min                           | 10.5                                                | 28.6    | 26.2         | 16.5                         |
| 8                       | 16.000             | 15min                           | 11.4                                                | 35.8    | 61.9         | 0.435                        |
| 9                       | 17.000             | 30min                           | 9.1                                                 | 24.9    | 51.5         | 0.68                         |
| 10                      | 18.000             | 15min                           | 18.4                                                | 55      | 104.3        | 0                            |
| 11                      | 31.000             | 15min                           | 22.6                                                | 62.3    | 74.1         | 23.5                         |
| 12                      | 20.000             | 15min                           | 6.3                                                 | 18      | 25.4         | 5.5                          |
| 13                      | 19.000             | 15min                           | 5.3                                                 | 15.7    | 22.3         | 3.5                          |
| 14                      | 22.000             | 240min                          | 1.9                                                 | 6.5     | 18           | 0                            |
| 15                      | 21.000             | 240min                          | 1.6                                                 | 5.6     | 15.5         | 0                            |
| 16                      | 39.000             | 240min                          | 2.1                                                 | 11.8    | 22.6         | 0                            |
| 17                      | 41.000             | 240min                          | 2.5                                                 | 17.6    | 30.4         | 0                            |
| 18                      | 40.001             | 240min                          | 2.9                                                 | 21.8    | 32.3         | 0                            |
| 19                      | 34.000             | 15min                           | 10.3                                                | 33.8    | 55.9         | 0                            |
| 20                      | 36.000             | 15min                           | 2.9                                                 | 9.5     | 17.5         | 0                            |
| 21                      | 38.000             | 15min                           | 7.3                                                 | 23.9    | 44.1         | 0                            |
| 22                      | 37.002             | 15min                           | 21.5                                                | 56.5    | 66.6         | 0                            |
| 23                      | 23.000             | 240min                          | 2.1                                                 | 5.3     | 10.3         | 0                            |









SW Stub

Allowable Discharge =  
5 litres / Second

ATTENUATION  
Approx 110m<sup>3</sup>

Non Resil Land 03  
Boundary Area = 3,200m<sup>2</sup>  
70% Imp Area = 0.224Ha  
Proposed Discharge = 5 litres / Sec  
Stub SW09/2  
IL = 2.500

## **APPENDIX L: List of Drawings in West of Wetlands Catchment**

## **HAMPTON PARK, TODDINGTON LANE, LITTLEHAMPTON**

### ***West of Wetlands Area – List of Drawings***

#### **Phase 1**

##### Civils Drawings– Glanville Consulting Engineers

(Parcel A1 - Planning reference LU/347/14/RES)

- CV8150558/100 RevC2 – Engineering Layout (1 of 3)
- CV8150558/101 RevC3 – Engineering Layout (2 of 3)
- CV8150558/102 RevC2 – Engineering Layout (1 of 3)
- CV8150558/103 RevC2 – Drainage Layout (1 of 3)
- CV8150558/104 RevC2 – Drainage Layout (2 of 3)
- CV8150558/105 RevC2 – Drainage Layout (3 of 3)
- CV8150558/112 RevC1 – Drainage Construction Details (1 of 2)
- CV8150558/113 RevC1 – Drainage Construction Details (2 of 2)

##### Civils & Drainage Drawings– Mayer Brown Ltd

(Internal Distribution Road – IDR)

- A/PHLITTLE.2/IDR-111 Rev C1 – S38 Highway Works Construction Treatment Drawing
- A/PHLITTLE.2/IDR-112 Rev C1 – S38 Highway Works Drainage and Ducting Drawing

##### Civils & Drainage Drawings– Mayer Brown Ltd

(Toddington Lane S278 works)

- A/PHLITTLE.2/112 Rev U – S278 Highway Works Drainage and Ducting Drawing

### **Planning reference LU/79/16/DOC & LU/96/16/DOC (Bovis Site)**

(Parcels B3 & B5)

##### Civils & Drainage Drawings– Bovis Homes Ltd

- LITL-502/1 RevD – Engineering Layout, Sheet 1
- LITL-502/2 RevD – Engineering Layout, Sheet 2
- LITL-502/3 RevH – Engineering Layout, Sheet 3
- LITL-503/1 RevC – Road & Sewer Sections, Sheet 1
- LITL-503/2 RevC – Road & Sewer Sections, Sheet 2
- LITL-503/3 RevC – Road & Sewer Sections, Sheet 3
- LITL-504 – Typical Road Details
- LITL-505 – Typical Sewer Details
- LITL-506 – Private Drive Details, plots 6 to 117

##### Civils Drawings– Glanville Consulting Engineers

- CV8140927/611 RevP2 – B3/B5 Access Road Construction Plan
- CV8140927/612 RevP2 – B3/B5 Access Road Drainage Plan

- CV8140927/613 – B3/B5 Access Road Highway Construction Details

## **Phase 2 Application: Planning reference LU/121/17/RES**

(Parcel C1, Partial C2, Partial B2 & Partial B4)

### **Estate Road & Infrastructure – Mayer Brown Ltd**

- A/PHLITTLE-INT.1/110-1 RevC2 – General arrangement Drawings (1 of 2)
- A/PHLITTLE-INT.1/110-2 RevC2 – General arrangement Drawings (2 of 2)
- A/PHLITTLE-INT.1/111-1 RevC2 – Construction Treatments Drawings (1 of 2)
- A/PHLITTLE-INT.1/111-2 RevC2 – Construction Treatments Drawings (2 of 2)
- A/PHLITTLE-INT.1/112-1 RevC3 – Drainage General Arrangement (1 of 2)
- A/PHLITTLE-INT.1/112-2 RevC3 – Drainage General Arrangement (2 of 2)
- A/PHLITTLE-INT.2/MB/C/01 RevC3 – Adopted & Non Adopted Roads Construction Details
- A/PHLITTLE-INT.2/MB/F/02 RevC2 – Permeable Sub-Base Road Construction Details
- A/PHLITTLE-INT.2/MB/F/03 RevC1 – Filter Trench Construction Detail

### **Plot Area Civil Design – MJA Consulting Engineers**

- 5691:01 Rev B – Drainage Layout (Sheet 1)
- 5691:02 Rev B – Drainage Layout (Sheet 2)
- 5691:03 Rev E – Levels Plan (Sheet 1)
- 5691:04 Rev C – Levels Plan (Sheet 2)
- 5691:05 Rev A – Drainage, Area in Abeyance
- 5691:06 Rev A – Levels, Area in Abeyance
- 5691:20 Rev A – Construction Details (Sheet 1) – Hard Standing Areas
- 5691:21 1<sup>st</sup> Issue – Construction Details (Sheet 2), Private Drainage 1
- 5691:22 1<sup>st</sup> Issue – Construction Details (Sheet 3), Private Drainage 2
- 5691:40 1<sup>st</sup> Issue – External Works (Sheet 1)
- 5691:41 1<sup>st</sup> Issue – External Works (Sheet 2)

## **Lyminster By Pass, Planning reference LU/278/17/RES**

(Northern Roundabout)

### **Civils & Drainage Drawing – Mayer Brown Ltd**

- PHLI-MB-S278-GF-DR-D-312 RevP8 – Proposed S38/S278 Highway Works Southern Bypass Roundabout, Drainage and Ducting Drawing

