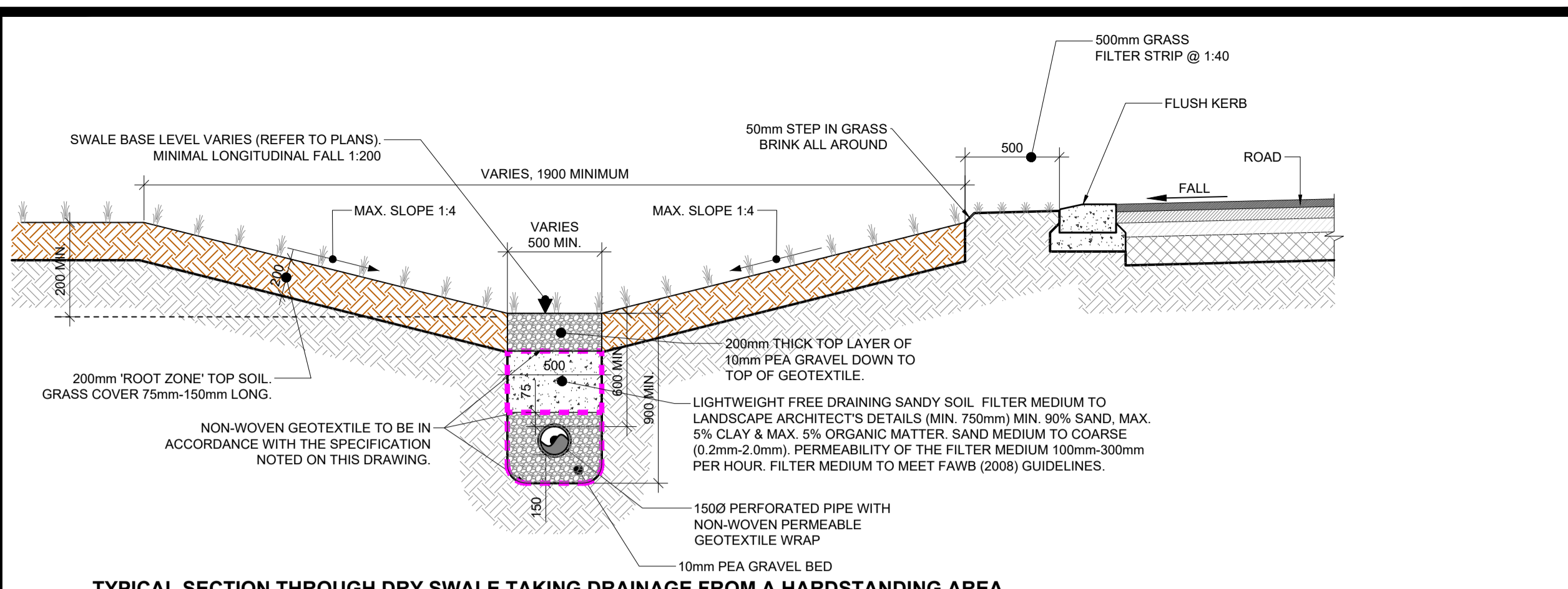


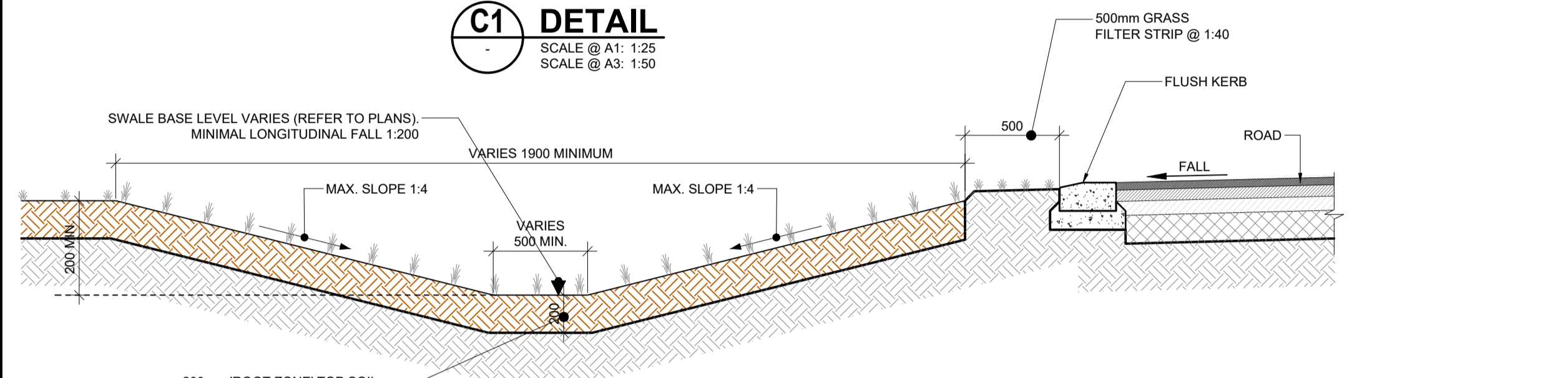
**NOTES**

1. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL ENGINEERS & ARCHITECTS DRAWINGS FIGURED DIMENSIONS ONLY (NOT SCALING) TO BE USED. WHERE A CONFLICT OF INFORMATION EXISTS OR IF IN ANY DOUBT - 'ASK'.
2. CONSULTANTS TO BE INFORMED IMMEDIATELY OF ANY DISCREPANCIES BEFORE WORK PROCEEDS.



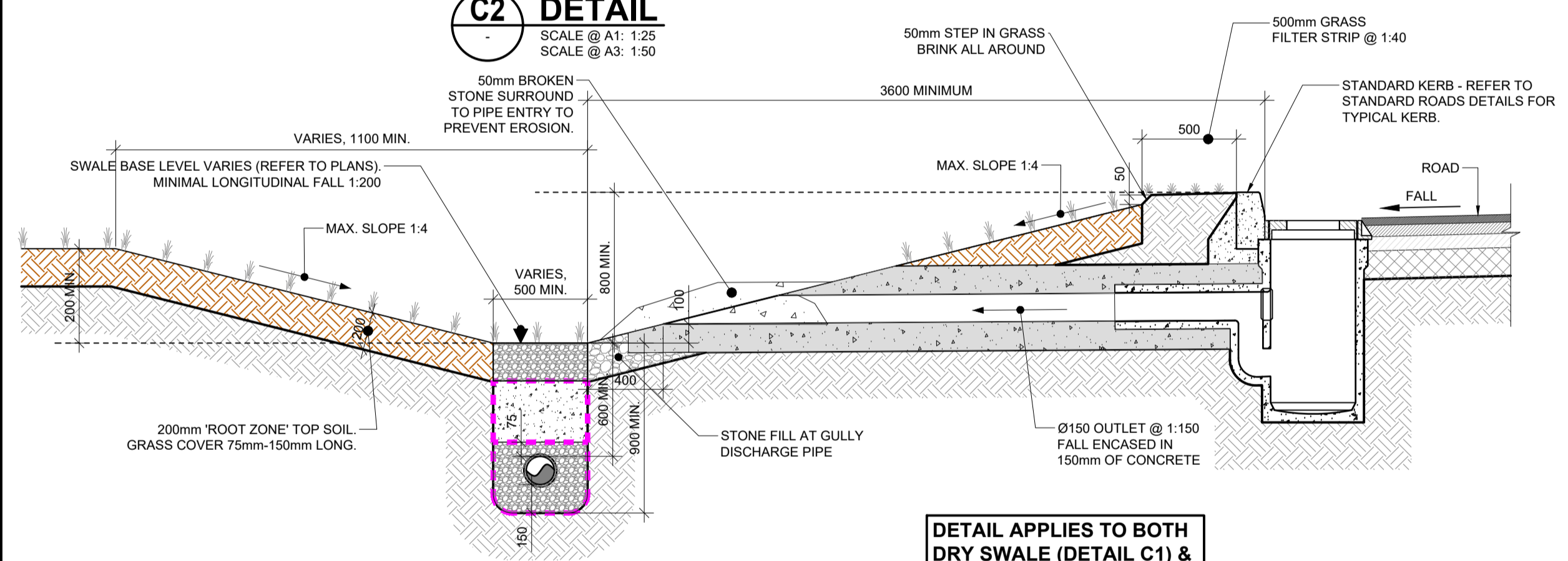
**TYPICAL SECTION THROUGH DRY SWALE TAKING DRAINAGE FROM A HARDSTANDING AREA**

**C1 DETAIL**  
SCALE @ A1: 1:25  
SCALE @ A3: 1:50



**TYPICAL SECTION THROUGH WET SWALE TAKING DRAINAGE FROM A HARDSTANDING AREA**

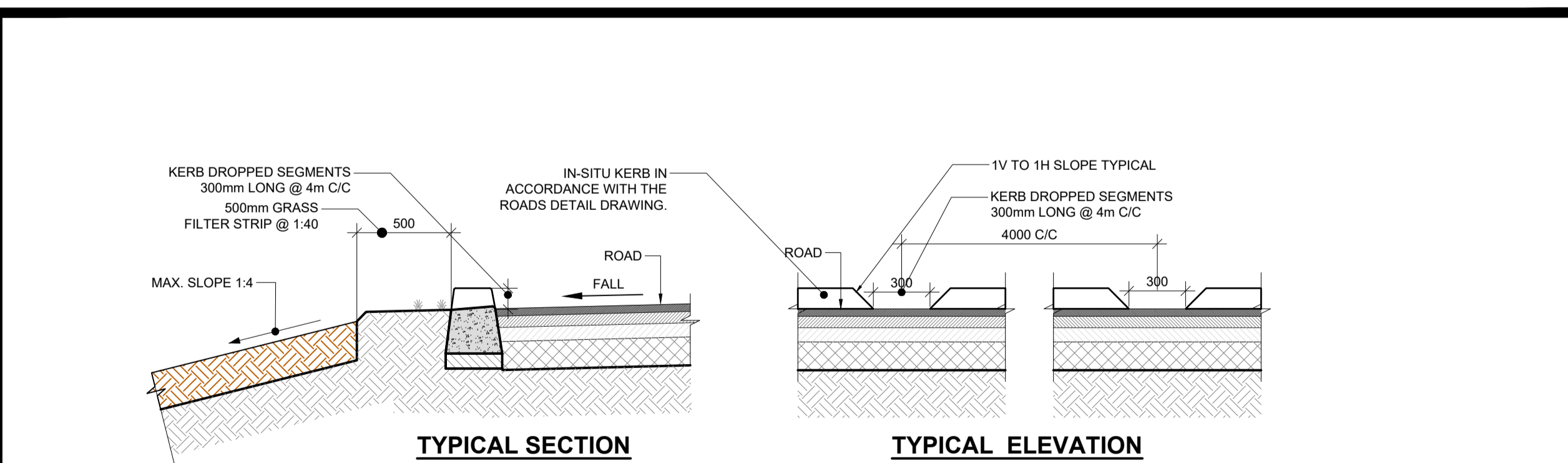
**C2 DETAIL**  
SCALE @ A1: 1:25  
SCALE @ A3: 1:50



**TYPICAL SECTION THROUGH SWALE TAKING DRAINAGE FROM A ROAD GULLY**

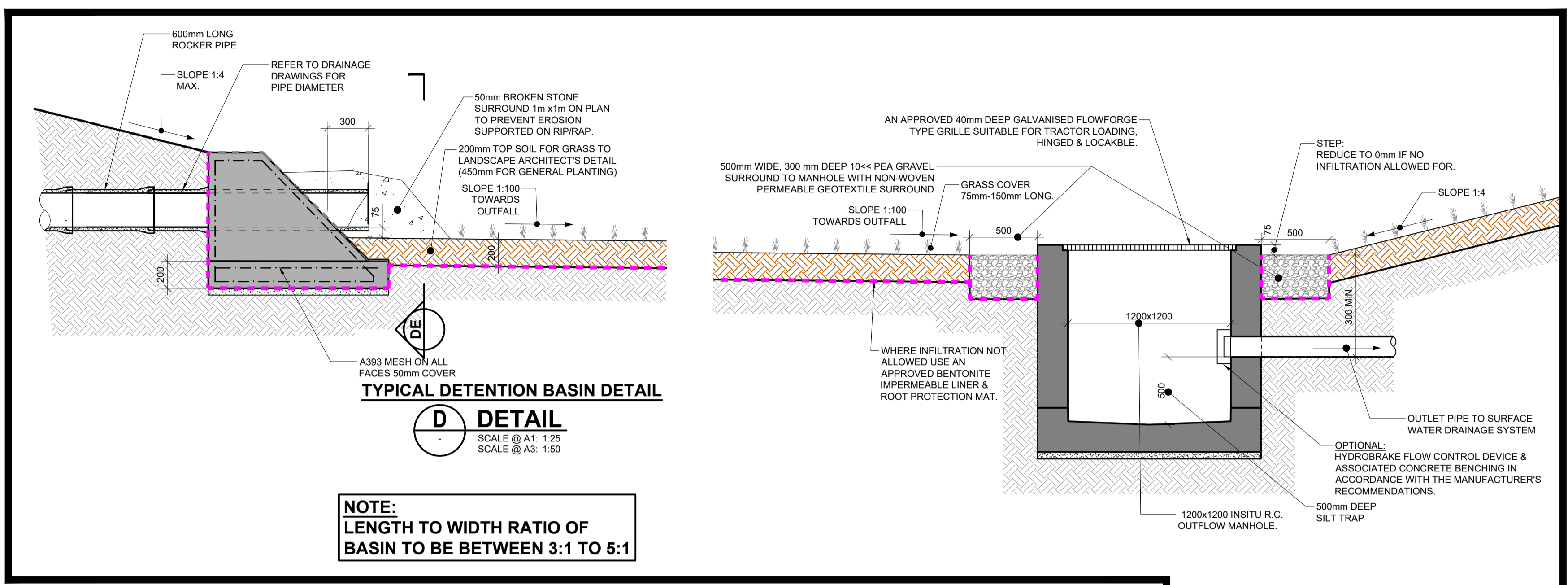
**C3 DETAIL**  
SCALE @ A1: 1:25  
SCALE @ A3: 1:50

**DETAIL APPLIES TO BOTH DRY SWALE (DETAIL C1) & WET SWALE (DETAIL C2).**



**TYPICAL SECTION TYPICAL ELEVATION  
DROPPED KERB DETAIL @ 4m C/C  
(ALTERNATIVE TO FLUSH KERB DETAIL FOR OVER-THE-EDGE ROAD DRAINAGE)**

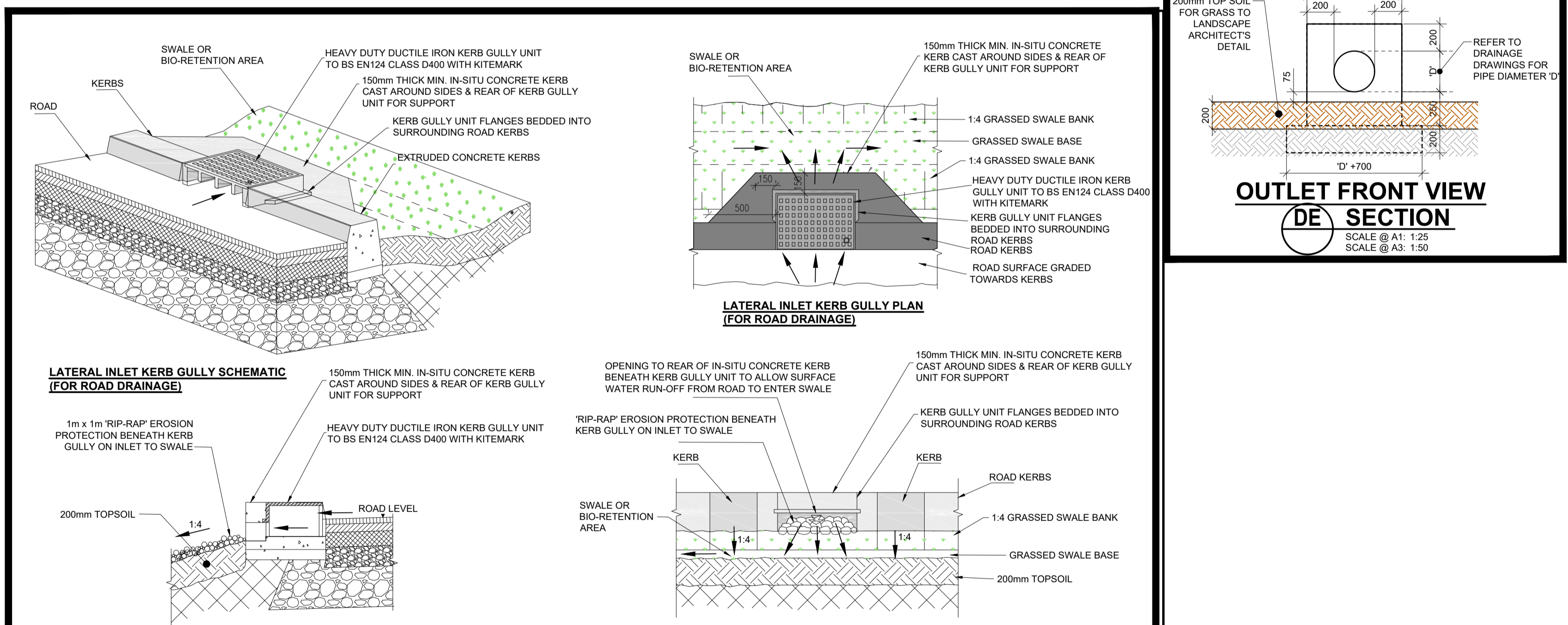
**F DETAIL**  
SCALE @ A1: NTS  
SCALE @ A3: NTS



**TYPICAL DETENTION BASIN DETAIL**

**D DETAIL**  
SCALE @ A1: 1:25  
SCALE @ A3: 1:50

**NOTE:  
LENGTH TO WIDTH RATIO OF  
BASIN TO BE BETWEEN 3:1 TO 5:1**



**LATERAL INLET KERB GULLY SCHEMATIC (FOR ROAD DRAINAGE)**

**LATERAL INLET KERB GULLY TO SWALE CROSS SECTION (FOR ROAD DRAINAGE)**

**LATERAL INLET KERB GULLY PLAN (FOR ROAD DRAINAGE)**

**LATERAL INLET KERB GULLY REAR ELEVATION (FOR ROAD DRAINAGE)**

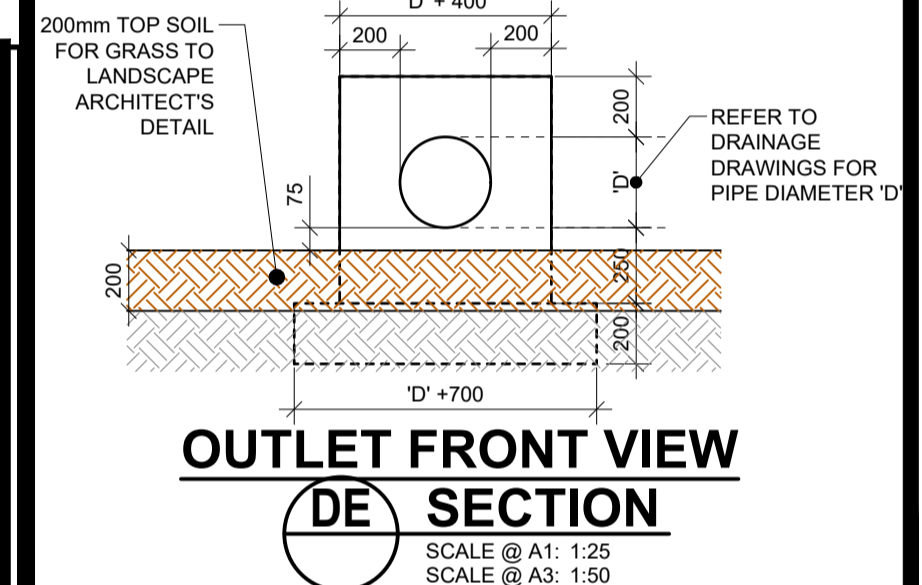
**LATERAL INLET KERB GULLY @ 4m C/C (ALTERNATIVE TO FLUSH KERB DETAIL FOR OVER-THE-EDGE ROAD DRAINAGE)**

**E DETAIL**  
SCALE @ A1: NTS  
SCALE @ A3: NTS

- MAINTENANCE OF SWALES & DETENTION BASINS:**
1. REGULAR GRASS MOWING.
  2. SEDIMENT REMOVED IF EQUAL OR MORE THAN 25mm DEEP.
  3. CLEARANCE OF ANY BLOCKAGES TO INLETS & OUTLETS.
  4. SILT TRAP CLEANING.
  5. REPAIR COMPACTED OR DAMAGED AREAS.

**NON-WOVEN GEOTEXTILE SPECIFICATION. THE GEOTEXTILE SHALL:**

- SUSTAIN A TENSILE LOAD OF NOT LESS THAN 5.0kN/m AT BREAK AND HAVE A MINIMUM FAILURE STRAIN OF 10%
- WHEN DETERMINED IN ACCORDANCE WITH IS EN ISO 10319;
- HAVE A MINIMUM PUNCTURE RESISTANCE OF 1200 N WHEN DETERMINED IN ACCORDANCE WITH IS EN ISO 12236;
- HAVE A SIZE DISTRIBUTION OF PORE OPENINGS SUCH THAT THE APPARENT OPENING SIZE 090 WHEN DETERMINED IN ACCORDANCE WITH IS EN ISO 12956, OR OTHER APPROPRIATE TEST, IS LESS THAN 300 MICRONS
- ALLOW WATER TO FLOW THROUGH IT, IN EITHER DIRECTION, NORMAL TO ITS PRINCIPAL PLANE AT A RATE OF NOT LESS THAN 10 l/m<sup>2</sup>/s, UNDER A CONSTANT HEAD OF WATER OF 100mm AND A MAXIMUM BREAKTHROUGH HEAD OF 50MM WHEN DETERMINED IN ACCORDANCE WITH IS EN ISO 12958.



**OUTLET FRONT VIEW SECTION DE SECTION**

SCALE @ A1: 1:25  
SCALE @ A3: 1:50

PL4	09.03.22	ISSUED FOR COMMENT	WK	POD	JPC
PL3	07.01.22	ISSUED FOR COMMENT	WK	POD	AK
ISSUE	DATE	DESCRIPTION	DRN	ORIG	P.F.

**PLANNING**

**BM**  
Dublin Office:  
Sandwith House, 52-54 Lower Sandwith Street, Dublin 2, Ireland.  
Tel: (01) 677 3200 Fax: (01) 677 3164  
London Office:  
12 Mill Street, London SE1 2AY, United Kingdom  
Tel: (0044) 084 5413 2722  
Consulting Engineers, Civil, Structural, Project Management. E-mail: bmce@bmce.ie Web: www.bmce.ie

**Barrett Mahony**  
The Institution of Structural Engineers  
**ACEI**  
International Federation of Consulting Engineers

CLIENT  
**LAND DEVELOPMENT AGENCY**

PROJECT TITLE <b>DUNDRUM CENTRAL DEVELOPMENT</b>	BM PROJECT No. <b>20.170</b>
MODEL REFERENCE	MODEL REV. SUITABILITY

DRAWING TITLE  
**SuDS DETAILS. SWALES, DETENTION BASIN & OVER-THE-EDGE ROAD DRAINAGE.**

DRAWING No. **DCD-BMD-00-00-DR-C-1210** ISSUE **PL4**