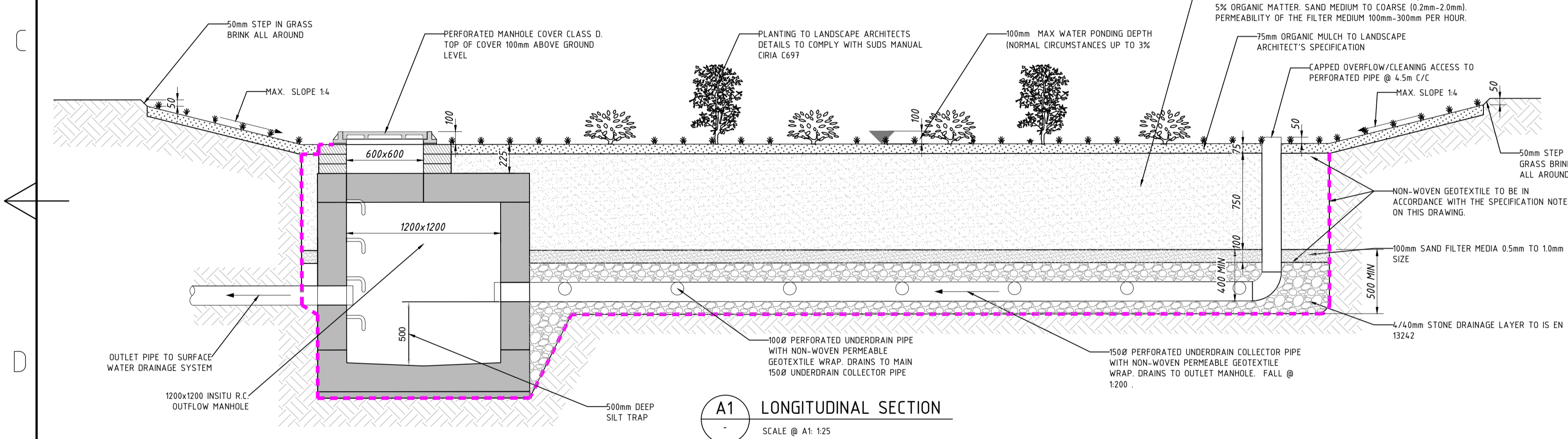
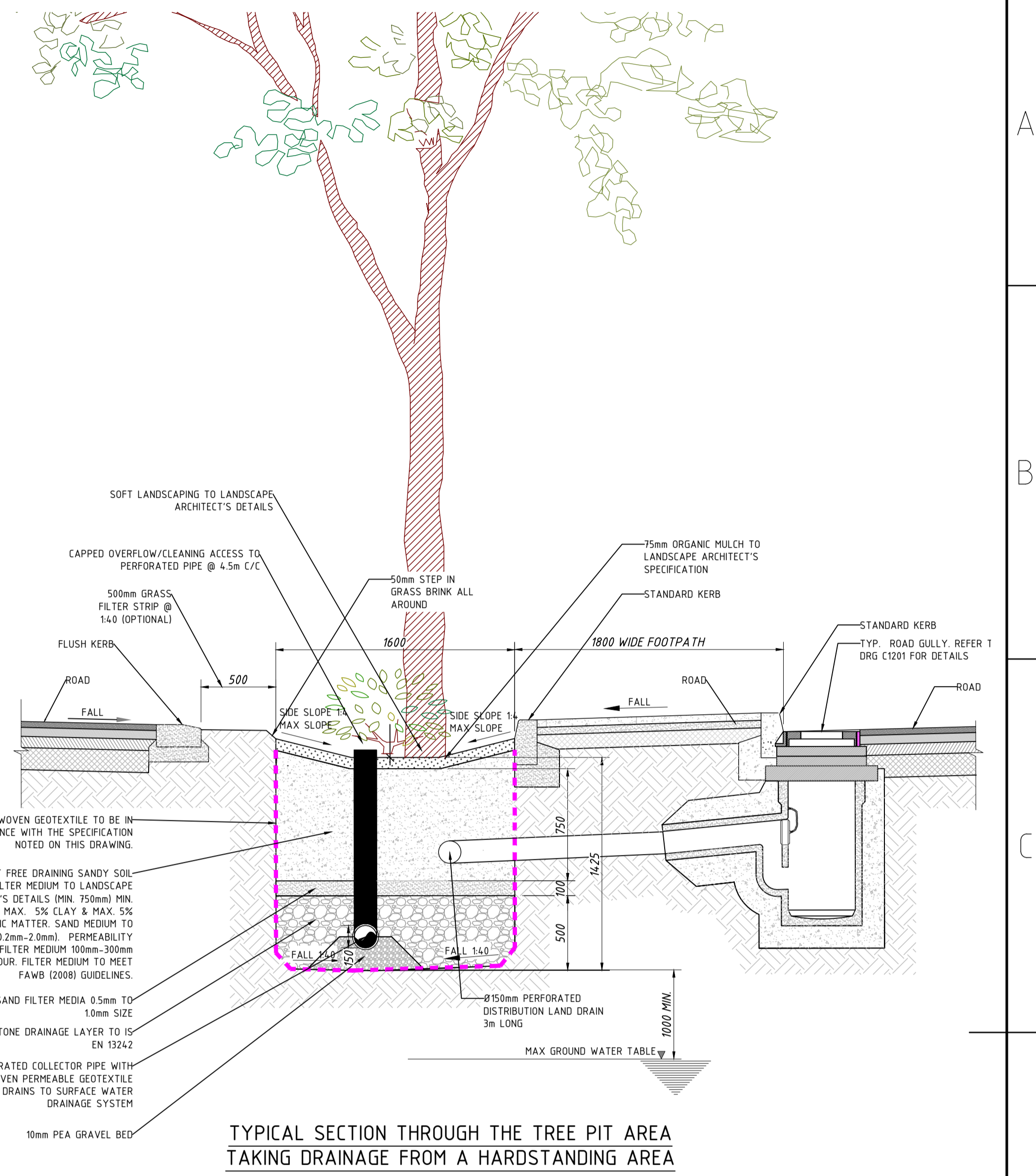


TYPICAL PLAN DETAIL OF BIO-RETENTION AREA FOR SURFACE WATER MANAGEMENT
SCALE @ A1: 125



A1 LONGITUDINAL SECTION
SCALE @ A1: 125

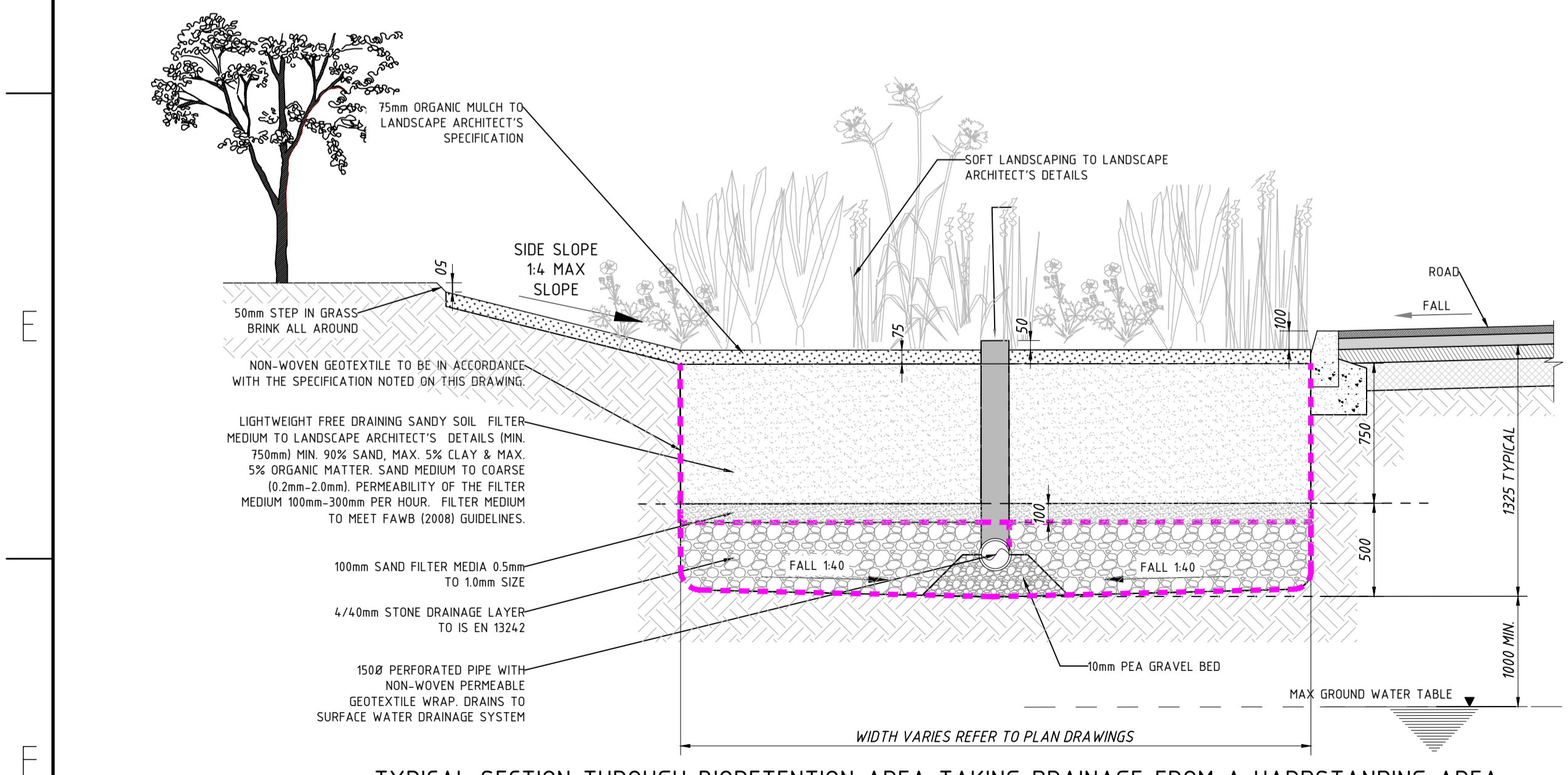


TYPICAL SECTION THROUGH THE TREE PIT AREA TAKING DRAINAGE FROM A HARDSTANDING AREA

A3 SECTION
SCALE @ A1: 120

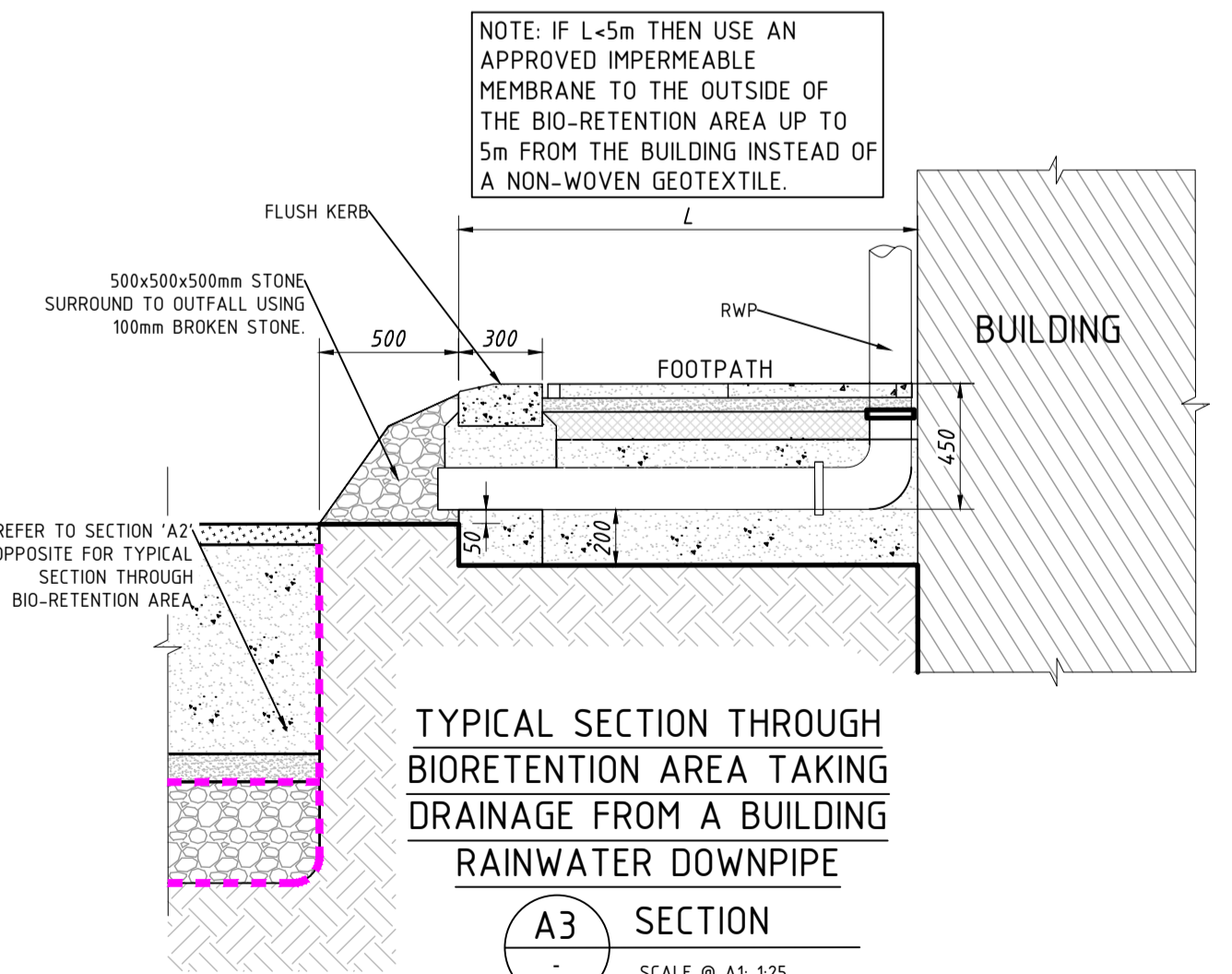
ROOTSPACE SUPPORT STRUCTURE UNDER COVERED / GRILLED TREE PITS.

IN ALL COVERED COVERED / GRILLED TREE PITS AND IN ALL INSTANCES WHERE THE TREE PIT SOIL EXTENDS BENEATH THE FOOTPATH / PAVEMENT, A PROPRIETARY ROOTSPACE PAVEMENT SUPPORT SYSTEM BY GREENLEAF IRELAND, OR EQUAL APPROVED, SHALL BE INTEGRATED ACROSS THE FULL EXTENT OF THE TREE PIT. REFER TO LANDSCAPE ARCHITECTS DRAWING FOR TREE PIT SOIL EXTENTS.



TYPICAL SECTION THROUGH BIORETENTION AREA TAKING DRAINAGE FROM A HARDSTANDING AREA

A2 SECTION
SCALE @ A1: 125



TYPICAL SECTION THROUGH BIORETENTION AREA TAKING DRAINAGE FROM A BUILDING RAINWATER DOWNPIPE

A3 SECTION
SCALE @ A1: 125

MAINTENANCE REQUIREMENTS FOR BIORETENTION SYSTEMS & TREE PITS

REGULAR INSPECTIONS
INSPECT INFILTRATION SURFACES FOR SILTING AND PONDING, RECORD DE-WATERING TIME OF THE FACILITY AND ASSESS STANDING WATER LEVELS IN UNDERDRAIN (IF APPROPRIATE) TO DETERMINE IF MAINTENANCE IS NECESSARY. FREQUENCY - QUARTERLY CHECK OPERATION OF UNDERDRAINS BY INSPECTION OF FLOWS AFTER RAIN. FREQUENCY - ANNUALLY ASSESS PLANTS FOR DISEASE INFECTION, POOR GROWTH, INVASIVE SPECIES ETC AND REPLACE AS NECESSARY. FREQUENCY - QUARTERLY INSPECT INLETS AND OUTLETS FOR BLOCKAGE. FREQUENCY - QUARTERLY

REGULAR MAINTENANCE
REMOVE LITTER AND SURFACE DEBRIS AND WEEDS. FREQUENCY - QUARTERLY (OR MORE FREQUENTLY FOR TIDINESS OR AESTHETIC REASONS) REPLACE ANY PLANTS, TO MAINTAIN PLANTING DENSITY. FREQUENCY - AS REQUIRED REMOVE SEDIMENT, LITTER AND DEBRIS BUILD-UP FROM AROUND INLETS OR FROM FOREBAYS. FREQUENCY - QUARTERLY TO BIANNUALLY INFILL ANY HOLES OR SCOUR IN THE FILTER MEDIUM, IMPROVE EROSION PROTECTION IF REQUIRED. FREQUENCY - AS REQUIRED REPAIR MINOR ACCUMULATIONS OF SILT BY RAKING AWAY SURFACE MULCH, SCARIFYING SURFACE OF MEDIUM AND REPLACING MULCH. FREQUENCY - AS REQUIRED

REMEDIAL ACTIONS
REMOVE AND REPLACE FILTER MEDIUM AND VEGETATION ABOVE. FREQUENCY - AS REQUIRED BUT LIKELY TO BE > 20 YEARS

NOTES:

- 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 Ø90 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/m²/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.
- PLAN AREA OF THE BIO-RETENTION AREA SHOULD BE 2-4% OF THE OVERALL AREA DRAINED. MAXIMUM WIDTH 10m UNLESS NOTED OTHERWISE.

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Drawn by: AH	Checked by: CC	Approved by: CC	Date: 23/08/23	Scale: S	Project: 22240 - CRO - X - XXX - DR - CE - 03902
0	09/25	AH	Planning		

Project: 22240 - CRO - X - XXX - DR - CE - 03902
Client: Rockspring Properties Ltd
Address: Banesbane, Midleton LRD
Title: Typical Bioretention & Tree Pit Details