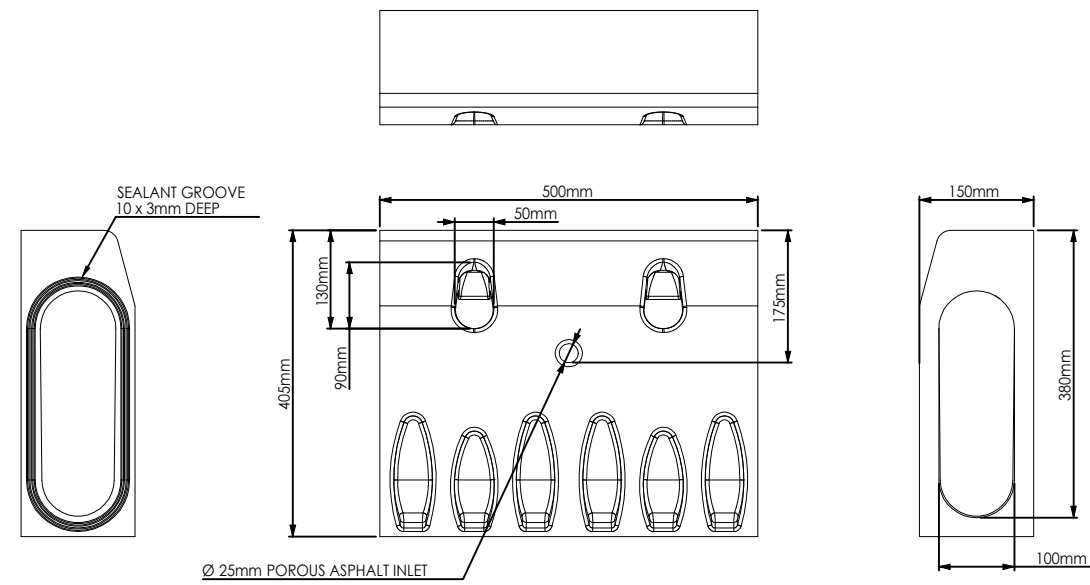
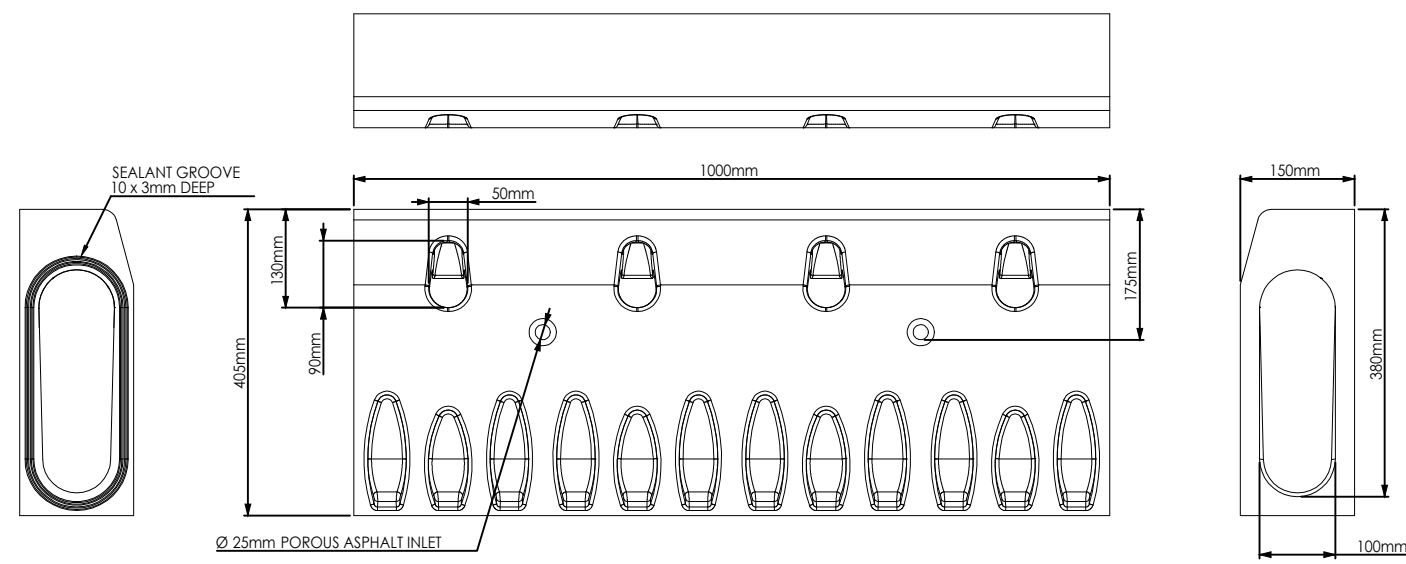
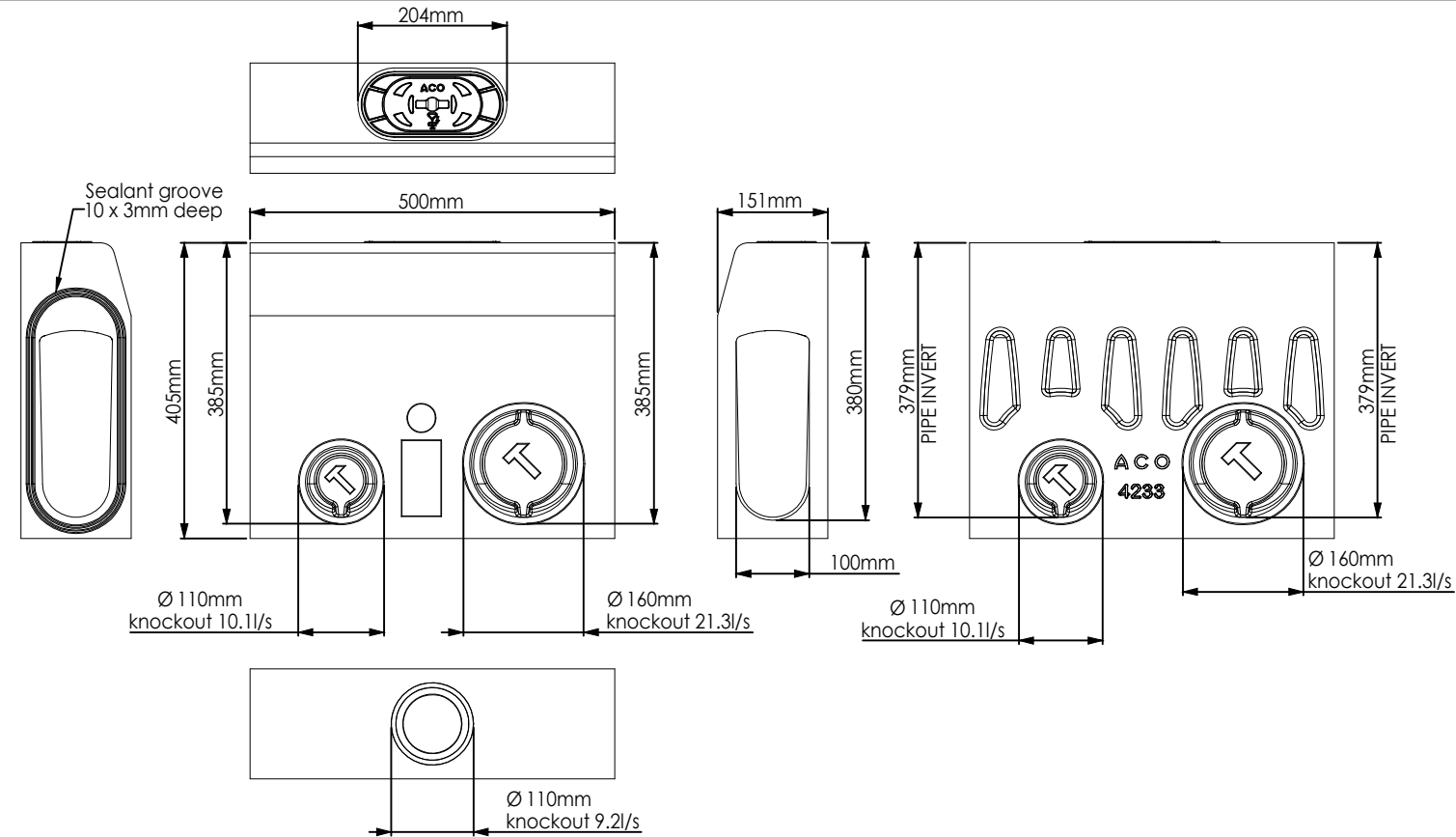




ACO-4231-KerbDrain-HB405 500mm Channel

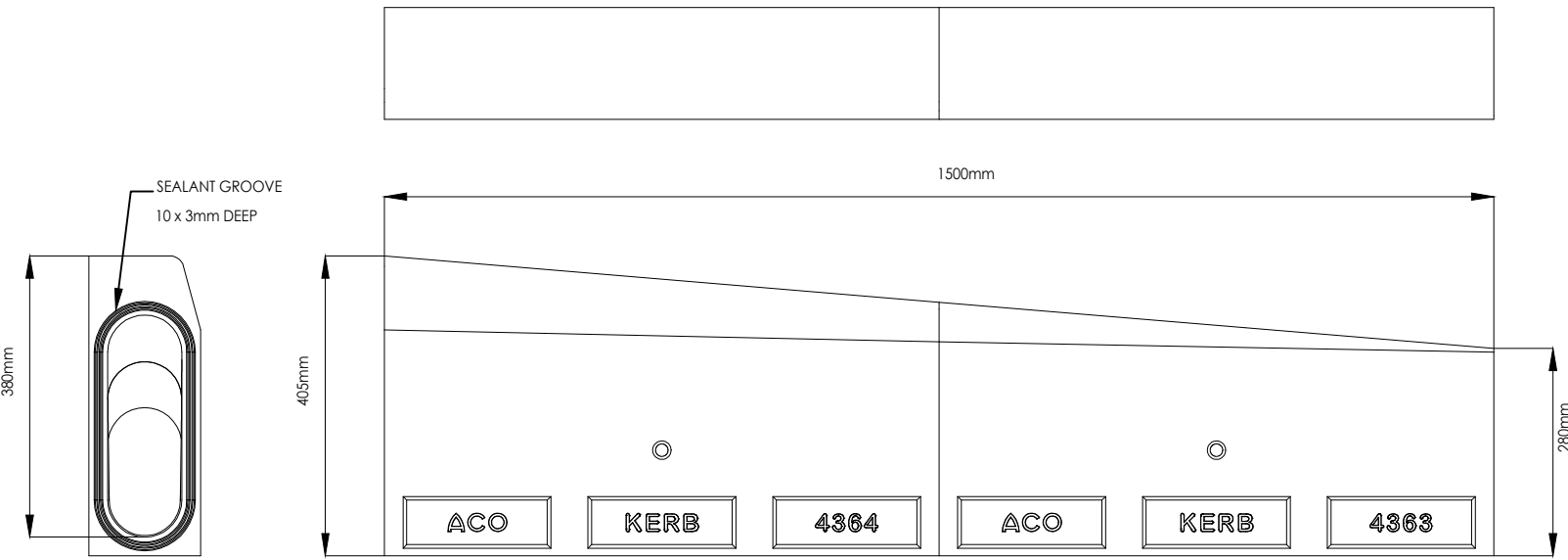


ACO-4232-KerbDrain-HB405 1000mm Channel

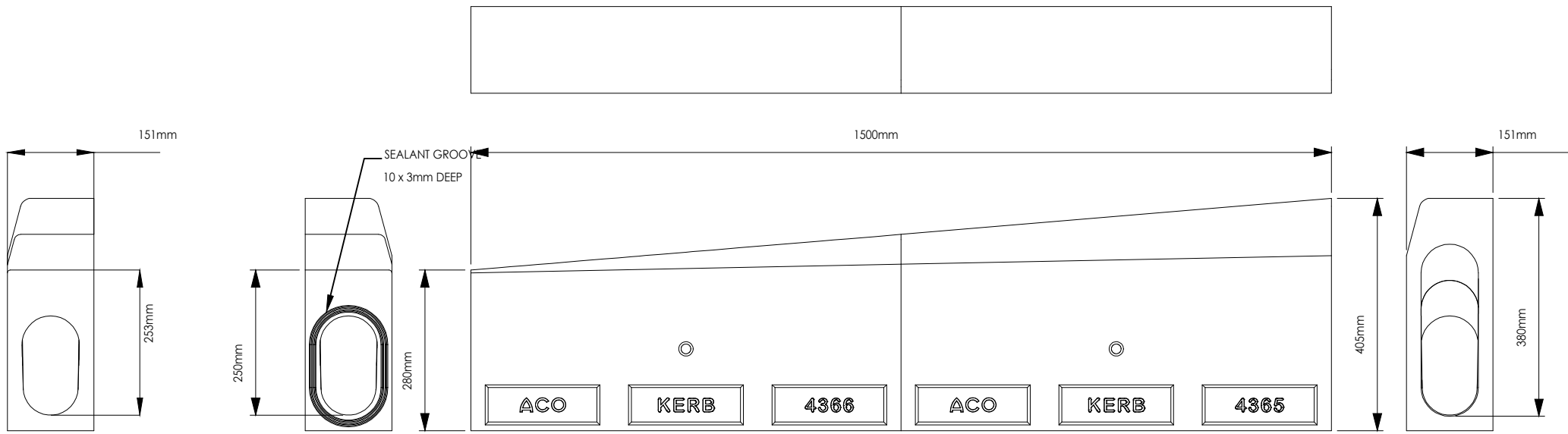


ACO-4233-KerbDrain-HB405 Access Unit

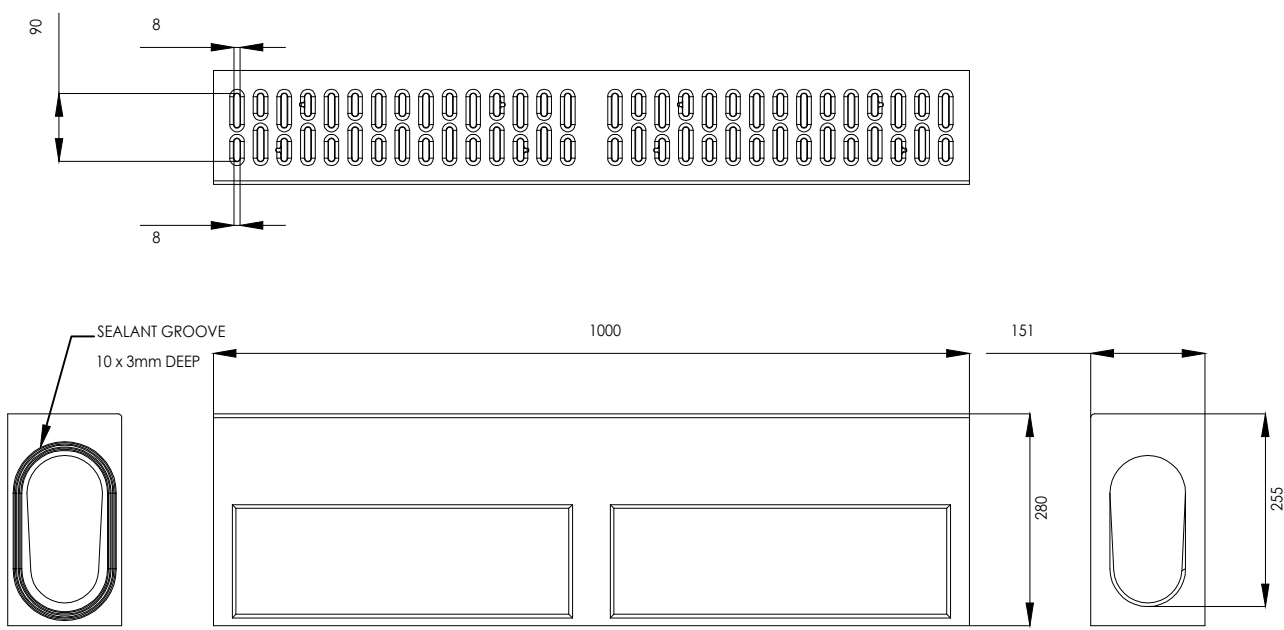
ALL PIPE BEDDING TO BE CLASS 'S' GRANULAR SURROUND UNLESS NOTED OTHERWISE ON THE DRAWING



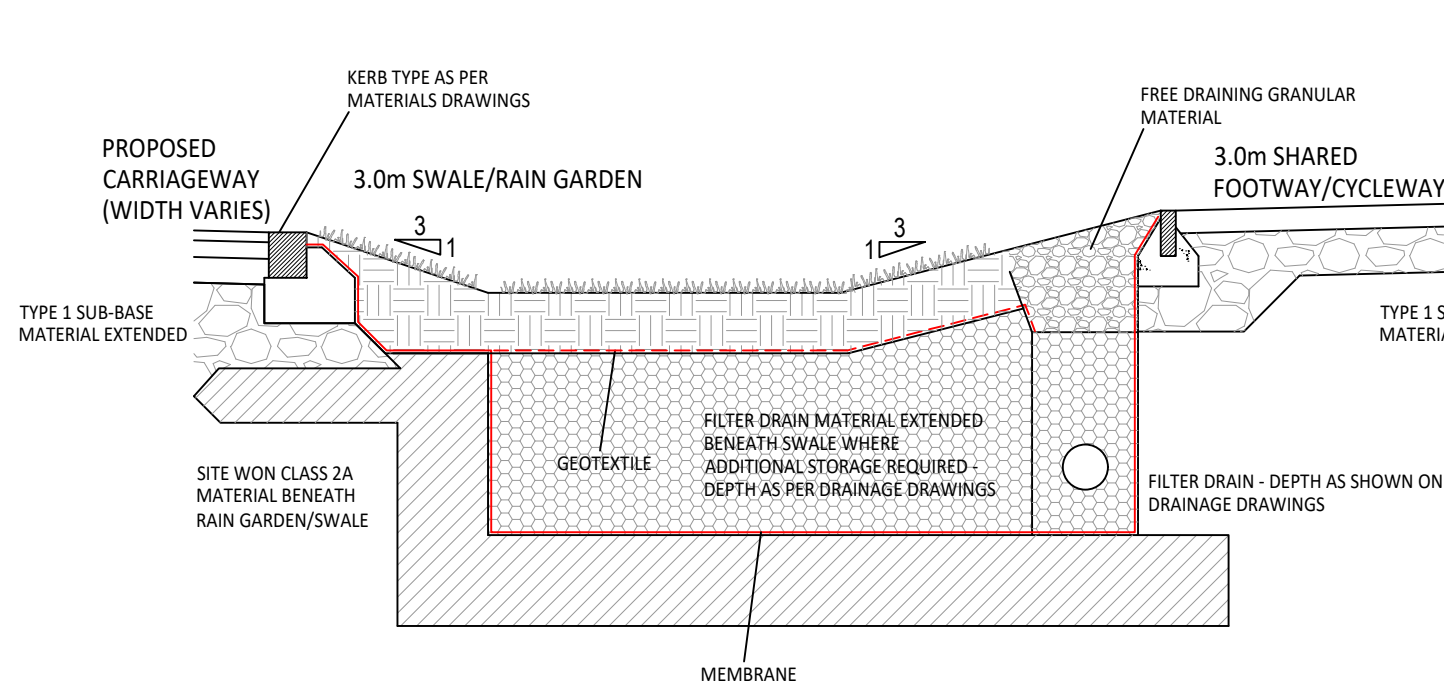
ACO-4367-KerbDrain-HB405 Flush Centre Stone LH Drop



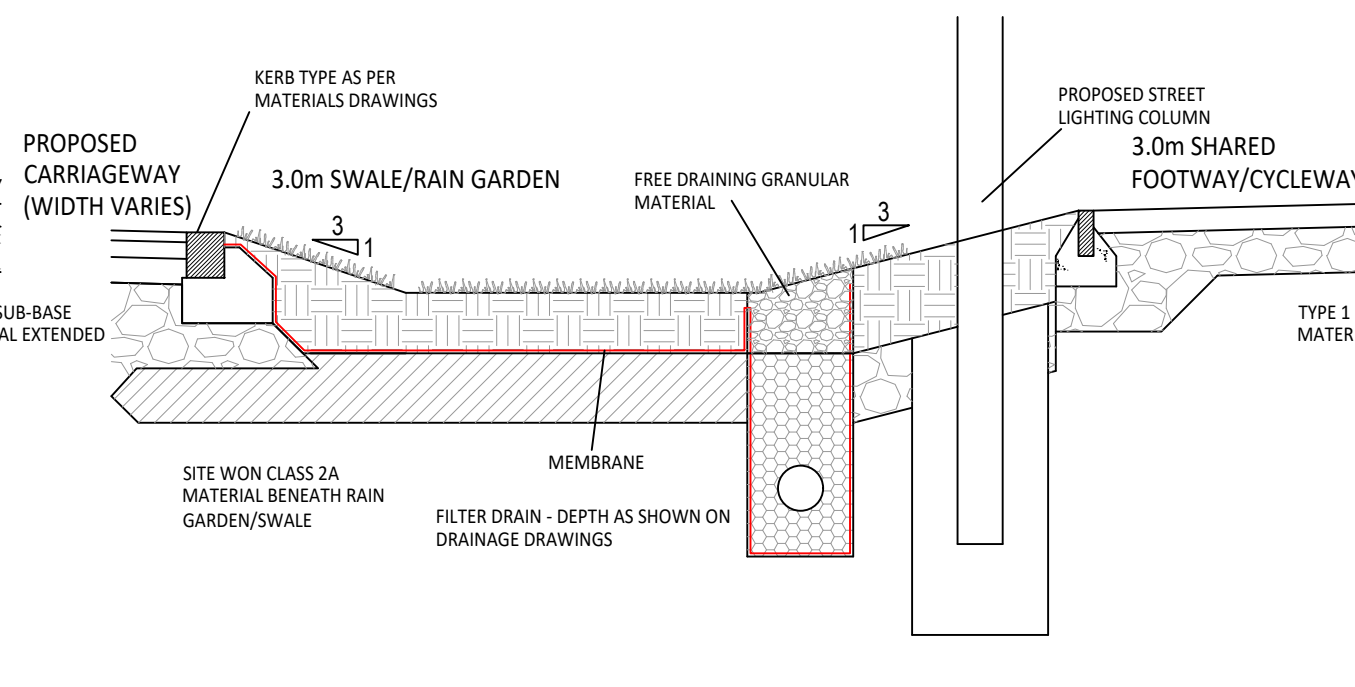
ACO-4368-KerbDrain-HB405 Flush Centre Stone RH Drop



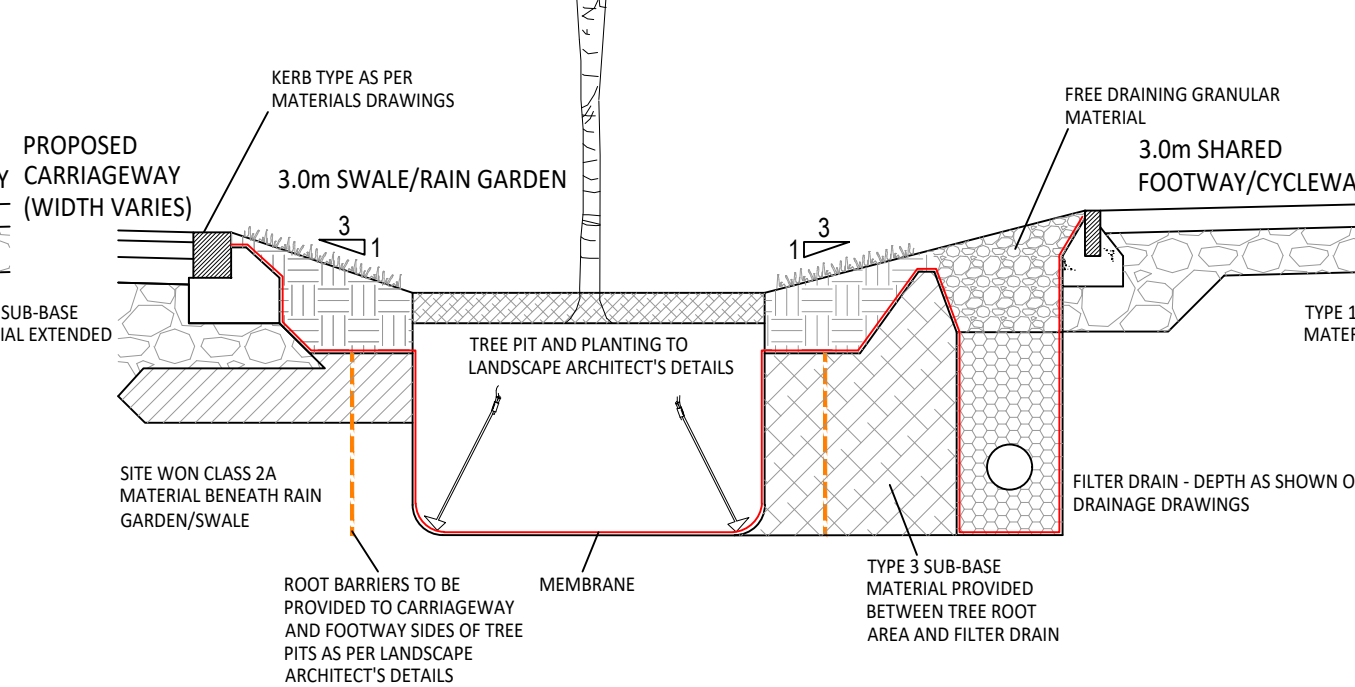
ACO-4362-KerbDrain-HB405 Flush Centre Stone



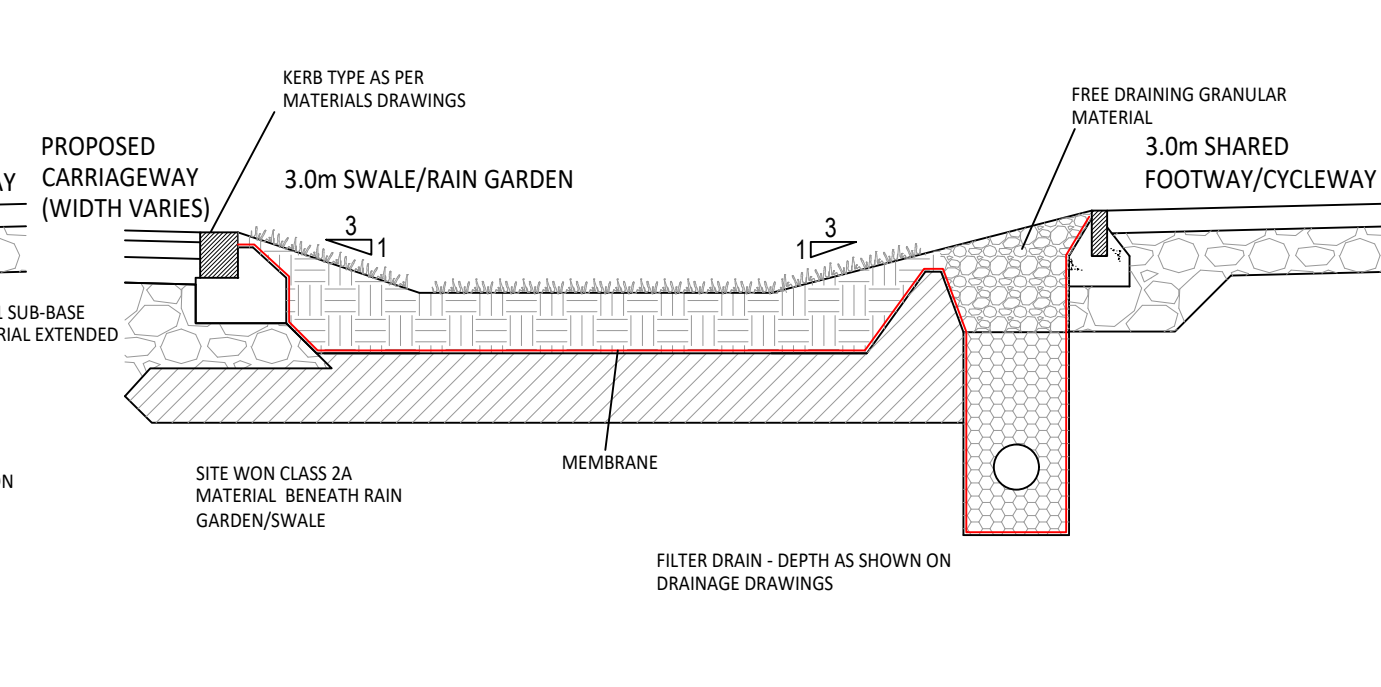
SWALE/RAIN GARDEN SECTION WITH ADDITIONAL STORAGE



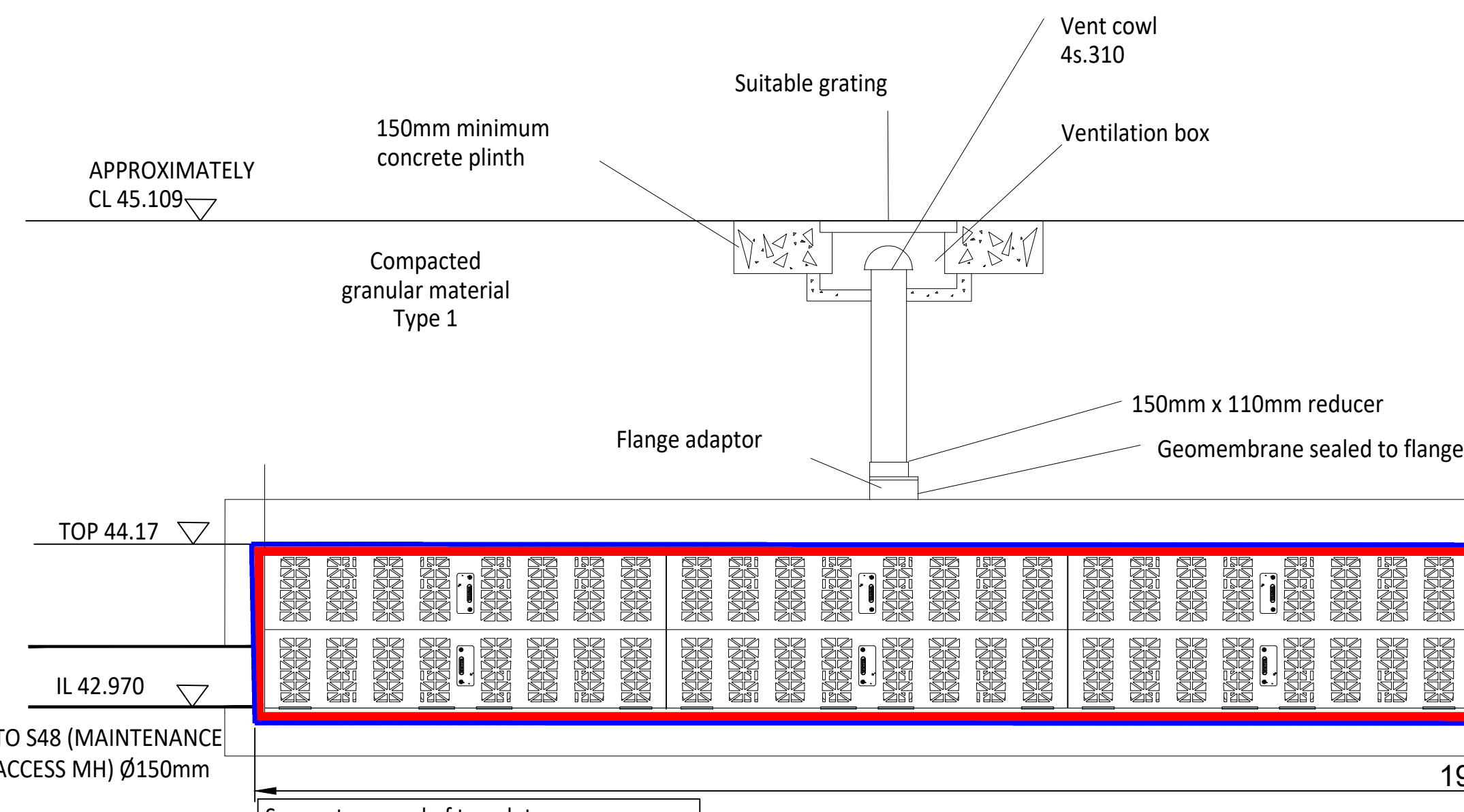
SWALE/RAIN GARDEN ADJACENT STREET LIGHTING SECTION



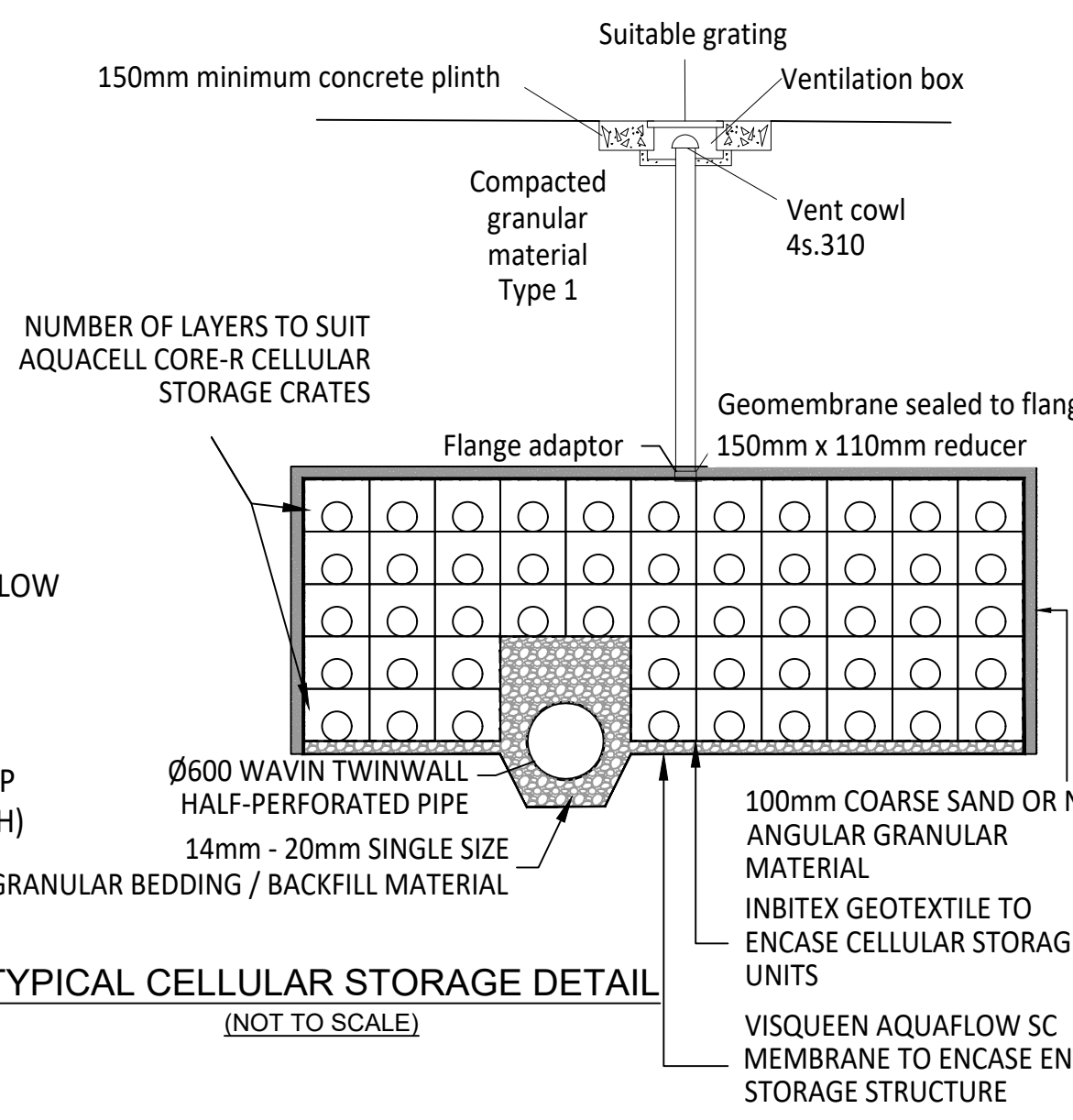
SWALE/RAIN GARDEN WITH TREE PLANTING SECTION



STANDARD SWALE/RAIN GARDEN SECTION



CELLULAR ATTENUATION DETAIL
(REFER TO DRAINAGE LAYOUT FOR SITE SPECIFIC DETAIL)
NOT TO SCALE



TYPICAL CELLULAR STORAGE DETAIL
(NOT TO SCALE)

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- DRAINAGE NOTES:
- Do not scale.
 - Refer to all other Project Drawings and supporting notes.
 - All adoptable drainage works to be constructed as detailed in Design and Construction Guidance or as stipulated in the Water Authorities Addendum.
 - All public sewers are to be the subject of a Section 104 agreement of the Water Industry Act 1991.
 - Invert levels of existing manholes and sewers are to be checked on site before construction commences and results reported to engineers.
 - The Contractor is responsible for maintaining continuity of flow for all existing sewers within the site boundary and limit of works for the duration of the project.
 - All drainage ironworks to comply with BS EN124, and be stamped with BS Kitemark. Covers to suit loading as below:
- Carriageways and Roads - E600/D400
- Driveways and Verges - C250
- Footways and Pedestrian Areas - B125
- Gardens/Landscaping - A15
 - All sewer pipes, up to, and including 225mm are to be vitrified clay to BS EN295. All sewer pipes 300mm diameter and above to be concrete pipes to BS EN1916. Where agreed with adopting authority pipes up to and including 600mm diameter can be PVC-U to BS EN1404.
 - All drainage shall be installed and tested strictly in accordance with the Manufacturers' printed instructions, BS EN 752, BS EN 1601, Local Water Authority requirements and the Building Regulations.
 - All bedding shall be Class S unless noted otherwise.
 - All trenches under existing and proposed public highways are to be backfilled with thoroughly compacted Type 1 granular sub-base material.
 - Drainage laid beneath roads and areas of vehicular access (car parking etc) with less than 1200mm of cover shall be encased in concrete bed and surround with associated movement joints. Drainage laid beneath paths, footways and pedestrian areas with less than 300mm of cover shall be similarly treated.
 - Chambers with outgoing pipes greater than 600mm diameter shall be fitted with guard bars, safety chains or other approved safety devices.
 - The use of precast concrete products made with sulphate resisting cement is mandatory, unless a laboratory report proves such precautions are not necessary.
 - All gully connections to use a minimum diameter pipe of 150mm and to be surrounded by a minimum of 150mm of grade C8/C10 concrete over its full length (which should not exceed 15m) and its connection to the carrier system.
 - All sewers to be abandoned must be surveyed to identify any lateral connections that are still live with any found to be reported to the Engineer.
 - All foul and storm water drains which are not to be adopted as public sewers shall be in accordance with Document H of the Building regulations, together with NHBC Standards Chapter 5.3 and BS8301.
 - All gullies connected direct to drains to be roddable.
 - Trees and shrubs of a large size or heavy canopy with a moderate or high water demand must not be planted within any sewer easement.
 - Gullies within and adjacent to area of site works to be suction cleaned at commencement and completion of works.

P4	08.24	Notes updated	LC	SM
P3	07.24	Attenuation tank detail updated	LC	SM
P2	05.24	ACO Kerb Drain details updated, swale/rain garden sections amended to reduce type 1 sub-base where not required and dimensions and annotations added to crate storage section	AS	SM
P1	04.24	First Issue	LC	SM

ABLEY LETCHFORD PARTNERSHIP
Consulting Engineers
3 Tealgate, Charnham Park
Hungerford, Berkshire RG17 0YT
www.alpce.co.uk Tel: 01488 684390

Client

UNIVERSITY OF READING

Project
THAMES VALLEY SCIENCE PARK
PRIMARY INFRASTRUCTURE

Title
NHM ACCESS ROAD
DRAINAGE CONSTRUCTION
DETAILS SHEET 4
Status
Scale
AS SHN @ A1
Date
APRIL 2024
Drawn
LC
Checked
SM
Drawing No.
HD065-554
Revision
P4