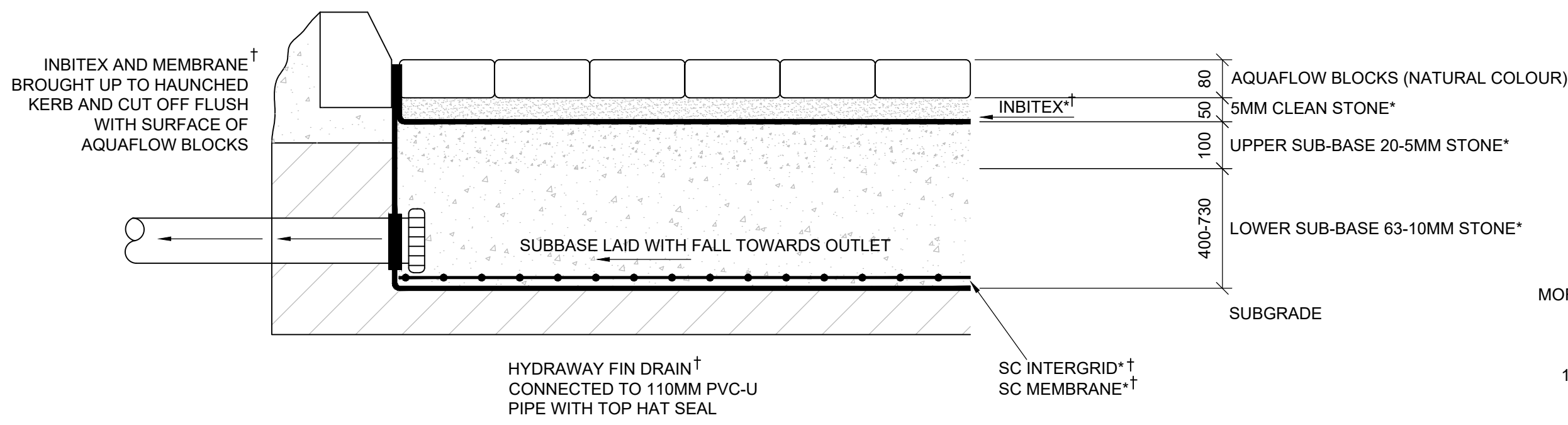




PRIVATE PERMEABLE PAVING SYSTEM

SCALE 1:10

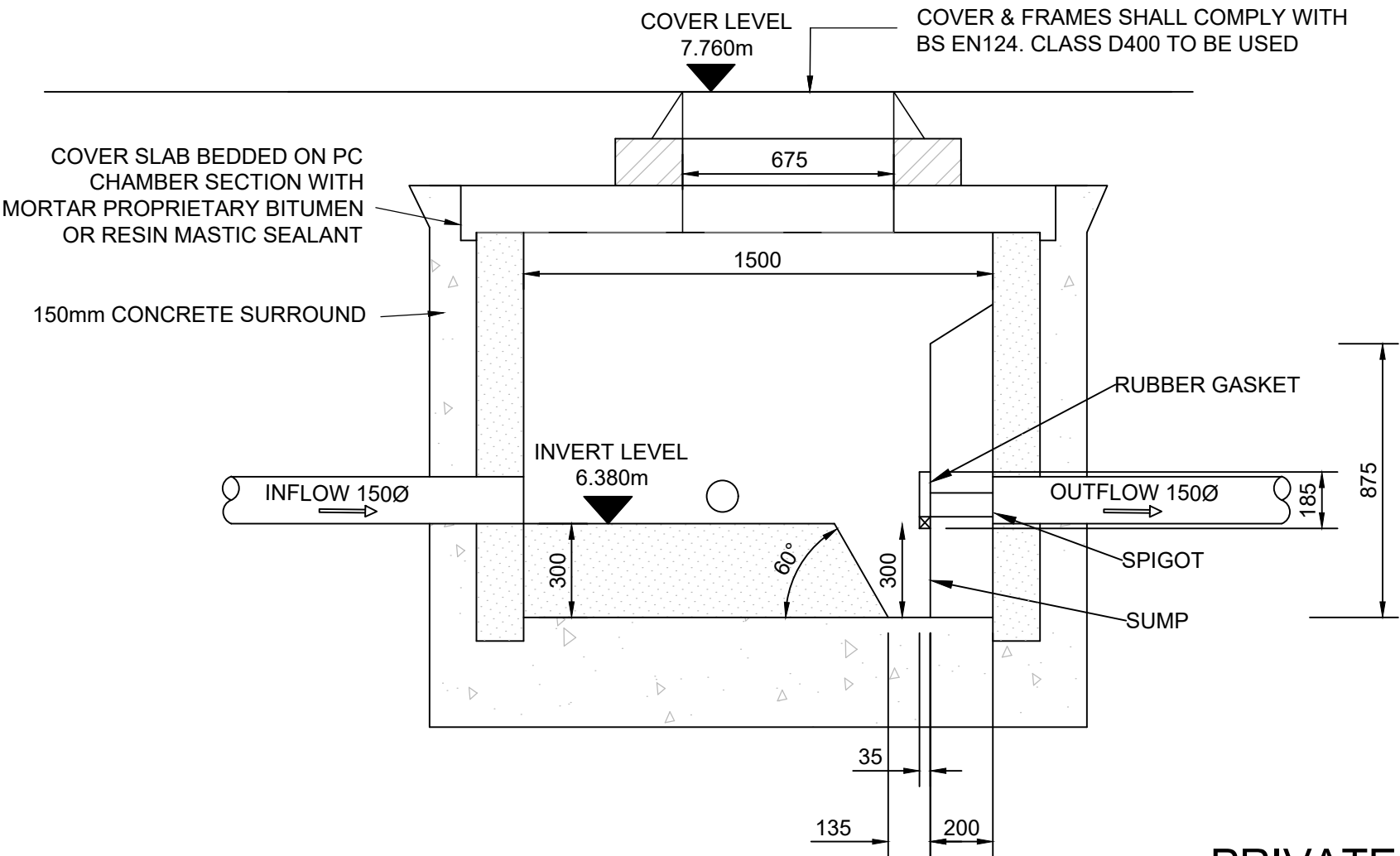
NOTES

† SUPPLIED BY WTB GEOTEXTILES

* SPECIFICATION FOR SUB-BASE, LAYING COURSE AND BLINDING LAYER: THE CRUSHED STONE MUST POSSESS WELL DEFINED EDGES AND HAVE NO FINES VALUE OF 150K/N WHEN TESTED IN ACCORDANCE WITH BS812 PART 3.

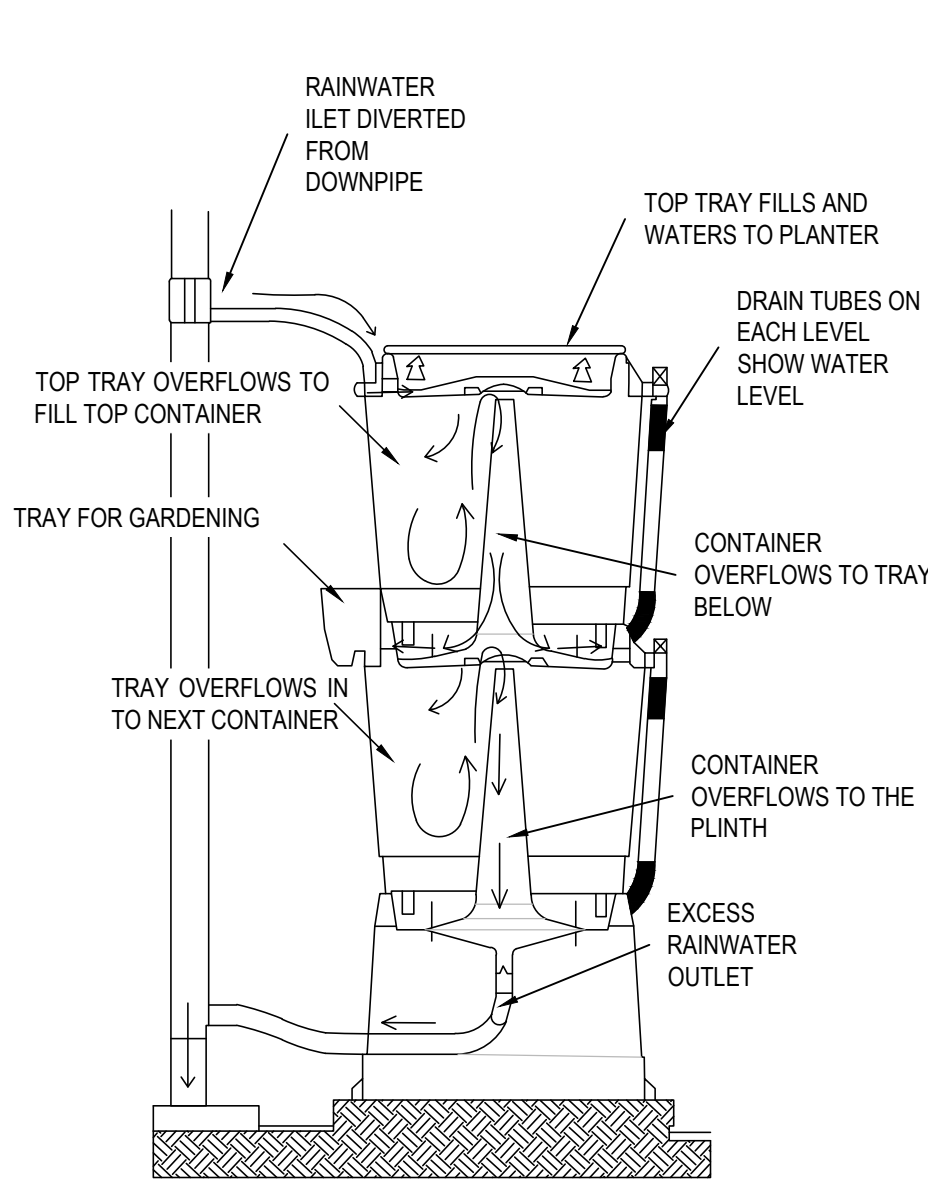
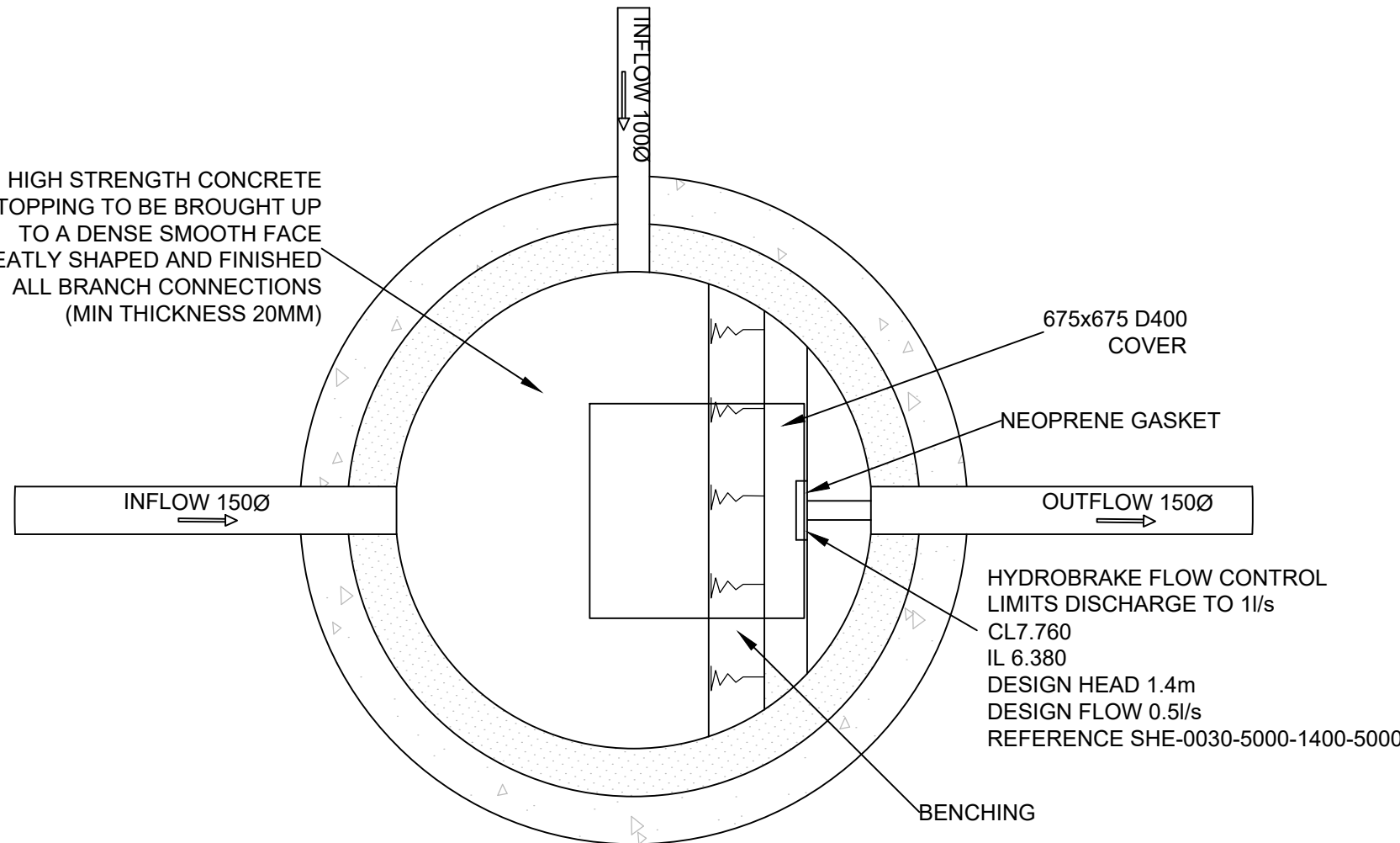
GRADING OF LOWER SUB-BASE STONE

SIEVE SIZE	% PASSING
100mm	100
80mm	80-100
60mm	60-80
40mm	30-50
20mm	0-20
10mm	0-5

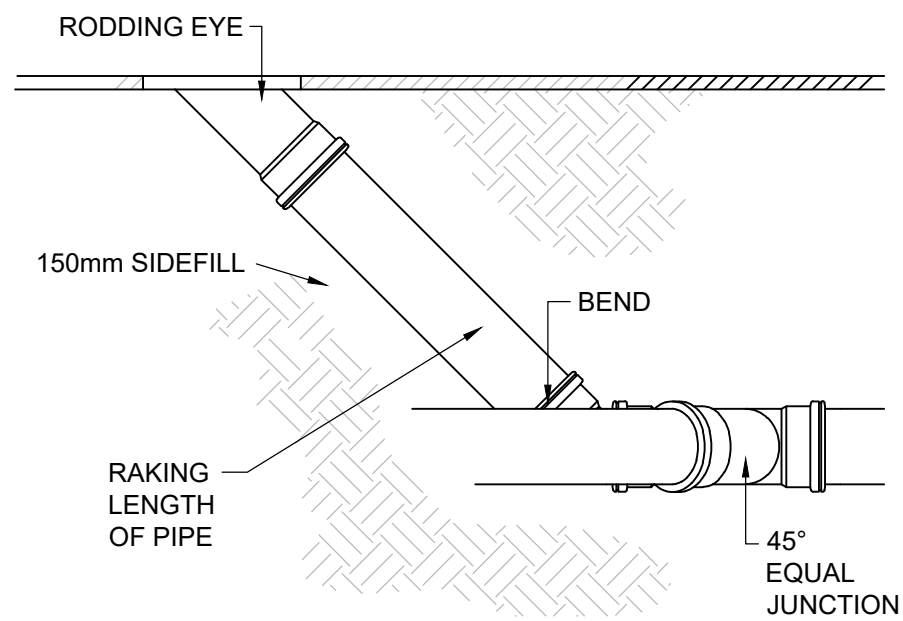


PRIVATE FLOW CONTROL CHAMBER

DETAIL BASED OF TYPE 2 MANHOLE
SCALE 1:20

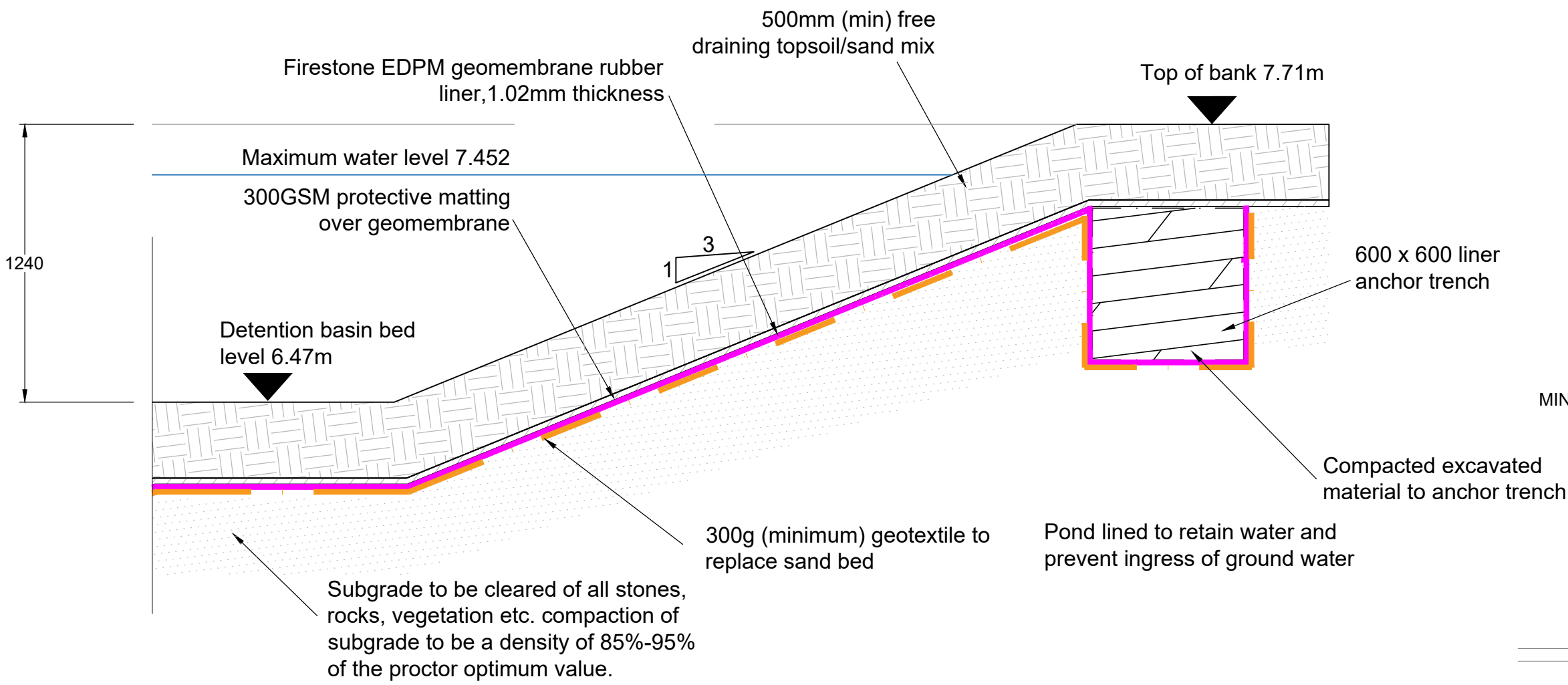


WATER BUTT SECTION



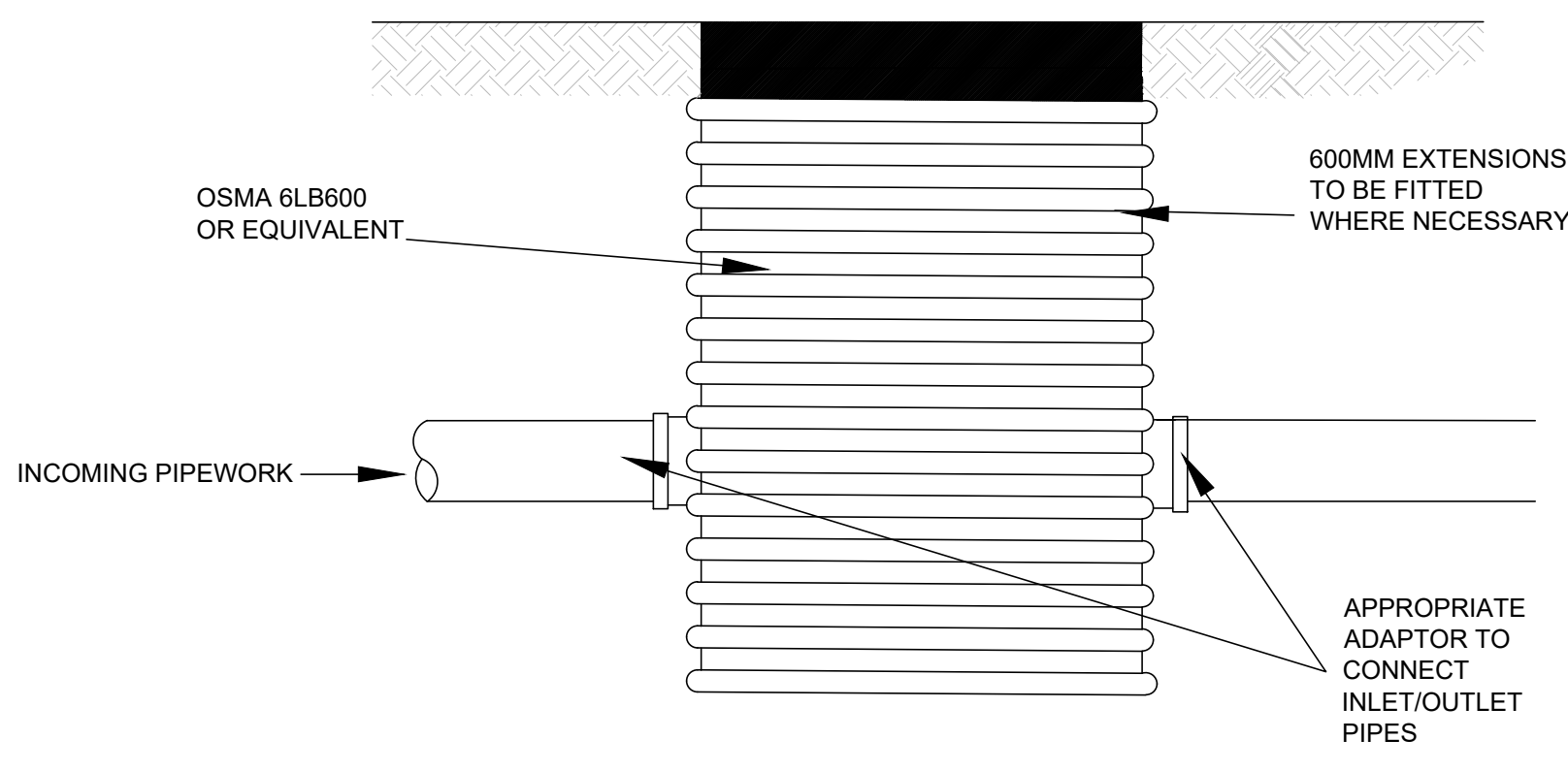
RODDING EYE

SCALE 1:20



INTERCEPTION BASIN SECTION

SCALE 1:20



CATCHPIT

RAINGARDEN NOTES

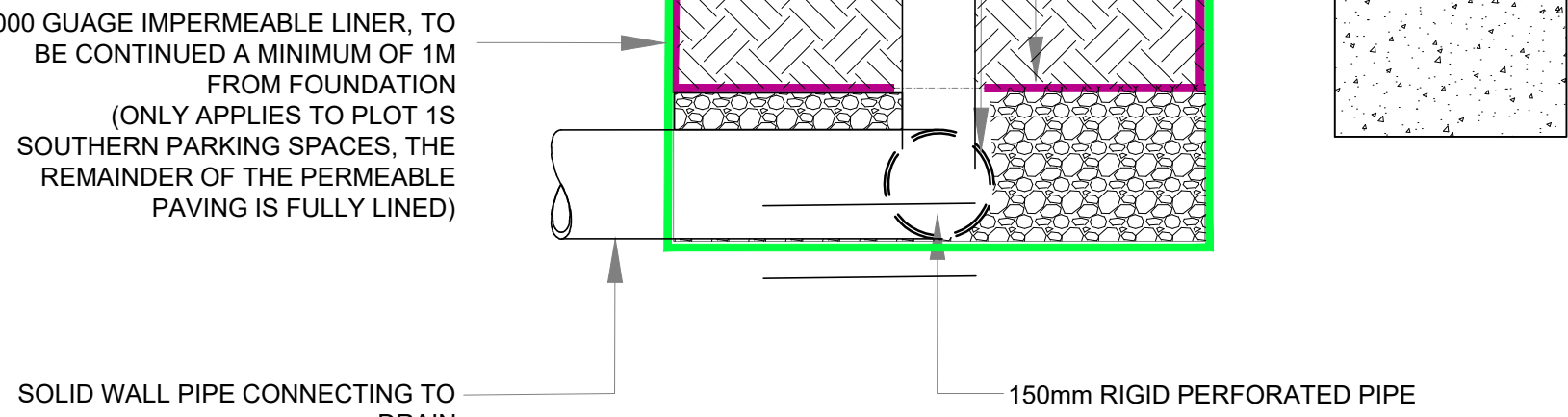
- The depth of the raingarden excavation should be 700mm (minimum). This depth through the "filter media".
- Terram 1000 (or similar approved), Non-Woven Geotextile fabric lining must be provided in the base of the bioretention area and all sides, to prevent fines migration from surrounding soil.
- Drainage Layer to be overlaid in Terram 1000 Non-Woven Geotextile (or similar approved), fabric lining.
- No Geotextile to be provided between Filter Medium layer as it increases the risk of clogging, stopping the system from functioning properly.
- A sub-soil drain in the base of the bioretention areas and one flushing point /rodding access (minimum) must be provided.
- The sub-soil drain /filter drain size is as specified on drawing. A perforated pipe is preferred as it is easier to clean whilst ribbed pipes retain moisture which may attract plant roots into the pipes.
- The base of the bioretention area must fall towards the sub-soil drain.
- The sub-soil drain must connect to the overflow, positions may be altered to suit site conditions, overflow sizes as shown.
- The surface level of the overflow should be set min. 25mm below any external surface level to prevent flooding beyond the bioretention area to allow for extended detention.
- This layer is 100-150mm Deep (minimum). This layer must consist of clean, non-angular clean stone such as a 6mm pea gravel.
- This layer will provide 50mm of cover over the sub-soil drain.

Drainage (Bottom) Layer

- The purpose of this layer is to collect and drain the treated stormwater that has passed

Filler Media (Top Layer) - THIS IS NOT TOP-SOIL

- This layer is where the majority of the water quality treatment occurs and so the sourcing and placement of this material is critical to the effective operation of the system.
- This layer is 400mm deep (minimum), up to 750mm where Trees have been specified.
- The material used must comply with the following requirements:
 - This layer must have a foamy sand texture.
 - The filter media must be free of rubbish, deleterious material and toxicants and is not hydrophobic.
 - Saturated hydraulic conductivity (permeability) of 100mm/hr.
 - Particle size distribution:
 - Clay and silt (<5%) (<0.063mm)
 - Fine sand (<20%) (0.063mm to 0.2mm)
 - Medium sand (35% to 65%) (0.2mm to 0.6mm)
 - Coarse sand (50% to 60%) (0.6mm to 2.0mm)
 - Fine gravel (<10%) (2.0mm to 6mm)
 - The filter medium should be well-graded, and the composition should contain limited particle size range.
 - The organic matter content must be less than 5% (weight to weight).
 - pH as for "natural soils and soil blends" of 5.5 to 8.5 (pH of 1:2.5 soil /water extract).
 - Electrical Conductivity (EC) as for "natural soils and soil blends" < 1.2.5dS/m



TYPICAL SECTION THROUGH PRIVATE RAINGARDEN ADJACENT TO BUILDING

SCALE 1:10

- Once placed this layer must be lightly compacted to prevent the migration of fine particles (90% standard compaction).
- The sides of the rain garden must be battered at 1(V):3(H), to base levels.
- Where there is to be a delay between the minimum level of completion (above) and the landscaping (below), an additional layer of geotextile fabric lining must be provided over the rain garden extending to the top of the batter to protect the "filter media" from sediment and gross pollutants.
- Mulch reduces weed growth and moisture loss from soils. Mulch used in a rain garden must be non-floating.
- Planting within the rain garden must be able to withstand periods of inundation, longer boggy wet periods as well as long dry periods. The free draining nature of rain gardens means that they can dry out quickly.
- Plant selection is critical for nutrient removal and hydraulic conductivity. Refer to Landscape Architects drawings for planting layouts.
- Turf MUST NOT be used as it requires a thick layer of heavy topsoil to which will stop the rain garden from being free draining. Turf is also incapable of withstanding periods of inundation or longer boggy wet periods.
- The rain garden should be separated from any adjacent turfed area by a timber edge strip or similar located at the top of the batter.
- Intensive initial planting will reduce the establishment period and make maintenance of the rain garden easier by reducing the risk of weed invasion.

GENERAL NOTES

- Do not scale
- The contractor is to check and verify all buildings and site dimensions and levels, including sewer invert levels, before works start on site. The contractor is to comply in all aspects with the current Building Legislation, NRSWA1991, British Standards, Building Regulations etc.
- Positions of existing services/statutory undertakers apparatus adjacent to or crossing proposed excavations are to be checked by the contractor prior to starting work
- This drawing is to be read in conjunction with and checked against all other drawings, engineering details, specification and any structural, geotechnical or other specialist document provided.
- Any anomaly or contradiction between any of the above is to be reported to Coastal Housing Group.
- This drawing is schematic for clarity only, positions of pipe runs and manholes may vary on site due to site conditions

ROAD AND SEWER ADOPTION NOTES

- All works for Adoption under a Section 38 Agreement shall be carried out to the approval of Monmouthshire Council.
- All works for Adoption under a Section 104 Agreement shall be carried out to the National Water Council Guide "Sewers for Adoption" 7th Edition and Dwr Cymru Welsh Water's requirements.
- Street lighting positions to be pegged on site and agreed by the local authority prior to erection commencing.

A	10/11/23	Issued for approval	TOR	SJD
REV	DATE	DETAILS	AA	TOR
1	27/04/23	First Issue	BY	CHK



PROJECT: Coastal Housing
Harvey Crescent
Aberavon, Port Talbot

DRAWING TITLE: SAB Construction Details

DRAWN:	CHK:	STATUS:	SCALE:
AA	TOR	Approval	NTS @ A1
DATE:	JOB NO:	DWG NO:	REV:
Apr'23	2336	105	A