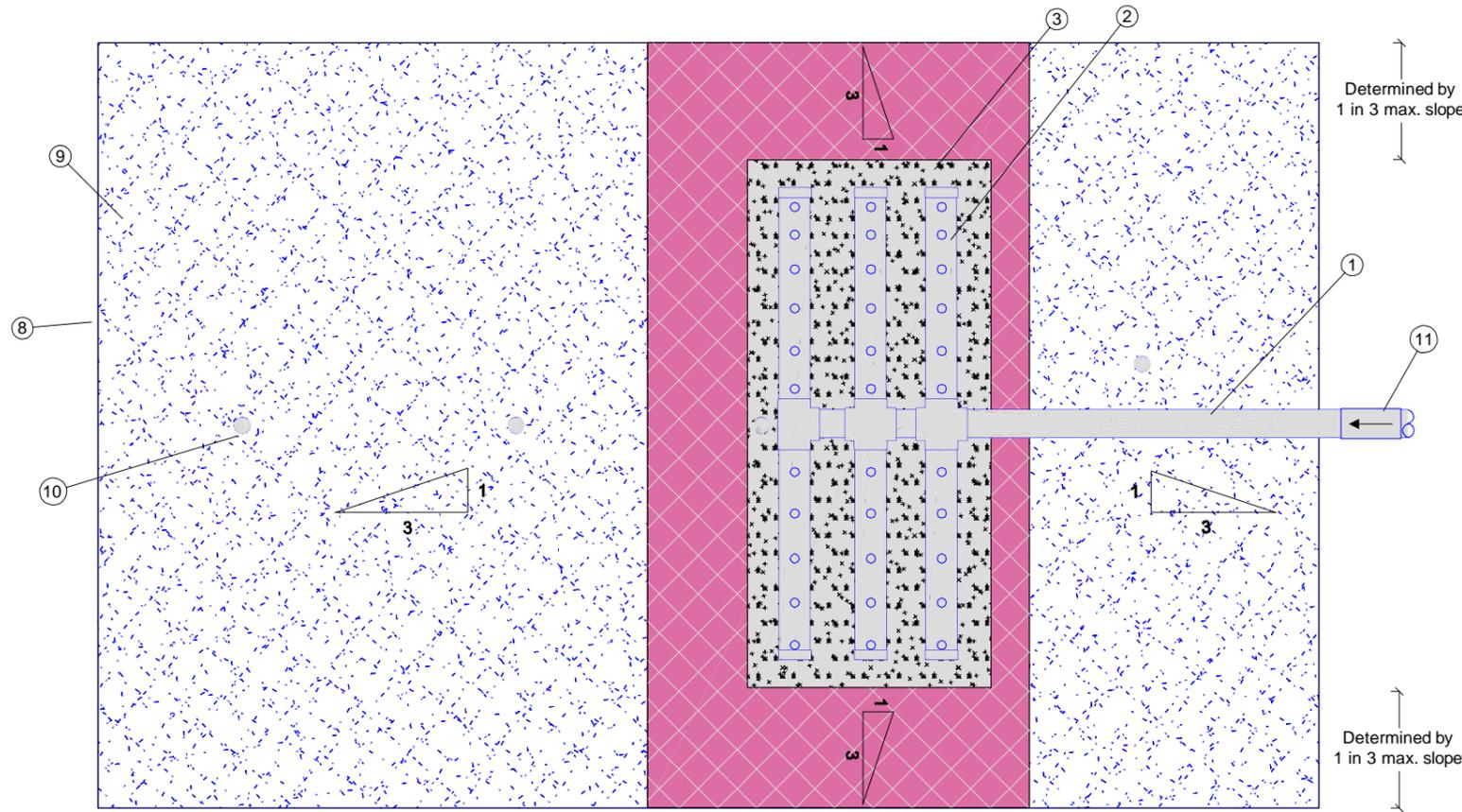


Mound System - PLAN VIEW



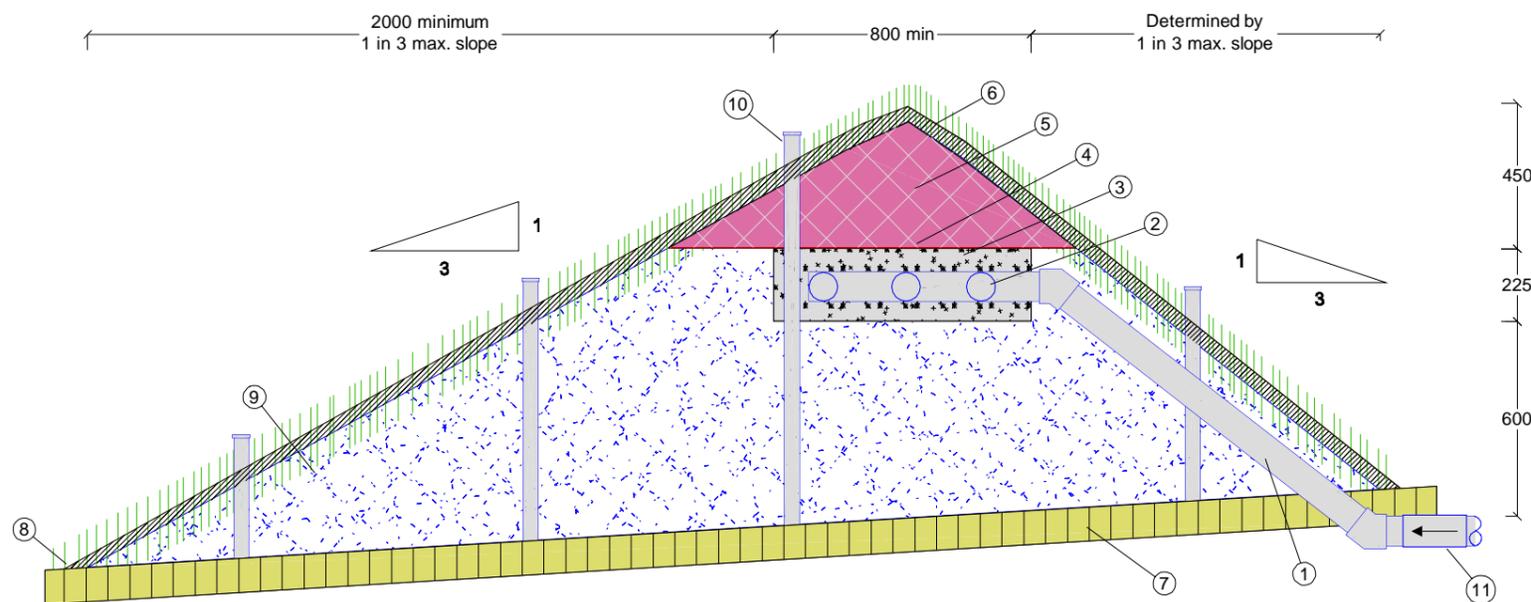
Minimum Components and Design Requirements

1. Inlet pipe, typically 100 mm PVC pipe. This may be by gravity feed through dosing siphon if there is sufficient static head from holding tank, or otherwise by pumped application.
2. Distribution manifold, designed and installed to provide even distribution. Typically 100 mm sewer-grade PVC (unpressurised distribution) with 30 mm perforations or 50 mm lines with 6 mm perforation at 400 mm centres (low-pressure dosing). The number and arrangement of dispersal laterals may be varied to suit size and shape of mound system and hydraulic requirements.
3. Coarse aggregate (20 - 40 mm).
4. Geotextile liner or filter cloth.
5. Compacted capping material. May be soil or clay.
6. 50 mm topsoil cover over entire mound system. To be vegetated (grass preferred).
7. Roughened or ploughed original soil surface.
8. Toe or front edge of mound system.
9. Sand media fill. In some circumstances, existing site soil materials (eg. sands and stones) may be used to build the filtration mound.
10. Inspection ports, typically 50 mm piezometers.
11. Non-return valve.

Notes

- a. Maximum grade of 1 in 3 for all mound surfaces. The mound is to be carefully constructed to prevent erosion, provide stability and maximise shedding of rainfall. Grass must be established quickly e.g. with turf.
 - b. For very long mounds, these may be broken into 2 or more individual mound systems (eg. where allotment width is less than required mound width).
 - c. On steep sites (> 15 % grade), slope modification may be necessary prior to mound installation.
 - d. Use of in-situ materials for mound filtration media should be confirmed by geotechnical investigation.
 - e. May be used to treat / dispose of both primary and secondary quality effluent.
 - f. Mound(s) to be installed parallel to site contours.
 - g. In clay soils surface preparation is required.
 - h. Plumbing and drainage works should be performed by licensed trades persons in accordance with council requirements.
 - i. All pipe work and fittings should comply with relevant Australian Standards.
 - j. All materials should be durable and non-corrosive components with an expected operating life of at least 15 years.
 - k. Effluent should be evenly distributed throughout the mound to prevent 'short-circuiting' and ensure that optimum operating conditions are maintained over the total available area.
 - l. The mound systems should be maintained in such a manner as to prevent any run-off of effluent of the mound system to adjoining allotments, public places and natural waterways.
 - m. Upslope run on diversion mound / trench may be required to prevent stormwater ingress.
- Maintenance and Management**
- a. The owner/occupier should maintain the mound systems. Regular maintenance should include: ensuring there is adequate surface cover (e.g. grass) and crop management (i.e. weed control and harvesting of vegetation).
 - b. Annual inspection(s) of the system to be carried in accordance with council requirements.
 - c. Owner/operator should maintain records of all maintenance, service inspections and pumpouts performed.

SECTION VIEW



Final Draft

CLIENT/ PROJECT	TITLE	DESIGNED:	DATUM:	SHEET	REV.	DESCRIPTION	DATE	ISSUED
North Coast Councils	Example Mounded Treatment/Dispersal System	DM	na	3 OF 10 SHEETS	1.0	Mound system unit design guide.	04/11/2003	DM
		DRAWN:	DM		na	2.0	Amended mound system unit design guide.	29/01/2003
PROJECT MANAGER:	PROJECT REFERENCE / DRAWING NUMBER:	REVIEWED:	na		3.0	Final mound system unit design guide.	01/03/2003	DM
		DL	na		4.0	Example Design - Mounded Dispersal System	18/04/2004	PDD

All measurements in mm unless otherwise specified.