



SHIRE OF
HARVEY

A Breath of Fresh Air



Policy 4.2.7 – Drainage and Fill for Building Sites in Wet Areas

1. Policy

The following conditions relating to “Residential” and “Special Residential” subdivisions, with lot sizes up to 4,000m², are to be recommended to the Western Australian Planning Commission at subdivision approval stage.

Conditions Applicable to New Subdivisions Where Sewerage Disposal System is Available

Where a sewerage disposal system is available, the land must be drained and/or filled to achieve the required minimum clearance of 0.6 metres from the highest known ground water level to the surface.

Before filling areas where heavy soil and clay predominates, the land should first be graded to a uniform contour to eliminate low areas which may fill with water after sand filling.

Desirably the land should be effectively sub-soil drained to obtain a clearance of 0.3 metres from the highest known ground water level to the natural ground level, with 0.3 metres of filling of clean coarse sand free organic material.

The locations of sub-soil drainage would need to be carefully planned to ensure that each block will have a stormwater drainage connection available. The subdivider would be required to provide the necessary easements or reserves.

Conditions Applicable to New Subdivisions Where Sewerage Disposal System is Not Available

Where a sewerage disposal system is not available, the land must be drained and/or filled to achieve the required minimum clearance of 1.2 metres from the highest known ground water level to the surface.

Before filling areas where heavy soil and clay predominates, the land should first be graded to a uniform contour to eliminate low areas which may fill with water after sand filling.

Desirably the land should be effectively sub-soil drained to obtain a clearance of 0.76 metres from the highest known ground water level to the natural ground level, with 0.45 metres of filling of clean coarse sand free organic material.

The location of sub-soil drainage would need to be carefully planned to ensure it did not create difficulties with the installation of septic disposal systems in the future and that each block will have a stormwater drainage connection available.

The subdivider would be required to provide the necessary easements or reserves.

Conditions Applicable to Existing Sewered Lots (Sand or Clay)

The lots must be drained and/or filled to provide a minimum clearance of 0.6 metres from the highest known ground water level to the surface and desirably sub-soil drainage should ensure a clearance of 0.3 metres from the highest known ground water level to the natural ground level leaving only filling with clean coarse sand free of organic material of 0.3 metres.

Depth of Fill

Where sub-soil drainage is difficult a greater depth than 0.3 metres of fill may be necessary.

Fill must be retained on the lot either by the use of retaining walls or by ensuring that the natural angle of repose is such that no fill flows onto adjoining property.

The entire lot should be filled with the maximum required depth at the building and effluent disposal site and with the remainder of the lot graded to retaining walls or natural surface at boundaries.

Drainage must be provided whenever filling may cause drainage problems to the lot being filled or to adjoining land. The drainage must be provided by the owner of the filled site and any easements given at no cost to Council. If drainage cannot be achieved due to the drainage system in the locality being inadequate for the purpose, the subdivision should not be permitted.

General

Effluent disposal by pumping to inverted leach drain areas may have the effect of reducing the overall amount of fill required.

The effect that filling of land proposed for subdivision or lots in existing subdivisions may have on adjoining land as well as the immediate effect to the land itself, must be considered before conditions for drainage and fill are laid down and must be carried out as approved by the Principal Building Surveyor and/or Principal Environmental Health Officer.

The new developer is responsible for ensuring that any work he/she does is not to the detriment of land adjoining; he/she must accept responsibility for any work required to prevent problems developing on his/her own or adjoining property.

The depth of fill should be minimised, however, sub-soil drainage may not necessarily be the solution (to the minimisation of fill) due to the difficulty of placing the drain without interference to septic effluent systems.

Conditions Applicable to Existing Unsewered Lots (Sand or Clay)

The lots must be drained and/or filled to provide a minimum clearance of 0.6 metres from the highest known ground water level to the finished ground surface and desirably sub-soil drainage should ensure a clearance of 0.3 metres from the highest known ground water level to the natural ground level leaving only filling with clean coarse sand free of organic material of 0.3 metres.

Depth of Fill

Where sub-soil drainage is difficult a greater depth than 0.45 metres of fill may be necessary.

Fill must be retained on the lot either by the use of retaining walls or by ensuring that the natural angle of repose is such that no fill flows onto adjoining property.

The entire lot should be filled with the maximum required depth at the building and effluent disposal site and with the remainder of the lot graded to retaining walls or natural surface at boundaries.

Drainage must be provided whenever filling may cause drainage problems to the lot being filled or to adjoining land. The drainage must be provided by the owner of the filled site and any easements given at no cost to Council.

If drainage cannot be achieved due to the drainage system in the locality being inadequate for the purpose, the building should not be permitted.

General

Effluent disposal by pumping to inverted leach drain areas may have the effect of reducing the overall amount of fill required.

The effect that filling of land proposed for subdivision or lots in existing subdivisions may have on adjoining land as well as the immediate effect to the land itself, must be considered before conditions for drainage and fill are laid down and must be carried out as approved by the Principal Building Surveyor and/or Principal Environmental Health Officer.

The depth of fill should be minimised, however, sub-soil drainage may not necessarily be the solution (to the minimisation of fill) due to the difficulty of placing the drain without interference to septic effluent systems.

No sub-soil drain or open drain channel shall be placed within 6.1 metres of any french drain, leach drain or soakwell.

A professional Engineer is to classify the sites in accordance with Australian Standard 2870 and provide Council with a site classification certificate for each lot.

2. Strategic objective

The policy aligns to the following strategic objective:



Strong civic leadership representing the whole of the Shire which engages in effective partnerships and reflects the aspirations of an engaged community.

3. Definitions

- Nil.

4. Legislation

- Nil.

5. Related documents

- Former Council Policy Number 19.3.

Responsible officer	Director Sustainability		
Responsible team	Building		
Responsible area	Building Services		
Version control	Date	Resolution	Number
Version 1	24.03.1997	Resolution	
Version 2	23.09.2008	Resolution	08/416
Version 3	13.11.2013	Resolution	13/363