



**Clearance & Easement  
Requirements for Structures  
Adjacent to Sewer & Stormwater  
Mains Policy**

## **POLICY OBJECTIVE**

The objective of this policy is to outline clearance requirements for structures adjacent to sewer and stormwater mains.

## **LEGISLATIVE PROVISIONS**

New South Wales Code of Practice Plumbing and Drainage 2006  
 Australian Standard AS3500 2005 Plumbing and Drainage  
 Sewerage Code of Australia WSA 2014 Version 3.1

## **POLICY STATEMENT**

A clearance between a structure and a sewer or stormwater main is required for the following reasons:

- To allow access for maintenance equipment to inspect manholes, house connections, drainage pits, and for the possible repair / replacement of the sewer or stormwater mains.
- To protect the stability of the adjacent buildings.
- To protect the sewer or stormwater main from damage by having it located within the zone of influence of structure footings.
- To minimise the potential for trench instability due to the presence of nearby footings.

The provisions of this policy apply regardless of the recent developments in construction techniques i.e. the provisions apply even with the advent of non-surface disruptive techniques such as pipe bursting and other trenchless technology.

## **APPLICATION**

Structures including dwellings, buildings, garages, store rooms, tool sheds, garden sheds, green/glass houses, gazebos, rainwater tanks (see exceptions below), verandas, decks, pergolas, bioretention pits, raingardens, house drainage lines, aviaries, pools, electrical and gas appliances, supports for building overhangs and parallel retaining walls and their reinforced footings cannot be constructed over, or within the minimum clearance zones of Council sewer and stormwater mains.

## **CLEARANCE SPACE AND EASEMENT REQUIREMENTS**

### **Single Main**

A single sewer or stormwater main requires clearances and easements as given in Table 1 below.

**Table 1: Pipe Depth, Minimum Horizontal Clearance and Easement Width requirements**

<b>Pipe Depth (m)</b>	<b>Minimum Horizontal Clearance (m)</b>	<b>Minimum Easement Width (m)</b>
<1.5	1.5	3
1.5 – 2	1.75	3.5
2 – 2.5	2	4
2.5 - 3	2.25	4.5
3 – 3.5	2.5	5
3.5 - 4	2.75	5.5
4 – 4.5	3	6

4.5 - 5	3.25	6.5
5 - 5.5	3.5	7
5.5 - 6	3.5	7

**Twin Mains**

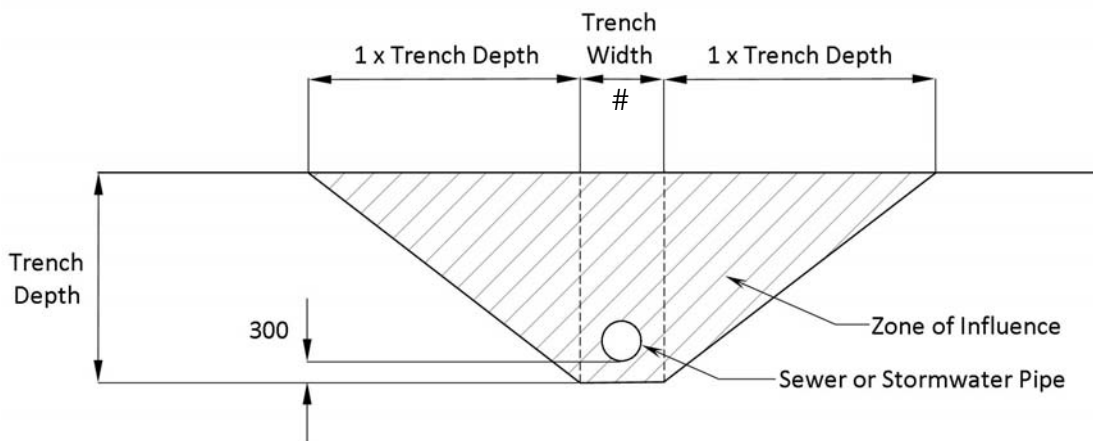
Where a sewer main and a stormwater main are close and parallel to each other, the minimum clearances shall apply to each main. The easement width shall encompass both such clearances.

A minimum clearance of 1m is required between the two mains.

**ZONE OF INFLUENCE REQUIREMENTS**

In addition to the clearance requirements above, there are requirements on building within a wider span of the zone of influence.

The zone of influence refers to the area either side of the main where a structure may transmit a load to the main. The zone of influence is determined by the depth of the main, width of trench (minimum 600mm required refer to plan below) and the angle of repose of 45 degrees, as indicated in the figure below.



- # (A) 600mm: Typical for pipes up to 300mm diameter not requiring trench support
- (B) 1000mm: For pipes greater than 1.5m deep and/or where trench support is required

The design of a structure's footings can be configured to transfer loads outside the zone of influence to allow building within the zone. Structures are permitted within the zone of influence (but outside the minimum clearance requirements), only under the following conditions:

1. The footing design must be undertaken by a suitably qualified engineer
2. The footings must be taken to a depth below the zone of influence
3. The structure and its footings shall be designed to not suffer damage should the trench subside or be excavated for maintenance and repairs of the main
4. The structure and its footings shall not apply load to the main  
Construction of the structure and its footings shall not damage the buried asset

## EXEMPTIONS

### Interlot Drainage

Interlot drainage requires a total clearance zone of 1.5m provided a 1m clearance is provided to a council main.

### Carports

Single vehicle carports are permitted to be built over sewer or stormwater mains under the following conditions:

- The carport's members are to be secured by bolts allowing easy disassembly
- Should a problem occur with the sewer or stormwater main requiring the removal of the carport, the owner of the property is to bear all costs associated with removing and reinstating the carport
- The carport must be open on at least 3 sides

### Rainwater Tanks

Rainwater tanks are permitted to be built over sewers or stormwater mains under the following conditions:

- The tank must be plastic moulded type of capacity no greater than nominal size 10,000L
- The tank must be founded on appropriate flat bedding material, at or just above natural surface level, to distribute loads evenly. Elevated tanks supported on structures/pedestals etc are not permitted.
- The tank must be able to be readily disconnected and removed from the easement.
- If connected to town water supply, valving must be remote from the tank
- The tank must be a minimum of 2m clear of manholes, pits, junctions or inspection openings.
- Should a problem occur with the sewer or stormwater main requiring the removal of the tank, the owner of the property shall bear all costs associated with removing and reinstating the tank including any costs incurred by council.
- Should the tank damage the underlying pipe, the owner of the property shall bear all costs associated with the pipe's repair.

### Retaining walls

Retaining wall are permitted to be built over sewers and stormwater mains under then following conditions

- The retaining wall is perpendicular to the sewer or stormwater main (parallel retaining walls are not permitted within the zone of influence
- The retaining wall spans across the zone of influence and with any piers located outside the zone of influence

### Town Centre Zone

Buildings may be erected over sewer (but not stormwater) mains in the 'Commercial Core' zone. In these instances, the following conditions must be met:

- The footings are to be pier and beamed to the design of a structural engineer or otherwise designed to alleviate stress on the main
- The main must be renewed (either replaced or relined) and concrete encased, at the developer's cost, over a distance determined by individual assessment, at a size to suit ultimate capacity
- The main is to be physically located prior to any excavation, including boring of the piers
- The structure is not to be constructed over or within 2m to the centre of a manhole, maintenance shaft, or sewer dead end

**Miscellaneous**

- Paved areas in concrete, asphalt or unit pavers are permitted provided an expansion joint is placed either side of the line of the covered main
- Cantilevered overhangs, including eaves are permitted. Must maintain a minimum 2.5m vertical clearance above the sewer or stormwater main
- Trees and Shrubs are not permitted within 1m of a man hole or maintenance structure
- Building over the sewer or within the sewer easement may be permissible on community based land or community based facilities where sewer or building relocation is not possible. For such cases Council will review any application and base any decision on the specific circumstances. In these cases, if approval is granted, the conditions outlined for the Town Centre Zone must be met

**DAMAGE TO SEWER AND STORMWATER MAINS**

Any damage caused to sewer and stormwater mains shall be the responsibility of the person undertaking the work and will be fully recovered by Council.

Version	Council Meeting Date	Resolution	Adoption Date	Effective From
1	15 May 2007	07/230	15 May 2007	15 May 2007
2	19 May 2009	09/264	6 July 2009	6 July 2009
3	17 November 2009	09/698	17 November 2009	17 November 2009
4	21 June 2011	11/220	17 August 2011	17 August 2011
5	16 July 2013	13/292	16 July 2013	19 July 2013
6	22 October 2013	13/438	22 October 2013	22 October 2013
7	3 May 2016	16/171	6 June 2016	9 June 2016
8	2 May 2017	17/148	2 May 2017	2 June 2017
<b>All policies can be reviewed or revoked by resolution of Council at anytime.</b>				

**DIRECTORATE:** Utilities

**BUSINESS UNIT:** Infrastructure