BUILDING OVER SEWERS POLICY

(Adopted by Council on 8 June 2016, Resolution No 2016/160,
Revised by Council on 17 June 2020, Resolution No 2020/100)

1. Purpose and context of the procedure

This policy document has been prepared as a guideline for proposed development/s where approval is required from Narromine Shire Council (Council) for building over or adjacent to Council's sewer mains gravity, rising and pressure or pumped. The implementation of this policy will ensure that Council's sewer assets are protected.

This policy will supersede the requirements specified in Narromine Shire Council's Development Control Plan (2011) adopted on 4 October 2011 and reviewed 8 May 2013.

2. Statement

Council's initial position is that:

a) No building, with the exception of minor structures, shall be permitted over Council's sewer mains other than where, in the opinion of the Council, exceptional circumstances exist.

b) New buildings proposed adjacent to existing Council sewer mains shall comply with the following requirements:

i. building footings and external walls shall be constructed no closer to the centreline of the constructed sewer than 1.0 metre horizontally if no easement exists, or no closer than the edge of the sewer easement if one already exists;

ii. building eaves shall be permitted no closer than 0.75 metres horizontally from the constructed sewer centreline;

iii. notwithstanding (ii) above the building eaves shall also not be permitted any closer than 0.75 metres horizontally to the centreline of any sewerage easement if one exists;

iv. the building footings adjacent to the sewer main shall be founded at a stratum below the line of influence of the existing or new sewer main as shown in appendix A.

Pressure sewer systems are to be treated in a similar fashion to normal gravity sewer in regard to building over sewer conditions. Access to the unit for maintenance and repairs is to be maintained at all times. No structures are to be constructed over the sewer pressure mains running from the unit to the boundary kit.

If required, and subject to application, relocation of the pressure main from the unit to the boundary kit may be approved.

If a Council sewerage vent pipe is located within 5.0 metres of the proposed new building then the requirements in relation thereto shall be referred to the appropriate Council officer for his/her determination.

Applications for construction adjacent to and over Council's assets will only be considered if it can be clearly demonstrated that the applicant has investigated all other options for development.

Council will treat each application on its merits but it should not be assumed that consent for construction over the sewer will be automatically granted.

3. Definitions:

Sewer/line/main/pipe means an asset owned by Council used for the conveyance of sewage, whether raw or treated.

Rising Main/Pressure or Pumped Main means any main that operates under pressure for the transfer of raw or treated sewage from one point to another. This includes systems within both Council and Private subdivisions and facilities such as Caravan Parks or Aerodromes etc.

Building over sewer means the erection of a structure over and within the zone of influence of the sewer.

Building adjacent to sewers means where a structure is proposed to be built in the zone of influence but not over the sewer. The structure is likely to impact on Council's sewers and associated structures.

Zone of influence means the area associated with Council's assets that, if built within or over, could cause undue loading on the asset.

sewer survey / peg-out means the process where Council assets are located and correctly documented by a Registered Surveyor.

encasement means the protection of a sewer pipe by encasing all around with concrete to Council standards.

easement to drain sewage means a legal entitlement placed over a parcel of land for the purposes of the provision, operation and maintenance of sewer infrastructure.

pressure sewer unit means a Council owned and maintained individual lot sewer pressure pump unit.

sewer pressure main means the pipe running from the pressure sewer unit to the boundary kit.

boundary kit means a Council installed valve box located on the sewer pressure main at the property boundary.

4. Responsibilities:

This policy applies to any application lodged with Council to erect a building over or adjacent to Council's sewer.

5. Provisions:

5.1. Restrictions/Exemptions

5.1.1. Restrictions

5.1.1.1. New Building

Where a new building, other than a minor structure, is required to be built over an existing Council sewer main then the sewer main shall be replaced by a new sewer main to be constructed on a new alignment around the proposed building, provided that the new section of sewer can equal or exceed a grade acceptable to Council for the construction of new sewers, based on the equivalent tenements (ET's) predicted for the new sewer. The old sewer main shall be drained of sewage and filled with grout, unless alternative structural engineering advice to the contrary is obtained and submitted for approval.

The following requirements shall apply to any sewer main diverted in accordance with this sub- clause:

i. building footings and external walls shall be constructed no closer to the centreline of the constructed sewer than 1.25 metres horizontally if no easement exists, or no closer than the edge of the sewer easement if one already exists;

ii. building eaves shall be permitted no closer than 0.75 metres horizontally from the constructed sewer centreline;

iii. notwithstanding (ii) above the building eaves shall also not be permitted any closer than 0.75 metres horizontally to the centreline of any sewerage easement if one exists;

iv. the building footings adjacent to the sewer main shall be founded at a stratum below the line of influence of the existing or new sewer main as shown in appendix A.

v. if a Council sewerage vent pipe is located within 5.0 metres of the proposed new building then the requirements in relation thereto shall be referred to the appropriate Council staff member for his/her determination.

vi. an easement of minimum width of two (2) metres shall be registered in Council's name over the sewer main for the total length of the main located within the property, permitting Council to enter upon the property, make inspections and effect any repairs or renewals;

vii. all construction shall be undertaken in accordance with AUS-SPEC, Council's adopted standard specification for design and construction of sewerage, and other infrastructure.

5.1.2. Exemptions

5.1.2.1. Exceptional Circumstances

Where, in the opinion of the Council, the developer has demonstrated that exceptional circumstances exist whereby the existing sewer main cannot practically be replaced around the proposed new building, or other special circumstances dictate and specific approval in writing is granted for the construction of a building over a sewer main, then at no cost to Council, the sewer main shall be replaced by:

i. new Tyton "extreme" internally lined ductile iron pipeline

ii. in the case where a trenchless technology method of rehabilitation is the preferred option, a grade PE80 high density polyethylene pipe (HDPE), of the same or greater internal diameter and constructed on the same location and grade of the existing sewer main. The pressure class of the HDPE material is to be determined in accordance with the manufacturer's recommendations in respect of depth, cover loading, size and grading etc.

iii. In certain circumstances depending on the condition of the existing sewer main Council may adopt rehabilitation by the installation of an internal close fit lining system.

The decision as to the type of pipe in each circumstance is to be made by appropriate member of Council's staff.

The existing sewage flow is to be diverted during construction of the new pipeline by pumping or temporary piping as necessary.

In this subclause "building" does not include minor structures as defined in Part 5.1.2.2 below, or other specialised structures as may be determined by Council in specific circumstances.

The following additional requirements shall also apply to sewerage constructed beneath a building in accordance with this sub clause:

i. access chambers shall be constructed as close as practicable to either side of the building in order to minimise the length between access chambers;

ii. building footings shall be constructed no closer to the centreline of the constructed sewer than 1.0 metre horizontally and no closer than the edge of sewer easement if one already exists;

iii. the building footings adjacent to the sewer main shall be founded at a stratum below the line of influence of the existing or new sewer main and any floor constructed over the sewer main shall include parallel construction joints at 1200mm centres either side of the sewer centre-line for the entire length of the slab where it overlies the main;

iv. if a Council sewerage vent pipe is located within 5.0 metres of the proposed new building then the requirements in relation thereto shall be referred to the appropriate member of Council's staff for his/her determination.

v. an easement for access to the sewer main located within the property of minimum width of two (2) metres shall be registered in Council's name over the sewer main for the total length of the main located within the property, permitting Council to enter upon the property, make inspections and effect any repairs or renewals, and absolving it from any liability for damage to property;

vi. no access chamber is to be located so that it is within an enclosed building of any kind.

vii. For the purpose of this clause an "access chamber" may also be described as an "access hole", "inspection point", "manhole", or "maintenance hole".

viii. all construction shall be undertaken in accordance with AUS-SPEC, Council's adopted standard specification for design and construction of sewerage, and other, infrastructure.

5.1.2.2. Minor Structures

Minor structures may be permitted over existing Council sewer mains in the following circumstances:

i. Fences, retaining walls and areas paved with removable concrete or pavers may be constructed over Council's sewer, whether or not there is an easement over the sewer.

ii. Reinforced concrete paving or flooring of a carport (as defined below) may be constructed over Council sewers provided that parallel construction joints at 1200mm centres either side of the sewer centre-line are constructed for the entire length of the main beneath the concrete slab. This provision applies whether or not there is an easement over Council's sewer.

iii. Carports, awnings, aviaries, BBQ's, cubbyhouses, gazebos, greenhouses, patios (or similar), shade sails, decorative water features (not including swimming pools), rainwater tanks and prefabricated metal sheds with floor area of 20m2 or less, may be constructed over Council's sewer whether or not there is an easement over the sewer, provided that the property owner accepts in writing that, although Council will take reasonable care to prevent damage to his/her property, he/she will be responsible for the restoration of any damage to the item if Council has to remove the item to access the sewer main. To this end, any minor structure shall be readily removable to the satisfaction of Council.

For the purpose of this clause a "carport" is defined as a:

- A structure consisting of a roof but not any enclosed side walls, for the purpose of garaging a car.
- A structure consisting of metal or timber columns supporting the roof assembly.
- A structure fixed to the ground or to an adjacent building only by means of a readily removable connection such as a bolted connection.
- A structure that can be readily removed.

5.1.2.3. Rainwater Tanks

Rainwater tanks that are to be constructed on concrete slabs, frames or other permanent bases, will for the purposes of this policy, be classified as permanent load bearing structures and will be subject to the provisions of this policy in regard to access and load bearing upon Council's sewers.

Rainwater tanks of a size 10,000 litres or less, constructed from plastic or other flexible material and to be situated upon natural ground or a base of sand, roadbase or similar material, and where it can be demonstrated that the tank can be readily emptied and moved (without damage to the tank) will be classified as demountable structures and not be subject to the provisions of this policy.

5.1.2.4. Planting of trees

Tree roots can penetrate into sewer mains through joints or damaged sections of pipes, causing blockages and subsequent overflows. As a result, certain species are not recommended to be planted near sewer mains. A list of the highest risk species is provided in Appendix B.

6. Submission Requirements

6.1.1. General

A written application including the following information is to be provided:-

a) Two (2) copies of the approved Building plans.

b) Two (2) copies of certified engineering plans, indicating protection requirements of the sewer infrastructure and proposed/existing structure(s). One copy will be retained by Council.

c) Site survey plan by Registered Surveyor accurately showing the location of the existing sewer (not a line between manhole lids) dimensioned both vertically and horizontally with respect to the lot boundaries and the proposed structure(s). Details to include offsets (square off the sewer main) and sewer chainages at those offsets, grade of the sewer main, AHD invert levels and surface levels at the affected footprint of the building. All dimensions indicated on the plan should be established by site survey and levels to AHD and not copied from Council's records.

d) In certain circumstances Council will require a work method statement showing the sequence of construction and method of protecting the sewer.

6.1.2. Plan Requirements

The plans must clearly indicate:

a) Engineering/building plans should set out the manner of construction, the type of material to be used and the precise location of the proposed and existing structure/s in relation to Council's sewers and other structures (offsets from sewer to structures/face of piers, to be provided), property boundaries and adjoining buildings (if deemed to affect the sewer), existing/finished surface levels at the

building and over the sewer, and sewer invert levels. It is the applicant's responsibility to ensure accuracy of all information provided,

b) Site soil classification as per AS 2870 (as amended) for the proposed development lot,

c) Proposed or existing concrete encasement of the sewer main and compliance with protection, clearance and access requirements, plus any other conditions as indicated on the relevant Development Consent and/or Building Over Sewer approval,

d) Details of the existing sewer pipe i.e. location (offsets) of main and manholes/lampholes in relation to property boundaries and proposed structures and face of piers (as determined by Registered Surveyor), invert levels, grade of pipeline, material type (i.e. uPVC, VC, AC etc.),

e) Long sections showing cut / fill of site, invert levels of the sewer(s), floor levels, finished and /or natural surface levels and levels of underside of foundations with appropriate clearances.

f) All levels shall be to AHD,

g) All plans shall include detailed construction notes.

6.2. Supervisions/Inspection

a) All works relating directly to the sewer infrastructure, as specified in the Development Consent and/or Building Over Sewer approval are to be carried out in the presence and to the satisfaction of NSC Council's inspection officer. Inspection for any works should be arranged and confirmed at least 48 hours in advance.

Applicants are to contact Council to determine the number of inspections and at what stage/s these are required prior to commencing any works.

b) CCTV inspection of affected sewers may be required prior to issue of a Construction Certificate and/or at the completion of works.

6.3. Works as Executed Plans

At the completion of the approved works, if there has been engineering changes on site to the sewer, it is the Engineer/Surveyor's responsibility to submit two (2) copies of Works as Executed plans supplied by a licensed surveyor prior to final approval.

6.4. References:

WASA Gravity Sewerage Code of Australia WSA 02—2014 Third Edition Version 3.1
AS/NZ 3500.3.2003 Plumbing and Drainage-Stormwater Drainage

6.5. Appendices:

APPENDIX A: Foundation Requirements

APPENDIX B: Plants to avoid near Sewer Mains

Authorisation:

Owner	**Director Governance**		
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8 June 2016	1.0	2016/160	8 June 2020
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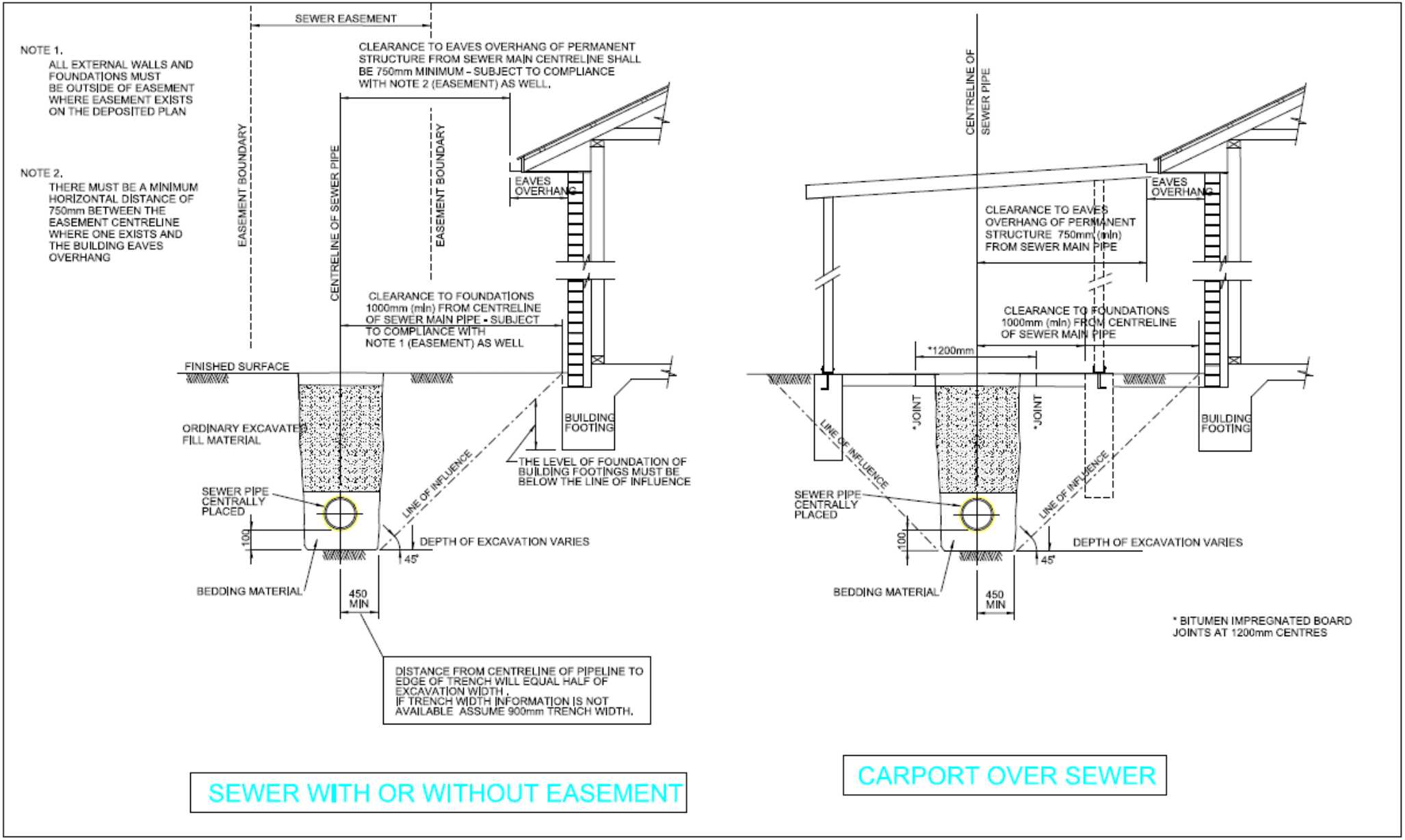
Related Council Policy / Procedure

Appendix A: Foundation Requirements



Appendix B: Plants to avoid near Sewer Mains

Botanical name	*Common Name*	*Damage rating*
Cinnamomum camphora	Camphor Laurel	Extreme
Ficus species	Fig Trees & Rubber Plants	Extreme
Populus species	Poplars	Extreme
Salix species	Willows	Extreme
Erythrina species	Coral Trees	Very High
Eucalyptus species	Large Gum Trees	Very High
Jacaranda mimosifolia	Jacaranda	Very High
Liquidambar styraciflua	Liquidambar	Very High
Araucaria species	Norfolk Island & Bunya Pines	Very High
Brachychiton acerifolium	Illawarra Flame Tree	Very High
Casuarina species	Casuarinas	Very High
Melia azedarach	Australian White Cedar	Very High
Pinus species	Pine Trees	Very High
Platanus acerifolia	Plane Tree	Very High
Schinus molle	Pepper Tree	Very High
Ulmus species	Elms	Very High
Bougainvillea species	Bougainvilleas	High
Cortaderia selloana	Pampas Grass	High
Grevillea robusta	Silky Oak	High
Ilex species	Hollies	High

Botanical name	*Common Name*	*Damage rating*
Lagunaria patersonii	Norfolk Island Hibiscus	High
Ligustrum species	Privets	High
Magnolia species	Magnolias	High
Nerium oleander	Oleander	High
Phoenix canariensis	Canary Island Date Palm	High
Phyllostachus species	Bamboos	High
Toxicodendron species	Rhus Trees	High
Lophostemon confetus	Brush Box, Tristania	High
Wisteria species	Wisteria	High