

Address of proposed drainage work: 16 Elizabeth Street Gore

Scope of works to be completed:

As part of the storm water/foul water separation being completed in this street, this application is to separate the private stormwater/foul water and install new laterals from the buildings within the property, to the new service connections at the boundary.

Please refer to the drainage proposal plan attached on the aerial map, this proposal is supplied to the best of our knowledge at this time. One drainage inspection will be arranged with at least 48hrs notice given. All drains will be laid at the correct grades and bedded ready for inspection. An as laid plan with critical dimensions will be supplied on the Gore DC template, signed by the drainlayer certifying the drainage work.

Buildings on the property to have drains separated are:

- ☒ Dwelling
- ☐ Garage
- ☐ Other

Will all new drains be installed external to the building(s) ?

- ☒ Yes
- ☐ No, **SW** downpipes will be redirected under the raised timber floor to the correct location for external connection to new buried SW drains
- ☐ No, **FW** fixture outlets will be redirected under the raised timber floor to the correct location for external connection to new buried FW drains
- ☐ Other **(SW only being upgraded)**

Signed on behalf of Gore Southern Plumbing and Heating by:

Name Phil Mowat

Date 19/01/2023

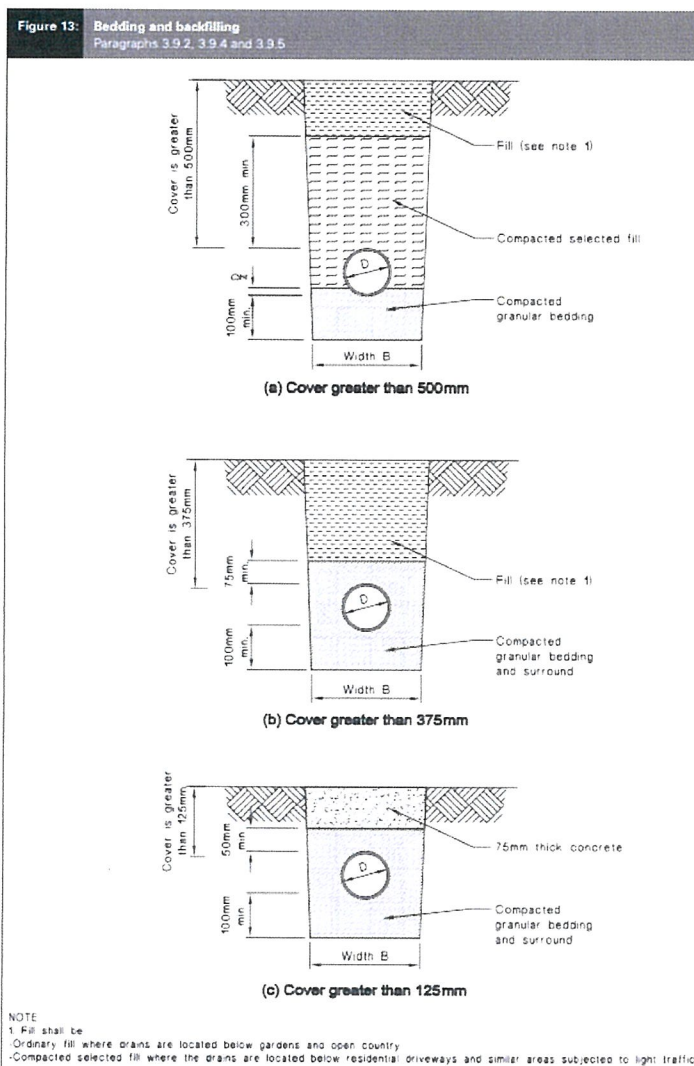
Signature 

All new SW drains will be 100mm PVC installed at min. 1:100 grade, have sweeping bends and an inspection point installed close to the dwelling. The drains will be laid in the correct bedding and have appropriate cover as per fig 13, E1/AS1

The trench excavation will be in accordance with fig. 14 E1/AS1 and clause 3.9.7, as per attached pages 40 – 41 from E1/AS1.

SURFACE WATER

Acceptable Solution E1/AS1



Acceptable Solution E1/AS1

SURFACE WATER

d) Spaced at,

- i) 7.5 m centres for trench slopes between 1 in 8 and 1 in 5, or
- ii) 5.0 m centres for trench slopes greater than 1 in 5.

COMMENT:

The anti-scour blocks partition off the trench and prevent ground or surface water running along the trench and causing scouring.

3.9.4 Trench width

The width B of the trench shall be no less than the pipe diameter D plus 200 mm. Trench width at the top of the pipe shall be no more than 600 mm unless the pipe(s) in the trench are covered with concrete, as shown in Figure 13 (c).

3.9.5 Acceptable materials

Acceptable fill materials shown in Figure 13 are

- a) Bedding material of clean granular non-cohesive material with a maximum particle size of 20 mm, or
- b) Selected compacted fill of any fine-grained soil or granular material which is free from topsoil and rubbish and has a maximum particle size of 20 mm, or
- c) Ordinary fill which may comprise any fill or excavated material.

3.9.6 Placing and compacting

- a) Granular bedding and selected fill shall be placed in layers of no greater than 100 mm loose thickness and compacted.
- b) Up to 300 mm above the pipe, compaction shall be by tamping by hand using a rod with a pad foot (having an area of 75 ± 25 mm by 75 ± 25 mm) over the entire surface of each layer to produce a compact layer without obvious voids.
- c) More than 300 mm above the pipe, compaction shall be by at least four passes of a mechanical tamping foot compactor (whacker type) with a minimum weight of 75 kg.

3.9.7 Proximity of trench to building

For light timber frame and concrete masonry buildings constructed to NZS 3604 or NZS 4229 in accordance with B1/AS1, pipe trenches which are open for no longer than 48 hours shall be located no closer than distance 'V' (see Figure 14) to the underside of any building foundation. Where the trench is to remain open for periods longer than 48 hours, the minimum horizontal separation shall increase to 3V in all ground except rock.

Amend 9
Feb 2024

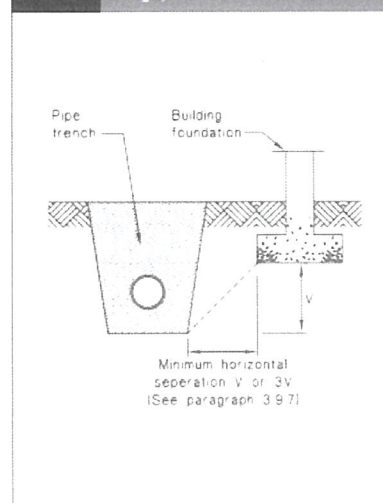
3.9.8 AS/NZS 2032, AS/NZS 2566 1 and AS/NZS 2566 2 provide other acceptable solutions.

Amend 11
Feb 2024

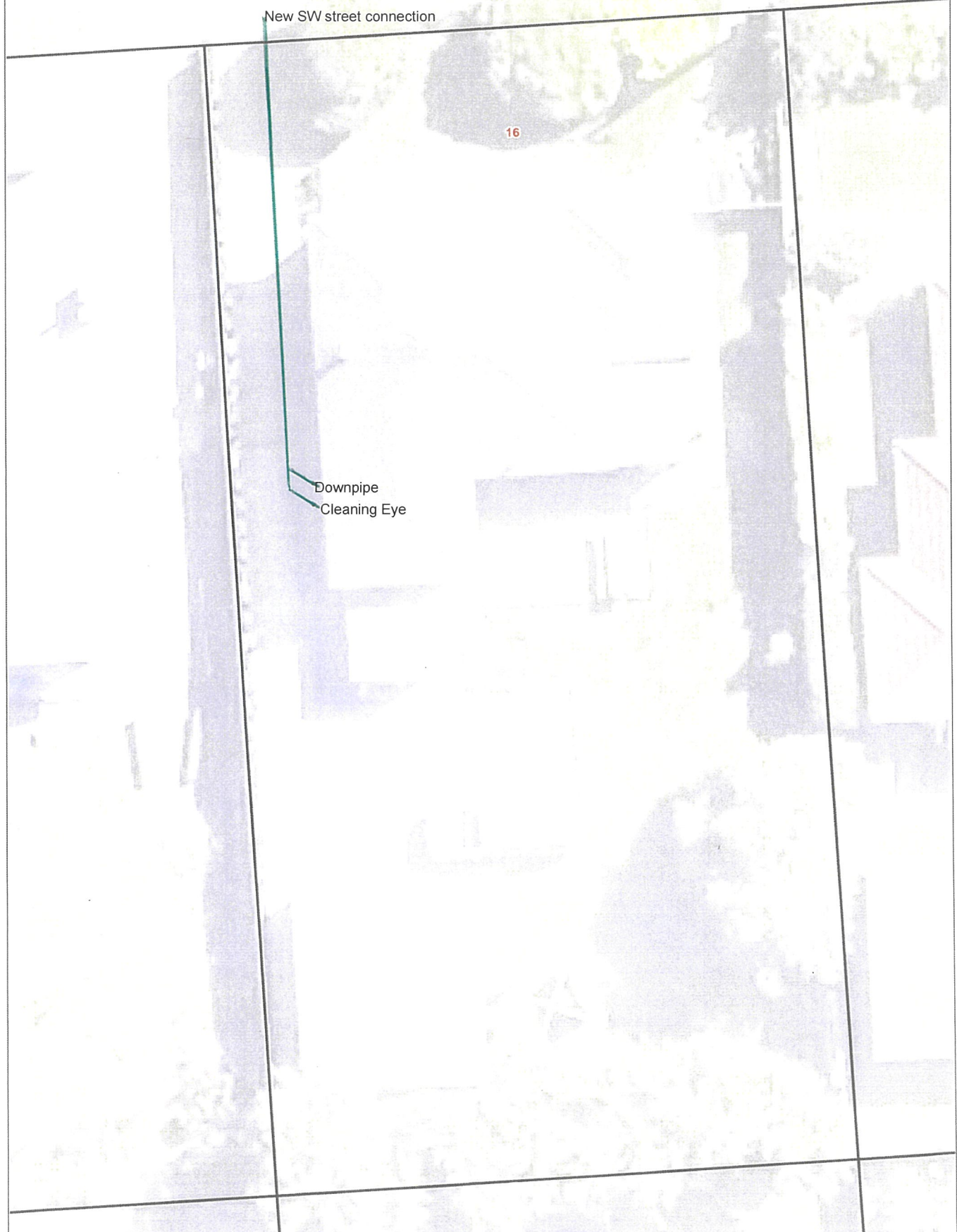
COMMENT:

These provisions may exceed New Zealand Building Code minimum requirements.

Figure 14: Relationship of Pipe Trench to Building Foundation
Paragraph 3.9.7



Amend 9
Feb 2024



16 ELIZABETH STREET
GORE

Date: 19/07/2022

GORE DISTRICT COUNCIL
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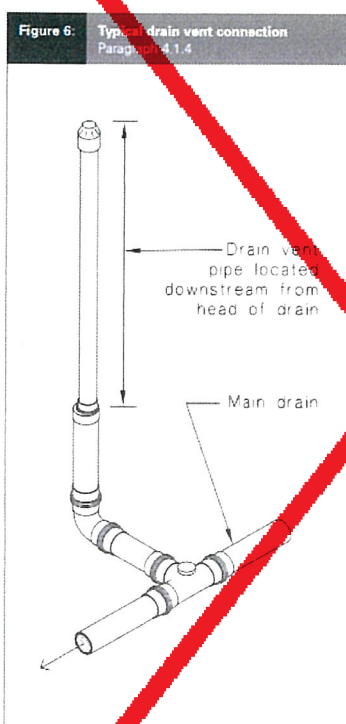


**GO
RE**

All new FW drains will be 100mm PVC installed at min. 1:60 grade, have sweeping bends and inspection points installed as detailed in clause 5.7.4 - G13/AS2. The drains will be laid in the correct bedding and have appropriate cover as per fig 7, G13/AS2
The trench excavation will be in accordance with fig. 8 - G13/AS2 and clause 5.6, as per attached pages 44 - 46 from G13/AS2.

FOUL WATER
DRAINAGE

Acceptable Solution G13/AS2



5.3.2 Drains laid in ground described in Paragraph 5.3.1 shall be subject to specific design.

5.4 Trench width

5.4.1 The width B of the trench shall be no less than the pipe diameter D plus 200 mm. The width of the trench at the top of the pipe shall be no more than 600 mm unless the pipes in the trench are covered with concrete, as shown in Figure 7 (c).

5.5 Placing and compacting

5.5.1 Base bedding (beneath the pipe) shall be placed and compacted before pipes are laid.

5.5.2 Side bedding (along both sides of the pipe) and cover bedding (where used) up to 300 mm above the pipe shall be compacted.

5.6 Proximity of trench to building

5.6.1 For light timber framed and concrete masonry buildings constructed to NZS 3604 or NZS 4229 in accordance with B1/AS1 pipe trenches which are open for no longer than 48 hours shall be located no closer than V to the underside of any building foundation, as shown in Figure 8. Where the trench is to remain open for periods longer than 48 hours the minimum horizontal separation shall increase to 3V in all ground except rock.

Amended
14 Feb 2016

5.7 Access points

5.7.1 Except in accordance with Paragraphs 5.8 and 5.9, all drains shall be laid to allow easy access for maintenance and the clearance of blockages.

5.7.2 Drains shall be provided with access points to facilitate cleaning and the clearance of blockages. Such access points shall be constructed to prevent the ingress of ground water and tree roots.

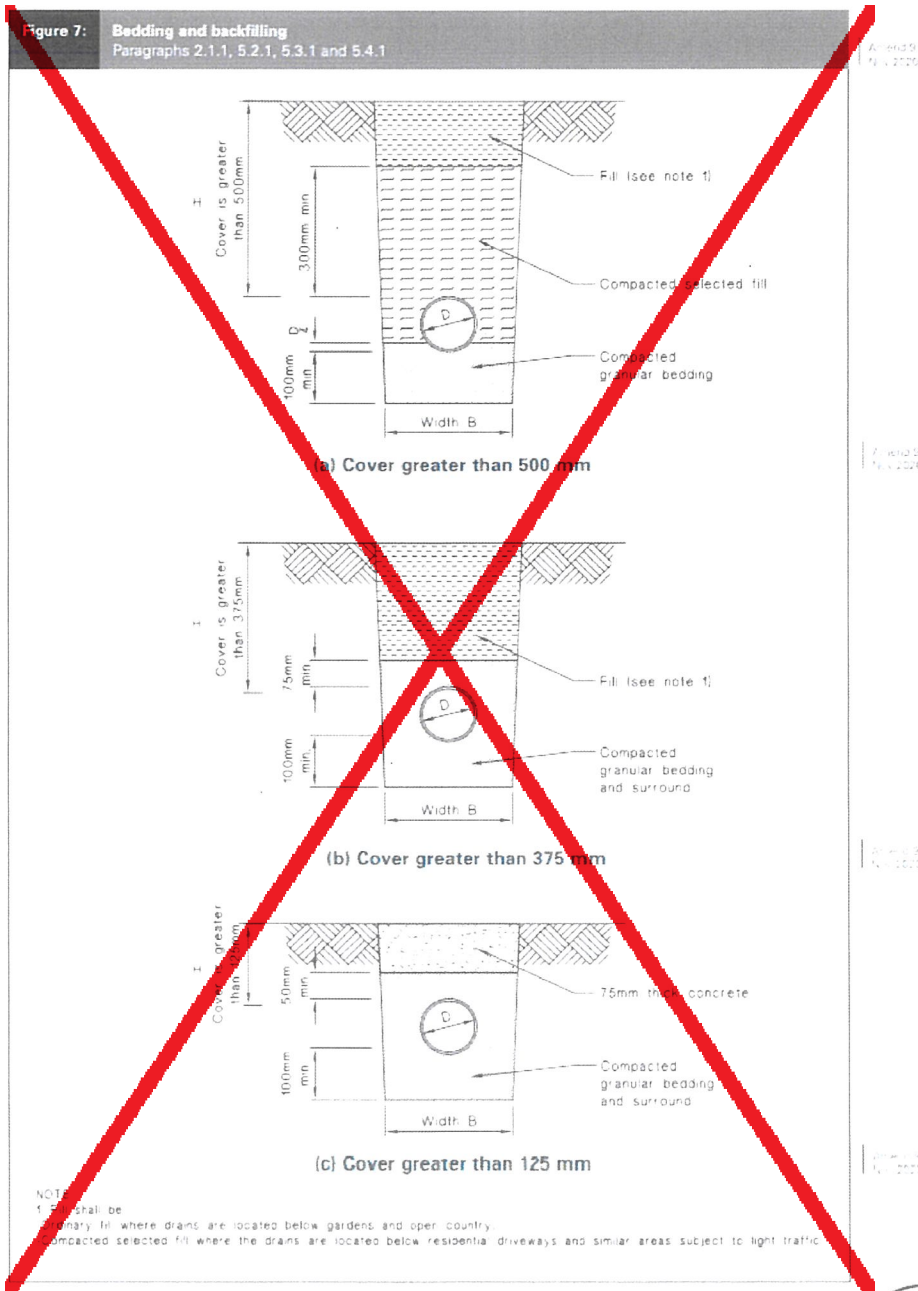
5.7.3 Access points may comprise access chambers, inspection chambers, rodding points or inspection points. Methods of access point construction are shown in Figures 9 to 12.

COMMENT:

Rodding points are preferred to inspection points in landscaped or sealed areas and within buildings.

Acceptable Solution G13/AS2

FOUL WATER
DRAINAGE



FOUL WATER
DRAINAGE

Acceptable Solution G13/AS2

Figure 8: Relationship of pipe trench to building foundation
Paragraph 5.6.1

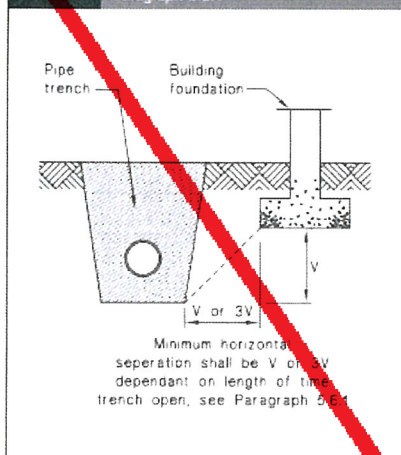


Figure 9: Inspection points
Paragraph 5.7.3

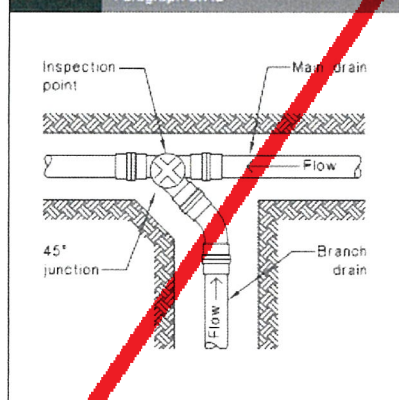
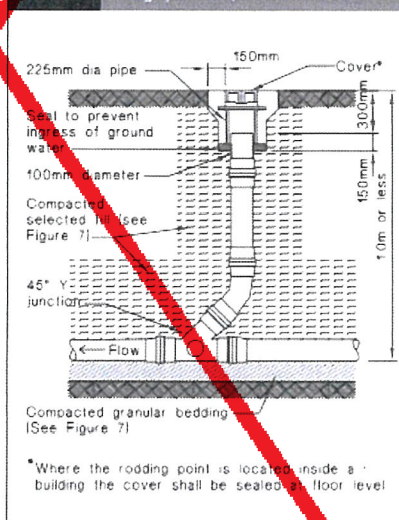


Figure 10: Rodding points
Paragraphs 3.4.6, 5.7.3 and 5.9.1



5.7.4 Access points shall be provided at the following locations.

- a) Immediately prior to drain outfalls,
- b) Immediately inside the boundary of the property served,
- c) At the junction of every drain with another drain except that no access points required where the branch drain is less than 2.0 m long and only serves a gully trap,
- d) Every change in horizontal direction of greater than 45°,
- e) Every change in gradient greater than 45°,
- f) At intervals (on straight lines) of no less than:
 - i) 50 m where rodding points are used, or
 - ii) 100 m where access chambers, inspection chambers or inspection points are used, and
- g) Within 2.0 m outside the building where a drain enters or exits from under a building.