



## INTRODUCTION

These guidelines provide an outline of the requirements which need to be considered when planning to construct works, excavate or place fill over Gippsland Water's easement or within one metre of a sewer or water asset.

It is the landowner's responsibility to ensure that any proposed works adhere to legislative obligations prior to any work proceeding. Section 148 of the *Water Act, 1989* deals with 'structures over works' and states that a person must not allow a structure to be built or any filling (eg: soil) to be placed over an easement of the water authority without consent. Further it states that regardless of the existence of an easement, no structure should be built or filling placed within one metre laterally of the water utility assets without the consent of Gippsland Water.

If consent is provided to the property owner to erect a structure over an asset or within an easement, the property owner must sign a deed of agreement which will outline the conditions applicable to the structure.

It is the property owner's responsibility to confirm the actual location of the assets prior to commencing any works.

In some cases there is an easement registered on title and no assets located within the easement. Even if there is no asset located within the easement, Gippsland Water reserve the right to access the easement in the future.

This guideline will assist landowners to make informed decisions when assets and/or easements are located within their property.

Applicants must ensure they provide detailed information with the application. Minimum requirements are:

- Site plan with measurements showing asset location in respect of the proposed development;
- Copy of property title including the plan diagram displaying easements on property and other relevant information;
- Details of any footings depth, width, distance from asset, engineered angle of repose (please refer to diagrams on pages 17-25))
- Details of height of structure (if applicable)

## **TABLE OF CONTENTS**

	ASSETS	PAGE
1	Up to and including 225mm PVC sewer main	6
2	150mm VC or concrete sewer main	8
3	225mm sewer mains or larger	10
4	Sewer rising mains, pressure sewer mains, major assets	12
5	Property connection and inspection opening	13
6	Maintenance hole or shaft	14
7	Decommissioned assets	15
8	Easement with no assets	16
9	Water pipe	16
	Useful Diagrams	17-25

## **GLOSSARY OF TERMS**

**Asset –** any part of a water supply or sewerage system that is the responsibility of Gippsland Water.

**Angle of repose** – Line defining the zone of influence below a load placed by soil by a structure or footing (generally taken to spread at an angle of 45 degrees). Water and sewer assets must be above this zone of influence (please refer to pages 18, 22-23 for diagrams).

**Decommissioned asset –** an asset that is not currently in active use but is still located within the ground.

**Demountable** – Any structure or roof that can be manually dismantled and removed from its current position within a 4 hour period.

**Easement** – an area of land, or part of a lot, reserved by law for a specific purpose, such as access, sewerage or water.

**Height clearance** – Height clearance required above ground level to allow access by machinery to water or sewer assets.

**Inspection opening** – in relation to sewerage works, means an access opening in a pipe or pipe fitting, installed to facilitate inspection, testing or the clearing of obstructions, and fitted with a threaded cap or plug or an access cover.

**Maintenance structure** – collective term for maintenance hole, maintenance chamber or maintenance shaft (please refer to pages 17 & 24 for diagrams)

**Major asset** – Our major assets include; pressure sewer mains, gravity trunk sewer mains, the Regional Outfall System pipeline and channel, the Saline Wastewater Outfall Pipeline, and raw water supply pipelines.

**Property connection branch –** means a section of pipe owned and maintained by Gippsland Water which connects the customer's sanitary drain to the reticulated sewerage system (sewer main).

**Property service** – means the water supply pipe connecting the water main of a water corporation to the outlet of any fixtures installed on a serviced lot.

PVC sewer pipe - Polyvinyl Chloride Pipe

**Sanitary drain** - A line of pipes, including all fittings, conveying or intending to convey sewage or trade waste from a building or structure on a serviced property to the sewer main of a water corporation.

**Sewer main** – means the pipe to which all serviced properties are connected by a sanitary drain for the discharge of sewage and trade waste.

Sewer rising main – A pipe that transfers sewage under pressure from a pump station.

VC sewer pipe - Vitreous clay pipe

**Water main –** means the pipe to which all serviced properties are connected for water supply to the properties and includes the stop valve and any fittings located at the connection between the water main and a water meter.

## Up to and including 225mm PVC SEWER MAIN

## The following CANNOT be built over this type of asset:

- Residential house/habitable structure, commercial or industrial building;
- Swimming pool either in ground or above ground;
- Tennis courts:
- Trees of any species

## The following CAN be built over this type of asset with certain CONDITIONS:

- Non habitable structure (ie: shed, garage, carport);
- Eaves and steps attached to habitable dwelling;
- Driveways;
- Fences:
- Excavation/fill:
- Retaining walls;
- Other utility services (ie: power, telephone, gas)
- Water tanks up to 5000L

- Non habitable structure (including steps attached to a dwelling) must be independently supported, or, if it is attached to another structure, it must be fully demountable;
- Access is required at all times;
- Construction adjacent to the sewer main requires a minimum horizontal clearance of one metre from the outside edge of the asset;
- Independent footings require a minimum horizontal clearance of one metre from the outside edge of the asset;
- Independent footings must extend to a depth that ensures that the asset is above the angle of repose;
- Engineered raft concrete slabs with integrated footings required a minimum horizontal clearance of 500mm from the outside edge of the asset.
- Slab foundations (including driveways) traversing the sewer main must maintain a minimum vertical clearance of 600mm between the underside of the slab and the top edge of the asset;

## Guidelines for proposed development over / adjacent to easements & assets

- Single storey construction only is permitted when a non-habitable structure traverses the sewer main;
- Maximum depth of fill placed over the sewer main is one metre;
- Unless a demountable structure, the height clearance above ground to the underside of the structure must be 2.8 metres
   to provide access and clearance for operating plant and equipment;



## 2. 150mm VC or CONCRETE SEWER MAIN

## The following CANNOT be built over these types of assets:

- Residential house/habitable structure, commercial/industrial building;
- Swimming pool either in ground or above ground;
- Tennis courts:
- Trees of any species

## The following CAN be built over these types of assets with certain CONDITIONS:

- Non habitable structure (ie: shed, garage, carport);
- Driveways;
- Fences:
- Excavation/fill:
- Retaining walls;
- Other utility services (ie: power, telephone, gas);
- Water tanks up to 5000L

- Non habitable structure must be independently supported, or, if it is attached to another structure, it must be fully demountable;
- Access is required at all times;
- Construction adjacent to sewer main requires a minimum horizontal clearance of one metre from the outside edge of the asset;
- Independent footings require a minimum horizontal clearance of one metre from the outside edge of the asset;
- Independent footings must extend to a depth that ensures that the asset is above the angle of repose;
- Engineered raft concrete slabs with integrated footings required a minimum horizontal clearance of 500mm from the outside edge of the asset.

- Slab foundations traversing the sewer main must maintain a minimum vertical clearance of 600mm between the underside of the slab and the top edge of the asset;
- Single storey construction only when non-habitable structure traverses the sewer main:
- Maximum depth of fill placed over the sewer is one metre;
- Landowner must obtain a CCTV inspection report to the standards of WSA 05-2013 before construction commences and forward the report to Gippsland Water for review. Construction will be dependent upon condition of main.
- Landowner must obtain a CCTV inspection report to the standards of WSA 05-2013 after construction has been completed and forward the report to Gippsland Water
   for review:
- If damage to the asset has occurred during construction, the land owner must repair/replace asset to the satisfaction of Gippsland Water.
- Unless a demountable structure, the height clearance above ground to the underside of the structure must be 2.8 metres
   to provide access and clearance for operating plant and equipment;
- No vibrating equipment to be used over sewer main to bed down sand and other supporting material.

## 3. 225mm SEWER MAINS or larger

## The following CANNOT be built over these types of assets:

- Residential house/habitable structure, commercial/industrial building;
- Swimming pool either in ground or above ground;
- Tennis courts:
- Non habitable structure (ie: shed, garage, carport);
- Retaining walls;
- Trees of any species

# The following CAN be built over these types of assets with certain CONDITIONS:

- Driveways;
- Fences:
- Excavation/fill:
- Other utility services (ie: power, telephone, gas)
- Water Tanks up to 5000L

- Access is required at all times;
- Construction adjacent to sewer main requires a minimum horizontal clearance of one metre from the outside edge of the asset;
- Footings require a minimum horizontal clearance of one metre from the outside edge of the asset;
- Footings must extend to a depth that ensures that the asset is above the angle of repose;
- Slab foundations traversing the sewer main must maintain a minimum vertical clearance of 1 metre between the underside of the slab and the top edge of the asset;
- Maximum depth of fill placed over the sewer is one metre;



## 4. MAJOR ASSETS (including rising sewer mains and pressure sewer mains)

## The following CANNOT be built over these types of assets:

- Residential house/habitable structure, commercial/industrial building;
- Swimming pool either in ground or above ground;
- Tennis courts:
- Non habitable structure (ie: shed, garage, carport);
- Retaining walls;
- Trees of any species

## The following CAN be built over these types of assets with certain CONDITIONS:

- Driveways;
- Fences;
- Excavation/fill;
- Other utility services (ie: power, telephone, gas).

NB - These conditions should be read in conjunction with the document titled Crossing of Major Assets Guidelines, which is available on request from Gippsland Water.

# PROPERTY CONNECTION AND INSPECTION OPENING – (including low pressure sewer system tanks)

## The following CANNOT be built over these types of assets:

- Residential house/habitable structure, commercial/industrial building;
- Swimming pool either in ground or above ground;
- Tennis courts:
- Non habitable structure (ie: shed, garage, carport);
- Trees of any species

# The following CAN be built over/next to these types of assets with certain CONDITIONS:

- Driveways;
- Fences;
- Excavation/fill:
- Retaining walls;

- Access is required at all times;
- Footings require a minimum horizontal clearance of one metre from the outside edge of the asset;
- Footings must extend to a depth that ensures that the asset is above the angle of repose;
- Slab (driveway) foundations traversing the sewer main must maintain a minimum vertical clearance of one metre between the underside of the slab and the top edge of the sewer main;
- Maximum depth of fill placed over the sewer or property connection branch is one metre;
- The inspection shaft must match new surface levels;
- If the inspection shaft is likely to be subject to trafficable load, the cap must be installed below surface level and covered by a heavy duty trafficable cover which must be supported so that no load can be transmitted onto the inspection shaft.

## 6. MAINTENANCE STRUCTURES

## The following CANNOT be built over a maintenance structure:

- House or habitable structure, commercial or industrial building;
- Swimming pool either in ground or above ground;
- Tennis courts;
- Non habitable structure (ie: shed, garage, carport);
- Retaining walls;
- Fences:
- Trees of any species

## The following CAN be built over a maintenance hole with certain CONDITIONS:

- Driveways;
- Excavation/fill;

- Access is required at all times;
- Construction adjacent to maintenance structures requires a minimum horizontal clearance of one metre from the manhole cover;
- Footings require a minimum horizontal clearance of one metre from the outside edge of the asset;
- Footings must extend to a depth that ensures that the asset is above the angle of repose;
- The maintenance structure must match new surface levels (all works at owner's cost under terms of a Minor Works Agreement);
- If the maintenance structure is likely to be subjected to vehicular traffic a heavy duty trafficable cover which must be installed (all works at owner's cost under terms of a Minor Works Agreement);

## 7. DECOMMISSIONED ASSETS

The following CAN be built over a decommissioned water or sewer asset with certain CONDITIONS:

- House or habitable structure, commercial or industrial building;
- Swimming pool above ground;
- Tennis courts;
- Non habitable structure (ie: shed, garage, carport);
- Driveways;
- Fences;
- Excavation/fill;
- Retaining walls

- The landowner must consider the risks associated with building over decommissioned assets when designing their structure;
- The landowner must execute a Transfer of Asset Agreement with Gippsland
  Water which transfers ownership of the decommissioned asset from Gippsland
  Water to the landowner. Gippsland Water will provide a surrender of easement
  document to the landowner. The landowner can register this document at Land
  Victoria to remove the easement from the title:
- To reduce risk, we strongly recommend that the landowner should either remove the asset from the ground or fill the asset with cement or some other grout slurry substance.

## 8. EASEMENT WITH NO ASSETS

Approval will not be given where there is an easement in favour of Gippsland Water to provide water or sewer service for future development.

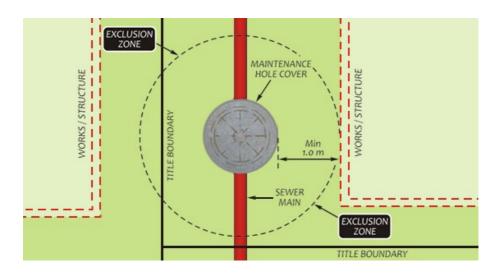
Where an easement does not contain assets, construction may be permitted with the landowner acknowledging access to the easement for asset installation may be required in the future. If the easement is identified as redundant by Gippsland Water, the property owner may request the removal of the easement from title. All costs associated with the removal of the easement from the title will be borne by the land owner.

## 9. WATER PIPES

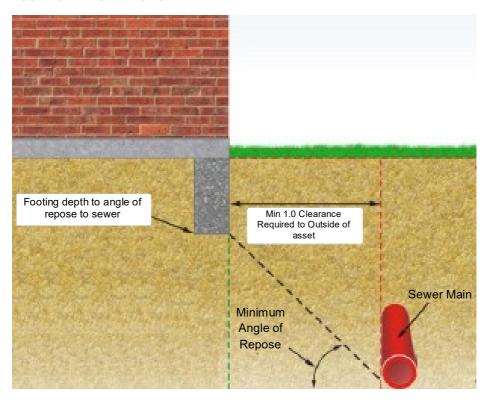
Other than driveways, construction over water mains of any size is not permitted.

## **USEFUL DIAGRAMS**

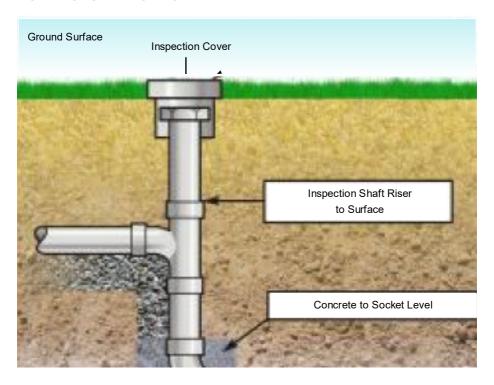
## **MAINTENANCE STRUCTURE**



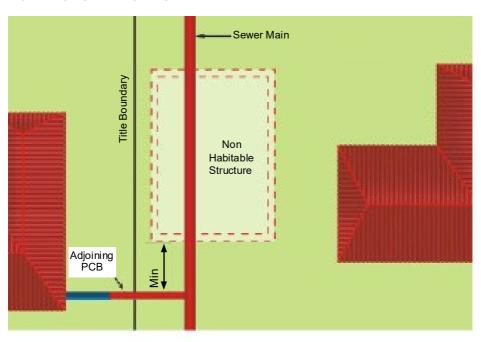
#### FOOTING IN RESPECT OF SEWER MAIN



#### **INSPECTION SHAFT COVERS**



#### **INSPECTION SHAFT COVERS**

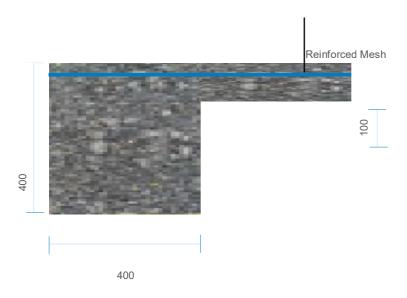


Sewer Mains - Gippsland Water's Responsibility

Internal Property Drains - Property Owner's Responsibility

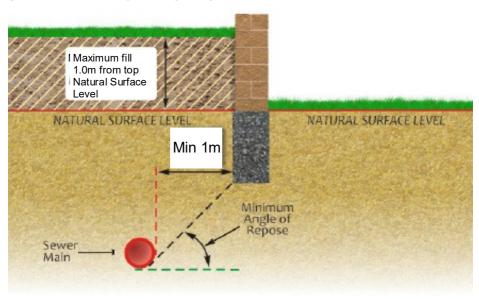
PCB - Property Connection Branch

## **CONCRETE SLAB WITH INTEGRATED FOOTING**

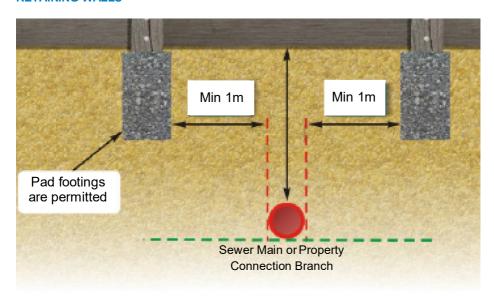


500mm lateral clearance between the asset and engineered integrated slab footing required.

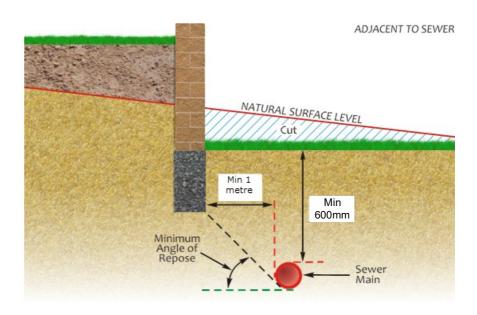
#### SITE FILL / RETAINING WALL OVER SEWER

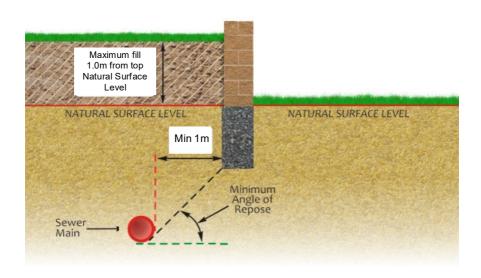


## **RETAINING WALLS**

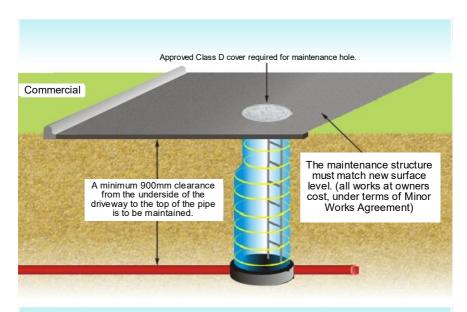


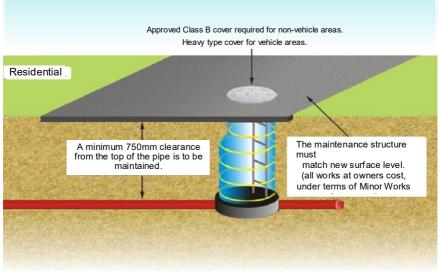
#### SITE FILL / EXCAVATION OVER SEWER MAIN



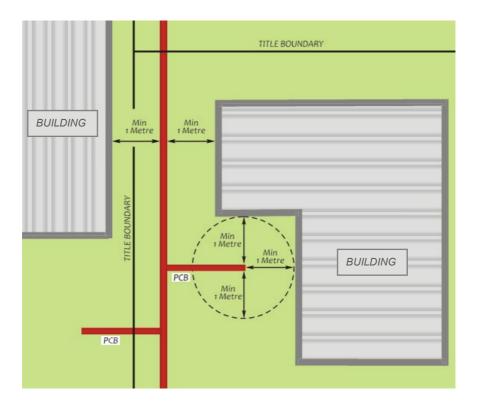


#### MAINTENANCE STRUCTURE REQUIREMENTS

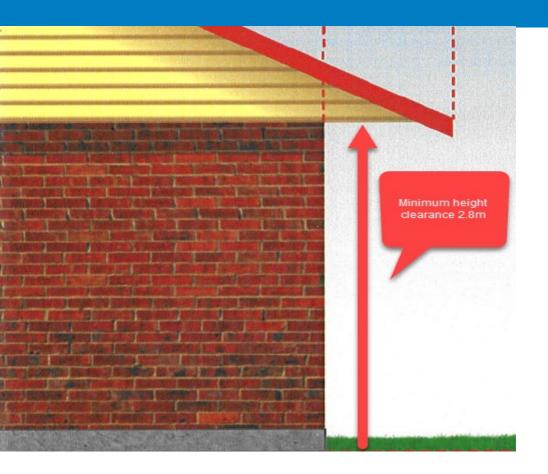




## PROPERTY CONNECTION BRANCH REQUIREMENTS



HEIGHT CLEARANCE REQUIREMENTS



Guidelines for proposed development over / adjacent to easements & assets

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