FORM 1 W
Design Certification List – Water Agreements

Job Description	
Location	
Developer / Owner	
Developer / Owner Contact Details	
Consultant	
Gippsland Water Drawing Numbers	

Note:

Where *Code* is referred to in this document it shall be taken as meaning the *Water Supply Code of Australia* WSA 03-2011-3.1 Melbourne Retail Water Agencies Edition together with Gippsland Water's Water Supply Code Supplement.

A General

A.1 Qualification of consultants

A.1.1 Designers are suitably qualified to design works in accordance with the appropriate Australian Standards, the Code, other codes of practice and Government regulations and are on Gippsland Water's Accredited Consultants list or are pre-qualified.

Initial _____

A.2 Consultation during design

A.2.1 All affected property owners have been consulted _____

A.2.2 Councils and other authorities have been consulted _____

A.2.3 Signed Form 13 (Creation of Easement Document) has been signed by affected land owners outside of the subdivision

_____

A.3 Economic considerations

A.3.1 Most cost-effective & technically appropriate design has been selected _____

A.4 Extent of works

A.4.1 All allotments in the development are serviced _____

A.4.2 Future system expansion has been allowed for in accordance with the *Code* and Gippsland Water requirements

_____

A.4.3 Termination points conform with the *Code* _____

B Environment considerations

B.1 Consideration of environment

B.1.1 Works have been designed with consideration for environment issues in accordance with the *Code*

_____

B.1.3 Environment requirements are listed on design plans _____

B.1.4 Permits for removal of vegetation have been obtained _____

C Design Requirements

C.1 General Location

C.1.1 All water mains has been located within road reserves or Gippsland Water easements_____

C.1.2 Duplicate or rider water mains have been provided in accordance with the *Code* _____

C.2 Obstructions

C.2.1 Allowance has been made for effect of surface obstructions on the alignment of mains _____

C.2.2 Location of all underground services has been determined and proven _____

C.2.3 Clearance from obstructions conforms to the *Code* _____

C.2.4 Prior approval has been given by Gippsland Water for water mains crossing under sewer mains and has been designed in accordance with the *Code*

_____

C.2.5 Design Drawings show common/shared trenching and is designed in accordance with the *Code*

_____

C.3 Alignment

C.3.1 Water main alignment has been approved by council _____

C.3.2 Pipeline alignment in road reserves in new subdivisions conforms to the Road Management Act 2004 Code of Practice, Management of Infrastructure in Road Reserves

_____

C.3.3 Horizontal alignment is sufficiently detailed to enable accurate set-out of the works and checking by Gippsland Water _____

C.3.4 Horizontal deviations have been detailed on design plans _____

C.3.5 Title boundaries or set-out lines have been established by licensed surveyor _____

C.3.6 Deviations of pipes are in accordance with manufacturer's recommendations _____

C.3.8 Deviations using bends are in accordance with the *Code* _____

C.3.9 Deflection around curved alignment is in accordance with manufacturer's recommendations _____

C.4 Cover

C.4.1 Minimum cover is in accordance with the *Code* _____

C.4.2 Gippsland Water has given written approval where cover is in excess of 1.5 metres _____

C.4.3 Design Plans clearly show locality where water main exceeds 1.5 metres in depth _____

C.4.4 Cover has allowed for future road and driveway construction _____

C.4.5 Design levels allow for installation of valves, fittings and anchors _____

C.4.6 Design levels take into account existing and proposed services _____

C.4.7 Level schedule has been produced where water main construction will precede road or drainage construction in accordance with the design requirements. _____

D Selection of pipeline materials

D.1 Design pressure

D.1.1 Maximum supply pressure has been obtained from Gippsland Water _____

D.1.2 Design pressure has been calculated and is shown on drawings _____

D.1.3 Operating pressure is contained within the maximum and minimum operating pressure limits stated in the *Code* _____

D.2 Approved pipeline systems

D.2.1 Pipes and fittings have been selected in accordance with requirements of the *Code* _____

D.2.2 Corrosion protection measures have been investigated in accordance with the *Code* and marked accordingly on the design plans if required _____

E Pipeline assemblies

E.1 Thrust restraints

E.1.1 Thrust restraints have been designed in accordance with the *Code* _____

E.2 Valves

E.2.1 Valve design requirements have been met _____

E.2.2 Correct valve type has been selected _____

E.2.3 Location of valves has been selected in accordance with the *Code* _____

E.3 Hydrants

E.3.1 Hydrants are not to be installed on mains less than DN100 _____

E.3.2 Hydrants have been located for water system operational requirements in accordance with the *Code* _____

E.3.3 Hydrants have been specified for terminal fittings on mains greater than or equal to DN100

_____

E.3.4 Spacing of hydrants is in accordance with the *Code* _____

E.3.5 Hydrants have been located clear of driveways _____

E.3.6 Hydrant symbols have been shown correctly on plan _____

E.3.7 Hydrants are adjacent to valves where possible _____

E.4 Terminal fittings

E.4.1 Washout bends have been designed at permanent and temporary end of mains greater than or equal to DN100 in accordance with the *Code* _____

E.4.2 Flushing assemblies have been designed at permanent end of mains less than DN100 in accordance with the *Code* _____

E.4.3 Chlorination assemblies designed for 225 to 375 mm diameter mains are in accordance with the *Code* _____

E.4.4 Location of permanent swabbing points and direction of swabbing have been specified as required by Gippsland Water in accordance with the *Code*

_____

E.5 Connections to existing water mains

E.5.1 Connections of all new mains to existing water mains are shown on the design plans and are in accordance with the *Code*

_____

E.5.2 Method of connection to transfer mains has been approved by Gippsland Water and shown on design plans _____

E.6 Property service connections

E.6.1 All lots are fronted by a water main in accordance with relevant regulations _____

E.6.2 All lots are designed to have one property service connection each unless approved to by Gippsland Water _____

E.6.3 Property service connections to be installed in accordance with the Code _____

F Presentation of design

F.1 Design plan contents

F.1.1 Design plans have been prepared in accordance with the Gippsland Water Drafting Standards _____

F.1.2 Design drawings provided in accordance with the *Code* _____

F.1.3 Drawing scale is in accordance with the *Code* _____

F.1.4 Content of drawings are in accordance with the *Code* _____

F.1.5 All relevant notes are included on the plans _____

G Drafting standards

G.1.1 Drafting standards are in accordance with the *Code* _____

- Detail plans in accordance with the *Code* _____
- Longitudinal plans in accordance with the *Code* _____
- Standard drawing borders in accordance with the *Code* _____
- Drawing legend in accordance with the *Code* _____

H Documents to be submitted

H.1 Design drawings

H.1.1 Two hard copies of final design drawings A3 size only _____

H.2 Civil drawings

H.2.1 Road and drainage civil drawings for the development **only** if requested by Gippsland Water _____

H.3 Correspondence with council

H.3.1 Approval of offsets and fixing of road levels have been approved by Council _____

H.3.2 Name and position of Council contact officer _____

H.4 Correspondence with other bodies

H.4.1 Vic Track _____

H.4.2 Vic Roads _____

H.4.3 Relevant Gas Company/Authority _____

H.4.4 Telstra _____

H.4.5 Optus Communications _____

H.4.6 Electrical authorities/companies _____

H.4.7 Aboriginal Affairs Victoria _____

H.4.8 Council Planning _____

H.4.9 Department of Environment, Land Water & Planning _____

H.4.10 EPA Victoria _____

H.4.11 Southern Rural Water _____

H.4.12 Community Groups if requested by Gippsland Water _____

H.4.13 CFA _____

H.4.14 Other _____

H.5 Design information

H.5.1 Approval for common trenching _____

H.5.2 Design computations for special structures and special pipelines, including but not limited to:

- Soil loading _____
- Traffic loading _____
- Pipe stiffness _____
- Soil modulus _____
- Deflection calculations _____
- Deflection at 50 years _____
- Bend or joint deflection radius for PVC pipe _____
- Head calculations _____

Consultant's Certification

As the Consultant's nominated representative responsible for the design of the Works detailed in

Gippsland Water Drawing No(s): _____

I certify that:

1 The design is in accordance with WSA 03-2011-3.1 Melbourne Retail Water Agencies Edition together with Gippsland Water's Water Supply Code Supplement.

2 Drawings comply Gippsland Water Drafting Specifications
.

3 Each item listed on Form 1 Design Certification List has been either **initialled** or marked **NA** or **AT** by the Responsible Design Representative, where:

- **Initialling** is my certification that the activity is completed and that it satisfies the requirements of Gippsland Water.
- Activities marked as **NA** are not applicable to this design.
- Activities marked as **AT** have an authorised attachment included.

_____ _____

Name Signature

(Design Consultant)

_____/_____/_____

Date

Documents Submitted with this form

- ❑ Plan of subdivision
- ❑ Application Form for conditions /agreement
- ❑ 2 sets of Design plans A3 size
- ❑ Estimate of construction costs
- ❑ Form 13 – Creation of Easement (if required)