CERTIFICATION DOCUMENTATION

PROCEDURE

There are four stages to certification. These are:

- Detailed Design;
- Pre-construction;
- Preliminary Acceptance;
- Final Acceptance

Words used in these documents have the same meaning (unless otherwise indicated by context) as in the Developer Construct Agreement.

The Corporation will not act as an inspector or an approver of that design, construction or administration of the works involved. The Corporation acts in reliance of the Consultant certification and representations made via the Certification Documents.

At the end of each stage and before proceeding to the next stage the Consultant must complete the Certification Documentation and submit those to the Corporation.

The Certification Documents form part of the Agreement entered into between the Owner, the Consultant and the Corporation.

The certification documents include a checklist of items and are a representation by the Consultant to the Corporation that the design and construction of the works accord with the Developer Construct Agreement and the design requirements of the Corporation. Any variation to the standard certification list must be detailed and attached and signed by the Consultant. In the checklist the Consultant must indicate:

- "tick" that the activity is complete and accords with the requirements of the
- Corporation; or
- "cross" to designate - not applicable;
- mark "V" where a variation or further detail is attached; and
- where a space is left for details they must be inserted. If insufficient room, attach details.

The checklist is a minimum standard and the Consultant remains responsible for any items not noted in the checklist as part of their total certification.

The "As Constructed" plans provided by the Consultant shall form part of the certification documents.

If at any stage during the course of the design or works any certified item by the Consultant has changed or no longer is correct, the Consultant must notify the Corporation in writing.

CONSULTANT CERTIFICATION

DETAILED DESIGN - SEWER

Matter Particulars

The Property: .....

The Development: .....

The Owner: .....

The Developer (*if applicable*): .....

The Accredited Consultant: .....

Date of Agreement: .....

References throughout this document to Goulburn Valley Region Water Corporation's ***"Design Specifications"*** *refer to the Sewerage Code of Australia, Melbourne Retail Water Agencies Edition (MRWA), WSA 02-2002, Goulburn Valley Water's Supplement to the MRWA WSA 02-2002, Goulburn Valley Water's Sewerage Pump Station Design Manual, the Water Supply Code of Australia MRWA WSA 03-2002, Goulburn Valley Water Supplement to the MRWA WSA 03-2002, and other General Specifications and standard Drawings adopted by Goulburn Valley Region Water Corporation and applying at the time of this certification. Where any standard or specification relates to something other than these documents it shall be noted.*

All boxes for each check list item in this certification must be completed.

CERTIFICATION RELATING TO SEWER

1. Compliance with Corporation Specifications

Subject to disclosed variations the Consultant certifies that the detailed design complies with or satisfies the Corporation's:

1.1 Sewerage Code of Australia, MRWA, 02-2002 and GVW Supplment; ☐

1.2 Sewerage Pump Station Design Manual; ☐

1.3 Water Supply Code of Australia, MRWA, 03-2002 and GVW Supplement applying to rising mains; ☐

1.4 The Corporation's Drafting Standards; ☐

2. Location of Sewer Mains

2.1 All sewer mains are either located within road reserves or registered easements; ☐

2.2 Where registered easements are located on adjoining land agreement has been reached or legal provision has been made for the appropriate compensation to the owner of adjoining land allowing the easements to be created; ☐

2.3 All easements contained in this detailed design accord with the easements that appear on the Certified Plan of Subdivision; ☐

2.4 The alignment of the mains have been approved by Council; ☐

2.5 The alignment of the mains accord with the Design Specification of the Corporation; ☐

2.6 A connection point to each allotment on the Certified Plan of Subdivision is provided; ☐

2.7 The Detailed Design provides for Cover of Main in accordance with the Design Specification. ☐

3. Competing Services and Impediments

3.1 All servicing and other authorities have provided written clearance as to the proposed location of sewer mains in accordance with the Corporation's *"Design Specifications"*; ☐

3.2 Regardless of written clearance from other servicing authorities, the Consultant has inspected plans and determined the location of other underground services to ensure there is no conflict; ☐

3.3 All surface obstructions have been considered in locating the sewerage mains; ☐

3.4 Minimum clearances from other underground services are complied with. ☐

4. Construction Material

4.1 All proposed materials incorporated in the Detailed Design satisfy the Corporation's Design Specifications; ☐

4.2 UPVC and HDPE pipes have not been used in design where inadequately diluted trade waste may be discharged; ☐

4.3 There are no non-approved products or materials specified in the Detailed Design. ☐

5. Physical Design

All of the items detailed below are designed and to be located in accordance with the Corporation’s Design Specification, specifically:

5.1 Works are offset from all property boundaries to allow access for construction and maintenance; ☐

5.2 Allow for existing and proposed services; ☐

5.3 Allow for all potentially dangerous services; ☐

5.4 The Consultant has investigated alternative alignments for sewer mains, consulted the Corporation in relation to same and adopted the appropriate cost effective design; ☐

5.5 Where curved sewers have been used justification is attached or available; ☐

5.6 Any curved sewers used satisfy the Corporation’s Design Specifications. ☐

6. Future Extensions

6.1 Where the sewer will be extended in the future to serve alternative land the main has been designed to extend to and beyond the boundary of the subdivision to cater for such other land. ☐

7. Designation of Lot Controls

In relation to lot control the Consultant certifies:

7.1 All lots are correctly categorised; ☐

7.2 All lot control computations have been calculated correctly; ☐

7.3 All other services have been considered for lot control; ☐

7.4 Depth of the sewer provides control over the entire allotment; ☐

7.5 Where only part of the lot is controlled by sewer details are attached to this certification and appropriate building envelopes have been specified on the relevant allotment. ☐

8. System Hydraulics

8.1 The design accounts for the full development of the total catchment; ☐

8.2 Sewer Main capacity allows for peak wet weather flow; ☐

8.3 Maximum loadings from Residential lots, as defined, are in accordance with the Design Specifications; ☐

8.4 Maximum loadings from Industrial/Commercial lots, as defined, have been determined individually where appropriate; ☐

8.5 Controlling lines have been identified; ☐

8.6 Minimum grades for Residential lots are in accordance with the Design Specifications; ☐

8.7 Residential lots are serviced by a sewer of a minimum diameter of 150mm; ☐

8.8 Minimum diameters and grades servicing Industrial/Commercial lots are in accordance with the Design Specifications; ☐

8.9 Pump stations are positioned to maximise catchment of land presently undeveloped which can be serviced via or in conjunction with the development; ☐

8.10 Manhole losses and channel depth are designed to satisfy the Design Speciation. ☐

9. Boring

9.1 Where Boring is specified all requirements set out in the Design Specifications have been complied with or provided for; ☐

9.2 Specifically in relation to Boring the following items have been investigated:

9.2.1 suitability of ground conditions; ☐

9.2.2 minimum grade; and ☐

9.2.3 tolerances; ☐

9.3 Written approval for Boring under any structures has been obtained from the Corporation. ☐

10. Manhole / Inspection Shafts

10.1 All manholes, subject to any variation listed, have been designed in accordance with the Corporation's Design Specifications, including specifically:

- 10.1.1 location; ☐
- 10.1.2 spacing; ☐
- 10.1.3 access; ☐
- 10.1.4 base design; ☐
- 10.1.5 diameter; ☐
- 10.1.6 type; ☐
- 10.1.7 grades of concrete; and ☐
- 10.1.8 slope of manhole covers. ☐

10.2 All inspection shafts, subject to any variation listed, have been designed in accordance with the Corporation's Design specifications Manual, including specifically: ☐

- 10.2.1 location; and ☐
- 10.2.2 types. ☐

11. Property Connection Branches

All property connection branches comply with the following criteria in the Design Specifications;

- 11.1 general conditions; ☐
- 11.2 diameter; and ☐
- 11.3 levels. ☐

12. Foundation / Embedment / Backfill

Comply with the Design Specifications and Trench Backfill Guidelines specifically;

- 12.1 pipe base; ☐
- 12.2 pipe embedment; and ☐
- 12.3 backfill. ☐

13. Isolating Valve

13.1 The design complies with the Design Specifications of the Corporation in relation to all isolating valves; ☐

14. Variations

14.1 In any case where a variation to the Design Specification has been proposed a justification has been attached to the design including design calculations, where applicable; ☐

15. Plans and Specifications

15.1 All design, plans and specifications comply with the Design Specification: ☐

15.2 Submitted with this Certification are the following:

15.2.1	General Locality Plan;	☐
15.2.2	Copy of the Certified Plan of Subdivision (or Final Plan of Subdivision if not yet certified);	☐
15.2.3	Copy of a full set of Plans including the Goulburn Valley Water endorsed signature box on each plan;	☐
15.2.4	Any additional computations or specifications requested by the Corporation;	☐
15.2.5	Copies of Plans of all road and drainage works drawn to a Civil Engineering Standard are provided with;	☐
15.2.6	Plans, where each page of the plans, computations and specifications (as applicable) have the signature of the qualified person who performed the design together with the approval signature of the Accredited Consultant.	☐

ACCREDITED CONSULTANTS CERTIFICATION

DETAILED DESIGN - SEWER

As the Accredited Consultant for the design of the works detailed in Goulburn Valley Region Water Corporation's Agreement/Job No .....

I certify that, subject to any variations detailed:

- That all information set out in this certification is true and correct;
- The design is in accordance with the Feasibility Report;
- The design has been completed in accordance with the Corporation's Design Specification;
- The Corporation's Sewage Pump Station Design Manual;
- The Corporation's Water Reticulation Manual in the case of rising mains;
- The drafting is in accordance with the Corporation's Design Specifications;
- The design is in accordance with all other relevant Corporation Design Specifications and requirements; and
- Each variation to the Feasibility Report, the Agreement between the Consultant/Owner and Corporation, and the Design Specifications of the Corporation have been detailed and are attached to this certification.

DATED this ..... day of..... 20 .....

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SIGNATURE OF ACCREDITED CONSULTANT

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(PRINT NAME IN FULL)