Gippsland Water – Design Audit Report

< insert auditors company details >

Audit Number		Gippsland Water Job Number	

Description	
Auditee	
Drawing Number(s)	
Field Note(s)	

Results are designated **C** for conformance, **NC** for non-conformance or **NR** for not required

Audit Result (**C** or **NC**)		See details below & on pages 2 to 6

Audit Date	

Auditor (Print Name)	
Auditor (Signature)	

Audit Summary

Additional Comments

Audit Details	Result

A. SEWERAGE RETICULATION (Audit to WSA 02-1999 Part 1:Design)

1. Drawings are to the correct scale.

2. Presentation of the design conforms with the standards.

3. Standard notes have been included on the design and conform with the standards.

4. All allotments in the development are serviced.

5. All allotments are adequately controlled or labelled “Partial Lot Control”.

6. Pipeline size and grade conforms with the design standards.

7. Pipe materials have been shown and conforms with design standards.

8. Types of pipe jointing to be used in construction have been shown.

9. Invert levels of upstream and downstream ends of pipe sections have been shown.

10. Grades of pipe sections have been clearly shown.

11. Internal diameters of pipes have been clearly shown.

12. Length of pipe section has been shown.

13. Maintenance structure spacings conform with design standards.

14. Unique structure numbers have been shown & suit the current numbering system.

15. Sufficient pipeline offsets and/or coordinates have been shown.

Audit Details	Result

16. Bend radius of horizontally curved sewers conforms with design standards.

17. Sufficient information has been provided for the accurate construction of horizontally curved sewers.

18. Sufficient information has been provided for the construction of vertical curves (eg. Start & end grades and curve length).

19. Existing pipelines, sizes & levels have been shown.

20. Methods of construction for the pipe sections have been shown where the method will not be standard open trench (eg. Bored)

21. Redundant/abandoned sewers have been clearly marked.

22. Embedment types to be used have been shown.

23. Backfill types to be used have been shown where not “Type B”.

24. Type and internal diameter of maintenance holes have been noted and meet design requirements.

25. Depth of maintenance structures have been shown.

26. Maintenance hole drops conform to design standards.

27. Depths of mains conforms to the design standards.

28. Types of property connections have been shown where not “Type 1”.

29. The size of property connections >100mm diameter have been shown.

30. Tie distances or chainages to property connections have been shown.

31. Invert levels of “Type 1” property connections have been shown.

Audit Details	Result

32. Long property connections conform to design standards.

33. Chainages from downstream maintenance structures to oblique branches have been shown.

34. Allowance has been made in the design to cater for future developments.

35. All sewers within private property are adequately protected by easements and are shown on the drawings.

B. WATER RETICULATION (Audit to WSA 03-1999 Part 1:Design)

1. Drawings are to the correct scale.

2. Presentation of the design conforms with the standards.

3. Standard notes have been included on the design and conform with the standards.

4. All allotments in the development are serviced.

5. Pipeline size conforms with the design standards.

6. Pipe materials have been shown and conforms with design standards.

7. Types of pipe jointing to be used in construction have been shown.

8. Pipeline size, type and length have been clearly shown.

9. Pipeline location conforms with the design standards.

10. Curved pipeline radius conforms with the design standards.

11. Sufficient pipeline offsets and/or coordinates have been shown.

Audit Details	Result

12. Pipeline depths have been shown and conform with the design standards.

13. Types of fittings have been shown and conform with the design standards.

14. Positioning of valves conforms with the design standards.

15. Valve spacings conform with the design standards.

16. Positioning and spacing of fire hydrants conforms with the design standards.

17. The extent & size of existing water mains have been shown.

18. The extent of redundant/abandoned water mains has been clearly shown.

19. Existing valves, hydrants etc. have been shown.

20. Allowance has been made in the design to cater for future developments.

21. All mains within private property are adequately protected by easements and are shown on the drawings.

C. SEWERAGE PUMP STATION & RISING MAIN (Audit to WITS Volume 4)

1. Drawings are to the correct scale.

2. Presentation of the design conforms with the standards.

3. Standard notes have been included on the design and conform with the standards.

4. Site selection for the pump station conforms with the standards.

5. Sizing of the pumps conforms with the standards.

Audit Details	Result

6. Sizing of the pumpwell conforms with the standards.

7. Pumpwell arrangement conforms with the standards.

8. Valve chamber arrangement conforms with the standards.

9. Pumpwell and valve chamber civil works conforms with the standard.

10. Control cabinet location & construction conforms with the standards.

11. Incoming sewer isolating valve included and shown.

12. Discharge pipework and rising main has valves correctly located and conforming with the standards.

13. Air release valves included and shown (if requested by Gippsland Water).

14. Scour valves included and shown where necessary on rising main (eg. pumpwell & low points).

15. Rising main size conforms with the standards.

16. Rising main pipe materials have been shown and conform with design standards.

17. Types of pipe jointing to be used in construction of the rising main have been shown and conform with the standards.

18. Minimum depth of rising main conforms with the standards.

19. Rising main has sufficient detail to enable setout eg. Offsets, amg coords or bearing and distance.

20. Rising main longitudinal section provided and shows all levels and fittings.
