



*Clean Water and Sanitation for a Better Life.*



# Water Authority of Fiji

Subdivision Standard

October 2021

## Document Control Page

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The latest version of this document takes effect on the date of release on all new work and supersedes all prior versions or formats of this document.

Where design works has been completed or where construction work has commenced, immediate adoption may be delayed unless the change is required within a timeframe provided by legislation, or an immediate health and safety concern. Under these circumstances, the Water Authority of Fiji will review any works in progress and provides specific notice for adoption.

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## Definitions

<b>Assets</b>	Components of Water or Wastewater Infrastructure that is above or below ground within the supply and distribution systems.
<b>Brownfield</b>	A land area that has existing infrastructure, or land that has been contaminated.
<b>Developer</b>	An individual or organization that has the financial responsibility for the development project. Developer includes the owner or any other Corporate entity that oversees the development project.
<b>Development</b>	Development shall for the purpose of this document refer to the proposed construction of a new building or refurbishment or renovation of an existing building, on a single residential, commercial, industrial or special use lot.
<b>Greenfield</b>	A land area that has no existing infrastructure and is not contaminated
<b>Subdivision</b>	Refers to the act of dividing a single piece of land into multiple lots either for the purpose of residential, commercial, industrial, or mixed use.

## Abbreviations

<b>AS/NZS</b>	Australian/New Zealand Standard	<b>PDWF</b>	Peak Dry Weather Flow
<b>ATS</b>	Automatic Transfer Switches	<b>Psi</b>	Pounds per Square Inch
<b>BWL</b>	Bottom Water Level	<b>PWWF</b>	Peak Wet Weather Flow
<b>DLP</b>	Defects Liability Period	<b>SAN</b>	Service Advice Notice
<b>EFL</b>	Energy Fiji Limited	<b>SCADA</b>	Supervisory Control And Data Acquisition
<b>EP</b>	Equivalent Population	<b>TFL</b>	Telecommunications Fiji Limited
<b>FMG</b>	Fiji Map Grid	<b>VSD</b>	Variable Speed Drives
<b>FRA</b>	Fiji Roads Authority	<b>WAF</b>	Water Authority of Fiji
<b>MIMS</b>	Ministry of Infrastructure and Meteorological Services	<b>WELS</b>	Water Efficiency Labeling Scheme
<b>NFA</b>	National Fire Authority	<b>WSA</b>	Water Services Association of Australia
<b>PDF</b>	Peak Demand Factor		

## **Aim**

This document has been developed to streamline and formally document the Water Authority of Fiji's (WAF) approval process and mandatory requirements for subdivision and other development applications received from the Department of Town and Country Planning, Local Councils or directly from the Developer.

This document aims to improve and maintain the quality of design and construction of Water and Sewerage Assets designed and built by others with the intention to be handed over and operated by the WAF.

## **Purpose and Objectives**

This document has been prepared in accordance with the Water Authority of Fiji Act 2007.

This document includes:

- WAF ability to provide service;
- Specific service levels required by developers;
- The developers responsibility during the application process;
- The WAF criteria for Scheme Plan application;
- The WAF criteria for Engineering Plan Approval;
- General Design Considerations for Proposed Developments & Subdivisions ;
- The WAF criteria for design of Water and Wastewater Infrastructure by a Developer;
- Limitation of Approval issued by WAF;
- Mandatory Inspection and Hold-points to be observed during construction;
- Procedure for Completion, Taking over and Beginning of Maintenance Period;
- Approved Product and Materials Specification ;and
- Recommended Product and Material Brands.

## **Scope / Coverage**

The Document will cover the general requirements that Developers are to comply with when lodging Development applications for approval to the WAF in line with the subdivision process of the WAF.

The WAF reserves the right to review and change clauses in this standard at any time.

## **1.0 Minimum Level of Service**

The WAF is committed to improving the lives of all Fijians through the provision of safe and efficient Water and Wastewater Services. The WAF shall make every effort to maintain and provide the following minimum service levels:

### **1.1 Minimum Pressure**

The WAF shall make every effort to provide a minimum pressure of 10m head (1bar) at the inlet to the customer meter or master meter for single residential development or large scale Developments respectively.

This condition shall only be applicable to proposed subdivisions and or developments located at an elevation no less than 20m below the BWL of the respective service reservoir.

### **1.2 Volume of Flow**

The WAF shall make every effort to provide flows sufficient to meet the average day demand for any proposed development irrespective of scale.

However due to operational constraints and the sensitive nature of Water and Wastewater networks these minimum service levels may not always be achievable as such WAF shall be restricted or limited to the flow and pressure present at the mains connection point.

The WAF of Fiji under the provisions of the WAF Act 2007, may exercise its power to ration or limit the supply of water to a Development or subdivision for the purpose of water conservation.

## **2.0 Specific Requirements beyond Existing Service Level**

### **2.1 Specific Pressure Requirements**

If a Development requires a specific minimum pressure beyond that present at the connection point, the Developer shall be responsible for the design for works to satisfy the pressure requirement of the Development.

This design shall be reviewed and subject to the approval by the WAF prior to implementation. Any physical works required to increase pressure beyond that present at the connection point shall be carried out at the expense of the Developer.

### **2.2 Specific Flow Requirements**

It shall be the responsibility of the Developer to carry out works to satisfy flow requirements of the Development beyond that present at the connection point. The Developer shall be responsible for the design which shall be subject to the review and approval of the WAF prior to implementation.

Any physical works required to increase the flow beyond that available at the connection point shall be carried out at the expense of the Developer.

## **2.3 Extension of Services.**

Any requirement for any extension of existing WAF services with the intention to provide connection to a development or meet the requirements of the Developer in terms of flow or pressure shall be carried out by the Water Authority of Fiji at the expense of the Developer.

## **2.4 Relocation of Services and Assets.**

Any relocation of WAF services or assets as required by the developer shall be carried out by the WAF at the cost of the Developer. The Developer shall cover the complete cost of works including surveys, compensation of land and registration of easement for land not owned by Developer that is used for relocation and any associated costs included during the shutdown, connection and restoration phases of work.

The developer shall arrange to make payment to WAF for relocation of services and assets prior to execution of works. WAF will not be responsible for any delays faced by the developer with regards to the completion of the development concerned.

## **3.0 Subdivision Lodgment Process**

The Department of Town and Country Planning and Local Council as part of the Development approval process requires input from utility operators such as the WAF during various stages of the application. The Department of Town and Country Planning and Local Council may issue conditional approval on that basis that all requirements, procedures, standards and specifications set out by the WAF is complied with by the Developer.

This section describes the various approval stages and process timelines that Developers are required to satisfy when lodging development applications to the WAF for approval.

It is to note that the WAF is currently working on creating an online subdivision applications internet portal for developers, especially during this COVID-19 pandemic, which will follow the requirements and timelines of this document.

### **3.1 Scheme Plan**

Approval of the scheme plan by the Department of Town and County Planning or the Local Council may be granted subject to certain conditions. These conditions may include obtaining comments from the WAF with regards to the provision and availability of service within the proposed Development area.

Developers may seek from the WAF a **Service Advice Notice** (SAN) that will detail the availability of services within the subject area.

#### **3.1.1 Scheme Plan Lodgment Timelines**

The lodgment process for the Scheme Plan timelines is 15 working days. Depending on complexity of the assessment, the approval process timeline is 5 -10 days before issue of the signed Service Advice Notice within 5 working days after approval of scheme plan.

#### **3.1.2 Required Form of Submittal**



In order to obtain a Service Advice Notice from the WAF the Developer is required to provide the following information in addition to the approved application form:

- Proposed Scheme Plan indicating the full extent of the proposed development;
- Locality Plan of the planned Development; and
- Copy of Department of Town and Country Planning or Local Town or City Council Development Application form / Referral.

### **3.1.3 Service Advice Notice (Letter)**

For developers requiring information with regards to the presence and location of the Water Authority of Fiji's services within a particular subject area. A Service Advice Notice in the form of a letter may be requested from the Water Authority of Fiji by the following means:

- Completing and submitting the approved Service Request Notice Application form; and
- Paying the fees stated within the WAF's Fees and Charges Schedules.

A Service Advice Notice may be required by the Local Council or Department of Town and Country Planning before or after the lodgment of a Development application.

If specifically required or requested the WAF may depending on the availability of data provide details within the Service Advice Notice relating to existing pressures and flows at the proposed connection point. This information is however only valid at the time of issuance of the notice and is subject to change given the behavior and change in the demand affecting the water reticulation network.

Additional fees shall be applicable for Service Advice Notices requiring pressure and flow information, if the data is not available.

### **3.1.4 Limitations of a Service Advice Notice**

While the WAF will make every effort to provide accurate advice with regards to the presence and location of services within a particular subject area, a Service Advice Notice does not bind the WAF if the person requesting the notice, subsequently applies for approval to connect to the WAF services.

The information provided within the Service Advice Notice shall only be considered as preliminary advice and in no way constitutes approval to any subsequent future connection application. The WAF reserves the right to amend the Service Advice Notice at any time following the receipt of a connection application.

### **3.1.5 Applicable Fess & Charges**

Application and lodgment for a request for Service Advice Notice shall be subject to fees stated in the WAF's fees and charges schedule.

Additional information relating to pressure and flow information shall be subject to the pressure and flow reading fees stated within the WAF's fees and charges schedule in addition to the standard fees applicable to a request for Service Advice Notice.

### 3.2 Engineer Sign off on Plan Submissions

A registered Engineer recognized by WAF must sign off on all hydraulic calculations, designs, drawings and plans for all plan submissions to WAF. The Engineer must be well versed with hydraulic standards and codes including the latest WSA design codes as set out in 3.3.2 and Fiji National Building Codes.

Where there is inconsistency in application of WSA design codes and Fiji National Building Codes, the WSA design codes shall prevail.

### 3.3 Engineering Plan Approval

As part of the conditional approval for Engineering Plans issued by the Department of Town and Country Planning or Local Council a Developer maybe required to obtain further approval from the WAF.

An approval for Engineering Plans maybe requested by:

- completing and submitting the approved form and completing the accompanying checklist; and
- paying the fees stated in the WAF's Fees and Charges Schedule.

All engineering plans approval applications must contain the required information detailed in section 3.3 and be designed in accordance with the design criteria in section 3.3.2 to be eligible for approval by the WAF.

#### 3.3.1 Engineering Plan Lodgment Timelines

The lodgment timeline for Engineering Plan applications is 25 working days or longer if applications does not fully comply. Application assessment is 20 working days after receiving completed application and 5 working days to give notice to Applicant of decision.

#### 3.3.2 Design Criteria

The WAF requires that all engineering designs relating to Water and Sewerage systems carried out by the Developer with regard to the Water Reticulation and Wastewater Collection systems must be designed in accordance with the following:

Design Standard	
Water Reticulation Network	WSA 03-2011 Water Supply Code of Australia Version 3.1 <sup>1</sup>
Gravity Sewerage System	WSA 02-2014 Gravity Sewerage Code of Australia Version 3.1 <sup>2</sup>
Sewerage Pumping Station	WSA 04-2005 Sewerage Pumping Station Code of Australia Version 2.1 <sup>3</sup>

Table 1: Water & Wastewater Design Standards

Designs that fail to comply with the above listed design standards shall be subject to rejection by the WAF.

<sup>1</sup> Shall be superseded by the latest Water Supply Code of Australia published by WSA.

<sup>2</sup> Shall be superseded by the latest Gravity Sewerage Code of Australia published by WSA.

<sup>3</sup> Shall be superseded by the latest Sewerage Pumping Station Code of Australia published by WSA.

### 3.3.3 Design Life

All Water and Wastewater assets shall be designed accordingly to Table 2. Some components such as pumps, meters, valves and control equipment may require earlier replacement. The WAF lists a number of accepted and standardized materials. The use of components not listed in the recommended materials list requires specific approval from the WAF prior to their use.

Typical Asset Design Life			
Water Reticulation Network	Expected Design Life (Years)	Sewerage System	Expected Design Life (Years)
• Water Mains	100	Sewers	100
• Reservoirs	50	Maintenance Structures	100
• Pumps	20	Pumps	25
• Valves	30	Valves	30
• SCADA	15	SCADA	15

Table 2: Typical Asset Design Life

### 3.3.4 General Design Considerations

These general design considerations are applicable to proposed Subdivisions and Residential, Commercial, Industrial, Special and or Mixed Use Developments.

#### 3.3.4.1 Utilities Coordination

Coordination of subdivision/development designs shall be done across all utilities and affected stakeholders, namely:

1. Fiji Roads Authority
2. Water Authority of Fiji
3. Energy Fiji Limited
4. Telecommunications Fiji Limited
5. Fiji Sugar Corporation

Reference documents from the respective utilities that are indicated in Table 3 below:

Reference Documents		
Utility	Reference Document	Version
Fiji Roads Authority	Code of Practice for Utility Operators Access to Road Corridors	Version 1.0 February 2017
Fiji Roads Authority	Technical Review – FRA Roadworks Standards (Multiple Files)	
Fiji Roads Authority	Code of Practice for Temporary Traffic Management (COPTTM Files)	Fourth edition, Amendment 3
Fiji Roads Authority	Manual of Traffic Signs and Markings (MOTSAM Files)	

Table 3: Reference Documents from Utilities

#### **3.3.4.2 Water Storage Provisions**

All proposed subdivisions and developments must have water storage provisions sized for at least five (5) days' supply or more for all domestic residences, high rise buildings, commercial projects and larger Development schemes and in compliance with Ministry of Infrastructure and Meteorological Services (MIMS) Policy (draft 2020) on Compulsory Water Storage Tanks. Water storage capacity shall be sized based on the Peak Demand (PD) multiplied by Peak Demand Factor (PDF) as specified within WSA 03-2011. Designer in consultation with the WAF shall provide adequate space at sufficient elevation for the purpose of reservoir construction, which shall be the responsibility of the Developer unless otherwise stated by the Chief Executive Officer of the WAF.

Land area for and cost of storage tanks and reservoirs installation shall be borne by the developer.

#### **3.3.4.3 Water & Waste Water Pump Station Considerations**

Water and waste water pump station designs to comply to required FRA, WAF, EFL & TFL standards and guidelines. The pump stations designs is to include the provision of required civil works, suitably sized structures & housings for pump installations/assemblies, fencing, adequately sized backup generators, generator self-monitoring capability, generator fuel tanks for 8 hours operation, soft starters and/or Variable Speed Drives (VSD), Switchboards, Automatic Transfer Switches (ATS), SCADA control capabilities, IP68 rated enclosures for electrical cabinets, cooling systems, lightening protection to AS/NZS 1768, to name a few.

Related pump station pipe-works to include provisions for Bypass Arrangements, Electronic Magnetic Flowmeters, Pressure Transmitter Tapping, safety bollards for above ground pipe assemblies, hydrants, non-return valves, etc.

#### **3.3.4.4 New Connection Provisions**

The developer is encouraged to allow installing the proposed water and waste water connections to the developed domestic and/or commercial lots in order to reduce the amount of damage and reworks done for the subdivision, especially on the newly constructed footpaths and across roads. These connections are to be done after successful testing of pipelines.

Water connections/service pipes are to be laid and terminated within 15 meters of the water main and marked with blue 2x2 stakes which are 1m high at the proposed meter locations.

Waste water connections are to be laid and connected to the waste water collection main and marked with green 2x2 stakes which are 1m high at the proposed termination points.

#### **3.3.4.5 Rainwater Harvesting**

The developer is encouraged to allow for Rainwater Harvesting for proposed lots as a secondary water source, to use for gardens, car washing, sprinkling lawns, etc. Rainwater Harvesting helps to reduce the demand for drinking water, reduce stress on urban waterways, streams & rivers and increase opportunities for sustainable water management.

Harvested rainwater stored in rainwater tanks can also be used in toilets and washing machines; the developer is to take special considerations for this particular use, which will require prior consultation and approval from WAF.

#### **3.3.4.6 Fire Hydrants**

The developer must allow for installation of fire hydrants which complies to the WSA design standards and National Fire Authority's (NFA) specifications.

If there is a discrepancy between the WSA design standard and NFA's specifications, the WSA design standard shall prevail.

#### **3.3.4.7 Water Efficiency Considerations**

All proposed Subdivisions and or Developments shall incorporate water efficient infrastructure to minimize water wastage through overflow and regulation of usage. Proposed developments are required to incorporate water efficient fixtures to reduce the demand on existing infrastructure.

Water Efficient fixtures includes low flow taps, showers and toilets as well as washing machines and dishwashers. Water Efficient fixtures must be recognized under the Australian Water Efficiency Labeling and Standards (WELS) scheme in accordance with the following standard:

- AS/NZS 6400: 2005 – Water Efficient Products – Rating and Labelling

#### **3.3.4.8 Energy Efficiency Considerations**

All mechanical and electrical components of the water reticulation or wastewater networks constructed by the developer must where practically possible be energy efficient as to reduce the future operating costs of these assets. Consideration must also be made for alternative energy sources such as solar, wind power, etc. as to reduce the dependency of the Electrical Grid.

Energy efficiency shall extend but not be limited to water and wastewater pump stations constructed by the developer with the intention to be handed over and operated by the WAF.

Assets constructed by the Developer requiring electrical supply shall be required to have a redundancy (Standby Generator, etc.) as to allow continuous operation in the event of an unplanned power outage.

#### **3.3.4.9 Liquid Trade Waste Considerations**

Subdivisions and developments constructed for the purpose of Commercial and or Industrial usage must comply with the WAF's Liquid Trade Waste Requirements contained within the Liquid Trade Waste Policy.

#### **3.3.5 Required Form of Submittal (Engineering Plans)**

The following documents must be attached as part of the submittal list when requesting approval of Engineering Plans for construction from the WAF.

- Detailed Hydraulic Calculation (Water), including anticipated water demands, anticipated flows, water mains sizing, pump sizing (if applicable) reservoir storage (if applicable), anticipated losses within the water mains located within the development area, etc.
- Detailed Hydraulic Calculation (Wastewater), including anticipated sewer loading (EP, PDWF, and PWWF), sewer mains or rising mains sizing, pump size and pump station design, etc.
- Detailed Engineering Plans, indicating subject area boundary, water and sewerage reserves proposed alignment of water mains and wastewater collection systems with chainages for each;

- Long Section of the proposed Water and or Sewerage Pipes, the long sections shall include information relating to existing surface, depth of cut, design level, pipe detail or description, chainage, grade and pipe length.
- Typical & Special Fittings Arrangement, including but not limited to: Air Valves, Hydrants, Washouts, Tee of Connection with associated chambering, thrust block and anchoring details;
- Detailed Engineering Drawings including pipe trench details;
- Detailed Material Listing which shall include, number and type of bends, valves, hydrants, booster pumps, pipes, etc.;
- Detailed cost estimate of the value of the pipes and fittings to be installed as part of the development;
- Material Brands & Specification in compliance with approved brands and specification of the Water Authority of Fiji as listed within the appendix A-1 & A-2 (Pipes, Fittings, Pumps and other ancillary materials required as part of construction);
- Construction and Pipe laying Specifications in accordance with the relevant Water Supply of Australia Code; and
- Soft copies of the Complete Engineering drawings provided in PDF and DWG or DXF formats provided in a Compact Disk or USB flash drive.
- Registered Engineer sign off on all design calculations and drawings.
- The Developer is to inform the WAF whether they will maintain the reticulation system within the subdivision or propose to hand over the maintenance and operations to WAF indicating the following;
  - Ownership of the actual assets on the ground (pipes, pumps, hydrants, pump stations, generators etc.) are to be transferred to WAF.
  - The operation and maintenance of the reticulation system to be privately maintained or handed over to WAF to operate and maintain the reticulation system (clearing blockages, fixing leaking/burst pipes, etc.).

An incomplete application shall be sufficient grounds for rejection of the Engineering Plan Approval Application.

The WAF reserves the right to request any additional information it may deem necessary but not included as part of the submittals from the Developer.

### **3.3.6 Approval of Engineering Plans**

The WAF shall issue approval for complete engineering plans containing the required submittals that comply with the above mentioned design criteria.

All hydraulic calculations including design drawings and plans are to be signed off by registered Engineer.

Issuance of approval by the WAF shall indicate that Engineering Plans are suitable for construction having met the required design criteria and material and construction specification.

### **3.3.7 Conditions of Approval**

All Approved Engineering plans shall be subject to the following conditions:

- The developer shall allow access to site for the WAF to carry out required mandatory and random inspections required during construction;
- The developer shall allow personnel from the WAF to inspect all pipes and fittings prior to assembly and installation;
- The developer must allow personnel from the WAF to carry out inspection during installation of pipes and fittings prior to burial;
- The Developer shall observe the mandatory hold points described in 4.2.3.1 and 4.2.3.2
- All completed assets and registered easements shall be vested to the WAF by the Developers prior to handover and beginning of maintenance by the WAF.
- Registered Engineer to sign off on all design calculations and drawings.

Approval is issued on the strict condition that the submitted designs, material and construction specification and standards are to be adhered to during construction. Any deviation from the approved design, materials and or construction specification and standard will not be approved.

The Developer will be liable to rectify any works, at their own cost for not complying with the approved engineering plans including replacement of materials not approved by the Water Authority of Fiji.

### **3.3.8 Limitations of Approval**

Approval of the Engineering Plans does not constitute approval to construct any structure whatsoever over Water and or Wastewater reserves and must not be construed as such.

Engineering Plan approval only indicates that the design of the proposed water and wastewater systems have been carried out to an acceptable standard and satisfies the requirements of the WAF.

### **3.3.9 Applicable Fees & Charges**

Application and lodgment of Engineering Plans for Approval by the WAF shall be subject to fees stated within the WAF's fees and charges schedule and is available on request.

## **4.0 Construction**

Only upon the receipt of Approval of the Engineering Plans from the WAF, the Developer may then proceed with construction of the water and wastewater assets required as part of the Development.

### **4.1 Approved Product and Material Specification**

The developer must ensure that only approved product and materials compliant with those listed within appendix (A-1) are used during the construction of the water and or wastewater network.

The Developer is liable to replace and make good any works using products and materials not compliant with that listed in the appendix of this document.

### **4.2 Inspections**

#### **4.2.1 Mandatory Inspections & Hold Points**

The developer shall allow the WAF to conduct mandatory inspections during construction and obtain the WAF's approval at key hold points before progressing any further.

It shall be the responsibility of the developer to notify the WAF and schedule the time and date for the mandatory inspection.

Mandatory Inspections shall include the following:

- Inspection of Pipes & Fittings prior to assembly and installation;
- Inspection of Pipes & Fittings during installation, prior to burial; and
- Inspection of Backfilling and reinstatement works (paying close attention to pipe bedding, marker tape presence and placement and compaction works).

The developer shall also observe specific construction hold points, where no work shall progress beyond the hold point unless prior approval by WAF is issued to continue indicating that the completed works have been completed in a manner deemed satisfactory to the WAF.

The Developer shall observe and notify the WAF when works have reached the hold points discussed in 4.2.3.1 and 4.2.3.2.

#### **4.2.2 Random Inspections**

The WAF reserves the right to conduct random inspection at any date or time during the construction as part of the conditions of approval for any Engineering Plan.



### **4.2.3 Construction Hold Points**

The approval issued by the WAF for the Engineering Plans is granted on the condition that the Developer must observe compulsory construction hold points during installations relating to water and wastewater infrastructure.

Upon reaching the hold points described in 4.2.3.1 & 4.2.3.2 the developer shall halt all work until such time that the WAF has conducted an inspection and issued approval to continue.

The WAF may reject the works, if the works are deemed unsatisfactory or non-compliant to the approved engineering plans. As such the Developer must make good rejected works at their own cost.

#### **4.2.3.1 Hold Points - Water**

1. Inspection of Installed Assembly of Air valves, Washout, Hydrants and flow meters prior to chambering

#### **4.2.3.2 Hold Points - Wastewater**

1. Inspection of Laid Sewer Pipe from Manhole to Manhole prior to Backfilling to confirm grade
2. Inspection of Constructed Manhole Prior to Sealing

The WAF may choose to amend or add to the hold points at any time.

### **4.3 Practical Completion Certificate**

A practical completion certificate shall be issued by the WAF upon the successful completion of water and or wastewater assets constructed in accordance with the standards and specification approved by the WAF.

The practical completion certificate indicates that the quality of works is to the satisfaction of the WAF. The practical completion does not bind nor guarantee that the WAF will subsequently takeover the assets for operation nor constitute approval to proceed with connection to the existing WAF Water Reticulation and or Wastewater Collection system.

### **4.4 Applicable Fees and Charges - Inspections**

The developer shall be liable to pay fees associated with the inspections carried out during the construction as well as application for Practical Completion. This shall be subject to the fees stated within the WAF's fees and charges schedule.

## 5.0 Testing and Commissioning

Testing of the Water and Wastewater networks shall be carried out by the WAF at the request of the Developer.

The Developer, depending on the scale of the Development may request for testing to be conducted after the completion of the works, alternatively for large scale Development testing may be conducted as works progress through predefined milestones.

The WAF may advise the developer of the optimum frequency of the testing for large scale developments due to availability of equipment, manpower and capability of the testing equipment.

### 5.1 Compulsory Testing

The Water and Wastewater networks shall be subject to the following tests:

#### 5.1.1 Tests for Water Networks

Water Mains testing shall take place prior to the tapping for service connections.

- Hydrostatic Pressure Testing (AS/NZS 2566.2) – Testing shall be conducted in sections or pipe networks longer than 1,000m, depending on the capability of being isolated and the availability of water and the spacing between sectioning valves or blank –ends. This test shall be applicable for Pressure pipelines
- Leakage Testing (AS/NZS 2566.2) – Testing shall be carried out by at least one of the following methods:
  - Low Pressure Air Testing
  - Vacuum Testing
  - Hydrostatic Testing
  - Infiltration Testing

Testing shall be done in accordance with relevant sections under (AS/NZS 2566.2)

#### 5.1.2 Tests for Wastewater Networks

- The testing of new waste water networks for sub divisions should be carried out by the developer/contractor under the supervision of the WAF.
- Methods of testing will include:
  - Hydrostatic Pressure Testing (AS/NZS 2566.2) –This test shall be applicable for Waste Water Pressure Main and Gravity pipelines. Waste water gravity lines are tested up to a pressure of 8 psi, unless otherwise specified by the Water Authority of Fiji.
  - Light & Mirror Test – determines the straightness of the waste water pipeline.

Should any of the above mentioned tests fail, the Developer shall undertake remedial works to rectify any defects at their cost. The network shall be subject to re-test until the required results are obtained.

All tests are to be inspected and supervised by a WAF Engineer and the WAF Engineer shall sign off on test results inspected.

## **5.2 Completion Certificate**

Upon the successful completion of testing to the satisfaction of the WAF, the Developer shall be issued with a Completion Certificate.

The Completion Certificate shall indicate that the works have been successfully completed and performs to the satisfaction of the WAF. The Completion Certificate does not bind nor guarantee that the WAF will subsequently takeover the assets for operation nor constitute approval to proceed with connection to the existing WAF Water Reticulation and or Wastewater Collection system.

## **5.3 Applicable Fees and Charges - Testing**

The developer shall be liable for the payment of fees associated with the Testing conducted by the WAF. This shall be subject to the fees stated within the WAF's fees and charges schedule.

Where testing has failed and for any remedial works requiring testing then the Developer will need to pay fees for retesting works by the WAF.

## 6.0 Taking Over

Upon the completion of construction works the Developer shall formally apply to the WAF to proceed with the Taking over of the newly constructed assets for operation and maintenance.

An Application of Taking Over by the WAF shall be requested by:

- Completing and submitting the approved form and completing the accompanying checklist; and
- Paying the fees stated in the WAF's Fees and Charges Schedule.

The Developer must submit and complete the following action in order to be eligible for taking over by the WAF:

- Submission of 2 x Hard Copy and Soft Copy As-built drawings (both PDF and CAD drawings provided in DXF or DWG format georeferenced to Fiji Map Grid(FMG)), Softcopy files are to saved and submitted in 2 x Thumb Drives;
- As-Built drawings to include signed survey plans by a registered surveyor (RS) who is a current member of the Fiji Institute of Surveyors (FIS) for water or wastewater reticulation network
- Practical Completion Certificate issued to the developer's contractor and signed by the developer's registered Engineer and/or Designer.
- Provision of a bond equivalent to 10% of the actual construction cost of the water and or wastewater infrastructure.
- Submission of Material Certification for Materials used during construction (Certified by an Accreditation body recognized by the Joint Accreditation System of Australia and New Zealand or Appraised by the Water Services Association of Australia (WSA)); and
- Submission of Receipts from suppliers as proof of purchase for approved materials;
- Transfer of Water and or Wastewater Assets including complete registration of easements vested to the WAF; and
- Submission of an Operation and Maintenance Manual for the Water and or Wastewater Network and associated ancillaries (Pump stations, Reservoir, etc.), the Manuals shall be submitted in Hard Copy (2 Copies) and Soft Copy formats (2 x Thumb drives)

Failure of the developer to provide the above listed documentation in support of their application shall result in the application for Taking Over being rejected.

Developers that satisfy the requirements under this section shall, be issued by the WAF with a Beginning of Maintenance Certificate

### 6.1 Beginning of Maintenance Certificate

Upon the completion of the above process to the satisfaction of the WAF's requirements, the Water Authority of Fiji shall issue the developer with a Beginning of Maintenance Certificate.

A Defects Liability Period shall be enforced for a period of one (1) year from the issuance of the Beginning of Maintenance Certificate.

#### 6.1.1 Defects Liability Period

A defects liability period shall be enforced for a period of at least one year (365 calendar days) from the issuance of the Beginning of Maintenance Certificate unless otherwise stated by the WAF.

The Developer shall rectify any defects that arises during the defects period at it's own cost. In the event that the Developer fails to rectify the works, the WAF shall rectify the defect and issue a claim to the Developer.

WAF shall take over the development/subdivision only upon the successful completion of the Defects Liability Period, clearance of pending WAF claims, the submission of relevant documents as detailed in section 6.0 and the submission of a Defects Rectification Report indicating all defects that have been rectified by the developer within the Defects Liability Period.

## **6.2 Roles & Responsibilities upon Taking Over by WAF**

### **6.2.1 Developers**

Developers are to ensure that the subdivision works are done as per approved Engineering Plans and the networks constructed should pass the minimum requirements set-out in section 5.1;

Relevant pipeline easements, land titles for pump stations and other ancillaries are to be legally transferred to WAF upon the successful completion of the Defects Liability Period. A copy of all titles and easements to be submitted to WAF as stipulated under section 6.0.

All required technical information related to the water and waste water networks constructed by the developer are to be submitted to WAF as stipulated under section 6.0.

Developers are to disclose relevant lot information to the intended buyer of a developed lot(s) and indicate that domestic and/or commercial water and waste water connections are to be applied to WAF by the buyer separately.

### **6.2.2 Body Corporate Entities**

A Body Corporate entity who develops a subdivision and whom intends to connect to the WAF water supply and/or waste water collection system but service and/or maintain their own respective systems/development will be:

1. billed in bulk through a WAF master meter for water supply and,
2. billed in bulk through a WAF electro-magnetic flowmeter for waste water collection.

The respective meters shall be supplied and installed by WAF, at the cost of the developer, at a WAF nominated location at the peripheries of the Body Corporate's respective land parcel/boundary.

The Body Corporate will show cause and be capable of servicing and/or maintaining the water and waste water network within their respective boundaries, after the WAF meter. This information is to be disclosed in writing to all existing and potential property owners within the Body Corporate's development/subdivision.

WAF and the Body Corporate entity shall execute an agreement prior to Practical Completion in order to demarcate area's of responsibility for the concerned development/subdivision upon the commissioning of the water mains and waste water collection networks.

### **6.2.3 Water Authority of Fiji**

Roles and responsibilities under the Water Authority of Fiji is defined in the WAF Customer Charter 2020 which is available on the WAF website, except in area's taken over by Body Corporate entities as stipulated in 6.2.2.

### **6.3 Taking Over of Asset(s) by WAF under Special Conditions**

The Water Authority of Fiji will take over privately owned assets under Special Conditions which shall be agreed upon and executed through a Memorandum of Agreement, approved by the respective Water Authority of Fiji's – Board of Director's.

At a minimum, the proposing party shall:

1. disclose it's intention to hand-over the asset(s) to WAF,
2. disclose and submit all necessary information of the asset to WAF,
3. certify that assets meet WAF's minimum standards through a registered engineer; related fees to be borne by the proposing party
4. legally transfer relevant easements and land titles to WAF; related fees to be borne by the proposing party.

### **6.4 Applicable Fees and Charges – Taking Over**

Application and lodgment for Taking over by the Water Authority of Fiji shall be subject to fees stated within the Water Authority of Fiji's fees and charges schedule.

### **6.5 WAF Subdivision Register**

All Subdivision Development applications, information and status of progress including scheme, including as-built drawings are to be recorded in a WAF subdivision register.

## Appendices

### A-1 Approved Material Standards

Water Services Association of Australia	
Product Specification for Product and Materials (Alphabetical Order)	
Product Specification	Product & Material Listing
Access Covers & Frames	
WSA PS – 290	Ductile Iron Access Covers and Frames for Water Supply and Sewerage to WSA 132
WSA PS – 291	Ductile Iron Access Covers and Frames for Water Supply and Sewerage to EN 124
WSA PS – 292	Macro-Composite Access Covers and Frames for Water Supply and Sewerage to WSA 133
WSA PS – 293	Thermoplastic Access Covers and Frames for Water Supply and Sewerage
Acrylonitrile Butadiene Styrene (ABS) Pipe and Fittings	
WSA PS – 217	Acrylonitrile Butadiene Styrene (ABS) Pipes for Pressure Applications - Water Supply and Sewerage
WSA PS – 238	Acrylonitrile Butadiene Styrene (ABS) Pipes and Fittings for Non-Pressure Applications – Sewerage
Casting Spacers	
WSA PS – 324	Casing Spacers
Centrifugally Cast Glass Reinforced Plastics (CC-GRP) Pipe and Fittings	
WSA PS – 205J	Centrifugally Cast Glass Reinforced Plastics (CC-GRP) Pipes for Pressure and Non-Pressure Applications – Water Supply and Sewerage – Installed Using Trenchless Installation Methods
WSA PS – 237	Centrifugally Cast Glass Reinforced Plastics (CC-GRP) Pipes and Fittings (ISO Sized) for Pressure and Non-Pressure Applications – Water Supply
WSA PS – 237S	Centrifugally Cast Glass Reinforced Plastics (CC-GRP) Pipes and Fittings (ISO Sized) for Pressure and Non-Pressure Applications - Sewerage
Clamps	
WSA PS – 313	Repair and Off-Take Clamps for Pressure Applications – Water Supply

Collection Tanks	
WSA PS – 402	Collection Tanks for Pressure and Vacuum Sewerage
Concrete	
WSA PS – 357	Concrete, Pre-Mixed, Normal Class
WSA PS – 358	Concrete, Pre-Mixed, Special Class
WSA PS – 367	Steel Reinforcing Materials for Concrete
Corrosion Protection	
WSA PS – 335	Pipeline Cold-Applied Liquid Adhesives and Prefabricated Tapes
WSA PS – 336	Pipeline Heat-Shrinkable, Cross-Linked Polyolefin Coatings
Couplings	
WSA PS – 235	Couplings, Metal-Banded Flexible, for Non-Pressure Applications - Sewerage
WSA PS – 270	Mechanical Couplings, Non-End Thrust Restraint for Pressure Applications – Water Supply and Sewerage
WSA PS – 271	Mechanical Couplings and Flange Adapters, End Thrust Restraint, for Pressure Applications – Water Supply and Sewerage
Ductile Iron Pipe & Fittings	
WSA PS - 200	Ductile Iron Pipes (CIOD) for Pressure Applications - Water Supply and Sewerage
WSA PS - 201	Ductile Iron Pipes (CIOD) for Pressure and Non Pressure Applications - Water Supply and Sewerage
WSA PS - 202	Ductile Iron Pipes and Fittings (ISO Sized) for Pressure Applications - Water Supply
WSA PS - 202S	Ductile Iron Pipes and Fittings (ISO Sized) for Pressure and Non Pressure Applications - Sewerage
WSA PS – 212	Ductile Iron Fittings (CIOD) for Plastics Pressure Pipe for Pressure and Non-Pressure Applications - Water Supply and Sewerage
WSA PS – 244	Ductile Iron Fittings (CIOD) with Restrained Flexible Joints for Pressure and Non-Pressure Applications – Water Supply and Sewerage



WSA PS – 245	Ductile Iron Fittings with Restrained Flexible Joints for Polyethylene Pipe of Nominal Sizes 90 to 1000 in Pressure Applications – Water Supply and Sewerage
WSA PS – 320	Sleeving, Polyethylene (PE) for Ductile Iron Pipes and Fittings – Water Supply and Sewerage
<b>Embedment Materials</b>	
WSA PS – 369	Bottom Ash Sand for Pipe Embedment
WSA PS – 352	Controlled Low Strength Materials (CLSM) for Pipe Embedment
WSA PS – 350	Compaction Sand For Pipe Embedment
WSA PS – 360	Embedment / Concrete Sand
WSA PS – 361	Embedment / 5 mm Minus Fine Crushed Rock
WSA PS – 364	Graded Recycled Materials for Pipe Embedment
WSA PS – 366	Graded and Single Sized Recycled Materials for Pipe Embedment
WSA PS – 351	Processed Aggregates for Pipe Embedment
WSA PS – 368	Recycled Glass Sand for Pipe Embedment
WSA PS – 362	Well Graded Crushed Rock for Pipe Embedment
WSA PS – 359	7mm Processed Aggregate for Pipe Embedment
<b>Extension Spindles</b>	
WSA PS – 262	Extension Spindles for Gate Valves
WSA PS – 269	Extension Spindles for Valves (Other than Gate Valves)
<b>Filament Wound Glass Reinforced Plastics (FW-GRP) Pipe and Fittings</b>	
WSA PS – 205	Filament Wound Glass Reinforced Plastics (FW-GRP) Pipes and Fittings for Pressure Applications – Water Supply
WSA PS – 205S	Filament Wound Glass Reinforced Plastics (FW-GRP) Pipes and Fittings for Pressure and Non-Pressure Applications - Sewerage
WSA PS – 206J	Filament Wound Glass Reinforced Plastics (FW-GRP) Pipes for Pressure and Non-Pressure Applications – Water Supply and Sewerage – Installed Using Trenchless Installation Methods

<b>Flange Gaskets and O-Rings</b>	
WSA PS – 312	Flange Gaskets and O-Rings
<b>Geotextile Filter Fabric</b>	
WSA PS – 355	Geotextile Filter Fabric
<b>Hydrants</b>	
WSA PS – 267	Hydrants (Spring) for Pressure Applications - Water Supply
<b>Ladders</b>	
WSA PS – 315	Fixed Ladders for Man Entry Structures – Water Supply and Sewerage
<b>Maintenance Chambers / Holes / Shafts</b>	
WSA PS – 338	Maintenance Chambers (MC) – Polyethylene (PE) for Non-Pressure Applications – Gravity Sewerage
WSA PS – 337	Maintenance Chambers (MC) – Polypropylene (PP) for Non-Pressure Applications – Gravity Sewerage
WSA PS – 331	Maintenance Chambers (MC) - Pre-Cast Concrete for Non-Pressure Applications – Gravity Sewerage
WSA PS – 342 – Under review	Maintenance Holes (MH) – Glass Reinforced Plastics (GRP) for Non-Pressure Applications – Gravity Sewerage
WSA PS – 339 – Under review	Maintenance Holes (MH) – Polyethylene (PE) for Non-Pressure Applications – Gravity Sewerage
WSA PS – 340 – Under review	Maintenance Holes (MH) – Polypropylene (PP) for Non-Pressure Applications – Gravity Sewerage
WSA PS – 323	Maintenance Holes (MH) – Pre-Cast Concrete for Non-Pressure Applications – Gravity Sewerage
WSA PS – 322	Maintenance Shafts (MS) – Polyethylene (PE) for Non-Pressure Applications – Gravity Sewerage
WSA PS – 341	Maintenance Shafts (MS) – Polypropylene (PP) for Non-Pressure Applications – Gravity Sewerage
WSA PS – 321	Maintenance Shafts (MS) – Polyvinylchloride, Unplasticised (PVC-U) for Non-Pressure Applications – Gravity Sewerage

WSA PS – 333	Pre-Cast Concrete Conical Bases for Concrete Maintenance Holes (MH) for Non-Pressure Applications – Gravity Sewerage
WSA PS – 334	Vitrified Clay (VC) Maintenance Holes (MH), Maintenance Chambers (MC) and Maintenance Shafts (MS) for Non-Pressure Applications – Gravity Sewerage
<b>Marking Tape</b>	
WSA PS – 318	Marking Tape, Detectable
WSA PS – 319	Marking Tape, Non-Detectable
<b>Piles</b>	
WSA PS – 356	Piles
<b>Polyethylene (PE) Pipe and Fittings</b>	
WSA PS – 208	Plastics Moulded Fittings for Pressure Applications with PE Pipe – Water Supply and Sewerage
WSA PS – 207	Polyethylene (PE) Pipes for Pressure Applications - Water Supply and Sewerage
WSA PS – 215	Polyethylene (PE) Property Service Pipes for Pressure Applications – Water Supply
WSA PS – 216	Polyethylene (PE) Fabricated Fittings for Pressure Applications - Water Supply and Sewerage
WSA PS – 242	Polyethylene (PE), Plain Wall, Pipes and Fittings for Non-Pressure Applications - Sewerage
WSA PS – 241	Polyethylene (PE), Ribbed Construction, Pipes and Fittings for Non-Pressure Applications – Sewerage
<b>Polypropylene Pipes and Fittings</b>	
WSA PS – 240	Polypropylene (PP), Ribbed Construction, Pipe and Fittings for Non-Pressure Applications – Sewerage
<b>Polyvinylchloride, Modified (PVC-M) Pipe</b>	
WSA PS – 209	Polyvinylchloride, Modified (PVC-M) Pressure Pipes for Pressure Applications - Water Supply and Sewerage
<b>Polyvinylchloride, Oriented (PVC-O) Pipe</b>	

WSA PS – 210	Polyvinylchloride, Oriented (PVC-O) Pressure Pipes for Pressure Applications - Water Supply and Sewerage
<b>Polyvinylchloride, Unplasticised (PVC-U) Pipe and Fittings</b>	
WSA PS – 211	Polyvinylchloride, Unplasticised (PVC-U) Pressure Pipes for Pressure Applications - Water Supply and Sewerage
WSA PS – 243	Polyvinylchloride, Unplasticised (PVC-U) Fittings (EN 1401) for Non-Pressure Applications - Sewerage
WSA PS – 213	PVC Pressure Fittings, Moulded and Post-Formed for Pressure Applications - Water Supply and Sewerage
WSA PS – 230	Polyvinylchloride, Unplasticised (PVC-U) Pipes and Fittings for Non-Pressure Applications – Sewerage and Drainage
WSA PS – 236	Variable Bend, Post-Formed PVC-U Fittings for Non-Pressure Applications – Sewerage
<b>Pre-Tapped Connectors</b>	
WSA PS – 246	Pre-Tapped Connectors for Pressure Applications – Water Supply
<b>Property Service Pipe</b>	
WSA PS – 214	Copper (Cu) Property Service Pipes for Pressure Applications – Water Supply
WSA PS – 215	Polyethylene (PE) Property Service Pipes for Pressure Applications – Water Supply
<b>Pumps</b>	
WSA PS – 401	Grinder Pumps and Related Components for Pressure Sewerage
WSA PS – 403	ISO End Suction Centrifugal Pumps for Water Supply Booster Pumping Stations
WSA PS – 404	ISO End Suction Centrifugal Motor Pumps for Water Supply Booster Pumping Stations
WSA PS – 400	Submersible Electric Pumps for Sewage Pumping Stations
<b>Reinforced Concrete (RC) Pipe</b>	
WSA PS – 233	Reinforced Concrete (RC) Plastics-Lined Pipes for Non-Pressure Applications – Sewerage

Roadbase	
WSA PS – 354	Rock, Coarse Crushed for Roadbase
WSA PS – 353	Rock, Fine Crushed for Roadbase
Sleeving	
WSA PS – 320	Sleeving, Polyethylene (PE) for Ductile Iron Pipes and Fittings – Water Supply and Sewerage
Steel Pipes and Fittings	
WSA PS – 203	Steel Pipes for Pressure and Non-Pressure Applications - Water Supply and Sewerage
WSA PS – 204	Steel Fittings for Pressure and Non-Pressure Applications -Water Supply and Sewerage
Steel Reinforcing Materials	
WSA PS – 367	Steel Reinforcing Materials for Concrete
Steps / Step Irons	
WSA PS – 314	Steps for Underground Man Entry Chambers – Water Supply and Sewerage
Tapping Bands	
WSA PS – 329	Tapping Bands, Electrofusion for Use with Polyethylene (PE) Mains for Pressure Applications – Water Supply and Pressure Sewerage
WSA PS – 327	Tapping Bands, Mechanical for Use with Polyethylene (PE) Mains for Pressure Applications – Water Supply
WSA PS – 310	Tapping Bands – Mechanical for Pressure Applications – Water Supply
Trench Fill Materials	
WSA PS – 365	Recycled Materials for Trench Fill
WSA PS – 363	Trench Fill Materials
Valves	
WSA PS – 275	Air Valves for Pressure Applications - Sewerage
WSA PS – 265	Air Valves for Pressure Applications - Water Supply
WSA PS – 268	Automatic Control Valves for Pressure Applications – Water Supply

WSA PS – 274	Ball Valves for Pressure Applications – Water Supply
WSA PS – 263	Butterfly Valves for Pressure Applications – Water Supply
WSA PS – 279	European Gate Valves, Resilient Seated for Pressure Applications – Water Supply
WSA PS – 262	Extension Spindles for Gate Valves
WSA PS – 269	Extension Spindles for Valves (Other than Gate Valves)
WSA PS – 261	Gate Valves, Metal Seated for Pressure Applications – Water Supply and Sewerage
WSA PS – 260	Gate Valves, Resilient Seated for Pressure Applications – Water Supply and Sewerage
WSA PS – 278	Gate Valves, Resilient Seated, with Integral Polyethylene (PE) Ends for Pressure Applications – Water Supply and Sewerage
WSA PS – 266	Knife Gate Valves for Pressure Applications - Water Supply and Sewerage
WSA PS – 264	Non-Return (Reflux) Valves for Pressure Applications – Water Supply and Sewerage
WSA PS – 273	Vacuum Interface Valves for Pressure Applications – Sewerage
<b>Vent Shafts</b>	
WSA PS – 325	Vent Shaft – Educt for Non-Pressure Applications - Sewerage
WSA PS – 326	Vent Shaft – Induct for Non-Pressure Applications - Sewerage
<b>Variable Bends</b>	
WSA PS – 236	Variable Bend, Post-Formed PVC-U Fittings for Non-Pressure Applications – Sewerage
<b>Vitrified Clay (VC) Pipes and Fittings</b>	
WSA PS – 231	Vitrified Clay (VC) Pipes and Fittings for Non-Pressure Applications – Sewerage
WSA PS – 294 – Under Review	Composite Access Covers and Frames for Water Supply and Sewerage

Table4: Water Services Association of Australia: Product and Material Specification

## A-2 Recommended Materials

Materials	Recommended Brands / Supplier
Ductile Iron Bends	Asmuss, Auslite, AVK, Clover, Crevet, Derwent, Iplex, Mallet, Sureflow
Ductile Iron Tees	Asmuss, Auslite, AVK, Clover, Crevet, Derwent, Iplex, Mallet, Sureflow
Non Return Valves	Auslite, AVK, Derwent, Hygrade, Sureflow
Flange Spigot Connectors	Asmuss, Auslite, Clover, Crevet, Daemco, Derwent, Mallet, Sureflow
Reducers (Socketed)	Asmuss, Auslite, Clover, Crevet, Iplex, Mallet
Concentric Reducers (Flanged)	Asmuss, Clover, Crevet, Derwent, Iplex, Mallet, Sureflow
Eccentric Reducers (Flanged)	Asmuss, Clover, Crevet, Derwent, Iplex, Mallet, Sureflow
Screw Down Hydrants	Auslite, AVK, Gillies, Sureflow
Hydrant Risers	Clover, Daemco, Mallet, Auslite, Asmuss
Flange Connectors with Puddle Pipe	Asmuss, Crevet, Iplex
Blank Flanges	Auslite, Clover, Daemco, Derwent, Mallet
Dressing Sets / Gaskets and Bolt Sets	Daemco, Hygrade, Shuk, Tyton
Super Flanged Adaptors	Asmuss, AVK, AVK Wang, Derwent, Mallet, Ultraquick, Saint-Gobain PAM, Viking Johnson
Resilient Seat Gate Valves	Asmuss, Auslite, AVFI, Betta, Daemco, Derwent, Hawle, Sureflow
Anti-Shock or Anti-Surge Air Valves	Vent-o-Mat
Multifit Couplings	AVK Wang, Daemco, Saint-Gobain PAM, Viking Johnson
Flow / Master Meters	Khrone
Reinforced Precast Concrete Culverts	Humes, Arrow Concrete

Table 5 : Water Authority of Fiji's Recommended Brands

### A-3 Applicable Fees and Charges

Scheme Application Fee		
Application Type	Number of Lots	Cost (FJD VEP)
Domestic/Residential	1 to 20	\$221.98
Domestic/Residential	21 to 50	\$221.98
Domestic/Residential	51 – 100	\$278.74
Domestic/Residential	Over 100	\$358.60
Commercial	N/A	\$358.60
Engineering Application Fee		
Application Type	Number of Lots	Cost (FJD VEP)
Domestic/Residential - Water Only	1 to 20	\$602.03
Domestic/Residential – Water Only	21 to 50	\$779.69
Domestic/Residential – Water Only	51 – 100	\$1,229.09
Domestic/Residential – Water Only	Over 100	\$2,385.81
Commercial – Water Only	N/A	\$2,385.81
Domestic/Residential - Water & Wastewater – Without Pump Stations	1 to 20	\$779.69
Domestic/Residential - Water & Wastewater – Without Pump Stations	21 to 50	\$987.60
Domestic/Residential - Water & Wastewater – Without Pump Stations	51 – 100	\$1,467.31
Domestic/Residential - Water & Wastewater – Without Pump Stations	Over 100	\$2,654.32
Commercial - Water & Wastewater – Without Pump Stations	N/A	\$2,654.32
Domestic/Residential - Water & Wastewater – With Pump Stations	1 to 20	\$813.56
Domestic/Residential - Water & Wastewater – With Pump Stations	21 to 50	\$1,036.20
Domestic/Residential - Water & Wastewater – With Pump Stations	51 – 100	\$1,666.41
Domestic/Residential - Water & Wastewater – With Pump Stations	Over 100	\$3,047.60
Commercial - Water & Wastewater – With Pump Stations	N/A	\$3,047.60



<b>As-Built Application Fee</b>		
<b>Application Type</b>	<b>Number of Lots</b>	<b>Cost (FJD VEP)</b>
Domestic/Residential	1 to 20	\$397.47
Domestic/Residential	21 to 50	\$397.47
Domestic/Residential	51 – 100	\$789.45
Domestic/Residential	Over 100	\$1,787.30
Commercial	N/A	\$1,787.30
<b>Other Services and Fees</b>		<b>Cost (FJD VEP)</b>
Pressure Testing by WAF, Mirror Testing by WAF, Connection to Water/Waste Water Mains or Extensions on Water/Waste Water Mains by WAF to non-reticulated area's		Case by case basis

## General Information about Applications.

The tables in this schedule outlines the Water Authority of Fiji’s requirements for lodgment and assessing of development applications.

### GI-1 Scheme Plan Application

Step	Scheme Plan Application
Application (Request)	<p><b>How do I request for Scheme Plan Approval?</b></p> <ul style="list-style-type: none"> <li>• Complete the Water Authority of Fiji approved Scheme Application Form, including supplying the plans and other information specified in the form;</li> <li>• Pay the fees stated in the Water Authority of Fiji Schedule of Fees and Charges to the nearest WAF Customer Service center.</li> <li>• If the applicant is not the owner of the land related to the development, provide land owners written consent and proof of ownership to the application.</li> </ul>
Assessment	<p><b>What is the timeframe for assessing approval?</b></p> <p>Between 5 to 10 working days dependent on the complexity of the scheme plan (or longer period agreed by the applicant)</p>
Decision	<p><b>What happens when the application has been approved?</b></p> <p>The Water Authority of Fiji shall issue the applicant with Service Advice Notice within 5 business days after the approval of the scheme plan application.</p> <p>The Service Advice Notice shall be signed off by either the Chief Executive Officer (CEO), Chief Operating Officer (COO), Manager Planning, &amp; Design (MPD) or Manager Infrastructure &amp; Service Delivery (MI&amp;SD); <b><i>A Service Advice Notice signed by any other office apart from those previously mentioned shall be deemed invalid.</i></b></p>

## GI-2 Engineering Plan Application

Step	Engineering Plan Application
Application (Request)	<p><b>How do I request for Engineering Plan Approval?</b></p> <ul style="list-style-type: none"> <li>• Complete the Water Authority of Fiji approved Engineering Plan Application Form, including supplying the plans and other information specified in the form;</li> <li>• Pay the fees stated in the Water Authority of Fiji Schedule of Fees and Charges to the nearest WAF Customer Service center.</li> <li>• If the applicant is not the owner of the land related to the development, provide land owners written consent and proof of ownership to the application.</li> </ul>
Assessment  Criteria & Timeframes	<p><b>What will the application be assessed against?</b></p> <ul style="list-style-type: none"> <li>• The application will be assessed against: <ul style="list-style-type: none"> <li>○ Design in accordance with the applicable Water Services Association of Australia (WSA) Design Codes;</li> <li>○ Suitability and conformity of Proposed Materials to WSA Product and Material Specification</li> <li>○ Any other matter the Water Authority of Fiji considers relevant to the possible future connection or supply of its water or wastewater services</li> </ul> </li> </ul> <p><b>What is the timeframe for deciding the application?</b></p> <ul style="list-style-type: none"> <li>• Decision timeframe – if no extra information is required: <ul style="list-style-type: none"> <li>○ Total decision timeframe – up to 25 working days (or longer period agreed by the applicant) as follows: <ul style="list-style-type: none"> <li>▪ Up to 20 working day to assess the application starting on the day after the Water Authority of Fiji receives the complete application</li> <li>▪ Up to 5 working days after the decision has been made to give the Applicant notice of the decision</li> </ul> </li> </ul> </li> <li>• Extended decision timeframe – if extra information is required from the Applicant: <ul style="list-style-type: none"> <li>○ Up to an extra 25 working days (or longer period agreed to by the Applicant) as follows: <ul style="list-style-type: none"> <li>▪ Up to 20 working days to assess the application starting on the day after the Water Authority of Fiji receives the Applicant’s complete response to the request of extra information and the application will be held in abeyance until the Applicant’s complete response is received’</li> <li>▪ Up to 5 business days after the decision has been made to give the Applicant notice of the decision.</li> </ul> </li> </ul> </li> <li>• Lapsing – The application shall lapse if the Applicant has not responded to the request for extra information within 2 months after the request was made.</li> </ul>

<b>Decision</b>	<b>What happens when the application has been approved?</b> The Water Authority of Fiji shall issue the Applicant with a formal notice signed off by the respective Manager – Infrastructure and Service Delivery and/or the Manager – Planning & Design and the Chief Operating Officer within 5 working days after the approval for the Engineering Plan Application.
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### GI-3 Taking Over Application

Step	Taking Over Application
Application (Request)	<p><b>How do I request for Water Authority of Fiji to Take Over?</b></p> <ul style="list-style-type: none"> <li>• Complete the Water Authority of Fiji approved Taking Over / As-built Application Form, including supplying the as-built / as constructed plans and other information specified in the form;</li> <li>• Pay the fees stated in the Water Authority of Fiji Schedule of Fees and Charges to the nearest WAF Customer Service center.</li> <li>• If the applicant is not the owner of the land related to the development, provide land owners written consent and proof of ownership to the application.</li> </ul>
Assessment  Criteria & Timeframes	<p><b>What will the application be assessed against?</b></p> <ul style="list-style-type: none"> <li>• The Application will be assessed against: <ul style="list-style-type: none"> <li>○ Registration of Water and or Wastewater Assets and easements under the Water Authority of Fiji;</li> <li>○ Comparison of As-Constructed Drawings against Engineering Design Drawings</li> <li>○ Assessment of Materials Used against approved material specification.</li> </ul> </li> </ul> <p><b>What is the timeframe for deciding the application?</b></p> <ul style="list-style-type: none"> <li>• Decision timeframe – if no extra information is required: <ul style="list-style-type: none"> <li>○ Total decision timeframe – up to 25 working days (or longer period agreed by the applicant) as follows: <ul style="list-style-type: none"> <li>▪ Up to 20 working day to assess the application starting on the day after the Water Authority of Fiji receives the complete application</li> <li>▪ Up to 5 working days after the decision has been made to give the Applicant notice of the decision</li> </ul> </li> </ul> </li> <li>• Extended decision timeframe – if extra information is required from the Applicant: <ul style="list-style-type: none"> <li>○ Up to an extra 25 working days (or longer period agreed to by the Applicant) as follows: <ul style="list-style-type: none"> <li>▪ Up to 20 working days to assess the application starting on the day after the Water Authority of Fiji receives the Applicant’s complete response to the request of extra information and the application will be held in abeyance until the Applicant’s complete response is received’</li> <li>▪ Up to 5 business days after the decision has been made to give the Applicant notice of the decision.</li> </ul> </li> </ul> </li> </ul> <p>Lapsing – The application shall lapse if the Applicant has not responded to the request for extra information within 2 months after the request was made.</p>
Decision	<p><b>What happens when the application has been approved?</b></p> <p>The Water Authority of Fiji shall issue the Applicant with a Beginning of Maintenance Certificate signed off by the Manager Infrastructure &amp; Service Delivery and/or Manager Planning &amp; Design and the Chief Operating Officer within 5 working days after the approval for the Taking Over Application.</p>

#### GI-4 Application Forms and Notices

No.	Application Form & Notices	Section /Clause
1	Scheme Plan Application Form	3.1.1
2	Service Advice Notice Application Form	3.1.2
3	Scheme Plan Approval template	3.3.6
4	Engineering Plan Application Form	3.3.5
5	Engineering Plan Application Form a) Includes “Key Hold Points”	3.3.7
6	Engineering Plan Approval template	3.3.8
7	Products and Materials Form	Under development
8	Construction Hold Points Inspection Form	4.2
9	Practical Completion Certificate template	4.3
10	Testing and Commissioning Form a) Water Network b) Wastewater Network	5.0 5.1.1 5.1.2
11	Completion Certificate template	5.2
12	Taking Over Application Form	6.0
13	Taking Over Application Check List	6.0
14	Taking Over Certificate template	6.0
15	Beginning of Maintenance Certificate template	6.1
16	Fees for Subdivision Application Assessment	6.2

### GI-5 Subdivision Application Process Map

