# builders guide.

water



# contents

1	р	ourpose	3
2	S	scope of works	4
3	0	on-lot infrastructure	5
	3.1	infrastructure ownership and O+M responsibility	
	3.2	infrastructure installation responsibility	
4	р	ore-construction	7
	4.1	inform	7
	4.2	building quote	7
	4.3	apply for a drinking water meter (where applicable)	8
	4.4	building & landscaping plan preparation	8
	4.5	non-standard buildings	9
	4.6	apply for BASIX certificate	9
	4.7	plan review and approval	11
	4.8	altogether building approval	11
5	С	construction phase	12
	5.1	customer registration	12
	5.2	pay on-lot infrastructure fee	12
	5.3	construction begins	13
		5.3.1 plumbing scope of works	
6	р	oost construction	15
	6.1	final plumbing inspection	15
	6.2	certificate of compliance electrical work	15
	6.3	pre-connection inspection	15
	6.4	final connection	16
	6.5	submit as-built services plans	16
	66	connection certificate	17

# 1 purpose

The purpose of this document is to provide a guide for builders (including owner builders) about what they need to do to prepare a residential housing lot for connection to drinking water (where applicable), recycled water and sewerage in an area for which the local water utility is part of the Altogether (Altogether).

Altogether's local water services network consists of a pressure sewer system, recycled water reticulation and drinking water reticulation (where applicable). This means that all homes and other buildings in this community are dual reticulated. Altogether's infrastructure meets all of the relevant regulations and standards, and while pressure sewer systems are not exactly the same as traditional gravity wastewater service, getting connected to our water services is not complicated.

In this document you will find information about technical specifications, including references to Altogether's standard drawings, and the process for approvals and construction of the water services required for residential housing lots.

Builders of multi-dwelling residential properties (e.g. townhouses, apartments etc.) or non-residential properties (e.g. retail/commercial, community facilities, schools etc.) should visit here for advice about servicing these types of properties.



# 2 scope of works

Builders (including owner builders) are responsible for the following.

See Altogether's connection process for a detailed end-to-end procedure for land and housing builds with Altogether on-lot infrastructure.

#### pre construction

- Incorporate Altogether's requirements into the plan you create (section 4.5)
- Apply for your BASIX Certificate and select "Reticulated Alternative Water Supply" (section 4.6)
- Have the homeowner register as a customer of Altogether (section 5.1)
- Apply to Altogether to purchase a drinking water meter (where applicable), (section 5.3)
- Before you send your plans to council or a private certifier, get your plans reviewed and approved by Altogether (and the developer where required) to make sure they meet design guidelines and technical requirements (section 4.7)

#### construction

 Make sure plumbers and electricians comply with Altogether's infrastructure requirements (section 5.3), NSW Fair Trading requirements (section 6.1) and statutory requirements (section 6.2)

#### post construction

- Complete the <u>pre-connection inspection checklist</u> (section 6.4)
- Book a pre-connection inspection by providing the following documents
  - Final Plumbing and Drainage Inspection Report (section 6.1)
  - Certificate of Compliance Electrical Work (section 6.2)
  - As-Built Services Plans to Altogether (Section 6.6)
- Upon a successful inspection, receive connection certificate from Altogether to apply for an occupation certificate (section 6.7)



### 3 on-lot infrastructure

For standard residential housing lots the pressure sewer system, including the wastewater collection tank (the 'tank'), valve assembly pit (the 'boundary kit') and the discharge pipework that connects these components to the pressure sewer main will be installed by the land developer before any building work commence. The tank will either be in a front or rear corner of the site, depending on the fall of the land. The developer will also have installed capped-off property connections for recycled water, drinking water and sewer.

Figure 1 below provides an indicative schematic view of a typical water services layout for a residential housing lot. The figure provides an example of the on lot-infrastructure and how it relates to property fittings and fixtures for the sewer, drinking water and recycled water networks.

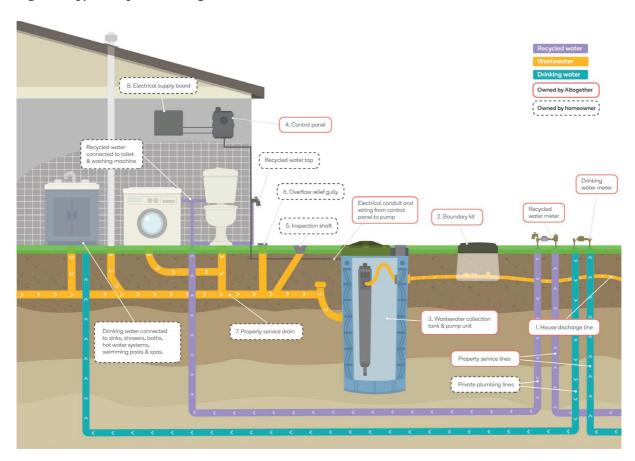


Figure 1: Typical layout of Altogether's on-lot water services infrastructure

The following drawings are applicable for all home builders on standard residential housing lots:

- <u>FSI-1001A-FS</u> shows the typical staging and the builder's scope of work for properties where the wastewater collection tank is situated at the <u>front of the lot</u>.
- <u>FSI-1001B-FS</u> shows the typical staging and the builder's scope of work for properties where the wastewater collection tank is situated at the <u>rear of the lot</u>.
- <u>WAT-1854-FS</u> shows property water and recycled water service requirements downstream of the property connection point.
- <u>PSS-1111-FS</u> shows the pressure sewer system on-lot infrastructure and how this relates to the property's sanitary drainage.
- <u>PSS-1114-FS</u> shows pool and spa drainage requirements if connecting to the wastewater collection tank.
- <u>FSI-1003A-FS</u> shows the dimensions of the pressure sewer unit control panel and the data management unit, including the wall space required for installation by Altogether.

### 3.1 infrastructure ownership and O+M responsibility

**Altogether** will own and, once the building process and final connection has been completed, and operate and maintain the:

- drinking water meter (where applicable) and recycled water meter
- wastewater collection tank, boundary kit and pressure sewer unit (pump, control panel, and associated instrumentation and cabling)
- electrical connections and between the pressure sewer unit control panel and the data management unit

The **property owner** will own and, once the building process and final connection has been completed, operate and maintain the:

- drinking water and recycled water plumbing immediately downstream of the meters (i.e. to the house)
- sewerage plumbing from the house to the property connection sewer/inspection shaft (riser pipe) immediately upstream of the wastewater collection tank
- electrical connection between the electrical distribution box and the pressure sewer unit control panel.

## 3.2 infrastructure installation responsibility

The following link will show you the table that sets out the installation responsibility for on-lot infrastructure  $\underline{\text{FSI-1005-FS}}$ 



# 4 pre-construction

#### 4.1 inform

The contract of sale for land discloses to the new property owner that Altogether is the water utility for their lot, including responsibility for <u>fees</u>.

If you can, make sure you remind your customer that their water utility is Altogether and they will be provided with recycled water as well as drinking water (where applicable), in addition to wastewater services, when their home is built. Essential to this is the dual reticulation in their home and tank and boundary kit in the corner of their lot. This infrastructure and connection to Altogether's sustainable water network means they get a high BASIX rating and don't need to install a rainwater tank to meet BASIX requirements

Either the homeowner or builder should check if Altogether's <u>on lot infrastructure fee</u> applies to their development area.

Other resources Altogether has to help with this process and answer customer questions are:

- help centre
- community pages
- connection process
- fees and charges
- shop

If you need any further information, please call 1300 803 803 or complete this form.

## 4.2 building quote

If it applies to the lot that the home is being built on, make sure you include Altogether's fees and charges into your building quote as the customer will secure a home loan based on these figures. Depending on the community, this could include Altogether's Infrastructure and/or Connection Fee. Regardless, remember to remove the cost of the rainwater tank and associated components from your quote and scope as they are not needed for BASIX.

It's important to ensure Altogether's <u>fees</u> are incorporated into your building quote/tender as this may impact the customer's ability to pay for the on-lot infrastructure and obtain access to sewer and subsequently receive their Occupation Certificate.

For non-standard buildings (e.g. apartments, townhouses, villas etc), please contact Altogether on 1300 803 803 to discuss our requirements. To meet building



requirements, non-standard buildings may require different meter types. Additional details can be found here.

### 4.3 apply for a drinking water meter (where applicable)

<u>Drinking water meters</u> must be purchased prior to submission of your altogether building approval at select communities where drinking water is supplied by Altogether. Once the meter has been installed, we will commence billing the property owner for service charges and usage on a monthly basis. Drinking water meters must be installed by Altogether prior to construction. Please allow 20 business days from your purchase for the drinking water meter to be installed.

A separate water meter is required for each additional dwelling. If you require multiple meters, please purchase a <u>secondary meter</u>.

#### NOTE

Customers in communities where Altogether does not provide drinking water services<sup>1</sup> should apply to your incumbent water utility or a Quick Check agent for their drinking water meter. All other communities should apply directly to Altogether.

## 4.4 building & landscaping plan preparation

The builder is responsible for complying with the following guidelines when preparing building and landscape plans for review and approval by Altogether:

- Altogether require minimum clearances around the wastewater collection tank, including: (Refer to our <u>guidelines for building near pressure sewer</u>)
  - 2.0m to the footings of building structures (excluding porches/verandahs/patios, which require 0.5m clearance to edge of tank, for single storeys. Double storeys with less than 2.0m will need to supply engineering plans.)
  - 0.5m to inside face of boundary fencing, retaining walls and
  - 0.5m from driveways and hardstands
- The footings of all structures (including dwellings, garages, walls and fences) need to be a minimum of 0.5m from our pipes.
- The landscaping plan must clearly show all of our on-lot infrastructure and the required infrastructure clearances. When developing the landscaping plans, please remember:
  - Altogether must have access to the on-lot infrastructure at all times and we have the right to remove anything that interferes with access. We will make all best endeavors to contact you prior to access but if necessary, Altogether will

trim or remove trees, shrubbery, grass or bark etc. without notifying the customer.

- Nothing can obstruct the top of the wastewater collection tank. It must not
  have any weight on it including soil, bark or any large objects such as boats,
  cars, trailers or horse floats parked above it.
- A minimum of 50mm clearance below the wastewater collection tank lid is required for all soil and the tank cannot be the lowest point in the landscape otherwise surface water can enter the tank.
- To help with drainage, landscaping must ensure the ground slopes away from the lid of the wastewater collection tank.
- Tree roots can damage, infiltrate and eventually destroy pipes, causing significant inconvenience and costly repairs. We recommend consulting a landscape designer or architect before planting trees.
- For further details on landscaping please refer to Altogether's <u>landscaping guide</u>
- If installing a pool and/or spa this must be shown on your landscaping plans. Please refer to Altogether's pool and spa guidelines
- Pool and Spa guidelines and <u>PSS-1114-FS</u> shows pool and spa drainage requirements if connecting to the wastewater collection tank.
- A full water servicing plan must be provided including recycled water service, drinking water service (where applicable1), sewer service and storm water service.
   Conduits and pool or spa locations and connections within the property. Example of an acceptable water servicing plan.
- Altogether prefer that the pump control panel is positioned in the same location as the electrical distribution box but Altogether's equipment must be in line of sight of the wastewater collection tank.
- <u>FSI-1003A-FS</u> shows the dimensions and the typical requirements for the pressure sewer unit control panel and the wall space required for future installation by Altogether.
- Do not put any concrete and/or paving over any of Altogether's on-lot infrastructure.

## 4.5 non-standard buildings

For non-standard buildings (e.g. apartments, townhouses, etc.), please contact Altogether on 1300 803 803 to discuss requirements. For approval of non-standard plans allow 15 business days for review.

## 4.6 apply for BASIX certificate

Apply for the BASIX Certificate:

select your local community/estate;

- select the "reticulated alternative water supply" category:
  - the applicant must make provision to connect the development to the reticulated alternative water supply system. This connection must meet the requirements of all applicable regulatory authorities.
  - the applicant must make provision to connect the reticulated alternative water supply system to:
    - All toilets in the development.
    - The single cold water tap that supplies each clothes washer in the development; and
    - At least two outdoor taps in the development.

Refer to Appendix A for an example of a completed BASIX Certificate for the Reticulated Alternative Water Supply" category.



#### NOTE

A rainwater tank is not permitted on the property. To comply with BASIX the following must be connected to recycled water: all toilets in the home; the cold water tap for the washing machine, and at least two outdoor tap.s

### 4.7 plan review and approval

As there is water and wastewater infrastructure on the lot that has specific design requirements (see section 4.5 above), Altogether needs to review and approve the lot, building, landscape and water service plans. If your development has a developer design review board or similar design review forum the developers will also need to provide approval, however Altogether will have a process to coordinate these approvals with the developer to make it easier for you.

If the plans meet with Altogether's requirements we will provide approval within 10 business days upon payment of your application. If you fail, you will be required to rectify plans and re-apply incurring additional fees and extended time frames.

### 4.8 altogether building approval

All plans must be submitted via our online shop. A property services water design, BASIX certificate and landscape design is required to be lodged with and approved by Altogether prior to issue of the Construction Certificate.

Your plans must show all requirements listed in section 4.3 & 4.5. For more information on how to submit a Development Application please visit <u>Building Plan Stamping</u>.

Once approved by Altogether, submit your development application to your local council or private certifier who will review and, when approved, stamp the application and issue a Construction Certificate. Please attach a copy of the Construction Certificate outlining name of the development, address/lot number, customer name and details of contact person to this <u>form</u>



# 5 construction phase

### 5.1 customer registration

If not already registered as an Altogether customer, the homeowner or their authorised agent (e.g. builder) must register and set up their customer account by entering their postcode <u>here.</u>

Once the customer is registered, this provides access to Altogether's customer services for approvals and to establish the connection to services.

To register, the following homeowner information is required:

- Current billing address
- Contact details (mobile, home, work phone and email address)
- Details of all authorised representatives to access to the account
- Date of birth. This is important. With it Altogether can validate a customer's identity to discuss a query on the account
- Identification Number (passport, Medicare card, driver's licence or authorised photo card issued by an Australian State or Territory)
- Direct debit details (credit card or bank account) to setup a direct debit agreement with Altogether for the monthly payment of services and usage

## 5.2 pay on-lot infrastructure fee

An on lot infrastructure fee is required for all new connections. The fee is for the supply and installation of the sustainable water infrastructure kit, including the pressure sewer pump, control panel, recycled water meter and hardware associated with the remote monitoring system.

Fees vary based on developer contributions on a regional basis, please refer to your sales disclosure notice for further detail.



#### 5.3 construction begins

Once the drinking water supply has been established and plans approved, construction on the new home can commence.

Wastewater services are not available until the final connection is complete so builders need to make their own arrangements for a portable toilet during construction.

Make sure the plumbing and electrical contractors are aware of Altogether's requirements for the utility services, including dual reticulation, pressure sewer and the electrical distribution boxes.

During the construction phase, it is the builders' responsibility to ensure that the wastewater tank, boundary kit and underground pipes on the lot are adequately protected. Any <u>repair costs</u> as a result of damage to these assets during the construction phase will be recovered from the builder and may delay final connection.

The position of the waste water tank, boundary kit and pipes are clearly marked on the development stage <u>reticulation drawings</u> and also available via dial before you dig.

No building debris or general rubbish is to be put into the wastewater collection tank. Failure by the builder to comply with this requirement will delay the customers' ability to move into their new home, as Altogether will be unable to issue a connection certificate until the wastewater collection tank has been cleaned out and made ready for daily operational use.

### 5.3.1 plumbing scope of works

#### recycled water in washing machines

Altogether mandates a recycled water washing machine tap on all new works. This means there will be two taps to supply the washing machine - hot drinking water and cold recycled water.

The Department of Health has determined there is no health risk from using recycled water to wash clothes and has approved its use in washing machines. The recycled water we produce is clean, clear and odourless. It leaves no residue in clothes or washing machines. Washing machines are typically the third highest user of water in the home. Using recycled water in washing machines can save about 20,000 litres of drinking water a year.

For further details of Altogether's on-lot plumbing requirements refer to Altogether's <u>plumber's guide.</u>



### 5.3.2 electrical scope of works

#### swimming pool and spa requirements

For further details of Altogether's specific requirements for properties with swimming pools and/or spas refer to Altogether's <u>pool and spa guidelines</u>.

#### NOTE

- All plumbing and electrical work must comply with relevant Australian Standards and Codes (e.g. AS 3000 Electrical Installations Wiring Rules and AS 3500 National Plumbing and Drainage Code);
- Builder's sewage, waste and other materials must not enter the wastewater collection tank, otherwise builders may have to bear the cost of emptying the tank and disposal of its contents via pump-out tanker; and
- The builder is responsible for the costs of repairing any damage to Altogether's on-lot infrastructure caused by the builder's construction activities.

For further details of Altogether's on-lot electrical requirements refer to Altogether's <u>electrician's guide.</u>



# 6 post construction

### 6.1 final plumbing inspection

During the construction phase, make sure the plumbing contractor complies with NSW Fair Trading's requirements for the various plumbing and drainage inspections required. Depending on the area, NSW Fair Trading may delegate these inspections to be carried out by the local council. For further information see <a href="NSW Fair Trading">NSW Fair Trading</a> Local Plumbing regulators. When the builder's plumbing work is complete (i.e. all fixtures are correctly fitted and connected), the plumbing contractor will need to book a final inspection. After the final inspection is completed, the inspector will provide a final plumbing and drainage inspection report.

### 6.2 certificate of compliance electrical work

When the builder's electrical work is complete, the electrical contractor will need to complete a uniquely numbered Certificate of Compliance Electrical Work (known as a Compliance Certificate or CCEW). The CCEW is a statutory requirement that provides assurance that a licensed electrical contractor has completed and tested the work to ensure it complies with the Australia/New Zealand Wiring Rules (AS/NZS 3000).

### 6.3 pre-connection inspection

Our technicians will complete a pre-connection inspection to ensure that your home complies with our requirements prior to wastewater and recycled water connection. Altogether will need access to your home to satisfy all the connection assessment criteria.

If your home passes <u>inspection</u> we will notify you and your builder of your connection date.

If your home does not pass the inspection, we will notify you and your builder by outlining what needs to be fixed.

Please note: fees are applicable to every <u>re-inspection</u>, so please ensure you are compliant the first time.

To book an <u>inspection</u> you need to provide the following documentation:

- Final pre inspection report OR Final plumbing inspection sticker issued by NSW Government, Office of Fair Trading
- Certificate of compliance for electrical work (CCEW)



#### 6.4 final connection

Altogether will arrange a final connection with the builder or homeowner once all the all the connection assessment criteria have been met. These appointments are weather-dependent and based on a first come, first served basis. Please allow 10 business days in your building schedule.

To complete the final connection, Altogether will be on site for up to four hours and will require access to the lot and dwelling to complete a cross connection check between drinking and recycled water services. Please make sure someone is on site to provide access and that Altogether has their name and contact details.

During the Final Connection, Altogether's authorised plumber and electrician will install, test and connect the property to the water and wastewater network.

Upon connection, if your home fails to comply to your approved building approval and/or our connection requirements, you will be charged an <u>incomplete inspection fee</u> prior to being booked in for a return inspection. To avoid having to the pay this fee please read the connection assessment requirements which provides guidance on what will be assessed by Altogether before connecting your home to the wastewater system and making it habitable to move in.

## 6.5 submit as-built services plans

Upon completion of the building works, the builder is required to email Altogether the final "as-built" drawings showing the actual locations on the property for the following services:

- sewage (i.e. provide a copy of the Sewer Service Diagram)
- recycled water supply
- drinking water supply
- electrical and instrumentation conduits for the pulse meter cables and the PSU electrical and control cables
- Pool and/or spa pipework (if applicable)



#### 6.6 connection certificate

When the final connection process is complete, Altogether will issue a Connection Certificate confirming that the lot is connected to the sewer, drinking water and recycled water network in accordance with our requirements. Please allow three business days after Altogether's final connection for this Connection Certificate to be issued.

You will need the connection certificate to apply to the local council or your private certifier for an occupation certificate. No-one is permitted to live in the home until the occupation certificate has been issued.

APPENDIX A Example Schedule of BASIX Commitments

#### **Schedule of BASIX commitments**

The commitments set out below regulate how the proposed development is to be carried out. It is a condition of any development consent granted, or complying development certificate issued, for the proposed development, that BASIX commitments be complied with.

Water Commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check		
Fixtures					
The applicant must install showerheads with a minimum rating of 3 star (> 7.5 but <= 9 L/min) in all showers in the development.		<b>~</b>	V		
The applicant must install a toilet flushing system with a minimum rating of 3 star in each toilet in the development.		<b>✓</b>	V		
The applicant must install taps with a minimum rating of 3 star in the kitchen in the development.		<b>V</b>			
The applicant must install basin taps with a minimum rating of 3 star in each bathroom in the development.		<b>✓</b>			
Alternative water					
Reticulated alternative water supply system					
The applicant must make provision to connect the development to the North Cooranbong (proposed) reticulated alternative water supply system. This connection must meet the requirements of all applicable regulatory authorities.		<b>~</b>	V		
The applicant must make provision to connect the reticulated alternative water supply system to:					
all toilets in the development		<b>✓</b>	•		
the cold water tap that supplies each clothes washer in the development		<b>✓</b>	•		
<ul> <li>at least one outdoor tap in the development (Note: NSWHealth does not recommend that recycled water be used to irrigate edible plants which are consumed raw.)</li> </ul>		<b>✓</b>	•		

AG-WAT-NSW-UG-RET-1570 18 November 2022 Page 19 of **19** Revision: 3