

POLICY NAME: WATER METERING
POLICY REF: W02
MEETING ADOPTED: 23 February 2012
Resolution No. 230212/34
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1. OBJECTIVE

The purpose of this policy is to develop a standard water meter assembly policy. The policy defines Council, Owners and Plumbing Contractors responsibilities for installations, maintenance and disconnections of water meters.

2. BACKGROUND

Council does not have a water metering policy which outlines the requirements for water meter installations, backflow prevention devices (device to prevent the reverse flow of water from a potentially polluted source into a potable water supply), fire services or rural connections. Due to this lack of policy direction there has been a wide range of different water meter assemblies installed over the years. Some of these installations do not comply with current standards...

3. DEFINITIONS

Back Siphonage	A condition where the water or other contaminated/polluted liquid enters the potable water supply by siphonage caused by a negative pressure (vacuum or partial vacuum) in the reticulation system. Back siphonage can be created when there is a stoppage of the water supply due to fire-fighting, repairs or breaks.
Back Pressure	A condition where the pressure downstream of the cross connection becomes greater than the pressure upstream of the cross connection, thus allowing water or other contaminated/polluted liquid to reverse its normal flow and enter the potable supply.
Council (BSC)	Ballina Shire Council
LWU	Local Water Utility (for the purposes of this policy, Ballina Shire Council).
GDD	Greywater Diversion Device; a device installed in sewerage areas used to divert greywater to an approved subsurface or subsoil disposal area within the property.
OSSMS	Onsite Sewage Management System.
GTS	Grey water Treatment System.
Water Meter	A device connected inline to a premises water supply usually at the front of the property to measure the amount of water used for billing purposes.
Back Flow Prevention Device	A device used to protect a water supply by preventing contaminated water from either <i>back siphoning</i> or being <i>back pressured</i> from a premise back into the water main.

Greenfield Developments	A term used in construction and development to reference land that has never been used (e.g. green or new), where there is no need to demolish or rebuild any existing structures.
WH&S	Workers Health & Safety
Urban Rainwater Tanks	Rainwater tanks located in a city, town, village, estate or other area supplied with a Council reticulated drinking water supply. These areas may or may not be sewered.
Topping up	Term used to describe the physical method of re-filling or topping up a rainwater tank with another water source.
Valve	A device used to turn off or on, or regulate up or down, or open and close the flow of water in a pipe.
Reclaimed Water	Wastewater that has been restored to a state that will allow it to be beneficially reused. This water is not for human or animal consumption or general contact.
Unpressurised Mains	Water mains that are being newly constructed and installed by developers/contractors and which have not been pressurised and/or handed over to Council.
Pressurised Mains	Water mains which have been handed over to Council and/or are pressurised or under Council control.

4. SCOPE OF POLICY

This policy applies to

- Council employees
- Community members
- Committees of Council
- Consultants/Contractors
- NSW Licensed Plumbers

5. RELATED DOCUMENTATION

- NSW Public Health Act 2010
- Environmental Planning and Assessment Act 1979 (NSW)
- Local Government Act 1993 (NSW)
- Local Government (General) Regulation 2005
- Protection of the Environment Operations Act 1997 (NSW)
- (Draft) NSW Public Health Regulation 2011
- NHMRC/NRMMC Australian Drinking Water Guidelines 2004
- NSW Code of Practice: Plumbing & Drainage, 3rd Edition 2006
- Australian & New Zealand Standard AS/NZS 3500.1 :2003

Ballina Shire Council documents:

- Ballina Shire Urban Water Management Strategy
- Community Strategic Plan 2010-2025
- Enforcement Policy
- Water Meter Policy

6. POLICY

All water and reclaimed water services must comply with this policy of water metering and will be controlled by Council's *Water & Sewer Section, Civil Services Group*.

An application for Water Service under this policy does not negate the need for the applicant/developer/property owner to submit to Council and have approved a Section 68 Application for the proposed works prior to works being undertaken.

7. RESPONSIBILITY

- Ballina Shire Council exercises its water supply functions under Division 2 Part 3 Chapter 6 of the *Local Government Act 1993*:
- Ballina Shire Council (BSC) is responsible for the pricing and installation of water meter assemblies for the provision of potable water and reclaimed water. BSC is responsible for the water service from the water main to the outlet of the meter and/or the backflow prevention device and isolation valve as required.
- BSC is responsible for the pricing and installation of water service assemblies for the purpose of fire protection. This includes the water service from the water main to the backflow prevention device and or by-pass detector meter assembly up to and including the downstream isolation valve as required.
- For developments on unpressurised mains the developer is responsible for house connections to the reticulated main. As per Council's standard drawing design *SP066* which is available from Council on request. The service connection is to be terminated inside the property boundary with a service isolation valve inside a termination box. When the main becomes live and a water meter is required the builder/owner shall make an application for water service to Council. Council will complete the installation by providing a riser and water meter.
- For development sites fronting pressurised mains the developer will make an application to Council for a house connection. As per standard drawing design *SP066* which is available from Council on request Council will terminate the service inside the property boundary with a service isolation valve inside a termination box. When a water meter is required the builder/owner shall make an application for water service to Council. Council will complete the installation by providing a riser and water meter.
- Ongoing service and maintenance of backflow prevention devices are the responsibility of the property owner as per the NSW Code of Practice (COP), Plumbing and Drainage, 3rd edition 2006.

11.4 Wardell Water Supply - Application for Rural Connection.DOC

- Customer service officers are responsible for receiving the Application for water services, charging the standard rate for new 20mm services in new development areas, or forwarding the Blue part of the *application for water service* triplicate book to the *Water Quality & Trade Waste Officer* for costing.
- Costing will be provided to the applicant in the form of an estimate only. Quotes can not be provided to the applicant. Estimates are subject to change and are current for 60 days only.
- *The Water Quality & Trade Waste Officer* is responsible for:
 - Providing accurate prices for the installation estimate of new services and disconnections of disused services to the applicant.
 - Entering details of the application into Council records.
 - Forwarding relevant paperwork and the completed *water service application* to the Team Leader for Water and Sewage for installation.
 - Providing site information to field staff including: site and main locations and standard installation diagrams and other utility diagrams.
- The field services staff crew are responsible for:
 - Installing and disconnecting of all water service assemblies at the water main up to and including the meter assembly in a professional and timely manner upon receipt of the correct documentation from the water meter officer.
 - Emergency work such as main breaks water service breaks and other urgent work may take priority over a new water connection.
 - The licensed plumbing contractor is responsible for providing connection from the private property side of the water service to the meter assembly.
 - The licensed plumbing contractor is responsible for providing permanent structural support to all water meter assemblies when connecting the private property side of the water service.
 - The applicant is responsible for clearly marking the desired position of the water meter assembly on the application form within the space provided, or with a site plan along with measurements and details required.
 - Council's connection to the main will then be installed perpendicular to the meter assembly location. Council recognises that certain situations may not allow this.

8. **CONDITIONS**

8.1. **Where Hydraulic Designs are required**

The following will require hydraulic design provided by a suitably competent and qualified person, (COP 2.2.8), which will need to be accompanied by a

design/compliance certificate by a suitably qualified person to the satisfaction of Council's *Water & Wastewater Strategic Engineer*.

- Any fire service assembly, including Fire Hose Reels, and/or
- Unit demand of 3 units and greater, and/or
- 32mm assemblies or greater.

Water Service Applications submitted without the necessary design details as outlined above will not be assessed or priced by Council.

A *Section 68* Application under the provisions of the *Local Government Act* must be submitted to and approved by the appropriate section of Council prior to the issue of a Construction Certificate and/or work being undertaken.

Such application must be accompanied by suitable hydraulic plans and associated detail of drinking water services, fire services, and any reclaimed water services.

8.2. Applications and Tendering

- Prices will not be provided by Council to plumbers or contractors for the tendering process.
- The owner of the property or the plumber commissioned for the job (the applicant) only may make a request for water services and an estimate may then be provided.
- Applications are to be completed in full and accompanied by the appropriate installation design. Applications with inadequate detail will not be assessed or priced by Council.
- Properties with a body corporation or multiple owners must have the written permission of the owner's corporation, or the property's entire owner's which must accompany the submitted application.
- Applicant's wishing to convert a single metered multi unit or duplex property to individual meters must show that a NSW licensed plumber has undertaken satisfactory investigation into the altering of the private owned component of the properties water service, and that these alterations are able to be carried out.

8.3. Location of Water Meters

- Generally the meter(s) will be installed a maximum of 500mm from the front and side boundaries typically at 90° to the road/front boundary. Further fees may apply if an alternative location is required.
- Meters must be readily accessible for reading, maintenance or removal and be clear of obstacles.
- If a new meter is installed that later requires relocating this shall be at the expense of the applicant.

- All meters with remote metering devices shall be installed so they are easily located, accessible for reading, able to be maintained or replaced and are clear of obstacles.
- Remote metering devices shall not be installed in locations that adversely impact on the ability of the device to transmit adequate signal strength back to Council's receiver.
- Plans must be submitted to Council with the locations of all remote meters identified.

8.4. Backflow Protection

- All backflow prevention devices to comply with AS 2845.1
- All backflow prevention shall comply with Ballina Shire Council's *Backflow Prevention Policy 2012*
- All services are to have a minimum of a dual check device
- The type of backflow for individual, zone and containment protection is as per AS/NZ 3500 appendix F table F1-F3
- Registered break tanks, air gaps, pressure-type vacuum-breakers, reduced-pressure-zone devices and double check valves require a test frequency not exceeding twelve months (AS 2845.3), and are the responsibility of the property owner
- Testing of any Backflow Prevention device shall comply with Council's *Backflow Prevention Policy 2012*, and will be at the property owner's expense.

8.5. Fire Services

- Fire services are required for buildings based on floor area, building levels as per the Building Code of Australia
- An application for a fire pressure certificate from Council's *Water and Wastewater Strategic Engineer* is required
- After receiving the pressure certificate, hydraulic details prepared by a qualified hydraulic consultant are to be submitted to Council with a compliance/design certificate for Council assessment
- Above ground isolation valves shall be a full flow outside screw and yoke wheel, resilient seated gate valve or approved butterfly valve closed by rotating the handle clockwise
- Below ground isolating valves shall be resilient seated key operated sluice valves
- The plumbing contractor is responsible for labelling and securing all fire services as per Australian Standards.

8.5.1. Where Inline Meters are not permitted

- Where the metering of water used for fire protection is required, in line meters shall not be installed. The preferred method is a metered bypass across a double check detector assembly (COP 6.5). This includes Fire hydrants installed in accordance with AS 2419.1, Booster pumps (AS 2419.1) sprinkler services (AS 2118.1), window or wall drencher systems.
- Window or wall drencher systems must be separate and distinct from all other services (AS 2118.1 cl 4.4.1). Large/complex installations will require metering across a double check detector assembly.

8.5.2. Where Inline Meters are permitted

- Hose Reels shall be connected to a metered service (COP 2.2.2), which can be inline metered. The minimum size service for a single hose reel is 25mm.
- A 32mm service is normally provided to allow for pressure and flow fluctuations. Where fire hose reels are connected there shall be no line strainer provided prior to the water meter (AS 3500 cl 4.6.1).
- Where practical it is preferred that all fire hose reels come off the domestic service to reduce tapings to the main and standardise installations.

8.6. Urban Rainwater Tanks

It is extremely important for the health and wellbeing of all Ballina Shire Council residents and visitors to ensure that Council's reticulated drinking water supply is protected from contamination from outside sources. One of the greatest risks of contamination of the drinking water supply is from cross connections with rainwater tanks.

Whilst the majority of rainwater tanks are well cared for it only takes one poorly managed or maintained rainwater tank to infect the drinking water supply which could cause sickness or even possibly death.

Where rainwater tank installations have been designed and installed so as to allow a top up connection with the drinking water supply the following is required:

- a) Zone Protection – zone protection shall also be provided by installation of an authorised backflow prevention device, suitable for the degree of hazard and sized to suit the water service. The backflow prevention device shall be fitted immediately upstream on the drinking water service at the point of connection.

Where a hot water service is fed by a rainwater supply, or any alternative water supply (e.g. bore or dam water), and a temperature control device is installed and connected to the mains drinking water supply, then a backflow prevention device shall be fitted upstream on the drinking water service at the point of connection.

- b) Containment protection – where a rainwater tank is to be connected (either directly or via an air gap), with the on-site drinking water supply, the mains supply shall be protected by installation of an authorised backflow prevention

- device, suitable for the degree of hazard and sized to suit the water service, fitted immediately downstream of the water meter or integral with the water meter.
- c) Council may permit a non-testable backflow prevention device to be used as zone protection for above ground rainwater tanks and a water meter with an integral dual check valve for containment if the drinking water service is DN 20 - DN 25.
 - d) Council shall permit a non-testable (Vented Dual Check Valve (VDCV)) backflow prevention device to be used for containment protection and a non-testable device for zone protection for any fully or partially buried rainwater tank(s) installation.
 - e) Council reserves the right to require greater backflow prevention or to disallow cross-connection if rainwater tanks are not installed or operated in strict compliance with Council requirements.
 - f) Where any sides of the rainwater tank are buried, or have soil or other such material in contact with the walls of the tank, the tank shall be treated as a fully buried tank for backflow prevention requirements.
 - g) For a tank to be above ground it must be clear of any embankment, fill or the like.
 - h) All water supply systems for rainwater tanks shall be installed as per the *NSW code of Practice Plumbing & Drainage, 3rd Edition 2006*.
 - i) Any top up mechanism shall incorporate a device to limit the flow rate to 4.0 litres per minute.
 - j) The connection to the rainwater tank shall be by a visible air gap external to the tank, or an approved auto change over device.
 - k) Manual changes over devices are strictly not permitted.
 - l) Any topping up from a non-drinking water supply (if permitted) shall be clearly marked/labelled and visible.
 - m) All permitted outlet points supplied by the rainwater tank shall be clearly marked/labelled as "*Rainwater*".
- 8.6.1.** Above ground rainwater tanks are to have as a minimum a Dual Check Valve (DCV) as zone and containment protection as required under the *NSW Code of Practice: Plumbing & Drainage, 3rd Edition 2006*.
- 8.6.2.** Fully or partially buried rainwater tanks are to have as a minimum a Testable Double Check Valve (TDCV) or a Vented Check Valve (VCV) as zone and containment protection, as required under the *NSW Code of Practice: Plumbing & Drainage, 3rd Edition 2006*.
- 8.6.3.** Council does permit the interconnection of rainwater tanks with the potable or non-potable water supplies. The New South Wales

department of health does not recommend consumption from rainwater tanks where a potable water supply is provided.

- 8.6.4.** Rainwater tanks installed in areas with a reticulated reclaimed water supply (e.g. Cumbalum Heights etc), are not permitted to have any type of top up device for the rainwater tank. This must be strictly complied with and all top up devices from any water supply, be it drinking water or reclaimed, shall not be permitted.
- 8.6.5.** Interconnection from a rainwater tank to any other water supply or plumbing fixture is not permitted in areas with a reticulated reclaimed water supply (e.g. Cumbalum Heights etc).

8.7. Rural Connections

- Rural areas are defined, in this case, as areas where no standard urban reticulation systems are present.
- Trunk mains are not standard urban reticulation systems. The reasons Council do not allow connections to trunk mains are as follows. Council can shut down trunk mains for periodic maintenance without prior notification to customers. Trunk mains are generally between two reservoirs hence the need for additional protection of the potable water supply. Pressure fluctuations are not regulated to the same extent as urban reticulation systems.
- A written submission is required for Council's consideration for a rural connection detailing any special considerations. It is at the sole discretion of the Council on a case by case basis as to whether a rural connection will be granted or not.

8.8. If Council Approves a Rural Connection

The following conditions apply: -

- All rural connections must have backflow protection to Council's satisfaction.
- Any property with its own Onsite Sewage Management System (OSSMS) or Greywater Treatment System (GTS), or a Grey Water Diversion Device (GDD) must comply with BSC's *Backflow Prevention Policy 2012*, and have as a minimum a testable backflow prevention device installed at the water meter assembly at the owner's expense.
- 20mm connections only are permitted as the water supply is for domestic purposes.
- Council makes no guarantee as to the quality and quantity of supply.
- A storage tank and pressure pump system to distribute the water supply to the dwelling is required. The owner's water supply line from the meter must only discharge into this storage tank. The discharge can be via a

visible air gap or in the case of an internal discharge point, with a registered air gap as per AS 2845 and AS 3500. There will be no connections in between the water meter and the storage tank.

- The tank shall be cleaned and disinfected at no greater than 2-year intervals. (COP 2.3.4).
- No headwork's charges will be levied, as this connection is not a guaranteed service to Council's service level standards for potable water supply.
- Where an extension of the main is required a meter will be installed just prior to the endpoint of the main. The owner is responsible for the running of appropriate pipe from this point and is responsible for its maintenance.
- Where the pipe is to be run along the Council road reserve a proposed pipe layout is required showing depth of pipe (minimum 600mm) and route for Council's consideration. It is the applicant's responsibility to check to ensure other services will not be disrupted or damaged and that the public and any workers health and safety are not put at risk.
- If a private contractor is engaged Council will need a copy of their public liability insurance, Workers compensation policy and OH&S policy. If the applicant is performing the works on there own. Public liability insurance only will be necessary.
- A traffic control plan is to be provided.
- Consult with Council's risk management officer before applicant is advised to proceed.

8.9. Reclaimed Water Installations

Reclaimed water connections will service toilet flushing, external usage, and/or other as determined by Council, and must comply with the following:

- Where reclaimed water installations are provided Ballina Shire Council will install both the potable and re-claimed water meter for the same fee as a single potable connection.
- Only a 20mm reclaimed water service will be provided for domestic purposes.
- Rainwater tanks installed in areas with a reticulated reclaimed water supply (e.g. Cumbalum Heights etc), are not permitted to have any type of top up device for the rainwater tank. This must be strictly complied with and all top up devices from any water supply be it drinking water or reclaimed water shall not be permitted.
- Interconnection from a rainwater tank to any other water supply or plumbing fixture is not permitted in areas with a reticulated reclaimed water supply (e.g. Cumbalum Heights etc).

- Interconnection from any reclaimed water supply, water service, fixture, or storage tank to any other water supply or plumbing fixture is not permitted in areas with a reticulated drinking water supply, (e.g. Cumbalum Heights, etc).
- Commercial/industrial requirements will be sized to suit demand upon application and the associated hydraulic designs. All costs of the installation will be provided as an estimate for the commercial/industrial property owner.
- The potable water meter will be installed with the appropriate backflow prevention device as per Council requirements. This meter will be located closest to the side property boundary.
- All external tap outlets on the potable supply shall be fitted with hose connection vacuum breakers and appropriate signage.
- All external tap outlets on the reclaimed supply shall be as per AS 3500, NSW COP 2006 and Ballina Shire Council guidelines.
- The lilac coloured reclaimed water meter will be installed beside the potable water meter with at least 100mm separation between the two meters.
- All plumbers contracted to do works where reclaimed services are available can be provided with a *Plumbers Information Pack*.
- Where the numbers of meters at the boundary become impractical see *remote metering* below.

8.10. Remote Metering and Developments

All Greenfield developments will be supplied with individual connections from the water main to each lot, including where road crossing are required.

All Greenfield developments will be required to have remote read meter installations as practicable. Remote read technology signals Council when meters are tampered with improving water security and water loss.

If it is impractical for separate metering at the boundary due to the number of meters required or the logistics of the installation remote read meters will be used. This includes all commercial, industrial and residential developments.

Council will install a master meter at the boundary and provide remote read meters to the applicant for installation by a licensed plumber. The master meter will have no access charge levied but will be used to capture common use consumption or inappropriate fire hose usage. Standard consumption charges will apply.

Each remote read meter would incur the appropriate water access charge.

The plumber contracted to install remote read meters will call Council with 24 hours notice for a commissioning inspection upon completion of installations.

Arrangements are to be made with Council as to how the meters can be collected for installation.

All meters & remote metering devices must be provided by Council to the developer at the expense of the applicant/developer.

All meters with remote metering devices shall be located so they are easily located, accessible for reading, and able to be maintained or replaced and clear of obstacles.

Remote metering devices shall not be installed in locations that adversely impact on the ability of the device to transmit adequate signal strength back to Council's receivers.

Plans must be submitted to Council with the locations of all remote meters clearly identified.

8.11. **Disused Services**

Where a service or part of a service becomes disused it shall be disconnected by Council after an application for water services disconnection has been made and the appropriate fee received by Council. Fees for such will be determined by Council on application and will be at the expense of the applicant.

8.12. **Damaged Water Meters**

Where field staff are able to identify the cause of meter damage that can be attributed to a property owner, contractor or individual then a cost estimate will be prepared. An invoice for the costs incurred in completing the repairs will be raised and issued by the finance section to the identified party.

8.13. **Water Service Compliance**

All water service installations downstream of the property service shall be installed in compliance with the Building of Australia, Australian Standards, NSW Code of Practice – Plumbing and Drainage 2006, and Ballina Shire Council's Guidelines as necessary.

8.14. **Council Adoption of Private Water Meters**

Application can be made for private meters to be read and maintained by Council on a case-by-case basis given the following conditions are met:

- Meters are at the boundary and are readily accessible for reading. If meters are not in a suitable location, remote read meters can be installed at the applicants cost.

- Meters are in good condition, of suitable quality and have the appropriate level of backflow prevention. If not, meters can be upgraded though Council at the applicants cost.

9. RELATED DOCUMENTATION

All installations as per: -

- Australian & New Zealand Standard AS/NZS 3500.1:2003
- AS/NZ 2419 – Fire Hydrant Installations
- AS/NZ 2118 – Automatic Fire Sprinkler Systems
- AS/NZ 2845 – Water Supply – Backflow Prevention Devices
- AS/NZ 2441 – Installation of Fire Reels
- NSW Code of Practice - Plumbing and Drainage 2006 3rd edition
- NSW Public Health Act 2010
- Environmental Planning and Assessment Act 1979 (NSW)
- Local Government Act 1993 (NSW)
- Local Government (General) Regulation 2005 (NSW)
- Protection of the Environment Operations Act 1997 (NSW)
- (Draft) NSW Public Health Regulation 2011
- NHMRC/NRMMC Australian Drinking Water Guidelines 2004

Ballina Shire Council (BSC) documents

- Ballina Shire Council – standard installation designs.
- BSC Urban Water Management Strategy
- Community Strategic Plan 2010-2025
- Enforcement Policy 2008
- Backflow Prevention Policy 2012

10. SPECIFIC SAFETY REQUIREMENTS FOR ALL WORKERS

- Appropriate traffic control when working on or near the road
- Hard hat and high visibility vests on construction sites or as required by site rules.
- Site inductions where required.
- *Workcover* site safety ticket (green card)
- All other PPE as required
- Compliance with all BSC WH&S Requirements
- Compliance with all relevant WH&S Code of Practices



Fresh @ Heart Pty Ltd
154 Sneesbys Lane
PO Box 198,
Wardell
NSW 2477

Tim Mackney
Manager Water and Wastewater
Ballina Shire Council
40 Cherry St
Ballina NSW 2478

Dear Tim

**Re: Seeking In Principle Support from Council to Access Potable Water
from East Wardell**

Further to last Mondays meeting I am including an electronic copy of our original request of the General Manager in March should you need to use any of the information in your briefing paper to council.

The original document outlines the current situation; the proposed expansion of the operation and the need to secure a supplementary supply of potable water.

We agree with your suggestion that it would be wise to seek in principle support from council before progressing too far with this project.

Overview

- Fresh at Heart Pty Ltd operates a large hydroponics farm at Sneesby's Lane, East Wardell.
- It supplies approximately 4,500 tonnes of cucumbers to Coles stores each year.
- Water for the hydroponics system is harvested from the roofs of the hot houses, stored and treated before use on site.
- Potable water used for staff amenities and final washing of produce, is collected and stored in tanks on site
- Supplementary potable water is trucked from Wardell when required by a contractor
- The company is ready to expand three fold to cater for increased demand from Coles
- Plans for expansion are dependant on a secure supplementary supply of potable water
- Such security can only be guaranteed by mains supply.

Our proposal:

- We would like access to 35 megalitres of potable water per year from the Council water mains.
- We propose council extends the main from its termination point on the town boundary at East Wardell, to the south western corner of 185 River Drive, DP626704 owned by Fresh@Heart. A distance of 1.2 kilometres
- If this is not possible, then Fresh@Heart be permitted to lay its own metered pipeline on public land (road) from the mains termination point on the town boundary at East Wardell, to the south western corner of 185 River Drive.
- Costs for either proposal would be met by Fresh@Heart as would any onfarm storage required by Council to alleviate potential demand stresses on the Wardell supply.

Benefit to Council:

- No cost to Council associated with this proposal. Costs will be met by Fresh@Heart
- Increased revenue to Council from water sales
- Increased revenue coming into the Shire. Fresh@Heart is firmly committed to its 'buy local' policy
- Sustainable and ecologically sound use of the flood plain. This hydroponics operation harvests its own water, produces no wastes, and uses natural sunlight.
- Fresh@Heart is a thriving business already bringing national accolades to Ballina Shire through billboards located in all Coles stores nationwide, television and print media. This will continue.
- Fresh@Heart is a business worthy of Council support.

Benefit to Community:

Fresh@Heart is already a significant contributor to the local community. The proposed expansion will result in:

- Increased employment – up to 120 positions. Fresh@Heart is currently a significant employer in the local area.
- Increase in the amount of money spent in the Shire, both by the operation and its employees.
- Greater diversity to the agriculture sector on the floodplain, and with guaranteed domestic sales, Fresh@Heart is not subject to world price fluctuations.
- continued support and sponsorship of local community organisations and events.

We are hopeful that Council will give in principle support to the proposal. Should you have any questions or require clarification please feel to contact us by email (freshatheart@bigpond.com) or mobile 0427664581 anytime.

Yours faithfully



Carlo Pippo
Owner/Director
Fresh @ Heart Pty Ltd
07/07/2014



Leanne Pippo
Owner/Director
Fresh @ Heart Pty Ltd

Fresh @ Heart Pty Ltd
154 Sneebys Lane
PO Box 198,
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NSW 2477

Mr Paul Hickey
General Manager
Ballina Shire Council
PO Box 450
Ballina NSW 2478

Dear Mr Hickey

Re: Extension of the existing Water Main at East Wardell

Further to discussions with Justin Ransom, Project Management Engineer, Civil Services Group Ballina Shire Council, we have attached a submission requesting Council extend the existing water main approximately 1.2km north along River Drive from its termination point on the town boundary at East Wardell, to the corner of our property, 185 River Drive, DP626704

Whilst our company harvests and treats its own water, we do not have security of supply for potable water required for a planned expansion of our operation. The proposed extension of the main would provide backup supply of potable water if required.

Should you have any questions or require clarification please feel to contact us by email (freshatheart@bigpond.com) or mobile 0427664581 anytime.

Yours faithfully

Carlo Pippo
Owner/Director
Fresh @ Heart Pty Ltd
/ 3/2014

Leanne Pippo
Owner/Director
Fresh @ Heart Pty Ltd

1.OVERVIEW

- Fresh at Heart Pty Ltd operates a large hydroponics farm at Sneesby's Lane, East Wardell.
- It supplies approximately 4,500 tonnes of cucumbers to Coles stores each year.
- Water for the hydroponics system is harvested, stored and treated before use on site.
- Potable water used for staff amenities and final washing of produce, is collected and stored in tanks on site
- Supplementary potable water is trucked from Wardell when required by a contractor
- The company is ready to expand to cater for increased demand from Coles
- Plans for expansion resulting in additional employment and income for the shire, are dependant on a secure supply of potable water
- Such security can only be guaranteed by mains supply.
- This submission by Fresh at Heart Pty Ltd, seeks the extension the existing water main approximately 1.5km north along River Drive from its termination point on the town boundary at East Wardell, to the south western corner of 185 River Drive, DP626704 owned by Fresh@Heart.

2.BACKGROUND

Fresh @ Heart Pty Ltd is a family company owned and operated by long term Ballina Shire residents and farmers Carlo and Leanne Pippo, since 1986.

The Sneesby's Lane farm produced tomatoes for 22 years, operating as Wardell Hydroponic Tomatoes, selling exclusively to Coles supermarkets. The farm has produced cucumbers for the last 6 years and now operates as Fresh@Heart Pty Ltd.

In a world class, and cutting edge hydroponic operation, the company provides three different types of cucumbers for Coles stores across Australia. The quality of the produce, and this ground breaking farming operation, has been highlighted in local newspapers, various websites, and more recently on the Coles advertisements on television. (Appendix A). The crop is grown undercover in a combination of green houses and growing tunnels, all climate controlled with computer monitored and directed irrigation and electrical back up systems.

All facets of production, from germination to final packaging, are completed on site.

The company has been recognised for its innovative approach to all aspects of its intensive agricultural production, and its use of ground breaking technology, much of which has been developed on site at Sneesby's Lane, East Wardell.

The principles of best practice displayed by the company are acknowledged in agricultural circles, with Fresh @ Heart Pty Ltd recognised as a leader in its field.

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The company is a significant employer in, and an important economic contributor to, Ballina Shire.

3.CURRENT SITUATION

Fresh @ Heart Pty Ltd utilises five hectares of climate controlled growing sheds on its property at Sneesbys Lane, East Wardell to supply approximately 4,500 tonnes of packed cucumbers to Coles stores each year. The company supplies exclusively to Coles.

The Company currently employs 41 people all year round

A 35 mega Litre fabric lined dam stores run off water, and access to 52 mega Litre bore licence, on site, provides sufficient suitable water for the hydroponics system used to grow the produce.

Approximately one megalitre of tank storage, provides potable water used for drinking, staff amenities and final washing of cucumbers before packing. Additional potable water is trucked in from the Shire's filling point at Wardell by one of three local licenced contractors, when required.

The water main currently terminates at a hydrant point on the northern boundary of East Wardell village approximately 5 metres south of Walsh's drain. This point is approximately 1.2 km (vehicle odometer reading) from the boundary of DP626704.

Given the presence of a hydrant, it is assumed this main would be between 150-200mm in diameter or larger. The main is fed from the Wardell reservoir.

It is acknowledged that the Wardell Reservoir now operates almost at capacity, and demand peaks in dry weather with three licenced water carriers drawing from the Wardell filling point, places additional demands on the supply.

4.NEED FOR PROPOSAL

Fresh @Heart needs a secure backup supply of potable water.

The company has been approached by Coles Supermarkets to increase its production and the amount of fruit supplied to them. Preliminary work to extend the existing five hectares of covered hydroponic growing sheds has begun, with the view to tripling production over the next three years generating employment for over one hundred workers. (Appendix B)

This expansion is dependant on a readily available and secure supply of external potable water to back up existing harvested water. There is little scope to harvest additional potable water on site, and reliance on road transport does not give the security of supply that this operation requires, - security that is given by mains supply.

The connection and mains supply would, in the unlikely event of the farm dam and bore simultaneously running dry, also give added protection against total crop loss.

5.PROPOSAL

Proposal

“That the existing water main be extended along River Drive from its termination point on the town boundary at East Wardell, to the south western corner of 185 River Drive, DP 626704.”

There are a few options that could be explored to effect this extension:

Option 1: Council extend the water main along River Drive from its termination point on the town boundary at East Wardell, to the south western corner of 185 River Drive, DP 626704 and meet the cost of the mains extension.



Fig.1 Proposed pipelines and metering point

Figure 1 and aerial photos (Appendix B) show the proposed extension of the existing 150-200 mm water main from its termination point at East Wardell, along River Drive to the south western boundary of DP 626704 owned by Fresh @ Heart Pty Ltd. Work to extend this mains pipeline would be done by Ballina Shire Council, or its designated contractor, on council land adjacent to River Drive. A more direct route through Lots 17,19,23,24and DP 571923 is not possible.

We assume the pipeline would be underground

The proposed extension would terminate at DP 626704 and a meter placed at this point within Fresh @ Heart Pty Ltd's boundary.

Fresh @ Heart would then construct a 75mm underground pipeline through their properties to deliver water to their production complex located in DP617632.

The diameter of the supply exiting the meter at this point would need to be greater than a domestic supply to allow sufficient flow through the proposed 75mm pipeline to DP617632

To overcome any chance of depleting the Wardell reservoir, by this connection, Fresh @ Heart would construct additional potable water storage within its boundaries ie adjacent to the proposed mains termination point at DP626704 or at the production site DP617632. Fresh@Heart would agree to take water from the mains during identified periods of low demand eg at night and to feed water back into the mains when required

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This Option provides a back-up 'insurance' system with low annual water consumption from the mains

Costings Option 1:

- Costs associate with the extension of the mains pipeline would be met by council
- Costs associated with connecting and meters would be met by Fresh @ Heart Pty Ltd
- Pipeline costs from River Drive to DP617632 would be met by Fresh @ Heart Pty Ltd
- Storage construction costs would be met by Fresh @ Heart Pty Ltd

Option 2: Council extend the water main along River Drive from its termination point on the town boundary at East Wardell, to the south western corner of 185 River Drive, DP 626704 and adjacent landholders, including fresh at Heart, connecting to it meet the cost



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agree to take water from the mains during identified periods of low demand eg at night and to feed water back into the mains when required

This Option provides a back-up 'insurance' system with low annual water consumption from the mains

Costings Option 2:

- Assuming Fresh at Heart was the only landholder to access the main, Costs associated with the extension of the mains pipeline would be met by Fresh @ Heart Pty Ltd as an initial upfront payment
- As/if other land holders connect to the extended main to gain supply, Fresh @t Heart Pty Ltd be reimbursed expenses on a pro rata basis.
- Costs associated with connecting and meters would be met by Fresh @ Heart Pty Ltd
- Pipeline costs from River Drive to DP617632 would be met by Fresh @ Heart Pty Ltd
- Storage construction costs would be met by Fresh @ Heart Pty Ltd, however if the storage was a safety buffer for Wardell supply, Fresh @t Heart Pty Ltd be reimbursed Storage construction expenses on a pro rata basis, as other landholders were connected.
- Any private storage expenses would be met by Fresh @t Heart Pty Ltd.

