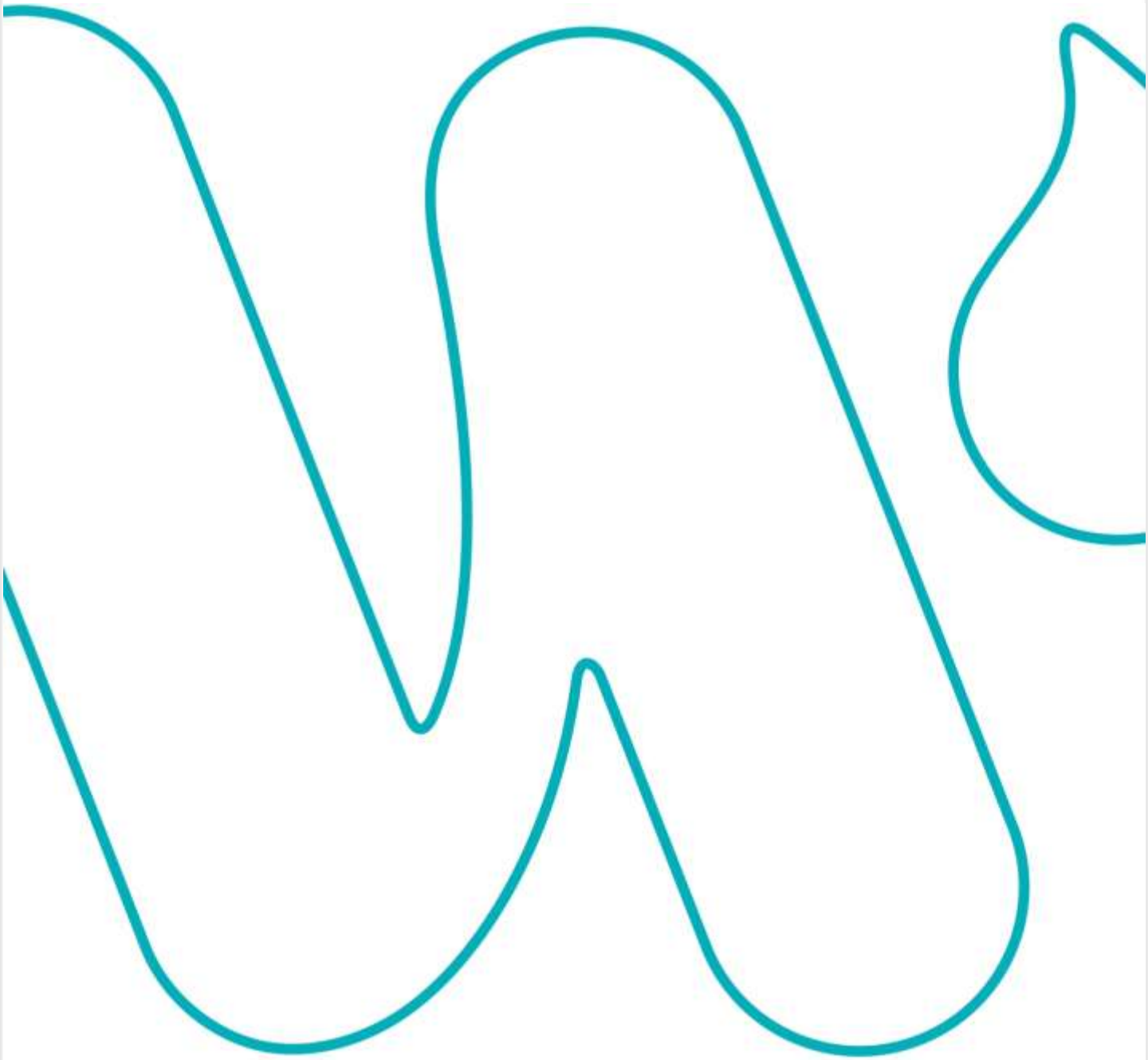
Wellington Water

Water Supply

Shutdown Process



Our water, our future.

Document information

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4/11/19	0.1	First draft
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28/02/20	0.3	Third Draft
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Note: All Personnel carrying out shutdowns of the water supply must be under the supervision of a water qualified person on site at all times (Level 4 Water Reticulation), and must follow the Water NZ "Good Practice Guide - Hygiene Practices to prevent Water Supply Contamination".

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Shutdown Process

1 Policies

1.1 Regional Specification for Water Services

Wellington Water is committed to improving the customer experience and safety performance of the organisation as a whole; including its full supply chain and assets it manages. Water supply shutdowns have been identified as an area that requires improvement in both aspects.

The Regional Specification for Water Services details various requirements relating to shutdowns. This shutdown process document summarises those requirements and includes some improvements. This shutdown process will be referenced by the next revision of the Regional Specification for Water Services.

1.2 Ministry of Health

Section 69S of the Health Act 1956 requires that any planned restriction or interruption of the provision of drinking water by a network supplier or a bulk supplier that is expected to exceed 8 hours, must have approval from the medical officer of health. The supplier must have taken all practicable steps to notify the affected persons before the restriction or interruption.

In the event of an emergency or reactive works that results in an unplanned interruption or restriction of the provision of drinking water that is likely to exceed 8 hours the supplier must notify the medical health officer. This notification must include the reason for the interruption or restriction as soon as practicable and in any event not less than 24 hours after the commencement of the interruption or restriction. The supplier must have taken all practicable steps to warn the affected persons before the restriction or interruption including by loudhailer and contacting critical customers. Notification of the outage is to be posted on the Wellington Water website and Facebook.

This shutdown process will alert those involved with planned shutdowns of these requirements and include a process to escalate issues to the relevant people if it is looking likely that any shutdown will exceed this duration so that this legal requirement can be met.

1.3 Statement of Intent 2020 – 23

Wellington Water delivers its service by focusing on four customer outcomes; safe and health water, respect for the environment, resilient networks and we have a capable adaptive and collaborative workforce. To help us achieve our goals there are a number of customer promise measures that have been included in the statement of intent. Effective planning and implementation of shutdowns will assist us in achieving the following customer promise measures:

1. The percentage of customers rating our performance as “Satisfied” or higher steadily improves.
2. Drinking water supply is reliable and fully meets drinking water standards (defined) and wholesome water standards (defined).
4. DIA Measure Part 2: Sub-part 1 - Water Supply (1) Safety of Water.

15. The number of health and safety serious harm and significant near miss incidents to our people, our supply chain and the public trends down annually.

20. Developers satisfaction with our relationship status is at least 65% annually.

We put customers at the heart of everything we do. We have moved away from an infrastructure focus to a customer focus – putting people before pipes. Listening to customers concerns and collaborating on solutions leads to greater trust and satisfaction.

Improvements in the shutdown process will help Wellington Water to meet these customer promises as follows:

- Thoroughly planned and well executed shutdowns will reduce the number and length of interruptions to the water supply.
- When the correct process is followed during shutdowns, in terms of customer notification, customers will understand the impact of the shutdown and feel well informed. In addition, well planned and executed shutdowns are less likely to run over the planned time or need to be rescheduled or repeated, improving the customer experience and satisfaction.
- A shutdown plan that includes notification of the correct parties (particularly the respective Council Call Centre) will enable complaints to be directed to the correct entity allowing them to resolve them promptly.
- Our Regional Water Safety Plan can reference a thorough shutdown process, with built in escalation processes and lessons learnt captured as a key feature of safeguarding our drinking water.
- Planning and executing a shutdown plan correctly, particularly with respect to following good flushing, draining and recharge protocols, will reduce the number of complaints relating to taste, clarity and odour.
- A detailed, but user friendly shutdown process, including an effective shutdown template, will help streamline the shutdown process.

2 Process

The purpose of this process is to provide guidance regarding shutdown planning and implementation to Investigators, Designers, Engineer's to Contract (and their representatives), Customer Operations Group (COG and their Sub-contractors), Contractors, Contracts Officers (Land Development), Developers (and their Designers and Contractors including preferred water supply connections) and other workers involved in any activities that require planned shutdowns to the water supply network in the Wellington region. All Personnel carrying out shutdowns of the water supply must be under the supervision of a water qualified person on site at all times (Level 4 Water Reticulation), and must follow the Water NZ "Good Practice Guide - Hygiene Practices to prevent Water Supply Contamination".

This process will include shutdown templates that will assist anyone involved in following the process.

2.1 Shutdown Levels

Criteria	Level 1	Level 2	Level 3
Carriageways	n/a	n/a	Shutdowns affecting any of the following: - Level 2 roads (AADT >10,000vpd) - Level 3 roads (AADT >10,000vpd and speed >75 km/h)
Critical 3Waters assets	n/a	Shutdowns affecting any of the following critical assets: - Pumping stations - Reservoirs - PRVs - ASV - AC pipes - Pipes > DN200	Shutdowns affecting any of the following critical assets: - Bulk network - Pipes >DN300
Shutdown Duration	n/a	n/a	Shutdowns expected to take longer than: Four (4) hours
Critical Customers	n/a	Critical customer (e.g. Dialysis Patient) Businesses dependent on water (e.g. bakery, restaurant, bars, hairdressers, coffee shops etc.)	Interruption of supply affecting at least one of the following Critical customers - Hospital - School or early childhood education facility - CBD
Water Supply Affected Customer Volume	Ten or fewer (< 10) domestic customers.	Greater than ten (11-100) domestic customer.	Greater than one hundred (>100) domestic customers.
Water Supply – Alternate/Temporary Supply	Shutdowns requiring alternate supplies (bottled water only).	Shutdowns requiring alternate supplies (bottled water only).	Shutdowns requiring alternate supplies (PRVs, boundary valves, hydrant to hydrant feeds, etc.). Shutdowns requiring temporary supplies (water tanker, feed from fire hydrant, etc.).
Water Supply Resilience	n/a	Shutdowns that result in an area greater than two hundred and fifty (>250) domestic customers being supplied by a single feed resulting in reduced resilience.	Shutdowns resulting in an area greater than one thousand (>1,000) domestic customers or any non-domestic customers being supplied by a single feed resulting in reduced resilience.
Fire Prevention	n/a	n/a	Shutdowns affecting fire protection systems.

2.2 Process Steps – Level 1-3 Planned Shutdowns

Note: Phase numbering refers to the Wellington Water project delivery process

#	Responsibility	Step	Level 1	Level 2	Level 3
13.5.1 Phase 1 - Define					
1-1	**Investigator**	**Consider shutdown requirements during planning** The Investigator shall consider if the work will require shutdowns and if there would be any alternative that would avoid shutdowns or reduce the area affected by shutdowns without reducing the effectiveness of the project or unrealistically increasing the cost.	**Y**	**Y**	**Y**
1-2	**Investigator**	**Brief designer on potential impacts and if alternatives shall be considered** The Investigator shall include their assessment of the required shutdowns in the design brief and shall also note if the Designer needs to further investigate alternatives.	**Y**	**Y**	**Y**
13.5.2 Phase 2 – Develop					
2-1	**Designer**	**Determine shutdown level** The Designer shall determine the level of shutdown based on the table in Section 2.1. This shall include a check for critical customers.	**Y**	**Y**	**Y**
13.5.4 Phase 4 – Detailed Design					
4-1	**Designer**	**Check for lessons learnt from shutdowns in the area** The Designer shall search Woogle for shutdown plans in the vicinity to see if any lessons have been learnt during previous shutdowns that could assist with the planning and implementation of this shutdown. In addition a copy of previous shutdowns shall be saved with as-builts. Speak to the COGs Customer Planning Engineer – North/East/South and the Customer Planning Engineer – Utilities to see if there have been previous shutdowns in this area.	**Y**	**Y**	**Y**
4-2	**Designer**	**Consider shutdown as part of Safety in Design (SiD)** The Designer shall include a discussion on what shutdowns will be required and what customers and infrastructure it will affect. The Designer must provide appropriate copies of the network plans to allow all affected customers and infrastructure to be viewed. With input from the COG, it shall be agreed if alternate supplies or temporary supplies will be required and the most appropriate time for the shutdown. Contingency plans shall be discussed and recorded. The shutdown level may be reclassified with the input of the COG.	**Y**	**Y**	**Y**
4-3	**Designer**	**Consider alternate options** The Designer shall consider alternate options to eliminate or reduce the size of the shutdown or number of shutdowns. This could be done as part of the SiD process with input from the COG. This could include opening zone boundary valves (if pressure is suitable), using permanent emergency PRV or trailer mounted temporary PRV's, hydrant-to-hydrant feeds, tanker supplies, temporary pipes etc. (This might result in reclassification of the shutdown)	**-**	**Y**	**Y**
4-4	**Designer**	**Undertake hydraulic calculations for alternate supplies** The Designer shall perform hydraulic calculations to ensure any alternate supplies will be adequate to meet the demands during the proposed shutdown times.	**-**	**-**	**Y**
4-5	**Designer**	**Check adequate temporary thrust restraint can be provided** The Designer must consider thrust restraint during the initial connection. If possible, thrust restraint shall be scheduled to be cast against competent ground seven (7) days prior.	**Y**	**Y**	**Y**

#	Responsibility	Step	Level 1	Level 2	Level 3
13.5.5.2 Phase 5 - Procure					
5-1	**Designer / Project Manager**	**Describe shutdown in Request for Tender (RFT), Request for Quote (RFQ) or Early Contractor Involvement (ECI)** The Designer or Project Manager who put the RFT/RFQ together shall include the Level of shutdown and a brief description of what is likely to be required to implement it. For ECI the shutdown will be described to the Contractor early on in the process and for ECI the Contractor shall be present at the SiD.	**Y**	**Y**	**Y**
13.5.6 Phase 6 – Construct (Planning)					
6-1	**Engineer**	**Shutdown discussed at site induction** The Engineer must ensure the shutdowns required to execute the project are discussed during the site induction. This shall include a brief discussion on the Temporary Traffic Management (TTM) required to execute the shutdown.	**Y**	**Y**	**Y**
6-2	**Contractor / Engineer**	**Ensure Traffic Management Plan (TMP) includes requirements for shutdown** The Contractor must include the required TTM as part of their TMP submission. This must be reviewed by the Engineer and detailed in the Shutdown Plan. An approved Works Access Permit (WAP) must have been received from the Road Controlling Authority (RCA).	**Y**	**Y**	**Y**
6-3	**Contractor**	**Submit shutdown plan and letter to Engineer and the COG prior to shutdown** The Contractor must submit the shutdown plan and the draft letter to the Engineer and the COG prior to the date of the planned shutdown by the identified deadline - Level 1 Shutdown – 2 working days prior to shutdown execution - Level 2 Shutdown – 7 working days prior to shutdown execution The draft shutdown plan must include a contingency plan that describes the response if there is a problem reopening the valves or a burst pipe when the system is recharged as a minimum.	**Y**	**Y**	**-**
6-4	**Contractor / Engineer / COG**	**Contractor to arrange meeting with Engineer and COG seven (7) working days prior to trial shutdown (trial shutdown at least one (1) working day prior to shutdown)** Seven (7) working days prior to the planned trial shutdown date the Contractor must arrange a meeting with the Engineer and the COG to confirm details of the shutdown and the trial shutdown (typically, the trial shutdown shall be 1-2 working days before shutdown). The Contractor shall bring a draft shutdown plan and notification letter to this meeting. Any changes shall be agreed at the meeting and the Contractor shall submit the revised shutdown plan and letter one (1) working day after the meeting. If all changes have been made and the plan and letter is acceptable, the Engineer and the COG shall approve the shutdown plan one (1) working day after receiving it. A contingency plan must be discussed at the meeting, describing the response if there is a problem reopening the valves or a burst pipe when the system is recharged as a minimum.	**-**	**-**	**Y**
	Contractor / Engineer	**Note: Shutdown Plans for 'Critical 3Waters Assets' must require the prior approval of the Wellington Water Network Controller – Plans to be submitted 7 working days prior to shutdown.**		**Y**	**Y**

#	Responsibility	Step	Level 1	Level 2	Level 3
6-5	**Contractor / Engineer**	**If connecting new pipework confirm it has passed bug test and pressure test** The Engineer shall only approve the shutdown plan if any new pipework that will be connected during the shutdown has passed a bug test and a pressure test. The Contractor is responsible for arranging and programming these in a timely manner.	**Y**	**Y**	**Y**
6-6	**Engineer / COG**	**Respond to shutdown plan/letter submitted by Contractor prior to shutdown** The Engineer and the COG must respond to the Contractor, to confirm if the shutdown plan is acceptable or if it requires changes. Response must be made within the identified timeframe - Level 1 Shutdown Response – Within 1 working day of receiving plan/letter - Level 2 Shutdown Response – Within 2 working days of receiving plan/letter	**Y**	**Y**	**-**
6-7	**Contractor / COG**	**On site verification of valves, hydrants & air valves (check they are functional)** The Contractor in liaison with the COG shall check all valves, hydrants and air valves on site are functional within the identified timeframe of the shutdown plan submission. - Level 1 on site verification – 1 working day - Level 2 and 3 on site verification – 2 working days	**Y**	**Y**	**Y**
6-8	**Contractor / COG**	**If alternate supplies have been proposed they must be tested to confirm they are functioning** The Contractor in liaison with the COG shall within two (2) working days of the shutdown plan having been submitted, check proposed alternate supplies are functional (follow correct flushing procedures).	**-**	**Y**	**-**
6-9	**Contractor / Engineer / COG**	**Expose all pipework and fittings, check size. Notify Engineer and COG prior to implementation** The Contractor will confirm with the Engineer and the COG prior to the planned shutdown date that they have exposed all pipework and fittings, confirmed size (caliper or circumference tape) and that they have the required pipework and fittings to complete the installation. - Level 1 Confirmation Timeframe – 24 hours - Level 2 Confirmation Timeframe – 5 working days - Level 3 Confirmation Timeframe – 6 working days	**Y**	**Y**	**Y**

#	Responsibility	Step	Level 1	Level 2	Level 3
6-10	Contractor / Engineer / COG	**Send out shutdown notifications (letters) prior to shutdown** Once the Contractor has received approval of the shutdown plan and letter from the Engineer and the COG, they shall send out notifications to advise customers of the shutdown. - **Level 1 Shutdown notifications** - Approved shutdown letters to affected domestic customers 24 hours prior to actual shutdown execution. - **Level 2 Shutdown notifications** - Approved shutdown letters to: o Affected business customers 5 working days prior to shutdown execution. o Affected domestic customers 24 hours prior to shutdown execution. - **Level 3 Shutdown notifications** - Approved shutdown letters to o Affected business customers 5 working days prior to trial and shutdown execution. o Affected domestic customers 24 hours prior to trial and shutdown execution. - **ALL LEVELS** - Email shutdowns@wellingtonwater.co.nz 24 hours prior to any trial or actual shutdown. The Customer Hub will then advise the Client Council Call Centre and the New Zealand Fire Services. (This email address includes the Network Controller, all Customer Planning Engineers, the Customer Hub and Community Engagement Team) - Email to the Project Engineer or Contracts Officer 24 hours prior to any trial or actual shutdown confirming that the shutdown is ready to proceed. **If any notification timeframe cannot be met then a new shutdown date must be agreed with affected parties.**	Y	Y	Y
6-11	Contractor / COG	**Full trial shutdown** The Contractor in liaison with the COG shall undertake a full trial shutdown where the regular supply is shutdown for the agreed period. The COG shall also confirm that the adjacent areas still have supply. The Customer Hub will then check if any complaints were received and inform the COG. If new customers are found to be connected to the main, the shutdown may only proceed on the planned date if they are consulted and agree, otherwise the planning and notification process must start again.	-	-	Y
6-12	Contractor / COG	**Test temporary or alternate supplies for the full duration of the shutdown plus one (1) hour either side, at the scheduled shutdown time, to confirm they are effective** If there are temporary or alternate supplies planned, the Contractor in liaison with the COG shall set up the temporary supplies on the day of the trial shutdown. Alternate/temporary supplies shall be available from one (1) hour prior to the planned shutdown time and remain available until one (1) hour after the trial is completed. The regular supply will be turned off (this may need to be done at individual TOBY's depending on the setup) to demonstrate that the temporary supplies will be adequate for the full duration of the shutdown.	-	-	Y

#	Responsibility	Step	Level 1	Level 2	Level 3
Hold point	**Engineer / COG / Network Controller**	**Approval to proceed** Prior to proceeding to the shutdown the following approvals must be obtained on the relevant shutdown templates: **Level 1 Shutdown approval** - The Engineer or Contracts Officer. - The relevant Customer Technical Advisor (COG). **Level 2 Shutdown approval** - The Engineer or Contracts Officer. - The relevant Customer Planning Engineer (COG). - The Network Controller (critical assets or customers only) **Level 3 Shutdown notifications** - The Engineer or Contracts Officer. - The relevant Customer Planning Engineer (COG). - The Network Controller	**Y**	**Y**	**Y**
13.5.6 Phase 6 – Construct (Day of Shutdown)					
6-13	**Contractor / Engineer**	**Confirm all fittings are on site and correct** On the day of the shutdown the Contractor shall confirm to the Engineer that they have all the required materials and resources on site to successfully complete the shutdown.	**Y**	**Y**	**Y**
6-14	**Contractor / Engineer**	**Engineer to double check all fittings are on site and correct** The Engineer, with the assistance of the Contractor shall confirm that all the required materials and resources are on site to successfully complete the shutdown.	**-**	**-**	**Y**
6-15	**Contractor / Engineer**	**Confirm Temporary Traffic Management (TTM) is on site and adequate** The Contractor and Engineer shall confirm that the TTM, arranged by the Contractor, is fit for purpose and will allow the shutdown to be executed safely (for the project team and members of the public).	**Y**	**Y**	**Y**
6-16	**Contractor/ COG**	**Implement alternate supplies (follow correct flushing procedure)** Within the identified timeframe prior to the scheduled shutdown time the contractor in liaison with the COG shall implement the alternate supplies, ensuring adherence to the correct flushing procedure. - **Level 2 – Implement alternate supply** **-** thirty (30) minutes prior to shutdown - **Level 3– Implement alternate supply** **-** sixty (60) minutes prior to shutdown	**-**	**Y**	**Y**
6-17	**Contractor / COG**	**Set up temporary supplies, shutdown regular supply and depressurise but don't fully drain one (1) hour prior** If temporary supplies are required, the contractor in liaison with the COG, shall set up the temporary supplies. The regular supply shall be shut down and if required depressurised to confirm the temporary supplies are functioning correctly.	**-**	**-**	**Y**
6-18	**Contractor / Engineer**	**Close supply as per approved shutdown plan** Once the alternate supplies have been implemented (if all the items above have been confirmed) and air valves checked the Contractor in liaison with the Engineer shall execute the shutdown plan, including checking adjacent areas still have supply.	**Y**	**Y**	**Y**
6-19	**Engineer / Contractor**	**Check any residual flow will still allow the works to be completed** Once the Contractor has completed the shutdown and the Engineer has confirmed the alternate supplies are operating correctly, the Contractor shall inspect any residual flow and confirm they will still be able to complete the installation.	**Y**	**Y**	**Y**

#	Responsibility	Step	Level 1	Level 2	Level 3
6-20	**Engineer**	**Confirm the alternate supplies are operating correctly once the water supply is shut off** Once the normal water supply has been shut off, the Engineer shall confirm that the alternate supplies are operating correctly. This can be done by confirming pressure on gauges, flow at a hydrant or property at a high point etc.	-	Y	Y
6-21	**Engineer**	**Confirm the temporary supplies are operating correctly once the water supply is shut off** Once the normal water supply has been shut off, the Engineer shall confirm that the temporary supplies are operating correctly. This can be done by confirming pressure on gauges, flow at a hydrant or property at a high point etc.	-	-	Y
6-22	**Contractor / Engineer**	**Confirm adequate time to complete installation before cutting any pipework** Before any pipes are cut or fittings are loosened, the Contractor in liaison with the Engineer shall check the time and confirm adequate time remains to successfully complete the installation.	Y	Y	Y
6-23	**Engineer / Contractor / Customer Hub / Council Call Centre**	**Thirty (30) minutes prior to proposed restoration time confirm shutdown will be complete, if not escalate** The Engineer shall check progress with the Contractor thirty (30) minutes before the proposed restoration time. If the shutdown is likely to extend beyond the notified shutdown duration then they shall notify the Customer Hub (during working hours) or the relevant Council Call Centre (outside of working hours). The Customer Hub or Council Call Centre will contact the relevant person from the COG who will assess the situation and escalate if required.	Y	Y	Y
6-24	**Contractor / Engineer**	**Once work is complete, confirm thrust restraint is adequate** Once the Contractor has confirmed the installation is complete the Engineer shall check any temporary or permanent thrust restraint is adequate.	Y	Y	Y
6-25	**Contractor / Engineer / COG**	**Restore supply as per the approved shutdown plan (follow correct bleeding and charging processes)** Once the Contractor has confirmed the installation is complete and the Engineer has checked any temporary thrust restraint they shall restore the supply. This shall be done following the approved shutdown plan unless any changes have had to be made, in which case the Contractor shall consult with the Engineer / COG and confirm the appropriate method to restore the supply. The Contractor shall ensure they leave all valves and other fittings in the correct position for normal network operation.	Y	Y	Y
6-26	**Contractor / Engineer / COG**	**Confirm restored supply is operating correctly** Once the supply has been restored, the Engineer shall, with the assistance of the Contractor and the COG, confirm that all valves have been returned to the correct position and that the supply is operating correctly.	Y	Y	Y
6-27	**Contractor / Engineer**	**Once regular supply has been restored disconnect alternate supplies** Once the regular supply has been restored and the Engineer and Contractor have confirmed there aren't any leaks the Contractor shall disconnect the alternate supplies.	-	Y	Y
6-28	**Contractor / Engineer / COG**	**On completion of shutdown note any lessons learnt that will assist with future shutdowns in the area** On completion of the shutdown the Engineer, Contractor and the COG shall have a brief discussion, and the Engineer shall record any lessons learnt that will assist with future shutdowns. This completed shutdown form must then be filed by the Engineer.	Y	Y	Y

#	Responsibility	Step	Level 1	Level 2	Level 3
13.5.7 Phase 7 – Complete					
7-1	**Engineer**	**Capture lessons learnt** The Engineer must submit the completed shutdown form with the As-built drawings and load them onto the project files in Woogle and send a copy to the COG.	**Y**	**Y**	**Y**

2.3 Process Steps – Level 1-3 Reactive Shutdowns

Note:

1. **Only Wellington Water COG carry out Reactive Shutdowns.**
2. **All Reactive Shutdowns following the Design stage below are to be carried out in accordance with the 'Wellington Water COG Standard Operating Procedures' - (WWL COG SOP Feb 2020)**

#	Responsibility	Step	Level 1	Level 2	Level 3
Phase 1 - Define					
1-1	**Investigator (Rover/Service person)**	**Consider shutdown requirements during planning** The Investigator shall consider if the work will require shutdowns and if there would be any alternative that would avoid shutdowns or reduce the area affected by shutdowns without reducing the effectiveness of the work or unrealistically increasing the cost.	**Y**	**Y**	**Y**
1-2	**Investigator (Rover/Service person)**	**Brief Engineer / Customer Hub on potential impacts and if alternatives shall be considered** The Investigator shall include their assessment of the required shutdowns and inform the Planning Engineer / Technical Advisor/Customer Hub if further investigation on alternatives is required	**Y**	**Y**	**Y**
13.5.2 Phase 2 – Develop					
2-1	**Designer (Rover/Service person)**	**Determine shutdown level** The Designer shall determine the level of shutdown based on the table in Section 2.1. This shall include a check for critical customers.	**Y**	**Y**	**Y**
13.5.4 Phase 4 – Detailed Design					
4-1	**Designer (Planning Engineer)**	**Check for lessons learnt from shutdowns in the area** The Designer shall search Woogle for shutdown plans in the vicinity to see if any lessons have been learnt during previous shutdowns that could assist with the planning and implementation of this shutdown. In addition a copy of previous shutdowns shall be saved with as-builts. Speak to the COGs Customer Planning Engineer – North/East/South and the Customer Planning Engineer – Utilities to see if there have been previous shutdowns in this area.	**-**	**Y**	**Y**
4-2	**Designer (Planning Engineer)**	**Consider shutdown as part of Safety in Design (SiD)** The Designer shall include a discussion on what shutdowns will be required and what customers and infrastructure it will affect. The Designer must provide appropriate copies of the network plans to allow all affected customers and infrastructure to be viewed. With input from the COG, it shall be agreed if alternate supplies or temporary supplies will be required and the most appropriate time for the shutdown. Contingency plans shall be discussed and recorded. The shutdown level may be reclassified with the input of the COG.	**-**	**Y**	**Y**
13.5.5.2 Phase 5 – Procure		**N/A**			
13.5.6 Phase 6 – Construct (Planning)		**To follow process in Section 2.2 above**			
13.5.6 Phase 6 – Construct (Day of Shutdown)		**To follow process in Section 2.2 above**			
13.5.7 Phase 7 – Complete		**To follow process in Section 2.2 above**			

3 Related Documents

- Wellington Water, Water Supply Shutdown template
  - Water Supply Shutdown Level 3, (QPulse ref no. DOC 125)
  - Water Supply Shutdown Level 2, (QPulse ref no. DOC 124)
  - Water Supply Shutdown Level 1, (QPulse ref no. DOC 123)
- Wellington Water Regional Specification for Water Services
- Health Act 1956
- Wellington Water "Our Water, Our Future" (Statement of Intent 2020-23)
- Wellington Water COG Standard Operating Procedures
- Water NZ Good Practice Guide - Hygiene Practices to Prevent Water Supply Contamination