Water Supply Change Log – Update 1 – 5/06/2025

Version	Date	Sections Affected	Summary of Changes	Reason for Change	Author/ Reviewer	Approved By
2.0	19/05/2025	Multiple	Revision of multiple sections	Operational Feedback	Mark Andrews/ Chrissie Reid	Tim Mason

Detailed Change Log – Version 2.0 (5/06/2025)

Section	Previous Text	Updated Text	Reason for Change
7.1 Reference Documents	Supply Bylaw 2008 (Document Link	Supply Bylaw 2008 (Document Link)	Grammer
7.1 Reference Documents	Selwyn District Council 5Waters – Strategies and Policies (2009) (Document Link)	Waiora One Water Strategy (Document Link)	Referring to the most recent strategy document
7.1 Reference Documents	Ministry of Health Drinking Water Standards for New Zealand 2005 (amended 2018) and any subsequent amendments	Taumata Arowai Drinking Water Standards and Drinking Water Quality Assurance Rules (DWQAR) (Guidance and Resources | Taumata Arowai)	Referring to the most recent standards
7.1 Reference Documents	AS/NZS 4020:2010	AS/NZS 4020:2018	Referring to the most recent standards
7.1 Reference Documents		AS/NZS 2566.2 Buried Flexible pipelines - Installation	Added appropriate standard to reference.
7.1 Reference Documents	AS/NZS 2845.1:2018	AS/NZS 2845.1:2022	Referring to the most recent standards
7.1 Reference Documents		Added references to multiple Council policy documents	Council policy is a founding documentation for the ECOP
7.2 Overview of Selwyn District's water supply	number of separate schemes that sources high quality groundwater	number of separate schemes that sources groundwater	Unnecessary qualifying remark.
7.2 Overview of Selwyn District's water supply	SDC's networks include the following supplies:	SDC's networks include the following:	Unnecessary qualifying remark.
7.2 Overview of Selwyn District's water supply		Removed Castle Hill and Raven Drive	Update to scheme status.

Section	Previous Text	Updated Text	Reason for Change
		from On Demand Supplies	
7.2 Overview of Selwyn District's water supply		Added Castle Hill to Combination of On Demand and Restricted	Update to scheme status.
7.2 Overview of Selwyn District's water supply		Corrected spelling errors for 3 scheme names.	
7.2 Overview of Selwyn District's water supply		In accordance with Council Policy, water connection type (On demand or restricted) is no longer solely defined by scheme type. If connections to a water supply are available, a restricted water connection would be required for all restricted water supplies, land parcels greater than 2,500m2 applying to connect to an on-demand water supply and all subdivisions or similar mechanisms to create for premises with a land parcel greater than 2,500m2.	Update to reflect Council policy.
7.2.1 Effects of Development on the Water Supply Network		Were modification or additional Water Treatment Plants, Water Pump Stations, Bores and Bore headworks are required this work will be designed and delivered by Councils Water Servies Team at the consent holders expense.	Council's preference is to manage the design process regarding this asset to ensure all regulatory requirements are met.
7.3 Water Supply Design Considerations	Council expects designers to develop water supplies that support Selwyn District Council's	Council expects designers to develop water supplies that support Selwyn District Council's obligations to provide	Addition to reaffirm Council's commitment to water supply objectives and outcomes.

Section	Previous Text	Updated Text	Reason for Change
	obligations to provide safe and reliable potable water.	compliant, safe and reliable potable water.	
7.3 Water Supply Design Considerations	Capacity and ability to service future extensions and development	Capacity and ability to service future intensification, extensions and development	To support growth in area's zoned MRZ potential intensification must be a design consideration.
7.3 Water Supply Design Considerations	Provide flexible joints and isolation valves at all junctions between rigid structures (e.g. reservoirs, pump stations, bridges, buildings, manholes) and natural or made ground	Provide flexible joints and isolation valves at all junctions between rigid structures (e.g. reservoirs, pump stations, bridges, buildings, manholes/chambers) and natural or made ground	Acknowledgement that chambers are also used.
7.3 Water Supply Design Considerations	In general a minimum of 300kPa is supplied at the point of supply.	In general a minimum of 310kPa is supplied at the point of supply within on demand schemes.	Updated to Council's level of service identified in the Activity Management Plan.
7.3 Water Supply Design Considerations		Supplied pressures in restricted schemes generally vary due to topography but must always exceed 150kPa and be less than 850kPa.	Design requirement for restricted water supply schemes.
7.3.2 Material specifications	Store fittings under cover at all times.	Store pipework and fittings under cover at all times. Stored pipe must have ends capped at all times.	Requirement reflects industry best practice.
7.3.2 Material specifications		Galvanised Steel pipework must not be buried.	Requirement reflects industry best practice.
7.4 Design Parameters	Other requirements (e.g. minimum mains size)	Other requirements (e.g. minimum mains size, connection sizes)	Added extra qualifier for context.
7.4 Design Parameters	Large diameter pipes (>200mm dia) and trunk mains should not have direct connections.	Large diameter pipes (>300mm dia) and trunk mains should not have direct connections.	Increased pipe diameter.

Section	Previous Text	Updated Text	Reason for Change
7.4.1 Living zones in on-demand water supply areas	The design average flow rates for the Selwyn District are based on Figure 1.	The design average flow rates for on demand connections within the Selwyn District are based on Figure 1.	Added for clarity.
7.4.1 Living zones in on-demand water supply areas	The minimum residual pressure at all points of supply must be no less than 300 kPa	The minimum residual pressure at all points of supply must be no less than 310 kPa	Updated to the Council's level of service identified in the Activity Management Plan.
7.4.1 Living zones in on-demand water supply areas	Figure 1 - Peak living zone design flow rates	Figure 1 - Peak living zone on demand supply design flow rates	Added for clarity.
7.4.2 Industrial or Commercial activities in on-demand water supply areas	7.4.2 Business zones in on-demand water supply areas	7.4.2 Industrial or Commercial activities in on-demand water supply areas	Updated section name for clarity. Added two paragraphs to the section to reflect policy requirements.
7.4.3 Design for restricted water supply areas	Provide each property with a restrictor at the time of connection that will pass the allocated number of units over a 24-hour period, depending on the volume set down under the resource consent.	Provide each property with a restrictor at the time of connection that will pass the allocated number of units over a 24-hour period, depending on the volume set down by the Water Services Team and/or under the resource consent.	Updated to reflect that not all connections are granted under resource consent.
7.4.3 Design for restricted water supply areas	Rural supply connections shall include dual check valve manifold with restrictor and tanks shall have a ball cock to provide air gap separation.	Restricted supply connections shall include dual check valve manifold with restrictor and tanks shall have a ball cock to provide air gap separation.	Updated to reflect current Council policy.
7.4.3 Design for restricted water supply areas		Tanks must be sealed and include air gap separation in the form of an overflow the greater of; 100mm below the inlet pipework invert or a minimum of 1.5 times the inlet diameter below the inlet pipework invert.	Sentence added to clarify installation requirements.

Section	Previous Text	Updated Text	Reason for Change
		The overflow must include a insect and vermin proof mesh.	
7.4.3 Design for restricted water supply areas	Any other sources of water on any property must not be connected to the reticulation upstream of the air gap separation.	Any other sources of water on any property must not be connected to the reticulation upstream of the air gap separation at the tank.	Qualifying statement added for clarity.
7.4.3 Design for restricted water supply areas	Design rural supplies for domestic purposes, rather than for stock water or irrigation purposes.	Design restricted supplies for domestic purposes, rather than for stock water or irrigation purposes.	Updated to reflect current Council policy.
7.4.3 Design for restricted water supply areas	Individual sites may provide their own water bores for domestic purposes.	Where available, connection to a Council reticulated system is strongly preferred; however, individual sites may provide their own water bores for domestic purposes.	Updated to reflect current Council policy.
7.4.4 Fire Supply Design		Residential areas which do not supply an industrial area must be designed to accommodate FW2 classification. Commercial or industrial areas must be designed to accommodate FW3 classification. If subdivision areas include multiple land uses (both commercial/industrial and residential) they must be designed to achieve FW3 classification.	Statement added to clarify design expectations for mixed zone requirements.
7.4.4 Fire Supply Design	When considering the effect on the reticulation network of the firefighting hydraulics (flow, headloss and pressure) scenario as determined by	When considering the effect on the reticulation network of the firefighting hydraulics (flow, headloss and pressure) scenario via reticulation	Qualifying statement added for clarity.

Section	Previous Text	Updated Text	Reason for Change
	SNZ PAS 4509:2008, the minimum pressure at all points of supply in the network shall not be less than 200 kPa.	network hydrants, as determined by SNZ PAS 4509:2008, the minimum pressure at all points of supply in the network shall not be less than 200 kPa.	
7.4.4 Fire Supply Design	Hydrant posts are not required in urban areas.	Hydrant posts are only required in rural areas and on all water supplies (rural and urban) greater than 300m above sea level.	Update to better reflect expectation regarding marker posts for fire hydrants.
7.4.4 Fire Supply Design		Private pumps (including for firefighting purposes) must not be directly connected to the Council reticulation network downstream of the point of supply, they must have a privately owned reservoir between the council point of supply and pump suction. These tanks and pumps must be sized to accommodate the full volume and pressure requirements of the sprinkler system without supplementary supply from the reticulation network. The inlet to all firefighting storage tanks must be restricted to refill in no less than 6 hours, assuming 310 kPa at the point of supply (subject to scheme source availability and reticulation network constraints), unless agreed to by Selwyn District	Updated to reflect current Council Policy requirements.

Section	Previous Text	Updated Text	Reason for Change
		Council Water Services Team in writing prior to construction.	
7.4.4 Fire Supply Design	All main connections to the Council reticulation must have a flow meter and testable backflow prevention fitted.	All firefighting connections to the Council reticulation must have a flow meter and testable backflow prevention fitted.	Correct errors in wording.
7.4.4 Fire Supply Design		There must not be any cross connection within the lot boundary between any fire connection and the domestic equivalent connection for normal demand. The systems must be hydraulically separate from the main in the road reserve and within the lot.	Updated to reflect current Council Policy requirements.
7.4.5 Standard Water Supply Pipe Sizes		PE watermains – 125 OD, 180 OD, 250 OD, 315 OD, 355 OD, 450 OD, 560 OD and 630 OD	Added to provide clarity on acceptable PE pipe sizes previously not specified.
7.4.5 Standard Water Supply Pipe Sizes	Commercial developments – approved on a case-by-case basis.	Commercial Lots/developments – approval by SDC Water Services team or resource consent on a case-by-case basis.	Updated for clarification.
7.4.6 Minimum Pipe Class and Fitting Class	The infrastructure shall be designed and pressure tested to the pressure rating of the lowest rated pipework or fitting (PN12).	The infrastructure shall be designed and pressure tested to the pressure rating of the lowest rated pipework or fitting.	Removed PN12 classification to stop confusion regarding testing requirements.
7.4.7 Infrastructure Sizing		Firefighting storage and sprinkler system design.	Updated design information requirement for completeness.
7.4.7 Infrastructure Sizing	Some of Selwyn District Councils water supplies are pumped, so keep	The majority of Selwyn District Councils water supplies are	Updated design requirement to align with best practice.

Section	Previous Text	Updated Text	Reason for Change
	hydraulic gradients (other than for firefighting purposes) below 0.01m/m.	pumped, so keep hydraulic gradients/headlosses (other than for firefighting purposes) below 0.01m/m and pipeline velocities below 1.5m/s.	
		All Water Treatment Plants, Water Pump Stations, Bores and Bore headworks are required this work will be designed and delivered by Councils Water Servies Team at the consent holders expense.	Council's preference is to manage the design process regarding this asset to ensure all regulatory requirements are met.
7.4.10 Mains Layout	Provision for hydrants, scour and air valves	Provision for hydrants, scour and air valves and their position outside of areas prone to surface water ponding.	Added for clarity regarding design information expectations.
7.4.10 Mains Layout	A hydrant must be placed at the end of all permanent and temporary sections of dead-end mains greater than or equal to 100mm diameter.	A hydrant must be placed at the end of all permanent and temporary sections of dead-end mains greater than or equal to 80mm nominal diameter.	Added for clarity.
7.4.10 Mains Layout		In rural areas a backflow protected above ground manual flush point must be placed at the end of all permanent sections of dead end mains less than 80mm diameter.	Added to reflect best practice.
7.4.10 Mains Layout		One toby box per connection is preferred but multi-box style toby boxes (such as Acuflo Class C mega boxes located in the berm or similar approved) with 316L stainless	Change from Jumbo boxes to a more appropriate solution.

Section	Previous Text	Updated Text	Reason for Change
		fasteners, 316L internal pipework and standard SDC manifolds, etc.) may be used subject to Council approval (generally where more than four back sections are serviced by a right of way). When used, each manifold must be clearly labelled regarding which property it serves.	
7.4.10 Mains Layout	Give special consideration to the design and installation of pipelines in any land prone to slips or instability or with a gradient steeper than 1:10.	Give special consideration to the design and installation of pipelines and waterstops in any land prone to slips or instability or with a gradient steeper than 1:10.	Added for completeness.
7.4.11 Reticulation location and depth in legal road	Minimum pipe cover 0.6m, maximum cover 1.2m unless otherwise agreed in writing with the Development Engineer.	Minimum pipe cover 0.6m in the berm and 0.75m in the road, maximum cover 1.2m unless otherwise agreed in writing with the Development Engineer.	Updated to reflect best practice.
7.4.11 Reticulation location and depth in legal road		Laterals. Pipe Cover: 0.6m in the berm and 0.75m in the road.	Added for completeness.
7.4.13 Reticulation on Private Property			Section content rewritten for improved understanding.
7.4.15 Submains	Valves are to be installed at each end.	Valves are to be installed on the submain at each end.	Addition of qualifying statement to clarify expectation.
7.4.15	Removed Table 2 – number of allowable connections to a submain.	The maximum number of connections to a submain within an on-demand scheme is 14. Where hydraulic modelling (using peak living	

Section	Previous Text	Updated Text	Reason for Change
		zone design flow rates) identifies a conflict with maximum permitted headloss parameters the number of connections on a ring fed submain shall be reduced to achieve compliance.	
7.4.17 Trenchless Technology		How the interface between carrier pipes and watermains will be sealed to prevent migration of backfill materials.	Added extra design consideration.
7.4.17 Trenchless Technology		The minimum pressure class for PE pipe used for directional drilling within the District is PN16. PE pipework used for directional drilling is preferred to be full RC pipe.	Added additional design constraint.
7.4.18 Connection Design Requirements		All costs associated with connection standover by Council Approved Network Management Contractor must be paid at the time of application for the connection and prior to the connection being approved.	Clarifying statement to reflect Council policy.
7.4.19 Provision for pressure testing and sterilisation	WSP005. Pressure testing and chlorination must be completed and approved before any connection to SDC's water network.	WSP005. Pressure testing, and chlorination and bacterial testing must be completed and approved before any connection to SDC's water network.	Added additional testing requirements to reflect WSP005 requirements.
7.4.19 Provision for pressure testing and sterilisation	Reports must be produced for both pressure tests and chlorination.	Reports must be produced for pressure tests, and chlorination and bacterial testing.	Added additional reporting requirements to reflect WSP005 requirements.
7.4.19 Provision for pressure testing and sterilisation	Corde will follow the shutdown procedures and	Council Network Management Contractor will follow	Remove reference to Corde.

Section	Previous Text	Updated Text	Reason for Change
	connection to the existing network must be done either by Corde or under the direct supervision of Corde staff.	the shutdown procedures and connection to the existing network must be done either by Councils Network Management Contractor or under the direct supervision of the Network Management Contractor.	
7.4.19 Provision for pressure testing and sterilisation	All contractors must work as instructed by SDC or Corde.	All contractors must work as instructed by SDC or Council's Network Management Contractor.	Removed reference to Corde.
7.5 System Review		Headlosses and velocities in pipeline	Added requirement to reflect best practice.
7.6.1 Valves	Sluice valves are also required at each end of submains. Submain sluice valves are to be 50mm Hawle, AVK or similar.	Sluice valves are also required at each end of submains. Submain sluice valves are to be 50mm Hawle, AVK or similar approved by Council.	Additional qualifying statement to reflect Council policy.
7.6.2 Backflow			Section rewritten to reflect Council policy.
7.6.3 Air Valves		To capture air, air valve take offs/saddles must be located at the top of the pipe and be no less than 50% of the pipe diameter (eg a DN50 saddle/tee on a DN100 pipe, or a DN150 saddle/tee on a DN300 pipe).	Added design consideration requirement.
7.6.3 Air Valves		All air valves must include a downward facing outlet and vermin and insect proof mesh to the vent. Consider how air valve servicing will occur and ensure that air valves can be	Added design consideration requirement.

Section	Previous Text	Updated Text	Reason for Change
		isolated and removed if required.	
7.6.9 Point of Supply Connections and property meters	Provide hydrants at low points on watermains, to drain the pipeline when scours are not installed.	Provide hydrants at low points on watermains (but away from areas of potential ponding surface water), to drain the pipeline when scours are not installed.	
7.6.9 Point of Supply Connections and property meters	Any connections (including meters) will become the property of and be maintained by the Council.	Any point of supply connections (including meters and/or restrictors) will become the property of and be maintained by the Council.	Additional qualifying statement for clarity.
7.6.9 Point of Supply Connections and property meters	Meters shall be Kent MS-M meters.	Meters will be either Kent MS-M or Elster V210 Volumetric meters and must be installed on Accuflo metal manifolds.	Added addition water meter option
7.6.9 Point of Supply Connections and property meters		Water meter assets that must be relocated as a result of a subdivision that are older than 15yrs will be replaced with new meters at the time the new connections to Council reticulation are made at the consent holder's expense.	The minimum level of service for water meters is 15yrs best practice is to replace it at the time of the new connection.
7.6.9 Point of Supply Connections and property meters			Added paragraph stating design requirements and expectations for connections supplied to commercial connections.
7.6.9 Point of Supply Connections and property meters	Design any rural supply to provide three days storage at the design flow for each property.	All properties connected to a restricted water supply will be required to install a water tank. Design the water tank to	Corrected mistakes with previous wording to reflect resource consent conditions.

Section	Previous Text	Updated Text	Reason for Change
		have a minimum of 3 days' water storage.	
7.6.10 Reticulation Network Flowmeters		Section Deleted	No longer required.
7.7.2 PE Pipeline Construction	One pre-construction test for each weld	One pre-construction test for each pipe size and fitting used and each different pipework material batch	Updated to reflect best practice.
7.7.3 Connection New Mains to Existing Mains			Section updated to reflect Council policy and best practice.
7.8 Completion Documentation		A copy of the signed and dated Network Management Contractors stand-over form for each connection. S224 will not be issued without this signed form.	Additional QA document requirement.
Appendix II			Updated with references to new standard drawings.

Review By: Date: 5/6/2025

(Development Engineering Manager)

Approved By: Date: 12/08/2025

(Acting Executive Director Infrastructure and Property)