

# Stormwater Management Plan summary



SMP Title	Kainga Ora – Aorere Stage 2-5
SMP Date	01/12/21
SMP Version	5
SMP prepared by	Piritahi
SMP Prepared for:	Kainga Ora
Location	Mayflower Close, Winthrop Way, Courtenay Crescent and Lavinia Crescent. Stages 2 – 4 are located to the north of Stage 1. Stage 5 is located to the southeast of Stage 1.
Consolidated Receiving Environment	Manukau Harbour
Stormwater Catchment	Pukaki Waiokauri
Brownfield / Greenfield	Brownfields Large
SMP Purpose	Redevelopment
Unitary Plan Precinct	N/A
Date SMP Adopted	8 March 2022
HW Reference	2021-041

## Notes:

The Aorere neighbourhood is located within the Pukaki-Waokauri Creek catchment. The neighbourhood drains via a pipe network to two freshwater tributaries of the Waokauri Creek. The addendum for Stage 1 has been adopted and is referenced as NDC-2021-009. Stages 2 – 4 are located to the north of Stage 1. Stage 5 is located to the southeast of Stage 1. The Aorere neighbourhood redevelopment is generally proposed within lots surrounding Mayflower Close, Winthrop Way, Courtenay Crescent and Lavinia Crescent.

A draft SMP for the wider Kāinga Ora neighbourhood redevelopment, including all stages of work, is dated November 2019 (BECA). The Stage 2-5 addendum is to be read in conjunction with the draft Aorere SMP.

The SMP applies to Kāinga Ora Stage 2 – Stage 5 development sites only.

This document is prepared to provide the user with a summary of the stormwater management requirements within the adopted Stormwater Management Plan. To see the full Stormwater Management Plan please contact [HWDevelopment@aucklandcouncil.govt.nz](mailto:HWDevelopment@aucklandcouncil.govt.nz)

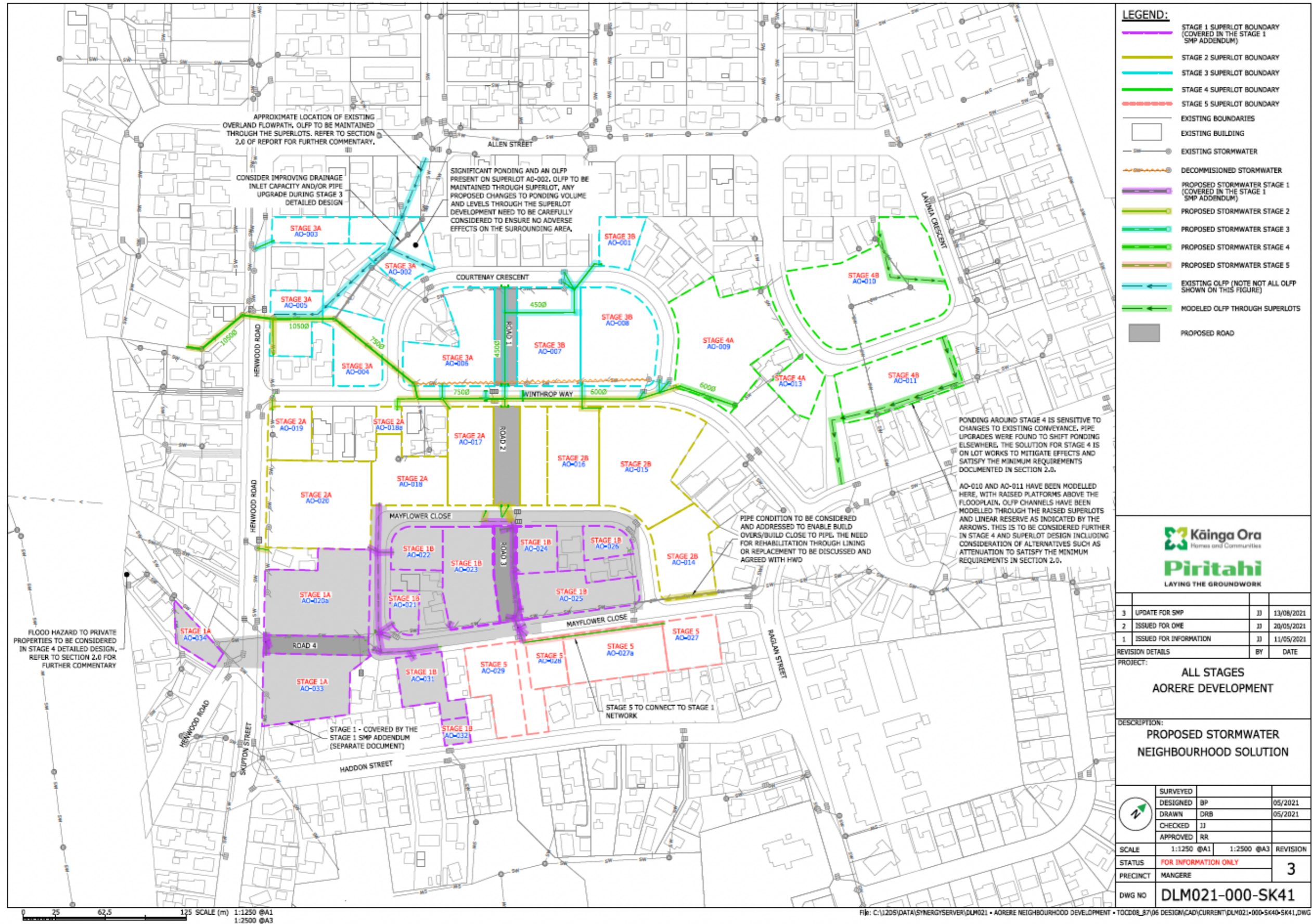
## Kainga Ora – Aorere Stage 2-5 - Stormwater Management Plan Summary

### Stormwater management requirements

Stormwater management catchment	Proposed land use	Receiving environment	Water quality management	Hydrology mitigation (retention)	Hydrology mitigation (detention)	Flood management	Outlet design	Assets to be vested with council	General comments
Public Roads	Residential	Existing stormwater network to Waokauri Creek – SEA marine area downstream	<ul style="list-style-type: none"> <li>As a minimum, at source treatment must be provided for 75% of the new road surface area via green infrastructure.</li> <li>Opportunities to treat existing roads, with a focus on high contaminant generating areas (high-use roads, bus stops, intersections) are to be investigated and considered.</li> <li>Removal of gross pollutants from all road surfaces at a minimum of 75% of the surface area of Stage 2-5.</li> </ul>	<ul style="list-style-type: none"> <li>Provide in stream erosion protection within the northern receiving stream corridor, on the southern side of the stream in Kāinga Ora land.</li> <li>Further nominal hydrological mitigation is to be provided through device selection.</li> <li>Green infrastructure options (swales, raingardens, tree-pits), are preferred as they provide a hydrological function along with other associated benefits (amenity, biodiversity temperature, etc).</li> </ul>		<ul style="list-style-type: none"> <li>A combination of network upgrades including trunk network and demonstration of no adverse effects.</li> <li>No increase in habitable floor flooding for private properties.</li> <li>OLFP's to be contained within public land or, protect designated OLFP's through private property by easements.</li> <li>OLFP's within superlots to be assessed and designed at superlot development stage.</li> </ul>	<ul style="list-style-type: none"> <li>Northern Stream works – New outfall to streams to be green/naturalised outfalls, and to include erosion protection.</li> <li>Consistent with the SW- CoP</li> </ul>	<ul style="list-style-type: none"> <li>Pipe network &amp; Manholes within development sites.</li> <li>Trunk network Upgrade along Winthrop Way, across Henwood Road and to stream outfall.</li> </ul>	<ul style="list-style-type: none"> <li>Encourage tree planting in new and existing street corridors to increase the urban tree canopy coverage.</li> <li>Seek opportunity to provide riparian planting and instream naturalisation features (pools and riffles) to provide additional instream filtration of flows (encouraged, but not a formal requirement of the SMP).</li> <li>Additional rehabilitation of the stream, planting and naturalisation of the stream base is encouraged but does not form a part of the SMP requirements.</li> </ul>
Superlots	Residential	Existing stormwater network to Waokauri Creek – SEA marine area downstream	<ul style="list-style-type: none"> <li>Inert building materials to be used for all building surfaces. No exposed roofing, guttering, or cladding made of galvanised steel or copper.</li> <li>As a minimum, gross pollutant removal shall be provided for no less than 75% of the Stage 2-5 neighbourhood total area (comprising superlots and adjacent roads).</li> <li>Gross pollutant traps for all multiunit communal waste storage areas.</li> </ul>	<ul style="list-style-type: none"> <li>Water sensitive design approach to superlot development.</li> <li>Encourage minimisation of impervious areas and disconnection of pedestrian footpaths.</li> <li>Provide mitigation of impervious surfaces over agreed threshold of 38.5% impervious area (refer to Table 3.2 of the SMP for toolbox options).</li> <li>Provide in stream erosion protection within the northern receiving stream corridor, on the southern side of the stream in Kāinga Ora</li> </ul>					
High contaminant generating carparks	Residential	Existing stormwater network to Waokauri Creek – SEA marine area downstream	<ul style="list-style-type: none"> <li>Carparks with &gt;30 spaces and/or 1,000 m2 treatment to achieve 75% TSS reduction using GD01 guidance.</li> <li>At source gross pollutant traps or catchpit filters to be installed.</li> </ul>						

# Kainga Ora – Aorere Stage 2-5 - Stormwater Management Plan Summary

## Catchment map



# Kainga Ora – Aorere Stage 2-5 - Stormwater Management Plan Summary

## Development plan



**Legend.**

- HNQC site
- HNQC site to be retained - post 2000
- Superlot Boundaries
- Proposed HNQC Superlot
- AT Acquisition
- Parks Acquisition
- High Priority Acquisition Lot
- Desired Acquisition Lot
- Proposed Vested Road
- Stage 1A
- Stage 1B
- Stage 2A
- Stage 2B
- Stage 3A
- Stage 3B
- Stage 4A
- Stage 4B
- Stage 5

**Total Yield by Stage**

Stage	Existing HNQC Homes	Proposed State	Proposed Market	Proposed Total
1A	13	11	22	33
1B	19	21	41	62
2A	15	23	41	64
2B	21	10	58	68
3A	15	26	35	61
3B	15	27	26	53
4A	11	2	38	40
4B	17	25	41	66
5	12	11	29	40
<b>Totals</b>	<b>138</b>	<b>156</b>	<b>331</b>	<b>487</b>

**Māngere Development** MASTERPLAN REV **J**

**Aorere.**

**2.5 Staging Plan.**

**Isthmus.**

Copyright © Isthmus Group Ltd.  
 Job: 4.012 Date: 04 August 2020

Client: Kainga Ora  
 Issued For: Information

Dw Nb: Scale: 1:1000@AO  
 Dw AW: Rv: SG

Disclaimer: This product is for informational purposes only and may not have been prepared for or be suitable for legal, engineering, or accounting purposes. It does not represent an offer of products or services and represents only the approximate indication of property boundaries. Acknowledgements: Copyright ©. This copyright data is licensed under the Creative Commons Attribution 3.0 New Zealand license. Courtesy: Auckland Council / 1100 Auckland Department of Information Systems/Information Systems Group