Stormwater Management Plan summary

SMP Title	155 Browns Road, Manurewa
SMP Date	01/07/21
SMP Version	4
SMP prepared by	Civil Plan
Location	155 Browns Road, Manurewa
Consolidated Receiving Environment	Manukau Harbour
Stormwater Catchment	Puhinui Creek
Brownfield / Greenfield	Large Brownfield
SMP Purpose	Subdivision
Unitary Plan Precinct	N/A
Date SMP Adopted	17 September 2021
HW Reference	2020-005



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
Homai Stream Catchment, Puhinui Creek	A residential subdivision is proposed, including 58 lots at the top of the catchment (stage 1), and superblocks across the remainder of the site (stage 2). Stormwater including lot connections for stage 2 will be completed in "stage1", along with bulk earthworks and roading for the entire site.	Homai Stream for the northern part of the site and Browns Road for the southern part.	Wetland to the Northwest of site, to treat the 90th percentile water quality storm for the entire catchment.	Retention will be provided "at source", by devices on individual lots (reuse tanks for roof runoff, and soakage trenches for runoff from driveways and paved areas.) Retention will not be provided for runoff from the roads and access lots, so this retention volume is required to be added to the extended detention storage provided in the wetland.	Extended detention (95th percentile storm for the whole development, not including lot retentions	Attenuation for the 2, 10 and 100 year storm events. The site is in Homai stream catchment which is very small and the flow path from top to bottom of the catchment is very short. The site despite being quite close to the coast is in the middle/upper part of the catchment and there are flooding risks immediate downstream of the site	Two outfalls for the wetland are proposed and these have been designed to prevent erosion during stormwater discharge	Wetland and pipework	The HEC-RAS model submitted for the flood depths and extents for the upstream and downstream boundary conditions pre and post development show no difference to the downstream Homai Stream. However, the upstream Browns Road flood extents have a horizontal encroachment of 0.5m and a maximum increase depth of 110mm. This will be addressed at the detailed engineering design stage.

Notes

Provisional approval was obtained for version 3 of the SMP. This version 4 change is minor and involves the wetland restoration in accordance with approved wetland monitoring plan

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 https://www.hwb.equalunch.nc and https://www.hwb.equalunch.nc.

Catchment map



Development plan

