

Conditions - Designation A112

Ruakura Water Supply Reservoir, Pump House and Bulk Water Main Lines

June 2018

Pursuant to section 168A of the Resource Management Act 1991, Hamilton City Council as the Territorial Authority recommends to Hamilton City Council as the Requiring Authority that the notice of requirement for the designation of the two new water reservoirs, pump house and two water supply main lines be confirmed, subject to the following recommended conditions:

DESCRIPTION OF WORKS

- A. The terms and conditions described herein apply to the designation for the Ruakura water supply reservoirs, pump house and bulk water main lines, specifically for the construction, operation, inspection, and maintenance to allow for the storage and supply of water. The designation applies to the area of land comprised of the following lots:
- In relation to the reservoir and pump house location, the land is legally described as Lot 3 DPS 78549 held in Computer Freehold Register (CFR) SA61C/245, with an area of 50.38 hectares.
 - In relation to the bulk water line mains, the land is legally described as Part Lot 2 DPS 77458 held in CFR 726931.

CONDITIONS

General

1. That the works to give effect to the designation for the water reservoirs, pump house and two water supply main lines shall be generally in accordance with the information supplied with the Notice of Requirement Ruakura Reservoir by WSP Opus dated February 2018.

Lapse Period

2. The designation shall lapse on the expiry of a period of 5 years after the date it is included in the District Plan in accordance with section 184 of the Resource Management Act 1991 unless:
 - a. It is given effect to before the end of that period; or
 - b. The Council determines, on an application made within 3 months before the expiry of that period, that substantial progress or effort has been made towards giving effect to the designation and is continuing to be made, and fixes a longer period for the purpose of this subsection.

Outline Plan

3. The Requiring Authority must submit an Outline Plan prior to the construction of the reservoirs and associated infrastructure in accordance with 176A of the RMA.
4. The Outline Plan shall also include the following:
 - a. Construction Management Plan (CMP)
 - b. Construction Traffic Management Plan
 - c. Amenity Planting Plan (APP)
 - d. An agreement regarding access to the site
 - e. Construction Noise and Vibration Management Plan

Built Form

5. That the layout of the Reservoir and Pump House shall be in general accordance with the Land Requirement Plan Project No: 3-39147.00 Sheet NO: C200 Revision A and Reservoir Site Stage 2 Excavation Contour Plan Project No 3-39147.00(01) Sheet No c57 Revision A (**Appendix A**) and designed to achieve compliance with the following parameters:
 - a. The maximum height of the two reservoirs shall be 10m (excluding aerials). and each have a maximum diameter of 45m.
 - b. The maximum height of the Pump House and Control Room shall be 7m (excluding aerials) and cover an area of no more than 700m².

Construction

6. The Requiring Authority must prepare, at least 10 working days prior to the commencement of any earthworks or construction activity within the designation boundaries (excluding site investigations and enabling works), a Construction Management Plan (CMP), and submit this to the Territorial Authority for certification by the Chief Executive Officer or nominee. The purpose of the CMP is to set out the management procedures and construction methods to be undertaken to avoid, remedy or mitigate potential adverse effects arising from the construction activities. The CMP shall include:
 - a. Confirmation of the proposed staging and order of the reservoir construction;
 - b. An outline construction programme and timetable;
 - c. Contact details of the site supervisor or project manager and the construction liaison person;
 - d. The proposed hours of work;
 - e. Measures to be adopted to maintain the land affected by the works in a tidy condition in terms of disposal/ storage of rubbish;
 - f. Location of site infrastructure including site offices, site amenities, contractors access, equipment;
 - g. Unloading and storage areas, construction staff car parking and security;

- h. Procedure for controlling sediment runoff and the removal of soil debris;
- i. Procedure for responding to complaints about the construction activities;
- j. Construction Traffic Management Plan.
- k. Construction Noise and Vibration Management Plan

The certified CMP is to be implemented and maintained throughout the entire construction period to manage adverse effects arising from the construction activities within the designated site.

Noise

7. The cumulative noise emission from all activities (excluding construction noise, testing and use of emergency generator/s, and maintenance activities) and mechanical plant shall not exceed 55dB LAeq(15-mins) at any point within the boundary of any other site in the Knowledge Zone. Noise levels shall be measured in accordance with NZS6801:2008 'Acoustics - Measurement of Environmental Sound' and assessed in accordance with NZS6802:2008 'Acoustics - Environmental Noise' before comparison with this level.
8. All construction work on the site (including earthworks and piling) shall be designed and conducted to ensure that construction noise from the site received at any other site in a residential zone does not exceed the noise limits in the following table. In the event that any sound level measurements are recorded they shall be measured and assessed in accordance with the provisions of NZS 6803:1999 Acoustics – Construction Noise.

Time period	Monday to Friday		Saturdays		Sundays and Public Holidays	
	Leq (dBA)	Lmax (dBA)	Leq (dBA)	Lmax (dBA)	Leq (dBA)	Lmax (dBA)
06:30am to 07:30am	55	75	45	75	45	75
07:30am to 06:00pm	70	85	70	85	55	85
06:00pm to 08:00pm	65	80	45	75	45	75
08:00pm to 06:30am	45	75				

New Zealand Noise Standards - NZS 6803:1999 Acoustics – Construction

Advisory note: The lower noise limits (shaded) mean that some construction work, particularly in relation to any concrete pours, piling and earthworks, may not be able to take place during the corresponding time frames, which includes all times on Sundays and public holidays.

9. Construction vibration received at any building shall be measured and assessed in accordance with the German standard DIN 4150-3:1999 Structural vibration – Part

3: Effects of vibration on structures, and shall comply with the criteria in the following table:

Type of structure	Short-term vibration			Long-term vibration	
	PPV at the foundation at a frequency of			PPV at horizontal plane of highest floor	PPV at horizontal plane of highest floor
	1 – 10 Hz (mm/s)	1 – 50 Hz (mm/s)	50 – 100 Hz (mm/s)	(mm/s)	(mm/s)
Commercial/Industrial	20	20 - 40	40 - 50	40	10
Residential/School	5	5 - 15	15 - 20	15	5
Historic or sensitive structures	3	3 - 8	8 - 10	8	2.5

German standard DIN 4150-3:1999 Structural vibration – Part 3: Effects of vibration on structures

10. A Construction Noise and Vibration Management Plan (which can be part of a larger CMP) shall be provided to Council's Planning Guidance Manager for certification at least 10 working days prior to construction work (including earthworks but excluding site investigations and enabling works), is commencing on site. The plan shall confirm and include the following: -

- The applicable construction noise and vibration limits (from the conditions above);
- Identification of likely affected persons (off-site);
- General methods to mitigate and manage construction noise and vibration in order to comply with the applicable noise limits;
- Identification of any special construction activities (including any pile driving and concrete pours) that may require specific mitigation measures in order to comply with the applicable noise and vibration limits;
- Contact details of the person in charge of construction works;
- A complaint handling procedure.

11. All construction works shall be carried out in accordance with the certified Construction Noise and Vibration Management Plan.

Earthworks

12. Within two weeks of earthworks and stockpiling being completed, the area that has been disturbed shall be appropriately re-grassed or planted to prevent any erosion and dust.

Contaminated Land

13. In the event that any previously unidentified contamination is discovered during the reservoir development activities, works in the affected area must cease immediately and not resume until measures are implemented to protect human health and the environment in accordance with Condition 14.
14. In the event that any previously unidentified contamination is discovered in any exposed or excavated soil, a Suitably Qualified Environmental Practitioner (SQEP) must be engaged to assess if further investigation is required. Council's Environmental Health Manager must be notified as to what contingency, remediation or management measures are being recommended to mitigate the risk posed by contaminants.
15. Any further investigation, remediation, validation or soil management works must be undertaken and reported in accordance with current editions of the Ministry for the Environment Contaminated Land Management Guidelines No. 5 – Site Investigation and Analysis of Soils No.2 – Hierarchy and Application of Environmental Guidelines and No.1 - Reporting on Contaminated Sites in New Zealand.

Access

16. No permanent vehicle access directly onto Wairere Drive shall be permitted to or from the bulk water main line designation corridor.
17. Any future subdivision of the land to confirm the boundary of the designation site shall include a vehicular right of way easement in general accordance with that shown on the Land Requirement Plan Project No: 3-39147.00 Sheet N0: C200 Revision A (**Appendix A**).

Amenity Planting

18. That the Amenity Planting Plan (APP) be prepared in general accordance with the Ruakura Reservoir Landscape Concept Plan, prepared by WSP Opus, Ref: 3-39147.00 Dated July 2017 (**Appendix B**) and shall include any proposed staging of the development of the Reservoirs. The APP should form part of the Outline Plan.

Archaeological

- 19(a) An archaeological authority from Heritage New Zealand Pouhere Taonga shall be applied for and issued prior to any earthworks related to construction of the first reservoir, pumphouse and associated pipework occurring on site. A copy of the authority is to be provided to the Manager of Planning Guidance, Hamilton City Council prior to earthworks beginning.
- 19(b) An archaeological assessment shall be undertaken before any earthworks commence on site for the second reservoir. The assessment shall review whether the area of earthworks required at site of the second reservoir has archaeological

or cultural significance taking into account the findings of the earthworks undertaken under the archaeological authority granted under condition 19(a). Should the archaeological assessment determine an Archaeological Authority is required this will be applied for under the Heritage New Zealand Pouhere Taonga Act 2014 and provided to the Manager of Planning Guidance, Hamilton City Council prior to earthworks occurring on site.

Advice Notes:

- (a) The Hamilton City Council as the Requiring Authority shall be responsible for ensuring that all appropriate authorisations under the Building Act, Resource Management Act and other relevant legislation, are obtained prior to works commencing on site.
- (b) Pursuant to section 176A of the Resource Management Act 1991, the Hamilton City Council as the Requiring Authority, shall submit an Outline Plan to the Manager of Planning Guidance, Hamilton City Council, prior to the commencement of any works on the site. Notwithstanding that requirements, an Outline Plan would not be required for the following works:
 - i. General building/structure maintenance and repair work (for example: re-painting, recladding, reroofing)
 - ii. Amendment to any internal access ways and pathways
 - iii. Installation, maintenance or repair to any in-ground infrastructure services such as stormwater, sewerage, water lines and electricity (this does not include the installation of the water main line identifies as part of the designation)
 - iv. Maintenance of the landscaping in accordance with the certified Amenity Planting Plan or the provision of additional landscaping/gardens within the site.
 - v. General site maintenance and repair, or boundary fencing otherwise permitted by the District Plan
 - vi. Ancillary earthworks associated with any of the above activities.
- (c) Consultation with Transpower New Zealand Limited (or its successor) is advised when considering works within the High Voltage Electricity National Grid Corridor.
- (d) The off-site disposal of any potentially contaminated soil may qualify as a discharge of contaminants under the Waikato Regional Plan and therefore the Requiring Authority is advised to contact Waikato Regional Council to establish if the disposal activity requires resource consent.
- (e) Enabling works shall include the following and similar activities: demolition and removal of buildings and structures and existing vehicle entrances, construction of site entrances and minor access tracking, fencing, tree felling and removal and other necessary vegetation clearance, relocation of underground and overhead services, and establishment of erosion and sediment controls.

- (f) Site investigations shall include the following and similar activities: geotechnical investigations, surveying and archaeological investigations.

Appendix A:

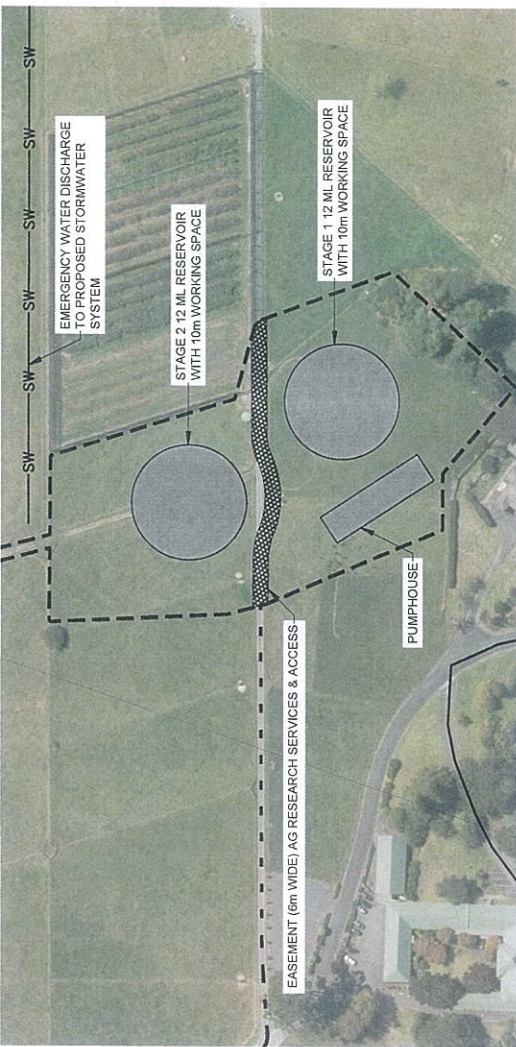
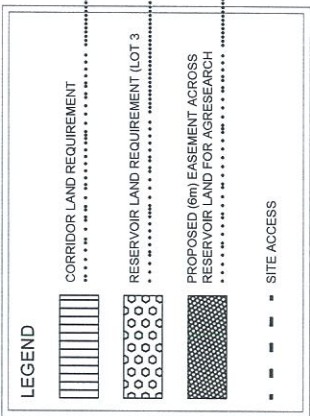
Land Requirement Plan Project No: 3-39147.00 Sheet NO: C200 Revision A (WSP
Opus)
&
Reservoir Site Stage 2 Excavation Contour Plan Project No 3-39147.00(01) Sheet No c57
Revision A (WSP Opus)

Appendix B:

Ruakura Reservoir Landscape Concept Plan, prepared by WSP Opus, Ref: 3-39147.00
Dated July 2017



LAYOUT PLAN
SCALE 1:2000(A1)



DETAIL A - RESERVOIR SITE
SCALE 1:1000(A1)

PRELIMINARY



Hamilton City Council
The Sustainable City



OPUS
Hamilton Office
Private Bag 3007
Hamilton 3240
New Zealand
07 552 0917

Prepared	Approved	Reviewed	Checked	Drawn	Project	Author	Date

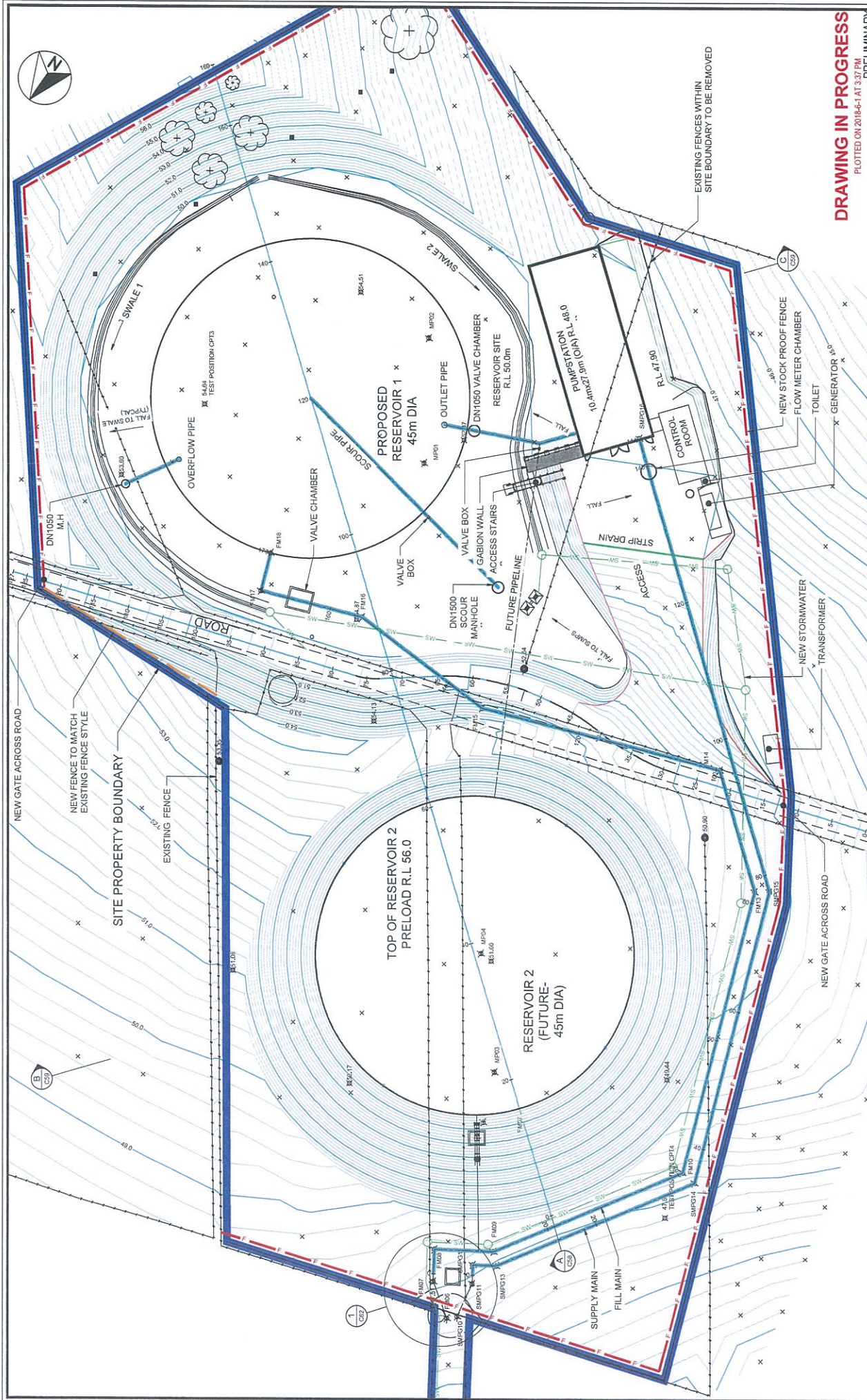
Hamilton City Council
BAILEY ROAD, RUAKURA HAMILTON
BULKHEAD & RESERVOIR
LAND REQUIREMENT PLAN

Project No. 3-39147.00
AS SHOWN
3-39147.00
C200
A

NOTES:

- LAYOUT SHOWN IS INDICATIVE ONLY AND SUBJECT TO DETAILED DESIGN.
- "IMAGERY SOURCED FROM THE LINZ DATA SERVICE
[HTTPS://DATA.LINZ.GOVT.NZ/LAYERS/1872-WAIKATO-05M-RURAL-AERIAL-PHOTOS-2012-2013/](https://data.linz.govt.nz/layers/1872-waikato-05m-rural-aerial-photos-2012-2013/) AND LICENSED BY WAIKATO REGIONAL AERIAL PHOTOGRAPHY SERVICE (WRAPS) 2012. LICENSED FOR RE-USE UNDER THE CREATIVE COMMONS ATTRIBUTION 3.0 NEW ZEALAND LICENSE."

Original Sheet Size: A1 (841x594)
Plot Date: 13 Jun 2017 @ 10:54 a.m.
Plot Path: C:\Users\jason\Documents\Hamilton Reservoir Layout 3-39147\A1 3200\Hamilton Reservoir Substation - Land Requirement Plan_3-39147.dwg (C200A)



DRAWING IN PROGRESS
PLOTTED ON 2018-04-11 AT 13:37 PM
PRELIMINARY

HAMILTON CITY COUNCIL
RUAKURA HAMILTON
NEW RESERVOIR

OPUS
Hamilton Office
447 838 834

Project: Private Bag 2027
Ruakura Hill Centre
Hamilton 3200

Drawn: J.M.P. / J.M.P. / J.M.P.
Checked: S.A. / S.A. / S.A.
Approved: S.A. / S.A. / S.A.

RESERVOIR SITE
STAGE 2 EXCAVATION CONTOUR PLAN

3-39147.00(01)

Notes:

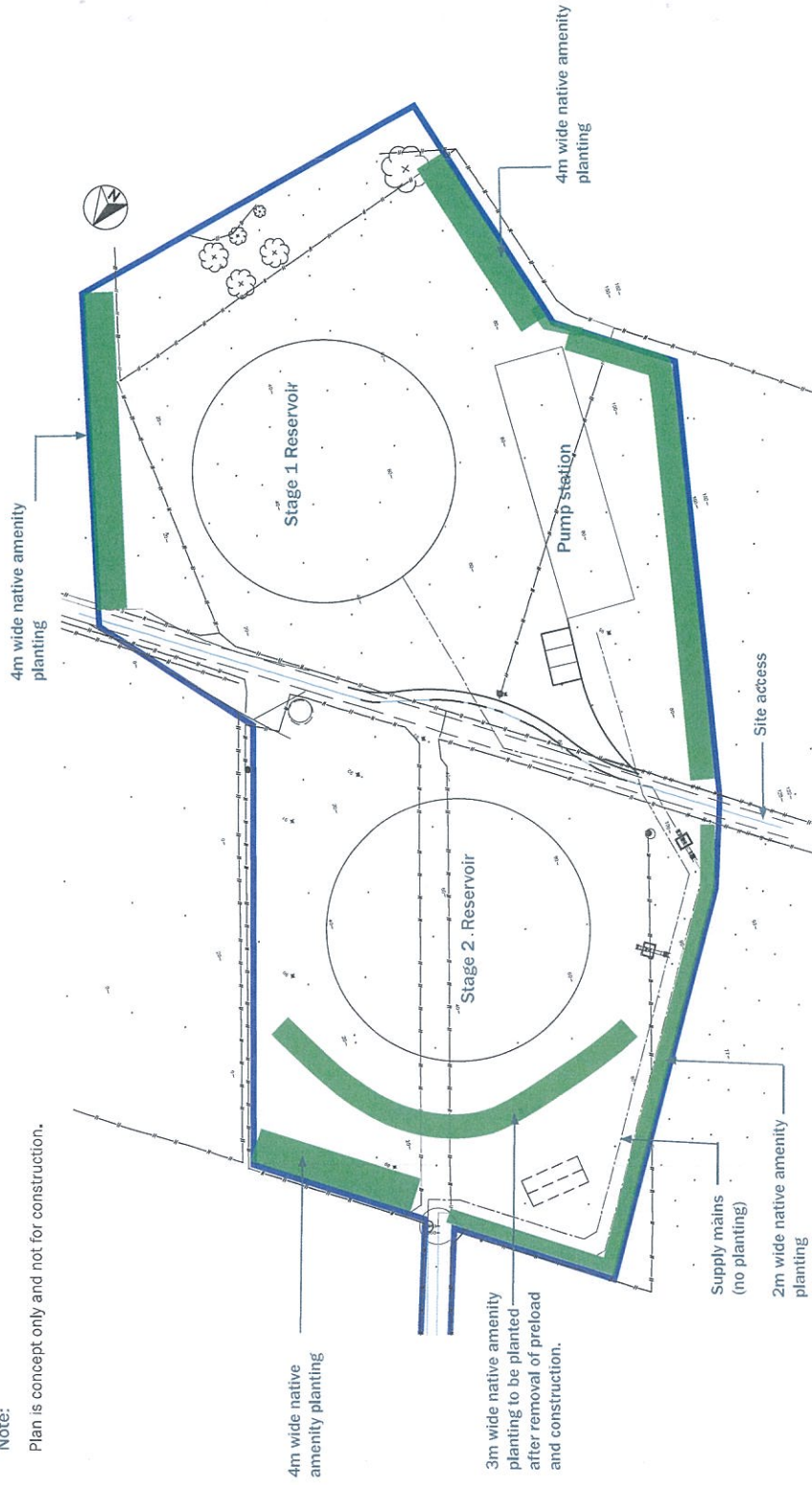
- FOR GENERAL NOTES REFER TO SHEET CS1.

Scale: 1:2000

North Arrow

Note:

Plan is concept only and not for construction.



LEGEND

Amenity Native Planting
mix 2-4m wide

Site Boundary

Concept Description

- To provide a fast growing and robust mix of native plants that is low maintenance.
- Once planting is established it will soften the appearance of the two reservoir structures.
- The plants selected are frost, draught and wind hardy.
- Additionally planting will provide some ecological enhancement and flowers to attract birds and bees.

