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23 August 2019

Resource Consent Numbers RM185013,
RM185014 and RM185015
Contact: Rosalind Squire
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Nelson City Council
C/- Opus International Consultants Ltd
Private Bag 36
Nelson Mail Centre
Nelson 7042

Dear Reuben

RM185013, RM185014 and RM185015 – Saxton Creek Upgrade, Stage 3C DECISION ON NOTIFIED RESOURCE CONSENTS

Pursuant to Section 114 of the Resource Management Act 1991 ("the Act"), please find enclosed a copy of the Council's decision on your applications for resource consents.

Section 357A of the Act provides you with the right to lodge an objection with the Council in respect of this decision and/or any associated conditions. Any such objection must be made in writing setting out the reasons for the objection and must be lodged with the Council, together with a fixed fee of $255.00 (GST inclusive), within 15 working days of receiving this letter.

In addition Section 120 of the Act provides you with the right to lodge an appeal with the Environment Court in respect of this decision and/or any associated conditions. Section 121 of the Act requires that any such appeal must be made in the prescribed form, must state the reasons for the appeal, the relief sought, state any matters required by regulations and must be lodged with both the Environment Court and the Council within 15 working days of receiving this letter. A copy of your appeal must also be served on all persons who made a submission on the consent applications within five working days of your appeal being lodged with the Environment Court.

You may commence your activity immediately unless you lodge an objection or appeal to this decision. However, it is important that you check the conditions of your consents carefully as some of them may require you to carry out specific actions before you may commence your activity. In some cases you may also require other permits or building consents for your activity and these must be obtained before you can commence your activity.

Please note that under Section 125 of the Act, your consents will lapse in five years unless you have given effect to them before then.

An invoice will be posted out within the next working week (if not included with the decision letter). Please feel free to contact me if you have any questions regarding any aspect of your consents or their conditions. My contact details are listed at the top of this letter.

Yours faithfully

Rosalind Squire
Consultant Planner

RESOURCE CONSENT DECISION 1[1]

Resource Consent number: RM185013

Pursuant to section 104B of the Resource Management Act 1991 ("the Act"), the Nelson City Council ("the Council") hereby **grants** resource consent to:

Nelson City Council

The activity to which this decision relates:

Land use consent in association with Stage 3C of the Saxton Creek stormwater upgrade for:

- Removal of existing obstructions (including vegetation, the culvert at 3 Hill St and gravel) from the bed of the creek;
- Realignment and filling redundant portions of the bed of the Creek;
- Construction and ongoing maintenance of the creek bed and batter protection with rock;
- Disturbance of the creek bank and erection of structures within the Riparian Overlay;
- Vegetation removal;
- Earthworks to widen, realign and to fill the creek bed, and for landscaping;
- Installation and removal of temporary culverts during construction; and
- Temporary Construction Noise in excess of the permitted residential and rural limits.

Location details: Stage 3C

Legal description and Certificates of Title:

25 Hill St – Lot 2 DP19728 (NL13A/1072)

3A Hill St – Lot 4 DP8212 (NL3C/1249)

3B Hill St - Lot 3 DP8212 (NL3C/1248)

3C Hill St - Lot 2 DP8212 (NL3D/748)

3D Hill St – Pt Lot 1 DP8212 (NL8C/678)

Nelson City Council, Local Purpose (Esplanade) Reserve – Lot 5 DP507574 (NL5D/234)

7 Hill Street – Lot 1 DP11378 (6D/415)

9 Hill Street - Lot 1 DP DP19728 DP 13371 (13A/1071)

17 Hill Street – Lot 5 DP507574 (CFR 779072)

Location co-ordinates:

1617877 E 5423833 N (NZ Transverse Mercator)

DURATION: The consent for construtions works shall expire on 23 August 2024. The consent for ongoing maintenance work shall expire on 23 August 2054.

[1] See the introduction to the Combined Decision Report (page 20 – 34) for identification of which rule breaches are dealt with by which consent decision. The site and proposal description sections are also relevant to understanding the consent decisions.

CONDITIONS

Pursuant to Section 108 of the Act, this consent is issued subject to the following conditions:

General Conditions

1. The activity shall be carried out in general accordance with the application lodged with Council on 20 December 2017 including the reports listed below, the further information provided on 15/05/2018, 12/07/2019, 29/05/2019, 6/6/2019, 23/07/2019, 30/7/19 and 9/08/2019, the attached approved plans labelled RM185013 and the following conditions of consent. Where there is any apparent conflict between the application and consent conditions, the consent conditions shall prevail.
   - *Nelson City Council, Saxton Creek Upgrade, Stage 3 - Design Drawings, Prepared by Cameron Gibson Wells Limited (Revision E Dated 30/11/17)*
   - *Design Basis Report, Saxton Creek Stormwater Upgrade - Stage 3 – 20 Ngati Rarua St to South Saxton Field - Document Number: 14000-246-RPT-010-C – Prepared by Cameron Gibson Wells Limited (24/11/2017)*
   - *Saxton Creek - Stage Three, Landscape Plans & Planting Establishment Plan, Prepared by Nelmac (Final Version dated 12/12/2018)*
   - *Saxton Creek Capacity Upgrade: Stage 3: 22 Rarua Street Downstream to Saxton Field – prepared by Fish and Wildlife Services Ltd (Dated 21/11/2017)*
   - *Appendix 5 - Cultural Effects Assessment - Saxton Creek Stage 3 – Prepared by Taiao/Environmental Management Unit, Wairau (Blenheim), Te Rūnanga o Ngāti Kuia Trust (7/11/2017)*
2. The Consent Holder shall advise Council's Monitoring Officer in writing, at least 5 working days prior to works commencing on site, so that monitoring of the conditions of this consent can be undertaken. Please email regulatory@ncc.govt.nz and advise the consent number RM185013.

   Note: *Failure to notify the Council as stated in the above condition may result in enforcement action.*

   Note: *A monitoring charge of $150 has been included in your invoice, as conditions of consent requiring monitoring have been imposed. This charge covers the costs involved in the first hour of monitoring compliance with the consent conditions. Where additional monitoring costs are required to determine that conditions have been met, these will be charged as provided in the Council's Fees and Charges Schedule.*

   Note: *The Consent Holder is advised that the Council applies annual environmental monitoring charges to resource consent holders to contribute to environmental monitoring and science costs. The costs for this land use consent will be $60 annually. For further information please contact Council's Environmental Programmes Adviser.*
3. The construction works shall be completed within 1 year from the date construction commences on site.
4. The works shall be carried out under the supervision of a suitably qualified engineer experienced in civil engineering and river control works (the Engineer).
5. Prior to commencing works on site the Consent Holder shall engage a suitably qualified and experienced freshwater ecologist (the Ecologist) who shall be approved by the Team Leader, Resource Consents. When required the Ecologist shall provide on-site

advice and instructions to the Consent Holder and the persons undertaking the works, on methods that must be implemented to minimise adverse effects on aquatic life and to oversee any fish salvage.

6. The Ecologist shall be present at least at the commencement and conclusion of works and when any dewatering or diversion works are undertaken and shall determine the flow levels at which works can be undertaken. The Consent Holder shall comply with the instructions of the Ecologist as required to meet the conditions of consent.

7. Prior to commencing works the Consent Holder shall organise and facilitate a Hui on site between representatives agreed by Te Ātiawa Manawhenua kī Te Ihu Trust and Ngāti Tama ki Te Waipounamu Trust, a Consent Holder representative and the Ecologist. The costs of various parties' attendance at this Hui are to be covered by the Consent Holder. The purpose of the Hui is to:

   (a) organise and agree to the process for an iwi monitor to attend significant fish salvages undertaken in association with the works;

   (b) provide early advice regarding the type and location of species to create shade, habitat, mahinga kai and rongoa at key sites (i.e. adjacent to pools);

   (c) organise and agree to the process for providing ongoing advice for the duration of construction on the type and location of species to create shade, habitat, mahinga kai and rongoa at key sites (i.e. adjacent to pools); and

   (d) organise and agree to the process for providing advice on the type and location of species to create shade, habitat, mahinga kai and rongoa at key sites (i.e. adjacent to pools) for the enrichment planting undertaken in the fifth planting season following construction.

   ***Note**: Any additional plantings adjacent to the pools or otherwise within the designed flood path will need to be selected from those which do not impact on the flood carrying capacity of Saxton Creek.*

8. For the purposes of, and pursuant to Section 128 of the Resource Management Act 1991, the Council reserves the right to review this consent annually commencing 12 months from the date this consent is granted, for any of the following purposes:

   (a) to modify existing conditions of consent relating to the effects of the activity on the environment;

   (b) to require the Consent Holder to adopt the best practicable option to mitigate any adverse effect upon the environment, arising from the generated effects of the activity; and

   (c) if the Council deems that it is necessary to do so in order to deal with any adverse effect on the environment which may arise from the exercise of this consent, and which is appropriate to deal with at a later date.

Financial Compensation

9. No later than 6 months following this decision the Consent Holder shall provide a financial contribution of $8,000 to the Science and Environment Team at the Nelson City Council to work with local schools to improve the Saxton Creek catchment. These works shall not conflict with the flood conveyance purpose of the project that these consents provide for.

10. No later than 6 months following this decision the Consent Holder shall provide a financial contribution of $10,000 to the Science and Environment Team at the Nelson City Council to enable improvement actions for aquatic biodiversity to be carried out where appropriate within Nelson.

    Note: *The assessment of the application concluded that there were some remnant adverse effects of the activities which were not mitigated. A compensation package was proposed by the applicant. This included the financial contributions specified in conditions 9 and 10. Other aspects of the compensation package were set out in the information provide on 30 July 2019 and form part of the application. These actions will be carried out in accordance with condition 1 of this decision.*

Pre-Construction

Information Requirements/Liaison

11. Prior to commencing works, a copy of the resource consent conditions (including all certified Management Plans) shall be provided to all parties undertaking works authorised by this consent.

12. The Consent Holder shall ensure that a copy of this consent and all documents and plans referred to in this consent, are kept on site at all times and presented to any Nelson City Council officer on request.

Construction Management Plan

13. At least 15 days prior to the works commencing on site, the Consent Holder shall provide a Construction Management Plan (CMP) to the Council's Monitoring Officer for certification by the Team Leader, Resource Consents in accordance with the specifications of Condition 14.

    Note: *For the purposes of this condition, certification refers to confirmation by the Team leader Resource Consents that each of the requirements of the CMP listed in Condition 14 have been met.*

14. The CMP required by Condition 13 shall include, but not be limited to:

    (a) details of the construction methodology and any engineering plans required;

    (b) the method of creek diversion and fish salvage chosen;

    (c) a Dust, Erosion and Sediment Control Plan (DESCP) prepared in accordance with Condition 17;

    (d) a Traffic Management Plan (TMP) prepared in accordance with Condition 21;

    (e) a requirement for a pre-construction meeting between the Consent Holder, project Ecologist (as appointed in Condition 5) the contractor undertaking the works and the Council's Monitoring Officer. The pre-construction meeting is required to discuss the DESCP and TMP requirements; and

    (f) any recommendations made by the Ecologist approved by the Team Leader, Resource Consents under Condition 5.

15. Variations to the CMP shall be undertaken in accordance with the process outlined in Conditions 25 and 26, and shall be provided to Council's Monitoring Officer for certification by the Team Leader, Resource Consents prior to replacing the previously approved CMP.

Dust, Erosion and Sedimentation Control Plan

16. All practical measures shall be taken to prevent any sediment, erosion, or dust effects beyond the boundaries of the site. In case of a dust, erosion or sediment breach occurring which has more than minor adverse effects all construction activities shall cease until the breach has been remedied to the satisfaction of the Council's Monitoring Officer.

17. At least 10 days prior to the works commencing, a Dust, Erosion and Sedimentation Control (DESCP) shall be prepared and provided to the Council's Monitoring Officer for certification by the Team Leader, Resource Consents in accordance with the requirements of Condition 18.

18. The DESCP required by Condition 17 shall be drafted in accordance with the Nelson Tasman Land Development Manual 2019 and shall include, but not be limited to:

    (a) a detailed description of the works proposed, construction methodology and timetable;

    (b) details of all principles, procedures and practices that will be implemented to undertake dust, erosion and sediment control and minimise the potential for sediment discharge from the site;

    (c) the design criteria and dimensions of all dust, erosion and sediment control measures;

    (d) details of how the performance of control measures will be measured and responded to on-site, including:

        i) measurement of the quality of discharges;

        ii) the setting of trigger points for adopting control measures;

        iii) processes to be followed where triggers are exceeded, including identification of the source of the exceedance; and

        iv) where the source is from works subject to this consent the processes to be adopted in the event any control measures failing.

    (e) plans at an appropriate scale clearly identifying:

        i) the extent of disturbance and vegetation removal;

        ii) any "no go" and/or buffer areas to be maintained undisturbed;

        iii) areas of cut and fill;

        iv) all key erosion and sediment control measures, including diversion channels; and

        v) any other relevant site information;

    (f) timetable and nature of bank stabilisation;

    (g) maintenance, monitoring and reporting procedures and frequency;

    (h) rainfall response and contingency measures including inspection measures and timing, procedures to minimise adverse effects in the event of significant rainfall events and/or the failure of any key erosion and sediment control structures;

    (i) procedures for reporting any incidents resulting from a significant rainfall event to the Manager, Consents and Compliance and Council's Monitoring Officer as soon as practicable, and no later than 3 working days after the rainfall event has occurred;

(j) responsibilities and contact details of all parties responsible for the works and maintenance of all key dust, erosion and sediment control equipment and structures; and

(k) procedures and timing for review and/or amendment to the DESCP.

Note: *For the purposes of this condition, a significant rainfall event is 60 mm or more over a 24-hour period as measured at either Nelson Airport or the Tasman District Council/Nelson City Council rainfall recording site at Orphanage Creek.*

Note: *For the purposes of this condition, best practice includes the requirements of the* Nelson Tasman Land Development Manual 2019*, and may refer to the Auckland City Council Technical Publication TP90 "Erosion and Sediment Control Guidelines for Land Disturbing Activities in the Auckland Region".*

19. The control measures contained in the approved DESCP shall be implemented prior to the works commencing and shall be maintained for the duration of the works.

20. Variations to the DESCP shall be undertaken in accordance with the process outlined in Conditions 25 and 26, and shall be provided to Council's Monitoring Officer for certification by the Team Leader, Resource Consents prior to replacing the previously approved DESCP.

Traffic Management Plan

21. At least 10 working days prior to the works commencing, a Traffic Management Plan (TMP) shall be prepared and provided to Council's Monitoring Officer for certification by the relevant Engineering Officer in accordance with the requirements of Condition 22. The TMP shall outline the controls and exclusions that will be implemented to adequately manage potential adverse traffic effects.

22. The TMP shall, as a minimum, be prepared in accordance with the Nelson Tasman Land Development Manual 2019 and shall include, but not be limited to, the following:

(a) location and design of temporary site access which includes measures for the management of interactions with any other existing intersections in the vicinity. This includes the management of laden trucks leaving the site entering the existing road environment;

(b) number and size of trucks operating to and from the site;

(c) hours of operation; and

(d) contact details for the contractor on site responsible for the TMP.

23. The details in the TMP prepared in accordance with condition 22 are to be displayed onsite and shall be legible at the boundary of the site.

24. Variations to the TMP shall be undertaken in accordance with the process outlined in Conditions 25 and 26, and shall be provided to Council's Monitoring Officer for certification by the relevant Engineering Officer prior to replacing the previously approved TMP.

Variations and Certification

25. The Management Plans required by Conditions 13, 17 and 21 or any variations to the Plans shall be submitted within their respective timeframes to the Council's Monitoring Officer for certification by the Team Leader, Resource Consents or relevant Engineering Officer for the TMP.

***Note**: For the purposes of this condition, certification refers to confirmation by the Team Leader Resource Consents that each of the requirements of the CMP, DESCP and TMP listed in Conditions* 14, 18 and 22 *have been met.*

26. If certification of any management plan is withheld, the Consent Holder shall submit a revised plan to the Team Leader, Resource Consents for certification as soon as practicable. If certification of the revised plan is again withheld then the Consent Holder shall engage a suitably qualified mutually acceptable independent person for resolution of the matters of dispute and his or her decision on those matters shall be final. The costs of dispute resolution shall be met by the Consent Holder.

27. Activities which are subject to a plan shall not commence until the plan has received certification.

28. The Consent Holder shall exercise this consent in accordance with the provisions of any certified management plan (including any certified variation) at all times.

Construction

29. Rocks used in the creek bed and bank shall be sourced locally and shall be similar in colour to the rock found in the creek or nearby. Any rocks used shall be clean and free of contaminants, including Didymo, before placement.

Noise and Hours of Operation

30. Works involving machinery at the site shall only be undertaken during the hours of 7:30 am to 5:30 pm Monday to Friday and 9:00 am to 2:00 pm on Saturday, except for overnight pumping for dewatering or creek bypass which is permitted to occur as required.

***Note:** 'Overnight' means all other times outside the hours specified in Condition 30.*

31. Noise generated from the activity shall comply with New Zealand Standard NZS 6803:1999 (Acoustics - Construction Noise). Noise producing plant operating at the site (including bypass pumps) shall be fitted with silencers, and noise insulation (such as hay bales) will be used as required in order to comply with the noise limits specified in the Standard.

Works within the creek

32. Work within the channel of the creek shall occur in the dry whenever practicable.

***Note:** A dry channel can be achieved through bypass pumping, passive creek diversion or similar methodology.*

33. The Ecologist shall be on site during construction of the low flow channel to oversee rock placement and meander patterns. The Ecologist shall also supervise the placement of a minimum of 17 pools and natural log refuges and 85 Novacoil pipe refuges for instream habitat and eel refuge.

34. The addition of river gravels over the placed rock to fill the voids shall be undertaken to partly offset the loss of hyporheic habitat where the geotextile cloth is placed. The location and quantity of river gravels shall be determined by the Ecologist.

35. The Ecologist approved in accordance with condition 5 shall inspect the sediment controls, any coffer dams and temporary fish barriers/bypass regularly to ensure they are functioning properly.

36. No works shall be undertaken between 1 April and 15 August in koaro and kokopu spawning areas unless the Ecologist has determined that no spawning habitats exist or that sedimentation will not pose a risk to any spawning area.

37. The Ecologist shall be on site during the de-watering of any part of the creek bed during construction, and shall manage and supervise fish salvage activities throughout the dewatering period until fish passage is restored.

38. Fish salvage and transfer prior to and during construction work shall occur where required. The Ecologist shall monitor for the presence of migrating fish both prior to and during construction and shall make provision to bypass the construction site where necessary. The duration of any diversion shall be based on the advice of the Ecologist and shall be the minimum necessary to avoid adverse effects on fish movement.

39. If any reach of Saxton Creek is bypass-pumped during the months of September to December (inclusive), the Ecologist shall determine, on a daily basis, if fish passage should be reinstated.

Storage of machinery

40. The Consent Holder shall ensure that:

    (a) any tools and machinery are thoroughly cleaned of unwanted vegetation (e.g. weeds), seeds and soils or contaminants prior to entering the site;

    (b) no contaminants (including but not limited to oil, petrol, diesel, hydraulic fluid, or concrete) are released into water from any equipment used for the works;

    (c) all contaminant storage or re-fuelling areas are bunded or contained in such a manner so as to prevent the discharge of contaminants to water or soil; and

    (d) all machinery is regularly maintained in such a manner so as to minimise the potential for leakage of contaminants.

41. In the event of a spill of fuel, hydraulic fluid, or other liquid contaminants, immediate steps shall be taken to contain the spilt contaminant. The spilt contaminants and any material used to contain it shall be removed from the site and disposed of at landfill authorised to receive the contaminant. The Consent Holder shall also immediately notify the Council's Monitoring Officer of the spill and actions taken and to be taken.

42. The Consent Holder shall ensure that no dry cement product, unset concrete, concrete wash water or any water contaminated with concrete enters the flowing channel of the creek during, or as a result of the works.

43. All machinery on the site shall be refuelled, and any maintenance work undertaken, in such a manner as to prevent contamination of land and surface water. Spillage of contaminants to any watercourse or onto land shall be adequately cleaned up so that no residual potential for contamination of land and surface water runoff from the site occurs. If a spill of more than 20 litres of fuel or other hazardous substances occurs, the Consent Holder shall immediately inform Council's Monitoring Officer. A pollution spill kit shall be maintained on site during any construction activities.

Landscape Planting and Maintenance

44. The landscaping outlined in the Landscape Plans & Planting Establishment Plan, Prepared by Nelmac (Final Version dated 12/12/2018) shall be undertaken in the first

planting season (1 May – 31 July) following the completion of works on each stage. . Planting shall be protected from grazing animals.

45. The plantings shall be established and maintained in accordance with the Planting Establishment Plan attached to this consent (Page 10 and 11 - Landscape Plans & Planting Establishment Plan).

46. The second stage enrichment planting (Page 12 Landscape Plans & Planting Establishment Plan) shall be undertaken in the fifth planting season following construction.

Accidental Discovery Protocol

47. If any archaeological and/or cultural artefacts or remains are found, Heritage New Zealand Pouhere Taonga, the appropriate iwi representative and the Council's Monitoring Officer shall be immediately informed, and work in the immediate vicinity of the find stopped until authorisation is provided by the Heritage New Zealand pursuant to its powers granted under the Heritage New Zealand Pouhere Taonga Act 2014.

Post Construction

48. Immediately following completion of the works the working areas and creek bed shall be rehabilitated and fish passage reinstated in accordance with this resource consent and the Consent Holder shall ensure that the site is left in a neat and tidy condition.

49. Within one month following completion of the works the Consent Holder shall forward to the Council's Monitoring Officer, documentation from the Ecologist confirming that the Consent Holder has complied with all his/her instructions during the works.

50. Within 12 months following completion of works the construction works the Consent Holder shall engage a suitably qualified and experienced freshwater ecologist to undertake a survey of the fish population, weeds and water temperature within the sections of creek subject to the works. The method and extent of survey shall be determined between the Consent Holder, the project ecologist and Nelson City Council's Science and Environment Team. These inspections shall include observations of instream weed growth to determine the need for its removal in accordance with condition 54.

51. Within 12 months following completion of construction works the Consent Holder shall engage a representative agreed by Te Ātiawa Manawhenua kī Te Ihu Trust and Ngāti Tama ki Te Waipounamu Trust, at the Consent Holder cost, to undertake a Cultural Health Monitoring Programme in conjunction with the ecological assessment carried out in condition 50.

52. The results of the surveys carried out in accordance with conditions 50 and 51 shall be submitted to the Council's Monitoring Officer as soon as practicable, but no later than 3 months following the surveys.

53. Thereafter a survey of the fish population and water temperature within the creek shall be undertaken once annually (Between December to March) for three years and then once every five years for the duration of the consent. Commencing at any time after the second round of 5 yearly monitoring, if no significant trend of adverse effect between the previous two, five yearly monitoring rounds is shown the monitoring programme shall cease with the agreement of the Science and Environment Team and Council's Monitoring Officer.

54. Ongoing maintenance of the works shall involve the replacement of existing rock and other in-stream structures providing enhanced aquatic habitat and fish and eel refuge, with like for like and generally in the same position as originally constructed – unless aquatic habitat can be enhanced by works in an alternative location. Maintenance shall also involve weed removal from the active channel where the weeds are restricting fish passage. The need for the removal shall be identified through the inspections set out in condition 50. Maintenance excludes any alteration or realignment of the creek bed, and does not include gravel extraction.

55. Any post construction erosion, scour or instability of the creek bed or banks that, in the opinion of the Manager, Consents and Compliance is attributable to the works authorised by this consent shall be remedied by the Consent Holder.

ADVICE NOTES

1. This is not a building consent, and the Consent Holder shall meet the requirements of the Council for all Bylaws, Regulations and Acts.
2. This resource consent authorises only the activity described above. Any matters or activities not consented to by this consent or covered by the conditions above must either:
   (a) comply with all the criteria of a relevant permitted activity in the Nelson Resource Management Plan (NRMP); or
   (b) be allowed by the Resource Management Act 1991; or
   (c) be authorised by a separate resource consent.
3. This consent is granted to the Consent Holder, but Section 134 of the Act states that such land use consent "attach to the land", and accordingly, may be enjoyed by any subsequent owners and occupiers of the land. Therefore, any reference to "Consent Holder" in any conditions shall mean the current owners and occupiers of the subject land. Any new owners or occupiers should therefore familiarise themselves with the conditions of this consent, as there may be conditions that are required to be complied with on an ongoing basis.
4. The Consent Holder should note that this resource consent does not override any registered interest on the property title.
5. The Plans applicable to this consent are attached as one set in Appendix 1 to this decision document.

RESOURCE CONSENT DECISION 2

Resource Consent number: RM185014

Pursuant to section 104B of the Resource Management Act 1991 ("the Act"), the Nelson City Council ("the Council") hereby **grants** resource consent to:

Nelson City Council

The activity to which this decision relates:

Water permit to temporarily divert water and abstract water and groundwater during construction and maintenance works in association with Stage 3C of the Saxton Creek stormwater upgrade.

Location details: Stage 3C

Legal description and Certificates of Title:

25 Hill St – Lot 2 DP19728 (NL13A/1072)

3A Hill St – Lot 4 DP8212 (NL3C/1249)

3B Hill St - Lot 3 DP8212 (NL3C/1248)

3C Hill St - Lot 2 DP8212 (NL3D/748)

3D Hill St – Pt Lot 1 DP8212 (NL8C/678)

Nelson City Council, Local Purpose (Esplanade) Reserve – Lot 5 DP507574 (NL5D/234)

7 Hill Street – Lot 1 DP11378 (6D/415)

9 Hill Street - Lot 1 DP DP19728 DP 13371 (13A/1071)

17 Hill Street – Lot 5 DP507574 (CFR 779072)

Location co-ordinates:

1617877 E 5423833 N (NZ Transverse Mercator)

DURATION: The permit to temporarily divert and abstract water and groundwater during construction works shall expire on 23 August 2024. The permit for the same activities for ongoing maintenance work shall expire on 23 August 2054.

CONDITIONS

1. The activity shall be carried out in general accordance with the application lodged with Council on 20 December 2017 including the reports listed below, the further information provided on 15/05/2018, 12/07/2019, 29/05/2019, 6/6/2019, 23/07/2019, 30/7/19 and 9/08/2019, the attached approved plans labelled RM185014 and the following conditions of consent. Where there is any apparent conflict between the application and consent conditions, the consent conditions shall prevail.
   - *Nelson City Council, Saxton Creek Upgrade, Stage 3 - Design Drawings, Prepared by Cameron Gibson Wells Limited (Revision E Dated 30/11/17)*
   - *Design Basis Report, Saxton Creek Stormwater Upgrade - Stage 3 – 20 Ngati Rarua St to South Saxton Field - Document Number: 14000-246-RPT-010-C – Prepared by Cameron Gibson Wells Limited (24/11/2017)*
   - *Saxton Creek - Stage Three, Landscape Plans & Planting Establishment Plan, Prepared by Nelmac (Final Version dated 12/12/2018)*

- *Saxton Creek Capacity Upgrade: Stage 3: 22 Rarua Street Downstream to Saxton Field – prepared by Fish and Wildlife Services Ltd (Dated 21/11/2017)*
- *Appendix 5 - Cultural Effects Assessment - Saxton Creek Stage 3 – Prepared by Taiao/Environmental Management Unit, Wairau (Blenheim), Te Rūnanga o Ngāti Kuia Trust (7/11/2017)*

2. The Consent Holder shall advise Council's Monitoring Officer in writing, at least 5 working days prior to works commencing on site, so that monitoring of the conditions of this consent can be undertaken. Please email regulatory@ncc.govt.nz and advise the consent number RM185014.

   Note: *Failure to notify the Council as stated in the above condition may result in enforcement action.*

   Note: *A monitoring charge of $150 has been included in your invoice, as conditions of consent requiring monitoring have been imposed. This charge covers the costs involved in the first hour of monitoring compliance with the consent conditions. Where additional monitoring costs are required to determine that conditions have been met, these will be charged as provided in the Council's Fees and Charges Schedule.*

   Note*: The Consent Holder is advised that the Council applies annual environmental monitoring charges to resource consent holders to contribute to environmental monitoring and science costs. The costs for this consent will be $150 annually from 1 July 2019 until the consent expires or works are completed. For further information please contact Council's Environmental Programmes Adviser.*

3. For the purposes of, and pursuant to Section 128 of the Resource Management Act 1991, the Council reserves the right to review this consent annually commencing 12 months from the date this consent is granted, for any of the following purposes:

   (a) to modify existing conditions of consent relating to the effects of the activity on the environment;

   (b) to require the Consent Holder to adopt the best practicable option to mitigate any adverse effect upon the environment, arising from the generated effects of the activity; and

   (c) if the Council deems that it is necessary to do so in order to deal with any adverse effect on the environment which may arise from the exercise of this consent, and which is appropriate to deal with at a later date.

4. Prior to commencing works on site the Consent Holder shall engage a suitably qualified and experienced freshwater ecologist (the Ecologist) who shall be approved by the Team Leader, Resource Consents. The Ecologist shall provide on-site advice and instructions to the Consent Holder and the persons undertaking the works, on methods that must be implemented to minimise adverse effects on aquatic life and to oversee any fish salvage. The Ecologist shall be present at least at the commencement and conclusion of works and when any dewatering or diversion works are undertaken. The Consent Holder shall comply with the instructions of the Ecologist as required to meet the conditions of consent.

5. The Ecologist shall determine the flow levels at which works can be undertaken in order to minimise the effects of the activity on the ecology of Saxton Creek.

6. The Ecologist approved in accordance with condition 4 shall inspect the sediment controls, any coffer dams and temporary fish barriers/bypass regularly to ensure they are functioning properly.

7. No works shall be undertaken between 1 April and 15 August in koaro and kokopu spawning areas unless the Ecologist has determined that no spawning habitats exist or that sedimentation will not pose a risk to any spawning area.

8. The Ecologist shall be on site during the de-watering of any part of the creek bed during construction, and shall manage and supervise fish salvage activities throughout the dewatering period until fish passage is restored.

9. Fish salvage and transfer prior to and during construction work shall occur where required. The Ecologist shall monitor for the presence of migrating fish both prior to and during construction and shall make provision to bypass the construction site where necessary. The duration of any bypass shall be based on the advice of the ecologist and shall be the minimum necessary to avoid adverse effects on fish movement.

   ***Note**: Note that representatives agreed by Te Ātiawa Manawhenua kī Te Ihu Trust and Ngāti Tama ki Te Waipounamu Trust are to be given the opportunity to be involved with significant fish salvage operations as per condition 7 of land use consent RM185013.*

10. If any reach of Saxton Creek is bypass pumped during the months of September to December (inclusive), the Ecologist shall determine, on a daily basis, if fish passage should be reinstated.

11. Within one month following completion of the works the Consent Holder shall forward to the Council's Monitoring Officer, documentation from the Ecologist confirming that the Consent Holder has complied with all his/her instructions during the works.

ADVICE NOTES

1. This resource consent authorises only the activity described above. Any matters or activities not consented to by this consent or covered by the conditions above must either:

   (a) comply with all the criteria of a relevant Permitted Activity in the Nelson Resource Management Plan (NRMP); or

   (b) be allowed by the Resource Management Act 1991; or

   (c) be authorised by a separate resource consent.

2. This water permit is granted to the above-mentioned Consent Holder and relates to a particular location. Section 136 of the Act states that the Consent Holder may apply to the Council to transfer the whole or part of the Consent Holder's interest in the permit to any owner or occupier of the site in respect of which the permit is granted; or a local authority; but not to another site unless the consent or a rule in the Nelson Resource Management Plan expressly provides otherwise.

3. The Consent Holder should note that this resource consent does not override any registered interest on the property title.

4. The Plans applicable to this water permit (RM185014) are attached as one set in Appendix 1 to this decision document.

RESOURCE CONSENT DECISION 3

Resource Consent number: RM185015

Pursuant to section 104A of the Resource Management Act 1991 ("the Act"), the Nelson City Council ("the Council") hereby **grants** resource consent to:

Nelson City Council

The activity to which this decision relates:

Discharge Permit to temporarily discharge stormwater and discharge of groundwater from temporary dewatering operations during construction and maintenance works in association with Stage 3C of the Saxton Creek stormwater upgrade.

Location details: Stage 3C

Legal description and Certificates of Title:

25 Hill St – Lot 2 DP19728 (NL13A/1072)

3A Hill St – Lot 4 DP8212 (NL3C/1249)

3B Hill St - Lot 3 DP8212 (NL3C/1248)

3C Hill St - Lot 2 DP8212 (NL3D/748)

3D Hill St – Pt Lot 1 DP8212 (NL8C/678)

Nelson City Council, Local Purpose (Esplanade) Reserve – Lot 5 DP507574 (NL5D/234)

7 Hill Street – Lot 1 DP11378 (6D/415)

9 Hill Street - Lot 1 DP DP19728 DP 13371 (13A/1071)

17 Hill Street – Lot 5 DP507574 (CFR 779072)

Location co-ordinates:

1617877 E 5423833 N (NZ Transverse Mercator)

DURATION: The permit to discharge stormwater and discharge of groundwater from temporary dewatering operations during construction works shall expire on 23 August 2024. The permit for the same activities in relation to ongoing maintenance work shall expire on 23 August 2054.

Discharge to Water

Primary Type	Secondary Type	Point Source Y/N	Receiving Water Classification	Max Instant l/s	Max Annual Volume m^3	Metered Y/N	Contaminants
SW	Construction related discharges	Y	Freshwater E	NA	NA	N	Sediment

Pursuant to Section 108 of the Act, this consent is issued subject to the following conditions:

CONDITIONS

1. The activity shall be carried out in general accordance with the application lodged with Council on 20 December 2017 including the reports listed below, the further information provided on 15/05/2018, 12/07/2019, 29/05/2019, 6/6/2019, 23/07/2019, 30/7/19 and 9/08/2019, the attached approved plans labelled RM185015 and the following conditions of consent. Where there is any apparent conflict between the application and consent conditions, the consent conditions shall prevail.
   - *Nelson City Council, Saxton Creek Upgrade, Stage 3 - Design Drawings, Prepared by Cameron Gibson Wells Limited (Revision E Dated 30/11/17)*
   - *Design Basis Report, Saxton Creek Stormwater Upgrade - Stage 3 – 20 Ngati Rarua St to South Saxton Field - Document Number: 14000-246-RPT-010-C – Prepared by Cameron Gibson Wells Limited (24/11/2017)*
   - *Saxton Creek - Stage Three, Landscape Plans & Planting Establishment Plan, Prepared by Nelmac (Final Version dated 12/12/2018)*
   - *Saxton Creek Capacity Upgrade: Stage 3: 22 Rarua Street Downstream to Saxton Field – prepared by Fish and Wildlife Services Ltd (Dated 21/11/2017)*
   - *Appendix 5 - Cultural Effects Assessment - Saxton Creek Stage 3 – Prepared by Taiao/Environmental Management Unit, Wairau (Blenheim), Te Rūnanga o Ngāti Kuia Trust (7/11/2017)*
2. The Consent Holder shall advise Council's Monitoring Officer in writing, at least 5 working days prior to works commencing on site, so that monitoring of the conditions of this consent can be undertaken. Please email regulatory@ncc.govt.nz and advise the consent number RM185015.

   Note: *Failure to notify the Council as stated in the above condition may result in enforcement action.*

   Note: *A monitoring charge of $150 has been included in your invoice, as conditions of consent requiring monitoring have been imposed. This charge covers the costs involved in the first hour of monitoring compliance with the consent conditions. Where additional monitoring costs are required to determine that conditions have been met, these will be charged as provided in the Council's Fees and Charges Schedule.*

   Note*: The Consent Holder is advised that the Council applies annual environmental monitoring charges to resource consent holders to contribute to environmental monitoring and science costs. The costs for this consent will be $150 annually from 1 July 2019 until the consent expires or works are completed. For further information please contact Council's Environmental Programmes Adviser.*
3. The discharge associated with the construction works shall cease within 2 years from the date construction commences on site. Discharge of stormwater and groundwater from temporary dewatering operations relating to ongoing maintenance of the works may be undertaken for the duration of the consent. For the purpose of this consent "maintenance" means maintenance of the rock bed and batter protection, involving replacement or repositioning of damaged rock protection, maintaining and replacing planting as necessary but not alteration or realignment of the creek bed, or gravel extraction.

4. For the purposes of, and pursuant to Section 128 of the Resource Management Act 1991, the Council reserves the right to review this consent annually commencing 12 months from the date this consent is granted the following purposes:
   (a) To modify existing conditions of consent relating to the effects of the activity on the environment;
   (b) To require the Consent Holder to adopt the best practicable option to mitigate any adverse effect upon the environment, arising from the generated effects of the activity; and
   (c) If the Council deems that it is necessary to do so in order to deal with any adverse effect on the environment which may arise from the exercise of this consent, and which is appropriate to deal with at a later date.
5. The Consent Holder shall take all practicable steps to minimise sedimentation and increased turbidity of the Creek during construction works and during maintenance works , including:
   (a) completing all works in the minimum time practicable;
   (b) undertaking works in dry weather and low flow conditions, as far as practicable;
   (c) avoiding placement of construction material or excavated material in the flowing channel of the Creek;
   (d) installing and maintaining appropriate erosion and sediment control measures; and
   (e) rapidly and progressively stabilising all disturbed areas.
6. The Consent Holder shall ensure that, after a reasonable mixing zone, any discharge from the site shall not give rise to any of the following effects in the receiving water:
   (a) the production of any conspicuous oil or grease films, scums or foams, or floatable or suspended materials; or
   (b) any emission of objectionable odour; or
   (c) any significant adverse effects on aquatic life.

   ***Note**: For the purpose of this condition, the reasonable mixing zone shall be as defined in the Nelson Resource Management Plan AP28.7.ii and relates to the stream classification of Saxton Creek being Class E – Extremely degraded.*
7. Prior to commencing works on site the Consent Holder shall engage a suitably qualified and experienced freshwater ecologist (the Ecologist) who shall be approved by the Team Leader, Resource Consents. The Ecologist shall provide on-site advice and instructions to the Consent Holder and the persons undertaking the works, on methods that must be implemented to achieve compliance with condition 6 and to minimise adverse effects on aquatic life. The Ecologist shall be present at least at the commencement and conclusion of any discharges arising from the work. The Consent Holder shall comply with the instructions of the Ecologist as required to meet the conditions of consent.
8. The Ecologist approved in accordance with condition 7 shall inspect the water quality controls regularly to ensure they are functioning properly.
9. No discharge of stormwater or groundwater from temporary dewatering operations shall be undertaken between 1 April and 15 August in koaro and kokopu spawning areas unless the Ecologist has determined that no spawning habitats exist or that sedimentation will not pose a risk to any spawning area.

10. The Ecologist shall be on site during the discharge of stormwater and discharge of groundwater from temporary dewatering operations during construction and maintenance, and shall manage and supervise water quality throughout the discharge period.

11. Within one month following completion of the works the Consent Holder shall forward to the Council's Monitoring Officer, documentation from the Ecologist confirming that the Consent Holder has complied with all his/her instructions during the discharge of stormwater and discharge of groundwater from temporary dewatering operations.

ADVICE NOTES

1. This resource consent authorises only the activity described above. Any matters or activities not consented to by this consent or covered by the conditions above must either:

   (a) comply with all the criteria of a relevant Permitted Activity in the Nelson Resource Management Plan (NRMP); or

   (b) be allowed by the Resource Management Act 1991; or

   (c) be authorised by a separate resource consent.

2. This discharge permit is granted to the above-mentioned Consent Holder and relates to a particular location. Section 137 of the Act states that the Consent Holder may apply to the Council to transfer the whole or part of the Consent Holder's interest in the permit to any owner or occupier of the site in respect of which the permit is granted; or a local authority; but not to another site unless the consent or a rule in the Nelson Resource Management Plan expressly provides otherwise.

3. The Consent Holder should note that this resource consent does not override any registered interest on the property title.

4. The Plans applicable to this discharge permit (RM185015) are attached as one set in Appendix 1 to this decision document.

COMBINED DECISION REPORT OF THE COMMISSIONER APPOINTED BY THE NELSON CITY COUNCIL

INTRODUCTION

Context

The Nelson City Council (the Council) appointed me as an independent Commissioner, pursuant to section 34A of the Resource Management Act 1991 (RMA), to make a decision on resource consent applications RM185013, RM185014 and RM185015 lodged by the Council for Stage 3C of the Saxton Creek Stormwater Upgrade.

This report has been prepared pursuant to section 104A, B and D of the Resource Management Act 1991.

Saxton Creek is a small watercourse near the Nelson City Council boundary with Tasman District Council. The creek has two branches, the North Branch which arises in the foothills on the Nelson City side of the boundary and the South Branch which arises in the Tasman District. These applications relate to the South Branch, but affect a small part of the North Branch where the two branches join.

Saxton Creek has been subject to flooding, and was badly affected by the December 2011 storm event and the April 2013 flood. The catchment is also receiving more stormwater from the new housing and the rest home development between Champion Road and Saxton Field.

Work to upgrade the Creek to accommodate a 1 in 100 year flood event has been undertaken in stages. Resource consents have been granted for Stage 1 and 2 and the works have been completed. The construction of Stage 3 is proposed to be completed in three phases (being 3A, 3B and 3C) in recognition of the different land ownerships, to ensure access is maintained for residents and to ensure existing stormwater infrastructure is not compromised. This suite of three applications relate to stage 3C as shown in Figure 1. There are nine applications in total for the works associated with Stage 3.

Although the works are principally to upgrade the flood capacity of the creek, the proposal will also involve completion of a walking/cycling pathway connecting Saxton Field to Champion Road via the Ngati Rārua Street esplanade pathway. The work will establish the creek completely within a publicly-owned esplanade reserve, and includes improvements to fish passage, the creation of instream pools and fish/eel refuges and landscaping and planting within the esplanade to provide shade and fish habitat.

Notification and Submissions

The applications were publicly notified on 11th of August 2018. Copies of the applications were served on the eight Te tau ihu iwi and the relevant statutory bodies including the Department of Conservation.

Council received submissions from Mr Andrew Litchfield who owns the property at 7 Hill Street North, he requested that some existing native trees and shrubs be retained. Following a meeting with Council staff Mr Litchfield withdrew his submission and right to be heard.

Council also received submissions from two iwi, Ngāti Tama and Te Ātiawa and from Wakatu (representing 4 iwi Ngāti Koata, Ngāti Rārua, Ngāti Tama and Te Ātiawa).

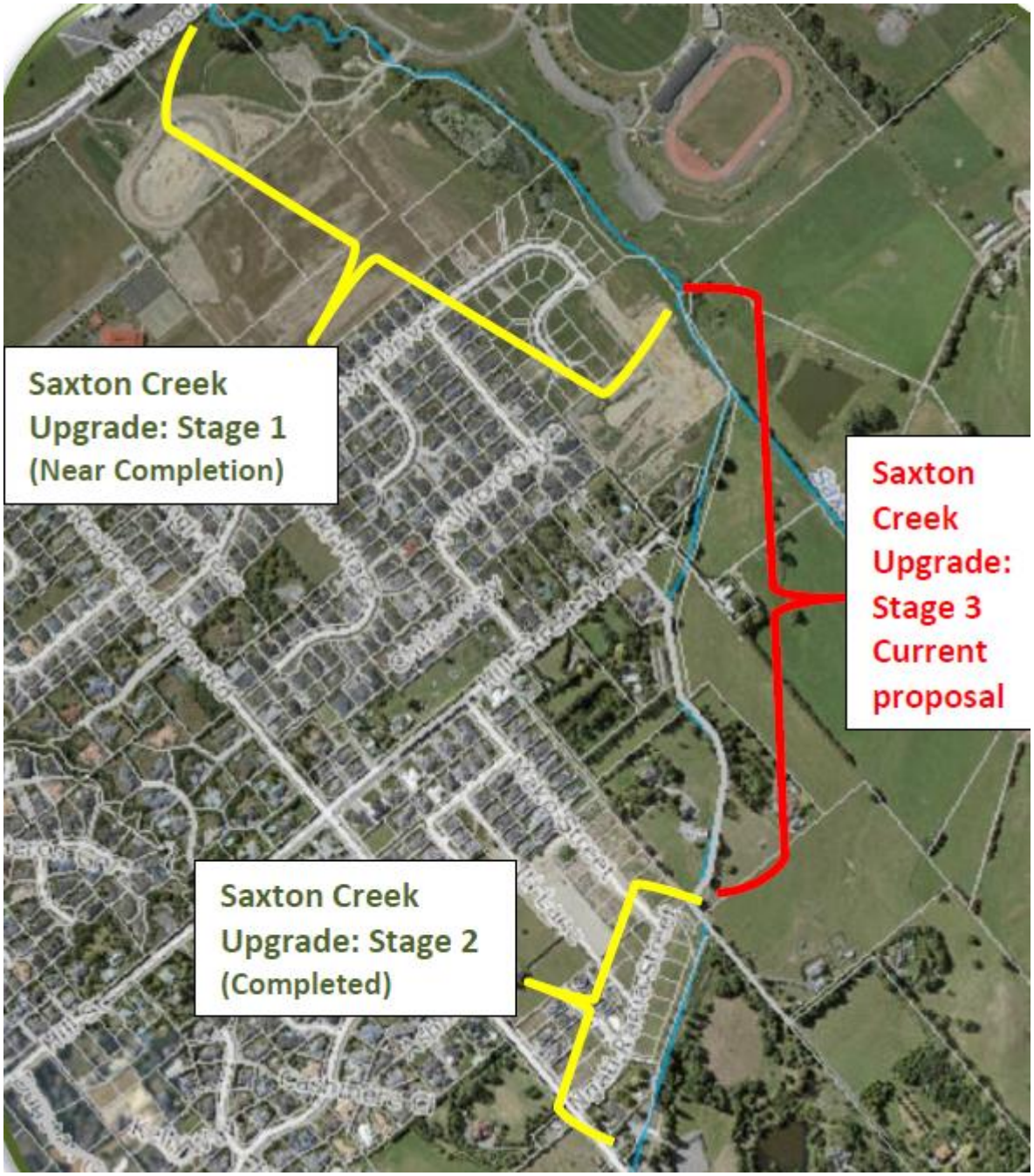


Figure 1 – Location of Stage 3 relative to stage 1 and 2.

Ngāti Tama neither supported nor opposed the applications. They expressed concerns about a lack of consultation and a desire to be involved with some of the activities including fish salvage and improving fish passage, rehabilitation and restoration. They indicated a preference for the creation of wetlands and the improvement of the Mauri and Wai of the creek. Ngāti Tama wished to be heard but supported the grant of consent subject to conditions.

Te Ātiawa neither supported nor opposed the applications. They submitted that the applications are not consistent with Part 2, Section 6 (e) or 7 (a), (f) and (g), and they also expressed concerns about consultation, but did not wish to be heard.

Wakatu supported the applications. They also expressed concerns about the lack of consultation and wished to be heard, but supported the grant of consent subject to conditions.

In response to the submissions the applicant convened a pre-hearing meeting on 1 November 2018 facilitated by Reginald Proffit. It was noted that for the Stage 3 works a Cultural Effect Assessment was prepared by Ngāti Kuia, however, it only represented Ngāti Kuia, Ngāti Apa and Rāngitane.

Te Ātiawa advised that they were not in a position to consult without the attendance of Mr Ian Shapcott. Ngāti Tama confirmed that they were not in a position to consult without the attendance of Jacki Ngawaka. Wakatu requested direct consultation with Ngāti Koata, Ngāti Rārua, Ngāti Tama and Te Ātiawa. They confirmed that if consultation was undertaken and the matters raised by iwi addressed, that would address their concerns.

It was agreed that once further meetings had been held, the Applicant would provide a summary of the further consultation and any amendments made to the applications in response to the consultation, which would then be provided to the respective iwi to review and sign.

The further meeting was held on 15 November 2018. Following the meeting Council left with several matters to consider, that were subsequently resolved. Council then confirmed the applications and volunteered a number of actions and consent conditions, including the involvement of an iwi monitor at specified times, a start-up Hui, enrichment planting in the fifth season following completion of the works, a cultural health monitoring programme and ongoing surveys of fish populations and temperature.

The applicant provided confirmation that, subject to the above actions and consent conditions, Wakatu, Ngāti Koata, Ngāti Rārua, Ngāti Tama and Te Ātiawa were adequately consulted and withdrew their right to be heard.

DESCRIPTION OF PROPOSAL

Stage 3C includes the upgrade of the channel between Stage 3A and Stage 3B as shown in Plans C, D and E attached to these consents. This stage will include the channel upgrade, footpath construction, landscape planting and short timber retaining walls in localised places resulting from the undulating topography on the adjacent land. There are four HAIL sites along this reach which will be affected by earthworks.

Stage 3A must occur first to ensure access to numbers 3A, 3B, 3C and 3D Hill Street is maintained. Stages 3B and 3C can then be progressed independently or together.

Stages 3B and 3C will include the installation of a number of electrical ducts under the new channel to allow the existing overhead power lines to be installed underground.

The consents sought are outlined below. This combined decision report covers the following applications in association with Stage 3C of the upgrade:

(a) RM185013: Land use consent for:

- removal of existing obstructions (including vegetation, the culvert at 3 Hill St and gravel) from the bed of the creek;
- realignment and filling redundant portions of the bed of the Creek;
- construction and ongoing maintenance of the creek bed and batter protection with rock;

- disturbance of the creek bank and erection of structures;
- vegetation removal;
- earthworks to widen, realign and to fill the creek bed, and for landscaping;
- installation and removal of temporary culverts during construction; and
- temporary Construction Noise in excess of the permitted residential and rural limits.

(b) RM185014: Water permit to temporarily divert water and abstract water and groundwater during construction and maintenance works in assocaition with Stage 3C.

(c) RM185015: Discharge Permit to temporarily discharge stormwater and discharge of groundwater from temporary dewatering operations during construction and maintenance works in association with Stage 3C.

ZONING AND OVERLAYS

According to the Nelson Resource Management Plan, the following apply to the stage 3C area:

Zone	Location
Residential Zone	7, 9, 17 and 25 Hill St
Rural Zone (Higher Density Small Holdings Area)	3D Hill St
Rural Zone	Esplanade reserve downstream of 3D Hill St
Overlay	Location
Riparian Overlay	Stage 3C area
Flood Path notation	Stage 3C area

PLAN RULES AFFECTED

Land Use	Status
RUr.25 and 29 - Vegetation Clearance	Controlled
RUr.27 and REr.61 – Earthworks (Earthworks to realign and to fill existing creek bed)	Restricted Discretionary
FWr.1 – Disturbing River (Removal of an existing culvert from the bed of a stream) FWr.5 - Installation and removal of temporary culverts during construction works FWr.10 – Realigning Stream (Realignment of the bed of Saxton Creek) RUr.58 and REr.71– Riparian Overlay (Land use consent for disturbance of river banks and erection of a bridge within the Riparian Overlay) REr.82 - Flood Path (Earthworks in the Residential Zone within the Flood Path) REr.43 and RUr.47 – Temporary Construction Noise in excess of the permitted residential and rural limits	Discretionary

FWr.9 - Depositing material in stream bed (rock lining, habitat enhancement, filling disused streambed)	Non-Complying
Water Permit	Status
FWr.13 – Temporary diversion of water	Discretionary
Discharge Permit	Status
FWr.22 – Temporary Discharge of Stormwater during construction and maintenance	Controlled

Riparian Overlay

Saxton Creek is subject to the Riparian Overlay. Saxton Creek is defined as having riparian values as follows:

- Conservation (aquatic habitat) priority 3;
- Access coast to Champion Road;
- Hazard mitigation flood capacity; and
- Recreation.

Ten metre wide esplanade reserves were set aside adjoining the Creek by Consent Order. They have played a key part in driving the design of the watercourse and have limited to some degree the available options to provide for instream values as part of the Q100 design.

Flood Path Notation

There is a Flood Path applying to Saxton Creek, defining a 15m wide flood path from the top of each bank. The esplanade reserve width is 10 metres from the top of the bank.

Overall Activity Status: Non-Complying and requires assessment under RMA section 104D.

REASONS FOR THE DECISION

Assessment of Effects

The Applicant has prepared an assessment of environmental effects (Annexure A) that I adopt in part under section 113(3) (i) of the RMA, including the following reports:

- *Nelson City Council, Saxton Creek Upgrade, Stage 3 - Design Drawings, Prepared by Cameron Gibson Wells Limited (Revision E Dated 30/11/17)*
- *Design Basis Report, Saxton Creek Stormwater Upgrade - Stage 3 – 20 Ngati Rarua St to South Saxton Field - Document Number: 14000-246-RPT-010-C – Prepared by Cameron Gibson Wells Limited (24/11/2017)*
- *Saxton Creek - Stage Three, Landscape Plans & Planting Establishment Plan, Prepared by Nelmac (Final Version dated 12/12/2018)*
- *Saxton Creek Capacity Upgrade: Stage 3: 22 Rarua Street Downstream to Saxton Field – prepared by Fish and Wildlife Services Ltd (Dated 21/11/2017)*
- *Appendix 5 - Cultural Effects Assessment - Saxton Creek Stage 3 – Prepared by Taiao/Environmental Management Unit, Wairau (Blenheim), Te Rūnanga o Ngāti Kuia Trust (7/11/2017)*

The applications included a set of volunteered conditions and an assessment of the effects of the activities on the environment (AEE). The applications have involved an appropriate level of design and assessment of effects and has proposed mitigation measures and volunteered conditions which will generally avoid, remedy or mitigate the adverse effects identified. The volunteered conditions include works off site and a financial contribution towards work within the Saxton Creek catchment and elsewhere to improve aquatic habitat and to offset the residual adverse effects that were unable to be addressed on site.

For completeness, I note that the key environmental effects (principal issues) associated with the activities are the effects of the activity on:

- Hazard mitigation flood capacity;
- Conservation (Aquatic Habitat);
- Access;
- Recreation;
- Archaeological and Cultural Finds;
- Construction effects; and
- Cultural effects.

These are addressed in turn in the following paragraphs.

Hazard mitigation/flood capacity

The Stage 3 section of Saxton Creek currently has very limited flood flow capacity. The Nelson Tasman Land Development Manual 2019 requires a 1% AEP overall system capacity for Saxton Creek. The design capacity of the proposed works will achieve a 1% AEP flow capacity.

Conservation (Aquatic Habitat)

The AEE on aquatic values notes that the Creek and fishery has endured significant natural and human-induced events over the years, in particular the last six years. A habitat assessment indicates that the existing habitat values are generally degraded and on average don't meet 50% of the maximum habitat indicators. Water quality within the creek has been classified at 'extremely degraded' or 'degraded' with elevated levels of nitrogen, sedimentation, *E.coli* and poor turbidity.

The AEE acknowledges that the reach is important because it still contains habitats for indigenous species such as the longfin eel that is in "National Decline" status. It notes that while the existing habitat is degraded there are two pools and some willow shade trees and overhanging grasses and incised banks that provide some shade and cover. The AEE acknowledges that pools and willow trees will be lost and there will be a loss of hyporheic habitat where the geotextile cloth is placed. However, this would be partially offset by:

- the requirement for an ecologist to provide on-site advice and instructions on methods that must be implemented to minimise adverse effects on aquatic life;
- the placement of logs for instream habitat and novacoil pipe for eel refuges; and
- significant riparian planting.

Following consideration of submissions and pre-hearing meetings with iwi and Council, the applications were amended. The amendments included the following additional mitigation measures;

- the provision of a total of 17 pools;

- the provision of 85 novacoil refuges;
- the distribution of river gravel over the placed rock to fill the voids to offset the loss of hyporheic habitat; and
- a more robust planting plan.

The amended applications were reviewed by an Ecologist, Ms McArthur from the Catalyst Group. A matrix of ecological effects and proposed avoidance, remediation or mitigation and potential for biodiversity off-setting or environmental compensation was compiled and some residual adverse effects were identified. She considered that the loss of residual ecological values (and therefore the biodiversity gains needed to off-set those losses) could not be adequately quantified and in the circumstances, many of the principles of biodiversity off-setting were unable to be met using best practice methodologies. It was suggested that the applicant volunteer some environmental compensation commensurate with the residual effects of the activity that were unable to be avoided, remedied or mitigated through consent conditions.

Following this the Applicant volunteered environmental compensation including:

- additional planting within the previously consented Stage 2 area up to the existing bridge at the Riding for the Disabled;
- the removal of nuisance weeds where they have adverse effects on fish passage from the upstream and proposed reach;
- restoration and enhancement of īnanga spawning habitat in the lower reaches of the Creek; and
- an $8,000 contribution towards NCC's environmental education programme, all to be targeted at Saxton Creek.

The area immediately upstream of Main Road Stoke (in Stage 1 of the works) had previously been identified as a potential inanga spawning area and work was undertaken during Stage 1 to establish/improve this.

Further work in stage 1, and other improvements volunteered within the completed stage 2 and proposed stage 3 will further expanded the wider habitat and fish passage for inanga. The Applicant has volunteered to develop a planting plan and implement planting to improve spawning in this area.

Table 1 below provides Ms McArthur's summary matrix of the ecological values affected by the works and effects addressed through the RMA hierarchy and residual effects.

Table 1 - Summary matrix of ecological values affected

Ecological values affected	Proposed avoidance, remediation or mitigation	Residual effects
Stream bed hyporheic habitat lost 880 lineal metres (1.17 m average width), or 1030 m^2	Invertebrate hyporheic habitat: remediated through gravel infill of rock lining to be included in consent conditions	Deeper hyporheic habitat will be permanently unavailable to fish, even if bed sedimentation is reduced in future
Net stream length lost 25 metres	Nil	Permeant loss of 25 m stream length
Water temperature increase and stream shade lost	Partially mitigated through planting plan and inclusion of tree lucerne to provide rapid	Residual temperature and loss of shade effects are expected even after full tree growth,

(including potential shade) Current stream shading estimated to be 66% of 850 m affected reach, or 561 m of shaded stream Final long-term stream shading (after proposed plant growth) was unable to be quantified	stream shading as other planting grows Lag time (~1.5 – 2 years for tree lucerne growth) until partial shading of 561 affected metres of stream Additional shading of upstream reaches from earlier upgrade works by tree lucerne proposed as environmental compensation	particularly during midday sun conditions as channel cross section requires most shade planting to occur well back from the stream edge Additional planting of tree lucerne in upstream reaches (environmental compensation) will partially mitigate permanent temperature and shade effects of existing (previously consented) activities
Inputs of wood and leaves (ecological function)	Partially mitigated through planting plan and addition of tree lucerne in affected and upstream reaches	Residual effect which will lessen over time, although some permanent reduction of woody inputs still expected due to channel cross section and distance of woody trees from stream edge
Existing pool habitats = 31	Partially remediated through creation of 17 pools in the affected reach associated with log refuges with minimum depth of 300 mm and an average spacing of 50 m (to be constructed with ecological advice) to be included in consent conditions	Permanent loss of 14 pool habitats
Instream refuges lost (bank overhang, woody debris, tree roots) Number of existing refuges unable to be quantified	Remediated through provision of artificial refuges: 17 log refuges associated with recreated pools and nova coil refuges at least every 10m (~85 in total)	Unable to be quantified but likely to be minimal
Fish passage (including to spawning habitats)	Remediated and potentially improved (although note most species are good climbers in Saxton Creek)	Potential net benefit to fish passage
Change in substrate size and type	Mitigated by gravel added to low flow channel (see invertebrate hyporheic habitat above) to be included in consent conditions	Nil

Ms McArthur acknowledged that the applicant had volunteered an environmental compensation package and that there will be beneficial effects of the compensation on some aspects of the ecological values of Saxton Creek. However, there remained some residual adverse effects, and in her opinion the benefits of the environmental compensation cannot be quantified against the losses.

Further offsetting was considered by the applicant. An alternative site for restoration of instream values was identified within Orchard Stream which could have involved the

creation of a back channel in the lower reaches to provide for habitat for giant bullies and giant kokopu. However, this approach was not preferred by the applicant because it required work within another catchment and a high probability that separate resource consents would be required, which would mean the approval of one consent would be contingent on the approval of another.

Instead the applicant volunteered a further financial contribution of $10,000 to the Science and Environment Team to enable improvement actions for aquatic biodiversity to be carried out where appropriate within Nelson. This was considered to be the most feasible method of enabling works to be completed while not having one consent being contingent on another.

It is acknowledged that in addition to the financial compensation to facilitate habitat enhancement elsewhere as set out above, mitigation measures outlined below had already been volunteered during the consideration of the applications:

- Creation of pools and natural log refuges (17);
- Novacoil refuges (85);
- Enhanced landscape plans, that include the addition of grasses immediately adjacent to the waterway, bulking out of planting along the eastern boundary, higher percentage of faster growing trees and shrubs, increased initial plant sizes;
- Enrichment planting in the fifth season following construction;
- Placement of river gravels within the voids between rocks;
- A low flow channel to maintain water depth;
- Exclusion of stock from the waterway; and
- Improvements to fish passage.

The existing degraded state of Saxton Creek is also acknowledged, as is the primary reason for the works, which is to improve the flood carrying capacity of the creek within the confines of the narrow esplanade area set aside for that purpose.

Overall, I consider that, although residual adverse effects remain, the remediation and mitigation and compensation package is appropriate in the circumstances. The site is somewhat unique due to the design of the previously authorised works upstream and downstream of the site and the width of the corridor within which the Council is able to work.

Access and Recreation

One of the aims of the work already undertaken as part of the first two stages of the upgrade is to facilitate public access to and along the length of Saxton Creek. The proposed works for Stage 3 will complete the shared path along the Creek for existing and future residents. This is a positive effect of the applications.

Archaeological or Cultural Finds

The creek is understood to be man-made, created when the wider area was drained prior its development for farming. There are no sites of archaeological or cultural interest identified in the Nelson Resource Management Plan or the Archaeological Association Register. It considered unlikely that the works will encounter any archaeological or cultural artefacts/sites. An accidental discovery protocol condition has been volunteered in order to avoid adverse effects if any items or sites are uncovered during the work.

Construction Effects

There will be some adverse effects for considerable periods of time during construction works, involving excavation, delivery of materials and construction activity. The applicant has volunteered a condition requiring compliance with the construction noise standard NZS 6803:1999.

In order to minimise adverse effects on nearby landowners the applicant has restricted the hours of operation to 7:30am to 5:30pm Monday to Friday, and 9am to 2pm Saturday. Compliance with the construction noise standard will ensure that construction noise effects will be minimised and will be similar to existing building construction activities being undertaken in the vicinity of the site.

The volunteered conditions of consent provide for a traffic management plan and appropriate controls and exclusions to minimise and manage any adverse effects on the roading network. The volunteered conditions also include the provision of a dust, erosion and sediment control plan to avoid, remedy or mitigate potential effects arising from earthworks and cartage of material.

Cultural Effects

The Cultural Effect Assessment (CEA) submitted with the applications made a number of recommendations to address the adverse effects of the work on cultural values. These included:

- the use of best practice methodologies to manage sediment discharges;
- the removal and protection of fish during the works;
- the re-establishment of suitable habitat prior to their re-introduction;
- the restoration of restore public access; and
- the restoration of riparian plantings using hardy species that provide berries, nectar and attract insects for birds and plants that can be used for Rongoā, traditional Māori medicine.

As mentioned earlier in this report Council received submissions from iwi. In response to the submissions the applicant held a pre-hearing meeting on 1 November 2018 facilitated by Reginald Proffit. It was noted that for the Stage 3 works a Cultural Effect Assessment was prepared by Ngāti Kuia and only represented Ngāti Kuia, Ngāti Apa and Rāngitane.

Wakatu requested direct consultation with Ngāti Koata, Ngāti Rārua, Ngāti Tama and Te Ātiawa. They confirmed that if consultation is undertaken and the matters raised by iwi are addressed, that would address their concerns. Te Ātiawa advised that they were not in a position to consult without the attendance of Mr Ian Shapcott. Ngāti Tama confirmed that they were not in a position to consult without the attendance of Jacki Ngawaka.

At the pre-hearing meeting it was agreed that once further meetings had been held, the Applicant would provide a summary of the further consultation and any amendments made to the applications in response to the consultation, which would then be provided to the respective iwi to review and sign.

The further meeting was held on 15 November 2018. Following the meeting Council left with several matters to consider, that were subsequently resolved. Council then confirmed the applications and volunteered a number of actions and consent conditions, including the involvement of an iwi monitor at specified times, a start-up Hui, enrichment planting in the

fifth season following completion of the works, a cultural health monitoring programme and ongoing surveys of fish populations and temperature.

The applicant provided confirmation that, subject to the above actions and consent conditions, Wakatu, Ngāti Koata, Ngāti Rārua, Ngāti Tama and Te Ātiawa were adequately consulted and withdrew their right to be heard.

Overall, I am satisfied that, subject to the volunteered conditions, the adverse effects of the activities on cultural values will be acceptable.

My decision relies on the professional opinions and assessments that have been provided by the applicant in the preparation of the applications, the further information, and recommendation of the Council's independent consultant (Ms Rosalind Squire).

Policy Statements and Plan Provisions

In considering these applications, I have had regard to the matters outlined in Part II, section 104 and 107 of the RMA. In particular, I have had regard to the relevant provisions of the Nelson Resource Management Plan and the National Policy Statement for Freshwater Management.

Nelson Resource Management Plan

The following objectives and policies in the Nelson Resource Management Plan are considered relevant:

District Wide Objective DO6.1 (Riparian and Coastal Margins) – The works seek to mitigate the potential adverse effects of natural hazards on people and property. The existing riparian margin is considered to have relatively low value due to the limited extent of planting and its form. The mitigation proposed including initial and enrichment planting, improvements to fish passage, provision of instream pools and refuges, the filling of voids and weed removal will improve the riparian margin, the natural functioning of the watercourse and provide habitat for aquatic and terrestrial flora and fauna.

District Wide Objective DO13A.2 (Improving Connections) - The works are consistent with this objective as they will restore aspects of the original vegetation, will help enhance biodiversity, and contribute to improved use and connectivity within the area.

Rural Objective RU3 (Protection of Amenity) – The activity will not be contrary to this objective. The hours of operation will be limited to those normally anticipated in a residential zone and will be similar to that expected in the rural environment, or as a result of the ongoing construction in the immediate vicinity of the site.

District Wide Objective DO17.1 (Effects in beds & margins of rivers) and policies DO17.1.3 (Flood damage), DO17.1.4 (Planting in the beds of rivers and lakes), DO17.1.5 Planting in riparian margins) and DO17.1.10 (Deposition of material in beds and on banks of rivers).

The proposal is generally consistent with the district wide objectives and policies. The works are designed to accommodate a 1% AEP (Q100) flood flow which is consistent with the requirement of the Nelson Tasman Land Development Manual 2019. The planting will enhance the amenity and in-stream habitat and values and proposes species that will not impede flood flow. The rock armouring and geotextile cloth will avoid erosion of the creek bed and margins and therefore is consistent with the Policy 17.1.10. The requirement for an ecologist to provide on-site advice and instructions on methods that must be

implemented will avoid, remedy and mitigate the adverse effects on aquatic habitat to an acceptable level. The methods include:

- The creation of pools and placement of logs for instream habitat and novacoil pipe for eel refuges;
- Planting of the riparian margins to provide habitat and shade; and
- Distribution of river gravel over the placed rock to fill the voids to offset the loss of hyporheic habitat.

The financial compensation will also enable a degree of offset mitigation within the catchment and elsewhere.

Overall, I agree with the assessment in the applications that the proposal is consistent with, and helps achieve, the relevant objectives and policies of the Nelson Resource Management Plan.

National Policy Statement for Freshwater Management

The following objectives and policies in the National Policy Statement for Freshwater Management are considered relevant:

Objective A1 - To safeguard the life-supporting capacity, ecosystem processes and indigenous species including their associated ecosystems, of fresh water and the health of people and communities, at least as affected by secondary contact with fresh water; in sustainably managing the use and development of land, and of discharges of contaminants.

Objective A2 - The overall quality of fresh water within a region is maintained or improved while:

a) protecting the significant values of outstanding freshwater bodies;

b) protecting the significant values of wetlands; and

c) improving the quality of fresh water in water bodies that have been degraded by human activities to the point of being over-allocated.

Objective B1 - To safeguard the life-supporting capacity, ecosystem processes and indigenous species including their associated ecosystems of fresh water, in sustainably managing the taking, using, damming, or diverting of fresh water.

Overall, I agree with the assessment in the applications that the proposal is consistent with, and helps achieve, the objectives of the National Policy Statement for Freshwater Management.

There will be residual adverse effects. However, the design and construction of the watercourse will be overseen by an Ecologist approved by the Council. The restoration of the bed of the creek will include the construction of a low flow channel, the re-use of gravel/cobble/rock bed material and their strategic placement to enhance in-stream values. The works will re-create pool habitats and log refuges and novacoil refuges for eels. The planting plan recognises the need to shade the north facing exposed stream bed, with shade trees, planting into the rock work and top edge to reduce heat transfer. Vegetation will be enhanced to facilitate bank naturalisation, canopy and shade cover for the creek. Enrichment planting is proposed five years following the works to further enhance riparian and instream shading and bio-diversity.

Much of the existing riparian margins have not been manged well, are grazed and lack significant riparian planting and are overgrown with weeds in places. The planting plan will

provide an attractive riparian margin on maturity with shade trees and leaf litter to support indigenous fish habitat. Further planting is proposed within the previously consented section of the creek (upstream). A programme of weed management will be undertaken within the affected and other reaches within the wider creek and Inanga spawning areas downstream of the site will be enhanced by additional planting.

In the medium term the works are expected to result in more fish abundance levels than there are currently. The diversity and relative abundance of some species will change as a result of less pool habitat and more run/riffle habitat. This will be a positive outcome for some species such as inanga. It is not fully understood if shaded pool cover, habitat for banded kokopu, will return to levels that existed prior to the capacity upgrade works within the affected reaches. However, fish passage for migrating juvenile banded kokopu and koaro to the upland habitats in the left and right branches of Saxton Creek has improved with the removal of previous obstructions as part of the capacity upgrades already completed.

The financial contribution will contribute to the enhancement of aquatic habitat within the Saxton Creek catchment and elsewhere in Nelson.

Section 104D RMA Non-Complying Activities

Under section 104D of the Act, non-complying activities have to pass one of two 'gateway tests' before they can be considered under section 104 of the Act. The Act states that a consent authority may grant consent for a non-complying activity if it is satisfied that either:

a) the adverse effects of the activity on the environment will be minor; or

b) the applications are for activities that will not be contrary to the objectives and policies of the relevant plan.

The aquatic AEE determined that the adverse effects on the environment would be more than minor, despite the mitigation proposed. Hence, the applications do not meet part a) of the 'gateway test'.

The objectives and policies of the NRMP have been considered previously. I conclude that the proposal is not contrary to the objectives and policies of the NRMP. Therefore, the applications pass the section 104D RMA gateway test via subsection (b). As such, the consent authority can consider the applications under section 104 and make a determination.

Section 107 RMA

Section 107 of the Resource Management Act (RMA) is relevant because the works involve the discharge of contaminants into water. The only effect of any significance which is likely to occur is a conspicuous change in the colour or visual clarity of the water for short periods. However, the implementation of a Dust, Erosion and Sedimentation Plan, use of diverted flows around the construction area and working in the dry where practicable will ensure that the level of change does not cause significant or permanent adverse effects on downstream water quality and on the receiving environment. Also, a water quality condition has been included in the decision. Any discharge will be temporary and short term, with silt levels managed in accordance with best practice. As such I consider that the applications comply with the requirements of Section 107.

Part II Resource Management Act (the Act)

The applicant has provided an assessment against Part 2 of the Act and I generally agree and adopt that assessment for the purposes of this decision. I consider that granting these applications achieves the purpose of the Act as presented in section 5.

Section 6 of the Act sets out those matters of national importance that are to be recognised and provided for in achieving its purpose. In the context of these applications section 6 (a), (c), (d), (e) and (h) are most relevant.

There are no areas of significant indigenous vegetation affected by the works. However, the Creek provides habitat for significant indigenous fauna (eels and other native fish). Although fish passage will be improved and instream habitat provided, residual adverse effects on these species remain. However, the mitigation proposed and compensation package will enhance instream values within the previously consented sections of Saxton Creek and habitat for significant indigenous fauna elsewhere within the Nelson Region.

Section 6(d) requires the maintenance and enhancement of public access to and along rivers, the coastal and lakes. The proposal will establish public access where none currently exists.

Section 6(e) relates to the relationship of Maori and their culture and traditions with their ancestral lands, water, sites, waahi tapu, and other taonga. The Cultural Effect Assessment and extensive consultation with iwi have addressed many of the concerns expressed. The works and volunteered conditions will provide aquatic habitat and restoration of riparian plantings using hardy species that provide berries, nectar and attract insects for birds and plants that can be used for Rongoā, traditional Māori medicine. They will provide enhanced fish passage and aquatic habitat in the previously authorised stages of the upgrades and education programmes and enhanced aquatic habitat elsewhere in Nelson.

Section 6(h) requires that Council recognise and provide for the management of significant risks from natural hazards. The principle driver of the works is to protect properties from flood events by accommodating stormwater from events up to a 1 in 100 year event in the Saxton Creek catchment.

Section 7 of the RMA sets out other matters that Council is to have particular regard to in achieving the purpose of the Act, these include amenity values and the quality of the environment. The site currently has relatively low amenity value. Although there will be adverse effects on the immediate amenity until the riparian and walkway planting develop over time. Amendments to the applications included the planting of fast growing species, including lucerne, native vegetation (including species of significance to iwi) and enrichment planting in the fifth year following completion of the works.

Section 8 of the Act relates to the Treaty of Waitangi. It was clear from the submissions from iwi that the creek held some values of significance. These are to be preserved and enhanced by the works and the additional conditions volunteered by the applicant following consultation with iwi. The volunteered conditions include;

- adherence to an accidental discovery protocol;
- involvement of iwi via a hui prior to commencing works;
- the organisation of, and agreement to the process for an iwi monitor to attend significant fish salvages;

- the provision of an opportunity for iwi to provide early advice regarding the type and location of species to create shade, habitat, mahinga kai and rongoa at key sites (i.e. adjacent to pools); and
- enrichment planting undertaken in the fifth planting season following construction.

Overall Evaluation

1. On balance, I consider that the applicant has put considerable effort into avoiding, remedying and mitigating the adverse effects of the works on the environment through the use of best practice methodologies, additional mitigation identified through further information and a compensation package.
2. I consider that the adverse effects of the activities on the environment are acceptable in the context.
3. Subject to the mitigation proposed and compensation package, the activities are consistent with the relevant objectives and policies contained in the Nelson Resource Management Plan and the National Policy Statement for Freshwater Management.
4. The applications are able to be granted under Section 104B and 104A having passed the 'gateway test' under Section 104D (b). The proposal is not contrary to the objectives and policies of the NRMP.
5. I have taken into account the relevant principles outlined in sections 6, 7 and 8 of the Act and consider that granting these resource consents achieves the purpose of the Act as set out in section 5.

DECISION

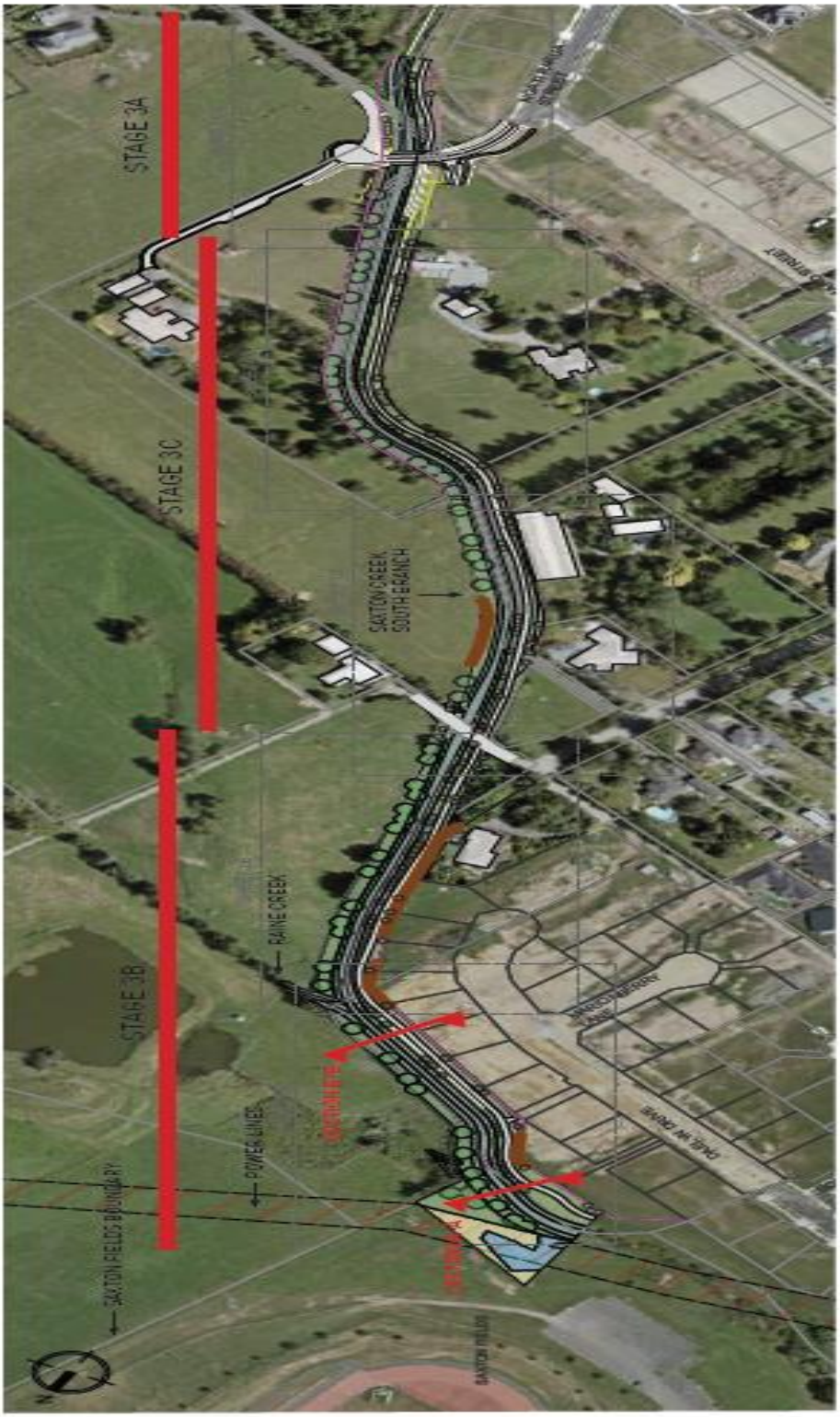
Resource consents RM185013, RM185014 and RM185015 are hereby **granted** on 23 August 2019 under delegated authority from the Nelson City Council by:

Craig Welsh
Independent RMA Commissioner

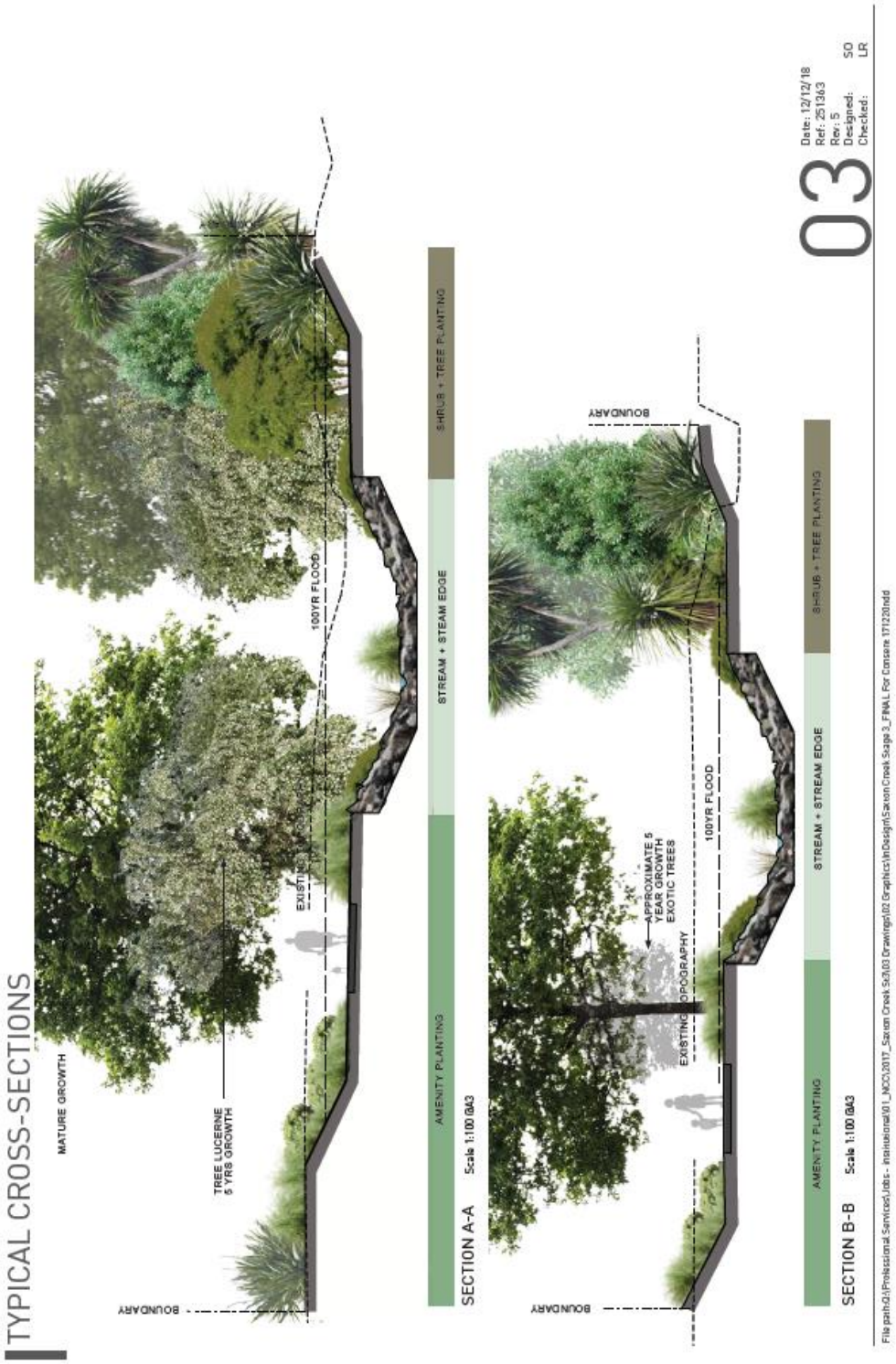
Appendix 1 – Plans, Cross Sections, Design and Planting Details

Stage 3C

Plan A - RM185013, RM185014 and RM185015 - Location of Stage 3C



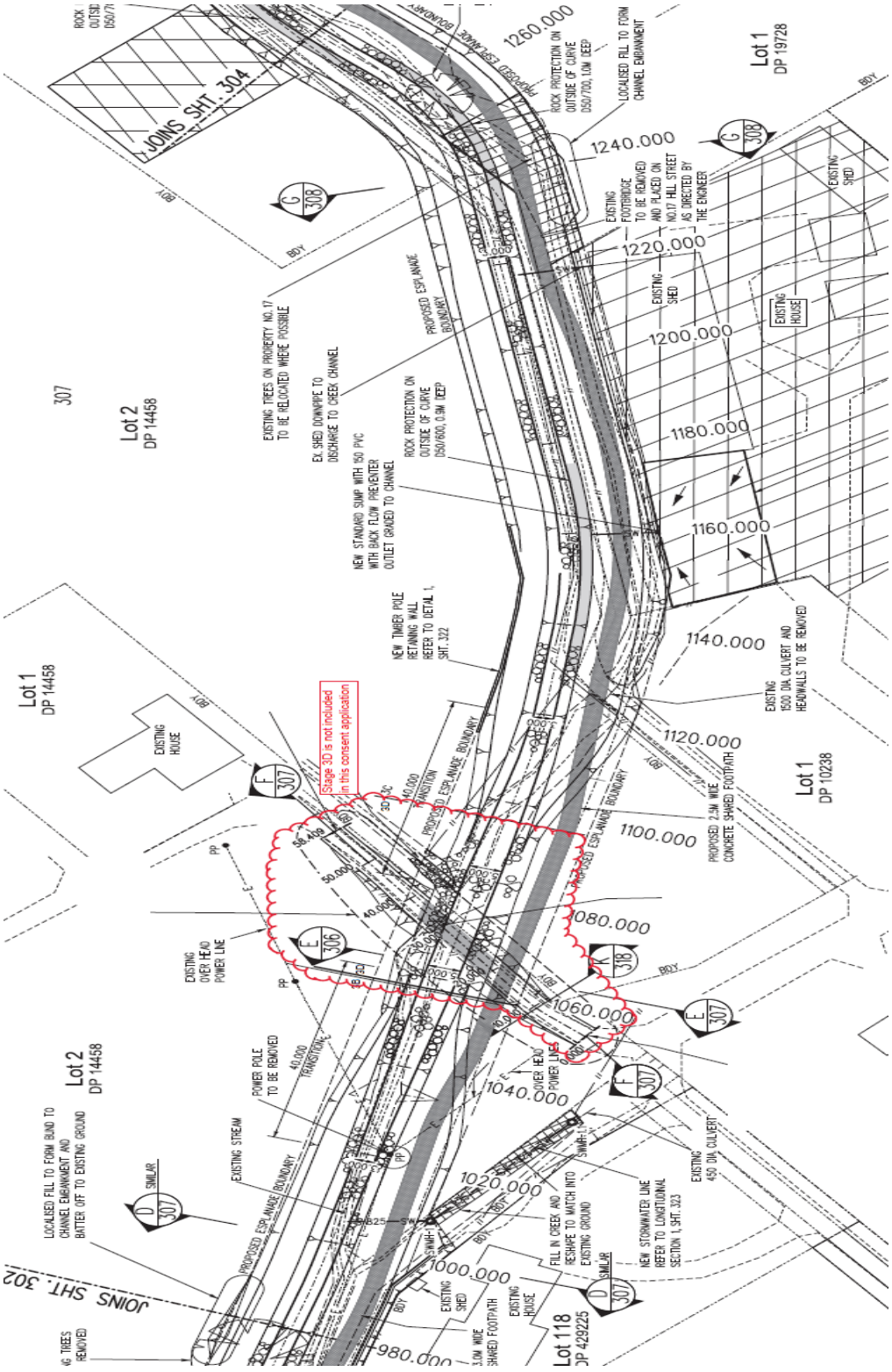
Plan B – RM185013, RM185014 and RM185015 - Typical Cross Sections (Vegetation at maturity)



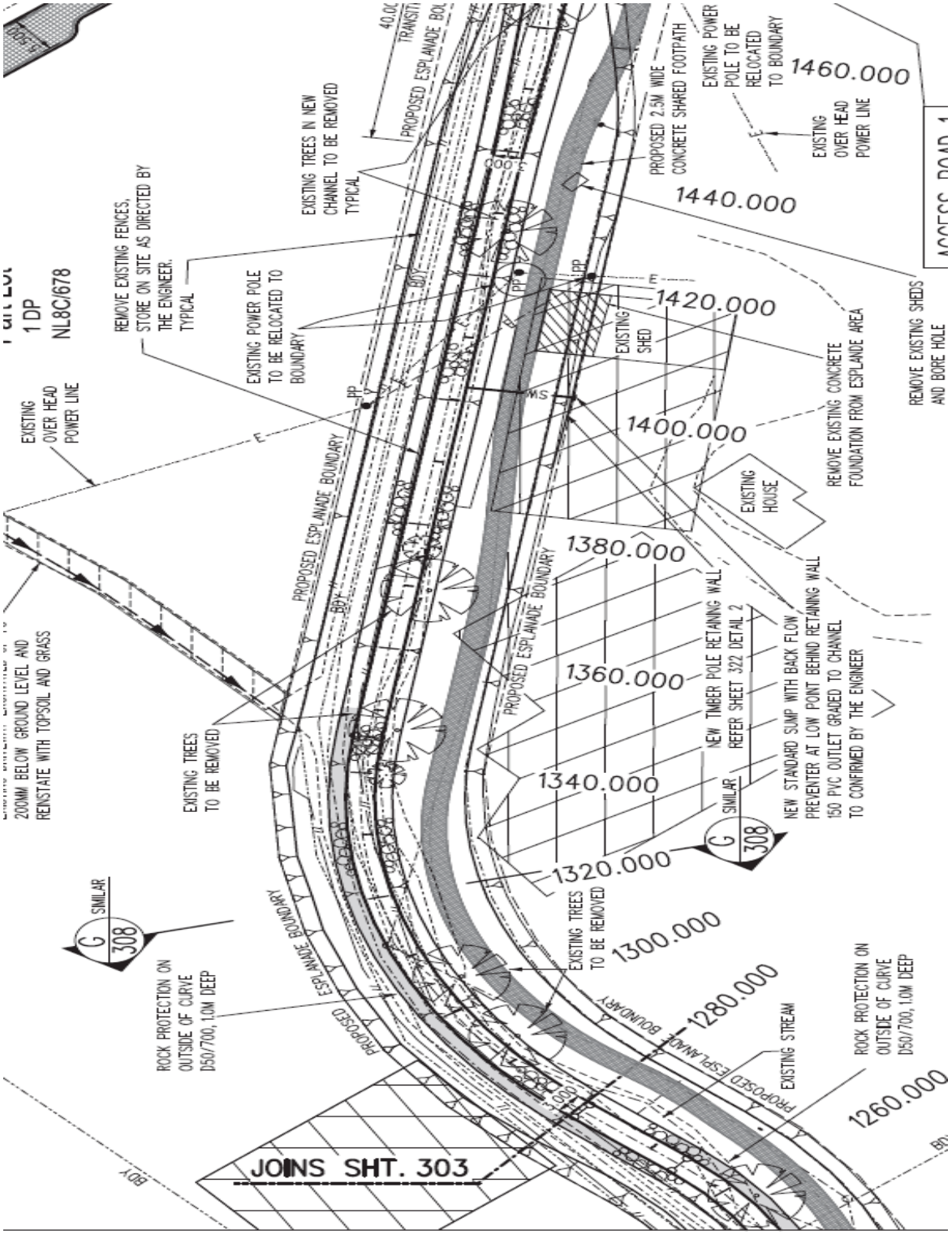
Plan C (a) – RM185013, RM185014 and RM185015 - Landscape Design Detail

Plan C (b) – RM185013, RM185014 and RM185015 - Landscape Design Detail (Continued)

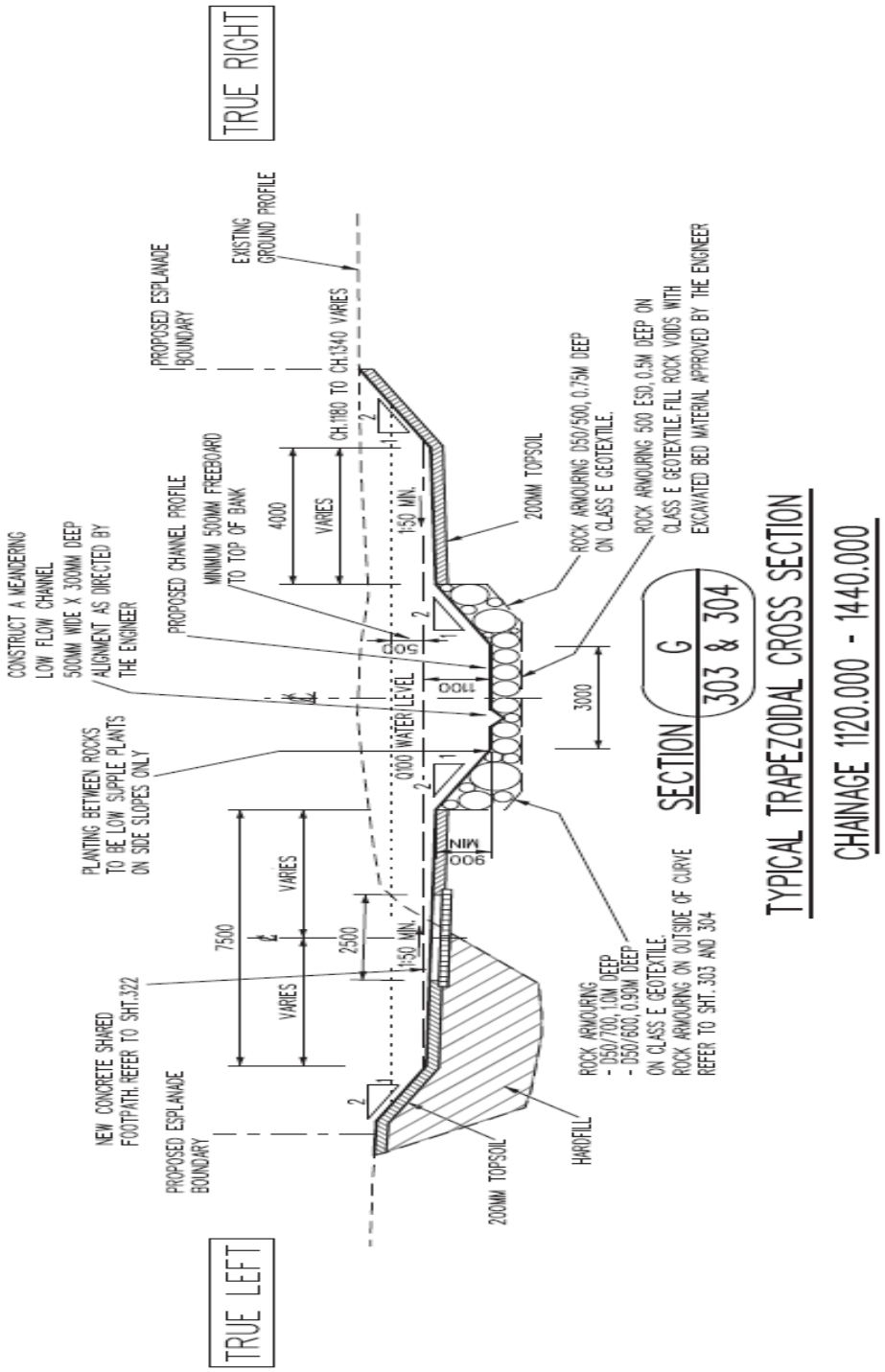
Plan D (a) – RM185013, RM185014 and RM185015 - Construction Design Detail



Plan D (b) – RM185013, RM185014 and RM185015 - Construction Design Detail (Continued)



Plan E – RM185013, RM185014 and RM185015 - Typical Cross Section



PLANTING PALETTE

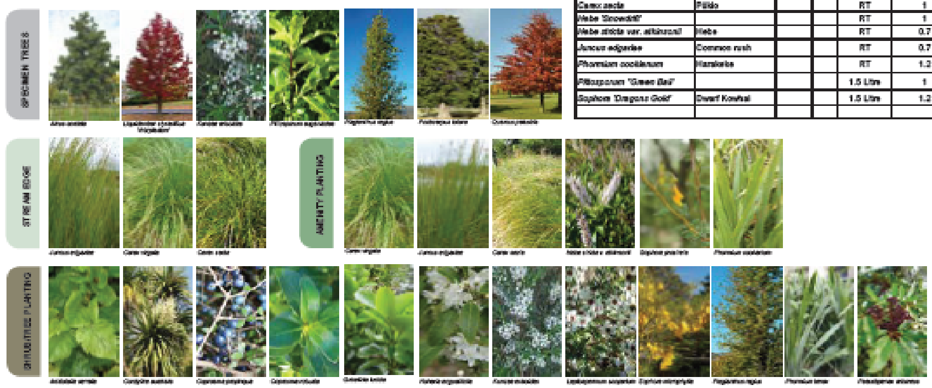
This is the recommended planting schedule for Sheet 101, and a typical representation of the entire length of Stage 3. The schedule is broken into four planting types, as defined in the Landscape Plans.

- Stream Edge (15% planting coverage into the rock protection stonework).
- Amenity Planting (predominantly groundcover /low sedges/shrubs).
- Shrub and Tree Planting (good mix of indigenous plants).
- Specimen Trees (oak trees , clusters of medium sized native trees and totara on the eastern bank)

Each planting type has an approximate area, planting species, % mix and proposed plant spacing centres.

General Planting Notes:

- All large grasses/sedges to be set back minimum of 1m the plant centre to the footpath edge.
- Phormium to be predominantly planted outside of 100 year flood zone on higher sections of land outside of 100 year flood waters.
- Coprosma kirkii to be planted at 2m centres along the top edge of the rock protection work, to creep over rock improving aesthetics, help keep the rocks and therefore water cool, and provide insect habitat.
- The Contractor shall coordinate with the project Ecologist to work together onsite with exact planting of specimen trees and planting into the rock protection to maxamise shade planting around ponds where they can be established.
- Tree lucerne to be planted along the top of the rock protection edge, both sides of the creek at approximately 10m centres. During maintenance period, shall be pruned from impeding on the foothpath. To be removed in the long term.



PLANTING SCHEDULE EXAMPLE

STREAM EDGE - Planting into Rock Work

Botanical Name	Common Name			Plant Size	Planting Centres (metre)	Percentage Mix of species
Carex secta	Pūkio			RT	1	30%
Carex virgata	Pūrei			RT	1	20%
Carex geminata	Pūkio			RT	1	20%
Juncus edgariae	Common rush			RT	1	30%
						100%

STREAM EDGE - Planting top edge of Rock Work

Botanical Name	Common Name	Mature height	H. after 5 yrs	Plant Size	Planting Centres (metre)	Percentage Mix of species
Coprosma kirkii	Groundcover coprosma			RT	2	
Chamaecytisus palmensis	Tagasaste/Tree Lucerne	7m	4m	RT	10	

AMENITY PLANTING (A) - Path Edge Planting

Botanical Name	Common Name			Plant Size	Planting Centres (metre)	Percentage Mix of species
Anemanthele lessoniana	Gossamer grass			RT	1	0%
Carex geminata	Pūkio			RT	0.7	10%
Carex virgata	Pūrei			RT	1	30%
Carex secta	Pūkio			RT	1	30%
Hebe 'Snowdrift'				RT	1	5%
Hebe stricta var. atkinsonii	Hebe			RT	0.7	5%
Juncus edgariae	Common rush			RT	0.7	10%

AMENITY PLANTING (B) - Path Edge Planting

Botanical Name	Common Name			Plant Size	Planting Centres (metre)	Percentage Mix of species
Anemanthele lessoniana	Gossamer grass			RT	1	10%
Carex geminata	Pūkio			RT	0.7	0%
Carex virgata	Pūrei			RT	1	20%
Carex secta	Pūkio			RT	1	25%
Hebe 'Snowdrift'				RT	1	15%
Hebe stricta var. atkinsonii	Hebe			RT	0.7	10%
Juncus edgariae	Common rush			RT	0.7	0%
Phormium cookianum	Harakeke			RT	1.2	5%
Pittosporum 'Green Ball'				1.5 Litre	1	10%
Sophora 'Dragons Gold'	Dwarf Kowhai			1.5 Litre	1.2	5%
						100%

SHRUB - Bank Tree/Shrub Planting

Botanical Name	Common Name	Mature height	H. after 5 yrs	Plant Size	Planting Centres (metre)	Percentage Mix of species
Aristotelia serrata	Wineberry	6m	4m	RT	1.5	3%
Chamaecytisus palmensis	Tagasaste/Tree Lucerne	7m	4m	RT	1.5	3%
Cordyline australis	Ti kouka	10m	4m	RT	1.5	8%
Coprosma propinqua	Mingimingi	5m	2m	RT	1.5	10%
Coprosma robusta	Karamu	5m	2m	RT	1.5	10%
Griselinia lucida	Puka	5m	2m	RT	1.5	3%
Dodonaea viscosa	Ake Ake	6m	4m	RT	1.5	10%
Hebe salicifolia	Koromiko	4m	3m	RT	1.5	5%
Hoheria angustifolia	Houhere	6m	3m	RT	1.5	5%
Kunzea ericoides	Kanuka	10m	3m	RT	1.5	8%
Leptospermum scoparium	Manuka	4m	2m	RT	1.5	5%
Pittosporum eugenioides	Tarata	12m	3m	RT	1.5	10%
Plagianthus regius	Manatu	12m	4m	RT	1.5	10%
Phormium tenax	Harakeke	3m	2m	RT	1.5	4%
Pseudopanax arboreus	Whauwhaupaku	6m	3m	RT	1.5	2%
Sophora microphylla	Kowhai	8m	3m	RT	1.5	4%
						100%

WETLAND

Botanical Name	Common Name	Mature height	H. after 5 yrs	Plant Size	Planting Centres (metre)	Percentage Mix of species
Carex secta	Pūkio			RT	1	10%
Carex virgata	Pūkio			RT	1	5%
Carex geminata	Pūkio			RT	1	5%
Austroderia richardii	Toe toe			RT	1	5%
Cyperus ustulatus				RT	1	5%
Juncus edgariae	Common rush			RT	1	5%
Juncus pallidus				RT	1	5%
Hebe stricta var Atkinsonii	Koromiko			RT	1	2%
Phormium tenax				RT	1	10%
						52%

PYLON PLANTING

Botanical Name	Common Name	Mature height	H. after 5 yrs	Plant Size	Planting Centres (metre)	Percentage Mix of species
Austroderia richardii	Toe toe	1.5m		RT	1	20%
Hebe stricta var Atkinsonii	Koromiko	3m		RT	1	20%
Phormium cookianum	Wharariki	1.5m		RT	1	60%

TREES - Specimen Trees

Botanical Name	Common Name	Mature height	H. after 5 yrs	Plant Size	Planting Centres	Percentage Mix of species
Alnus cordata	Italian Alder	20m	7m	PB18	As Shown	As Shown
Liquidambar S. 'Worplesdon'	Sweet Gum	7m	5m	PB18	As Shown	As Shown
Kunzea ericoides	Kanuka	10m	3m	PB18	As Shown	As Shown
Pittosporum eugenioides	Tarata	12m	3m	PB18	As Shown	As Shown
Plagianthus regius	Manatu	12m	4m	PB18	As Shown	As Shown
Podocarpus totara	Totara	15m	2m	PB18	As Shown	As Shown
Quercus palustris	Pin Oak	20m	4m	PB18	As Shown	As Shown
						0%

04

Date: 12/12/18
Ref: 251363
Rev: 5
Designed: SO
Checked: LR

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PLANTING ESTABLISHMENT

TIMING
Planting shall generally take place between 1 April and 30 September (the planting season). Planting may occur outside these times with the approval of the Landscape Architect.

The Contractor shall carry out any necessary works to protect the existing subsoil structures and prevent excessive soil structural damage during the construction period. This includes not driving heavy vehicles on the soil, especially during wet weather. Work shall only be undertaken when the weather is suitable and when the ground is moist and workable. All planting and grassing operations shall be suspended during periods of severe frosts, drought, water logging or persistent drying winds.

ECO-SOURCING
Where plants are part of an environmental planting (i.e. riparian or restoration planting) they shall be eco-sourced (plants are those which are grown from seeds or cuttings collected from naturally-occurring vegetation in a locality close to where they are to be planted). Note that growers require a minimum of 6 months notice to grow eco-sourced plants for the following planting season.

PLANT MATERIAL QUALITY
Acceptance of the plant material shall be at the discretion of the Landscape Architect and shall;

- be eco-sourced,
- be located as specified,
- be upright and firm in the ground
- have the top of the root ball level with the surrounding surface, and
- be healthy with no evidence of decline or damage (e.g. dead/dying/ diseased foliage/tips/branches, loss of foliage that is uncharacteristic to the species, discoloured foliage, pests and diseases).

Plant Species And Spacing: Plants species shall be in accordance with the planting schedule at the spacings shown. Any plant substitution shall be at the approval of the Landscape Architect and Nelson City Council.

TRANSPORTATION AND STORAGE OF PLANTS
All tree and plant material shall be carefully packed and protected during transport to the site to prevent damage. Trees and plants shall be planted within 48 hours of delivery. The Engineer shall be informed where this is not achieved. Plants that cannot be planted immediately on delivery shall be kept in the shade, well protected, sheltered and the soil kept well watered.

If damage occurs the trees or plants shall be replaced at the Contractor's expense.

Pots and other protective materials shall not be removed until immediately prior to planting, and shall be disposed of off the site after planting.

SITE PREPARATION
The area to be planted and grassed shall be entirely free of grass, plant pests and nuisance weed species.

Planting bed preparation is limited in the rock protection areas as the bank are formed with clay and lined with bidim fabric, then covered with a layer of rock to the depth of 450mm to prevent erosion. Plant pockets will be created in amongst the irregular formation of the stone layer. These individual holes will be filled manually with topsoil at the time of planting.

All other planting areas, particularly where compaction has been caused by earthworks during construction, soil shall be scarified to a depth of 300mm then 200mm of topsoil placed with gypsum and incorporate into the soil substrate.

WEED CONTROL METHODOLOGY
If herbicidal eradication is required the Contractor shall notify the Engineer at least one week prior to all spraying activities.

Details to be advised include: the area to be sprayed, materials to be used, the name of the Spraying Contractor, and when the areas will be sprayed. A registered Spraying Contractor shall be on site and controlling the spraying operation at all times. The Spraying Contractor shall be a Registered Chemical Applicator with current Growsafe Certificates.

Spraying activities shall meet the requirements of the controlling local authority. All necessary Resource Consents relating to the planting and maintenance of the riparian area shall be the responsibility of the Contractor. The Contractor shall be responsible for ensuring compliance with the freshwater rules outlined in the Nelson Resource Management Plan.

Herbicide application general: Apply using protective clothing, in dry, still-air conditions to the spray manufacturer's requirements. The Contractor shall be responsible for reinstating any damage caused by drift of spray.

Weed control during the Plant Establishment shall consist of the following:

Hand Releasing: Hand weeding and mechanical releasing shall be the only control method employed within and up to one metre from the waterway. When hoeing/pulling, care shall be taken to avoid damage to plants and their roots. The removal of aquatic and semi-aquatic vegetation shall retain any natural stream meander within the channel. In all other areas, weeds shall be controlled both manually and with herbicide application unless otherwise approved by the Engineer.

Spray Releasing: All spray releasing of plants shall be undertaken with roundup (or equivalent glyphosate herbicide) only. Weeds shall be released as necessary throughout the Maintenance Period. Releasing shall be undertaken by a suitably qualified person with a current Growsafe Certificate.

Protection Of Existing Shrubs And Trees: All significant existing plants within and neighbouring the site shall be protected from weed control.

PLANTING LAYOUT
Prior to planting the Contractor shall organise a meeting with the Landscape Architect to setout sample planting areas for each zone, once the setout has been agreed the Contractor shall replicate this setout throughout the site.

In areas of block planting, plants shall be spaced so that when established they will completely and evenly fill the areas indicated, unless otherwise specified. Plants shall be planted in groups of 5 or more. The remaining plants shall then be used to fill the centre of the area in an informal manner avoiding straight lines and regular geometric patterns, unless otherwise specified.

PLANTING TECHNIQUE AND FERTILISER
Prepare holes for plants in a manner and to dimensions required by the particular specimen. The planting holes are to be approximately twice the width and one and a half times the depth of the rootball. Where the plant rootball depth exceeds the depth of the planting mix (300mm), continue down into the subsoil a further 150mm, breaking it up and mixing in planting mix before replacing. Base and sides of the hole are to be well shattered.

Plants are to be thoroughly watered prior to planting. Do not remove container until planting. Trim damaged roots and score the sides of matted root balls with a sharp instrument. Place plant with its roots well spread out and hanging downwards, roots should not be bent or distorted in any way. Fertiliser tablets must be placed close to but not in contact with the roots in the bottom of the planting hole. Grasses and sedges shall not be fertilised. Tablets shall be used at the rate of;
- 1 tablet per plug
- 2 tablets per PB2.5,
- 3 tablets per plant for larger than PB6.5L.

Backfill in with the planting mix in 150mm layers, compact each layer firmly to a level that will allow the top of the root ball to finish flush with surrounding ground. Water-in immediately after planting to the saturation level of surrounding soil.

STAKING AND TIES
All 8-10L trees and larger shall have two stakes. Tie trees at 2/3 the height of the main stem leaving enough play for a small amount of natural movement. All stakes shall be rough sawn, free from knots and weaknesses. Size/length: 50 mm x 50 mm, length to suit tree/plant size. Ties shall be hessian webbing, or other such material that does not cause abrasion to the trees.

MULCHING
The Contractor shall allow for chip mulching within Amenity Planting Area and Tree and Shrub Planting Areas. There shall be a minimum of 75mm consolidated depth of Arborist Chip Mulch placed around each plant, not over the entire area. No mulch shall be within the rock protection area. Mulch shall be bark shall be free of foreign material (e.g. gravel, sand) natural or artificial toxins and preservatives which may be detrimental to plant material, and free of whitewood. Once consolidated the mulch shall be 75mm deep and the finished level shall be 25mm below the surrounding hard surfaces.

PLANT REPLACEMENTS
Any plants that have died during the Maintenance Period shall be replaced during the planting season prior to council handover.

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MAINTENANCE METHODOLOGY

Following the completion of the planting and the issue of the Practical Completion Certificate, the Maintenance Periods shall be as follows.

MAINTENANCE PERIOD
All grassed, mulched and planted areas and specimen trees shall be maintained for a period of **24 months** after issue of 224C.

The Contractor shall allow for a minimum of **12 maintenance visits each year;** being one visit every 4 weeks on average, within the specified maintenance period. The frequency of visits will change relative to seasonal demand of weed control within the specified Maintenance Period.

Works should include barricading, watering, weed control, cultivation, control of pests and diseases, removal of litter, checking of stakes and ties, trimming, pruning or mowing and other accepted horticultural operations necessary to ensure normal and healthy landscape establishment and growth, and the monthly reporting of the works carried out under this clause.

LANDSCAPE CONSTRUCTION MONTHLY ESTABLISHMENT REPORT
The Contractor shall provide a monthly report on works undertaken including any damage, vandalism or plant losses. Refer to Monthly Establishment Report Template.

WEED CONTROL
The entire area of plantings shall be kept free of nuisance and noxious weeds and plant pest species. For weed control the Contractor may elect to use spray or manual means, as approved by the Engineer. All weed eradication shall comply with the spraying requirements of this document.

Weeds shall not encroach within 500mm of the centre of any plant. Weed control shall be frequent enough to prevent weed species prolific flowering and seeding. Weeds outside this area shall be maintained between 0.25m and 0.4m in height.

PESTS AND DISEASES
The Contractor shall promptly report all animal, insect or fungal infestations found during the Maintenance Period to the Landscape Architect.

MAINTENANCE WATERING
For the entire Maintenance Period it shall be the Contractor's responsibility to ensure the plants receive sufficient water to maintain growth.

MAINTENANCE BARK MULCH
Chip Mulch will naturally break down over time and it is not required to maintain this at the initial 75mm depth.

MAINTENANCE OF GRASS AREAS
Within two months of sowing the specified grasses shall be evenly distributed across the lawn with at least 95% of the ground surface covered and with no bare areas greater than 30mm in diameter. The grass sward shall have less than 10% of its area in non-specified grasses and weeds. For the entire maintenance period it shall be the Contractor's responsibility to ensure that the grass areas receive sufficient watering, fertilising, mowing and weed control. Grass shall be maintained throughout the establishment period at a height between 50mm and 150mm.

REPLACEMENT OF PLANTS
A specified inspection will be held three weeks prior to the end of the Maintenance Period to inspect requirements for replacement plants. All plants deemed by the Engineer as dead, defective or unhealthy are to be removed and replacements supplied and planted at the Contractor's expense, within three weeks from the inspection date.

Plants damaged by wilful vandalism or lost by theft shall be replaced at the expense of the Principal. This work shall be at scheduled rates and be confirmed by the Engineer prior to implementation. Where it is identified that plant failure is due to the Contractor's spraying of herbicide replacement will also be at the Contractor's expense.

An **establishment rate of 100%** is required for all plants at the end of the Maintenance Period.

All replacement plants shall be to the same grade originally planted, and be the same species and position as the removed plant, unless otherwise approved or directed by the Engineer. Replacement plants and planting shall conform to this specification. Replacement plants shall be maintained for a period of 6 months

COMPLETION AND FINISHING
At completion of the maintenance period, the work shall be left in good condition, the whole site cleared of rubbish, plastic bags and debris and any damage made good to the satisfaction of the Engineer.

GRASS AND PLANTING ACCEPTANCE CRITERIA
The grass shall be an even sward of vegetation at a uniform height with a healthy colour throughout. The ground surface shall be free from hollows arising from uneven consolidation of the ground and from stones or similar debris. There shall be no bare area greater than 30mm in diameter and shall have less than 10% of this area in non-specified grasses and weeds.

Plants shall be located as specified. Plantings shall be well formed, upright and planted so that the soil level is the same as was in the container and without roots exposed.

MANAGEMENT PROPOSAL
The Contractor shall be responsible for the successful establishment of the plants over the 24 month maintenance period, and be directly responsible for ensuring the appropriate information is provided to Council and the Landscape Architect within the time-frames set in the resource consent.

MONITORING AND REPORTING RESPONSIBILITIES
The following monitoring and reporting shall be provided at a minimum.

During the 2 year Maintenance Period;

- The Contractor shall provide a monthly Landscape Construction Establishment Report on works undertaken including any damage, vandalism or plant losses. Refer to Monthly Establishment Report Template in Appendices.
- The Contractor shall notify the Landscape Architect annually of the establishment regime and planting progress, this shall include site photos of progress. Any issues or remedial plantings that are evident, the Landscape Architect shall confirm what work is required.
- The Landscape Architect shall report to the NCC Project Manager annually that the maintenance regime is adequate and in compliance with the resource consent requirements.
- On completion of the 2 year management period the Landscape Architect shall inspect the site and if acceptable, inform the NCC Project Manager that the site has been developed in accordance with the landscape plan.

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Plan I – RM185013, RM185014 and RM185015 - Enrichment Planting

SECOND STAGE ENRICHMENT PLANTING

ENRICHMENT PLANTING
Enrichment planting shall be considered during the 5th season after the completion of stage 1 planting and when adequate shade cover has been achieved. Plant species shall be locally native to the area and of either botanical and/or cultural interest and increases biodiversity of the site.

PLANT SELECTION
Nelson City Council shall liaise with Local Iwi and a Plant Ecologist on the appropriate enrichment planting to increase diversity for bird life, allow for future cultural harvesting and provide opportunities for education on traditional uses of native flora.

MAINTENANCE OF ENRICHMENT PLANTING
Enrichment planting shall be maintained as part of the general maintenance for the site. Watering shall be undertaken as necessary during the first year after planting to ensure the success.