Proposed Amendments for the Christchurch City Plan

Understanding the changes

The proposed changes to the District Plan are varied. In some instances it has been necessary to replace entire provisions with new provisions. In other instances changes have been able to be made to individual words or parts of existing provisions. In each instance the proposed deletions are shown in **strike through and bold**, while the new provisions are **underlined and bold**. Text that has previously been changed pursuant to the Canterbury Earthquake Recovery Act 2011 is shown as **italic and bold**. Text before a changed provision and text after a changed provision is indicated by the use of "(...)". Instructions to add understanding of what is to be amended are included in a text box.

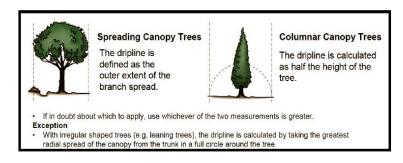
Every effort has been made to ensure that the changes specified in this document give the reader a full and fair understanding of the exact change proposed. It should be noted, however, that given the complexity of the changes proposed to the existing City Plan, readers are encouraged to view these amendments alongside the District Plan, which is available on the Council's website under the title "City Plan".

Volume 3, Part 1 Definitions

Amend the definition of "Filling" and "pressurised injection"

Dripline

For the purposes of rule 5.2A (Volume 3 Part 9), the dripline of a tree means a circular area where the radius is equivalent to either: the outer extent of the branch spread; or half the height of the tree, whichever is the greater. This is illustrated in the diagram below.



Filling

means the placing *or disturbance* of material upon the surface of the land above natural ground level, or upon land which has been excavated below natural ground level *or the placing or disturbance of material into land below natural ground level where excavation has not taken place.*

Grout

For the purposes of rule 5.2A (Volume 3 Part 9), grout means a material which consists of water and at least 20% cement, and which may also contain aggregate, inert additives, or bentonite.

Pressurised injection

For the purposes of rule 5.2A (Volume 3 Part 9), means injection of grout at more than 25 40 bar at the pump. (see advice note viii to Rule 5.2A.)

Volume 3, Part 9 General City Rules

Amend clause 5.2A, and provide clarification where necessary.

- 5.2A Rules Repair of land used for residential purposes damaged by earthquakes until 31 December 2018
- 1. Any filling or excavation undertaken to repair land used for residential purposes damaged by earthquakes is a permitted activity provided it:
 - i. complies with all the standards in (a) to (i) below where relevant;
 - ii. occurs in a zone listed in Table 1 or 2 (b) below; and
 - iii. is commenced prior to the expiry of Rule 5.2A on 31 December 2018.
 - (a) Where the land repair and earthworks are not designed, supervised or certified by a suitably qualified and experienced chartered geotechnical engineer, Any any filling, excavation or disturbance of soils shall not exceed the criteria in Tables 1 or 2 below or any of the standards at (c).

Table 1: Where the land repair and earthworks are not designed, supervised or certified by a suitably qualified and experienced chartered geotechnical engineer.

	Column A Max. Volume (Cumulative)	Column B Max. depth (m)	Column C Max. depth of fill (m) [below ground level]	Column D Fill above ground level	Column E Setback from site boundary
Living Zones (excluding the Living H, H deferred, HA, HA deferred, HB and 1D Zones), where a site or part of a site is located OUTSIDE a Flood Management Area*	50m³/site	0.6	0.6	0.3m max. depth;	Setback from site boundary must be equivalent to or greater than the depth of filling or excavation.
Rural 1 - 5 Zones, where a site or part of a site is located OUTSIDE a Flood Management Area *	2000m3/site	0.6	0.6	0.3m max. depth;	
Living Zones (excluding the Living H, H deferred, HA, HA deferred, HB and 1D Zones), where Any site or part of a site in a zone listed in the above rows is located WITHIN a Flood Management Area *	50m³/site	0.6	0.6	0.3m max. depth; and 10m³/site max. volume	
Rural 1 - 5 Zones, where a site or part of a site is located WITHIN a Flood Management Area *	50m³/site	0.6	0.6	0.3m max. depth; and 10m³/site max. volume	
Land repair works in	Not more than	1.0	1.0	0.3m max.	-

any zone listed in this	10m ³ of grout		depth.	
table involving soil	per site			
mixing aggregate piers,				
or grout.				

^{*} shown on planning maps

Table 2: Where the land repair and earthworks are designed, supervised and certified by a suitably qualified and experienced chartered geotechnical engineer.

	Golumn A Max. Volume (Cumulative)	Column B Max. depth (m)	Golumn G Max. depth of fill (m) [below ground level]	Golumn D Fill (m) [above ground level]	Column E Setback from site boundary
Living Zones (excluding the Living H, H deferred, HA, HA deferred, HB and 1D Zones), where any site or part of a site is located OUTSIDE a Flood Management Area *	250m³/site	2.0	2.0	NA.	N A
Living Zones (excluding the Living H, H deferred, HA, HA deferred, HB and 1D Zones), where any site or part of a site is located WITHIN a Flood Management Area*	250m³/site	2.0	2.0	0.3m max. depth; and 10m³/site max. volume	N A
Rural 1 - 5 Zones, where the site or part of a site is located OUTSIDE a Flood Management Area *	2000m³/site	2.0	2.0	NA	NA
Rural 1 - 5 Zones, where the site or part of a site is located WITHIN a Flood Management Area *	2000m³/site	2.0	2.0	0.3m max. depth; and 10m³/site max. volume	N A
Land repair works involving soil mixing, aggregate piers, or grout.	250m³, where not more than 50m³ may be grout	4.0	4.0	NA	1.5m

^{*} shown on planning maps

(b) There shall be no filling, excavation or disturbance of soil within:

i. 3m from any utility waterway to be piped;

ii.5m from any open utility waterway;

iii. 7m from any environmental asset waterway;

iv. 10m from any other waterway; and

v.20m from any coastline

In Living Zones (excluding the Living H, H deferred, HB and 1D Zones) and Rural 1 - 5 Zones, where the land repair and earthworks are designed, supervised and certified by a suitably qualified and experienced chartered geotechnical engineer, any filling, excavation or disturbance of soils shall not exceed any of the criteria below or the standards at (c):

- (i) Where a site or part of a site is located within a Flood Management Area (as shown on planning maps) earthworks shall not exceed a depth above ground level of 0.3m or fill above ground level of 10m3 per site.
- (ii) Where a site or part of the site is located within a silent file (as shown in the Mahaanui lwi Management Plan), or statutory acknowledgement area.
- (iii) Not more than 80m3 of grout shall be used per site.
- (iv) Land repair works involving soil mixing aggregate piers, or grout shall not occur within 1.0m of a boundary.
- (v) At least 3 working days prior to commencing any work on the site (including stockpiling and preparatory works):
 - a. written notice shall be provided to the Council informing of the location of the land repair and the name and contact details of the supervising engineer;
 - b. written notice shall be provided to any occupier of a residential dwelling adjoining the land repair site to inform them that the works will be taking place, the expected duration of the works and provide contact details of the site supervisor; and
 - c. <u>a sign shall be erected at the front of the property including the name and contact details of the site supervisor.</u>
- (vi) A statement of professional opinion completed by a suitably qualified and experienced chartered geotechnical engineer must be provided to the Council within 3 months of the land repair being completed to the effect that the works will meet all applicable standards and requirements and be suitable for its intended purpose. This shall include as-built plans of the works.

except where works within these riparian area setbacks are permitted under the Canterbury Regional Council rules for repair to earthquake damaged land in or where the earthworks are authorised by a land use consent granted by the Canterbury Regional Council.

- (c) All filling, excavation or disturbance of soil:
 - i. is not within the dripline of a heritage or notable tree listed at Volume 3 Part 10
 Appendix 4; or
 - ii does not alter the ground level by more than 0.25m within 5m of the dripline of a heritage or notable tree listed at Volume 3 Part 10 Appendix 4; or
 - iii. is not within an Ecological Heritage Area; or
 - iv. is not at or within 5m of a heritage item listed at Volume 3 Part 10, including items of significance to tangata whenua, where the heritage item is on the same site.

(c) General standards

(i) There shall be no filling, excavation or disturbance of soil within 3m of any utility waterway to be piped or 5m of any open utility waterway.

Note: Canterbury Regional Council manages earthworks within 10m of other rivers and lakes and 20m of the coast and land use consent may be required from it. Refer to the Natural Resource Regional Plan rule WQL36A, and the Land and Water Regional Plan Rules 8.5.2, 9.5.6 and 11.5.1.

- (ii) All filling, excavation or disturbance of soil:
 - a. <u>is not within the dripline of a heritage or notable tree listed at Volume 3</u>
 Part 10 Appendix 4; or

- b. is not within an Ecological Heritage Area; or
- c. <u>is not at or within 5m of a heritage item listed at Volume 3 Part 10, including items of significance to tangata whenua.</u>
- (iii) Erosion and sediment control measures are implemented and maintained in accordance with Environment Canterbury's Erosion and Sediment Control Guidelines for Small Sites to minimise erosion and the discharge of sediment laden water to surface water.
- (iv) All filling greater than 0.3m in depth shall be in accordance with New Zealand
 Standard NZS 4431:1989 Code of Practice for Earth Fill for Residential
 Development. Certification is not required except as specified at (b)(v).
- (v) All land repair works are to be managed in accordance with New Zealand

 Standard NZS 6803:1999 Acoustics Construction Noise and DIN 4150 1999-02

 Structural Vibration.
- (vi) Land repair works involving mixing or insertion of grout shall not involve:
 - a. mixtures with a flow time greater than 30 seconds when tested in accordance with the grout flow test at NZS 3112: Part 1: 1986 (Test 3) or a flowable concrete/grout including cement and inert additives which exceed a diameter of 300mm when tested in accordance with inverted cone test at NZS 3112: Part 1: 1986 (Test 11) except for in-situ mixing: or
 - b. pressurised injection of grout into the ground.

(vii)

- a. Where grout is deposited into land using in-situ mixing the grout shall be mixed evenly through the augured soil column and the percentage of grout within the augured soil column shall not exceed 20%; or
- b. Where grout is deposited into land using methods other than in-situ mixing, the percentage of cement in the dry grout mixture shall not exceed 30%.
- (viii) Land repair materials shall consist only of:
 - a. soil, gravel, rocks, concrete, sand, silt (such as exists on site already), or clean, inert material;
 - b. cement and/or bentonite grout including inert additives; or
 - c. <u>timber foundation piles.</u>

and shall not:

- d. <u>include or disturb putrescible, pollutant, inflammable or hazardous components; and/or</u>
- e. <u>include fill which comprises more than 5% vegetation of any load by volume.</u>
- (ix) Land repair works, other than dust and sediment control measures, shall not be undertaken outside of the hours of 7.30am to 6.00pm Monday to Friday and 8.00am to 5.00pm on Saturday. No works shall occur on public holidays.
- (d) All filling, excavation or disturbance of soil greater than 10m³ in volume and 0.6m in depth or within the waterway setbacks at (b) shall be undertaken in accordance with the Erosion and Sediment Control Guidelines for Small Sites and Section 6.1 of the Erosion and Sediment Control Guidelines (both prepared by Environment Canterbury).
- (e) All filling, excavation or disturbance of soil greater than 0.3m in depth shall be in accordance with New Zealand Standard NZS 4431:1989 Code of Practice for Earth Fill for Residential Development. Certification is not required except as specified at (g).

- (f) All filling, excavation or disturbance of soil is to be undertaken in accordance with New Zealand Standard NZS6803:1999 Acoustics — Construction Noise and DIN 4150 1999-02 Structural Vibration.
- (g) For filling, excavation or disturbance of soil completed under Table 2, PS-4
 certification completed by a suitably qualified and experienced chartered
 geotechnical engineer must be provided to the Council within 3 months of the land
 repair being completed. This shall include as-built plans of the works.
- (h) Land repair works involving mixing or insertion of grout shall not involve:
 - i. mixtures with a flow time greater than 30 seconds when tested in accordance the grout flow test at NZS 3112: Part 1:1986 (Test 3) or a flowable concrete/grout including cement and inert additives which exceed a diameter of 300mm when tested in accordance with inverted cone test where at NZS 3112: Part 1:1986 (Test 11) except for in-situ mixing; or
 - ii. pressurised injection of grout into the ground.
 - (i) i. Where grout is deposited into land using in-situ mixing the grout shall be mixed evenly through the augured soil column and the percentage of grout within the augured soil column shall not exceed 20%; or
 - ii. Where grout is deposited into land using methods other than in-situ mixing, the percentage of cement in the dry grout mixture shall not exceed 30%.
- (j) Land repair materials shall consist only of:
 - i. soil, gravel, rocks, concrete, sand, silt (such as exists on site already), or clean, inert material; or
 - ii. cement and/ or bentonite grout including inert additives.
- 2. Any filling or excavation undertaken to repair land used for residential purposes damaged by earthquakes that does not comply with Rule 5.2A.1 shall be a restricted discretionary activity with the exercise of Council's discretion limited to the matter(s) addressed in the assessment matters at clauses 5.9.2, 5.9.3, 5.9.4 and 5.9.6 (Volume 3 Part 9). Any restricted discretionary activity application arising from non-compliance with Rule 5.2A.1 will not require the written approval of other persons and shall be non-notified.
- 3. Exemptions to Rules 5.2A (1) and 5.2A.2:
 - (i) Works involving the establishment, repair or replacement of any permitted utilities or the maintenance of existing drains or ponds by a utility operator.
 - (ii) Works permitted by or exempted from a building consent (including works forming part of foundations for a building) do not require resource consent under Rules 5.2A1 or 5.2A2 where;
 - a. they comply with criteria in column D of Tables 1 and 2 (b) controlling fill above ground level in Flood Management Areas; or and
 - b. they are designed, supervised and certified by a suitably qualified and experienced chartered geotechnical engineer, and including where they exceed the criteria at columns A, B, C or E of Tables 1 and 2; or
 - c. they comply with criteria $\frac{5.2A1(b) (j)}{(c)(i)}$ and $\frac{(c)(ii)}{(ii)}$.
 - (iii) Testing or investigation preceding land repairs or remediation as a result of land damaged by earthquakes are permitted provided it meets the criteria at rule 5.2A.1(b), (c), (e), (f), (h) and (i).
 - (iv) filling or excavation associated with the maintenance of flood protection works. (v) post holes for the erection of fences or for permitted or approved buildings and signs. (vi)planting holes for trees and plants.
- 4. For the avoidance of doubt, where the earthworks are associated with the repair of land damaged by earthquakes. Rule 5.2A substitutes other earthworks Rules 5.2, 5.3(b) and (c).

5.4, 5.5, 5.6 & 5.7 and 5.8.1. and used for residential purposes in the zones listed in Tables 1 and 2:

- i. Rule 5.2A substitutes other earthworks Rules 5.2, 5.3, 5.4, 5.5, 5.6 & 5.7; and
- ii. Rule 5.8.1 relating to the content of fill material applies, except in relation to (h) and (i) above.

Clarification of rule

- i. Measurement of volume shall include only areas which have been disturbed, including by filling, excavation, soil mixing or injection of materials. Soil above or between these areas which remain undisturbed does not form part of the allowable volume, including where those undisturbed soils are compacted or otherwise altered by the works.
- ii. For the purposes of this rule, the building consent platform extends to a maximum of 2.5m from the exterior wall of an enclosed structure or support structures of open structures.
- iii. For the purposes of this rule, when land repairs are being undertaken over a number of properties at the same time and by the same contractor, the site boundary for the purpose of the setback is the outer perimeter of the properties the subject of the land repair works.

Advice Notes:

- i. For the purposes of this rule, "repair land used for residential purposes damaged by earthquakes" does not include repair of land on the Port Hills or Banks Peninsula. It does include all other residential land whether or not an EQC payment has been made and residential land which was unimproved when damage occurred.
- ii. People intending to do land repair earthworks are responsible for complying with the National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health (2011). People should contact the Christchurch City Council or ECan to find out whether their land has been used for hazardous activities which might trigger the need for compliance with the NES.
- iii. People intending to do land repair works should check that the works they intend to undertake do not compromise the insurance of their land in the event of future seismic events, including with EQC.
- iii. Any vegetation removed during land repairs should not be replaced with pest species as listed in Appendix 1 to the Infrastructure Design Standard (Part 10). The Council prefers that replanting occurs in accordance with its Streamside Planting Guideline to ensure bank stability is not compromised.
- iv. Information regarding the disposal of excavated material and the Standards and Guidelines referenced in the rule is available from the Council.
- v. Measurement of volume shall include only areas which have been disturbed, including by filling, excavation, soil mixing or injection of materials. Soil above or between these areas which remain undisturbed does not form part of the allowable volume, including where those undisturbed soils are compacted or otherwise altered by the works.
- vi. For the purposes of this rule, the building consent platform extends to a maximum of 2.5m from the exterior wall of an enclosed structure or support structures of open structures
- viii. The injection of grout under pressure should be undertaken by competent practitioners in line with current best practice guidelines. The practitioner should be aware of buried services when undertaking works,