Appendix 1 – Recommended Amendments to Earthworks Chapter

KEY

Red Underlined – Additions recommended as part of s42A Report

~~Red Strikethrough~~ – Deletions recommended as part of s42A Report

Green Underlined – Additions recommended as part of supplementary evidence

~~Green Strikethrough~~ – Deletions recommended as part of supplementary evidence

EARTHWORKS - EW

Overview

Earthworks and other *land disturbance* activities are a necessary part of *subdivision*, land use and development. Changes in *ground level* and creating areas of level land is required to carry out a range of activities and the construction of *buildings* and *infrastructure*. However, if not appropriately managed, adverse *effects* can arise, including land instability, sediment loss and increased *natural hazards*, with impacts on amenity, Ngāi Tahu cultural values, strategic *infrastructure* and the natural environment.

This chapter excludes earthworks provisions relating to *Historic Heritage sites*, *Significant Natural Areas*, Outstanding Natural Landscapes or Features and Amenity Landscapes. For *earthworks* rules relating to these topics, refer to those chapters.

In addition to the District Plan provisions, consent may also be required for *earthworks* under Regional Plan provisions and/or National Environmental Standards.

Objectives

EW-O1 *Earthworks* and *land disturbance* for *subdivision*, land use and development are facilitated and undertaken in a manner that minimises adverse *effects* on the surrounding environment and protects the natural environment, Ngāi Tahu cultural values, people and property.

Policies

EW-P1 Recognise the benefits and necessity of *earthworks* for the *subdivision*, use and development of land and the provision of utilities, by enabling *earthworks* and *land disturbance*:

1. for a range of small scale and *temporary activities* that are associated with and support anticipated *subdivision* and land development, such as fencing and service connections, geotechnical investigations, septic systems, underground storage tanks and clearing of *drains*;
2. associated with ~~rural~~ primary production, where these are located in the General Rural Zone;
3. that provide for the construction, upgrade or maintenance and repair of the *transport network*, recreational tracks and *network utilities*; or
4. that are of a bulk, scale and form appropriate to the anticipated character and amenity of the zone.

EW-P2 Allow for *earthworks* within the *National Grid Yard* where these are of a scale and nature that will not compromise the safe and efficient functioning, operation, maintenance and repair, upgrading and development of the *National Grid*.

EW-P3 Allow for *earthworks* of a limited bulk and scale within areas of potential inundation to ensure these do not exacerbate inundation or flooding effects on other sites.

EW-P4 Require *earthworks* to be appropriately designed, located and undertaken so that:

1. the cut depth and fill *height* does not detract from the amenity or stability of other sites;
2. unretained batters are designed and managed to ensure people and property are protected;
3. *earthworks* near *rivers* and *streams* are managed to ensure *river* and stream values are maintained or enhanced;
4. *earthworks* on steeper slopes are managed the ensure land stability is maintained;
5. *dust*, sediment and erosion are controlled to protect land stability, air, soil and *water* quality;
6. the area of disturbed ground is stabilised and replanted in a timely manner to minimise visual *effects*, *dust*, sediment or erosion; and
7. *accidental discovery* protocol inclusive of Ngāi Tahu tikanga and values is followed in the event of discovery of *sensitive material* or unknown *archaeological sites*.

EW-P5 Manage *earthworks* that are of a nature, scale or in a location where there may be adverse *effects* to ensure that:

1. the *earthworks* do not exacerbate or create any *natural hazard*, such as impact on *land* stability or inundation or flooding *effects* on other *sites*;
2. the natural character of *rivers* and their margins are preserved and *water* quality, stream health, the intrinsic values of ecosystems, ~~Ngāi Tahu cultural~~ mauri and mahinga kai values, and public *access* are maintained or enhanced;
3. the design, location and undertaking of *earthworks* recognise Ngāi Tahu cultural values associated with the area, including whakapapa and a consideration of cultural landscapes, protects *archaeological sites* and cultural *sites* of significance and any wāhi tapu, and limits any adverse *effects* on the underlying relationship Ngāi Tahu hold with the natural *environment*;

4. any changes to the natural landform minimise the visual *effects* on the landscape character, and *indigenous vegetation* is maintained, replaced or enhanced;
5. the safe and efficient functioning of the *transport network* or regionally significant *infrastructure* is not impacted; and
6. they are compatible with the character of the underlying zone and anticipated *amenity values* of surrounding *sites* are maintained by controlling:
   (a) ongoing adverse *effects* such as visual *effects*, overlooking, shading or dominance from the bulk and scale;
   (b) potential short term adverse *effects* such as the visual appearance of the works, *dust*, *noise* and vibration and traffic *effects*.

Notes

Note 1	**Provisions in Other Chapters**
	The provisions in this chapter apply in addition to the provisions of the other chapters in the District Plan and the plan should be read as a whole. This chapter also implements other chapters in the District Plan that do not have specific rules such as Sites and Areas of Significance to Māori and Mana Whenua.
Note 2	**Gore District Council Subdivision and Land Development Engineering Standards**
	The Gore District Council Subdivision and Land Development Bylaw 2019 provides layout and design standards that apply to construction and *land* development activities. In addition to the requirements of the District Plan, compliance is the required with the provisions and processes of the Bylaw, or any subsequent Council Engineering Code of Practice replacing it.
Note 3	***Accidental Discovery* Protocol**
	Heritage New Zealand Pouhere Taonga Act 2014 Should an archaeological site or wāhi tapu site be discovered as a result of earthworks these may also require authorisation under the Heritage New Zealand Pouhere Taonga Act 2014. An archaeological authority is required under the Heritage New Zealand Pouhere Taonga Act 2014 to modify or destroy an archaeological site. If you wish to do any earthworks that will or may modify or destroy the whole or any part of an archaeological site, you must first obtain an authority from Heritage New Zealand Pouhere Taonga. This is the case regardless of whether the site is designated, or the activity is permitted under the District Plan or Regional Plan, or a resource or building consent has been granted. The Heritage New Zealand Pouhere Taonga Accidental Discovery Protocol manages unidentified archaeological sites that may be discovered as a result of earthworks. It is not always appropriate to operate under an Accidental Discovery Protocol. If there is cause to suspect any works may encounter archaeology, an archaeological assessment should be undertaken by a consultant archaeologist to determine

whether an archaeological authority is required to be obtained.

Heritage New Zealand Pouhere Taonga and mana whenua via Hokonui Rūnanga should be consulted regarding any activity which may result in the modification, damage or destruction of any entry on the New Zealand Heritage List/Rārangi Kōrero or any archaeological site recorded on the New Zealand Archaeological Association's (NZAA) national database of recorded archaeological sites, Archsite.

Ngai Tahu ki Murihiku Accidental Discovery Protocol

Should a Ngāi Tahu Kōiwi, archaeological site, taonga or artefact or in-situ (natural state) pounamu/greenstone be uncovered mana whenua will need to be contacted via Hokonui Rūnanga and the Ngai Tahu ki Murihiku Accidental Discovery Protocol must be followed. This process is set out in the Section 4.1 of the Mana Whenua chapter of the District Plan.

Note 4	**Archaeological alert layer**

The archaeological alert layer provides a mechanism to highlight areas where archaeology is known to be present or where current or future development may impact upon as yet unrecorded *archaeological sites*, both above ground and subsurface. The layer does not indicate that these are the only places where archaeology may be encountered. Any proposed development, within the layer or not, should assess whether there is reasonable cause to suspect that archaeology may be present to ensure compliance with the archaeological provisions of the Heritage New Zealand Pouhere Taonga Act 2014.

Rules

***Earthworks* and *Land Disturbance* Exempt from District Plan Rules in this Chapter**	
All Zones **Excluding *Historic Heritage* sites, *Significant Natural Areas*, Outstanding Natural Landscapes or Features**	***Earthworks* and *Land Disturbance* of the following activities are exempt from the rules in this chapter of the District Plan other than EW-R12:** ~~1. *Cultivation* of land~~ ~~2. Planting vegetation, trees and crops~~ ~~3. Restoration of *indigenous vegetation*~~ ~~4. Gardening, planting or any vegetation and/or the construction or maintenance of garden amenities~~ ~~5. Drilling *bores*~~ ~~6. Internments in a burial ground, cemetery or *urupā*, within the burial plot of that internment~~ ~~7. Filling of *building* foundation with granular fill under concrete slab foundation~~ ~~8. Filling with drainage metal behind a retaining wall~~ ~~9. Digging of hāngī pits, or other small scale cultural cooking methods~~ 10. *Earthworks* either permitted by a rule in a regional plan or Resource Consent issued by Environment Southland. 11. *Earthworks* for *natural hazard* mitigation undertaken by or on behalf of a statutory authority.
EW-RX	***Cultivation* of land, planting vegetation, trees and crops**
EW-RX	**Restoration of indigenous vegetation**
EW-RX	***Gardening*, ~~planting or any vegetation~~ and/or the construction or maintenance of garden amenities**
EW-RX	**Drilling bores**
EW-RX	**Internments in a burial ground, cemetery or urupā, within the burial plot of that internment**
EW-RX	**Filling ~~of building foundation~~ with granular fill under concrete slab building foundations, sub-grade for roads and other sealed areas, or filling with drainage metal behind a retaining wall**

EW-RX	Digging of hāngī pits, or other small-scale cultural cooking methods	
All Zones Excluding *Historic Heritage* sites, *Significant Natural Areas*, Outstanding Natural Landscapes or Features	**Activity status:** Permitted Where: 1. The works are undertaken in accordance with Earthworks Standards EW-S3, EW-S5 and EW-S7.	**Activity status where compliance is not achieved:** Restricted Discretionary **Matters of discretion:** 1. The timing and duration of the works. 2. *Effects* on ground stability. 3. *Effects* on any *adjoining land*, including visual *effects*. 4. Visual amenity and landscape *effects*. 5. Sediment, erosion and *dust* management. 6. Impacts on Ngāi Tahu cultural values, including those listed in MW-2.3. 7. The matters of discretion of any infringed Standard(s).
EW-RX EW-R1	Disposal of spoil from drain clearance work within the site the drain is located ***Earthworks*** **and *land disturbance* for the construction of *fences***	
All Zones **Excluding *Historic Heritage* sites, *Significant Natural Areas*, Outstanding Natural**	**Activity status:** Permitted Where: ~~1. Any *land disturbance* does not exceed:~~ ~~(a) 1 metre in width for more than 10 metres in any 100-metre length; and/or~~ ~~(b) 1 metre in *height* or depth; and~~	**Activity status where compliance is not achieved:** Restricted Discretionary **Matters of discretion:** 8. The timing and duration of the works. 9. *Effects* on ground stability. 10. *Effects* on any *adjoining land*, including visual *effects*.

Landscapes or Features	~~2. The ground is reinstated to original levels within 48 hours of work being completed.~~ ~~3. The works are undertaken in accordance with Earthworks Standards EW-S3, EW-S5 and EW-S7.~~ 1. All Earthworks Standards are complied with. *Note:* *The disturbance of land for the installation of fence posts is exempt from the earthworks rule.*	11. Visual amenity and landscape *effects*. 12. Sediment, erosion and *dust* management. 13. Impacts on Ngāi Tahu cultural values, including those listed in MW-2.3. 14. The matters of discretion of any infringed Standard(s).
EW-R2	**Test pits or boreholes necessary as part of a geotechnical assessment**	
EW-R3	**Installing septic tanks and associated drainage fields**	
EW-R4	~~**Disposal of spoil from *drain* clearance work within the *site* the *drain* is located**~~	
EW-R5	**Replacement, removal and installation of underground storage tanks**	
EW-R6	**Service connections**	
All Zones **Excluding *Historic Heritage* sites, *Significant Natural Areas*, Outstanding Natural**	**EW-R2 to EW-R6** **Activity status:** Permitted Where: 1. The ground is reinstated to original levels within 48 hours of work being completed. 2. The works are undertaken in accordance with Earthworks Standards EW-S1, EW-S2, EW-S3, ~~EW-S4~~ EW-S5 and EW-S7.	**Activity status where compliance is not achieved:** Restricted Discretionary **Matters of discretion:** 1. The timing and duration of the works. 2. *Effects* on ground stability. 3. *Effects* on any *adjoining land*. 4. Visual amenity and landscape *effects*.

Landscapes or Features		5. Sediment, erosion and *dust* management. 6. Impacts on Ngāi Tahu cultural values, including those listed in MW-2.3. 7. The matters of discretion of any infringed Standard(s).
EW-R7	**Digging of *dead holes* and farm rubbish pits**	
EW-R8	***Earthworks* for *silage pits***	
EW-R9	***Earthworks* for the construction, maintenance and repair or upgrade of a *farm track* or *farm infrastructure***	
General Rural Zone **Excluding *Historic Heritage* sites, *Significant Natural Areas*, Outstanding Natural Landscapes or Features**	**EW-R7 to EW-R9** **Activity status:** Permitted Where: 1. The total *earthworks* area ~~in any 12 month period~~ at any one time does not exceed 2,500 m^2 per *site*. 2. The area is progressively stabilised, filled or recontoured. 3. The works are undertaken in accordance with Earthworks Standards EW-S1, EW-S2, EW-S3, ~~EW-S4~~, EW-S5 and EW-S7.	**Activity status where compliance is not achieved:** Restricted Discretionary **Matters of discretion:** 1. The timing and duration of the works. 2. *Effects* on ground stability. 3. *Effects* on any adjoining *site*, including visual *effects*, *dust*, *noise*, vibration or loss of privacy. 4. Visual amenity and landscape *effects*, and whether there is a *functional* or *operational* *need* for the location of the activity, and the extent to which alternative practicable options have been considered and their feasibility. 5. Sediment and erosion *effects* and management.

		6. The potential to create new or exacerbate existing *natural hazards*, impact natural drainage patterns, redirect overland flow paths or flood flows. 7. *Vehicle movements* to and from the *site* related to the *earthworks* and the controls to manage *effects* on traffic safety and amenity. 8. Impacts on Ngāi Tahu cultural values, including those listed in MW-2.3. 9. The matters of discretion of any infringed Standard(s).
All Other Zones	**Activity status:** Non-complying	**Activity status where compliance not achieved:** N/A
EW-R10 **EW-R11**	***Earthworks* for the construction, upgrade or maintenance and repair of the *transport network* and recreational walking and cycling tracks** ***Earthworks* and *land disturbance* for *network utilities* or *renewable electricity generation activities*, including associated vehicle access tracks**	
All Zones **Excluding *Historic Heritage* sites, *Significant Natural Areas*, Outstanding Natural Landscapes or Features**	**EW-R10 to EW-R11** **Activity status:** Permitted Where: 1. The total *earthworks* area open at any one time does not exceed 2,500 m^2. 2. The *earthworks* area is progressively stabilised, filled or recontoured.	**Activity status where compliance is not achieved:** Restricted Discretionary **Matters of discretion:** 1. The timing and duration of the works. 2. The functional and *operational needs* of, and benefits derived from, the works, including the potential impact on the levels of service if the work is not undertaken. 3. *Effects* on ground stability.

	3. The works are undertaken in accordance with Earthworks Standards EW-S1, EW-S2, EW-S3, ~~EW-S4~~, EW-S5, and EW-S7.	4. *Effects* on any adjoining *site*, including visual *effects*, *dust*, *noise*, vibration or loss of privacy. 5. Visual amenity and landscape *effects*. 6. Sediment and erosion *effects* and management. 7. The potential to create new or exacerbate existing *natural hazards*, impact natural drainage patterns, redirect overland flow paths or flood flows. 8. *Vehicle movements* to and from the *site* related to the *earthworks* and the controls to manage *effects* on traffic safety and amenity. 9. Impacts on Ngāi Tahu cultural values, including those listed in MW-2.3. 10. The matters of discretion of any infringed Standard(s).
EW-R12	***Earthworks* and *land disturbance* within *National Grid Yards***	
All Zones ~~**Excluding *Historic Heritage* sites, *Significant Natural Areas*, Outstanding Natural Landscapes or Features**~~	**Activity status:** Permitted Where, within the *National Grid Yard:* 1. The depth of the *earthworks* or *land disturbance* is no greater than 300mm within 6m of the outer edge of the visible foundation of a *National Grid* support *structure*; and 2. The depth of the earthworks or land disturbance is no deeper than 3 metres when located between 6 metres and 12 metres from the National Grid Support Structure; and	**Activity status where compliance is not achieved:** Non-complying

	3. The stability of the *National Grid* support *structure* is not compromised; and 4. Physical and practical *access* to the *National Grid* support *structures* is maintained; and 5. The *earthworks* or *land disturbance* do not result in a reduction in the ground to *conductor* clearance distances, below what is required by Table 4 of NZECP34:2001; and 6. The e~~E~~*arthworks* ~~that~~ otherwise comply with clause 2.4.1 of NZECP34:2001. 7. All Earthworks Standards are complied with. Note: Rule EW-R12 ~~Clauses (1) above~~ does not apply to *earthworks* or *land disturbance*: 1. Undertaken as part of normal agricultural, horticultural or domestic *cultivation*, or repair, sealing or resealing of a *road*, *footpath*, driveway or *farm track*; 2. Involving vertical holes not exceeding 500mm in diameter, provided they: a. are more than 1.5m from the outer edge of the pole *structure* or stay wire; or b. are a post hole for a farm fence or horticulture *structure* more than 6 m from the visible outer edge of the tower or support *structure* foundation.	
EW-R13	***Earthworks* and *land disturbance* within areas subject to Natural Hazards (Flooding)**	
Areas subject to Natural Hazards (Flooding)	**Activity status:** Permitted Where:	**Activity status where compliance is not achieved with:**

	1. The work is not undertaken within the Mataura River Floodway; and 2. The work is not undertaken on the river side of a stopbank. 3. The work is within the Actual or Potential Inundation area and: (a) The activity is undertaken within the mapped Stopbank Protection Area; or (b) The bulk and scale does not exceed: i. Cut depth ~~or fill height~~ (measured vertically) ~~does not exceed~~ of 0.~~5~~6 meters; ii. Fill height (measured vertically) of 0.3 metres; iii. Fill volume above ground level of 10 m^3 per site; and iv. Cumulative volume of filling and excavation of 25 m^3 per site/ 10 years.	**EW-R13(1) or EW-R13(2):** Non Complying **EW-R13(3):** Restricted Discretionary **Matters of discretion:** 1. The potential to create new or exacerbate existing *natural hazards*, impact natural drainage patterns, redirect overland flow paths or flood flows. 2. *Effects* on *water* quality. 3. Sediment and erosion *effects* and management. 4. Impacts on Ngāi Tahu cultural values, including those listed in MW-2.3. 5. The matters of discretion of any infringed Standard(s).
EW-R14	***Earthworks* and *land disturbance* not otherwise provided for**	
Commercial and Mixed Use Zones **Residential Zones** **Natural Open Space Zone** **Sport and Active Recreation Zone** **Maori Purpose Zone**	**Activity status:** Permitted 1. In any 12 month period, the total volume of *earthworks* does not exceed 250m^3 per *site*. 2. All Earthworks Effects Standards are complied with.	**Activity status where compliance is not achieved:** Restricted Discretionary **Matters of discretion:** 1. Whether the *earthworks* are of a type, scale and form that is appropriate for the location and character of the zone. 2. The timing and duration of the works.

Rural Lifestyle Zone **Settlement Zone** **Field Days Zone** **Camp Columba Zone** **Excluding *Historic Heritage sites*, *Significant Natural Areas*, Outstanding Natural Landscapes or Features**		3. *Effects* on ground stability. 4. *Effects* on any surrounding *site*, including visual *effects*, *dust*, *noise*, vibration or loss of privacy. 5. Visual amenity and landscape *effects*. 6. Sediment and erosion control *effects* and management. 7. The potential to create new or exacerbate existing *natural hazards*, impact natural drainage patterns, redirect overland flow paths or flood flows. 8. *Vehicle movements* to and from the *site* related to the *earthworks* and the controls to manage *effects* on traffic safety and amenity. 9. Impacts on Ngāi Tahu cultural values, including those listed in MW-2.3. 10. Whether there is a functional or operational need for the location of the activity. 11. The matters of discretion of any infringed Standard(s).
General Rural Zone **Industrial Zone** **Airport Zone** **Excluding *Historic Heritage* sites, *Significant Natural Areas*, Outstanding Natural Landscapes or Features**	3. In any 12 month period, the total volume of *earthworks* does not exceed 1,000m^3 per *site*. 4. All Earthworks Effects Standards are complied with.	

Standards

EW-S1	Cut depth and fill *height*	
All areas	1. Cut depth or fill *height* shall not: (a) exceed a cut depth or fill *height* (measured vertically) of 3 meters; or (b) exceed a cut depth or fill *height* (measured vertically) of 0.5 meters within ~~1.5m~~ 1 metre of a *boundary* with a *site* in different ownership, except for the construction of post and wire fences of in the General Rural Zone. *Note: a building consent may be required for retaining structures.*	**Activity status where compliance is not achieved:** Restricted Discretionary **Matters of discretion:** 1. *Effects* on any *adjoining land*, including shading, outlook and loss of privacy. 2. Visual amenity and landscape *effects*. 3. The stability of *land* or *structures* in or on the *site* or adjacent *sites*. 4. Erosion management and sediment control. 5. The potential to create new or exacerbate existing *natural hazards*, impact natural drainage patterns, redirect overland flow paths or flood flows. 6. Impacts on Ngāi Tahu cultural values, including those listed in MW-2.3.
EW-S2	**Unretained batters**	
All areas	1. Unretained cut and fill batters shall not: (a) be steeper than 2 horizontal to 1 vertical; (b) be steeper than 1 horizontal to 1 vertical where constructed in rock;	**Activity status where compliance is not achieved:** Restricted Discretionary **Matters of discretion:**

	~~(c) be constructed using moisture content susceptible soils;~~ (d) have a bench with a width of ~~more~~ less than 1.8m; or (e) be closer than 0.6m from the edge of a batter to the *kerb* or back edge of any *footpath*.	1. *Effects* on any *adjoining land*, including shading, outlook and loss of privacy. 2. Visual amenity and landscape *effects*. 3. The stability of *land* or *structures* in or on the *site* or adjacent *sites*. 4. Erosion management and sediment control. 5. The potential to create new or exacerbate existing *natural hazards*, impact natural drainage patterns, redirect overland flow paths or flood flows. 6. Impacts on Ngāi Tahu cultural values, including those listed in MW-2.3.
EW-S3	***Setbacks* from *rivers* and streams**	
All areas	1. Earthworks shall be set back the minimum distances from the top of the closest bank of a river or stream as follows: (a) 20m for high order rivers or streams (order 5 and above); (b) 10m for middle order rivers or streams (order 3 and 4); and (c) 5m for low order rivers or streams (order 1 and 2). Except that this standard does not apply to earthworks for restoration of indigenous vegetation. Refer to Appendix 3 for river and stream orders	**Activity status where compliance is not achieved:** Restricted Discretionary **Matters of discretion:** 1. Whether there is a *functional need* for the works to locate in a riparian margin, and the extent to which alternative practicable options have been considered and their feasibility. 2. The effects on water quality and the stability and health of the stream bed and banks, including erosion and *sedimentation control measures.*

	Note: *This standard does not apply to land disturbance activities and excludes gardening, cultivation, and disturbance of land for the installation of fence posts.* *Earthworks either permitted by a rule in a regional plan or Resource Consent issued by Environment Southland, including in relation to drainage, vegetation and weed management, are also exempt from the rules in this chapter*	3. The nature of existing riparian vegetation and the effects of proposed planting or modification on indigenous *biodiversity* and ~~/or habitats.~~ proposed mitigation measures, including: (a) opportunities for enhancement and restoration; (b) methods proposed to monitor or inspect the works undertaken; (c) the timing of works to minimise adverse effects on threatened or at risk indigenous species; and (d) management of potential adverse effects through a *Council Authorised Biodiversity Management Plan*. 4. The natural character of the riparian margin and the effects of the activity on landscape values and the ability to restore, rehabilitate or enhance riparian areas. Refer to Natural Features and Landscapes – Appendix 5 in regard to the Mataura River. 5. Impacts on Ngāi Tahu cultural values, including those listed in MW.2.3. 6. The effects on public and customary access to the stream or *river*. 7. The potential for flooding and to create new or exacerbate existing *natural hazards*, impact natural drainage patterns, redirect overland flow paths or flood flows, including on to other *sites*.
~~**EW S4**~~	~~**Instability of Land**~~	
~~**All areas**~~	~~1. *Earthworks* shall not be undertaken on land with an existing slope angle exceeding 15 degrees.~~ ~~*Notes:*~~	~~**Activity status where compliance is not achieved:**~~ ~~Restricted Discretionary~~ ~~**Matters of discretion:**~~

	~~*A 15 degree slope angle is also expressed as: 1 vertical to 3.7 horizontal, or 26.8 percent.*~~ ~~*Earthworks or land disturbance must not result in any instability of land or structures at or beyond the boundary of the site where the earthworks occur. If there is reason to suspect that the earthworks may result in instability of any land, notwithstanding the slope degree, a site-specific geotechnical assessment undertaken in accordance with engineering best practice may be required.*~~	~~1. The stability of *land* or *structures* in or on the *site* or adjacent *sites*~~ ~~2. Erosion management and sediment control.~~ ~~3. The natural landform and landscape *effects*.~~ ~~4. The potential to create new or exacerbate existing *natural hazards*, impact natural drainage patterns, redirect overland flow paths or flood flows.~~ ~~5. Impacts on Ngāi Tahu cultural values, including those listed in MW-2.3.~~
EW-S5	**Erosion, sediment, and *dust* control**	
All areas	1. For the duration of *earthworks* or *land disturbance* measures must be implemented to: (a) ~~(b)~~ prevent silt or sediment from entering the *stormwater* system, overland flow paths, rail or *roads*; (b) ~~(c)~~ control erosion; and (c) ~~(d)~~ control *dust* beyond the boundaries of the *site*. 2. Protection measures utilised to comply with EW-S5.1 above shall include the following, as appropriate: (a) On-*site stormwater* management and treatment with interceptor *drains* and/ or bunds diverting *water* at toes of slopes and away from batter faces or areas of fill; (b) Soil shaping and compaction of exposed surfaces; (c) Resurfacing and revegetation of completed surfaces; (d) Planting, environmental matting, hydroseeding, drainage channels, or similar measures at an early stage in the *earthworks* construction phase;	**Activity status where compliance is not achieved:** Restricted Discretionary **Matters of discretion:** 2. Silt and sedimentation *effects* and the *earthworks* design and construction management measures to control and retain and silt and sediment on *site*. 3. Erosion *effects* and the *earthworks* design and construction management measures to control erosion. 4. The *effects* of *dust* generation and management of adverse amenity *effects*, including from transport. 5. Erosion sediment and *dust effects* on any surrounding *site*, including *roads* and Council reticulated services.

	(e) Grading surfaces of cuts and fill to prevent ponding; (f) Sediment traps and/or retention ponds; (g) Temporary barriers or silt *fences;* (h) Vegetated buffer strips; and/or (i) Watering and/or permanently surfacing of *roads* early in the construction phase.	5. Impacts on Ngāi Tahu cultural values, including those listed in MW-2.3.
EW-S6	**Site Reinstatement**	
All areas	1. No later than six months from the commencement of *earthworks* and *land disturbance*: (a) the *earthworks* area shall be stabilised, filled and/or recontoured in a manner consistent with the surrounding land; and (b) replanted with vegetation; or (c) sealed, paved, metalled or built over.	**Activity status where compliance is not achieved:** Restricted Discretionary **Matters of discretion:** 1. The timing and duration of the works. 2. *Effects* on ground stability. 3. *Effects* on any surrounding *site*, including visual *effects* and *dust*. 4. Visual amenity and landscape *effects*. 5. The nature of the vegetation proposed and whether species are indigenous. 6. Sediment and erosion *effects* and management. 7. The potential to create new or exacerbate existing *natural hazards*, impact natural drainage patterns, redirect overland flow paths or flood flows.

		8. Impacts on Ngāi Tahu cultural values, including those listed in MW-2.3.
EW-S7	***Accidental Discovery* Protocol**	
All areas	In the event that any of the following is discovered or disturbed, the procedure set out below must be adhered to, as well as the procedures set out in MW-4.1 in the case of human remains/ kōiwi, taonga or Māori cultural artefact, and in-situ (natural state) pounamu/greenstone: • Human remains/ kōiwi • An *archaeological site* • A Māori cultural artefact/taonga tūturu • In situ (natural state) pounamu/greenstone • A protected New Zealand object as defined in the Protected Objects Act 1975 (including any fossil or sub-fossil). 1. Cease works and secure the area (a) immediately cease all works within 20m of any part of the discovery, including shutting down all earth disturbing machinery and stopping all earthmoving activities (b) secure the area of the discovery, including a sufficient buffer area to ensure that all *sensitive material* remains undisturbed.	**Activity status where compliance is not achieved:** Non-complying

2. Inform relevant authorities and parties immediately of the discovery
   (a) the New Zealand Police if the discovery of human remains/ kōiwi.
   (b) the Council in all cases.
   (c) Heritage New Zealand Pouhere Taonga if the discovery is an *archaeological site*, Māori cultural artefact, human remains/ kōiwi.
   (d) *Mana Whenua* if the discovery is an *archaeological site*, Māori cultural artefact, human remains/ kōiwi or in situ (natural state) pounamu/greenstone.
   (e) The Ministry for Culture and Heritage for protected New Zealand objects.

3. Wait for and enable an inspection of the *site*
   (a) wait for and enable an inspection of the *site* by the relevant authority or agency or Hokonui Rūnanga representative (where applicable).
   (b) following *site* inspection and consultation with all relevant parties (including owner and consent holder), the Council will determine the area within which work must cease and any changes to controls on *discharges* of *contaminants*.

4. Recommencement of work
   (a) work within the area determined by the Council in (2) above must not recommence until all of the following requirements, so far as relevant to the discovery, have been met:
      (i) Heritage New Zealand has confirmed that an *archaeological authority* has been approved for the work or that none is required.

(ii) any required notification under the Protected Objects Act 1975 has been made to the Ministry for Culture and Heritage.

(iii) any material of scientific or educational importance must be recorded and if appropriate, recovered and preserved.

(iv) where the *site* is of Māori origin and an authority from Heritage New Zealand Pouhere Taonga is not required, the Council will confirm, in partnership with Hokonui Rūnanga that:

- any human remains/kōiwi have either been retained where discovered or removed in accordance with the appropriate tikanga; and
- any agreed revisions to the planned works to be/have been made in order to address adverse *effects* on Ngāi Tahu cultural values, including those listed in MW-2.3.

(b) resource consent has been granted to any alteration or amendment to the *earthworks* or *land disturbance* that may be necessary to avoid the *sensitive materials* and that is not otherwise permitted under the plan or allowed by any existing resource consent.

(c) there are no requirements in the case of *archaeological sites* that are not of Māori origin and are not covered by Heritage New Zealand Pouhere Taonga Act 2014.

Note:

Where the Heritage New Zealand Pouhere Taonga Act 2014 applies the Heritage New Zealand Pouhere Taonga Accidental Discovery Protocol manages unidentified

archaeological sites that may be discovered as a result of earthworks separate to District Plan requirements.