

## Auckland Unitary Plan

## **Standard Conditions Manual**

## General Earthworks

#### **Disclaimer**

The information in this Standard Conditions Manual is, according to Auckland Council's best efforts, accurate at the time of publication. Auckland Council makes every reasonable effort to keep it current and accurate. However, users of the Conditions Manual are advised that:

- Although the conditions are "standardised", in the sense that they should be applied consistently where they are required, this does not mean that they should all be applied in every instance. Applicants need to consider the nature of the activity, and the characteristics of the site and its surroundings in considering whether to apply each and every condition.
- The standard conditions should be used with caution as a starting point from which appropriate conditions for the individual consent should be drafted to align with the requirements of ss108, 108AA and 220 of the Resource Management Act 1991.
- Further guidance as to whether to apply the conditions are included in the guidance notes that accompanies each condition.
- Users should take specific advice from qualified professional people before undertaking any action as a result of information obtained in this Standard Conditions Manual.
- Auckland Council does not accept any responsibility for, or liability whatsoever whether in contract, tort, equity or otherwise (including negligence) arising from the use of, or reliance on, this Standard Conditions Manual. This includes, without limitation, any liability arising from any error, or inadequacy, deficiency, flaw in or omission from the information provided.

## How are the conditions set out?

The standard conditions for earthworks are grouped under four broad headings:

- General Earthworks Conditions
- Geotechnical related Conditions
- Erosion and Sediment Control Conditions
- Erosion and Sediment Control Adaptive Management Plan

The guidance notes of each condition outlines whether it can be applied to scenarios around regional and/or district plan consents.

## Which conditions should I use?

Your first consideration is whether any condition at all is even required in the circumstances.

The standard earthworks conditions have been prepared having regard to the potential earthworks effects of different types of activities on different types of sites.

It may be that a general condition requiring the *activity to be carried out in accordance with plans*, one of the standard conditions set out in this section, or a purpose-built condition may be required. Refer first to the general guidance section for more guidance on this matter. In the event that you decide that a standard earthworks condition is required, the following tables will guide you in making a choice as to the most appropriate option. There are cross references to other condition sets within the Standard Conditions Manual i.e. general construction conditions, contamination condition, management plan condition and advice notes.

As a *general* guide, some standard earthwork conditions may be appropriately applied where the site is small, the activity is less complex and/or has a lower risk profile, and/or the effects of the activity are likely to be less significant. Others may be more appropriately applied where the site is larger, the activity is more complex and/or has a higher risk profile, and/or the effects of the activity are likely to be more significant. The potential applicability of all the conditions in these circumstances is set out in Table 1. Tables 2, 3 and 4 set out some examples of where, based on the low, medium or highrisk profile of the activity in question, the imposition of certain conditions may be warranted, if the condition is directly connected to an adverse effect of the activity on the environment and/or to an applicable district or regional rule.

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## Tables showing what conditions to use and when

**Table 1: Potential applicability of standard conditions** 

Purpose / nature of condition	Consider applying to simple activities, smaller sites with lower risk profiles, less significant effects	Consider applying to complex activities, larger sites with higher risk profiles, more significant effects
Prior work notification	2	See general construction pre-start condition
Control of noise	see general construction condition 4	see general construction condition 4
Access protection	see general construction conditions	see general construction conditions
Control of dust	see general construction conditions	see general construction conditions
Discovery Protocol	N/A	2
Accidental Discovery Protocol advice note	N/A	N/A
Control of vibration	N/A	See general construction condition 6
Traffic management	see general construction	see general construction conditions
	conditions (7)	(7 or 8)
Access control	N/A	see general construction conditions
Quality of fill	10	10 & 11
Fill disposal	N/A	See contamination condition 10
Stability of works	16	14, 15 & 16
Control of sediment	17	17
		18 or 19
		20, 21 & 22
Staging	N/A	15 & 16
Seasonal limitations	N/A	19 & 20
Decanting Earth Bunds	N/A	21
Chemical Treatment Plan	N/A	22 & 23

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N/A	See Erosion and sediment control
	Adaptive Management Plan
	conditions (24 - 30)

**Table 2: Potential application of conditions in low risk situations** 

Aspect	Applicability
Example of activity	Construction and preparation for new building(s)
	Minimal cut and/or fill required
	Minimal site modification required
Reasons for	Extent of Earthworks - District Rules
consent (amongst others)	
Site and surrounds characteristics	Relatively flat site
	No nearby sensitive receptors (e.g. streams, buildings etc.)
	No traffic management required
	No specific sediment controls required
	No likelihood of staging works
Conditions	Should be included
	Control of sediment (17)
	May also be required
	Prior notification - see general construction
	Control of noise - see general construction

Table 3: Potential application of conditions in medium risk situations

Aspect	Applicability
Example of activity	Construction and preparation for new building(s)
	Moderate levels cut and/or fill
	Moderate levels of site modification
Reasons for consent (amongst others)	Extent of Earthworks - District Rules
Site and surrounds characteristics	Sloping site
	Possibility of nearby sensitive receptors (e.g. streams, intensive urban environment)

Aspect	Applicability	
	Extent of earthworks such that some specific traffic management may be required  Extent of earthworks such that dust management may be appropriate	
	Specific sediment protection measures not required	
	Likelihood of staging of works	
	Possibility of some geotechnical considerations	
Conditions	Should be included	
	Prior notification (2) or pre-start meeting - see general construction	
	Control of sediment (17), or possibly (18) or (19)	
	Control of noise - see general construction	
	May also be required	
	Traffic management - see general construction	
	Access control - see general construction	
	Access protection - see general construction	
	Control of dust - see general construction	
	Quality of fill (10)	
	Approved geotechnical design (14)	
	Certification of sediment controls (20)	
	Ensure effectiveness of sediment controls (21)	
	Accidental Discovery Protocol (2)	
	Control of vibration - see general construction	
	Stability of works (16)	

Table 4: Potential application of conditions in high-risk situations

Aspect	Applicability
Activity	Construction and preparation for new building(s)
	Extensive levels of cut and fill
	Extensive levels site modification
Reasons for consent (amongst others)	Extent of Earthworks - District Rules and Regional Rules

Aspect	Applicability
Site and surrounds	Sloping site
characteristics	Nearby sensitive receptors (e.g. streams, intensive urban
	environment, sensitive land uses etc.)
	Extent of earthworks such that specific traffic management is
	required
	Extent of earthworks such that dust management may be appropriate
	Large quantities of cut and/or fill involved
	Specific sediment protection measures required
	Likelihood of staging of works
	Specific geotechnical considerations
Conditions	Should be included
	Pre-start meeting (general construction 1)
	Control of sediment (17) or (18)
	Control of noise - see general construction
	Traffic management - see general construction (7) or (8)
	May also be required
	Seasonal limitations (19 and 20)
	Control of dust - see general construction (11)
	Quality of fill (10) and (11)
	Fill disposal (see contamination condition 10)
	Approved geotechnical design (14)
	Supervised/Certified geotechnical design (15)
	Ensure stability of neighbouring site (16)
	Certification of sediment controls (20)
	Effectiveness of sediment controls (21)
	Notification of removal of required sediment controls (22)
	Access protection - see general construction
	Accidental Discovery Protocol (2)
	Control of vibration - see general construction (6)
	Access control - see general construction (9)
	Decanting earth bunds (21)
	Chemical treatment plan (22/23)

## General earthworks conditions

## Condition 1: Advanced notification that earthworks will be beginning on site

The Council must be notified at least [choose two (2) / five (5)] working days prior to earthwork activities commencing on the subject site.

#### Guidance Note:

This condition should be used to ensure that the monitoring officer is aware that earthworks are beginning, and to allow the opportunity to check any site management measures are in place. This condition may not be required if a comprehensive prestart meeting requirement has been imposed. All regional earthworks consents will require this condition as well as a condition requiring a pre-start meeting to be held.

Where the site is located a significant distance from the service centre (i.e. Orewa, Pukekohe etc.) consideration should be given to extending the two working day default to five working days.

## **Condition 2: Discovery Protocol**

A suitably qualified archaeologist shall be on site during the earthwork operations authorised under this consent to monitor the earthworks. The archaeologist is to be present when [freetext - specify the exact details when the archaeologist should be on site. This should include details on the location of earthworks and the particular types or stages of the earthworks being carried out. For example, when heavy machinery is being used to create the building platforms and stormwater pond etc. as shown on the approved plan Ref #].

If, at any time during <u>site</u> works, sensitive materials (koiwi/human remains, an archaeology site, a maori cultural artefact, a protected NZ object, contamination or a lava cave greater than 1m in diameter) are discovered, then the protocol set out in standards E11.6.1 and E12.6.1 of the Auckland Unitary Plan (Operative in Part) must be followed. In summary these are:

- a. All works must cease in the immediate vicinity (at least 20m from the site of the discovery) and the area of the discovery must be secured including a buffer to ensure all sensitive material remains undisturbed.
- b. The consent holder must immediately advise <u>Council</u>, Heritage New Zealand Pouhere Taonga and Police (if human remains are found) and arrange a site inspection with these parties.

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- c. If the discovery contains koiwi, archaeology or artefacts of Maori origin, representatives from those Iwi groups with mana whenua interest in the area are to be provided information on the nature and location of the discovery.
- d. The consent holder must not recommence works until the steps set out in the above-mentioned standards have been followed and commencement of works approved by <u>Council</u>.

#### Advice Note:

If, at any time during <u>site</u> works, sensitive materials (koiwi/human remains, an archaeology site, a maori cultural artefact, a protected NZ object), contamination or a lava cave greater than 1m in diameter) are discovered, then the protocol set out in standards E11.6.1 and E12.6.1 of the Auckland Unitary Plan (Operative in Part) shall be followed. In summary these are:

- a. All earthworks will cease in the immediate vicinity (at least 20m from the site of the discovery) and the area including a buffer secured to ensure all sensitive material remains undisturbed.
- b. The consent holder must immediately advise <u>Council</u>, Heritage New Zealand Pouhere Taonga and Police (if human remains are found) and arrange a site inspection with these parties.
- c. If the discovery contains koiwi, archaeology or artefacts of Maori origin, representatives from those Iwi groups with mana whenua interest in the area are to be provided information on the nature and location of the discovery.
- d. The consent holder must not recommence works until the steps set out in the above-mentioned standards have been followed and commencement of works approved by <u>Council</u>.

#### Guidance Note:

If there are known "sensitive material" as per rules E11.6.1 & E12.6.1 of the Auckland Unitary Plan (Operative in part) on the site or if there is a high chance that sensitive material may be found, then use the Discovery Protocol condition. If any sensitive material are to be protected, then conditions requiring the protection of the feature will need to be written. This may include, for example, the area to be fenced with controls on activities within this protected area.

For all other low risk sites, the advice note alone will suffice. The advice note will draw attention to the applicant's obligations, and can be applied where there is low risk, for example, no sensitive material within the immediate vicinity, but the wider location is known for the potential for some archaeological features For guidance and advice on managing the discovery of archaeological features, contact the Team Leader Cultural Heritage Implementation on 09 301 0101.

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## Condition 3: Ensure the quality of fill used on the site is acceptable.

All imported fill used must:

- a. comply with the definition for 'cleanfill material' in the Auckland Unitary Plan (Operative in Part) (<u>Chapter J1</u> Definitions) .
- b. be solid material of a stable, inert nature and
- c. not contain hazardous substances or contaminants above recorded natural background levels of the receiving site.

## Advice Note:

(To be used for residential developments or when guided by development engineers)

In addition to the characteristics for imported fill outlined in condition (XX), please refer to the relevant <a href="New Zealand Standard">New Zealand Standard</a> <a href="[e.g. NZS 4431:1989">(Code of Practice for Earth Fill for Residential Development</a>) to ensure that all fill used is of an acceptable engineering standard.

Background contamination levels for the site receiving clean fill referred to by condition (XX) can be found in the <u>Auckland Council</u>, <u>Technical Publication No.</u> 153, <u>Background concentrations of inorganic elements in soils from the Auckland Region (2001)</u>

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# Condition 4: Additional condition for when certification is required (medium and higher risk situations only)

Within 10 working days following the completion of earthworks, the suitably qualified engineering professional responsible for supervising the works must provide to Council, written evidence that all fill used on the subject site has the characteristics set out in condition [3 or as referenced]. Written evidence must be in the form of a receipt, compaction certificate(s) or similar.

#### Guidance Note:

Condition (3) sets an expectation regarding the quality of fill to be used. This condition should only be used where this is some risk regarding the potential quality of fill and potential effects, and can be used irrespective of volume. It should not be a used on all applications. In low risk situations, where minimal controls are required and low levels of fill are involved, this condition should not be necessary, and where no fill is proposed it would not be appropriate to use this condition at all. Medium and high risk situations, involving large volumes of fill, or where specific geotechnical requirements are identified are likely to require this condition, which may also be expanded to include the requirements for certification set out in condition (10). Where there is known contamination, specific contamination conditions would either complement or replace/expand on this condition.

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## Condition 5: Ensure machinery does not discharge/spill hazardous substances during earthworks.

All machinery associated with the earthworks activity must be operated in a way, which ensures that spillages of hazardous substances such as fuel, oil, grout, concrete products and any other contaminants are prevented.

#### Advice Note:

In accordance with condition (XX) refuelling and lubrication activities associated with earthworks machinery should be carried out away from any water body and using methods so that any spillage that does occur can be contained and does not enter the water body.

### Alternative advice note when no condition is imposed:

All machinery associated with the earthworks activity should be operated in a way, which ensures that spillages of hazardous substances such as fuel, oil, grout, concrete products and any other contaminants are prevented.

#### Guidance Note:

It is **not appropriate** to use this condition on all sites, and it should only be used where there is some risk of effects identified (risk indicators could include: large site, with volume of work requiring a range of machinery, and possibly storage/refill areas). Consideration should be given to whether there are activities occurring next to sensitive environments or the nature or volumes of materials being used on site pose a high risk of discharging hazardous substances. In low risk situations, an advice note can be used in the place of a condition.

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## Geotechnical related conditions

## Condition 6: Works in accordance with approved design (where there is risk).

Prior to the commencement of any earthworks, the Council must be provided with written certification from a suitably qualified professional that all permanent earth bunds, retaining walls, and building foundations [add or delete from this list as required] have been designed in accordance with XX [specific reference to relevant engineering code of practice, detailed plans forming part of the application etc.] Written certification must be in the form of a report, or any other form acceptable to the council.

#### Guidance Note:

This condition should only be employed where there are works proposed that carry significant consequences associated with their failure, and detailed designs for such works are not otherwise provided at the application stage. The condition should make specific reference to the works carrying significant risk or consequences of failure, which can be added to or deleted as necessary. As this condition is applied based on significant risk or consequences of failure, it may be applicable irrespective of site size, and may also apply to temporary or permanent structures (such as earth bunds).

Other works (such as haul roads) may not carry such consequences or need for assurance, and may not need to be designed by a suitably qualified engineering professional. In such circumstances, the 'catch-all' condition ensuring stability of neighbouring sites (refer condition (8)) may suffice as a means of assurance.

Supervision and/or certification of such works by a suitably qualified engineering professional (refer condition (7)) may also be appropriate, where a high-risk profile applies. Where issues such as dewatering are of relevance, additional conditions specifically addressing these concerns may complement this condition.

In this context, earth bunds referred to are permanent fixtures, and not those required as temporary silt and sediment control measures (See <u>condition 9</u> for silt and sediment controls).

## Condition 7: Ensure supervision and certification of geotechnical works.

The construction of permanent earth bunds, retaining walls and building foundations and the placement and compaction of fill material [add or delete from this list as required] must be supervised by a suitably qualified engineering professional. In supervising the works, the suitably qualified engineering professional must ensure that they are constructed and otherwise completed in accordance with XX [specific reference to engineering plans referred to in condition (6 or as referenced), relevant engineering code of practice, detailed plans forming part of the application etc.]

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[Include following text where required] Certification from a suitably qualified engineering professional responsible for supervising the works must be provided to Council, confirming that the works have been completed in accordance with condition XX [condition reference], within ten (10) working days following completion. Written certification must be in the form of a geotechnical completion report, or any other form acceptable to the council.

#### Guidance Note:

As with conditions requiring works to be designed by a suitably qualified engineering professional (refer condition (6), this condition should only be employed where there are works proposed that carry significant consequences associated with their failure. The condition should make specific reference to the works carrying significant risk or consequences of failure, which can be added to or deleted as necessary.

Other works (such as the construction of haul roads) may not carry such consequences or need for assurance, and may not need to be supervised by a suitably qualified engineering professional. In such circumstances, a condition relating to ensuring the stability of neighbouring properties (such as condition (8)) may suffice as a means of assurance.

Design of such works by a suitably qualified engineering professional (refer condition (6)) may also be appropriate, where a high-risk profile applies.

Where a high risk profile applies, it may also be appropriate to expand the condition to include the provision for certification. In this context, earth bunds referred to are permanent fixtures, and not those required as temporary silt and sediment control measures (See Condition 9 for silt and sediment controls).

## Condition 8: Ensure stability of the site/neighbouring sites.

All earthworks must be managed to ensure that they do not lead to any uncontrolled instability or collapse either affecting the site or adversely affecting any neighbouring properties. In the event that such collapse or instability does occur, it must immediately be rectified.

#### Guidance Note:

More often than not the council is the first port of call when these complaints are received. Therefore, this condition should be employed when there is an identified risk that the extent or nature of the works are such that stability of other sites should be brought to the consent holder's attention. This condition is likely to be required in conjunction with conditions relating to the design and supervision of works (refer Conditions (6) and (7)). Where site-specific issues have been identified, this condition can complement conditions that are more detailed.

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## **Erosion and sediment control conditions**

#### Condition 9: General sediment control conditions.

All earthworks must be managed to minimise any discharge of debris, soil, silt, sediment or sediment-laden water is discharged beyond the subject site to either land, stormwater drainage systems, watercourses or receiving waters. In the event that a discharge occurs, works must cease immediately and the discharge must be mitigated and/or rectified to the satisfaction of Council.

#### Guidance Notes:

This condition should be applied in lower risk situations to sites that are likely to be flat and involve earthwork consent requirements triggered by the Unitary Plan. In situations of greater risk, the requirement for an Erosion and Sediment Control Plan (ESCP) should be considered (see conditions (10) and (11)).

These are likely to be sites where active monitoring is not otherwise warranted or required by other conditions, and compliance action is generated only as a result of complaints by third parties. For this reason, there is an expectation that earthworks will be managed to minimise any discharge from the site. In setting this expectation and removing any subjectivity around 'minimising' and quantifying appropriate levels of discharge, if discharge occurs then the monitoring officer will have the opportunity to open dialogue with the consent holder to ensure that the site is managed appropriately.

Where contamination issues are at play, conditions (10) and (11) should be used in conjunction with specific contamination conditions.

## Condition 10: Sediment/erosion control in accordance with approved plan

Prior to the commencement of earthworks activity, all required erosion and sediment control measures on the subject site must be constructed and carried out in accordance with the approved XX Erosion and Sediment Control Management Plan [include specific reference to the document].

#### Guidance Note

For guidance on the format of a management plan condition see 'The use of management plan conditions' here.

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## Condition 11: Sediment/erosion control in accordance with plan to be provided

- I. Prior to the commencement of earthworks activity on the subject site, a finalised Erosion and Sediment Control Management Plan (ESCP) [include specific reference to the document] must be prepared in accordance with XX [specific reference to any relevant code of practice e.g.GD05] and submitted to Council for certification No earthworks activity on the subject site must commence until the Council has certified that that the ESCP satisfactorily meets the requirements of [refer specific code above].
- II. The Erosion and Sediment Control Plan required by Condition (11) must contain sufficient detail to address the following matters: [Add matters that should be specifically addressed in this assessment e.g.]:
  - specific erosion and sediment control works (location, dimensions, capacity [Add or delete as required])
  - supporting calculations and design drawings
  - catchment boundaries and contour information
  - details of construction methods
  - timing and duration of construction and operation of control works (in relation to the staging and sequencing of earthworks)
  - details relating to the management of exposed areas (e.g. grassing, mulching)
  - monitoring and maintenance requirements

## Advice note:

Please note that the diversion of stormwater and/or groundwater may require a consent in accordance with the Auckland Unitary Plan (Operative in Part).

(Also include the general advice note 8 and advice note 8A if there are matters in the management plan that are outside the scope of the RMA 1991 and may raise potential liability issues for the council).

#### Guidance Note:

See guidance on the use of management plan conditions here.

Condition (10) can be employed where an Erosion and Sediment Control Management Plan has been approved at the time of consent. Condition (11) can be employed where a draft Erosion and Sediment Control Management Plan has been submitted with the application and requires modification subsequent to the granting of consent.

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#### Condition 12: Certification of sediment and erosion controls.

Within ten (10) working days following implementation and completion of the specific erosion and sediment control works referred to in condition XX, and prior to the commencement of earthworks activity on the subject site, a suitably qualified and experienced person must provide written certification that the erosion and sediment control measures have been constructed and completed in accordance with XX [specific reference to plan referred to in condition (10 or 11), relevant code of practice e.g. GD05, detailed plans forming part of the application etc.] to Council. Written certification must be in the form of a report or any other form acceptable to the council.

### Advice note:

Where certification of specific erosion and sediment controls is required in accordance with the condition above, it can be accompanied by an advice note as follows:

Certification of the sediment and erosion control structure(s)\_required by condition (XX) should contain sufficient details to address the following matters: [Add matters that should be specifically addressed in this assessment e.g.]:

- Details on the contributing catchment area
- Retention volume of structure (dead storage and live storage measured to the top of the primary spillway)
- Dimensions and shape of structure
- Position of inlets/outlets
- Details regarding the stabilisation of the structure

#### Guidance Note:

Where specific sediment and erosion control are required (refer conditions (18) and (19)), and either the extent of the works, or the surrounding environment is of a nature that increases the risk profile, a requirement that the controls be certified may be appropriate. Where earthworks are to be undertaken in stages, this condition should be modified to provide for interim certifications.

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#### Condition 13: Ensure effectiveness of sediment and erosion controls

The operational effectiveness and efficiency of all erosion and sediment control measures specifically required by condition XX or by the XX Erosion and Sediment Control Plan [include specific reference to the document] must be maintained throughout the duration / each stage [delete as required]) of earthworks activity, or until the site is permanently stabilised against erosion. A record of any maintenance work must be kept and be supplied to Council on request.

### Advice note:

As a guide, maintenance of the erosion and sediment control measures required by condition (XX) should seek to ensure that the accumulated sediment be removed from sediment retention devices prior to reaching 20% of total storage capacity. Sediment removed from treatment devices should be placed on stable ground where it cannot re-enter the device or be washed into any watercourse.

Where maintenance work is required to ensure the effectiveness of these erosion and sediment control measures, the record should include the date, time and details on the nature of any maintenance. The site manager (or equivalent) will need to ensure regular inspections of these measures, and particularly within 24 hours after any rainstorm event. Where it is identified that erosion and sediment control measure have become ineffective and maintenance is required, Council should be contacted on (XX phone # or email monitoring@aucklandcouncil.govt.nz)

#### Guidance Note:

This condition should only be employed where specific erosion and sediment control measures have been required as a condition of consent or as part of an Erosion and Sediment Control Plan (e.g. under Conditions (10) and (11)). A condition relating to the management of erosion should works cease (refer to condition (17)) may complement this condition. In situations where the works will be staged, consideration should be given to complementing this condition with a further condition requiring the progressive stabilisation of the site (refer to condition 16).

For earthworks requiring regional consent (such as quarries, most cleanfill sites, as well as sites with a higher risk profile e.g. sensitive environments), further monitoring, sampling, and annual management plans should be considered to either accompany or if necessary replace this condition.

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## Condition 14: Ensure controls are in place until approved to be removed.

Notice must be provided to the Council at least two (2) working days prior to the removal of any erosion and sediment control works specifically required by condition XX or by the XX Erosion and Sediment Control Plan [include specific reference to the document]

#### Guidance Note:

This condition should be employed only where specific erosion and sediment controls have been required as a condition of consent or as part of an Erosion and Sediment Control Plan (e.g. under Conditions (10) and (11)). In other words, there should be no requirement on the part of the consent holder to inform the council where, for instance, geotextiles that have not been specifically required in a condition or a plan, and that are used to cover temporary stockpiles, are moved during the course of progressive works on site. As this condition relates to specific controls, it can be applied irrespective of site size.

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## Condition 15: Staging of earthworks – site management and erosion [version A]

Earthworks on the site must be staged in accordance with the application documents such that no more than *[enter staging limit – i.e. area (hectares / demarcated stage)]* are disturbed at any one time, and must be sequenced to minimise the discharge of sediments to groundwater or surface water in accordance with XX Erosion and Sediment Control Plan.

# Condition 16: Staging of earthworks – site management and erosion [version B]

The site must be progressively stabilised against erosion at all stages of the earthwork activity, and must be sequenced to minimise the discharge of contaminants to groundwater or surface water in accordance with XX Erosion and Sediment Control Plan.

## Advice Note (for either version A or B):

In accordance with condition (XX) earthworks should be progressively stabilised against erosion during all stages of the earthwork activity. Interim stabilisation measures may include [add or delete as necessary]:

- the use of waterproof covers, geotextiles, or mulching
- top-soiling and grassing of otherwise bare areas of earth
- aggregate or vegetative cover that has obtained a density of more than 80% of a normal pasture sward

It is recommended that you discuss any potential measures with Council who may be able to provide further guidance on the most appropriate approach to take. Please contact Council on [insert email and/or phone number or email monitoring@aucklandcouncil.govt.nz] for more details. Alternatively, please refer to "GD05 Erosion and Sediment Control Guide for Land Disturbing Activities in the Auckland region".

#### Guidance Note:

The above conditions can be applied in instances where the extent of work required is likely to require earthworks to occur in a progressive/staged manner.

Both conditions will **not** need to be applied to the same consent. Variation A is proposed for regional earthworks where staging is required to ensure that sensitive environments are protected (and is not necessarily linked to volume). Variation B can be applied where the extent and volume of works requires staging, and stabilisation against erosion is required as works progress through other stages.

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## Condition 17: Manage erosion if work stopped/completed.

Immediately upon completion or abandonment of earthworks on the subject site all areas of bare earth must be permanently stabilised against erosion to the satisfaction of Council.

## Advice Note:

In accordance with condition (XX) measures to stabilise against erosion may include [add or delete as necessary]:

- the use of mulching
- top-soiling and grassing of otherwise bare areas of earth
- aggregate or vegetative cover that has obtained a density of more than 80% of a normal pasture sward.

The on-going monitoring of these measures is the responsibility of the consent holder.

It is recommended that you discuss any potential measures with Council who will guide you on the most appropriate approach to take. Please contact Council on [insert email and/or phone number or email (monitoring@aucklandcouncil.govt.nz] for more details. Alternatively, please refer to "GD05 Erosion and Sediment Control Guide for Land Disturbing Activities in the Auckland region"

#### Guidance Note:

This condition could be applied to large or small sites depending on the slope and surrounding environment (i.e. sensitive receptors, coastal environments etc.) and the nature of the earthwork activities proposed (staged etc.). This condition <u>should always</u> be employed in situations where earthwork consent requirements are triggered by regional rules within Chapter E11 of the AUP(OP), and in this context should be employed together with Condition 19.

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## Condition 18: Prevent sediment-laden water in stormwater/ waterways from roads.

Earthworks must be managed to avoid deposition of earth, mud, dirt or other debris on any public road or footpath resulting from earthworks activity on the subject site. In the event that such deposition does occur, it must immediately be removed. In no instance must roads or footpaths be washed down with water without appropriate erosion and sediment control measures in place to prevent contamination of the stormwater drainage system, watercourses or receiving waters.

### Advice Note:

In order to prevent sediment laden water entering waterways from the road, the following methods may be adopted to prevent or address discharges should they occur: [Add or delete as appropriate]

- provision of a stabilised entry and exit(s) point for vehicles
- · provision of wheel wash facilities
- ceasing of vehicle movement until materials are removed
- · cleaning of road surfaces using street-sweepers
- silt and sediment traps
- · catchpits or environpods

In no circumstances should the washing of deposited materials into drains be advised or otherwise condoned.

It is recommended that you discuss any potential measures with Council who may be able to provide further guidance on the most appropriate approach to take. Please contact Council on [insert email and/or phone number or email monitoring@aucklandcouncil.govt.nz] for more details. Alternatively, please refer to "GD05 Erosion and Sediment Control Guide for Land Disturbing Activities in the Auckland region".

#### Guidance Note:

This condition will be appropriate in most situations and sets a clear expectation that soil and debris will not be deposited on roads or footpaths where it can make its way into receiving waters via stormwater drains.

In some situations, specific conditions requiring the provision of a stabilised entry and exit point and/or wheel wash facilities can be imposed; this will be appropriate where the scale of earthworks and associated vehicle movements demands this.

As this condition specifically refers to roads, in most situations it will be appropriate to apply it in conjunction with erosion and sediment control conditions (refer to Conditions 9, 10, and 11), which seek to manage erosion and sediment from the site in to drains and waterways.

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#### Condition 19: Restrict earthworks to the earthworks season.

No earthworks on the subject site must be undertaken between 01 May and 30 September in any year.

# Condition 20: Variation to allow for out of season works (only include when considered as part of the application)

No earthworks on the subject site must be undertaken between 01 May and 30 September in any year, without the submission of a 'Request for winter works' for approval to Council. All requests must be renewed annually prior to the approval expiring and no works must occur until written approval has been received from Council. All winter works will be re-assessed monthly or as required to ensure that adverse effects are not occurring in the receiving environment and approval may be revoked by Council upon written notice to the consent holder.

## Advice Note (for variation only):

Any 'Request for winter works' submitted in accordance with condition (20) will be assessed against criteria in line with the information required to assess a comprehensive application. Principally that will focus on the level of risk, the propensity to manage that risk with contingency planning and a 'track record' of good compliance with consent requirements. Each 'Request for winter works' submitted, should include the following:

- Description of works proposed to be undertaken between 01 May and 30 September and the duration of those works.
- Details of proposed measures to prevent sediment discharge from these specific works, particularly during periods of heavy rainfall.
- Details of area(s) already stabilised.
- Revised erosion and sediment control plan detailing stabilisation to date and time line/staging boundaries showing proposed progression of stabilisation.
- Contact details for contractor who will undertake stabilisation of the site including date(s) expected on site.
- Alternatives/contingencies proposed if the contractor referred to above becomes unavailable.
- Details of site responsibilities, specifically who is responsible for erosion and sediment controls and stabilisation processes over the specified period.

#### Guidance Note:

This condition should only be employed in situations where earthwork consent requirements are required by regional rules for land disturbance/earthworks. Where these circumstances apply, this condition should be included on all consents unless

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the application has been specifically assessed to allow works outside of the earthworks season (between 01 May and 30 September).

If it is considered likely that earthworks may be required out of season (due to the extent or nature of the works required) and this has been specifically addressed as part of the application, a variation to the condition is provided that sets the scope for winter works to be considered.

## **Condition 21: Requirements for decanting earth bunds (DEBs)**

- I. All decanting earth bunds utilised during earthworks must be designed to ensure that they:
  - a. have a two percent storage capacity, being at least two cubic metres of impoundment volume for every 100m² of contributing catchment;
  - b. have a level invert and two layers of geotextile covering and pinned securely to the emergency spillway to prevent erosion;
  - c. use floating decant devices that discharge at a rate of 3 litres per second, per hectare of contributing catchment;
- II. (Delete if not applicable) All DEBs must be chemically treated in accordance with the Chemical Management Plan required under condition (21).

## Advice Note:

The decanting earth bunds required by condition (XX) should be constructed in accordance with <u>"GD05 Erosion and Sediment Control Guide for Land Disturbing Activities in the Auckland region"</u>.

#### Guidance Note:

This condition will be appropriate in almost all situations where DEBs are proposed. Importantly, this condition must only be imposed when DEBs have been discussed and approved as part of the assessment process.

It is anticipated that most applications will propose  $3m^3$  of impoundment volume for every  $100m^2$  of contributing catchment. If this is not the case, the condition will need to be amended to reflect the different ratios.

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## **Condition 22: Approved chemical treatment management plan**

All sediment retention ponds and/or decanting earth bunds must be chemically treated in accordance with the Chemical Treatment Management Plan (CTMP) [include specific reference to the document]. All measures required by the CTMP must be put in place prior to commencement of the earthworks activity and be maintained for the duration of the earthworks activity.

### Guidance Note:

For guidance on the format of a management plan see 'The use of management plan conditions' <u>here</u>.

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## **Condition 23: Chemical Treatment Management Plan to be supplied**

- I. Prior to the commencement of earthworks activity on the subject site, a finalised (add or delete as required) Chemical Treatment Management Plan (CTMP) [include specific reference to the document] must be prepared in accordance with XX [specific reference to any relevant code of practice e.g. GD05] and submitted to Council for certification. No earthwork activities must commence until certification is provided by Council that the CTMP meets the requirements of [refer specific code above], and the measures referred to in that plan for the sediment retention ponds and/or decanting earth bunds (add or delete as required) have been put in place.
- II. The CTMP required by Condition (23) must include as a minimum:
  - Specific design details of chemical treatment system based on a rainfall activated dosing methodology for the site's decanting earth bunds and/or sediment retention ponds;
  - b. Monitoring, maintenance (including post-storm) and contingency programme (including a record sheet);
  - c. Details of optimum dosage (including assumptions);
  - d. Results of initial chemical treatment trial;
  - e. A spill contingency plan; and
  - f. Details of the person or bodies that will hold responsibility for long term operation and maintenance of the chemical treatment system and the organisational structure which will support this system.

### Advice Note:

Also include the general advice note 8 and advice note 8A if there are matters in the management plan that are outside the scope of the RMA 1991 and may raise potential liability issues for the council.

#### Guidance Note:

See guidance on the use of management plan conditions here.

Condition (22) can be employed when a Chemical Treatment Management Plan (CTMP) has been approved during the consent process (sometimes identified as a Flocculation Management Plan). Condition (23) can be employed when either a draft CTMP requires finalisation, or where a CTMP is required to be prepared subsequent to the granting of consent.

Chemical treatment will be required for most sediment retention ponds, and in some cases will also be required for the treatment of decanting earth bunds. These conditions will only be required where earthworks require consent under the regional rules in Chapter E11 of the AUP(OP).

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# **Erosion and sediment control Adaptive Management Plan** conditions

## **Condition 24: General AMP requirement**

- I. All earthworks must be undertaken in accordance with the Adaptive Management Plan (as referred to in Condition (1)) and any subsequent revisions of the Adaptive Management Plan certified by the Council.
- II. The consent holder must implement and comply with the Adaptive Management Plan referenced in Condition (1), or any subsequent revisions certified by the council for the duration of the earthworks. Any proposed revisions of the Adaptive Management Plan must be submitted to the council for written certification at least 10 working days (edit number of working days if required) prior to formalising and implementing the revision.

#### Advice Note:

Adaptive management applies in addition to, and not instead of, basic consent compliance. Council requires the development and implementation of AMPs on significant earthworks sites. Those AMPs typically require a range of monitoring based on various triggers, responses to identified effects, and reporting. The council has now sought an exemplar for AMPs included in the <a href="Erosion and Sediment Control Adaptive Management Plan Guidance Document">Erosion and Sediment Control Adaptive Management Plan Guidance Document</a>. This document provides the discussion background to the development of the template.

#### Guidance Note:

See Erosion and Sediment Control Adaptive Management Plan Guidance Document here.

Condition (24) can be employed where the proposal involves large-scale earthworks which will require significant refinement of erosion and sediment control management once the consent for the development is granted.

Not all large-scale earthwork proposals will require the submission of an AMP. However, as a guide, if a site comprises one or more of the following characteristics an AMP should be provided as part of the AEE, or be required to be provided prior to any earthworks commencing:

- earthworks exceeding 5ha;
- earthworks proposed to be undertaken over multiple stages;
- anticipated duration of the earthworks(construction) programme;

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- proximity of sensitive and/or complex ecological systems/receiving environments including, but not limited to streams, wetlands, SEA's,
- slope of earthworks area and proximity to sensitive and/or complex ecological systems/receiving environments

This condition will only be required where earthworks require consent under the regional rules in Chapter E11 of the AUP(OP).

The time frame of 10 working days may be adjusted based on the scale and complexity of the works.

This condition should only be employed in consultation with the relevant earthworks specialist in the Earth, Streams and Trees team, Specialist Unit

## Condition 25: AMP to be supplied

- I. No less than 20 working days (edit number of working days if required) prior to the commencement of earthworks on site an Adaptive Management Plan must be submitted to Council for certification. The purpose of the Adaptive Management Plan is to [insert purpose].
- II. The *Adaptive Management Plan* required by Condition (25) must include as a minimum, information on the following matters:

[Add and/or delete matters that should be specifically addressed e.g.]:

- erosion and sediment control plan implementation;
- receiving environment monitoring;
- weather monitoring;
- erosion and sediment control device monitoring;
- data interpretation;
- trigger thresholds;
- management responses;
- reporting.

## **Advice Note:**

Adaptive management applies in addition to, and not instead of, basic consent compliance. Council requires the development and implementation of AMPs on significant earthworks sites. Those AMPs typically require a range of monitoring

based on various triggers, responses to identified effects, and reporting. The council has now sought an exemplar for AMPs included in the <u>Erosion and Sediment Control Adaptive Management Plan Guidance Document</u>. This document provides the discussion background to the development of the template.

#### Guidance Note:

See <u>Erosion and Sediment Control Adaptive Management Plan Guidance Document</u> here.

Condition (25) can be employed where an AMP has not been submitted as part of the application yet the proposal involves large-scale earthworks which will require significant refinement of erosion and sediment control management once the consent for the development is granted.

Not all large-scale earthwork proposals will require the submission of an AMP. However, as a guide, if a site comprises one or more of the following characteristics an AMP should be provided as part of the AEE, or be required to be provided prior to any earthworks commencing:

- earthworks exceeding 5ha;
- earthworks proposed to be undertaken over multiple stages;
- anticipated duration of the earthworks(construction) programme;
- proximity of sensitive and/or complex ecological systems/receiving environments including, but not limited to streams, wetlands, SEA's,
- slope of earthworks area and proximity to sensitive and/or complex ecological systems/receiving environments

This condition will only be required where earthworks require consent under the regional rules in Chapter E11 of the AUP(OP).

The time frame of 20 working days may be adjusted based on the scale and complexity of the works.

This condition should only be employed in consultation with the relevant earthworks specialist in the Earth, Streams and Trees team, Specialist Unit

## Condition 26: Where baseline monitoring is required

I. A Freshwater and/or Coastal Baseline Report containing pre-construction in-stream monitoring, in accordance with Conditions (XX) – (XX), must be provided to the Council for written certification prior to any earthworks or streamworks commencing.

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- II. A [Freshwater and / or Coastal] Baseline Report must be prepared in accordance with the Adaptive Management Plan. The purpose of the [Freshwater and / or Coastal] Baseline Report is to [confirm pre-construction baseline environmental conditions]. The [Freshwater and / or Coastal] Baseline Report must be submitted to the Council for certification at least 20 working days prior to the programmed commencement of works and must confirm pre-construction environmental conditions.
- III. The pre-construction monitoring shall be undertaken by a suitably qualified and experienced freshwater ecologist for one summer and one winter period (delete or edit if required) prior to commencement of Construction Works.
- III. A [Freshwater and / or Coastal] Baseline Report required by Condition (26) must include as a minimum, information on the following matters:
  [Add and/or delete matters that should be addressed in this report e.g.]:
  - sediment quality such as description of sediment inputs, transport, substrate composition and embeddedness,
  - water quality such as TSS and turbidity,
  - actual and potential inanga (Galaxias maculatus) spawning habitat; and
  - identify the pre-construction condition of any Erosion Prone Streams against which to measure construction effects and possible mitigation measures.

## **Advice Note:**

Pre-construction baseline monitoring of the receiving environment must be completed prior to the earthworks commencing, to confirm pre-construction environmental conditions. The pre-construction baseline monitoring will then provide a more detailed understanding of receiving environment characteristics over a range of weather conditions and / or seasons. The details and content (methodology) of the Baseline Monitoring will be specific to each site and should be discussed with council prior to being undertaken.

#### Guidance Note:

See <u>Erosion and Sediment Control Adaptive Management Plan Guidance Document</u> here.

Condition (26) can be employed where the project is of a scale that is significant enough to warrant the adoption of an AMP. Pre-construction baseline monitoring of the receiving environment must be completed prior to the earthworks commencing, to confirm pre-construction environmental conditions.

The pre-construction baseline monitoring provides a more detailed understanding of receiving environment characteristics over a range of weather conditions and / or seasons. Due to this, the period for which the baseline monitoring needs to take place

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will vary based on the proposal. The details and content of that monitoring will also be specific to each site and cannot be easily represented in a template.

Rather, those details should be addressed through the consent process and listed as parameters to be included through a consent condition, or a draft AMP that is prepared through the consent process and prior to consent being issued.

The time frame of 20 working days may be adjusted based on the scale and complexity of the works. The information required in the Baseline Report will also be adjusted based on the specifics of the site.

This condition will only be required where earthworks require consent under the regional rules in Chapter E11 of the AUP(OP).

This condition should only be employed in consultation with the relevant earthworks specialist in the Earth, Streams and Trees team, Specialist Unit.

## **Condition 27: Pre-rain inspections**

- I. Pre-rain forecast inspections as defined in the Adaptive Management Plan must be undertaken at a minimum of 24 hours prior to the forecasted event. If the forecast is not made available within 24 hours of the event, all reasonable attempts must be made to inspect the site prior to the event.
- II. In addition to routine monitoring of erosion and sediment control devices, the consent holder must undertake pre-rain inspections of forecast events equal to or greater than 20mm in 24 hours, in accordance with the Adaptive Management Plan at least 24 hours prior to the forecasted start of the rainfall. If the forecast is not made available within 24 hours of the event, the consent holder must make all reasonable attempts to inspect the site prior to the event.

## **Advice Note:**

As a pre-curser to a likely or possible trigger event, if forecasts indicate >20mm over 24 hours of rainfall, additional pre-rain event inspections should be undertaken by an Erosion and Sediment Control Specialist in conjunction with the contractor. The aim of the inspection will be targeted at additional ESC that are required to be installed to ensure that the sites ESC devices perform effectively.

### Guidance Note:

See <u>Erosion and Sediment Control Adaptive Management Plan Guidance Document</u> here.

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Condition (27) can be employed where the submission of an AMP is required under Condition (24). Close monitoring of the rain forecast will be necessary to ensure the appropriate site works can be implemented prior to rainfall events. This is a normal day-to-day site management requirement and is not unique to a site that is implementing an AMP.

Pre-rain event inspections should be undertaken by an Erosion and Sediment Control Specialist in conjunction with the contractor. The aim of the inspection will be targeted at additional ESC that are required to be installed to ensure that the site's ESC devices perform effectively.

This condition will only be required where earthworks require consent under the regional rules in Chapter E11 of the AUP(OP).

This condition should only be employed in consultation with the relevant earthworks specialist in the Earth, Streams and Trees team, Specialist Unit.

## Condition 28: Re-opening stabilised areas

- I. An earthworks catchment which has been stabilised as a result of a trigger level exceedance as defined and required by the Adaptive Management Plan (referred in Condition (1)) and any subsequent revisions approved by the Council may only be re-opened on the written approval of the Council.
- II. Any earthworks areas which have been reduced (by stabilisation) as a management response implemented though the Adaptive Management Plan may only be increased on the written approval of the Council.

## **Advice Note:**

Management responses/actions to address when a trigger event occurs can include stabilising some or all the contributing catchment. Once an investigation has been undertaken by an Erosion and Sediment Control Specialist in conjunction with the contractor and the cause of the exceedance has been established and remedied, it may be possible to open up all or some of the previously stabilised contributing catchment with the written approval of Council.

## Guidance Note:

See <u>Erosion and Sediment Control Adaptive Management Plan Guidance Document here.</u>

Condition (28) can be employed where the submission of an AMP is required under Condition (24).

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This condition will only be required where earthworks require consent under the regional rules in Chapter E11 of the AUP(OP).

This condition should only be employed in consultation with the relevant earthworks specialist in the Earth, Streams and Trees team, Specialist Unit.

## **Condition 29: Changes initiated by Council**

If in the Council's opinion, there are changes required to be made to the Adaptive Management Plan as a result of observed inefficiencies on site or identified within the site reporting, Council may request that the Adaptive Management Plan be updated to address those inefficiencies. If such a request is made by the Council, the revised plan must be submitted to the Council within 5 working days of the request. The revision may not be implemented without the Council's approval.

## **Advice Note:**

Management responses/actions should be identified when a trigger event occurs in the AMP. These responses should not be mistaken for business and usual site management and maintenance. The default position may be to stabilise some or all the contributing catchment unless the reporting and investigations demonstrate that there were other / better solutions than a catchment shut down, and there was agreement with council. For further guidance on possible management responses see <a href="Erosion and Sediment Control Adaptive Management Plan Guidance">Erosion and Sediment Control Adaptive Management Plan Guidance</a>
Document here.

#### Guidance Note:

Condition (29) can be employed where the submission of an AMP is required under Condition (24).

This condition will only be required where earthworks require consent under the regional rules in Chapter E11 of the AUP(OP).

This condition should only be employed in consultation with the relevant earthworks specialist in the Earth, Streams and Trees team, Specialist Unit.

### **Condition 30: Provide data to Council**

Upon request by the Council, the consent holder must make available any monitoring results and data recorded in accordance with the Adaptive Management Plan.

#### **Advice Note:**

A report containing sampling and monitoring results may be requested by Council. This report is expected to contain the following details:

- the results of all monitoring within that period;
- a summary of receiving environment effects, including any ecological changes and subsequent ecological response;
- a summary of any event trigger levels exceedance that occurred and any subsequent change of the AMP;

#### Guidance Note:

Condition (30) can be employed where the submission of an AMP is required under Condition (24).

This condition will only be required where earthworks require consent under the regional rules in Chapter E11 of the AUP(OP).

This condition should only be employed in consultation with the relevant earthworks specialist in the Earth, Streams and Trees team, Specialist Unit.

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