

**INFORMATION REQUIREMENTS FOR
RESOURCE CONSENT
EARTHWORKS
(MINOR EFFECTS)**

When submitting your application to the Northland Regional Council “the council” for a resource consent to carry out earthworks, you need to ensure that sufficient information is supplied in support of your application.

The council has specific forms to help you supply the required information. When applying to carry out earthworks, please ensure all the relevant questions in AEE 6 are answered fully. Supplying this information will enable council staff to adequately assess your application in terms of the Resource Management Act 1991, and any relevant resource management plans.

If all the necessary information is not supplied with the application, then the council may return your application or request further information (pursuant to section 92 of the Resource Management Act 1991) and this will lead to delays in the processing of your application.

If the effects of the proposed earthworks are minor, then the council may process your application on a non-notified basis provided written approvals are gained from all parties that may be affected by the works. Details of the consultation required are outlined later in this document.

If you are unable to supply the necessary written approvals from the affected parties, or if the effects of the works are more than minor, then the council must publicly notify the application. This can result in significant delays in the processing of your application and additional processing costs.

If you have any doubt about who you need to provide written approvals from, or what information should be supplied with your application, then you should contact the council to discuss the matter.

The following information relates to the questions asked in AEE 6 and is provided to assist you with answering the questions.

A – Description of the Proposed Activity

Question A.1

Provide a clear and detailed description of the types of earthworks proposed to be carried out (e.g. roading, building site development or land contouring), and the reason why these earthworks are required.

Use extra sheets of paper for this section if necessary.

Question A.2 & A.3

Provide a clear description of the method of carrying out the works including the type of machinery to be used and the name and contact details of the proposed contractor(s).

Questions A.4 & A.5

Start and completion dates will be dependent upon a number of factors including weather, availability of contractors, financial matters and consent timing. A best estimate of these dates is required. Any large earthworks project should be carried out during the drier months of the year (unless it is on sand country).

Should a resource consent be issued, you will be required to provide more accurate details on the timing of construction activities. This is discussed later in Section C.

Question A.6

For large earthworks projects it is often necessary to carry out the works over more than one construction season, or it may be necessary to break down the project into different stages to allow for settlement or drying and subsequent compaction of wet soils. Provide approximate details of the stages proposed.

Where earthworks are being carried out over more than one construction season, it is essential that appropriate mitigation measures are included to avoid adverse effects on the environment, such as downstream sediment discharges. This is discussed later in Section C.2.

Questions A.7 & A.8

Provide details of the estimated total volume and area of earthworks associated with the proposed activity. The total volume needs to be included for any proposed cut and fill areas, and the volume of any material that is proposed to be imported to the site as part of the activity.

The total area needs to include all areas that will be disturbed as a result of the proposed earthworks. Large areas of bare land have the potential to generate considerable quantities of sediment and dust and create greater adverse effects than smaller confined sites.

Question A.9

Cut batters are often required for earthworks activities on sloping land, for roading and tracking, and the construction of building platforms. An indication of the maximum height of any batter, and its length must be provided. On unstable land, batter slopes are very prone to failure, necessitating the requirement for engineer designed slopes with a suitable Factor of Safety.

Question A.10

Where fill slopes or large stockpiles of soil are proposed, details must be included. This is of particular importance on sloping land where there is a need to ensure that any potential for slumping of these areas does not occur. Provide details of any relevant information on the proposed dimension, location and duration of the stockpiles and details on any benching and compaction proposed.

Question A.11–A.14

If the proposed earthworks is associated with minor quarrying or mining activities, then provide details requested in **A.11 to A.14**, otherwise go to **Section B – Site Details**.

Overburden is the softer weathered material overlying the rock resource, generally regarded as unsuitable for use within the construction industry, but is often used on cattle races or as fill in some situations. This material has a higher percentage of clay material, and as such has a greater potential to create adverse effects within streams.

Because of potential offsite problems with this material, the council needs to have a good estimate of the quantities of overburden to be removed, and how it is to be treated. Where large quantities of overburden are involved, engineer designed overburden stockpiles may also be required.

The volume of rock to be extracted will vary depending on the demand for this product. However, a best estimate of the anticipated maximum quantity expressed as a solid measure will need to be provided.

B – Site Details

The following is a guideline of the types of plans required to enable the council staff to readily locate the site and adequately assess the proposed activity.

Question B.1

Maps

It is very important that you supply a map showing the items listed on the application form. The map may be a topographical map, a legal survey plan or aerial photograph. However, relevant distances are required to be shown between the proposed activity, property boundaries, any waterways etc. The direction of north should be shown on the map and an accurate scale and legend is also required.

Question B.2

Plans

Plans may include cross-sectional and long-sections of the proposed earthworks site or sites, with particular emphasis on larger cuts and fill areas, and areas close to watercourses. Large-scale earthworks may also require comprehensive contour plans of the site. For areas of potential instability, engineer designed plans for earthworks need to be provided.

All plans need to be clearly legible and drawn at an appropriate scale.

Question B.3

Provide details of the general topography and slope of the land. This should include a description of slopes affected by the proposed works – such as flat, rolling or steep.

Question B.4

Information on rock and soil types can be obtained from maps or council offices. Where more than one soil or rock type is involved, please provide all relevant information. Where there are rock and soil types with known instability problems, these details are also to be provided.

Question B.5

Provide details on the type of vegetation present on the proposed earthworks site e.g. pasture, native bush or scrub, exotic weed species or wetland species. For wetland areas, indicate the dominant type of vegetation present (e.g. flax, raupo, rushes). Recent photographs of the site,

including aerial photographs, may also be useful in answering this question.

Question B.6

Earthworks carried out on a floodplain have the potential to interfere with natural flood flows, and may divert water onto other properties. Earth, fill material or vegetation moved during earthworks placed on floodplains also has the potential to be washed downstream during storm events. If the earthworks are associated with a stopbank this should be clearly described in A.1.

Question B.7

The catchment area includes the earthworks site and the catchment area of the surrounding land from which stormwater runoff is likely to flow during a storm event. In some cases, on flat land, the catchment area may be just the site itself, as stormwater may have already been diverted away from the earthworks areas. Where the affected land is in the base of a valley, the entire upstream catchment area that flows through this site needs to be included in this estimated catchment area.

In some cases, such as with earthworks covering a large area, there may be numerous catchments involved, and in such cases a figure for each catchment area needs to be estimated. Catchment area can be determined from topographical maps, aerial photographs or other more detailed survey data.

Questions B.8

This section relates to permanently or intermittently flowing watercourses, and wetlands within 200 metres of the proposed earthworks. (This does not include dry gullies (ephemeral watercourses) that may flow only during or immediately following a storm event.) These water bodies should be clearly shown on the map in B.1.

The name of the watercourse can be obtained from 1:50,000 topographical maps of your area. Where the watercourse has no name on this map, the name of the downstream stream into which the affected watercourse (or wetland) flows should be provided.

C – Assessment of Effects on the Environment

In this section you need to consider what the effects of your proposed earthworks will have on the environment. For the purpose of this section, you need to consider the effects of your proposal under the “*worst case scenario*”.

The word “*environment*” includes the land, air, any adjacent water body, downstream water users, adjacent landowners and local iwi. The information below will help you answer the questions of this section.

Question C.1

You need to consider whether your proposed earthworks will have any effect on adjacent property and/or downstream water users. This may include the effects of land movement or subsidence undermining or discharging onto adjacent property, windblown dust, or sediment discharges affecting downstream water users.

If written approvals are obtained from all parties that may be affected by the earthworks and the effects of your proposed earthworks are minor, then the council is likely to process your application without public notification.

Question C.2

Tick the boxes that correspond to the parties with whom you have consulted regarding your proposal. The council can advise you of those parties considered to be “*affected*” and can also supply you with a list of appropriate iwi contacts.

Question C.3

The proposed earthworks may affect nearby streams and wetlands, either directly or where there is a potential for discharges from the earthworks. You need to identify the potential values of any waterbodies in the vicinity of the earthworks by ticking the appropriate boxes in this section.

You also need to consider how the earthworks may affect the waterbodies, i.e. decreased water clarity as a result of silty runoff. If your proposed earthworks are likely to result in effects on the waterbodies, provide details of the mitigation measures proposed to avoid or reduce the effects.

Question C.4

You need to consider how the nearby land may be affected by the earthworks. You need to identify any sensitive areas in the vicinity of the earthworks by ticking the appropriate boxes in this section as detailed below.

Indigenous Vegetation or Habitats of Indigenous Fauna

Include comments on types of vegetation and whether or not there are any significant indigenous species such as Kiwi or Hochstetter frogs present.

Significance to Iwi

Identify any known sites such as pa sites, urupā (burial grounds), or other features. The presence of such sites within the earthworks area may also require you to obtain authorisation from the New Zealand Historic Places Trust to modify, damage, or destroy such sites. You will also need to consult with the local iwi and obtain their written approval for these activities.

Slope Instability

Areas of slope instability need to be identified, as these sites may affect the future integrity of your proposal.

If the proposed earthworks are likely to result in effects on any of the above, provide details of the mitigation measures proposed to avoid or reduce the effects.

Question C.5 & C.6

Sediment and erosion control measures can include a variety of methods including sediment detention ponds, silt fences, diversion drains and runoff controls. Unless the upstream catchment is relatively small, the use of sediment detention ponds in the bed of a watercourse is not recommended. For larger earthworks proposals an appropriate Erosion and Sediment Control Plan will be required; a draft plan should be prepared as part of the application, while a more detailed plan may be provided prior to the commencement of construction. Sediment detention ponds need to be sized with a capacity of not less than 100 m³ per hectare of contributing catchment for short-term projects or 200 m³ per hectare of contributing catchment for long-term projects.

For more information on this subject, it is recommended that you refer to the Auckland Council's – 'Erosion and Sediment Control Guidelines for Land Disturbance' (TP 90), and discuss the issue with an appropriate council officer.

Question C.7

Consider any other adverse effects that the proposed earthworks may have on the environment i.e. the “worst case” scenario. This may include noise and dust nuisance on neighbouring properties and the potential for slumping or ground movement.

If other potential adverse effects are identified, provide details on how these effects may be minimised or avoided.

Question C.8

Identify any positive effects on the environment as a result of the proposed earthworks. These may include economic benefits or safety improvements (e.g. roading proposals).

Question C.9

The Resource Management Act 1991 requires applicants to consider “*alternatives*” and discuss why they have made that choice. Alternatives for earthworks activities include:

- Different sites
- Different methods

Question C.10

For this question you will need to consider monitoring required while the earthworks project is underway, and any long-term monitoring that may be required.

The amount of monitoring likely to be required will depend upon the volume of earthworks, area of land involved, and size of upstream catchment (where applicable). For earthworks carried out over more than one construction season, extra mitigation measures will be required to ensure that over-wintering facilities are put in place to minimise the possible adverse effects of storm events. Monitoring will be required to ensure that these measures are put in place at the commencement of earthworks, and maintained throughout the period of construction, and until the area has satisfactory vegetation or other covering to prevent erosion.

If you have any queries relating to information requirements, please contact the Northland Regional Council.

Northland Regional Council offices:				
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