

1. GENERAL REQUIREMENTS AND PROCEDURES

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1. GENERAL REQUIREMENTS AND PROCEDURES

1.A MINIMUM REQUIREMENTS

- 1.A.1** A consent involving land modification will generally be approved provided adequate provision can and is intended to be made for services such as roads, vehicular access, stormwater drainage, water supply, wastewater disposal, electricity, streetlighting, gas and telecommunications.
- 1.A.2** The land must be suitable for the proposed use.
- 1.A.3** Sufficient provision must be made for likely effects of damage by erosion, falling debris, subsidence, slippage or inundation from any source.
- 1.A.4** The owner shall appoint a single representative with approved qualifications who shall be responsible for submitting information required for consent, preparing engineering plans, liaison with Council, monitoring/supervising construction, certifying the “As built” information and the works.
- 1.A.5** Resource consent shall be obtained, engineering plans that adequately specify the works and materials shall be prepared and approved and all the required consents obtained before construction can commence.
- 1.A.6** The works shall be constructed in compliance with the approved plans. “As built” plans and documentation shall be prepared and certified by the developers representative. A geotechnical foundation completion report shall be submitted where appropriate.
- 1.A.7** An engineering release is issued upon fulfilment of the completion requirements. This enables the relevant completion certificate to be issued prior to the relevant uses being commenced.

1.A.8 The following should be complete prior to the occupation of habitable dwellings:

- i) Earthworks and bulk of topsoiling exclusive of road reserves,
- ii) Kerb and channels,
- iii) Basecourse metal,
- iv) Street names and traffic signs,
- v) Stormwater, wastewater and water reticulation: inspected tested and arrangements in place for hook-up. Note that all valve and hydrant boxes must be in place and clearly identified,
- vi) Arrangements satisfactory to Council in place for the installation of electricity, streetlighting, telecommunications and gas where applicable.

1.B MEANS OF COMPLIANCE

1.B.1 Introduction

1.B.1.1 These **Engineering Quality Standards** provide the developer with a means of compliance when producing engineering plans and constructing the physical works that are required to achieve compliance with the engineering aspects of the conditions set down in the consent.

1.B.1.2 Related Documents

- i) **District Plan**: Plan for the orderly development of the district, reviewed every ten years. Note that Chapter 9, Land Modification, Development and Subdivision of the District Plan includes Engineering Performance Standards in Appendix 1. The Engineering Performance Standards set out the functional requirements and performance criteria activities must comply with to establish in the city,

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Engineering standards are necessary to provide controls to ensure that the infrastructure created is and will remain fit for the intended use for the foreseeable future. People with an interest in a piece of land have different views on the acceptability of a development. Standards are necessary to ensure that a balance is achieved to reconcile the different needs of people. Controls help protect the environment and those with an interest in a development from failures resulting from natural hazards and inadequate design and construction. These standards are minimum requirements. The developer can contribute to creating a more interesting environment by use of variations above the minimum requirements.

- ii) **MANARC Manual**: The MANARC (Manukau Approved Requirements, Code of Land Development) process provides for the assessment and approval of products for use in Land Development in Manukau City. Products used must be approved for use by the Engineering Quality Standards or via the MANARC process, otherwise specific approval may be required,
- iii) **Land Development Quality Assurance Manual** (QAM Manual). This document sets out procedures for monitoring the construction stage including completion information requirements and the like.

1.B.1.3 Precedence of the Standards

In general where there are conflicting requirements the documents shall have precedence in the following order:

1. District Plan,
2. Resource Consent,
3. Approved Engineering drawings,
4. Engineering Quality Standards,
5. MANARC.

1.B.1.4 Power, Streetlighting, Telephone and Gas

The owner of all new subdivisions or developments incorporating roads for vesting in the Council shall enter into financial agreements with the relevant Network Utility Operators such as will ensure provision is made, to the satisfaction of the Council, for the underground reticulation of all electric power lines, telephone services, road and accessway lighting, unless in any particular subdivision or development or part thereof the requirement for underground reticulated services would, in the determination of the Council, after consultation with the relevant Network Utility Operator, not be practical.

Where required in the resource consent, the owner shall make financial provision for the reticulation of gas.

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Arrangements with the relevant Network Utility Operators for the installation of their services should be made as early as possible to avoid delays and to avoid situations where services are installed late, causing unnecessary damage to footpaths, berm grassing and the like.

1.B.2 Financial Contributions

1.B.2.1 Where the Council grants any resource consent or any consent to an activity involving a development, the applicant may be required as a condition of consent to make the financial contributions for the purposes of:

- i) Public utility services,
- ii) Mitigating adverse effects,
- iii) Ensuring positive effects on the environment to mitigate adverse effects,
- iv) A contribution for reserve purposes.

Refer to the District Plan for details.

1.B.3 Developers Representative

1.B.3.1 The owner shall appoint a single developers representative who shall be responsible for submitting information required for consent, preparing and submitting engineering plans, liaison with Council, monitoring/ supervising construction, certifying the 'as built' information and the works. The developers representative shall be a registered engineer or registered surveyor except in the case of minor works as set out in 1.B.3.3.

1.B.3.2 The geotechnical investigation and completion reports shall be prepared by a registered professional engineer experienced in geotechnical engineering and who has professional indemnity cover.

1.B.3.3 Minor engineering works, defined as works serving development of land involving no more than six residential building sites and/or works that are within 20m of the site boundaries may be designed by a New Zealand Certificate Engineer/(Civil), New Zealand Certificate Land Surveyor or suitably experienced draughtsperson. Minor works may be certified by a New Zealand Certificate Engineer/(Civil) or New Zealand Certificate Land Surveyor.

1.B.3.4 Drainage lines less than 20m in length within site boundaries may be certified by a registered drain layer.

1.B.3.5 The developers representative shall be available for a meeting on site within two working days of being so requested by the Councils Compliance Engineer or their representative except in the case of emergencies in which case an immediate response may be required.

1.B.4 Resource Consents

Detailed information requirements and application forms can be obtained in the Kotuku Customer Service Centre. Details are identified in the District Plan and will involve more than is set out here. Note that full engineering plans are required for all resource consents containing or connecting to public assets. Applications for resource consents must be submitted to the Vetting Officer, Ground Floor, Kotuku House.

1.B.4.1 Information Required to Support Application for Fee Simple Subdivision Resource Consent:

- i) Scheme Plan showing all existing site information and services, subdivision layout identifying roads, reserves and lots,
- ii) Engineering plans,
- iii) Legal Description of land being developed and identification of notes on titles, easements etc,
- iv) Copy of recent Certificate of Title,
- v) Geotechnical report. (refer to Section 2),
- vi) Environmental impact report,
- vii) Assessment of serviceability of each lot with wastewater and stormwater disposal, water supply (domestic and fire), power, telephone reticulation, vehicle and pedestrian access,
- viii) Assessment of upstream catchment and of overland flows,
- ix) Reserve levies applicable,
- x) Deposit as per Council's schedule of fees.

1.B.4.2 Information Required to Support Application for Cross Lease Subdivision Resource Consent:

- i) Cross Lease or Unit Title Plan of proposed subdivision,
- ii) Any approved building consent plan (if possible) or other plan showing location of buildings, driveways, service courts, outlook courts and drainage reticulation,
- iii) Legal Description,
- iv) Copy of recent Certificate of Title,
- v) Engineering Plans,
- vi) An assessment of the vacant land in terms of land stability, serviceability for stormwater, wastewater and water supply, power and phone and flood flows,
- vii) Deposit as per Council's schedule of fees.

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It is advisable to arrange pre-application meetings with Council Officers to clarify their requirements. An example would be environmental impact issues the requirements for which vary considerably

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Note that existing land still requires assessment for flooding. This is not being done on a mandatory basis however it is being called for where land development control considers it necessary

1.B.4.3 Information Required to Support Application for Land Use Resource Consent

Refer to the information sheets available from the Planning Activity for both notified and non-notified applications for information you need to supply with your application. These are available at the Kotuku Customer Centre.

1.B.4.4 Consent

The Council vets the application and sends a receipt for the application. The applicant is advised when the application has been accepted as complete. Further information may be requested during processing. The applicant is advised when this is available for collection.

1.B.4.5 Commencement of Consent

The consent commences if the decision is to grant the consent and the applicant does not lodge an objection pursuant to section 357 or an appeal pursuant to section 120 of the Resource Management Act and the time for lodging appeals against the grant of the consent expires and no appeals have been lodged.

1.B.4.6 Objections

An applicant has a right to lodge an objection to Council against certain decisions and requirements in regard to a consent application. If the reporting officer does not support the objection it is referred to a hearing of the Committee. A decision is sent to the applicant and the consent commences if the decision is to grant the consent and the applicant does not lodge an appeal. Refer to section 357 of the Resource Management Act for more detail.

1.B.4.7 Appeals

An applicant has a right to appeal to the Planning Tribunal against a decision on a resource consent application. The Council receives a copy of the appeal notice and replies. If the appeal is not able to be resolved a hearing follows. The Planning Tribunal determines the appeal and resource consent commences if the decision is to grant the consent.

Appeals against Planning Tribunal decisions can be made only on a point of law according to section 299 of the Act.

Refer to Resource Management Act for more detail.

1.B.5 Engineering Plan Requirements

1.B.5.1 Approved engineering plans are required to obtain fee simple subdivision, cross lease and land use resource consents involving land modification and/or network utility services.

1.B.5.2 Engineering plans must adequately specify the works and materials. Approved engineering plans are one of several requirements to be met before construction may commence.

1.B.5.3 Drawing Standards

- i) **Size:** All drawings submitted shall be submitted in A3 size and may be 50% reductions of A1 sheets to A3 size and must still be scaleable,
- ii) **Symbols :** Refer to drawing GP 1,
- iii) **Scales :** Original Scales :
Plan and Long Sections :
Horizontal 1:500 1:250
Vertical 1:100 1:50
Cross Sections :
Horizontal and Vertical 1:100 1:50.

1.B.5.4 Subdivision Engineering Plan Requirements

1.B.5.4.1 Some of the requirements below may not be applicable, and there may be additional requirements for your development depending on whether the development is a greenfields, minor or cross lease subdivision. Check your conditions of consent or enquire before submission.

1.B.5.4.2 Drawings (4 Sets of A3)

- i) **Locality plan:** Showing location of work in relation to existing main roads and features,
- ii) **Stage development plan:** Where a block is developed in stages each stage must include a plan showing how the particular stage relates to the block as a whole and also to other stages. Note that staging must be sorted out at resource consent stage. Align with the staging as shown in the resource consent stage drawings,
- iii) **General Roading Works Plan:**
 - (a) Plans showing horizontal alignment, kerbs, proposed benchmark positions, setting out data, co-ordinates etc,
 - (b) Detailed plans with contours of intersections, cul-de-sac heads, parking bays and the like,
 - (c) Long-section showing at minimum 20m chainage intervals existing ground levels, proposed final levels, cuts and fills, grades, vertical curve details, horizontal curves and services,

- (d) Cross sections and typical cross sections,
- iv) **Drainage and Water Reticulation:**
 - (a) Separate plan showing reticulations in relation to section boundaries,
 - (b) Long sections of each drainage line with existing and final ground levels at minimum 20m intervals, pipe sizes, lengths and grades, manhole cover levels, invert levels and depths,
- v) Electric power layout,
- vi) Street lighting layout,
- vii) Telephone reticulation layout,
- viii) Gas reticulation layout (if applicable),
- ix) Earthworks and Silt control plan: Separate plan showing final contours, areas of cutting and filling together with depths relative to original ground level,
- x) Topographical survey plan: Showing and identifying existing features, spot levels on permanent features, invert levels, pipe and manhole materials, flow directions. The survey must be oriented by reference to legal survey pegs and not merely boundary fences and walls. Where a possibility exists that a service may be affected by proposed construction it shall be accurately located by excavation if necessary,
- xi) **Detail drawings:** Standard and other detail drawings showing details of kerbs and/or channels, pram crossings, paving and underchannel drains, stormwater inlet and outlet structure details, manholes, junctions, ramped risers, cesspits, pipe beddings and the like,
- xii) **Structural drawings** (if applicable),
- xiii) **Ducting Plan** showing ducts for telecommunications, electricity, traffic lights, water connections etc,
- xiv) **Road signs and markings plan** including street names,
- xv) **Pump station details** (if applicable),
- xvi) **Landscape Planting Plan** (if applicable).

1.B.5.4.3 Documentation

- i) **Stormwater Catchment Plan and calculations** showing catchment of each drainage system, minimum floor levels for lots adjacent to flowpath, long sections and cross sections,
- ii) **Wastewater catchment plan and calculations** if trunk system are to be constructed or if requested,
- iii) **Video inspection and report:** Where an existing private drain is to become part of the public system and the condition of the drainage line is doubtful a video inspection and report is required. Video inspections and reports must be undertaken by Council. Contact the Manukau Water who arrange these upon request,
- iv) **Road pavement design calculations,**
- v) **Structural calculations,**
- vi) **Geotechnical stability calculations,**
- vii) **Construction management plan outlining methods of dust, noise control etc,**
- viii) **Health and safety plan:** required for any work on Council land. Must identify any potential hazards and proposed measures of dealing with them,
- ix) Copy of **Earthworks and Silt Control plan** submitted to Auckland Regional Council if applicable. (Refer Erosion and Sediment Control Guidelines for Earthworks, ARC Environment and Planning Division, Technical Publication TP90, March 1999),
- x) **Approval to work within 10m of a trunk interceptor or trunk watermain:** Obtain from Watercare Services Ltd. if applicable,
- xi) **Any work intended to be undertaken on other land owners land must be clearly identified on the plan.** e.g. where uncertified unsuitable fill or tree stumps are to be placed in reserves,
- xi) **Where it is proposed to open cut excavate in existing roads this must be identified on the plan.**

1.B.5.5 Engineering Plan Approval

1.B.5.5.1 Engineering Plans are checked for compliance with the Standards and MANARC.

1.B.5.5.2 If major alterations are required the plans and documents will be returned with the request that fresh plans be drawn up. If amendments are required which are of a minor nature these will be endorsed on all copies of the plans.

1.B.5.5.3 Two complete sets of stamped approved plans will be returned to the subdivider's representative together with the resource consent.

1.B.5.5.4 During construction one set of stamped approved plans shall be kept on site at all times, together with the resource consent (where applicable).

1.B.6 Construction**1.B.6.1 Commencement of Works**

1.B.6.1.1 No engineering works may commence on any subdivision or development unless engineering plan approval, resource consent (where applicable) and all other necessary consents obtained. A pre-construction meeting must be held with the Council Compliance Engineer's nominated Field Representative. The Field Representative will check that pre-construction conditions have been met before work may proceed.

1.B.6.1.2 The developers representative shall furnish the Field Representative with such information as he may reasonably request (see the QAM Manual for details). The Field representative shall be given two working days notice by the developers representative of the intention to commence work. Formal meeting times shall be specifically agreed. A minimum of two working days notice shall be given for pre-construction or final inspections. For other inspections 24 hours notice is required.

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Note: If building in close proximity to or over a drain a separate application for this must be made for this.

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Time frame: There are statutory time frames for consent processes. In addition Council sets it's own targets. Refer to RMA for the details.

1.B.6.2 Maintenance of Standards

It is the developers responsibility both directly and through his appointed representative to ensure that all physical construction work carried out directly or by contractors or sub-contractors is at all times in accordance with the approved engineering plans.

1.B.6.3 Deviation from Approved Plans

Any deviation from the requirements of the approved plans which may be necessary to meet particular circumstances must be referred to the Compliance Engineer or their Field Representative for specific approval. A field amendment may be agreed to or an amended design may be requested.

1.B.6.4 Emergency

If during construction works any situation arises whereby the security of the public, public or private property or the operation of any public facility is endangered, the Compliance Engineer may instruct the subdivider's representative to carry out such remedial measures required to remove the danger. Any work so ordered to be done at the expense and liability of the developer.

1.B.6.5 Fencing

Temporary fencing shall be erected in accordance with the approved Health and Safety Plan by the developer to protect the general public, particularly children, from all danger areas in the development including silt ponds. Danger signs shall be erected warning persons of the danger in the area.

1.B.6.6 Temporary Site Signs

There are restrictions on signs. Refer to Council Consolidated Bylaws and to the District Plan Chapter 5.

1.B.6.7 Wastewater, Stormwater and Water Supply Connections

Connection to Council's water supply and drainage reticulation network may only be made under permit by Approved Licensed Contractors (ALCs). Every connection requires a Council consent and every connection must be certified. Wastewater and stormwater connections may be certified by either the owners consultant or by Council. If Council certifies, the owner or developer still has the choice of ALC however Council pays the ALC and the amount is added to the consent application fee for the connection. For water supply connections certification must be undertaken by Council. A list of ALCs and the application forms are available in the Customer Service Centre.

1.B.6.8 Testing

All testing deemed necessary by the engineer, to achieve the required compliance levels, shall be undertaken by an ianz accredited laboratory.

Carriageway testing shall be undertaken in accordance with Clause 6.B.6 Carriageway acceptance, of [Chapter 6 Road Construction](#).

Stormwater testing shall be undertaken in accordance with [Clause 3.B.12 Testing and Acceptance](#).

Water Supply and Wastewater testing shall be undertaken in accordance with Manukau Water's requirements.

The Council does not monitor suppliers therefore [MANARC](#) approval alone is not evidence that a product is satisfactory, in some cases products need to be checked for standards markings or certificate called from the supplier (e.g. for elastomeric joint rings) in other cases testing is required (eg for basecourse metal). Consult the QAM manual for more detail on inspection, testing and monitoring procedures.

1.B.7 Completion

As-built information shall be provided, Consultants Completion certificate issued, satisfactory arrangements for fee payments made, barter invoice provided and Application for Release submitted at completion. Consult the QAM manual for detailed requirements.

1.B.8 Bonding

1.B.8.1 The Council **may** for the purposes of section 224 of the Resource Management Act issue a certificate under section 222 with the 224 certificate to the effect that the owner has entered into a bond binding the owner to carry out and complete the work to the satisfaction of the Council within a specified period.

1.B.8.2 It must be emphasised that Council agreement to bonding is not guaranteed, the owner is not entitled to completion under bond as of right, however Council would normally agree to completion under bond for incomplete works. Consult the QAM manual for detailed requirements.

1.B.9 Release

Issue of Engineering release will not be considered unless :

- i) All "As built" drawings and information has been received checked and approved,
- ii) Payment has been made or satisfactory arrangements made for payment of all fees and other charges or the bond for the same executed,
- iii) Final inspection held,
- iv) Any other approval conditions have been complied with.

1.B.10 Maintenance

Council does not require a formal maintenance period except for the landscaping and stormwater quality devices. Consult the QAM manual for the detailed requirement.

1.B.11 Defects

Councils receipt and acceptance of `as built' plans does not absolve the consultant of any responsibility for their accuracy. In the event of a connection not being found where shown on the `as built' plan Council will verify the `as built' information with the consultant and give the consultant 48 hours to rectify the situation. If "As Built" information is incorrect Council will arrange for another connection to be installed and charge the consultant accordingly.

When public drainage and watermain systems have been hooked up to the live system, the maintenance and operation become physically the responsibility of the Council although the developer remains financially responsible for any hidden defects and defects bonded for, and covered by the engineers certificate.