



PART 1

GENERAL REQUIREMENTS AND PROCEDURES





PART 1: GENERAL RECOMMENDATIONS AND PROCEDURES

101 SCOPE

This Code gives:

- (i) Recommendations for the development of land, and
- (ii) Recommendations for the development of land where such land is required to be subdivided in terms of the Resource Management Act 1991, and
- (iii) Recommendations for the development of land where such land is subject to conditions of approval in terms of an application for a resource consent (whether notified or non notified).
- (iv) A means of compliance therewith.

Part 1 of this Code concerns matters of general application.

Parts 2 to 6 of this Code outline recommendations relating to particular types of services to be provided, and the means of compliance in residential, commercial and industrial subdivisions and developments.

Part 7 outlines Council's recommendations for subdivision and development of rural land. This section shall also be read in conjunction with Parts 2 to 6.

102 INTERPRETATION

102.1 *General*

102.1.1 These documents set out recommendations (of design and construction) which shall be regarded as the minimum standards acceptable.

Notes for guidance are inserted in italics.

102.1.2 The full titles of reference documents cited in this Code are given in the list of related documents immediately preceding Part 1.

102.2 *Statutory Requirements*

102.2.1 The provisions of this Code shall be read subject to the provisions of the District Plan and to any applicable statutes, regulation and bylaws, regional plans, including (but without limitation):



- (i) The Building Act 1991
- (ii) The Local Government Act 1974
- (iii) The Resource Management Act 1991
- (iv) The Construction Act 1959
- (v) The Plumbers Gasfitters & Drainlayers Act 1976
- (vi) The Drainage & Plumbing Regulations 1978
- (vii) The Gas Act 1992 and The Gas Regulations 1993
- (viii) The Waikato Transitional Regional Plan and other Regional Plans
- (ix) The Health and Safety in Employment Act 1992
- (x) The Electrical Codes of Practice
- (xi) The Electricity Act 1992
- (xii) The Electricity Regulations 1993

102.3 **Definitions**

In this Code, unless inconsistent with the context, the following definitions shall apply:

Earthworks means any alteration to the contours, including the excavation and backfilling or recompaction of existing natural ground and the stripping of vegetation and topsoil.

Ground is a general term used to describe the material in the vicinity of the surface of the earth whether soil or rock.

Land Drainage System refers to the flow of surface and ground water but concentrates mainly on peak surface discharges and their regulation under urban conditions.

Low Flow Path refers to the path taken by runoff resulting from ground water discharge and light rainfall. The low flow path should be kept to the minimum size consistent with ease of maintenance and may be considered to be 2% to 5% of the primary design flow.

Post Construction Settlement means the settlement of the ground surface which takes place after completion of the construction earthworks.

Primary Design Flow is the estimated runoff selected to provide a reasonable degree of protection to the surrounding land. In most cases this flow will be piped or contained within relatively narrow confines under public control by reserve or easement.

Road has the same meaning as defined by Section 315 of the Local Government Act 1974.

Scheme Plan means a plan of a proposed subdivision accompanying an application for subdivision consent under Resource Management Act 1991.

Secondary Flow Path refers to the path taken by runoff in excess of the primary design flow and should be capable of producing a reasonable degree of protection to the surrounding buildings (normally once in 50 years protection for commercial, industrial and habitable residential floor levels).



A freeboard above the secondary flow level is normally considered advisable when determining allowable floor levels. This is to cater for inaccuracies in flow estimation methods and for possible failure of the primary system.

Soil means the heterogeneous aggregation of particles comprising either peat, clays, silts, sands, gravels, crushed and re-oriented rock fragments, or a mixture of any of the above. The term excludes rock that is intact rock masses whether highly jointed or not.

- (i) **Cohesionless Soil** means a non-plastic soil (sand, gravel) where the strength is derived primarily from interlocking forces between soil grains.
- (ii) **Cohesive Soil** means a plastic soil (clay, silt, organic) where the strength is derived primarily from cohesion between the soil particles.
- (iii) **Soft Soil** means cohesive soil having a low shear strength (for example, less than 25 kPa).
- (iv) **Loose Soil** means cohesionless soil (for example, having a low Standard Penetration Resistance, for example, of less than 10 blows per 300mm). Also refers to uncompacted or poorly compacted refill.

Soils Engineer means a person who is currently entitled to practice as a registered engineer and has experience in soil engineering acceptable to the Council; or such other person as the Council may specifically approve as being competent.

Stable Ground means ground existing in a state which is unlikely to settle, slip, erode or otherwise move to the detriment of superimposed buildings, services, roads or property generally.

Subdividing Owner means the owner of the land to be subdivided, until allotments are sold.

Survey Plan has the same meaning as Section 2 of the Resource Management Act 1991 and means a plan of subdivision of land, or a building, or part of a building, prepared in a form suitable for deposit under the Land Transfer Act 1952 or with the Registrar of Deeds; and any Crown Plan prepared for a similar purpose as the case requires, and includes -

- (i) A unit plan, and
- (ii) A plan to give effect to the grant of a cross lease or company lease.

102.4 Requirements of Authorities other than Council

102.4.1 In addition to the Council, bodies or persons that may require to be consulted in respect of any proposed development of land include:

- (i) The Regional Council
- (ii) The New Zealand Historic Places Trust
- (iii) The Minister of Transport (Transit NZ) in relation to any State Highway or government road
- (iv) Railways Corporation
- (v) The Owner of the electricity network to which connection is to be made
- (vi) The Owner of the gas utility network



- (vii) Telecom or other relevant owner of the utility network in relation to telephone services

Department of Occupational Safety and Health

103 DESIGN BASIS FOR DEVELOPMENT

103.1 *General*

Every development shall make provision for such works or services that will adequately serve the needs of the site and the area when developed. Council may waive requirements for specific works or services in specific circumstances.

103.2 *Standard Design Basis*

Proposals submitted on a standard design basis should conform to the standard requirements of this Code and to whatever amendments are made by the Council to meet specific requirements.

103.3 *Alternative Design Basis*

Proposals submitted on the alternative design basis may differ from any standard requirement of this Code and shall apply specifically to a particular proposal. Approval of the Council to an alternative design does not confer approval in general by the Council to design criteria, construction technique or material forming part of the alternative design. An explanation of the design basis or construction method is to be submitted, for approval in principle, and will be considered on its merits in relation to the proposal. The aim is to provide flexibility for adoption of design to meet circumstances which may be peculiar to the site, or as a means of encouraging innovative design, or both.



104 OWNER'S REPRESENTATIVE

104.1 The owner, if not adequately qualified, shall appoint a representative or representatives to undertake the responsibilities of:

- (i) Design of the development, including preparation of and obtain the approval of engineering documents by Council;
- (ii) Supervision of the works;
- (iii) Certification upon completion that the works have been carried out in accordance with the documents and sound engineering practice.

104.2 The representative shall have experience acceptable to the Council in development/construction work. The representative shall be a registered surveyor or registered engineer or a person with experience and qualifications acceptable to the Council in development/construction work.

104.3 The owner's representative shall be available for a meeting on the site within eight ordinary working hours of being so requested by the Group Manager Asset Management.

105 PROCEDURE FOR APPROVAL OF DEVELOPMENT AND FOR ITS DESIGN AND CONSTRUCTION

105.1 *General*

105.1.1 Before any development can proceed, the owner must submit a plan(s) to the Council and have the plan(s) approved. The owner should therefore approach the Council to find out what plan(s) are in fact required for the proposed development.

105.1.2 The owner should be careful to ensure that no physical work should be undertaken in the proposed development area especially any work that might involve the disturbance of the surface of the land, other than work which is necessary for survey and engineering design purposes. Carrying out of other work prior to development approval requires the prior approval of the Group Manager Asset Management.

105.1.3 Where preparatory work is agreed to on the development prior to development plan(s) approval, such approval cannot be taken to authorise the destruction of any natural landscape, areas of trees or bush, buildings or sites of historic or archaeological or other significance or wildlife habitats that may be worthy of preservation and which may be identified during the development consent process.

105.1.4 Where the subdivider carries out works on a dedicated road, or any other land not owned by the subdivider, the following insurance provisions should apply:

- (i) The subdivider should ensure that public liability insurance is taken out in the joint names of the subdivider and the Council for a minimum amount of \$1,000,000.



- (ii) The policy should be extended to cover all insurable risks normally applicable to subdivisional work.
- (iii) The policy should have attached thereto either:
 - a. A cross liabilities/joint insureds clause; or
 - b. Appropriate wording which states that the policy will be construed as though a separate policy had been issued to each of the joint insureds.

105.2 Documents to be Submitted

105.2.1 Where development works are proposed, to comply with the requirements of the development approval the Council may require the submission of engineering drawings, specifications, calculations and landscaping details specified in Clause 105.3.1 prior to the commencement of the relevant aspects of development work. This means they could be submitted at any time after the relevant approval has been obtained, unless specific approval for preparatory development works has been given prior to the approval stage (see Section 105.1).

105.3 Additional Documents to be Submitted for Approval

105.3.1 As a condition of its approval of the development, the Council may require additional documents to be submitted.

These additional documents comprise:

- (i) Engineering drawings, specifications and calculations where required, covering the following sections of the work to be carried out:
 - a. Site regrading
 - b. Roothing
 - c. Drainage (stormwater and sanitary)
 - d. Water supply and other services
 - e. Soils Engineer's report on the suitability of the land for development, or other reports as considered necessary by the Council.
- (ii) "As-built" plans as and when the various aspects of the work of the development have been completed.



- (iii) Landscape plans, where required, covering site layout, extent of plantings, number and location of road trees, species to be used and quantities, list of botanical and/or common name and size of planter bag, special features such as rocks, signs to be used within these plantings.

105.3.2 The engineering drawings, specifications, calculations or landscape plans will be required to be examined by the Council and the relevant service authorities as appropriate. One copy of these documents will then be returned to the owner within one month, indicating any required amendments. Copies of documents as amended accordingly shall then be supplied to the Council. If amendments meet the Council's requirements, the Group Manager Asset Management (or Group Manager Community Development in regards to landscape plans), shall approve the documents forthwith, and return one copy to the owner endorsed accordingly.

Council will reserve the right to comment on the competence of any contractor engaged to carry out the work. Additional inspection costs may be charged by Council to the developer where contractor's work is deemed faulty and this requires increased input from Council staff.

Conditions of approval imposed by the Regional Council may, of necessity, be made known after this period has elapsed. A copy of this set shall be available for inspection on site at all times. (These drawings and specifications shall be prepared generally in accordance with NZS 5902:1986).

105.3.3 Upon completion of construction, copies of "as-built" plans are to be submitted by the owner showing the following details as constructed:

- (i) Roading. Showing all geometric roading and landscaping features with details as per engineering approval and show finished road centreline levels.
- (ii) Sanitary Drainage Reticulation. Including the measured position of manholes, invert (depth) and lid levels. Measurements of house connections, referred to the centre of the downstream manhole cover and the length and position of laterals and the sizes, classes and materials used for all pipes.
- (iii) Stormwater Drainage Reticulation. Detailed as for (i). The plans shall also show subsoil drainage and flood-path level information.
- (iv) Water Reticulation. Including the position of mains, location of hydrants, valves, tees and connections and the sizes, classes and materials used for all pipes.
- (v) Areas Of Filling. Showing the total depth of fill, in the forms of lines joining all points of equal fill depth.
- (vi) Ducts. Measurements to ducts installed for telephone, power and gas reticulation.
- (vii) Road Names. As approved by the Group Manager Asset Management after consultation with New Zealand Post, or other local authority, to prevent duplication of names.

105.3.4 Engineering drawings and "as-built" drawings shall comply with the following general requirements:



- (i) Drawing sheet size shall be A1 or A2. The title shall be across the lower width and a 50mm border left along the left hand edge for binding.

A locality plan is to be incorporated in the first plan sheet of each set of plans and to be located at the top right hand corner of the sheet.

- (ii) Minimum scales shall be:

Plans 1 : 500 or 1 : 200
Long sections 1 : 500 horizontal
1 : 100 vertical
Cross Sections 1 : 100

Details - to larger scales as appropriate.

- (iii) Drawing and construction details are to be in accordance with the attached plans included in Appendix C.
- (iv) All services are to be shown on the same plan, annotated as indicated on fig 1, Appendix C, Draughting Symbols. Existing services not directly affected by the development, remaining on the site are to be shown.
- (v) "As-built" plans for roading and services are to be provided on permatrace and to scale. The base used for the "as-built" plans shall be as per the Transfer Plan. All service lines, components (manholes, bends, hydrants etc) and connections are to be dimensioned perpendicular to at least two separate adjoining boundaries. Invert/depth and lid levels of manholes and connections are to shown.
- (vi) All levels shown shall be to the Moturiki Datum (Orthometric) and their origin shown.



105.4 ***Number of Copies of Documents Required***

105.4.1 Unless otherwise specified, the number of copies (sets) of documents required to be submitted to Council shall be as follows:

Engineering Documents	2
"As-built" Plans	1
Landscape Plans	3

105.5 ***Approval Before Commencing Work***

105.5.1 Work shall not commence upon the engineering construction of the development unless:

- (i) The Council has approved the development plans; and
- (ii) The Group Manager Asset Management has subsequently approved the engineering drawings, specifications and calculations for the specific work that is required.

Provided that where the Council has entered into an agreement with the owner to enable preparatory work to be undertaken prior to the approval of the development plan, the Group Manager Asset Management will, in such circumstances, approve the engineering drawings, specifications, and calculations to enable the work to proceed, subject to these being satisfactory.

105.6 ***Notification of Contracts and Phases of Work***

105.6.1 The owner shall advise the Group Manager Asset Management, in writing, of the names and addresses of contractors to whom it is proposed to award the work, and the nature of the work to be awarded in each case.

105.6.2 The owner shall notify the Group Manager Asset Management when the following phases of work are reached and such other phases as the Council may determine to enable inspection to be carried out:

- (i) Commencement of work
- (ii) Prepared earthworks and subsoil drainage prior to filling
- (iii) Complete earthworks and prepared subgrade
- (iv) Commencement of drainage reticulation
- (v) Commencement of water reticulation
- (vi) Finished basecourse

Work shall not proceed until inspection has been made.



105.7 ***Supervision of Work***

105.7.1 The owner shall be responsible, both directly and through his representative, to ensure that work is carried out in accordance with the approved documents and sound civil engineering practice, or landscaping practice.

105.8 ***Connection of Existing Services***

105.8.1 Connection of new water supply and sewerage to existing systems will normally be carried out by Council at the cost of the owner, except that at the discretion of the Council, sewerage connections may be made by the owner under the supervision of the Group Manager Asset Management.

105.8.2 The owner shall give the Council five working days notice of intention to connect to existing services. New services shall be tested and approved by the Group Manager Asset Management prior to connection.

105.9 ***Emergency Procedure***

105.9.1 If during the course of construction, a situation arises which may endanger the security of public or private property or the operation of a public facility, the Group Manager Asset Management may instruct the owner to undertake such remedial measures as he considers necessary to abate the danger. Such work will be at the owner's cost.

105.10 ***Damage***

105.10.1 Damage caused by new works shall be the liability of the owner, subdivider or developer, and shall be repaired on the instruction of the Group Manager Asset Management. If remedial work is not commenced within 16 working hours, the Group Manager Asset Management may carry out the work at the owner's cost. This provision includes the removal of mud and debris from existing roads, which may be required daily in the interest of traffic safety.

105.11 ***Testing***

105.11.1 Any work required to be tested by or in the presence of the Group Manager Asset Management shall be pre-tested and proved satisfactory by the owner before the test by Council is carried out.

105.12 ***Safety Fencing and Signs***

105.12.1 Temporary fencing shall be erected by the owner where required, in accordance with the Construction Regulations 1961. Signs shall be erected warning persons of the danger in the area.

105.13 ***Road Names***

105.13.1 Where necessary the owner shall submit to the Group Manager Asset Management a list of proposed road names with alternatives. When approved, the owner shall erect nameplates as approved by the Group Manager Asset Management - or meet the cost thereof - at all road intersections, visible from all approaches.



105.14 ***Maintenance***

105.14.1 The owner shall maintain the works including landscaping, until they are formally taken over by the Council or to a date specified in a bond for completion of uncompleted works, or landscaping maintenance. (Note: The maintenance period is generally three months from the receipt of a certificate from the Group Manager Asset Management that the works are complete.)

105.15 ***Approval of Uncompleted Work***

105.15.1 Where in the opinion of the Council it is desirable, the Council may approve uncompleted work.

105.16 ***Interference or Alteration to Existing Work***

When it is necessary to cut any concrete path or kerb to lay any service, the concrete should be sawn and the minimum width of the section removed should be 500mm outside the edge of the trench to be cut. The cut should be at right angles to the lie of the path or kerb. The replacement concrete should be reinforced with 665 mesh placed 50mm above the bottom of the slab. When it is necessary to cut a sealed surface, it should also be sawn and the surface reinstated with 30mm thickness of hotmix asphalt.

105.17 ***Other Public Utilities***

The relevant electricity operator or other public utility authority should be presented with complete drawings of the approved roading proposal at the earliest opportunity, so that they may design and allow for their utilities to be installed with the minimum delay and interference to the final surfacing of carriageways and footpaths.

For development where road construction is involved, the owner's representative should supply approved copies of the engineering drawings to the relevant authorities, immediately after the drawings have been approved by the Group Manager Asset Management. Any financial contributions in respect of these utilities must be paid by the owner.

When required by the owner of the utility network, the owner shall provide utility sites off the road reserve.

The installation of these services shall be at no cost to Council.



105.18 Requirements for Final Approval of Development

- (i) Roading:
 - a. second coat completed and swept once.
 - b. alternatively asphaltic concrete would be acceptable (thickness 25mm minimum in residential area, 40mm minimum in industrial/commercial area)
 - c. road marking completed
- (ii) Kerb and channel - completed.
- (iii) Footpaths - completed.
- (iv) Berms - sown grass established and mown once.
- (v) Water supply - completed and tested.
- (vi) Stormwater drainage - inspected, cesspits cleaned out.
- (vii) Sanitary drainage - mains tested.
- (viii) Road names - signs erected.
- (ix) "As-built" plans - received by Group Manager Asset Management.
- (x) Certificate received by Group Manager Asset Management that payment has been made to the appropriate authority for underground reticulation of power, telephone and gas services.
- (xi) Soils Engineer's statement as to the suitability of the land for building development in the format of Appendix B.
- (xii) Reserves - condition acceptable to Group Manager Community Development.
- (xiii) A letter from the relevant electricity operator advising that power supply will be made available to the boundary of the development and to each lot contained within the development or subdivision.

106 BONDS AND CHARGES**106.1 Uncompleted Works Bonds**

- 106.1.1 Bonds to cover uncompleted works and landscaping maintenance, especially where a development has been substantially completed, are recognised as an acceptable procedure available to owners and allow for the more efficient and economical use of resources.
- 106.1.2 Bonds other than cash deposits will require some time to be prepared and executed by the Council, the owner and his guarantor. To minimise or avoid this delay, the items of uncompleted work included in the bond should be agreed upon by the Council at the earliest date possible.



- 106.1.3* Bonds to cover more extensive works where a development is not substantially completed may be permitted by the Council and will vary depending upon the type, size and use of the development.
- 106.1.4* Bonds to cover landscaping maintenance should be held for a period of one calendar year in the case of plantings carried out in the planting season but otherwise for a period so to include two consecutive planting seasons immediately following the first planting, thus allowing for replacement of any dead or diseased plant material and/or replacing of topsoil in case of excessive weeds growth (the planting season is from may to August inclusive).
- 106.1.5* Bonds should take the form of an agreed cash deposit, refundable upon completion of the works, or a formally signed bond supported by a guarantor. The value of the bond should be equal to:
- (i) The value of the uncompleted works and/or landscaping maintenance, plus
 - (ii) Engineering supervision fees at 10% of the value of the works to be bonded, plus
 - (iii) 12.5% of the summed value of (i) and (ii) above per 3 months for the term of the bond, plus
 - (iv) Goods and Services Tax.

107 DECLARATION OF PUBLIC DRAINS

- 107.1** All new public drains shall be declared public drains in accordance with Section 462 of the Local Government Act 1974. This shall be done upon completion of the maintenance period for the sanitary and stormwater drainage reticulation works and certification by the Group Manager Asset Management that the work has been constructed in accordance with the Council's requirements of this Code.
- 107.2** Where a declared public drain passes through private property, a memorandum may be registered on the title in accordance with Section 462 (3) of the Local Government Act 1974.

