



development guide

“ HNZC provides access to decent homes,
helping New Zealanders manage their own
circumstances and contribute to community life **”**

Housing New Zealand Corporation, mission statement.



A detailed architectural sketch of a multi-story building complex, rendered in a light grey tone. The drawing shows various levels, balconies, and structural elements, with some areas filled with cross-hatching for shading. The style is a loose but precise line drawing.

> Introduction

WHY THIS GUIDE?

The Development Guide is a practical response to the challenge of raising the standard of social housing provided in New Zealand.

The New Zealand Building Code, associated standards and acceptable solutions set a minimum standard for housing provision in New Zealand. Housing New Zealand Corporation (HNZC) recognises that relying solely on the Code is not sufficient for the provision of social housing.

The Development Guide provides a framework that will raise the standard of housing that HNZC supplies. It is to be used as a tool by all involved in constructing and reconfiguring HNZC housing and will deliver:

- 1 A consistent model for development utilising and retaining expertise within the Corporation
- 2 A set of performance-based Design Guides that promote good design principles.

The document is a set of principles, providing a checklist for design. It also describes the development process, sign-off requirements, and key roles for projects presented to HNZC.

The Development Guide is a useful tool to those outside HNZC when partnering with the Corporation, mapping out the steps that will be undertaken in the delivery of social housing.

The Development Guide is to be a living document reviewed regularly, and will follow HNZC Quality Management System (QMS) procedures for review.

Development Planning Team

HNZC AIMS TO RAISE THE STANDARD OF SOCIAL HOUSING BY PROVIDING HOUSING THAT IS:

- > **sustainable**
 - Promoting functional, safe and attractive urban environments
 - Promoting health and safety awareness within housing design
 - Promoting energy efficient design principles
 - Selecting materials and processes that mitigate adverse environmental effects
 - Selecting construction systems based on life-cycle costing
- > **functional**
 - Meets current and predicted occupier needs
 - Allows for flexibility of use to accommodate varied occupier lifestyles
- > **affordable**
 - Provided at a cost which balances quality of product and number of units being provided
 - Balances the need to provide a return to HNZC with the social objectives of the Corporation

THIS WILL BE DONE THROUGH A PROCESS WHICH ADDRESSES:

- > **delivery**
 - Promoting clear steps for the delivery of housing developments within HNZC
 - Promoting better coordination with other Government Departments and non-Government Organisations
 - Supporting consistency across building projects which will result in an improved standard of housing stock over time
- > **consultation**
 - Improving the building project coordination and communication between teams within HNZC
 - Including external parties in a structured process which enables these stakeholders to work with HNZC
- > **measurement**
 - Capturing relevant, measurable economic and social data
 - Utilising feedback management to improve the processes for future projects

WHAT'S IN THIS GUIDE

The Development Guide folder is divided into two parts:

- 1 This Development Guide which covers the process for new developments ▼
- 2 The four Design Guides which cover quality issues for building work ►



1 THIS DEVELOPMENT GUIDE

This booklet starts with an introduction to the development guide, and explains development routes that need to be considered. It then steps through the three phases of the development planning process - starting, building and finishing.



1 Introduction

2 Development Routes

3 Starting

- determining the need for housing
- putting a project plan together
- assessing the bulk and location feasibility

4 Building

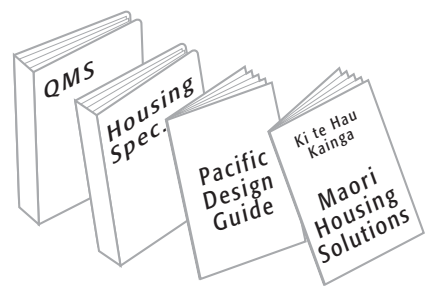
- developing the design and getting sign-off
- producing contract documentation
- completing construction

5 Finishing

- producing an occupier manual
- establishing and evaluating community support
- gathering feedback on the success of the project
- incorporating any feedback into the guide

Other related material

Throughout the Development Guide, references are made to a number of other resources.



2 THE DESIGN GUIDES

While going through the three process steps refer to the Design Guides. There are four Design Guides. Start with either **Urban** or **Rural**...

Urban

For use in residential neighbourhoods and urban areas, this guide runs through urban issues such as transport networks and street layout, existing infrastructure, density and public and private open space.

Rural

This guide highlights the questions you will need to answer, and helps you produce a design response for rural or outlying areas.

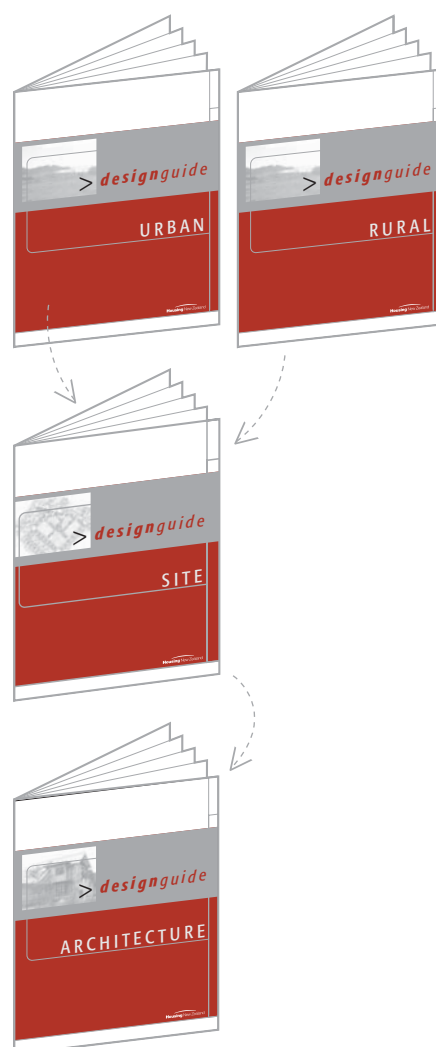
Site

Site design is an important step in the process. It relates to land condition, access, aspect and amenity. It highlights any questions and issues you need to consider as you move through the site design process.

Architecture

This guide addresses issues that influence the layout of the building (how the rooms are arranged, connections to outdoors etc). Areas covered include cultural issues, accessibility, materials, construction techniques, energy conservation and amenity.

Note: as the titles of the guides suggest, the scale of the design decreases with each guide (eg. Rural is on an 'area' scale, Architecture is on a 'house' scale).



HOW TO USE THIS DEVELOPMENT GUIDE

The Starting, Building and Finishing steps of this Development Guide outline the building project process step by step. The order of the steps is not important; however all sign-offs must be achieved. Throughout the process steps the following icons will occur...

A CONSULTATION

Where a project requires consultation, the Process steps refer the project to the required external parties or teams within HNZN. The following is an example...

DEVELOPMENT PLANNING

Consultation needed. This example refers the user to the Development Planning team.

B SIGN-OFF

The process steps use a system of sign-offs, referring the project through the various departments inside HNZN. The following is an example...

HNZN BOARD

Sign-off needed. This example refers the user to the HNZN board for sign-off.

C DESIGN GUIDES

Where the project requires design guidance during the process steps the Development Guide refers the project to the relevant Design Guide. The following is an example...

RURAL

Design guidance needed. This examples refers the user to the Rural Design Guide for design guidance.

COMMUNITY AND IWI CONSULTATION

Community and Iwi consultation needs to be undertaken by the individual sponsors or HNZC at executive level. When community and Iwi consultation occurs, the purpose is to focus on issues that exist and require exploration. Community consultation is undertaken to define problems. It is important not to raise unrealistic expectations on the outcomes of the consultation and to clearly define the consultation scope at the outset.

A light gray architectural sketch of a residential development, showing various building footprints, rooflines, and structural elements. The sketch is rendered in a loose, hand-drawn style with fine lines and some shading to indicate depth and form. It occupies the central horizontal band of the page.

> Development Routes

DEVELOPMENT ROUTES

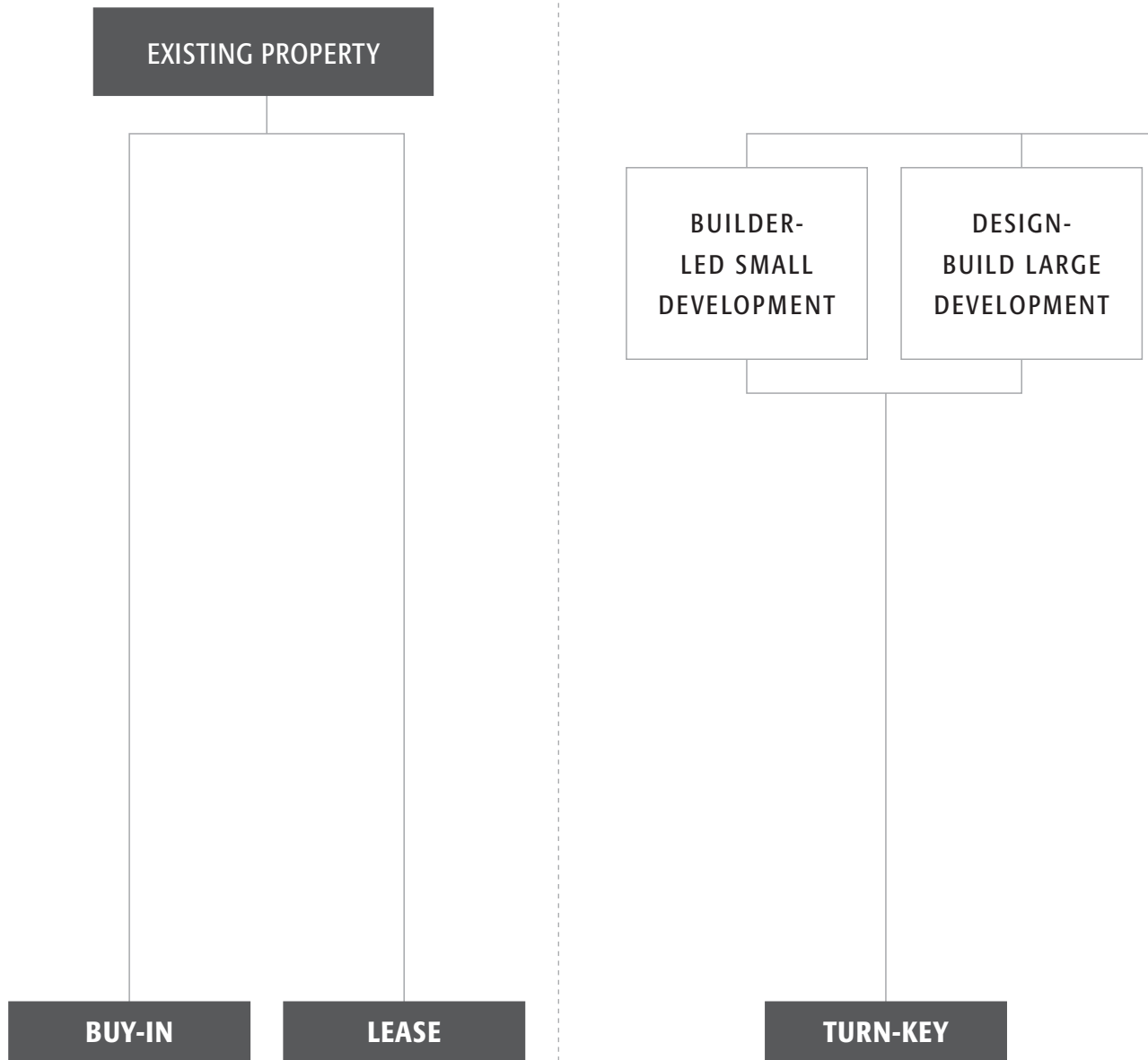
Different projects will enter HNZN at different stages of completion. The Development Guide will work with all projects, from those where no design work has been undertaken through to those where construction is partially complete.

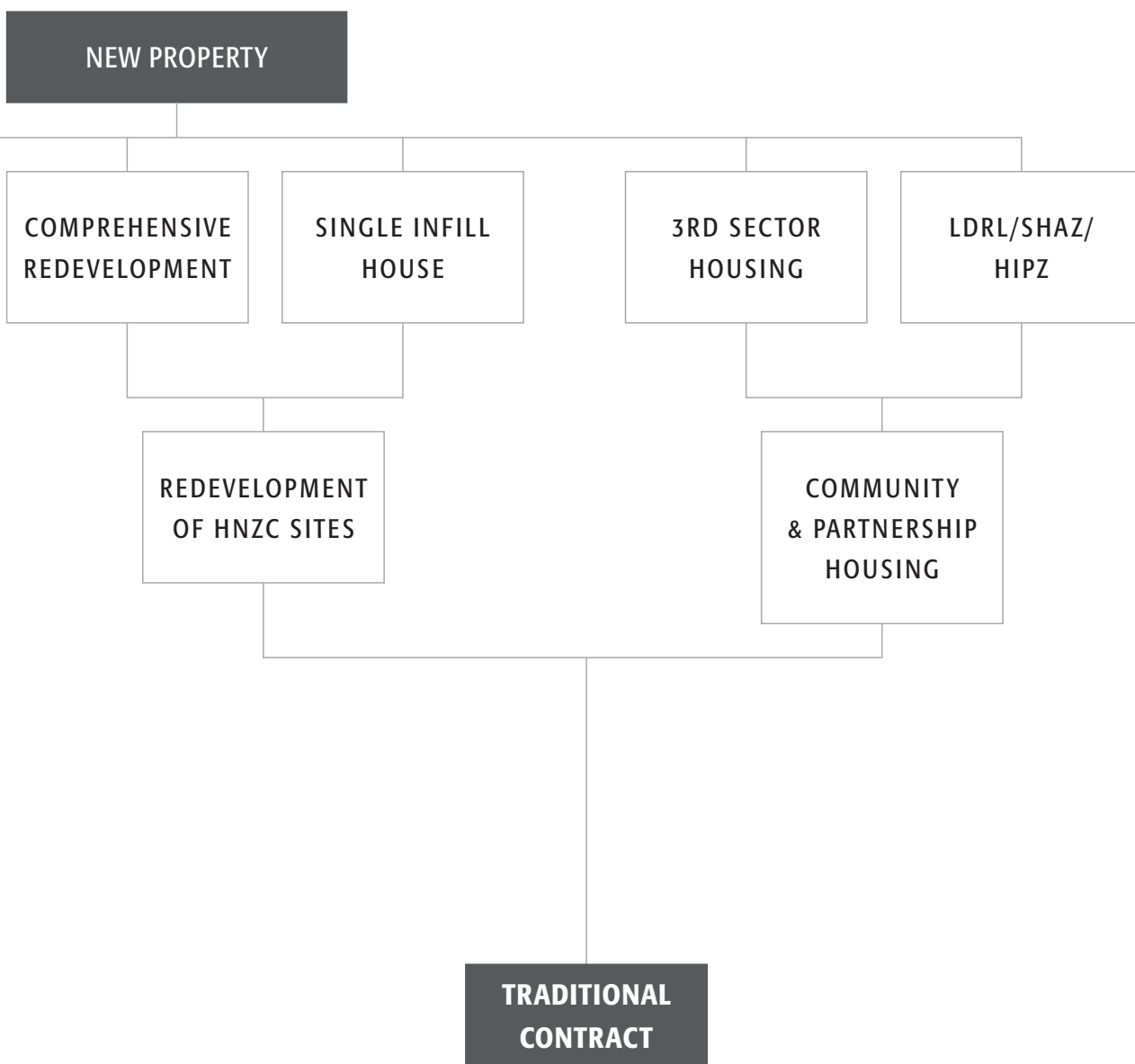
Note: buy-ins and lease properties will need to follow through the process steps in the Guide retrospectively to ensure they meet the requirements of the Guide. This will ensure that HNZN does not buy or lease properties that are poorly located, sited, designed or built.



PROJECT INITIATION

- Building project initiation will be made in one of the following ways:*
- *A redevelopment of HNZN housing generated by a housing sponsor*
 - *An enquiry to the area manager within a neighbourhood unit*
 - *An approach by an external party to a particular housing sponsor.*





HNZC SPONSOR

In order for a project to receive funding from HNZC it must be sponsored by an HNZC team. Each sponsor will have their own guiding policies for undertaking housing provision. Once a project has a sponsor, the Development Guide process sections in this book shows how the project will interact with other teams inside the organisation. The following is a list of HNZC housing sponsors.

A THE ACQUISITION AND REDEVELOPMENT TEAM (ART)

- ART sponsor all rental acquisitions, leases, new-builds and modernisation programmes directly, when they occur inside the greater Auckland area.
- ART sponsor most large scale redevelopment projects where subdivision or reconfiguration on an urban scale is required.
- Where a project is a one-off or a pilot in a certain area for community groups or rental accommodation, ART can directly sponsor the project. Examples of such sponsorship are pilot rental properties designed using the principles of Ki-Te-Hau Kainga (HNZC Maori Design Guide).

B HOUSING SERVICES

The Housing Services Area Team, headed by the Area Manager, act as agents for ART acquisitions, leases, new-builds and modernisation programmes outside the Auckland Area.

C HOUSING PARTNERSHIPS

- Where housing provision occurs in partnership with a non-government organisation, social agency or local government agency, Partnerships will become the housing sponsor.
- The NECBOP (Northland, East Coast, Bay of Plenty) programme is run by Housing Partnerships. The NECBOP regions have been identified as Special Housing Action Zones, that require assistance and funding to improve housing provision in the area. The NECBOP programme works alongside various local Iwi and community Trusts in the areas, as well as facilitating new-build rental accommodation.

D COMMUNITY GROUP HOUSING (CGH)

Where housing provision is for a group (organisations rather than individuals) that support and serve the community, CGH will become the sponsor. Examples of groups sponsored by CGH include Women's Refuge and IHC homes.

E COMMUNITY RENEWAL

Community Renewal is a longer term approach for change within the economic, social and physical environments of communities in which HNZN has a high concentration of housing. An example of recent work inside communities by the team is the reconfiguration work started at Aranui in Christchurch.

F HOME OWNERSHIP

- HNZN runs home ownership programmes for first home buyers in rural areas who do not meet the private sector requirements.
- The LDRL (Low Deposit Rural Lending) course offers a programme for home ownership where buyers attend an 8-week course on home maintenance, budgetary advice and debt reduction before they can apply for a housing loan.
- Successful LDRL applicants can have monies approved for purchasing housing on multiply-owned land, or self-build programmes where individuals or groups use their 'sweat equity' or own labour as a deposit to get them into a home.

CONTRACTING METHODS

Once a building project has an HNZN sponsor there are several contracting methods that HNZN can follow. This is not a definitive list, but outlines commonly used processes. The typical project types with associated contracting methods are mapped out in the following list...

A BUY-IN

HNZN purchases property on the open market either through the ART team, or via the Area Manager. Properties proposed for buy-in will be reviewed against the principles of this Development Guide.

B LEASE

HNZN leases new and existing property in addition to its wholly owned portfolio. Properties proposed for lease will be reviewed against the principles of this Development Guide.

C TURN-KEY DEVELOPMENT

This is the process often adopted where a developer has land with designs, or newly developed property that they would like to sell (in part) to HNZN. An example of this would be a new subdivision, where HNZN is being offered 20% of the proposed new houses. Development Planning and ART will assess the project and formulate a case summary that effectively completes all the steps of the Guide retrospectively. All sign-offs and consultation steps will still be carried out.

The Development Guide has notes on Turn-key contracts adjacent to the process steps to highlight key differences with this form of contract.

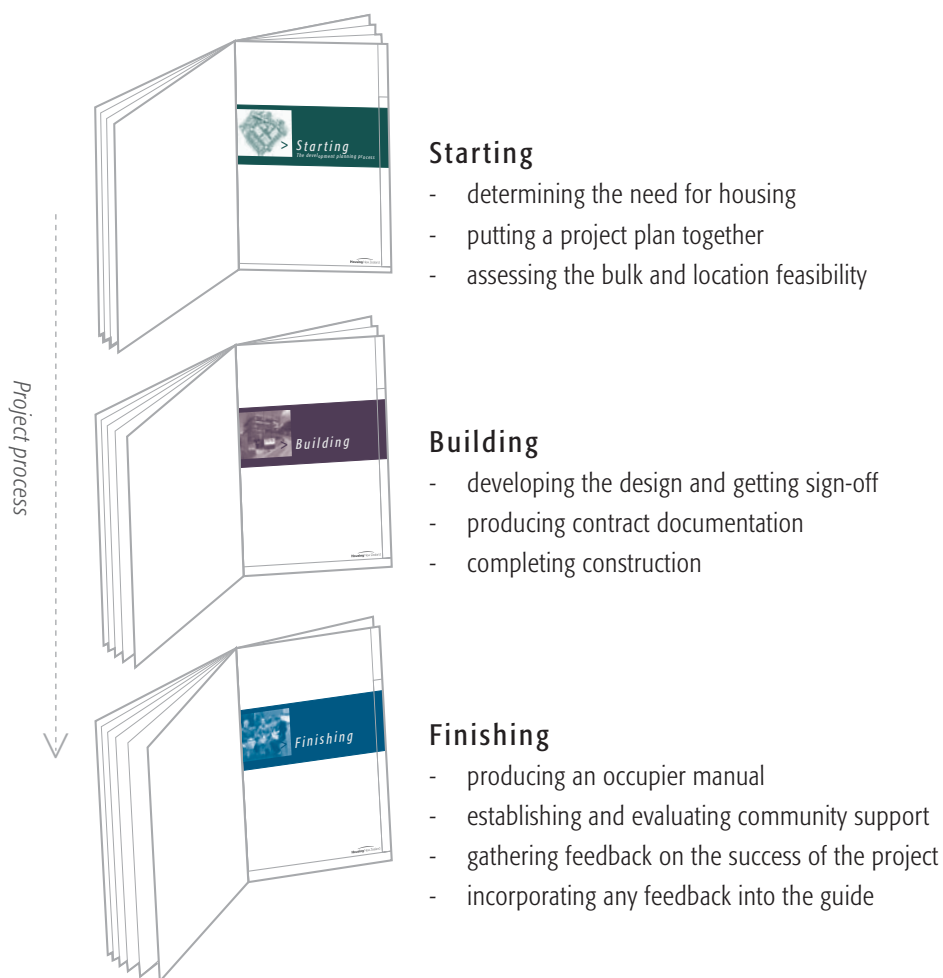
D TRADITIONAL CONTRACT

- This is the process that HNZN follows to develop its own property. An example of this might be intensification of a block of existing properties. Another example could be 3rd sector housing.
- Self-build can be used by individuals or by a group in order to obtain housing where otherwise they would not be able to afford it. Their labour becomes equity. This process requires specific designs for each project and requires careful management to negotiate the complex set of relationships it involves. It is necessary to have a detailed cost plan for the project, including a draw-down system for payment of subcontractors and suppliers.

The Development Guide has notes for Self-build projects adjacent to the process steps to highlight key differences with this building method.

DEVELOPMENT GUIDE PROCESS

Begin the Development Guide process over the page...








Starting

The development planning process

OVERVIEW OF THE PROCESS

This section explains, step-by-step, the process to use to start a project. From researching to identifying that there is a clear and sustainable housing need, to establishing the project team and producing the project plan.

PAGE		 CONSULTATION	 DESIGN GUIDE	 SIGN-OFF
20	Needs analysis	Sponsor Area Manager TLA		
21	Site analysis	Development Planning Partnerships ART	Rural Urban Site	
22	Economic viability	ART		
23	Critical review			Sponsor
24	Design brief	Development Planning		
25	Preliminary design	Development Planning TLA	Site Architecture	
26	Project plan			HNZC Sponsor

NEEDS ANALYSIS

It is essential that all future projects undertaken by HNZC answer a clearly established need.

1 DEMOGRAPHICS

Houses built today must fulfil a future demand within their community. The following is a guide to formulate a demand profile:

- Levels of employment and income
- Special housing requirements eg. temporary migrant housing
- Age distribution
- Ethnic groupings.



2 NUMBERS

Assess current housing shortfalls including:

- Substandard accommodation (unsafe or unsanitary)
- Unhealthy occupancy levels (eg. adults and children sleeping in the same room)
- Accommodation ill-suited to occupier needs (eg. obsolete planning, high commuting costs).



3 RESOURCES

Local resources may enhance the viability of a project. Some areas to consider include:

- Physical and natural resources (eg. land, timber, existing houses, plant and equipment)
- Possible sources of finance (Government organisations, charitable organisations, and third sector housing providers)
- Local labour pool. Some projects may include training for unskilled local people, which requires careful management.

C SPONSOR

It is the responsibility of the project sponsor to ensure that the demographic analysis is completed, over and above any social objectives analysis required by their own processes.

C AREA MANAGER

The Area Manager has information about existing housing need, and knowledge of available local resources and should be consulted.

C TLA

Territorial Local Authorities (Councils) will often have a profile of an existing area showing current population statistics, and predicted trends.

SELF-BUILD

Where a group is to provide labour, the responsibilities of the group members must be formally established. In all situations training mechanisms, quality assurance procedures and responsibilities and an HNZC appointed project overseer must be established.

SITE ANALYSIS

Before a building project is undertaken, the suitability of the site for housing development must be proven. This may require input from expert consultants.

1 DEMOGRAPHICS

The location of the site must be appropriate (eg. close to work and community facilities, supported by public transport).

 **RURAL/URBAN**

2 SITE CONDITION

The site must be suitable for development. Items such as access and aspect must be assessed.

 **SITE**

3 DISTRICT PLAN REQUIREMENTS

Refer to the Territorial Local Authority District Plan for permitted development rules.

- If the development is not a permitted activity under the plan expert consultants may be required.
- Some land will require resource consent to develop for residential use.

4 LAND OWNERSHIP

Identify owners, legal description and area of the site. As a minimum a Certificate of Title and a Deposited Plan for the site are required.

- If the development is on land where there is more than one owner, then consult ART and/or Partnerships.

 **RURAL**

DEVELOPMENT PLANNING

Development Planning will review the project site analysis in accordance with the Urban or Rural and Site Design Guides.

ART/PARTNERSHIPS

Partnerships or Acquisitions and Redevelopment staff can help in dealing with development on land that has multiple ownership.

ECONOMIC VIABILITY

A preliminary appraisal of the project's economic constraints must be made. It will establish the budgetary parameters for the project prior to any design work being done. This will include the following:

- An assessed value of the land
- A preliminary guide for the cost of the project (eg. a number of units at an estimated cost per unit, given current square metre building rates).

C ART

ART will review the project assessment of economic viability.



CRITICAL REVIEW

At this review a decision on the future of the project will be made. A project summary is to be submitted for the review. Proposals which are unsuccessful will not progress in their present form. An outcome of a successful critical review will be the appointment of an HNZN project representative to coordinate the HNZN input into the project.

✓ SPONSOR

The Sponsor will ensure that the overview steps and their associated consultation requirements have been fulfilled and signed off by all project stakeholders.



SPONSORS ROUTE

The Sponsor for the project is responsible for ensuring the initial overview steps and the consultation required in these steps are retrospectively completed. The same project criteria apply to Turn-key development work. The entry point and order will be different from other HNZN development routes.

DESIGN BRIEF

The design brief will take the summary of the project from the critical review and turn it into a set of required architectural outcomes. Among these will be the following:

- Size of development
- Number and size of units
- Any specific housing needs (eg. level access, level entry showers, sleepouts)
- Flexibility of use
- Economic constraints (including life cycle costing requirements).

C DEVELOPMENT PLANNING

Development Planning will review the project summary promptly and can assist with writing the design brief.

TURN-KEY

Where the design has not been completed it is desirable for HNZA Development Planning to assist with writing the design brief for the developer.



PRELIMINARY DESIGN

Preliminary design will respond to the design brief and as a minimum will include the following information (scales are indicative and may vary):

- Location plans (1:500)
- Site Plan (1:200)
- Site and context photos
- Bulk and location drawings (indicative plans, sections and elevations 1:100).

HNZC require the following information on all project drawings:

- Project title
- Address
- Drawing title
- Number and revision
- Date
- North point
- Scale
- Design office contact details.



SITE AND ARCHITECTURE



DEVELOPMENT PLANNING

Development Planning will review the preliminary design in accordance with the Design Guides.



TLA

Depending on the scope of the project it may be prudent to consult with the TLA at this early stage.

PROJECT PLAN

The project plan details the scope and structures progression of the project to delivery. The project plan will be formulated by a project team including:

- HNZC representative
- Representatives from other key stakeholders
- Design team (eg. architect or designer, structural and civil engineer, urban planner and landscape consultant).

The project team needs a formal structure and lines of reporting, as well as a clear system for decision making.

The plan will include and outline the following:

- Preliminary design
- Timelines and specific deliverables
- Key stakeholders
- Performance requirements and responsibilities of the project team
- Financial Plan, including budgets, sources and availability of funding (these should be mapped on a timeline), critical funding milestones, and regular scheduled reviews
- Regulatory issues (including Resource Management Act and specific District Plan requirements, and Maori Land Act issues).

✓ HNZC SPONSOR

The Sponsor will present the proposal at the appropriate level within HNZC and once approved will proceed into the **building** phase of the development process. Major projects will require approval from the HNZC Board of Directors Property Sub-committee.

TURN-KEY

The HNZC project representative in a turn-key development will have a Quality Assurance role only.

The project plan and all the items it contains will be managed by the developer but will still need to be presented by the project sponsor to the HNZC board for approval.

SELF-BUILD

The mechanisms for supplying materials and making payments must be formalised as part of the project plan.

In all Self-Build situations, projects must be supervised by an experienced tradesperson.



Building

OVERVIEW OF THE PROCESS

PAGE		 CONSULTATION	 DESIGN GUIDE	 SIGN-OFF
30	Developed design	Development Planning	Site Architecture	
31	Resource consent			TLA
32	Construction documents	Development Planning	Architecture	
33	Cost estimates			ART
34	Building consent			TLA
35	Contract			ART
36	Construction observation			ART

DEVELOPED DESIGN

This step involves firming up site design, developing the building form and layout to a considerable level of detail (including window and door positions as well as kitchen and bathroom layouts), and establishing materials.

SITE AND ARCHITECTURE

The following drawings will be required (scales are indicative and may vary):

- Location plan (1:500) - showing bulk and location, significant vegetation, access, community facilities in the immediate vicinity, and neighbouring buildings
- Site Plan (1:200) - indicating site layout, topography, building location, vehicle crossings and landscaping
- Building plans (1:100) - indicating labelled internal layout with indicative furniture, location and size of window and door openings, and location of plumbing fixtures
- Building sections (1:100) - indicating structure, roof form, construction, ceiling heights and floor levels and relevant District Plan requirements (eg. height planes)
- Building elevations (1:100) - indicating external appearance, materials and windows and doors
- Note: drainage drawings may be required if a subdivision or intensification of an existing urban area is being sought.

The following supporting information will also be required:

- Detailed Cost Estimate - including 15 year life-cycle costings.

HNZC require the following information on all project drawings: project title, address, drawing title, number and revision, date, north point, scale, and design office contact details.

DEVELOPMENT PLANNING

Development Planning will review the developed design in accordance with the Design Guide requirements.



CONSTRUCTION DOCUMENTS

The documents must communicate comprehensively all necessary construction information for the building of the project. These will include working drawings, specifications and, where appropriate, schedules of quantities.

Working drawings must:

- Demonstrate compliance with Statutory Requirements (including meeting the New Zealand Building Code)
- Enable the project to be accurately costed
- Detail architectural and construction features
- Indicate materials, set out dimensions, levels, and construction techniques.

Specifications must:

- Include detailed information prescribing materials, products and their application and workmanship
- Be written specifically to suit regional differences and local construction practices
- Contain a preliminary section outlining contract establishment procedures and general rules to follow during the course of construction
- Include a schedule of related documents.

Specifications must not include contractual clauses or repeat specific information given on drawings.

Schedules of Quantities should:

- Outline the materials and labour involved in completing the contract work as described in the working drawings and specifications
- Break down the main areas of work by trade measuring the quantity of materials and estimating the unit costs
- Estimate the hours of work required for each trade.

ARCHITECTURE

DEVELOPMENT PLANNING

Development Planning will review the construction documents in accordance with the Development Guide requirements.

SELF-BUILD

Construction drawings must:

- 1 Focus on how building components are put together, specifically detailing difficult junctions. Use of 3D sketches rather than 2D drawings is advised*
- 2 Show the construction sequence*
- 3 Include a materials list.*

COST ESTIMATES

A detailed cost estimate must be provided. It is to be based on the completed construction documents, and must cover all costs of the development. This figure will include landscaping, interior finishes such as window and floor coverings. **GST must be included.**

✓ **ART**

ART will review the cost estimate against the preliminary budget parameters.

Revised M2 Budget Estimate - 1 x Unit

Item	Description	Total
46.	Main electric HVAC and valves (wet back compatible)	2,215.20
47.	Laundry tub and taps	367.68
48.	Stainless steel shower tray	443.04
49.	Supplies, vents and waste connections to all fittings	
50.	Water to building	
51.	Sewerage & drainage provisional sum	6,313.32
ELECTRICAL & TELECOM SERVICES		500.00
52.	Power to building provisional sum	750.00
53.	Residential switchboard	
54.	Light fittings	350.00
55.	Light switches and cabling	498.42
56.	Power outlets and cabling	526.11
57.	Catenary wire to test	894.38
58.	Wire and install extractor fans	1,370.02
59.	Wire HVAC and cabling	196.14
60.	Wire Oven/hob and cabling	deleted
61.	Telecom to building	110.76
62.	Phone wiring and outlets throughout	110.76
		276.90
		21.50 5.80
FIRE PROTECTION		414.35
63.	Hard wired smoke detector to outside bedrooms	
EXTERNAL WORKS		
64.	Decking or patio Provisional Sum	deleted NTT # 01
		5.80 2.00
		8.50 3.80
		21.50 0.80
		5.00 0.70
SUNROOMS		
65.	Letter box	deleted
66.	Clothes line	deleted
Total Budget Estimate (inc. GST)		\$118,798.32
Total Floor area (m2)		120.00
Estimated Cost / m2 (including decks)		\$989.99

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17/06/2002

BUILDING CONSENT

Building Consent is required for building work as defined in the Building Act 1991, including:

- Structural building (including new buildings)
- Plumbing work
- Drainage work
- Heating, ventilation and air conditioning systems necessary for the functioning of the building
- Lifts
- Site-works associated with the building
- Demolition
- Relocation of existing buildings.

Building Consent allows building work in accordance with the Consent, associated plans, and specifications. It does not give any form of planning approval under the District Plan. It is the responsibility of the applicant to contact the relevant TLA or an architect, to determine that the proposal complies with the District Plan. If it does not, a Resource Consent is required. Resource Consent considerations need to precede the Building Consent application. At this stage a LIM (Land Information Memorandum) is recommended.

Other consents such as Resource Consents to discharge contaminants to any body of land, water, or air, may be required.

A PIM (Project Information Memorandum) is also required with each Building Consent application, and provides the developer with information held by the TLA on the property being developed. Except for internal alterations and minor works, you are encouraged to apply for a PIM prior to the Building Consent application.

✓ TLA

Ensure that all Resource Consent application requirements have been met in the documentation - these will vary between TLAs.

SELF-BUILD

HNZC may retain the long-term liability for self-build buildings.

HNZC must also:

- *Complete the application for building consent, and pay the applicable charges*
- *Discuss sign-off procedures with the TLA or Building Certifier on application. The number of TLA Building Inspector visits may be able to be reduced as an HNZC appointed agent is completing the QA for the entire construction phase.*

CONTRACT

A building contract will be required. HNZN has guidelines for these procedures.

- Tendering: refer to QMS procedures.
- Negotiation and Managed Contracts: refer to Acquisitions and Redevelopment Team (ART) for standard procedures.

Before construction starts, a contract for the delivery of the building must be signed. This contract will include:

- Construction drawings, specification, and schedules where applicable
- A timeline to achieve practical completion
- Any relevant correspondence between the parties to the contract
- Additional information that may be requested in the form of Contract, eg. details of margins applying to monetary allowances and hourly charge rates, proof of insurance, etc.

✓ ART

Ensure that all contract types are checked by the ART team in Auckland - these will vary between developments and may need legal advice.

TURN-KEY

In a Turn-key development an agreement for sale and purchase must be executed. This must include provision for:

- *Design standards reaching those of the Development Guide*
- *Quality Assurance being agreed*
- *Obtaining the relevant certificates such as a Code of Compliance Certificate, and warranties and guarantees. Legal advice may be required at this stage on a project by project basis*
- *For larger developments a Building Warrant of Fitness and Compliance Schedule will be required.*

SELF-BUILD

There is no standard form of contract for self-build. HNZN use NZS 3910/3915 as the preferred standard form of contract.

- *Sub-contracts can either be tendered or negotiated.*
- *Supply contracts for materials and fittings will need to be negotiated.*
- *Payment structures will need to include the predicted cashflow.*

CONSTRUCTION OBSERVATION

During the construction phase of any building project, HNZN must carry out Quality Assurance (QA) for the duration of the contract. The appointed person will make regular site visits at least at critical times eg. prior to pouring concrete, prior to closing in, and before lining.

The HNZN representative will be suitably qualified to undertake the work described above, and will be appointed by ART.

Although an HNZN representative will undertake the above QA, the contractor is still responsible under the contract to carry out the work as indicated in the contract documents. The HNZN representative is not responsible for either checking the contractor's work or for providing remedies for situations where the contractor has made an error. HNZN will rely on the contractor to carry out work as dictated by the contract.

Where the contract type requires certification of work for payment, the HNZN representative is responsible for completing certification. Certification does not exempt the contractor from any of their contractual obligations, but rather checks that work has been completed to the degree entitling payment.

Payment of the final account will also require the contractor to deliver to the HNZN representative the following:

- Final approved copies of as-built drawings, including services drawings
- On behalf of HNZN, the Code of Compliance Certificate for the completed work from the building certifier or TLA
- Any and all guarantees or warranties required by the contract.

✔ ART

ART will ensure that the QA process has been carried out satisfactorily and will sign the building off when complete.

SELF-BUILD

The HNZN representative will be empowered to certify draw-downs to suppliers and sub-contractors.

SELF-BUILD

The delivery of necessary guarantees and warranties becomes the responsibility of the site supervisor who is also responsible for ensuring compliance with the NZBC and delivery of the Code of Compliance Certificate upon project completion.

TURN-KEY




The payment of the full amount stated in the Sale and Purchase Agreement will result from the handover of the completed buildings to HNZN at a quality acceptable under the contract.



Finishing

OVERVIEW OF THE PROCESS

HNZC's goal is for its housing to contribute to the development of communities that are socially, environmentally and economically sustainable.

PAGE	 CONSULTATION	 DESIGN GUIDE	 SIGN-OFF
40	Building information		Development Planning
41	Occupation		
42	Post-occupancy evaluation		
43	Review	Maintenance	Development Planning

BUILDING INFORMATION

All information relating to systems within the building will have been collected by the building contractor and the design team. This information must be collated in a file and deposited with ART. The project Sponsor must ensure that relevant information is entered into the RENTEL database. This will include the following:

- cladding system information including system type, guarantee, and manufacturer required maintenance procedures
- roof system information including roof structure, downpipes, and spouting
- floor type (slab or pile construction with flooring type)
- structure (with any areas of exposed structure noted)
- type of doors and windows (including garage door, manufacturer and guarantees)
- painting requirements
- internal fixed appliances such as stoves, hot water system, and smoke detectors
- the building designer, the contractor and the HNZA QA agent
- all relevant information on maintenance requirements.

The project Sponsor will be responsible for forwarding a separate file to Development Planning. This file will include:

- contract documents (including drawings and specifications)
- as-built drawings
- a copy of the project brief
- site photos and construction progress photos where available
- post-occupancy evaluation (refer to Post Occupancy Evaluation).

This information will form a library of projects which are able to be referred to in future. Drawings are to be in A3 format.

DEVELOPMENT PLANNING

The project sponsor must obtain sign-off from Development Planning that all the requested information has been received.

OCCUPATION

A successful new-build or reconfiguration project requires support of the end user. Strong communities need support. To develop this strength, when an occupant moves into a new dwelling the following support procedures should occur:

- Explanation of occupier obligations (eg. mowing lawns regularly)
- Any specific restrictions applicable to the property should be highlighted
- Outlining of house care requirements, (eg. maintenance of electrical appliances, and cleaning of proprietary fittings)
- Contact details for local service providers should be given to the occupants (eg. rubbish collection procedures, electricity and gas supply companies)
- Contact details for local social support services should be supplied (eg. Citizen's Advice Bureau, the Salvation Army, local marae and church organisations)
- Other Government Agencies should be contacted where necessary to provide a whole-of-Government approach to supporting at-risk occupants (eg. health support for families at high risk of developing diabetes).

Refer also QMS - Your Home Housing Manual.

To promote sustainable communities it is important to consider the appropriateness of dwelling type to the particular occupier ie. large extended families are ill-suited to small apartment accommodation.

POST OCCUPANCY EVALUATION

The purpose of the Post Occupancy Evaluation is to identify problems and successes with the housing solution. The evaluation should distinguish social concerns from those directly related to the building and siteworks.

Post Occupancy Evaluation requires a questionnaire form targeting housing items such as layout and ease of use. The responses will be used to evaluate the Design Guides, and amend them where they are not currently providing the desired outcomes - refer to the next topic on Review.

The interview should be conducted within 6 months of tenancing a new or altered dwelling.



REVIEW

The Development Guide is a living document. Continual review of the Process steps and the Design Guides allow issues to be addressed and amended.

Regular reviews of the document will be undertaken by the Development Planning Team. Review information will also come from the Maintenance team and ART.

Feedback from other users of the Guide should be directed to the HNZA Development Planning Team, c/- 28 Grey Street, Wellington, phone 04 474 2100.

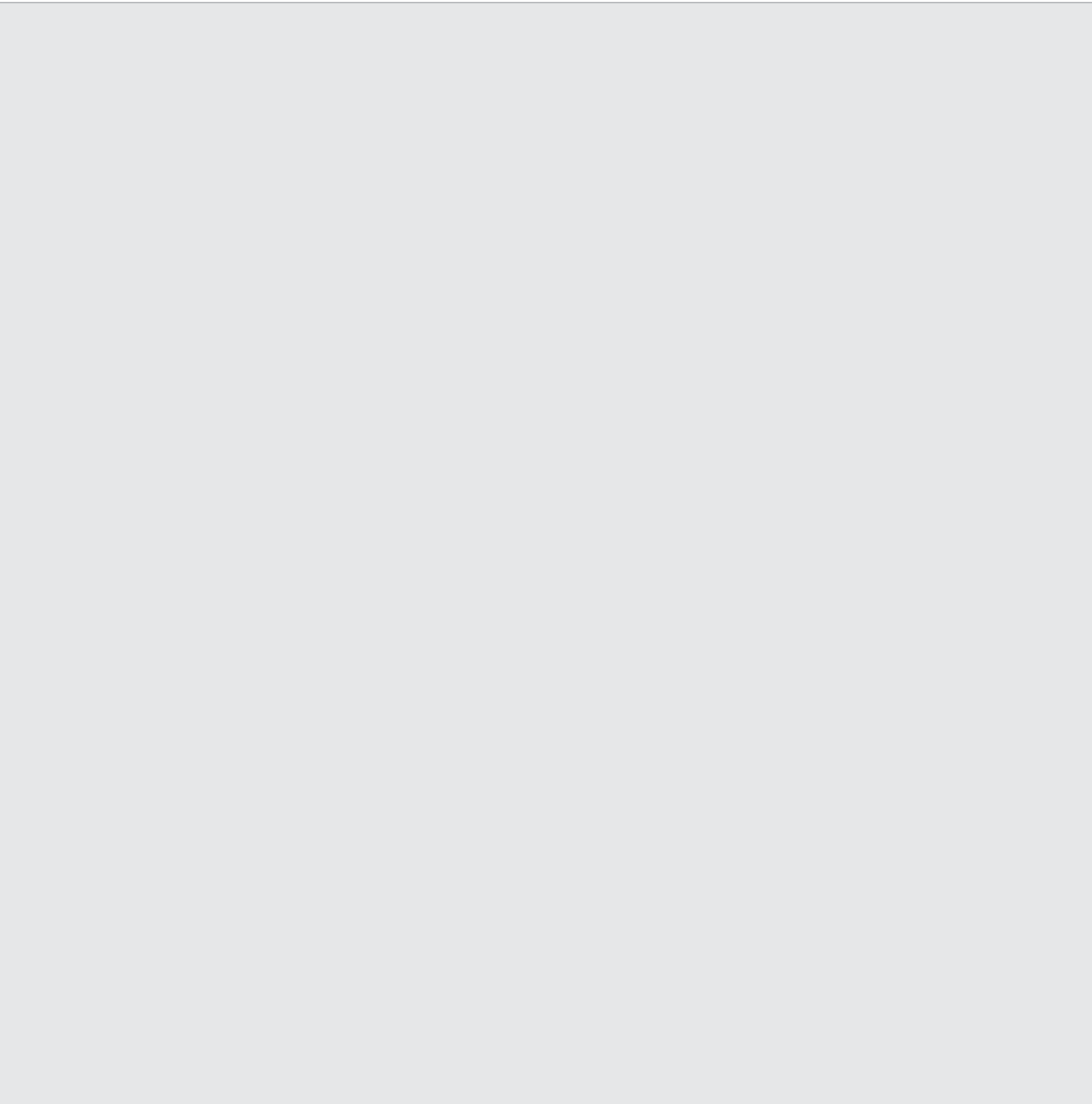
The feedback for review will be managed in accordance with QMS procedures for updating documentation.

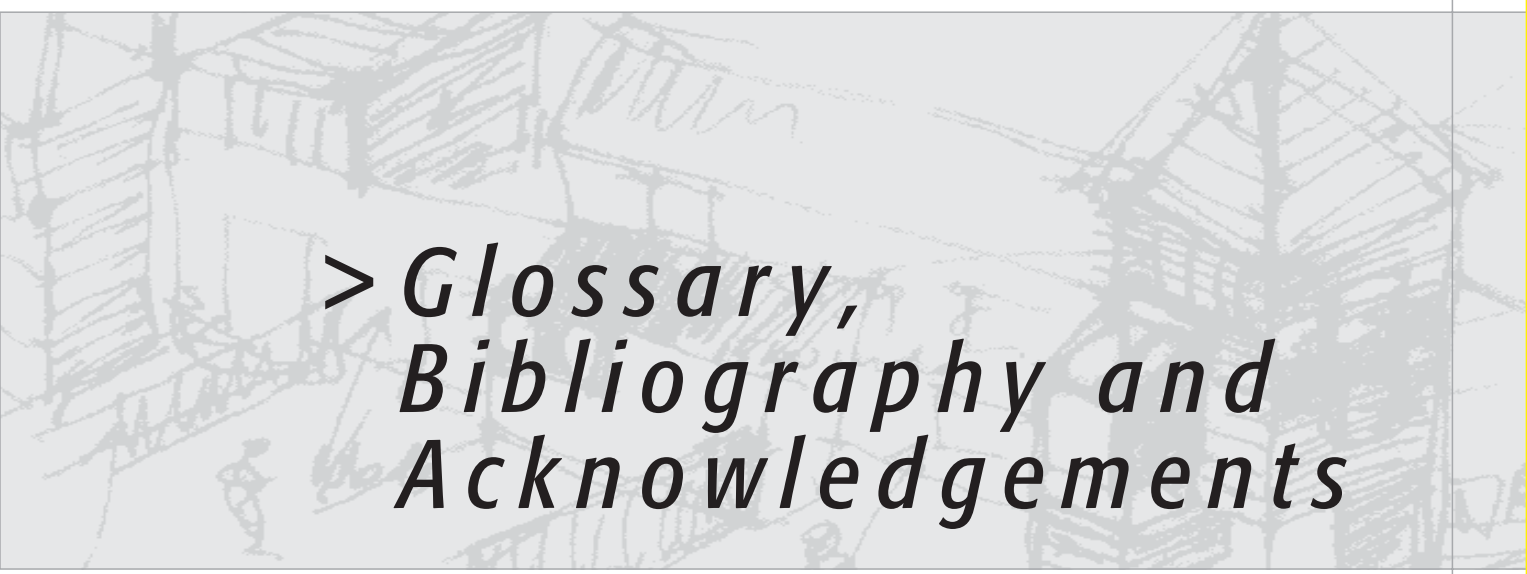
MAINTENANCE

The technical screening process for incorporating feedback into the Guide remains the responsibility of Development Planning and questions regarding revision dates should be made via the Development Planning Manager.

DEVELOPMENT PLANNING

It is important that the screens in RENDEL are updated noting when items have failed and been replaced or repaired. This information will then be available to improve HousingSpec and the Procurement Schedule, as well as the Development Guide.





> *Glossary,
Bibliography and
Acknowledgements*

GLOSSARY OF TERMS

The following terms are used throughout the Development Guide...

HNZC TERMS

Area Manager	A person employed to manage a group of HNZC neighbourhood units, representing the Corporation at the local community level.
ART	The Acquisitions and Redevelopment team based in the Auckland National Office of HNZC.
Community Group Housing	The Community Group Housing team based in the Wellington National Office of HNZC. (Part of the Housing Partnerships Team.)
Community Renewal	The Community Renewal team based in the Wellington National Office of HNZC.
Development Planning	The Development Planning team based in the Wellington National Office of HNZC.
HNZC	Housing New Zealand Corporation.
Housing Partnerships	The Housing Partnerships Team based in the Wellington Office of HNZC.
NECBOP	The NECBOP Project is Housing New Zealand Corporation's response to the Government's goal of eliminating unsafe and substandard housing in Northland, the East Coast and the Eastern Bay of Plenty.
QMS	The Housing New Zealand Corporation Quality Management System (QMS) provides a framework for the continuous improvement for the Corporation's operations and is an essential element of the Corporation's risk management process.
RENTEL	HNZC's specific computer database and storage system that manages tenant and property details.
Sponsor	The project leader within the HNZC team which funds a housing project.
Tenancy Manager	A person employed to manage HNZC tenants, including letting, maintenance, monitoring the tenancy, and tenant liaison/debt management.

OTHER TERMS

Affordable	The financial ability to proceed with a construction development based on the individual project parameters.
Building Certifier	A person approved under the Building Act 1991 to certify building work.
BRANZ	Building Research Association of New Zealand.
Building Consent	Building work on or around your property is required to conform to the Building Act 1991 and the local bylaws regarding issues like earthworks and vehicle access. A building consent gives you the authority to proceed with this work.
Consultation	A process whose purpose is to focus on issues that exist and require exploration. The process is undertaken to define problems, rather than to offer solutions.
District Plan	All TLAs are required to prepare a District Plan under the Resource Management Act 1991 (RMA). The District Plan is the primary document that manages land use and development within the district of the council's territorial boundaries. The plan is required to work towards the sustainable management of the District's natural and physical resources.
Quality Assurance	Method of ensuring that an outcome or process has been subject to current company policy, procedures and information that allows them to perform effectively and efficiently.
Resource Consent	Any development, subdivision or other proposed use of a site must be assessed against the TLAs District Plan. Anything not permitted by the Plan requires a Resource Consent.
Sustainable	The provision of environments that promote attractive alternatives with energy efficiency and health & safety principles and selection of materials and systems based on life-cycle principles.
TLA	Territorial Land Authority (District Council).
Turn-key	A term used to describe a development route where a sale and purchase agreement is the method of procuring housing.

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