



New Zealand  
**Historic Places Trust** *Pouhere Taonga*

## **Archaeological Guidelines Series No. 1**

### **Guidelines for the Investigation and Recording of Buildings and Standing Structures**



**New Zealand Historic Places Trust  
Pouhere Taonga**

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Cover image: Westlawn Hut, Waiouru (2004, NZHPT).

## **1. Introduction**

### **1.1 Purpose**

The New Zealand Historic Places Trust is involved in an increasing number of archaeological authority applications for archaeological sites that include buildings and standing structures. If destruction, substantial modification or relocation is involved any authority, if granted, is likely to contain conditions that require the investigation and recording of the built component of sites, in addition to any subsurface remains. This guide forms part of an ongoing project by the Trust about built heritage and archaeology.

The following guidelines have been developed in response to a need for information and standards for buildings recording and analysis work. In the first instance, these guidelines are intended as a technical guide, for use by heritage professionals with training and/or experience in this field. It is expected that in some instances the approved archaeologist carrying out work required by an archaeological authority will need to obtain professional assistance to assist with meeting the conditions relating to buildings recording and analysis.

### **1.2 Buildings and archaeology**

Buildings and standing structures can be seen as important components of archaeological sites. Created by past human activity, their investigation using archaeological methods may reveal significant evidence relating to the history of New Zealand. Standing structures and the in-ground components of archaeological sites that lie beneath and around them are in many cases inter-linked. As with other forms of archaeological enquiry, the examination of standing structures provides information that is not normally retrievable through other means.

Archaeological approaches to the investigation of standing structures are founded on an awareness of the potential of all physical material within and around a building to shed light on historical issues. Investigation consequently requires a consideration of all aspects of human activity linked with a structure, including its preparation, construction, development and use. It incorporates an awareness of all material that contributes to the chronology of the site – not just original fabric – potentially encompassing structural elements, fixtures and fittings, decorative material, layers of accretion and loose artefacts of many periods. This approach generally seeks to explore the relationship between a structure and its setting, particularly when part of a broader archaeological site.

## **2. The investigative process**

The process of investigation can be divided into three stages, involving evaluation, recording and analysis.

### **2.1 Evaluation**

Evaluation assesses the potential of a structure to provide information of value about the past, based on a brief examination of its physical fabric and documentary research into its historical background and context. In most cases it will include the foundation of a research strategy, which guides the aims and parameters of any further investigative work. Where part of a larger archaeological site, it is anticipated that the research design will encompass both structures and in-ground and buried deposits, ensuring that the overall work programme is targeted at, and appropriate to, the questions being asked.

In most cases, the establishment of the chronological phasing of a structure through archaeological means will be considered an essential part of any investigation. Other aims, however, will vary according to the type and historical context of each structure, and other factors. Research designs may adopt a multi-faceted approach acknowledging the varied potential of archaeological fabric.

For example, the investigation of a church might include questions about how its changing layout, access arrangements and ornamentation illuminate shifting attitudes to religious identity and worship; or how the finish and source of its materials reflect historical production techniques and trading patterns; or how its construction methods indicate the ethnic origins, craft organisation or other influences of its designers and builders. Lower-level aims may also be adopted, such as those involving the establishment of chronological sequences for artefact types such as nails, roofing tiles or wallpaper.

### **2.2 Recording**

Recording involves the “capture” of information about physical fabric and other contents of a structure. This occurs through the transformation of on-site evidence into a portable archive. It will generally include the creation of drawn, written and photographic records, and may also involve the collection of samples and loose artefacts (see checklist below). Recording should, in most cases, be analytical as well as descriptive, providing clear evidence of the chronological development of the structure. It is important that it should serve the aims set out in the research strategy, although such aims may be modified when new and unexpected evidence is encountered.

The recording process is most effective when carried out in a systematic manner, and can be carried out in stages, before, during, and – particularly where associated with buried deposits – after the demolition or substantial alteration of a structure. Where a structure is associated with buried archaeological deposits, the links between above and below ground material should be noted. Recording may include the removal of fabric, but only when specified within an approved research strategy. All records should be of archival quality, and capable of permanent or long-term storage.

## **2.3 Analysis**

Analysis examines the evidence about chronology and other research aspects collected during recording, and combines it with that from artefact and sample analysis, comparative work and further documentary research. Discrepancies between different forms of evidence (e.g. stratigraphic, typological, scientific and documentary) should be noted and discussed. It is expected that analysis will integrate the results of any broader archaeological investigation and recording of subsurface features to provide an overall history and analysis of the site and its components. It will generally also include the production of an appropriate report.

### **3. Recording techniques and standards**

The following checklist provides a range of appropriate techniques and standards for recording buildings and standing structures in the context of investigation and recording under an archaeological authority, where the building is to be demolished, substantially modified or relocated.

Depending on the design and focus of the research strategy, not all of these techniques may be appropriate. Alternatively, as this list is not exhaustive, additional recording techniques may be employed.

In all cases, recording should be carried out at a level that is appropriate to the project, which will depend on factors such as the significance of the material being investigated and the impact of the works being carried out. Further information on levels of recording is provided after basic techniques are discussed.

Recording techniques are varied but include the production of drawn, written and photographic records. Each has its own merits although they are best used in combination. Measured drawings offer an effective means for systematically gathering evidence about a structure and conveying accurate visual information about its appearance. Written records enable more detailed evidence to be captured, including the composition and finish of materials, the configuration of stratigraphic relationships (such as through stratigraphic matrices) and other aspects of chronological development. Photographic recording is a rapid way of capturing descriptive information and usefully conveys aspects of visual appearance. However, it is the least valuable in terms of analysing a structure.

#### **3.1 Drawings**

Plans, elevations and sections should incorporate all relevant elements that contribute to an understanding of the design, construction, development and use of the structure, including structural material, decorative elements, and information relating to alteration and wear.

The scale indicated below is generally the minimum required. In many cases a larger scale will be necessary, particularly where significant details are small. It may be necessary to draw some perspectives – particularly internal elevations – more than once as overlays, if different information appears during the course of the investigation (e.g. when earlier decorative schemes or blocked features are revealed after the removal of timber lining or wallpaper).

In most instances, it is important that the drawings accurately depict the material that exists rather than display an idealised version through the use of artificially straight lines, level planes or exact right angles. Survey equipment will generally be required to ensure appropriate levels of accuracy. In some lower-level recording, artificially level planes (such as from a top plate or base plate) may be appropriately employed, providing significant information is not overly distorted.

All drawings should be of archive quality – normally 4H pencil on permatrace – with a title and indications of scale, orientation, date of illustration and author. It is anticipated that most drawings will be carried out by hand, although photogrammetry, CAD survey or other digital recording may aid them. Further illustration in the form of axiomatic or reconstruction

drawings can be valuable in the presentation of information, but will not normally be required as part of the recording process.

For standardised drawing conventions, reference is made to those used by the Royal Commission on the Historical Monuments of England (RCHME 1991), although others may be used if appropriately keyed.

#### *Recommended Scale*

|                                 |  |
|---------------------------------|--|
| Overall site layout             | 1:500 or 1:200 (showing overall layout, boundaries and topographic features in relation to main buildings) |
| Floor plans                     | 1:50 or 1:20   |
| Roof and ceiling plans          | 1:50 or 1:20 (showing disposition of roof/ ceiling timbers)  |
| Elevations (interior/ exterior) | 1:50 or 1:20   |
| Sections                        | 1:50 or 1:20 (across and along structure)  |
| Joinery details                 | 1:20 or 1:10   |
| Other significant details       | 1:20 or 1:10   |
| Moulding profiles               | 1:2 or 1:1   |
| Phased plans and elevations     | Scale flexible, as appropriate   |

### **3.2 Written accounts**

Written notes should be of archival quality, which will include a copy in non-digital format. They will usually be compiled in conjunction with detailed scale drawings, and should include the clear and systematic labeling of all information portrayed on such illustrations. In complicated instances or when dealing with fabric of outstanding or considerable significance, a full stratigraphic record of a structure – or part of a structure – may be of value, with pro-forma sheets for the description of each appropriate element and a stratigraphic matrix detailing their chronological order. In many cases, an intermediate approach is likely to be sufficient, with separate descriptions and preliminary interpretations supplementing the other records. Accurate architectural terminology should always be employed.

Generally, written notes fall under two categories: descriptive and interpretive.

#### *Descriptive*

- General description of exterior (materials, methods of construction, dimensions, overall shape and form)
- General relationship between the structure and its past and present setting (e.g. other buildings, curtilage layout, curtilage boundaries, gardens, access roads, streetscape etc.)
- General description of interior (including overall layout)
- Systematic description of each room/ space, including architectural elements, decorative schemes, fixtures and fittings, evidence of use/ wear and alteration. Information should include the description of materials, construction methods, visual appearance and dimensions as appropriate.  
Note: the attic and subfloor each count as a space, as does the exterior.
- Index of all drawings, photographs, finds and samples.

### *Primary interpretation*

- Evidence for overall chronological development (stratigraphic relationships, typological information and artefactual evidence)
- Evidence for original and changing use.
- Evidence for the preparation of materials, sources and supply.
- Initial comparison of original plans (if available) with the structure as built.
- Initial comparison of evidence with that from other known documentary sources e.g. photographs, sketches and written accounts.
- Summary account of the preliminary phasing (incorporating plan, form, function and age), based on all of the above.

## **3.3 Photography**

Photography should be carried out to archival standards, using 35mm cameras and good quality lenses as a minimum. Fine-grained black and white print and colour slide film (125 ISO or less) should generally be employed. Where better quality resolution is required, medium or large format cameras and film are preferred. Colour print and digital photography are not currently considered to be archivally stable, but can be usefully employed for aide-memoire or presentational purposes. The processing of black and white film, as the most effective long-term archival record, requires particular care.

### *Perspectives*

#### Context:

- Views showing relationship to setting, other buildings or significant viewpoints (e.g. streetscape, yards, gardens, boundary walls)

#### Exterior:

##### Principal elevation (frontage)

- Other elevations
- Significant features (structural or decorative, roof, signage, evidence of modification etc)
- Typical details (chimneys, doors, windows, fixtures and fittings, eaves, weatherboards)

#### Interior:

- Rooms (including roof space, attics, subfloor areas, basements)
- Features (staircase, fireplaces etc)
- Significant elements (stained glass, tiles, plaster, wallpaper, wear marks, fixtures)
- Typical details (doors, architraves, windows, fittings)

### **3.4 Sampling and artifact collection**

All samples and artefacts should be bagged, numbered and labeled to ensure stratigraphic information is retained. Possible samples and artefact collection strategies include:

- The sampling of *in situ* material for analysis and/or curation (e.g. wall coverings, ceramic pipes, bricks, nails, timber, dendochronological samples, industrial residue samples etc.)
- The collection of loose artefactual material for analysis and/or curation (e.g. items found behind linings, in roof spaces, subfloor areas etc.)
- The development of reference collections of materials used in structures, showing changes in content, technology, appearance etc. through time.

### **3.5 Other techniques**

- Removal or test scraping of accumulated material to determine sequence of alterations.
- Excavation of associated in-ground material, including earlier floor surfaces, foundations and services.

## **4. Levels of recording**

The following recording levels are for guidance only, and may be adapted according to the specifics of each research design. Four different levels are suggested:

Level I is a top level record, suitable in cases where a structure or part of a structure of outstanding archaeological or other heritage significance is to be demolished or otherwise destroyed.

Level II is a high level record, appropriate where a structure or part of a structure of outstanding archaeological or other heritage significance is to be relocated or otherwise significantly modified, or where a structure or part of a structure of considerable archaeological or other heritage significance is to be demolished or otherwise destroyed.

Level III is a medium level record, relevant where a structure or part of a structure of considerable archaeological or other heritage significance is to be relocated or otherwise significantly modified, or where a structure or part of a structure of moderate archaeological or other heritage significance is to be demolished or otherwise destroyed.

Level IV is a low level record, suitable only in cases where a structure or part of a structure of moderate archaeological or other heritage significance is to be relocated or otherwise significantly modified, or where a structure or part of a structure of low archaeological or other heritage significance is to be demolished or relocated.

Different levels of recording may be appropriate for different parts of a structure.

### **4.1 Level I**

- Comprehensive measured drawings of all elevations - internal and external – cross-sections, floor plans, roof plans, ceiling plans, mouldings and other details
- Comprehensive written records, including detailed stratigraphic recording and matrices
- Comprehensive photography of all contextual views, elevations, spaces, fixtures and other features, incorporating the use of high or medium format photography
- Comprehensive sampling of relevant materials

### **4.2 Level II**

- Extensive measured drawings, including all main elevations – internal and external – cross-sections, floor plans, roof plans and ceiling plans
- Extensive written records, including a combination of stratigraphic matrices and annotated drawings
- Extensive photography, including all main contextual views, elevations, spaces, fixtures and other features. It may incorporate the use of high or medium format photography
- Extensive sampling of relevant materials

### **4.3 Level III**

- Measured drawings of selective elevations – internal and external – cross-sections, floor plans, roof plans and ceiling plans
- Written records, including annotation of measured drawings
- Photography of selective contextual views, elevations, spaces, fixtures and other features
- Selective sampling of relevant materials

### **4.4 Level IV**

- Outline measured drawings or sketches
- Written annotation on measured drawings or sketches
- Limited photography
- Limited sampling, if appropriate

## 5. Further reading

Dallas, Ross (ed.). 2003. *Measured Survey and Building Recording for Historic Buildings and Structures*. Historic Scotland Guide for Practitioners. Edinburgh.

Institute of Field Archaeologists (United Kingdom). 2001. *Standards and guidance for the archaeological investigation and recording of standing buildings or structures*. Revised edition.

New South Wales Heritage. 1994. *Guidelines for Photographic Recording of Heritage Sites, Buildings and Structures*. Sydney.

Royal Commission on the Historical Monuments of England (RCHM). 1991. *Recording Historic buildings: A descriptive specification*. 2nd edition, London.

U.S. Department of the Interior. 1990. *Secretary of the Interior's Standards and Guidelines for Architectural and Engineering Documentation: HABS/HAER Standards*. Washington

### ***Useful glossaries of architectural terms include those presented in:***

Arden, Stuart and Ian Bowman. 2004. *The New Zealand Period House: A Conservation Guide*. Auckland.

R Brunskill, W. 1994. *Timber Building in Britain*. London.

Fleming, John, Hugh Honour and Nicolaus Pevsner. 1999. *The Penguin Dictionary of Architecture and Landscape Architecture*. 5<sup>th</sup> edition. Penguin Books, London.

Salmond, Jeremy. 1986. *Old New Zealand Houses 1800-1940*. Auckland.

## **6. Acknowledgements**

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