

Property Maintenance Management

May 2011

Manual-General property maintenance CIIC

Introduction

The Cook Islands Investment Corporation is mandated to manage the assets of the Crown by protecting and prolonging its value and quality.

On average, 70% of CIICs annual budget is appropriated for maintenance of Government buildings.

It is CIICs goal to improve its approach to maintenance through implementation of a Property Maintenance Plan. In the past, CIIC have approached maintenance in an ad hoc manner; priority is given to major renovation work and quite often politically influenced projects. As a result, many buildings become neglected and maintenance is deferred due to the cost of major renovations to other buildings. In many cases, the small neglected jobs lead to structural deterioration and thus become a major renovation job before being attended to.

The regular expenditure of a small about of maintenance funds is much better for a building, and more cost effective, than large injections of capital every 20 years or so. Commitment to planned regular maintenance would ensure money is well spent and standards are maintained across the board for many years.

What is maintenance?

Maintenance is defined as being a combination of technical and administrative actions contributing to the protection and satisfactory operation of an asset. Maintenance includes everything from regular cleaning to repairs and replacements. It can be as small as changing a washer to stop a leaking tap, or as large as repainting an entire building.

Good maintenance helps retain the value of the building and makes the property more enjoyable to occupy.

When buildings are neglected, defects can occur which may result in extensive and avoidable damage to the building fabric or structure. Neglect of maintenance can also become a fire and safety hazard which could result in CIIC being legally liable for any injuries.

Types of Maintenance

Maintenance can be categorized according to why and when it happens, and includes:

• Corrective maintenance – to keep the building at an acceptable standard. This includes cleaning gutters and changing light bulbs. Corrective maintenance would normally be carried out by the occupants.

- Predictable (planned) maintenance to prevent predictable failure of building infrastructure or capital items This includes repainting surfaces or replacing roof cladding at the times specified by product manufacturers. Predictable maintenance would be covered by the CIIC.
- Emergency corrective maintenance must happen immediately for health and safety or security reasons. This includes work that may result in the rapid deterioration of the structure or fabric if unattended to immediately. Such includes roof repairs after cyclones, graffiti removal or repair of broken glass. The cost should be covered by CIIC or by replacement and reinstatement insurance.

What is the best way to approach maintenance?

There are many approaches to maintenance. Four key approaches are highlighted below.

- Carry out regular preventative maintenance, such as clearing out gutters to prevent major problems (i.e blockage/spouting breakage) from happening.
- Carry out repairs or replace items as needed, preventing small problems from turning into big ones.
- Plan ahead for major maintenance tasks, such as repainting or reroofing, so budget and time is available when the work is needed
- Be prepared for emergencies know where and how to turn off utilities and who to contact to report these to

A repetitive process is needed in order to provide adequate maintenance. A **maintenance plan** will ensure the correct approach, as highlighted above, is carried out and any shortfalls are discovered and corrected in a timely manner.

Maintenance Plan

A maintenance plan is the most cost-effective way to maintain the value of an asset. The advantages of a plan are:

- The property is maintained in a systematic rather than ad-hoc way
- Building services can be monitored to assist their efficient use
- The standard and presentation of the property can be maintained, and
- Subjective decision making and emergency corrective maintenance are minimized.

A maintenance plan sets out the work required in the next financial year and longer term. Maintenance plans must be supported by a maintenance budget.

Preparing the maintenance plan..



Collect property information

To prepare the maintenance plan, you will need:

- Site plans
- Floor plans and building plans showing construction details and utility layouts (if available)
- Details on age and condition of building
- Fabric/product specifications
- Previous reports on the building, and
- Details of previous maintenance work

Create Maintenance Records

Records show the history of a buildings condition, and are a guide to likely future problems and costs. They indicate whether a property is being over or under-maintained or misused, and can show if previous maintenance was appropriate or if there are design or material faults. It is advantageous to record the long-term performance, materials and procedures in order to assess their suitability for future maintenance work. As there may be changes in maintenance personnel, the failure to keep detailed records could result in repetition of previous mistakes. The usefulness of written records can be enhanced by taking photographs periodically to illustrate changes in performance of the repair.

Carry out maintenance survey

All properties should be inspected at regular intervals to identify any deterioration and required maintenance work, including cleaning.

Inspect the property and review the maintenance every year. The results will help you set the next work program and budget.

Do not attempt to carry out work or inspections that may expose you or others to danger. You may need specialized assistance to carry out the inspections, risk assessment, maintenance scoping and budgeting.

Before inspections, it is a good idea to survey the property occupiers about maintenance issues. This survey:

- Identifies problems affecting occupants
- Provides extra information about the building
- Shows that CIIC are exercising due diligence in carrying out duties, functions and powers
- Encourages communication between CIIC and occupiers, and
- Builds awareness of issues and legal responsibilities.

Keep records of surveys, inspections and maintenance work. Over time, these records can track problems and are a handy reference when setting out the maintenance plan. A record of maintenance should include:

- A description of the work
- The estimated and actual date of completion
- Estimated and actual cost
- Contractor details
- Any warranties
- Product maintenance specifications

Use <u>Form A</u> as a template for surveys and inspections. This will make it easier to compare results from previous years.

Review Maintenance Survey Results

The maintenance inspector(s) should review the results of the survey/ inspections to determine overall priority needs. The priorities must be reported and followed through. High priority items should be attended to immediately and others scheduled accordingly.

Organise maintenance inspection for options and costs

Technical assistance should be sought to provide options and costs where required.

Prepare maintenance report and budget

A maintenance report would categorize priorities and costs into the following:

- managed expenditure, relates to unplanned maintenance work,
- **committed expenditure**, tasks that occur every year as part of planned maintenance
- **variable expenditure**, includes regular tasks within overall planned maintenance that may not occur every year

The aim of a maintenance plan and budget is to reduce managed expenditure over time as far as possible and replace it with variable expenditure. Regular inspections will help identify how components are performing and when they might fail.

Approve and implement report and budget

Invariably, the cost of all desirable works in any one year will exceed the budget. The Property Manager or CEO then has to decide what is necessary this year to maintain the asset within the funds available, and what could be carried forward to the following year.

This implies setting priorities for different works. Some of the factors affecting priorities are:

- occupational health and safety
- security of premises
- statutory requirements
- vandalism
- loss of revenue
- likely failure of critical building fabric
- policy decisions

Maintenance Review

Implementation of the maintenance plan should be reviewed annually to report on its effectiveness and areas requiring improvement. An important part of maintenance planning for a building is to improve the previous decisions to maintain the asset so that subsequent maintenance expenditure will be more effective. Issues to consider when reviewing the work include:

- Whether the work was necessary or appropriate
- The cost, timing and standard of work, and
- The time needed for planned maintenance work.

This can form part of the annual inspection when the building condition is being assessed.

Maintenance Survey/Inspection Checklist

Scheduling	Schedule inspections / assessments days or weeks ahead. Inspections may take as little as half an hour, or as long as 4 hours depending on the size and condition of the property. Adequate time should be given for each property.
Inspectors	Ideally a representative of CIIC (i.e Property Officer) and the occupant (person in-charge of maintenance) will carry out the assessments. Builders or engineers may be brought in as required to assess any technical aspects.
Equipment	 Things to take: Paperwork – site plans, floor plans and building plans (if any) Stationery – Form A, notepad, pens Camera Measuring tape Step ladder (to access gutters and roof) Safety footwear Drinking water
Dos and don'ts	 Always ✓ Be on time and be prepared. ✓ Be respectful of occupiers and their property. ✓ Take notes and photos of areas of concern. ✓ Follow up on outstanding matters promptly. Never × Show up unannounced. Ensure to schedule inspections. × Make promises. Assure them you will check and confirm. × Make assumptions if you are uncertain. × Put yourself or others in a hazardous or life threatening situation.